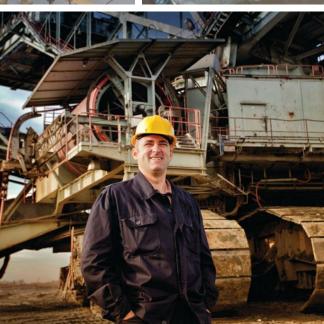




# **SNAP-ON INDUSTRIAL**















# SNAP-ON MAKES WORK EASIER... FOR SERIOUS PROFESSIONALS... DOING CRITICAL TASKS... IN CRITICAL INDUSTRIES

Critical industries support our world's fundamental infrastructure. Maintenance in critical industries requires precision, control & repeatability. The environment is sometimes extreme, even punishing, and there is often a high consequence of failure. At the same time, competition is fierce and productivity and profitability must be maximized.

Manufacturing and maintenance professionals in critical industries like aerospace, oil & gas, power generation, military, mining, and many others need tools, systems, and solutions that solve their problems, make their work easier, keep their operations running, and keep their workers safe. Only Snap-on Industrial can help you overcome these challenges in the most critical industry of all – yours.

# INDUSTRIAL QUICK REFERENCE

Tool Sets & Custom Kitting	
Set Building Program U.S. Set Building, Metric Set Building, Tool Control and Keyless Entry Set Building	N006-N017
Specialized Tool Sets Portable Mechanic's, General Mechanic's, Wind Power, General Industrial Maintenance	N018-N021
Aviation Tool Sets Military, Commercial, Aircraft Overhaul, Engine Overhaul, Master Mechanical Set, Basic Mechanic's, All Purpose Mechanic's, Flight Line Mechanic's, Basic Maintenance Tool	N022-N033
Portable Tool Cases Pelican® Laptop, Micro, Medium, and Large Cases, Pelican Storm Cases	N034-N035
Tool Management and Safety	
Level 5™ Tool Control Systems ATC, NTC, KTC, Tool Control Software, Tool Control Hardware	N038-N043
All Weather Mobile Tool Chest. One Drawer at a Time	N044-N045
Level 5™ TCMax® Hardware and Software	N046-N047
Build-a-Bay Modular High Density Tool Storage	N048-N050
FOD & FME Prevention Flight Line Roll Cabinets, FOD Hand Tools, Aeroprobe®, and STARK Kit	N051-N053
Tethered Tools Tools at Height Tool Set, Lanyards, Carabiners, Tethers, Cordless Tools, Hand & Miscellaneous Tools	N054-N059
Retention System Tools Torque Wrenches, Ratchets, Handles, Extensions, Adaptors, Sockets, Crowfoot, Hand Tools	N059-N068
Industrial Finish Hand Tools Sockets, Wrenches, Screwdrivers, Torque Wrenches	N069-N070
Safety Products Safety Approved Flashlights, Pelican Remote Area Lighting System, Safety Ball Pein, Cross Pein, & Sledge Hammers, Gloves	N071-N074
Fleet Repair	
Shop & Service Equipment Alignment & Service Lifts, Deployable Mobile Column Lifts, Collision Service Equipment, Tire Changers, Brake Lathes, Alignment Equipment, Wheel Balancers, Pro-Link iQ <sup>TM</sup> Diagnostic Scan Tool, Military NATO Battery Chargers, KrankingKART, ShopKey Repair and Information System	N076-N085
Omega and Hein-Werner Hydraulics Floor Jacks, Wheel Lift System, Truck Air Jacks, Jack Stands, Air Bottle Jacks, Truck Ramps, Shop Press, Engine Stands, Engine Cranes	N086-N088
- 4 4 5	9-N093, N096
COXREELS Retractable Air, Water, and Electric Hose and Cord Reels	N094-N095
CONTLETE Househable Fill, Water, and Electric Hoose and Cold Hoose	11004 11000
Facilities Maintneance	
Williams® Job Site Boxes, Hand Carry Tool Boxes, Workbenches, Service Wrenches, High Visibility Combo Wrenches, Flare Nut Wrenches, Adjustable Wrenches, Construction Wrenches, Scaffold Ratchet, 3/4" Drive Sockets & Sets, Pipe and Chain Wrenches	N098-N117
"Williams Hydraulics Combination Sets, Pumps, Cylinders, Maintenance Sets, Bottle Jacks, Toe Jacks, Flat Body Cylinders and Kits, Spreaders, Shop Presses, Accessories, Hydraulic Oil"	N118-N125
Wera Screwdriver Sets, Koloss Ratchet, Stainless Steel Tools	N126-N127
ENERPAC Hydraulics Combination Sets, Cylinders, Pumps, Bench Vise, Shop Presses, Maintenance Sets, Machine Lifts & Load Skates	N128-N132
Columbus McKinnon Material Handling Electric Chain Hoists, Load Binders, Manual Chain Hoists, Beam Clamps, Trolleys, Chain, Slings	N133-N136
TPI Electronic Measuring Instruments HVAC Gas, Pressure, and Airflow Test Equipment, Thermometers, Leak Detectors, Test Meters, Probes	N137-N139
Wilton/JET Shop Equipment Horizontal and Vertical Bandsaws, Belt Sander, Bench Grinders, Drill Press, Pallet Trucks, Service Carts	N140-N142
Evertile Locktile Commercial & Industrial Flooring and Edging	N143
Equipto Spool & Reel Racks	N144
Industry Specific Applications	
Aerospace Hand Tools Ratchets, Sockets, Drive Tools and Accessories, Wrenches	N146-N149
ATI Airframe Tools Rivet Sets, Rivet Squeezers, Micro Stops, Bucking Bars, Vacuums, Angle Drills, Deburring Tools	N150-N161
Zephyr and Wera Bits and Fastener Kits Torq-Set® Insert / Power Bits, HiTorq® Driver Bits, Hi-Lok® Tools, Jo-Bolt Fastener Tools	N162-N163
Sioux Aerospace Air Tools Drills, Angle Drills, Rivet Shavers, Skin Clamp Runner	N164
Sioux Production Air Tools Pistol Grip, Straight, and Angle Air Drills, Air Screwdrivers, Die Grinders, Wheel Grinders, Scalers	N165-N167
Starrett® Precision Tools Micrometers, Calipers, Dial Indicators, Depth Gauges, Height Gauges, Protractors, Levels, Pin Vises, Combination Squares Sets	N168-N175
<b>Snap-on Railroad Specialty Tools</b> Lag Screw Sockets, Engine Specials, Cotter Key Tools, Signal Tools, Bridge and Building Tools	N176-N177
Snap-on Utility Specialty Tools Manhole Cover Removal Tool, Ratchet Wrench, Adaptors	N178
Heavy-Duty Bolting	
Sioux Industrial Heavy-Duty Impact Wrenches	N180
ENERPAC Hydraulic Heavy-Duty Bolting Tools Hydraulic Punches, Flange Alignment Tools and Spreaders, Industrial Spreaders, Nut Splitters, Hydraulic Cutters, Self-Contained Cutters	N181-N184
Assembly	
Snap-on® Interchangeable-Head Torque Wrenches Dual Scale	N186
NES Universal Thread Repair Tools External Tools, Internal Tools, Sets	N186-N187
Wera Adjustable Torque Screwdrivers, Bitholding Screwdrivers, ESD Tools	N188-N189
Sioux Production Air Drills and Screwdrivers Reversible and Non-Reversible Drills, Positive Clutch, Adjustable Clutch, & Stall Drive Screwdrivers	N190-N192
	N001

# Snap-on Industrial works with you to make sure the tools you buy and use fit your business.



Our products, services, and capabilities help reduce downtime, control costs, solve tough problems in service and maintenance, and increase the safety of your operations.



#### We do this by focusing on seven important applications:

- Tool Sets and Custom Kitting
- Tool Management and Safety
- Fleet Repair
- Construction and Maintenance
- Industry-Specific Applications
- Heavy-Duty Bolting
- Assembly



## Let Snap-on Industrial work with you to:

- Create custom service kits with the exact components you need, and deliver them anywhere in the world
- Implement tool security, control and tracking appropriate to your business
- Control costs, eliminate shrinkage, and meet strict FOD and FME requirements
- Provide a wide range of productivity-enhancing tools for:
  - Railroads
- Aviation and AerospaceMilitary and Defense
- Power generationConstruction
- Vehicles
- Manufacturing
- Fleets and Education





# Begin with tools. End with solutions.







can create sets ranging from one-of-a-kind kits to a thousand identical tool sets.

Creating tool sets is at the heart of what we do. We offer a unique, modular set building program, an assortment of sets for specific applications, even ready-to-ship containers for disaster relief and plant outages. And the scale may surprise you, from small kits to service copy machines to hundreds of tool boxes completely outfitted for repairing military vehicles. Standard or custom, small to large, we do it all.

# **SET BUILDING**

## U.S. Sets



9100GSBO

## **U.S. Apprentice Set**

9100GSBO Complete Apprentice Set.

- Includes 9100GSO and KRA2055FPBO top chest **9100GSO** Apprentice Set.
- More than 100 pieces for a well-balanced selection
- Does not include tool storage

9100GSM Metric Plus Apprentice Set.

- 9100GS set plus AWM110DK metric hex wrench Set (11 pcs), 212FMY Metric 12-point socket Set (12 pcs) and 0EXM710B metric 12-point combination wrench set (10 pcs)
- Does not include tool storage

# An Unequaled Opportunity When we introduced our set building

When we introduced our set building program it revolutionized the industry — for the first time there was a planned way to expand tool sets as work and responsibilities evolved and grew. It is designed to provide the most used tools in the most likely progression. And as metric tools became the standard in the industry, we began offering a greatly expanded metric selection with a master set that tops anything else available. Ask your Snap-on® Industrial Account Manager for more information on how you can build exactly the right tool set for your specific needs.

## **How the Program Works**

If you're building a set from the ground up, start with our 9100GSBO Apprentice Set. It includes a balanced selection of 1/4", 3/8" and 1/2" square drive tools, wrenches, screwdrivers, pliers, punches and chisels — a basic set for routine maintenance. We've also put increased emphasis on getting you all the metric tools you need, as they are increasingly becoming the standard in many industries.

When your needs grow, the second tool group provides more than 100 additional standard and specialty tools for more advanced work. Each new tool group offers recommendations on the appropriate storage chests and cabinets to help you stay organized and productive. Through this method of steady, planned expansion, you can continue building your tool set until you've achieved the ultimate selection of matched hand tools and storage units.



9200GSB

Warning: In the set illustrations on this page and following pages, storage unit drawers are shown open for display purposes only. In use, storage unit could tip and cause injury or damage if a number of loaded drawers are extended.

## U.S. Set 2

9200GSB Complete U.S. Set 2.

• Includes 9100GSO, 9000GS2 plus KRA4059FPBO top chest

#### 9200AGSO U.S. Set 2.

- More than 200 pcs: includes all tools in 9100GSO and 9000GS2
- Does not include tool storage

#### 9000GS2 Add-on Group 2.

- More than 100 pcs in the add-on to 9100GSO apprentice set
- · Does not include tool storage

U.S. and metric set cabinetry and contents are subject to change and may not be exactly as illustrated. U.S. set listings are shown on pages N008 and N009. Metric sets are shown on pages N012 and N013. Metric listings are shown on pages N012 and N013.

**U.S. Sets** 

#### U.S. Set 3

9300GSBO Complete U.S. Set 3.

• Includes 9200AGS0, 9000GS30 plus KRA4059FPB0 top chest and KRA4008FPB0 roll cab

#### 9300GSO U.S. Set 3.

- More than 300 pcs: includes all tools in 9200AGSO and 9000GS30
- · Does not include tool storage

#### 9000GS3O Add-on Group 3.

- More than 100 pcs in the add-on to 9200AGS0 U.S. Set 2
- Does not include tool storage



9300GSBO

## U.S. Set 4

9400GSBO Complete U.S. Set 4.

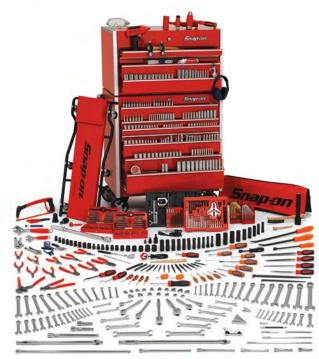
• Includes: 9300GSO, 9000GS40 plus KRL751PBO top chest and KRL756CPBO roll cab

#### 9400GSO U.S. Set 4.

- More than 600 pcs: includes all tools in 9300GSO and 9000GS40
- · Does not include tool storage

#### 9000GS40 Add-on Group 4.

- More than 250 pcs in the add-on to 9300GS0 U.S. Set 3
- · Does not include tool storage



9400GSBO

- · Do not open more than one loaded drawer at a time
- Keep children away
- · Close lid, lock drawers and doors before moving
- · Apply brakes on locking casters when not moving unit
- . Do not step in or on drawers

- · Secure units together with fasteners
- Do not pull; push to move
- · Wear gloves when lifting by edges
- . Keep feet and fingers clear of edges when stacking, hanging, or moving units
- · Read additional safety precautions on pages W1 to W4







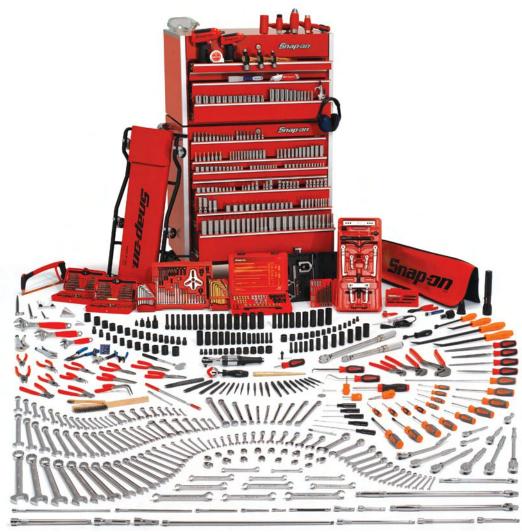








# **U.S. Sets**



9500GSBO

#### **U.S. Set 5**

9500GSBO Complete U.S. Set 5.

- Includes 9400GSO, 9000GS50 plus KRL751PB0 top chest and KRL756CPB0 roll cab **9500GSO** U.S. Set 5.
- More than 800 pcs: includes all tools in 9400GSO and 9000GS50
- · Does not include tool storage

9000GS50 Add-on Group 5.

- More than 150 pcs in the add-on to 9400SGO U.S. Set 4
- Does not include tool storage

Warning: In the set illustrations on this page and following pages, storage unit drawers are shown open for display purposes only. In use, storage unit could tip and cause injury or damage if a number of loaded drawers are extended.

U.S. and metric set cabinetry and contents are subject to change and may not be exactly as illustrated. U.S. set listings are shown on pages N008 and N009. Metric sets are shown on pages N012 and N013. Metric listings are shown on pages N012 and N01.

**U.S. Sets** 



#### 9600GSBO

#### U.S. Set 6

9600GSBO Complete U.S. Set 6.
• Includes 9500GS0, 9000GS60 plus KRL791APB0 top chest, KRL722BPB0 roll cab and KRA276D wall cabinet

#### 9600GSO U.S. Set 6.

- More than 1,000 pcs: includes all tools in 9500GSO and 9000GS60
- Does not include tool storage

#### 9000GS6O Add-on Group 6.

- More than 250 pcs in the add-on to 9500GS0 U.S. Set 5
- Does not include tool storage
  - Do not open more than one loaded drawer at a time
  - Keep children away
  - Close lid, lock drawers and doors before moving
  - Apply brakes on locking casters when not moving unit
  - . Do not step in or on drawers

- · Secure units together with fasteners
- Do not pull; push to move
- Wear gloves when lifting by edges
- Keep feet and fingers clear of edges when stacking, hanging, or moving units
- Read additional safety precautions on pages W1 to W4

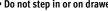












# **U.S. Set Contents**

# 9100GSO Apprentice Set

Stock No.	Stock No. Description D	
	Description F	
114ATMP	1/4" Dr. General Service Set, 6-Point (14 pcs) 82	
206EAU	3/8" Dr. Adaptor/Extension Set (6 pcs) 75	
211FSY	3/4" Dr. Socket Set, 6-Point (11 pcs)	25
211SFSY	3/8" Dr. Deep Socket Set, 6-Point (11 pcs)	26
317MSPC	½" Dr. General Service Set, 6-Point (17 pcs)	88
91ACP	Adjustable Joint Pliers, 9 1/4"	153
AW1015DK	Hex Wrench Set (10 pcs) (7/250" to 3/8")	118
BP16B	Ball Peen Hammer, 16 oz.	175
CSA8C	Carbon Scraper	181
ECF201A	3 Watt, (2) D Cell, LED Flashlight 4	
F80	3/8" Dr. Sealed Head Ratchet	
GA295	Round Mirror (2 1/4" Diameter)	534
GAC1580	Goggles	584
HBPT16	Plastic Tip Hammer 17	
HSG319	Deluxe Hacksaw (for 12" blades)	
0EX709B	Combination Wrench Set, 12-Point (9 pcs)	98
PL300CF	Needle Nose/Diagonal Cutter/Pliers Set, 3 pcs.	
PPC710BK	Punch and Chisel Set, 11 pcs 11	
PRH57A	Retaining Ring Pliers 15	
PT5C	Magnetic Pick Up Tool 53	
PWC6	Wire Stripper/Cutter, 6" 15	
SHDX800	Combination Screwdriver Set (8 pcs) 12	
TPMA12	Tape Rule, U.S. (12')	533

# 9000GS2 Add-on Group

Stock No.	Description	Page
110STMY	1/4" Dr. Deep Socket Set, 6-Point (10 pcs)	19
112TMMY	1/4" Dr. Metric Shallow Socket Set, 6-Point (12 pcs) 18	
2004BSKA	Battery Service Kit (4 pcs)	435
212EFTXY	1/4" and 3/8" Dr. Torx® Driver Set (12 pcs)	52
212FSMY	3/8" Dr. Metric Shallow Socket Set, 6-Point (12 pcs) 25	
212SFSMY	3/8" Dr. Metric Deep Socket Set, 6-Point (12 pcs) 126	
97CCP	Needle Nose Pliers, 8"	152
1650	Prybar, 16"	149
AC5B	Hand Scratch Brush	578
AWM110DHK	Metric Hex Wrench Set, L-Shaped	118
CT4G	Circuit Tester	409
FADH12A	Adjustable Wrench, Cushion Handle, 12"	120
FB303B	Wire Gap Gauge	
FB316B	Spark/Ignition Gauge (18 blades) 5	
FB325A	U.S./Metric Gauge (25 blades) 5	
FB361A	Gapper Gauge 532	
FLF80	3/8" Dr. Long Flex Head Sealed Ratchet	8
FXK11	3/8" Dr. Extension, 11"	67
GSAF1E	Square Drive Adaptor 7	
LP10WR	Locking Pliers, 10" 16	
OEX30B	Std. Length Combination Wrench, 15/16"	98
0EX32B	Combination Wrench, 12-Point, 1"	98
OEXM710B	Metric Combination Wrench Set (10 pcs)	97
PK53	Putty Knife/Scraper 1	
RXFS605B	3/8" Dr. Double End Flare Nut Wrench Set (5 pcs) 11	
S9704KR	3/8" Dr. Spark Plug Retention Socket, 6-Point, 13/16" 18	
S9706KRA	Spark Plug Retention Socket, 6-Point, 5/8" 187	
SGA173BR	Radiator Hose Pick 45	
SGASA204A0	Miniature Pick Set, 4 pcs 145	
SGDMRC44B	Ratcheting Soft Grip Screwdriver	136
SGT4BR	1/4" Dr. Standard Shank Driver	74
TMXK60	1/4" Dr. Extension, 6"	65

U.S. and metric set cabinetry and components are subject to change and may not be exactly as illustrated. U.S. sets are shown on pages N004-N007. Metric sets are shown on pages N010 and N011. Metric listings are shown on pages N012 and N013.

## 9000GS30 Add-on Group

Jooda Jo Add-oil Gloup		
Stock No.	Description	Page
112STMMY	1/4" Dr. Metric Deep Socket Set, 6-Point (12 pcs)	19
207EFAMY	3/8" Dr. Metric Hex Driver Set (7 pcs)	55
208EFAY	3/8" Dr. Hex Driver Set (8 pcs)	57
309SIMYA	1/2" Dr. Deep Impact Socket Set, 6-Point	41
310IMMYA	1/2" Dr. Metric Shallow Impact Socket Set, 6-Point	40
310SIMMYA	1/2" Dr. Metric Deep Impact Socket Set, 6-Point	41
311IMYA	1/2" Dr. Shallow Impact Socket Set, 6-Point	40
313TWMYA	1/2" Dr. Metric Socket Set, 6-Point (13 pcs)	36
AC58D	Wire Brush	578
GA3000A	Ear Protectors	582
IP80D	1/2" Dr. Impact Universal Joint	78
JCK7D	Fender Cover	525
JT13A	Blow Gun	298
MG725	½" Dr. Impact Wrench	265
OEXM6B	Metric Short Combination Wrench, 12-Point, 6mm	99
OEXM7B	Metric Short Combination Wrench, 12-Point, 7mm	99
OEXM8B	Metric Short Combination Wrench, 12-Point, 8mm	99
OEXM9B	Metric Short Combination Wrench, 12-Point, 9mm	99
QD3R250	1/2" Dr. Torque Wrench, 50-250 ft. lb.	231
RXFMS606B	Metric Double End Flare Nut Wrench Set (6 pcs)	110
S8	1/2" Dr. Universal Joint	77
SL80	1/2" Dr. Long Handle Sealed Ratchet	10
SPBS240	Prybar with Handle, 24", Orange	147
SXK3	1/2" Dr. Extension, 3 1/2"	69
TF72	1/4" Dr. Flex Head Sealed Ratchet	7
TMXK140	1/4" Dr. Extension, 14"	65

# 9000GS40 Add-on Group

Stock No.	Description Page 1		
1250	Prybar, 12"	149	
206AFSA	3/8" Dr. Universal Shallow Socket, 12-Point (6 pcs)	34	
206FSUMA	3/8" Dr. Metric Universal Shallow Socket Set, 6-Point (6 pcs)	34	
207SFRH	3/8" Dr. Metric Crowfoot Wrench Set (7 pcs)	111	
210FRHMA	3/8" Dr. Metric Crowfoot Wrench Set (10 pcs)	111	
313TSYA	1/2" Dr. Deep Socket Set, 6-Point (13 pcs)	37	
388CF	High Leverage Cutters	151	
61ACP	Duck Bill Pliers	152	
AWP160	Adjustable Joint, Tongue & Groove Pliers	160	
BP24B	Ball Peen Hammer, 24 oz.	175	
CJ2001P			
CSA12CO	Carbon Scraper, Orange	205 181	
E1020	Extractor Set, 20 pcs	195	
FADH8A	Adjustable Wrench, Cushion Handle, 8"	120	
FL80	3/8" Dr. Long Handle Sealed Ratchet	8	
FX24A	3/8" Dr. Extension, 24"	67	
FXK4	3/8" Dr. Extension, 4"	67	
FXK8	3/8" Dr. Extension, 8"	67	
HBBD32	Ball Peen Dead Blow Hammer, 32 oz.	173	
HBFE32	Dead Blow Hammer, 32 oz.	314	
JCW60R	Creeper, Red	526	
LP7WR	Locking Pliers, 7"	161	
OEXO80B	Short Combination Wrench, 12-Point, 1/4"	99	
OEX10B	Combination Wrench, 12-Point, 5/16"	98	
OEX34B	Combination Wrench, 12-Point, 1 1/16"	98	
OEX36B	Combination Wrench, 12-Point, 1 1/8"	98	
OEX40B	Combination Wrench, 12-Point, 1 1/4"	98	
OEXM200B	Metric Combination Wrench, 12-Point, 20mm	97	
OEXM210B	Metric Combination Wrench, 12-Point, 21mm	97	
OEXM220B	Metric Combination Wrench, 12-Point, 22mm		
OEXS709B	Short Combination Wrench Set, 12-Point ( 9 pcs)		
OEXSM710B	Metric Short Comb. Wr. Set, 12-Point (10 pcs)		
PPB1012A	Bronze Tapered Punch, 3%"		
PPC104A	Pin Punch, 1/8"		
PPC108A	Pin Punch, 1/4"		
PPC204A	Starter Punch, 1/8"	170	
PPC208A	Starter Punch, 1/4"	170	
PPC3A	Center Punch, 1/8"	170	
PPC5A	Punch/Chisel Holder	170	
SGCP1BR	Cotter Pin Puller	451	
SGHBF500A	File Set with Handles (4 pcs)	183	
SHDX400	Mini Combination Screwdriver Set, Orange	129	
SN24C	1/2" Dr. Breaker Bar, 24"	16	
SPBS180	Prybar w/Handle, 18" Orange	147	
SRPC105	Retaining Ring Pliers Set (5 pcs)	155	
SSM5A	Flat Tip Screw Starter 13		
SX2	1/2" Dr. Extension, 2" 69		
TA3	1/4" to 3/8" Adaptor 73		
TD2425	Tap and Die Set (41 pcs)		
TDM117A	Metric Tap and Die Set (41 pcs)		
TF528D	Tube Cutting and Double Flaring Set		
TM61A	1/4" Dr. Flexible Extension, 6"	66	
TMX1	1/4" Dr. Extension, 1 1/4"	65	
TMXK110	1/4" Dr. Extension, Knurled, 11"	65	
UTK100	Utility Knife	180	

# **U.S. Set Contents**

# 9000GS50 Add-on Group

Stock No.	Description	Page
196CF	Needle Nose Pliers with Side Cutter, 7 1/8"	
212IMFYA	3/8" Dr. Shallow Impact Socket Set, 6-Point (12 pcs)	31
212SIMFYA	3/8" Dr. Deep Impact Socket Set, 6-Point (12 pcs)	32
214IMFMYA	3/8" Dr. Shallow Impact Socket Set, 6-Point (14 pcs)	31
214SIMFMYA	3/8" Dr. Deep Impact Socket Set, 6-Point (14 pcs)	32
313TSMYA 497CCP	½" Dr. Metric Deep Socket Set, 6-Point (13 pcs) Needle Nose Pliers (90° Angle Jaw) 6 5%"	37 152
650	Prybar, 6"	149
AWP120	Adjustable Joint, Tongue & Groove Pliers	154
BP8B	Ball Peen Hammer, 8 oz.	175
C2201A	Kit Bag	_
CJ2002	Bar Type Gear Puller Set	204
F12LA	3/8" Dr. Breaker Bar	16
FADH10A	Adjustable Wrench, Cushion Handle, 10"	120
FAR7200	Super Duty Air Ratchet, 3/8" Drive	269
FBF80	3/8" Dr. Bent Flex Head Sealed Ratchet	8
FK80	3/8" Dr. Stubby Head Sealed Ratchet	8
HBBT24 IMM200	Bronze Tip Hammer, 24 oz. 1/2" Dr. Metric Shallow Impact Socket, 6-Point, 20mm	174 40
IMM210	1/2" Dr. Metric Shallow Impact Socket, 6-Point, 2011111	40
IMM220	1/2" Dr. Metric Shallow Impact Socket, 6-Point, 21mm	40
IMM230	1/2" Dr. Metric Shallow Impact Socket, 6-Point, 23mm	40
IMM240	1/2" Dr. Metric Shallow Impact Socket, 6-Point, 24mm	40
IPF800B	3/8" Dr. Impact Universal Joint	77
MG325	3/8" Dr. Air Impact Wrench	267
OEX11B	Combination Wrench, 12-Point, 11/32"	98
OEX260B	Short Combination Wrench, 12-Point, 13/16"	99
OEX280B	Short Combination Wrench, 12-Point, 7/8"	99
OEX300B	Short Combination Wrench, 12-Point, 15/16"	99
0EX320B 0EX38B	Short Combination Wrench, 12-Point, 1"	99
OEX42B	Combination Wrench, 12-Point, 1 ¾6" Combination Wrench, 12-Point, 1 ¾6"	98 98
OEX42B	Combination Wrench, 12-Point, 1/4"	98
OEXM230B	Metric Standard Combination Wrench, 12-Point, 23mm	97
OEXM240B	Metric Standard Combination Wrench, 12-Point, 24mm	97
OEXM90B	Metric Standard Combination Wrench, 12-Point, 9mm	97
OXI10B	Midget Combination Wrench, 12-Point, 5/16"	100
OXI12B	Midget Combination Wrench, 12-Point, 3/8"	100
OX1706B	Fractional Midget Comb. Wrench Set, 12-point (6 pcs)	100
OXI8B	Midget Combination Wrench, 12-Point, 1/4"	100
OXIM710B	Metric Midget Comb. Wrench Set, 12-Point (10 pcs)	100
OXIM7B OXIM8B	Metric Midget Combination Wrench, 12-Point, 7mm  Metric Midget Combination Wrench, 12-Point, 8mm	100
OXIM9B	Metric Midget Combination Wrench, 12-Point, 9mm	100
PPC110A	Pin Punch. 5/16"	170
PPC112	Pin Punch, 3/8"	170
PPC210A	Starter Punch, 5/16"	170
PPC824B	Flat Chisel, 3/4"	170
PPC828B	Flat Chisel, 7%"	170
PT28E	Pick Up Tool	535
PWC14	Wire Stripper/Cutter/Crimper/Bolt Cutter, 8 3/4"	155
QD2R100	3/8" Dr. Adj. Click Type Torque Wrench 20-100 ft. lb.	231
RTD48	Rethreading Kit (48 pcs)	189
S9704KFUA S9706KRFUA	3/6" Dr. Spark Plug Universal Socket, 13/16" 3/8" Dr. Universal Spark Plug Socket, 6-Point, 5/8"	187
SDM400A	Screwdriver Bit Kit (37 pcs)	187 141
SF80	½" Dr. Flex Head Sealed Ratchet	10
SHDP1620	Phillips® Tip Screwdriver, #2, Orange, 16"	131
SHDP62IR0	Phillips® Tip Screwdriver, #2, Orange, 6"	131
SHDP63IR0	Phillips® Tip Screwdriver, #3, Orange, 6"	131
SIMM200	½" Dr. Deep Impact Socket, 6-Point, 20mm	41
SIMM210	½" Dr. Deep Impact Socket, 6-Point, 21mm	41
SIMM220	½" Dr. Deep Impact Socket, 6-Point, 22mm	41
SIMM230	½" Dr. Deep Impact Socket, 6-Point, 23mm	41
SIMM240	1/2" Dr. Deep Impact Socket, 6-Point, 24mm	41
SPBS120	Prybar with Handle, 12", Orange	147 132
SSDE42C	Flat, Thin Blade Electronic Screwdriver	
SSDE43C	Flat, Thin Blade Electronic Screwdriver	
CCDE 440	Flat, Thin Blade Electronic Screwdriver	
SSDE44C	Flat, Thin Blade Electronic Screwdriver	
SSDE46C		122
SSDE46C SSDE48C	Flat, Thin Blade Electronic Screwdriver	132
SSDE46C SSDE48C SSDMR1AO	Flat, Thin Blade Electronic Screwdriver Ratcheting Magnetic Screwdriver, Orange	137
SSDE46C SSDE48C SSDMR1AO TC123C	Flat, Thin Blade Electronic Screwdriver Ratcheting Magnetic Screwdriver, Orange Tube Cutter	137 184
SSDE46C SSDE48C SSDMR1AO	Flat, Thin Blade Electronic Screwdriver Ratcheting Magnetic Screwdriver, Orange	137

# 9000GS60 Add-on Group

20000300	Ada-on Group	
Stock No.	Description	Page
106ATMXWP	1/4" Dr. Wobble Extension Set (6 pcs)	66
106TMUSA 10SSD	1/4" Dr. Universal Socket Set, 6-Point (6 pcs) Offset Flat Tip Screwdriver	23 135
110ETMAY	1/4" Dr. Hex Driver Set (10 pcs)	57
120SSDP	Offset Phillips® Screwdriver, #1 and #2	135
2050	Prybar, 20"	149
205IPF	Frac. 3/8" Dr. Swivel Impact Socket Set, 6-Point (5 pcs)	35
206AFXWP 20SSD	3/8" Dr. Wobble Plus Extension Set (6 pcs)	68 135
307IPLY	Offset Flat Tip Screwdriver Frac. ½" Dr. Impact Swivel Socket Set, 6-Point (5 pcs)	44
AWP45	Adjustable Joint, Tongue & Groove Pliers, 4 3/4"	160
AWP65	Adjustable Joint, Tongue & Groove Pliers, 7"	160
BP12B	Ball Peen Hammer, 12 oz.	175
CHN480	Adjustable Joint Pliers, 20"	160
CJ2003A CJ2004	Rear Axle Puller Set	204 204
CJ2005	Interchangeable Puller Set Puller Accessory Set	
CM6551	Miniature Screwdriver Set (5 pcs)	204 135
DBTR129	Drill Bit Set, 29 Bits	286
E703BCG	Electronic Needle Nose Pliers	158
E704BCG	Elec. Needle Nose Pliers, 60° Bent Tip, Non-Serrated	158
E710BCG	Electronic Taper Head Cutters, True Flush Cut	157
FADH6A FAR25A	Adjustable Wrench, Cushion Handle, 6" 1/4" Dr. Air Ratchet	120 269
FS12B	3/8" Dr. Universal Shallow Socket, 6-Point, 3/8"	34
FSUM11A	3/8" Dr. Universal Shallow Socket, 6-Point, 11mm	34
FSUM16A	3/8" Dr. Universal Shallow Socket, 6-Point, 16mm	34
FSUM18A	3/6" Dr. Universal Shallow Socket, 6-Point, 18mm	34
FSUM19A FX18	%" Dr. Universal Shallow Socket, 6-Point, 19mm %" Dr. Extension, 18"	34 67
FX36	3/8" Dr. Extension, 36"	67
HBF100	Mixed File Set (6 pcs)	183
HBFE48	Dead Blow Hammer, 48 oz.	173
IMTM10A	1/4" Dr. Shallow Impact Socket, 6-Point, 5/16"	22
IMTM12A IMTM14A	1/4" Dr. Shallow Impact Socket, 6-Point, 3/6" 1/4" Dr. Shallow Impact Socket, 6-Point, 7/16"	22 22
IMTM14A	1/4" Dr. Shallow Impact Socket, 6-Point, 1/2"	22
IMTM18A	1/4" Dr. Shallow Impact Socket, 6-Point, 9/16"	22
IMTM8A	1/4" Dr. Shallow Impact Socket, 6-Point, 1/4"	22
IMTMM10	1/4" Dr. Metric Impact Socket, 6-Point, 10mm	21
IMTMM11	1/4" Dr. Metric Impact Socket, 6-Point, 11mm	21
IMTMM12 IMTMM13	1/4" Dr. Metric Impact Socket, 6-Point, 12mm 1/4" Dr. Metric Impact Socket, 6-Point, 13mm	21 21
IMTMM14	1/4" Dr. Metric Impact Socket, 6-Point, 14mm	21
IMTMM15	1/4" Dr. Metric Impact Socket, 6-Point, 15mm	21
IMTMM5	1/4" Dr. Metric Impact Socket, 6-Point, 5mm	21
IMTMM5.5	1/4" Dr. Metric Impact Socket, 6-Point, 5.5mm	21
IMTMM6 IMTMM7	1/4" Dr. Metric Impact Socket, 6-Point, 6mm 1/4" Dr. Metric Impact Socket, 6-Point, 7mm	21 21
IMTMM8	1/4" Dr. Metric Impact Socket, 6-Point, 7mm	21
IMTMM9	1/4" Dr. Metric Impact Socket, 6-Point, 9mm	21
LP6LN	Locking Long Nose Pliers, 6"	161
NDD1070A	Fractional Nut Driver Set, 6-Point (7 pcs)	140
OEX44B OEX46B	Combination Wrench, 12-Point, 1 3/8" Combination Wrench, 12-Point, 1 7/16"	98 98
OEX48B	Combination Wrench, 12-Point, 1 1/16  Combination Wrench, 12-Point, 1 1/2"	98
PDR3000A	Air Drill, 3/8"	271
PPR708BK	Roll Pin Punch Set (8 pcs)	171
R810C	Frac. Ratcheting Box Wrench, 12-Point, 1/4"-5/16"	104
RB604C RXS605B	Frac. Ratcheting Box Wrench Set, 12-Point (4 pcs) Flare Nut/Open End Wrench Set, 6-Point (5 pcs)	104 109
SHDTX3150	T15 Torx® Screwdriver, Orange	135
SHDTX3200	T20 Torx Screwdriver, Orange	135
SPBS80	Prybar with Handle, 8", Orange	147
SSDMR8A0	Ratcheting Magnetic Screwdriver, Orange	137
SX15 TD9902B	1/2" Dr. Extension, 15" Tap and Die Set (25 pcs)	69 37
TS381	1/2" Dr. Deep Socket, 6-Point 1 3/16"	37
TS401	1/2" Dr. Deep Socket, 6-Point 1 1/4"	37
TS421	1/2" Dr. Deep Socket, 6-Point 1 5/16"	37
TW381	1/2" Dr. Socket, 6-Point 1 3/16"	36
TW401	1/2" Dr. Socket, 6-Point 1 1/4"	36
TW421 TW441	1/2" Dr. Socket, 6-Point 1 5/16" 1/2" Dr. Socket, 6-Point 1 3/8"	36 36
TW461	½" Dr. Socket, 6-Point 1 7/16"	36
TW481	1/2" Dr. Socket, 6-Point 1 1/2"	36
TWM25	½" Dr. Metric Socket, 6-Point, 25mm	36
TWM26	1/2" Dr. Metric Socket, 6-Point, 26mm	36
TWM27 TWM30	1/2" Dr. Metric Socket, 6-Point, 27mm 1/2" Dr. Metric Socket, 6-Point, 30mm	36 36
TWM32	½" Dr. Metric Socket, 6-Point, 30mm	36
VE200A	Tool Control Board	204
VS26B	Open End Wrench, 13/16"	108
VS28B	Open End Wrench, 7/8"	108
VS30B	Open End Wrench, 15/16"	108
VS32B X0605	Open End Wrench, 1" Fractional Offset Box Wrench Set, 12-Point (5 pcs)	108 103
	,	

# **SET BUILDING**

## **Metric Sets**



9100GMBO

## **Metric Set A**

- 9100GMBO Complete Metric Set A.
   More than 150 pcs: includes 9100AGMO plus KRA4059FPB0 top chest
- 9100AGMO Metric Basic Set A.
- Does not include tool storage



9200GMBO

# **Metric Set B**

9200GMBO Complete Metric Set B.

• Includes: 9100AGMO, 9000GM20 plus KRA4059FPB0 top chest and KRA4008FPB0 roll cab

9200GMO Metric Set B.

- More than 400 pcs

• Does not include tool storage **9000GM2O** Add-on Group B.

- More than 200 pcs
- Does not include tool storage

U.S. and metric set cabinetry and components are subject to change and may not be exactly as illustrated. U.S. sets are shown on pages N004-N007. U.S. set listings are on pages N008 and N009. Metric listings are shown on pages N012 and N013.

# **Metric Sets**

#### **Metric Set C**

9300GMBO Complete Metric Set C.

• Includes 9200GM0, 9000GM30 plus KRL751PB0 top chest and KRL756CPBO roll cab

#### 9300GMO Metric Set C.

- More than 600 pcs: includes all tools in 9200GMO and 9000GM30
- Does not include tool storage

#### 9000GM3O Add-on Group C.

- More than 200 pcs in the add-on set to 9200GM0 Set B
- Does not include tool storage



9300GMBO

## Metric Set D

9400GMBO Complete Metric Set D.

• Includes: 9300GMO, 9000GM40 plus KRL751PB0 top chest, KRL756CPBO roll cab and KRA276D wall cabinet

#### 9400GMO Metric Set D.

- More than 800 pcs: includes all tools in 9300GMO and 9000GM40
- Does not include tool storage

#### 9000GM4O Add-on Group D.

- More than 175 pcs in the add-on set to 9300GMO Set C
- Does not include tool storage



9400GMBO

- Do not open more than one loaded drawer at a time
- Keep children away
- · Close lid, lock drawers and doors before moving
- . Apply brakes on locking casters when not moving unit
- . Do not step in or on drawers

- Secure units together with fasteners
- Do not pull; push to move
- · Wear gloves when lifting by edges
- Keep feet and fingers clear of edges when stacking, hanging, or moving units
- Read additional safety precautions on pages W1 to W4















# **Metric Set Contents**

# 9100AGMO Metric Basic Set A

112STMMY	7100Adino inclite basic Sci A		
117TMM	Stock No.		
2004BSKA   Battery Service Kit (4 pcs)   435   206EAU   36" Dr. Adaptor Set (6 pcs)   75   212EFTXY   36" and 1/4" Dr. Torx® Driver Set (12 pcs)   52   212EFTXY   36" Dr. Metric Socket Set, 6-Point (12 pcs)   25   212SFSMY   36" Dr. Metric Deep Socket Set, 6-Point (12 pcs)   26   317AMMPC   1/2" Dr. Metric Gen. Service Set, 6-Point (17 pcs)   88   91ACP   Adjustable Joint Pliers   153   97CCP   Needle Nose Pliers   153   1650   Prybar, 16" long   149   AC5B   Wire Brush   578   AWM110DHK   Metric Hex Wrench Set (11 pcs)   118   BP16B   Ball Peen Hammer, 16 oz.   175   CSA8C   Carbon Scraper   181   CT4G   Circuit Tester   409   ECF201A   3 watt LED Flashlight   496   F80   36" Dr. Sealed Ratchet   8   FADH12A   Adjustable Wrench, Cushion Handle, 12"   120   FB316B   Ignition/Spark Plug Gauge Set (18 blades)   531   FB360C   Feeler Gauge Set (6 blades)   532   FB361A   Gapper Gauge   532   FB361A   Gapper Gauge Set (20 blades)   531   FEKO   36" Dr. Long Flex Head Sealed Ratchet   8   FXK11   36" 8" Dr. Extension, 11" long   67   GA295   Mirror   534   GSAF1E   Square Drive Adaptor   75   HBPT16   Plastic Tip Hammer, 16 oz.   174   HBG339   Metric Combination Wrench Set, 12-Point (10 pcs)   97   PK53A   Punch and Chisel Set (11 pcs)   170   PK95A   Retaining Ring Pliers, 10" long   161   DEXM710B   Metric Combination Wrench Set, 12-Point (10 pcs)   97   PK53A   Punch and Chisel Set (11 pcs)   170   PRH57A   Retaining Ring Pliers, Convertible   156   PFSC   Telescopic Pick Up Tool   535   PVC6   Wire Stripper/Cutter Pliers   155   SYFMS606B   Metric Flare Nut Wrench Set, 6-Point, 5/8"   187   S9706KRA   36" Dr. Spark Plug Retention Socket, 6-Point, 5/8"   187   S9706KRA   36" Dr. Spark Plug Retention Socket, 6-Point, 5/8"   187   S9706KRA   36" Dr. Spark Plug Retention Socket, 6-Point, 5/8"   187   S9706KRA   36" Dr. Spark Plug Retention Socket, 6-Point, 5/8"   187   S9706KRA   36" Dr. Spark Plug Retention Socket, 6-Point, 5/8"   187   S9706KRA   36" Dr. Spark Plug Retention Socket, 6-Point, 5/8"   187   S9706K	112STMMY		
206EAU   %6" Dr. Adaptor Set (6 pcs)   75   212EFTXY   36" and ¼" Dr. Torx® Driver Set (12 pcs)   52   212FSMY   %6" Dr. Metric Socket Set, 6-Point (12 pcs)   25   212FSMY   36" Dr. Metric Deep Socket Set, 6-Point (12 pcs)   26   317AMMPC   ½" Dr. Metric Gen. Service Set, 6-Point (17 pcs)   88   91ACP   Adjustable Joint Pliers   153   97CCP   Needle Nose Pliers   153   1650   Prybar, 16" long   149   AC5B   Wire Brush   578   AWM110DHK   Metric Hex Wrench Set (11 pcs)   118   BP16B   Ball Peen Hammer, 16 oz.   175   CSA8C   Carbon Scraper   181   CT4G   Circuit Tester   409   ECF201A   3 watt LED Flashlight   496   E6F201A   3 watt LED Flashlight   496   E83   36" Dr. Sealed Ratchet   8   FADH12A   Adjustable Wrench, Cushion Handle, 12"   120   EB316B   Ignition/Spark Plug Gauge Set (18 blades)   531   EB361A   Gapper Gauge   532   EB361A   Gapper Gauge   532   EB361A   Gapper Gauge   532   EB361A   Gapper Gauge   532   EB361A   Gapper Gauge   534   EFBM32O   Metric Feeler Gauge Set (20 blades)   531   ELFBO   36" Dr. Long Flex Head Sealed Ratchet   8   EXK11   36" 8" Dr. Extension, 11" long   67   GA295   Mirror   534   GSAF1E   Square Drive Adaptor   75   HBPT16   Plastic Tip Hammer, 16 oz.   174   HSG319   Hacksaw   176   LOcking Pliers, 10" long   161   OEXM710B   Metric Combination Wrench Set, 12-Point (10 pcs)   97   PK53A   Scraper   PL90WR   Locking Pliers, 10" long   161   OEXM710B   Metric Combination Wrench Set, 12-Point (10 pcs)   97   PK53A   Scraper   182   PPC710ABK   Punch and Chisel Set (11 pcs)   170   PRH57A   Retaining Ring Pliers, Convertible   156   PT5C   Telescopic Pick Up Tool   535   PWC6   Wire Stripper/Cutter Pliers   155   RXFMS606B   Metric Flare Nut Wrench Set, 6-Point, 19/16"   187   S9706KRA   36" Dr. Spark Plug Retention Socket, 6-Point, 19/16"   187   S9706KRA   36" Dr. Spark Plug Retention Socket, 6-Point, 19/16"   187   S9706KRA   36" Dr. Spark Plug Retention Socket, 6-Point, 19/16"   187   S9706KRA   36" Dr. Spark Plug Retention Socket, 6-Point, 19/16"   187   S9706KRA	117TMM	1/4" Dr. Metric Starter Set (17 pcs)	81
212EFTXY   36" and 1/4" Dr. Torx® Driver Set (12 pcs)   52   212EFMY   36" Dr. Metric Socket Set, 6-Point (12 pcs)   25   212EFMY   36" Dr. Metric Deep Socket Set, 6-Point (12 pcs)   26   317AMMPC   1/2" Dr. Metric Gen. Service Set, 6-Point (17 pcs)   88   91ACP   Adjustable Joint Pfliers   153   97CCP   Needle Nose Pfliers   153   1650   Prybar, 16" long   149   AC5B   Wire Brush   578   AWM110DHK   Metric Hex Wrench Set (11 pcs)   118   BP16B   Ball Peen Hammer, 16 oz.   175   CSABC   Carbon Scraper   181   CT4G   Circuit Tester   409   ECF201A   3 watt LED Flashlight   496   ECF201A   3 watt LED Flashlight   496   ECF201A   Adjustable Wrench, Cushion Handle, 12"   120   EB316B   Ignition/Spark Plug Gauge Set (18 blades)   531   EB360C   Feeler Gauge Set (8 blades)   532   EB361A   Gapper Gauge   532   EB361A   Gapper Gauge   532   EBM320   Metric Feeler Gauge Set (20 blades)   531   EFB361A   Gapper Gauge   532   EBM320   Metric Feeler Gauge Set (20 blades)   531   EFB361   Square Drive Adaptor   75   GA295   Mirror   534   GSAF1E   Square Drive Adaptor   75   HBPT16   Plastic Tip Hammer, 16 oz.   174   HSG319   Hacksaw   176   LP10WR   Locking Pflers, 10" long   161   DEXM710B   Metric Combination Wrench Set, 12-Point (10 pcs)   97   PK53A   Scraper   182   PL300CF   Needle Nose/Diagonal Cutter/Pflers Set (3 pcs)   153   PPC710ABK   Punch and Chisel Set (11 pcs)   170   PRH57A   Retaining Ring Pflers, Convertible   156   Telescopic Pick Up Tool   535   PWC6   Wire Stripper/Cutter Pflers   155   RXFMS606B   Metric Flare Nut Wrench Set, 6-Point, 13/16"   187   S9704KR   3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/6"   187   S9704KR   3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/6"   187   S9704KR   3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/6"   187   S9704KR   3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/6"   187   S9704KR   3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/6"   187   S9704KB   3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/6"   187   S9704KB   3/6" Dr. Spark Plug Reten	2004BSKA	Battery Service Kit (4 pcs)	435
212FSMY   36" Dr. Metric Socket Set, 6-Point (12 pcs)   25   212SFSMY   36" Dr. Metric Deep Socket Set, 6-Point (12 pcs)   26   317AMMPC   1/2" Dr. Metric Gen. Service Set, 6-Point (17 pcs)   88   91ACP   Adjustable Joint Pliers   153   97CCP   Needle Nose Pliers   153   1650   Prybar, 16" long   149   AC5B   Wire Brush   578   AWM110DHK   Metric Hex Wrench Set (11 pcs)   118   BP16B   Ball Peen Hammer, 16 oz.   175   CSABC   Carbon Scraper   181   CT4G   Circuit Tester   409   ECF201A   3 watt LED Flashlight   496   EF80   3/6" Dr. Sealed Ratchet   8   FADH12A   Adjustable Wrench, Cushion Handle, 12"   120   FB316B   Ignition/Spark Plug Gauge Set (18 blades)   531   FB360C   Feeler Gauge Set (6 blades)   532   FB361A   Gapper Gauge   532   FB3320   Metric Feeler Gauge Set (20 blades)   531   FLF80   3/6" Dr. Long Flex Head Sealed Ratchet   8   FXK11   3/6" 8" Dr. Extension, 11" long   67   GA295   Mirror   534   GSAF1E   Square Drive Adaptor   75   HBPT16   Plastic Tip Hammer, 16 oz.   174   HSG319   Hacksaw   176   LP10WR   Locking Pliers, 10" long   161   OEXM710B   Metric Combination Wrench Set, 12-Point (10 pcs)   97   PK53A   Scraper   182   PL300CF   Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)   153   PPC710ABK   Punch and Chisel Set (11 pcs)   170   PRH57A   Retaining Ring Pliers, convertible   156   PTSC   Telescopic Pick Up Tool   535   PWC6   Wire Stripper/Cutter Pliers   155   RXFMS606B   Metric Flare Nut Wrench Set, 6-Point, 13/16"   187   S9704KR   3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"   187   S9704KR   3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"   187   S9704KR   3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"   187   S9704KR   3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"   187   S9704KR   3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"   187   S9704KR   3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"   187   S9704KR   3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/8"   187   S9706KRA   3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/8"	206EAU		75
212SFSMY   3%" Dr. Metric Deep Socket Set, 6-Point (12 pcs)   26	212EFTXY	3/8" and 1/4" Dr. Torx® Driver Set (12 pcs)	52
317AMMPC	212FSMY	3/8" Dr. Metric Socket Set, 6-Point (12 pcs)	25
Part	212SFSMY	3/8" Dr. Metric Deep Socket Set, 6-Point (12 pcs)	26
Needle Nose Pliers   153	317AMMPC	1/2" Dr. Metric Gen. Service Set, 6-Point (17 pcs)	88
Resident	91ACP	Adjustable Joint Pliers	153
AC5B	97CCP	Needle Nose Pliers	153
AWM110DHK         Metric Hex Wrench Set (11 pcs)         118           BP16B         Ball Peen Hammer, 16 oz.         175           CSA8C         Carbon Scraper         181           CT4G         Circuit Tester         409           ECF201A         3 watt LED Flashlight         496           F80         3/6" Dr. Sealed Ratchet         8           FADH12A         Adjustable Wrench, Cushion Handle, 12"         120           FB316B         Ignition/Spark Plug Gauge Set (18 blades)         531           FB36CC         Feeler Gauge         54 (6 blades)         532           FB361A         Gapper Gauge         532           FB361A         Gapper Gauge         532           FB32O         Metric Feeler Gauge Set (20 blades)         531           FLF80         3/6" Dr. Long Flex Head Sealed Ratchet         8           FXK11         3/6" 8" Dr. Extension, 11" long         67           GA295         Mirror         534           GSAF1E         Square Drive Adaptor         75           HBPT16         Plastic Tip Hammer, 16 oz.         174           HBSG319         Hacksaw         176           LP10WR         Locking Pliers, 10" long         161           OEXM710B	1650	Prybar, 16" long	149
BP16B	AC5B	Wire Brush	578
CSA8C         Carbon Scraper         181           CT4G         Circuit Tester         409           ECF201A         3 watt LED Flashlight         496           F80         36" Dr. Sealed Ratchet         8           FADH12A         Adjustable Wrench, Cushion Handle, 12"         120           FB316B         Ignition/Spark Plug Gauge Set (18 blades)         531           FB360C         Feeler Gauge Set (6 blades)         532           FB361A         Gapper Gauge         532           FBM320         Metric Feeler Gauge Set (20 blades)         531           FL80         36" Dr. Long Flex Head Sealed Ratchet         8           FXK11         36" 8" Dr. Extension, 11" long         67           GA295         Mirror         534           GSAF1E         Square Drive Adaptor         75           HBPT16         Plastic Tip Hammer, 16 oz.         174           HSG319         Hacksaw         176           LP10WR         Locking Pliers, 10" long         161           OEXM710B         Metric Combination Wrench Set, 12-Point (10 pcs)         97           PK53A         Scraper         182           PL300CF         Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)         153           PPC	AWM110DHK	Metric Hex Wrench Set (11 pcs)	118
CT4G         Circuit Tester         409           ECF201A         3 watt LED Flashlight         496           F80         36" Dr. Sealed Ratchet         8           FADH12A         Adjustable Wrench, Cushion Handle, 12"         120           FB316B         Ignition/Spark Plug Gauge Set (18 blades)         531           FB360C         Feeler Gauge Set (6 blades)         532           FB361A         Gapper Gauge         532           FBM320         Metric Feeler Gauge Set (20 blades)         531           FLF80         36" Dr. Long Flex Head Sealed Ratchet         8           FXK11         36" 8" Dr. Extension, 11" long         67           GA295         Mirror         534           GSAF1E         Square Drive Adaptor         75           HBPT16         Plastic Tip Hammer, 16 oz.         174           HSG319         Hacksaw         176           LP10WR         Locking Pliers, 10" long         161           OEXM710B         Metric Combination Wrench Set, 12-Point (10 pcs)         97           PK53A         Scraper         182           PL300CF         Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)         153           PPC710ABK         Punch and Chisel Set (11 pcs)         170	BP16B	Ball Peen Hammer, 16 oz.	175
ECF201A         3 watt LED Flashlight         496           F80         3/6" Dr. Sealed Ratchet         8           FADH12A         Adjustable Wrench, Cushion Handle, 12"         120           FB316B         Ignition/Spark Plug Gauge Set (18 blades)         531           FB360C         Feeler Gauge Set (6 blades)         532           FB361A         Gapper Gauge         532           FB320         Metric Feeler Gauge Set (20 blades)         531           FLF80         3/6" Dr. Long Flex Head Sealed Ratchet         8           FXK11         3/6" 8" Dr. Extension, 11" long         67           GA295         Mirror         534           GSAF1E         Square Drive Adaptor         75           HBPT16         Plastic Tip Hammer, 16 oz.         174           HSG319         Hacksaw         176           LP10WR         Locking Pliers, 10" long         161           OEXM710B         Metric Combination Wrench Set, 12-Point (10 pcs)         97           PK53A         Scraper         182           PL300CF         Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)         153           PPC710ABK         Punch and Chisel Set (11 pcs)         170           PRH57A         Retaining Ring Pliers, Convertible <td< th=""><th>CSA8C</th><th>Carbon Scraper</th><th>181</th></td<>	CSA8C	Carbon Scraper	181
F80	CT4G	Circuit Tester	409
FADH12A	ECF201A	3 watt LED Flashlight	496
FB316B   Ignition/Spark Plug Gauge Set (18 blades)   531     FB360C   Feeler Gauge Set (6 blades)   532     FB361A   Gapper Gauge   532     FBM320   Metric Feeler Gauge Set (20 blades)   531     FLF80   3%" Dr. Long Flex Head Sealed Ratchet   8     FXK11   3%" 8" Dr. Extension, 11" long   67     GA295   Mirror   534     GSAF1E   Square Drive Adaptor   75     HBPT16   Plastic Tip Hammer, 16 oz.   174     HSG319   Hacksaw   176     LP10WR   Locking Pliers, 10" long   161     DEXM710B   Metric Combination Wrench Set, 12-Point (10 pcs)   97     PK53A   Scraper   182     PL300CF   Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)   153     PPC710ABK   Punch and Chisel Set (11 pcs)   170     PRH57A   Retaining Ring Pliers, Convertible   156     PT5C   Telescopic Pick Up Tool   535     PWC6   Wire Stripper/Cutter Pliers   155     RXFMS606B   Metric Flare Nut Wrench Set, 6-Point, 13/16"   187     S9704KR   3%" Dr. Spark Plug Retention Socket, 6-Point, 13/16"   187     SGA173BR   Radiator Hose Tool   451     SGA320440   Miniature Awl/Pick Set, Orange   145     SGT4BR   Standard Shank Driver   74     SMDX800   Combination Screwdriver, Orange   137     TMXK60   14" Dr. Extension, 6" long   65	F80	3/8" Dr. Sealed Ratchet	8
FB360C   Feeler Gauge Set (6 blades)   532	FADH12A	Adjustable Wrench, Cushion Handle, 12"	120
FB361A   Gapper Gauge   532     FBM320   Metric Feeler Gauge Set (20 blades)   531     FLF80   36" Dr. Long Flex Head Sealed Ratchet   8     FXK11   36" 8" B" Dr. Extension, 11" long   67     GA295   Mirror   534     GSAF1E   Square Drive Adaptor   75     HBPT16   Plastic Tip Hammer, 16 oz.   174     HSG319   Hacksaw   176     LP10WR   Locking Pliers, 10" long   161     OEXM710B   Metric Combination Wrench Set, 12-Point (10 pcs)   97     PK53A   Scraper   182     PL300CF   Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)   153     PPC710ABK   Punch and Chisel Set (11 pcs)   170     PRH57A   Retaining Ring Pliers, Convertible   156     PT5C   Telescopic Pick Up Tool   535     PWC6   Wire Stripper/Cutter Pliers   155     RXFMS606B   Metric Flare Nut Wrench Set, 6-Point (6 pcs)   110     S9704KR   36" Dr. Spark Plug Retention Socket, 6-Point, 13/16"   187     S9706KRA   36" Dr. Spark Plug Retention Socket, 6-Point, 5/8"   187     SGA173BR   Radiator Hose Tool   451     SGA3204AO   Miniature Awl/Pick Set, Orange   145     SGT4BR   Standard Shank Driver   74     SHDX800   Combination Screwdriver, Orange   137     TMXK60   14" Dr. Extension, 6" long   65	FB316B	Ignition/Spark Plug Gauge Set (18 blades)	531
FBM320         Metric Feeler Gauge Set (20 blades)         531           FLF80         ¾6" Dr. Long Flex Head Sealed Ratchet         8           FXK11         ¾6" 8" Dr. Extension, 11" long         67           GA295         Mirror         534           GSAF1E         Square Drive Adaptor         75           HBPT16         Plastic Tip Hammer, 16 oz.         174           HSG319         Hacksaw         176           LP10WR         Locking Pliers, 10" long         161           OEXM710B         Metric Combination Wrench Set, 12-Point (10 pcs)         97           PK53A         Scraper         182           PL300CF         Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)         153           PPC710ABK         Punch and Chisel Set (11 pcs)         170           PRH57A         Retaining Ring Pliers, Convertible         156           PT5C         Telescopic Pick Up Tool         535           PWC6         Wire Stripper/Cutter Pliers         155           RXFMS60B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         ¾6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         ¾6" Dr. Spark Plug Retention Socket, 6-Point, 5/8"         187           SGA1	FB360C	Feeler Gauge Set (6 blades)	532
FBM320         Metric Feeler Gauge Set (20 blades)         531           FLF80         %e" Dr. Long Flex Head Sealed Ratchet         8           FXK11         %e" B" Dr. Extension, 11" long         67           GA295         Mirror         534           GSAF1E         Square Drive Adaptor         75           HBPT16         Plastic Tip Hammer, 16 oz.         174           HSG319         Hacksaw         176           LP10WR         Locking Pliers, 10" long         161           OEXM710B         Metric Combination Wrench Set, 12-Point (10 pcs)         97           PK53A         Scraper         182           PL300CF         Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)         153           PPC710ABK         Punch and Chisel Set (11 pcs)         170           PRH57A         Retaining Ring Pliers, Convertible         156           PT5C         Telescopic Pick Up Tool         535           PWC6         Wire Stripper/Cutter Pliers         155           RXFMS60B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/6"         187           SG	FB361A	Gapper Gauge	532
FXK11         3/6" 8" Dr. Extension, 11" long         67           GA295         Mirror         534           GSAF1E         Square Drive Adaptor         75           HBPT16         Plastic Tip Hammer, 16 oz.         174           HSG319         Hacksaw         176           LP10WR         Locking Pliers, 10" long         161           OEXM710B         Metric Combination Wrench Set, 12-Point (10 pcs)         97           PK53A         Scraper         182           PL300CF         Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)         153           PPC710ABK         Punch and Chisel Set (11 pcs)         170           PRH57A         Retaining Ring Pilers, Convertible         156           PT5C         Telescopic Pick Up Tool         535           PWC6         Wire Stripper/Cutter Pilers         155           RXFMS606B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/6"         187           SGA173BR         Radiator Hose Tool         451           SGA3204A0         Miniature Awl/Pick Set, Orange         145           SGT4BR	FBM320	Metric Feeler Gauge Set (20 blades)	531
GA295         Mirror         534           GSAF1E         Square Drive Adaptor         75           HBPT16         Plastic Tip Hammer, 16 oz.         174           HSG319         Hacksaw         176           LP10WR         Locking Pliers, 10" long         161           DEXM710B         Metric Combination Wrench Set, 12-Point (10 pcs)         97           PK53A         Scraper         182           PL300CF         Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)         153           PPC710ABK         Punch and Chisel Set (11 pcs)         170           PRH57A         Retaining Ring Pliers, Convertible         156           PT5C         Telescopic Pick Up Tool         535           PWC6         Wire Stripper/Cutter Pliers         155           RXFMS606B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         ½" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         ¾" Dr. Spark Plug Retention Socket, 6-Point, 5/6"         187           SGA173BR         Radiator Hose Tool         451           SGA3204A0         Miniature Awl/Pick Set, Orange         145           SGT4BR         Standard Shank Driver         74           SHDX800         Comb	FLF80		
GSAF1E         Square Drive Adaptor         75           HBPT16         Plastic Tip Hammer, 16 oz.         174           HSG319         Hacksaw         176           LP10WR         Locking Pliers, 10" long         161           OEXM710B         Metric Combination Wrench Set, 12-Point (10 pcs)         97           PK53A         Scraper         182           PL300CF         Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)         153           PPC710ABK         Punch and Chisel Set (11 pcs)         170           PRH57A         Retaining Ring Pliers, Convertible         156           PT5C         Telescopic Pick Up Tool         535           PWC6         Wire Stripper/Cutter Pliers         155           RXFMS606B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/8"         187           SGA173BR         Radiator Hose Tool         451           SGA3204A0         Miniature Awl/Pick Set, Orange         145           SGA54BR         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129	FXK11	3/8" 8" Dr. Extension, 11" long 67	
HBPT16	GA295	Mirror 534	
HSG319	GSAF1E	Square Drive Adaptor	75
LP10WR	HBPT16	Plastic Tip Hammer, 16 oz.	174
OEXM710B         Metric Combination Wrench Set, 12-Point (10 pcs)         97           PK53A         Scraper         182           PL300CF         Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)         153           PPC710ABK         Punch and Chisel Set (11 pcs)         170           PRH57A         Retaining Ring Pliers, Convertible         156           PT5C         Telescopic Pick Up Tool         535           PWC6         Wire Stripper/Cutter Pliers         155           RXFMS606B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         3%" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         3%" Dr. Spark Plug Retention Socket, 6-Point, 5/8"         187           SGA173BR         Radiator Hose Tool         451           SGA3204A0         Miniature Awl/Pick Set, Orange         145           SGA4204BO         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129           SDMR4BO         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         1/4" Dr. Extension, 6" long         65	HSG319		
PK53A         Scraper         182           PL300CF         Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)         153           PPC710ABK         Punch and Chisel Set (11 pcs)         170           PRH57A         Retaining Ring Pliers, Convertible         156           PT5C         Telescopic Pick Up Tool         535           PWC6         Wire Stripper/Cutter Pliers         155           RXFMS606B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/6"         187           SGA173BR         Radiator Hose Tool         451           SGA3204A0         Miniature Awl/Pick Set, Orange         145           SGT4BR         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129           SDMR4B0         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         1/4" Dr. Extension, 6" long         65	LP10WR	Locking Pliers, 10" long	161
PL300CF         Needle Nose/Diagonal Cutter/Pliers Set (3 pcs)         153           PPC710ABK         Punch and Chisel Set (11 pcs)         170           PRH57A         Retaining Ring Pliers, Convertible         156           PT5C         Telescopic Pick Up Tool         535           PWC6         Wire Stripper/Cutter Pliers         155           RXFMS606B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/8"         187           SGA173BR         Radiator Hose Tool         451           SGA3204A0         Miniature Awl/Pick Set, Orange         145           SGT4BR         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129           SDMR4B0         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         1/4" Dr. Extension, 6" long         65	OEXM710B	Metric Combination Wrench Set, 12-Point (10 pcs)	97
PPC710ABK         Punch and Chisel Set (11 pcs)         170           PRH57A         Retaining Ring Pliers, Convertible         156           PT5C         Telescopic Pick Up Tool         535           PWC6         Wire Stripper/Cutter Pliers         155           RXFMS606B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/8"         187           SGA173BR         Radiator Hose Tool         451           SGA3A204A0         Miniature Awl/Pick Set, Orange         145           SGT4BR         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129           SDMR4B0         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         1/4" Dr. Extension, 6" long         65	PK53A	Scraper	182
PRH57A         Retaining Ring Pliers, Convertible         156           PT5C         Telescopic Pick Up Tool         535           PWC6         Wire Stripper/Cutter Pliers         155           RXFMS606B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         3½" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         3½" Dr. Spark Plug Retention Socket, 6-Point, 5½"         187           SGA173BR         Radiator Hose Tool         451           SGA8A204A0         Miniature Awl/Pick Set, Orange         145           SGT4BR         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129           SDMR4B0         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         1/4" Dr. Extension, 6" long         65	PL300CF		153
PT5C         Telescopic Pick Up Tool         535           PWC6         Wire Stripper/Cutter Pliers         155           RXFMS606B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         3½" Dr. Spark Plug Retention Socket, 6-Point, ¹3½"         187           S9706KRA         3½" Dr. Spark Plug Retention Socket, 6-Point, ½%"         187           SGA173BR         Radiator Hose Tool         451           SGASA204A0         Miniature Awl/Pick Set, Orange         145           SGT4BR         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129           SDMR4B0         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         ½" Dr. Extension, 6" long         65	PPC710ABK		170
PWC6         Wire Stripper/Cutter Pliers         155           RXFMS606B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         3½" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         3½" Dr. Spark Plug Retention Socket, 6-Point, 5½"         187           SGA173BR         Radiator Hose Tool         451           SGA8204A0         Miniature Awl/Pick Set, Orange         145           SGT4BR         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129           SDMR4B0         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         1/4" Dr. Extension, 6" long         65	PRH57A		156
RXFMS606B         Metric Flare Nut Wrench Set, 6-Point (6 pcs)         110           S9704KR         3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/6"         187           SGA173BR         Radiator Hose Tool         451           SGA8204A0         Miniature Awl/Pick Set, Orange         145           SGT4BR         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129           SDMR4B0         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         1/4" Dr. Extension, 6" long         65	PT5C	Telescopic Pick Up Tool	535
S9704KR         3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16"         187           S9706KRA         3/6" Dr. Spark Plug Retention Socket, 6-Point, 5/6"         187           SGA173BR         Radiator Hose Tool         451           SGA8204A0         Miniature Awl/Pick Set, Orange         145           SGT4BR         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129           SDMR4B0         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         1/4" Dr. Extension, 6" long         65	PWC6		155
\$\sqrt{8}\text{" Dr. Spark Plug Retention Socket, 6-Point, 5/8"} 187 \$\sqrt{8}\text{GA173BR} \text{Radiator Hose Tool} 451 \$\sqrt{8}\text{GA5A204A0} \text{Miniature Awl/Pick Set, Orange} 145 \$\sqrt{8}\text{GA5A204BR} \text{Standard Shank Driver} 74 \$\sqrt{8}\text{SHDX800} \text{Combination Screwdriver Set, Orange} 129 \$\sqrt{8}\text{SDMR4B0} \text{Ratcheting Magnetic Screwdriver, Orange} 137 \$\text{TMXK60} 14\text{" Dr. Extension, 6" long} 65	RXFMS606B	Metric Flare Nut Wrench Set, 6-Point (6 pcs) 110	
SGA173BR         Radiator Hose Tool         451           SGASA204A0         Miniature Awl/Pick Set, Orange         145           SGT4BR         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129           SSDMR4B0         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         1/4" Dr. Extension, 6" long         65	S9704KR	3/6" Dr. Spark Plug Retention Socket, 6-Point, 13/16" 187	
SGASA204A0         Miniature Awl/Pick Set, Orange         145           SGT4BR         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129           SSDMR4B0         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         1/4" Dr. Extension, 6" long         65		3	
SGT4BR         Standard Shank Driver         74           SHDX800         Combination Screwdriver Set, Orange         129           SSDMR4B0         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         1/4" Dr. Extension, 6" long         65			
SHDX800         Combination Screwdriver Set, Orange         129           SSDMR4B0         Ratcheting Magnetic Screwdriver, Orange         137           TMXK60         1/4" Dr. Extension, 6" long         65		Miniature Awl/Pick Set, Orange 14	
SSDMR4BO Ratcheting Magnetic Screwdriver, Orange 137  TMXK60 1/4" Dr. Extension, 6" long 65		Standard Shank Driver 74	
<b>TMXK60</b> 1/4" Dr. Extension, 6" long 65			
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TPMA25EM Metric Tape Rule, 5M 533			
	TPMA25EM	Metric Tape Rule, 5M	533

# 9000GM20 Add-on Group

70000III.2	O Add-oil Gloup	
Stock No.	Description	Page 34
206FSUMA	SUMA 3/8" Dr. Metric Shallow Universal Socket Set, 6-Point (6 pcs)	
207EFAMY	AMY 3/8" Dr. Metric Hex Driver Set (7 pcs)	
210FRHMA	3/8" Dr. Met. Flare Nut Wrench Set, 6-Point (10 pcs)	111
310IMMYA	1/2" Dr. Shallow Metric Impact Socket Set, 6-Point (10 pcs)	40
310SIMMYA	1/2" Dr. Deep Metric Impact Socket Set, 6-Point (10 pcs)	41
313TSMYA	½" Dr. Metric Deep Socket Set, 12-Point (13 pcs)	37
388CF	Hi Leverage Cutters, 7 3/4" long	151
61ACP	Duck Bill Pliers, 7 3/4" long	152
1250	Prybar, 12" long	149
AC58D	Wire Brush	578
AWP160	Adjustable Joint Tonque & Groove Pliers	160
BP24B	Ball Peen Hammer, 24 oz.	175
CJ2001P	Bolt Grip Puller Set	205
CSA12CO	Carbon Scraper	181
E1020	Extractor Set (20 pcs)	195
FADH8A	Adjustable Wrench, Cushion Handle, 8"	120
FL80	3/8" Dr. Long Handle Sealed Ratchet	8
FX24A	3/8" Dr. Extension, 24" long	67
FXK4	3/8" Dr. Extension, 4" long	67
FXK8	3/8" Dr. Extension, 8" long	67
GA3000B	Ear Protectors	582
HBFE32	Dead Blow Hammer, 32 oz.	173
IP80D	1/2" Dr. Impact Swivel Socket	78
JCK7D	Fender Cover	525
JT13A	Blow Gun	298
LP7WR	Locking Pliers, 7" long	161
MG725	Heavy Duty Air Impact Wrench, 1/2" Dr.	265
OEXM200B	Metric Combination Wrench, 12-Point, 20mm	97
MTK100	Utility Knife 97	
OEXM210B	Metric Combination Wrench, 12-Point, 21mm	97
OEXM220B	Metric Combination Wrench, 12-Point, 22mm	97
OEXM6B	Metric Short Combination Wrench, 12-Point, 6mm	99
OEXM7B	Metric Short Combination Wrench, 12-Point, 7mm	99
OEXM8B	Metric Short Combination Wrench, 12-Point, 8mm	
OEXM9B		
OEXSM710B Metric Short Combination Wrench Set 12-Point (10 pcs)		99 99
PPC104A	Pin Punch, 1/8"	170
PPC108A	Pin Punch, 1/4"	170
PPC204A	Starter Punch, 1/8"	170
PPC208A	Starter Punch, 1/4"	170
PPC3A	Center Punch, 5/16"	170
QD3RM30	1/2" Dr. Click Type Torque Wrench, 30 kg•m	231
S8	½" Dr. Universal Joint	<u> </u>
SGCP1BR	Cotter Pin Puller	451
SGHBF500A	File Set with Handles (4 pcs)	183
SL80	1/2" Dr. Long Handle Sealed Ratchet	10
SN24C	1/2" Dr. Breaker Bar, 24" long	16
SPBS240	Prybar with Handle, 24" long, Orange	147
SRPC105	Retaining Ring Pliers	157
SXK3	1/2" Dr. Extension, 3" long	69
TA3	1/4" to 3/8" Dr. Adaptor	73
TC28C	Tube Cutter	184
TDM117A	Metric Tap and Die Set (41 pcs)	193
TF72	1/4" Dr. Flex Head Sealed Ratchet	7
TFM428	Flaring Tool	184
TMX1	1/4" Dr. Extension, 1" long	65
TMXK140	1/4" Dr. Extension, 14" long	65
UTK100	Utility Knife	180

# **Metric Set Contents**

# 9000GM30 Add-on Group

Stock No.	Description	Page
106ATMXWP	1/4" Dr. Wobble Extension Set (6 pcs)	66
196CF	Needle Nose Pliers with Cutter, 7 1/8"	152
206AFXWP 214IMFMYA	3/8" Dr. Wobble Plus Extension Set (6 pcs) 3/8" Dr. Shallow Impact Socket Set, 6-Point (14 pcs)	68 31
214SIMFMYA	3/8" Dr. Metric Deep Impact Socket Set, 6-Point (14 pcs)	32
497CCP	90° Angle Needle Nose Pliers, 6 5/8"	152
650 AWP120	Prybar, 6" Adjustable Joint Tongue and Groove Pliers, 12 3/4"	149 154
BP8B	Ball Peen Hammer, 8 oz.	175
CJ2002	Puller Set	204
F12LA FADH10A	3/8" Dr. Breaker Bar Adjustable Wrench, Cushion Handle, 10"	16 110
FAR7200	Super Duty Air Ratchet, 3/8" Dr.	269
FBF80	3/8" Dr. Bent Flex Head Sealed Ratchet	8
FK80 HBBD32	3/8" Dr. Short Handle Ratchet Dead Blow Ball Peen Hammer, 32 oz.	8 173
HBBT24	Bronze Tip Hammer, 24 oz.	174
IMM200	1/2" Dr. Shallow Impact Socket, 6-Point, 20mm	40
IMM210 IMM220	1/2" Dr. Shallow Impact Socket, 6-Point, 21mm	40 40
IMM230	1/2" Dr. Shallow Impact Socket, 6-Point, 22mm 1/2" Dr. Shallow Impact Socket, 6-Point, 23mm	40
IMM240	1/2" Dr. Shallow Impact Socket, 6-Point, 24mm	40
IPF800B	3/4" Dr. Impact Universal Joint	78
IPFM10C IPFM12C	3/6" Dr. Metric Shallow Swivel Impact Socket, 10mm 3/6" Dr. Metric Shallow Swivel Impact Socket, 12mm	35 35
IPFM13C	3/8" Dr. Metric Shallow Swivel Impact Socket, 13mm	35
IPFM14C	3/8" Dr. Metric Shallow Swivel Impact Socket, 14mm	35
IPFM15C IPFM16C	3/8" Dr. Metric Shallow Swivel Impact Socket, 15mm 3/8" Dr. Metric Shallow Swivel Impact Socket, 16mm	35 35
IPFM17C	3/8" Dr. Metric Shallow Swivel Impact Socket, 17mm	35
IPFM18C	3/8" Dr. Metric Shallow Swivel Impact Socket, 18mm	35
IPFM19C IPFM9C	3/6" Dr. Metric Shallow Swivel Impact Socket, 19mm 3/6" Dr. Metric Shallow Swivel Impact Socket, 9mm	35 35
JCW60R	Creeper	526
KB2178	Kit Bag	170
MG325 OEXM230B	3/8" Dr. Air Impact Wrench Metric Combination Wrench, 12-Point, 23mm	267 97
OEXM240B	Metric Combination Wrench, 12-Point, 23mm  Metric Combination Wrench, 12-Point, 24mm	97
OEXM270B	Metric Combination Wrench, 12-Point, 27mm	97
OEXM300B OEXM90B	Metric Combination Wrench, 12-Point, 30mm Metric Combination Wrench, 12-Point, 9mm	97 97
OXIM710B	Metric Midget Comb. Wrench Set, 12-Point (10 pcs)	100
OXIM7B	Metric Midget Combination Wrench, 12-Point, 7mm	100
OXIM8B OXIM9B	Metric Midget Combination Wrench, 12-Point, 8mm	100 100
PPB1012A	Metric Midget Combination Wrench, 12-Point, 9mm Bronze Tapered Punch, 3/8"	171
PPC110A	Pin Punch, 5/16"	170
PPC112 PPC210A	Pin Punch, ¾" Starter Punch, ½6"	170 170
PPC5A	Punch and Chisel Holder	170
PPC824B	Flat Chisel, ¾"	170
PPC828B PT28E	Flat Chisel, 7%" Pick Up Tool	170 535
PWC14	Wire Stripper/Cutter/Bolt Cutter	155
QD2RM1000	Metric Adj. Click Type Torque Wrench 3/8"	231
RTD48 S9704KFUA	Rethreading Kit  3/8" Dr. Spark Plug Universal Socket, 11/16"	189
S9704KFUA S9706KRFUA	3/8" Dr. Spark Plug Universal Socket, 1/16" 3/8" Dr. Spark Plug Universal Socket, 6-Point, 5/8"	187 187
SDM400A	Screwdriver Bit Set (37 pcs)	141
SF80 SGD304BR	1/2" Dr. Sealed Flex Head Ratchet	10
SHDP1620	Flat Tip Electronics Sc. Dr., .018" x 1/8" x 3" Phillips® Tip Screwdriver #2, Orange	130 131
SHDP62IR0	Phillips® Screwdriver, #2, Orange	131
SHDP63IR0	Phillips® Tip Screwdriver #3, Orange	131
SIMM200 SIMM210	1/2" Dr. Deep Impact Socket, 6-Point, 20mm 1/2" Dr. Deep Impact Socket, 6-Point, 21mm	41 41
SIMM220	½" Dr. Deep Impact Socket, 6-Point, 22mm	41
SIMM230	1/2" Dr. Deep Impact Socket, 6-Point, 23mm	41
SIMM240 SPBS120	1/2" Dr. Deep Impact Socket, 6-Point, 24mm Prybar with Handle, 12", Orange	41 147
SSDE42C	Flat Tip Electronics Sc. Dr., .018" x 1/8" x 2"	132
SSDE44C	Flat Tip Electronics Sc. Dr., .018" x 1/8" x 4"	132
SSDE46C SSDE48C	Flat Tip Electronics Sc. Dr., .018" x 1/8" x 6" Flat Tip Electronics Sc. Dr., .018" x 1/8" x 8"	132 132
SSDMR1A0	Ratcheting Magnetic Screwdriver, Orange	137
SX2	½" Dr. Extension, 2"	69
TC123C	Tube Cutter 1/4" Dr. Flexible Extension, 6"	184 66
TM61A TMXK110	1/4" Dr. Flexible Extension, 6"	66 65
TWM25	1/2" Dr. Metric Socket, 6-Point, 25mm	36
TWM26	½" Dr. Metric Socket, 6-Point, 26mm	36
TWM27	16" Dr. Motrio Cooket & Point 97mm	
TWM27 TWM30	1/2" Dr. Metric Socket, 6-Point, 27mm 1/2" Dr. Metric Socket, 6-Point, 30mm	36 36
TWM27 TWM30 VSM807B	1/2" Dr. Metric Socket, 6-Point, 30mm Metric Open End Wrench Set (7 pcs)	36 108
TWM30	1/2" Dr. Metric Socket, 6-Point, 30mm	36

## 9000GM40 Add-on Group

9000GM4C	Ada-on Group		
Stock No.	Description	Page	
106ETMAMY	1/4" Dr. Metric Hex Driver Set (6 pcs)	55	
10SSD	Offset Flat Tip Screwdriver	135	
111TMUSMA	1/4" Dr. Metric U-Socket Set (11 pcs)	23	
120SSDP	Phillips® Offset Screwdriver, #1-#2	135	
20SSD 307IPLMY	Offset Flat Tip Screwdriver  1/2" Dr. Impact Swivel Sockets, 6-Point (7 pcs)	135 44	
2050	Prvbar. 20"	149	
AWP65	Adjustable Joint Tongue & Groove Pliers	160	
BP12B	Ball Peen Hammer, 12 oz.	175	
CHN480	Adjustable Joint Pliers, 20"	160	
CJ2003A	Rear Axle Puller Set	204	
CJ2004 CJ2005	Interchangeable Puller Set Puller Accessory Set	204 204	
CM6551	Miniature Screwdriver Set	135	
DBTR129	Drill Bit Set 1/16"-1/4" (29 pcs)	286	
E703BCG	Elec. Needle Nose Pliers, Serrated Jaws	158	
E704BCG	Elec. Needle Nose Pliers, 60° Bent Tip, Non-Serrated	158	
E710BCG	Taper Head Electronic Cutters, True Flush Cut	159	
FADH6A	Adjustable Wrench, Cushion Handle, 6"	120	
FAR25A FSM61	1/4" Dr. Air Ratchet 3/8" Dr. Metric Socket, 6-Point, 6mm	269 25	
FSM71	3/8" Dr. Metric Socket, 6-Point, 7mm	25	
FSUM11A	3/8" Dr. Shallow Universal Socket, 6-Point, 11mm	34	
FSUM16A	3/8" Dr. Shallow Universal Socket, 6-Point, 16mm	34	
FSUM18A	3/8" Dr. Shallow Universal Socket, 6-Point, 18mm	34	
FSUM19A	3/8" Dr. Shallow Universal Socket, 6-Point, 19mm	34	
FX18 FX36	3%" Dr. Extension, 18" 3%" Dr. Extension, 36"	67 67	
HBF100	Mixed File Set (6 pcs)	183	
HBFE48	Dead Blow Hammer, 48 oz.	173	
IMTMM10	1/4" Dr. Metric Impact Socket, 6-Point, 10mm	21	
IMTMM11	1/4" Dr. Metric Impact Socket, 6-Point, 11mm	21	
IMTMM12	1/4" Dr. Metric Impact Socket, 6-Point, 12mm	21	
IMTMM13	1/4" Dr. Metric Impact Socket, 6-Point, 13mm	21	
IMTMM14 IMTMM15	1/4" Dr. Metric Impact Socket, 6-Point, 14mm 1/4" Dr. Metric Impact Socket, 6-Point, 15mm	21 21	
IMTMM5	1/4" Dr. Metric Impact Socket, 6-Point, 13mm	21	
IMTMM5.5	1/4" Dr. Metric Impact Socket, 6-Point, 5.5mm	21	
IMTMM6	1/4" Dr. Metric Impact Socket, 6-Point, 6mm	21	
IMTMM7	1/4" Dr. Metric Impact Socket, 6-Point, 7mm	21	
IMTMM8	1/4" Dr. Metric Impact Socket, 6-Point, 8mm	21	
IMTMM9 LP5WR	1/4" Dr. Metric Impact Socket, 6-Point, 9mm Locking Pliers, 5"	161	
LP6LN	Long Nose Pliers, 6"	161	
NDDM1070	Metric Nut Driver Set, 6-Point (7 pcs)	140	
OEXM250B	Metric Combination Wrench, 12-Point, 25mm	97	
OEXM260B	Metric Combination Wrench, 12-Point, 26mm	97	
OEXM290B	Metric Combination Wrench, 12-Point, 29mm	97	
OEXM320B	Metric Combination Wrench, 12-Point, 32mm	97 271	
PDR3000A PPR708BK	3/8" Reversible Air Drill Roll Pin Punch Set (8 pcs)	171	
RBM604C	Metric Ratcheting Box Wrench Set, 12-Point (4 pcs)	104	
	Metric Flare Nut/Open End Wrench Set, 6-Point		
RXSM605B	(5 pcs)	109	
SFSM6	1/4" Dr. Metric Deep Socket, 6-Point, 6mm	26	
SFSM7 SHDTX3150	1/4" Dr. Metric Deep Socket, 6-Point, 7mm T15 Torx® Screwdriver, 0range	26 135	
SHDTX3200	T20 Torx Screwdriver, Orange	135	
SPBS80	Prybar with Handle, Orange, 8"	147	
SSDMR8A0	Ratcheting Magnetic Screwdriver, Orange	137	
STMM4.5	1/4" Dr. Metric Deep Socket, 6-Point, 4.5mm	19	
SX15	1/2" Dr. Extension, 15"	69	
TDM99117B	Metric Tap and Die Set (25 pcs)	193	
TMM4.5 TSM26	1/4" Dr. Metric Socket, 6-Point, 4.5mm 1/2" Dr. Metric Deep Socket, 6-Point, 26mm	18 37	
TSM27	½" Dr. Metric Deep Socket, 6-Point, 25mm	37	
TSM30	1/2" Dr. Metric Deep Socket, 6-Point, 30mm	37	
TSM32	1/2" Dr. Metric Deep Socket, 6-Point, 32mm	37	
TWM10A	1/2" Dr. Metric Socket, 6-Point, 10mm	36	
TWM11A	1/2" Dr. Metric Socket, 6-Point, 11mm 1/2" Dr. Metric Socket, 6-Point, 28mm	36	
TWM28	1/2" Dr. Metric Socket, 6-Point, 28mm 1/2" Dr. Metric Socket, 6-Point, 29mm	36	
TWM29 TWM31	½" Dr. Metric Socket, 6-Point, 29mm	36 36	
TWM32	½" Dr. Metric Socket, 6-Point, 37mm	36	
VE200A	Puller Control Board	204	

# TOOL CONTROL SET BUILDING

## **U.S. Tool Control Sets**

## Please refer to page N015 for the full set listing

## Intermediate Sets (in blue over yellow tool control foam) -

We offer many choices so you can find the system that best fits your exact needs.

Choose from a variety of ideas:



9200 Set in KRA4059 Tool Chest (US Set 2)

#### · Complete Tool Sets

- Tool Control Systems
- Tool Control Foam Inserts
- Portable Tool Control Systems
- High Visibility Tools

## **Apprentice Set**

Includes more than 100 pieces with complete Tool Control Foam System.

Stock No.	Description
KRA2055FPB0	Snap-on Top Chest
9100GS0	9100 - Tools Only
FC9100GSB-UY	9100 - Foam Only (Blue over Yellow)

## **Complete Set 2**

Includes more than 200 pieces with complete Tool Control Foam System.

Stock No.	Description
KRA4059FPB0	Snap-on Top Chest
9200AGS0	9200 - Tools Only
FC9200GSB-UY	9200 - Foam Only
1	(Blue over Yellow)



#### Complete Set 3

Includes more than 300 pieces wih complete Tool Control Foam System.

Stock No.	Description
KRA4059FPB0	Snap-on Top Chest
KRA4008EFPB0	Snap-on Roll Cab
9300GS0FPB0	9300 - Tools Only
FC9300GSB-UY	9300 - Foam Only (Blue over Yellow)

#### Complete Set 4

Includes more than 600 pieces with complete Tool Control Foam System.

Stock No.	Description
KRL751PB0	Snap-on Top Chest
KRL756CPB0	Snap-on Roll Cab
9400GS0	9400 - Tools Only
FC9400GSB-UY	9400 - Foam Only (Blue over Yellow)

# **Complete Set 5**

Includes more than 800 pieces, with complete Tool Control Foam System.

Stock No.	Description
KRL751PB0	Snap-on Top Chest
KRL756CPB0	Snap-on Roll Cab
9500GS0	9500 - Tools Only
FC9500GSB-UY	9500 - Foam Only (Blue over Yellow)

## **Complete Set 6**

Includes more than 1000 pieces with complete Tool Control Foam System.

Stock No.	Description
KRL791APB0	Snap-on Top Chest
KRL722BPB0	Snap-on Roll Cab
9600GS0	9600 - Tools Only
VF9600GSB-UY	9600 - Foam Only
	(Blue over Yellow)

#### Shown:

Blue Over Yellow (-UY)

#### Other Foam Colors Available:

- Yellow Over Red (-YR)
- · Black Over Red (-BR)
- · Black Over Yellow (-BY)

# U.S. Tool Control Set Building: Complete Tool Set Configuration sets are available with tool storage and tool control foam See below for ordering information for each configuration

9100 SERIES	9100GS0	9100GSB0	9100GSBFMBR0	9100GSBFMBY0	9100GSBFMUY0	
DESCRIPTION	U.S. APPRENTICE SET TOOLS ONLY	U.S. APPRENTICE SET TOOLS AND TOOL STORAGE	U.S. APPRENTICE SET INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM	U.S. APPRENTICE SET INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM	U.S. APPRENTICE SET INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM	
CONTENTS Refer to pages N006-N016 for		KRA2055FPB0	FC9100GSB-BR	FC9100GSB-BY	FC9100GSB-UY	
descriptions and listings for all tool sets		9200GSB	KRA2055FPB0	KRA2055FPB0	KRA2055FPB0	
9200 SERIES	9200GS0	9200GSB0	9200GSBFMBR	9200GSBFMBY	9200GSBFMUY	9200GSBFMYR
DESCRIPTION	U.S. SET 2 TOOLS ONLY	U.S. SET 2 INCLUDING TOOLS AND TOOL STORAGE	U.S. SET 2 INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM	U.S. SET 2 INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM	U.S. SET 2 INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM	U.S. SET 2 INCLUDING TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM
CONTENTS Refer to pages N006-N016 for		KRA4059	FC9200GSB-BR	FC9200GSB-BY	FC9200GSB-UY	FC9200GSB-YR
descriptions and listings for all tool sets			KRA4059FPB0	KRA4059FPB0	KRA4059FPB0	KRA4059FPB0
9300 SERIES	9300GS0	9300GSB0	9300GSBFMBR0	9300GSBFMBY0	9300GSBFMUY0	9300GSBFMYRO
DESCRIPTION	U.S. SET 3 TOOLS ONLY	U.S. SET 3 INCLUDING TOOLS AND TOOL STORAGE	U.S. SET 3 INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM	U.S. SET 3 INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM	U.S. SET 3 INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM	U.S. SET 3 INCLUDING TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM
CONTENTS		KRA4008FPB0	FC9300GSB-BR	FC9300GSB-BY	FC9300GSB-UY	FC9300GSB-YR
Refer to pages N006-N016 for		KRA4059FPB0	KRA4008FPB0	KRA4008FPB0	KRA4008FPB0	KRA4008FPB0
descriptions and listings for all tool sets			KRA4059FPB0	KRA4059FPB0	KRA4059FPB0	KRA4059FPB0
9400 SERIES	9400GS0	9400GSB0	9400GSBFMBR0	9400GSBFMBY0	9400GSBFMUY0	9400GSBFMYR0
DESCRIPTION	U.S. SET 4 TOOLS ONLY	U.S. SET 4 INCLUDING TOOLS AND TOOL STORAGE	U.S. SET 4 INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM	U.S. SET 4 INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM	U.S. SET 4 INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM	U.S. SET 4 INCLUDING TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM
CONTENTS	U.S. SET 4 TOOLS ONLY	TOOLS AND TOOL	TOOL STORAGE WITH BLACK OVER RED TOOL	TOOL STORAGE WITH BLACK OVER YELLOW	TOOL STORAGE WITH BLUE OVER YELLOW TOOL	TOOL STORAGE WITH YELLOW OVER RED TOOL
CONTENTS Refer to pages N006-N016 for	U.S. SET 4 TOOLS ONLY	TOOLS AND TOOL STORAGE	TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM	TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM	TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM	TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM
CONTENTS Refer to pages	U.S. SET 4 TOOLS ONLY	TOOLS AND TOOL STORAGE KRL751PBO	TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM FC9400GSB-BR	TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM FC9400GSB-BY	TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM FC9400GSB-UY	TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM FC9400GSB-YR
CONTENTS Refer to pages N006-N016 for descriptions and listings	U.S. SET 4 TOOLS ONLY  9500GS0	TOOLS AND TOOL STORAGE KRL751PBO	TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM FC9400GSB-BR KRL751PB0	TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM FC9400GSB-BY KRL751PB0	TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM FC9400GSB-UY KRL751PB0	TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM FC9400GSB-YR KRL751PB0
CONTENTS Refer to pages N006-N016 for descriptions and listings for all tool sets		TOOLS AND TOOL STORAGE KRL751PBO KRL756CPBO	TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM FC9400GSB-BR KRL751PB0 KRL756CPB0	TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM FC9400GSB-BY KRL751PB0 KRL756CPB0	TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM FC9400GSB-UY KRL751PB0 KRL756CPB0	TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM FC9400GSB-YR KRL751PB0 KRL756CPB0
CONTENTS Refer to pages N006-N016 for descriptions and listings for all tool sets  9500 SERIES  DESCRIPTION  CONTENTS	9500GSO	TOOLS AND TOOL STORAGE  KRL751PBO  KRL756CPBO  9500GSB0  U.S. SET 5 INCLUDING TOOLS AND TOOL	TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM  FC9400GSB-BR  KRL751PB0  KRL756CPB0  9500GSBFMBR0  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL	TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-BY  KRL751PB0  KRL756CPB0  9500GSBFMBY0  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW	TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-UY  KRL751PB0  KRL756CPB0  9500GSBFMUYO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL	TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM  FC9400GSB-YR  KRL751PB0  KRL756CPB0  9500GSBFMYRO  U.S. SET 5 INCLUDING TOOL STORAGE WITH YELLOW OVER RED TOOL
CONTENTS Refer to pages N006-N016 for descriptions and listings for all tool sets  9500 SERIES  DESCRIPTION  CONTENTS Refer to pages N006-N016 for	9500GSO	TOOLS AND TOOL STORAGE  KRL751PBO  KRL756CPBO  9500GSB0  U.S. SET 5 INCLUDING TOOLS AND TOOL STORAGE	TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM  FC9400GSB-BR  KRL751PBO  KRL756CPBO  9500GSBFMBRO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM	TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-BY  KRL751PB0  KRL756CPB0  9500GSBFMBY0  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM	TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-UY  KRL751PB0  KRL756CPB0  9500GSBFMUYO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM	TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM  FC9400GSB-YR  KRL751PB0  KRL756CPB0  9500GSBFMYR0  U.S. SET 5 INCLUDING TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM
CONTENTS Refer to pages N006-N016 for descriptions and listings for all tool sets  9500 SERIES  DESCRIPTION  CONTENTS Refer to pages	9500GSO	TOOLS AND TOOL STORAGE  KRL751PBO  KRL756CPBO  9500GSBO  U.S. SET 5 INCLUDING TOOLS AND TOOL STORAGE  KRL751PBO	TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM  FC9400GSB-BR  KRL751PB0  KRL756CPB0  9500GSBFMBR0  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM  FC9500GSB-BR	TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-BY  KRL751PBO  KRL756CPBO  9500GSBFMBYO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM  FC9500GSB-BY	TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-UY  KRL751PBO  KRL756CPBO  9500GSBFMUYO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM  FC9500GSB-UY	TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM  FC9400GSB-VR  KRL751PB0  KRL756CPB0  9500GSBFMYR0  U.S. SET 5 INCLUDING TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM FC9500GSB-YR
CONTENTS Refer to pages N006-N016 for descriptions and listings for all tool sets  9500 SERIES  DESCRIPTION  CONTENTS Refer to pages N006-N016 for descriptions and listings	9500GSO	TOOLS AND TOOL STORAGE  KRL751PBO  KRL756CPBO  9500GSBO  U.S. SET 5 INCLUDING TOOLS AND TOOL STORAGE  KRL751PBO	TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM  FC9400GSB-BR  KRL751PB0  KRL756CPB0  9500GSBFMBR0  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM  FC9500GSB-BR  KRL751PB0	TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-BY  KRL751PB0  KRL756CPB0  9500GSBFMBY0  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM  FC9500GSB-BY  KRL751PB0	TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-UY  KRL751PB0  KRL756CPB0  9500GSBFMUYO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM  FC9500GSB-UY  KRL751PB0	TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM  FC9400GSB-YR  KRL751PBO  KRL756CPBO  9500GSBFMYRO  U.S. SET 5 INCLUDING TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM  FC9500GSB-YR  KRL751PBO
CONTENTS Refer to pages N006-N016 for descriptions and listings for all tool sets  9500 SERIES  DESCRIPTION  CONTENTS Refer to pages N006-N016 for descriptions and listings for all tool sets	9500GSO  U.S. SET 5 TOOLS ONLY	TOOLS AND TOOL STORAGE  KRL751PB0  KRL756CPB0  9500GSB0  U.S. SET 5 INCLUDING TOOLS AND TOOL STORAGE  KRL751PB0  KRL756CPB0	TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM  FC9400GSB-BR  KRL751PBO  KRL756CPBO  9500GSBFMBRO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM  FC9500GSB-BR  KRL751PBO  KRL756CPBO	TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-BY  KRL751PB0  KRL756CPB0  9500GSBFMBY0  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM  FC9500GSB-BY  KRL751PB0  KRL756CPB0	TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-UY  KRL751PB0  KRL756CPB0  9500GSBFMUYO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM  FC9500GSB-UY  KRL751PB0  KRL756CPB0	TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM  FC9400GSB-YR  KRL751PB0  KRL756CPB0  9500GSBFMYRO  U.S. SET 5 INCLUDING TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM  FC9500GSB-YR  KRL751PB0  KRL756CPB0
CONTENTS Refer to pages N006-N016 for descriptions and listings for all tool sets  9500 SERIES  DESCRIPTION  CONTENTS Refer to pages N006-N016 for descriptions and listings for all tool sets  9600 SERIES  DESCRIPTION  CONTENTS	9500GS0  U.S. SET 5 TOOLS ONLY  9600GS0	TOOLS AND TOOL STORAGE  KRL751PBO  KRL756CPBO  9500GSBO  U.S. SET 5 INCLUDING TOOLS AND TOOL STORAGE  KRL751PBO  KRL756CPBO  U.S. SET 6 INCLUDING TOOLS AND TOOLS AND TOOLS AND TOOL STORAGE	TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM  FC9400GSB-BR  KRL751PBO  KRL756CPBO  9500GSBFMBRO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM  FC9500GSB-BR  KRL751PBO  KRL756CPBO  9600GSBFMBRO  U.S. SET 6 INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL	TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-BY  KRL751PBO  KRL756CPBO  9500GSBFMBYO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM  FC9500GSB-BY  KRL751PBO  KRL756CPBO  9600GSBFMBYO  U.S. SET 6 INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM	TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-UY  KRL751PBO  KRL756CPBO  9500GSBFMUYO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM  FC9500GSB-UY  KRL751PBO  KRL756CPBO  9600GSBFMUYO  U.S. SET 6 INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL	TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM  FC9400GSB-VR  KRL751PB0  KRL756CPB0  9500GSBFMYRO  U.S. SET 5 INCLUDING TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM  FC9500GSB-YR  KRL751PB0  KRL756CPB0  9600GSBFMYRO  U.S. SET 6 INCLUDING TOOL STORAGE WITH YELLOW OVER RED TOOL
CONTENTS Refer to pages N006-N016 for descriptions and listings for all tool sets  9500 SERIES  DESCRIPTION  CONTENTS Refer to pages N006-N016 for descriptions and listings for all tool sets  9600 SERIES  DESCRIPTION	9500GS0  U.S. SET 5 TOOLS ONLY  9600GS0	TOOLS AND TOOL STORAGE  KRL751PBO  KRL756CPBO  9500GSBO  U.S. SET 5 INCLUDING TOOLS AND TOOL STORAGE  KRL756CPBO  KRL756CPBO  U.S. SET 6 INCLUDING TOOLS AND TOOL STORAGE	TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM  FC9400GSB-BR  KRL751PBO  KRL756CPBO  9500GSBFMBRO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM  FC9500GSB-BR  KRL751PBO  KRL756CPBO  9600GSBFMBRO  U.S. SET 6 INCLUDING TOOL STORAGE WITH BLACK OVER RED TOOL CONTROL FOAM	TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-BY  KRL751PBO  KRL756CPBO  9500GSBFMBYO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM  FC9500GSB-BY  KRL751PBO  KRL756CPBO  9600GSBFMBYO  U.S. SET 6 INCLUDING TOOL STORAGE WITH BLACK OVER YELLOW TOOL CONTROL FOAM	TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM  FC9400GSB-UY  KRL751PB0  KRL756CPB0  9500GSBFMUYO  U.S. SET 5 INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM  FC9500GSB-UY  KRL751PB0  KRL756CPB0  9600GSBFMUYO  U.S. SET 6 INCLUDING TOOL STORAGE WITH BLUE OVER YELLOW TOOL CONTROL FOAM	TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM  FC9400GSB-YR  KRL751PBO  KRL756CPBO  9500GSBFMYRO  U.S. SET 5 INCLUDING TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM  FC9500GSB-YR  KRL751PBO  KRL756CPBO  9600GSBFMYRO  U.S. SET 6 INCLUDING TOOL STORAGE WITH YELLOW OVER RED TOOL CONTROL FOAM

# **Complete Tool Sets**

(Please refer to pages N004-N014 for the complete tool listings and add-on options) See Tool Storage section for available color options. Sets Subject to Change.











- Storage units can tip or strike you
- Do not open more than one loaded drawer at a time
- · Keep children away
- Apply brakes on locking casters when not moving unit
- . Do not step in or on drawers
- Secure units together with fasteners
- Read safety precautions on pages W1 to W4

# TOOL CONTROL SET BUILDING

# **Complete Tool Control Tool Sets**

Complete Tool Control Tool Sets offer the ease and convenience of single part number ordering for our most popular tool sets, roll cabinets, and tool control systems. Sets are available in standard roll cabinets or in our Level 5™ NTC keyless entry cabinets for added security and control. All sets include tool sets, blue over yellow foam, and roll cabinet.





## Complete Keyless Entry Tool Control Tool Sets in Red NTC Roll Cabinets

- All sets feature Blue over Yellow Foam in NTC Tool Control System Roll Cabinet
- See pages N007 through N011 for full tool set information
- One copy of Lockview software, Stock Number L5LVSG3, is required per administrator; see page N041 for complete NTC product information
- See Pages 315 316 for complete Roll Cabinet specifications
- Other colors of foam and roll cabinets are available, contact your Snap-on Industrial Representative for more information

Stock Number	Description / Access Reader Included	Tool Set Included	Foam Included	Roll Cabinet Included
9300GSOKETCP	Set 3 in foam / NTC Roll Cabinet with HID Prox Access reader	9300GS0	L5UY93K722	L5P722PB0
9300GSOKETCI	Set 3 in foam / NTC Roll Cabinet with HID I Class Access reader	9300GS0	L5UY93K722	L5I722PB0
9300GSOKETCM	Set 3 in foam / NTC Roll Cabinet with HID Mag Strip Access reader	9300GS0	L5UY93K722	L5M722PB0
9400GSOKETCP	Set 4 in foam / NTC Roll Cabinet with HID Prox Access reader	9400GS0	L5UY94K7022	L5P7022PB0
9400GSOKETCI	Set 4 in foam / NTC Roll Cabinet with HID I Class Access reader	9400GS0	L5UY94K7022	L5I7022PB0
9400GSOKETCM	Set 4 in foam / NTC Roll Cabinet with HID Mag Strip Access reader	9400GS0	L5UY94K7022	L5M7022PB0
9500GSOKETCP	Set 5 in foam / NTC Roll Cabinet with HID Prox Access reader	9500GS0	L5UY95K7023	L5P7023PB0
9500GSOKETCI	Set 5 in foam / NTC Roll Cabinet with HID I Class Access reader	9500GS0	L5UY95K7023	L5I7023PB0
9500GSOKETCM	Set 5 in foam / NTC Roll Cabinet with HID Mag Strip Access reader	9500GS0	L5UY95K7023	L5M7023PB0
9600GSOKETCP	Set 6 in foam / NTC Roll Cabinet with HID Prox Access reader	9600GS0	L5UY96K1023	L5P1023PB0
9600GSOKETCI	Set 6 in foam / NTC Roll Cabinet with HID I Class Access reader	9600GS0	L5UY96K1023	L5I1023PB0
9600GSOKETCM	Set 6 in foam / NTC Roll Cabinet with HID Mag Strip Access reader	9600GS0	L5UY96K1023	L5M1023PB0

# Complete Tool Control Tool Sets in Standard Red Roll Cabinets

- All sets feature Blue over Yellow Foam in standard Red roll cabinet
- See pages N005 through N009 for full tool set information
- See Pages 315 316 for complete Roll Cabinet specifications
- Other colors of foam and roll cabinet are available, contact Snap-on Industrial for more information



NNL/UZSA	FDU
Standard Roll	Cabinet

Stock Number	Description	Tool Set Included	Foam Included	Roll Cabinet Included
9300GSOTCF	Complete U.S. Set 3 in foam / Standard red roll cabinet	9300GS0	L5UY93K722	KRL722BPB0
9400GSOTCF	Complete U.S. Set 4 in foam / Standard red roll cabinet	9400GS0	L5UY94K7022	KRL7022BPB0
9500GSOTCF	Complete U.S. Set 5 in foam / Standard red roll cabinet	9500GS0	L5UY95K7023	KRL7023BPB0
9600GSOTCF	Complete U.S. Set 6 in foam / Standard red roll cabinet	9600GS0	L5UY96K1023	KRL1023BPB0

# **TOOL CONTROL SET BUILDING**

# **Foam Tool Control Kits**



Complete Pre-cut Tool Control Foam Kits KRL Series

Storage Model	Royal Blue Over Yellow	Black Over Red
KRL1033	L5A1033RBY	L5A1033BRD
KRL1023A	L5A1023ARBY	L5A1023ABRD
KRL7023A	L5A7023ARBY	L5A7023ABRD
KRL1032A	L5A1032ARBY	L5A1032ABRD
KRL1022A	L5A1022ARBY	L5A1022ABRD
KRL7022A	L5A7022ARBY	LYA7022ABRD
KRL722A	L5A722ARBY	L5A722ABRD
KRL1056B	L5A1056ARBY	L5A1056ABRD
KRL756B	L5A756BRBY	L5A756BBRD

Pre-cut Tool Control Foam for Individual Drawers KRL Series

Royal Blue Over Yellow	Black Over Red	Drawer Size
L5A6726RBY	L5A6726BRD	67 1/8" X 26 31/32"
L5A4926RBY	L5A4926BRD	49 1/8" X 26 31/32"
L5A3026RBY	L5A3026BRD	30 1/2" X 26 31/32"
L5A1426RBY	L5A1426BRD	14 5/8" X 26 31/32"
L5A3021RBY	L5A3021BRD	30 31/32" X 21 29/32"

1/2" Tool Control Foam Over 1/8" Base



Complete Pre-cut Tool Control Foam Kits KRA Series

Storage Model	Royal Blue Over Yellow	Black Over Red
KRA5319D	L5A5319DRBY	L5A5319DBRD
KRA5213D	L5A5213DRBY	L5A5213DBRD
KRA4813D	L5A4813DRBY	L5A4813DBRD
KRA4107D	L5A4107DRBY	L5A4107DBRD
KRA4008E	L5A4008ERBY	L5A48008EBRD
KRA2418	L5A2418RBY	L5A2418BRD
KRA2432	L5A2432RBY	L5A2432BRD
KRA2407	L5A2407RBY	L5A2407BRD
KRA2411	L5A2411RBY	L5A2411BRD
KRA2306	L5A2306RBY	L5A2306BRD
KRA2007	L5A2007RBY	L5A2007BRD
KRA2005	L5A2005RBY	L5A2005BRD

Pre-cut Tool Control Foam for Individual Drawers KRA Series

Royal Blue Over Yellow	Black Over Red	Drawer Size
L5A1117RBY	L5A1117BRD	11 7/32" X 17 1/2"
L5A2117RBY	L5A2117BRD	21 13/32" X 17 1/2"
L5A3417RBY	L5A3417BRD	<b>34</b> 23/32" <b>X 17</b> 1/2"
L5A4921RBY	L5A4921BRD	49 1/8" X 21 29/32"
L5A1421RBY	L5A1421BRD	14 19/32" X 21 29/32"
L5A3021RBY	L5A3021BRD	30 17/32" X 21 29/32"

1/2" Tool Control Foam Over 1/8" Base

## **Custom Foam Kits**

Each foam kit includes: Six sheets of top and base foam material, one cutting tool, one 24 oz. can spray glue, one roll of tracing paper — to custom design and organize your tool drawers.

Royal Blue Over Yellow	Black Over Red	Size
TCK1827BUY	TCK1827BBR	18" X 27"
TCK4020BUY	TCK4020BBR	40" X 20"
TCK3627BUY	TCK3627BBR	36" X 27"

# **SPECIALIZED TOOL SETS**

## Portable Mechanics' Service Sets

#### General Maintenance Technician's Kit

- Mobile so that tools may be easily deployed to any jobsite rain or shine
- Black over red tool control foam ensures an easy way to check for the presence or absence of tools
- Contains over 200 individual tools
- All Weather Mobile Tool Chest (AWMTC)

#### Features and Benefits:

- 22.1" wheel base on the wide corners for stability
- Innovative latch system for secure lid closure
- Telescoping trolley handle with higher reach
- · Over-top hinged lid can be used as a seat when case is open
- Drawers fully extend on Snap-on's proprietary composite slides
- KMC18GMTK comes in a black AWMTC



KMC18GMTKG	KMC18GMTK
Includes 208 pieces	Includes 208 pieces
102 drive tools and sockets	102 drive tools and sockets
8 screwdrivers	8 screwdrivers
70 wrenches	70 wrenches
7 Pliers	7 Pliers
37 Miscellaneous tools	37 Miscellaneous tools
1 multimeter	1 multimeter
F0AM: IKCFM0000047	F0AM: IKCFM0000047
CASE: KMC18062NGR (green)	CASE: KMC18062NBK (black)

# **Maximum Mobility Tool Sets**

- Designed specifically for the mechanic on the go
- · Rapid tool acess and accountability helps protect valuable vehicles and equipment
- Snap-on tool control foam system measurably increases productivity
- Tools are furnished in custom foam and loaded into removable drawers
- Sets are offered in two configurations: tools only, or complete with tools, foam, and case

The extremely rugged and durable Pelican 0450 case features:

- Rugged trolley handle and wheels for easy and secure mobility
- Seven removable drawers plus foam tray in top of case
- Two automatic pressure equalization valves
- Water, temperature, drop, and impact resistant design and construction



9050VMTB (pictured)	9060VMTB (not pictured)
• Includes 206 pieces:	• Includes 215 pieces:
102 drive tools and sockets	105 drive tools and ratchets
• 9 screwdrivers	• 10 screwdrivers
• 50 wrenches	• 60 wrenches
• 7 pliers	• 7 pliers
• 38 miscellaneous tools	• 33 miscellaneous tools
• 9050VMTB: Tool set, case & foam	• 9060VMTB: Tool set, case & foam
• 9050VMT: Tool set, tools only	• 9060VMT: Tool set, tools only
• VFI13365: Foam only	• VFI11750: Foam only

Contents subject to change. Consult your Snap-on Industrial Account Manager for up-to-date set contents.

# **SPECIALIZED TOOL SETS**

#### General Mechanic's Tool Kit

Now available in choice of: Metal tool chest KRA4059, tools & foam or New soft-sided tool bag with tools & foam

#### **GMTK Tool Set includes:**

Sockets
Wrenches
Pliers
Screwdrivers
Miscellaneous / Specialty Tools 50

Total = 142 tools

**GMTKBOXWT Tool Set In Metal Tool** Chest.

Metal Tool Chest dimensions: 26"W x 17-3/16"H x 14-23/32"D

# GMTKTLBAGWT Tool Set In Soft Sided

Take your tool control programs all the way to the work area, flightline, deployment or anywhere! User-friendly, lightweight & rugged.

- Tool pallets designed for outdoor use
- Improves tool control, FOD & productivity
- Satisfies the Army GMTK Specification
- Tool kits contain individual tool compartments
- · Tool compartments include tool stock number for positive tool identification

#### Features of Soft-sided Bag:

- · Easy to carry & easy to stow
- · Zips open at top or end to allow individual tool pallets to be removed
- No sharp edges
- · Rugged, heavy-duty materials can outperform & outlast metal
- Made from 100% polyester-coated Cordura
- Contains five individual tools pallets inside see-through, zippered, protective vinyl pouches Security/Convenience Features:
- Two clear vinyl I.D. pockets on outer surface top and end
- Additional I.D. pockets—to contain tool inventory lists, pallet bills of material, DA form 2404, etc.
- Zippers align–for easy padlocking

Standard Tool Sets

Model No.

A. GMTKBOXWT







**GMTKTLBAGWT** 



Standard

Color

Snap-on Red

Flightline Black

Box

24" x 18" x 11"

26" x 14



Description

Snap-on Metal Chest with Tools

General Mechanic's Tool Kit w/ tools & Foam in a 9 drawer KRA4059A Snap-on Metal Chest

XXL Standard 5 Pallet GMTK

Soft-sided bag available in standard
Olive Green or "Flightline Black"

Box/Bag Size	Pallet Size	Loaded with
(W x H x D)	(WxH)	Tools* – Weight
14 <sup>23</sup> /32" x 17 <sup>3</sup> /16"	(See p. 74 for inner dim. on top chest)	107 lbs.

20" x 16"

**PALLETS FROM** SOFT-SIDED BAG

Standard, 5 Pallet, General Mechanic's Tool Kit w/tools – Flightline Black **B. GMTKTLBAGWT** \* Tool weight may vary. Snap-on reserves the right to change tool content.





67 lbs.

# SPECIALIZED TOOL SETS

## Wind Power Tool Sets

#### Wind Power Technician Sets

- Specifically designed to cover standard maintenance applications on GE® 1.5 Turbines
- 68 piece tool sets available in soft-sided or hard case Contents include:
  - 1/4" drive metric sockets and drive set
  - 5 in 1 screwdriver
  - 6" and 10" adjustable wrenches
  - 5 pair of pliers
  - Metric and fractional hex wrench sets
  - 3/16" 1/2" 7 piece nutdriver set
  - 1/8" tip VDE tweeker
  - Multimeter and lead set
  - and more...

#### WPTECH-2

- 68 piece GE 1.5 tool set in hard case
- Tools mounted on four pallets of tool control foam (included)
- Hard case is rugged, waterproof, and virtually unbreakable

#### WPTECH-1

- 68 piece GE 1.5 tool set in soft case
- Tools mounted on two pallets of tool control foam (included)

# WPGENERAL-1

General Service Wind Power Tool Set

- Ideal selection of high-quality tools for general service in and around the wind farm
- 106 piece tool set comes in a rugged, waterproof, and virtually unbreakable hard case, packed in tool-control foam Contents include:
  - 1/4" drive SAE shallow & deep sockets and drive tools
  - 3/8" drive SAE deep and shallow sockets and drive tools
  - 5 piece screwdriver set
  - · Midget, combination, and ratcheting box wrenches
  - 5 pair of pliers
  - Hammers, punches, hacksaw, and more...









## Vestas V82 Turbine Tool Set ————

## WPTECH-AO-S1

Vestas V82 Turbine Tool Set

- Specifically configured to provide required tools for servicing the V82 turbine
- 77 piece tool set comes in a rugged, waterproof, and virtually unbreakable hard case, packed in tool-control foam Contents include:
  - 1/4" drive and 1/2" drive metric sockets and drive tools
  - Ratcheting box, adjustable, and hex wrenches
  - Pliers, screwdrivers, multimeter, and more...



Contents subject to change. Consult your Snap-on Industrial Account Manager for up-to-date set contents.

## **Industrial Maintenance Tool Sets**

#### **Master Maintenance Service Kit**

4338GS Tools Only. Own the variety of essential hand and power tools necessary to perform most maintenance operations safely and efficiently. Kit includes all the tools in the General and Intermediate Kits, plus Larger pinch bars, Hammers, Adjustable Spanner Wrenches, C-Clamps, 3/4" Dr. 12-Point Shallow Sockets to 2-3/8", 3/4" Dr. Extensions and Ratchet, 1/2" Dr. Shallow and Deep Impact sockets 1", Combination Wrenches to 1-1/2", Extended Locking Pliers, Snap Ring Pliers and 1/2" Dr. Turbo Sockets to 1".



#### Intermediate Maintenance Service Kit

4264GS. Have the tools on hand to quickly solve difficult maintenance problems and reduce costly down time. Kit includes all the items in the General Maintenance Kit, plus 3/8" Dr. 8-Point Sockets and Accessories, Feeler Gauges, 3/8" Dr. Impact Sockets (shallow) to 7/8", 3/8" Dr. Impact sockets Deep 6-Point to 3/4", Ratchet Wrenches, Flare Nut Wrenches to 1", 1/2" Dr. 12-Point Deep Sockets to 1-1/8", 1/2" Dr. Hex Sockets, 3/8" Dr. 6-Point Deep Impact Sockets to 3/4", 1/2" Dr. 8-Point Sockets, Box Wrenches, 12-Point to 1-5/16", Open End Wrenches to 1-5/16", Expanded Punches, Hole Saw Kit, chisels and Pliers.

#### **General Maintenance Service Kit**

4161GS Tools only. Kit includes 3/8" Dr. Hex Drivers, Universals to 3/4". Combination Wrenches to 1", expanded punch sizes, 1/2" Dr. Ratchet, Extensions, Breaker Bar, 1/2" Dr. Shallow 12 point Sockets to 1-5/16", Open End Wrenches to 1-5/16", Box Wrenches to 9/16", 1/4" Dr. 12-Point Deep Sockets to 9/16". Nut Drivers and expanded pliers.

#### **Metric Set Building**

Nothing else gets the job done as safely and efficiently as having the right tools and having them when needed. To assist you in bringing this about, our many years of close association with the industry have been consolidated into these expertly compiled add-on sets.



4000 Series Metric Add-On 4102GM1

#### 4000 Series Metric Add-On Set 1

4102GM1. Build on your existing metric set to achieve a complete inventory of metric tools essential for servicing today's industrial maintenance needs. Set includes: Metric Nut drivers, L-Type Hex Wrenches. 1/4" Dr. 12-Point Deep and Shallow Sockets to 14mm, 3/8" Dr. 12-Point Deep and Shallow Sockets to 19mm, 12-Point Combination Wrenches to 22mm, Standard sizes in the Four-Way Angle Head Wrenches, Double End Flare Nut Wrenches, and Box Wrenches, Hex Socket Drivers are also included.

#### 4000 Series Metric Add-On Set 2

4086GM2. Expand your metric tool inventory with this set including 12-Point Ratcheting Box Wrenches, Open End Wrenches to 32mm, 3/8" Dr. 6-Point Deep and Shallow Impact Sockets to 24mm, 1/2" Dr. 12-Point Shallow Sockets to 32mm, 1/2" Dr. 6-Point Deep and Shallow Impact Sockets and 1/2" Dr. 12-Point Metric Sockets. We have also expanded the 12-Point Combination Wrenches, Four-Way Angle Head Wrench line, along with the 12-Point Offset Box Wrench Set. The 1/2" Dr. Hex Socket Set has also been added to complete this set.

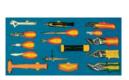
#### 4000 Series Maintenance Add-On Set

4023GSACC. Our Maintenance Accessory Add-On Set includes Tap and Dies, Rethreading Tap and Dies, Extractors, Pipe Wrenches, Strap Wrenches, Awls, Nut Splitter, Ruler, Mirror and Pick Up Tools, In this kit we have also expanded the Files, Pliers (Snap Ring), Scrapers, Pry Bars, Saws and Hammers.



4000 Series Maintenance Add-On Set

Contact your Snap-on Account Manager to choose your Roll Cab and to add a custom foam insert.





- Do not open more than one loaded drawer at a time
- Keep children away
- · Close lid, lock drawers and doors before moving
- Apply brakes on locking casters when not moving unit

- Secure units together with fasteners
- . Do not pull; push to move
- Wear gloves when lifting by edges
- Keep feet and fingers clear of edges when stacking, hanging, or moving units
- · Read additional safety precautions on pages W1 to W4 N<sub>0</sub>21













· Do not step in or on drawers

# **AVIATION TOOL SETS**

## **Military Aviation Tool Sets**

Over 30 years of experience and tens of thousands of kits – all custom tailored to suit your needs. Snap-on continues to set the bar for maximum productivity and flight safety.

**No one offers you more.** More selection. More sets. More experts to assist you. More understanding of your needs. Whether you need one kit or one thousand kits, Snap-on can provide the kit you need for any application.



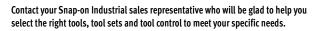
Army Kits:
Power Plant
Technical Inspection
General Mechanical
Sheet Metal
Electrical
Hydraulic
Powertrain
Small Arms

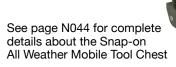
USAF Kits: APG CTK APG Launch CTK Custom TDY CTK Engine CTK E7E CTK C130 Mobility Army Aviation Kits: AH6, AH7 Crew Chief Airframe Blackhawk Phase Chinook Crew Chief Crew Chief

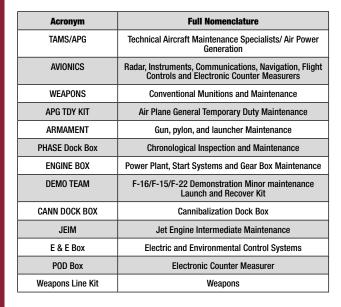
Chinook Crew Chief Crew Chief Electronics Engine Shop Hydraulics Shop Prop and Rotor

Marine Kits: Marine Common 1

Navy Kits: LM2500 Contents







Acronym	Full Nomenclature
SPEC BOX	Radar, Instruments, Communications, Navigation, Flight Controls and Electronic Counter Measurers
AGE	Aerospace Ground Equipment
PMEL	Precision Measurement Equipment Laboratory
TRANS	Transportation Vehicle maintenance
E&E In Shop	Electric and Environmental Control Systems
R&R/ RECOVERY	Repair and Reclamation
EGRESS	Ejection Seat Maintenance
Sheet Metal	Structural Repair
LO BARN	LOW Observance Coating Maintenance
Fuel Shop	Fuel System maintenance
TM	Trailer Maintenance
PGM	Precision Guidance munitions
Conventional	Conventional Air to Ground munitions

## **Commercial Aviation Tool Sets**

Our OEM and commercial aviation customers agree: Snap-on is the world leader in custom kits. Whether you're managing a small operation or large fleet, Snap-on can deliver a kitting solution to increase productivity and flight safety; no one offers more. The following is a partial list of the many kits that have been developed with our customers for specific commercial aviation requirements.

For a complete listing of all available kits, or to develop a custom kit, contact your Snap-on Industrial representative.

#### Boeing:

A-Check Mechanical – all aircraft
A-Check Electrical – all aircraft
B-C-D-Check General Mechanical – all
B-C-D Check Electrical – all aircraft
Boeing and Airbus General Mechanic
Engine Change kits
Sheet Metal kits
Flight Line (FOD bag)
B737 General Mechanic

#### Airbus:

A-Check Mechanical – all aircraft
A-Check Electrical – all aircraft
B-C-D-Check General Mechanical – all
A350 General Mechanic Kit
A380 Torque Tool & Accessories kit
A380 Bolter kit
A380 Structure kit
A380 Drillers kit
A380 Drillers kit
A319, A340, & B737 A-Check General Mechanic
A319, A340, & B737 to B767 A-B-Check General
Mechanic kit
A319, A340, & B737 to B767 Electrical
Engine Change kit
Flight Line (FOD bag)





OEM and airlinedetermined kits: BAE Systems Beechcraft Bombardier Cessna Embraer Falcon Fokker Gulfstream Lear Helicopter: Agusta Bell Boeing Eurocopter Robinson

Propulsion: GE Pratt & Whitney Rolls Royce

From OEM assembly to flight line maintenance, Snap-on has your solution. Contact your Snap-on Industrial sales representative who will be glad to help you select the right tools, tool sets and tool control to meet your specific needs.

# **AVIATION TOOL SETS**

#### Aircraft Maintenance Kit with Portable Chest

#### Complete Set: KMC18AVTK

- Use to work on nearly any aircraft system.
- Easy to carry and stow.
- Case is chemical resistant, dust proof, water tight, and has a pressure equalization valve.
- Ideal for flightline maintenance.
- Exceeds U.S. Air Force operating instructions.

# Basic Flightline Kit with Tote Bag Complete Set: ATKBFL

- A basic kit to do a wide variety of aircraft light maintenance.
- Ideal for a fly away/on board service kit



KMC18AVTK

**ATKBFL** 

# Intermediate Flightline or Hanger

Complete Set includes tools, foam, and storage: ATKIFLB

**Tools Only: ATKIFL** 

Black over Yellow Foam: FOAMIFL Tool Storage: KRA2007FPBO

· Ideal for A & B checks



**ATKIFL** 

# Master Flightline or Hanger

Complete Set includes tools, foam, and storage: ATKMFLB Tools Only: ATKMFL

Black over Yellow Foam: FOAMMFL Tool Storage: KRL722BPBO

 Covers a wide variety of maintenance activities with room for customization





**ATKMFL** 

# All Purpose Mechanic

Complete Set includes tools, foam, and storage: ATKAPMB

Tools Only: ATKAPM

Black over Yellow Foam: FOAMAPM

Tool Storage: KRA2411PBO

 Supports a large range of maintenance requirements with additional space to support the addition of our Master Mechanic Add On set below or customize to your specific needs





#### **ATKAPM**

#### Master Mechanic Add On

Tools and Foam Set to be added to ATKAPMB: ATKMMAOFOAM
Tools Only: ATKMMAO
Black over Yellow Foam: FOAMMMAO
Tool Storage: Not applicable, designed to be added to ATKAPMB above

 Expands your capabilities of the ATKAPMB above to cover a wider range of maintenance requirements.



**ATKMMAO** 

#### Aircraft Overhaul

Complete Set includes tools, foam, and storage: ATKAOB

Tools Only: ATKAO

Black over Yellow Foam: FOAMAO

Tool Storage: KRA4107FPBO

• Designed to cover a wide range of heavy maintenance overhaul requirements





**ATKAO** 

# **AVIATION TOOL SETS**

# **Engine Overhaul**

Complete Set includes tools, foam,

and storage: ATKEOB Tools Only: ATKEO

Black over Yellow Foam: FOAMEO Tool Storage: KRA4107FPBO

• Comprehensive selection to cover powerplant maintenance & overhaul





**ATKEO** 

# Avionics with Tote Bag Complete Set: ATKAV

 Portable kit with a selection of tools to support a wide range of electrical or avionics maintenance and repairs



ATKAV

## **Sheet Metal**

Tools Only: ATKBSM Recommended Tool Storage: KRSC33PBO

 Selection supports drilling, sheet holding, riveting, cutting, and more. The optional cart is ideal to store and organize your sheet metal tools.





ATKBSM

# **Aviation Tool Kit Contents**

## KMC18AVTK Aircraft Maintenance Basic Kit

Aircraft Maintenance Basic Kit			
Stock No.	Description	Page	
106TMUA	S/FLEX SET	24	
10HR	FILE HALF ROUND 10IN	195	
10MA 110STMDY	FILE MILL 10IN D/HEX SET	195 19	
11051MD1	D/HEX SET	18	
196CF	LONG NOSE W/CUTTER	167	
211FY	D/HEX SET	26	
211SFY	D/HEX SET	27	
46ACP	PLIERS	168	
61ACP	PLIERS	167	
85BCP	DIAG CUTTER	166	
86CF	DIAGONAL CUTTER	166	
95BCP	PLIERS	167	
AW1015DHK	HEX WRENCH SET	131	
AWP120	PLIERS	168	
DAS30 DS809K	SHEAR SET IGN WR SET	579 118	
	4IN CUTTER TAPER FULL		
E709BCG	FLUSH	173	
ECF35	FLASHLIGHT	528	
F80	3/8 RATCHET	8	
FB325A	FEELER GA	237 564	
FU8A	UNIV JT	83	
FXK11	EXTENSION	74	
FXK3	EXTENSION	74	
FXK6	EXTENSION	74	
GA295	MIRROR	567	
GA98A	FILE HANDLE PLASTIC HAMMER	196	
HBBD8	BALL PEEN HAMMER-8 OZ	187	
HBPT16	16Z PLASTIC TIPPED	188	
HSG319	BI MOLD SOFT GRIP	190	
	HACKSAW		
IKCFM0000046	FOAM SET 18IN ALL-WTHR BOX 8DRWR	NA	
KMC18062NBK	BLACK	370	
OEX10B	5/16 FLKDR COMBO	109	
OFV11B	WRENCH 11/32 FLKDR COMBO	109	
OEX11B	WRENCH		
OEX8B	1/4 FLKDR COMBO WRENCH	109	
OXI7B PPC103A	WRENCH PUNCH	111 184	
PPC103A PPC104A	PIN PUNCH	184	
PPC105A	PIN PUNCH	184	
PPC106A	PIN PUNCH	184	
PPC107A	PIN PUNCH	184	
PPC108A	PUNCH	184	
PPC110A	PUNCH	184	
PPC3A	PUNCH	184	
PT5C	TEL 2LB PICK UP TOOL CHROME	568	
RULER600	6 IN ENG RULE	566	
RWTP6	6IN REVRSBLE SFTY WIRE PLIERS	245	
SDDD41	SNAP ON 4 IN 1	147	
SDM213B	FLAT BIT	156	
SDM222IRB	1011		
ODINELLIND	NO. 2 PHILLIPS BIT	156	
SGDMRC11A	NO. 2 PHILLIPS BIT STUBBY SCREWDRIVER	156 149	
SGDMRC11A SQUARECOMB12	NO. 2 PHILLIPS BIT STUBBY SCREWDRIVER BLUE POINT COMBO SQUARE	149 566	
SGDMRC11A SQUARECOMB12 T72	NO. 2 PHILLIPS BIT STUBBY SCREWDRIVER BLUE POINT COMBO SQUARE 72 TOOTH STD HANDLE	149 566 7	
SGDMRC11A SQUARECOMB12 T72 TMU8B	NO. 2 PHILLIPS BIT STUBBY SCREWDRIVER BLUE POINT COMBO SQUARE 72 TOOTH STD HANDLE UNIVERSAL JOINT	149 566 7 81	
SGDMRC11A SQUARECOMB12 T72 TMU8B TMXK2	NO. 2 PHILLIPS BIT STUBBY SCREWDRIVER BLUE POINT COMBO SQUARE 72 TOOTH STD HANDLE UNIVERSAL JOINT EXTENSION	149 566 7 81 72	
SGDMRC11A SQUARECOMB12 T72 TMU8B TMXK2 TMXK4	NO. 2 PHILLIPS BIT STUBBY SCREWDRIVER BLUE POINT COMBO SQUARE 72 TOOTH STD HANDLE UNIVERSAL JOINT EXTENSION EXTENSION	149 566 7 81 72 72	
SGDMRC11A SQUARECOMB12 T72 TMU8B TMXK2 TMXK4 TMXK60	NO. 2 PHILLIPS BIT STUBBY SCREWDRIVER BLUE POINT COMBO SQUARE 72 TOOTH STD HANDLE UNIVERSAL JOINT EXTENSION EXTENSION EXTENSION	149 566 7 81 72 72 72	
SGDMRC11A SQUARECOMB12 T72 TMU8B TMXK2 TMXK4	NO. 2 PHILLIPS BIT STUBBY SCREWDRIVER BLUE POINT COMBO SQUARE 72 TOOTH STD HANDLE UNIVERSAL JOINT EXTENSION EXTENSION	149 566 7 81 72 72	
SGDMRC11A SQUARECOMB12 T72 TMU8B TMXK2 TMXK4 TMXK60 VS807B	NO. 2 PHILLIPS BIT STUBBY SCREWDRIVER BLUE POINT COMBO SQUARE 72 TOOTH STD HANDLE UNIVERSAL JOINT EXTENSION EXTENSION EXTENSION WRENCH SET.	149 566 7 81 72 72 72 72 119	

# ATKBFL Basic Flightline, ToteBag

/ (I I (D) L D	isic ragiltane, roter	
Stock No.	Description	Page
120SSDP	OFFSET SD PH1 X PH2	147
20SSD	OFFSET SD .050 X 5/16	147
49ACP	SLIP JOINT PLIERS	168
95BCP	PLIERS	167
AW1015DK	.050 IN HEX KEY	131
BP12B	HAMMER	189
ECF201A	3 WATT LED 2D CELL	528
	FLASHLIGHT	
F80F0D	HSSFODRAT	N052
FB302A	FEELER GA 3/8IN DR 12PT	565
FDS101	CHROME 5/16IN	27
FDS121	3/8IN DR 12PT	27
LDSIZI	CHROME 3/8IN	27
FDS141	3/8IN DR 12PT	27
	CHROME 7/16IN 3/8IN DR 12PT	
FDS161	CHROME 1/2IN	27
EDC104	3/8IN DR 12PT	07
FDS181	CHROME 9/16IN	27
FU12B	FLEXOCKET	35
FU14B	FLEXOCKET	35
FU8A	UNIV JT	83
GA53A	HINGED MIRROR	567
HBPT16	16Z PLASTIC TIPPED HAMMER	188
PPC106A	PIN PUNCH	184
PPC710BK	PUNCH/CHISEL SET/KIT BAG	184
RULER600	6 IN ENG RULE	566
	9IN REVSBLE SFTY	
RWTP9	WIRE PLIERS	245
SG5ASABR	INSTINCT AWL	159
SGCP1BR	INSTINCT COTTER	482
	PIN PULLER	499
SGMRC44B	SOFT GR SD	149
SS5A	SCR START	152
STMD10	SOCKET	19
STMD11	SOCKET	19
STMD12	SOCKET	19
STMD14	SOCKET	19
STMD16	SOCKET	19
STMD18	SOCKET	19
STMD6	SOCKET	19
STMD7 STMD8	SOCKET SOCKET	19 19
STMD9	SOCKET	19
T936F0D	HSSFODRAT	13
TB40	TOTE BAG 17X9X11	397
TM61A	FLEXTENSION	73
TMU8B	UNIVERSAL JOINT	81
TMXK140	EXTENSION	72
TMXK2	EXTENSION	72
TMXK4	EXTENSION	72
TPMA12FP	12FT FOD TAPE	566
V01214B	WRENCH	118
V01214B	WRENCH	118
V0810B	WRENCH	118
XDH1214A	BOXOCKET	136
XDH1618A	BOXOCKET	136
XDH810B	BOXOCKET	136
AD11010D	DOMOGNET	1 100

# **ATKIFL Intermediate Flightline**

AIKIILIII	ermediate Flightlind	
Stock No.	Description	Page
10MA	FILE MILL 10IN	195
120SSDP	OFFSET SD PH1 X PH2	147
196CF	LONG NOSE W/CUTTER	167
20SSD	OFFSET SD .050 X 5/16 SLIP JOINT PLIERS	147 168
49ACP 61ACP	PLIERS	167
86CF	DIAGONAL CUTTER	166
8HR	FILE HALF ROUND 8IN	195
8R	FILE ROUND 8IN	195
A2A	ADAPTOR	83 85
AW1015DK	.050 IN HEX KEY	131
BP12B	HAMMER	189
DS2224A	IGN WR	118
ECF201A	3 WATT LED 2D CELL	528
	FLASHLIGHT	
F081	SOCKET	26
F101	SOCKET	26
F10LC	BREAK BAR	16
F121 F141	SOCKET SOCKET	26 26
F161	SOCKET	26
F181	SOCKET	26
F201	SOCKET	26
F221	SOCKET	26
F241	SOCKET	26
F261	SOCKET	26
F281	SOCKET	26
F4LBK	3/8 IN DR. SPEEDER	84
F80F0D	HSSFODRAT	N052
FB302A	FEELER GA	565
FU8A	UNIV JT	83
FXK11	EXTENSION	74
FXK3	EXTENSION	74
FXK6	EXTENSION	74
GA265A	MECH FNGR	569
GA53A GA98A	HINGED MIRROR FILE HANDLE PLASTIC	567 196
GFAT1E	ADAPTOR	81 83
GSAF1E	ADAPTOR	83 85
HBPT16	16Z PLASTIC TIPPED HAMMER	188
10MA	FILE MILL 10IN	195
120SSDP	OFFSET SD PH1 X PH2	147
196CF	LONG NOSE W/CUTTER	167
20SSD	OFFSET SD .050 X 5/16	147
49ACP	SLIP JOINT PLIERS	168
61ACP	PLIERS	167
86CF	DIAGONAL CUTTER	166
8HR	FILE HALF ROUND 8IN	195
8R	FILE ROUND 8IN	195
A2A AW101EDV	ADAPTOR	83 85 131
AW1015DK BP12B	.050 IN HEX KEY HAMMER	189
DS2224A	IGN WR	118
ECF201A	3 WATT LED 2D CELL FLASHLIGHT	528
F081	SOCKET	26
F101	SOCKET	26
F10LC	BREAK BAR	16
F121	SOCKET	26
F141	SOCKET	26
F161	SOCKET	26
F181	SOCKET	26
F201	SOCKET	26
F221	SOCKET	26
F241	SOCKET	26
F261 F281	SOCKET SOCKET	26 26
. 201	JUURLI	

# **AVIATION TOOL SETS**

# **Aviation Tool Kit Contents**

# ATKIFL Intermediate Flightline (Cont'd)

	Description 3/8 IN DR. SPEEDER HSSFODRAT FEELER GA UNIV JT EXTENSION EXTENSION EXTENSION MECH FNGR HINGED MIRROR FILE HANDLE PLASTIC ADAPTOR	84 N052 565 83 74 74 74 569 567
FB302A FU8A FXK11 FXK3 FXK6 GA265A GA53A GA98A	FEELER GA UNIV JT EXTENSION EXTENSION EXTENSION MECH FNGR HINGED MIRROR FILE HANDLE PLASTIC	565 83 74 74 74 74 569 567
FU8A FXK11 FXK3 FXK6 GA265A GA53A GA98A	UNIV JT EXTENSION EXTENSION EXTENSION MECH FNGR HINGED MIRROR FILE HANDLE PLASTIC	83 74 74 74 74 569 567
FXK11 FXK3 FXK6 GA265A GA53A GA98A	EXTENSION EXTENSION EXTENSION MECH FNGR HINGED MIRROR FILE HANDLE PLASTIC	74 74 74 569 567
FXK3 FXK6 GA265A GA53A GA98A	EXTENSION EXTENSION MECH FNGR HINGED MIRROR FILE HANDLE PLASTIC	74 74 569 567
FXK6 GA265A GA53A GA98A	EXTENSION MECH FNGR HINGED MIRROR FILE HANDLE PLASTIC	74 569 567
GA265A GA53A GA98A	MECH FNGR HINGED MIRROR FILE HANDLE PLASTIC	569 567
GA53A GA98A	HINGED MIRROR FILE HANDLE PLASTIC	567
0===45	ADAPTOR	196
GFAT1E		81 83
GSAF1E	ADAPTOR	83 85
HBPT16	16Z PLASTIC TIPPED HAMMER	188
	BI MOLD SOFT	100
HSG319	GRIP HACKSAW	190
PPC3A	PUNCH	184
PPC4A	PUNCH	184
PPC820B	CHISEL	184
PPC905B RULER600	PUNCH 6 IN ENG RULE	185 566
S261	SOCKET	38
S281	SOCKET	38
S321	SOCKET	38
S936FOD	HSSFODRAT	13
SF201	SOCKET	27
SF221	SOCKET	27
SF241	SOCKET	27
SG5ASABR	INSTINCT AWL	159
SGDMRC44B SGDX80BR	SOFT GR SD SOFT GR 8 pc set	149
SN18B	BREAKER BAR	16
SS5A	SCR START	152
SSDE610C	ELEC SD 3/16IN	144
	X 10IN FLAT	
STMD10	SOCKET	19
STMD11 STMD12	SOCKET SOCKET	19 19
STMD12	SOCKET	19
STMD14	SOCKET	19
STMD18	SOCKET	19
STMD6	SOCKET	19
STMD7	SOCKET	19
STMD8	SOCKET	19
STMD9	SOCKET	19
SW301	SOCKET	37
SW321 SW341	SOCKET SOCKET	37
SW361	SOCKET	37
SW381	SOCKET	37
SW401	SOCKET	37
SX2	EXTENSION	77
T936F0D	HSSFODRAT	13
TA3	ADAPTOR	81 83
TM04	SOCKET	18
TM05	SOCKET	18
TM10G	BREAK BAR	16
TM408	SOCKET	22
TM410 TM412	SOCKET SOCKET	22
TM5	SLIDE BAR	82
TM61A	FLEXTENSION	73
TM62B	FLEX DRIV	82
TM65	ADJ TOOL	455
TM77	RAT ADAPT	13
TM82	SCR DRIV	65 240
TM83A	SCR DRIV	455
TM84	SCR DRIV	455

Stock No.	Description	Page
TMA2.5E	HEX DRIVER	62
TMA3.5E	HEX DRIVER	62
TMA3E	HEX HEAD DR	62
TMA4.5E	HEX DRIVER	62
TMA4E	HEX DRIVER	62
TMA5E	HEX DRIVER	62
TMA6E	HEX DRIVER	62
TMA7E	HEX DRIVER	62
TMA8E	HEX DRIVER	62
TMC104E	FLAT TIP DR	65
TMC105E	FLAT TIP DR	65
TMC106E	FLAT TIP DR	65
TMD10	SOCKET	18
TMD11	SOCKET	18
TMD12	SOCKET	18
TMD14	SOCKET	18
TMD16	SOCKET	18
TMD18	SOCKET	18
TMD6	SOCKET	18
TMD7	SOCKET	18
TMD8	SOCKET	18
TMD9	SOCKET	18
TMP12E	PHILLIPS DR	66
TMP22E	PHILLIPS DR	66
TMP23E	PHILLIPS DR	66
TMS4E	SPEEDER	82
TMS70A	SPINNER	14
TMU101A	FLEXOCKET	24
TMU121A	FLEXOCKET	24
TMU141A	FLEXOCKET	24
TMU161A	FLEXOCKET	24
TMU81B	FLEXOCKET	24
TMU8B	UNIVERSAL JOINT	81
TMXK140	EXTENSION	72
TMXK2	EXTENSION	72
TMXK4	EXTENSION	72
TMXK60	EXTENSION	72
TPMA12FP	12FT FOD TAPE	566
V01012B	WRENCH	118
V01214B	WRENCH	118
V01416B	WRENCH	118
V01618B	WRENCH	118
V01820B	WRENCH	118
V02022B V02224B	WRENCH WRENCH	118
V02224B V02426B	WRENCH	118
		118
V02628B	WRENCH WRENCH	
V02830B	WRENCH	118
V03032B V0810B	WRENCH	118
XS1012A	BOXOCKET	114
XS1214A	BOXOCKET	114
XS1416A	BOXOCKET	114
XS1416A XS1618A	BOXOCKET	114
XS1820A	BOXOCKET	114
XS2024A	BOXOCKET	114
XS2226A	BOXSOCKET	114
		114
XS67A XS810A	BOXOCKET BOXOCKET	114
AUI OGA	DUNUUREI	114

# **ATKMFL Master Flightline**

	laster Flightline	
Stock No.	Description	Page
106TMC0	OPEN END SET	121
10MA	FILE MILL 10IN	195
10R 10SSD	FILE ROUND 10IN  OFFSET SD .040 X 1/4	195 147
120SSDP	OFFSET SD .040 X 1/4 OFFSET SD PH1 X PH2	147
12055DP	FILE MILL 12IN	195
12R	FILE ROUND 12IN	195
	HIGH LEVERAGE	
137CF	COMBO PLIERS	168
184CCP	DIAG CUTTER	166
196CF	LONG NOSE W/CUTTER	167
206AFX	EXTENSION ST	74
20SSD	OFFSET SD .050 X 5/16	147
211FY	D/HEX SET	26
211SFY	D/HEX SET	27
30SSD	OFFSET SD .060 X 3/8	147
340SSDP	OFFSET SD PH3 X PH4	147
47CF	COMBO PLIERS	168
61ACP	PLIERS	167
6MA	FILE MILL 6IN	195
6R	FILE ROUND 6IN	195
86CF	DIAGONAL CUTTER	166
87CF	DIAGONAL CUTTER	166
8MA	FILE MILL 8IN	195
8R	FILE ROUND 8IN	195
95BCP	PLIERS 3X19 ROW CURVED	167
AC58E	SCRATCH CS	609
AD704A	4PC ADJ WRENCH SET	133
ATI508K	CANNON PLUG PLIER	N161
AW1020DK	HEX WRENCH SET	131
AWP120	PLIERS	168
BP16B	HAMMER	189
CD10A	TIN SNIP	579
CD7A	TIN SNIP	579
CRA180PB	BIT SET	NA
DAL10B	SHEARS	579
DAR10B	SHEARS	579
DAS10B	SHEARS	579
DB113C	BIT SET 13 PC HSS	311
E1020	EXTR SET 64785	212
E709BCG	4IN CUTTER TAPER FULL	173
	FLUSH 3 WATT LED 2D CELL	
ECF201A	FLASHLIGHT	528
F111	SOCKET	26
F40B	HANDLE	84
F4LBK	3/8 IN DR. SPEEDER	84
F77	RAT ADAPT	13
F936F0D	HSSFODRAT	13
FB302A	FEELER GA	565
FB325A	FEELER GA	237
		564
FB326B	FEELER GA CROWFOOT	564
FC40A	CROWFOOT	123
FC012A	CROWFOOT	123
FC014A	CROWFOOT	123
FC016A FC018A	CROWFOOT	123
FC018A FC020A	CROWFOOT	123
FC020A FC022A	CROWFOOT	123
	CROWFOOT	
FC024A	CROWFOOT 7/8"	123
FC028A	3/8"SQ DR.	123
FRS70A	SPINNER	14
FU10B	FLEXOCKET	35
FU14B	FLEXOCKET	35
FU16B	FLEXOCKET	35
FU18B	FLEXOCKET	35
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# **Aviation Tool Kit Contents**

# ATKMFL Master Flightline (Cont'd)

	uster ragname (co	u,
Stock No.	Description	Page
FU20B FU22B	FLEXOCKET FLEXOCKET	35 35
FU24B	FLEXOCKET	35
FU26B	FLEXOCKET	35
FU28B	FLEXOCKET	35
FU30A	FLEXOCKET	35
FXKL6A	3/8IN LOCKING Extension	76
GA265A	MECH FNGR	569
GA294	MIRROR	567
GA53A GA98A	HINGED MIRROR FILE HANDLE PLASTIC	567 196
GFAT1E	ADAPTOR	81 83
GSAF1E	ADAPTOR	83 85
HBPT16	16Z PLASTIC TIPPED HAMMER	188
HBPT24	240Z PLASTIC	188
HSBM1232B	TIPPED HAMMER HACKSAW BLADES 10/PK	190
	BI MOLD SOFT	
HSG319	GRIP HACKSAW	190
KER1600S0	CHIVE KNIFE COMBINATION PLIERS SET	192 169
	3 - 4IN MECH DIG	
MIC4B	MICROMETER	561
NDD1070A	NUT DR SET MASTIC REMOVAL	153 244
NYZ7007HD	HAND KIT	586
0EX711B	WR SET	109
OXI10SB OXI6SB	WRENCH WRENCH	111
OXI7SB	WRENCH	111
OXI8SB	WRENCH	111
OXI9SB	WRENCH	111
PBMP16A	16 IN MULTI Position Prybar	162
PK50A	SCRAPER	197
PK52A	SCRAPER	197
PPC710BK	PUNCH/CHISEL SET/KIT BAG	184
PT28E	MAGNETIC PICK-UP TOOL.	568
PWC27	WIRE STRIPPR	175
PWC52A	JAW PLIERS	174
R1214C	RATCHET WRENCH 3/8 X 7/16 IN	115
R1618C	RATCHET WRENCH	115
1110100	1/2X9/16IN RATCHET WRENCH	
R2022C	5/8 X 11/16IN	115
R2426C	RATCHET WRENCH 3/4X13/16IN	115
R2830C	RATCHET WRENCH	115
1120300	7/8X15/16IN RATCHET WRENCH	113
R810C	1/4INX5/16IN	115
RULER600	6 IN ENG RULE 9IN REVSBLE SFTY	566
RWTP9	WIRE PLIERS	245
RXFS605B	WRENCH SET.	121
S12L	SLIDE BAR	86
S4	SPEEDER 1/2IN RATCHETING	86
S77A	ADAPTOR.	13
S8 S936FOD	UNIV JT HSSFODRAT	85 13
SG5ASABR	INSTINCT AWL	159
SGASA204AR	SOFT GRIP MINI	159
	PICK SET INSTINCT COTTER	482
SGCP1BR	PIN PULLER	499
SGD153BR	Marine Plug Screwdriver	141

TECH2R100         FIXED 3/8IN HEAD TECHWRENCH         247           TECH3R250         FIXED 1/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM10G         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM30E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM408         SOCKET         22           TM410         SOCKET         22           TM412         SOCKET         22           TM45SA         1/4IN SHANK DRIVER         82           TM61A         FLEXTENSION         73           TM62B         FLEX DRIV         82           TM65         ADJ TOOL         455           TM77         RAT ADAPT         13	Stock No.	Docariution	Done
SHDX40R         1/AIN DRIVER         62           SHDX40R         4PC ORG HARD GRIP SCRDRVR SET         140           SHDX80R         ORANGE 8PC HARD GRIP SCRDR SET         140           SHD231R         NUM 1 3IN EXO POSI SD         145           SHD242R         NUM 2 4IN EXP POSI SD         145           SN18B         BREAKER BAR         16           SRPC7000         RING PLIERS         508           SSDE         SCR START         152           SSDE42C         ELEC SD 1/8IN X 2IN FLAT         144           SSDE43C         ELEC SD 1/8IN X 3IN FLAT         144           SSDE44C         ELEC SD 1/8IN X 3IN FLAT         144           SSDE46C         ELEC SD 1/8IN X 8IN FLAT         144           SSDE46C         ELEC SD 1/8IN X 8IN FLAT         144           STMD10         SOCKET         19           STMD11         SOCKET         19           STMD12         SOCKET         19           STMD14         SOCKET         19           STMD15         SOCKET         19           STMD18         SOCKET         19           STMD18         SOCKET         19           STMD18         SOCKET         19			
SHDX80R         SET         140           SHDX31R         ORANGE SPC HARD GRIP SCROR SET         140           SHDZ31R         NUM 1 3IN EXO POSI SD         145           SHDZ42R         NUM 2 4IN EXP POSI SD         145           SN1BB         BREAKER BAR         16           SRPC7000         RING PLIERS         170           SS5A         SCR START         152           SSDE42C         ELEC SD 1/8IN X 2IN FLAT         144           SSDE43C         ELEC SD 1/8IN X 3IN FLAT         144           SSDE44C         ELEC SD 1/8IN X 4IN FLAT         144           SSDE46C         ELEC SD 1/8IN X 3IN FLAT         144           SSDE46C         ELEC SD 1/8IN X 3IN FLAT         144           SSDE48C         ELEC SD 1/8IN X 3IN FLAT         144           STMD10         SOCKET         19           STMD11         SOCKET         19           STMD12         SOCKET         19           STMD14         SOCKET         19           STMD18         SOCKET         19           STMD18         SOCKET         19           STMD18         SOCKET         19           STMD18         SOCKET         19           STM	SGT4BR	1/4IN DRIVER	82
SHDZ31R         NUM 1 3IN EXO POSI SD         145           SHDZ42R         NUM 2 4IN EXP POSI SD         145           SN18B         BREAKER BAR         16           SRPC7000         RING PLIERS         170           SS5A         SCR START         152           SSDE42C         ELEC SD 1/8IN X 2IN FLAT         144           SDE43C         ELEC SD 1/8IN X 3IN FLAT         144           SDE44C         ELEC SD 1/8IN X 3IN FLAT         144           SDE46C         ELEC SD 1/8IN X 6IN FLAT         144           SDE46C         ELEC SD 1/8IN X 8IN FLAT         144           SDE48C         ELEC SD 1/8IN X 8IN FLAT         144           STMD10         SOCKET         19           STMD11         SOCKET         19           STMD12         SOCKET         19           STMD14         SOCKET         19           STMD15         SOCKET         19           STMD6         SOCKET         19           STMD7         SOCKET         19           STMD9         SOCKET         37           SW161A         SOCKET         37           SW161A         SOCKET         37           SW211         SOCKET	SHDX40R	SET	140
SHDZ42R         NUM 2 4IN EXP POSI SD         145           SN18B         BREAKER BAR         16           SRPC7000         RING PLIERS         508           SS5A         SCR START         152           SDE42C         ELEC SD 1/8IN X 2IN FLAT         144           SDE43C         ELEC SD 1/8IN X 3IN FLAT         144           SSDE44C         ELEC SD 1/8IN X 4IN FLAT         144           SSDE46C         ELEC SD 1/8IN X 4IN FLAT         144           SSDE48C         ELEC SD 1/8IN X 8IN FLAT         144           STMD10         SOCKET         19           STMD11         SOCKET         19           STMD12         SOCKET         19           STMD13         SOCKET         19           STMD14         SOCKET         19           STMD15         SOCKET         19           STMD6         SOCKET         19           STMD7         SOCKET         19           STMD8         SOCKET         19           STMD9         SOCKET         37           SW161A         SOCKET         37           SW161A         SOCKET         37           SW261         SOCKET         37 <t< th=""><th>SHDX80R</th><th></th><th>140</th></t<>	SHDX80R		140
SN18B         BREAKER BAR         16           SRPC7000         RING PLIERS         170           SS5A         SCR START         152           SSDE42C         ELEC SD 1/8IN X 2IN FLAT         144           SDE43C         ELEC SD 1/8IN X 3IN FLAT         144           SSDE44C         ELEC SD 1/8IN X 4IN FLAT         144           SSDE46C         ELEC SD 1/8IN X 8IN FLAT         144           SSDE48C         ELEC SD 1/8IN X 8IN FLAT         144           STMD10         SOCKET         19           STMD11         SOCKET         19           STMD12         SOCKET         19           STMD14         SOCKET         19           STMD15         SOCKET         19           STMD6         SOCKET         19           STMD7         SOCKET         19           STMD8         SOCKET         19           SW121A         SOCKET         37           SW161A         SOCKET         37           SW161A         SOCKET         37           SW241         SOCKET         37           SW221         SOCKET         37           SW231         SOCKET         37           SW	SHDZ31R	NUM 1 3IN EXO POSI SD	145
SRPC7000         RING PLIERS         170           SS5A         SCR START         152           SSDE42C         ELEC SD 1/8IN X 2IN FLAT         144           SDE43C         ELEC SD 1/8IN X 3IN FLAT         144           SDE44C         ELEC SD 1/8IN X 4IN FLAT         144           SDE46C         ELEC SD 1/8IN X 8IN FLAT         144           SSDE48C         ELEC SD 1/8IN X 8IN FLAT         144           STMD10         SOCKET         19           STMD11         SOCKET         19           STMD12         SOCKET         19           STMD14         SOCKET         19           STMD18         SOCKET         19           STMD6         SOCKET         19           STMD7         SOCKET         19           STMD8         SOCKET         19           STMD9         SOCKET         19           SW121A         SOCKET         37           SW121A         SOCKET         37           SW161A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW231 <th></th> <th></th> <th>_</th>			_
\$\$\frac{\text{SSDE42C}}{\text{SSDE43C}}\$\text{CELC SD 1/8IN X 2IN FLAT}\$\text{144}\$\$\text{SSDE44C}\$\text{ELEC SD 1/8IN X 3IN FLAT}\$\text{144}\$\$\text{SSDE44C}\$\text{ELEC SD 1/8IN X 4IN FLAT}\$\text{144}\$\$\text{SSDE46C}\$\text{ELEC SD 1/8IN X 4IN FLAT}\$\text{144}\$\$\text{SSDE46C}\$\text{ELEC SD 1/8IN X 8IN FLAT}\$\text{144}\$\$\text{STMD10}\$\text{SOCKET}\$\text{19}\$\$\text{STMD11}\$\text{SOCKET}\$\text{19}\$\$\text{STMD12}\$\text{SOCKET}\$\text{19}\$\$\text{STMD12}\$\text{SOCKET}\$\text{19}\$\$\text{STMD14}\$\text{SOCKET}\$\text{19}\$\$\text{STMD6}\$\text{SOCKET}\$\text{19}\$\$\text{STMD6}\$\text{SOCKET}\$\text{19}\$\$\text{STMD7}\$\text{SOCKET}\$\text{19}\$\$\text{STMD9}\$\text{SOCKET}\$\text{19}\$\$\text{STMD9}\$\text{SOCKET}\$\text{19}\$\$\text{STMD9}\$\text{SOCKET}\$\text{19}\$\$\text{STMD9}\$\text{SOCKET}\$\text{37}\$\$\text{SW141A}\$\text{SOCKET}\$\text{37}\$\$\text{SW141A}\$\text{SOCKET}\$\text{37}\$\$\text{SW261}\$\text{SOCKET}\$\text{37}\$\$\text{SW221}\$\text{SOCKET}\$\text{37}\$\$\text{SW221}\$\text{SOCKET}\$\text{37}\$\$\text{SW221}\$\text{SOCKET}\$\text{37}\$\$\text{SW221}\$\text{SOCKET}\$\text{37}\$\$\text{SW221}\$\text{SOCKET}\$\text{37}\$\$\text{SW321}\$\text{SOCKET}\$\text{37}\$\$\text{SW321}\$\text{SOCKET}\$\text{37}\$\$\text{SW331}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW341}\$\text{SOCKET}\$\text{37}\$\$\text{SW351}\$\text{SOCKET}\$\text{37}\$\$\text{SW421}\$\text{SOCKET}\$\text{37}\$\$\text{SM361}\$\text{SOCKET}\$\text{37}\$\$\text{SOCKET}\$37			_
SSDE42C         ELEC SD 1/8IN X 2IN FLAT         144           SSDE43C         ELEC SD 1/8IN X 3IN FLAT         144           SSDE44C         ELEC SD 1/8IN X 4IN FLAT         144           SSDE46C         ELEC SD 1/8IN X 6IN FLAT         144           SSDE48C         ELEC SD 1/8IN X 6IN FLAT         144           STMD10         SOCKET         19           STMD11         SOCKET         19           STMD12         SOCKET         19           STMD14         SOCKET         19           STMD14         SOCKET         19           STMD18         SOCKET         19           STMD6         SOCKET         19           STMD7         SOCKET         19           STMD9         SOCKET         19           SW121A         SOCKET         37           SW121A         SOCKET         37           SW141A         SOCKET         37           SW161A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW231         SOCKET         37           SW321			
SSDE43C         ELEC SD 1/8IN X 3IN FLAT         144           SSDE44C         ELEC SD 1/8IN X 4IN FLAT         144           SSDE46C         ELEC SD 1/8IN X 6IN FLAT         144           SSDE48C         ELEC SD 1/8IN X 6IN FLAT         144           STMD10         SOCKET         19           STMD11         SOCKET         19           STMD12         SOCKET         19           STMD14         SOCKET         19           STMD18         SOCKET         19           STMD6         SOCKET         19           STMD7         SOCKET         19           STMD9         SOCKET         19           STMD9         SOCKET         37           SW121A         SOCKET         37           SW161A         SOCKET         37           SW181A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW231         SOCKET         37           SW321         SOCKET         37           SW331         SOCKET         37           SW341         SOCKET			
SSDE44C         ELEC SD 1/8IN X 4IN FLAT         144           SSDE46C         ELEC SD 1/8IN X 6IN FLAT         144           SSDE48C         ELEC SD 1/8IN X 8IN FLAT         144           STMD10         SOCKET         19           STMD11         SOCKET         19           STMD12         SOCKET         19           STMD14         SOCKET         19           STMD18         SOCKET         19           STMD6         SOCKET         19           STMD7         SOCKET         19           STMD8         SOCKET         19           STMD9         SOCKET         19           SW11A         SOCKET         37           SW11A         SOCKET         37           SW141A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW231         SOCKET         37           SW321         SOCKET         37           SW331         SOCKET         37           SW341         SOCKET         37 <th></th> <th></th> <th></th>			
SSDE48C         ELEC SD 1/8IN X 8IN FLAT         144           STMD10         SOCKET         19           STMD11         SOCKET         19           STMD12         SOCKET         19           STMD14         SOCKET         19           STMD18         SOCKET         19           STMD18         SOCKET         19           STMD6         SOCKET         19           STMD7         SOCKET         19           STMD8         SOCKET         19           STMD9         SOCKET         19           SW121A         SOCKET         37           SW161A         SOCKET         37           SW161A         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW281         SOCKET         37           SW281         SOCKET         37           SW321         SOCKET         37           SW331         SOCKET         37           SW341         SOCKET         37           SW341         SOCKET         37           SW421	SSDE44C		144
STMD10         SOCKET         19           STMD11         SOCKET         19           STMD12         SOCKET         19           STMD14         SOCKET         19           STMD18         SOCKET         19           STMD18         SOCKET         19           STMD6         SOCKET         19           STMD9         SOCKET         19           STMD9         SOCKET         37           SW121A         SOCKET         37           SW121A         SOCKET         37           SW121A         SOCKET         37           SW181A         SOCKET         37           SW181A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW281         SOCKET         37           SW321         SOCKET         37           SW321         SOCKET         37           SW331         SOCKET         37           SW401         SOCKET         37           SW421         SOCKET         37           SW421         SOCKET			
STMD11         SOCKET         19           STMD12         SOCKET         19           STMD14         SOCKET         19           STMD6         SOCKET         19           STMD6         SOCKET         19           STMD7         SOCKET         19           STMD8         SOCKET         19           STMD9         SOCKET         19           STMD9         SOCKET         37           SW121A         SOCKET         37           SW121A         SOCKET         37           SW141A         SOCKET         37           SW141A         SOCKET         37           SW141A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW231         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW331         SOCKET         37           SW341         SOCKET         37           SW341         SOCKET			
STMD14         SOCKET         19           STMD6         SOCKET         19           STMD7         SOCKET         19           STMD8         SOCKET         19           STMD9         SOCKET         19           SW121A         SOCKET         37           SW141A         SOCKET         37           SW161A         SOCKET         37           SW181A         SOCKET         37           SW201         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW261         SOCKET         37           SW281         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW341         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW421         SOCKET         37           SW421         SOCKET         37           SXK3         EXTENSION         77           SXK3         EXTENSION         77           TM33         ADAPTOR			_
STMD18         SOCKET         19           STMD6         SOCKET         19           STMD7         SOCKET         19           STMD8         SOCKET         19           STMD9         SOCKET         37           SW121A         SOCKET         37           SW141A         SOCKET         37           SW181A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW261         SOCKET         37           SW281         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW321         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW361         SOCKET         37           SW421         SOCKET         37           SW421         SOCKET         37           SXK3         EXTENSION         77           SXK3         EXTENSION         77           SXK3         EXTENSION			
STMD6         SOCKET         19           STMD7         SOCKET         19           STMD8         SOCKET         19           STMD9         SOCKET         19           SW121A         SOCKET         37           SW141A         SOCKET         37           SW161A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW261         SOCKET         37           SW281         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW321         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW381         SOCKET         37           SW401         SOCKET         37           SW421         SOCKET         37           SXK3         EXTENSION         77           SXK3         EXTENSION         77           SXK3         EXTENSION         77           TM36FOD         HSSFODRAT </th <th></th> <th></th> <th></th>			
STMD7         SOCKET         19           STMD8         SOCKET         19           STMD9         SOCKET         19           SW121A         SOCKET         37           SW121A         SOCKET         37           SW141A         SOCKET         37           SW161A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW261         SOCKET         37           SW261         SOCKET         37           SW281         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW321         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW381         SOCKET         37           SW421         SOCKET         37           SXK3         EXTENSION         77           SXK3         EXTENSION         77           SXK3         EXTENSION         77           TGCH3R250         FIXED J/SIN HEAD         247           TECH3R250			_
STMDB         SOCKET         19           STMD9         SOCKET         19           SW121A         SOCKET         37           SW141A         SOCKET         37           SW161A         SOCKET         37           SW181A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW241         SOCKET         37           SW261         SOCKET         37           SW281         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW361         SOCKET         37           SW401         SOCKET         37           SW421         SOCKET         37           SW421         SOCKET         37           SXK3         EXTENSION         77           SXK3         EXTENSION         77           SXK3         EXTENSION         77           TGCH3R250         FIXED J/SIN HEAD         247           TECH3R250			
SW121A         SOCKET         37           SW141A         SOCKET         37           SW161A         SOCKET         37           SW161A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW221         SOCKET         37           SW261         SOCKET         37           SW301         SOCKET         37           SW301         SOCKET         37           SW341         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW381         SOCKET         37           SW421         SOCKET         37           SW421         SOCKET         37           SXK3         EXTENSION         77           SXK3         EXTENSION         77           SXK5         EXTENSION         77           T936FOD         HSSFODRAT         13           TA3         ADAPTOR         81 83           TECH2R100         FIXED 3/8IN HEAD         247           TECH3R250         FIXED 1/2IN HEAD         247 <t< th=""><th></th><th></th><th></th></t<>			
SW141A         SOCKET         37           SW161A         SOCKET         37           SW181A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW241         SOCKET         37           SW261         SOCKET         37           SW281         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW381         SOCKET         37           SW421         SOCKET         37           SW421         SOCKET         37           SXK11         EXTENSION         77           SXK5         EXTENSION         77           SXK5         EXTENSION         77           SXK5         EXTENSION         77           TA3         ADAPTOR         81 83           TECH2R100         FIXED 3/8IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM106 </th <th></th> <th></th> <th>19</th>			19
SW161A         SOCKET         37           SW181A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW241         SOCKET         37           SW261         SOCKET         37           SW281         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW381         SOCKET         37           SW421         SOCKET         37           SW421         SOCKET         37           SXK11         EXTENSION         77           SXK3         EXTENSION         77           SXK5         EXTENSION         77           SXK5         EXTENSION         77           T33         ADAPTOR         81 83           TECH2R100         FIXED J/2IN HEAD TECHWRENCH         247           TECH3R250         FIXED J/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18			
SW181A         SOCKET         37           SW201         SOCKET         37           SW221         SOCKET         37           SW241         SOCKET         37           SW261         SOCKET         37           SW281         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW381         SOCKET         37           SW401         SOCKET         37           SXK31         EXTENSION         77           SXK3         EXTENSION         77           SXK3         EXTENSION         77           SXK3         EXTENSION         77           T936FOD         HSSFODRAT         13           TA3         ADAPTOR         81 83           TECH2R100         FIXED J/2IN HEAD         247           TECH3R250         FIXED J/2IN HEAD         247           TM04         SOCKET         18           TM05         SOCKET         18           TM10G         BREAK BAR         16           <			
SW221         SOCKET         37           SW241         SOCKET         37           SW261         SOCKET         37           SW281         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW381         SOCKET         37           SW401         SOCKET         37           SW421         SOCKET         37           SXK3         EXTENSION         77           SXK3         EXTENSION         77           SXK3         EXTENSION         77           SXK3         EXTENSION         77           TSAGFOD         HSSFODRAT         13           TA3         ADAPTOR         81         83           TECH2R100         HSSFODRAT         13         18           TECH3R250         FIXED J/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM10G         BREAK BAR         16           TM27E         CLUTCH SOCKET			
SW241         SOCKET         37           SW261         SOCKET         37           SW281         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW341         SOCKET         37           SW341         SOCKET         37           SW381         SOCKET         37           SW401         SOCKET         37           SW421         SOCKET         37           SXK3         EXTENSION         77           SXK3         EXTENSION         77           SXK3         EXTENSION         77           T936FOD         HSSFODRAT         13           TA3         ADAPTOR         81         83           TECH2R100         FIXED 3/8IN HEAD TECHWRENCH         247           TECH3R250         FIXED 1/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM06         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM410         SOCK			_
SW261         SOCKET         37           SW281         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW381         SOCKET         37           SW401         SOCKET         37           SW421         SOCKET         37           SXK1         EXTENSION         77           SXK3         EXTENSION         77           SXK5         EXTENSION         77           T936FOD         HSSFODRAT         13           TA3         ADAPTOR         81         83           TECH2R100         FIXED 3/8IN HEAD TECHWRENCH         247           TECH3R250         FIXED 1/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM06         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         22           TM410         SOCKE			
SW281         SOCKET         37           SW301         SOCKET         37           SW321         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW381         SOCKET         37           SW401         SOCKET         37           SW421         SOCKET         37           SXK1         EXTENSION         77           SXK3         EXTENSION         77           SXK5         EXTENSION         77           T936FOD         HSSFODRAT         13           TA3         ADAPTOR         81         83           TECH2R100         FIXED 3/8IN HEAD TECHWRENCH         247           TECH3R250         FIXED 1/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM06         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         22           TM410         SOCKET         22           TM412         <			
SW321         SOCKET         37           SW341         SOCKET         37           SW361         SOCKET         37           SW381         SOCKET         37           SW401         SOCKET         37           SW421         SOCKET         37           SXK11         EXTENSION         77           SXK5         EXTENSION         77           SXK5         EXTENSION         77           SXK5         EXTENSION         77           TA3         ADAPTOR         81         83           TECH2R100         FIXED 3/8IN HEAD TECHWRENCH         247           TECH3R250         FIXED 1/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM10G         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         22           TM408         SOCKET         22           TM410         SOCKET         22           TM412         SOCKET         22           TM45         SLIDE B			-
SW341         SOCKET         37           SW361         SOCKET         37           SW381         SOCKET         37           SW401         SOCKET         37           SW421         SOCKET         37           SXK1         EXTENSION         77           SXK5         EXTENSION         77           T936FOD         HSSFODRAT         13           TA3         ADAPTOR         81         83           TECH2R100         FIXED J/2IN HEAD TECHWRENCH         247           TECH3R250         FIXED J/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM10G         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM408         SOCKET         22           TM410         SOCKET         22           TM412         SOCKET         22           TM413         SLIDE BAR         82           TM5         SLIDE BAR         82           TM61A         FL	SW301	SOCKET	37
SW361         SOCKET         37           SW381         SOCKET         37           SW401         SOCKET         37           SW421         SOCKET         37           SXK11         EXTENSION         77           SXK3         EXTENSION         77           SXK5         EXTENSION         77           T936FOD         HSSFODRAT         13           TA3         ADAPTOR         81         83           TECH2R100         FIXED J/2IN HEAD TECHWRENCH         247           TECH3R250         FIXED J/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM06         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM30E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         22           TM408         SOCKET         22           TM410         SOCKET         22           TM412         SOCKET         22           TM412         SOCKET         22           TM45 <t< th=""><th></th><th></th><th>_</th></t<>			_
SW381         SOCKET         37           SW401         SOCKET         37           SW421         SOCKET         37           SXK11         EXTENSION         77           SXK3         EXTENSION         77           SXK5         EXTENSION         77           TSXK5         EXTENSION         77           T33         ADAPTOR         81         83           TECH2R100         FIXED 3/8IN HEAD TECHWRENCH         247           TECH3R250         FIXED 1/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM06         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM408         SOCKET         22           TM410         SOCKET         22           TM412         SOCKET         22           TM412         SOCKET         22           TM45         SLIDE BAR         82           TM5         SLIDE BAR         82           TM61A         FLE			
SW421         SOCKET         37           SXK11         EXTENSION         77           SXK3         EXTENSION         77           SXK5         EXTENSION         77           T936FOD         HSSFODRAT         13           TA3         ADAPTOR         81         83           TECH2R100         FIXED 3/8IN HEAD TECHWRENCH         247           TECH3R250         FIXED 1/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM10G         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM30E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM408         SOCKET         22           TM408         SOCKET         22           TM410         SOCKET         22           TM412         SOCKET         22           TM412         SOCKET         22           TM45         SLIDE BAR         82           TM5         SLIDE BAR         82           TM61A         FLEX DRIV         82           TM65 <t< th=""><th></th><th></th><th>_</th></t<>			_
SXK11         EXTENSION         77           SXK3         EXTENSION         77           SXK5         EXTENSION         77           T936F0D         HSSFODRAT         13           TA3         ADAPTOR         81         83           TECH2R100         FIXED 3/8IN HEAD TECHWRENCH         247           TECH3R250         FIXED 1/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM10G         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM408         SOCKET         22           TM410         SOCKET         22           TM412         SOCKET         22           TM412         SOCKET         22           TM45         SLIDE BAR         82           TM65         SLIDE BAR         82           TM65         ADJ TOOL         455           TM77         RAT ADAPT         13           TM82         SCR DRIV         455			_
SXK3         EXTENSION         77           SXK5         EXTENSION         77           T936F0D         HSSFODRAT         13           TA3         ADAPTOR         81         83           TECH2R100         FIXED J/SIN HEAD TECHWRENCH         247           TECH3R250         FIXED 1/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM10G         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM30E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM408         SOCKET         22           TM410         SOCKET         22           TM412         SOCKET         22           TM412         SOCKET         22           TM45         SLIDE BAR         82           TM65         SLIDE BAR         82           TM65         ADJ TOOL         455           TM77         RAT ADAPT         13           TM82         SCR DRIV         455	<u> </u>		
SXK5         EXTENSION         77           T936F0D         HSSF0DRAT         13           TA3         ADAPTOR         81 83           TECH2R100         FIXED 3/8IN HEAD TECHWRENCH         247           TECH3R250         FIXED 1/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM10G         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         66           TM408         SOCKET         22           TM410         SOCKET         22           TM412         SOCKET         22           TM412         SOCKET         22           TM45SA         1/4IN SHANK DRIVER         82           TM5         SLIDE BAR         82           TM61A         FLEXTENSION         73           TM62B         FLEX DRIV         82           TM65         ADJ TOOL         455           TM77         RAT ADAPT         13           TM82         SCR DRIV         455			
TA3			
TECH2R100         FIXED 3/8IN HEAD TECHWRENCH         247           TECH3R250         FIXED 1/2IN HEAD TECHWRENCH         247           TM04         SOCKET         18           TM05         SOCKET         18           TM10G         BREAK BAR         16           TM27E         CLUTCH SOCKET         66           TM30E         CLUTCH SOCKET         66           TM31E         CLUTCH SOCKET         22           TM410         SOCKET         22           TM410         SOCKET         22           TM412         SOCKET         22           TM413         SHANK DRIVER         82           TM5         SLIDE BAR         82           TM61A         FLEXTENSION         73           TM62B         FLEX DRIV         82           TM65         ADJ TOOL         455           TM77         RAT ADAPT         13           TM82         SCR DRIV         455			
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TM4CSA         1/4IN SHANK DRIVER         82           TM5         SLIDE BAR         82           TM61A         FLEXTENSION         73           TM62B         FLEX DRIV         82           TM65         ADJ TOOL         455           TM77         RAT ADAPT         13           TM82         SCR DRIV         65 240           TM83A         SCR DRIV         455			
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נו עוווווו ו	JUINLI	10

Stock No.	Description	Page
TMMD5	SOCKET	18
TMMD5.5	SOCKET	18
TMMD6	SOCKET	18
TMMD7	SOCKET	18
TMMD8	SOCKET	18
TMMD9	SOCKET	18
TMS4EK	1/4IN SPEEDER	82
TMX240	EXTENSION	72
TMXK140	EXTENSION	72
WER066624	TORQ SET 1/4IN BIT 1IN X NO4	N163
WER066626	TORQ SET 1/4IN BIT 1IN X NO5	N163
WER066628	TORQ-SET 1/4IN BIT 1IN X NO6	N163
WER066630	TORQ-SET 1/4IN BIT 1IN X NO8	N163
WER066632	TORQ SET 1/4IN BIT 1IN X NO10	N163
WER066654	TORQ SET 5/16IN BIT 1IN X 1/4	N163
WER066656	TORQ SET 5/16IN BIT 1IN X 5/16	N163
YA728A	GREASE GUN,LEVER	539

# ATKMMAO Master Mechanic Add On

Stock No.	Description	Page
10MA	FILE MILL 10IN	195
10R	FILE ROUND 10IN	195
10SSD	OFFSET SD .040 X 1/4	147
120SSDP	OFFSET SD PH1 X PH2	147
12R	FILE ROUND 12IN	195
1650	PRY BAR	163
340SSDP	OFFSET SD PH3 X PH4	147
6MA	FILE MILL 6IN	195
6R	FILE ROUND 6IN	195
A2A	ADAPTOR	83 85
AC58E	3X19 ROW CURVED SCRATCH BRUSH	609
AW1015DK	HEX WRENCH SET	131
AWP120	PLIERS	168
CD7A	TIN SNIP	579
CX1416	BOXOCKET	116
CX1820	BOXOCKET	116
CX2024	BOXOCKET	116
CX2226	BOXOCKET	116
CX2830	BOXOCKET	116
DAL10B	SHEARS	579
DAR10B	SHEARS	579
DAS10B	SHEARS	579
DB113C	BIT SET 13 PC HSS	311
E1020	EXTR SET 64785	212
F111	SOCKET	26
F77	RAT ADAPT	13
GA261B	SCREWSTART	152
GA265A	MECH FNGR	569
GA98A	FILE HANDLE PLASTIC	196
GLASSVIS	CLEAR UNCOATED LENS, BLACK TMP	615
HBBD16	16 OZ. DEAD BLOW HAMMER	187
HSBM1232B	HACKSAW BLADES 10/PK	190
HSG319	BI MOLD SOFT GRIP HACKSAW	190
NDD1070A	NUT DR SET	153
NYZ7007HD	MASTIC REMOVAL HAND KIT	244 586

# **Aviation Tool Kit Contents**

# ATKMMAO Master Mechanic Add On (Cont'd)

Stock No.	Description	Page
PK50A	SCRAPER	197
PPC210BK	PUNCH/CHISEL SET/KIT BAG	184
PPVP70BK	MIDGET PUNCH AND CHISEL SET	185
PT28E	MAGNETIC PICK-UP TOOL.	568
R460B	120V SOLDER KIT	182
RULER600	6 IN ENG RULE	566
SG5ASABR	INSTINCT AWL	159
SGD304BR	MINI SLOTTED SCREWDRIVER RED	141
SGT4BR	SOFTGRIP 1/4IN DRIVER	82
SN18B	BREAKER BAR	16
SRPC7000	RING PLIERS	170 508
TPMA12FP	12FT FOD TAPE	566
XB3032A	BOXOCKET	113
XB3234A	BOXOCKET	113
XB3638A	BOXOCKET	113
XB4042A	BOXOCKET	113
XDHF605	WRENCH SET	137
XS609A	WR SET	114

# ATKEO Engine Overhaul

Stock No.	Description	Page
1210B	5/16 LONG TAPER PUNC	185
137CF	HIGH LEVERAGE COMBO PLIERS	168
1512B	LONG PUNCH.	185
1816B	LG PUNCH	185
184CCP	DIAG CUTTER	166
196CF	LONG NOSE W/CUTTER	167
218AFP	3/8 DR SET	94
388CF	HIGH LEVERAGE CUTTER	166 499
46ACP	PLIERS	168
61ACP	PLIERS	167
91ACP	PLIERS	168
A2A	ADAPTOR	83 85
AW1015DHK	HEX WRENCH SET	131
BH232A	HAMMER	188
BP4B	HAMMER	189
BP8B	HAMMER	189
BPN12B	HAMMER	189
DAL9A	SNIPS	579
DAR9A	SNIPS	579
DAS10B	SHEARS	579
DB160C	60 PC HSS WIRE SET	312
DBF1/4C	1/4 DRILL BIT	212 214 311
DBF5/16C	5/16 DRILL BIT	212 214 311
DM6	DEPTH MICROMETER	561
ECF35	FLASHLIGHT	528
F301	SOCKET	26
F321	SOCKET	26
FA10E	HEX DRIVER	62
FA12E	HEX DRIVER	62
FA4.5E	HEX DRIVER	62
FA4E	HEX DRIVER	62
FA5E	HEX DRIVER	62
FA6E	HEX DRIVER	62
FA7E	HEX DRIVER	62
FA8E	HEX DRIVER	62
FB335	FEELER GA	564
FU10B	FLEX0CKET	35

# ATKEO Engine Overhaul (Cont'd)

AIKEU Eng	gine Overhaul (Cont'	d)
Stock No.	Description	Page
FU12B	FLEXOCKET	35
FU14B	FLEXOCKET	35
FU16B	FLEXOCKET	35
FU18B	FLEXOCKET	35
FXWP8	WOBBLE PLUS EXT MIRROR	75
GA295 GA353B	4-JAW FLEX PICKUP TOOL	567 569
GFAT1E	ADAPTOR	81 83
HBFE24	24 OZ DB HAMMER	187
HBFN120A	SWISS FILE SET	196
	16Z PLASTIC	
HBPT16	TIPPED HAMMER	188
HSG319	BI MOLD SOFT	190
	GRIP HACKSAW	
LP404	COMBINATION PLIERS SET 6IN LONG NOSE	169
LP6LN	LOCKING PLIER	169
MIC3B	2 - 3IN MECH DIG	561
MICSD	MICROMETER	561
MICB1B	0 - 1IN OUTSIDE MIC	561
MNH1002	5X POWER LIGHTED MAGNIFIER	RWD
MPC7A	7IN BENT NOSE MINI PLIERS	183
MPS7A	7IN STRAIGHT MINI PLIERS	183
MROUND4	4 PC SMALL HOLE GAGE SET	562
OEXO80B	1/4IN WRENCH	110
OEXO90B	WRENCH	110
OEX10B	5/16 FLKDR COMBO WRENCH	109
OEX11B	11/32 FLKDR	109
-	COMBO WRENCH	
0EX12B	3/8 FLKDR COMBO WRENCH	109
0EX14B	7/16 FLKDR COMBO WRENCH	109
OEX16B	1/2 FLKDR COMBO WRENCH	109
OEX18B	9/16 FLKDR COMBO WRENCH	109
OEX20B	5/8 FLKDR COMBO WRENCH	109
OEX22B	11/16 FLKDR COMBO WRENCH 3/4 FLKDR COMBO WRENCH	109
OEX24B OEX26B	13/16 FLKDR COMBO WRENCH	109
OEX28B	7/8 FLKDR COMBO WRENCH	109
OEX30B	15/16 FLKDR COMBO WRENCH	109
OEX32B	1IN FLKDR COMBO WRENCH	109
	1-1/16 FLKDR	
OEX34B	COMBO WRENCH	109
OEX36B	1-1/8 FLKDR COMBO WRENCH	109
0EX38B	1-3/16 FLKDR COMBO WRENCH	109
OEX40B	1-1/4 FLKDR COMBO WRENCH	109
PK52A	SCRAPER	197
PMF129	6" DIVIDER	562
PPC250BK	PUNCH/CHISEL SET/KIT BAG	184
PPC3A	PUNCH	184
PPC404A	PUNCH	185
PPC4A	PUNCH	184
PPC6B	PUNCH	184
PPVP70BK	MIDGET PUNCH AND	185
	CHISEL SET TEL 2LB PICK UP	.00
PT5C	TOOL CHROME	568
PTM143	INSPECTION MIRROR	567
PTS5	SCRIBER	568
R1011C	RATCHET WRENCH	115
	5/16INX11/32IN	110
R1012C	RATCHET WRENCH 5/16INX3/8IN	115
	RATCHET WRENCH	4
R1214C	3/8 X 7/16 IN	115
R1618C	RATCHET WRENCH 1/2X9/16IN	115
R40B	40 WATT SOLDERING IRON KIT	182
R810C	RATCHET WRENCH	115
	1/4INX5/16IN	-
RULER120	12 IN. RULE SOCKET	566 38
S121A S141A	SOCKET	38
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Stock No.	Description	Page
S161A	SOCKET	38
S181A S201	SOCKET	38
S201 S221	SOCKET SOCKET	38
S241	SOCKET	38
S261	SOCKET	38
S281	SOCKET	38
S301	SOCKET	38
S321	SOCKET	38
S341	SOCKET	38
S361	SOCKET	38
S381 S401	SOCKET SOCKET	38
S421	SOCKET	38
S441	SOCKET	38
S461	SOCKET	38
S481	SOCKET	38
S8	UNIV JT	85
S936F0D	HSSFODRAT	13
SA10E	HEX DRIVER	62
SA12E	HEX DRIVER	62
SA14E SA16E	HEX DRIVER HEX DRIVER	62 62
SA18E	HEX DRIVER	62
SA20E	HEX DRIVER	62
SA24E	HEX DRIVER	62
SF081	SOCKET	27
SF101	SOCKET	27
SF121	SOCKET	27
SF141	SOCKET	27
SF161	SOCKET	27
SF181 SF191	SOCKET SOCKET	27
SF201	SOCKET	27
SF221	SOCKET	27
SF241	SOCKET	27
SF261	SOCKET	27
SF281	SOCKET	27
SF301	SOCKET	27
SF321	SOCKET	27
SG5ASABR SGASA204A	INSTINCT AWL SOFT GRIP MINI PICK SET	159 159
	SOFT GRIP INITION SET	
SGD146BR	SLOTTED DRV	141
SGDP162BR	SOFT GRIP PHILLIPS	141
SGFMN106	CABNT DRIVR FILE SET	142
SGHBF300A	FILE SET	139
SGHBF400A	FILE SET	195
SGHBF500A	FILE SET	195
SGT4BR	SOFTGRIP 1/4IN DRIVER	195
SGD10BR	HARD GRIP INSTINCT	195
SGDX80BR	SLOTTED DRV INSTINCT SCREWDRIVER SET	82
SN18B	BREAKER BAR	16
	BLUE POINT	
SQUARECOMB12	COMBINATION SQUARE	566
ST50A	5PC OFFSET SCREWDRIVER SET.	147
OIOOA	SOCKET	19
		10
STMD10	SOCKET	19
STMD10 STMD11 STMD12	SOCKET	19
STMD10 STMD11 STMD12 STMD14	SOCKET SOCKET	19 19
STMD10 STMD11 STMD12 STMD14 STMD16	SOCKET SOCKET SOCKET	19 19 19
STMD10 STMD11 STMD12 STMD14 STMD16 STMD18	SOCKET SOCKET SOCKET SOCKET	19 19 19 19
STMD10 STMD11 STMD12 STMD14 STMD16 STMD18 STMD6	SOCKET SOCKET SOCKET SOCKET SOCKET	19 19 19 19 19
STMD10 STMD11 STMD12 STMD14 STMD16 STMD18 STMD6 STMD7	SOCKET SOCKET SOCKET SOCKET SOCKET SOCKET SOCKET	19 19 19 19 19 19
STMD10 STMD11 STMD12 STMD14 STMD16 STMD18 STMD18	SOCKET SOCKET SOCKET SOCKET SOCKET	19 19 19 19 19

# **AVIATION TOOL SETS**

# **Aviation Tool Kit Contents**

# ATKEO Engine Overhaul (Cont'd)

Stock No.	Description			
SW141A	-			
SW161A	SOCKET	37		
SW181A	SOCKET	37		
SW201	SOCKET	37		
SW221	SOCKET	37		
SW241	SOCKET	37		
SW261	SOCKET	37		
SW281	SOCKET	37		
SW301	SOCKET	37		
SW321 SW341	SOCKET SOCKET	37		
	SOCKET	37		
SW361		_		
SXK11	EXTENSION EXTENSION	77		
SXK5		77		
T936FOD	HSSFODRAT	13		
TA3	ADAPTOR	81 83		
TM10G	BREAK BAR	16		
TMA2.5E	HEX DRIVER	62		
TMA2E	HEX DRIVER	62		
TMA3.5E	HEX DRIVER	62		
ТМАЗЕ	HEX HEAD DR	62		
TMD10	SOCKET	18		
TMD11	SOCKET	18		
TMD12	SOCKET	18		
TMD14	SOCKET	18		
TMD16	SOCKET	18		
TMD18	SOCKET	18		
TMD6	SOCKET	18		
TMD7	SOCKET	18		
TMD8	SOCKET	18		
TMD9	SOCKET	18		
TMRX10	TORQ ADAPTOR	121		
TMRX12	TORQ ADAPTOR	121		
TMRX8	TORQ ADAPTOR	121		
TMS4E	SPEEDER	82		
TMU101A	FLEXOCKET	24		
TMU81B	FLEXOCKET	24		
TMU8B	UNIVERSAL JOINT	81		
	EXTENSION	72		
TMXK2				
TMXK4	EXTENSION	72		
TMXK60	EXTENSION TABLE	72		
TPMA12FP	12FT FOD TAPE	566		
TZK7	TWEEZER SET7	183		
V01012B	WRENCH	118		
V01214B	WRENCH	118		
V01416B	WRENCH	118		
V01618B	WRENCH	118		
V01820B	WRENCH	118		
V02022B	WRENCH	118		
V02224B	WRENCH	118		
V02426B	WRENCH	118		
V02628B	WRENCH	118		
V02830B	WRENCH	118		
V03032B	WRENCH	118		
V03234B	WRENCH	118		
V03440B	WRENCH	118		
V03638B	WRENCH	118		
V04042B	WRENCH	118		
V04042B V0810B	WRENCH	118		
XS609A	WRENCH WR SET	114		
ACUUCA				
YA900	CENTER PUNCH	186		

# **ATKAO Aircraft Overhaul**

MINIO AII	lait Overliaut	
Stock No.	Description	Page
102TMXKV	2PC VAR LEN EXT SET	73
137CF	HIGH LEVERAGE COMBO PLIERS	168
196CF	LONG NOSE W/CUTTER	167
203FXLBP	3/8 LOCKING EXT.	76
211FCOA	CROWFEET	123
218AFP	3/8 DR SET	94
61ACP	PLIERS	167
86CF	DIAGONAL CUTTER	166
91ACP	PLIERS	168
A2A	ADAPTOR	83
ATI508K	CANNON PLUG PLIER	85 N161
ATI508K ATI508SG	SHEET HOLDER PLIER	N150
ATI560C	PLASTIC MIN VAC POWER	N160
ATISYSSO ASEV	SHEET METAL KIT	N156
ATISK359495K	Comprehensive Hi-Lok r Kit	N158
AW1015DHK	HEX WRENCH SET	131
BF185A	SANDING BLK	586
BF189A	SANDING BLK	586
BP12B	HAMMER	189
BP2B	HAMMER	189
BP4B	HAMMER	189
BP8B	HAMMER	189
CD12A	TIN SNIP	579
CL402A	C CLAMP	523
CL403A	C CLAMP	523
DAL9A	SNIPS	579
DAR9A	SNIPS	579
DB160C	60 PC HSS WIRE SET	312
		212
DBF1/4C	1/4 DRILL BIT	214 311
DBF5/16C	5/16 DRILL BIT	212 214 311
ECF35	FLASHLIGHT	528
F111	SOCKET	26
F301	SOCKET	26
F321	SOCKET	26
F5L	SLIDE BAR	84
F80F0D	HSSFODRAT	N052
FA10E	HEX DRIVER	62
FA12E	HEX DRIVER	62
FA4.5E	HEX DRIVER	62
FA4E	HEX DRIVER	62
FA5E	HEX DRIVER	62
FA6E	HEX DRIVER	62
FA7E FA8E	HEX DRIVER HEX DRIVER	62 62
FB335		
FU10B	FEELER GA	564
	FLEXOCKET	35
FU12B	FLEXOCKET	35
CAOOE	MIRROR	567
GA295	A TAM ELEV DIOMID TOO	
GA353B	4-JAW FLEX PICKUP TOOL	569
GA353B GAJ4A	4IN ADJ WRENCH	134
GA353B GAJ4A HBFE24	4IN ADJ WRENCH 24 OZ DB HAMMER	134 187
GA353B GAJ4A HBFE24 HBFN120A	4IN ADJ WRENCH 24 OZ DB HAMMER SWISS FILE SET	134 187 196
GA353B GAJ4A HBFE24 HBFN120A HBPT16	4IN ADJ WRENCH 24 OZ DB HAMMER SWISS FILE SET 16Z PLASTIC TIPPED HAMMER	134 187 196 188
GA353B GAJ4A HBFE24 HBFN120A	4IN ADJ WRENCH 24 OZ DB HAMMER SWISS FILE SET	134 187 196
GA353B GAJ4A HBFE24 HBFN120A HBPT16 HSG319	4IN ADJ WRENCH 24 OZ DB HAMMER SWISS FILE SET 16Z PLASTIC TIPPED HAMMER	134 187 196 188
GA353B GAJ4A HBFE24 HBFN120A HBPT16 HSG319	4IN ADJ WRENCH 24 OZ DB HAMMER SWISS FILE SET 16Z PLASTIC TIPPED HAMMER BI MOLD SOFT GRIP HACKSAW	134 187 196 188 190
GA353B GAJ4A HBFE24 HBFN120A HBPT16 HSG319 LP404	4IN ADJ WRENCH 24 OZ DB HAMMER SWISS FILE SET 16Z PLASTIC TIPPED HAMMER BI MOLD SOFT GRIP HACKSAW COMBINATION PLIERS SET	134 187 196 188 190 169
GA353B GAJ4A HBFE24 HBFN120A HBPT16 HSG319 LP404 LST50379	4IN ADJ WRENCH 24 OZ DB HAMMER SWISS FILE SET 16Z PLASTIC TIPPED HAMMER BI MOLD SOFT GRIP HACKSAW COMBINATION PLIERS SET 6" DIVIDER 5X POWER LIGHTED	134 187 196 188 190 169 N174

Stock No.	Description	Page		
NYZ7007HD	MASTIC REMOVAL HAND KIT	244		
		586		
OEX080B OEX10B	1/4IN WRENCH 5/16 FLKDR COMBO WRENCH	110		
OEX10B	11/32 FLKDR COMBO WRENCH	109		
OEX11B	3/8 FLKDR COMBO WRENCH	109		
OEX14B	7/16 FLKDR COMBO WRENCH	109		
OEX16B	1/2 FLKDR COMBO WRENCH	109		
OEX18B	9/16 FLKDR COMBO WRENCH	109		
OEX20B	5/8 FLKDR COMBO WRENCH	109		
0EX22B	11/16 FLKDR COMBO WRENCH	109		
0EX24B	3/4 FLKDR COMBO WRENCH	109		
OEX26B	13/16 FLKDR COMBO WRENCH	109		
OEX28B	7/8 FLKDR COMBO WRENCH	109		
OEX30B	15/16 FLKDR COMBO WRENCH	109		
OEX32B	1IN FLKDR COMBO WRENCH 1-1/16 FLKDR COMBO	109		
OEX34B	WRENCH	109		
ОЕХЗ6В	1-1/8 FLKDR COMBO WRENCH	109		
OEX40B	1-1/4 FLKDR COMBO WRENCH	109		
PK52A	SCRAPER	197		
PPC905B	PUNCH	185		
PPC908B	PUNCH	185		
PPC910B	PUNCH	185		
PPC912B	PUNCH CHICEL CET C/CDID	185		
PPCSG710	PUNCH-CHISEL SET S/GRIP TEL 2LB PICK UP TOOL	186		
PT5C	CHROME	568		
PTM143	INSPECTION MIRROR	567		
PTS5	SCRIBER	568		
R1011C	RATCHET WRENCH 5/16INX11/32IN	115		
R1214C	RATCHET WRENCH 3/8 X 7/16 IN	115		
RWTP9	9IN REVSBLE SFTY WIRE PLIERS	245		
RXFS2432B	WRENCH	121		
RXFS605B	WRENCH SET.	121		
SA10E	HEX DRIVER	62		
SA12E	HEX DRIVER	62		
SA14E	HEX DRIVER	62		
SA16E	HEX DRIVER	62		
SA18E	HEX DRIVER	62		
SA20E	HEX DRIVER	62		
SA24E SF081	HEX DRIVER SOCKET	62 27		
SF101	SOCKET	27		
SF121	SOCKET	27		
SF141	SOCKET	27		
SF161	SOCKET	27		
SF181	SOCKET	27		
SF191	SOCKET	27		
SF201	SOCKET	27		
SF221	SOCKET	27		
SF241	SOCKET			
SF261	SOCKET	27		
SF281	SOCKET	27		
SF301	SOCKET	27		
SF321	SOCKET	27		
SG4ASABR SG5ASABR	INSTINCT AWL	159		
	INSTINCT AWL MINI SLOTTED	159		
SGD304BR	SCREWDRIVER RED	141		
SGDX80BR	HARD GRIP INSTINCT PHILLIPS DR			
SGFMN106	FILE SET	195		
SGHBF300A	FILE SET	195		

# ATKAO Aircraft Overhaul (Cont'd)

AIRAO AIICIAIL OVEIIIAUL (COIIL				
Stock No.	Description	Page		
SGHBF400A	FILE SET	195		
SGHBF500A	FILE SET	195		
SGT4BR	SOFTGRIP 1/4IN DRIVER	82		
SSDE63C	ELEC SD 3/16IN X 3IN FLAT	144		
SSDE66C	ELEC SD 3/16IN X 6IN FLAT	144		
ST50A	5PC OFFSET SCREWDRIVER SET.	147		
STMD10	SOCKET	19		
STMD11	SOCKET	19		
STMD12	SOCKET	19		
STMD14	SOCKET	19		
STMD16	SOCKET	19		
STMD18	SOCKET	19		
STMD6	SOCKET	19		
STMD7	SOCKET	19		
STMD8	SOCKET	19		
STMD9	D9 SOCKET			
T936FOD	HSSFODRAT			
TM10G	BREAK BAR	16		
TM5	SLIDE BAR	82		
TM61A	FLEXTENSION	73		
TMA2.5E	HEX DRIVER	62		
TMA2E	HEX DRIVER	62		
TMA3.5E	HEX DRIVER	62		
TMA3E	HEX HEAD DR	62		
TMS4EK	1/4IN SPEEDER	82		
TMU8B	UNIVERSAL JOINT	81		
TMXK2	EXTENSION	72		
TMXK4	EXTENSION	72		
TMXK60	EXTENSION	72		
TPMA12FP	12FT FOD TAPE	566		
VGP12406	LKG C CLAMP	524		
VS814A	WR SET	119		
YA900	CENTER PUNCH	186		
ZEPZKLS-2	KWIK-LOK TEMP KIT	N162		

# **ATKBSM Basic Sheet Metal**

Stock No.	Description	Page
110TMDY	D/HEX SET	18
6HR	FILE HALF ROUND 6IN	195
6MA	FILE MILL 6IN	195
6R	FILE ROUND 6IN	195
86CF	DIAG CUTTER	166
AD8A	8IN ADJUSTABLE WRENCH	133
ATI590SMKSP1	SHEET METAL KIT	N156
DAL10B	SHEARS	579
DAR10B	SHEARS	579
DAS10B	SHEARS	579
GA295	MIRROR	567
GA98A	FILE HANDLE	196
LP404	4PC LOCKING PLIERS SET	169
0EX707B	7PC COMBO WR SET 3/8 TO 3/4	109
OXI7B	WRENCH	111
OXI8B	WRENCH	111
OXI9B	WRENCH	111
PK23A	SCRAPER	197
PL400B	PLIER SET	165
PT5C	TEL PKUP TL	568
R810C	RATCHET	115
RULER120	12 IN. RULE	566
SH6ASA	STUBBY AWL	139
SGDX80B0	ORANGE 8PC HARD GRIP SCRDR SET	160
SSDMR4B0	SCREWDRIVER	150
T72	72 TOOTH STD HANDLE RATCHET	7
V0810B	WRENCH	118
XS67A	BOXOCKET	114

# **ATKAV Avionics**

AIKAV AVI	OIIICS	
Stock No.	Description	Page
112RT	1/4IN SAE LOW PROF RAT SKT SET	20
120SSDP	OFFSET SD PH1 X PH2	147
134ATMP	1/4" DR. SET	90
20SSD	OFFSET SD .050 X 5/16	147
497CCP	PLIER	167
61ACP	PLIERS	167
BHS13A	BLX13 SET	130
BP12B	HAMMER	189
DS809K	IGN WR SET	118
E703BCG	NEEDLENOSE SERRATED	172
E706BCG	LNG ANGLE FLUSH CUT 4IN CUTTER TAPER	173
E709BCG	FULL FLUSH	173
E713BCG	SERRATED SNIPENOSE PLIER	172
ECF925C	LED FLASHLIGHT 25LUMEN 1AA	528
FB325A	FEELER GA	237 564
GA199A	FLAT TIP STARTER SCREW	152
GA353B	4-JAW FLEX PICKUP TOOL	569
GAJ4A	ADJ WRN 4"	134
GAJ8A	ADJ WRN 8"	134
HBFE24	24 OZ DB HAMMER	187
HBPT16	16Z PLASTIC TIPPED HAMMER	188
KER1600S0	CHIVE KNIFE	192
NDD1070A	NUT DR SET	153
OEX10B	5/16 FLKDR COMBO WRENCH	109
OEX11B	11/32 FLKDR COMBO WRENCH	109
0EX707B	7PC COMBO WR SET 3/8 TO 3/4	109
0EX8B	1/4 FLKDR COMBO WRENCH	109
OXI4SB	WRENCH	111
OXI5SB	WRENCH	111
OXI6SB	WRENCH	111
OXI7B	WRENCH	111
OXI8B	WRENCH	165
PL400B	PLIER SET	568
PT28E PTM157	MAGNETIC PICK-UP TOOL. INSPECTION MIRROR.	567 174
PWCS9	WIRE STRIPPER MULTI-TOOL	159
SGASA204A	SOFT GRIP MINI PICK SET	144
SGDE70	ELEC SCREWDRIVER	149
SGDMRC44B	SG RATCHETING.	142
SGDP122BR	SOFT GRIP PHILLIPS CABNT DRIVR	142
SGDP162BR	SOFT GRIP PHILLIPS CABNT DRIVR	142
SGDP82BR	SOFT GRIP INSTINCT	139
SGDX40BR	PHILLIPS DR 4PC RED SOFT GRIP	139
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TB50	SCRDR SET COLLAPSABLE TOTE BAG	397
TPMA12FP	20X11X9 12FT FOD TAPE	183
TZK5	TWEEZER SET5	152
YA480B	SCREWDRIVER	152

## **Pelican Micro and Medium Cases**









#### Micro Cases

Stock Number	PCD1020100	PCD1040100	PCD1060100
Exterior Dimensions (L x W x D)	6.82" x 4.75" x 2.12" (17.3 x 12.1 x 5.4 cm)	7.50" x 5.06" x 2.12" (19 x 12.8 x 5.4 cm)	9.37" x 5.56" x 2.62" (23.8 x 14.1 x 6.7 cm)
Interior Dimensions (L x W x D)	5.31" x 3.56" x 1.68" (13.5 x 9 x 4.3 cm)	6.50" x 3.87" x 1.75" (16.5 x 9.8 x 4.4 cm)	8.25" x 4.25" x 2.25" (20.9 x 10.8 x 5.7 cm)
Weight	0.55 lbs. (0.25 kg)	0.7 lbs. (0.32 kg)	1 lbs. (0.45 kg)

#### **GREAT FOR RUGGED SPORTS - NOT FOR SWIMMING OR SUBMERGING**

- · Easy open latch, includes carabiner
- · Stainless steel hardware with rubber liner that doubles as o-ring seal
- Water resistant, crushproof, and dust proof
- Automatic Pressure Equalization Valve balances interior pressure, keeps water out

## **Medium Cases**

Model	Stock Number	Color	Exterior Diminsions	Interior Dimensions	Lid / Bottom Depth	Weight
1450	PCD1450110	Black		14.62" X 10.18" X 6.00" (37.1 X 25.8 X 15.2 cm)"	1.75" / 4.25" (4.4 cm / 10.8 cm)"	5.51 LBS. (2.5 KG)"
	PCD1450130	OD Green	16.00" X 13.00" X 6.87" (40.6 X 33 X 17.4 cm)"			
	PCD1450240	Yellow	(,			
1460	PCD1460110	Black		18.54" x 9.92" x 10.92" (47.1 x 25.2 x 27.7 cm)	4.91" / 6.01" (12.5 cm / 27.7 cm)	12.48 lbs. (5.66 kg)
	PCD1460130	OD Green	20.85" x 12.73 x 12.75" (52.9 x 32.3 x 32.4 cm)			
	PCD1460190	Desert Tan	(02.0 x 02.0 x 02.1 0)			
1510	PCD1510110	Black	22.00" X 13.81" X 9.00"(55.9 X	19.75" X 11.00" X 7.60" (50.1 X 27.9 X 19.3 cm)"	1.79" / 5.79" (4.5 cm / 14.7 cm)"	11.99 LBS. (5.44 KG)"
	PCD1510130	OD Green	35.1 X 22.9 cm)"`			
1520	PCD1520110	Black		18.06" X 12.89" X 6.72" (45.9 X 32.7 X 17.1 cm)"	1.79" / 4.93" (4.5 cm / 12.5 cm)"	8.29 LBS. (3.76 KG)"
	PCD1520130	OD Green	19.78" X 15.77" X 7.41" (50.2 X 40 X 18.8 cm)"			
	PCD1520240	Yellow	(00.2 % 10 % 10.0 0)			
1550	PCD1550110	Black			1.75" / 5.87" (4.4 cm / 14.9 cm)"	10.58 LBS. (4.8 KG)"
	PCD1550130	OD Green	20.62" X 16.87" X 8.12" (52.4 X 42.8 X 20.6 cm)"	18.43" X 14.00" X 7.62" (46.8 X 35.5 X 19.3 cm)"		
	PCD1550240	Yellow				











Model 1450

**Model 1460** 

Model 1510\*

Model 1520

Model 1550

- Open cell core with solid wall design is strong, light weight, watertight, crushproof, and dust proof
- Easy open Double Throw latches and O-ring seal with Automatic Pressure Equalization Valve
- Comfortable rubber over-molded handle and stainless steel hardware and padlock protectors
- · Cases do not include tools or foam inserts
- \* Model 1510 Carry-On Case is the FAA maximum carry-on size, and includes retractable handle and wheels with stainless steel bearings





OD Green

Yellow

See product specifications chart for available colors for each case. Call your Snap-on Industrial Representative or Customer Service for more information

#### **Pelican Large Cases**



#### **Large Cases**

Model	Stock Number	Color	Exterior Diminsions	Interior Dimensions	Lid / Bottom Depth	Weight	
1600	PCD1600110	Black					
	PCD1600130	OD Green	24.25" X 19.43" X 8.68" (61.6 X 49.3 X 22 cm)	21.43" X 16.50" X 7.87" (54.4 X 41.9 X 20 cm)	1.75" / 6.12" (4.4 cm / 15.5 cm)	13 LBS. (5.9 KG)	
	PCD1600240	Yellow	(, , , , , , , , , , , , , , , , , , ,	(* ,	,		
1610	PCD1610110	Black	24.83" x 19.69" x 11.88"	21.78" x 16.69" x 10.62" (55.3 x 42.4 x 27 cm)	2.05" / 8.57" (5.2 cm / 21.8 cm)	19.5 lbs. (8.85 kg)	
	PCD1610130	OD Green	(63 x 50 x 30.2 cm)				
1620	PCD1620110	Black	24.64" x 19.39" x 13.78"	21.48" x 16.42" x 12.54"	2.01" / 10.53"	01 0 lbo (0 60 kg)	
	PCD1620130	OD Green	(62.6 x 49.2 x 35 cm)	(54.5 x 41.7 x 31.8 cm)	(5.1cm / 26.7 cm)	21.2 lbs. (9.62 kg)	
1650	PCD1650110	Black	31.59" x 20.47" x 12.45"	28.57" x 17.52" x 10.62"	1.81" / 8.84"	24.03 lbs.	
	PCD1650130	OD Green	(80.2 x 52 x 31.6 cm)	(72.5 x 44.5 x 27 cm)	(4.6 cm / 22.4 cm)	(10.9 kg)	









Model 1600\*

**Model 1610** 

- · Retractable extension handle and strong polyurethane wheels with stainless steel bearings\*\*\*
- Open cell core with solid wall design is strong, light weight, watertight, crushproof, and dust proof
- Easy open Double Throw latches and O-ring seal with **Automatic Pressure Equalization Valve**

Model 1620

Model 1650

- · Comfortable rubber over-molded handle and stainless steel hardware and padlock protectors
- · Cases do not include tools or foam inserts
- \* Model 1600 does not include retractable handle or wheels

#### **Laptop Cases**

Model	Stock Number	Color	Exterior Diminsions	Interior Dimensions	Lid / Bottom Depth	Weight
1055	PCD1055110	Black	9.42" x 7.02" x 1.24" (23.9 x 17.8 x 3.1 cm)	8.55" x 5.52" x 0.85" (21.7 x 14 x 2.2 cm)	0.43" / 0.85" (1.1 cm / 2.2 cm)	0.82 lbs. (0.37 kg)
1065	PCD1065110	Black	10.86" x 9.28" x 1.24" (27.6 x 23.6 x 3.1 cm)	9.96" x 7.76" x 0.81" (25.3 x 19.7 x 2.1 cm)	0.41" / 0.81" (1 cm / 2.1 cm)	1.25 lbs. (0.57 kg)
1075	PCD1070110	Black	12.38" x 9.75" x 2.13" (31.4 x 24.8 x 5.4 cm)	11.11" x 7.92" x 1.63" (28.2 x 20.1 x 4.1 cm)	0.81" / 1.63" (2.1 cm / 4.1 cm)	1.54 lbs. (0.7 kg)







**Model 1055** 

**Model 1065** 

**Model 1075** 

- Model 1055 Designed to protect the most popular eReaders and 7 inch tablets
- Model 1065 Designed to protect the most popular 10 inch tablets including iPad®, iPad® 2 with smart cover
- Model 1075 Designed to protect the most popular netbooks up to 11.3" x 8.1" x 1.6"
- Watertight Gasket Tight seal created when case is shut
- The easy open latch remains shut under pressure or after impact
- Automatic Purge Valve Keeps water and dust out while balancing air pressure
- Molded plush shock absorbing liner protects contents from impact and scratching





#### **PORTABLE TOOL CASES**

#### **Pelican Storm Cases**

#### 0450 Mobile Tool Chest

- · Heavy duty buttress hinges and two way handles
- Auto Pressure Equalization Valves
- . Stable, wide track mobility
- Includes 7 drawers
- Hybrid double throw butterfly latches
- · Graduated deflector ribs and secure stack design
- Trolley handle & wheel system
- · Easy access beneath the top lid for extra storage space
- Three unsealed pockets on the left side for storing smaller items
- Exterior dimensions: 23.95" x 14.75" x 17.95" (60.8 x 37.5 x 45.6 cm)
- Interior Dimensions: 20.56" x 10.97" x 12.65" (52.2 x 27.9 x 32.1 cm)
- Weight: 41.5 LBS. (18.82 KG)
- · Tools and foam shown are not included
- Stock Number PCD0450110

Snap-on Industrial offers complete custom tool set and tool control services for this and all Pelican cases shown. Contact your Snap-on Industrial Representative for more information, or call our Customer Service Center at (877) 740-1900





Model PCD0450110

Stock #	Interior Dimensions L x W x H (inches)	Exterior Dimensions L x W x H (inches)	Empty Weight (lbs.)	Wheels	Retractable Handle	Airline Carry-on	NSN Available
HIM20500000	9.5 x 7.5 x 4.25	11.8 x 9.8 x 4.7	2.7	N	N	Υ	Y
HIM21000000	13.0 x 9.2 x 6.0	14.2 x 11.4 x 6.5	4.2	N	N	Y	Y
HIM22000000	15.0 x 10.5 x 6.0	16.2 x 12.7x 6.6	4.9	N	N	Υ	Y
HIM2300000	17.0 x 11.7 x 6.2	18.2 x 13.4 x 6.7	5.8	N	N	Y	Υ
HIM2400000	18.0 x 13.0 x 6.7	19.2 x 15.2 x 7.3	6.5	N	N	Υ	Y
HIM25000000	20.5 x 11.5 x 7.2	21.7 x 14.1x 8.9	11	Y	Υ	Y	Υ
HIM26000000	20.0 x 14.0 x 7.7	21.2 x 16.0 x 8.3	8.5	N	N	N	Υ
HIM2700000	22.0 x 17.0 x 8.0	24.6 x 19.7 x 8.6	11.1	N	N	N	Y
HIM27200000	22.0 x 17.0 x 10.0	24.6 x 19.7 x 11.7	16.8	Υ	Y	N	Υ
HIM27500000	22.0 x 17.0 x 12.7	24.6 x 19.7 x 14.4	18.5	Y	Υ	N	Υ
HIM29500000	29.0 x 18.0 x 10.5	31.3 x 20.4 x 12.2	20.8	Υ	Y	N	Υ
HIM29750000	29.0 x 18.0 x 13.8	31.3 x 20.4 x 15.5	22.5	Y	Y	N	Y
HIM31000000	36.5 x 14.0 x 6.0	39.8 x 16.5 x 6.7	15.2	Υ	N	N	Υ
HIM33000000	50.5 x 14.0 x 6.0	53.8 x 16.5 x 6.7	19	Y	N	N	Y

- Press & Pull Latches, double-layered, soft-grip handle, padlockable hasps, and Vortex® Valve
- Built to withstand impact, temperature, moisture, and rough transit
- Anti-shear teeth keep lids from shifting during impact
- Uniquely designed hinges with feet to allow sturdy upright standing
- Cases furnished in black. For other color options, contact your Snap-on Industrial Representative





At Snap-on, we created scalable tool management & safety programs to deliver simple, cost-effective & practical solutions to fit virtually any need.

We believe in systems that are simple enough that people will actually use them, and design them to encourage people to be responsible for what they do. We deliver systems that give organizations the information they need based on their business requirements to control expenses, reduce downtime, and promote safety.

# Simple, scalable tool control starts with centralized access control.

Tool control systems control tool shrinkage and replacement cost. They also help reduce lost-tool downtime. In critical industries and applications such as aviation and nuclear power, tool control is an essential step toward eliminating FOD (Foreign Object Damage in aviation) and implementing FME (Foreign Material Exclusion in the power industry). Unlocked and open access tool boxes can result in FOD/FME problems. Snap-on puts you in control with three choices. Our Level 5™ NTC system (N042-N043) allows you to specify access to boxes, audit when they are used, and manage it all over a network.

Our Level 5™ ATC system provides the simplest and most user-friendly solution for detecting tools issued from and returned to a tool box, providing a critical enhancement to your FOD/FME program. Using advanced digital imaging technology and proprietary software, the tool box automatically keeps track of its inventory by user, and records which tools are removed and replaced, and when.



Level 5<sup>TM</sup> ATC Advanced technology that makes tracking tools simple. Level 5<sup>TM</sup> ATC is a true tool control system. Based on the tool list that you supply, each drawer in the tool box is organized and each tool assigned to a unique space in the foam drawer liner. That information is then programmed into the scanning hardware fitted to the top of the box. As each drawer is opened and closed it is scanned digitally, and the image is instantly compared with the baseline stored image of that drawer. Any tool that has been removed or returned is identified and the computer makes an audible announcement: a tool has been removed or replaced.

Additionally, the computer tracks each tool removed and replaced by its part number and by user, and creates an audit trail in database format. Both the digital images and the data entries are stored for review in an audit trail of the last 15,000 transactions. Not only do you get detailed information, but you have access to the actual pictures of the drawer contents for verification.

#### Plug and Play vs. Some Assembly Required

Some solutions to FOD and FME problem involve attaching RFID tags, sensors or bar codes to the tools to track them. Additional operations and attachments can create significant additional cost and limitations by:

- · Interfering with the normal use of the tool
- Using up additional real estate in the drawers
- Having limited usability on small tools like sockets
- · Dislodging and becoming a new source of FOD



- No RFID tags to install or replace
- · No limitations on tool size—if it fits in the drawer, it works
- · Intuitive interface—easy-to-use touchscreen
- Audible voice confirmation of tool removal and replacement
- · Automatic locking
- Errors announced and displayed for incorrect tool position or drawer not closed

The Snap-on Level 5<sup>™</sup> ATC system is delivered with your predetermined set of tools already installed in one of two basic platforms, the KRL1056 36" framework, or the KRL1021 54" framework. Each is offered in eleven color choices, three different drawer configuration options, with and without casters, and in 110V or 230V European power options. To order, work with your Snap-on Industrial Account Manager or Customer Service Center to determine:

- Tool Set Contents
- 36" or 54" platform
- Color choice
- · Drawer configuration
- Casters/no casters
- Voltage 110V/230V
- Standard or extended warranty
- · Administrative software, with or without remote HID scanner

Technical Support is just a phone call away! (800) 272-2033



# ATC Selection Guide

#### How to Order

The Snap-on Level 5<sup>™</sup> ATC system is delivered with your predetermined set of tools already installed in one of two basic platforms, 36" or 54". Each is offered in eleven color choices, three different drawer configuration options, with and without casters, and in 110V or 230V European power options.

To order, work with your Snap-on Industrial Account Manager or Customer Service Center to determine:

- Tool Set Contents—pick the tools you need and we will lay out the drawer arrangements
- 2 36" or 54" Platform—we'll help you pick the right platform based on the number of tools in your set
- Color Choice—pick one of eleven
- Drawer Configuration—pick one of three
- Casters—with or without, depending on mobility requirements
- Voltage—110V or 230V European
  - Warranty—standard or extended
- Corder Administrative Software, with Remote HID Scanner

Configura	Configuration 36" w/ Casters		ters	36" w/out Casters			54" w/ Casters			54" w/out Casters			
Number of D	rawers	6	7	8	6	7	8	6	7	8	6	7	8
		-	-		-	2			Total	[Gas.]	- M		The state of the s
Color	٧	& O	8 0	& &				Ç\$ 25	ලම් ම්ව	డ్రకి కేస్ట			
Green Mica	110V	L5AA363AW	L5AA362AW	L5AA361AW	L5AA3S3AW	L5AA3S2AW	L5AA3S1AW	L5AA543AW	L5AA542AW	L5AA541AW	L5AA5S3AW	L5AA5S2AW	L5AA5S1AW
Oreen Milea	230V	L5AE363AW	L5AE362AW	L5AE361AW	L5AE3S3AW	L5AE3S2AW	L5AE3S1AW	L5AE543AW	L5AE542AW	L5AE541AW	L5AE5S3AW	L5AE5S2AW	L5AE5S1AW
Red	110V	L5AA363BO	L5AA362BO	L5AA361BO	L5AA3S3BO	L5AA3S2BO	L5AA3S1BO	L5AA543BO	L5AA542BO	L5AA541BO	L5AA5S3BO	L5AA5S2BO	L5AA5S1BO
Reu	230V	L5AE363BO	L5AE362BO	L5AE361BO	L5AE3S3BO	L5AE3S2BO	L5AE3S1BO	L5AE543BO	L5AE542BO	L5AE541BO	L5AE5S3BO	L5AE5S2BO	L5AE5S1BO
Royal Blue	110V	L5AA363CM	L5AA362CM	L5AA361CM	L5AA3S3CM	L5AA3S2CM	L5AA3S1CM	L5AA543CM	L5AA542CM	L5AA541CM	L5AA5S3CM	L5AA5S2CM	L5AA5S1CM
Royal Dide	230V	L5AE363CM	L5AE362CM	L5AE361CM	L5AE3S3CM	L5AE3S2CM	L5AE3S1CM	L5AE543CM	L5AE542CM	L5AE541CM		L5AE5S2CM	L5AE5S1CM
Ultra Yellow	110V	L5AA363ES	L5AA362ES	L5AA361ES	L5AA3S3ES	L5AA3S2ES	L5AA3S1ES	L5AA543ES	L5AA542ES	L5AA541ES	L5AA5S3ES	L5AA5S2ES	L5AA5S1ES
Ottia Tettow	230V	L5AE363ES	L5AE362ES	L5AE361ES	L5AE3S3ES	L5AE3S2ES	L5AE3S1ES	L5AE543ES	L5AE542ES	L5AE541ES	L5AE5S3ES	L5AE5S2ES	L5AE5S1ES
Deep Purple	110V		L5AA362EV	L5AA361EV	L5AA3S3EV	L5AA3S2EV	L5AA3S1EV	L5AA543EV	L5AA542EV	L5AA541EV	L5AA5S3EV	L5AA5S2EV	L5AA5S1EV
	230V		L5AE362EV	L5AE361EV	L5AE3S3EV	L5AE3S2EV	L5AE3S1EV	L5AE543EV	L5AE542EV	L5AE541EV	L5AE5S3EV	L5AE5S2EV	L5AE5S1EV
Candy Apple	110V	L5AA363JH	L5AA362JH	L5AA361JH	L5AA3S3JH	L5AA3S2JH	L5AA3S1JH	L5AA543JH	L5AA542JH	L5AA541JH	L5AA5S3JH	L5AA5S2JH	L5AA5S1JH
Red	230V	L5AE363JH	L5AE362JH	L5AE361JH	L5AE3S3JH	L5AE3S2JH	L5AE3S1JH	L5AE543JH	L5AE542JH	L5AE541JH	L5AE5S3JH	L5AE5S2JH	L5AE5S1JH
Extreme	110V	L5AA363JJ	L5AA362JJ	L5AA361JJ	L5AA3S3JJ	L5AA3S2JJ	L5AA3S1JJ	L5AA543JJ	L5AA542JJ	L5AA541JJ	L5AA5S3JJ	L5AA5S2JJ	L5AA5S1JJ
Green	230V	L5AE363JJ	L5AE362JJ	L5AE361JJ	L5AE3S3JJ	L5AE3S2JJ	L5AE3S1JJ	L5AE543JJ	L5AE542JJ	L5AE541JJ	L5AE5S3JJ	L5AE5S2JJ	L5AE5S1JJ
Electric	110V	L5AA363JK	L5AA362JK	L5AA361JK	L5AA3S3JK	L5AA3S2JK	L5AA3S1JK	L5AA543JK	L5AA542JK	L5AA541JK	L5AA5S3JK	L5AA5S2JK	L5AA5S1JK
Orange	230V	L5AE363JK	L5AE362JK	L5AE361JK	L5AE3S3JK	L5AE3S2JK	L5AE3S1JK	L5AE543JK	L5AE542JK	L5AE541JK	L5AE5S3JK	L5AE5S2JK	L5AE5S1JK
Arctic Silver	110V	L5AA363KS	L5AA362KS	L5AA361KS	L5AA3S3KS	L5AA3S2KS	L5AA3S1KS	L5AA543KS	L5AA542KS	L5AA541KS	L5AA5S3KS	L5AA5S2KS	L5AA5S1KS
	230V		L5AE362KS	L5AE361KS	L5AE3S3KS	L5AE3S2KS	L5AE3S1KS	L5AE543KS	L5AE542KS	L5AE541KS	L5AE5S3KS	L5AE5S2KS	L5AE5S1KS
Gloss Black	110V		L5AA362PC	L5AA361PC	L5AA3S3PC	L5AA3S2PC	L5AA3S1PC	L5AA543PC	L5AA542PC	L5AA541PC	L5AA5S3PC	L5AA5S2PC	L5AA5S1PC
	230V	L5AE363PC	L5AE362PC	L5AE361PC	L5AE3S3PC	L5AE3S2PC	L5AE3S1PC	L5AE543PC	L5AE542PC	L5AE541PC	L5AE5S3PC	L5AE5S2PC	L5AE5S1PC
Deep Cranberry	110V 230V	L5AA363PM L5AE363PM		L5AA361PM L5AE361PM	L5AA3S3PM L5AE3S3PM	L5AA3S2PM L5AE3S2PM	L5AA3S1PM L5AE3S1PM	L5AA543PM L5AE543PM	L5AA542PM L5AE542PM	L5AA541PM L5AE541PM	L5AA5S3PM L5AE5S3PM	L5AA5S2PM L5AE5S2PM	

#### Software

- Administrative Software L5AADMIN
- Administrative Software with Employee Badge Scanner - L5AADMINSCAN
- Employee Badge Scanner Only L5ASCAN

#### Platforms available:

- 36" single bank roll cab, approximate capacity 450 tools
- 54" single bank roll cab, approximate capacity 750 tools

#### Features and Specifications

- 1 year electronics warranty
- Extended warranty available
- 110V/230V AC power required
- Unlimited number of assigned users
- Networking through Ethernet or wireless
- 1 copy of ATC software required for each administrator

# Protect Your Investment with a Snap-on Service Plan

Snap-on offers one, two and three year service plans that will help keep your system fully mission capable, and includes services such as software updates, extra foam cutting and annual inspections

#### **Key Level 5™ NTC Features**

- · Access by time, user and date
- How long the user was in the box
- Records unauthorized access attempts by date, time and user
- It records the date, time, and user who performed a physical or visual inventory with findings
- · Network-ready with your choice of Ethernet or wireless
- · Works with your existing badge system, HID or magnetic strip card
- · Connects to other boxes with slave units to create customized workstations
- Intuitive wizard driven NTC software provides centralized control for all boxes

#### Additional Level 5™ NTC features:

#### **Power**

- 12 V rechargeable battery for extended portability
- Battery level (fuel) gauge in LCD screen
- · Messages alert users to recharge
- Indicates charging mode: plugged in, fast-charge or standby mode

#### **Multi-Function Buttons**

- Allow programming at the box
- · View all settings, make changes
- View audit trails
- Record visual or physical inventories
- Add and delete users easily

#### **Additional Features**

- Programmable auto-relock time
- · Auto-relock on box movement for safety
- · Drawer ajar alarm
- Programmable alarm system
- System upgradeable to 802.11N
- Supports up to 999 active users per box

#### **Technical Support**

 Technical Support is provided through your Industrial **Account Manager** 

#### **Networking**

- Networking allows easy system management from a central location LCD Screen
- Show date, time, user name,





#### How to Order

Level 5<sup>™</sup> NTC is offered in eight base unit configurations built on Snap-on KRL Roll Cab platforms.

For complete specifications, please see the full-line Snap-on Industrial Catalog.

- Step 1. Determine the base unit requirement based on footprint, capacity and color from the chart.
- Step 2. Choose your Level 5™ NTC access method, either HID Standard/I Class proximity badge reader or magnetic strip card reader.
- Step 3. Choose your networking connections, either Ethernet or wireless.
- Step 4. Order 1 copy of Level 5<sup>™</sup> NTC software per administrator (usually 1 copy per site).
- Step 5. Choose the accessories that you need for your installation.

If you plan to add and connect tool chests, drawer sections and side cabinets to create networked workstations, contact your Snap-on Industrial Account Manager or Customer Service Center for information on slave modules and latches.

			<u> </u>			<u> </u>			
	Platform	Footprint	Drawer Banks	No. Drawers	Color	Standard HID Prox Access	I Class HID Prox Access	Mag Strip Access	
	KRL756				Red	L5P756APBO	L5I756APBO	L5M756APBO	
	and the second				Blue	L5P756APCM	L5I756APCM	L5M756APCM	
		35-58"X 24"	1	7	Black	L5P756APC	L5I756APC	L5M756APC	
					Yellow	L5P756APES	L5I756APES	L5M756APES	
<b>つ</b>					Arctic Silver	L5P756APKS	L5I756APKS	L5M756APKS	
4	KRL1056				Red	L5P1056APBO	L5I1056APBO	L5M1056APBO	
					Blue	L5P1056APCM	L5I1056APCM	L5M1056APCM	
		35-58"X 29"	1	8	Black	L5P1056APC	L5I1056APC	L5M1056APC	
					Yellow	L5P1056APES	L5I1056APES	L5M1056APES	
	• •				Arctic Silver	L5P1056APKS	L5I1056APKS	L5M1056APKS	
	KRL722				Red	L5P722APBO	L5I722APBO	L5M722APBO	
	To the same of the				Blue	L5P722APCM	L5I722APCM	L5M722APCM	
		54-1/4" X 24"	2	11	Black	L5P722APC	L5I722APC	L5M722APC	
					Yellow	L5P722APES	L5I722APES	L5M722APES	
					Arctic Silver	L5P722APKS	L5I722APKS	L5M722APKS	
	KRL1022				Red	L5P1022APBO	L5I1022BPBO	L5M1022APBO	
	The Part of the Pa				Blue	L5P1022APCM	L5I1022BPCM	L5M1022APCM	
		54-1/4" X 29"	2	13	Black	L5P1022APC	L5I1022BPC	L5M1022APC	
					Yellow	L5P1022APES	L5I1022BPES	L5M1022APES	
					Arctic Silver	L5P1022APKS	L5I1022BPKS	L5M1022APKS	
	KRL1032				Red	L5P1032APBO	L5I1032BPBO	L5M1032APBO	
					Blue	L5P1032APCM	L5I1032BPCM	L5M1032APCM	
		54-1/4" X 29"	2	16	Black	L5P1032APC	L5I1032BPC	L5M1032APC	
					Yellow	L5P1032APES	L5I1032BPES	L5M1032APES	
	•				Arctic Silver	L5P1032APKS	L5I1032BPKS	L5M1032APKS	
	KRL7022				Red	L5P7022APBO	L5I7022BPB0	L5M7022APBO	
	The second second				Blue	L5P7022APCM	L5I7022BPCM	L5M7022APCM	
		54-1/4" X 29"	2	11	Black	L5P7022APC	L5I7022BPC	L5M7022APC	
					Yellow	L5P7022APES	L5I7022BPES	L5M7022APES	
					Arctic Silver	L5P7022APKS	L5I7022BPKS	L5M7022APKS	
	KRL1023				Red	L5P1023APBO	L5I1023BPBO	L5M1023APBO	
	1				Blue	L5P1023APCM	L5I1023BPCM	L5M1023APCM	
		72-7/8" X 29"	3	22	Black	L5P1023APC	L5I1023BPC	L5M1023APC	
					Yellow	L5P1023APES	L5I1023BPES	L5M1023APES	
	***				Arctic Silver	L5P1023APKS	L5I1023BPKS	L5M1023APKS	
	KRL7023				Red	L5P7023APBO	L5I7023BPB0	L5M7023APBO	
	No.				Blue	L5P7023APCM	L517023BPCM	L5M7023APCM	
		72-7/8" X 29"	3	19	Black	L5P7023APC	L5I7023BPC	L5M7023APC	
					Yellow	L5P7023APES	L5I7023BPES	L5M7023APES	
					Arctic Silver	L5P7023APKS	L5I7023BPKS	L5M7023APKS	
	Network Connec	tion							

Netwo	rk Connection					
Wirele	ss 802.11 Module	Wifi module with cable one required per box	L580211G			
Ethern	et Module, Cable	Module with cable one required per box L5ETHER				
MTC	Software	One copy per administrator not one per box	L5LVSG3			
Access	sories					
Slave	Jnit Control	One required per top box or side cabinet	L5SUG3			
HID Ac	cess Panel		L5PROXG3			
HIDIO	lass Access Panel		L5ICLG3			
Mag S	trip Access Panel		L5MSG3			
Batter	/ Box & Batteries	Battery box with batteries and cable	L5BPG3			
	Supply	Replacement power supply with cable	L5PSG3			
Power	Connector (back)		L5YPSG3			
HID Re	trofit Kit	Complete kit to retrofit a KRL bottom box with HID reader	L5PROXKITG3			
Mag S	trip Retrofit Kit	Complete kit to retrofit a KRL bottom box with magstrip reader	L5MAGSKITG3			
Auxilia	ry Latch Module		L5SHAHXG3			

To order contact your Industrial Account Manager or call the Snap-on Industrial Customer Service Center 1-877-740-1900



Snap-on's KTC system secures your tool box, allowing you to control who has access to its contents. No keys to lose or share - your choice of access method:

#### Keypad PIN entry - Magstripe ID card - Proximity ID card

Administrative access at the unit or through remote software lets you add and delete up to 250 authorized users, display an audit trail of past access, and more!

#### Level 5™ KTC LockView® Features

- Eliminate the hassle of keys to open tool boxes
- Battery power makes KTC ideal for environments where tool boxes are on the move
- Powered by 6 D-cell batteries (not included) or power cord
  - Single set of batteries can last up to six months depending upon environment
- Grants access to tool boxes with three access methods:
  - Keypad PIN entry only
  - Magstripe ID card and/or keypad PIN entry
  - Proximity ID card and/or keypad PIN entry
- Access with single credential or dual credential: card plus PIN for example
- Access unit sits on top of the box and comes pre-assembled all you need to do is put in the batteries and set up access credentials
- LED lights indicate if box is opened or closed

#### **KTC Accessories:**

**L5KTCLVS** – Administrative Software

- Allows boxes to be connected to a laptop via USB cable
- See historical logs for box access
- Manage box settings
- Manage box user settings and access rights
- Manage groups of users
- Prevent "jackpot" access by locking out boxes after a number of access attempts

**L5KTCPS** – Replacement KTC AC Power Supply

#### **Retrofit Kits:**

Existing boxes may be retrofitted with KTC modules. Each kit contains detailed instructions and box modification templates.

L5KTCKPAD - Keypad access kit

**L5KTCMSKP** – Mag-stripe and Keypad access

L5KTCPRKP – Standard HID proximity card and keypad access







#### How to Order

Level 5<sup>™</sup> KTC is offered in 14 base unit configurations built on Snap-on KRA Roll Cab platforms.

For complete specifications, please see the full-line Snap-on Industrial Catalog.

- Step 1. Determine the base unit requirement based on footprint, capacity and color from the chart.
- Step 2. Choose your Level 5<sup>™</sup> KTC access method, either Keypad access, HID Proximity Card and Keypad access or Magnetic Stripe Card and Keypad access.
- Step 3. Order 1 copy of Level 5<sup>TM</sup> KTC software per administrator (usually 1 copy per site).

#### Classic Series KTC Boxes

	Number of Drawers	Cab Color	Keypad access	HID Proximity Card and Keypad Access	Magnetic Stripe Card and Keypad Access
		Red	L5KK2418PBO	L5KP2418PBO	L5KM2418PBO
73" Triple Bank	18	Black	L5KK2418PC	L5KP2418PC	L5KM2418PC
		Blue	L5KK2418PCM	L5KP2418PCM	L5KM2418PCM
		Red	L5KK2432PBO	L5KP2432PBO	L5KM2432PBO
73" Double Bank	12	Black	L5KK2432PC	L5KP2432PC	L5KM2432PC
0		Blue	L5KK2432PCM	L5KP2432PCM	L5KM2432PCM
		Red	L5KK2422PBO	L5KP2422PBO	L5KM2422PBO
55" Double Bank	10	Black	L5KK2422PC	L5KP2422PC	L5KM2422PC
-		Blue	L5KK2422PCM	L5KP2422PCM	L5KM2422PCM
₩ parameter	7	Red	L5KK2407PBO	L5KP2407PBO	L5KM2407PBO
36" Single Bank		Black	L5KK2407PC	L5KP2407PC	L5KM2407PC
,		Blue	L5KK2407PCM	L5KP2407PCM	L5KM2407PCM

#### Heritage Series KTC Boxes

	Number of Drawers	Cab Color	Keypad access	HID Proximity Card and Keypad Access	Magnetic Stripe Card and Keypad Access
· ·		Red	L5KK2318PBO	L5KP2318PB0	L5KM2318PBO
53" Triple Bank	18	Black	L5KK2318PC	L5KP2318PC	L5KM2318PC
		Blue	L5KK2318PCM	L5KP2318PCM	L5KM2318PCM
The state of the s		Red	L5KK2312PBO	L5KP2312PB0	L5KM2312PBO
53" Double Bank	12	Black	L5KK2312PC	L5KP2312PC	L5KM2312PC
		Blue	L5KK2312PCM	L5KP2312PCM	L5KM2312PCM
•		Red	L5KK5311PBO	L5KP5311PBO	L5KM5311PBO
53" Double Bank	11	Black	L5KK5311PC	L5KP5311PC	L5KM5311PC
		Blue	L5KK5311PCM	L5KP5311PCM	L5KM5311PCM
		Red	L5KK4813PBO	L5KP4813PBO	L5KM4813PBO
40" Double Bank	13	Black	L5KK4813PC	L5KP4813PC	L5KM4813PC
		Blue	L5KK4813PCM	L5KP4813PCM	L5KM4813PCM
	12	Red	L5KK2212PBO	L5KP2212PB0	L5KM2212PBO
40" Double Bank		Black	L5KK2212PC	L5KP2212PC	L5KM2212PC
		Blue	L5KK2212PCM	L5KP2212PCM	L5KM2212PCM
	7	Red	L5KK4107PBO	L5KP4107PBO	L5KM4107PBO
40" Single Bank		Black	L5KK4107PC	L5KP4107PC	L5KM4107PC
		Blue	L5KK4107PCM	L5KP4107PCM	L5KM4107PCM
		Red	L5KK2106PBO	L5KP2106PB0	L5KM2106PBO
40" Single Bank	6	Black	L5KK2106PC	L5KP2106PC	L5KM2106PC
5-0		Blue	L5KK2106PCM	L5KP2106PCM	L5KM2106PCM
		Red	L5KK4008PBO	L5KP4008PBO	L5KM4008PBO
26" Single Bank	8	Black	L5KK4008PC	L5KP4008PC	L5KM4008PC
		Blue	L5KK4008PCM	L5KP4008PCM	L5KM4008PCM
· ·		Red	L5KK2007PBO	L5KP2007PB0	L5KM2007PB0
26" Single Bank	7	Black	L5KK2007PC	L5KP2007PC	L5KM2007PC
		Blue	L5KK2007PCM	L5KP2007PCM	L5KM2007PCM
		Red	L5KK2005PBO	L5KP2005PBO	L5KM2005PBO
26" Single Bank	5	Black	L5KK2005PC	L5KP2005PC	L5KM2005PC
		Blue	L5KK2005PCM	L5KP2005PCM	L5KM2005PCM

To order contact your Industrial Account Manager or call the Snap-on Industrial Customer Service Center 1-877-740-1900

#### TOOL MANAGEMENT AND SAFETY

#### 18 Inch All Weather Mobile Storage Chest

The most durable, most versatile, and most functional chest in its category. Its wider wheel base and telescoping handle makes for more stable and easier transport. Secure latching allows for better security, yet is easy to use. Accommodates up to 10 drawers, in 2 different sizes, for the greatest flexibility of tool storage. And of course, nothing can protect your tools better from the elements.

#### Fully enclosed ball bearing wheels on wide corners

- 22" wheel base improves stability during transport
- Can open the lid without having to flip the box over on its side
- Simple, fast field repair capability reduces downtime and frustration
- · Solid rubber wheels absorb shock of rough surfaces

#### Four bar latches

- · Prevents accidental opening
- · Can be released with one hand
- · Simple and secure
- Superior to swing latch offered on competitive cases

#### Telescoping trolley handle

- Comfortable for people between the 5th and 95th percentile height
- Extends to three positions: 36", 39" and 43"
- Competition has only one position

#### Cover swings open on top and can be used as a seat

- Made possible by durable butterfly hinges with stainless steel hardware
- · Passivated stainless steel resists corrosion in harsh environments

# Drawers fully extend on Snap-on's proprietary, composite slides and rails

- Loaded drawers extend fully so the entire contents of the drawer may be easily viewed
- Two drawer sizes 1-1/4" & 2-3/4"

#### Meets/Exceeds Applicable Standards

- MIL 810 Environmental Resistance and Performance
- MIL 1916 Quality Standard

Stock Number	Color	Description		
KMC18062NBK	Black	2 Two-inch drawers plus 6 one-inch drawers		
KMC18043NBK	Black	3 Two-inch drawers plus 4 one-inch drawers		
KMC18062NGR	Olive	2 Two-inch drawers plus 6 one-inch drawers		
KMC18043NGR	Olive	3 Two-inch drawers plus 4 one-inch drawers		
KMC18062NTN	Tan	2 Two-inch drawers plus 6 one-inch drawers		
KMC18043NTN	Tan	3 Two-inch drawers plus 4 one-inch drawers		
KMC18062NOR	Orange	2 Two-inch drawers plus 6 one-inch drawers		
KMC18043NOR	Orange	3 Two-inch drawers plus 4 one-inch drawers		

#### Service Parts Available

• Drawers • Telescoping Handle Kit

SlidesSelf SupportWheel KitLock Kit

• Side Handle Kit • Two-motion Latch Kit

#### **Optional Accessories**

JIKMC18-7NS - Non-Slip Drawer Liner Set, 7 pieces TCK18043BR - Tool Control Kit for KMC18, 7-drawer series







#### One Drawer At A Time



#### Safety At Your Fingertips.

Snap-on® Drawer Control is an interlocking mechanism that prevents you from opening more than one drawer at a time in each drawer bank. This valuable safety feature helps prevent fully loaded roll cabs from tipping over.

Drawer Control is available for all Snap-on Masters Series products. Call your Snap-on Industrial sales representative for additional information.

#### **How It Works**

What makes Drawer Control work? A special interlocking mechanism connects all drawer slides within a given drawer bank. When one drawer is opened the interlocking shaft locks all the other drawer slides in the drawer bank, preventing them from opening. When all drawers are closed, the special interlocking mechanism releases all the drawer slides, allowing you to open any single drawer in the drawer bank. Smart AND safe.

When all drawers are closed the special interlocking mechanism releases the drawer slides, allowing you to open any single drawer in the drawer bank.



When one drawer is opened the special interlocking mechanism connects the remaining drawer slides, preventing them from opening.

#### Easy To Order.

**STANDARD UNITS** with One-Drawer-at-a-Time Feature

Other boxes and colors available through Industrial Customer Service Center.

You can order this feature on all new Snap-on Masters series roll cabs and top chests. To order Drawer Control, simply contact our Industrial Customer Service Center (ICSC).

Drawer Control Stock Number	Base Unit
KRDC711	KRL711A
KRDC722	KRL722B
KRDC751	KRL751
KRDC756	KRL756B
KRDC1011	KRL1011A
KRDC1022	KRL1022B
KRDC1023	KRL1023B
KRDC1056	KRL1056C
KRDC1203	KRL1203B
KRDC1251	KRL1251
KRDC7022	KRL7022B
KRDC7023	KRL7023B



See pages 314 - 333 for the complete selection and specifications for Snap-on Master Series tool storage

#### **TOOL CONTROL SYSTEMS**

#### Level 5<sup>TM</sup> TCMax®





#### **Label & Receipt Printers**

L5CLBLPRT38 Easy to install and set up. Label cost is about 25 cents per label to the end user. It makes a plastic label that sticks well and is easy to read. Switching label material size is easy. We include 5 rolls of industrial grade white 3/8" tape; will give the user about 500 labels. Use this printer to print individual replacement labels or labels in small quantities. Appearance may vary.

To print 1/2" wide labels, order **L5CLBLPRT12** printer. Includes 5 rolls of 1/2" industrial grade label tape.

L5CTZS221 3/8" Label Tape Roll L5CTZS231 1/2" Label Tape Roll

**L5CTLP3844Z** Prints on tamper proof label material that is very difficult to pick off anything. With other labels, once the label starts to peel off, the rest of the label soon follows. This label will only chip and will not peel off. Label costs are rather low, 4 cents per label, and the 3/8" x 1 1/2" label is utilized by pocket badges.

L5CZDESTR Replacement Tape for L5TCP3844Z.

**L5CWP0517** Polyester label material for your laser printer, 1/2" x 1 3/4", 80 labels per sheet, 50 sheets/pack.

**L5CTSP743U** Thermal receipt printer with USB interface, 208 dpi. Barcodes on the receipts expedite the turn-in process at a busy tool crib and can be used on the job to show what tools you should have at this time.

**L5CWP3R8** Polyester label material 8 1/2" x 11", 135 labels per sheet, 10 sheets/pack.

#### Signature Pad

L5CSIGPAD Required to support electronic capture of signature, provide proof of delivery and return by a specified individual.

#### **Level 5 Box Adaptor**

**L5CADA** RS232 adaptor box, cable and USB to RS232 adaptor to connect Level 5 Tool Box to a PC and TCMax for Level  $5^{\text{TM}}$  Gen 3 boxes only.

#### **Barcode Scanners**

**L5CPWRSCN** is a wireless barcode scanner, with a keypad on the top and is our most popular scanner. It does NOT do 2-D PDF417 or DataMatrix barcodes, but it is great for all 1-D applications. Keypad on the top allows you to easily enter quantities of items without having to return to the computer keyboard.

L5CLS2208 has a six foot USB cable that plugs into the PC or laptop. Works best when all items to be scanned are within 5 feet of the PC.

**L5CHHP4620** is a wireless 2-D scanner that can read all linear barcodes plus 2-D barcodes like PDF417 and DataMatrix, but NOT on laser engraved chrome plated tools. Great for 2-D labels but does not have a keypad. Also available is the **L5C4600SF** which has a 6 foot USB cable (not wireless).

**L5CHHP46LEN** can read a DataMatrix laser engraved barcode on a chrome plated tool! This special modification is available on this scanner with a 6 foot USB cord and on the Pocket PC. Requires that tools be laser engraved with a DataMatrix barcode, with our specifications.



L5CSIGPAD

Level 5<sup>TM</sup> TCMax®



SS2763

Level 5™ TCMax® is Tool Control Software that talks™, eliminating the need to repeatedly look at the computer screen between barcode scans. It is the fastest, most accurate way to check tools in and out. TCMax can communicate with the Snap-on® Keyless Entry System for the ultimate in positive tool contol. Provides audible and visual verification of items and function. It's easy to use, smart and secure.

Stock Number	Description
SS2763	TCMax Demo Disc
L5CAP1	TCMax 1 seat maintenance agreement and updates for one year
L5CAP3	TCMax 3 seats maintenance agreement and updates for one year
L5CAP5	TCMax 5 seats maintenance agreement and updates for one year
L5CSL1P	TCMax 1 Seat License
L5CSL3P	TCMax 3 Seat License
L5CSL5P	TCMax 5 Seat License
L5CPP1	TCMax 1 Seat Mobile Pocket PC License
L5CPP3	TCMax 3 Seat Mobile Pocket PC License
L5CPP5	TCMax 5 Seat Mobile Pocket PC License





Contact your Snap-on Industrial Representative for more information, or call our Customer Service Center at (877) 740-1900



#### The TCMax Mobile Pocket PC

Handle physical inventories quickly and simply. From anywhere in the plant or facility.

**L5CHHP7600** with a built-in imager for both 1-D and 2-D barcodes. It talks to you just like TCMax on a PC. It's perfect for performing physical inventories of assets or for issuing and turning in items at a remote location.

#### Text DataMatrix Barcoding. Higher Security. Broader Flexibility.

Today's most advanced, most secure barcoding system. Up to nine characters of information encoded in small square or rectangular marks.

Identify, track and control every tool, instrument and piece of equipment in your inventory. The marks are permanent and can be placed and read on almost any metal or plastic surface – even curved surfaces.

There is no better way to protect and control your assets and your costs than DataMatrix Barcoding from Snap-on.

- Laser engraving application
- Encode both text and raw data
- Wear and tamper-proof
- Flat and curved surfaces
- · Limit of 9 characters for laser marks

#### Tool Chits

#### Problem: FOD

Foreign Object Debris costs the aerospace industry millions of dollars each year in damage to equipment and personnel.

#### **Solution: Tool Chits**

A Personalized Tool Management System

- Tool Chits allow an immediate visual accounting for all tools in a drawer
- Tool Chits promote personal accountability
- Tool Chits are simple to implement and use
- Tool Chits reduce and minimize tool loss
- A Tool Chit program is easy to tie into an existing system
- Custom Tool Chits are available with sequential numbers, employee photos, and your logo





#### Ordering Tool Chits Is easy!

- 1. Send your logo in jpg or bmp format.
- 2. Send photos in jpg or bmp format with unique file names.
- Send data for text in an Excel, Access, or comma-delimited ASCII format.

For more information contact your Snap-on Industrial representative.

Stock Number	Description	Pack Quantity
L5C019BT10	Tool Chit Broken Tool	10
L5C019CC10	Tool Chit Cal-Cert	10
L5C019NT10	Tool Chit No Tool	10
L5C019TR10	Tool Chit Tool Repair	10
L5C019TT45	Tempoary Tool Chits	45
MSI36929172	Brass Chits	50





## **MODULAR HIGH DENSITY TOOL STORAGE**

#### **Build-A-Bay**

Build-ABay.

Build-A-Bay is an innovative, custom designed storage solution. By taking your tool room or work area to a new level. Build-A-Bay provides world class aesthetic appeal and conveys the "Look of Leadership". Contact your Snap-on representative or the Build-A-Bay hotline: 877-437-3553

#### **Build-A-Bay Gives You:**

- A project coordinator to stay with you every step of the way including:
  - Capabilities presentations
  - Concept generation
  - Customized quotations
  - Scheduling
  - Delivery
  - Installation
- The "Look of Leadership" with Snap-on Tool Storage
- · Quality installation performed by experienced technicians



#### **MODULAR HIGH DENSITY TOOL STORAGE**



A complete selection of base cabinets for complete design flexibility. Choose from single, double and triple bank configurations. All base units come standard with bottom skids for forklift access and 4" flat black kick plates. Best of all, everything, from top to bottom, is Snap-on.

# for ng,

#### Double Bank KRS1502

Width: 54.28" Height: 54.60" Depth: 29.09" Case height: 50.67"



#### Single Bank KRS756

Width: 35.68" Height: 36.82" Depth: 24.09" Case height: 32.89"

#### Double Bank Work Center KRS1022WC

**Double Bank** 

Width: 54.28" Height: 64.00" Depth: 29.09" Case height: 37.31"



#### Double Bank KRS7022

Single Bank KRS1501

Width: 35.68"

Height: 54.60"

Depth: 29.09"

Case height: 50.67"

Width: 54.28" Height: 36.82" Depth: 29.09" Case height: 32.89"



Height: 40.00" Depth: 29.09" Case height: 37.31"



Width: 54.28" Height: 40.00" Depth: 29.09" Case height: 37.31"



Width: 54.28" Height: 54.60" Depth: 29.09" Case height: 50.67"



#### Double Bank KRS722

Width: 54.28" Height: 36.82" Depth: 24.09" Case height: 32.89"



#### Triple Bank KRS7023

Width: 72.87" Height: 36.82" Depth: 29.09" Case height: 32.89"



#### Single Bank KRS1056

Width: 35.68" Height: 40.00" Depth: 29.09" Case height: 37.31"





#### **MODULAR HIGH DENSITY TOOL STORAGE**

Have a special need? Snap-on has the answer. For example, our innovative Docker LockerTM allows technicians to bring their tools to the job and secure them overnight. Our under-bench cart port provides safe, easy overnight tool storage for your technicians.







KRS2413R (not shown)

Right Hand Door

#### 18" Bulk Storage KRS1815 (not shown)

Width: 18.00" Height: 36.82" Depth: 24.00" Case height: 32.89"

#### 24" Bulk Storage KRS2415 (above)

Width: 24.00"

#### 48" Bulk Storage w/2 Doors KRS4815 (not shown)

Width: 48.00"

#### 72" Bulk Storage w/4 Doors KRS7215 (below)

Width: 73.50"



All docker lockers include tool cart KR7088A







(not shown) Width: 24.00" Height: 19.70" Depth: 18.00"

#### 36" Wall Mounted Overhead KRS3616

(not shown) Width: 36.00"

#### 48" Wall Mounted Overhead KRS4816

(above left) Width: 48.00"

#### Docker Locker for KRS 1500 Series KRS1518

(not shown) Width: 24.00" Height: 54.60" Depth: 29.09" Case height: 50.67"

## For KRS 700 and 7000 Series KRS7018

(not shown) Width: 24.00" Height: 57.90" Depth: 29.09" Case height: 57.89"

## For KRS 1000 Series KRS1018 (shown left)

Width: 24.00" Height: 63.375" Depth: 29.09" Case height: 62.375"

## Under Bench Cart Port KRS2417 (left)

Width: 24.00" Height: 36.82" Depth: 29.09" Case height: 32.89"

(Shown with KRS 2415 Bulk Storage, can also be used with 700 and 7000 series tool storage units).

# In Ground Challenger Lift Controls KRS1214CC (left)

Width: 12.00" Height: 36.82" Depth: 24.00" Case height: 32.89"

#### In Ground Rotary Lift Controls KRS1214BR (not shown)

Width: 12.00" Height: 36.82" Depth: 24.00" Case height: 32.89"

#### Flight Line Roll Cabinets





#### **Exclusive FOD free**

- "Kingpinless" caster design
- Wheel is solid rubber for maximum shock absorption
- Can be used to retrofit KRL756, KRL722, KRL1056, KGV756, KGV722, and all Classic and Heritage series boxes:

#### **Designed to Reduce Potential Sources of FOD**

- Laser-cut logo eliminates nameplates and decals
- 14 ga. base pan helps seal bottom of cabinet to reduce possibility of objects falling out, and provides lifting point for forklift truck
- T-bar easily allows drawers to be locked for movement without using a key, eliminating another potential FOD source
- Stainless steel cap has no wood core and wraps around all four sides of the boxes to keep the elements and debris out
- Phantom Casters are "Kingpinless", FOD free, rated at 600 lb capacity, and whisper quiet.

#### **Drawer Configurations**

Drawer Depth (number each)	KGVFL756	KGVFL758
2"	0	3
4"	4	2
8"	1	0
10"	0	1
TOTAL	5	6



5 Drawer Desert Tan

KGVFL758POT 6 Drawer Matte Black

Easier to roll over long distances and hangar tracks

Swivel caster: 8-21839A Fixed caster: 8-21939A

- All surfaces are powder-coated inside and out for maximum corrosion resistance
- Double-wall construction and precision welding for rugged durability
- Piano hinge lock bar for security Flat finish reduces glare in harsh lighting
- · All colors come standard with black trim
- · Available in six colors and two standard configurations — 5-drawer and 6-drawer, with 8" or 10" deep bottom drawer
- Available in Snap-on Red (PND), Ultra Yellow (PBU), Olive Drab (PHG), Matte Black (POT), Putty (POS), and Texture Grey (PHY)
- Made in the U.S.A.

#### **Available Colors**

Color	5-DRAWER	6-DRAWER	
Snap-on Red	KGVFL756CPN	KGVFL758PN	
Ultra Yellow	KGVFL756CPD0	KGVFL758PDO	
Olive Drab	KGVFL756CPHG	KGVFL758PHG	
Matte Black	KGVFL756CPOT	KGVFL758POT	
Desert Tan	KGVFL756CPOS	KGVFL758POS	
Arctic Silver	KGVFL756CPKS	KGVFL758PKS	

#### **Overall Dimensions**

Width: 35-5/8" Height: 40" Depth: 24" Weight: 415 lbs. 16,368 cubic inches 3,410 square inches





#### **FOD PREVENTION**

#### **FOD Hand Tools**

#### **FOD (Foreign Object Damage) Ratchets**

- Designed to help prevent foreign object damage in sensitive work environments
- Coverplate and reverse lever permanently affixed to ratchet head with rivets to prevent chance of small parts debries



Stock Number	Square Drive, Inches	Description	Gear Teeth	Swing Arc	A	В	C
T936FOD	1/4	Standard Handle FOD	36	10°	3/8	1-7/32	4-7/16
F80F0D	3/8	Standard Handle FOD	80	4.5°	9/16	1-1/4	7-7/16
S936FOD	1/2	Standard Handle FOD	36	10°	3/4	1-5/8	10-5/16



Snap-on Industrial FOD ratchets feature rivets instead of screws for maximum FOD and FME program conformance.





No one offers more FOD and FME solutions than Snap-on Industrial!

#### **FOD (Foreign Object Damage) 12 Foot Tape Measure**

- Recessed rivets for FOD prevention
- Clasp on rear of case for use with universal tether
- 3/4" x 12 ft. tape
- Inch scale with 16" stud markings



#### FOD (Foreign Object Damage) Mirror -

This telescoping mirror was designed in conjunction with a major aircraft manufacturer. The extension shaft has been modified to reduce the chance of the sections pulling apart. This substantially reduces the likelihood of breakage and, ultimately, FOD.

- 2-1/4" diameter mirror
- 6-1/2" long collapsed
- 35" maximum extended length.



#### **Round Nylon-Framed Stainless Steel Mirror**

Round nylon-framed stainless steel mirror uses a FOD free ball & socket configuration allowing 360 degree rotation to prevent chance of small parts debris.

- 6-1/2" to 33" telescoping stainless steel handle
- Soft vinyl grip
- 7" collapsed, 36-1/4" extended overall length

Stock Number	Diameter
SET309N2STE	2-1/4"
SET306N2STE	1-1/4"



#### Aeroprobe® & Stark Kit

#### Aeroprobe® Electronic Tool Detection System

Aeroprobe can be easily integrated into your present aircraft technician safety program to minimize aircraft downtime and danger of foreign object damage from misplaced tools. As a supplement to visual inspection, the Aeroprobe is a completely portable selfcontained system for locating misplaced tools in and around aircraft.

- · Save lives by preventing accidents
- · Save man-hours searching for misplaced tools
- · Reduce aircraft downtime
- Prevent damage to aircraft

# Prevent tear downs Activator

Simply pass your existing tools over the activator and they are magnetically sensitized.

The Validator is used to verify that a tool has sufficient sensitivity for detection.

#### Aeroprobe Kit Contents

#### **Detector & Probe Assembly**

The portable detector pinpoints the location of misplaced tools and is powered by regular or rechargeable batteries. Small enough to fit into confined areas, yet provides wide area scanning capability.

#### **Head Set**

A headset is used to receive audio signals from the detector indicating the presence of a sensitized tool.

#### STARK Search Tool And Recovery Kit

The exclusive Snap-on® Industrial STARK contains what you need to find and recover misplaced tools. The kit begins with Aeroprobe Detection components and adds the most commonly used items for searching out and removing any misplaced tools.

Includes the BK5500 Digital Imaging Video Inspection Scope for maximum versatility. See page 403 for full details on the BK5500 and for additional accessories. The STARK kit comes ready to travel, packed in a Pelican Storm® case with custom fitted Tool Control Foam inserts.

		L5DAK-1	L5DDK-1	L5DAVI-I-II	STRK01
Stock Number	Description	Activation Kit	Detection Kit	Aeroprobe Tool Detection & Recovery System	STARK Kit
L5DAC-2	Aeroprobe Activator	•		•	
L5DVL-1	Aeroprobe Validator	•		•	
L5DDT-3	Aeroprobe Detector		•	•	•
L5DHS-1	Aeroprobe Head Set		•	•	•
L5DPR-2	Aeroprobe Probe Assembly		•	•	•
L5DBH-1	Aeroprobe Belt Carrying Harness		•	•	•
L5DSC-3	Aeroprobe High Impact Case	•	•	•	•
BK5500	Snap On Video Inspection Scope				•
BK5500-7	8.5 mm 72 in. Straight View Image				•
DPTC24	24" Four-Claw Flexible Pick-Up Tool				•
DPTM24	24" Flexible Shaft Magnetic Pick-Up Tool				•
ECF1600	16" Light, Bendable w/ 10" Flexible Shaft				•
ECF975AX	5.8 Watt 95 Lumen Flashlite				•
GA294	2 1/8" X 3 1/2" Mirror w/ 15" Shaft				•
GA295	2-1/4" Round Mirror w/ 14" Shaft				•
HIM272000000	Pelican Storm Case				•
VFI10561PNP	FOD Foam Tool Control Inserts				•

#### Aeroprobe Tool Detection & Recovery System: L5DAVI-I-II

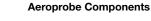


Tool Control System Contact Your Snap-on

Industrial sales representative for complete details and ordering information.



STRK01





- . Any tool that weighs more than 5 pounds should be attached to an anchor point such as a work platform or utility
- bucket rather than the operator. Tool weights are available in the Snap-on Industrial printed price list.
- · Read safety precautions on pages W1 to W4

#### **TETHERED TOOLS**

#### Level 5™ TAH Tool Set

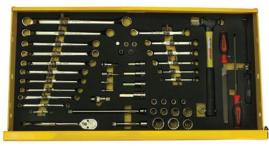
#### **THKITUS500 General Purpose Tethered Tool Maintenance Set**

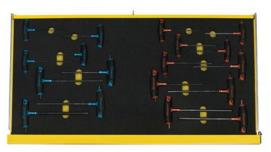
THKITUS500 includes Snap-on Industrial's most popular Tethered Tools for the offshore oil extraction industry. It consists of a rugged Snap-on KRA4107 seven-drawer roll cab complete with high-density foam drawer inserts pre-cut to fit the 180 tools included in the set. Six drawers are fitted with foam as pictured above, and there is a spare drawer for storage of other miscellaneous tools not included with the set. Both SAE and metric tools are included, as well as lanyards, and wrist straps.













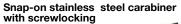


Set Contents are subject to change. Complete set contents can be viewed at www.snapon.com/industrial/sets.html

#### Lanvards

Snap-on® Industrial's Level 5™ TAH retention system increases safety and productivity wherever tools are used. Attaching tools to a lanyard or tether can keep them from falling when used in high places, can help prevent foreign material, and can reduce loss of valuable tools in environments like ocean platforms. Snap-on tethers can be used on a wide range of hand tools and cordless power tools. Lanvards can be attached to wrist, belt, harness or other location based on usage and weight. Be sure to use a lanyard with capacity that exceeds the weight of the tool you are attaching because drop forces are often greater than the actual tool weight.

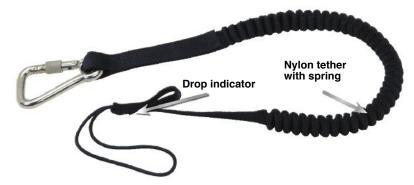






#### All Retention Systems Are Not Created Equal

Snap-on Industrial uses a stainless steel, screw-locking carabiner connector while many competitors use aluminum connectors that are not load rated. Snap-on also gives you a nylon tether that has a spring inside to absorb the shock of a dropped tool and built in drop indicator. Lanyards that have been involved in a drop should be replaced. The drop indicator identifies that for you.



#### Tethers, Lanyards, and Carabiners

Stock Number	Size / Description	Extension Length	Capacity
THCARA15	3/4" Super Coil Personal Duty Tether w/ 2 SST Carabiners	42"	15#
THCARA25 **	1" Super Coil Anchor Nylon Tether w/ 2 SST Carabiners	10'	25#
THCARA30 30lb. Heavy Duty Lanyard with 2 Stainless Steel Carabiners		40"	30#
THL1	Snap-Hook Tether for Attachment to Safety Coils, Key Rings, or Cable Loops	12"	5#
THL2	Universal Tether with One Snap Hook and One Adjustable Loop	12"	5#
THPRT	Pin Release Tool for Snap-on Retention System Drive	_	_
THTOOLPOUCH	Tool Pouch with Attachment Points	_	_
THUNI6	3/4" Super Coil Personal Duty Tether w/1 SST Carabiner & 1 Fixed Loop	46"	6#
THUNI12 **	1" Super Coil Anchor Tool Tether w/1 SST Carabiner & 1 Fixed Loop	10'	12#
THUNI15	<sup>3</sup> / <sub>4</sub> " Super Coil Personal Duty Tether w/1 SST Carabiner & 1 Fixed Loop	46"	15#
THUNIRET1	Personal Duty Retractable Tether w/ Universal Attachment	36"	16 oz.
THUNIRET2	Personal Duty Retractable Tether w/ Universal Attachment	42"	32 oz.
THWS1	Adjustable Wrist Strap with Velcro Closure & D-Ring	_	_
THWSRET1	Personal Duty Retractable Tether w/ Universal Attachment and Wrist Strap	36"	16 oz.

<sup>\*\*</sup> Note: 1" Super Coils are designed to be attached to an anchor point such as a utility bucket or work platform. Due to length and capacity we do not recommend attaching these to an individual.



**THPRT** 



**HANCHOR** 

THCARA30

- · Any tool that weighs more than 5 pounds should be attached to an anchor point such as a work platform or utility
- bucket rather than the operator. Tool weights are available in the Snap-on Industrial printed price list.
- Read safety precautions on pages W1 to W4

#### **Cordless Impact Wrenches**

#### **Tetherable Heavy Duty Cordless Impact Wrenches**

- Complete program of 14.4v Impact Wrenches
- Tools include heavy duty steel bracket secured at (4) points and stainless steel carabiner with screw link for high security and corrosion free use
- Carabiner allows tools to be quickly secured or released to a tether, hand line or tool belt when climbing

	Stock Number	Description	Voltage	Battery Type	Drive Size	Socket Retention	Battery Qty Included	Charger Type
14.4v Compact	THCT4410A	14.4v <sup>3</sup> / <sub>8</sub> " Friction Ring Impact Wrench Kit w/ TAH System			3/8"	Friction Ring		
Cordless	THCT4410AP	14.4v 3/8" Pinned Anvil Impact Wrench Kit w/ TAH System		2.5 3/8" Amp Hr 1/2"	3/8"	Pin	2	
Impact	THCT4450A	14.4v <sup>1</sup> /2" Friction Ring Impact Wrench Kit w/ TAH System	14.4v		1/2"	Friction Ring		120 VAC
Wrenches with	THCT4450AP	14.4v 1/2" Pinned Anvil Impact Wrench Kit w/ TAH System		Ni-Cad	1/2"	Pin		
TAH System	THCT4410AQC	14.4v <sup>1</sup> /4" QC Chuck Impact Driver Kit w/ TAH System			1/4" Hex	Quick Change		

See pages 270 to 282 for the complete assortment of Snap-on Cordless Tools

#### **Tools at Height System Retro Fit Kits**

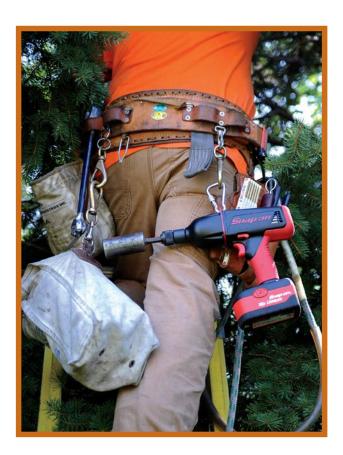
- Retrofit Tools at Height System kits available for 14.4v (CT4410 / CT4450 series) and 18v (CT4850 / CT6850 / CT6855 series) Impact Wrenches
- Includes everything needed to quickly and easily convert existing Snap-on cordless tools to the TAH Retention System

TH14VKIT	Tools at Height System Retro Fit Kit for 14.4v Compact Impact Wrenches Fits CT4410 / CT4450 Series Impact Wrenches - (Incl. Bracket, Caribiner & T20 Torx Bit)		
TH18VKIT	Tools at Height System Retro Kit for 18v High Torque Impact Wrenches Fits CT4850 / CT6850 / CT6855 Series Impact Wrenches - (Incl. Bracket, Caribiner & T20 Torx Bit)		

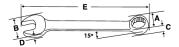




Be sure to use a lanyard that has more weight capacity than the tool you are attaching because drop forces are greater than actual tool weight.



#### **Wrenches**



#### Standard Length, mm, Combination

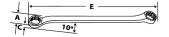
	0- /					
	(12)	A	В	C	D	E
8	THOEXM80B	13	17	6	4	146
9	THOEXM90B	14	19	6	5	159
10	THOEXM100B	15	21	7	5	171
11	THOEXM110B	17	23	8	6	184
12	THOEXM120B	18	25	8	6	195
13	THOEXM130B	20	27	9	6	207
14	THOEXM140B	21	29	9	7	219
15	THOEXM150B	22	31	10	7	231
16	THOEXM160B	24	33	10	7	242
17	THOEXM170B	25	35	11	8	255
18	THOEXM180B	27	37	12	8	267
19	THOEXM190B	28	39	12	9	279
20	THOEXM200B	30	41	13	9	292
21	THOEXM210B	31	43	13	9	304
22	THOEXM220B	33	46	14	10	318
23	THOEXM230B	34	47	14	10	327
24	THOEXM240B	35	49	15	11	337
25	THOEXM250B	37	52	16	11	356
26	THOEXM260B	38	53	16	11	363
27	THOEXM270B	39	55	17	12	375
29	THOEXM290B	42	58	18	12	394
30	TH0EXM300B	44	61	19	13	413
32	THOEXM320B	46	65	19	14	432
34	TH0EXM340B	48	68	19	14	452
36	THOEXM360B	53	74	22	15	489
ACME/ANCLE	2107 100					

#### ASME/ANSI B107.100

#### Standard Length, inches, Combination

<b>□</b> Ţ	(12)	A	В	C	D	E
1/4	TH0EX8B	13/32	17/32	3/16	5/32	5
5/16	TH0EX10B	1/2	21/32	7/32	5/32	5 3/4
11/32	THOEX11B	17/32	3/4	1/4	3/16	6 1/8
3/8	TH0EX12B	19/32	13/16	5/16	3/16	6 1/2
7/16	TH0EX14B	21/32	29/32	5/16	7/32	7 1/4
1/2	THOEX16B	3/4	11/16	11/32	1/4	8
9/16	THOEX18B	27/32	13/16	3/8	9/32	8 3/4
5/8	TH0EX20B	15/16	<b>1</b> 5/16	13/32	9/32	9 1/2
11/16	TH0EX22B	1 1/32	1 13/32	7/16	5/16	10 1/4
3/4	TH0EX24B	1 1/8	1 9/16	15/32	11/32	11
13/16	THOEX26B	1 3/16	1 21/32	17/32	3/8	11 3/4
7/8	THOEX28B	1 9/32	1 13/16	9/16	3/8	12 1/2
15/16	TH0EX30B	1 3/8	1 29/32	19/32	13/32	13 1/4
1	TH0EX32B	1 15/32	2 1/32	21/32	7/16	14
1 1/16	TH0EX34B	1 9/16	2 3/16	11/16	15/32	14 3/4
1 1/8	THOEX36B	1 5/8	2 5/16	11/16	17/32	15 7/16
1 3/16	THOEX38B	1 3/4	2 7/16	3/4	1/2	<b>16</b> 5/16
1 1/4	TH0EX40B	1 13/16	2 9/16	3/4	17/32	17 1/16
1 5/16	TH0EX42B	1 29/32	2 21/32	3/4	9/16	17 13/16
1 3/8	TH0EX44B	2	2 13/16	3/4	19/32	18 9/16
1 7/16	THOEX46B	2 1/16	2 29/32	7/8	19/32	19 1/32
1 1/2	THOEX48B	2 5/32	3 1/16	7/8	5/8	20 1/16
1 9/16	TH0EX50B	2 1/4	3 3/16	7/8	23/32	20 13/16
1 5/8	TH0EX52B	2 11/32	3 11/32	7/8	11/16	21 9/16

#### Flank Drive® Double Box -



#### Standard Length, 10° Offset, mm

	(12)	A	C	E
8 - 10	THXBM810A	12.3 - 15	6.7 - 7.7	185
11 - 13	THXBM1113A	16.4 - 19.1	8.3 - 9.3	219
12 - 14	THXBM1214A	17.7 - 20.4	8.8 - 9.7	230
13 - 15	THXBM1315A	19.1 - 21.8	9.3 - 10.2	241
14 - 17	THXBM1417A	20.4 - 24.5	9.8 - 11.4	248
16 - 18	THXBM1618A	23.1 - 25.9	10.9 - 11.9	275
17 - 19	THXBM1719A	24.5 - 27.2	11.4 - 12.3	286
18 - 21	THXBM1821A	25.9 - 29.9	11.9 - 13.3	303
22 - 24	THXBM2224A	31.3 - 34	13.7 - 14.7	342
27 - 30	THXBM2730A	38.1 - 42.2	16 - 17.3	404

# Midget, 10° Offset, inches

	(12)	A	C	E				
1/4 - 9/32	THXID1618A	13/32 - 7/16	5/32 - 3/16	3 13/32				
5/16 - 11/32	THXID2022A	15/32 - 1/2	3/16 - 7/32	3 31/32				
AOME (ANOLDEO TO 1004								

ASME/ANSI B107.6-1994

#### Short Handle, 10° Offset, mm

	(12)	A	В	C
6 - 7	THXSM67A	9.6 - 10.9	5.7 - 6.2	86

#### Standard Length, 10° Offset, inches

	•	•		
<b>□</b> Ţ	(12)	A	C	E
3/8 - 7/16	THXB1214A	9/16 - 21/32	5/16 - 11/32	7 19/32
1/2 - 9/16	THXB1618A	3/4 - 13/16	11/32 - 3/8	8 11/16
5/8 - 11/16	THXB2022A	29/32 - 1	7/16 - 15/32	10 5/32
3/4 - 13/16	THXB2426A	1 1/16 - 1 5/32	1/2 - 17/32	11 21/32
7/8 - 15/16	THXB2830A	1 1/4 - 1 11/32	17/32 - 9/16	13 1/8
1 - 1 1/16	THXB3234A	1 13/32 - 1 1/2	19/32 - 5/8	14 19/32
1 1/4 - 1 5/16	THXB4042A	1 3/4 - 1 27/32	23/32 - 3/4	17 19/32

#### Flare Nut Double End, mm

<b>mm</b> <u></u>	<b>6</b>	A	C	E
9 - 11	THRXFMS911B	18 - 21	7 - 8	145
10 - 12	THRXFMS1012B	20 - 22	8 - 9	153
13 - 14	THRXFMS1314B	24 - 25	9 - 10	173
15 - 17	THRXFMS1517B	26 - 29	10 - 11	193
16 - 18	THRXFMS1618B	28 - 30	11 - 12	200
19 - 21	THRXFMS1921B	32 - 34	12 - 13	223



<sup>•</sup> Any tool that weighs more than 5 pounds should be attached to an anchor point such as a work platform or utility

bucket rather than the operator. Tool weights are available in the Snap-on Industrial printed price list.

<sup>•</sup> Read safety precautions on pages W1 to W4

#### **Pliers & Miscellaneous Tools**

#### **Tethered Pliers & Cutters**

Stock Number	Description / Style	Overall Length (inches)	Jaw Opening / Capacity	Jaw Length (inches)	Jaw Positions
TH388CF	High Leverage PowerEdgeTM Cutter	8 5/16	-	1 <sup>1</sup> /16	-
TH85BCP	Diagonal Cutter	5	-	9/16	-
TH95BCP	Needle Nose Pliers	6	-	1 <sup>11</sup> /16	-
THAWP120	Tongue and Groove Adjustable Joint Pliers	12 3/4	2 <sup>3</sup> / <sub>16</sub>	-	7
THLP10WR	LP Series Locking Pliers	10	2 <sup>7</sup> / <sub>16</sub>	-	-
THPWCS9	Wire Stripper/Cutter/Crimper/Bolt Cutter	8 3/4	"AWG20 - AWG10 - Stranded Wire AWG16 - AWG8 - Solid Wire"	-	-
THWTR1A	Reversible Wire Twister	8 3/4	0.041	-	-

#### **Tethered Pipe Wrenches**

Stock Number	Description / Style	Overall Length (inches)	Jaw Opening / Capacity
THPW10C	Cast Iron Pipe Wrench	10	1 1/2
THPWA24A	Aluminum Pipe Wrench	24	3

#### **Tethered Hammers**

.cencica na								
Stock Number	Description / Style	Weight Overa (lbs) (inch		Face Diameter (inches)				
THBPN32B	Fiberglass Handle Ball-Pien Hammer	2	16	-				
THBC110B	Dead Blow Sledge Hammer	8	30	2 3/4				
THBD6ESG	Heavy-Duty Fiberglass Handle Sledge Hammer	6	18	1 5/8				
THBD10ESG	Heavy-Duty Fiberglass Handle Sledge Hammer	10	32	2				



#### TH85BCP

#### **Tethered Scrapers**

Stock Number	Description / Style	Overall Length (inches)	Blade Width (inches)
THCSA8C	Rigid Carbon Scraper	7 5/8	7/8
THCSA12C	Rigid Carbon Scraper	12 7/8	1
THCSA14C	Rigid Carbon Scraper	14	1 <sup>1</sup> / <sub>2</sub>

#### **Miscellaneous Tethered Tools**

Stock Number	Description / Style	Overall Length (inches)
THHSG319	12" Bi-Mold Handle Hacksaw	14 3/4
THNPB124B	Claw-Type Wrecking Bar (3/4" Stock)	24
THPPC5A	Punch & Chisel Holder	6 <sup>15</sup> /16
THUTK100	Retractable Blade Quick Change Utility Knife	5
THYA728A	6000 PSI Lever-Type Grease Gun W/18" Hose	-

 The mission of the Snap-on Industrial Level 5<sup>TM</sup> TAH Tool Retention System is to deliver the best possible solution for Safety, FOD, and FME problems.

We address the issues, but don't compromise the functionality of the tools.

- Snap-on® FOD-compliant and Retention System tools are delivered ready-to-use.
- We offer a wide selection of hand and power tools that are ready to tether, and the lanyards and carabiners required to safely attach them to a fixture (tools over five pounds) or operator (tools under five pounds).
- All Snap-on TAH ratchets and accessories feature a pin which mates with the socket hole for positive retention.



TH388CF (shown with lanyard, not included)



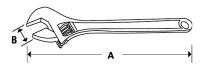
#### **TETHERED & RETENTION SYSTEM TOOLS**

#### Screwdrivers, Torque Wrenches, and Miscellaneous



#### **Tethered Adjustable Wrenches**

	<del>-</del>					
Stock	A	В				
Number	Inches (mm)	Inches (mm)				
THGAJ10	10 (254)	1 1/8 (29)				
THGAJ18	18 (457)	2 5/32 (55)				



#### **Tethered Soft Grip File Handles**

• Featuring twist-on threads for securely holding files

Stock Number	For Files
THSGHF614BR	4MA, 6R, 6T, 6MA, 6HR, 8CR, 8R
THSGHF615BR	8T, 8MA, 8HR, 10R

#### Tethered Hard Handle Instinct™ Screwdrivers

	Stock Number	A	В	C	D
	THSHD2AR	.035	7/32	2 13/16	6-15/16
Flat Tim	THSHD4AR	.040	1/4	3 15/16	8 27/32
Flat Tip	THSHD6AR	.050	5/16	5 <sup>15</sup> / <sub>16</sub>	10 27/32
	THSHD8AR	.055	3/8	7 29/32	13 <sup>13</sup> / <sub>32</sub>
	THSHDP31AIRR	#1	3/16	2 31/32	7 1/8
Dhilling	THSHDP42AIRR	#2	1/4	3 31/32	8 7/8
Phillips	THSHDP63AIRR	#3	5/16	5 <sup>29</sup> / <sub>32</sub>	10 <sup>13</sup> / <sub>16</sub>
	THSHDP64AIRR	#4	3/8	6	11 1/2

#### **Tethered Electronic Miniature Screwdrivers**

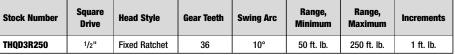
• Feature rotating handles making them ideal for precise detail work

Stock Number	A	В	C	D
THSGDE215	1.5	3/32	2	5 3/4
THSGDE220	2.0	3/32	2	5 3/4
THSGDE225	2.5	3/32	2	5 <sup>3</sup> /4
THSGDE230	3.0	1/8	2	5 <sup>3</sup> /4
THSGDEP20	#00	1/8	2	5 <sup>3</sup> / <sub>4</sub>
THSGDEP200	#0	1/8	2	5 <sup>3</sup> / <sub>4</sub>

#### Retention System Adjustable Click-Type Torque Instrument (± 4% Accuracy)



Snap-on® Retention System sockets positively lock onto ratchets and handles with a secure pin and hole design



The certification of accuracy provided per ASME and ISO standards is at 20% to 100% of full scale

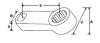




# Retention System Techwrench Torque Wrenches Standard Models / ± 2% Accuracy / Fixed Head

, ,,								
Stock Number	THTECH2R100	THTECH3R250						
Square Drive	3/8"	1/2"						
Head Type	Sealed Fixed Ratchet	Sealed Fixed Ratchet						
Gear Teeth	36	36						
Swing Arc	10°	10°						
Range, in. lb.	60 - 1,200	300 - 3,000						
Range, ft. lb.	5 - 100	25 - 250						
Range, Nm	6.7 - 135	34 - 339						
Head Depth, inches	5/8	3/4						
Head Width, inches	1 <sup>5</sup> /32	1 <sup>5</sup> /8						
Length, inches	17 1/4	26 <sup>1</sup> / <sub>4</sub>						

The certification of accuracy provided per ASME and ISO standards is at 20% to 100% of full scale



#### 3/8" Drive Torque Adaptors, Non-Spline

Stock Number	Size	A	В	C	D	E
THFRDH101	5/16"	.475	.750	1/4	7/16	2
THFRDH121	3/8"	.570	.750	5/16	7/16	2
THFRDH141	<sup>7</sup> /16"	.655	.750	11/32	7/16	2
THFRDH161	1/2"	.740	.750	11/32	7/16	2
THFRDH181	9/16"	.825	.750	3/8	7/16	2





<sup>•</sup> Any tool that weighs more than 5 pounds should be attached to an anchor point such as a work platform or utility

bucket rather than the operator. Tool weights are available in the Snap-on Industrial printed price list.

<sup>•</sup> Read safety precautions on pages W1 to W4

#### **RETENTION SYSTEM DRIVE TOOLS**

#### **Ratchets & Drive Tools**

#### Snap-on Level 5<sup>™</sup> TAH Ratchets

Stock Number	Drive Size (inches)	Description	Overall Length (inches)	Repair Kit
THT72	1/4	72 Tooth Standard Handle Ratchet	4 <sup>7</sup> / <sub>16</sub>	THRKRT72LB
THTL72	1/4	72 Tooth Long Handle Ratchet	6 1/2	THRKRT72LB
THF80	3/8	80 Tooth Standard Handle Ratchet	7 <sup>7</sup> / <sub>16</sub>	THRKRF80LB
THFL80	3/8	80 Tooth Long Handle Ratchet	10 <sup>5</sup> /16	THRKRF80LB
THFN100	3/8	Round Head, Standard Length	7 <sup>7</sup> / <sub>16</sub>	
THS80A	1/2	80 Tooth Standard Handle Ratchet	10 <sup>5</sup> /16	THRKRS80ALB
THSL80A	1/2	80 Tooth Long Handle Ratchet	15	THRKRS80ALB



Snap-on Retention System sockets positively lock onto ratchets and handles with a secure pin and hole design





**THFU8A** 



#### Snap-on Level 5™ TAH Drive Tools

	Drive		Overall
Stock Number	Size	Description	Length
	(inches)		(inches)
THTMU8B	1/4	1/4" Drive Universal Joint	1 <sup>5</sup> /16
THTMUL8	1/4	1/4" Drive Locking Universal.	2 1/4
THTM62B	1/4	Driver, Flexible,	6 3/4
THTMR4	1/4	Driver, Ratcheting	8 31/32
THTM65	1/4	Adjusting Tool, Flexible	15
THTM10G	1/4	Breaker Bar	6
THTMS70A	1/4	Spinner, Ratchet	7/8
THTMRT8	1/4	Driver, T-Handle, Ratcheting	10
THTM77	1/4	Ratcheting Adaptor	1 <sup>5</sup> /8
THT9TURB0	1/4	Turbo-T Spd Drvr 1/4 In Sq Dr	
THFU8A	3/8	3/8" Drive Universal Joint	2 1/16
THF10L	3/8	Breaker Bar	9 9/16
THFRS70A	3/8	Spinner, Ratchet	<b>1</b> 5/16
THF11TURB0	3/8	Turbo-T Spd Drvr 3/8 In Sq Dr	
THS8	1/2	1/2" Drive Universal Joint	2 11/16
THSN15	1/2	Breaker Bar 1/2" Dr	15
THSN18	1/2	Breaker Bar 1/2" Dr	18
THSN24	1/2	Breaker Bar 1/2" Dr	24
THS77A	1/2	Ratcheting Adaptor	3

- Our mission is to deliver the best possible solution for Safety, FOD, and FME problems.
   We address the issues, but don't compromise the functionality of the tools.
- Snap-on FOD-compliant and Retention System tools are delivered ready-to-use.
- We offer a wide selection of hand and power tools that are ready to tether, and the lanyards and carabiners required to safely attach them to a fixture (tools over five pounds) or operator (tools under five pounds).
- Snap-on TAH ratchets and accessories feature a pin which mates with the socket hole for positive retention.

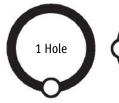




## **RETENTION SYSTEM DRIVE TOOLS**

#### **Extensions & Adapters**







Competitor's socket

Snap-on socket

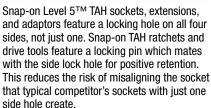
#### Snap-on Level 5™ TAH Extensions

	Drive	Overall
Stock Number	Size	Length
	(inches)	(inches)
THTMXK2	1/4	2
THTMXK4	1/4	4
THTMXK60	1/4	6
THTMXK80	1/4	8
THTMXK110	1/4	11
THTMXK140	1/4	14
THTMX240	1/4	24
THFX1	3/8	1 1/2
THFXK3	3/8	3
THFXK4	3/8	4
THFXK6	3/8	6
THFXK8	3/8	8
THFXK11	3/8	11
THSX2	1/2	2 1/8
THSXK3	1/2	3 1/2
THSXK5	1/2	5
THSXK8	1/2	8
THSXK11	1/2	11
THSX15	1/2	15









#### Snap-on Level 5™ TAH Adaptors

Stock Number	Female Drive Size (IN.)	we Size   Male Drive   Description		Length (IN.)
THTA3	1/4	3/8	ADAPTOR	15/16
THTMXM17	1/4	1/4	Adaptor, Magnetic	1 21/32
THTMXM114	1/4	1/4	Adaptor, Magnetic	1 17/32
THA2A	3/8	1/2	ADAPTOR	1 5/16
THGFAT1E	3/8	1/4	ADAPTOR	1 1/4
THGFAT1E2	3/8	1/4	REPLACEMENT BIT / THGFAT1E	
THGSAF1E	1/2	3/8	ADAPTOR	1 3/16
THGLA12B	1/2	3/4	ADAPTOR	1 7/16
THGLAS1E	3/4	1/2	ADAPTOR	2 7/16
THGLAS1E2	3/4	1/2	REPLACEMENT BIT / THGLAS1E2	



THA2A



THGFAT1E

Snap-on Industrial uses a stainless steel, screw-locking carabiner connector while many competitors use aluminum connectors that are not load rated. Snap-on also gives you a nylon tether that has a spring inside to absorb the shock of a dropped tool and built in drop indicator. Lanyards that have been involved in a drop should be replaced. The drop indicator identifies that for you.

See page N055 for the complete assortment of Snap-on Industrial tethers, lanyards, and carabiners.





<sup>•</sup> Any tool that weighs more than 5 pounds should be attached to an anchor point such as a work platform or utility

bucket rather than the operator. Tool weights are available in the Snap-on Industrial printed price list.

<sup>•</sup> Read safety precautions on pages W1 to W4

#### 1/4" Drive



#### Shallow 1/4" Drive, mm

	(12)	A	В	C	D	E
5	THTMMD5*	7.7	12.1	13.3	22.2	4.3
5.5	THTMMD5.5	8.3	12.1	13.3	22.2	4.6
6	THTMMD6	9.3	12.1	13.3	22.2	5.6
7	THTMMD7	10.5	12.1	13.3	22.2	6.1
8	THTMMD8	11.5	12.1	13.3	22.2	6.9
9	THTMMD9	12.7	12.1	13.3	22.2	7.4
10	THTMMD10	13.2	13.2	13.3	22.2	7.4
11	THTMMD11	15.2	14.6	13.3	22.2	9.4
12	THTMMD12	16.5	15.6	13.3	22.2	9.4
13	THTMMD13	17.6	16.7	13.3	22.2	9.4
14	THTMMD14	18.8	17.8	14.1	22.2	9.7

<sup>\*</sup>Conventional hex

#### Shallow 1/4" Drive, inches

	<b>6</b>	(12)	A	В	С	D	E
1/8	THTM04	_	7/32	7/16	1/2	7/8	1/8
5/32	THTM05*	_	9/32	15/32	1/2	7/8	5/32
3/16	THTM6*	THTMD6*	9/32	15/32	1/2	7/8	5/32
7/32	THTM7*	THTMD7*	11/32	15/32	1/2	7/8	3/16
1/4	THTM8	THTMD8	3/8	15/32	1/2	7/8	7/32
9/32	THTM9	THTMD9	13/32	15/32	1/2	7/8	1/4
5/16	THTM10	THTMD10	15/32	15/32	1/2	7/8	9/32
11/32	THTM11	THTMD11	1/2	15/32	5/16	7/8	9/32
3/8	THTM12	THTMD12	17/32	1/2	1/2	7/8	9/32
7/16	THTM14	THTMD14	19/32	9/16	1/2	7/8	3/8
1/2	THTM16	THTMD16	11/16	21/32	1/2	7/8	3/8
9/16	THTM18	THTMD18	25/32	23/32	1/2	29/32	3/8

<sup>\*</sup>Conventional hex

#### Semi Deep 1/4" Drive, mm

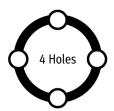
	(12)	A	В	C	D	E
5	THTMMDS5*	7.7	12.1	22.9	31.8	5.1
5.5	THTMMDS5.5	8.3	12.1	22.9	31.8	5.3
6	THTMMDS6	9.3	12.1	22.9	31.8	5.8
7	THTMMDS7	10.5	12.1	22.9	31.8	6.1
8	THTMMDS8	11.5	12.1	18.4	31.8	6.9
9	THTMMDS9	12.7	12.1	18.4	31.8	7.4
10	THTMMDS10	14.0	13.2	18.4	31.8	7.4
11	THTMMDS11	15.4	14.6	18.4	31.8	9.4
12	THTMMDS12	16.5	15.6	18.4	31.8	9.4
13	THTMMDS13	17.6	16.7	18.4	31.8	9.4
14	THTMMDS14	18.8	17.8	18.4	31.8	9.7
15	THTMMDS15	20.4	19.4	18.4	31.8	9.7

<sup>\*</sup>Conventional hex

#### Semi Deep 1/4" Drive, inches

<u> </u>	700p =/ . =	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	U11U3			
<b>□</b> Ţ	(12)	A	В	C	D	E
3/16	THTMDS6*	5/16	15/32	29/32	1 1/4	7/32
7/32	THTMDS7*	11/32	15/32	29/32	1 <sup>1</sup> / <sub>4</sub>	7/32
1/4	THTMDS8	3/8	15/32	29/32	1 1/4	1/4
9/32	THTMDS9	13/32	15/32	23/32	1 <sup>1</sup> / <sub>4</sub>	1/4
5/16	THTMDS10	15/32	15/32	23/32	1 1/4	9/32
11/32	THTMDS11	1/2	15/32	23/32	1 <sup>1</sup> / <sub>4</sub>	5/16
3/8	THTMDS12	9/16	1/2	23/32	1 1/4	5/16
7/16	THTMDS14	5/8	19/32	23/32	1 <sup>1</sup> / <sub>4</sub>	3/8
1/2	THTMDS16	11/16	21/32	23/32	1 1/4	3/8
9/16	THTMDS18	3/4	23/32	23/32	1 1/4	3/8

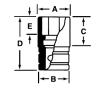
<sup>\*</sup>Conventional hex





O Double Square

	Stock No.	A	В	C	D	E
1/4	THTM408	15/32	15/32	17/32	7/8	1/4
5/16	THTM410	9/16	17/32	17/32	7/8	9/32
3/8	THTM412	21/32	5/8	17/32	7/8	5/16



Snap-on Level 5<sup>TM</sup> TAH sockets, extensions, and adaptors feature a locking hole on all four sides, not just one. Snap-on TAH ratchets and drive tools feature a locking pin which mates with the side lock hole for positive retention. This reduces the risk of misaligning the socket that typical competitor's sockets with just one side hole create.

1/4" & 3/8" Drive



#### Deep, mm

<b>mm</b> ]	(12)	A	В	C	D	E
5	THSTMMD5*	7.7	12.1	42.2	50.8	5.1
5.5	THSTMMD5.5	8.3	12.1	42.2	50.8	5.3
6	THSTMMD6	9.3	12.1	42.2	50.8	5.8
7	THSTMMD7	10.5	12.1	42.2	50.8	6.1
8	THSTMMD8	11.5	12.1	42.2	50.8	6.9
9	THSTMMD9	12.7	12.1	38.1	50.8	7.4
10	THSTMMD10	14.0	13.2	38.1	50.8	7.4
11	THSTMMD11	15.2	14.6	38.1	50.8	9.4
12	THSTMMD12	16.5	15.6	38.1	50.8	9.4
13	THSTMMD13	17.6	16.7	38.1	50.8	9.4
14	THSTMMD14	18.8	17.8	38.1	50.8	9.7

<sup>\*</sup>Conventional hex

Snap-on socket



Snap-on Level 5<sup>™</sup> TAH sockets, extensions, and adaptors feature a locking hole on all four sides, not just one. Snap-on TAH ratchets and drive tools feature a locking pin which mates with the side lock hole for positive retention. This reduces the risk of misaligning the socket that typical competitor's sockets with just one side hole create.

#### Deep, inches

	<b>6</b>	(12)	A	В	C	D	E
3/16	THSTM6*	THSTMD6*	5/16	15/32	1 21/32	2	3/16
7/32	THSTM7*	THSTMD7*	11/32	15/32	1 21/32	2	7/32
1/4	THSTM8	THSTMD8	3/8	15/32	1 21/32	2	7/32
9/32	THSTM9	THSTMD9	13/32	15/32	1 21/32	2	1/4
5/16	THSTM10	THSTMD10	15/32	15/32	1 21/32	2	7/32
11/32	THSTM11	THSTMD11	1/2	15/32	1 <sup>21</sup> / <sub>32</sub>	2	9/32
3/8	THSTM12	THSTMD12	17/32	9/16	1 21/32	2	9/32
7/16	THSTM14	THSTMD14	5/8	9/16	1 21/32	2	3/8
1/2	THSTM16	THSTMD16	11/16	21/32	1 21/32	2	3/8
9/16	THSTM18	THSTMD18	3/4	23/32	1 21/32	2	3/8

<sup>\*</sup>Conventional hex

#### Shallow, inches

	<b>6</b>	(12)	A	В	C	D	E
1/4	THFS081	THF081	13/32	11/16	7/16	29/32	7/32
5/16	THFS101	THF101	15/32	11/16	7/16	29/32	1/4
11/32	THFS111	THF111	1/2	11/16	7/16	29/32	9/32
3/8	THFS121	THF121	9/16	11/16	7/16	29/32	9/32
7/16	THFS141	THF141	5/8	11/16	7/16	29/32	9/32
1/2	THFS161	THF161	23/32	11/16	1/2	15/16	5/16
9/16	THFS181	THF181	25/32	3/4	1/2	1 1/32	3/8
5/8	THFS201	THF201	27/32	25/32	19/32	1 3/32	1/2
11/16	THFS221	THF221	15/16	7/8	5/8	1 <sup>1</sup> /8	17/32
3/4	THFS241	THF241	1	15/16	11/16	1 <sup>3</sup> / <sub>16</sub>	15/32
13/16	THFS261	THF261	1 <sup>1</sup> /16	1	11/16	1 7/32	1/2
7/8	THFS281	THF281	1 5/32	1 1/32	23/32	1 9/32	9/16
15/16	THFS301	THF301	1 1/4	1 <sup>3</sup> / <sub>16</sub>	25/32	1 11/32	9/16
1	THFS321	THF321	1 <sup>5</sup> /16	1 1/4	13/16	1 3/8	19/32

#### Shallow, inches

<b>□</b> Ţ	<b>6</b>	(12)	A	В	C	D	E
1/4	THFS081	THF081	13/32	11/16	7/16	29/32	7/32
5/16	THFS101	THF101	15/32	11/16	7/16	29/32	1/4
11/32	THFS111	THF111	1/2	11/16	7/16	29/32	9/32
3/8	THFS121	THF121	9/16	11/16	7/16	29/32	9/32
7/16	THFS141	THF141	5/8	11/16	7/16	29/32	9/32
1/2	THFS161	THF161	23/32	11/16	1/2	15/16	5/16
9/16	THFS181	THF181	25/32	3/4	1/2	1 <sup>1</sup> /32	3/8
5/8	THFS201	THF201	27/32	25/32	19/32	1 3/32	1/2
11/16	THFS221	THF221	15/16	7/8	5/8	1 <sup>1</sup> /8	17/32
3/4	THFS241	THF241	1	15/16	11/16	1 <sup>3</sup> /16	15/32
13/16	THFS261	THF261	<b>1</b> <sup>1</sup> /16	1	11/16	1 7/32	1/2
7/8	THFS281	THF281	1 <sup>5</sup> /32	1 <sup>1</sup> /32	23/32	1 9/32	9/16
<sup>15</sup> / <sub>16</sub>	THFS301	THF301	1 <sup>1</sup> /4	<b>1</b> 3/16	25/32	1 11/32	9/16
1	THFS321	THF321	<b>1</b> 5/16	1 <sup>1</sup> / <sub>4</sub>	13/16	1 3/8	19/32





- · Any tool that weighs more than 5 pounds should be attached to an anchor point such as a work platform or utility
- bucket rather than the operator. Tool weights are available in the Snap-on Industrial printed price list.
- Read safety precautions on pages W1 to W4

#### 3/8" & 1/2" Drive

#### Deep 3/8" Drive, mm

	(12)	A	В	C	D	E
8	THSFM8	11.4	17.7	42.0	54.0	7.1
9	THSFW9	12.8	17.2	42.0	54.0	7.1
10	THSFW10	14.3	17.2	42.0	54.0	7.9
11	THSFW11	15.7	17.2	42.0	54.0	9.7
12	THSFW12	16.5	17.2	42.0	54.0	9.9
13	THSFW13	18.0	17.2	42.0	54.0	10.7
14	THSFW14	19.6	18.6	43.3	60.3	10.7
15	THSFW15	20.3	19.4	43.3	60.3	10.7
16	THSFW16	21.1	20.0	43.3	60.3	10.7
17	THSFW17	22.7	21.8	43.6	66.7	11.2
18	THSFW18	24.3	23.2	49.0	66.7	11.2
19	THSFW19	25.1	24.0	49.0	66.7	15.5

#### Deep 3/8" Drive, inches

	<b>6</b>	(12)	A	В	C	D	E
1/4	THSFS081	THSF081	15/32	11/16	<b>1</b> <sup>11</sup> / <sub>16</sub>	21/8	1/4
5/16	THSFS101	THSF101	15/32	11/16	<b>1</b> <sup>11</sup> / <sub>16</sub>	21/8	7/32
3/8	THSFS121	THSF121	9/16	11/16	<b>1</b> <sup>11</sup> / <sub>16</sub>	21/8	5/16
7/16	THSFS141	THSF141	5/8	11/16	<b>1</b> <sup>11</sup> / <sub>16</sub>	21/8	3/8
1/2	THSFS161	THSF161	23/32	11/16	<b>1</b> <sup>11</sup> / <sub>16</sub>	21/8	7/16
9/16	THSFS181	THSF181	25/32	23/32	1 29/32	23/8	7/16
19/32	_	THSF191	13/16	25/32	1 29/32	23/8	7/16
5/8	THSFS201	THSF201	27/32	13/16	1 29/32	23/8	15/32
11/16	THSFS221	THSF221	<sup>15</sup> / <sub>16</sub>	7/8	23/16	25/8	1/2
3/4	THSFS241	THSF241	1	1	23/16	25/8	5/8
13/16	THSFS261	THSF261	<b>1</b> <sup>1</sup> / <sub>16</sub>	1	21/4	23/4	5/8
7/8	THSFS281	THSF281	1 5/32	<b>1</b> 1/8	21/4	23/4	23/32
15/16	_	THSF301	1 1/4	1 3/16	21/4	23/4	23/32
1	_	THSF321	1 5/16	1 1/4	21/4	23/4	13/16

ASME/ANSI B107.1-2002







Snap-on Level  $5^{\text{TM}}$  TAH sockets, extensions, and adaptors feature a locking hole on all four sides, not just one. Snap-on TAH ratchets and drive tools feature a locking pin which mates with the side lock hole for positive retention. This reduces the risk of misaligning the socket that typical competitor's sockets with just one side hole create.



#### Shallow 1/2" Drive, mm

	(12)	A	В	C	D	E
10	THSWM101A	15.0	23.2	22.2	38.1	7.9
11	THSWM111A	16.6	23.2	22.2	38.1	8.7
12	THSWM121A	18.2	23.2	22.2	38.1	9.5
13	THSWM131A	19.0	23.2	22.2	38.1	10.3
14	THSWM141A	20.6	23.2	22.2	38.1	10.3
15	THSWM151A	22.2	22.2	22.2	38.1	10.3
16	THSWM161	23.8	22.2	22.2	38.1	11.9
17	THSWM171	24.6	23.2	22.2	38.1	12.7
18	THSWM181	25.4	23.8	21.4	38.1	14.2
19	THSWM191	26.3	24.8	21.3	38.1	13.9
20	THSWM201	26.7	26.1	21.2	38.1	14.0
21	THSWM211	28.3	27.5	21.1	38.1	14.0
22	THSWM221	29.9	28.6	20.9	38.1	14.2
23	THSWM231	31.2	29.9	20.8	38.1	14.5
24	THSWM241	32.5	30.9	22.2	38.8	15.8
27	THSWM271	36.5	34.9	25.4	42.8	17.4
30	THSWM301	41.0	39.6	26.1	44.5	18.5
32	THSWM321	42.5	41.2	28.9	47.6	19.8

#### 1/2" Drive

# Snap-on socket





Snap-on Level  $5^{\text{TM}}$  TAH sockets, extensions, and adaptors feature a locking hole on all four sides, not just one. Snap-on TAH ratchets and drive tools feature a locking pin which mates with the side lock hole for positive retention. This reduces the risk of misaligning the socket that typical competitor's sockets with just one side hole create.

#### Shallow 1/2" Drive, inches

	(12)	A	В	C	D	E
3/8	THSW121A	19/32	29/32	7/8	1 1/2	5/16
7/16	THSW141A	11/16	29/32	7/8	1 1/2	11/32
1/2	THSW161A	3/4	29/32	7/8	1 1/2	13/32
9/16	THSW181A	13/16	29/32	7/8	1 1/2	13/32
5/8	THSW201	15/16	7/8	7/8	1 1/2	15/32
11/16	THSW221	31/32	29/32	7/8	1 1/2	1/2
3/4	THSW241	1 1/32	31/32	7/8	1 1/2	9/16
13/16	THSW261	1 1/8	1 1/16	7/8	1 1/2	9/16
7/8	THSW281	1 3/16	1 1/8	7/8	1 1/2	25/32
15/16	THSW301	1 9/32	1 7/32	27/32	1 17/32	3/4
1	THSW321	1 11/32	1 9/32	7/8	1 9/16	3/4
1 1/16	THSW341	1 7/16	1 3/8	1 31/32	1 11/16	3/4
1 1/8	THSW361	1 1/2	1 7/16	1 31/32	1 3/4	1 3/16
1 3/16	THSW381	1 5/8	1 9/16	1 1/8	1 3/4	3/4
1 1/4	THSW401	1 11/16	1 5/8	1 1/4	1 7/8	3/4
<b>1</b> 5/16	THSW421	1 3/4	1 11/16	1 1/4	1 7/8	1
1 1/2	THSW481	2	1 15/16	1 5/8	2 1/2	1

#### Deep 1/2" Drive, mm



<b>~</b> ₩Ţ	(12)	A	В	C	D	E
10	THSM10A	15.0	23.2	66.7	82.6	7.9
11	THSM11A	16.6	23.2	66.7	82.6	8.7
12	THSM12B	18.2	23.2	66.7	82.6	9.5
13	THSM13A	19.0	23.2	66.7	82.6	10.3
14	THSM14A	20.6	23.2	66.7	82.6	10.3
15	THSM15A	22.2	22.2	66.7	82.6	10.3
16	THSM16	23.8	22.2	51.0	82.6	11.9
17	THSM17	24.6	23.2	51.0	82.6	12.7
18	THSM18	25.4	23.8	51.0	82.6	14.3
19	THSM19	26.3	24.6	52.5	82.6	14.2
20	THSM20	26.7	26.1	58.5	82.6	14.0
21	THSM21	28.3	27.5	58.5	82.6	14.0
22	THSM22	29.9	28.6	58.5	82.6	14.2
23	THSM23	31.2	29.9	58.0	82.6	14.5
24	THSM24	32.5	30.9	50.0	82.6	15.8

#### Deep 1/2" Drive, inches

<u> </u>						
<b>□</b> Ţ	(12)	A	В	C	D	E
3/8	THS121A	19/32	29/32	2 5/8	3 1/4	5/16
7/16	THS141A	3/4	29/32	2 5/8	3 1/4	11/32
1/2	THS161A	3/4	29/32	2 5/8	3 1/4	13/32
9/16	THS181A	13/16	29/32	2 5/8	3 1/4	13/32
5/8	THS201	15/16	7/8	1 31/32	3 1/4	15/32
11/16	THS221	31/32	29/32	1 31/32	3 1/4	1/2
3/4	THS241	1 1/32	31/32	2 5/8	3 1/4	9/16
13/16	THS261	1 1/8	1 1/16	2 5/8	3 1/4	9/16
7/8	THS281	1 3/16	1 1/8	2 5/8	3 1/4	9/16
15/16	THS301	1 9/32	1 7/32	1 31/32	3 1/4	3/4
1	THS321	1 11/32	1 9/32	1 31/32	3 1/4	3/4
1 1/16	THS341	1 7/16	1 3/8	1 31/32	3 1/4	3/4
1 1/8	THS361	1 1/2	1 7/16	1 31/32	3 1/4	1 3/16

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<sup>•</sup> Any tool that weighs more than 5 pounds should be attached to an anchor point such as a work platform or utility

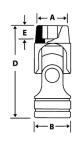
bucket rather than the operator. Tool weights are available in the Snap-on Industrial printed price list.

<sup>•</sup> Read safety precautions on pages W1 to W4

#### 1/4", 3/8", 1/2" Drive Universals

#### Shallow Universal 1/4" Drive, mm

	(12)	A	В	D	E
5	THTMUM5A	8.1	12.7	29.2	3.3
6	THTMUM6A	9.6	12.7	29.7	3.8
7	THTMUM7A	10.7	12.7	30.5	4.3
8	THTMUM8A	11.8	12.7	30.5	4.8
9	THTMUM9A	12.7	12.7	31.2	4.8
10	THTMUM10A	14.0	12.7	32.5	5.8
12	THTMUM12A	16.5	12.7	34.5	6.9
13	THTMUM13A	17.3	12.7	36.8	7.6



#### Shallow Universal 1/4" Drive, inches

	(12)	A	В	D	E
1/4	THTMU81B	3/8	1/2	1 <sup>17</sup> /64	1/4
5/16	THTMU101A	15/32	1/2	<b>1</b> 11/32	9/32
3/8	THTMU121A	17/32	1/2	1 27/64	9/32
7/16	THTMU141A	19/32	1/2	1 29/64	13/32
1/2	THTMU161A	11/16	1/2	1 <sup>33</sup> /64	13/32
9/16	THTMU181A	3/4	1/2	1 <sup>35</sup> / <sub>64</sub>	13/32

#### 3/8" Drive Flank Drive® Universal ——

#### Shallow 3/8" Drive Universal, mm

	(12)	A	В	D	E
10	THFUM10A	14.0	18.1	43.5	6.4
12	THFUM12A	16.8	18.1	45.5	7.9
13	THFUM13A	18.1	18.1	45.5	7.9
14	THFUM14A	18.9	18.1	47.9	8.9
15	THFUM15A	20.5	18.1	47.9	8.9
16	THFUM16A	21.3	18.1	47.9	10.2
17	THFUM17A	22.9	18.9	50.7	10.4

#### Shallow 3/8" Drive Universal, inches

	(12)	A	В	D	E
5/16	THFU10B	15/32	11/16	1 <sup>5</sup> /8	1/4
3/8	THFU12B	17/32	11/16	1 5/8	1/4
7/16	THFU14B	5/8	11/16	1 5/8	9/32
1/2	THFU16B	23/32	11/16	1 <sup>11</sup> / <sub>16</sub>	9/32
9/16	THFU18B	25/32	11/16	1 23/32	11/32
5/8	THFU20B	27/32	11/16	1 25/32	3/8
11/16	THFU22B	15/16	3/4	2	3/8
3/4	THFU24B	1	3/4	2 <sup>1</sup> / <sub>16</sub>	7/16
13/16	THFU26B	1 <sup>3</sup> /32	3/4	2 3/32	15/32
7/8	THFU28B	1 5/32	3/4	2 3/32	1/2
15/16	THFU30A	1 1/4	3/4	2 9/32	9/16
1	THFU32A	<b>1</b> 5/16	3/4	2 9/32	9/16

#### 1/2" Drive Flank Drive Universal

#### Universal, inches

	<b>6</b>	A	В	D	E
9/16	THSU18	27/32	15/16	2 7/16	11/32
5/8	THSU20	15/16	15/16	2 15/32	3/8
11/16	THSU22	1 1/16	1 1/16	2 9/16	7/16
3/4	THSU24	1 1/8	1 1/8	2 7/8	1/2
13/16	THSU26	1 3/16	1 1/8	2 15/16	9/16
7/8	THSU28	1 1/4	1 1/8	2 15/16	9/16
15/16	THSU30	1 5/16	1 1/8	3	9/16

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#### 1/4", 3/8", 1/2" Drive Bit Brivers

#### Snap-on socket



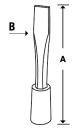


Snap-on Level  $5^{\text{TM}}$  TAH sockets, extensions, and adaptors feature a locking hole on all four sides, not just one. Snap-on TAH ratchets and drive tools feature a locking pin which mates with the side lock hole for positive retention. This reduces the risk of misaligning the socket that typical competitor's sockets with just one side hole create.

#### Hex/Extra Long 3/8" Drive, inches

	$\bigcirc$	A	Fits These Cap Screws	Fits These Set Screws	В
5/32	THFA5LE	6 <sup>1</sup> / <sub>16</sub>	#10	5/ <sub>16</sub> "	FA5LE2
3/16	THFA6LE	6 1/8	1/4"	3/8"	FA6LE2
7/32	THFA7LE	6 <sup>1</sup> /8	_	7/16"	FA7LE2
1/4	THFA8LE	6 1/8	5/16"	1/2"	FA8LE2
5/16	THFA10LE	6 <sup>1</sup> /16	3/8"	5/8"	FA10LE2
3/8	THFA12LE	6 1/16	1/4"	3/4"	FA12LE2

#### Flat Tip 1/4" Drive, inches



	<b>□</b> Ţ	Stock No.	Square Drive, in.	A	В
	3/16 x .032	THTMC104E	1/4	2 7/8	TMC104E2
Standard	1/4" x .032	THTMC105E	1/4	2 15/16	TMC105E2
Length	3/8 x .042	THTMC106E	1/4	2 7/8	TMC106E2
	1/4 x .036	THTM82	1/4	7/8	TM82-2C
Short	3/8 x 1/32	THTM83A	1/4	3/4	_
	7/16 X 1/32	THTM84	1/4	3/4	_

# $\stackrel{B}{\longrightarrow} \stackrel{\bigcap}{\longleftarrow} \stackrel{\bigcap}{\downarrow}$

# → Phillips/Standard 1/4" Drive

	<b>□</b> Ţ	Stock No.	Square Drive, In.	A	В
Standard Length	#1	THTMP12E	1/4	1 <sup>7</sup> /8	TMP12E2
	#2	THTMP22E	1/4	1 <sup>7</sup> /8	FP22E2
Long	#2	THTMP23E	1/4	3 <sup>1</sup> / <sub>16</sub>	TMP23E2
Short	#2	THTMP21E	1/4	1 <sup>1</sup> /4	TMP21E



#### Clutch, Standard Length 1/4" Drive

	Stock No.	Square Drive, In.	A	В
3/16	THTM27E	1/4	3/16	1 3/8
1/4	THTM30E	1/4	1/4	1 <sup>3</sup> /8
5/32	THTM31E	1/4	5/32	1 <sup>3</sup> /8

#### Hex/Standard 3/8" & 1/2" Drive, mm

Square Drive, In.		$\bigcirc$	A	В				
3/8	4	THFAM4E	52.3	FAM4E2				
	5	THFAM5E	52.6	FAM5E2				
	6	THFAM6E	52.6	FAM6E2				
	7	THFAM7E	52.6	FAM7E2				
	8	THFAM8E	52.6	FAM8E2				
	9	THFAM9E	52.6	FAM9E2				
	10	THFAM10E	52.6	SAM10E2				
	11	THFAM11E	69.9	FAM11E2				
	12	THFAM12E	69.9	FAM12E2				
	13	THFAM13E	69.9	FAM13E2				
	14	THFAM14E	69.9	FAM14E2				
1/2	6	THSAM6E	60.5	FAM6E2				
	8	THSAM8E	62	FAM8E2				
	10	THSAM10E	62.8	SAM10E2				
	12	THSAM12E	81	SAM12E2				
	14	THSAM14E	81	SAM14E2				
	17	THSAM17E	93.7	SAM17E2				
	19	THSAM19E	103.1	SAM19E2				

# Hex/Standard 1/4", 3/8" & 1/2" Drive, inches

X 1/2		, IIICIICS		
Square Drive, In.			A	В
1/4	1/16	THTMA2E	1 <sup>7</sup> /8	TMA2E2
	5/64	THTMA2.5E	1 7/8	TMA2.5E2
	3/32	THTMA3E	1 7/8	TMA3E2
	7/64	THTMA3.5E	1 7/8	TMA3.5E2
	1/8	THTMA4E	1 7/8	TMA4E2
	9/64	THTMA4.5E	1 7/8	TMA4.5E2
	5/32	THTMA5E	1 7/8	FA5E2
	3/16	THTMA6E	1 15/16	FA6E2
	7/32	THTMA7E	1 7/8	FA7E2
	1/4	THTMA8E	1 7/8	FA8E2
3/8	1/8	THFA4E	2 1/16	TMA4E2
	9/64	THFA4.5E	2 1/16	TMA4.5E2
	5/32	THFA5E	2 1/16	FA5E2
	3/16	THFA6E	2 1/16	FA6E2
	7/32	THFA7E	2 1/16	FA7E2
	1/4	THFA8E	2 1/16	FA8E2
	5/16	THFA10E	2 1/16	FA10E2
	3/8	THFA12E	2 3/32	FA12E2
1/2	5/16	THSA10E	2 3/8	FA10E2
	3/8	THSA12E	2 1/2	SA12E2
	7/16	THSA14E	2 7/8	SA14E2
	1/2	THSA16E	3 1/16	SA16E2
	9/16	THSA18E	3 3/16	SA18E2
	5/8	THSA20E	3 11/32	LAW120E2
	3/4	THSA24E	4 1/16	LAW124E2

# Ball Hex/Standard 1/4" & 3/8" Drive, inches

u 5/0	,	,		
Square Drive, In.	<b>□</b> Ţ		A	В
1/4	1/8	THTMAB4E	1 7/8	TMAB4E2
	9/64	THTMAB4.5E	1 7/8	TMAB4.5E2
	5/32	THTMAB5E	1 7/8	TMAB5E2
	3/16	THTMAB6E	1 7/8	TMAB6E2
3/8	7/32	THFAB7E	2 3/32	FAB7E2
	1/4	THFAB8E	2 3/32	FAB8E2
	5/16	THFAB10E	2 3/32	FAB10E2
	3/8	THFAB12E	2 3/32	FAB12E2

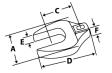




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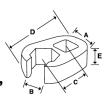
• Read safety precautions on pages W1 to W4

#### **Crowfoot Wrenches**



#### 1/4" Drive Open End, inches

		A	C	E	F	D
1/4	THTMC8	17/32	17/32	1/4	1/4	31/32
5/16	THTMC10	21/32	9/16	1/4	1/4	1 1/32
3/8	THTMC12	25/32	19/32	1/4	1/4	1 3/32
7/16	THTMC14	7/8	5/8	5/16	5/16	1 5/32
1/2	THTMC16	1 1/32	21/32	5/16	5/16	1 1/4
9/16	THTMC18	1 <sup>1</sup> /8	11/16	5/16	5/16	1 9/32



3/8" Drive Flank Drive Flare Nut, inches, 6-Point (chrome)

<b>□</b> <u>⊺</u>		A	В	C	D	E	Maximum Recommended Working Torque, in. lb.
3/8	THFRH120S	13/32	1/4	9/16	1 11/32	3/8	150
7/16	THFRH140S	29/32	5/16	9/16	1 13/32	3/8	200
1/2	THFRH160S	1	11/32	9/16	1 7/16	3/8	250
9/16	THFRH180S	1 <sup>1</sup> /8	3/8	3/4	1 5/8	7/16	300
5/8	THFRH200S	1 <sup>1</sup> /8	7/16	3/4	1 5/8	7/16	375
11/16	THFRH220S	1 <sup>5</sup> / <sub>16</sub>	1/2	13/16	1 25/32	1/2	450
3/4	THFRH240S	1 <sup>5</sup> / <sub>16</sub>	9/16	13/16	1 25/32	1/2	525

# 3/8" Drive Flank Drive Flare Nut-Deep, inches, 12-Point (chrome)

		A	В	C	E	Maximum Recommended Working Torque, in. lb.
5/8	THAN850810	15/16	1/2	23/32	23/32	250
11/16	THAN850811	1 1/32	17/32	25/32	23/32	310
3/4	THAN850812	1 <sup>1</sup> /8	9/16	13/16	3/4	450
13/16	THAN850813	1 7/32	5/8	7/8	3/4	450
7/8	THAN850814	1 <sup>5</sup> / <sub>16</sub>	25/32	15/16	25/32	625
15/16	THAN850815	1 3/8	3/4	31/32	25/32	625
1	THAN850816	1 7/16	3/4	1	13/16	625
1 1/16	THAN850817	1 17/32	25/32	1 1/32	13/16	625

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#### 3/8" Drive Open End with Side Lock Hole, inches

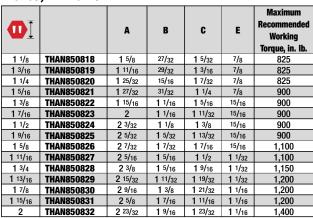
•							
<b>⊕</b> Ţ		A	C	E	F	D	Maximum Recommended Working Torque, in. lb.
3/8	THFC12A	7/8	23/32	7/32	33/64	1 19/64	75
7/16	THFC14A	7/8	41/64	7/32	33/64	1 17/64	75
1/2	THFC16A	1 1/32	51/64	7/32	33/64	1 29/64	105
9/16	THFC18A	1 1/4	59/64	7/32	33/64	1 5/8	105
5/8	THFC20A	1 1/4	55/64	7/32	33/64	1 19/32	125
11/16	THFC22A	1 9/16	1 3/32	7/32	33/64	1 59/64	150
3/4	THFC24A	1 9/16	1 1/32	7/32	33/64	1 57/64	190
13/16	THFC26A	1 23/32	1 3/32	9/32	19/32	2	245
7/8	THFC28A	1 23/32	1 1/32	9/32	19/32	1 31/32	300
15/16	THFC30A	2	1 5/32	11/32	21/32	2 1/8	360
1	THFC32A	2	1 5/64	11/32	21/32	2 3/32	420

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#### 1/2" Drive Open End, inches

<b>□</b> Ţ		A	C	E	F	Maximum Recommended Working Torque, in. lb.
1 1/16	THSC34	2 3/32	1 3/4	3/8	5/8	2,000
1 1/8	THSC36	2 7/32	1 3/4	3/8	5/8	2,100
1 3/16	THSC38	2 11/32	1 3/4	13/32	5/8	2,200
1 1/4	THSC40	2 15/32	2	13/32	5/8	2,300
<b>1</b> 5/16	THSC42	2 19/32	2	7/16	5/8	2,400
1 3/8	THSC44	2 23/32	2	7/16	5/8	2,500
1 7/16	THSC46	2 27/32	2	7/16	5/8	2,600
1 1/2	THSC48	2 31/32	2	15/32	5/8	2,900
1 5/8	THSC52	3 7/32	1 31/32	1/2	5/8	3,400
1 11/16	THSC54	3 11/32	2 3/16	1/2	5/8	3,700
1 3/4	THSC56	3 15/32	2 3/16	17/32	5/8	3,900
1 13/16	THSC58	3 19/32	2 3/16	17/32	5/8	4,100
1 7/8	THSC60	3 23/32	2 3/16	9/16	5/8	4,300
2	THSC64	3 31/32	2 7/32	9/16	5/8	5,000

# 1/2" Flare Nut-Deep, inches, 12-Point



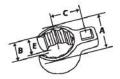
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#### **INDUSTRIAL FINISH HAND TOOLS**

#### **Sockets & Accessories**





#### 1/4" Flank Drive Flare Nut-Deep, inches, 12-Point

ΦĪ	(12)	A	C	E	Maximum Recommended Working Torque, in. lb.
3/8	GAN85086B	9/32	1/2	1/2	75
7/16	GAN85087B	11/32	9/16	9/16	200
1/2	GAN85088B	13/32	19/32	9/16	200
9/16	GAN85089B	15/32	5/8	9/16	200

<sup>•</sup> Use only moderate force on crowfoot and flare nut wrenches

#### 3/8" Flank Drive Flare Nut-Deep, inches, 12-Point

<b>⊕</b> Ţ	(12)	A	В	C	E	Maximum Recommended Working Torque, in. lb.
5/8	GAN850810B	15/16	1/2	23/32	23/32	250
11/16	GAN850811B	1 1/32	17/32	25/32	23/32	310
3/4	GAN850812B	1 1/8	9/16	13/16	3/4	450
13/16	GAN850813B	1 7/32	5/8	7/8	3/4	450
7/8	GAN850814B	1 <sup>5</sup> / <sub>16</sub>	25/32	15/16	25/32	625
15/16	GAN850815B	1 3/8	3/4	31/32	25/32	625
1	GAN850816B	1 7/16	3/4	1	13/16	625
1 <sup>1</sup> /16	GAN850817B	1 17/32	25/32	1 1/32	13/16	625

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# 1/2" Flank Drive® Flare Nut-Deep, inches. 12-Point

ΦĬ	12	A	В	C	E	Maximum Recommended Working Torque, in. lb.
1 1/8	GAN850818B	1 5/8	27/32	1 5/32	7/8	825
1 3/16	GAN850819B	1 11/16	29/32	1 3/16	7/8	825
1 1/4	GAN850820B	1 25/32	15/16	1 7/32	7/8	825
1 5/16	GAN850821B	1 27/32	31/32	1 1/4	7/8	900
1 3/8	GAN850822B	1 15/16	1 1/16	1 5/16	15/16	900
1 7/16	GAN850823B	2	1 1/16	1 11/32	15/16	900
1 1/2	GAN850824B	2 3/32	1 1/8	1 3/8	15/16	900
1 9/16	GAN850825B	2 5/32	1 5/32	1 13/32	15/16	900
1 5/8	GAN850826B	2 7/32	1 7/32	1 7/16	15/16	1,100
1 11/16	GAN850827B	2 5/16	1 5/16	1 1/2	1 1/32	1,100
1 3/4	GAN850828B	2 3/8	1 5/16	1 9/16	1 1/32	1,150
1 13/16	GAN850829B	2 15/32	1 11/32	1 19/32	1 1/32	1,200
1 7/8	GAN850830B	2 9/16	1 3/8	1 21/32	1 1/16	1,200
1 15/16	GAN850831B	2 5/8	1 7/16	1 11/16	1 1/16	1,200
2	GAN850832B	2 23/32	1 9/16	1 23/32	1 1/16	1,400
2 1/4	GAN850836B	3 1/32	1 11/16	1 7/8	1 1/8	1,500
2 9/16	GAN850841B	3 7/16	1 29/32	2 3/32	1 9/32	1,750





- Do not use chrome or industrial finish sockets with impact drivers
- Any tool that weighs more than 5 pounds should be attached to an anchor point such as a work platform or utility bucket rather than the operator. Tool weights are available in the Snap-on Industrial printed price list.
- Read safety precautions on pages W1 to W4

#### **INDUSTRIAL FINISH HAND TOOLS**

#### **Screwdrivers, Torque Wrenches**

#### **Electronic Thin Blade Screwdriver**

• Recessed ends for fingertip pressure

<u> </u>									
Stock No.	A	В	C	D					
GSSDE42CNP	.018 x <sup>1</sup> / <sub>8</sub>	1/8	2	5 <sup>5</sup> /16					
GSSDE44CNP	.018 x 1/8	1/8	4	7 5/16					
GSSDE46CNP	.018 x 1/8	1/8	6	9 5/16					
GSSDE63CNP	.030 x 3/16	3/16	3	9 9/16					
GSSDE64CNP	.028 x 3/16	3/16	4	7 9/16					
GSSDE66CNP	.030 x 3/16	3/16	6	6 9/16					
GSSDE68CNP	.028 x 3/16	3/16	8	11 9/16					





#### Adjustable Click Type Torque Wrenches/ ±4% Accuracy

	/1	I .	,					
Square Drive, Inches	Stock No.	Head Style	Range, min.	Range, max	Increments	Length, in.	Head Width, in.	Head Depth, in.
1/4	GQT1F200NP	Plain	40 in. lb.	200 in. lb.	1 in. lb.	8.97	.61	.69
1/4	GQT1R200NP	Fixed Ratchet	40 in. lb.	200 in. lb.	1 in. lb.	8.97	.88	.76
3/8	GQT2F1000NP	Plain	200 in. lb.	1000 in. lb.	5 in. lb.	14	.80	1.03
3/8	GQT2R1000NP	Fixed Ratchet	200 in. lb.	1000 in. lb.	5 in. lb.	14	1.26	1.07
3/8	GQT2R200NP	Fixed Ratchet	40 in. lb.	300 in. lb.	1 in. lb.	8.97	.88	.88
1/2	GQT3R250NP	Fixed Ratchet	50 ft. lb.	250 ft. lb.	1 fl. lb.	23.75	1.74	1.42



#### Dial Type Torque Wrenches, U.S. Reading/ Standard ±2% Accuracy

Square Drive, Inches	Stock No.	Range	Increments	Length, in.	Width, in.	Head* Depth, in.	Storage Case
1/4	GTE6A	75 in. lb.	1 in. lb.	9 29/32	2 11/16	1 <sup>1</sup> /4	PB9
1/2	GTE100	100 ft. lb.	1 ft. lb.	16	2 <sup>3</sup> /4	1 <sup>3</sup> /8	PBR5
1/2	GTE175	175 ft. lb.	2 1/2 ft. lb.	18 ³/4	2 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> /8	PBR5

<sup>\*</sup>Does not include square drive dimension

#### **Dial Type Torque Wrenches Guaranteed Accuracy:**

Standard 2% models are accurate within  $\pm 2\%$  of the reading from 20% of full scale to full scale in both clockwise and counterclockwise directions.



## **Pelican Safety Approved LED Flashlights**

## **Personal Lights**

Stock No.	Model	Batteries	Run Time (Hours)	Lumens	Approvals
PCD1830245	L4, yellow 1830	3 AAAA	32	5	Class I, Div. 1 Gp. CD T4A / Class I, Div. 2 Gp. ABCD T4A
PCD1910	1910, black 1910	1 AAA	1	39	NA
PCD1920	1920, black 1920	2 AAA	2.75	67	NA





## PCD1830245

This is molded out of polycarbonate resin, it won't cause sparks and is safe to use in electrical environments.

## PCD1910 and PCD1920

Long burn times combined with hi-lumen output make for an efficient lighting tool; the perfect personal light.

## **Medium Duty Lights**

Stock No.	Model	Batteries	Run Time (Hours)	Lumens	Approvals
PCD2010247	SabreLite™, yellow w/PL shroud 2010	3 C	32	109	Class I II III Div. 1 Groups ABCDFG Operating Temp. T4 (Energizer E93), 145°C (Duracell MN1400), T3 (Panasonic LR14)
PCD2220245	VB3, yellow 2220	2 CR2032	34	9	UL Listed 4S67/E184884 Class I, Div. 1 Gps.A,B,C,D, T6.



## PCD2010247

Produces a white collimated beam that's as bright as an incandescent flashlight and provides 10,000 hours of lamp life and extended battery burn time.



## PCD2220245

Provides over 30 hours of run time. Light turns on when the head is flipped up. Pivots to a full 180° for aiming light.

## **Tactical LED Lights**

Stock No.	Model	Batteries	Run Time (Hours)	Lumens	Approvals
PCD2360	2360, black 2360	2 AA	40L - 2H	10L - 110H	NA
PCD7060	7060, black 7060	Lithium Ion	2	160	NA
PCD2410247	StealthLite™, yellow w/ PL shroud 2410	4 AA	7.5	126	Class I II III Div. 1 Grps. ABCDEFG Operating Temp. Class T4



## PCD2360

If you like the convenience of AA alkaline batteries, but need the performance of lithium batteries, the 2360 LED is the light for you.



## PCD7060

New dual switch technology that allows the light to be activated by either a body-mounted patrol switch or a tail-mounted tactical switch.



## PCD2410247

The 2410 is corrosion proof, resistant to extreme temperatures, and submersible.

## **LED Headlights**

Stock No.	Model	Batteries	Run Time (Hours)	Lumens	Approvals
PCD2610	HeadsUp Lite™, black 2610	3 AAA	47L - 19H	14L - 30H	Class I, Div. 1; Gp. D T1
PCD2690	HeadsUp Lite™, black 2690	3 AAA	10.5	60	CL I, II,III,DIV1 GRPS ABCDEFG CL 1,
PCD2720	HeadsUp Lite™, black 2720	3 AAA	175L - 8H	5L - 80H	wNA



## PCD2610

The 2610 provides handsfree light where you need it, when you need it.



## PCD2690

It's brighter, more efficient, compact and lighter than other headlamps in its



Gloved hands, wet hands or oily hands are not an issue when using the 2720 with Gesture Activation Control. Turn on the light with a wave of a hand. Additional features include: Low level red light that preserves night vision. Signaling red (S.O.S.) beacon light.

## **Right Angle Light**

Stock No.	Model	Batteries	Run Time (Hours)	Lumens	Approvals
PCD3715	3715, yellow w/ PL shroud 3715	4 AA	31L - 4.75H	32L - 174H	Class I, Div. 1 Groups CD Operating Temp. Class T4



## PCD3715

Featuring downcast LEDs for illuminating your path, the new 3715 LED light also features 174 lumens (high) and 95 lumens (low), and a signaling mode. Another first is a built-in battery life indicator so you will know your light's battery level before you go in.

## **Heavy Duty Light**

	<u>,                                     </u>				
Stock No.	Model	Batteries	Run Time (Hours)	Lumens	Approvals
PCD9410	9410, yellow 9410	NiMH pack	4.75L - 1.75H	300L - 741H	NA



## PCD9410

120° rotating head, Burn time: 4.75 hrs. (low)/ 1.75 hrs. (high), Battery status indicator, 3 mode switch (High, Low, Flashing)









## Pelican Remote Area Lighting Systems/Bash™ Hammers





## PCD9430245

- Up to 15 hours of burntime
- 2000 lumens of brightness
- Maintenance Free LED Array with life expectancy of 50,000 hours



PCD9430T

- Up to 15 hours of burntime
- 2000 lumens of brightness
- Maintenance Free LED Array with life expectancy of 50,000 hours



PCD9435

- Battery powered safety approved remote area light.
- 1500 lumens illuminate hazardous locations
- 2 Power settings extend burn time up to 10 hours of clean even light



PCD9460245

PCD9470245

## Pelican LED Rechargeable Remote Area Lighting Systems

Stock No.	Description	Battery Type	Run Time (Hours)	Lumens
PCD9430245	RALS LED Single Head, Yellow 9430B	Sealed Gel Acid	8 High Power - 15 Low Power	1000L - 2000H
PCD9430T	Tripod Kit w/ Extension Cord / for 9430T	NA	NA	NA
PCD9435	RALS LED Single Head Safety Approved, Orange 9435	NiMH	"5 High Power -	
PCD9460245	2-Head RALS System in 1510 Protector™ Case, Yellow 9460	Sealed Gel Acid	7 High Power - 40 Low Power	Variable 500L - 6,000H
PCD9470245	4-Head RALS System in 1510 Protector™ Case, Yellow 9470	Sealed Gel Acid	7 High Power - 14 Low Power	Variable 1,000L - 12,000H
PCD9430230	Optional RALS Universal Voltage Charger 9438	NA	NA	NA
PCD9430012	Optional RALS 12v-24v Vehicle Charger / 9436	NA	NA	NA

Using solid-state mounted LED's coupled with a thermally efficient light engine and the Pelican Protector Case<sup>TM</sup>, the RALS 9470 and RALS 9460 give the user the ultimate maintenance free portable floodlight station to get the job done efficiently, safely and on time. The RALS systems pack light heads and a multi-stage charger in the case for total self contained convenience. The case is also equipped with a telescopic handle and rugged wheels for ease of transport. Includes convenient low battery warning system and waterproof activation switch.

## Wilton® Bash™ Cross Pein Hammers With Unbreakable™ Handle Technology

Stock No.	Description	
WMH30216	2 Lb Head, Cross Pein Hammer, 16" BASH Handle	
WMH30316	3 Lb Head, Cross Pein Hammer, 16" BASH Handle	

## Wilton® Bash™ Ball Pein Hammers With Unbreakable™ Handle Technology

Stock No.	Description	
WMH32414	24 Oz Head, Ball Pein Hammer, 14" BASH Handle	
WMH33214	IH33214 32 Oz Head, Ball Pein Hammer, 14" BASH Handle	
WMH34014	40 Oz Head, Ball Pein Hammer, 14" BASH Handle	



- UNBREAKABLE™ TECHNOLOGY steel core eliminates breaking during overstrikes
- HIGH VIS HEAD Soft Face Hammer's 30 HRC head mushrooms while striking harder materials, promoting safety on the jobsite
- SAFETY PLATE locks head firmly to handle to prevent head dislodging
- ANTI-VIBE NECK thick, tapered neck absorbs vibration reducing worker fatigue
- NO-SLIP GRIP vulcanized rubber handle for secure girp while striking
- LANYARD HOLE safely secure hammer to wrist or stationary object

APPLICATIONS: Construction and Maintenenance where safety is a consideration





## **Sledge Hammers**

Stock No.	Head Size - .lbs	Handle Size - inch
WMH20212	2-1/2	12
WMH20412	4	12
WMH20416	4	16
WMH20424	6	24
WMH20630	6	30
WMH20636	6	36
WMH20824	8	24
WMH20830	8	30
WMH20836	8	36
WMH21024	10	24
WMH21030	10	30
WMH21036	10	36
WMH21224	12	24
WMH21230	12	30
WMH21236	12	36
WMH21430	14	30
WMH21436	14	36
WMH22036	20	36



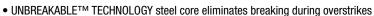


- UNBREAKABLE™ TECHNOLOGY steel core eliminates breaking during overstrikes
- HIGH VIS HEAD drop forged 46 HRC head endures the most demanding applications
- SAFETY PLATE locks head firmly to handle to prevent head dislodging
- ANTI-VIBE NECK thick, tapered neck absorbs vibration reducing worker fatigue
- NO-SLIP GRIP vulcanized rubber handle for secure girp while striking
- LANYARD HOLE safely secure hammer to wrist or stationary object

APPLICATIONS: Demolotion Work, Fracturing Stone and Concrete, Driving Fence Posts, Driving Stakes, Rebar Work, Railroads, Police, Fire and Resuce.

## **B.A.S.H.** Unbreakable Handle Soft Face Sledge Hammers

Stock No.	Head Size - .lbs	Handle Size - inch
WMH40212	2-1/2	12
WMH40412	4	12
WMH40416	4	16
WMH40624	6	24
WMH40636	6	36
WMH40824	8	24
WMH40836	8	36
WMH41036	10	36
WMH41236	12	36
WMH41436	14	36



- HIGH VIS HEAD Soft Face Hammer's 30 HRC head mushrooms while striking harder materials, promoting safety on the jobsite
- SAFETY PLATE locks head firmly to handle to prevent head dislodging
- ANTI-VIBE NECK thick, tapered neck absorbs vibration reducing worker fatigue
- NO-SLIP GRIP vulcanized rubber handle for secure girp while striking
- LANYARD HOLE safely secure hammer to wrist or stationary object

APPLICATIONS: Mining, Railroads, Cutting Tools, Maintenenance on hard metal surfaces.





## **MECHANIX WEAR**

## **Gloves**



## **Mechanix Wear® FASTFIT Gloves**

Stock No.	Glove Size
AXOMFFF55008	TAA FastFit Covert Small
AXOMFFF55009	TAA FastFit Covert Medium
AXOMFFF55010	TAA FastFit Covert Large
AXOMFFF55011	TAA FastFit Covert X-Large
AXOMFFF55012	TAA FastFit Covert XX-Large

## FIT

Atomically cut thumb area of palm provides an exceptional feel

## **FUNCTION**

Taller, easy on-off cuff design with elastic closure



## Mechanix Wear® ORIGINAL Gloves

Stock No. Glove Size			
AXOMGF55008	TAA Original Covert Small		
AXOMGFF55009	TAA Original Covert Medium		
AXOMGFF55010	TAA Original Covert Large		
AXOMGFF55011	TAA Original Covert X-Large		
AXOMGFF55012	TAA Original Covert XX-Large		

## DEXTERITY

Reinforced fingertips and 2-ply thumb reduce wear and increase protection

## COMFORTABLE

2-way stretch spandex top increases breathability and flexibility for fit



## Mechanix Wear® M-PACT Gloves

Stock No. Glove Size	
AXOMFPF55008	TAA M-PACT Covert Small
AXOMFPF55009	TAA M-PACT Covert Medium
AXOMFPF55010	TAA M-PACT Covert Large
AXOMFPF55011	TAA M-PACT Covert X-Large
AXOMFPF55012	TAA M-PACT Covert XX-Large

## KNUCKLE GUARD

New molded rubber exoskeleton design adds flexible Knuckle protection

## PADDED PALM

Medium density palm padding to reduce wear and increase protection







At Snap-on Industrial, we understand fleet operations and we know how to help you keep your fleet in action.

No matter what type of fleet you maintain, there is one overriding consideration: Unless those vehicles are out doing their job, they're costing you money. Downtime needs to be reduced or eliminated. No one offers more tools to keep your fleet running than Snap-on.

## **Alignment Lifts**





14,000 lb. Lifting Capacity 4814605AF

14K Scissor Alignment Lift

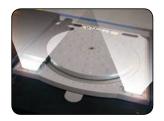
## John Bean Scissor Alignment Lifts

Maximize your bay's productivity with 10K and 14K Scissor Lifts featuring the industry's widest runways, highest lift height and longest wheelbase capabilities. These lifts feature clear access between runways for superb alignment accuracy.

Turntable cutouts and integrated rear slip plates make these lifts alignment ready. (Turntables must be purchased separately)

## Also available: Locked & Lighted Scissor Alignment Lifts

- Turntables and Roller Jacks standard
- Industry's first certified lifts with an integrated light system
- 10,000 Lifting Capacity: 4810605LL - 255" OAL 4810605XLL - 265" OAL
- 14,000 Lifting Capacity: 4814605LL - 270" OAL



## John Bean 4-Post Alignment Lifts

4-Post alignment lifts come in open-front and closed-front styles. 12K, 14K, and 18K lifting capacities are available. John Bean lifts offer rugged durability and multiple safety systems. (Roller Jacks are included standard. Turntables must be purchased separately.)



## Also Available:

Stock Number	Description	Style	Lifting Capacity (lbs)	
4412405ST	154" Wheelbase, Two-Wheel Alignment	Closed-Front	12,000	
00044212Q00	172" Wheelbase, Two-Wheel Alignment	Closed-Front	12,000	
000442120Q0	172" Wheelbase, Two-Wheel Alignment	Open-Front	12,000	
442120QE	210" Wheelbase, Two-Wheel Alignment	Open-Front	12,000	
EELR507A	172" Wheelbase, Two-Wheel Alignment	Open-Front	14,000	
00044218000	210" Wheelbase, Two-Wheel Alignment	Closed-Front	18.000	



## **Deployable Mobile Column Lifts**

## **Deployable Mobile Column Lifts**

Package contents: Mobile Column Lift System - Lift Capacity - 96,000 lbs. - 6 Columns, 6 Mobile Support Stands, 6 Small Wheel Adapters, 2 Light Vehicle Adapters and 2 Tri-con Container

QTY	Item Number	Description		
1	DEPMCLS6 MCL 16-6 Deployable Lift Package (includes items listed below)			
1	MCL16-6W	ICL16-6W Mobile Column Lift System, 6 Columns, 12.5" Fork Length, Wide Body, 96k lbs cap.		
6	AB-16-16 Mobile Support Stands, 16,000 lbs Tall (Adj. range 51." to 79.0")			
6	SMA-2 (pair)	Small Wheel Adapters - 6" - for reduction to 13"rims (1 pair/Column)		
2	LVA-8W (pair)	Light Vehicle Adapter, 16,000 lbs capacity per pair, for Wide Body Carriage WB		

Each column is mobile and can be easily positioned on the vehicle wheels for the lifting operation. It can be used both in automotive and heavy-duty repair shops. The diverse accessories allow the operator to use the MCL's for various lifting needs. The columns can be operated in pair mode and as a set of four or six.

- Capacity: 16,000 lbs. per column
- Standard delivery of 4 and 6 columns
- · Electronic self diagnostics
- Standard leveling control
- · Lifting carriage with fixed wheel lifting forks
- Ball Screw Mechanism
- Automatic synchronization
- · High safety level insured by independent locking device
- · Space-saving column design
- · Low net weight for easy handling
- Virtually maintenance free
- Made in the USA



## Standard Package 6 Lifts & Accessories - MCLSFSS6

6 Column, 230 Volt, 3-phase

QTY	Item Number	Description		
1	MCL16-6 W	Mobile Column Lift System, 6 Columns, 12.5" Fork Length, Wide Body		
6	AB-16-16	Mobile Support Stands, 16,000 lbs - Tall (Adj. range 51." to 79.0")		
6	SMA-2 (pair)	Small Wheel Adapters - 6" - for reduction to 13" rims (1 pair / Column)		
1	LVA-8W (pair)	Light Vehicle Adapter, 16,000 lbs capacity per pair, For Wide Body Carriage WB		
1	LVA-C-W	Cart for LVA-8-W		
1	LVA-EX-MF	Extension Kit - 2",4",6",8" Extensions & Metal Fork Adapters		
1	МСВ	Main Control Box - to allow separating 2 of the columns from the set of 6		
1	DP-20	Dummy Plug - to allow separating 2 of the columns from the set of 6		
1	CB-32-W	Cross-Beam - 32 k lbs Capacity		

## Wireless Package 6 Lifts & Accessories - MCLWFSS6

6 Column Battery Operated Wireless

QTY	Item Number	Description		
1	MCL16-6 W-B WRL	Wireless Mobile Column Lift System, 6 Columns, 12.5" Fork Length, Wide Body		
6	AB-16-16 Mobile Support Stands, 16,000 lbs - Tall (Adj. range 51." to 79.0")			
6	SMA-2 (pair)	SMA-2 (pair) Small Wheel Adapters - 6" - for reduction to 13" rims (1 pair / Column)		
1	LVA-8W (pair)	Light Vehicle Adapter, 16,000 lbs capacity per pair, For Wide Body Carriage WB		
1	LVA-C-W	Cart for LVA-8-W		
1	LVA-EX-MF	Extension Kit - 2",4",6",8" Extensions & Metal Fork Adapters		
1	CB-32-W	Cross-Beam - 32 k lbs Capacity		

## Standard Package 4 Lifts & Accessories - MCLSFSS4

4 Column, 230 Volt, 3-phase

QTY	Item Number	Description	
1	MCL16-4 W	Mobile Column Lift System, 4 Columns, 12.5" Fork Length, Wide Body	
4	AB-16-16	Mobile Support Stands, 16,000 lbs - Tall (Adj. range 51." to 79.0")	
4	SMA-2 (pair)	Small Wheel Adapters - 6" - for reduction to 13" rims (1 pair / Column)	
1	LVA-8W (pair)	A-8W (pair) Light Vehicle Adapter, 16,000 lbs capacity per pair, For Wide Body Carriage WB	
1	LVA-C-W	Cart for LVA-8-W	
1	LVA-EX-MF	Extension Kit - 2",4",6",8" Extensions & Metal Fork Adapters	
1	МСВ	Main Control Box - to allow separating 2 of the columns from the set of 4	
1	DP-20 Dummy Plug - to allow separating 2 of the columns from the set of 6		
1	CB-32-W	Cross-Beam - 32 k lbs Capacity	

## Wireless Package 4 Lifts & Accessories - MCLWFSS4

4 Column Battery Operated Wireless Built-in Charging System

QTY	Item Number	Description
1	MCL16-4 W-B WRL	Wireless Mobile Column Lift System, 4 Columns, 12.5" Fork Length, Wide Body
4	AB-16-16	Mobile Support Stands, 16,000 lbs - Tall (Adj. range 51." to 79.0")
4	SMA-2 (pair)	Small Wheel Adapters - 6" - for reduction to 13" rims (1 pair / Column)
1	LVA-8W (pair)	Light Vehicle Adapter, 16,000 lbs capacity per pair, For Wide Body Carriage WB
1	LVA-C-W	Cart for LVA-8-W
1	LVA-EX-MF	Extension Kit - 2",4",6",8" Extensions & Metal Fork Adapters
1	CB-32-W	Cross-Beam - 32 k lbs Capacity



- Read and follow all safety messages in instructions
- Read safety precautions on pages W1 to W4

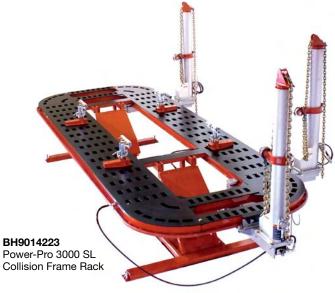
## **Collision Service Equipment**





## **Shark Electronic Measuring System**

With easy-to-use ultrasound technology, the Shark provides live measurements on up to 12 points on the vehicle. User-friendly software guides the technician through the pulling process, and prints pre/post-repair documentation. VIN decoding and a real vehicle image based vehicle database allows for a faster job throughput process. The Shark comes with a space-saving cabinet and 22" HD wide screen monitor.



## **Blackhawk Power Pro SL/SLT Series**

The Power-Pro SL and SLT series are available in 20' and 22' lengths and enables 360°, 10 Ton pulling, along with a 9,000 Lbs. lifting capacity.

The Power-Pro SL series of racks have an extended height lifting capability (12" to 42") for ergonomic working heights, an open front and rear for greater accessibility to the vehicle for repairs, a faster pinchweld anchoring system with fewer bolts to secure it to the rack platform and 60% more chain ty-downs for efficient and timely vehicle tie backs.

The SLT series provides the same features as above but with a 22" working height which tilts to the rear for easy vehicle loading.



## Blackhawk Power-Pro BT/CT Series

The Power Pro BT (Bearing Tower) and CT (Castered Tower) Series are available in 18', 20' and 22' lengths and enables 360°, 10 Ton pulling, along with a 10,000 Lbs. lifting capacity. Front and rear removable crossmembers provide for closer access to the vehicle when making mechanical or structural repairs.

## 

## **Tire Changers & Brake Lathes**

John Bean Tire Changers are the answer to the latest needs of the modern tire service center. They are ideal for handling passenger car, light truck, heavy-duty and high-performance wheels found today and those of the future. Their combination of speed, versatility and safety translate into better wheel service and increased productivity for your business or organization.

**EEWHT8026** Heavy Duty Tire Changer

**EEWH537A** Pegasus ATC 800 Leverless Automated Tire Changer

**EEWH512AU** EHP System II Swing-Arm Tire Changer





EEWH512AU EHP System II Swing-Arm Tire Changer



**EEWHT8026** Heavy-Duty Tire Changer



EEWH517A EHP System V Tilt-Tower Tire Hanger

## **Brake Lathes**

JBC401BL Brake Lathe. The John Bean 401 professional combination bench brake lathe is designed to handle all brake resurfacing needs. The 401 comes equipped with our standard tooling package to resurface most passenger cars and light trucks; optional tooling is available to handle specialty and heavy-duty applications. Shown with optional Work Bench and Tool Board.

EEWH537A

Pegasus ATC 800

Leverless Automated

Tire Changer

JBC201BL Brake Lathe. The John Bean 201 single-speed combination bench brake lathe is designed to handle all your brake resurfacing needs. the 201 comes equipped with our standard tooling package to resurface most passenger cars and light trucks; optional tooling is available to handle specialty and heavy-duty applications. Shown with optional Work Bench and Tool Board.





JBC401BL

JBC201BL





- · Read and follow all safety messages in instructions
- Read safety precautions on pages W1 to W4

## **Imaging Wheel Aligners**





## EEWA550AL22 Arago V3D Imaging Wheel Aligner

## EEWA550AL22 Arago V3D Imaging Wheel Aligner.

The Arago V3D is the fastest, most accurate imaging alignment system available. The DigiSmartTM imaging camera system automatically tracks the targets on the vehicle, allowing the technician to perform adjustments at a comfortable working height.





EEWA544AL V3D-EL Imaging Wheel Aligner. The V3D-EL Imaging Wheel Alignment System combines the benefits of UltraTM High-Definition camera technology and quality with an affordable price. Our patented VODITM graphic display provides visual and directional assistance to the technician during the alignment measuring procedure. The V3D-EL will boost your shops productivity by allowing technicians to do more alignments in less time. (Shown with Optional Variable-Height Camera Support)



## **Wheel Balancers**

## BFH 1000 Total Ride Performance System.

Designed to meet the demands of high-volume shops and those needing wheel optimization, the BFH 1000 is the right choice. This "touchless" system obtains all readings and indicates weight placement automatically in a single spin. Weight management software saves you money by tracking your usage so that you buy only what you use.

## BFH 800 Fully-Automated Wheel Balancing.

The BFH 800 is designed to meet the demands of high-volume shops and those users looking to improve productivity. With the fastest floor-to-floor time in the industry, the BFH 800 provides revenue-generating functionality, such as wheel weight management, behind-spoke tape weight placement and wheel-to-tire matching.

## VPI System I Wheel Balancer.

The VPI System I wheel balancer combines cutting-edge technology with a small footprint - perfect for shops where space-saving equipment is a necessity.

## 9800 Heavy-Duty Wheel Balancer.

The John Bean 9800 wheel balancer meets the heavy-duty wheel balancing needs of todays shops. The John Bean 9800 wheel balancer is designed to balance truck, bus, RV and automobile wheel and tire assemblies.













## Pro-Link iQ™ Scan Tools

# IQMNTKITB Fault code C

## IQMNTKITB Pro-Link iQ Military Diagnostic Scan Tool

## **Standard Kit Includes:**

Pro-Link iQ Scan Tool
J1708/J1587 Heavy Duty Standard*
Power and Data Cable
110v Power Adapter
9-pin Deutsch Adapter
6-pin Deutsch Adapter
2-cell Battery Pack
Stylus Pen
CD Manual/Drivers
2 Year Warranty

6-pin Deutsch adapter **EEHD488024** 



12-pin Connector **EEHD481003** 



9-pin Deutsch adapter **EEHD488028** 



OBD II/J1962 **EEHD481013** 

## **Included Software:**

Detroit Diesel DDEC VI (2007–2009)	EEHD889015
DDEC® Suite – DDEC III, IV, and V (1995–2006)	EEHD888015
Detroit Diesel® MBE	EEHD889031
CAT® ACERTTM 2.0 (2003-2009)	EEHD880024
CAT® Electronic Engines (1990–2003)	EEHD889024
International® Engines 2.0 (1994–2006)	EEHD880010
Allison Suite: GEN IV, 1K/2K, 3K/4K, CEC1	EEHD888005
WABCO Suite—Air and Hydraulic	EEHD888014
Bendix ABS	EEHD889013
Heavy Duty Standard J1939	EEHD889008
OBD II for light and medium trucks	EEHD888076
(1996-2006)	
Includes OBD II/J1962 Adapter	
(Part#EEHD488013)	
Navistar® MaxxForce (2007–2009)	EEHD881009
* Cumming aumort for those applications limited	I to boois sadas

<sup>\*</sup> Cummins support for these applications limited to basic codes and data



EEHD481009



110v AC Adapter **EEHD488099** 



NATO Adapter WPI509011



Snap-on Fault Code Guide **EEHD909008** 

## **Included Accessories:**

HD/1962 GM Truck w/ CAT Engine Adapter	EEHD481009
Snap-on Fault Code Guide	EEHD909008
12-Pin Connector	EEHD481003
NATO Adapter	WPI509011
Storm Case	EEHD219006
Screen Protector (3 piece set)	EEHD2450801A
Foam Insert	EEHD219006-1

## **Battery Chargers/KBI**

## **EEBC500NATO Standard NATO Battery Charger.**

- Charges 6, 12, and 24 volt batteries
- Foam filled wheels for enhanced portability
- Upgraded control board coating for durability
- Based on Snap-on EEBC500 Battery Charger Plus (see p. 431)
- Versatilite connectivity
- · Fitted with twin extruded output cable and Anderson connector
- Includes both standard clamp set and NATO adaptor



**EEBC500NATO** 

## **EEBC500DEP Deployable NATO Battery Charger.**

- Fitted in rugged Storm® case for extreme portability
- Includes housing mounts, transformer, control panel, and cable storage
- Auto shut-off when case closes
- . Charges 12 and 24 volt batteries
- Flash reprogramming at 24 volts
- Shown with EECS500 battery tester (not included)

See pages 461-466 for the complete selection of Snap-on Battery Chargers & Testers



**EEBC500DEP** 

## **KBI**

## **KrankingKART™**

The heart of the KrankingKART™ is the nickle carbon KAPower® supercapacitor. The KAPower® supercapacitor is initially energized from the vehicles electrical system. KAPower® than stores energy until needed. It has a long service life of 500,000 + cycles and will outlast the vehicle it is jump-starting. The KAPower® is virtually unaffected by cold temperatures and is maintenance free.



KBI800030

KBI800031



	Portable	Automotive	HD Commercial	HD Commercial	HD Industrial	Military	HD Industrial	Military
Part Number	KBI800034	KBI800033	KBI8000030	KBI800030-14	KBI8000031	KBI800032	KBI800035	KBI800036
Capacitor	12 Volt	12 Volt	12 Volt	12 Volt	24 Volt	24 Volt	12/24 Volt (Dual Voltage)	12/24 Volt (Dual Voltage)
Engines Up To	7 Liter	10 Liter	15 Liter	15 Liter	18 Liter	18 Liter	18 Liter	18 Liter
Auxiliary Connector	HD Booster Clamp	HD Booster Clamp	HD Booster Clamp	HD Booster Clamp	HD Booster Clamp	NATO	HD Booster Clamp	NATO/HD Booster Clamp
Cable Length	6 Feet	7.5 Feet	7.5 Feet	15 Feet	7.5 Feet	12 Feet	7.5 Feet	7.5 Feet
Cable Gauge	1/0	4/0	4/0	4/0	4/0	4/0	4/0	4/0
Dimensions	18 1/2" x 19 3/4" x 11 1/4"	41" x 25" x 19"	41" x 25" x 19"	41" x 25" x 19"	41" x 25" x 19"			
Weight	51 lbs	99 lbs	106 lbs	118 lbs	106 lbs	112 lbs	115 lbs	115 lbs

**Heavy Duty Jump-Start Carts** Giving An Engine The Power It Needs To Start.





## **SHOP EQUIPMENT**

## **ShopKey**



SHOPKEY® PRO is faster, easier and more intuitive than ever before. So your shop can be more productive than ever before.

## **IT'S FASTER**

ShopKey Pro eliminates the need for multiple searches. By returning all relevant content in just one look-up, ShopKey Pro quickly delivers the answers you need to complete the job.

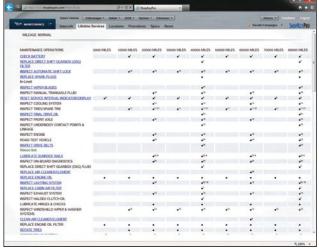
TSBs – Now you get relevant TSBs without all the extra steps. ShopKey Pro automatically shows TSBs and recalls along with the rest of the repair information, so you don't have to perform a separate search.

ShopKey Pro introduces a completely new way of capturing exactly the information you need. The information look-up is based on vehicle components, so it matches the repair process.

Simply look up a component and ShopKey Pro returns only the relevant repair information, including TSBs, component locators, diagnostic procedures, maintenance schedules, live expert information and the best color wiring diagrams in the business.



Relevant TSBs and recall notices are automatically displayed onscreen

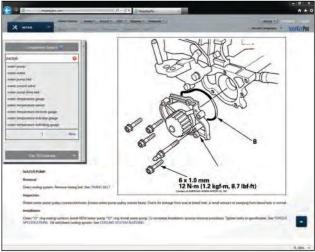


Lifetime maintenance service schedule with locations, procedures and specs

## IT'S MORE INTUITIVE

Auto-Suggest – Frequent look-up terms are displayed after only three keystrokes. ShopKey Pro automatically spell checks and locates the right answer, including the top ten look-ups for the selected vehicle.

Built-in Thesaurus – Water pump, coolant pump, recirculating pump No need to know what each manufacturer calls a specific component. Just type a standard term and ShopKey Pro will intelligently cross-reference component names.



Component look-up with auto-suggest shows top ten look-up terms





Imagine being just 30 seconds away from a solution to any repair problem that pulls into your bay. Introducing shopkey pro, the most trusted name in repair information. Designed to be the fast and easy path to the answers you need for over 50 makes, shopkey pro puts everything in one place – from repair, diagnostics and maintenance schedules to wiring diagrams and expert information.

## **INCLUDED RESOURCES**

Repair - This comprehensive component-based resource works the way you do. Select a vehicle component and see component location, specifications, operating values, removal & installation procedures and wiring diagrams.

**Diagnostics** – Enter a fault code to find the information needed to diagnose and fix the problem, including code description, code set conditions, component location, diagrams, test procedures and specifications.

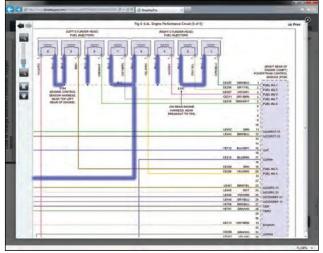
Maintenance – The maintenance schedules are straight forward so anyone in the shop can sell services and grow a profitable maintenance business. You get lifetime service schedules. maintenance procedures and related specifications. The unique component locator tab shows exactly where to begin the maintenance procedure.

Wiring Diagrams - The full-color diagrams are easy to follow. Zoom in on a diagram and it remains clear. Select a wire and the circuit trace feature highlights the complete circuit from end-to-end.

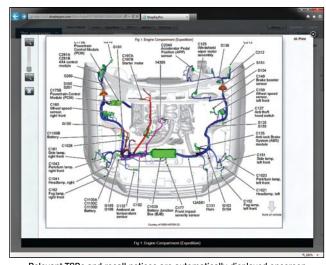
Community – An exclusive online community puts you in touch with the latest FastTrack® repair solutions. Exchange the latest tips and expertise with ShopKey Pro technicians across the country.

TSBs - Vehicle-specific TSBs and recalls from the OEMs are presented with the component look-up. No need to search for TSBs separately.

Vintage – With coverage for vehicles all the way back to 1960, you'll be ready for anything. ShopKey Pro Vintage comprises a rich library of engine performance, wiring, chassis, and other information.



Relevant TSBs and recall notices are automatically displayed onscreen



Relevant TSBs and recall notices are automatically displayed onscreen

With online access, you never need to worry about staying current. Just login to ShopKeyPro.com using the browser of your choice -Firefox, Chrome or Internet Explorer, and you'll automatically receive access to fresh content delivered daily. Increase customer loyalty, boost profits and make your shop the best in the business.

Contact your Snap-on representative to see the complete power of ShopKey Pro.







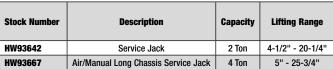


Avoid overcharging batteries
 Read safety precautions on pages W1 to W4

## lacks & lack Stands



## Service Jacks



TOMOTUA

## HW93642

- · One piece handle
- · Flanged side plates increase strength
- · Wider for more stability under a load
- · Large for easy maneuvering
- · Cast iron pump base for strength and durability
- Sealed hydraulic pump for durability
- Pressure relief valve prevents overloading
- · Cast iron lift arm for heavy duty loads
- U-joint release mechanism for precise load control

## HW93657

- · Handle adjusts to three pumping positions
- · Extra long chassis for hard to reach points
- T handle with release knob for positioning and load control
- · Sealed hydraulic unit keeps out grit, grime and moisture
- · Cast lift arm for heavy loads
- · Operates manually or with air
- Patented "Speed Pak™" reduces handle pumping
- 140PSI required for maximium load

## HW93693

Note: Sold and to be used in pairs

## 10 Ton Wheel Lift System

Stock Number	Capacity per Pair	Max. Height	Power Raise	Min. Wheel Dia.	Max. Wheel Dia.
HW93693	10 Ton	24"	24"	19-1/2"	24-1/2"

- · Lifts engage wheels
- No need to remove panels on vehicle
- Raise front or rear of vehicle using a single controller
- Load retention pin allows lifts to function as stands
- · Wide base ensures stability
- · Completely air operated, no electrical connections
- · Safety latch provides six different locked positions
- Portable, use in any area of the shop

## **Truck Air Jacks**

Stock Number	Description	Capacity	Power Raise	Min. Ht.	Max. Ht.	Required Operating Pressure
HW93737A	Trolley Air Jack	10 Ton	11-1/2"	17-3/4"	51-1/2"	150 - 200 PSI
HW93735A	Wheeled Truck Jack	25 Ton	5-1/8"	8"	18"	110 - 200 PSI

## HW93735A

- 8" Low height for lifting from axle or suspension
- Compact, powerful design for quicklifts
- Pressure relief valve prevents overloading
- Coated ram prevents rust, extends jack life
- · Air assisted ram retract
- 3 position handle
- 2 year warranty

## HW93737A

- · Removable handle and 10 foot air hose for safe position and operation
- 10 ton capacity when used separately, 20 tons when used in pairs
- Lifting Range 17-1/2" to 51-1/2"
- · Completely air-operated
- Doubles as a support stand

## lack Stands

Stock Number	Description	Capacity per Pair	Base Size	Min. Height	Max. Height	Height Intervals
HW93511	Heavy Duty Jack Stands	10 Ton	18 x 18"	30"	52"	2"
HW93512	High Reach Jack Stands	10 Ton	16 x 16"	19-1/2"	31-1/2"	2"
HW93526A	Forklift Jack Stands	25 Ton	10 x 10"	12-1/4"	20"	1-1/2"

Stock Number	Description	Capacity per Pair	Base Size	Min. Height	Max. Height	Height Intervals
HW93511	Heavy Duty Jack Stands	10 Ton	18 x 18"	30"	52"	2"
HW93512	High Reach Jack Stands	10 Ton	16 x 16"	19-1/2"	31-1/2"	2"
HW93526A	Forklift Jack Stands	25 Ton	10 x 10"	12-1/4"	20"	1-1/2"

HW93737A



HW93526A HW93511 Note: Sold and to be used in pairs

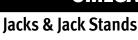
## HW93511 / HW93512

- Pin style column adjustment
- · Heavy duty square tubing
- · Large saddle securely supports load
- · Attached wheels for easy movement (HW93511 Only)
- · Ideal for fleet, agricultural and construction maintenance
- Sold in pairs

## HW93526A

- Pin style column adjustment
- · Heavy duty square tubing
- Large saddle securely supports load
- · Ideal for fleet, agricultural, and construction maintenance
- Sold and to be used in pairs

HW93735A





## Air Bottle Jacks

Stock No.	Description	Lifting Range
OMG18122C	12 Ton Capacity	9-1/2" - 18-1/2"
OMG18202C	20 Ton Capacity	9-3/4" - 18-3/4"
OMG18302C	30 Ton Capacity	11" - 18-1/8"
OMG18502	50 Ton Capacity	12" - 19"

- · Air motor operation for fast, easy lifts
- Uses standard shop air (110-175 PSI)
- · Quick connector air Hose for easy hook up and disconnection
- · Sturdy steel construction with extra forged base for added stability



OMG18122C









Note: Sold and to be used in pairs

## Low Profile Service Jack

Stock No.	Description	Lifting Range
OMG29023	2 Ton Capacity	2-1/2" - 20"

- Extra long low side frames designed for long reach under the car chassis
- No load first pump lifting point up to 13"
- Innovative design of Magic LiftTM offers a quicker life for professional performance
- Low profile design for maximum access, which fits easily and safely under vehicle
- Wide stance and low center of gravity provides optimum stability under load stress

## "Magic Lift™" Service Jack

		•	
	Stock No.	Description	Lifting Range
	OMG27025	2-1/2 Ton Capacity	4" - 20-1/4"

- Revolutionary technology offers a fast lift for professional performance
- One or two pumps of the handle quickly raises saddle to the load lift point
- Heavy gauge steel fram helps prevent distortion and twisting
- Safety by-pass system protects against overload damage

## Pin Style Jack Stands

Stock No.	Description
OMG32107	10 Ton Capacity - high lift, adjusts from 28" - 47"
OMG32225	22 Ton Capacity - truck jack stands, adjusts from 12-1/8" - 19-7/8"

- · Jack Stands use pin to hold bar safely in place when supporting load
- · Easy height adjustment
- · Sturdy welded steel construction for superior safety and strength
- · Heavy gauge steel frame helps prevent distortion or twisting
- Sold and to be used only in pairs

## 20 Ton Wide Truck Ramps

Stock No.	Dimensions	Handle Length	Maximum Vehicle Tire Width
OMG93201	45-5/8 x 18-1/4 x 9-1/4"	33-1/2"	15-1/2"

- · Specifically designed for heavy-duty tasks
- · Steel wheels design for extra durability
- · Long T-handle increases mobile efficiency
- . Sold and to be used only in pairs
- Wider width for stability



Note: Sold and to be used in pairs



## **Shop Equipment**





## **Shop Press With Hand Pump**

Stock No.	Description
OMG60253	25 Ton Capacity

- Ideal for removal or installation of gears, u-joints, pulleys, wrist pins & other shop jobs
- · Excellent for bending, bonding or straightening applications
- · Multi position bed for work at various heights
- Heavy steel welded frame for strength and stability

## **Engine Stands**

Stock No.	Description	Rotation	
OMG30750	750 Lbs. Capacity	Manual	
OMG31250	1250 Lbs. Capacity	Manual	
OMG31252	1250 Lbs. Capacity	Manual	
OMG31256	1250 Lbs. Capacity	Gear Drive	

- Constructed from heavy-gauge welded square tubular steel
- Extra-long handle with rubber grip for easy rotation and maneuvering
- Head plate locks in 8 positions and rotates 360°
- Only OMG31256 come with worm gear



Stock No.	Description			
OMG44010	1 Ton Capacity (Fold-up Design)			
OMG44020	2 Ton Capacity			

- Heavy duty welded construction with rugged reinforced tubular steel
- Metered control release valve for lowering boom at a precisely-controlled rate of speed
- Special 8 ton hydraulic long rams are equipped with a patented built-in by-pass mechanism



- Efficiently operates any single-acting rams up to 55 ton capacity
- Provides up to 10K PSI with standard shop air (110-175 PSI)
- Built-in pressure by-pass protects against overload operation
- Constructed of light weight corrosion-free aluminum
- Uses 3/8" NPT fluid coupler
- Stock No. OMG22903





## Available in 3 colors

## Red Blue Gray

## **Equipto® V-Grip™ Shelving**

## **V-Grip Shelving**

- Shelves Adjust on 1.5" Centers No Tools Required
   Common Uprights for Continuous Row Applications
- Closed Units Feature Reflective White Side/Back Panels
- Customize with Wire Shelves and Modular Drawers

## 84" Open Preconfigured Units

Depth	Width	Capacity Per Shelf	Color	Five Shelves Starter Stock No.	Add-On Stock No.	Seven Shelves Starter Stock No.	Add-On Stock No.	Extra Shelf
18"	36"	700 lbs.	Red	EQ663-5SR	EQ663-5AR	EQ663-7SR	EQ663-7AR	EQ6231R
18"	36"	700 lbs.	Gray	EQ663-5SG	EQ663-5AG	EQ663-7SG	EQ663-7AG	EQ6231G
18"	36"	700 lbs.	Blue	EQ663-5SB	EQ663-5AB	EQ663-7SB	EQ663-7AB	EQ6231B
24"	36"	721 lbs.	Red	EQ665-5SR	EQ665-5AR	EQ665-7SR	EQ665-7AR	EQ6232R
24"	36"	721 lbs.	Gray	EQ665-5SG	EQ665-5AG	EQ665-7SG	EQ665-7AG	EQ6232G
24"	36"	721 lbs.	Blue	EQ665-5SB	EQ665-5AB	EQ665-7SB	EQ665-7AB	EQ6232B

84"H Closed preconfigured unites with drawers

**Open Starter** Open Add-On

## 84" Closed Preconfigured Units

Depth	Width	Capacity Per Shelf	Color	Five Shelves Starter Stock No.	Add-On Stock No.	Seven Shelves Starter Stock No.	Add-On Stock No.	Extra Shelf
18"	36"	700 lbs.	Red	EQ673-5SR	EQ673-5AR	EQ673-7SR	EQ673-7AR	EQ6231R
18"	36"	700 lbs.	Gray	EQ673-5SG	EQ673-5AG	EQ673-7SG	EQ673-7AG	EQ6231G
18"	36"	700 lbs.	Blue	EQ673-5SB	EQ673-5AB	EQ673-7SB	EQ673-7AB	EQ6231B
24"	36"	721 lbs.	Red	EQ675-5SR	EQ675-5AR	EQ675-7SR	EQ675-7AR	EQ6232R
24"	36"	721 lbs.	Gray	EQ675-5SG	EQ675-5AG	EQ675-7SG	EQ675-7AG	EQ6232G
24"	36"	721 lbs.	Blue	EQ675-5SB	EQ675-5AB	EQ675-7SB	EQ675-7AB	EQ6232B

84"H Closed preconfigured unites with drawers: Shown with optional wire shelf top.

## 84" Closed Preconfigured Units With Drawers

- · Shown with optional wire shelf top
- Includes (2) 4-1/2" High and (2) 6" High Drawers
- 48 Standard drawer sizes
- 36" and 48" widths
- 18" and 24" depths
- Drawer heights from 3" to 131/2"
- 200 and 400lb. Drawer capacity
- Each drawer has individual rigid mounting brackets for 100% flexibility of drawer location
- · Drawers available with or without divider sets
- Drawers include handles with integral plastic-covered label holder

Drawer Depth	Drawer Width	Capacity per Drawer	Color	Starter Stock Number	Add-On Unit Stock Number
18"	36"	200 lbs.	Gray	EQ4221VNS	EQ4221VNA
18"	36"	400 lbs.	Gray	EQ4221VHS	EQ4221VHA
18"	48"	400 lbs.	Gray	EQ4241VHS	EQ4241VHA
24"	36"	200 lbs.	Gray	EQ4231VNS	EQ4231VNA
24"	36"	400 lbs.	Gray	EQ4231VHS	EQ4231VHA
24"	48"	400 lbs.	Gray	EQ4251VHS	EQ4251VHA



**Closed Starter** 

Closed Add-On



Starter

Add-on



## **Equipto® Workcenters**

EQUIPTO

Optimize work areas by combining work and storage space into a modular drawer cabinet workcenter. With capacity up to 400 lbs per drawer, and single or double cabinet configurations, these workcenters are designed to last a lifetime.









All Workcenters are Available in 3 colors



## **Preconfigured Modular Drawer Cabinet Workcenters**

- 30" wide drawer cabinets
- "Quiet Ride™" drawers with 400 lb. capacity per drawer
- Choice of vivid colors to enhance work environment
- Knockouts in legs provide for safe, convenient electrical hookup
- · Lower recessed shelf for convenience
- All benches are 30" deep
- Equipto offers over 140 sizes and styles of modular workcenters

Bench Height	Тор	Bench Length	Color	Number of Drawers	Stock Number
34"	Hardwood	5'	Red	6	EQ2576-5WR
34"	Hardwood	5'	Gray	6	EQ2576-5WG
34"	Hardwood	5'	Blue	6	EQ2576-5WB
34"	Hardwood	6'	Red	6	EQ2576-6WR
34"	Hardwood	6'	Gray	6	EQ2576-6WG
34"	Hardwood	6'	Blue	6	EQ2576-6WB
34"	Hardwood	8'	Red	6	EQ2576-8WR
34"	Hardwood	8'	Gray	6	EQ2576-8WG
34"	Hardwood	8'	Blue	6	EQ2576-8WB
34"	Hardwood	8'	Red	12	EQ2596-8WR
34"	Hardwood	8'	Gray	12	EQ2596-8WG
34"	Hardwood	8'	Blue	12	EQ2596-8WB

## **Preconfigured Closed Leg Workcenters**

- Sliding doors and 1 shelf included
- · Steel top with backsplash
- All benches are 30" deep

Bench Height	Bench Length	Color	Stock Number
34"	4'	Red	EQ275U4R
34"	4'	Gray	EQ275U4G
34"	4'	Blue	EQ275U4B
34"	5'	Red	EQ275U5R
34"	5'	Gray	EQ275U5G
34"	5'	Blue	EQ275U5B
34"	6'	Red	EQ275U6R
34"	6'	Gray	EQ275U6G
34"	6'	Blue	EQ275U6B
34"	8'	Red	EQ275U8R
34"	8'	Gray	EQ275U8G
34"	8'	Blue	EQ275U8B

Equipto closed leg benches combine high-efficiency bench features with the important benefits of cabinet space. Choose from more than 200 sizes and styles and a range of features to match your exact needs. Rugged structural unit designed for tough use with the flexibility for adding accessories.

## **Preconfigured Pedestal Workcenters**

- Lower recessed shelf
- Door cabinets have middle shelf
- All benches are 30" deep
- All Cabinets are 34"H x 15'W

Bench Height	Bench Length	Color	Stock Number
34"	4'	Red	EQ255U4R
34"	4'	Gray	EQ255U4G
34"	4'	Blue	EQ255U4B
34"	5'	Red	EQ255U5R
34"	5'	Gray	EQ255U5G
34"	5'	Blue	EQ255U5B
34"	6'	Red	EQ255U6R
34"	6'	Gray	EQ255U6G
34"	6'	Blue	EQ255U6B
34"	8'	Red	EQ255U8R
34"	8'	Gray	EQ255U8G
34"	8'	Blue	EQ255U8B

Equipto Pedestal Benches offer the perfect bench/cabinet combination and feature strong, rugged work surfaces, lower shelf space and lockable cabinets and drawers. Customize with accessories and over 180 combinations of height, length, depth, and top surfaces.

Snap-on Industrial offers the complete assortment of Equipto workcenters. Call your sales representative or customer service for more information



## **Equipto® Workcenters**

## Preconfigured Adjustable-Height Iron-I Workbenches

- Include lower shelf, aerial shelf, drawer, and rails
- · Lower shelf adjusts to three heights and tilts front or back to fit your application
- Back and side rails keep parts on top of workcenter
- Adjustable from 26" to 36" or from 34" to 44" in 1/2" increments to meet your exact height requirements
- Aerial shelf adds space for increased productivity
- Depending on type of top, workbench will support up to 1,800 lbs.

	Height	Length	Steel Top with Backstop	Hardwood Top	Bonded Wood Top	Hardboard Top with Backstop	ESD Anti-Static Top
		4'	EQ427U4	EQ427-4W	EQ427-4B	EQ427U4M	EQ427-4C
	26" to 36"	5'	EQ427U5	EQ427-5W	EQ427-5B	EQ427U5M	EQ427-5C
	20 10 30	6'	EQ427U6	EQ427-6W	EQ427-6B	EQ427U6M	EQ427-6C
30" Depth		8'	EQ427U8	EQ427-8W	EQ427-8B	EQ427U8M	EQ427-8C
30" Dehm		4'	EQ428U4	EQ428-4W	EQ428-4B	EQ428U4M	EQ428-4C
	34" to 44"	5'	EQ428U5	EQ428-5W	EQ428-5B	EQ428U5M	EQ428-5C
		6'	EQ428U6	EQ428-6W	EQ428-6B	EQ428U6M	EQ428-6C
		8'	EQ428U8	EQ428-8W	EQ428-8B	EQ428U8M	EQ428-8C
		4'	EQ437U4	EQ437-4W	EQ437-4B	EQ437U4M	EQ437-4C
	26" to 36"	5'	EQ437U5	EQ437-5W	EQ437-5B	EQ437U5M	EQ437-5C
	20 10 30	6'	EQ437U6	EQ437-6W	EQ437-6B	EQ437U6M	EQ437-6C
2011 Donath		8'	EQ437U8	EQ437-8W	EQ437-8B	EQ437U8M	EQ437-8C
36" Depth		4'	EQ438U4	EQ438-4W	EQ438-4B	EQ438U4M	EQ438-4C
	34" to 44"	5'	EQ438U5	EQ438-5W	EQ438-5B	EQ438U5M	EQ438-5C
	34 10 44	6'	EQ438U6	EQ438-6W	EQ438-6B	EQ438U6M	EQ438-6C
		8'	EQ438U8	EQ438-8W	EQ438-8B	EQ438U8M	EQ438-8C



## **Wall Mount Open Leg Benches**

- Easy to anchor to wall
- · Clean-up of work area is easy
- Efficient use of wall space

	Length	Steel Top with Backstop	Hardwood Top	Bonded Wood Top	Hardboard Top with Backstop	ESD Anti-Static Top
	30"	EQ2340U3	EQ2340-3W	EQ2340-3B	EQ2340U3M	_
	4'	EQ2340U4	EQ2340-4W	EQ2340-4B	EQ2340U4M	EQ2340-4C
30" Depth	5'	EQ2340U5	EQ2340-5W	EQ2340-5B	EQ2340U5M	EQ2340-5C
	6'	EQ2340U6	EQ2340-6W	EQ2340-6B	EQ2340U6M	EQ2340-6C
	8'	EQ2340U8	EQ2340-8W	EQ2340-8B	EQ2340U8M	EQ2340-8C
	30'	EQ2345U3	EQ2345-3W	EQ2345-3B	EQ2345U3M	_
	4'	EQ2345U4	EQ2345-4W	EQ2345-4B	EQ2345U4M	EQ2345-4C
36" Depth	5'	EQ2345U5	EQ2345-5W	EQ2345-5B	EQ2345U5M	EQ2345-5C
-	6'	EQ2345U6	EQ2345-6W	EQ2345-6B	EQ2345U6M	EQ2345-6C
	8'	EQ2345U8	EQ2345-8W	EQ2345-8B	EQ2345U8M	EQ2345-8C

## **Teardown Benches**

- Ideal for working on transmissions, small engines and hydraulic components
- · Reinforced work surface will stand up to years of heavy use
- Top has a 3/4" high retaining lip on all sides tapering to the rear center to a 1/2" threaded and plumbed drain
- Optional caster kit consists of 4 swivel 71/2"H casters
- 1/2" threaded drain nipple allows for connection of hose for fluid capture

Stock No.	Description	Depth	Length	Leg Height
EQ2301DT	Steel Top	30"	48"	29"
EQ2303DT	Steel Top	30"	48"	34"
EQ2311DT	Steel Top	30"	60"	29"
EQ2313DT	Steel Top	30"	60"	34"
EQ2301DTSS	Stainless Steel Top	30"	48"	29"
EQ2303DTSS	Stainless Steel Top	30"	48"	34"
EQ2311DTSS	EQ2311DTSS Stainless Steel Top		60"	29"
EQ2313DTSS	Stainless Steel Top	30"	60"	34"





optional fluid container, drawer kit and shelf.







2307DT Fluid Container Kit

221DT -**Drawer Kit** 

2203 -Caster Kit





<sup>8&#</sup>x27; bench legs are on 6' centers. The top overhangs legs 1' on each side.

## **Work Centers/Storage Cabinets**



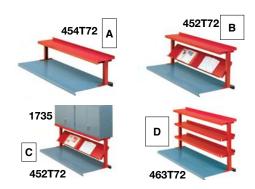
## **Production Boosters (pictured at right)**

A. 14" High Unit	For 4' Bench	For 5' Bench	For 6' Bench			
With 1 Shelf	EQ454T48	EQ454T60	EQ454T72			
B. 24" High Unit	For 4' Bench	For 5' Bench	For 6' Bench			
With 1 Shelf	EQ451T48	EQ451T60	EQ451T72			
With 2 Shelves	EQ452T48	EQ452T60	EQ452T72			
With 3 Shelves	EQ453T48	EQ453T60	EQ453T72			
D. 36" High Unit	For 4' Bench	For 5' Bench	For 6' Bench			
With 1 Shelf	EQ461T48	EQ461T60	EQ461T72			
With 2 Shelves	EQ462T48	EQ462T60	EQ462T72			
With 3 Shelves	EQ463T48	EQ463T60	EQ463T72			
Extra Top Shelves	EQ450T48	EQ450T60	EQ450T72			
C. Cabinets (note: not available for 4' workbenches)						
13" D x 30" W 2 required for		EQ17	34DI			

• Intermediate shelves are 13-1/2" D x 44", 56" or 68" L

13" D x 36" W x 27" H 2 required for 6' bench

• Full length top shelves are 13-1/2" D x 48", 60" or 72" L



## **Production Boosters**

- Can be used on any work bench
- Hands off use for manuals and instruments
- Shelves adjust to any angle, tip toward front or back
- · Safely holds expensive test equipment
- Can triple work surface

## **Aerial Shelves**

Stock Number	Width
EQ226-30	30"
EQ226-48	48"
EQ226-60	60"
EQ226-72	72"

- Provide added space
- Gain a shelf without losing table top space Note: will not fit 36" D steel tops





## Flammable Liquid Storage Cabinets\*

EQ1735DI

Stock Number	Description	Outside Height	Inside Height	Width Outside	Width Inside	Depth Outside	Depth Inside	Capacity (Gallons)	
EQFSC45M	Standard Doors	65	60	43	40	18	15	45	
EQFSC45S	Self-Closing Doors	Self-Closing Doors         65         58         43         40         18         15         45							
EQFSC45XS	Extra Shelf for 43" wide	Extra Shelf for 43" wide units above (cabinets include 2 shelfs)							

\*Meets OSHA and NFPA Code 30 specifications. Comes in Safety Yellow only.

- Galvanized steel shelves and leveling legs
- Support up to 350 lbs
- Internal and external welded construction
- 18 gauge steel reinforced double wall panel construction
- 2" raised leakproof sill

- 2" vent with fire baffle and cap
- Ground connection
- · Lead-free high gloss baked on powder finish
- 3 point key lock doors
- Meet OSHA and NFPA code 30 specifications
- Self-closing models meet UFC79



## **Storage Cabinets**

## **Quick-View Storage Cabinets**

Stock Number	Description	Color	Width	Depth	Height
EQQVC301226R	Wall Hung Quick-View Cabinet	Red	30"	12"	26"
EQQVC301226G	Wall Hung Quick-View Cabinet	Gray	30"	12"	26"
EQQVC301226B	Wall Hung Quick-View Cabinet	Blue	30"	12"	26"
EQQVC361842R	Quick-View Storage Cabinet	Red	36"	18"	42"
EQQVC361842G	Quick-View Storage Cabinet	Gray	36"	18"	42"
EQQVC361842B	Quick-View Storage Cabinet	Blue	36"	18"	42"
EQQVC361878R	Quick-View Storage Cabinet	Red	36"	18"	78"
EQQVC361878G	Quick-View Storage Cabinet	Gray	36"	18"	78"
EQQVC361878B	Quick-View Storage Cabinet	Blue	36"	18"	78"
EQQVC362478R	Quick-View Storage Cabinet	Red	36"	24"	78"
EQQVC362478G	Quick-View Storage Cabinet	Gray	36"	24"	78"
EQQVC362478B	Quick-View Storage Cabinet	Blue	36"	24"	78"
EQQVC482478R	Quick-View Storage Cabinet	Red	48"	24"	78"
EQQVC482478G	Quick-View Storage Cabinet	Gray	48"	24"	78"
EQQVC482478B	Quick-View Storage Cabinet	Blue	48"	24"	78"

- UV, break and scratch resistant plastic Lexan panels are mounted in both door frames for an unobstructed view of the cabinet's contents
- Each shelf has a 225 lb. weight capacity with 2" increment height adjustability
- · Cabinet doors have a 3-point locking mechanism with one chrome plated handle
- Multiple cabinets can be keyed alike or individually
- Dollies are available for the 78" high cabinets to add mobility



## **Dollies for Quick-View Storage Cabinets**

Fits Cabinet Size	Red	Gray	Blue
36" x 18"	EQCD1836R	EQCD1836G	EQCD1836B
36" x 24"	EQCD1836R	EQCD1836G	EQCD1836B
48" x 24"	EQCD2448R	EQCD2448G	EQCD2448B



## **Standard Storage Cabinets**

Stock Number	Description	Color	Width	Depth	Height
EQ1714R	Combination Cabinet	Red	36"	18"	78"
EQ1714G	Combination Cabinet	Gray	36"	18"	78"
EQ1714B	Combination Cabinet	Blue	36"	18"	78"
EQ1719R	Combination Cabinet	Red	36"	24"	78"
EQ1719G	Combination Cabinet	Gray	36"	24"	78"
EQ1719B	Combination Cabinet	Blue	36"	24"	78"
EQ1710R	5-Shelf Cabinet	Red	36"	18"	78"
EQ1710G	5-Shelf Cabinet	Gray	36"	18"	78"
EQ1710B	5-Shelf Cabinet	Blue	36"	18"	78"
EQ1715R	5-Shelf Cabinet	Red	36"	24"	78"
EQ1715G	5-Shelf Cabinet	Gray	36"	24"	78"
EQ1715B	5-Shelf Cabinet	Blue	36"	24"	78"
EQ1734R	2-Shelf Cabinet	Red	30"	13"	27"
EQ1734G	2-Shelf Cabinet	Gray	30"	13"	27"
EQ1734B	2-Shelf Cabinet	Blue	30"	13"	27"
EQ1735R	2-Shelf Cabinet	Red	36"	13"	27"
EQ1735G	2-Shelf Cabinet	Gray	36"	13"	27"
EQ1735B	2-Shelf Cabinet	Blue	36"	13"	27"



**Combination Cabinet** 



5-Shelf Cabinet





## **SHOP ORGANIZATION**

## Coxreels

## **Compact Spring Retractable Hose Reels**

Compact, lightweight professional grade spring rewind hose reel that is small enough to do heavy-duty jobs where space or budget is limited.

- Heavy gauge 12GA steel base & support post
- Brass NPT swivel inlet machined from solid
- CoxComposite<sup>TM</sup> Hub that integrates a high strength composite with self lubricating bronze bearings
- CoxComposite<sup>TM</sup> Grommet with continuous radius design that does not pinch or catch the cord during operation

Stock No.	Hose I.D., Inches	Hose O.D., Inches	Hose Length, Feet	Maximum Pressure, PSI	Weight
CXRLGLP115	1/4"	1/2"	15'	300	9
CXRLGLP125	1/4"	1/2"	25'	300	11
CXRLGLP310	3/8"	21/32"	10'	300	9
CXRLGLP320	3/8"	21/32"	20'	300	11



## **Spring Retractable Hose Reels**

Performance and Super-Hub™ (dual axle support system for extra stability) Series - Perfect to pull the hose out of the way in work shop areas and utility vehicles. Can be wall, ceiling, floor or vehicle mounted. T (Truck) Series - Ideal for stationary and mobile units such as service trucks featuring air compressor or product tank.

- Heavy gauge 1/4" steel base & support post
- Factory-matched cartridge-style spring motor
- · Brass NPT swivel inlet machined from solid
- 1" solid steel axle with 1" lubricated precision bearings
- · Guide arm adjusts to wall, floor & overhead positions
- SH, MP & HP Series features dual axle support with Super Hub™
- T Series features triple axle support with a full frame & Super Hub™
- Choice of Standard or EZ-Coil® Models



In 2000 Coxreels developed EZ-Coil®, a patented safety system that retracts up to 80% slower than conventional reels. EZ-Coil® is an exclusive Coxreels feature protecting your facility, property & most importantly yourself! NOBODY SHOULD BE WITHOUT EZ-COIL®!

Standard Stock No.	EZ-Coil® Stock No.	Series	Hose I.D., Inches	Hose O.D., Inches	Hose Length, Feet	Maximum Pressure, PSI	Weight
- LOW PRESSUR	RE FOR AIR / WATER			10			
CXRPLP325	CXREZPLP325	P	3/8"	21/32"	25'	300	28
CXRPLP350	CXREZPLP350	Р	3/8"	21/32"	50'	300	43
CXRSHN350	CXREZSH350	SH	3/8"	21/32"	50'	300	50
CXRTSHN350	CXREZTSH350	T	3/8"	21/32"	50'	300	61
CXRTSHN3100	CXREZTSH3100	T	3/8"	21/32"	100'	300	85
CXRPLP425	-	Р	1/2"	27/32"	25'	300	44
CXRPLP450	CXREZPLP450	P	1/2"	27/32"	50'	300	48
CXRSHN450	CXREZSH450	SH	1/2"	27/32"	50'	300	54
CXRTSHN450	CXREZTSH450	T	1/2"	27/32"	50'	300	63
CXRTSHN4100	CXREZTSH4100	Т	1/2"	27/32"	100'	300	95
CXRTSHN550	CXREZTSH550	T	3/4"	1 5/32"	50'	300	83
CXRTSHN650	-	T	1"	1 7/16"	50'	300	98
- MEDIUM PRES	SURE FOR OIL APP	LICATION	S				
CXRPMP325	-	P	3/8"	21/32"	25'	3000	49
CXRMPN350	CXREZMP350	MP	3/8"	21/32"	50'	3000	65
CXRTMPN350	CXREZTMP350	Т	3/8"	21/32"	50'	3000	74
CXRTMPN3100	-	T	3/8"	21/32"	100'	3000	106
CXRPMP425	CXREZPMP425	P	1/2"	27/32"	25'	2500	49
CXRMPN450	CXREZMP450	MP	1/2"	27/32"	50'	2500	67
CXRTMPN450	CXREZTMP450	T	1/2"	27/32"	50'	2500	77
CXRTMPN4100	-	T	1/2"	27/32"	100'	2500	106
- HIGH PRESSU	RE FOR GREASE AP	PLICATIO	NS	): 	50		
CXRPHP125	CXREZPHP125	P	1/4"	17/32"	25'	5000	48
CXRHPN150	CXREZHP150	HP	1/4"	17/32"	50'	5000	64
CXRTHPN150	CXREZTHP150	Т	1/4"	17/32"	50'	5000	74
CXRTHPN1100	CXREZTHP1100	Т	1/4"	17/32"	100'	5000	104
CXRPHP325	CXREZPHP325	P	3/8"	21/32"	25'	4000	49
CXRHPN350	CXREZHP350	HP	3/8"	21/32"	50'	4000	65
CXRTHPN350	CXREZTHP350	T	3/8"	21/32"	50'	4000	78











T Series features triple axle support with a full frame & Super Hub™

**Coxreels** 

## **Available Electrical Accessories**



## **Combo Air / Electric Spring Driven Reels**

Combo reels are perfect for applications that require pneumatic air and an electrical power feed with one mounting pattern. This unit allows for half the installation time needed to install two reels at one station. The single expanded 1/4" steel base provides stability and space efficiency.

- · Compact two reel assembly in one convenient mounting base
- · Brass NPT swivel inlet machined from solid
- · Each reel operates independently
- · Choice of electrical accessory

s	
CXRCL350516C	

Stock No.	Electric Cord			Air Hose			Hose & Cord	Weight
Stock No.	Accessory	AWG	Amps	Hose I.D.	Hose O.D.	PSI	Length Each	weight
CXRCL350516A	Single Industrial Receptacle	16	13	3/8"	21/32"	300	50	94
CXRCL350512B	Quad Industrial Receptacle	12	20	3/8"	21/32"	300	50	97
CXRCL350516C	Fluorescent Tube Light	16	0.3	3/8"	21/32"	300	50	94
CXRCL350516D	Fluorescent Angle Light	16	13	3/8"	21/32"	300	50	94
CXRCL350516E	Incandescent Cage Light	16	13	3/8"	21/32"	300	50	94
CXRCL350512F	G.F.C.I. Receptacle	12	20	3/8"	21/32"	300	50	96

## **Compact Spring Retractable Power Cord Reels**

Ground-breaking design sets a new bar as the ideal cord management solution capable of fulfilling any commercial or industrial application where space is limited. For indoor use.

- CoxComposite™ Hub that integrates a high strength composite with self lubricating bronze bearings
- CoxComposite<sup>™</sup> Grommet with continuous radius design that does not pinch or catch the cord during operation.
- · Choice of electrical accessory

Stock No.	Accessory	AWG	Amps	Cord Length, Feet	Weight
CXRPC103012A	Single Industrial Receptacle	12	20	30¹	17
CXRPC103012B	Quad Industrial Receptacle	12	20	30'	18
CXRPC103016C	Fluorescent Tube Light	16	0.3	30 <sup>1</sup>	15
CXRPC103016D	Fluorescent Angle Light	16	13	30¹	16
CXRPC103016E	Incandescent Cage Light	16	13	30 <sup>1</sup>	14
CXRPC103012F	G.F.C.I. Receptacle	12	20	30'	19
CXRPC103012X	No Accessory	12	20	30'	18
CXRPC103016X	No Accessory	16	13	30'	14



CoxComposite™ Hub



CoxComposite™ Grommet

## **Spring Retractable Power Cord Reels**

PC Series spring driven "Power Cord" reels are heavy duty, industrial grade power sources.

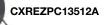
- Includes 5' pigtail & grounding plug
- Heavy gauge powder coated steel components cover for simple slip ring routine maintenance.
- · Choice of electrical accessory
- Choice of Standard or EZ-Coil® Models

Standard Stock No.	EZ-Coil® Stock No.	Accessory	AWG	Amps	Cord Length, Feet	Weight
CXRPC135012A	CXREZPC3512A	Single Industrial Receptacle	12	20	50'	40
CXRPC135012B	CXREZPC3512B	Quad Industrial Receptacle	12	20	50'	41
CXRPC135016C	CXREZPC3516C	Fluorescent Tube Light	16	0.3	50'	37
CXRPC135016D	CXREZPC3516D	Fluorescent Angle Light	16	13	50'	37
CXRPC13516D2	CXREZPC016D2	Dual Fluorescent Light	16	12	50'	37
CXRPC135012F	CXREZPC5012F	G.F.C.I. Receptacle	12	20	50'	42
CXRPC135012X	CXREZPC5012X	No Accessory	12	20	50'	40
CXRPC135016X	-	No Accessory	16	13	50'	36



CXRPC103012A







• Read safety precautions on pages W1 to W4

## **Equipto® Tire Racks / Mezzanines**





- Flexible and economical tire storage adjustable for all sizes of passenger car tires and rims
- Racks assemble quickly and adjust with a minimum number of tools
- Beams adjust up or down on 1- 1/2" centers
- Brackets furnished for use back-to-back or against the wall

## **Equipto® V-Grip Tire Racks**

Stock Number	Description	Dimensions
EQ80652M0B	2 Tier Mobile Tire Rack with Casters	18"D x 60"W x 67"H
EQ80652S	3 Tier Stationary Tire Rack Starter Section (2 ends)	15"D x 60"W x 84"H
EQ80652A	3 Tier Stationary Tire Rack Add-on Section (1 end)	15"D x 60"W x 84"H
EQ80632S	4 Tier Stationary Tire Rack Starter Section (2 ends)	15"D x 60"W x 120"H
EQ80632A	4 Tier Stationary Tire Rack Add-on Section (1 end)	15"D x 60"W x 120"H

## Need more space but don't want to add on?

Double or triple your space with EQUIPTO® pre-fabricated Mezzanine Platforms and Shelving Deck-over Systems! EQUIPTO Mezzanine Platforms and Shelving Deck-over Systems are made of rugged elevated floors, walkways and stairways which add valuable area where you need it, at a fraction of the cost of acquiring new buildings. Standard heights are available up to 12' high, with 20' lengths.

Custom designs and sizes are also available.







Snap-on Industrial can work with you to configure an EQUIPTO Mezzanine System that will suit your facility, your needs, and your budget. Call your Snap-on Industrial Representative for more information, or contact our Customer Service Center:

Snap-on Industrial Customer Service (North America)

USA: 877-740-1900 Fax: 877-740-1880

E-Mail: order@snapon.com

Monday - Friday 7:00 a.m. - 6:00 p.m. U.S. Central Time

Snap-on Government Customer Service (North America)

Worldwide: 888-418-5600 Fax: 888-418-5900

E-Mail: contract.sales@snapon.com

Monday - Friday 7:00 a.m. - 6:00 p.m. GMT-06:00



Our line-up of tools for facilities maintenance and construction offers rugged, superior application-based performance.

Snap-on Industrial offers a unique assortment of high-quality tools for construction and facilities maintenance. Whether you do your work at a factory, hospital, or school, on-site or off-site, Snap-on Industrial will work with you to improve worker productivity and safety. Specialized hand tools, material handling equipment, and industrial hydraulics all contribute to working faster and smarter.

## **WILLIAMS® TOOL STORAGE**

## **Job Site**

## **Job Site Boxes**

## Designed for the toughest outdoor work environments

-	•
Product Code	Description
JHW50950	32" Wide x 19" Deep x 17 1/2" High
JHW50951	42" Wide x 20" Deep x 23 1/2" High
JHW50952	48" Wide x 24" Deep x 27 1/2" High
JHW50953	48" Wide x 30" Deep x 33 1/2" High
JHW50949	6" x 2" Swivel Caster Set

- · Casters weight capacity is 3500 lbs
- Tough industrial powder coating finish
- Heavy 16 gauge steel construction
- Recessed and concealed locking area protects padlock for ultimate security against drills and bolt cutter
- Fully welded seams provide maximum strength
- Recessed side handles for easy transportation
- Reinforced overlapping lid provides protection from weather and forced entry
- Heavy duty industrial lid stays prevents accidental closure
- · Tread plate design for rugged durability
- 50954 available in black only, all others are blue



JHW50950



## **Job Site Boxes**

## Designed for the toughest outdoor work environments

Product Code	Description
JHW50954	48" Wide x 24" Deep x 28 3/8" High

- Tough industrial powder coating finish
- Super heavy gauge steel construction
- Recessed locking area protects contents
- Fully welded seams provide maximum strength
- Reinforced overlapping lid provides protection from weather and forced entry
- · Heavy duty industrial lid stays prevents accidental closure
- 4 way entry skid for easy handling



JHW50954







## **Hand Carry**

## 21" Four Tray Cantilever Toolbox

Product C	ode	Width (Inches)	Depth (Inches)	Height (Inches)	Cubic Inch Capacity
JHWTB-62	18A	21 1/4	8 3/4	12	1971

- Four trays cantilever outward when box is open providing access to the exceptionally deep box.
- . Two of the trays feature movable dividers and another has a protective cover to prevent small tools or parts from spilling into the box.
- Formed feet in the box bottom add to strength and keep the box away from wet, dirty surfaces.



**JHWTB-6218A** 

## 20" Hip Roof Toolbox

Product Code	Width (Inches)	Depth (Inches)	Height (Inches)	Cubic Inch Capacity
JHWTB-6220A	20	7	8	959

- Hip roof design for fitting bulky tools.
- Ideal for tradesman who carries bulky drills or 3/4 inch drive sets.
- · Extra large tote tray with deeper space between handle and tray bottom.
- Combination drawbolt and padlock eye provide security.



## 19" Flat Top Toolbox

Product Code	Width (Inches)	Depth (Inches)	Height (Inches)	Cubic Inch Capacity
JHWTB-6119A	19	6	6 1/2	741

- Ideal lor general use.
- · Steel tote tray keeps smaller Items handy.
- Combination drawbolt and padlock eye provide security.



## 16" Flat Top Toolbox with Trav

			,	
<b>Product Code</b>	Width (Inches)	Depth (Inches)	Height (Inches)	Cubic Inch Capacity
JHWTB6116	16	6	6 1/2	574

- · Ruggedly constructed hand lool box
- Three compartment tray with socket divider to keep small tools better organized and close al hand.
- Double drawbolts keep the lid lightly closed.
- · Padlock eye with slotted hasp provides security



JHWTB6116







- Do not use damaged tool
- Do not use with impact drivers

## **WILLIAMS® TOOL STORAGE**

## WILLIAMS

## **Hand Carry**

## 26" Flat Top Toolbox

Product Code	Width	Depth	Height	Cubic Inch
	(Inches)	(Inches)	(Inches)	Capacity
JHWTB-6124A	26	8 3/4	9	1980

- Ruggedly constructed hand tool box.
- Extra long tools up to 25" fit neatly inside.
- Three compartment tray with socket divider to keep small tools better organized and close at hand.
- Double drawbolts keep the lid tightly closed.
- Padlock eye with slotted hasp provides security.



## 21" Flat Top Toolbox

Produc	t Code	Width (Inches)	Depth (Inches)	Height (Inches)	Cubic Inch Capacity
JHWT	B6121	21 1/4	8 3/4	12	1613

- Ruggedly constructed hand lool box
- Three compartment tray with socket divider to keep small tools better organized and close al hand.
- Double drawbolts keep the lid lightly closed.
- · Padlock eye with slotted hasp provides security



## 21" Flat Top Toolbox

<b>Product Code</b>	Width	Depth	Height	Cubic Inch
	(Inches)	(Inches)	(Inches)	Capacity
JHWTB-6123	21	8 3/4	12	1606

- Ideal lor general use
- Steel tote tray keeps smaller Items handy
- · Combination drawbolt and padlock eye provide security





## Work Bench/Toolbox/Tote Bags

## **Work Bench**

## **Heavy duty steel construction**

,,				
<b>Product Code</b>	Description	Width (Inches)	Depth (Inches)	Height (Inches)
JHW50921	71-3/4" Professional Workbench	71-3/4"	25-3/4"	34-13/16"
JHW50920	71-3/4" Professional Workbench with Pegboard	71-3/4"	26-11/16"	58-7/8"
JHW50922	57-1/4" Professional Workbench	57-1/4"	25-3/4"	34-7/8"
JHW50923	45-1/4" Professional Workbench	45-1/4"	25-3/4"	34-7/8"
JHW50924	36" Professional Workbench	36"	25-3/4"	34-7/8"



## **Features**

- Heavy duty steel construction
- High gloss powder coat scratch resistant paint
- · Back and side roll-off panel prevents tools and hardware from rolling off the bench



JHWTB103

## **Metal Socket Set Toolboxes**

## Rugged storage for Williams' premium socket sets

raggou otorago for rimamo promium oconot octo				
Product Code	Length (Inches)	Width (Inches)	Height (Inches)	
JHWTB-101	10	7	1 1/2	
JHWTB-102	13	9	1 3/4	
JHWTB103	18	8	2	
JHWTB-104	25	9	2	
JHWTB-12	30 1/4	11 1/2	4 3/4	
JHWTB-35	14 1/2	5 1/2	1 3/4	
JHWTB-49	24 7/8	8 1/8	3 7/8	

- · Ruggedly constructed for long life.
- · Ideal for storing socket sets, other tools, and small parts.



## **Tool Tote Bags**

Product Code	Length	Width	Height
	(Inches)	(Inches)	(Inches)
JHWTOTEBAG	14	11	10

- · Constructed from heavy Cordura® for maximum durability.
- Ideal for storing and toting tools, parts, and supplies.
- · Heavy duty zippers for extra long life.





## **WILLIAMS® TOOL STORAGE**

## WILLIAMS

## **Double Open End**

## 15°-60° Double Open End Angle-Head Wrenches Chrome Satin Finish, SAE

		Α	В	С
Product Code	Size (Inches)	Head Diameter	Head Thickness	Overall Length (Inches)
JHW3712	3/8	25/32	7/32	43/4
JHW3714	7/16	7/8	7/32	5
JHW3716	1/2	1	7/32	5 ½
JHW3718	9/16	1 1/8	1/4	6
JHW3720	5/8	<b>1</b> ¾16	9/32	6 1/4
JHW3722	11/16	1 5/16	9/32	7
JHW3724	3/4	<b>1</b> ½16	9/32	7 1/4
JHW3726	<sup>13</sup> / <sub>16</sub>	<b>1</b> 19/32	9/32	7 ½
JHW3728	7∕8	<b>1</b> <sup>21</sup> / <sub>32</sub>	9/32	8 1/4
JHW3732	1	<b>1</b> 15/16	5/16	9 ¾
JHW3734	<b>1</b> ½16	2 1/16	5/16	10
JHW3736	1 1/8	2 1/4	5/16	11
JHW3740	11/4	2 %	11/32	11 ½
JHW3744	1 3/8	2 11/16	13/32	12 ½
JHW3746	<b>1</b> ½16	<b>2</b> <sup>11</sup> / <sub>16</sub>	13/32	12 ½
JHW3748	1 ½	2 11/16	13/32	12 ½
JHW3752	1 %	3 13/64	15/32	15 ¾
JHW3754	<b>1</b> 11/16	3 11/32	1/2	16 ½
JHW3756	1 3/4	3 1/16	17/32	17
JHW3758	<b>1</b> <sup>13</sup> / <sub>16</sub>	3 %16	17/32	17 ¾
JHW3760	<b>1</b> 1/8	3 11/16	9/16	18 ½
JHW3764	2	3 15/16	19/32	19 1/4

Fed. Spec. ANSI B107.39 Type 2 Class 3

## JHW3780 5 Piece Double Open End Wrench Set, SAE, in Roll Pouch

## **Contents Include:**

Product Code	Size (Inches)	Product Code	Size (Inches)
JHW3712	3/8	JHW3718	9/16
JHW3714	7/16	JHW3720	5/8
JHW3716	1/2		

## JHW3782 10 Piece Double Open End Wrench Set, SAE, in Roll Pouch

## **Contents Include:**

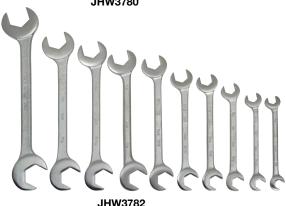
Product Code	Size (Inches)	Product Code	Size (Inches)
JHW3712	3/8	JHW3722	11/16
JHW3714	7/16	JHW3724	3/4
JHW3716	1/2	JHW3726	13/16
JHW3718	9/16	JHW3728	7/8
JHW3720	5/8	JHW3732	1

 Wrench heads are offset at 15° and 60° to the handle

- Made in U.S.A.
- Both ends are the same size to permit the wrench to be used in four different positions
- 45° chamfer on wrench ends allow easy placement of wrench on the fastener
- Continuous arc design minimizes spreading and is stronger than "V" design
- Thin head is perfect for tight clearances
- · Satin chrome finish provides good grip and cleans easily









**Service** 

## 30° Service Wrenches, Metric **Satin Chrome Finish, Metric**



Product Code	Size (Inches)	Overall Length (Inches)	Head Diameter	Head Thickness
JHW3519M	19	6 1/4	1 11/16	1/4
JHW3521M	21	6 1/4	1 11/16	1/4
JHW3522M	22	6 1/4	1 11/16	1/4
JHW3524M	24	67/8	1 1/8	1/4
JHW3527M	27	67/8	1 1/8	1/4
JHW3530M	30	7	2 1/16	1/4
JHW3532M	32	7	2 1/16	1/4
JHW3536M	36	7 %	2 1/2	9/32
JHW3537M	37	7 %	2 1/2	9/32
JHW3538M	38	7 %	2 1/2	9/32
JHW3540M	40	7 %	2 %	9/32
JHW3541M	41	7 %	2 %	9/32
JHW3542M	42	7 %	2 %	9/32
JHW3544M	44	7 %	2 1/8	9/32
JHW3546M	46	8 1/2	3 1/8	5/16
JHW3548M	48	8 1/2	3 1/8	5/16
JHW3550M	50	8 1/2	3 1/8	5/16
JHW3552M	52	8 1/2	3 ½	5/16
JHW3555M	55	8 1/2	3 ½	5/16
JHW3560M	60	9 1/2	3 1/2	5/16
JHW3565M	65	9 1/2	3 ½	5/16

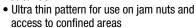
Fed. Spec: GGG-W-636E Type 17 Class 3

## JHWMWS-3510 10 Piece Service Wrench Set, MM in Roll Pouch - R11

## **Contents Include:**

Contonts molador						
Product Code	Size (MM)	Product Code	Size (MM)			
JHW3519M	19	JHW3530M	30			
JHW3521M	21	JHW3532M	32			
JHW3522M	22	JHW3536M	36			
JHW3524M	24	JHW3538M	38			
JHW3527M	27	JHW3540M	40			

## **Features**





· Satin chrome finish



## 30° Service Wrenches, SAE Satin Chrome Finish, SAE



Product Code	Size (Inches)	Overall Length (Inches)	Head Diameter	Head Thickness
JHW3524	3/4	6 1/4	1 11/16	1/4
JHW3526	13/16	6 1/4	1 11/16	1/4
JHW3528	7/8	6 1/4	1 11/16	1/4
JHW3530	15/16	6 1/8	1 1/8	1/4
JHW3532	1	6 1/8	1 1/8	1/4
JHW3534	1 1/16	6 1/8	1 1/8	1/4
JHW3536	1 1/8	7	2 1/16	1/4
JHW3538	1 <sup>3</sup> / <sub>16</sub>	7	2 1/16	1/4
JHW3540	1 1/4	7	2 1/16	1/4
JHW3542	1 5/16	7 1/8	2 ½	9/32
JHW3544	1 3/8	7 1/8	21/2	9/32
JHW3546	1 1/16	7 1/8	2 1/2	9/32
JHW3548	1 ½	7 1/8	2 1/2	9/32
JHW3550	1 %16	7 1/8	2 %	9/32
JHW3552	1 %	7 5/8	2 %	9/32
JHW3554	1 11/16	7 1/8	2 1/8	9/32
JHW3556	1 3/4	8 1/2	3 1/8	5/16
JHW3558	1 <sup>13</sup> / <sub>16</sub>	8 1/2	3 1/8	5/16
JHW3560	1 1/8	8 1/2	3 1/8	5/16
JHW3562	1 <sup>15</sup> / <sub>16</sub>	8 1/2	3 1/8	5/16
JHW3564	2	8 1/2	3 1/2	5/16
JHW3568	2 1/8	8 1/2	3 ½	5/16
JHW3572	2 1/4	8 1/2	3 ½	5/16
JHW3576	2 ¾	9 1/2	3 1/2	5/16

Fed. Spec: GGG-W-636E Type 17 Class 3

## JHWWS-3510 10 Piece Service Wrench Set, **SAE in Roll Pouch - R11**

## **Contents Include:**

Product Code	Size (MM)	Product Code	Size (MM)	
JHW3524	3/4	JHW3534	1 1/16	
JHW3526	13/16	JHW3536	1 1/8	
JHW3528	7/8	JHW3538	1 3/16	
JHW3530	15/16	JHW3540	1 1/4	
JHW3532	1	JHW3544	1 3/8	

· Ultra thin pattern for use on jam nuts and access to confined areas



- 30° offset head
- · Satin chrome finish

JHW3537M





**JHWMWS-3510** JHWWS-3510



N103

## WILLIAMS® WRENCHES

## **High-Visibility Combination**

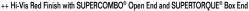
## **SUPERCOMBO® Combination Wrenches**

## High Visibility Red Finish, 12 Point, SAE





		Α	В	С	D	E
Product Code	Size (Inches)	Overall Length (Inches)	Open End Width (Inches)	Open End Thickness (Inches)	Box End Diameter (Inches)	Box End Thickness (Inches)
JHW1212RSC ++	3/8	6 1/2	<sup>13</sup> /16	<sup>3</sup> /16	<sup>9</sup> /16	1/4
JHW1214RSC ++	<sup>7</sup> / <sub>16</sub>	7 1/4	<sup>15</sup> /16	7/32	11/16	9/32
JHW1216RSC ++	1/2	8	1 1/16	1/4	3/4	11/32
JHW1218RSC ++	<sup>9</sup> /16	8 ¾	1 1/4	1/4	7/8	3/8
JHW1220RSC ++	5/8	9 1/2	1 3/8	9/32	<sup>15</sup> /16	13/32
JHW1222RSC ++	11/16	10 1/4	1 1/2	5/16	1 1/32	<sup>7</sup> / <sub>16</sub>
JHW1224RSC ++	3/4	11	1 1/8	<sup>5</sup> ∕16	1 1/8	1/2
JHW1226RSC ++	<sup>13</sup> /16	11 3/4	1 3/4	3/8	1 7/32	17/32
JHW1228RSC ++	7/8	12 ½	1 1/8	13/32	1 5/16	<sup>9</sup> /16
JHW1230RSC ++	<sup>15</sup> /16	13 1/4	2	<sup>7</sup> /16	1 3/8	19/32
JHW1232RSC ++	1	14	<b>2</b> 1/8	15/32	1 15/32	5/8
JHW1234RSC ++	1 1/16	14 3/4	2 1/4	1/2	1 %16	21/32
JHW1236RSC ++	1 ½	15 1/2	2 <sup>13</sup> / <sub>32</sub>	17/32	1 <sup>21</sup> /32	11/16
JHW1240RSC ++	1 1/4	17	<b>2</b> <sup>21</sup> / <sub>32</sub>	<sup>9</sup> ⁄16	1 <sup>13</sup> /16	3/4



Fed. Spec.: ANSI B107.6



## **Contents Include:**

Product Code	Size (Inches)	Product Code	Size (Inches)	Product Code	Size (Inches)
JHW1212RSC	3/8	JHW1218RSC	%16	JHW1224RSC	3/4
JHW1214RSC	7/16	JHW1220RSC	5/8	Roll Pouch	
JHW1216RSC	1/2	JHW1222RSC	11/16		

## JHWWS1171RSC 11 Piece Hi-Vis Red Combination Wrench Set, 12 Point, SAE, in Roll Pouch – R-41

## **Contents Include:**

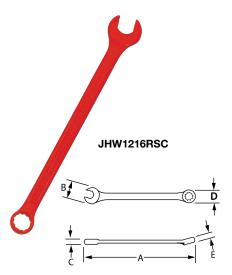
Product Code	Size (Inches)	Product Code	Size (Inches)	Product Code	Size (Inches)
JHW1212RSC	3/8	JHW1220RSC	5/8	JHW1228RSC	7/8
JHW1214RSC	7/16	JHW1222RSC	11/16	JHW1230RSC	<sup>15</sup> ⁄16
JHW1216RSC	1/2	JHW1224RSC	3/4	JHW1232RSC	1
JHW1218RSC	<sup>9</sup> /16	JHW1226RSC	<sup>13</sup> /16	Roll Pouch	

## JHWWS1172RSC 14 Piece Hi-Vis Red Combination Wrench Set, 12 Point, SAE. in Roll Pouch - R-37

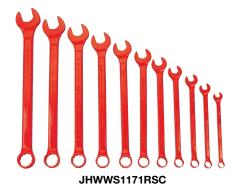
## **Contents Include:**

Product Code	Size (Inches)	Product Code	Size (Inches)	Product Code	Size (Inches)
JHW1212RSC	3/8	JHW1222RSC	11/16	JHW1232RSC	1
JHW1214RSC	<sup>7</sup> ⁄16	JHW1224RSC	3/4	JHW1234RSC	11/16
JHW1216RSC	1/2	JHW1226RSC	<sup>13</sup> /16	JHW1236RSC	11/8
JHW1218RSC	<sup>9</sup> /16	JHW1228RSC	7/8	JHW1240RSC	11/4
JHW1220RSC	5/8	JHW1230RSC	<sup>15</sup> /16	Roll Pouch	

- \* USA
- SUPERCOMBO® open end has specially designed grooves that direct wrench force away from fastener corners.
- SUPERTORQUE® box opening design allows application of higher torque without rounding or deforming hex fastener points. No contact is made at the corners. Instead, wrenching forces are placed on the flat surfaces behind the points.
- Meets or exceeds aerospace specification AS 954 for 12 point fasteners (as defined by AS 870) to provide accurate torque/tension relationship for precision application.
- May be used on all common hex (6 point) fasteners with considerable advantage over conventional box end wrenches to increase both hand tool flexibility and economy.
- Box and open end openings are identical.











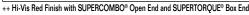
## **SUPERCOMBO® Combination Wrenches**





\* USA

## High Visibility Yellow Finish, 12 Point, SAE **Overall** Open End Open End **Box End Box End Product Code** Size (Inches) Length Thicknes (Inches) (Inches) (Inches) (Inches) (Inches) JHW1212YSC ++ <sup>13</sup>/16 6 1/2 JHW1214YSC ++ 7 1/4 <sup>15</sup>/16 11/16 7/16 7/32 9/32 JHW1216YSC ++ 1/4 3/4 1/2 8 1 1/16 11/32 JHW1218YSC ++ 1/4 <u>%16</u> 8 3/4 1 1/4 7/8 13/32 1 3/8 <sup>15</sup>/16 JHW1220YSC ++ 5/8 9 1/2 <sup>9</sup>/32 JHW1222YSC ++ <sup>11</sup>/16 10 1/4 1 1/2 5∕16 1 1/32 <sup>7</sup>/16 JHW1224YSC ++ 3/4 1 % 5∕16 1 1/8 1/2 11 <sup>13</sup>/16 17/32 3/4 JHW1226YSC ++ 11 3/4 <u>3⁄8</u> 1 <sup>7</sup>/32 JHW1228YSC ++ 7/8 12 1/2 1 1/8 13/32 1 5/16 <sup>9</sup>/16 JHW1230YSC ++ <sup>15</sup>/16 13 1/4 2 7/<sub>16</sub> 1 % 19/32 JHW1232YSC ++ 14 2 1/8 15/32 1 15/32 5∕8 1 %16 JHW1234YSC ++ 21/32 1 1/16 14 3/4 2 1/4 1/2 JHW1236YSC ++ 1 1/8 15 1/2 2 13/32 17/32 1 21/32 11/16 JHW1240YSC ++ 1 1/4 17 2 21/32 <sup>9</sup>/16 1 13/16 3/4



Fed. Spec.: ANSI B107.6

## JHWWS1170YSC 7 Piece Hi-Vis Yellow Combination Wrench Set, 12 Point. SAE, in Roll Pouch – R-42

## Contents Include:

Product Code	Size (Inches)	Product Code	Size (Inches)	Product Code	Size (Inches)
JHW1212YSC	3/8	JHW1218YSC	<sup>9</sup> /16	JHW1224YSC	3/4
JHW1214YSC	<sup>7</sup> /16	JHW1220YSC	5/8	Roll Pouch	
JHW1216YSC	1/2	JHW1222YSC	11/16		

## JHWWS1171YSC 11 Piece Hi-Vis Yellow Combination Wrench Set, 12 Point, SAE, in Roll Pouch – R-41

## **Contents Include:**

Product Code	Size (Inches)	Product Code	Size (Inches)	Product Code	Size (Inches)
JHW1212YSC	3/8 7/	JHW1220YSC	5% 117	JHW1228YSC	7/8 15/
JHW1214YSC JHW1216YSC	<sup>7</sup> /16 1/2	JHW1222YSC JHW1224YSC	11/16 3/4	JHW1230YSC JHW1232YSC	15/16 1
JHW1218YSC	<sup>9</sup> /16	JHW1226YSC	<sup>13</sup> /16	Roll Pouch	

## JHWWS1172YSC 14 Piece Hi-Vis Yellow Combination Wrench Set, 12 Point, SAE, in Roll Pouch – R-37

## **Contents Include:**

Product Code	Size (Inches)	Product Code	Size (Inches)	Product Code	Size (Inches)
JHW1212YSC	3/8	JHW1222YSC	11/16	JHW1232YSC	1
JHW1214YSC	7/16	JHW1224YSC	3/4	JHW1234YSC	11/16
JHW1216YSC	1/2	JHW1226YSC	<sup>13</sup> /16	JHW1236YSC	11/8
JHW1218YSC	<sup>9</sup> /16	JHW1228YSC	7/8	JHW1240YSC	11/4
JHW1220YSC	5/8	JHW1230YSC	<sup>15</sup> ⁄16	Roll Pouch	

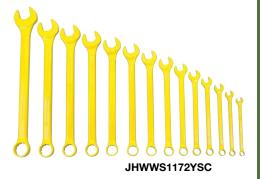
- SUPERCOMBO® open end has specially designed grooves that direct wrench force away from fastener corners.
- SUPERTORQUE® box opening design allows application of higher torque without rounding or deforming hex fastener points. No contact is made at the corners. Instead, wrenching forces are placed on the flat surfaces behind the points.
- Meets or exceeds aerospace specification AS 954 for 12 point fasteners (as defined by AS 870) to provide accurate torque/tension relationship for precision application.
- May be used on all common hex (6 point) fasteners with considerable advantage over conventional box end wrenches to increase both hand tool flexibility and economy.
- Box and open end openings are identical.







JHWWS1171YSC





## WILLIAMS® WRENCHES

## **Double Open End**

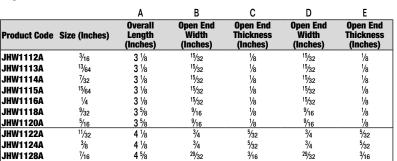
## Miniature 15° x 75° Double Head Open End Wrenches

High Polish Chrome Finish, SAE

1/2

<sup>9</sup>/16

5/8



<sup>29</sup>/32

1 1/8

1 1/8

3/16

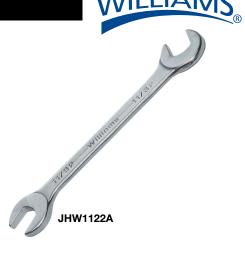
3/16

3/16

3∕16

<sup>3</sup>/16

3/16



## JHWWS-1113CA 10 Piece Mini Open End Wrench & Plier Set, SAE, in Roll Pouch – R-36

<sup>29</sup>/<sub>32</sub>

1 1/8

1 1/8

4 1/16

5 <sup>3</sup>/<sub>32</sub>

5 1/16

## **Contents Include:**

JHW1132A

JHW1136A

JHW1140A

<b>Product Code</b>	Size (Inches)	<b>Product Code</b>	Size (Inches)	Product Code	Size (Inches)
JHW1112A	<sup>3</sup> /16	JHW1116A	1/4	JHW1124A	3/8
JHW1113A	<sup>13</sup> / <sub>64</sub>	JHW1118A	9/32	JHWPL-1519CA	5" SUPERJOINT® Utility Pliers
JHW1114A	7/32	JHW1120A	5∕16		·
JHW1115A	15/64	JHW1122A	11/32		

## JHWWS-1142PCA 14 Piece Mini Open End Wrench & Plier Set, SAE, in Roll Pouch – R-20

## **Contents Include:**

<b>Product Code</b>	Size (Inches)	Product Code	Size (Inches)	Product Code	Size (Inches)
JHW1112A	<sup>3</sup> / <sub>16</sub>	JHW1118A	9/32	JHW1132A	1/2
JHW1113A	13/64	JHW1120A	<sup>5</sup> ∕16	JHW1136A	<del>%</del> 16
JHW1114A	7/32	JHW1122A	11/32	JHW1140A	5/8
JHW1115A	15/64	JHW1124A	3/8	JHWPL-1519CA	5" SUPERJOINT® Utility Pliers
JHW1116A	1/4	JHW1128A	7/16		·

- Excellent for fast turning of fasteners in limited clearance areas.
- Each wrench has the same size opening at both ends.
- 15° x 75° angled wrench openings permit maximum versatility in tight areas.



JHWWS-1113CA



\* USA



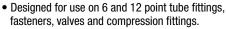
#### **Flare Nut**

#### **Ratcheting Flare Nut Wrenches Black Industrial Finish, 12 Point, SAE**





Product Code	Size (Inches)	Overall Length (Inches)	Head Diameter (Inches)	Head Thickness (Inches)
JHWRFW-12	3/8	5 3/8	1	<sup>5</sup> /16
JHWRFW-14	7/16	5 %	1	5/16
JHWRFW-16	1/2	5 %	1	5/16
JHWRFW-18	<sup>9</sup> /16	7 1/4	1 1/32	3/8
JHWRFW-20	5/8	7 1/4	1 1/32	3/8
JHWRFW-22	11/16	7 1/4	1 1/32	3/8
JHWRFW-24	3/4	7 1/4	1 1/32	3/8
JHWRFW-26	<sup>13</sup> /16	9 5/16	1 <sup>5</sup> /8	1/2
JHWRFW-28	7/8	9 5/16	1 5/8	1/2
JHWRFW-30	<sup>15</sup> /16	9 5/16	1 5/8	1/2
JHWRFW-32	1	9 5/16	1 <sup>5</sup> /8	1/2





- Unique design requires only 30° rotation for ratcheting action.
- High carbon steel jaws snap open, then close around fastener with 6 point contact.
- Prevents distortion of thin-walled fitting.
- Allow easy access to tight locations.



#### **Double Head Flare Nut Wrenches** Chrome Satin Finish, 6 Point, SAE





		Α	В	С	D	E
Product Code	Size (Inches)	Overall Length (Inches)	Open End Dia (Inches)	Open End Thickness (Inches)	Open End Dia (Inches)	Open End Thickness (Inches)
JHWXFN-0810	1⁄4 x 5∕16	4 27/32	19/32	1/4	5/8	9/32
JHWXFN-1214	3⁄8 <b>x</b> <sup>7</sup> ∕16	5 <sup>13</sup> /16	25/32	5/16	27/32	11/32
JHWXFN-1618	½ <b>x</b> %16	6 13/16	15/16	3/8	1	13/32
JHWXFN-2022	5⁄8 <b>x</b> 11∕16	7 3/4	1 3/32	7/16	3/16	15/32
JHWXFN-2432	3/4 x 1	9 1/2	1 1/4	1/2	19/32	5/8
JHWXFN-2836	7/8 <b>x 1</b> 1/8	10.5	1 7/16	9/16	1 3/4	11/16





Made in U.S.A.

Fed. Spec.: ANSI B10	7.6					
JHWWS-14 Roll Pouch -		ouble Head	d Flare Nut	Wrench S	et, 6 Point	, SAE, in

Contents Include:						
Product Code	Size (Inches)	Product Code	Size (Inches)	Product Code	Size (Inches)	
JHWXFN-1214 JHWXFN-1618	3/8 X <sup>7</sup> /16	JHWXFN-2022 JHWYFN-2432	5/8 X <sup>11</sup> /16 3/4 <b>x 1</b>	JHWXFN-2836	½ x 1 ⅓	

- · Will not mar fittings on pipes and tubing.
- Satin chrome textured finish provides great feel and extra gripping power.
- Recessed corners in ends provide extra turning power.



JHWXFN-1618



JHWWS-14





# WILLIAMS® WRENCHES

#### **Adjustable**

#### Adjustable Wrench **Chrome Finish**



Product Code	Length (Inches)	Maximum Jaw Opening (Inches)	Head Thickness (Inches)
JHWAP-4A	4	1/2	11/32
JHWAP-6A	6	3/4	7/16
JHWAP-8A	8	1	1/2
JHWAP-10A	10	1 11/64	<sup>39</sup> / <sub>64</sub>
JHWAP-12A	12	1 5/16	<sup>23</sup> / <sub>32</sub>
JHWAP-15A	15	1 11/16	51/64
JHWAP-18A	18	2 1/16	57/64
JHWAP-24A	24	2 1/16	1 %4

- Chrome plated finish allows for easy cleaning after each use.
- Serrated knurl is designed for quick and smooth adjustments.
- I-Beam designed handle provides strength and durability.
- Inch (SAE) scale is laser-etched on head face for easy determination of bolt head width.



#### Adjustable Wrench Black Finish



\* AUSA

Product Code	Length (Inches)	Maximum Jaw Opening (Inches)	Head Thickness (Inches)			
JHWAB-4A	4	1/2	11/32			
JHWAB-6A	6	3/4	7/16			
JHWAB-8A	8	1	1/2			
JHWAB-10A	10	1 11/64	<sup>39</sup> / <sub>64</sub>			
JHWAB-12A	12	1 5/16	<sup>23</sup> / <sub>32</sub>			
JHWAB-15A	15	1 11/16	51/64			
JHWAB-18A	18	2 1/16	57/64			
JHWAB-24A	24	2 7/16	1 %4			



- Drop forged, heat treated industrial finish with satin finish handles for firm safe grip.
- Inch (SAE) scale is laser-etched on head face for easy determination of bolt head width.



#### **Adjustable Wrench Comfort Grip**



Product Code	Length (Inches)	Maximum Jaw Opening (Inches)	Head Thickness (Inches)
JHWAPC-6A	4	3/4	7/8
JHWAPC-8A	6	1	1/2
JHWAPC-10A	10	1 11/64	39/64
JHWAPC-12A	12	1 %	<sup>23</sup> / <sub>32</sub>

- Comfort thermoplastic grips cushion the handle surface and stay comfortable even in extreme temperatures.
- Chrome plated finish allows for easy cleaning.
- Serrated knurl is designed for quick and smooth adjustments.
- I-Beam designed handle provides strength and durability.
- Inch (SAE) scale is laser-etched on head face for easy determination of bolt head width.



JHWAB-10A





**Adjustable** 

# Adjustable Wrenches Heavy Duty Industrial Grade Adjustable Wrenches

Product Code	Length (Inches)	Maximum Jaw Opening (Inches)	Head Thickness (Inches)
Chrome Finish:			
JHW13404	4	1/2	11/32
JHW13406	6	15/16	7/16
JHW13408	8	1 3/16	1/2
JHW13410	10	1 3/8	5/8
JHW13412	12	1 5/8	23/32
JHW13415	15	1 25/32	<sup>15</sup> /16
JHW13418	18	2 3/16	1 1/32
JHW13424	24	2 7/16	1 1/8
Black Phosphat	e Finish:		
JHW13604	4	1/2	11/32
JHW13606	6	15/16	7/16
JHW13608	8	1 3/16	1/2
JHW13610	10	1 3/8	5/8
JHW13612	12	1 5/8	23/32
JHW13615	15	1 25/32	<sup>15</sup> /16
JHW13618	18	2 <sup>3</sup> /16	1 1/32
JHW13624	24	2 7/16	1 1/8

Fed. Spec.: ANSI B107.8M

#### JHW13342 4 Piece Chrome Adjustable Wrench Set, in Vinyl Pouch - 50005

#### **Contents Include:**

Product Code	Size (Inches)	Product Code	Size (Inches)
JHW13406	6	JHW13410	10
JHW13408	8	JHW13412	12

#### JHW13642 4 Piece Black Adjustable Wrench Set, in Vinyl Pouch - 50005

#### **Contents Include:**

Product Code	Size (Inches)	Product Code	Size (Inches)
JHW13606	6	JHW13610	10
JHW13608	8	IHW13612	12

- Measurement scale on head conveniently shows fastener size.
- Chrome wrenches are fully polished for easy clean-up.
- Exceed ANSI specifications for strength.
- Precision hardened and anti-corrosion treated.





JHW13642

# WILLIAMS® WRENCHES

#### Construction

#### **Adjustable Construction Wrench**

#### **Heavy-Duty With Polished Head and Measurement Scales**

Product Code	Length	Maximum Jaw	Head Thickness	
	(Inches)	Opening (Inches)	(Inches)	
JHW13625	16	1 ½	<sup>23</sup> / <sub>32</sub>	

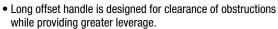
- Tapered spud handle locates and aligns bolts and rivets.
- Hole in handle permits tethering wrench for safety.
- Measurement scale on head conveniently shows fastener size.
- · Economical black phosphate finish resists rust.



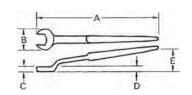
# Single Head Open End Offset Structural Wrenches Industrial Black Finish, SAE



		Α	В	С	D
Product Code	Size (Inches)	Overall Length (Inches)	Open End Width (Inches)	Open End Thickness (Inches)	Handle Offset (Inches)
JHW1904A	3/4	11 %16	1 19/32	15/32	7/8
JHW1905	7/8	14 5/16	2	<sup>9</sup> /16	1
JHW1906	<sup>15</sup> /16	14 <sup>3</sup> ⁄16	1 <sup>31</sup> /32	19/32	1
JHW1906B	1	14 1/4	2	19/32	1
JHW1907	1 1/16	16 <sup>13</sup> /16	<b>2</b> 5/32	5/8	1 1/8
JHW1907A	11/8	16 <sup>13</sup> /16	2 1/4	5/8	1 1/8
JHW1908	1 1/4	17 <sup>11</sup> /16	2 <sup>23</sup> / <sub>32</sub>	11/16	1 1/4
JHW1908A	1 5/16	18 ¾	2 <sup>13</sup> /16	23/32	1 1/4
JHW1909	1 7/16	19 ¾	3 5/32	<sup>25</sup> /32	1 1/4
JHW1909A	1 ½	19 %	3 5/32	<sup>25</sup> /32	1 ½
JHW1910	1 1/8	21 1/16	3 1/32	7/8	1 ½
JHW1911	1 <sup>13</sup> /16	23	3 3/4	1 3/4	1 1/8
JHW1911A	1 1/8	<b>22</b> <sup>13</sup> /16	3 <sup>25</sup> / <sub>32</sub>	31/32	1 1/8
JHW1912	2	23 ¾	4 7/32	31/32	1 1/8







JHW1906B

Tapered spud handle locates and aligns bolt and rivet holes.

# Single Head Open End Construction Wrenches Industrial Black Finish, SAE



		A	D	C
Product Code	Size (Inches)	Overall Length (Inches)	Open End Width (Inches)	Open End Thickness (Inches)
JHW204A	3/4	12	1 23/32	15/32
JHW205	7/8	14 1/4	2 1/16	19/32
JHW206	<sup>15</sup> /16	14 3/4	2 1/8	19/32
JHW206B	1	13 1/8	2 <sup>3</sup> / <sub>32</sub>	1/2
JHW207	1 1/16	16 %16	2 1/16	21/32
JHW207A	1 1/8	17	2 %16	11/16
JHWQ-208	1 1/4	18 <sup>15</sup> /16	2 <sup>23</sup> / <sub>32</sub>	23/32
JHW208A	1 5/16	19	<b>2</b> <sup>27</sup> / <sub>32</sub>	3/4
JHW209	1 7/16	21 1/8	3 %	<sup>27</sup> / <sub>32</sub>
JHW209A	1 ½	18 3/4	2 3/4	<sup>13</sup> /16
JHWQ-210	1 %	22 11/16	3 <sup>21</sup> / <sub>32</sub>	7/8
JHW211	1 13/16	25	4 1/2	1 1/32
JHW211A	1 1/8	25 1/8	4 %16	1 1/16

- 15° open end provides two gripping angles when wrench is turned over.
- Tapered spud handle locates and aligns bolt and rivet holes.





#### **Structural Box**

# Offset Structural Box Wrenches Industrial Black Finish, SAE



		Α	В	С
Product Code	Size (Inches)	Overall Length (Inches)	Head Diameter (Inches)	Offset at End
JHW8905A	13/16	12	1 15/32	1 25/32
JHW8905	7∕8	12	1 15/32	1 <sup>25</sup> / <sub>32</sub>
JHW8906	15/16	12	1 1/8	1 61/64
JHW8906B	1	12	1 1/8	1 <sup>61</sup> / <sub>64</sub>
JHW8907	1 1/16	15	1 <sup>53</sup> / <sub>64</sub>	2 %4
JHW8907A	1 1/8	15	1 <sup>53</sup> / <sub>64</sub>	2 %4
JHW8908	1 1/4	17	2 5/64	2 <sup>21</sup> / <sub>64</sub>
JHW8908A	<b>1</b> 5/16	17	2 5/64	2 <sup>21</sup> / <sub>64</sub>
JHW8909	1 7/16	21	<b>2</b> %	2 ¾
JHW8909A	1 ½	21	2 %	2 3/4
JHW8910	1 %	22	2 %	2 1/8
JHW8910A	1 11/16	22	2 1/8	2 1/8
JHW8911	1 13/16	23	2 29/32	3
JHW8911A	1 1/8	23	2 29/32	3
JHW8912	2	24 1/2	3 5/32	3 5/32
JHW8913	2 3/16	26	3 15/32	3 1/2
JHW8914	2 3/8	28	3 23/32	3 11/16
JHW8915	2 1/16	30	3 29/32	3 <sup>13</sup> / <sub>16</sub>
JHW8916	2 3/4	30	4 1/32	3 <sup>29</sup> / <sub>32</sub>
ad Case CCC W 62	SE Time O Class 2	·	·	



Fed. Spec: GGG-W-636E Type 9 Class 2

- Offset from handle to permit clearance of obstructions
- Handles are tapered for insertion into bolt holes
- Industrial Black Finish



#### **Scaffolding Ratchet**

- 1/2" Drive with pinned 7/8" 6-point socket
- 36 tooth gear with 10 degree of engagement allows engagement in tight working areas
- Bronze hammer head reduces rebound
- Prybar handle provide alignment option
- Socket feature provide alignment option
- Socket feature SUPERTORQUE lobular opening for greater turning power without deforming the fastener
- Easy access reversing lever allows user to change working direction quickly and easily with only one hand
- · Tethering device attached to handle

Product Code	Description	
JHWBS-63B	Scaffolding Ratchet	
JHWBS-63BBAR	Replacement Pry Bar	
JHWBS-63BRK	Ratchet Repair Kit	
JHWBS-63BTIP	Replacement Hammer Tip	



#### **Square and Hex Drive Ratchet**

- Length 5"
- Drives 1/4" Drive Sockets & 1/4" Hex Bits



JHW30012



N111

# WILLIAMS® SOCKETS AND DRIVE TOOLS

#### 3/4" Drive



# 20 Piece 3/4" Drive Socket-Lok® Tool Set 12 Point SAE, with Metal Box





Product Code	Description
JHW33901	20 Piece Tool Set with 50081 Metal Tool Box
JHW50081	Replacement Case Only for Set 33901

#### **Contents Include:**

3/4" Drive Tools:		3/4" Drive Shallow 12-Point Sockets	
<b>Product Code</b>	Description	Product Code	Size (Inches)
JHW33001	20" Socket-Lok® Ratchet	JHW33238	1 3/16
JHW33006	18" Sliding T-Handle	JHW33240	1 1/4
JHW33002	4" Extension	JHW33242	1 1/16
JHW33003	8" Extension	JHW33244	1 3/8
		JHW33246	1 7/16
3/4" Drive Shallow 12-Point Sockets		JHW33248	1 ½
Product Code	Size (Inches)	JHW33252	1 %
JHW33228	7/8	JHW33256	1 3/4
JHW33230	<sup>15</sup> ⁄16	JHW33258	1 <sup>13</sup> ⁄16
JHW33232	1	JHW33260	1 1/8
JHW33234	1 1/16	JHW33264	2
JHW33236	1 ½		

- Unique Socket-Lok® Safety Retention System features a spring-loaded locking button for maximum socket retention and quick disassembly when used with our Williams® locking-button square drive tools and sockets. May also be used with all standard 3/4" drive tools.
- Chamfered ends provide easy engagement of the drive tool and fastener.
- All tools are professional quality, made of high-grade chrome vanadium steel.
- Sockets feature SUPERTORQUE® lobular openings for greater turning power without deforming the fastener.
- Metal tool box made for years of rugged use.



Socket-Lok® button positively locks the socket and drive tool together, providing positive retention and quick disassembly.





3/4" Drive

#### 20 Piece 3/4" Socket Set





#### 12 Point Rugged-Case-System Tool Set, SAE

Product Code	Description	
JHW33903	20 Piece 3/4" Socket Set	

#### Contents Include:

3/4" Drive Tools:		3/4" Drive Shallow 12 Point Sockets	
Product Code	Description	Product Code	Size (Inches)
JHW33003	8" Extension	JHW33236	1 1/8
JHW33004	16" Extension	JHW33240	1 1/4
JHW33012	32 Tooth Ratchet Head	JHW33242	1 5/16
JHW33013	Universal Extendable Handle	JHW33244	1 3/8
JHW33014	Sliding T-Handle	JHW33246	1 7/16
		JHW33248	1 1/2
3/4" Drive Shallow 12 Point Sockets		JHW33252	1 5/8
Product Code	Size (Inches)	JHW33256	1 3/4
JHW33228	7/8	JHW33258	1 13/16
JHW33230	15/16	JHW33260	1 7/8
JHW33232	1	JHW33264	2
JHW33234	1 1/16		

- Extended Handle extends from 23-1/2" to 36"
- Sockets feature SUPERTORQUE® lobular openings for greater turning power without deforming the fastener
- Packed in rugged high-density polyethylene (HDPE) cases that are strong and durable yet light in weight
- · Case is shock proof at both high and low temperatures, equipped with heavy-duty metal latches and hinges
- Two-component handles are easy to grip and comfortable to carry

#### 25 Piece 3/4" Socket Set











Product Code Description		
JHW33905	25 Piece 3/4" Socket Set	

#### Contents Include:

3/4" Drive Tools:		3/4" Drive Shallow 12 Point Sockets	
Product Code	Description	Product Code	Size (Inches)
JHW33001	2 Piece Ratchet	JHW33240	1 1/4
JHW33002	4" Extension	JHW33242	<sup>15</sup> ⁄ <sub>16</sub>
JHW33003	8" Extension	JHW33244	1 3/8
JHW33004	16" Extension	JHW33246	1 1/16
3/4" Drive Shallo	w 12 Point Sockets	JHW33248	1 ½
Product Code	Size (Inches)	JHW33252	1 1/8
JHW33228	7/8	JHW33256	1 3/4
JHW33230	<sup>15</sup> / <sub>16</sub>	JHW33258	1 13/16
JHW33232	1	JHW33260	1 1/8
JHW33234	1 1/16	JHW33264	2
JHW33236	1 1/8	JHW33268	2 1/8
JHW33238	1 <sup>3</sup> ⁄ <sub>16</sub>	JHW33272	2 1/4

- · All tools are professional quality, made of high-grade chrome vanadium steel
- Sockets feature SUPERTORQUE® lobular openings for greater turning power without deforming the fastener
- Packed in rugged high-density polyethylene (HDPE) cases that are strong and durable yet light in weight
- Case is shock proof at both high and low temperatures, equipped with heavy-duty metal latches and hinges
- Two-component handles are easy to grip and comfortable to carry





# **WILLIAMS® SOCKETS AND DRIVE TOOLS**

#### 3/4" Drive

#### 3/4" Drive Extendable Ratchet and t-head

#### **High-Polished Chrome Finish**

Product Code	Description	Length (Inches)
JHW33012	32 Tooth Ratchet Head	6
JHW33013	Universal Extendable Handle	23 ½" to 36"
JHW33014	Sliding T-Head	

Fed. Spec: ANSI B107.10M

- Williams 3/4" Drive Ratchet and Drive Tools Feature:
  - Unique Socket-Lok® Safety Retention System features a spring-loaded locking button for maximum socket retention and quick disassembly when used with our Williams® locking-button square drive tools and sockets.
     May also be used with all standard 3/4" drive tools.
  - Two-piece ratchet design for maximum versatility.
  - Knurled handle to provide a firm, non-slip grip and extra turning power.
  - Narrow pear-shaped head for access into confined work areas.
  - High-polished chrome finish for easy cleaning.
- Chamfered ends provide easy engagement of the drive tool and fastener.
- Extended Handle extends from 23-1/2" to 36"

#### 3/4" Drive Ratchets and Handles

#### **High-Polished Chrome Finish**

Product Code	Description	Length (Inches)
JHW33001	Socket-Lok® Ratchet - 32 Teeth	20
JHW33005	Flex Handle	19
JHW33006	Sliding T-Handle	18

Fed. Spec: ANSI B107.10M

- Williams 3/4" Drive Ratchet and Drive Tools Feature:
- Unique Socket-Lok® Safety Retention System features a spring-loaded locking button for maximum socket retention and quick disassembly when used with our Williams® locking-button square drive tools and sockets.
   May also be used with all standard 3/4" drive tools.
- Two-piece ratchet design for maximum versatility.
- Knurled handle to provide a firm, non-slip grip and extra turning power.
- Narrow pear-shaped head for access into confined work areas.
- High-polished chrome finish for easy cleaning.
- · Chamfered ends provide easy engagement of the drive tool and fastener.

#### 3/4" Drive Extensions and Accessories

#### **High-Polished Chrome Finish**

Product Code	Description	Length (Inches)
JHW33002	Extension	4
JHW33003	Extension	8
JHW33004	Extension	16
JHW33007	Universal Joint	4 5/16
JHW33008	3/4"F x 1/2"M Adapter	2 1/8
JHW33009	3/4"F x 1"M Adapter	2 7/16
JHW33011	1"F x 3/4"M Adapter	2 %

Fed. Spec: ANSI B107.10M

- Williams 3/4" Drive Ratchet and Drive Tools Feature:
  - Unique Socket-Lok® Safety Retention System features a spring-loaded locking button for maximum socket retention and quick disassembly when used with our Williams® locking-button square drive tools and sockets.
     May also be used with all standard 3/4" drive tools.
  - High-polished chrome finish for easy cleaning.
- Chamfered ends provide easy engagement of the drive tool and fastener.





JHW33006 Socket-Lok® button positively locks the socket and drive tool together, providing positive retention and quick disassembly.





JHW33007







JHW

JHW33011



3/4" Drive

# 3/4" Drive Shallow 12 Point Sockets, SAE

#### **High-Polished Chrome Finish**





		A	D	C	
Product Code	Size (Inches)	OAL (Inches)	Drive End Diameter (Inches)	Working End Diameter (Inches)	Nose Length (Inches)
JHW33228	7/8	1 <sup>15</sup> /16	1 7/16	1 1/4	<sup>35</sup> /64
JHW33230	<sup>15</sup> /16	2	1 1/16	1 3/8	5/8
JHW33232	1	2 1/16	1 1/16	1 7/16	5/8
JHW33234	1 1/16	2 1/16	1 7/16	1 1/2	7/8
JHW33236	1 1/8	2 1/16	1 1/2	1 %16	7/8
JHW33238	1 <sup>3</sup> ⁄16	2 1/8	1 1/2	1 11/16	<sup>15</sup> /16
JHW33240	1 1/4	2 3/16	1 1/2	1 3/4	<sup>15</sup> /16
JHW33242	1 5/16	2 ¾16	1 1/2	1 <sup>13</sup> /16	1
JHW33244	1 3/8	2 1/4	1 %	1 1/8	1
JHW33246	1 7/16	2 1/4	1 %	1 <sup>31</sup> /32	1 7/64
JHW33248	1 1/2	2 %	1 3/4	2 1/16	1 7/64
JHW33252	1 1/8	2 ½	1 3/4	2 3/16	1 3/16
JHW33256	1 3/4	2 %16	1 <sup>13</sup> /16	2 5/16	1 1/4
JHW33258	1 <sup>13</sup> /16	2 11/16	1 <sup>13</sup> /16	2 %	1 1/4
JHW33260	1 1/8	2 ¾	1 1/8	2 1/2	1 11/32
JHW33264	2	2 <sup>13</sup> /16	1 1/8	2 <sup>11</sup> /16	1 <sup>13</sup> / <sub>32</sub>



Fed. Spec: ANSI B107.1

# JHW33920 11 Piece 3/4" Drive Shallow 12-Point Socket Set on Clip Rails Contents Include:

Product Code	Size (Inches)	Product Code	Size (Inches)	Product Code	Size (Inches)
JHW33228	7/8	JHW33236	1 1/8	JHW33244	1 ¾
JHW33230	<sup>15</sup> /16	JHW33238	1 3/16	JHW33246	1 7/16
JHW33232	1	JHW33240	1 1/4	JHW33248	1 ½
JHW33234	1 1/16	JHW33242	1 5/16		



JHW33920

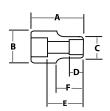
# JHW33922 16 Piece 3/4" Drive Shallow 12-Point Socket Set on Clip Rails Contents Include:

Product Code	Size (Inches)	Product Code	Size (Inches)	Product Code	Size (Inches)
JHW33228	7/8	JHW33242	1 5/16	JHW33260	1 1/8
JHW33230	<sup>15</sup> /16	JHW33244	1 %	JHW33264	2
JHW33232	1	JHW33246	1 7/16		
JHW33234	1 1/16	JHW33248	1 1/2		
JHW33236	1 1/8	JHW33252	1 %		
JHW33238	1 3/16	JHW33256	1 3/4		
JHW33240	1 1/4	JHW33258	1 13/16		

- Williams 3/4" Drive Hand Sockets and Drive Tools Feature:
- Unique Socket-Lok® Safety Retention System features a spring-loaded locking button for maximum socket retention and quick disassembly when used with our Williams® locking-button square drive tools and sockets. May also be used with all standard 3/4" drive tools.
- Sockets feature a deep chamfer on the drive end to speed insertion onto the drive tool.
- Chamfered ends provide easy engagement of the drive tool and fastener.
- SUPERTORQUE® recessed corners in socket end provide extra turning power.
- High-polished chrome finish tools clean easily and resist rust.
- Designed for quick engagement on both 6 and 12 point fasteners.



JHW33922



# WILLIAMS® PIPE TOOLS

# **Pipe Wrenches**



#### **Aluminum, Heavy Duty**

Product Code	<b>Overall Capacity</b>	<b>Maximum Jaw Opening</b>	Spare Parts			
Product code	(Inches)	(Inches)	Hook Jaw	<b>Heel Jaw &amp; Pin</b>	Knurl Nut	
JHW13500	8	1 5/16	JHW13551	JHW13567	JHW13571	
JHW13502	10	1 %	JHW13552	JHW13562	JHW13572	
JHW13504	12	2 1/8	JHW13553	JHW13563	JHW13573	
JHW13506	14	2 %16	JHW13554	JHW13564	JHW13574	
JHW13508	18	3 1/8	JHW13555	JHW13565	JHW13575	
JHW13510	24	3 3/4	JHW13556	JHW13566	JHW13576	
JHW13512	36	5	JHW13557	JHW13568	JHW13577	
JHW13514	48	6	JHW13558	JHW13569	JHW13578	

#### **Pipe Wrench Set**

Product Code	Contents Include:				
JHW13542	3 Piece Aluminum Pipe Wrench Set. Includes 8", 12", and 18" wrenches				

- Aluminum pipe wrenches are approximately 40% lighter than cast iron.
- Heavy duty construction for strength and durability.
- Scale on wrench indicates pipe diameter.



#### **Pipe Wrenches**

#### Cast Iron, Heavy-Duty

Product Code	<b>Overall Capacity</b>	<b>Maximum Jaw Opening</b>	Spare Parts			
Product Gode	(Inches)	(Inches)	Hook Jaw	Heel Jaw & Pin	Knurl Nut	
JHW13516	6	7/8	JHW13550	JHW13560	JHW13570	
JHW13518	8	1 5/16	JHW13511	JHW13567	JHW13571	
JHW13520	10	1 %	JHW13552	JHW13562	JHW13572	
JHW13522	12	2 1/8	JHW13553	JHW13563	JHW13573	
JHW13524	14	2 %16	JHW13554	JHW13564	JHW13574	
JHW13526	18	3 1/8	JHW13555	JHW13565	JHW13575	
JHW13528	24	3 ¾	JHW13556	JHW13566	JHW13576	
JHW13530	36	5	JHW13557	JHW13568	JHW13577	
JHW13532	48	6	JHW13558	JHW13569	JHW13578	

#### **Pipe Wrench Set**

Product Code	Contents Include:				
JHW13544	3 Piece Cast Iron Pipe Wrench Set. Includes 8", 12", and 18" wrenches				

- Heavy duty construction for strength and durability
- Scale on wrench indicates pipe diameter





**Pipe Tools** 

#### **Chain Pipe Tongs**

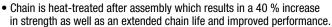
#### The Original Williams Chain Pipe Tong

Product Code	Pipe Minimum Diameter (Inches)	Pipe Maximum Diameter (Inches)	Tong Length (Inches)	Chain Length (Inches)				
JHWCT-12	1/4	2 1/2	27	18 1/2				
JHWCT-13	3/4	4	38 ¹/ <sub>8</sub>	25				
JHWCT-13-1/2	1	6	46 <sup>1</sup> / <sub>4</sub>	33				
JHWCT-14	1 1/2	8	50 <sup>1</sup> / <sub>2</sub>	40 <sup>3</sup> / <sub>4</sub>				
JHWCT-15	2	12	67	56				

- Chain swings from the center and can be used on either side of the jaws, reducing tooth wear.
- Flat link chains are heat-treated for greater strength and reliability.
- Fully adjustable to fit any shape pipe.

#### **Replacement Parts for Pipe Tongs**

	Replacement Jaw Sets	Replacement Chain Assembly				
Product Code	Product Code	Product Code	Length (Inches)	Loading Capacity		
JHWCT-12	JHWCT-12-4	JHWCT-12-1	18 1/2	13,800		
JHWCT-13	JHWCT-13-4	JHWCT-13-1	25	17,600		
JHWCT-13-1/2	JHWCT-13-1/2-4	JHWCT-13-1/2-1	33	20,000		
JHWCT-14	JHWCT-14-4	JHWCT-14-1	40 3/4	22,000		
JHWCT-15	JHWCT-15-4	JHWCT-15-1	56	31,000		



 Jaws are drop forged from carbon steel and heat treated to provide the strength and reliability expected from Williams pipe tools.



JHWCT-13-1/2



JHWCT-13-4

#### **Pipe Chain Wrench**

#### **Heat Treated**

<b>Product Code</b>	Product Code Pipe Diameter Minimum - Maximum (Pipe Size)		Chain Length (Inches)	
JHWCW-4	<sup>3</sup> /8 - 4	11	15	

- Forged handle is fully heat-treated.
- Ideal for use in close quarters and where space is at a premium.
- Successive "bites" can be taken without removal of wrench from the work piece.
- Fully adjustable to fit any shape pipe.





#### **Pipe Chain Wrench**

#### **Heat Treated**

Product Code	Pipe Diameter Capacity	Handle Length (Inches)	Chain Length (Inches	
JHW40222	4	12	16	
JHW40223	5	15	19	
JHW40224	6	24	23	

- · Forged strong I Beam handle.
- Designed for working in confined areas when regular pipe wrenches will not fit, excellent for pipe fittings.
- Portable and lightweight can be used for overhead and underground work.



## **WILLIAMS HYDRAULICS**

#### **Combination Sets**

#### WILLIAMS HYDRAULICS

- · Great value, combining high quality with competitive prices
- State-of-the-art design, engineering, and construction combine to create superior tools that work better and last longer
- All parts are machined on CNC and NC machines for maximum precision
- Components are cleaned ultrasonically prior to assembly to ensure the highest quality
- All welds are performed robotically for maximum precision
- 100% functional QC testing is done on all products
- · Quality features create tools that work better and last longer
- Hard-chrome plated rams prevent scratching and corrosion
- Steel stop rings for ram over travel protection
- Pressure relief valves for overload protection
- Cylinders are burnish rolled for a smooth precision mirror finish, which reduces scoring and prolongs seal life
- All items are interchangeable with other leading companies' models for maximum versatility
- Ideal for on site construction as well as maintenance



#### **Pump & Cylinder Combos**

	Cylinders and Specifications				Combination Set Model Number With Hand Pump:		Combination Set Model Number With Air Pump:			
Туре	Cylinder Capacity	Cylinder Stock Number	Stroke	Collapsed Height	5HS2S35	5HS2S100	5HS2S200	5AS150	5AS150L	5AS380
Single Acting	5	JHW6C05T05	5.08	8.7	JHW1HP05T05					
Single Acting	10	JHW6C10T02	2.01	4.84		JHW1HP10T02		JHW1AP10T02		
Single Acting	10	JHW6C10T06	5.94	9.84		JHW1HP10T06		JHW1AP10T06	JHW1AP10T06L	
Single Acting	10	JHW6C10T10	9.96	13.86		JHW1HP10T10		JHW1AP10T10	JHW1AP10T10L	
Single Acting	10	JHW6CT10T06	5.95	11.46		JHW1HP10T06T		JHW1AP10T06T	JH1AP10T06TL	
Single Acting	10	JHW6CT10T10	9.96	15.47		JHW1HP10T10T		JHW1AP10T10T	JH1AP10T10TL	
Single Acting	15	JHW6C15T04	3.86	8.66		JHW1HP15T04		JHW1AP15T04		
Single Acting	15	JHW6C15T06	5.87	10.67		JHW1HP15T06		JHW1AP15T06		
Single Acting	25	JHW6C25T02	2.01	6.82		JHW1HP25T02		JHW1AP25T02		
Single Acting	25	JHW6C25T04	3.94	8.78		JHW1HP25T04		JHW1AP25T04		
Single Acting	25	JHW6C25T06	5.94	10.79		JHW1HP25T06		JHW1AP25T06		
Single Acting	25	JHW6C25T08	7.95	12.8			JHW1HP25T08	JHW1AP25T08		
Single Acting	55	JHW6C55T06	6.25	11.13			JHW1HP55T06	JHW1AP55T06		
Single Acting	100	JHW6C100T06	6.63	13.25						JHW1AP100T06
Single Acting Low Profile	10	JHW6CL10T01	1.5	3.48	JHW1HP10T01L			JHW1AP10T01L		
Single Acting Low Profile	20	JHW6CL20T02	1.75	3.9	JHW1HP20T02L			JHW1AP20T02L		
Single Acting Low Profile	30	JHW6CL30T02	2.44	4.61		JHW1HP30T02L		JHW1AP30T02L		

Matched sets provide a combination of components for single acting cylinder applications. Ordering is as easy as 1, 2, 3:

- 1. Select the cylinder you want
- 2. Select the pump you want
- 3. Choose the set number



Complete selection of Williams Industrial Hydraulics available at www.jhwilliamstoolgroup.com





# Pump & Cylinder Matching Charts

#### AIR PUMP AND SINGLE-ACTING CYLINDER MATCHING CHART

Capacity (Tons) Stroke (Inches)	5	10	15	25	30	55	75	100
<1.00								
1.00								
2.00								
3.00								
4.00								
5.00								
6.00								
7.00								
8.00								
9.00								
10.00								
12.00								
13.00								
14.00								
Street Miller Comments of the		Williams Williams						
	JHW5AS60		JHW	5AS150			JHW5AS38	30

Note: Selection based on oil capacity requirements of cylinders.

#### Not Recommended

#### HAND PUMP / E-PUMP AND SINGLE-ACTING CYLINDER MATCHING CHART

Capacity (Tons) Stroke (Inches)	5	10	15	25	30	55	75	100
<1.00								
1.00								
2.00								
3.00								
4.00								
5.00								
6.00								
7.00								
8.00								
9.00								
10.00								
12.00								
13.00								
14.00								
Strong Manager	JHW5HS2S35	IHW5	HS2S100	IHW5	HS2S200	JHW5E10		

Note: Selection based on oil capacity requirements of cylinders.



#### **WILLIAMS HYDRAULICS**

#### **Pumps**

#### **Hand Pumps**

- JHWHS2S35, JHW5HS2S100 and JHW5HS2S200 feature 2 speed operation
- Pressure relief valve for overload protection
- Load release valve for single acting cylinder usage



JHW5HS2S35

Used			Usable Oil	Product	Pressure Rating		Oil Displacement per Stroke		Max. Operating	Piston		ı
	with	Pump Type	Capacity		(p:	(psi)		13)	Force	Stroke	Oil Outlet Port	
Cylinder			(in3)		1st Stage	2nd Stage	1st Stage	2nd Stage	(lbs)	(in)		ı
		Single-speed	36.5	JHW5HS1S60				0.15	109	0.79	3/8"-18NPTF	i
			21.4	JHW5HS2S35			0.18	0.05	88	0.38	1/4"-18NPTF	
Single Acting	Two-speed	61.0	JHW5HS2S100	200	10,000	0.01	0.14	132	0.00	3/8"-18NPTF	1	
			128.0	JHW5HS2S200			0.81	0.14	132	0.82	9/8 - IONPIF	

#### **Electric Pumps**

- Quiet operation meets OSHA regulations (80dBA)
- 2 speed operation allows for faster cylinder advance
- Full load starting capacities
- Internal filter keeps contamination from damaging pump
- Ideal for on site construction as well as maintenance



Motor	Usable Oil	Product	Product Code with Remote	Max. Output	Oil Output Flow Rate		- Valve		Current	Motor	Sound Level
Size	Capacity	Code	Control Pendant Switch	Pressure	1st Stage	2nd Stage		Valve Function	Draw	Voltage	Country Level
(hp)	(gal)		renuant switch	(psi)	(ii	n3)			(amps)	(volts)	(dBA)
0.5	1.0	JHW5E05H1G	JHW5E05H1GR		293	18	_		8		
1.0	2.0	JHW5E10H2G	JHW5E10H2GR	10,000	311	37	4-way, 3-pos.	Advance Hold Return	15	115	80
1.5	3.0	JHW5E15H3G	JHW5E15H3GR		470	61	υ-μυ <b>σ</b> .	noid neturn	17		

# MILLIAMS WILLIAMS

JHW5AS150

#### Air Pumps

- High strength reinforced aluminum alloy reservoir is lightweight and corrosion resistant
- Pressure relief valve for overload protection
- Suggested air pressure range: 90-175 psi / 6-12 bar
- . Designed to be used with single acting cylinders
- JHW5AS200 offers a turbo function that features high flow at high pressure condition
- JHW5AD150M offers a 4-way control valve for operation of double acting cylinders
- Maximum working pressure: 10,000 psi / 700 bar
- High strength reinforced aluminum alloy reservoir is lightweight and corrosion resistant
- Pressure relief valve for overload protection
- Suggested air pressure range: 90-175 psi / 6-12 bar
- Designed to be used with single acting cylinders
- JHW5AS200 offers a turbo function that features high flow at high pressure condition
- JHW5AD150M offers a 4-way control valve for operation of double acting cylinders
- Maximum working pressure: 10,000 psi / 700 bar



JHW5AS380L

Used with Cylinder	Usable Oil Capacity	Product Code	Pressure Product Code Rating		Oil Output Flow Rate (in3/min)		
			(psi)	No Load	Range (psi)		
	(in3)		(hai)	NU LUAU	Load	(hai)	
	36.6	JHW5AS60		61	9	100-200	
	91.5	JHW5AS150	10.000	66	11		
Single	122.1	JHW5AS200		65	12		
Acting	231.9	JHW5AS380	10,000	65	11		
	91.5	JHW5AS150L		61	10		
	231.9	JHW5AS380L		61	10		
Double Acting	91.5	JHW5AD150M	10,000	66	11	100-200	

Complete selection of Williams Industrial Hydraulics available at www.jhwilliamstoolgroup.com





#### **Cylinders**

# Single Acting Cylinders • 39 models

- Internal plunger threads
- Snap in grooved saddles
- Rod wiper seals out dirt and contamination
- Collar fixture threads
- Two base mounting holes on most models
- · High strength steel construction from gun drilled solid bar
- High flow 3/8" NPTF couplers

- · Collar thread protector
- One piece high grade alloy bearing for side load protection and long life
- Polyurethane cup seal provides optimum performance
- Industrial hard chrome plated ram helps prevent rust and corrosion
- Solid steel cylinder body
- · Heavy duty return spring provides quicker retraction
- Ideal for lifting and pressing
- Maximum working pressure: 10,000 psi / 700 bar

Cylinder Capacity	Stroke	Stock No.	Cylinder Effective Area	Pressure at Capacity	Oil Capacity	Collapsed Height
(tons)	(in)		(in2)	(psi)	(in3)	(in)
	0.63	JHW6C05T00	1.10	9,090	0.69	1.61
	1.00	JHW6C05T01			1.00	4.58
5	3.07	JHW6C05T03			3.07	6.65
5	5.08	JHW6C05T05	1.00	10,000	5.08	8.70
	7.09	JHW6C05T07			7.09	10.71
	9.09	JHW6C05T09			9.09	12.72
	1.00	JHW6C10T01			2.24	3.62
	2.01	JHW6C10T02	]		4.50	4.84
	4.02	JHW6C10T04	1		9.00	6.85
10	5.94	JHW6C10T06	0.04	0.000	13.31	9.84
10	7.95	JHW6C10T08	2.24	8,930	17.81	11.85
	9.96	JHW6C10T10	1		22.31	13.86
	11.97	JHW6C10T12	1		26.81	15.87
	14.02	JHW6C10T14	1		31.40	17.72
	0.99	JHW6C15T01			3.11	4.88
	2.01	JHW6C15T02	1		6.31	5.87
	3.98	JHW6C15T04	1		12.50	7.87
15	5.87	JHW6C15T06	]	0.550	18.43	10.67
	7.87	JHW6C15T08	3.14	9,550	24.71	12.68
	9.88	JHW6C15T10	]		31.02	14.69
	12.01	JHW6C15T12			37.71	16.65
	14.02	JHW6C15T14			44.02	18.66
	1.02	JHW6C25T01			5.24	5.84
	2.01	JHW6C25T02		9,730	10.33	6.82
	3.94	JHW6C25T04	]		20.25	8.78
25	5.94	JHW6C25T06	5.14		30.53	10.79
25	7.95	JHW6C25T08	3.14	9,730	40.86	12.80
	9.96	JHW6C25T10			51.19	14.80
	12.24	JHW6C25T12	]		62.91	16.73
	14.25	JHW6C25T14			73.25	18.74
30	8.27	JHW6C30T08	6.49	9,240	53.67	15.24
	2.01	JHW6C55T02			22.09	6.93
55	3.98	JHW6C55T04	10.99	10,000	43.74	8.94
33	6.22	JHW6C55T06	10.55	10,000	68.36	11.14
	13.27	JHW6C55T13			145.84	18.15
75	6.14	JHW6C75T06	16 10	0.220	98.85	11.22
75	13.11	JHW6C75T13	16.10	9,320	211.07	19.37
100	6.61	JHW6C100T06	20.57	9,720	135.97	14.06
100	10.24	JHW6C100T13	20.01	3,120	210.64	17.68



JHW6C05T05



JHW6C55T06



# **WILLIAMS HYDRAULICS**

#### Maintenance Kits & Bottle Jacks



#### Maintenance Kits

- Sets are portable for easy use in the plant or on the job site
- · Custom fitted, rugged blow molded storage case
- 10 ton set case has wheels for easy movement
- Designed for applications of pushing, spreading, pressing and more
- Pumps are rated from 8,000 to 10,000 psi

	Capacity (tons) Stock No.		Ram Spec	Ram Specifications				
			Collapsed	Extended	Number of Attachments			
			Height (Inches) Height (inches)					
	4	JHW4M04T	11.00	15.75	14			
	10	JHW4M10T	13.63	19.75	13			

NOTE: capacity may be reduced when extension tubes and attachments are used



#### **Maintenance Kit Contents:**

Stock No.	JHW4M04T	JHW4M10T
Hand Pump	Х	X
Ram	Х	X
Hose Assembly	X	X
Hose Coupler	X	X
Ram Coupler	X	X
Case	X	X
Hydraulic Spreader	Х	X
Combination Head	Х	Х
Rubber Head	X	X
Ram Toe	X	X
Plunger Toe	X	X
Flat Base	Х	Х
Serrated Saddle	X	X
Wedge Head	X	X
Male Connector	X	X
	3"	4"
Extension Tubes	6 1/8 "	10"
Included:	8 1/2 "	18"
menaea:	16 ½ "	27"
	19 ½ "	



JHW3S12TV

#### Side Pump Bottle Jacks

- Hydraulic system is protected from internal damage by a patented by-pass mechanism
- Machined and polished cylinders with die-cut threads provide non-abrasive leak-free, durable performance
- Fabricated from hard-cast steel with heat-treated critical stress areas
- Serrated heat-treated saddle provides generous lifting area and secure grip
- Heat-treated extension screw allows low pick-up height adjustment and maximum lift height
- U.S. patented built-in by-pass device protects hydraulic system from overpumping damage
- Unique cross-type forged release valve assures positive control
- · A wide, rugged base provides stability and strength
- · Critical stress points are reinforced in all models for added durability and dependability
- Economically priced for maximum value

Capacity (tons)	Stock No.	Min Height (inches)	Max. Height (inches)	Extension Screw (inches)	Hydraulic Lifting (Inches)	Base Size (LxW) Inches
12	JHW3T12TV	9.5	18.63	3.13	6	5.25 x 5.13
12	JHW3S12TV	6	10.63	1.63	3	5.25 x 5.13
20	JHW3T20TV	9.5	18.63	3.13	6	6.25 x 5.88
20	JHW3S20TV	6.5	11.25	1.63	3.13	6.25 x 5.88

Complete selection of Williams Industrial Hydraulics available at www.jhwilliamstoolgroup.com



#### **Toe Jacks & Flat Body Cylinders**



#### Toe Jacks

#### JHW4T10T

- Heat treated and chrome plated medium-carbon steel cylinder
- Chrome plated ram promotes longer seal life and optimum performance
- U.S. Patented by-pass device protects hydraulic system from over traveling damage



JHW4T06T

		Toe Saddle		Head :	Saddle		
Capacity (tons)	Stock No.	Min Height	Max. Height	Min Height	Max height	Hydraulic Lift	
		(inches)	(inches)	(inches)	(Inches)		
6	JHW4T06T	.88	6.00	10.50	15.63	5.13	
10	JHW4T10T	1.13	6.25	11.00	16.13	5.13	

#### **Flat Body Cylinder Kits**

- Kits include a variety of height magnetic adapters
- · Perfect for low clearance areas needing a cylinder height boost
- Maximum working pressure: 10,000 psi / 700 bar
- Kits include magnetic adapters and carrying case
- · Cylinders may be ordered separately



JHW6CF05T03TB

Cylinder Capactiy	Stroke	Complete Kit Stock No.	Cylinder Model	Oil Capacity (in3)	Collapsed Height (In)
5	0.24	JH6CF05T03TB	JHW6CF05T03	0.26	1.26
10	0.43	JH6CF10T05TB	JHW6CF10T05	1.02	1.69
20	0.43	JH6CF20T05TB	JHW6CF20T05	1.90	2.01
30	0.51	JH6CF30T05TB	JHW6CF30T05	3.32	2.31

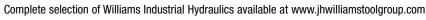
#### Flat Body Cylinder Mounting Hole Dimensions

- Made of high quality steel
- Extremely low collapsed height for applications with minimal clearance at the lift point
- · Great for areas of low clearance
- Maximum working pressure 10,000 psi / 700 bar

Maximum Wor	maximum working product 10,000 per 700 bar											
Stock No.	Hole Pitch	Counter Bore Dia.	Counter Bore Depth	Min Height (inches)								
JHW6CF05T03	1.12	0.2	0.31	0.17								
JHW6CF10T05	1.44	.028	0.42	0.31								
JHW6CF20T05	1.94	0.4	0.59	0.39								
JHW6CF30T05	2.06	0.4	0.62	0.44								



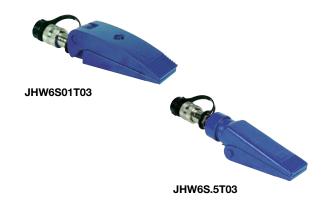
JHW6CF05T03



# **WILLIAMS HYDRAULICS**

#### **Spreaders & Presses**





#### **Spreaders**

- Designed to operate in confined space where expansion is needed
- Compact size makes for easy use in hard to reach places
- Positive over travel stops and return spring
- · Connects directly to pump hose with high flow coupler
- Maximum working pressure: 10,000 psi/ 700 bar

Cylinder Capacity	Product Code	Cylinder Effective Area	Oil Capacity	
(tons)	0000	(in²)	(in³)	
0.5	JHW6S.5T03	1.22	0.58	
1	JHW6S01T03	1.09	0.86	



- 55/100 Ton Shop Presses
  Heavy steel welded construction
  Multi-position bed for work height adjustment
  Ideal for the removal or installation of gears, universal joints, pulleys, wrist pins, and other press jobs
- Excellent for bending, bonding or straightening applications

Capacity	Product	Pump	Pump	
(tons)	Code	Туре	Model	
	JHW9A55T06	Air	JHW5AS150	
	JHW9E55T06	Electric	JHW5E05H1GR	
55	JHW9H55T06	Manual	JHW5HS2S200	
	JHW9A55T13	Air	JHW5AS380	
	JHW9E55T13	Electric	JHW5E05H1GR	
100	JHW9E100T10	Electric	JHW5E10H2GR	



#### **Accessories**

#### **Gauges**

							Gradu	ation	
Gauge Type	Stock No.	Face Dia.	Thread	Press Rang		Major Graduation	Minor Graduation	Major Gradua- tion	Minor Graduation
		(in)	(in)	(psi)	(bar)	(p	si)	(i	oar)
Wet	JHW8G025W	2.50	1⁄4"-18NPTF	0-10,000	0-700	1,000	100	100	10
wet	JHW8G04W	4.00	74 - TONFIF	0-10,000	0-700	2,000	200	100	10



JHW8G04W

#### **Gauge Adaptors**

Stock No.	Dimensions (in)					
Stock No.	A	В	C	D	E	F
JHW8FG38MF	5.12	1.38	1/4"-18NPTF	3⁄8"-18NPTF	3/8"-18NPTF	1.25



#### **Adapters**

Description	cription Stock No. Male Thread Female Thread		Dimensions (in)		
		C	D	Α	В
Adapter	JHW8FR38M25F	1/4"-18NPTF	3/8"-18NPTF	1.39	0.91
Bushing	JHW8FB25F38M	3/8"-18NPTF	1/4"-18NPTF	0.87	0.67





JHW8FB25F38M JHW8FR38M25F

#### **Hydraulic Hoses**

	Hose I.D.	Stock No.	Hose End Fittings	Operating Pressure	Hose Length	Weight
	(in)		90	(psi)	(ft)	(lbs)
		JHW8H2525D06	1/4"-18NPTF		6	2.5
	1/4"	JHW8H3825D06		10.000	6	3.0
	JHW8H3825D	JHW8H3825D10	3/8"-18NPTF		10	5.0
		JHW8H3825D20			20	10.5
ſ		JHW8H2538D06	1/4"-18NPTF	10,000	6	3.2
	3/8" JHW8H3838D06 JHW8H3838D10			6	3.5	
		JHW8H3838D10	3/8"-18NPTF		10	6.5
L		JHW8H3838D20			20	13.5



JHW8H2525D06

#### Hvdraulic Oil

,								
Volume	Stock No.	Viscosity Index	Viscosity @ 100°F	Viscosity @ 210°F	ASTM Grade	Flash Point	Pour Point	API
(gal)		(min)	(S.U.S.)	(S.U.S.)	uraue	(°F)	(°F)	Gravity
1	JHW8H1G	144	234	53	215	403	-33	30.8



#### JHW8H1G

# **Couplers**

Coupler Type	Product code				
333,000	Complete Set	Male Half	Female Half		
High-Flow Coupler	JHW8RH38D	JHW8RH38DM	JHW8RH38DF		
Regular-Flow Coupler	JHW8R38D	JHW8R38DM	JHW8R38DF		





JHW8RH38DM

JHW8RH38D

Complete selection of Williams Industrial Hydraulics available at www.jhwilliamstoolgroup.com

# **STAINLESS STEEL TOOLS**

#### **WERA**



#### **Wera Koloss Ratchet with Hammer Function**

Stock No.	Description
WER003692	Koloss 1/2" Drive Ratchet
WER003695	Extension
WER003696	Centering Pin
WER003697	Protective Pad Set

- The first ratchet in the world that can safetly be used as a hammer
- Reversible, heavy duty ratchet that can transfer at least 600 Nm of torque
- Double pawl mechanism and a return angle of only 6 ° allow you to tighten and loosen screws quickly and accurately even in cramped conditions.



#### Wera Kraftform Kompakt 62

Stock No.	Description
WER059297	33 Piece Tamperproof Bitholding Screwdriver Set

- With Wera's multi-componet ergonomic handle that fi ts the shape of the hand for the ultimate comfort and speed while allowing high torque transfer
- Our Rapidaptor bit holder with quick-release chuck for rapid bit changes will hold both insert and power bits.



#### 7 Piece Insulated Set with Interchangable Blades

Stock No.	Description
WER003470	7 Piece KK VDE 60I/ 7 Set

• Set includes Kraftform insulated handle for Wera interchangeable blades, 4 Slotted, 3/32", 9/64", 5/32", 7/32",; 2 Phillips, PH1, PH2; Includes durable belt pouch for transport and storage



#### 18 Insulated Set with interchangable blades

Stock No.	Description
WER347163	18 Piece KK VDE 70i/62i/ 68i/ 18 Set

- Set includes Kraftform insulated handle for Wera interchangeable blades, 5 Slotted, 3/32", ", 9/64", 5/32", 7/32"; 2 Phillips, PH1, PH2; 2 PlusMinus (Slotted/Phillips), #1, #2; 2 PlusMinus (Slotted/Pozidriv), #1, #2; 2 Square head, #1, #2; 4 blades for switchboard cabinet
- Includes durable belt pouch for transport and storage





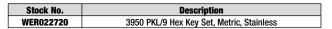
#### **Stainless Steel Tools**

- Keep rust at bay! Wera Stainless tools are made from 100% stainless steel, preventing extraneous rust caused by use of conventional tools contaminating stainless fasteners
- Wera's vacuum ice-hardned process gives the necessary hardness for industrial applications

#### **Hex Key Sets**

Stock No.	Description
WER022721	950 PKL/9 SZ Hex Key Set, Imperial, BlackLaser







#### **Tool Sets**

Stock No.	Description
WER071230	8 Piece Nutsetter Set, stainless steel, with retaining spring,
WERU/1230	belt pouch included







#### **Screwdriver Sets**

Stock No.	Description						
WER032060	6 piece Screwdriver Set - Slotted & Phillips						
WER022728	6 piece VDE Screwdriver Set - Slotted & Pozidriv						



#### **Bit Sets**

Stock No.	Description
WER071112	10 Piece Stainless Steel Bit Set, includes Phillips, MM, Hex
WER071113	10 Piece Stainless Steel Bit Set, Includes Phillips, Torx
WER071117	17 Piece Stainless Steel Bitholding Screwdriver Set



# **ENERPAC HYDRAULICS**



## **Cylinders & Combination Sets**

- For most lifting applications
- Designed for use in all positions
- ENECR400 Coupler and Dust Cap included on all models



Additional sizes and styles, including aluminum cylinders, are available. Contact your Snap-on Industrial Representative or Customer Service for more information about Enerpac hydraulic equipment.

#### **Single Acting RC-Series Cylinders**

Cylinder Capacity		Stock	Oil Capacity	Collapsed	Weight
(tons)	(inches)	Number	(cu.in.)	Height (inches)	(lbs.)
5	0.63	ENERC50	0.62	1.63	2.2
5	1	ENERC51	0.99	4.34	2.3
5	3	ENERC53	2.98	6.5	3.3
5	5	ENERC55	4.97	8.5	4.1
5	7	ENERC57	6.96	10.75	5.3
5	9.13	ENERC59	9.07	12.75	6.1
10	1	ENERC101	2.24	3.53	4
10	2.13	ENERC102	4.75	4.78	5.1
10	4.13	ENERC104	9.23	6.75	7.2
10	6.13	ENERC106	13.7	9.75	9.8
10	8	ENERC108	17.89	11.75	12
10	10.13	ENERC1010	22.65	13.75	14
10	12	ENERC1012	26.84	15.75	15
10	14	ENERC1014	31.31	17.75	18
15	1	ENERC151	3.14	4.88	7.2
15	2	ENERC152	6.28	5.88	9
15	4	ENERC154	12.57	7.88	11
15	6	ENERC156	18.85	10.69	15
15	8	ENERC158	25.13	12.69	18
15	10	ENERC1510	31.42	14.69	21
25	1	ENERC251	5.16	5.5	13
25	2	ENERC252	10.31	6.5	14
25	4	ENERC254	20.63	8.5	18
25	6.25	ENERC256	32.23	10.75	22
25	8.25	ENERC258	42.55	12.75	27
25	10.25	ENERC2510	52.86	14.75	31
25	12.25	ENERC2512	63.18	16.75	36
25	14.25	ENERC2514	73.49	18.75	39
30	8.25	ENERC308	53.56	15.25	40
50	2	ENERC502	22.09	6.94	33
50	4	ENERC504	44.18	8.94	42
50	6.25	ENERC506	69.03	11.13	51
50	13.25	ENERC5013	146.34	18.13	83
75	6.13	ENERC756	97.41	11.25	65
75	13.13	ENERC7513	208.74	19.38	130
100	6.63	ENERC1006	136.67	14.06	130
100	10.25	ENERC10010	211.45	17.69	160



# Single Acting Pump and Cylinder Sets • Optimum match of individual components

- · All sets include cylinder, hand or air pump, 6' safety hose, calibrated gauge and gauge adaptor
- The quickest and easiest way to start working right away

Stock Number	Set Capacity (tons)	Cylinder Stroke Length (inches)	Pump Type Included
ENESCR55H	5	5	Two-Speed Hand
ENESCR102H	10	2.13	Two-Speed Hand
ENESCR106H	10	66.13	Two-Speed Hand
ENESCR154H	15	4	Two-Speed Hand
ENESCR156H	15	6	Two-Speed Hand
ENESCR252H	25	2	Two-Speed Hand
ENESCR254H	25	4	Two-Speed Hand
ENESCR256H	25	6.25	Two-Speed Hand
ENESCR2514H	25	14.25	Two-Speed Hand
ENESCR506H	50	6.25	Two-Speed Hand
ENESCR1006H	100	6.63	Two-Speed Hand



**Cylinders** 

#### **RCH-Series Hollow Cylinders**

- Versatile: for testing, maintenance, and tensioning applications
- · Hollow plunger design allows for both pull and push forces
- Nickel-plated, floating center tube on models over 20 tons
- ENERCH121 has ENEFZ1630 Reducer and ENEAR630 Coupler, all other models feature ENECR400 Coupler

Cylinder Capacity (tons)	Stroke (inches)	Stock Number	Oil Capacity (cu.in.)	Collapsed Height (inches)	Weight (lbs.)
	0.31	ENERCH120	0.86	2.19	3
12	1.63	ENERCH121	4.49	4.75	6
	3.00	ENERCH123	8.29	7.25	10
20	2.00	ENERCH202	9.46	6.38	17
20	6.10	ENERCH206	28.67	12.05	31
30	2.50	ENERCH302	18.05	7.03	24
30	6.13	ENERCH306	44.23	13.00	48
CO	3.00	ENERCH603	38.2	9.75	62
60	6.00	ENERCH606	76.41	12.75	78



#### Flat and Low Height Cylinders

- RSM-Series Flat-Jac® Cylinders
   Compact, flat design for use where other cylinders will not fit
- Stroke is less than 1"
- ENERSM1000 includes handle
- ENECR400 Coupler and Dust Cap included on all models RCS-Series Low Height Cylinders
- Lightweight, low profile design for use in confined spaces
- Stroke range: 1.50 to 2.25"
- ENECR400 Coupler and Dust Cap included on all models
- ENERCS1002 includes handle

	Cylinder Capacity (tons)	Stroke (inches)	Stock Number	Oil Capacity (cu.in.)	Collapsed Height (inches)	Weight (lbs.)
	5	0.25	ENERSM50*	0.25	1.28	2.3
	10	0.44	ENERSM100	0.98	1.69	3.1
RSM-Series	20	0.44	ENERSM200	1.94	2.03	6.8
Flat-Jac <sup>®</sup> Cylinders	30	0.5	ENERSM300	3.25	2.31	10
- Cymnuoi C	50	0.63	ENERSM500	6.01	2.63	15
	100	0.63	ENERSM1000	12.27	3.38	32
	10	1.5	ENERCS101	3.35	3.47	9
RCS-Series	20	1.75	ENERCS201	7.75	3.88	11
Low Height	30	2.44	ENERCS302	15.82	4.63	15
Cylinders	50	2.38	ENERCS502	22.85	4.81	24
	100	2.25	ENERCS1002	44.18	5.56	50

<sup>\*</sup> ENERSM-50 is fitted with an AR400 coupler



#### **ENERPAC HYDRAULICS**

#### ENERPAC @ Hydraulic Technology Worldwide

ENERPAC

#### **Pumps**



#### Turbo II Air Hydraulic Pumps

- "Turbo" feature utilizes exhaust air to help power the pump
- Air exhaust muffler for quieter operation and reduced operator fatigue
- High efficiency cast aluminum housing for increased productivity
- ENEPARG1102N includes a 15-foot pendant for remote operation New air piston reduces air consumption
- Advance / Hold / Retract valve function
- Recommended Regulator-Filter Lubricator: ENERFL102

Stock No.	Usable Oil Cap., cu. in.	Pressure Rating, PSI	Air Pressure Range, PSI	Air Consump, SCFM	Sound, dBA	Weight (lbs.)
ENEPATG1102N	127	10,000	40-125	12	76	18
ENEPATG1105N	230	10,000	40-125	12	76	22
ENEPARG1102N	127	10,000	40-125	8 to 12	76	22

ENERPAC @

#### **Hand Pumps**

#### STEEL HAND PUMPS

- Designed for maintenance, construction, lifting, and testing applications
- Two-speed models reduce handle strokes by as much as 78% over single speed pumps
- Internal pressure relief valves for overload protection

#### ULTRA HIGH-PRESSURE HAND PUMP

- Operational up to 40,000 psi., all other hand pumps have a 10,000 psi limit.
- Two-speed operation for faster fill, reduces cycle time for many applications
- Outlet ports are 3/4"-16 cone for 40,000 psi rating
- Large release knob for improved control of pressure release

#### COMPOSITE HAND PUMPS

- · Light weight and compact design, with lower handle effort
- Two-speed models reduce handle strokes by as much as 78% over single speed pumps
- Non-conductive fiberglass handle for operator safety
- Pump reservoir made of durable composite material for corrosion resistance
- Handle lock and light weight construction for easy carrying
- Internal pressure relief valve for overload protection

Stock No.	Description	Usable Oil Cap., cu.	Pressure Rating, PSI		Oil Displacement per Stroke, cu. in.		Maximum Handle
		in.	1st Stage	2nd Stage	1st Stage	2nd Stage	Effort, lbs.
ENEP39	Single Speed Steel Hand Pump	40	N/A	10,000	N/A	0.16	111
ENEP80	Two-Speed Steel Hand Pumps	134	350	10,000	0.99	0.15	104
ENEP462	Two-Speed Steel Hand Pumps	453	200	10,000	7.69	0.29	110
ENEP2282	Ultra High-Pressure Hand Pump	60	200	40,000	0.99	0.037	106
ENEP391	Composite Hand Pump, Single Speed	55	N/A	10,000	N/A	0.151	85
ENEP142	Composite Hand Pump, Two Speed	20	200	10,000	0.221	0.055	78
ENEP802	Composite Hand Pump, Two Speed	155	400	10,000	2.4	0.151	95
ENEP392	Composite Hand Pump, Two Speed	55	200	10,000	0.687	0.151	93



The BP cordless pump is best suited for small to medium size cylinders or hydraulic tools, or wherever portable cordless hydraulic power is needed.

#### **Battery Powered Hydraulic Pumps**

- · Lightweight, compact design with integrated handle for maximum portability
- Dual power selection and variable speed for preferred ow and precise control
- Heavy-duty 28 volt Lithium-lon battery pack delivers constant fade-free power
- Immediate charging after use a quick one hour charge
- Pump models include two 3.0 amp-hour battery packs and quick charger

Stock No.	Usable Oil Cap.,	Output Flow Rate (cu. in./ minute)		Charger Voltage	Weight, (lbs.)	
	Gallon	200 psi	10,000 psi	(VAC)	()	
ENEBP122	0.5	120	15	115	21.2	
ENEBP124	1.0	120	15	115	24.0	
ENEBP122E	0.5	120	15	230	21.2	
ENEBP124E	1.0	120	15	230	24.0	



#### **Presses & Maintenance Sets**

- **Hydraulic Maintenance Sets** All sets include Enerpac pump, hose, cylinder, and gauge
- Lock-on or threaded connectors
- Complete set for almost every maintenance application

#### The Universal Hydraulic Tool Box

Stock No.	Capacity, Using Attachments, Tons	Capacity, Without Attachments, Tons	Number of Components	Weight, (lbs.)
ENEMS24	2.5	5.0	34	59
ENEMSFP5	2.5	5.0	24	44
ENEMS210	5.0	10.0	35	140
ENEMSFP10	5.0	10.0	22	105
ENEMS220	12.5	25.0	13	210
ENEMS21020	5.0 - 12.5	10.0 - 25.0	53	350



, araane mameenance see components							
Stock No.	Hand Pump	Hose	Cylinder	Gauge	Gauge Adaptor		
ENEMS24	ENEP142	ENEHC7206	ENERC55	ENEGP10S	ENEGA4		
ENEMSFP5	ENEP142	ENEHC7206	ENERC55	ENEG2535L	ENEGA3		
ENEMS210	ENEP392	ENEHC7206	ENERC106	ENEGP10S	ENEGA2		
ENEMSFP10	ENEP392	ENEHC7206	ENERC106	ENEG2535L	ENEGA3		
ENEMS220	ENEP392	ENEHC7206	ENERC256	ENEGP10S	ENEGA2		
ENEMS220	ENEP392	ENEHC7206	ENERC102, ENERC106, ENERC256	ENEGP10S	ENEGA2		

#### **Hydraulic H-Frame Press Sets**

- Available in 10, 25, 50, 100, 150, and 200-ton capacities
- Press set includes H-frame press, cylinder, pump, load gauge, gauge adaptor, and 6-foot hose
- Designed for general maintenance, intermittent use
- Heavy-duty welded frame minimizes flex under load, lasting longer than bolted or pinned-style frames
- Exclusive "Hydra-Lift" system uses an 18" stroke, press-mounted hydraulic jack to adjust press bed height. (25-, 50-, 100-ton models only)
- Includes pump mounting bracket to support the pump
- · Roller head design allows movement and locking of the cylinder from side-to-side for off-center pressing jobs (50- and 100-ton models only, 10- & 25-ton models are able to move side-to-side but do not have rollers)
- Adjustable work bed is supported by pin supports which are 10" apart
- V-blocks sold separately (come in pairs)

	Power Source Type			е Туре						
Press Stock Number	Optional V-Blocks Stock Number	Hand	Elec	Air	Press Capacity, tons	Maximum Bed Daylight, inches	Maximum Bed Width, inches	Cylinder Stroke Length (inches)	Cylinder Type	Weight, Ibs.
ENEIPA1220	ENEA136			Х	10	40.00	18.63	10	1-Speed	175
ENEIPH1240	ENEA136	Х			10	40.00	18.63	10	1-Speed	170
ENEIPE2505	ENEA130		Х		25	54.50	29.00	6	1-Speed	605
ENEIPA2520	ENEA130			Х	25	54.50	29.00	14	1-Speed	610
ENEIPE5060	ENEA150		Х		50	48.56	28.75	13	2-Speed	1,120
ENEIPE10060	ENEA200		Х		200	48.56	35.00	13	2-Speed	1,801







Optional V-Blocks

# ENERPAC & Hydraulic Technology Worldwide

#### **Machine Lifts & Load Skates**



#### **Hydraulic Machine Lifts**

- For lifting heavy equipment with minimum available access
- · Remote operation of hydraulic pump enhances safety
- Low-height lifting toe
- · Precision guided to reduce friction and isolate cylinder from side-loads
- Two extendable support feet provide extra stability
- Includes RC-Series cylinder with CR-400 coupler

Stock Capaci			rance with racted (inc		Stroke	Oil Capacity	Total Extended	Total Body	Weight
Number	(tons)	Minimum	Central	Maximum	(inches)	(in3)	Height	Height	
ENESOH106	8.5	.79	3.74	6.69	5.39	13.7	17.00	11.61	59.2
ENESOH236	20	1.18	4.33	7.48	6.18	32.0	18.58	12.4	99.2



**ENEERS20** 

#### Caterroller™ Load Skate Sets

- Rugged and sturdy construction for long life
- · Low profile construction for increased stability
- Low rolling-resistance allows for easy load movement
- Attachable load leveling plates and swivel turntables for turning corners
- Sets (see table) include all components necessary to handle a variety of applications
- Two ENEELB1 link-up bars, two ENEERH1 handles (34.6" long), and a metal box are included
- Optional long handle ENEERH2 (46") is also available

Stock Number	Set Capacity (tons)	Load Skates (4)	Turntable Swivels (2)	Leveling Plates (2)	Weight Incl. handles and metal box (lbs)
ENEERS20	20	ENEER10	ENEES10	ENEELP10	110
ENEERS30	30	ENEER15	ENEES15	ENEELP15	123
ENEERS60	60	ENEER30	ENEES30	ENEELP30	167

#### Caterroller™ Load Skate Set Components

Stock Number	Description	Capacity (tons)
ENEER1	Load Skate	1
ENEER10	Load Skate	10
ENEER15		15
ENEER30	and the same	30
ENEER60		60
ENEER80		80
ENEES1	Turntable Swivel	1
ENEES10	Turritable Swiver	10
ENEES15		15
ENEES30		30
ENEES60		60
ENEES80		80
ENEELP10	Loveling Blote	10
ENEELP15	Leveling Plate	15
ENEELP30		30
ENEELP60		60
ENEELP80		80

Components are available in sets or separately

To place the Load Skates, the load must first be lifted. This can be done easily and safely using Enerpac Lifting Wedge or Machine Lifts.



See also pages N183 to N186 for our selection of Enerpac Heavy-Duty Bolting tools. For more information contact your Snap-on Industrial Representative or call Customer Service at (877) 740-1900



**Hoists** 

#### Series 602/603 Mini-Lever Hoist

- Compact design small and lightweight allows you to take it where ever you go, fits in your toolbox
- Sturdy construction for years of use forged upper and lower hooks, impact resistant, all steel frame, plated load chain

Stock Number	Description	Capacity (tons)	Lift (feet)	Weight (lbs)
CMS0210	CM Series 602 Mini Lever Hoist, 550 lbs 5' lift	1/4	5	6
CMS0214	CM Series 602 Mini Lever Hoist, 550 lbs 10' lift	1/4	10	7
CMS0215	CM Series 603 Mini Lever Hoist, 1100 lbs. 5' lift	1/2	5	7
CMS0216	CM Series 603 Mini Lever Hoist, 1100 lbs. 101 lift	1/2	10	8

#### Series 653 Manual Lever Hoist

- Sturdy construction for years of use forged upper and lower hooks, impact resistant, all steel frame, plated load chain
- Lowest handle pull force in the industry reduces related injuries, easy operation in confined spaces
- True one-handed free chaining allows for fast and easy load attachment

Stock Number	Description	Capacity (tons)	Lift (feet)	Weight (lbs)
CMS5310	CM Series 653 Lever Hoist, 3/4 ton, 5' lift	3/4	5	19
CMS5311	CM Series 653 Lever Hoist, 3/4 ton, 10' lift	3/4	10	21
CMS5315	CM Series 653 Lever Hoist, 1 1/2 ton, 5' lift	1 1/2	5	31
CMS5316	CM Series 653 Lever Hoist, 1 1/2 ton, 10' lift	1 1/2	10	36
CMS5320	CM Series 653 Lever Hoist, 3 ton, 5' lift	3	5	51
CMS5321	CM Series 653 Lever Hoist, 3 ton, 10' lift	3	10	59

#### Series 640 Manual Lever Hoist

- Made in the U.S.A Approved for use on Government Projects
- Simple construction with few parts less downtime since it is reliable and easy to maintain
- · Weatherproof construction can be used for indoor and outdoor applications

Stock Number	Description	Capacity (tons)	Lift (feet)	Weight (lbs)
CMS4043	CM Series 640 Puller Lever Hoist, 3/4 ton, 5' Lift	3/4	5	16.0
CMS4060	CM Series 640 Puller Lever Hoist, 3/4 ton, 10' Lift	3/4	10	20.0
CMS4045	CM Series 640 Puller Lever Hoist, 1 1/2 ton, 5' Lift	1 1/2	5	26.0
CMS4062	CM Series 640 Puller Lever Hoist, 1 1/2 ton, 10' Lift	1 <sup>1</sup> / <sub>2</sub>	10	31.0
CMS4047	CM Series 640 Puller Lever Hoist, 3 ton, 5' Lift	3	5	38.0
CMS4065	CM Series 640 Puller Lever Hoist, 3 ton, 10' Lift	3	10	47.0

#### **Series 622 Hand Chain Hoist**

- Simple, efficient, economical design get the job done while staying within budget
- · Compact, low headroom design lightweight and easy to install or move, even in confined spaces

Stock Number	Description	Capacity (tons)	Lift (feet)	Weight (lbs)
CMS2216	CM Series 622 Hand Chain Hoist, 1/2 Ton, 15' Lift	1/2	15	25.0
CMS2231	CM Series 622 Hand Chain Hoist, 1/2 Ton, 20' Lift	1/2	20	30.0
CMS2217	CM Series 622 Hand Chain Hoist, 1 Ton, 15' Lift	1	15	30.0
CMS2262	CM Series 622 Hand Chain Hoist, 1 Ton, 20' Lift	1	20	38.0
CMS2218	CM Series 622 Hand Chain Hoist, 2 Ton, 15' Lift	2	15	71.0
CMS2233	CM Series 622 Hand Chain Hoist, 2 Ton, 20' Lift	2	20	80.0
CMS2230	CM Series 622 Hand Chain Hoist, 3 Ton, 15' Lift	3	15	99.0
CMS2214	CM Series 622 Hand Chain Hoist, 3 Ton, 20' Lift	3	20	109.0









# **COLUMBUS MCKINNON**

#### **Hoists & Trolleys**

#### **Cyclone Hand Chain Hoist**

- Made in the U.S.A Approved for use on Government Projects
- Load limiter is a standard option overload protection for proper and safe use of hoist
- Highest efficiency in the industry greater lift with minimum effort
- Easy to maintain lower maintenance costs, interchageable parts

Stock Number	Description	Capacity (tons)	Lift (feet)	Weight (lbs)
CMS4621	CM Cyclone Hand Chain Hoist, 1/4 ton, 10' Lift	1/4	10	40.0
CMS4732	CM Cyclone Hand Chain Hoist, 1/4 ton, 20' Lift	1/4	20	55.0
CMS4622	CM Cyclone Hand Chain Hoist, 1/2 ton, 10' Lift	1/2	10	40.0
CMS4733	CM Cyclone Hand Chain Hoist, 1/2 ton, 20' Lift	1/2	20	55.0
CMS4624	CM Cyclone Hand Chain Hoist, 1 ton, 10' Lift	1	10	43.0
CMS4734	CM Cyclone Hand Chain Hoist, 1 ton, 20' Lift	1	20	60.0
CMS4625	CM Cyclone Hand Chain Hoist, 1 1/2 ton, 10' Lift	1 1/2	10	70.0
CMS4735	CM Cyclone Hand Chain Hoist, 1 1/2 ton, 20' Lift	1 1/2	20	93.0
CMS4626	CM Cyclone Hand Chain Hoist, 2 ton, 10' Lift	2	10	70.0
CMS4894	CM Cyclone Hand Chain Hoist, 2 ton, 20' Lift	2	20	92.0
CMS4627	CM Cyclone Hand Chain Hoist, 3 ton, 10' Lift	3	10	103.0
CMS4736	CM Cyclone Hand Chain Hoist, 3 ton, 20' Lift	3	20	144.0
CMS4629	CM Cyclone Hand Chain Hoist, 5 ton, 10' Lift	5	10	138.0



#### **Beam Clamps**

- Used as an anchor for a hoist or rigging operation, or as a tool to position and hold beams in place when welding
- · Adjustable to fit wide range of beam sizes

Stock Number	Description	Capacity (tons)	Flange Width (inches)	Weight (lbs)
CMS09001W	CM Beam Clamp, 1 ton (BC-1)	1	3 - 9	8.5
CMS09002W	CM Beam Clamp, 2 ton (BC-2)	2	3 - 9	10.5
CMS09003W	CM Beam Clamp, 3 ton (BC-3)	3	3.2 - 12.6	20.25
CMS09004W	CM Beam Clamp, 5 ton (BC-5)	5	3.6 - 12.2	24.25



#### **Trolleys**

Both Trolleys feature:

- Shielded ball bearings smooth rolling motion with little effort, longer life
- Wrap around side plates protect wheels and act as stopper to prevent movement beyond desired location
- · Adjustable to fit wide range of beams

	Stock Number	Description	Capacity (tons)	Std. Beam Height (inches)	Beam Flange Width (inches)	Weight (lbs)
	CMSCBTP0025	CMCO CBT Push Trolley, 1/4 ton	1/4	4 - 24	2 - 8.7	19.0
	CMSCBTP0050	CMCO CBT Push Trolley, 1/2 ton	1/2	4 - 24	2 - 8.7	19.0
ODT Decel	CMSCBTP0100	CMCO CBT Push Trolley, 1 ton	1	5 - 24	2.3 - 8.7	26.0
CBT Push Trolley	CMSCBTP0150	CMCO CBT Push Trolley, 1 1/2 ton	1 1/2	6 - 24	2.3 - 8.7	46.0
oncy	CMSCBTP0200	CMCO CBT Push Trolley, 2 ton	2	6 - 24	2.3 - 8.7	46.0
	CMSCBTP0300	CMCO CBT Push Trolley, 3 ton	3	8 - 24	3 - 8.7	86.0
	CMSCBTP0500	CMCO CBT Push Trolley, 5 ton	5	10 - 24	3.5 - 8.7	130.0
	CMSCBTG0100	CMCO CBT Geared Trolley, 1 ton	1	5 - 24	2.3 - 8.7	45.0
СВТ	CMSCBTG0150	CMCO CBT Geared Trolley, 1 1/2 ton	1 1/2	6 - 24	2.3 - 8.7	66.0
Geared	CMSCBTG0200	CMCO CBT Geared Trolley, 2 ton	2	6 - 24	2.3 - 8.7	69.0
Trolley	CMSCBTG0300	CMCO CBT Geared Trolley, 3 ton	3	8 - 24	3 - 8.7	111.0
	CMSCBTG0500	CMCO CBT Geared Trolley, 5 ton	5	10 - 24	3.5 - 8.7	158.0





**CBT Geared Trolley** 



## **Electric Chain Hoist & Rigging**

#### **Lodestar Electric Chain Hoist**

- · Largest installed base of any hoist in the industry
- Rugged, long life design
- Grease lubrication lifetime protection for less maintenance and improved
- Made in the U.S.A

Stock Number	Description	Capacity (tons)	Lift (feet)	Lifting Speed (ft/min)	Weight (lbs)
CMS3555-3651	CM Lodestar 230/460V, 3ph, 60Hz, 1 ton, 10' Lift	1	10	32	117.0
CMS4255-3651	CM Lodestar 230/460V, 3ph, 60Hz, 1 ton, 20' Lift	1	20	32	128.0
CMS3565-3658	CM Lodestar 230/460V, 3ph, 60Hz, 2 ton, 10' Lift	2	10	16	137.0
CMS4265-3658	CM Lodestar 230/460V, 3ph, 60Hz, 2 ton, 20' Lift	2	20	16	157.0
CMS9508-9559	CM Lodestar 230/460V, 3ph, 60Hz, 3 ton, 10' Lift	3	10	11	162.0
CMS9510-9559	CM Lodestar 230/460V, 3ph, 60Hz, 3 ton, 20' Lift	3	20	11	190.0



#### **Shopstar Electric Chain Hoist**

- Small compact design-easy to install and move from location to location
- Grease lubrication lifetime protection for less maintenance and improved durability
- Made in the U.S.A

Stock Number	Description	Capacity (tons)	Lift (feet)	Lifting Speed (ft/min)	Weight (lbs)
CMS2070	CM ShopStar 115V, 1ph, 60Hz, 250 lbs	1/8	10	16	26.0
CMS2090	CM ShopStar 115V, 1ph, 60Hz, 500 lbs	1/4	10	12	26.0
CMS2110	CM ShopStar 115V, 1ph, 60Hz, 1000 lbs	1/2	10	6	32.0
CMS2072	CM ShopStar 460V, 3ph, 60Hz, 250 lbs	1/8	10	16	28.0
CMS2077	CM ShopStar 460V, 3ph, 60Hz, 250 lbs	1/8	10	24	28.0
CMS2084	CM ShopStar 460V, 3ph, 60Hz, 500 lbs	1/4	10	16	28.0
CMS2100	CM ShopStar 460V, 3ph, 60Hz, 500 lbs	1/4	10	24	28.0
CMS2121	CM ShopStar 460V, 3ph, 60Hz, 1000 lbs	1/2	10	12	32.0



#### **Valustar Electric Chain Hoist**

- Economical unit with robust design
- Grease lubrication-lifetime protection for less maintenance and improved performance
- Made in the USA

Stock Number	Description	Capacity (tons)	Lift (feet)	Lifting Speed (ft/min)	Weight (lbs)
CMS2401C	CM Valustar 115V, 1ph, 60Hz, 1/4 ton, 20' Lift	1/4	20	16	68.0
CMS2403C	CM Valustar 115V, 1ph, 60Hz, 1/2 ton, 20' Lift	1/2	20	16	68.0
CMS2407C	CM Valustar 115V, 1ph, 60Hz, 1 ton, 20' Lift	1	20	16	116.0
CMS2409C	CM Valustar 115V, 1ph, 60Hz, 2 ton, 20' Lift	2	20	8	150.0
CMS2402C	CM Valustar 230/460V, 3ph, 60Hz, 1/4 ton, 20' Lift	1/4	20	16	66.0
CMS2404C	CM Valustar 230/460V, 3ph, 60Hz, 1/2 ton, 20' Lift	1/2	20	16	66.0
CMS2408C	CM Valustar 230/460V, 3ph, 60Hz, 1 ton, 20' Lift	1	20	16	117.0
CMS2410C	CM Valustar 230/460V, 3ph, 60Hz, 2 ton, 20' Lift	2	20	8	142.0



#### **Removable Handle Ratchet Binders**

- Removable handle provides greater load security by making it less likely for load to be stolen
- Reduces overall weight

Stock Number	Description	Chain Size for Grade 43	Chain Size for Grade 70	WLL (lbs)
CMS46565	Removable Handle Ratchet Binder - Body	3/8"	5/16"	5400
CMS46566	Removable Handle Ratchet Binder - Body	1/2"	3/8"	9200
CMS46565H	Removable Handle Ratchet Binder - Handle	-	-	-



#### **CMG Ratchet Binders**

• Economical unit where handle remains attached to ratchet binder; durable construction

Stock Number	Description	Chain Size for Grade 43	Chain Size for Grade 70	WLL (lbs)
CMS48365CMG	3/8" Ratchet Binder	-	<sup>5</sup> / <sub>16</sub>	6600
CMS48366CMG	1/2" Ratchet Binder	-	3/8	9200







# CM

## **Rigging**



- Highest working load limit in the industry provides extra protection and helps insure a safer lift
- Save money by having the ability to use a smaller shackle vs. the competiti
- Made in the USA

#### **Super Strong Carbon Steel Shackle**

Stock Number	Description	Size Diameter (in)	WLL (tons)
CMSM646P	Super Strong Shackle, Carbon Steel, Painted, 1/4"	1/4	3/4
CMSM647P	Super Strong Shackle, Carbon Steel, Painted, 5/16"	5/16	1
CMSM648P	Super Strong Shackle, Carbon Steel, Painted, 3/8"	3/8	1 <sup>1</sup> /2
CMSM650P	Super Strong Shackle, Carbon Steel, Painted, 1/2"	1/2	3
CMSM651P	Super Strong Shackle, Carbon Steel, Painted, 5/8"	5/8	4 1/2
CMSM652P	Super Strong Shackle, Carbon Steel, Painted, 3/4"	3/4	6 1/2
CMSM653P	Super Strong Shackle, Carbon Steel, Painted, 7/8"	7/8	8 1/2
CMSM654P	Super Strong Shackle, Carbon Steel, Painted, 1"	1	10
CMSM656P	Super Strong Shackle, Carbon Steel, Painted, 1 1/4"	1 1/4	14
CMSM657P	Super Strong Shackle, Carbon Steel, Painted, 1 1/2"	<b>1</b> 1/2	20
CMSM677P	Super Strong Shackle, Carbon Steel, Painted, 1 3/4"	1 3/4	30
CMSM658P	Super Strong Shackle, Carbon Steel, Painted, 2"	2	35

#### 

- Manufactured to meet ASTM & NACM specifications
- Typically used as barrier chain, trailer safety chains, light construction, and the marine industry
- Not for overhead lifting

#### **Grade 30 Proof Coil Chain**

Stock Number	Description	Size (in)	WLL (lbs)	Feet per Pail	Weight per 100' (lbs)
CMS671410	Grade 30 Zinc Plated Pails, 3/16"	3/16	800	250	37
CMS671411	Grade 30 Zinc Plated Pails, 1/4"	1/4	1300	140	60
CMS671412	Grade 30 Zinc Plated Pails, 5/16"	5/16	1900	90	81
CMS671413	Grade 30 Zinc Plated Pails, 3/8"	3/8	2650	60	133
CMS671015	Grade 30 Zinc Plated Pails, 1/2"	1/2	4500	90	278



- Meets all Department of Tranportation requirement
- No ultra-violet degrading like with synthetic straps

#### **Grade 70 Binder Chain Assemblies**

Stock Number	Description	Size (in)	WLL (lbs)	Weight Each (lbs)
CMS638277	5/16" x 16' Grade 70 with Clevis Hooks - In Bag	5/16	4700	17.1
CMS638266	5/16" x 20' Grade 70 with Clevis Hooks - In Bag	5/16	4700	22.1
CMS638268	3/8" x 16' Grade 70 with Clevis Hooks - In Bag	3/8	6600	26.6
CMS638267	3/8" x 20' Grade 70 with Clevis Hooks - In Bag	3/8	6600	32.9



#### **Herc-Alloy 1000 Chain Slings**

- Utilizes Herc-Alloy® 1000 Chain which has the strongest weight-to-strength ratio
- Easy to inspect and repair

Stock Number	Description	Chain Size (in)	Reach (ft)	WLL at 90° (lbs)	WLL at 60° (lbs)	WLL at 45° (lbs)	WLL at 30° (lbs)
CMS39SOSR5	Single Chain Sling - Master Link and Sling Hook, 5'	3/8	5	8800	-	-	-
CMS28SAALR10	Single Adjustable Chain Sling, 10'	9/32	10	4300	-	-	-
CMS39SAALR10	Single Adjustable Chain Sling, 10'	3/8	10	8800	-	-	-
CMS51SAALR10	Single Adjustable Chain Sling, 10'	1/2	10	15000	-	-	-
CMS28DOSR5	Double Chain Sling - Master Link and Sling Hook, 5'	9/32	5	-	7400	6100	4300
CMS39DOSR5	Double Chain Sling - Master Link and Sling Hook, 5'	3/8	5	-	15200	12400	8800
CMS51DOSR5	Double Chain Sling - Master Link and Sling Hook, 5'	1/2	5	-	26000	21200	15000
CMS28DAALR10	Double Adjustable Chain Sling, 10'	9/32	10	-	7400	6100	4300
CMS39DAALR10	Double Adjustable Chain Sling, 10'	3/8	10	-	15200	12400	8800
CMS51DAALR10	Double Adjustable Chain Sling, 10'	1/2	10	-	26000	21200	15000





#### **HVAC Analyzers & Meters**

Flue Gas and CO Analyzers

SPECIFICATIONS SPECIFICATIONS	TPI708C10	TP1709A740	TP1712A740	TPI715K3
MODEL	171/00010	1717U9A74U	1F1/1ZA/40	IFI/ IORO
CO Measurement	0-10,000 ppm	0-10,000 ppm	0-10,000 ppm	0-10% (100,000 ppm)
02 Measurement	0-25%	0-25%	0-25%	0-25%
NO Measurement	n/a	n/a	n/a	0-5,000 ppm
NOx (Calculated)	n/a	n/a	n/a	0-5,250 ppm
CO2 Measurement	0-25%	0-25%	0-25%	0-25%
CO/CO2 Ratio	0 to 0.999	0 to 0.999	0 to 0.999	0 to 0.999
Combustible Leak Indication	no	no	yes	no
Pressure	yes (TPI621)	yes	yes	no
Pressure Differential	yes (TPI621)	yes	yes	no
Stack Temp (CH1)	yes	yes	yes	yes
Ambient Temp (CH2)	yes	yes	yes	yes
Temperature Differential	yes	yes	yes	yes
Excess-Air	yes	yes	yes	yes
Air-Free (CO)	yes	yes	yes	yes
Efficiency	yes	yes	yes	yes
Store Memory	50	50	50	10
Logger Memory	no	no	yes	no
IRDA (optional)	no	no	yes	yes
Battery	3 "AA" batteries	3 "AA" batteries	rechargeable	rechargeable
Standard Accessories Included	TPI708 Analyzer, flue probe, silcon tubing, beaded temp probes, brass fit- tings, carrying case TPI621 manometer and TPIA740 printer	TPI709 Analyzer, flue probe, silcon tubing, beaded temp probe, brass fit- tings, carrying case and TPIA740 printer	TPI712 Analyzer, flue probe, silcon tubing, beaded temp probe, brass fit- tings, carrying case and TPIA740 printer	TPI715 Analyzer, flue probe, silcon tubing, beaded temp probe, brass fittings, carrying case



#### TPI708C10 / TPI709A740 / TPI712A740 / TPI715K3

Choose from a complete line of flue gas and CO analyzers. Calculate CO2, gross or net efficiency and excess air. All units measure CO. 02. temperature and, depending on the model, pressure and NOX. NOTE:

· When selecting oil as fuel be sure to use the optional TPI773 oil filter or reading could become erratic.

#### **TPI750A Refigerant Leak Detector**

- 0.2 ounces per year sensitivity
- Detects all existing refrigerants and blends including 404A, PURON, and R507 (AZ50)
- 400 hour sensor life under normal use
- Easy one-hand, thumb wheel operation

#### **TPI753A Refigerant Leak Detector**

- 0.1 ounces per year sensitivity
- · Detects all existing refrigerants and blends including 404A, PURON, and R507 (AZ50)
- 400 hour sensor life under normal use
- Pump driven: finds and clears quicker for finding leaks faster

# TPI750A

TPI753A

#### TPI621C3 Manometer Kit

- · Measure high efficiency gas and oil equipment pressure to make proper adjustments and maximize efficiency
- Kit includes:
- TPI621 with resolution of 0.001" of H20
- Range of ±120" of H20
- TPIA612 protective tilt stand boot
- (2) TPIA605 ¼ inch tapered "T's
- (2)TPIA603 brass fittings (1/4 inch NPT to ½ inch barb)
- TPIA774 (six foot of silicone tubing)
- (2) TPIA776 static tips
- · Carrying case.

#### TPI1010A IAQ Meter

Features & Benefits:

- · Calculate percent outside air to maintain acceptable CO2 levels in buildings and work spaces

  • Print test data with date and time stamp
- using optional A740 printer

   Measure and display Carbon Dioxde(CO2)
- and Carbon Monoxide
- Measure ambient air temperature
- Measure relative humidity, dewpoint and wet bulb
- . Log up to 10,000 readings in 1second to 1 hour intervals
- Download to computer via optional TPIA368 USB cable TPI1010A







TPI621C3

12.

#### TPI343C1 Digital Thermometer

- Auto field calibrate in less than 10 seconds in ice water to achieve +/- 1° F system (tester & probe) accuracy within 30 to 120° F temperature
- TPI343 can measure -58 to +2.462° depending upon the probe used
- Durable TPICK21M pipe clamp probes for one hand operation on suction lines
- T1, T2, T-differential, Min, Max, Data hold, and selectable C/F°
- · Comes with tilt-stand, protective boot, two TPICK21M, and TPIA340 soft pouch



**TPI343C1** 

#### TPI575C1 Dual Air Velocity Meter

- Vane: Air flow 0.4 to 25 m/s (Also reads km/s, ft/min, knots/h, miles/h)
- . Hotwire: Air flow 0.2 to 20 m/s (Also reads km/s, ft/min, knots/h, miles/h)
- Temperature -5 to 175° F (-20 to 80°C).
- · Data record function for maximum and minimum temperature and air velocity readings
- 39" cable length with Lemo connector
- Data hold
- Auto power off
- Protective boot and soft carrying case included

#### TPI605 Digital Vacuum Meter

- Measure vacuum 15 to 12,000 microns
- Display updates every 0.5 seconds
- · Read vacuum in seven international units of measure: microns, PSI, inHg, mBar, Pascals, Torr, and mTorr



TPI575C1



TPI605







## **FACILITIES MAINTAINENCE**

#### **Universal & Safety Tools**

#### TP1775 Combination CO/ Combustible Gas Detector

- Combo ambient CO measurement and combustible gas leak detector
- . One-hand easy to use
- Auto and manual zero
- Adjustable tic rate
- · Audible & visual alarms

# TPI720B Combustible Gas Detector

• Similar to TPI775 but without Co-Detection



#### **TPI510 Solar Irradiance Meter**

- Measures maximum solar energy angle
- Displays results in W/m² or BTU
- Range of 0 to 1999 W/m<sup>2</sup> or 0 to 634 BTU
- Min/Max and Data Hold functions

#### **TPI50 AC Low Voltage Tester**

- Non-contact voltage detector
- 50 to 1,000 volts
- · Audio and visual alert
- · Always on, no switch required
- UL listed

#### TPISDIT300 Resistance Tester

Digital Insulation Resistance Tester with AC Volts.

- Insulation Resistance Ranges:  $20M\Omega$ ,  $200M\Omega$ ,  $2000M\Omega$
- Test Voltages: 250V, 500V, 1000V
- Continuity Ranges:  $2\Omega$ ,  $20\Omega$

# TPI9000 Inspection/Monitoring

- Capture repetative information to analyze equipment over long periods of time for efficency
- · Set up custom data collection
- Download and save critical information
- 8.7" x 3.7" x 1.8" (220mm x 95mm x 45mm



#### TPI381, TPI383, TPI384 IR Non-Contact Temperature Tester

Measures surface temperature without the use of a probe.

- Easy to use single button operation
- 0.1 resolution for best reading (380/381)
- Last reading held for 30 seconds
- Soft holster pouch included
- · Large, easy to read backlit display
- °C and °F selectable
- Temperature ranges:
- TPl381: 0°F to 572°F (-18°C to 300°C)
- TPI383: -31°F to 999°F v (-35°C to 560°C)
- TPI384: -4°F to 1,832°F (-20°C to 1,000°C)

#### TPI376C1 I/R Contact/ Non-Contact Tester

Combines IR with contact temperature measurement, includes:

- TPI376 IR Thermometer Temp. Range: -58°F to 950°F (-50°C to 510°C)
- TPIGK13M K-type probe
- TPIHK11M handle
- TPICK15M HD surface probe
- TPIGK16M air probe
- TPICK13M chisel probe
- TPIA905 carrying case

#### TPI9020 Pro Data Collection Analyzer

- C-Trend Software gives you greater ease of use and flexibility.
- Store, analyze and report on all your vibration, lube and process parameters (e.g. oil pressures, lube volume, temperature, run hours, etc.) in one place.
- All information is just a click away. Color coded alarms highlight problems. Trend lines show problems before they happen.
- Data can be accessed anywhere on any machine, with networking software. Plant history is everything and C-Trend turns it into useful information with the click of a mouse!



#### **TPI395 Refractometer**

Accurately measures the freezing point of fluids used in hydronic heating systems.

Measures propylene, glycol, ethylene, and battery fluid

#### TPI397 pH Meter - Pen Style

- Wide pH range of 0.10-14.00pH covering most applications
- Operating temperature from 40 -120 °F (5 - 50 °C) allows for temperature compensated readings
- Waterproof design protects the meter
- Low power consumption extends battery life for low operation costs and reliability
- Auto-off function turns power off

#### TPI390 Total Dissolved Solids Meter

- Test TDS levels in make-up water to prevent scale formation, corrosion, and embrittlement
- Test condensate water in cooling tower/ humidifier reservoir applications to prevent bacterial growth
- Reduce water and chemical consumption in boilers and cooling towers
- Verify automated TDS controllers are functioning properly
- Prevent low quality wet steam generation in boilers due to foaming caused by high TDS levels

#### **TPI9070 Smart Vibration Meter**

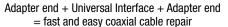
- ISO Built-in Alarms
- Identify bearing problems with BDU Reading
- Identify balance, alignment, looseness problems with our built in band filters
- 800 line FFT (spectrum)
- Ruggedized IP67 case
- 3-year Limited Warranty Features:
- Full Color OLED Display
- Built-in accelerometer with interchangeable stinger and magnetic mount



#### **Universal Coax Cable Connector Kits**

Universal Connector Kits provide the exact adapters you need for mating or repairing coax cables. Quickly and easily make repair fittings yourself with the proper ends and the threaded "Universal Interface" connector. Connectors screw together in seconds without soldering or crimping The machined brass connectors are silver or zinc plated with gold plated connector tips and insulated with teflon seals. Use the components you need, then reorder as needed to keep the kit ready for your next custom connector project. All components are available from Snap-on Industrial.







TPI3000A 30 Piece Standard Universal Connector Kit



TPI5000A 40 Piece Master Universal Connector Kit



TPI5010 Universal Adapter Cable Kit (RG58)

Standard kit offers basic selection of connectors. Master Kit Includes all of the Standard Kit components plus T-connectors, Banana connector and BNC connector. Ideal for military field work.

# **FACILITIES MAINTAINENCE**



#### **Digital Meters**

#### TPI460 Dual Trace, 20MHz Oscilloscope with True RMS Digital Multimeter With Backlight

- 20 MHz Bandwidth captures signals from AC/DC drive motors, sensors, actuators, line and control voltages, UPS and industrial machines
- Curser Readout measures the width and amplitude of the signal and display it on the screen instead of trying to figure it out manually
- · Decibels accurately measure sound signals
- Pre- and Post- Triggering views the waveform before and after the point the scope triggers at to find glitches
- Trend Mode graph readings over a predetermined time period to check for surges or dropouts
- Dual Input views two waveforms on the display for comparison and troubleshooting

Applications:
• Power quality

- Variable speed drives
- Industrial motor controls
- · Battery testing
- Prográmmablě logic controls NC/CNC machines
- Uninterruptible power supplies
- Audio/Video
- Industrial lighting controls
- Factory automation Line conditioners
- Voltage regulators
- Inverters · Gaming industry





**TPI460** 

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#### TPI440 Single Trace, 1MHz Oscilloscope with True RMS Digital Multimeter

- Auto Ranging 4,000 Count True RMS DMM: The TPI440 has 9 measurement functions and 0.3% basic DC accuracy
- 1 MHz Single Trace Oscilloscope: View industrial power signals such as motor controls, and switching power supplies with detail and clarity

  • Trend Mode: Graph readings over a predetermined time period
- to check for surges or dropouts
- · Component Test: Check voltage-current signatures on resistors, capacitors, and semiconductors
- Logic Test: Indicates transitions up to 2MHz
- Frequency Counter: Measure low frequency signals from 1Hz to 2MHz and display duty cycle, pulse width and period

#### Applications:

- Power Quality Industrial Motor
- Controls
- · View waveform to verify power equality delivered to variable speed drives
- Measure voltage and frequency at the same time
- 400µF to check motor start and run capacitors
- DC µAmps for checking
- flame safety controls
  DC mV for checking thermocouples





#### TPI192 50,000 Count True RMS Digital Multimeter: CATIII 1,000VAC, CATIV 600VAC TPI194 50,000 Count True RMS Digital Multimeter

Features:

- · Large 50,000 count display increases resolution and improves accuracy (1.7" x 2.75", 43mm x 70mm)
- Triple Display shows more than one reading simultaneously
- 51 Segment Analog Bar Graph to catch fast AC fluctuations
- Back Light (LED Type) allows viewing in any light condition
   Auto Range attornatically selects the best range for the measurement
- Separate battery and fuse compartment for easy replacement
- AC voltage and current waveforms found on controls and circuits Silicone 1.000V CAT III. 600V CAT IV. 10A test leads (CE & cUL listed)
- Capacitance measures the value of capacitors
- Diode Test displays approximate forward bias voltage
- · Continuity and buzzer to check for opens and shorts
- Time Stamp Logging logs up to 100 readings (min/max/avg)
- Pulse Width measures the duration of a pulse
- · Duty Cycle displays the total "on" time of a component
- Inductance measures the value of inductors and coils

- Applications:
   Power Quality
- Industrial Motor Controls
- · View waveform to verify power equality delivered to variable speed drives.
- . Measure voltage and frequency at the same time
- 400µF to check motor start and run capacitors
- DC uAmps for checking flame safety controls
- DC mV for checking thermocouples



TPI192 /



**TPI194** 

#### TPI196 50.000 Count 0-24mA Process Control Meter

- Large 50,000 count display increases resolution and improves accuracy (1.7" x 2.75", 43mm x 70mm)
   0-24mA output for process controls

- Triple Display shows more than one reading simultaneously
   51 Segment Analog Bar Graph to catch fast AC fluctuations
   Back Light (LED Type) allows viewing in any light condition
- Auto Range automatically selects the best range for the measurement
- · Separate battery and fuse compartment for easy replacement
- · Continuity and buzzer to check for opens and shorts
- Includes protective boot and silicone rubber (CAT IV 600V) test leads

## Applications:

- 4~20mA Transducers (Pressure, Strain, Temperature, Flow, Level)

  • Loop Powered Isolators
- Two Wire Transmitters
- Valve Positioners Signal Conditioners
- Process Scaled Indicators





**TPI196** 

#### TPI270 Clamp-on Ammeter

Measure motor in-rush & run current. Measure temperature differential with relative mode using any K-type probe (no adapter required)

- Non-contact voltage tester function
- Slim iaw and body design for use in crowded electrical panels
- Up to 400 AC amps with 0.01 resolution
- · Capacitance, Hz, VAC, VDC, Ohms, and continuity



**TPI270** 

# Accessories For: TPI440, TPI460, & TPI192/TPI194

Stock Number	Description
TPIA402	PC software and RS232 cable for TPI440
TPIA403	Protective boot for TPI440
TPIA900	Soft zipper carrying case for TPI440 with shoulder strap
EETA503C	Low current adapter for TPI440, TPI460, TPI192/TPI194
EEDM5030	Current shunt adapter for TPI440, TPI460, TPI192/TPI194
TPIA312	Dual input temperature adapter for TPI440, TPI460, TPI192/TPI194
TPIA251	400 AC mV output adapter for TPI440, TPI460, TPI192/TPI194
EETA501C	400 AC/DC amp adapter for TPI440, TPI460, TPI192/TPI194
EETA502C	1,000 AC/DC amp adapter TPI440, TPI460, TPI192/TPI194





#### Metalsawing





# WMH414461, WMH414453\* - 5" X 8" Horizontal Bandsaws

A steel heat-treated worm driving a bronze worm gear gives smooth and quiet operations of the gear box assembly. The JET oil bath drive train extends the production life of the machine parts. The blade guides adjust fully in three planes. The saw's sliding guide arm permits positioning close to the cut.

#### STANDARD FEATURES

- Adjustable hydraulic feed system
- Adjustable ball bearing guides
- Heat treated steel worm gear and bronze drive gear
- · Automatic shut off at end of cut
- Handle & Wheels for convenient moving to various work stations
- 115V 1PH, 1/2HP

\*Includes 1 gallon capacity coolant system, 115V/IPh, complete with hose, flexible nozzle, shut-off valve, tank and baffle

Bandsaw Blade: Please order Easy-Cut® Part Number: 825966205084



## WMH414454 - 7" x 12" Horizontal Wet Band Saw

STANDARD FEATURES

• Blade Guides:

Side: Eccentric shaft, ball bearing

Rear: Ball bearings

- Blade drive is steel, heat treated worm, driving a bronze worm gear in oil bath
- · Heavy duty cast iron saw head and table
- Oil bath hardened and ground worm gear
- · Adjustable ball bearing blade guides
- · Blade wheels are made of flanged cast iron
- Adjustable hydraulic feed system
- Automatic shut-off at end of cut
- 115V 1PH. 3/4HP

\*Wet cutting saw includes 1 gallon capacity coolant system, 115V/IPh, complete with hose, flexible nozzle, shut-off valve, tank and baffle

Bandsaw Blade: Please order Easy-Cut® Part Number: 825967907090

#### WMH414500K - 14" Wood/Metal Vertical Bandsaws

These saws are specially designed to effectively cut a variety of materials including wood, plastic, bakelite, composites, ferrous and non-ferrous metals. Capable of contour and straight cutting and resawing. Can cut delicate curves in both thick and thin stock.

#### STANDARD FEATURES

- Cast iron frame
- · Solid, one-piece steel base for extra stability
- · Conveniently located on/off switch
- Exclusive gear box design allows wood/metal model saws to be used for a wider variety of metal, wood, non-ferrous metal and plastic cutting applications.
- Voltage 1HP, 115V, 1PH



WMH414500K

Bandsaw Blade: Please order Easy-Cut® Part Number: 82596620784

Please refer to page N164 for more Easy-Cut® Bandsaw Blades.



#### Metalworking

#### WMH577003 - 1" x 42" Belt/8" Sander with Miter Gauge

STANDARD FEATURES

- Hinged idler wheel cover
- Power take off, allows for mounting an optional flex shaft, when can be used to do carving, drum sanding, deburring and dozens of other jobs
- Deluxe miter gauge that turns and locks for common angles 45° both left and right
- Abrasive belt unit does the work of a jig saw, coping saw or hand file while removing material and finishing at the same time, allows the operator to get into small openings, plus handle odd shapes and angles
- Allows for sanding, grinding or finishing of outside, curves or odd shaped work pieces on the belt

- Grind, sand or finish large work pieces on the disc unit fast and efficiently; combined with the tilting table, the operator has the advantage of chamfering or beveling, table is slotted to accept miter gauge
- Delivers sharper, faster cutting actions; easy belt changes with a variety of grits, belt keeps the machine cool, so one can complete a wide range of jobs
- When using non-woven synthetic belts the operator can blend, polish, buff or finish metal surfaces in addition to defuzzing wood surfaces
- 1/3HP, 1PH, 115V Motor and Toggle Switch



WMH577101

#### WMH577101 JET Industrial Bench Grinders

STANDARD FEATURES

- UL listed
- · Totally enclosed, pre-lubricated ball bearings
- Heavy-duty guarded toggle switch on 8" and 10"
- · Rubber mounts prevent movement

Stock No. Wheel Diameter (dia. x W/in.)			
WMH577101	6" Bench Grinder x 3/4" Wide Wheels, 1/2HP, 115V, 1PH		
WMH577102	8" Bench Grinder, 1" Wide Wheels, 1HP, 115V, 1PH		
WMH577103	10" Bench Grinder, 1" Wide Wheels, 1 1/2HP, 115V, 1PH		

#### WMH577172 Pedestal Stand for Bench Grinders

STANDARD FEATURES

- · Heavy-duty cast iron construction
- · Stable, wide stance base
- Fully adjustable platform coolant tank and tool tray

#### WMH414550K Combination Belt and Disc Machine

STANDARD FEATURES

- 6" x 48" Belt
- 10" Disc
- Two cast iron tilting tables for mitering applications
- Full access to the belt when tilted in the horizontal position
- Dust collection shrouds on belt and disc
- Quick-release tension mechanism makes belt changes quick and easy
- · Removable safety key switch
- Enclosed base protects motor from sanding dust
- Floor stand included (some assembly required)





#### WMH354170 JET 20" Floor Drill Press

STANDARD FEATURES

- Hinged metal belt and pulley cover coupled with quick adjustment motor mount allow rapid changing of spindle speeds
- Rotating, 45° tilting, crank-operated worktable with quick release clamp
- On/off switch located on front of the drill press head
- A 1/2" diameter external positive depth stop with three nut locking feature for quick adjustment
- Adjustable tension spindle return spring
- · Spindle is supported by high quality ball bearings
- Built-in work lamp on all models, bulb not included.
- · Drill chuck and key included
- 1" Drilling Capacity, 1-1/2 HP, 1Ph, 115/230V





• Read safety precautions on pages W1 to W2

#### **Material Handling**



#### JET 6,000 Lb. Capacity Premium Pallet Trucks

- Premium quality 6.000 lbs. capacity pallet truck
- Easy-to-use with large ergonomic handle, fingertip controls and 200 degrees turning radius
- Articulating axle maintains wheel contact on
- Hydraulic pump is load tested and inspected 20 times prior to assembly
- One-piece cast pump features hardened and chromed piston and ram with high quality seals
- Pump also features step-less lowering valve, allowing you to control the rate of descent, top-of-stroke and safety overload bypass system
- Single point replacement valve makes servicing or rebuilding easy
- Solid steel lifting rods, no periodic adjustment
- Rounded fork tips with nylon rollers for trouble-free pallet entry and exit
- · Polyurethane over aluminum steer wheels with lifetime lubricated bearings
- Nylon load wheels with lifetime lubricated bearings

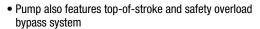
Stock No.	Item Description
WMH140170	20" x 36" Forks 6,000 lb Capacity
WMH140172	20" x 48" Forks 6,000 lb Capacity
WMH140174	27" x 42" Forks 6,000 lb Capacity
WMH140175	27" x 48" Forks 6,000 lb Capacity

#### JET 5,000 Lb. Capacity J Series Pallet Trucks

STANDARD FEATURES

- High quality 5,000 lbs. capacity pallet truck with durable powder coat finish
- 2-1/2" lowered height for smaller opening pallets
- Easy-to-use with one hand operation, fingertip controls and 180 degrees turning radius
- Handle returns to upright position when not in use
- Articulating axle maintains wheel contact on uneven floor surfaces
- · Welded steel pump features hardened and chromed piston and ram with high quality seals

	Stock No.	Item Description			
JET PALLET TRUCKS	WMH140016	16" x 36" Forks, 5,000 Lb Capacity			
	WMH140084	20" x 42" Forks, 5,000 Lb Capacity			
	WMH140083	20" x 48" Forks, 5,000 Lb Capacity			
	WMH140081	27" x 42" Forks, 5,000 Lb Capacity			
	WMH140080	27" x 48" Forks, 5,000 Lb Capacity			



• Solid steel lifting rods, no periodic adjustment required • Tapered fork tips with steel ramps for trouble-free pallet entry and exit

• Polyurethane over steel steer wheels with lifetime lubricated bearings

• Nylon load wheels with lifetime lubricated bearings

 Additional grease fittings provide for lubrication of pivot points





#### **IET HD Resin Service Carts**

STANDARD FEATURES

- Heavy duty resin construction resists dents, chips, and rust
- · Handle has built in storage bins
- · Round corners mean no sharp edges to nick walls or furniture
- Large, quiet, non-marking 5" casters

Stock	k No.	Model No.	Max Capacity (lbs.)	Shelf Size (in)	Upper Shelf Height (in)	Height Between Shelves (in)	Lower Shelf Height (in)	Caster Size (Ibs)	Overall Size (LxWxH/IN)	Shipping Weight	Carton Pack
WMH	1140018	PUC-3117	550	31 <sup>1</sup> /8 x 17 <sup>1</sup> /8	33 1/2	19 <sup>1</sup> / <sub>2</sub>	6	5 x 1	39 <sup>3</sup> /4 x 17 <sup>1</sup> /8 x 33 <sup>1</sup> / <sub>2</sub>	40	1
WMH	1140019	PUC-3725	550	37 <sup>3</sup> /8 x 25 <sup>5</sup> /8	33 1/2	19 <sup>1</sup> / <sub>2</sub>	6	5 x 1	46 x 25 <sup>5</sup> / <sub>8</sub> x 33 <sup>1</sup> / <sub>2</sub>	42	1

### Locktile® Commercial & Industrial Flooring

- Locktile® can be installed over virtually any existing substrate, including concrete, wood, resin, ceramic tiles, porcelain, linoleum etc.
- Locktile® unique interlocking system allows for loose lay without any adhesives in most installations.
   Locktile® provides a simple, rapid solution for covering worn, contaminated and damaged floors
- Locktile® is an extremely resilient and ergonomic industrial floor solution

#### Locktile Commerical Flooring (19-5/8" x 19-5/8" x 3/16" Thick)

				,		- ,		
Standard Surface Coating					DURO-X-TREMETM Surface Coating			
	Coin Style	9	Smooth Style		Coin Style		Smooth Style	
Color	Stock Number	Color	Stock Number	Color	Stock Number	Color	Stock Number	
Black	EVFS5LT001	Black	EVFS5TT001	Black	EVFS5LT001X	Black	EVFS5TT001X	
Gray	EVFS5LT002	Gray	EVFS5TT002	Gray	EVFS5LT002X	Gray	EVFS5TT002X	
White	EVFS5LT003	White	EVFS5TT003	White	EVFS5LT003X	White	EVFS5TT003X	
Brown	EVFS5LT004	Brown	EVFS5TT004	Brown	EVFS5LT004X	Brown	EVFS5TT004X	
Tan	EVFS5LT005	Tan	EVFS5TT005	Tan	EVFS5LT005X	Tan	EVFS5TT005X	
Red	EVFS5LT006	Red	EVFS5TT006	Red	EVFS5LT006X	Red	EVFS5TT006X	
Yellow	EVFS5LT007	Yellow	EVFS5TT007	Yellow	EVFS5LT007X	Yellow	EVFS5TT007X	
Blue	EVFS5LT008	Blue	EVFS5TT008	Blue	EVFS5LT008X	Blue	EVFS5TT008X	
Green	EVFS5LT009	Green	EVFS5TT009	Green	EVFS5LT009X	Green	EVFS5TT009X	
Orange	EVFS5LT010	Orange	EVFS5TT010	Orange	EVFS5LT010X	Orange	EVFS5TT010X	

#### Locktile Industrial Flooring (19-5/8" x 19-5/8" x 1/4" Thick)

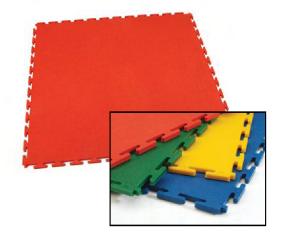
Standard Surface Coating				DURO-X-TREMETM Surface Coating				
Coin Style			Smooth Style		Coin Style		Smooth Style	
Color	Stock Number	Color	Stock Number	Color	Stock Number	Color	Stock Number	
Black	EVFS7LT001	Black	EVFS7TT001	Black	EVFS7LT001X	Black	EVFS7TT001X	
Gray	EVFS7LT002	Gray	EVFS7TT002	Gray	EVFS7LT002X	Gray	EVFS7TT002X	
White	EVFS7LT003	White	EVFS7TT003	White	EVFS7LT003X	White	EVFS7TT003X	
Brown	EVFS7LT004	Brown	EVFS7TT004	Brown	EVFS7LT004X	Brown	EVFS7TT004X	
Tan	EVFS7LT005	Tan	EVFS7TT005	Tan	EVFS7LT005X	Tan	EVFS7TT005X	
Red	EVFS7LT006	Red	EVFS7TT006	Red	EVFS7LT006X	Red	EVFS7TT006X	
Yellow	EVFS7LT007	Yellow	EVFS7TT007	Yellow	EVFS7LT007X	Yellow	EVFS7TT007X	
Blue	EVFS7LT008	Blue	EVFS7TT008	Blue	EVFS7LT008X	Blue	EVFS7TT008X	
Green	EVFS7LT009	Green	EVFS7TT009	Green	EVFS7LT009X	Green	EVFS7TT009X	
Orange	EVFS7LT010	Orange	EVFS7TT010	Orange	EVFS7LT010X	Orange	EVFS7TT010X	

### **Locktile Edging**

Black Single Edging Strip	Gray Single Edging Strip	
EVFS001 - Sold by the foot, order number of feet desired	EVFS002 - Sold by the foot, order number of feet desired	

#### Locktile Flooring features:

- Extremely durable and hard wearing.
- Can be installed over cracked un-even and contaminated sub-floors.
- Long lasting, with exceptional resistance to moisture. impact and abrasion.
- Exceptional sound absorption qualities, reducing ambient noise levels.
- Ergonomic benefits include warmth and underfoot comfort.
- DURO-X-TREMETM tiles feature a resiliant superior scratch resistant finish, for easer maintenance.





### **Reel Racks**





### Wire Spool Rack

- 7-shelf reel rack adustable on 1-1/2" centers
- · Organize and retrieve wire, cable, chain, hose, rope or tubing
- . Holds reels up to 16" in diameter
- · V-shaped shelves with center rod
- · Fiberboard on shelves to deaden noise and prevent excessive uncoiling

Stock Number	Description	Dimensions (W x H x D)
EQ880-7	Wire Spool Rack	36" x 84" x 8"

See more Equipto shop organization products on pages N091 to N095 Snap-on Industrial offers the full assortment of Equipto products. Contact your Snap-on Industrial Representative or call our Customer Service at (877) 740-1900 for more information.

### **Reel Racks**

- Organize reels of cable and supplies, making them easy to retrieve
- Racks hold up to 2000 lbs. per level, and up to 12000 lbs. per rack
- High capacity free standing A-frame racks
- 96"-120"-144" heights
- 12,000 lb. capacity
- 3" x 3" vertical posts with mounting holes
- Adjustable cross beams on 2" centers with automatic safety locks

Adjustable cross seams on E contere that automatic safety focies				
Width		Number of		
wiatn	96"	120"	144"	Reel Holders
48"	EQ1072R04	EQ1072R14	EQ1072R24	Two Pair
72"	EQ1072R06	EQ1072R16	EQ1072R26	Two Pair
48"	EQ1073R04	EQ1073R14	EQ1073R24	Three Pair
72"	EQ1073R06	EQ1073R16	EQ1073R26	Three Pair
48"	EQ1074R04	EQ1074R14	EQ1074R24	Four Pair
72"	EQ1074R06	EQ1074R16	EQ1074R26	Four Pair
48"	EQ1075R04	EQ1075R14	EQ1075R24	Five Pair
72"	EQ1075R06	EQ1075R16	EQ1075R26	Five Pair

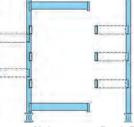




EQ1072R04

EQ1076E08

Racks can be ganged. Each unit is supplied with right-hand reel holders (as shown) that fasten to next unit or rack end.



Unit **Rack End** 

#### **Reel Rack Ends**

Stock Number	Height
EQ1076E08	96"
EQ1076E10	120"
EQ1076E12	144"



- Sold in pairs ony
- Accommodate axles up to 2-3/8" 0.D.
- · Capacity 2,000 lbs.
- Stock Number EQ78218RH
- · Reel rack shown assembled with one Rack Unit and one Rack End
- Pipe is not included. Secure standard schedule 40 pipe (up to 2" nominal) from your local plumbing supply
- Reel holders are adjustable on 2" increments to hold multiple reels
- Use 47" pipe length for 48" wide rackUse 71" pipe length for 72" wide rack





At Snap-on Industrial, we've helped customers solve difficult problems for years. Our expertise can help solve yours.

Today, Snap-on Industrial continues as an industry leader with more than 300 hand tools that meet aerospace standards AS954, AS4283 and AS4984. From high tech aerospace tools to heavy-duty tools for railroads, we have an unmatched diversity of experience. We offer a steady stream of new products, as well as refinements and improvements to existing products. Let Snap-on Industrial help you solve your industry's most specific problems.

### **AEROSPACE STANDARDS**

### **Commitment to Quality and Standards**

Snap-on® is committed to meeting ANSI and global product standards, and often goes beyond them. Whether it's Snap-on products or partner products, every tool we sell goes through rigorous testing for performance, quality, ergonomics, durability and safety. Done at our own corporate test facility in Kenosha, we pledge to meet or exceed the highest standards in the industry. At Snap-on, we:

- Are active participants in the creation of ANSI and other industry standards
- Hold regular meetings with government and industry bodies to review and update current and developing technologies
- Offer unique and proprietary products designed to go beyond the scope of ANSI and other standards

### The Snap-on® Flank Drive® Advantage



Conventional 12-point wrench and the contact it makes on the corner of a nut or bolt. The corner can round off under high loads causing the wrench to slip.



A Snap-on® Flank Drive® wrench moves the contact away from the corners with a radius, then provides flat-to-flat contact for up to 20% more turning power.

## AS954 Specification References Explained

318 Snap-on 12 point sockets, universal sockets, wrenches, and torque adaptors noted in our catalog completely meet the AS954 standard.



Competition implies meeting AS954 (Aerospace Standard) specification in their catalog. But they only reference ONE subsection of the standard.

AS954 Sub Sections	Sub section description	Snap-on	Competition
3.2	aterial	Х	
3.4.1 (sockets only)	Drive end dimensions	Х	
3.4.1.1 (sockets only)	Internal drive opening	Х	
3.4.1.1.1 (sockets only)	Detent	X	
3.4.2 (sockets only)	Tang engagement	X	
3.5	Hardness	Х	
3.6	Plating	Х	
3.6.1	Surface Finish	Х	
3.6.3	Surface Condition	Х	
3.7	Proof Load Test	Х	
3.7.3.1	Cyclic Load test	Х	
3.7.3.2	Fragmentation Test	X	
3.8.1	Wrench Design	X	Х*
3.8.3	Wrench Opening Tolerance	Х	
3.8.4.1 (sockets only)	Through hole clearance	Х	
3.8.4.2 (sockets only)	Bolt Clearance Hole	Х	
3.11	Workmanship	Х	
3.11.1	Foreign Object Damage	Х	

<sup>\*</sup> as shown in competitor's catalog

1/4" & 3/8" Drive

Snap-on® offers over 300 hand tools that conform to Aerospace Standards AS954, AS4283, AS4984, and/or MIL-W-8982. They can be found in their respective locations in the Hand Tools section of this

1/4" Drive Ratchets and Accessories

Stock Number	Description	Catalog Page
T72	Ratchet - Standard Handle - Sealed	7
GT72	Ratchet - Standard Handle - Sealed - Ind Finish	7
TMU8B	Universal Joint	81
TMS4E	Speeder	82
TMXK2	Knurled Extension - 2"	72
TMXK4	Knurled Extension - 4"	72
TMXK60	Knurled Extension - 6"	72
TMXK140	Knurled Extension - 14"	72
TM10G	TM10G Breaker Bar	

### 1/4" Drive, Semi Deep 12 Pt. Sockets, Page 18

Stock Number	Size (SAE)
TMDS6	3/16"
TMDS7	7/32"
TMDS8	1/4"
TMDS9	9/32"
TMDS10	5/16"
TMDS11	11/32"
TMDS12	3/8"
TMDS14	7/16"
TMDS16	1/2"
TMDS18	9/16"

### 1/4" Drive, Deep 12 Pt. Sockets, Page 19

Stock Number	Size (SAE)
STMD6	3/16"
STMD7	7/32"
STMD8	1/4"
STMD9	9/32"
STMD10	5/16"
STMD11	11/32"
STMD12	3/8"
STMD14	7/16"
STMD16	1/2"
STMD18	9/16"

### 1/4" Drive, Deep Flare-Nut Sockets - 12 Pt. **Page 121**

- 0 -	
Stock Number	Size (SAE)
AN85086B	3/8"
AN85087B	7/16"
AN85088B	1/2"
AN85089B	9/16"

### 1/4" Drive, High Performance/Spline Sockets - Shallow Page 69\*\*

Stock Number	Size (Spline / SAE)
TES7	# <b>7 -</b> <sup>7</sup> / <sub>32</sub> "
TES8	#8 - 1/4"
TES9	#9 - 9/32"
TES10	#10 - <sup>5</sup> /16"
TES12	#12 - 3/8"
TES14	#14 - <sup>7</sup> /16"

### 1/4" Drive, High Performance/Spline **Sockets Deep** 6 Pt. Page 69\*\*

Stock Number	Size (Spline / SAE)
TEL7	#7 - <sup>7</sup> /32"
TEL8	#8 - 1/4"
TEL10	#10 - <sup>5</sup> /16"

### 1/4" Drive, High Performance/Spline **Sockets Universal** Page 69\*\*

Stock Number	Size (Spline / SAE)
TESU8	#8 - 1/4"
TESU10	#10 - <sup>5</sup> /16"

1/4" Drive, High **Performance Sockets-**Universal - 12 Pt. Page 69 \*\*

Stock Number	Size (SAE)
TDHU81A	1/4"
TDHU101A	5/16"
TDHU121A	3/8"

catalog. The stock numbers and descriptions are shown below, please reference the catalog pages shown for the complete description and specifications of these items

### 3/8" Drive Ratchets and Accessories

Stock Number	Description	Catalog Page
F80	Ratchet - Standard Handle - Sealed	8
FL80	Ratchet - Long Handle - Sealed	8
FX1	Extension - Friction Ball - 1 1/2"	
FXK3	Extension - Friction Ball - 3"	74
FXK6	Extension - Friction Ball - 6"	74
FXK8	Extension - Friction Ball - 8"	74
FX18	Extension - Friction Ball - 18"	
FX24A	FX24A Extension - Friction Ball - 24"	
F10LC	Breaker Bar	
F4LB	Speeder	84
F4LBK	Speeder with knob	84
FU8A	Universal Joint	83

### 3/8" Drive, Semi Deep 12 3/8" Drive, Deep 12 Pt. Pt. Sockets, Page 27

Stock Number	Size (SAE)
FDS081	1/4"
FDS091	9/32"
FDS101	5/16"
FDS111	11/32"
FDS121	3/8"
FDS141	7/16"
FDS161	1/2"
FDS181	9/16"
FDS201	5/8"
FDS221	11/16"
FDS241	3/4"
FDS251	25/32"
FDS261	13/16"
FDS281	7/8"
FDS301	15/16"

## Sockets, Page 27

Stock Number	Size (SAE)
SF081	1/4"
SF091	9/32"
SF101	5/16"
SF111	11/32"
SF121	3/8"
SF141	7/16"
SF161	1/2"
SF181	9/16"
SF191	19/32"
SF201	5/8"
SF221	11/16"
SF241	3/4"
SF251	25/32"
SF261	13/16"
SF281	7/8"
SF301	15/16"
SF321	1"

\*\* Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft.

Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque without damage to the fastener or to the tool.

Chrome spline tools comply with Military Spec. MS-33787 and MIL-W-8982. (Industrial finish tools comply with performance specifications and differ only in finish.) The unique patented spline wrenching configuration can also be used on ordinary 6 and 12-point fasteners with an advantage similar to the Snap-on Flank Drive® wrenching system.

### **AEROSPACE STANDARDS**

### 3/8" & 1/2" Drive

## 3/8" Drive, Universal 12 Pt. Sockets, Page 35

Stock Number	Size (SAE)
FU18B	9/16"
FU20B	5/8"
FU22B	11/16"
FU24B	3/4"

### 3/8" Drive, Deep Flare Nut Crowfoot Wrench, Page 122

Stock Number	Size (SAE)
AN850810B	5/8"
AN850811B	11/16"
AN850812B	3/4"
AN850813B	13/16"
AN850814B	7/8"
AN850815B	15/16"
AN850816B	1"
AN850817B	1 <sup>1</sup> /16"

### 3/8" Drive, High Performance/Spline Sockets - Shallow Page 70\*\*

Stock Number	Size (Spline / SAE)
FES120	#12 - 3/8"
FES140	#14 - <sup>7</sup> /16"
FES160	#16 - <sup>1</sup> /2"
FES180	#18 - <sup>9</sup> /16"
FES200	#20 - 5/8"

### 3/8" Drive, High Performance/Spline Sockets Deep Page 70\*\*

Stock Number	Size (Spline / SAE)
FEL120	#12 - 3/8"
FEL140	# <b>14 -</b> <sup>7</sup> / <sub>16</sub> "
FEL160	#16 - <sup>1</sup> /2"
FEL180	#18 - 9/16"
FEL200	#20 - <sup>5</sup> /8"

\*\* Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft.

Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque without damage to the fastener or to the tool.

### 3/8" Drive, High Performance/Spline Sockets - Universal Page 70\*\*

Stock Number	Size (Spline/SAE)
FESU120	#12 - 3/8"
FESU140	# <b>14 -</b> <sup>7</sup> / <sub>16</sub> "
FESU160	#16 - <sup>1</sup> /2"
FESU180	#18 - <sup>9</sup> /16"

### 3/8" Drive, Torque Adaptors 12 Pt., Page 266

Stock Number	Size (SAE)
FRDH101	5/16"
FRDH121	3/8"
FRDH141	7/ <sub>16</sub> "
FRDH161	1/2"
FRDH181	9/16"

### 3/8" Drive Sockets, Spline Torque Adaptors, Page 266\*\*

Stock Number	Size (SAE)
FRES7	# <b>7 -</b> <sup>7</sup> / <sub>32</sub> "
FRES8	#8 - 1/4"
FRES9	# <b>9 -</b> 9/32"
FRES10	#10 - <sup>5</sup> /16"
FRES12	#12 - 3/8"
FRES14	# <b>14 -</b> <sup>7</sup> / <sub>16</sub> "
FRES16	#16 - <sup>1</sup> /2"
FRES18	#18 - <sup>9</sup> /16"
FRES20	#20 - 5/8"
FRES22	#22 - <sup>11</sup> / <sub>16</sub> "
FRES24	#24 - <sup>3</sup> /4"

Chrome spline tools comply with Military Spec. MS-33787 and MIL-W-8982. (Industrial finish tools comply with performance specifications and differ only in finish.) The unique patented spline wrenching configuration can also be used on ordinary 6 and 12-point fasteners with an advantage similar to the Snap-on Flank Drive® wrenching system.

### 1/2" Drive Ratchets and Accessories

Stock Number	Description	Catalog Page
S80	High Strength Ratchet - Standard Handle - Sealed	10
SL80	High Strength Ratchet - Long Handle - Sealed	10
SX2	Knurled Extensions - 2 1/8"	77
SXK5	Knurled Extensions - 5"	
SX20	Knurled Extensions - 20"	
SX36	Knurled Extensions - 36"	77
S4	Speeder	86
S8	Universal Joint	85
SN15B	Breaker Bar - 15"	16

### 1/2" Drive, Semi Deep 12 Pt. Sockets, Page 39

	,
Stock Number	Size (SAE)
SDH121	3/8"
SDH141	7/16"
SDH161	1/2"
SDH181	9/16"
SDH201	5/8"
SDH221	11/16"
SDH241	3/4"
SDH251	25/32"
SDH261	13/16"
SDH281	7/8"
SDH301	15/16"
SDH321	1"
SDH341	<b>1</b> 1/16"
SDH361	1 1/8"
SDH381	1 <sup>3</sup> /16"
SDH401	1 1/4"
SDH421	1 <sup>5</sup> /16"

### 1/2" Drive, Deep Flare Nut Crowfoot Wrenches, Page 124

Stock Number	Size (SAE)
AN850818B	1 <sup>1</sup> /8"
AN850819B	1 <sup>3</sup> /16"
AN850820B	1 1/4"
AN850821B	1 <sup>5</sup> /16"
AN850822B	1 3/8"
AN850823B	1 7/16"
AN850824B	1 1/2"
AN850825B	1 <sup>9</sup> /16"
AN850826B	1 5/8"
AN850827B	1 <sup>11</sup> / <sub>16</sub> "
AN850828B	1 3/4"
AN850829B	1 13/16"
AN850830B	1 7/8"
AN850831B	1 <sup>15</sup> /16"
AN850832B	2"
AN850834B	2 1/8"
AN850835B	2 3/16"
AN850836B	2 1/4"

## 1/2" Drive, Deep 12 Pt. Sockets, Page 38

, ,		
Stock Number	Size (SAE)	
S121A	3/8"	
S141A	7/16"	
S161A	1/2"	
S181A	9/16"	
S201	5/8"	
S221	11/16"	
S241	3/4"	
S251	25/32"	
S261	13/16"	
S281	7/8"	
S301	15/16"	
S321	1"	
S341	1 <sup>1</sup> /16"	
S361	1 ¹/8"	
S381	1 <sup>3</sup> /16"	
S401	1 <sup>1</sup> /4"	
S421	1 <sup>5</sup> /16"	

# 1/2" Drive, High Performance/Spline Sockets - Shallow Page 70\*\*

Stock Number	Size (Spline/
	SAE)
SES161	#16 - <sup>1</sup> /2"
SES181	#18 - <sup>9</sup> /16"
SES201	#20 - 5/8"
SES221	#22 - 11/16"
SES241	#24 - 3/4"
SES261	#26 - 13/16"
SES281	#28 - 7/8"
SES301	#30 - 15/16"

### 1/2" Drive, Spline Torque Adaptors Page 266\*\*

Stock Number	Size (Spline/
	SAE)
SRES18	#18 - <sup>9</sup> /16"
SRES20	#20 - 5/8"
SRES22	#22 - 11/16"
SRES24	#24 - 3/4"
SRES26	#26 - <sup>13</sup> / <sub>16</sub> "
SRES28	#28 - 7/8"

3/4" Drive, Wrenchs

### 3/4" Drive Ratchets and Accessories

•		
Stock Number	Description	Catalog Page
L872	Ratchet Head	15
L872RJ	Knurled Ratchet Handle	15
L32	Extension - Lock Button - 3"	80
L62	Extension - Lock Button - 8"	80
L122	Extension - Lock Button - 16"	80
1824	Universal Joint	87

### 3/4" Drive High Performance/ Spline - Shallow Sockets, Page 70

Stock Number	Size (Spline/SAE)
LES242	#24 - 3/4"
LES302	#30 - <sup>15</sup> / <sub>16</sub> "
LES342	#34 - 1 <sup>1</sup> /16"
LES362	#36 - 1 1/8"

### 3/4" Drive Shallow 12 Pt. Sockets, Page 46

Stock Number	Size (SAE)
LDH242	3/4"
LDH262	13/16"
LDH282	7/8"
LDH302	15/16"
LDH322	1"
LDH342	<b>1</b> 1/16"
LDH362	1 1/8"
LDH382	1 3/16"
LDH402	1 1/4"
LDH422A	1 <sup>5</sup> /16"
LDH442	1 3/8"
LDH462	1 7/16"
LDH482	1 1/2"
LDH502	1 <sup>9</sup> /16"
LDH522	1 5/8"
LDH542	1 11/16"
I DH562	1 3/4"

### Flank Drive Plus® Combination Wrenches, Page 107

Stock Number	Size
S0EX8	1/4"
SOEX10	5/16"
SOEX11	1 1/32"
SOEX12	3/8"
SOEX14	7/16"
SOEX16	1/2"
SOEX18	9/16"
S0EX20	5/8"
S0EX22	11/16"
S0EX24	3/4"
SOEX26	13/16"
SOEX28	7/8"
SOEX30	15/16"
S0EX32	1"
SOEX34	1 <sup>1</sup> /16"
SOEX36	1 1/8"
S0EX38	1 <sup>3</sup> /16"
S0EX40	1 1/4"

## Flank Drive Combination Wrenches, Page 109

Stock	Size
Number	3126
0EX8B	1/4"
OEX10B	5/16"
OEX11B	11/32"
OEX12B	3/8"
0EX14B	7/16"
OEX16B	1/2"
OEX18B	9/16"
OEX20B	5/8"
0EX22B	11/16"
0EX24B	3/4"
OEX26B	13/16"
OEX28B	7/8"
OEX30B	15/16"
OEX32B	1"
0EX34B	1 1/16"
OEX36B	1 1/8"
OEX38B	1 3/16"
OEX40B	1 <sup>1</sup> /4"



Conventional 12-point wrench and the contact it makes on the corner of a nut or bolt. The corner can round off under high loads causing the wrench to slip.



A Snap-on® Flank Drive® wrench moves the contact away from the corners with a radius, then provides flatto-flat contact for up to 20% more turning power.

### Box Wrench - Standard Length 12 Point - 10° Offset, Page 113

Stock Number	Size
XB1214A	3/8 - 7/16"
XB1416A	7/16 - 1/2"
XB1618A	1/2 - 9/16"
XB1820A	9/16 - 5/8"
XB2022A	5/8 - 11/16"
XB2224A	11/16 - 3/4"
XB2426A	3/4 - 13/16"
XB2830A	7/8 - 15/16"
XB3032A	<sup>15</sup> /16 <b>- 1</b> "

## Box Wrench - High Performance - 12 Point - 15° Offset, Page 136

Stock Number	Size
XDH78A	7/32 - 1/4"
XDH810B	1/4 - 5/16"
XDH1012B	5/ <sub>16</sub> - 3/8"
XDH1214A	3/8 - 7/16"
XDH1416A	7/16 - 1/2"
XDH1618A	1/2 - 9/16"
XDH2226A	11/16 - 13/16"
XDH2528	25/32 - 7/8"

### Box Wrench - High Performance/ Spline - 15° Offset, Page 137\*\*

Stock Number	Size (Spline/SAE)
XDES810A	#8 / #10 - <sup>1</sup> /4 / <sup>5</sup> /16"
XDES1214A	#12 / #14 - 3/8 / 7/16"
XDES1618A	#16 / #18 - <sup>1</sup> / <sub>2</sub> / <sup>9</sup> / <sub>16</sub> "
XDES1820A	#18 / #20 - <sup>9</sup> / <sub>16</sub> / <sup>5</sup> / <sub>8</sub> "
XDES2224A	#22 / #24 - 11/16 / 3/4"

### Box Wrench - Standard Length - 12 Point - Deep 60° Offset, Page 114

•	
Stock Number	Size
X0810	1/4 - 5/16"
X01012	5/16 - 3/8"
X01214	3/8 - 7/ <sub>16</sub> "
X01618	1/2 - 9/16"
X01820	9/16 - 5/8"
X02022	5/8 - 11/16"
X02024	5/8 - 3/4"
X02226	11/ <sub>16</sub> - <sup>13</sup> / <sub>16</sub> "
X02428	3/4 - 7/16"

\*\* Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft.

Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque without damage to the fastener or to the tool. Chrome spline tools comply with Military Spec. MS-33787 and MIL-W-8982. (Industrial finish tools comply with performance specifications and differ only in finish.) The unique patented spline wrenching configuration can also be used on ordinary 6 and 12-point fasteners with an advantage similar to the Snap-on Flank Drive® wrenching system.

For Production and Maintenance

### A SEVENTY-YEAR HERITAGE OF SERVING THE AVIATION INDUSTRY



ATI was formed in 1938 and incorporated in 1949 as Aircraft Tools, Inc. In 1986 Snap-on acquired ATI Tools. Today, the legendary ATI brand is managed by Snapon Specialty Tools in City of Industry, California, utilizing its newly renovated. state of the art 120,000 square foot manufacturing facility. The ATI product line is known for quality and continues to be the choice of aviation professionals.

We are proud to offer one of the broadest assortments of airframe fabrication tools for the production, maintenance, and repair of commercial, civilian and military aircraft.

### ALUMINUM PREPARATION & MAINTENANCE TOOLS

**Edge Breakers** 



#### ATI514 Sheet Metal Edge Breaker.

- Quickly removes burrs and sharp edges from aluminum sheet stock
- · Plastic handle
- Safety shield



#### ATISP225 Sheet Metal Edge Breaker, Carbide.

- · Cast aluminum body
- · Double-sided, indexable carbide inserts
- Quickly removes burrs and sharp edges from all types of sheet stock
- · Thumb rest acts as safety shield

### Pliers. Fastener Installation -



#### 04-4P3 Camloc Pliers.

 For use with Camloc fasteners, stud series 2000, 2700 and 4002



#### ATI508SG Sheet Holder Pliers.

- Forged steel
- High visability cushioned grips
- Used with spring-loaded clamps, temporary fasteners, plier operated

### Clamps, Temporary Fasteners, Plier Operated \_







**ΔTI542** 

ATI550SG

**ΔTI552M** 

Stock No.	AT1542	ATI550SG	ATI551M	ATI552M	ATI553M	ATI554M	ATI556M
Description	U - Clamp	Side Grip Clamp	3/32" Fastener	1/8" Fastener	5/32" Fastener	3/16" Fastener	1/4" Fastener
Capacity	7/16	3/4	0 - 1/4"	0 - 1/4"	0 - 1/4"	0 - 1/4"	0 - 1/4"
Reach	2	1					
Force (lbs)	70	60					
Features	Zamak Alloy		#40 Drill	#30 Drill	#20 Drill	#10 Drill	1/4" Drill

### Chip Chasers



#### ATI512 Chip Chaser - 5-7/8 long.

- Designed to remove chips between sheet stock
- Spring steel with high visibility molded handle



#### ATISP200-1 Chip Chaser - Pointed Hook Blade - 5-7/8 long.

- Designed to remove chips between sheet stock
- Consist of ATISP200 cast aluminum handle and ATISP20002 pointed hook blade
- Blades are made from spring steel. Secured in handle by locking over handle pin
- Handle side hole allows for inserting 1/8 pin releasing blade from handle

### ALUMINUM PREPARATION & MAINTENANCE TOOLS

### Deburring



#### ATI521B Deburring - Speed Driver - Accepts Threaded Shank Cutters.

- Similar to ATI521A but excepts 1/4-28 threaded shank cutters
- Uses ATI407-4 deburring cutter, or ATI420, ATI445 and ATI455 cutter families

### ATI521A Deburring - Speed Driver.

- Popular swivel handle allows for rapid burr removal around drilled holes
- Uses ATI521C deburring cutter



#### ATI521C Deburring Cutter.

 Used in ATI521A speed driver. 100-degree cutting angle, 3/8" body diameter, tip length 3/4", shank length 7/8", shank diameter 7/32"



#### ATI407-4 Countersink - Hand Deburring.

 100° cutting angle for hand deburring and countersinking. Use with ATI521B speed driver or any 1/4-28" threaded drill attachment

### **ALUMINUM HOLE FABRICATION/DRILL ATTACHMENTS**

-Threaded Drills, Adaptors and Stops



#### ATI339EC Chuck-Three Jaw.

- Capacity 1/16" to 1/4"
- Internal 3 jaws are inverted, with the heavier portion of the jaws at the face to maximize chucking power
- Used in angle attachments with 1/4-28 threaded spindles
- Provides additional flexibility by allowing the use of straight shank tools in threaded shank spindles



ATI503C-1/4



ATI503-72

### ATI503C-1/4 Drill Collet Adaptor - 1/4" and ATI503-72 Drill Adaptor 1/4".

- Both types of adaptors are used to secure straight shank tools in angle attachments with 1/4-28 threaded spindles
- Tools are secured in collet type by tightening nut onto base while standard type use two set screws





#### ATI570-30 Drill Stop-#30.

- · Designed to control hole depth
- Cushions break-through of the drill and prevents rotating jaws from coming in contact with drilled surface
- · Set-screw locks unit onto drill



#### ATIHSSSH3/16 Threaded Shank Drill Bit - 3/16" Diameter, 1-1/4" long (Short).

- Made from HSS, 135-degree split point.
- 1/4"-28 threaded shank, (1" drill length plus 1/4" nut length)

**Drill Attachments** 



#### ATI313B Drill Attachment - Flat Head - Gear Drive - Straight Offset.

- Machined steel housing, high speed gear drive with anti-friction roller bearings
- Recommended drill capacity 1/4", one to one drive ratio
- 4-3/8" overall length, 15/16" width, 5-1/16" overall height, 19/64" thick gear drive body, 3-33/64" centerline distance from input shaft to output shaft, 27/64" from centerline of output shaft to end of housing
- 1/4" diameter input shaft, 1/4-28 female threaded output



ATI332SC

# ATI326B

#### ATI332SC Drill Attachment - Flat Head - Gear Drive - Straight Offset.

- Machined steel housing, high speed gear drive with anti-friction roller bearings
- Recommended drill capacity 1/4", one to one drive ratio
- 3-1/8" overall length, 15/16" width, 2-1/16" overall height, 11/32" thick gear drive body, 2-7/16" centerline distance from input shaft to output shaft. 5/16" from centerline of output shaft to edge of housing
- 1/4" diameter input shaft, 1/4-28 female threaded output

### ATI326B Drill Attachment - 7" Straight Drive - 90 - Degree Head Angle.

- Machined steel housing, sealed bearings, maintenance free straight drive drill attachment
- Recommended drill capacity 3/16", one to one drive ratio
- 7" overall length includes the 90-degree angle head, 27/32" head height, 17/32" head width, 17/64" centerline of output shaft to outside circumference of head
- 1/4" diameter input shaft, 1/4"-28 female threaded output

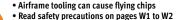












### ALUMINUM HOLE FABRICATION/DRILL ATTACHMENTS

### **Drill Guides, Housings and Bushings**



#### ATI590DBK Drill Bushing Kit.

- Hand held guide maintains tool perpendicular to flat or curved surface
- Guide assemblies consist of a case hardened drill bushing threaded into a polycarbonate quide housing
- Used with drills, taps or reamers
- Kit contains three polycarbonate guide housings and nine drill bushings, sizes #40, #30, 5/32", #21, 3/16", #10, 7/32", 1/4"



ATI589AB2187

#### ATI589A-1935 Drill Guide Housing with #10 Bushing.

- · Guide assembly consist of a case hardened drill bushing threaded into a polycarbonate guide housing
- Maintains tool perpendicular to flat or curved surface
- Used with drill, taps or reamers



ATI589AB1935

#### ATI589AB1935 Threaded Drill Bushing - #10.

• Case hardened drill bushing used with polycarbonate guide housing (ATI589AA)

### Nut Plate Drill Jigs, Transfer Punches -



#### ATI518C Nut Plate Drill Jig - Two Lug Type.

- Double wing standard.. A=.344", B=.688", C=.191", D=#40, bolt size reference #10
- Designed for accurate drilling of the two rivet holes for installing nut plate fasteners
- Drill heads are made from oil hardened tool steel heat treated to Rc 60 64 for long life
- High strength spring steel connects the hardened head to the aluminum knurled handle providing a flexible handle for clearing obstacles



#### ATI507KT Duplicating Punch Kit.

- Accurately transfer hole location from one sheet to another
- · Locating diameter and the punch tip are ground after heat treat ensuring they are concentric for accurate hole transfers
- Manufactured from oil hardened drill rod hardened to Rc 58 60
- Kit box provides safe storage and size chart on inner lid allows for quickly determining the tool needed
- Kit contains fourteen 3-1/2" OAL punches, sizes 3/32", #40, 1/8", #30, 5/32", #19, 3/16", #10, 7/32", 1/4", 5/16", 3/8", 7/16", 1/2"



#### ATI532-61 Strap Duplicator - Bushing Type - #40 Pilot / #40 Bushing.

- Bushing type for drilling duplicate matching holes in overlapping sheets
- Made from high grade spring steel, with through hardened radius edge pilot tip and the case hardened drill bushing come together in a very effective tool
- 6-1/4" working length with a beveled edge on the handle for prying sheets apart

#### Holesaws and Arbors -



ATI413-2

#### ATI413-2 Hole Saw - Fine Tooth - 7/16".

- 7/16" cutting diameter, 5/16"-24 threaded arbor hole
- Use ATII415-0 or ATII415-1 arbor
- · For cutting thin aluminum skins and corrugated sheets
- Made from M2 HSS hardened to Rc 62



- 1-1/4" cutting diameter, 5/16"-24 threaded arbor hole
- Use ATI415-0 or ATI415-1 arbor
- · Used for fast and effective cutting of aluminum and mild steel

ATI474-15 Hole Saw - Coarse Tooth.

Made from M2 HSS hardened to Rc 62



#### ATI415-1 Hole Saw Arbor.

- 1/4" shank and 1/4" pilot diameters are ground between centers
- 5/16"-24 threaded arbor
- For use with ATI413 and ATI474 hole saws

### COUNTERBORES/BACK SPOTFACETS-COUNTERSINKS

### **Aircraft Style Counterbores & Pilots**





#### ATI488C-21 Counterbore - Aircraft Type - 7/8" Cutting Diameter.

- 4-flute, 2-13/16" length, 1/4" shank diameter, 3/16" pilot hole
- Manufactured of M2 (HSS) high speed tool steel. Hardened to Rc 62
- Used in drill presses and portable drill motors
- To machine a flat area or 'seat' on a contoured or uneven surface for a bolt head or nut
- Supplied with .005" corner radius, unless otherwise specified at time of order
- Uses ATI489C family of pilots secured in pilot hole with set-screw

### ATI489C-5 3/16" Pilot Diameter - Counterbore, 3/16" Shank Diameter.

- Manufactured from (OHDR) oil hardened drill rod. Hardened to Rc 50 to minimize wear
- Pilot diameters are held within .0005" size envelope to provide maximum support
- · Shank end has flat surface for set screw security
- Used with ATI488C family of counterbores

### **Back Spotfacers-Countersinks**



#### ATI590S Back Spotfacer Cutter Kit - 16 Pieces.

- Used for reverse spotfacing and counterboring where direct access is not possible using straight shank tools
- Made from M2 HSS heat treated to Rc 62, 4-flutes end cutting with ground .03" corner radius
- Kit includes 8 back spotfacers, sizes 1/4", 5/16", 3/8", 1/2", 3/4", 7/8", 1", and 1-1/4" diameters and 8 gunlock pilots, sizes 3/32", 1/8", 5/32", 3/16", 1/4", 5/16", 3/8" and 1/2" diameters, 6" OAL



#### ATI590TA Back Countersink Cutter Kit - 16 Pieces.

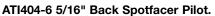
- Used to countersink area's where direct access is not possible
- Made from M2 HSS, heat treated to Rc 62, 4-flutes, 100 degree cutting angle
- Kit includes 8 back countersinks, sizes 1/4", 5/16", 3/8", 1/2", 3/4", 7/8", 1", and 1-1/4" diameters and 8 gunlock pilots, sizes 3/32", 1/8", 5/32", 3/16", 1/4", 5/16", 3/8" and 1/2" diameters, 6" OAL





#### ATI403X Back Spotfacer- 1-1/4" OD.

- 1-1/4" body diameter, 1/2" pilot hole, 4 flute, 100° cutting angle, M2 HSS Rc 62
- Use ATI404-8 pilot
- Used for reverse spotfacing and counterboring where direct access is not possible using straight shank tools



- 5/16" diameter, 6" overall length, positive lock. AKA: bayonet lock
- Oil-hardened drill rod with lock end at Rc 45

### ATI402I-4 Back Countersink - 1/2" OD.

- 1/2" body diameter, 3/16" pilot hole, 4 flute, 100° cutting angle, .M2 HSS Rc 62
- Use ATI4044 pilot
- Used to countersink area's where direct access is not possible

### ATI4044 3/16" Back Spotfacer Pilot.

- 3/16" diameter, 6" overall length, positive lock. AKA: bayonet lock
- Oil-hardened drill rod with lock end at Rc 45



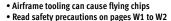












### **DIMPLING ALUMINUM**

### **Dimple Dies**



#### ATI206A-24PC Dimple Die Kit-Cold.

- Die sets designed for cold dimpling applications to form the 100 degree angle prior to installation of AN426 flush rivets
- 3/16" diameter shank with stainless steel lock ring securing the die sets into the pneumatic or hand squeezer
- Kit includes 12 male and 12 female dimple-die combinations, for rivet sizes 3/32", 1/8", 5/32" and 3/16"
- Three different body lengths (1/4", 3/8" and 1/2") are provided for each rivet size
- Kit box protects the polished surface of the dies, engraved aluminum plate can provide for quick size identification, as well as determining quickly if a tool is missing

### MICROSTOPS/COUNTERSINKS

### **Microstops**



#### ATI590CSK Microstop/Countersink Cutter Kit.

- Provides countersinking versatility in a convenient and portable kit
- Aluminum base plate keeps components separated and easy identification if item missing
- Includes nine 1/2" diameter 100-degree 2-flute integral piloted countersink cutters
- Pilot diameters include #40, #30, #21, #10, 3/32", 1/8", 5/32", 3/16" and 1/4"
- Microstop, .001" incremental depth adjustment, needle bearings, 5/16" shaft travel
- Utilizes a left handed hex locknut, along with thrust ball bearing for improved depth control
- Six different foot piece combinations available to cover the different materials and/or coatings



#### ATI441HSS Microstop - .001" Adjustment - Straight Skirt.

- Accepts up to 5/8" countersink cutter diameter using 1/4"-28 male threaded shank
- Utilizes needle bearings, 5/16" shaft travel, left handed hex locknut
- 1/4" shaft, straight skirt, and a thrust ball bearing for longevity

#### ATI441HSBS Microstop - .001" Adjustment - Straight Skirt.

- Accepts up to 5/8" countersink cutter diameter using 1/4"-28 male threaded shank
- Utilizes ball bearings, 5/16" shaft travel, left handed hex locknut
- 1/4" shaft with 3-chucking flats, straight skirt, and a thrust ball bearing for longevity



#### ATI441HSSPCC Microstop - .001" Adjustment - Extended Nose.

- Accepts up to 3/8" countersink cutter diameter using 1/4"-28 male threaded shank
- Utilizes needle bearings, 5/16" shaft travel, left handed hex locknut
- 1/4" shaft, 1/2" diameter nose, 2-3/4" extended straight skirt, and a thrust ball bearing for longevity



### ATI432B Microstop - 3/8"-24 Threaded Jumbo - .001" Adjustment.

- Accepts up to 1-1/4" countersink cutter diameter using 3/8"-24 male threaded shank
- · Solid one piece shaft utilizes oilite bearings, and a thrust ball bearing for longevity

#### ATI462H3-1.3 Microstop - 3/8"-24 Threaded Jumbo - .0005" Adjustment.

- Accepts up to 1-1/4" countersink cutter diameter using 3/8"-24 male threaded shank
- Solid one piece shaft utilizes ball radial bearings and thrust bearings for operating to 5000 rpm
- Unique shaft features chucking flats and 3/4" travel
- .0005 in adjustable depth control answers the need for a tighter tolerance requirement in a larger microstop application



### MICROSTOPS/COUNTERSINKS

### **Countersink Cutters, Threaded Shank**





### ATI420D-4PC Countersink Set - 7/16" Body - Integral Pilot -Three Flute.

- 1/4"-28 shank, 3-flutes, 100-degree angle, HSS
- Integral pilots for 3/32", 1/8", 5/32" and 3/16"
- Anodized aluminum bar, holds four 1/4-28 shank cutters

#### ATI445E-5PC Countersink Set - 1/2" Body - Integral Pilot -Two Flute.

- 1/4"-28 shank, 2-flutes, 100-degree angle, HSS
- Integral pilots for 3/32", 1/8", 5/32", 3/16" and 1/4"
- Anodized aluminum bar holds five 1/4-28 shank cutters.

#### ATI445E410 Countersink - 1/2" Body - Integral Pilot -Two Flute.

• #10 pilot, 1/4"-28 shank, 2 flute, 100-degree angle, HSS





#### ATI445CTE410 Carbide - Tipped Countersink - 1/2" Body-Integral Pilot-Two Flute.

• #10 pilot, 1/4"-28 shank, 2-flute, 100-degree angle - carbide tipped



ATI484-57

### ATI455G-4 Countersink Cutter - 5/8" Body - Replaceable Pilot -

- 1/4"-28 shank, 100-degree angle, .086" pilot hole, HSS
- Uses ATI484 family of pilots

#### ATI484-57 Pilot - Countersink - .086" Shank.

- 1/8" pilot diameter
- Undercut pilot head allows pilot to seat flush onto cutter angle
- Use with ATI455 family of replaceable piloted countersink cutters

### **RIVETING TOOLS AND ACCESSORIES**

- Retaining Springs



### ATI114C-3 Spring Retainer-Quick Change.

- Utilizes fast thumb release to quick change any rivet set that has safety spring shoulder without removing spring retainer
- . Works with 3X and 4X rivet guns
- Accommodates 1/2" and 9/16" body diameters
- Length 1-1/8", body 1/2" to 9/16", shank .401



ATI115A

### ATI115A Retainer Spring-Beehive Type.

- · Safely retains rivet sets in 3X and 4X rivet guns
- Accepts straight and 10 degree offsets with 1/2" body diameters
- Length 1-5/16", body 1/2", shank .401

#### ATI115B Retainer Spring-Beehive Type.

- Safely retains rivet sets in 5X, 9X and 7X rivet guns
- Similar to the ATI115A except this is used with 5/8" body diameter sets, both straight and 10 degree offsets
- Length 1-1/2", body 5/8", shank .498

Rivet Guns





#### ATIATC3X and ATIATC4X Rivet Guns, Pistol Grip.

- Power, control and industrial durability make these a popular choice for driving solid rivets
- Excellent teasing trigger for precise control and upset uniformity
- · Beehive style retaining spring and air flow control valve are included
- Most parts are interchangeable with Chicago Pneumatic 'X' series rivet guns
- 3X Gun: shank .401, capacity 3/16" aluminum rivet, BPM 2160, length 6-1/2", 3 lbs.
- 4X Gun: shank .401, capacity 1/4" aluminum rivet, BPM 1740, length 7-1/4", 3-1/4 lbs.

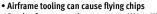












### **RIVETING TOOLS AND ACCESSORIES**

### **Riveting Tool Kits**



ATI590RGK3X Clear zipper case included.

#### ATI590RGK3X and ATI590RGK-4X 3X and 4X Rivet Gun Kits.

- These kits include essentials for straight and offset riveting
- Pistol grip rivet gun
- · Four commonly used bucking bars
- Eight cupped sets for AN470 universal head rivets
- Three flush sets for AN426 flush rivets
- Two retainer springs
- · Air regulater and air tool oil
- Durable soft sided case

### 90 Degree Rivet Gun Attachments



ATI595B

#### ATI595B and ATI595C 90 Degree Rivet Gun Attachment.

- ATI595B for use on Sioux® & Ingersoll-Rand 3X & 4X rivet gun
- ATI595C for use on Chicago Pneumatic 3X & 4X rivet gun
- Great for installing up to 5/32" rivets at tough to reach angles
- Uses ATI1757AP family of rivet sets

### **Sheet Metal Mechanics Set**



ATI590SMKSP1

#### ATI590SMKSP1 Sheet Metal Mechanics Kit.

• Starter kit includes: 3X rivet gun, Sioux brand, 1/4" 2600 rpm drill, Sioux® brand, 3-1/2" long cupped rivet sets - 3/32", 1/8", 5/32", 3/16", 3-1/2" long flush set 1-1/4" face, integral piloted 3-flute countersinks - #10, #21, #30, #40, micro-stop, hand rivet cutter, sheet holder pliers, spring tension u-clamps 4 ea., sheet holders 12ea. 3/32", 1/8", 5/32", 3/16", drill stops - #10, #21, #30, #40, bucking bar, HSS drill bits - #10, #21, #30, #40, 1/8", 3/16", 3/32", 5/32", retainer spring-quick change

#### Rivet Sets -



#### ATI100A71/8

#### ATI100A71/8 Cupped Rivet Set 1/2" Body.

• Straight-drive. .401 shank. 7-1/2" length for installing 1/8" AN470 rivet



#### ATI104A-5/32 Cupped Rivet Set -Gooseneck.

• Gooseneck-drive, .401 shank, 6-5/8" length for installing 5/32" AN470 rivets



#### ATI107A-1 Flush Set Straight.

- Flush set straight, .401 shank, 2-3/4" length
- 1" diameter crowned face for rapid flush riveting



#### ATI101A53/16 Cupped Rivet Set -Offset 1/2" Body.

• Offset-drive, .401 shank, 5-1/2" length for installing 3/16" AN470 rivet



#### ATI105A-3/16 Cupped Rivet Set -**Double Offset.**

• 3/8" double offset, .401 shank, 5-3/4" length for installing 3/16" AN470 rivets



#### ATI110CB Rivet Set - Flush, Anti -Slip Edge.

- .401 shank, 2-1/2" length, 1" diameter crowned face
- · Rubber rim guard to prevent slipping and damage to skin surface



#### ATI100AF-3A Flush Rivet Set.

• Straight-drive, .401 shank, 3-1/2" length for installing flush rivets



#### ATI106A Flush Set Swivel.

- Flush set ball swivel type, .401 shank, 3-1/2" length
- 1-1/4" crowned face with rubber guard and retainer spring
- · Performs high-speed flush riveting on flat or curved surfaces
- · Designed for ease of handling, with a swivel action for quick alignment
- · Highly polished head is enclosed in a rubber sleeve
- · Easily hand assembled or disassembled

### **RIVETING TOOLS AND ACCESSORIES**

### **Knock-Out Punches**



#### ATI141A33/32 Knock Out Punch.

• .401 shank diameter, 3/32" rivet size, 3-1/2" overall length



#### ATI140A-6 Knock Out Punch, Hi-Shear®.

• .401 shank diameter, 3/16" rivet size, 3-1/2" overall length

### Rivet Squeezing – Hand



#### ATI502AHE 360 Degree Swivel Head - Hand Rivet Squeezer - 3 in Reach.

- 360-degree yoke locks in any position in relation to the handles
- 3/8" stroke and 5/8" ram length adjustment, eliminates the necessity of shims
  Uses standard 3/16" shank tools
- Can be used for cold dimpling



#### ATI502TH11/2 Hand Rivet Squeezer - 1-1/2 in Reach.

- Stainless steel, adjustable ram eliminates the necessity of shims
- Uses standard 3/16" shank tools

### Rivet Squeezing – Pneumatic



#### **ATIU114A Pneumatic Alligator Type Rivet** Squeezer - Single Cylinder.

- Single cylinder rivet capacity 1/8" aluminum, 3/32" steel
- 9-1/4" long 4 lbs. including jaws
- · Quiet, simple and easy operation
- Speed of squeeze riveter can be controlled by throttle
- · Swivel air inlet aids maneuverability



#### ATI114TC Pneumatic C-Type Rivet Squeezer -Tandem Cylinder.

- Tandem cylinder rivet capacity 3/16" aluminum, 5/32" steel
- 14" long 5.5 lbs. including jaws
- · Quiet, simple and easy operation
- · Ram speed can be controlled by throttle
- Develops full squeezing force near the end of stroke
- · Swivel air inlet aids maneuverability

**Rivet Squeezers** 



#### ATI108A33PC Rivet Squeezer Set - 3/16" shank diameter.

- 23 each universal cupped, rivet sizes 3/32", 1/8", 5/32", 3/16" and 1/4"
- Available body lengths of 1/8", 1/4", 3/8", 1/2", and 5/8"
- 10 flush sets total, 1/2" and 3/8" diameter, body lengths of 1/8", 1/4", 3/8" 1/2" and 5/8"
- 3/16" diameter shank with stainless steel lock ring secures die sets into the pneumatic or hand rivet squeezer
- For installing AN470 (MS20470) and AN426 rivets



#### ATI108AT3/16 Rivet Squeezer - Cupped.

- 3/16" shank diameter, 1/2" body diameter, 5/8" body length
- For installing 3/16" AN470 cupped rivets



#### ATI109ER Rivet Squeezer - Flush.

- 3/16" shank diameter, 3/8" body diameter, 3/8" body length
- For installing AN426 flush rivet

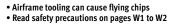












### **RIVETING TOOLS AND ACCESSORIES**

### **Bucking Bars**

#### **High-Density Tungsten Bucking Bars**

- · Significantly reduces vibration and minimizes bucking bar movement when riveting
- · Greatly improves operator comfort and safety
- Sharp edges are radiused up to 1/16" to prevent skin damage
- Smaller configurated design provides enhanced bucking in tight areas
- · Dipped in plastic to prevent damage during shipment and storage

Note: Additional sizes and configurations can be manufactured upon special request.

ATI732T Bucking Bar

• 2.11 lbs (.95 kg)



ATI634T Bucking Bar

• 1.59 lbs (.72 kg)



ATI729-3T Bucking Bar

• 1.55 lbs (.70 kg)



ATI729-13T Bucking Bar

• 1.20 lbs (.54 kg)



ATI764T Bucking Bar ATI765T Bucking Bar • 1.28 lbs (.58 kg)

• 1.74 lbs (.78 kg)



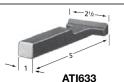
ATI766T Bucking Bar

• 1.70 lbs (.77 kg)



#### ATI590BBK 4 - Piece Bucking Bar Set.

- Set includes ATI638, ATI647, ATI670 and ATI681
- Please refer to separate ATI online catalog for bucking bar specifications



#### ATI633 Bucking Bar.

- 1.5 lbs (.68 kg)
- . Ductile iron casting Rc 40



### ATI670 Bucking Bar.

- 2 lbs (.91 kg)
- Ductile iron casting Rc 40

Hi-Lok® Tools



#### ATI3594/95K Comprehensive Hi-Lok® Kit -1/4 in and 3/8 in Ratchets, Sockets, T-hex Keys.

- Used for installation of Hi-Lok® fasteners
- · Ratchet with sockets and t-hex kevs
- Includes 1/4" and 3/8" square drive, fine tooth, reversible ratchets
- Sockets for 1/4" drive are 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8"
- Sockets for 3/8" drive are 3/8", 7/16", 1/2"
- T-hex keys 5/64", 3/32", 1/8", 5/32"
- 1/16" hex key for securing sockets to ratchet drive



#### ATISK3539A8 Hi-Lok® Roller Clutch Wrench Kit.

- Used for fastener installation and removal in confined spaces
- 2 each 1/4" drive (zero backlash) roller clutch 1 for installation, 1 for removal
- Dedicated hex sizes are 7/32", 1/4", 5/16", 11/32", 3/8", 7/16" for installation only
- Includes a pair of removal pliers ATI2979U
- Kit box with cut-outs for each tool. Allows for quick identification of missing tools
- All 8-roller ratchets are 3" long. The two 1/4" square drives have a wire ring to aid in socket retention if using other than Hi-Lok® configuration
- · Wrenches designed for maximum socket rotation with minimum handle movement



#### ATI3539IT38 Dedicated 3/8" Hex Hi-Lok® Roller Clutch Wrench -**Black Handle**

- Dedicated 3/8" hex, 3" handle length (zero backlash) roller clutch
- · Wrench is designed for maximum socket rotation with minimum handle movement
- · Used for fastener installation in confined spaces



#### ATISK3539L 1/4" Square Drive Hi-Lok® Roller Clutch Wrench -**Black Handle**

- 1/4" drive, 6" handle length (zero backlash) roller clutch
- Wrench is designed for maximum socket rotation with minimum handle movement
- Used for fastener installation in confined spaces
- Can be used with any standard 1/4" drive socket



#### ATI2979U Hi-Lok® Fastener Removal Pliers.

- · Serrated-jaw pattern for removal of all aluminum Hi-Lok® fasteners
- · Comfort grip handles
- Easy access to tight areas

### Hi-Shear® Removal



ATI493C-2 Collar Cutter (Hi-Shear®) 1/4" - Hollow Core - Threaded Shank.

- Used to remove 1/4" Hi-Shear® fasteners by cutting away the swaged collar
- 1/2" cutter diameter, 1/4" inside diameter, 1/4-28 threaded shank
- Engineered to fit standard microstops (ATI441HSS or ATI441HSBS) to control cutting depth

Huck® Removal



ATI2165-2

#### ATI1206-6 Flat Chisel.

- .401 shank diameter. 3/4" blade width, 6-3/4" overall length
- Precision sharpened

#### ATI2165-2 Chisel - Huck Lockbolt®.

- .401 shank diameter, .62 head diameter, 5/32" rivet size, 5-1/2" overall length
- Used to remove 5/32" Huck® fasteners by shearing away the swaged collar

Hi-Torque® Bits



ATIHTS-3 #3 Hi-Torque® Bit - 1/4" Square Drive.

• Blade thickness .059", width .377", 1/2" body diameter, 1" length

**Screw Removal** 



ATI540 Screw Removal Tool - 9" Length - 3/8" Square Drive.

- .401 shank diameter, 9" overall length, includes wrench handle as shown
- Use with ATI540SE-5 1/4" hex-bit adaptor
- This unit in many cases provides the additional force needed to break loose stubborn fasteners



ATI540SE-5 1/4" Hex - Bit Adaptor - 3/8" Square Drive.

• Use in conjunction with ATI540 and ATI540S screw removal tools

**Rivet Shavers** 



#### ATI590L Rivet Shaver Kit.

- . Known as the micro miller kit
- Rivet shaver, 1 Hp, 20,000 rpm, .0005" incremental depth adjustment
- Rivet shaver oun weighs 2-1/2 lbs. Gun handle has comfort grips
- Carbide cutters and skirts for 5/16", 3/8", 7/16"", 1/2", 9/16", 5/8" and 3/4" rivets
- Kit box with cut-outs provides protection and guick identification of missing tools

ATI590L



#### ATI429SXC Micro Miller - Rivet Shaver Gun.

- 3/4" cutter capacity, .0005" incremental depth adjustment, 1/4"-28 threaded spindle
- ATI's shaver head on Sioux® gun, motor is 1 hp at 20,000 rpm, comfort grip



ATI429B-6

#### ATI429A-7 Skirt Detail - Micro Miller.

- 3/4" cutter capacity used with ATI429B-7 cutter
- · Skirt detail is exclusive only to ATI products

#### ATI429B-6 Carbide Cutter Detail - Micro Miller.

- 5/8" diameter carbide cutter used with ATI429A-6 skirt
- · Engineered to cut very clean, no chatter or high spots in center



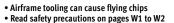




ATI429A-7







### SHOP TOOLS AND ACCESSORIES

### Mini-Vacs



#### ATI560MF12 Mina-Vac Air Vacuum With 12" Clear Flex Hose.

- This one-piece aluminum vacuum has larger diameter inlet tube and venturi that pulls up to six inches of mercury
- Removes objects such as sheet fasteners up to 3/4" diameter from confined spaces
- Efficient lightweight venturi type vacuum designed for use in confined areas
- Built in chip deflector to minimize bag damage
- Equipped with an "on" and "off" trigger button that can be locked in the "on" position



#### ATI560C Mina-Vac - Plastic Housing Only.

- Plastic sub-assembly capable of pulling up to six inches of mercury
- · Extension tube not included
- For extension tubes: flex type ATI560CF family. Rigid type ATI560R family
- Efficient lightweight venturi type vacuum designed for use in confined areas
- Built in chip deflector to minimize bag damage
- Equipped with an "on" and "off" trigger button that can be locked in the "on" position



#### ATI560A Mina-Vac - Aluminum Housing.

- Aluminum sub-assembly capable of pulling over four inches of mercury
- · Extension tube not included
- For extension tubes; flex type ATI560CF family. Rigid type ATI560R family
- Efficient lightweight venturi type vacuum designed for use in confined areas
- · Built in chip deflector to minimize bag damage
- Equipped with an "on" and "off" trigger button that can be locked in the "on" position



#### ATI560CF18 Mina-Vac - 18" Long Extension Flex Tube.

Clear PVC hose assembly for ATI560C and ATI560A



ATI560A-3

#### ATI560A-3 Mina-Vac - Replacement Bag.

• Made from canton flannel. Does not include ATI560A-4 clip



#### ATI560R10

#### ATI560R10 Mina-Vac - 12" Long Extension Gray Rigid Tube.

• Rigid gray PVC hose assembly for ATI560C and ATI560A



ATI560HD3

#### ATI560HD3 Mina-Vac - Heavy Duty Replacement Bag.

- Heavy-duty nylon reinforcement sewn to inside of bag
- Fits all ATI mina-vac systems
- Does not include ATI560A-4 clip

**Rivet Cutter** 



#### ATI501R Rivet Cutter - 3/32 in - 1/4 in - Standard Handles.

- Aluminum rivet sizes 3/32", 1/8", 5/32", 3/16", 7/32", and 1/4"
- Cuts all AN430, AN435, AN442, AN456 and AN470 aluminum rivets
- Adjustable rivet cutting length guide from 1/4" to 3/4" in 1/16" increments

Valve Core Removal Tool



#### ATISK3614 Tire Valve Core Deflating Tool.

- For rapid and safe tire deflation
- Machined aluminum tool threads onto the valve stem
- Releases and traps the valve core within the tool
- Exhausts the tire air through ports, away from the technician, onto the wheel

### **SHOP TOOLS AND ACCESSORIES**

### **Cannon Plug Pliers**









#### ATI508K Cannon Plug Plier.

- · Slip-joint handles
- Serrated replaceable plastic jaws ATI508K-4
- Used to loosen or tighten the threaded collars on electrical connectors
- Adjustable grip range from 3/4" to 2-1/2" diameter

#### ATI508K-4 Cannon Plug Plier Pad.

- Replaceable pad for ATI508K and ATI508KG
- Use 2 pads per plier

#### **Connector Plug Pliers**

Stock Number	Description
ACP8	Pliers, Cannon Connector, angled head (30° offset), 1-5/8" capacity, 8" length, self-adjusting
RCP8	Pliers, Cannon Connector, regular head (straight), 1-5/8" capacity, 8" length, self-adjusting
RCP9	Pliers, Cannon Connector, regular head (straight), 3" capacity, 9" length, self-adjusting
CPP8	Replacement Pads, for models ACP8 and RCP8
CPP9	Replacement Pads, for models ACP8 and RCP9

### AIRCRAFT CABLE SWAGING

Equipment



#### ATI520J Cable Swager - Portable Unit.

- This light weight unit is designed to precision-swage the various MS type cable terminals on 1/16" through 3/16" diameter braided wire rope
- It can be used as a bench unit when mounted on the shock absorbing base, or taken directly to the scene of operation on the flight deck
- The unit comes complete including base plate, air hose and foot control. A pair of dies is all you need to be operational
- Dies must be ordered separately, see ATI520 family of die sets

#### ATI520CGC Pull Tester Calibration Kit.

- This exclusive kit includes adaptors required to certify ATI pull tester equipment part number ATI520CT
- Quality assurance tool recognized by the Boeing Company. This instrument will eliminate the necessity of costly outside calibration service



- Self-contained hydraulic unit, where the pressure in the cylinder is related to the pounds tension applied to the terminal and cable
- Designed to applying tensile load to the cable and terminal assembly at the rated 60% yield strength of the cable, verifying the swaged terminal integrity
- Unit is capable of testing up through 3/16" diameter wire rope
- This is the basic unit with out any adaptors or laws. At minimum you must have the basic adaptor set including the copper jaws for the cable size your testing
- Complete kit including metal box is available (ATI520CTK). This includes complete set of jaws and adaptors for testing the majority of swaged MS fittings in use today

**Swaging Dies** 



ATI520CDB-3

#### ATI520CDB-3 Swaging Dies - 3/32" Cable Diameter.

- Swages MS20663-3 terminal to 3/32" wire rope cable
- · Packaged as a matched pair



ATI520CS-5

### ATI520CS-5 Swaging Dies - 5/32" Cable Diameter.

- Swages MS21259-5, MS20667-5, MS20668-5, MS21260-5 sleeve type terminals and Boeing stop terminal BACT14A-4 to 5/32" cable
- Packaged as a matched pair



ATI520CGC

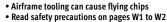
ATI520CT











#### Bits & Fastener Tools



**ZEPTS170-8** 

Torg-Set® Insert/Power Bits

Zephyr Torq-Set® bits are manufactured using the highest quality high carbon steel and heat treated to exacting standards to provide a maximum amount of torque to the fastener with a minimum of slippage or breakage. Zephyr Torg-Set®-ACR® bits provide better "BITE." With better fit and purchase (surface contact area) they will deliver more torque!

### Torg-Set Insert Bits – 1/4" Hex Shank

1014 000111100110 =/ 1 11011				
Model Number	Screw Size	Overall Length		
ZEPTS212-0	0	1"		
ZEPTS2121	1	1"		
ZEPTS2122	2	1"		
ZEPTS2123	3	1"		
ZEPTS2124	4	1"		
ZEPTS2125	5	1"		
ZEPTS2126	6	1"		
ZEPTS212-8	8	1"		
ZEPTS21210	10	1"		
ZEPTS2121/4	.25	1"		

### Torg-Set Power Bits – 1/4" Hex Shank

		•
<b>Model Number</b>	Screw Size	Overall Length
ZEPTS1700	0	1.25"
ZEPTS1701	1	1.25"
ZEPTS1702	2	1.25"
ZEPTS1703	3	1.25"
ZEPTS1704	4	1.25"
ZEPTS1705	5	1.25"
ZEPTS1706	6	1.25"
ZEPTS1708	8	1.25"
ZEPTS17010	10	1.25"



**Hi-Torq® Driver Bits** "Hi-Torq" drivers are manufactured using the highest quality, high carbon steel and heat-treated to exacting standards to provide a maximum amount of torque to the fastener with a minimum of slippage or breakage. These bits are designed for high torque fastener installation and removal utilizing a square drive and detent pin drive system.

**ZEPZHTS-4** 

Model Number	Drive S	Recess	Nom. Screw Size	T	D1	D	L
ZEPZHTS1	1/4"	1	3, 4, 5, 6	.049"	.274"	1/2"	1"
ZEPZHTS-2	1/4"	2	8	.059"	.295"	1/2"	1"
ZEPZHTS-3	1/4"	3	10	.059"	.377"	1/2"	1"
ZEPZHTS-4	1/4"	4	1/4	.073"	.502"	1/2"	1"
ZEPZHTS-5	3/8"	5	5/16	.079"	.629"	3/4"	1 1/4"
ZEPZHTS-6	3/8"	6	3/8	.095"	.745"	3/4"	1 1/4"
ZEPZHTS-7	1/2"	7	7/16	.112"	.884"	1"	1 5/8"
ZEPZHTS-8	1/2"	8	1/2	.142"	.995"	1"	1 5/8"

<sup>\*</sup> Conforms to MS33750.



ZEPQCK-4040

### Frangible Collar Hi-Lok® Tools

These tools are designed to install and remove frangible collar (castle nut) style Hi-Lok fasteners. Utilizing a two piece ratcheting tool, socket and pin combination system, they both hold the fastener body in place and rotate the collar to its predetermined torque shear load, breaking off the collar.

The removal tools also utilize the two piece ratchet system with a hex pin and a specialized socket containing eccentric rollers which, when rotated in the reverse rotation, cam into the body of the round collar allowing it to be rotated off the fastener body for removal.

**ZEPOCK-4040** Hand installation and Removal Kit includes: Hex Tip Pin sizes 1/16", 5/64", 3/32" and 1/8" Socket Hex sizes 7/32", 1/4", 9/32", 5/16", 11/32", 3/8" and 7/16" Removal Sockets in ranges of .235-.255, .245-.265, .255-.275, .265-.285, .275-.295, .285-.305, .295-.315, .305-.325, .315-.355, .325-.345, .335-.355, .355-.375, .375-.395, and .395-.415



### Kwik-Lok Temporary Kit

Zephyr temporary fasteners are designed to hold multiple pieces of material together temporarily during the assembly process via predrilled, undersize, holes and are designed with the highest quality materials to ensure proper material holding and long life.

**ZEPZKLS-2** Kit includes: 1 pair of Kwik-Lok Pliers, 10 each temporary fasteners for hole sizes 3/32", 1/8", 5/32", 3/16" and 1/4" with a 0-1/2" grip range. Kit comes in a convenient plastic carrying case.



ZEP4000KIT

#### Io-Bolt Blind Fastener Tools

These blind fasteners utilize a specialized thread drive pin assembly to tighten and secure the fastened assembly from one side, unlike a pull type or pintail blind fastener. This system uses two types of nose pieces – a flush nose with a taper and indexing groove and a protruding nose, with a standard hex socket configuration. The drivers utilize a two flat drive system and work with both the flush and protruding style noses to install these specialized fasteners.

**ZEP4000KIT** Visu-Lok/Composi-Lok Hand Installation Kit includes:

1 each HW300 Ratchet tool assembly

1 each LFVLG-1 Grip gauge

Fastener drivers in sizes -5, -6, -8, -10 and -12

Flush noses in sizes -5, -6, -8, -10 and -12

Reduced flush noses in sizes -5, -6, -8, -10 and -12

Protruding noses in sizes -5, -6, -8, -10 and -12

Millable noses in sizes -5, -6, -8, -10 and -12

Kit comes complete with a durable metal carrying case with a foam insert to hold tools properly in place.





### **Mplus Insert Bits**

- · Mplus for greater fracture torque and longer service life, tough viscous, ideal for hard screwdriving e.g. in metal sheet or structures
- Stock No. is for individual bits. Bits are available in pack quantity shown

### Torq-set 1/4"



Stock No.	Description	Pack Qty
WER066618	1" x #0	10
WER066619	1" x #1	10
WER066620	1" x #2	10
WER066622	1" x #3	10
WER066624	1" x #4	10
WER066626	1" x #5	10
WER066628	1" x #6	10
WER066630	1" x #8	10
WER066632	1" x #10	10
WER066633	1" x 1/4"	10
WER066634	1 1/4" x 1/4"	10
WER066635	1 1/4" x 5/16"	10

### Torq-set 5/16"



Stock No.	Description	Pack Qty
WER066650	1" x # 8	5
WER066652	1" x # 10	5
WER066654	1" x 1/4"	5
WER066656	1" x 5/16"	5
WER066658	1" x 3/8"	5

### Torq-set Diamond-coated 1/4"



Stock No.	Description	Pack Qty
WER066640	1" x #6	10
WER066642	1" x #8	10
WER066644	1" x #10	10
WER066646	1 1/4" x 1/4"	10

### Torq-set 5/16" Power Bit



Stock No.	Description	Pack Qty
WER066700	1 3/8" x #8	5
WER066702	1 3/8" x #10	5
WER066704	1 3/8" x 1/4"	5

### Torq-set 7/16" Power Bit



Stock No.	Description	Pack Qty
WER066740	1 3/8" x 1/4"	5
WER066742	1 3/8" x 5/16"	5
WER066744	1 3/8" x 3/8"	5
WER066746	1 3/8" x7/16"	5

### Torq-set 1/4" Power Bit



Stock No.	Description	Pack Qty
WER066660	2" x #2	10
WER066683	3 1/2" x #2	5
WER066662	2" x #3	10
WER066684	3 1/2" x #3	5
WER066664	2" x #4	10
WER066685	3 1/2" x #4	5
WER06666	2" x #5	10
WER066668	2" x #6	10
WER066676	2 3/4" x #6	5
WER066686	3 1/2" x #6	10
WER066670	2" x #8	10
WER066678	2 3/4" x #8	5
WER066687	3 1/2" x #8	10
WER066672	2" x #10	10
WER066680	2 3/4" x #10	5
WER066682	3 1/2" x #10	5
WER066674	2" x 1/4"	10
WER221110	2" x 5/16"	10

### Torq-set 5/8" Power Bit



Stock No.	Description	Pack Qty
WER066750	1 9/16" x 1/2"	5
WER066752	1 9/16" x 9/16"	5
WER066754	1 9/16" x 5/8"	5

### "Harpoon" ACR 1/4" Power Bit (Boeing specification)



Stock No.	Description	Pack Qty
WER160901	PH 2 x 2"	10
WER160895	PH 2 x 2 3/4"	10
WER160908	PH 2 x 6"	10

 With reduced shaft, tough viscous, ideal for hard screwdriving e.g. in metal sheet or structures, ACR (Anti Cam-Out Ribs) prevents bit from slipping out

### Reduced Tip 1/4" Power Bit (Boeing specification)



Stock No.	Description	Pack Qty
WER160899	PH 2 x 2"	10
WER160896	PH 2 x 6"	10

 With reduced shaft, tough viscous, ideal for hard screwdriving e.g. in metal sheet or structures

### **Aerospace Air Tools**

### 1/4" Chuck Pistol Grip Air Drills

- An industry favorite due to its small size and full 1/3 HP motor
- Ergonomic comfort grip and handle design for maximum comfort
- Smooth teasing trigger for controlled starts
- Rotatable Exhaust
- .6" / 15mm side to center

	Stock Number Capacity			Free Speed	Weight		ght Length		Sound Level	Spindle Thread											
		in.	mm	rpm	lb	kg	in	mm	dB(A)												
	1410	1/4	6	2600		0.60	6.0	160	75	3/8"-24											
.33 hp (0.25 kw) -	DR1412			3600	10																
Non-reversible	DR1414			0	O	U	0	0	0	0	0	0	0	U	0	O	4300	1.3	0.60	6.3	100
	DR1416			6000																	
.20 hp (0.15 kw) -	1410R	1/4	6	2000	12	0.60	6.2	160	75	3/8"-24											
Reversible '	1412R	'/4	0	2600	1.3	0.60	6.3			3/8 -24											



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### 45° & 90° Aircraft Angle Air Drills

- Requires only 2" of clearance with the proper drill bit
- Drill up to 1/4" diameter holes
- Internally threaded 1/4-28 spindle accepts industry standard threaded drill bits
- .33 hp (0.25 kw)

	Stock Number	Free Speed	Weight		Length		Sound Level
		rpm	lb	kg	in	mm	dB(A)
45° Angle Head	1AM1541	2800	1.5	0.7	10.2	259	75
45 Allyle neau	1AM1441	2200	1.5	0.7	10.2	209	/3
OO° Angle Heed	1AM1551	2800	1.5	0.7	9.7	246	75
90° Angle Head	1AM1451	2200	1.0	0.7	9.7	240	/3



- Pistol Grip Rivet Shavers
   Powerful 21,000 RPM, 1HP (0.75 kw), 5 vane motor
- · Micro adjustable shaving depth with spring loaded removable stabilizer
- Shaves rivets from 5/16" 5/8"
- Uses industry standard 1/4" 28 threaded rivet shaver cutters

obbo madely standard 171 Zo anotatod most onavor outlore										
Stock Number	Cutter I	Cutter Diameter		Weight		Len	Sound Level			
	in.	mm	rpm	lb	kg	in	mm	dB(A)		
SRS10P21-5	5/16	8	21,000				205			
SRS10P21-6	3/8	10	21,000					İ		
SRS10P21-7	7/16	11	21,000	2.7	1.2	8.0		80		
SRS10P21-8	1/2	13	21,000	2.1	1.2	0.0	205	00		
SRS10P21-9	9/16	14	21,000	İ						
SRS10P21-10	5/8	16	21,000							



See our ATI rivet shaver cutters on pages N150 to N161



- **Pistol Grip Skin Clamp Runner** 2500 RPM Quickly installs and removes hex nut style Skin Clamps
- Teasing throttle for precise control
- Conveniently located reverse

Conveniently located reverse								
Stock Number	Free Speed	Weight		Length		Sound Level		
	rpm	lb	kg	in	mm	dB(A)		
SSR6P25	2500	2.7	1.2	9.2	234	78		



style skin clamp on pages N150 to N161

## SIOUX

### **Air DieGrinders**



#### Performance

- Powerful motors deliver consistent power and working speeds (from 12-25,000 rpm) for heavy loads
- Heavy-duty dual-taper collets provide secure clamp loads and deliver superior run out characteristics
- Responsive Teasing Throttles provide excellent control
- Precision Machined Heat Treated Spiral Bevel Gears for smooth operation and maximum life

#### **Ergonomics**

- Comfortable, compact tool bodies measure only 1.67" (43mm) in diameter
- · Contoured safety levers and ergonomic composite handles with textured grips

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• Low noise and vibration levels for comfort in extended use operations

### Serviceability

- Drop in motors with no alignment required
- No press fits & no shims = quick easy maintenance
- High part interchangeability = lower service part inventories

### **Signature Series Die Grinders**

- Unmatched performance and real productivity
- Ideal for grinding, cutting, weld dressing, blending & finishing, deburring, surface prep, finishing and cleaning
- Heavy duty dual taper 200 Series Collet provides a secure clamp load and delivers superior run out characteristics

Description	Stock Number	Free Speed	Collet	Exhaust	Wei	ight	Len	gth	Sound Level		um Air mption
		rpm	0.20		lb	kg	in	mm	dB(A)	scfm	l/s
0.70 hp (0.52	SDG7S25F	25,000	1/4"	Front	1.2	0.6	6	150	82	25	12
kw) - Śtraight	SDG7S18F	18,000	-74	TTOIL	1.2	0.0		130	02	20	12
Die Grinders Lever Throttle	SDG7S25M6F	25,000	6mm	Front	1.2	0.6	6	150	82	25	12
Lever Infottie	SDG7S18M6F	18,000	Onnin	TTOIL	1.2	0.0		100	02	20	'-
	SDG10S25F	25,000									
	SDG10S18F	18,000		Front							
	SDG10S12F	12,000	1/4"		1.7	0.8	7.5	190	78	30	14
	SDG10S25R	25,000	, "		1.,	0.0	7.5	130	76	30	
kw) -Straight Die Grinders	SDG10S18R	18,000		Rear							
	SDG10S12R	12,000									
	SDG10S25M6F	25,000	6mm	Front	1.7	0.8	7.5	190	78	30	
	SDG10S18M6F	18,000									
	SDG10S12M6F	12,000									14
	SDG10S25M6R	25,000		Rear							
	SDG10S18M6R	18,000									
	SDG10S12M6R	12,000									
	STXG10S23	23,000						308	78		
1 hp (0.75	STXG10S18	18,000	1/4"	Rear							
kw) - Straight Die Grinders	STXG10S12	12,000			2.2	1.0	12.1			30	14
Lever Throttle	STXG10S23M6	23,000							"	"	•
- Extended	STXG10S18M6	18,000	6mm	Rear							
	STXG10S12M6	12,000									
	SAG10S12	12,000									
1 hp (0.75 kw)	SAG10S15	15,000	1/4"	Rear							
- Right Angle	SAG10S18	18,000			2.7	1.2	9.0	230	78	30	14
Die Grinders Lever Throttle	SAG10S12M6	12,000		_			9.0	230	/6	00	- '
react tillottic	SAG10S15M6	15,000	6mm	Rear							
	SAG10S18M6	18,000									



SDG7S25F



SDG10S25F



STXG10S23



All Sioux Signature Series Die Grinders (SDG/SAG/STXG Series) use a heavy duty dual-taper 200 Series collet which provides a secure clamp load and delivers superior run out characteristics.



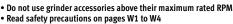












### **Heavy-Duty Grinders**







## Right Angle Type 27 Wheel Grinders with Lockoff Lever Throttle • Full 1HP air motor maintains power under load

- Heavy duty gearing for increased life
- · Light weight aluminum reinforced nylon housing
- · Ergonomic composing handle with soft textured grip
- Side handle can be positioned for left or right handed operators
- Teasing throttle for exceptional control

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	Stock Number	Free Speed	Wh Capa	eel acity	Wei	ight	Len	igth	Sound Level	Consu	ir mption r Load	Consu	ir mption Speed	Spindle Thread
		rpm	in.	mm	lb	kg	in	mm	dB(A)	cfm	I/s	cfm	I/s	
	SWG10S183	18,000	3.0	75	2.5	1.1	7.5	190	77	N/A	N/A	35	17	3/8"-24
1 hp (0.75 kw)	SWG10S124	12,000	4.0	100	3.0	1.6	8.3	210	77	N/A	N/A	35	17	3/8"-24
	SWG10S1245	12,000	4.5	115	3.0	1.6	8.3	210	77	N/A	N/A	35	17	5/8"-11
1 hp (0.75 kw) - Governed Speed	1285L*	6,000	7.0	175	5.9	2.7	12.4	315	85	35	17	18	8	5/8"-11

\* NOTE: 1285L is not CE approved







VG30AL-60C6



VG20AL-60D7

### Vertical and Horizontal Wheel Grinders, Governed Speed with Lever Throttle

- Three piece housing construction for ease of maintenance
- Governor controlled
- Lock off lever prevents accidental start up

### CE

20011 011 10101														
Description	Stock Number	Free Speed		ieel acity	(wit	ight hout nrd)	(Veri	ght tical) igth contal)	Sound Level	Consu	Air mption r Load	Consu	ir mption Speed	Spindle Thread
		rpm	in.	mm	lb	kg	in	mm	dB(A)	cfm	I/s	cfm	I/s	
Vertical Type 6 & 11 - 2 hp (1.5 kw)	VG20AL-60C6	6000	6	150	7.4	3.3	5.5	145	85	75	35	26	12	5/8"-11
Vertical Type 6 & 11 - 3 hp (2.2 kw)	VG30AL-60C6	6000	6	150	9.5	4.3	6.4	165	84	90	42	39	18	5/8"-11
V1'1 T 07	VG20AL-60D7	6000	7	175										
Vertical Type 27 - 2 hp (1.5 kw)	VG20AL-45D9	4500	9	230	7.4	3.3	5.5	145	85	75	35	26	12	5/8"-11
2 lip (1.5 kw)	VG20AL-60D9	6000	9	230										
	VG30AL-60D7	6000	7	175	9.5	4.3	6.4	165	84	90	42	39	18	5/8"-11
Vertical Type 27 -	VG30AL-45D7	4500	7	175	9.5	4.3	6.4	165	84	90	42	39	18	5/8"-11
3 hp (2.2 kw)	VG30AL-45D9	4500	9	230	9.5	4.3	6.4	165	84	90	42	39	18	5/8"-11
	VG30AL-60D9	6000	9	230	9.5	4.3	6.4	165	84	90	42	39	18	5/8"-11
Hardan Hall Oller	HG20AL-60S6	6000	6	150	10.5	4.8	20.8	530	85	75	35	26	12	5/8"-11
Horizontal 2 hp (1.5 kw)	HG20AL-45S8	4500	8	200	10.5	4.8	20.8	530	85	75	35	26	12	5/8"-11
(1.5 KW)	HG20AL-80P3	8000	3	75	10.5	4.8	20.8	530	85	75	35	26	12	5/8"-11
	HG30AL-60S6	6000	6	150	12.5	5.6	21.8	550	84	90	42	39	18	5/8"-11
Horizontal 3 hp (2.2 kw)	HG30AL-45S8	4500	8	200	12.5	5.6	21.8	550	84	90	42	39	18	5/8"-11
(L.L KW)	HG30AL-80P3	8000	3	75	12.5	5.6	21.8	550	84	90	42	39	18	5/8"-11

#### What are the benefits of a Governed Motor?

- Governed motors maintain maximum working RPMs and provide more power at higher speed.
- · Governed motors require less air and control the speed of the wheel, preventing overspeed.

#### What does the user gain?

- · Improved productivity and enhanced operator
- · Increased abrasive efficiency and improved service life of consumables.
- · Result? Reduced cost.





### **Chisel and Needle Scalers**













### **Square Shank and Octagon Shank Scalers**

- Available with lever or push pull style throttle
- SC4 Series accepts square shank chisels
- SC8 series accepts octagon chisels
- Adjustable housing allows the operator to vary the length of the exposed needles

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Stock Number	Туре	Shank	Throttle	Stroke	Length	Bore Di	ameter	Blows per Minute	Wei	ight	Len	gth	Sid Cer	e to iter		lir mption
				in.	mm	in.	mm		lb	kg	in.	mm	in.	mm	scfm	I/s
SC80910AL-C	Chisel	Octagon	Lever	1.0	25	15/16	23	4300	4.0	1.7	15.0	375	0.8	20	12.0	6
SC80910AL-N5	Needle	Octagon	Lever	1.0	25	15/16	23	4300	6.2	2.7	17.0	425	0.9	23	12.0	6
SC41011AL-C	Chisel	Square	Lever	1.1	28	1.0	25	4600	4.6	2.1	10.5	263	0.9	23	12.0	6
SC41011AU-C	Chisel	Square	Push-Pull	1.1	28	1.0	25	4600	4.6	2.1	12.0	300	0.9	23	12.0	6
SC41011AL-N5	Needle	Square	Lever	1.1	28	1.0	25	4600	6.3	2.9	15.3	383	1.0	25	12.0	6
SC41011AU-N5	Needle	Square	Push-Pull	1.1	28	1.0	25	4600	6.3	2.9	16.8	420	1.0	25	12.0	6



SC4 Square Shank Scaler Kit Stock Number SC41011AL-K Includes:

- SC4 Lever Needle Scaler
- Additional Set of Needles
- 5/8" x 7" Flat Chisel
- 1-3/8" x 7" Flat Chisel 1-3/8" x 7" Spoon Chisel
- · Custom Carrying Case







SC8 Octagon Shank Scaler Kit Stock Number SC80910AL-K Includes:

- SC8 Needle Scaler
- Additional Set of Needles
- 5/8" x 7" Flat Chisel
- 1-3/8" x 7" Flat Chisel
- 1-3/8" x 7" Spoon Chisel

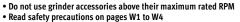














## **S766AZ Series Basic Electronic Tool Set Basic Electronic Tool Set**

- Basic starter set with Electronic Caliper & Micrometer
- Furnished in attractive, protective case

Electronic Outside Micrometer: Cat. No. 3732XFL-1

• 0-1"/0-25 mm

Electronic Slide Caliper: Cat. No. 799A-6/150

• 0-6"/0-150 mm

Stock Number	Description
LST12206	Basic Electronic Tool Set w/out Output (inch/metric)



### **3732 Series Electronic Micrometers**

Features:

- Extremely hard and stable one-piece spindle
- Micro-lapped carbide measuring faces
- Instant inch/millimeter conversion
- Measurement HOLD button
- · Ability to zero tool at any position

Stock No.	Range	Resolution	Accuracy +/-
LST12268	0-1" / 0-25mm	.00005"/.001mm	.0001"/.002mm
LST12269	1-2" / 25-50mm	.00005"/.001mm	.0001"/.003mm
LST12270	2-3" / 50-75mm	.00005"/.001mm	.0001"/.003mm
LST12271	3-4" / 75-100mm	.00005"/.001mm	.00015"/.004mm
LST12272	4-5" / 100-125mm	.0001"/.001mm	.00015"/.004mm
LST12273	5-6" / 125-150mm	.0001"/.001mm	.00015"/.004mm

STARRETT: 486

SNAP-ON: LST52499

## 486 Series Blade Type Micrometers with non-rotating spindle

Designed for fast and accurate measurements of circular form tools, diameter and depth of narrow grooves, slots, keyways, recesses, and depths between lands and fins.

Features:

- Non-rotating spindle
- .030" (0.8mm) thick blade
- Blades will measure to 5/16" (8mm) depths

Stock No.	Range	Graduation	Description
LST52499	0-1 "	_	_
LST52501	1-2 "	_	_
LST52503	2-3 "	.001"	With Speeder
LST52505	3-4 "	_	_
LST52507	4-5 "	_	_
LST52509	5-6 "	_	_





STARRETT: S909Z SNAP-ON: LST65122

### S909Z Basic Precision Measuring Tool Set

Features:

- Inch Set
- Furnished in attractive, protective case
- Contains three of the most commonly used precision tools

00		moor commonly acca procion toolo
Stock No.		Description
		Set includes:
 	T436.2XRL-1	1" Outside Micrometer with Carbide Faces
LST65122	120A-6	6" Dial Caliper
	C604R-6	6" Spring Tempered Precision Rule



## 210AP Screw Thread Comparator Micrometer - Pointed Anvils

This micrometer is ideal for quick comparisons of thread accuracy in screw cutting operations, measuring in small grooves or recesses where regular micrometers cannot be used, and for many other applications.

Stock No.	Range	Graduation
LST50731	7/8"	.001"

NOTE: Does not measure pitch diameter.

### 230 Series Outside Micrometers

Features:

- Lock nut
- · Carbide measuring faces
- Range: 0-1"
- Graduation: .0001"
- Full satin chrome finished tapered frame
- One-piece extra hard, stable spindle
- Micro-lapped carbide anvil & spindle faces

Stock No.	Description
LST50947	With friction thimble
LST50944	With ratchet stop



STARRETT: 230 SNAP-ON: LST50947

Contact your Snap-on Industrial Representative for more information, or call our Customer Service Center at (877) 740-1900



### 436 Series Outside Micrometers

Range: 0-6" Features:

Lock Nut

· Micro-lapped finish on anvil andspindle faces

· Quick reading figures on thimble with every thousandth numbered

STARRETT: 436 SNAP-ON: LST67996

			OIAI -OII. LOTO/330
Stock No.	Range	Graduation	Description
LST67996	0-1"	.001"	Friction Thimble, Lock Nut
LST67793	0-1"	.001"	Ratchet Stop, Lock Nut
LST67994	0-1"	.001"	Ratchet Stop, Lock Nut, Carbide Faces
LST67999	0-1"	.0001"	Friction Thimble, Lock Nut, Carbide Faces
LST67997	0-1"	.0001"	Ratchet Stop, Lock Nut, Carbide Faces
LST68002	1-2"	.001"	Ratchet Stop, Lock Nut
LST68003	1-2"	.001"	Ratchet Stop, Lock Nut, Carbide Faces
LST68007	1-2"	.0001"	Friction Thimble, Lock Nut, Carbide Faces
LST68005	1-2"	.0001"	Ratchet Stop, Lock Nut, Carbide Faces
LST68010	2-3"	.001"	Ratchet Stop, Lock Nut
LST68011	2-3"	.001"	Ratchet Stop, Lock Nut, Carbide Faces
LST68013	2-3"	.0001"	Ratchet Stop, Lock Nut, Carbide Faces
LST68019	3-4"	.0001"	Ratchet Stop, Lock Nut, Carbide Faces
LST68025	4-5"	.0001"	Ratchet Stop, Lock Nut, Carbide Faces
LST68031	5-6"	.0001"	Ratchet Stop, Lock Nut, Carbide Faces

### 124 Series Solid-Rod Inside Micrometers

Features:

• Range: 2-12" Graduation: .001"

Screw Movement: 1/2"

Hardened & ground anvils on heads & rods

· Furnished in case





STARRETT: 124 SNAP-ON: LST50542

### **Dial Calipers**

Features:

· Hardened stainless steel construction

• Range: 0-6" (0-150 mm)

Furnished in fitted plastic case

STARRETT: 120 SNAP-ON: LST64514

	Stock No.	Range	Graduation	Dial Color
	LST64514	0-6"	.001"	White
	LST64515	0-6"	.001"	Black
120 Series	LST64520*	0-9"	.001"	White
001103	LST56693*	0-12"	.001"	White
	LST66295	0-150 mm	0.02 mm	Yellow



#### Features:

- Dial graduations of .001" with .100" per revolution
- Black graduations on the satin finished bar, every. 100"
- Knife-edge contacts

Thumb-operated fine adjustment roll

STARRETT: 1202 **SNAP-ON: LST68814** 

Read safety precautions on pages W1 to W2

- Adjustable bezel
- Lock screws for sliding jaw and dial bezel
- Covered rack depth rod (not on LST56693)
- Hardened stainless steel bar, measuring surfaces
- No. 1202F-6 shows measurements as fractions on yellow outer scale in 1/64" inch graduations

	Stock No.	Range	Description
1202 Series	LST68814	0-4"	Caliper in fitted case
	LST66964	0-6"	Caliper in fitted case
	LST66979	0-8"	Caliper in fitted case
	LST66980	0-12"	Caliper in fitted case
	LST68931	0-6"	Fractional Caliper in fitted case





#### S436 Series Micrometer **Sets with Standards in Case**

Features:

- · Lock nut
- Flat type cases for 0-3" set
- · Carbide measuring faces
- Box type cases for 0-6" sets



STARRETT: S436 SNAP-ON: LST68038

Stock No.	Range	Graduation	Description	Set Includes
LST68038	0-3"	.0001"	Friction Thimble	1", 2" & 3" Mics.
LST68037	0-3"	.0001"	Ratched Stop	1", 2" & 3" Mics. w/ Two Standards
LST68045	0-6"	.001"	Ratched Stop	1", 2", 3", 4", 5" & 6" Mics.,w/ Five Standards
LST68044	0-6"	.001"	Ratched Stop	1", 2", 3", 4", 5" & 6" Mics.,w/ Five Standards

### **Electronic Calipers**

Features:

- Large easy-to read LCD, 32" high
- Inch/mm conversion reads .0005" or 0.01mm
- Zero at any position
- Automatic shut-off after 5 minutes of nonuse
- · Last measuring position retained when shut off
- Integrated depth rod on all sizes
- · Fine adjustment thumb wheel
- Lock screw to hold the slide in position
- Linear accuracy meets DIN862

STARRETT: 799 SNAP-ON: LST67410

	Stock No.	Range	Graduation	Description
	LST67410	0-6"	.001"	Electronic Caliper in Fitted Case
799 Series	LST67412	0-8"	.001"	Electronic Caliper in Fitted Case
	LST67621	0-12"	.001"	Electronic Caliper in Fitted Case

#### Features:

- Large, easy to read LCD, .310" character height
- . IP67 level of protection against coolant, water, dirt and dust
- Data Output
- · Heavy-duty bar and slide, 3.5mm thick
- Hardened stainless steel measuring surfaces for long life
- · Fine adjustment and slide lock
- CR2032 3V battery (>1 year battery life under normal use)
- In/mm conversion reads .0005" or 0.01mm
- Zero at any position
- · Automatic shutoff after 30 minutes
- Linear accuracy meets DIN862

STARRETT: 798 SNAP-ON: LST68659

SNAP-ON: LST61660

	Stock No.	Range	Approx. Jaw	Approx. Jaw	Description
		90	Depth, Outside	Depth, Inside	2000.1-p0.1
798 Series	LST68659	0-6" (150 mm)	1 1/2" (38 mm)	5/8" (16 mm)	Caliper with output in fitted plastic case
	LST68660	0-8" (200 mm)	1 7/8" (47.6 mm)	3/4" (19 mm)	Caliper with output in fitted plastic case
	LST68661	0-12" (300 mm)	2 1/2" (63.5 mm)	3/4" (19 mm)	Caliper with output in fitted plastic case
	LST20798	0-6" (150 mm)	1 1/2" (38 mm)	5/8" (16 mm)	Caliper w/out output in fitted plastic case
	LST20799	0-8" (200 mm)	1 7/8" (47.6 mm)	3/4" (19 mm)	Caliper w/out output in fitted plastic case
	LST20800	0-12" (300 mm)	2 1/2" (63.5 mm)	3/4" (19 mm)	Caliper w/out output in fitted plastic case

### 125MEA Series Vernier Calipers

- English and metric measurement STARRETT: 125MEA
- · Lock screw for sliding iaw
- · Hardened stainless steel depth rod Graduations: .002" English, 0.020 mm metric
- Sharp, black graduations on the satin finished bar

Stock No.	Range	Description
LST61660	0-6" (150 mm)	Metric / English Vernier Caliper
LST61882	0-8" (200 mm)	Metric / English Vernier Caliper
LST61886	0-12" (300 mm)	Metric / English Vernier Caliper

### 823 Series Tubular Micrometer Sets

Features:

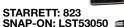
• Range: 1 1/2-24"

· Hardened & ground anvils

• 3/8" Rods centerless ground with thermal insulation

 Furnished in attractive. protective case

Graduation: .001"



Stock No.	Range	Movement of Screw	Description
LST53050	1 1/2" - 8"	1/2"	With 5 rods and handle
LST53052	1 1/2" - 12"	1/2"	With 8 rods and handle
LST53054	4" – 24"	1"	With 7 rods

### **Starrett 3089 Series Dial Bore Gages**

- Ergonomic design with non-slip insulating grip
- · Carbide contacts for extended wear
- · 2-point contact
- · All anvils laser marked for easy selection
- · Includes sturdy aluminum case

STARRETT: 3089 SNAP-ON: LST2456

Resolution: .0005

Stock No.	Range	Probe Depth	Contacts		
LST12456	0.7-1.5 "	6 "	10		
LST12457	1.4-2.4 "	6 "	6		
LST12458	2-6 "	6 "	11		

#### 25 Series ADG Group 2 Dial Indicators Features:

• Double Dial & Revolution Counter

Jewel Bearings

Rotatable bezel w/lock

STARRETT: 25

SNAP-ON: LST53299 • Hardened steel gear train

Stock No.	Graduation	Range One Rev.	Range Total	Dial Reading
LST53299	.0001"	.010"	.200"	0-5-0
LST53304	.0005"	.050"	1.000"	0-50
LST53295	.001"	.100"	1.000"	0-100
LST53294*	.001"	.100"	.500"	0-100
LST53287	.001"	.100"	1.000"	0-50-0

\*Plain Bearings

### 2900 Series Electronic Indicators

Features:

- True Absolute Sensor Technology remembers position and zero set point even during battery replacement. Cannot be "over-sped" into failure.
- Intuitive design and layout easy to learn and use
- · Positive, tactile-feel button activation
- IP67 protection against dirt, dust water and coolant to withstand hostile shop environments STARRETT: 2900

Data output		·	SNAP-	ON: LS
Stock No.	Graduation	Res. (in)	Feaures	
STOGGEO	5"/12mm	00005"/0 001mm	Rasic	l

Stock No.	Graduation	Res. (in)	Feaures
LST09980	.5"/12mm	.00005"/0.001mm	Basic
LST09981	.5"/12mm	.0001"/0.001mm	Basic
LST09983	.5"/12mm	.0005"/.0001"/.00005"	Advanced

### 196 Series Universal Back-Plunger Dial Test Indicator

Features:

- Accurate, reliable, simple to operate
- · Large assortment of accessories available

Stock No.	Graduation	Range	Dial Reading
LST50697*	.001"	.200"	0-100
LST50699**	.001"	.200"	0-100

\*Indicator with 3 contact points, adapter, case, 4 attachments clamp, tool post holder, snug and hole attachment.
 \*\*Indicator comes with 3 contact points and adapter.



### **Micrometer Depth Gages**

Features:

• Range: 0-9" Adjustable Rods

With Ratchet Stop & Locknut

Graduation: .001"

Protective Case



\* With locknut only, in case

### 449 Series Micrometer Depth Gages with non-rotating blades

- · Non-rotating, blade type rods
- For slots as narrow as .045"
- Graduation: .001"

Stock No.	Range	Base Length	No. of Rods
LST52318	0 – 3"	2 1/2"	3
LST52320	0 – 6"	2 1/2"	6
LST52322	0 – 3"	4"	3
LST52324	0 – 6"	4"	6

STARRETT:449 **SNAP-ON: LST5218** 

STARRETT: 25

SNAP-ON: LST53309

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STARRETT:440 SNAP-ON: LST52113

### 25 Series Dial Indicators with long range

- Interchangeable contact point
- Jewel Bearings

Stock No.	Graduation	Range One Rev.	Range Total	Dial Reading
LST53309	.001"	.100"	2.000"	0-100

### 3600 Series Electronic Indicator

Features:

- · Large, easy-to-read LCD
- Range: .500" or 12.7mm
- Resolution: .0005" or .01mm
- Reverse travel (± control indicates direction)
- · Zero setting at any position
- ST09980 3/8" diameter stem

• Lug-on-center back + additional flat back

STARRETT: 3600

**SNAP-ON: LST68813** 

### 25R Contact Point Set

Features:

• 14 points with #4-48 screw thread to fit AGD indicators

- · High grade steel, hardened and ground
- All points are mounted on an aluminum ring

	Stock No.	Description
		Set includes: Regular 1/4" (6.3mm) long point, 9 special form points, No. 28
7	LST50153	Shock Absorbing Anvil, 3 extra long points – 1/2", 3/4" and 1" (13, 19, 25mm)



STARRETT: 25R

SNAP-ON: LST50153





## Starrett

### Dial Test Indicators w/dovetail mounts

Features:

- Large 1 3/8" diameter Dial faces
- Long 13/16" carbide Contact Point
- Three standardized dovetail positioning mounts
- · Easy to read angled head
- Meets or exceeds ISO accuracy specifications
- Precision gear drive with jeweled movement

• Furnished in case

STARRETT: 709 SNAP-ON: LST64219

	Stock No.	Graduation	Range	Dial Reading	Description	Dial Color
709 Series	LST64219	.0005"	.030"	0-15-0	With Attachments	White
708 Series	LST64217	.0001"	.010"	0-5-0	With Attachments	White

### 711 SeriesLast Word® Dial Test Indicators

- Steel contact points length: 5/32" (4mm)
- · Easy reading dials, half-shaded yellow for clarity
- · Smooth, jeweled lever action
- · Positive reversing switch
- · Hard chrome-plated ratchet contact point
- Ideal for precise measurements in machining, layout, and inspection work

STARRETT: 711 SNAP-ON: LST52943

Stock No.	Graduation	Range	Dial Reading	Description
LST52943	.001"	.030"	0-15-0	Indicator with ALL attachments*
LST52957	.0005"	.030"	0-15-0	Indicator with ALL attachments*
LST52925	.001"	.030"	0-15-0	Indicator with universal shank with long and short arm, body clamp, and one contact point .120"

\*Attachments include 3 contact points – .035", .062", .120" – body clamp – universal friction holder with shank – universal shank complete with long & short arm – double-jointed attachment – height gage attachment – surface gage attachment – coupling with 3/16" (4.8 mm) hole.

#### Features:

- Large, easy-to-read LCD display reads to .0005" (0.01mm)
- Instant inch-millimeter conversion
- "Hold" control feature retaining a reading at any position
- Plus or minus direction selector
- Ability to set zero at any position
- Ability to install minimum and maximum limits

### 33259 Dial Height Gages

- · Hardened, stainless steel bar, gears, scriber, and scriber carrier
- · Zero/reset button located on the digital counter
- · Carbide tipped scriber and clamp
- · Locking lever
- Hardened and ground base lapped for flatness

EDP No.	Range	Description
LST68815	0-12" (300 mm)	Height Gage without case
LST68816	0-24" (600 mm)	Height Gage without case
LST12219	0-12" (300 mm)	Height Gage without case
LST69906	0-24" (600 mm)	Height Gage without case

STARRETT: 3752 SNAP-ON: LST68815

Read safety precautions on pages W1 to W2

#### **Precision Tools**

### 660 Series Magnetic Base Universal Indicator Holder with triple-jointed arm & fine-adjustment Features:

STARRETT: 660

• Three pivots for positioning indicator tightening knob

SNAP-ON: LST68621 · Base includes articulating arm with dovetail and stem hole clamp

- Small, powerful, versatile & compact (1.2" x 1.6" x 1.4")
- 72 lb. pull
- Holds indicators w/ 3/8" (9.5mm) stem
- Holds indicators w/ standard dovetail mount

Stock No.	Description	
LST68621	Magnetic Base Universal Indicator Holder with triple-jointed arm and fine-adjustment	

### 659 Series Heavy-Duty Magnetic Base Indicator Holder with rotary on-off switch

STARRETT: 659

SNAP-ON: LST56687

Features:

- · Powerful magnetic base
- · Fine adjustment at the
- end of the gage rod · Indicator positioned at any height or angle
- Extra tapped hole in base for multiple
- inspection work

- <b>!</b> · · · · · ·	
Stock No.	Description
LST56687	Magnetic Base, Upright Post Assembly Including Post, Snug, Gage Rod with Clamp and Fine Adjust, and Thread Adapter, without Indicator, without Case
LST55948	Base and Upright Post Assembly with Inch reading indicator No. 25-131J in Case

## 657AA Magnetic Base Indicator Holder with attachments

LST52743 Features:

- Three precision ground magnetic contact surfaces
- Grips horizontally, vertically or upside down
- V-step holds base to arbors, shafts & chucks
- · Push button on-off switch
- Threaded end fits lug backs of all indicators

### 657D Series Magnetic Base Indicator Holder with attachments LST52749

Features:

STARRETT: 657D SNAP-ON: LST52749

STARRETT: 657

SNAP-ON: LST52743

• Swivel Post Snug allows adjustment to any vertical angle

### 657T Series Flex-O-Post Indicator Holder with magnetic base

LST52760 Features:

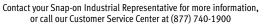
STARRETT: 657T SNAP-ON: LST52760

- · For use with all Starrett Dial Indicators Can be adjusted and locked to any position
- Vertical reach of 15", horizontal reach of 10"
- 360° indicator snug can be locked in any position













#### **Parallels**

No.	Range	Length	Thickness
Α	3/8 - 1/2"	1 3/4"	9/32"
В	1/2 - 11/16"	2 1/8"	9/32"
С	11/16 - 15/16"	2 11/16"	9/32"
D	15/16 <b>- 1</b> 5/16"	3 9/16"	9/32"
Е	1 5/16 - 1 3/4"	4 3/16"	9/32"



	Stock No.	Description
154	LST50586	Set consists of 6 parallels- A,B,C,D,E,F w/case
Series	LST50584	Set consists of 4 parallels- A,B,C,D w/case



### 568 Series V-Blocks and Cla

#### Features:

- Hardened steel precision ground on all sides
- 3/8-16 tapped holes for face plate mounting
- Stepped grooves for high & low clamping
- · For round or square work

amps	

STARRETT: 568 SNAP-ON: LST52	2590

Stock No. Capacity		Description
LST52590	2" (50 mm) dia. round;	1 V-Block and Clamp
LST52592	1 <sup>7</sup> /16" (36 mm) square (1 <sup>9</sup> /16" [40 mm] w/screw at top)	Complete Set w/ 2 V-Blocks & 2 Clamps (Matched Pair)
LST52591		Clamp Only

STARRETT: C493B

#### C183 Steel Protractor LST50672

#### Features:

- 6" locking blade
- · Satin chrome finish
- Range: 0-180°



### C493B Protractor and Depth Gage LST52534

#### Features:

- 6" locking blade
- SNAP-ON: LST52534 Satin chrome finish
- Range: 0-180°
- Blade graduations: 32nds, 64ths

#### 237 Steel Rule Depth Gage LST51080

#### Features:

STARRETT: 237 SNAP-ON: LST51080

- 6" locking rule
- · Case hardened steel head
- Blade graduations: 32nds, 64ths

### 67B Improved Scriber LST50317

· Scribers are steel, properly tempered & well-finished

**STARRETT: 67B** 

SNAP-ON: LST50317

STARRETT: AM-2

- · Points are finely tapered
- Two points are furnished: 1 straight, 1 short bent
- Knurled handle & points
- · Nickel plating on handle

#### AM-2 Angle Meter LST36080

- · Finds angles & level readings easily & quickly
- · Measures any angle for pitch or slope
- · High-impact plastic construction
- Magnetic base & back



### 98 a Machinists' Improved Levels

- · Adjustable main vial
- Involute groove running length of base
- Bases are seasoned castings wrinkle finish STARRETT: 98
- Accurately machined on bearing surface



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		_
Stock No.	Size	Description
LST50440	4"	Without cross test vial
LST50441	6"	With cross test vial
LST50442	8"	With cross test vial
LST50443	12"	With single plumb vial and cross test vial
LST50445	18"	With double plumb vial and cross test vial

### **135 Series Pocket Level** with satin nickel-plated finish

- Fits handily in the pocket with no sharp edges
- · Made from hexagon stock with convex ends

· ·			
Stock No.	Size	Description	
LST50570	2 1/2" (63 mm)	With Main Vial	
LST50571	3 1/2" (88 mm)	With Main Vial	

STARRETT: 135 SNAP-ON: LST50570

STARRETT: 199Z

STARRETT: 134

### 199Z Master Precision Level

#### LST50719 Features:

- 15" long x 1 5/8" wide x 3" high
- 10-second accuracy of graduated main vial SNAP-ON: LST50719
- Auxiliary vials for lateral & horizontal setting
- Castings thoroughly seasoned and machined

### 134 Cross Test Level and Plumb

#### Features:

SNAP-ON: LST50569 . Two vials at right angles for cross test leveling

• For approximate squaring, leveling & machine set-up.

To approximate equaling, leveling a macrime cot up			
Stock No.	Size	Description	
LST50569	2" x 3" x 1/2"	w/ cross test vials & plumb vial	

### 505 Series Miter and Combination Protractor

- Miter Cut (for miter joints): Transfer readings directly to the Miter Saw
- Compound Cut Conversion Table (on the bottom leg with the tool facing up): Specifically for the Compound Miter Saw
- Protractor (Reverse side)
- Roof Pitch Scale

Stock No.	Description
LST12256	Combination Protractor, Miter Gage, With Compound Cut Conversion Table and Quick Roof Pitch Reference



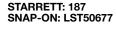
STARRETT: 505 SNAP-ON: LST12256

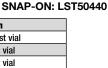
### 187 Jobbers' Drill Gage – ardened

#### Features:

- Range: 1/6-1/2"
- Approximately 5/64" thick by 2 5/16" by 6 1/4" long
- Size of any twist drill from 1/16-1/2" by 64ths can be quickly determined
- · 29 holes marked with the drill size in inches and the decimal equivalent
- Information steel stamped on one side & white marked on the reverse side

Stock No.	Description
LST50677	Jobbers' Drill Gage









SNAP-ON: LST53062

### **Screw Pitch Gages**

Starrett screw pitch gages quickly determine the pitch of various threads. These gages consist of a substantial steel case with a number of folding leaves at both ends, each leaf having teeth corresponding to a definite pitch, marked on each leaf.

Features:

STARRETT: • V, Unified, American National 60° threads SNAP-ON: LST50035

Internal Matrix Observational COO. House de				
Stock No.	Description	No. of Leaves	Sizes	
LST50035	Screw Pitch Gage V Unified, TPI 4 to 42	30	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42	
LST52484	Screw Pitch Gage, V, Unified, TPI 4 to 84	51	First Corner 17 Leaves: 4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18	
1	_	ı	Second Corner 17 Leaves: 20, 22, 24, 26, 27, 28,30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50	
1	_	1	Third Corner 17 Leaves: 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84	
LST52486	Screw Pitch Gage, V, Unified, 4 to 80	28	4, 4-1/2, 5, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 16, 18, 20, 24, 27, 28, 32, 36, 40, 44, 48, 56, 64, 72, 80	
LST50589	Screw Pitch Gage, Metric, 0.25 to 2.5	28	0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 1, 1.10, 1.20, 1.25, 1.30, 1.40, 1.50, 1.60, 1.70, 1.75, 1.80, 1.90, 2, 2.50	
LST50591	Screw Pitch Gage, Metric,1 to 11.5	28	0.5, 0.75, 1, 1.10, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, and 60% Center Core.	

### S831EZ Series Small Hole Gages

Features:

• Range: .125"-.500"

• Approx. Length: 2 13/16" - 3 1/2"

 Half-ball surface & flat bottom for use in shallow holes, slots & recesses

STARRETT: S831EZ • Two-point contact for maximum accuracy SNAP-ON: LST53087

· Smooth, sensitive adjustment

Safety stop prevents breakage of gages beyond adjustment range

Stock No.	Description	
LST53087	Set of 4 in case: Nos. 831A,B,C,D	

### 91 Series Tap Wrenches

Features:

· Made of rugged steel with tempered gripping surface

	Capacity			
Stock No.	Tap Size	Square Shank	Body Length	
LST50419	1/16-1/4"	3/32-5/32"	6"	
LST50420	3/16-1/2"	5/32-9/32"	9"	
LST50421	1/4-5/8"	5/32-3/8"	12"	
LST50422	5/16-3/4"	13/64-7/16"	16"	



### Starrett Thickness Gages

- · Leaves made of tempered-stee and marked with thickness
- Locking device
- · Leaves easily removed or replaced
- · Rugged steel case

STARRETT: SNAP-ON: LST50314

### 827 Series Edge Finders STARRETT: 827

Features:

· Locate work surface easily, quickly & accurately

. Body & contacts made of hardened, ground tool steel

 Double-end model has pointed contact center point & scribed lines

Stock No.	Description	<b>Body Diameter</b>	Contact Diameter
LST53062	Single End	.375"	.200"
LST53063	Double End	.500"	.200" & pointed contact

### 269 Series .100-1" Taper Gages

These gages are for determining hole sizes in dies and other work. They read in thousandths of an inch or 0.02mm. Made of tempered steel with a locking device.

Stock No.	Range	Length	No. Leaves
LST51290	.100500"	2 1/2"	8
LST51291	.500-1"	2 3/4"	10

STARRETT: 269 SNAP-ON: LST51290

## 93 Series T-Handle Tap Wrenches STARRETT: 93

Centered body for use on lathe or drilling machines
 Heat tracked:

- · Heat treated jaws
- Sliding handle

Stock No.	Capacity Tap Size	Capacity Square Shank	Body Length
LST50427	1/16 - 3/16"	1/16 - 5/32"	2"
LST50428	7/32 - 7/16"	5/32 - 1/4"	2 1/2"
LST50429	1/4 - 1/2"	3/ <sub>16</sub> - 5/ <sub>32</sub> "	3 1/2"
LST50430	1/16 - 3/16"	1/ <sub>16</sub> - 5/ <sub>32</sub> "	6"
LST50431	7/32 - 7/16"	5/32 - 1/4"	10"
LST50432	1/4 - 1/2"	3/16 - <sup>5</sup> /16"	13"

### **579 Series Telescoping Gage Set**

Features:

. Two automatically self-centering contacts

· Contact points are hardened & radius ground

Stock No.	No. of Gauges	Description
LST52616	4	4 pc. set - 5/16" to 2 1/8"*
LST52617	6	6 pc. set - 5/16" to 6"*

\*in protective case

## 

**STARRETT: 579** 

SNAP-ON: LST52616

### 270 Series Taper Gage

Features:

· Useful for bearing work and for gaging slots

 Made of quality tool steel 7/16" (11 mm) wide by 6 1/4" (160 mm) long

STARRETT: 270 SNAP-ON: LST51292

STARRETT: 166

SNAP-ON: LST50609

• Graduated from .010" to .150" in thousandths of an inch and the reverse side from 0.3 mm to 4 mm in one-twentieth of a mm (0.05 mm)

Stock No.	Range: Inch	Range: mm	Description	
LST51292	.010150"	0.3-4 mm	Taper Gage	

### 166 Series Pin Vises

Features:

- Insulated, octagonal PVC handles
- For small wire, reamers, drills, taps & stock
- Hole extends length of handle

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5	Stock No.	Range					
L	ST50609	09 0040" (0-1 mm)					
L	ST50610	.030062" (0.8-1.6 mm)					
L	ST50611	.050125" (1.3-3.2 mm)					
L	ST50612	.115187" (2.9-4.8 mm)					
I	LST50614 Set of all 4 sizes in protective vinyl case						



Stock No.	Description	Range (In.)	Leave Size	Leave No.	Leave Type	<b>Locking Device</b>	Leave Sizes
LST50314	Thickness Gage, 26 Straight Leaves	0.0015-0.25	1/2 X 3 1/32	26	Straight	Yes	.0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025
LST50315	Thickness Gage, 26 Tapered Leaves	0.0015-0.25	1/2-1/4 X 3 1/32	26	Tapered	Yes	.0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025
LST52464	Thicknoon Cono	0.0015.0.200	1/2 <b>X 4</b> 1/2	13	Straight	Yes	.0015, .002, .003, .004, .006, .008, .010, .020, .030, .040, .075, .100, .200
LST57098	Thickness Gage, 22 Leaves Plus SP Wires	0.0015-0.035	1/2 <b>X 3</b> 1/32	22	Straight	Yes	.0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .012, .013, .014, .015, .016, .018, .020, .022, .025, .030, .035 Spark Plug Wire Gages: .025, .030, .034, .035, .040, .045



## arrett

### **Precision Tools**

#### 283 Series U.S. Standard Gage - hardened LST51318

Features:

- Nos. 0-36 (.3125-.007") range
- . Made to the United States Standard for uncoated sheet, plate iron and steel
- · Satin finish
- · Decimal equivalents on reverse side

STARRETT: 283 SNAP-ON: LST51318

SNAP-ON: LST51316

### 281 Series American Standard Wire Gage LST51316

Features:

- · Hardened & tested
- Range: Nos. 0-36 (.325-.005")
- · For gaging sheets, plate & wire of non-ferrous metals
- Decimal equivalents on reverse side

· Satin finish

· Accepted standard adopted by brass manufacturers



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- Fine quality steel w/easy-to-read satin chrome finish
- Highly accurate. Matches Starrett master standards

Stock No.	Length	Width x Thickness	Steel	Graduations	
LST56701	6"	1/2" x 1/64"	Full-Flexible	No. 10 - 32nds and 64ths One Side Only	

### 668 Series Shaft Alignment Clamp Sets

Starrett Shaft Alignment Clamp is designed for fast, precise alignment of motors, pumps, and compressors



• Rigid 3/8" diameter stainless steel indicator posts provided in three lengths (5", 7-7/16", and 9")

· Heavy-duty roller chain can accommodate up to a 7-1/2 diameter shaft

 Sets are available with either two Starrett Nos. 196B5 or 81-141J Indicators or clamps alone

	The manual of th
Stock No.	Description
LST67152	Shaft Alignment Set,196B5 Indicators, Case
LST67153	Shaft Alignment Set, 81-141J Indicators, Case
LST67151	Shaft Alignment Set, Clamp, Plate and Posts, Case
LST67150	Shaft Alignment Clamp, Plate and Posts
1 9767155	Shaft Alignment Clamp Only

### 83 Series "Yankee" Dividers with flat legs

Features:

- . Made of durable high-grade steel
- Extra strong, flexible bow spring · Fulcrum stud: hardened w/ smooth surface
- · Quick adjust spring nut

With Solid Nut	Quick-Spring Nut	
Stock No.	Stock No.	Size / Capacity
LST50376	LST50377	4" (100 mm)
LST50378	LST50379	6" (150 mm)
LST50380	LST50381	8" (200 mm)
LST50384	LST50385	12" (300 mm)

Contact your Snap-on Industrial Representative for more information, or call our Customer Service Center at (877) 740-1900

STARRETT: 83 SNAP-ON: LST50377

### Starrett Brass Pin Punches – Ideal for Delicate Work

Ideal for Delicate Work

STARRETT: SB565Z

SNAP-ON: LST12473 · B565 Brass Punches, 4 Inch Length, eight sizes from 1/16" to 5/16"

. B248 Extended Length Brass Punches, 8 inch Length, four sizes from 3/16" to 3/8"

Length, four sizes from 5/10 to 5/6							
	Stock No.	Description					
	LST12465	Brass Drive Pin Punch, 4 In, 1/16 In Dia					
	LST12466	Brass Drive Pin Punch, 4 In, 3/32 In Dia					
B565 Series	LST12467	Brass Drive Pin Punch, 4 In, 1/8 In Dia					
Brass Drive	LST12468	Brass Drive Pin Punch, 4 In, 5/32 In Dia					
	LST12469	Brass Drive Pin Punch, 4 In, 3/16 In Dia					
Pin Punches	LST12470	Brass Drive Pin Punch, 4 In, 7/32 In Dia					
& Sets	LST12471	Brass Drive Pin Punch, 4 In, 1/4 In Dia					
	LST12472	Brass Drive Pin Punch, 4 In, 5/16 In Dia					
	LST12473	Brass Drive Pin Punch Set, 8 Pc, Case					
<b>B248 Series</b>	LST12460	Brass Drive Pin Punch, 8 ln, 3/16 ln Dia					
Brass Drive	LST12461	Brass Drive Pin Punch, 8 In, 1/4 Dia					
	LST12462	Brass Drive Pin Punch, 8 In, 5/16 Dia					
Pin Punches	LST12463	Brass Drive Pin Punch, 8 In, 3/8 Dia					
& Sets	LST12464	Brass Drive Pin Punch, Set, B248B/C/D/E					

### **C391 Series Center Gage**

Features:

- · For grinding & setting screw cutting tools
- Satin chrome finish

STARRETT: C391 02 =28 SNAP-ON: LST12465

- Graduations in 14ths, 20ths, 24ths and 32nds of an inch
- · Table of double depths of threads for determining tap drill sizes
- Made of spring-tempered steel

Stock No.	Description
LST51475	Inch grads., American Unified National Standard, 60°

### S248PC Series Drive Pin Punches

Features:

- · Set of 5 punches in protective vinyl case
- Extra-long 8" (200 mm)

STARRETT: S248PC

STARRETT: 50

ANGLES OF

STARRETT: S565WB

Starrett

- Extra-rong o (200 mill)
   Bodies, 4 1/2" (115 mm); Drive pin sections, 3 1/2" (90 mm)
- Hardened & tempered
   Knurled grip

	•	• .
Catalog No.		Description
LST51186	Dia. of Punche 1/4" (6 mm), 5/	s: 1/8"(3 mm), 3/16" (5 mm), 16" (8 mm) and 3/8" (9.5 mm)

### **S565WB Series Drive Pin Punches** Features:

SNAP-ON: LST52586 Well proportioned, hardened, properly tempered

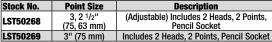
• Knurled finger grip • Set of 8 punches in round plastic box Fach punch has size stamped on head • 4" (100 mm) length

	Each parion has size stamped on hoad 1 (100 mm) longer									
Stock No. Punch Diameters										
L	ST52586	1/16" (1.5 mm), 3/32" (2.5 mm), 1/8" (3 mm), 5/32" (4 mm), 3/16" (5 mm), 7/32" (5 5 mm), 1/4" (6 mm), 5/16" (8 mm)								

### 50 Series Trammel Heads with divider points, pencil socket

- · Die cast heads w/ black wrinkle finish
- Hardened, forged steel divider points
- No. 50A has an adjustable point

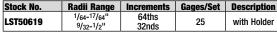
SNAP-ON: LST50268 **Point Size** Description 3. 2 1/2



### S167CHZ Radius Gage Set

Features:

- · Satin finish stainless steel
- STARRETT: S167CHZ SNAP-ON: LST50619
- · Clearly marked with radius
- Five different gaging surfaces for convex & concave radii
- Precision finished radii
- · Gage Holder, 4" long

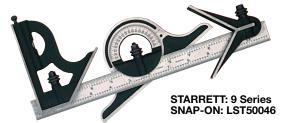






## tarret

### Precision Tools



### Combination Set w/Non Reversible Protractor Head

#### Features:

- · Non-reversible protractor head
- Cast iron heads Black wrinkle finish
- · Blade graduations: 8ths, 16ths, Quick Reading 32nds, 64ths
- Accuracy of head to blade: ±.002"
- Tempered steel, machine divided blade
- · Reversible lock bolt, scriber & spirit level

	Stock No.	Blade	Size		EDP No.	Size	Blade
	LST50046	Satin Chrome	12"	9-12-4R		4011	D
9 Series	LST50044	Regular	18"	Series	LST50042	12"	Regular
	LST50045	Regular	24"				



#### Steel Rules

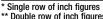
- STARRETT: C303 SNAP-ON: LST51334 Features:
- Fine quality steel w/ easy-to-read satin chrome finish · Machine divided (not photo-engraved) for uniformity of line depth & width
- · Highly accurate. Matches Starrett master standards

	Stock No.	Length	Width/ Thickness	Steel	Graduations
	LST51334	6"	1/2" X 1/64"	Full-Flexible	No. 3R QR 10ths, Aircraft QR 50ths, 32nds, & 64ths
C303,	LST66008	6"	1/2" x 1/64"	Full-Flexible	
C304	LST51343	6"	3/4" x 1/50"	Semi-Flexible	No. 4R – 8ths, 16ths,
Series	LST51344	12"	1" x 1/40"	Semi-Flexible	QR 32nds & 64ths
	LST56645	24"	3/4 x 1/50"	Full-Flexible	
C305 Series	LST51347	6"	1/2" X 1/64"	Full-Flexible	No. 5R – Quick-Reading 10ths, Aircraft
	LST51348	12"	1/2" X 1/64"	Full-Flexible	Quick-Reading 100ths,32nds, and 64ths
	LST51374	6"	1/2" x 1/64"	Full-Flexible	No. 16R – Quick-Reading
C316 Series	LST51375	12"	1/2" X 1/64"	Full-Flexible	32nds, 64ths, Aircraft Quick-Reading, 50ths, & 100ths

#### Features:

- · Spring-tempered steel
- No. 4R Graduations 8ths, 16ths, quick reading 32nds and 64ths
- Fine quality steel w/easy-to-read satin chrome finish
- · Machine divided (not photo-engraved) for uniformity of line depth & width
- · Highly accurate. Matches Starrett master standards

÷ -			
	Stock No.	Length	Width x Thickness
	LST52660***	6"	3/4" x 3/64"
	LST52673****	6"	3/4" x 3/64"
C604	LST52678*	6"	3/4" x 3/64"
Series	LST52679**	12"	1" x 3/64"
	LST52680**	18"	1 1/8" x 3/64"
	I \$752681**	2/11	1 1/4" v 3/e4"





### **Combination Squares**

#### Features:

- No. 4R graduations 8ths, 16ths, Quick Reading 32nds, 64ths
- · Cast iron heads with black wrinkle finish

Blade

Regular

Regular

12'

18'

24

- · Reversible lock bolt, scriber, spirit level
- · Hardened steel, machine-divided blade
- Easy to read, sharp graduations

LST56366 Satin Chrome

Stock No.

LST50059

LST50063

	Ų
STARRETT:	

е		Stock No.	Size	Blade
	11H-12-	LST50055	12"	Regular
•	4R, C11H-	LST56362	6"	Satin
ı	6-4R	LS156362	6"	Chrome

SNAP-ON: LST51542

#### Combination Set w/Reversible **Protractor Head** STARRETT: 434 Series

#### Features:

11H

- . No. 4R 8ths, 16ths, Quick Reading 32nds, 64ths graduations
- · Double reading 180° protractor head
- Tempered steel, machine divided blade
- · Bearing surfaces are accurately ground
- Reversible lock bolt, scriber & spirit level

, ,			
	Stock No.	Description	Blade
	LST51542	Forged & Hardened Steel Square Heads & Center Head	Regular
434, 435 Series	LST51548	Cast Iron Protractor Head w/ Smooth Black Enamel Finish	Satin Chrome
	LST51556	Cast Iron Heads with Black Wrinkle Finish	Regular

## MARKET NA

### **Steel Straight Edges**

#### STARRETT: SNAP-ON: LST51438

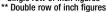
Precision ground to rigid Starrett standards. They are unexcelled for drawing or scribing straight lines and checking surfaces for straightness.

Stock No.	Item Description	Width x Thickness
LST51438	Straight Edge, 12 "	1 13/32" x 11/64"
LST51440	Straight Edge, 24"	1 13/32" x 11/64"
LST51441	Straight Edge, 36"	2 13/32" x 7/32"
LST51455	Straight Edge, Beveled, 12"	1 13/32" x 11/64"
LST51457	Straight Edge, Beveled, 24"	1 13/32" x 11/64"
LST51459	Straight Edge, Beveled, 48"	2 13/32" x 7/32"

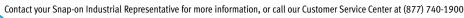
### Combination Set w/Square Head & Center Head

	Stock No.	Blade	Size	Graduation
33HC Series	LST56393	Satin Chrome	6"	4R – 8ths, 16ths, Quick Reading 32nds, 64ths
	LST56397	Satin Chrome	12"	4R – 8ths, 16ths, Quick Reading 32nds, 64ths
	LST56399	Satin Chrome	12"	16R – Quick Reading 32nds, 64ths, Aircraft QR 50ths, 100ths

Stock No.	Fits Blade Size	Description
LST50224	6"	Square Head Only
LST50227	6"	Center Head Only
LST50225	12", 18", 24"	Square Head Only
LST50228	12", 18", 24"	Center Head Only
LST64601	12" and up	Protractor Head, black wrinkle, chrome on turret



\*\*\* End graduations \*\*\*\* Reversible hook





### **RAILROAD TOOLS**

### **Snap-on Specialty Tools**

### 1" Drive Lag Screw Sockets

N8705ANP Crossing Lag Socket.

The socket has a T70 TORX® bit for easy installation and removal of "star" crossing screws.

N8705A2NP Replacement Bit for N8705ANP.

This bit can be used with the N8705ANP.

5703747UP Rectangular Head Lag Socket.

For use on special rectangular head lag screws. The opening is 1 1/8" X 7/8" size and can be used on an impact wrench.

### 1" Drive Lag Screw Sockets

IM728NT Single Square Tapered Nose Socket.

1" drive, 1" square

IM736NT Single Square Tapered Nose Socket.

1" drive, 1 1/8" square



N8842 1 5/8" Double Square

N8834 1 11/16" Double Square

N8835 1 13/16 Double Square

## 1" Drive Shallow Impact Socket, 4 Point, SAE IM748BC1.5 1" Drive Shallow Impact Socket, 4 Point, SAE

1" SQ Drive to 1-1/2" - Single Square Deep Impact Socket For use with impact tools

## 1" Drive Deep Frog Bolt Impact Sockets N8741 2 3/16" Deep Double Square Frog Bolt Socket

1" drive socket is used primarily for Frog bolt applications. It is an 8-point socket.



IM748BC1.5

N8842



N8741

**Diesel Specialty Tools** -

## Exhaust Stack Tools B4203A-30FHD Torque Adaptor

- 1/2" drive, 12-point 15/16" box-end
- · Offset provides access to exhaust stacks
- Centerline distance is 2". 5 1/2" long

### Water Pump Wrenches

N6369L-JHW Left hand water pump wrench 3/4" and 7/8" 12-point box. The left-hand offset bend allows

N6369R-JHW Right Hand water pump wrench 3/4" and 7/8" 12-point box. The right-hand offset bend allows easy access. (not shown)

K2921A Ratcheting water pump wrench

This half moon ratcheting wrench is 3/4" by 5/8" 12-point.

#### Miscellaneous Diesel Tools N6387A Test Cock Cylinder Socket

This 1/2" drive socket is used to loosen or tighten the test cocks on EMD locomotives.

DS560A Deep Diode Socket.

Thin wall 1/2" drive 1 1/4" 6-point slotted socket. For use on high horsepower EMD locomotives.

Note: Products shown are available via special order

You can also submit a QuickQuote on-line at: www.snaponspecialproducts.com



Special Products Division

N6387A

### **Snap-on Specialty Tools**





#### Cotter Key Tools

**CK200 Cotter Key Pliers** Tapered jaws on these pliers reach in to remove the self spreader in most cotter keys. The prybar end can be used to pry cotter keys, gaskets, etc.

**K2952 Dual purpose Pliers,** one end is a heavy duty combination pliers, while the other end can be used to bend cotter keys.

### **Ratcheting Open End Wrenches**

Jaw design allows ratcheting action, ideal in situations where a socket can't be used.

**RS24 3/4" wrench size,** 9 1/4" long. For dirt collectors or empty load sensor valves.

**RS30 15/16" wrench size,** 12 5/16" long. For use on airbrake service portions.

RS32TS 1" wrench size used on articulated cars to service nuts on Meisner airbrakes.

RS34TS 1 1/16" wrench size, similar use as RS32TS. RS64 2" wrench size, 9 1/4" long. Used to adjust WABCO brake beams.

### Signal Tools

**N6161N8MD2.1 Point Detector Bushing Socket.** 1/2" square drive internal 4 lug socket designed for installing or removing the point detector bushing found on WABCO switch machines. The internal lugs provide greater strength.

**Switch Machine Wrenches.** Each wrench features a 45 degree offset and two different wrench sizes. The 25" length gives added leverage.

**GVS5264-45** 1-5/8" and 2" offset open end wrenches. **GVS3440-45** 1-1/16" and 1-1/4" wrench sizes

### **Bridge and Building Tools**

**Hook Bolt Sockets.** These 6" long sockets are used on hook bolt applications, where extra bolt clearance is needed. All in 1" drive.

IM736S6TL Single Square: Socket size 1 1/8". IM740S6TL Single Square: Socket size 1 1/4".

N8930 Six Point: Socket size 1 1/8".

N8893 Six Point: Socket size 1 1/4".

**IMASQ162NP Impact Adapter.** This 1/2" external by 3/4" internal impact adapter has lock button retention, and a replaceable 1/2" external drive.

IMASQ162-2B Replacement 1/2" drive. Must order roll pin ESD311K separately.

You can also submit a QuickQuote on-line at: www.snaponspecialproducts.com

Note: Products shown are available via special order





### **UTILITY PRODUCTS**

### **Snap-on Specialty Tools**





### ATSK3715 Manhole Cover Removal Tool.

This Manhole Cover Removal Tool is used by Electrical Utilities to remove manhole covers weighting up to 600 lbs.





## A327-48R 32MM Hex x 1/2" Torque Adaptor. This tool is used to open and close the switch on the four-way

This tool is used to open and close the switch on the four-way Distribution Switch commonly found in the Electrical Utilities Industry.





GBR1824 3/4" x 9/16" Ratcheting Wrench.
This non-insulated, combination ratcheting wrench is used by

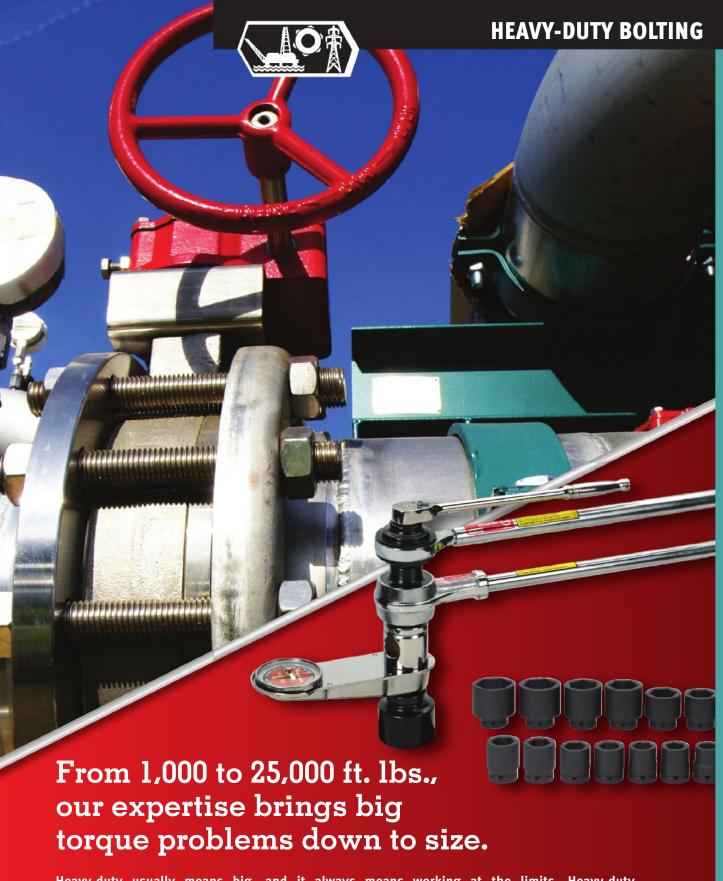
This non-insulated, combination ratcheting wrench is used by Lineman in all applications of the Electrical Utilities Industry.



ATSK3621 7/16" Hex to 1/2" Square Adaptor. This tool in used with Part Number B2192 Impact Pentagon

Socket, in the removal and tightening of special bolts used by Electrical Utilities on Pad Mounted and Sub-Surface Underground Facilities.

See 178-180 for complete assortment of Snap-on non-conductive composite tools



Heavy-duty usually means big, and it always means working at the limits. Heavy-duty bolting tools include impact sockets from 3/4"-2-1/2" drive and combination wrenches from 9/16"-3-1/2". At the limits, we're talking about more than 25,000 ft. lb. of torque. Fortunately, we have the sockets, wrenches, torque tools and experience to handle those job requirements.

## **Industrial-Duty Impact Wrenches**







Thru-hole anvil for maximum socket security



# **Sioux Industrial-Duty Pistol Grip Impact Wrenches**

- Thru-Hole Anvil for positive socket retention
- Three piece housing construction for ease of maintenance
- Two jaw impact mechanism
- Aluminum handle with steel hammer case
- · Suspension bail included
- Down handle exhaust directs air away from the operator
- Conveniently located reverse

Stock Number	Drive	Size		Cap. de 5	Tor	king que nge¹	Maxi Tor	mum que	Blows Per Minute	Free Speed	Wei	ight	Len	gth	Side Cer		Cons	g Air sump- ion
	in.	mm	ln	mm	ft lb	Nm	ft lb	Nm		rpm	lb	kg	in.	mm	in.	mm	cfm	I/s
IW75BP-6H	3/4	19	3/4	19	800	1085	1000	1356	1000	5700	11.6	5.3	7.6	193	1.75	45	15	7
IW75BP-8H	1	25	3/4	19	825	1119	1100	1492	1000	5700	11.7	5.3	7.6	193	1.75	45	15	7

<sup>&</sup>lt;sup>1</sup> Maximum working torque determined by 5-second rundown on appropriate Skidmore-Wilhelm Torque-Tension Tester









#5 Spline

Square drive and Spline Thru-hole anvil

# Sioux Industrial-Duty D-Handle Impact Wrenches

- Thru-Hole Anvil for positive socket retention
- 3 piece housing construction for ease of maintenance
- Thru-Hole Anvil for positive socket retention
- Aluminum housing with steel hammer case
- Available with inside or outside trigger
- · Conveniently located reverse
- Front exhaust directs air away from the operator
- Side handle included
- Available with 1", 1 ½" and #5 spline anvils and 6" extended anvils

•	•
•	•

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Description Stock Number		Drive Size Bolt Cap. Grade 5			Working Torque Range¹  Maximum Torque			Free Speed	Weight		Length		Side To Center		Avg Air Consumption				
		in.	mm	ln	mm	ft lb	Nm	ft lb	Nm	Minute	rpm	lb	kg	in.	mm	in.	mm	cfm	I/s
	IW100HAI-8H	1	25	1 3/8	35	1600	2170	2000 2	2710	850	5000	22.0	10.0	12.4	315	2	51	38	18
	IW100HAI-5S	#5 S	pline	1 9/8	ออ	1000			2710	650	3000		10.0		315		31		
Inside Trigger	IW150HAI-12H	1 1/2	38	2	50	2500	3390	3000	4070	650	3750	33.1	15.0	14.5	368	2.5	65	60	28
	IW150HAI-5S	#5 S	pline		50	2000	2300 3390	3000	4070	000	3/50	33.1	15.0	17.3	300				
	IW100HAI-8H6	1	25	1 3/8	35	1600	2170	2000	2710	850	5000	26.2	11.8	18.4	467	2	51	38	18
- with 6" Extended Anvil	IW100HAI-5S6	#5 S	pline	1 3/8	30	1600	2170	70   2000	2710	030	3000	20.2	11.0	10.4	407				
	IW100HA0-8H	1	25	1 3/8	35	1600	2170	2000	2710	850	5000	22.0	10.0	12.4	315	2	51	38	10
	IW100HA0-5S	#5 S	pline	1 3/8	30	1600	2170	2000	2/10	650	5000	22.0	10.0	12.4	313	2	51	30	18
Outside Trigger	IW150HA0-12H	1 1/2	38	2	50	2500	2200	3000	4070	650	2750	33.1	1 15.0	14.5	368	2.5	65	60	
	IW150HA0-5S	#5 S	pline	2	50	2500	3390	3000	4070	000	3750	33.1		14.5	308	2.5	00	60	28
Outside Trigger - with 6" Extended Anvil	IW100HA0-8H6	1	25	1 3/8	35	1600	2170	2000	0710	050	E000	20.0	11.8 18.4		467	2	51	38	18
	IW100HA0-5S6	#5 S	pline	1 3/8	ან	1600	2170	2000	2710	850	5000	26.2		10.4	467	2	51	38	

<sup>&</sup>lt;sup>1</sup> Maximum working torque determined by 5-second rundown on appropriate Skidmore-Wilhelm Torque-Tension Tester

#### POWERFUL SOLUTIONS. GLOBAL FORCE.

# Lightweight Hydraulic Punch

# **Hydraulic Punches & Sets**• Much Faster than Drilling

- 35 tons capacity
- .50" mild steel maximum thickness
- Punches hole sizes 0.31 to 0.81 inch
- · Round, oblong and square punches and dies are available to solve your punching applications
- Long life Enerpac single-acting, spring return design
- Durable steel case keeps tools and dies together and provides for easy carrying and storage
- CR-400 female coupler and SPK-10 tool kit included
- May be ordered by itself or as a complete ready-to-use set that includes a pump and hose
- Punch oil capacity: 4.58 in3



Stock Number	Description	Punch & Die Set	Pump	Pump Type	Hose	Weight (lbs)
ENESP35	Hydraulic Punch Only	_	_	_	_	35
ENESP35S	Hydraulic Punch with Punch & Die Set	Standard**	_	_	_	40
ENESP35SP	Complete Hydraulic Punch with Punch & Die Set and Pump & Hose	Standard**	ENEPUD1100B	Electric	HC-7206	70
ENEMSP351	Hydraulic Punch with Punch & Die Set	Metric***	_	_	_	40
ENESTP35H	Complete Hydraulic Punch with Punch & Die Set and Pump & Hose	Standard**	ENEP392	Hand	HC-7206	55
ENESTP35A	Complete Hydraulic Punch with Punch & Die Set and Pump & Hose	Standard**	ENEPATG1102N	Air Operated	HC-7206	63

Includes the following punch and die sets:

\*\* SPD-438, SPD-688, SPD-563 and SPD-813 - Standard Punch & Die Set

\*\*\* SPD-375, SPD-531, SPD-438 and SPD-688 - Metric Punch & Die Set

#### **Punch & Die Set Selection Chart**

			ı	Maximum <i>A</i>	Allowable	Materia	l Thickn	ess To B	e Punct	1ed						
Punch & Die Set		Imperial*	Imperial*	Metric*	Metric*	Steel Qualities (see chart below) ++										
Stock Number	<b>Hole Shape</b>	<b>Hole Size</b>	<b>Bolt Size</b>	<b>Hole Size</b>	<b>Bolt Size</b>	1	2	3	4	5	6	7	8	9	10	11
Stock Number		(in)	(in)	(mm)	(mm)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)	(in)
ENESPD313	Round	0.31	1/4	7,9	-	0.31	0.31	0.25	0.25	0.25	0.25	0.13	0.19	0.25	0.25	0.25
ENESPD375	Round	0.38	<sup>5</sup> /16	9,5	M8	0.38	0.38	0.31	0.31	0.31	0.31	0.19	0.25	0.31	0.31	0.31
ENESPD438	Round	0.44	3/8	11,1	M10	0.44	0.44	0.38	0.38	0.38	0.31	0.19	0.31	0.31	0.31	0.31
ENESPD531	Round	0.53	7/ <sub>16</sub>	13,5	M12	0.5	0.5	0.44	0.44	0.44	0.38	0.25	0.31	0.38	0.38	0.38
ENESPD563	Round	0.56	1/2	14,3	-	0.5	0.5	0.5	0.44	0.5	0.44	0.25	0.38	0.44	0.44	0.44
ENESPD688	Round	0.69	5/8	17,5	M16	0.5	0.5	0.5	0.44	0.5	0.4	0.25	0.31	0.4	0.4	0.4
ENESPD781	Round	0.78	-	19,8	M18	0.5	0.5	0.5	0.44	0.5	0.38	0.25	0.31	0.38	0.39	0.38
ENESPD813	Round	0.81	3/4	20,6	-	0.5	0.5	0.5	0.44	0.5	0.31	0.19	0.31	0.31	0.31	0.31
ENESPD458	Square	0.31	1/4	7,9	-	0.31	0.31	0.25	0.25	0.25	0.25	0.13	0.19	0.25	0.25	0.25
ENESPD549	Square	0.38	<sup>5</sup> /16	9,5	M8	0.38	0.38	0.31	0.31	0.31	0.31	0.19	0.25	0.31	0.31	0.31
ENESPD639	Square	0.44	3/8	11,1	M10	0.44	0.44	0.38	0.38	0.38	0.31	0.19	0.31	0.31	0.31	0.31
ENESPD728	Square	0.5	7/ <sub>16</sub>	12,7	M12	0.5	0.5	0.44	0.44	0.44	0.38	0.25	0.31	0.38	0.38	0.34
ENESPD106	Oblong	.31 x .75	1/4	7,9 x 19	-	0.31	0.31	0.25	0.25	0.25	0.25	0.13	0.19	0.25	0.25	0.25
ENESPD125	Oblong	.38 x .75	5/16	9,5 x 19	M8	0.38	0.38	0.31	0.31	0.31	0.31	0.19	0.25	0.31	0.31	0.31
ENESPD188	Oblong	.44 x .75	3/8	11,1 x 19	M10	0.44	0.44	0.38	0.38	0.38	0.31	0.19	0.31	0.31	0.31	0.31
ENESPD250	Oblong	.50 x .75	7/16	12,7 x 19	M12	0.5	0.5	0.44	0.44	0.44	0.38	0.25	0.31	0.38	0.38	0.38

	++ Steel	Qualities	
1	Mild A-7	7	Hot Rolled C-1095
2	Boiler Plate	8	Hot Rolled C-1095 Annealed
3	Structural A-36	9	Stainless Annealed
4	Struct Corten (ASTM A242)	10	Stainless 304 Hot Rolled
5	Cold Rolled C-1018	11	Stainless 316 Cold Rolled
6	Hot Rolled C-150		

- Thickness chart is for reference only! Maximum allowable material thickness to be punched varies with tool wear
- Material thickness should not exceed hole diameter





# ENERPAC. 🗗

#### OWERFUL SOLUTIONS. GLOBAL FORCE

# **Hydraulic Spreaders & Flange Tools**



ENEFSM8 w/safety blocks



- For maintenance, commissioning, shutdowns, testing and valve change outs
- · For disassembling and assembling flange joints safely & efficiently
- Safety blocks included with ENEFSH14 and ENEFSM8
- ENEFSB1 safety blocks sold separately in pairs

Stock Number	Maximum Spreading Force (ton)	Tip Clearance	Maximum Spread* in (mm)	Туре	Weight (lbs.)				
ENEFSH14	14	.24 in (6mm)	3.16 (81)	Hydraulic	15.7				
ENEFSM8	8	.24 in (6mm)	3.16 (81)	Mechanical	14.3				
* Using stepped blocks ENEFSB1									



#### **Hydraulic Spreader Cylinders**

- ENEWR5 for use in very confined work areas
- ENEWR15 for long stroke spreading applications

Stock Number	Cylinder Capacity (tons)	Tip Clearance (in)	Length (in)	Oil Capacity (in3)	Stroke (in)	Weight (lbs.)
ENEWR5	1.00	.38	8.78	.61	3.70	5.0
ENEWR15	.75	1.26	21.65	3.91	11.50	25.0



## **Hydraulic Flange Spreaders**

- Adjustable jaw widths from 2.75" to 8.5" for a wide range of application
- · Lightweight, ergonomic design for ease of use
- Single-acting, spring return Enerpac RC cylinders for fast trouble-free operation

Stock Number	Maximum Flange Thickness (in)	Stud Size (in)	Standard Wedge (in)	Capac- ity (tons)	Stroke (in)	Oil Ca- pacity (in3)	Weight (lbs.)
ENEFS56	2 x 2.25	.75 - 1.13	.13 - 1.13	5	1.5	1.5	2.0
ENEFS109	2 x 3.63	1.25 - 1.63	.13 - 1.13	10	2.13	4.8	9.1

# ENEATM3

# Hydraulic & Mechanical Flange Alignment Tools

- Rectifies twist and rotational misalignment without additional stress in pipe lines
- For most commonly used ANSI, API, BS and DIN flanges
- No slings, hooks, or lifting gear. Extremely safe, high precision
- ATM-1 supplied with three bushings for different bolt hole sizes. Can be used in reversed position
- ATM-3 fits when flange joint is between 1.18 5.23" apart and bolt hole size is 0.95" or greater
- ATM-5 fits when flange joint is between 3.75 9" apart and bolt hole size is 1.25" or greater

ENEATM1	

	_	Maximum	Bolt Hole	Range	Flange Wall T	Weight	
Stock Number	Туре	Lifting Force (ton)	(in)	(mm)	(in)	(mm)	(lbs.)
ENEATM1	Mechanical	0.3	<sup>11</sup> / <sub>16</sub> - <b>1</b> <sup>1</sup> / <sub>8</sub>	17 - 27,2	11/16 - 2	17 - 50	4.4
ENEATM3	Mechanical	3.3	1 - 2 <sup>1</sup> /8	25 - 54	1 <sup>3</sup> / <sub>16</sub> - 4 <sup>1</sup> / <sub>2</sub>	30 - 115	21.4
ENEATM5	Hydraulic	5.5	= or > 1 <sup>1</sup> / <sub>4</sub>	= or > 31,5	3 1/8 - 8	80 - 203	35.7





Two ENEFSH14 spreaders used simultaneously with Enerpac handpump & hoses.



Flange alignment with ENEATM1

# **Hydraulic Nutsplitters & Cutters**

#### **Hydraulic Nut Splitters**

- · Heavy-duty chisels can be reground
- Applications include servicing trucks, piping industry, tank cleaning, railroad, petrochemical, steel
  construction, mining, etc. Does not damage stud of bolt. (Not for use on square nuts)
- Nut splitters include a spare chisel, a spare set screw, and the wrench used to secure the chisel
- Maximum allowable hardness of nuts to split is HRC44

Stock Number	Bolt Range (in)	Hexagon Nut Range (in)	Capacity (ton)	Oil Capacity (in3)	Weight (lbs)	Replacement Blades Stock Number
ENENC1319	.3150	.5075	5	.92	1.8	ENENCB1319
ENENC1924	.5063	.7594	10	1.22	4.4	ENENCB1924
ENENC2432	.6388	.94-1.13	15	3.66	6.6	ENENCB2432
ENENC3241	.88-1.13	1.13-1.56	20	4.88	9.7	ENENCB3241
ENENC4150	1.13-1.38	1.56-2.00	35	9.46	18	ENENCB4150
ENENC5060	1.38-1.50	2.00-2.25	50	14.64	26	ENENCB5060
ENENC6075	1.50-1.88	2.38-2.88	90	30.00	75.1	ENENCB6075





Easily removing rusty nuts during railroad construction is just one of many application examples for the Enerpac Nut Splitter.

#### **Hydraulic Cutterheads**

- Single acting, spring return on all models, except WHR-1250
- Guillotine action for efficient operation
- · Lifting handles on larger models
- Carrying bag included for easy carrying and tool protection
- Ideal for use with most Enerpac pumps featuring 3-way valve or dump valve and 10,000 psi pressure rating (except WHR-1250, which requires 4-way valve)
- CR-400 coupler and dust cap included on all models
- · Selection chart provides cutting capacity for each tool

					Steel Wire		Roun	d Bar			Wire	Strand		C	able		
Туре	Stock Number	lumber Capa- city (ton) Capa- city (in) (in3)	Rope, Hempcore or IWRC 6x7, 6x12 or 6x19	Copper Wire or Bar	Alum. Wire or Bar	Soft Steel Bolts	Rein- forcing Bar	Bare Copper Wire Strands	Bare Alum. Wire Strands 6x7	ACSR Wire Strands	Guy Steel Wire Strands 1x7 1x19	Tele- phone Cable CPP	Under ground Cable (Power)	(lbs)	Replacement Blades Stock Number		
	ENEWHC750	4	1.20	5.00	0.63	0.75	0.75	0.75	.50***	0.75	.75	0.75	0.63	##	##	7	ENEWCB750
Single-Acting	ENEWHC1250	20	8.20	11.00	1.25	1.13	1.25	1.13	1.00	1.25	1.25	1.25	0.88	##	##	25	ENEWCB1250
Hydraulic Cutterheads	ENEWHC2000	13	7.30	15.00	1.00	1.25	1.25	0.88	##	2.00	2.00	2.00	0.75	##	2.00	23	ENEWCB2000
with Spring Return	ENEWHC3380	3	4.00	19.00	##	##	##	##	##	1.63	1.69	##	##	3.38	3.38	20	ENEWCB3380
	ENEWHC4000	8	8.40	24.00	##	##	##	##	##	##	##	##	##	4.00	4.00	32	ENEWCB4000
Double-Acting Hydraulic Cutterhead	ENEWHR1250	20	7.50	16.50	1.25	1.25	1.25	1.13	1.00	1.25	1.25	1.25	0.88	##	##	26	ENEWCB1250

<sup>##</sup> Will not cut designated material

## **Hydraulic Cutterhead Sets**

- Everything needed to start the job immediately
- Sets include cutterhead, pump, and hose
- · Foot pump frees hands for versatility

Stock Number	Pump Type	Cutter Stock Number	Pump Stcok Number
ENESTC750H	Hand Pump	ENEWHC750	ENEP392
ENESTC750A	Air Operated Pump	ENEWHC750	ENEPATG1102N
ENESTC1250H	Hand Pump	ENEWHC1250	ENEP392
ENESTC1250A	Air Operated Pump	ENEWHC1250	ENEPATG1102N
ENESTC750FP	Foot Pump	ENEWHC750	ENEP392FP
ENESTC1250FP	Foot Pump	ENEWHC1250	ENEP392FP







<sup>\*\*\*</sup> Low alloy material



#### **Self-Contained Hydraulic Cutters**

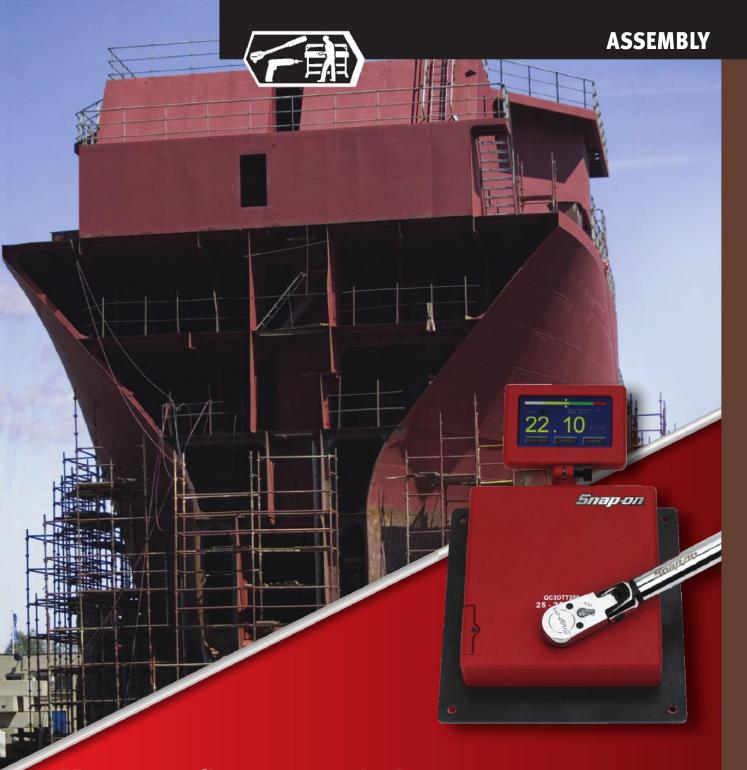
- Self-contained cutters contain built-in hydraulic pumps to acheive maximum convenience and portability
- Rotating heads for operator convenience
- Guillotine action (except WMC-1000) for efficient operation
- Carrying bag included for easy carrying and tool protection
- Velcro straps to secure handles on larger models for easy transportation
- · Spring return on all models
- Lightweight, self-contained tool, can be used anywhere
- Selection chart provides cutting capacity for each tool



			Steel Wire		Round	l Bar		Wire Strand				Ca	able	4.2		
Stock Number	Capa- city (ton)	Length (in)	Rope, Hempcore or IWRC 6x7, 6x12 or 6x19	Copper Wire or Bar	Alum. Wire or Bar	Soft Steel Bolts	Rein- forcing Bar	Bare Copper Wire Strands	Bare Alum. Wire Strands 6x7	ACSR Wire Strands	Guy Steel Wire Strands 1x7	Guy Steel Wire Strands 1x19	Tele- phone Cable CPP	Under ground Cable (Power)	Weight (lbs)	Replacement Blades Stock Number
ENEWMC580	4	15.00	.63	.63	.63	.63	.38	.63	.63	.63	.56	.56	##	.63	8	ENEWCB750
ENEWMC750	4	15.00	.63	.69	.69	.69	.50***	.75	.75	.75	.56	.56	##	.68	8	ENEWCB750
ENEWMC1000*	20	26.75	##	.75	.75	.75	.75	##	##	##	##	##	##	##	25	ENEWCB1000
ENEWMC1250	20	26.75	1.25	1.13	1.25	1.25	.88	1.25	1.25	1.25	.88	1.00	##	##	23	ENEWCB1250
ENEWMC1580	6	2200	.75	.75	.75	.75	##	1.50	1.63	1.63	.63	.63	33	1.63	15	ENEWCB1580
ENEWMC2000	13	24.75	1.00	1.25	1.25	.88	##	2.00	2.00	2.00	.75	.75	##	2.00	24	ENEWCB2000
ENEWMC3380	3	26.00	##	##	##	##	##	1.83	1.69	##	##	##	3.37	3.38	22	ENEWCB3380

<sup>\*</sup> ENEWMC1000 cuts .50" alloy chain grade 70 (type G7 transport or tie-down or grade 80 (for overhead lifting applications ## Will not cut designated material





# You trust Snap-on to help you maintain and service your equipment. Now trust us to help you build and assemble it.

Assembly operations require the right tools, at the right stations, always ready for the operator. Processes must be quick, accurate, and repeatable. Snap on Industrial has the expertise to put together the tools you need for your assembly operation, and to organize and store them so you have them when and where you need them. Whether you are assembling wind turbines, aerospace equipment, heavy machinery, electronics, or other equipment, trust us to help you build them right.

# THREAD REPAIR/TORQUE

# Snap-on®

#### Torque Wrench Bodies/Adjustable Dual Scale/ +/- 4 % Accuracy

Stock No.	Lower Range (ft. lbs.)	Upper Range (ft. lbs.)	Lower Range (Nm)	Upper Range (Nm)	Increments
QD2IN50	8	36	10	50	0.5 Nm/0.4 ft.lb.
QD2IN100	16	72	20	100	0.5 Nm/0.4 ft.lb.
QD3IN200	20	150	40	200	2 Nm/1.2 ft.lb.
QD3IN350	59	251	70	350	2 Nm/1.2 ft.lb.
QD4IN800	120	600	150	800	5 Nm/4.3 ft.lb.
center of the fa Includes certific Minimal friction	astener, so no ac cate of calibration	djustment calc on cam retains an	ulations are ı		pin to the

- Plug-and-play system of interchangeable heads are consistently sized from pin to the center of the fastener, so no adjustment calculations are needed
- Includes certificate of calibration
- Minimal friction "Hour Glass" cam retains and releases lubricant where needed to reduce friction
- Push buttons for guick release of interchangeable head
- All torque wrenches are calibrated per ASME B- 107-14 and ISO 6789, Standards for Accuracy, from 20% of full scale to 100% of full scale using NIST traceable equipment
- Laser marked scale for easier reading in varying light sources
- · Positive stop ensures instrument cannot be accidentally disassembled if wound down past scale
- Each instrument comes in a molded storage case for long term protection

# 1/2" Drive 30mm Torque Adaptor, 4" Overall Length

Stock No.	Description
GSRM430	1/2" Drive 30mm Torque Adaptor



## **NES**

## **NES Universal Thread Repair Tools**

Easy to use, fast and cost saving way for your production & maintenance jobs

- · Every tool can repair all thread types: MM, Inch, Standard, Pipes, Coarse & Fine
- One tool can repair right and left handed threads
- The tool is designed to repair large diameter range one tool replace hundreds of dies or taps
- Special tool for Keyway slots available for threads up to 6"
- Highest Quality standards for all Tools
- No need to know your defect thread size or pitch the tool will find it automatically
- Floating cutters are self-adjusting to any pitch and size within range, no need for calibration or identifying fastener thread type

#### **External Tools**

Stock No.	Description	Spare Blade
AAENES1A	5/32" - 11/16"	AAENESRK1
AAENES2	11/16" - 1-1/2"	AAENESRK2
AAENES3	1-3/8" - 6"	AAENESRK3
AAENES06040	5/32" - 1/2"	AAENES06046
AAENES3KEYWAY	Keyway Skip Acc Tool for NES3	

#### **Internal Tools**

Stock No.	Description	Spare Blade	Nylon Pad
AAENES21	5/16" - 7/16"	AAENESRK21	AAENES21NY
AAENES22	1/2" - 5/8"	AAENESRK22	AAENES22NY
AAENES23	11/16" - 13/16"	AAENESRK23	AAENES23NY
AAENES24	7/8" - 1-1/4"	AAENESRK24	AAENES24NY
AAENES25	1-1/4" - 2-1/8"	AAENESRK25	
AAENES26	1-1/4" - 2-5/8"	AAENESRK26	
AAENES27	2-3/4" - 3-3/16"	AAENESRK26	
AAENES28	3-1/4" - 3-3/4"	AAENESRK26	
AAENES29	3-3/4"- 4-1/4"	AAENESRK26	



#### ThreadMate Mini Kit

Stock No.	Description
AAENES01044	External 4-13 mm, 5/32" - 1/2", Internal 5-12 mm, # 12 -1/2"
AAENESRKTM20	Spare blade for Internal Threadmate
AAENESRKTM21	Spare blade for Internal Threadmate

- Complete ThreadMate thread repair kit
- Mini Kit also includes 1 external and 2 internal tools for both left and right turning thread applications
- Easily straightens any bent or damaged external thread from 5/32" 1/2" (4 13mm)
- Repairs internal threads from #12-1/2" (5-12mm)

#### Nes Set 12 (1000)

Stock No.	Description
AAENES12	External thread repair set

- Diameter 5/32" 1-1/2"
- 4 38mm
- Includes spare blades
- Recommended for Automotive & Industrial Maintenance
- Includes NES1A and NES2



#### **Nes Set 1007**

Stock No.	Description
AAENES1007	Internal thread repair set

- Diameter 5/16" 13/16"
- 8 20mm
- Includes spare blades
- Recommended for Automotive Aftermarket
   Industrial Maintenance
- Includes NES21, 22 and 23



#### Nes Set 1036

	Stock No.	Description
AA	AENES1036	Internal thread repair set

- Diameter 7/8" 2-5/8"
- 22 68mm
- Includes spare blades
- Recommended for Heavy Industrial Maintenance & Shipyards
- Includes NES24, NES25 and 2 sleeves



#### **Nes Set 1017**

Stock No.	Description
AAFNES1017	Combination thread renair set

- Diameter External 5/32" 11/16", Internal 5/16" 13/16"
- Includes spare blades
- Recommended for Automotive & Industrial Maintenance
- Includes NES1A, NES21, 22, and 23



#### Nes Set 123 (1300)

Stock No.	Description
AAENES123	External thread repair

- Diameter 5/32" 6"
- 4 152mm
- Includes spare blades
- Recommended for Industrial Maintenance, Shipyards, Energy Industry, Large Automotive - Trucks, Tractors
- Includes NES1A, NES2 and NES3



#### **Nes Set 1008**

	Stock No.	Description
Ì	AAENES1008	Internal thread repair set

- Diameter 5/16" 1-1/4"
- 8 32mm
- Includes spare blades
- Recommended for Small Automotive, Houseware, Technician Toolbox
- Includes NES21, 22, 23 and 24



#### **Nes Set 1015**

Stock No.	Description
AAENES1015	Combination thread repair set

- Diameter External -5/32" - 11/16", Internal -5/16" - 5/8"
- Includes spare blades
- Recommended for Automotive & Small Industrial Maintenance
- Includes NES1A, NES21 and 22



#### Nes Set 1025

Stock No.	Description
AAENES1025	Combination thread repair set

- Diameter External 5/32" 1 1/2 , Internal 5/16" 1-1/4"
- Includes spare blades
- Recommended for Industrial Maintenance, Shipyards, Energy Industry, Large Automotive
- Includes NES1A, NES2, NES21, 22, 23 and 24



# **ADJUSTABLE TORQUE SCREWDRIVERS**

#### **WERA**

# Kraftform adjustable torque screwdriver with Rapidaptor quick release chuck

Stock No.	Description
WER074700	.3 - 1.2 Nm Adjustable Torque Screwdriver
WER074701	1.2 - 3.0 Nm Adjustable Torque Screwdriver
WER074710	2.5 - 11.5 Nm Adjustable Torque Screwdriver
WER074711	11.0 - 29.0 Nm Adjustable Torque Screwdriver

- Suitable for 1/4" DIN 3126-C 6,3 und E 6,3 (ISO 1173) hexagon insert bits and Wera Series 1 and 4
- Rapidaptor rapid-in, rapid-out, rapid-spin, chuck-all, and single-hand technology



# Kraftform pre-set adjustable torque screwdrivers with Rapidaptor quick-release chuck

Stock No.	Description
WER074715	0.3-1.2 Nm Pre-set Adjustable Torque Screwdriver
WER074716	1.2-3.0 Nm Pre-set Adjustable Torque Screwdriver
WER074720	2.5-11.5 in lbs. Pre-Set Adjustable Torque Screwdriver
WER074722	11.0-29.0 in lbs. Pre-Set Adjustable Torque Screwdriver

- Suitable for 1/4" DIN 3126-C 6,3 und E 6,3 (ISO 1173) hexagon insert bits and Wera Series 1 and 4
- Rapidaptor rapid-in, rapid-out, rapid-spin, chuck-all, and single-hand technology



# Kraftform pistol handle, adjustable torque screwdriver with Rapidaptor quick release chuck

Stock No.	Description
WER074702	3.0 - 6.0 Nm Adjustable Torque Screwdriver
WER074712	1.2 - 3.0 Nm Adjustable Torque Screwdriver

- Suitable for 1/4" DIN 3126-C 6,3 und E 6,3 (ISO 1173) hexagon insert bits and Wera Series 1 and 4
- Rapidaptor rapid-in, rapid-out, rapid-spin, chuck-all, and single-hand technology



# Kraftform pistol handle, pre-set adjustable torque screwdrivers with Rapidaptor quick-release chuck

Stock No.	Description
WER074717	3.0-6.0 Nm Pre-set Adjustable Torque Screwdriver
WER074721	25.0-55.0 in lbs. Pre-set Adjustable Torque Screwdriver

- Suitable for 1/4" DIN 3126-C 6,3 und E 6,3 (ISO 1173) hexagon insert bits and Wera Series 1 and 4
- Rapidaptor rapid-in, rapid-out, rapid-spin, chuck-all, and single-hand technology



#### **WERA**

# 810/1 ESD Bitholding Screwdriver with retaining ring suiteable for all 1/4" - bits

Stock No.	Description
WER328463	Bitholding Screwdriver

 Suitable for 1/4" DIN 3126-C 6,3 (ISO 1173) hexagon insert bits and Wera Series 1



## 811/1 ESD Bitholding Screwdriver

Stock No.	Description
WER051106	Bitholding Screwdriver

- Suitable for 1/4" DIN 3126-C 6,3 (ISO 1173) hexagon insert bits and Wera Series 1
- Extra short, for 1/4" hexagon insert bits with retaining ring



#### 813 R ESD Bitholding Screwdriver, non-magnetic

Stock No.	Description
WER051273	Bitholding Screwdriver - 90 mm
WER051464	Bitholding Screwdriver - 110 mm

- Suitable for 1/4" DIN 3126-C and E 6,3 (ISO 1173) hexagon insert bits and Wera Series 1 and 4
- 1/4" hexagon socket with Wera quick-release chuck and Rapidaptor rapid-in, rapid-out, rapid-spin, chuck-all, and single-hand technology



# 1578 A/6 Electronics Screwdriver Set & Rack

Stock No.	Description
WER030170	6 Piece Screwdriver Set, Phillips & Slotted

· For slotted and Phillips screws - 6 piece in rack



# Kraftform Kompakt 11 ESD

Stock No.	Description
WER056678	10 Piece Set, Phillips, Torx

• 1 bit holder 813 R ESD Kraftform with quick release chuck Rapidaptor



# Kraftform ESD adjustable torque screwdrivers with Rapidaptor quick-release chuck

Stock No.	Description
WER074730	0.3-1.2 Nm Adjustable Torque Screwdrivers
WER074731	1.2-3.0 Nm Adjustable Torque Screwdrivers
WER074733	2.5-11.5 in. lbs. Adjustable Torque Screwdrivers
WER074734	11.0-29.0 in, lbs. Adjustable Torque Screwdrivers

- Suitable for 1/4" DIN 3126 C 6,3 and E 6,3 (ISO 1173) hexagon insert bits und Wera Series 1 and 4
- Rapidaptor rapid-in, rapid-out, rapid-spin, chuck-all, and single-hand technology



#### **Production Air Drills**



Sioux drills are used in applications ranging from light assembly to metalworking, manufactured housing and wood working. Their powerful five vane motors makes these drills great for drilling applications that contain ferrous and non-ferrous metals, wood and composite materials.

Built for durability, their 3 planet gear system delivers superior life and load capacity. The Sioux drills offer maximum comfort with reduced operator fatigue by offering a low sound level and low vibration solution. Operator comfort is achieved through the implementation of a light weight aluminum housing and a comfort grip. Drills are available in both reversing and non-reversing pistol grip and lever handle configurations.



#### Performance

Powerful 0.6 HP and 1.0 HP motors easily handle a a wide range of drilling applications

- With excellent run-out characteristics,
   (+/- 0.0025" @ 2.5" from the end of the chuck)
   Sioux drills provide precision required for critical applications
- Teasing trigger provides excellent speed control

#### **Ergonomics**

- Comfortable, compact drill bodies includes finger rests on the side of tool do not protrude which allows trigger actuation with stronger middle finger
- Anatomic design keeps wrist and arm straight, allows high feed forces
- Low noise and vibration levels for comfort in extended use operations

#### Serviceability

 Drop in motors with no alignment required (applies to non-reversing drills only)

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 High part interchangeability = lower service part inventories

#### **Reversible Air Drills**

- Pistol Grip (0.6 HP & 1.0 HP) Shuttle Reverse
- Right Angle Drills (1.0 HP) Rapid Reverse
- Side to Center = 0.8" (20mm)
- Max Air Consumption:
  - 0.6 HP Drills 25 scfm (12 l/s)
- 1.0 HP Drills 30 scfm (14 l/s)

SDR10P25R3	
SDR10A20R3	

N190

Style	Stock Number		uck acity	Free Speed	We	ight	Ler	igth	Spindle	Sound Level
O.y.o	Oldok Hallidoi	in.	mm	rpm	lb	kg	in	mm	Thread	dB(A)
	SDR10P40R2			4,000						
SDR10P20F	SDR10P25R2	1/4	6	2,500	2.4	1.1	7.1	180	3/8" - 24	
	SDR10P20R2			2,000						
	SDR10P40R3			4,000						
I.U IIP	SDR10P25R3			2,500	2.6	1.2	7.6	195	3/8" - 24	
(0.75 kw)	SDR10P20R3	3/8	10	2,000						
Pistol Grip	SDR10P7R3	9/8	10	700	3.1	1.4	8.6	220	1/2" - 20	80
Drills - Reversible	SDR10P5R3			500						
	SDR10P3R3			300						
	SDR10P20R4		13	2,000	3.0	1.4	7.9	200		
	SDR10P7R4	1/2		700	3.6				1/2" - 20	
	SDR10P5R4	12		500		1.6	9.1	230	/2 20	
	SDR10P3R4			300						
	SDR10A20R2	1/4	6	2,000	2.9	1.3	11	280	3/8" - 24	
	SDR10A16R2	/4	Ů	1,600	3.2	1.4	12	305	70 24	
1.0 hp	SDR10A20R3			2,000	3	1.35	11	280		
(0.75 kw)	SDR10A16R3			1,600						
RIGHT	SDR10A10R3	3/8	10	1,000	3.3	1.5	12	305	1/2" - 20	78
Angle Drills - Reversible	SDR10A6R3			600	0.0	1.5	12	000		76
	SDR10A3R3			300						
HEVELSING	SDR10A10R4			1,000				305	1/2" - 20	
	SDR10A6R4	1/2	13	600	3.7	1.7	12			
	SDR10A3R4			300						

www.snapon.com/industrial

#### **Production Air Drills**

- Tipper valve and valve seat is easily accessible for service
- 2 Slip fit of front end plate bearing allows easy service of the air motor without disturbing the rotor spacing
- 3 Drop in motor. No alignment necessary (applies to non-reversing drills only)
- A Rotor pinion is case hardened to resist wear
- **6** Grease zerk makes it easy to grease the gears without disassembly
- **6** Planetary reduction can be serviced without removing the chuck
- Planet gear pins are slip fit for ease of assembly and disassembly
- 3 Ring gear is machined into the motor retainer for ease of assembly and disassembly
- 1 Interchangeable rotor, cylinder, bearings and endplates. This reduces the number of spare parts tool cribs need to stock

#### Non-Reversible Air Drills

- Pistol Grip (0.6 HP & 1.0 HP)
- Straight Drills (1.0 HP)
- Right Angle Drills (1.0 HP)
- Side to Center = 0.8" (20mm)
- Max Air Consumption:
- 0.6 HP Drills 25 scfm (12 l/s)
- 1.0 HP Drills 30 scfm (14 l/s)



CE

	1 20 30 1111	ì	_	_						
			uck acity	Free Speed	We	ight	Ler	igth	Spindle	Sound Level
Style	Stock Number	in.	mm	rpm	lb	kg	in	mm	Thread	dB(A)
	appapagua			•						
	SDR6P60N2	١.,		6,000	0.4	0.05		145	2/ 11 04	
	SDR6P40N2	1/4	6	4,000	2.1	0.95	5.8		3/8"-24	
CO h	SDR6P26N2			2,600						
.60 hp (0.45 kw)	SDR6P60N3	-		6,000 4,000	2.3	1	6.3	160	3/8"-24	
PISTOL	SDR6P40N3 SDR6P26N3	1			2.3	'	0.3	160	3/8 -24	
GRIP	SDR6P12N3	3/8	10	2,600 1,200						80
DRILLS-	SDR6P12N3	-		700	2.7	1.2	7.3	185	1/2"-20	
Non- Reversible	SDR6P4N3			400	2.1	1.2	7.3	103	1/2 -20	
HEVELSIDIE	SDR6P26N4			2,600	2.7	1.2	6.6	170		
	SDR6P7N4	1/2	13	700	2.1	1.2	0.0	170	1/2"-20	
	SDR6P4N4	-,,2	13	400	3.1	1.4	7.8	200	1/2 -20	
	SDR10P280N2			21,000						
	SDR10P280N2			18,000						
	SDR10P60N2	1/4	6	6,000	2.3	1.05	6.5	165	3/8"-24	80
	SDR10P40N2	- '/4	0	4,000		1.03				
1.0 hp	SDR10P46N2	1		2,600						
(0.75 kw) PISTOL GRIP DRILLS- Non- Reversible	SDR10P20N2 SDR10P60N3			6,000	2.5		7	180	3/8"-24	
	SDR10P40N3	-		4,000		1.1				
	SDR10P26N3	1	10	2,600		'	′			
	SDR10P12N3	3/8		1,200						
	SDR10P7N3			700		1.3	8	205	1/2"-20	
TICVOISIBIC	SDR10P4N3			400		1.5	"		1/2 -20	
	SDR10P26N4		13	2,600	2.9	1.3	7.5	190		
	SDR10P7N4	1/2		700					1/2"-20	
	SDR10P4N4	- ''	10	400	3.3	1.5	8.5	215	/2 20	
	SDR10S280N2			21,000						
	SDR10S180N2	1		18,000			8.3	8.3 211	3/8"-24	
	SDR10S60N2	1/4	6	6,000	2.3	1.05				
	SDR10S40N2	- '-	"	4,000	2.3					
1.0 hp	SDR10S26N2	-		2,600						
(0.75 kw) STRAIGHT	SDR10S60N3			6,000						
DRILLS-	SDR10S40N3	1		4,000	2.3	1.05	8.3	211	3/8"-24	78
Non-	SDR10S26N3	1		2,600		1.00	0.0		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
reversible	SDR10S12N3	3/8	10	1,200						
	SDR10S7N3			700	2.8	1.25	9.3	236	1/2"-20	
	SDR10S4N3			400	0	5	0.0	-00	,,, 25	
	SDR10S4N4	1/2	13	400	2.8	1.25	9.3	236	1/2"-20	
	SDR10A22N2			2,200	2.9	1.3	10.2	260		
1 () hn	SDR10A13N2	1/4	6	1,300	3.2	1.4	11.2	285	3/8"-24	
1.0 hp				2,200	3.0	1.35	10.2	260		
1.0 hp (0.75 kw)	SDR10A22N3				ა.0		1.35   10.2			78
(0.75 kw) RIGHT	SDR10A22N3 SDR10A13N3	١		1.300						
(0.75 kw) RIGHT ANGLE	SDR10A13N3	3/8	10	1,300 1,000	3.3	1.5	11.2	285		78
(0.75 kw) RIGHT ANGLE DRILLS	SDR10A13N3 SDR10A10N3	3/8	10	1,000	3.3	1.5	11.2	285	1/2"-20	78
(0.75 kw) RIGHT ANGLE	SDR10A13N3	3/8	10		3.3	1.5	11.2	285	1/2"-20	78







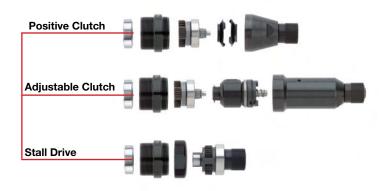




## **Production Air Screwdrivers**







# Positive Clutch, Adjustable Clutch and Stall Driver Screwdrivers

- Trigger start with conveniently located shuttle reverse
- 3 planet gear system for increased life and load capacity
- Comfortable, compact tool bodies include finger rests on side of tool, allowing trigger actuation with stronger middle finger
- Teasing throttle for excellent control
- Side to Center 0.8" (20mm)
- Maximum air Consumption 30 scfm (13 l/s)
- Contact your Snap-on Industrial salesman to request a complete listing of Sioux Screwdrivers and Nutrunners









Clutch Type	Stock Number	-	Max. Torque (Soft Joint)		We	Weight		Length	
		in.	mm	rpm	lb	kg	in	mm	dB(A)
1.0 hp (0.75 kw) Positive Clutch	SSD10P25PS	58	6.5	2500	0.4	4.07	7.0	105	
Pistol Grip Screwdrivers - torque output varies with force exerted by operator	SSD10P20PS	80	9.0	2000	2.4	1.07	7.3	185	80
	SSD10P12PS	145	16.4	1200	2.8	1.30	9.1	231	
1.0 hp (0.75 kw) Adjustable Clutch Pistol Grip Screwdrivers - when fastener is tight, clutch will	SSD10P25AC	60	6.8	2500	2.8 1.	1.25	8.4	213	
	SSD10P20AC	80	9.0	2000		1.25	0.4	213	
	SSD10P12AC	120	13.5	1200		1 45	1.45 10.2	259	80
ratchet. Adjusting spring pressure will effect final output torque.	SSD10P7AC	140	15.8	700	3.2 1.				
Offers consistent torque control	SSD10P5AC	140	15.8	500		1.45			
with little operator reaction	SSD10P3AC	140	15.8	300	]				
1.0 hp (0.75 kw) Stall Drive	SSD10P25S	58	6.6	2500	2.2	0.98	6.5	165	
Pistol Grip Screwdrivers - final	SSD10P20S	80	9.0	2000	2.2	0.96	0.5	100	
torque is reached when resis- tance of the fastener overcomes	SSD10P12S	145	16.4	1200					
the torque output of the motor.	SSD10P7S	220	24.9	700					80
Final torque can be influenced	SSD10P5S	325	36.7	500	2.6 1.1	1.17	7.5	191	
by air pressure and/or operator twisting the tool	SSD10P3S	400	45.2	300					



# **QUICK REFERENCE**

Hand Tools	
Ratchets  Dual 80® Technology Ratchets (1/4", 3/8", 1/2" Drive), Round Head, Specialty, Quick Release, Low Profile, FOD, Special Application, Spinners, Heads & Handles, Breaker Bars	6 - 16
Sockets 1/4" Drive, 3/8" Drive, 1/2" Drive, 3/4" Drive, 1 "Drive, 1 1/2" Drive, Bit Sockets, Impact Drivers and Sets, Combination Bit Sets, High Performance Spline Sockets	17 - 70
Extensions	71 - 88
1/4" Drive, 3/8" Drive, 1/2" Drive, 3/4" Drive, 1 1/2" Drive, Accessories  General Service Sets	
1/8" Drive, 1/4" Drive, 3/8" Drive, 3/4" Drive	89 - 100
Wrenches Combination Ratcheting Box/Open End, Flex Head Ratcheting Box/Open End, Ratcheting Wrench Adaptors, Combination, British Standard, Offset Box, Ratcheting Box, Specialty Box, Open End, Flex Head, Flare Nut, Crowfoot, Heavy Duty Striking, T and L Shape, Adjustable, Special Application, High Performance, Spline	101 - 137
Screwdrivers Combination Sets, Flat Tip, Phillips®, Electronic Service, Pozidriv®, Torx®, Special Application, Ratcheting, Nut Drivers, Bit Sets, Awls, Hooks, Picks, Prybars	138 - 163
Pliers Cutters, Needle Nose, Combination, Wire Tools, Retaining Ring, Electronic Service, Pliers and Cutters, Nonconductive Composite, Soldering, Butane	164 - 183
Punches and Chisels, Hammers, Cutting, Scrapers/Putty Knives, Flie Sets, Tubing, Exhaust, Tubing, Spark Plug, Threading/Restoring, Extractors	184 - 217
Pullers, Diesel, Heavy Duty, Motorcycle, Aviation  Torque	218 - 245
Techwrench®, Adjustable Click-Type, TORQOMETER®, Torque Screwdrivers, Interchangeable Heads, Geared Multipliers, Electronic, Versatoq®, Torque Testers, Torque Adaptors	246 - 266
Power Tools	
Cordless Kits, 18 Volt, 14.4 Volt, 7.2 Volt, Flashlights, International	270 - 282
Air	283 - 306
Impact Wrenches, Ratchets, Drills, Hammers, Die Grinders, Cutting, Sanders, Finishing  Accessories	200 - 300
	307 - 324
Boots, Bits, Wire Brushes, Blades, Blow Guns, Couplers, Adaptors	JU. ULT
Tool Storage	33. VET
	328
Tool Storage	
Tool Storage Roll Cab - Quick Reference	328 329 - 339 340 - 355
Tool Storage Roll Cab - Quick Reference Epiq	328 329 - 339 340 - 355 356 - 361
Tool Storage Roll Cab - Quick Reference Epiq Masters	328 329 - 339 340 - 355 356 - 361 362 - 368
Tool Storage Roll Cab - Quick Reference Epiq Masters Classic	328 329 - 339 340 - 355 356 - 361 362 - 368 369 - 376
Tool Storage Roll Cab - Quick Reference Epiq Masters Classic Heritage	328 329 - 339 340 - 355 356 - 361 362 - 368
Tool Storage Roll Cab - Quick Reference Epiq Masters Classic Heritage Mobile Solutions Accessories  Diagnostics	328 329 - 339 340 - 355 356 - 361 362 - 368 369 - 376
Tool Storage  Roll Cab - Quick Reference  Epiq  Masters  Classic  Heritage  Mobile Solutions  Accessories  Diagnostics  ETHOS®, SOLUS Ultra®, Vantage PRO™, VERDICT™, MODIS™, VERUS®, Diagnostics Accessories, Heavy Duty Pro-Link iQ™	328 329 - 339 340 - 355 356 - 361 362 - 368 369 - 376 377 - 400
Tool Storage  Roll Cab - Quick Reference  Epiq  Masters  Classic  Heritage  Mobile Solutions  Accessories  Diagnostics  ETHOS®, SOLUS Ultra®, Vantage PRO™, VERDICT™, MODIS™, VERUS®, Diagnostics Accessories, Heavy Duty Pro-Link iQ™  Shop & Technician Tools	328 329 - 339 340 - 355 356 - 361 362 - 368 369 - 376 377 - 400
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Tool Storage  Roll Cab - Quick Reference  Epiq  Masters  Classic  Heritage  Mobile Solutions  Accessories  Diagnostics  ETHOS®, SOLUS Ultra®, Vantage PRO™, VERDICT™, MODIS™, VERUS®, Diagnostics Accessories, Heavy Duty Pro-Link iQ™  Shop & Technician Tools Specialty Meters & Analyzers Testing and Electronics, Fuel and Engine Systems  Battery Service Chargers, Testers, Tools	328 329 - 339 340 - 355 356 - 361 362 - 368 369 - 376 377 - 400 404 - 424 428 - 459 460 - 467
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Tool Storage  Roll Cab - Quick Reference  Epiq  Masters  Classic  Heritage  Mobile Solutions  Accessories  Diagnostics  ETHOS®, SOLUS Ultra®, Vantage PRO™, VERDICT™, MODIS™, VERUS®, Diagnostics Accessories, Heavy Duty Pro-Link iQ™  Shop & Technician Tools Specialty Meters & Analyzers Testing and Electronics, Fuel and Engine Systems  Battery Service Chargers, Testers, Tools  Air Conditioning & Cooling Under Car Service Wheel Balancing, Tire Changers, Tire and Wheel, Wheel/Axle Pullers, Wheel Alignment, Drive Line, Lifting	328 329 - 339 340 - 355 356 - 361 362 - 368 369 - 376 377 - 400 404 - 424 428 - 459 460 - 467 468 - 482 483 - 514
Tool Storage  Roll Cab - Quick Reference  Epiq  Masters  Classic  Heritage  Mobile Solutions  Accessories  Diagnostics  ETHOS®, SOLUS Ultra®, Vantage PRO™, VERDICT™, MODIS™, VERUS®, Diagnostics Accessories, Heavy Duty Pro-Link iQ™  Shop & Technician Tools  Specialty Meters & Analyzers Testing and Electronics, Fuel and Engine Systems  Battery Service  Chargers, Testers, Tools  Air Conditioning & Cooling  Under Car Service  Wheel Balancing, Tire Changers, Tire and Wheel, Wheel/Axle Pullers, Wheel Alignment, Drive Line, Lifting  Welding	328 329 - 339 340 - 355 356 - 361 362 - 368 369 - 376 377 - 400 404 - 424 428 - 459 460 - 467 468 - 482 483 - 514 515 - 526
Tool Storage  Roll Cab - Quick Reference  Epiq  Masters  Classic  Heritage  Mobile Solutions  Accessories  Diagnostics  ETHOS®, SOLUS Ultra®, Vantage PRO™, VERDICT™, MODIS™, VERUS®, Diagnostics Accessories, Heavy Duty Pro-Link iQ™  Shop & Technician Tools Specialty Meters & Analyzers Testing and Electronics, Fuel and Engine Systems  Battery Service Chargers, Testers, Tools  Air Conditioning & Cooling Under Car Service Wheel Balancing, Tire Changers, Tire and Wheel, Wheel/Axle Pullers, Wheel Alignment, Drive Line, Lifting  Welding Lighting	328 329 - 339 340 - 355 356 - 361 362 - 368 369 - 376 377 - 400 404 - 424 428 - 459 460 - 467 468 - 482 483 - 514
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Tool Storage  Roll Cab - Quick Reference  Epiq  Masters  Classic  Heritage  Mobile Solutions  Accessories  Diagnostics  ETHOS®, SOLUS Ultra®, Vantage PRO™, VERDICT™, MODIS™, VERUS®, Diagnostics Accessories, Heavy Duty Pro-Link iQ™  Shop & Technician Tools  Specialty Meters & Analyzers  Testing and Electronics, Fuel and Engine Systems  Battery Service  Chargers, Testers, Tools  Air Conditioning & Cooling  Under Car Service  Wheel Balancing, Tire Changers, Tire and Wheel, Wheel/Axle Pullers, Wheel Alignment, Drive Line, Lifting  Welding  Lighting  Shop Equipment  Fluid Maintenance, Lubrication, Engine Service, Valve, Cylinder, Piston, Bushing/Seal, Fender Covers, Creepers, Measuring, Mirrors and Pick-up	328 329 - 339 340 - 355 356 - 361 362 - 368 369 - 376 377 - 400 404 - 424 428 - 459 460 - 467 468 - 482 483 - 514 515 - 526 527 - 534

# SNAP-ON GENERAL CONTACTS — NORTH AMERICA

Official Website

www.snapon.com

**U.S. Customer Service** 

877-762-7664 www.snapon.com Click on Customer Service in upper

right corner of website

**Canada Customer Service** 

866-824-0524 www.snapon.com Click on Customer Service in upper right corner of website

**Snap-on Corporate** 

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Request a Franchisee or Snap-on Representative

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Click on Find a Franchisee in the upper right corner of website

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**Snap-on Racing** 

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**Snap-on Business Solutions** www.sbs.snapon.com

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**Tool Storage** 

www.snapon.com/toolstorage

**Diagnostics** 

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**Diagnostics Product Support** 

877-447-6276

diagnostics\_Support@snapon.com

Diagnostic Training - Online

www.diagnostics.snapon.com/trainingsolutions

**Shop and Technician Tools** 

www.snapon.com/shoptools

# **Technical Support**

Specialty Meters	888-382-6522
Trailer Harness Testers and Adaptors (YA7900A, YA7900AP, LT series)	888-786-7899
Hand Held Gas Analyzers (all HHGA)	888-717-1333
Carbon Monoxide Analyzer (MT706A)	888-382-6522
Diagnostic Smoke <sup>™</sup> Vapor Producing Machines	800-901-1988
Battery Chargers (EEBC500, 100 and accessories)	866-713-6007
Electronic Battery Tester (EECS500 only)	866-592-8052
ECO™ PLUS A/C Service Center, KoolKare Plus (EEAC325A, EEAC325B, EEAC324A, EEAC324B)	866-769-2788
Wheel Balancers and Tire Changers (EEWB304C, EEWB305C)	800-225-5786
Pin Plate (EEWB3-1, EEWB3-2 and all components)	800-242-6687
TPMS1 Tools	866-498-7671
MIG/TIG Welders and Plasma Cutter	800-ABC-WELD
Heavy Duty Transmission Fluid Exchangers (EETF303B, EETF304B, EETF306A)	800-303-5874
BrakeKare™ Brake Flush System (EEBR311A)	800-393-1272 ext. 230
TransKare™ 1 ATF Exchanger (EETF305A)	877-906-1395, press 3 for technical support
FuelKare™ Fuel Service System (EEFS305A)	877-906-1395, press 3 for technical support
Fuel System Decarbonizer (EEFS505A)	877-776-8486
Blast Cabinet (All YA cabinets)	800-253-3661
Solvent Based Parts Washers (all PBC and PBD washers)	800-253-3661

#### Snap-on General Contacts - International

Snap-on Australia Customer Service

1800 810 581

www.snapontools.com.au

Snap-on Japan

www.snapon.co.jp

Snap-on Germany

www.snapon.de

Snap-on International

www.snapon.com/international

Snap-on Italy

www.snapon.it

Snap-on Mexico

www.snapon.com.mx

Snap-on Netherlands/Belgium

www.snap-on.eu

Snap-on UK

www.snapon.co.uk

Snap-on UK Customer Service – Internet Orders

01536 413877

E-mail: uksales@snapon.com

#### **Government and Industrial**

**Snap-on Industrial** 

www.snapon.com/industrial

Snap-on Industrial Customer Service, U.S.

877-740-1900

E-mail: order.crystallake.rcsc@snapon.com

Snap-on U.S. Government Customer Service

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Fax: 888-418-5900

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888-451-8665

Fax: 888-447-8665

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**Snap-on Industrial Europe** 

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**Snap-on Industrial UK** 

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Industrial and Government Customer Service

01536 413904

E-mail: industrialuk@snapon.com

**Industrial Customer Service Australia** 

1800 811 480

E-mail: sota.ind.customerservice@snapon.com

Snap-on Equipment

www.snaponequipment.com Equipment Service - North America

800-225-5786

# **HAND TOOLS**



# REACH FOR THE LEGENDARY BRAND OF PROFESSIONALS

For more than 90 years, Snap-on has served the serious professional with hand tools that deliver quality, innovation and performance

**Reach for Quality** 

Snap-on® hand tools are crafted from the highest quality materials and built to the most rigorous standards

**STRONG AND LONG LASTING** – Born of special steel with higher alloy content than most

**PRECISE FIT** – Upheld to stringent tolerances during manufacture for tight fit to fastener

CORROSION RESISTANT - Finished with Snap-on's signature nickel-chrome plating

Snap-on's signature nickel-chrome plating

Snap-on's signature nickel-chrome plating

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#### Reach for Innovation

Since 1920, Snap-on has taken the most basic of hand tools and made them more productive, more versatile and more comfortable to use

#### FLANK DRIVE® WRENCHING SYSTEM —

Adds up to 15-20% more torque, preventing rounding off of fasteners

#### POWEREDGE™ CUTTERS AND TALON GRIP™

**PLIERS** — Cleaner cuts, more pulling power and increased durability, with greater comfort and leverage

**TECHANGLE® TORQUE WRENCH** — Most accurate way to achieve torque and angle tightening sequences, using aircraft technology

#### **Reach for Performance**

**Snap-on** hand tools are unsurpassed in performing the job quickly and accurately

**STRENGTH** — Open end jaws that don't spread, ratchets that don't slip and screwdrivers that stand up to today's torque requirements

**ACCESSIBILITY** — Ability to access and perform work in the tightest quarters

**VERSATILITY** — Broad and deep hand tool lines ensure the right tool for the job



## Designed to Last a Lifetime.

Snap-on® ratchets perform day after day, year after year, generation after generation.

**Highest quality materials** — Each ratchet is built with our proprietary alloy steel and precision-crafted gears, springs and pawls.

**Sealed mechanism** — Ratchet heads are sealed to protect gears from debris and liquids to provide trouble-free performance.

**Tested under extreme conditions** — *Snap-on* ratchets are put through rigorous testing to perform in the real world.

## The Ultimate System.

Snap-on ratchets and sockets are synonymous with productivity. They get into the tightest spots—and work with the shortest swing arc.

**Lowest combined height** — Combined with *Snap-on* sockets, our ratcheting systems have the lowest profile, giving you better access to restricted areas.

**Dual 80° Technology** — Dual pawls and an 80 tooth gear provide more power in less lateral space.

**Variety** — Snap-on offers a wide range of ratchets including flex-head, long handle, swivel head, palm ratchets and more.



1/4" Drive



# **Dual 80® Technology Based Ratchets**

Stop, Turn and Listen. A smoother, stronger ratchet. Try them to believe them.

#### **Dual 80 Technology Ratchets Feature:**

- 72 tooth gear
- 7 teeth in contact with gear to provide strength and durability



Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	В	C	Repair Kit
T72	1/4	Standard Handle	72	5°	7/16	15/16	4 7/16	RKRT72A
GT72	1/4	Standard Handle, Industrial Finish	72	5°	7/16	15/16	4 7/16	RKRT72A
THL72	1/4	Long Handle	72	5°	7/16	15/16	6 7/8	RKRT72A
TL72	1/4	Long Handle	72	5°	7/16	15/16	6 1/2	RKRT72A
TF72*	1/4	Long Flex Head	72	5°	7/16	15/16	6 1/4	RKRT72A
THLF72*	1/4	Long Flex Head	72	5°	7/16	15/16	8 1/4	RKRT72A
TX72**	1/4	Locking Flex Head	72	5°	7/16	<sup>15</sup> /16	6 1/4	RKRT72A
THLX72	1/4	Locking Flex Head	72	5°	7/16	15/16	8 1/4	RKRT72A

#### TH936-12 Soft Grip Replacement Handle.





- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

<sup>\*\*</sup>Uses RKRT841JT Flex Joint Repair Kit.

\*\*Uses RKRT841JT Flex Joint Repair Kit.

\*\*Uses RKRT841JT Flex Joint Repair Kit and RKRT841LM Locking Mechanism Repair Kit.

# 3/8" Drive



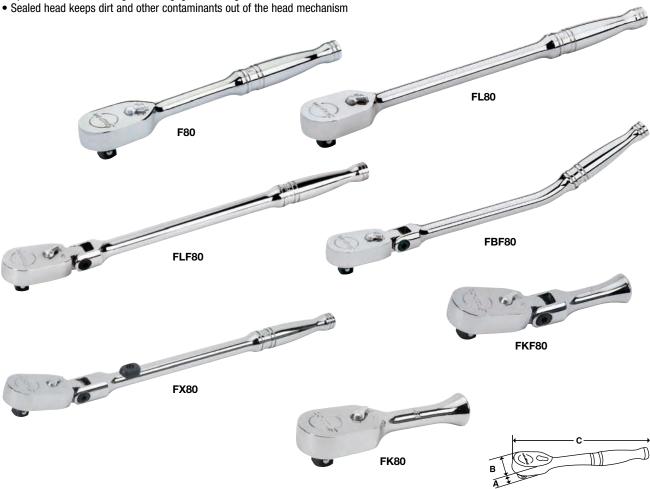
# **Dual 80® Technology Ratchets**

Stop, Turn and Listen. A smoother, stronger ratchet.

Try them to believe them.

#### **Dual 80 Technology Ratchets Feature:**

- 80 tooth gear
- 7 teeth in contact with gear to provide strength and durability
- Up to 25% less ratcheting arc to engage the next gear tooth



Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	В	C	Repair Kit
F80	3/8	Standard Handle	80	4.5°	9/16	1 1/4	7 7/16	RKRF80
FL80	3/8	Long Handle	80	4.5°	9/16	1 1/4	10 <sup>5</sup> /16	RKRF80
GF80	3/8	Standard Handle, Black Industrial	80	4.5°	9/16	1 1/4	7 7/16	RKRF80
FLF80*	3/8	Long Flex Head	80	4.5°	9/16	1 1/4	11 <sup>1</sup> / <sub>2</sub>	RKRF80
FBF80*	3/8	Bent Handle Flex Head	80	4.5°	9/16	1 <sup>1</sup> / <sub>4</sub>	11 <sup>1</sup> / <sub>4</sub>	RKRF80
FX80**	3/8	Locking Flex Head	80	4.5°	9/16	1 <sup>1</sup> /4	11 <sup>1</sup> / <sub>2</sub>	RKRF80
FKF80*	3/8	Stubby Flex Head	80	4.5°	9/16	1 1/4	4 3/4	RKRF80
FK80	3/8	Stubby Handle	80	4.5°	9/16	1 1/4	4 3/16	RKRF80

ASME®/ANSI® B107.10
\*Uses RKRF841JT Flex Joint Repair Kit.
\*\*Uses RKRF841JT Flex Joint Repair Kit Repair Kit.

3/8" Drive



Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	В	C	Repair Kit
FH80	3/8	Standard Length	80	4.5°	9/16	1 <sup>1</sup> /4	9 9/16	RKRF80
FHL80	3/8	Long Handle	80	4.5°	9/16	1 <sup>1</sup> /4	12 <sup>7</sup> /16	RKRF80
FHF80*	3/8	Flex Head	80	4.5°	9/16	<b>1</b> 1/4	9 5/8	RKRF80
FHLF80*	3/8	Long Flex Head	80	4.5°	9/16	1 <sup>1</sup> /4	13 <sup>11</sup> / <sub>16</sub>	RKRF80
FHBF80*	3/8	Bent Handle Flex Head	80	4.5°	9/16	1 <sup>1</sup> /4	13 <sup>5</sup> /16	RKRF80
FH0F80*	3/8	Offset Flex Head	80	4.5°	9/16	1 <sup>1</sup> /4	9 15/16	RKRF80
FHX80**	3/8	Locking Flex Head	80	4.5°	9/16	1 <sup>1</sup> /4	11 <sup>15</sup> / <sub>16</sub>	RKRF80

ASME®/ANSI® B107.10
\*Uses RKRF841JT Flex Joint Repair Kit.
\*\*Uses RKRF841JT Flex Joint Repair Kit and RKRFX936ALM Locking Mechanism Repair Kit.
FH936-12 Soft Grip Replacement Handle.





# **RATCHETS**

# 1/2" Drive



# **Dual 80® Technology Ratchets**

Stop, Turn and Listen. A smoother, stronger ratchet.

#### Try them to believe them.

#### **Dual 80 Technology Ratchets Feature:**

- 80 tooth gear
- 7 teeth in contact with gear to provide strength and durability
- Up to 25% less ratcheting arc to engage the next gear tooth
- Sealed head keeps dirt and other contaminants out of the head mechanism



Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	В	C	Repair Kit
S80A	1/2	Standard Handle	80	4.5°	3/4	1 <sup>5</sup> /8	10 <sup>5</sup> /16	RKRS80A
GS80A	1/2	Industrial Finish	80	4.5°	3/4	1 <sup>5</sup> /8	10 5/16	RKRS80A
SH80A	1/2	Standard Handle	80	4.5°	3/4	1 <sup>5</sup> /8	12	RKRS80A
SL80A	1/2	Long Handle	80	4.5°	3/4	1 <sup>5</sup> /8	15	RKRS80A
SHL80A	1/2	Long Handle	80	4.5°	3/4	1 <sup>5</sup> /8	16 <sup>5</sup> /8	RKRS80A
SF80A*	1/2	Flex Head	80	4.5°	3/4	1 5/8	17 11/16	RKRS80A
SHF80A*	1/2	Long Handle	80	4.5°	3/4	1 5/8	17 11/16	RKRS80A
SLF80A*	1/2	Long Flex Head	80	4.5°	3/4	1 5/8	24 13/16	RKRS80A
SHLF80A*	1/2	Long Flex Head	80	4.5°	3/4	1 <sup>5</sup> /8	25 3/4	RKRS80A
SX80B**	1/2	Locking Flex Head	80	4.5°	3/4	1 5/8	17 5/8	RKRS80A
SLX80A**	1/2	Locking Flex Head	80	4.5°	3/4	1 <sup>5</sup> /8	24 13/16	RKRS80A

ASME®/ANSI® B107.10
\*Uses RKRSX936JT Flex Joint Repair Kit
\*\*Uses RKRSX80AJT Flex Joint Repair Kit
\*\*Uses RKRSX80AJT Flex Joint Repair Kit and RKRSX80ALM Locking Mechanism Repair Kit
SH936-12 Soft Grip Replacement Handle.

#### **Round Head**



The Snap-on® Round Head features up to 100 teeth to achieve the lowest possible swing arc. Slim round head ratchets are perfect for the tightest of space constraints.





#### **Round Head Ratchets**

Feature a slim design plus a strong 60, 72 or 100 tooth gear action for use in confined areas.

Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	В	C	Repair Kit
TKN72	1/4	Short Handle	72	5°	7/16	1 1/4	3 1/16	RKRTHNF72
THNF72*	1/4	Swivel Head	72	5⁰	7/16	1 1/4	6 7/8	RKRTHNF72
TN72	1/4	Round Head	72	5⁰	7/16	1 1/4	4 1/2	RKRTHNF72
TMR860	1/4	Fingertip	60	6°	7/16	1 1/2	4 1/2	RKRT860
FHNF100**	3/8	Swivel Head	100	3.6°	11/16	1 3/4	12 <sup>1</sup> / <sub>2</sub>	RKRFHNF100
FN100	3/8	Round Head	100	3.6°	11/16	1 3/4	<b>7</b> <sup>7</sup> /8	RKRFHNF100
FHCNF72**	3/8	Compact Swivel Head	72	5°	<sup>7</sup> / <sub>16</sub>	1 1/4	6 7/8	RKRFHCNF72

ASME®/ANSI® B107.10

**Specialty** 



#### **Ratchet Features:**

· Compact head design offers greater accessibility



# **Specialty Ratchets**

Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	В	С	Repair Kit
SKF80A	1/2	Stubby Handle	80	4.5°	3/4	1 <sup>5</sup> /8	7 9/16	RKRS80A
FC72	3/8	Compact Head	72	5°	7/16	15/16	4 7/16	RKRFC72
FCF72	3/8	Compact Flex Head	72	5°	7/16	15/16	6 1/4	RKRFC72

ASME/ANSI B107.10





<sup>\*</sup>TH936-12 Soft Grip Replacement Handle.

<sup>\*\*</sup>FH936-12 Soft Grip Replacement Handle.

# **RATCHETS**

#### **Quick Release**

- Quick release button for rapid socket/accessory changes, even with greasy or oily hands
- Contoured handle for comfort and control
- · Chrome finish for easy cleanup















# **Ouick Release Ratchets**

Salet Hoteupe Hateliets								
Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	В	C	Repair Kit
TR72	1/4	Quick Release	72	5°	7/16	15/16	7 7/16	RKRTR72
THR72*	1/4	Quick Release	72	5°	7/16	15/16	9 9/16	RKRTR72
THRLF72*	1/4	Quick Release	72	5°	7/16	15/16	8 1/4	RKRTR72
FR80	3/8	Quick Release	80	4.5°	9/16	1 1/4	7 7/16	RKRFR80
FHR80**	3/8	Quick Release	80	4.5°	9/16	1 1/4	9 9/16	RKRFR80
FHRLF80**	3/8	Quick Release	80	4.5°	9/16	1 1/4	13 11/16	RKRFR80
SR80A	1/2	Quick Release	80	4.5°	3/4	<b>1</b> 5/8	10 5/16	RKRSR80A
SHR80A***	1/2	Quick Release	80	4.5°	3/4	1 5/8	10 5/16	RKRSR80A
SHRLF80A***	1/2	Quick Release	80	4.5°	3/4	1 <sup>5</sup> /8	25 <sup>3</sup> / <sub>4</sub>	RKRSR80A

ASME®/ANSI® B107.10

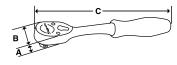
\*TH936-12 Soft Grip Replacement Handle.

\*\*FH936-12 Soft Grip Replacement Handle.

\*\*\*SH936-12 Soft Grip Replacement Handle.







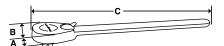
**BPR703** 

	BPR703	1			BP	R703SG			Bo	
Quick Releas	e Ratchets	(Blue-Point®)						Set Contains:	PATOS TO	9703SG
Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	В	С	Repair Kit		
BPRTR936	1/4	Standard Handle	36	10°	15/32	31/32	5 <sup>5</sup> /8	RKRBPRTR936	•	
BPRTR936SG	1/4	Soft Grip Handle	36	10°	15/32	31/32	5 <sup>5</sup> /8	RKRBPRTR936		•
BPRFR938	3/8	Standard Handle	38	9.5°	9/16	1 9/32	7 3/4	RKRBPRFR938	•	
BPRFR938SG	3/8	Soft Grip Handle	38	9.5°	9/16	1 9/32	7 3/4	RKRBPRFR938		•
BPRSR940	1/2	Standard Handle	40	9°	23/32	1 23/32	9 7/8	RKRBPRSR940	•	
BPRSR940SG	1/2	Soft Grip Handle	40	9°	23/32	1 23/32	9 7/8	RKRBPRSR940		•

ASME/ANSI B107.10

#### **Low Profile**





#### **Low Profile Ratchets**

- Square drive design works with low profile sockets to access restricted clearance areas without loss of strength
- Use with standard 3/8" drive sockets or other attachments
- Thin handle cross section allows for increased accessibility in tight quarters
- Dual 80® Technology requires less arc to engage the next gear tooth
- 7 teeth in contact with gear to provide strength and durability
- See low profile sockets on p. 28



RAT72

	·							
Stock No.	Drive Size	Description	Gear Teeth	Swing Arc	A	В	C	Repair Kit
RAT72	11 mm Internal Hex	Low Profile	72	5°	3/8	15/16	4 7/8	_
RAF80	3/8" Square Drive	Low Profile	80	4.5°	7/16	1 1/4	7 1/2	RKRRAF80

# **FOD (Foreign Object Damage)**



# **FOD (Foreign Object Damage) Ratchets**

- Designed to help prevent foreign object damage in sensitive work environments
- Coverplate and reverse lever permanently affixed to ratchet head with rivets to prevent chance of small parts debris

Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	В	C	Repair Kit
T936FOD	1/4	Standard Handle	36	10°	3/8	1 7/32	4 <sup>7</sup> / <sub>16</sub>	_
F936F0D	3/8	Standard Handle	36	10°	5/8	<b>1</b> 3/16	7 <sup>7</sup> / <sub>16</sub>	_
S936FOD	1/2	Standard Handle	36	10°	3/4	1 <sup>5</sup> /8	10 <sup>5</sup> /16	_

ASME®/ANSI® B107.10

# **Adaptors**





**TM77** 



F77





S77A

L672B

# **Ratchet Adaptors**

Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	В	Repair Kit
TM77	1/4	Ratchet Adaptor	20	18°	<sup>15</sup> / <sub>16</sub>	1 <sup>5</sup> /8	_
F77	3/8	Ratchet Adaptor	20	18°	13/16	2 <sup>3</sup> /16	_
S77A	1/2	Ratchet Adaptor	20	18°	1 <sup>5</sup> /8	3	RKRS77
L672B	3/4	Ratchet Adaptor	44	8.2°	2 1/2	3 15/16	RKR881B

ASME/ANSI B107.10





<sup>•</sup> Do not use "cheater bars" on handles

# **RATCHETS**

# **Special Application**



## **Special Application Ratchets**

Stock No.	Square Drive, inches	Description	Gear Teeth	Swing Arc	A	В	C	Repair Kit
TFY936*	1/4	HY-LOK® Ratchet	36	10°	7/16	7/8	6 1/4	_
FZ936A	3/8	MultiPurpose	36	10°	5/8	1 <sup>3</sup> /16	3 1/4	RKRF936
PALMRAT	3/8	Palm Style	20	18°	<b>1</b> <sup>3</sup> / <sub>16</sub>	_	2 <sup>5</sup> /8	RKRPALMRAT
SA936A	1/2	Scaffold	36	10°	4 3/16	1 5/8	10 <sup>5</sup> /16	RKRSA936
GSP936*	1/2	Spud	36	10°	3/4	1 <sup>5</sup> /8	15 <sup>5</sup> /8	RKRGSP936-1

<sup>\*</sup>ASME®/ANSI® B107.10

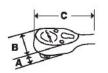
**GSP936 Spud Ratchet.** The "spud" ratchet is ideal for lining up holes in scaffolding and other construction jobs. A long reverse lever provides easy reversing even while wearing heavy work gloves. Locking button retention. Taper diameter is 3/16 to 7/8". Taper length is 8".

#### **Spinners** TMS70A **FSDR BLPSD14** FRS70A FSD1 FSD38 LRS70A FSD14 rs<sub>D3</sub><sub>k1</sub> Set Contains: **Ratchet Spinners** Stock No. **Square Drive, inches** Description A В TMS70A 1/4 Ratchet Spinner 7/8 1 FSDR 1/4 male to 1/4 female **Finger Ratchet** BLPSD14 1/4 Ratchet Spinner 7/8 27/32 FRS70A 3/8 Ratchet Spinner 1 1/4 **1** 5/16 FSD1 3/8 male to 3/8 female Spinner Adaptor FSD14 3/8 male to 1/4 female • Spinner Adaptor FSD38 1/4 male to 3/8 female Spinner Adaptor • **Ratchet Spinner** 1 3/4 1 5/8

LRS70A ASME/ANSI B107.10

**FSDR Finger Ratchet (Blue-Point®).** Reversible finger ratchet. Small size works great for extremely tight areas. Aluminum knurled outer ring for sure grip. 1/4" external square drive on one side and 1/4" internal hex drive on other side.

## **Heads & Handles**









L873



Heads

Stock No.	Drive Size	Description	Gear Teeth	Swing Arc	A	В	С	Repair Kit
L872	3/4	Sealed	32	11°	1 <sup>1</sup> /4	2 1/2	5 <sup>15</sup> / <sub>16</sub>	RKRQC4
GL872	3/4	Sealed Industrial Finish	32	11°	1 1/4	2 1/2	5 <sup>15</sup> / <sub>16</sub>	RKRQC4
L873	1	Sealed	30	12°	1 1/2	3 1/8	7 7/8	RKRQC5
GL873	1	Sealed Industrial Finish	30	12°	1 1/2	3 1/8	7 7/8	RKRQC5





3/4" Head and Handle Combinations

	Heads using <sup>13</sup> / <sub>16</sub> " (small) diameter handle holes	Heads using <sup>15</sup> /- (large) diameter handle holes	
	<b>L52B</b> Sliding T-handle Head	L872 Ratchet Head	<b>L8112A</b> Breaker Bar Head
Short 19 1/4" Handle (Lock Button Both Ends)	L872H	_	_
Short 19 <sup>1</sup> / <sub>4</sub> " Handle (Lock Button End/Knurled End)	_	L872RJ	L872RJ
Long 36" Handle (Lock Button End/Knurled End)	_	L872RM	L872RM

ASME®/ANSI® B107.10

No. of Concession, Name of Street, or other party of the Concession, Name of Street, or other pa				
	L53HB			
	-		=	m=1=
		L853HA1		

# 1" Handle/Handle Extension

Stock No.	A	В
L53HB	1 <sup>1</sup> /8	29
L853HA1	1 3/8	36

#### L53HB Handle.

- Plain handle with locking buttons at both ends
- Use on 1" drive ratchet heads, breaker bar heads and sliding T-heads

#### L853HA1 Handle Extension.

- Knurled grip extension handle attaches to L53HB handle for added leverage
- Only used with L53HB handle; L853HA1 will not connect directly to L873 ratchet head

#### 1" Head and Handle Combinations

Stock No.	Description	Required Handle	Optional Handle Extension
L873	Ratchet Head	L53HB	L853HA1
L113H	Breaker Bar Head	L53HB	<b> </b>
L53A	Sliding T-handle Head	L53HB	_



2104101 241/2104101 241 11044									
Drive Size	Handle w/Head	Length	Head Only	A	В	C	Handle Only		
3/4	_	_	L8112A	15/16	1 9/16	3 11/16	_		
1	L113H	32 13/16	L113	_	2 1/8	6 7/16	L53HB		

L113H

ASME/ANSI B107.10





<sup>•</sup> Do not use "cheater bars" on handles

• Read safety precautions on pages W1 to W4

# **BREAKER BARS**

# **Breaker Bars**



Dicarter De							,
Stock No.	Square Drive, inches	Description	A	В	С	Repair Kit	
TM10G*	1/4	Standard Handle	5/8	6	5/16	RKBB1	
THBB10*	1/4	Comfort Handle	5/8	6 1/2	5/16	RKBB1	
F10LC*	3/8	Standard Handle	13/16	9 9/16	1/2	RKBB2	
F12LA*	3/8	Long Handle	13/16	11 <sup>9</sup> /16	1/2	RKBB2	
FHBB12*	3/8	Comfort Handle	13/16	13	1/2	RKBB2	
SN15B*	1/2	Standard Handle	1 1/8	15	11/16	RKBB3	
SN18B*	1/2	Standard Handle	1 <sup>1</sup> /8	18	11/16	RKBB3	
GSN18B*	1/2	Standard Handle, Industrial Finish	1 <sup>1</sup> /8	18	11/16	RKBB3	
SN24C*	1/2	Standard Handle	1 <sup>1</sup> /8	24	11/16	RKBB3	
SHBB24*	1/2	Comfort Handle	1 1/8	24	11/16	RKBB3	
SN25A*	1/2	45° Offset Square	1 1/8	24	11/16	RKBB3	
BLPBB146	1/4	Standard Handle	5/8	6	3/8	_	•
BLPBB3810	3/8	Standard Handle	7/8	9 31/32	1/2	_	. •
BLPBB1215	1/2	Standard Handle	1 <sup>1</sup> /8	15	3/4	_	•
BLPBB1224	1/2	Telescoping Handle	1 <sup>1</sup> /16	12–24	5/8-7/8	_	•

<sup>\*</sup>ASME®/ANSI® B107.10



## From Start to Finish, Strong, Powerful Sockets.

Snap-on® sockets are designed to fit and built to perform for a lifetime.

**Special alloy steel** — Made with proprietary alloy content steel for a stronger, more durable tool.

**Thin wall design** — Uniform wall thickness provides greater access and improved performance where you need it most.

**Broach depth** — *Snap-on* sockets have a broach depth that allows rethreading a nut without removing it from the socket. Just another way Snap-on pays attention to the details.

**Flank Drive® wrenching system** — Grabs fasteners on the flats, increasing torque and preventing fastener corners from rounding off.

#### Yes, We Have That.

Snap-on offers a full range of sockets to meet customer needs.

Sizes ranging from 1/4" to 21/2" drive

Standard, semi-deep and deep

Single and double hex

Chrome/impact/swivel: deep, semi-deep and shallow

Specialty sockets such as low profile, twist and magnetic

**Snap-on** bit sockets are available in a variety of configurations

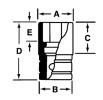
Bit lengths ranging from 3/4" to 7"

Standard, stubby and long lengths

Hex, double hex and ball hex



# 1/4" Drive (Flank Drive®)













TMD16 GTMD16

Shall	Shallow, mm Set Cont								
<b>~</b> □	<b>(6</b> )	(12)	A	В	C	D	E	<b>6</b>	(12)
4	TMM4*	_	6.7	12.1	13.3	22.2	4.6		
4.5	TMM4.5*	_	7.2	12.1	13.3	22.2	4.3		
5	TMM5*	TMMD5*	7.7	12.1	13.3	22.2	4.3	•	•
5.5	TMM5.5	TMMD5.5	8.3	12.1	13.3	22.2	4.6	•	•
6	TMM6	TMMD6	9.3	12.1	13.3	22.2	5.6	•	•
7	TMM7	TMMD7	10.5	12.1	13.3	22.2	6.1	•	•
8	TMM8	TMMD8	11.5	12.1	13.3	22.2	6.9	•	•
9	TMM9	TMMD9	12.7	12.1	13.3	22.2	7.4	•	•
10	TMM10	TMMD10	13.2	13.2	13.3	22.2	7.4	•	•
11	TMM11	TMMD11	15.2	14.6	13.3	22.2	9.4	•	•
12	TMM12	TMMD12	16.5	15.6	13.3	22.2	9.4	•	•
13	TMM13	TMMD13	17.6	16.7	13.3	22.2	9.4	•	•
14	TMM14	TMMD14	18.8	17.8	14.1	22.2	9.7	•	•
15	TMM15	_	20.4	19.4	14.1	23.0	9.1	•	
16	TMM16	_	21.0	20.2	16.1	25.0	10.2		

<sup>\*</sup>Conventional hex \*ASME® B107.5m

Sets shown include magnetic storage tray

Shall	hallow, inches							Set Contains:						
	<b>6</b>	(12)	6	9	A	В	C	D	E	<b>6</b>	(12)			
1/8	TM04		l	ı	7/32	7/16	1/2	7/8	1/8					
5/32	TM05*	_	-	-	9/32	15/32	1/2	7/8	5/32					
3/16	TM6*	TMD6*	GTM6	GTMD6	9/32	15/32	1/2	7/8	5/32	•	•			
7/32	TM7*	TMD7*	GTM7	GTMD7	11/32	15/32	1/2	7/8	3/16	•	•			
1/4	TM8	TMD8	GTM8	GTMD8	3/8	15/32	1/2	7/8	7/32	•	•			
9/32	TM9	TMD9	GTM9	GTMD9	13/32	15/32	1/2	7/8	1/4	•	•			
5/16	TM10	TMD10	GTM10	GTMD10	15/32	15/32	1/2	7/8	9/32	•	•			
11/32	TM11	TMD11	GTM11	GTMD11	1/2	15/32	5/16	7/8	9/32	•	•			
3/8	TM12	TMD12	GTM12	GTMD12	17/32	1/2	1/2	7/8	9/32	•	•			
7/16	TM14	TMD14	GTM14	GTMD14	19/32	9/16	1/2	7/8	3/8	•	•			
1/2	TM16	TMD16	GTM16	GTMD16	11/16	21/32	1/2	7/8	3/8	•	•			
9/16	TM18	TMD18	_	GTMD18	25/32	23/32	1/2	29/32	3/8	•	•			
5/8	TM20	_	_	_	27/32	25/32	19/32	31/32	13/32					

\*Conventional hex ASME B107.1

Sets shown include magnetic storage tray

#### 120STTM 6 Point Shallow/Deep Set.

- TM6 to TM18 shallow sockets (pg. 18) and STM6 to STM18 deep sockets (pg. 19) • (20 pcs) 3/16 to 9/16"













TMDS14

12 1/20

Semi	Deep, m	ım		Set Contains:						
	<b>6</b>	(12)	A	В	C	D	E	<b>6</b>	<u>(12)</u>	
5	TMMS5*	TMMDS5*	7.7	12.1	22.9	31.8	5.1	•	•	
5.5	TMMS5.5*	TMMDS5.5	8.3	12.1	22.9	31.8	5.3	•	•	
6	TMMS6	TMMDS6	9.3	12.1	22.9	31.8	5.8	•	•	
7	TMMS7	TMMDS7	10.5	12.1	22.9	31.8	6.1	•	•	
8	TMMS8	TMMDS8	11.5	12.1	18.4	31.8	6.9	•	•	
9	TMMS9	TMMDS9	12.7	12.1	18.4	31.8	7.4	•	•	
10	TMMS10	TMMDS10	14.0	13.2	18.4	31.8	7.4	•	•	
11	TMMS11	TMMDS11	15.4	14.6	18.4	31.8	9.4	•	•	
12	TMMS12	TMMDS12	16.5	15.6	18.4	31.8	9.4	•	•	
13	TMMS13	TMMDS13	17.6	16.7	18.4	31.8	9.4	•	•	
14	TMMS14	TMMDS14	18.8	17.8	18.4	31.8	9.7	•	•	
15	TMMS15	TMMDS15	20.4	19.4	18.4	31.8	9.7	•	•	

<sup>\*</sup>Conventional hex

Sets shown include magnetic storage tray

Semi I	Deep, i	nches			Set Contains:					
	<b>6</b>	(12)	A	В	C	D	E	<b>6</b>	(12)	
3/16	TMS6*	TMDS6*	5/16	15/32	29/32	1 1/4	7/32	•	•	
7/32	TMS7*	TMDS7*	11/32	15/32	29/32	1 1/4	7/32	•	•	
1/4	TMS8	TMDS8	3/8	15/32	29/32	1 1/4	1/4	•	•	
9/32	TMS9	TMDS9	13/32	15/32	23/32	1 1/4	1/4	•	•	
5/16	TMS10	TMDS10	15/32	15/32	23/32	1 1/4	9/32	•	•	
11/32	TMS11	TMDS11	1/2	15/32	23/32	1 1/4	5/16	•	•	
3/8	TMS12	TMDS12	9/16	1/2	23/32	1 1/4	5/16	•	•	
7/16	TMS14	TMDS14	5/8	19/32	23/32	1 1/4	3/8	•	•	
1/2	TMS16	TMDS16	11/16	21/32	23/32	1 1/4	3/8	•	•	
9/16	TMS18	TMDS18	3/4	23/32	23/32	1 1/4	3/8	•	•	

<sup>\*</sup>Conventional hex \*ASME B107.1

Sets shown include magnetic storage tray





Deep	, mm					Z Set Contair	esman	STMMO	w\
	<b>6</b>	(12)	A	В	C	D	E	<b>(6</b> )	(12)
4	STMM4*	_	6.7	12.1	42.2	50.8	4.6		
4.5	STMM4.5*	_	7.2	12.1	42.2	50.8	4.6		
5	STMM5*	STMMD5*	7.7	12.1	42.2	50.8	5.1	•	•
5.5	STMM5.5	STMMD5.5	8.3	12.1	42.2	50.8	5.3	•	•
6	STMM6	STMMD6	9.3	12.1	42.2	50.8	5.8	•	•
7	STMM7	STMMD7	10.5	12.1	42.2	50.8	6.1	•	•
8	STMM8	STMMD8	11.5	12.1	42.2	50.8	6.9	•	•
9	STMM9	STMMD9	12.7	12.1	38.1	50.8	7.4	•	•
10	STMM10	STMMD10	14.0	13.2	38.1	50.8	7.4	•	•
11	STMM11	STMMD11	15.2	14.6	38.1	50.8	9.4	•	•
12	STMM12	STMMD12	16.5	15.6	38.1	50.8	9.4	•	•
13	STMM13	STMMD13	17.6	16.7	38.1	50.8	9.4	•	•
14	STMM14	STMMD14	18.8	17.8	38.1	50.8	9.7	•	•
15	STMM15		20.4	19.4	38.1	50.8	9.1	•	



\*Conventional hex

Sets shown include magnetic storage tray

#### 124STTMM Metric 6 Point Shallow/Deep Set.

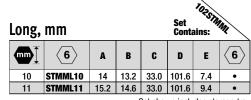
- TMM4 to TMM14 shallow sockets (except TMM4.5) (pg 18) plus STMM4 to STMM14 Deep Sockets (except STMM4.5) (pg 19)
- 24 pcs
- 4, 5 to 14 mm

Deep	, inch	es		Set Contains:							
<b>⊕</b> Ţ	<b>6</b>	(12)	6	9	A	В	C	D	E	<b>6</b>	(12)
1/8	STM04*	_	_	_	7/32	7/16	1 21/32	2	1/8		
5/32	STM05*	_	_	_	1/4	15/32	1 21/32	2	3/16		
3/16	STM6*	STMD6*	GSTM6	GSTMD6*	5/16	15/32	1 21/32	2	3/16	•	•
7/32	STM7*	STMD7*	GSTM7	GSTMD7*	11/32	15/32	1 21/32	2	7/32	•	•
1/4	STM8	STMD8	GSTM8	GSTMD8	3/8	15/32	1 21/32	2	7/32	•	•
9/32	STM9	STMD9	GSTM9	GSTMD9**	13/32	15/32	1 21/32	2	1/4	•	•
5/16	STM10	STMD10	GSTM10	GSTMD10**	15/32	15/32	1 21/32	2	7/32	•	•
11/32	STM11	STMD11	GSTM11	GSTMD11	1/2	15/32	1 21/32	2	9/32	•	•
3/8	STM12	STMD12	GSTM12	GSTMD12	17/32	9/16	1 21/32	2	9/32	•	•
7/16	STM14	STMD14	GSTM14	GSTMD14	5/8	9/16	1 21/32	2	3/8	•	•
1/2	STM16	STMD16	GSTM16	GSTMD16	11/16	21/32	1 21/32	2	3/8	•	•
9/16	STM18	STMD18	_	GSTMD18	3/4	23/32	1 21/32	2	3/8	•	•



Sets shown include magnetic storage tray

<sup>\*\*</sup>Larger bolt clearance diameter for servicing aerospace fasteners



Application:

Set shown includes storage tray

For bumper cover bolts found on most European, Asian and U.S. vehicles.





<sup>•</sup> Do not use chrome or industrial finish tools with impact drivers

• Read safety precautions on pages W1 to W4



**110STMY** 



STMD16 GSTMD14

#### 1/4" Drive Low Profile



RTSM15

Low P	rofile, r	nm			Set Contains	112ATS	TORTSA	1124	
	<b>6</b>	A	В	C	D	E	<b>6</b>	<b>6</b>	(12)
5	RTSM5	7.7	12.1	-	20.2	2.2	•	•	•
5.5	RTSM5.5	8.3	12.1	-	20.2	2.6	•	•	•
6	RTSM6	9.3	12.1	-	19.3	2.7	•	•	•
7	RTSM7	10.5	12.1	-	19.0	2.8	•	•	•
8	RTSM8	11.5	12.1	-	19.0	3.6	•	•	•
9	RTSM9	12.7	12.1	9.2	18.7	3.9	•	•	•
10	RTSM10	14.0	12.1	9.4	19.0	4.7	•	•	•
11	RTSM11	15.4	12.1	6.2	17.3	4.5	•	•	•
12	RTSM12	16.5	12.1	6.1	17.8	4.9	•	•	•
13	RTSM13	17.6	12.1	5.9	18.1	5.1	•	•	•
14	RTSM14	18.7	12.1	6.4	19.3	5.8			
15	RTSM15	20.3	12.1	6.3	20.3	6.4			

Low Profile Ratchet

Low Profile Magnetic Bit Holder

Sets shown include storage tray

.ow P	rofile, i	nches			Set 1/2/17 1/0/17 Contains:					
	(12)	A	В	C	D	E	(12)	(12)		
3/16	RT61	5/16	15/32	11/32	25/32	3/32	•	•		
7/32	RT71	11/32	15/32	3/8	13/16	3/32	•	•		
1/4	RT81	3/8	15/32	5/16	3/4	1/8	•	•		
9/32	RT91	13/32	15/32	5/16	3/4	1/8	•	•		
5/16	RT101	15/32	15/32	5/16	3/4	5/32	•	•		
11/32	RT111	1/2	15/32	13/32	9/32	3/16	•	•		
3/8	RT121	17/32	15/32	9/32	11/16	3/16	•	•		
7/16	RT141	19/32	15/32	1/4	11/16	7/32	•	•		
1/2	RT161	11/16	15/32	7/32	23/32	7/32	•	•		
9/16	RT181	3/4	15/32	1/4	3/4	1/4	•	•		
	RAT72	Low Pro	file Ratcl	•						
	RTMBS8	Low Pro	•							

Sets shown include storage tray







RTMBS8

# Stubby Bits and

RAT72

RTMBS8

Bit Holder		Contains:					
	Stock No.	Size					
Flat Tip	SDMS213	1/4"	•				
Phillips	SDMS222IR	#2	•				
Metric Hex	SDMSM3	3 mm	•				
	SDMSM4	4 mm	•				
	SDMSM5	5 mm	•				
	SDMSM6	6 mm	•				
	SDMSM8	8 mm	•				
Inch Hex	SDMS8	1/8"	•				
	SDMS9	9/64"	•				
	SDMS10	5/32"	•				
	SDMS12	3/16"	•				
	SDMS16	1/4"	•				
Torx	SDMST15	T15	•				
	SDMST20	T20	•				
	SDMST25	T25	•				
	SDMST27	T27	•				
	SUMST3U	T30					

#### RTMBS8 Low Profile Magnetic Bit Holder.

- Magnetic Bit Holder for the Low Profile RAT72 Ratcheting Wrench
- Special alloy steel provides the highest match of strength and durability
- Nickel-chrome plating provides corrosion resistance
- Holds any 1/4" shank bit: fractional and metric hex bits, TORX® and ball TORX, Phillips and straight bits
- Fits in any 11 mm ratcheting wrench

#### Applications:

Perfect for tight and compact applications found on automotive, motorcycle, ATV and aviation.

Examples of some automotive applications: heater boxes and motor actuators in dash of vehicle, air conditioning work and on top of dash board where the windshield meets the dash.

# 1/4" Drive (Blue-Point®)









BLPSM145

BLPSM149

**BLPSM1412** 

**BLPS1414** 

BLPS14716

# Shallow, mm

<b>─</b>	6	Length, mm	
4	BLPSM144	24.8	
4.5	BLPSM144.5	24.8	
5	BLPSM145	24.8	
5.5	BLPSM145.5	24.8	
6	BLPSM146	24.8	
7	BLPSM147	24.8	
8	BLPSM148	24.8	
9	BLPSM149	24.8	
10	BLPSM1410	24.8	
11	BLPSM1411	24.8	
12	BLPSM1412	24.8	
13	BLPSM1413	24.8	
14	BLPSM1414	24.8	

# Shallow, inches

	<b>6</b>	Length, inches
3/16	BLPS14316	1
7/32	BLPS14732	1
1/4	BLPS1414	1
9/32	BLPS14932	1
5/16	BLPS14516	1
11/32	BLPS141132	1
3/8	BLPS1438	1
7/16	BLPS14716	1
1/2	BLPS1412	1
9/16	BLPS14916	1
5/8	BLPS1458	1







Deep, mm

BLPLSM145 BLPLSM1412

<b>mm</b> Ţ	<b>6</b>	Length, mm
4	BLPLSM144	50
5	BLPLSM145	50
6	BLPLSM146	50
7	BLPLSM147	50
8	BLPLSM148	50
9	BLPLSM149	50
10	BLPLSM1410	50
11	BLPLSM1411	50
12	BLPLSM1412	50
13	BLPLSM1413	50
14	BLPLSM1414	50

Deen, inches

**BLPLS1414 BLPLS1412** 

beep, menes					
<b>□</b> Ţ	<b>6</b>	Length, inches			
3/16	BLPLS14316	1 31/32			
7/32	BLPLS14732	1 31/32			
1/4	BLPLS1414	1 31/32			
9/32	BLPLS14932	1 31/32			
5/16	BLPLS14516	1 31/32			
11/32	BLPLS141132	1 31/32			
3/8	BLPLS1438	1 31/32			
7/16	BLPLS14716	1 31/32			
1/2	BLPLS1412	1 31/32			
9/16	BLPLS14916	1 31/32			
5/8	BLPLS1458	<b>1</b> 31/32			





O Double Square				
	8	Length, inches		
1/4	BLPS81414	1		
5/16	BLPS814516	1		
3/8	RI PSR1438	1		



# External Torx®

##_ Ţ	Stock No.	Length, inches
E4	BLPTE144	1
E5	BLPTE145	1
E6	BLPTE146	1
E7	BLPTE147	1
E8	BLPTE148	1

BLPTE145







<sup>•</sup> Do not use chrome or industrial finish tools with impact drivers • Read safety precautions on pages W1 to W4

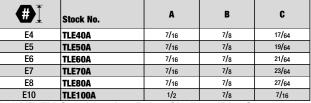
#### 1/4" Drive





213AFLEY

# Torx®/Shallow



#### 213AFLEY Combination Drive Shallow Torx Set.

 1/4" drive TLE40A to TLE100A (pg 22), 3/8" drive FLE110A to FLE140A (pg. 30) and 1/2" drive SLE160A to SLE240A (pg 40) (13 pcs) (E4 to E24)

#### 210AFLEY Combination Drive Shallow Torx Set.

 1/4" drive TLE40A to TLE80A (pg 22) plus 3/8" drive FLE100A to FLE180A (except FLE110A) (pg 30) (10 pcs) (E4 to E18).

Note: Sets shown include magnetic storage tray













**Contains:** 

106RTLE



<b>#</b> ]	Stock No.	A (mm)	B (mm)	C (mm)
E4	RTLE40	12.1	6.7	16.5
E5	RTLE50	12.1	7.7	16.5
E6	RTLE60	12.1	8.4	16.5
E7	RTLE70	12.1	9.3	16.5
E8	RTLE80	12.1	10.5	16.6
E10	RTLE100	12.1	12.1	17.4

Set shown includes storage tray



STLE50

# Torx/Deep

<b>#</b> Ţ	Stock No.	A	В	C
E4	STLE40	15/32	9/32	2
E5	STLE50	15/32	5/16	2
E8	STLE80	15/16	13/32	2





TM412

# Ouble Square

	Stock No.	A (inches)	B (inches)	C (inches)	D (inches)	E (inches)
1/4	TM408	15/32	15/32	17/32	7/8	1/4
5/16	TM410	9/16	17/32	17/32	7/8	9/32
3/8	TM412	21/32	5/8	17/32	7/8	5/16

# 1/4" and 3/8" Drive Shallow/Deep Combination Sets -









#### **222SFFS**

224SFFSM

#### 1/4" Drive

22

**120STTM 6 Point Shallow/Deep Set.** TM6 to TM18 shallow sockets (pg 18) and STM6 to STM18 deep sockets (pg 19) (20 pcs) (3/16 to 9/16").

**124STTMM Metric 6 Point Shallow/Deep Set.** TMM4 to TMM14 shallow sockets (except TMM4.5) (pg 18) plus STMM4 to STMM14 deep sockets (except STMM4.5) (pg 19) (24 pcs) (4.5 to 14 mm).

## 3/8" Drive

**222SFFS 6 Point Shallow/Deep Set.** FS081 to FS281 shallow sockets (except FS111) (pg 26) plus SFS081 to SFS281 deep sockets (except SFS111) (1/4 to 7/8") (22 pcs) (pg 27).

**224SFFSM Metric 6 Point Shallow/Deep Set.** FSM81 to FSM191 shallow sockets (pg 26) plus SFSM8 to SFSM19 deep sockets (pg 27) (24 pcs) (8 to 19 mm).



1/4" Drive Impact

Shal	low.	mm



	6	A	В	C	D	E	6
5	IMTMM5	8.5	12.1	13.1	22.2	4.1	•
5.5	IMTMM5.5	9.3	12.1	13.1	22.2	4.1	•
6	IMTMM6	10.2	12.1	13.1	22.2	6.1	•
7	IMTMM7	11.5	12.1	13.1	22.2	6.1	•
8	IMTMM8	12.7	12.7	13.1	22.2	6.1	•
9	IMTMM9	14.0	14.0	13.1	22.2	6.1	•
10	IMTMM10	15.2	15.2	13.0	22.2	6.1	•
11	IMTMM11	16.4	16.4	12.8	22.2	6.4	•
12	IMTMM12	17.3	17.3	12.7	22.2	7.1	•
13	IMTMM13	18.7	18.7	12.5	22.2	7.4	•
14	IMTMM14	20.3	20.3	13.1	23.0	8.6	•
15	IMTMM15	21.1	21.1	13.9	23.8	8.9	•

Set includes magnetic storage tray

### Deep, mm



	6	A	В	C	D	E	6
5	SIMTMM5	8.5	12.1	41.9	50.8	4.1	•
5.5	SIMTMM5.5	9.3	12.1	41.9	50.8	4.1	•
6	SIMTMM6	10.2	12.1	41.9	50.8	6.1	•
7	SIMTMM7	11.5	12.1	41.9	50.8	6.1	•
8	SIMTMM8	12.7	12.7	41.9	50.8	6.1	•
9	SIMTMM9	14.0	14.0	41.9	50.8	6.1	•
10	SIMTMM10	15.2	15.2	41.9	50.8	6.1	•
11	SIMTMM11	16.4	16.4	41.9	50.8	6.4	•
12	SIMTMM12	17.3	17.3	41.9	50.8	7.1	•
13	SIMTMM13	18.7	18.7	41.9	50.8	7.4	•
14	SIMTMM14	20.3	20.3	41.9	50.8	8.6	•
15	SIMTMM15	21.1	21.1	41.9	50.8	8.9	•

Set includes magnetic storage tray



Shallow, inches



<b>□</b> Ţ	6	A	В	C	D	E	6
1/4	IMTM8A	13/32	1/2	17/32	7/8	1/4	•
5/16	IMTM10A	1/2	1/2	17/32	7/8	1/4	•
3/8	IMTM12A	9/16	1/2	17/32	7/8	1/4	•
<sup>7</sup> / <sub>16</sub>	IMTM14A	21/32	1/2	17/32	7/8	1/4	•
1/2	IMTM16A	23/32	1/2	17/32	7/8	9/32	•
9/16	IMTM18A	13/16	1/2	9/16	29/32	11/32	•

ASME®/ANSI® B107.2



Deep, inches





	6	A	В	C	D	E	6
1/4	SIMTM8	13/32	15/32	1 1/2	2	1/4	•
5/16	SIMTM10	1/2	1/2	1 1/2	2	1/4	•
3/8	SIMTM12	9/16	9/16	1 1/2	2	1/4	•
7/16	SIMTM14	21/32	21/32	1 1/2	2	1/4	•
1/2	SIMTM16	11/16	11/16	1 1/2	2	9/32	•
9/16	SIMTM18	13/16	13/16	1 1/2	2	11/32	•

ASME/ANSI B107.2

Set includes magnetic storage tray

1/4" Drive Torx® Impact



_						
<b>#</b> ]	6	A	В	C	D	E
E4	IMTLE40A	9/32	1/2	17/32	7/8	5/32
E5	IMTLE50A	5/16	1/2	17/32	7/8	3/16
E6	IMTLE60A	11/32	1/2	17/32	7/8	3/16
E7	IMTLE70A	3/8	1/2	17/32	7/8	1/4
E8	IMTLE80A	7/16	1/2	17/32	7/8	1/4



IMTLE40A

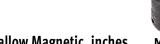
1/4" Drive (Flank Drive®) Magnetic Power





MGMM10

	6	A	В	D	E
5.5	MGMM5.5	9.9	12.4	22.2	1.9
7	MGMM7	11.5	14.0	22.2	2.0
8	MGMM8	12.7	14.0	22.2	2.4
10	MGMM10	14.8	14.8	23.8	3.1



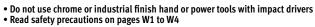
**Shallow Magnetic, inches** MGM8D

<b>□</b> Ţ	6	A	В	D	E
1/4	MGM8D	7/16	1/2	7/8	3/32
5/16	MGM10C	1/2	1/2	15/16	3/32
3/8	MGM12C	9/16	19/32	15/16	1/8
7/16	MGM14C	11/16	11/16	15/16	1/8









## 1/4" Drive (Flank Drive®) Magnetic Power



MGMMS11B

### Deep Magnetic, mm

	6	A	В	D	E
7	MGMMS7A	10.7	12.4	50.8	5.8
8	MGMMS8A	11.8	12.4	50.8	5.8
10	MGMMS10A	14.1	14.1	50.8	6.4
11	MGMMS11B	15.6	15.6	50.8	6.4
12	MGMMS12B	17.3	17.3	50.8	7.1
13	MGMMS13A	18.1	18.1	50.8	7.6



MGMS10A

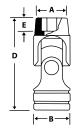
### **Deep Magnetic, inches**

	6	A	В	D	E
1/4	MGMS8A	3/8	7/16	2	3/32
5/16	MGMS10A	3/8	15/32	2	5/16

### 1/4" Drive (Flank Drive) Universal



**TMUM8A** 





TMUS161A GTMU141A





106TMUSA

## Shallow Universal mm

Jiialli	OM OHIVEL	sai, IIIIII		Contains: 4 4				
	<b>6</b>	(12)	A	В	D	E	<b>6</b>	<b>6</b>
5	TMUSM5A*	TMUM5A*	8.1	12.7	29.2	3.3		
5.5	TMUSM5.5A	_	8.5	12.7	29.2	3.6	•	
6	TMUSM6A	TMUM6A	9.6	12.7	29.7	3.8	•	
7	TMUSM7A	TMUM7A	10.7	12.7	30.5	4.3	•	
8	TMUSM8A	TMUM8A	11.8	12.7	30.5	4.8	•	•
9	TMUSM9A	TMUM9A	12.7	12.7	31.2	4.8	•	
10	TMUSM10A	TMUM10A	14.0	12.7	32.5	5.8	•	•
11	TMUSM11A	_	15.4	12.7	33.0	6.6	•	
12	TMUSM12A	TMUM12A	16.5	12.7	34.5	6.9	•	•
13	TMUSM13A	TMUM13A	17.3	12.7	36.8	7.6	•	•
14	TMUSM14A	_	18.8	12.7	38.6	8.6	•	•
15	TMUSM15A	_	20.4	12.7	41.1	8.9	•	•

<sup>\*</sup>Conventional hex

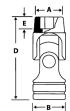
Sets shown include storage tray

### **Shallow Universal, inches Contains:** TMU61A\* 3/16 19/64 1 17/64 1/4 1/2 7/32 TMU71A\* 11/32 1 17/64 1/4 GTMU71A TMUS81A TMU81B 1/4 1/4 3/8 1/2 1 17/64 TMU91A 27/64 1/2 1 5/16 9/32 9/32

5/16	TMUS101A	TMU101A	_	15/32	1/2	1 11/32	9/32	•	•
11/32	_	TMU111A	_	1/2	1/2	1 3/8	9/32		
3/8	TMUS121A	TMU121A	_	17/32	1/2	1 27/64	9/32	•	•
7/16	TMUS141A	TMU141A	GTMU141A	19/32	1/2	1 29/64	13/32	•	•
1/2	TMUS161A	TMU161A	_	11/16	1/2	1 33/64	13/32	•	•
9/16	TMUS181A	TMU181A	_	3/4	1/2	1 35/64	13/32	•	•

<sup>\*</sup>Conventional hex

Sets shown include storage tray



## 1/4" Drive (Flank Drive®) Universal



STMUM10A

E

5.8

В

12.7

41.4

### Deep Universal, inches

GSTMU101A

		-			
	12	A	В	D	E
5/16	GSTMU101A	15/32	15/32	1 11/16	9/32

### 1/4" Drive Torx® Universal



10

### Torx/Universal

Deep Universal, mm

STMUM10A

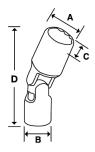
<b>#</b> ]	Stock No.	A	В	D
E8	TSE80	13/32	1/2	1 <sup>3</sup> /8
E10	TSE100	1/2	1/2	1 <sup>3</sup> /8
E12	TSE120	1/2	1/2	1 3/8

A

14.0

TSE80 Applications: Mercedes-Benz® turbo chargers, crankshaft position sensor, sensors and intake bolts, bell housing bolts and ignitions switch.

TSE100 and TSE120 Applications: Mercedes-Benz oil pan bolts, interior and engine fasteners, water pumps, power steering pumps and engine covers on newer models.



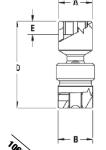


**TSE120** 

### 1/4" Drive (Flank Drive) Impact Swivel









Shallow Swivel. mm

Jiiuttoi			Containor 3				
	6	A	A B		E	6	
5	IPTMM5	8.6	15.4	35.4	4.1		
5.5	IPTMM5.5	9.5	15.4	35.8	4.1		
6	IPTMM6	10.7	15.4	36.2	4.1		
7	IPTMM7	11.5	15.4	37.4	4.3		
8	IPTMM8	12.7	15.4	38.6	4.8	•	
9	IPTMM9	13.9	15.4	39.7	5.3		
10	IPTMM10	15.2	15.4	41.0	5.8	•	
11	IPTMM11	16.4	15.4	42.5	6.4		
12	IPTMM12	17.3	17.9	44.9	6.9	•	
13	IPTMM13	18.7	17.9	46.1	7.4	•	
14	IPTMM14	20.4	17.9	47.6	7.8	•	
15	IPTMM15	21.1	17.9	48.1	7.8	•	

Set includes storage tray (not magnetic)

Set Contains:



•		•••••	. /			
	6	6 A		D	E	6
1/4	IPTM8	27/64	39/64	1 27/64	5/32	•
5/16	IPTM10	1/2	39/64	1 1/2	3/16	•
3/8	IPTM12	35/64	39/64	1 <sup>13</sup> / <sub>16</sub>	7/32	•
7/16	IPTM14	41/64	39/64	1 <sup>13</sup> /16	1/4	•
1/2	IPTM16	45/64	46/64	1 <sup>13</sup> /16	19/64	•
9/16	IPTM18	51/64	45/64	<b>1</b> 7/8	5/16	•

Set includes storage tray (not magnetic)



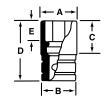


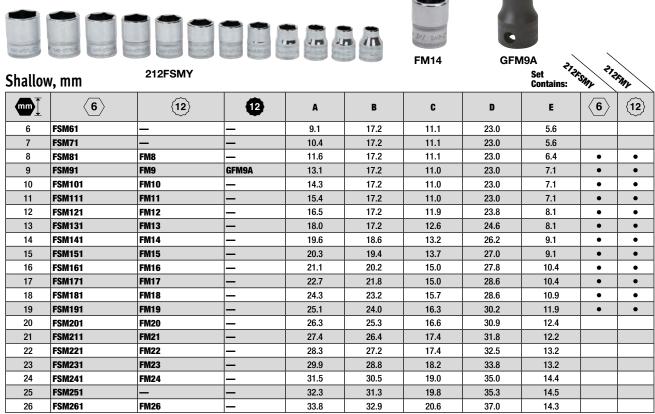




- Do not use chrome or industrial finish hand sockets with impact drivers
- Read safety precautions on pages W1 to W4

### 3/8" Drive (Flank Drive®)





Sets shown include magnetic storage tray

**224SFFSM Metric 6 Point Shallow/Deep Set.** FSM81 to FSM191 shallow sockets (pg 26) plus SFSM8 to SFSM19 deep sockets (pg 27) (24 pcs) (8 to 19 mm).



Sets shown include magnetic storage tray

222SFFS 6 Point Shallow/Deep Set. FS081 to FS281 shallow sockets (except FS111) (pg 26) plus SFS081 to SFS281 deep sockets (except SFS111) (1/4 to 7/8") (22 pcs) (pg 27).

## 3/8" Drive (Flank Drive®)











Set Contains:

### Semi Deep, mm

Semi [	Deep, mr	n		Set Contains:					
	<b>6</b>	(12)	A	В	C	D	E	<b>(6</b> )	
8	FSMS8	FMS8	11.4	17.2	29.3	41.3	7.1	•	
9	FSMS9	FMS9	12.8	17.2	29.3	41.3	7.1	•	
10	FSMS10	FMS10	14.3	17.2	29.3	41.3	7.9	•	
11	FSMS11	_	15.7	17.2	29.3	41.3	9.7	•	
12	FSMS12	FMS12	16.5	17.2	29.3	41.3	9.9	•	
13	FSMS13	FMS13	17.9	17.2	23.2	41.3	10.7	•	
14	FSMS14	FMS14	19.6	18.6	23.2	41.3	10.7	•	
15	FSMS15	FMS15	20.3	19.4	23.2	41.3	10.7	•	
16	FSMS16	FMS16	21.1	20.2	23.0	41.3	10.7	•	
17	FSMS17	FMS17	22.6	21.8	23.0	41.3	11.2	•	
18	FSMS18	FMS18	24.2	23.2	23.0	41.3	11.2	•	
19	FSMS19		25.1	24.0	22.7	41.3	11.7	•	

Sets shown include magnetic storage tray

### Semi Deep, inches

<b>□</b> Ţ	<b>6</b>	(12)	A	В	C	D	E	<b>6</b>
1/4	FSS081	_	13/32	11/16	1 <sup>1</sup> /8	1 <sup>5</sup> /8	7/32	•
9/32	_	FDS091	7/16	11/16	3/4	1 <sup>1</sup> /4	7/32	
5/16	FSS101	FDS101	15/32	11/16	<b>1</b> 1/8	1 <sup>5</sup> /8	9/32	•
3/8	FSS121	FDS121	9/16	11/16	1 <sup>1</sup> /8	1 <sup>5</sup> /8	5/16	•
7/16	FSS141	FDS141	5/8	11/16	1 <sup>1</sup> /8	1 5/8	3/8	•
1/2	FSS161	FDS161	23/32	11/16	31/32	1 5/8	13/32	•
9/16	FSS181	FDS181	25/32	23/32	31/32	1 <sup>5</sup> /8	13/32	•
5/8	FSS201	FDS201	27/32	51/64	31/32	1 5/8	13/32	•
11/16	FSS221	FDS221	15/16	7/8	31/32	1 5/8	7/16	•
3/4	FSS241	FDS241	1	15/16	31/32	1 <sup>5</sup> /8	15/32	•
25/32	_	FDS251	<b>1</b> <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> /32	<b>1</b> <sup>1</sup> / <sub>16</sub>	1 5/8	5/8	
13/16	FSS261	FDS261	<b>1</b> <sup>1</sup> / <sub>16</sub>	1	31/32	1 <sup>5</sup> /8	1/2	•
7/8	FSS281	_	1 5/32	1 3/32	31/32	1 5/8	17/32	•
15/16	_	FDS301	1 1/4	1 7/32	1 3/16	1 3/4	23/32	
1	_	FDS321	1 <sup>5</sup> /16	1 9/32	1 1/4	1 3/4	3/4	·

Set shown includes magnetic storage tray



SFM19





GSF181

реер	, mm			Contains: "						
	<b>6</b>	(12)	A	В	C	D	E	<b>6</b>	(12)	
6	SFSM6	SFM6	9.1	17.2	42.0	54.0	5.6			
7	SFSM7	SFM7	10.5	17.2	42.0	54.0	5.6			
8	SFSM8	SFM8	11.4	17.7	42.0	54.0	7.1	•	•	
9	SFSM9	SFM9	12.8	17.2	42.0	54.0	7.1	•	•	
10	SFSM10	SFM10	14.3	17.2	42.0	54.0	7.9	•	•	
11	SFSM11	SFM11	15.7	17.2	42.0	54.0	9.7	•	•	
12	SFSM12	SFM12	16.5	17.2	42.0	54.0	9.9	•	•	
13	SFSM13	SFM13	18.0	17.2	42.0	54.0	10.7	•	•	
14	SFSM14	SFM14	19.6	18.6	43.3	60.3	10.7	•	•	
15	SFSM15	SFM15	20.3	19.4	43.3	60.3	10.7	•	•	
16	SFSM16	SFM16	21.1	20.0	43.3	60.3	10.7	•	•	
17	SFSM17	SFM17	22.7	21.8	43.6	66.7	11.2	•	•	
18	SFSM18	SFM18	24.3	23.2	49.0	66.7	11.2	•	•	
19	SFSM19	SFM19	25.1	24.0	49.0	66.7	15.5	•	•	
20	SFSM20	_	26.3	25.3	48.1	66.7	12.2			
21	SFSM21	_	27.5	26.4	47.6	66.7	12.4			

Sets shown include magnetic storage tray

## Deep, inches

ССР	, ilicii	<b>.</b>					OUIIL	aiii5.				
<b>I</b>	<b>6</b>	(12)	6	12	A	В	C	D	E	<b>(6</b> )	(12)	(12)
1/4	SFS081	SF081	GSFS081	GSF081	15/32	11/16	1 11/16	2 1/8	1/4	•	•	•
9/32	_	SF091	_	_	7/16	11/16	<b>1</b> 5/8	2 1/8	7/32			
5/16	SFS101	SF101	GSFS101	GSF101	15/32	11/16	1 11/16	2 1/8	7/32	•	•	•
11/32	SFS111	SF111	_	_	1/2	11/16	<b>1</b> 11/16	2 1/8	9/32			
3/8	SFS121	SF121	GSFS121	GSF121	9/16	11/16	1 11/16	2 1/8	5/16	•	•	•
7/16	SFS141	SF141	GSFS141	GSF141	5/8	11/16	1 11/16	2 1/8	3/8	•	•	•
1/2	SFS161	SF161	GSFS161	GSF161	23/32	11/16	1 11/16	2 1/8	7/16	•	•	•
9/16	SFS181	SF181	GSFS181	GSF181	25/32	23/32	1 29/32	2 3/8	7/16	•	•	•
9/32	_	SF191	_	_	13/16	25/32	1 29/32	2 3/8	7/16			•
5/8	SFS201	SF201	GSFS201	GSF201	27/32	13/16	1 29/32	2 3/8	15/32	•	•	•
11/16	SFS221	SF221	GSFS221	GSF221	15/16	7/8	2 3/16	2 <sup>5</sup> /8	1/2	•	•	•
3/4	SFS241	SF241	GSFS241	GSF241	1	1	2 3/16	2 <sup>5</sup> /8	5/8	•	•	•
25/32	_	SF251	_	_	<b>1</b> <sup>1</sup> / <sub>16</sub>	1 1/32	1 3/4	2 <sup>5</sup> /8	5/8			
13/16	SFS261	SF261	GSFS261	GSF261	<b>1</b> <sup>1</sup> / <sub>16</sub>	1	2 1/4	2 3/4	5/8	•	•	•
7/8	SFS281	SF281	GSFS281	GSF281	1 5/32	1 <sup>1</sup> /8	2 1/4	2 3/4	23/32	•	•	•
15/16	SFS301	SF301	GSFS301	GSF301	1 1/4	<b>1</b> 3/16	2 1/4	2 3/4	23/32			•
1	SFS321	SF321	GSFS321	GSF321	<b>1</b> 5/16	1 1/4	2 1/4	2 3/4	13/16			•

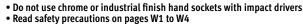
ASME®/ANSI® B107.1

Sets shown include magnetic storage tray

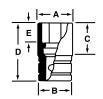








## 3/8" Drive Low Profile







RFM12

### Low Profile, mm

LOWITO	1110, 111111	Idilis: 7	"	, ,						
	6	(12)	A	В	C	D	E	<b>6</b>	(12)	<b>6</b>
8	RFSM8	RFM8	11.6	16.5	_	16.8	3.8	•	•	•
9	RFSM9	RFM9	13	16.5	_	17	4.1			
10	RFSM10	RFM10	14.3	16.5	_	17.3	4.3	•	•	•
11	RFSM11	RFM11	16	16.5	-	17.7	4.8			
12	RFSM12	RFM12	17.2	16.5	9.8	18.1	5.1	•	•	•
13	RFSM13	RFM13	18	17.2	10.3	18.5	5.6	•	•	•
14	RFSM14	RFM14	19.6	18.8	10.5	18.7	6.1	•	•	•
15	RFSM15	RFM15	20.4	19.6	10.8	19.1	6.6	•	•	•
16	RFSM16	RFM16	21.1	20.4	11.4	19.6	7.1	•	•	•
17	RFSM17	RFM17	22.8	22	11.9	20.1	7.4	•	•	•
18	RFSM18	RFM18	24.3	23.6	12.5	20.8	7.9	•	•	•
19	RFSM19	RFM19	25.1	16.5	13.3	21.5	8.2			
20	RAF80	Low Profile Ratchet						•	•	

Sets shown include storage tray





Low Drofile inches

Low Profile	, inches					Contai	ins: 🏋	Mr.
<b>□</b> Ţ	(12)	A	В	C	D	E	(12)	(12)
1/4	RF081	.46	.65	_	.66	.11	•	•
5/16	RF101	.46	.65	_	.66	.15	•	•
11/32	RF111	.49	.65	_	.68	.17		
3/8	RF121	.56	.65	_	.69	.18	•	•
7/16	RF141	.61	.65	_	.70	.19	•	•
1/2	RF161	.71	.69	.39	.72	.21	•	•
9/16	RF181	.77	.74	.42	.75	.24	•	•
5/8	RF201	.83	.80	.47	.79	.28	•	•
11/16	RF221	.93	.90	.49	.81	.30	•	•
3/4	RF241	.99	.96	.50	.82	.31	•	•
	RAF80	Low Profile Ra	atchet				•	

Sets shown include storage tray

## 3/8" Drive (Blue-Point®)

















BLPSM389

Shallow, mm

**BLPSM3815** 

**BLPS3838** 

**BLPS3878** 

BL 8816 BLPLM3822

Deep, mm

.PLM3810	BLPLM3
oon mm	

	<b>6</b>	Length, mm
6	BLPSM386	25.5
7	BLPSM387	25.5
8	BLPSM388	25.5
9	BLPSM389	25.5
10	BLPSM3810	25.5
11	BLPSM3811	25.5
12	BLPSM3812	25.5
13	BLPSM3813	25.5
14	BLPSM3814	27
15	BLPSM3815	27
16	BLPSM3816	27
17	BLPSM3817	27
18	BLPSM3818	27
19	BLPSM3819	29
20	BLPSM3820	29
21	BLPSM3821	29
22	BLPSM3822	31
23	BLPSM3823	31
24	BLPSM3824	31

Shallow, inches					
	<b>6</b>	Length, inches			
1/4	BLPS3814	1			
5/16	BLPS38516	1			
3/8	BLPS3838	1			
7/16	BLPS38716	1			
1/2	BLPS3812	1			
9/16	BLPS38916	<b>1</b> <sup>1</sup> / <sub>16</sub>			
5/8	BLPS3858	<b>1</b> <sup>1</sup> / <sub>16</sub>			
11/16	BLPS381116	<b>1</b> <sup>1</sup> / <sub>16</sub>			
3/4	BLPS3834	1 5/32			
13/16	BLPS381316	1 5/32			
7/8	BLPS3878	1 7/32			
15/16	BLPS381516	1 7/32			
1	BLPS381	1 7/32			

<b>─</b>	(12)	Length, mm
6	BLPLM386	64
7	BLPLM387	64
8	BLPLM388	64
9	BLPLM389	64
10	BLPLM3810	64
11	BLPLM3811	64
12	BLPLM3812	64
13	BLPLM3813	64
14	BLPLM3814	64
15	BLPLM3815	64
16	BLPLM3816	64
17	BLPLM3817	64
18	BLPLM3818	64
19	BLPLM3819	64
20	BLPLM3820	64
21	BLPLM3821	64
22	BLPLM3822	64
23	BLPLM3823	64
24	BLPLM3824	64

### Deep, inches

<b>□</b> Ţ	(12)	Length, inches
1/4	BLPL3814	2 17/32
5/16	BLPL38516	2 17/32
3/8	BLPL3838	2 17/32
7/16	BLPL38716	2 17/32
1/2	BLPL3812	2 17/32
9/16	BLPL38916	2 17/32
5/8	BLPL3858	2 17/32
11/16	BLPL381116	2 17/32
3/4	BLPL3834	2 17/32
13/16	BLPL381316	2 17/32
7/8	BLPL3878	2 17/32
15/16	BLPL381516	2 17/32
1	BLPL381	2 17/32



3/8" Drive Torx® and Special Application

## **Torx**

<b>#</b> \ <u>T</u>	Stock No.	Length, inches
E4	BLPTE384	1 7/32
E5	BLPTE385	1 7/32
E6	BLPTE386	1 7/32
E7	BLPTE387	1 7/32
E8	BLPTE388	1 7/32
E10	BLPTE3810	1 7/32
E12	BLPTE3812	1 7/32
E14	BLPTE3814	1 7/32
E16	BLPTE3816	1 7/32
E18	BLPTE3818	1 7/32
E20	BLPTE3820	1 7/32





**BLPTE3810** 

**BLPTE3818** 







 $\bullet$  Do not use chrome or industrial finish hand sockets with impact drivers  $\bullet$  Read safety precautions on pages W1 to W4

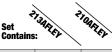
### 3/8" Drive Torx® and Special Application







### \*\*Torx/Shallow



<b>#</b> ]	Stock No.	A	В	C		
E8	FLE80A	15/32	11/16	1 <sup>5</sup> /32		
E10	FLE100A	1/2	11/16	1 <sup>5</sup> /32		•
E11	FLE110A	9/16	11/16	1 5/32	•	
E12	FLE120A	9/16	11/16	1 5/32	•	•
E14	FLE140A	5/8	11/16	1 5/32	•	•
E16	FLE160A	3/4	11/16	1 1/4		•
E18	FLE180A	13/16	25/32	<b>1</b> 5/16		•

Sets shown include magnetic storage tray

### 213AFLEY Combination Drive Shallow Torx Set.

Includes 1/4" drive TLE40A to TLE100A (pg 22), 3/8" drive FLE110A to FLE140A (pg 30) and 1/2" drive SLE160A to SLE240 (pg 40) (13 pcs) (E4 to E24).

### 210AFLEY Combination Drive Shallow *Torx* Set.

1/4" drive TLE40A to TLE80A (pg. 21) plus 3/8" drive FLE100A to FLE180A (except FLE110A) (pg 30) (10 pcs) (E4 to E18).



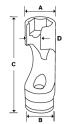
FLEL80

### Clong *Torx* Socket

<b>#</b> ]	Stock No.	Dimension A, Drive End Dia., inches	Dimension B, Socket End Dia., inches	Dimension C, Length, inches
E8	FLEL80	19/32	7/16	5

Application: Fits  $Delco^{\circ}$  alternator Model CS130 found on both GM passenger and light trucks.





### Flank Drive® Flare Nut, mm

rtank brive Traie ivat, iiiii			GU	IIIaiii5i	`	
	Stock No.	A	В	C	D	
10	FRXM10	16.9	18.3	53.3	7.2	•
11	FRXM11	18.1	18.7	53.3	8.3	•
12	FRXM12	19.3	18.3	53.3	8.8	•
13	FRXM13	20.4	19.1	62.5	9.4	•
14	FRXM14	22.0	20.5	62.5	10.4	•
15	FRXM15	22.6	21.0	71.6	11.2	•
16	FRXM16	23.5	21.9	71.6	11.7	•
17	FRXM17	25.1	23.5	78.0	12.7	•
18	FRXM18	25.9	24.3	83.8	13.5	•
10	EDVM40	26.7	25.1	00.0	1/10	







FLEP180

180 FLEPL10

### Torx Plus®

<b>#</b> ]	Stock No.	A	В	C
EP18	FLEP180	3/4	13/16	<b>1</b> 5/16

FLEP180 *Torx Plus* Socket. Use to remove seat hold down nuts on 1999 and later GM® full size pickup trucks. 3/8" square drive.

FLEPL100 Torx Plus Socket. For removal and installation of low profile transmission bolts that secure the valve body to the inside of the transmission. To access the valve body, the bottom pan and filter, which are secured by 6 low profile Torx Plus 10EPL bolts, need to be removed. The low profile fasteners are used on the following GM 6 speed automatic transmissions: 6L50, 6L80, 6L90 and the BMW® model 6L45.



### EL CE120

### Shallow *Torx* with Countersink

<b>#</b> ]	Stock No.	Dimension A, Drive End Dia., inches	Dimension B, Socket End Dia., inches	Dimension C, Length, inches
E12	FLCE120	19/32	11/16	1 <sup>5</sup> /32

Application: Remove/install shallow countersink *Torx* fasteners that hold window regulators in place for *BMW* 5 & 7 Series.





## ODouble Square, inches

	Stock No.	A	В	C	D	E
1/4	F308	1/2	21/32	3/8	27/32	7/32
5/16	F310	9/16	21/32	3/8	27/32	1/4
3/8	F312	21/32	11/16	15/32	15/16	9/32
7/16	F314	25/32	11/16	17/32	1	5/16
1/2	F316	7/8	25/32	17/32	1	5/16
9/16	F318	1	29/32	19/32	1 <sup>1</sup> /8	7/16
5/8	F320	1 1/16	31/32	19/32	1 1/8	7/16



### Flank Drive/Flare Nut, inches

turn Drive, itale ital, illenes						
<b>□</b> Ţ	Stock No.	A	В	C	D	
3/8	FRX121	5/8	3/4	2 3/32	9/32	•
7/16	FRX141	23/32	3/4	2 3/32	11/32	•
1/2	FRX161	13/16	3/4	2 1/8	3/8	•
9/16	FRX181	7/8	13/16	2 15/32	13/32	•
5/8	FRX201	15/16	7/8	2 27/32	15/32	•
11/16	FRX221	1	15/16	3 7/32	1/2	•
3/4	ERY2/11	1 1/16	1	3 11/22	9/16	

Set shown includes magnetic storage tray

### 3/8" Drive Torx® Special Application



### Pipe Plug, mm

mm Ţ	Stock No.	A	В	Stock No.	A	В
6	PMM406A	16.4	31.0	PMP406A	17.2	25.8
8	PMM408A	17.2	31.0	_	17.2	28.6
10	PMM410A	17.2	28.4	PMP410A	18.8	25.4

### Flank Drive®/Pentagon (5 Point)

Stock No.			C		
B2190	1 <sup>1</sup> /8	1/2	1 <sup>1</sup> /16		

A specialty socket for servicing recessed 5 point nuts found on tamper resistant Buffalo covers used by gas, electric and some water companies to protect shutoff gates.







### Swivel Ball Extension, mm

	6	12	A	В	C	D	E
10	PFSXM910B	_	19.1	14.4	9.5	5.6	243.4
11	PFSXM911B	_	19.1	15.6	9.5	6.3	243.8
12	PFSXM912B	<b> </b>	19.1	16.9	9.5	6.8	244.6
13	PFSXM913B	_	19.1	18.4	12.4	7.6	245.9
14	PFSXM914B	_	19.1	19.8	12.4	9.1	247.9
15	PFSXM915B	_	19.1	20.4	12.4	9.1	247.4
13	_	GFLXM13	19.1	19.1	17.3	9.5	320.3

PFSXM910B and PFSXM912B Applications: Toyota® and Lexus® vehicles transmission pan bolts plus several underdash applications. Volvo® vehicle: removing intake faster and easier. **GFLXM13** Applications: Removing water pumps and transmission bolts for Mercedes-Benz® vehicles. Various applications for Caterpillar® engines.

# 211PPPMY

### Pipe Plug, inches

11 Stock No. Stock No. PPM406A 3/16 1 1/8 PP408A PPM408A 1/4 1 1/8 PPM409A 1 1/8 PP409A PPM410A PP410A 5/16 1 1/8 11/32 PPM411A 1 1/8 PP411A

1 1/8

211PPPMY Internal/External Set. PPM406 to PPM412 external sockets plus PP408 to PP412 internal sockets (11 pcs) (3/16 to 3/8").

### **Drag Link**

3/8

Stock No.	A	В	C
GF22	11/16	7/64	1 1/4

PPM412A

Applications include use on the engine oil fill cap on Kawasaki® UN1500, UN1600 and UN2000 motorcycles.



GF22

PP412A

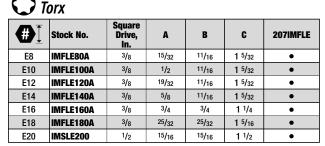




### Weatherhead®

Size, inches	Stock No.	Finish	A	В
3/8	FD120	Chrome	11/16	1 <sup>1</sup> /4
7/16	FD140	Chrome	13/16	1 1/4
15/32	FD150	Chrome	7/8	1 <sup>1</sup> /4
1/2	FD160	Chrome	15/16	1 <sup>1</sup> /4
17/32	FD170	Chrome	1	1 <sup>1</sup> /4
9/16	FD180	Chrome	1 <sup>1</sup> /16	1 <sup>1</sup> /4
19/32	FD190	Chrome	1 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> /4
21/32	FD210	Chrome	1 <sup>3</sup> / <sub>16</sub>	1 3/8
9/16	FD220	Chrome	1 3/16	1 3/8
3/4	FD240	Chrome	1 1/4	1 3/8
25/32	FD250	Chrome	1 1/4	1 3/8

### 3/8" Drive Torx Impact



Set shown includes magnetic storage tray

Various applications on heavy duty trucks with Mercedes-Benz engines.

Use E18 size for F550 brake rotor.

Use E20 size for rear brake caliper bolts on BMW® X5.



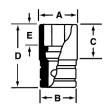


- Impact sockets are heat treated to a lower hardness to add impact resistance
- · Black oxide finish
- · Designed to absorb repeated impact cycling
- Various applications on European vehicles found on BMW® and Mercedes-Benz European vehicles
- Various applications on heavy duty trucks with Mercedes-Benz engines
- . E18 for F550 brake rotor
- E20 for rear brake caliper bolts on BMW X5





- . Do not use chrome or industrial finish hand sockets with impact drivers
- . Use only moderate force on flare nut sockets
- Read safety precautions on pages W1 to W4





212IMFYA

MDF180

				Set Contains:						
Shall	ow, mm					et ontains	TANENT,	OFMA	,	
	6	12	A	В	C	D	E	6	Ø	
8	IMFM8A	IMDFM8A	12.8	17.2	11.1	23.0	6.4	•		
9	IMFM9A	_	14.0	17.2	11.0	23.0	7.1	•		
10	IMFM10A	IMDFM10A	15.1	17.2	11.0	23.0	7.1	•	•	
11	IMFM11A	IMDFM11A	16.7	18.8	11.6	23.8	7.1	•		
12	IMFM12	IMDFM12	18.8	18.0	11.6	23.8	7.1	•	•	
13	IMFM13	IMDFM13	18.8 (19.4)	18.8 (19.4)	12.4 (10.9)	24.6 (23.8)	7.4 (7.6)	•	•	
14	IMFM14	IMDFM14	20.4	20.4	13.5	27.0	9.1	•	•	
15	IMFM15	IMDFM15	21.2	21.2	13.5	27.0	9.1	•	•	
16	IMFM16	IMDFM16	22.7	22.7	14.1	27.8	10.4	•		
17	IMFM17	IMDFM17	24.3	24.3	14.4	28.2	10.2	•	•	
18	IMFM18	IMDFM18	25.1	25.1	14.3	29.0	10.9	•	•	
19	IMFM19	IMDFM19	26.7	26.7	15.6	30.6	11.7	•		
20	IMFM20	IMDFM20	28.3	28.3	16.5	30.9	12.2			
21	IMFM21	IMDFM21	28.8 (29.1)	28.8 (29.1)	17.5	29.5 (32.1)	12.2 (12.4)	•		
22	IMFM22	IMDFM22	29.9	29.9	18.3	32.9	13.0			
23	IMFM23	_	31.5	31.5	19.3	31.5	13.2			
24	IMFM24	_	32.6	32.6	21.1	33.0	14.5	•		

Shallo	w, inch		Set Contains:						
<b>□</b> Ţ	6	12	A	В	C	D	E	6	12
5/16	IMF100A	_	1/2	11/16	3/8	7/8	1/4	•	
3/8	IMF120A	IMDF120A	9/16	11/16	7/16	7/8	3/16	•	•
7/16	IMF140A	IMDF140A	21/32	3/4	7/16	15/16	9/32	•	•
1/2	IMF160	IMDF160	3/4	3/4	7/16	15/16	9/32	•	•
9/16	IMF180	IMDF180	13/16	13/16	7/16	15/16	9/32	•	•
5/8	IMF200	IMDF200	29/32	29/32	7/16	15/16	9/32	•	•
11/16	IMF220	IMDF220	31/32	31/32	9/16	11/32	3/8	•	•
3/4	IMF240	IMDF240	11/16	11/16	9/16	13/32	13/32	•	•
13/16	IMF260	_	11/8	11/8	11/16	13/16	1/2	•	
7/8	IMF280	<b> </b> -	13/16	13/16	3/4	19/32	1/2	•	
15/16	IMF300	_	19/32	19/32	13/16	15/16	17/32	•	
1	IMF320	_	111/32	19/32	13/16	15/16	9/16	•	

Sets shown include magnetic storage tray

IMFS16

Dimensions in ( ) apply to 12 point sockets only.  $\;\;$  Sets shown include magnetic storage tray

212IMFMSYA IMFMS12

210IMFSYA

Semi Deep, mm

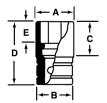
<b>5</b> 01111	Deep,				Contains. •				
	6	A	В	C	D	E	6		
8	IMFMS8A	12.8	17.2	29.3	41.3	6.4	•		
9	IMFMS9A	14.0	17.2	29.3	41.3	7.1	•		
10	IMFMS10A	15.1	17.2	29.3	41.3	9.7	•		
11	IMFMS11A	17.2	17.2	29.3	41.3	9.7	•		
12	IMFMS12	18.0	18.0	29.3	41.3	9.7	•		
13	IMFMS13	19.6	19.6	29.3	41.3	10.4	•		
14	IMFMS14	20.4	20.4	29.3	41.3	10.4	•		
15	IMFMS15	21.2	21.2	29.3	41.3	10.4	•		
16	IMFMS16	22.7	22.7	29.3	41.3	10.4	•		
17	IMFMS17	24.3	24.3	29.3	41.3	11.2	•		
18	IMFMS18	25.1	25.1	29.3	41.3	11.2	•		
19	IMFMS19	26.7	26.7	29.3	41.3	11.7	•		
21	IMFMS21	29.2	25.1	29.3	65.7	12.4			

Semi Deep, inches

Jenn L	reep, ilici		G	•			
	6	A	В	C	D	E	6
5/16	IMFS10A	1/2	11/16	1 5/32	1 <sup>5</sup> /8	1/4	•
3/8	IMFS12A	9/16	11/16	1 5/32	1 <sup>5</sup> /8	9/32	•
7/16	IMFS14A	21/32	3/4	1 5/32	1 <sup>5</sup> /8	11/32	•
1/2	IMFS16	3/4	3/4	1 5/32	1 <sup>5</sup> /8	13/32	•
9/16	IMFS18	13/16	13/16	1 5/32	1 <sup>5</sup> /8	13/32	•
5/8	IMFS20	29/32	29/32	1 5/32	1 <sup>5</sup> /8	13/32	•
11/16	IMFS22	31/32	31/32	1 5/32	1 <sup>5</sup> /8	7/16	•
3/4	IMFS24	1 <sup>1</sup> /16	<b>1</b> <sup>1</sup> / <sub>16</sub>	1 5/32	1 <sup>5</sup> /8	15/32	•
13/16	IMFS26	1 <sup>1</sup> /8	1 1/8	1 5/32	1 <sup>5</sup> /8	1/2	•
7/8	IMFS28	1 <sup>3</sup> / <sub>16</sub>	1 <sup>3</sup> /16	1 5/32	1 <sup>5</sup> /8	17/32	•

Set shown includes magnetic storage tray

Set shown includes magnetic storage tray



214SIMFMYA SIMDFM14	212SIMFYA	SIMF26
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Daan						Set	SINIFNI ns:	MOFM	
Deep,	mm					Contai	ns:	4 /	4
	6	12	A	В	C	D	E	6	12
8	SIMFM8A	SIMDFM8A	12.8	17.2	38.1	54.0	6.4	•	•
9	SIMFM9A	SIMDFM9A	14.0	17.2	38.1	54.0	7.1	•	•
10	SIMFM10A	SIMDFM10A	15.1	17.2	38.1	54.0	9.7	•	•
11	SIMFM11A	SIMDFM11A	17.2	17.2	38.1	54.0	9.7	•	•
12	SIMFM12	SIMDFM12	18.0	18.0	38.1	54.0	9.7	•	•
13	SIMFM13	SIMDFM13	19.6	19.6	38.1	54.0	10.4	•	•
14	SIMFM14	SIMDFM14	20.4	20.4	42.7	60.3	10.4	•	•
15	SIMFM15	SIMDFM15	21.2	21.2	42.7	60.3	10.4	•	•
16	SIMFM16	SIMDFM16	22.7	22.7	42.7	60.3	10.4	•	•
17	SIMFM17	SIMDFM17	24.3	24.3	47.0	66.7	11.2	•	•
18	SIMFM18	SIMDFM18	25.1	25.1	47.0	66.7	11.2	•	•
19	SIMFM19	SIMDFM19	26.7	26.7	47.0	66.7	14.2	•	•
20	SIMFM20	_	28.3	28.3	47.0	66.7	12.2		
21	SIMFM21	SIMDFM21	28.9	28.9	47.0	66.7	12.4	•	•
22	SIMFM22	_	29.9	29.9	51.6	73.0	13.0		
23	SIMFM23	_	31.5	31.5	51.6	73.0	13.0		
24	SIMFM24	SIMDFM24	33.0	33.0	58.2	73.0	14.7	•	•

Deep,	inches			Set Contains:					
	6	A	В	C	D	E	6	6	
5/16	SIMF100A	1/2	11/16	1 <sup>1</sup> / <sub>2</sub>	2 1/8	3/16		•	
3/8	SIMF120A	9/16	11/16	1 1/2	2 1/8	9/32	•	•	
7/ <sub>16</sub>	SIMF140A	21/32	3/4	1 1/2	2 1/8	5/16	•	•	
1/2	SIMF160	3/4	3/4	1 1/2	2 1/8	3/8	•	•	
9/16	SIMF180	13/16	13/16	1 1/2	2 3/8	7/16	•	•	
5/8	SIMF200	29/32	29/32	1 1/2	2 3/8	7/16	•	•	
11/16	SIMF220	31/32	31/32	1 1/2	2 5/8	1/2	•	•	
3/4	SIMF240	<b>1</b> <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>16</sub>	1 1/2	2 5/8	9/16	•	•	
13/16	SIMF260	1 <sup>1</sup> /8	1 <sup>1</sup> /8	2 <sup>1</sup> / <sub>16</sub>	2 3/4	9/16		•	
7/8	SIMF280	1 <sup>3</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>16</sub>	2 1/16	2 3/4	9/16		•	
15/16	SIMF300	1 9/32	1 9/32	2 1/32	2 3/4	9/16		•	
1	SIMF320	1 11/32	1 11/32	2 3/16	2 3/4	5/8		•	

Sets shown include magnetic storage tray

Sets shown include magnetic storage tray

21 2140

3/8" Drive Impact/Special Purpose

Twist sockets remove rounded/damaged fasteners

209TFSMYA



iwist, Snai	llow, inci		Contains: 4				
	6	A	В	C	6	6	
3/8	TFSY121A	11/16 (17.5)	9/16 (14.3)	1 1/4 (31.8)		•	
<sup>7</sup> /16 (11)	TFSY141A	11/16 (17.5)	21/32 (16.7)	1 1/4 (31.8)	•	•	
1/2	TFSY161A	3/4 (19.1)	3/4 (19.1)	1 1/4 (31.8)		•	
9/16	TFSY181A	<sup>13</sup> / <sub>16</sub> (20.6)	<sup>13</sup> / <sub>16</sub> (20.6)	1 1/4 (31.8)		•	
5/8 (16)	TFSY201A	<sup>29</sup> / <sub>32</sub> (23.0)	<sup>29</sup> / <sub>32</sub> (23.0)	1 1/4 (31.8)	•	•	
11/16	TFSY221A	31/32 (24.6)	31/32 (24.6)	1 3/8 (35.0)		•	
3/4 (19)	TFSY241A	1 1/16 (27.0)	1 1/16 (27.0)	1 3/8 (35.0)	•	•	
10	TFSY10A	11/16 (17.5)	<sup>19</sup> / <sub>32</sub> (15.1)	1 1/4 (31.8)	•	•	
12	TFSY12A	11/16 (17.5)	11/16 (17.5)	1 <sup>1</sup> / <sub>4</sub> (31.8)	•	•	
13	TFSY13A	3/4 (19.1)	3/4 (19.1)	1 1/4 (31.8)	•	•	
14	TFSY14A	<sup>13</sup> / <sub>16</sub> (20.6)	<sup>13</sup> / <sub>16</sub> (20.6)	1 1/4 (31.8)	•	•	
15	TFSY15A	13/16 (20.6)	27/32 (21.4)	1 1/4 (31.8)	•	•	
17	TFSY17A	31/32 (24.6)	31/32 (24.6)	1 3/8 (35.0)	•	•	

Sets shown include storage tray



iwist, beep, inches/mm						
6	A	В	C	6		
TSFSY121A	11/16 (17.5)	9/16 (14.3)	2 1/8 (54.0)	•		
TSFSY141A	11/16 (17.5)	21/32 (16.7)	2 1/8 (54.0)	•		
TSFSY161A	3/4 (19.1)	3/4 (19.1)	2 1/8 (54.0)	•		
TSFSY181A	13/16 (20.6)	<sup>13</sup> / <sub>16</sub> (20.6)	2 3/8 (60.3)	•		
TSFSY201A	29/32 (23.0)	<sup>29</sup> / <sub>32</sub> (23.0)	2 3/8 (60.3)	•		
TSFSY221A	31/32 (24.6)	31/32 (24.6)	2 5/8 (66.7)	•		
TSFSY241A	1 1/16 (27.0)	1 1/16 (27.0)	2 5/8 (66.7)	•		
TSFSY10A	11/16 (17.5)	<sup>19</sup> / <sub>32</sub> (15.1)	2 1/8 (54.0)	•		
TSFSY12A	<sup>11</sup> / <sub>16</sub> (17.5)	<sup>11</sup> / <sub>16</sub> (17.5)	2 1/8 (54.0)	•		
TSFSY13A	3/4 (19.1)	3/4 (19.1)	2 1/8 (54.0)	•		
TSFSY14A	13/16 (20.6)	<sup>13</sup> / <sub>16</sub> (20.6)	2 3/8 (60.3)	•		
TSFSY15A	13/16 (20.6)	<sup>27</sup> / <sub>32</sub> (21.4)	2 3/8 (60.3)	•		
TSFSY17A	31/32 (24.6)	31/32 (24.6)	2 5/8 (66.7)	•		
	TSFSY121A TSFSY141A TSFSY161A TSFSY161A TSFSY201A TSFSY201A TSFSY221A TSFSY241A TSFSY10A TSFSY12A TSFSY13A TSFSY14A TSFSY15A	TSFSY121A 11/16 (17.5) TSFSY141A 11/16 (17.5) TSFSY161A 3/4 (19.1) TSFSY161A 13/16 (20.6) TSFSY201A 29/32 (23.0) TSFSY201A 31/32 (24.6) TSFSY21A 1 1/16 (27.0) TSFSY10A 11/16 (17.5) TSFSY12A 11/16 (17.5) TSFSY13A 3/4 (19.1) TSFSY14A 13/16 (20.6) TSFSY15A 13/16 (20.6)	TSFSY121A 11/16 (17.5) 9/16 (14.3) TSFSY141A 11/16 (17.5) 21/32 (16.7) TSFSY161A 3/4 (19.1) 3/4 (19.1) TSFSY181A 13/16 (20.6) 13/16 (20.6) TSFSY201A 29/32 (23.0) 29/32 (23.0) TSFSY21A 31/32 (24.6) 31/32 (24.6) TSFSY241A 1 1/16 (27.0) 1 1/16 (27.0) TSFSY10A 11/16 (17.5) 19/32 (15.1) TSFSY12A 11/16 (17.5) 11/16 (17.5) TSFSY13A 3/4 (19.1) 3/4 (19.1) TSFSY14A 13/16 (20.6) 13/16 (20.6) TSFSY15A 13/16 (20.6) 27/32 (21.4)	TSFSY121A 11/16 (17.5) 9/16 (14.3) 2 1/8 (54.0) TSFSY141A 11/16 (17.5) 21/32 (16.7) 2 1/8 (54.0) TSFSY161A 3/4 (19.1) 3/4 (19.1) 2 1/6 (54.0) TSFSY181A 13/16 (20.6) 13/16 (20.6) 2 3/8 (60.3) TSFSY201A 29/32 (23.0) 29/32 (23.0) 2 3/8 (60.3) TSFSY21A 31/32 (24.6) 31/32 (24.6) 2 5/8 (66.7) TSFSY241A 1 1/16 (27.0) 1 1/16 (27.0) 2 5/8 (66.7) TSFSY10A 11/16 (17.5) 19/32 (15.1) 2 1/8 (54.0) TSFSY12A 11/16 (17.5) 11/16 (17.5) 2 1/8 (54.0) TSFSY13A 3/4 (19.1) 3/4 (19.1) 2 1/8 (54.0) TSFSY14A 13/16 (20.6) 13/16 (20.6) 2 3/8 (60.3) TSFSY15A 13/16 (20.6) 27/32 (21.4) 2 3/8 (60.3)		

Set shown includes storage tray





## 3/8" Drive Magnetic/Surface Drive/Special Purpose





MFIMM15

MFIM101

### Shallow Magnetic, mm

	6	12	A	В	D	E
10	MFIMM10A	MFIMMD10	15.1	17.2	29.1 (28.6)	4.7 (7.1)
12	MFIMM12	_	18.1	19.1	28.6	3.7
13	MFIMM13	_	19.4	19.4	28.6	3.9
15	MFIMM15	_	21.6	21.8	28.6	3.9

Dimensions in () apply to 12 point sockets only.

MFIMMD10 Applications: For use on Detroit Diesel® 60 series. Use on the 3 camshaft gear thrust plate bolts located inside the camshaft gear cover within the front gear case on the engine. The technician has to go through the cover to start the bolts. If one is dropped, it is very labor intensive and time consuming to retrieve. Applies to 2002 and later 60 series *Detroit Diesel* engines with the compact gear case. Earlier engines with the tall gear case have 13 mm 6 point bolts. Please use MFIMM13 for this application.

### **Shallow Magnetic, inches**

	6	A	В	D	E
<sup>5</sup> / <sub>16</sub>	MFIM101	15/32	11/16	1 1/16	3/32
3/8	MFIM121	17/32	11/16	1 <sup>1</sup> /16	1/8
7/16	MFIM141	5/8	11/16	1 1/16	5/32
1/2	MFIM161	25/32	25/32	1 <sup>1</sup> /16	5/32
<sup>9</sup> /16	MFIM181	7/8	7/8	1 <sup>1</sup> /16	5/32



SMFIMM13B

### Deep Magnetic Spring Loaded, mm

	6	A	В	D	E
10	SMFIMM10B	15.1	17.2	50.8	7.1
12	SMFIMM12B	18.1	19.1	50.8	7.1
13	SMFIMM13B	19.4	19.4	50.8	7.6



### **Deep Surface Drive**

Use in the industrial market for assembly line work. The lead in chamfer and special design of these sockets will engage with a fastener while rotating on a power nut runner.



	6	A	В	C	D	E
10	DFSM10	14.5	17.2	42.5	54.0	8.4

## O Deep, inches

	6	A	В	C	D	E
7/16	DFS14	21/32	11/16	1 <sup>21</sup> /32	2 1/8	11/32



## 3/8" Drive (Flank Drive®) Universal









## Shallow, mm

	Set Cont	₹0 <sub>6FSU/</sub> ains:	ZOGFUI	n
	D	E	<b>6</b>	(12)
	43.1	6.4		
	43.5	6.4	•	•
1	43.5	71		

	<b>6</b>	(12)	A	В	D	E	<b>6</b>	(12)
8	FSUM8A	_	11.9	17.2	43.1	6.4		
10	FSUM10A	FUM10A	14.0	18.1	43.5	6.4	•	•
11	FSUM11A	_	15.3	18.1	43.5	7.1		
12	FSUM12A	FUM12A	16.8	18.1	45.5	7.9	•	•
13	FSUM13A	FUM13A	18.1	18.1	45.5	7.9	•	•
14	FSUM14A	FUM14A	18.9	18.1	47.9	8.9	•	•
15	FSUM15A	FUM15A	20.5	18.1	47.9	8.9	•	•
16	FSUM16A	FUM16A	21.3	18.1	47.9	10.2		•
17	FSUM17A	FUM17A	22.9	18.9	50.7	10.4	•	•
18	FSUM18A	FUM18A	24.5	18.9	50.7	10.7		•
19	FSUM19A	FUM19A	25.3	18.9	52.5	11.7		•
22	FSUM22A	_	28.4	18.9	53.9	13.0		

Sets shown include storage tray

### Shallow, inches

Shall	ow, inc	hes			Set Contains:					
<b>□</b> Ţ	<b>6</b>	(12)	A	В	D	E	<b>6</b>	(12)		
5/16	_	FU10B	15/32	11/16	1 5/8	1/4				
3/8	FS12B	FU12B	17/32	11/16	1 5/8	1/4				
7/16	FS14B	FU14B	5/8	11/16	1 5/8	9/32	•	•		
1/2	FS16B	FU16B	23/32	11/16	<b>1</b> <sup>11</sup> / <sub>16</sub>	9/32	•	•		
9/16	FS18B	FU18B	25/32	11/16	1 23/32	11/32	•	•		
5/8	FS20B	FU20B	27/32	11/16	1 25/32	3/8	•	•		
11/16	FS22B	FU22B	15/16	3/4	2	3/8	•	•		
3/4	FS24B	FU24B	1	3/4	2 1/16	<sup>7</sup> /16	•	•		
13/16	_	FU26B	1 3/32	3/4	2 3/32	15/32				
7/8		FU28B	1 <sup>5</sup> /32	3/4	2 3/32	1/2				
15/16	_	FU30A	1 1/4	3/4	2 9/32	9/16				
1	_	FII32A	1 5/16	3/4	2 9/22	9/16				

Sets shown include storage tray







### 207FSU

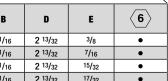
### Deep, mm



,			oontainoi ·					
	<u>(6)</u>	A	В	D	E	6		
8	SFSUM8	11.9	17.2	63.6	6.9			
10	SFSUM10	14.4	18.1	63.6	7.4	•		
11	SFSUM11	15.6	18.1	63.6	7.6			
12	SFSUM12	17.1	18.1	63.6	8.1	•		
13	SFSUM13	18.1	18.1	63.6	8.4	•		
14	SFSUM14	18.9	18.1	63.6	9.1	•		
15	SFSUM15	20.5	18.1	63.6	9.7	•		
16	SFSUM16	21.3	18.1	63.6	10.4			
17	SFSUM17	22.9	18.9	63.6	10.9	•		
18	SFSUM18	24.5	18.9	63.6	10.9			
19	SFSUM19	25.3	18.9	63.6	11.9			

Set shown includes storage tray

### Deep, inches



	<b>6</b>	A	В	D	E	<b>6</b>
3/8	FSU12	9/16	11/16	2 13/32	3/8	•
7/16	FSU14	5/8	11/16	2 13/32	<sup>7</sup> / <sub>16</sub>	•
1/2	FSU16	23/32	11/16	2 13/32	15/32	•
9/16	FSU18	25/32	11/16	2 13/32	17/32	•
5/8	FSU20	27/32	11/16	2 13/32	9/16	•
11/16	FSU22	15/16	3/4	2 15/32	9/16	•
3/4	FSU24	1	3/4	2 15/32	9/16	•

Set shown includes storage tray







Do not use chrome or industrial finish sockets with impact drivers
 Read safety precautions on pages W1 to W4

### 3/8" Drive Torx®/Universal





○ Torx/Universal

<b>#</b> ]	Stock No.	A	В	C	D
E8	FSE80	3/8	11/16	9/32	1 5/8
E10	FSE100	15/32	11/16	<sup>5</sup> /16	1 11/16
E12	FSE120	9/16	11/16	11/32	1 <sup>25</sup> /32
E14	FSE140	5/8	11/16	13/32	1 7/8
E16	FSE160	23/32	3/4	15/32	2 1/16
E18	FSE180	13/16	3/4	1/2	2 1/16
E20	FSE200	15/16	3/4	<sup>9</sup> /16	2 1/8

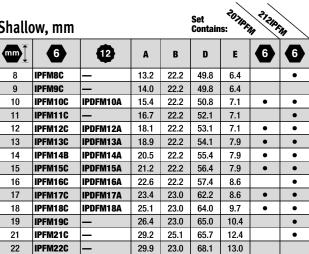
### 3/8" Drive (Flank Drive®)/Impact Swivel







Shal	low.	mm





, , , , , , , , , , , , , , , , , , , ,										
	6	6	A	В	D	E	6			
3/8	IPF12C	IPDF12A	9/16	7/8	1 31/32	1/4				
<sup>7</sup> / <sub>16</sub>	IPF14C	_	21/32	7/8	2 <sup>1</sup> / <sub>16</sub>	9/32	•			
1/2	IPF16C	_	3/4	7/8	2 1/8	5/16	•			
9/16	IPF18C	_	13/16	7/8	2 3/16	5/16	•			
5/8	IPF20C		7/8	7/8	2 1/4	11/32	•			
11/16	IPF22C	_	31/32	29/32	2 17/32	13/32				
3/4	IPF24C		<b>1</b> <sup>1</sup> / <sub>16</sub>	29/32	2 19/32	7/16	•			

Set shown includes storage tray

Set Contains:







IPLFM12B

**IPLF18B** 

Sami Daan mm

IPSFM	121A			સ્	<b>)</b>				
Semi	Deep, mn	1	Set Contains:						
	6	A	В	D	E	6			
8	IPSFM8A	12.8	22.2	62.5	6.4				
10	IPSFM10A	15.1	22.2	64.1	9.7	•			
11	IPSFM11A	17.2	22.2	65.6	9.7				
12	IPSFM12A	18.0	23.0	70.9	9.7	•			
13	IPSFM13A	19.6	23.0	71.9	10.4	•			
14	IPSFM14A	20.4	23.0	72.9	10.4	•			
15	IPSFM15A	22.0	23.0	74.4	10.4	•			
16	IPSFM16A	22.7	23.0	74.9	10.4				
17	IPSFM17A	24.3	23.0	76.0	11.2	•			
18	IPSFM18A	25.1	23.0	77.5	11.2	•			
19	IPSFM19A	26.7	23.0	79.0	14.2				
21	IPSFM21A	29.2	25.1	77.7	12.4				

Cat	includos	magnetic	tro
σeι	Iliciuues	magneuc	ua\

Deep,	, mm		Set Con	ર tains:	PIPLEM	
	6	A	В	D	E	6
8	IPLFM8B	15.8	24.9	70.1	9.1	
10	IPLFM10B	15.8	24.9	70.1	9.1	•
12	IPLFM12B	16.6	24.9	70.1	9.7	•
13	IPLFM13A	18.8	22.2	79.5	10.4	•
14	IPLFM14A	20.4	22.2	81.0	10.4	•
15	IPLFM15A	21.2	22.2	82.6	10.4	•
16	IPLFM16A	23	25	86.1	10.4	
17	IPLFM17A	23.4	23.0	88.3	10.2	•
18	IPLFM18A	25.1	23.0	90.1	10.7	•
19	IPLFM19A	26.7	23.0	91.2	14.2	

**IPLFM21A** 29.2 25.3 92.2 12.4 Set includes magnetic tray

Deep, inches

	6	A	В	D	E
3/8	IPLF12B	9/16	7/8	2 15/16	1/4
7/16	IPLF14B	21/32	7/8	2 3/4	9/32
1/2	IPLF16B	3/4	7/8	2 3/4	5/16
9/16	IPLF18B	13/16	7/8	3 3/16	5/16
5/8	IPLF20B	7/8	7/8	3 1/4	11/32



1/2" Drive (Flank Drive®)



310TWMYA

### SWM241

*3.*\

Shallov	v, mm						Set Contain	S: STUNNYA	OTNINTA	23 TMM2	3SWM/A	OSMANA	3235 MM2
	<b>6</b>	(12)	A	В	C	D	E	<b>6</b>	<b>6</b>	<b>6</b>	(12)	(12)	(12)
10	TWM10A	SWM101A	15.0	23.2	22.2	38.1	7.9	•	•	•		•	•
11	TWM11A	SWM111A	16.6	23.2	22.2	38.1	8.7	•	•	•		•	•
12	TWM12A	SWM121A	18.2	23.2	22.2	38.1	9.5	•		•	•	•	•
13	TWM13A	SWM131A	19.0	23.2	22.2	38.1	10.3	•	•	•	•	•	•
14	TWM14A	SWM141A	20.6	23.2	22.2	38.1	10.3	•	•	•	•	•	•
15	TWM15A	SWM151A	22.2	22.2	22.2	38.1	10.3	•		•	•	•	•
16	TWM16	SWM161	23.8	22.2	22.2	38.1	11.9	•	•	•	•	•	•
17	TWM17	SWM171	24.6	23.2	22.2	38.1	12.7	•	•	•	•	•	•
18	TWM18	SWM181	25.4	23.8	21.4	38.1	14.2	•	•	•	•	•	•
19	TWM19	SWM191	26.3	24.8	21.3	38.1	13.9	•	•	•	•	•	•
20	TWM20	SWM201	26.7	26.1	21.2	38.1	14.0		•	•	•		•
21	TWM21	SWM211	28.3	27.5	21.1	38.1	14.0		•	•	•		•
22	TWM22	SWM221	29.9	28.6	20.9	38.1	14.2		•	•	•		•
23	TWM23	SWM231	31.2	29.9	20.8	38.1	14.5		•	•	•		•
24	TWM24	SWM241	32.5	30.9	22.2	38.8	15.8			•	•		•
25	TWM25	SWM251	33.3	31.7	22.2	38.8	15.8		•	•			•
26	TWM26	SWM261	34.9	33.3	23.8	41.2	15.8		•	•			•
27	TWM27	SWM271	36.5	34.9	25.4	42.8	17.4		•	•			•
28	TWM28	SWM281	38.1	36.5	26.9	44.4	17.4		•	•			•
29	TWM29	SWM291	39.3	38.0	26.1	44.5	17.8		•	•			•
30	TWM30	SWM301	41.0	39.6	26.1	44.5	18.5		•	•			•
31	TWM31	SWM311	42.5	41.2	29.1	47.6	19.1		•	•			•
32	TWM32	SWM321	42.5	41.2	28.9	47.6	19.8		•	•			•

Sets shown include storage tray unless noted \*Does not include storage tray

## Shallow, inches

### **313TWYA**

## Set Contains:

	<b>6</b>	(12)	6	12	A	В	C	D	E	<b>6</b>	6	(12)
3/8	TW121A	SW121A	GTW121A	GSW121A	19/32	29/32	7/8	1 1/2	5/16	•	•	•
7/16	TW141A	SW141A	GTW141A	GSW141A	11/16	29/32	7/8	1 1/2	11/32	•	•	•
1/2	TW161A	SW161A	GTW161A	GSW161A	3/4	29/32	7/8	1 1/2	13/32	•	•	•
9/16	TW181A	SW181A	GTW181A	GSW181A	13/16	29/32	7/8	1 1/2	13/32	•	•	•
5/8	TW201	SW201	GTW201	GSW201	15/16	7/8	7/8	1 1/2	15/32	•	•	•
11/16	TW221	SW221	GTW221	GSW221	31/32	29/32	7/8	1 1/2	1/2	•	•	•
3/4	TW241	SW241	GTW241	GSW241	1 1/32	31/32	7/8	1 1/2	9/16	•	•	•
13/16	TW261	SW261	GTW261	GSW261	1 1/8	1 1/16	7/8	1 1/2	9/16	•	•	•
7/8	TW281	SW281	GTW281	GSW281	1 3/16	1 1/8	7/8	1 1/2	25/32	•	•	•
15/16	TW301	SW301	GTW301	GSW301	1 9/32	1 7/32	27/32	1 17/32	3/4	•	•	•
1	TW321	SW321	GTW321	GSW321	1 11/32	1 9/32	7/8	1 9/16	3/4	•	•	•
1 1/16	TW341	SW341	GTW341	GSW341	1 7/16	1 3/8	1 1/16	1 11/16	3/4	•	•	•
1 1/8	TW361	SW361	GTW361	GSW361	1 1/2	1 7/16	1 31/32	1 3/4	1 3/16	•	•	•
1 3/16	TW381	SW381	_	GSW381	1 5/8	1 9/16	1 1/8	1 3/4	3/4			
1 1/4	TW401	SW401	GTW401	GSW401	1 11/16	1 5/8	1 1/4	1 7/8	3/4		•	
<b>1</b> 5/16	TW421	SW421	_	GSW421	1 3/4	1 11/16	1 1/4	1 7/8	1			
1 3/8	TW441	SW441	_	GSW441	1 13/16	1 3/4	1 7/16	2 1/16	1			
1 7/16	TW461	SW461	_	_	1 15/16	1 7/8	1 5/8	2 1/4	1			
1 1/2	TW481	SW481	_	GSW481	2	1 15/16	1 5/8	2 1/4	1			

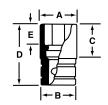
Sets shown include storage tray





- $\bullet$  Do not use chrome or industrial finish hand sockets with impact drivers  $\bullet$  Read safety precautions on pages W1 to W4

## 1/2" Drive (Flank Drive®)







313TSMYA

c	R A	•	A

Deep, mm							Set Contains:	SMYA	Orsm	SMYA
	6	(12)	A	В	С	D	E	<b>6</b>	<b>6</b>	(12)
10	TSM10A	SM10A	15.0	23.2	66.7	82.6	7.9		•	
11	_	SM11A	16.6	23.2	66.7	82.6	8.7			
12	TSM12A	SM12B	18.2	23.2	66.7	82.6	9.5	•	•	•
13	TSM13A	SM13A	19.0	23.2	66.7	82.6	10.3	•	•	•
14	TSM14A	SM14A	20.6	23.2	66.7	82.6	10.3	•	•	•
15	TSM15A	SM15A	22.2	22.2	66.7	82.6	10.3	•	•	•
16	TSM16	SM16	23.8	22.2	51.0	82.6	11.9	•	•	•
17	TSM17	SM17	24.6	23.2	51.0	82.6	12.7	•	•	•
18	TSM18	SM18	25.4	23.8	51.0	82.6	14.3	•	•	•
19	TSM19	SM19	26.3	24.6	52.5	82.6	14.2	•	•	•
20	TSM20	SM20	26.7	26.1	58.5	82.6	14.0	•	•	•
21	TSM21	SM21	28.3	27.5	58.5	82.6	14.0	•		•
22	TSM22	SM22	29.9	28.6	58.5	82.6	14.2	•		•
23	TSM23	SM23	31.2	29.9	58.0	82.6	14.5	•		•
24	TSM24	SM24	32.5	30.9	50.0	82.6	15.8	•		•
25	TSM25	SM25	33.3	31.7	50.0	82.6	15.8			
26	TSM26	SM26	34.9	33.3	50.0	82.6	15.8			
27	TSM27	SM27	36.2	34.9	50.0	82.6	17.5			
28	TSM28	SM28	37.8	36.5	50.0	82.6	17.5			
29	TSM29	SM29	39.3	38.0	64.3	82.6	17.8			
30	TSM30	SM30	41.0	39.6	64.0	82.6	18.5			
31	TSM31	SM31	42.5	41.2	64.0	82.6	19.1			
32	TSM32	SM32	42.5	41.2	63.8	82.6	19.8			

Sets shown include storage tray



Deep, i	nches	313T	SYA			S241	
	6	(12)	6	12	A	В	

0	
GS201	

Set Contains:	375 MA 375	GISM	73514
_		_	~~

Deep, i	inches	3131	SIA			3241	G3201		Contains:	SHA	SKA	SHA
	<b>6</b>	(12)	6	12	A	В	С	D	E	<b>6</b>	6	(12)
3/8	TS121A	S121A	GTS121A	_	19/32	29/32	2 5/8	3 1/4	5/16	•	•	•
7/16	TS141A	S141A	GTS141A	_	3/4	29/32	2 5/8	3 1/4	11/32	•	•	•
1/2	TS161A	S161A	GTS161A	GS161A	3/4	29/32	2 5/8	3 1/4	13/32	•	•	•
9/16	TS181A	S181A	GTS181A	GS181A	13/16	29/32	2 5/8	3 1/4	13/32	•	•	•
5/8	TS201	S201	GTS201	GS201	15/16	7/8	1 31/32	3 1/4	15/32	•	•	•
11/16	TS221	S221	GTS221	GS221	31/32	29/32	1 31/32	3 1/4	1/2	•	•	•
3/4	TS241	S241	GTS241	GS241	1 1/32	31/32	2 5/8	3 1/4	9/16	•	•	•
25/32	_	S251	_	_	<b>1</b> 1/16	1 1/32	2 1/8	3 1/4	5/8			
13/16	TS261	S261	GTS261	GS261	1 1/8	1 1/16	2 5/8	3 1/4	9/16	•	•	•
7/8	TS281	S281	GTS281	GS281	1 3/16	1 1/8	2 5/8	3 1/4	9/16	•	•	•
15/16	TS301	S301	GTS301	GS301	1 9/32	1 7/32	1 31/32	3 1/4	3/4	•	•	•
1	TS321	S321	GTS321	GS321	1 11/32	1 9/32	<b>1</b> 31/32	3 1/4	3/4	•	•	•
1 1/16	TS341	S341	GTS341	GS341	<b>1</b> 7/16	1 3/8	1 31/32	3 1/4	3/4	•	•	•
<b>1</b> 1/8	TS361	S361	GTS361	GS361	1 1/2	1 7/16	<b>1</b> 31/32	3 1/4	1 3/16	•	•	•
<b>1</b> 3/16	TS381	S381	GTS381	GS381	1 5/8	1 9/16	2 5/8	3 1/4	1 3/16			
1 1/4	TS401	S401	GTS401	GS401	<b>1</b> 11/16	1 5/8	2 5/8	3 1/4	1			
<b>1</b> 5/16	TS421	S421	_	-	1 3/4	1 11/16	2 9/16	3 1/4	1			
1 3/8	TS441	S441	_	-	1 13/16	1 3/4	2 9/16	3 1/4	1			
1 7/16	TS461	S461	_	-	1 15/16	1 7/8	2 5/8	3 1/4	1			
1 1/2	TS481	S481	_	_	2	1 15/16	2 5/8	3 1/4	1 1/16			

ASME®/ANSI® B107.1

Sets shown include storage tray

## 1/2" Drive (Flank Drive®)

### Semi Deep, inches

	(12)	A	В	C	D	E
3/8	SDH121	19/32	7/8	13/16	1 1/2	9/32
7/16	SDH141	11/16	29/32	13/16	1 1/2	11/32
1/2	SDH161	3/4	29/32	13/16	1 1/2	3/8
9/16	SDH181	27/32	29/32	13/16	1 1/2	13/32
5/8	SDH201	29/32	7/8	13/16	1 1/2	15/32
11/16	SDH221	31/32	15/16	<b>1</b> 1/16	1 3/4	1/2
3/4	SDH241	1 1/16	1 1/32	<b>1</b> 1/16	1 3/4	19/32
13/16	SDH261	1 1/8	1 3/32	1 1/16	1 3/4	21/32
7/8	SDH281	1 3/16	1 5/32	1 1/8	1 3/4	23/32
15/16	SDH301	1 9/32	1 1/8	1 5/32	1 13/16	23/32
1	SDH321	1 11/32	<b>1</b> 5/16	1 7/32	1 7/8	3/4
<b>1</b> 1/16	SDH341	1 7/16	1 13/32	1 7/32	<b>1</b> 15/16	3/4
1 1/8	SDH361	1 1/2	1 15/32	1 1/4	1 31/32	25/32
<b>1</b> 3/16	SDH381	1 9/16	1 17/32	<b>1</b> 5/16	2	25/32
1 1/4	SDH401	1 9/16	1 17/32	1 9/32	2 1/32	13/16
1 5/16	SDH421	1 21/32	1 5/8	1 5/16	2 1/32	27/32



**SDH201** 

**320TSWMA Metric 6 Point Shallow/Deep Set.** Includes TWM10A to TWM19 shallow sockets (pg 37) and TSM10A to TSM20 deep sockets (pg 38) (20 pcs) (10 to 20 mm).



- 1/2" Drive (Blue-Point®)





**BLPSM1216** 

mm <u>Ţ</u>	<b>6</b>	Length
12	BLPSM1212	38.1
13	BLPSM1213	38.1
14	BLPSM1214	38.1
15	BLPSM1215	38.1
16	BLPSM1216	38.1
17	BLPSM1217	38.1
18	BLPSM1218	38.1
19	BLPSM1219	38.1
20	BLPSM1220	38.1
21	BLPSM1221	38.1
22	BLPSM1222	38.1
24	BLPSM1224	38.1



Shallow, inches

**BLPS1234** 

<b>□</b> Ţ	6	Length
3/8	BLPS1238	1 1/2
7/ <sub>16</sub>	BLPS12716	1 1/2
1/2	BLPS1212	1 1/2
9/16	BLPS12916	1 1/2
5/8	BLPS1258	1 1/2
11/16	BLPS121116	1 1/2
3/4	BLPS1234	1 1/2
13/16	BLPS121316	1 1/2
7/8	BLPS1278	1 1/2
15/16	BLPS121516	1 9/16
1	BLPS121	1 9/16
1 1/16	BLPSB121116	1 9/16
1 1/8	BLPSB12118	1 3/4
<b>1</b> 3/16	BLPSB121316	1 3/4
1 1/4	BLPSB12114	1 3/4







Torx Plus®/External
SLEPL200 Low Profile Torx Plus Socket. For removal and installation of low profile drive plate and flywheel bolts on QR25 Nissan® motors with automatic transmissions. It is similar to the J-45816 Nissan specialty tool. Size is 20EPL. 1/2" drive. Please note: For flywheel bolts on QR25 Nissan motors with manual transmissions, use the 3/8" drive FTX50TPE T50 Torx Plus bit socket (pg 58).



### Torx®/Shallow

<b>#</b> ]	Stock No.	A	В	D
E14	SLE140	21/32	7/8	1 1/2
E16	SLE160A	23/32	27/32	1 1/2
E18	SLE180A	27/32	7/8	1 1/2
E20	SLE200A	15/16	7/8	1 1/2
E24	SLE240	1 1/16	1	1 1/2

213AFLEY Combination Drive Shallow Torx Set. Includes 1/4" drive TLE40A to TLE100A (pg 22), 3/8" drive FLE110A to FLE140A (pg 30) and 1/2" drive SLE160A to SLE240 (pg 40) (13 pcs) (E4 to E24).



Torx, Impact

<b>#</b> ]	Stock No.	A	В	D
E18	IMSLE180	29/32	29/32	1 1/2
E20	IMSLE200	15/16	15/16	1 1/2

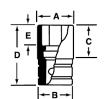


Torx Plus/External (Blue Point®)

#1	Stock No.	Length, inches
E18	BLPTE1218	1 1/2
E20	BLPTE1220	1 1/2
E22	BLPTE1222	1 1/2
E24	BLPTE1224	1 1/2

### 1/2" Drive Special Application

SW420



### O Double Square, inches

<b>□</b> Ţ	Stock No.	A	В	C	D	E
3/8	SW412	23/32	7/8	7/8	1 1/2	5/16
7/16	SW414	51/64	7/8	7/8	1 1/2	3/8
1/2	SW416	29/32	7/8	7/8	1 1/2	13/32
9/16	SW418	31/32	29/32	7/8	1 1/2	7/16
5/8	SW420	1 1/16	1	7/8	1 1/2	1/2
11/16	SW422	1 3/16	1 1/8	7/8	1 1/2	1/2
3/4	SW424	1 9/32	1 3/16	7/8	1 1/2	9/16
13/16	SW426	1 7/16	1 3/8	1	1 5/8	5/8
7/8	SW428	1 1/2	1 7/16	1 1/8	1 3/4	5/8
15/16	SW430	1 5/8	1 9/16	1 1/8	1 13/16	11/16
1	SW432	1 11/16	1 5/8	1 1/4	1 7/8	11/16

ASME®/ANSI® B107.1





WH290

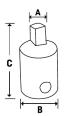
## Drag Link

Diag Lilik			
Stock No.	A	В	C
A26A	3/4	.109	1 11/16
A17A	15/16	.150	1 11/16
A15A	1 3/16	.150	1 11/16

**A26A** 

### Weatherhead®, inches

	Stock No.	A	В
7/8	WH280	1 3/8	1 13/16
29/32	WH290	1 7/16	1 13/16
15/16	WH300	1 1/2	1 13/16





DDM516





22101

Pipe Plug, inches

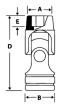
<u>, o, </u>			
Stock No.	A	В	C
PPM516A	1/2	15/16	1 7/16

### Flank Drive® Pentagon

Stock No.	A	В	C
B2191	1 1/8	1/2	1 1/16

**B2191 Pentagon Socket.** Services recessed 5 point nuts found on tamper resistant Buffalo covers used by gas, electric and water companies to protect shutoff gates.

### 1/2" Drive Special Application





**SU24** 

### Universal, inches

	<b>6</b>	A	В	D	E
9/16	SU18	27/32	15/16	2 7/16	11/32
5/8	SU20	15/16	15/16	2 15/32	3/8
11/16	SU22	1 1/16	1 1/16	2 9/16	7/16
3/4	SU24	1 1/8	<b>1</b> 1/8	2 7/8	1/2
13/16	SU26	1 3/16	<b>1</b> 1/8	2 15/16	9/16
7/8	SU28	1 1/4	1 1/8	2 15/16	9/16
15/16	SU30	1 5/16	1 1/8	3	9/16

ASME®/ANSI® B107.1

### 1/2" Drive Flank Drive Impact



IMDM150A



### Shallow, mm

Shallow	v, mm						Contai	ns: 74	11/1	1/4	1/4
$\overline{\mathbf{m}}$	6	12	A	В	С	D	E	6	6	6	12
10	IMM100A	IMDM100A	15	22.6	22.2	38.1	7.9	•		•	•
11	IMM110A	IMDM110A	18.2	22.6	22.2	38.1	8.7	•		•	•
12	IMM120A	IMDM120A	19	24.3	22.2	38.1	9.5	•		•	•
13	IMM130A	IMDM130A	20.6	24.3	22.2	38.1	10.3	•		•	•
14	IMM140A	IMDM140A	22.2	24.3	22.2	38.1	10.3	•		•	•
15	IMM150A	IMDM150A	23.8	26.4	22.2	38.1	10.3	•	•	•	•
16	IMM160A	IMDM160A	24.6	26.4	22.2	38.1	11.9	•	•	•	•
17	IMM170A	IMDM170A	25.4	26.7	22.2	38.1	12.7	•	•	•	•
18	IMM180	IMDM180	26.7	26.7	19.1	38.1	12.7	•	•	•	•
19	IMM190	IMDM190	28.3	28.3	21.3	38.1	12.7	•	•	•	•
20	IMM200	IMDM200	29.9	29.9	21.1	38.1	14.2	•	•		•
21	IMM210	IMDM210	31.5	31.5	21	38.1	14.2	•	•		•
22	IMM220	IMDM220	33.3	33.3	21.4	38.1	15.9	•	•		•
23	IMM230	IMDM230	34.1	34.1	27.8	44.5	15.9	•	•		•
24	IMM240	IMDM240	34.9	34.9	27.8	44.5	15.9	•	•		•
25	IMM250	_	29.8	29.8	27	44.5	15.9		•		
26	IMM260	_	38.1	38.1	33.3	50.8	15.9				
27	IMM270	_	39.4	39.4	27.1	50.8	20.3		•		
29	IMM290	_	41.1	41.1	33.3	50.8	21.1				
30	IMM300		42.7	42.7	32.1	50.8	21.6				
32	IMM320	IMDM320	45.8 (45.7)4	5.8 (45.7)32.1	(36.8)	50.8	22.4 (20.6)				
34	IMM340		47.6	42.9	40.5	52.4	22.4				
36	IMM360	IMDM360	50.5 (50.8)4	5.8 (46.0)40.5	(41.3)	57.2	22.4 (22.2)				
39	_	IMDM390	53.8	39.6	36.8	50.8	22.3				
46	IMM460	_	64.8	47.6	50.3	69.9	29.7				

Dimensions in () apply to 12 point sockets only.

Sets include storage tray

IMDM320 Applications: Uses include axle nuts on Mercedes-Benz® W140 chassis 1992 to 1999 SC and SL Class, Porsche® Boxster, Cayenne and 944 plus BMW® X3, X5 and X6 Series 2007 and later. Other uses include drive shaft nuts on VW® Touareg 2003 and later.

**IMDM360** Applications: Use to remove pinion nuts on 2003 GM® and 2004 Dodge® Trucks with 11.5 AAM axles. Other uses include Duramax® Diesel Front Crankshaft bolts and late model *BMW* axle shafts.

**IMDM390** Applications: Use on front axle hub of 2007 Toyota® Tundra.







- Do not use chrome or industrial finish sockets with impact drivers
- Read safety precautions on pages W1 to W4



hallov	v, inches						Set Contai	3771M1/4 ns:	313IMD	307MOVA
	6	12	A	В	C	D	E	6	12	<b>P</b>
3/8	IM120A	IMD120A	19/32	29/32	7/8	1 1/2	5/16	•	•	•
7/16	IM140A	IMD140A	23/32	29/32	7/8	1 1/2	11/32	•	•	•
1/2	IM160A	IMD160A	13/16	29/32	7/8	1 <sup>1</sup> / <sub>2</sub>	13/32	•	•	•
9/16	IM180A	IMD180A	7/8	29/32	7/8	1 1/2	13/32	•	•	•
5/8	IM200	IMD200	15/16	1	7/8	1 1/2	15/32	•	•	•
11/16	IM220	IMD220	1 <sup>1</sup> /16	1 <sup>1</sup> /16	3/4	1 <sup>1</sup> / <sub>2</sub>	1/2	•	•	•
3/4	IM240	IMD240	1 <sup>1</sup> /8	1 <sup>1</sup> /8	3/4	1 <sup>1</sup> / <sub>2</sub>	1/2	•	•	•
13/16	IM260	IMD260	1 1/4	1 1/4	3/4	<b>1</b> 1/2	1/2	•	•	
7/8	IM280	IMD280	1 <sup>5</sup> /16	1 <sup>5</sup> /16	13/16	1 <sup>1</sup> / <sub>2</sub>	9/16	•	•	
15/16	IM300	IMD300	1 3/8	1 <sup>3</sup> /8	1 1/16	1 3/4	3/4	•	•	
1	IM320	IMD320	1 7/16	1 <sup>7</sup> /16	1 <sup>1</sup> /16	1 3/4	3/4	•	•	
<b>1</b> <sup>1</sup> / <sub>16</sub>	IM340	_	1 9/16	1 <sup>9</sup> /16	1	2	13/16			
1 <sup>1</sup> /8	IM360	IMD360	1 5/8	1 <sup>5</sup> /8	1	2	13/16		•	
<b>1</b> <sup>3</sup> / <sub>16</sub>	IM380	_	1 11/16	1 1/2	1 3/32	2	13/16			
1 <sup>1</sup> / <sub>4</sub>	IM400	IMD400	1 3/4	1 <sup>1</sup> /2	1 5/32	2	13/16		•	
<b>1</b> 5/16	IM420H	_	1 7/8	1 <sup>1</sup> / <sub>2</sub>	1 3/8	2	7/8			
1 3/8	IM440	_	1 <sup>15</sup> /16	1 <sup>1</sup> / <sub>2</sub>	1 3/8	2	7/8			
<b>1</b> <sup>7</sup> / <sub>16</sub>	IM460	_	2	1 <sup>1</sup> / <sub>2</sub>	1 3/8	2	15/16			
1 <sup>1</sup> / <sub>2</sub>	IM480	_	2 1/8	1 <sup>9</sup> /16	1 3/8	2	15/16			
1 9/16	IM500	_	2 1/4	1 5/8	1 11/16	2 5/16	15/16			

Sets shown include storage tray



**312IMMS** 

Semi Deep, m	m					Set Contains:
<b>mm</b> <u>T</u>	6	A	В	D	E	
15	IMMS150	23.7	23.7	55.9	10.7	•
16	IMMS160	24.4	24.4	55.9	11.9	•
17	IMMS170	25.3	25.3	55.9	11.2	•
18	IMMS180	26.8	26.8	55.9	12.7	•
19	IMMS190	28.5	28.5	55.9	14.2	•
20	IMMS200	30.0	30.0	55.9	14.2	•
21	IMMS210	31.6	31.6	55.9	14.2	•
22	IMMS220	33.2	33.2	60.4	14.2	•
23	IMMS230	34.0	34.0	60.4	16.2	•
24	IMMS240	34.9	34.9	60.4	15.5	•
25	IMMS250	36.3	36.3	60.4	16.2	•
27	IMMS270	39.6	39.6	60.4	20.3	•

Set shown includes storage tray



				01	JOHVIIVI TA	Set	315SIMMYA	3125MM	310SIMMYA	305SIMMY	325SIMM
eep, mi	n					Conta	ains: ************************************	MM	MA	"My	MM
<b>mm</b> <u>T</u>	6	A	В	С	D	E	6	6	6	6	6
10	SIMM100A	15.0	23.2	66.7	82.6	7.9	•		•		•
11	SIMM110A	18.2	23.2	66.7	82.6	8.7	•		•		•
12	SIMM120A	19.0	23.2	66.7	82.6	9.5	•		•		•
13	SIMM130A	20.6	23.2	66.7	82.6	10.3	•		•		•
14	SIMM140A	22.2	23.2	66.7	82.6	10.3	•		•		•
15	SIMM150A	23.8	23.8	50.0	82.6	10.3	•	•	•		•
16	SIMM160A	24.6	24.6	50.0	82.6	11.9	•	•	•		•
17	SIMM170A	25.1	25.1	57.9	82.6	11.2	•	•	•		•
18	SIMM180	26.7	26.7	61.0	82.6	12.7	•	•	•		•
19	SIMM190	28.3	28.3	61.0	82.6	14.2	•	•	•		•
20	SIMM200	29.9	29.9	61.0	82.6	14.2	•	•			•
21	SIMM210	31.5	31.5	61.0	82.6	14.2	•	•			•
22	SIMM220	33.1	33.1	71.6	88.9	15.7	•	•			•
23	SIMM230	33.1	33.1	64.3	88.9	15.9	•	•			•
24	SIMM240	34.9	34.9	63.5	88.9	15.9	•	•			•
25	SIMM250	36.5	36.5	63.5	88.9	15.9		•			•
26	SIMM260	34.9	33.3	50.0	88.9	19.8					•
27	SIMM270	39.4	39.4	71.0	88.9	20.3		•			•
28	SIMM280A	41.0	41.0	71.0	88.9	20.8					
29	SIMM290	41.3	41.3	71.6	88.9	21.3				•	•
30	SIMM300	42.9	42.9	71.1	88.9	21.6				•	•
32	SIMM320	45.8	45.8	71.1	88.9	22.4					•
33	SIMM330	46.0	44.5	72.8	88.9	22.4					•
34	SIMM340	49.3	44.5	72.8	88.9	22.6				•	•
35	SIMM350	50.8	45.8	72.8	88.9	22.9				•	•
36	SIMM360	50.8	45.8	72.8	88.9	22.9				•	•

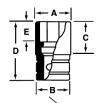
Sets shown include storage tray



Doon inc	_			SIMA		S	et ontains:	309SIMVA	320SM1
Deep, inc	iies		3133	SIIVIA		C	ontains: 🌂 🔪	4	<b>**</b>
	6	A	В	C	D	E	6	6	6
3/8	SIM120A	19/32	29/32	2 5/8	3 1/4	5/16			•
7/16	SIM140A	23/32	29/32	2 5/8	3 1/4	11/32			•
1/2	SIM160A	13/16	29/32	2 5/8	3 1/4	3/8	•	•	•
9/16	SIM180A	7/8	29/32	2 5/8	3 1/4	13/32	•	•	•
5/8	SIM200	31/32	29/32	2 5/8	3 1/4	15/32	•	•	•
11/16	SIM220	1 1/16	<b>1</b> 1/16	2 5/8	3 1/4	1/2	•	•	•
3/4	SIM240	1 1/8	<b>1</b> 1/8	2 5/8	3 1/4	9/16	•	•	•
13/16	SIM260	1 1/4	1 1/4	2 5/8	3 1/4	19/32	•	•	•
7/8	SIM280	1 5/16	<b>1</b> 5/16	2 3/32	3 1/2	9/16	•	•	•
15/16	SIM300	1 3/8	1 3/8	2 3/32	3 1/2	3/4	•	•	•
1	SIM320	1 7/16	1 7/16	2 7/8	3 1/2	3/4	•	•	•
<b>1</b> <sup>1</sup> /16	SIM340	1 9/16	<b>1</b> 9/16	2 11/16	3 1/2	25/32	•		•
1 <sup>1</sup> /8	SIM360	1 <sup>5</sup> /8	1 <sup>5</sup> /8	2 11/16	3 1/2	25/32	•		•
1 <sup>3</sup> /16	SIM380	1 11/16	1 1/2	2 11/16	3 1/2	25/32	•		•
1 <sup>1</sup> /4	SIM400	1 3/4	1 1/2	2 11/16	3 1/2	1	•		•
1 <sup>5</sup> /16	SIM420H	1 7/8	1 1/2	2 11/16	3 1/2	15/16			•
1 <sup>3</sup> /8	SIM440	2	1 1/2	2 11/16	3 1/2	15/16			•
1 7/16	SIM460	2	1 1/2	2 21/32	3 1/2	15/16			•
1 1/2	SIM480	2 1/8	<b>1</b> 9/16	2 5/8	3 1/2	15/16			•
1 9/16	SIM500	2 1/4	1 5/g	2 5/8	3 1/2	15/16			•









### Shallow Thin Wall, inches

<b>□</b> Ţ	6	A	В	C	D	E	6
3/8	IMFS120	19/32	7/8	3/8	1 1/2	7/32	•
7/16	IMFS140	11/16	7/8	9/16	1 1/2	11/32	•
1/2	IMFS160	3/4	7/8	5/8	1 1/2	3/8	•
9/16	IMFS180	13/16	7/8	11/16	1 1/2	13/32	•
5/8	IMFS200	29/32	29/32	3/4	1 1/2	15/32	•
11/16	IMFS220	1	1	13/16	1 1/2	1/2	•
3/4	IMFS240	<b>1</b> <sup>1</sup> / <sub>16</sub>	<b>1</b> <sup>1</sup> / <sub>16</sub>	13/16	1 1/2	1/2	•
13/16	IMFS260	1 <sup>1</sup> /8	1 <sup>1</sup> /8	25/32	1 1/2	1/2	•
7/8	IMFS280	1 7/32	1 7/32	29/32	1 1/2	9/16	•
15/16	IMFS300	<b>1</b> <sup>5</sup> /16	1 <sup>5</sup> /16	1 <sup>3</sup> /16	1 17/32	3/4	•
1	IMFS320	1 3/8	1 <sup>3</sup> /8	1 <sup>3</sup> /16	1 9/16	3/4	•
1 <sup>1</sup> /16	IMFS340	1 <sup>7</sup> / <sub>16</sub>	<b>1</b> <sup>7</sup> / <sub>16</sub>	1 1/4	<b>1</b> 11/16	13/16	
1 <sup>1</sup> /8	IMFS360	1 1/2	1 1/2	1 1/4	1 3/4	13/16	
1 <sup>3</sup> / <sub>16</sub>	IMFS380	1 5/8	1 <sup>5</sup> /8	1 1/4	1 3/4	13/16	
1 <sup>1</sup> /4	IMFS400	<b>1</b> 11/16	<b>1</b> 11/16	1 1/4	1 7/8	13/16	
1 <sup>5</sup> /16	IMFS420	1 3/4	1 3/4	1 1/4	1 7/8	13/16	
1 3/8	IMFS440	<b>1</b> 13/16	<b>1</b> 13/16	1 1/4	2 <sup>1</sup> /16	13/16	
1 7/16	IMFS460	1 29/32	1 29/32	1 3/8	2 1/16	13/16	
<b>1</b> 1/2	IMFS480	2	2	1 <sup>3</sup> /8	2 <sup>1</sup> /16	<sup>13</sup> / <sub>16</sub>	

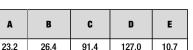


### SIMML150



127.0

10.7



91.4



### SIMMF21A Extra Deep/Thin Wall, mm

Extra Deep, mm

6 SIMML150

mm

15

Sockets are 34% thinner than a standard thin wall socket. Use to access nut on long studs and other hard to reach areas. Ideal for wheel lugs.

<b>mm</b> <u></u>	6	A	В	C	D	E
14	SIMMF14A	20.6	23.8	50.8	76.2	25.4
17	SIMMF17A	23.8	23.8	50.8	76.2	25.4
19	SIMMF19A	25.4	25.4	50.8	76.2	25.4
21	SIMMF21A	28.6	28.6	50.8	76.2	25.4
22	SIMMF22A	30.2	30.2	50.8	76.2	25.4

1 1/2	13/32	•
1 1/2	15/32	•
1 1/2	1/2	•
1 1/2	1/2	•
1 1/2	1/2	•
1 1/2	9/16	•
1 17/32	3/4	•
1 9/16	3/4	•
1 11/16	13/16	
1 3/4	13/16	
1 3/4	13/16	
1 7/8	13/16	
1 7/8	13/16	
2 1/16	13/16	
2 1/16	13/16	
2 1/16	13/16	
1	Set sho	wn includes storage tray

### SIML200 Extra Deep, inches

<b>□</b> Ţ	6	A	В	C	D	E
1/2	SIML160*	25/32	15/16	4 1/4	5	3/8
9/16	SIML180	7/8	15/16	4 1/4	5	13/32
5/8	SIML200	31/32	1	4 1/4	5	15/32
11/16	SIML220	1 <sup>1</sup> /16	1 <sup>1</sup> /16	4 1/4	5	1/2
3/4	SIML240	1 <sup>1</sup> /8	1 <sup>1</sup> /8	4 1/4	5	9/16
13/16	SIML260	1 1/4	1 1/4	4 1/4	5	19/32
7/8	SIML280	1 <sup>5</sup> /16	1 <sup>5</sup> /16	4 1/4	5	21/32
15/16	SIML300	1 3/8	1 3/8	4 1/4	5	23/32
1	SIML320	1 <sup>7</sup> /16	1 <sup>7</sup> /16	4 3/8	5	3/4
1 <sup>1</sup> /16	SIML340	1 <sup>9</sup> /16	1 <sup>9</sup> /16	4 3/8	5	25/32
1 <sup>1</sup> /8	SIML360	1 <sup>5</sup> /8	1 <sup>5</sup> /8	4 3/8	5	25/32

\*ASME®/ANSI® B107.2

- · Use for removing or replacing fuel tank retaining strap nuts
- Also has applications on emergency brake adjustment nuts and stabilizer retainers

## 1/2" Drive Special Application Impact





### **TTWY281A** Twist/Shallow, inches

Removes rounded/damaged fasteners

	Stock No.	A	В	C	D
3/4	TTWY241A	1 1/32	1	1	1 <sup>5</sup> /8
13/16	TTWY261A	<b>1</b> 1/8	1	1	1 <sup>5</sup> /8
7/8	TTWY281A	1 3/16	<b>1</b> <sup>1</sup> / <sub>16</sub>	1	1 <sup>5</sup> /8
15/16	TTWY301A	1 1/4	<b>1</b> 3/16	1	1 <sup>5</sup> /8
1	TTWY321A	1 5/16	1 1/4	1	1 5/g

305TTWYA Shallow Twist Set. TTWY241A to TTWY321A (5 pcs) (3/4 to 1").





SPS10

### Shackle Pin

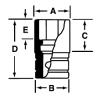
Designed with an oval configuration to service shackle pins on International Harvester® and Kenworth® semi trucks. SPS10 41/64" x 1 3/32" x 1 3/4" long. SPS11 21/32" x 1 17/32" x 1 3/4" long





### Drum Plug

A172A One socket removes virtually all screws in drum plugs or caps. Spring loaded inner wrench handles smaller plugs and recesses automatically when removing large plugs. Use with a 1/2" drive ratchet or impact wrench.





Deep Swivel, inches

SIP18A

	•				
	6	A	В	D	E
9/16	SIP18A	13/16	1 <sup>3</sup> / <sub>16</sub>	3 13/16	11/32
3/4	SIP24A	1 1/32	1 3/16	4 1/4	7/16

### 1/2" Drive Special Application Impact

Semi Deep Swivel, mm

	6	A	В	C	D	E
15	IPSM15	23.0	25.1	_	65.7	12.4
18	IPSM18	26.5	31.5	_	89.1	12.7
21	IPSM21	30.0	31.5	33.8	89.2	12.7
22	IPSM22	32.4	31.5	_	89.1	12.7



IPSM21 Metric Semi Deep Impact Swivel Socket. Designed for GM® and Ford® upper control arm bolts. Welded pivot pin reinforces socket wall and allows full 30° of uninterrupted smooth action for efficient power transfer at any angle.

### 1/2" Drive (Flank Drive®)/Surface Drive



### Flank Drive Deep, mm

SPM19

		6	A	В	С	D	E
Г	17	SPM17	24.6	24.6	66.6	82.6	12.7
Г	19	SPM19	26.4	26.4	64.8	82.6	11.9
Γ	21	SPM21	28.3	28.3	64.8	82.6	12.3



## Surface Drive Shallow, mm

	6	A	В	C	D	E
15	DTM15A	22.3	22.9	21.3	38.1	10.7

## Surface Drive Deep, mm

DTSM13A

Surface drive sockets will engage with a fastener while rotating on a power nut runner

m	<b>)</b>	6	A	В	C	D	E
1	3	DTSM13A	19.3	21.8	65.8	82.6	10.2
1	5 I	DTSM15A	22.3	21.8	65.8	82.6	10.7





		· · · · · · · · ·	,			
<b>□</b> Ţ	6	A B		C	C D	
1/2	DTS16A	3/4	29/32	2 19/32	3 1/4	13/32
9/16	DTS18A	13/16	29/32	2 19/32	3 1/4	13/32

## 1/2" Drive Special Application Power



## **Shallow Double Square, inches**

	8	A	В	C	D	E
3/8	P412	13/32	7/8	7/8	1 1/2	5/16
7/16	P414	13/16	15/16	7/8	1 1/2	3/8
1/2	P416	29/32	1	7/8	1 1/2	5/16
9/16	P418	1	1 <sup>1</sup> /8	7/8	1 1/2	1/2
5/8	P420	1 3/32	1 <sup>3</sup> / <sub>16</sub>	7/8	1 1/2	1/2
11/16	P422	1 7/32	1 1/4	7/8	1 1/2	13/32
3/4	P424	1 <sup>5</sup> /16	1 3/8	7/8	1 1/2	9/16
13/16	P426	1 <sup>7</sup> /16	<b>1</b> 7/16	7/8	1 1/2	5/8
7/8	P428	1 1/2	1 1/2	1 <sup>1</sup> /32	1 3/4	5/8
1	P432	1 23/32	1 3/4	1 1/8	1 3/4	3/4



SIPR426

## Deep Double Square, inches

	8	A	В	C	D	E
13/16	SIPR426	1 <sup>7</sup> / <sub>16</sub>	1 3/8	2 9/16	3 1/4	5/8
1	SIPR432	1 3/4	1 1/2	2 11/16	3 1/2	3/4
1 1/8	SIPR436	1 <sup>15</sup> / <sub>16</sub>	1 <sup>51</sup> / <sub>64</sub>	2 23/32	3 1/2	27/32



**MPK121A** 

### Flank Drive/Magnetic, inches

	,	,			
	6	A	В	D	E
3/8	MPK121A	19/32	7/8	1 1/2	1/8
7/16	MPK141A	11/16	7/8	1 1/2	5/32
1/2	MPK161A	25/32	15/16	1 1/2	5/32
9/16	MPK181A	7/8	<sup>15</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>2</sub>	5/32



8



SIPRL436

Extra Deep Double Square, inches

1 15/16

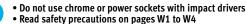


1 1/2

C

4 13/32

D

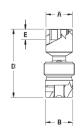


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27/32

### 1/2" Drive (Flank Drive®) Impact Swivel





Shallow Swivel mm

IPDLM12

Shallow Swivel Inches

Contains:

11/32

11/32

11/32 7/16

15/32

1/2

9/16

5/8

11/16 23/32

3/4

3/4

13/16

Silatti	Shallow Swivel, iiiii					Contains:			Silation Swiver, littles				Contai
	6	12	A	В	D	E	6 6		6	12	A	В	D
10	IDI M400		15.0	00.0	70.7	0.7		1/2	IPL16C	IPDL16	25/32	<b>1</b> 1/16	2 29/32
10	IPLM10C	_	15.6	23.8	73.7	9.7	•	9/16	IPL18C	_	7/8	1 1/16	2 29/32
11	IPLM11C	_	17.8	23.8	73.7	9.7	•	5/8	IPL20C	IPDL20	31/32	1 1/16	2 31/32
12	IPLM12C	IPDLM12	18.9	23.8	73.7	9.7	•	11/16	IPL22C		1 1/16	1 1/4	3 1/16
13	IPLM13C	IPDLM13A	19.7	23.8	73.7	8.6	•	3/4					3 1/16
14	IPLM14C	_	21.3	23.8	73.7	8.6	• •		IPL24C	_	1 1/8	1 1/4	
15	IPLM15C		22.6	23.8	73.7	8.6		13/16	IPL26C	_	1 <sup>3</sup> / <sub>16</sub>	1 1/4	3 1/16
16	IPLM16C	IPDLM16A	24.1	30.2	77.8	10.4	•	7/8	IPL28C	<b>—</b>	1 9/32	1 1/4	3 7/32
							_	15/16	IPL30C	<b> </b>	1 11/32	1 1/4	3 7/32
17	IPLM17C	IPDLM17A	25.6	30.2	77.7	10.4	• •	1	IPL32C	_	1 11/32	1 1/4	3 3/16
18	IPLM18C	IPDLM18A	26.7	30.2	77.7	10.4	• •	1 1/16	IPL34C	_	1 7/16	1 1/4	3 7/32
19	IPLM19C	<b> </b>	28.3	30.2	77.7	11.2	• •						
21	IPLM21C	_	31.5	30.2	77.7	12.7		1 1/8	IPL36C	_	1 9/16	1 1/4	3 11/32
22	IPLM22C	_	33.1	30.2	77.8	14.2		1 3/16	IPL38C	_	1 9/16	1 1/4	3 3/8
24	IDI MOAC		24.0	20.2	Q1 O	15.0		1 1/4	IPL40C	<b> </b>	1 5/8	1 1/4	3 7/16

3 7/16 7/8 Sets shown include storage tray Sets shown include storage tray

3/4" Drive (Flank Drive)

# LDH482

## Shallow, inches

IPLM24C

	(12)	A	В	C	D	E
3/4	LDH242	1 <sup>1</sup> /8	1 <sup>7</sup> /16	1 <sup>1</sup> / <sub>4</sub>	2	17/32
13/16	LDH262	1 7/32	1 <sup>7</sup> /16	1 <sup>1</sup> /4	2	11/16
7/8	LDH282	<b>1</b> 5/16	1 <sup>7</sup> / <sub>16</sub>	1 1/4	2	11/16
15/16	LDH302	1 3/8	1 <sup>7</sup> / <sub>16</sub>	1 1/4	2	23/32
31/32	LDH312	1 13/32	1 <sup>7</sup> / <sub>16</sub>	1 1/4	2	23/32
1	LDH322	1 15/32	1 1/2	1 <sup>5</sup> /16	2 1/16	3/4
1 1/16	LDH342	<b>1</b> 9/16	1 1/2	1 3/8	2 1/8	3/4
1 <sup>1</sup> /8	LDH362	1 5/8	1 1/2	1 <sup>7</sup> /16	2 3/16	13/16
1 3/16	LDH382	1 11/16	1 1/2	1 1/2	2 1/4	7/8
1 1/4	LDH402	1 3/4	1 1/2	1 1/2	2 1/4	15/16
<b>1</b> 5/16	LDH422A	1 7/8	1 3/4	1 9/16	2 1/2	7/8
1 3/8	LDH442	1 <sup>15</sup> / <sub>16</sub>	1 3/4	1 9/16	2 1/2	7/8
1 7/16	LDH462	2	1 3/4	1 5/8	2 1/2	15/16

ASME®/ANSI® B107.1

### Shallow, inches

	(12)	A	В	C	D	E
1 1/2	LDH482	2 1/8	1 3/4	1 11/16	2 1/2	1 <sup>1</sup> /16
1 9/16	LDH502	2 3/16	1 3/4	1 7/8	2 5/8	1 5/32
1 5/8	LDH522	2 1/4	1 3/4	1 <sup>7</sup> /8	2 5/8	1 5/32
1 11/16	LDH542	2 3/8	1 3/4	2	2 3/4	1 <sup>3</sup> / <sub>16</sub>
1 3/4	LDH562	2 <sup>7</sup> / <sub>16</sub>	1 3/4	2	2 3/4	1 <sup>3</sup> / <sub>16</sub>
1 13/16	LDH582	2 1/2	1 3/4	2 1/8	2 7/8	1 1/4
1 <sup>7</sup> /8	LDH602	2 9/16	1 3/4	2 1/4	3	1 <sup>5</sup> / <sub>16</sub>
2	LDH642	2 3/4	1 3/4	2 3/8	3 1/8	1 3/8
2 1/16	LDH662	2 15/16	1 3/4	2 3/8	3 1/8	1 3/8
2 1/8	LDH682	2 15/16	1 3/4	2 1/2	3 1/4	1 <sup>7</sup> / <sub>16</sub>
2 3/16	LDH702	2 15/16	1 3/4	2 1/2	3 1/4	1 1/2
2 1/4	LDH722	3 1/8	1 3/4	2 5/8	3 3/8	1 1/2
2 3/8	LDH762	3 1/4	1 3/4	2 7/8	3 5/8	1 3/4

ASME/ANSI B107.1

## 3/4" Drive Special Application



### Shallow, mm

46

|--|

	(12)	A	В	C	D	E
22	LDHM222	31.1	34.6	30.2	50.8	17.1
24	LDHM242	33.4	34.6	31.8	50.8	17.9
27	LDHM272	37.3	39.5	31.8	54.0	19.9
30	LDHM302	41.0	39.8	34.0	57.2	21.8
36	LDHM362	49.3	41.2	35.1	58.7	22.1
41	LDHM412	55.1	44.5	42.9	66.5	26.7





**GLD139** 

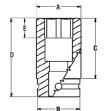


### Deep, inches

<b>□</b> <u>Ť</u>	<b>6</b>	A	В	C	D	E
<b>1</b> <sup>1</sup> /16	LS342	1 9/16	1 1/2	2 3/4	3 1/2	1

### Drag Link, inches

Stock No.	BxA	A	В	C
GLD138	13/64 X 1 3/8	1 3/8	13/64	2 3/16
GLD139	1/4 x 1 11/16	<b>1</b> 11/16	1/4	2 3/16





IMM302

## 3/4" Drive (Flank Drive®) Impact

### Shallow, mm

Shall	ow, mm			Set Contains:					
	6	<b>@</b>	A	В	С	D	E	6	
17	IMM172A	_	29.2	41.1	27.2	50.8	13.7	•	
18	IMM182A	_	31.6	41.1	27.2	50.8	12.7	•	
19	IMM192A	_	31.8	41.1	27.2	50.8	13.7	•	
20	IMM202A	IMMD202B	35.1	41.1	27.2	50.8	14.0	•	
21	IMM212A	_	34.9	41.1	27.2	50.8	15.2	•	
22	IMM222A	_	38.1	41.1	27.2	50.8	15.2	•	
23	IMM232A	_	36.3	41.1	27.2	50.8	16.5	•	
24	IMM242A	_	39.5	41.1	26.4	50.8	16.5	•	
25	IMM252A	_	39.6	41.1	26.4	50.8	16.3	•	
26	IMM262A	_	39.6	41.1	26.4	50.8	17.5	•	
27	IMM272A	_	42.6	41.1	26.4	50.8	19.0	•	
28	IMM282	_	44.7	41.1	32.8	57.2	17.5	•	

IMMD202B 12 Point Metric Shallow Impact Socket. Specific applications include removing the head bolts on Caterpillar® C7, C8, C9 and C10 engines.

						'M'		
	6	12	A	В	С	D	E	6
29	IMM292	_	46.0	41.1	32.8	57.2	18.0	•
30	IMM302	_	47.0	44.5	32.8	57.2	19.1	•
31	IMM312	_	49.2	44.5	32.8	57.2	19.1	•
32	IMM322	_	50.8	44.5	32.8	57.2	20.6	•
33	IMM332	_	50.8	44.5	32.8	57.2	20.3	•
34	IMM342	_	50.8	44.5	32.8	57.2	22.4	•
35	IMM352	_	54.0	44.5	32.8	57.2	22.4	•
36	IMM362	_	54.0	44.5	32.8	57.2	22.4	•
38	IMM382	_	57.2	44.5	32.8	57.2	23.9	•
40	IMM402	_	59.7	44.5	45.5	69.9	28.4	•
41	IMM412	_	60.5	44.5	33.5	57.2	26.2	•

66.7

71.4

44.5

44.5

45.5

52.6

69.9

76.2

29.0





46 50 IMM462

IMM502

				II	M402	IMD302A	`						
Shallow,	inches						Set Contains	129M	17mm	18M 42	SIMD 47	7MD 47	SIMD .
	6	<b>1</b>	A	В	C	D	E	9	6	6	12	12	12
9/16	IM182A	IMD182A	1	1 5/8	1	1 3/4	7/16	•			•		
5/8	IM202A	IMD202A*	1 3/32	1 5/8	1	1 3/4	1/2	•			•		
11/16	IM222A	IMD222A	1 5/32	1 5/8	1	1 3/4	9/16	•			•		
3/4	IM242A	IMD242A	1 1/4	1 <sup>5</sup> /8	1	1 3/4	9/16	•	•		•	•	
13/16	IM262A	IMD262A	1 3/8	1 <sup>5</sup> /8	1 <sup>1</sup> /8	1 7/8	5/8	•	•		•	•	
7/8	IM282A	IMD282A	1 1/2	1 5/8	1 <sup>1</sup> /8	1 7/8	5/8	•	•		•	•	
15/16	IM302A	IMD302A*	1 9/16	1 5/8	1 <sup>1</sup> /8	1 7/8	3/4	•	•		•	•	
1	IM322A	IMD322A*	1 <sup>5</sup> /8	1 <sup>5</sup> /8	1 <sup>1</sup> /4	2	3/4	•	•		•	•	
<b>1</b> <sup>1</sup> / <sub>16</sub>	IM342A	IMD342A	1 <sup>11</sup> / <sub>16</sub>	1 <sup>5</sup> /8	1 1/4	2	3/4	•	•		•	•	
1 <sup>1</sup> /8	IM362	IMD362A	1 7/8	1 <sup>5</sup> /8	1 3/8	2 1/8	3/4	•	•		•	•	
1 <sup>3</sup> / <sub>16</sub>	IM382	IMD382	1 7/8	1 <sup>5</sup> /8	1 <sup>5</sup> / <sub>16</sub>	2 1/8	3/4	•	•		•	•	
1 <sup>1</sup> /4	IM402	IMD402	2	1 3/4	1 <sup>3</sup> /8	2 1/8	13/16	•	•	•	•	•	•
1 <sup>5</sup> /16	IM422	IMD422	2 1/8	1 3/4	1 1/2	2 1/4	7/8	•	•	•	•	•	•
1 3/8	IM442	IMD442	2 1/8	1 3/4	1 <sup>1</sup> / <sub>2</sub>	2 1/4	7/8	•	•	•	•	•	•
1 <sup>7</sup> /16	IM462	IMD462	2 1/4	1 3/4	1 <sup>1</sup> / <sub>2</sub>	2 1/4	7/8	•	•	•	•	•	•
1 1/2	IM482	IMD482	2 1/4	1 3/4	1 1/2	2 1/4	<sup>15</sup> / <sub>16</sub>	•	•	•	•	•	•
1 <sup>9</sup> / <sub>16</sub>	IM502	IMD502	2 7/16	1 3/4	1 9/16	2 3/8	15/16	•	•	•	•	•	•
1 5/8	IM522	IMD522	2 7/16	1 3/4	1 5/8	2 3/8	7/8	•	•	•	•	•	•
1 11/16	IM542	IMD542	2 1/2	1 3/4	1 <sup>13</sup> /16	2 <sup>9</sup> /16	1	•	•	•	•	•	•
1 3/4	IM562	IMD562	2 1/2	1 3/4	1 <sup>13</sup> / <sub>16</sub>	2 9/16	1	•	•	•	•	•	•
1 <sup>13</sup> / <sub>16</sub>	IM582	IMD582	2 5/8	1 3/4	1 <sup>5</sup> /8	2 <sup>5</sup> /8	1 1/4	•		•	•		•
1 7/8	IM602	IMD602	2 5/8	1 3/4	1 <sup>3</sup> / <sub>4</sub>	2 3/4	1 1/8	•		•	•		•
1 <sup>15</sup> /16	IM622A	IMD622	2 3/4	1 3/4	<b>1</b> 9/16	2 27/32	1 <sup>3</sup> /32	•		•	•		•
2	IM642A	IMD642	2 7/8	1 3/4	1 <sup>15</sup> /16	2 7/8	1 <sup>1</sup> /8	•		•	•		•
2 1/16	IM662A	IMD662	3	1 3/4	1 7/8	2 7/8	1 <sup>3</sup> /16	•		•	•		•
2 1/8	IM682A	IMD682	3	1 3/4	1 3/4	3	1 <sup>1</sup> /4	•		•	•		•
2 3/16	IM702A	IMD702	3 1/4	1 3/4	2 3/16	3 3/16	1 <sup>5</sup> /16	•		•	•		•
2 1/4	IM722A	IMD722	3 1/4	1 3/4	2 3/16	3 3/16	1 3/8	•		•	•		•
2 3/8	IM762A	IMD762	3 1/2	1 3/4	2 3/8	3 1/2	1 <sup>7</sup> /16	•		•	•		•

<sup>3 1/2</sup> 1 3/4 2 3/8 3 1/2 1 7/16 \* Applications include repair of heavy duty trucks and off road equipment, most diesel engines including Caterpillar and Cummins plus head bolts and bearing cap bolts. IMD242A Applications: Most Caterpillar head bolts, Detroit Diesel® main bearing cap bolts, K19 Cummins® head bolts.



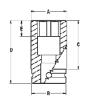




<sup>•</sup> Do not use chrome or industrial finish hand sockets with impact drivers

Read safety precautions on pages W1 to W4





### Deep, mm

SIMDM212

	6	<b>@</b>	A	В	C	D	E
17	SIMM172	_	28.9	41.1	52.6	76.2	12.7
19	SIMM192	_	32.4	41.1	51.8	76.2	14.2
21	SIMM212	SIMDM212	34.2 (33.3)	41.1 (41.3)	37.5 (19)	76.2	14.2 (18.3)
22	SIMM222	_	35.8	41.1	37.4	76.2	14.2
23	SIMM232	_	35.8	41.1	37.2	76.2	16.3
24	SIMM242	_	37.7	41.1	37.0	76.2	16.5
26	SIMM262	_	39.6	41.1	36.7	76.2	16.3
27	SIMM272	_	42.8	41.1	38.4	76.2	19.1
30	SIMM302	_	46.8	41.1	58.2	82.6	18.5
32	SIMM322	_	50.8	44.5	58.9	82.6	19.1
33	SIMM332	_	52.4	44.5	57.4	82.6	22.4
35	SIMM352	_	52.7	44.5	57.2	82.6	21.6
36	SIMM362	_	54.0	44.5	62.5	88.9	22.9
38	SIMM382	_	57.2	44.5	65.3	88.9	23.8
41	SIMM412*	_	55.1	44.5	74.9	100.1	26.7

<sup>\*</sup> Applications include usage on stud piloted, budd style wheels.

Dimensions in ( ) apply to 12-point sockets only.

**SIMDM212** Application: Flywheel bolts on Cummins® ISX engines.



IIAAA	INC	hac
Deep.	1116	いしろ

423SIM

Set	
Contains:	

_ · · · · · ·							
	6	A	В	С	D	E	6
9/16	SIM182	1	1 5/8	2 1/16	3	9/16	•
5/8	SIM202	1 <sup>1</sup> /16	1 5/8	2 1/16	3	9/16	•
11/16	SIM222	1 <sup>1</sup> /8	1 <sup>5</sup> /8	2 1/16	3	9/16	•
3/4	SIM242	<b>1</b> <sup>1</sup> / <sub>4</sub>	1 <sup>5</sup> /8	2	3	9/16	•
13/16	SIM262	1 <sup>3</sup> /8	1 <sup>5</sup> /8	2	3	5/8	•
7/8	SIM282	1 1/2	1 <sup>5</sup> /8	2	3	5/8	•
15/16	SIM302	1 <sup>5</sup> /8	1 <sup>5</sup> /8	2	3	5/8	•
1	SIM322	1 <sup>5</sup> /8	1 <sup>5</sup> /8	2	3	11/16	•
1 <sup>1</sup> /16	SIM342	1 3/4	1 <sup>5</sup> /8	2	3	11/16	•
1 <sup>1</sup> /8	SIM362	1 <sup>3</sup> / <sub>4</sub>	1 <sup>5</sup> /8	2	3	3/4	•
1 3/16	SIM382	2	1 3/4	2 1/4	3 1/4	3/4	•
1 1/4	SIM402	2	1 <sup>3</sup> / <sub>4</sub>	2 1/4	3 1/4	7/8	•
1 <sup>5</sup> /16	SIM422	2 1/8	1 3/4	2 <sup>9</sup> /16	3 1/4	7/8	•
1 <sup>3</sup> /8	SIM442	2 1/8	1 3/4	2 1/4	3 1/4	7/8	•
1 <sup>7</sup> /16	SIM462	2 3/16	1 <sup>3</sup> / <sub>4</sub>	<b>2</b> 1/2	3 1/2	7/8	•
1 1/2	SIM482	2 1/4	1 <sup>3</sup> / <sub>4</sub>	<b>2</b> 1/2	3 1/2	15/16	•
1 <sup>9</sup> /16	SIM502	2 <sup>5</sup> /16	1 3/4	<b>2</b> 1/2	3 1/2	15/16	•
1 5/8	SIM522	2 <sup>7</sup> /16	1 3/4	<b>2</b> 1/2	3 1/2	<sup>15</sup> / <sub>16</sub>	•
1 <sup>11</sup> / <sub>16</sub>	SIM542	2 1/2	1 3/4	<b>2</b> 1/2	3 1/2	1	•
1 3/4	SIM562	2 1/2	1 <sup>3</sup> / <sub>4</sub>	2 1/2	3 1/2	1	•
1 <sup>13</sup> / <sub>16</sub>	SIM582	2 5/8	1 3/4	2 3/4	3 3/4	1 <sup>1</sup> /16	•
1 7/8	SIM602	2 11/16	1 3/4	2 3/4	3 3/4	1 1/8	•
2	SIM642A	2 13/16	1 3/4	2 3/4	3 3/4	1 <sup>1</sup> /8	•

Larger sizes available on special order.



### Thin Wall, inches

<b>□</b> Ţ	12	A	В	C	D	E
3/4	IMFDL242	1 <sup>3</sup> /8	1 <sup>5</sup> /8	4 3/4	5 <sup>3</sup> / <sub>4</sub>	1/2

Larger sizes available on special order.

### **IMFDL242 Deep Thin Wall Impact Socket**

- Clearance on certain Caterpillar® head bolts requires a thin walled socket that needs to be a certain length
- Designed to remove the head bolts on Caterpillar C12, C15, C16 and 3406Es where the front 2 and back 2
  head bolts are positioned under the valve covers
- Additional applications include Detroit Diesel® main bearing cap bolts and 19 mm head bolts on Mercedes-Benz® MBE904/MBE906 EGR engines (2007 and later)







**IM243R** 

### 3/4" Locking Rings and Pins

For use on SIM, IM, IMM and SIMM sockets and other sockets on this page.

Stock No.	Drive Size	Description	Use with						
IM182R 3/4"		Rubber Locking Ring	All 3/4" Drive Sockets/Accessories						
IMR2 3/4"		Socket Retainer	All 3/4" Drive Sockets/Accessories						
Use the following for the IM124E	Use the following for the IM124B Adaptor:								
IM243R	1"	Locking Ring	1" Drive Sockets/Accessories Up to 13/8"						
IM243P 1"		Steel Locking Pin	1" Drive Sockets/Accessories Up to 1 3/8"						

### 1" Drive (Flank Drive) Impact



IMM503

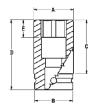
### Shallow, 6 Point, mm

	* *						
	6	A	В	С	D	E	6
27	IMM273	44.5	53.8	27.0	57.2	17.5	•
30	IMM303	47.8	53.8	27.0	57.2	17.5	•
32	IMM323	50.8	53.8	33.3	63.5	19.1	•
33	IMM333	52.3	53.8	33.3	63.5	22.4	•
36	IMM363	57.2	57.2	34.3	63.5	22.4	•
35	IMM353	53.8	53.8	33.5	63.5	22.4	•
38	IMM383	59.7	57.2	40.1	69.9	23.6	•
41	IMM413A	59.9	57.2	39.6	69.9	26.4	•
46	IMM463	69.9	60.5	44.2	76.2	30.0	•
50	IMM503	69.9	60.5	49.3	82.6	31.2	•
55	IMM553	82.6	60.3	46.7	82.6	31.8	•
60	IMM603	88.9	57.2	51.6	88.9	38.1	•
65	IMM653	92.1	60.5	63.8	101.6	45.7	•
70	IMM703	95.3	60.5	62.2	101.6	45.7	•
75	IMM753	104.8	60.5	67.1	108.0	51.6	•
80	IMM803	108.7	61.1	65.9	108.7	47.6	•



WARNING







IM703

Shallo	w, 6 Pc	oint, iı	nches	Set STIM STORM STORM					
	6	A	В	C	D	E			
3/4	IM243	1 7/16	2 1/8	1	2 1/8	11/16	•		
13/16	IM263	1 <sup>7</sup> / <sub>16</sub>	2 1/8	1	2 1/8	11/16	•		
7/8	IM283	1 1/2	2 1/8	1	2 1/8	11/16	•		
15/16	IM303	1 19/32	2 1/8	1	2 1/8	11/16	•		
1	IM323	1 11/16	2 1/8	1 1/16	2 1/4	11/16	•		
1 1/16	IM343	1 3/4	2 1/8	1 1/16	2 1/4	11/16	•		
1 <sup>1</sup> /8	IM363	1 7/8	2 1/8	1 <sup>1</sup> /16	2 1/4	11/16	•		
1 3/16	IM383	1 7/8	2 1/8	<b>1</b> <sup>1</sup> / <sub>16</sub>	2 1/4	11/16	•		
1 1/4	IM403	2	2 1/8	1 3/16	2 3/8	3/4	•		
1 <sup>5</sup> / <sub>16</sub>	IM423	2 1/16	2 1/8	1 <sup>15</sup> / <sub>16</sub>	2 1/2	7/8	•		
1 3/8	IM443	2 1/8	2 1/8	1 15/16	2 1/2	7/8	•		
1 7/16	IM463	2 1/4	2 1/4	1 7/16	2 1/2	15/16	•		
1 1/2	IM483B	2 3/8	2 1/4	1 7/16	2 5/8	15/16	•		
1 9/16	IM503A	2 3/8	2 1/4	1 <sup>7</sup> /16	2 5/8	15/16	•		
1 5/8	IM523A	2 3/8	2 1/4	1 5/8	2 3/4	1 1/16	•		
1 11/16	IM543	2 9/16	2 3/8	1 5/8	2 3/4	1 <sup>1</sup> /16	•		
1 3/4	IM563	2 5/8	2 3/8	1 23/32	2 7/8	1 5/32	•		
1 13/16	IM583	2 3/4	2 3/8	1 23/32	2 15/16	1 3/16	•		
1 7/8	IM603	2 3/4	2 3/8	1 23/32	2 15/16	1 3/16	•		
1 15/16	IM623	2 3/4	2 3/8	1 23/32	2 15/16	1 3/16	•		
2	IM643	3	2 3/8	1 31/32	3 1/8	1 9/32	•		
2 1/16	IM663	3	2 3/8	1 31/32	3 1/8	1 9/32		•	
2 1/8	IM683	3 1/8	2 3/8	2 3/32	3 1/4	1 9/32		•	
2 3/16	IM703	3 1/4	2 3/8	<b>2</b> 5/32	3 11/32	<b>1</b> 7/16		•	
2 1/4	IM723	3 1/4	2 3/8	2 <sup>5</sup> / <sub>32</sub>	3 11/32	1 7/16		•	
2 5/16	IM743	3 3/8	2 3/8	<b>2</b> 5/32	3 1/2	1 <sup>1</sup> / <sub>2</sub>		•	
2 3/8	IM763	3 1/2	2 3/8	2 5/32	3 1/2	1 1/2		•	
2 7/16	IM783	3 1/2	2 3/8	2 5/32	3 1/2	1 1/2		•	
2 1/2	IM803	3 1/2	2 3/8	2 1/8	3 5/8	1 <sup>5</sup> /8		•	
2 9/16	IM823	3 5/8	2 3/8	2 1/8	3 5/8	1 <sup>5</sup> /8		•	
2 5/8	IM843	3 3/4	2 3/8	2 5/16	3 3/4	1 5/8		•	
2 11/16	IM863	3 3/4	2 3/8	2 1/2	4	1 13/16		•	

Shallo	ow, 6 Po	oint, ir	Set SZIJA SZZAM SZZAM						
	6	A	В	C	D	E			
2 3/4	IM883	3 3/4	2 3/8	2 7/16	4	1 13/16		•	
2 13/16	IM903	4	2 3/8	2 7/16	4	1 13/16		•	
2 7/8	IM923	4	2 3/8	2 7/16	4	1 13/16		•	
2 15/16	IM943	4 1/8	2 3/8	2 5/8	4 1/4	2		•	
3	IM963	4 1/4	2 3/8	2 5/8	4 1/4	2 1/16		•	
3 1/8	IM1003	4 1/4	2 3/8	2 9/16	4 1/4	2 1/16		•	
3 1/4	IM1043	4 1/2	2 3/8	2 9/16	4 1/4	2 1/16		•	
3 3/8	IM1083	4 5/8	2 3/8	2 3/4	4 1/2	2 1/4		•	
3 1/2	IM1123	4 3/4	2 3/8	3	4 3/4	2 1/4		•	
3 5/8	IM1163	5	2 3/8	2 15/16	4 3/4	2 5/16			•
3 11/16	IM1183	5 5/16	2 3/8	3 3/16	5	2 7/16			•
3 3/4	IM1203	5 1/8	2 3/8	2 7/8	4 3/4	2 3/8			•
3 13/16	IM1223	5 3/8	2 3/8	3 1/8	5	2 1/2			•
3 7/8	IM1243	5 1/4	2 3/8	3 1/8	5	2 9/16			•
3 15/16	IM1263	5 3/8	2 3/8	3 3/8	5 1/4	2 9/16			•
4	IM1283	5 1/2	2 3/8	3 1/16	5	2 9/16			•
4 1/16	IM1303	5 1/2	2 3/8	3 1/16	5	2 9/16			•
4 1/8	IM1323	5 <sup>9</sup> / <sub>16</sub>	2 3/8	3 1/16	5	2 9/16			•
4 3/16	IM1343	6	2 3/8	3	5	2 9/16			•
4 1/4	IM1363	5 3/4	2 3/8	3 1/4	5 1/4	2 5/8			•
4 5/16	IM1383	5 <sup>25</sup> / <sub>32</sub>	2 3/8	3 7/16	5 1/2	2 5/8			•
4 3/8	IM1403	5 13/16	2 3/8	3 3/16	5 1/4	2 5/8			•
4 7/16	IM1423	6	2 3/8	3 3/16	5 1/4	2 11/16			•
4 1/2	IM1443	6	2 3/8	3 3/16	5 1/4	2 5/8			•
4 <sup>9</sup> /16	IM1463	6 1/2	2 3/8	3 7/16	5 1/2	2 3/4			•
4 <sup>5</sup> /8	IM1483	6 <sup>7</sup> /16	2 3/8	3 7/8	6	3 1/16			•
4 3/4	IM1523	6 5/8	2 3/8	3 5/8	5 3/4	2 7/8			•
4 7/8	IM1563	7	2 3/8	3 9/16	5 3/4	3			•
5	IM1603	7	2 3/8	3 1/2	5 3/4	3			•
5 <sup>3</sup> /8	IM1723	7 1/2	2 3/8	4 7/16	6 3/4	3 9/16			•
5 3/4	IM1843	8 1/4	2 3/8	4 5/16	6 3/4	3 9/16			•



SIMM323

## Deep, mm

	6	A	В	C	D	E
30	SIMM303	46.0	53.7	46.0	76.2	19.1
32	SIMM323	52.3	53.7	76.2	82.6	22.4
33	SIMM333*	52.3	53.7	53.3	82.5	22.4
38	SIMM383	60.3	57.2	59.7	88.9	25.4

 $<sup>\</sup>ensuremath{^{\star}}$  Applications include use on wheel lug nuts on Hub Piloted wheel systems.





ep, i	nches			SIM5	63	Set Con	\$79SIM	520SM	5175M
DŢ	6	A	В	C	D	E			
7/8	SIM283	1 19/32	2 1/8	1 13/16	3	5/8	•		
15/16	SIM303	1 19/32	2 1/8	1 13/16	3	11/16	•		
1	SIM323	1 <sup>19</sup> /32	2 1/8	1 <sup>13</sup> / <sub>16</sub>	3	3/4	•		
l <sup>1</sup> /16	SIM343	1 <sup>13</sup> / <sub>16</sub>	2 1/8	1 <sup>13</sup> / <sub>16</sub>	3	3/4	•		
1 <sup>1</sup> /8	SIM363	1 <sup>13</sup> / <sub>16</sub>	2 1/8	1 <sup>13</sup> / <sub>16</sub>	3	3/4	•		
3/16	SIM383	1 <sup>13</sup> / <sub>16</sub>	2 1/8	<b>1</b> 13/16	3	3/4	•		
1 1/4	SIM403	2 1/16	2 1/8	2 1/16	3 1/4	7/8	•		
5/16	SIM423*	2 1/16	2 1/8	2 1/16	3 1/4	7/8	•		
1 3/8	SIM443	2 1/16	2 1/8	2 1/16	3 1/4	7/8	•		
1 <sup>7</sup> / <sub>16</sub>	SIM463A SIM483B**	2 <sup>1</sup> / <sub>4</sub> 2 <sup>3</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub> 2 <sup>1</sup> / <sub>4</sub>	2 3/32	3 1/4	29/32	•		
9/16	SIM503A	2 3/8	2 1/4	2 <sup>11</sup> / <sub>32</sub> 2 <sup>11</sup> / <sub>32</sub>	3 1/2 3 1/2	1 1	•		
1 <sup>5</sup> /16 1 <sup>5</sup> /8	SIM523B	2 3/8	2 1/4	2 1/32	3 1/2	1	•		
11/16	SIM543	2 1/2	2 3/8	2 7/16	3 5/8	1 1/8	•		
1 3/4	SIM563	2 3/4	2 3/8	2 11/16	3 7/8	1 1/8	•		
13/16	SIM583	2 3/4	2 3/8	2 11/16	3 7/8	1 3/16	•		
1 7/8	SIM603	2 3/4	2 3/8	2 11/16	3 7/8	1 3/16	•		
15/16	SIM623	3	2 3/8	2 15/16	4 1/8	1 1/4	•		
2	SIM643	3	2 3/8	2 15/16	4 1/8	1 <sup>5</sup> /16	•		
2 1/16	SIM663	3	2 1/4	2 15/16	4 1/4	1 5/16		•	
2 1/8	SIM683	3 1/8	2 1/4	2 7/8	4 1/4	1 <sup>5</sup> /16		•	
2 3/16	SIM703	3 1/4	2 1/4	3 1/8	4 1/2	1 1/2		•	
2 1/4	SIM723	3 1/4	2 3/8	3 1/8	4 1/2	1 1/2		•	
2 5/16	SIM743	3 3/8	2 <sup>3</sup> /8	3 1/16	4 1/2	1 1/2		•	
2 <sup>3</sup> /8	SIM763	3 1/2	2 3/8	3 1/16	4 1/2	1 1/2		•	
2 7/16	SIM783	3 1/2	2 3/8	3 1/16	4 1/2	1 1/2		•	
2 1/2	SIM803	3 1/2	2 3/8	3 1/4	4 3/4	1 <sup>5</sup> /8		•	
2 9/16	SIM823	3 5/8	2 3/8	3 1/4	4 3/4	1 5/8		•	
2 5/8	SIM843	3 3/4	2 3/8	3 1/4	4 3/4	1 5/8		•	
11/16	SIM863	3 3/4	2 3/8	3 1/2	5	1 13/16		•	
2 3/4	SIM883	3 3/4	2 3/8	3 7/16	5	1 13/16		•	
13/16	SIM903	4	2 3/8	3 7/16	5	1 3/4		•	
2 7/8	SIM923	4 4 1/8	2 <sup>3</sup> / <sub>8</sub>	3 <sup>7</sup> / <sub>16</sub> 3 <sup>3</sup> / <sub>8</sub>	5	1 <sup>3</sup> / <sub>4</sub>		•	
3	SIM943 SIM963	4 1/4	2 3/8	3 5/8	5 5 <sup>1</sup> / <sub>4</sub>	1 3/4		•	
3 <sup>1</sup> /8	SIM1003	4 1/4	2 3/8	3 9/16	5 1/4	1 7/8		•	
3 1/4	SIM1043	4 1/2	2 3/8	3 9/16	5 <sup>1</sup> / <sub>4</sub>	1 7/8		•	
3 3/8	SIM1083	4 1/2	2 3/8	4	5 3/4	2 1/4		•	
3 1/2	SIM1123	4 3/4	2 3/8	4	5 3/4	2 1/4		•	
3 <sup>5</sup> /8	SIM1163	5	2 3/8	3 15/16	5 3/4	2 1/4			•
11/16	SIM1183	5 5/16	2 3/8	3 15/16	5 3/4	2 7/16			•
3 3/4	SIM1203	5 1/8	2 3/8	3 7/8	5 3/4	2 1/4			•
13/16	SIM1223	5 3/8	2 3/8	4 1/8	6	2 1/2			•
3 7/8	SIM1243	5 1/4	2 3/8	4 3/8	6 <sup>1</sup> /4	2 9/16			•
15/16	SIM1263	5 1/2	2 <sup>3</sup> / <sub>8</sub>	4 3/8	6 1/4	2 3/8			•
4	SIM1283	5 1/2	2 <sup>3</sup> /8	4 5/16	6 <sup>1</sup> / <sub>4</sub>	2 9/16			•
1/16	SIM1303	5 1/2	2 3/8	4 5/16	6 1/4	2 1/2			•
4 1/8	SIM1323	5 9/16	2 3/8	4 5/16	6 1/4	2 9/16			•
3/16	SIM1343	6	2 3/8	4 1/4	6 1/4	2 1/2			•
1 7/ <sub>16</sub>	SIM1423	6	2 3/8	4 3/16	6 1/4	2 11/16			•
4 1/2	SIM1443	6	2 3/8	4 7/16	6 1/2	2 3/4			•
1 9/16 4 5/0	SIM1463	6 1/2	2 3/8	4 7/16	6 1/2	2 3/4			•
4 5/8	SIM1483	6 5/8	2 3/8	4 3/8	6 1/2	2 13/16			•
4 <sup>3/4</sup> 4 <sup>7/8</sup>	SIM1523	6 <sup>5</sup> /8	2 3/8 2 3/8	4 <sup>5</sup> / <sub>8</sub> 4 <sup>9</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>4</sub> 6 <sup>3</sup> / <sub>4</sub>	2 7/8			•
4 ′/8 5	SIM1563	7	2 3/8	4 <sup>9</sup> /16 4 <sup>1</sup> / <sub>2</sub>	6 3/4	3			•
<u>5</u> 5 <sup>3</sup> /8	SIM1603 SIM1723	7 1/2	2 3/8	5 <sup>7</sup> / <sub>16</sub>	7 3/4	3 9/16			
J ~/6	SIM1843	8 1/4	2 3/8	5 <sup>7</sup> /16	7 3/4	3 9/16			

<sup>\*</sup> Applications include use on heavy duty wheel lug nuts.
\*\* Applications include use on wheel lug nuts on stud piloted/budd style wheel systems.





## 1" Drive Special Application Impact





### **Shallow Single Square, inches**

	4	A	В	C	D	E
3/4	IM724	1 <sup>15</sup> /16	2 1/8	31/32	2 1/8	21/32
13/16	IM726	<b>1</b> <sup>15</sup> / <sub>16</sub>	2 1/8	31/32	2 1/8	21/32
7/8	IM728	2 1/16	2 1/8	31/32	2 1/8	21/32
15/16	IM730	2 1/16	2 1/8	15/16	2 1/8	5/8
1	IM732	2 1/8	2 1/8	1 3/32	2 1/4	25/32
1 <sup>1</sup> /8	IM736	2 1/4	2 1/4	1 3/32	2 1/4	25/32



### **Shallow Double Square, inches**

<b>□</b> Ţ	8	A	В	C	D	E
1 1/4	IM740	2 3/8	2 3/8	1 <sup>1</sup> /8	2 3/8	13/16





### 1" Drive Locking Rings and Pins

Stock No.	No. Drive Size Description		Use with					
IM483R	3 ,		All Spline Drive Sockets/Accessories 1" Drive Sockets from 1 7/16" and from 35mm					
IM243R	Synthetic Rubber Locking Ring for IM243 to IM443, and SIM233 to SIM353		1" Drive Sockets/Accessories up to 1 3/8" and up to 35mm					
IM243P	1"	Steel Locking Pin, use with IM243R	1" Drive Sockets/Accessories up to 1 3/8" and up to 35mm					
IMR3	R3 1" Spline Socket Retainer		All Spline Drive Sockets/Accessories All 1" Drive Sockets/Accessories					
IM483P	1" Spline	Steel Locking Pin	All Spline Drive Sockets/Accessories 1" Drive Sockets from 1 7/16" and from 35mm					

## 



**IMM365** 

Shallow, mm

	6	A	В	C	D	E
36	IMM365	73.0	82.6	34.5	76.2	25.4
38	IMM385	73.0	82.6	34.5	76.2	25.4
41	IMM415	73.0	82.6	34.5	76.2	27.7
46	IMM465	79.4	82.6	40.9	82.6	29.7
50	IMM505	79.4	82.6	47.2	88.9	31.8
55	IMM555	88.9	82.6	47.2	88.9	35.6
60	IMM605	94.5	82.6	58.2	101.6	38.6
65	IMM655	99.2	82.6	56.6	101.6	41.4
70	IMM705	105.6	82.6	61.7	108.0	45.7
75	IMM755	111.1	82.6	66.5	114.3	47.2





					IM445		6,	67	67	60
low, i	nches				IIVI445	Set Contai	67.9/M	616IM	678IM	609IM
	6	A	В	C	D	E				
1 3/8	IM445	2 7/8	3 1/4	1 3/8	3	1	•			
<b>1</b> <sup>7</sup> /16	IM465	2 7/8	3 1/4	1 <sup>3</sup> /8	3	1	•			
1 1/2	IM485	3	3 1/4	1 3/8	3	1	•			
1 %16 1 5/8	IM505 IM525	2 <sup>7</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>8</sub>	3	1 1 1/16	•			
1 11/16	IM545	3	3 1/4	1 3/8	3	1 1/16	•			
1 3/4	IM565	3 1/8	3 1/4	1 5/8	3 1/4	1 1/8	•			
13/16	IM585	3 1/8	3 1/4	1 <sup>5</sup> /8	3 1/4	1 3/16	•			
1 7/8	IM605	3 1/8	3 1/4	1 7/8	3 1/2	1 3/16	•			
1 <sup>15</sup> / <sub>16</sub>	IM625A IM645	3 1/8	3 <sup>1</sup> / <sub>4</sub>	1 <sup>7</sup> / <sub>8</sub> 1 <sup>7</sup> / <sub>8</sub>	3 1/2	1 <sup>1</sup> / <sub>4</sub>	•			
2 1/16	IM665	3 <sup>1</sup> / <sub>2</sub> 3 <sup>1</sup> / <sub>2</sub>	3 1/4	1 7/8	3 1/2 3 1/2	1 7/16	•			
2 1/8	IM685	3 1/2	3 1/4	1 7/8	3 1/2	1 7/16	•			
2 3/16	IM705	3 1/2	3 1/4	1 7/8	3 1/2	1 1/2	•			
2 1/4	IM725A	3 3/4	3 1/4	2 1/8	3 3/4	1 7/16	•			
2 5/16	IM745	3 3/4	3 1/4	2	3 3/4	1 1/2	•			
2 <sup>3</sup> / <sub>8</sub> 2 <sup>7</sup> / <sub>16</sub>	IM765 IM785	3 <sup>7</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub> 2 <sup>1</sup> / <sub>4</sub>	4	1 <sup>1</sup> / <sub>2</sub> 1 <sup>9</sup> / <sub>16</sub>	•			
2 1/2	IM805	3 7/8	3 1/4	2 1/4	4	1 5/8	•			
2 %16	IM825	3 7/8	3 1/4	2 1/4	4	1 5/8		•		
2 5/8	IM845	4 1/16	3 1/4	2 1/2	4 1/4	1 11/16		•		
2 11/16	IM865	4 1/8	3 1/4	2 1/2	4 1/4	1 11/16		•		
2 3/4	IM885	4 1/4	3 1/4	2 3/8	4 1/4	1 13/16		•		_
2 13/16	IM905 IM925	4 3/8 4 3/8	3 <sup>1</sup> / <sub>4</sub>	2 3/8 2 3/8	4 1/4 4 1/4	1 <sup>13</sup> / <sub>16</sub>		•		
2 ½ 2 ½ 15/16	IM945	4 3/8	3 1/4	2 5/8	4 1/4	1 15/16		•		
3	IM965	4 7/16	3 1/4	2 5/8	4 1/2	1 15/16		•		
3 1/16	IM985	4 11/16	3 1/4	2 5/8	4 1/2	1 15/16		•		
3 1/8	IM1005	4 3/4	3 1/4	2 7/8	4 3/4	2		•		
3 3/16	IM1025	4 3/4	3 1/4	2 1/2	4 1/2	2		•		
3 ½ 3 ½	IM1045 IM1065	4 3/4	3 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	4 3/4 4 3/4	2 1/8 2 1/8		•		
3 %	IM1085	5	3 1/4	2 3/4	4 3/4	2 1/4		•		_
3 7/16	IM1105	5	3 1/4	3	5	2 1/4		•		
3 1/2	IM1125	5 <sup>1</sup> /8	3 1/4	3	5	2 1/4		•		
3 %16	IM1145	5 1/8	3 1/4	2 7/8	5	2 1/4			•	
3 5/8	IM1165 IM1185	5 1/8	3 1/4	2 7/8	5	2 5/16			•	_
3 <sup>11</sup> / <sub>16</sub> 3 <sup>3</sup> / <sub>4</sub>	IM1185	5 <sup>1</sup> / <sub>4</sub> 5 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>	3 1/8 3 1/8	5 1/4 5 1/4	2 <sup>3</sup> / <sub>8</sub> 2 <sup>1</sup> / <sub>2</sub>				
3 13/16	IM1225	5 3/8	3 1/4	3 1/8	5 1/4	2 1/2			•	
3 1/8	IM1245	5 <sup>1</sup> / <sub>2</sub>	3 1/4	3 1/8	5 <sup>1</sup> /4	2 9/16			•	
3 15/16	IM1265	5 1/2	3 1/4	3 1/8	5 1/4	2 9/16			•	
41/2	IM1285	5 5/8	3 1/4	3 1/4	5 1/2	2 5/8			•	
4 ½ 4 ½	IM1305 IM1325	5 <sup>3</sup> / <sub>4</sub> 5 <sup>13</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>4</sub> 3 <sup>1</sup> / <sub>4</sub>	5 1/2 5 1/2	2 <sup>11</sup> / <sub>16</sub> 2 <sup>3</sup> / <sub>4</sub>			•	
4 1/4	IM1365	6	3 1/4	3 1/2	5 3/4	2 3/4			•	
<b>4</b> 5/16	IM1385	6 1/4	3 1/4	3 1/2	5 3/4	2 7/8			•	
4 3/8	IM1405	6 1/4	3 1/4	3 3/8	5 3/4	2 15/16			•	
4 7/16	IM1425	6 1/4	3 1/4	3 3/8	5 3/4	3			•	
4 ½ 4 ½	IM1445 IM1485	6 <sup>1</sup> / <sub>4</sub> 6 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>4</sub>	3 <sup>5</sup> / <sub>8</sub> 3 <sup>7</sup> / <sub>8</sub>	6 6 <sup>1</sup> / <sub>4</sub>	3 1/8 3 1/8			•	
4 3/4	IM1525	6 <sup>9</sup> / <sub>16</sub>	3 1/4	3 7/8	6 1/4	3 1/8			•	
4 7/8	IM1565	6 11/16	3 1/4	3 3/4	6 1/4	3 3/16			•	
5	IM1605	6 <sup>7</sup> /8	3 1/4	3 3/4	6 1/4	3 3/16				•
5 %	IM1725	7 5/16	3 1/4	3 5/8	6 1/4	3 7/16				•
5 3/4	IM1845	7 11/16	3 1/4	4 1/2	7 1/4	3 11/16				•
6 ½ 6 ½	IM1965 IM2085	8 8 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>8</sub>	7 1/4	3 <sup>15</sup> / <sub>16</sub> 4 <sup>3</sup> / <sub>16</sub>				•
6 7/8	IM2205	8 <sup>13</sup> / <sub>16</sub>	3 1/4	4 7/8	8	4 3/16				
7 1/4	IM2325	9 3/16	3 1/4	6 1/8	9 1/4	4 5/8				
7 5/8	IM2445	9 1/2	3 1/4	6 1/4	9 1/2	4 7/8				•
8	IM2565	10	3 1/4	6 5/8	10	5 1/8				•







### Deep, inches

SIM485

	6	A	В	C	D	E
1 3/16	SIM445	2 7/8	3 1/4	2 5/8	4 1/4	1
1 7/16	SIM465	2 7/8	3 1/4	2 5/8	4 1/4	1
1 1/2	SIM485	2 7/8	3 1/4	2 5/8	4 1/4	1
1 5/8	SIM525	2 7/8	3 1/4	2 5/8	4 1/4	1 1/8
1 11/16	SIM545	3	3 1/4	2 5/8	4 1/4	1 1/8
2	SIM645	3 3/8	3 1/4	3 ½ 3 ½	4 3/4	1 1/4
2 1/16	SIM665	3 7/16	3 1/4	3 1/8	4 3/4	1 5/16
2 3/16	SIM705	3 1/2	3 1/4	3 <sup>3</sup> / <sub>8</sub> 3 <sup>5</sup> / <sub>8</sub>	5	1 3/8
2 1/4	SIM725	3 9/16	3 1/4	3 5/8	5 1/4	1 1/2
2 5/16	SIM745	3 5/8	3 1/4	3 ½ 3 ½	5 <sup>1</sup> / <sub>4</sub>	1 9/16
2 3/8	SIM765	3 3/4	3 1/4	3 1/2	5 <sup>1</sup> / <sub>4</sub>	1 9/16
2 7/16	SIM785	3 3/4	3 1/4	3 <sup>1</sup> / <sub>2</sub> 3 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>4</sub>	1 9/16
2 1/2	SIM805	3 7/8	3 1/4	3 1/2	5 1/4	1 5/8
2 9/16	SIM825	3 7/8	3 1/4	3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub>	5 1/2	1 5/8
2 5/8	SIM845	4	3 1/4	3 3/4	5 <sup>1</sup> / <sub>2</sub>	1 11/10
2 11/16	SIM865	4 1/8	3 1/4	3 <sup>3</sup> / <sub>4</sub> 3 <sup>5</sup> / <sub>8</sub>	5 <sup>1</sup> / <sub>2</sub>	1 3/4
2 3/4	SIM885	4 1/8	3 1/4	3 5/8	5 <sup>1</sup> / <sub>2</sub>	1 13/10
2 13/16	SIM905	4 1/4	3 1/4	3 7/8	5 <sup>3</sup> / <sub>4</sub>	1 13/10
2 7/8	SIM925	4 <sup>5</sup> / <sub>16</sub>	3 1/4	3 7/8	5 <sup>3</sup> / <sub>4</sub>	1 7/8
2 <sup>15</sup> / <sub>16</sub>	SIM945	4 3/8	3 1/4	3 7/8	5 <sup>3</sup> / <sub>4</sub>	1 <sup>15</sup> /10
3	SIM965	4 7/16	3 1/4	4 1/8	6	1 15/16
3 1/16	SIM985	4 9/16	3 1/4	4 1/8	6	2
3 1/8	SIM1005	4 5/8	3 1/4	4 1/8	6	2 1/16
3 3/16	SIM1025	4 11/16	3 1/4	4 1/4	6 1/4	2 1/8
3 1/4	SIM1045	4 3/4	3 1/4	4 1/4	6 1/4	2 1/8
3 5/16	SIM1065	4 7/8	3 1/4	4 1/4	6 1/4	2 3/16
3 3/8	SIM1085	4 15/16	3 1/4	4 1/4	6 1/4	2 1/4
3 7/16	SIM1105	5	3 1/4	4 1/2	6 1/2	2 1/4
3 1/2	SIM1125	5 1/16	3 1/4	4 1/2	6 1/2	2 5/16
3 9/16	SIM1145	5 1/8	3 1/4	4 3/8	6 1/2	2 3/8
3 5/8	SIM1165	5 1/4	3 1/4	4 5/8	6 3/4	2 7/16
3 11/16	SIM1185	5 <sup>5</sup> / <sub>16</sub>	3 1/4	4 5/8	6 3/4	2 7/16
3 3/4	SIM1205	5 3/8	3 1/4	4 5/8	6 3/4	2 1/2
3 13/16	SIM1225	5 7/16	3 1/4	4 7/8	7	2 1/2
3 7/8	SIM1245	5 <sup>1</sup> / <sub>2</sub> 5 <sup>5</sup> / <sub>8</sub>	3 1/4	4 7/8	7 7 <sup>1</sup> /4	2 9/16
3 15/16	SIM1265		3 1/4	5 1/8		2 9/16
4	SIM1285	5 5/8	3 1/4	5	7 1/4	2 5/8
4 1/16	SIM1305	5 3/4	3 1/4	5 1/4	7 1/2	2 11/10
4 1/8	SIM1325	5 <sup>13</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>4</sub> 3 <sup>1</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>4</sub> 5 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> / <sub>2</sub> 7 <sup>3</sup> / <sub>4</sub>	2 3/4
4 <sup>1</sup> /4 4 <sup>5</sup> /16	SIM1365	6 6 <sup>1</sup> / <sub>4</sub>	3 1/4	5 1/2	7 3/4	2 13/16
4 <sup>3</sup> / <sub>16</sub>	SIM1385	6 1/4	3 1/4	5 1/2		3 3
4 3/8	SIM1405 SIM1445	6 1/4	3 1/4	5 <sup>3</sup> / <sub>8</sub> 5 <sup>5</sup> / <sub>8</sub>	7 3/4	3
4 1/2		6 3/8	3 1/4		<u>8</u>	3 1/16
4 3/4	SIM1485 SIM1525	6 <sup>1</sup> / <sub>2</sub>	3 1/4	5 <sup>5</sup> /8 5 <sup>5</sup> /8	<u>8</u> 8	3 1/16





IM243P

## Locking Rings and Pins for 1 1/2" Extensions, Adaptors, Impact Sockets and 2 1/2" Impact Sockets

Stock No.	Drive Size	Description	Use with		
IM243R	1 1/2"	Synthetic Rubber Locking Ring, for IM35	1" Drive Sockets/Accessories up to 1 3/8" and up to 35 mm		
IM243P	1 1/2" Spline	Steel Locking Pin, for IM35	1" Drive Sockets/Accessories up to 1 3/8" and up to 35 mm		
IM445R	<b>1</b> <sup>1</sup> /2"	Synthetic Rubber Locking Ring, for <b>IM105</b> , <b>IM205</b> , <b>IM59</b> , <b>IP85</b> , and " <b>IGE Series</b> " sockets	All 1 1/2" Drive Sockets/Accessories		
IM729P	2 1/2"	Steel Locking Pin, for <b>IM95</b>	All 2 1/2" Drive Sockets		

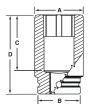




Shallow,	inches			IM220		et <sup>27</sup> 6/M	713111	Frank	211111
<b>□</b> Ţ	6	A	В	C	D				
2	IM649	3 7/16	5	2 31/32	5 1/2	•			
2 3/16	IM709	3 21/32	5	3 7/32	5 <sup>3</sup> /4	•			
2 1/4	IM729	3 23/32	5	3 7/32	5 <sup>3</sup> /4	•			
2 3/8	IM769	3 7/8	5	3 15/32	6	•			
<b>2</b> 1/2	IM809	4	5	3 15/32	6	•			
2 <sup>9</sup> /16	IM829	4 3/32	5	3 15/32	6	•			
2 5/8	IM849	4 5/32	5	3 15/32	6	•			
2 7/8	IM929	4 7/16	5	3 23/32	6 1/4	•			
2 3/4	IM889	4 5/16	5	3 23/32	6 1/4	•			
2 15/16	IM949	4 17/32	5	3 23/32	6 1/4	•			
3	IM969	4 19/32	5	3 23/32	6 1/4	•			
3 1/8	IM1009	4 3/4	5	3 31/32	6 1/2	•			
3 1/4	IM1049	5	5	3 31/32	6 1/2	•			
3 3/8	IM1089	5	5	3 31/32	6 1/2	•			
3 7/16	IM1109	5	5	4 7/32	6 3/4	•			
3 1/2	IM1129	5 3/16	5	4 7/32	6 3/4	•			
3 5/8	IM1169	5 5/16	5	4 7/32	6 3/4		•		
3 3/4	IM1209	5 15/32	5	4 15/32	7		•		
3 7/8	IM1249	5 5/8	5	4 15/32	7		•		
4	IM1289	5 3/4	5	4 15/32	7		•		
4 1/16	IM1309	5 27/32	5	4 15/32	7		•		
4 1/8	IM1329	5 29/32	5	4 23/32	7 1/4		•		
4 1/4	IM1369	6 1/16	5	4 23/32	7 1/4		•		
4 <sup>3</sup> / <sub>8</sub>	IM1409 IM1449	6 <sup>7</sup> / <sub>32</sub>	5 5	4 <sup>23</sup> / <sub>32</sub> 4 <sup>31</sup> / <sub>32</sub>	7 <sup>1</sup> / <sub>4</sub> 7 <sup>1</sup> / <sub>2</sub>		•		
4 1/2	IM1449	6 1/2	5	4 31/32	7 1/2		•		
4 3/4	IM1529	6 21/32	5	4 31/32	7 1/2		•		
4 7/8	IM1529	6 25/32	5	5 7/32	7 3/4		•		
5	IM1609	6 15/16	5	5 7/32	7 3/4		•		
5 1/8	IM1649	7 3/32	5	5 7/32	7 3/4		-	•	
5 1/4	IM1689	7 7/32	5	5 15/32	8			•	
5 3/8	IM1729	7 3/8	5	5 15/32	8			•	
5 7/16	IM1749	7 7/16	5	5 3/8	8			•	
5 1/2	IM1769	7 17/32	5	5 5/8	8 1/4			•	
5 5/8	IM1809	7 21/32	5	5 19/32	8 1/4			•	
5 3/4	IM1849	7 13/16	5	5 19/32	8 1/4			•	
5 7/8	IM1889	7 31/32	5	5 <sup>13</sup> / <sub>16</sub>	8 1/2			•	
6	IM1929	8 3/32	5	5 3/4	8 1/2			•	
6 1/8	IM1969	8 1/4	5	5 3/4	8 1/2			•	
6 1/4	IM20099	8 13/32	5	5 31/32	8 3/4			•	
6 3/8	IM2049	8 17/32	5	5 <sup>15</sup> / <sub>16</sub>	8 3/4			•	
6 1/2	IM2089	8 11/16	5	5 <sup>15</sup> / <sub>16</sub>	8 3/4			•	
6 5/8	IM2129	8 27/32	5	6 <sup>5</sup> /32	9			•	
6 3/4	IM2169	8 31/32	5	6 <sup>1</sup> /8	9				•
6 7/8	IM2209	9 1/8	5	6 1/8	9				•
7	IM2249	9 9/32	5	6 5/16	9 1/4				•
7 1/8	IM2289	9 13/32	5	6 5/16	9 1/4				•
7 1/4	IM2329	9 9/16	5	6 17/32	9 1/2				•
7 3/8	IM2369	9 23/32	5	6 1/2	9 1/2				•
7 1/2	IM2409	9 7/8	5	6 1/2	9 1/2				•
7 5/8	IM2449	10	5	6 23/32	9 3/4				•
7 3/4	IM2489	10 5/32	5	6 11/16	9 3/4				•
7 7/8	IM2529	10 5/16	5	6 11/16	9 3/4				•
8	IM2569	10 7/16	5	6 7/8	10				•



55





IMM1159

Shallow, n	nm					Set Contains:	From	709MM
mmŢ	6	A	В	C	D			
60	IMM609	97.6	127	88.1	152.4	•		
65	IMM659	104.0	127	88.1	152.4	•		
67	IMM679	105.6	127	88.1	152.4	•		
70	IMM709	109.5	127	94.5	158.8	•		
71	IMM719	110.3	127	94.5	158.8	•		
75	IMM759	115.1	127	94.5	158.8	•		
80	IMM809	121.4	127	100.8	165.1	•		
85	IMM859	127.0	127	100.8	165.1	•		
86	IMM869	127.0	127	100.8	165.1	•		
90	IMM909	132.6	127	107.2	171.5	•		
95	IMM959	138.9	127	107.2	171.5	•		
98	IMM989	142.1	127	113.5	177.8	•		
100	IMM1009	144.5	127	113.5	177.8	•		
105	IMM1059	150.8	127	119.9	184.2		•	
110	IMM1109	156.4	127	119.9	184.2		•	
115	IMM1159	161.9	127	126.2	190.5		•	
120	IMM1209	168.3	127	126.2	190.5		•	
125	IMM1259	173.8	127	132.6	196.9		•	
130	IMM1309	179.4	127	132.6	196.9		•	
135	IMM1359	185.7	127	138.9	203.2		•	
140	IMM1409	191.3	127	142.9	209.6		•	
145	IMM1459	196.9	127	142.1	209.6		•	
150	IMM1509	203.2	127	147.6	215.9		•	
155	IMM1559	208.8	127	146.1	215.9			•
160	IMM1609	215.1	127	151.6	222.3			•
165	IMM1659	215.1	127	150.8	222.3			•
170	IMM1709	226.2	127	156.4	228.6			•
175	IMM1759	232.6	127	161.9	235.0			•
180	IMM1809	238.1	127	160.3	235.0			•
185	IMM1859	243.7	127	165.9	241.3			•
190	IMM1909	250.0	127	165.1	241.3			•
200	IMM2009	261.9	127	169.9	247.7			•







### Torx/Standard

Set Contains:	TIZEFTAY TOTETA	2

				l	1	$\overline{}$	
<b>#</b> ]	Stock No.	Stock No.	Square Drive, In.	A	В		
T8	TTX8E	GTTX8E	1/4	<b>1</b> 9/16	TTX8E2	•	
T10	TTX10E	GTTX10E	1/4	<b>1</b> 9/16	TTX10E2	•	
T15	TTX15E	GTTX15E	1/4	<b>1</b> 9/16	TTX15E2	•	
T20	TTX20E	GTTX20E	1/4	<b>1</b> 9/16	TTX20E2	•	
T25	TTX25E	GTTX25E	1/4	1 9/16	TTX25E2	•	
T27	TTX27E	_	1/4	1 9/16	FTX27E2		
T30	TTX30E	_	1/4	1 9/16	FTX30E2		
T40	TTX40E	_	1/4	<b>1</b> 9/16	FTX40E2		
T27	FTX27E	GFTX27E	3/8	1 3/4	FTX27E2	•	•
T30	FTX30E	GFTX30E	3/8	1 3/4	FTX30E2	•	•
T40	FTX40E	GFTX40E	3/8	1 3/4	FTX40E2	•	•
T45	FTX45E	GFTX45E	3/8	2 1/16	FTX45E2	•	•
T47	FTX47E	_	3/8	2 <sup>1</sup> /16	FTX47E2		•
T50	FTX50E	GFTX50E	3/8	2 1/16	FTX50E2	•	•
T55	FTX55E	GFTX55E	3/8	2 1/32	FTX55E2	•	•
T60	FTX60E	_	3/8	2 5/16	FTX60E2		
T55	STX55E	_	1/2	2 9/16	FTX55E2		
T60	STX60E	_	1/2	3 11/32	STX60E2		
T70	STX70E	_	1/2	3 1/2	STX70E2		
T80	T802E	_	3/4	4 3/8	T802E2		
T90	T902E	_	3/4	4 3/8	T902E2		

Sets shown include storage tray

212EFTXY and 207EFTXY sets also include the FTX47SE GM® Style Torx Socket Driver. STX70E Applications: include brake rotor retaining bolts on GM C4500 Trucks (2003 and later) and torque converter drain plug on Subaru, Legacy, Impreza and Forester® (2003 and later).



### \*Torx/Long

<b>#</b> ]	Stock No.	Square Drive, In.	A	В
T8	TTXL8E	1/4	4 1/6	TTXL8E2
T10	TTXL10E	1/4	4 1/6	TTXL10E2
T15	TTXL15E	1/4	4 1/6	TTXL15E2
T20	TTXL20E	1/4	4 1/6	TTXL20E2
T25	TTXL25E	1/4	4 1/6	TTXL25E2
T27	FTXL27E	3/8	4 1/4	FTXL27E2
T30	FTXL30E	3/8	4 1/4	FTXL30E2
T40	FTXL40E	3/8	4 1/4	FTXL40E2
T45	FTXL45E	3/8	4 1/4	FTXL45E2
T50	FTXL50E	3/8	4 1/4	FTXL50E2
T45	STXL45E	1/2	4 5/8	STXL45E2
T50	STXL50E	1/2	4 5/8	STXL50E2
T55	STXL55E	1/2	4 5/8	STXL55E2
T60	STXL60E	1/2	4 5/8	STXL60E2

### Torx® Bit Sockets



• 1017	a, stabby		oontains.	• \	
<b>#</b> ]	Stock No.	Square Drive, In.	A	В	
T27	FTX27SE	3/8	1 <sup>13</sup> / <sub>32</sub>	FTX27SE2	•
T30	FTX30SE	3/8	1 13/32	FTX30SE2	•
T40	FTX40SE	3/8	1 <sup>13</sup> / <sub>32</sub>	FTX40SE2	•
T45	FTX45SE	3/8	1 13/32	FTX45SE2	•
T47	FTX47SE	3/8	1 13/32	FTX47SE2	•
T50	FTX50SE	3/8	1 13/32	FTX50SE2	•
T55	FTX55SE	3/8	1 7/16	FTX55SE2	•

Set shown includes magnetic storage tray

207EFTXYSE Applications: BMW® under dash and sensors in engine compartment. Porsche® 911 and Cayenne ignition coil bolts. Honda® airbag control module inside passenger compartment of dashboard. Cadillac® water pump and oil drain plugs. Various applications on motorcycles.



### Torx/Stubby Universal

Torx/Stubby

	103
Set	-9
Conta	ins:

<b>#</b> ]	Stock No.	Square Drive, In.	A	
T20	TUTX20E	1/4	1 3/4	•
T25	TUTX25E	1/4	1 3/4	•
T27	TUTX27E	1/4	1 3/4	•
T30	TUTX30E	1/4	1 3/4	•
T40	TUTX40E	1/4	1 3/4	•

Set shown includes storage tray

105TUTX Applications: T40 for Porsche 2005 and newer 911, Boxster® and Cayenne for ignition coil bolts. T30 for Volvo® turbo return lines. T30 for Honda airbag control module inside passenger compartment of dashboard. T30 for pump alignment on Mitsubishi® F4A51 transmissions (97 and later). Numerous other applications for Mercedes® that require a stubby Torx where a regular Torx bit socket will not fit in T20, T25 and T27.



Torx/

### Heavy Duty Removal

20	ΛEI	ETVI	DV
20	3CI		D 1
20	9EI	FTXI	BY

neary buty hemorat				oontains.	. /
<b>#</b> ₹	Stock No.	Square Drive, In.	A	В	
T15	TTXB15E	1/4	1 <sup>9</sup> /16	TTXB15E2	•
T20	TTXB20E	1/4	1 <sup>9</sup> /16	TTXB20E2	•
T25	TTXB25E	1/4	1 <sup>9</sup> /16	TTXB25E2	•
T27	FTXB27E	3/8	<b>1</b> 13/16	FTXB27E2	•
T30	FTXB30E	3/8	1 <sup>13</sup> / <sub>16</sub>	FTXB30E2	•
T40	FTXB40E	3/8	1 <sup>13</sup> / <sub>16</sub>	FTXB40E2	•
T45	FTXB45E	3/8	2 1/16	FTXB45E2	•
T50	FTXB50E	3/8	2 1/16	FTXB50E2	•
T55	STXB55E	3/8	2 1/16	FTXB55E2	•

Set shown includes magnetic storage tray



WARNING







Read safety precautions on pages W1 to W4

### Torx® Bit Sockets







<b>#</b> ]	Stock No.	Square Drive, In.	A	В	
T8	TTXR8E	1/4	1 9/16	TTXR8E2	•
T10	TTXR10E	1/4	1 9/16	TTXR10E2	•
T15	TTXR15E	1/4	1 9/16	TTXR15E2	•
T20	TTXR20E	1/4	1 9/16	TTXR20E2	•
T25	TTXR25E	1/4	1 9/16	TTXR25E2	•
T27	FTXR27E	3/8	1 3/4	FTXR27E2	•
T30	FTXR30E	3/8	1 3/4	FTXR30E2	•
T40	FTXR40E	3/8	1 3/4	FTXR40E2	•
T45	FTXR45E	3/8	2 1/16	FTXR45E2	•
T50	FTXR50E	3/8	2 1/16	FTXR50E2	•



**Torx Plus/Tamper Resistant** 

5 lobe configuration. 2 piece pinless design holds bit securely in socket while facilitating quick bit replacement. Cold formed socket delivers a strong, durable tool. Chrome plating resists corrosion and cleans easily. For sale to authorized technicians only.



<b>#</b> ]	Stock No.	Square Drive, In.	A	В	
8IPR	TTXR8TPE	1/4	1 <sup>9</sup> /16	TTXR8TPE2	•
10IPR	TTXR10TPE	1/4	1 <sup>9</sup> /16	TTXR10TPE2	•
15IPR	TTXR15TPE	1/4	1 9/16	TTXR15TPE2	•
20IPR	TTXR20TPE	1/4	1 9/16	TTXR20TPE2	•
25IPR	TTXR25TPE	1/4	1 9/16	TTXR25TPE2	•
27IPR	FTXR27TPE	3/8	1 3/4	FTXR27TPE2	•
30IPR	FTXR30TPE	3/8	1 3/4	FTXR30TPE2	•
40IPR	FTXR40TPE	3/8	1 3/4	FTXR40TPE2	•
45IPR	FTXR45TPE	3/8	2 1/32	FTXR45TPE2	•
50IPR	FTXR50TPE	3/8	2 5/32	FTXR50TPE2	•
55IPR	FTXR55TPE	3/8	2 11/32	FTXR55TPE2	•

Set shown includes magnetic storage tray

**211EFTXRTPY** Applications: 2003 Ford Mustang transmissions, 2004 Ford F150 transfer case, 2004 Porsche® Cayenne turbo air sensor, Delphi® and Stanadyne® pumps, Cummins® B and C engine injection pumps and John Deere® diesel injector pumps.



FTXEL45E

## Special Application Torx (3/8" Drive)



<b>#</b> ]	Stock No.	Description	Square Drive, inches	A	В
T40	FTXEL40E	Extra Long	3/8	7 1/2	FTXEL40E2
T47	FTX47E	GM Style	3/8	2 1/16	FTX47E2
T45	FTXEL45E	Extra Long	3/8	7 <sup>11</sup> / <sub>16</sub>	FTXEL45E2
T40	FTXR40TPE	Tamper Resistant	3/8	1 <sup>3</sup> / <sub>4</sub>	FTXR40TPE2
T47	GFTX500E	GM Style	3/8	2 1/16	FTX500E2
T30	FTXEL30TPE	Extra Long	3/8	5	FTXEL30TPEZ

FTXEL40E Applications include service on intake manifold bolts on Ford 5.0 L engines with fuel injection, model years 1985 to 1990. FTXEL45E Quickly and easily access intake bolts on Cummins N14 diesel engines without removing the air pump. Can also be used on older Cummins NH Big Cam 4 diesel engines. 3/8" square drive.

FTX47E For use on GM door strikers.

**GFTX500E** For use on *GM* door strikers and seat belt bolts.

FTXEL30TPE For removing the engine harness from the firewall on 2007 and newer. For Volvo® trucks with D16, MPT 8 and MPT 10 engines, Cummins ISX fuel timing and metering actuators.





•					_
<b>#</b> ]	Stock No.	Square Drive, In.	A	В	
8IP	TTX8TPE	1/4	1 9/16	TTX8TPE2	•
10IP	TTX10TPE	1/4	1 9/16	TTX10TPE2	•
15IP	TTX15TPE	1/4	1 9/16	TTX15TPE2	•
20IP	TTX20TPE	1/4	1 9/16	TTX20TPE2	•
25IP	TTX25TPE	1/4	1 9/16	TTX25TPE2	•
27IP	FTX27TPE	3/8	1 3/4	FTX27TPE2	•
30IP	FTX30TPE	3/8	1 3/4	FTX30TPE2	•
40IP	FTX40TPE	3/8	1 3/4	FTX40TPE2	•
45IP	FTX45TPE	3/8	2 1/8	FTX45TPE2	•
50IP	FTX50TPE	3/8	2 1/8	FTX50TPE2	•
55IP	FTX55TPE	3/8	2 5/16	FTX55TPE2	•
555P	STX55TPE	1/2	2 3/4	FTX55TPE2	•

Set shown includes magnetic storage tray

Torx Plus fasteners may be found in almost all vehicles from the 1999 model year to present. Common applications include GM® transmissions bell housing bolts and Ford® seat belt anchors. T27IP size can be used to service Taurus and Sable front spring shields. Use of a standard Torx driver on Torx Plus fasteners may result in a rounded out fastener head or damaged driver.



PFTX30E

### **Torx/Power Drivers**

<b>#</b> ]	Stock No.	Square Drive, In.	A	В
T20	PTTX20E	1/4	1 9/16	TTX20E2
T25	PTTX25E	1/4	1 9/16	TTX25E2
T27	PFTX27E	3/8	1 3/4	FTX27E2
T30	PFTX30E	3/8	1 3/4	FTX30E2
T40	PFTX40E	3/8	1 3/4	FTX40E2
T45	PSTX45E	1/2	2 7/16	FTX45E2
T50	PSTX50E	1/2	2 7/16	FT50E2
T50	PSTX500E*	1/2	2 7/16	FTX500E2
T55	PSTX55E	1/2	2 7/16	FTX55E2

\*GM Style



# Torx® Bit Sockets (Blue-Point®)



#### **BLPTORX1410**





- ,	,		contains.	
<b>#</b> <u>₹</u>	Stock No.	Square Drive, in.	A	
T10	BLPTS1410	1/4	3/4	•
T15	BLPTS1415	1/4	3/4	•
T20	BLPTS1420	1/4	3/4	•
T25	BLPTS1425	1/4	3/4	•
T27	BLPTS1427	1/4	3/4	•
T30	BLPTS1430	1/4	3/4	•
T40	BLPTS1440	1/4	3/4	•
T45	BLPTS1445	1/4	3/4	•
T47	BLPTS1447	1/4	3/4	•
T50	BLPTS1450	1/4	3/4	•

Set shown includes storage tray







# **Tamper Resistant, Stubby**

rumper resistant, stabby						
<b>#</b> ]	Stock No.	Square Drive, in.	A			
T8	BLPTS148TP	1/4	3/4			
T10	BLPTS1410TP	1/4	3/4			
T15	BLPTS1415TP	1/4	3/4			
T20	BLPTS1420TP	1/4	3/4			
T25	BLPTS1425TP	1/4	3/4			
T27	BLPTS1427TP	1/4	3/4			
T30	BLPTS1430TP	1/4	3/4			
T40	BLPTS1440TP	1/4	3/4			
T45	BLPTS1445TP	1/4	3/4			
T50	BLPTS1450TP	1/4	3/4			



# **Tamper Resistant, Long**

P	<b>,</b>		
<b>#</b> <u>₹</u>	Stock No.	Square Drive, in.	A
T6	BLPTL146TP	1/4	3 15/16
T7	BLPTL147TP	1/4	3 15/16
T8	BLPTL148TP	1/4	3 15/16
T9	BLPTL149TP	1/4	3 15/16
T10	BLPTL1410TP	1/4	3 15/16
T15	BLPTL1415TP	1/4	3 15/16
T20	BLPTL1420TP	1/4	3 15/16
T25	BLPTL1425TP	1/4	3 15/16
T27	BLPTL1427TP	1/4	3 15/16
T30	BLPTL1430TP	1/4	3 15/16
T40	BLPTL3840TP	3/8	4 3/8
T45	BLPTL3845TP	3/8	4 3/8
T50	BLPTL3850TP	3/8	4 3/8
T55	BLPTL1255TP	1/2	4 5/8
T60	BLPTL1260TP	1/2	4 5/8



BLPTL1425TP



# **Tamper Resistant, Standard**

	•		
<b>#</b> <u>₹</u>	Stock No.	Square Drive,	A
		in.	
T6	BLPT146TP	1/4	1 7/16
T7	BLPT147TP	1/4	<b>1</b> 7/16
T8	BLPT148TP	1/4	1 7/16
T9	BLPT149TP	1/4	<b>1</b> 7/16
T10	BLPT1410TP	1/4	<b>1</b> 7/16
T15	BLPT1415TP	1/4	<b>1</b> 7/16
T20	BLPT1420TP	1/4	<b>1</b> 7/16
T25	BLPT1425TP	1/4	<b>1</b> 7/16
T27	BLPT1427TP	1/4	<b>1</b> 7/16
T30	BLPT1430TP	1/4	<b>1</b> 7/16
T10	BLPT3810TP	3/8	1 27/32
T15	BLPT3815TP	3/8	1 27/32
T20	BLPT3820TP	3/8	1 27/32
T25	BLPT3825TP	3/8	1 27/32
T27	BLPT3827TP	3/8	1 27/32
T30	BLPT3830TP	3/8	1 27/32
T40	BLPT3840TP	3/8	2
T45	BLPT3845TP	3/8	2
T50	BLPT3850TP	3/8	2
T55	BLPT3855TP	3/8	2
T55	BLPT1255TP	1/2	2 5/16
T60	BLPT1260TP	1/2	2 <sup>5</sup> /16



BLPT3820TP







### **Metric Hex Bit**







**211EFAMY** 

210EFTAMY

LAWM19E

Hex/S	Standard	l, mm		TOGETHAND Set Contains:	OZEFAM)	EFTANN)	JEFANN	TESAM	`\
	$\bigcirc$	Square Drive, In.	A	В					
2	TMAM2E	1/4	47.8	TMAM2E2A	•		•		
2.5	TMAM2.5E	1/4	47.8	TMAM2.5E2	•		•		
3	TMAM3E	1/4	47.8	TMAM3E2	•		•		
4	TMAM4E	1/4	47.8	FAM4E2	•				
5	TMAM5E	1/4	47.8	FAM5E2	•				
6	TMAM6E	1/4	47.8	FAM6E2	•				
4	FAM4E	3/8	52.3	FAM4E2		•	•	•	
5	FAM5E	3/8	52.6	FAM5E2		•	•	•	
6	FAM6E	3/8	52.6	FAM6E2		•	•	•	
7	FAM7E	3/8	52.6	FAM7E2		•	•	•	
8	FAM8E	3/8	52.6	FAM8E2		•	•	•	
9	FAM9E	3/8	52.6	FAM9E2		•	•	•	
10	FAM10E	3/8	52.6	SAM10E2		•	•	•	
11	FAM11E	3/8	69.9	FAM11E2				•	
12	FAM12E	3/8	69.9	FAM12E2				•	
13	FAM13E	3/8	69.9	FAM13E2				•	
14	FAM14E	3/8	69.9	FAM14E2				•	
6	SAM6E	1/2	60.5	FAM6E2					•
8	SAM8E	1/2	62	FAM8E2					•
10	SAM10E	1/2	62.8	SAM10E2					•
12	SAM12E	1/2	81	SAM12E2					•
14	SAM14E	1/2	81	SAM14E2					•
17	SAM17E	1/2	93.7	SAM17E2					•
19	SAM19E	1/2	103.1	SAM19E2					•
17	LAWM17E	3/4	41/8"	SAM17E2					
19	LAWM19E	3/4	413/32"	SAM19E2					

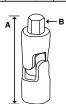


# Hex/Stubby, mm

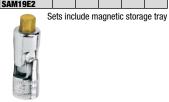
ZOBEF1	
Set Contains:	MASK

<b>m</b> m <u>Ţ</u>		Square Drive, In.	A	В	$\bigcirc$
3	TMAMXS3E	1/4	26.0	TMAMXS3E2	•
4	TMAMXS4E	1/4	27.0	TMAMXS4E2	•
5	TMAMXS5E	1/4	27.0	TMAMXS5E2	•
6	TMAMXS6E	1/4	29.0	TMAMXS6E2	•
7	FAMXS7E	3/8	34.7	FAMXS7E2	•
8	FAMXS8E	3/8	35.7	FAMXS8E2	•
9	FAMXS9E	3/8	36.7	FAMXS9E2	•
10	FAMXS10E	3/8	37.7	FAMXS10E2	•

Set includes magnetic storage tray



**m**m∫



TUAM6E

Square Drive, In.

1/4

38.1

# Hex/Long, mm





<b>™</b> Ţ	$\bigcirc$	Square Drive, In.	A	В	
4	FAML4E	3/8	153.9	FAML4E2	•
5	FAML5E	3/8	153.9	FAML5E2	•
6	FAML6E	3/8	153.9	FAML6E2	•
7	FAML7E	3/8	153.9	FAML7E2	•
8	FAML8E	3/8	153.9	FAML8E2	•
10	FAML10E	3/8	153.4	FAML10E2	•
10	SAM10LE	1/2	152.4	SAM10LE2	
12	SAM12LE	1/2	98.0	SAM12LE2	

Hex/Universal Stubby, mm

TUAM5E TUAM6E

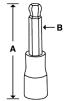
Ball Hex	«/Standard, n		Set Contains:		
<b>mm</b> Ţ		Square Drive, In.	A	В	
3	ТМАВМЗЕ	1/4	47.7	TMABM3E2	•
4	TMABM4E	1/4	47.6	TMABM4E2	•
5	TMABM5E	1/4	47.9	TMABM5E2	•
6	ТМАВМ6Е	1/4	47.9	TMABM6E2	•
7	FABM7E	3/8	52.5	FABM7E2	•
8	FABM8E	3/8	52.5	FABM8E2	•
9	FABM9E	3/8	52.5	FABM9E2	•
10	FABM10E	3/8	52.5	FABM10E2	•

Set includes magnetic storage tray

**SAM12LE** Applications: Essential for removal or installation of bolt found on the lower forks of 2006 and newer Harley-Davidson® Dyna series. Used when servicing the internal parts of the fork.



208EFTABMY





Double Hex socket drivers and Triple Square socket drivers cannot be interchanged between applications. Triple square socket drivers have

90° corners. Double hex socket drivers have 120° corners. Using a Triple Square tool in a Double Hex application will strip the bolt head. In general, Triple Square tools are used on European vehicles and Double Hex tools are used on Asian vehicles.

### 206EFABLM

#### Ball Hex/Long, mm

				\	
	206EF	206r			
Ball Hex/Long, mm				Set Contains:	ZIM .
		Square Drive, In.	A	В	
4	FABLM4E	3/8	129.3	FABLM4E2	•
5	FABLM5E	3/8	128.5	FABLM5E2	•
6	FABLM6E	3/8	128.5	FABLM6E2	•
7	FABLM7E	3/8	128.5	FABLM7E2	•
8	FABLM8E	3/8	127.3	FABLM8E2	•
10	FABLM10E	3/8	128.3	FABLM10E2	•

Set shown includes storage tray

#### Double Hex, mm

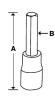
<b>™</b> Ţ	$\bigcirc$	Square Drive, In.	A	В
8	FADM8E	3/8	51.3	FADM8E2
8	FADM8LE	3/8	121.9	FADM8LE2
10	SADM10E	1/2	100	SADM10E2

**FADM8E / FADM8LE** Applications: Removal/installation of head bolts on Toyota® Tercel 1995 and later, and Paseo (1992 to 1997). **SADM10É** Applications: Removal/installation of head bolts on Toyota Highlander, 4Runner, Camry, Matrix, Corolla and Lexus® IS300, GS300, SC300 vehicles.

## Hex, mm (Power)

	•	Square Drive, In.	A	В
4	PFAM4E	3/8	52.3	FAM4E2
5	PFAM5E	3/8	52.6	FAM5E2
6	PFAM6E	3/8	52.6	FAM6E2
7	PFAM7E	3/8	52.5	FAM7E2
8	PFAM8E	3/8	52.1	FAM8E2
9	PFAM9E	3/8	52.5	FAM9E2
10	PFAM10F	3/₂	52.5	SAM10F2







**BLPH3810** 

Metric Hex Bit (Blue-Point®)



## Hex/Stubby, mm

mm Ţ	$\bigcirc$	Square Drive, In.	Length, mm
2	BLPHSM142	1/4	19.1
2.5	BLPHSM1425	1/4	19.1
3	BLPHSM143	1/4	19.1
4	BLPHSM144	1/4	19.1
5	BLPHSM145	1/4	19.1
6	BLPHSM146	1/4	19.1
7	BLPHSM147	1/4	19.1
8	BLPHSM148	1/4	19.1
9	BLPHSM149	1/4	19.1
10	BLPHSM1410	1/4	19.1

BLPHEXS1418 Hex Driver Set. Includes all BLPHSM metric bit sockets listed above plus all BLPHS fractional bit sockets.

## Hex, mm

•			
		Square Drive, In.	Length, mm
2.5	BLPH1425	1/4	34.9
6	BLPH386	3/8	47
7	BLPH387	3/8	47
8	BLPH388	3/8	50.5
9	BLPH389	3/8	50.5
10	BLPH3810	3/8	50.5
3	BLPH123	1/2	60.3
4	BLPH124	1/2	60.3
5	BLPH125	1/2	60.3
6	BLPH126	1/2	60.3
10	BLPH1210	1/2	60.3
12	BLPHM1212	1/2	60.3
14	BLPH1214	1/2	60.3
17	BLPH1217	1/2	60.3
19	RI PH1219	1/2	60.3





<sup>•</sup> Do not use chrome or industrial finish tools with impact drivers

Read safety precautions on pages W1 to W4

## **Hex Bit**







208EGFAY

IMA283

### Hex/Standard, inches

Hex/St	andard,	ıncnes					Contain	is: "	·44	144	144	*41×
			Square Drive, In.	A	В	Length with Opt. Long Bit	Optional Long Bit	$\bigcirc$	$\bigcirc$		$\bigcirc$	$\bigcirc$
1/16	TMA2E	<u> </u>	1/4	1 7/8	TMA2E2A	6	TMAL2E2	•			•	
5/64	TMA2.5E	GTMA2.5E	1/4	1 7/8	TMA2.5E2	6	TMAL2.5E2	•			•	
3/32	TMA3E	GTMA3E	1/4	1 7/8	TMA3E2	6	TMAL3E2	•			•	
7/64	TMA3.5E	_	1/4	1 7/8	TMA3.5E2	6	TMAL3.5E2	•			•	
1/8	TMA4E	GTMA4E	1/4	1 7/8	TMA4E2	6	TMAL4E2	•				
9/64	TMA4.5E	_	1/4	1 7/8	TMA4.5E2	6	TMAL4.5E2	•				
5/32	TMA5E	GTMA5E	1/4	1 7/8	FA5E2	_	_	•				
3/16	TMA6E	GTMA6E	1/4	1 <sup>15</sup> /16	FA6E2	_	_	•				
7/32	TMA7E	GTMA7E	1/4	1 7/8	FA7E2	_	_	•				
1/4	TMA8E	GTMA8E	1/4	1 7/8	FA8E2	_	_	•				
			Square Drive, In.	A	В	Fits These Cap Screws	Fits These Set Screws		$\bigcirc$		$\bigcirc$	$\bigcirc$
1/8	FA4E	GFA4E	3/8	2 1/16	TMA4E2	_	1/4		•	•	•	
9/64	FA4.5E	GFA4.5E	3/8	2 1/16	TMA4.5E2	#8	_		•	•	•	
5/32	FA5E	GFA5E	3/8	2 1/16	FA5E2	#10	5/16		•	•	•	
3/16	FA6E	GFA6E	3/8	2 1/16	FA6E2	1/4	3/8		•	•	•	
7/32	FA7E	GFA7E	3/8	2 1/16	FA7E2	_	7/16		•	•	•	
1/4	FA8E	GFA8E	3/8	2 1/16	FA8E2	5/16	1/2		•	•	•	
5/16	FA10E	GFA10E	3/8	2 1/16	FA10E2	3/8	5/8		•	•	•	
3/8	FA12E	GFA12E	3/8	2 3/32	FA12E2	7/16, 1/2	3/4		•	•	•	
5/16	SA10E	GSA10E	1/2	2 3/8	FA10E2							•
3/8	SA12E	GSA12E	1/2	2 1/2	SA12E2	_	_					•
7/16	SA14E	GSA14E	1/2	2 7/8	SA14E2	_						•
1/2	SA16E	GSA16E	1/2	3 1/16	SA16E2	_	_					•
9/16	SA18E	GSA18E	1/2	3 3/16	SA18E2							•
5/8	SA20E	GSA20E	1/2	3 11/32	LAW120E2	_						•
3/4	SA24E	GSA24E	1/2	4 1/16	LAW124E2							•
5/8	LAW120E		3/4	3 3/4	LAW120E2	_						
3/4	LAW124E	<u> </u>	3/4	4 3/8	LAW124E2							
7/8	IMA283	_	1	5 <sup>5</sup> /8	IMA283-2	_						
1	IMA323	I—	1	5 5/8	IMA323-2	_	_					

**NOTE:** Optional long bits are not included in the listed sets.

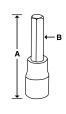
Sets shown include storage tray





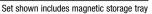
Set Contains:

206FEA



# Hex/Stubby, inches

<b>□</b> Ţ	$\bigcirc$	Square Drive, In.	A	В	Fits These Cap Screws	Fits These Set Screws	
1/8	TMAXS4E	1/4	1 1/32	TMAXS4E2	_	_	•
9/64	TMAXS4.5E	1/4	1 <sup>1</sup> /16	TMAXS4.5E2	_	_	•
5/32	TMAXS5E	1/4	1 1/16	TMAXS5E2	_	_	•
3/16	TMAXS6E	1/4	1 3/32	TMAXS6E2	_	_	•
7/32	FAXS7E	3/8	1 <sup>5</sup> / <sub>16</sub>	FAXS7E2	_	_	•
1/4	FAXS8E	3/8	1 11/32	FAXS8E2	5/16"	1/2"	•
5/16	FAXS10E	3/8	1 13/32	FAXS10E2	3/8"	5/8"	•
3/8	FAXS12E	3/8	1 15/32	FAXS12E2	1/2"	3/4"	•



Hex/Extra Long, inches

- 1		υ,					_
<b>□</b> Ţ	$\bigcirc$	Square Drive, In.	A	Fits These Cap Screws	Fits These Set Screws	В	$\bigcirc$
5/32	FA5LE	3/8	6 1/16	#10	5/16"	FA5LE2	•
3/16	FA6LE	3/8	6 1/8	1/4"	3/8"	FA6LE2	•
7/32	FA7LE	3/8	6 1/8	_	7/16"	FA7LE2	•
1/4	FA8LE	3/8	6 1/8	5/16"	1/2"	FA8LE2	•
5/16	FA10LE	3/8	6 1/16	3/8"	5/8"	FA10LE2	•
3/9	FΔ121F	3/9	6 1/16	1/4"	3/4"	FΔ12LF2	•

Set shown includes storage tray

## **Hex Bit**





## Ball Hex/Standard, inches

		Square Drive, In.	A	В	
1/8	TMAB4E	1/4	1 7/8	TMAB4E2	•
9/64	TMAB4.5E	1/4	1 7/8	TMAB4.5E2	•
5/32	TMAB5E	1/4	1 7/8	TMAB5E2	•
3/16	TMAB6E	1/4	1 7/8	TMAB6E2	•
7/32	FAB7E	3/8	2 3/32	FAB7E2	•
1/4	FAB8E	3/8	2 3/32	FAB8E2	•
5/16	FAB10E	3/8	2 3/32	FAB10E2	•
3/8	FAB12E	3/8	2 3/32	FAB12E2	•

Sets shown include magnetic storage tray

Set Contains:



206EFABL

#### Ball Hex/Long, inches

Ball Hex/	Long, inche	Set Contains:	EFABI		
	Ω	Square Drive, in.	A	В	
5/32	FABL5E	3/8	5 <sup>1</sup> / <sub>16</sub>	FABL5E2	•
3/16	FABL6E	3/8	5 <sup>1</sup> / <sub>16</sub>	FABL6E2	•
7/32	FABL7E	3/8	5 <sup>1</sup> / <sub>16</sub>	FABL7E2	•
1/4	FABL8E	3/8	5 <sup>1</sup> / <sub>16</sub>	FABL8E2	•
5/16	FABL10E	3/8	5 <sup>1</sup> / <sub>16</sub>	FABL10E2	•
3/8	FABL12E	3/8	5 <sup>1</sup> / <sub>16</sub>	FABL12E2	•

Sets shown include storage tray



Hex, inches (Power)

•						
<b>□</b> Ţ		Square Drive, in.	A	Fits These Cap Screws	Fits These Set Screws	В
1/8	PFA4E	3/8	2 1/16	_	1/4"	TMA4E2
9/64	PFA4.5E	3/8	2 1/16	#8	_	TMA4.5E2
5/32	PFA5E	3/8	2 1/16	#10	5/16"	FA5E2
3/16	PFA6E	3/8	2 1/16	1/4"	3/8"	FA6E2
7/32	PFA7E	3/8	2 1/16	_	5/16"	FA7E2
1/4	PFA8E	3/8	2 1/16	7/16"	1/2"	FA8E2
5/16	PFA10E	3/8	2 1/16	3/8"	5/8"	FA10E2
3/₂	PFΔ12F	3/₂	2 1/16	1/4" 1/2"	3/4"	FΔ12F2

### Hex, inches

		Square Drive, in.	A	В
5/16	PSA10E	1/2	2 7/16	FA10E2
3/8	PSA12E	1/2	2 9/16	SA12E2
7/16	PSA14E	1/2	2 7/8	SA14E2
1/2	PSA16E	1/2	3 1/16	SA16E2
9/16	PSA18E	1/2	3 1/8	SA18E2
5/8	PSA20E	1/2	3 7/16	LAW120E2
3/4	PSA24E	1/2	4 1/16	LAW124E2



PSA<sub>10</sub>E

# Hex Bit (Blue-Point®)





#### Hex Standard, inches

iick Stail	aara, michi		
<b>□</b> Ţ		Square Drive, In.	A
1/8	BLPH1418	1/4	1 <sup>7</sup> / <sub>16</sub>
9/64	BLPH14964	1/4	1 <sup>7</sup> / <sub>16</sub>
5/32	BLPH14532	1/4	1 <sup>7</sup> /16
3/16	BLPH14316	1/4	1 7/16
7/32	BLPH14732	1/4	1 7/16
1/4	BLPH1414	1/4	1 7/16
5/16	BLPH14516	1/4	1 7/16
7/32	BLPH38732	3/8	1 <sup>15</sup> / <sub>16</sub>
1/4	BLPH3814	3/8	1 <sup>15</sup> / <sub>16</sub>
5/16	BLPH38516	3/8	1 <sup>15</sup> / <sub>16</sub>
3/8	BLPH3838	3/8	1 15/16
7/16	BLPH12716	1/2	2 7/16
1/2	BLPH1212	1/2	2 7/16
9/16	BLPH12916	1/2	2 7/16
5/8	BLPH1258	1/2	2 7/16
21.	D. D	1/-	0.7/



#### **BLPHEXS1418**

# Hex/Stubby, inches

<b>□</b> Ţ	$\bigcirc$	Square Drive, In.	A
5/64	BLPHS14564	1/4	3/4
3/32	BLPHS14332	1/4	3/4
7/64	BLPHS14764	1/4	3/4
5/32	BLPHS14532	1/4	3/4
3/16	BLPHS14316	1/4	3/4
7/32	BLPHS14732	1/4	3/4
1/4	BLPHS1414	1/4	3/4
5/16	BLPHS14516	1/4	3/4
3/8	BLPHS1438	1/4	3/4

#### **BLPHEXS1418 Hex Driver Set.**

Includes all BLPHS bit sockets listed above plus all BLPHSM metric bit sockets in storage tray.







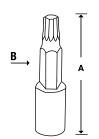


- Do not use chrome or industrial finish hand sockets with impact drivers
- Read safety precautions on pages W1 to W4

#### Triple Square Drivers

Double Hex socket drivers and Triple Square socket drivers cannot be interchanged between applications. Triple square socket drivers have 90° corners. Double hex socket drivers have 120° corners. Using a Triple Square tool in a Double Hex application will strip the bolt head. In general, Triple Square tools are used on European vehicles and Double Hex tools are used on Asian vehicles.





Tr	Triple Square, mm    Stock No.   Square   Drive, In.				Set 🐧 Contains:	in
		Stock No.	Drive,	A	В	
	4	FTSM4E	3/8	48.5	FTSM4E2	
0111	5	FTSM5E	3/8	48.5	FTSM5E2	
	6	FTSM6E	3/8	48.5	FTSM6E2	•
Longui	8	FTSM8E	3/8	58	FTSM8E2	•
	10	FTSM10E	3/8	67.8	FTSM10E2	•
	8	FTSM8LE	3/8	84.6	FTSM8LE2	
	10	FTSM10LE	3/8	101.6	FTSM10LE2	
	10	STSM10E	1/2	88.9	STSM10E2	

1/2

1/2

1/2

1/2

1/2

109.5

147.6

108.0

108.0

STSM12E

STSM12LE

STSM14E

STSM16E\*

STSM18E

12

12

14

18

Long

Set shown includes storage tray

STSM12E2

STSM14E2

STSM16E2

STSM18E2

STSM12LE2

#### Applications:

FTSM6E (6 mm, 3/8" drive) Various applications on European vehicles.

FTSM8E (8 mm, 3/8" drive) Remove and install head and accessory bolts on Mercedes®, and remove and install axle shaft bolts on VW® and Audi® vehicles.

FTSM10E (10 mm, 3/8" drive) Used for cylinder head bolts and drive shaft bolts on Mercedes, and remove and install axle shaft bolts on VW and Audi vehicles.

STSM12E (12 mm, 1/2" drive) Remove and install cylinder head bolts on Mercedes, rear toe adjustment on 1999 and newer Audi A6, and axel shaft bolts on new VW vehicles.

STSM14E Metric Triple Square Driver. Applications include 2003 and later VW Touareg front axle bolts, 2003 and later Porsche® Cayenne front axle bolts, various Audi / VW axle bolts plus Audi TT differential mount bolts and transmission drain plugs.

STSM16E Metric Triple Square Driver. Applications include Audi TT Clutch and Belly Pan, various VW / Audi transmission drain plugs (tamper resistant), 2003 and later VW Touareg front and rear brake caliper bolts, 2003 and later *Porsche* Cavenne brake caliper bolts, plus Detroit Diesel® flywheel bolts and front crank pulley on 900 and 4000 engines and head bolts on 900 engines.

STSM18E Metric Triple Square Driver. Applications include removing and installing rear axle bolts of 2006 VW Jetta and Golf.



# Triple Square/Stubby, mm (1/2" drive)

Triple Square/	Set Contains:			
<b>mm</b> Ţ	Stock No.	A	В	
10	STSM10SE	59.4	STSM10SE2	•
12	STSM12SE	59.4	STSM12SE2	•
14	STSM14SE	63.2	STSM14SE2	•
16	STSM16SE	68.1	STSM16SE2	•
18	STSM18SE	69.8	STSM18SE2	•

Set shown includes storage tray

STSM10SE Used for cylinder head bolts, driveshaft bolts and various other applications on VW, Audi and Mercedes vehicles,

STSM12SE Access exhaust manifold bolts on DD15 and Mercedes 900/4000 engines. Also for the back of the turbo and some oil pans. Head bolts and axle shaft bolts on VW, Audi and Mercedes vehicles.

STSM14SE Brake caliper bolts on Volkswagen®, Jetta, Rabbit, Passat, EOS and Tiquan. There is limited room due to the control arm in the way when backing out the fastener.

STSM16SE VW and Audi transmission and differential plug. Porsche Cayenne brake caliper bolts.

STSM18SE Rear axle bolts on Volkswagen Jetta and Golf.

<sup>\*</sup>Tamper Resistant

# Triple Square Bit (Blue-Point®)







	Stock No.	Square Drive, in.	
4	BLPXZNM384	3/8	•
5	BLPXZNM385	3/8	•
6	BLPXZNM386	3/8	•
8	BLPXZNM388	3/8	•
10	BLPXZNM3810	3/8	•
12	BLPXZNM3812	3/8	•
14	BLPXZNM3814	3/8	•
16	BLPXZNM3816	3/8	•
18	BLPXZNM3818	3/8	•

Set shown includes storage tray



**BLPXZN146** 

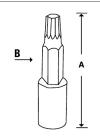
# Triple Square/Stubby, mm

	Stock No.	Square Drive, in.	A mm
4	BLPXZN144	1/4	27
5	BLPXZN145	1/4	27
6	BLPXZN146	1/4	27
8	BLPXZN148	1/4	27
10	BLPXZN1410	1/4	27
12	BLPXZN1412	1/4	27

# **Special Application**









Mortorg®/Super Bit

, · ,						
<b>#</b> ]	Stock No.	Square Drive, In.	A	В		
MTS-0	PFMTS0E	3/8	_	PFMTS0E2		
MTS-1	PFMTS1E	3/8	1 3/4	PFMTS1E2		
MTS-3	PFMTS3E	3/8	2 1/8	PFMTS3E2		
MTS-4	PFMTS4E	3/8	2 1/8	PFMTS4E2		

**PFMTS1E Socket Driver.** Applications: For seat tracks on 2009 Mazda® 6. Other seat applications: Cadillac® CTS, Nissan® Maxima and Altima.

PFMTS4E Socket Driver. Applications: Remove/install the bolts that secure the bell housing to the transmission on GM® 4L60 transmissions.

### Polydrive Head Bolt, mm

	Stock No.	Description	A	В
10	SPDL10E	#10 Polydrive Head Bolt Socket Driver	159	SPDL10E2

SPDL10E Socket Driver. Use to remove and install #10 Polydrive cylinder head bolts on 1998 and later VW®/Audi® vehicles with 5 valve motors. 1/2" Drive.

# - Flat Tip, inches

	<b>□</b> Ţ	Stock No.	Industrial Stock No.	Square Drive, in.	A	В
Standard	3/16 x .032	TMC104E	_	1/4	2 7/8	TMC104E2A
Length	1/4" x .032	TMC105E	_	1/4	2 <sup>15</sup> /16	TMC105E2A
	3/8 x .042	TMC106E	-	1/4	2 7/8	TMC106E2A
	1/4 X 1/32	F23E	_	3/8	3	F23E2A
	5/16 X 3/64	F25E	GF25E	3/8	3	F25E2A
	3/8 x 1/16	F31E	GF31E	3/8	3 7/16	F31E2A
	<sup>7</sup> / <sub>16</sub> x .050	SW28E	_	1/2	3 1/16	SW28E2A
	1/2 x .075	SW32E	_	1/2	3 1/16	SW32E2A
	5/8 x .093	SW40E	_	1/2	3 1/4	SW40E2A
Short	1/4 x .036	TM82	_	1/4	7/8	TM82-2C
	1/4 X 1/32	F42E	_	3/8	1 <sup>13</sup> / <sub>16</sub>	F42E2
	5/16 X <sup>1</sup> /16	F52E		3/8	1 <sup>13</sup> / <sub>16</sub>	F52E2
	3/8 x 1/16	F62E	GF62E	3/8	1 27/32	F62E2





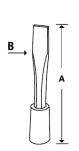




- Do not use chrome or industrial finish hand sockets with impact drivers
- · Read safety precautions on pages W1 to W4

Flat Tip Bit

# **Flat Tip Bits**







BLPFT14732 BLPFS1438

# - Flat Tip (Blue-Point®), inches

	<b>□</b> Ţ	Stock No.	Square Drive, In.	A
Standard Length	5/32	BLPFT14532	1/4	<b>1</b> <sup>7</sup> / <sub>16</sub>
	7/32	BLPFT14732	1/4	<b>1</b> 7/16
	9/32	BLPFT14932	1/4	<b>1</b> <sup>7</sup> / <sub>16</sub>
Short	1/4	BLPFS1414	1/4	3/4
	3/8	BLPFS1438	1/4	3/4

# Phillips® Bits









+ /

Phillips/Standard

 $\stackrel{B}{\longrightarrow} \stackrel{\bigcap}{\bigvee} \stackrel{A}{\bigvee}$ 

+	Phillips	(Blue-Point)
T	rniuips	(Blue-Point)

	<b>□</b> Ţ	Stock No.	Square Drive, In.	A
Standard	#0	BLPP140	1/4	1 7/16
Length	#1	BLPP141	1/4	1 7/16
	#2	BLPP142	1/4	1 7/16
	#3	BLPP383	3/8	1 27/32
	#4	BLPP384	3/8	1 27/32
Stubby	#1	BLPPS141	1/4	3/4
	#2	BLPPS142	1/4	3/4

	<b>□</b> Ţ	Stock No.	Industrial Stock No.	Square Drive, In.	A	В
Standard	#1	TMP12E	GTMP12E	1/4	1 <sup>7</sup> /8	TMP12E2
Length	#2	TMP22E	_	1/4	1 <sup>7</sup> /8	FP22E2
	#2	FP22E	GFP22E	3/8	2 1/16	FP22E2
	#3	FP32E	_	3/8	2 <sup>5</sup> /16	FP32E2
	#4	FP41E	_	3/8	1 <sup>21</sup> / <sub>32</sub>	FP41E2
	#3	SP32E	_	1/2	2 3/16	SP32E2
	#4	SP42E	_	1/2	2 <sup>5</sup> /16	SP42E2
Short	#2	TMP21E	_	1/4	1 1/4	TMP21E2
	#2	TMP82	_	1/4	15/16	TMP82-2B
	#3	FPS32E	_	3/8	1 29/32	SP32E2
Long	#2	TMP23E	_	1/4	3 <sup>1</sup> /16	TMP23E2
	#2	FP24E	_	3/8	4 1/32	FP24E2
	#3	FP34E	_	3/8	4 1/32	FP34E2
	#4	FP42E	_	3/8	2 9/16	FP42E2

# Pozidriv® and Clutch® Drivers-











FPD32E

🌞 Pozidriv

<b>#</b> ]	Stock No.	Square Drive, In.	A	В
#2	FPD22E	3/8	2 1/16	FPD22E2
#3	FPD32E	3/8	2	FPD32E2

BLPPD383
Pozidriv. (Blue-Point)

- I original (State I offic)						
Size	Stock No.	Square Drive, In.	A			
#3	BLPPD383	3/8	1 27/32			
#4	RI DDD384	3/₂	1 27/22			

F29E

**Clutch**, Standard Length

	<b>□</b> Ţ	Square Drive, In.	A	В
3/16	TM27E	1/4	3/16	1 3/8
1/4	TM30E	1/4	1/4	1 3/8
5/32	TM31E	1/4	5/32	1 3/8
3/8	F29E	3/8	3/8	1 3/4
<sup>5</sup> /16	F30E	3/8	19/64	1 3/4

# 3/8" and 1/2" Impact Drivers and Sets

# 3/8" Drive Impact Sets 208EPIT Set. 8 pcs Includes:

Stock No.	Description
PIT120	Impact Driver
F42E	1/4" Flat Tip Driver
F52E	5/16" Flat Tip Driver
F62E	3/8" Flat Tip Driver
FP22E	#2 Phillips Driver
FP32E	#3 Phillips Driver
FP42E	#4 Phillips Driver
FPD22E	#2 Pozidriv Driver
PB108A	Storage Case

#### PIT120 Impact Driver.

Delivers cam action impact when struck with a hammer for loosening or tightening fasteners. Industrial finish.

#### PIT2230E Impact Driver Set.

Includes PIT120 impact driver plus all sockets, screwdrivers and replacement bits (36 pcs) conveniently displayed in a storage tray that fits in the KRA142 metal box.

#### PIT2230E Set. 36 pcs Includes:

Stock No.	Description
PIT120	Impact Driver
FA6E	3/16" Hex Driver w/extra FA6E2 Bit
FA7E	7/32" Hex Driver w/extra FA7E2 Bit
FA8E	1/4" Hex Driver w/extra FA8E2 Bit
FA10E	5/16" Hex Driver w/extra FA10E2 Bit
FA12E	3/8" Hex Driver w/extra FA12E2 Bit
F42E	1/4" Flat Tip Driver w/extra F42E2 Bit
F52E	5/16" Flat Tip Driver w/extra F52E2 Bit
F62E	3/8" Flat Tip Driver w/extra F62E2 Bit
FP22E	#2 Phillips Driver w/extra FP22E2 Bit
FP32E	#3 Phillips Driver w/extra FP32E2 Bit
FP41E	#4 Phillips Driver w/extra FP41E2 Bit
FP42E	#4 Phillips Driver w/extra FP42E2 Bit
F29E	3/8" Clutch Driver
F30E	5/16" Clutch Driver
FPD22E	#2 <i>Pozidriv</i> Driver
IMF120A	3/8" 6-point Impact Socket
IMF140A	7/16" 6-point Impact Socket
IMF160	1/2" 6-point Impact Socket
IMF180	9/16" 6-point Impact Socket
IMF200	5/8" 6-point Impact Socket
IMF220	11/16" 6-point Impact Socket
IMF240	3/4" 6-point Impact Socket
GF22	11/16" Drag Link Socket
KRA142	Metal Box

#### 1/2" Drive Impact Sets

_,	
Stock No.	Description
PIT160	Impact Driver
A26A	Drag Link Socket
SA10E	5/16" Hex Head Driver
SA12E	3/8" Hex Head Driver
SA14E	7/16" Hex Head Driver
SA16E	1/2" Hex Head Driver
SA18E	9/16" Hex Head Driver
SA20E	5/8" Hex head Driver
SP32E	#3 Phillips Driver
SP42E	#4 Phillips Driver
SW28E	7/16" x .050" Socket Driver
SW32E	1/2" x .075" Socket Driver
KRA142	Metal Box

#### Includes:

PIT160 This 1/2" drive unit delivers cam action impact when struck with a hammer.

PIT3120EB Impact Driver Set. PIT160 impact driver plus sockets and socket drivers (12 pcs) in KRA142 metal box.





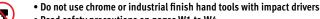




PIT3120EB







# Combination Bit Sets (Blue-Point®)



BLPBSS40

# 1/4" Drive Stubby Bit Socket Set (40 pcs)

	Stock No.	Size
Torx	BLPTS148TP	TP8
Tamper	BLPTS1410TP	TP10
Resistant	BLPTS1415TP	TP15
nosistant	BLPTS1420TP	TP20
	BLPTS1425TP	TP25
	BLPTS1427TP	TP27
	BLPTS1430TP	TP30
	BLPTS1440TP	TP40
	BLPTS1445TP	TP45
	BLPTS1450TP	TP50
Triple	BLPXZN144	XZN4
Square	BLPXZN145	XZN5
-	BLPXZN146	XZN6
	BLPXZN148	XZN8
	BLPXZN1410	XZN10
	BLPXZN1412	XZN12
Flat Tip	BLPFS1414	1/4" Wide
_	BLPFS1438	3/8" Wide
Phillips	BLPPS141	P1
	BLPPS142	P2
Hex, inches	BLPHS14564	5/64"
	BLPHS14332	3/32"
	BLPHS14764	7/64"
	BLPHS1418	1/8"
	BLPHS14532	5/32"
	BLPHS14316	3/16"
	BLPHS14732	7/32"
	BLPHS1414	1/4"
	BLPHS14516	5/16"
	BLPHS1438	3/8"
Hex, mm	BLPHSM142	2 mm
	BLPHSM142.5	2.5 mm
	BLPHSM143	3 mm
	BLPHSM144	4 mm
	BLPHSM145	5 mm
	BLPHSM146	6 mm
	BLPHSM147	7 mm
	BLPHSM148	8 mm
	BLPHSM149	9 mm
	BLPHSM1410	10 mm
	BLPCSS400PB Storage Case	



**BLPTSSC43** 

# Combination Torx®/Socket and Bit Socket Set (43 pcs)

	Stock No.	Size	Drive Size, inches
External <i>Torx</i>	BLPTE144	E4	1/4
Sockets	BLPTE145	E5	1/4
	BLPTE146	E6	1/4
	BLPTE147	E7	1/4
	BLPTE148	E8	1/4
	BLPTE3810	E10	3/8
	BLPTE3812	E12	3/8
	BLPTE3814	E14	3/8
	BLPTE3816	E16	3/8
	BLPTE1218	E18	1/2
	BLPTE1220	E20	1/2
	BLPTE1222	E22	1/2
	BLPTE1224	E24	1/2
<i>Torx</i> Tamper	BLPT146TP	T6	1/4
Resistant Bit	BLPT147TP	T7	1/4
Sockets	BLPT148TP	T8	1/4
	BLPT149TP	T9	1/4
	BLPT1410TP	T10	1/4
	BLPT1415TP	T15	1/4
	BLPT1420TP	T20	1/4
	BLPT1425TP	T25	1/4
	BLPT1427TP	T27	1/4
	BLPT1430TP	T30	1/4
	BLPT3840TP	T40	3/8
	BLPT3845TP	T45	3/8
	BLPT3850TP	T50	3/8
	BLPT1255TP	T55	1/2
	BLPT1260TP	T60	1/2
<i>Torx</i> Tamper	BLPTL146TP	T6	1/4
<b>Resistant Long Bit</b>	BLPTL147TP	T7	1/4
Sockets	BLPTL148TP	T8	1/4
	BLPTL149TP	T9	1/4
	BLPTL1410TP	T10	1/4
	BLPTL1415TP	T15	1/4
	BLPTL1420TP	T20 T25	1/4
	BLPTL1425TP BLPTL1427TP	T27	1/4
	BLPTL1430TP	T30	1/4
	BLPTL14301P	T40	3/8
	BLPTL3845TP	T45	3/8
	BLPTL3850TP	T50	3/8
	BLPTL1255TP	T55	1/2
	BLPTL1260TP	T60	1/2
	BLPTSSC43PB Storage Case	100	1/12
	DLF 133043FD Storage Case		

#### **Combination Bit Set**

# Combination Hex Drive Bit Socket Set BLPHSSC30 Combination Socket Driver Set.

- 30 piece Combination 1/4, 3/8 and 1/2" drive Hex Bit Socket Set
- Set covers a full range of metric hex sizes from 2.5 to 19 mm and fractional from 1/8 to 3/4"
- Drive size increase with bit size to offer maximum strength
- Perfect set for the technician in the shop or for use around the house
- Comes in a durable compact case
- · Supported by a full lifetime warranty, no need to replace bits

### **Combination Socket Driver Set (30 pcs)**

	Stock No.	Size	Drive Size, inches		Stock No.	Size	Drive Size, inches
Hex, inches	BLPH1418	1/8	1/4	Hex, mm	BLPH1425	2.5	1/4
	BLPH14964	9/64	1/4		BLPH386	6	3/8
	BLPH14532	5/32	1/4		BLPH387	7	3/8
	BLPH14316	3/16	1/4		BLPH388	8	3/8
	BLPH14732	7/32	1/4		BLPH389	9	3/8
	BLPH1414	1/4	1/4		BLPH3810	10	3/8
	BLPH38732	7/32	3/8		BLPH123	3	1/2
	BLPH3814	1/4	3/8		BLPH124	4	1/2
	BLPH38516	5/16	3/8		BLPH125	5	1/2
	BLPH3838	3/8	3/8		BLPH126	6	1/2
	BLPH12716	7/16	3/8		BLPH1210	10	1/2
	BLPH1212	1/2	1/2		BLPHM1212	12	1/2
	BLPH12916	9/19	1/2		BLPH1214	14	1/2
	BLPH1258	5/8	1/2		BLPH1217	17	1/2
	BLPH1234	3/4	1/2		BLPH1219	19	1/2



**BLPHSSC30** 

# High Performance 1/4" Drive (Flank Drive®) Sockets

#### Universal, inches

	<b>□</b> Ţ	(12)	A	В	D	E
	1/4	TDHU81A	3/8	1/2	1 15/64	1/4
	<sup>5</sup> /16	TDHU101A	29/64	1/2	1 23/64	9/32
[	3/8	TDHU121A	17/32	1/2	1 15/32	11/32

Chrome tools comply with Military Spec. MS-33787 and MIL-W-8982. (Industrial finish tools comply with performance specifications and differ only in finish.) The unique spline wrenching configuration can also be used on ordinary

6 and 12 point fasteners with an advantage similar to the Snap-on® *Flank Drive* wrenching system.





# 1/4" Drive Spline Sockets

Snap-on spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft. Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque to reduce risk of damage

to the fastener or to the tool.



**TES10** 

#### Shallow, inches

	-						
		Stock No.	A	В	C	D	E
#7	7/32	TES7	11/32	27/64	29/64	59/64	7/32
#8	1/4	TES8	3/8	27/64	29/64	59/64	17/64
#9	9/32	TES9	7/16	3/16	37/64	59/64	19/64
#10	5/16	TES10	29/64	29/64	19/32	59/64	21/64
#12	3/8	TES12	35/64	35/64	19/32	59/64	23/64
#14	7/16	TES14	5/8	39/64	23/32	1 3/64	7/16



#### Deep, inches

TEL<sub>10</sub>

	<b>□</b> Ţ	Stock No.	A	В	C	D	E
#7	7/32	TEL7	11/32	27/64	143/64	2	7/32
#8	1/4	TEL8	3/8	7/16	1 43/64	2	17/64
#10	5/16	TEL10	29/64	29/64	1 43/64	2	21/64

Chrome tools comply with Military Spec. MS-33787 and MIL-W-8982. (Industrial finish tools comply with performance specifications and differ only in finish.) The unique spline wrenching configuration can also be used on ordinary 6 and 12 point fasteners with an advantage similar to the *Snap-on Flank Drive* wrenching system.





#### Shallow Universal, inches

		Stock No.	A	В	D	E
#8	1/4	TESU8	3/8	1/2	1 <sup>15</sup> / <sub>64</sub>	17/64
#10	5/16	TESU10	29/64	1/2	1 23/64	21/64
				_		

#### Deep, mm

		Stock No.	A	В	C	D	E
#7	7	TELM7A	10.4	10.9	36.3	50.8	7.3
#8	8	TELM8A	11.7	11.7	36.3	50.8	8.8







- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# 3/8" Drive Spline Sockets



Shallow, inches

**FES200** 

		Stock No.	A	В	C	D	E
#12	3/8	FES120	35/64	21/32	19/32	1 3/64	23/64
#14	7/16	FES140	5/8	11/16	5/8	1 7/64	7/16
#16	1/2	FES160	23/32	3/4	39/64	1 7/64	29/64
#18	9/16	FES180	53/64	53/64	39/64	1 7/64	15/32
#20	5/8	FES200	57/64	57/64	45/64	1 15/64	35/64



### Deep, mm

		Stock No.	A	В	C	D	E
#10	10	FELM10A	14.5	16.8	40.4	54.0	10.0

## Deep, inches



**FEL200** 

	<b>□</b> Ţ	Stock No.	A	В	C	D	E
#12	3/8	FEL120	35/64	5/8	1 41/64	2 1/8	23/64
#14	7/16	FEL140	41/64	43/64	1 3/4	2 1/8	7/16
#16	1/2	FEL160	23/32	23/32	1 55/64	2 1/4	15/32
#18	9/16	FEL180	53/64	53/64	1 55/64	2 3/8	15/32
#20	5/8	FEL200	57/64	57/64	1 27/32	2 3/8	35/64

# 1/4" Drive Spline Sockets





IMFES14

**Shallow Universal, inches** 

		Stock No.	A	В	D	E
#12	3/8	FESU120	35/64	3/4	1 31/32	23/64
#14	7/16	FESU140	5/8	3/4	2 3/64	7/16
#16	1/2	FESU160	23/32	3/4	2 5/64	29/64
#18	9/16	FESU180	53/64	3/4	2 1/8	15/32

SAE Spec. MA1547A

# Impact, inches

		Stock No.	A	В	C	D	E
#14	7/16	IMFES14	3/4	3/4	5/8	1 7/64	7/16

# 1/2" Drive Spline Sockets



Shallow, inches

	<b>□</b> Ţ	Stock No.	A	В	C	D	E	
#16	1/2	SES161	23/32	55/64	5/8	1 <sup>19</sup> /64	29/64	•
#18	9/16	SES181	53/64	55/64	5/8	1 <sup>19</sup> /64	15/32	•
#20	5/8	SES201	57/64	57/64	55/64	1 35/64	35/64	•
#22	11/16	SES221	31/32	31/32	27/32	1 35/64	37/64	•
#24	3/4	SES241	1 3/64	31/32	53/64	1 35/64	37/64	•
#26	13/16	SES261	1 <sup>1</sup> /8	1 <sup>1</sup> /8	13/16	_	37/64	•
#28	7/8	SES281	1 3/16	1 <sup>1</sup> /8	51/64	1 35/64	37/64	•
#30	15/16	SES301	1 17/64	1 17/64	49/64	1 35/64	37/64	•

3/4" and 1" Drive Spline Sockets



3/4" Drive Shallow, inches

70

•		•					
	<b>□</b> Ţ	Stock No.	A	В	C	D	E
#24	3/4	LES242	1 3/64	1 3/8	1	1 51/64	41/64
#30	15/16	LES302	1 3/8	1 3/8	1 7/64	1 <sup>59</sup> / <sub>64</sub>	51/64
#34	<b>1</b> <sup>1</sup> / <sub>16</sub>	LES342	1 35/64	1 19/32	1	2 3/64	57/64
#36	1 1/8	I FS362	1 5/g	1 1/2	1 3/16	2 3/16	15/16

1" Drive Shallow, inches

Set 'Contains:

	<b>□</b> Ţ	Stock No.	A	В	C	D	E
#32	1	LES323	1 29/64	1 <sup>55</sup> / <sub>64</sub>	1 35/64	2 7/16	53/64
#34	<b>1</b> <sup>1</sup> / <sub>16</sub>	LES343	1 35/64	1 <sup>55</sup> / <sub>64</sub>	1 37/64	2 35/64	57/64
#38	1 3/16	LES383	1 23/64	1 63/64	1 25/32	2 51/64	1 <sup>1</sup> / <sub>64</sub>



# 1/4" Drive (Chrome/Industrial Finish)







GTMXK80

**BLPTXK3** 

# **106BTMX**

Knurled	1002111111		Contain	s: OTALY
Stock No.	Industrial Stock No.	A	В	
TMX1*	_	<sup>5</sup> /16	1 <sup>1</sup> /4	•
TMXK2**	GTMX2*	<sup>5</sup> /16	2	•
TMXK4	GTMX4*	<sup>5</sup> /16	4	•
TMXK60**	GTMX60*	<sup>5</sup> /16	6	•
TMXK80**	GTMXK80	<sup>5</sup> /16	8	•
TMXK110	GTMXK110	<sup>5</sup> /16	11	•
TMXK140	GTMX140*	<sup>5</sup> /16	14	
TMX240*		3/8	24	
TMX360	_	3/8	36	

<sup>\*</sup>Not knurled

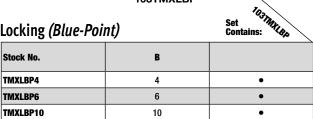
### Knurled (Blue-Point®)

Stock No.	В
BLPTXK1.5	1 9/16
BLPTXK2	2 <sup>3</sup> / <sub>32</sub>
ВLРТХКЗ	2 <sup>15</sup> /16
BLPTXK4	4
BLPTXK6	6



103TMXLBP

# Locking (Blue-Point)



Set shown includes storage tray

Set



103TMXKLA

### **Locking - Knurled**

- Quick release sleeve releases socket quickly and easily
- . Knurling at the drive end provides for easy fingertip turning



Stock No.	A	В	
TMXKL60A	<sup>5</sup> /16	6	•
TMXKL110A	<sup>5</sup> /16	11	•

#### TMXKLP Locking Pins.

- Locking pins for TMXKLP Series ExtensionsSet shown includes storage tray
- TMXKLRK Repair Kit.
- · Repair kit for TMXKLP Series Extensions
- 5 pack



# Locking (Set Screw) (Blue-Point)

Stock No.	Finish	A	В
YA515A	Chrome	1/2	1 <sup>11</sup> /16

#### YA515A Set Screw Locking Extension.

- Allows easy and secure tool stacking
- · Securely connects breaker bar, extensions and ratchets to socket and socket drivers for overhead work
- Sliding sleeve for easy removal
- Not for use with power or impact tools



TZ1

#### Connectors

#### **TZ1 Extension Connector.**

- 1/4" drive extension connector adds versatility to extensions, breaker bars, ratchets and crowfoot wrenches
- · Connect one or more tools for a variety of ways to reach limited access fasteners
- For use in marine, heavy truck, plumbing and manufacturing applications

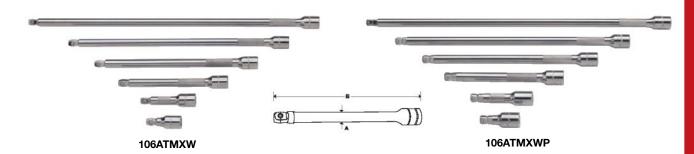
#### TZ2 Extension Connector Set.

Set of 2 TZ1

Set shown includes storage tray

<sup>\*\*</sup>ASME®/ANSI® B107.10

# 1/4" Drive (Chrome/Industrial Finish)



#### Wobble

Provides 16° of additional accessibility

· Knurled shanks for easy fingertip turning

	100	
WW	مرورة ains:	Set Conta
WW	مرود ains:	Set Conta

Tallanda chamic for each imgerup tanning			
A	В		
5/16	1 <sup>1</sup> /4	•	
5/16	2	•	
<sup>5</sup> /16	4	•	
<sup>5</sup> /16	6	•	
<sup>5</sup> /16	8	•	
<sup>5</sup> /16	11	•	
	5/16 5/16 5/16 5/16 5/16	5/16 1 1/4 5/16 2 5/16 4 5/16 6 5/16 8	

\*Not knurled Set shown includes storage tray

#### **Wobble Plus**

Provides 16° of additional accessibility

Useable in both wobble and rigid functionality Contains:					
Stock No.	A	В			
TMXWP1*	5/16	1 <sup>1</sup> /4	•		
TMXWP2	5/16	2	•		
TMXWP4	<sup>5</sup> /16	4	•		
TMXWP6	<sup>5</sup> /16	6	•		
TMXWP8	5/16	8	•		
TMXWP11	5/16	11	•		

\*Not knurled Set shown includes storage tray

#### Variable Length

- · Reach recessed fasteners easier and quicker in limited access applications
- For use under automotive dashboards and aircraft engines
- · Spring loaded extension maintains contact with fastener
- · Chamfered ends for easy engagement and knurling for easy hand turning



			-
Stock No.	Finish	Extended Length, inches	
ТМХКV3	Chrome	3	•
TMXKV5	Chrome	5	•

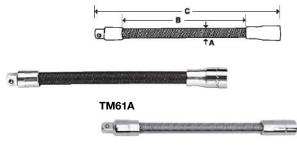
Set shown includes storage tray



#### **Flexible**

Stock No.	A	В	С
TM61A*	<sup>5</sup> /16	5	6
BLPEXTF146	<sup>5</sup> /16	3 <sup>5</sup> /8	6

\*ASME®/ANSI® B107.10



**BLPEXTF146** 

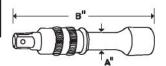






- Do not use chrome or industrial finish hand tools with impact drivers
- Wobble extensions have about half the torque strength of extensions with conventional square drives
  - Read safety precautions on pages W1 to W4

# 1/4" Drive (Impact)

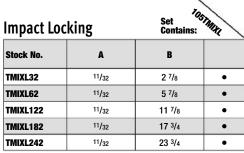




#### TMIXL62

#### **Impact Locking Extensions**

- Quick release locking sleeve provides secure connection and easy socket removal
- Knurled release collar for easy one hand operation, even with slippery hands
- Female drive end recessed to accommodate new style impact guns
- · Positive pin lock retains socket securely
- Heavy duty shank for high torque applications



Set includes storage tray



**103ITMX** 

#### **Impact Extensions**

- Features snap ring anvil for excellent socket to extension engagement
- Designed for use with most 1/4" cordless electric and air operated impact tools

Impact Extensions Set Contains:				
Stock No.	Finish	A	В	
ITMX20	Industrial Finish	5/16	2	•
ITMX40	Industrial Finish	5/16	4	•
ITMX60	Industrial Finish	5/16	6	•

Set shown includes storage tray

# 3/8" Drive (Chrome/Industrial Finish)



Contains:

#### 206AFX

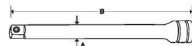
#### Knurled

Knurling at the drive end provides for easy fingertip turning.

-or odey migerup turning.				7	7
Stock No.	Industrial Stock No.	A	В		
FX1*	GFX1	1/2	1 1/2	•	•
FXK3	GFXK3	13/32	3	•	•
FXK4	<u> </u>	13/32	4	•	•
FXK6	GFXK6	13/32	6	•	•
FXK8	GFXK8	13/32	8	•	•
FXK11	GFXK11	13/32	11	•	•
FX18	_	1/2	18	•	
FX24A	<u>-</u>	1/2	24	•	
FX36		1/2	36		

\*Not Knurled

Sets include storage tray





## Knurled (Blue-Point®)

Stock No.	В
BLPEXTK383	2 31/32
BLPEXTK386	5 29/32
BLPEXTK3810	9 29/32





#### Wobble

. Wobble function provides 16° of additional accessibility

• Kr

<ul> <li>Knurled shanks for easy fingertip turning</li> </ul>			Contains:
Stock No.	A	В	
FXW1*	1/2	1 <sup>1</sup> /2	•
FXWK3	13/32	3	•
FXWK4	13/32	4	•
FXWK6	13/32	6	•
FXWK8	13/32	8	•
FXWK11	13/32	11	•

\*Not Knurled

Set shown includes storage tray



#### **Locking Wobble Set**

- Provides 16° of additional accessibility
- Quick release locking sleeve provides secure connection and easy socket removal
- · Knurled release collar for easy one hand operation, even with slippery hands

Set	Set				
Co	Contains:				

Stock No.	A	В	
FXWKL3	1/2	3	•
FXWKL6	1/2	6	•
FXWKL11	1/2	11	•

Set shown includes storage tray

#### **Connectors**

#### FZ1 Connector.

- 3/8" drive extension connector adds versatility to extensions, breaker bars, ratchets and crowfoot wrenches
- · Connect one or more tools for a variety of ways to reach limited access fasteners
- · Use in automotive, aircraft, marine, heavy truck, plumbing and manufacturing applications

#### FZ2 Connector Set.

Set of 2 FZ1



FZ1

# 3/8" Drive (Chrome/Industrial Finish)



#### **Wobble Plus**

#### 206AFXWP

- · Useable in wobble and rigid functionality
- Wobble function provides 16° additional accessibility
- · Knurled shanks for easy fingertip turning



Stock No.	Α	В	
FXWP1*	1/2	1 <sup>1</sup> / <sub>2</sub>	•
FXWP3	13/32	3	•
FXWP4	13/32	4	•
FXWP6	13/32	6	•
FXWP8	13/32	8	•
FXWP11	13/32	11	•

\*Not Knurled

Set shown includes storage tray



### Flexible Extensions (Blue-Point®)

Stock No.	Finish	Length, inches
BLPEXTF388	Chrome	8



FXKR6

## Ratcheting Extensions/Speeders

- Allows extension to be used as a speeder to quickly snug fasteners and save time
- Ability to control torque and minimize damage to composite parts and mounts
- One hand operation with built-in forward/reverse lever
- Can be used separately or with Snap-on® 3/8" ratchets
- . Machined from a single piece of alloy steel for robust performance
- Knurled shaft provides precise fingertip control

Stock No.	Finish	A	В
FXKR3	Chrome	13/32	3
FXKR6	Chrome	13/32	6







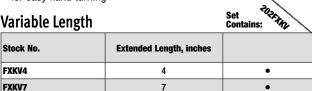


## **EXTENSIONS**

### 3/8" Drive (Chrome)

#### Variable Length

- · Reach recessed fasteners easier and quicker in limited access applications
- Applications include limited access areas around water pumps, fuel pumps and turbo mounting bolts
- · Spring loaded extension maintains contact with fastener
- Chamfered drive ends for easy engagement and knurling for easy hand turning



Set shown	includes	storage tray



Variable Length (Locking)		Set Contains: THE
Stock No.	Extended Length, inches	
FXKLV5	5	•
FXKLV7	7	•

Set shown includes storage tray



203FXLBP







**YA525A** 

# Locking (Rlue-Point®)

ocking (blue i onit )		ontains: "
Stock No.	В	
FXLBP3	3	•
FXLBP6	6	•
FXLBP10	10	•

Set shown includes storage tray

# Locking (Set Screw) (Blue-Point) • Allows easy and secure tool stacking

- Securely connects breaker bar, extensions and ratchets to socket and socket driver for overhead work
- · Sliding sleeve for easy removal
- Not for use with power or impact tools

Stock No.	A	В
YA525A	3/4	2 1/8



204FXKLA



#### **Quick Release, Locking**

- Releases socket from extension guickly and easily
- Knurling at drive end provides easy fingertin turning

inigorup turning			Contains.
Stock No.	A	В	
FXKL3A	1/2	3	•
FXKL6A	1/2	6	•
FXKL11A	1/2	11	•
FXKL24A	1/2	24	•

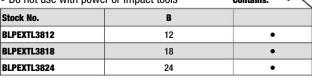
Set shown includes storage tray

Set

**FXKLP Pins.** Locking pins for FXKL Series Extensions. 5 pack. **FXKLRK Repair Kit.** Repair kit for FXKL Series Extensions.

## Extra Long Locking (Blue-Point)

- · Smooth, durable chrome finish
- Made from tough 6130 steel
- · Secure socket retention
- · Lifetime warranty on individual extensions
- . Do not use with power or impact tools



Set shown includes storage tray

# 3/8" Drive (Power/Industrial Finish)

**Locking Button**Use with power or impact sockets with retention holes.

Stock No.	A	В
PF3	1/2	3
PF6	1/2	6
PF11A	1/2	11



# - 3/8" **Drive (Impact)**



## Snap Ring Retention Device

Shap king ketention bevice somemon .			
Stock No.	A	В	is s
IMX11	1/2	1 <sup>3</sup> /4	•
IMX31	1/2	3	•
IMX61	1/2	6	•
IMX111	1/2	11	•

Includes storage tray



### Locking

- · Quick release locking sleeve provides a secure connection plus easy socket removal
- · Knurled release collar for easy one hand operation, even with slippery hands

Stock No.	A	В
IMXL31	1/2	3
IMXL61	1/2	6
IMXL111	1/2	11



Locking Adaptors
• Quick release locking sleeve at the 3/8" drive

Stock No.	A	В	C	D
IMSFXL18	3/8 (locking)	1/2	21/32	18
IMSFXL24	3/8 (locking)	1/2	21/32	24
IMSFXL33	3/8 (locking)	1/2	21/32	33

# 1/2" Drive (Chrome/Industrial Finish)

Extensions			Set Contains:	
Stock No.	Industrial Stock No.	A	В	
SX2	_	5/8	2 1/8	•
SXK3	GSXK3	5/8	3 1/2	•
SXK5	GSXK5	5/8	5	•
SXK8	_	5/8	8	•
SXK11	GSXK11	5/8	11	•
SX15	<u>-</u>	5/8	15	
SX20	_	5/8	20	
SX24		5/8	24	
SX36	<u>-</u>	5/8	36	

Set includes storage tray



ASME®/ANSI® B107.10M





- Do not use chrome or industrial finish hand tools with impact drivers
- Wobble extensions have about half the torque strength of extensions with conventional square drives
- Read safety precautions on pages W1 to W4

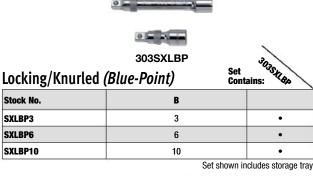
# 1/2" Drive (Chrome/Industrial Finish)



**BLPEXTK123** 

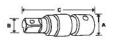
#### Extensions (Blue-Point®)

Stock No.	В
BLPEXTK123	3
BLPEXTK126	6
BLPEXTK1210	10





**GALX3** 



# **Locking Adaptors**

Stock No.	A	В	C
GALX3	1/2	1/2	3 1/8

ASME®/ANSI® B107.10



#### Wobble

Provides 16° of additional accessibility

Knurled chanks for easy fingertin turning

Rituriou sitatiks for easy fingerup turning		oontains.	,	
Stock No.	Industrial Stock No.	A	В	
SXW2*	GSXW2	5/8	2	•
SXWK3	_	5/8	3 1/2	•
SXWK5	GSXWK5	5/8	5	•
SXWK8	_	5/8	8	•
SXWK11	GSXWK11	5/8	11	•

\*Not Knurled ASME/ANSI B107.10

Set shown includes storage tray



#### Wobble Plus

- · Provides 16° of additional accessibility
- · Usable in wobble and rigid functionality
- Knurled shanks for easy fingertin turning

Tritariou siturities for easy migorap turning			tailis.
Stock No.	Α	В	
SXWP2*	5/8	2	•
SXWP3	5/8	3	•
SXWP5	5/8	5	•
SXWP8	5/8	8	•
SXWP11	5/8	11	•

\*Not Knurled ASME/ANSI B107.10

Set shown includes storage tray



303SXWKL

- 1/2" Locking Wobble Set
  Provides 16° of additional accessibility
  Quick release locking sleeve provides secure connection and easy socket removal
- Knurled release collar for easy one hand operation, even with slippery hands

operation, even with supporty hands		•	manis.
Stock No.	A	В	
SXWKL3	21/32	3	•
SXWKL5	21/32	5	•
SXWKL8	21/32	8	•

Set shown includes storage tray

# 1/2" Drive (Power)

#### **Lock Button Retention**

Stock No.	A	В
PS2	5/8	2
PS3	5/8	3 1/2
PS5	5/8	5
PS10	5/8	10



1/2" Drive (Impact)

Locking Extens	sions	ડ્ર Set Contains:	REMINE RESERVE
Stock No.	A	В	
IMXL32	5/8	3 1/2	•
IMXL52	5/8	5	•
IMXL102	5/8	10	•
IMXL182	5/8	18	•
IMXL242	5/8	24	•
IMXL312	5/8	31	•



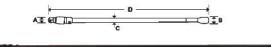


- Ideal for use on transmission bellhousing bolts, transaxle and suspension service
- Pull back collar for fast and easy attachment and removal of sockets
- Knurled release collar provides easy one hand operation
- Single body construction for maximum strength and locking mechanism specifically for impact use
- Female drive end recessed to accommodate newer style impact guns

Snap Ring Retention		CAINIX
A	В	
5/8	3	•
21/32	5 <sup>3</sup> /32	•
21/32	11 <sup>1</sup> /4	•
	5/8 21/32	A B 5/8 3 21/32 5 3/32







#### **IMSFXL18**

# **Locking Adaptors**

 Quick release locking sleeve at 3/8" drive end provides a secure connection plus easy socket removal

Stock No.	A	В	C	D
IMSFXL18	3/8	1/2	21/32	18
IMSFXL24	3/8	1/2	21/32	24
IMSFXL33	3/8	1/2	21/32	33



#### Adaptor

Stock No.	A	В	C	D
IMXA42	3/8	1	1/2	4







- Do not use chrome or industrial finish hand tools with impact drivers
- Wobble extensions have about half the torque strength of extensions with conventional square drives
- Read safety precautions on pages W1 to W4

# 3/4" Drive (Chrome/Industrial Finish)



# **Extensions with Locking Button**

Stock No.	Industrial Stock No.	A	В
L32	GL32	15/16	3
L42	GL42	15/16	5
L62	GL62	15/16	8
L122	GL122	15/16	16

# 3/4" Drive (Impact)



### **Extensions**

Stock No.	A	В
IM132A	1	3
IM62B	1	7
IM92B	1	10
IM122B	1	13

# 1" Drive (Chrome)



### **Extension with Locking Button**

0.2	(S)	
Stock No.	A	В
L63	1 1/4	8

# 1" Drive (Impact)





## **Extensions with Pin Hole**

Stock No.	A	В
IM133	1	3
IM63B	1 1/8	7 <sup>1</sup> /8
IM123	1 <sup>3</sup> /8	13 <sup>1</sup> /8



# **Master Ring and Pin Chart for Impact Sockets and Accessories** The following are required for tool use:



IMR3

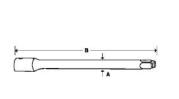
	the following die required for tool date.				
Stock No.	Description	Used With	See Page:		
IM182R	Rubber Locking Ring	All 3/4" drive Sockets/Accessories	47-49, 80, 87, 495		
IMR2	Socket Retainer	All 3/4" drive Sockets/Accessories	47-49, 80, 87, 495		
IM243R	Rubber Locking Ring (Use with IM243P)	All 1" drive Sockets/Accessories up to 1 3/8" (35 mm) plus 3/4" drive IM124 Adaptor	49-52, 80, 88, 495		
IM243P	Steel Locking Pin (Use with IM243R)  All 1" drive Sockets/Accessories up to 1 3/8" (35 mm) plus 3/4" drive IM124 Adaptor 49-52, 80		49-52, 80, 88, 495		
IMR3	Socket Retainer  All 1" drive Sockets/Accessories, All #5 Spline drive Sockets/Accessories  49-52, 80,		49-52, 80, 88, 495		
IM483R	Rubber Locking Ring (Use with IM483P)  All 1" drive Sockets/Accessories from 1 7/16" (36 mm) and larger, All #5 Spline drive Sockets/Accessories  49-52, 80		49-52, 80, 88, 495		
IM483P	Steel Locking Pin (Use with IM483R)	All 1" drive Sockets/Accessories from 1 7/16" (36 mm) and larger, All #5 Spline drive Sockets/Accessories	49-52, 80, 88, 495		
IM445R	Rubber Locking Ring	Rubber Locking Ring All 1 1/2" drive Sockets/Accessories 52-54, 8			
IM729P	Steel Locking Pin	All 2 1/2" drive Sockets/Accessories	55-56		

# **EXTENSIONS/ACCESSORIES**

# 1 1/2" Drive (Impact)

#### **Extensions with Pin Hole**

Stock No.	A	В	
IM105	2	10	
IM155	2	15	
IM205	2	20	





IM105

# 1/4" Drive Accessories (Chrome/Industrial Finish)

### **Universal Joint**

Stock No.	A	В
TMU8B	1/2	1 <sup>5</sup> /16
TMUL8	1/2	2 1/4



- Universal joints help increase access to hard to reach fastener applications
- Pins in the universal joint are laser welded and won't "walk" out over time

#### TMUL8 Locking Collar Universal Joint.

• Locking pin to ensure better socket retention

#### 103UFTS Combination Drive Universal Joint Set.

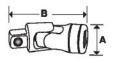
- Includes 1/4" drive TMU8B, 3/8" drive FU8A (pg. 83), and 1/2" drive S8 (pg. 85)
- Universal joints (3 pcs) in storage tray





Universal Joint (Blue-Point®)

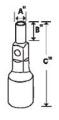
omversat joint (blue i omt )		
Stock No.	A	В
DI DII 14 4	5/0	1 1/0







**103UFTS** 





TMXM17

# **Magnetic Adaptors**

<u> </u>			
Stock No.	A	В	С
TMXM17	7/32	13/32	1 21/32
TMXM114	7/32	9/32	1 17/32

# **Square Drive Adaptors**

Stock No.	Industrial Stock No.	A	В	C	D
_	GFAT1E	3/8	1/4	11/16	1 <sup>1</sup> /4
TA3	GTA3	1/4	3/8	1/2	15/16

#### 1206GS Combination Drive Adaptor Set.

 Includes 1/4" drive GFAT1E (pg. 83) and TA3 adaptors, 3/8" drive A2A (pg. 83) and GSAF1E adaptors and 1/2" drive GLA12B (pg. 85) and GLAS1E adaptors (6 pcs) in storage tray





1206GS







- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# 1/4" Drive (Chrome/Industrial Finish)



TM40ASA

### **Handled Driver/Stubby**

Stock No.	C	E
TM40ASA	2 1/8	1 <sup>3</sup> /4



SGT4BR

## Handled Drivers/Instinct® Handle

- Provides maximum turning power and increased comfort
- 6 specially designed curves and flutes provide fingertip control and aid in spinning
- Nickel-chrome plating helps protect against corrosion and makes cleaning easy

Stock No.	A	В	C
SGT4BR	<sup>5</sup> /16	2	6 <sup>13</sup> /16
SGTL4BR	<sup>5</sup> /16	6 3/8	8 1/8

**SGTL4BR** Features a locking pin for better socket retention.



TM4CSA

# **Handled Drivers/Square Drive Handle**

• Internal square drive in handle allows use with various handles

Stock No.	A	В	C
TM4CSA	5/16	2 3/8	6
TM9CSA	5/16	6 3/8	10



**BLPCGHD146** 

### Handled Driver (Blue-Point®)

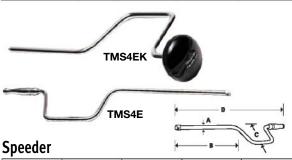
Stock No.	Description	C
BLPCGHD146	Spinner Handle	6



#### **Ratcheting Driver**

- Use with any 1/4" drive socket to create a ratcheting nut driver
- · 3 position ratchet mechanism works in forward, reverse or lock out the ratcheting action completely

Stock No.	Color	В	C	E
TMR4	Black	3 7/8	8 31/32	5 3/32
TMR40	Orange	3 7/8	8 31/32	5 3/32
TMRT8	Black	8	10	2



<u>. I I i i i i i i i i i i i i i i i i i </u>				
Stock No.	A	В	C	D
TMS4E	<sup>5</sup> /16	7 1/8	3	16
TMS4EK	<sup>5</sup> /16	7 1/8	3	15 <sup>1</sup> /32

#### Flexible Drivers

• For low torque applications

Stock No.	A	В	C
TM62B	1/4	2 7/32	6 <sup>3</sup> /4
TM63A	1/4	4 21/32	9 3/16
TM615	1/4	15	18 <sup>5</sup> /8



# **Sliding T-handle**

- Designed for heavier applications
- For use as a T-handle or offset wrench
- · Spring and friction ball holds head in position

Stock No.	A	В	C
TM5	13/16	5/16	4 1/2
ASMF®/ANSI® B107 1	n	92	

# 1/4" Drive (Power/Impact)





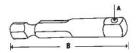


IPM80A

IPM800A

### **Swivel Ball Universal Joint (Impact)**

Stock No.	Retention Type	Α	В
IPM80A	Lock Button	5/8	1 <sup>3</sup> /8
IPM800A	Friction Ball	5/8	1 <sup>3</sup> /8





GMB3042

#### **Hex-To-Square Adaptors (Power)**

• 1/4" hex size; 1" length of hex

Stock No.	A	В
GMB3041*	Friction Ball	1
GMB3042	Friction Ball	2
GMB3046	Friction Ball	6
GM3042A	Lock Button	2
GM3043	Lock Button	4
GM3046	Lock Button	6
GM3048	Lock Button	8

\*Insert Bit Style, non impact

### **Locking Power Adaptors**

- Use with electric/cordless drills and screwdrivers that accept 1/4" shanks
- · Manufactured from the highest quality proprietary steel, providing optimum strength and durability
- · Knurled sleeve provides easy attachment and removal of sockets even with the greasiest hands
- · One handed lock mechanism with ball retention ensures socket retention and allows for faster socket attachment and removal

· Black oxide finish helps protect against corrosion for longer tool life

1/4

1/4

1/4

Set Contains:	/
•	
•	
•	



Set includes storage tray



Stock No. TMLPA2

TMLPA4

TMLPA6

FU8A



2

4

**103UFTS** 

Stock No.	Industrial Stock No.	A	В
FUL8A	<b>—</b>	3/4	3
FU8A**	GFU8A	3/4	2 <sup>1</sup> /16
FU80B**	_	11/16	1 <sup>11</sup> /16
FUB8A*	_	3/4	2 <sup>5</sup> /16

\*Swivel Universal Joint \*\*ASME®/ANSI® B107.10

#### **FUL8A Locking Pin.**

· Locking pin for better socket retention

#### **103UFTS Combination Drive**

#### Universal Joint Set.

• Includes 1/4" drive TMU8B (pg. 81), 3/8" drive FU8A (this page), and 1/2" drive S8 (pg. 85) universal joints (3 pcs) in a storage tray





## Universal Joints (Blue-Point®)

17,000		
Stock No.	A	В
BLPUJ38	_	2 1/32

# 3/8" Drive (Chrome/Industrial Finish)



### Adaptors

Stock No.	Industrial Stock No.	A	В	C
_	GFAT1E	3/8	1/4	1 <sup>1</sup> /4
TA3	GTA3	1/4	3/8	15/16
A2A	GAF2A	3/8	1/2	1 <sup>5</sup> /16
_	GSAF1E	1/2	3/8	1 <sup>13</sup> /16

#### 206EAU Adaptor/Extension Set.

• Includes GFAT1E and A2A adaptors (this page); FU8A universal joint (this page) and FX1, FXK3 and FXK6 extensions (pg. 74) (6 pcs) in storage tray

#### 1206GS Combination Drive Adaptor Set.

• Includes 1/4" drive GFAT1E and TA3 adaptors (pg. 81); 3/8" drive A2A and GSAF1E adaptors (this page) and 1/2" drive GLA12B and GLAS1E adaptors (pg. 85) (6 pcs)







- . Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# 3/8" Drive (Chrome/Industrial Finish)



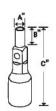




BLPAFM1438

# **Magnetic Adaptors**





Adaptors	(Blue-I	oint®)

Stock No.	Description	A	В
BLPAFM3814	Square Drive Adaptor	3/8	1/4
BLPAFM1438	Square Drive Adaptor	1/4	3/8

Stock No.	A	В	C
FXM112	5/16	9/32	1 25/32
FXM18	3/16	9/32	1 <sup>25</sup> / <sub>32</sub>



### **Handled Drivers**

Stock No.	A	В	C
SGF50BR*	1/2	3 3/32	8
F40B	1/2	1	5 5/16

<sup>\*</sup>Instinct® Handle



**BLPCGHD388** 

# Handled Drivers (Blue-Point)

Stock No.	Description	C
BLPCGHD388	Spinner Handle	8 5/8

# **Speeders**

Stock No.	A	В	C	D
F4LB	13/32	7 7/8	3 1/2	17 <sup>27</sup> /32
F4LBK*	13/32	7 7/8	3 1/2	16 <sup>5</sup> /8

<sup>\*</sup>Speeder with knob.



TURBOT103



# **Sliding T-handles**

Stock No.	A	В	C
F5L	3/4	13/32	8

# Turbo T-handle Speed Drivers (Blue-Point)

Stock No.	Description	Handle Type
T9TURB0	1/4" square drive	Turbo T-handle
TH10TURB0	1/4" hex	Turbo T-handle
F11TURBO	3/8" square drive	Turbo T-handle

#### TURBOT103 Turbo T-handle Set.

- T9TURBO (1/4" drive), TH10TURBO (1/4" hex) and F11TURBO (3/8" drive)
- 3 pcs in storage tray

# 3/8" Drive (Power/Impact)

**Adaptors (Power)** 

Stock No.	Socket Attachment	A	В	C	D
PA2A	Pin Type	3/8	1/2	3/4	<b>1</b> <sup>13</sup> / <sub>16</sub>
PA4E	Pin Type	1/2	3/8	15/16	1 13/16

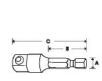




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**Hex-To-Square Adaptors (Power)** 

	20 0			
Stock No.	Socket Attachment	A	В	С
A3042	Pin Type	1/4	1	2
A3044	Pin Type	1/4	. 1	4
A3046	Pin Type	1/4	1 <sup>1</sup> / <sub>4</sub>	6
A3017A	Pin Type	7/16	1 <sup>1</sup> /4	1 <sup>3</sup> / <sub>4</sub>
AB3042	Ball Type	1/4	1	2
AB3044	Ball Type	1/4	1	4
AB3046	Ball Type	1/4	1 1/4	6





A3042

# **Universal Joint (Power)**

Stock No.	Socket Attachment	A	В
PFU8A	Pin Type	3/4	1 <sup>31</sup> / <sub>32</sub>





PFU8A

**Universal Joints (Impact)** 

Stock No.	Socket Attachment	A	В				
IPF80B	Pin Type	1	2 1/8				
IPF800B	Ball Type	1	2 1/8				





IPF80B

# 1/2" Drive (Chrome/Industrial Finish)

# **Universal Joints**

Stock No.	Industrial Stock No.	A	В
S8	GU8	<sup>15</sup> / <sub>16</sub>	2 11/16



#### 103UFTS Set.

 Includes 1/4" drive TMU8B (pg. 81), 3/8" drive FU8A (pg. 83) and 1/2" drive S8 (this page) universal joints

• 3 pcs in storage tray





GU8 S8

#### Universal loints (Blue-Point®)

Universal Joints (Blue-Points)				
Stock No.	В			
BLPUJ12	2 3/4			



BLPUJ12



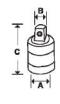


### **Adaptors**

ASME/ANSI B107.10

Stock No.	Industrial Stock No.	A	В	C
_	GSAF1E	1/2	3/8	1 <sup>1</sup> / <sub>2</sub>
A2A	GAF2A	3/8	1/2	<b>1</b> 5/16
_	GLA12B	1/2	3/4	1 7/8
_	GLAS1E	3/4	1/2	3





**Extension Adaptors** 

Stock No.	Retention Type	A	В	C
GAX5	Ball Type	1/2	3/8	5
GAX12	Ball Type	1/2	3/8	12
GAX24	Ball Type	1/2	3/8	23 1/4
GAX36	Ball Type	1/2	3/8	36

ASME/ANSI B107.10







- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# 1/2" Drive (Chrome/Industrial Finish)



# **Speeders**

Stock No.	A	В	C	D
S4	1/2	7	4 3/8	18 7/8
SN4B*	5/8	6 <sup>3</sup> /8	3	17 1/4
SL4	1/2	7 3/8	4 <sup>7</sup> / <sub>16</sub>	19 <sup>1</sup> / <sub>8</sub>

**Sliding T-handle** 

Stock No.	A	В	C
\$12L	<b>1</b> <sup>11</sup> / <sub>16</sub>	5/8	12

ASME/ANSI B107.10

ASME®/ANSI® B107.10 \*Uses RKBB3 Repair Kit.

#### SL4 Locking Speeder.

• Sliding collar and locking pin for better socket retention

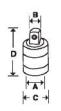


# Turbo T-handle Speed Drivers (Blue-Point®)

Stock No.	Description	Handle Type
S13TURBO	1/2" Speed driver	Turbo T-Handle

# 1/2" Drive (Power/Impact)





# **Adaptors (Power)**

Stock No.	Socket Attachment	A	В	C	D
PA2A	Pin Type	3/8	1/2	3/4	<b>1</b> 5/16
PA4E	Pin Type	1/2	3/8	15/16	<b>1</b> 13/16

PA2A



# **Hex Shank (Power)**

Stock No.	Socket Attachment	A	В	C	D
A3011A	Pin Type	1/2	7/16	1 <sup>1</sup> /4	2 3/4

A3011A

86



Universal Joint (Impact)			Cont	ains: R	
Stock No.	Drive Size	Socket Attachment	A	В	
IP800	3/8	Ball Type	1 1/4	2 3/4	•
IP80D	1/2	Pin Type	1 1/4	2 3/4	•

Set includes storage tray

# 3/4" Drive (Chrome/Industrial Finish)

# **Universal Joints**

3 <u> </u>		t .
Stock No.	A	В
L82A	1 9/16	3 7/8





## **Adaptors**

Stock No.	A	В	C	D
GLA12B	1/2	3/4	1 1/8	1 7/8
GLAS1E	3/4	1/2	1 7/16	2 7/16
GLA72A	3/4	1	1 <sup>7</sup> / <sub>16</sub>	2 5/8
GLA124A	1	3/4	1 <sup>13</sup> /16	2 3/4

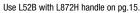




GLAS1E

- Sliding T-handle
   Designed for heavier applications
- Spring and friction ball hold head in position

Stock No.	A	В
L52B	1 <sup>1</sup> / <sub>2</sub>	2 <sup>5</sup> /16







# 3/4" Drive (Impact)









IM124B

# Swivel Ball Universal Joint

- Maximum Accessibility Design
- No internal spring used

Stock No.	A	В
IP82	1 3/4	3 5/32

### **Adaptors**

Stock No.	A	В	C	D
IM72	3/4	1 with Pin Hole	1 5/8	2 9/16
IM124B	1	3/4 with Pin Hole	2 3/8	2 13/16

# Ring and Pin Chart for 3/4" Drive Impact Sockets and Accessories

The following are required for tool use:

The following are required for tool use.				
Stock No.	Description	Used With		
IM182R	Rubber Locking Ring	All 3/4" drive Sockets/Accessories		
IMR2	Socket Retainer	All 3/4" drive Sockets/Accessories		
IM243R	Rubber Locking Ring (Use with IM243P)	1" drive Sockets/Accessories plus IM124B Adaptor		
IM243P	Steel Locking Pin (Use with IM243R)	1" drive Sockets/Accessories plus IM124B Adaptor		



# 1" Drive (Chrome/Industrial Finish)

# **Adaptors**

Stock No.	A	В	C	D
GLA72A	3/4	1	1 7/16	2 5/8
GLA124A	1	3/4	1 13/16	2 3/4





GLA72A







- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

# 1" Drive (Chrome/Industrial Finish)

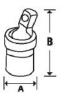


# **Sliding T-handle**

Stock No.		Sliding Head Only Stock No.	A	Handle Stock No.
L53	29	L53A	2	L53HB

# 1" Drive (Impact) -





Swivel Universal Joint with Pin Hole

Stock No.	A	В			
IP83	2 1/2	4 <sup>3</sup> /16			





**Adaptors with Pin Hole** 

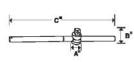
80 · · · · · · · · · · · · · · · · · · ·				
Stock No.	A	В	C	D
IM72	3/4	1	1 <sup>5</sup> /8	2 <sup>9</sup> /16
IM124B	1	3/4	2 3/8	2 13/16
IM35	1	1 <sup>1</sup> /2	2 1/4	3 1/2
IM53	1 1/2	1	3 1/4	4 1/4

# 1 1/2" and #5 Spline Drive (Impact)



Swivel Universal Joint

Stock No.		Retention Type	A	В
	IP85	Pin Hole	3 5/8	6 <sup>1</sup> /16





Stock No.	C	Sliding Head Only Stock No.	A	Handle Stock No.
L55	36	L55-2	2 7/8	L55-1





**Square Drive Adaptors** 

Stock No.	A	В	C	D
IM35	1	1 <sup>1</sup> /2	2 1/4	3 1/2
IM53	1 1/2	1	3 1/4	4 1/4
IM59	2 1/2	1 <sup>1</sup> /2	3 1/4	4 3/4
IM95	1 1/2	2 1/2	5	6 3/8



IMSA3

## **Spline to Square Drive Adaptor**

Stock No.	A	В	C	D
IMSA3	1" Square	No. 5, 14 Tooth	2 3/8	3 3/8







IM483P

R .

# Ring and Pin Chart for 1", 1 1/2" and #5 Spline Drive Impact Sockets and Accessories

The following are required for tool use:

OLIVE N.	B	Harris W.
Stock No.	Description	Use with
IM243R	Rubber Locking Ring (Use with IM243P)	All 1" drive Sockets/Accessories up to 1 <sup>3</sup> / <sub>8</sub> " (35 mm) plus <sup>3</sup> / <sub>4</sub> " drive IM124 Adaptor
IM243P	Steel Locking Pin (Use with IM243R)	All 1" drive Sockets/Accessories up to 1 <sup>3</sup> /8" (35 mm) plus <sup>3</sup> /4" drive IM124 Adaptor
IMR3	Socket Retainer	All 1" drive Sockets/Accessories, All #5 Spline drive Sockets/Accessories
IM483R	Rubber Locking Ring (Use with IM483P)	All 1" drive Sockets/Accessories from 1 7/16" (36 mm) and larger, All #5 Spline drive Sockets/Accessories
IM483P	Steel Locking Pin (Use with IM483R)	All 1" drive Sockets/Accessories from 1 7/16" (36 mm) and larger, All #5 Spline drive Sockets/Accessories
IM445R	Rubber Locking Ring	All 1 1/2" drive Sockets/Accessories

1/8" Drive

# 1605TA General Service Torx® Set 5 Tools, Includes:

0	6 Point Sockets
3/32"	T6
1/8"	T8
5/32"	T10
3/16"	T12
1/8" Drive Handle	T40A



1/4" Drive



# 144TMPB 6 Point Metric/Fractional Set 44 Tools, Includes:

	6 Point Shallow Sockets		6 Point Shallow Sockets		6 Point Deep Sockets	<b>□</b> Ţ	6 Point Deep Sockets
5.5	TMM5.5	3/16	TM6*	5.5	STMM5.5	3/16	STM6
6	TMM6	7/32	TM7*	6	STMM6	7/32	STM7
7	TMM7	1/4	TM8	7	STMM7	1/4	STM8
8	TMM8	9/32	TM9	8	STMM8	9/32	STM9
9	тмм9	<sup>5</sup> /16	TM10	9	STMM9	5/16	STM10
10	TMM10	11/32	TM11	10	STMM10	11/32	STM11
11	TMM11	3/8	TM12	11	STMM11	3/8	STM12
12	TMM12	7/16	TM14	12	STMM12	7/16	STM14
13	TMM13	1/2	TM16	13	STMM13	1/2	STM16
14	TMM14	9/16	TM18	14	STMM14	9/16	STM18

Also Includes:	T72	High Strength Sealed Ratchet
	TMU8B	Universal Joint
	TMXK2	2" Knurled Extension
	TMXK60	6" Knurled Extension
	PB99A	Storage Box

<sup>\*</sup>Conventional hex

#### 117TMM Metric 6 Point Starter Set 17 Tools, Includes:

,		
	6 Point Shallow Sockets	
4	TMM4	
5	TMM5	
5.5	TMM5.5	
6	TMM6	
7	TMM7	
8	TMM8	
9	TMM9	
10	TMM10	
11	TMM11	
12	TMM12	
13	TMM13	
14	TMM14	
15	TMM15	



Also Includes:	T72	72 High Strength Sealed Ratchet	
	TMU8B	Universal Joint	
	TMXK2	2 2" Knurled Extension	
	TMXK4	4" Knurled Extension	







• Read safety precautions on pages W1 to W4

# 131TMPB 6 Point Metric Set 31 Tools, Includes:

**131TMPB** 

31 100IS, Includes:				
	6 Point Shallow Socket	6 Point Deep Socket		
5	TMM5	STMM5		
5.5	TMM5.5	STMM5.5		
6	TMM6	STMM6		
7	TMM7	STMM7		
8	TMM8	STMM8		
9	TMM9	STMM9		
10	TMM10	STMM10		
11	TMM11	STMM11		
12	TMM12	STMM12		
13	TMM13	STMM13		
14	TMM14	STMM14		
15	TMM15	STMM15		

Also Includes:	TMXK60	6" Knurled Extension
	SSDMR4B	Magnetic Ratcheting Screwdriver
	TMXK2	2" Knurled Extension
	T72	High Strength Sealed Ratchet
	TM10G	Breaker Bar
	TMU8B	Universal Joint
	GMB3041	Hex to Square Adaptor

# **GENERAL SERVICE SETS**

# 1/4" Drive



120DTMPB

# 120DTMPB 6 Point Fractional General Service 20 Tools, Includes:

<b>□</b> Ţ	6 Point Shallow Sockets
3/16	TM6
7/32	TM7
1/4	TM8
9/32	TM9
5/16	TM10
11/32	TM11
3/8	TM12
7/16	TM14
1/2	TM16
9/16"	TM18

Also Includes:	TM4CSA	Handle
	TM10G	6" Breaker Bar
	TM408	Double Square Socket 1/4"
	TM410	Double Square Socket 5/16"
	TM412	Double Square Socket 3/8"
	T72	High Strength Sealed Ratchet
	TMU8B	Universal Joint
	TMXK2	2" Knurled Extension
	TMXK4	4" Knurled Extension
	TMXK60	6" Knurled Extension



**134ATMP** 



# 114ATMP 6 Point Fractional Set 14 Tools, Includes:

<u> </u>	6 Point Shallow Sockets
3/16	TM6
7/32	TM7
1/4	TM8
9/32	TM9
5/16	TM10
11/32	TM11
3/8	TM12
7/16	TM14
1/2	TM16
9/16	TM18

Also Includes:	T72	High Strength Sealed Ratchet
	TMU8B	Universal Joint
	TMXK2	2" Knurled Extension
	TMXK4	4" Knurled Extension

# 134ATMP 6 Point Fractional Set 34 Tools, Includes:

<b>□</b> Ţ	6 Point Shallow Sockets	<b>□</b> Ţ	6 Point Deep Sockets
3/ <sub>16</sub>	TM6	3/ <sub>16</sub>	STM6
7/32	TM7	7/32	STM7
1/4	TM8	1/4	STM8
9/32	TM9	9/32	STM9
5/16	TM10	5/ <sub>16</sub>	STM10
11/32	TM11	11/32	STM11
3/8	TM12	3/8	STM12
7/16	TM14	7/ <sub>16</sub>	STM14
1/2	TM16	1/2	STM16
9/16	TM18	9/16	STM18

Also Includes:	T72	High Strength Sealed Ratchet
	TMU8B	Universal Joint
	TMXK2	2" Knurled Extension
	TMXK4	4" Knurled Extension
	TMXK60	6" Knurled Extension
	SGT4BR	Long Shank Driver
	TM10G	6" Breaker Bar
	TM61A	6" Flexible Extension
	TM67A	Ratchet Adaptor
	TM82	Flat Tip Driver .036 x 1/4"
	TM408	Double Square Socket 1/4"
	TM410	Double Square Socket 5/16"
	TM412	Double Square Socket 3/8"
	TMS70A	Ratchet Spinner

1/4" Drive

#### Set (Add-on)

**107ATMPB Éxpandable General Service Set and Additions.** Start with the 107ATMPB General Service Set and add any of the suggested socket sets below to custom build exactly the 1/4" drive set you need. The storage case has a large enough cavity to accommodate 2 rows of sockets—standard, semi deep, deep, universal, or any combination of these in fractional or metric sizes.

#### 7 Tools, Includes:

T72	High Strength Sealed Ratchet		
TMU8B	Universal Joint 1/4" Drive		
TMXK2	2" Knurled Extension		
TMXK4	4" Knurled Extension		
TMXK60	6" Knurled Extension		
TM10G	Breaker Bar 6"		
SGT4BR	Long Shank Driver 1/4"		

Suggested additions not included in set:	110TMY	6 Point Shallow Socket Set (10 pcs)
	110STMY	6 Point Deep Socket Set (10 pcs)
	111TMMDY	12 Point Metric Shallow Socket Set (11 pcs)
	111STMMDY	12 Point Metric Deep Socket Set (11 pcs)
	106ETMAMY	Metric Hex Driver Set (6 pcs)



# General Service Sets (Blue-Point®) BLPGSS1427 General Service Set.

Components (all 1/4" drive):

- 11 Fractional (3/16 to 5/8") 6 point Shallow Sockets
- 11 Fractional (3/16 to 9/16") 6 point Deep Sockets
- 3 Ratchet/Socket Accessories
- 1 Quick Release Ratchet
- 1 Spinner Handle
- BLPGSS1427PB storage case



BLPGSS1427

#### BLPGSSM1427 General Service Set.

Components (all 1/4" drive):

- 11 Metric (4 to 14 mm) 6 point Shallow Sockets
- 11 Metric (4 to 14 mm) 6 point Deep Sockets
- 3 Ratchet/Socket Accessories
- 1 Quick Release Ratchet
- 1 Spinner Handle
- BLPGSSM1427PB storage case



BLPGSSM1427

#### BLPGSS1438 General Service Set.

Components (all 1/4" drive):

- 11 Fractional (3/16 to 5/8") and 11 Metric (4 to 14 mm) 6 point Shallow Sockets
- 4 fractional hex bits (9/64, 3/16, 7/32, 1/4")
- 3 flat tip bits (5/32, 3/16, 1/4")
- 2 Phillips® tip bits (#1, #2)
- 5 Ratchet/Socket Accessories
- 1 Quick Release Ratchet
- 1 Spinner Handle
- BLPGSS1438PB storage case



BLPGSS1438







- Do not use chrome or industrial finish hand tools with impact drivers
- Read safety precautions on pages W1 to W4

### 1/4" -3/8" Drive (Blue-Point®)



BLPGSS1462



BLPGSS1451A



BLPGSSC100



**BLPGSSC155** 

#### BLPGSS1462 General Service Set.

Components (all 1/4" drive):

- 11 fractional (3/16 to 5/8") and 11 metric (4 to 14 mm) standard sockets
- 11 fractional (3/16 to 5/8") and 11 metric (4 to 14 mm) deep sockets
- 1 bit holder
- 4 hex bits (9/64, 3/16, 7/32, 1/4")
- 3 flat tip bits (5/32, 3/16, 1/4")
- 2 Phillips® bits (#1, #2)
- 7 ratchet/socket accessories
- 1 ratchet
- BLPGSS1462PB storage case

#### BLPGSS1451A General Service Set.

Components (all 1/4" drive):

- 10 fractional (3/16 to 9/16") and 13 metric (4 to 14 mm) standard sockets
- 3 fractional (1/4, 5/16, 3/8") 8 point sockets
- 6 Torx® socket drivers (T8 to T27)
- 6 fractional hex socket drivers (1/8 to 5/16")
- 3 flat tip socket drivers (5/32, 7/32, 9/32")
- 3 *Phillips* socket drivers (#0, #1, #2)
- 6 ratchet/socket accessories
- 1 ratchet
- BLPGSS1451AC storage case

#### **BLPGSSC100 General Service Set.**

Components (1/4" Drive):

- 10 fractional (3/16 to 9/16") and 13 metric (4 to 14 mm) standard sockets
- 5 ratchet/socket accessories
- 1 ratchet

Components (3/8" Drive):

- 13 fractional (1/4 to 1") and 19 metric (6 to 24 mm) standard sockets
- 11 external Torx sockets (E4 to E20)
- 2 spark plug sockets (5/8, 13/16")
- 5 ratchet/socket accessories
- 1 ratchet
- 1 spinner handle

Components (Combination Wrenches):

- 9 fractional combination wrenches (1/4 to 3/4")
- 10 metric combination wrenches (10 to 19 mm)
- BLPGSSC100PB storage case

#### BLPGSSC155 General Service Set.

Components (1/4" Drive):

- 10 fractional (3/16 to 9/16") and 13 metric (4 to 14 mm) standard sockets
- 10 fractional (3/16 to 9/16") and 11 metric (4 to 14 mm) deep sockets
- 20 assorted 1/4" hex bits with bit holder
- 5 ratchet/socket accessories
- 1 quick release ratchet

• 1 spinner handle 1/4" Components (3/8" Drive):

- 13 fractional (1/4 to 1") and 19 metric (6 to 24 mm) standard sockets
  11 fractional (3/8 to 1") and 15 metric (10 to 24 mm) deep sockets
- 11 external Torx sockets (E4 to E20)
- 2 spark plug sockets (5/8, 13/16")
- 3 metric hex socket drivers (7, 8, 10 mm)
- 4 tamper resistant *Torx* socket drivers (T40, T45, T50, T55)
- · 5 ratchet/socket accessories
- 1 quick release ratchet
- BLPGSSC155PB storage case

3/8" Drive

#### **Build Your Own Set**

The 206AFSP handle set is the foundation for the ideal basic general service set. Add any of the suggested socket sets or choose from various special purpose sockets available in fractional and metric sizes.

#### 206AFSP Handle Set.

Includes:

- F80 sealed ratchet, FU8A universal joint, FX1 extension (1 1/2"), FXK3 knurled extension (3"), FXK6 knurled extension (6") and FXK11 knurled extension (11")
- 6 pcs in convenient PB16B storage case large enough to store 4 rows of standard length sockets, 2 rows of deep or universal sockets or a combination of the two

#### Suggested additions not included in set:

<b>□</b> Ţ	Stock No.		Stock No.
6 Point Shallow Set	211FSY	6 Point Shallow Set	212FSMY
6 Point Shallow Set	212FY	6 Point Semi Deep Set	212SFSMY
6 Point Deep Set	211SFSY	12 Point Deep Set	212SFMY
12 Point Shallow Set	211SFY	6 Point Semi Deep Set	212FSMSY
6 Point Deep Universal Set	207FSU	12 Point Semi Deep Set	212FMSY
12 Point Semi Deep Set	211FDSY	12 Point Shallow Set	212FMY

# 218AFSP 6 Point Fractional General Service Set. 18 Tools, Includes:

<b>□</b> Ţ	6 Point Shallow Sockets
1/4	FS081
5/16	FS101
3/8	FS121
7/16	FS141
1/2	FS161
<sup>9</sup> /16	FS181
5/8	FS201
11/16	FS221
3/4	FS241
13/16	FS261
7/8	FS281

Also Includes: F80		Standard Handle Sealed Ratchet
	F4LB	Speeder
	F10LC	Breaker Bar
	FU8A	Universal Joint
	FXK3	3" Knurled Extension
	FXK6	6" Knurled Extension
	FXK11	11" Knurled Extension

# 210AFSP 6 Point Fractional General Service Set. 10 Tools, Includes:

<b>□</b> Ţ	6 Point Shallow Sockets
3/8	FS121
7/16	FS141
1/2	FS161
<sup>9</sup> /16	FS181
5/8	FS201
11/16	FS221
3/4	FS241

Also Includes:	F80	Standard Handle Sealed Ratchet
	FXK3	3" Knurled Extension
	EXKE	6" Knurled Extension



206AFSP



218AFSP



210AFSP



222AFSP

# 222AFSP 6 Point Fractional General Service Set. 22 Tools, Includes:

<b>□</b> Ţ	6 Point Shallow Sockets	<u>u</u> Ţ	6 Point Deep Sockets
3/8	FS121	3/8	SFS121
7/16	FS141	7/16	SFS141
1/2	FS161	1/2	SFS161
9/16	FS181	9/16	SFS181
5/8	FS201	5/8	SFS201
11/16	FS221	11/16	SFS221
3/4	FS241	3/4	SFS241

Also Includes:	F80	Standard Handle Sealed Ratchet	
	S9704KA	13/16" Spark Plug Socket	
	S9706KA	5/8" Spark Plug Socket	
	F10LC	Breaker Bar	
	FU8A	Universal Joint	
	FXK3	3" Knurled Extension	
	FXK4	4" Knurled Extension	
	FXK8	8" Knurled Extension	







- Do not use chrome or industrial finish hand tools with impact drivers
- Read complete safety precaution information on pages W1 to W4

# **GENERAL SERVICE SETS**

# 3/8" Drive



248F 12 Point Fractional General Service Set. 48 Tools, Includes:

<b>□</b> Ţ	12 Point Shallow Sockets	<b>□</b> Ţ	12 Point Deep Sockets	<b>□</b> Ţ	12 Point Universal Sockets
1/4	F081	1/4	SF081	5/16	FU10A
5/16	F101	5/16	SF101	3/8	FU12A
3/8	F121	3/8	SF121	7/16	FU14A
7/16	F141	7/16	SF141	1/2	FU16A
1/2	F161	1/2	SF161	9/16	FU18A
9/16	F181	9/16	SF181	5/8	FU20A
5/8	F201	5/8	SF201	11/16	FU22A
11/16	F221	11/16	SF221	3/4	FU24A
3/4	F241	3/4	SF241	13/16	FU26A
13/16	F261	13/16	SF261	7/8	FU28A
7/8	F281	7/8	SF281	15/16	FU30A
<sup>15</sup> /16	F301			1	FU32A

Also Includes:	F80	Standard Handle Sealed Ratchet	
	F40B	Short Shank Driver	
	FXK4	4" Extension	
	FRS70A	Ratchet Spinner	
	FXK6 6" Extension		
	F4LB	Speeder	
	F77	Ratchet Adaptor	
	FXK11	11" Extension	
	F5L	Sliding T-Handle	
	FU8A	Universal Joint	
	F10LC	Breaker Bar	
	FXK3	3" Knurled Extension	
	BLPEXTF388	8" Flexible Extension	



218AFP 12 Point Fractional General Service Set (Tools only). 18 Tools, Includes:

<b>□</b> <u>Ţ</u>	12 Point Shallow Sockets
1/4	F081
5/16	F101
3/8	F121
7/16	F141
1/2	F161
9/16	F181
5/8	F201
11/16	F221
3/4	F241
13/16	F261
7/8	F281

Also Includes:	F80	Standard Handle Sealed Ratchet		
	F4LB	Speeder		
	F10LC	Breaker Bar		
	FU8A	Universal Joint		
	FXK3	3" Knurled Extension		
	FXK6	6" Knurled Extension		
	FXK11	11" Knurled Extension		



#### 292F 6/12 Point General Service Set. 92 Tools, Includes:

201 0, 11 1 0111 4011014 0011100 0011 01 10010, 1110144001					
6 Point Shallow Sockets: 211SFY	Shallow, 6 Point (11 pcs) (1/4 to 7/8")				
6 Point Deep Sockets: 211SFSY	Deep, 6 Point (11 pcs) (1/4 to 7/8")				
12 Point Deep Sockets: 211SFY	Deep, 12 Point (11 pcs) (1/4 to 7/8")				
12 Point Shallow Sockets: 211FY	Shallow, 12 Point (11 pcs) (1/4 to 7/8")				
12 Point Shallow Universal Sockets:	Universal, Shallow, 12 Point (12 pcs) (5/16 to 1")				

	F80	Standard Handle Sealed Ratchet	FXK6	6" Knurled Extension	F30E	5/16" Clutch Type Driver
Includes: FLF80 Sealed Flex Head Ratche		Sealed Flex Head Ratchet	FXK8	8" Knurled Extension	FA5E	5/32" Hex Driver
	F4LB Speeder		FXK11	11" Knurled Extension	FA6E	3/16" Hex Driver
	F5L Sliding T-Handle		FP22E	#2 Phillips® Driver	FA7E	7/32" Hex Driver
	F10LC	Breaker Bar	FP32E	#3 Phillips Driver	FA8E	1/4" Hex Driver
	F40B	Short Shank Driver	FP42E	#4 <i>Phillips</i> Driver	FA10E	5/16" Hex Driver
	FRS70A	Ratchet Spinner	S9704KFUA	13/16" Spark Plug Universal Socket	FA12E	3/8" Hex Driver
	F77	Ratchet Adaptor	GF22	Drag Link Socket	PP409A	9/32" Pipe Plug Socket
	FU8A	Universal Joint	F23E	1/4" Flat Tlp Socket Driver	PP410A	5/16" Pipe Plug Socket
	FX1	1 1/2" Extension	F25E	5/16" Flat Tlp Socket Driver	PP412A	9/32" Pipe Plug Socket
	FXK3	3" Knurled Extension	F31E	3/8" Flat Tlp Socket Driver	<b>BLPEXTF388</b>	8" Flexible Extension
	FXK4	4" Knurled Extension	F29E	3/8" Clutch Type Driver	PP412A	11/32" Shallow Socket

3/8" Drive

# 222AFSMP 6 Point Metric General Service Set. 22 Tools, Includes:

mm <u>Ţ</u>	6 Point Shallow Sockets:	<b>mm</b> <u>T</u>	6 Point Deep Sockets:
10	FSM101	10	SFSM10
11	FSM111	11	SFSM11
13	FSM131	13	SFSM13
14	FSM141	14	SFSM14
15	FSM151	15	SFSM15
17	FSM171	17	SFSM17
19	FSM191	19	SFSM19

Also Includes:	F80	Standard Handle Sealed Ratchet	
	FU8A	Universal Joint	
	F10LC	Breaker Bar	
	FXK3	3" Knurled Extension	
	FXK4	4" Knurled Extension	
	FXK8	8" Knurled Extension	
	S9704KA	13/16" Spark Plug Socket	
	S9706KA	5/8" Spark Plug Socket	
	PB17B	Storage Case	









262MFB

KRA21G

#### 262MFB 6/12 Point Metric General Service Set. 61 Tools, Includes:

mm <u>Ţ</u>	6 Point Shallow Sockets	mm <u>Ţ</u>	12 Point Shallow Sockets	mm Ţ	12 Point Deep Sockets	mm <u></u>	6 Point Shallow Universal Sockets
8	FSM81	9	FM9	8	SFM8	8	FSUM8A
9	FSM91	10	FM10	9	SFM9	10	FSUM10A
10	FSM101	11	FM11	10	SFM10	11	FSUM11A
11	FSM111	12	FM12	11	SFM11	12	FSUM12A
12	FSM121	13	FM13	12	SFM12	13	FSUM13A
13	FSM131	14	FM14	13	SFM13	14	FSUM14A
14	FSM141	15	FM15	14	SFM14	15	FSUM15A
15	FSM151	16	FM16	15	SFM15	16	FSUM16A
16	FSM161	17	FM17	16	SFM16	17	FSUM17A
17	FSM171	18	FM18	17	SFM17	18	FSUM18A
18	FSM181	19	FM19	18	SFM18	19	FSUM19A
19	FSM191			19	SFM19	22	FSUM22A

Also Includes:	F80	Standard Handle Sealed Ratchet	
	F4LB	Speeder	
	F10LC	Breaker Bar	
	F40B	Short Shank Driver	
	FRS70A	Ratchet Spinner	
	F77	Ratchet Adaptor	
	FU8A	Universal Joint	
	FXK3	3" Knurled Extension	
	FXK6	6" Knurled Extension	
	FXK11	11" Knurled Extension	
	S9704KR	13/16" Spark Plug Socket	
	BLPEXTF388	8" Flexible Extension	
	S9706KA	5/8" Spark Plug Socket	
	S9716KA	9/16" Spark Plug Socket	
	KRA21G	Metal Box	







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- Read complete safety precaution information on pages W1 to W4

#### 3/8" Drive



STARTERSET3



STARTERSET5

#### STARTERSET3 6 Point Metric Starter Set.

- High strength sealed head ratchet built for strength, precision, and durability
- Stronger alloy steel allows extensions to be turned to a smaller diameter for greater accessibility
- Sockets feature Flank Drive® wrenching system which grips the fastener on the flanks/flats increasing torque by up to 15-20%
- Nickel chrome plating provides a wear resistant finish along with a mirror like finish
- Universal joint helps increase access to hard to reach fasteners

#### 17 pieces, Includes:

<u></u>	6 Point Deep Sockets	mm <u></u>	6 Point Deep Sockets
8	SFSM8	14	SFSM14
9	SFSM9	15	SFSM15
10	SFSM10	16	SFSM16
11	SFSM11	17	SFSM17
12	SFSM12	18	SFSM18
13	SFSM13	19	SFSM19

Also Includes:	FL80A	Sealed Ratchet
	FU8A	Universal Joint
	FXK3	3" Knurled Extension
	FXK6	6" Knurled Extension
	S9706KA	5/8" Spark Plug Socket

#### STARTERSET5 6 Point Metric Starter Set.

- · High strength sealed head ratchet built for strength, precision and durability
- Wobble engagement on extensions provides 16° of additional accessibility
- Sockets feature *Flank Drive* wrenching system which grips the fastener on the flanks/flats increasing torque by up to 15-20%
- Nickel chrome plating provides a wear resistant finish along with a mirror like finish
- Highest quality steel on breaker bar provides strength and durability

#### 17 pieces, Includes:

mm <u></u>	6 Point Shallow Sockets	<b>mm</b> <u>_</u>	6 Point Shallow Sockets
8	FSM81	14	FSM141
9	FSM91	15	FSM151
10	FSM101	16	FSM161
11	FSM111	17	FSM171
12	FSM121	18	FSM181
13	FSM131	19	FSM191

Also Includes:	F12LA	Breaker Bar
	F80	Sealed Ratchet
	FXWP1	1 1/2" Wobble Plus Extension
	FXWP3	3" Wobble Plus Extension
	FXWP6	6" Wobble Plus Extension

### 1/4" - 3/8" Drive (Blue-Point®)



#### **BLPGSSC100 General Service Set.**

Components (1/4" Drive):

- 10 fractional (3/16 to 9/16") and 13 metric (4 to 14 mm) standard sockets
- 6 ratchet/socket accessories
- 1 ratchet

#### Components (3/8" Drive):

- 13 fractional (1/4 to 1") and 19 metric (6 to 24 mm)
- 11 external Torx® sockets (E4 to E20)
- 2 spark plug sockets (5/8", 13/16")
- 5 ratchet/socket accessories
- 1 ratchet

#### Components (Combination Wrenches):

- 9 fractional combination wrenches (1/4 to 3/4")
- 10 metric combination wrenches (10 to 19 mm)
- BLPGSSC100PB storage case

1/4" - 3/8" Drive (Blue-Point®)



**BLPGSSCT71** 



BLPGSS3837



**BLPGSSC155** 

#### **General Service Sets**

#### **BLPGSSCT71 General Service Set.**

Components (3/8" Drive):

- 9 fractional combination wrenches (1/4 to 3/4")
- 10 metric combination wrenches (1/4 to 3/4")
- 12 fractional (5/16 to 1") and 15 metric (10 to 24 mm) 6 point standard sockets
- 2 spark plug sockets (5/8, 13/16")
- 1 quick release ratchet
- 1 spinner Handle
- 3 extensions (3, 6 and 10")
- 1 bit holder (3/8" drive)
- 4 hex bits (1/8, 5/32, 7/32 and 1/4")
- 3 flat tip bits (5/32, 3/16 and 1/4")
- 4 Phillips® tip bits (#0, #1, #2 and #3)
- 2 Square tip bits (#1 and #2)
- 1 diagonal cutting pliers (7")
- 1 long nose pliers (6")
- 1 groove joint pullers (10")
- 1 adjustable wrench (8")
- BLPGSSCT71PB storage case

#### **BLPGSS3837 General Service Set.**

Components (3/8" Drive):

- 8 fractional (5/16 to 3/4") and 14 metric (6 to 19 mm) standard 6 point sockets
- 4 fractional (5/16-3/8", 7/16-1/2", 9/16-5/8", 11/16-3/4") and 5 metric (10-11, 12-13, 14-15, 16-17, 18-19 mm) double open end wrenches
- 2 extensions: 3 and 6"
- 1 ratchet
- 1 universal joint
- 2 adaptors: 1/4" f x 3/8" m, 3/8" f x 1/4" m
- BLPGSS3837PB storage box

#### **BLPGSSC155 General Service Set.**

Components (1/4" Drive):

- 10 fractional (3/16 to 9/16") and 13 metric (4 to 14 mm) standard sockets
- 10 fractional (3/16 to 9/16") and 11 metric (4 to 14 mm) deep sockets
- 20 assorted 1/4" hex bits with bit holder
- 6 ratchet/socket accessories
- 1 quick release ratchet

#### Components (3/8" Drive)

- 13 fractional (1/4 to 1") and 19 metric (6 to 24 mm) standard sockets
- 11 fractional (3/8 to 1") and 15 metric (10 to 24 mm) deep sockets
- 11 external Torx® sockets (E4 to E20)
- 2 spark plug sockets (5/8, 13/16")
- 3 metric hex socket drivers (7, 8, 10 mm)
- 4 tamper resistant *Torx* socket drivers (T40, T45, T50, T55)
- 5 ratchet/socket accessories
- 1 quick release ratchet
- BLPGSSC155PB storage case

#### **BLPGSS3885** General Service Set.

Components (3/8" Drive):

- 13 fractional (1/4 to 1") and 14 metric (6 to 19 mm) standard sockets
- 13 fractional (1/4 to 1") and 14 metric (6 to 19 mm) deep sockets
- 11 external Torx sockets (E4 to E20)
- 1 Phillips socket drivers (#3 and #4)
- 2 Pozidriv® socket drivers (#3 and #4)
- 8 tamper resistant *Torx* socket drivers (T10 to T45)
- 2 spark plug sockets (5/8, 13/16")
- . 6 ratchet/socket accessories
- 1 ratchet
- BLPGSS3885PB storage case

#### BLPGSS3849 General Service Set.

Components (3/8" Drive):

- 8 fractional (5/16 to 3/4") and 14 metric (6 to 19 mm) standard 6 point sockets
- 8 fractional (5/16 to 3/4") and 13 metric (7 to 19 mm) deep 12 point sockets
- 2 extensions (3 and 6")
- 1 universal joint
- 1 3/8 to 1/4" adaptor
- 1 1/4 to 3/8" adaptor
- 1 ratchet
- BLPGSS3849PB storage case



BLPGSS3885







Do not use chrome or industrial finish hand tools with impact drivers

#### 3/8" Drive (Blue-Point®)







**BLPPTA3438** 



**BLPPTSM10** 

#### Pass Thru Socket Set

Size, inches (mm)	Stock No.	External Hex, inches	Length, inches
3/8	BLPPTS38	3/4	1 7/16
7/16	BLPPTS716	3/4	1 7 <b>/</b> 16
1/2	BLPPTS12	3/4	1 7 <b>/</b> 16
9/16	BLPPTS916	3/4	1 7 <b>/</b> 16
5/8	BLPPTS58	3/4	1 7 <b>/</b> 16
11/16	BLPPTS1116	3/4	1 7/16
3/4	BLPPTS34	3/4	1 <sup>7</sup> / <sub>16</sub>
(8)	BLPPTSM8	3/4	1 7 <b>/</b> 16
(9)	BLPPTSM9	3/4	1 7 <b>/</b> 16
(10)	BLPPTSM10	3/4	1 7 <b>/</b> 16
(11)	BLPPTSM11	3/4	1 7 <b>/</b> 16
(12)	BLPPTSM12	3/4	1 7 <b>/</b> 16
(13)	BLPPTSM13	3/4	1 7 <b>/</b> 16
(14)	BLPPTSM14	3/4	1 7 <b>/</b> 16
(15)	BLPPTSM15	3/4	1 7 <b>/</b> 16
(16)	BLPPTSM16	3/4	<b>1</b> 7 <b>/</b> 16
(17)	BLPPTSM17	3/4	<b>1</b> 7 <b>/</b> 16
(18)	BLPPTSM18	3/4	<b>1</b> 7 <b>/</b> 16
(19)	BLPPTSM19	3/4	1 7 <b>/</b> 16

**BLPPTS3822 Pass Thru Socket Set.** Includes: BLPPTS38 through BLPPTS34 (3/8 to 3/4") sockets, BLPPTSM8 through BLPPTSM19 (8 to 19 mm) metric sockets, BLPPTA3438 square drive adaptor, BLPPTEXT3 extension and BPRFPT10 ratchet (22 pcs) in storage case.

#### **BPRFPT10 Ratchet.**

- Flex head has 7 locking positions
- 3/4" hex drive, 10" long

#### **BLPPTEXT3 Extension.**

• 3" extension

#### **BLPPTA3438 Adaptor.**

• 3/8" square drive adaptor, 1 1/4" long BLPPTSS3822PB Storage Case.

1/2" Drive -

17 pieces, Includes:



317MSPC

317MSPC Fractional Chrome Set in a Storage Tray.

317AMMPC

317AMMPC Metric 6 Point General Service Set. 17 pieces, Includes:

<b>□</b> Ţ	6 Point Shallow Sockets
3/8	TW121A
7/16	TW141A
1/2	TW161A
9/16	TW181A
5/8	TW201
11/16	TW221
3/4	TW241
13/16	TW261
7/8	TW281
15/16	TW301
1	TW321
1 1/16	TW341
1 1/6	TW361

Also Includes:	S80A	Sealed Ratchet
	SXK5	5" Knurled Extension
	SXK11	11" Knurled Extension
	SN18B	18" Breaker Bar

<b>mm</b> <u></u>	6 Point Shallow Sockets
12	TWM12A
13	TWM13A
14	TWM14A
15	TWM15A
16	TWM16
17	TWM17
18	TWM18
19	TWM19
20	TWM20
21	TWM21
22	TWM22
23	TWM23
24	TWM24

Also Includes:	S80A	Sealed Ratchet	
	SXK5	5" Knurled Extension	
	SXK11	11" Knurled Extension	
	SN18B	18" Breaker Bar	

1/2" Drive



**344AMB** 

# 344AMB Fractional Chrome General Service Set. 44 pieces, Includes:

<b>□</b> Ţ	12 Point Shallow Sockets	<b>□</b> Ţ	12 Point Deep Sockets
3/8	SW121A	1/2	S161A
7/16	SW141A	9/16	S181A
1/2	SW161A	5/8	S201
9/16	SW181A	11/16	S221
5/8	SW201	3/4	S241
11/16	SW221	13/16	S261
3/4	SW241	7/8	S281
13/16	SW261	15/16	S301
7/8	SW281	1	S321
15/16	SW301	1 1/16	S341
1	SW321	1 1/8	S361
1 1/16	SW341		
1 1/8	SW361		
1 3/16	SW381		
1 1/4	SW401		
<b>1</b> 5/16	SW421		

6 Point Universal Sockets Set	307SUY	9/16 to 15/16" (7 pcs)
Also Includes:	LRS70A	1 19/32" Ratchet Spinner
	S4	18 7/8" Speeder
	<b>S8</b>	2 11/16" Universal Joint
	S12L	12" Sliding T-Handle
	S77A	Ratcheting Adaptor
	S80A	Sealed Ratchet
	SN18B	18" Breaker Bar
	SX2	2" Extension
	SXK5	5" Knurled Extension
	SXK11	11" Knurled Extension

# 345MMB Chrome Metric General Service Set. 45 pieces, Includes:

	12 Point Socket Sets
(23 pcs) (10 to 32 mm)	323SWMY Metric 12 point Shallow Socket Set
(13 pcs) (12 to 24 mm)	313SMYA Metric 12 point Deep Socket Set

Also Includes:	S4	18 7/8" Speeder
	S8	2 11/16" Universal Joint
	S12L	12" Sliding T-Handle
	S77A	Ratcheting Adaptor
	S80A	Sealed Ratchet
	SN18B	18" Breaker Bar
	SXK3	3 ½" Extension
	SXK5	5" Extension
	SXK11	11" Extension



# 360MB Fractional Chrome General Service Set in KRA21G Metal Box.

59 pieces, Includes:

	12 Point Shallow Sockets	<b>□</b> Ţ	6 Point Deep Sockets	<b>□</b> Ţ	12 Point Deep Sockets
3/8	SW121A	1/2	TS161A	1/2	S161A
7/16	SW141A	9/16	TS181A	9/16	S181A
1/2	SW161A	5/8	TS201	5/8	S201
9/16	SW181A	11/16	TS221	11/16	S221
5/8	SW201	3/4	TS241	3/4	S241
11/16	SW221	13/16	TS261	13/16	S261
3/4	SW241	7/8	TS281	7/8	S281
13/16	SW261	15/16	TS301	<sup>15</sup> /16	S301
7/8	SW281	1	TS321	1	S321
15/16	SW301	<b>1</b> ½16	TS341	1 1/16	S341
1	SW321	1 1/8	TS361		
<b>1</b> ½16	SW341				
1 1/8	SW361				
1 3/16	SW381				
1 1/4	SW401				
<b>1</b> 5⁄16	SW421				

6 Point Universal Sockets Set	307SUY	9/16 to <sup>15</sup> /16" (7 pcs)
Also Includes:	A17	15/16" Blade Width Drag Link Socket
	S12L	12" Sliding T-Handle
	S77A	Ratcheting Adaptor
	SN18B	18" Breaker Bar
	SX2	2" Extension
	SXK3	3 ½" Extension
	SXK5	5" Knurled Extension
	SXK11	11" Knurled Extension
	A80A	1/4 to 1/2" Capacity Stud Remover
	LRS70A	1 19/32" Ratchet Spinner
	S80A	Sealed Ratchet
	SL80A	Long Handle Sealed Ratchet
	S4	18 1/8" Speeder
	<b>S8</b>	2 11/16" Universal Joint



345MMB







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# **GENERAL SERVICE SETS**

# 1/2" Drive (Blue-Point®)



BLPGSS1233

#### BLPGSS1233 1/2" Drive General Service Set.

#### **Set Components:**

- 15 fractional (3/8 to 1 1/4") and 12 metric (12 to 24 mm) standard sockets
- 1 breaker bar
- 1 universal joint
- 1 quick release ratchet
- 3 extensions (3, 6 and 10")

3/4" Drive



434HDB

## 434HDB 12 Point Fractional General Service Set (Tools with Metal Box). 35 Tools, Includes:

<u> </u>	12 Point Shallow Sockets
3/4	LDH242
13/16	LDH262
7/8	LDH282
15/16	LDH302
31/32	LDH312
1	LDH322
1 1/16	LDH342
1 1/8	LDH362
1 <sup>3</sup> /16	LDH382
1 1/4	LDH402
5/16	LDH422A
1 3/8	LDH442
1 7/16	LDH462
1 1/2	LDH482
1 <sup>9</sup> /16	LDH502
1 5/8	LDH522
1 11/16	LDH542
1 3/4	LDH562
1 13/16	LDH582
1 7/8	LDH602
2	LDH642
2 1/16	LDH662
2 1/8	LDH682
2 <sup>3</sup> / <sub>16</sub>	LDH702
2 1/4	LDH722
2 3/8	LDH762

Also includes:	L32	3" Extension
	L62	8" Extension
	L122	16" Extension
	L52B	Sliding Head
	L872	Ratchet Head
	L82A	Universal Joint
	L8112A	Breaker Bar Head
	L672B	Ratchet Adaptor
	L872H	19 <sup>1</sup> /4" Handle
	KRA226B	Metal Box



414ΔΗΓ

# 414AHD 12 Point Fractional General Service Set (Tools with Storage Tray). 15 Tools, Includes:

	12 Point Shallow Sockets
1 1/16	LDH342
1 1 8	LDH362
114	LDH402
<b>1</b> <sup>5</sup> <sub>16</sub>	LDH422A
1 3 8	LDH442
<b>1</b> 7 16	LDH462
1 1 2	LDH482
1 <sup>5</sup> 8	LDH522
1 3 4	LDH562
1 7 8	LDH602

Also includes:	L62	8" Extension
	L122	16" Extension
	L872	Ratchet Head
	L872RJ	19 1/4" Handle
	L8112A	Breaker Bar Head

#### The Finest Wrenches. Period.

Snap-on® wrenches are manufactured with special alloy steel, precision forged and heat treated for optimum strength and durability. The Flank Drive® box-end wrenching system grips the fastener flats and provides up to 15-20% more turning power. Nickel chrome finishing helps protect against corrosion and makes it easy to wipe clean. Longer length handles provide increased leverage and better access to those hard to reach areas.

mm61

13mm

Snap-on

BMM

AND-DENZ

#### Flank Drive® Plus

The Flank Drive® Plus teeth design provides more flat-to-flat contact preventing slipping and rounding of the fastener and delivering up to 62% more turning power than conventional open end wrenches.

15° wrench-end offset orientation provides easy access in restricted areas.

#### **Standard Box End**

The box end is rotated 7.5° away from the handle so the wrench can be flipped to get a new grip in tight situations.

Set at 15° angle for knuckle clearance and increased access in any space.

#### **Ratcheting Box End**

Up to 80 gear teeth lets the wrench move easier with less exertion.

Reversible, dual-pawl ratcheting box end yields smoother operation with greater strength.



# Flank Drive® Plus Combination Reversible Ratcheting Box/Open End

- Open end features Flank Drive Plus wrenching configurations that deliver up to 62% more turning power than conventional wrenches
- Longer overall length increases leverage to let the wrench do the work

SOEXRM710

- 12 point box end features the Flank Drive wrenching configuration, the proven design for turning fasteners
- Up to 80 gear teeth require minimal movement in tight areas
- Low profile easy action reverse lever won't get in your way



4	-0	C1	1 1		
1	5°	Stan	aard	Handle,	mm

וס סנ	allualu n	Contains: '0						
	(12)	A	В	C	D	E	Reverse Lever Repair Kit	(12)
8	SOEXRM8	17.8	17.0	7.1	4.3	149	RKW1	
9	SOEXRM9	19.6	19.2	7.9	4.7	164	RKW2	
10	SOEXRM10	21.5	21.1	8.3	5.1	179	RKW3	•
11	SOEXRM11	22.0	23.4	8.6	5.5	194	RKW3	•
12	SOEXRM12	23.5	25.1	9.3	5.9	207	RKW4	•
13	SOEXRM13	25.0	27.2	10.2	6.3	221	RKW5	•
14	SOEXRM14	27.0	29.2	10.2	6.7	235	RKW6	•
15	SOEXRM15	28.5	31.2	11.1	7.1	249	RKW7	•
16	SOEXRM16	30.5	33.0	11.1	7.4	261	RKW8	•
17	SOEXRM17	32.0	35.1	12.0	7.8	277	RKW9	•
18	SOEXRM18	34.5	37.1	12.0	8.2	291	RKW10	•
19	SOEXRM19	36.5	39.4	12.9	8.6	305	RKW11	•

15° Standard Handle, inches

	(12)	A	В	C	D	E	Reverse Lever Repair Kit	(12)
3/8	S0EXR12	27/32	27/32	5/16	3/16	7	RKW3	•
7/16	S0EXR14	7/8	29/32	11/32	7/32	7 5/8	RKW3	•
1/2	SOEXR16	31/32	<b>1</b> <sup>1</sup> / <sub>16</sub>	13/32	1/4	8 11/16	RKW5	•
9/16	SOEXR18	<b>1</b> <sup>1</sup> / <sub>16</sub>	1 <sup>5</sup> /32	13/32	1/4	9 1/4	RKW6	•
5/8	S0EXR20	<b>1</b> <sup>3</sup> / <sub>16</sub>	<b>1</b> 5/16	7/16	9/32	10 <sup>1</sup> / <sub>4</sub>	RKW8	•
11/16	S0EXR22	1 1/4	1 <sup>3</sup> /8	15/32	5/16	10 <sup>7</sup> /8	RKW9	•
3/4	SOEXR24	<b>1</b> <sup>7</sup> / <sub>16</sub>	<b>1</b> 9/16	1/2	11/32	12	RKW11	•

ASME B107.100

Set includes storage tray

Flank Drive Combination Ratcheting Box/Open End



### 0° Standard Handle, mm

<b>~</b>	(12)	A	В	C	D	E	(12)
8	OEXRM8	17.8	17.0	7.1	4.3	147	
9	OEXRM9	19.6	19.2	8.0	4.7	159	
10	OEXRM10	21.5	21.1	8.4	5.1	171	•
11	0EXRM11	22.0	23.4	8.7	5.6	183	•
12	0EXRM12	23.5	25.1	9.3	5.9	195	•
13	0EXRM13	25.0	27.2	10.2	6.4	207	•
14	0EXRM14	27.0	29.2	10.2	6.7	219	•
15	0EXRM15	28.5	31.2	11.1	7.1	231	•
16	OEXRM16	30.5	33.0	11.1	7.4	243	•
17	0EXRM17	32.0	35.1	12.0	7.8	255	•
18	0EXRM18	34.5	37.1	12.0	8.2	267	•
19	OEXRM19	36.5	39.4	12.9	8.7	279	•

ASME B107.100

ASME® B107.100

Set includes storage tray

Set includes storage tray

**Contains:** 



#### 0° Standard Handle, inches

	OE	:XH/U/				
dard Har	Set OFTATO					
(12)	A	В	C	D	E	(12)
0EXR12	27/32	27/32	5/16	3/16	6 3/4	•
0EXR14	7/8	29/32	11/32	7/32	7 3/16	•
0EXR16	31/32	<b>1</b> <sup>1</sup> / <sub>16</sub>	13/32	1/4	8 3/16	•
0EXR18	1 <sup>1</sup> / <sub>16</sub>	1 5/32	13/32	1/4	8 5/8	•
0EXR20	1 3/16	1 <sup>5</sup> /16	7/16	9/32	5 9/16	•
0EXR22	1 7/32	1 3/8	15/32	5/16	10 <sup>1</sup> / <sub>16</sub>	•
0EXR24	1 <sup>15</sup> / <sub>32</sub>	<b>1</b> 9/16	1/2	11/32	11	•
	0EXR12 0EXR14 0EXR16 0EXR18 0EXR20 0EXR22	dard Handle, in  (12) A  OEXR12 27/32  OEXR14 7/8  OEXR16 31/32  OEXR18 1 1/16  OEXR20 1 3/16  OEXR20 1 7/32	OEXR12         27/ <sub>32</sub> 27/ <sub>32</sub> OEXR14         7/ <sub>8</sub> 29/ <sub>32</sub> OEXR16         31/ <sub>32</sub> 1 ½ <sub>16</sub> OEXR18         1 ½ <sub>16</sub> 1 ½ <sub>32</sub> OEXR20         1 ¾ <sub>16</sub> 1 ½ <sub>16</sub> OEXR22         1 ¾ <sub>32</sub> 1 ¾ <sub>8</sub>	dard Handle, inches           12         A         B         C           OEXR12         27/32         27/32         5/16           OEXR14         7/8         29/32         11/32           OEXR16         31/32         1 1/16         13/32           OEXR18         1 1/16         1 5/32         13/32           OEXR20         1 3/16         1 5/16         7/16           OEXR22         1 7/32         1 3/8         15/32	dard Handle, inches         Set Con           (12)         A         B         C         D           OEXR12         27/32         27/32         5/16         3/16           OEXR14         7/8         29/32         11/32         7/32           OEXR16         31/32         1 1/16         13/32         1/4           OEXR18         1 1/16         1 5/32         13/32         1/4           OEXR20         1 3/16         1 5/16         7/16         9/32           OEXR22         1 7/32         1 3/8         15/32         5/16	dard Handle, inches         Set Contains:           12         A         B         C         D         E           0EXR12         27/32         27/32         5/16         3/16         6 3/4           0EXR14         7/8         29/32         11/32         7/32         7 3/16           0EXR16         31/32         1 1/16         13/32         1/4         8 3/16           0EXR18         1 1/16         1 5/32         13/32         1/4         8 5/8           0EXR20         1 3/16         1 5/16         7/16         9/32         5 9/16           0EXR22         1 7/32         1 3/8         15/32         5/16         10 1/16

ASME B107.100

Set includes storage tray



### Flank Drive® Combination Ratcheting Box/Open End





						_	_	
Short I	Handle, r	nm	OXIRI	M707	Set Conta	OXIRMI ins:	OXIRM!	as
	(12)	A	В	C	D	E	(12)	(12)
8	OXIRM8	17.8	17.0	7.1	4.3	88.7	•	
9	OXIRM9	19.6	19.2	8.0	4.8	92.7	•	
10	OXIRM10	21.5	21.1	8.4	5.1	97.0	•	
11	OXIRM11	22.0	23.4	8.7	5.6	101.1	•	
12	OXIRM12	23.5	25.1	9.3	5.9	105.4	•	
13	OXIRM13	25.0	27.2	10.2	6.4	109.5	•	
14	OXIRM14	27.0	29.2	10.2	6.7	113.8	•	
15	OXIRM15	28.5	31.2	11.1	7.1	118.1		•
16	OXIRM16	30.5	33.0	11.1	7.4	122.2		•
17	OXIRM17	32.0	35.1	12.0	7.8	126.5		•
18	OXIRM18	34.5	37.1	12.0	8.2	130.6		•
19	OXIRM19	36.5	39.4	129	8.7	135.4		•

			OXIR7	07			
Short	Handle, inc	Set Oxination Contains:					
	(12)	A	В	C	D	E	(12)
3/8	OXIR12	27/32	27/32	5/16	3/16	3 27/32	•
7/16	OXIR14	7/8	29/32	11/32	7/32	3 31/32	•
1/2	OXIR16	31/32	1 <sup>1</sup> /16	13/32	1/4	4 <sup>5</sup> / <sub>16</sub>	•
9/16	OXIR18	<b>1</b> <sup>1</sup> / <sub>16</sub>	1 <sup>5</sup> /32	13/32	1/4	4 15/32	•
5/8	OXIR20	1 <sup>3</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	15/32	9/32	4 13/16	•
11/16	OXIR22	1 7/32	1 3/8	15/32	5/16	4 31/32	•
3/4	OXIR24	1 <sup>15</sup> / <sub>32</sub>	1 <sup>9</sup> / <sub>16</sub>	1/2	11/32	5 11/32	•
4014E D46	= 100						

ASME B107.100

Set includes storage tray

ASME® B107.100

Sets include storage tray

## Reversible Ratcheting Box/Speed Open End, mm

- Patented open end speed wrenching configuration delivers more speed than conventional wrenches
- Speed open end provides quick, ratchet like action
- Flank Drive wrenching system on box end provides up to 15 to 20% more turning power with less risk of tool or fastener damage
- · Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability
- Up to 80 gear teeth for minimal movement in tight areas
- Box ends are offset 15° for clearance
- · Sized for optimum comfort and balance
- Nickel-chrome plating helps protect against corrosion and makes it easy to

wipe o	ciean						Contains	: '0
	(12)	A	В	C	D	E	Gear Teeth	(12)
10	SRXRM10	21.5	19.1	8.3	5.1	179	72	•
11	SRXRM11	22.0	21.0	8.6	5.6	194	72	•
12	SRXRM12	23.5	22.9	9.3	5.9	207	80	•
13	SRXRM13	25.0	24.8	10.2	6.4	221	80	•
14	SRXRM14	27.0	26.7	10.2	6.6	235	80	•
15	SRXRM15	28.5	28.6	11.1	7.1	249	80	•
16	SRXRM16	30.5	30.5	11.1	7.4	261	80	•
17	SRXRM17	32.0	32.4	12.0	7.9	277	80	•
18	SRXRM18	34.5	34.3	12.0	8.2	291	80	•
19	SRXRM19	36.5	36.2	12.9	8.6	305	80	•





**Ratcheting Box/Speed Open End** 

ASME B107.100

Set includes storage tray

### Ratcheting Rox mm

Ratcheting Box, mm Set Contains:									
<b>mm</b> <u></u>	(12)	A	C	E	(12)				
10	XDHRM10	14.4	6.3	256.5	•				
13	XDHRM13	18.7	7.5	295.4	•				
15	XDHRM15	21.5	8.8	349.3	•				
10	XDHRM17	23.7	9.0-10.2	375.2	•				

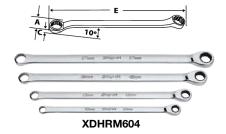
Set includes kit bag



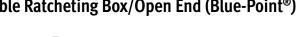


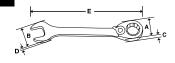
- Do not use "cheater bars" on handles
- · Read safety precautions on pages W1 to W4

### **High Performance Ratcheting Box**



### **Combination Reversible Ratcheting Box/Open End (Blue-Point®)**







**BOER708** 



Standard Handle,

	dard Han ffset, mr	•	Set BOERMY SOLERMY OA					
	(12)	A	В	C	D	E	(12)	(12)
6	BOERM6	16.3	16.3	6.6	3.6	114.3		
7	BOERM7	16.5	16.4	6.6	3.9	125.0		
8	BOERM8	17.8	17.7	6.5	4.0	135.0	•	
9	BOERM9	19.5	20.0	7.4	4.0	150.0	•	
10	BOERM10	21.5	21.9	8.0	5.0	160.0	•	
11	BOERM11	22.0	23.9	8.5	5.5	170.0	•	
12	BOERM12	23.5	25.0	9.0	5.5	175.0	•	
13	BOERM13	25.0	25.9	10.0	6.3	180.0	•	
14	BOERM14	27.0	29.9	10.0	6.5	190.0	•	
15	BOERM15	28.5	31.1	11.0	7.0	200.0	•	
16	BOERM16	30.5	33.6	11.0	7.0	210.0	•	
17	BOERM17	32.0	36.5	12.0	7.0	230.0	•	
18	BOERM18	34.5	38.5	12.0	8.0	240.0	•	
19	BOERM19	36.5	38.7	12.9	8.7	250.0	•	
21	BOERM21	39.4	43.2	13.7	9.4	266.7		•

ASME® B107.100

BOERM22

BOERM24

BOERM25

22

24

25

Sets include storage tray

Standard Handle, 15° Offset, inches

	d Handl et, inch	•		Set ROFATOR ROFATOR					
<b>□</b> Ţ	(12)	A	В	C	D	E	(12)	(12)	
1/4	BOER8	21/32	21/32	1/4	5/32	4 1/2			
<sup>5</sup> /16	BOER10	11/16	11/16	1/4	5/32	5 <sup>5</sup> /16	•		
3/8	BOER12	27/32	7/8	<sup>5</sup> /16	3/16	6 <sup>5</sup> /16	•		
<sup>7</sup> /16	BOER14	7/8	15/16	11/32	7/32	6 11/16	•		
1/2	BOER16	31/32	1 <sup>1</sup> /32	13/32	1/4	7 1/16	•		
9/16	BOER18	1 <sup>1</sup> /16	1 <sup>3</sup> /16	13/32	1/4	7 1/2	•		
5/8	BOER20	1 <sup>3</sup> /16	<b>1</b> 5/16	7/16	9/32	8 1/4	•		
11/16	BOER22	1 1/4	<b>1</b> 7/16	15/32	9/32	9 1/16	•		
3/4	BOER24	1 <sup>7</sup> /16	1 17/32	1/2	11/32	9 13/16	•		
13/16	BOER26	<b>1</b> 9/16	1 23/32	17/32	3/8	10 <sup>1</sup> / <sub>2</sub>		•	
7/8	BOER28	1 <sup>21</sup> / <sub>32</sub>	1 27/32	9/16	3/8	11 <sup>1</sup> / <sub>4</sub>		•	
15/16	B0ER30	1 27/32	1 31/32	5/8	7/16	12		•	
1	BOER32	1 <sup>7</sup> /8	2 3/32	5/8	7/16	12 <sup>7</sup> /8		•	

ASME B107.100

Sets include storage tray

## **Ratcheting Wrench Adaptors**

41.7

46.5

47.2

45.7

49.5

14.5

15.5

15.5

9.4

11.2

285.8

304.8

327.2





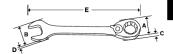




**RWA404** 

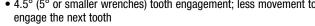
- Converts ratcheting wrench into a ratchet
- Use with reversible ratcheting box wrenches such as the SOEXRM, BOERM, BOERMF and BOERMS series
- Can be used with the combination ratcheting box wrenches such as the OEXRM and OXIRM series
- · Use reverse lever on wrench to secure or remove adaptor from wrench
- Push button on adaptor to release socket

Katchetin	g wrench Adap	LOIS Contains:	A3 /	·# \
Stock No.	Configuration	Use with Ratcheting Wrench Size		
RWA1	1/4" drive	13mm	•	
RWA2	3/8" drive	16mm	•	
RWA3	1/2" drive	19mm	•	
RWA4	1/4" hex	13mm	•	
RWA1FR	1/4" drive	1/2"		•
RWA2FR	3/8" drive	5/8"		•
RWA3FR	1/2" drive	3/4"		•
RWA4FR	1/4" hex	1/2"		•



#### Combination Ratcheting Box/Open End (Blue-Point®)

- Flex head pivots 90° in either direction to reach hard to get fasteners 4.5° (5° or smaller wrenches) tooth engagement; less movement to
- Reversible, dual pawl ratcheting box end yields smooth operation and maximum strength



• Tough, durable nickel-chrome finish



**BOERMF712A** 



#### Flex Head/Standard, 15° Offset, mm

	(12)	A	В	C	D	E	0	(12)
8	BOERMF8A	17.8	17.7	6.5	4.0	142	60	•
9	BOERMF9A	19.5	20.0	7.4	4.0	152	72	•
10	BOERMF10A	21.5	21.9	8.0	5.0	162	72	•
11	BOERMF11A	22.0	23.9	8.5	5.5	172	72	•
12	BOERMF12A	23.5	25.0	9.0	5.5	180	80	•
13	BOERMF13A	25.0	25.9	10.0	6.3	188	80	•
14	BOERMF14A	27.0	29.9	10.0	6.5	196	80	•
15	BOERMF15A	28.5	31.1	11.0	7.0	204	80	•
16	BOERMF16A	30.5	33.6	11.0	7.0	214	80	•
17	BOERMF17A	32.0	36.5	12.0	7.0	228	80	•
18	BOERMF18A	34.5	38.5	12.0	8.0	242	80	•
19	BOERMF19A	36.5	38.7	12.9	8.7	256	80	•

Flex Head/Standard, 15° Offset, inches

- 0	iioci, iiici		U	mtams:	' \			
	(12)	A	В	C	D	E	0	(12)
5/16	BOERF10A	11/16	11/16	1/4	5/32	<b>5</b> 19/32	72	•
3/8	BOERF12A	27/32	7 <b>/</b> 8	5/16	3/16	63/8	72	•
7/16	BOERF14A	7/8	<sup>15</sup> / <sub>16</sub>	11/32	7/32	6 3/4	72	•
1/2	BOERF16A	31/32	<b>1</b> 1/32	13/32	1/4	<b>7</b> 13/32	80	•
9/16	BOERF18A	<b>1</b> 1/16	<b>1</b> 3/16	13/32	1/4	<b>7</b> 23/32	80	•
5/8	BOERF20A	<b>1</b> 3/16	<b>1</b> 5/16	<sup>7</sup> /16	9/32	<b>8</b> 7/16	80	•
11/16	BOERF22A	<b>1</b> 1/4	<b>1</b> 7/16	15/32	9/32	831/32	80	•
3/4	BOERF24A	<b>1</b> 7/16	<b>1</b> 17/32	1/2	11/32	<b>10</b> <sup>1</sup> / <sub>16</sub>	80	•

ASME B107.100

Set includes storage tray

ASME® B107.100

Set includes storage tray

Set Contains:

- Up to 80 gear teeth; less movement required to engage next tooth
- 12 point Flank Drive® wrenching system is ideal in tight quarters
- Small footprint with 0° offset unidirectional gear



BOERMS712

wrong direction · High quality steel ensures a better fit and yields a long lasting tool

· Low ratcheting torque is less likely to move loose fastener in



**BOERS708** 

art 150 Offcat mm

Snort, 1	15° Onset	, mm		Contains:						
	(12)	A	В	C	D	E	(12)			
8	BOERMS8	17.8	17.7	6.5	4.0	90	•			
9	BOERMS9	19.5	20.0	7.4	4.0	95	•			
10	BOERMS10	21.5	21.9	8.0	5.0	100	•			
11	BOERMS11	22.0	23.9	8.5	5.5	105	•			
12	B0ERMS12	23.5	25.0	9.0	5.5	110	•			
13	BOERMS13	25.0	25.9	10.0	6.3	115	•			
14	BOERMS14	27.0	29.9	10.0	6.5	120	•			
15	BOERMS15	28.5	31.1	11.0	7.0	125	•			
16	BOERMS16	30.5	33.6	11.0	7.0	128	•			
17	B0ERMS17	32.0	36.5	12.0	7.0	132	•			
18	BOERMS18	34.5	38.5	12.0	8.0	138	•			
19	BOERMS19	36.5	38.7	12.9	8.7	142	•			

ASME B107.100

Set includes storage tray



Siloit,	15 Olls	et, inci	nes		Con	<b>49</b>	
<b>□</b> Ţ	(12)	A	В	C	D	E	(12)
5/16	BOERS10	11/16	11/16	1/4	5/32	3 9/16	•
3/8	B0ERS12	27/32	7/8	5/16	3/16	3 <sup>15</sup> / <sub>16</sub>	•
7/16	BOERS14	7/8	15/16	11/32	7/32	4 1/8	•
1/2	BOERS16	31/32	1 <sup>1</sup> /32	13/32	1/4	4 1/2	•
9/16	BOERS18	<b>1</b> <sup>1</sup> / <sub>16</sub>	1 <sup>3</sup> / <sub>16</sub>	13/32	1/4	4 3/4	•
5/8	BOERS20	1 <sup>3</sup> / <sub>16</sub>	<b>1</b> 5/16	7/16	9/32	5 <sup>1</sup> /16	•
11/16	B0ERS22	1 1/4	1 <sup>7</sup> /16	15/32	9/32	5 <sup>3</sup> / <sub>16</sub>	•
3/4	B0ERS24	1 <sup>7</sup> / <sub>16</sub>	1 17/32	1/2	11/32	5 <sup>9</sup> / <sub>16</sub>	•

ASME B107.100

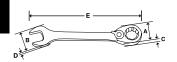
Set includes storage tray





- Do not use "cheater bars" on handles
- · Read safety precautions on pages W1 to W4

### Flex Head Ratcheting Box/Open End (Blue-Point®)





BOERSF708

#### BOERMSF712

Contains:

133

140

#### Flex Head Ratcheting Box/ Open End. Stubby, 15° Offset, mm

BOERMSF17

BOERMSF18

•	•	,,		•			
	(12)	A	В	C	D	E	(12)
8	BOERMSF8	17.8	17.7	6.5	4.0	94	•
9	B0ERMSF9	19.5	20.0	7.4	4.0	98	•
10	B0ERMSF10	21.5	21.9	8	5	103	•
11	B0ERMSF11	22	23.9	8.5	5.5	108	•
12	B0ERMSF12	23.5	25	9	5.5	111	•
13	B0ERMSF13	25	25.9	10	6.3	115	•
14	BOERMSF14	27	29.9	10	6.5	120	•
15	B0ERMSF15	28.5	31.1	11	7	124	•
16	BOERMSF16	30.5	33.6	11	7	128	•

38.5 BOERMSF19 36.5 19 38.7 12.9 8.7 147 ASME® B107.100 Set includes kit bag

36.5

12

12

32

34.5

# Flex Head Ratcheting Box/ Open End, Stubby, 15° Offset, inches Contains:

B0ERSF22

ΦĪ  $\{12\}$  $\{12\}$ 5/16 B0ERSF10 11/16 11/16 1/4 5/32 3 11/16 3/8 BOERSF12 27/32 7/8 5/16 3/16 4 1/16 15/16 11/32 4 1/4 7/16 BOERSF14 7/8 7/32 1/2 BOERSF16 31/32 1 1/32 13/32 1/4 4 17/32 BOERSF18 **1** <sup>1</sup>/<sub>16</sub> 1 3/16 13/32 1/4 4 23/32 9/16 BOERSF20 1 3/16 **1** 5/16 7/16 9/32 5 1/32 5/8

B0ERSF24 1 7/16 1 17/32 11/32 5 <sup>25</sup>/<sub>32</sub> ASME B107.100 Set includes kit bag

15/32

9/32

5 1/4

Set includes kit bag

1 7/16

1 1/4

### **Locking Flex Head Ratcheting Box (Blue-Point)**





#### **BOERMFLCG712**

#### Locking Flex Head Ratcheting Box/ Cushion Grin mm

Cusino	in orip, iiiiii		ontains:			
	(12)	A	В	C	D	(12)
8	BOERMFLCG8	17.8	6.55	32	228	•
9	BOERMFLCG9	19.5	7.45	34	229	•
10	BOERMFLCG10	21.5	8.05	38	233	•
11	BOERMFLCG11	22	8.55	40	235	•
12	BOERMFLCG12	23.5	9.05	42	285	•
13	BOERMFLCG13	25	10.05	45	287	•
14	BOERMFLCG14	27	10.05	48	289	•
15	BOERMFLCG15	28.5	11.05	52	293	•
16	BOERMFLCG16	30.5	11.05	54	347	•
17	BOERMFLCG17	32	12.05	56	348	•
18	BOERMFLCG18	34.5	12.05	60	352	•
19	BOERMFLCG19	36.5	12.95	64	354	•
ASME B107	7.100				Set include	es kit bag

Locking Flex Head Ratcheting Box/ Cushion Grin inches

Cusillo	in only, inc	.1163			Contains:	• /
<b>□</b> Ţ	(12)	A	В	C	D	(12)
5/16	BOERFLCG10	23/32	1/4	1 <sup>1</sup> /4	9	•
3/8	BOERFLCG12	27/32	5/16	1 1/2	9 1/4	•
7/16	BOERFLCG14	7/8	11/32	1 9/16	9 19/32	•
1/2	BOERFLCG16	31/32	13/32	1 25/32	11 9/32	•
9/16	BOERFLCG18	<b>1</b> <sup>1</sup> / <sub>16</sub>	13/32	1 29/32	11 3/8	•
5/8	BOERFLCG20	1 7/32	7/16	2 1/8	13 <sup>21</sup> / <sub>32</sub>	•
11/16	BOERFLCG22	1 <sup>1</sup> /4	15/32	2 7/32	13 <sup>23</sup> / <sub>32</sub>	•
3/4	BOERFLCG24	1 <sup>7</sup> / <sub>16</sub>	1/2	2 17/32	13 <sup>15</sup> / <sub>16</sub>	•

**BOERFLCG708** 

ASME B107.100

#### Flank Drive® Plus Combination



Snap-on® *Flank Drive* Plus combination wrenches exceed the limits of any other open end design.

The open end features a series of flutes or notches that grip a fastener away from its corners much like our box ends do.

Force is directed away from the weaker corners of the nut and directed to the stronger flats. You can actually see the grip. In fact, on some fasteners that you don't want marked, you should use our standard wrench.

A 11 13 13 14 10 15	15 17	<b>C</b> 5	<b>D</b>	E 135	SOEAN!	(12)
3 13 1 14	17		4	135	1	
14		6		100		
	10	0	4	146		
0 15	19	6	5	159		
	21	7	5	171	•	•
1 17	23	8	6	184	•	•
2 18	25	8	6	195	•	•
3 20	27	9	6	207	•	•
4 21	29	9	7	219	•	•
5 22	31	10	7	231	•	•
6 24	33	10	7	242	•	
7 25	35	11	8	255	•	•
8 27	37	12	8	267	•	
9 28	39	12	9	279	•	
20 30	41	13	9	292		
2 <b>1</b> 31	43	13	9	304		
22 33	46	14	10	318		
2 <b>3</b> 34	47	14	10	327		
<b>24</b> 35	49	15	11	337		
<b>25</b> 37	52	16	11	356		
	6 24 7 25 8 27 9 28 0 30 11 31 12 33 13 34	6         24         33           7         25         35           8         27         37           9         28         39           10         30         41           11         31         43           12         33         46           13         34         47           14         35         49	6         24         33         10           7         25         35         11           8         27         37         12           9         28         39         12           10         30         41         13           11         31         43         13           12         33         46         14           13         34         47         14           14         35         49         15	6         24         33         10         7           7         25         35         11         8           8         27         37         12         8           9         28         39         12         9           90         30         41         13         9           11         31         43         13         9           12         33         46         14         10           13         34         47         14         10           14         35         49         15         11	6         24         33         10         7         242           7         25         35         11         8         255           8         27         37         12         8         267           9         28         39         12         9         279           10         30         41         13         9         292           11         31         43         13         9         304           12         33         46         14         10         318           13         34         47         14         10         327           14         35         49         15         11         337           15         37         52         16         11         356	6 24 33 10 7 242

Selection, convenience and quality. Flank Drive Plus combination

wrenches are available in many different styles and sizes. Just like all *Snap-on* wrenches, they are sized for optimum comfort and balance in your hand. Tough, durable, nickel-chrome plating produces a mirror like finish, that helps protect against corrosion and makes it easy to wipe the wrenches clean.





Standa	ard Leng	gth, in		Set Contains:						
	(12)	A	В	C	D	E	(12)	(12)		
1/4	SOEX8	13/32	17/32	3/16	5/32	5				
5/16	SOEX10	1/2	21/32	7/32	5/32	5 3/4	•			
11/32	SOEX11	17/32	23/32	1/4	3/16	6 <sup>1</sup> /8	•			
3/8	SOEX12	19/32	25/32	1/4	3/16	6 1/2	•	•		
7/16	SOEX14	21/32	29/32	7/32	7/32	7 1/4	•	•		
1/2	SOEX16	3/4	<b>1</b> 1/16	11/32	1/4	8	•	•		
9/16	SOEX18	27/32	1 5/32	3/8	9/32	8 3/4	•	•		
5/8	S0EX20	15/16	<b>1</b> 5/16	13/32	9/32	9 1/2	•	•		
11/16	S0EX22	1 1/32	1 13/32	7/16	5/16	10 <sup>1</sup> / <sub>4</sub>	•	•		
3/4	S0EX24	1 1/8	<b>1</b> 9/16	15/32	11/32	11	•	•		
13/16	SOEX26	1 3/16	1 21/32	17/32	3/8	11 3/4	•			
7/8	SOEX28	1 9/32	1 <sup>13</sup> / <sub>16</sub>	9/16	3/8	12 <sup>1</sup> / <sub>2</sub>				
15/16	SOEX30	1 3/8	1 29/32	19/32	13/32	13 <sup>1</sup> / <sub>4</sub>				
1	SOEX32	1 <sup>15</sup> /32	2 1/32	5/8	7/16	14				
11/16	SOEX34	1 9/16	2 5/32	19/32	15/32	14 3/4				
<b>1</b> 1/8	SOEX36	1 5/8	2 5/16	11/16	15/32	15 <sup>17</sup> / <sub>32</sub>				
1 <sup>3</sup> / <sub>16</sub>	SOEX38	1 23/32	2 13/32	23/32	1/2	16 <sup>1</sup> / <sub>4</sub>				
11/4	SOEX40	1 13/16	2 9/16	3/4	17/32	17				
1 <sup>5</sup> / <sub>16</sub>	SOEX42	1 29/32	2 21/32	3/4	9/16	17 <sup>25</sup> /32				



WARNING



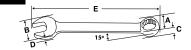
- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4



**SOEX710** 

107

### Flank Drive® Combination





OEXM710B











# Standard Length, mm

Set Contai	OSHNA Ins:	OSHM70	PR. OEXA	OEAM Z	OEXM7,	7. \ 'T	GOEXMI	75

	6	(12)	12	A	В	C	D	E	6	6	(12)	(12)	(12)	(12)	(12)	12
7	OSHM70B	_	_	11	15	5	4	135	•							
8	OSHM80B	OEXM80B	_	13	17	6	4	146	•		•	•				
9	OSHM90B	OEXM90B	_	14	19	6	5	159	•		•	•				
10	OSHM100B	OEXM100B	GOEXM100B	15	21	7	5	171	•	•	•	•	•	•	•	•
11	OSHM110B	OEXM110B	GOEXM110B	17	23	8	6	184	•	•	•	•	•	•	•	•
12	OSHM120B	OEXM120B	GOEXM120B	18	25	8	6	195	•	•	•	•	•	•	•	•
13	OSHM130B	OEXM130B	GOEXM130B	20	27	9	6	207	•	•	•	•	•	•	•	•
14	OSHM140B	OEXM140B	GOEXM140B	21	29	9	7	219	•	•	•	•	•	•	•	•
15	OSHM150B	OEXM150B	GOEXM150B	22	31	10	7	231	•	•	•	•	•	•	•	•
16	OSHM160B	OEXM160B	GOEXM160B	24	33	10	7	242	•		•	•	•	•		•
17	OSHM170B	OEXM170B	GOEXM170B	25	35	11	8	255	•	•	•	•	•	•	•	•
18	OSHM180B	OEXM180B	GOEXM180B	27	37	12	8	267	•		•	•	•	•		•
19	OSHM190B	OEXM190B	GOEXM190B	28	39	12	9	279	•		•	•	•	•		•
20	-	OEXM200B	GOEXM200B	30	41	13	9	292			•	•	•			•
21	<u> -</u>	OEXM210B	GOEXM210B	31	43	13	9	304			•	•	•			•
22	-	OEXM220B	GOEXM220B	33	46	14	10	318			•	•	•			•
23	<u> -</u>	OEXM230B	GOEXM230B	34	47	14	10	327			•	•				•
24	-	OEXM240B	GOEXM240B	35	49	15	11	337			•	•				•
25	-	OEXM250B	_	37	52	16	11	356			•	•				
26	_	OEXM260B	_	38	53	16	11	363			•	•				
27	-	OEXM270B	_	39	55	17	12	375			•	•				
29	_	OEXM290B	_	42	58	18	12	394			•	•				
30	_	OEXM300B	_	44	61	19	13	413			•	•				
32	_	OEXM320B	_	46	65	19	14	432			•	•				
34	_	OEXM340B	_	48	68	19	14	452			•					
36	_	OEXM360B	_	53	74	22	15	489			•					
		Kit Bag										C2301A				1

ASME®/ANSI® B107.100

\*Set includes storage tray

#### Flank Drive® Combination GOEX722K **OEX707B** GOEXTITE GOESTIAN **OSH711B** OEX714K OEXTOSB+ OEXTOTE. OSHTOTE: OESTRAK OEXTIGH OSH7118\* OEXTION. OEXTITE: Set Standard Length, inches Contains: 12 6 (12) 12 6 6 12 {12` **(12**) **[12**] **[12**] 12 12 12 В C D E 1/4 **OEX8B** 13/32 17/32 3/16 5/32 5 • GOEX10B 21/32 5/16 OSH10B OEX10B 1/2 7/32 5/32 5 3/4 • • • 11/32 3/4 OSH11B OEX11B 17/32 1/4 3/16 6 1/8 3/8 OSH12B OEX12B GOEX12B 19/32 13/16 5/16 3/16 6 1/2 • • • • 29/32 GOEX14B 21/32 7 1/4 7/16 OSH14B OEX14B 5/16 7/32 • 3/4 11/32 1/2 OSH16B OEX16B GOEX16B **1** 1/16 1/4 8 • 9/16 OSH18B OEX18B GOEX18B 27/32 1 3/16 3/8 9/32 8 3/4 • • 13/32 15/16 9 1/2 5/8 OSH2OR OFX20R GOFX20B 1 5/16 9/32 • • • • 11/16 OSH22B OEX22B GOEX22B 1 1/32 1 13/32 7/16 5/16 10 1/4 • • 3/4 OSH24B GOEX24B 1 1/8 1 9/16 15/32 11/32 0EX24B 11 13/16 OSH26B GOEX26B 1 3/16 1 21/32 3/8 11 3/4 OEX26B • 7/8 OSH28B 0EX28B GOEX28B 1 9/32 1 13/16 9/16 3/8 12 1/2 • • • 1 3/8 1 29/32 13 1/4 15/16 OSH30B OEX30B GOEX30B 19/32 13/32 1 15/32 1 OSH32B 0EX32B GOEX32B 2 1/32 21/32 7/16 14 **1** <sup>1</sup>/<sub>16</sub> 0EX34B GOEX34B 1 9/16 2 3/16 11/16 14 3/4 1 5/8 1 1/8 **0EX36B** GOEX36B 2 5/16 11/16 17/32 **15** 7/16 1 3/16 **0EX38B** GOEX38B 1 3/4 2 7/16 3/4 1/2 16 <sup>5</sup>/<sub>16</sub> 1 1/4 OEX40B GOEX40B 1 13/16 2 9/16 3/4 17/32 **17** <sup>1</sup>/<sub>16</sub> 1 5/16 0EX42B GOEX42B 1 29/32 2 21/32 3/4 9/16 17 13/16 • • 1 3/8 0EX44B GOEX44B 2 2 13/16 3/4 19/32 18 9/16 1 7/16 0EX46B GOEX46B 2 1/16 2 29/32 7/8 19/32 19 1/32 • • 7/8 1 1/2 OEX48B GOEX48B 2 5/32 3 1/16 5/8 20 1/16 1 9/16 2 1/4 20 13/16 3 3/16 7/8 23/32 OEX50B GOEX50B 1 5/8 0EX52B GOEX52B 2 11/32 3 11/32 7/8 11/16 21 9/16 3 13/32 23/32 1 11/16 2 7/16 7/8 22 9/32 OEX54A 1 3/4 OEX56A GOEX56A 2 17/32 3 9/16 1 1/32 23/32 22 7/8 1 13/16 2 5/8 3 21/32 3/4 23 15/32 OFX58A GOFX58A 1 1/32 1 7/8 OEX60A GOEX60A 2 11/32 3 13/16 1 1/32 25/32 24 1/32 2 OEX64A GOEX64A 2 7/8 4 1/16 1 1/32 27/32 25 1/4 2 1/16 GOEX66A 2 31/32 4 5/32 1 1/8 27/32 25 25/32 2 1/8 GOEX68A 3 1/16 4 5/16 1 5/32 7/8 26 3/8 2 3/16 GOEX70A 3 1/8 4 13/32 1 1/8 7/8 26 31/32 2 1/4 GOEX72A 3 7/32 4 9/16 1 1/8 15/16 27 9/16 3 13/32 4 13/16 31/32 28 3/4 2 3/8 GOEX76A 1 9/32 2 1/2 GOEX80A 3 19/32 5 1/16 1 9/32 1 29 29/32 2 5/8 GOEX84A 4 7/8 6 5/8 1 5/8 1 3/16 32 2 3/4 GOEX88A 4 7/8 6 5/8 1 5/8 1 3/16 32 2 7/8 GOEX92A 4 7/8 6 5/8 1 5/8 1 3/16 32 2 15/16 GOEX94A 4 7/8 6 5/8 1 5/8 1 3/16 32 3 GOEX96A 4 7/8 6 5/8 1 5/8 1 3/16 32 3 1/8 **GOEX1100A** 4 7/8 6 5/8 1 5/8 1 3/16 32 3 3/8 G0EX1108A 4 7/8 6 5/8 1 5/8 1 3/16 32

ASME® B107.100

**WARNING** 

3 1/2

\*Set includes storage tray OEX32B thru OEX52B are full polish chrome. OEX54A through OEX64A are satin finish chrome.

6 5/8

4 7/8

G0EX1112A

. Do not use "cheater bars" on handles

Read safety precautions on pages W1 to W4

1 5/8

1 3/16

32

Kit Bag:

CIADI

#### **WRENCHES**

Contains:

Set Contains:

#### Flank Drive® Combination



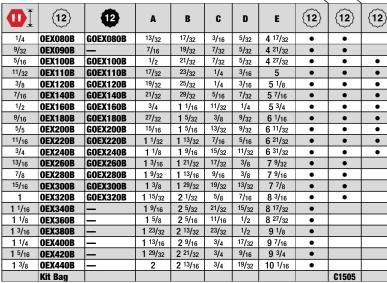
#### Short Handle, mm

									$\overline{}$	<u> </u>
	(12)	12	A	В	C	D	E	(12)	(12)	(12)
6	OEXM6B	GOEXM6B	10	13	5	4	113	•	•	
7	OEXM7B	GOEXM7B	11	15	5	4	118	•	•	
8	OEXM8B	GOEXM8B	13	17	6	4	123	•	•	
9	OEXM9B	GOEXM9B	14	19	6	5	128	•	•	
10	OEXM10B	GOEXM10B	15	21	7	5	133	•	•	•
11	OEXM11B	GOEXM11B	17	23	8	6	138	•	•	•
12	0EXM12B	GOEXM12B	18	25	8	6	142	•	•	•
13	OEXM13B	GOEXM13B	20	27	9	6	148	•	•	•
14	OEXM14B	GOEXM14B	21	29	9	7	152	•	•	•
15	OEXM15B	GOEXM15B	22	31	10	7	157	•	•	•
16	OEXM16B	GOEXM16B	24	33	10	7	162	•	•	•
17	OEXM17B	GOEXM17B	25	35	11	8	167	•	•	•
18	OEXM18B	GOEXM18B	27	37	12	8	172	•	•	•
19	OEXM19B	GOEXM19B	28	39	12	9	177	•	•	•
20	OEXM20B	_	30	41	13	9	182	•		
21	OEXM21B	_	31	43	13	9	186	•		
22	OEXM22B	_	33	46	14	10	192	•		
23	OEXM23B	_	34	47	14	10	197	•		
24	OEXM24B	_	35	49	15	11	201	•		
	Kit Bag								C1402	

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\*Set includes storage tray

# Short Handle, inches



ASME B107.100

\*Set includes storage tray



### Long Handle, mm

Long H	Iandle, mr		Set Contains:				
	(12)	A	В	C	D	E	(12)
10	OEXLM10B	15	21	7	5	186	•
11	OEXLM11B	17	23	8	6	203	•
12	0EXLM12B	18	25	8	6	218	•
13	OEXLM13B	20	27	9	6	234	•
14	OEXLM14B	21	29	9	7	250	•
15	OEXLM15B	22	31	10	7	266	•
16	OEXLM16B	24	33	10	7	282	•
17	OEXLM17B	25	35	11	8	298	•
18	OEXLM18B	27	37	12	8	314	•
19	OEXLM19B	28	39	12	9	330	•

ASME B107.100

Set includes storage tray





### Flank Drive® Combination

## Long Handle, inches

Long Ha	andle, inc	ches				Set Contains:	Trong
<b>□</b> Ţ	(12)	A	В	C	D	E	(12)
3/8	0EXL12B	19/32	25/32	1/4	3/16	7	•
7/16	0EXL14B	21/32	29/32	5/16	7/32	8	•
1/2	OEXL16B	3/4	1 1/16	11/32	1/4	9	•
9/16	0EXL18B	27/32	1 <sup>5</sup> /32	3/8	9/32	10	•
5/8	OEXL20B	15/16	1 <sup>5</sup> /16	13/32	9/32	11	•
11/16	0EXL22B	1 <sup>1</sup> /32	1 13/32	7/16	5/16	12	•
3/4	0EXL24B	1 <sup>1</sup> /8	1 9/16	15/32	11/32	13	•
13/16	0EXL26B	1 <sup>3</sup> / <sub>16</sub>	1 <sup>21</sup> / <sub>32</sub>	17/32	3/8	14	
7/8	0EXL28B	1 9/32	1 <sup>13</sup> / <sub>16</sub>	9/16	3/8	15	
15/16	OEXL30B	1 <sup>3</sup> / <sub>8</sub>	1 29/32	19/32	13/32	16	
1	OEXL32B	1 15/32	2 1/32	5/8	7/16	17	

ASME® B107.100

Set includes storage tray

OEXL707B

### Midget, mm

							Q <sub>1</sub>	OXM70.	Oxina	
Midge	t, mm					Set Conta	ins:	717 10	OXM710	8**
	<b>6</b>	(12)	A	В	C	D	E		<b>6</b>	(12)
4	OXIM4SB*	_	7	10	4	3	72	6 point	•	
5	OXIM5SB*	_	8	12	4	3	76	6 point	•	
5.5	OXIM55SB	_	9	13	4	4	79	6 point	•	
6	OXIM6SB	OXIM6B	10	13	5	4	81	12 point	•	
7	OXIM7SB	OXIM7B	11	15	5	4	85	12 point	•	
8	OXIM8SB	OXIM8B	13	17	6	4	89	12 point	•	
9	OXIM9SB	OXIM9B	14	19	6	5	93	12 point	•	
10	_	OXIM10B	15	21	7	5	98	12 point		•
11		OXIM11B	17	23	8	6	102	12 point		•
12	_	OXIM12B	18	25	8	6	106	12 point		•
13	_	OXIM13B	20	27	9	6	110	12 point		•
14	_	OXIM14B	21	29	9	7	115	12 point		•
15	_	OXIM15B	22	31	10	7	119	12 point		•
16	_	OXIM16B	24	33	10	7	122	12 point		•
17	_	OXIM17B	25	35	11	8	127	12 point		•
18	_	OXIM18B	27	37	12	8	131	12 point		•
19	_	OXIM19B	28	39	12	9	136	12 point		•
	Kit Bag								C0700	

ASME B107.100

\*Conventional Hex

\*\*Set includes storage tray

2	Sam Sauson
2	Sam Snao-an
2	7mm Secon
2	Smm Sharen
2	com soom (
2-	Land Sound
2	Amm Snapan 10

OXIM707SBK

OXI709SBK

### Midget inches

Midge	Midget, inches							Set Contains: ONTO By ONTO SATORDAY				
	<b>6</b>	(12)	A	В	C	D	E	<b>6</b>	(12)		(12)	
1/8	OXI4SB*	_	7/32	11/32	1/8	1/8	2 11/16	•		6 point		
5/32	OXI5SB*	_	9/32	13/32	5/32	1/8	2 27/32	•		6 point		
3/16	OXI6SB*	OXI6B*	5/16	7/16	5/32	1/8	2 31/32	•	•	12 point		
7/32	OXI7SB	OXI7B	3/8	1/2	3/16	1/8	3 3/32	•	•	12 point		
1/4	OXI8SB	OXI8B	13/32	17/32	3/16	5/32	3 7/32	•	•	12 point		
9/32	OXI9SB	OXI9B	7/16	19/32	7/32	5/32	3 11/32	•	•	12 point		
5/16	OXI10SB	OXI10B	1/2	21/32	7/32	5/32	3 1/2	•	•	12 point		
11/32	OXI11SB	OXI11B	17/32	23/32	1/4	3/16	3 5/8	•	•	12 point		
3/8	OXI12SB	OXI12B	19/32	25/32	1/4	3/16	3 3/4	•	•	12 point		
7/16	_	OXI14B	21/32	29/32	5/16	7/32	4 1/32			12 point	•	
1/2	_	OXI16B	3/4	1 <sup>1</sup> /16	11/32	1/4	4 9/32			12 point	•	
9/16	_	OXI18B	27/32	1 5/32	3/8	9/32	4 17/32			12 point	•	
5/8	_	OXI20B	15/16	1 <sup>5</sup> /16	13/32	9/32	4 13/16			12 point	•	
11/16	_	OXI22B	1 1/32	1 13/32	7/16	5/16	5 <sup>1</sup> / <sub>16</sub>			12 point	•	
3/4	_	OXI24B	1 1/8	1 9/16	15/32	11/32	5 11/32			12 point	•	
	Kit	Bag						C0900A	C0700			

ASME B107.100



\*\*Set includes storage tray

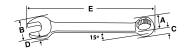




<sup>•</sup> Do not use "cheater bars" on handles

• Read safety precautions on pages W1 to W4

#### **British Standard**





#### **Short Handle Combination**

BS	Decimal Equiv., inches	(12)	A	В	C	D	E
3/16	.338	WOEX6B	25/32	19/32	3/16	1/4	5 3/32
1BA	.365	WOEX70B	25/32	19/32	3/16	1/4	5 <sup>1</sup> /8
0BA	.413	WOEX80B	29/32	21/32	7/32	5/16	5 13/32
1/4	.445	WOEX90B	29/32	21/32	7/32	5/16	5 <sup>15</sup> / <sub>32</sub>
5/16	.52	WOEX100B	1 5/32	27/32	9/32	3/8	6 1/32
3/8	.600	WOEX110B	1 <sup>5</sup> /16	15/16	9/32	13/32	6 11/32
7/16	.710	WOEX120B	1 <sup>5</sup> / <sub>16</sub>	1 <sup>1</sup> /32	5/16	7/16	6 23/32

# Combination Wrenches (Blue-Point®)



#### Standard mm

Standard	, mm		Contains: ベン
	Stock No.	Length, mm	(12)
8	BLPCWM8	148	•
9	BLPCWM9	160	•
10	BLPCWM10	167	•
11	BLPCWM11	186	•
12	BLPCWM12	196	•
13	BLPCWM13	205	•
14	BLPCWM14	223	•
15	BLPCWM15	233	•
16	BLPCWM16	243	•
17	BLPCWM17	262	•
18	BLPCWM18	272	•
19	BLPCWM19	281	•

Set includes storage tray

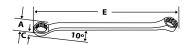


## Standard, inches

Juliualu	, iliciics		Contains: 17
<b>□</b> Ţ	Stock No.	Length, inches	(12)
1/4	BLPCW14	5 <sup>1</sup> / <sub>32</sub>	
5/16	BLPCW516	5 7/32	
3/8	BLPCW38	6 <sup>9</sup> /16	•
7/16	BLPCW716	7 11/32	•
1/2	BLPCW12	8 <sup>1</sup> /16	•
9/16	BLPCW916	8 25/32	•
5/8	BLPCW58	9 9/16	•
11/16	BLPCW1116	10 5/16	•
3/4	BLPCW34	<b>11</b> <sup>1</sup> /16	•
13/16	BLPCW1316	11 <sup>27</sup> /32	•
7/8	BLPCW78	12 <sup>19</sup> /16	•
15/16	BLPCW1516	13 11/32	•
1	BLPCW1	14 3/32	•
·			

Set includes storage tray

#### Flank Drive® Offset Box



Midget,	10° Offse	t, inches		Contains	: Cata
	(12)	A	C	E	(12)
3/16 - 13/64	XID1213A	5/16 - 11/32	1/8 - 5/32	2 13/16	•
7/32 - 15/64	XID1415A	3/8 - 3/8	5/32 - 5/32	3 <sup>1</sup> /16	•
1/4 - 9/32	XID1618A	13/32 - 7/16	5/32 - 3/16	3 13/32	•
5/16 - 11/32	XID2022A	15/32 - 1/2	3/16 - 7/32	3 31/32	•
	Kit Bag				C0401

ASME® B107.100

5/16 Snap-on 11/32
V4 5napan 9/32
7/32 5ngron E/84
3/18 Shapen 13/84

XID604KA

OTOI	x®			Set Contains	5: *11. F605
<b>#</b> ₹		A	C	E	
E5 - E6	XLE56	9/32 - 5/16	5/32 - 3/16	6 13/32	•
E7 - E8	XLE78	11/32 - 3/8	7/32 - 7/32	7 7/32	•
E10 - E12	XLE1012A	15/32 - 17/32	1/4 - 5/16	8 7/8	•
E14 - E16	XLE1416	5/8 - 23/32	11/32 - 11/32	10 <sup>7</sup> /16	•
E18 - E20	XLE1820	13/16 - 7/8	13/ <sub>32</sub> - 7/ <sub>16</sub>	12 <sup>3</sup> /8	•

ASME B107.100

Set includes storage tray

Set Contains:



**XLE605** 

## Standard Length, 10° Offset, mm

	<b>6</b>	(12)	A	C	E	(12)
8 - 10	_	XBM810A	12.3 - 15	6.7 - 7.7	185	
10 - 11	_	XBM1011A	15 - 16.4	7.7 - 8.3	202	•
10 - 12	_	XBM1012A	15 - 17.7	7.7 - 8.8	208	
11 - 13	_	XBM1113A	16.4 - 19.1	8.3 - 9.3	219	
12 - 14	XBM1214SA	XBM1214A	17.7 - 20.4	8.8 - 9.7	230	•
13 - 15	XBM1315SA	XBM1315A	19.1 - 21.8	9.3 - 10.2	241	•
14 - 17	_	XBM1417A	20.4 - 24.5	9.8 - 11.4	248	
16 - 18	_	XBM1618A	23.1 - 25.9	10.9 - 11.9	275	•
17 - 19	_	XBM1719A	24.5 - 27.2	11.4 - 12.3	286	•
18 - 21	_	XBM1821A	25.9 - 29.9	11.9 - 13.3	303	
22 - 24	_	XBM2224A	31.3 - 34	13.7 - 14.7	342	
27 - 30	_	XBM2730A	38.1 - 42.2	16 - 17.3	404	

ASME B107.100

Set includes storage tray



XBM605A

## Standard Length, 10° Offset, inches

		o			4
<b>□</b> Ţ	(12)	A	C	E	(12)
3/8 - 7/16	XB1214A	9/16 - 21/32	5/16 - 11/32	7 19/32	•
7/16 - 1/2	XB1416A	21/32 - 3/4	5/16 - 11/32	7 <sup>15</sup> /16	
1/2 - 9/16	XB1618A	3/4 - 13/16	11/32 - 3/8	8 11/16	•
9/ <sub>16</sub> - <sup>5</sup> / <sub>8</sub>	XB1820A	13/16 - 29/32	13/32 - 7/16	9 13/32	
5/8 - 11/16	XB2022A	<sup>29</sup> / <sub>32</sub> - 1	7/16 - 15/32	10 <sup>5</sup> /32	•
11/16 - 3/4	XB2224A	1 - 1 <sup>1</sup> /16	15/32 - 1/2	10 <sup>15</sup> /16	
3/4 - <sup>13</sup> / <sub>16</sub>	XB2426A	1 <sup>1</sup> /16 - 1 <sup>5</sup> /32	1/2 - 17/32	11 21/32	•
7/8 - 15/16	XB2830A	1 1/4 - 1 11/32	17/32 - 9/16	13 <sup>1</sup> /8	•
<sup>15</sup> / <sub>16</sub> - <b>1</b>	XB3032A	1 11/32 - 1 13/32	9/16 - 19/32	13 7/8	
1 - 1 <sup>1</sup> /16	XB3234A	1 13/32 - 1 1/2	19/32 - 5/8	14 <sup>19</sup> /32	
1 1/16 - 1 1/4	XB3440A	1 1/2 - 1 3/4	5/8 - 23/32	16 <sup>3</sup> /32	
1 1/8 - 1 3/16	XB3638A	1 9/32 - 1 <sup>21</sup> /32	21/32 - 11/16	16 <sup>3</sup> /32	
1 1/4 - 1 5/16	XB4042A	1 3/4 - 1 27/32	23/32 - 3/4	17 <sup>19</sup> /32	
1 3/8 - 1 7/16	XB4446A	1 <sup>31</sup> / <sub>32</sub> - 2 <sup>1</sup> / <sub>16</sub>	3/4 - 25/32	19 <sup>1</sup> /8	
1 1/2 - 1 5/8	XB4852A	2 3/32 - 2 9/32	13/16 - 7/8	20 15/16	

ASME B107.100



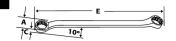


• Do not use "cheater bars" on handles • Read safety precautions on pages W1 to W4





#### Flank Drive® Offset Box







## Short Handle, 10° Offset, mm

Set Contains:	MEORA
	~

	•	•			•
	(12)	A	C	E	(12)
6 - 7	XSM67A	9.6 - 10.9	5.7 - 6.2	86	•
8 - 9	XSM89A	12.3 - 13.7	6.7 - 7.2	103	•
8 - 10	XSM810	12.3 - 15	6.7 - 7.7	107	
9 - 10	XSM910A	13.7 - 15	7.2 - 7.7	112	•
11 - 12	XSM1112A	16.4 - 17.7	8.3 - 8.8	128	•
13 - 14	XSM1314A	19.1 - 20.4	9.3 - 9.8	146	•
15 - 16	XSM1516A	21.8 - 23.1	10.2 - 10.9	163	•
17 - 19	XSM1719A	24.5 - 27.2	11.4 - 12.3	185	•
18 - 20	XSM1820A	25.9 - 28.6	11.9 - 12.8	194	•

ASME® B107.100

 $\langle 12 \rangle$ 

	Short Handle, 10° Offset, inches									
		(12)	A	С	E	(12)				
1	3/16 - 7/32	XS67A	5/16 - 11/32	7/32 - 7/32	3 27/32	•				
	1/4 - 5/16	XS810A	13/32 - 15/32	1/4 - 9/32	4 1/4	•				
	5/16 - 3/8	XS1012A	15/32 - 9/16	9/32 - 5/16	4 9/16	•				
ı	3/8 - 7/16	XS1214A	9/16 - 21/32	5/16 - 11/32	4 29/32	•				
ĺ	7/16 - 1/2	XS1416A	21/32 - 3/4	11/32 - 11/32	5 3/16	•				
- 1	1/2 - 9/16	VS1618A	3/4 = 13/16	3/9 - 3/9	5 17/22	•				

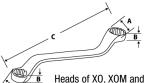
1/4 - 5/16 XS810A 13/32 - 15/3 15/32 - 9/1 5/16 - 3/8 XS1012A 9/16 - 21/32 3/8 - 7/16 XS1214A 7/16 - 1/2 XS1416A 21/32 - 3/4 3/4 - 13/16 1/2 - 9/16 XS1618A 13/16 - 29/32 9/16 - 5/8 XS1820A 13/32 - 7/16 5 7/8 5/8 - 3/4 XS2024A 29/32 - 1 1/16 7/16 - 1/2 11/16 - 13/16 XS2226A 1 - 1 5/32 15/32 - 17/32 6 23/32

Set includes storage tray

ASME B107.100

Set includes storage tray

Contains:



Heads of XO, XOM and XSO wrenches are deeply offset at 60° angle to the handles so recessed fasteners may be easily reached.







## Standard Length, Deep 60° Offset, mm

	0 , 1	•			• \
mm <u>Ţ</u>	(12)	A	В	C	(12)
8 - 10	X0M810	11.7 - 14.2	6.9 - 7.3	178.1	
10 - 11	X0M1011	15 - 16.3	7.6	193.0	•
12 - 14	X0M1214	15 - 20.3	9.0	210.0	•
13 - 15	X0M1315	16.3 - 21.2	8.9	223.0	•
16 - 18	X0M1618	17.7 - 25.4	10.8	253.0	•
17 - 19	X0M1719	17.7 - 27.4	11.1	260.0	•
20 - 21	X0M2021	32.5 - 33.3	13.7	329.6	

31.9 - 34.1

22 - 24 ASME B107.100

Set includes storage tray

#### Standard Length, Deep 60° Offset, inches

X0M2224



329.6

<b>□</b> Ţ	(12)	A	В	С	(12)
1/4 - 5/16	X0810	3/8	9/32 (1/4 - 9/32)	6 13/32	
5/16 - 3/8	X01012	15/32 - 9/16	9/32	7	
3/8 - 7/16	X01214	9/16 - 5/8	<sup>5</sup> / <sub>16</sub>	7 19/32	•
1/2 - 9/16	X01618	23/32 - 13/16	11/32	8 25/32	•
9/16 - 5/8	X01820	13/16 - 29/32	13/32	9 3/8	•
5/8 - 11/16	X02022	<sup>29</sup> / <sub>32</sub> - 1	13/32	9 15/16	
5/8 - 3/4	X02024	<sup>29</sup> / <sub>32</sub> - 1 <sup>3</sup> / <sub>32</sub>	7/16	10 1/4	
11/16 - 13/16	X02226	1 - 1 5/32	15/32	10 <sup>27</sup> /32	•
3/4 - 7/8	X02428	1 3/32 - 1 1/4	1/2	11 <sup>13</sup> / <sub>32</sub>	•
7/8 - 15/16	X02830	1 1/4 - 1 11/32	17/32	12 <sup>31</sup> / <sub>32</sub>	
<sup>15</sup> /16 - 1	X03032	1 11/32 - 1 7/16	9/16	13 <sup>15</sup> /16	

ASME/ANSI® B107.6

Set includes storage tray

#### Short Handle, Deep 60° Offset, inches

<b>□</b> Ţ	(12)	A	В	С
1/4 - 5/16	XS0810A	3/8 - 7/16	3/16 - 7/32	4 5/32
3/8 - 7/16	XS01214A	17/32 - 5/8	1/4 - 9/32	4 13/16

ASME/ANSI B107.100

## **Ratcheting Box**



T-Handle, mm

				_		\		
RTBM605 Set Contains: T-Handle, mm								
<b>₽</b>	(12)	A	В	C	D	(12)	(12)	
8	RTBM8	17.5	71.4	307.2	9.5	•		
10	RTBM10	23.0	76.2	307.2	9.5	•		
12	RTBM12	29.4	86.5	308.8	12.7	•		
13	RTBM13	29.4	86.5	308.8	12.7	•		
14	RTBM14	29.4	86.5	308.8	12.7	•		
15	RTBM15	36.8	98.6	308.8	12.7		•	
16	RTBM16	36.8	98.6	308.8	12.7		•	
17	RTBM17	36.8	98.6	308.8	12.7		•	
18	RTBM18	36.8	98.6	308.8	12.7		•	
19	RTBM19	36.8	98.6	308.8	12.7		•	



	,			·	onums.	. \
	(12)	A	В	C	D	(12)
1/4	RTB8	11/16	2 13/16	12 3/32	3/8	•
5/16	RTB10	11/16	2 13/16	12 <sup>3</sup> / <sub>32</sub>	3/8	•
11/32	RTB11	29/32	3	12 3/32	3/8	•
3/8	RTB12	29/32	3	12 3/32	3/8	•
7/16	RTB14	29/32	3	12 3/32	3/8	•
1/2	RTB16	1 5/32	3 13/32	12 <sup>5</sup> /32	1/2	•
9/16	RTB18	1 5/32	3 13/32	12 <sup>5</sup> /32	1/2	•

**RTB607** 

Set includes storage tray



BXORM706 Standard Length, 25° Offset, mm (Blue-Point®)

	(12)	A	C	E	(12)
8 - 9	BXORM89	18.0 - 19.3	6.4 - 7.6	184.2	•
10 - 11	BXORM1011	21.8 - 22.1	8.1 - 8.6	203.2	•
12 - 13	BXORM1213	23.6 - 26.6	8.9 - 10.2	222.3	•
14 - 15	BXORM1415	27.2 - 28.7	10.2 - 10.9	241.3	•
16 - 17	BXORM1617	31.0 - 32.0	10.9 - 11.9	260.4	•
18 - 19	BXORM1819	34.5 - 36.8	12.2 - 13.2	279.4	•

RBM604C

15.1 - 17.1

20.2 - 22.6

20.2 - 22.6

25.8 - 29.4

25.8 - 29.4

25.8 - 29.4

25.8 - 29.4

32.9 - 36.5

32.9 - 36.5

32.9 - 36.5

 $\{12\}$ 

RBM78C

RBM810C

RBM910C

RBM1011C

RBM1012C

RBM1213C

RBM1214C

RBM1415C

RBM1618C

RBM1719C

Standard Length, 0° Offset, mm

 $\langle$  6 $\rangle$ 

RBM78SC

Set includes storage tray

REMEOAC.

114.3

139.7

139.7

174.6

174.6

174.6

174.6

206.4

206.4

206.4

Set includes storage tray

 $\{12\}$ 

Set Contains:

C

9.5

9.5

12.7

12.7

12.7

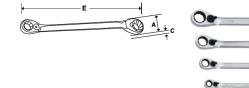
12.7

12.7

EXORM706

**Contains:** 

Sets include storage tray





<b>□</b> Ţ	(12)	A	C	E	(12)
5/ <sub>16</sub> - 3/ <sub>8</sub>	BX0R1012	23/32 - 7/8	1/4 - 5/16	7 1/2	•
7/16 - 1/2	BX0R1416	7/8 - 31/32	11/32 - 13/32	8 3/4	•
9/16 - 5/8	BX0R1820	1 1/16 - 7/32	13/32 - 7/16	9 3/4	•
11/16 - 3/4	BXOR2224	1 9/32 - 7/16	15/32 - 1/2	11	•

Set includes storage tray

Set Contains:

Set Contains:



Standard Length, 0° Offset, inches

11 6 12 A C E	(12)
* \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
1/4 - 5/16 <b>R810SC R810C</b> 19/32 - 43/64 3/8 4 1/2	
5/ <sub>16</sub> - 11/ <sub>32</sub> — <b>R1011C</b> 5/ <sub>8</sub> - 3/ <sub>4</sub> 11/ <sub>32</sub> 5 3/ <sub>8</sub>	
5/16 - 3/8 — R1012C 51/64 - 57/64 3/8 5 1/2	
3/8 - 7/16 R1214SC R1214C 51/64 - 57/64 3/8 5 1/2	•
1/2 - 9/16 <b>R1618SC R1618C</b> 1 1/64 - 1 5/32 1/2 6 7/8	•
5/8 - 11/16 — <b>R2022C</b> 1 19/64 - 1 7/16 1/2 8 1/8	•
5/8 - 3/4 — <b>R2024C</b> 1 19/64 - 1 7/16 1/2 8 1/8	
3/4 - 13/16 — <b>R2426C</b> 1 13/32 - 1 37/64 1/2 9 1/4	
3/4 - 7/8 — <b>R2428C</b> 1 13/32 - 1 37/64 1/2 9 1/4	•
13/16 - 15/16 — <b>R2630C</b> 1 13/32 - 1 37/64 1/2 9 1/4	
7/8 - 15/16 — <b>R2830C</b> 1 29/32 - 2 17/64 9/16 15	
15/16 - 1 — R3032C 1 29/32 - 2 17/64 9/16 15	
1 1/16 - 1 1/8 — R3436A 2 - 2 9/16 12 3/4	
1 1/8 - 1 1/4 <b>R3640SA</b> — 2 3/32 - 2 3/32 9/16 12 13/16	
1 3/16 - 1 1/4 — R3840A 2 - 2 9/16 12 3/4	

Set includes storage tray



**mm**Î

7 - 8

8 - 10

9 - 10

10 - 11

10 - 12

12 - 13

12 - 14

14 - 15

16 - 18



- Do not use "cheater bars" on handles
- · Read safety precautions on pages W1 to W4

#### **Ratcheting Box**



#### Latch-on®, 0° Offset, mm

· Latch-on head keeps

0 01 - 0 0 - 10 0 RBZM605

wrench on fastener · Ring prevents nut/fastener head

from sliding	through wrer	Contains:			
	(12)	A	C	E	(12)
7 - 8	RBZM78	15.1 - 17.1	9.5	114.3	•
9 - 10	RBZM910	20.4 - 22.6	9.5	140.3	•
11 - 12	RBZM1112	25.8 - 29.4	12.7	174.6	•
13 - 14	RBZM1314	25.8 - 29.4	12.7	174.6	•
15 - 17	RBZM1517	32.9 - 36.5	12.7	206.4	•
16 - 18	RBZM1618	32.9 - 36.5	12.7	206.4	
19 - 21	RBZM1921	35.7 - 40.1	12.7	234.9	

Set includes storage tray

0° Offset, inches · Latch-on head keeps wrench on fastener

Latch-on,

0 - - - - 0

**RBZ605** 

	WIGHOU OU IUOLOHOI
•	Ring prevents nut/fastener head
	from sliding through wrench

	0				• •
	(12)	A	C	E	(12)
1/4 - 5/16	RBZ810	19/32 - 11/16	3/8	4 1/2	•
3/8 - 7/16	RBZ1214	13/16 - 29/32	3/8	5 1/2	•
1/2 - 9/16	RBZ1618	1 1/32 - 1 5/32	1/2	6 7/8	•
5/8 - 11/16	RBZ2022	1 <sup>5</sup> /16 - 1 <sup>7</sup> /16	1/2	8 1/8	•
3/4 - 7/8	RBZ2428	1 13/32 - 1 19/32	1/2	9 1/4	•

Set includes storage tray

Contains:



Standard Length, 25° Offset, mm		RBYAM605		Set Contains:	
	(12)	A	C	E	(12)
7 - 8	RYAM78	15.5 - 16.3	9.5	105.2	•
9 - 10	RYAM910	19.8 - 22.6	9.5	134.5	•
11 - 12	RYAM1112	25.4 - 29	12.7	165.9	•
13 - 14	RYAM1314	25.4 - 29	12.7	165.9	•
15 - 17	RYAM1517	33 - 36.5	12.7	197.2	•
16 - 18	RYAM1618	33 - 36.5	12.7	197.2	
19 - 21	RYAM1921	35.7 - 40.1	12.7	224.2	

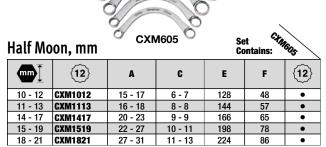
Set includes storage tray



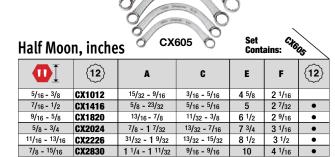
	et, inches	RBYA	A605	Set Contains:	SYAGOS
	(12)	A	C	E	(12)
1/4 - 5/16	RYA810	9/16 - 5/8	11/32	4 9/32	•
5/16 - 11/32	RYA1011	19/32 - 11/16	3/8	4 1/32	
3/8 - 7/16	RYA1214	3/4 - 7/8	11/32	6 5/32	•
1/2 - 9/16	RYA1618	<sup>15</sup> /16 <b>- 1</b>	13/32	6 31/32	•
5/8 - 11/16	RYA2022	1 1/8 - 1 1/4	13/32	7 27/32	•
3/4 - 7/8	RYA2428	1 3/8 - 1 1/2	7/16	8 5/8	•

Set includes storage tray

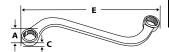
# Flank Drive® Specialty Box



ASME® B107.100

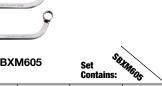


ASME B107.100



# Flank Drive® Specialty Box





"S"	Shaped, mm	
-----	------------	--

<b>™</b> Ţ	(12)	A	C	E	(12)
10 - 12	SBXM1012	14 - 18	6 - 8	140	•
11 - 13	SBXM1113	16 - 19	7 - 8	155	•
14 - 15	SBXM1415	21 - 22	9 - 9	190	•
16 - 18	SBXM1618	24 - 27	10 - 11	173	•
17 - 19	SBXM1719	25 - 28	10 - 12	240	•

ASME® B107.100 Set includes storage tray

"S" Shaped, inches

"S" Sha <sub>l</sub>	oed, inch	es		Set 🤏 Contains:	605
	(12)	A	C	E	(12)
5/ <sub>16</sub> - 3/ <sub>8</sub>	SBX1012	15/32 - 9/16	9/16 - 7/32	3 3/4	•
7/16 - 1/2	SBX1416	21/32 - 3/4	9/32 - 5/16	5 <sup>5</sup> /16	•
9/16 - 5/8	SBX1820	27/32 - 15/16	11/32 - 13/32	6 7/8	•
11/16 - 3/4	SBX2224	1 1/32 - 1 1/8	13/32 - 15/32	8 7/16	•
13/16 - 7/8	SBX2628	1 <sup>7</sup> /32 - 1 <sup>5</sup> /16	17/32 - 9/16	10	•

Set includes storage tray ASME B107.100









#### LTAM811

Low Torque Slimline, 15° Offset, mm contains: ***/							
	Stock No.	В	D	E			
6 - 7	LTAM67	13 - 15	3	165	•		
8 - 10	LTAM810	17 - 21	3	165	•		
10 - 11	LTAM1011	21 - 23	3	165	•		
12 - 14	LTAM1214	25 - 29	4	241	•		
13 - 15	LTAM1315	27 - 31	4	241	•		
16 - 18	LTAM1618	33 - 37	4	241	•		
17 - 19	LTAM1719	35 - 39	4	241	•		
19 - 22	LTAM1922	39 - 45	4	241	•		
21 - 24	LTAM2124	43 - 49	4	241	•		
27 - 30	LTAM2730	55 - 61	6	311	•		
32 - 36	LTAM3236	65 - 73	6	311	•		

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# Low Torque Slimline, 15° Offset, inches

-5 055	.,			niuiii3i	• \	• \
	Stock No.	В	D	E		
3/8 - 7/16	LTA1214	25/32 - 29/32	3/32	9 1/2	•	
7/16 - 1/2	LTA1416	29/32 - <b>1</b> 1/32	5/32	9 1/2	•	•
1/2 - 9/16	LTA1618	1 1/32 - 1 5/32	5/32	9 1/2	•	•
5/8 - 11/16	LTA2022	1 9/32 - 1 <sup>13</sup> /32	5/32	9 1/2	•	•
3/4 - 13/16	LTA2426	1 17/32 - 1 11/16	5/32	9 1/2	•	
3/4 - 7/8	LTA2428	1 17/32 - 1 25/32	5/32	9 1/2	•	•
<sup>15</sup> / <sub>16</sub> - <b>1</b>	LTA3032	1 29/32 - 2 1/32	5/32	9 1/2	•	•
1 1/16 - 1 1/8	LTA3436	2 5/32 - 2 9/32	1/4	12 <sup>1</sup> / <sub>4</sub>	•	
1 1/4 - 1 5/16	LTA4042	2 17/32 - 2 21/32	1/4	12 <sup>1</sup> / <sub>4</sub>	•	
1 3/8 - 1 7/16	LTA4446	2 25/32 - 2 29/32	1/4	12 <sup>1</sup> / <sub>4</sub>	•	
1 1/2 - 1 5/8	LTA4852	3 1/16 - 3 9/32	9/32	14 <sup>1</sup> / <sub>4</sub>	•	
1 11/16 - 1 7/8	LTA5460	3 13/32 - 3 17/32	9/32	14 <sup>1</sup> / <sub>4</sub>	•	
	Kit Bag					C0507
ACME D107 100						

ASME B107.100





- . Use only moderate force on slimline wrench
- Do not use "cheater bars" on handles
   Read safety precautions on pages W1 to W4

### **WRENCHES**

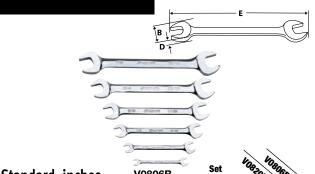
## **Open End**



Standard, mm

	Stock No.	В	D	E
6 - 7	VOM67B	13 - 15	4 - 4	97
7 - 8	VOM78B	15 - 17	4 - 4	106
8 - 10	VOM810B	17 - 21	4 - 5	121
10 - 11	V0M1011B	21 - 23	5 - 6	136
11 - 13	V0M1113B	23 - 27	6 - 6	151
12 - 13	VOM1213B	25 - 27	6 - 6	157
12 - 14	V0M1214B	25 - 29	6 - 7	162
14 - 15	V0M1415B	29 - 31	7 - 7	178
16 - 18	VOM1618B	33 - 37	7 - 8	205
17 - 19	VOM1719B	35 - 38	8 - 9	216
19 - 22	VOM1922B	39 - 46	9 - 10	245
21 - 24	V0M2124B	43 - 49	9 - 10	267
22 - 24	V0M2224B	46 - 49	10 - 10	273
27 - 30	V0M2730B	55 - 61	11 - 12	338
30 - 32	VOM3032B	61 - 65	12 - 12	368

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Standard	d, inches	V0806B	Con	Contains: **		
<b>□</b> Ţ	Stock No.	В	D	E		
1/4 - 5/16	V0810B	17/32 - 21/32	5/32 - 5/32	4 1/16	•	•
5/16 - 3/8	V01012B	21/32 - 25/32	5/32 - 3/16	4 21/32	•	
3/8 - 7/16	V01214B	25/32 - 29/32	3/16 - 7/32	5 <sup>5</sup> / <sub>16</sub>	•	•
7/16 - 1/2	V01416B	29/32 - 1 1/16	7/32 - 1/4	5 <sup>15</sup> / <sub>16</sub>	•	
1/2 - 9/16	V01618B	1 1/16 - 1 5/32	1/4 - 9/32	6 19/32	•	•
9/16 - 5/8	V01820B	1 5/32 - 1 5/16	9/32 - 9/32	7 9/32	•	
5/8 - 11/16	V02022B	1 5/16 - 1 13/32	9/32 - 5/16	7 15/16	•	•
5/8- 3/4	V02024B	1 5/16 - 1 9/16	9/32 - 11/32	8 9/32	•	
11/ <sub>16</sub> - 3/ <sub>4</sub>	V02224B	1 13/32 - 1 9/16	5/16 - 11/32	8 5/8	•	
3/4 - 13/16	V02426B	1 9/16 - 1 21/32	11/32 - 3/8	9 11/32	•	•
3/4 - 7/8	V02428B	1 9/16 - 1 13/16	11/32 - 3/8	9 21/32	•	
13/ <sub>16</sub> - 7/ <sub>8</sub>	V02628B	1 21/32 - 1 13/16	3/8 - 3/8	10 1/32	•	
7/8 - 15/ <sub>16</sub>	V02830B	1 13/16 - 1 29/32	3/8 - 13/32	10 <sup>3</sup> / <sub>4</sub>	•	•

1 29/32 - 2 1/32

2 1/32 - 2 5/32

2 5/32 - 2 17/32

2 5/16 - 2 13/32

2 17/32 - 2 21/32

1 3/8 - 1 7/16 V04446B 2 13/16 - 2 29/32 17/32 - 17/32 11/2 - 1 5/8 V04852B 3 1/16 - 3 5/16 9/16 - 19/32 Kit Bag ASME/ANS/ B107.100

V03032B V03234B

<sup>15</sup>/<sub>16</sub> - 1

1 - 1 1/16

1 1/16 - 1 1/4 **VO3440B** 

1 1/8 - 1 3/16 **V03638B** 

1 1/4 - 1 5/16 V04042B

\*Set includes storage tray

11 <sup>15</sup>/<sub>32</sub>

12 <sup>7</sup>/<sub>32</sub>

12 <sup>15</sup>/<sub>16</sub>

13 23/32

15 <sup>1</sup>/<sub>4</sub>

16 <sup>7</sup>/8

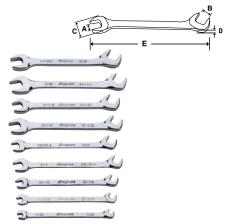
18 29/32



## Ignition, 15/60° Offset, mm

ignitio	n, 15/	60° Offset, f	nm	(	Contains:	'04
A	В	Stock No.	C	D	E	
3.2	5.5	DSM3.25.5	8 - 11	3	74	•
5.5	3.2	DSM5.53.2	11 - 8	3	83	•
4	5	DSM45	9 - 11	3	77	•
5	4	DSM54	11 - 9	3	81	•
6	7	DSM67	12 - 14	3	85	•
7	6	DSM76	14 - 12	3	89	•
8	9	DSM89	15 - 17	3	93	•
9	8	DSM98	17 - 15	3	97	•
10	11	DSM1011	20 - 22	4	101	•
11	10	DSM1110	22 - 20	4	105	•
		Kit Rag				C1003A

ASME/ANSI B107.100



13/32 - 13/32

13/32 - 7/16

7/<sub>16</sub> - 1/<sub>2</sub>

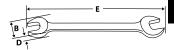
7/16 - 15/32

1/2 - 1/2

Ignition, 15/60° Offsets, inches Set Usanga Usanga Usanga									
A	В	Stock No.	C	D	E				
1/8	1/8	DS88A	5/16 - 5/16	1/8	2 29/32	•			
5/32	5/32	DS1010A	3/8 - 3/8	1/8	2 7/8	•			
3/16	3/16	DS1212A	13/32 - 13/32	1/8	3 1/8	•			
15/64	1/4	DS1516A	15/32 - 1/2	1/8	3 1/4	•	•		
1/4	15/64	DS1615A	1/2 - 15/32	1/8	3 13/32	•	•		
9/32	5/16	DS1820A	9/16 - 19/32	1/8	3 1/2	•	•		

19/32 - 9/16 5/16 DS2018A 1/8 3 21/32 21/32 - 23/32 3 3/4 11/32 3/8 DS2224A 5/32 3/8 11/32 DS2422A 23/32 - 21/32 5/32 Kit Bag

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**Open End** 

- Angle head wrenches offset at 30° and 60° angles to the handle
- · Both ends are same size to permit use of one wrench in four positions





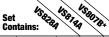
## Four-Way Angle Head, mm

Four-W	ay Angle He	s I c	Set VSN <sub>NBO78*</sub>			
	Stock No.	В	D	E		
10	VSM5210B	20	6	127	•	•
11	VSM5211B	22	6	137	•	•
12	VSM5212B	24	6	145	•	•
13	VSM5213B	26	6	154	•	•
14	VSM5214B	28	6	164	•	•
15	VSM5215B	30	7	173	•	•
16	VSM5216B	31	7	181	•	
17	VSM5217B	34	7	191	•	•
18	VSM5218B	36	7	200	•	
19	VSM5219B	37	7	210	•	
21	VSM5221B	41	8	228	•	
22	VSM5222B	44	8	239	•	
24	VSM5224B	47	8	254	•	
27	VSM5227B	53	9	283	•	

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\*Set includes storage tray





	,							
	Stock No.	Industrial Stock No.	В	D	E			
1/4	VS8B	<b>I</b> —	17/32	3/16	3 11/16	•		
5/16	VS10B	<b>—</b>	21/32	3/16	4 1/4	•		
11/32	VS11B	I—	23/32	7/32	4 17/32	•		
3/8	VS12B	_	25/32	7/32	4 27/32	•	•	•
7/16	VS14B	_	7/8	7/32	5 13/32	•	•	•
1/2	VS16B	GVS16B	1	1/4	5 31/32	•	•	•
9/16	VS18B	GVS18B	1 <sup>1</sup> /8	1/4	6 <sup>9</sup> /16	•	•	•
5/8	VS20B	GVS20B	1 1/4	9/32	7 1/8	•	•	•
11/16	VS22B	GVS22B	1 3/8	9/32	7 11/16	•	•	•
3/4	VS24B	GVS24B	1 15/32	9/32	8 9/32	•	•	•
13/16	VS26B	GVS26B	1 19/32	5/16	8 27/32	•	•	
7/8	VS28B	GVS28B	1 23/32	5/16	9 13/32	•	•	
15/16	VS30B	GVS30B	1 27/32	11/32	10	•	•	
1	VS32B	GVS32B	1 31/32	11/32	10 <sup>9</sup> /16	•	•	
1 1/16	VS34B	<u> </u>	2 3/32	11/32	11 <sup>1</sup> /8	•	•	
1 1/8	VS36B	<b> </b> -	2 3/16	3/8	11 <sup>23</sup> / <sub>32</sub>	•	•	
1 3/16	VS38B	_	2 11/32	3/8	12 <sup>9</sup> / <sub>32</sub>	•		
1 1/4	VS40B	GVS40B	2 7/16	13/32	12 <sup>7</sup> /8	•	•	
1 <sup>5</sup> / <sub>16</sub>	VS42B	_	2 9/16	13/32	13 <sup>7</sup> /16	•		
1 3/8	VS44B	-	2 11/16	13/32	14	•		
1 7/16	VS46B	<u> </u>	2 27/32	7/16	14 <sup>19</sup> / <sub>32</sub>	•		
1 1/2	VS48B	<b> </b> -	2 15/16	7/16	15 <sup>5</sup> /32	•		
1 5/8	VS52B	_	3 7/32	15/32	16 <sup>5</sup> /16	•		
1 11/16	VS54B	<b> </b> -	3 11/32	1/2	16 <sup>7</sup> /8	•		
1 3/4	VS56B	<u> -</u>	3 15/32	1/2	17 <sup>7</sup> /16	•		
<b>1</b> 13/16	VS58B	-	3 19/32	1/2	18	•		
1 7/8	VS60B	-	3 23/32	17/32	18 <sup>19</sup> / <sub>32</sub>	•		
2	VS64B	-	3 31/32	9/16	19 <sup>3</sup> / <sub>4</sub>	•		

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\*Set includes storage tray

# 00



- Aluminum (for AN Fittings)
   Securely tighten expensive AN fittings to reduce risk of damage in aircraft, marine and industrial applications as well as race and show cars
- · Machined from aluminum billet to exacting tolerances
- Made from quality heat treated hardened aluminum
- Corner reliefs on open end wrenches prevent rounding the corners of the fitting
- Handle length designed to apply appropriate
- torque without overtightening

  Open end wrenches are color coded and stamped for quick size identification

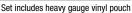
•					• \
<b>#</b> ₹	<b>□</b> Ţ	Stock No.	Color	A inches (mm)	
No. 3	1/2	ANWR3	Silver	4 (101.6)	•
No. 4	9/16	ANWR4	Black	4 3/4 (120.7)	•
No. 6	11/16	ANWR6	Light Blue	5 3/4 (146.1)	•
No. 8	7/8	ANWR8	Pink	5 3/4 (146.1)	•
No. 10	1	ANWR10	Gold	7 1/8 (181.0)	•
No. 12	1 1/4	ANWR12	Red	7 1/2 (190.5)	•
No. 16	1 1/2	ANWR16	Brass	8 3/4 (222.3)	•
No. 20	1 13/16	ANWR20	Dark Blue	9 1/4 (237 0)	



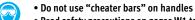


**ANWR708** 









- · Read safety precautions on pages W1 to W4

## Open End Wrenches (Blue-Point®)



#### Open End, mm

<b>™</b>	Stock No.	Length, mm
10-11	BD0EM1011	145
12-13	BD0EM1213	165
14-15	BD0EM1415	185
16-17	BD0EM1617	185
18-19	BD0EM1819	227

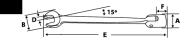


#### Open End, inches

	Stock No.	Length, inches
5/16-3/8	BD0E1012	5 <sup>5</sup> /16
7/16-1/2	BD0E1416	6 1/2
9/16-5/8	BD0E1820	7 9/32
11/16-3/4	BD0E2224	8 15/16

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#### Flank Drive® Flex Head







Flex-Co	mbinatio		Set Contains:				
	(12)	A	В	D	E	F	(12)
8	FHOM8B	12	17	5	146	6	
9	FHOM9B	13	18	5	156	6	
10	FHOM10B	14	20	5	166	6	•
11	FHOM11B	16	23	6	181	7	
12	FHOM12B	17	30	6	198	9	•
13	FHOM13B	19	27	7	205	9	•
14	FHOM14B	20	30	7	213	9	•
15	FHOM15B	21	31	7	224	10	•
16	FHOM16B	23	33	7	229	10	
17	FHOM17B	24	37	8	246	10	•
18	FHOM18B	24	38	8	254	11	
19	FHOM19B	26	40	8	261	12	

FH06078 Set Contains: Flex-Combination, inches **(12)**  $\langle 12 \rangle$ 1/4 FH08B 3/8 17/32 4 15/16 1/8 7/32 5/16 FH010B 15/32 21/32 5 31/32 3/16 1/4 FH012B 9/16 17/32 7/32 6 1/2 1/4 7/16 FH014B 5/8 29/32 7/32 7 1/8 9/32 FH016B 23/32 1 1/16 7 13/16 11/32 9/16 FH018B 25/32 1 3/16 9/32 8 3/8 11/32 5/8 FH020B 29/32 1 5/16 9/32 9 3/8 11/16 FH022B 1 7/16 9/32 9 11/16 13/32

1 1/2

1 23/32

1 27/32

5/16

5/16

5/16

7/8 ASME B107.100

3/4

13/16

FH024B

FH026B

FH028B

Open End and Flare Nut, inches

1 1/32

1 1/32

1 3/16

9/16 Set includes storage tray

15/32

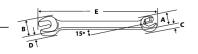
1/2

#### Flank Drive Flare Nut -

ASME® B107.100



Set includes storage tray



10 1/4

10 5/16

10 15/32



Open E	pen End and Flare Nut, mm						058
	<b>6</b>	A	В	C	D	E	<b>6</b>
8	RXSM8B	17	17	7	7	135	
9	RXSM9B	18	19	7	7	144	
10	RXSM10B	20	21	8	8	152	•
11	RXSM11B	21	23	9	9	162	•
12	RXSM12B	22	25	9	9	169	•
13	RXSM13B	24	27	9	9	178	•
14	RXSM14B	25	29	10	10	186	•
15	RXSM15B	26	31	10	10	194	
16	RXSM16B	27	33	11	11	202	
17	RXSM17B	29	35	11	11	211	
18	RXSM18B	30	37	12	12	219	
19	RXSM19B	32	39	12	12	228	
20	RXSM20B	33	41	14	14	235	

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 $\langle \mathbf{6} \rangle$ RXS12B 3/4 25/32 5/16 5/16 5 27/32 29/32 7/16 RXS14B 27/32 11/32 11/32 6 3/8 1/2 RXS16B 29/32 1 1/16 3/8 6 7/8 13/32 9/16 RXS18B 1 5/32 13/32 7 13/32 7/16 RXS20B 5/8 1 3/32 1 <sup>5</sup>/<sub>16</sub> 7 15/16

Set includes storage tray

Set Contains:

ASME B107.100

235 Set includes storage tray



#### Flank Drive® Flare Nut



ouble	Ena, mm	Contains:	46B /		
		А-В	C-D	E	<b>6</b>
9 - 11	RXFMS911B	18 - 21	7 - 8	145	•
10 - 12	RXFMS1012B	20 - 22	8 - 9	153	•
13 - 14	RXFMS1314B	24 - 25	9 - 10	173	•
15 - 17	RXFMS1517B	26 - 29	10 - 11	193	•
16 - 18	RXFMS1618B	28 - 30	11 - 12	200	•

ANSI® B107.100

Set includes storage tray

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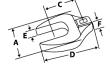


#### Double End inches

Dunnie Li	ilu, iliciies		(	ontains:	₩ /
<b>□</b> Ţ	<b>6</b>	А-В	C-D	E	<b>6</b>
1/4 - 5/16	RXFS810B	19/32 - 21/32	1/4 - 9/32	4 27/32	•
3/8 - 7/16	RXFS1214B	3/4 - 27/32	5/16 - 11/32	5 <sup>13</sup> / <sub>16</sub>	•
1/2 - 9/16	RXFS1618B	<sup>29</sup> / <sub>32</sub> - 1	3/8 - 13/32	6 13/16	•
5/8 - 11/16	RXFS2022B	1 3/32 - 1 5/32	7/16 - 15/32	7 3/4	•
3/4 - 13/16	RXFS2426B	1 1/4 - 1 5/16	1/2 - 17/32	8 25/32	•
3/4 - 7/8	RXFS2428B	1 1/4 - 1 27/64	1/2 - 5/8	9 1/2	
3/4 - 1	RXFS2432B	1 1/4 - 1 9/16	1/2 - 5/8	9 1/2	
7/8 <b>- 1</b> 1/8	RXFS2836B	1 13/32 - 1 3/4	9/16 - 11/16	10 1/2	

ASME® B107.100

Set includes storage tray



19 - 21 RXFMS1921B

### 1/4" Drive Crowfoot Wrenches



107TMCOM

# Open End. chrome mm

Open End, chrome mm									
mm ]	Stock No.	A	C	E	F	D			
7	TMCOM7	13.5	13.2	6.6	6.6	24.4	•		
8	TMCOM8	16.8	14.1	6.6	6.6	25.9	•		
10	TMCOM10	19.8	14.6	6.6	6.6	27.5	•		
11	TMCOM11	22.4	16.0	7.9	7.9	29.4	•		
12	TMCOM12	24.4	16.5	7.9	7.9	30.6	•		
13	TMCOM13	26.4	16.6	7.9	7.9	31.2	•		
14	TMCOM14	29.0	17.7	7.9	7.9	32.9	•		

ASME B107.21

Set includes storage tray



(	Open E	ind, chro	Set Contains:					
		Stock No.	A	C	E	F	D	
Ī	1/4	TMC08	17/32	17/32	1/4	1/4	31/32	•
	5/16	TMC010	21/32	9/16	1/4	1/4	1 1/32	•
Γ	3/8	TMC012	25/32	19/32	1/4	1/4	1 3/32	•
	7/16	TMC014	7/8	5/8	5/16	5/16	1 5/32	•
Γ	1/2	TMC016	1 1/32	21/32	5/16	5/16	1 1/4	•
	9/16	TMC018	1 1/8	11/16	5/16	5/16	1 9/32	•

ASME B107.21

Set includes storage tray



#### TMRX12

#### Flank Drive Flare Nut-Shallow, inches, 12 Point

				•		•
	(12)	A	В	C	E	Maximum Recommended Working Torque, in Ib
1/4	TMRX8	13/32	1/8	31/32	1/4	75
5/16	TMRX10	1/2	3/16	31/32	1/4	75
3/0	TMDV12	19/22	1/4	31/20	1/4	75

ASME B107.21



AN85088B

#### Flank Drive Flare Nut-Deep, inches, 12 Point

	(12)	A	C	E	Maximum Recommended Working Torque, in Ib
3/8	AN85086B	9/32	1/2	1/2	75
7/16	AN85087B	11/32	9/16	9/16	200
1/2	AN85088B	13/32	19/32	9/16	200
9/16	AN85089B	15/32	5/8	9/16	200

ASME B107.21





- . Use only moderate force on crowfoot and flare nut wrenches
- Do not use "cheater bars" on handles
- · Read safety precautions on pages W1 to W4

#### 3/8" Drive Crowfoot Wrenches



#### Flank Drive® Flare Nut, chrome mm, 6 Point

	Drive® F Point	Set Contains:	Ya V					
	<b>6</b>	A	В	C	D	E	Maximum Recommended Working Torque, in Ib	<b>6</b>
9	FRHM9	22.4	6.7	14.2	33.3	9.7	150	
10	FRHM10	22.9	7.4	14.2	35.3	9.7	200	•
11	FRHM11	22.9	8.3	14.2	35.3	9.7	200	•
12	FRHM12	25.4	9.0	14.2	36.6	9.7	250	•
13	FRHM13	25.4	9.4	14.2	36.6	9.7	250	•
14	FRHM14	28.4	10.5	18.8	40.9	11.2	375	•
15	FRHM15	28.4	11.2	18.8	40.9	11.2	375	•
16	FRHM16	28.4	11.7	18.8	40.9	11.2	375	•
17	FRHM17	33.3	12.6	20.6	44.7	12.7	525	•
18	FRHM18	33.3	13.6	20.6	44.7	12.7	525	•
19	FRHM19	33.3	14.7	20.6	44.7	12.7	525	•
20	FRHM20	41.1	15.2	22.1	50.3	14.2	600	
21	FRHM21	41.1	16.3	22.1	50.3	14.2	650	
22	FRHM22	41 1	17.0	22 1	50.3	14.2	650	

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Set includes storage tray



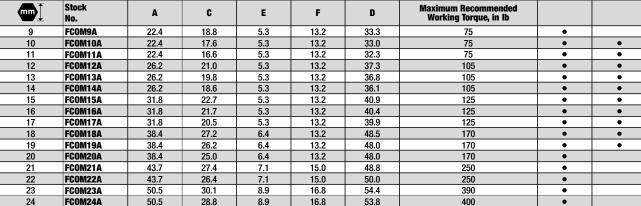
#### Flank Drive Flare Nut-Deep, chrome mm, 12 Point

Flank Dr mm, 12	<i>ive</i> Flare Point		Set 🤏 Contains:	SANN		
	(12)	A	В	C	E	
12	ANM12	18.9	8.3	16.3	15.0	•
13	ANM13	21.2	9.7	17.7	15.0	•
14	ANM14	21.2	10.5	17.7	15.0	•
17	ANM17	26.6	13.0	19.7	19.1	•
19	ANM19	29.0	14.6	20.9	19.8	•

Set includes storage tray

# 210FCOMA

### Open End, chrome mm



ASME B107.21

# Flank Drive Flare Nut, chrome

inches	, 6 Point		Contains:	* \				
	<b>6</b>	A	В	C	D	E	Maximum Recommended Working Torque, in Ib	<b>6</b>
3/8	FRH120S	13/32	1/4	9/16	1 11/32	3/8	150	•
7/16	FRH140S	29/32	5/16	9/16	1 13/32	3/8	200	•
1/2	FRH160S	1	11/32	9/16	1 7/16	3/8	250	•
9/16	FRH180S	<b>1</b> 1/8	3/8	3/4	1 5/8	7/16	300	•
5/8	FRH200S	1 1/8	7/16	3/4	1 5/8	7/16	375	•
11/16	FRH220S	<b>1</b> 5/16	1/2	13/16	1 25/32	1/2	450	•
3/4	FRH240S	<b>1</b> 5/16	9/16	13/16	1 25/32	1/2	525	•
13/16	FRH260S	1 <sup>5</sup> /8	5/8	7/8	1 31/32	9/16	600	
7/8	FRH280S	1 5/8	23/32	7/8	1 31/32	9/16	675	
15/16	FRH300S	1 7/8	11/16	15/16	2 3/16	5/8	750	
1	FRH320S	1 7/8	3/4	15/16	2 3/16	5/8	825	

ASME B107.21

Set includes storage tray





#### Flank Drive Flare Nut-Deep, chrome inches, 12 Point

	orive Flare 5, 12 Point	Set &	SAN				
	(12)	A	В	C	E	Maximum Recommended Working Torque, in Ib	(12)
5/8	AN850810B	15/16	1/2	23/32	23/32	250	•
11/16	AN850811B	1 <sup>1</sup> /32	17/32	25/32	23/32	310	•
3/4	AN850812B	1 <sup>1</sup> /8	9/16	13/16	3/4	450	•
13/16	AN850813B	1 7/32	5/8	7/8	3/4	450	•
7/8	AN850814B	1 5/16	25/32	15/16	25/32	625	•
15/16	AN850815B	1 <sup>3</sup> /8	3/4	31/32	25/32	625	•
1	AN850816B	1 7/16	3/4	1	13/16	625	•
1 1/16	AN850817B	1 17/32	25/32	1 1/32	13/16	625	•

ASME/ANSI® B107.21



\*Set includes storage tray

3/8" Drive Crowfoot Wrenches





#### Open End inches

Open End, inches								Contains: Art. Car. Tar. Cr. Cr.						
<b>□</b> Ţ	Stock No.	Industrial Stock No.	A	C	E	F	D	Maximum Recommended Working Torque, in lb	2	2	2	3	2	
3/8	FC012A	GFC012A	7/8	23/32	7/32	33/64	1 19/64	75				•	•	
7/16	FC014A	GFC014A	7/8	41/64	7/32	33/64	1 17/64	75	•	•	•	•	•	
1/2	FC016A	GFC016A	1 1/32	51/ <sub>64</sub>	7/32	33/ <sub>64</sub>	1 29/64	105	•	•	•	•	•	
9/16	FC018A	GFC018A	1 1/4	59/ <sub>64</sub>	7/32	33/ <sub>64</sub>	1 5/8	105	•	•	•	•	•	
5/8	FC020A	GFC020A	1 1/4	55/ <sub>64</sub>	7/32	33/ <sub>64</sub>	1 19/32	125	•	•	•	•	•	
11/ <sub>16</sub>	FC022A	GFC022A	1 9/16	1 <sup>3</sup> / <sub>32</sub>	7/32	33/64	1 <sup>59</sup> / <sub>64</sub>	150	•	•	•	•	•	
3/4	FC024A	GFC024A	1 9/16	1 1/32	7/32	33/ <sub>64</sub>	1 57/64	190	•	•	•	•	•	
13/ <sub>16</sub>	FC026A	GFC026A	1 23/32	1 3/32	9/32	19/32	2	245	•	•	•	•	•	
7/8	FC028A	GFC028A	1 23/32	1 1/32	9/32	19/32	1 31/32	300	•	•	•	•	•	
15/ <sub>16</sub>	FC030A	GFC030A	2	1 <sup>5</sup> / <sub>32</sub>	11/32	21/32	2 1/8	360	•	•	•	•	•	
1	FC032A	GFC032A	2	1 <sup>5</sup> / <sub>64</sub>	11/32	21/32	2 3/32	420	•	•	•	•	•	
1 <sup>1</sup> / <sub>16</sub>	FC34B	_	1 23/32	1 <sup>3</sup> / <sub>64</sub>	3/8	39/64	1 15/32	465	•	•	•			
1 <sup>1</sup> /8	FC36A		1 29/32	1 <sup>5</sup> / <sub>32</sub>	3/8	39/64	2 1/16	510	•	•	•			
1 3/16	FC38A	_	1 29/32	1 13/64	3/8	39/64	2 1/16	510	•	•	•			
1 <sup>1</sup> / <sub>4</sub>	FC40A	_	2 5/32	1 15/64	3/8	41/64	2 7/32	555	•	•	•			
1 <sup>5</sup> / <sub>16</sub>	FC42A		2 5/32	1 17/64	3/8	41/ <sub>64</sub>	2 7/32	600	•	•				
1 3/8	FC44A	_	2 3/8	1 19/64	3/8	41/ <sub>64</sub>	2 3/8	680	•	•				
1 7/16	FC46A	_	2 3/8	1 11/32	3/8	41/ <sub>64</sub>	2 3/8	760	•	•				
1 <sup>1</sup> / <sub>2</sub>	FC48A	_	2 17/32	1 <sup>3</sup> / <sub>8</sub>	3/8	41/ <sub>64</sub>	2 1/2	795	•	•				
1 9/16	FC50A	_	2 17/32	1 13/32	3/8	41/ <sub>64</sub>	2 1/2	795	•	•				
1 5/8	FC52A	_	2 21/32	1 29/64	3/8	41/ <sub>64</sub>	2 19/32	820	•	•				
1 11/16	FC54A	_	2 21/32	1 31/64	3/8	41/ <sub>64</sub>	2 19/32	860	•	•				
1 3/4	FC56A	_	2 7/8	1 33/64	3/8	41/64	2 3/4	910	•	•				
1 13/16	FC58A		2 7/8	1 35/64	3/8	41/64	2 3/4	960	•	•				
1 7/8	FC60A	_	3 5/32	1 19/32	3/8	41/64	2 55/64	1040	•	•				
1 <sup>15</sup> / <sub>16</sub>	FC62A	_	3 5/32	1 <sup>5</sup> / <sub>8</sub>	3/8	41/64	2 55/64	1040	•	•				
2	FC64A	_	3 13/32	1 23/32	1/2	45/64	3 1/8	1115	•	•				
2 <sup>1</sup> /16	FC66A	_	3 13/32	1 3/4	1/2	45/64	3 1/8	1190	•					
2 1/8	FC68A		3 19/32	1 25/32	1/2	45/64	3 1/4	1190	•					
2 3/16	FC70A		3 19/32	1 53/64	1/2	45/64	3 1/4	1275	•					
2 1/4	FC72A		3 27/32	1 15/16	1/2	45/64	3 1/2	1370	•					
2 <sup>5</sup> /16	FC74A	_	3 27/32	1 15/16	1/2	45/64	3 1/2	1370	•					
2 3/8	FC76A		4 3/32	2 1/16	1/2	45/64	3 3/4	1450	•					
2 7/16	FC78A	_	4 3/32	2 1/8	1/2	45/64	3 3/4	1555	•					
2 1/2	FC80A		4 9/32	2 11/64	1/2	45/64	3 57/64	1555	•		_	_		
2 <sup>9</sup> /16	FC82A	_	4 9/32	2 11/64	1/2	45/64	3 57/64	1660	•					
2 5/8	FC84A		4 17/32	2 21/64	1/2	45/64	4 1/8	1760	•					
2 11/16	FC86A	_	4 17/32	2 3/8	1/2	45/64	4 1/8	1760	•					
2 3/4	FC88A		4 23/32	2 7/16	1/2	45/64	4 19/64	1900	•					
2 13/16	FC90A	_	4 23/32	2 17/32	1/2	45/64	4 19/64	2075	•					
2 7/8	FC92A		5 3/32	2 41/64	1/2	45/64	4 43/64	2075	•					
2 <sup>15</sup> /16	FC94A		5 3/32	2 43/64	1/2	45/64	4 5/8	2200	•					
3	FC96A	<u> </u>	5 3/32	2 23/32	1/2	45/64	4 5/8	2200	•					

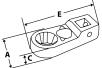
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<sup>•</sup> Use only moderate force on crowfoot and flarenut wrenches

# 3/8" - 1/2" Drive Crowfoot Wrenches



Contains:



#### BFCRM712A

		A	C	E	
8	BFCRM8A	17.8	6.5	49.3	•
9	BFCRM9A	19.5	7.4	50.8	•
10	BFCRM10A	21.5	8.0	53.8	•
11	BFCRM11A	22.0	8.5	53.8	•
12	BFCRM12A	23.5	9.0	57.2	•
13	BFCRM13A	25.0	10.0	57.2	•
14	BFCRM14A	27.0	10.0	60.3	•
15	BFCRM15A	28.5	11.0	63.5	•
16	BFCRM16A	30.5	11.0	66.7	•
17	BFCRM17A	34.5	12.0	68.3	•
18	BFCRM18A	36.5	12.0	71.4	•
19	BFCRM19A	36.5	12.9	73.0	•

\*Set includes FXLBP10 -10" locking extension

Set includes storage tray



BFCR708A





#### 1/2" Flank Drive® Flare Nut-Deep, inches 12 Point

Set Contains:	375AN
	•

IIICIICS	, 12 PUIII		Contains: *	<b>/</b> \			
	(12)	A	В	C	E	Maximum Recommended Working Torque, in Ib	(12)
1 <sup>1</sup> /8	AN850818B	1 <sup>5</sup> /8	27/32	1 <sup>5</sup> /32	7/8	825	•
1 <sup>3</sup> / <sub>16</sub>	AN850819B	<b>1</b> 11/16	29/32	1 <sup>3</sup> / <sub>16</sub>	7/8	825	•
1 1/4	AN850820B	1 <sup>25</sup> /32	15/16	1 7/32	7/8	825	•
<b>1</b> 5/16	AN850821B	1 27/32	31/32	1 <sup>1</sup> /4	7/8	900	•
1 3/8	AN850822B	1 <sup>15</sup> / <sub>16</sub>	1 <sup>1</sup> /16	<b>1</b> 5/16	15/16	900	•
<b>1</b> 7/16	AN850823B	2	<b>1</b> <sup>1</sup> / <sub>16</sub>	1 11/32	15/16	900	•
1 <sup>1</sup> / <sub>2</sub>	AN850824B	2 3/32	1 <sup>1</sup> /8	1 3/8	15/16	900	•
1 9/16	AN850825B	2 <sup>5</sup> / <sub>32</sub>	1 5/32	1 13/32	<sup>15</sup> /16	900	•
1 5/8	AN850826B	2 7/32	1 7/32	<b>1</b> 7/16	15/16	1,100	•
1 11/16	AN850827B	2 5/16	<b>1</b> 5/16	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> /32	1,100	•
1 3/4	AN850828B	2 3/8	<b>1</b> 5/16	<b>1</b> 9/16	1 <sup>1</sup> /32	1,150	•
1 13/16	AN850829B	2 15/32	1 11/32	1 19/32	1 <sup>1</sup> /32	1,200	•
1 7/8	AN850830B	2 9/16	1 3/8	1 21/32	1 <sup>1</sup> / <sub>16</sub>	1,200	•
1 15/16	AN850831B	2 5/8	<b>1</b> 7/16	1 11/16	<b>1</b> <sup>1</sup> / <sub>16</sub>	1,200	•
2	AN850832B	2 23/32	1 9/16	1 23/32	1 <sup>1</sup> / <sub>16</sub>	1,400	•
2 1/8	AN850834B	2 7/8	1 9/16	1 13/16	1 <sup>1</sup> /8	1,450	
2 3/16	AN850835B	2 <sup>15</sup> / <sub>16</sub>	1 21/32	1 27/32	1 1/8	1,500	
2 1/4	AN850836B	3 1/32	1 11/16	1 7/8	1 <sup>1</sup> /8	1,500	
2 3/8	AN850838B	3 3/16	1 13/16	1 31/32	1 <sup>3</sup> / <sub>16</sub>	1,600	
2 <sup>7</sup> / <sub>16</sub>	AN850839B	3 1/4	1 <sup>13</sup> / <sub>16</sub>	2	<b>1</b> 3/16	1,650	
2 9/16	AN850841B	3 7/16	1 29/32	2 3/32	1 9/32	1,750	
2 5/8	AN850842B	3 1/2	2 1/16	2 1/8	1 9/32	1,800	
2 11/16	AN850843B	3 19/32	2 1/16	2 <sup>5</sup> /32	1 9/32	1,800	
2 3/4	AN850844B	3 21/32	2 1/16	2 7/32	1 9/32	1,850	
3 1/8	AN850850B	4 1/8	2 5/16	2 7/16	<b>1</b> 5/16	2,000	

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## 3/8" Ratcheting, inches (Blue-Point)

Set Contains:	CA7

	<b>6</b>	A	C	E	
5/16	BFCR10A	11/16	1/4	2	•
3/8	BFCR12A	27/32	5/16	2 1/8	•
7/16	BFCR14A	7/8	11/32	2 1/8	•
1/2	BFCR16A	31/32	13/32	2 1/4	•
9/16	BFCR18A	1 <sup>1</sup> /16	13/32	2 3/8	•
5/8	BFCR20A	1 3/16	7/16	2 5/8	•
11/16	BFCR22A	1 <sup>1</sup> /4	15/32	2 5/8	•
3/4	BFCR24A	1 <sup>7</sup> /16	1/2	2 7/8	•

\*Set includes FXLBP10 -10" locking extension

Set includes storage tray

### **Crowfoot Wrench Holder**

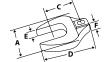
#### A277 3/8" Crowfoot Holder.

- Organize and store your crowfoot wrenches • 2 piece design snaps apart for access to desired size
- 8 3/4" long

#### ADCF8 Adjustable Crowfoot Wrench.

- Metric and fractional scales
- Opening range from 0 to 1.14" (0 to 29 mm)
- · Lateral side nut designed to work on difficult access fasteners and minimize dirt accumulation

Stock No.	Drive Size	Maximum Recommended Working Torque, in Ib
ADCF8	3/8	2,849



#### Flank Drive® Combination



SCOM32

## 1/2" Open End. inches



1/2	υþ	pen	En	a,	П	ım
		-		3)	T	

	<b>I</b>	A	C	E	F	Maximum Recommended Working Torque, in Ib
20	SCOM20	40.4	42.9	7.8	15.9	1,400
21	SCOM21	40.4	42.9	7.8	15.9	1,500
22	SCOM22	44.7	44.5	8.2	15.9	1,500
23	SCOM23	48.0	44.5	8.9	15.9	1,600
24	SCOM24	46.7	44.5	8.5	15.9	1,800
25	SCOM25	51.1	45.2	8.9	15.9	1,800
26	SCOM26	53.1	45.2	9.2	15.9	1,800
27	SCOM27	53.1	44.5	9.2	15.9	2,000
28	SCOM28	53.1	43.6	9.2	15.9	2,100
30	SCOM30	59.7	44.5	9.9	15.9	2,200
32	SCOM32	62.7	50.0	10.3	15.9	2,300
34	SCOM34	62.7	51.6	10.3	15.9	2,400
35	SCOM35	69.1	50.8	11.0	15.9	2,500
36	SCOM36	69.1	50.0	11.0	15.9	2,600
38	SCOM38	75.4	50.8	11.8	15.9	2,900
40	SCOM40	75.4	51.6	11.8	15.9	3,000
41	SCOM41	81.8	50.8	12.5	15.9	3,400
42	SCOM42	81.8	50.0	12.5	15.9	3,400
46	SCOM46	91.2	51.2	13.5	15.9	4,100

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1/2 Open Lina, menes						contains:	· \
	2	A	C	E	F	Maximum Recommended Working Torque, in Ib	
15/16	SC030	1 27/32	1 15/32	11/32	5/8	1,800	
1	SC032	1 31/32	1 11/16	23/64	5/8	1,900	
<b>1</b> <sup>1</sup> / <sub>16</sub>	SC034	2 3/32	1 3/4	3/8	5/8	2,000	•
1 1/8	SC036	2 7/32	1 3/4	3/8	5/8	2,100	•
1 <sup>3</sup> / <sub>16</sub>	SC038	2 11/32	1 3/4	13/32	5/8	2,200	•
1 1/4	SC040	2 15/32	2	13/32	5/8	2,300	•
<b>1</b> 5/16	SC042	2 19/32	2	7/16	5/8	2,400	•
1 3/8	SC044	2 23/32	2	7/16	5/8	2,500	•
<b>1</b> 7/16	SC046	2 27/32	2	7/16	5/8	2,600	•
1 1/2	SC048	2 31/32	2	15/32	5/8	2,900	•
<b>1</b> 9/16	SC050	2 31/32	1 31/32	15/32	5/8	3,000	
<b>1</b> 5/8	SC052	3 7/32	1 31/32	1/2	5/8	3,400	•
1 11/16	SC054	3 11/32	2 3/16	1/2	5/8	3,700	•
1 3/4	SC056	3 15/32	2 3/16	17/32	5/8	3,900	•
1 <sup>13</sup> / <sub>16</sub>	SC058	3 19/32	2 3/16	17/32	5/8	4,100	•
1 7/8	SC060	3 23/32	2 3/16	9/16	5/8	4,300	•
2	SC064	3 31/32	2 7/32	9/16	5/8	5,000	•
2 1/8	SC068	3 31/32	2 7/32	37/64	5/8	5,000	
2 1/4	SC072	3 31/32	2 13/32	37/64	5/8	5,000	
2 3/8	SC076	4 3/8	2 31/64	19/32	5/8	5,000	

2 <sup>7</sup>/<sub>16</sub> 2 <sup>13</sup>/<sub>32</sub>

4 3/8

4 3/8

2 1/2 ASME B107.21

2 7/16

SC078

SC080

## **Heavy Duty Striking Wrenches**

5/8

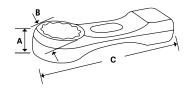
19/32

5,000 5,000

# Flank Drive Straight Handle Sledge Hammer, inches. 12 Point

inches,	12 Point			Č	Contains: 1634
	(12)	A	В	C	
1 <sup>3</sup> /16	DX138A	7/8	2 3/32	7 35/64	•
1 1/4	DX140A	7/8	2 3/32	7 35/64	•
1 <sup>5</sup> /16	DX142A	7/8	2 3/32	7 35/64	•
1 3/8	DX144A	61/64	2 17/64	7 41/64	•
1 7/16	DX146A	61/ <sub>64</sub>	2 17/64	7 41/64	•
1 1/2	DX148A	61/ <sub>64</sub>	1 17/64	7 41/64	•
1 <sup>5</sup> /8	DX152A	1 9/64	2 <sup>5</sup> /8	7 53/64	•
1 11/16	DX154A	1 9/64	2 5/8	7 53/64	•
1 3/4	DX156A	1 7/32	2 13/16	7 29/32	•
1 13/16	DX158A	1 7/32	2 13/16	7 29/32	•
1 7/8	DX160A	1 7/32	2 13/16	7 29/32	•
2	DX164A	1 <sup>13</sup> / <sub>32</sub>	3 11/64	11 <sup>19</sup> / <sub>32</sub>	•
2 1/16	DX166A	1 13/32	3 11/64	11 19/32	•
2 3/16	DX170A	1 17/32	3 29/64	11 47/64	•
2 1/4	DX172A	1 <sup>17</sup> /32	3 <sup>29</sup> / <sub>64</sub>	11 <sup>47</sup> / <sub>64</sub>	•
2 3/8	DX176A	1 <sup>21</sup> / <sub>32</sub>	3 <sup>23</sup> / <sub>32</sub>	11 <sup>55</sup> /64	•
2 7/16	DX178A	1 21/32	3 <sup>23</sup> / <sub>32</sub>	11 <sup>55</sup> /64	•
2 1/2	DX180A	1 <sup>21</sup> / <sub>32</sub>	3 <sup>23</sup> / <sub>32</sub>	11 <sup>55</sup> / <sub>64</sub>	•
2 9/16	DX182A	<b>1</b> 51/64	3 63/64	13	•
2 5/8	DX184A	1 <sup>51</sup> / <sub>64</sub>	3 63/64	13	•
2 3/4	DX188A	1 <sup>59</sup> /64	4 17/64	14 <sup>17</sup> / <sub>64</sub>	•
2 13/16	DX190A	1 59/64	4 17/64	14 17/64	•
2 15/16	DX194A	2 3/64	4 17/32	14 13/32	•
3	DX196A	2 3/64	4 17/32	14 13/32	•
3 1/8	DX1100A	2 17/64	4 29/32	17 37/64	•
3 3/8	DX1108A	2 17/64	4 29/32	17 37/64	•
3 1/2	DX1112A	2 29/64	5 19/64	17 <sup>51</sup> /64	•
3 3/4	DX1120A	2 21/32	5 17/32	17 51/64	•
3 7/8	DX1124A	2 21/32	5 17/32	17 <sup>57</sup> /64	•
4 1/8	DX1132A	2 59/64	6 1/32	18 9/64	•
4 1/4	DX1136A	2 59/64	6 1/32	18 9/64	•
4 1/2	DX1144A	3 5/32	6 25/32	20 1/64	•
4 5/8	DX1148A	3 5/32	6 <sup>25</sup> /32	20 1/64	•





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• Use only moderate force on crowfoot and flarenut wrenches

• Read safety precautions on pages W1 to W4

# **Heavy Duty Striking Wrenches**

# Flank Drive® Offset Handle Slugging, inches, 12 Point

Set (163)



						_ `
		(12)	A	В	С	(12)
1 1/16	27	HX340A	11/16	1 <sup>5</sup> /8	10	•
1 <sup>1</sup> /8	-	HX360A	3/4	1 <sup>15</sup> /16	11	•
1 3/16	30	HX380A	3/4	1 <sup>15</sup> /16	11	•
1 1/4	32	HX400B	3/4	1 <sup>15</sup> /16	11	•
1 <sup>5</sup> /16	33	HX420A	3/4	1 <sup>15</sup> /16	11	•
1 3/8	35	HX440A	7/8	2 1/8	11 1/2	•
1 7/16	36	HX460A	7/8	2 1/8	11 1/2	•
1 <sup>1</sup> /2	38	HX480A	1	2 7/16	12	•
1 5/8	41	HX520A	1	2 7/16	12	•
1 11/16	43	HX540A	1 <sup>1</sup> /8	2 5/8	12 1/2	•
1 3/4	44	HX560A	1 <sup>1</sup> /8	2 <sup>5</sup> /8	12 <sup>1</sup> / <sub>2</sub>	•
1 <sup>13</sup> / <sub>16</sub>	46	HX580A	1 <sup>1</sup> /8	2 <sup>5</sup> /8	12 <sup>1</sup> / <sub>2</sub>	•
1 7/8	47	HX600A	1 1/4	2 7/8	13	•
1 <sup>15</sup> / <sub>16</sub>	49	HX620A	1 <sup>1</sup> /4	2 7/8	13	•
-	50	HXM50	1 <sup>1</sup> /4	2 7/8	13	•
2	51	HX640A	1 <sup>1</sup> /4	2 7/8	13	•
2 1/8	-	HX680A	1 <sup>3</sup> /8	3 1/4	13 <sup>9</sup> / <sub>16</sub>	•
2 3/16	55	HX700A	1 3/8	3 1/4	13 <sup>9</sup> / <sub>16</sub>	•
2 1/4	57	HX720A	1 3/8	3 1/4	13 <sup>9</sup> / <sub>16</sub>	•
2 <sup>5</sup> /16	59	HX740A	1 <sup>3</sup> /8	3 1/4	13 <sup>9</sup> / <sub>16</sub>	•
2 3/8	60	HX760A	1 1/2	3 5/8	14 <sup>1</sup> /8	•
2 1/2	64	HX800A	1 1/2	3 5/8	14 <sup>1</sup> /8	•
2 9/16	65	HX820A	1 1/2	3 5/8	14 <sup>1</sup> /8	•
2 5/8	67	HX840A	1 <sup>5</sup> /8	3 <sup>15</sup> /16	15	•
2 3/4	70	HX880A	1 <sup>5</sup> /8	3 <sup>15</sup> /16	15	•
2 7/8	73	HX920A	1 <sup>3</sup> / <sub>4</sub>	4 7/16	16	•
2 15/16	75	HX940A	1 3/4	4 7/16	16	•
3	76	HX960A	1 3/4	4 <sup>7</sup> / <sub>16</sub>	16	•
3 1/8	80	HX1000A	1 <sup>3</sup> / <sub>4</sub>	4 7/16	16	•
3 3/8	85	HX1080A	2	6 <sup>1</sup> /4	18 <sup>1</sup> /4	•
3 1/2	89	HX1120A	2	6 <sup>1</sup> / <sub>4</sub>	18 1/4	•
3 3/4	95	HX1200A	2	6 <sup>1</sup> /4	18 <sup>1</sup> / <sub>4</sub>	•
3 7/8	98	HX1240A	2	6 <sup>1</sup> /4	18 ¹/4	•
4 1/8	105	HX1320A	2	6 <sup>1</sup> / <sub>4</sub>	18 1/4	•
4 1/4	108	HX1360A	2	6 <sup>1</sup> / <sub>4</sub>	18 1/4	•
ACME® D107 1	00					

ASME® B107.100

# **Heavy Duty Tubular Wrenches**



# Open End Tubular Wrenches, inches/mm

			•		•	
		(12)	A	В	C	Fits Handle No.
7/8	-	0E128C	1/2	1 <sup>15</sup> / <sub>16</sub>	10 <sup>1</sup> / <sub>2</sub>	13B or 24B
15/16	-	0E130C	1/2	1 <sup>15</sup> / <sub>16</sub>	10 <sup>1</sup> / <sub>2</sub>	13B or 24B
1	-	0E132C	9/16	2 <sup>5</sup> /16	11 <sup>5</sup> /16	13B or 24B
<b>1</b> <sup>1</sup> / <sub>16</sub>	27	0E134C	9/16	2 <sup>5</sup> /16	11 <sup>5</sup> /16	13B or 24B
1 1/8	-	0E136C	9/16	2 <sup>5</sup> /16	11 <sup>1</sup> / <sub>4</sub>	13B or 24B
1 1/4	32	0E140C	5/8	2 3/4	12 <sup>5</sup> /16	13B or 24B
1 <sup>5</sup> /16	33	0E142C	5/8	2 3/4	12 <sup>5</sup> /16	13B or 24B
1 3/8	35	0E144B	5/8	2 3/4	12 <sup>1</sup> / <sub>4</sub>	13B or 24B
1 <sup>7</sup> /16	36	0E146C	11/16	3 1/8	13 <sup>1</sup> / <sub>4</sub>	13B or 24B
1 1/2	38	0E148C	11/16	3 1/8	13 <sup>5</sup> /16	13B or 24B

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#### **Tubular Handles**

<b>(12)</b>	A	В	Size, inches
13B	13 1/2	7/8	13
24B	24	7/8	24
36B	36	1 9/64	36

#### Flank Drive Straight Box, inches/mm

XH124C

rtank birte betatgite box, menes, in								
		(12)	A	В	C	Fits Handle No.		
3/4	-	XH124C	1/2	1 1/4	10 13/16	13B or 24B		
13/16	-	XH126C	1/2	1 1/4	10 13/16	13B or 24B		
7/8	-	XH128C	5/8	1 <sup>7</sup> / <sub>16</sub>	10 <sup>15</sup> / <sub>16</sub>	13B or 24B		
15/16	-	XH130C	5/8	<b>1</b> 7/16	10 <sup>15</sup> / <sub>16</sub>	13B or 24B		
1	-	XH132C	11/16	<b>1</b> 9/16	11	13B or 24B		
1 <sup>1</sup> / <sub>16</sub>	27	XH134C	11/16	<b>1</b> 9/16	11	13B or 24B		
1 1/8	-	XH136C	11/16	1 11/16	11 <sup>1</sup> /8	13B or 24B		
1 1/4	32	XH140C	3/4	1 <sup>15</sup> / <sub>16</sub>	13 <sup>1</sup> / <sub>2</sub>	13B or 24B		
1 <sup>5</sup> / <sub>16</sub>	33	XH142C	3/4	1 <sup>15</sup> /16	13 <sup>1</sup> / <sub>2</sub>	13B or 24B		
1 7/16	36	XH146C	7/8	2 3/16	13 5/8	13B or 24B		
1 1/2	38	XH148C	7/8	2 3/16	13 <sup>5</sup> /8	13B or 24B		
1 5/8	41	XH152C	15/16	2 3/8	13 3/4	13B or 24B		
3 1/8	79	XH1100C	1 3/4	4 <sup>15</sup> /16	14 <sup>7</sup> /8	36B		

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# **Combination T and L-Shape Wrenches**







	Blue Handle	T-Length, mm	Length, mm	
2	AWSGM2	95	152	•
2.5	AWSGM2.5	95	152	•
3	AWSGM3	98	152	•
4	AWSGM4	98	187	•
5	AWSGM5	117	187	•
6	AWSGM6	117	246	•
8	AWSGM8	117	246	•
10	AWSGM10	124	248	•

Set includes storage tray

- Ergonomic, soft grip handle provides comfort during repetitive tasks
- Delivers superior turning power
- Allows maximum pressure to be applied when loosening difficult fasteners with both "T" and "L" applications
- Blades constructed from high strength steel and hardened for durability



Hex, inches



	•			
	Red Handle	T-Length, inches	Length, inches	
3/32	AWSG06	3 7/8	6	•
7/64	AWSG07	3 7/8	6	•
1/8	AWSG08	3 7/8	6	•
9/64	AWSG09	3 7/8	6	•
5/32	AWSG10	3 7/8	7 3/8	•
3/16	AWSG12	4 3/4	7 3/4	•
7/32	AWSG14	4 3/4	7 3/4	•
1/4	AWSG16	4 3/4	9 5/8	•
5/16	AWSG20	4 3/4	9 5/8	
3/8	AWSG24	4 3/4	9 5/8	

Set includes storage tray

- Blade tips are black oxide coated to prevent chipping and to help maintain a secure fastener engagement
- · Short blade provides maximum torque for tight quarters
- Long blade promotes quick fastener turning in difficult access situations
- · Hole in handle for hanging tool or tether
- · Color coded handles identify metric and inch sizes at a glance



 ${\Bbb A}$  Ball Hex, mm



_	•			- \
	Blue Handle	T-Length, mm	Length, mm	
2	AWBSGM2	95	152	•
2.5	AWBSGM25	95	152	•
3	AWBSGM3	98	152	•
4	AWBSGM4	98	187	•
5	AWBSGM5	117	187	•
6	AWBSGM6	117	246	•
8	AWBSGM8	117	246	•
10	AWRSGM10	124	248	•

Set includes storage tray



# Ball Hex, inches



	Red Handle	T-Length, inches	Length, inches	
3/32	AWBSG06	3 7/8	6	•
7/64	AWBSG07	3 7/8	6	•
1/8	AWBSG08	3 7/8	6	•
9/64	AWBSG09	3 7/8	6	•
5/32	AWBSG10	3 7/8	7 3/8	•
3/16	AWBSG12	4 3/4	7 3/4	•
7/32	AWBSG14	4 3/4	7 3/4	•
1/4	AWBSG16	4 3/4	9 5/8	•
5/16	AWBSG20	4 3/4	9 5/8	
3/8	AWBSG24	4 3/4	9 5/8	

Set includes storage tray





- Plastic handle does not protect against electric shock
- Read safety precautions on pages W1 to W4

# **Combination T and L-Shape Wrenches**



# Torx Special Application

**AWSGTRP20** 

- Extra long T20 tamper resistant *Torx* Access mirrors on Mercedes® vehicles
- Short end also T20 Tamper resistant *Torx* for tight quarters

<b>#</b> ]	Green Handle	T-Length, inches	Length, inches
T20	AWSGTRP20	3 7/8	10 <sup>1</sup> / <sub>2</sub>

Torx®			Set Contain	s: FBOO
<b>#</b> ]	Green Handle	T-Length, inches	Length, inches	
T6	AWSGT6	3 7/8	6	
T7	AWSGT7	3 7/8	6	
T8	AWSGT8	3 7/8	6	
T9	AWSGT9	3 7/8	6	
T10	AWSGT10	3 7/8	6	•
T15	AWSGT15	3 7/8	7 3/8	•
T20	AWSGT20	3 7/8	7 3/8	•
T25	AWSGT25	4 3/4	7 5/8	•
T27	AWSGT27	4 3/4	7 5/8	•
T30	AWSGT30	4 3/4	9 5/8	•
T40	AWSGT40	4 3/4	9 5/8	•
T45	AWSGT45	4 3/4	9 3/4	•
T50	AWSGT50	4 3/4	9 3/4	

Set includes storage tray

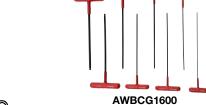
#### T-Shape







	Stock No.	Handle	Length, inches	
2	AWBMCG1602	Blue	9	•
2.5	AWBMCG16025	Blue	9	•
3	AWBMCG1603	Blue	9	•
4	AWBMCG1604	Blue	9	•
5	AWBMCG1605	Blue	9	•
6	AWBMCG1606	Blue	9	•
8	AWBMCG1608	Blue	9	•
10	AWBMCG1610	Blue	9	•



Ball Hex, inches



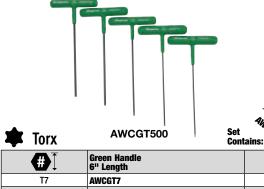
<b>□</b> Ţ	Stock No.	Handle	Length, inches	
3 <b>/</b> 32	AWBCG1606	Red	9	•
7/ <sub>64</sub>	AWBCG1607	Red	9	•
1/8	AWBCG1608	Red	9	•
9/64	AWBCG1609	Red	9	•
5 <b>/</b> 32	AWBCG1610	Red	9	•
3/ <sub>16</sub>	AWBCG1612	Red	9	•
7 <b>/</b> 32	AWBCG1614	Red	9	•
1/4	AWBCG1616	Red	9	•
5 <b>/</b> 16	AWBCG1620	Red	9	
3/8	AWBCG1624	Red	9	



### Tamper Resistant, mm

AWMCGR1608 Metric T-Shape Hex Wrench.

- Yamaha® Rhino doors and aftermarket license plate holders with 8 mm tamper proof hex security fasteners
- · Permits maximum pressure application when loosening difficult fasteners



Torx	AWCGT500	Set Contains:
##  Ţ	Green Handle 6" Length	
T7	AWCGT7	
T8	AWCGT8	•
T10	AWCGT10	•
T15	AWCGT15	•
T20	AWCGT20	•
T25	AWCGT25	•
T30	AWCGT30	
T40	AWCGT40	
T45	AWCGT45	

### **T-Shape**



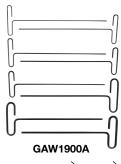
#### AWMCG1600B

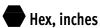


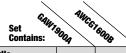
# Hex, mm

	Stock No.	Handle	Length, mm	
2	AWMCG1602B	Blue	152	•
2.5	AWMCG16025B	Blue	152	•
3	AWMCG1603B	Blue	152	•
4	AWMCG1604B	Blue	152	•
5	AWMCG1605B	Blue	152	•
6	AWMCG1606B	Blue	152	•
8	AWMCG1608B	Blue	152	•
10	AWMCG1610B	Blue	152	•









	Standard Handle 9" Length	Red Handle 6" Length		
3/32	GAW1906	AWCG1606B	•	•
7/64	GAW1907	AWCG1607B	•	•
1/8	GAW1908	AWCG1608B	•	•
9/64	GAW1909	AWCG1609B	•	•
5/32	GAW1910	AWCG1610B	•	•
3/16	GAW1912	AWCG1612B	•	•
7/32	GAW1914	AWCG1614B	•	•
1/4	GAW1916	AWCG1616B	•	•
5/16	GAW1920	AWCG1620B		
3/8	GAW1924	AWCG1624B		

# Wrench Stands AWSTAND Wrench Stand.

- Mounting holes on top and bottom of stand provide many mounting locations
- Another AWSTAND can be added for increased storage options
- Stands can mount to a Slots-N-Dots Plus<sup>™</sup> personal work center or lie flat on top of tool box
- Stand holds the following wrench styles:
  - L or T-shaped fractional hex 1/16 to 3/8"
  - L or T-shaped metric hex 2 to 10 mm
  - L or T-shaped Torx® T6 to T50
  - Metric or Torx on one stand
  - · Fractional and metric on one stand
  - · Metric and fractional ball wrenches



**Folding Sets** 



	AWMEF7K	AWMEF8K	AWMEF6K
	A	A	A
1.5	45.7	_	_
2	50.8	50.8	_
2.5	55.9	55.9	_
3	61.0	61.0	83.8
4	66.0	66.0	88.9
5	78.7	78.7	96.5
6	83.8	96.5	101.6
7	_	106.7	_
8	_	121.9	121.9
10	_	_	129.5







AWMEF8K

**AWMEF6K** 





- Plastic handle does not protect against electric shock
  - Read safety precautions on pages W1 to W4

#### L-Shaped/Folding Sets









AWEF6K

Hex. inches

<b>□</b> Ţ	A
5/32	2.7
3/16	3.3
7/32	3.5
1/4	3.7
5/16 3/8	4.8
3/8	5.1

₩↓	A
.050	1.8
1/16	1.9
5/64	2.0
3/32	2.1
7/64	2.3
1/8	2.4
9/64	2.6
5/32	2.7
34c	20

AWCPEF16K Combination Set.

Set includes

AWEF9K hex set

AWMEF7K metric hex set (p. 129)

#### **Ball Hex Sets**

Industrial Finish L-Shaped Ball Hex Wrench Sets:
Ball hex allows up to 25° angle entry. Made from high strength steel.

Metric Sets:

BHM9A Metric Ball Hex Set. Set includes 1.5, 2, 2.5, 3, 4, 5, 6, 8 and 10 mm sizes (9 pcs) (1.5 to 10 mm) in plastic index. AWMBPH9 Metric Ball Hex Set. Screw holding tip holds fastener to tool for delicate installations. Set includes 1.5, 2, 2.5, 3, 4, 5, 6, 8 and 10 mm sizes (9 pcs) (1.5 to 10 mm) in plastic index. AWMBS9 Metric Stubby Ball Hex Set. Stubby length for access in tight quarters. Set includes 1.5, 2, 2.5, 3, 4, 5, 6, 8 and 10 mm sizes (9 pcs) (1.5 to 10 mm) in plastic index.

**AWBMXL9 Metric Extra Long Ball Hex Set.** Set includes: 1.5, 2, 2.5, 3, 4, 5, 6, 8 and 10 mm sizes

#### **Standard Sets:**

**BHS7A Ball Hex Set.** Set includes 5/64, 3/32, 7/64, 1/8, 9/64, 5/32 and 3/16" sizes (7 pcs) (5/64 to 3/16") in plastic index. **BHS13A Ball Hex Set.** Set includes 0.05, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 and 3/8" sizes (13 pcs) (.050 to 3/8") in plastic index.

**AWBPH13 Ball Hex Set.** Screw holding tip holds fastener to tool for delicate installations. Set includes 0.05, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 and 3/8" sizes (13 pcs) (.050 to 3/8") in plastic index.

**AWBS13 Stubby Ball Hex Set.** Stubby length for access to tight quarters. Set includes 0.05, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 and 3/8" sizes (13 pcs) (.050 to 3/8") in plastic index.

**AWBXL13 Extra Long Ball Hex Set.** Set includes sizes: .05, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16 and 3/8"



Same

**AWEFBH9K** 

AWTEF8K

# Ball Hex, inches

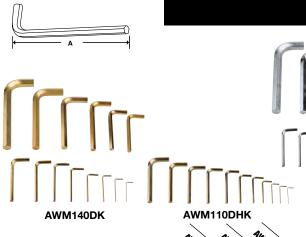
<b>Ū</b> Ţ	A	<b>#</b> ]	A
5/64	2.0	T8	2.4
3/32	2.1	T10	2.7
7/64	2.3	T15	3.0
1/8	2.4	T20	3.2
9/64	2.6	T25	3.4
5/32	2.7	T27	3.5
3/16	2.9	T30	3.7
7/32	3.5	T40	3.9



# Combination AWHD8K Hex/Torx Set.

Torx®

Includes two *Torx* sizes (T27, T40) and six hex sizes (5/32, 3/16, 7/32, 1/4, 5/16 and 3/8"). Fits a wide range of Harley-Davidson® motorcycles.



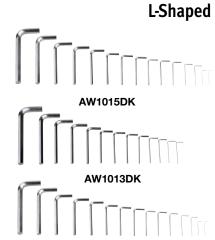
			_	
	0200			

AW18D

AW20D

AW24D

Kit Bag Metal Index



ì

He	x, mm		Set Contains:	ODA WIT	100x 1170	DH4
	Stock No.		A			
Standard	AWM2D	2	47.7	•	•	•
Length	AWM2-1/2D	2.5	52.0	•	•	•
	AWM3D	3	58.6	•	•	•
	AWM4D	4	65.6	•	•	•
	AWM5D	5	75.6	•	•	•
	AWM6D	6	82.2	•	•	•
	AWM7D	7	92.4	•	•	•

		AWM8D	8	99.2	•	•	
		AWM9D	9	105.1	•	•	
		AWM10D	10	111.4	•	•	
		AWM12D	12	139.3	•	•	
		AWM14D	14	138.8	•		
		AWM17D	17	167.2	•		
		AWM19D	19	193.6	•		
L	.ong	AWML1.5D	1.5	77.7			
		AWML2D	2	83.0			

2.5

3

Long

AWML4D	4	107.0			
AWML5D	5	118.5			
AWML6D	6	141.0			
AWML8D	8	161.5			
AWML10D	10	172.0			
AWML12D	12	193.6			
Kit Bag			C1209	C15B	
Metal Index					BHK11

89.9

100.0

_	Hex, Standard	
	Length inches	۶

Hex, Star Length, i	ndard nches a	et Alvio	AW10	AW10,	AW1015	OHA
Stock No.	<b>□</b> Ţ	A				
AW028D	0.028	1 <sup>1</sup> /4	•	•		•
AW035D	0.035	1 <sup>5</sup> / <sub>16</sub>	•	•		•
AW050D	0.050	1 3/4	•	•	•	•
AW2D	1/16	1 3/4	•	•	•	•
AW2-1/2D	5/64	1 <sup>7</sup> /8	•	•	•	•
AW3D	3/32	2	•	•	•	•
AW3-1/2D	7/64	2 1/8	•	•	•	•
AW4D	1/8	2 1/4	•	•	•	•
AW4-1/2D	9/64	2 3/8	•	•	•	•
AW5D	5/32	2 1/2	•	•	•	•
AW6D	3/16	2 3/4	•	•	•	•
AW7D	7/32	3	•	•	•	•
AW8D	1/4	3 1/4	•	•	•	•
AW10D	5/16	3 3/4	•	•	•	•
AW12D	3/8	4 1/4	•	•	•	•
AW14D	7/16	4 3/4	•			

5 3/4

6 1/4

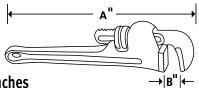
7 1/4

C1209

C154

# **Pipe Wrenches**

BHK15



# **External Pipe Wrenches**

AWML2.5D

AWML3D

Stock No. Coated Handle	Stock No. Aluminum Handle	A	B Max Opening
PW6C	_	6	3/4
PW8C	_	8	1
PW10C	PWA10A	10	1 1/2
PW12C	_	12	2
PW14C	PWA14A	14	2
PW18C	PWA18A	18	2 1/2
PW24C	PWA24A	24	3
PW36C	PWA36A	36	5



9/16

5/8

3/4







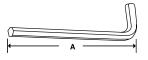
<sup>•</sup> Do not use "cheater bars" on handles • Read safety precautions on pages W1 to W4

# **WRENCHES**

# L-Shaped

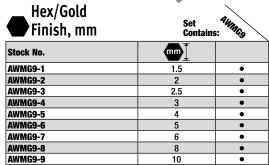






AWS13

Hex, Long, inches		Set Contain	W.10100HK	
Stock No.		A		
AWL3D	3/32	3 1/8	•	•
AWL3-1/2D	7/64	3 1/2	•	•
AWL4D	1/8	3 3/4	•	•
AWL4-1/2D	9/64	4	•	•
AWL5D	5/32	4 1/8	•	•
AWL6D	3/16	4 1/2	•	•
AWL7D	7/32	4 7/8	•	•
AWL8D	1/4	5 <sup>1</sup> / <sub>4</sub>	•	•
AWL10D	5/16	6	•	•
AWL12D	3/8	6 3/4	•	•
AWL14D	7/16	7 1/2		
AWL16D	1/2	8 1/4		
AWL18D	9/16	9		
AWL20D	5/8	9 3/4		
Kit Bag			C15B	
Metal Index				RHK10





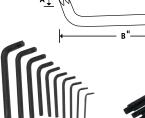
# Hex/Natural Finish, inches

Stock No.

Contains	" 1813 /
<b>□</b>	
1/20	•
1/ <sub>16</sub> 5/ <sub>64</sub> 3/ <sub>32</sub>	•
5/64	•
3/32	•
7/64	•
1/8	•

Set Contains:

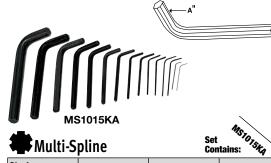
AWS13-1	1/20	•
AWS13-2	1/16	•
AWS13-3	5/64	•
AWS13-4	3/32	•
AWS13-5	7/64	•
AWS13-6	1/8	•
AWS13-7	9/64	•
AWS13-8	5/32	•
AWS13-9	3/16	•
AWS13-10	7/32	•
AWS13-11	1/4	•
AWS13-12	<sup>5</sup> /16	•
AWS13-13	3/8	•







Torx®			Set Contains:	OKA P	8
Stock No.	<b>#</b> ]	A	В		
AWT8A	T8	.137	1 7/8		
AWT9A	T9	.148	1 7/8		
AWT10A	T10	.162	2	•	•
AWT15A	T15	.194	2 1/8	•	•
AWT20A	T20	.228	2 1/4	•	•
AWT25A	T25	.262	2 3/8	•	•
AWT27A	T27	.295	<b>2</b> 1/2	•	•
AWT30A	T30	.218	2 3/4	•	•
AWT40A	T40	.262	3	•	•
AWT45A	T45	.430	3 5/8	•	
AWT50A	T50	.348	3 3/4	•	
AWT55A	T55	.442	4 1/4	•	



Multi-Spline
--------------

Stock No.	A	В	
MS2A	4	.033	•
MS3A	4	.048	•
MS4A	6	.060	•
MS5A	4	.069	•
MS6A	4	.076	•
MS7A	6	.072	•
MS8A	6	.096	•
MS10A	6	.110	•
MS16A	6	.144	•
MS20A	6	.183	•
MS24A	6	.216	•

6

.251

.291

.372

.454

# Torx/Tamper Resistant

Stock No.	##_ Ţ
AWTR8-1	T9
AWTR8-2	T10
AWTR8-3	T15
AWTR8-4	T20
AWTR8-5	T25
AWTR8-6	T27
AWTR8-7	T30
AWTR8-8	T40



Set includes kit bag

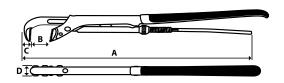
MS28A

MS32A

MS40A

MS48A

# Adjustable/Special Application





### **Pliers Wrench**

Stock No.	A	В	C	D	Weight, lbs
PWZ0	8 3/16	1 1/2	5/16	9/16	1
PWZ1	12 <sup>5</sup> /8	1 3/4	1/2	3/4	1 5/8
PWZ2	17	2 1/2	5/8	13/16	2 1/2
PWZ3	21 1/2	3 1/2	3/4	1	6 3/8

### **Pliers Wrench**

- Inwardly angled teeth (fine teeth at back of jaw, coarse teeth at front of jaw) for a stronger grip
- · Quick adjustment of grip width
- · Built-in guard against unthreading
- Soft, warm to the touch, high friction handle surfaces with a strong, stable core

# Adjustable



- Adjustable wrenches with serrated jaws feature our Flank Drive® Plus wrenching system for more turning power from an adjustable wrench
- Precision made wrenches feature fractional and metric scales for size reference
- · Elastomer handle surface is soft, yet provide a nonslip gripping surface even for greasy and oily hands
- Cushion handle insulates against cold temperatures

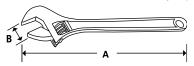
# Flank Drive Plus Adjustable/Cushion Handles



Stock No.	A inches (mm)	B inches (mm)	
FADH6A	6 (152)	<sup>3</sup> / <sub>4</sub> (19)	•
FADH8A	8 (203)	<sup>15</sup> / <sub>16</sub> (24)	•
FADH10A	10 (254)	1 <sup>1</sup> /8 (29)	•
FADH12A	12 (304)	1 <sup>5</sup> /16 (33)	•

ASME® Standard

Set includes storage tray



# The Do

FADH704A

# **Adjustable Wrenches**

- Opposing fractional and metric quick sizing scales are provided for convenience
- High strength alloy steel machined to exacting specs and precision heat treated for strength and durability
- Nickel-chrome finish helps protect against corrosion and speeds clean up





Set Cont	و ains:	07044	\

Stock No.	A inches (mm)	B inches (mm)	
AD6A	6 (155)	<sup>25</sup> / <sub>32</sub> (20)	•
AD8A	8 (205)	1 1/16 (27)	•
AD10A	10 (255)	1 <sup>3</sup> /16 (30)	•
AD12A	12 (305)	1 11/32 (34)	•

# Wide Mouth Adjustable/Cushion Handle

- Opens larger than standard adjustable wrench
- · Longer jaws and slimline design for greater reach
- · Metric and fractional scales for quick observation
- · Adjustable moving jaw will not fall out, even when at max opening
- Elastomer handle is soft, insulates against cold and provides a nonslip surface
- ADHW6 opens as wide as an 8" adjustable wrench: ADHW8 opens as wide as a 10" adjustable wrench

Stock No.	A inches (mm)	B inches (mm)
ADHW6	6 (152)	1 1/4 (32)
ADHW8	8 (203)	1 1/2(38)





Set includes storage tray

ASME B107.100

• Plastic coated handle does not protect against electric shock • Do not use "cheater bars" on handles

# Adjustable (Blue-Point®)





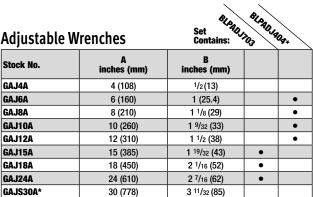






ANADJ8

# **Adjustable Wrenches**



ASME® B107.100

\*Set includes storage tray

- Inch and metric scales on fixed jaw indicate wrench opening
- · Fixed jaw and handle forged in one piece to ensure maximum strength
- · Wrench is balanced to minimize wrist stress
- · Hole at handle end for tether or hanging

# **Composite Handle** Adjustable Wrench

BA	
Set Contains:	DICTOS

Stock No.	A inches	B inches	
BADJC6	6 7/16	1	•
BADJC8	8 9/16	1 3/16	•
BADJC10	10 1/2	1 <sup>3</sup> /8	•

Set includes storage tray

# **Adjustable** Wrenches/Soft Grip

BIPAN	
Set Contains:	lao <sub>ASG</sub>

Stock No.	A inches (mm)	B inches (mm)	
GAJ6SG	6 (160)	1 (25.4)	•
GAJ8SG	8 (210)	1 1/8 (29)	•
GAJ10SG	10 (260)	1 <sup>9</sup> /32 (32.8)	•
GAJ12SG	12 (310)	1 1/2 (38)	•

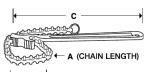
Set includes storage tray

# **Aluminum (for AN Fittings)**

Stock No.	Color	A inches (mm)	B inches (mm)
ANADJ8	Red	8 (203)	AN #10 (1")

- Securely tighten expensive AN fittings to reduce risk of damage in aircraft, marine and industrial applications as well as for race and
- Machined from aluminum billet to exacting tolerances and made from quality heat treated aluminum

# CW12A VGP18110



### **Chain Wrenches**

Stock No.	A	В	C	Replacement Chain
CW12A	16	4	12	CW12A-1
CW15A	19	5	15	CW15A-1
CW24A	23	6	24	CW24A-1

### VGP18110 Locking Chain Wrench.

- Wraps around and holds irregular shaped objects like oil filters and mufflers
- Chain capacity: up to 6 9/32" (160 mm)
- Handle length: 9 27/32" (250 mm)

### VGP181101 Replacement Chain.

• Replacement chain for VGP18110



# Strap Wrenches (Blue-Point®) BLPSTWR4 Strap Wrench.

- · Adjusts to fit any circumference or irregular shape
- Won't scratch or damage surfaces
- Cushioned grip for maximum comfort
- · Heavy duty construction for longer life
- 4" max diameter

### **BLPSTWR6 Strap Wrench.**

- Same as BLPSTWR4 except features a 6" max diameter BLPSTWRKT Strap Wrench Set.
- BLPSTWR4 and BLPSTWR6 (2 pcs)



### Valve Persuader (Special order only.) N6893B Valve Persuader Wrench.

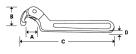
- Persuader end provides extra leverage on valve wheels
- Hooks around valve stems and protrudes through spokes
- 15" long





# **Special Application**





304AHSK

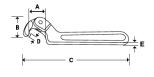
### **Adjustable Hook Spanners**

- Services collars, rings and bearings
- · Single jaw and roll pin construction with industrial finish
- Make sure jaw hook is properly positioned when in use

				Contains:	THS#
Stock No.	A	В	C	D	
AHS300B	3/4-2	1/8	6 3/8	11/32	•
AHS301B	1 <sup>1</sup> /4-3	5/32	8 1/8	13/32	•
AHS304B	2-4 3/4	3/16	11 <sup>3</sup> /8	15/32	•
AHS307B	4 1/2-6 1/2	1/4	12 <sup>1</sup> /8	15/32	•

Set shown includes Kit bag





304APSK

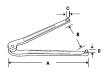
# **Adjustable Pin Spanners**

- · Removes rings, collars and lock nuts
- Make sure jaw hook is properly aligned when in use

when in u	ise				contains:	4
Stock No.	A	В	C	D	E	
APS351B	3/4-2	1/8	6 3/8	1/8	11/32	•
APS357B	1 1/4-3	3/16	8 1/8	3/16	11/32	•
APS363B	2-4 3/4	1/4	11 3/8	1/4	15/32	•
APS366B	4 1/2-6 1/4	1/4	12 1/8	3/8	15/32	•

Set shown includes Kit bag





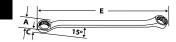
# **Adjustable Face Pin Spanners**

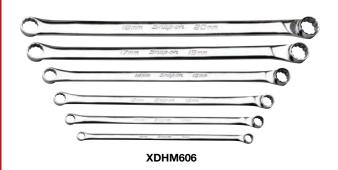
For servicing seal and packing nuts on hydraulic cylinders.

Stock No.	A	В	C	D
AFS482B	6 3/8	2	3/16	5/32
AFS483B	8 1/4	3	1/4	3/16
AFS484B	10 3/8	4	5/16	1/4

# **HIGH PERFORMANCE**

# **High Performance Flank Drive® Wrenches**





Box, 15	Box, 15° Offset Heads, mm			Set Contains:		
	(12)	A	C	E	(12)	
8-9	XDHM89	11.6-13.0	5.8-6.2	219.2	•	
8-10	XDHM810	11.6-14.4	6.2-7.6	225.6		
10-11	XDHM1011	14.4-15.6	7.6-8.5	246.3	•	
10-12	XDHM1012	14.4-17.1	7.6-9.0	264.0		
12-13	XDHM1213	17.1-18.7	9.0-9.0	277.6	•	
12-14	XDHM1214	17.1-20.1	9.0-10.2	289.6		
14-15	XDHM1415	20.1-21.5	9.8-10.9	313.1	•	
14-17	XDHM1417	20.1-23.7	9.8-11.3	334.7		
15-16	XDHM1516	21.5-22.6	10.9-10.9	334.8		
17-19	XDHM1719	23.7-26.3	11.3-12.1	360.1	•	
18-20	XDHM1820	24.9-27.3	12.1-13.6	384.0	•	

Set includes storage tray



Box, 15° Offset Heads, inches				Set TO <sub>HEOS</sub>			
	(12)	<b>®</b>	A	C	E	(12)	
7/32 - 1/4	XDH78A	GXDH78A	11/32 - 3/8	13/64 - 15/64	7 15/64		
1/4 - 5/16	XDH810B	GXDH810B	3/8 - 29/64	1/4 - 1/4	8 3/64	•	
5/16 - 3/8	XDH1012B	GXDH1012B	29/64 - 35/64	1/4 - 19/64	8 7/8		
3/8 - 7/16	XDH1214A	GXDH1214A	35/64 - 5/8	19/64 - 11/32	9 11/16	•	
7/16 - 1/2	XDH1416A	GXDH1416A	11/32 - 3/4	11/32 - 23/64	10 <sup>7</sup> / <sub>16</sub>		
1/2 - 9/16	XDH1618A	GXDH1618A	23/32 - 13/16	23/64 - 13/32	<b>11</b> 7/16	•	
5/8 - 3/4	XDH2024A	_	57/64 -1 3/64	7/16 - 31/64	13 <sup>9</sup> / <sub>32</sub>	•	
11/16 -13/16	XDH2226A	_	63/64 -1 9/64	31/64 - 17/32	15 <sup>5</sup> /32	•	

Aerospace Spec. AS954E

Set includes storage tray





# Box/Short Handle, 0° Offset Heads, mm

<b>mm</b> <u></u>	(12)	A	C	E
8-10	XDHSFM810	12.1-14.9	6.2-7.6	162.9
10-12	XDHSFM1012	14.4-17.1	7.6-9.0	190.5
12-14	XDHSFM1214	17.1-20.1	8.5-10.2	208.8
17-19	XDHSFM1719	23.8-26.3	11.3-12.1	260.3

# **HIGH PERFORMANCE/SPLINE**

### Flank Drive® Wrenches



### 7.2... 0

13/32 - 15/32

17/32 - 5/8

23/32 - 13/16

7/8 - 1 1/32

31/32 - 1 5/32

7/16 - 15/32

15/32 - 17/32

Box, 0° Offset Heads, inches

12

XDHF810

XDHF1214

XDHF1618

XDHF2024

11/<sub>16</sub> - 13/<sub>16</sub> XDHF2226

II)

1/4 - 5/16

3/8 - 7/16

1/2 - 9/<sub>16</sub> 5/<sub>8</sub> - 3/<sub>4</sub>

	Set Contains:	605
C	E	
7/32 - 1/4	8 5/16	•
5/16 - 11/32	10 <sup>1</sup> /16	•
11/32 - 13/32	11 3/4	•

15 <sup>5</sup>/8

Set includes storage tray

### XDHFM606 Box, 0° Offset Heads, mm

	(12)	A	C	E	(12)
6-7	XDHFM67	9.1-10.4	5.3-5.8	211.5	
8-9	XDHFM89	11.6-13.0	5.8-6.2	226.1	
8-10	XDHFM810	11.6-14.4	6.2-7.6	232.7	
10-11	XDHFM1011	14.4-15.6	7.6-8.5	253.7	•
10-12	XDHFM1012	14.4-17.1	8.5-9.0	272.2	
12-13	XDHFM1213	17.1-18.7	9.0-9.0	286.2	•
12-14	XDHFM1214	17.1-20.1	9.0-10.2	298.4	
13-14	XDHFM1314	18.7-20.1	9.0-9.7	299.2	
14-15	XDHFM1415	20.1-21.5	9.8-10.9	323.5	•
14-17	XDHFM1417	20.1-23.7	9.8-11.3	345.0	
15-16	XDHFM1516	21.5-22.6	10.9-10.9	347.5	•
17-19	XDHFM1719	23.8-26.3	11.3-12.1	372.1	•
18-20	XDHFM1820	25.0-27.3	12.1-13.6	395.7	•
21-22	XDHFM2122	28.8-30.6	13.7-14.6	421.2	
22-24	XDHFM2224	30.6-33.1	14.0-14.9	445.2	

Set includes storage tray

to<sub>HFM606</sub>

Contains:

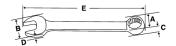
Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft.

Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque to reduce risk of damage to the fastener or to the tool.

# **Spline Wrenches**

Chrome tools comply with Military Spec. MS-33787 and MIL-W-8982. (Industrial finish tools comply with performance specifications and differ only in finish.) The unique spline wrenching configuration can also be used on ordinary 6 and 12 point fasteners with an advantage similar to the *Snap-on Flank Drive* wrenching system.







# Combination/Short Handle, inches

		Stock No.	A	В	C	D	E
#8	1/4	0ES8B	13/32	17/32	1/8	5/32	4 1/2
#10	5/16	OES10B	15/32	21/32	11/64	15/64	4 55/64
#12	3/8	0ES12B	17/32	25/32	13/64	17/64	5 7/32
#14	7/16	0ES14B	5/8	29/32	15/64	5/16	5 <sup>27</sup> / <sub>64</sub>
#16	1/2	OES16B	23/32	1 <sup>1</sup> /16	1/4	5/16	5 47/64
#18	9/16	0ES18B	13/16	1 3/16	17/64	21/64	6 1/32
#20	5/8	OES20B	7/8	1 <sup>5</sup> / <sub>16</sub>	9/32	11/32	6 <sup>5</sup> /16
#22	11/16	0ES22B	31/32	1 <sup>7</sup> /16	19/64	23/64	6 39/64
#24	3/4	0ES24B	<b>1</b> <sup>1</sup> /16	1 9/16	5/16	3/8	6 29/32



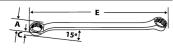
### HES2030

17/32-37/64

# Ratcheting Box, inches

		Stock No.	A	C	E	# of Gear Teeth
#8-#10	1/4-5/16	RES810C	9/16-5/8	11/32	4 11/16	16-18
#12-#14	3/8-7/16	RES1214C	3/4-7/8	11/32	6 5/32	20-22
#18-#20	9/16-5/8	RES1820C	1 1/8-1 1/4	13/32	7 27/32	20-22
#26-#30	13/16-15/16	RES2630C	1 1/2-1 9/16	7/16	9 25/32	22-22





# 15° Offset Heads, inches

	<b>□</b> Ţ	Stock No.	A	C	E
#7-#9	7/32-9/32	XDES79A	11/32-7/16	11/64-13/64	7 1/4
#8-#10	1/4-5/16	XDES810A	3/8-15/32	3/16-7/32	8 1/16
#12-#14	3/8-7/16	XDES1214A	35/64-41/64	5/16-11/32	9 3/4
#16-#18	1/2-9/16	XDES1618A	3/4-13/16	3/8-3/8	11 <sup>7</sup> / <sub>16</sub>
#18-#20	9/16-5/8	XDES1820A	13/16-57/64	25/64-13/32	12 <sup>3</sup> /8
#22-#24	11/16-3/4	XDES2224A	<sup>31</sup> / <sub>32</sub> <b>-1</b> <sup>5</sup> / <sub>64</sub>	7/16-5/64	14 <sup>1</sup> /4
#26-#30	13/16-15/16	XDES2630A	1 <sup>5</sup> /32-1 <sup>5</sup> /16	1/2-9/16	16 <sup>3</sup> /16

1 1/4-1 7/16



XDES2832A

- Do not use "cheater bars" on handles
  - Read safety precautions on pages W1 to W4

### Power. Speed. Finesse.

Snap-on<sup>®</sup> Instinct<sup>®</sup> screwdrivers offer a unique combination of power, comfort and versatility in the most basic of hand tools.

**Multi-faceted design** — Unique handle geometry provides excellent gripping surface and superior turning force.

**Inner core** — Maximizes torque between the handle and the blade.

**Middle layer** — Tough, brightly-colored material provides impact and solvent resistance.

**Outer layer** — Textured material gives you grip, comfort and torque—even in the greasiest shop environments.

**Hard or soft grip handle design** — Choose from an ultra-comfortable soft grip or a grease-resistant hard grip.

**Seven tip types** — *Snap-on* screwdrivers are available in seven different tip profiles so you can handle a wide variety of fastener types.

### It's All About the Details.

**Snap-on** screwdrivers are built with exclusive features that give you superior durability and performance.

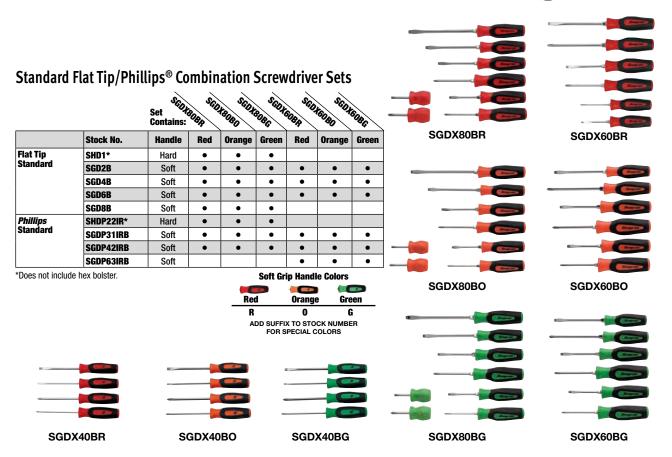
**Trans-Drive™** — This unique ratcheting mechanism uses an advanced pawl design based on transmission ring gear principles to deliver outstanding power and torque.

Shanks — Round shanks are made from special alloy steel with few impurities for strength and lasting durability.





# Soft Grip Handle Combination Sets **SINSTINCT**



# Cabinet, Mini Tip, Extra Long Flat Tip/Phillips **Screwdriver Sets**

	Set Contains:	1808A	18080 VI	ROBG SEDX	TOBA GO	AOBO X	1086 41	OBA
	Stock No.	Red	Orange	Green	Red	Orange	Green	Red
Flat Tip	SGD146B	•	•	•				
Cabinet	SGD480B	•	•	•				
	SGD4120B	•	•	•				
	SGD4160B	•	•	•				
Phillips	SGDP61B	•	•	•				
Cabinet	SGDP82B	•	•	•				
	SGDP122B	•	•	•				
	SGDP162B	•	•	•				
Flat Tip	SGD304B				•	•	•	
Mini-Tip	SGD306B				•	•	•	
Phillips	SGDP300B				•	•	•	
Mini-Tip	SGDP301B				•	•	•	
Extra Long	SGD424B							•
	SGDP242B							•

Ser Ser Ser Ser Ser Ser Ser Ser

SGDXL80BO Soft Grip Handle Colors SGDXL80BG Red **Orange** Green ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS



SGDXL80BR

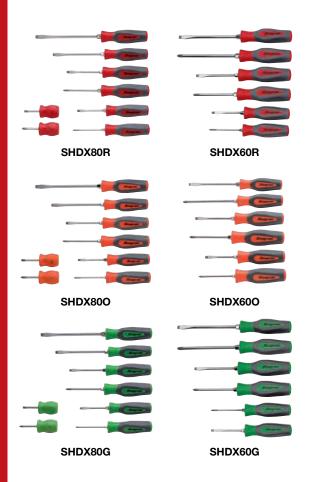








# Hard Grip Handle Combination Sets **SINSTINCT**





# Standard Length Flat Tip/Phillips® **Combination Screwdriver Sets**

	Set Contains	SHOXBOR SI	Sh Sh	DXBOG SH	10×60A	HDX600 SI	NOX60G
	Stock No.	Red	Orange	Green	Red	Orange	Green
Flat Tip Standard	SHD1*	•	•	•			
	SHD2	•	•	•	•	•	•
	SHD4	•	•	•	•	•	•
	SHD6	•	•	•	•	•	•
	SHD8	•	•	•			
	SHD10R						
Phillips	SHD22IR*	•	•	•			
Standard	SHD31IR	•	•	•	•	•	•
	SHD42IR	•	•	•	•	•	•
	SHD62IR						
	SHD63IR				•	•	•
	SHD64IR						

\*Does not include hex bolster.

		Hard Grip	Handle Co	lors
			GE to	( a)
	Re	d (	Orange	Green
	R		0	G
	A		O STOCK NU	
,			T/C	
6			11 (	

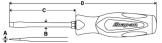
SHDX400 SHDX40R

SHDX40G

# Industrial Finish Shank, Cabinet and Mini Tip Flat Tip/Phillips Screwdriver Sets

	Set Contains	SHOXEOR	SHOXI800	SHOXAOR	SHOXADO	SHOXADG
	Stock No.	Red	Orange	Red	Orange	Green
Flat Tip Industrial Finish Shank	GSHD1*	•				
	GSHD2	•				
i iiii3ii Oliulik	GSHD4	•				
	GSHD6	•				
	GSHD800	•				
<i>Phillips</i> Tip Industrial Finish Shank	GSHDP22IR*	•				
	GSHDP31	•				
	GSHDP42	•				
Flat Tip	SHD146		•			
Cabinet	SHD480		•			
	SHD4120		•			
	SHD4160		•			
<i>Phillips</i> Tip	SHDP61		•			
Cabinet	SHDP82		•			
	SHDP122		•			
	SHDP162		•			
Flat Tip	SHD304			•	•	•
Mini Tip	SHD306			•	•	•
<i>Phillips</i> Tip	SHDP300			•	•	•
Mini Tip	SHDP301			•	•	•
Does not includ	e hex bolster.			Hard G	irip Handle C	olors

Red Orange Green ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS









SGD2BR

SGD480BR

### Standard

Red	Orange	Green	A	В	C	D
SGD2BR	SGD2B0	SGD2BG	.035	7/32	2 13/16	6 15/16
SGD4BR	SGD4B0	SGD4BG	.040	1/4	3 15/16	8 27/32
SGD6BR	SGD6B0	SGD6BG	.050	5/16	5 <sup>15</sup> / <sub>16</sub>	10 27/32
SGD8BR	SGD8B0	SGD8BG	.055	3/8	7 29/32	13 13/32
SGD10BR	SGD10B0	SGD10BG	.055	3/8	9 15/16	15 <sup>7</sup> /16

### Cabinet

Red	Orange	Green	A	В	C	D
SGD146BR	SGD146B0	SGD146BG	.030	3/16	5 13/16	10 <sup>1</sup> / <sub>8</sub>
SGD153BR	<b> </b>	<b> </b>	.050	3/8	2 3/4	8 1/4
SGD480BR	SGD480B0	SGD480BG	.032	1/4	7 15/16	12 3/4
SGD4100BR	SGD4100B0	SGD4100BG	.032	1/4	9 15/16	14 3/4
SGD4120BR	SGD4120B0	SGD4120BG	.032	1/4	11 <sup>15</sup> / <sub>16</sub>	16 <sup>3</sup> / <sub>4</sub>
SGD4160BR	SGD4160B0	SGD4160BG	.032	1/4	15 <sup>15</sup> / <sub>16</sub>	20 3/4



SGD306BR

# SGD424BR

### **Extra Long**

Red	A	В	C	D
SGD424BR	.046	<sup>5</sup> / <sub>16</sub>	24	28 3/4

# Mini Tip

Red	Orange	Green	A	В	C	D
SGD304BR	SGD304B0	SGD304BG	.020	1/8	3	5 7/8
SGD306BR	SGD306B0	SGD306BG	.030	3/16	3	5 7/8



SGDS50BR Flat Tip Screwdriver Set. Includes SGD2BR, SGD4BR and SGD6BR Flat Tip Screwdrivers plus SGD304BR and SGD306BR Miniature Flat Tip Screwdrivers ( 5 pcs)







SHD6R



# Industrial Finish Shank

### Standard

Red	Orange	Green	A	В	C	D
SHD1R*	SHD10*	SHD1G*	.040	1/4	1 <sup>7</sup> /8	3 3/4
SHD2R	SHD20	SHD2G	.035	7/32	2 13/16	6 <sup>15</sup> /16
SHD4R	SHD40	SHD4G	.040	1/4	3 15/16	8 27/32
SHD6R	SHD60	SHD6G	.050	5/16	5 <sup>15</sup> / <sub>16</sub>	10 27/32
SHD8R	SHD80	SHD8G	.055	3/8	7 29/32	13 13/32
SHD10R	SHD100	SHD10G	.055	3/8	9 <sup>15</sup> / <sub>16</sub>	15 <sup>7</sup> /16

Industrial/ Red	A	В	C	D
GSHD1R*	.037	1/4	1 1/2	3 3/4
GSHD2R	.032	7/32	2 7/8	7
GSHD4R	.037	1/4	4	8 7/8
GSHD6R	.046	5/16	6	10 27/32
GSHD8R	.050	3/8	8	13 13/32

<sup>\*</sup>Does not include hex bolster.

\*Does not include hex bolster.





### SHD41600

# Mini Tip

Red	Orange	Green	A	В	C	D
SHD304R	SHD3040	SHD304G	.018	1/8	3	5 <sup>7</sup> /8
SHD306R	SHD3060	SHD306G	.030	3/16	3	5 7/8

### Cabinet

Orange	A	В	C	D
SHD1460	.030	3/16	6	10 <sup>1</sup> /8
SHD4800	.032	1/4	8	12 3/4
SHD41200	.032	1/4	12	16 <sup>3</sup> / <sub>4</sub>
SHD41600	.032	1/4	16	20 3/4









- Do not use screwdrivers as prybars, chisels or punches
- Read safety precautions on pages W1 to W4

# Flat Tip/Pocket and Spark Test





### SDD2040

Stock No.	Туре	Description	A	D
SDD2040	Pocket	Screwdriver w/ Pocket Clip	.025	4 3/4
SDD2240*	Pocket	Distributor Screwdriver	.025	4 3/4

<sup>\*</sup>Magnet on handle.



SDD214

■ Spark Test

Stock No.	Туре	Description	A	D
SDD214	Spark Test	Screwdriver with Pocket Clip	.025	5 1/8

# Soft Handle Phillips® **(3)**



SGDP42IRBR



SGDP300BR



SGDP50BR



# **Standard**

Red	Orange	Green	A	В	C	D
SGDP31IRBR	SGDP31IRB0	SGDP31IRBG	#1	3/16	2 31/32	7 1/8
SGDP42IRBR	SGDP42IRB0	SGDP42IRBG	#2	1/4	3 31/32	8 7/8
SGDP63IRBR	SGDP63IRB0	SGDP63IRBG	#3	5/16	5 29/32	10 <sup>13</sup> / <sub>16</sub>
SGDP64IRBR	SGDP64IRB0	SGDP64IRBG	#4	3/8	6	11 1/2



# Mini Tip

Red	Orange	Green	A	В	C	D
SGDP300BR	SGDP300B0	SGDP300BG	#0	1/8	3	6
SGDP301BR	SGDP301B0	SGDP301BG	#1	3/16	3	6

### SGDP50BR Phillips Tip Screwdriver Set.

Includes SGDP31IRBR, SGDP42IRBR and SGDP63IRBR Phillips Tip Screwdrivers plus SGDP300BR and SGDP301BR Miniature *Phillips* Tip Screwdrivers (5 pcs).



Red	Orange	Green	A	В	C	D
SGDP82BR	SGDP82B0	SGDP82BG	#2	1/4	8	12 <sup>7</sup> /8
SGDP61BR	SGDP61B0	SGDP61BG	#1	3/16	6	10 1/4
SGDP101BR	SGDP101B0	SGDP101BG	#1	3/16	10	14 <sup>1</sup> / <sub>8</sub>
SGDP102BR	SGDP102B0	SGDP102BG	#2	1/4	9 3/8	14 1/4
SGDP122BR	SGDP122B0	SGDP122BG	#2	1/4	12	16 <sup>3</sup> / <sub>4</sub>
SGDP162BR	SGDP162B0	SGDP162BG	#2	1/4	16	20 3/4





Red	A	В	C	D
SGDP242BR	#2	5/16	24	28 3/4





SGDDP50BR

# Diamond Tip

- · Diamond particles "bite" into fasteners which minimizes slipping
- · Diamond particles are extremely hard for long lasting performance and minimal wear



Red	A	В	C	D	Blade	
SGDDP31IRBR	#1	.197	3	7 5/32	SSDDP31RB	•
SGDDP42IRBR	#2	.236	4	8 29/32	SSDDP42RB	•
SGDDP61IRBR	#1	.197	6	10 <sup>5</sup> /32	SSDDP61RB	•
SGDDP62IRBR	#2	.236	6	10 29/32	SSDDP62RB	•
SGDDP63IRBR	#3	.315	5 3/4	10 <sup>5</sup> /8	SSDDP63RB	•

# Hard Handle *Phillips*

Red	Orange	Green	A	В	C	D
SHDP22IRR*	SHDP22IR0*	SHDP22IRG*	#2	1/4	1 <sup>5</sup> /8	3 1/2
SHDP31IRR	SHDP31IR0	SHDP31IRG	#1	3/16	2 31/32	7 1/8
SHDP42IRR	SHDP42IR0	SHDP42IRG	#2	1/4	3 31/32	8 7/8
SHDP62IRR	SHDP62IR0	SHDP62IRG	#2	1/4	6	10 <sup>13</sup> / <sub>32</sub>
SHDP63IRR	SHDP63IR0	SHDP63IRG	#3	5/16	5 29/32	10 <sup>13</sup> / <sub>16</sub>
SHDP64IRR	SHDP64IR0	SHDP64IRG	#4	3/8	6	11 <sup>1</sup> / <sub>2</sub>

<sup>\*</sup>Does not include hex bolster.



Hard Handle Phillips® **(3)INSTINCT.** 



# Standard/Industrial Finish Shank

Industrial/Red	A	В	C	D
GSHDP22IRR*	#2	1/4	1 1/2	3 3/4
GSHDP31R	#1	3/16	3	7 1/4
GSHDP42R	#2	1/4	4	8 7/8

<sup>\*</sup>Does not include hex bolster.

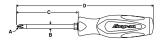




# **Cabinet Type**

Chrome/Orange	A	В	C	D
SHDP610	#1	3/16	6	10 <sup>1</sup> / <sub>4</sub>
SHDP820	#2	1/4	8	12 <sup>7</sup> /8
SHDP1220	#2	1/4	12	16 <sup>3</sup> / <sub>4</sub>
SHDP1620	#2	1/4	16	20 3/4





# Phillips/Instinct® Hard Handle/Electronic Service





### SHDP300R

• See flat tip mini drivers and 4 piece combination Phillips/flat tip sets

Orange	Red	Green	A	В	C	D
SHDP3000	SHDP300R	SHDP300G	#0	1/8	3	5 13/16
SHDP3010	SHDP301R	SHDP301G	#1	3/16	3	5 13/16



**SHDP2040** 

١	Pocke	et			
	Orange	A	D	В	C
	CUDDOGAO	ш4	A 7/a	1/0	

Soft Grip (Blue-Point®)



BSGD7



**BSGDP52** 

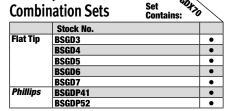


# Flat Tip

- · · · · · · · · · · · · · · · · · · ·							
Stock No.	Tip Size	Blade Length, inches	Length, inches				
BSGD3	1/8	3	6 1/2				
BSGD4	7/32	5	9				
BSGD5	1/4	6	10 1/4				
BSGD6	5/16	7	11 1/4				
RSGD7	3/8	8	12 3/s				

Standard Phillips

_			
Stock No.	Tip Size	Blade Length, inches	Length, inches
BSGDP41	#1	4	8
BSGDP52	#2	5	9 1/4













- Do not use screwdrivers as prybars, chisels or punches
- Read safety precautions on pages W1 to W4

# **Electronic Service**

### **Electronic Miniature**

- Rotating handle mechanism ideal for precise, detailed electronics work
  Blades manufactured to exacting tolerances from special heat treated alloy steel
- Blade tip finish is industrial black



<b>- 4</b>	Flat/Ph	illips®		Set Contains:	10
Stock No.	A	В	C	D	
SGDE215	1.5	3/32	2	5 3/4	•
SGDE220	2.0	3/32	2	5 3/4	•
SGDE225	2.5	3/32	2	5 3/4	•
SGDE230	3.0	1/8	2	5 3/4	•
SGDEP200	#00	1/8	2	5 3/4	•
SGDEP20	#0	1/8	2	5 3/4	•
SGDEP21	#1	3/16	3	6 1/2	•



● Hex/N	Miniature	Set Contains:			
Stock No.	A	В	C	D	
SGDEH304	1/16	3/32	2	5 1/2	•
SGDEH306	3/32	1/8	3	6 1/2	•
SGDEH307	7/64	3/16	3	6 1/2	•
SGDEH315	1.5 mm	3/32	2	5 1/2	•
SGDEH320	2.0 mm (5/64)	3/32	2	5 1/2	•
SGDEH325	2.5 mm	3/32	3	6 1/2	•
SGDEH330	3.0 mm	3/16	3	6 1/2	•

Blow molded case included.



# **Electronic Thin Blade**

• Recessed ends for fingertip pressure

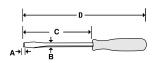
	go.up process								
Stock No.	A	В	C	D					
SSDE42C	.018 x <sup>1</sup> / <sub>8</sub>	1/8	2	5 <sup>5</sup> /16					
SSDE43C	.018 x <sup>1</sup> / <sub>8</sub>	1/8	3	6 <sup>5</sup> /16					
SSDE44C	.018 x <sup>1</sup> / <sub>8</sub>	1/8	4	7 <sup>5</sup> /16					
SSDE46C	.018 x <sup>1</sup> / <sub>8</sub>	1/8	6	9 5/16					
SSDE48C	.018 x <sup>1</sup> / <sub>8</sub>	1/8	8	11 <sup>5</sup> /16					
SSDE63C	.030 x <sup>3</sup> /16	3/16	3	9 9/16					
SSDE64C	.028 x <sup>3</sup> / <sub>16</sub>	3/16	4	7 9/16					
SSDE66C	.030 x <sup>3</sup> /16	3/16	6	6 <sup>9</sup> /16					
SSDE68C	.028 x 3/16	3/16	8	<b>11</b> 9/16					
SSDE610C	.030 x <sup>3</sup> /16	3/16	10	13 <sup>9</sup> /16					
SSDEP30C	#0	1/8	3	6 3/8					
SSDEP31C	#1	3/16	3	6 5/8					
SSDEP60C	#0	1/8	6	9 3/8					
SSDEP61C	#1	3/16	6	9 5/8					



### SSDE33C

# **Potentiometer Adjuster**

Stock No.	A	В	C	D
SSDE33C	.015 x <sup>3</sup> / <sub>32</sub>	3/32	3	5 <sup>9</sup> /16





Torx®			Set Contair	SGD <sub>E</sub>	1/10				
Stock No.	A	В	C	D					
SGDET26	T6	1/8	2	5 1/2	•				
SGDET27	T7	1/8	2	5 1/2	•				
SGDET28	T8	1/8	2	5 1/2	•				
SGDET29	T9	1/8	2	5 1/2	•				
SGDET210	T10	1/8	2	5 1/2	•				
SGDET215	T15	3/16	3	6 1/2	•				
SGDET220	T20	3/16	3	6 1/2	•				
Blow molded case included.									

### **Electronic Service**

Stock No.

SGDEL8

SGDEL10

SGDELP8

SGDELP10

# • Extra long shanks for improved reach

- Small diameter shanks provide excellent clearance in tight applications
- · Rotating handle mechanism for easy turning, important when working on detailed electronics work

В

1/8

3/16

1/8

3/16

C

8

10

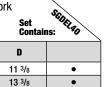
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• Bimold handle for a comfortable, nonslip gripping surface

#0

#1



11 3/8

13 3/8

•

•



SGDEL40

# Pozidriv® Instinct® Hard Handle



### Pozidriv/Hard Instinct Handle

- Walls on tips are less tapered than Phillips® tips
- Tips have wedges for a tight fit on Pozidriv fasteners
- Phillips tip drivers should not be used on Pozidriv fasteners (and vice versa), as they will ride out of the recess and round tool and screw recess corners



Stock No.	A	В	C	D	
SHDZ22R	#2	1/4	1 1/2	3 3/4	
SHDZ31R	#1	<sup>3</sup> / <sub>16</sub>	3	7 1/4	•
SHDZ42R	#2	1/4	4	8 7/8	•
SHDZ63R	#3	<sup>5</sup> /16	6	10 <sup>7</sup> /8	•
SHDZ84R	#4	3/8	8	13 <sup>7</sup> / <sub>16</sub>	•



# *Torx* Tip/*Instinct* Soft Handle



### Torx Standard

• Designed for internal type *Torx* fasteners used in automotive and appliance industries

			Set Contain	ıs:	1908A	508A
Stock No.	A	В	C	D		
SGDTX38BR	T8	3/16	3	7 1/4	•	
SGDTX310BR	T10	3/16	3	7 1/4	•	
SGDTX315BR	T15	3/16	3	7 1/4	•	•
SGDTX320BR	T20	3/16	3	7 1/4	•	•
SGDTX425BR	T25	1/4	4	8 7/8	•	•
SGDTX427BR	T27	1/4	4	8 7/8	•	•
SGDTX430BR	T30	1/4	4	8 7/8	•	•
SGDTX640BR	T40	5/16	6	10 <sup>7</sup> /8	•	
SGDTX645BR	T45	<sup>5</sup> /16	6	10 <sup>7</sup> /8	•	



SGDTX90BR









- Do not use screwdrivers as prybars, chisels or punches
- Read safety precautions on pages W1 to W4

# Torx® Tip/Instinct® Soft Handle







SGTX40BR

**Torx** Mini Tip

Stock No.

SGDT308BR

SGDT308BG

SGDT308B0

SGDT310BR

SGDT310BG

SGDT310B0

SGDT315BR SGDT315BG

SGDT315B0

SGDT320BR

SGDT320BG

SGDT320B0

 Designed for internal type Torx fasteners used in automotive and appliance industries

Color

Red

Green

Orange

Red

Green

**Orange** 

Green

**Orange** 

Red

Green

**Orange** 

Contains: OBA VBO VBC							
A	В	C	D				
T8	3/16	3	5 7/8	•			
T8	3/16	3	5 7/8			•	
T8	3/16	3	5 7/8		•		
T10	3/16	3	5 7/8	•			
T10	3/16	3	5 <sup>7</sup> /8			•	
T10	3/16	3	5 7/8		•		
T15	3/16	3	5 <sup>7</sup> /8	•			
T15	3/16	3	5 7/8			•	
T15	3/16	3	5 7/8		•		
T20	3/16	3	5 7/8	•			
T20	3/16	3	5 7/8			•	

5 7/8

 Tamper Resistant
 Hole in the end of each bit tip fits over center peg in *Torx* tamper resistant fasteners

er	Set Contains:						
	C	D					
	3	7 1/4	•				
	3	7 1/4	•				

Red	A	В	C	D	
SGDTRX315BR	T15	3/16	3	7 1/4	•
SGDTRX320BR	T20	3/16	3	7 1/4	•
SGDTRX425BR	T25	3/16	4	8 7/8	•
SGDTRX427BR	T27	7/32	4	8 7/8	•
SGDTRX430BR	T30	1/4	4	8 7/8	•



T20 3/16 3

SGDTRXL70BR

# Tamper Resistant/Long

 Hole in the end of each bit tip fits over center peg in *Torx* tamper resistant fasteners

Applications:

VW®/Audi® door and interior trim plus headlight assemblies. GM® e sensors/components and steering column multiswitches.	Set Conta	SGDTRAL 70	Zen Zen		
Red	A	В	C	D	
SGDTRX608BR	T8	3/16	6	10	•
SGDTRX610BR	T10	3/16	6	10	•
SGDTRX615BR	T15	3/16	6	10	•
SGDTRX620BR	T20	3/16	6	10	•
SGDTRX825BR	T25	1/4	8	12 <sup>3</sup> / <sub>4</sub>	•
SGDTRX827BR	T27	1/4	8	12 <sup>3</sup> / <sub>4</sub>	•
SGDTRX830BR	T30	1/4	8	12 <sup>3</sup> / <sub>4</sub>	•



SGTRXL40BR

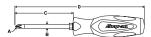
# Tamper Resistant/Mini Tip

· Hole in the end of each bit tip fits over center peg in *Torx* tamper resistant fasteners

Applications:

VW/Audi door and interior trim panels plus headlight assemblies.

Contains:				"	
Red	A	В	C	D	
SGDTR608B	T8	3/16	6	8 7/8	•
SGDTR610B	T10	3/16	6	8 7/8	•
SGDTR615B	T15	3/16	6	8 7/8	•
SGDTR620B	T20	3/16	6	8 7/8	•



# Torx® Tip/Instinct® Hard Handle

# Torx Standard Stock No.

SHDTX380

SHDTX3100

SHDTX3150

SHDTX3200

SHDTX4250

SHDTX4270

**SHDTX4300** 

SHDTX6400

SHDTX6450

A

**T8** 

T10

T15

T20

T25

T27

T30

T40

T45

5/16

5/16

Set Contains:						
В	C	D				
3/16	3	7 1/4	•			
3/16	3	7 1/4	•			
3/16	3	7 1/4	•			
3/16	3	7 1/4	•			
1/4	4	8 7/8	•			
1/4	4	8 7/8	•			
1/4	4	8 7/8	•			

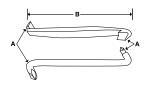
**10** 7/8

10 <sup>7</sup>/8

Su



# **Special Application**





6

6

ST50A







S6189

Dzus® Fastener • For Dzus type fasteners used in aircraft and auto racing applications

<b>4</b> 70 011300301	70 Oliset Scientificis					
Stock No.	Tip	A	В			
120SSDP	Phillips	#1 and #2	4 3/4	•		
340SSDP	Phillips	#3 and #4	6	•		
10SSD	Flat Tip	.040 x 1/4	4	•		
20SSD	Flat Tip	.050 x 5/16	4 11/16	•		
30SSD	Flat Tip	.060 x 3/8	5 1/2	•		

Stock No.	Tip Thickness, inches	Tip Width, inches	Blade Length, inches	Length, inches
S6180	.05	1/2	2	6 13/32
S6189	.032	19/64	2	5 3/4



90° Offset Screwdrivers

CM6551

SDDD41

### **Reversible Blade Screwdriver and Sets** SDDD101 Reversible Blade Screwdriver Set.

SDDD101

- Includes 4 reversible bits for 8 different tip sizes: 1/4 and 3/16" flat tip, #1 and #2 Phillips tip, T15, T20, T25 and T30 Torx tip
- Individual 1/4 and 5/16" nut drivers
- ASME® B107
- · Durable, classic hard handle is textured for a sure grip

### **SDDD41 Reversible Blade** Screwdriver Set.

- Includes 2 reversible bits for 4 different tip sizes: 9/32 and 13/64" flat tip, #1 and #2 Phillips tip
- ASME B107
- · Durable, classic hard handle is textured for a sure grip

### Miniature Screwdriver/Awl Set CM6551 Miniature Screwdriver Set.

- Includes 4 blades in the following flat tip sizes: .055, .070, .080 and .100"
- Includes awl and plastic pouch









- Do not use screwdrivers as prybars, chisels or punches
- Read safety precautions on pages W1 to W2

# **Special Application**



### Pop up Screwdriver and Diamond Bits SGDQ6 Pop up Screwdriver.

- Easy to use, spring loaded shank can adjust to different lengths for clearance as well as compact storage. (Approximately 6 1/2" and 8 1/2" lengths)
- Shank can be fully released to allow use with cordless drills
- Highly engineered collet incorporates both a magnetic and mechanical locking system to securely hold bits
- Rotating collet sleeve for "spinning" when quickly setting/removing fasteners
- INSTINCT® handle provides maximum turning power and greater comfort
- Diamond particles in bits "bite" into fasteners which minimizes stripping
- · Diamond bits are extremely hard for long lasting performance and
- Can accept all conventional 1/4" hex shank insert and power bits SGDQ16KT Pop up Screwdriver Kit.

Kit includes: SGDQ6 Pop up Screwdriver, SDMD221 through SDMD223 Phillips® Diamond Bits (#1, #2, #3), SDMD213 Flat Tip Diamond Bit, SDMDT10 through SDMDT30 TORX® Diamond Bits (T10 to T30) and SDMD321 through SDMD323 Power Phillips Diamond Bits (#1, #2, #3) in PAKSC062 Nylon Pouch.

PAKSC062 Nylon Pouch.



### Square Tip

- Square tip screwdrivers offer excellent fastener engagement
- Tips are precision cut and vapor blasted for optimal grip
- Intended for use on #3 through #12 square tip fasteners

Set Contaiı	1S: ODRAID
C	D
3	6 21/32
3	6 21/32
1	Q 13/22

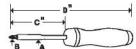
			- Olitan	
Stock No.	Color	Tip	C	D
SDDR0B30Y	Yellow	#0	3	6 21/32
SDDR0B31G	Green	#1	3	6 21/32
SDDR0B42R	Red	#2	4	8 13/32
SDDR0B43	Black	#3	4	8 13/32

# Ratcheting Screwdrivers (Blue-Point®) -



# **BSGDMR6** Ratcheting Screwdriver

- 45 tooth ratcheting mechanism ensures precise positioning and movement
- Bits are stored in a bit magazine inside the handle
- Includes 6 1/4" hex bits: flat tip (4.5 and 5.5), Phillips (#1 and #2) plus Torx (T15 and T20)
- · Bits are considered a consumable and carry no warranty



# **Ratcheting/Hard Handle**

Red, orange or green - pick your preference with a complete screwdriver from the Soft Grip Ratcheting Screwdriver System. Perfectly matched combinations of magnetic bit holding shanks and handles means a perfect match to the technician's particular requirements.

### All Handles

- . Soft, solvent resistant cover material to provide a positive gripping surface
- "Thumbs up" forward/reverse lever for quick directional changes
- · High quality stainless steel shanks with knurling
- · Contoured thumb stop at base of handle helps user apply maximum pressure to the fastener
- · Smooth ratcheting mechanism
- Use with any SGDMRC series interchangeable blades and shanks
- Ergonomic handle shape provides comfort and control (design patent D421,888)
- Comfort crown of handle cap provides low friction surface for palm while turning

### Standard Handle

- · Cap functions as a bit holder when working in tight quarters
- Handle stores up to 10 bits

### 5 Position Soft Grip

- Features 0°, 30° and 60° locking positions at the push of a button (U.S. patent 7,213,491 -Ratcheting Tool; U.S. Patent 7,481,135 - Hand Tool with Adjustable Head)
- · Designed for right or left hand operation
- · Ergonomic handle shape provides comfort and control (design patent D421,888)
- · Cap functions as a bit holder for storage of up to 7 bits
- TransDrive<sup>™</sup> ratchet mechanism provides twice the strength of previous mechanism (U.S. Patent 7213491)













# **Ratcheting Soft Grip**

	Stock No.	Handle	Shank	Flat Tip Bit	Phillips® Bit	C	D
5-Position	SGDMRCE44	SGDMRCE4	SGDMRC1-10	SDM213B	SDM222IRB	2 5/8	8 1/2
Standard	SGDMRC44B	SGDMRC4	SGDMRC4-40	SDM213B	SDM222IRB	3 7/8	9 3/4
Stubby	SGDMRC11A	SGDMRCA1	SGDMRC1-10	_	_	2	4 1/2

Soft grip ratcheting screwdriver features a nonmagnetic, fixed steel shank plus bit ring retainer, making the SGDR44C ideal for FOD, avionic and electronic applications. Includes one flat tip and one Phillips'



### **Handles**

Stock No.	Handle	Color	A
SGDMRC1A Stubby		Red	2 5/8
SGDMRC1A0	Stubby	Orange	2 5/8
SGDMRC1AG	Stubby	Green	2 5/8
SGDMRC4A Standard		Red	6
SGDMRC4AO Standard		Orange	6
SGDMRC4AG	Standard	Green	6
SGDMRCE4	5 Position	Red	5 7/8
SGDMRCE40	5 Position	Orange	5 <sup>7</sup> /8
SGDMRCE4G	5 Position	Green	5 7/8











SGDMRC1A

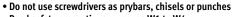
SGDMRC4AO SGDMRCE4G











• Read safety precautions on pages W1 to W4

### **Ratcheting/Hard Handle**



### Standard Handle

Stock No.	Handle	Color	C	D
SSDMR4B	Standard	Black	3 25/32	8 3/4
SSDMR4B0	Standard	Orange	3 25/32	8 3/4

Stock No.	Handle	Color	C	D
SSDMR1A	Stubby	Black	1 <sup>15</sup> /16	4 5/16
SSDMR1A0	Stubby	Orange	1 15/16	4 5/16

Includes SDM211B (3/16") and SDM213B (9/32") flat tip bits, SDM221IRB (#1) SDM222IRB (#2) Phillips® ACR® bits and 221, 222 and 223 (#3) Phillips ACR SDM223IRB

RKSDR1 Service Kit. Order for servicing all the above drivers.

Stock No. Handle		Color	C	D
SSDMR8A	Long	Black	7 7/16	12 <sup>15</sup> / <sub>16</sub>
SSDMR8A0	Long	Orange	7 7/16	12 <sup>15</sup> / <sub>16</sub>

### T-Handle

Stock No.	Handle	Color	A	В
SSDMRT4R	Standard	Red	3 7/8	5 27/32
SSDMRT40	Standard	Orange	3 7/8	5 <sup>27</sup> / <sub>32</sub>

Stock No.	Handle	Color	A	В
SSDMRT1R	Stubby	Red	2	3 <sup>15</sup> /16
SSDMRT10	Stubby	Orange	2	3 <sup>15</sup> / <sub>16</sub>

Stock No.	Handle	Color	A	В
SSDMRT8A	Long	Black	8	10

Includes the following bit: SDM222IRB #2 Phillips ACR

RKRSSDMR4AC Service Kit. Order for servicing all the above drivers.

# **Interchangeable Shanks**

- · Use with handles in the soft grip ratcheting screwdriver system
- Neodymium magnet in shank holds bit securely (U.S. Patent RE36,797)
- 1/4" square drive shanks in standard and flexible styles allow attachment of a wide range of 1/4" drive sockets and accessories

Stock No.	Description	C	D
SGDMRC1-10	Magnetic Bit Holder	3 1/4	2
SGDMRC4-40	Magnetic Bit Holder	5	3 3/4
SGDMRC4-80	Magnetic Bit Holder	9	7 3/4
SGDMRC4-TM4	1/4" Sq. Dr. Shank		3 3/4
SGDMRC4-TMF4	Flexible 1/4" Sq. Dr. Shank		5
SGDMRC4-C6	Composite (Nonconductive) 7 1/4 Magnetic Bit Holder		6
SGDMRC-SP	1/4" Speeder Shank	13	

### SGDMRC-SP Speeder Shank.

 Ideal for aviation technicians and other applications where accessibility is limited



# **Ratcheting/Screwdriver Sets**



### **Soft Grip Ratcheting Screwdriver Sets**

 SGDMRC starter sets include standard handle, medium and long magnetic bit holding shanks plus 2 flat tip bits, 2 Phillips® bits and one Torx® bit to meet most basic job requirements

### SGDMRC103A Red Ratcheting **Screwdriver Set**

	T .		
Stock No.	Description		
SGDMRC4	Ratcheting Handle		
SGDMRC4-40	Magnetic Shank/Bit Holder		
SGDMRC4-80	Magnetic Shank/Bit Holder		
SDM211B	3/16" Flat Tip Bit		
SDM213B	9/32" Flat Tip Bit		
SDM221IRB	#1 Phillips ACR bit		
SDM222IRB	#2 Phillips ACR bit		
SDMT15D	T15 Torx bit		
PB146A	Storage Case		

### SGDMRC103AO Orange Ratcheting Screwdriver Set.

• Same as SGDMRC103A set except has SGDMRC40 orange ratcheting handle

### SGDMRC103AG Green Ratcheting Screwdriver Set.

 Same as SGDMRC103A set except has SGDMRC4AG green ratcheting handle



### Torx Bit Set

### DHW1 Reversible Ratcheting Bit Wrench (Blue-Point®).

- Overall length: 10.75" (273 mm)
- Low head clearance for access to tight spots
- Internal ring in square drive provides more secure bit retention than magnetic models

Stock No.	Description	Size
SDMTAS15	T15 Torx Bit	5/16" Hex Size
SDMTAS20	T20 Torx Bit	5/16" Hex Size
SDMTAS25	T25 Torx Bit	5/16" Hex Size
SDMTAS27	T27 Torx Bit	5/16" Hex Size
SDMTAS30	T30 Torx Bit	5/16" Hex Size
SDMTAS40	T40 Torx Bit	5/16" Hex Size
SDMTAS45	T45 Torx Bit	5/16" Hex Size

### SHORTORX Bit Set (Blue-Point).

BMW®: Under dash and sensors in engine compartment. Cadillac®: Water pumps; Cadillac CTS, 3.2 L, 2003-2004/Cadillac Catera 3.0 L, 1997 to 2001: oil drain plug; Ford® Escort, early model: Door hinge bolts; GM®: Fender applications; Jeep® Cherokee, 1997 to 1998: Door hinge bolts; VW®, prior to 1999: Exterior and interior door hinge bolts.



### SGDMRC108AO

### SGDMRC108AO Orange Master **Ratcheting Screwdriver Set**

Stock No.	Description		
SGDMRC1	Ratcheting Handle		
SGDMRC4	Ratcheting Handle		
SGDMRC1-10	Magnetic Shank/Bit Holder		
SGDMRC4-40	Magnetic Shank/Bit Holder		
SGDMRC4-80	Magnetic Shank/Bit Holder		
SGDMRC4-TM4	1/4" Drive Shank		
SDM400A	Master Bit Kit		
PB146A	Storage Case		

### SGDMRC108A Red Ratcheting Screwdriver Set.

 Same as SGDMRC108AO set except has SGDMRC1A and SGDMRC4A ratcheting handles

### SGDMRC108AG Green Ratcheting Screwdriver Set.

 Same as SGDMRC108A set except has SGDMRC1AG and SGDMRC4AG green ratcheting handles

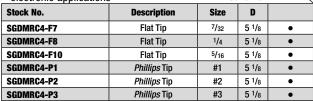


### SGDMRC60

# Interchangeable Blades

 Nonmagnetic blade is ideal for electronic applications

Se Co	MACEO	
Size	D	
7/32	5 <sup>1</sup> /8	•
1/4	5 <sup>1</sup> /8	•
5/16	5 <sup>1</sup> /8	•
#1	5 <sup>1</sup> /8	•
_		





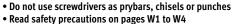
**SHORTORX** 











### **Ratcheting Screwdriver Sets**



# Magnetic Ratchet and Bit Set

### TM936SET Magnetic Bit and Ratchet Set.

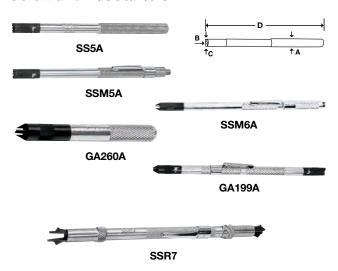
- Ideal for accessing fasteners in tight areas
- Ratchet in set features magnetic retention for 1/4" hex bits
- SDM211B (3/16")
- SDM213B (9/32") flat tip bits
- SDM221IRB (#1) and SDM222IRB (#2) Phillips® ACR® bits
- SDMT15D (T15) Torx® bit

Stock No.	0	O <sub>5</sub>	A	В	C	D
TM936SET	30	12º	7/16	27/32	1 3/4	4 1/2

### RKRTM936 Ratchet Repair Kit.

Repair kit for TM936 ratchet.

### **Screw and Nut Starters**



### Aluminum Starters

- Spring loaded steel bits grip screw slot wall to withstand an 8 lb pull
- Bits release automatically when applied torque reaches a certain level

Stock No.	A	B C		D
SS5A	5/16	Flat Tip	.032 x <sup>9</sup> / <sub>32</sub>	5
SSM3*	5/16	Flat Tip	.032 x <sup>9</sup> / <sub>32</sub>	2 1/2
SSM5A*	5/16	Flat Tip .032 x 9/32		5 1/4
SSM6A*	9/32	Phillips	#3	5 1/2
GA260A	9/32	Phillips	#2	2 5/8
GA261B	9/32	Phillips #3		5 5/8
GA199A	9/32	Combination .032 x 9/32, #2		5 7/8

<sup>\*</sup>Aluminum handle with magnet.

### SSR7 Recessed Screw and Nut Starter.

- Round aluminum body with knurled gripping area in center
- · Designed to accommodate the most popular sizes of recessed screws: Torx, Socket Head, Phillips, etc.
- Opposite end handles #3, #4, #6, #8 and #10 nuts
- Overall length is 6 3/4"

# Ratcheting Bit Wrenches (Blue-Point®)



**YA480B** 

### YA480B Right Angle Ratcheting

Screwdriver. Includes one each:

• Flat Tip, #2 Phillips, #2 Pozidriv® bits **BTWSMPK Miniature Ratcheting** 

### Handle Set. Includes:

- . BTWSM, BTWOS and BTWROS mini ratcheting handles
- SDM213B (9/32") flat tip bit
  SDM213B (9/32") flat tip bit
- SDM221IRB (#1)
- SDM222IRB (#2) Phillips ACR bits
- SDMT150D (T15) *Torx* bit



### **BTWSMPK**

### **BTWOSK Miniature Ratcheting** Handle Set. Includes:

- . BTWOS mini ratcheting handle
- SDM213B (9/32") flat tip bit
- SDM221IRB (#1)
- SDM222IRB (#2) Phillips ACR bits
- SDMT150D (T15) *Torx* bit

### **BTWS Miniature Ratcheting**

Handle. Straight.

**BTWOS Miniature Ratcheting** 

Handle, 25° Offset.



**BTWOSK** 

### **BTWROS Miniature Ratcheting**

Handle. 25° Reverse Offset.

### Miniature Ratcheting Handle Features:

- 72 tooth ratchet engagement with only 5° movement to engage the next tooth
- 25° offset handles help avoid knuckle injuries
- · Magnetic holder keeps bits in place

**Nut Drivers** 



NDDM1070

# Hard Handle, mm



mm <u>Ţ</u>	Stock No.	<b>A</b> *	В	
6	NDDM60	7.5	169.1	•
7	NDDM70	9.1	169.1	•
8	NDDM80	9.9	169.1	•
9	NDDM90	9.9	188.0	•
10	NDDM100	13.1	188.0	•
11	NDDM110	13.1	188.0	•
12	NDDM120	13.1	202	•

\*Socket Length



**NDD1070A** Hard Handle, inches

	10070704 ins:
Set	10%
Conta	ins: 🌂

<b>□</b> Ţ	Stock No.	Color	<b>A</b> *	В	
1/4	NDD108AR	Red	19/64	6 21/32	•
9/32	NDD109A0	Orange	23/64	6 21/32	•
5/16	NDD110AY	Yellow	23/64	6 21/32	•
11/32	NDD111AG	Green	25/64	6 21/32	•
3/8	NDD112AB	Blue	25/64	7 13/32	•
7/16	NDD114ABR	Brown	33/64	7 13/32	•
1/2	NDD116AR	Red	33/64	7 <sup>15</sup> /16	•

<sup>\*</sup>Socket Length

# Locking Nut Drivers (Blue-Point®) • Tools lock onto hex screws

- · Great for hose clamp and other hard to reach applications



Stock No.	Size	Length		
NDL1410	1/4	10	•	
NDL51610	5/16	10	•	
NDLM610	6 mm	10		•
NDLM710	7 mm	10		•

# Ergonomic Soft Grip Handle, inches



	Stock No.	Handle Color	Length	
1/2	NDSG12	Red	6 3/8	•
1/4	NDSG14	Red	6 3/8	•
3/8	NDSG38	Red	6 3/8	•
5/16	NDSG516	Red	6 3/8	•
7/16	NDSG716	Red	6 3/8	•
9/32	NDSG932	Red	6 3/8	•

# **Ergonomic Soft** Grip Handle, mm



<b>mm</b> ]	Stock No.	Handle Color	Length	
7	NDSGM7	Blue	160	•
8	NDSGM8	Blue	160	•
10	NDSGM10	Blue	160	•
12	NDSGM12	Blue	160	•
13	NDSGM13	Blue	160	•
14	NDSGM14	Rlue	160	•









- Do not use screwdrivers as prybars, chisels or punches
- Read safety precautions on pages W1 to W4







### **Bit Sets**

# Master Bit Set (1/4" Hex) SDM400A Master Bit Kit.

- 37 pc set
- 1/4" hex shank bits

- SDM400A
- SDM11 magnetic insert bit holder for quick hex bit changes when using cordless drill or screw gun
- TMBS8A 1/4" hex magnetic socket for use with 1/4" drive handles
- GMB3042 1/4" power hex to square adaptor

Includes all bits below:

Includes all bits below		
	Stock No.	<b>#</b> -Ţ
Flat Tip Bit	SDM211B	.031 x .187
	SDM212B	.035 x .219
	SDM213B	.038 x .250
	SDM214C	.046 x .312
	SDM215C	.055 x .375
Hex Bit	SDM2704D	1/16
	SDM2705D	5/64
	SDM2706D	3/32
	SDM2707D	7/64
	SDM2708D	1/8
	SDM2709D	9/64
	SDM2710D	5/32
	SDM2712D	3/16
	SDM2714D	7/32
	SDM2716D	1/4
Phillips ACR Bit	SDM221IRB	#1
	SDM222IRB	#2
	SDM223IRB	#3
<i>Torx</i> Bit	SDMT8D	T8
	SDMT9D	T9
	SDMT10D	T10
	SDMT15D	T15
	SDMT20D	T20
	SDMT25D	T25
	SDMT27D	T27
	SDMT30D	T30
	SDMT40D	T40
Pozidriv ACR Bit	SDM251IRC	#1
	SDM252IRB	#2
	SDM253IRC	#3
Scrulox Bit	BTS0	#0
	BTS1	#1
	BTS2	#2
	BTS3	#3

### SDMC8 Kit.

 Case is designed to fit the shank of Snap-on® ratcheting screwdriver allowing the tools to be stored together

 Indexable tray has good bit spacing and pivots up to make bit selection/removal easy

•	•
Stock No.	Description
SDMC8P	Bit Set, 8 pc Combo Blk
SDMC8H	Bit Set, 8 pc Hex Blk
SDMC8MH	Bit Set, 8 pc Met Hex Blk
SDMC8T	Bit Set, Torx Blk
SDMC8D	Bit Set, Diamond Combo Blk





### Ball Hex Bit Sets (1/4" Hex) SDM32KT Ball Hex Set (Blue-Point®).

- 1/4" shank bits for use in difficult access applications where fastener cannot be approached straight on
- 32 pc set

	Stock No.	##_Ţ
Metric	SDMBMH2702	2 mm
	SDMBMH2702.5	2.5 mm
	SDMBMH2703	3 mm
	SDMBMH2704	4 mm
	SDMBMH2705	5 mm
	SDMBMH2706	6 mm
	SDMBMH2707	7 mm
	SDMBMH2708	8 mm
	SDMBMH2709	9 mm
	SDMBMH2710	10 mm
Fractional	SDMBH2706	3/32
	SDMBH2707	7/64
	SDMBH2708	1/8
	SDMBH2709	9/64
	SDMBH2710	5/32
	SDMBH2712	3/16
	SDMBH2714	7/32
	SDMBH2716	1/4
	SDMBH2720	5/16
	SDMBH2724	3/8
Torx	SDMBT10	T10
	SDMBT15	T15
	SDMBT20	T20
	SDMBT25	T25
	SDMBT27	T27
	SDMBT30	T30
	SDMBT40	T40
	SDMBT45	T45
	SDMBT50	T50
	SDMBT55	T55
Bit Holder	SDM13	_
1/4" Fem Hex to 1/4"Fem Sq Dr. Adaptor	TMBS108	_



### SDM11KT Torx Ball Hex Set (Blue-Point).

- 1/4" shank bits for use in difficult access applications where fastener cannot be approached straight on
- 11 pc set
- · All components store in case with belt clip

	Stock No.	#1
Torx	SDMBT10	T10
	SDMBT15	T15
	SDMBT20	T20
	SDMBT25	T25
	SDMBT27	T27
	SDMBT30	T30
	SDMBT40	T40
	SDMBT45	T45
	SDMBT50	T50
Bit Holder	SDM13	_
1/4" Fem Hex to 1/4" Fem Sq Dr Adaptor	TBMS108	_

### **Bit Sets**



YA52PBSQC

### YA52PBSQC Power Bit Set (Blue-Point®).

- · Ideal for use with cordless drills and screwdrivers Includes:
- 49 1/4" hex shank bits in short and long lengths
- · 2 hex adaptors
- · Quick change chuck and convenient storage case
- Flat tip bits (Short): 5-6, 6-8, 8-10 (2 each), 10-12
- Flat tip bits (Long): 6-8, 8-10, 10-12
- Hex bits (Short): 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 9/32"
- Hex bits (Long): 5/32, 3/16, 7/32"
- Phillips® tip bits (Short): #1, #2 (2 each), #3
- Phillips tip bits (Long): #1, #2, #3
- Tamper resistant Torx® bits (Short and Long): T10, T15, T20, T25, T27, T30, T40
- Square bits (Short and Long): #1, #2, #3
- Clutch bits (Short and Long): 5/32, 3/16",
- Double end Bits: 6-8 x #2 Phillips, 8-10 x #3 Phillips
- Adaptors: 1/4" hex female to 1/4" hex female, 1/4" hex male to 1/4" square male, 1/4" hex Quick Change Chuck.

All bit quantities shown are (1) each unless otherwise indicated.



SDML19KT

### SDML19KT Long Power Bit Set.

- · Includes an assortment of popular sized bits to cover a wide range of applications
- Helps avoid costly damage to work surface by eliminating chuck contact Includes:
- 4 flat tip bits (2) 3" long, (2) 6" long
- 6 Phillips bits (3) 2 3/4" long, (3) 6" long
- 8 Torx bits (4) 2 3/4" long, (4) 6" long
- TMC109A quick change coupler



SDMEXT19K

### SDMEXT19K Adaptor and Bit Set.

- Complete set includes the most popular sizes and lengths of extensions, adaptors and bits
- 1/4" hex to 1/4" or 3/8" square drives hex to square adaptors for use with sockets (2 and 6" long)
- · Magnetic bit holder for use with insert bits and quick change coupler for use with 1/4" hex power bits

### Includes:

- 3 flat tip
- 3 Phillips
- 3 Phillips insert bits
- 3 Torx power bits

### **Magnetic Insert Bit Holders** SDM11.

- For quick hex bit changes when used with electric drill or screw gun
- . Magnetic and lock ring bit retention
- 2 7/8" long

### SDM12.

- Similar to SDM11 but features lock ring retention only
- 1 1/8" long

### SSDM10A.

- · Pocket sized storage system for SDM series bits
- Includes quick change bit holder

### SSDM28.

- Holds (8) 5/16" and (18) 1/4" hex bits
- 5 clips slide on rail to easily access bit
- . Magnets on base of holder for attachment to any ferrous metal surface
- Plastic material helps protect finished surface from scratches







# **Magnetic Screwdriver Bit Sockets**

• For use with standard 1/4" hex SDM series screwdriver bits

Stock No.	Description
TMBS8A	1/4" hex opening, 1/4" drive.
GTMBS8A	1/4" hex opening, 1/4" drive. Black industrial finish.
TMUBS8	1/4" hex opening, 1/4" drive.
FBSM8A	1/4" hex opening, 3/8" drive.

### **Screwdriver Bits and Accessories**

# Snap-on. SSDM10A

SSDM10A



FBS8



SDM11



CFSSB8

### Screwdriver Bit Sockets

• For use with standard 1/4" hex SDM series screwdriver bits

Stock No.	Description
FBS8	3/8" Drive, Socket for 1/4" Hex Shanks.
FBS9	3/8" Drive, Socket for 5/16" Hex Shanks.
CFSSB8	Insulating universal bit socket. 1/4" hex opening, 3/8" drive.

### Screwdriver Bit Holders TMC109A Quick Change Coupler.

- Use with any 1/4" drive handle
- Spring release shell retracts to accept 1/4" hex power type bits
- Ideal for production situations where positive bit retention is required
- Industrial finish







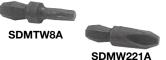


- Do not use screwdrivers as prybars, chisels or punches
- Read safety precautions on pages W1 to W4

# 1/4" Hex Shank Bits

	Stock No.	#
	SDM211B**	.031" x .187"
Flat Tip	SDM212B**	.035" x .219"
Anvelop 1	SDM213B**	.038" x .250"
	SDM214C**	.046" x .312"
	SDM215C**	.055" x .375"
	SDM221C	#1
Phillips	SDM222ZB	#2
	SDM222CZ*	#2
	SDM223C	#3
Reed & Prince	SDM231A	#2
	SDM242	3/32"
Clutch A	SDM243	1/8"
	SDM244	5/32"
	SDM245	3/16"
	SDM246	1/4"
	SDM247	5/16"
Clutch G	SDM242G	3/32"
Ciutch G	SDM243G	1/8"
	SDM244G	5/32"
4	SDM245G	3/16"
	SDM246G	1/4"
	SDM2704D**	1/16"
Hex, inches	SDM2705D**	5/64"
	SDM2706D**	3/32"
	SDM2707D**	7/64"
	SDM2708D**	1/8"
	SDM2709D**	9/64"
	SDM2710D**	5/32"
	SDM2712D**	3/16"
	SDM2714D**	7/32"
	SDM2716D**	1/4"
	SDM2720D	5/16"
	SDM2724D	3/8"
<b>A</b>	SDMM2702B	2 mm
Hex, mm	SDMM2702.5B	2.5 mm
	SDMM2703B	3 mm
	SDMM2704C	4 mm
	SDMM2705C	5 mm
	SDMM2706C	6 mm
	SDMM2708B	8 mm
	SDMM2710B	10 mm
1	SDM251C**	#1
Pozidriv Pozidriv	SDM252C**	#2
-	SDM253C**	#3

<sup>\*</sup> small profile/narrow tip \*\* included as part of SDM400A Master Bit Set



# **Wobble Bits**

• Give up to an 18° angle of "wobble"

Stock No.	#∄
SDMTW8A	T8
SDMTW9A	T9
SDMTW10A	T10
SDMTW15A	T15
SDMTW20A	T20
SDMTW25A	T25
SDMTW27A	T27
SDMTW30A	T30
SDMTW40A	T40
SDMW221A	#1
SDMW222A	#2
SDMW223A	#3



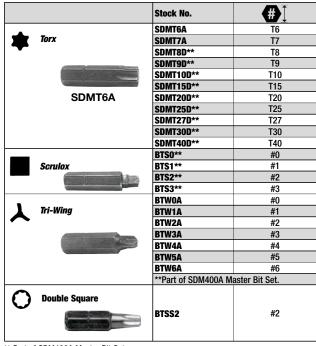
SDM221IRB

# ♣ Phillips ACR® Installer/Remover ♣ Anticamout ribs bite into fasteners and

help prevent camout

Stock No.	#∄
SDM221IRB***	#1
SDM222IRB***	#2
SDM223IRB***	#3

\*\*\* Part of SDM400A Master Bit Set.



- \*\* Part of SDM400A Master Bit Set
- BTS and BTSS Series bits can be used on recessed double square fasteners used on trailer and RV exteriors
- · Bit size varies by application

# **Tamper Resistant** *Torx*



Stock No.	##}
SDMTR8	T8
SDMTR10	T10
SDMTR15	T15
SDMTR20	T20
SDMTR25	T25
SDMTR27	T27
SDMTR30	T30
SDMTR40	T40
SDMTR45	T45
SDMTR50	T50

• Bits SDMTR8 through SDMTR40 are all 1/4", bits SDMTR45 and SDMTR50 are 5/16"



SDM252IRB

# \* Pozidriv ACR Installer/Remover • Anticamout ribs bite into fasteners and

help prevent camout

Stock No.	<b>#</b> ]
SDM251IRC***	#1
SDM252IRB***	#2
SDM253IRC***	#3

<sup>\*\*\*</sup>Part of SDM400A Master Bit Set.

# 1/4" Hex Shank Bits

- Diamond Tip Insert Bits
   Diamond particles "bite" into fasteners which minimizes slipping
- Diamond particles are extremely hard for long lasting performance and minimal wear

	Stock No.	<b>#</b> ]
	SDMD221	#1
Phillips®	SDMD222	#2
_	SDMD223	#3
	SDMD212	.8 mm/5.5 mm
Flat Tip	SDMD213	1 mm/5.5 mm
	SDMD214	1.2 mm/6.5 mm
	SDMDT10	T10
Torx®	SDMDT15	T15
	SDMDT20	T20
	SDMDT25	T25
	SDMDT30	T30
	SDMDT40	T40

# **Diamond Tip Power Bits**

	Stock No.	<b>#</b> -Ţ
Power Bit	SDMD321	#1
	SDMD322	#2
	SDMD323	#3

- Mortorq® Bits
   Typically used on aerospace applications
- Low profile head design, high strength torque acceptance and lighter weight

	Stock No.	<b>#</b> ]
Mortorq Mortorq	SDMMT00	#00
	SDMMTO	#0
	SDMMT1	#1
	SDMMT2	#2
	SDMMT3	#3

**Insert Bits** 

	Stock No.	<b>#</b> ]	<b>□</b> Ţ	Length
Torx	SDMTA40	T40	5/16	1 <sup>1</sup> / <sub>4</sub>
	SDMTA45	T45	5/16	1 1/4
	SDMTA50	T50	5/16	1 1/4
	SDMTA55	T55	5/16	1 1/4



SDMTA55

1/4" Hex Shank Bits (Blue-Point®)

# Bit Holder and 1/4" Bits

Dit ilotadi ai	= / . =				
Stock No.	Description	Size	Stock No.	Description	Size
BLPTMBS1414	Bit Holder (for 1/4" hex bits)	1/4"	BLPTB20TP	Tamper Resistant <i>Torx</i> Bit	T20
BLPTMBS3814	Bit Holder (for 1/4" hex bits)	3/8"	BLPTB25TP	Tamper Resistant Torx Bit	T25
BLPHB18	Hex Bit	1/8"	BLPTB30TP	Tamper Resistant Torx Bit	T30
BLPHB964	Hex Bit	9/64"	BLPFB532	Flat Tip Bit	5/32"
BLPHB532	Hex Bit	5/32"	BLPFB732	Flat Tip Bit	7/32"
BLPHB316	Hex Bit	3/16"	BLPFB932	Flat Tip Bit	9/32"
BLPHB732	Hex Bit	7/32"	BLPFB316	Flat Tip Bit	3/16"
BLPHB14	Hex Bit	1/4"	BLPFB14	Flat Tip Bit	1/4"
BLPHBM3	Metric Hex Bit	3 mm	BLPPB0	Phillips Tip Bit	#0
BLPHBM4	Metric Hex Bit	4 mm	BLPPB1	Phillips Tip Bit	#1
BLPHBM5	Metric Hex Bit	5 mm	BLPPB2	Phillips Tip Bit	#2
BLPHBM6	Metric Hex Bit	6 mm	BLPPB3	Phillips Tip Bit	#3
BLPTB10TP	Tamper Resistant Torx Bit	T10	BLPSQB1	Square Tip Bit	#1
BLPTB15TP	Tamper Resistant Torx Bit	T15	BLPSQB2	Square Tip Bit	#2



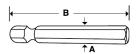
BLPTMBS1414







# **Power Bits**



	Stock No.	<b>#</b> ]		A	В
	SDM311B	.026" x .122"	1/4	.187	1 <sup>15</sup> / <sub>16</sub>
Flat Tip	SDM312B	.028" x .134"	1/4	.187	1 15/16
	SDM313B	.032" x .154"	1/4	.187	1 15/16
	SDM314B	.034" x .187"	1/4	.187	1 15/16
	SDM315A	.036" x .215"	1/4	.234	1 15/16
	SDM316A	.038" x .250"	1/4	.234	1 15/16
	SDM317A	.042" x .275"	1/4	.234	1 15/16
	SDM318A	.046" x .312"	1/4	.234	1 15/16
	SDM319A	.050" x .360"	1/4	.234	1 15/16
	SDM411B	.026" x .122"	1/4	.234	3
	SDM412B	.028" x .134"	1/4	.187	3
	SDM413B	.032" x .154"	1/4	.187	3
	SDM414A	.034" x .187"	1/4	.187	3
	SDM415A	.036" x .215"	1/4	.250	3
	SDM416A	.038" x .250"	1/4	.234	3
	SDM417A	.042" x .275"	1/4	.234	3
	SDM418A	.046" x .312"	1/4	.234	3
	SDM419A	.050" x .360"	1/4	.234	3
	SDM511A	.026" x .122"	1/4	.187	3 1/2
	SDM512A	.028" x .134"	1/4	.187	3 1/2
	SDM513A	.032" x .154"	1/4	.187	3 1/2
	SDM514A	.034" x .187"	1/4	.187	3 1/2
	SDM515A	.036" x .215"	1/4	.234	3 1/2
	SDM516A	.038" x .250"	1/4	.234	3 1/2
	SDM517A	.042" x .275"	1/4	.234	3 1/2
	SDM518A	.046" x .312"	1/4	.234	3 1/2
	SDM519A	.050" x .360"	1/4	.234	3 1/2
	SDM614	.034" x .187"	1/4	.187	6
	SDM616	.038" x .250"	1/4	.234	6

	Stock No.	<b>#</b> ]		A	В
Phillips ACR®	SDM361RA	#1	1/4	.187	<b>1</b> <sup>15</sup> /16
Removal Bits	SDM362RA	#2	1/4	.234	<b>1</b> <sup>15</sup> /16
	SDM363RA	#3	1/4	.234	<b>1</b> <sup>15</sup> / <sub>16</sub>

	Stock No.	<b>#</b> ₹		A	В
Phillips ACR	SDM361IA	#1	1/4	.187	<b>1</b> <sup>15</sup> / <sub>16</sub>
Installer Bits	SDM362IA	#2	1/4	.234	<b>1</b> <sup>15</sup> / <sub>16</sub>
	SDM363IA	#3	1/4	.234	<b>1</b> 15/16



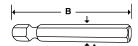
### SDM351B

# \* Pozidriv®, inches

Stock No.	<b>#</b> ]	<b>□</b> Ţ	A	В
SDM351B	#1	1/4	.187	1 <sup>15</sup> / <sub>16</sub>
SDM352B	#2	1/4	.234	1 <sup>15</sup> /16
SDM353B	#3	1/4	.234	1 <sup>15</sup> / <sub>16</sub>
SDM451A	#1	1/4	.187	2 3/4
SDM452A	#2	1/4	.234	2 3/4
SDM453A	#3	1/4	.234	2 3/4
SDM551A	#1	1/4	.187	3 1/2
SDM552A	#2	1/4	.234	3 1/2
SDM553A	#3	1/4	.234	3 1/2
SDM651A	#1	1/4	.187	6
SDM652A	#2	1/4	.234	6
SDM653A	#3	1/4	.234	6

	Stock No.	<b>#</b> ]		A	В
<b>A</b>	SDM220A	#0	1/4	_	1
Phillips®	SDM320A	#0	1/4	.125	1 <sup>15</sup> / <sub>16</sub>
	SDM321B	#1	1/4	.187	1 <sup>15</sup> / <sub>16</sub>
	SDM322B	#2	1/4	.234	1 <sup>15</sup> /16
	SDM323A	#3	1/4	.234	1 <sup>15</sup> /16
	SDM421B	#1	1/4	.187	2 3/4
	SDM422B	#2	1/4	.234	2 3/4
	SDM423B	#3	1/4	.234	2 3/4
	SDM521A	#1	1/4	.187	3 1/2
	SDM522A	#2	1/4	.234	3 1/2
	SDM523A	#3	1/4	.234	3 1/2
	SDM621A	#1	1/4	.187	6
	SDM622A	#2	1/4	.234	6
	SDM623A	#3	1/4	.234	6
	SDMA421	#1	5/ <sub>16</sub>	.250	3
	SDMA422A	#2	5/ <sub>16</sub>	.250	3
	SDMA423A	#3	5/16	.296	3
	SDMB422A	#2	7/16	.312	3
	SDMB423A	#3	7/16	.312	3
	SDMB424A	#4	7/16	.375	3
	SDMB522A	#2	7/16	.312	4 1/2
	SDMB523A	#3	7/16	.312	4 1/2
	SDMB524A	#4	7/16	.375	4 1/2
	SDMB622	#2	7/16	.312	6
	SDMB623A	#3	7/16	.312	6
	SDMB624A	#4	7/ <sub>16</sub>	.312	6

	Stock No.	<b>#</b> }	<b>□</b> Ţ	A	В
<b>_</b>	SDMT307A	T7	1/4	.140	1 <sup>15</sup> /16
Torx®	SDMT308A	T8	1/4	.140	1 <sup>15</sup> / <sub>16</sub>
	SDMT309A	T9	1/4	.140	1 <sup>15</sup> / <sub>16</sub>
	SDMT310A	T10	1/4	.140	1 <sup>15</sup> / <sub>16</sub>
	SDMT315A	T15	1/4	.140	1 <sup>15</sup> / <sub>16</sub>
	SDMT320A	T20	1/4	.203	1 <sup>15</sup> / <sub>16</sub>
	SDMT325B	T25	1/4	.203	1 <sup>15</sup> / <sub>16</sub>
	SDMT327A	T27	1/4	.203	1 <sup>15</sup> / <sub>16</sub>
	SDMT330A	T30	1/4	.250	1 <sup>15</sup> / <sub>16</sub>
	SDMT340A	T40	1/4	.250	1 <sup>15</sup> / <sub>16</sub>
	SDMT407	T7	1/4	.140	2 3/4
	SDMT408	T8	1/4	.140	2 3/4
	SDMT409	T9	1/4	.140	2 3/4
	SDMT410	T10	1/4	.140	2 3/4
	SDMT415	T15	1/4	.140	2 3/4
	SDMT420	T20	1/4	.203	2 3/4
	SDMT425	T25	1/4	.203	2 3/4
	SDMT427	T27	1/4	.203	2 3/4
	SDMT430	T30	1/4	.250	2 3/4
	SDMT440	T40	1/4	.250	2 3/4
	SDMT507	T7	1/4	.140	3 1/2
	SDMT508	T8	1/4	.140	3 1/2
	SDMT509	T9	1/4	.140	3 1/2
	SDMT510	T10	1/4	.140	3 1/2
	SDMT515	T15	1/4	.140	3 1/2
	SDMT520	T20	1/4	.203	3 1/2
	SDMT525	T25	1/4	.203	3 1/2
	SDMT527	T27	1/4	.203	3 1/2
	SDMT530	T30	1/4	.250	3 1/2
	SDMT540	T40	1/4	.250	3 1/2
	SDMT607	T7	1/4	.140	6
	SDMT608	T8	1/4	.140	6
	SDMT609	T9	1/4	.140	6
	SDMT610	T10	1/4	.156	6
	SDMT615	T15	1/4	.156	6
	SDMT620	T20	1/4	.187	6
	SDMT625	T25	1/4	.234	6
	SDMT627	T27	1/4	.250	6
	SDMT630	T30	1/4	.250	6
	SDMT640	T40	1/4	.250	6



### **Power Bits**





SDMM3702

### Hex, mm

Stock No.	mm Ţ	A	В
SDMM3702	2	.09	49.3
SDMM37025	2.5	.11	49.3
SDMM3703	3	.13	49.3
SDMM3704	4	18	49.3
SDMM3705	5	.22	49.3
SDMM3706	6	.27	49.3
SDMM3707	7	.31	49.3
SDMM3708	8	.36	49.3
SDMM3710	10	.45	49.3

# Hex, inches

### SDM3704

Stock No.		<b>□</b> Ţ	A	В
SDM3704	1/16	1/4	.07	1 <sup>15</sup> /16
SDM3705	5/64	1/4	.09	1 <sup>15</sup> / <sub>16</sub>
SDM3706	3/32	1/4	.11	1 <sup>15</sup> / <sub>16</sub>
SDM3707	7/64	1/4	.12	1 <sup>15</sup> / <sub>16</sub>
SDM3708	1/8	1/4	.14	1 <sup>15</sup> / <sub>16</sub>
SDM3709	9/64	1/4	.16	1 <sup>15</sup> / <sub>16</sub>
SDM3710	5/32	1/4	.18	1 <sup>15</sup> / <sub>16</sub>
SDM3712	3/16	1/4	.21	1 <sup>15</sup> /16
SDM3714	7/32	1/4	.25	1 <sup>15</sup> / <sub>16</sub>
SDM3716	1/4	1/4	.28	1 <sup>15</sup> /16
SDMA4708	1/8	5/16	.14	3
SDMA4710	5/32	5/16	.18	3
SDMA4712	3/16	5/16	.21	3
SDMA4714	7/32	5/16	.25	3
SDMA4716	1/4	5/16	.28	3
SDMA4720	<sup>5</sup> /16	<sup>5</sup> /16	.36	3
SDMA4724	3/8	5/16	.43	3





SGASA104BR





SGASA204A

SGASA204AO

SGASA204AG

Awls and Hooks/Soft Grip
• Use for scribing, alignment, 0-ring removal, piercing holes in leather or fabric and cleaning crevices



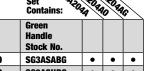
Stock No.	Description	Handle Color	Blade Length, inches	Overall Length, inches	Awl and Hook Set
SG4ASABR	Awl	Red	3 3/4	8	•
SG4ASHBR	Hook Tool	Red	3 3/4	8	•
SG5ASABR	Awl	Red	4 3/4	9 5/8	•
SG7ASABR	Awl	Red	5 <sup>3</sup> / <sub>4</sub>	10 5/8	•

Set includes storage tray.

Miniature Awls, Hooks and Picks/Soft Grip

• Use for scribing, alignment, 0-ring removal, piercing holes in leather or fabric and cleaning crevices

• 3 1/8" blade length, 6" long



Description	Red Handle Stock No.	Orange Handle Stock No.	Green Handle Stock No.			
Mini Awl	SG3ASABR	SG3ASAB0	SG3ASABG	•	•	•
Mini Hook	SG3ASHBR	SG3ASHB0	SG3ASHBG	•	•	•
Mini Pick, 45°	SG3ASH45BR	SG3ASH45B0	SG3ASH45BG	•	•	•
Mini Pick, 90°	SG3ASH90BR	SG3ASH90B0	SG3ASH90BG	•	•	•
•			0.1. '.	.1 .1.		. 1

Sets include storage tray.

Long Small Size Awls, Hooks and Picks/Soft Grip

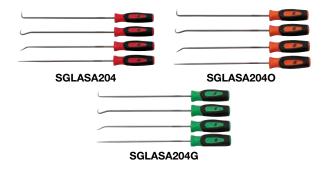
• Use for scribing, alignment, 0-ring removal, piercing holes in leather or fabric and cleaning crevices

• Blade length 8", 9 23/32" overall length



Description	Red	Orange	Green Handle			
Long Mini Awl	SGL3ASA	SGL3ASA0	SGL3ASAG	•	•	•
Long Mini Hook	SGL3ASH	SGL3ASH0	SGL3ASHG	•	•	•
Long Mini Pick, 45° tip	SGL3ASH45	SGL3ASH450	SGL3ASH45G	•	•	•
Long Mini Pick, 90° tip	SGL3ASH90	SGL3ASH900	SGL3ASH90G	•	•	•

Sets include storage tray.













- Do not use bits with impact driver
- · Read safety precautions on pages W1 to W4

### Awls, Hooks and Picks



### Seal Removal Tools/Soft Grip

- Rounded tip with blended radius edge allows easy removal of seals or 0-rings while reducing chance of damage to seal or
- 2 tip configurations and 2 blade lengths handle most seal removal situations
- Industrial black finish blades

YA145

YA149

**YA338** 

**YA339** 

### Applications:

Transmissions, heater and vacuum hoses, oil pump drive shaft seals, injectors and fuel rail O-rings, inner tie rod rack boot and CV boot removal, fork seals and caliper dust boot assemblies on Harley-Davidson® and other motorcycles and steering racks and pumps



Stock No.	Tip Style	Blade Length, inches	Overall Length, inches	Seal Remover Set
SGSR1	Spoon	5 <sup>1</sup> / <sub>4</sub>	8	•
SGSR2	Spoon	2 1/2	5 11/32	•
SGSR3	Contoured	2 1/2	5 11/32	•
SGSR4	Contoured	5 <sup>1</sup> / <sub>4</sub>	8	•

Set includes storage tray.

### Picks and Scribes (Blue-Point) YA145 Pick Set.

- Includes knurled handle and 4 screw-in picks with different hook configurations
- Clear plastic pouch

	Overall length, inches
Stock No.	(assembled to handle)
YA145-1 Straight Tip Pick	7 1/4
YA145-2 O-Ring, 90° Tip Pick	7 1/4
YA145-3 Hook Tip Pick	7 <sup>5</sup> /16
YA145-4 Angle Tip Pick	7 <sup>3</sup> /8

### YA149 Pick and Probe Set.

• Includes (5) 5 1/2" single ended and (2) 7" doùble ended probes made of tempered stainless steel



	Description	Stock No.		
	Straight Pick	YA145-1	•	
	90° Pick	YA145-2	•	
	Hook Pick	YA145-3	•	
	Angle Pick	YA145-4	•	
	Straight Pick	YA149-1		•
	90° Curved Pick	YA149-2		•
	45° Flat Pick	YA149-3		•
\	90° Pointed Pick	YA149-4		•
	Double End Short Pick	YA149-5		•
	Double End Long Pick	YA149-6		•
	Half Circle Pick	YA149-7		•

### YA338 Scribe.

. One straight end, one end hooked for picking 0-rings and small parts

### YA339 Scribe.

• One end is straight, the other has a 90° angle for detail work around small objects



### Awl/Hard Grip

Stock No.	Blade Length, inches	Overall Length, inches
CHEACA	<b>4</b> 3/ <sub>4</sub>	6 5/g



### Picks and Scribes/Extra Long (Blue-Point®)

- Use to separate wires, remove small fuses and 0-rings, retrieve washers and loose parts too small to pick up with fingers or to mark metal or plastic surfaces
- Heavy duty shank diameter is 0.02" thicker than standard picks for added durability and extended tool life
- Fach pick is 9 3/4" (247.7 mm) long

• Lacif plok is 5 5/4 (247.7 min) io	Contains:	SIRA	IA6
Description	Stock No.		
Hook Pick	PSLR4-1	•	•
90° Hook Pick	PSLR4-2	•	•
Straight Pick	PSLR4-3	•	•
Complex Pick	PSLR4-4	•	•
Combo Pick	PSLR4-5		•
Double Angle Pick	PSLR4-6		•

PSLR4 Extra Long Pick Set. Includes PSLR4-1 to PSLR4-4 (4 pcs) in vinyl storage pouch.

PSLR6 Extra Long Pick Set. Includes PSLR4-1 to PSLR4-6 (6 pcs) in vinyl storage pouch.



# Picks and Scribes/Extra Long/Lighted (Blue-Point)

- LED lighted hook and pick set allows easier viewing in dark and hard to reach areas
- · Made of durable carbon heat treated steel
- Ergonomic soft grip contoured handle
- Each pick measures 9-3/4 inches long (247.7 mm)
- Push button LED switch on end of handle
- Each pick requires (3) LR41 batteries (included). Replacement battery P/N RSND384392PK (1 battery)

Set Con	tains:
	•
	•

Description	Stock No.	
Hook Pick	PSLR4LT-1	•
90° Hook Pick	PSLR4LT-2	•
Straight Pick	PSLR4LT-3	•
Complex Pick	PSLR4LT-4	•

# **Prybars**

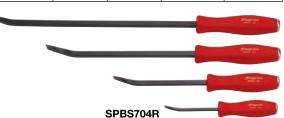
- Heavy Duty/Striking Crown Handle
   Durable crown handle offers protection from off center hammer strikes
- Handle is 10 3/8" long for a comfortable, secure grip (long handle ensures that two hands can fit for high leverage applications)
- Cylindrical design with taper allows user to find a comfortable grip regardless of hand size
- 3/4" square bar manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability
- High leverage flared tip (1 1/8") with precision ground edge
- Handle resists extreme temperatures

- Standard Duty/Striking Handle
   Ergonomic shape and contour handle matched to blade length for optimum leverage
- Blade extends through handle and makes contact with end cap to provide solid striking force
- Metal end cap allows hammer striking while reducing chance of damage to handle
- High leverage design with smooth radius head provides maximum leverage when lifting and pulling back
- Blade manufactured from special alloy steel, precision forged and heat treated for strength and durability
- Industrial finish to protect against corrosion



### SPBH48R

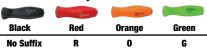
Stock No	Handle Color	Sq. Shank, inches	Tip Width, inches	Length, inches
SPBH30R	Red	3/4	1 <sup>1</sup> /8	30
SPBH300	Orange	3/4	<b>1</b> 1/8	30
SPBH30G	Green	3/4	1 <sup>1</sup> /8	30
SPBH48R	Red	3/4	1 <sup>1</sup> /8	48
SPBH480	Orange	3/4	1 <sup>1</sup> /8	48
SPBH48G	Green	3/4	1 1/8	48
SPBH54R	Red	3/4	1 1/8	54
SPBH540	Orange	3/4	1 <sup>1</sup> /8	54
SPBH54G	Green	3/4	<b>1</b> 1/8	54



Set Contains	SPBS TOA	SPBS TOAR	SPES TOAD	SPBS TOAG

					•			
Stock No.	Color	Sq. Shank, Inches	Tip Width, Inches	Length, Inches				
SPBS8	Black	1/4	7/16	8	•			
SPBS8R	Red	1/4	7/16	8		•		
SPBS80	Orange	1/4	7/16	8			•	
SPBS8G	Green	1/4	7/16	8				•
SPBS12	Black	3/8	5/8	12	•			
SPBS12R	Red	3/8	5/8	12		•		
SPBS120	Orange	3/8	5/8	12			•	
SPBS12G	Green	3/8	5/8	12				•
SPBS18	Black	7/16	23/32	18	•			
SPBS18R	Red	7/16	23/32	18		•		
SPBS180	Orange	7/16	23/32	18			•	
SPBS18G	Green	7/16	23/32	18				•
SPBS24	Black	7/16	13/16	24	•			
SPBS24R	Red	7/16	13/16	24		•		
SPBS240	Orange	7/16	13/16	24			•	
SPBS24G	Green	7/16	13/16	24				•
SPBS36	Black	5/8	1 <sup>1</sup> /8	<b>36</b> 5/8				
SPBS36R	Red	5/8	<b>1</b> 1/8	36 <sup>5</sup> /8				
SPBS360	Orange	5/8	1 <sup>1</sup> /8	36 <sup>5</sup> /8				
SPBS36G	Green	5/8	<b>1</b> 1/8	36 <sup>5</sup> /8				
SPBS42R	Red	5/8	1 <sup>1</sup> /8	42 1/4				
SPBS420	Orange	5/8	1 1/8	42 1/4				

**Standard Pry Bar Handle Colors** 



ADD SUFFIX TO STOCK NUMBER FOR SPECIAL COLORS







# **Prybars**





MPBS11400

# Striking/40° Offset Blade

Stock No.	Handle Length, Inches	Exposed Bar Length, Inches	Sq. Shank Inches	Tip Width, Inches	Tip Type
MPBS11400	5 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	3/8	3/8	Straight

### MPBS11400 Prybar/Brake Tool.

- Strong 3/8" square alloy steel bar with straight tip
- 11" total length with 40° offset ensures access into tight wheel wells
- · Large, comfortable, high visibility orange handle with striker cap allows good grip versus small, hard to hold brake adjustment tools
- Ideal for general prybar applications



Striking/	Straight Bla	Set Contains:	De la companya della companya della companya de la companya della	
Stock No	Sq. Shank, inches	Tip Width, inches	Length, inches	
MPBS12	3/8	5/8	12	•
MPBS24	7/16	13/16	24	•
MPBS36	5/8	1 <sup>1</sup> /8	<b>36</b> 5/8	•



**PBN500** 



### **Demolition Chisels/Crown Handle**

- Exclusive crown handle offers protection from off center hammer strikes
- Handle provides a comfortable secure grip in a variety of environments
- Engineered composite handle offers excellent temperature resistance and bar retention

Stock No.	Handle Color	Hex Shank, inches	Tip Width, Inches	Length, inches
SPDC18R	Red	3/4	1 1/8 Double Edge	18
SPDC18G	Green	3/4	1 1/8 Double Edge	18
SPDC180	Orange	3/4	1 1/8 Double Edge	18





### Multiposition

- Each prybar features 17 incremental angles of 15° to provide great flexibility
- High leverage design with smooth radius head provides maximum leverage when lifting
- Manufactured from special alloy steel, precision forged and heat treated for strength and durability
- Industrial finish helps protect against corrosion

• Industrial finish help		Corrosion Set Contains:	34
Stock No.	Tip Width, Inches	Length, Inches	
PBMP8A	1/2	8	•
PBMP12A	5/8	12	•
PBMP16A	5/8	16	•
PBMP24A	1	24	
PBMP36A	1	36	

# **Nonmarring Prybars**

- Made from tough, reinforced nylon
- Ideal for removing clips, fasteners, molding or gaskets from interior/ exterior applications
- Will not damage delicate surfaces unlike metal removal tools
- · Lightweight and resistant to most automotive fluids
- · Block end allows use with hammer

<ul><li>automotive fluid</li><li>Block end allow</li></ul>	Set Contains:	500		
Stock No.	Length	Tip Width	Tip Profile	
PBN1	6 3/4	5/8	Narrow Wedge	•
PBN2	6 3/4	<sup>15</sup> /16	Wide Wedge	•
PBN3	6 3/4	7/8	Narrow Fork	•
PBN5	6 3/4	1 <sup>3</sup> / <sub>16</sub>	Wide Fork	•
PBN7	6 3/4	1 3/8	Flat Fork	•

# **Prybars**

650



### Wrecking Bar (Blue-Point®)

• Slotted claw on "gooseneck" end and a chisel configuration on opposite end

Stock No.	Sq. Stock, inches	Length, inches
NPB124B	3/4	24



### Slate Bar (Blue-Point)

Stock No.	Sq. Stock, inches	Edge, inches	Length, inches
3260B	1	1/2	60



# Pinch Bars (Blue-Point)

 Pinch bar has a tapered point on one end and a chisel type edge on the other

Stock No.	Sq. Stock, inches Edge, inche		Length, inches
1412A	1/2	5/8	14
1658C	1/2	5/8	16
2420A	3/4	<sup>15</sup> / <sub>16</sub>	20
2430C	3/4	5/8	30
2438C	3/4	7/8	38
2842C	7/8	1	42

BLPPB704 Prybar Set. Includes 1412A (14") and 2420A (20") Pinch Bars, 7031A Close Quarter Bar (16") plus BPPC1878 Flat Chisel (18") (page 184).



### **Utility Bars (Blue-Point) UB222PK Miniature Utility Bar.**

- 5 3/8" length
- Pack of 10

# Prybar Rack

KŔ294AAPV Hang-On Prybar Rack. Hang up to 4 prybars or long tools with handles

- Notched angle plate keeps tools from shifting
- Suspend from roll cab or tool chest with 1/4" or more lip

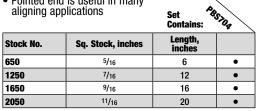


KR294APV

### **Prybars**

"Rolling head" acts as fulcrum and provides leverage

•	Pointed	end i	s us	eful	in	many
	aligning	appli	icati	ons		•





### Close Quarter Bars (Blue-Point)

- Powerful leverage where space is at a premium
- Ideal for aligning molds

Stock No.	Sq. Stock, inches	Tip Width, inches	Length, inches	
7030A	3/8	7/16	9	
7031A	1/2	9/16	16	
7032	5/8	3/4	18	



### Die Setter Bars (Blue-Point)

Designed for separating, scraping or prying

Stock No.	Sq. Stock, inches	Tip Width, inches	Length, inches
7035	5/8	7/16	18
7037	3/4	9/16	30



### **Heavy Duty**

- Bars feature a rubber grip that eliminates contact with rust and damaged surfaces, provides a secure gripping surface under a wide range of conditions and protects the bar from damage during transit
- Grip offers a non slip surface that provides a secure gripping surface/leverage, when hands are wet, sweaty or oil covered

Stock No.	Tip Style	Weight, lbs.	Radius Curves, inches	Length, inches	Diameter, inches
PBHG48	1 <sup>1</sup> /2" Offset Chisel, 2 <sup>1</sup> /4" Offset Claw	9.5	5 <sup>1</sup> /8	48	1 Hex
РВНС48	1 1/8" Straight Chisel, 2" Offset Chisel	11.25	-	48	1 Hex
РВНС60	1 1/8" Straight Chisel, 2" Offset Chisel	14.25	ı	60	1 Hex

PBHC1 - 48" Replaceable rubber grip.





# Control, Comfort, Power and Durability are Built In.

All of our pliers and cutters undergo a precision manufacturing process to give you the quality you expect in Snap-on® tools.

**Alloysteel** — Snap-on uses its own special alloy steel in every set of pliers and cutters.

**Cold-forgedprocess** — Increased strength from top to bottom.

**Joints** — Positioned close to the cutting edge, making it much easier to cut heavy wire with less user fatigue.

### Talon Grip™ Series

Diamond serrated jaws provide a better grip and increased pulling power.



Ramped tips provide stronger jaws and increased accessibility.

Longer contoured handle with new joint location provides higher leverage and increased comfort.

Rounded jaw edges minimize nicks to wire when making loops or bends.

### PowerEdge™ Geometry

Tapered blades increase power at the joint to cut thicker wire and provide finesse at the tip for thinner wire.

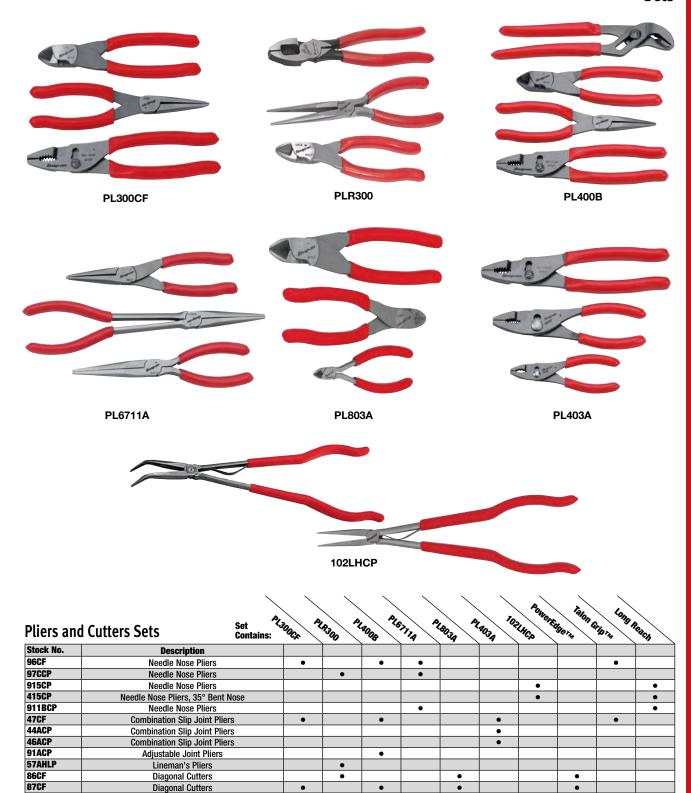
Slight gap close to joint allows tips to meet perfectly and keeps tips from wearing prematurely during power cuts.

After thousands of cuts through hardened music wire, cutting edges remain aligned and still provide clean and easy cuts.

More cutting surface close to the joint for power cuts.



Sets



See product details on following pages

184CCP

Sets include storage tray



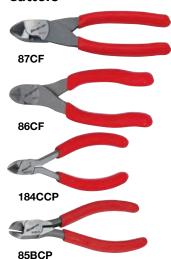


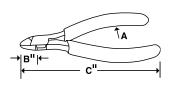


Diagonal Cutters

### **Cutters**

**86EP** 





### **Standard Diagonal Cutters**

- Quality forged steel ensures tools that will provide years of service
- · Differential heat treatment produces the strength and toughness in desired areas to withstand repeated tough cutting jobs
- Handles are designed for comfort and to deliver leverage needed to tackle demanding jobs

Power	Edgern	\

	Stock No.	Description	Handle Style (A)	Jaw Length, inches (B)	Length, inches (C)	
Standard	87CF	Standard Diagonal	Bowed	13/16	7 3/8	•
Diagonal	86CF	Standard Diagonal	Bowed	3/4	6 5/16	•
	184CCP	Cutter	Bowed	13/32	4 3/4	•
	85BCP	Cutter	Bowed	9/16	5	•
	86EP	Pistol Grip Cutter	Pistol	3/4	6 5/16	•



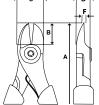
- Ergonomic contour cushion grip handle provides up to 22% increased cutting leverage for superior comfort and control
- Induction hardened, precision sharpened, offset cutting edges produce a shearing cut (not a pinching cut) to stay sharp longer and cut with less effort
- Differential heat treatment produces strength and toughness

### 312CP Heavy Duty Diagonal Cutter.

- 11" length provides maximum reach and access
- Offset jaws easily make flush cuts
- Offset cutting edge produces a shearing cut (not a pinching cut) to stay sharp longer and cut with less effort
- Bowed nonslip handle design for increased leverage and comfort



Stock No.		Description	Handle Style (A)	Jaw Length, inches (B)	Length, inches (C)	
High Leverage Diagonal 388CF 388CF 388CF		High Leverage Cutter	Bowed	<b>1</b> <sup>1</sup> / <sub>16</sub>	8 5/16	•
		Heavy Duty	Long Handle	1 <sup>1</sup> /8	11	•
Cutters	Cutters 808ACP Mini		Bowed	9/16	6 <sup>15</sup> /16	•





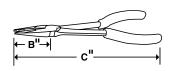
- Manufactured from 1% carbon/chrome ball bearing steel to provide strength without brittleness
- · Adjustable screw joint minimizes friction and maximizes cutting edge alignment
- Precision hardened cutting edge provides superior durability
  Unique jaw design of the EPC160 makes it ideal for cutting plastic, rubber and vinyl.

				<u> </u>					
	Stock No.	Description	Length, inches (A)	Cutting Edge Length, inches (B)	Jaw Width, inches (C)	Jaw Thickness, inches (D)	Tip Width, inches (F)		
	EPC160	Plastic and Cable Cutter	6.3	0.7	0.85	0.39	0.059		





# **Needle Nose/Long Reach/Special Purpose**



# **Needle Nose Pliers**

• Rounded jaw edges minimize nicks to wire when making loops or bends

<ul> <li>Rounded jaw edges minimize nicks to wire when making loops or bends</li> <li>Jaw tips are perfectly aligned and feature machined teeth for precise gripping strength with positive control</li> </ul>							
Stock No.	Description Jaw Length, inches (C)						
95BCP	Standard	<b>1</b> 11/16	6				
96CF	Standard	2 1/4	8	•			
196CF*	With Cutter	2 1/4	8	•			
196NCF*	With Pin Puller, Cutter and Fastener Turning Jaw	2 1/4	8	•			
97CCP	Long, Slim Jaw	3 <sup>3</sup> / <sub>16</sub>	8				
597CCP	Pin Gripping Jaws -	3 <sup>3</sup> / <sub>16</sub>	<b>7</b> 15/16				

<sup>\*</sup>Rated to cut .049" diameter music wire

# **Long Reach Pliers**

· Long, slim jaws and flush riveted joints for increased reach into recessed areas

• Ideal for electric and electronic work, holding pins or small components

Stock No.	Description	Jaw Length, inches (B)	Length, inches (C)
911BCP	Long Handle	3 3/16	11
915CP	Long Handle	3 1/2	<b>14</b> 1/2
415CP	Long Handle / 35° Bent Nose	2 <sup>7</sup> /8	<b>14</b> 5/16
411BCP	35° Bent	2 7/8	10 7/8

# **Special Purpose Pliers**

- Bent Nose Pliers Angled jaws for better access to hard to reach areas
   Pistol Grip Angled handle for access to hard to reach areas
   Duck Bill Specially designed for electronics work

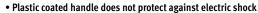
	Stock No.	Description	Jaw Length, inches (B)	Length, inches (C)
Bent	497CCP	90° Angle	<b>2</b> 5/8	6 <sup>5</sup> /8
	490BCP*	90° Bent	1 <sup>7</sup> /8	9 3/4
	408ACP	35° Mini Bent	1 <sup>1</sup> / <sub>2</sub>	<b>7</b> 7/8
Straight	908ACP	Mini	1 <sup>5</sup> /8	<b>8</b> 1/8
Pistol Grip	612AEP	Pistol Grip	1 <sup>3</sup> /8	9 3/4
	912AEP	Pistol Grip	2 <sup>1</sup> / <sub>8</sub>	10 <sup>5</sup> /8
Duck Bill	609ACP	3/8" Jaw Width	1 <sup>3</sup> /8	9 1/4
	61ACP	15/32" Jaw Width	<b>1</b> 5/16	7 3/4











• Read safety precautions on pages W1 to W4

61ACP

609ACP





























# Combination/Lineman's/Adjustable Joint





**47CF** 



137CF





5ACP



57AHLP



AWP45









**CHN480** 

# **Combination Slip Joint Pliers**• Slip joints for adjustable jaw width

				_	
Stock No.	Description	Length, inches (A)	Jaw Thickness, inches (B)		
44ACP	Combination Slip Joint	4 1/2	15/64		
46ACP	Combination Slip Joint	6 <sup>7</sup> /16	23/64		
47CF*	Combination Slip Joint	8 1/4	7/16	•	
49ACP	Combination Slip Joint	9 1/4	1/2		
137CF*	Heavy Duty Combination Slip Joint	8 3/16	27/64	•	•

<sup>\*</sup>Third position gives a wider jaw spread for tough to get a hold of jobs

# **Special Purpose Pliers**

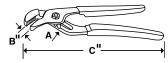
- High Leverage Combination Pliers requires 1/4 the effort normally needed for cutting/gripping
- Midget Pliers with serrated jaws are ideal for extremely small work

Stock No.	Description	Length, inches (A)	Jaw Thickness, inches (B)		
HL138ACP	High Leverage Combination	7 7/8	1 <sup>1</sup> /16		
5ACP	Midget Pliers	4 3/4	1/4		

#### Lineman's Pliers

- Machined cutter heads for perfectly matched blades
  Induction hardened head for extra strength and durability
- Gripper teeth behind the head can be a useful crushing area

Stock No.	Description	Length, inches (A)	Jaw Thickness, inches (B)
57AHLP	Lineman's Pliers	7 3/8	1/2
59AHLP	Lineman's Pliers	9 1/4	1/2



# **Tongue and Groove Pliers**

- · Special tongue and groove design that assures nonslip jaw action
- Unique fastener system inhibits side to side jaw wobble for added strength and smoother operation

	Contains:	.04
)	Length, inches (C)	

Stock No.	Jaw Type	Max. Jaw Positions (A)	Parallel Opening, inches (B)	Length, inches (C)	
AWP45	Straight Serrated	3	1/2	4 3/4	•
AWP65	Straight Serrated	5	7/8	7	•
AWP120	Straight Serrated	7	2 3/16	12 <sup>3</sup> / <sub>4</sub>	•
AWP160	Straight Serrated	8	3 <sup>13</sup> /16	16 <sup>3</sup> / <sub>4</sub>	•
CHN410*	Parrot	5	1 1/2	10 <sup>1</sup> /8	

<sup>\*(</sup>Blue-Point®)

Set shown includes storage tray



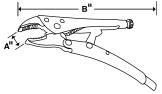
# Standard Pliers

- Specially hardened jaw teeth provide long life and a solid grip on work objects
  Vinyl covered handles for a secure, comfortable grip

Stock No.	Finish	Max. Jaw Positions (A)	Parallel Opening, inches (B)	Length, inches (C)	
91ACP	Industrial	5	1 3/8	9 1/4	
CHN480*	Nickel-Chrome	11	5 1/2	20	

<sup>\*(</sup>Blue-Point)

Locking



#### LP Series

Stock No.

LP5SLIM

LP7SLIM

LP5WR

LP6LN

LP7WR

LP7R

LP10R

LP10LN

LP10GRV

LP10WR

- Spring loaded release lever allows quick "no-pinch" release
- · Locking nut secures jaw opening for repeat jobs
- Larger jaw capacity to hold larger objects

Description

Thin Curved Jaw

Thin Curved Jaw

Curved Jaw w/cutter

Long Nose

Curved Jaw w/cutter

Curved Jaw w/cutter

Straight Jaw

Straight Jaw

Long Nose

10" Grooved Joint

• Jaws feature greater surface area and broader teeth for more secure gripping



LP404

Length, inches (B)

7

5

6

7

10

7

10

10

10

Set Contains:

LPADA

•



LP7SLIM











A "V" groove houses round objects, preventing lateral movement.



**BLP404** 



BSGLP404





Locking Pliers LP5SLIM, LP7SLIM Locking Pliers.

- · Use for removal of socket style sway bar links
- Thinner jaws fit between stabilizer bar and stabilizer link to allow a socket to be used for nut removal

Jaw Capacity, inches (A)

1 5/32

1 <sup>5</sup>/8

1 5/32

2 1/8

1 5/8

2 7/16

1 5/8

2 7/16

2 3/4

1 5/8

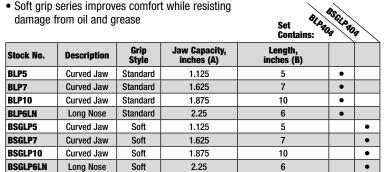
• LP7SLIM Applications: 2002-2004 Dodge® Caravans, Chrysler® Town and Country and any other vehicles with nongreaseable sway bar links

#### LP10GRV Grooved Jaw Locking Pliers.

- Longitudinal V groove section provides 3 points of contact preventing lateral movement while working
- Specially tapered groove means the larger the work piece, the larger the groove section that holds it
- Convex tooth section of mobile jaw pushes flat work pieces against the large. flat fixed jaw for tighter clamping
- Recessed area of mobile iaw allows angled objects to be held and clears small obstacles
- Serrated milled teeth provide a positive grip on different shaped objects

# Locking Pliers (Blue-Point®)

- Made from high grade, heat treated steel alloys, the hardened precision ground jaws "lock" onto work pieces that are tough to hold
- Adjusting screws ensure fine adjustments for precise gripping
- Soft grip series improves comfort while resisting damage from oil and grease





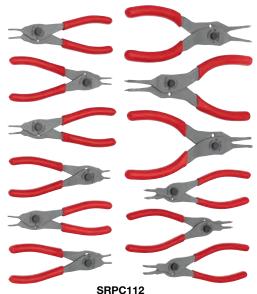




- Plastic coated handle does not protect against electric shock
- Read safety precautions on pages W1 to W4

# **Retaining Ring**





- Fixed Tip/Convertible, Forged Pliers
   Longer 45° and 90° jaws make it easier to access hard to reach snap ring
- Pivot screw converts from internal to external
- Wide cushion grip provides more comfort and control

Stock No.	Length, inches	Ring Size Range, inches	Jaw Angle	Tip Diameter, inches			
SRPC3800	6 7/16	1/8 - 1	0°	.038	•	•	•
SRPC4700	6 7/16	3/16 <b>- 1</b> 3/8	0°	.047	•	•	•
SRPC7000	7 7/16	7/16 - 2	0°	.070	•	•	•
SRPC9000A	8 3/4	1 1/2 - 3 1/2	0°	.090	•		
SRPC3845	6 7/16	1/8 - <b>1</b>	45°	.038	•		
SRPC4745	6 7/16	3/16 <b>- 1</b> 3/8	45°	.047	•		
SRPC7045	7 7/16	7/16 - 2	45°	.070	•	•	
SRPC9045A	8 3/4	1 1/2 - 3 1/2	45°	.090	•	•	
SRPC3890	6 7/16	1/8 <b>- 1</b>	90°	.038	•		•
SRPC4790	6 1/2	3/16 <b>- 1</b> 3/8	90°	.047	•		
SRPC7090	7 1/2	<sup>7</sup> / <sub>16</sub> - 2	90°	.070	•	•	•
SRPC9090A	8 3/4	1 1/2- 3 1/2	90°	.090	•	•	

Set Contains:

ASME®/ANSI® B107.500

Sets shown include storage tray



# Fixed Tip/Convertible Pliers

Unique dial feature eliminates the need to take apart pliers when changing from internal to external

apart piloto wite	an changing nu	iai.	Guitallis: •			
Stock No.	Length, inches	Ring Size Range, inches	Jaw Angle	Tip Diameter, inches		
PRH12	5 3/4	1/8 - 1	18°	.038	•	
PRH32	6	5/16 <b>- 1</b> 3/8	18°	.047	•	
PRH34	7 1/2	7/16 - 2	18°	.070	•	
PRH129	5 3/4	1/8 - 1	90°	.038	•	
PRH329	5 7/8	5/16 <b>- 1</b> 3/8	90°	.047	•	
PRH349	7 1/2	7/16 - 2	90°	.070	•	

ASME/ANSI B107.500

Sets shown include storage tray



interchang	geavie	rip/cor	ivertible Plier	3			Contains:	6	4	39 \ \	4
Internal	External	Length, inches	Ring Size Range, inches	Tip Kit Included	Tip Sizes Included Inches/Degree	Optional Kits	Optional Tip Sizes				
PR37	_	6 <sup>1</sup> / <sub>4</sub>	3/8 - 2	PR5 (For PR36 only)	2 pair each in PR36 set: .047" 0°, .070" 0°, .047" 45°, .039" 90°	PR5	.047" 0°, .070" 0°, .047" 45°, .039" 90°	•			
_	PR38	6 <sup>1</sup> / <sub>4</sub>	1/4 - 2	_	_	PR5	.047" 0°, .070" 0°, .047" 45°, .039" 90°	•			
PRH56A (Convertible)	_	6 3/8	Internal 1/4 - 1 External 1/8 - 1	PRH56A-1	1 pair each: .023" 0°, .036" 0°, .047 0°, .036" 90 °, .047" 90°	_	_		•	•	
PRH57A (Convertible)	_	8	Internal <sup>3</sup> / <sub>8</sub> - 2 External <sup>1</sup> / <sub>4</sub> - 2	PRH57A-1	1 pair each: .036" 0°, .047" 0°, .070 0°, .036" 90 °, .047 90°	_	_		•	•	
PRC65A (Convertible)	_	10	Internal 1 <sup>13</sup> / <sub>64</sub> - 4 External 1 <sup>1</sup> / <sub>3</sub> - 4	PRC65A-1	1 pair each: .090", .108", .120" (15° and 90°)	_	_			•	
PR51	_	9 1/2	2 7/16 - 4	PR502	.108", 15°	PR501	.108", 0°				•
_	_	_	_	PR503	.108", 45°	PR504	.108", 90°				
_	PR52	9 1/2	1 1/2 - 3 11/32	PR507	.120", 45°	PR505	.120", 0°				•
_	_	_	_	PR508	.120", 90°	PR506	.120", 15°				
PR7	_	<b>15</b> <sup>11</sup> / <sub>16</sub>	3 1/16 - 6 1/4	PR7-1	.120", 0°	PR7-2	.120", 45°				
_	_	_	_	_	_	PR7-3	.120", 90°				
_	PR8	<b>15</b> <sup>11</sup> / <sub>16</sub>	3 1/16 - 6 1/4	PR7-1	.120", 0°	PR7-2	.120", 45°				
_	_	_	_	_	_	PR7-3	.120", 90°				
PR54	_	29	6 <sup>1</sup> /2 - 10	PR54-1	.150", 0°	PR54-2	.150", 45°				
_	_	_	_	_	_	PR54-3	.150", 90°				
_	PR53	19	6 1/2 - 10	PR53-1	.170", 0°	PR53-2	.170", 45°				
_	_	_	_	_	_	PR53-3	.170", 90°				

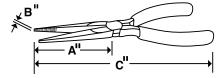
PR36 Set includes PR5 tip kit. Individual PR37 and PR38 units do not include tips and require PR5 tip kit. PR51 and PR52 work with tip kits PR501 through PR508 PRH503-1 Replacement Case for PRH503







# **Electronic Service** E700BCG E703BCG E704BCG E712BCG E713BCG E708BCG E718BCG E715BCG E721BCG E770BCG E790BCG



- Spring jaw opening
- Cutter models have a small hole at the base of the blades to relieve pressure on the cutting edges
- Innovative cushion grip handles result in a very comfortable, yet durable handle grip

Snap-on manufactured pliers with plastisol or cushion grip handles meet the electrostatic discharge (ESD) specifications in MIL-B-81705B, IS-5, and NFPA-56A.

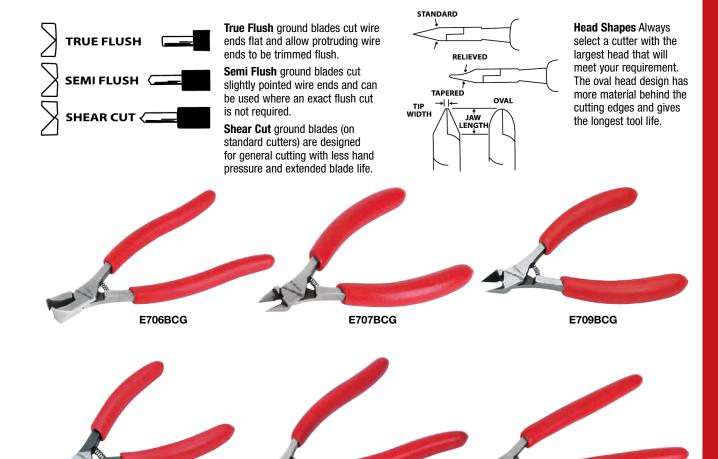
# **E Series Pliers**

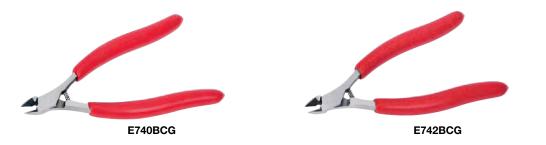
Stock No.	). Description		Tip Width, inches (B)	Length, inches (C)
E700BCG	Round Wire Looper Jaws Taper from 3/16 to 1/32"		1/16	6 <sup>1</sup> /8
E703BCG	Long Serrated Jaws	2 3/16	1/16	6 <sup>9</sup> /16
E704BCG	Angled (45°) Serrated Jaws	2 1/4	1/16	6 <sup>5</sup> /8
E708BCG	Short Nonserrated Jaws		1/16	5 <sup>15</sup> / <sub>16</sub>
E712BCG	Serrated Jaws	1 11/16	1/16	6 <sup>1</sup> /8
E713BCG	Short Serrated Jaws	7/8	1/16	4 5/8
E715BCG	Extra Slim Serrated Jaws	1 <sup>3</sup> / <sub>16</sub>	1/16	5 <sup>1</sup> /8
E718BCG	Curved (70°) Serrated Jaws	1 1/8	1/16	5 <sup>9</sup> /16
E721BCG	Extra Slim Nonserrated Jaws	1 <sup>23</sup> / <sub>32</sub>	1/16	6 <sup>7</sup> /8
E770BCG	Needle Thin Serrated Jaws	1 <sup>1</sup> /8	1/32	5
E790BCG	Flat Nose Nonserrated Jaws	1	1/16	6 <sup>1</sup> /8

Pliers in this chart use the E74X1 Coil Replacement Spring.

# **Electronic Service Cutters**

**E719BCG** 





**E711BCG** 

# **Cutters (E Series)**

Stock No.	Cut	Head Style	Cutting Capacity	Tip Width, inches	Cutting Edge Length, inches	Length, inches
E706BCG	True Flush	End Cut	AWG #19	1/16	15/32	5 <sup>7</sup> /8
E707BCG	True Flush	Tapered	AWG #17	1/16	7/16	4 3/8
E709BCG	True Flush	Tapered	AWG #17	1/16	7/16	4 7/16
E710BCG*	True Flush	Tapered	AWG #12	3/32	11/16	5 <sup>3</sup> /16
E711BCG	Semi Flush	Tapered	AWG #16	3/16	7/16	5 3/4
E719BCG	True Flush	Tapered	AWG #17	1/16	7/16	6 3/8
E740BCG	True Flush	Oval	AWG #16	1/16	7/16	5 <sup>3</sup> / <sub>4</sub>
E742BCG	True Flush	Oval	AWG #16	1/16	7/16	5 3/4

These cutters use the **E74X1** Replacement Spring

\*E710BCG uses E71XL1 Replacement Spring





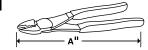


**E710BCG** 



- Plastic coated handle does not protect against electric shock
- Read safety precautions on pages W1 to W4

#### Wire Tools





29CF

PWCS7

PWCS9

#### Crimpers 29CF Cold Forged Wire Terminal Crimping Tool.

- Cold formed heat treated rivet for smooth action and long life
- Precision machined joint and cutting edges, hardened wire cutter with "Knife to Anvil" design, never needs sharpening

Stock No.	Description	Length, inches (A)	Crimps
29CF	Terminal Crimping Pliers with Cutter	9 3/8	10, 12, 14, 16, 18, 20, 22 AWG Insulated and Noninsulated.

# Wire Stripper/Cutter/Crimper

Stock No.	Description	Length, inches (A)	Strips AWG Sizes
PWCS7	Wire Stripper/Cutter/Crimper	6 3/4	12, 14, 16, 18, 20
PWCS9	Wire Stripper/Cutter/Crimper/Bolt Cutter	8 3/4	AWG20 to 10 (stranded wire), AWG16 to 8 (solid wire)

#### PWCS7 Wire Stripper/Cutter/Crimper.

- Unique smaller wire stripper/crimper that strips 12, 14, 16, 18, and 20 gauge insulated wire
- Crimps insulated and bare wire connectors
- Wire cutter in the jaw and handle
- Ideally suited for work in confined areas such as under dash or within electrical service enclosures

# PWCS9 Wire Stripper/Cutter/Crimper/Bolt Cutter.

- Cold forged from special alloy steel and induction heat treated for superior performance and durability
- Bi-molded, soft grip handle provides comfort and helps reduce fatigue
- Pliers tip for grabbing or pulling wire
- Cuts #6 and #8 soft bolts
- Crimps both insulated and non insulated terminals
- Includes shears in throat area for general cutting applications

# Crimpers (Blue-Point®)

	,		
Stock No.	Description	Length, inches (A)	Crimps
PWC30	Terminal Crimping Pliers with Cutter	10 1/4	10, 12, 14, 16, 18, 20, 22 AWG Insulated and Noninsulated.
PWC47	Computer/Sensor Terminal Crimping Tool	8	Open barrel and weather-pack terminals 14 to 24 AWG

# **PWC30**

**PWC47** 

# Ratcheting Crimpers (Blue-Point) PWC48 Ratcheting Crimper Kit.

- · Versatile quick change jaw system allows work on many kinds of terminals
- Exclusive patented quick installation for easy jaw change, no tools required
- Jaws are precision investment casting made of AISI 4140 alloy steel
- Easy adjustment for changing the pressure of the crimp

#### PWC48NJ Ratcheting Crimper. Ratcheting crimper without jaw set.

PWC48-1 Crimping Jaw Set.

Jaw Set A. Use on Insulated 10-22 connectors.

PWC48-2 Crimping Jaw Set.

Jaw Set B. Use on noninsulated 8-20 connectors.

#### PWC48-3 Crimping Jaw Set. Jaw Set C. Use on Open Barrel

10-20 connectors.

#### PWC48-4 Crimping Jaw Set.

Jaw Set H. Use on Open Barrel D-Sub connectors.



### PWC34 Crimping Tool (Blue-Point).

- Double compound action with ratchet control for almost effortless operation
- Use with insulated connectors on 10 to 22 gauge wire
- Easy, efficient, single squeeze crimping of modular connectors





### PWC80A Cable Cutter (Blue-Point).

- · For cutting battery cables and other soft metal cables
- · Vinyl covered handles
- 7 1/2" long



#### PWC39 Cable Slitter (Blue-Point).

- Slits and removes insulation on single or multiple conductor cablesup to 1.25" OD
- Adjustable blade allows for varying insulation thickness up to .187"
- · Lightweight, fiberglass reinforced nylon body
- Extra blade in handle, 5 1/4" long

PWC39-1 Replacement Blade. Replacement blade for PWC39.

#### **PWC52A Connector Pliers** (Blue-Point).

- For gripping round and irregularly shaped objects such as cannon plugs or plated pipe
- Range is 3/4 to 2 1/2"
- 9 3/4" long

PWC52A1 Vinyl Jaw Inserts. For PWC52A (set of 2). PWC52A2L Replaceable Hinge Bolt. For PWC52A.



**PWC39** 



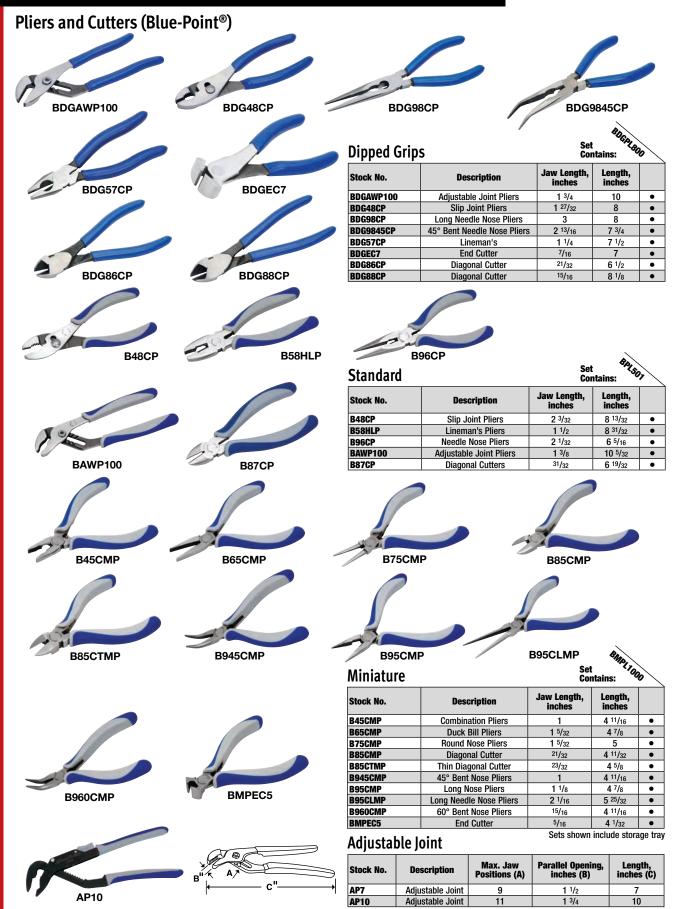
# Strippers/Cutters/Crimpers

Stock No.	Description	Length, inches (A)	Strips AWG Sizes	Strips Metric Sizes, mm	Application	Replacement Blades
PWC12A	Wire Stripper/Cutter/Crimper	9 1/2	10, 12, 14, 16, 18	10-18 Insulated and Noninsulated 7-8 mm Ignition Terminals	_	_
PWC28A	Wire Stripper/Cutter/Crimper/Bolt Cutter	8 <sup>1</sup> /4	10, 12, 14, 16, 18, 20, 22 Stranded, 8, 10, 12, 14, 16, 18 Solid	d, 8, 10, 12, 14, 16, Terminals and Crimp		1
PWC14	Wire Stripper/Cutter/Crimper/Bolt Cutter	8 3/4	10, 12, 14, 16, 18, 20, 22	10-22 Insulated and Noninsulated 7-8 mm Ignition Terminals	_	_
PWC16A	Wire Cutter/Stripper	5	10-18	Adjustable	Strips PVC, THHN, and THWN	_
PWC27	Automatic Wire Stripper	6 1/4	10, 12, 14, 16, 18, 20, 22	_	Strips PVC, THHN, and THWN	PWC27-7
PWC42	Automatic Wire Stripper	5 <sup>1</sup> / <sub>2</sub>	16, 18, 20, 22	1.5, 1.0, .5, .42	Cotton Coated PVC Wire, and Silicone Coated Wire	PWC42-17
PWC24	Automatic Wire Stripper	6 1/4	16, 18, 20, 22, 24, 26	_	Strips <i>Teflon</i> Type E Wire	PWC24-1
PWC5	Mini Wire Cutter/Stripper	5 <sup>1</sup> /16	26-14	_	Copper Wire	_
PWC8	Wire Stripper/Cutter	5 7/8	14 to 10 AWG	_	_	_
PWC19	Micro Shear Wire Cutters	5 1/8	Up to 20	Up to .80	_	_
PWC6	Wire Stripper/Cutter/Pliers	6	10, 12, 14, 16, 18, 20	2.6, 2.0, 1.6, 1.3, 1.0, .80	Strips PVC, THHN, and THWN	_
PWC22A	Automatic Wire Stripper with Cutter	7 1/4	12, 14, 16, 18, 20	_	Strips PVC, THHN, and THWN	_



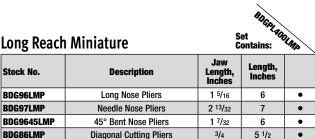






# Pliers and Cutters (Blue-Point®)

# **Long Reach Miniature**





BDGPL400LMP

# Long Reach Compound Joint

Long Reach C	Julipoulla Joille		Contains:	-C/2 /
Stock No. Description		Jaw Length, Inches	Length, Inches	
913DJBCP	45° Bent Nose Pliers	2 5/8	12 <sup>3</sup> /4	•
913DJCP	Needle Nose Pliers	2 3/4	13	•
613DJCP	Duck Bill Pliers	1 <sup>1</sup> /2	12 <sup>5</sup> /8	•

Sets shown include storage tray



303DJCP

# Extended Reach Hose Grin

LALCHUCU NC		76		
Stock No.	Description	Jaw Length, Inches	Length, Inches	
BDGPL410HG	Small Hose Grip Pliers	2 1/4	11	•
BDGPL411HG	Medium Hose Grip Pliers	2 1/4	11	•
BDGPL412HG	Large Hose Grip Pliers	2	11	•



# Lang Daach

Louig Reach		C	MA	
Stock No.	Description	Jaw Length, Inches	Length, Inches	
BDG311CP	Diagonal Cutter	1 <sup>9</sup> / <sub>16</sub>	11	•
BDG91145CP	45° Bent Needle Nose Pliers	3 3/16	11	•
RDG911CP	Needle Nose Pliers	3 9/16	11	<b>─</b>



# Extra Long Reach

LALIA LUIIS IN	C	44 /		
Stock No.	Description	Jaw Length, Inches	Length, Inches	
BDG91645CP	45° Bent Needle Nose Pliers	3 3/16	16	•
BDG916CP	Needle Nose Pliers	3 9/16	16	•



**Heavy Duty Bolt Cutters**Drop forged, alloy steel jaws are precision ground to provide a long lasting cutting edge. Lightweight, tubular steel handles deliver extra leverage for tough jobs. Comfortable, heavy duty grips resist slippage.

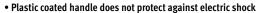
Stock No.	Capacity (Soft Material), Inches	Capacity (Hard Material), Inches	Length, Inches	Weight, Ib (kg)	Replacement Jaw Assembly
BLPBC18	3/8	1/4	18	3.4 (1.55)	BLPBC18-1
BLPBC24	7/16	<sup>5</sup> /16	24	5.6 (2.55)	BLPBC24-1
BLPBC30	1/2	3/8	30	8.6 (3.9)	BLPBC30-1
BLPBC36	9/16	7/16	36	14.2 (6.45)	BLPBC36-1





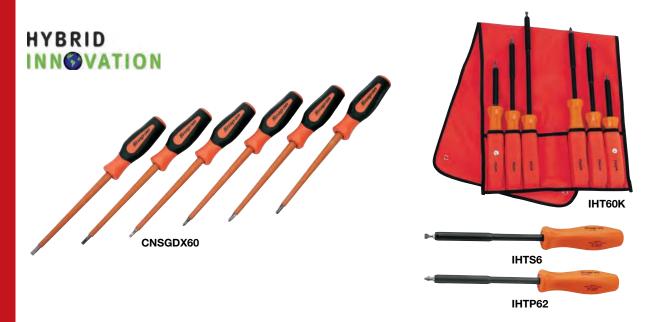






• Read safety precautions on pages W1 to W4

# **NONCONDUCTIVE COMPOSITE TOOLS**



# **Screwdrivers (Soft Grip)**

- Slim tip design accesses fasteners in tight areas faster and easier
- · No conductive path to user
- No insulation to puncture, tear or wear through
- Exceeds ANSI®, ISO® and ASME® strength and performance requirements for standard steel tools
- Every tool is individually tested to protect up to 1,000 V AC and 1,500 V DC
- Snap-on® nonconductive tools are UL® listed, assuring compliance to IEC®60900
- U.S. Patent 6,655,240 B1



	Stock No.	Tip Size	Shank Length, inches	Length, inches	
Flat Tip	CNSGDF66	3/16	6	11 <sup>1</sup> /2	•
	CNSGDF68	1/4	6	11 <sup>1</sup> / <sub>2</sub>	•
	CNSGDF69	9/32	6	11 <sup>1</sup> /2	•
<b>Phillips</b> Tip	CNSGDP61	#1	6	11 <sup>1</sup> / <sub>2</sub>	•
	CNSGDP62	#2	6	11 <sup>1</sup> /2	•
	CNSGDP63	#3	6	11 1/2	•

# **Screwdrivers (Screwdriver Handle)**

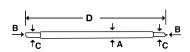
- No conductive path to user
- No insulation to puncture, tear or wear through
- Every tool is individually tested to protect up to 1,000 V AC and 1,500 V DC
- U.S. Patent 5,259,277



	Stock No.	Tip Size	Shank Length, inches	Length, inches	Replacement Bit	
Flat Tip	IHTS3	3/16	3 1/4	8 3/16	IHTS65	•
	IHTS37	7/32	3 1/4	8 3/16	IHTS37-5	
	IHTS38	1/4	3 1/4	8 3/16	IHTS685	
	IHTS6	1/4	6	11	IHTS685	•
	IHTS610	5/16	6	11	IHTS6105	
	IHTS9	5/16	9	14	IHTS6105	•
	IHTS912	3/8	9	14	IHTS912-5	
<i>Phillips</i> Tip	IHTP31	#1	3 1/4	8 3/16	IHTP315	•
	IHTP62	#2	6	11	IHTP625	•
	IHTP63	#3	6	11	IHTP635	•







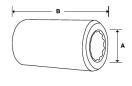
# **Screwstarters and Screwdriver Shanks**

- No conductive path to user
- No insulation to puncture, tear or wear through
- Every tool is individually tested to protect up to 1,000 V AC and 1,500 V DC
- Snap-on nonconductive tools are UL listed, assuring compliance to IEC60900

Stock No.	Handle Type	Handle Diameter, inches (A)	Tip Style (B)	Tip Style (C)	Length, inches (D)
CSSC9	Composite*	9/32	Flat Tip/Phillips	.032" x <sup>9</sup> / <sub>32</sub> ", #2	9
SGDMRC4-C6	Composite Magnetic Bit Holder	3/8	_	_	7 1/4

<sup>\*</sup>Rated shock resistant up to 1,000 V.

# **NONCONDUCTIVE COMPOSITE TOOLS**











# **Nonconductive Composite Socket**

- No conductive path to user
- No insulation to puncture, tear or wear through
- Strong as steel
- Every tool is individually tested to protect up to 1,000 V AC and 1.500 V DC
- Snap-on® nonconductive tools are UL® listed, assuring compliance to IEC®60900

# 3/8" Drive Sockets, mm, 12 Point

mmŢ	(12)	Outside Diameter, mm (A)	Length, mm (B)
10	CFDSM10B	25.1	44.9
12	CFDSM12B	29.6	51.2
13	CFDSM13B	29.6	51.2
14	CFDSM14B	29.6	51. 2
15	CFDSM15B	29.6	51.2
16	CFDSM16B	33.5	57.4
17	CFDSM17B	33.5	57.4
18	CFDSM18B	33.5	57.4
19	CFDSM19B	33.5	57.4



#### Ratchets

- · No conductive path to user
- No insulation to puncture, tear or wear through
- Every tool is individually tested to protect up to 1,000 V AC and 1,500 V DC
- Snap-on nonconductive tools are UL listed, assuring compliance to *IEC*60900

Stock No.	Square Drive, inches (A)	Head Width, inches (B)	Length, inches (C)	Repair Kit
CFS949A	3/8	1 <sup>19</sup> /32	8 3/4	RKRCFS949A
CSS949A	1/2	1 <sup>19</sup> /32	8 3/4	



# **Extensions**

CFX6

Stock No.	Square Drive, inches (A)	Outside Diameter, inches (B)	Length, inches (C)
CFX3	3/8	1	3
CFX6	3/8	2	6
CFX12	3/8	2	12
CSX5	1/2	1 5/16	5 <sup>21</sup> / <sub>32</sub>
CSX10	1/2	1 <sup>5</sup> / <sub>16</sub>	10 21/32







207CFDSY

3/8" Drive Sockets, inches, 12 Point



•				
<b>□</b> Ţ	(12)	Outside Diameter, inches (A)	Length, inches (B)	
1/4	CFDS8B	15/16	1 3/4	
5/16	CFDS10B	15/16	1 3/4	
3/8	CFDS12B	1	1 3/4	•
7/16	CFDS14B	1	1 3/4	•
1/2	CFDS16B	1 <sup>3</sup> /16	2	•
9/16	CFDS18B	1 3/16	2	•
5/8	CFDS20B	1 <sup>3</sup> /16	2	•
11/16	CFDS22B	1 <sup>3</sup> /8	2 1/4	•
3/4	CFDS24B	1 <sup>3</sup> /8	2 1/4	•

**IHT208K Nonconductive Composite Ratchet and** Socket Set. CFDS12B thru CFDS24B sockets (3/8 to 3/4") (8 pcs) plus CFS949A ratchet in C0800 kit bag.



#### Breaker Bar

#### CSN24B

- Features the comfort and control of a Snap-on screwdriver style handle
- UL listed
- Each tool is individually tested to protect up to 1,000 V AC and 1,500 V DC
- Meets IEC60900 and ASTM® 1505 standards for insulating hand tools
- Exceeds ASME®/ANSI® B107.10M strength requirements for standard steel tools

Stock No.	Head Width,	Length,	Head Diameter,
	inches	inches	inches
CSN24B	<b>1</b> 1/8	24 1/2	1







Adaptors

CFSSB8

- No conductive path to user
- No insulation to puncture, tear or wear through
- · Strong as steel
- Every tool is individually tested to protect up to 1,000 V AC and 1.500 V DC
- Only Snap-on nonconductive tools are UL listed, assuring compliance to IEC60900

Stock No.	Description	External Square Drive, inches (A)	Internal Square Drive, inches (B)	Outside Diameter, inches (C)	Length, inches (D)
CA1MF	1/2" Square Drive Adaptor	3/8	1/2	<b>1</b> <sup>5</sup> /16	3 <sup>25</sup> / <sub>32</sub>
CA2A	3/8" Square Drive Adaptor	1/2	3/8	1	3 7/8

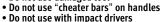
**CFSSB8 Nonconductive Composite Universal Bit** Socket. Composite (insulating) universal bit socket for holding 1/4" bits. 3/8" square drive, 1" 0.D., 1 3/4" long.









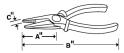


. Do not use damaged tool

• Read safety precautions on pages W1 to W4

# **NONCONDUCTIVE COMPOSITE TOOLS**





#### **Pliers**

- Nonconductive needle nose pliers feature all composite jaw
- Spring loaded joint returns pliers to comfortable working position
- Durable jaw teeth aid in gripping and twisting
- Integral thumb guard for user protection
- Each tool is individually tested to protect up to 1.000 V AC and
- Snap-on® nonconductive tools are UL® listed, assuring compliance to IEC®60900 ASTM® standards for insulating
- Nonconductive lineman pliers have same quality as standard lineman pliers for performance and durability
- Nonconductive handles are soft grip for comfort and control
- Handles feature thumb guards, 2 position grip and tether hole
- Each tool is individually tested to ensure protection up to 1,000 V AC and 1,500 V DC

Stock No.	Description	Jaw Length, inches (A)	Length, inches (B)	Tip Width, inches (C)
C97CP	Needle Nose Pliers	2	8 1/2	5/32
C59AHLP	Lineman's Pliers	1 <sup>13</sup> / <sub>32</sub>	10	_



### **Nut Drivers**

- Snap-on nonconductive composite nut drivers have the 6 point Flank Drive® wrenching system for greater turning power with less fastener damage. Nut drivers feature narrow, nonconductive composite shanks for greater access and a full 5" bolt clearance depth
- Screwdriver style handles provide maximum comfort and control
- · Handles are color coded for easy size reference
- Sizes are stamped on the handle crown for better visibility when wearing a tool pouch
- U.S. Patent 6,427,563



Stock No.		Bolt Clearance Diameter, inches (A)	Length, inches (B)	
CNDD106	3/16	5/32	7 5/8	•
CNDD107	7/32	5/32	7 5/8	•
CNDD108	1/4	5/32	7 5/8	•
CNDD110	5/16	5/32	7 5/8	•
CNDD112	3/8	11/32	8 3/8	•
CNDD114	7/16	11/32	8 17/32	•
CNDD116	1/2	11/32	9 1/16	•



#### CRB1824

# **Ratcheting Box Wrenches**

- UL listed
- Individually tested to protect up to 1,000 V AC and 1,500 V DC
- Meets IEC60900 ASTM standards for insulating hand tools

Stock No.		Finish	Head Diameter, inches (A)	Head Depth, inches (B)	Length, inches (C)
CRB1824	9/16-3/4	Composite	1 9/16 - 1 <sup>13</sup> /16	5/8-5/8	9 1/16

# Soldering



# Butane Soldering Iron Kit (Blue-Point®) YAKS300 Butane Soldering Iron Kit

(50 W). A robust economy model featuring an ultrasonically welded gas tank for better strength. Butane compatible plastics helps prevent gas from leaking.

- 12 month replacement warranty
- · Easy to light with added flint ignitor in the cap
- 50 W equivalent with a 30 minute continuous use run time
- Safety cutoff switch when cap is replaced Cordless butane powered; no cords or wires
- Kit includes 4 tips, stand and cleaning sponge YAS300 Butane Soldering Iron.

# **YAKS300 Soldering Tips**

Stock No.	Description	Size, inches (mm)		
YAKS3002	Fine Solder Tip	1/8 (3.2)		
YAKS3003	Chisel Solder Tip	3/32 (2.4)		
YAKS3004	Double Flat Solder Tip	3/16 (4.8)		
YAKS3005	Hot Knife Tip	_		
YAK10-8	Hot Iron Stand	_		
YAK10-9	Metal Sponge Cup	_		
YAK10-10	Plastic Box	_		

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# **ELECTRICAL / ELECTRONIC SERVICE**

### Butane



# **Butane Soldering Iron Kit**

#### YAKS32A Butane Soldering Iron Kit (25 to 125 W).

Durable all around favorite featuring an ultrasonically welded gas tank for better strength, safety and reliability. Made with butane compatible plastics to help prevent gas from leaking.

- Kit includes 5 soldering tips plus hot knife, hot air and hot air deflector tips
- Pushbutton electronic ignitor
- Torch and soldering iron all in one
- Run time 90 mins plus continuous use
- Adjustable temperature control 25 to 130 W (equivalent)
- Converts to a heat shrink tool and hot knife with the addition of interchangeable tips
- Cordless butane powered, no cords or wires
- 12 month replacement warranty

Optional Tips for YAS32A Soldering Iron

YAKS1-1 Single Face Solder Tip. 1/32" (1.0 mm) YAKS1-3 Single Face Solder Tip. 1/8" (3.2 mm)

YAKS1-4 Single Face Solder Tip. 3/16" (4.8 mm)

YAKS113 Hot air blower with deflector

### YAS32A 2 IN 1 Gas Soldering Auto-Ignition Tool

(25 to 130 W). Durable all around favorite featuring an ultrasonically welded gas tank for better strength, safety and reliability. Made with butane compatible plastics to help prevent gas from leaking.

- Includes YAKS1-6 2.4 mm Double Flat soldering tip
- Pushbutton electronic ignitor
- Torch and soldering iron all in one
- Run time 90 mins plus continuous use
- Adjustable temperature control 25 to 130 W (equivalent)
- Converts to a heat shrink tool and hot knife with the addition of interchangeable tips
- Cordless butane powered, no cords or wires
- 12 month replacement warranty

Optional Tips for YAS32A Soldering Iron

YAKS1-1 Single Face Solder Tip. 1/32" (1.0 mm)

YAKS1-3 Single Face Solder Tip. 1/8" (3.2 mm)

YAKS1-4 Single Face Solder Tip. 3/16" (4.8 mm)

YAKS113 Hot air blower with deflector

# Kit Comparison YAKS300, YAKS32A & YAKS22A

Products	YAKS300	YAKS32A	YAKS22A
Fine Tip	•		
1.0 DF Tip		•	•
2.4 DF Tip	•	•	•
3.2 DF Tip		•	•
4.8 mm Tip		•	•
Hot Knife Tip	•	•	•
Hot Blow & Deflector		•	•
Torch		•	•
Cleaning Sponge & Tray	•	•	•
Kit Box	•	•	•
Flint Ignitor cap	•		
Сар		•	•



# **Butane Soldering Iron Kit**

#### YAKS22A Butane Soldering Iron Kit (15 to 75 W).

Versatile and compact professional soldering iron, featuring an ultrasonically welded gas tank for better strength, safety and reliability. Made with butane compatible plastics to help prevent gas from leaking.

- Kit includes 8 tips: Hot air, heat shrink, torch, hot knife with 4 soldering tips
- Pushbutton electronic ignitor
- Short distance from tip to grip gets you closer to your work
- Run time up to 1 hour
- Adjustable temperature control 15 to 75 W (equivalent)
- Converts to a torch, heat shrink tool and hot knife with the addition of interchangeable tips
- ESD safe antistatic
- · Cordless butane powered, no cords or wires
- 12 month warranty

Optional Tips for YAS22A Soldering Iron

YAKS221 Single Flat Tip. 1/32" (1.0 mm)

YAK\$223 Single Flat Tip. 1/8" (13.2 mm)

YAKS224 Single Flat Tip. 3/16" (4.8 mm)

YAKS2213 Hot Air Tip with deflector

#### YAS22A Gas Soldering with Auto-Ignition

(15 to 75 W). Versatile and compact professional soldering iron, featuring an ultrasonically welded gas tank for better strength, safety and reliability. Made with butane 3/32 compatible plastics to help prevent gas from leaking.

- Includes YAKS226 2.4 mm Double Flat Tip
- · Pushbutton electronic ignitor
- . Short distance from tip to grip gets you closer to your work
- Run time up to 1 hour
- Adjustable temperature control 15 to 75 W (equivalent)
- Converts to a torch, heat shrink tool and hot knife with the addition of interchangeable tips
- ESD safe antistatic
- Cordless butane powered, no cords or wires
- 12 month warranty

Optional Tips for YAS22A Soldering Iron

YAKS221 Single Flat Tip. 1/32" (1.0 mm) YAKS222 Single Flat Tip. 3/32" (2.4 mm)

YAKS223 Single Flat Tip. 1/8" (13.2 mm) YAKS224 Single Flat Tip. 3/16" (4.8 mm)

YAKS2213 Hot Air Tip with deflector

Product	Push Button ignitor	Max. power (watts equivalent)	Adjustable Temperature Control	Run time, mins	Tips included	ESD Safe
YAKS32A	Yes	130	Yes	90	8	Yes
YAKS22A	Yes	75	Yes	60	8	Yes
YAKS300	No	50	Yes	30	4	Yes











- Do not store butane at temperature over 120 °F • Transport and dispose of butane in accordance with all regulations
- Do not use damaged tool
- · Read safety precautions on pages W1 to W4

# **ELECTRICAL / ELECTRONIC SERVICE**

# **YAKS32A Soldering Tips**

<u> </u>	
Description	Size, inches (mm)
Single Flat Solder Tip	1/32 (1.0)
Single Flat Solder Tip	3/32 (2.4)
Single Flat Solder Tip	1/8 (3.2)
Single Flat Solder Tip	3/16 (4.8)
Double Flat Solder Tip	1/32 (1.0)
Double Flat Solder Tip	3/32 (2.4)
Double Flat Solder Tip	1/8 (3.2)
Double Flat Solder Tip	3/16 (4.8)
Hot Air Blower Tip	_
Hot Knife Tip	_
Hot Air Blower Deflector	_
Hot Air Blower and Deflector Tip	_
Plastic Case	_
	Single Flat Solder Tip Single Flat Solder Tip Single Flat Solder Tip Single Flat Solder Tip Single Flat Solder Tip Double Flat Solder Tip Double Flat Solder Tip Double Flat Solder Tip Double Flat Solder Tip Hot Air Blower Tip Hot Air Blower Tip Hot Air Blower and Deflector

# **YAKS22A Soldering Tips**

Stock No.	Description	Size, inches (mm)
YAKS221	Single Flat Solder Tip	1/32 (1.0)
YAKS222	Single Flat Solder Tip	3/32 (2.4)
YAKS223	Single Flat Solder Tip	1/8 (3.2)
YAKS224	Single Flat Solder Tip	3/16 (4.8)
YAKS225	Double Flat Solder Tip	1/32 (1.0)
YAKS226	Double Flat Solder Tip	3/32 (2.4)
YAKS227	Double Flat Solder Tip	1/8 (3.2)
YAKS228	Double Flat Solder Tip	3/16 (4.8)
YAKS229	Hot Air Blower Tip	_
YAKS2210	Hot Knife Tip	_
YAKS2211	Hot Air Blower Deflector	_
YAKS2212	Flame Tip	_
YAKS2213	Hot Air Blower and Deflector Tip	_
YAKS2214	Instruction Sheet	_
YAKS2215	Carrying Case	_

# **Soldering / Electrical Soldering Kits**









R25A

#### R450B Soldering Gun Kit.

 3 different tip and element configurations give this tool great flexibility from delicate soldering to larger, heavy duty applications, such as automotive maintenance

- Slim, single post design ideal for confined work areas
- Fast heat up
- Built in spotlight to illuminate the work area
- · Integral tool stand keeps heated part of the tool out of harms way
- Polarized plug and professional quality
- Packed in a plastic storage case
- UL<sup>®</sup> listed

#### R460B Heavy Duty Soldering Gun Kit (Blue-Point®).

- · Heavy duty soldering gun for those big jobs, quick and efficient
- · Built in spotlight illuminates the work area
- Balanced tool design is more comfortable and easier to use
- Tip heats up in less than 10 seconds
- Quick change type tips can be easily changed within 30 seconds
- Integral tool stand keeps heated part of the tool from damaging surrounding areas
- · Packed in a plastic storage case
- UL listed

#### R490 Industrial Soldering Gun (Blue-Point).

- Dual wattage elements: high wattage heats tip in seconds, lower wattage maintains rated tip temperature
- Effective tip temperature of 1,000 °F or more for heavy duty, sustaining soldering
- Trigger activated control is convenient, easy to use and provides instant response
- · Built-in worklight illuminates the work area
- Plug-in tip and element (TE) assemblies are plug in units that can be changed within a minute
- Integral tool stand prevents heated part of tool from damaging surrounding areas
- Plastic storage case
- · UL listed

#### R60B (60 W) Soldering Station (Blue-Point).

- Includes low voltage, temperature controlled soldering pencil that features a heat shield, a nonburnable silicone rubber cord and a plug-in tip design
- Transformer powered
- 700 °F; 1/16" screwdriver tip included
- 120 V, 60 Hz
- Optional 700 °F tips for R60B or RH60B

#### Irons

#### R40B Industrial Soldering Kit.

- 40 W solder iron is ideal for large solder jobs like battery terminal cables or radiator repair. Threaded tips offer improved heat exchange compared to set screw types
- Features a heat deflection shield, 4 3/4" long handle, 8 1/2" overall length and 8' power cord
- Includes pointed, chisel and fine tips plus 1/2 oz of lead free rosin core solder and holder
- *UL* listed
- 120 V, 60 Hz

#### R25A Industrial Soldering Kit.

- Lightweight 25 W pencil style kit for fine soldering applications
- Threaded tips offer improved heat exchange
- Features a heat deflection shield, 4 3/4" long handle, 8 1/2" overall length and 8' power cord
- Includes pointed, chisel and fine tips plus 1/2 oz of lead free rosin core solder and holder
- UL listed
- 120 V, 60 Hz

#### Ontional Tins

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Item	Description
R60A7	Screwdriver 1/16 Tip 700 °F
R60A8A	Screwdriver 1/16 Tip 800 °F
R60B7	Screwdriver 3/32 Tip 700 °F
R60B8	Screwdriver 3/32 Tip 800 °F
R60D7	Screwdriver 3/16 Tip 700 °F
R60D8	Screwdriver 3/16 Tip 800 °F
R6007	Long Conical 1/32 Tip 700 °F
R60R7	Narrow Screwdriver 1/16 Tip 700 °F
R60R8	Narrow Screwdriver 1/16 Tip 800 °F
R60S7	Long Conical 1/64 Tip 800 °F

# **ELECTRICAL / ELECTRONIC SERVICE**

#### **Solder Suckers**

#### YA477A Solder Sucker.

- · Low static unit designed for desoldering electrostatic discharge sensitive components
- Set plunger and release creates a vacuum that draws up solder YA477-1 Replacement Tip. Replacement tip for YA477A.

#### YA476A Small Solder Sucker.

- Smaller version of YA477A above
- · Includes self cleaning feature

YA476-1A Replacement Tip. Replacement tip for YA476A.



**Soldering/Butane** 

TORCH6

TORCH4

### Miniature Butane Soldering Torches (Blue-Point®) **TORCH2A Turbo Torch.**

- Child resistant Piezo Ignition System
- Instant 1,300 °C/2,400 °F Micro Flame
- Pocket size
- · Internal fuel tank
- 20 minutes of continuous use per refilling
- Dimensions: 4" H x 2 3/4" L x 3/4" W

#### Applications:

Camping, first aid, survival kits, thawing frozen locks, DIY repairs, heat shrink and outdoor activities.

#### **TORCH3A Professional Torch.**

- · Child resistant Piezo Ignition System
- Instant 1,300 °C/2,400 °F pencil point flame
- Adjustable gas control valve
- Safety continuous use lock
- 20 minutes of continuous use per refilling
- Dimensions: 6 1/2" H x 4 1/2" L x 2" W Applications:

Brazing, soldering, plumbing, tool and die shops, automotive and truck repairs, electronic repairs and industrial maintenance.

#### **TORCH4 Butane Blow Torch.**

- · Ultrasonically welded gas tank for better strength and safety
- Butane compatible plastics prevents gas leaks
- Powerful wind resistant flame with 751 Btu/h
- Temperature up to 2,462 °F (1,350 °C)
- All in one easy to use on/off ignition switch
- Adjustable flame length up to 3 1/2"
- Run time is a continuous 40 minutes plus
- 220 W equivalent

# TORCH2A **TORCH6 Butane Torch.**

- · Features an ultrasonically welded gas tank for better strength, safety and reliability
- Made with butane compatible plastics, prevents gas leaking

**TORCH3A** 

- 18 month replacement warranty
- Robust burner specifically designed to protect the ceramic greatly extends the life of the torch
- Twin spark ignition, lights first time every time
- Massive 2.797 Btu/h flame power
- Adjustable flame length up to 4 1/2"
- Temperature up to 2,462 °F (1,350 °C)
- Almost 4 times more powerful than any other butane micro torch

- BUTANE15CSA Butane Fuel Cans (Case).

   Triple filtered butane fuel for use with Snap-on® TORCH2A, TORCH3A, TORCH4 and TORCH6 mini torches, YAKS300/YAKS32A/ YAKS22A soldering irons and GLUEGUN3/GLUEGUN4KT glue guns
- Universal filling tip can be used with most refillable butane products as well
- Case of (24) 1.5 oz cans



# Tweezers (Blue-Point)

TZK5 Tweezers Kit. Includes 5 tweezers in a vinyl zipper pouch.

- · All stainless steel construction
- Pointed tweezers w/plain ends, 4 3/8" long
- Self closing tweezers w/plain ends, 4 1/2" long
- Self closing, weighted solder tweezers w/serrated blunt end, 7" long
- Sharp point utility tweezers w/bent plain ends, 7" long
- Sharp point utility tweezers w/plain ends, 7" long

TZK7 Tweezers Kit. Includes 7 tweezers in a black vinyl zipper pouch.

- All stainless steel construction
- Pointed tweezers, 4 3/8" long
- Curved head utility tweezers, 6 3/4" long
- · Self closing, heat resistant tweezers, 6" long
- Sharp pointed utility tweezers, 7" long
- Side locking tweezers, 6" long
  Spade point tweezers, 4 3/8" long
- Weighted solder tweezers, 6" long











- Do not store butane at temperature over 120 °F
  - Transport and dispose of butane in accordance with all regulations
  - Read safety precautions on pages W1 to W4



# Miniature Tool/Pliers (Blue-Point)

Mini-Pliers. Stainless steel, 3 notch ratcheting locking mechanisms lock onto small objects with varying degrees of pressure. 1/16" tips; 1 3/8" long jaws. MPC7A Mini-Pliers. Curved, serrated jaws. 7" long.

MPC10A Mini-Pliers. Curved, serrated jaws. 10" long. MPS7A Mini-Pliers. Straight, serrated jaws. 7" long. MPS10A Mini-Pliers. Straight, serrated jaws. 10" long MPK4A Mini-Pliers Set. MPC7 and MPC10 plus MPS7 and MPS10A (4 pcs) in black zipper pouch.



# **PUNCHES AND CHISELS**

# **Punches and Chisels**

The anvil end on heads of Snap-on® punches and chisels are machined to a modified parabolic curve. This design directs the striking force to the center of the tool head to allow slow metal displacement. The parabolic curve controls mushrooming to reduce chipping and splitting. Heads should be redressed to their original shape with hand files as necessary. The tough alloy steel is machined and differentially heat treated for optimum performance. The hardness of the striking head is reduced to help toughness and add qualities that result in a slower mushrooming of the striking surface.



PPC19B



PPC250BK Punch and Chisel Set.

Includes 24 pcs in KB2179 kit bag: PPC1A PPC820B PPC106A PPC205A PPC108A PPC3A PPC206A PPC824B PPC4A PPC110A PPC208A PPC12B PPC103A PPC112 PPC14B PPC210A PPC104A PPC203A PPC812B PPC15B PPC19B PPC816B PPC105A PPC204A



PPC816B PPC12B

PPC820B PPC13B

PPC824B PPC14B



PPC210BK

PPC210BK Punch and Chisel Set.

Includes 2	2 pcs in KB2178	kit bag:	
PPC1A	PPC105A	PPC204A	PPC816B
PPC3A	PPC106A	PPC205A	PPC820B
PPC4A	PPC108A	PPC206A	PPC824B
PPC5A	PPC110A	PPC208A	PPC828B
PPC103/	A PPC112	PPC210A	
PPC104/	A PPC203A	PPC812B	
	PPC1A PPC3A PPC4A PPC5A PPC103/	PPC1A PPC105A PPC3A PPC106A PPC4A PPC108A PPC5A PPC110A PPC103A PPC112	PPC3A PPC106A PPC205A PPC4A PPC108A PPC206A PPC5A PPC110A PPC208A PPC103A PPC112 PPC210A



PPCD70BK Pin Punch Set. Includes 7 pcs in KB2183 kit bag: PPC103A PPC106A PPC110A PPC104A PPC107A PPC105A PPC108A

PPC715BK Punch and Chisel Set.

Includes 16 pcs in KB2182 kit bag:

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PPC1A	PPC104A	PPC203A	PPC208A
PPC3A	PPC105A	PPC204A	PPC812B
PPC4A	PPC106A	PPC205A	PPC816B
PPC103A	PPC108A	PPC206A	PPC820B



PPCS60BK Starter Punch Set. Includes 6 pcs in KB2185 kit bag: PPC203A PPC205A PPC208A PPC204A PPC206A PPC210A



PPC710BK Punch and Chisel Set.

Includes 11 pcs in KB2181 kit bag:

morado i i	P00 III 11DE 10	i inic bag.	
PPC1A	PPC105A	PPC205A	PPC816B
PPC4A	PPC106A	PPC206A	PPC820B
PPC103A	PPC203A	PPC812B	



PPC50AK Flat Chisel Set. Includes 5 pcs in KB2173 kit bag: PPC812B PPC820B PPC828B PPC816B PPC824B



PPSD120BK Pin and Starter Punch Set. Includes 12 pcs in KB2187 kit bag:

molado i =	000 111 1102 101	int bag.	
PPC103A	PPC106A	PPC203A	PPC206A
PPC104A	PPC108A	PPC204A	PPC208A
PPC105A	PPC110A	PPC205A	PPC210A



PPC50AK

PPCM60BK Metric Pin Punch Set. Includes 6 pcs in KB2189 kit bag: PPCM103B PPCM104B PPCM105B PPCM106B PPCM107B PPCM108B

	Stock No.	Hex Size, inch	Point / Edge, inch (mm)	Length, inch (mm)
Punch and Chisel Accessories	PPC1A Chisel Gauge	_	_	2 5/8
Statement Co	PPC5A Punch/Chisel Holder	_	_	7 11/16
Center Punches	PPC3A	5/16	1/8	5
	PPC4A	7/16	3/16	6
	PPC6B	5/8	5/16	7
	PPC714B	9/16	5/32	14
Pin Punches	PPC103A	9/32	3/32	4 7/32
	PPC104A	5/16	1/8	4 1/2
h.	PPC105A	3/8	5/32	4 1/2
	PPC106A	3/8	3/16	5 1/4
	PPC107A	3/8	7/32	5 1/4
	PPC108A	7/16	1/4	5 3/4
	PPC110A	1/2	5/16	6
	PPC112	9/16	3/8	5 1/4
Metric Pin Punches	PPCM103B	5/16	(3)	(159)
<b>.</b>	PPCM104B	5/16	(4)	(159)
	PPCM105B	3/8	(5)	(159)
	PPCM106B	3/8	(6)	(159)
	PPCM107B	3/8	(7)	(159)
	PPCM108B	7/16	(8)	(159)
Starter Punches	PPC203A	5/16	3/32	5 1/2
	PPC204A	3/8	1/8	5 3/4
	PPC205A	3/8	5/32	6
	PPC206A	7/16	3/16	6 1/4
100	PPC208A	1/2	1/4	6 3/4
	PPC210A	9/16	5/16	7 1/4

	Stock No.	Hex Size, inch	Point/ Edge, inch	Length, inch
Flat Chisels	PPC808A	1/4	1/4	5
	PPC812B	5/16	3/8	5 1/4
III.	PPC816B	7/16	1/2	5 <sup>5</sup> /8
	PPC820B	1/2	5/8	6 1/2
1000	PPC824B	5/8	3/4	7 1/4
_	PPC828B	11/16	7/8	8
	PPC832B	7/8	1	9
	BPPC1878*	7/8	1	18
Long Flat Chisels	PPC820LB	1/2	5/8	16
Half Round Nose Cape Chisels	PPC12B	3/8	<sup>5</sup> /16	6
Cape Chisels	PPC13B	<sup>5</sup> /16	1/4	5 5/8
	PPC14B	3/8	<sup>5</sup> /16	6
Diamond Point Chisels	PPC15B	7/16	7/32	6
	PPC19B	3/8	1/8	5 <sup>3</sup> /4

\*Blue-Point®

#### PPRG80 Roll Pin Punch Guide Set.

- Companion tool for the PPR708BK roll pin punch set
- Provides faster, safer pin installation
- Pin quide is a vinyl sleeve uniting pin and punch to achieve perfect alignment during installation
- Ideal for pin installation in tight quarters where 2 hands can't reach
- Use with Snap-on® roll pin punches PPR2 through PPR8 (1/16 to 1/4")
- Can also be used with Snap-on pin punches



PPRG80

PPC103A through PPC108A (3/32 to 1/4") and long pin punches PPC104LA thru PPC108LA (1/8 to 1/4")

PPR708BK Roll Pin Punch Set. Includes 8 pcs in KB2186 kit bag:

PPR2 PPR4 PPR7 PPR2-1/2 PPR<sub>5</sub> PPR8 PPR3

PPR6



PPR708BK

PPCL60BK Long Pin Punch Set. Includes 6 pcs in KB2184 kit bag:

PPC104LA PPC106LA PPC108LA PPC105LA PPC107LB PPC110LA



PPCL60BK

	Stock No.	Hex Size, inch	Point/ Edge, inch	Length, inch
Roll Pin Punches	PPR2	_	1/16	3 5/32
	PPR2-1/2	_	5/64	3 1/2
	PPR3	_	3/32	3 29/32
	PPR4	_	1/8	4 1/4
	PPR5	_	5/32	4 5/8
	PPR6	_	3/16	5
	PPR7	_	7/32	5 3/8
	PPR8	_	1/4	5 3/4
	PPR10	_	5/16	6 1/8
	PPR12	_	3/8	6 <sup>1</sup> /8
	PPR14	_	7/16	6 <sup>1</sup> /8
	PPR16	_	1/2	6 1/8
Long Pin Punches	PPC104LA	5/16	1/8	5 <sup>15</sup> /16
	PPC105LA	3/8	5/32	6 1/2
	PPC106LA	3/8	3/16	7 1/16
	PPC107LB	3/8	7/32	7 5/8
	PPC108LA	7/16	1/4	8 <sup>3</sup> /16
	PPC110LA	1/2	5/16	8 3/4
Midget Punches and Chisels	PPC402A Pin Punch	9/32	1/16	3
	PPC403A Pin Punch	9/32	1/8	3 1/4
1000	PPC404A Center Punch	9/32	3/32	3 <sup>5</sup> /8
	PPC405A Starter Punch	9/32	1/16	3 3/4
	PPC406B Cape Chisel	9/32	<sup>3</sup> / <sub>16</sub>	4
	PPC407B Cape Chisel	9/32	5/32	4
	PPC408B Flat Chisel	_	5/16	4 1/8

**PPVP70BK Midget** Punch and Chisel Set. Includes 7 pcs in KB2188 kit bag:

PPC402A PPC406B PPC403A PPC407B PPC404A PPC408B PPC405A



PPLT40AK Drift Pin Punch Set. Includes 4 pcs in KB2174 kit bag:

PPC905B PPC908B PPC910B PPC912B



LP30A Drift Pin Punch Set. Includes 3 pcs in KB2177 kit bag: 1210B 1512B 1816B



PPB30AK Bronze Punch Set. Includes 3 pcs in KB2171 kit baq: PPB408A PPB612A PPB816A



PPBL30AK Bronze Punch Set. Includes 3 pcs in KB2172 kit bag: PPB1012A PPB1226A PPB826A

**PPB20AK Bronze Tapered** 

PPBL30AK

Punch Set. Includes 2 pcs in KB2170 kit bag: PPB1012A PPB1414A

	Stock No.	Hex Size, inch	Point/ Edge, inch	Length, inch
Drift Pin Punches	PPC905B	3/8	5/32	8
	PPC908B	7/16	1/4	8 1/2
	PPC910B	1/2	<sup>5</sup> / <sub>16</sub>	9
	PPC912B	9/16	3/8	9 1/2
	1210B	5/8	<sup>5</sup> /16	<b>12</b> 1/2
	1512B	3/4	3/8	15
	1816B	7/8	1/2	18
Bronze Pin Punches	PPB408A	_	1/4	4
	PPB612A	_	3/8	6
Bronze Drift Punches	PPB816A	_	1/2	8
T	PPB826A	_	13/16	8
	PPB1226A	_	13/16	12
Bronze Tapered Punches	PPB1001A	5/8	3/8	8
	PPB1012A	_	3/8	10
	PPB1414A	_	7/16	14
Bronze Round Punch	PPB1002A	_	3/4	10







- Use the proper punch or chisel for the job
- . Do not use punches or chisels having chipped or mushroomed end; dress to original shape with a hand file
- · Hammer head diameter should be approximately 3/8" larger than head of punch or chisel
- Read safety precautions on pages W1 to W4

# **PUNCHES AND CHISELS**

### Soft Grip

Stock No.

PCSG812

PCSG816

PCSG820

PPSG103

PPSG105

PPSG106

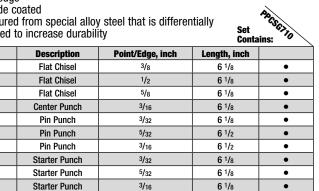
PPSG203

PPSG205

PPSG206

PPSG4

- · Ergonomic soft grip handle provides a powerful grip, improves the thermal sensation in cold work environments and reduces strike vibration
- Semispherical striking area controls mushrooming to help reduce chipping and splitting
- · Cutting edges on chisels are hand ground to consistently produce a quality edge
- Black oxide coated
- Manufactured from special alloy steel that is differentially heat treated to increase durability





Supple	Shapan usdays	Shapan saddius
	PPCSG71	0

# PPC14LB

### **Oval Bearing Race Punches**

High alloy steel makes these tools ideal for stubborn bearing races. PPC704BK Punch Set. Includes PPC6LB thru PPC20LB (4 pcs). **PPC6LB** 7/16" hex stock, 7/16" x 15/64" oval point, 6" long. **PPC10LB** 1/2" hex stock, 1/2" x 17/64" oval point, 10" long. **PPC14LB** 9/16" hex stock, 9/16" x 19/64" oval point, 14" long. **PPC20LB** 9/16" hex stock, 5/8" x 5/16" oval point, 20" long.



PGH8A

#### **Gasket Punch Set** PGH8A Gasket Punch Set.

- · Cuts holes in gaskets and other soft materials
- Includes (5) 3/8" long mandrel and (10) punches: 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8 and 1" in a storage case



# **Bushing Cutter**

# GA1

# GA1 Bushing Cutter (7 1/4" long). • Made of 1/2" octagonal stock with a 7/16" x 1/8" bit

- Curved bit pushes material away from work



#### **Automatic Centering Punches (Blue-Point)** YA900 Automatic Center Punch (4 3/4" long).

- Strikes blow when pressure is applied, no hammer needed
- Cap adjusts force of blow
- 7/16" diameter

#### YA879A Heavy Duty Automatic Center Punch (5" long).

- Single hand operation
- Design eliminates need for striking with hammer
- Adjustable spring tension cap
- Hardened steel point is replaceable
- 1/2" diameter



# **Revolving Punch**

# YA8290A Revolving Punch (Blue-Point).

- · Punch round holes in leather, rubber, plastic, canvas, gaskets and other similar materials
- 6 punch sizes included in tool: 5/64, 3/32, 7/64, 1/8, 9/64 and 5/32"



DPFT528A

### Transfer Punch Set (Blue-Point®) DPFT528A Transfer Punch Set.

- · For transferring hole patterns
- Set includes punches from 3/32 to 1/2" in 1/64" increments plus 17/32'
- · Each punch is marked with its size and manufactured from tempered steel to promote long tool life
- Metal index provides convenient storage
- Punches are 4 7/8" in length



# Steel Stamping Sets (Blue-Point)

- Heat treated square stamp bodies
- Stored in 2 piece wooden containers

**GA237** 

Set Stock No.	Characters	Number Stamps	Figure size, inches	Square body, inches	Length, inches
GA237	0-9*	9	3/16	<sup>5</sup> /16	2 <sup>7</sup> /16
YA817	0-9*	9	1/8	1/4	2 3/8
GA238	A-Z**	27	3/16	5/ <sub>16</sub>	2 <sup>7</sup> /16
YA818	A-Z**	27	1/8	1/4	2 3/8

\*One stamp serves as both 6 and 9.

\*\*Also includes stamp for period.

# Dead Blow

# **HBFE Series Dead Blow Hammers**

- Free flowing shot design to improve dead blow action while reducing rebound
- Compact head has larger surface striking area and heavier caps to improve delivered force by as much as 40 percent



Applications: Brake rotors, brake drum removal, ball joints (tie rod removal), tires, seal installation, loosen oil pans and covers, OE rims, axle insertion, piston installation and crank shaft end play

# Standard

- · Soft grip handle with ribbed, textured elastomer grip prevents hand slippage
- Composite handle shank improves balance while defusing shock and dampening vibration
- Improved thermoplastic urethane material is nonsparking and resistant to most shop chemicals

	HBE
Set Contain	HBFE103

Stock No.	Weight, oz	Head Length, inches	Face Diameter, inches	Length, inches	
HBFE16	16	3 1/4	<b>1</b> 9/16	12	
HBFE24	24	3 3/4	1 3/4	12 <sup>3</sup> /4	•
HBFE32	32	4 1/4	2	13 1/2	•
HBFE48	48	4 3/4	2 1/4	15	•
HBFE56	56	5 <sup>7</sup> /16	2 3/4	15 <sup>3</sup> / <sub>4</sub>	

#### **HBBD Series Ball Peen Hammers**

- Freeflowing steel canister shot design to improve dead blow action while reducing rebound
- Soft grip handle with ribbed, textured elastomer grip prevents hand slippage
- · Composite handle shank improves balance while defusing shock and dampening vibration



Applications: Rear drums, tie rods, U-joints rounded end, track bar rounded end, rivets, punch and chisel applications

Stock No.	Weight, oz	Head Length, inches	Face Diameter, inches	Length, inches
HBBD8	8	4	1	11 5/8
HBBD16	16	4 3/8	1 1/4	12 <sup>1</sup> / <sub>4</sub>
HBBD24	24	4 3/4	1 3/8	12 3/4
HBBD32	32	5 <sup>3</sup> / <sub>4</sub>	1 3/4	13 <sup>5</sup> /8
HBBD40	40	5 3/4	1 3/4	15 <sup>1</sup> /8



## Sledge

Stock No.	Weight, Ib	Head Length, inches	Face Diameter, inches	Length, inches
BC7B	5	7	2 3/4	20
BC110B	8	7	2 3/4	30
BC114B	11 lb 8 oz	8	3 1/4	36

#### **HBSE Series Slimline Dead Blow Hammers**

Incorporates our new microcellular soft grip handle, a softer, more comfortable energy absorbing material.

· Microcellular grip and composite shank -Comfortable, secure grip and dampens the vibration to the user's hand. Smaller face -For more concentrated blows. • Longer head profile -For extended reach. HBSE20 Internal steel canister · Wide flare at with free flowing end of handle shot design - Mulit-position Helps prevent Delivers maximum dead hand grip hammer from blow action. Helps user "choke up" slipping out of in tighter work areas. hand.

Applications: Main bearing caps, dust caps, smalller objects, custom bikes and tighter applications that standard dead blow hammers will not fit

Stock No.	Weight. oz	Head Length, inches	Face Diameter, inches	Length, inches
HBSE10	10	3 1/2	1 <sup>1</sup> /4	10 5/8
HBSE20	20	4 1/8	1 3/8	11 <sup>1</sup> /8
HBSE30	30	5 1/8	1 1/2	12 <sup>3</sup> /8



#### **Piston**

- One piece urethane construction
- Full length canister increases head strength
- Made of material that won't damage the piston
- · Shot filled head drastically reduces rebound

Stock No.	Weight, oz	Head Length, inches	Face Diameter, inches	Length, inches
HLE24	24	7 3/4	5 1/2	12 3/4



#### **Dual Face Drilling**

- Sustained impact and maximum striking force with almost no rebound
- Composite handle shank improves the hammer balance while defusing shock
- Free flowing steel head canister design improves dead blow action and reduces rebound
- · Nonsparking, chemical resistant molded urethane covering
- Ribbed thumb rest allows user to choke up in tighter work areas

Stock No.	Weight. oz	Head Length, inches	Face Diameter, inches	Length, inches
HSSD32	32	5 <sup>3</sup> /8	1 3/4-1 3/8	11 1/2





- Do not use urethane hammers near liquid oxygen Do not strike another hammer or other hardened object
- . Do not use chipped, mushroomed or cracked hammers
- Strike squarely, avoid glancing blows
- Read safety precautions on pages W1 to W4

#### Soft Face

#### **HBBT Series**

 Bronze tipped nonmarring hammer ideally suited for work on bushings, gears and transmissions.



Applications: Bearings & race install, pinion & half shafts, distributor rebuilds, alternator and starter rebuilds, seal installation, body moldings and nonspark applications

Stock No.	Weight, oz	Head Length, inches	Head Diameter inches	Length, inches
HBBT16	16	3 3/4	1 3/8	12
HBBT24	24	4 1/4	1 <sup>3</sup> /8	12
HBBT32	32	4 1/2	1 1/2	12 <sup>3</sup> / <sub>4</sub>



Soft Blow (Blue-Point®)

- Designed to reduce marring and denting
- Use in assembly applications and on surfaces including metal, glass, plastic and wood
- Special polymer head resists dynamic fatigue, creep and compression set, even at extreme temperatures

Stock No.	Face Dimensions, inches	Head Color	Length, inches
BF623	1 7/8 x 2 1/8	Blue	12 <sup>1</sup> / <sub>2</sub>



#### BF620C Rubber Head Mallet (Blue-Point).

- Solid rubber head is 3 3/4" long and 2 1/4" in diameter
- 11" hardwood handle
- Ideal for replacing hubcaps, bodywork, etc.



# Interchangeable Head (Blue-Point)

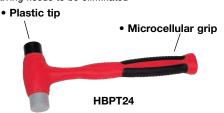
- Shot loaded, dead blow hammer adds more striking force by eliminating rebound and dampening vibration shock
- 1 1/2" striking face diameter on each hammer head
- Six interchangeable heads meet a number of various applications, including nonmarring and nonsparking applications with selected head surfaces
- Comfortable, nonslip handle grip
- Set includes 10" fiberglass handle and storage case
- 1" head extender is optional



Stock No.	Description	Color	Weight, oz	
HSPI6KT1	Hammer Handle	_	22	•
HSPI6KT2	Soft Face	Brown	1.5	•
HSPI6KT3	Medium Face	Red	1.4	•
HSPI6KT4	Medium Hard Face	Cream	1.3	•
HSPI6KT5	Hard Face	Black	1.3	•
HSPI6KT6	Steel Face	Steel	2.2	•
HSPI6KT7	Brass Face	Brass	2.2	•
HSPI6KT8	Plastic Storage Case	Black	_	•
HSDIEKTO	1" Head Extender			

# **HBPT Series**

 Plastic tipped hammers used where metal to metal scratching or marring needs to be eliminated



Applications: Transmission work, rear end work, metal body moldings and light tapping

Stock No.	Head Length, inches	Weight, oz	Length, inches	Soft Tip Stock No.	Hard Tip Stock No.
HBPT16	3 3/4	16	12	HPTS16	HPTH16
HBPT24	4 3/4	24	12 3/4	HPTS24A	HPTH24A



# **Combination**

- · Combination steel and soft face dead blow
- 1 pc urethane construction
- Replaceable tips

Stock No.	Head Length, inches	Weight, oz	Tip Diameter, inches	Length, inches	Soft Tip Stock No.	Hard Tip Stock No.
HSPD16	4 3/8	16	1 1/4	12 <sup>1</sup> /8	HPTS16	_
BH232A*	_	32	1 <sup>5</sup> /8	13	BH232-2	BH232-3
BH232-4 Optional nylon tip (also available)						

\*(Blue-Point)



# Brass (Fiberglass Handle) (Blue-Point)

- Nonsparking/nonmarring surface for many applications
- Brass head absorbs blow and reduces rebound
- · Flat surface for even distribution of blow
- Comfortable, nonslip handle grip

Stock No.	Weight, Ibs	Length, inches
HBR15	1 1/2	12
HBR25	2 1/2	12
HBR4	4	12



#### HCL16 Claw Hammer, 16 oz.

- Drop forged carbon steel head
- Oversized striking surface
- Polyurethane leather improves grip and offers abrasion resistance and low temperature flexibility for unparalleled comfort
- Antishock core reduces vibration and hand fatique
- 1 pc construction delivers increased strength

# Ball Peen (Blue-Point®)



# **Ball Peen (Hickory Handle)**



	` ,	•		
Stock No.	Weight, oz	Handle Length, inches	Replacement Handle	
BP2B	2	9 1/2	BPH2C	
BP4B	4	10 1/2	BPH4C	
BP8B	8	12 <sup>1</sup> / <sub>2</sub>	BPH8C	•
BP12B	12	13 1/2	BPH12C	•
BP16B	16	14 <sup>1</sup> / <sub>2</sub>	BPH16C	•
BP20B	20	15	BPH20C	
BP24B	24	16	BPH20C	•
BP32B	32	16	BPH40C	
BP40B	40	16 <sup>1</sup> / <sub>4</sub>	BPH40C	
BP48B	48	16 <sup>1</sup> / <sub>4</sub>	BPH40C	

ASME®/ANSI® B107.400



# **Ball Peen (Fiberglass Handle)**

Stock No.	Weight, oz	Handle Length, inches	Replacement Handle	Previous Model Handle
BPN8B	8	11	BPNH8B	BPN8-1
BPN12B	12	12	BPNH12B	BPN12-1
BPN16B	16	13	BPNH12B	BPN16-1
BPN24B	24	14	BPNH24B	BPN24-1
BPN32B	32	16	BPNH24B	BPN24-1

ASME/ANSI B107.400

# **Heavy Duty**





# Dual Face Dead Blow (Fiberglass Handle)

- 100% cast polyurethane face is designed to withstand the most severe striking applications
- Nonsparking/nonmarring brass face for multiple applications
- Nonferrous shot loaded cavity delivers more power and less rebound than any hammer of its kind
- Abrasion and Impact Resistant
- Chemical Resistant
- Comfortable, nonslip handle grip
- Applications: aerospace, automotive, metal fabrication, petrochemical, electronics, industrial assembly, construction, oil and mining

Stock No.	Weight, lbs (kg)	Face Diameter, inch (mm)	Handle Length, inch (mm)	Overall Length, inch (mm)
HCB2SG	2 (.91)	2 (50.8)	10 5/8 (270)	13 3/4 (349)
HCS2SG	2 (.91)	2 (50.8)	10 5/8 (270)	13 3/4 (349)

Meets or exceeds all ANSI specifications

# BC/BD/HD Series Heavy Duty (Fiberglass Handle) (Blue-Point)

- Dampens vibration and provides strength and safety
- Handle is resistant to dry rot, warp and splintering
- Fiberglass handle dampens vibration and provides extra strength and safety
- · Handle is epoxy welded to hammer head and will withstand 8,000 lbs of separation force
- · Comfortable, nonslip handle grip
- · Materials will resist most shop chemicals



Stock No.	Description	Weight, lbs	Striking Face Diameter, inches	Handle Length, inches	Overall Length, inches	Replacement Handle
BC4SG	Cross Peen	4	1 1/2	12	14	BD4SG-1
BD4SG	Engineer	4	1 1/2	12	14	BD4SG-1
HD4SG	Hand Drilling	4	1 1/2	8 3/4	10 <sup>3</sup> / <sub>4</sub>	HD4SG-1

# **BD Series Sledge Hammers**

 Handles - Tensile strength of 200,000 pounds per square inch.

• Drop forged carbon steel heads -Heat treated for durability & safety. **BD10ESG** • Ergonomic grip -

• Fiberglass handles - Welded into the sledge eyehole to withstand 8,000 pounds of separation force.

Provides a superior gripping surface, helping to dampen & absorb vibration.

# Sledge (Fiberglass Handle) (Blue-Point)

Stock No.	Weight, Ibs (kg)	Face Diameter, inch (mm)	Handle Length, inch (mm)	Overall Length, inch (mm)	Replacement Handle
BD6ESG	6 (2.7)	1 5/8 (41.1)	16 (406.4)	18 (457.2)	BD6ESG-1
BD10ESG	10 (4.5)	2 (50.8)	29 (736)	32 (812.8)	BD8ESG-1

 Durable handles - Will not dry rot, warp or splinter from exposure to the elements and resists most shop chemicals.

BH122D



# BH Series Heavy Duty (Hickory Handle) (Blue-Point)

	•	, ,	•	, ,	•
Stock No.	Description	Weight, oz	Head Length, inches	Overall Length, inches	Replacement Handle
BH122D	Engineer	40	4 1/2	15	BPH40C
BH123D	Engineer	48	4 3/4	15	BPH40C
BH141A	Cross Peen	32	4 1/2	15	BPH20C
BH142A	Cross Peen	40	5	15	BPH40C
BH143A	Cross Peen	48	5 1/2	15	BPH40C
BH133B	Hand Drilling	48	4 1/2	10	BPH133







- Do not use urethane hammers near liquid oxygen
- Do not strike another hammer or other hardened object · Do not use chipped, mushroomed or cracked hammers
- · Strike squarely, avoid glancing blows

### **Hacksaws**



**HSG325** 



**HSG319** 



HS151



HS50



**HSG325 Professional Hacksaw.** 

- · Ergonomic front grip for increased comfort and control
- Thermoplastic comfort grip handle
- Quick blade loading, spring loaded tensioning mechanism for quick blade changes
- Dual blade positioning, alternative 55° blade mounting for flush cutting
- High blade tension for straighter, more accurate and faster cuts

#### HSG319 Bi mold Handle Hacksaw.

- Solid steel frame overmolded with soft grip for comfortable use
- Designed for 12" (300 mm) blades
- Blade tensioner discreetly blends with handle
- Positions for normal flush cutting or 55° angle

#### **HS5A Mini Hacksaw.**

- Designed for 10" (250 mm) blades
- 8 1/4" frame fits in limited access areas
- Includes HSBM1024B 10" blade

#### **HS151 Junior Frame Hacksaw.**

- Designed for 6" blades
- 9 1/2" long
- Blade included

# HSM632 6" Replacement Blade (32 TPI).

- 1/4" wide, 32 teeth per inch, 6" length
- Package of 5

# **Quick Cutter Hand Saws**

- Features contoured screwdriver type handle for a secure grip
- Saw holder keeps a tight hold on any of the 3 included blades
- Turn the knurled knob and easily switch blades
- All components neatly packaged in CO417 kit bag

#### Hacksaw Blades

- Shatter resistant bimetal for a long life and fast, efficient cutting
- Available in packages of 10 only

Stock No.	Length, inches	Teeth per Inch
HSBM1018B	10	18
HSBM1024B	10	24
HSBM1032B	10	32
HSBM1214B	12	14
HSBM1218B	12	18
HSBM1224B	12	24
HSBM1232B	12	32

#### HS50 Quick Cutter Hand Saw.

Includes: HS14X1, HS18X1 and HS24X1

#### **HS14X1 General Purpose Blade.**

• For metal over 1/8", hard rubber and fiber

# **HS18X1 Fine Metal Cutting Blade.**

• For metal 18 gauge to 1/8", nail embedded wood

#### **HS24X1 Heavy Metal Cutting Blade.**

 For metal 18 gauge and under trim and tubing, plus galvanized pipe under 18 gauge

#### **HSKIT Handsaw Kit.**

- Ergonomic handle design reduces pressure points and stops hand from sliding
- Handle angle and position of handle to blade teeth reduces sawing forces and increases efficiency
- High quality aluminum body ensures rigidity and retaining/protecting locking mechanism
- Locking system helps reduce play between handle and blade when assembled
- · Easy access to lever through handle opening
- Long lever for easy lock and release: security spring locks lever Includes:

HSEXRL Handle.

**HSEX16** General Purpose Blade.

**HSEX22 Coarse Wood Blade.** 



**HSEXRL** 

# Scissors/Multi Tools



#### Scissors

#### YA114 Stainless Scissors (Blue-Point®).

- High quality stainless steel
- Compact: 3" long

#### KER1120 Taskmaster Shears.

- High carbon stainless steel blades designed to hold their edge longer and sharpen quickly
- Blades are permanently bonded to comfortable, nonslip handles
- Overall length 9"



Pruning Tools PRN8P Hand Pruner.

- Slicing cutting action requires minimal effort
  High quality carbon steel blades with precision ground edges keep the blade sharp longer
- Glass fiber handle is lighter than aluminum yet stronger than steel
- Strong rubber bumper absorbs shock
- Smooth spring keeps blade in open position while providing minimal resistance in cutting action
- Blades can be locked in closed position

# **Landscape Tools**



### PRN75SFS Folding Pruning Saw.

- General purpose folding saw for cutting wood or plastics
- 2 component plastic handles for firm grip
- Blade specially coated for low friction and rust protection
- Blade locks in both open and closed position

# Sharpeners



# Sharpening Kits

# GAT10005 Professional Knife Sharpening System.

- Knife clamp/angle guide for 6 precise sharpening angles and secure knife clamping to ensure efficient blade to stone contact
- · Includes extra coarse, medium and fine honing stones, specialty serrated blade sharpening stone, honing oil and custom case GAT10004 Diamond Hone Knife Sharpening System.

- · Fusing diamonds to metal substrate of the hones yields a sharpening instrument to outperform others
- Includes extra coarse, medium and fine monocrystalline honing stones, honing oil and custom case
- · Knife clamp/angle guide for 6 precise sharpening angles and secure knife clamping to ensure efficient blade to stone contact

#### GAT10003 Standard Knife Sharpening System.

- Knife clamp/angle guide for 6 precise sharpening angles and secure knife clamping to ensure efficient blade to stone contact
- Includes extra coarse, medium and fine honing stones, honing oil

#### GAT8T001 Tri hone Knife Sharpening System.

- Coarse silicon carbide stone for setting the bevel on dull or badly damaged blades
- 100% natural Arkansas stones: medium stone for sharpening and fine stone for polishing
- Honing oil included
- All stones mounted on natural wood triangle to provide elevated work surface

#### GAT80005 Stone Knife Sharpening Kit.

- Includes block mounted natural Arkansas stone: 5" for sharpening, 3" for final honing
- Includes honing oil and convenient storage case

# KER2535 Blade Sharpener.

- Embedded with 600 grit diamond coating, bonded with nickel plating to a lightweight tube
- Length is 8.5" (20.3 cm): sheath is 5.5" (12.7 cm)

#### GAT60204 Pocket Knife Sharpener.

- · Compact, lightweight sharpener with side by side rod for knives, fish hooks, darts and serrated edges
- Edge holds 2 rods and an angle guide to allow proper angle for serrated blades
- High density alumina rods are removable for cleaning and repositioning
- Measures 2.40" x 2.12" x .45"

#### GAT60016 TRI-SEPS® Knife Sharpener.

- Triangular shaped, portable sharpener features built-in angle guide
- Restore edges to serrations, plain edges, entrenching tools, scissors, darts, fish hooks, ice picks and more
- Includes bead chain and clasp

# Premium grade 96% alumina ceramic Overall length: 4.5" (115 mm) GAT40001 Carbide Knife Sharpener.

- · Tungsten carbide blade
- Lightweight 6061 T6 aluminum body features a flat bottom and knurled handle with thumb and finger insets
- Not recommended for serrated edges

### GAT12001 Clamp Mount.

- Holds knife clamp/angle guide from GAT10004 and GAT10003 systems to maximize ease of sharpening
- Useful when sharpening large or numerous knives in succession
- Can be permanently mounted to any work surface or C-clamped for portability

# SCKS1 Carbide Knife Sharpener.

- Preset angle simplifies sharpening of all blades (except serrated)
- Slip resistant rubber base pads increase steadiness in sharpening position
- Lightweight 1.7 oz
- Compact, 1.8" x 2.2" x .25"
- Strong 6061-T-6 aircraft aluminum frame
- Tungsten carbide sharpening element will sharpen the toughest blades





- · Keep away from children
- Read safety precautions on pages W1 to W4

# CUTTING

# Knives



Stock No.	Description	Blade Type (Straight/Serrated)	Blade Length, inches	Closed Length, inches	Opening Mechanism
KER1004RDS0	Caribiner Tool	Partially Serrated	3 1/4	4 1/8	Manual
KER1060RT	Black Horse II	Straight Edge	3 3/4	4 7/8	Manual
KER1475	Storm II	Straight Edge	3 1/2	4 3/4	Manual
KER1550	Blackout	Straight Edge	3 1/4	4 1/2	Assisted (SpeedSafe)
KER1550ST	Blackout	Partially Serrated	3 1/4	4 1/2	Assisted (SpeedSafe)
KER1600S0	Chive	Straight Edge	<b>1</b> <sup>15</sup> /16	2 7/8	Assisted (SpeedSafe)
KER1620RDS0	Scallion	Straight Edge	2 1/4	3 1/2	Assisted (SpeedSafe)
KER1620BLS0	Scallion	Straight Edge	2 1/4	3 1/2	Assisted (SpeedSafe)
KER1620GNS0	Scallion	Straight Edge	2 1/4	3 1/2	Assisted (SpeedSafe)
KER1620ST	Scallion	Partially Serrated	2 1/4	3 1/2	Assisted (SpeedSafe)
KER1660CKTS0	Leek	Straight Edge	3	4	Assisted (SpeedSafe)
KER1660BRS0	Leek	Straight Edge	3	4	Assisted (SpeedSafe)
KER1660VIB	Rainbow Leek	Straight Edge	3	4	Assisted (SpeedSafe)
KER1660CBS0	Leek Composite	Straight Edge	3	4	Assisted (SpeedSafe)
KER1670BLK	Blur	Straight Edge	3 3/8	4 1/2	Assisted (SpeedSafe)
KER1670BLKST	Blur	Partially Serrated	3 3/8	4 1/2	Assisted (SpeedSafe)
KER1670RDS0	Blur	Straight Edge	3 3/8	4 1/2	Assisted (SpeedSafe)
KER1670RDST	Blur	Partially Serrated	3 3/8	4 1/2	Assisted (SpeedSafe)
KER1670TBLKT	Blur	Partially Serrated	3 3/8	4 1/2	Assisted (SpeedSafe)
KER1725	Junkyard Dog II	Straight Edge	3 3/4	4 7/8	Manual
KER1730	Groove	Straight Edge	3 1/2	4 1/2	Manual
KER1820	Needs Work	Straight Edge	3	4 1/8	Assisted (SpeedSafe)
KER1820ALSO	Needs Work	Straight Edge	3	4 1/8	Assisted (SpeedSafe)

# **Knives**



Stock No.	Blade Materials	Handle Material	Lock Type	Weight (oz.)	Features
KER1004RDS0	AUS6A S/S	Teflon Coated Aluminum	Liner Lock	2.7	Includes flat head, <i>Phillips</i> , bottle opener, and carabiner clip
KER1060RT	440A S/S	Co polymer with RealTree Hardwoods HD	Back Lock	4.6	Includes Sheath
KER1475	Sandvik 13C26 S/S	410 S/S with Trac-Tec inserts	Frame Lock	5.8	Thumb Stud, Pocket Clip
KER1550	Sandvik 13C26 S/S	Polyimide	Liner Lock	3.5	Thumb Stud, Pocket Clip, Tungsten DLC Blade Coating
KER1550ST	Sandvik 13C26 S/S	Polyimide	Liner Lock	3.5	Thumb Stud, Pocket Clip, Tungsten DLC Blade Coating
KER1600S0	420HC S/S	410 S/S	Frame Lock	1.9	Thumb Stud, Pocket Clip, Tip Lock
KER1620RDS0	420HC S/S	6061-T6 AA	Liner Lock	2.3	Thumb Stud, Pocket Clip, Red Finish, Snap-on Logo
KER1620BLS0	420HC S/S	6061-T6 AA	Liner Lock	2.3	Thumb Stud, Pocket Clip, Blue Finish, Snap-on Logo
KER1620GNS0	420HC S/S	6061-T6 AA	Liner Lock	3.3	Thumb Stud, Pocket Clip, Green Finish, Snap-on Logo
KER1620ST	420HC S/S	Polyimide	Liner Lock	2.3	Thumb Stud, Pocket Clip
KER1660CKTSO	Sandvik 13C26 S/S	6061-T6 AA	Liner Lock	3.0	Thumb Stud, Pocket Clip, Black Finish, Tungsten DLC Coating, <i>Snap-on</i> Logo
KER1660BRS0	Sandvik 13C26 S/S	6061-T6 AA	Liner Lock	3.0	Thumb Stud, Pocket Clip, Black/Red Smoked Finish
KER1660VIB	Sandvik 13C26 S/S	410 S/S	Frame Lock	3.0	Thumb Stud, Pocket Clip, Titanium Oxide Coating
KER1660CBS0	Sandvik 13C26/CPM-D2	410 S/S	Frame Lock	3.0	Thumb Stud, Pocket Clip, Composite Blade
KER1670BLK	Sandvik 13C26 S/S	6061-T6 AA with <i>Trac-Tec</i> inserts	Liner Lock	4.2	Thumb Stud. Pocket Clip, Black Finish, Blade Coating
KER1670BLKST	Sandvik 13C26 S/S	6061-T6 AA with <i>Trac-Tec</i> inserts	Liner Lock	4.2	Thumb Stud. Pocket Clip, Black Finish, Blade Coating
KER1670RDS0	Sandvik 13C26 S/S	6061-T6 AA with <i>Trac-Tec</i> inserts	Liner Lock	4.2	Thumb Stud. Pocket Clip, Red Finish, Snap-on Logo
KER1670RDST	Sandvik 13C26 S/S	6061-T6 AA with Trac-Tec inserts	Liner Lock	4.2	Thumb Stud. Pocket Clip, Red Finish
KER1670TBLKT	Sandvik 13C26 S/S	6061-T6 AA with <i>Trac-Tec</i> inserts	Liner Lock	4.2	Thumb Stud, Pocket Clip, Black Finish, Tanto Blade, <i>Snap-on</i> Logo (Same as KER1670TBLKSTSO)
KER1725	Sandvik 13C26 S/S	G-10 Composite	Liner Lock	5.2	Pocket Clip
KER1730	Sandvik 13C26 S/S	410 S/S with G-10 overlays	Frame Lock	5.2	Pocket Clip, Grooved Blade
KER1820	Sandvik 13C26 S/S	Polyimide	Liner Lock	3.5	Pocket Clip
KER1820ALSO	Sandvik 13C28 S/S	6061-T6 AA	Liner Lock	3.5	Pocket Clip

Abbreviations: S/S - Stainless Steel

AA - Anodized Aluminum









# **Utility Knives**



# **Utility Knives**

#### YA403A Miniature Utility Knife (Blue-Point®).

UTK150

- 1 spare blade stores in handle
- 3 1/8" long

#### YA403A-1 Replacement Blade.

• Use with YA403A

#### UTK100 Utility Knife.

- · Retractable blade
- Quick release, spring loaded handle provides fast, sure blade changes
- Integrated hinge handle means no handle parts to lose and no tools required to change blades
- · Rubber grip for comfort and control
- 3 blade positions: open, half closed and closed

#### UTK100SB Utility Knife.

- Auto retracting
- Quick release, spring loaded handle provides fast, sure blade changes
- Rubber grip for comfort and control
- Includes one safety point, 2 notch blade

#### UKBU10 Utility Knife Blades.

- 2 notch double pointed blades (10 pack)
- Use with UTK100, UTK100SB, UTK150, LBUK1, and LBUK2 utility knives

#### **UKBU50PK Utility Knife Blades.**

- 2 notch double pointed blades (50 pack)
- · Dispenser ejects blades one at a time
- · Blade guard in the ejector
- Use with UTK100, UTK100SB, UTK150, LBUK1 and LBUK2 utility knives

#### YA1850A Utility Knife Blades (Blue-Point).

• 100 3 notch, double pointed utility blades in bulk packaging

#### YA1800A Single Edge Razor Blades (Blue-Point).

- 100 blades in a plastic dispenser
- Blades have aluminum backs that can be shaped for special applications

### LBUK1 Lock Back Utility Knife (Blue-Point).

- Convenience and good looks of a folding lock back knife with easily replaceable 2 notch razor blades
- Folding lock back blade, hardwood handle with belt clip and thumb stud for 1 hand opening
- Includes utility knife and leather pouch (both with Blue-Point logo) plus 10 replacement blades
- Uses UKBU10 (10 pack) or UKBU50PK (50 pack) replacement blades

#### LBUK2 Lock Back Utility Knife (Blue-Point).

- Thumb pad allows controlled application of pressure
- · Blades are easily replaced with a flip of the switch
- Blade storage under spring loaded door
- Includes leather pouch with belt loop plus 5 replacement blades
- Uses UKBU10 (10 pack) or UKBU50PK (50 pack) replacement blades

#### UTK150 Auto Loading Utility Knife.

- Exposed blade is easily removed or reversed with the push of a button
- New blade is auto loaded from 5 blade magazine
- Cushioned handle provides comfort and control
- 3 blade positions: 1" and 1/4" exposures and closed
- Uses standard 2 notch replacement blades



# Multipurpose Cutters (Blue-Point)

# YA580A Multipurpose Cutter.

- · Auto locking, fully retractable blade
- Metal body is black with blue cap and pocket clip
- Includes (1) premium steel 13 point snap blade
- Overall length of 5 3/8"
- Uses YA580A-1 replacement blades

#### YA580A-1 Replacement Blades.

- Individual break off replacement blades for the YA580A and YA584A multipurpose cutters
- Pack of 5

#### YA581A Multipurpose Cutter.

- 3 blades with eight snap off points
- . Minimum blade wobble
- Fully retractable

#### YA581A-1 Blades.

- · Replacement blades for YA581A
- 10 pack



# Hobby Knife (Blue-Point)

#### YA405A Hobby Knife.

- 5 1/2" long aluminum handle with bottom knurl and knurled brass nose cap
- Includes the following blades: YA405-1, YA405-2, YA405-3, YA405-4

YA405-1 23° Angle Blade.

YA405-2 50° Angle Blade.

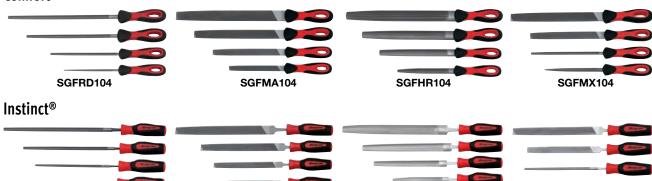
YA405-3 Curved Edge Blade.

YA405-4 Straight Chisel Edge Blade.

# **File Sets**

SGHBF500A





SGHBF300A

# **Bastard Cut Individual Files**

SGHBF200A

Additional mill file sizes are also available.

Set Contain	SERRING IS:	SERMATOR	SETHITON	SERMATOR	SCHRETON	SEHARJOOA	SCHEFERON	SCHEREGOA
onath	Comfort	Comfort	Comfort	Comfort				

SGHBF400A

	Stock No.	Diameter, inches	Cut	Length, inches	Comfort Grip	Comfort Grip	Comfort Grip	Comfort Grip	Instinct	Instinct	Instinct	Instinct
Round Files	6R	7/32	_	6	•		<u> </u>	<u> </u>	•			
	8R	9/32	_	8					•			•
	10R	3/8	_	10					•			
	12R	1/2	_	12					•			
	SGF6R	_	_	6	•							
	SGF8R		_	8	•			•				
	SGF10R	_	_	10	•							
	SGF12R	_	_	12	•							
Mill Files	6MA		5 1/2	6						•		
	8MA	_	7 1/2	8						•		•
	10MA	_	9 1/2	10						•		•
	12MA	_	11 <sup>1</sup> / <sub>2</sub>	12						•		
	14MA		13 <sup>1</sup> / <sub>2</sub>	14								
	SGF6MA	_		6		•						
	SGF8MA			8		•		•				
	SGF10MA	_	_	10		•		•				
	SGF12MA	_	_	12		•						
Half Round	6HR	_	_	6							•	
Files	8HR	_	_	8							•	
	10HR	_	_	10							•	
	12HR	_	_	12							•	
	SGF6HR	_	_	6			•					
	SGF8HR	_	_	8			•					
	SGF10HR	_	_	10			•					
	SGF12HR	_	_	12			•					
Three Square	6T	_	5 1/2	6				•				•
File .	10T	_	9 1/2	10								
Instinct	SGHF614BR	_	_	_					2	1	2	2
Handles	SGHF615BR		_	_					1	1	1	1
	SGHF616BR	_	_	_					1	1	1	1
	SGHF617BR	_	_	_						1		
Kit Bag					PAKKB069	PAKKB069	PAKKB069	PAKKB069	CO413A	C0414A	C0415A	CO416B

# **Miniature Files**

minatare rices		manis.
Stock No.	Description	
SGF4MA	Hand	•
SGF4W	Warding	•
SGF4HR	Half Round	•
SGF4SQ	Square	•
SGF4R	Round	•
SGF4T	Triangular, Slim Taper	•





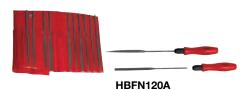






# FILES/SCRAPERS/PUTTY KNIVES

# **Files**



#### Swiss Needle HBFN120A Set.

- 12 needle files with round, knurled handles
- Each is 5 1/2" long and "O" cut for coarse filing
- Packaged in a plastic pouch

#### HF611A File Handle.

· Plastic screwdriver collet style handle for holding individual files in HBFN120 set

Stock No.	Description
5NRA	Round
5NHRA	Half Round
5NFA	Flat
5NCA	Crossing
5NKA	Knife
5NSQA	Square
5NTSB	3 Square
5NEA	Equaling
5NBA	Barrette
5NJA	Joint
5NSA	Slitting
5NMA	Marking

**6T** 

# 3 Square Files

**6T.** 6" long, 5 1/2" cut length. **10T.** 10" long, 9 1/2" cut length.

6CR

# Single Cut Chain Saw Files

6CR. 6" long, 5/32" diameter. Uses HF611A file handle. **8CR.** 8" long, 7/32" diameter.

10FMK

**YA337A** 

Multicut Flat File 10FMK. 10" long.

#### Accessories





- For all bastard cut files that use replacement Wooden twist on handles with case soft grip handle
- · Feature twist on threads for securely holding files

Stock No.	For Files
SGHF614BR	4MA, 6R, 6T, 6MA, 6HR, 8CR, 8R
SGHF615BR	8T, 8MA, 8HR, 10R
SGHF616BR	10T, 10MA, 10HR, 12R
SGHF617BR	12MA, 12HR





# Wooden Twist on Handles

- hardened, threaded steel inserts
- · Use on all bastard cut files on this page

Stock No.	For Files
GA613	4MA, 8CR, 6R
GA614	6T, 6MA, 6HR, 8R
GA615	8T, 8MA, 8HR, 10R
GA616	10T, 10MA, 10HR, 12R
GA617	12MA, 12HR
GA618	14MA, 16MA





# **GA98A Wooden Adjustable Jaw Handle** (Blue-Point®).

- · Provides a large, comfortable grip for all bastard cut files
- · Adjustable jaws grip the file so it can't turn
- Use on files 4 to 16" long
- 4 1/2" long, 1" in diameter, 3/8" maximum opening

#### YA337A File Cleaner.

- Bristle area of 3 1/2 x 1 1/2" with .013" (33 ga.) wire
- · Wooden handle

1 1/g

3/4

5/8

• 7 1/2" long

# Scrapers/Putty Knives -



**PKN500** 

# Nonmarring Scrapers/Tools

- Tips are matched for most popular applications including badge/emblem/decal removal, gasket and molding removal, adhesive removal and dirt and debris removal or cleaning
- Glass reinforced nylon provides strength
- Lightweight and resistant to most automotive fluids
- Useable with hammers (block end/tap into position)
- Avoids scratching or gouging of soft materials

### **PSN500 Nonmarring Tool Set.**

- Unique selection of tip profiles for numerous prying, scraping, aligning, cutting and shielding applications
- Includes a cloth kit bag to organize and store tools
- Intended for general automotive use
- Do not use on surfaces such as glass or clear acrylics

Blade Style/Tip Profile

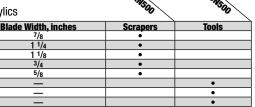
Straight Curved

Angle Curved

Narrow Wedge

Curve Cup Narrow Point

Curve Tube



C0100

C0100

Set



# **Striking Scrapers**

Stock No.

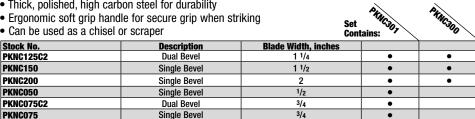
PKN1 PKN2 PKN3

PKN4

PKN5 PBN10 PBN11

PBN12 PBN14

- Striking cap is designed for hammering
- Heavy duty blade extends through the handle and meets the cap to equally distribute the striking force
- Thick, polished, high carbon steel for durability
- · Ergonomic soft grip handle for secure grip when striking
- · Can be used as a chisel or scraper



PKNC125C2 Striking Scraper (1-1/4"). Dual bevel design for two distinct blade lengths.





# **SCRAPERS/PUTTY KNIVES**

# **Scrapers and Putty Knives**



# **Rigid Carbon Scrapers**

• 1/4" square shanks are flared to form scraping edge

• Classic screwdriver type handle



Stock No.	Handle Color	Length, inches	Blade Width, inches	Blade Style			
CSA8C	Black	7 5/8	7/8	Straight	•		
CSA8C0	Orange	7 5/8	7/8	Straight		•	
CSA8CR	Red	7 5/8	7/8	Straight			•
CSA12C	Black	12 7/8	1	Straight	•		
CSA12CO	Orange	12 <sup>7</sup> /8	1	Straight		•	
CSA12CR	Red	12 7/8	1	Straight			•
CSA14C	Black	14 1/8	1 1/2	Straight	•		
CSA14CO	Orange	14 1/8	1 1/2	Straight		•	
CSA14CR	Red	14 1/8	1 1/2	Straight			•



# Knife Blade Scrapers (Blue-Point®)

- Remove gaskets, sealers and other caked on materials
- Blade edge designed to work effectively in both push and pull directions
- · Stainless steel blades for durability
- · Polished blades clean up easily
- Comfortable composite handles feature a contour thumb stop for maximum control and a wide hilt for control

Us	_
Set	703
Contains:	_ `

Stock No.	Blade Style	Blade Length, inches	Length, inches	
US710	Spoon	3 3/8	8	•
US711	Chisel Tip	2 1/2	7 1/8	•
US712	Oyster	2 1/8	6 3/4	•



# **Putty Knives/Scrapers (Blue-Point)**

- Full length steel blades for strength and durability
- Soft molded rubber handles maximize hand grip, are easy to clean and resistant to most solvents
- Broad hilt design helps protect against hand slipping when scraping



Stock No.	Blade Length, inches	Blade Width, inches	Blade Style	Edge	
PK50A	3 1/2	2	Flexible	Straight	•
PK52A	3 19/32	1 1/4	Flexible	Straight	•
PK53A	3 19/32	1 1/4	Stiff Chisel	Single Bevel	•



# Walnut Handled Scrapers (Blue-Point)

- Quality crafted for hard scraping applications
- · Walnut wood handle for comfort
- · Full length heavy duty blades for strength
- · Large steel cap for striking capability
- Remove gaskets, sealants and body weld breakaway
   Com



tionioro guerroto, comante una sou, meta si cantaria, contanis.						
Stock No.	Blade Length, Inches	Blade Width, inches	Blade Style	Edge	Length, Inches	
PKWBS53A	3	1 1/4	30° Bent	Chisel	7 1/2	•
PKWLR53A	5 1/2	1 1/4	Straight	Chisel	9 1/2	•
PKWSS53A	2 3/4	1 1/4	Straight	Chisel	6 3/4	•



# **Brass Putty Knives/Scrapers (Blue-Point)**

- Spring tempered, solid brass blades are nonmarring, nonsparking, nonmagnetic and noncorrosive
- Soft molded rubber handles maximize hand grip, are easy to clean and are resistant to most solvents
- Broad hilt design helps protect against hand slipping when scraping
- Stiff blade style



-					`	
Stock No.	Handle Length, inches	Blade Length, inches	Blade Width, inches	Blade Style	Edge	
PKB50A	4 7/8	3 1/2	2	Stiff	Straight	•
PKB52A	4 7/8	3 19/32	1 1/4	Stiff	Straight	•
PKB53A	4 7/8	3 19/32	1 1/4	Stiff	Single Bevel	•



PK23A

# Maple Handle Putty Knife (Blue-Point)

- Mirror finished hardened steel blade extends through hardwood handle, solidly riveted for durability
- Maple handle has metal bolster where handle meets blade

Stock No.	Handle Length, inches	Blade Width, inches	Blade Style	Edge
PK23A	3 7/8	1 1/4	Heavy Chisel	Single Bevel









- · Keep away from children
- Read safety precautions on pages W1 to W4

# **SCRAPERS/PUTTY KNIVES/EXHAUST**

# **Scrapers**



# **Scrapers**

# **CS1** Flexible Wire Carbon Scraper.

- 10 blades made of oil tempered spring steel
- Sliding ferrule is used to adjust to the required flexibility

#### PK70 Multipurpose Scraper (Blue-Point®).

- Use for gasket removal, deburring, car body work and rust removal
- Durable tungsten carbide blades
- Ergonomic handle reduces fatique
- Thumbgrip allows precision scraping

PK70TRI Replacement Blade. For PK70.

PK70ROUND Replacement Blade. For PK70.

PK70DROP Replacement Blade. For PK70.

PK70PEAR Replacement Blade. For PK70.

# MS400 Compact Scraper (4") (Blue-Point).

- · Removes stickers, molding paint and decals
- Use with standard, single edge steel or plastic razor blades
- Quick and easy blade changes
- · Angled head provides maximum leverage
- 4" long

#### MS800 Standard Scraper (8") (Blue-Point).

• Same as MS400 except 8" long

#### MS1300 Long Scraper (13") (Blue-Point).

• Same as MS400 except 13" long

#### MS3000 Scraper Set (Blue-Point).

• Includes MS400, MS800, MS1300 and MSRPACK5 in storage case

### PKRS1 Ergo Grip Razor Scraper (Blue-Point).

- 3 blade positions: closed, open and loading
- Rubberized contour grip provides comfort and a sure gripping surface
- Uses YA1800 Replacement Blades

# **Cutters, Expanders and Special Tools**



PKRS1

# Cutters (Blue-Point)

# VGP18210 Chain Pipe Cutter.

- Quickly and easily cuts exhaust pipes with 13 alloy cutting wheels in chain
- Cuts stainless steel, copper and PVC piping from 15 mm up to 75 mm (19/32 to 2 15/16") in diameter, up to 2.6 mm (3/32") wall thickness
- Locking mechanism helps avoid lateral movement and misaligned cutting
- Large butterfly screw allows application of greater force to cutting wheels with each series of cuts

#### VGP18210-1 Replacement Chain.

For VGP18210

#### TC90A Tail Pipe Cutter.

- Handles on the car cutting from 3/4 to 3 1/2" diameter
- 16 link cutter chain is 12" long
- Threaded shaft with cross piece provides elasticity to help prevent chain wheels from breaking
- Ideal for cutting the strut assembly to enable servicing of the strut cartridge TC90A1 Chain Assembly.
- Includes 1 wheel and 1 roll pin



# Exhaust Tools (Blue-Point) YA1300 Manifold Jack (set of 2).

- Use to expand manifold to its original shape and bolt hole alignment
- Use with a 3/4" open end wrench

#### YA3202 Exhaust Hanger Removal Pliers.

- Remove hanger brackets from rubber mounting straps by placing jaw behind rubber grommet ring and forcing pin of pliers on the end of steel hanger
- When handles are squeezed, the forcing pin pushes the ring off the hanger
- 14" long

Applications: most U.S. and import cars and light trucks

# **Cutters, Expanders and Specialty Tools**

# **Expanders**

#### PH800 Tailpipe Expander with Collets.

- · Simple and convenient set for tailpipe expansion jobs
- Using an impact wrench the pipe stretcher is a convenient, inexpensive alternative to hydraulic pipe expander
- Can be used right on the vehicle
- Includes PH300 and 5 aluminum collets
- Expands from 1 5/8 to 4 1/4"
- · Includes molded storage case

#### PH300 Tailpipe/Exhaust Stretcher.

- Stretches all types of exhaust pipe, including stainless steel, from 1 5/8 to 2 7/16"
- · Use with an impact wrench

#### CG5560HY Hydraulic Tailpipe/Exhaust Stretcher Conversion Kit.

- Converts PH300 tailpipe/exhaust stretcher to the convenience and power of hydraulic operation
- Includes the CG122 10 ton hydraulic ram and pump set and hydraulic cone adaptor

#### CG5560 Tailpipe/Exhaust Stretcher Conversion Kit.

- Add to CG122 10 ton hydraulic ram and pump set to add hydraulic power to the PH300
- Includes exhaust pipe and instructions



# **Cutters, Flaring and Bending**

#### **Cutters**

# TC15A Ratcheting Cutter.

- · Ratchet action allows cutting all the way around the tubing by simply pumping the handle
- Handles 1/8 to 3/8" O.D. copper, plastic and PVC tubing
- Ideal for fuel, vacuum and air conditioning applications

#### TC15-7C Cutting Wheel.

Standard replacement cutting wheel for TC15A tube cutter

#### TC15-HSS Small Cutting Wheel.

· High speed steel cutting wheel

#### TC28C Tubing Cutter (Blue-Point®).

- Cuts soft metal tubing ranging from 1/8 to 1" in diameter
- 0.D. capacity is 1/8 to 1 1/8"
- Micrometer type adjustment
- Retractable locking reamer blade
- Cutter wheel is easily replaceable

#### TC28C1 Cutting Wheel.

Extra cutter wheel for TC28C

### TC123C Tubing Cutter (Blue-Point).

• Handles tubing from 1/8 to 5/8" 0.D.

- Can be used where clearance around tubing is less than 1 3/8"
- 1 1/2" long when closed and 2" long when open; feed knob is 7/8" in diameter

# TC123CR Ratcheting Tube Cutter (Blue-Point).

TC123C cutter and TC123CRH handle combined into one unit

# TC123CRH Ratcheting Tube Cutter Handle.

Handle for TC123C tube cutter

#### TC123C1 Cutting Wheel.

Extra cutter wheel for TC123C

# TC25A Ratcheting Cutter (Blue-Point).

- Designed for automotive, plumbing, air conditioning, marine, chemical laboratories, refineries and hydraulic industries
- Cuts steel, copper, brass, aluminum, plastic and PVC sizes 5/16 to 1 1/8" diameter
- Ratcheting tube cutter with unique spring loaded action mechanism allows 1 or 2 tightening adjustments to complete the cut in very hard to reach places
- Ratchet motion allows operation in close quarters
- High impact fiberglass handle is strong and lightweight



















# **Cutters, Flaring and Bending**









**TF275A** 

**TFM428** 

TFLM800

# Flaring Tool Sets (Blue-Point®)

# TF528D Tube Cutting and Double Flaring Set.

- Contains TC28C tubing cutter and a double flaring set with a flaring bar, rod handle, yoke and 5 adaptors: 3/16, 1/4, 5/16, 3/8 and 1/2"
- · Storage case included

- TF5A Double Flaring Tool Set.
   Makes double or single flares on soft steel, brass or aluminum tubing from 3/16 to 1/2" 0.D.
- Makes a smooth fitting, crack free 45° flare
- Set includes 5 adaptors, yoke assembly, bar assembly and handle
- · Storage case included

#### TFM5A Metric Double Flaring Tool Set.

- Same design as TF5A except it is for tubing with an 0.D. from 4.75
- Set includes yoke, bar assembly, handle and 5 adaptors: 4.75, 5, 6, 8 and 10 mm

#### TF275A Flaring and Swaging Set.

- 45° flare or swage soft copper, brass or aluminum tubing
- Die blocks handle 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, and 3/4" 0.D. tubing
- Swages 3/16, 1/4, 5/16, 3/8, 1/2, 5/8 and 3/4" 0.D. tubing
- TF275PB storage case included

#### TFM428 Metric Bubble Flaring Set.

- · For automotive brake systems
- . Designed for crack free bubble flares on soft wall tubing up to a wall thickness of .028"
- · Adaptors included for 4.75, 6, 8 and 10 mm flares
- TFM428PB storage case included



# **Bending Tools**

#### TBS100 Tubing Bender.

- Bends tubing up to 1/4" O.D.
- Bends copper, brass, bundy weld, noncoated brake lines and more
- Comfort grip handle
- 7" long

# TBS200A Multipurpose Tubing Bender (Blue-Point).

- Makes left, right or offset bends up to a 90° angle
- Degrees shown for accurate bending angle

**TBS100** 

- Handles 3/16, 1/4, 5/16 and 3/8" (4, 6 and 8 mm) 0.D. aluminum, copper and stainless steel tubing
- Aluminum unit is 8 1/4" long when opened

#### TFL500 Flaring Kit.

TFL500

• Use with a ratchet to make consistent flares faster and easier

**TFL800** 

- Makes double flares on 3/16" and 4.75 mm tubing
- Low profile design allows for use on or off the car
- In line design makes a more accurate flare
- Double clamp and hex screw design keeps tubing locked tightly in position
- For use on thin walled steel and copper tubing

#### TFL800 Flaring Kit.

- Use with a ratchet to make consistent flares faster and easier
- Makes double flares on 3/16" and 4.75 mm tubing
  Low profile design allows for use on the car or off
- In line design makes a more accurate flare
- Double clamp and hex screw design keeps tubing locked tightly in position
- For use on thin walled steel and copper tubing

#### TFLM800 Flaring Kit.

- Use with a ratchet to make consistent flares faster and easier
- Makes double flares on 4.75, 5 and 6 mm tubing
- Low profile design allows for use on the car or off
- In line design makes a more accurate flare
- Double clamp and hex screw design keeps tubing locked tightly in position
- For use on thin walled steel and copper tubing





- **TBS300 Tubing Bender** (*Blue-Point*).
   Easily bend 1/4, 5/16 and 3/8" 0.D. soft copper or aluminum tubing up to 180°
- Degrees, in 15° increments, noted on tool for accurate bends
- Pull lever to easily disengage tool after bending
- · Cushioned handles provide comfort and control, even with greasy hands
- Offset handles provide hand clearance when making 180° bends
- Lightweight, die cast aluminum construction
- Overall length is 10 1/2"

#### **GA244 Tubing Bender.**

- Allows smooth bend without denting tubing
- Makes bends to 180° and 13/16"
- Handles 3/16, 1/4 and 5/16" O.D. steel and copper tubing
- · Reversible forming pad
- Polypropylene posts minimize friction

# Service Tools (Blue-Point®)













# **Boot Pliers**

#### YA824C Spark Plug Boot Pliers.

- 45° offset jaws
- Vinyl coated jaws and handles assure gripping ability

SBP3

- Use only on automotive type ignition systems
- 9 1/2" long

#### YA824ASTR Boot Pliers.

- Straight jaw version of YA824C
- 9 3/4" long

#### SBP5 Boot Pliers.

- 5 positions for easy access to restricted spark plugs
- Internal spring keeps pliers in the open position
- Vinyl coated jaws and handles
- Black industrial finish
- 10" long

#### SBP3 Boot Pliers.

- Vinyl coated offset jaw tips will pull most U.S. and import spark plug boots, including the back plugs on late model Porsche® and Mercedes-Benz® vehicles
- Vinyl covered handles are cushioned for comfort

### YA8230 Valve Stem Seal Pliers.

- Removes valve stem seals from overhead camshaft engines including 4 valve per cylinder engines that have restricted access
- Gripping serrations in the pliers tip easily grab both OEM and aftermarket seals with ease
- Easy grip handles

#### YA9818 Spark Plug Boot Puller.

- Quickly and easily remove and install hard to reach steel spark plug boots on VW® and Audi® vehicles
- T-handle design delivers greater pulling power
- Constructed from hardened stainless steel for strength and corrosion resistance
- 25/32" diameter with 12" overall length





# Spark Plug Extractors FSPK Spark Plug Extractors.

Removes broken spark plugs from cylinder head on Ford® Triton 5.4 L 3 valve engines, 4.6 L engines and 6.8 L engines without removing head

	Cuitan	19.
Stock No.	Description	
FSPK1	Barrel	•
FSPK2	Threaded Shaft	•
FSPK3	Nut	•
FSPK4	Thrust Washer	•
FSPK5	Vinyl Cap	•
T910M	Metric Tap	•

Optional Tap Holder TDL8-10

# Porcelain Extractors FSPPRK Porcelain Extractor Set.

- Used in combination with FSPK spark plug extractor kit for use on Ford vehicles to remove any porcelain left behind from the process of extracting the plug
- Tool does not push the porcelain through the sleeve, preventing engine damage
- 4 cylinders can be worked on at one time to save time and money
- Set includes porcelain repair kit for use on Ford vehicles, pins (10 pack), special Loctite® 680 adhesive (5 mL) to remove broken porcelain, clean out wire and blow molded storage case

Applications (engines covered):

4.6 L V8 2005-2008 (*Ford* Mustang, Explorer, Mercury® Mountaineer); 5.4 L V8 2004-2008 (*Ford* F150, F250 Super Duty, F350 Super Duty, E450 Super Duty, Expedition, Lincoln® Navigator, Mark LT); 6.8 L V10 2005-2008 (*Ford* F250 Super Duty, F350 Super Duty, F450 Super Duty, F450 Super Duty, E450 Super Duty, E450 Super Duty, F450 
FSPPRK1 Porcelain Repair Kit for use on Ford vehicles.

· Washer, center screw, guide, hex nut and end nut

FSPPRK2 Pins (10 pack). FSPPRK3 Loctite (680, 5 mL). FSPPRK4 Clean Out Wire. FSPPRKPB Storage Case.









# **SPARK PLUG TOOLS**

# **Service Tools**



YA6845







# Spark Plug Tools

# YA832A Spark Plug Firing Indicator (Blue-Point®).

- Test spark plugs, coils and distributors on breaker point and electronic ignition systems
- · Blunt nose tip prevents lead puncturing
- High intensity bulb and viewing window for greater flash concentration
- 4 3/4" long

#### YA6845 Spark Plug Boot Remover.

- · For use on ripped or stuck spark plug boots
- Easily saves time as it is awkward to use a pliers to try to get the stuck boot off, especially when the spark plug is in a recessed or confined area where vision is limited
- · Made from high quality heat treated steel
- High tech black finish

Applications for Ford® vehicle: 4.6 L V8 2 valve heads (1997-1999); 4.6 L V8 2 valve heads (2000 and later); 4.6 L V8 3 valve heads (2007 and later); 5.4 L V8 2 valve heads (1997-2004); 5.4 L V8 3 valve heads (2005 and later); 6.8 L V10 2 valve heads (1999-2008); 6.8 L V10 3 valve heads (2008 and later)

Applications for Chrysler® vehicle:

3.7 L V6 2 valve heads (2005 and later); 5.7 L V8 Hemi 2 valve heads (2004 and later)

Other Applications:

Applications where the diameter of the porcelain on the spark plug is smaller than 0.432 of an inch.

#### YA840 In Line Spark Tester (Blue-Point).

· Quickly diagnose ignition systems

HB5PK

- Works on all ignition systems including distributorless ignitions
- Status of indicator light shows if problem exists in the ignition system or fuel system

#### HB5PK Spark Plug File Set.

- Fine, single cut tungsten file for smoothing or cleaning spark plug and other contact points
- Includes (2) HB5 spark plug files

#### FRT10 Spark Plug Insert Installer Set (Blue-Point).

- Repairs damaged heads from blown spark plugs with an alloy steel insert in as little as 15 to 45 minutes
- Services modular cylinder heads on Ford vehicles 4.6, 5.4 and 6.8 L
- Set Includes tap (FRT10-1), Core Drill (FRT10-2), Guide (FRT10-3), Storage Case (FRT10-CASE), Instructional DVD (FRT10-DVD) and Spark Plug Insert (FRT10-INS)

#### FRT12 Three Valve Insert Kit for Ford Vehicles (Blue-Point).

- Repair cylinders without removing the head
- . Custom guide, tap and drill for quick and simple repair of damaged threads
- · Unique insert installer makes the job quick and easy
- Works on 3 valve 5.4 and 6.8 engines built before 10/9/2007
- Also works on 3 valve 4.6 L engines built before 11/30/2007 found on many 2004 to 2008 *Ford*, Lincoln® and Mercury® vehicles
  • Set includes Tap (FRT-1), Core Drill (FRT-2), Guide (FRT-3), Insert
- Installer (FRT-4), Insert (FRT1-INS) and Storage Case (FRT-CASE)

# Flank Drive® Spark Plug Sockets



S9721A

# Double Swivel (3/8" Drive), inches

 Use double swivel universals for rear spark plug removal or installation on transverse V6 engines

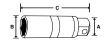
<b>□</b> Ţ	<b>6</b>	C	Rubber Insert
5/8	S9721A	4 13/16	S9706KARI



# Flexible Extensions (3/8" Drive) inches

remote Extensions (5/6 Birre), menes						
	<b>6</b>	В	C	Rubber Insert		
5/8	FSXK320A	2 15/32	5 11/32	S9706KARI		





Universal (3/8" Drive)

<b>#</b> 1	<b>6</b>	A	В	C	Rubber Insert
13/16"	S9704KFUA	3/8	13/16	3 9/16	S9705A2
5/8"	S9706KFUA	3/8	5/8	3 23/32	S9706KARI
14 mm	S9714MKFUA	3/8	25/32	3 1/8	S9714MK-2
9/16"	S9716KFUA	3/8	3/4	2 15/16	S9714MK-2



# Ball Joint Swivel (3/8" Drive), inches

<b>□</b> Ţ	<b>6</b>	C	Rubber Insert
13/16	S9709KB	3 25/32	S9705A2
5/8	S9710KC	3 25/32	S9706KARI

## **Spark Plug Sockets**













S9704KR

S9714MKR







S9723

S9724RHS

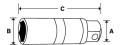
S9704RHS

## Retention Spark Plug Sockets (3/8" Drive)

- Patented tapered hex design (U.S. Patent 6,626,067)
- Securely retains spark plug in socket without rubber insert or magnet
- Patented "Diamond Wedge" design with 6 wedges equally align plug in the center to avoid damage to the porcelain
- Spark plug is easily disengaged by applying gentle side pressure
- Spark plug socket configuration is cold formed for extended tool life
- External hex on standard models for restricted access applications
- Knurled surface for finger tightening/removal
- Side through hole for secure extension retention for coil on plug applications
- \$9706KRA/\$9706KRFUA Applications: 4.7 L engines used on Jeep® Commander and Grand Cherokee, Dodge® Ram, Durango and Dakota plus Chrysler® Aspen vehicles. General applications on autos, light trucks, motorcycles and power equipment
- S9716KR Applications: 2005 Ford® Mustang (4.6 L, 3 valve engine) and Ford 2004 F150 (5.4 L V8, 3 valve engine)
- S9714MKR Applications: 14 mm spark plugs used in Nissan® 1.8 L Versa and 2.0 L Sentra, Mercedes® and BMW® vehicles

<b>#</b> ]	<b>6</b>	A	В	С
9/16	S9716KR	5/8	25/32	2 3/8
5/8	S9706KRFUA	_	27/32	3 3/4
5/8	S9706KRA	11/16	27/32	2 7/8
13/16	S9704KR	7/8	<b>1</b> <sup>1</sup> /16	2 27/32
14 mm	S9714MKR	16 mm	19.6 mm	60.3 mm

ANSI® B107.34M





S9706KMAG

## Magnetic (3/8" Drive), inches

<b>□</b> Ţ	<b>6</b>	В	С
5/8	S9706KMAG	11/16	2 19/32
13/16	S9704KMAG	11/16	2 11/16



## Extra Deep (3/8" Drive), inches

	<b>6</b>	С	Rubber Insert
9/16	S9716KL	5 <sup>7</sup> /8	S9719-2A
5/8	S9720KA	5 31/32	S9706KARI
13/16	S9719KA	5 7/8	S9719-2A

## Special Application

## S9723 Offset Spark Plug Socket.

- 5/8" offset spark plug socket for limited access situations
- Remove/install the spark plug on the #3 cylinder without interference from the steering column on GM® 4.3 L V6 engines used in GMC® Jimmys, Chevy® Blazers, S10 and S15 pickup trucks (1994 to 2004) plus Oldsmobile® Bravadas (1996 to 2001) vehicles
- Use with 11" extension
- 12 point, Flank Drive® wrenching system
- Industrial black finish
- 1 1/2" length, 1 3/4" height, 3/8" drive

#### S9724RHS Low Profile Spark Plug Socket.

- Low profile socket easily reaches 5/8" (16 mm) spark plugs on muscle cars, ATVs, motorcycles and boats without interference from custom exhausts or chassis
- Spark plug extends through the socket for access in tight quarters
- Patented tapered hex design retains spark plug securely without rubber insert or magnet
- Spark plug is easily disengaged from socket by applying side pressure
- Use ratcheting box wrench on 5/8" external hex drive
- 1 1/16" length

#### Applications:

Harley-Davidson® motorcycles with large gas tanks (1986 and later Sportster® and 1999 and later twin cam models) plus small block Chevy, Ford and Mopar® vehicles and other engines with 5/8" (16 mm) spark plugs and racing exhaust headers

#### S9704RHS Low Profile Spark Plug Socket.

- Low profile socket easily reaches 13/16" spark plugs on muscle cars, ATVs, motorcycles, RVs and boats without interference from custom exhausts or chassis
- Spark plug extends through the socket for access in tight quarters
- Patented tapered hex design retains spark plug securely without rubber insert or magnet
- Spark plug is easily disengaged from socket by applying side pressure
- Use with open end or ratcheting box wrench on 13/16" external hex drive
- 1 1/4" length

## Applications:

Small or big block *Chevy, Ford* and *Mopar* vehicles and other engines with 13/16" spark plugs and racing exhaust headers





BLPSPS3858

**BLPSPS381316** 

## Spark Plug Sockets, inches (Blue-Point®)

<b>□</b> Ţ	<b>6</b>	C
5/8	BLPSPS3858	2 9/16
13/16	BLPSPS381316	2 1/4











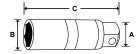


Read safety precautions on pages W1 to W4

## **SPARK PLUGS/NUT SPLITTERS/CABLE CUTTERS**

## Flank Drive® Spark Plug Sockets













S9716KA

S6106KA

Standard (3/8" Drive), inches

	6	A	В	C	Rubber Insert
5/8	S9706KA*	3/8	27/32	2 27/32	S9706KARI
9/16	S9716KA*	5/8	23/32	2 1/8	S9714MK-2
3/4	S9718KA*	3/8	31/32	2 13/32	S9705A2
13/16	S9704KA*	3/8	7/8	2 3/4	S9705A2
7/8	S6106KA**	3/8	7/8	3 7/32	S6106-2R

ASME®/ANSI® B107.34M

Standard (3/8" Drive), mm

	270 - 1110,						
		<b>6</b>	(12)	A	В	C	Rubber Insert
	18 mm	S9711KA	_	11/16	24.3	66.9	S9706KARI
ſ	14 mm	_	S9714MK	5/8	18.0	60.3	S9714MK-2

ASME/ANSI B107.34M

## **Nut Splitters**



## **Hydraulic Nut Splitter**

## CG675HY Hydraulic Nut Splitter.

- 6 ton controlled hydraulic power for removal of frozen or corroded nuts up to 2H hardness and 1 3/4" across the flats or 2" hex on soft nuts
- Includes CG652 ram and pump set
- 1 1/2" stroke

#### CG675 Nut Splitter.

• Nut splitter without the hydraulics



## Manual Nut Splitter

## NC52 Nut Splitter.

- For splitting nuts up to 3/4" across the flats
- Bar acts as a handle to hold tool securely

#### NC52-3 Extra Cutter.

NC52-4A Anvil.

## Cable Cutters



CG410HY

• Includes CG420-2A pump, CG420-3-1 hose and CG420-4 coupler set CG410 Cable Cutter.

Hydraulic Cable Cutters
CG410HY Hydraulic Cable Cutter.

• Cut steel cable up to 1 1/2" in diameter easily with up to 29 tons of force generated by this hydraulic package

Hardened tool steel cutting blade and die make clean, square

· Cable cutter without the hydraulics

Both can be resharpened

CG420-2A One stage 20, 35 and 50 ton pump.

cuts and provide long, dependable service

CG420-3-1 Hose.

CG420-4 Coupler.

<sup>\*\*</sup> Designed for aircraft applications

## **Rethreading Taps and Dies**



RTD48

#### RTD48 U.S./Metric Master Rethreading Kit.

- Includes taps and dies
- Also includes TF1124B and TFM7530B thread restorer files
- All components stored in storage case (48 pcs)



TRC3

# TRC3 U.S. Rethreading Tap Set (NC). • Includes 6 NC taps and 12 NC dies (18 pcs)

- Silver finish



# TRF3 U.S. Rethreading Tap Set (NF). • Includes 6 NF taps and 12 NF dies (18 pcs)

- · Black finish

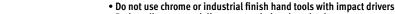


RTD15M

#### **RTD15M Metric Rethreading** Tap & Die Set.

- Includes 7 metric dies and 7 metric taps (14 pcs)
- Gold finish

	Size, inches (mm)	Stock No.	RTD48	TRC3	TRF3	RTD15M
NC Rethreading Taps	1/4-20	TRT2520A	N1D40	INUS	INFO	MIGIUIA
no nouncouning raps	5/16-18	TRT3118A	•	•		
	3/8-16	TRT3716A	•	•		
The state of the s	7/16-14	TRT4314A	•	•		
	1/2-13		•	•		
	9/16-12	TRT5013A TRT5612A	•	•		
NF Rethreading Taps	1/4-28		•			
nr neuncauniy laps	5/16-24	TRT2528A	•		•	
	3/8-24	TRT3124A TRT3724A			-	
	<sup>7</sup> / <sub>16</sub> -20	_	•		•	
		TRT4320A	-		-	
	1/2-20	TRT5020A	•		•	
Metric Rethreading Taps	9/16-18	TRT5618A	-		•	
metric nettireating raps	(M6 x 1)	TRT51	•			•
	(M8 x 1.25)	TRT53	•			
	(M10 x 1.5)	TRT54	•			•
	(M10 x 1.25)	TRM1025-2	_			-
	(M12 x 1.75)	TRT55	•			•
	(M12 x 1.5)	TRT56	•			•
	(M12 x 1.25)	TRT57	•			•
	(M10 x 1.00)	TRT101	•			
	(M11 x 1.50)	TRT11150	•			
NO Dallama dina Dias	(M14 x 1.50)	TRT14150	•			
NC Rethreading Dies	1/4-20	TR2520A	•	•		
	5/16-18	TR3118A	•	•		
	3/8-16	TR3716A	•	•		
	7/16-14	TR4314A	•	•		
	1/2-13	TR5013A	•	•		
	9/16-12	TR5612A	•	•		
	5/8-11	TR6211A	•	•		
	3/4-10	TR7510A		•		
	7/8-9	TR8759A		•		
	1-8	TR10008A		•		
	1 1/8-7	TR11257A		•		
ME D. H P D	1 1/4-7	TR12507A		•		
NF Rethreading Dies	1/4-28	TR2528B	•		•	
	5/16-24	TR3124B	•		•	
	3/8-24	TR3724B	•		•	
	7/16-20	TR4320B	•		•	
	1/2-20	TR5020B	•		•	
	9/16-18	TR5618B	•		•	
	5/8-18	TR6218B	•		•	
	3/4-16	TR7516A			•	
	7/8-14	TR8714A			•	
	1-14	TR10014A			•	
	1 1/8-12	TR11212A			•	
Matria Dathera dina D'	1 1/4-12	TR12512A			•	
Metric Rethreading Dies	(M6 x 1)	TDM51B	•			•
	(M8 x 1.25)	TDM53B	•			•
	(M10 x 1.5)	TDM54B	•			•
	(M10 x 1.25)	TRM1025-1	•			•
	(M12 x 1.75)	TDM55B	•			•
	(M12 x 1.5)	TDM56B	•			•
	(M12 x 1.25)	TDM57B	•			•
	(M10 x 1.00)	TR101	•			
	(M11 x 1.50)	TR11150	•			
	(M14 x 1.50)	TR14150	•			



- Rethreading taps and dies renew existing threads, do not use for cutting new threads or on hardened steel
- Read safety precautions on pages W1 to W4





## **Thread Restoring Files/Thread Chasers**



#### TF1124B Thread Restorer File.

- For any diameter right or left hand threads
- · Removable vinyl handles

**TF1124B.** 11, 12, 13, 14, 16, 18, 20, and 24 threads per inch. **TF1127B.** 9, 10, 12, 16, 20, 27, 28, and 32 threads per inch. **TFM7530B.** Pitches: .75, 1, 1.25, 1.50, 1.75, 2 and 3 mm.

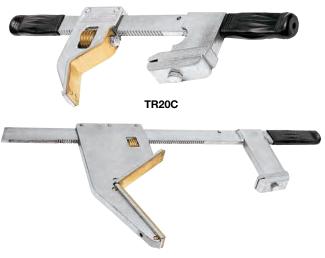


#### TFTFM932A

#### TFTFM932A Thread Restorer File Set.

- · Includes 3 commonly needed files
- Files feature a black industrial finish and comfortable vinyl handles
- Files service a range of 9 to 32 threads per inch and 0.75 to 3 mm pitches
- Includes TFTFM932-1 vinyl kit bag for storage

## Thread Chasers -



TR21A

# TR25B

## **U.S. Thread Chaser Sets**

#### TR20C U.S. External Thread Chaser Set.

 Includes small rethreading tool with 1/2 to 5 3/4" diameter capacity for bolt threads and 1/4 to 4" capacity for pipe threads plus 9 thread chasers

#### TR21A U.S. External Thread Chaser Set.

 Includes large rethreading tool with 5 to 14" diameter pipe thread capacity plus 9 thread chasers

## TR25B U.S. Internal Thread Chaser Set.

 Includes knurled handle internal thread chasing tool plus 9 chasers

## **Metric Thread Chaser Sets**

## TR20M Metric External Thread Chaser Set.

 Same rethreading tool as the TR20C U.S. set, except it includes 6 metric chasers (7 pcs)

#### TR25M Metric Internal Thread Chaser Set.

 Includes a knurled handle thread chasing tool plus 6 metric chasers (7 pcs)

## **Thread Chaser Set Components**

	Stock No.	Threads/inch & Pitch (mm)
U.S. Chaser	TR20-10	4 & 5
	TR20-11	6 & 7
	TR20-12	8 & 9
	TR20-32	8R & 10R
	TR20-13	10 & 11
	TR20-14	11 <sup>1</sup> / <sub>2</sub> & 12
	TR20-15	13 & 14
	TR20-16	16 & 18
	TR20-17	20 & 24
Metric Chaser	TR20-25	(4.5 & 5)
	TR20-26	(3.5 & 4)
	TR20-27	(2.5 & 3)
	TR20-28	(1.75 & 2)
	TR20-29	(1.25 & 1.5)
	TR20-30	(.75 & 1)

## **Special Purpose**

## **Spindle Rethreading Set** RD8 Spindle Rethreading Set.

· For most imported or U.S. front wheel drive vehicles

Stock No.

RD7-1

**RD7-2** 

RD7-3

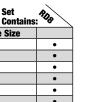
**RD7-4** 

RD7-5

RD7-6

RD7-7

RD7-9





RD8

#### **RD7-8** Storage Case Master Spindle Rethreading Set

## RD20 Master Spindle Rethreading Set.

**Rethreading Die Size** 

M24 x 1.5

M24 x 2

M22 x 1

M22 x 1.5

M20 x 1.5

<sup>3</sup>/<sub>4</sub>"-20

13/16"-20 M20 x 1.25

- Repair and renew damaged threads on stub axles and spindles for most vehicles
- . Dies are manufactured from high tempered steel for strength and durability

**Contains:** 

- · Each die size is embossed in the case directly below each die for easy identification and selection RDZO
- Application chart included



Stock No.	Rethreading Die Size	
RD7-1	M24 x 1.5	•
RD7-2	M24 x 2	•
RD7-3	M22 x 1	•
RD7-4	M22 x 1.5	•
RD7-5	M20 x 1.5	•
RD7-6	3/4"-20	•
RD7-7	<sup>13</sup> / <sub>16</sub> "-20	•
RD7-9	M20 x 1.25	•
RD7-10	3/4"-16 NF	•
RD7-11	<sup>7</sup> /8"-14 NF	•
RD7-12	1"-14 NF	•
RD7-13	<sup>11</sup> / <sub>16</sub> "-24 NF	•
RD7-14	M25 x 1.5	•
RD7-15	M27 x 2	•
RD7-16	<sup>27</sup> / <sub>32</sub> "-20 NF	•
RD7-17	M16 x 1	•
RD7-18	M16 x 1.5	•
RD7-19	M18 x 1.5	•
RD7-20	M19 x 1.5	•
RD7-21	M20 x 1	•



## **Light Truck Spindle Rethreading Set RD8LT Light** Truck Spindle Retheading Set.

- For use on 4 wheel drive front and rear axle housings) and medium to heavy duty 2 wheel drive trucks (rear axle)
- Restore axle housing and bearing/hub retention threads





	Contains:	37
Stock No.	Rethreading Die Size	
RD7-23	2"-16	•
RD7-24	M38 x 1.5	•
RD7-25	1 <sup>5</sup> /8"-16	•
RD7-26	1 <sup>13</sup> /16"-16	•
RD7-27	Left Hand, 2"-16	•
RD7-28	2 <sup>1</sup> /8"-16	•
RD7-29	2 <sup>1</sup> /4"-16	•
RD8LT-1	2 5/8" Driver	•
RDSI T-2	Storage Case	•

## Metric Spark Plug Hole Taps

Stock No.	Size
T10100	M10 x 1.00
T12125	M12 x 1.25
T14125	M14 x 1.25
T18150	M18 x 1.50
T2818	<sup>7</sup> /8"-18 NF



T14125

## **Thread Gauge TDM101 Metric Bolt** and Thread Gauge.

 Bolt diameter range of 2.3 to 24 mm (with inch/decimal equivalents)

Thread gauge sizes: .35 to 3 mm



**TDM101** 

## Deep Well Thread Chasers

RD7-22

- · Designed to clean and repair threads that are rusted, painted or damaged
- Unique pass through design allows you to thread even the longest bolt or wheel stud
- · Back end of chaser is left open so that it can be threaded backwards on a stud to use the interior of the thread chaser as a guide to align the first couple threads
- Flip chaser over and clean threads the remaining distance on the fastener or stud

Storage Case

Use a socket or wrench on the external

hex drive end to	operate chaser	Contains:	105	105	105	10	1/4
Stock No.	Туре	Thread Size	•			•	•
DTRC38	NC	3/8"-16 NC	•			•	•
DTRC716	NC	7/16"-14 NC	•			•	•
DTRC12	NC	1/2"-13 NC	•			•	•
DTRC916	NC	9/16"-12 NC	•			•	•
DTRC58	NC	5/8"-11 NC	•			•	•
DTRF38	NF	3/8"-24 NF		•		•	•
DTRF716	NF	7/16"-20 NF		•		•	•
DTRF12	NF	1/2"-20 NF		•	•	•	•
DTRF916	NF	9/16"-18 NF		•		•	•
DTRF58	NF	5/8"-18 NF		•		•	•
DTRM12.125	Metric	M12 x 1.25			•		•
DTRM12.150	Metric	M12 x 1.50			•		•
DTRM14	Metric	M14 x 1.50			•		•

M16 x 1.50





DTRFS105







DTRM16



Metric



- · Rethreading taps and dies renew existing threads, do not use for cutting new threads or on hardened steel
  - Read safety precautions on pages W1 to W4

## **THREADING**

## Tap and Die Sets







TD9902

TD2425



TDTDM117A

TDTDM500A

TDTDM117A Deluxe Combination Set. Includes all components of the TDTDM500A U.S./Metric set plus 41 pc high speed steel drill bit set in fractional, metric, wire gauge and letter sizes and 5 spiral screw extractors. Each drill bit matches to corresponding tap size for correct fit. Set offers a complete assortment of high carbon steel taps and dies in fractional and metric sizes. Tap/drill charts and tool diagrams included. Set packaged in a storage case.

				Contair	1S: 🍪 🖊	4	~~~ <u>~</u>	4	
	Thread Size	Tap Stock No.	Die Stock No.	Die Type	U.S. Set	U.S. Set	U.S. Set	U.S./Metric Set	U.S. Set
National Fine Threads	1/4"-28 NF	T105	D015	1" Double Hex Adjustable		•		•	•
(Adjustable Dies)	5/16"-24 NF	T106	D016	1" Double Hex Adjustable		•		•	•
	3/8"-24 NF	T107	D017	1" Double Hex Adjustable		•		•	•
	<sup>7</sup> /16"-20 NF	T108	D018	1" Double Hex Adjustable		•		•	•
	1/2"-20 NF	T109	D019	1" Double Hex Adjustable		•		•	•
	1/2"-20 NF	<b> -</b>	DR019	1 <sup>1</sup> /2" Round Adjustable	•				
	9/16"-18 NF	T125	DR035	1 <sup>1</sup> /2" Round Adjustable	•				•
	5/8"-18 NF	T126	DR036	1 <sup>1</sup> /2" Round Adjustable	•				•
	3/4"-16 NF	T127	DR037	1 <sup>1</sup> /2" Round Adjustable	•				•
	<sup>7</sup> /8"-14 NF	T128	DR042	2" Round Adjustable	•				•
	1"-14"	T129	DR043	2" Round Adjustable	•				•
<u>National</u>	1/4"-28 NF	T105	GA541-1428	1" Single Hex Non Adjustable					•
Fine Threads	5/16"-24 NF	T106	GA541-51624	1" Single Hex Non Adjustable					•
(Non Adjustable Dies)	3/8"-24 NF	T107	GA541-3824	1" Single Hex Non Adjustable					•
	<sup>7</sup> /16"-20 NF	T108	GA541-71620	1" Single Hex Non Adjustable					•
	1/2"-20 NF	T109	GA541-1220	1" Single Hex Non Adjustable					•
National	1/4"-20 NC	T100	D010	1" Double Hex Adjustable		•		•	•
Coarse Threads	5/16"-18 NC	T101	D011	1" Double Hex Adjustable		•		•	•
(Adjustable Dies)	<sup>3</sup> /8"-16 NC	T102	D012	1" Double Hex Adjustable		•		•	•
	<sup>7</sup> /16"-14 NC	T103	D013	1" Double Hex Adjustable		•		•	•
	1/2"-13 NC	T104	D014	1" Double Hex Adjustable		•		•	•
	1/2"-1 NC	<b> -</b>	DR014	1 <sup>1</sup> /2" Round Adjustable					•
	9/16"-12 NC	T120	DR030	1 <sup>1</sup> /2" Round Adjustable	•				•
	<sup>5</sup> /8"-11	T121	DR031	1 <sup>1</sup> /2" Round Adjustable	•				•
	3/4"-10 NC	T122	DR032	1 <sup>1</sup> /2" Round Adjustable	•				•
	7/8"-9 NC	T123	DR040	2" Round Adjustable	•				•
	1"-8 NC	T124	DR041	2" Round Adjustable	•				•
National .	1/4"-20 NC	T100	GA541-1420	1" Single Hex Non Adjustable					
Coarse Threads	5/16"-18 NC	T101	GA541-51618	1" Single Hex Non Adjustable	1				
(Non Adjustable Dies)	3/8"-16 NC	T102	GA541-3816	1" Single Hex Non Adjustable					
	<sup>7</sup> /16"-14 NC	T103	GA541-71614	1" Single Hex Non Adjustable	1				
	<sup>1</sup> /2"-13 NC	T104	GA541-1213	1" Single Hex Non Adjustable					
Machine	4-40	T111A	D021A	5/8" Double Hex Adjustable	-	•		•	•
Screw Threads	6-32	T112	D022	5/8" Double Hex Adjustable		•		•	•
(Adjustable Dies)	8-32	T113	D023	5/8" Double Hex Adjustable		•		•	•
	10-24	T114	D024	5/8" Double Hex Adjustable		•		•	•
	10-32	T115	D025	5/8" Double Hex Adjustable		•		•	•
	12-24	T116	D026	5/8" Double Hex Adjustable		•		•	•
Machine	4-40	T111A	GA541-440	5/8" Single Hex Non Adjustable	-				•
Screw Threads (Non Adjustable Dies)	6-32	T112	GA541-632	5/8" Single Hex Non Adjustable					•
(NUII AUJUSTADIE DIES)	8-32	T113	GA541-832	5/8" Single Hex Non Adjustable	_				•
	10-24	T114	GA541-1024	5/8" Single Hex Non Adjustable					•
	10-32	T115	GA541-1032	5/8" Single Hex Non Adjustable	_				•
	12-24	T116	GA541-1224	5/8" Single Hex Non Adjustable					•
Pipe Threads	1/8"-27 NPT	T110	_			•	•	•	
(Adjustable Dies)	1/8"-27 NPT	-	D020	1" Double Hex Adjustable		•		•	•
	1/4"-18 NPT	T130	_		•		•		•
	1/4"-18 NPT		DR033	1 <sup>1</sup> /2" Round Adjustable	•				•
	3/8"-18 NPT	T131	_	_	-		•		
	1/2"-14 NPT	T132	_	_			•		
	3/4"-14 NPT	T133	_	_			•		
	1"-11 <sup>1</sup> /2" NPT	T134	_	_			•		
Pipe Threads (Non Adjustable Dies)	<sup>1</sup> /8"-27 NPT	T110	GA541-1827	1" Double Hex Non Adjustable					

## **Tap and Die Sets**

		Contains: * \ \ \ \ \ \ \					~	4	4		
	Thread Size	Tap Stock No.	Die Stock No.	Die Type	U.S. Set	U.S. Set	Metric Set	Metric Set	Metric Set	U.S./ Metric Set	U.S. Set
<b>Metric Threads</b>	M3 x .50	T305M	D305M	5/8" Double Hex Adjustable			•		•	•	
	M4 x .70	T407M	D407MA	5/8" Double Hex Adjustable			•		•	•	
	M4 x .75	T4075M	D4075M	5/8" Double Hex Adjustable			•		•	•	
	M5 x .80	T508M	D508MA	5/8" Double Hex Adjustable			•		•	•	
	M5 x .90	T509M	D509M	5/8" Double Hex Adjustable			•		•	•	
	M6 x 1.00	T610M	D610MA	5/8" Double Hex Adjustable			•		•	•	
	M7 x 1.00	T710M	D710M	1" Double Hex Adjustable			•		•	•	
	M8 x 1.00	T810M	D810M	1" Double Hex Adjustable			•		•	•	
	M8 x 1.25	T812M	D812M	1" Double Hex Adjustable			•		•	•	
	M9 x 1.00	T910M	D910M	1" Double Hex Adjustable			•		•	•	
	M9 x 1.25	T912M	D912M	1" Double Hex Adjustable			•		•	•	
	M10 x 1.25	T1012M	D1012M	1" Double Hex Adjustable			•		•	•	
	M10 x 1.5	T1015M	D1015M	1" Double Hex Adjustable			•		•	•	
	M11 x 1.5	T1115M	D1115M	1" Double Hex Adjustable			•		•	•	
	M12 x 1.5	T1215M	D1215M	1" Double Hex Adjustable			•		•	•	T
	M12 x 1.75	T1217M	D1217M	1" Double Hex Adjustable			•		•	•	
	M14 x 1.25	T14125	DR1412M	1 1/2" Round Adjustable			•	•			
	M14 x 1.5	T1415M	DR1415M	1 <sup>1</sup> /2" Round Adjustable			•	•			
	M14 x 2.0	T1420M	DR1420M	1 <sup>1</sup> /2" Round Adjustable			•	•	ĺ		
	M1 x 1.5	T1615M	DR1615M	1 <sup>1</sup> /2" Round Adjustable			•	•			
	M16 x 2.0	T1620M	DR1620M	1 1/2" Round Adjustable			•	•	ĺ		
	M18 x 1.5	T1815M	DR1815M	1 1/2" Round Adjustable			•	•			
	M18 x 2.5	T1825M	DR1825M	1 1/2" Round Adjustable			•	•			
	M20 x 2.5	T2025M	DR2025M	2" Round Adjustable			•	•			
	M22 x 1.5	T2215M	DR2215M	2" Round Adjustable			•	•			Ť T
	M24 x 2.0	T2420M	DR2420M	2" Round Adjustable			•	•			
	M24 x 3.0	T2430M	DR2430M	2" Round Adjustable			•	•			1
	1/8"-28 BSP	T110M	D020M	1" Double Hex Non Adjustable			•		•	•	
Accessories	GA541-1 Die Stock	_	_	For 5/8" single hex dies							
110000001100	TD3A Die Stock	_	_	For 5/8" double hex dies		•	•		•	•	•
	GA26-2 Die Stock	_	<b>-</b>	Adjustable for 1" single hex dies							i –
	TD10A Die Stock	_	_	Self Centering for 1" double hex dies		•	•		•	•	•
	TD35 Die Stock	_	<b> </b> -	Self Centering for 1 1/2" diameter round dies	•		•	•			•
	TD40 Die Stock	_	_	Self Centering for 2" diameter round dies	•		•	•			•
	TD4 Tap Wrench	<b>–</b>	1_	4 jaw, for 0 - 1/4" taps		•	•		•	•	•
	TD6 Tap Wrench	_	_	2 jaw, for <sup>1</sup> /16 - <sup>1</sup> /4" taps							
	TD7 Tap Wrench	_	1_	2 jaw, for 1/4 - 1/2" taps							
	TD50 Tap Wrench	_	-	4 jaw, for <sup>1</sup> /4 - <sup>1</sup> /2" (M7 x 1.00 to M12 x 1.75) taps		•	•		•	•	•
	TD88A Tap Wrench	_	_	Clamp type, for 0 - 1/2" (M3 x 0.50 to M12 x 1.75) taps		•	•		•	•	•
	TD98A Tap Wrench	-	[-	Clamp type, for 0 - 1" (M7 x 10 to M24 x 3.0) taps	•		•	•			•
	TD1040 Thread Pitch Gauge	_	_	U.S.		•				•	•
	TDM100 Thread Pitch Gauge	_	_	Metric			•		•	•	
	TDS1 Screwdriver	_	1-	For adjusting dies		•	•		•	•	•

## **Metric Tap Set**

**TMA34.** Precision ground flutes ensure accurate threading. High carbon steel ensures less breakage. Tap adaptors turn any 3/8" socket drive into a tap driver.

## Metric Tap Set Includes:

Stock No.	Thread Size	Stock No.	Thread Size	Stock No.	Thread Size
T305M	M3 x 0.50	T910M	M9 x 1.00	T1420M	M14 x 2.00
T306M	M3 x 0.60	T912M	M9 x 1.25	T1610M	M16 x 1.00
T407M	M4 x .070	T1010M	M10 x 1.00	T1615M	M16 x 1.50
T4075M	M4 x 0.75	T1012M	M10 x 1.25	T1620M	M16 x 2.00
T508M	M5 x 0.80	T1015M	M10 x 1.50	T1815M	M18 x 1.50
T509M	M5 x 0.90	T1115M	M11 x 1.50	T18150	M18 x 1.50
T610M	M6 x 1.00	T1212M	M12 x 1.25	T1825M	M18 x 2.50
T6310M	M6.3 x 1.00	T1215M	M12 x 1.50	TDM100	Metric Thread, Pitch Gauge
T710M	M7 x 1.00	T1217M	M12 x1.75	ATSS	Adj. Tap Socket , 3-6 mm
T810M	M8 x 1.00	T1412M	M14 x 1.25	ATSL	Adj. Tap Socket , 6-12 mm
T812M	M8 x 1.25	T14125	M14 x 1.25		
T9075M	M9 x 0.75	T1415M	M14-1.50		

## **GAM541 Metric Set**

(Blue-Point®). 40 pc set features 1" single hex nonadjustable dies from 3 to 12 mm, a 1/8"-28 BSP die plus taps in the same sizes. Also includes a die stock, 2 T-handle tap wrenches, a thread pitch gauge, a drill/tap chart and a midget screwdriver, all in a storage case.



**GA541 U.S. Set** (Blue-Point). Taps and dies from #4 to 1/2" in both NF and NC threads, a pipe thread tap and die, plus 2 die stocks and 3 tap wrenches, a screw pitch gauge and a screwdriver (41 pc) in a storage case.





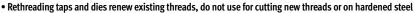












## **Self Aligning Taps and Dies**





## Self Aligning Taps

- Self aligning taps feature Chip Breaking Technology (CBT) allowing the cutting edge to cut, break and chip cleaner. Up to 30% easier to break chips
- · Self aligning taps come with an alignment chamfer that allows the tap to start straight every time, ensuring straight threads and less chance of cross threading
- · Increased flute taper increases tap durability up to 20%
- · Plug chamfer style for general purpose threading
- · High carbon steel is ideal for hand tapping applications

99999
O O O O O O



**DSA117M** 

## Self Aligning Dies

- · Self aligning dies feature CBT ensuring clean cuts in both directions
- · Alignment plate design starts straight every time to reduce the chance of cross threading
- · Roller threads provide greater thread quality, accuracy and cutting ease
- · Made from high carbon steel
- Use dies with the TDALDS1 Die Stock

## **Self Aligning** Taps, U.S.



Stock No.	Thread Size	
T110	1/8"-27 NPT	•
TSA111	4-40 Machine Screw	•
TSA112	6-32 Machine Screw	•
TSA113	8-32 Machine Screw	•
TSA114	10-24 Machine Screw	•
TSA115	10-32 Machine Screw	•
TSA116	12-24 Machine Screw	•
TSA100	1/4"-20 NC	•
TSA105	1/4"-28 NF	•
TSA101	5/16"-18 NC	•
TSA106	5/16"-24 NF	•
TSA102	3/8"-16 NC	•
TSA107	3/8"-24 NF	•
TSA103	7/16"-14 NC	•
TSA108	7/16"-20 NF	•
TSA104	1/2"-13 NC	•
TSA109	1/2"-20	•

## **Self Aligning** Taps, Metric



	- Containor		
Stock No.	Thread Size		
T110M	1/8"-28 BSP	•	
TSA305M	M3 x .50	•	
TSA4075M	M4 x .75	•	
TSA407M	M4 x .70	•	
TSA508M	M5 x .80	•	
TSA509M	M5 x .90	•	
TSA610M	M6 x 1.00	•	
TSA710M	M7 x 1.00	•	
TSA810M	M8 x 1.00	•	
TSA812M	M8 x 1.25	•	
TSA910M	M9 x 1.00	•	
TSA912M	M9 x 1.25	•	
TSA1012M	M10 x 1.25	•	
TSA1015M	M10 x 1.50	•	
TSA1115M	M11 x 1.50	•	
TSA1212M	M12 x 1.25	•	
TSA1217M	M12 x 1.75	•	

## **Self Aligning** Dies, U.S.



Stock No.	Die Type	Thread Size	
D020	1" Double Hex Non Adjustable	1/8"-27 NPT	•
DSA010	Double Hex	1/4"-20 NC	•
DSA011	Double Hex	5/16"-18 NC	•
DSA012	Double Hex	3/8"-16 NC	•
DSA013	Double Hex	7/16"-14 NC	•
DSA014	Double Hex	1/2"-13 NC	•
DSA015	Double Hex	1/4"-28 NF	•
DSA016	Double Hex	5/16"-24 NF	•
DSA017	Double Hex	3/8"-24 NF	•
DSA018	Double Hex	7/16"-20 NF	•
DSA019	Double Hex	1/2"-20	•
DSA021	Double Hex	4-40 Machine Screw	•
DSA022	Double Hex	6-32 Machine Screw	•
DSA023	Double Hex	8-32 Machine Screw	•
DSA024	Double Hex	10-24 Machine Screw	•
DSA025	Double Hex	10-32 Machine Screw	•
DSA026	Double Hex	12-24 Machine Screw	•

## **Self Aligning** Dies, Metric



Stock No.	Die Type	Thread Size	
D020M	1" Double Hex Non Adjustable	1/8"-28 BSP	•
DSA305M	Double Hex	M3 x .50	•
DSA407M	Double Hex	M4 x .70	•
DSA4075M	Double Hex	M4 x .75	•
DSA508M	Double Hex	M5 x .80	•
DSA509M	Double Hex	M5 x .90	•
DSA610M	Double Hex	M6 x 1.00	•
DSA710M	Double Hex	M7 x 1.00	•
DSA810M	Double Hex	M8 x 1.00	•
DSA812M	Double Hex	M8 x 1.25	•
DSA910M	Double Hex	M9 x 1.00	•
DSA912M	Double Hex	M9 x 1.25	•
DSA1012M	Double Hex	M10 x 1.25	•
DSA1015M	Double Hex	M10 x 1.50	•
DSA1115M	Double Hex	M11 x 1.50	•
DSA1212M	Double Hex	M12 x 1.25	•
DSA1217M	Double Hex	M12 x 1.75	•

## Tap and Die Drive Tool System

## TDALDS1 Die Stock.

- · Features a twist die lock which means no more set screws are needed
- Simply twist to insert or remove the die
- Ergonomic handles for comfort and control when threading
- Fits 1" double hex dies

#### TDALTS1 Adjustable Tap Socket.

- For 0 to 1/4" (M3 x .50 to M6 x 1.00) taps
- Versatile base can be driven with die stock, 3/8" ratchet or T-bar handle

#### TDALTS2 Adjustable Tap Socket.

- For 1/4 to 1/2" (M7 x 1.00 to M12 x 1.75) taps
- Versatile base can be driven with die stock, 3/8" ratchet or T-bar handle

#### **TDALDSS Die Spacer.**

- 1/8" spacer accommodates standard 1" hex dies
- Drives tools compatible with all 1" hex dies and ANSI® spec taps

#### **TDALTSB T-Bar Handle.**

 For TDALTS1 and TDALTS2 Adjustable Tap Sockets

## TDRSET Tap and Die Drive Tool Set.

Includes: TDALDS1 Die Stock, TDALTS1 and TDALTS2 Adjustable Tap Sockets, TDALDSS Die Spacer, TDALTSB T-Bar Handle, TD1040 U.S. Thread Pitch Gauge and TDM100 Metric Thread Pitch Gauge (7 pcs) in storage box.







## **Tap Sockets (1/4 - 3/8" Drive)**

Stock No.	Square Drive, inches	Fits SAE Size Taps	Fits Metric Size Taps	Shank Dia., inches	Square Size, inches
TDL8-1	1/4	#1, #2, #3, #4, #5, #6	M1.6, M1.8, M2, M2.2, M2.5, M3, M3.15, M3.5	.141	.110
TDL8-2	1/4	#8	M4	.168	.131
TDL8-3	1/4	#10	M4.5, M5	.194	.152
TDL8-4	1/4	1/4"	M6, M6.3	.255	.191
TDL8-5	3/8	<sup>5</sup> /16", <sup>7</sup> /16"	M7, M8	.323	.242
TDL8-6	3/8	3/8"	M10	.381	.286
TDL8-7	3/8	1/2"	M12, M12.5	.367	.275
TDL8-8	3/8	1/8" <b>NPT</b>	_	.437	.328

#### **TDL8 Tap Socket Set.**

- For use with ratchets and handles
- Rubber O-rings hold taps securely in place
- Black industrial finish
- Includes 8 sockets on TDL8-9 socket rail and clips

## Tap Sockets (1/2" Drive)

- · Use in restricted areas where a T-handle won't easily fit
- . Manufactured to M.C.T.I. Standards
- · Black industrial finish



Stock No.	Square Drive, inches	Fits SAE Size Taps, inches		Shank Dia., inches	Square Size, inches	
TDL31	1/2	5/8	16 mm	.480	.360	•
TDL32	1/2	11/16	18 mm	.542	.406	•
TDL33	1/2	3/4	_	.590	.442	•



TD1040

## **Thread Pitch Gauge**

## TD1040 Thread Pitch Gauge.

Measures U.S. or sharp "V" threads

• Includes 18 plated blades for the following thread sizes: 8, 9, 10, 11, 11 1/2, 12, 13, 14, 16, 18, 20, 24, 27, 28, 32, 36, 40, and 44 threads per inch

## Plug Taps and Dies -

	Stock No.	Thread Size	Thread Pitch	Die Type
Tap T111		4-36	Right Hand	_
	T6310M	M6.33 x 1	Right Hand	_
	T1010M	M10 x 1	Right Hand	_
	T1112M	M11 x 1.25	Right Hand	_
	T1212M	M12 x 1.25	Right Hand	_
	T1412M	M14 x 1.25	Right Hand	_
	T1415M	M14 x 1.5	Right Hand	_
	T1420M	M14 x 2	Right Hand	_
Die	D021	4-36	Right Hand	5/8" Dbl. Hex
	D040	1/4"-18	Right Hand	1" Dbl. Hex
	D147M	M4 x .7	Right Hand	1" Dbl. Hex
	D158M	M5 x .8	Right Hand	1" Dbl. Hex
	D161M	M6 x 1	Right Hand	1" Dbl. Hex
	D1010M	M10 x 1	Right Hand	1" Dbl. Hex
	D1112M	M11 x 1.25	Right Hand	1" Dbl. Hex
	D1212M	M12 x 1.25	Right Hand	1" Dbl. Hex
	D1615M	M16 x 1.5	Right Hand	1 1/4" Hex
	D1615ML	M16 x 1.5	Left Hand	1 1/4" Hex

# WARNING



## **Tap Sockets and Die Sets**

**TB300C** 

## **Bottoming Taps** TB300C Set.

 Allows blind holes to be tapped within one thread of bottom of hole

- **TB5/16C Tap.** 5/16"-18 NC thread size
- **TB3/8C Tap.** 3/8"-16 NC thread size

TB7/16C Tap. • 7/16"-14 NC thread size

#### TB300F Set.

- Allows blind holes to be tapped within one thread of bottom of hole **TB5/16F Tap.**• 5/16"-24 NF thread size

  - TB3/8F Tap.

     3/8"-24 NF thread size
    TB7/16F Tap.
  - - 7/16"-20 NF thread size

## Ratcheting Tap Wrenches (Blue-Point® YA577A T-handle Tap Wrench.

- For taps up to 1/4"
- · Ratchet clockwise or counterclockwise
- 3 3/8" long body, 3 15/16" handle

## YA578A T-handle Tap Wrench.

- For 1/4 to 1/2" taps
- Ratchet clockwise or counterclockwise
- 4 3/8" long body, 4 3/4" handle

YA577A

**TDW1000** 

## TDW1000 Ratcheting Tap and Die Wrench.

- · Cut and renew threads in confined areas
- · Bi directional ratcheting action
- · Holds dies with 1" (25 mm) diameter
- · Includes adaptors for hex and double hex
- Also includes adaptors for most popular tap sizes: .250" (6.35 mm), .290" (7.36 mm), .335" (8.5 mm) and .535" (13.58 mm)

## Adjustable Tap Sockets

 Designed for use with taps, reamers, screw extractors and other tools with a square shank





Small profile for easier access to tight work spaces

 Adaptor turns any 3/8" square drive ratchet or handle into a tap driver

#### ATSS Adjustable Tap Socket.

• Fits common taps from #6 to 1/4" (3 to 6 mm)

#### ATSL Adjustable Tap Socket.

• Fits common taps from 1/4 to 1/2" (6 to 12 mm)

#### ATSSET Adjustable Tap Socket Set.

ATSS and ATSL (2 pcs)

	Stock No.	Thread Size	Thread Pitch	Die Type
Die	D1620M	M16 x 2	Right Hand	1 1/4" Hex
	D1810M	M18 x 1	Right Hand	1 7/16" Hex
	D1815M	M18 x 1.5	Right Hand	1 7/16" Hex
	D1815ML	M18 x 1.5	Left Hand	1 7/16" Hex
	D1825M	M18 x 2.5	Right Hand	1 7/16" Hex
	DR2015M	M20 x 1.5	Right Hand	2" Round
	D2025M	M20 x 2.5	Right Hand	1 7/16" Hex
	D2215M	M22 x 1.5	Right Hand	1 5/8" Hex
	D2215ML	M22 x 1.5	Left Hand	1 5/8" Hex
	D2415M	M24 x 1.5	Right Hand	1 13/16" Hex
	D3015M	M30 x 1.5	Right Hand	2" Hex

## EXTRACTORS

Extractor Sets	Set & Contains:	TOMSAG	<b>NO35</b>	1010	DI TO	1035	1020
Right Hand Drill Bits	Stock No. CSE405B					•	
	DBCFS5/64			•			
	DBCFS7/64 DBCFS5/32			•			
	DBCFS1/4			٠			
	DBCFS19/64 DBF1/8C			•		•	•
	DBF3/16C					•	•
	DBF1/4C DBF5/16C					•	•
	DBF11/32C					•	•
	DBF7/16C DBF1/2C					•	
Left Hand Drill Bits	DBCL5/64A	•	•		•		
	DBCL7/64A DBCL1/8	·	•		Ť		
	DBCL5/32A	•	•		•		
	DBCL3/16 DBCL7/32	•					
	DBCL1/4A DBCL9/32	•	•		•		
	DBCL19/64A	•	•		•		
	DBCL5/16	•	•				
	DBCL11/32 DBCL3/8	•	÷				
	DBCL13/32 DBCL7/16	•	•				
	DBCL17/10 DBCL15/32	•	•				
Solid Type Drill Guides	DBCL1/2 E921	•	•			•	
Solia Type Drill Guides	E1021					•	•
	E1121					•	•
	E1221 E1321					•	•
	E1421					•	•
	E1521 E1621					•	•
	E1721					•	•
Sleeve Type Drill Guides	E1821 E33A					•	•
	E34					•	
Sleeve Bushings (in pairs) Straight Screw Extractors	E3033 E1					•	•
	E2					•	•
	E3 E4					•	•
	E5					•	•
	E6 E7					•	
Dina Dina Fatasatana	E8					•	
Pipe Plug Extractors	E80 E81					•	
	E82					•	
	E83 E84					•	
0 ·	E85					•	
Spiral Flute Screw Extractors	EX1 EX2	•	•	•	•		
	EX3	•	•	٠	٠		
	EX4 EX5	•	•	•	•		
Mulliantina Canana Futuratana	EX6	•	•	•	•		
Multispline Screw Extractors	REX104A REX105A	•	•				
	REX106A	•	٠				
	REX107A REX108A	•	•				
	REX109A	•	•				
	REX110A REX111A	•	•				
	REX112A	•	•				
	REX113A REX114A						
	REX115A	•	•				
Hex Head Fastener Extractors	REX116A BEX081	•	٠				
	BEX101	•					
	BEX121 BEXM101	•					
	BEX141	•					
	BEXM121 BEX161	•					
	BEXM131	•					
	BEX181 BEX201	•					
	BEXM171	•					
	BEX221	•					



#### EXDMS48 Master Extractor Set.

- Quickly and easily extracts the toughest screws from 3/32 to 15/16" screw sizes (including metric sizes)
- Includes 16 left hand mechanic's length cobalt drill bits, 13 multispline screw extractors (1/8 to 1/2"), 6 spiral flute screw extractors plus 13 hex head fastener extractors (1/4 to 3/4")
- Hex head extractors feature left hand spiral flutes for maximum gripping power
- External hex and square drive wrenching options for use with wrenches, impact wrenches and ratchet/socket combinations
- 48 pcs in storage case



## EXD35 Screw Extractor Set.

- Quickly and easily extracts tough screws from 3/32 to 15/16" (including metric sizes)
- Includes 16 left hand mechanic's length cobalt drill bits, 13 multispline screw extractors and 6 spiral flute screw extractors in EXD35-1 storage case



#### EXD10 Right Hand Extractor Set.

 Includes 5 right hand, mechanic's length cobalt drill bits and 5 spiral flute screw extractors in metal index



#### EXDL10 Left Hand Extractor Set.

 Includes 5 left hand, mechanic's length cobalt drill bits and 5 spiral flute screw extractors in metal index



## E1025 Extractor Set (Blue-Point®).

- Extract broken screws from 1/4 to 1" diameter and standard pipe sizes 1/8 to 1"
- Storage case



## E1020 Extractor Set (Blue-Point).

- Extracts broken screws from 1/4 to 1/2" diameter
- · Storage case













BEX13A

## Multispline Extractor Sets

 Shoulder prevents extractor from entering too deeply and expanding screw

**REX25B Multispline Extractor Set. REX104A** to REX128A (25 pcs) in REX25BMT storage case. **REX10B Multispline Extractor Set. REX104A** to REX113A (10 pcs) in REX10BMT storage case. **REX15B Multispline Extractor Set. REX104A** to REX118A (15 pcs) in REX15BMT storage case.



## **Multispline Extractors**

#### REX114A

Stock No.	Drill Size, inches	Bolt Size, inches	Pipe Size, inches	Hex Size, inches	Mark
REX104A	1/8	1/4	_	1/2	A
REX105A	5/32	5/16	1	1/2	В
REX106A	3/16	3/8	_	1/2	C
REX107A	7/32	7/16	-	1/2	D
REX108A	1/4	1/2	1/8	1/2	E
REX109A	9/32	9/16	_	1/2	F
REX110A	5/16	5/8	_	1/2	G
REX111A	11/32	11/16	1/4	1/2	Н
REX112A	3/8	3/4		1/2	
REX113A	13/32	13/16	1	1/2	J
REX114A	7/16	7/8	1	5/8	K
REX115A	15/32	15/16	3/8	5/8	П
REX116A	1/2	1		5/8	M
REX117A	17/32	1 <sup>1</sup> /16	_	5/8	N
REX118A	9/16	1 <sup>1</sup> /8	_	3/4	0
REX119A	19/32	1 <sup>3</sup> / <sub>16</sub>	_	3/4	P
REX120A	5/8	1 1/4	1/2	3/4	Q
REX121A	21/32	1 <sup>5</sup> /16	_	7/8	R
REX122A	11/16	1 3/8		7/8	S
REX123A	23/32	<b>1</b> 7/16		7/8	T
REX124A	3/4	1 1/2	_	7/8	U
REX125A	25/32	<b>1</b> 9/16	3/4	1	V
REX126A	13/16	1 <sup>5</sup> /8	_	1	W
REX127A	27/32	<b>1</b> 11/16	_	1	Х
REX128A	7/8	1 3/4	_	1	Υ

## Power Fastener Extractors (Blue-Point®)

- Extracts hex head, socket head, round head and other fasteners
- 1/4" universal hex shank is ideal for use with cordless, air or electric drills, impact wrenches, nut runners and hand tools
- · Power groove for use with quick change adaptors
- Reverse spiral flutes hold on to the most elusive fastener heads
- · High carbon steel ensures longer life and greater durability
- High carbon steel shank is larger than most fastener shanks and resists torsional shear

	Set Contains:	OFF TO
Stock No.	Size, inches (mm)	
BET76	3/16 (5)	•
BET78	1/4 (6)	•
BET710	5/16 (8)	•
BET712	3/8 (10)	•
BEMT710	(10)	•
BET714	7/16 (11)	•
BET716	1/2 (12)	•



#### **Hex Head Fastener Extractors**

- Use on most popular hex head fasteners from 1/4 to 1" (8 to 24 mm)
- Sockets feature left hand spiral flutes for maximum gripping power
- Manufactured from high carbon steel for maximum strength
- · External hex and square drive wrenching options for use with wrenches, impact wrenches and ratchet/socket combinations

Stock No.	Square Drive, inches	Size, inches (mm)	External Hex, inches (mm)	Outside Dia., inches (mm)	Length, inches (mm)		
BEX081	3/8	1/4 (6)	5/8 (15.9)	3/8 (9.5)	1 1/16 (27.0)	•	
BEX101	3/8	5/16 (8)	5/8 (15.9)	<sup>7</sup> /16 (11.1)	1 1/16 (27.0)	•	
BEX121	3/8	3/8 (10)	5/8 (15.9)	9/16 (14.3)	1 1/16 (27.0)	•	
BEXM101	3/8	n/a (10)	3/4 (19.1)	5/8 (15.5)	1 1/16 (27.0)	•	
BEX141	3/8	<sup>7</sup> /16 (11)	3/4 (19.1)	5/8 (15.9)	1 <sup>1</sup> / <sub>16</sub> (27.0)	•	
BEXM121	3/8	n/a (12)	3/4 (19.1)	<sup>23</sup> / <sub>32</sub> (17.5)	1 1/16 (27.0)	•	
BEX161	3/8	1/2 (12)	3/4 (19.1)	<sup>23</sup> / <sub>32</sub> (17.9)	1 1/16 (27.0)	•	
BEXM131	3/8	n/a (13)	3/4 (19.1)	<sup>23</sup> / <sub>32</sub> (18.5)	1 1/16 (27.0)	•	
BEX181	3/8	9/16 (14)	7/8 (22.2)	<sup>25</sup> / <sub>32</sub> (19.4)	1 1/16 (27.0)	•	
BEX201	3/8	5/8 (16)	7/8 (22.2)	7/8 (21.8)	1 1/16 (27.0)	•	
BEXM171	3/8	n/a (17)	1 (25.4)	<sup>29</sup> / <sub>32</sub> (23.0)	1 1/16 (27.0)	•	
BEX221	3/8	11/16 (n/a)	1 (25.4)	<sup>15</sup> / <sub>16</sub> (24.2)	1 1/16 (27.0)	•	
BEX241	3/8	3/4 (19)	1 1/16 (27)	1 1/32 (26.2)	1 1/16 (27.0)	•	
BEXW241	1/2	3/4 (19)	1 1/4 (31.8)	1 <sup>1</sup> / <sub>8</sub> (28.6)	1 3/4 (44.5)		•
BEXW261	1/2	13/16 (21)	1 3/8 (34.9)	1 3/16 (30.2)	1 3/4 (44.5)		•
BEXW281	1/2	7/8 (22)	1 7/16 (36.5)	1 1/4 (31.8)	1 3/4 (44.5)		•
BEXW301	1/2	<sup>15</sup> /16 (24)	1 7/16 (36.5)	1 <sup>5</sup> / <sub>16</sub> (33.3)	1 3/4 (44.5)		•
BEXW321	1/2	1 (n/a)	1 7/16 (36.5)	1 3/8 (34.9)	1 3/4 (44.5)		•



#### **110STSY**

## External Drive Hex Head Slim Twist Sockets

Stock No.	Nut/Bolt Size, inches (mm)	Socket Number	External Hex, inches	Socket Thickness, inches (mm)	Finish
110STSY1	3/8 (9)	#1	5/8	0.38 (9.5)	Industrial Black
110STSY2	(10)	#2	5/8	0.38 (9.5)	Industrial Black
110STSY3	7/16 (11)	#3	11/16	0.38 (9.5)	Industrial Black
110STSY4	(12)	#4	3/4	0.38 (9.5)	Industrial Black
110STSY5	(13)	#5	3/4	0.50 (12.7)	Industrial Black
110STSY6	(14)	#6	13/16	0.50 (12.7)	Industrial Black
110STSY7	(15)	#7	7/8	0.50 (12.7)	Industrial Black
110STSY8	5/8 (16)	#8	15/16	0.62 (15.9)	Industrial Black
110STSY9	(17)	#9	1	0.62 (15.9)	Industrial Black
110STSY10	3/4 (19)	#10	1 <sup>1</sup> /16	0.62 (15.9)	Industrial Black

#### 110STSY External Drive Twist Socket Set.

- Quickly and easily remove damaged or rounded nuts and bolts. socket head cap screws in close quarters and nuts threaded on long studs
- Ideal for use for aircraft and exhaust systems applications
- Includes 10 external hex drive slim twist sockets for the following hex head fasteners:

SAE: 3/8, 7/16, 5/8 and 3/4"

Metric: 9, 10, 11, 12, 13, 14, 15, 16, 17, and 19 mm Sockets are stored on MSR1 magnetic socket holder



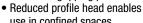


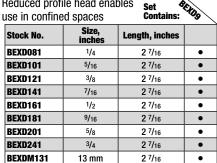


## **Extractor Tools**

**BEXD181** 

- **BEXD Deep Well Extractors** External hex and 3/8" square drive wrenching options for use with wrenches, impact wrenches and ratchet/socket combinations
- · Deep well design fits over exposed studs and reaches recessed fasteners
- · Reverse spiral flutes bite into stubborn fasteners, both fractional and metric, with maximum gripping power







BEXD9

## **Right Hand Fractional Drill Bits**

• Use right hand drill bits to make a hole in the broken screw before the extractor is inserted

Stock No.	Size, inches	Flute Length, inches	Overall Length, inches
CSE405B	5/8	3	6
DBF1/2C	1/2	2 1/4	4 3/4
DBF1/4C	1/4	2 1/2	4
DBF1/8C	1/8	1 3/8	3
DBF11/32C	11/32	2 3/4	4 1/2
DBF3/16C	3/16	2	3 1/2
DBF5/16C	5/16	2 5/8	4 1/2
DBF7/16C	7/16	1 7/8	4 1/4

# **Left Hand Fractional**

• Left hand drill bits tend
screws for set easier removal

040.01 1011101	· Contain	5: '	\
Stock No.	Size, inches		
DBCL5/64A	5/64	•	
DBCL7/64A	7/64	•	
DBCL5/32A	5/32	•	_
DBCL3/16	<sup>3</sup> / <sub>16</sub>		
DBCL1/4A	1/4	•	
DBCL9/32	9/32		
DBCL19/64A	19/64	•	_
DBCL5/16	5/16		
DBCL11/32	11/32		_
DBCL3/8	3/8		
DBCL13/32	13/32		
DBCL7/16	7/16		
DBCL15/32	15/32		
DBCL1/2	1/2		



## **Tapered Bit Extractors** SR40K Tapered Bit Extractor Set.

- · Tapered ends have left hand threads to bite deep into drilled studs
- · Square shafts for use with wrench
- Set includes (4 pcs) in C0407 kit bag SR4A 1/8" SR10A 9/64"

SR14 7/32" SR20 5/16" C0407 Kit Bag



## **Left Hand Fractional Drill Bits** (High Speed Steel)

· Left hand drill bits tend to loosen screws for easier removal



	Stock No.	Size, inches	Flute Length, inches	Overall Length, inches	
<b>Left-Hand</b>	DBLS1/8A	1/8	1 <sup>3</sup> /8	3	•
	DBLS3/16A	3/16	2	3 1/2	•
	DBLS1/4A	1/4	2 1/2	4	•
	DBLS5/16A	5/16	2 5/8	4 1/2	•
	DBLS11/32A	11/32	2 3/4	4 1/2	•

## Spiral Flute Screw Extractors

- Designed to remove broken studs, bolts, socket screws and fittings
- Aggressive left hand spiral design for extra gripping power



Stock No.	Use Drill Size, inches	Removes Bolts and Screws
EX1	5/64	3/32 to 5/32", 2.5 to 4 mm, #3 to #6
EX2	7/64	5/32 to 7/32", 4 to 6 mm, #6 to #12
EX3	5/32	7/32 to 9/32", 6 to 8 mm, #12
EX4	1/4	9/32 to 3/8", 1/8" NPT, 1/8" BSP, 8 to 10 mm
EX5	19/64	3/8 to 5/8", 1/4" NPT, 1/4" BSP, 10 to 16 mm
EX6	13/32	5/8 to 7/8", 3/8" NPT, 3/8" BSP, 16 to 22 mm

## Solid Type Drill Guides

Used for centering drills at a depth not exceeding 1"



E921

Stock No.	Outside Dia., inches	For Drill Size, inches	Length, inches
E921	9/32	1/8	1 3/16
E1021	5/16	1/8	1 3/16
E1121	11/32	1/8	1 3/16
E1221	3/8	1/8	1 3/16
E1321	13/32	3/16	1 3/16
E1421	5/16	3/16	1 3/16
E1521	15/32	3/16	1 3/16
E1621	1/2	3/16	1 3/16
E1721	17/32	1/4	1 3/16
E1821	9/16	1/4	1 3/16

## Sleeve Type Drill Guides

- Use to center 1/4" diameter, 6" long drill bits (see DBL1/4A above)
- Parts are interchangeable to adapt to different screw or stud holes and depths up to 3 3/4"

**E34** Sleeve Type 5/8" 0.D.

E33A Sleeve Type 3/4" diameter

E33B Sleeve Spacer (set of 4) 5/8" diameter

## Sleeve Bushing (in pairs)

- · · · · · · · · · · · · · · · · · · ·				
Stock No.	Diameter, inches			
E2133	21/32			
E2933	29/32			
E3033	15/16			
E3133	31/32			



SR40K

## **Extractor Tools**





E1

## **Straight Screw Extractors**

	Stock No.	For Screw Dia. or Std. Pipe, inches	Drill Size, inches	Length, inches
Straight	E1	1/4	1/8	2 5/16
Screw,	E2	5/16	3/16	2 3/4
Hex Nut Type	E3	3/8	1/4	3 1/16
	E4	7/16	5/16	3 5/16
	E5	1/2	11/32	3 3/4
	E6	1/2	7/16	4 1/8
	E7	3/4	1/2	4 1/2
	E8	1	1/2	4 5/8



## **Pipe Plug Extractors**

, ,			
Stock No.	For Screw Dia. or Std. Pipe, inches	Drill Size, inches	Length, inches
E80	1/8	17/64	2 1/4
E81	1/4	3/8	2 1/2
E82	3/8	1/2	2 3/4
E83	5/8	5/8	3
E84	3/4	13/16	3 1/4
E85	1	1 1/16	3 1/2

# All in one Extractor Set YA769 Extractor Set. (Blue-Point®)

- Extract broken screws from 1/4 to 1/2" diameter
- · Drill/extract with one tool
- · Left hand drill bit
- For use in 3/8" drive reversible drill



YA769

Stock No.	Extractor Size, inches	Drilling Speed, rpm	Extracting Speed, rpm
YA769-1	1/4	700-800	350
YA769-2	5/16	650-750	470
YA769-3	3/8	600-700	350
YA769-4	1/2	475-575	350

## YA2020 Screw Extractor Set (Blue-Point).

- Easily extracts #6 to #14 damaged screws from wood, metal or plastic.
   Remove hex, Torx\*, Phillips\*, slotted or square head screws
- Use with 1/4" quick disconnect or 1/4" hex hand or power tool
- Works with a variety of screw materials



YA2020

# Cam and Wedge Type Stud Removers A50A Stud Remover.

- 7/16 to 1/2" capacity
- . V-shaped rack grips stud
- Grip releases when pressure is relieved
- Uses 1/2" drive handle

## A50-4B Optional Rack.

• For 5/16 to 3/8" capacity

#### A36A Stud Remover.

- 1/2 to 3/4" capacity
- · Knurled wheel grips stud
- Driving shank extends through both sides of housing for bearing surface on each side of wheel
- Uses 1/2" drive handle

#### A80A Stud Remover.

- 1/4 to 1/2" capacity
- · Jaws grip when pressure is applied
- Built in ratchet action
- Needs only 1 1/4" clearance
- Use with 1/2" drive handle or 1" wrench

#### LA55A Stud Remover.

- 9/16 to 1" capacity
- Grip is released by turning tool in reverse direction
- Works on wedge principle
- Use with 3/4" drive handle
- Includes 2 wedge sizes: LA55A2 and LA55A3

#### LA54 Stud Remover.

- 1/4 to 5/8" capacity
- Smaller version of LA55A
- Includes 2 wedge sizes: LA54-2A and LA54-3A
- Requires 1/2" drive handle

#### YA789 Power Extractor Set (Blue-Point).

- Place extractor end of tool in drill chuck, set for reverse and hole can be drilled
- Next, insert drill side into chuck, exposing extractor end, and finish the job to remove broken screw
- Packaged in YA789-5 storage case

U	
Set Contains:	4789

Contains. • \									
Stock No.	Dell Circ	Extractor Size							
SLUCK NO.	<b>Bolt Size</b>	Fractional	Metric						
YA789-1	_	#5 - #6	M3	•					
YA789-2	_	#8	M4						
YA789-3	#10, #12	_	M5	•					
YA789-4	_	1/4"	M6	•					

# YA2019 Screw Remover Set (Blue-Point).

- Use to remove damaged Phillips, Torx, Pozidriv\*, slotted, Internal Hex, Tri-Wing\*, Frearson and most tamper resistant screws and fasteners
- Tool bites into the damaged fastener in the reverse direction allowing the user to easily remove damaged screws
- Use with variable speed reversing drill or 1/4" hex bit screwdriver



A50A



A36A



A80A



LA55A



**YA789** 



YA2019



Stock No.	Extractor Size Bolt Size	
YA2019-1	#6 - #8	•
YA2019-2	#8 - #10	•
YA2019-3	#10 - #12	•





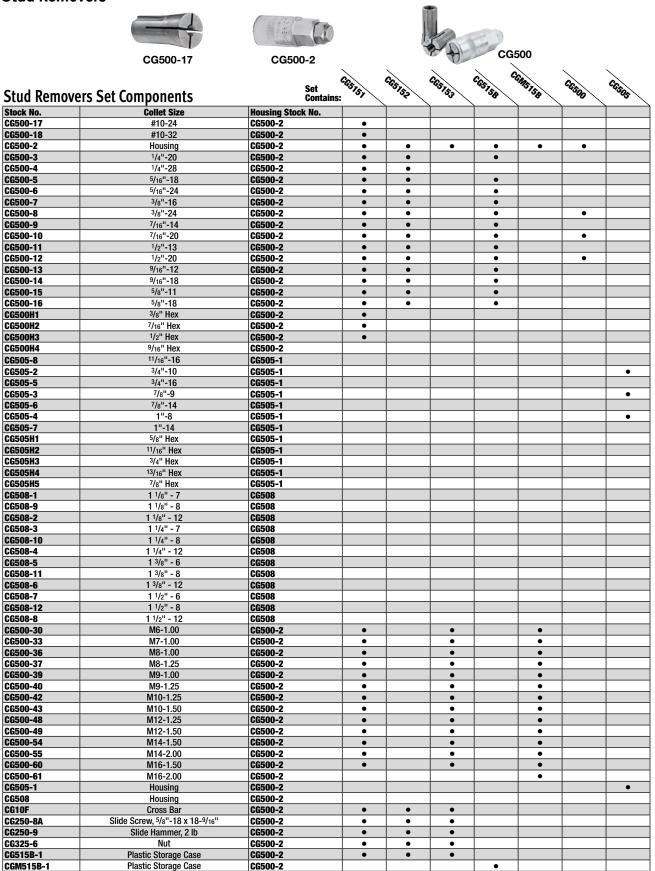






## **EXTRACTORS**

## **Stud Removers**



## **Stud Removers/Dowel Pin Pullers**

## **Stud Removers**

- Tapered collets thread onto stud, even if only a few threads are exposed
- Tightening the housing bolt draws the collet into the housing and clamps collet onto stud
- Tools reduce chance of damage to stud threads
- Avoid bottoming or shouldering studs to avoid shearing or damaging stud or workpiece

#### **CG5151 Master Stud and Dowel Puller Set includes:**

- Dowel pin componets: CG503-1 housing, CG503S1 square collet, plus CG503-2 to CG503-14 collets
- Serrated collet components: CG500-20 to CG500-24
- Pipe nipple components: CG500P1 to CG500P3

## CG5152 SAE Stud and Dowel Puller Set also includes:

- Dowel pin componets: CG503-1 housing, plus CG503-2 to CG503-8 collets
- Does not include CG503S1 collet

#### CG5153 Metric Stud and Dowel Puller Set also includes:

 Dowel pin components: CG503-1 housing plus CG503-9 to CG503-14 collets

**Dowel Pin Pullers** 



#### Dowel Pin Puller Sets

	i ullei Jels				
Stock No.	Collet Size	CG503	CGM503	CG513	CG503S
CG503-2	1/4"	•			
CG503-3	5/16"	•			
CG503-4	3/8"	•			
CG503S1	3/8" Square				
CG503-5	7/16"	•			
CG503-6	1/2"	•			
CG503-7	9/16"	•			
CG503-8	5/8"	•			
CG513-4	3/4"			•	
CG513-5	7/8"			•	
CG513S1	1/2" Square				
CG513S2	5/8" Square				
CG513-6	1"			•	
CG503-9	6 mm		•		
CG503-10	8 mm		•		
CG503-11	10 mm		•		
CG503-12	12 mm		•		
CG503-13	14 mm		•		
CG503-14	16 mm		•		
CG503-1	Housing	•	•		•
CG513-1	Housing				
CG513-2	Slide Screw			•	
CG10F	Cross Bar	•	•		•
CG250-8A	Slide Screw, 5/8"-18 x 18 9/16"	•	•		•
CG250-9	Slide Hammer, 2 lb	•	•		•
CG45670	Slide Hammer, 10 lb			•	
CG325-6	Nut		•		•
CG513-3	Nut			•	

## **Serrated Collets**

- Serrated gripping portions are used to remove unthreaded studs that cannot be removed with standard collets due to lack of gripping surface
- Avoid bottoming or shouldering studs to avoid shearing or damaging stud or workpiece

Stock No.	Description
CG500-20	1/4" Collet
CG500-21	5/16" Collet
CG500-22	3/8" Collet
CG500-23	7/16" Collet
CG500-24	1/2" Collet
CG500-2	Housing



CG500-23





CG508P

## **Pipe Nipple Remover Set Components**

	<u>.'</u>				
Stock No.	Collet Size	Housing Stock No.	CG500P	CG505P	CG508P
CG500P1	1/8" NPT	CG500-2	•		
CG500P2	1/4" NPT	CG500-2	•		
CG500P3	3/8" NPT	CG500-2	•		
CG505P1	1/2" NPT	CG505-1		•	
CG505P2	3/4" NPT	CG505-1		•	
CG508P1	1" NPT	CG508-2			•
CG508P2	1 1/4" NPT	CG508-2			•
CG500-2	Housing	_	•		
CG505-1	Housing	_		•	
CG508	Housing	_			•

Note: Avoid bottoming or shouldering studs to avoid shearing or damaging stud or workpiece.

## **Heavy Duty Housing with Collet**

- Collets are threaded to order: specify stud thread size when ordering.
   Example: CG510 1 3/4"-10 collet
- Avoid bottoming or shouldering studs to avoid shearing or damaging stud or workpiece

CG510 For larger stud sizes 1 5/8 to 2".

CG511 For larger stud sizes 2 to 2 1/2".

CG512 For larger stud sizes 2 1/2 to 3".





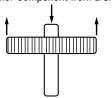




## **Puller Feature**

## What Type of Puller do I Want to Use? Will it be the Combination that Works the Best?

Removing a Gear, Bearing, Pulley, or Other Component from a Shaft



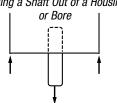
Tools to Use

**Jaw Type Puller.** 2 or 3 jaw style, with 3 jaw being the best choice. Manual or hydraulic with outside jaw positions.

Push/Pull Puller. Use male or female adaptors to thread into tapped holes on components. Slide Hammer Puller. Use on light duty applications. For use with attachments.

Bar Type Puller with Bearing Separator. Bar type with side rods threaded into bearing separator provides "knife edge" to get behind component or when there is not a good gripping edge.

Pulling a Shaft Out of a Housing



## Tools to Use

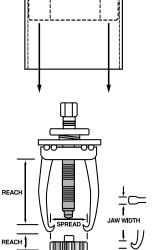
Push/Pull Puller. Use male or female adaptors.

**Bar Type Puller with Bearing Separator.** Use when housing lacks sufficient surface for puller side rods to bear against.

Slide Hammer Puller. Use on light duty applications. For use with attachments.

Slide Hammer Puller. Use with male or female adaptors. See this section for a full listing of compatible adaptors.

Removing a Bearing or Bushing from a Blind Hole



## Tools to Use -

**Jaw Type Puller.** For inside jaw positions (inside pulls), a manual or hydraulic jaw type puller can be used with pressure screw or slide hammer variations.

**Expanded Collet Puller.** The inside diameter should range between 1/4 and 7". Pulling can be done with bridge, bar type yokes or slide hammers. See page 210 for full information.

Bearing Adaptors with Slide Hammer Puller. CJ127A, CJ128A and CJ137 bearing adaptors with CJ97-3A slide hammer should be used in this application.

Bar Type Puller with Bearing Separator. Bar type with side rods threaded into bearing separator provides "knife edge" to get behind components or when there is not a good gripping edge.

## Determine the "Reach" and "Spread" Needed

The puller's reach must equal or exceed the same distance on the part. The puller's spread is the width of the part.

#### **Estimate the Puller Tonnage**

Generally, if you already have the correct "reach and spread," you will usually have the proper tonnage. If in doubt, use the next larger size.

#### **General Rule to Choose Pullers**

**Manual Pullers.** Pressure screw should be at least half the diameter of the shaft on the pulling/pushing job.

Hydraulic Pullers. Maximum tonnage capacity (tons) should be 8 to 10 times the diameter (in inches) of the shaft to be pulled or pushed.





JAW THICKNESS

**Anvil Head:** Curved at the top and features a hex design. The curved head provides a striking surface to handle those tough pulling jobs while the hex allows the pressure screw to be easily turned with a standard hex wrench or a socket.

**Spring Loaded Locking Mechanism:** *Snap-on* pullers feature a unique spring tension locking mechanism which allows the puller jaws to easily lock onto the work surface for both "outside" and "inside" pulling applications.

**Two Position Yoke:** Allows jaws to be easily reversed to accommodate inside or outside pulling situations. Interchangeable yokes accommodate 2 and 3 jaw setups. Yokes are heat treated for additional strength and safety.

One Piece Jaw Construction: Provides a stronger, safer jaw. Most competitive puller jaws have holes drilled through them to allow for a bracket attachment. This hole significantly weakens the competitor's puller jaws.

Forged Jaws: Resist breakage, prolong tool life and provide additional strength.

**Replaceable Points:** Center pulling power to prevent cocking. Provide less friction and minimum drag for easier turning of pressure screw during the pulling process. If damage occurs, simply replace the point and not the entire pressure screw.

**Curved Jaws:** Provide positive grip on the work surface.

## **Bar Type Interchangeable**

Interchangeable bar style pullers provide high quality pulling equipment with the versatility needed to handle a wide variety of pulling functions. Standardized pressure screw threading, jaw retention and design means that new components can be added to an existing puller to change its reach or spread in order to handle new or different applications.

These Snap-on® bar style pullers also feature:

- Replaceable pressure screw points help keep the puller safely centered
- Multiposition yokes help keep the jaws properly aligned with the item being pulled
- Adjustable clamp bolts allow jaws to be snugged up against the job for a safer, more convenient pull
- Spring ball pin retention securely holds jaws while allowing quick jaw changes

**CJ83C Pulley and Gear Puller.** Ideal for servicing crankshaft pulleys, gears and timing gears on a wide range of gasoline and diesel engines including Cummins® accessory drives and water pumps. Includes each 3/8"-16 x 3", 5/16"-18 x 2 1/2" and M10-1.5 x 65 mm bolts. Nominal capacity is 3 1/2 tons. Includes:

CJ86-1 Yoke. ME5A55 Washer.
CJ83-3 Pressure Screw. ME3A45 Studs (2).
CJ66-15-3 Centering Point. ME3A44 Studs (2).
ME5A54 Washer (1 needed). ME3A75 Studs (2).

**CJ82B Pitman Arm Puller.** Handles many Pitman® arm applications plus a variety of general pulling jobs. Nominal capacity is 6 tons.

CJ86-1 Yoke. CJ86-4A Clamp Bolt.
CJ83-2 Pressure Screw. CJ85-4 Washer (2).
CJ66-15-3 Centering Point. ME4A33 Clamp Nuts (2).
CJ81-2A Jaws (2). CJ105-11 Jaw Pins (2).

**CJ81D Differential Side Bearing Puller.** Narrow jaws slip into housing grooves in back of bearing and let jaws seat and pull along with inner race. Jaws are locked onto bearing by clamp bolt. 4 centering plates are included. Nominal capacity is 6 tons.

CJ86-1 Yoke.

CJ83-2 Pressure Screw.

CJ66-15-3 Centering Point.

CJ81-2A Jaws (2).

CJ81B1A Adaptors (set of 4).

CJ81D1A Adaptors (set of 4).

CJ86-4A Clamp Bolt (2).

ME4A33 Clamp Nuts (2).

**CJ85A Truck Differential Side Bearing Puller.** Similar in appearance to CJ81D but bigger for handling truck applications. 4 centering plates included. Nominal capacity is 7 1/2 tons.

CJ85-1 Yoke.

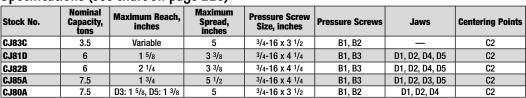
CJ83-2 Pressure Screw.
CJ66-15-3 Centering Point.
CJ85-2 Jaws (2).
CJ85-6 Adaptors (set of 4).
CJ85-3 Clamp Bolt (2).
CJ85-7 Adaptors (set of 4).
CJ85-4 Washer (2).
CJ85-8 Adaptors (set of 4).

ME4A33 Clamp Nuts (2).

**CJ80A A/C Pulley Puller.** Also excellent for removal of alternator, generator, power steering and crankshaft pulleys, harmonic balancers and fiber timing gears. Includes an extra pair of jaws for versatility. Nominal capacity is 7 1/2 tons.

CJ85-1 Yoke. CJ85-3A Clamp Bolt.
CJ83-3 Pressure Screw. CJ85-4 Washer (2).
CJ66-15-3 Centering Point. ME4A33 Clamp Nuts (2).
CJ87-1 Jaws (2).
CJ85-3A Clamp Bolt.
CJ85-4 Washer (2).
CJ85-3A Clamp Bolt.
CJ85-4 Washer (2).

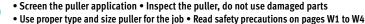
## Specifications (see chart on page 220)





















CJ80A

## Bar Type Interchangeable

## CJ Interchangeable Pullers—Major Components

	CJ83C	CJ82B	CJ81D	CT85A	CJ80A	Component	Key No.	Stock No.	Specific Di	mensions
A 1									Usable Range, inches	Pin Holes per Side
						Yoke	A1	CJ100-1	10 <sup>1</sup> /2-16	4
2						Yoke	A2	CJ118-1	6 - 10 <sup>1</sup> / <sub>2</sub>	3
3 4				•	•	Yoke	A3	CJ85-1	3 - 6 1/2	3
	•	•	•			Yoke	A4	CJ86-1	1 3/4-4 1/2	2
В _									Thread x Length	Hex Size, inches
1						Pressure Screw	B1	CJ105-3	3/4-16 x 10 <sup>1</sup> / <sub>2</sub>	7/8
2		•	•	•		Pressure Screw	B2	CJ83-2	<sup>3</sup> /4-16 x 6 <sup>11</sup> / <sub>16</sub>	7/8
3	•				•	Pressure Screw	В3	CJ83-3	<sup>3</sup> /4-16 x 5 <sup>1</sup> /8	7/8
C → 1 → 2									Head Diameter inches	Point Type
<b>→</b> 1 <b>→</b> 2	•	•	•	•	•	Point	C1	CJ66-15-3	5/8	90° Outward
						Point	C2	CJ84-16	7/8	90° Outward
									Maximum Reach, inches	
3						Jaws (2 needed)	D1	CJ116-1	8 <sup>1</sup> / <sub>4</sub>	
						Jaws (2 needed)	D2	CJ282-1	4 <sup>3</sup> /8	
2 4 5		•	•		•	Jaws (2 needed)	D3	CJ81-2A	1 <sup>3</sup> /8	_
•				•		Jaws (2 needed)	D4	CJ85-2	1 <sup>3</sup> / <sub>4</sub>	
					•	Jaws (2 needed)	D5	CJ87-1	1 <sup>3</sup> /8	_
E									Maximum Length, inches	
						Clamp Bolts	E1	CJ100A2	18	_
3 ~4						Clamp Bolts	E2	CJ118-2A	11 <sup>1</sup> / <sub>2</sub>	
				•	•	Clamp Bolts	E3	CJ85-3A	7 1/2	_
		•	•			Clamp Bolts	E4	CJ86-4A	5	_
F O₁O									Inside Diameter, inches	Outside Diameter inches
<b>0</b> <sub>1</sub> <b>0</b>		•	•	•	•	Washer (2 needed)	F1	CJ85-4	15/32	7/8
	•					Washer (1 needed)	F2	ME5A54	11/32	3/4
	•					Washer (1 needed)	F3	ME5A55	9/32	3/4
G oʻo						Olemen Note			Thread Size	
1		•	•	•	•	Clamp Nuts (2 Needed)	G1	ME4A33	<sup>7</sup> / <sub>16</sub> x 20	_
<b>H</b> = 1									Diameter, inches	Length, inches
		•	•	•	•	Jaw Pins (2 needed)	H1	CJ105-11	<sup>5</sup> /16	1 <sup>15</sup> /32
J									Outside Diameter, inches	Step Diameter, inches
			•					CJ81B1A	1 <sup>1</sup> /2	1 <sup>1</sup> /8
			•			Adaptors	J1	CJ81B2A	1 <sup>5</sup> /8	1 <sup>1</sup> /4
<b>66</b> <sub>1</sub> <b>66</b> <sub>2</sub>			•			(Set of 4)	01	CJ81D1A	1 3/4	1 1/8
00'00			•					CJ81D2A	1 11/32	15/16
				•				CJ85-5	2 2 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub> 1 <sup>21</sup> / <sub>32</sub>
						Adaptors (Set of 4)	J2	CJ85-6 CJ85-7	2 <sup>1</sup> / <sub>8</sub> 2 <sup>1</sup> / <sub>2</sub>	1 <sup>21</sup> /32 1 <sup>27</sup> /32
						(361 01 4)		CJ85-8	3 <sup>1</sup> /16	2 <sup>3</sup> / <sub>8</sub>
K								2002-0	Thread x Length	2 78
<b>_</b> 1 <b>_</b> 2 <b>_</b> 3	•					Studs (2 needed)	K1	ME3A44	<sup>3</sup> /4-16 x 3	_
	•					Studs (2 needed)	K2	ME3A45	5/16-18 x 2 <sup>1</sup> /2	
	•	_	_	_	+	Studs (2 needed)	K3	ME3A75	M10-1.5 x 65 mm	1

Letters in chart refer to Key No. in chart below (A3, B1, C1 etc.)

## **CJ Series Major Components**

## Other Interchangeable Components

Stock No.	A Yoke	B Pressure Screw	C Point	D Jaws (2)	E Clamp Bolt	F Washers (2)	G Clamp Nuts (2)	H Jaw Pins (2)	J Adaptors	K Studs (2)	Pressure Screws	Jaws	Points
CJ83C	A4	В3	C1	_	_	F2, F3	_	_	_	K1, K2, K3	B1, B2	_	C2
CJ82B	A4	B2	C1	D3	E4	F1	G1	H1	_	_	B1, B3	D1, D2, D4, D5	C2
CJ81D	A4	B2	C1	D3	E4	F1	G1	H1	J1	_	B1, B3	D1, D2, D4, D5	C2
CJ85A	A3	B2	C1	D4	E3	F1	G1	H1	J2	_	B1, B3	D1, D2, D3, D5	C2
C IOUV	٧3	R3	C1	D3 D5	F3	F1	G1	H1			R1 R2	D1 D2 D4	ቦን

These puller sets are designed to provide the tools you need as your work grows. Start with one or more sets geared to specific tasks and build toward the ultimate set: the CJ2000A with display board and cabinet. No duplication in set contents or jaws. Yokes are interchangeable for added versatility.

## Master Interchangeable Puller Set

CJ2000SB Master Interchangeable Puller Set. Includes all components for the CJ2001, CJ2002, CJ2003A, CJ2004 and CJ2005 puller sets on VE200A tool control board and KRA276D locking wall storage cabinet.

CJ2000S Master Interchangeable Puller Set. Same as CJ2000SB without the wall cabinet.

CJ2000A Master Interchangeable Puller Set. Same as CJ2000SB without the wall cabinet or the tool control board.



## Rear Axle Puller Set

CJ2003A

CJ2003A Rear Axle Puller Set. Slide hammer power pulls many flange type rear axles as well as axle bearings. Includes: CJ105-4B Ślide Screw, 3/4"-16 x 22-1/2".

CJ137 Bearing Adaptor.

CJ97-3A Slide Hammer, 3 3/4 lb. CJ123-1 Axle Yoke.

ME4A8 Lock Nut (3/4").

CJ127A Bearing Adaptor.

CJ66-19 Bearing Hook.

CJ128A Bearing Adaptor.

## CJ Series Bearing Adaptors

Stock No.	Swivel Head Width, inches	Overall Length, inches	
CJ127A	1.2	2.03	3.02
CJ128A	1.2	2.31	3.15
CJ137	1.2	2.9	3.24



## **Accessory Set**

CJ2005

CJ2005 Accessory Set. Boost the versatility of the CJ2000A components with a bearing separator, a variety of centering adaptors, and a 12" yoke and clamp bolt to add spread to your bar type set. Includes:

CJ81B1A Adaptor (1 1/8-1 1/2" Diameter). CJ85-6 Adaptor (1 21/32-2 1/8" Diameter). CJ81B2A Adaptor (1 1/4-1 5/8" Diameter). CJ85-7 Adaptor (1 27/32-2 1/2" Diameter). CJ81D1A Adaptor (1 1/8-1 5/8" Diameter). CJ85-8 Adaptor (2 3/8-3 1/16" Diameter). CJ81D2A Adaptor (13/16-1 11/32" Diameter). CJ118-1 Yoke (6-10 1/2"). CJ118-2A Bolt. CJ85-2 Jaw (1 3/4" Maximum reach). CJ950 Bearing Separator. CJ85-5 Adaptor (1 1/2-2" Diameter).

#### Pressure Screws

CJ83-9 Pressure Screw. Optional pressure screw for bar style intechangeable pullers. Applications include heavy duty truck transmissions like Eaton® transmissions found on Kenworth® heavy duty trucks. Can also be used with: CJ2000A, CJ2000S, CJ2000SB, CJ2002 and CJ2004. Thread: 3/4 - 16". Length: 8 3/4".

## **Bar Type Interchangeable**



CJ2002

#### **Gear Puller Set**

CJ2002 Gear Puller Set. Use on Pitman® arms, timing gears, carrier side bearings and more. Combine to create 10 different pullers. Capacity from 6 to 10 tons depending on yoke and jaws used. Includes:

CJ105-11 Long Jaw Pin (4).

CJ87-1 3" Jaw (2).

CJ282-1 6" Jaw (2)

ME4A33 Hex Nut (4).

CJ82B Puller.

CJ66-15-3 Centering Point.

CJ83-3 Pressure Screw (9/16" hex).

CJ81-2A Jaw (2).

CJ84-16 Centering Point.

CJ83-2 Pressure Screw. CJ85-1 Yoke (3-6 1/2").

CJ86-4A Bolt.

CJ85-3A Bolt. CJ86-1 Yoke (1 3/4-4 1/2").

CJ85-4 Washer (4).



CJ2004

## Interchangeable Puller Set

CJ2004 Interchangeable Puller Set. Use on bearings, bearing races, gears, bushing retainers, etc. Builds any of 12 different pullers. 2 and 3 jaw capability with 3 sets of jaws. All jaws reverse for inside and outside pulls. Pulling capacity: (short jaws) 4 1/2 ton, (medium jaws) 6 1/2 ton, (large jaws) 8 ton. Includes:

CJ105A8 3-Way Jaw Control.

CJ105-3 Pressure Screw (3/4-16 x 13").

CJ105A9 2-Way Jaw Control.

CJ105-1 Yoke.

CJ105-5 Small Jaw (3).

CJ105-10 Short Jaw to Control Pin (3).

CJ105-6 Medium Jaw (3).

CJ105-11 Long Jaw Pin (4).

CJ105-7 Large Jaw (3).

CJ105-12 Cross Bar. CJ66-15-3 Centering Point.

CJ86-1 Yoke (1 3/4-4 1/2").







## **Special Purpose**



**Bolt Grip Puller Set** 

CJ2001P Bolt Grip Puller Set. Services steering wheels, flywheels, pulleys and gears with tapped holes. Includes a 4 position 2 and 3 way yoke, 3 different pressure screw tips and an assortment of fractional and metric bolts. Approximate spread to bolt is 1 1/4 to 3 13/16". Includes PB54B storage case.

CJ2001FBK Bolt and Washer Set. Replaces all fractional bolts and washers in CJ2001P bolt grip puller set.

CJ2001MBK Bolt and Washer Set. Replaces all metric bolts and washers in CJ2001P bolt grip puller set.



Tapped Hole Puller Set

CG60GB Tapped Hole Puller Set. Use on steering wheels with tapped holes. Includes 2 and 3 way yoke, pressure screw and adaptor plus 4 sets of studs.

CG60-17 Stud (M8-1.25) (2). CG60R1 Yoke Pressure Screw (5/8"-18) (1).

CG60-7-4A Stud (5/16"-24) (2).

CG60-7-6 Stud (5/16"-18) (3).

CG60R2 Four-Arm Yoke (1). CG60M2 Stud (3/8"-16) (3).

CG60R3 Pressure Screw Adaptor (1).



## Small Slide Hammer Puller Set

CJ93B Small Slide Hammer Puller Set. Remove bushings, seals, sleeves, bearings, bearing races, bronze and oilite bushings, and pressed in studs. Includes 2 sets of jaws, grease retainer adaptor, bearing hook, body dent puller, stud pulling head and 2 lb slide hammer. Thread size is 3/8-16".



SP2031

Small/Pilot Bearing Pullers

A78 Small Bearing Puller. For bearings and bushings typically found in small electric motors. Includes large jaw set for bronze and oilite bushings and small jaw set for smaller bearings and bushings. Up to 3 tons of pulling power.

SP2031 Pilot Bearing Puller (Blue-Point®). Attaches to slide hammer shafts with 3/4-16" or 5/8-18" threads. Pressure screw adaptor is made of stress resistant steel. Industrial finish.

## Rear Axle Bearing Puller CJ9180 Rear Axle Bearing

Puller. No slide hammer required. Removes axle bearing on free floating axle designs. Use with impact gun or by hand. Uniquely designed to brace against axle housing for complete removal of bearing assembly. Smooth, steady operation. Kit contains interchangeable feet to allow pulling of bearings with an I.D. from 1 to 2 7/8"



CJ9180

#### Automotive



Ford® and GM® vehicles.

**CG95B Steering Wheel Lock Plate Remover.** Designed for airbag equipped Saginaw steering columns found on  $\dot{G}\dot{M}$ , Chrysler LH Series (LHS, Intrepid, Concorde, and Eagle Vision), some Toyota® and Saab® vehicles. Includes 1 narrow bridge, 1 wide bridge, 2 pressure screws: one has 9/16-18" threads, the other has M14-1.5 threads. The puller is zinc plated. Overall length is 4 7/8".

Steering Wheel Pullers CJ134 Tilt Steering Pivot Pin Puller.

Allows efficient removal of the 2 pivot pins on

all tilt steering columns used on Chrysler®,



CG95B

CG6095A

CG6095A Master Steering Wheel Puller Set. Combines the CG60GB Tapped Hole Puller and CG95B Lock Plate Remover. Lock Plate Remover is designed for servicing airbag equipped Saginaw steering columns found on *GM*, *Chrysler* LH Series (LHS, Intrepid, Concorde and Eagle Vision), some Toyota and Saab vehicles.



CJ145 Steering Wheel Puller for GM

**Vehicles.** Use on new *GM* steering wheels with air bags including tilting and telescoping styles. Handle attachment facilitates puller set up and can be removed when working in confined areas. Applications: Buick® (1997 and later Park Avenue/Regal), Cadillac® (1997 and later Catera), Chevrolet®/GMC® (1997 and later Corvette/Malibu, 1998 C & K series trucks, 1998 full size vans, 1998 Astro/Safari vans), Oldsmobile® (1997 and later Cutlass) and Pontiac® (1988 to 1993 LeMans, 1997 and later Grand Prix/Trans Sport van).



**CJ131P** 

**CJ131P Steering Wheel Puller** and Lock Plate Depressor Set.

Includes a selection of bolts and a handle in PB72 storage case for servicing GM, Ford, Chrysler, and AMC® vehicles. Adaptors are included for servicing lock plates on all GM and AMC vehicles with tilt wheel. Detachable handle helps hold puller when turning force is applied to pressure screw. Industrial finish.

## Automotive





## Harmonic Damper Pulley Pullers

YA6490 Harmonic Damper Pulley Puller. Use on many Chrysler®, Mitsubishi® and GM® engines. In most applications this compact tool eliminates the need to remove the radiator prior to removing the pulley. Includes short push rod for use on crankshafts that are not drilled full depth plus 2 other push rods. Applications: GM: 4.2 L Straight 6 cylinder: Chevy® Trailblazer, GMC® Envoy, Oldsmobile® Bravada (2003 and later), Buick® Rainier (2004 and later), 3.5 L Straight 5 cylinder: Chevy Colorado, GMC Canyon (2004 and later), Hummer® H3 (2006 and later), 2.8 L Straight 4 cylinder: *Chevy* Colorado, *GMC* Canyon (2005 and later), 5.7 L V8 (Gen III): Camaro, Corvette, Firebird and Trans-Am (1997 and later), Gen III trucks and SUVs with 4.8 L V8, 5.3 L V8, 6.0 L V8 and 8.1 L V8 (2000 and later) Chrysler. 3.3 L V6: (1990 and later vans), 3.3 L and 3.5 L V6 (1993-1997 automobiles), 3.8 L V6 (1994 and later vans), 8.0 L V10 (1994 and later pickups), 2.0 L 4 Cylinder, 2.4 L 4 Cylinder and 2.5 L V6 (1995 and later automobiles), 2.7 L DOHC V6, 3.2 L SOHC V6 and 3.5 L SOHC V6 (1998 and later automobiles), 4.7 L V8 (1998 and later) Cadillac®: 4.5 L V8: (1988-1992), 4.9 L V8: (1991-1995), 4.6 L V8: (1993 and later), 6.0 L V8: Escalade, *Mitsubishi*: 2.0L DOHC non turbo: Eclipse (1995-1999), Oldsmobile: 4.0 L V8: (1995 and later)

YA6491 Harmonic Damper Pulley Puller Update Kit. Updates earlier YA9740 pullers to the same applications as the new YA6490. Kit will also update other pulley pullers that are similar to the YA9740 series of pullers. Add YA6491 Update Kit to existing YA9740 series pullers to add these new applications: GM: 4.2 L straight 6 cylinder: Chevy Trailblazer, GMC Envoy, Oldsmobile Bravada (2003 and later), Buick Rainier (2004 and later), 3.5 L Straight 5 cylinder: *Chevy* Colorado, *GMC* Canyon (2004 and later), Hummer H3 (2006 and later), 2.8 L straight 4 cylinder: Chevy Colorado, GMC Canyon (2005 and later)

CJ146 GM Crankshaft Harmonic Balancer Kit. Remove the crankshaft harmonic balancer on 1990 and later 3.3 and 3.8 L GM engines. Shoulder bolt adaptors provide correct installation depth, preventing damage to the crank sensor and interrupter rings. Includes (3) CJ146-1 adaptors and (1) CJ146-2 extension plus vinyl storage pouch. Requires Snap-on® CJ98-1 yoke and CJ83-3 pressure screw for use (not included). Separate purchases and not included with kit.

## **Power Steering and Alternator Pullers** CJ122 Power Steering Pulley Installer

Set. Includes CJ113B installer and CJ113C4 pulley installer shaft. Thread size of 5/8"-18UNF-2A (puller end), 3/8" 16UNC-2A (shaft end).

CJ138 Pulley Installer. 8 mm pulley installer features a black industrial finish and a thrust bearing for easier installation. Applications: power steering pulley on Ford 4.6 L V8 (1991 and later), Ford 2.5 L V6 (1995 and later) plus the installation of water pump drive pulleys on GM 4.6 L (1992 and later Oldsmobile Aurora).

CJ113B Power Steering/Alternator Pulley Installer. Designed for U.S. cars. 1" pulley driver hex, 7/16" pressure screw hex, thread size of 5/8"-18UNF-2A (puller end), 3/8" 16UNC-2A (shaft end). 4 5/8" long.

CJ113B3 Bushing. Included with CJ113B. CJ113C4 Pulley Installer Shaft. Length of 4.62" (optional). Thread size of 5/8"-18UNF-2A (puller end), 3/8" 16UNC-2A (shaft end).

WARNING



CJ122











CJ117C Power Steering and Alternator Pulley Puller.

Includes short adaptor to remove small flange type pulley; use long adaptor on GM 200/Platform vehicles. Can also remove alternator pulleys on *Chrysler* vehicles that have double grooves. Replace pulleys with CJ113B Installer. Long adaptor included to handle pulleys on GM minivans. Nickel/chrome finish, industrial finish screw. Designed for most U.S. vehicles (replace pulley with CJ122 sets). Long adaptor included to handle pulleys on GM minivans. Nickel/chrome finish, industrial finish screw.

CJ124A Power Steering/Alternator Pulley Puller. Larger version of CJ117C. Designed for Chrysler, Ford and earlier GM vehicles. CJ3PSA Power Steering and Alternator Pulley Puller/ **Installer Set.** Set includes CJ113B, CJ117C, and CJ124A pullers. CJ147A Power Steering Gear Lower Pinion Bearing **Puller.** Required tool to comply with *GM* Recall Bulletins #02049 and #03062 regarding power steering gear lower pinion bearing separation. To correct the problem, inspect the condition of the lower pinion bearing and replace the lower pinion bearing. In a few cases, replacement of the rack and pinion steering gear assembly may be necessary. Instructions included.

Applications:

Buick: Regal 1996-1998 Chevrolet: Cavalier 1996-1998 Lumina 1997-1998 Lumina 1997-1998 Lumina APV 1996 Monte Carlo 1997-1998

Venture 1997-1998

Oldsmobile: Cutlass 1997-1998 **Cutlass Supreme** 1996-1998 Silhouette 1996-1998 Intrique 1998

Pontiac: Grand Prix 1996-1998 Sunfire 1996-1998 Trans Sport 1996-1998



CJ132A

CJ132A Master Power Steering Pump/Alternator Puller/ Installer Set. GM Quad 4, GM 3.1 L and Ford 4.6 L applications. Removes/installs press on, belt driven accessory pulleys. Removal housing for grooved hub diameters of 1 1/8, 1 5/16 and 1 3/8". Includes components for 3/8"-16 threaded shaft. Housing holding bar prevents main housing from spinning during use with an impact wrench. Quad 4 installation nut simplifies usage with 4 cylinder *GM* vehicles. Includes instructions and carrying case.

## Pitman® Arm Pullers

CJ119B Pitman Arm Puller. Designed for most U.S. cars and light trucks. Pressure screw size: 3/4"-16 x 6 7/8". Industrial finish.

CJ115 Pitman Arm Puller. Similar in design to CJ119B except it is designed for compact and intermediate size cars.

PAS110 Pitman Arm Puller. Pitman arm remover for 2 ton and heavier trucks. Quickly and easily remove stuck *Pitman* arms. The tool wedge opens the Pitman arm slots for removal. Can also be used with impact wrench.

YA6880 Low Profile Pitman Arm Puller. Fits in the confined space on most GM 1988-2000 C & K chassis trucks and SUVs. Also fits 2001 to present trucks and SUVs with steering gear box/Pitman arms. Forged chromoly steel for strength and durability. Design allows the technician to remove the arm off the steering gear box without altering the boxes position as a substantial time saver. Patent pending.





**PAS110** 









## **General Purpose Interchangeable**



**Light Duty**Builds Pullers:

Stock No.	Puller Type	Maximum Reach, inches	Outside Spread, inches	Inside Spread, inches
CG240	2 Jaw	2 1/2	0-3	<sup>7</sup> /8-3 <sup>1</sup> /4
CG240H	2 Jaw	2 1/2	0-3	<sup>7</sup> /8 <b>-3</b> <sup>1</sup> /4
CG243	3 Jaw	2 1/2	3	<sup>7</sup> /8-3 <sup>1</sup> /4
CG243H	3 Jaw	2 1/2	3	<sup>7</sup> /8 <b>-3</b> <sup>1</sup> /4

**CG2400B Light Duty Puller Set.** This versatile set provides 2 or 3 jaw pulling with pressure screw or slide hammer options. Interchange parts to build any of the 5 puller combinations.

- Up to 2 1/2 tons of pulling power
- 3" diameter capacity for outside pulls



Heavy Duty Builds Pullers:

CG2510BSHY

Stock No.	Puller Type	Maximum Reach, inches	Outside Spread, inches	Inside Spread, inches
CG654HY	Hydraulic, 2 Jaw	3	<b>0-4</b> <sup>1</sup> / <sub>2</sub>	1 1/2-3 1/2
CG655HY	Hydraulic, 3 Jaw	3	0-4 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> /2-3 <sup>1</sup> /2
CG270	2 Jaw	5 <sup>1</sup> / <sub>2</sub>	8 1/2	2 1/2-7
CG270H	2 Jaw	5 <sup>1</sup> / <sub>2</sub>	0-8 <sup>1</sup> / <sub>2</sub>	2 1/2-7
CG270S	Special Grip, 2 Jaw	5 <sup>1</sup> / <sub>2</sub>	0-8 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> /2-7
CG273	3 Jaw	5 <sup>1</sup> / <sub>2</sub>	0-8 <sup>1</sup> / <sub>2</sub>	2 1/2-7
CG273H	3 Jaw	5 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>2</sub>	2 1/2-7
CG280	Long Jaw, 2 Jaw	8	0-10	3-8
CG283	Long Jaw, 3 Jaw	8	0-10	3-8
CG274HY	Hydraulic, 2 Jaw	8 3/4	10	3-8
CG275HY	Hydraulic, 3 Jaw	8 3/4	0-10	3-8

## The CG2510 and CG2500 Series delivers:

- Up to 12 1/2 tons of pulling power
- 10" diameter capacity for outside pulls
- From 3/4 to 8" diameter capacity for inside pulls

CG2510BSBHY Heavy Duty Manual/Hydraulic Puller Set. Includes 40 interchangeable components, including the CG1224 10 ton hydraulic power kit. All components are displayed on a VE213 tool control board, which is mounted inside a KRA276D wall cabinet. CG1224 Hydraulic Conversion Kit. 10 ton. Converts CG270, CG273, CG280, and CG283 manual pullers (on Tool Control Panel "A") and CG1700/CG2500B puller sets to hydraulic power.

VE213 Tool Control Board. Tool control board for the CG2500BSBHY manual/hydraulic puller set.

Medium duty pullers deliver up to 7 1/2 tons of pulling power, 4 1/2" diameter capacity for outside pulls and from 3/4 to 8" diameter capacity for inside pulls. CG6223 hydraulic conversion set converts CG250 and CG253 manual pullers to hydraulic power. The manual components of the indicated medium duty pullers are included in the heavy duty (CG2500 / CG2510 Series) sets.



Medium	Duty
<b>Builds Puller</b>	

CG253L

Outside Maximum Inside Spread, Stock No. **Puller Type** Spread, Reach, inches inches CG250 2 Jaw 4 1/2 1 1/2-3 1/2 CG250H 2 Jaw 0-4 1/2 1 1/2-3 1/2 3 CG250HL Long Jaw, 2 Jaw 0-8 1/2 3/4-8 6 CG253 4 1/2 1 1/2-3 1/2 3 Jaw 3 CG253H 3 Jaw 3 4 1/2 1 1/2-3 1/2

6

3/4-8

3 Jaw



The big CG2510BSBHY set builds 45 different pullers with dozens of pulling variations from the included 40 components and 10 ton hydraulic set. Without hydraulics (CG2500BS Manual Set), 32 separate pullers are still possible. Add the Snap-on® CG6223 6 ton hydraulic power kit and add 7 puller combinations to each set.

CG2510BSHY Heavy Duty Manual/Hydraulic Set. Same as CG2510BSBHY set mounted on a VE213 tool control board. Does not include the wall cabinet.

CG2510BHY Heavy Duty Manual/Hydraulic Puller Set. Same as CG2510BSBHY Set except it doesn't include either the tool control board or the wall cabinet.

CG2500BSB Heavy Duty Manual Puller Set. This is the CG2510BSBHY set less the 10 ton hydraulic power kit components. Tool control board for this set is VE113B; wall cabinet is KRA276D. VE113B Tool Control Board. Panel "A" is designed to hold the components for CG2500BS interchangeable puller set (6, 7 1/2, 10 and 12 1/2 ton capacity). Also used as the tool control board for the CG2500BSB manual puller set.

CG2500BS Heavy Duty Manual Puller Set. Same as CG2500BSB set mounted on a VE113B tool control board, without the KRA276D wall cabinet.

CG2500B Heavy Duty Manual Puller Set. Same as CG2500BSB set, without the tool control board or the wall cabinet. CG270SETX Long Puller Jaw Set. Adds extra reach capability to any CG270 or CG280 series puller, the CG1700 set and any CG2500B series set. Includes (3) CG270-12 extra long jaws and (1) CG270-13 pressure screw adaptor.

## 2 Jaw Pressure Screw











2 Ton Capacity (1.8 t), 2 Jaw

Stock No.	Maximum Reach, inches (mm)	Maximum Spread, inches (mm) inside	Maximum Spread, inches (mm) outside	Pressure Screw Size, inches	Jaw Thickness, inches (mm)	Jaw Width, inches (mm)
CG240	2 <sup>1</sup> / <sub>2</sub> (64)	<sup>7</sup> /8-3 <sup>1</sup> /4 (22-83)	3 (76)	<sup>3</sup> /8- <b>16</b> x 5 <sup>1</sup> /16	<sup>3</sup> / <sub>16</sub> (5)	<sup>3</sup> /8 (10)
CG240L	3 <sup>1</sup> / <sub>2</sub> (89)	<sup>7</sup> /8-3 <sup>3</sup> /4 (25-95)	4 (102)	<sup>3</sup> /8 <b>-16</b> x 6 <sup>1</sup> /16	<sup>3</sup> /16 (5)	<sup>3</sup> /8 (10)

## 6 Ton Capacity (5.4 t), 2 Jaw

CG250A*	3 (76)	1 1/2-3 1/2 (38-89)	4 <sup>1</sup> / <sub>2</sub> (114)	5/8-18 x 6 <sup>7</sup> /8	1/4 (6)	3/4 (19)
CG250	3 (76)	1 1/2-3 1/2 (38-89)	4 <sup>1</sup> /2 (114)	<sup>5</sup> /8 <b>-18</b> x 6 <sup>7</sup> /8	1/4 (6)	3/4 (19)

## 10 Ton Capacity (9.1 t), 2 law

	(2 1 - 7) - 1 - 1					
CG270	5 <sup>1</sup> / <sub>2</sub> (140)	2 1/2-7 1/2 (64-178)	8 <sup>1</sup> /2 (216)	<sup>3</sup> /4-16 x 9 <sup>13</sup> / <sub>16</sub>	1/4 (6)	<sup>15</sup> /16 (24)
CG270A*	5 <sup>1</sup> / <sub>2</sub> (140)	2 1/2-7 1/2 (64-178)	8 <sup>1</sup> / <sub>2</sub> (216)	<sup>3</sup> /4-16 x 9 <sup>13</sup> / <sub>16</sub>	1/4 (6)	<sup>15</sup> /16 (24)
CG272	5 <sup>1</sup> / <sub>2</sub> (140),	2 1/2-7 1/2 (64-178),	8 <sup>1</sup> / <sub>2</sub> (216),	<sup>3</sup> /4-16 x 9 <sup>13</sup> / <sub>16</sub>	1/4 (6)	<sup>15</sup> /16 (24)
2 Jaw Lengths	8 3/4 (222)	3-8 (76-203)	10 (254)	<sup>3</sup> /4-16 x 12 <sup>1</sup> /8	1/4 (6)	<sup>15</sup> / <sub>16</sub> (24)
CG270S	5 <sup>1</sup> /2 (140)	2 1/2-7 1/2 (64-178)	8 <sup>1</sup> /2 (216)	<sup>3</sup> /4-16 x 9 <sup>13</sup> / <sub>16</sub>	1/4 (6)	<sup>15</sup> /16 (24)
CG280	8 3/4 (222)	3-8 (76-203)	10 (254)	3/4-16 x 12 <sup>1</sup> /8	1/4 (6)	<sup>15</sup> /16 (24)
CG284**	15 (381)	4 <sup>3</sup> / <sub>4</sub> -11 <sup>1</sup> / <sub>2</sub> (121-292)	13 <sup>3</sup> /4 (349)	<sup>3</sup> /4-16 x 18 <sup>15</sup> / <sub>16</sub>	<sup>3</sup> /8 (10)	1 (25)

<sup>\*</sup>Includes CG1 pulling plate. \*\*Includes pressure screw extension.

## 20 Ton Capacity (18.1 t), 2 Jaw

CG300	9 1/2 (241)	3 1/2-10 (89-254)	12 (305)	1-14 x 15	<sup>7</sup> /16 (11)	1 <sup>1</sup> /4 (32)
CG305	14 <sup>3</sup> /8 (365)	5-13 (127-330)	16 (406)	1-14 x 19	<sup>9</sup> /16 <b>(14)</b>	1 <sup>1</sup> /4 (32)

## 3 Jaw Pressure Screw







CG253L



CG253

## 2 1/2 Ton Capacity (2.3 t), 3 Jaw

CG243 2 1/2 (64) 7/8-3 1/4 (22-83) 3 (76) 3/8-16 x 5 1/16 3/16 (5) 3/8 (10) CG243 3 1/2 (89) 7/8-3 3/4 (22-95) 4 (102) 3/8-16 x 6 1/16 3/16 (5) 3/16 (5) 3/16 (10)	Stock No.	Maximum Reach, inches (mm)	Maximum Spread, inches (mm) inside	Maximum Spread, inches (mm) outside	Pressure Screw Size, inches	Jaw Thickness, inches (mm)	Jaw Width, inches (mm)
CC2421 3 1/2 (80) 7/2 3/4 (22-05) 4 (102) 3/2-16 v 6 1/45 3/45 (5) 3/2 (10)	CG243	2 1/2 (64)	7/8-3 <sup>1</sup> /4 (22-83)	3 (76)	3/8-16 x 5 <sup>1</sup> /16	<sup>3</sup> /16 (5)	3/8 (10)
00243L 5 72 (03) 76-0 74 (22-33) 4 (102) 76-10 X 0 710 (3) 76 (10)	CG243L	3 <sup>1</sup> / <sub>2</sub> (89)	<sup>7</sup> /8-3 <sup>3</sup> /4 (22-95)	4 (102)	<sup>3</sup> /8-16 x 6 <sup>1</sup> / <sub>16</sub>	<sup>3</sup> / <sub>16</sub> (5)	<sup>3</sup> /8 (10)

## 6 Ton Capacity (5.4 t), 3 Jaw

<u>- 1011 - Superior 19, 19, 19, 19</u>							
CG253L	6 (152)	<sup>3</sup> /4-8 (19-203)	<sup>5</sup> /8 <b>-18 x 6</b> <sup>7</sup> /8	<sup>7</sup> / <sub>32</sub> (5)	<sup>5</sup> /16 <b>(8)</b>	<sup>3</sup> /8 (10)	

## 7 1/2 Ton Capacity (6.8 t) 3 Jaw

	<u> </u>				
CG253 3 (70	6) 1 <sup>1</sup> / <sub>2</sub> -3 <sup>1</sup> / <sub>2</sub> (38-89	4 <sup>1</sup> / <sub>2</sub> (114)	5/8-18 x 6 <sup>7</sup> /8	1/4 (6)	3/4 (19)

## 12 1/2 Ton Capacity (11.3 t), 3 Jaw

	<u> </u>					
CG273	5 <sup>1</sup> /2 (140)	2 1/2-7 1/2 (64-178)	8 <sup>1</sup> /2 (216)	3/4 <b>-16</b> x 9 <sup>13</sup> /16	1/4 (6)	<sup>15</sup> / <sub>16</sub> (24)
CG273A	5 <sup>1</sup> /2 (140)	2 <sup>1</sup> /2-7 <sup>1</sup> /2 (64-178)	8 <sup>1</sup> /2 (216)	<sup>3</sup> /4 <b>-16</b> x 9 <sup>13</sup> /16	<sup>1</sup> /4 (6)	<sup>15</sup> /16 (24)
CG283	8 (203)	3-8 (76-203)	10 (254)	3/4-16 x 12 <sup>1</sup> /8	1/4 (6)	<sup>15</sup> / <sub>16</sub> (24)
CG285	15 (381)	4 <sup>3</sup> /4-11 <sup>1</sup> / <sub>2</sub> (121-292)	13 <sup>3</sup> / <sub>4</sub> (254)	3/4-16 x 18 <sup>15</sup> /16	<sup>3</sup> /8 (10)	1 (25)

## 20 Ton Capacity (18.1 t) Combination 2 and 3 Jaw

CG343	9 <sup>1</sup> / <sub>2</sub> (241)	_	13 (330)	1-14 x 15	<sup>7</sup> /16 ( <b>11</b> )	1 <sup>1</sup> /4 (32)
CG348	14 <sup>3</sup> / <sub>8</sub> (365)	_	16 (406)	1-14 x 19	<sup>9</sup> /16 ( <b>14</b> )	1 <sup>1</sup> /4 (32)
CG325	19 (482)	_	20 (508)	1 <sup>3</sup> /8-8 x 21 <sup>11</sup> / <sub>16</sub>	1 1/8 (29)	1 1/2 (38)

# Pulling Plate CG1 Pulling Plate.

Ideal where there is no gripping surface for the puller alone. Attach plate to item being pulled – puller clamps behind the plate. Includes 4 each of the following screws: 1/4"-20 x 3/4" and 1/4"-28 x 1". Plate has a 3 5/8" diameter.



CG1

## Flat Points

CG250-21 Flat Point. Fits CG250 series pullers.

CG270-21 Flat Point. Fits CG270 and CG280 series pullers.

CG300-21 Flat Point. Fits CG300 and CG305 series pullers.

CG325-21 Flat Point. Fits CG325 series pullers.

CG70 Flat Point Set. Includes CG270-21, CG300-21 and CG325-21 flat points.









Screen the puller application • Inspect the puller, do not use damaged parts
 Use proper type and size puller for the job • Read safety precautions on pages W1 to W4

## 2 Jaw Slide Hammer



## 2 Ton Capacity (1.8 t) - 1 1/16 lb Hammer

Stock No.	Maximum Reach, inches (mm)	Maximum Spread, inches (mm) inside	Maximum Spread, inches (mm) outside	Slide Screw Size, inches	Jaw Thickness, inches (mm)	Jaw Width, inches (mm)
CG240H	2 1/2 (63)	<sup>7</sup> /8-3 <sup>1</sup> /4 (22-82)	3 (76)	3/8-16 x 12 5/8	<sup>3</sup> /16 (5)	<sup>3</sup> /8 (10)
CG240HL	3 <sup>1</sup> / <sub>2</sub> (88)	<sup>7</sup> /8-3 <sup>3</sup> /4 (25-95)	4 (102)	3/8-16 x 12 5/8	<sup>3</sup> /16 (5)	<sup>3</sup> /8 (10)

## 6 Ton Capacity (5.4 t) - 2 1/8 lb Hammer

CG250C*	3 (76)	1 1/2-3 1/2 (38-89)	4 <sup>1</sup> /2 (114)	5/8-18 x 18 <sup>1</sup> /16	<sup>1</sup> /4 (6)	<sup>3</sup> /4 (19)
CG250H	3 (76)	1 <sup>1</sup> /2-3 <sup>1</sup> /2 (38-89)	4 <sup>1</sup> /2 (114)	5/8-18 x 18 <sup>1</sup> /16	<sup>1</sup> /4 (6)	<sup>3</sup> /4 (19)
CG250HL	6 (152)	3/4-8 (19-203)	_	5/8-18 x 18 9/16	<sup>7</sup> /32 (5)	5/16 (8)

<sup>\*</sup>Includes CG250H puller, CG1 pulling plate and pressure screw.

## 10 Ton Capacity (9.1 t) - 3 1/2 lb Hammer

CG270C**	5 <sup>1</sup> /2 (140)	2 1/2-7 1/2 (64-178)	8 <sup>1</sup> /2 (216)	<sup>3</sup> /4-16 x 23 <sup>3</sup> /8	1/4 (6)	<sup>15</sup> /16 (24)
CG270H	5 <sup>1</sup> /2 (140)	2 <sup>1</sup> /2-7 <sup>1</sup> /2 (64-178)	8 <sup>1</sup> /2 (216)	3/4-16 x 23 3/8	1/4 (6)	<sup>15</sup> /16 (24)

<sup>\*\*</sup>Includes CG1 pulling plate and pressure screw.

## 3 Jaw Slide Hammer







CG273C

## 2 1/2 Ton Capacity (2.3 t) - 1 1/16 lb Hammer

Stock No.	Maximum Reach, inches (mm)	Maximum Spread, inches (mm) inside	Maximum Spread, inches (mm) outside	Slide Screw Size, inches	Jaw Thickness, inches (mm)	Jaw Width, inches (mm)
CG243H	2 <sup>1</sup> / <sub>2</sub> (64)	<sup>7</sup> /8-3 <sup>1</sup> /4 (22-83)	3 (76)	3/8-16 x 12 5/8	<sup>3</sup> /16 (5)	<sup>3</sup> /8 (10)
CG243HL	3 1/2 (89)	<sup>7</sup> /8-3 <sup>3</sup> /4 (25-95)	4 (102)	3/8-16 x 12 5/8	<sup>3</sup> /16 (5)	3/8 (10)

## 7 1/2 Ton Capacity (6.8 t) - 2 1/8 lb Hammer

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CG253H	3 (76)	1 <sup>1</sup> /2-3 <sup>1</sup> /2 (38-89)	4 <sup>1</sup> /2 (114)	<sup>5</sup> /8 <b>-18</b> x 18 <sup>1</sup> /16	1/4 (6)	<sup>3</sup> /4 (19)					

## 12 1/2 Ton Capacity (11.3 t) - 3 1/2 lb Hammer

,	, , , , , ,					
CG273C*	5 <sup>1</sup> /2 (140)	2 1/2-7 1/2 (64-178)	8 <sup>1</sup> /2 (216)	3/4-16 x 23 3/8	1/4 (6)	<sup>15</sup> /16 (24)
CG273H	5 <sup>1</sup> /2 (140)	2 <sup>1</sup> /2-7 <sup>1</sup> /2 (64-178)	8 <sup>1</sup> /2 (216)	<sup>3</sup> /4-16 x 23 <sup>3</sup> /8	<sup>1</sup> /4 (6)	<sup>15</sup> /16 (24)

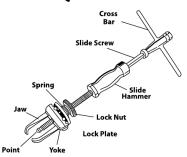
<sup>\*</sup>Includes CG273H puller, CG1 pulling plate and pressure screw.



#### CG270-3S Special Grip Jaw.

Engineered for 2x the gripping surface area of standard jaws. Can be used with any of the CG270 and CG273 series pressure screw and slide hammer pullers.

## **Quick Reference Charts**



# 2 and 2 1/2 Ton Puller Group (CG240 Series): 1 1/16 lb Hammer (CG240H Series)

Stock No.	2 Jaw Yoke CG240-2	3 Jaw Yoke CG243-2	Std. Pres. Screw CG240-1	Long Pres. Screw CG240-11	Slide Screw CG240-8	Slide Hammer CG240-9	2 Jaw Lock Plate CG240-5	3 Jaw Lock Plate CG243-5	Spring CG240-6	Adj. Nut CG240-7	Std. Jaw CG240-3	Long Jaw CG240-10
CG240	1	_	1	_	_	_	1	_	1	1	2	_
CG240L	1	_	_	1	-	_	1	_	1	1	_	2
CG240H	1	_	_	_	1	1	1	_	1	1	2	_
CG240HL	1	_	_	_	1	1	1		1	1	-	2
CG243	_	1	1	_		_	1	1	1	1	3	_
CG243L		1	_	1		_	_	1	1	1	_	3
CG243H	_	1	_	_	1	1	_	1	1	1	3	_
CG243HL	_	1	_	_	1	1	-	1	1	1	I	3

## 6 and 7 1/2 Ton Puller Group (CG250 Series): 2 1/8 lb Hammer (CG250H Series)

Stock No.	2 Jaw Yoke CG250-2	3 Jaw Yoke CG253-2	Pressure* Screw CG250-1A	Slide* Screw CG250-8A	Slide Hammer CG250-9	Cross Bar CG10F	Lock Plate CG250-5	Spring CG250-6	Adj. Nut CG250-7	Std. Jaw CG250-3	Long Jaw CG250-10	Pulling Plate CG1
CG250	1	_	1	_	_	_	1	1	1	2	_	_
CG250A	1	_	1	_	_	_	1	1	1	2	_	1
CG250C	1	_	1	1	1	1	1	1	1	2	_	1
CG250H	1	_	_	1	1	1	1	1	1	2	_	_
CG250HL	1	_	_	1	1	1	1	1	1	_	2	_
CG253		1	1	_	_	_	1	1	1	3	_	_
CG253H	_	1	_	1	1	1	1	1	1	3	_	_
CG253L		1	1	_	_	_	1	1	1	_	3	_
CG2500B**	1	1	1	1	1	1	2	2	2	3	3	_

<sup>\*</sup>CG250-20 replacement point and CG250-21 flat point for CG250 series. CG250-8A has 5/8" UNF threads.

## 10 and 12 1/2 Ton Puller Group (CG270, CG280 Series): 3 1/2 lb Hammer (CG270H Series)

				, ,				, , ,		•			•		
Stock No.	2 Jaw Yoke CG270-2	3 Jaw Yoke CG273-2	Std. Pres.* Screw CG270-1A	Long Pres.* Screw CG270-11A	Man. Adaptor CG270-13	Slide* Screw CG270-8A	Slide Hammer CG66-2	2 Jaw Lock Plate CG270-5	3 Jaw Lock Plate CG273-5	Spring CG270-6	Lock Nut CG270-7	Std. Jaw CG270-3	Long Jaw CG270-10	Special Jaw CG270-3S	Extra Long Jaw CG270-12
CG270	1	_	1	_	_	_	_	1	_	1	1	2	-	_	_
CG270A	1	_	1	_	_	_	_	1	_	1	1	2	-	_	_
CG270C	1	_	1	_	_	1	1	1	_	1	1	2	-	_	_
CG270H	1	_	_	_	_	1	1	1	_	1	1	2	_	_	_
CG270S	1	_	1	_	_	_	_	1	_	1	1	_	_	2	_
CG272	1	_	_	1		_	_	1	_	1	1	_	2		_
CG273A	_	1	1	_	_	_	_	_	1	1	1	3	-	_	_
CG273C	_	1	1	_	_	1	1	_	1	1	1	3	1		_
CG273H	_	1	_	_	_	1	1	_	1	1	1	3	-	_	_
CG280	1	_	_	1	_	_	_	1	_	1	1	_	2	_	_
CG283	_	1	_	1	_	_	_	_	1	1	1	_	3	_	_
CG284	1	_	_	1	1	_	_	1	_	1	1	_	_	_	2
CG285	_	1	_	1	1	_	_	_	_	1	1	_	_	_	3
CG2500B	1	1	1	1	_	1	1	1	1	2	2	3	3	3	_

<sup>\*</sup>CG270-20 replacement point for CG270/CG280 series pullers. CG270-8A has 3/4-16" UNF threads.

CG270-21 flat point for CG270/CG280 series pullers.

## 20 Ton Pullers (CG300 Series)

Stock No.	2 Jaw Yoke CG300-2	Pressure Screw CG300-1	Pressure Screw CG305-8	Lock Plate CG300-5	Spring CG300-6	Lock Nut CG300-7	Std. Jaw CG300-3	Long Jaw CG305-9
CG300	1	1	_	1	1	1	2	_
CG305	1	_	1	1	1	1	1	2

<sup>\*</sup>CG300-20 replacement point and CG300-21 flat point for CG300 and CG305 series pullers.







<sup>•</sup> Screen the puller application • Inspect the puller, do not use damaged parts

**Lock Nut** 

Pressure

Screw

Spring

**Lock Plate** 

Point

<sup>\*\*</sup>CG2500B continued in next chart

## **Industrial**

VE113B Panel A

VE138-3B Panel B



#### Industrial Puller Sets

**CG1038KA Industrial Puller Set.** Includes more than 35 basic pullers that will assemble into more than 165 puller combinations. Standard pullers in this set have a range from 2 to 20 tons. The hydraulic power components provide up to 20 tons of easy pulling power. Optional 10 and 50 ton hydraulic accessories are available. Components are mounted on (4) 24" x 32" x 3/4" tool control panels (labeled "A," "B," "C" and "D" below) with white silhouettes. The panels are mounted on KRA213E A-frame.

CG1038K Industrial Puller Set. This is the CG1038KA set but does not include the KRA213E A-frame.

#### **Tool Control Boards**

**VE113B Tool Control Board.** Panel "A" is designed to hold the components for CG2500BS interchangeable puller set (6, 7 1/2, 10 and 12 1/2 ton capacity). Also used as the tool control board for the CG2500BSB manual puller set.

CG250 Screw Type Puller.
CG250H Medium Slide Hammer.
CG250HL Medium Slide Hammer.
CG253 Screw Type Puller.
CG253H Medium Slide Hammer.
CG270 Screw Type Puller.
CG270H Large Slide Hammer.
CG270S Screw Type, Special Grip.
CG273 Screw Type Puller.
CG273H Large Slide Hammer.
CG280 Screw Type Puller.
CG283 Screw Type Puller.

**VE138-3B Tool Control Board.** Panel "B" is designed to hold CG2400 light duty puller set, CJ840C tapped hole puller set, CJ949 bearing separator and CJ9500 bearing separator set components.

CG240 Screw Type Puller.
CG240H Small Slide Hammer.
CG243 Screw Type.
CG243H Small Slide Hammer.
CJ93B Small Slide Hammer.
CJ840C Bar Type Tapped Hole Puller.
CJ949 Bearing Separator.
CJ950 Bearing Separator.
CJ951 Bearing Separator.
CJ952 Bearing Separator.



CG1050KA Expanded Industrial Puller Set. Includes CG1038KA set plus the CG1224 power kit for converting 10 ton manual pullers to hydraulic power; CG300-1, CG305-8, and CG350-1 pressure screws; CG343-1 4" plug; CG350-2 manual yoke for converting the 20 ton hydraulic pullers to manual power; and CG555 basic hydraulic set for building a 50 ton hydraulic bar type puller. Also includes CG420-5C pressure gauge, CG420-6 gauge mounting adaptor, 10 CG250-20 small centering adaptors and 10 CG270-20 large centering adaptors.

**KRA213E** A-Frame. Mobile unit features 23,220 cu in, 1,260 sq in of storage for convenient access and orderly storage. Measures 26 1/2" x 52 3/8" x 32 3/8".

**VE138-2B Tool Control Board.** Panel "C" is designed to hold CG450HYA 20 ton hydraulic bar type puller components and the components of CG2545AB blind hole bearing puller set.

CG40C Blind Hole Bearing Set. CG45 Blind Hole Bearing Set. CG450 Bar Type Puller. CG450HYA Hydraulic Bar Type Puller.

**VE138-1B Tool Control Board.** Panel "D" is designed to hold components of CG400 20 ton jaw type puller, three CG305-9 long jaws, CG455 and CG455A threaded adaptor sets, plus CG455-18 and CG455-19 pressure screw adaptors. The adaptors are for use with the bar type pullers on tool control panel "C."

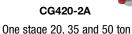
CG400 Jaw Type Puller. CG400HYA Hydraulic Jaw Type Puller. CG405 Jaw Type Puller. CG450HYA Hydraulic Bar Type Puller.

## **Hydraulic Power Units**

Features of 2 Stage Hydraulic Pumps

- 2 stage design will advance 20 to 50 ton rams in the low pressure stage in less than 1/3 the strokes required on other models
- CG520 Ram extends in 60 to 70 strokes
- CG420 Ram extends in 17 to 19 strokes
- When high pressure is required, the low pressure stage automatically kicks out to leave the high pressure stage to do the work





pump 24 fl oz capacity



CG420-2S

Two stage 20, 35 and 50 ton pump 24 fl oz capacity



OGT-ZA













**CG520** 50 ton Ram

CG420-1A 20 ton Ram

CG650 6 ton Ram

CG720 35 ton Ram

## Ram (Cylinder) Specifications

Capacity, tons	Stock No.	Stroke, inches	Collapsed Height, inches	Extended Height, inches	Effective Area (piston)	Oil Capacity, cu in	Pressure Screw Size, inches
4	CG220	2 <sup>1</sup> /4	6	8 <sup>1</sup> / <sub>4</sub>	.966	2.174	<sup>1</sup> /2-13 x 14 <sup>1</sup> / <sub>4</sub>
6	CG650	1 <sup>1</sup> /2	4 11/16	6 <sup>3</sup> /16	1.473	2.210	5/8-11 x 13 <sup>1</sup> /4
10	CG120	1	4 3/4	5 <sup>3</sup> /4	2.440	2.440	3/4-10 x 16 <sup>1</sup> /4
20	CG420-1A	2	6	8	4.418	8.836	1 <sup>1</sup> /8-8 x 20 <sup>1</sup> / <sub>2</sub>
35	CG720	2 <sup>1</sup> / <sub>2</sub>	7	9 <sup>1</sup> / <sub>2</sub>	7.903	19.758	1 <sup>3</sup> /8-8 x 25
50	CG520	3	8 1/8	11 <sup>1</sup> /8	11.066	33.198	1 5/8-5 1/2 x 30

CG222 4 Ton Set	CG652 6 Ton Set	CG122 10 Ton Set	CG420A 20 Ton Set
Includes: CG120-3-1 Hose. CG120-4 Coupler Set. CG220 4 Ton Ram. CG220-13 Pressure Screw. CG4-2A 4 to 10 Ton Hyd. Pump.	Includes: CG120-3-1 Hose. CG120-4 Coupler Set. CG250-20 Replacement Point. CG4-2A 4 to 10 Ton Hyd. Pump. CG650 6-Ton Ram.	Includes: CG120 10 Ton Ram. CG120-13 Pressure Screw. CG120-3-1 Hose. CG120-4 Coupler Set. CG270-20 Replacement. Point. CG4-2A 4 to 10 Ton Hyd. Pump.	Includes: CG420-1-14 Centering Adaptor. CG420-1A 20 Ton Ram. CG420-2A 1 Stage Pump. CG420-3-1 Hose. CG420-4 Coupler Set. CG420A2S 20 Ton Set. Same as CG420A with the CG420-2S two stage pump.

## **Hydraulic Accessories**

Both conversion kits provide hydraulic power for the pullers, which are included in the CG2500B puller sets.



## CG6223 6 Ton Power Kit.

Converts CG250 and CG253 manual pullers to hydraulic power. Includes:

CG652 6 Ton Pump and Ram Set. CG250-15 2 Jaw Yoke.

CG250-16 Hand Wheel Adaptor.

CG253-15 3 Jaw Yoke.

#### CG1224 10 Ton Power Kit.

Converts CG270, CG273, CG280 and CG283 manual pullers (on tool control panel "A") and CG1700/CG2500B puller sets to hydraulic power.

Includes:

CG122 10 Ton Pump and Ram Set.

CG270-15 2 Jaw Yoke.

CG270-16 Hand Wheel Adaptor.

CG273-15 3 Jaw Yoke.



CG420-5C

#### CG420-5C Pressure Gauge.

Can be used with 6, 10, 20, 35 and 50 ton hydraulic equipment. Use CG4-2A, CG420-2A or CG420A-2S pumps. Indicates hydraulic pressure in tons of pressure as well as psi. Adaptor CG420-6 is required to attach gauge to pumps.



#### CG420-6 Gauge Mounting Adaptor.

Mounts CG420-5C pressure gauge to 6, 10, 20, 35 and 50 ton hydraulic systems.







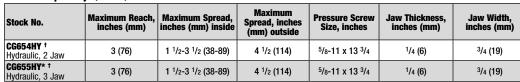


- Screen the puller application Inspect the puller, do not use damaged parts
- Use proper type and size puller for the job Read safety precautions on pages W1 to W4

## 2 and 3 Jaw Hydraulic









<sup>\*</sup>To convert to manual power, use pressure screw, adjusting nut and yoke from either CG250 or CG253 Pullers.



## 10 Ton Capacity (9.1 t)

Stock No.	Maximum Maximum Reach, inches (mm) (mm) inside		Maximum Spread, inches (mm) outside	inches (mm) Pressure Screw		Jaw Width, inches (mm)
CG274HY † 2 Jaw Model	8 <sup>3</sup> /4 (222)	3-8 (76-203)	3-8 (76-203), 10 <sup>1</sup> / <sub>2</sub> (266)	<sup>3</sup> /4-10 x 16 <sup>1</sup> /4	1/4 (6)	<sup>15</sup> / <sub>16</sub> (24)
CG275HY † 3 Jaw Model	8 <sup>3</sup> /4 (222)	3-8 (76-203)	10 (254)	<sup>3</sup> /4-10 x 16 <sup>1</sup> /4	1/4 (6)	<sup>15</sup> /16 <b>(24)</b>
CG276HY † 2 Jaw Model	15 (381)	4 <sup>3</sup> /4-11 <sup>1</sup> / <sub>2</sub> (121-292)	13 <sup>3</sup> / <sub>4</sub> (349)	<sup>3</sup> /4-10 x 23 <sup>3</sup> /8	<sup>3</sup> /8 <b>(9)</b>	1 (25)
CG277HY* 3 Jaw Model	15 (381)	4 <sup>3</sup> /4-11 <sup>1</sup> / <sub>2</sub> (121-292)	13 <sup>3</sup> / <sub>4</sub> (349)	<sup>3</sup> /4-10 x 23 <sup>3</sup> /8	<sup>3</sup> /8 (9)	1 (25)

<sup>†</sup> Includes hydraulic ram and pump set.

<sup>\*</sup>To convert to manual power, use pressure screw, adjusting nut and yoke from either CG270 or CG273 Pullers.



CG560HY

## 20 Ton Capacity (18.1 t) - Combination 2 and 3 law

	, (=====, ===											
Stock No.	Maximum Reach, inches	Max. Spread, in. (mm) outside	Pressure Screw Size, inches	Jaw Thickness, in. (mm)	Jaw Width, inches (mm)							
CG400HYA*	9 1/2 (241)	13 (330)	1 <sup>1</sup> /8-8 x 20 <sup>1</sup> / <sub>2</sub>	<sup>7</sup> /16 (11)	1 1/4 (32)							
CG400HYA2S		CG400HYA v	vith two stage pum	p								
CG400	CG400HYA less hydraulic ram and pump											
CG343	Manual version of CG400HYA	lanual version of CG400HYA. Includes CG343-1 4" Plug and CG300-1 1"-14 Pressure Screw in place of ram and pump										
CG343-1	4" Plug		_	_	_							
CG300-1	1-14 Pressure Screw		1 x 14 x 14 <sup>5</sup> / <sub>8</sub>	_	_							
CG405HYA*	14 (355)	15 (381)	1 <sup>1</sup> /8-8 x 20 <sup>1</sup> / <sub>2</sub>	9/16 (14)	1 <sup>1</sup> / <sub>4</sub> (32)							
CG405HYA2S		CG405HYA v	vith two stage pum	p								
CG405	CO	G405HYA less	hydraulic ram and p	oump								
CG348	Manual version of CG405HYA		343-1 4" Plug and ( of ram and pump	CG305-8 1"-14 Pr	essure Screw							
CG425HYA*	19 (482)	20 (508)	1 <sup>1</sup> /8-8 x 20 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> /8 (29)	1 <sup>1</sup> / <sub>2</sub> (38)							
CG425HYA2S		CG425HYA v	vith two stage pum	p								
CG425	CO	G425HYA less	hydraulic ram and p	oump								
CG325	Manual version of CG425HY ram, wa		3/8-8 x 20 <sup>11</sup> / <sub>16</sub> " pre ram adaptor, and c		ace of pump,							

<sup>\*</sup>Included with hydraulic ram.

## 50 Ton Capacity (45.36 t) - Combination 2 and 3 Jaw

Stock No.	Maximum Reach, inches (mm)	Maximum Spread, inches (mm) outside Pressure Sc Size, inche		Jaw Thickness, inches (mm)	Jaw Width, inches (mm)							
CG560HY*	28 (711)	44 (1,118)	1 <sup>5</sup> /8-5 <sup>1</sup> /2 x 30	1 <sup>7</sup> /16 (36)	2 (51)							
CG560HY2S		CG560HY w/ 2 stage pump										

<sup>\*</sup>Included with hydraulic ram.

## **Bar Type Manual Tapped Hole Sets**

6 Ton Capacity (5.4 t), Tapped Hole

	· · · · · ·						
Stock No.	in. (mm) / Max. Spread, in. (mm)		Pressure Screw Size, inches	Side Rods	Side Rod Adaptors (2 each), inches		
CJ840C	33 (838)	2 5/8 -11 5/8 (67-295)	1-14 x 33	<sup>5</sup> /8 <b>-18</b>	<sup>1</sup> / <sub>2</sub> -20, <sup>1</sup> / <sub>2</sub> -13, <sup>3</sup> / <sub>4</sub> -16, <sup>3</sup> / <sub>4</sub> -10,		
Complete Puller Set	Side rods	in set are provided 2 eac and 20" (CJ84-		0" (CJ84A2)	<sup>3</sup> / <sub>8</sub> -24, <sup>3</sup> / <sub>8</sub> -16, <sup>5</sup> / <sub>16</sub> -24, <sup>5</sup> / <sub>16</sub> -18, <sup>7</sup> / <sub>16</sub> -20, <sup>5</sup> / <sub>8</sub> -18, <sup>5</sup> / <sub>8</sub> -11, <sup>7</sup> / <sub>16</sub> -14		
CJ84C	CJ840C less a	III adaptors and side rods	except 5/8 -18 x 10	)			
Basic Puller Set					<sup>1</sup> / <sub>2</sub> -20, <sup>1</sup> / <sub>2</sub> -13, <sup>5</sup> / <sub>8</sub> -18, <sup>5</sup> / <sub>8</sub> -11, <sup>3</sup> / <sub>4</sub> -16, <sup>3</sup> / <sub>4</sub> -10		



## -Bar Type Manual Push/Pull Sets

6 Ton Capacity (5.4 t), Push/Pull

Stock No.	Max. Reach, in. (mm)		Pressure Screw Size, inches	Pressure Screw Adaptors	Side Rods, inches	Side Rod Adaptors, inches	
<b>CG706</b> Push/Pull Set	14 <sup>1</sup> / <sub>8</sub> (358)2	<sup>5</sup> /8 -7 <sup>1</sup> / <sub>2</sub> (67-191)	<sup>5</sup> /8 -18 x 10	_	<sup>7</sup> / <sub>16</sub> -14 x 8 (4 each)	<sup>7</sup> /16 -14f x <sup>5</sup> /8 -18m	



## 10 Ton Capacity (9.1 t), Push/Pull

Stock No.	Max. Reach, in. Max. Spread, in. (mm)		Pressure Screw Size, inches	Pressure Screw Adaptor	Side Rods, inches
<b>CG710</b> Push/Pull Set	17 <sup>5</sup> /8 (448)	3 <sup>9</sup> / <sub>16</sub> -9 <sup>3</sup> / <sub>8</sub> (90-238)	<sup>3</sup> /4 -16 x 12	CG710-3 3/4 -16f x 5/8 -18m	(2) <sup>5</sup> / <sub>8</sub> -18 x 8, (2) <sup>5</sup> / <sub>8</sub> -18 x 12

Bar Type Hydraulic/Manual Sets

6 Ton Capacity (5.4 t), Hydraulic

Stock No.	Maximum Reach, inches (mm)	Maximum Spread, inches (mm) Pressure Screw Size, inches		Pressure Screw Adaptor	Side Rods, inches	Side Rod Adaptors, inches							
CG656HY* Hydraulic Set	14 <sup>1</sup> /8 (358)	2 <sup>5</sup> /8-7 <sup>1</sup> /2 (67-191)	<sup>5</sup> /8-11 x 13 <sup>3</sup> /4	<sup>5</sup> /8 -11f x <sup>5</sup> /8 -18m	<sup>7</sup> / <sub>16</sub> -14 x 8	<sup>7</sup> / <sub>16</sub> -14f x <sup>5</sup> / <sub>8</sub> -18m							
CG656		CG656HY Set less the hydraulic components											



## 10 Ton Capacity (9.1 t), Hydraulic

Stock No.	Maximum Reach, inches (mm)	Maximum Spread, inches (mm)	Pressure Screw Size, inches	Pressure Screw Adaptor	Side Rods, inches	Side Rod Adaptors, inches
CG150HY* Hydraulic Set	17 <sup>5</sup> /8 (448)	3 <sup>9</sup> / <sub>16</sub> -9 <sup>3</sup> / <sub>8</sub> (90-238)	<sup>3</sup> / <sub>4</sub> -10 x 16 <sup>1</sup> / <sub>4</sub>		<sup>5</sup> /8 -18 x 8, <sup>5</sup> /8 -18 x 12	_
CG150		C	G656HY Set less the	hydraulic component	S	

<sup>\*</sup>Included with hydraulic ram.

## 20 Ton Capacity (18.1 t), Hydraulic

		· ,					
Stock No.	Maximum Reach, inches (mm)	Maximum Spread, inches (mm)	Pressure Screw Size, inches	Pressure Screw Adaptor	Side Rods, inches	Side Rod Adaptors, inches	
CG450HYA* Hydraulic Set	24 (610)	6-15 (152-381)	1 <sup>1</sup> /8 -8 x 20 <sup>1</sup> / <sub>2</sub>	_	<sup>7</sup> /8 -14 x 20, <sup>7</sup> /8 -14 x 10	<sup>7</sup> / <sub>8</sub> -14f x <sup>7</sup> / <sub>8</sub> -14m, <sup>7</sup> / <sub>8</sub> -14f x <sup>5</sup> / <sub>8</sub> -18m	
CG450HYA2S*			CG450HY Set wit	th 2 stage pump			
CG450		C	G450HY Set less the	hydraulic component	S		
CG350*			Manually operated v	ersion of the CG450			



CG450HYA

## 35 Ton Capacity (31.7 t), Hydraulic

Stock No.	Maximum Reach, inches (mm)	Maximum Spread, inches (mm)	Pressure Screw Size, inches	Pressure Screw Adaptor	Side Rods, inches	Side Rod Adaptors, inches
CG750HY* Hydraulic Set	26 (660)	8 <sup>1</sup> /2 -17 (216-432)	1 <sup>3</sup> /8 -8 x 25	1 <sup>3</sup> / <sub>8</sub> -8f x <sup>7</sup> / <sub>8</sub> -14m	1-14 x 20, 1-14 x 10	1-14f x <sup>7</sup> / <sub>8</sub> -14m, <sup>7</sup> / <sub>8</sub> -14f x <sup>3</sup> / <sub>4</sub> -16m
CG750HY2S			CG750HY Set wi	th 2 stage pump		
CG750		C	G750HY Set less the	hydraulic components	S	

<sup>\*</sup>Included with hydraulic ram.





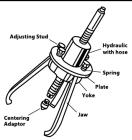


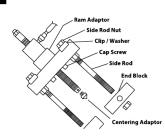
Screen the puller application • Inspect the puller, do not use damaged parts
 Use proper type and size puller for the job • Read safety precautions on pages W1 to W4

<sup>\*</sup>Included with hydraulic ram.

<sup>\*</sup>Included with hydraulic ram.

## **Quick Reference Charts**



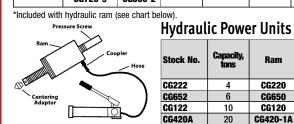


## Jaw Style Pullers (Hydraulic and Manual)

,		- ()						_					
Stock No.	Hydraulic Unit	Ram Adaptor	Hydraulic Adaptor	Yoke	Pressure Screw	4" Dia. Plug	Plate	Spring	Adj. Stud	Jaws	Side Arms/ Side Plate	Arm Bolts Arm Nuts	Washers/ Cap Screws
CG654HY	CG652	CG250-16	_	CG250-15	CG650-13	_	CG250-5	CG250-6	_	CG250-3 (2)	_	_	_
CG655HY	CG652	CG250-16		CG253-15	CG650-13		CG250-5	CG250-6	_	<b>CG250-3</b> (3)	_	_	_
CG274HY	CG122	CG270-16	_	CG270-15	CG120-13	_	CG270-5	CG270-6	_	CG270-3 (2)	_	_	_
CG275HY	CG122	CG270-16	_	CG273-15	CG120-13	_	CG273-5	CG270-6	_	CG270-10 (3) CG270-3 (3)	_	_	_
CG276HY	CG122	CG270-16	CG270-14	CG270-15	CG120-13	_	CG270-5	CG270-6 (4)	_	CG270-12 (2)	_	_	_
CG277HY	CG122	CG270-16	CG270-14	CG273-15	CG120-13	_	CG273-5	CG270-6 (4)	_	CG270-12 (3)	_	_	_
CG400HYA	CG420A	_	_	CG400-2	CG420-1-13A	_	CG400-5	CG400-6 (4)	CG400-7 (4)	<b>CG300-3</b> (3)	_	_	_
CG343	_	_	_	CG400-2	CG300-1	CG343-1	CG400-5	CG400-6 (4)	CG400-7 (4)	CG300-3 (3)	_	_	_
CG405HYA	CG420A	_	_	CG400-2	CG420-1-13A	_	CG400-5	CG400-6 (4)	CG400-7 (4)	CG305-9 (3)	_	_	_
CG348	_	_		CG400-2	CG305-8	CG343-1	CG400-5	CG400-6 (4)	CG400-7 (4)	<b>CG305-9</b> (3)	_	_	_
CG425HYA	CG420A	CG425-9	_	CG325-2	CG420-1-13A			_		<b>CG325-3</b> (3)	CG325-4 (3)	<b>CG325-5</b> (3)	CG425-8
CG325	_	_	-	CG325-2	CG325-1		1	_	_	<b>CG325-3</b> (3)	CG325-4 (3)	<b>CG325-6</b> (3)	
CG560HY	See Hyd. Unit Chart	_	_	CG560-2	CG520-13	_	_	_	_	<b>CG560-3</b> (3)		<b>CG560-6</b> (9) <b>CG560-5</b> (9)	_

## **Bar Style Pullers (Hydraulic and Manual)**

Set Stock No.	Hyd. Unit Ram Adapt.	Yoke	Pressure Screw	Centering Adaptor	Pressure Screw Adaptor	Thrust Nut Thrust Washer	Side Rods (2)	(2) Hex Nuts (6)		Side Rod Conn. Nuts (2)	End Blocks (2)	Side Rod Adaptors (2)	Cap Screw (2 Each)
CJ84C	_	CJ84-1B	CJ84-4	CJ84-16	_		CJ84A2 (10")	_	ME5A16 (2)	_	-	_	_
CG706	_	CG656-2	CG706-1	CG250-20	_	CG325-6	<b>CG656-3</b> (4) (8")	CG656-7	<b>CG656-</b> <b>8</b> (4)	CG656-6	CG656-6	CG656-12	_
						CG706-2							
CG710	_	CG150-2	CG710-1	CG270-20	CG710-3	CG45-2	CG150-3 (12")	_	_	_	CG150-6	_	_
						CG710-2	CG150-4 (8")						
CG656HY	CG652	CG656-2	*	_	CG656-13	_	CG656-3 (8")	CG656-7	<b>CG656-8</b> (2)	CG656-5	CG656-6	CG656-12	CG656-11
	CG656-9												CG656-10
CG656	_	CG656-2	_	_	CG656-13	_	CG656-3 (8")	CG656-7	<b>CG656-8</b> (2)	CG656-5	CG656-6	CG656-12	CG656-11
													CG656-10
CG150HY	CG122	CG150-2	*	*	CG150-12 (5%")	1	<b>CG150-3</b> (12")	CG150-7	CG150-8	CG150-5	CG150-6	_	CG150-11
	CG150-9				CG150-13 ( <sup>3</sup> ⁄ <sub>4</sub> ")		CG150-4 (8")					_	CG150-10
CG150	_	CG150-2	_	_	CG150-12 (5/8")	_	<b>CG150-3</b> (12")	CG150-7	CG150-8	CG150-5	CG150-6	_	CG150-11
					CG150-13 (3/4")		CG150-4 (8")						CG150-10
CG450HYA	CG420A	CG450-10	*	*		_	CG350-3 (18")	CG350-7	CG350-8 (2)	CG350-5	CG350-6	CG350-9	CG450-11
	CG425-9						CG350-4 (9")						CG450-12
CG450	_	CG450-10	_	_	_	_	CG350-3 (18")	CG350-7	CG350-8 (2)	CG350-5	CG350-6	CG350-9	CG450-11
	CG425-9						CG350-4 (9")						CG450-12
CG350	CG420A	CG350-2	CG350-1	_	_	_	CG350-3 (18")	CG350-7	CG350-8 (2)	CG350-5	CG350-6	CG350-9	CG450-11
	CG425-9						CG350-4 (9")						CG450-12
CG750HY	See Hyd. Unit Chart	CG750-2	*	*	CG750-11 ( <sup>7</sup> / <sub>8</sub> ")	_	<b>CG750-3</b> (20")	CG750-7	<b>CG750-8</b> (2)	CG750-5	CG750-6	CG750-9	CG750-11
					CG750-13 ( <sup>7</sup> / <sub>8</sub> ")		<b>CG750-4</b> (10")					CG750-10	CG750-12
CG750	_	CG750-2		_	CG750-14 (1 ½")		CG750-3 (20") CG550-3	CG750-7	<b>CG750-8</b> (2)	CG350-5	CG750-6	CG750-9	CG750-11 CG550-10
	CG720-9	CG550-2					<b>CG750-4</b> (10")	CG550-7				CG750-10	CG750-12

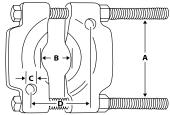


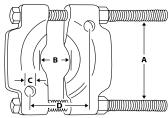
Stock No.	Capacity, tons	Ram	Included with Ram Pressure Screw		Hose	Coupler	Pump	Optional Pressure Gauge	Items* Gauge Adaptor
CG222	4	CG220	CG220-13	_	CG120-3-1	CG120-4	CG4-2A	_	_
CG652	6	CG650	CG650-13	CG250-20	CG120-3-1	CG120-4	CG4-2A	CG420-5C	CG420-6
CG122	10	CG120	CG120-13	CG270-20	CG120-3-1	CG120-4	CG4-2A	CG420-5C	CG420-6
CG420A	20	CG420-1A	CG420-1-13A	CG420-1-14	CG420-3-1	CG420-4	CG420-2A	CG420-5C	CG420-6

<sup>\*</sup>Standard with CG559 Bar Style Puller Set.

## **Bearing Separators**

Bearing separators. For separating and pulling double bearings and close fitting gears. Use with tapped hole, 2 jaw pullers or floor presses.







Stock No.	A	В	В	C	D
CJ949	1 <sup>11</sup> / <sub>16</sub>	1 <sup>1</sup> /8	1/4	<sup>5</sup> /16 <b>-18</b>	2 <sup>5</sup> /8
CJ950	2 <sup>3</sup> /8	2 <sup>3</sup> /8	3/8	<sup>3</sup> /8-16	3 3/4
CJ951	4 3/8	4 1/2	5/8	<sup>5</sup> /8-18	7 1/4
CJ952	5 <sup>7</sup> /8	6 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> /2	<sup>5</sup> /8-18	9 <sup>5</sup> / <sub>16</sub>
CJ953	8 <sup>3</sup> /8	8 <sup>3</sup> / <sub>4</sub>	1 <sup>1</sup> /4	<sup>3</sup> /4-16	14 <sup>7</sup> /16

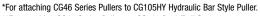


## **Bar Type Puller Adaptors**

## **Male Adaptors**

CJ952

Stock No.	Female Thread	Male Thread
CG656-12	<sup>7</sup> / <sub>16</sub> -14	5/8-18
CG656-13	<sup>5</sup> /8-11	<sup>5</sup> /8-18
CJ84-6	<sup>5</sup> /8-18	<sup>5</sup> /16 <b>-24</b>
CJ84-15	<sup>5</sup> /8-18	<sup>5</sup> /16 <b>-18</b>
CJ84-7	<sup>5</sup> /8-18	3/8-24
CJ84-10	<sup>5</sup> /8-18	3/8-16
CJ84-8	<sup>5</sup> /8-18	<sup>7</sup> /16 <b>-20</b>
CJ84-18	<sup>5</sup> /8-18	<sup>7</sup> /16 <b>-14</b>
CJ84-9	<sup>5</sup> /8-18	1/2-20
CJ84-11	<sup>5</sup> /8-18	1/2-13
CJ84-17	<sup>5</sup> /8-18	5/8-18
CJ84-12	<sup>5</sup> /8-18	5/8-11
CJ84-13	<sup>5</sup> /8-18	3/4-16
CJ84-14	<sup>5</sup> /8-18	<sup>3</sup> /4-10
CG710-3	3/4-16	5/8-18
CG150-12	3/4-10	5/8-18
CG150-13	<sup>3</sup> /4-10	<sup>3</sup> /4-16
CG46-7*	<sup>3</sup> /4-10	1-14
CG46-8**	<sup>3</sup> /4-16	1-14
CG750-9	1-14	<sup>3</sup> /4-16
CG750-10	1-14	<sup>7</sup> /8-14
CG455-18	1 <sup>1</sup> /8-8	5/8-18
CG455-19	1 <sup>1</sup> /8-8	<sup>7</sup> /8-14
CG47-420	1 <sup>1</sup> /8-8	1 <sup>1</sup> /4-12
CG550-9	1 <sup>3</sup> /8-6	1 <sup>3</sup> /4-12
CG455-1	<sup>7</sup> /8-14	<sup>5</sup> /8-18
CG455-2	<sup>7</sup> /8-14	<sup>5</sup> /8 <b>-11</b>
CG455-3	<sup>7</sup> /8-14	<sup>3</sup> /4-16
CG455-4	<sup>7</sup> /8-14	<sup>7</sup> /8-10
CG455-5	<sup>7</sup> /8-14	<sup>7</sup> /8-9
CG455-6	<sup>7</sup> /8-14	1-14
CG455-7	<sup>7</sup> /8-14	1-8
CG455-8	<sup>7</sup> /8-14	1 <sup>1</sup> /8-12



<sup>\*\*</sup>For attaching CG46 Series Pullers to CG710 Push/Pull Set.



CG455 Male Adaptor Set. Includes 2 each of the male adaptors CG455-1 through CG455-8 (16 pcs).

- . Male and female adaptors add versatility to the pulling
- and pushing capabilities of bar style pullers

   Adaptors change the diameter and/or thread pitch of pressure screws and side rods to accommodate item being pushed or pulled
- · Unthreaded male ends of bull nose adaptors perform many pushing operations



## **Female Adaptors**

· omato / taup to io	
Stock No.	Female Thread
CG455-9	7/8-14 and 5/8-18
CG455-10	<sup>7</sup> /8-14 and <sup>3</sup> /4-16
CG455-11	<sup>7</sup> /8-14 and 1-14
CG455-12	7/8-14 and 1 1/8-8
CG455-13	7/8-14 and 1 <sup>1</sup> /8-12
CG455-14	<sup>7</sup> /8-14 and 1 <sup>1</sup> /4-8
CG455-15	<sup>7</sup> /8-14 and 1 <sup>1</sup> /4-12
CG455-17	<sup>7</sup> /8-14 and 1 <sup>1</sup> /2-12
CG455-16	7/8-14 and 1 <sup>1</sup> /2-8

CG455A Female Adaptor Set. Includes 2 each of the female adaptors (18 pcs).







• Screen the puller application • Inspect the puller, do not use damaged parts • Use proper type and size puller for the job • Read safety precautions on pages W1 to W4

## **Blind Hole Bearing**

These special pullers will pull blind hole bearings, bushings and sleeves with inside diameters ranging from 1/4 to 7" where regular pullers won't reach. The operation is simple. After the special collet is inserted through the bearing or sleeve, a matched expanding rod is threaded into the collet and secured. Pulling can be done through bridge of bar type yokes or with side hammers.





**CG45** 

A

Yoke and Pressure Screw Slide

Hammer

H H

**CG40CB Blind Hole Bearing Puller.** Includes 9 collets and yoke. Uses CG250-8A slide screw and CG250-9 slide hammer.

CG40CB

Includes:	
CG40-1	CG40-9
CG40-3	CG40-15
CG41-11	CG40A6
CG41-14	CG40A10
CG41-12	CG40-7
CG41-13	CG40-8
CG40-4	CG40-2

CG45 (1-1 3/4") Puller Set.
3 collets and yoke. Uses CJ105-4B slide screw and CJ97-3A slide hammer. Includes:
CG270-1A CG45-4 CG45-6
CG45-2 CG45-15 CG45-7
CG45-3





**CG2545AB** 

## Accessories

CG40-11 (43/64-53/64") Collet.

For needle bearings on Leece-Neville alternators. Use with CG40-4 expanding rod.

CG40-12 (15 to 18 mm) Collet. For pilot bearings on late model Ford®

transmissions. Use with CG40-4 expanding rod.

CG40-4-1 (4" long) Collet Extension. For CG40 series collets.

CG46-8 Manual Adaptor.

For attaching CG46 series pullers to CG710 push/pull set.

CG46-7 Hydraulic Adaptor.

For attaching CG46 series pullers to CG105HY hydraulic bar style puller.

CG47-420 Hydraulic Adaptor.

For attaching CG47 series pullers to CG450HYA hydraulic bar style puller.

CG46-3 Expanding Rod.

## **Set Components**

Stock No.	Description	Internal Thread Size	External Thread Size
CG40-11	Collet, 43/64-53/64"	_	_
CG40-12	Collet, 15-18 mm	_	
CG40-4-1	Collet Extension, 4" long	_	_
CG46-8	Manual Adaptor	_	_
CG46-7	Hydraulic Adaptor	_	_
CG47-420	Hydraulic Adaptor	_	_
CG250-8A	Slide Screw, 5/8"-18 x 18 9/16"	_	_
CG250-9	Slide Hammer, 2 lb	_	_
CG40-1	Pressure Screw, 5/8"-18 x 7 3/4"	_	_
CG40-2	Nut, 15/16" Wrench Size	_	_
CG40-3	Yoke, 3 1/4" Spread	_	_
CG41-11	Expanding Rod	5/8"-18	3/8"-24
CG41-14	Collet, 1/4-5/16"	_	_
CG41-12	Collet, 5/16-3/8"	_	_
CG41-13	Collet, 3/8-7/16"	_	_
CG40-4	Expanding Rod	<sup>5</sup> /8"-18	1/2"-20
CG40-9	Collet, 7/16-1/2"	_	_
CG40-15	Collet, 1/2-5/8"	_	_
CG40A6	Collet, 5/8-3/4"	_	_
CG40-7	Collet, 3/4-7/8"	_	_
CG40-8	Collet, <sup>7</sup> /8-1"	_	_
CG40A10	Collet, 1-1 1/8"	_	_
CJ105-4B	Slide Screw, 3/4-16 x 22 1/2"	_	_
CJ97-3A	Slide Hammer, 3 3/4 lb	_	_
CG270-1A	Pressure Screw, 3/4-16 x 9 1/2"	_	
CG45-2	Nut, 1 <sup>1</sup> /8" Wrench Size	_	
CG45-3	Yoke, 5 3/4" Spread	_	
CG45-4	Expanding Rod for:	<sup>3</sup> /4"-16	<sup>5</sup> /8" <b>-1</b> 8
CG45-15	Collet, 1-1 1/4"		
CG45-6	Collet, 1 1/4-1 1/2"	_	_
CG45-7	Collet, 1 <sup>1</sup> / <sub>2</sub> -1 <sup>3</sup> / <sub>4</sub> "	_	
CG46-1	Slide Screw, 1"-14 x 18"	_	
CG46-2	Slide Hammer, 6 lb		<del>_</del>
CG46-3	Expanding Rod	1"-14	1 <sup>1</sup> /8"-12
CG46-4	Collet, 1 5/8-2"		
CG46-5	Collet, 2-2 1/2"		
CG46-6	Collet, 2 1/2-3"		
CG4567N	Slide Screw, 1 1/4"-12 x 24"		_
CG45670	Slide Hammer, 10 lb	1 <sup>1</sup> / <sub>4</sub> "-12	1 <sup>1</sup> /8"-12
CG47-201	Expanding Rod for:	1 '/4"-12	1 '/8"-12
CG47-202	Master Collet Collet Pad, 3-3 1/2" (3)		
CG47-203	Collet Pad, 3-3 1/2" (3)  Collet Pad, 3 1/2-4" (3)		_
CG47-204			
CG47-205 CG47-206	Collet Pad, 4-4 <sup>1</sup> / <sub>2</sub> " (3) Collet Pad, 3 <sup>1</sup> / <sub>2</sub> -5" (3)		
CG47-206	Collet Pad, 5-5 1/2" (3)		
CG47-207	Collet Pad, 5-5 1/2 (3)  Collet Pad, 5 1/2-6" (3)		_
CG47-208	Collet Pad, 6-6 <sup>1</sup> /2" (3)		
CG47-219			
	Collet Pad, 6 1/2-7" (3)		
CG47-211	Screw, 3/4" (3 sets of 2)		_
CG47-212	Screw, 1 3/4" (3 sets of 2)		

## CG2545AB Blind Hole Bearing Puller.

Includes CG40C and CG45 sets plus slide screw

anu nammers.		
Includes:	CG40-9	CG45-2
CG40-1	CG40-15	CG270-8A
CG40-2	CG40A6	CG45-15
CG40-3	CG40A10	CG45-3
CG41-11	CG40-7	CG45-4
CG41-14	CG40-8	CG45-6
CG41-12	CG250-8A	CG45-7
CG41-13	CG250-9	CG66-2
CG40-4	CG270-1A	



#### CG46 (1 5/8-3") Puller Set.

3 collets, slide screw and hammer. For large size blind hole bearings, Torrington needle bearings, heavy duty bearings on live center lathes, conveyor belts and rollers. Includes:

CG46-1 CG46-3 CG46-5 CG46-2 CG46-4 CG46-6

#### CG47 (3-7") Puller Set.

Master collet and pads plus slide screw and hammer. Pulling size is changed by changing pads. Includes:

CG4567N	CG47-204	CG47-209
CG45670	CG47-205	CG47-210
CG47-201	CG47-206	CG47-211
CG47-202	CG47-207	CG47-212
CG47-203	CG47-208	

## **Diesel Service Sets/Diesel Fuel Service**

## Tools Required for Cummins® B and C Series Service Kits

		Applications			Set Contents		
		12 Valve		24 Valve		CUMDS12V	CUMDS24V
Stock No.	Description	pre 1994	1994 to 1998.5	1999 to 2002	2003	12 Valve	24 Valve
FB300A	Bent Blade Feeler Gauge	•	•	•	•	•	•
MT33C	Compression Gauge	•	•	•	•	•	•
MB5B	Bronze Injector Brush	•	•	•	•	•	•
MB6BT	Stainless Steel Injector Brush	•	•	•	•	•	•
YA9565A	Engine Turn Over Tool	•	•	•	•	•	•
CJ140-1	Injector Slide Hammer Puller	•	•	•		•	•
CJ141	12 mm Injector Adaptor	•				•	
CJ142	14 mm Injector Adaptor	•				•	
FRHM17	17 mm 6 Point Crowfoot	•				•	
FRXM17	17 mm 6 Point Flare Nut Socket	•				•	
M3584	Compression Adaptor	•				•	
SP144	Injection Pump Wrench	•				•	
SP145	Idle Wrench (10mm)	•				•	
TSM24	24 mm 6 Point Deep Socket	•				•	
FRHM19	19 mm 6 Point Crowfoot		•	•	•		•
FRXM19	19 mm 6 Point Flare Nut Socket		•	•	•		•
EEPV313A	Compression Adaptor		•	•	•		•
CJ143	Adaptor		•	•			•
CJ144	Adaptor		•	•			•
SP504	Gear Puller		•	•			•
CJ148	Fuel Line Plug			•	•		•
CJ149	Adaptor				•		•
KRW200A	Storage Case					•	•



**CUMDS12V** 



**CUMDS24V** 



KRW200A

**Optional Tools** 

EEDMTACH1	Digital Tachometer to measure engine RPM	•	•	•	•	
TWM14A	14 mm 1/2" dr Shallow Socket use with V22A to adjust valves	•				
SP346	Fan Wrench (36 mm)	•				

#### CUMDS12V 12 Valve Diesel Set for Cummins B and C Series.

- Services Cummins B and C Series 12 valve engines from pre 1994
- Additional applications include Dodge® Ram 250 and 350 pickups, Ford® pickups with 3.9 L, 5.9 L and 8.3 L diesel engines, J.I. Case® tractors and off road equipment
- 15 tools in storage case

#### CUMDS24V 24 Valve Diesel Set for Cummins B and C Series.

- Services Cummins B and C Series 12 and 24 valve engines 1994 and later
- · Additional uses include Dodge heavy duty pickups and all applications with ISB and ISC diesel engines
- 14 tools in storage case

## Diesel Timing Gauge Set (Blue-Point®) SP500 Diesel Timing Gauge Set.

- The SP500 diesel gauge set will update existing 2017DSP diesel service sets to handle 1994 to 1998 Cummins "B" engines used in Dodge Ram 250/350 pickup trucks and some Ford trucks
- Updated 2017DSP set will also service J.I. Case tractors and off road equipment



**SP500** 

## SP5001 Dial Indicator (Blue-Point).

- Features rack and pinion construction
- Refer to the pump manufacturer's service manual when using this gauge
- Gauge diameter is 2 1/4"
- Range is 30 mm
- · Gauge is marked in .01 mm increments



## SP503 Spline Socket (Blue-Point).

- · Used to remove and replace the delivery valve on most Bosch® fuel injection pumps
- · Wrench size is 34 tooth
- 1/2" drive size



#### SP504 Gear Puller (Blue-Point).

- · Used to remove the injection pump gear
- Bolt thread is M8 x 1.25
- · Bolt length is 44 mm



SP5002

## SP5002 Gauge Holder (Blue-Point).

- · Used in fuel injection pump in place of the #1 delivery valve to locate the base circle of the injection pump cam
- Male thread is M22 x 1.5







## **Diesel Tools**



## Injector Height Gauges (Blue-Point®)

- Use height gauges to set injectors during installation and at set service intervals
- Knurled handle screws into gauge at 90° angle for work in close quarters

Stock No.	Size	Series	Engine	Year	
SP78	78.2 mm	60 60 and 50	DDECI DDECII	1986-1993 1986-1993	
SP80	78.8 mm	60 and 50	DDECIII	1994-1997	
SP79	80.3 mm	60 60 and 50	DDECIII DDECIV	Late 1997 1997-1998	
SP81	81.0 mm	60 and 50	DDECIV Marine	1998-1999 2000-2003	
SP82	82.1 mm	60	See service manual		

#### SP7882 Diesel Injector Height Gauge Set.

- 5 in 1 gauge set covers all applications for Detroit Diesel® 50 and 60 series Engines
- Includes SP78, SP79, SP80, SP81 and SP82 injector gauges plus handle in vinyl storage pouch



## Governor Gap Wrenches

#### M3530 Governor Gap Adjusting Wrench.

• 3/8" open ends, 4" long

Special thin design with 30° and 60° angle heads

## M3531 Governor Gap Lock Nut Wrench.

Similar to M3530 but has 7/16" open ends and is 4 1/4" long.



## Fan Clutch Wrench (Blue-Point) FCT706 Fan Clutch Wrench.

- Fan clutch wrench for heavy duty truck engines
- Hole pattern on tool aligns with fasteners on fan hub
- Use with open end wrench to remove fan clutch. 24 1/2" length for maximum leverage

Applications: International (VT365, T444E, DT466, DT350 and HT530), Ford® Power Stroke (7.6 L and 6.0 L), Detroit Diesel (Series 40) and John Deere® engines.



## **Injector Brush**

**BDD1 Injector Brush.** Stainless steel wire brush is for cleaning carbon buildup in the injector cup.





M3525A

M3503B

## **Special Application Sockets** M3525A Spanner Socket. • 1/2" drive, 3 7/32" long

- Includes 1 1/8" internal hex for use on "Fuel Squeezer" series of engines

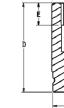
#### M3503B Fuel Line Nut Socket.

- 1/2" wrench opening. 6 point, 3/8" drive
- Shaped for access to fuel line nuts. 3 1/4" long
- Additional applications on the head temperature sensor found on **Buell® Motorcycles**



S6200 Engine Bearing Cap Bolt Socket. Use to service engine cam bearing cap bolts on both older and newer generation Detroit Diesel engines. Newer generation Detroit Diesel engines use longer cam bolts than earlier generation engines. The \$6200 is specially designed to work on both engine generations. 12 mm wrench size. 1/2" drive. 4 3/8" overall length. S6200 is similar to Snap-on® SIMDM120A socket but is longer.





MFIMMD10

## MFIMMD10 12 Point Metric Shallow Magnetic Socket.

- For use on *Detroit Diesel* 60 series, the MFIMMD10 is used on the 3 camshaft gear thrust plate bolts located inside the camshaft gear cover within the front gear case on the engine
- The mechanic has to go through the cover to start the bolts
- If one is dropped, it is very labor intensive and time consuming to retrieve
- Applies to 2002 and later 60 series Detroit Diesel engines with the compact gear case
- PLEASE NOTE: Earlier engines with the tall gear case have 13 mm 6 point bolts
- Please use MFIMM13 for this application

Stock No.	Size, mm	Finish	Style	A	В	D	E
MFIMMD10	10	Industral Finish	12 point	15.1	17.2	28.6	7.1

## **Diesel Tools**



# Feeler Gauges (Blue-Point®) FB325A U.S./Metric Feeler Gauge Set.

- · For adjusting governor gap
- Includes (25) 1/2 x 3" blades in sizes .0015" plus .002 to .025" in .001" increments



**FB308D** 

#### FB308D Step Feeler Gauge Set and Holder (Blue-Point).

- For adjusting valves
- Includes 12 step blades in sizes .008/.010 to .028/.030"



**FB328A** 

#### FB328A Step Feeler Gauge Set and Holder.

- For adjusting valves
- Includes 2 step blades: .011/.013 and .013/.015"



## **Push Rod Wrenches**

M3517B Push Rod Lock Nut Wrench. 1/2" open end, 102°

M3518 Push Rod Adjusting Wrench. 5/16" open end, 102° offset handle.



## **Metric Hex Wrenches**

AWM4D Metric L-Shape Hex Wrench. For adjusting governor gap. 4 mm hex.

AWM5D Metric L-Shape Hex Wrench. For adjusting governor gap. 5 mm hex.



YA9340

#### Belt Tensioning Tool (Blue-Point). YA9340 Serpentine Belt Wrench.

- Use to release any serpentine belt tensioner with 1/2" square drive opening
- Ratcheting action allows better positioning of the tool, which allows more swing angle than a solid type serpentine belt wrench
- Reversible ratchet head is only 1" thick so it will fit between tensioner face and fan blades on S Series 60 Detroit Diesel® and
- some Caterpillar® engines

   Also great for working on buses and delivery vans where the doghouse or engine shrouding restrict access
- Compact overall length keeps handle from coming in contact with radiator hoses, charged air cooler pipes, hydraulic lines or frame rails
- · Vinyl grip for comfort
- 13" overall length



## SRD6 Belt Tensioner Release Tool.

- 6" long adaptor with 1/2" male square
- The female triple square drive allows the user more flexibility to work around obstacles by coming in at different angles
- With a 1/2" breaker bar
  Similar to Snap-on® 6" torque adaptors but with a male square
- If using with a torque wrench, please refer to Snap-on part # SS306G Torque Chart for formula to obtain the correct applied torque

#### **Heavy Duty Applications:**

- For serpentine belt tensioners with a 1/2" square drive opening found on Series 60 Detroit Diesel and Caterpillar engines
- Other heavy duty applications include buses and delivery vans where the doghouse or engine shrouding can get in the way and make the work area very tight

#### Automotive Applications:

- 1/2" serpentine belt tensioners on Dodge®/Chrysler® vehicles (2.0 L and 3.0 L engines)
- Ford® vehicles
- Lincoln® and Mercury® vehicles (2.3 L, 3.0 L, 4.2 L and 4.6 L engines)
- GM® vehicles (2.5 L, 4.7 L, 5.0 L and 5.7 L engines)







- . Do not use chrome or industrial finish hand tools with impact driver.
- · Read safety precautions on pages W1 to W4

## Tools for Ford®/Navistar® Vehicles



Pulley Puller SP448 Pulley Puller. For removing the air pump pulley. Fits over pulley flange.

## Compression Adaptor

M3545B Glow Plug Compression Adaptor.
• For GM® 4.3 L and 5.7 L plus *Navistar* 6.9 L and

- 7.3 L diesel engines
- Replacement valve core is M3545A4
- Must be used in conjunction with MT33C Compression Gauge and M3569 or M3570 Quick Couplers

M3545A4 Replacement Valve Core.

## Replaces valve core on M3545B

#### Sensor Socket for *Ford* ICP S6196KR Sensor Socket for Ford ICP.

- Easily remove and install the ICP Sensor on 2002 and 2003 Ford 6.0 L diesel truck engines
- Spring retention securely holds sensor during use
- 6 point configuration with Flank Drive® wrenching system
- Wrench Size: 1 1/16". Drive Size: 3/8"
- 0.D.: 1 7/16" (36.2 mm). Length: 2 9/16" (64.8 mm)



M3545B

#### Diesel Turbo Tools **PSWT10K Power Stroke Diesel Turbo Wrench** for Ford.

- 10 mm wrench is ideal for accessing the turbo mounting bolts located between the firewall and the turbo with exhaust intake in the way
- Designed for use on 2003 and later 6 L diesel Powerstroke engines used on Ford F250, F350, E250 and E350
- · Additional applications on Navistar VT365 engines and some International 4000 series of medium duty trucks • Wrench has a zero degree offset 6 point head
- Designed to remove excessively tight fasteners off the intake when removing turbocharger where a conventional 15° offset wrench will not work

## • 5 1/2" long S6210 Diesel Turbo Inlet Pipe Socket for Ford Vehicles.

Application: To access bolts holding the turbo inlet pipes to the turbo on 6.4 L diesel engines. There are 6 bolts with restricted access between the turbo and firewall. Removal of the 2 bolts below the EGR OC pipe is especially difficult without a 10 mm.



PSWT10K

SWR3 Water Sensor Socket.

SWR3

**OFSKIT** 

#### stainless steel wire brush to clean the injector bore and injector tip hole in the cylinder head.

injector tips.

**Quick Couplers** 

Injector Brushes

- · Easily remove/replace water sensor without damage when changing the fuel filter on 2001 to present GM® 6.6L DuraMax® diesel engines
- GM 6.6 L *DuraMax* diesel engine applications include 2001 to present Chevy®/GMC® pickups and *Chevy/GMC* medium duty trucks
- Manufactured from high strength, chemical resistant glass filled nylon. 3/8" square drive
- NOTE: Due to possible sensor distortion from previous incorrect removal/installation methods, the sensor may slip in the SWR3 during removal. Use to reinstall the sensor, when proper hand tightening is used



**FGPT** 

**Glow Plug Tools** FGPT Glow Plug Harness Tool. Prevents damage to harness and

- connector rail · Removes and installs glow plug connectors
- Orange color for easy identification in dark engine compartments



Fan Wrench

**SP60 Fan Wrench.** 1 7/8" (48 mm) wrench services the cooling fan hub retaining nut. Has a 1/2" drive hole for torquing of the fan nut. 15 3/4" long.



## Fuel Filter Wrenches (Blue-Point®) FFW2 Dual Fuel Filter and Oil Filter Cap Socket.

- Dual Purpose 36 mm hex and 6 notches allows the tool to work as both a fuel filter and oil cap socket
- 3/8" drive



MT257B

#### Diesel Pulse Adaptor MT257B Diesel Pulse Adaptor.

- Test injector timing or engine RPM on diesel engines equipped with 1/4" or 6 mm external steel fuel injector lines
- Enables use with inductive pick up timing light to test engine timing
- MT257B is not for use on diesels with common rail fuel systems

M3569A Quick Coupler. 45° offset.

M3570A Quick Coupler. 90° offset.

MB5B Injector Brush (Blue-Point). Bronze, nonabrasive brush cleans carbon from

MB73 Injector Brush (Blue-Point).

Combination 5/16 and 13/16" diameter





MB5B

**MB73** 

## **Automotive Diesel Service Tools** Sensor and Filter Sockets

## S3624 Filter Flip Socket.

- One tool will remove/install all 3 filter caps on Ford 6.0 L Power Stroke diesel powered vehicles such as Super Duty Series pickups, Econoline Vans and Excursions
- Use for removal and installation of the Oil Filter cap plus primary and secondary fuel filter caps on these vehicles
- Not for impact use
- Requires optional 3/8" drive extension (FX1 or FXWP1 1-1/2" long)
- See additional applications on pg 506
- Mercedes-Benz® diesel engines
   S3624 Specifications

- Square drive size: 3/8"
- Wrench sizes: 24 and 35/36 mm
- Flank Drive wrenching system
- OD Major: 1.80" (45.7 mm)OD Minor: 1.38" (34.9 mm) • Length: 1.73" (43.9 mm)



S3624

## A129 Diesel Fuel Filter Socket.

- Use for removing and installing fuel filter housings found on 2002 and later Dodge® Ram trucks with the 24 valve Cummins® diesel engine
- 1 1/8" wrench size. 3/8" drive



- Includes A127 and A106 oil filter sockets, S3624 filter flip socket and A129 Cummins diesel fuel filter socket (4 pcs) in storage tray
- Applications for A127, A106 and S3624 are listed on pg 537. Applications for A129 are listed on this page



#### Fan Clutch Wrench (Blue-Point®) YA6180 Fan Clutch Wrench.

- Use on GM® and Ford® diesel and gas engines with a 48 mm fan clutch nut
- Provides the extra leverage needed to remove the fan clutch nut
- Overall length of 20 1/8"
- Head width of 4 1/8"
- . Head thickness of 3/8"



#### Flywheel Lock (Blue-Point) YÁ6925 Flywheel Lock for GM Duramax® 6.6 Liter Engines.

- Works on 2001 and later 6.6 L Duramax diesel truck engines
- · Saves time by not removing the starter motor
- Holds the engine in place for high torque requirements
- Handle is visible to remind the technician that the engine is locked

#### **Automotive Diesel**





S6104B

S6128

M1322

#### Metric Injector Sockets S6104B Metric Injector Socket.

- For diesel engines in VW® and Mercedes® vehicles
- 27 mm, 12 point.
- · Clearance bored to fit over fuel injector
- 1/2" drive, 3 1/4" long

#### S6128 Metric Injector Socket.

- For Bosch® type injectors on GM 6.2 L 6.5 L diesel engines
- 30 mm, 6 point. 2 1/16" bolt clearance. 7/16" opening depth, 2 11/16" long
- 7/8" external hex on drive end

## Service Tools for Cummins® Engines



#### Air Compressor/Fuel Pump Wrenches

M1328A Air Compressor/Fuel Pump Wrench. Includes 5/8", 12 point box wrench on one end for servicing fuel pumps and a specially designed 11/16" open end for access to air compressor bolts. M1321 Air Compressor/Fuel Pump Wrench.

- Similar to M1328A but has a 12 point box wrench on both ends
- Accommodates air compressor and fuel pump flange bolts on NH Series Inline 6 cylinder engines

CJ125A Injector Puller. Slide hammer puller services "D,"

CJ140 Diesel Injector Puller Set. Use on fuel injectors in Cummins "B" and "C" Series 3.9 L, 5.9 L and 8.3 L engines used in Dodge® pickups and Case® tractors/off-road equipment. Will service

all 1994 to 1998-1/2 standard injectors as well as fuel inlet tubes.

CJ140-1 Slide Hammer (8 mm). Use to pull injectors from

heads on 1998-1/2 to 2002 Dodge/Cummins. 8 mm x 1.25 thread.

CJ141 Diesel Injector Puller Adaptor (12 mm). Use on

CJ142 Diesel Injector Puller Adaptor. Use on Cummins

CJ144 Diesel Injector Puller (15 mm). Use on 1998-1/2 to

diesel injectors from 1994 to 1998-1/2. M14 X 1.5 threads. CJ143 Diesel Injector Puller (8 mm). Use on 1998-1/2

Use CJ144 Puller to put the fuel inlet tube prior to removing the

"Top Stop," and small V8 injectors. 10 1/2" long.

#### M1329 Fuel Pump Wrench.

CJ125A

Cummins diesel injectors prior to 1994.

*Cummins* diesel injectors in tight access areas.

• Includes 7/16", 12 point box end for servicing fuel pump bolts on NH series engines equipped with *Cummins* air compressors

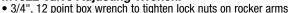
CJ140-1

• 6 5/8" long

**Iniector Pullers** 

iniector.

# Valve Adjusting Wrenches M1322 Valve Adjusting Wrench.



- Designed to clear the aftercooler
- 14 3/4" long

#### M1319 Valve Adjusting Wrench.

- 7/8", 12 point box wrench to tighten lock nuts on rocker arms
- Designed to clear the aftercooler
- 12" long



#### Fan Wrench (*Blue-Point*) SP346 Fan Wrench.

- 36 mm open end wrench services fan clutch attaching bolts on B Series Cummins engines
- Can also be used on fan clutch bolts on Navistar 6.9 and 7.3 L engines
- Wrench is 15" long and has a blue, vinyl covered handle





#### Injector Pump/Idle Lock Nut Wrench (*Blue-Point*) SP144 Injection Pump Wrench.

13 mm, 12 point box wrench is used to service the injection pump mounting bolts found on 5.9 L Cummins engines.

#### SP145 Idle Lock Nut Wrench.

- 10 mm, 12 point wrench with 90° angle is designed to remove or install mounting bolts on the diesel injection pump
- For *Cummins* B Series 5.9 L engines

## Engine Turning Tool

#### YA9565A Engine Turning Tool.

 Used to rotate the engine for making valve and injection pump adjustments on Cummins and J.I. Case 3.9, 5.9 and 8.3 L "B" and "C" Series engines

• 3/8" square drive



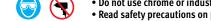
YA9565A





- Do not use chrome or industrial finish sockets with impact driver.
- Read safety precautions on pages W1 to W4

CJ144



## Tools for Cummins® Vehicle Service



**Wet Sleeve Pullers** CG80HYA Hydraulic Wet Sleeve Puller.

 Provides hydraulic pressure for removing wet sleeves on Cummins diesels, trucks, and heavy construction and farm equipment with a cylinder diameter of 3 to 6"

Reach of 7 to 12'

Adjustable bridge fits around studs in block

Includes a 6 ton hydraulic power pack

Contains (1) set each of CG80-11 and CG80-22

CG80A Wet Sleeve Puller. Manual version of CG80HYA. CG80-11 Insert (1/4"). For CG80A/CG80HYA Wet Sleeve Pullers. CG80-22 Insert (5/16"). For CG80A/CG80HYA Wet Sleeve Pullers.



#### **Engine Sockets**

PPM516A Drain Plug Socket. 1/2" square male end with 1/2" drive. Extra strength to remove drain plugs, 1 7/16" long.

SIML200 6 Point Extra Deep Impact Socket. 5/8" single hex for the stud used for the rocker box on engines equipped with

Jacobs® engine brake. 1/2" drive, 5" long.

FTXEL45E Extra Long Torx® Socket Driver. Quickly and easily access intake bolts on *Cummins* N14 diesel engines without removing the air pump. Can also be used on older Cummins NH Big Cam 4 diesel engines, 3/8" square drive.



## Timing Gauge Injectors

#### **GA3711 Injector Timing Gauge Set.**

- Range is 0 to 1" in .001" increments
- Time injectors on Cummins NH, NT, L-10, and V-model engines in or out of the chassis
- Set includes 2 dial indicators, mounting hardware, instructions and storage case

#### GA3707 Injector Adjustment Gauge Set.

- Indicator Range is 0 1" in .0005" increments
- Adjust injector travel on NH, NT, L-10 and V model engines except those with Top Stop Injectors
- Do not use this tool for engines with Top Stop Injectors
- Obtain accurate plunger travel and uniform fuel delivery for top performance and maximum fuel economy
- · Comes in fitted storage case
- Always refer to the appropriate shop manual and follow the recommended procedures when using this tool



Injector Brushes (Blue-Point®)

**MB5B Injector Brush.** Bronze, non abrasive brush cleans carbon

MB6BT Injector Brush. Stainless steel wire brush cleans the injector cavity in the cylinder head. For Cummins B series engines and J.I. Case® equipment. 9" long.

**BNH1 Injector Brush.** For *Cummins* NH series engines.





#### Pulley Installers and Pullers

#### CJ83C Pulley and Gear Puller.

- Ideal for servicing crankshaft pulleys and gears and timing gears on a wide range of gasoline and diesel engines including *Cummins* accessory drives and water pumps
- Nominal capacity is 3.5 ton
- Use to remove accessory drive pulley (replace with M1324)
- Includes yoke; 2 each 3/8-16 x 3", 5/16-18 x 2 1/2", and M10-1.5 x 65 mm studs; and 3/4-16 x 5" pressure screw

M1324 Pulley Installer. For installing the accessory drive pulley on the shaft. Includes 7/8"-14 NC threaded adaptor, washer type bearing, and installer housing.



Torque Adaptor Set

ST669 Torque Adaptor Set. Use to loosen and adjust lock nuts to manufacturing specifications.

ST669-1 Handle Assembly. Handle assembly. M1302B18 12 point Deep Socket. 9/16" deep, 12 point socket.

M1302B24 12 point Deep Socket. 3/4" deep, 12 point socket.

M1302A5 Screwdriver. 1/2" x .062 screwdriver. TM82 Flat Tip Socket Driver. 1/4" x .036 flat tip driver.



#### Compression Adaptors

These compression adaptors are for use with the MT33C compression gauge on page 421.

M3540A Compression Adaptor. For Cummins 855 cu. in. NH and 903 V8 and L10 diesel engines.

M3584 Compression Adaptor. For Case/Cummins series "B" 2.9 L, 3.9 L and 5.9 L diesel engines.

M3585 Compression Adaptor. For Case/Cummins series "C" 8.3 L engines.



#### **Fuel Line Tools**

CJ148 Fuel Line Plug. For plugging fuel lines.

CJ149 Fuel Tube Remover. For fuel inlet tubes on later model vehicles.

#### YA6615 Flare Nut Wrench (Blue-Point).

- Use on Dodge® trucks with 5.9 L engines (2003 and later) and 6.7 L engines (2007 and later)
- Easily slides into the confined area of the cylinder head
- Wrench is required to hold the 24 mm flare nut while the 19 mm fuel line coupler is loosened
- Helps prevent costly damage to the fuel lines

## **HEAVY DUTY TRUCK TOOLS**











#### **Hand Sockets**

#### **Hand Sockets**

- S6160 Extra Long Head Bolt Socket.
  Use on 1986 and later Nissan® engines with 12 mm head bolts
  8" length reaches past cam and rocker assembly to service head bolts
- Thin profile socket and shank will reach through access hole and past overhead camshaft
- Additional high torque applications include removal and installation of universal joint flange bolts on Ford®/Mercury® cars such as Mustang, Crown Victoria, and Lincoln® plus *Ford* Explorer, Ranger and F150/F250 trucks
- 12 point, industrial finish, 1/2" sq drive

#### S6194 Head Bolt Socket.

- Use on Toyota® and Nissan cars and trucks and Honda® cars with 12 mm héad bolts
- 4 1/8" length reaches past cam and rocker assembly to service head bolts
- Thin profile socket and shank reach through the access hole and past overhead camshaft
- · Additional high torque applications include removal and installation of universal joint flange bolts on Ford Explorer, Ranger and F150/F250 trucks
- 12 point, industrial finish, ½" sq drive

#### S6190 IPR Sensor Socket for Ford vehicles.

- Ford 6.0 L diesel injection pressure regulator (IPR) socket
- Use on 1994 and later Ford 6.0 L diesel trucks plus International® CT365, 530E and 466F

## • Similar to Rotunda® part number 303-1112 \$6260 Heavy Duty Spicer Drive Socket.

- For removal of heavy duty spicer drive shaft bolts that have ½" fasteners found on Kenworth®, Peterbilt® trucks and many other heavy duty applications
- 8" long, 12 point, industrial finish, ½" sq drive SHR20 Oil Galley Drain Plug Socket

- For removing and installing oil galley drain plug on Caterpillar® 6 cylinder engines
- Galley plugs may leak and need to be removed so a new 0-ring can be installed
- Low profile design to get into tight applications
- Special alloy steel provides corrosion resistance
- 5/8" Hex Socket, 6 point, 1 1/4" long

Impact Sockets



#### Impact Sockets

- S6197 Heavy Duty Driveline Socket.
  Use on Kenworth/Peterbuilt heavy duty drivelines that use 1/2" fasteners
  Many other heavy duty 1/2" applications as well
  Example: Socket will clear the weld yoke, when removing the cap screws holding the wing bushings to the end yoke. 1/2" wrench size, 12 point, 1/2" drive, 4 1/8" long

  S6199 U-bolt Impact Socket.

  • Most semi trucks use many 5/8" diameter U-bolts for springs and

- other suspension components
- · Saves you time as you do not need to cut off the excess thread compared to using a standard 1 1/8" deep socket that is 3/4" drive
- Up to 2" longer than a standard deep socket to easily accommodate the excess thread length
- 1 1/8" wrench size, 6 point, 3/4" drive, 5" long

#### S6217 Head Bolt Impact Socket.

- For head bolts on heavy duty trucks and buses with Mercedes® engine MBE900
- Clearance on certain Detroit Diesel® head bolts with the *Mercedes* engine MBE900 require a thin walled socket
- Height of socket helps the technician when using a torque wrench due to the length of torque wrench handle for clearance

# 17 mm, 3/4" drive, 12 point, 4 3/4" long S6216 for *Detroit Diesel* Engines Head Bolt Impact Socket. For head bolts on *Detroit Diesel* 50 and 60 Series engines

- Tight clearances between some head bolts and the cylinder head casting require a thin walled socket; these engines are found in truck, bus, motor home, marine and heavy equipment
- The increased height of the socket allows for clearance between the drive tool (ratchet, breaker bar or torque wrench) and installed valve train components, allowing technicians access to head bolts from either side of the engine

## • 16 mm, 3/4" drive, 12 point, 4" long IMFDL242 Deep Thin Wall Impact Socket.

- Designed to remove the head bolts on Caterpillar C12, C15, C16 and 3406Es where the front 2 and back 2 head bolts are positioned under the valve covers
- Clearance on certain *Caterpillar* head bolts requires a thin walled socket that needs to be a certain length
- Additional applications include Detroit Diesel main bearing cap bolts and 19 mm head bolts on Mercedes Benz MBE904/MBE906 EGR engines (2007 and later)
- 3/4" wrench size, 3/4" drive, 5 3/4" long

#### SIMDM212 12 Point Metric Deep Impact Socket. Applications: Use on flywheel bolts on Cummins ISX engines.

#### DW402C Dayton Lug Nut Impact Socket.

- 3/4" square drive with a 1 1/4", 6 point wrench opening
- Use with socket retainers

#### SIML302 6 Point Impact Socket - 5 5/8" long.

- · Head bolts are sunk in pretty deep and the current method is a large impact socket with an extension to reach the application
- In this scenario, you lose too much power with an extension and 3/4" impact gun for the torque required on this application

- S6230 Impact Socket, 15/16" 6" long.
   Designed for Autocar® and CCC® style dump trucks and garbage trucks that use the 30/36 spring brake chamber made by MGM® **hrakes**
- When doing an emergency repair on the road or changing the diaphragm
- Length of the S6230 is designed to accommodate the very long threaded spring brake release stud assembly (release tool) in the brake chamber

#### IPRD20 Low Profile Swivel Impact Socket, 5/8".

- Use on starter bolts on Cummins, Caterpillar and International engines where housing is in the way when backing out the fastener using a standard length impact socket. *Detroit Diesel* series 60 starter bolts
- 30° uninterrupted swivel action, means greater accessibility in tight quarters, which allows easier and faster removal of stubborn fasteners thus saving time

- S6220 C15 Impact Socket for Caterpillar Engines.

   Use on Caterpillar C15 engine rocker stud bolts where the length of socket and broach depth of the socket are critical for the application
- 11/16", 6 point, 1/2" drive configuration, 3 1/4" long







- Do not use chrome or industrial hand finish sockets with impact driver.
- Read safety precautions on pages W1 to W4

## **HEAVY DUTY TRUCK TOOLS/MOTORCYCLE**

## **Hose Clamp Sockets**



Drive Size, inches	Stock No.		A	В	C	D	
3/8	FIHC140	7/16	21/32	11/16	2 1/4	2 3/4	•
3/8	FIHC160	1/2	3/4	3/4	_	2 3/4	•
3/8	FIHCM8	8 mm	12.9	17.2	57.1	69.8	•
3/8	FIHCM10	10 mm	15.9	17.2	57.1	69.8	•

Set shown includes storage tray

Set **Contains:** 

**Torque Adaptors** 



#### SRDM624 Torque Adaptor.

- Services the rear brake caliper mounting bracket assembly on 2007 Ford® F450/550 trucks
- Tool fits between the bracket bolt and frame to allow the use of a torque wrench to properly torque the bracket bolts
- 24 mm, 6" long, 12 point wrench design, 1/2" square drive

- SRD35 Diesel Head Bolt Torque Adaptor.
   Special tool for use on *Ford* F250/F350 Trucks and Excursion vehicles (2003-2007) plus Ford E-Series Vans (2004-2009) including ambulance, law enforcement and shuttle bus conversions using the 6.0 L Power Stroke® diesel engine
- When coupled with an SM18, 18 mm socket, the SRD35 can access all of the head bolts eliminating the need to change tools or remove the adaptor during the job



- Use of 3/4" drive ratchet/torque wrench transmits the high torque necessary to loosen and tighten head bolts, with less strain on the technician
- Eliminates the need to remove the truck/van cab from the chassis to access the rear head bolts, saving time and preventing damage to the rear heat shield
- Eliminates the need to remove the evaporator housing, saving 2 hours of time and the additional cost of refrigerant added during air conditioning recharging
- Center to center length: 3 1/2"
- Overall length of 4 7/8"

## Slack and Valve Adjusters



**BSA916** 

**HSA716** 

#### BSA916 Slack Adjuster Wrench.

- For brake service and slack adjuster installation on heavy duty trucks equipped with Bendix® automatic slack adjusters
- Use to turn the manual adjuster hex
- Extra deep 9/16" hex allows reach to recessed adjusters
- 14 1/2" overall length helps to overcome the anti reverse mechanism
- Turn over to reverse
- Includes protective vinyl boot

#### **HSA716 Slack Adjuster Wrench.**

- · For brake service and slack adjuster installation on heavy duty trucks equipped with Haldex® automatic slack adjusters
- Use to turn the manual adjuster hex
- Extra deep 7/16" hex allows reach to recessed adjusters
- 14 5/8" overall length helps to overcome the anti reverse mechanism
- Turn over to reverse
- Includes protective vinyl boot

#### S6205 S6205 Valve Adjuster Socket.

- See through window in its 14 mm socket to see the position of the 5 mm hex blade
- Faster valve adjustment time
- Sized for low clearance
- Soft grip handle

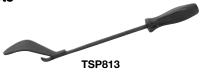
Applications: 2002 and later Mercedes® "900" series diesel engines. 2002 and later trucks and busses.

#### S6206 Valve Adjuster Socket.

- See through window in its 17 mm socket to see the position of the 6 mm hex blade
- Faster valve adjustment time
- Sized for low clearance
- Soft grip handle

Applications: 2002 and later Mercedes "4000" series diesel engines. 2002 and later trucks and buses.

## Motorcycle Tools



#### Tire Spreader

#### TSP813 Motorcycle Tire Spreader.

- Permits 1 person installation of tubed tires on motorcycles, ATVs, small farm equipment and industrial equipment
- Easily access valve stem hole when installing difficult 90° valve stems on tubed tires
- Overall length is 23"



KAC1224TCA

S6206

#### **Fuel Tank Cover**

#### KAC1224TCA Motorcycle Gas Tank Cover.

- Fits Harley-Davidson® Dyna, Softail and Touring models
- Fits various models of Yamaha®, Victory®, Triumph® and Kawasaki® motorcycles plus many more
- Nonmarring cover uses a nonabrasive inner liner that won't slide off

#### **Hand Sockets**

#### **HXD22 Motorcycle Wheel Socket.**

- Essential for removing motorcycle front wheels
- Use torque wrench for axle torque specs
- Use breaker bar to remove difficult fasteners
- Applications: 2002 and later Kawasaki® motorcycles (ZX7R, ZRX1200, ZX12R, and ZS6); 2002 and later Honda® motorcycle (CBR954RR); 2002 and later Triumph® motorcycle (955i)

#### **HXD24 Motorcycle Wheel Socket.**

- Essential for removing motorcycle front wheels
- Use torque wrench for axle torque specs
- Use breaker bar to remove difficult fasteners
- Applications: Suzuki® motorcycles (1300GSXR and 1000GSXR); Hayabusa® motorcycles (various models)

Stock No.	Drive Size, inches	External Hex, (mm)	Outer Dia., inches (mm)	Hex Depth, inches (mm)	Length, inches (mm)
HXD22	1/2	22	<sup>15</sup> / <sub>16</sub> (23.8)	11/16 (17.8)	1 1/2 (38.1)
HXD24	1/2	24	1 1/32 (26.2)	11/16 (17.8)	1 1/2 (38.1)

#### S9724RHS Low Profile Spark Plug Socket.

- Easily reaches 5/8" (16 mm) spark plugs on muscle cars, ATVs, motorcycles and boats without interference from custom exhausts or chassis
- Spark plug extends through the socket for access in tight quarters
- Patented tapered hex design retains spark plug securely without rubber insert or magnet
- · Spark plug easily disengaged from socket by applying side pressure
- Use ratcheting box wrench on 5/8" external hex drive
- Length 1 1/16"

Applications: Harley-Davidson® motorcycles with large gas tanks (1986 and later Sportster® and 1999 and later twin cam models) plus small block Chevy®, Ford®, Mopar® and other engines with 5/8" (16 mm) spark plugs and racing exhaust headers

#### **Adjusting Tools**

#### HD6529 Ratcheting Hex Wrench.

- · Reversible ratchet lever conveniently located for one hand operation
- 3/16" hex bit is easily replaced if damaged
- Low profile design for extra clearance between frame and engine
- · Comfortable rubber grip will not scratch chrome
- 9 3/4" overall length for additional reach
- 1/4" hex drive, 3/16" hex bit for Harley-Davidson Evolution® motor rocker box cover bolts

#### **NBATI Neck Bearing Adjustment Tool.**

- For neck bearing adjustment on Harley-Davidson motorcycles
- Easily maneuvers between the triple clamp and frame
- Fits into the star adjustment nut, allowing technician to adjust the neck bearing play
- Tapered end allows easy access to the neck bearing adjusting star
- · Screwdriver style handle offers a comfortable grip
- 18 1/2" overall length
- Neck bearing adjustment is usually checked at the following service intervals: 1,000, 5,000, 15,000 and 25,000 miles or annually

#### HFTLRT Fuel Tank Lock Ring Tool (Harley-Davidson).

- Remove/install the lock ring on 2008 and later FL touring series
- Allows access to the fuel filter and pump as the lock ring is connected to the pump

#### **General Service Tools**

Stock No.	Description	See Catalog Page
CPT110A	Motorcycle Wheel Socket	506
A15A	Drag Link Socket	40
GF22	Drag Link Socket	31
YA243A	Dial Type Pressure Gauge	487
YA173A	Clip On Style Angled Air Chuck	488
VT1A	Valve Stem Inserter	489
GA599A	Tread Depth Gauge	489
SGSR104	Seal Remover Set	160
MT125A	Self Powered Timing Light	446
TA358 Torque Angle Gauge - 3/8" Drive		253
AWHD8K	Hex/Torx® Folding Wrench Set	130

#### **Motorcycle Service Tools**











HXD22

HXD34

30724RHS

S9704RHS SAM12LE

#### S9704RHS Low Profile Spark Plug Socket.

- Reaches 13/16" spark plugs on muscle cars, ATVs, motorcycles, RVs and boats without interference from custom exhausts or chassis
- · Extends through the socket for access in tight quarters
- Patented tapered hex design retains spark plug securely without rubber insert or magnet
- · Easily disengaged from socket by applying side pressure
- Use with open end or ratcheting box wrench on 13/16" external hex drive; Length 1 1/4"

#### SAM12LE Long Hex Socket Driver.

- Essential for removal or installation of bolt found on the lower forks of 2006 and newer Harley-Davidson Dyna series motorcycles
- . Used when servicing the internal parts of the fork, 12 mm
- 98 mm long



#### OFHD Motorcycle Oil Filler for Harley-Davidson.

- Allows access to the fuel filter and pump as the lock ring is connected to the pump
- Competitive products are metal and can scratch the painted surface of the motorcycle
- Oil filler for 1999-2006 Harley-Davidson Touring Motorcycles with the "Push in Style" oil caps
- Prevents any unwanted mess; fastens and seals onto filler neck
- No need to hold funnel while pouring in oil
- Can fill funnel with almost 1 quart of oil and work on something else
- ABS plastic
- Smooth surface will not scratch painted surface

#### OFHARLEY Motorcycle Oil Filler for Harley-Davidson.

- Prevents any unwanted mess; fastens and seals onto filler neck
- No need to hold funnel while pouring in oil
- Can fill funnel with almost 1 quart of oil and work on something else
- ABS plastic
- Smooth surface so not to scratch painted surface
- For Harley-Davidson Touring bikes and Dyna series motorcycles 2007 to present

#### **Motorcycle Service Equipment**

Stock No.	Stock No. Description	
MTPV100	MTPV100 Motorcycle/ATV Peak Voltage Meter	
EEPV503	EEPV503 Motorcycle Compression Gauge Set	
EEPV5G10L	Motorcycle Compression Gauge Adaptor	450
EEWB308D	Motorcycle Wheel Balancer	485
EEWH310B	EEWH310B Motorcycle Tire Changer	
YA1715		









- Do not use chrome or industrial finish sockets with impact drivers.
- Read safety precautions on pages W1 to W4

## **MOTORCYCLE/AVIATION**

#### Motorcycle Service Tools



#### Service Sets CYCLESET Motorcycle Tool Set.

- 33 pc kit services most U.S. manufactured motorcycles
- From battery service, cable and clutch adjustments, to gas tank and seat removal, this set covers roadside maintenance and emergency repairs
- Conveniently organized and stored in a gas tank shape bag measuring
   10" L, 5 1/2" W, and 2 1/4" H and is small enough to fit almost anywhere
- Visit www.snapon.com for the full list of set components and applications

## **Motorcycle Special Application**



#### MTPV1000 Peak Voltage Tester (Blue-Point®). **Optional Accessories**

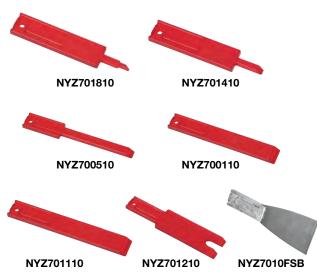
- 0 400 AC/DC A clamp-on probe (EETA501C)
- 0 1,000 AC/DC A clamp-on probe (EETA502C)
- Boot Hook Hanger (EEDM503B1)
- K-type temperature adaptor ( EEDM506B)
- Heavy duty surface probe for EEDM506B (EETH502B)
- Heavy duty gas probe for EEDM506B (EETH503B)

#### **Applications**

- Peak voltage measurement of secondary ignition systems on all types of vehicles and pleasure craft
- CDI ignition diagnosis on motorcycles, ATVs and snowmobiles
- Digital multimeter functions to measure battery, sensor and circuit voltage
- Check continuity of wiring and resistance of ignition wires

- Tester automatically selects the best range for taking a measurement
- on V DC, V AC and ohms
   Use AC/DC voltage ranges to check ignition coil primary, ignition pulse generator, exciter coil and battery
- Add adapters to measure temperature, rpm, pressure and amps
- . Measure ohms to determine resistance of a coil or spark plug
- Use the continuity buzzer for finding breaks or shorts in wires
- Large, easy to read, 4,000 count LCD and bar graph to easily view rapidly changing input signals
- · Lock readings on display with data hold
- View + or spark readings with the push of a button
- Measure peak voltage of ignition coil and secondary spark
- Input connector for kV probe
- Auto power off to conserve battery power when not in use
- · Includes test instrument, test lead set with alligator clips, protective rubber boot, kV probe, soft carrying case, 9 V battery and instruction manual

## Aviation Specialty Service Tools –



#### NYROC® Blades

Blade Size, inches	Description	Pack of 10	Pack of 200
1/8 wide	General Use	NYZ701810	NYZ7018200
1/4 wide	General Use	NYZ701410	NYZ7014200
1/2 wide	General Use	NYZ700510	NYZ7005200
3/4 wide	General Use	NYZ703410	NYZ7034200
1 wide	General Use	NYZ700110	NYZ7001200
1 wide	Button Head Rivet	NYZ701110	NYZ7011200
1 1/2 wide	Highlock for 3/8 high locks	NYZ701210	NYZ7012200

Blades available in 10 pack and 200 pack quantities only.

NYZ7010FSB Flexible Steel Blade. Use with NYZ7026EH Rubber Handle.



#### Complete Kits

#### NYZ7000MDKIT Master Mastic Removal Kit.

- · Saves most of the time and labor involved to remove PRC and other mastics from every area of an aircraft without damage to the substrate
- Speed controllable vibration gun permits infinitely variable job performance
- Included pneumatic blade sharpener rapidly puts an edge on all NYROC blades up to 1" width right at the job site

  Completely portable system is fully grounded and antistatic
- · Kit includes medium duty Vibro gun, pneumatic blade sharpener, (1) antistatic vacuum bag, (1) sharpening disc, (1) manual handle, (2) 1" NYROC blades, (2) 1/2" NYROC blades, (2) 1/4" NYROC blades, blade locks and connecting hoses in padded storage case

#### NYZ7007HD Manual Mastic Removal Kit.

- · Hand kit is ideal for aviation, automotive and industrial use especially for delicate jobs and limited access scraping applications
- NYROC blades are sharpened with sandpaper, small stone or optional pneumatic sharpener
- Kit includes (6) 1" NYROC blades, (6) 1/2" NYROC blades, (3) 1/4" NYROC blades and ergonomic rubber handle

## **Specialty Service Tools**



## Blade Sharpener NYZ7000S Pneumatic Blade Sharpener.

- Pneumatic powered sharpener quickly sharpens all NYROC® blades up to 1" W
- · Consistently sharpens blades to the optimal 51° angle
- Operates with single push button
- Connects directly to shop air
- Removed material is collected in disposable antistatic vacuum bag attached directly to the discharge chute

NYZ7025H50

#### Accessories

#### NYZ7004VB AntiStatic Vacuum Bags.

- · Antistatic vacuum bags for NYZ7000S blade sharpener

#### NYZ700AD Abrasive Sharpening Discs.

- Abrasive sharpening discs for NYZ7000S blade sharpener

#### NYZ7026EH NYROC Blade Holder.

- Vulcanized rubber padded blade holder, works exclusively with NYROC blades
- Fits comfortably in the users hand, reduces operator fatigue and helps to prevent injury

#### **Guns and Hoses**

#### NYZ7025H50 Air Hose (AntiStatic).

- NONSTAT® antistatic 1/4" hose is fully grounded to prevent static discharge
- Hose is ideal for environments and projects where static control is essential
- 50' long

#### NYZ7024H100 Air Hose (AntiStatic).

Same as NYZ7025H50 except 100' long

#### NYZ7006MG Vibro Gun Kit.

- Kit includes medium duty Vibro gun, 1", 1/2" and 1/4" NYROC blades (1 ea.) plus blade locks in black kit bag
- Medium duty Vibro gun adds pneumatic power to all scraping jobs. using standard NYROC blades





AVPW716

AFPW38

#### Aircraft Vacuum/Fuel Pump Wrenches AVPW716 Aircraft Vacuum Pump Wrench.

- Removes and replaces vacuum pump flange nuts on aviation and experimental aircraft
- Use with any 1/4" drive extension
- Easily fits into tight areas between the pump and nearby accessories
- Cut down head design adds greater flexibility than a wrench with a bent shank

Applications Include: Cessna®: Skyhawk, Skylane, Stationair Piper®: Cub, Warrior, Archer, Seminole, Aztec, Navaho, Chieftain Mooney®: M20 series, M200 series, Ovation, Acclaim Beechcraft®: Bonanza, Duchess, Baron Cirrus®: SR20 and SR22 aircraft **AFPW38 Aircraft Fuel Pump Wrench.** 

- . Small crowfoot which will remove and install the fuel primer/injector line on Continental® and Lycoming® engines
- Can be used with a 1/4" drive extension and will easily fit into tight areas



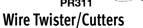
## Aircraft Oil Filter Wrench

#### AOFW2 Aviation Oil Filter Wrench.

- Oil filter wrench can be used for installing and removing oil filters on all standard general aviation aircraft with 1" hex oil filters
- Compact size allows for reach in restricted areas
- 3/8" drive torque wrench
- Please refer to Snap-on® SS306G Torque Chart for formula to obtain the correct applied torque

## Safety Wiring (Blue-Point®)





Stock No.	Description/Features	Wire Capacity, inches	Overall Length, inches	Wire Retainer				
RWTP6	Reversible Wire Twister/Cutters	.020 to .041	8 1/2	No				
RWTP9	Reversible Wire Twister/Cutters	.020 to .051	10 1/2	No				
GA311C	Wide range of applications.	.060	10 1/2	No				
PR311	Similar to GA311C, but not spring loaded. Right hand only with manual return.	.060	10 1/2	No				
WT11B	Small size for use in tight quarters.	.041	8 1/2	No				
WTR1A	Reversible wire twisters let you perform right and left hand twist with the same tool. Spring return and control knob.	.041	8 <sup>3</sup> /4	No				
WTRW6A	Reversible wire twister lets you perform right and left hand twist with the same tool. Spring return and control knob. Oval cushioned throat captures and holds wire firmly.	.041	6	Yes				



#### Wire Twisters

Cushion throat wire twisters feature a polyurethane filler that is bonded into the tool's cutter head to help prevent flying wire bits. A special undercut design helps maintain cutting edges and increases tool durability. Ideal for assembly line applications.



WT105-2004

WT105-2516

## Safety Wire

Stock No.	Wire Size, inches	Container
WT105-2004	.020	1/4 lb Spool
WT105-3204	.032	1/4 lb Spool
WT105-4204	.041	1/4 lb Spool
WT105-2016	.020	1 lb Canister
WT105-2516	.025	1 lb Canister
WT105-3216	.032	1 lb Canister
WT105-4116	.041	1 lb Canister
WT105-5116	.051	1 lb Canister

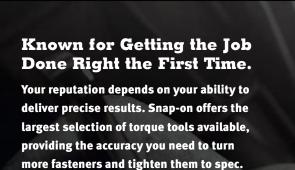












## Torque in Less Time.

#### TechAngle® Electronic Torque Wrench —

Performs the job of multiple torque wrenches and an angle gauge to complete precise "torque to yield" specifications. Angle calculation is based on the same gyroscope technology that keeps helicopters flying level.

#### Techwrench® Electronic Torque Wrench —

Revolutionized the industry. Electronic easy-touse push button tool that precisely measures



## **Techwrench® Torque Wrenches**

TechAngle® torque wrenches are truly revolutionary. They do the job of multiple torque wrenches and an angle gauge to complete precise "torque plus turn" specifications at a fraction of the cost. Even better, it saves you some serious time on every head bolt or connecting rod nut. www.torqueinlesstime.com

#### **TechAngle**

Eliminates the need for angle gauges and protractors, providing the most accurate and fastest way to achieve torque plus angle tightening sequences now specified by many manufacturers.

- . Digital readout shows torque setting then changes to the follow up angle
- Not affected by ratcheting
- Angle calculation based on the same gyroscope technology that keeps helicopters flying level
- Torque accuracy: 2% CW, 3% CCW from 20 to 100% F.S. 4% CW, 6% CCW from 10 to 19% F.S. 8% CW, 10% CCW from 5 to 9% F.S.
- Angle accuracy ±1% of reading ±1°@ angular velocity >10°/sec <180°/sec.
- Display resolution 1°
- More information at www.snapon.com/torque/techangle and www.torqueinlesstime.com
- Dual 80 technology on all 72 and 80 tooth



#### ATECH2FR100A

#### TechAngle Models/2% Accuracy

Specifications	ATECH1FR240 †	ATECH2FR100A †	ATECH3FR250A †	ATECH4R600 †
Square Drive, inches	1/4	3/8	1/2	3/4
Head Type	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head	Sealed Fixed Head*
Gear Teeth	72	80	80	32
<b>Gear Action</b>	5°	4.5°	4.5°	11°
Range, in Ib	24-240	60-1,200	150-3,000	720-7200
Range, ft lb	2-20	5-100	12.5-250	60-600
Range, N•m	6.7-27.2	13.5-135.0	17.5-340	81-813
Angle Range	5-360°	5-360°	5-360°	5-360°
Head Depth, inches	<sup>7</sup> / <sub>16</sub>	5/8	3/4	1 <sup>1</sup> /4
Head Width, inches	7/8	1 <sup>5</sup> /32	1 <sup>5</sup> /8	2 <sup>1</sup> / <sub>2</sub>
Operating Temperature	40-110 °F (5-42 °C)	40-110°F (5-42 °C)	40-110 °F (5-42 °C)	40-110 °F (5-42 °C)
Storage Temperature	0-122 °F (-20-50 °C)	0-122 °F (-20-50 °C)	0-122 °F (-20-50 °C)	0-122 °F (-20-50 °C)
Humidity	up to 90% noncondensing	up to 90% noncondensing	up to 90% noncondensing	up to 90% noncondensing
<b>Housing Color</b>	Grey	Grey	Grey	Black
Length, inches	15	17	26	49
Ratchet Service Kit	RKRT72	RKRF80	RKRS80	RKRQC4

<sup>\*</sup>Includes protective boot.

## Standard Models / 2% Accuracy

Stallualu Muue				
Specifications	TECH1FR240 †	TECH2FR100 †	TECH3FR250 †	TECH4R600 †
<b>Square Drive, inches</b>	1/4	3/8	1/2	3/4
Hood Tune	Sealed Flex	Cooled Floy Head	Sealed Flex Head	Sealed Fixed
Head Type	Head	Sealeu Flex Heau	Sealeu Flex Heau	Ratchet
Gear Teeth	72	80	80	32
<b>Gear Action</b>	5°	4.5°	4.5°	11°
Range, in Ib	24-240	60-1,200	300-3,000	720-7,200
Range, ft lb	2-20	5-100	25-250	60-600
Range, N•m	2.7-27.12	6.7-135	34-339	81-813
Head Depth, inches	<sup>7</sup> / <sub>16</sub>	<sup>5</sup> /8	3/4	1 <sup>1</sup> /4
Head Width, inches	7/8	1 <sup>5</sup> /32	1 <sup>5</sup> /8	2 <sup>1</sup> / <sub>2</sub>
<b>Housing Color</b>	Red	Grey	Red	Red
Length, inches	15 <sup>1</sup> /4	17 <sup>1</sup> /4	26 <sup>1</sup> / <sub>4</sub>	48
<b>Ratchet Service Kit</b>	RKRT72	RKRF80	RKRS80	RKRQC4
†(6				

#### Techwrench (all models)

- · Manual preset and automatic track and peak hold modes
- Torque units conversion: N•m, ft lb, in lb
- Audible (tone) and tactile (vibrating handle) preset alerts
- Display resolution: 0.1 ft lb, 0.1 N•m, 1 in lb
- · Each button has only one function (power on, preset increase, preset decrease, unit of measure select)
- Comfortable, nonslip grip
- Stand on handle bottom keeps tool from rolling off flat surface
- Sealed flex head ratchets move ±15°
- 3 "AA" lithium cells included
- Low battery indicator and auto shut off (after 2 minutes idle)
- Operating temperature 40-110 °F (5-42 °C)
   Storage temperature 0-122 °F (-20-50 °C)
- Humidity up to 90% noncondensing
- · Designed to withstand shocks without failure
- Splash proof, protects against water and most automotive shop fluid
- ISO-6789-2003 and ASME® B107.300 standards compliant
- Certificate of N.I.S.T. traceability for 20% to 100% of full scale
- Includes storage case
- More information at www.snapon.com/torque/techwrench
- Dual 80 technology on all 72 and 80 tooth



TECH2R100

## Standard Models/2% Accuracy/Fixed Head

Specifications	TECH1R240 †	TECH2R100 †	TECH3R250 †				
<b>Square Drive, inches</b>	1/4	3/8	1/2				
Hood Time	Sealed Fixed	Sealed Fixed	Sealed Fixed				
Head Type	Ratchet	Ratchet	Ratchet				
Gear Teeth	72	80	80				
<b>Gear Action</b>	5° 4.5°		4.5°				
Range, in lb	24-240 60-1,200		300-3,000				
Range, ft lb	2-20	5-100	25-250				
Range, N•m	2.7-27.12 6.7-135		34-339				
Head Depth, inches	7/16	5/8	3/4				
Head Width, inches	7/8	1 <sup>5</sup> /32	1 <sup>5</sup> /8				
<b>Housing Color</b>	Red Red		Red				
Length, inches	15 <sup>1</sup> /4	15 <sup>1</sup> / <sub>4</sub> 17 <sup>1</sup> / <sub>4</sub>					
Ratchet Service Kit	RKRT936	RKRF936	RKRS936				

† **(** €

## Techwrench (standard models)

- Torque accuracy ratchet head models: 2% CW, 3% CCW from 20-100% F.S. 4% CW, 6% CCW from 10-19% F.S. 8% CW, 10% CCW from 5-9% F.S. (TECH2 only)
- Torque accuracy interchangeable head models: 4% CW, 6% CCW from 20-100% F.S. 8% CW, 12% CCW from 10-19% F.S. 16% CW, 20% CCW from 5-9% F.S. (TECH Y only)
- Tolerance (early preset alert) 2% of torque setting



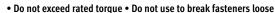
TECH2FR100

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration. (unless otherwise indicated) All wrenches and drivers are calibrated per ASME and ISO standards for accuracy, from 20 to 100% of full scale, using NIST traceable equipment.











## TOROUE

## **Techwrench® Torque Wrenches**

Techmemory<sup>™</sup> electronic torque wrenches include TORQLOG®. a downloading software on CD for IBM® PCs and a 6' RS232 serial cable. 2 Microsoft® Excel® templates are also in the CD for customer convenience. The download template provides basic statistical analysis of dumped readings. The date/time template adds a date and time stamp to each reading while the wrench is attached to the PC. Templates can be customized to suit specific user needs. 6 button operation, RS232 port for downloading data to computer for analysis. All models include 3 "AA" batteries for power. Comfortable, nonslip grip. Stand on handle bottom keeps tool from rolling off flat surface. Flex head ratchet moves 15°. All models have a low battery indicator and auto shutoff (after 2 minutes idle). Designed to withstand shocks without failure. Splash proof to protect against water and most automotive shop fluid. Includes storage case. Complies with ISO®-6789-2003 and ASME® B107.300 Standards. Additional technical information is available at www.snapon.com/torque/techwrench.

#### **Techmemory** Features:

- Torque accuracy TECH1, 2 and 3 ratchet head models: 1% CW. 1.5% CCW 2% CW. 3% CCW from 10 to 19% F.S. 4% CW, 8% CCW from 5 to 9% F.S. (TECH2 only)
- Torque accuracy TECH4 ratchet head model: 2% CW, 3% CCW from 20 to 100% F.S. 4% CW. 6% CCW from 10 to 19% F.S.
- Torque accuracy interchangeable head models: 4% CW. 6% CCW from 20 to 100% F.S. 8% CW. 12% CCW from 10 to 19% F.S. 4% CW, 20% CCW from 5 to 9% F.S. (TECH Y only)
- Manual peak store, recall, clear and print functions
- Memory capacity: 1000 peak readings
- TechLog<sup>™</sup> download software CD included
- Excel® Download Template with basic statistics
- Date/time Excel download template (wrench connected to PC)
- Serial RS232, with selectable 1200 to 19.2K baud rate
- · Serial cable: 6' with 9 pin PC interconnect included
- Dual 80<sup>®</sup> technology on all 72 and 80 tooth Applications:
- Automotive service: printout provides assurance that lug nuts, head bolts, etc. have been tightened to specification
- · Assembly operations: gather data to manage quality
- Manufacturing ISO and SPC®: generate statistics for technical files and process auditing
- . Military: document compliance with maintenance schedules and inspections
- Aviation: include torque data in maintenance reports

#### **Techwrench Features:** (all "D" models)

- Hidden torque preset adjustment (momentary displays at Zero/Tare)
- Hidden tolerance adjustment + and 1 to 16% of preset value



#### Standard Models/4% Accuracy/Interchangeable Head and "D" Models

Stock No.	Range, in lb	Range, ft lb	Range, N•m	Shank Diameter	Housing Color	Length, inches
TECH1J240 †	24-240	2-20	2.7-27.12	J (0.425")	Red	13 3/4
TECH2Y100 †	60-1,200	5-100	6.7-135	Y (0.560")	Red	15 1/2
TECH3X250 <sup>†</sup>	300-3,000	25-250	34-339	X (0.735")	Red	23 3/4
TECH4Z600 †	720-7,200	60-600	81-813	Z (0.990")	Red	42
TECH1JD240 †	24-240	2-20	2.7-27.12	J (0.425")	Grey	13 3/4
TECH2YD100 †	60-1,200	5-100	6.7-135	Y (0.560")	Grey	15 <sup>1</sup> / <sub>2</sub>
TECH3XD250 †	300-3,000	25-250	34-339	X (0.735")	Grey	23 3/4
TECH4ZD600 †	720-7,200	60-600	81-813	Z (0.990")	Grey	42

Wrench length specification does not include the length of interchangeable heads.

The certification of accuracy provided per ASME and ISO standards is 20 to 100% of full scale. See pg 255-258 for Interchangeable Tool Heads.





## Memory Models/1% Accuracy/Ratcheting/Flex Head

Specifications	TECH1FRM240 †	TECH2FRM100 †	TECH3FRM250 †	TECH4RM600 †						
Square Drive, inches	1/4	3/8	1/2	3/4						
Head Type	Flex Head	Flex Head	Flex Head	Fixed Ratchet						
Gear Teeth	72	80	80	32						
Gear Action	5°	4.5°	4.5°	11°						
Range, in lb	24-240	60-1,200	300-3,000	720-7,200						
Range, ft lb	2-20	5-100	25-250	60-600						
Range, N•m	2.7-27.12	6.7-135	34-339	81-813						
Head Depth, inches	7/16	5/8	3/4	1 <sup>1</sup> /4						
Head Width, inches	7/8	1 <sup>5</sup> /32	1 5/8	2 1/2						
Torque Setting Resolution	0.1 ft lb (0.1 N•m, 1 in lb)	1 ft lb (1 N•m, 1 in lb)	1 ft lb (1 N•m, 1 in lb)	1 ft lb (1 N•m, 1 in lb)						
Overall Length, inches (mm)	15 (381)	17 (432)	26 (660)	48 (1,219)						
Ratchet Service Kit	RKRT72	RKRF80	RKRS80	RKRQC4						
<b>Housing Color</b>	_	Grey	Red	_						
Weight, lbs (kg)	1.7 (.77)	2.2 (.98)	3.7 (1.68)	10.0 (4.54)						
The certification of accura	cy provided per ASME	and ISO standards	The certification of accuracy provided per ASME and ISO standards is 20 to 100% of full scale.							

TECH2YDM100

#### TECH2YM100 Memory Models/4% Accuracy/Interchangeable Head and "D" Models

•	• • • • • • • • • • • • • • • • • • • •	•				
Specifications	TECH1JM240 †	TECH1JDM240 †	TECH2YM100 †	TECH2YDM100 †	TECH3XM250 †	TECH3XDM250 †
Head Type	Interchangeable	Interchangeable	Interchangeable	Interchangeable	Interchangeable	Interchangeable
Range, in Ib	24-240	24-240	60-1,200	60-1,200	300-3,000	300-3,000
Range, ft lb	2-20	2-20	5-100	5-100	25-250	25-250
Range, N•m	2.7-27.12	2.7-27.12	6.7-135	6.7-135	34-339	34-339
Shank Diameter	J (0.425")	J (0.425")	Y (0.560")	Y (0.560")	X (0.735")	X (0.735")
Torque Setting	0.1 ft lb	0.1 ft lb	1 ft lb	1 ft lb	1 ft lb	1 ft lb
Resolution	(0.1 N•m, 1 in lb)	(0.1 N•m, 1 in lb)	(1 N•m, 1 in lb)	(1 N•m, 1 in lb)	(1 N•m,1 in lb)	(1 N•m, 1 in lb)
Housing Color	Red	Grey	Red	Grey	Red	Grey
Overall Length, in (mm)	13 <sup>1</sup> / <sub>2</sub> (343)	13 1/2 (343)	15 <sup>1</sup> / <sub>2</sub> (394)	15 <sup>1</sup> / <sub>2</sub> (394)	23 1/2 (597)	23 1/2 (597)
Weight, Ibs (kg)	1.6 (.73)	1.6 (.73)	1.9 (.86)	1.9 (.86)	2.9 (1.32)	2.9 (1.32)

Wrench length specification does not include the length of interchangeable heads. The certification of accuracy provided per ASME and ISO standards is 20 to 100% of full scale. See pg 255-258 for interchangeable tool heads.

## Adjustable Click-Type

The QD Series of click-type Torque Instruments features an innovative design that provides consistently accurate readings and rugged, trouble free performance.

#### Features:

- Certificate of Calibration. A Certificate of Calibration (right) is
  packed with every QD series torque instrument. Actual certification
  readings and individual instrument serial number are included. Each
  torque instrument, as calibrated at the factory, is certified to meet the
  accuracy specified in ASME® and was calibrated on a torque standard
  traceable to the National Institute of Standards Technology (NIST®)
- Accuracy. All QD series torque instruments are accurate to ±4% clockwise and ±6% counterclockwise from 20% of full scale to full scale
- Long Life Ratchet Head. QD series torque instruments feature the Snap-on® high strength sealed ratchet head. Sealed ratchet heads keep out dirt and moisture while being virtually maintenance free. Applies to all QD series ratchet head models. (U.S. Patent 6,125,722) applies to 1/4, 3/8 and 1/2" drive ratchet head models only
- Minimal Friction "Hour Glass" Cam. Unique cam design minimizes friction due to reduced contact area between the cam and internal tube wall. Cam retains and releases lubricant where needed. Reduces friction results in more accurate and repeatable torque values

	Ce	rtificate of Cal	ibration				
Model No.	QD2FR75		Serial Number		0198492147		
Type Range Manufacturer	Micrometer adju 15.00 ft-lb - 75.0 Snap-on	stable 00 ft-1b	Calibration equi Accuracy of cali	pment brator	Versatest .25%		
Set Torque (ft-lb)		Readings	{ft-lb]				
Clockwise torque (Tole	rance: 4.0%)						
15.00 45.00 75.00	15.11 0.7% 44.44 1.2% 75.96 1.3%	15.11 0.7% 44.44 -1.2% 77.13 2.8%	15.11 0.7% 44.44 1.2% 77.13 2.8%	15.11 44.44 77.13	0.7% -1.2% 2.8%	15.11 44.44 77.13	-1.2%
Counterclockwise torque	(Tolerance: 6.0%)						
15.00 45.00 75.00	15.23 1.5% 45.30 0.7% 72.32 -3.6%	15.23 1.5% 45.30 0.7% 72.32 -3.6%	15.23 1.5% 45.30 0.7% 72.32 -3.6%	15.13 45.30 72.32	0.9% 0.7% -3.6%	15.55 45.30 72.32	0.7%
Result: Measured values	s are within tolerance ac	cording to : ISO 6789				_	_
Date 1/21/05	Operator	Eric Brathwaite	Supervisor	Gilbert C	ervantes		

- Laser Etched Scale. Easier to read under most light conditions.
- Positive Stop. Instrument cannot be accidentally disassembled if wound down past scale
- Long Term Protection. Each instrument includes a storage case







U.S. Torque Instruments (in lb)/±4% Accuracy

Square Drive, Inches	Stock No.	Head Style	Gear Teeth	Swing Arc	Range, min	Range, max	Increments	Length, inches	Head Width, inches	Head Depth, inches	Storage Case	Ratchet Service Kit
1/4	QD150	Fixed	_	_	10 in lb	50 in lb	.5 in lb	9 3/4	5/8	13/16	PBQD1	_
1/4	QD1R50	Fixed Ratchet	36	10°	10 in lb	50 in lb	.5 in lb	9 7/8	7/8	7/16	PBQD1	RKRT936
1/4	QD1200	Fixed	_	_	40 in lb	200 in lb	1 in lb	10 <sup>15</sup> / <sub>16</sub>	5/8	13/16	PBQD1	_
1/4	QD1R200	Fixed Ratchet	36	10°	40 in lb	200 in lb	1 in lb	<b>11</b> <sup>1</sup> /16	7/8	7/16	PBQD1	RKRT936
3/8	QD2R200	Compact Ratchet	36	10°	40 in lb	200 in lb	1 in lb	11 <sup>1</sup> /16	7/8	7/16	PBQD1	RKRFC936
3/8	QD21000	Fixed	_	_	200 in lb	1,000 in lb	5 in lb	<b>14</b> 9/16	1	1 3/16	PBQD2	_
3/8	QD2R1000	Fixed Ratchet	36	10°	200 in lb	1,000 in lb	5 in lb	15 <sup>9</sup> / <sub>16</sub>	1 <sup>5</sup> /32	9/16	PBQD2	RKRF936
1/2	QD3R1600	Fixed Ratchet	36	10°	320 in lb	1,600 in lb	10 in lb	19	1 <sup>5</sup> /8	3/4	PBQD3	RKRS936
1/2	QD32500	Fixed	_	_	500 in lb	2,500 in lb	10 in lb	18 <sup>1</sup> / <sub>8</sub>	1	1 <sup>1</sup> / <sub>4</sub>	PBQD3	_
1/2	QD3R2500	Fixed Ratchet	36	10°	500 in lb	2,500 in lb	10 in lb	19 <sup>1</sup> / <sub>8</sub>	1 <sup>5</sup> /8	3/4	PBQD3	RKRS936

## **U.S.** Torque Instruments (ft lb)

•												
3/8	QD275	Fixed	_	_	5 ft lb	75 ft lb	.5 ft lb	<b>14</b> 9/16	1	1 <sup>3</sup> / <sub>16</sub>	PBQD2	_
3/8	QD2FR75	Flex Ratchet	36	10°	5 ft lb	75 ft lb	.5 ft lb	15 <sup>3</sup> / <sub>4</sub>	1 5/32	9/16	PBQD2	RKRF936
3/8	QD2100	Fixed	_	_	20 ft lb	100 ft lb	.5 ft lb	14 <sup>9</sup> / <sub>16</sub>	1	1 3/16	PBQD2	_
3/8	QD2R100	Fixed Ratchet	36	10°	20 ft lb	100 ft lb	.5 ft lb	15 <sup>9</sup> / <sub>16</sub>	1 5/32	9/16	PBQD2	RKRF936
1/2	QD3150	Fixed	_	_	30 ft lb	150 ft lb	1 ft lb	18	1	1 1/4	PBQD3	_
1/2	QD3R150	Fixed Ratchet	36	10°	30 ft lb	150 ft lb	1 ft lb	19	1 <sup>5</sup> /8	3/4	PBQD3	RKRS936
1/2	QD3250	Fixed	_	_	50 ft lb	250 ft lb	1 ft lb	23 3/16	1	1 1/4	PBQD3	_
1/2	QD3R250	Fixed Ratchet	36	10°	50 ft lb	250 ft lb	1 ft lb	24 3/16	1 <sup>5</sup> /8	3/4	PBQD3	RKRS936
1/2	BRUTUS3R250D	Fixed Ratchet	36	10°	50 ft lb	250 ft lb	1 ft lb	28	1 3/8	3/4	_	RKRS936
3/4	QD4400	Fixed	_	_	75 ft lb	400 ft lb	2.5 ft lb	33 3/4	1 1/2	1 1/2	PBQC4	_
3/4	QD4R400	Fixed Ratchet	32	11°	75 ft lb	400 ft lb	2.5 ft lb	35 3/4	2 1/2	1 1/4	PBQC4	RKRQC4
3/4	QD4600	Fixed	_	_	100 ft lb	600 ft lb	5 ft lb	40 3/4	1 <sup>1</sup> / <sub>2</sub>	1 1/2	PBQC4	_
3/4	QD4R600	Fixed Ratchet	32	11°	100 ft lb	600 ft lb	5 ft lb	42 3/4	2 1/2	1 1/4	PBQC4	RKRQC4
1	QD5R1000	Fixed Ratchet	30	12°	200 ft lb	1,000 ft lb	5 ft lb	71	3 1/8	1 1/2	PBQC5	RKRQC5

## Metric Torque Instruments (kg m, kg cm)

		` ' '											
3/8	QD2RM1000	Flex Head	36	10°	200 kg cm	1,000 kg cm	5 kg cm	15 <sup>9</sup> / <sub>16</sub>	1 5/32	9/16	PBQD2	RKRF936	
1/2	QD3RM30	Fixed Ratchet	36	10°	6 ka m	30 ka m	.2 ka m	19	1 5/8	3/4	PBQD3	RKRS936	1

## **Newton Meter Torque Wrenches/±4% Accuracy**

1	1/4	QD1RN6	Fixed Ratchet	36	10°	10 dN•m	60 dN•m	.5 dN•m	9 7/8	7/8	7/16	PBQD1	RKRT936
1	1/4	QD1RN25	Fixed Ratchet	36	10°	50 dN•m	250 dN•m	1 dN•m	11 3/4	7/8	7/16	PBQD1	RKRT936
3	3/8	QD2RN25	Compact Ratchet	36	10°	50 dN•m	250 dN•m	1 dN•m	11 3/4	7/8	7/16	PBQD2	RKRFC936
3	3/8	QD2RN50	Fixed Ratchet	36	10°	10 N∙m	50 N•m	.5 N∙m	15 <sup>9</sup> / <sub>16</sub>	1 5/32	9/16	PBQD2	RKRF936
3	3/8	QD2RN100	Fixed Ratchet	36	10°	20 N∙m	100 N∙m	.5 N∙m	15 <sup>9</sup> / <sub>16</sub>	1 5/32	9/16	PBQD2	RKRF936
1	1/2	QD3RN200	Fixed Ratchet	36	10°	40 N∙m	200 N•m	2 N•m	19	1 5/8	3/4	PBQD3	RKRS936
1	1/2	QD3RN350	Fixed Ratchet	36	10°	70 N•m	350 N•m	2 N•m	24 <sup>3</sup> / <sub>16</sub>	1 <sup>5</sup> /8	3/4	PBQD3	RKRS936
3	3/4	QD4RN800	Fixed Ratchet	32	11°	150 N∙m	800 N∙m	5 N∙m	42 3/4	2 <sup>1</sup> / <sub>2</sub>	1 1/4	PBQC4	RKRQC4

All Snap-on torque wrenches, drivers and testers are provided with a Certificate of Calibration, (unless otherwise indicated)

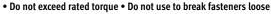
All wrenches and drivers are calibrated per ASME and ISO® standards for accuracy, from 20 to 100% of full scale, using NIST traceable equipment.













## Adjustable Click-Type, TQ Series

### TQ Thumb Wheel Series:

- Flex Head Models offer sealed Snap-on® ratchets, which flex up to 15° to provide knuckle and obstruction clearance
- Fixed Ratchet Models offer a sealed Snap-on ratchet that is rigidly fixed in line with the torque body
- Snap-on Sealed Ratchet Head is virtually maintenance free; more time working with the tool, less time on tool maintenance
- Thumb Screw Type Adjustment is faster than cycling through a
  micrometer style torque wrench. Guard prevents setting from being
  changed accidentally. Setting is displayed in window. Conversion
  table to N•m displayed on handle
- Sealed Neck keeps dust and grit away from the torque mechanism for longer tool life
- "Split Beam" Measuring Element provides accurate, reliable readings and eliminates the heavy coil spring used in conventional click-type wrenches. This yields fewer moving parts, reducing friction and wear

- Cushion Grip Handle provides comfort plus control and resists most automotive fluids
- Designed for measuring torque in a clockwise direction only. Wrench is not reversible
- **( €** EU GB, FR, ES, DE

#### **Guaranteed Accuracy:**

TQ Series - Accurate within  $\pm 4\%$  of any clockwise setting from 20% of full scale to full scale.

#### TQR400E/TQR600E only:

- ±4% of setting when used in the following orientations:
- · Main body vertical orientation
- Torque wrench square drive axis with vertical orientation
- In all other positions, guaranteed accuracy is ±5%. Accuracy is guaranteed in the clockwise direction from 20% of capacity to full capacity



#### TQR600E

## U.S. Reading Torque Wrenches with Conversion Scale/±4% Accuracy

Square Drive, inch	Stock No.	Head Style	Gear Teeth	Swing Arc	Range, max	Range, min	Increments	Length, inches	Head Width, inches	Head Depth*, inches	Ratchet Service Kit	Case
3/8	TQFR50B	Flex Head	30	12°	600 in lb	120 in lb	10 in lb	17 <sup>5</sup> /8	1 <sup>1</sup> /8	9/16	RKQJA2D	PB50A
3/8	TQFR100B	Flex Head	30	12°	100 ft lb	20 ft lb	2 ft lb	17 <sup>5</sup> /8	1 <sup>1</sup> /8	9/16	RKQJA2D	PB50A
3/8	TQFR50C	Flex Head	36	10°	600 in lb	120 in lb	10 in lb	18 <sup>5</sup> /8	1 <sup>1</sup> /8	9/16	RKRF936	PBTQ2
3/8	TQFR100C	Flex Head	36	10°	100 ft lb	20 ft lb	2 ft lb	18 <sup>5</sup> /8	1 <sup>1</sup> /8	9/16	RKRF936	PBTQ2
3/8	TQR100B	Fixed Ratchet	30	12°	100 ft lb	20 ft lb	2 ft lb	18 <sup>5</sup> /8	1 5/32	5/8	RKRF936	PBTQ2
1/2	TQFR250E	Flex Head	36	10°	250 ft lb	40 ft lb	5 ft lb	22 3/8	1 <sup>5</sup> /8	3/4	RKRS936	PBTQ3
1/2	TQR250E	Fixed Ratchet	36	10°	250 ft lb	40 ft lb	5 ft lb	22 3/8	1 <sup>5</sup> /8	3/4	RKRS936	PBTQ3
3/4	TQR400E**	Detach Ratchet	32	11°	400 ft lb	130 ft lb	10 ft lb	38 1/8	2 1/2	1 1/4	RKRTQ4	PBTQ4
3/4	TQR600E**	Detach Ratchet	32	11°	600 ft lb	200 ft lb	10 ft lb	48 5/8	2 1/2	1 1/4	RKRTQ4	PBTQ4

Note: Difference between B and C are ratchet head and handle type.

Newton Meter Torque Wrenches with Conversion Scale /+ 4% Accuracy

INCMION	MICICI IOI	que wienci	IC3 WI	tii Coii	ACIDIOII D	<u> </u>	Accuracy				
3/8	TQFRN130B	Flex Head	30	12°	130 N∙m	25 N•m	5 N•m	17 5/8	1 <sup>1</sup> /8	9/16	RKQJA2D
3/8	TQFRN68B	Flex Head	30	12°	68 N∙m	14 N∙m	2 N•m	17 5/8	1 <sup>1</sup> /8	9/16	RKQJA2D
1/2	TOFRN350D	Flex Head	32	11°	350 N•m	70 N∙m	5 N∙m	22 1/8	1 5/8	3/4	R33BFRK

Metric Torque Wrenches with Conversion Scale/±4% Accuracy

							- 1				
1/2	TQFRM34D	Flex Ratchet	32	11°	34 kg m	5.0 kg m	1.0 kg m	22 1/8	1 <sup>5</sup> /8	3/4	RKTQ3
3/4	TORM80C	Detach Ratchet	32	11°	80 kg m	26.0 kg m	2.0 kg m	48	2 3/8	1 1/4	RKRQC4

All wrenches are nonreversible.

\*Does not include square drive dimension.

\*\*3 piece construction disassembles for storage/transport.

All Snap-on torque wrenches, drivers and testers are provided with a Certificate of Calibration. (unless otherwise indicated)
All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20 to 100% of full scale, using NIST® traceable equipment.

## **TORQOMETER®**







TE50FUA

**TE175L** 

## U.S. Reading/Standard 2% Accuracy

Square Drive, inches	Basic Models Stock No.	Follow-up Models Stock No.	Signal Models Stock No.	Range	Increments	Length, inches	Width, inches	Head* Depth, inches	Storage Case
///	TE1A	TE1FUA	_	//////	////////			11/11	PB9
1//	TE3A	TE3FUA	_	//////	/ // /////			11/1/	PB9
1//	TE6A	TE6FUA	_	//////	/////			11/11	PB9
///	TE12A	TE12FUA	TE12LA	///////	// ///////			11/11	PB9
///	TE25A	TE25FUA	TE25LA	///////	/////			11/1/	PB9
///	TE50A	TE50FUA	TE50LA	///////	//////	// //		// //	PB9
///	TE12FA	TE12FFUA	TE12FLA	//////	/ // /////			11/1/	PB9
///	TE25FA	TE25FFUA	TE25FLA	//////	/ // /////			11/11	PB9
1//	TE50FA	TE50FFUA	TE50FLA	IIIIII	/////	// ///		11/1/	PB9
///	TE51	TE51FU	TE51L	///////	//////			11/11	T-
///	TE51F	TE51FFU	TE51FL	//////	/////	//		11/11	<b>  -</b>
///	TE100	TE100FU	TE100L	///////	/////	// //	// //	// //	PB8A
///	TE175	TE175FU	TE175L	///////	/	// ///	// //	11/11	PB8A
///	TE250	TE250FU	TE250L	///////	/////	// ///	////	11/11	PB8A
///	TE352A	TE352FUA	TE352LA	///////	/////	// ///	11/1	11 11 111	PB39
///	TE602A	TE602FUA	TE602LA	///////	//////	/// ///	// //		PB39
/	TE803**	TE803FU**	TE803L**	///////	//////	// ///	11 / 111	11/11	<u> </u>
/	TE1003**	TE1003FU**	TE1003L**	////////	//////	// ///	11/1/	11/1/	<u> </u>
/	TE1503 †	TE1503FU †	TE1503L †	////////	//////	//		11/11	<u> </u>
/	TE2003 †	TE2003FU †	TE2003L †		//////	//		11/11	_
////	TE2005 †	TE2005FU †	TE2005L †		//////	//		11/1	_
11/1	TE3005 †	TE3005FU	TE3005L	////////	//////	///	11/11		<b>—</b>

Does not include certificate of calibration.





## **Newton Meter Reading/Standard 2% Accuracy**

Square Drive, inches	Basic Models Stock No.	Follow up Models Stock No.	Signal Models Stock No.	Range, N•m	Increments, N•m	Length, inches	Width, inches	Head* Depth, inches	Storage Case
///	TESI5	_	TESI5L	/	//	// //	11 11 111	11/11	PB9
1//	TESI10	TESI10FU	TESI10L	//	//			11/1/	PB9
1//	TESI20	TESI20FU	TESI20L	//	//		11 11 111	11/11	PB9
1//	TESI30	TESI30FU	TESI30L	//	/			11/11	PB9
1//	TESI60	TESI60FU	TESI60L	//	/	// //	11 11 111	11/1/	PB9
1//	TESI70	TESI70FU	TESI70L	//	/	// //	11 11 111	11/11	PB9
1//	TESI75	TESI75FU	TESI75L	//	/	// //	11 11 111	11/11	PB9
1//	TESI125	TESI125FU	TESI125L	///	/	//	11/11	11/11	PB8A
1/1	TESI200	TESI200FU	TESI200L	///	/	// //	11/11	11/11	PB8A
1//	TESI250	TESI250FU	TESI250L	///	/	// //	// //	11/1/	PB8A
1//	TESI500A	TESI500FUA	TESI500LA	///	//	// //	11/11		PB39
1//	TESI800A	TESI800FUA	TESI800LA	///	//	// //	11/11		PB39
/	TESI1360**	TESI1360FU**	TESI1360L**	////	//		11/11	11/11	_
/	TESI2803 †	TESI2803FU †	TESI2803L †	////	//	//		11/11	_
11/11	TESI2805 †	TESI2805FU †	TESI2805L †	////	//	//	11 11 111	11/11	_
11/1	_	TESI4000FU	TESI4000L	////	///	///	11/1		<b> </b>

\*\*Does not include certificate of calibration.

\*Does not include square drive dimension.

\*\*Includes separately packed 92TQPA 4' tubular extension handle.

†Includes separately packed 93TQPA 5' tubular extension handle.

#### **Guaranteed Accuracy:**

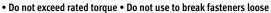
Standard 2% models are accurate within ±2% of the reading from 20% of full scale to full scale clockwise and counterclockwise.











## **TORQOMETER®**



**TER175** TER175L

#### Combination U.S./Newton Meter Reading - Precise 1% Accuracy

Square Drive, Inches	Basic Models Stock No.	Follow up Models Stock No.	Signal Models Stock No.	N•m Range	N•m Increments	U.S. Range	U.S. Increments	Length, inches	Width, inches	Head* Depth, inches	Storage Case
1/4	TER1A	TER1FUA	_	1.7 N•m	.05 N∙m	15 in lb	.5 in lb	9 29/32	2 11/16	1 1/4	PB9
1/4	TER3A	TER3FUA	_	3.5 N•m	0.1 N•m	30 in lb	1 in lb	9 29/32	2 11/16	1 1/4	PB9
1/4	TER6A	TER6FUA	_	8.4 N∙m	0.2 N•m	75 in lb	1 in lb	9 29/32	2 11/16	1 1/4	PB9
3/8	TER12A	TER12FUA	TER12LA	17 N∙m	.5 N•m	150 in lb	5 in lb	9 29/32	2 11/16	1 1/4	PB9
3/8	TER25A	TER25FUA	TER25LA	3,200 N•cm	50 N•cm	300 in lb	5 in lb	9 29/32	2 11/16	1 1/4	PB9
3/8	TER50A	TER50FUA	TER50LA	60 N∙m	1 N•m	600 in lb	20 in lb	12 1/2	2 11/16	1 1/4	PB9
1/2	TER51	TER51FU	TER51L	60 N∙m	1 N•m	600 in lb	20 in lb	15	2 11/16	1 5/16	
1/2	TER100	TER100FU	TER100L	140 N•m	5 N•m	100 ft lb	2 ft lb	16	2 3/4	1 3/8	PB8A
1/2	TER175	TER175FU	TER175L	230 N•m	10 N•m	175 ft lb	5 ft lb	18 3/4	2 3/4	1 3/8	PB8A
1/2	TER250	_	_	340 N•m	10 N•m	250 ft lb	10 ft lb	23 ¾	2 3/4	1 3/8	PB8A
3/4	TER352A	TER352FUA	TER352LA	480 N∙m	10 N•m	350 ft lb	5 ft lb	29 1/8	3 1/4	1 3/8	PB39
3/4	TER602A	TER602FUA	TER602LA	800 N•m	20 N•m	600 ft lb	20 ft lb	40 1/8	3 1/4	1 25/32	PB39
1	TER1003**	_	TER1003L**	1,360 N•m	20 N•m	1,000 ft lb	20 ft lb	66 <sup>13</sup> / <sub>16</sub>	3 %16	2 1/32	_

Does not include certificate of calibration.



#### Combination U.S./Metric Reading - Standard 2% Accuracy

Square Drive, Inches	Basic Models Stock No.	Follow up Models Stock No.	Signal Models Stock No.	Metric Range	Metric Increments	U.S. Range	U.S. Increments	Length, inches	Width, inches	Head Depth*, inches	Storage Case
1/4	TEC1A	TEC1FUA	_	16 kg cm	1 kg cm	15 in lb	.5 in lb	9 29/32	2 11/16	1 1/4	PB9
1/4	TEC3A	TEC3FUA	_	35 kg cm	1 kg cm	30 in lb	1 in lb	9 29/32	2 11/16	1 1/4	PB9
1/4	TEC6A	TEC6FUA	_	90 kg cm	2.5 kg cm	75 in lb	1 in lb	9 29/32	2 11/16	1 1/4	PB9
3/8	TEC12A	TEC12FUA	TEC12LA	175 kg cm	5 kg cm	150 in lb	5 in lb	9 29/32	2 11/16	1 1/4	PB9
3/8	TEC25FA	TEC25FFUA	TEC25FLA	350 kg cm	10 kg cm	25 ft lb	1 ft lb	9 29/32	2 11/16	1 1/4	PB9
3/8	TEC50A	TEC50FUA	TEC50LA	700 kg cm	20 kg cm	600 in lb	20 in lb	12 1/2	2 11/16	1 1/4	PB9
1/2	TEC51	TEC51FU	TEC51L	700 kg cm	20 kg cm	600 in lb	20 in lb	15	2 11/16	<b>1</b> 5/16	_
1/2	TEC100	TEC100FU	TEC100L	14 kg m	.5 kg m	100 ft lb	2 ft lb	16	2 3/4	1 3/8	PB8A
1/2	TEC175	TEC175FU	TEC175L	25 kg m	1 kg m	175 ft lb	5 ft lb	18 ¾	2 3/4	1 3/8	PB8A
1/2	TEC250	TEC250FU	TEC250L	35 kg m	1 kg m	250 ft lb	10 ft lb	23 ¾	2 3/4	1 %	PB8A
3/4	TEC352A	TEC352FUA	TEC352LA	50 kg m	1 kg m	350 ft lb	10 ft lb	29 1/8	3 1/4	1 <sup>25</sup> /32	PB39
3/4	TEC602A	TEC602FUA	TEC602LA	80 kg m	2 kg m	600 ft lb	20 ft lb	40 1/8	3 1/4	1 <sup>25</sup> /32	PB39
1	TEC803**	TEC803FU**	TEC803L**	110 kg m	2 kg m	800 ft lb	25 ft lb	67 3/4	3 9/16	2 1/32	_
1	_	_	TEC1003L**	136 kg m	2 kg m	1,000 ft lb	20 ft lb	67 3/4	3 %16	2 1/32	_
1	_	TEC1503FU †	TEC1503L <sup>†</sup>	200 kg m	5 kg m	1,500 ft lb	25 ft lb	80	4 13/32	2 1/8	_
1	_	TEC2003FU †	TEC2003L †	280 kg m	5 kg m	2,000 ft lb	50 ft lb	80	4 13/32	2 1/8	_
1 1/2	TEC2005 †	TEC2005FU †	TEC2005L †	280 kg m	5 kg m	2,000 ft lb	50 ft lb	80	4 13/32	2 ¾	_
1 1/2	_	TEC3005FU	TEC3005L	400 kg m	5 kg m	3,000 ft lb	50 ft lb	140	5 1/2	2 <sup>13</sup> /16	_

Does not include certificate of calibration.

#### **Guaranteed Accuracy:**

Precise 1% models are accurate within ±1% of the reading from 20% of full scale to full scale clockwise and counterclockwise. Standard 2% models are accurate within ±2% of the reading from 20% of full scale to full scale clockwise and counterclockwise.

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration. (unless otherwise indicated) All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20 to 100% of full scale, using NIST® traceable equipment.

<sup>\*</sup>Does not include square drive dimension.
\*\*Includes separately packed 92TQPA 4' tubular extension handle.

fincludes separately packed 93TQPA 5' tubular extension handle.





## T-handle TORQOMETER®

85TQP

Optional "T"

#### II S Reading Standard 2% Accuracy

0.5.	o.s. Reading Standard 270 Accuracy									Dá	Dars/Extension nanules			
Inp Driv Fem Sq, in	ve Drive	Follow up Models Stock No.	Light Signal Models Stock No.	U.S. Range, ft lb	U.S. Increments, ft lb	Metric Range kg m	Metric Increments, kg m	Length, inches	Width, inches	Head Depth, inches	"T" Bars	Length, inches	Ext., inches	Length, inches
3/2	3/4	TEX602TFUA	TEX602TLA	600	10	_	_	10 1/8	4 3/8	3 3/4	81TQP	45	_	_
3/2	1 1	TEX1003TFUA	TEX1003TLA	1,000	10	_		10 1/8	4 3/8	4 1/8	81TQP	66	_	_
1	1	_	TEX2003TL	2,000	25	_	_	10 1/8	4 3/8	4 7/16	82TQP	18	85TQP	31
1	1 1/2	TEX2005TFU	_	2.000	25	_	-	10 7/8	4 3/8	4 7/16	82TQP	18	85TQP	31

Does not include certificate of calibration.

#### Combination U.S./Metric Reading

		•	•											
3/4	3/4	TEXC602TFUA	TEXC602TLA	600	20	80	2	9	3 1/4	3 3/4	81TQP	45	_	_
3/4	1	TEXC1003TFUA	TEXC1003TLA	1,000	20	136	2	9 1/8	3 1/8	4 1/8	81TQP	66	_	_
1	1	TEXC2003TFU	TEXC2003TL	2,000	50	280	5	10 1/8	4 3/8	4 7/16	82TQP	18	85TQP	31

Does not include certificate of calibration.

-TORQOMETER Torque Drivers - 1/4" Drive

TQSSC4FUA



#### U.S. Reading Standard 2% Accuracy

Standard Basic Models Stock No.	Standard Follow up Models Stock No.	Length, inches	Stubby Basic Models Stock No.	Stubby Follow up Models Stock No.	Length, inches	Range	Increments	
TQS025A	TQS025FUA	8 7/64	TQSS025A	TQSS025FUA	5 1/4	48 in oz/3 in lb	1 in oz/ 1/16 in lb	
TQS050A	TQS050FUA	8 7/64	TQSS050A	TQSS050FUA	5 1/4	96 in oz/6 in lb	2 in oz/ 1/8 in lb	
TQS1A	TQS1FUA	8 7/64	TQSS1A	TQSS1FUA	5 1/4	192 in oz/12 in lb	4 in oz/ 1/4 in lb	
TQS2A	TQS2FUA	8 7/64	TQSS2A	TQSS2FUA	5 1/4	384 in oz/24 in lb	8 in oz/ 1/2 in lb	
TQS2.5A	TQS2.5FUA	8 7/64	TQSS2.5A	TQSS2.5FUA	5 1/4	480 in oz/30 in lb	12 in oz/1 in lb	
TQS4A*	TQS4FUA*	8 11/16	TQSS4A*	TQSS4FUA*	5 1/4	50 in lb	1 in lb	
TQS6A*	TQS6FUA*	8 <sup>11</sup> /16	TQSS6A*	TQSS6FUA*	5 1/4	75 in lb	1 in lb	

Does not include certificate of calibration.

#### Combination U.S./Metric Reading - Standard 2% Accuracy

		<u> </u>	#	- 7			
_	TQSC1FUA	8 7/64	_	TQSSC1FUA	5 1/4	17 kg cm/15 in lb	.5 kg cm/.5 in lb
_	TQSC2.5FUA	8 7/64	_	TQSSC2.5FUA	5 1/4	35 kg cm/30 in lb	1 kg cm/1 in lb
_	TQSC4FUA*	8 11/16	_	TQSSC4FUA*	5 1/4	56 kg cm/50 in lb	2 kg cm/2 in lb
_	TQSC6FUA	_	_	TQSSC6FUA*	5 1/4	90 kg cm/75 in lb	3 kg cm/5 in lb

Does not include certificate of calibration.

## Combination U.S./Newton Meter Reading - Standard 2% Accuracy\*\*

_	TQSR1FUA	8 7/64	_	_		1.6 N•cm/15 in lb	5 N•cm/.25 in lb
_	TQSR2.5FUA	8 7/64	_	_	1	3.4 N•m/30 in lb	.1 N•m/1 in lb
_	TQSR4FUA*	8 11/16	_	_	_	5.5 N•cm/50 in lb	.1 N•m/1 in lb
_	TQSR6FUA*	8 11/16	_	_		8.4 N•m/75 in lb	.2 N•m/5 in lb

Does not include certificate of calibration.

All drivers come in PB47 Plastic Case. Precise 1% models are available on special order.

ANSI® Spec. B107.300 applies to all these models.

\*Includes 1/4" internal square drive in handle.

#### TA358 Torque Angle Gauge.

- Determines angle controlled torque tightening
- Allows user to follow manufacturer's specifications
- Use on automotive, diesel and industrial equipment plus head bolts and rod bolts on motorcycles
- 3/8" square drive

#### TA362 Torque Angle Gauge.

- Allows user to follow manufacturer's specifications
- · Calibrated in degrees in large, easy to read increments
- 3/4" square drive

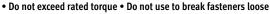
#### TA360 Torque Angle Gauge.

• Similar to TA362 except 1/2" square drive









Periodic recalibration is necessary to maintain accuracy
 Read safety precautions on pages W1 to W4

**Torque Angle Gauges** 



TA362

## **Torque Screwdrivers**



#### QDRIVER3P

### Preset Torque Screwdrivers/±6% Accuracy

- Ideal for low torque assemblies and precision application
- Drivers accept all standard 1/4" hex screwdriver bits
- Cam over torque limiting clutch free wheels when set torque is achieved
- Accuracy is ±6% from 20% to 100% of full scale in clockwise direction only for all drivers in series
- Lightweight construction features red anodized aluminum body with stainless steel shank
- · Comfortable ergonomic trilobe grip and magnetic bit retention
- Not supplied with certificate of calibration

Stock No.	Range, min	Range, max	Length, inches
QDRIVER1P	6 in oz (4 N•cm)	32 in oz (22 N•cm)	4 9/16
QDRIVER2P	10 in oz (7 N•cm)	100 in oz (70 N•cm)	5 <sup>5</sup> /8
QDRIVER3P	1.5 in lb (16 N•cm)	15 in lb (169 N•cm)	5 5/8
QDRIVER4P	4 in lb (45 N•cm)	40 in lb (451 N•cm)	6

# Torque Limiting Drivers/±4% Accuracy QTS135 Adjustable Limiting Driver.

- Micrometer type adjustment
- Clutch allows 25° of free rotation on reaching set torque
- Guaranteed accuracy: within ±4% of setting from 20% of capacity to full capacity clockwise and counterclockwise

Stock No.	Range, minimum	Range, maximum	Increments	Length, inches
QTS135	5 in lb	35 in lb	0.5 in lb	7

## Interchangeable Head, Click Type Torque Wrenches

Interchangeable heads permit ratcheting, fixed, or open end torquing capability with either adjustable or preset torque wrench bodies. A push of the locking pin provides quick change action, with a wide range of head styles to choose from.

- Selection: there are 2 adjustable models for quickly setting desired torque and 8 preset models for assembly line work
- Slim profile: each torque body is thin enough and long enough to get into tight areas
- Micrometer type adjustment: ensures fast, accurate settings and changes
- Guaranteed accuracy: all QC series interchangeable torque wrenches are accurate ±4% clockwise and ±6% counterclockwise from 20% of full scale to full scale





**QDRIVER3** 

## Adjustable Torque Screwdrivers/±6% Accuracy

- Ideal for low torque assemblies, precision applications and dash/ under dash work on most domestic and imported vehicles
- Drivers accept all standard 1/4" hex screwdriver bits
- Cam over torque limiting clutch free wheels when set torque is achieved
- Accuracy is ±6% from 20% to 100% of full scale in clockwise direction only for all drivers in series
- Lightweight construction features red anodized aluminum body with stainless steel shank
- · Comfortable ergonomic trilobe grip and magnetic bit retention

Stock No.	Range	Resolution	Length, inches
QDRIVER2	20 - 100 in oz (14 - 70 N•cm)	1 in oz	5 <sup>7</sup> /16
QDRIVER3	3 - 15 in lb (34 - 169 N•cm)	.2 in lb	6 1/4
QDRIVER4	5 - 40 in lb (56 - 451 N•cm)	.5 in lb	6 11/16
ODRIVER4NM	50 - 450 N•cm	_	6 11/16



QTS135

#### QTSP135 U.S. Preset Limiting Driver.

- Clutch mechanism to help prevent over torquing by allowing free rotation upon reaching the set torque value
- Ideal selection for assembly line work where the same requirement is constant
- Can be reset at different torque values or readjusted for accuracy whenever necessary

## Torque Wrench Bodies/Adjustable/±4% Accuracy

Stock No.	Model Type	Shank Diameter	Range	Increments	Length, inches
QC11200	Adjustable	J (0.425")	40-200 in lb	1 in lb	9 3/8
QC2175	Adjustable	J (0.425")	5-75 ft lb	.5 ft lb	13

## Torque Wrench Bodies/Pre-Set/±4% Accuracy

Stock No.	Model Type	Shank Diameter	Range	Length, inches
QC1P60	Preset	J (0.425")	10-60 in lb (11-66 dN•m)	6
QC1P100	Preset	J (0.425")	15-100 in lb (17-113 dN•m)	8
QC1P300	Preset	J (0.425")	60-300 in lb (68-339 dN•m)	10
QC2P75	Preset	J (0.425")	5-75 ft lb (7-100 N•m)	11
QC3P150	Preset	Y (0.560")	30-150 ft lb (41-203 N•m)	23
QC3P200	Preset	Y (0.560")	40-200 ft lb (55-270 N•m)	23
QC4P300	Preset	X (0.735")	60-300 ft lb (82-400 N•m)	27

## Interchangeable Head, Click-Type Torque Wrenches

#### Torque Wrench Bodies/Adjustable/Dual Range

- Plug and play system of interchangeable heads are consistently sized from pin to the center of the fastener, so no adjustment calculations are needed
- Includes certificate of calibration
- Minimal friction "Hour Glass" cam retains and releases lubricant where needed to reduce friction
- Push buttons for quick release of interchangeable head
- Laser etched scale for easier reading in varying light sources
- · Positive stop ensures instrument cannot be accidentally disassembled if wound down past scale
- Each instrument comes in a molded storage case for long term protection

Stock No.	Range, ft lb	Range, N•m	Increments	Shank Type	Weight, lbs (kg)	Length, inches (mm)
QD2IN50	8-36	10-50	0.5 N•m/0.4 ft lb	J	2.3 (1.12)	14 1/2 (368)
QD2IN100	16-72	20-100	0.5 N•m/0.4 ft lb	J	2.3 (1.12)	14 1/2 (368)
QD3IN200	20-150	40-200	2 N•m/1.2 ft lb	Y	3.36 (1.64)	23 (584)
QD3IN350	59-251	70-350	2 N•m/1.2 ft lb	Х	3.36 (1.64)	23 (584)
QD4IN800*	120-600	150-800	5 N•m/4.3 ft lb	Z	11.14 (5.46)	41 1/2 (1054)

<sup>\*</sup> For use with dual pin heads only ASME® B107.300





Allow use of torque wrench bodies on previous page with sockets, crowfoot wrenches or other similar attachment.

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Square Drive, inches	J (0.425")	Y (0.560")	X (0.735")	Z (0.990")	Head 0.D., inches		Center of Fastener to Retaining Pin	Ratchet Service Kit
1/4	QJD8A-72** (350)	_	_	_	17/32	9/64	QJD Series - 2.50"	RKRT72
3/8	<b>QJD12A**</b> (900)	QYD12A** (1,200)	_	_	21/32	11/64	QYD Series - 3.00"	RKRF936
1/2	QJD16A** (900)	QYD16A** (2,400)	QXD16A** (3,000)	_	21/32	11/64	QXD Series - 4.50"	RKRS936
3/4	_		QXD24A (3,600)	<b>QZD24BDP</b> (7,200)	25/32	11/64	QZD Series - 5.75"	RKRQC4
1	_	_	QXD32A	QZD32BDP	29/32	11/64	_	RKRQC5

<sup>\*\*</sup> U.S. Patent 6,125,722

Value in parentheses in chart is the Maximum Recommended Working Torque, in Ib

- · Ratcheting box head allows constant contact with the fastener
- Plug and play shanks are consistently sized from pin to the center of the fastener, so no adjustment calculations are needed
- Reverse lever is located on top of the head to reduce the chance of accidental ratchet reversal



## Ratcheting Box End Heads, 12 Point, mm

Size, mm	Stock No.	Shank Diameter	0.D., mm	Head Depth, mm
10	QJB0ERM10A	J (0.425")	21.9	5.0
13	QJB0ERM13A	J (0.425")	25.9	6.3
16	QJB0ERM16A	J (0.425")	33.6	7.0
17	QJB0ERM17A	J (0.425")	36.5	7.0
18	QJB0ERM18A	J (0.425")	38.5	8.0
19	QJB0ERM19A	J (0.425")	38.7	8.7
22	QJB0ERM22A	J (0.425")	45.7	9.4
24	QJB0ERM24A	J (0.425")	49.5	11.2

# QD3IN200



#### Square Drive Heads/Fixed

Allow use of torque wrench bodies on previous page with sockets, crowfoot wrenches or other similar attachments.

Square Drive, inches	J (0.425")	Y (0.560")	X (0.735")	z (0.990")	Center of Fastener to Retaining Pin			
1/4	QJSD8A (350)	_	_	_	QJD Series - 2.50"			
3/8	QJSD12A (900)	QYSD12A (1,200)	_	_	QYD Series - 3.00"			
1/2	QJSD16A (900)	QYSD16A (2,400)	QXSD16A (3,000)	_	QXD Series - 4.50"			
3/4	_	_	QXSD24A (3,600)	<b>QZSD24ADP</b> (7,200)	QZD Series - 5.75"			
1	_	_	<b>QXSD32A</b> (3,600)	<b>QZSD32ADP</b> (7,200)	_			

Value in parentheses is the Maximum Recommended Working Torque, in lb



### Ratcheting Box End Heads, 12 Point, inches

Size, inches	Stock No.	Shank Diameter	0.D., inches	Head Depth, inches
3/8	QJB0ER12A	J (0.425")	7/8	3/16
7/16	QJB0ER14A	J (0.425")	15/16	7/32
1/2	QJB0ER16A	J (0.425")	1 1/32	1/4
9/16	QJB0ER18A	J (0.425")	1 3/16	1/4
5/8	QJB0ER20A	J (0.425")	1 <sup>5</sup> /16	9/32
3/4	QJB0ER24A	J (0.425")	1 17/32	11/32

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration. (unless otherwise indicated)

All wrenches and drivers are calibrated per ASME and ISO standards for accuracy, from 20 to 100% of full scale, using NIST traceable equipment.









- Do not exceed rated torque Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy Read safety precautions on pages W1 to W4

## Interchangeable Head, Click-Type

## 12 Point Box End Heads, mm



QYXM21A

Center of fastener to retaining pin:

- \* QYXM Series 3.00"
- \* QXXM Series 4.50"
- \* QZXM Series 5.75"

	J (0.425")	Y (0.560")	X (0.735")	Z (0.990")	0.D., mm	Head Depth, mm
6	QJXM6A (180)	_	1-	1-	11	5
7	<b>QJXM7A</b> (240)	_	_	_	11	5
8	<b>QJXM8A</b> (265)	_	_	_	13	6
9	<b>QJXM9A</b> (355)	_	_	_	14	6
10	QJXM10A (630)	_	_	_	15	7
11	QJXM11A (710)	_	_	_	17	8
12	QJXM12A (805)	_	_	_	18	8
13	QJXM13A (900)	_	_	_	20	9
14	QJXM14A (900)	QYXM14A (1,400)	QXXM14A (1,400)	_	21	9
15	QJXM15A (900)	QYXM15A (1,770)	_	_	22	10
16	QJXM16A (900)	QYXM16A (2,195)	QXXM16A (2195)	_	24	10
17	QJXM17A (900)	QYXM17A (2,365)	QXXM17A (2,365)	_	25	11
18	QJXM18A (900)	QYXM18A (2,400)	QXXM18A (2,690)	_	27	12
19	QJXM19A (900)	QYXM19A (2,400)	QXXM19A (2,860)	_	28	12
20	QJXM20A (900)	QYXM20A (2,400)	QXXM20A (3,070)	<b>—</b>	30	13
21	QJXM21A (900)	QYXM21A (2,400)	QXXM21A (3,295)	_	31	13
22	QJXM22A (900)	QYXM22A (2,400)	QXXM22A (3,600)	_	32	14
23	QJXM23A (900)	QYXM23A (2,400)	QXXM23A (3,600)	_	34	15
24	QJXM24A (900)	QYXM24A (2,400)	QXXM24A (3,600)	QZXM24ADP (4,505)	35	15
25	_	_	QXXM25A (3,600)	<b>QZXM25ADP</b> (4,950)	37	16
26	QJXM26A (900)	QYXM26A (2,400)		QZXM26A (5,380)	38	16
27	QJXM27A (900)	QYXM27A (2,400)	QXXM27A (3,600)	QZXM27ADP (5,940)	39	17
29	_	QYXM29A (2,400)	QXXM29A (3,600)	<b>QZXM29A</b> (6,640)	42	18
30	_	QYXM30A (2,400)	QXXM30A (3,600)	<b>QZXM30ADP</b> (7,035)	44	19
32	_	QYXM32A (2,400)	QXXM32A (3,600)	<b>QZXM32ADP</b> (7,200)	46	19
34	_	QYXM34A (2,400)	QXXM34A (3,600)	QZXM34ADP (7,200)	48	19
36	_	QYXM36A (2,400)	QXXM36A (3,600)	<b>QZXM36ADP</b> (7,200)	53	22

Value in parentheses is the Maximum Recommended Working Torque, in Ib

\* QJXM Series - 2.50"

## 12 Point Box End Heads, inches





QXX52A

Center of fastener to retaining pin:

- \* **QJX** Series 2.50"
- \* QYX Series 3.00"
- \* QXX Series 4.50"
- \* QZX Series 5.75"

	J (0.425")	Y (0.560")	X (0.735")	Z (0.990")	0.D., inches	Head Depth, inches
1/4	QJX8A (220)	_	_	_	13/32	3/16
9/32	QJX9A (250)	_	_	_	13/32	3/16
3/8	QJX12A (490)	_	_	_	9/32	1/4
7/16	<b>QJX14A</b> (715)	_	_	_	21/32	5/16
1/2	QJX16A (900)	QYX16A (900)	_	_	3/4	11/32
9/16	QJX18A (900)	QYX18A (1,340)	_	_	27/32	3/8
5/8	QJX20A (900)	QYX20A (2,050)	_	_	15/16	13/32
11/16	QJX22A (900)	QYX22A (2,400)	_	_	1 1/32	7/16
3/4	QJX24A (900)	QYX24A (2,400)	QXX24A (2,630)	_	1 <sup>1</sup> /8	15/32
13/16	QJX26A (900)	QYX26A (2,400)	QXX26A (3,600)	<b>QZX26ADP</b> (3,300)	1 <sup>3</sup> / <sub>16</sub>	17/32
7/8	QJX28A (900)	QYX28A (2,400)	QXX28A (3,600)	_	1 9/32	9/16
15/16	QJX30A (900)	QYX30A (2,400)	QXX30A (3,600)	_	1 3/8	19/32
1	QJX32A (900)	QYX32A (2,400)	QXX32A (3,600)	_	1 15/32	21/32
1 1/16	QJX34A (900)	QYX34A (2,400)	_	<b>QZX34ADP</b> (5,940)	<b>1</b> 9/16	11/16
1 <sup>1</sup> /8	_	QYX36A (2,400)	QXX36A (3,600)	<b>QZX36ADP</b> (6,430)	1 5/8	11/16
1 3/16	_	QYX38A (2,400)	QXX38A (3,600)	<b>QZX38ADP</b> (7,200)	1 3/4	3/4
1 1/4	_	QYX40A (2,400)	QXX40A (3,600)	<b>QZX40ADP</b> (7,200)	1 <sup>13</sup> / <sub>16</sub>	3/4
1 <sup>5</sup> /16	_	QYX42A (2,400)	QXX42A (3,600)	<b>QZX42ADP</b> (7,200)	1 29/32	3/4
1 7/16	_	_	QXX46A (3,600)	<b>QZX46ADP</b> (7,200)	2 1/16	7/8
1 1/2	_	QYX48A (2,400)	QXX48A (3,600)	<b>QZX48ADP</b> (7,200)	<b>2</b> 5/32	7/8
1 <sup>9</sup> /16	_	_	<b>QXX50A</b> (3,600)	<b>QZX50ADP</b> (7,200)	2 1/4	7/8
1 <sup>5</sup> /8	_	QYX52A (2,400)	QXX52A (3,600)	<b>QZX52ADP</b> (7,200)	2 11/32	7/8
1 3/4	_		QXX56A (3,600)	<b>QZX56ADP</b> (7,200)	2 17/32	1 <sup>1</sup> /32
1 <sup>13</sup> / <sub>16</sub>	_	_	QXX58A (3,600)	<b>QZX58ADP</b> (7,200)	2 5/8	1 <sup>1</sup> /32
1 7/8	_	_	<b>QXX60A</b> (3,600)	<b>QZX60ADP</b> (7,200)	2 11/32	1 <sup>1</sup> /32
2	_	-	QXX64A (3,600)	<b>QZX64ADP</b> (7,200)	2 7/8	1 <sup>1</sup> /32
2 1/16	-	_	-	<b>QZX66ADP</b> (7,200)	2 21/32	1 <sup>3</sup> / <sub>16</sub>
2 1/8	_	_	_	<b>QZX68ADP</b> (7,200)	3 1/16	1 <sup>3</sup> / <sub>16</sub>
2 1/4	_		_	<b>QZX72ADP</b> (7,200)	3 7/32	1 <sup>3</sup> / <sub>16</sub>
2 1/2	_	_		<b>QZX80ADP</b> (7,200)	3 19/32	<b>1</b> <sup>5</sup> / <sub>16</sub>

Value in parentheses is the Maximum Recommended Working Torque, in Ib

## Interchangeable Head, Click-Type

## Open End Heads, mm

mm]	J (0.425")	Y (0.560")	X (0.735")	Z (0.990")	0.D., mm	Head Depth, mm
6	QJOM6A* (60)	_	_	_	13.5	3.6
7	QJOM7A* (75)	_	_	_	13.5	3.6
8	QJOM8A* (120)	-	_	_	16.5	3.3
9	<b>QJOM9A</b> (170)	_	_	_	19.8	4.8
10	QJOM10A (265)	-	-	_	19.8	4.8
11	QJOM11A (400)	_	_	_	22.9	5.6
12	QJOM12A (430)	_	-	_	26.9	6.1
13	QJOM13A (495)	_	_	_	26.9	6.1
14	QJOM14A (665)	QYOM14A (665)	-	_	29.5	6.6
15	QJOM15A (885)	QYOM15A (885)	_	_	33.3	6.9
16	QJOM16A (900)	QYOM16A (1,060)	_	_	33.3	6.9
17	QJOM17A (900)	QYOM17A (1,235)	QXOM17A (1,235)	_	37.1	7.3
18	QJOM18A (900)	QYOM18A (1,375)	QXOM18A (1,375)	_	37.1	7.3
19	QJOM19A (900)	QYOM19A (1,650)	QXOM19A (1,650)	_	40.4	7.6
20	QJOM20A (900)	QYOM20A (1,925)	QXOM20A (1,925	_	43.7	9.2
21	QJ0M21A (900)	QYOM21A (2,160)	QXOM21A (2,160)	_	43.7	9.2
22	QJ0M22A (900)	QYOM22A (2,400)	QXOM22A (2,470)	_	43.7	9.2
23	QJ0M23A (900)	QYOM23A (2,400)	QXOM23A (2,745)	_	47	10
24	QJOM24A (900)	QYOM24A (2,400)	QXOM24A (2,970)	<b>QZOM24ADP</b> (2,970)	49	11
25	<b>QJOM25A</b> (900)	QYOM25A (2,400)	QXOM25A (3,570)	<b>QZOM25ADP</b> (3,295)	52	11
26	<b>QJOM26A</b> (900)	QYOM26A (2,400)	QXOM26A (3,570)	<b>QZOM26ADP</b> (3,570)	53	11
27	QJ0M27A (900)	QYOM27A (2,400)	QXOM27A (3,600)	<b>QZOM27ADP</b> (3,825)	55	12
29	<b>QJOM29A</b> (900)	QYOM29A (2,400)	QXOM29A (3,600)	<b>QZOM29ADP</b> (4,550)	58	12
30	_	QYOM30A (2,400)	<b>QXOM30A</b> (3,600)	<b>QZOM30ADP</b> (4,950)	61	13
32	_	QYOM32A (2,400)	<b>QXOM32A</b> (3,600)	<b>QZOM32ADP</b> (5,755)	65	14
34	-	QYOM34A (2,400)	<b>QXOM34A</b> (3,600)	<b>QZOM34ADP</b> (6,595)	68	14
36	QJOM36A (900)	QYOM36A (2,400)	<b>QXOM36A</b> (3,600)	<b>QZOM36ADP</b> (7,200)	74	15



Center of fastener to retaining pin:

- \* QJOM Series 2.50"
- \* QYOM Series 3.00"
- \* **QXOM** Series 4.50"
- \* **QZOM** Series 5.75"

## Open End Heads, inches

	J (0.425")	Y (0.560")	X (0.735")	Z (0.990")	0.D., inches	Head Depth, inches
1/4	QJ08A* (55)	_	_	_	17/32	9/64
5/16	QJ010A (110)	_	_	_	21/32	11/64
3/8	QJ012A (220)	_	_	_	25/32	11/64
7/16	QJ014A (310)	_	_	_	29/32	11/64
1/2	<b>QJ016A</b> (410)	QY016A (410)	_	_	<b>1</b> <sup>1</sup> / <sub>16</sub>	11/64
9/16	<b>QJ018A</b> (695)	QY018A (695)	_	_	<b>1</b> <sup>1</sup> /16	11/64 [QJ018A = 9/32]
5/8	QJ020A (835)	QY020A (835)	_	_	<b>1</b> 5/16	11/64 [QJ020A = 9/32]
11/16	QJ022A (900)	QY022A (1,185)	_	_	1 <sup>7</sup> /16	11/64 [QJ022A = 5/16]
3/4	QJ024A (900)	QY024A (1,500)	QXO24A (1,500)	_	1 19/32	11/64 [QJ024A = 11/32]
13/16	QJ026A (900)	QY026A (2,310)	QX026A (1,965)	_	1 23/32	3/8
7/8	QJ028A (900)	QY028A (2,310)	_	_	1 23/32	3/8
15/16	QJ030A (900)	QY030A (2,400)	QX030A (2,400)	_	1 29/32	13/32
1	QJ032A (900)	QY032A (2,400)	QX032A (3,575)	<b>QZ032ADP</b> (3,575)	2 1/32	7/16
<b>1</b> <sup>1</sup> /16	QJ034A (900)	QY034A (2,400)	QX034A (3,600)	_	2 3/16	15/32
1 <sup>1</sup> /8	<b>QJ036A</b> (900)	QY036A (2,400)	QX036A (3,600)	<b>QZ036ADP</b> (4,400)	2 <sup>5</sup> / <sub>16</sub>	15/32
1 <sup>3</sup> / <sub>16</sub>	_	QY038A (2,400)	QX038A (3,600)	<b>QZ038A</b> (5,200)	2 <sup>7</sup> / <sub>16</sub>	1/2
1 <sup>1</sup> / <sub>4</sub>	QJ040A (900)	QY040A (2,400)	QXO40A (3,600)	<b>QZ040ADP</b> (5,775)	2 9/16	17/32
1 <sup>5</sup> /16	_	QY042A (2,400)	QX042A (3,600)	<b>QZ042A</b> (5,600)	2 21/32	<sup>9</sup> / <sub>16</sub>
1 3/8	QJ044A (900)	QY044A (2,400)	QXO44A (3,600)	<b>QZ044ADP</b> (7,200)	2 3/16	19/32
1 <sup>7</sup> /16	_	QY046A (2,400)	QXO46A (3,600)	<b>QZ046ADP</b> (7,200)	3	19/32
1 1/2	QJ048A (900)	QY048A (2,400)	QXO48A (3,600)	<b>QZ048ADP</b> (7,200)	3 <sup>1</sup> / <sub>16</sub>	5/8
<b>1</b> 9/16	_	QY050A (2,400)	<b>QX050A</b> (3,600)	<b>QZ050ADP</b> (7,200)	3 <sup>3</sup> / <sub>16</sub>	21/32
1 5/8	_	QY052A (2,400)	QX052A (3,600)	<b>QZ052ADP</b> (7,200)	3 11/32	11/16
1 11/16	_	_	QX054A (3,600)	<b>QZ054ADP</b> (7,200)	3 13/32	23/32
1 3/4	_	_	QX056A (3,600)	<b>QZ056ADP</b> (7,200)	3 <sup>9</sup> /16	23/32
1 <sup>13</sup> / <sub>16</sub>	_	_	QX058A (3,600)	<b>QZ058ADP</b> (7,200)	3 21/32	13/32
1 7/8	_	_	QX060A (3,600)	<b>QZ060ADP</b> (7,200)	3 <sup>13</sup> / <sub>16</sub>	25/32
2	_	_	QX064A (3,600)	<b>QZ064ADP</b> (7,200)	4 1/16	27/32
2 <sup>1</sup> /16	_	_	QX066A (3,600)	<b>QZ066ADP</b> (7,200)	4 3/16	27/32
2 1/8	_	_	_	<b>QZ068ADP</b> (7,200)	<b>4</b> <sup>5</sup> / <sub>16</sub>	5/8
2 1/4	_	_	_	<b>QZ072ADP</b> (7,200)	4 <sup>9</sup> /16	15/16
2 1/2	_	_	_	<b>QZ080ADP</b> (7,200)	5 <sup>1</sup> /16	1



QJO28A

Center of fastener to retaining pin:

- \* QJO Series 2.50"
- \* QYO Series 3.00"
- \* QXO Series 4.50"
- \* **QZO** Series 5.75"

Value in parentheses is the Maximum Recommended Working Torque, in Ib
\*Use with QC1P100 and QC1I200 Torque Bodies only; other heads may be used with all listed torque bodies.









- Do not exceed rated torque Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy
   Read safety precautions on pages W1 to W4

Value in parentheses is the Maximum Recommended Working Torque, in lb \*Use with QC1P100 and QC1l200 Torque bodies only; other heads may be used with all listed torque bodies.

## Interchangeable Head, Click-Type

#### Flare Nut Heads, 6 Point, mm

	<u>*</u>			
mmŢ	Shank Dia. J (0.425")	Shank Dia. Y (0.560")	O.D., mm	Head Depth, mm
10	<b>QJRXSM10A</b> (400)	_	20	8
11	QJRXSM11A (500)	_	21	9
12	QJRXSM12A (600)	_	22	9
13	QJRXSM13A (700)	_	24	9
14	QJRXSM14A (740)	_	25	10
16	_	QYRXSM16A (900)	27	11
17	QJRXSM17A (900)	QYRXSM17A (1,000)	29	11
18	QJRXSM18A (900)	QYRXSM18A (1,125)	30	12
19	QJRXSM19A (900)	QYRXSM19A (1,250)	32	12
20	_	QYRXSM20A (1,350)	33	13

Value in parentheses is the Maximum Recommended Torque, in Ib

#### Flare Nut Heads, 6 Point, inches

	Shank Dia. J (0.425")	Shank Dia. Y (0.560")	0.D., inches	Head Depth, inches
7/16	QJRXS14A (500)	_	27/32	11/32
5/8	QJRXS20A (720)	QYRXS20A (950)	1 3/32	7/ <sub>16</sub>
11/16	QJRXS22A (720)	QYRXS22A (1,100)	1 5/32	15/32
3/4	QJRXS24A (720)	QYRXS24A (1,245)	1 1/4	1/2
13/16	QJRXS26A (720)	QYRXS26A (1,400)	1 <sup>5</sup> / <sub>16</sub>	17/32
7/8	QJRXS28A (720)	QYRXS28A (1,600)	1 13/32	9/16
15/16	QJRXS30A (900)	QYRXS30A (1,750)	1 1/2	19/32
1	QJRXS32A (900)	QYRXS32A (1,900)	1 <sup>9</sup> / <sub>16</sub>	5/8
1 1/8	_	QYRXS36A (2,200)	1 3/4	11/16

Value in parentheses is the Maximum Recommended Working Torque, in Ib



Center of fastener to retaining pin:

QJRXS Series - 2.50" QYRXS Series - 3.00" QJRXSM Series - 2.50" QYRXSM Series - 3.00" QJRX Series - 2.50"

QYRX Series - 3.00" QJRO Series - 2.50" QYRO Series - 3.00" QJROM Series - 2.50" QYROM Series - 3.00"

### Flare Nut Heads, 12 Point, inches

	Shank Dia. Y (0.560")	0.D., inches	Head Depth, inches
9/16	QYRX18A (800)	1	13/32
5/8	QYRX20A (950)	1 3/32	7/16
3/4	QYRX24A (1,245)	1 1/4	1/2
13/16	QYRX26A (1,400)	1 11/32	17/32
7/8	QYRX28A (1,600)	1 <sup>13</sup> / <sub>32</sub>	9/16
15/16	QYRX30A (1,750)	1 1/2	19/32
1	QYRX32A (1,900)	1 19/32	21/32
1 1/16	QYRX34A (2,050)	1 21/32	11/16
1 1/8	QYRX36A (2,200)	1 3/4	23/32
1 <sup>3</sup> /16	QYRX38A (2,400)	<b>1</b> <sup>7</sup> /16	3/4
1 1/4	QYRX40A (2,400)	1 29/32	25/32

Value in parentheses is the Maximum Recommended Torque, in Ib

## **Geared Head Multipliers**





#### **Geared Head Multipliers**

- · Some models feature a replacement square drive to protect components by automatically shearing when rated output is exceeded by 3 to 10%
- All models include an input/output conversion chart in ft lb and N•m

Specifications	YA290PLUS	YA300	YA391	YA292	YA392	YA393	YA394	YA395
Reaction Type	Bar	Bar	Bar	Bar	Bar	Bar	Plate	Plate
Output Capacity, ft lb	750	1,000	1,200	2,000	2,200	3,200	5,000	8,000
Input Capacity, ft Ib	227	303	200	500	162	173	189	154
Gear Ratio	4:1	4.0:1	6.3:1	4.27:1	15.0:1	20.25:1	29.25:1	60.0:1
Torque Ratio	3.3:1	3.3:1**	6.0:1*	3.7:1**	13.6:1*	18.5:1*	26.5:1*	52.0:1*
Reductions	1	1	1	1	2	3	2	2
Input Drive Female Square, inches	1/2	1/2	1/2	3/4	1/2	1/2	1/2	1/2
Output Drive Male Square, inches	3/4	3/4	3/4	1	1	1	1 1/2	1 1/2
Bearings	_	_	Needle	_	Needle	Needle	Needle	Needle
Length, inches	8 3/4	17 <sup>1</sup> / <sub>2</sub>	20	19 <sup>1</sup> / <sub>2</sub>	20	20	15	15 <sup>1</sup> / <sub>2</sub>
Width, inches	2 3/4	2 13/16	4	4 1/2	4	4	8 5/8	6
Height, inches	3 1/4	3 5/16	4 1/16	3 3/4	5 <sup>13</sup> / <sub>16</sub>	6 1/2	8 3/4	10 3/4
Storage Case	Yes	_	Yes	_	Yes	Yes	Yes	Yes
Angle Protractor	_		Yes	_	Yes	Yes	_	_
Anti Backlash	_	_	-	_	Yes	Yes	Yes	Yes
Replacement Square Drive	_	_	YA391RK	_	YA392RK	YA393RK	YA394RK	YA395RK

\*Accuracy of Torque Ratio is ±5%.
\*\*Accuracy of Torque Ratio is ±10%.

Handle or other anchor plate serves as a "reaction bar" and must be placed against a strong fixed object.



#### YA390 Reversible Air Motor.

- Provides up to 200 ft lb of input power for each of the YA Series Gear Multipliers
- Output drive: 1/2"
- Maximum operating air pressure: 60 PSIG
- Free speed: 70 RPM, Dimensions: 16 1/4" x 3 1/8" x 4 3/4"

## **Geared Head Multipliers**

#### **Geared Head Multipliers X4 Models**

- Use singularly or stack up to 3 X4 models
- Stacking multiplies torque ratios; resulting torque can be considerable
- Only the torque ratio changes; total capacity is equal to and does not exceed the capacity of the largest wrench in the stack

Specifications	GA184A	GA185	GA190
Reaction Type	Bar	Bar	Bar
Output Capacity, ft lb	1,000	2,000	2,000
Input Capacity, ft Ib	294	588	588
Gear Ratio	4.0:1	4.0:1	4.0:1
Torque Ratio	3.4:1**	3.4:1**	3.4:1**
Reductions	1	_	1
Input Drive Female Square, inches	1/2	3/4	3/4
Output Drive Male Square, inches	3/4	1	1
Dimension A, O.D., inches	3 1/2	3 3/4	3 3/4
Dimension B, Length, inches	6 5/8	6 5/8	6 <sup>5</sup> /8
Dimension C, Head Height, inches	1/2	3/4	1 1/2
Dimension D, Drive End Height, inches	3/4	1	1
Dimension E, Overall Height, inches	3 11/32	4 3/8	5
Overall Length, inches	22	25	25
Anti Backlash	_	_	Yes



Handle or other anchor plate serves as a "reaction bar" and must be placed against a strong fixed object.

## **Electronic Dial Type Torque Wrenches**

- Great for worldwide automotive, nuclear, military and industrial markets
- Digital accuracy is ±1% from 20 to 100% of full scale in both directions
- 3 step LED visual signal system: Over torque alarm (Red), Approaching target warning signal when getting close (Yellow at 90% of target), and target achieved signal when desired torque is obtained (Green)
- · Secondary audible alarm goes off when desired torque is reached

Stock No.	Square Drive, inches	In Ib	ft lb	N•m	kg cm	Length, inches (mm)	Weight, lbs kgs)
ED1050 †	1/4	5-50.42	-417.56-5.6	557-57.6111.	5 (292)1.25	(57)	
ED2250 †	3/8	25-2502	.08-20.832.8	2-28.2528-28	0.0314.5 (3	68)1.51 (66)	
ED2600 †	3/8	60-6005	-506.79-67.	7969-691.271	4.5 (368)1.5	1 (66)	

#### † **( (**

- Largest storage capacity available: memory stores up to 4,000 torque values
- Downloading capability: individual torque values and store values in memory may be directly downloaded to a printer or data logger via an RS-232 connection
- Selectable modes of operation: "peak hold" and "track" modes of operation are standard
- Range: available from 5 in lb to 600 ft lb engineering units can be selected through the keypad (in oz, in lb, ft lb, N•m, dN•m, k gm, and kg cm)
- Accuracy: ±1% from 10 to 100% of scale
- Quality Construction: proven industrial quality
- 9 V alkaline battery included

#### **Electrotork** Torque Wrenches

- All Electrotork® electronic torque wrenches are designed for continuous use
- · High degree of accuracy, clockwise or counterclockwise regardless of handhold position
- Easy to read scales and sealed membrane keypad enhance operator usefulness
- · Each wrench includes a storage case

Stock No.	Square Drive, inches	Square Drive, inches Range Increments		Length, inches
QCE115A	1/4	5-50 in lb, 5.6-56 dN•m, 5.7-57 kg cm, 80-800 in oz	.01 in lb, .01 dN•m, .01 kg cm, .10 in oz	13 <sup>1</sup> / <sub>2</sub>
QCE215A	3/8	25-250 in lb, 28-282 dN•m, 29-288 kg cm	.01 in lb, .10 dN•m, .10 kg cm	14 <sup>7</sup> /8
QCE225A	3/8	5-50 ft lb, 68-677 dNom, 69-691 kg cm, 60-600 in lb	.01 ft lb, .10 dN•m, .10 kg cm, .10 in lb	14 <sup>7</sup> /8
QCE325A	1/2	25-250 ft lb, 34-338 N•m, 3.4-34 kg m	.10 ft lb, .10 N•m, .01 kg m	<b>21</b> 1/2
QCE425A	3/4	60-600 ft lb, 81-813 N•m, 8.3-83 kg m	.10 ft lb, .10 N•m, .01 kg m	46 <sup>1</sup> / <sub>2</sub>

ED2600

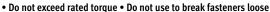
The certification of accuracy provided per ASME® and ISO® Standards is 20 to 100% of full scale. **P11350** Optional PC download cable is available.

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration. (unless otherwise indicated)
All wrenches and drivers are calibrated per ASME and ISO standards for accuracy, from 20 to 100% of full scale, using NIST® traceable equipment.











## **Electronic Torque Wrenches**

#### Features:

- Display can be turned 180° to allow left hand usage
- 4 units of measurement on the same torque wrench: in lb, ft lb, N•m, Kg cm
- Large 2" easy to read single scale eliminates confusion on conversion scales
- Tough polycarbonate body ensures durability
- Comfort cushion grip reduces strain for prolonged use
- Rubber boot protects work piece
- The durable, composite and steel body beam provides years of accurate service
- Packaged in storage box for maximum protection
- 9 V battery with long life and easy replacement, 80 hours
- Battery cover designed to be FOD proof



<sup>\*\*</sup>Accuracy of Torque Ratio is ±10%.

#### **Torque Testers**



QC3DTT250

#### Digital Torque Tester™ (DTT)

The Snap-on® *Digital Torque Tester (DTT)* is designed to be a low cost torque tester that can be mounted on a wall or in a bench top vise to allow operator to conveniently test torque wrenches and torque screwdrivers. It features an easy to use touch pad screen to capture peak torque values during a test in real time and download stored torque data to a PC. All DTT torque testers are sold in a kit with the complete tester, ac/dc power supply, USB cable adaptor and carrying case. The fast and accurate *Snap-on Digital Torque Tester (DTT)* Torque testing device. Also includes test adaptor

- Easy to use touch screen
- · Intuitive screen layout
- Testing options: quick check or ASME® style test
- Refresh rate of 1,000 data points per second
- Fast change of units or target torque
- Record and track torque wrench test results by serial number
- Choose your wrench type
- Adds traceability by using wrench serial numbers and technician I.D.
- Color coded numbers indicate a low, good and high torque readings
- Color bar at the top allows the user to see progress relative to the target torque
- Data can be stored for download later on your computer via USB

Specifications	QC1DTT10	QC1DTT50	QC2DTT250	QC3DTT250	QC4DTT600	
Specifications	QUIDITIO	UCIDITOU	QUZDI1Z9U	QU3D11Z3U	QU4D11000	
Sq. Drive, inches	1/4	1/4	3/8	1/2	3/4	
Range, English	10-100 in oz	5-50 in lb	25-250 in lb	25-250 ft lb	60-600 ft lb	
Range, Nm	.07706 Nm	.57-5.6 Nm	2.9-28.2 Nm	33.9-338.9 Nm	81.3-813.4 Nm	
Accuracy	±0	.50% ±1 count 109	% CW & CCW of ind	icated test value@ 2	.5 °C	
Units of Measure		Nm, kgcm, ft lb, in lb, in oz				
Operation Modes		TRACK, PEAK, FIRST PEAK				
Operating Temperature	10 to 32 °C (50 to 90 °F)					
Storage Temperature	-20 to 50 °C (-2 to 122 °F)					
Humidity	85% Relative Humidity @ 21 °C (70 °F)					
Power Supply	Included 9 V ac/dc adaptor, 6 AA batteries included					
Data/Storage/Recall		Memory Capacity - 500 records (complete check mode only)				

## **Electronic Torque Testers**



#### Electronic Torque Tester™

Designed to be a sturdy, low cost tester, these electronic torque testers can be placed on the wall in the factory or on a bench to allow operators to test torque wrenches or power tools without having to leave their station.

- Track and peak modes
- Can be used with nonimpacting power tools (joint rate simulators required)
- Reads bidirectional (clockwise and counterclockwise)
- Uses rechargeable Ni-Cad batteries (2 Ni-Cad 9 V). Charger included

Stock No.	Square Drive, inches	Range, English	Range, N•m
QC1ETT10	1/4	10-100 in oz	7.0-70.6 cN•m
QC1ETT400	1/4	40-400 in oz	28-280 cN•m
QC1ETT50	1/4	5-50 in lb	5.6-56 dN•m
QC1ETT100	1/4	10-100 in lb	11.3-113 dN•m
QC2ETT250	3/8	25-250 in lb	28-280 dN•m
QC2ETT1000	3/8	100-1,000 in lb	113-1,130 dN∙m
QC3ETT250	1/2	25-250 ft lb	34-339 N•m
QC4ETT600	3/4	60-600 ft lb	81-813 N•m

The certification of accuracy provided per ASME and  $ISO^{\$}$  Standards is 10 to 100% of full scale.

All Snap-on torque wrenches, drivers and testers are provided with a Certificate of Calibration. (unless otherwise indicated)
All wrenches and drivers are calibrated per ASME and ISO standards for accuracy, from 20 to 100% of full scale, using NIST® traceable equipment.

## Versatorq® Torque Metering/Data Acquisition System

The *Versatorq* system can be used for any job requiring repetitive torque applications or regular inspection of fastener torque. This system can also be used to verify pneumatic and mechanical torque wrench accuracy. Peak torque can be captured by using a rotary sensor with a non-impact power tool operating at less than 1,000 RPM and being driven into a soft joint. Inspectors can check critical fastener torque and record data for quality audits. Perfect for process quality control. The *Versatorq* system can internally perform statistical analysis, including histograms, and print to a serial printer.

- Versatile battery operated and lightweight, with available ranges from 2 to 20 in oz to 150 to 1,500 ft lb and
   7 units of measure: in oz, in lb, ft lb, N•m, d•Nm, kgm, and kgcm.
   The Versatorq system can be used with sockets, extensions, universal joints, ratcheting drivers or any of these combined
- Data Aquisition store and recall up to 3,500 readings.
   An internal memory backup battery retains setup and last memory data for up to 10 years
- Track or Peak Mode track mode displays applied torque value and peak mode displays highest torque value
- Easily Calibrated customer calibration supports ISO9000.
   Instructions for step by step calibration provided in the users manual
- Smart Sensors built in EEPROM memory chip stores sensor identification and calibration factors. Factory calibrated, a sensor retains its accuracy with all *Versatorq* meters; just plug in the desired sensor. Periodic recalibration is necessary

- 120VAC/220VAC, 60 Hz Adaptor rechargeable battery and belt clip allow you to take it to the task or use it at the bench with the optional table stand and AC adaptor
- PC Statistical Analysis Output download histogram, minimum and maximum reading, mean, sigma N, sigma, Cp, Cpk, % error and number of readings under and over tolerance
- Serial Port Interface with Computer or Printer true RS-232 communications port for downloading to computer or serial printer or configurable to MITUTOYO statistical printer protocol
- Visual and Audio Cues analog bar graph at top of display provides a live indication of applied torque. An OVER warning flag comes on to indicate that maximum sensor range has been exceeded. Green MIN LED indicates lower tolerance has been achieved, and Red MAX LED indicates upper tolerance has been exceeded. Audio alarm produces a distinctive 2 kHz tone. Includes an audio output jack for optional headphones in a noisy environment

#### **Versatorq1® System Specifications**

Superfections	
Specifications	Description
VERSATORQ1	120 V ac Charger, and Carrying Case. Basic
	Torque Acquisition Meter
Display	4 digit with alpha and numeric function flags
Display Capacity*	± 4 digits, 8,000 counts
	±1% of Reading (10 to 100% of Sensor Range)
Accuracy	(± 2% with VERSA1S10 and VERSA1S20
	Sensors)
Buch Button Konned	MIN/MAX Alarm, ZERO TARE, SET-UP, UNITS,
Push-Button Keypad	STORE/RECALL/CLEAR, SEND, STATISTICS, ENTER
Units Of Measure	in oz, in lb, ft lb, N•m, dN•m, kg•m, kg•cm
Operating Temperature	5 °C to 42 °C (40 °F to 110 °F)
Storage Temperature	-10 °C to 50 °C (-2 °F to 12 °F)
Humidity	Up to 90%, non-condensing
Dimensions	3" W, 2.5" H (3" with belt clip), 6" D
Weight	1 lb
Charge Life	20 hours continuous
(full charge to shutoff)	
Battery Charger	120 V ac or 220 V ac, 50-60 Hz
Data Storage/Recall	3,500 measurements
Battery Charger Output	9 V dc, 200 mA
Serial Output Port -	RS-232 (True), 300-19.2K baud and Mitutoyo
VERSATORQ1	(statistical protocol)
Statistical Analysis -	MAX, MIN, Sigma, Cp, Cpk, % Error, -NoGo,
VERSATORQ1	+NoGo
Histogram - VERSATORQ1	Lower set limit, upper set limit, 10 divisions
	, , , , , , , , , , , , , , , , , , , ,

 $^*\mbox{\it Versatorq}$  display ignores torque input less than .5% of full scale in track mode and 2.0% of full scale in peak mode.

Please reference the *Versatorq* instruction manual for the sensor ranges and resolutions in different units of torque measurement.

# VERSATORQ1 Torque Acquistion Meter Includes VERSACHARGE1 charger and PB57A case. Sensors sold separately.



## Versatorq System Accessories

Stock No.	Description
VERSACHARGE1	Power Pack, 120 V ac to 9 V dc
VERSACABLE	RS-232 Serial Printer Cable
VERSACABLE2	PC Interface Cable
PB57A	Carrying Case

#### Versatora Sensors

Stock No.	Square Drive, inches	Range	Sensor Diameter, inches	Sensor Length, inches	Cable Length, inches
VERSA1S20*	1/4	2-20 in oz	.5	2.9	48
VERSA1S10*	1/4	1-10 in lb	.7	2.9	48
VERSA1S50	1/4	5-50 in lb	.9	2.1	48
VERSA1S200	1/4	20-200 in lb	.9	2.1	48
VERSA2S100	3/8	10-100 ft lb	1.2	2.4	48
VERSA3S250	1/2	25-250 ft lb	1.4	2.6	48
VERSA4S600	3/4	60-600 ft lb	2.0	3.9	96
VERSA5S1500**	1	150-1,500 ft lb	2.4**	4.4	92 †

<sup>\*</sup>Knurled handles allow for fingertip control.



VERSA2S100







- $\bullet$  Do not exceed rated torque  $\bullet$  Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy Read safety precautions on pages W1 to W4

<sup>\*\*</sup>Diameter does not include side mounted connector.

<sup>†</sup> Heavy duty coiled cord with 4 pin MS style connector.

## Versatest™ Electronic Torque Tester



**VERSATEST** 

The *Versatest* Indicator is a laboratory grade instrument used for precise, in house torque wrench testing and calibration. High precision torque transducers provide system readings with an accuracy of ± 0.25% of indicated value. Transducers are available in ranges from 15 to 200 in oz to 200 to 2,000 ft lb and feature a special built in memory chip that identifies the range and maintains the calibration between all *Versatest* Indicators. Setup and calibration programming is entered via front panel membrane keys. The *Versatest* can store and recall up to 3,000 different torque/force readings. Statistical analysis stored in memory can be downloaded to a computer or serial printer. A hard wired lithium battery keeps the internal memory and the date/time clock operating for up to 10 years.

#### **Versatest Specifications**

versulest speci	iications		
Specifications	Description		
Display	Large 5.5" x 1.5" backlighted LCD graphics display (240 x 64 dot matrix, 0.67" torque digits character height)		
Capacity	5 significant digits ± 32,000 counts (16 bit A/D)		
Sample Rate	2,000 samples per second		
Display Rate	5 updates per second		
Accuracy*	± 0.25% OF READING AT 25 °C (with TTC Transducer calibration)		
Temperature Drift	+ 0.03% / °C (+0.017% / °F)		
Bar Graph	100 segment analog of applied torque scaled to Limits Set value		
Units Of Measure	in oz, in lb, ft lb, N•m, dN•m, kg cm and kg m		
Modes	TRACK, PEAK HOLD, FIRST PEAK, POWER TOOL		
Soft Key User Interface	Units, Calibration, Date/Time, Statistics, Hi/Low Limits Set, Data Store, Data Recall, Printer Setup, Zero, Auto/Manual Store/Send/Clear		
Select Keys	Increment, Decrement, Shift Left, Shift Right, Enter		
Operating Temperature	10 to 32 °C (50 to 90 °F)		
Storage Temperature	-20 to 50 °C (-2 to 122 °F)		
Humidity	85% Relative Humidity @ 21 °C (70 °F)		
Dimensions	10" wide x 4" high x 10.5" deep (including carry handle)		
Power Supply	Auto Switching 100 V AC-24 V AC, 50/60 Hz, 50 W		
Data Storage/Recall	3,000 Measurements		
Statistical Analysis	Max, Min, Range, Mean, Sigma N, Sigma, Cp, Cpk, % Error, -NoGo, +NoGo		
Histogram	Lower Set Limit, Upper Set Limit, 10 Divisions		
Printer/Computer Serial Output Port	RS232 (True), 300-19.2K Baud		
Computer Serial Com Port	RS232 (True), 300-19.2K Baud		
Analog Output	+(CW)/-(CCW) 1.8V at Transducer Full Range Linearity, ±1% of reading		
Loader Control Relays	Two, Normally Open, Form A, Rated 12 V DC @ 1/2A close contact at 110% CW or CCW or torque/force transducer range		

Refer to Transducer Chart on pg 245 for additional information.

#### Features:

- Automatic downloading
- RS232C serial port use with printer or PC
- Data storage/recall (with date/time stamp) holds up to 3,000 measurements
- Real time clock
- · Smart transducers
- Analog output: connect to oscilloscope or X-Y plotter
- External printer can be mounted on top of the Versatest unit
- Remote foot switch interface for send/print functions
- Four modes: TRACK, PEAK HOLD, FIRST PEAK, POWER TOOL
- Statistic Process Control (SPC) built in



VERSA600LDR2

#### VERSATEST600 Electronic Torque Metering System.

Provides high speed monitoring of static and dynamic torque inputs. Includes the *Versatest* indicator, VERSA600LDR2 loader, TTC12 transducer, TTC400 4-in-1 transducer and TTC5000-1 4-in-1 adaptor plate.

VERSA600LDR2 Mechanical Loader. Unit will load dial, micrometer, beam and electronic torque wrenches. Maximum capacity of 600 ft lb Use with any TTC series transducer from 15 in oz to 600 ft lb

#### Accessories

TTC3421	Table Mounting Bracket for Transducers up to 1,000 in lb		
TTC3422	Table Mounting Bracket for Transducers from 125-600 ft lb		
CDI200015003	Table Mounting Bracket for Transducers from 1,000-2,000 ft lb		
TTC501 Connects TTC610 Digital Indicator to PC			
TTC502 Connects TTC610 Digital Indicator to printer			
TTC75006	Torque Screwdriver Testing Kit		

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration. (unless otherwise indicated)

All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20 to 100% of full scale, using NIST® traceable equipment.

## TTC2000 Electronic Torque Tester™

- Automatic sensor recognition with TTC series "Smart" transducers
- Range: 15 in oz to 2,000 ft lb (bidirectional)
- Total uncertainty (10% to 100% of range): ± 0.25% of indicated torque value
- Alpha numeric 8 digit display
- Memory to 3,000 values
- Includes low profile serial printer
- Date and time stamp for stored values
- Statistical analysis performed on stored data
- Programmable manual or automatic options for clear, store and print functions

- Recall and review of stored torque values
- Modes: TRACK, PEAK, FIRST PEAK and POWER TOOL
- · Optional angle encoder
- RS232C port is standard
- · Analog output is standard
- Full digital circuitry
- 8 torque measurement units: in oz, in lb, ft lb, cN•m, dN•m, N•m, kg cm and kg m
- Automatic lock up for transducer protection
- Automatic zero
- Automatic transducer recognition
- . Operates on 120 V AC or 240 V AC



#### TTC2000/TTC2800 System Specifications

TTC2000 Manual	Torque/Force Display	Eight digit, alpha-numeric, super bright red LED, 0.55 inch character height
Loader System		
Luauei System	Capacity	8 digits ± 32,000 counts (16 bit A/D)
	Accuracy*	± 0.25% of reading at 25 °C (with TTC Transducer calibration)
	Temperature Drift	+ 0.03% / °C (+ 0.017% / °F)
	Units Of Measure	TORQUE: ft lb, in lb, in oz, N•m, dN•m, kg cm and kg cm; FORCE: lbf, ozf, N, dN, kp and gf
	Maximum Range Display	2-line x 16 character 5 x 8 dot-matrix LCD used for MAX. Transducer range, Units, Angle, Calibration, Date/Time, Statistics, Torque/Force or Torque/Angle Limits Set, Data Store/Recall, Printer Set Up
	Modes	Track, Peak Hold, Angle, First Peak, Power Tool
	Operating Temperature	10 to 32 °C (50 to 90 °F)
	Storage Temperature	-20 to 50 °C (-2 to 122 °F)
	Humidity	Up to 90%, Noncondensing
	Power Supply	120 V AC ±10%, 50/60 Hz @ 3.14 A (including motor current)
	Data Storage/Recall	3,000 Measurements
	Statistical Analysis	Max, Min, Range, Mean, SigmaN, Sigma, Cp, Cpk, % Error, -NoGo, +NoGo
	Histogram	Lower Set Limit, Upper Set Limit, 10 Divisions
	Printer/Computer Serial Output Port	RS232 (True), 300-19.2K Baud
	Computer Serial Com Port	RS232 (True), 300-19.2K Baud (Optional)
	Analog Output	+(CW/-(CW) 1.8 V at Transducer Full Range Linearity, ±1% of reading
	Loader Control Relays	Two, Normally Open, Form A, Rated 12 V DC @ 1/2 A close contact at 110% CW or CCW or torque/ force transducer range
	Loader Hand Crank	Input torque 8 ft lb Maximum, Output Torque 2,000 ft lb Maximum
TTC2800 Motorized	Motorized Loader Modes	Manual; Auto Dial; Auto 1st Peak
Control Loader System	Motorized Loader Power Supply	120 V AC $\pm$ 10% Hz @ 3.14 A (including motor current); (optional step down transformer for 240 V AC operation)

## TTC2000/TTC2800 System Components

	Stock No.	Description	Application
TTC2000 Components	TTC600	Mechanical Loader	Applies load to torque wrenches for testing on TTC2000. Includes loader, torque indicator stand, torque pin, protective shield, small transducer adaptor and power cord.  45" W x 24" D x 9.5" H
	TTC610	Digital Indicator	Torque tester for the TTC2000 System.
	KRA2411PDC	Roller/Storage Cabinet	Used to mount TTC600/TTC610 (TTC2000) or TTC800/TTC810 (TTC2800) and store accessories. Not available individually
TTC2800 Components	TTC800	Motorized Loader	Applies load to torque wrenches for testing on TTC2800 System
	TTC810	Digital Indicator	Torque Tester for the TTC2800 System
	KRA2411PDC	Roller/Storage Cabinet	Used to mount TTC600/TTC610 (TTC2000) or TTC800/TTC810 (TTC2800) and store accessories. Not available individually

All Snap-on® torque wrenches, drivers and testers are provided with a Certificate of Calibration. (unless otherwise indicated)

All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20 to 100% of full scale, using NIST® traceable equipment.







- Do not exceed rated torque Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy Read safety precautions on pages W1 to W4

## **Electronic Torque Tester and Calibrator**









Transducers TTC

All TTC series transducers include the correct adaptor for the indicated torque range.

Stock No.	Description	Sq. Drive Size	Range	Bench Top Mounting Bracket	
TTC4	Transducer	1/4	5-50 in oz	TTC3421	
TTC5	Transducer	1/4	15-200 in oz	TTC3421	
TTC6	Transducer	1/4	4-50 in lb	TTC3421	
TTC65	Transducer	1/4	15-150 in lb	TTC3421	
TTC7	Transducer	3/8	30-400 in.lb.	TTC3421	
TTC8	Transducer	3/8	80-1,000 in lb	TTC3421	
TTC10	Transducer	1/2	10-125 ft lb	TTC3422	
TTC11	Transducer	1/2	20-250 ft lb	TTC3422	
TTC12	Transducer	3/4	60-600 ft lb	TTC3422	
TTC13	Transducer	1	100-1,000 ft lb	TTC15002	
TTC14	Transducer	1	200-2,000 ft lb	TTC15002	
TTC400*	* 4-in-1 Transducer		4-50 in lb 30-400 in lb 80-1,000 in lb 20-250 ft lb		
TTC5000-1**	4-in-1 Adaptor Plate	_	_	_	

<sup>\*</sup>TTC400 requires the TTC5000-1 adaptor plate when used with the TTC600 manual loader, TTC800 motorized loader and VERSA600LDR

#### Calibration Wheels/Arms

Use to calibrate any  $\overline{\text{TTC}}$  series transducer. Arms are certified to manufacturer's standards.

TTC500	2.5" Calibration Wheel, <sup>1</sup> /4" square drive						
TTC1510	5" Calibration Wheel, 1/4" drive (includes 3/8" adaptor)						
TTC1520	10" Calibration Butterfly, <sup>1</sup> /2" square drive						
TTC1540	40" Calibration Arm, 1 1/4" square drive (includes 3/4" adaptor)						



#### Accessories

Stock No.	Description					
TTC501	Connects TTC610 Digital Indicator to PC					
TTC502	Connects TTC610 Digital Indicator to printer					
TTC25002	Free standing calibration stand with mounting block and hardware for use with TTC2000/TTC2800 Systems and all TTC Series Transducers					
TTC75002	Torque Screwdriver Testing Kit					
TTC5500-1	Extension Arm (required for wrenches longer than 45")					



QC2JRS400









**Force Testing Equipment** 

- Reaction arms, cables, mounting plates and fixtures are available for testing tensiometers plus compression and tension gauges. The TTC600 and TTC800 loaders and TTC series transducers can be configured to deliver compression and tension loads
- The TTC610/TTC810 indicator also provides measurement, display, storage and statistical analysis for FORCE inputs

TTC2600	Tensiometer Testing Kit
TTC2610	Tension Gauge Testing Kit
TTC2620	Compression Gauge Testing Kit
TTC26302	Force Arm Kit (Only one is needed for any Force Testing Kit)

#### **Weight Sets**

Use to calibrate any TTC series transducer. All weights are NIST (NBS) traceable.

TTC3200	Weight Set #1 (Use for all TTC Series Transducers)
TTC3210	Weight Set #2 (For 200 in oz to 250 ft lb TTC Series Transducers)
TTC3220	Weight Set #3 (For 600 ft. lb To 2.000 ft lb TTC Series Transducers)



## Weight Hangers/Trays

Use to calibrate any TTC series transducer. Weight trays certified as to weight.

TTC301	Weight Hanger, 8 oz			
TTC3040	Weight Tray, 7.5 lb			
TTC3020	Weight Tray, 15 lb			
TTC3030	Weight Tray, 50 lb			

#### **Joint Rate Simulator Adaptors**

- Use with torque tester when testing nonimpacting power tools
- Square drive adaptor is placed on top of square drive of the torque tester and tightened with a set screw
- Adaptor bit is inserted into the power tool and mated to the top of the joint adaptor
- By stacking the belleville washers in set patterns, the joint rate adaptor can simulate soft, medium, or hard joints

Stock No.	Square Drive, inches	Capacity, in lb	Adaptor Bit	Load Screw
QC1JRS50	1/4	50	<sup>1</sup> /4" Hex x <sup>3</sup> /16" Hex	<sup>1</sup> /4" x 28 x 1
QC2JRS400	3/8	400	3/8" Square Internal x 3/8" Hex	<sup>7</sup> /16" x 20 x 1.5
QC2JRS1000	3/8	1,000	3/8" Square Internal x 1/2" Hex	<sup>5</sup> /8" x 18 x 1.5

<sup>\*\*</sup>Required for TTC400 4-in-1 torque transducer to be used on TTC600/TTC800 loaders.

## **Electronic Bench Top Torque Testers**

# Horizontal Torque Testers and Transducers TBT600A Horizontal Torque Tester.

- Designed to be a complete and flexible calibration solution
- Peak hold feature incorporates "hands free" mode to increase efficiency
- Certificate generation function allows unit to print certifications directly to a printer or computer
- NTEP® certified scale is independently traceable to NIST® standard Handbook 44 and stored data of tester calibration for auditing purposes



## Transducers(optional)

Stock No.	Description	Range	Resolution
TBTT16A	Transducer 7.5 to 200 in lb		.002 ft lb, .02 in lb, .025 in oz, .002 N•m., .0002 kg m., .02 kg cm
TBTT100A	Transducer 5 to 100 ft lb		.01 ft lb, .1 in lb, 2 in oz, .01 N•m., .001 kg m, .1 kg cm
TBTT600A	OOA Transducer 30 to 600 ft lb		.05 ft lb, .5 in lb, 10 in oz, .1 N•m., .01 kg m., .1 kg cm



**TCR175** 

## **Torque Comparators**

#### **TCR175 Torque Comparator.**

- To determine if a torque wrench requires calibration to maintain proper application of torque
- Large and easy to read dial and simple operation makes the tester quick and easy to use for everyday verification of torque calibration
- 1/2" female square drive input and 175 ft lb capacity with 5 ft lb graduations and 230 N⋅m capacity with 10 N⋅m increments is a perfect fit for the most popular torque wrenches
- Integrated exercise adaptor makes it easy to break in simple, providing the most accurate results (as per B107-300 standard)
- 2% accurate within ± 2% of the reading from 20% of full scale to full scale clockwise and counterclockwise
- Can check a 3/8" drive torque wrench by using an A2A or GAF2A adaptor



TCR600

#### **TCR600 Torque Comparator.**

Similar to TCR175 except for these differences:

- 3/4" female square drive input and 600 ft lb capacity with 10 ft lb graduations and 800 N

  m capacity with 20 N

  m increments
- Compact design with 1/4" steel mounting plate allows for convenient installation in any direction: horizontally on a bench, vertically on a wall, or on any other sturdy, flat surface
- Use on most 3/4" drive torque wrenches including these popular Snap-on® models: ATECH4R600, TECH4R600/TECH4RM600, QD4400/QD4R400, QD4600/QD4R600, TQR400E/TQR600E, TE352A/TE602A series and TEC352A/TEC602A series
- · Does not include certificate of calibration

All Snap-on torque wrenches, drivers and testers are provided with a Certificate of Calibration. (unless otherwise indicated)

All wrenches and drivers are calibrated per ASME® and ISO® standards for accuracy, from 20 to 100% of full scale, using NIST® traceable equipment.







- Do not exceed rated torque Do not use to break fasteners loose
- Periodic recalibration is necessary to maintain accuracy Read safety precautions on pages W1 to W4

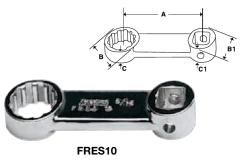
## **HIGH PERFORMANCE/SPLINE**

## **Spline Torque Adaptors**

Snap-on® spline wrenching tools have been developed to service high tensile strength spline nuts and bolts widely used on both military and commercial aircraft.

Precise, radial spline teeth engage the fastener teeth over a wider area to minimize stress, and allow application of high torque to reduce risk of damage to the fastener or to the tool.

Chrome tools comply with Military Spec. MS-33787 and MIL-W-89823. (Industrial finish tools comply with performance specifications and differ only in finish.) The unique spline wrenching configuration can also be used on ordinary 6 and 12 point fasteners with an advantage similar to the *Snap-on* Flank Drive® wrenching system.



## 3/8" Drive Spline, inches

#]	<b>□</b> Ţ	Stock No.	Working Torque, in lb	A	B-B1	C-C1
#7	7/32	FRES7	140	2	.375750	1/4-7/16
#8	1/4	FRES8	195	2	.400750	1/4-7/16
#9	9/32	FRES9	220	2	.445750	1/4-7/16
#10	5/16	FRES10	250	2	.490750	1/4-7/16
#12	3/8	FRES12	515	2	.590750	5/16-7/16
#14	7/16	FRES14	875	2	.680750	5/16 <b>-</b> 7/16
#16	1/2	FRES16	1,575	2	.745750	5/16-7/16
#18	9/16	FRES18	1,750	2	.825750	3/8-7/16
#20	5/8	FRES20	1,750	2	.895750	3/8-7/16
#22	11/16	FRES22	1,750	2	.997750	1/2-7/16
#24	3/4	FRES24	1,750	2	1.08750	9/16-7/16



## 1/2" Drive Spline, inches

,	•						• \
<b>#</b> ]	<b>□</b> Ţ	Stock No.	Working Torque, in Ib	A	B-B1	C-C1	
#18	9/16	SRES18	2,275	3	.818-1.04	13/32 -1/2	•
#20	5/8	SRES20	2,450	3	.900-1.04	1/2 -1/2	•
#22	11/16	SRES22	2,975	3	.989-1.04	1/2 -1/2	•
#24	3/4	SRES24	3,500	3	1.08-1.04	1/2 -1/2	•
#26	13/16	SRES26	4,410	3	1.16-1.04	1/2 -1/2	•
#28	7/8	SRES28	4,900	3	1.26-1.04	1/2 -1/2	•
#30	15/16	SRES30A	6,000	3	1.26-1.04	37/64 -37/64	

## 3/8" Drive Torque Adaptors, Non-Spline



## Flank Drive Torque Adaptors, mm

Working Torque, in lb		(12)	A	В	C	D	E
420	10	FRDHM10	17.1	18.8	7.8	11.1	50.8
720	13	FRDHM13	21.0	18.8	7.8	11.1	50.8
1,200	15	FRDHM15	25.1	18.8	7.8	11.1	50.8
1,480	18	FRDHM18	22.4	18.8	13.3	11.1	50.8



Set Contains:

## Flank Drive Torque Adaptors, inches

Working Torque, in lb		(12)	A	В	C	D	E	<b>(12</b> )
190	5/16	FRDH101	.475	.750	1/4	7/16	2	•
420	3/8	FRDH121	.570	.750	5/16	7/16	2	•
500	7/16	FRDH141	.655	.750	11/32	7/16	2	•
710	1/2	FRDH161	.740	.750	11/32	7/16	2	•
1,050	<sup>9</sup> /16	FRDH181	.825	.750	3/8	7/16	2	•

Conventional he

# **POWER TOOLS**



# SERIOUS POWER TAKES MANY FORMS

From lithium cordless impact wrenches, to powerful air tools, to ergonomic sanders, Snap-on delivers power combined with unmatched comfort and control



## **POWER TOOLS**

#### Power

Power is defined by your ability to get the job done and Snap-on gives you more ways to do it

**POWERFUL TORQUE** — More power per pound, combining heavy duty components with lightweight bodies

**CORDLESS TOOLS** — Long-lasting power for the new lithium series tools you use most

**ACCESSIBILITY** — Power to places where just hand tools used to go

#### **Comfort and Control**

Snap-on® power tools are built with the comfort and control you need to use them all day, every day

**BALANCED WEIGHT** — Better control with glass-filled nylon housings balancing the weight

**ERGONOMIC GRIPS** — Feels better in your hand, making it easier to use

**COMPACT NOSE DESIGN** — Better access to restricted areas by removing unnecessary bulk



# Progress is Measured in the Power to Move on to Your Next Job.

Each Snap-on® cordless tool combines surprising power with maximum mobility.

**Lightweight and comfortable** — *Snap-on* cordless tools are designed to feel balanced and natural in your hand.

**Power** — Pull the trigger and feel the power. That's when you realize why Snap-on has become a leader in the cordless category.

## Durability.

If you are going to use tools that go anywhere, they'd better work when you get there.

Snap-on builds tools with the best components and engineers them to exacting standards.

Higher grade metals — Internal components combined with glass-filled nylon housings give you a tool that will stand up in the toughest shop environment.

## More Ways to Give You Power.

Snap-on recently added more battery options to the power tool collection.

#### **Lithium Batteries**

The CTB7185 lithium battery is compact, lightweight and long lasting. The CTB7185 contains the highest grade lithium cells available. The built-in fuel gauge allows the user to monitor the current charge state.

#### **Ni-Cad Batteries**

When it comes to long life cycles, Ni-Cad is the rechargeable battery you can count on. Ni-Cad offers high performance in cold temperatures. Durability and power you can trust.







## **Quick Reference Chart**

## **Impacts**

Specifications	CT7850 †	CT6850 †	CT4450A †	CT4410A †	CT561 †	CT661 †
Battery Type	Lithium 3.0 Ah	Ni-Cad 2.5 Ah	Ni-Cad 2.5 Ah	Ni-Cad 2.5 Ah	Ni-Cad 700 mAh	Lithium 1.5 Ah
Battery Voltage	18	18	14.4	14.4	7.2	7.2
Square Drive, inches	1/2	1/2	1/2	3/8	3/8	3/8
Torque Output, ft lb (N•m)	450 (542)	400 (475)	150 (203)	150 (203)	50 (68)	70 (7.9)
Blows Per Minute, bpm	2,100	2,100	2,900	2,900	3,000	3,000
Free Speed, rpm	2,200	2,200	2,280	2,280	2,500	2,000
Charge Time (minutes)	30	40	35	35	55	30
Length, in. (mm)	9.95 (252)	9.95 (252)	6.4 (163)	6.4 (163)	6.2 (157)	6.2 (157)
Weight w/Battery, lbs (kg)	6.8 (3.1)	7.6 (3.4)	4.6 (2.1)	4.6 (2.1)	1.7 (.77)	1.71 (.77)
Warranty (battery)	2 Years/1,000 Cycles	1 Year	1 Year	1 Year	1 Year	1 Year
Warranty (tool, charger)	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year
Pinned Anvil Version	CT7850P †	CT6850P †	CT4450AP †	CT4410AP †	_	_
Quick Change Anvil Version	CT7850QC † (7/16")	CT6850QC † (7/16")	_	CT4410AQC † (1/4")	CT561QC †	CT661QC †
Tool Body Only	CT7850DB †	CT6850DB †	CT4450ADB †	CT4410ADB †	CT561DB †	CT661DB †

## Drills/Drivers 1/2" (13mm)

			1			
Specifications	CDR7850H †	CDR6850 †	CDR4450 †	CTS561CL †	CTS561 †	CTS661 †
Battery Type	Lithium 3.0 Ah	Ni-Cad 2.5 Ah	Ni-Cad 2.5 Ah	Ni-Cad 700 mAh	Ni-Cad 700 mAh	7.2 V Lithium
Battery Voltage	18	18	14.4	7.2	7.2	7.2
Chuck Capacity, inches	1/2	1/2	1/2	1/4 Hex	1/4 Hex	1/4 Hex
Torque Output, inches lbs (N•m)	450 (50.8)	450 (50.8)	400 (45.2)	60 (6.78)	60 (6.78)	100 (11.29)
Clutch Settings	22	22	22	6	_	9
Gear Box Type	2 speed	2 speed	2 speed	1 speed	1 speed	1 speed
RPM (Low)	0-500	0-500	0-350	_	_	_
RPM (High)	0-1,800	0-1,800	0-1,500	375	375	400
Charge Time (minutes)	30	40	35	55	55	30
Length, inches (mm)	10.25 (260)	10.25 (260)	7.85 (199)	5.2 (132)	4.6 (117)	5 1/4 (133.3)
Weight w/Battery, lbs (kg)	5.5 (2.5)	6.3 (2.8)	4.9 (2.2)	1.5 (.68)	1.2 (.55)	1.5 (.68)
Warranty (battery)	2 Years/1,000 Cycles	1 Year	1 Year	1 Year	1 Year	1 Year
Warranty (tool)	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year
Tool Body Only	CDR7850HDB †	CDR6850DB †	CDR4450DB †	CTS561CLDB †	CTS561DB †	CT661DB †

## **Reciprocating Saws/Grease Guns**

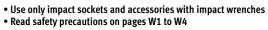
Specifications	CTRS6855 <sup>†</sup> Recip Saw	CTRS6850 † Recip Saw	CGG4850 † Grease Gun
Battery Type	Lithium 3.0 Ah	Ni-Cad 2.5 Ah	Ni-Cad 2.5 Ah
Battery Voltage	18	18	18
Stroke Length, inches (mm)	1 (25.4)	1 (25.4)	_
Strokes Per Minute	2,300	2,300	_
Capacity (tubes dispensed w/one battery)	_	_	12
Hose Length, inches (mm)	_	_	30 (762)
Pressure Rating (psi)	_	_	7,500
Charge Time (minutes)	30	40	40
Length, inches (mm)	17 (431)	17 (431)	15.8 (401)
Weight w/Battery, lbs (kg)	7.7 (3.4)	8.7 (4.0)	9.5 (4.3)
Warranty (battery)	2 Years/1,000 Cycles	1 Year	1 Year
Warranty (tool)	1 Year	1 Year	1 Year
Tool Body Only	CTRS6850DB †	CTRS6850DB †	CGG4850DB †

<sup>†</sup>**( (** 









18 V Kits



## **Cordless Kits**

When multiple cordless tools are needed at the same time, take a look at investing in cordless kits. Kits offer superior value and come complete with batteries, a battery charger, flashlight and tote bag. Add versatility, add mobility and add on to your cordless kit down the road with additional cordless tools. Snap-on offers tool only options to build your portfolio of tools. Lithium or Ni-Cad. Mix or match. Snap-on® cordless allows you to operate the same tool with either Lithium or Ni-Cad batteries.

Cycog Set Contains:	CKERS,	ODILA, CKG8501	DIRLA, CKG850	ORIA, CA76	SOCIL, CATE	500H , CK76	SODI, CATE	SOCIL, CKAATO	ONA,
CDR6850DB † 18 V Drill Body	•	•	•	•					
CDR7850HDB † 18 V Hammer Drill Body						•	•		
CT6850DB † 18 V 1/2" Drive Impact Wrench Body		•	•						
CT7850DB † 18 V Lithium 1/2" Drive Impact Wrench Body					•	•		•	
CTRS6850DB † 18 V Reciprocating Saw Body and Blades			•	•					
CDR4450DB † 14.4 V Drill Body									•
CT4410ADB <sup>†</sup> 14.4 V 3/8" Drive Impact Wrench Body									•
DBBPT13 Blue-Point Drill Bit Set	•						•		
CTB6187 † 18 V Lithium Battery (2)									
CTB7185 † 18 V Lithium Battery (2)					•	•	•	•	
CTB4187 † 18 V Ni-Cad Batteries (2)	•	•	•	•					
CTB4147 † 14.4 V Ni-Cad Batteries (2)									•
CTC620 † Battery Charger	•	•	•	•					•
CTC720 † Battery Charger						•	•		
CTC628 † Mobile Battery Charger									
CTC728 <sup>†</sup> Mobile Battery Charger					•			•	
CTLED4918H0 † LED Flashlight High Output	•	•	•	•				•	·
CTL7850 † Compact Worklight					•	•	•		
CTTOTEA † Tote Bag	•	•	•	•	•	•	•	•	•

## **18 V Impact Wrenches**





- 450 ft lbs torque output
- Built-in super bright 1 W LED light
- Built-in anvil brake stop
- Digital microprocessor controlled switch for precise control
- Rare earth magnet motor provides greater torque
- Housing screen keeps debris out of the tool
- Thermal temperature controlled motor prolongs tool life
- Includes (2) Lithium batteries and tote bag





Friction Ring



Quick Change



Pinned Anvil

## CT6850 18 V Ni-Cad Impact.

- 400 ft lbs torque output
- Glass filled nylon housing provides durability and strength
- Patented air flow system routes cool air over the motor to extend tool life
- Needle bearing support helical cut gears distribute even torque load from the motor
- Ergonomic cushion grip absorbs vibration and reduces fatigue
- Super heavy duty motor is cushion mounted to reduce vibration
- One handed forward/reverse lever
- (2) Ni-Cad batteries and blow molded case

Specifications	CT7850 †	CT7850M †	CT6850 †	CT6850M †
Battery Type	Lithium 3.0 Ah	Lithium 3.0 Ah	Ni-Cad 2.5 Ah	Ni-Cad 2.5 Ah
Battery Voltage	18	18	18	18
Square Drive, inches (mm)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)
Anvil Type	Friction Ring	Friction Ring	Friction Ring	Friction Ring
Torque Output ft lb (N•m)	450 (542)	450 (542)	400 (475)	400 (475)
Blow Per Minute, bpm	2,100	2,100	2,100	2,100
Free Speed, rpm	2,200	2,200	2,200	2,200
Charge Time (minutes)	30	30	40	40
Length, inches (mm)	9.95 (252)	9.95 (252)	9.95 (252)	9.95 (252)
Weight w/Battery, lbs (kg)	6.8 (3.1)	6.8 (3.1)	7.6 (3.5)	7.5 (3.4)
Warranty (tool & charger)	1 Year	1 Year	1 Year	1 Year
Warranty (battery)	2 Years/1,000 cycles	2 Years/1,000 cycles	1 Year	1 Year
Pinned	CT7850P †	CT7850P †	CT6850P †	CT6850PM †
Quick Change	CT7850QC †	CT7850QC †	CT6850QCDB †	CT6850QCM †
Tool only	_	_	CT6850DB †	_
Battery (qty)	CTB7185 † (2)	CTB7185 † (2)	CTB4187 † (2)	CTB4187 † (2)
Storage Case	CTTOTEA	CTTOTEA	PB165	PB165
Charger	CTC720 †	CTC728 †	CTC620 †	CTC628 †
Optional Protective Boot	CT7850B00T	CT7850B00T	CT4850B00T	CT4850B00T

CT6850DB and CT6850QCDB are tool bodies only and do not include batteries, charger or case

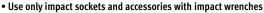
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• Read safety precautions on pages W1 to W4

#### 18 V Drills



#### 18 V Drills CDR7850 18 V Lithium Hammer Drill.

- · Hammer function allows for drilling in concrete and masonry
- Built-in super bright 1 W LED light
- Housing screen keeps debris out of the motor
- All steel spindle lock for longer tool life
- 3 position function: Hammer/Drill/Screw
- Digital microprocessor controlled switch for precise control
- . Includes 2 Lithium batteries and tote bag



#### CDR6850 18 V Ni-Cad Drill.

- 2 battery choices available: 18 V Lithium or 18 V Ni-Cad match the needs of any application
- Industrial strength, heavy duty gearing designed for drilling in metal
- · Heavy duty single sleeve keyless chuck with carbide jaws grips bits securely and prevents slippage
- 22 position clutch with a 2 speed gearbox provides torque control for driving applications
- · Glass filled nylon housing is rugged and provides durability and strength
- Over molded ergonomic cushion grip absorbs vibration and reduces user fatigue
- · Stainless steel motor screens keep debris out of the motor, extending tool life
- · Contoured variable speed trigger provides ergonomic comfort and superior control

Specifications	CDR7850H †	CDR7850HDB †	CDR6850 †	CDR6850DB †	
Battery Type	Lithium 3.0 Ah	Lithium 3.0 Ah	Ni-Cad 2.5 Ah/Lithium 3.0 Ah	Ni-Cad 2.5 Ah/Lithium 3.0 Ah	
Battery Voltage	18	18	18	18	
Chuck Capacity, inches (mm)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	
Torque Output, in Ibs (N•m)	450 (50.8)	450 (50.8)	450 (50.8)	450 (50.8)	
Clutch Settings	22	22	22	22	
Gear Box Type	3 speed	3 speed	2 speed	2 speed	
Hammer Mode	Yes	Yes	No	No	
RPM (Low)	0-500	0-500	0-500	0-500	
RPM (High)	0-1,800	0-1,800	0-1,800	0-1,800	
Charge Time (minutes)	30	30	40	40	
Length, inches (mm)	10.25 (260)	10.25 (260)	10.25 (260)	10.25 (260)	
Weight w/Battery, lbs (kg)	5.5 (2.5)	** 3.7 (1.6)	6.3 (2.8)	** 3.7 (1.6)	
Warranty (tool & charger)	1 Year	1 Year	1 Year	1 Year	
Warranty (battery)	2 Years/1,000 cycles	_	1 Year	_	
Battery (qty)	CTB7185 † (2)	Not Included	CTB4187 † (2)	Not Included	
Storage Case	CTTOTEA	Not Included	PB165	Not Included	
Charger	CTC720 †	Not Included	CTC620 †	Not Included	

CDR6850DB/CDR7850HDB is the tool body only and does not include batteries, charger or case

CT6850PDB is Pinned Anvil tool only and does not include batteries, charger or case

<sup>†</sup> **( (** 

<sup>\*\*</sup> Battery not included in weight

### **18 V Reciprocating Saws**



### 18 V Reciprocating Saws CTRS6855/CTRS6850 Series.

- 2 battery choices available, 18 V Lithium or 18 V Ni-Cad match the needs of any application
- 75 A rated, heavy duty variable speed trigger provides long life and is contoured to reduce user fatigue
- . Heavy duty 14 gauge internal wiring withstands high current loads during heavy sawing
- Spring loaded blade retention system requires no tools and ejects broken blades easily
- Nonslip cushion grip nose reduces vibration and provides positive tool control
- Heavy duty armature and balanced motor design provide smooth operation
- Turbine style cooling system reduces heat buildup, extending tool life
- · Sealed nose mechanism prevents dirt and sawing debris from damaging internal components

Specifications	CTRS6855 †	CTRS6850 †	CTRS6850DB †
Battery Type	Lithium 3.0 Ah	Ni-Cad 2.5 Ah	Ni-Cad 2.5 Ah/Lithium 3.0 Ah
Battery Voltage	18	18	18
Stroke Length, inches (mm)	1 (25.4)	1 (25.4)	1 (25.4)
Strokes Per Minute	2,300	2,300	2,300
Charge Time (minutes)	30	40	_
Length, inches (mm)	17 (431)	17 (431)	17 (431)
Weight w/Battery, lbs (kg)	7.7 (3.4)	8.7 (4.0)	6.0 (2.7)
Warranty (tool & charger)	1 Year	1 Year	1 Year
Warranty (battery)	2 Years/1,000 cycles	1 Year	_
Battery (qty)	CTB6187 † (1)	CTB4187 † (1)	Not Included
Storage Case	CTTOTEA	CTTOTEA	Not Included
Charger	CTC620 †	CTC620 †	Not Included

CTRS6850DB is the tool body only and does not include batteries, charger or case

†(E

### **Grease Gun**

#### 18 V Grease Guns

- · All steel heavy duty gearing provides strength and durability
- High pressure 7,500 psi hose stays flexible in cold weather
- Planetary spur gear system resists wear and stripping

Specifications	CGG4850 †	CGG4850DB †
Battery Type	Ni-Cad 2.5 Ah	Ni-Cad 2.5 Ah
Battery Voltage	18	18
Capacity, Tubes Per Charge	12	12
Hose Length, inches (mm)	30 (762)	30 (762)
Charge Time (minutes)	40	_
Length, inches (mm)	15.8 (401)	13 (330)
Weight w/Battery, lbs (kg)	9.5 (4.3)	7.5 (3.4)
Warranty (tool & charger)	1 Year	1 Year
Warranty (battery)	1 Year	_
Battery (qty)	CTB4187 † (2)	Not Included
Storage Case	CTTOTEA	Not Included
Charger	CTC620 †	Not Included

CGG4850DB is the tool body only and does not include batteries, charger or case

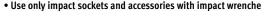
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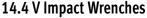


CGG4850

## 14.4 V Impacts & Drills



CT4410A



- Compact, balanced, glass filled nylon housing provides durability and strength
- · Built-in LED illuminates work area
- Cushion mounted heavy duty motor reduces vibration
- · Over molded ergonomic cushion grip absorbs vibration and reduces user fatigue
- Heat treated alloy gears provide power and durability
- Heavy duty heat sink protects switch and dissipates heat to prolong life
- One hand forward/reverse lever changes direction easily





Friction Ring



**Quick Change** 



**Pinned Anvil** 

### 14.4 V Drills

- Built-in LED illuminates work area
- Rare earth magnet motor increases power and efficiency
- 22 position clutch with a 2 speed gearbox provides torque control
- · Over molded ergonomic cushion grip absorbs vibration and reduces user fatigue
- 1/2" capacity chuck with carbide jaws provides secure bit retention and easy changes
- · Heavy duty heat sink protects switch and dissipates heat to prolong life
- One hand forward/reverse lever changes direction easily
- Single sleeve chuck allows for easy bit changes

	Impact V	Vrenches	Drills
Specifications	CT4410A †	CT4450A †	CDR4450 †
Battery Type	Ni-Cad 2.5 Ah	Ni-Cad 2.5 Ah	Ni-Cad 2.5 Ah
Battery Voltage	14.4 V	14.4 V	14.4 V
Square Drive, inches (mm)	<sup>3</sup> /8 (10)	1/2 (13)	1/2 (13)
Anvil Type	Friction Ring	Friction Ring	_
Torque Output ft lb (N+m)	150 ft lb (203)	150 ft lb (203)	400 in lb (45.2)
Gear Box Type	_	_	2-speed
Clutch Settings	_	_	22
Free Speed, rpm	2,280	2,280	0-350/0-1,500
Blows Per Minute, bpm	2,900	2,900	_
Charge Time (minutes)	35	35	35
Length, inches (mm)	6.4 (163)	6.4 (163)	7.8 (199)
Weight w/Battery, lbs (kg)	4.6 (2.1)	4.6 (2.1)	4.9 (2.2)
Warranty (tool & charger)	1 Year	1 Year	1 Year
Warranty (battery)	1 Year	1 Year	1 Year
Pinned	CT4410AP †	CT4450AP †	_
Quick Change	CT4410AQC †	_	_
Tool only	CT4410ADB †	CT4450ADB †	CDR4450DB †
Battery (qty)	CTB4147 † (2)	CTB4147 † (2)	CTB4147 † (2)
Blow Molded Case	PB165	PB165	PB165
Charger	CTC620 †	CTC620 †	CTC620 †

CT4410ADB, CT4450ADB and CDR4450DB are tool body only and do not include batteries, chargers or case. CT4410APDB† is Pinned Anvil tool only and does not include battery charger or case.



## 14.4 V Platforms (Blue-Point®)



## 14.4 V Cordless Tool Kit ETB144DBDIL Cordless Power Tool Kit.

- Impact wrench delivers 140 ft lb of maximum torque directly to the fastener without kickback
- 3/8" drill features a heavy duty single sleeve keyless chuck, plus a variable speed trigger, high and low RPM speed settings and a 20 position clutch
- Portable light features long lasting LED bulb and a 90° pivoting head to position the beam where it's needed
- 1.9 Ah slide on batteries provide the best connection plus a long run time
- All tools offer compact shape with comfort grips and perfect balance
- 21 pc HSS drill bit set with 135° point
- Heavy duty tote bag will carry all these tools and more with ease Kit Includes:

ETB14438ADB - 3/8" Impact Wrench (body only).

ETB14410A - LED Light (body only).

ETB14420ADB - 3/8" Chuck Drill (body only).

ETB14419A - 14.4 V Ni-Cad Battery (2).

ETB14401A - Charger.

**BPTOTE** - Tote Bag.

DBBP21 - High Speed Steel Drill Bit Set (21 pcs).

### 14.4 V Impact Wrenches (3/8")

- Delivers 140 ft lb max torque in a compact design to provide the user maximum versatility
- Includes 2 batteries and one charger packed in a blow molded case
- Batteries have a 1.9 Ah that provides a long run time
- Easy replaceable carbon brushes to keep your investment running like new
- Slide on battery provides better contact and safer operation since battery won't drop
- Perfectly balanced compact shape with surrounding soft grip handle reduces fatique
- Space included in the molded case to add the ETB14410A LED light

Specifications	ETB14438A	ETB14438ADB
Square Drive, inches	3/8	3/8
Blows per Minute, bpm	2,400	2,400
Maximum Torque, in lb (N∙m)	140 (189)	140 (189)
Free Speed, rpm	0-2, 200	0-2, 200
Motor/Battery Voltage	14.4	14.4
Length, inches (mm)	7 (178)	7 (178)
Weight, Ibs (kg)	4.22 (1.9)	4.22 (1.9)
Battery Pack	ETB14419A (1.9Ahr)	Not included
Battery Charger	ETB14401A	Not included

#### 14.4 V Cordless Ratchet

#### ETB14460A/ETB14460ADB 14.4 V 3/8" Cordless Ratchet.

- Cord free eliminates dragging dirty air hoses in and across the service vehicle
- High speed (190 rpm) increase productivity
- Delivers 35 ft lb of torque
- 1.9 Ah Ni-Cad battery provides users with ample run time between charges
- · Aluminum housing provides durability under manual stress loads

#### Kit Includes:

- 14.4 V 3/8" ratchet
- (2) batteries
- · Battery charger
- Molded carrying case

Specifications	ETB14460A	ETB14460ADB			
Square Drive, inches (mm)	<sup>3</sup> /8 (10)	<sup>3</sup> /8 (10)			
Maximum Torque ft lb (N-M)	35 (47)	35 (47)			
Free Speed RPM	190	190			
Motor Battery Voltage	14.4	14.4			
Length, inches (mm)	14 <sup>7</sup> /8 (378)	14 <sup>7</sup> /8 (378)			
Weight w/Battery, lbs (kg)	4.48 (6.6)	4.48 (6.6)			
Battery Pack (1.9 Ah)	ETB14419A	Not Included			
Battery Charger	ETB14401A	_			
Vinyl Boot (optional)	YA889A	YA889A			



ETB14460A











- Use only impact sockets and accessories with impact wrenches
- Read safety precautions on pages W1 to W4

### 14.4 V Platforms (Blue-Point®)



ETB14420A



ETB14430A



- · Includes cordless drill, 2 batteries and battery charger
- Keyless chuck provides quick replacement of bits to save time
- 2 speed switch and variable speed trigger offers maximum control in both forward and reverse
- Clutch cap provides 20 different settings up to 260 in lb torque for precision jobs
- · White LED illuminates when trigger is depressed for those dim working conditions
- Slide on battery provides better contact and safer operation since battery won't drop
- · Perfectly balanced compact shape with surrounding soft grip handle reduces fatigue
- Space included in the molded case to add the ETB14410A light

#### ETB14430A 14.4 V Right Angle Cordless Driver/Drill.

- Field replaceable carbon brushes are easy to repair saving cost and time
- Full alloy gear box for longer life
- Single speed 1,000 rpm with 140 in lb torque output is suitable for heavy duty applications using large bits and fasteners
- Compact size (5" from chuck tip to top of tool body) is ideal for close guarter drilling
- 3/8" stainless steel keyed chuck for strength and precise drilling
- · Ergonomic designed handle reduces fatigue
- White LED illuminates when trigger is depressed for dim working conditions
- Functions as a drill and screwdriver providing value and versatility
- Includes (2) 14.4 V Ni-Cad batteries and one charger in blow molded case
- Use for automotive repairs, construction and home improvements

Specifications	ETB14420A	ETB14420ADB	ETB14430A †	ETB14430ADB
Chuck Cap, inches	3/8	3/8	3/8	3/8
No Load Speed, rpm	0-400/0-1,400	0-400/0-1,400	0-1,000	0-1,000
Maximum Torque, in lb (N•m)	260 (30)	260 (30)	140 (15.8)	140 (15.8)
Motor/Battery Voltage	14.4	14.4	Ni-Cad 1.9 Ah/14.4	Ni-Cad 1.9 Ah/14.4
Length, inches (mm)	8.5 (216)	8.5 (216)	5.0 (127)	5.0 (127)
Weight, Ibs. (kg)	4.28 (1.9)	4.28 (1.9)	4.0 (1.81)	4.0 (1.81)
Battery Pack	ETB14419A (1.9Ah)	Not Included	ETB14419A (2)	Not Included
Battery Charger	ETB14401A	Not Included	ETB14401A	Not Included

<sup>† (</sup> E



ETB14410A

#### 14.4 V Cordless Work Lights ETB14410A Cordless LED Work Light.

- LED bulb provides long life and low power draw for less job interruptions
- 90° pivoting head puts the light where you need it
- Faceted reflector provides bright uniform beam
- · Perfectly balanced compact shape with surrounding soft grip handle reduces fatigue
- Slide on battery provides better contact and safer operation since battery won't drop

Specifications	ETB14410A	
Length, inches (mm)	9 (228)	
Weight, lbs. (kg)	0.5 (0.2) (without battery)	
Battery Pack	Not Included	
Battery Charger	Not Included	



ETB14419A

ETB14401A

Cordless Battery Charger/Pack ETB14419A Battery Pack.

- 14.4 V battery pack for A Series ETB cordless power tools **ETB14401A Battery Charger.**
- Charging unit for ETB14419A battery packs

## 7.2 V Lithium Impact/Screwdrivers







CT661/CT625 7.2 V Lithium Impact

- CT661: 70 ft lbs of torque output
- CT625: 60 ft lbs of torque output
- Variable speed digital toggle style trigger
- Built-in brake stops the anvil from spinning
- Twin beam headlights illuminate work area
- Built-in fuel gauge indicates battery charge
- Fast 30 minute charge time
- Housing screen keeps debris out of the tool
- Includes (2) lithium batteries and soft sided case

#### CTS661 7.2 V Cordless Screwdriver

- 100 in lbs of torque output
- 400 rpms for quick fastener removal
- Variable speed digital toggle style trigger
- Built-in brake stops rotation quickly
- 275 in lbs of spindle lock breaks fasteners loose quickly
- 9 position clutch allows you to dial in the proper application
- . Metal gears for increased torque and longer tool life
- Built-in LED lights
- Includes (2) lithium batteries and tote bag

Specifications	CT661 †	CT625 †	CTS661 <sup>†</sup>
Battery Type	7.2 V Lithium	7.2 V Lithium	7.2 V Lithium
Battery Voltage	7.2 V DC	7.2 V DC	7.2 V DC
Square Drive, inches (mm)	3/8 (10)	1/4 (6)	1/4 (6)
Torque Output, (N•m)	70 ft lb (95)	60 ft lb (81)	100 in lb (11)
Clutch Settings	_	_	9
Free Speed, rpm	2,000	2,000	400
Blows Per Minute, bpm	3,000	3,000	_
Charge Time (minutes)	30	30	30
Length, inches (mm)	6 <sup>1</sup> /4 (159)	6 <sup>1</sup> /4 (159)	6 <sup>1</sup> /4 (159)
Width, inches (mm)	1.8 (45.72)	1.8 (45.72)	1.9 48.26)
Weight w/Battery, lbs (kg)	1.71 (.77)	1.71 (.77)	1.5 (.68)
Warranty (tool & charger)	1 Year	1 Year	1 Year
Warranty (battery)	1 Year	1 Year	1 Year
Quick Change	CT661QC †	_	_
Tool only	CT661DB †	CT625DB †	CTS661DB †
Battery (qty)	CTB6172 † (2)	CTB6172 † (2)	CTB6172 † (2)
Blow Molded Case/Soft Case	CTSC1	CTSC1	CTSC1
Charger	CTC722 †	CTC722 †	CTC722 †







## 7.2 V Ni-Cad Impact/Screwdrivers







- 7.2 V Impact WrenchesSmall, lightweight design is easy to control and reduces user fatigue
- Oversized forward/reverse toggle trigger for versatility
- Integrated soft grip handle provides comfort and positive tool control
- Tapered, lightweight, aluminum nose gets into restricted applications easily

#### 7.2 V Screwdrivers

- 1/4" quick change hex chuck provides secure bit retention
- 6 position clutch for added torque control (CTS561CL only)
- Small, lightweight design maneuvers easily in restricted access applications
- Up to 250 in lb of manual torque can be applied to break stubborn fasteners loose
- · Gearless spindle lock has no teeth or gears to break or chip



**CTS561** 



**CT561QC** 

	Impact Wrenches			Screwdrivers	
Specifications	CT561 <sup>†</sup>	CT561QC †	CT525 †	CTS561 <sup>†</sup>	CTS561CL †
Battery Type	Ni-Cad 700 mAh	Ni-Cad 700 mAh	Ni-Cad 700 mAh	Ni-Cad 700 mAh	Ni-Cad 700 mAh
Battery Voltage	7.2	7.2	7.2	7.2	7.2
Square Drive, inches	3/8	1/4	1/4	1/4	1/4
Torque Output, (N∙m)	600 in lb (67.8)	300 in lb (34)	600 in lb (67.8)	60 in lb (6.78)	60 in lb (6.78)
Clutch Settings	_	_	_	_	6
ree Speed, rpm	2,500	2,500	2,500	375	375
Blows Per Minute, bpm	3,000	3,000	3,000	_	_
Charge Time (minutes)	55	55	55	55	55
ength, inches (mm)	6.4 (136)	6.2 (157)	6.2 (157)	4.6 (117)	5.2 (132)
Veight w/Battery, lbs (kg)	1.7 (.77)	1.7 (.77)	1.7 (.77)	1.2 (.55)	1.5 (.68)
Narranty (tool & charger)	1 Year	1 Year	1 Year	1 Year	1 Year
Narranty (battery)	1 Year	1 Year	1 Year	1 Year	1 Year
Battery (qty)	CTB5172 † (2)	CTB5172 † (2)	CTB5172 † (2)	CTB5172 † (2)	CTB5172 † (2)
Tool Only	CT561DB* †	CT561QCDB* †	CT525DB* †	CTS561DB* †	CTS561CLDB †
Blow Molded Case/Soft Case	CTSC1	CTSC1	CTC572	PB166	PB166
Charger	CTC572 †	CTC572 <sup>†</sup>	CTSC1 <sup>†</sup>	CTC572 <sup>†</sup>	CTC572 †

<sup>\*</sup>Tool bodies only and do not include batteries, charger or case

280

<sup>†</sup> **( (** 

## **Flashlights**



CTLED4918HO



CTL7850 CTL7850 Flashlight.

· Unique compact design

• 8 position 90° rotating head

Operates on 7850 series 18 V

· 4 high quality LEDs

4 position switch

Lithium batteries

· Tempered lens

• ( €

• 9 hour run time



CTL761 Flashlight.

- 200 lumens
- · Low battery indicator
- 4 hour run time
- 120° rotating head
- Aluminum head
- Operates on 661 series 7.2 V Lithium batteries
- ( €

#### CTLED566 Flashlight.

- Features 6 super bright LED bulbs to illuminate the work area
- Durable glass filled nylon housing holds up in tough environments

**Chargers/Batteries** 

• ( E

#### CTLED4918HO Rechargeable LED Flashlight.

- Super bright 200 lumens LED light
- 120° pivoting head allows for greater versatility
- Operates on 14.4 or 18 V 6850 Series Lithium or Ni-Cad slide on batteries
- C E

## 18 V Lithium Batteries

- 50% more run time, 36% lighter, 50% more life than Ni-Cad batteries
- 3.0 Ah high capacity cells
- No self discharge
- 4 LED fuel gauge indicates battery charge and condition

#### 14.4 and 18 V Ni-Cad Batteries

- 2.5 Ah high capacity cells for long life
- No memory effect for maximum charging
- Glass filled nylon housing for durability

#### 7.2 V Lithium Batteries

- 50% more run time than Ni-Cad batteries
- 1.5 Ah high capacity cells
- · Thermostat protects battery from overheating

#### 7.2 V Ni-Cad Batteries

- · No memory effect for maximum charging

- .7 Ah high capacity cells
- CTB5172

**CTB7185** 



**CTC720** 

#### **Batteries**

Туре	Voltage	Style	Charge Time (minutes)	Used With
Ni-Cad	7.2	Stick	55	CTS561, CTS561CL, CT561,CTLED566
Ni-Cad	9.6	Tower	45	CT30, CDR20, lights
Ni-Cad	12	Tower	45	CDR30, CT310, CT350, lights
Ni-Cad	12	Tower	45	CDR30, CT310, CT350, lights
Ni-Cad	14.4	Tower	45	CDR40, CDR45, CT3450, lights
Ni-Cad	14.4	Slide on	40	CDR4450 CT4110, CT4450, lights
Ni-Cad	18	Tower	40	CDR3850, CT3850, lights
Ni-Cad	18	Slide on	40	CDR4850, CDR4850A, CDR6850, CGG4850, CT4850, CT4850H0, CT6850, CTRS4850, CTRS6850, lights
Lithium	18	Slide on	40	CDR4850A, CDR6850, CDR6855, CT4850HO, CT6850, CT6855, CTRS6850, CTRS6855 and all lights with a slide on style base or any model with a green battery terminal connector
Lithium	18	Slide on	30	CT7850, CDR7850H, CTL7850
Lithium	7.2	Tower	30	CT661, CTS661, CT661QC, CT061, CTL761
	Ni-Cad Ni-Cad Ni-Cad Ni-Cad Ni-Cad Ni-Cad Ni-Cad Ni-Cad Lithium	Ni-Cad 7.2 Ni-Cad 9.6 Ni-Cad 12 Ni-Cad 12 Ni-Cad 14.4 Ni-Cad 14.4 Ni-Cad 18 Ni-Cad 18 Lithium 18	Ni-Cad         7.2         Stick           Ni-Cad         9.6         Tower           Ni-Cad         12         Tower           Ni-Cad         12         Tower           Ni-Cad         14.4         Tower           Ni-Cad         14.4         Slide on           Ni-Cad         18         Tower           Ni-Cad         18         Slide on           Lithium         18         Slide on	Ni-Cad   7.2   Stick   55     Ni-Cad   9.6   Tower   45     Ni-Cad   12   Tower   45     Ni-Cad   12   Tower   45     Ni-Cad   12   Tower   45     Ni-Cad   14.4   Tower   45     Ni-Cad   14.4   Slide on   40     Ni-Cad   18   Slide on   40     Lithium   18   Slide on   30     Ni-Cad   18   Slide on   30     Lithium   18   Slide on   30

†( **E** 

### Chargers

Cilaigei	3	
Stock No.	Туре	Application
CTC572 <sup>†</sup>	7.2 V Ni-Cad Charger	Charges all 7.2 V Ni-Cad batteries
CTC6172 <sup>†</sup>	7.2 V Lithium Charger	CT661, CTS661, CT661QC
CTC578 <sup>†</sup>	7.2 V DC Mobile Charger	Charges all 7.2 V Ni-Cad batteries
CTC420 <sup>†</sup>	Multivolt Ni-Cad Charger	Charges all 9.6 V, 14.4 V and 18 V Ni-Cad slide on or tower style batteries
CTC428 <sup>†</sup>	Multivolt Ni-Cad Mobile Charger	Charges all 9.6 V, 14.4 V and 18 V Ni-Cad slide on or tower style batteries
CTC620 <sup>†</sup>	Dual Chemistry Charger	Charges all 14.4 V / 18 V Ni-Cad or Lithium slide on style batteries
CTC628 <sup>†</sup>	12 V DC Dual Chemistry Mobile Charger	Charges all 14.4 V / 18 V Ni-Cad or Lithium slide on style batteries
CTC720 <sup>†</sup>	18 V Lithium Charger	CT7850, CDR7850H, CTL7850
CTC728 <sup>†</sup>	12 V DC Lithium Mobile Charger	CT7850, CDR7850H, CTL7850





· Read safety precautions on pages W1 to W4







#### International Product

Australia	Charger	Stock No.	Stock No.	
Chargers:	Dual Chemistry Charger	CTCFA620 <sup>†</sup> charges all 14.4/18 V Ni-Cad or Lithium slide on	CTCA720 <sup>†</sup> charges all	
	Multivolt Ni-Cad Charger	CTCFA420 <sup>†</sup> charges all 9.6, 12, 14.4 and 18 V Ni- Cad slide on or tower	18 V Lithium	
	7.2 V Charger	CTCA572 † Ni-Cad	CTCA772 † Lithium	
Australia	Tool	Ni-Cad Version	Lithium Version	
Tools:	18 V Impact Wrench	CTA6850 <sup>†</sup>	CTA7850 <sup>†</sup>	
	18 V Drill	CDRA6850 †	CDRA7850 †	
	18 V Reciprocating Saw	CTRSA6850 †	CTRSA6855 †	
	18 V Hammer Drill	_	CDRA7850H † Lithium	
	14.4 V Impact Wrench	CTA4410A †	_	
	14.4 V Drill	CDRA4450 †	_	
	7.2 V Screwdriver	CTSA561 †	CTSA661 †	
	7.2 V Screwdriver w/Clutch	CTSA561CL †	_	
	7.2 V Impact Wrench	CTA561 †	CTA661 †	
United Kingdom	Charger	Stock No.	Stock No.	
Chargers:	Dual Chemistry Charger	CTCFU620 † charges all 14.4/18 V Ni-Cad or Lithium slide on	CTCU720 <sup>†</sup> charges all	
	Multivolt Ni-Cad Charger	CTCFU420 <sup>†</sup> charges all 9.6, 12, 14.4 and 18V Ni-Cad slide on or tower	18 V Lithium	
	7.2 V	CTCU572 † Ni-Cad	CTCEU772 † Lithium	
United Kingdom	Tool	Ni-Cad Version	Lithium Version	
Tools:	18 V Impact Wrench	CTU6850 †	CTCEU7850 <sup>†</sup>	
	18 V Drill	CDRU6850 †	CDRU7850 †	
	18 V Reciprocating Saw	CTRSU6850 †	CTRSU6855 †	
	18 V Hammer Drill	_	CDREU7850H † Lithium	
	14.4 V Impact Wrench	CTU4410A †	_	
	14.4 V Drill	CDRU4450 †	_	
	7.2 V Screwdriver	CTSU561 †	CTSEU661 †	
	7.2 V Screwdriver w/Clutch	CTSU561CL †	_	
	7.2 V Impact Wrench	CTU561 †	CTEU661 †	
Korea	Charger	Stock No.	Application	
Chargers:	Dual Chemistry Charger	CTCFK620 †	Charges all 14.4/18 V Ni-Cad or Lithium slide on	
Korea	Tool	Ni-Cad Version	Lithium Version	
Tools:	18 V Impact Wrench	CTK6850 <sup>†</sup>	CTK7850 †	
	18 V Drill	CDRK6850 †	CDRK7850 †	

Europe	Charger	Stock No.	Stock No.
Chargers:	Dual Chemistry Charger	CTCFE620 <sup>†</sup> charges all 14.4/18 V Ni-Cad or Lithium slide on	CTCE720 † charges all
	Multivolt Ni-Cad Charger	CTCFE420 <sup>†</sup> charges all 9.6, 12, 14.4 and 18 V Ni-Cad slide on or tower	18 V Lithium
	7.2 V	CTCE572 † Ni-Cad	CTCE772 † Lithium
Europe	Tool	Ni-Cad Version	Lithium Version
Tools:	18 V Impact Wrench	CTE6850 <sup>†</sup>	CTCEU7850 †
	18 V Drill	CDRE6850 †	CDRE7850 <sup>†</sup>
	18 V Reciprocating Saw	CTRSE6850 †	CTRSE6855 †
	18 V Hammer Drill	_	CDREU7850H † Lithium
	14.4 V Impact Wrench	CTE4410A †	_
	14.4 V Drill	CDRE4450 †	_
	7.2 V Screwdriver	CTSE561 †	CTSEU661 †
	7.2 V Screwdriver w/Clutch	CTSE561CL †	_
	7.2 V Impact Wrench	CTE561 †	CTEU661 †
Japan	Charger	Stock No.	Stock No.
Chargers:	Dual Chemistry Charger	CTCJ620 <sup>†</sup> charges all 14.4/18 V Ni-Cad or Lithium slide on	CTCJ720 † charges all
	Multivolt Ni-Cad Charger	CTCJ420 <sup>†</sup> charges all 9.6, 12, 14.4 and 18V Ni- Cad slide on or tower	18 V Lithium
	7.2 V Charger	CTCJ572 † Ni-Cad	CTCJ772 † Lithium
Japan	Tool	Ni-Cad Version	Lithium Version
Tools:	18 V Impact Wrench	CTJ6850 †	CTJ7850 †
	18 V Drill	CDRJ6850 †	CDRJ7850 †
	18 V Reciprocating Saw	CTRSJ6850 †	CTRSJ6855 †
	18 V Hammer Drill	_	CDRJ7850H † Lithium
	14.4 V Impact Wrench	CTJ4410A †	_
	14.4 V Drill	CDRJ4450 †	_
	7.2 V Screwdriver	CTSJ561 †	CTSJ661 †
	7.2 V Screwdriver w/Clutch	CTSJ561CL †	_
	7.2 V Impact Wrench	CTJ561 †	CTCJ661 †
All	Charger	Stock No.	Application
Countries			
Chargers:	12 V DC Mobile Charger	CTC628 †	Charges all 14.4/18 V Ni-Cad or Lithium slide on style batteries
	12 V DC Mobile Charger	CTC428 †	Charges all 9.6, 12, 14.4 and 18V Ni-Cad slide on
	7.2 V DC Mobile Charger	CTC578 †	Charges 7.2 V Ni-Cad batteries

†( €

## Screwdriver Accessories/Polisher/Grinder/Engraver

CTRSK6850 †



18 V Reciprocating Saw

## CTEXTSET Quick Change Extension Set.

- Includes: CTEXT6 and CTEXT12 quick change extensions plus a T15 Torx® bit (1/4" shank) and a Phillips® bit (power groove hex shank)
- Ideal companion to the CTS561 and CTS561CL series screwdrivers where extended reach is needed



## ETB1580A Polisher (Blue-Point).

- 6 position speed setting allows user to dial in desired speed
- Variable speed trigger lets user vary the speed within the range and have control over polishing speed
- Push button spindle lock for quick and easy pad changes



#### CTS561BITSET Quick Change Bit Set.

 Quick change bit set for Snap-on® CTS561 and CTS561CL cordless screwdrivers plus other power drivers

CTRSK6855 †

 Assortment of 22 popular sized bits (all 3" long) plus a 1/4" square drive (2" long) in storage case



## CTS561CHUCK Quick Change Keyless Drill Chuck (1/4").

- 1/4"Hex shank for fast change over
- Compact size improves access and visibility of drilling surface
- 1/4" chuck capacity provides convenience for small jobs
- 1/32 to 1/4" drill capacity
- Use for light duty, small holes in metal and wood



#### CTS561HOLSTR Bit Holster.

- Holster for CTS561/CTS561CL series cordless screwdrivers
- Includes 3 flat tip bits (3/16", 7/32", 1/4"), 3 *Phillips* bits (#0, #1, #2) and 2 *Torx* bits (T15, T25)



## GA236C Engraver (Blue-Point®).

- Marks all materials
- Includes 3 mm tungsten carbide tip
- 9 position stroke adjustment to control engraving depth

#### GA236-32 Diamond Tip.

. Optional heavy duty tip

#### ETB415 4-1/2" Air-Thru™ Grinder (Blue-Point).

- Air-Thru Technology; Exhaust air keeps disc cooler and dust away from work surface
- D-handle allows user to grab the grinder from right, left or top
- Adjustable guard for safely cutting, grinding and polishing
- · On board wrench holder and cord wrap
- Spindle lock for easy disc replacement
- Includes (1) grinding wheel





### It's About Making the Best Tool. And then Making it Better.

For decades, Snap-on has built a reputation for lightweight, ergonomic tools that combine power and unmatched durability.

Snap-on delivers tools that help you finish the job, not stand in the way of it.

Snap-on has taken air to a new level by fitting heavy duty components into smaller places, giving you more power without more weight.

# Unsurpassed Power and Speed.

Big torque and speed come from innovation—inside and out.

**Twin hammer impact mechanisms** — Unique hammer design results in more power per blow.

**8-vane rotors** — More vanes in the rotor mean smoother power transfer to the impact hammers and less power lost in the motor.



### Making Your Job Easier.

Really, this is what it's all about; air tools with features to make everyday tasks simpler.

**Better balance** — For more user control.

**Compact nose design** — Allows easy access into tight spaces.

Snapan

### Durability.

Snap-on® air tools feature heavy duty components made to resist the everyday wear and tear of the shop.

One-piece magnesium housings — Keeps internal components in better alignment.

Magnesium is incredibly tough and lightweight.

**Oil-bath lubrication** — Unique technology keeps internal components continuously lubricated for smooth operation and longer tool life.

### Ergonomic Design.

**Snap-on** air tools are designed to work comfortably and feel natural.

**Reduced vibration** — Smooth-flowing motors and shock absorption reduce the stress from vibration.

**Tip-valve trigger** — For an intuitive flow of power from the user to the tool.

**Comfort grips** — Over-molded, cushion grips further absorb shock and take the strain out of repetitive use.



## Quick Reference Chart Impact Wrench

Stock No.	Drive Size, inches (mm)	Max. Torque, ft lbs (N•m)	Free Speed RPM	Blows per Minute	Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	Vibration Level, m/s <sup>2</sup>	Sound Level dBa Pressure	Length, inches (mm)	Weight, lbs (kg)
IM1800 <sup>†</sup>	1 (25)	1,800 (2,440)	5,500	900	6.7 (48) [190]	8.5	104	14 (356)	15 (6.8)
IM1800L †	1 (25)	1,800 (2,440)	5,500	900	6.7 (48) [190]	8.5	104	20 (508)	16 (7.3)
AT1300A †	1 (25)	3,000 (4,068)	4,000	505	5.3 (38) [150]	4.4	92	21 (533)	25.6 (11.6)
AT1300AL †	1 (25)	2,700 (3,661)	4,000	505	5.3 (38) [150]	4.4	92	27 (686)	28 (12.7)
MG1200A †	3/4 (19)	1,200 (1,627)	7,000	1,200	6.4 (46) [181]	2.02	102	8 (203)	8 (3.6)
MG1200AL †	3/4 (19)	1,200 (1,627)	7,000	1,200	6.4 (46) [181]	2.02	102	10 (254)	9 (4.09)
MG1200AXL †	3/4 (19)	1,200 (1,627)	7,000	1,200	6.4 (46) [181]	2.02	102	13 (330)	10 (4.5)
MG1200AP †	3/4 (19)	1,200 (1,627)	7,000	1,200	6.4 (46) [181]	2.02	102	8 (203)	8 (3.6)
AT670 †	3/4 (19)	1,050 (1,423)	6,700 (F), 6,900 (R)	1,050	5.6 (40) [159]	19.7	99	8.5 (215)	7.5 (3.44)
AT670L †	3/4 (19)	1,050 (1,423)	6,700 (F), 6,900 (R)	1,050	5.6 (40) [159]	19.7	99	13.5 (343)	8.8 (4)
AT126 <sup>†</sup>	3/4 (19)	1,100 (1,491.6)	5,500 (F), 6,000 (R)	1,000	5.3 (38) [150.1]	24.9	96	8.8 (224)	12.40 (5.62)
AT126L †	3/4 (19)	1,100 (1,491.6)	5,500 (F), 6,000 (R)	1,000	5.3 (38) [150.1]	24.9	96	14.8 (376)	13.7 (6.21)
MG725 †	1/2 (13)	810 (1,098)	9,800	1,270	4.0 (29) [113]	6.6	99.9	7.7 (194)	4.8 (2.2)
MG725L †	1/2 (13)	810 (1,098)	9,800	1,270	4.0 (29) [113]	6.6	99.9	9.7 (245)	5.0 (2.3)
MG725P †	1/2 (13)	810 (1,098)	9,800	1,270	4.0 (29) [113]	6.6	99.9	7.7 (194)	4.8 (2.2)
MG3255 <sup>†</sup>	1/2 (13)	325 (440)	10,700	1,400	2.4 (17) [68]	4.54	99.1	6.1 (155)	2.8 (1.3)
MG3255L †	1/2 (13)	325 (440)	10,700	1,400	2.4 (17) [68]	4.54	99.1	7.6 (193)	2.9 (1.3)
MG3255P †	1/2 (13)	326 (442)	10,700	1,400	2.4 (17) [68]	4.54	99.1	6.1 (155)	2.8 (1.3)
MG3255LP †	1/2 (13)	325 (440)	10,700	1,400	2.4 (17) [68]	4.54	99.1	7.6 (193)	2.9 (1.3)
AT123B †	1/2 (13)	450 (610)	9,000	1,000	4.2 (30) [119]	3.35	92	7.3 (185)	5.8 (2.6)
AT123BL †	1/2 (13)	425 (576)	9,000	1,000	4.2 (30) [119]	13	92	9.2 (236)	6.1 (2.8)
AT555B †	1/2 (13)	550 (745)	7,500	1,000	2.2 (16) [62]	3.75	89	7.8 (198)	5.8 (2.6)
AT570 <sup>†</sup>	1/2 (13)	570 (773)	6,900 (F), 7,000 (R)	1,050	5.0 (36) [142]	6.08	95	7.24 (184)	4.08 (1.87)
ATC500 <sup>†</sup>	1/2 (13)	525 (712)	10,500	1,250	3.5 (25) [99]	<2.5	95.5	7.8 (198)	5 (2.3)
MG325 †	3/8 (10)	325 (440)	10,700	1,400	2.4 (17) [68]	4.54	99.1	6.1 (155)	2.8 (1.3)
MG325P †	3/8 (10)	325 (440)	10,700	1,400	2.4 (17) [68]	4.54	99.1	6.1 (155)	2.8 (1.3)
AT380 †	3/8 (10)	160 (216)	10,000	1,050	3.4 (24) [95]	3.5	94	6.3 (160)	2.62 (1.19)
AT321 <sup>†</sup>	3/8 (10)	180 (224)	11,000	1,500	3.8 (27) [108]	9.8	100	6.1 (155)	2.9 (1.3)
AT370 †	<sup>3</sup> /8 (10)	320 (434)	10,000 (F), 11,000 (R)	1,050	4.4 (32.6) [125] F 4.7 (34) [133] R	3.25	92	6.3 (160)	2.62 (1.19)
AT351 †	3/8 (10)	175 (237)	9,700	1,200	2.5 (18) [71]	3.09	96.6	7.6 (194)	2.5 (1.2)
AT235MCA †	1/4 (6)	25 (34)	13,000	2,900	1.67 (12) [47]	<2.5	82	6.2 (158)	1.4 (.64)

## Ratchet

Stock No.	Drive Size, inches (mm)	Torque Range, ft lbs (N•m)	Free Speed RPM	Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	Vibration Level, m/s <sup>2</sup>	Sound Level dBa Pressure	Length, inches (mm)	Weight, lbs (kg)
AT705B †	1/2 (13)	5 - 50 (6 - 68)	150	3.0 (22) [85]	8.7	89	10.7 (273)	2.5 (1.14)
FAR72C †	3/8 (10)	5 - 65 (6 - 88)	225	2.7 (19) [76]	5.3	90	11.8 (300)	3 (1.3)
FAR7200 †	3/8 (10)	5 - 70 (7 - 97) open mode; 5-50 (7-67) quiet mode	260 (open mode); 200 (quiet mode)	4.5 (32) [127]	5.2	93 (open mode) 87 (quiet mode)	12.1 (308)	3 (1.3)
FAR2505 †	3/8 (10)	0 - 35 (6 - 47)	235	1.4 (10) [40]	6.2	85	7.7 (197)	1.4 (.6)
AT704 †	3/8 (10)	5 - 55 (6 - 75)	200	3.9 (28) [111]	<3.9	101	10.5 (266)	3.3 (1.5)
AT700F †	3/8 (10)	5 - 45 (6 - 61)	150	3.0 (22) [85]	8.7	89	10.1 (257)	3.5 (1.6)
AT702 †	3/8 (10)	5 - 60 (6 - 81)	200	3.0 (22) [85]	12.6	95	10.4 (265)	2.4 (1.1)
AT738 <sup>†</sup>	3/8 (10)	0 - 60 (0 - 81)	350	4.1 (29) [113]	5.9	89	10.4 (265)	3 (1.3)
FAR2500 †	1/4 (6)	0 - 35 (6 - 47)	235	1.4 (10) [40]	6.2	84	7.8 (197)	1.4 (.66)
FAR25A †	1/4 (6)	5 - 25 (6 - 34)	225	1.4 (10) [40]	6.2	88	6.7 (171)	1.2 (.57)
AT203 †	1/4 (6)	5 - 25 (6 - 34)	285	3.1 (22) [88]	<4.4	95	7.4 (188)	1.2 (.57)
AT200D †	1/4 (6)	5 - 20 (6 - 27)	150	1.4 (10) [40]	3.3	85	8.7 (222)	1.1 (.50)
AT204 †	1/4 (6)	5 - 22 (6 - 30)	275	2.4 (17) [68]	<1.7	80	4.9 (127)	1.4 (.66)

## Drill

Stock No.	Chuck Size, inches (mm)	Rated Power, hp (kW)	Torque Range, in lbs (N•m)	Free Speed RPM	Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	Vibration Level, m/s <sup>2</sup>	Sound Level dBa Pressure	Length, inches (mm)	Weight, lbs (kg)
PDR5000A †	1/2 (13)	0.45 (.33)	0 - 300 (0 - 34)	450	3.8 (27) [108]	<0.4	85.2	8.7 (222)	3 (1.3)
AT5000 †	1/2 (13)	0.45 (.33)	0 - 120 (0 - 14)	490	3.8 (27) [108]	<2.5	82	9 (229)	3.8 (1.7)
PDR3000A †	3/8 (10)	0.45 (.33)	0 - 50 (0 - 6)	2,500	3.5 (25) [99]	<3.5	83.6	7 (178)	2.5 (1.1)
AT3000 †	3/8 (10)	0.45 (.33)	0 - 40 (0 - 4.5)	1,675	3.5 (25) [99]	<2.5	82	7.6 (194)	3.2 (1.4)
AT811 <sup>†</sup>	3/8 (10)	0.25 (.19)	0 - 55 (0 - 6)	1,320	3.4 (24) [95]	<.8	97	8.2 (208)	2.5 (1.1)
AT184 <sup>†</sup>	5/16 (8)	-	-	1,800	8.4 (60) [238]	<1.0	84	7.9 (201)	3.1 (1.4)
AT801MCA †	1/4 (6)	0.25 (.19)	0 - 18 (0 - 2)	1,800	1.9 (13.6) [53.8]	<2.5	84	7.2 (183)	1.5 (.68)

### Hammer

Stock No.	Bore Diameter, inches (mm)	Blows per Minute	Piston Stroke, inches	Shank Opening, inches (mm)	Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	Vibration Level, m/s <sup>2</sup>	Sound Level dBa Pressure	Length, inches (mm)	Weight, lbs (kg)
PH3050B †	3/4 (19)	2,500	3	0.401 (10.1)	1.8 (13) [51]	2.8	103	8.9 (227)	5.9 (2.7)
AT2050 †	3/4 (19)	3,400	2.75	0.401 (10.1)	2.5 (18) [71]	3.0	99	7.4 (187)	4.6 (2.1)

## **Quick Reference Chart**

## **Finishing Tool**

Stock No.	Pad Size, inches (mm)	Style	Rated Power, hp (kW)	Free Speed RPM	Spindle Thread, inches	Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	Vibration Level, m/s²	Sound Level dBa Pressure	Length, inches (mm)	Weight, lbs (kg)
PSF4312 <sup>†</sup>	3 (76)	Orbital	0.25 (.19)	12,000	1/4-20	2 (14) [57]	2.1	76	3 (76)	1.4 (.65)
PS4512 <sup>†</sup>	5 (127)	Orbital	0.25 (.19)	12,000	<sup>5</sup> /16 <b>-24</b>	2 (14) [57]	2.3	77	5 (127)	1.7 (.77)
PS4612 <sup>†</sup>	6 (152)	Orbital	0.25 (.19)	12,000	5/16-24	2 (14) [57]	2.3	81	6 (152)	2.5 (1.14)
PSF4612 <sup>†</sup>	6 (152)	Orbital Finishing	0.25 (.19)	12,000	5/16-24	2 (14) [57]	2.1	81	6 (152)	2.4 (1.11)
PS4609 <sup>†</sup>	6 (152)	Geared (NV)	0.42 (.31)	1,000	3/8	3 (21.7) [85]	5.9	82	11 (281)	3.7 (1.70
PS4609V †	6 (152)	Geared (V)	0.42 (.31)	1,000	3/8	3 (21.7) [85]	5.9	82	11 (281)	3.7 (1.70
PS4809 †	8 (203)	Geared (NV)	0.42 (.31)	1,000	3/8	3 (21.7) [85]	5.9	82	11 (281)	4 (1.82)
PS4809V <sup>†</sup>	8 (203)	Geared (V)	0.42 (.31)	1,000	3/8	3 (21.7) [85]	5.9	82	11 (281)	4 (1.82)
AT240 <sup>†</sup>	_	Tire Buffer	0.4	2,600	_	3.7	1.18	89	9.1 (233)	1.8 (0.80)
AT406B	6 (152)	Orbital	0.24	10,000	5/16-24	3.5 (14) [97.86]	15	89	4.5 (115)	1.9 (0.86)
AT408 †	8 (203)	Geared (NV)	0.5 (.37)	850	5/16-24	5 (36) [142]	3.7	87	11 (281)	4.8 (2.18)
AT411A †	6 (152)	Dual Action	0.5 (.37)	10,000	5/16-18	5 (36) [142]	3.7	79	8 (203)	4.7 (2.14)
AT425R †	5 (127)	Reversible Hi-speed	0.45 (.33)	13,000	<sup>7</sup> / <sub>16</sub> <b>-20</b>	4.3 (31) [122]	<0.8	93	5.3 (135)	2.8 (1.28)
AT475A †	_	Inline	_	1,800	_	2.3 (17) [65]	14.9	87	16 (406)	6.8 (3.09)
AT435A †	_	Jitter Bug	0.5 (.37)	8,000	_	3 (22) [85]	4.5	85	6.7 (171)	4.6 (2.09)
AT450BP †	7 (177)	Angle Polisher	1 (.74)	2,700	5/8-11	4.8 (34) [136]	<2.5	84	15.7 (400)	5.5 (2.50)
AT401MCA †	3 (76)	Micro Surface Prep	0.25 (.19)	15,000	1/4-20	2.1 (15) [59]	<2.5	84	4.7 (119)	.97 (.44)
AT402MCA †	3 (76)	Micro Sander	0.25 (.19)	15,000	5/16-24	2.1 (15) [59]	<2.5	84	5.2 (133)	1.1 (.50)
AT403MCA †	3 (76)	Micro Polisher	0.25 (.19)	6,000	5/16-24	2.2 (16) [62]	<2.5	86	5.6 (143)	1.3 (.60)
AT615 †	_	Belt	0.5 (0.3)	20,000	_	4.2 (30) [119]	1.36	95	14.13 (359)	2.64 (1.20)
AT265A †	3.5	Material Removal	0.4	3,600	5/16-24	3.7	0.69	88	8.1 (207)	1.8 (0.80)
AT1212 †	_	Scaler	_	4,000 BPM	_	45	11.5	88	12.4 (316)	2.64 (1.2)
PT280THUGA †	_	Material Removal Tool	0.45 (.33)	3,500	_	4 (28) [113]	2.8	85	12 (304)	2.4 (1.09)

## **Cutting Tools**

Stock No.	Wheel Size, inches (mm)	Rated Power, hp (kW)	Free Speed SPM	Free Speed RPM	Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	Vibration Level, m/s²	Sound Level dBa Pressure	Length, inches (mm)	Weight, lbs (kg)
PT250A †	3 (76)	0.5 (.37)	_	22,000	2.7 (19) [76]	<2.5	84	7.2 (183)	1.2 (.55)
AT154R* †	4 (101.5)	0.9 (.67)	_	16,000	3.6 (26) [102]	<.6	93	14.8 (376)	3.1 (1.4)
AT157R* †	3 (76)	0.45 (.33)	_	20,000	3.5 (25) [99]	<3.8	94	7.3 (185)	1.9 (.86)
AT192A †	_	_	11,000	_	1 (7) [28]	10.1	82	9.3 (235)	1.7 (.80)
AT194A †	_	_	8,250	_	.70 (5) [20]	<6.6	84	6.7 (175)	1 (.45)
AT185 <sup>†</sup>	_	-	_	_	11.3 (81) [320]	<2.5	48.6	9.3 (235)	2.6 (1.2)
AT195 †	_	_	_	_	4 (29) [113]	<2.5	88	10 (254)	2.8 (1.3)
AT180C <sup>†</sup>	_	_	3,500	_	4 (29) [113]	4.3	90	7.6 (194)	1.9 (.88)

## **Grinders**

\*Blue-Point®

Stock No.	Wheel Size, inches (mm)	Rated Power, hp (kW)	Free Speed SPM	Free Speed RPM	Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	Vibration Level, m/s <sup>2</sup>	Sound Level dBa Pressure	Length, inches (mm)	Weight, Ibs (kg)
PT450 <sup>†</sup>	_	1.0	_	12,000	4.17 (30) [118]	8.93	86.3	9 (229)	3.25 (1.47)
AT415B* †	4 <sup>1</sup> / <sub>2</sub> (114)	0.86 (.64)	_	12,000	3.2 (23) [91]	5.1	83	10 (254)	4.2 (1.9)

### **Die Grinder**

\*Blue-Point®

Stock No.	Collet Size, inches	Rated Power, hp (kW)	Free Speed RPM	Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	Vibration Level, m/s <sup>2</sup>	Sound Level dBa Pressure	Length, inches (mm)	Weight, lbs (kg)
PT100A †	1/4	0.3 (.2)	25,000	1.4 (10) [40]	3.8	84	5.8 (149)	1.6 (.73)
PT110A <sup>†</sup>	1/4	0.3 (.2)	25,000	1.4 (10) [40]	3.8	84	5.6 (144)	1.9 (.86)
PT200A †	1/4	0.5 (.3)	22,000	2.7 (19) [76]	3.8	84	6.7 (170)	1.8 (.83)
PT210A †	1/4	0.5 (.3)	22,000	3 (22) [85]	<2.5	84	6.6 (168)	2.0 (.93)
PT200AL †	1/4	0.5 (.3)	22,000	1.4 (10) [40]	2.6	84	10.6 (269)	2.0 (.91)
PT400 †	1/4	1.0 (.6)	25,000	4.17 (30) [118]	2.10	84.7	7.5 (190)	1.5 (.68)
PT410 †	1/4	1.0 (.6)	12,000	4.17 (30) [118]	.78	81.8	7.5 (190)	2.0 (.91)
AT115 <sup>†</sup>	1/4	0.2 (.15)	22,000	4 (29) [113]	<2.5	91	6.5 (165)	1.3 (.61)
AT118 <sup>†</sup>	1/4	0.2 (.15)	20,000	2.1 (15) [59[	2.5	93	5.5 (140)	1.1 (.50)
AT105 <sup>†</sup>	1/4	0.2 (.15)	22,000	4 (29) [113]	<2.5	91	6.5 (165)	1.3 (.61)
AT109* †	1/4	0.2 (.15)	20,000	2.1 (15) [59]	2.5	93	5.5 (140)	1.1 (.50)
AT119 <sup>†</sup>	1/4	.45 (.33)	20,000	3 (15) [59]	<6.92	100	6.81 (173)	1.1 (50)
AT116 †	1/4	0.2 (.15)	20,000	3 (15) [59]	2.5	100	6.5 (165)	1.1 (50)
AT1070A †	1/8	_	75,000	1 (7) [28]	2.0	72	5.3 (135)	.55 (.25)
AT1070RA †	1/8	_	75,000	1 (7) [28]	2.0	72	5.9 (150)	.46 (.21)

 $<sup>^{\</sup>star}$  See p. 303 for AT109DGK Die Grinder Kit specifications.  $^{\dagger}$  C  $\overleftarrow{\textbf{c}}$ 



## 1", 3/4" Drive Impact Wrenches





Thru-Hole Anvil (P)



3" Long Anvil (L)



6" Extra Long Anvil (XL)

# Super Duty Air Impact Wrenches IM1800 Series 1" Drive.

- Convenient D-handle and side handle for less user fatigue
- Lightweight aluminum nose for better balance
- Standard and long anvils are thru-hole design for positive socket retention
- High torque to remove stubborn fasteners quicker
- · Lightweight aluminum housing for less user fatigue
- 3 position speed control and full power reverse have more control when tightening or removing fasteners
- Twin hammer mechanism is durable and hard hitting
- Sealed in oil bath lubrication keeps impact mechanism lubricated for less wear and longer tool life

# Super Duty Air Impact Wrenches MG1200 Series 3/4" Drive.

- 1 pc magnesium housing assures precision alignment of components and reduces vibration
- Continuous oil bath lubrication reduces wear and increases life
- Twin hammer mechanism delivers hard hitting blows with fewer moving parts for longer tool life
- 6 vane rotor delivers maximum torque and speed to remove stubborn fasteners
- Cushion grip variable speed trigger reduces user fatigue
- Balanced design distributes weight evenly to increase control
- Anvil stops with release of the trigger to prevent throwing fasteners
- 1 hand reverse button for easy operation

### **Super Duty**

Specifications	IM1800 †	IM1800L †	MG1200A †	MG1200AL †	MG1200AXL †	MG1200AP †
Drive Size, inches (mm)	1 (25)	1 (25)	3/4 (19)	3/4 (19)	3/4 (19)	<sup>3</sup> /4 (19)
Max. Torque, ft lbs (N•m)	1,800 (2,440)	1,800 (2,440)	1,200 (1,627)	1,200 (1,627)	1,200 (1,627)	1,200 (1,627)
Free Speed RPM	5,500	5,500	7,000	7,000	7,000	7,000
Blows per Minute	900	900	1,200	1,200	1,200	1,200
Extended Anvil Length, inches (mm)	_	6 (152)	_	3 (76)	6 (152)	_
Anvil Type	Friction Ring w/ Thru-Hole	Thru-Hole	Friction Ring	Friction Ring w/ Thru-Hole	Friction Ring w/ Thru-Hole	Thru-Hole
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	6.7 (48) [190]	6.7 (48) [190]	6.4 (46) [181]	6.4 (46) [181]	6.4 (46) [181]	6.4 (46) [181]
Air Inlet Thread Size	1/2"-14 NPT	1/2"-14 NPT	3/8"-18 NPT	3/8"-18 NPT	3/8"-18 NPT	3/8"-18 NPT
Recommended Hose Size, inches	1/2	1/2	3/8	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	8.5	8.5	2.02	2.02	2.02	2.02
Sound Level dBa Pressure	104	104	102	102	102	102
Length, inches (mm)	14 (356)	20 (508)	8 (203)	10 (254)	13 (330)	8 (203)
Weight, lbs (kg)	15 (6.8)	16 (7.3)	8 (3.6)	9 (4.09)	10 (4.5)	8 (3.6)
Vinyl Boot (included)		_	MG1200B00T	MG1200B00T	MG1200B00T	MG1200B00T

Impact wrench suffix: P = Pinned anvil, L = Long anvil, XL = Extra long anvil. Standard anvil for applications where frequent socket change is required. Pinned anvil for high torque applications where socket security is a priority. Long or Extra long anvil for tight applications that require extra reach.

## 1", 3/4" Drive Impact Wrenches (Blue-Point®)





AT670



AT1300A

AT126







6" Long Anvil (L)

6" Long Anvil (L)

6" Long Anvil (L)

## Heavy Duty Air Impact Wrenches AT1300A Series 1" Drive.

- Workhorse performance for use on trucks, buses and heavy equipment
- Steel nose for rugged, demanding applications
- Pin clutch style impact mechanism for fast startup and high torque requirements
- Thru-hole anvil

## Heavy Duty Air Impact Wrenches AT670 Series 3/4" Drive.

- Lightweight composite housing with aluminum nose
- 3 position thumb operated forward/reverse lever
- · Bottom handle exhaust
- Twin hammer mechanism

## Heavy Duty Air Impact Wrenches AT126 Series 3/4" Drive.

- Grease lubrication system prolongs tool life
- Jumbo single hammer impact mechanism for greater power and durability
- Handle diffused exhaust directs exhaust away from user
- 6" long anvil available for extended reach (AT126L)

## **Heavy Duty**

Specifications	AT1300A †	AT1300AL †	AT670 †	AT670L †	AT126 †	AT126L †
	AI I JUUA '	AI I 3UUAL	AID/U '	AIB/UL '	Al 126 '	AI I ZOL '
Drive Size, inches (mm)	1 (25)	1 (25)	<sup>3</sup> /4 (19)	<sup>3</sup> /4 (19)	<sup>3</sup> /4 (19)	<sup>3</sup> /4 (19)
Max. Torque, ft lbs (N•m)	3,000 (4,068)	2,700 (3,661)	1,050 (1,423)	1,050 (1,423)	1,100 (1,491.6)	1,100 (1,491.6)
Free Speed RPM	4,000	4,000	6,700 (F), 6,900 (R)	6,700 (F), 6,900 (R)	5,500 (F), 6,000 (R)	5,500 (F), 6,000 (R)
Blows per Minute	505	505	1,050	1,050	1,000	1,000
Extended Anvil Length, inches (mm)	_	6 (152)	_	6 (152)	1	6 (152)
Anvil Type	Friction Ring w/Thru-hole	Friction Ring w/Thru-hole	Friction Ring	Friction Ring	Friction Ring	Friction Ring
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	5.3 (38) [150]	5.3 (38) [150]	5.6 (40) [159]	5.6 (40) [159]	5.3 (38) [150.1]	5.3 (38) [150.1]
Air Inlet Thread Size	1/2"-14 NPT	1/2"-14 NPT	3/8"-18 NPT	3/8"-18 NPT	3/8"-18 NPT	3/8"-18 NPT
Recommended Hose Size, inches	1/2	1/2	3/8	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	4.4	4.4	19.7	19.7	24.9	24.9
Sound Level dBa Pressure	92	92	99	99	96	96
Length, inches (mm)	21 (533)	27 (686)	8.5 (215)	13.5 (343)	8.8 (224)	14.8 (376)
Weight, lbs (kg)	25.6 (11.6)	28 (12.7)	7.5 (3.44)	8.8 (4)	12.40 (5.62)	13.7 (6.21)
Vinyl Boot (optional)	_	_	_	_	_	_

Impact wrench suffix: L = Long anvil. Standard anvil for applications where frequent socket change is required. Long anvil for tight applications that require extra reach.















## 1/2" Drive Impact Wrenches





Pinned Anvil (P)



3" Long Anvil (L)

#### MG725 Series 1/2" Drive.

- 1 pc machined magnesium housing is externely durable, lightweight and provides alignment of internal parts to reduce vibration
- 8 vane rotor provides faster motor startup and greater performance with more torque
- Patented cushion grip helps insulate user's hand from cold and reduces vibration to reduce user fatique
- · Patented tip valve trigger provides increased air flow and greater tool control
- Twin hammer impact mechanism is durable and hard hitting to quickly remove stubborn fasteners
- Sealed in oil bath lubrication keeps impact mechanism lubricated for less wear
- · Slim style nose is ideal for working in restricted access areas
- Anvil stops with release of the trigger to prevent throwing of fasteners
- Cushion grip trigger button delivers improved comfort and control

## 1/2" Drive Super Duty

1/2 Drive Super Duty			
Specifications	MG725 †	MG725L †	MG725P †
Drive Size, inches (mm)	1/2 (13)	1/2 (13)	1/2 (13)
Max. Torque, ft lbs (N•m)	810 (1,098)	810 (1,098)	810 (1,098)
Free Speed RPM	9,800	9,800	9,800
Blows per Minute	1,270	1,270	1,270
Extended Anvil Length, inches (mm)	1	3 (76)	_
Anvil Type	Friction Ring	Friction Ring	Pinned
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	4.0 (29) [113]	4.0 (29) [113]	4.0 (29) [113]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	6.6	6.6	6.6
Sound Level dBa Pressure	99.9	99.9	99.9
Length, inches (mm)	7.7 (194)	9.7 (245)	7.7 (194)
Weight, lbs (kg)	4.8 (2.2)	5.0 (2.3)	4.8 (2.2)
Vinyl Boot (included)	MG725B00T	MG725B00T	MG725B00T

Impact wrench suffix: P = Pinned anvil, L = Long anvil. Standard anvil for applications where frequent socket change is required. Pinned anvil for high torque applications where socket security is a priority. Long anvil for tight applications that require extra reach.

## 1/2" Drive Impact Wrenches (Blue-Point®)



#### AT555B 1/2" Drive.

- · Powerful twin hammer clutch
- Reverse bias motor provides additional breakaway torque
- Built-in power regulator
- · Molded ergonomic handle improves grip

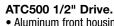


AT555B

2" Long Anvil (L)

#### AT570 1/2" Drive.

- Use on automotive and truck fasteners
- Shot peen anvils for improved durability
- Reverse Bias motor provides additional breakaway torque
- 3 position regulator to control power
- One handed forward/reverse lever for user convenience
- Composite housing with aluminum nose combine to deliver a durable, lightweight and balanced unit
- Twin hammer impact mechanism delivers hard hitting blows to quickly remove stubborn fasteners



- Aluminum front housing and composite rear housing combine to deliver a durable, lightweight and balanced unit
- Ribbed, textured handle provides maximum comfort and control
- 4 position power regulator for greater job versatility
- Twin hammer impact mechanism for longer life and greater power



**Heavy Duty** 

Specifications	AT123B †	AT123BL †	AT555B †	AT570 †	ATC500 †
Drive Size, inches (mm)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)
Max. Torque, ft lbs (N•m)	450 (610)	450 (610)	475 (644)F, 550 (745)R	570 (773)	525 (712)
Free Speed RPM	9,000	9,000	6,800 (F), 7,500 (R)	6,900 (F), 7,000 (R)	10,500
Blows per Minute	1,000	1,000	1,000	1,050	1,250
Extended Anvil Length, inches (mm)		2 (51)	_	ı	_
Anvil Type	Friction Ring	Friction Ring	Friction Ring	Friction Ring	Friction Ring
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	4.2 (30) [119]	4.2 (30) [119]	2.2 (16) [62]	5.0 (36) [142] F 5.3 (38) [150] R	3.5 (25) [99]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	3.35	13	3.75	6.08	<2.5
Sound Level dBa Pressure	92	92	89	95	95.5
Length, inches (mm)	7.3 (185)	9.2 (236)	7.8 (198)	7.24 (184)	7.8 (198)
Weight, lbs (kg)	5.8 (2.6)	6.1 (2.8)	5.8 (2.6)	4.08 (1.87)	5 (2.3)
Vinyl Boot (optional)	AT123-45	AT123-45	AT555B00T	AT570B00T	_

 $Impact \ wrench \ suffix: L = Long \ anvil. \ Standard \ anvil for applications \ where \ frequent \ socket \ change \ is \ required.$   $Long \ anvil \ for \ tight \ applications \ that \ require \ extra \ reach.$ 













AT570

- Use only impact sockets and accessories with impact wrenches
- Read safety precautions on pages W1 to W4

## 3/8" Drive Impact Wrenches







Pinned Anvil (P)



2" Long Anvil (L)



2" Long Pinned Anvil (LP)

## MG325 3/8" Drive and MG3255 1/2" Drive MG325 Features:

- 1 pc magnesium housing for precise internal component alignment to reduce vibration
- Twin hammer impact mechanism delivers hard hitting blows with fewer moving parts to quickly remove stubborn fasteners
- Continuous oil bath lubrication prolongs tool life by reducing premature component wear
- 8 vane motor delivers maximum speed and torque
- Lightweight, balanced design distributes weight evenly to reduce user fatigue
- One handed forward/reverse lever for user convenience
- Cushion grip handle insulates user's hand from cold and absorbs vibration
- Comfort cushion trigger button allows the user to work comfortably with less finger stress
- Anvil stop feature means anvil will stop when trigger is released to avoid throwing fasteners

#### MG3255 Features:

- Same features as MG325, except for a 1/2" drive anvil
- Compact, yet powerful, 1/2" model is ideal for working in confined areas

#### MG3255P (Pinned anvil)

• Same features as MG3255, except for a pinned anvil

#### MG3255L (Long anvil)

· Same features as MG3255, except for a long anvil

#### MG3255LP (Long pinned anvil)

• Same features as MG3255, except for a long pinned anvil

### **Super Duty**

Specifications	MG325 †	MG325P †	MG3255 †	MG3255L †	MG3255P †	MG3255LP †
Drive Size, inches (mm)	3/8 (10)	3/8 (10)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)
Max, Torque, ft lbs (N•m)	325 (440)	325 (440)	325 (440)	325 (440)	326 (442)	325 (440)
Free Speed RPM	10,700	10,700	10,700	10,700	10,700	10,700
Blows per Minute	1,400	1,400	1,400	1,400	1,400	1,400
Extended Anvil Length, inches (mm)	_	_	_	2 (51)	_	2 (51)
Anvil Type	Friction Ring	Pinned	Friction Ring	Friction Ring	Pinned	Pinned
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	2.4 (17) [68]	2.4 (17) [68]	2.4 (17) [68]	2.4 (17) [68]	2.4 (17) [68]	2.4 (17) [68]
Air Inlet Thread Size	1/4"-18 NPT					
Recommended Hose Size, inches	3/8	3/8	3/8	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	4.54	4.54	4.54	4.54	4.54	4.54
Sound Level dBa Pressure	99.1	99.1	99.1	99.1	99.1	99.1
Length, inches (mm)	6.1 (155)	6.1 (155)	6.1 (155)	7.6 (193)	6.1 (155)	7.6 (193)
Weight, Ibs (kg)	2.8 (1.3)	2.8 (1.3)	2.8 (1.3)	2.9 (1.3)	2.8 (1.3)	2.9 (1.3)
Vinyl Boot (included)	MG325B00T	MG325B00T	MG325B00T	MG325B00T	MG325B00T	MG325B00T

Impact wrench suffix: P = Pinned anvil, L = Long anvil, LP= Long pinned anvil. Standard anvil for applications where frequent socket change is required. Pinned anvil for high torque applications where socket security is a priority. Long anvil for tight applications that require extra reach.

## 3/8", 1/4" Drive Impact Wrenches (Blue-Point®)



AT380

AT321

#### AT380 3/8" Drive.

- Twin hammer impact mechanism
- · Slim style nose for restricted access applications
- Variable speed trigger for superior control
- · Built-in 5 position air regulator

#### AT321 3/8" Drive.

- · Single hammer impact mechanism
- · Steel nose case with lightweight aluminum housing
- Convenient slide bar forward/reverse bar width regulator



#### AT370 3/8" Drive.

- Use on automotive and truck fasteners
- · Shot peened anvils for improved durability
- Reverse Bias motor provides additional breakaway torque
- 3 position regulator to control power
- One handed forward/reverse lever for use convenience
- · Composite housing with aluminum nose combine to deliver a durable, lightweight and balanced unit
- Twin hammer impact mechanism delivers hard hitting blows to quickly remove stubborn fasteners



AT351

#### AT351 3/8" Drive.

- · Built-in air inlet swivel
- 8 position power regulator
- · Rotary action air motor is ball bearing mounted for balance, speed and power
- · Ideal tool for small engine repair and bench work



#### AT235MCA 1/4" Drive Micro.

- Fast speed
- · Lightweight composite housing with molded comfort grip
- · Convenient one handed forward/reverse lever
- · Oversized trigger with variable speed

## 3/8", 1/4" Drive Impact

Specifications	AT380 †	AT321 †	AT370 †	AT351 <sup>†</sup>	AT235MCA †
Drive Size, inches (mm)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	1/4 (6)
Max. Torque, ft lbs (N•m)	160 (216)	180 (224)	320 (434)	175 (237)	25 (34)
Free Speed RPM	10,000	11,000	10,000 (F), 11,000 (R)	9,700	13,000
Blows per Minute	1,050	1,500	1,050	1,200	2,900
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	3.4 (24) [95]	3.8 (27) [108]	4.4 (326) [125] F, 4.7 (34) [133] R	2.5 (18) [71]	1.67 (12) [47]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	3.5	9.8	3.25	3.09	<2.5
Sound Level dBa Pressure	94	100	92	96.6	82
Length, inches (mm)	6.3 (160)	6.1 (155)	6.3 (160)	7.6 (194)	6.2 (158)
Weight, lbs (kg)	2.7 (1.2)	2.9 (1.3)	2.62 (1.19)	2.5 (1.2)	1.4 (.64)
Vinyl Boot (optional)	AT380B00T	AT321-44	AT370B00T	_	_

† **( (** 













- Use only impact sockets and accessories with impact wrenches
  - Read safety precautions on pages W1 to W4

### 3/8", 1/4" Drive Ratchets



8

#### FΔR7200

#### FAR72C 3/8" Drive.

- Dual pawls for reduced vibration
- Steel wear bushings to prevent ratchet head wear
- · Adjustable exhaust directs airflow away from work area
- "Stop lock" pins prevent ratchet pawl lockup
- Easy access zerk fitting allows ratchet head lubrication for longer tool life
- Lightweight aluminum handle provides a sure grip for easy control

#### FAR7200 3/8" Drive.

- Muffler bypass allows tool to be used in quiet mode or full power
- Tip valve style trigger is easy to feather for greater control
- Cushion grip handle for added comfort and control
- Heavy duty motor and crank add durability to handle torque loads
- Steel wear bushings to prevent ratchet head wear
- Large selector knob is easy to turn with greasy hands to change direction



**FAR2500** 



FAR2505



#### FAR25A

#### FAR2500 1/4" Drive and FAR2505 3/8" Drive Mini Ratchets.

- Balanced, lightweight housing for superior control with less user fatigue
- Soft grip handle increases comfort, reduces vibration and insulates against the cold
- Hard coated motor plates help prevent scoring for longer tool life
- Improved rotor vanes provide more power and speed for greater performance in low pressure environments
- Large, lightweight selector knob is easy to turn with greasy hands, easy to reverse direction
- Zerk fitting in selector knob allows ratchet head to be lubricated for longer tool life
- Robust head design for maximum strength and durability
- All ball bearing construction and high strength alloy steel gear system for increased durability

#### FAR25A 1/4" Drive.

- Air motor vanes resist wear, chipping, cracking and moisture
- Needle bearing supported drive shaft provides a smooth running tool
- Ergonomic handle design provides a sure grip and reduces fatigue
- Paddle style variable speed trigger is spring loaded for easy control
- Directional muffler rotates exhaust away from the user
- Lightweight clamshell housing easily accesses restricted areas

#### **Air Ratchets**

Specifications	FAR72C †	FAR7200 †	FAR2505 †	FAR2500 †	FAR25A †
Drive Size, inches (mm)	3/8 (10)	3/8 (10)	<sup>3</sup> /8 (10)	1/4 (6)	1/4 (6)
Torque Range, ft lbs (N•m)	5 - 65 (6 - 88)	5 - 70 (7 - 97) open mode 5-50 (7-67) quiet mode	0 - 35 (6 - 47)	0 - 35 (6 - 47)	5 - 25 (6 - 34)
Free Speed RPM	225	260 (open mode); 200 (quiet mode)	235	235	225
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	2.7 (19) [76]	4.5 (32) [127]	1.4 (10) [40]	1.4 (10) [40]	1.4 (10) [40]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	5.3	5.2	6.2	6.2	6.2
Sound Level dBa Pressure	90	93 (open mode) 87 (quiet mode)	85	84	88
Length, inches (mm)	11.8 (300)	12.1 (308)	7.7 (197)	7.8 (197)	6.7 (171)
Weight, lbs (kg)	3 (1.3)	3 (1.3)	1.4 (.6)	1.4 (.66)	1.2 (.57)
Vinyl Boot (included)	YA889A	YA889A	YA905	YA905	YA888

<sup>†</sup>**(**€

## 1/2", 3/8", 1/4" Drive Ratchets (Blue-Point®)



#### AT705B 1/2" Drive.

- 1/2" drive ratchet in a 3/8" drive body
- Ball bearing mounted motor for longer tool life

#### AT704 3/8" Drive.

- · Lightweight aluminum housing
- Rugged ball bearing mounted air motor and precision planetary gear system
- Easy to use variable speed throttle plus adjustable air regulator

#### AT700F 3/8" Drive.

- Lightweight aluminum housing
- Rugged ball bearing mounted air motor and precision planetary gear system
- Easy to use variable speed throttle plus adjustable air regulator

#### AT702 3/8" Drive High Torque.

- Flywheel mechanism
- Rugged ball bearing mounted air motor coupled with precision planetary gear system
- Easy to use variable speed throttle and adjustable air regulator



#### AT738 3/8" Drive.

- Reactionless mechanism absorbs kickback when running fasteners tight
- High RPM removes fasteners quickly
- · Adjustable air regulator
- Ideal tool for spark plugs, water pumps, shocks and muffler clamps

#### AT203 1/4" Drive.

- Lightweight aluminum housing
- Rugged ball bearing mounted air motor and precision planetary gear system
- Easy to use variable speed throttle plus adjustable air regulator

# AT200D 1/4" Drive.

- Lightweight aluminum housing
- Rugged ball bearing mounted air motor and precision planetary gear system



• Ideal for working in tight quarters

AT204 1/4" Drive Mini.

- Head clearance is less than 3/4"
- Includes variable speed trigger, adjustable air regulator and 5' nylon braided whip hose for maneuverability and control
- Polished aluminum housing provides strength and durability

#### **Air Ratchets**

Specifications	AT705B †	AT704 †	AT700F †	AT702 †	AT738 †	AT203 †	AT200D †	AT204 †
Drive Size, inches (mm)	1/2 (13)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	1/4 (6)	1/4 (6)	1/4 (6)
Torque Range, ft lbs (N•m)	5 - 50 (6 - 68)	5 - 55 (6 - 75)	5 - 45 (6 - 61)	5 - 60 (6 - 81)	0 - 60 (0 - 81)	5 - 25 (6 - 34)	5 - 20 (6 - 27)	5 - 22 (6 - 30)
Free Speed RPM	150	200	150	200	350	285	150	275
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	3.0 (22) [85]	3.9 (28) [111]	3.0 (22) [85]	3.0 (22) [85]	4.1 (29) [113]	3.1 (22) [88]	1.4 (10) [40]	2.4 (17) [68]
Air Inlet Thread Size	1/4"-18 NPT							
Recommended Hose Size, inches	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	8.7	<3.9	8.7	12.6	5.9	<4.4	3.3	<1.7
Sound Level dBa Pressure	89	101	89	95	89	95	85	80
Length, inches (mm)	10.7 (273)	10.5 (266)	10.1 (257)	10.4 (265)	10.4 (265)	7.4 (188)	8.7 (222)	4.9 (127)
Weight, Ibs (kg)	2.5 (1.14)	3.3 (1.5)	3.5 (1.6)	2.4 (1.1)	3 (1.3)	1.2 (.57)	1.1 (.50)	1.4 (.66)
Vinvl Boot (included)	AT700E49A	_	AT700E49A	AT700E49A	AT738B00T	_	AT200D22A	_

† **( (** 











## 1/2", 3/8" Drills



#### PDR5000A 1/2" Reversible.

- 5 vane air motor delivers high torque power for added durability
- · Reversible for added versatility
- 3 planet industrial strength gear train provides durability for heavy duty applications
- Precise .0025" chuck runout for precision drilling
- Includes side handle for added control in high torque drilling applications



#### PDR3000A 3/8" Reversible.

- Top mounted forward/reverse switch allows 1 hand operation
- Internal ball bearing construction for smooth operation
- Insulated cushion grip to reduce cold and vibration
- · Reversible for added versatility
- Variable speed trigger for added control

### 1/2" and 3/8" Capacity Drills

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Specifications	PDR5000A †	PDR3000A †
Chuck Size, inches (mm)	1/2 (13)	<sup>3</sup> /8 (10)
Rated Power, hp (kW)	0.45 (.33)	0.45 (.33)
Torque Range, in lbs (N•m)	0 - 300 (0 - 34)	0 - 50 (0 - 6)
Free Speed RPM	450	2500
Spindle Thread, inches	1/2-20 UNF	3/8-24 UNF
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	3.8 (27) [108]	3.5 (25) [99]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8
Vibration Level, m/s <sup>2</sup>	0.4	3.5
Sound Level dBa Pressure	85.2	83.6
Length, inches (mm)	8.7 (222)	7 (178)
Weight, lbs (kg)	3 (1.3)	2.5 (1.1)
Auxiliary Handle	PDR5000-40A	_
Keyless Chuck (optional)	_	PDR3A-2

†**( (** 



#### AT184 Spotweld Drill (Blue-Point®).

- Twist depth control collar allows precise setting of drilling depth up to 1/4"
- 2 speed trigger for low or high speeds
- Includes (1) 5/16" (8 mm) drill bit and removeable clamp arm

### **Spotweld Drill**

Specifications	AT184 †
Chuck Size, inches (mm)	5/16 (8)
Rated Power, hp (kW)	_
Torque Range, in lbs (N•m)	_
Free Speed RPM	1,800
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	8.4 (60) [238]
Air Inlet Thread Size	1/4"-18 NPT
Recommended Hose Size, inches	3/8
Vibration Level, m/s <sup>2</sup>	<1.0
Sound Level dBa Pressure	84
Length, inches (mm)	7.9 (201)
Weight, lbs (kg)	3.1 (1.4)
Spotweld Drill Bit (8 mm) (included)	AT183-50
Spotweld Drill Bit (6.5 mm) (optional)	AT183-43
Spotweld Drill Bit (10 mm) (optional)	AT183-51
Support Arm 5.5 (optional)	AT184-26A

†(E

## 1/2", 3/8", 1/4" Drills (Blue-Point®)



#### AT5000 1/2" Reversible.

- · Chuck key conveniently stores in handle
- Variable speed trigger
- Convenient, 1 hand forward/reverse operation
- · Bottom handle exhaust directs exhaust away from the work



#### AT811 3/8" Angle.

- Convenient, 1 hand pushbutton forward/reverse
- · Rear exhaust keeps air away from the work area
- Ball bearing construction for longer tool life



#### AT3000 3/8" Reversible.

- Convenient, 1 hand forward/reverse operation
- Bottom handle diffused exhaust
- · Comfort grip handle
- Keyless chuck



#### AT801MCA 1/4" Micro.

- Small size ideal for working in confined areas
- Durable composite housing stands up to rugged use
- Reverse lever conveniently positioned for 1 hand operation
- · Oversize variable speed trigger

## 1/4", 3/8" and 1/2" Capacity Drills

Specifications	AT5000 †	AT3000 †	AT811 †	AT801MCA
Chuck Size, inches (mm)	1/2 (13)	3/8 (10)	3/8 (10)	1/4 (6)
Rated Power, hp (kW)	0.45 (.33)	0.45 (.33)	0.25 (.19)	0.25 (.19)
Torque Range, in lbs (N•m)	0 - 120 (0 - 14)	0 - 40 (0 - 4.5)	0 - 55 (0 - 6)	0 - 18 (0 - 2)
Free Speed RPM	490	1,675	1,320	1,800
Spindle Thread, inches	1/2 <b>-20 UNF</b>	3/8-24 UNF	3/8-24 UNF	3/8-24 UNF
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	3.8 (27) [108]	3.5 (25) [99]	3.4 (24) [95]	1.9 (13.6) [53.8]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	<2.5	<2.5	<.8	<2.5
Sound Level dBa Pressure	82	82	97	84
Length, inches (mm)	9 (229)	7.6 (194)	8.2 (208)	7.2 (183)
Weight, lbs (kg)	3.8 (1.7)	3.2 (1.4)	2.5 (1.1)	1.5 (.68)
Auxiliary Handle	PDAH1A	_	_	_
Vinyl Boot (optional)	AT5000B00T	AT3000B00T	_	_

†(E











#### **Hammers**







PH3050BCH4

#### PH3050B Super Duty.

- Dual elastomer cushions absorb shock and vibration to reduce user fatigue
- Phenolic (Kevlar® reinforced) flutter disc provides long life
- Direct multiport front exhaust keeps air and debris away from user
- · High grade steel barrel provides greater strength
- Variable speed soft touch trigger provides featherability for greater control
- 4 position built in air regulator varies power for different applications
- Air line screen helps prevent foreign particles from clogging trigger mechanism
- Hardened steel piston delivers harder blows for maximum impact
- Includes PH200D Quick Change Chuck Retainer

### PH3050BCH4 † Set

#### Includes:

Stock No.	Description
PH3050B	Heavy Duty Air Hammer
PH200D	Retainer Chuck
PHG55A	Flat Chisel, <sup>3</sup> / <sub>4</sub> " wide
PHG57A	Double Blade Panel Cutter, 3/4" wide
PHG59A	Taper Punch, 3/16" tip
PHG87A	Muffler Cutter, 17/32" wide
PB1D	Storage Box
	*

† **(** €

## AT2050 Heavy Duty (Blue-Point®).

- Variable speed trigger with built-in speed regulator
- Quick change chuck makes bit changing easy
- Comfort grip handle for less user fatigue
- Hard hitting to get the job done quicker



#### PH200D Universal Quick Change Chuck Retainer.

- Use for fast and easy insertion/removal of air hammer bits
- Nonturning insert design reduces wear for longer tool life
- Constructed from high grade steel; insert is constructed from durable polyurethane elastomer
- Universal design fits most air hammers
- Knurled chrome collar provides a solid gripping surface, even with greasy hands

#### PH200D

## Super and Heavy Duty

super and neary sucy		
Specifications	PH3050B †	AT2050 †
Bore Diameter, inches (mm)	3/4 (19)	<sup>3</sup> /4 (19)
Blows per Minute	2,500	3,400
Piston Stroke, inches	3	2.75
Shank Opening, inches (mm)	0.401 (10.1)	0.401 (10.1)
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	1.8 (13) [51]	2.5 (18) [71]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	5/16	5/16
Vibration Level, m/s <sup>2</sup>	1.5	3.0
Vibration Level, m/s <sup>2</sup>	2.8	3 m/s2
Sound Level dBa Pressure	103	99
Length, inches (mm)	8.9 (227)	7.4 (187)
Weight, lbs (kg)	5.9 (2.7)	4.6 (2.1)
Vinyl Boot (optional)	PH3050B00T	AT2050B00T

†CE

#### **Die Grinders**

#### PT 100 and 200 Series

- Ergonomic handle is contoured to fit comfortably in the hand as well as absorb vibration
- Adjustable rear exhaust outlet allows adjustment of exhaust away from the work area while keeping material removal away from operator's face
- Thermally balanced air motor acts as internal cooling system to protect moving parts, efficiently routing air to control surface temperature of tool
- Built-in 10 position power/speed regulator precisely matches tool speed to job requirements
- Easy bit changing using standard wrenches
- Safety style variable speed paddle trigger helps prevent accidental starting of tool
- Low dBA rating reduces fatigue from noise
- Dual taper collet system for improved bit retention

### **PT100 Mini Series**











PT200AL

#### PT400 Heavy Duty Series

PT200A





#### PT400 Heavy Duty 1 HP Die Grinder.

- 1 HP Thermally balanced air motor
- Dual taper collet system
- · Ergonomic comfort grip handle

#### PT410 Heavy Duty 1 HP 90° Angle Die Grinder.

- 1 HP Thermally balanced air motor
- Dual taper collet system
- · Paddle style safety trigger
- Includes Snap-on® INSTINCT® side handle added control

### Straight, Angle Head and Extended Shaft - 1/4" Collet

	Mini 9	Series	Standard Series			Heavy Duty Series	
Specifications	PT100A †	PT110A †	PT200A †	PT210A †	PT200AL †	PT400 <sup>†</sup>	PT410 <sup>†</sup>
Collet Size, inches	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Rated Power, hp (kW)	0.3 (.2)	0.3 (.2)	0.5 (.3)	0.5 (.3)	0.5 (.3)	1	1
Free Speed RPM	25,000	25,000	22,000	22,000	22,000	25,000	12,000
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	1.4 (10) [40]	1.4 (10) [40]	2.7 (19) [76]	3 (22) [85]	1.4 (10) [40]	4.17 (30) [118]	4.17 (30) [118]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8	3/8	3/8	3/8	3/8 (10 mm)	3/8 (10 mm)
Vibration Level, m/s <sup>2</sup>	3.8	3.8	3.8	<2.5	2.6	2.10	.78
Sound Level dBa Pressure	84	84	84	84	84	84.7	81.8
Length, inches (mm)	5.8 (149)	5.6 (144)	6.7 (170)	6.6 (168)	10.6 (269)	7.5 (190)	7.5 (190)
Weight, lbs (kg)	1.6 (.73)	1.9 (.86)	1.8 (.83)	2.0 (.93)	2.0 (.91)	1.5 (.68)	2.0 (.91)

† **( E** 











- Use air hammer accessories only for intended purpose
- Read safety precautions on pages W1 to W4

## Die Grinders (Blue-Point®)



#### AT118 Right Angle Mini.

- Comfort grip insulates from cold and vibration
- . Small size fits in palm
- · High quality bearings improve productivity with less repair
- Rear exhaust directs air away from work area



#### AT109 Right Angle Mini.

- Aluminum housing for long lasting durability
- Compact mini design with 90° head for easy access
- · High quality bearings improve productivity with less repair
- · Rear exhaust directs air away from work area



#### AT115 Standard.

- · Comfort grip insulates from cold and vibration
- Brass bezel and air inlet provide durability and long life
- · High quality bearings improve productivity with less repair

 Rear exhaust directs air away from work area



### AT119 Mini Angle Die Grinder (115°).

- 115° offset head provides a more ergonomic grinding position
- Thread on style disc provides a more compact head
- (1) 2" quick change disc included so tool is ready for your abrasive pad



AT105

#### AT105 Standard.

- · Aluminum housing for long lasting durability
- Intended for most standard deburring operations
- · High quality bearings improve productivity with less repair
- Rear exhaust directs air away from work area



#### AT116 Mini Angle Die Grinder (115°).

- 115° offset head provides a more ergonomic grinding position
- Quick change 1/4" collet for faster job changes
- · Comfort grip over mold
- Variable speed regulator for precision control
- Rear exhaust

## Straight and Angle Head - 1/4" Collet

0	•					
Specifications	AT118 †	AT115 †	AT105 †	AT109* †	AT119 †	AT116 †
Collet Size, inches	1/4	1/4	1/4	1/4	1/4	1/4 QC
Rated Power, hp (kW)	0.2 (.15)	0.2 (.15)	0.2 (.15)	0.2 (.15)	0.45 (.33)	0.2 (.15)
Free Speed RPM	20,000	22,000	22,000	20,000	20,000	20,000
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	2.1 (15) [59]	4 (29) [113]	4 (29) [113]	2.1 (15) [59]	3 (15) [59]	3 (15) [59]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8	3/8	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	2.5	<2.5	<2.5	2.5	<6.92	2.5
Sound Level dBa Pressure	104	102	102	104	100	100
Length, inches (mm)	5.5 (140)	6.5 (165)	6.5 (165)	5.5 (140)	6.81 (173)	6.5 (165)
Weight, lbs (kg)	1.1 (.50)	1.3 (.61)	1.3 (.61)	1.1 (.50)	1.1 (50)	1.1 (50)

\* See p. 303 for AT109DGK die grinder kit specifications.

**Pencil Die Grinders** 

† ( E



AT1070A

Specifications	AT1070A †	AT1070RA †
Collet Size, inches	1/8	1/8
Rated Power, hp (kW)	_	_
Free Speed RPM	75,000	75,000
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	1 (7) [28]	1 (7) [28]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8
Vibration Level, m/s <sup>2</sup>	2.0	2.0
Sound Level dBa Pressure	72	72
Length, inches (mm)	5.3 (135)	5.9 (150)
Weight, lbs (kg)	.55 (.25)	.46 (.21)



#### AT1070A Pencil.

- Twist action variable speed control
- 5' (1.5 m) long protected air hose
- Used with 1/8" shank grinding accessories rated a minimum of 75,000 rpm
- Ideal for tight spaces and easy cleaning of dies. rotors and brake pads
- (€

#### AT1070RA Pencil.

· Same as AT1070A except features right angle head

## **Cutting Tools**



PT250A

#### PT250A 3" Cut Off Tool.

- · Adjustable cutting wheel guard rotates to any safe and convenient position
- Adjustable rear exhaust keeps exhaust away from the work area
- . Thermally balanced air motor acts as internal cooling system to protect moving parts and efficiently routes air to control surface temperature of tool
- 10 position power/speed regulator precisely matches tool speed to job requirements



#### AT154R 4" Reversible Cut Off Tool (Blue-Point®).

- 14.8" overall length provides extended reach for easier access
- · Reverse mode controls the direction of sparks for safety
- · Exhaust diffused through the rear of tool away from work surface
- Side handle provides additional tool control



#### AT157R 3" Reversible Cut Off Tool (Blue-Point).

- Reversible to change direction of sparks
- · Built-in speed regulator for fine tuning
- Side handle provides additional tool control
- Extended reach for hard to access areas

#### **Cut Off Tools**

cat on roots			
Specifications	PT250A †	AT154R †	AT157R †
Wheel Size, inches (mm)	3 (76)	4 (101.5)	3 (76)
Rated Power, hp (kW)	0.5 (.37)	0.9 (.67)	0.45 (.33)
Free Speed RPM	22,000	16,000	20,000
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	2.7 (19) [76]	3.6 (26) [102]	3.5 (25) [99]
Air Inlet Thread Size	<sup>1</sup> /4"-18 NPT	<sup>1</sup> /4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	<2.5	<.6	<3.8
Sound Level dBa Pressure	84	93	94
Length, inches (mm)	7.2 (183)	14.8 (376)	7.3 (185)
Weight, lbs (kg)	1.2 (.55)	3.1 (1.4)	1.9 (.86)
3" Cutter Wheels (36 grit) (optional)	AT150-20A	_	AT150-20A
3" Cutter Wheels (54 grit) (optional)	AT150C29A	_	AT150-29A
4" Cutter Wheels	<u> </u>	AT154RWHLMP	_

† **( €** 

**Grinders** 



#### PT450 4 1/2" Angle Grinder.

- 12.000 rpm Maximum Free Speed
- 1 HP thermally balanced air motor
- Adjustable Wheel Guard
- Lightweight, only 3 1/4 lbs
- Features Snap-on® INSTINCT® Screwdriver Side Handle



#### AT415B 4 1/2" Compact Grinder (Blue-Point).

• Includes 1 grinding disc

#### Grinders

Specifications	PT450 †	AT415B †
Wheel Size, inches (mm)	4 <sup>1</sup> / <sub>2</sub> (114)	4 <sup>1</sup> / <sub>2</sub> (114)
Rated Power, hp (kW)	1.0	0.86 (.64)
Free Speed RPM	12,000	12,000
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	4.7 (30) [118]	3.2 (23) [91]
Air Inlet Thread Size	1/4"-18 NPT	<sup>1</sup> /4"-18 NPT
Recommended Hose Size, inches	3/8	3/8
Vibration Level, m/s <sup>2</sup>	8.93	5.1
Sound Level dBa Pressure	86.3	83
Length, inches (mm)	9 (229)	10 (254)
Weight, lbs (kg)	3.25 (1.47)	4.2 (1.9)
Grinding Discs	PT450-WH	AT415A51









- . Do not operate without the guard
- Do not use grinder accessories above their maximum rated rpm
   Read safety precautions on pages W1 to W4

## **Cutting Tools (Blue-Point®)**



#### AT192A High Speed Reciprocating Saw.

- Adjustable blade guard to control cutting depth
- Teflon® coated piston for smooth operation and durability
- Comfort grip handle with safety lever throttle
- Includes bimetal blades: (1) 18PTI, (1) 24TPI, (1) 32TPI



#### AT194A Micro Air Saw.

- Compact size for easy access in tight quarters
- Guarded hose extension helps prevent damage to finished sufaces
- Performs straight or scroll cuts in metal and plastic
- Includes bimetal blades: (1) 18PTI, (1) 24TPI, (1) 32TPI

#### Air Saws

Specifications	AT192A †	AT194A †
Free Speed, rpm	11,000	8,250
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	1 (7) [28]	.70 (5) [20]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8
Vibration Level, m/s <sup>2</sup>	10.1	<6.6
Sound Level dBa Pressure	94	87
Length, inches (mm)	9.3 (235)	6.7 (175)
Weight, lbs (kg)	1.7 (.80)	1 (.45)
Replacement Blades		
Bi-Metal Blade, 18TPI, 3 3/4" long (qty. 5)	AT190-39C	AT190-39C
Bi-Metal Blade, 24TPI, 3 3/4" long (qty. 5)	AT190-40C	AT190-40C
Bi-Metal Blade, 32TPI, 3 3/4" long (qty. 5)	AT190-41C	AT190-41C





AT185

## AT185 Dual Punch Tool.

- Use to make 3/16 and 5/16" punches in light sheet metal
- Head swivels 360° for maximum versatility

Specifications	AT185 †
Free Speed, rpm	_
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	11.3 (81) [320]
Air Inlet Thread Size	1/4"-18 NPT
Recommended Hose Size, inches	3/8
Vibration Level, m/s <sup>2</sup>	<2.5
Sound Level dBa Pressure	48.6
Length, inches (mm)	9.3 (235)
Weight, Ibs (kg)	2.6 (1.2)

AT180C



#### AT195 Powered Shears.

- Trims, outlines and shears
- Replaceable brass filter screen
- · Built-in speed regulator

Specifications	AT195 <sup>†</sup>
Free Speed, rpm	_
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	4 (29) [113]
Air Inlet Thread Size	1/4"-18 NPT
Recommended Hose Size, inches	3/8
Vibration Level, m/s <sup>2</sup>	<2.5
Sound Level dBa Pressure	99.6
Length, inches (mm)	10 (254)
Weight, lbs (kg)	2.8 (1.3)

<sup>†(</sup>E

#### AT180C Nibbler.

- Cuts mild steel sheet up to 16 gauge (0.62") (1.55 mm)
- Anvil is adjustable for forward, backward and left or right cutting
- Readily cuts most nonferrous materials including aluminum, brass, formica, laminates, fiberglass and masonite

Specifications	AT180C †
Free Speed SPM	3,500
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	4 (29) [113]
Air Inlet Thread Size	1/4"-18 NPT
Recommended Hose Size, inches	3/8
Vibration Level, m/s <sup>2</sup>	4.3
Sound Level dBa Pressure	97
Length, inches (mm)	7.6 (194)
Weight, lbs (kg)	1.9 (.88)

<sup>†</sup> C E



<sup>† (</sup> **E** 

#### **Sanders**







**PSF4612** 

PS4512

PS4612

PS4512/PS4612/PSF4612 Orbital Sanders.

- Delivers 12,000 rpm with unsurpassed control and comfort
- Soft, ergonomic adjustable grip is indexible and can be rotated to fit the user's hand
- Patented 0-ring sealed motor extends tool life by preventing dust and debris from entering mechanical components
- S-shaped paddle lever to better fit the curve of the user's hand to provide comfort and resist fatigue
- Multiposition regulator controls maximum speed for versatility
- Robust front spindle and precision balanced crank extend motor life and provide smoother operation with minimal vibration
- Patented bearing dust shield extends motor life by preventing contamination of lower motor bearings
- Composite over molded housing is lightweight and easy to maneuver
- Optional PSV4612KIT vacuum kit is also available



PSF4312



PS4609

PS4809

#### PSF4312 3" Orbital Sander.

- Same features as PS4612 except:
- 3" lightweight, 30 gram pad is flexible for spot sanding and feather edging, providing more control of the application

#### PS4609 6" and PS4809 8" Geared Sanders.

- Remove and leveling of large amounts of filler materials such as glue or epoxy
- To level small welds
- . Removing coatings prior to painting
- For use on metal, solid surfaces, wood and fiberglass
- Super ergonomic adjustable grip is indexable to multiple positions for optimum comfort
- Soft grip housing material for maximum vibration absorption
- PS4609V vacuum model
- PS4809V vacuum model

#### **Orbital and Geared Sanders**

Specifications	PS4512 †	PS4612 †	PSF4612 †	PSF4312 †	PS4609 †	PS4609V †	PS4809 †	PS4809V †
Pad Size, inches (mm)	5 (127)	6 (152)	6 (152)	3 (76)	6 (152)	6 (152)	8 (203)	8 (203)
Rated Power, hp (kW)	0.25 (.19)	0.25 (.19)	0.25 (.19)	0.25 (.19)	0.42 (.33)	0.42 (.33)	0.42 (.33)	0.42 (.33)
Free Speed RPM	12,000	12,000	12,000	12,000	1,000	1,000	1,000	1,000
Spindle Thread, inches	5/16-24	5/16-24	5/16-24	1/4-20	3/8	1/4	3/8	3/8
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	2 (14) [57]	2 (14) [57]	2 (14) [57]	2 (14) [57]	3 (21.7) [85]	3 (21.7) [85]	3 (21.7) [85]	3 (21.7) [85]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	2.3	2.3	2.1	2.1	5.9	5.9	5.9	5.9
Sound Level dBa Pressure	77	81	81	76	82	82	82	82
Length, inches (mm)	5 (127)	6 (152)	6 (152)	3 (76)	11 (281)	11 (281)	11 (281)	11 (281)
Weight, lbs (kg)	1.7 (.77)	2.5 (1.14)	2.4 (1.11)	1.4 (.65)	3.7 (1.70	3.7 (1.70	4 (1.82)	4 (1.82)
Standard Pad	PS4512-1AH	PS4612-1AH	PS4612-1AH	PS4312-2H	PS468-34	PS468-34V	PS468-35	PS468-35V

† **( E** 











- Do not use grinding discs on sanders
- Read safety precautions on pages W1 to W4

## Sanders (Blue-Point®)



AT406B

#### AT406B 6" Orbital Palm Sander.

- Orbital action assures final swirl free finish
- · Sealed outer bearings for long lasting quality
- Built-in speed regulator for precision adjustment Removable brass filter screens out debris
- Nonvacuum Velcro® pad included



AT408

#### AT408 8" Geared Sander.

- · Rear diffused exhaust
- Built-in adjustable speed regulator



#### AT411A 6" Dual Action Sander.

- For fine sanding operations and swirl free finishing
- Comfort handle helps reduce fatigue
- Converts from rotary to random orbit action by sliding drive plate
- Built-in thumb wheel speed regulator

#### **Sanders**

Specifications	AT406B	AT408 †	AT411A †
Pad Size, inches (mm)	6 (152.4)	8 (203)	6 (152)
Rated Power, hp (kW)	.24	0.5 (.37)	0.5 (.37)
Free Speed RPM	10,000	850	10,000
Spindle Thread, inches	5/16-24	<sup>5</sup> /16 <b>-24</b>	<sup>5</sup> /16 <b>-18</b>
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	3.5 (14) [97.86]	5 (36) [142]	5 (36) [142]
Air Inlet Thread Size	1/4"	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	15	3.7	3.7
Sound Level dBa Pressure	89	87	79
Length, inches (mm)	4.5 (115)	11 (281)	8 (203)
Weight, lbs (kg)	1.9 (.86)	4.8 (2.18)	4.7 (2.14)
Standard Pad	AT406B30	AT408-2	AT411A-1
Orbit Dia., inches (mm)	0.19 (5.00)	_	_

**<sup>†</sup> ( €** 



## AT425R 5" Reversible Hi-speed Sander.

- · Comfort grip handle
- 1 hand forward/reverse lever
- Built-in speed regulator
- Includes 3 backing discs: 3, 4 and 5"

#### **Reversible Disc Sanders**

Specifications	AT425R †
Pad Size, inches (mm)	5 (127)
Rated Power, hp (kW)	0.45 (.33)
Free Speed RPM	13,000
Spindle Thread, inches	<sup>7</sup> / <sub>16</sub> -20
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	4.3 (31) [122]
Air Inlet Thread Size	1/4"-18 NPT
Recommended Hose Size, inches	3/8
Vibration Level, m/s <sup>2</sup>	<0.8
Sound Level dBa Pressure	93
Length, inches (mm)	5.3 (135)
Weight, lbs (kg)	2.8 (1.28)
Standard Pad	AT425R-24
3" Replacement Pad (opt.)	AT425R-22
4" Replacement Pad (opt.)	AT425R-23

<sup>†</sup> **( E** 

### **Finishing Tools**



#### AT109DGK Die Grinder Kit.

- Aluminum housing
- Compact mini design
- Rear exhaust

Includes: AT109 mini angle die grinder plus 2" (50.8 mm) ROLOC® pad (1 ea.), 2" (50.8 mm) coarse discs (2 ea.), 2" (50.8 mm) medium discs (2 ea.), 2" (50.8 mm) 24 grit discs (2 ea.), 2" (50.8 mm) 36 grit discs (2 ea.), 2" (50.8 mm) crud discs (2 ea.), 3" (76.2 mm) *ROLOC* pad (1 ea.), 3" (76.2 mm) 50 grit discs (2 ea.), 3" (76.2 mm) 120 grit discs (2 ea.), 3" (76.2 mm) crud discs (2 ea.), 1/4" shank adaptor (1 ea.) and spanner wrenches (2 ea.) in storage case.



PT110ADGK

#### PT110ADGK Die Grinder Kit.

Includes PT110A Mini Angle Die Grinder plus:

- (2) 2" Surface Prep Discs Medium (1) 2" Roloc Holder
- (3) 2" Surface Prep Discs Coarse (1) 3" Roloc Holder
- (2) 3" Surface Prep Discs Medium (1) 1/4" Connecting Shank
- (3) 3" Surface Prep Discs Coarse (1) 7 1/4" Connecting Shank
- (1) 2" Coating Removal Disc
- (2) Service Wrenches
- (1) 3" Coating Removal Disc
- (1) Blow Mold Tray w/clear cover

Specifications	AT109DGK †	PT110ADGK †
Rated Power, hp (kW)	0.2 (.15)	0.3 (.2)
Free Speed RPM	20,000	25,000
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	2.1 (15) [59]	1.4 (10) [40]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8
Vibration Level, m/s <sup>2</sup>	2.5	3.8
Sound Level dBa Pressure	104	84
Length, inches (mm)	5.5 (140)	5.6 (144)
Weight, lbs (kg)	1.1 (50)	1.9 (.86)



AT475A

#### AT475A Heavy Duty In Line Sander.

- 5/8" stroke
- Minimal vibration
- For fast material removal
- · Pad has positive locking clamps

#### **In-Line and Jitterbug Sanders**



#### AT435A Jitterbug Sander.

- Features top mounted throttle
- · For fast material removal
- Pad has positive locking clamps

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Specifications	AT475A †	AT435A †
Rated Power, hp (kW)	_	0.5 (.37)
Free Speed - strokes/min.	1,800	8,000
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	2.3 (17) [65]	3 (22) [85]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8
Vibration Level, m/s <sup>2</sup>	14.9	4.5
Sound Level dBa Pressure	87	85
Length, inches (mm)	16 (406)	6.7 (171)
Weight, lbs (kg)	6.8 (3.09)	4.6 (2.09)
Standard Pad	AT475A-29	AT435A-48

† **( (** 











- . Do not use sanding discs or accessories above maximum rated RPM
- Do not use grinding discs on sanders
- · Read safety precautions on pages W1 to W4

**Belts** 

### Belt Sanders (Blue-Point®)





### **Belt Sander**

Specifications	AT615 †
Rated Power, hp (kW)	0.5 (.3)
Free Speed rpm	20,000
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	4.2 (30) [119]
Air Inlet Thread Size	1/4"-18 NPT
Recommended Hose Size, inches	3/8
Vibration Level, m/s <sup>2</sup>	1.36
Sound Level dBa Pressure	95
Length, inches (mm)	14.13 (359)
Weight, lbs (kg)	2.64 (1.20)

† **( E** 

#### AT615 Belt Sander.

- · Grinding head pivots 360° for increased flexibility
- Simple belt tracking adjustment knob to adjust belt slack
- Powerful 0.5 hp for long lasting performance
- Belt guard detaches for quick abrasive changes
- Ergonomic 7º off set handle and lightweight design minimizes operator fatique

#### AT615K Belt Sander Kit.

 Includes AT615,3 18" x 3/8" sanding belts (60, 80, 120 grit), 3 18" x 1/2" sanding belts (60, 80, 120 grit) and 3 18" x 3/4" sanding belts (60, 80, 120 grit)

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## AT615ARM1 Contact Arm Assembly (1"D X 3/8"W rubber).

Use with AT615 Belt Sander

## AT615ARM2 Contact Arm Assembly (3/4"D x 3/8"W rubber).

Use with AT615 Belt Sandér

## AT615ARM3 Contact Arm Assembly (3/4"D x 5/8"W).

Use with AT615 Belt Sander

#### AT615-31 Collet Assembly (1/4").

 Optional 1/4" collet assembly for use with the AT615 Belt Sander

#### AT615KPB Storage Case.

• Storage case for the AT615K Belt Sander Kit

#### Package Stock No. Grit Stock No. Grit Description Size Description Size Quantity 60 Grit 1/2" x 18" 50 Grit ATBA381860 3/8" x 18" ATBB121850 5 pack **Coated Abrasive** 5 pack Nonwoven Abrasive ATBA381880 3/8" x 18" 80 Grit 1/2" x 18" 100 Grit **Coated Abrasive** 5 pack ATBB1218100 Nonwoven Abrasive 5 pack ATBA3818120 **Coated Abrasive** 3/8" x 18" 120 Grit 5 pack ATBB1218240 Nonwoven Abrasive 1/2" x 18" 240 Grit 5 pack 60 Grit 3/4" x 18" ATBA121860 **Coated Abrasive** 1/2" x 18" 5 pack ATBB341850 Nonwoven Abrasive 50 Grit 5 pack 1/2" x 18" 80 Grit Nonwoven Abrasive 3/4" x 18" 100 Grit **Coated Abrasive** ATBB3418100 5 pack ATBA121880 5 pack ATBA1218120 **Coated Abrasive** 1/2" x 18" 120 Grit 5 pack ATBB3418240 Nonwoven Abrasive 3/4" x 18" 240 Grit 5 pack 3/8" x 18" ATBA341860 3/4" x 18" 60 Grit ATBB381850 50 Grit **Coated Abrasive** 5 pack Nonwoven Abrasive 5 pack Coated Abrasive 3/4" x 18" 80 Grit Nonwoven Abrasive 3/8" x 18" 100 Grit ATBA341880 5 pack ATBB3818100 5 pack ATBA3418120 **Coated Abrasive** 3/4" x 18" 120 Grit 5 pack ATBB3818240 Nonwoven Abrasive 3/8" x 18" 240 Grit 5 pack



### Tire Buffer AT240 Tire Buffer.

- Use for tire patch preparation, roughing up rubber for tire recaps plus removing excess rubber
- · Speed regulator for improved tool control
- Comfort grip housing for reduced operator fatigue
- · Rear exhaust directs air away from work
- Semicircle buffing wheel for maximum surface preparation



#### Pin Stripe Removal Tool AT265A Pinstripe Removal Tool.

- Use to remove pinstripes, adhesive, tape, and graffiti
- Includes (3) 3.5" eraser pads to keep you working longer
- Step pad eraser design for improved visibility during operation
- · Comfort grip handle for less fatigue
- Auxiliary side handle for improved tool control



#### AT1212

#### Needle Scaler AT1212 Mini Needle Scaler.

- Mini size for access in confined areas
- Smooth palm controlled trigger mechanism for ease of operation
- 12 high tension steel needles conform to any irregular surface for cleaning crevices

Stock No.	Pad Size	Style	Rated Power	Free Speed RPM	Spindle Size	Air Consumption	Vibration Level, m/s²	Sound Level dBa Pressure	Length, inches (mm)	Weight, lbs (kg)
AT240 †	_	Tire Buffer	.04	2,600	_	3.7	1.18	89	9.1 (233)	1.8 (0.80)
AT265A †	3.5	Material Removal	.04	3,600	5/16" - 24	3.7	0.69	88	8.1 (207)	1.8 (0.80)
AT1212 †		Scaler		4,000 BPM		4.5	11.5	88	12.4 (316)	2.64 (1.2)

## Finishing Tools (Blue-Point®)



AT401MCA



AT402MCA

Specifications



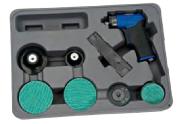
AT403MCA

AT401MCA † AT402MCA † AT403MCA †

#### AT401MCA, AT402MCA and AT403MCA Micro Series Features. · Powerful direct drive gear train for greater durability • Large 2 finger trigger for better control · High quality bearings for longer tool life · Composite housing with comfort grip insulates from cold · Bottom handle diffused exhaust

opcomoutions	AITOIIIIOA	AITULIIIUA	AITOUIIOA
Pad Size, inches (mm)	3 (76)	3 (76)	3 (76)
Rated Power, hp (kW)	0.25 (.19)	0.25 (.19)	0.25 (.19)
Free Speed RPM	15,000	15,000	6,000
Spindle Thread, inches	1/4-20	5/16-24	5/16-24
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	2.1 (15) [59]	2.1 (15) [59]	2.2 (16) [62]
Air Inlet Thread Size	1/4"-18 NPT	1/4"-18 NPT	1/4"-18 NPT
Recommended Hose Size, inches	3/8	3/8	3/8
Vibration Level, m/s <sup>2</sup>	<2.5	<2.5	<2.5
Sound Level dBa Pressure	84	84	86
Length, inches (mm)	4.7 (119)	5.2 (133)	5.6 (143)
Weight, lbs (kg)	.97 (.44)	1.1 (.50)	1.3 (.60)
† ( 6			

† ( E



AT401MCKA



AT402MCKA



AT403MCKA

#### AT401MCKA Micro Surface Prep Tool Kit.

· Variable speed trigger

- Includes: AT401MCA micro surface prep tool, (1) 2" ROLOC® pad, (1) 3" ROLOC pad, (5) 2" 40 grit pads and (5) 3" 80 grit pads in storage case
- ( €

#### AT402MCKA Micro **Dual Action Sander Kit.**

• Includes: AT402MC micro sander, (1) 3" Hook-It® pad, (25) 3" 180 grit pads, (25) 3" 200 grit pads, (10) 3" 320 grit pads and (10) 3" 800 grit pads in storage case

• ( €

#### AT403MCKA Micro Polisher Kit.

- Includes: AT403MCA micro polisher, (1) 3" Hook-It pad, (1) 3" wool pad, and (1) 3" foam pad in storage case
- ( €

## Polichers

Specifications	AT450BP †
Pad Size, inches (mm)	7 (177)
Rated Power, hp (kW)	1 (.74)
Free Speed rpm	2,700
Spindle Thread, inches	5/8-11
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	4.8 (34) [136]
Air Inlet Thread Size	1/4"-18 NPT
Recommended Hose Size, inches	3/8
Vibration Level, m/s²	<2.5
Sound Level dBa Pressure	84
Length, inches (mm)	15.7 (400)
Weight, lbs (kg)	5.5 (2.50)
Standard Wool Pad	POLISHW8A
Spanner Wrench (opt.)	AT450-50H



AT450BP

#### AT450BP Heavy Duty Vertical Polisher.

- Removeable side handle
- · Includes wool pad











- . Do not use sanding discs or accessories above maximum rated rpm
  - Read safety precautions on pages W1 to W4



Specifications	PT280THUGA †
Rated Power, hp (kW)	0.45 (.33)
Free Speed rpm	3,500
Air Consumption, Free Speed, CFM (SCFM) [L/MIN]	4 (28) [113]
Air Inlet Thread Size	1/4"-18 NPT
Recommended Hose Size, inches	3/8
Vibration Level, m/s <sup>2</sup>	2.8
Sound Level dBa Pressure	85
Length, inches (mm)	12 (304)
Weight, lbs (kg)	2.4 (1.09)

## PT280THUGA Crud Thug® Removal Air Tool. • Quickly remove seam sealers, rust, paint and

- underbody coatings
- · Optional rubber eraser wheel for pinstripe and graphics removal
- Easily removes automotive "crud" without fumes, heat buildup or surface damage
- Includes (1) fine wire wheel and (1) coarse wire wheel
- Thermally balanced air motor routes air between housing and liner for cooler tool temperatures and longer life
- Planetary gear system for increased torque
- Ergonomic cushion grip insulates against cold and vibration
- · Adjustable exhaust outlet in rear of tool allows choice of exhaust direction
- 10 position power/speed regulator allows easy rpm adjustment
- Paddle style trigger for precise speed control



PT280-300-11

PT280-301-11

PT280-302-11

PT280-304-11

PT280-305-11

PT280-306-11

Stock No.	Description	Width, mm	Wheel Diameter, inches	Wire Style	Max. Safe Free Speed RPM	Applications
SPPT280-300	Hub	23	4.05	_	4,000	Use to mount wire wheel to tool.
PT280-301MP5	Wire Wheel (coarse)	23	4.05	Bent, sharpened spring steel tips	4,000	Removes sealers and coatings. Profiles steel surfaces, rough fiberglass, plastic and rubber.
PT280-302MP5	Wire Wheel (fine)	23	4.05	Straight, hardened spring steel tips	4,000	Removes light rust, paint and gasket material. Cleans contours and tight areas.
PT280-303MP3	Rubber Eraser Wheel	30	4.13	_	3,500	Removes vinyl, decals and pinstripes, along with reflective and DOT tape. Also removes molding and adhesive tape.
PT280-304	Stainless Steel Wire Wheel (fine)	23	4.05	Straight tip stainless steel	4,000	Removes paint, oxidation and liquid gaskets. Cleans weld seams and rivets.
PT280-305	Stainless Steel Wire Wheel (coarse)	23	4.05	Bent tip stainless steel	4,000	Removes paint, corrosion, cleans weld seams, burn and slag. Effective for nonferrous metals.
PT280-306	Wire Wheel (medium)	23	4.05	Bent, sharpened spring steel tips	4,000	Removes heavy rust, paint, epoxy and marine growth. Profiles aluminum surfaces.
PT280-300-11	Hub	11	4.05	_	4,000	Use to mount wire wheel to tool.
PT280-301-11	Wire Wheel (coarse)	11	4.05	Bent, sharpened spring steel tips	4,000	Removes sealers and coatings. Profiles steel surfaces, roughs fiberglass, plastic and rubber.
PT280-302-11	Wire Wheel (fine)	11	4.05	Straight, hardened spring steel tips	4,000	Removes light rust, paint and gasket material. Cleans contours and tight areas.
PT280-304-11	Stainless Steel Wire Wheel (fine)	11	4.05	Straight, hardened stainless steel tips	4,000	Removes paint, oxidation and liquid gaskets. Cleans weld seams and rivets.
PT280-305-11	Stainless Steel Wire Wheel (coarse)	11	4.05	Bent, sharpened stainless steel tips	4,000	Removes paint, corrosion, cleans weld seams, burn and slag. Effective for nonferrous metals.
PT280-306-11	Wire Wheel (medium)	11	4.05	Bent, sharpened spring steel tips	4,000	Remove heavy rust, paint, epoxy and marine growth. Profiles aluminum surfaces.

## **POWER TOOL ACCESSORIES**



## **POWER TOOL ACCESSORIES**

## Air/Cordless Tool Boots









PH3050BOOT

CT6850MBBOOT





CT4410AGBOOT

OOT YA969

		Air Tool Stock No.	Stock No.		
Air Ratchet	1/2" Sq. Drive	AT705 Series	AT700E49A		
Boots		AT205 Series	AT200D22A		
		AT700 Series / AT702	AT700E49A		
		ETB14460A	YA889A		
	3/8" Sq. Drive	FAR7000	FAR7000B00T		
	9/8 Sq. Dilve	FAR7200, FAR72B, FAR72C	YA889A		
		PTR205A	YA905		
		PTR215A	YA905		
		PTR225A	YA905		
		AT200 Series	AT200D22A		
	1/4" Sq. Drive	FAR25, FAR25A	YA888		
		PTR200A, FAR2500, FAR2505	YA905		
Air Hammer		AT2050	AT2050B00T		
Boots	_	PH3050/PH3050A	PH3050B00T		
Cordless		CT3450, CT3850 Series	YA982		
Impact		CT4850, CT6850, CT6855 Series	CT4850B00T		
Wrench Boots			CT4410B00T		
DUUIS		CT4410A Series	CT4410AGB00		
			CT4410A0B00		
	1/2" Sq. Drive		CT6850GB00T		
			CT68500B00T		
		CT6850 Series	CT6850MBB00		
			CT6850MPB00		
			CT6850MRB00		
		CT7850 Series	AT700E49A AT200D22A AT700E49A YA889A FAR7000B00T YA899A YA905 YA905 AT200D22A YA888 YA905 AT2050B00T PH3050B00T YA982 CT4850B00T		
		CT30 Series	YA968		
	3/8" Sq. Drive	0.00	YA982		
	'	CT3110, CT3110HP Series	YA969		
Battery	10.1/	CTB4185/CTB4187 Series	CTB4185B00T		
Boots	18 V	CTB7185	CTB7185B00T		
	14.4 V	CTB4145/CTB4147 Series	CTB4145B00T		

### Air/Cordless Boots

		Air Tool Stock No.	Stock No.
Air Impact	3/4" Sq. Drive	AT670	AT670B00T
Wrench	74 Sq. Dilve	AT760	AT760B00T
Boots		AT775 / AT775L	YA979
		IM75	YA770
		MG1200	MG1200B00T
	1/2" Sq. Drive	AT123 Series	AT123-45
		AT500C / AT500D	YA972
		AT555 / AT555A Series	AT531-25
		AT570	AT570B00T
		IM51 / IM510 Series	YA848
		IM5100	YA978
		IM6100 Series / IM6500HP	YA980
		IMC500	IMC500B00T
		XT7100 MG725 Series	XT7100B00T MG725B00T MG725GB00T MG7250B00T MG725MFBB00T MG725MFPB00T MG725MFRB00T
	3/8" Sq. Drive	AT321	AT321-44
		AT351	_
		AT355A	YA977
		AT360	AT360-25
		AT370	AT370B00T
		IM31 Series	YA877A
		IM32 Series	YA1032
		MG31 Series	MG31B00T
		MG325 Series	MG325B00T MG325GB00T MG3250B00T MG325MFBB00T
			MG325MFPB00T MG325MFRB00T
	1/4" Sq. Drive	AT225B Series	

## **Impact Wrench and Ratchet Accessories**



MRB25

## MRB25 Magnetic Impact Wrench Holder.

- Attach to lift post, tool storage unit or cart to keep impact gun handy
- Ideal for tire and wheel shops
- 160 lbs of magnetic force
- Outer diameter of base is 3 7/8"
- Inner diameter of holder is 2 7/8"



**YA4190A** 

#### YA4190A Grease Gun.

- Fits all flush type fittings
- Good for FAR72B/FAR70 series air ratchets
- Spring return plunger
- 3 oz capacity

#### YA4190DIS Grease Dispenser.

- Grease dispenser attachment for YA4190A
- Contains 3 oz of Mobil® temp SHC-32 grease for Snap-on® FAR series air ratchets

YA4190FAR Grease Gun Assembly. YA4190CAPA Grease Gun Head.



YA4190DIS



YA4190FAR



YA4190CAPA

## **POWER TOOLS ACCESSORIES**

#### **Drill Accessories**



DC150 Chuck Set.

· Packaged in a storage case

DC15014 Drill Chuck.

DCA375 Drill Chuck.

• Thread size 3/8"-24;

Capacity 1/32 to 3/8"

• 3/8" chuck fits AT3000 drill

Includes PD3A3 chuck key

• 1/4" drill chuck DC15038 Drill Chuck.

• 3/8" drill chuck

• Includes 1/4 and 3/8" drill chucks, a

chuck key and a set of 5 stubby drill bits

in 1/8, 3/16, 1/4, 5/16 and 3/8" sizes







AT3000-26





DCBP500

DC15014

DCA500 Drill Chuck.

- 1/2" chuck fits AT5000 drill
- Thread size 1/2"-20: Capacity 1/16 to 1/2'
- Includes PD30-3 chuck key

#### DCB375 Drill Chuck.

- 3/8" chuck
- · General use on light duty drills
- Thread size 3/8"-24; Capacity 1/32 to 3/8"
- Includes AT825-7 chuck key

#### DCB500 Drill Chuck.

- 1/2" chuck fits AT3000 drill
- Thread size 3/8"-24; Capacity 1/16 to 1/2"
- Includes PD30-3 chuck key

#### AT3000-26 Keyless Chuck.

3/8" keyless chuck for AT3000 drill

PDAH1A

#### PD3A3 Chuck Kev.

• 3/8" replacement key for PDR3A and AT800 drills

#### PDAH1A Auxiliary Handle.

 Provides 2 handed power and control when used in conjunction with air drills

#### AT5000-6-1 Chuck Key.

• 1/2", for AT5000

#### AT5000-6 Drill Chuck.

- 1/2" keyed chuck fits AT5000
- Thread size 1/2"-20; Capacity 1/16"-1/2
- Key not included

#### DCBP500 Drill Chuck.

- 1/2" keyless chuck fits AT500
- Thread size 1/2"-20; Capacity 1/16"-1/2

#### YA52PBSQC Power Bit Set.

Set Includes:

- · Ideal for use with cordless drills and screwdrivers
- Includes 49 1/4" hex shank bits in short and long lengths, 2 hex adaptors and quick change chuck
- · Storage case holds all components



YA52PBSQC

Flat Tip Bits (Short)	5-6, 6-8, 8-10 (2 each), 10-12
Flat Tip Bits (Long)	6-8, 8-10, 10-12
Hex Bits (Short)	1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 9/32"
Hex Bits (Long)	5/32, 3/16, 7/32"
PHILLIPS Bits (Short)	#1, #2 (2 each), #3
PHILLIPS Bits (Long)	#1, #2, #3
TORX® Tamper Resistant Bits (Short and Long)	T10, T15, T20, T25, T27, T30, T40
Square Bits (Short and Long)	#1, #2, #3
Clutch Bits (Short and Long)	5/32, 3/16"
Double End Bits	6-8 x #2 PHILLIPS, 8-10 x #3 PHILLIPS
Adaptors	1/4" hex female to 1/4" hex female, 1/4" hex male to 1/4" square male, 1/4" hex Quick Change Chuck

#### PTB32K Power Bit Set.

- · Ideal for use with cordless drills and screwdrivers, includes (30) 1/4" hex shank bits plus 2 adaptors
- · Storage case clearly indicates bit type and size

Set Includes:

Flat Tip Bits	5/32, 3/16, 7/32, 1/4, 9/32"
Hex Bits	3/32, 7/64, 1/8, 5/32, 3/16, 7/32, 1/4"
PHILLIPS Bits	#0, #1, #2, #3
POZIDRIV Bits	#0, #1, #2, #3
<b>TORX</b> Tamper Resistant Bits	T10, T15, T20, T25, T27, T30, T40
Square Bits	#0, #1, #2
Adaptors	1/4" hex male to 1/4" square male, 1/4" hex Quick Change Coupler

#### Magnetic Power Nut Drivers

- Magnets keep ferrous metal fasteners positioned in driver
- · High grade alloy material for long lasting durability
- · Storage case to keep tools organized under hood and bench work

Applications: Under dash

**PTND4KA Magnetic Power Nut** Setter Set, inch (4 pc). Includes: 1/4, 5/16, 3/8 and 1/2" Nut Setters.

PTNDM4KA Magnetic Power Nut Setter Set, Metric (4 pc).

Includes: 8, 10, 12 and 14 mm nut setters.



PTNDM4KA

#### CTS561BITSET Quick Change Bit Set.

- For Snap-on® CTS561 and CTS561CL cordless screwdrivers plus other power drivers
- Quick change hex saves time changing bits
- Includes 22 bits (all 3" long) plus a 1/4" square drive (2" long)
- Storage case included

Set Includes:



PTB32K

CTS561BITSET

PHILLIPS Bits	#0, #1, #2
Flat Tip Bits	5/32, 3/16, 7/16, 1/4, 9/32"
TORX Bits	T10, T15, T20, T25, T27, T30, T40
Hex Bits	3/32, 7/64, 1/8, 5/32, 3/16, 7/32, 1/4"









## **POWER TOOL ACCESSORIES**

### **Drill Bits**



**DBTBC121** 

#### **DBTBC121 THUNDERBIT** Cobalt Drill Bit Set.

DBTBC1/16 through DBTBC3/8 (21 bits) in B121B metal drill index .



**DBTBC129** 

#### **DBTBC129 THUNDERBIT** Cobalt Drill Bit Set.

DBTBC1/16 through DBTBC1/2 (29 bits) in B129B metal drill index.



**DBTB121** 

#### **DBTB121 THUNDERBIT** High Speed Drill Bit Set. DBTB1/16 through DBTB3/8

(21 bits) in B121B metal drill index.



**DBTB129** 

## DBTB129 Drill Bit Set.

DBTB1/16 through DBTB1/2 (29 bits) in B129B metal drill index.

# THUNDERBIT®/Cobalt

- Jobber Length 135° Split Point
   For drilling at higher speeds in tougher drilling conditions
- Feature 135° split points for easier drill starting without the need for center punching
- Heavy duty web construction for higher strength and less breakage

MECHANIC'S LENGTH

• Improved chip ejection through a specially engineered flute design

, , , , , , , , , , , , , , , , , , , ,					
Stock No.	Size, inches	Stock No.	Size, inches		
DBTBC1/16	1/16	DBTBC19/64	19/64		
DBTBC5/64	5/64	DBTBC5/16	5/16		
DBTBC3/32	3/32	DBTBC21/64	21/64		
DBTBC7/64	7/64	DBTBC11/32	11/32		
DBTBC1/8	1/8	DBTBC23/64	23/64		
DBTBC9/64	9/64	DBTBC3/8	3/8		
DBTBC5/32	5/32	DBTBC25/64	25/64		
DBTBC11/64	11/64	DBTBC13/32	13/32		
DBTBC3/16	3/16	DBTBC27/64	27/64		
DBTBC13/64	13/64	DBTBC7/16	7/16		
DBTBC7/32	7/32	DBTBC29/64	29/64		
DBTBC15/64	15/64	DBTBC15/32	15/32		
DBTBC1/4	1/4	DBTBC31/64	31/64		
DBTBC17/64	17/64	DBTBC1/2	1/2		
DBTBC9/32	9/32	_	_		

## THUNDERBIT/High Speed Steel Jobber Length 135° Split Point • Industrial grade steel with bronze oxide surface treatment

- Bits will drill at higher speeds in tougher drilling conditions
- 135° split points for easier drill starting without the need for center punching
- · Heavy duty web construction for higher strength and less breakage
- Improved chip ejection through a specially engineered flute design

Stock No.	Size, inches	Stock No.	Size, inches
DBTB1/16	1/16	DBTB19/64	19/64
DBTB5/64	5/64	DBTB5/16	5/16
DBTB3/32	3/32	DBTB21/64	21/64
DBTB7/64	7/64	DBTB11/32	11/32
DBTB1/8	1/8	DBTB23/64	23/64
DBTB9/64	9/64	DBTB3/8	3/8
DBTB5/32	5/32	DBTB25/64	25/64
DBTB11/64	11/64	DBTB13/32	13/32
DBTB3/16	3/16	DBTB27/64	27/64
DBTB13/64	13/64	DBTB7/16	7/16
DBTB7/32	7/32	DBTB29/64	29/64
DBTB15/64	15/64	DBTB15/32	15/32
DBTB1/4	1/4	DBTB31/64	31/64
DBTB17/64	17/64	DBTB1/2	1/2
DBTB9/32	9/32	_	_

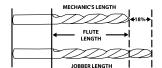
## **High Speed Steel Drill Bits**



DBTR129 Drill Bit Set. DBTR1/16 through DBTR1/2 (29 bits) in B129B metal drill index.

## Mechanic's Length 135° Point with 3 Flat Shank

	U				
Stock No.	Size, inches	Stock No.	Size, inches	Stock No.	Size, inches
DBTR1/16	1/16	DBTR7/32	7/32	DBTR3/8	3/8
DBTR5/64	5/64	DBTR15/64	15/64	DBTR25/64	25/64
DBTR3/32	3/32	DBTR1/4	1/4	DBTR13/32	13/32
DBTR7/64	7/64	DBTR17/64	17/64	DBTR27/64	27/64
DBTR1/8	1/8	DBTR9/32	9/32	DBTR7/16	7/16
DBTR9/64	9/64	DBTR19/64	19/64	DBTR29/64	29/64
DBTR5/32	5/32	DBTR5/16	5/16	DBTR15/32	15/32
DBTR11/64	11/64	DBTR21/64	21/64	DBTR31/64	31/64
DBTR3/16	3/16	DBTR11/32	11/32	DBTR1/2	1/2
DBTR13/64	13/64	DBTR23/64	23/64	_	_



# High Speed Steel Drill Bits

# Jobber Length 118° Point

Stock No.	Size, inches	Stock No.	Size, inches
DBF1/16C	1/16	DBF19/64C	19/64
DBF5/64C	5/64	DBF5/16C	5/16
DBF3/32C	3/32	DBF21/64C	21/64
DBF7/64C	7/64	DBF11/32C	11/32
DBF1/8C	1/8	DBF23/64C	23/64
DBF9/64C	9/64	DBF3/8C	3/8
DBF5/32C	5/32	DBF25/64C	25/64
DBF11/64C	11/64	DBF13/32C	13/32
DBF3/16C	3/16	DBF27/64C	27/64
DBF13/64C	13/64	DBF7/16C	7/16
DBF7/32C	7/32	DBF29/64C	29/64
DBF15/64C	15/64	DBF15/32C	15/32
DBF1/4C	1/4	DBF31/64C	31/64
DBF1764C	17/64	DBF1/2C	1/2
DBF9/32C	9/32	<b> </b>	_







DB129C Drill Bit Set. DBF1/16C through DBF1/2C (29 bits) in B129C metal drill index.

DB121C Drill Bit Set.

**DB121C** 

DBF1/16C through DBF3/8C (21 bits) in B121C metal drill index.

**DB113C** 

DB113C Drill Bit Set. DBF1/16C through DBF1/4C (13 bits) in B113B metal drill index.

# lobber Length Letter Size 118° Point

,			
Stock No.	Size, inches	Stock No.	Size, inches
DBAA1A	.234 (A)	DBAA1N	.302 (N)
DBAA1B	.238 (B)	DBAA10	.316 (0)
DBAA1C	.242 (C)	DBAA1P	.323 (P)
DBAA1D	.246 (D)	DBAA1Q	.332 (Q)
DBAA1E	.250 (E)	DBAA1R	.339 (R)
DBAA1F	.257 (F)	DBAA1S	.348 (S)
DBAA1G	.261 (G)	DBAA1T	.358 (T)
DBAA1H	.266 (H)	DBAA1U	.368 (U)
DBAA1I	.272 (I)	DBAA1V	.377 (V)
DBAA1J	.277 (J)	DBAA1W	.386 (W)
DBAA1K	.281 (K)	DBAA1X	.397 (X)
DBAA1L	.290 (L)	DBAA1Y	.404 (Y)
DBAA1M	.295 (M)	DBAA1Z	.413 (Z)

DBA126B Letter Drill Bit Set. DBAA1A through DBAA1Z (26 pcs) (.234 to .413") in B126C metal index.

# **Jobber Length Metric Size 118° Point**

Stock No.	Size, mm	Stock No.	Size, mm
DBM1A	1	DBM7.5A	7.5
DBM1.5A	1.5	DBM8A	8
DBM2A	2	DBM8.5A	8.5
DBM2.5A	2.5	DBM9A	9
DBM3A	3	DBM9.5A	9.5
DBM3.5A	3.5	DBM10A	10
DBM4A	4	DBM10.5A	10.5
DBM4.5A	4.5	DBM11A	11
DBM5A	5	DBM11.5A	11.5
DBM5.5A	5.5	DBM12A	12
DBM6A	6	DBM12.5A	12.5
DBM6.5A	6.5	DBM13A	13
DRM7A	7	T_	_

DBM125C Metric Drill Bit Set. DBM1A through DBM13A (25 pcs) (1 to 13 mm) in B125C metal index.









# Wire Gauge Drill Bits



**DB120C** 



Wire Gauge 118° Point (Cobalt and High Speed Steel)

Cobalt	High Speed Steel	Decimal Equiv. inches	Length, inches	Cobalt	High Speed Steel	Decimal Equiv. inches	Length, inches
DBCE1A	DBE1B	.2280	3 7/8	DBCE41A	DBE41B	.0960	2 3/8
DBCE2A	DBE2B	.2210	3 7/8	DBCE42A	DBE42B	.0935	2 1/4
DBCE3A	DBE3B	.2130	3 3/4	DBCE43A	DBE43B	.0890	2 1/4
DBCE4A	DBE4B	.2090	3 3/4	DBCE44A	DBE44B	.0860	2 1/8
DBCE5A	DBE5B	.2055	3 3/4	DBCE45A	DBE45B	.0820	2 1/8
DBCE6A	DBE6B	.2040	3 3/4	DBCE46A	DBE46B	.0810	2 1/8
DBCE7A	DBE7B	.2010	3 5/8	DBCE47A	DBE47B	.0785	2
DBCE8A	DBE8A	.1990	3 5/8	DBCE48A	DBE48B	.0760	2
DBCE9A	DBE9B	.1960	3 5/8	DBCE49A	DBE49B	.0730	2
DBCE10A	DBE10B	.1935	3 5/8	DBCE50A	DBE50B	.0700	2
DBCE11A	DBE11B	.1910	3 1/2	DBCE51A	DBE51B	.0670	2
DBCE12A	DBE12B	.1890	3 1/2	DBCE52A	DBE52B	.0635	1 <sup>7</sup> /8
DBCE13A	DBE13B	.1850	3 1/2	DBCE53A	DBE53B	.0595	1 7/8
DBCE14A	DBE14B	.1820	3 3/8	DBCE54A	DBE54B	.0550	1 7/8
DBCE15A	DBE15B	.1800	3 3/8	DBCE55A	DBE55B	.0520	1 7/8
DBCE16A	DBE16B	.1770	3 3/8	DBCE56A	DBE56B	.0465	1 3/4
DBCE17A	DBE17B	.1730	3 3/8	DBCE57A	DBE57B	.0430	1 3/4
DBCE18A	DBE18B	.1695	3 1/4	DBCE58A	DBE58B	.0420	1 5/8
DBCE19A	DBE19B	.1660	3 1/4	DBCE59A	DBE59B	.0410	1 5/8
DBCE20A	DBE20B	.1610	3 1/4	DBCE60A	DBE60B	.0400	1 5/8
DBCE21A	DBE21B	.1590	3 1/4	_	DBE61B	.0390	1 5/8
DBCE22A	DBE22B	.1570	3 1/8	_	DBE62B	.0380	1 1/2
DBCE23A	DBE23B	.1540	3 1/8	_	DBE63B	.0370	1 1/2
DBCE24A	DBE24B	.1520	3 1/8	_	DBE64B	.0360	1 1/2
DBCE25A	DBE25B	.1495	3	_	DBE65B	.0350	1 1/2
DBCE26A	DBE26B	.1470	3	_	DBE66B	.0330	1 3/8
DBCE27A	DBE27B	.1440	3	_	DBE67B	.0320	1 3/8
DBCE28A	DBE28B	.1405	2 7/8	_	DBE68B	.0310	1 3/8
DBCE29A	DBE29B	.1360	2 7/8	_	DBE69B	.0292	1 3/8
DBCE30A	DBE30B	.1285	2 3/4	_	DBE70B	.0280	1 1/4
DBCE31A	DBE31B	.1200	2 3/4	_	DBE71B	.0260	1 <sup>1</sup> /4
DBCE32A	DBE32B	.1160	2 3/4	_	DBE72B	.0250	1 <sup>1</sup> /8
DBCE33A	DBE33B	.1130	2 5/8	_	DBE73B	.0240	1 <sup>1</sup> /8
DBCE34A	DBE34B	.1110	2 5/8	_	DBE74B	.0225	1
DBCE35A	DBE35B	.1100	2 5/8	_	DBE75B	.0210	1
DBCE36A	DBE36B	.1065	2 1/2	_	DBE76B	.0200	7/8
DBCE37A	DBE37B	.1040	2 1/2	_	DBE77B	.0180	7/8
DBCE38A	DBE38B	.1015	2 1/2	_	DBE78B	.0160	7/8
DBCE39A	DBE39B	.0995	2 3/8	_	DBE79B	.0145	3/4
DBCE40A	DBE40B	.0980	2 3/8	_	DBE80B	.0135	3/4

**DB120C High Speed Drill Bit Set.** DBE61B through DBE80B (20 pcs) (.0390 to .0135") in a metal index.

**DBC260A Cobalt Drill Bit Set.** DBCE1A through DBCE60A (60 pcs) (.2280 to .0400") in a B160C metal index.

**DB160C High Speed Drill Bit Set.** DBE1B through DBE60B (60 pcs) (.2280 to .0400") in a B160C metal index.

# Drill Bits (Blue-Point®)



DBBPC21

# Jobber Length 135° Split Point (Cobalt)

Stock No.	Size, Inches	Stock No.	Size, Inches
DBBPC1/16	1/16	DBBPC15/64	15/64
DBBPC5/64	5/64	DBBPC1/4	1/4
DBBPC3/32	3/32	DBBPC17/64	17/64
DBBPC7/64	7/64	DBBPC9/32	9/32
DBBPC1/8	1/8	DBBPC19/64	19/64
DBBPC9/64	9/64	DBBPC5/16	5/16
DBBPC5/32	5/32	DBBPC21/64	21/64
DBBPC11/64	11/64	DBBPC11/32	11/32
DBBPC3/16	3/16	DBBPC23/64	23/64
DBBPC13/64	13/64	DBBPC3/8	3/8
DBBPC7/32	7/32	_	_

**DBBPC21 Cobalt Drill Bit Set.** DBBPC1/16 through DBBPC3/8 (21 pcs) (1/16 to 3/8") in metal drill bit index.

Drill Bits (Blue-Point®)

# 135° Split Point (High Speed Steel) (Titanium Coated)

Stock No.	Size, Inches
DBBPT1/16	1/16
DBBPT5/64	5/64
DBBPT3/32	3/32
DBBPT7/64	7/64
DBBPT1/8	1/8
DBBPT9/64	9/64
DBBPT5/32	5/32
DBBPT11/64	11/64
DBBPT3/16	3/16
DBBPT13/64	13/64
DBBPT7/32	7/32
DBBPT15/64	15/64
DBBPT1/4	1/4

DBBPT13 Titanium Coated Steel Drill Bit Set. DBBPT1/16 through DBBPT1/4 (13 pcs) (1/16 to 1/4") in metal drill bit index.

# Jobber Length 135° Split Point (High Speed Steel)

Stock No.	Size, Inches	Stock No.	Size, Inches
DBBP1/16	1/16	DBBP15/64	15/64
DBBP5/64	5/64	DBBP1/4	1/4
DBBP3/32	3/32	DBBP17/64	17/64
DBBP7/64	7/64	DBBP9/32	9/32
DBBP1/8	1/8	DBBP19/64	19/64
DBBP9/64	9/64	DBBP5/16	5/16
DBBP5/32	5/32	DBBP21/64	21/64
DBBP11/64	11/64	DBBP11/32	11/32
DBBP3/16	3/16	DBBP23/64	23/64
DBBP13/64	13/64	DBBP3/8	3/8
DBBP7/32	7/32		

DBBP21 HSS Drill Bit Set. DBBP1/16 through DBBP3/8 (21 pcs) (1/16 to 3/8") in metal drill bit index.





# **Specialized Drill Bits**

DBCL105A

# **Left Hand Fractional Drill Bits (Cobalt)**

Stock No.	Size, inches
DBCL5/64A	5/64
DBCL7/64A	7/64
DBCL5/32A	5/32
DBCL3/16	3/16
DBCL1/4A	1/4
DBCL9/32	9/32
DBCL19/64A	19/64
DBCL5/16	5/16
DBCL11/32	11/32
DBCL3/8	3/8
DBCL13/32	13/32
DBCL7/16	7/16
DBCL15/32	15/32
DBCL1/2	1/2

**DBCL105A Left Hand Drill** Bit Set. DBCL5/64, DBCL7/64, DBCL5/32, DBCL1/4 and DBCL19/64 drill bits (5 pcs) in a plastic pouch.

DBLS105A

# **Left Hand Fractional Drill Bits** (High Speed Steel)

- Use left hand drill bits to make a hole in the broken screw before the extractor is inserted
- · Left hand drill bits tend to loosen screws for easier removal

Stock No.	Size, inches	Flute Length, inches	Overall Length, inches
DBLS1/8A	1/8	1 3/8	3
DBLS3/16A	3/16	2	3 1/2
DBLS1/4A	1/4	2 1/2	4
DBLS5/16A	5/16	2 5/8	4 1/2
DBLS11/32A	11/32	2 3/4	4 1/2

DBLS105A Left Hand Drill Bit Set. DBLS1/8 through DBLS11/32 (5 pcs) in a plastic pouch.

# DBH7A

# **Hex Shank**

Stock No.	Size, inches
DBH1/16A	1/16
DBH3/32A	3/32
DBH1/8A	1/8
DBH5/32A	5/32
DBH3/16A	3/16
DBH7/32A	7/32
DBH1/4A	1/4

DBH7A Hex Shank Drill Bit Set. Includes DBH1/16A through DBH1/4A (1/16 to 1/4") in storage pouch.











# **Double Ended 135° Split Point**

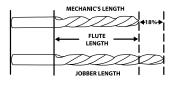
Stock No.	Size, inches	Stock No.	Size
DBD7/64A	7/64	DBD7/32A	7/32"
DBD1/8A	1/8	DBD1/4A	1/4"
DBD9/64A	9/64	DBD11A	#11
DBD5/32A	5/32	DBD20A	#20
DBD3/16A	3/16	DBD30A	#30

# DBD110A Double Ended Drill Bit Set.

DBD7/64A through DBD30A (10 pcs) (7/64" to #30) in a plastic pouch.

# DBD1/8AMP10 Double Ended Drill Bit

(10 pack). 10 pack of DBD1/8A drill bits.





# 1/2" Reduced Shank Drill Bits 118° Point

- Ideal for cutting in low and medium tensile strength materials
- · Flatted shank provides a more secure grip for the drill chuck

Stock No.	Size, inches
CSE345B	17/32
CSE365B	9/16
*CSE375	37/64
CSE385B	19/32
CSE405B	5/8
CSE425B	21/32
CSE445B	11/16
CSE465B	23/32
*CSE475	45/64
CSE485B	3/4
CSE505B	25/32
CSE525B	13/16
CSE565B	7/8
*CSE575	59/64
CSE605B	15/16
CSE645B	1

<sup>\*</sup>Use with TDP6 pipe tap set on pg. 208.

# Aircraft Length 135° Split Point Extra long bits for drilling thick materials.



Stock No.	Size, inches	Flute Length, inches	Length, inches	
DBT1/8A	1/8	1 <sup>5</sup> /8	12	•
DBT3/16A	<sup>3</sup> / <sub>16</sub>	2 1/4	12	•
DBT1/4A	1/4	2 <sup>3</sup> / <sub>4</sub>	12	•
DBT5/16A	5/16	3 1/4	12	•
DBT3/8A	3/8	3 3/4	12	•
DBT7/16A	7/16	4	12	•
DBT1/2A	1/2	4 1/2	12	•



# YA409 90° Angle Drill Kit.

- Allows drilling up to 1/4" holes in confined areas by positioning the bit at a 90° angle to the drill
- Threaded drill bits provide consistent concentricity and eliminate slippage Kit includes:

YA409 Drive unit; Chucking spud **YA409-316M** 3/16" bit, 1 1/4" long YA409-18L 1/8" bit, 2 1/8" long **YA409-332L** 3/32" bit, 2 1/8" long

YA409-18M 1/8" bit, 1 1/4" long YA409-532M 5/32" bit, 1 1/4" long YA409-18S 1/8" bit, 3/4" long YA409-15 Storage Case

# **Accessories for YA409 Set**

Size	2 <sup>1</sup> /8" Long Bit Stock No.	1 <sup>1</sup> /4" Medium Bit Stock No.	3/4" Short Bit Stock No.
#10	YA409-10L	YA409-10M	YA409-10S
#11	_	_	YA409-11S
#13	_	_	YA409-13S
#20	_	_	YA409-20S
#21	_	_	YA409-21S
#27	_	_	YA409-27S
#30	YA409-30L	YA409-30M	YA409-30S
#40	YA409-40L	YA409-40M	YA409-40S
3/32"	YA409-332L	YA409-332M	YA409-332S
1/8"	YA409-18L	YA409-18M	YA409-18S
9/64"	_	_	_
5/32"	YA409-532L	YA409-532M	YA409-532S
3/16"	YA409-316L	YA409-316M	YA409-316S
1/4"	YA409-14L	YA409-14M	YA409-14S

YA409-6 Threaded Collet. Allows the use of 1/4" diameter shank grinding burrs and abrasive wheels.

# **Specialized Drill Bits**





# **Step Drills**



Size Range, inches	Increments, inches	Stock No.	Shank Size, inches	Hole Sizes Per Bit	Length, inches	
1/8 - 1/2	1/32	YA261A	1/4	13	3 1/4	•
3/16 - 1/2	1/16	YA262A	1/4	6	3 3/8	•
3/8	_	YA265A	1/4	1	1 5/8	
1/4 - 3/4	1/16	YA263A	3/8	9	2 5/8	•
3/16 - 7/8	1/16	YA267A	3/8	12	3	
9/16 - 1	1/16	YA266A	1/2	8	2 1/2	

YA1TA

# Titanium Nitride Step Drills

- Titanium nitride coating creates a surface hardness that makes these tools last 4 to 5 times longer than ordinary drill bits
- Surface coating also reduces friction, resulting in a tool that runs cooler while running dry

Size Range	Increments	Stock No.	Shank Size	Hole Sizes Per Bit	Length, inches
1/8 - 1/2"	1/32"	YA1TA	1/4"	13	3 1/4
3/16 - 1/2"	1/16"	YA2TA	1/4"	6	3 1/4
1/4 - 3/4"	1/16"	YA3TA	3/8"	9	2 5/8
3/16 - 7/8"	1/16"	YA4TA	3/8"	12	3
4 - 12 mm	1 mm	YA1MTA	1/4" - 6.5 mm	9	3 1/4
6 - 18 mm	2 mm	YA3MTA	3/8" - 10 mm	7	2 5/8
4 - 22 mm	2 mm	YA4MTA	3/8" - 10 mm	10	3
5 - 35 mm	2 - 3 mm	YA5MTA	1/2" - 13 mm	13	3 3/32

# **Hole Saws**

# **Hole Saws and Arbors**

- · High speed cutting edge welded to an alloy steel back to absorb shocks
- Cut clean, accurate holes in steel and cast iron pipe, steel plates, aluminum, copper, brass, stainless steel, wood or plastic
- · Side slits make it easy to knock out the spent disks

Stock No.	Dia., inches	Recommended Arbors	Stock No.	Dia., inches	Recommended Arbors
LHS18D	9/16	LHS1C, LHS6C	LHS52D	1 5/8	LHS3D
LHS20D	5/8	LHS1C, LHS6C	LHS54D	1 11/16	LHS3D
LHS22D	11/16	LHS1C, LHS6C	LHS56D	1 3/4	LHS3D
LHS24D	3/4	LHS1C, LHS6C	LHS58D	1 13/16	LHS3D
LHS26D	13/16	LHS1C, LHS6C	LHS60D	1 7/8	LHS3D
LHS28D	7/8	LHS1C, LHS6C	LHS64D	2	LHS3D
LHS30D	15/16	LHS1C, LHS6C	LHS66D	2 1/16	LHS3D
LHS32D	1	LHS1C, LHS6C	LHS68D	2 1/8	LHS3D
LHS34D	<b>1</b> 1/16	LHS1C, LHS6C	LHS72D	2 1/4	LHS3D
LHS36D	1 1/8	LHS1C, LHS6C	LHS76D	2 3/8	LHS3D
LHS38D	1 3/16	LHS1C, LHS6C	LHS80D	2 1/2	LHS3D
LHS40D	1 1/4	LHS3D	LHS88D	2 3/4	LHS3D
LHS42D	1 5/16	LHS3D	LHS96D	3	LHS3D
LHS44D	1 3/8	LHS3D	LHS128D	4	LHS3D
LHS46D	1 7/16	LHS3D	LHS152D	5	LHS3D
LHS48D	1 1/2	LHS3D	LHS184D	6	LHS3D
LHS50D	1 9/16	LHS3D			

**LHS608B Hole Saw and Arbor Kit.** Includes LHS44D, LHS48D, LHS56D, LHS64D, LHS80D and LHS96D hole saws plus LHS6C and LHS3D arbors and LHS8C arbor adaptor (9 pcs) in storage case. Recommended speed charts are included.

LHS606D Hole Saw and Arbor Kit. Includes LHS24D, LHS28D, LHS32D, LHS36D and LHS40D hole saws plus LHS6C arbor and LHS8C arbor adaptor (7 pcs) in storage case. Recommended speed charts are included.

# Hole Saw Arbors and Pilot Drills

Stock No.	Thread Size	Fits Saws, inches	Fits Drill Chucks, inches	Replacement Pilot Drill		
LHS5C	1/2"-20	9/16 <b>- 1</b> 3/16	1/4	LHS4D		
LHS6C	1/2"-20	9/16 <b>- 1</b> 3/16	3/8	LHS4D		
LHS1C	1/2"-20	9/16 <b>-1</b> 3/16	1/2	LHS4D		
LHS3D	5/8"-18	1 1/4 - 6	3/8	LHS4D		
LHS8C	Arbor adaptor to convert 1/2"-20 thread to 5/8"-18					



LHS18D







LHS64D



LHS608B







# **Drilling Accessories**





CL6

# R120 Tapered Reamer.

- Tapers from 1/8 to 1/2"
- · Ideal for removing burrs and enlarging holes
- Includes crossbar

# R121 Tapered Reamer.

- Tapers from 1/2 to 1"
- Similar to R120 but has a 3/8" square head for use with socket wrenches when extra torque is required

# CL6 Cutting Oil.

- Superior antiweld and lubricating properties reduce heat buildup in drill bits, grinding burrs and other metal cutting tools



# **DEBUR300 Deburring Tool.**

- Easily deburr drilled and machined holes
- Pushbutton locking collet enables quick, easy blade changes
- Includes 3 round head deburring blades
- · Blades store in handle of tool
- Weighs 1 lb
- 6" long

# YA246A Micro Utility Drill Set.

- Knurled surface at chuck end of pin vise provides a sure gripping surface
- Long 1 7/8" drill length
- Includes pin vise and 12 precision HSS twist drills from .0635 to .0225", numbers 52 to 74

Applications: Fuel injectors, fuel lines, welding and soldering torch tips, shower heads, water jets, electronics and hobbies.

# Sander Accessories















/A246A

PS4612-1AH

PS4612V-1AH

PSV4612KIT

PSV4312KIT

YA7341

PS468-34V

PS468-34HL

# Replacement Pads

Stock No.	Size, inches	Type	Style	Use on:	
PS4312-1H	3	PSA	Vacuum/Nonvacuum	PSF4312	
PS4312-2H	3	Velcro®	Vacuum/Nonvacuum	PSF4312	
PS4512-1AH	5	PSA	Nonvacuum	PS4512	
PS4512V-1AH	5	PSA	Vacuum	PS4512	
PS4512-2H	5	Velcro	Nonvacuum	PS4512	
PS4512V-2H	5	Velcro	Vacuum	PS4512	
PS4612-1AH	6	PSA	Nonvacuum	PS4612 & PSF4612	
PS4612V-1AH	6	PSA	Vacuum	PS4612 & PSF4612	
PS4612-2H	6	Velcro	Nonvacuum	PS4612 & PSF4612	
PS4612V-2H	6	Velcro	Vacuum	PS4612 & PSF4612	

Vacuum Adaptor Kits (contains vacuum adaptor & shroud)						
PSV4312KIT	PSV4312KIT Vacuum Kit for 3" Sanders PSF4312					
PSV4612KIT	Vacuum Kit for 5 & 6" Sanders	PS4512, PS4612 & PSF4612				

# YA7341 Bonnet Cleaning Tool.

 Run the spur wheels over your buffing pad or bonnet and it will work to dislodge and remove dry, hardened polish

Stock No.	Size, inches	Туре	Style	Use on:
PS468-34	6	PSA	Nonvacuum	PS4609
PS468-34V	6	PSA	Vacuum	PS4609
PS468-34HL	6	Velcro	Nonvacuum	PS4609
PS468-34VHL	6	Velcro	Vacuum	PS4609
PS468-35	8	PSA	Nonvacuum	PS4809
PS468-35V	8	PSA	Vacuum	PS4809
PS468-35HL	8	Velcro	Nonvacuum	PS4809
PS468-35VHL	8	Velcro	Vacuum	PS4809
AT116-3	2	Roloc	Nonvacuum	AT401MCA
AT116-4	3	Roloc	Nonvacuum	AT401MCA
AT402VEL75MM	3	Velcro	Nonvacuum	AT402MCA & AT403MCA
AT406B33	6	PSA	Nonvacuum	AT406B
AT406B30	6	Velcro	Nonvacuum	AT406B

Tune-up Kits (contains seals, o-rings, washers, valve, rotor & vanes)						
PS43-TK	PS43-TK Tune-up Kit for 3" Sanders PSF4312					
PS46-TK	Tune-up Kit for 5 & 6" Sanders	PS4512, PS4612 & PSF4612				



# Micro Tool Accessory Kits AT401ACCKIT Micro Surface Prep Accessory Kit.

- 1/4 turn abrasive disc in 2 different grits help get the job of removing rust, or gasket material done quickly, even in confined areas
- Kit contains all the consumables needed to restore a Micro Surface Prep Tool Kit back to new
- Kit Includes (1) 2" ROLOC® Pad 1/4" x 20T, (1) 3" ROLOC Pad 1/4" x 20T, (5) 2" 40 grit pads and (5) 3" 80 grit pads



# AT402ACCKIT Micro Dual Action Sander Accessory Kit.

- Fresh backing pad with all the sanding disc needed to work the surface down until it is ready for paint
- Kit contains all the consumables needed to restore a Micro Dual Action Sander Tool Kit back to new
- Kit includes (1) 3" Velcro Pad 5/16" x 24T, (25) 3" 180 Grit pads, (25) 3" 220 Grit pads, (10) 3" 320 Grit pads and (10) 3" 800 Grit pads



AT403ACCKIT

# AT403ACCKIT Micro Polisher Accessory Kit.

- · All the pads needed to go from buffing to final polish
- Kit contains all the consumables needed to restore a Micro Polisher Tool Kit back to new
- Kit includes (1) 3" Velcro Pad 5/16" x 24T, (1) 3" Wool Pad and (1) Foam Waffle Pad

Wire Brushes/Flap Wheels (Blue-Point®) AC3D AC16D AC6A AC240B AC241B AC204C AC339A AC343A AC208A

Style/Application	Stock No.	Brush Diameter, inches	Shank Size Arbor Size, inches	Wire Diameter, inches	Maximum Rated RPM
Crimped	AC2D	1	1/4	.020	20,000
for removing carbon from cylinder heads and valve parts	AC3D	3/4	1/4	.020	20,000
<b>Solid end</b> for cleaning aluminum cylinder heads and transmission parts	AC16D	3/4	1/4	.006	20,000
Spiral twist	AC6A	3/4	1/4	.014	20,000
for removing heavy deposits	AC7D	1	1/4	.020	20,000
Cup type for cleaning wheel rims and scuffing tires	AC240B	1 1/2	1/4	.012	6,000
Hollow end crimped cup for light duty cleaning	AC241B	2 1/2	1/4	.012	6,000
	AC208A	1 1/2	1/4	.008	20,000
Cup flared	AC212A	1 1/2	1/4	.012	20,000
for deburring, cleaning hard to reach areas and wheel rims, and scuffing tires	AC214A	2 1/2	1/4	.014	18,000
and bouning thoo	AC224A	3	1/4	.014	15,000
Face-worlded using and homeless	AC204C	1/2	1/4	.014	8,000
Encapsulated wire end brushes for a consistent stiff brushing action	AC205C	3/4	1/4	.014	8,000
Tor a consistent sun brushing action	AC206C	1	1/4	.014	8,000
Vact time single year mire our	AC339A	3	5/8"-11	.020	12,500
Knot type, single row wire cup for heavy duty surface applications	AC341B	3	<sup>5</sup> /8" <b>-11</b>	.012	7,000
ioi noavy daty surrace applications	AC342B	4	5/8"-11	.020	7,000
Crimped cup	AC343A	4	5/8"-11	.014	6,000
for light duty cleaning	AC345	3	5/8"-11	.012	12,500







AC616





AC243

AC420A











AC3180FWMP



AC13002

	Stock No.	Brush Dia., inches	Shank Size Arbor Size, inches	Wire Diameter, inches	Maximum Rated RPM
<b>Knotted Wire Wheel</b>	AC420A	4	5/8" - 11	.020	20,000
for heavy duty cleaning	AC421A	4	M10 x 1.25"	.020	20,000
Crimped Wire Wheel general purpose cleaner	AC616	3	1/4	.0118	20,000
Wire Brush	AC17D	1	1/4	.006	20,000
medium duty general cleaner	AC243	3	5/8" - 11	.014	14,000
End Brush	AC10302	1/2	1/4	.014	25,000
ideal for cleaning right angle	AC10306	3/4	1/4	.014	22,000

# A24C Arbor Adaptor.

- · Adapts electric drill to light duty grinding and wire brushing: use with wheels and brushes up to 4" in diameter

  Shank is 1/4": arbor is 1/2" in diameter; Length is 1 3/4"
- Maximum rated RPM: 20,000

	Stock No.	Diameter, inches	Туре	Grit	Quantity to Pack
Flap Discs	AC2Z40T27MP	2	27	40	10
	AC2Z60T27MP	2	27	60	10
	AC2Z80T27MP	2	27	80	10
	AC3Z40T27MP	3	27	40	10
	AC3Z60T27MP	3	27	60	10
	AC3Z80T27MP	3	27	80	10
	AC4Z60T27MP	4	27	60	10
Flap Wheels	AC3160FWMP	3		60	10
	AC3180FWMP	3		80	10
	AC31120FWMP	3		120	10

# AC13002 Drill Accessory Kit.

 Includes AC616 crimped wire wheel, AC240B crimped wire cup brush, AC3D crimped wire end brush and AC3180FWMP abrasive flap wheel

# **ACMANDREL Mandrel.**

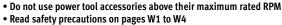
• 1/4" stem for use on 2 and 3" flap discs











# Cutting and Grinding Accessories (Blue-Point®)



AT415CWMP

# AT415CWMP Cut Off Wheel.

- Use for metal notching and bolt cutting
- Use on 4 1/2" grinders with 5/8 x 11" thread arbor
- Maximum rated RPM: 13,300
- · Front and back illustrated
- · Package of 5 discs



AT415T27MP

# AT415T27MP Grinding Wheel.

- Use for rough grinding applications
- Use on 4 1/2" grinders with 5/8 x 11" thread arbor
- Maximum rated RPM: 13,300
- · Package of 5 discs



ETA125A

# ETA125A Grinding Wheel Set.

- Use with ET1350/ET1360
- Maximum rated RPM: 12,000
- · Package of 5 discs



AT415-20B

# AT415-20B Grinding Disc.

- For AT415B grinder
- 4" diameter x 3/16" thick with 5/8" arbor hole
- Maximum rated RPM: 12,000
- · Package of 5 discs



AT415A51

# AT415A51 Grinding Discs.

- For AT415B grinder
- 4 1/2" diameter x 3/16" thick with 7/8" arbor hole
- Maximum rated RPM: 12,000
- · Package of 5 discs



AT215GWSET

# AT215GWSET

# 2" Grinding Wheel Set.

- Replacement grinding wheels for AT215 (2", 60 grit, 6 pcs)
- Maximum rated RPM: 20,000
- · Package of 6 discs



ETA250A

# ETA250A Grinding Wheel Set.

- 1/4 x 4 1/2 x 7/8"
- Grit coarse (24)
- Maximum rated RPM: 12,000

# AT116-3 ROLOC® Pad.

- 2" ROLOC Pad with 1/4" shaft
- Optional accessory for the AT116 Die Grinder

# AT116-4 ROLOC Pad.

- 3" ROLOC Pad with 1/4" shaft
- Optional accessory for the AT116 Die Grinder



AT150C28A

# AT150C28A Cutter Wheels.

- 3" diameter x 1/32" thick with 3/8" arbor hole
- 54 grit
- Maximum rated RPM: 25,000
- · Package of 6 discs



AC13001



AC13003

# AC13001 Mini Grinder Kit.

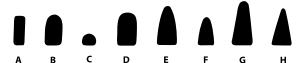
 Includes AC4Z60T27MP flap disc max RPM 13,000, AC339A knot cup brush max RPM 14,000 and AC402A knot wire wheel, max RPM 20,000

# AC13003 Cut/Grind/Finish Kit.

 Includes AC4Z60T27MP flap disc max RPM 13,000, AC339A knot cup brush max RPM 14,000, AT415T27MP grinding wheel max RPM 13,300 and (2) AT415CWMP cut off wheels max RPM 13,500

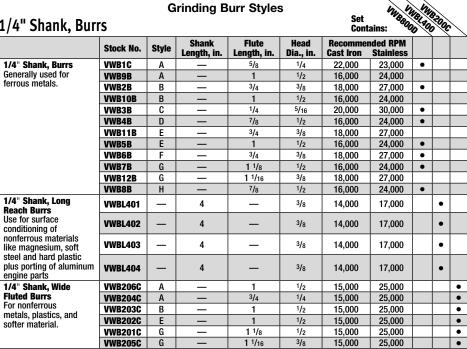
# **Grinding Burrs**

Grinding burrs are ideal for use with Snap-on® die grinders described on p. 297-298. 1/4 and 1/8" shank burrs are available, all with solid carbide heads. The 1/8" shank units all have a max head diameter of 1/8".



# **Grinding Burr Styles**

# 1/4" Shank, Burrs









# 1/8" Shank, Burrs

-,	,			oontainsi	. /
Stock No.	Style	Flute Length, in.	Recommer Cast Iron	nded RPM Stainless	
VWB301B	Α	9/16	20,000	75,000	•
VWB302B	В	9/16	20,000	75,000	•
VWB303B	С	1/8	20,000	75,000	•
VWB304B	D	7/32	20,000	75,000	•
VWB305B	E	1/2	20,000	75,000	•
VWB306B	F	3/8	20,000	75,000	•
VWB307B	G	1/2	20,000	75,000	•
VWB308B	Н	7/16	20,000	75,000	•



# 1/4" Shank, Mounted Points

Stock No.	Size Inches	Maximun RPM	
VWB501	<sup>11</sup> / <sub>16</sub> x <b>1</b> <sup>1</sup> / <sub>4</sub>	28,000	•
VWB502	3/4 x 3/4	28,000	•
VWB503	3/4 x <b>1</b> 1/8	28,000	•
VWB504	1/4 x <b>1</b> 3/4	28,000	•
VWB505	3/4 x 1 1/4	28,000	•
VWB506	3/8 x 1	28,000	
VWB507	1/4 x <b>1</b> 1/4	28,000	
VWB508	11/ <sub>16</sub> x <sup>7</sup> / <sub>8</sub>	28,000	



VWB508



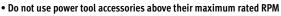
VWB500











· Read safety precautions on pages W1 to W4

Containe:

# Air and Reciprocating Saw Blades



AT190-42B

# Air Saw Blades (Blue-Point®)

Bi-Metal Blades	AT192A	AT194A
Bi-Metal Blade Scroll, 18TPI, 3 3/4" long (qty. 5)	AT190-39C	AT190-39C
Bi-Metal Blade Scroll, 24TPI, 3 3/4" long (qty. 5)	AT190-40C	AT190-40C
Bi-Metal Blade Scroll, 32TPI, 3 3/4" long (qty. 5)	AT190-41C	AT190-41C
Bi-Metal Blade Multipurpose, 18TPI, 4" (qty. 5)	AT190-42B	_
Bi-Metal Blade Multipurpose, 24TPI, 4" (qty. 5)	AT190-43B	_
Bi-Metal Blade Multipurpose, 32TPI, 4" (qty. 5)	AT190-44B	



CTRS614MC

# **Metal Cutting Blades**

Bi-metal reciprocating saw blades with precision ground teeth for maximum cutting power, greater control and higher speed.

Stock No.	lo. Application / Material Thickness		Blade Thickness, inches	Blade Length, inches	Qty, Each
CTRS614MC	Metal 1/8 to 3/8" thick	14	.035	6	5
CTRS914MC	Metal 1/8 to 3/8" thick	14	.035	9	5
CTRS618MC	Metal 1/8 to 1/4" thick	18	.035	6	5
CTRS918MC	Metal 1/8 to 1/4" thick	18	.035	9	5
CTRS624MC	Metal less than 1/8" thick	24	.035	6	5



CTRS126GP

**General Purpose Blades** Versatile bi-metal blades for general purpose cutting of metal, plastic laminates

Stock No.	Application / Material Thickness	Teeth per Inch	Blade Thickness, inches	Blade Length, inches	Qty, Each
CTRS658GP	Metal/Plastic/Wood	5 to 8 variable	.050	6	5
CTRS96GP	Metal/Plastic/Wood	6	.050	9	5
CTRS126GP	Metal/Plastic/Wood	6	.050	12	5





# **Demolition Blades**

Extra heavy duty bi-metal blades with thicker body and variable 5/8 tooth pitch are ideal for heavy demolition work in wood with nails also strong enough to handle thick metals.

Application / Material Thickness	Teeth per Inch	Blade Thickness, inches	Blade Length, inches	Qty, Each
Nail Embedded Wood	5 to 8 variable	.062	6	5
CTRS958DB Nail Embedded Wood		.062	9	5
	Thickness Nail Embedded Wood	Application / Material per Inch  Nail Embedded Wood 5 to 8 variable	Application / Material per Inickness, inches Nail Embedded Wood 5 to 8 variable .062	Application / Material per Inickness, inches Nail Embedded Wood 5 to 8 variable .062 6

**Wood Cutting Blades**Bi-metal blades with precision ground teeth for fast cutting of wood 3/8" and thicker.

Stock No.	Application / Material Thickness	Teeth per Inch	Blade Thickness, inches	Blade Length, inches	Qty, Each
CTRS67WB	Fast Cutting Wood 3/8" and thicker	7	.040	6	5
CTRS97WB	Fast Cutting Wood 3/8" and thicker	7	.040	9	5

PHG1055K Length, inches Application

For separating ball joints and tie rods

Shears ball joint rivets

For bushing cutting

For pneumatic bushing driving

Cuts bolts, nuts, tees and angles. Also splits and bevels. Nonturn shank

For rivet cutting work

For panels cutting and sheet metal

cutting For punching out pins and other

driving applications For punching out pins and other driving

applications that need extra reach

For normal chisel cutting applications

For normal chisel cutting applications,

when extra reach is needed

For hammering application,

when extra reach is needed For normal chisel cutting applications, when a wide blade is needed

Remove and install tube hinge

pins on car and truck doors Remove and install tube hinge

pins on car and truck doors Punches 3/16" diameter starting hole in sheet metal to prepare it for use with CJ107 and CJ114 Body Dent Pullers.

For cutting the exhaust

pipe inside the flange

For removing the tail pipe

Projecting rods chip away rust and

scale. Use only at low pressure For bushing cutting, when

extra reach is needed

For cutting the muffler flange

Edges and trims sheet metal. Cutting

end is offset 25°. Nonturn shank

For 3/16" stem

For 1/4" stem

For forming heads on

3/16" compression rivets For forming heads on

1/4" compression rivets

For removing and installing roll pins

For removing and installing roll pins

For Hammering applications, when

extra reach is needed

For hammering applications

For scraping applications

For sheet metal ripping and cutting

Cuts exhaust system pipes, 1/8" tip

thickness. Nonturn shank

For cutting tail pipes and other

surfaces Attaches to air hammer to provide

vibration while turning stubborn

fasteners. 3/4" hex, 3/8" square drive

For weld removal

For removal of pins

For needle type trunions

Use for fast, easy insertion/

removal of air hammer bits

For removing and

installing valve guides For removing and installing

valve guides For removing and installing

valve guides For removing and

installing valve guides For removing and

PHG1005AK

Description

**Ball Joint and** 

Tie Rod Separators **Ball Joint and** 

Tie Rod Separators **Ball .loint and** 

Tie Rod Separators Ball Joint and

Tie Rod Separators

Bent End Chisel

**Bushing Cutter** 

Bushing Driver

**Cold Chisel** 

**Curved Flat Chisel** 

Double Bladed

Panel Cutter

**Drift Punch** 

**Drift Punch** 

Flat Chisel

Flat Chisel

Flat Chisel

Flat Chisel

Hinge Pin Punch

Hinge Pin Punch

**Hole Punch** 

**Inside Cutter** 

**Inside Cutter** 

Needle Scaler

Offset Bushing Splitter

**Outside Cutter** 

**Panel Cutter** 

Riveter

Riveter

Riveter

Riveter

**Roll Pin Punch** 

Roll Pin Punch

**Round Hammer** 

Round Hammer

Scraper

Sheet Metal Ripper

**Slitting Chisel** 

Slitting Chisel

**Socket Adaptor** 

Spot Weld Breaker

**Tapered Punch** 

**U-Joint Trunion Driver** 

Universal Quick Change

Chuck Retainer

Valve Guide Remover

Stock No.

PHG63A

PHG69A

PHG93A

PHG94A

PHG64A

PHG76A

PH75A

P HG155A

PHG85A

PHG57A

PHG73A

PHG77

PHG55A

PHG58B

PHG84A

PHG99

PHG111

PHG112

PHG95A

PHG66A

PHG87A

PH201

PHG21

PHG65A

P HG151A

PHG74A

PHG78A

PHG88A

PHG89A

PHG80A

PHGR1A

PHG68

PHG71A

PHG56A

PHG51A

P HG161A

PHG61A

PH1038

PHG70A

PHG59A

PHG72A

PH200D

PHG83A

PHG86A

PHG91A

PHG96A

PHG97A

# Air Hammer Accessories

PHG 1055k		
	PHG94A	<b>₩</b>

**Contains:** 

Tip, inches

13/16 opening

1 opening

1 1/4 opening

5/8 opening

1/2

21/32

5/8

3/4

1/2

1/2

3/4

3/4

1 1/2

0.237

0.302

3/16

7/8

5/8

7/8

5/8

1/2

1/2

7/8

1/4 5/16

1

1 5/16

5/8

1

3/4

3/16

7/8

7.7 mm pilot

9.3 mm pilot

6.5 mm pilot

6.9 mm pilot

5.2 mm pilot

•

•

•

•

•

•

•

7 3/8

7 3/8

8 3/4

7 13/16

10 <sup>1</sup>/<sub>2</sub>

6 1/4

5 1/2

7

5 3/4

6

 $6^{1/2}$ 

18

6 1/2

10

18

6 1/2

7 3/8

7 3/8

5 5/8

8 3/4

8 3/4

7 13/16

8 3/8

8 5/8

67/8

5 13/16

5 13/16

5 13/16

3 7/8

7 1/2

7 1/2

7

4 1/4

6 3/16

5 3/8

8 3/4

67/8

5

6 1/4

 $6^{1/2}$ 

3 7/8

190 mm

190 mm

189 mm

189 mm

189 mm

	The state of the s
PHG94A	PHG64A

DLC76A	DUCTER
-	







PHG85A





PHG73A

















PHG74A





































PHG59A



PHG72A

PHG97A **PH200D** 



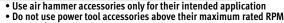












# **Non Vented Blow Guns**



# **Nonvented Blow Guns**

Do not use nonvented blow guns above 30 psi air supply pressure. JT13B Blow Gun (Blue-Point®).

- Tapered, rubber tip for a leak proof connection between gun and fluid line
- · Vinyl coated control lever
- · Hanging hook for storage
- 4 1/2" long

JT17A Blow Gun (Blue-Point). Same as JT13B except with a 3" tip extension in place of the rubber tip.

YA1050B Blow Gun (Blue-Point). Pistol grip style with front full size trigger. Infinitely variable flow. 10 1/4" long.

YA4010 Quick Change Tip. Conical rubber tip for YA1050B.

JT14 Blow Gun (Blue-Point). Industrial, interchange style coupler.

JT15 Blow Gun. Universal 1/4" pipe threading.

JT20 Blow Gun. AR0® style coupler.

JT21 Blow Gun. True flate style male coupler.

JT22 Blow Gun. Lincoln® style male coupler.

JT23 Blow Gun (Blue-Point). Solid brass. Industrial interchange style coupler.

JT24 Blow Gun (Blue-Point). Solid brass. ARO style coupler. YA105020 Blow Gun (Blue-Point).

- 20" bent nozzle
- Trigger provides variable air flow control
- · Lightweight body with ergonomically designed grip provides comfort and control
- Venturi<sup>®</sup> tip directs air sideways if tip end is obstructed
- Reinforced 1/4"-18 NPT inlet

YA105013 Blow Gun. Same as YA105020 except 13" bent nozzle. YA1050T2 Venturi Air Booster. Venturi nozzle draws in ambient air for extra high flow increasing by 100%. Suitable for deflecting lightweight wood chips. Diverts air when dead ended, reducing the outlet pressure to less than 2 bar (29 psi).

YA1050T1 Removable Star Tip. Removable star tip for YA105020 blow gun.

YA1050T3. Rubber Tip Kit Rubber tip set for YA105020

YA1050T4 Chip/Fluid Shield. Chip/fluid shield for YA105020 blow gun.

# AT4101 Blow Gun (4").

- Built-in valve system improves trigger control
- Impact resistant material for long lasting service
- Galvanized blow tube for corrosion resistance
- Lifetime warranty (Accessories not included)

# AT4113 Blow Gun (19").

- Built-in valve system improves trigger control
- Impact resistant material for long lasting service
- Galvanized blow tube for corrosion resistance
- Lifetime warranty (Accessories not included)

# AT4135 Blow Gun w/Air Adjustment.

- Built-in valve system improves trigger control
- Impact resistant material for long lasting service
- Galvanized blow tube for corrosion resistance
- Lifetime warranty (Accessories not included)
- Sound level 78 dB (8 bar)
- Regulate flow with adjustable volume control
- Complies with OSHA safety standards

AT4116 Turbo By-Pass Nozzle. Increases air flow by 100% for use with AT4101, AT4113 and AT4135 blow guns AT4124 Rubber Tip. Prevents scratching of surface for AT4101,

AT4113 and AT4135 blow guns.

AT4180 Chip/Fluid Shield. Chip/fluid shield for AT4101 and AT4113 blow guns.





# **Vented Blow Guns (Blue-Point®)**



# **Vented Blow Guns**

Do not obstruct vents. Do not use vented blow guns above 135 psi maximum air supply pressure.

# JT11AS Blow Gun.

- Paddle type air control lever regulates airflow from partial to full line pressure
- Valve has no cutoff and no restrictions
- Tip is side vented includes hanging hook
- 6 1/2" long, 4" tube
- Air inlet: 1/4"-18 NPT(f)

# JT19A Venturi Tip Blow Gun.

- · Directs air sideways if tip end becomes obstructed and increases airflow
- · Includes stabilizer valve for variable pressure
- 1" hanging hook and paddle type air control lever
- Air inlet: 1/4"-18 NPT(f)

# YA1055B Blow Gun.

- Variable flow trigger offers precise air flow control
- 6 outlet "star tip" delivers an even distribution of air
- 4" full flow tube
- Complies with OSHA safety standards
- Air inlet: 1/4"-18 NPT(f)

# Air Hoses and Swivels



# **Rubber Air Hoses**

IM2005A

Ideal for industrial applications. Male threads at both ends.

Stock No.	Hose I.D., inches	Hose Length, feet	Thread Size	Maximum Pressure, psi
IM2001A	1/4	5	1/4"-18 NPT	300
IM2002A	3/8	5	3/8"-18 NPT	300
IM2004A	3/8	2	1/4"-18 NPT	300
IM2005A	3/8	25	1/4"-18 NPT	325
IM2008A	3/8	50	1/4"-18 NPT	325
IM2009A	1/2	50	3/8"-18 NPT	325



AIRHOSE35

Air Hoses/Reinforced Polyurethane

Reinforced construction eliminates laver

separation resulting from expansion and

contraction during pulsating operations

UV stabilized for longer outdoor life

Extremely lightweight for easy maneuverability

# **BPPH3825**

- Rubber and PVC compound combines light weight with durability while maximizing flexibility

**BPPH3825 Air Hose.** 25'

 Strain relief features a tight bending radius to virtually eliminate hose kinking

More abrasion resistant than PVC and rubber hoses

Easy to wrap and store even in subzero weather

· Reusable fittings and strain reliefs for longer life

Stock No.	Color	Hose I.D., inches	Hose Length, feet	Thread Size	Temp. Range	Working Press.
AIRHOSE35	Red	3/8	35	1/4" NPT	-40 °F to 165 °F (-40 °C to 73.9 °C)	200 psi @ 70 °F (21 °C)
AIRHOSE50	Red	3/8	50	1/4" NPT	-40 °F to 165 °F (-40 °C to 73.9 °C)	200 psi @ 70 °F (21 °C)



# Air Swivel Connectors (Blue-Point)

- Swivels turn 360° at 2 points for complete tool maneuverability
- · Air hoses hang straight to the floor

Stock No.	Thread Size	Maximum Pressure, psi	Airflow		
YA502M	<b>2M</b> 1/4" NPT 150		Up to 4.6 CFM (33 SCFM)		
YA503M	YA503M 3/8"-18 NPT		Up to 6.3 CFM (45 SCFM) [178 LPM]		
ASC14	ASC14 1/4" NPT		Up to 35 SCFM (991 LPM)		
ASC14U	1/4" NPT	150	Up to 35 SCFM (991 LPM)		





# Air Hoses Rubber/PVC (Blue-Point)

- Use from paint booth to service bay
- Nonmarring hose material helps protect painted surfaces
- Won't kink or curl to help reduce tripping hazards

BPPH3850 Air Hose, 50'

# Air Hoses Polyurethane (Blue-Point)

- · Use from bench work to service bay
- Polyurethane hose is light weight, durable and resists kinking plus has better memory then nylon
- · Recoil design is self retracting and space efficient
- Nonmarring hose material helps protect painted surfaces
- Operating temperature range of -40 °F to +140 °F for use in all types of weather
- Swivel Fitting on long tail end for ease of use

**BPCH3825** Air Hose, 25'









- · Do not direct blow gun at yourself or others
- · Read safety precautions on pages W1 to W4

# Air Line Couplers and Adaptors (Blue-Point®)



# Air Valves and Manifolds IM10D Air Valve.

- · Volume of airflow can be regulated with 1/4 turn of control knob
- · Male/female threads

# AHC300 Multiline Air Manifold.

- Capacity of 3 air lines running at the same time
- Allows 3 workstations to use the same air supply
- Evenly distributes air through 3 different lines

# Air Line Couplers and Adaptors

	ii ziiie coupteis ana /taaptois									
Body Size, inches	Style	Thread Size	Quick Coupler Male	Quick Coupler Female	Adaptor Male	Adaptor Female				
1/4	Lincoln	1/4"-18 NPT	_	AHC26D	AHC26MD	AHC26FD				
1/4	True-Flate	1/4"-18 NPT	_	AHC24D	AHC24MD	AHC27FD				
3/8	True-Flate	3/8"-18 NPT	_	AHC25D	AHC25MD	AHC25FD				
1/4	AR0	1/4"-18 NPT	AHC23PMD	AHC23D	AHC23MD	AHC23FD				
1/4	Industrial Interchange	1/4"-18 NPT	AHC21PMD	AHC21D	AHC21MD	AHC21FD				
3/8	Industrial Interchange	1/4"-18 NPT	-	AHC22E	AHC22MD	AHC22FD				
3/8	Industrial Interchange	3/8"-18 NPT	_	AHC28D	AHC28MD	AHC28FD				
1/2	Industrial Interchange	1/2"-14 NPT	-	AHC27D	AHC27MC	AHC27FD				
1/4	Rigid Mounting*	1/4"-18 NPT	_	AHC21PD	_	_				
1/4	Hi-Flow	1/4"-18 NPT	_	AHCC98C	АНССР97С	_				
1/4	Hi-Flow HVLP	1/4"-18 NPT	AHCC91C	AHCC90C	_	АНССР90С				

\* Conforms to Mil Spec MIL-C-4109F

All adaptors are plated steel to improve durability







AHC22FD

**AHC300** 

AHC25FD

AHCCP97C

# **General Accessories**



# AT187 Engraving Pens (Blue-Point).

- . Mark tools and other objects to prevent theft
- Use on hardened steel plate (up to HRC55), metals, glass, stone, ceramic, plastics and more
- Used for deburring operations plus reshaping screw or bolt heads for removal
- Rugged metal housing
- Knurled fingertip control
- Tips sold separately

Specifications	AT187 †
Recommended Air Pressure, psi	90
Air Consumption, average, cfm (scfm)	1.0 (7)
Free Speed, rpm	14,000
Sound Level, dBa	90
Air Inlet Thread Size	1/4"-18 NPT
Recommended Hose Size, inches	3/8
Hose Length, inches	59 1/2"
Overall Length, inches	5 1/2 without hose
Weight, Ibs	.48

# † ( E

AT187-11 45° Thick Plate Carbide Tip. For AT187.

AT187-13 30° Medium Plate Carbide Tip. For AT187.

AT187-14 15° Thin Plate Carbide Tip. For AT187.



**BPTOTE** 

**CTTOTEA** 

# **CTTOTEA Power Tool Tote Bag.**

- Wide opening for easy access to tools, extra padding for protection
   Durable 600 Denier® outside for strength
- Interior pockets and compartments for tool organization
- Padded handles for comfortable transport
- · Reinforced bottom for strength
- 6 external pockets for extra storage
- Approximate inside dimensions, open: 18" L x 8" W x 11 1/2" D

# BPTOTE Tote Bag (Blue-Point).

- Heavy duty 600 x 300 D polyester
- · Water resistant, rugged and versatile
- Wide top opening for easy access
- Multiple interior and external pockets for organization
- Overall dimensions: 16 1/2" L x 10 1/2" W x 12 1/4" H



# **Lubrication Accessories** IM1PTMP6 Air Motor Oil.

- · Cleans all piston and rotary air motors and helps prevent rust formation
- . 6 pack of IM1PT 16 oz bottles

# IM10ZMP12 Air Motor Oil.

12 pack of 1 oz bottles

# **TOOL STORAGE** Overview 326 **Roll Cab** 328 **Quick Reference EPIQ Series** 329 **Masters Series** 340 **Classic Series** 356 **Heritage Series** 362 **Mobile Solutions** 369 **Accessories** 377 Scan to learn about innovations in tool storage from Snap-on 325

# TOOL STORAGE THAT SPEAKS LOUDER THAN WORDS

Owning Snap-on® tool storage says a lot:

you're proud, you're professional, you don't cut corners

Personalize. Customize. Organize. Never Compromise.

You're buying productivity when you specify a storage unit configured to your needs

**BREADTH** — Solutions for every job, from the ground breaking EPIQ to the Masters, Classic and Heritage Series, as well as carts and specialty storage

**SYSTEM EXPANSION** — Gives you the options to grow with your tool collection and your capabilities

# **Inspired Innovation**

From your inspiration came industry leading features that work the way you do and details that matter

POWERED TOOL STORAGE — Charge your tools while securely storing them in the revolutionary EPIQ Series with PowerBank™

**MOBILE STORAGE** — More ways to take your tools where you need them, from roll cabs to carts to the one-of-a-kind Road Chest

INPULSE™ DRAWERS — Intuitive flush finish drawers that are easier to open, smoother to close and don't drift

Tough. Reliable. Functional.

Snap-on tool storage units are designed and built to last and tested to the extremes

**STRUCTURAL CONTINUITY** — A structural, integrated bond making the overall strength of the unit greater than the sum of its parts

**DOUBLE WALL CONSTRUCTION** — Guards against faulty drawer operation caused by dents and dings

**HIGH-END PAINT** — Ultra-tough powder coat process provides impressive finishes in a variety of colors

# **TOOL STORAGE**

# **Roll Cab - Quick Reference Chart**











		70		0	40	U
	Features	EPIQ	Masters	Classic	Heritage	Blue-Point
Steel Gauge:	Bottom	16 (14 Gauge Super Duty Skid Support System)	16 (14 Gauge Extra Heavy Duty Skid Support System)	16 (14 Gauge Heavy Duty Skid Support System	16 (14 Gauge Heavy Duty Skid Support System on 53" Roll Cabs)	16
	Тор	16 (Super Duty Stiffeners)	16 (Extra HD Stiffeners)	16 (Heavy Duty Stiffeners)	16 (Medium Duty Stiffeners on 53")	16
	Back	16	16	16	18	20
	Side	16	16	16	18	20
	False Side Panels	18	18	18	20	20
	Drawer Front	18	18	18	20	20
	Drawer Body	18	18	18	18/20	20
	Drawer Back	18	18	18	20	20
	Standing Seam	•	•	• – –		_
	Corner Gussets	4	4	4 4 (53"); 2 (40")		2
Features:	Slides, lbs. (ball bearing)	227	227	120	120	80-100
	Handle	Chrome w/grips	Chrome w/insert	Ergonomic	Ergonomic	Straight
	Drawer Trim	Dual-function Aluminum	Aluminum Installed	Aluminum Installed	Aluminum Installed	Gray Polymer
	Case Trim	Alum. Wrap Installed	Aluminum Installed			
	Lock	Removeable Core	Removeable Core	Removeable Core	Removeable Core	Flat Key
	Casters	7" x 2" Super Duty ISO-Ride® 8,000 lbs	6" x 2" Extra Heavy ISO-Ride 6,800 lbs*	6" x 2" 2,400 lbs	6" x 2" 2,400 lbs	5" x 1.25" 1,120 lbs
	Caster/ Handle Mounting	Weld Nut/ Heavy Plate	Weld Nut/ Heavy Plate	Weld Nut/ Heavy Plate	Weld Nut & Plate	Weld Nut
	Top Mat	Nondirectional Rubber	Nondirectional Rubber	Nondirectional Rubber	Unidirectional Rubber	Rubber
	Drawer Liner	Nonslip Premium	Nonslip Premium	Semi Nonslip	Foam	Foam
	Drawer Retention	InPulse	Lock-n-Roll	Lock-n-Roll	Lock-n-Roll	
	Paint	All Powder Coat Scratch Resistant	All Powder Coat Scratch Resistant	All Powder Coat Scratch Resistant	All Powder Coat Scratch Resistant	All Powder Coat Scratch Resistant
	Colors Available	12 Standard	10 Standard	7 Standard	4 Standard	Red & Blue
	Integrated Power Available	•	Optional Cabinet	_	_	_

<sup>\*6800</sup> lbs casters on all Masters except KRL722A, KRL756B, KRL1056B Tools shown in tool storage not included

# Created By Techs. For Techs.

When Snap-on wanted to improve on already legendary tool storage, it went to the people who know the work best. Technicians. The result? The first fully-powered tool storage unit that works the way you do. At its core, EPIQ Series is about a passion for excellence.

**PowerBank™** — Charge and store your cordless tools in this lockable bank.

PowerHouse™ — Power and store a diagnostic tool or PC under the lockable flip-top.

PowerTop™ — A stainless steel work surface with integrated power sources accommodates laptops, power tools and a variety of accessories.



# **Designed to Perform.**

Power is not the only thing that sets the EPIQ Series apart. Every component is the best Snap-on has to offer and many are EPIQ exclusives. Every facet of the construction is built without compromise.

**InPulse™ Drawers** – Intuitive flush finished drawers for the ultimate in performance and professional look.

**ISO-Ride® Casters** – 7" swivel-lock mag wheels with independent spring suspension for a smooth ride.

**Standing Seams** – Increases the overall strength, protects you from unnecessary bumps and bruises.

**Corner Gussets** – Reinforcement in the corners to prevent racking, even under the heaviest loads.

**Structural Support** – Stiffeners, gussets and reinforcements used in strategic places throughout the drawers and roll cab.



# **EPIQ SERIES**

# **Quick Reference Chart**

















Roll Cabs	Specifications	KERP842B	KERN842B	KERP843B	KERN843B	KERP762B	KERP763B	KERN682B	KERN602B
Capacity	Approx Cubic Inches (cm³)	55,670 (912,268)	55,550 (910,301)	53,407 (875,184)	53,316 (873,693)	49,719 (814,748)	47,485 (778,140)	43,922 (719,753)	38,000 (622,708)
	Approx Square Inches (cm²)	13,541 (87,361)	13,769 (88,832)	13,876 (89,522)	13,898 (89,664)	11,985 (77,322)	12,114 (78,155)	12,412 (80,077)	10,650 (68,710)
	Load Capacity, lbs (kg)	8,000 (3,629)	8,000 (3,629)	8,000 (3,629)	8,000 (3,629)	8,000 (3,629)	8,000 (3,629)	8,000 (3,629)	8,000 (3,629)
Footprint	Width, inches (mm)	84 (2,134)	84 (2,134)	84 (2,134)	84 (2,134)	76 (1,930)	76 (1,930)	68 (1,727)	60 (1,524)
	Depth, inches (mm)	30 (762)	30 (762)	30 (762)	30 (762)	30 (762)	30 (762)	30 (762)	30 (762)
	Height, inches (mm)	46 7/8 (1,191)	46 7/8 (1,191)	46 7/8 (1,191)	46 7/8 (1,191)	46 7/8 (1,191)	46 7/8 (1,191)	46 7/8 (1,191)	46 7/8 (1,191)
Drawers	Drawer Banks	2	2	3	3	2	3	2	2
	Drawer Count	8	13	14	19	8	14	13	13
	Widest Drawer, inches (mm) [Qty]	62 (1,575) [7]	54 (1,372) [7]	62 (1,575) [2]	54 (1,372) [2]	54 (1,372) [7]	54 (1,372) [2]	62 (1,575) [2]	54 (1,372) [2]
	Slides, lbs (kg) [ball bearing]	227 (103)	227 (103)	227 (103)	227 (103)	227 (103)	227 (103)	227 (103)	227 (103)
	Double Slide (included)	Yes (5)	Yes (6)	Yes (3)	Yes (4)	Yes (5)	Yes (3)	Yes (3)	Yes (3)
Extras	Writing Surface (Qty)	Yes (1)							
	Third Caster Set Option	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Weight	Net Weight, lbs (kg)	990 (449)	1,044 (474)	990 (449)	1,044 (474)	936 (425)	936 (425)	832 (377)	774 (351)
	Shipping Weight, lbs (kg)	990 (449)	1,044 (474)	990 (449)	1,044 (474)	936 (425)	936 (425)	946 (429)	880 (399)
EPIQ	PowerBank unit	Yes	No	Yes	No	Yes	Yes	No	No
Configurations	Nondirectional Rubber Top	KERP842B0	KERN842B0	KERP843B0	KERN843B0	KERP762B0	KERP763B0	KERN682B0	KERN602B0
	Stainless Steel PowerTop	KERP842B4	KERN842B4	KERP843B4	KERN843B4	KERP762B4	KERP763B4	KERN682B4	KERN602B4
	Stainless Steel PowerHouse Top	KERP842B5	KERN842B5	KERP843B5	KERN843B5	KERP762B5	KERP763B5	_	_
Optional	Top Chest	KECN842A	KECN842A	KECN843A	KECN843A	_	_	KECN682A	KECN602A
Add-ons Available	Top Drawer Section	KESN842A	KESN842A	KESN843A	KESN843A	_	_	KESN682A	KESN602A
	<b>Bulk Side Cabinet</b>	KEBN301AL KEBN301AR	KEBN301AL KEBN301AR	KEBN301AL KEBN301AR	KEBN301AL KEBN301AR	KEBN301AL KEBN301AR	KEBN301AL KEBN301AR	KEBN301AL KEBN301AR	KEBN301AL KEBN301AR
	Locker	KELN301BL KELN301BR	KELN301BL KELN301BR	KELN301BL KELN301BR	KELN301BL KELN301BR	KELN301BL KELN301BR	KELN301BL KELN301BR	KELN301BL KELN301BR	KELN301BL KELN301BR
	WorkCenter	KEWN840A	KEWN840A	KEWN840A	KEWN840A	KEWN760A	KEWN760A	KEWN680A	KEWN600A
	Overhead	KEHN840B	KEHN840B	KEHN840B	KEHN840B	KEHN760B	KEHN760B	KEHN680B	KEHN600B
	Stainless Steel PowerTop	KWSP3084BST	KWSP3084BST	KWSP3084BST	KWSP3084BST	KWSP3076BST	KWSP3076BST	KWSP3068BST	KWSP3060BST
	Stainless Steel PowerHouse Top	KWSH3084BST	KWSH3084BST	KWSH3084BST	KWSH3084BST	KWSH3076BST	KWSH3076BST		_
	Stainless Steel Work Surfaces	KWSN3084BST	KWSN3084BST	KWSN3084BST	KWSN3084BST	KWSN3076BST	KWSN3076BST	KWSN3068BST	KWSN3060BST
	Bedliner Steel Work Surface	KWSN3084ABL	KWSN3084ABL	KWSN3084ABL	KWSN3084ABL	KWSN3076ABL	KWSN3076ABL	KWSN3068ABL	KWSN3060ABL
	Hardwood Top	KWSN3084AWT	KWSN3084AWT	KWSN3084AWT	KWSN3084AWT	KWSN3076AWT	KWSN3076AWT	KWSN3068AWT	KWSN3060AWT

Tools shown in tool storage not included



All EPIQ Series units are available in 12 standard colors. Add suffix to base stock number for special colors.

# Roll Cab - Quick Reference Chart





<b>Roll Cabs</b>	Specifications	KEXP725A	KEXN725A	KEXN603A
CapacityA	pprox Cubic Inches (cm³)	91,690 (1,501,882)	91,627 (1,500,850)	77,672 (1,272,267)
	Approx Square Inches (cm <sup>2</sup> )	25,319 (163,308)	25,340 (163,443)	22,690 (146,351)
	Load Capacity, lbs (kg)	16,000 (7,258)	16,000 (7,258)	16,000 (7,258)
Footprint\	Midth, inches (mm)	144 (3,658)	144 (3658)	120 (3,048)
	Depth, inches (mm)	30 (762)	30 (762)	30 (762)
	Height, inches	46 <sup>7</sup> /8 (1,191)46	<sup>7</sup> /8 (1,191)46	<sup>7</sup> /8 (1,191)
<b>DrawersD</b>	rawer Banks	5	5	3
	Drawer Count	26	31	20
	Widest Drawer, inches (Qty)	62" (3)	54" (6)	54" (11)
	Slides, lbs (ball bearing)	227	227	227
	Double Slide (included)	Yes (7)	Yes (7)	Yes (8)
Extras	Writing Surface (Qty)	Yes (1)	Yes (1)	Yes (1)
	Third Caster Set Option	N/A	N/A	N/A
WeightShi	ipping Weight, Ibs	1,925 (873)	1,925 (873)	1,970 (802)

Cont.	Specifications	KEXP725A	KEXN725A	KEXN603A
EPIQ	PowerBank unit	Yes	No	No
Configurations	Nondirectional Rubber Top	KEXP725A0KE	XN725A0	KEXN603A0
	Stainless Steel PowerTop	KEXP725A1KE	XN725A1	KEXN603A1
Optional Add-ons	Top Drawer Section	KESN843A KESN602A	KESN843A KESN602A	KESN602A
Available	Side Cab	KEBN302AL KEBN302AR	KEBN302AL KEBN302AR	KEBN302AL KEBN302AR
	Locker	KELN302BL KELN302BL KELN302BR KELN302BR		KELN302BL KELN302BR
	WorkCenter	KEWN840A KEWN600A	KEWN840A KEWN600A	KEWN602A
	Overhead	KEHN840B KEHN600B	KEHN840B KEHN600B	KEHN600B
	Stainless Steel Top	KWSN3012ASTKWSN3012ASTKV		VSN3010AST
	Stainless Steel PowerTop Stainless Steel	Choose comb and 84 See page 381 fo	Choose combination of 60" tops. See page 381	
	PowerHouse Top Hardwood Top		WSN3012AWTK	for part numbers.
	Bed Liner Top		WSN3012ABLKV	

Tools shown in tool storage not included



KEXP725A0PJK

# **EPIO Series Roll Cab Drawer Sizes**

Wi	idth	De	pth	Не	eight	KEXP725A
Inches	mm	Inches	mm	Inches	mm	Drawers
11 <sup>5</sup> /8	295	26 <sup>13</sup> / <sub>16</sub>	681	30 1/2	775	1
19 <sup>5</sup> /8	498	26 <sup>7</sup> /8	683	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	6
19 <sup>5</sup> /8	498	27 <sup>15</sup> / <sub>16</sub>	710	3 15/16	100	1
<b>19</b> 5/8	498	27 15/16	710	6 3/16	157	1
<b>19</b> 5/8	498	27 <sup>15</sup> / <sub>16</sub>	710	10 <sup>5</sup> /8	270	1
30 1/16	764	26 <sup>7</sup> /8	683	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	3
30 1/16	764	27 15/16	710	3 15/16	100	1
30 1/16	764	27 15/16	710	6 3/16	157	1
38 1/16	967	26 <sup>7</sup> /8	683	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	3
38 1/16	967	27 <sup>15</sup> / <sub>16</sub>	710	3 15/16	100	1
38 1/16	967	27 15/16	710	6 3/16	157	1
<b>54</b> <sup>1</sup> / <sub>16</sub>	1,373	27 15/16	710	2 11/16	68	1
<b>54</b> <sup>1</sup> / <sub>16</sub>	1,373	27 <sup>15</sup> / <sub>16</sub>	710	3 13/16	97	1
<b>54</b> <sup>1</sup> / <sub>16</sub>	1,373	27 15/16	710	4 7/8	124	1
62 1/16	1,576	27 <sup>15</sup> / <sub>16</sub>	710	2 11/16	68	1
<b>62</b> <sup>1</sup> / <sub>16</sub>	1,576	27 15/16	710	3 13/16	97	1
62 <sup>1</sup> / <sub>16</sub>	1,576	27 <sup>15</sup> / <sub>16</sub>	710	4 7/8	124	1
					Total Drawer Count	26

Tools shown in tool storage not included













• Do not open multiple drawers • Read safety precautions on pages W1 to W4

# **Roll Cabs**





# **EPIQ Series Roll Cab Drawer Sizes**

Wi	Width Depth Height		ight	KEXN725A	KEXN603A		
Inches	mm	Inches	mm	Inches	mm	Drawers	Drawers
19 <sup>5</sup> /8	498	26 <sup>7</sup> /8	683	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	8	3
19 5/8	498	27 <sup>15</sup> /16	710	10 <sup>5</sup> /8	270	2	1
30 1/16	764	26 <sup>7</sup> /8	683	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	6	3
30 1/16	764	27 <sup>15</sup> /16	710	3 15/16	100	2	1
30 1/16	764	27 <sup>15</sup> /16	710	6 <sup>3</sup> /16	157	2	1
54 <sup>1</sup> / <sub>16</sub>	1,373	26 <sup>7</sup> /8	683	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	_	3
54 <sup>1</sup> / <sub>16</sub>	1,373	27 <sup>15</sup> /16	710	2 11/16	68	2	2
<b>54</b> <sup>1</sup> / <sub>16</sub>	1,373	27 <sup>15</sup> / <sub>16</sub>	710	3 13/16	97	2	3
54 <sup>1</sup> / <sub>16</sub>	1,373	27 <sup>15</sup> /16	710	4 7/8	124	2	2
54 <sup>1</sup> / <sub>16</sub>	1,373	27 <sup>15</sup> /16	710	6	152	_	1
					<b>Total Drawer Count</b>	31	20

Tools shown in tool storage not included



All EPIQ Series units are available in 12 standard colors. Add suffix to base stock number for special colors.

# **Roll Cabs**



76" EPIQ with PowerBank™ Unit and PowerTop™.





84" EPIQ with PowerBank Unit and PowerHouse™ Top.



84" EPIQ with PowerBank Unit.



76" EPIQ with PowerBank Unit and PowerHouse Top.



84" EPIQ with PowerBank Unit and PowerTop Unit.

# **EPIQ Series Roll Cab Drawer Sizes**

<b>·</b>								
V	Vidth	De	pth	Hei	ght	KERP763B	KERP843B	
Inches	mm	Inches	mm	Inches	mm	Drawers	Drawers	
11 <sup>5</sup> /8	295	26 13/16	681	30 1/2	775	1	1	
19 <sup>5</sup> /8	498	26 <sup>7</sup> /8	683	<b>1</b> 11/16	43	3	3	
19 <sup>5</sup> /8	498	27 15/16	710	3 15/16	100	1	1	
19 <sup>5</sup> /8	498	27 15/16	710	10 5/8	270	1	1	
<b>30</b> <sup>1</sup> / <sub>16</sub>	764	26 <sup>7</sup> /8	683	<b>1</b> 11/16	43	3	_	
<b>30</b> <sup>1</sup> / <sub>16</sub>	764	27 15/16	710	3 15/16	100	2	_	
<b>30</b> <sup>1</sup> / <sub>16</sub>	764	27 15/16	710	6 <sup>3</sup> /16	157	1	_	
38 <sup>1</sup> / <sub>16</sub>	967	26 <sup>7</sup> /8	683	<b>1</b> 11/16	43	_	3	
38 <sup>1</sup> / <sub>16</sub>	967	27 15/16	710	3 15/16	100	_	2	
38 <sup>1</sup> / <sub>16</sub>	967	27 <sup>15</sup> /16	710	6 <sup>3</sup> /16	157	_	1	
<b>54</b> <sup>1</sup> / <sub>16</sub>	1,373	27 15/16	710	2 11/16	68	1	_	
<b>54</b> <sup>1</sup> / <sub>16</sub>	1,373	27 15/16	710	4 7/8	124	1	_	
<b>62</b> <sup>1</sup> / <sub>16</sub>	1,576	27 <sup>15</sup> / <sub>16</sub>	710	2 11/16	68	_	1	
<b>62</b> <sup>1</sup> / <sub>16</sub>	1,576	27 15/16	710	4 7/8	124	_	1	
					Total Drawer Count	14	14	

Tools shown in tool storage not included













• Do not open multiple drawers • Read safety precautions on pages W1 to W4

# **EPIQ SERIES**

# **Roll Cabs**





KERP762B4PBO 76" EPIQ with PowerBank™ Unit and PowerTop™.



KERP762B0PC 76" EPIQ with *PowerBank* Unit.







KERP842B4PAW 84" EPIQ with *PowerBank* Unit and *PowerTop*.

# **EPIQ Series Roll Cab Drawer Sizes**

V	/idth	De	pth	Height		KERP762B	KERP842B
Inches	mm	Inches	mm	Inches	mm	Drawers	Drawers
11 5/8	295	26 <sup>13</sup> / <sub>16</sub>	681	30 <sup>1</sup> / <sub>2</sub>	775	1	1
54 <sup>1</sup> / <sub>16</sub>	1,373	26 <sup>7</sup> /8	683	<b>1</b> 11/16	43	1	_
<b>54</b> <sup>1</sup> / <sub>16</sub>	1,373	27 <sup>15</sup> / <sub>16</sub>	710	2 11/16	68	1	_
54 <sup>1</sup> / <sub>16</sub>	1,373	27 <sup>15</sup> / <sub>16</sub>	710	3 13/16	97	3	_
<b>54</b> <sup>1</sup> / <sub>16</sub>	1,373	27 <sup>15</sup> / <sub>16</sub>	710	4 7/8	124	1	_
54 <sup>1</sup> / <sub>16</sub>	1,373	27 <sup>15</sup> / <sub>16</sub>	710	6	152	1	_
62 <sup>1</sup> / <sub>16</sub>	1,576	26 <sup>7</sup> /8	683	<b>1</b> 11/16	43	_	1
<b>62</b> <sup>1</sup> / <sub>16</sub>	1,576	27 <sup>15</sup> / <sub>16</sub>	710	2 11/16	68	_	1
62 <sup>1</sup> /16	1,576	27 <sup>15</sup> / <sub>16</sub>	710	3 13/16	97	_	3
62 <sup>1</sup> /16	1,576	27 <sup>15</sup> / <sub>16</sub>	710	4 7/8	124	_	1
62 <sup>1</sup> / <sub>16</sub>	1,576	27 <sup>15</sup> / <sub>16</sub>	710	6	152	_	1
					Total Drawer Count	8	8

Tools shown in tool storage not included



All EPIQ Series units are available in 12 standard colors. Add suffix to base stock number for special colors.

# **Roll Cabs**













# **EPIQ Series Roll Cab Drawer Sizes**

w	idth	De	pth	He	ight	KERN842B	KERN843B
Inches	mm	Inches	mm	Inches	mm	Drawers	Drawers
19 <sup>5</sup> /8	498	26 <sup>7</sup> /8	683	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	2	5
19 <sup>5</sup> /8	498	27 <sup>15</sup> / <sub>16</sub>	710	3 15/16	100	2	3
19 <sup>5</sup> /8	498	27 <sup>15</sup> / <sub>16</sub>	710	6 <sup>3</sup> /16	157	1	1
19 <sup>5</sup> /8	498	27 15/16	710	10 5/8	270	1	2
30 1/16	764	26 <sup>7</sup> / <sub>8</sub>	683	<b>1</b> 11/16	43	_	3
30 <sup>1</sup> /16	764	27 <sup>15</sup> / <sub>16</sub>	710	3 15/16	100	_	2
<b>30</b> <sup>1</sup> /16	764	27 <sup>15</sup> / <sub>16</sub>	710	6 <sup>3</sup> /16	157	_	1
54 <sup>1</sup> /16	1,373	26 7/8	683	1 11/16	43	1	_
<b>54</b> <sup>1</sup> /16	1,373	27 <sup>15</sup> / <sub>16</sub>	710	2 11/16	68	1	1
<b>54</b> <sup>1</sup> /16	1,373	27 <sup>15</sup> / <sub>16</sub>	710	3 13/16	97	3	_
<b>54</b> <sup>1</sup> / <sub>16</sub>	1,373	27 <sup>15</sup> / <sub>16</sub>	710	4 7/8	124	1	1
54 <sup>1</sup> /16	1,373	27 <sup>15</sup> / <sub>16</sub>	710	6	152	1	_
					Total Drawer Count	13	19









# **EPIQ SERIES**

# **Roll Cabs**









# **EPIQ Series Roll Cab Drawer Sizes**

Wi	dth	De	pth	Hei	ight	KERN602B	KERN682B
Inches	mm	Inches	mm	Inches	mm	Drawers	Drawers
19 5/8	498	26 <sup>7</sup> /8	683	<b>1</b> 11/16	43	3	3
19 5/8	498	27 <sup>15</sup> /16	710	3 <sup>15</sup> /16	100	1	1
19 5/8	498	27 <sup>15</sup> / <sub>16</sub>	710	10 <sup>5</sup> /8	270	1	1
30 1/16	764	26 <sup>7</sup> /8	683	<b>1</b> 11/16	43	3	_
30 1/16	764	27 <sup>15</sup> / <sub>16</sub>	710	3 <sup>15</sup> / <sub>16</sub>	100	2	_
30 1/16	764	27 <sup>15</sup> /16	710	6 <sup>3</sup> /16	157	1	_
38 1/16	967	26 <sup>7</sup> /8	683	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	_	3
38 1/16	967	27 <sup>15</sup> /16	710	3 15/16	100	_	2
38 1/16	967	27 <sup>15</sup> /16	710	6 <sup>3</sup> /16	157	_	1
<b>54</b> <sup>1</sup> / <sub>16</sub>	1,373	27 <sup>15</sup> / <sub>16</sub>	710	2 11/16	68	1	_
<b>54</b> <sup>1</sup> / <sub>16</sub>	1,373	27 <sup>15</sup> / <sub>16</sub>	710	4 7/8	124	1	_
62 1/16	1,576	27 <sup>15</sup> /16	710	2 11/16	68	_	1
<b>62</b> <sup>1</sup> / <sub>16</sub>	1,576	27 <sup>15</sup> /16	710	4 7/8	124	_	1
					<b>Total Drawer Count</b>	13	13



All EPIQ Series units are available in 12 standard colors. Add suffix to base stock number for special colors.

# Top Chests

# **KECN602A0 Series Top Chest**

Cubic inches (cm³)	Square (cn			Weight, (kg)	Shipping Weight, lbs (kg)	
28,259 (462,882)	8,344 (5	3,819)	525	(238)		605 (274)
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	10	60 (1,524)		30 (762)		27 1/2 (699)
Drawers	2	<b>19</b> 5/8	(498)	26 7/8 (683)		1 11/16 (43)
	3	19 <sup>5</sup> /8	(498)	27 <sup>15</sup> /16 (710)		3 <sup>15</sup> /16 (100)
	2	30 1/16	(764)	26 <sup>7</sup> /8 (6	83)	1 11/16 (43)
	3	30 1/16 (764)		27 15/16 (710)		3 <sup>15</sup> /16 (100)
<b>Top Compartment</b>	1	54 (1	,372)	27 <sup>15</sup> /16 (	710)	4 <sup>7</sup> /8 (124)



KECN602A0PBO

# **KECN682A0 Series Top Chest**

Cubic inches (cm³)	Square (cm			Weight, s (kg)	Si	nipping Weight, lbs (kg)
32,714 (535,855)	9,668 (6	2,359)	600	(272)		685 (311)
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	10	68 (1	,727)	30 (762)		27 1/2 (699)
Drawers	2	19 5/8	(498)	26 <sup>7</sup> /8 (6	83)	1 11/16 (43)
	3	<b>19</b> 5/8	(498)	27 15/16 (710)		3 <sup>15</sup> /16 (100)
	2	38 1/16	(967)	26 <sup>7</sup> /8 (6	83)	1 11/16 (43)
	3	38 <sup>1</sup> /16 (967)		27 <sup>15</sup> /16 (710)		3 <sup>15</sup> /16 (100)
<b>Top Compartment</b>	1	62 (1	,575)	27 <sup>15</sup> /16 (710)		4 7/8 (124)



KECN682A0PC

# **KECN842A0 Series Top Chest**

Cubic inches (cm³)	Square (cm			Weight, s (kg)	Si	nipping Weight, lbs (kg)
41,331 (677,002)	12,372 (	79,799)	750	(340)		850 (386)
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	10	84 (2,134)		30 (762)		27 1/2 (699)
Drawers	2	<b>54</b> <sup>1</sup> / <sub>16</sub>	(1,373)	26 7/8 (683)		1 <sup>11</sup> /16 (43)
	3	<b>54</b> <sup>1</sup> / <sub>16</sub>	(1,373)	27 <sup>15</sup> /16 (	710)	3 <sup>15</sup> /16 (100)
	2	19 5/8	(498)	26 <sup>7</sup> /8 (6	83)	1 <sup>11</sup> /16 (43)
	3	19 5/8 (498)		27 15/16 (710)		3 <sup>15</sup> /16 (100)
Top Compartment	1	80 (2	,032)	27 <sup>15</sup> / <sub>16</sub> (	710)	4 <sup>7</sup> /8 (124)



KECN842A0PU

# **KECN843A0 Series Top Chest**

Cubic inches (cm³)	Square (cm				Si	nipping Weight, lbs (kg)
40,356 (656,117)	11,770 (75,917)		750	750 (340)		850 (386)
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	15	84 (2	,134)	30 (762)		27 1/2 (699)
Drawers	4	19 <sup>5</sup> /8	(498)	26 <sup>7</sup> /8 (6	83)	1 11/16 (43)
	6	19 <sup>5</sup> /8	(498)	27 <sup>15</sup> /16 (	710)	3 15/16 (100)
	2	30 1/16	(764)	26 <sup>7</sup> /8 (6	83)	1 11/16 (43)
	3	30 1/16 (764)		27 <sup>15</sup> /16 (710)		3 15/16 (100)
<b>Top Compartment</b>	1	80 (2	,032)	27 15/16 (710)		4 <sup>7</sup> /8 (124)



KECN843A0PDG

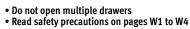












# **Drawer Sections**



KESN602A0PBO



KESN682A0PC



KESN842A0PU



KESN843A0PDG



# **KESN602A0 Series Drawer Sections**

Cubic inches (cm³)	Square inches (cm²)			Weight, 6 (kg)	Shipping Weight, lbs (kg)		
26,370 (431,941)	8,223 (53,038)		525 (238)		605 (274)		
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	12	60 (1	,524)	30 (762)		27 1/2 (699)	
Drawers	2	<b>19</b> 5/8	(498)	26 7/8 (683)		1 11/16 (43)	
	4	<b>19</b> 5/8	(498)	27 <sup>15</sup> /16 (	710)	3 15/16 (100)	
	2	30 1/16	(764)	26 <sup>7</sup> /8 (6	83)	1 11/16 (43)	
	4	30 <sup>1</sup> /16	(764)	27 15/16 (7		3 <sup>15</sup> /16 (100)	

# **KESN682A0 Series Drawer Sections**

Cubic inches (cm³)	Square inches (cm²)			Weight, 6 (kg)	Shipping Weight, lbs (kg)		
30,616 (501,490)	9,547 (61,578)		600 (272)			685 (311)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	12	68 (1	,727)	30 (762)		27 1/2 (699)	
Drawers	2	<b>19</b> 5/8	(498)	26 <sup>7</sup> /8 (6	83)	1 11/16 (43)	
	4	<b>19</b> 5/8	19 5/8 (498) 27 15/16 (71		710)	3 15/16 (100)	
	2	38 1/16 (967)		26 <sup>7</sup> /8 (6	83)	1 11/16 (43)	
	4	38 1/16	(967)	27 <sup>15</sup> /16 (710)		3 <sup>15</sup> /16 (100)	

# **KESN842A0 Series Drawer Sections**

Cubic inches (cm³)	Square inches (cm²)			Weight, s (kg)	Shipping Weight, lbs (kg)		
38,352 (628,206)	12,195 (78,658)		750 (340)			850 (386)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	12	84 (2	,032)	30 (762)		27 1/2 (699)	
Drawers	2	<b>19</b> 5/8	(498)	26 <sup>7</sup> /8 (6	83)	1 11/16 (43)	
	4	<b>19</b> 5/8	(498)	27 <sup>15</sup> /16 (	710)	3 <sup>15</sup> /16 (100)	
	2	<b>54</b> <sup>1</sup> / <sub>16</sub>	(1,373)	26 <sup>7</sup> /8 (6	83)	1 11/16 (43)	
	4	<b>54</b> <sup>1</sup> / <sub>16</sub>	(1,373)	27 <sup>15</sup> /16 (	710)	3 <sup>15</sup> /16 (100)	

# **KESN843A0 Series Drawer Sections**

Cubic inches (cm³)	Square inches (cm²)			Weight, s (kg)	Shipping Weight, lbs (kg)		
36,785 (602,538)	11,471 (73,988)		750	(340)		850 (386)	
	Drawers	Width, (m		Depth, inches (mm)		Height, inches (mm)	
Specifications	18	84 (2	,032)	2) 30 (762		27 1/2 (699)	
Drawers	4	<b>19</b> 5/8	(498)	26 <sup>7</sup> /8 (6	83)	1 11/16 (43)	
	8	<b>19</b> 5/8	(498)	27 <sup>15</sup> /16 (	710)	3 15/16 (100)	
	2	30 1/16	(764)	26 <sup>7</sup> /8 (6	83)	1 11/16 (43)	
	4	30 1/16	(764)	(764) 27 15/16 (7		3 <sup>15</sup> /16 (100)	

All EPIQ Series units are available in 12 standard colors. Add suffix to base stock number for special colors.

# **EPIQ WorkCenters**

EPIQ WorkCenters - Stainless Steel, Bed Liner or Butcher Block worksurface required to use WorkCenter.

		Overall			Inside				
	Width, inches (mm)	Depth, inches (mm)	Height, inches (mm)	Width, inches (mm)	Depth, inches (mm)	Height, inches (mm)	Square Inches (cm²)	Cubic Inches (cm³)	Weight Net/Ship, Ibs (kg)
KEWN840A0	84 (2,134)	30 (762)	25 <sup>1</sup> / <sub>2</sub> (648)	80 <sup>9</sup> / <sub>16</sub> (2,046)	26 <sup>5/8</sup> (676)	25 (635)	5,130 (33,090)	38,924 (657,575)	355 (161) 410 (186)
KEWN760A0	76 (1,930)	30 (762)	25 <sup>1</sup> / <sub>2</sub> (648)	72 <sup>9/</sup> 16 (1,843)	26 <sup>5/8</sup> (676)	25 (635)	4,717 (30,424)	35,060 (574,283)	325 (147) 375 (170)
KEWN680A0	68 (1,727)	30 (762)	25 <sup>1</sup> / <sub>2</sub> (648)	64 <sup>9</sup> / <sub>16</sub> (1,640)	26 <sup>5/8</sup> (676)	25 (635)	4,303 (27,757)	31,196 (510,991)	300 (136) 345 (156)
KEWN600A0	60 (1.524)	30 (762)	25 <sup>1</sup> / <sub>2</sub> (648)	56 <sup>9/16</sup> (1.437)	26 <sup>5</sup> / <sub>8</sub> (676)	25 (635)	3,890 (25.091)	27,332 (447,698)	275 (125) 315 (143)



KEWN840A0PBO

# **EPIQ Series Overhead Cabinets**

# **Bulk Overhead Cabinets**

		Overall			Inside				
	Width, inches (mm)	Depth, inches (mm)	Height, inches (mm)	Width, inches (mm)	Depth, inches (mm)	Height, inches (mm)	Square Inches (cm²)	Cubic Inches (cm³)	Weight Net/Ship, Ibs (kg)
KEHN840B0	84 (2,134)	30 (762)	21 <sup>7</sup> / <sub>8</sub> (556)	80 <sup>1</sup> / <sub>4</sub> (2,038)	28 <sup>3/<sub>16</sub></sup> (716)	13 <sup>5</sup> / <sub>8</sub> (346)	2,263 (14,595)	30,888 (505,945)	320 (145) 368 (167)
KEHN760B0	76 (1,930)	30 (762)	21 <sup>7</sup> / <sub>8</sub> (556)	72 <sup>1</sup> / <sub>4</sub> (1,835)	28 <sup>3</sup> / <sub>16</sub> (716)	13 <sup>5</sup> / <sub>8</sub> (346)	2,037 (13,141)	27,811 (455,539)	300 (136) 348 (158)
KEHN680B0	68 (1,727)	30 (762)	21 <sup>7</sup> / <sub>8</sub> (556)	64 <sup>1</sup> / <sub>4</sub> (1,632)	28 <sup>3/16</sup> (716)	13 <sup>5</sup> / <sub>8</sub> (346)	1,812 (11,687)	24,733 (405,134)	275 (125) 318 (144)
KEHN600B0	60 (1,524)	30 (762)	21 <sup>7</sup> / <sub>8</sub> (556)	56 <sup>1</sup> / <sub>4</sub> (1,429)	28 <sup>3/16</sup> (716)	13 <sup>5</sup> / <sub>8</sub> (346)	1,587 (10,233)	21,656 (354,728)	260 (118) 298 (135)



KEHN840B0PBO

# **EPIQ Series Side Cabinets**

# **KELN301B Side Locker Cabinets**

Side Cabinets require attachment to an EPIQ roll cabinet or side cabinet. CANNOT BE USED AS A STAND ALONE UNIT.

Cubic inches (cm³)	Square inches (cm²)		Load Capacity, lbs (kg)		Net Weight, lbs (kg)				
32,835 (537,837)	4,310	(27,800) 4,00		000 (1,814)		467 (212)			
	Drawers	Width, ind (mm)		Depth, inches (mm)		Height, inches (mm)			
Specifications	6/1	30 (762	2)	30 (762)		74 (1,880)			
Pull Out Bin	2	24 <sup>1</sup> /8 (6	13)	23 3/8 (594)		4 (102)			
Pull Out Bin	4	24 <sup>1</sup> /8 (6	24 1/8 (613)			4 (102)			
Stationary Shelf	1	25 1/2 (648)		24 (610)		_			
Can Racks	2	17 <sup>7</sup> /8 (4	54)	3 3/16 (81)		4 (102)			

KELN301BL - Left side locker KELN301BR - Right side locker



# **KEBN301A Series Bulk End Cabinet**

CANNOT BE USED AS A STAND ALONE UNIT.

Cubic inches (cm³)	Square inches (cm²)			d Capacity, lbs (kg)	Weight Net/Ship, Ibs (kg)		
17,260 (282,719)	2,461	(15,873)	4,000 (1,814)			390 (177) 440 (200)	
	Drawers	Width, ind (mm)			s	Height, inches (mm)	
Specifications	3/1	30 (762	2)	30 (762)		46 <sup>7</sup> /8 (1,191)	
Pull Out Bin	1	24 <sup>1</sup> /8 (6	13)	23 3/8 (594)		4 (102)	
Pull Out Bin	2	24 <sup>1</sup> /8 (6	13)	26 <sup>5</sup> /8 (676)		4 (102)	
Stationary Shelf	1	25 <sup>1</sup> /2 (64	48)	24 (610)		_	
Can Racks	2	17 <sup>7</sup> /8 (4	54)	3 3/16 (81)		4 (102)	



KEBN301AL - Left side bulk end cabinet KEBN301AR - Right side bulk end cabinet **KEBN301ALPBO** 













Do not open multiple drawers
Read safety precautions on pages W1-W4.

# Built to Exceed the Highest Standards. Yours.

With the Masters Series, every component is precision engineered to the most exacting standards—from ball bearing drawer slides to the strongest mar-resistant powder coat paint in the industry.

# There Are No Short-Cuts.

Every facet of Masters Series tool storage unit construction is performed without compromise to ensure the strength and durability you need.

**Breadth** — The widest variety of configuration options, from single to the race-inspired Tool Utility Vehicle—with all of the add-on options you can imagine.

# The Snap-on Difference.

Designed by Snap-on with you in mind.

Snap-on has taken the time to precisely engineer each Masters Series box with features that help you work more productively.

**PowerCab™** — Bolt on to any Masters Series roll cab for a secure way to power your cordless tools.

**Extended Cab Feature** — Extra-wide drawers for maximum organizational power.

**Security** — Round key interchangeable core and lifetime warranty on all components for peace of mind.

**ISO-Ride® Casters** - 6" casters for unmatched strength and smoothness when transporting heavy loads.







# **Quick Reference Chart**



















Roll Cabs	Specifications	KRL1032E	KRL1033C	KRL1023C	KRL7023C	KRL1022C	KRL7022C	KRL722B	KRL1056C	KRL756C
Capacity	Approx. Cubic Inches (cm³)	46,425 (76,077)	44,761 (73,350)	44,260 (75,529)	37,812 (61,963)	33,735 (55,282)	32,160 (52,701)	23,251 (38,101)	22,356 (36,635)	15,506 (25,410)
	Approx. Square Inches (cm²)	12,251 (79,038)	12,925 (83,387)	13,111 (84,587)	11,499 (74,187)	9,563 (61,697)	8,341 (53,813)	6,770 (43,677)	6,585 (42,484)	4,677 (30,174)
	Load Capacity, Ibs (Kg)	6,800 (3,084)	6,800 (3,084)	6,800 (3,084)	6,800 (3,084)	6,800 (3,084)	6,800 (3,084)	3,600 (1,633)	3,600 (1,633)	3,600 (1,633)
Footprint	Width, inches (mm)	72 <sup>7</sup> /8 (1,851)	72 <sup>7</sup> /8 (1,851)	72 <sup>7</sup> /8 (000)	72 <sup>7</sup> /8 (1,851)	54 <sup>1</sup> / <sub>4</sub> (1,378)	54 <sup>1</sup> / <sub>4</sub> (1,378)	54 <sup>1</sup> / <sub>4</sub> (1,378)	35 <sup>5</sup> / <sub>8</sub> (892)	35 <sup>5</sup> /8 (892)
	Depth, inches (mm)	29 <sup>1</sup> /8 (740)	29 <sup>1</sup> / <sub>8</sub> (740)	29 <sup>1</sup> /8 (740)	29 <sup>1</sup> /8 (740)	29 <sup>1</sup> / <sub>8</sub> (740)	29 <sup>1</sup> /8 (740)	24 (610)	29 <sup>1</sup> / <sub>8</sub> (740)	24 (610)
	Height, inches (mm)	45 <sup>7</sup> /8 (1,165)	45 <sup>7</sup> /8 (1,165)	45 <sup>7</sup> /8 (1,165)	41 3/8 (1, 051)	45 <sup>7</sup> / <sub>8</sub> (1,165)	41 3/8 (1,051)	39 <sup>7</sup> / <sub>8</sub> (1,013)	44 <sup>1</sup> / <sub>4</sub> (1,124)	39 <sup>7</sup> / <sub>8</sub> (1,013)
Drawers	Drawer Banks	2	3	3	3	2	2	2	1	1
	Drawer Count	12	19	22	19	13	11	11	8	7
	Widest Drawer, inches (mm) [Qty]	69 (1,753) [2]	69 (1,753) [2]	50 (1,270) [2]	50 (1,270) [2]	50 (1,270) [2]	50 (1,270) [2]	50 (1,270) [2]	34 (864)	34 (864)
	Slides, lbs (Kg) (Ball Bearing)	227 (103)	227 (103))	227 (103)	227 (103)	227 (103)	227 (103)	261 (118)	227 (103)	261 (118)
	Double Slide (included)	Yes (5)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (2)	Yes (1)	Yes (1)
Extras	Work Surface	Nondirectional Rubber	Nondirectional Rubber	Nondirectional Rubber	Nondirectional Rubber	Nondirectional Rubber	Nondirectional Rubber	Nondirectional Rubber	Nondirectional Rubber	Nondirectional Rubber
	Writing Surface (Qty)	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)	Yes (1)	No	No
	Third Caster Set Option	Yes	Yes	Yes	Yes	No	No	No	No	No
Weight	Net Weight, lbs (Kg)	892 (405)	892 (405)	892 (405)	785 (356)	632 (287)	562 (255)	489 (222)	396 (180)	306 (139)
	Shipping Weight, Ibs (Kg)	1,006 (456)	1,006 (456)	1,006 (456)	893 (405)	720 (326)	645 (292)	548 (248)	450 (204)	361 (164)
Optional	Top Chest	KRL1232	KRL1203B	KRL1203B	KRL1203B	KRL1201A	KRL1201A	KRL791A	KRL1251	KRL751
Add-ons Available	Side Cab	KRL1011A KRL1015B	KRL1011A KRL1015B	KRL1011A KRL1015B	KRL7011A KRL7015B	KRL1011A KRL1015B	KRL7011A KRL7015B	KRL711A KRL715B	KRL1011A KRL1015B	KRL711A KRL715B
	Locker	KRL1012B KRL1018	KRL1012B KRL1018	KRL1012B KRL1018	KRL7012A KRL7018	KRL1012B KRL1018	KRL7012A KRL7018	KRL712B	KRL1012B KRL1018	KRL712B
	Workcenter/ Riser with Door	KRL7972A	KRL7972A	KRL7972A	KRL7972A	KRL7954A	KRL7954A	KRW7554A	_	_
	Overhead	KRL7245A	KRL7245A	KRL7245A	KRL7245A	KRL5445A	KRL5445A	KRWL5435	_	_
	Stainless Steel Top	KRSST7003B	KRSST7003B	KRSST7003B	KRSST7003B	KRSST1001B	KRSST1001B	KRSST761B	KRSST7001	KRSST756
	Hardwood Top	KRWT7003B	KRWT7003B	KRWT7003B	KRWT7003B	KRWT7002A	KRWT7002A	KRWT761B	KRWT7001A	KRWT756A
	Bedliner Top	KRBLT1023	KRBLT1023	KRBLT1023	KRBLT1023	KRBLT1022	KRBLT1022	KRBLT722	_	KRBLT756



All KRL Series units are available in 10 standard colors. Add suffix to base stock number for special colors.















• Do not open multiple drawers • Read safety precautions on pages W1 to W4

# **Roll Cabs**



KRL1032E Series Roll Cab.



KRL1033C Series Roll Cab.

# **MASTERS Series Roll Cab Drawer Sizes**

Wi	idth	De	pth	He	ight	KRL1032E	KRL1033C
Inches	mm	Inches	mm	Inches	mm	Drawers	Drawers
14 <sup>5</sup> /8	371	26 <sup>15</sup> / <sub>16</sub>	684	1 11/16	43	3	6
14 <sup>5</sup> /8	371	26 <sup>15</sup> / <sub>16</sub>	684	4	102	1	3
14 <sup>5</sup> /8	371	26 <sup>15</sup> / <sub>16</sub>	684	6 <sup>3</sup> / <sub>16</sub>	157	_	1
14 <sup>5</sup> /8	371	26 <sup>15</sup> / <sub>16</sub>	684	10 <sup>5</sup> /8	270	1	1
<b>30</b> <sup>1</sup> / <sub>2</sub>	775	26 <sup>15</sup> / <sub>16</sub>	684	1 11/16	43	_	3
<b>30</b> <sup>1</sup> / <sub>2</sub>	775	26 <sup>15</sup> / <sub>16</sub>	684	4	102	_	2
<b>30</b> <sup>1</sup> / <sub>2</sub>	775	26 <sup>15</sup> / <sub>16</sub>	684	6 <sup>3</sup> / <sub>16</sub>	157	_	1
49 <sup>1</sup> / <sub>8</sub>	1,248	26 <sup>15</sup> / <sub>16</sub>	684	<b>1</b> 9/16	40	1	_
49 <sup>1</sup> / <sub>8</sub>	1,248	26 <sup>15</sup> / <sub>16</sub>	684	3 13/16	97	3	_
49 <sup>1</sup> /8	1,248	26 <sup>15</sup> / <sub>16</sub>	684	6	152	1	_
67 <sup>1</sup> /8	1,705	26 <sup>15</sup> / <sub>16</sub>	684	2 11/16	68	1	1
67 <sup>1</sup> /8	1,705	26 <sup>15</sup> / <sub>16</sub>	684	4 <sup>7</sup> /8	124	1	1
	•				Total Drawer Count	12	19



All KRL Series units are available in 10 standard colors. Add suffix to base stock number for special colors.

# **Roll Cabs**

KRL1023C Series Roll Cab.



KRL7023C Series Roll Cab.



# **MASTERS Series Roll Cab Drawer Sizes**

Wi	dth	De	pth	Hei	ight	KRL1023C	KRL7023C
Inches	mm	Inches	mm	Inches	mm	Drawers	Drawers
14 <sup>5</sup> /8	371	26 <sup>15</sup> /16	684	1 <sup>11</sup> / <sub>16</sub>	43	8	8
14 <sup>5</sup> /8	371	26 <sup>15</sup> /16	684	4	102	4	2
14 <sup>5</sup> /8	371	26 <sup>15</sup> /16	684	6 <sup>3</sup> /16	157	1	1
14 <sup>5</sup> /8	371	26 <sup>15</sup> /16	684	10 <sup>5</sup> /8	270	1	1
30 <sup>1</sup> / <sub>2</sub>	775	26 <sup>15</sup> /16	684	1 <sup>11</sup> / <sub>16</sub>	43	3	3
30 <sup>1</sup> / <sub>2</sub>	775	26 <sup>15</sup> /16	684	4	102	2	1
30 <sup>1</sup> / <sub>2</sub>	775	26 <sup>15</sup> /16	684	6 <sup>3</sup> /16	157	1	1
49 <sup>1</sup> / <sub>8</sub>	1,248	26 <sup>15</sup> /16	684	2 11/16	68	1	1
49 <sup>1</sup> / <sub>8</sub>	1,248	26 <sup>15</sup> /16	684	4 <sup>7</sup> /8	124	1	1
					<b>Total Drawer Count</b>	22	19









# **Roll Cabs**



KRL1022C Series Roll Cab.



KRL7022C Series Roll Cab.

# **MASTERS Series Roll Cab Drawer Sizes**

w	idth	De	pth	Hei	ght	KRL1022C	KRL7022C
Inches	mm	Inches	mm	Inches	mm	Drawers	Drawers
14 <sup>5</sup> /8	371	26 <sup>15</sup> /16	684	1 <sup>11</sup> / <sub>16</sub>	43	3	3
14 <sup>5</sup> /8	371	26 <sup>15</sup> /16	684	4	102	1	_
14 <sup>5</sup> /8	371	26 <sup>15</sup> /16	684	10 <sup>5</sup> /8	270	1	1
30 <sup>1</sup> / <sub>2</sub>	775	26 <sup>15</sup> /16	684	<b>1</b> <sup>11</sup> / <sub>16</sub>	43	3	3
30 <sup>1</sup> / <sub>2</sub>	775	26 <sup>15</sup> /16	684	4	102	2	1
30 <sup>1</sup> / <sub>2</sub>	775	26 <sup>15</sup> /16	684	6 <sup>3</sup> /16	157	1	1
49 <sup>1</sup> / <sub>8</sub>	1,248	26 <sup>15</sup> /16	684	2 11/16	68	1	1
49 <sup>1</sup> / <sub>8</sub>	1,248	26 <sup>15</sup> /16	684	4 7/8	124	1	1
					<b>Total Drawer Count</b>	13	11



All KRL Series units are available in 10 standard colors. Add suffix to base stock number for special colors.

# **Roll Cabs**

KRL722B Series Roll Cab.







KRL1056C Series Roll Cab.

KRL756C Series Roll Cab.

# **MASTERS Series Roll Cab Drawer Sizes**

W	idth	De	pth	Hei	ght	KRL1056C	KRL722B	KRL756C
Inches	mm	Inches	mm	Inches	mm	Drawers	Drawers	Drawers
14 <sup>5</sup> /8	371	21 <sup>7</sup> /8	557	<b>1</b> <sup>11</sup> /16	43	_	3	_
14 <sup>5</sup> /8	371	21 <sup>7</sup> /8	557	10 <sup>5</sup> /8	270	_	1	_
30 <sup>1</sup> / <sub>2</sub>	775	21 <sup>7</sup> /8	557	1 <sup>11</sup> / <sub>16</sub>	43	_	3	3
30 <sup>1</sup> / <sub>2</sub>	775	21 <sup>7</sup> /8	557	4	102	_	1	3
30 <sup>1</sup> / <sub>2</sub>	775	21 <sup>7</sup> /8	557	6 <sup>3</sup> /16	157	_	1	1
49 <sup>1</sup> /8	1,248	21 <sup>7</sup> /8	557	2 11/16	68	_	1	_
49 <sup>1</sup> /8	1,248	21 <sup>7</sup> /8	557	4 <sup>7</sup> /8	124	_	1	_
30 <sup>1</sup> / <sub>2</sub>	775	<b>26</b> <sup>15</sup> /16	684	1 <sup>11</sup> / <sub>16</sub>	43	3	_	_
30 <sup>1</sup> / <sub>2</sub>	775	<b>26</b> <sup>15</sup> /16	684	4	102	4	_	_
30 <sup>1</sup> / <sub>2</sub>	775	<b>26</b> <sup>15</sup> /16	684	6 <sup>3</sup> /16	157	1	_	_
				To	otal Drawer Count	8	11	7









# Top Chests



KRL1232PM



KRL1203BPBO



KRL1201APES



KRL1251PJK



# **KRL1232 Series Top Chest**

Cubic inches (cm³)	Square inches Net Weight, Sh (cm²) lbs (kg)		ipping Weight, lbs (kg)				
33,358 (546,404)	10,533 (6	67,938)	590	590 (268)		668 (303)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	10	72 <sup>7</sup> /8 (	1,851)	29 1/8 (7	40)	25 % (645)	
Drawers	2	14 5/8	(371)	26 <sup>15</sup> /16 (684)		1 11/16 (43)	
	3	14 5/8	(371)	26 <sup>15</sup> /16 (0	684)	4 (102)	
	2	49 1/8 (	1,248)	26 <sup>15</sup> /16 (0	684)	1 <sup>11</sup> / <sub>16</sub> (43)	
	3	49 ½ (	1,248)	26 <sup>15</sup> /16 (0	684)	4 (102)	
Top Compartment	Narrow	18 %16	(471)	26 <sup>7</sup> / <sub>8</sub> (6	83)	4 ½ (105)	
	Wide	53 <sup>7</sup> /8 (	1,368)	26 % (6	83)	4 ½ (105)	

# **KRL1203B Series Top Chest**

Cubic inches (cm³)				Weight, Shi s (kg)		ipping Weight, lbs (kg)		
32,109 (525,945)	9,994 (6	64,461)	590	(268)		681 (309)		
	Drawers			Depth, in (mm)		Height, inches (mm)		
Specifications	15	72 <sup>7</sup> /8 (	1,851)	29 ½ (7	40)	25 3/8 (645)		
Drawers	4	14 5/8	(371)	26 <sup>15</sup> /16 (6	684)	1 <sup>11</sup> /16 (43)		
	6	14 5/8	(371)	26 <sup>15</sup> /16 (6	684)	4 (102)		
	2	30 1/2	(775)	26 <sup>15</sup> /16 (6	684)	1 11/16 (43)		
	3	30 ½	(775)	26 <sup>15</sup> /16 (6	684)	4 (102)		
Top Compartment	Narrow	18 %16	(471)	26 <sup>7</sup> / <sub>8</sub> (6	83)	4 ½ (105)		
	Wide	53 <sup>7</sup> /8 (	1,368)	26 % (6	83)	4 <sup>1</sup> /8 (105)		

# **KRL1201A Series Top Chest**

· · · · · · · · · · · · · · · · · · ·								
Cubic inches (cm³)	Square inches (cm²)			Weight, 5 (kg)	Shipping Weight, lbs (kg)			
24,456 (400,589)	7,526 (4	18,543)	424	(192)		505 (229)		
	Drawers	Width, (m		Depth, in (mm)		Height, inches (mm)		
Specifications	10	54 1/4 (1,375)		29 1/8 (740)		25 % (645)		
Drawers	2	14 5/8	(371)	26 <sup>15</sup> /16 (684)		1 <sup>11</sup> /16 (43)		
	3	14 5/8	(371)	26 <sup>15</sup> /16 (0	684)	4 (102)		
	2	30 1/2	(775)	26 <sup>15</sup> /16 (0	684)	1 <sup>11</sup> /16 (43)		
	3	30 1/2	(775)	26 <sup>15</sup> /16 (0	684)	4 (102)		
Top Compartment	_	53 ¾ (	1,368)	26 <sup>7</sup> /8 (6	683) 4 1/8 (105)			

# **KRL1251 Series Top Chest**

Cubic inches (cm³) 16,348 (267,780)	- (cm	Square inches (cm²)         Net Weight, lbs (kg)         Shi           5.059 (32,631)         267 (121)		ipping Weight, Ibs (kg) 306 (140)		
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	5	35 <sup>5</sup> /8	(905)	29 <sup>1</sup> / <sub>8</sub> (7	40)	25 <sup>3</sup> / <sub>8</sub> (645)
Drawers	2	30 <sup>1</sup> / <sub>2</sub>	(775)	26 <sup>15</sup> /16 (0	684)	1 11/16 (43)
	3	30 <sup>1</sup> / <sub>2</sub> (775)		26 <sup>15</sup> /16 (684)		4 (102)
Top Compartment	_	35 <sup>3</sup> /8	(899)	26 <sup>7</sup> /8 (6	83)	4 <sup>1</sup> /8 (105)

All KRL Series units are available in 10 standard colors. Add suffix to base stock number for special colors.

# **Top Chests**

# **KRL791A Series Top Chest**

Cubic inches (cm³)		Square inches (cm²)		Net Weight, lbs (kg)		Shipping Weight, lbs (kg)	
15,927 (260,884)	5,132 (3	3,101)	302 (137)			384 (174)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	8	54 <sup>1</sup> /4 (	(1,375)	24 (610)		21 (533)	
Drawers	2	14 <sup>5</sup> /8	(371)	21 <sup>7</sup> /8 (557)		1 11/16 (43)	
	2	14 <sup>5</sup> /8	(371)	21 <sup>7</sup> /8 (5	57)	4 (102)	
	2	30 <sup>1</sup> / <sub>2</sub>	(775)	21 <sup>7</sup> /8 (5	57)	1 11/16 (43)	
	2	30 <sup>1</sup> / <sub>2</sub> (775)		21 <sup>7</sup> /8 (557)		4 (102)	
Top Compartment	_	53 <sup>7</sup> /8 (1,368)		21 3/4 (552)		4 <sup>1</sup> /8 (105)	

# **KRL751 Series Top Chest**

Cubic inches (cm³)	Square (cm		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)	
13,294 (217,756)	4,115 (2	26,542)	194	194 (88)		245 (111)
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	4	35 <sup>5</sup> / <sub>8</sub>	(905)	24 (610)		21 (533)
Drawers	2	30 1/2	(775)	21 % (5	57)	1 11/16 (43)
	2	30 ½ (775)		21 <sup>7</sup> / <sub>8</sub> (557)		4 (102)
Top Compartment	I	35 ¾	(899)	21 ¾ (552)		4 ½ (105)



KRL791APAW



KRL751PC

# **Work Centers & Bulk Overhead Cabinets**

## **Work Centers**

- · Factory assembled unit complete with door
- Work surface required

Specifications	KRL7972A	KRL7954A	KRW7554A	
Cubic Inches (cm³)	32,156 (526,708)	23,768 (389,326)	16,945 (277,552)	
Square Inches (cm²)	4,243 (27,365)	3,371 (21,743)	2,884 (18,605)	
Width, inches (mm)	72 <sup>7</sup> /8 (1,851)	54 <sup>1</sup> /4 (1,378)	54 <sup>1</sup> /4 (1,378)	
Height, inches (mm)	23 1/2 (597)	23 1/2 (597)	23 1/2 (597)	
Depth, inches (mm)	27 <sup>1</sup> / <sub>2</sub> (699)	27 <sup>1</sup> / <sub>2</sub> (699)	21 (533)	

KRL Workcenters includes (1) KAT12PV and (1) KAS12PV. All include 63A5000 clip kit.

# 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 2 202 2 202 2 202 2 202 2 202 2 202 2 202 2 202 2 202 2 202 2 202 2 202 2 202 2 202 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 KRL7972APJJ



# **Bulk Overhead Cabinets**

Specifications	KRL7245A	KRL5445A	KRWL5435
Cubic Inches (cm³)	26,814 (439,219)	19,629 (321,516)	15,076 (246,948)
Square Inches (cm²)	1,740 (11,224)	1,274 (8,216)	1,042 (6,719)
Width, inches (mm)	72 <sup>7</sup> /8 (1,851)	54 <sup>1</sup> /4 (1,378)	54 <sup>1</sup> /4 (1,378)
Height, inches (mm)	18 <sup>1</sup> /8 (460)	18 <sup>1</sup> /8 (460)	16 (406)
Depth, inches (mm)	27 1/2 (699)	27 <sup>1</sup> / <sub>2</sub> (699)	21 (533)











- Do not open multiple drawers Read safety precautions on pages W1 to W4

# **MASTERS SERIES**

# **Drawer End Cabinets**



KRL1221PC









# **KRL1221 Series Top Cabinet**

Cubic inches (cm³)	Square (cm		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)		
8,115 (132,924)	2,469 (1	5,925)	,925) 170 (77)			218 (99)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	5	19 3⁄4	(502)	29 <sup>1</sup> /8 (740)		25 % (645)	
Drawers	2	14 <sup>5</sup> / <sub>8</sub>	(371)	26 <sup>15</sup> /16 (684)		1 <sup>11</sup> /16 (43)	
	3	14 % (371)		26 <sup>15</sup> /16 (684)		4 (102)	
<b>Top Compartment</b>	_	18 %16 (471)		(471) 26 <sup>7</sup> / <sub>8</sub> (68		4 1/8 (105)	

# **KRL1011A Series End Cabinet**

Cubic inches (cm³)		quare inches (cm²)		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)	
10,735 (175,839)	3,152 (2	20,330) 267		7 (121)		295 (134)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	8	19 ¾	(502)	29 ½ (740)		37 <sup>5</sup> /16 (948)	
Drawers	3	14 <sup>5</sup> ⁄8	(371)	26 <sup>15</sup> /16 (0	684)	1 <sup>11</sup> / <sub>16</sub> (43)	
	4	14 % (371)		26 <sup>15</sup> /16 (684)		4 (102)	
	1	14 <sup>5</sup> ⁄8	(371)	26 <sup>15</sup> / <sub>16</sub> (685)		6 <sup>3</sup> /16 (157)	

# **KRL7011A Series End Cabinet**

Cubic inches (cm³)	Square (cn		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)		
9,160 (150,041)	2,758 (1	7,789)	230	0 (104)		267 (121)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	7	19 3⁄4	(502)	29 1/8 (740)		32 <sup>15</sup> /16 (837)	
Drawers	3	14 <sup>5</sup> ⁄8	(371)	26 <sup>15</sup> /16 (0	684)	1 <sup>11</sup> / <sub>16</sub> (43)	
	3	14 <sup>5</sup> / <sub>8</sub> (371)		26 <sup>15</sup> / <sub>16</sub> (684)		4 (102)	
	1	14 %	(371)	26 <sup>15</sup> /16 (684)		6 <sup>3</sup> /16 (157)	

# **KRL711A Series End Cabinet**

Cubic inches (cm³)	Square (cn		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)	
7,438 (121,834)	2,239 (1	4,442) 19		193 (88)		225 (102)
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	7	19 3⁄4	(502)	) 24 (610)		32 <sup>15</sup> /16 (837)
Drawers	3	14 <sup>5</sup> ⁄8	(371)	1) 21 <sup>7</sup> / <sub>8</sub> (557)		1 <sup>11</sup> /16 (43)
	3	14 % (371)		(371) 21 % (557		4 (102)
	1	14 5/8	(371) 21 7/8 (55		57)	6 3/16 (157)

All KRL Series units are available in 10 standard colors. Add suffix to base stock number for special colors.

# PowerCab™ End Cabinets

# KRL1099 Series PowerCab End Cabinet

Cubic inches (cm³)		quare inches (cm²)		Net Weight, lbs (kg)		Shipping Weight, lbs (kg)	
11,375 (186,323)	1,584 (1	1,584 (10,217)		184 (83)		220 (100)	
	Drawers	Width, inches (mm)		Depth, in (mm)		Height, inches (mm)	
Specifications	1	19 3⁄4	(502)	29 <sup>1</sup> / <sub>8</sub> (7	40)	37 <sup>5</sup> ⁄16 (948)	

<sup>•</sup> Includes 2 adjustable shelves



**Bulk End Cabinets** 

# **KRL1015B Series Bulk End Cabinet**

Cubic inches (cm³)	Square (cm		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)	
11,608 (190,139)	1,094 (	7,056) 184 (8		4 (83)	220 (100)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	2	19 ¾	(502)	29 <sup>1</sup> / <sub>8</sub> (740)		37 <sup>5</sup> /16 (948)
Drawers	2	13 ½ (337)		24 3/4 (629)		4 (102)
Shelves	1	16 1/4	(413)	25 % (645)		Adjustable

# **KRL7015B Series Bulk End Cabinet**

Cubic inches (cm³)	Square (cm		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)	
9,770 (160,033)	1,094 (	7,056)	142 (64)			181 (82)
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	2	19 ¾	(502)	29 <sup>1</sup> /8 (740)		32 <sup>15</sup> /16 (837)
Drawers	2	13 1/4 (337)		24 3/4 (629)		4 (102)
Shelves	1	16 1/4	16 1/4 (413)		45)	Adjustable

# **KRL715B Series Bulk End Cabinet**

ML, 130 Series Datk Ena Cabinet							
Cubic inches (cm³)	Square (cn		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)		
7,984 (130,778)	894 (5	,766) 122 (55)		2 (55)	159 (72)		
	Drawers		Width, inches (mm)			Height, inches (mm)	
Specifications	2	19 ¾	(502)	24 (610)		32 <sup>15</sup> /16 (837)	
Drawers	2	13 1/4 (337)		20 1/8 (511)		4 (102)	
Shelves	1	16 1/4	(413)	20 11/16 (	525)	Adjustable	



KRL1015BPBO











- Secure end cabinet to roll cabinet per instructions
   Do not open multiple drawers
   Read safety precautions on pages W1 to W4

<sup>•</sup> Includes integrated power strip

# **MASTERS SERIES**

# Lockers



KRL1012BPBO

# **KRL1012B Series Locker**

Cubic inches (cm³)		quare inches (cm²)		Net Weight, lbs (kg)		Shipping Weight, lbs (kg)	
28,446 (465,945)	3,564 (2	2,988) 30		306 (139)		369 (167)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	4	24 ½16 (611)		29 ½ (740)		62 <sup>3</sup> / <sub>8</sub> (1,584)	
Drawers	4	19 7/16 (495)		25 1/8 (638)		4 (102)	
Shelves	3	24 1/16 (611)		(611) 22 3/4 (578)		Adjustable	
Trays	2	17 <sup>7</sup> /8	(454)	(454) 3 ½ (79)		4 (102)	

## **KRL7012A Series Locker**

Cubic inches (cm³)	Square (cm		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)		
26,085 (427,272)	3,564 (2	2,988) 2		285 (129)		345 (156)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	4	24 ½16 (611)		29 ½ (740)		57 <sup>15</sup> /16 (1,472)	
Drawers	4	19 ½ (495)		95) 25 ½ (638)		4 (102)	
Shelves	3	24 1/16 (611)		(611) 22 <sup>3</sup> / <sub>4</sub> (578)		Adjustable	
Trays	2	17 <sup>7</sup> /8	(454)	3 1/8 (79)		4 (102)	

### **KRL712B Series Locker**

Cubic inches (cm³)	Square (cm		Net Weight, lbs (kg)		Shipping Weight, lbs (kg)	
20,568 (336,904)	2,831 (1	8,260)	238 (108)		297 (135)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	4	24 1/16 (611)		24 (610)		53 <sup>7</sup> /16 (1,357)
Drawers	4	19 <sup>7</sup> /16 (495)		20 (508)		4 (102)
Shelves	3	21 ½16 (535)		) 17 %16 (446		Adjustable
Trays	3	17 7/8	(454)	3 1/8 (7	9)	4 (102)

# **Vertical Storage Modules**



1012AVSMPV

# Vertical Storage Modules • Provide exceptional visual upright storage

- Organize puller sets, pliers, screwdrivers, wrenches and more
- 5 easy operating slide out panels
- Not for use with Docker Locker<sup>®</sup> lockers

1012AVSMPV: Fits KRL1012B/KRL7012A series lockers and TUVs

712AVSMPV: Fits KRL712B series lockers



All KRL Series units are available in 10 standard colors. Add suffix to base stock number for special colors.

# Docker Locker® Lockers



### KRL7018 Series similar in appearance.

### **Docker Locker Lockers**

Provides a quick way to secure tools and gives additional bulk storage. Includes a roll cart designed to fit locker (not available separately), KAT18PV can rack and one adjustable shelf. Mounts on either side of KRL1000 or KRL7000 Series roll cabs. Not designed for use with standard roll carts.

### **KRL1018 Series**

Cubic inches	Square inches (cm²)	Net Weight,	Shipping Weight,	
(cm³)		lbs (kg)	lbs (kg)	
31,642 (518,296)	1,578 (10,178)	202 (92)	295 (134)	
	Width, inches	Depth, inches	Height, inches	
	(mm)	(mm)	(mm)	
Specifications	24 1/16 (611)	29 1/8 (740)	62 % (1,584)	

### **KRL7018 Series**

Cubic inches (cm³)	Square inches (cm²)	Net Weight, Ibs (kg)	Shipping Weight, lbs (kg)	
29,139 (477,297)	1,578 (10,178)	190 (86)	287 (130)	
	Width, inches (mm)	Depth, inches (mm)	Height, inches (mm)	
Specifications	24 ½16 (611)	29 1/8 (740)	57 <sup>15</sup> ⁄16 (1,472)	

(U.S. Patent 6,719,384)











- Secure end cabinet to roll cabinet per instructions
- Do not open multiple drawers
   Read safety precautions on pages W1 to W4

# **MASTERS SERIES**

# Tool Utility Vehicles (TUV)



### KRLP1032A Series TUV

THE TOTELLES TOT							
Cubic inches (cm³)	Square incl	Square inches (cm²)		Weight, os (kg)	Load Capacity, lbs (kg)		
113,947	19,4			1,975		6,000	
(1,866,452)	(125,2	298)		(896)		(2,722)	
	Drawers	Width, ii (mm		Depth, inches (mm)		Height, inches (mm)	
Specifications	16	124 (3,150)		29 <sup>7</sup> / <sub>8</sub> (759) 35 for tires (889)		70 (1,778)	
Drawers in	3	14 <sup>5</sup> /8 (371)		26 <sup>15</sup> /16 (684)		1 <sup>11</sup> / <sub>16</sub> (43)	
Roll Cab	1	14 <sup>5</sup> /8 (	371)	26 <sup>15</sup> /16 (	684)	4 (102)	
	1	14 <sup>5</sup> /8 (	371)	26 <sup>15</sup> /16 (	684)	10 <sup>5</sup> /8 (270)	
	1	49 <sup>1</sup> /8 (1	,248)	26 <sup>15</sup> /16 (	684)	1 <sup>9</sup> /16 (40)	
	3	49 <sup>1</sup> / <sub>8</sub> (1	,248)	26 <sup>15</sup> /16 (	684)	3 13/16 (97)	
	1	49 <sup>1</sup> /8 (1	,248)	26 <sup>15</sup> /16 (	684)	6 (152)	
	1	67 <sup>1</sup> /8 (1	,705)	26 <sup>15</sup> /16 (	684)	4 <sup>7</sup> /8 (124)	
	1	67 <sup>1</sup> /8 (1	,705)	26 <sup>15</sup> /16 (	684)	2 11/16 (68)	
<b>Locker Drawers</b>	4	19 <sup>7</sup> /16 (	(494)	25 <sup>1</sup> /8 (6	38)	4 (102)	
Locker Shelves	4	21 <sup>1</sup> /16 (	(535)	22 <sup>3</sup> /4 (5	78)	Adjustable	
Can Tray	1	17 <sup>7</sup> /8 (4	454)	3 1/8 (7	9)	4 (102)	
Work Center	Dimensions	71 <sup>3</sup> / <sub>8</sub> (1	,813)	23 3/4 (6	03)	23 (584)	

### Ontional Add-Ons Available

Optional Add-Ons Available						
Top Chest	_					
Side Cab	_					
End Cab	_					
Middle Drawer Section	_					
Locker	2 Included					
Workstation Riser	KRL7972A Included					
Hardwood Top	KRWT7003A option					
Stainless Top	Included KRSST7003B					
Protective Cover (roll cab)	KACP1023 option					
Third Caster Set Option	_					
Verticle Storage Option	_					
Overhead	KRL7245A option					

Includes (1) KAS12PV, (1) KASR12PV and (1) writing surface

# Colors Available Red Gloss Royal Black Blue Vellow Apple Red Green Orange Silver Cranberry PAW PBO PC PCM PES PJH PJJ PJK PKS PM

# **KRLT1032A Series TUV**

Cubic inches (cm³)		Square inches (cm²)		Net Weight, Ibs (kg)		Load Capacity, lbs (kg)	
120,528 (1,974,249)	26,7 (172,			2,350 1,066)		6,000 (2,722)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	26	124 (3,	150)	29 <sup>7</sup> / <sub>8</sub> (7 35 for tires	,	70 (1,778)	
Drawers in	5	14 <sup>5</sup> /8 (371)		26 <sup>15</sup> /16 (	684)	1 <sup>11</sup> / <sub>16</sub> (43)	
Roll Cab/Top Chest	4	14 <sup>5</sup> /8 (	(371)	26 <sup>15</sup> /16 (684)		4 (102)	
Unicat	1	14 <sup>5</sup> /8 (	(371)	26 <sup>15</sup> /16 (684)		10 <sup>5</sup> /8 (270)	
	3	49 <sup>1</sup> /8 (1	,248)	26 <sup>15</sup> /16 (684)		1 <sup>9</sup> /16 (40)	
	3	49 <sup>1</sup> /8 (1	1,248)	26 <sup>15</sup> /16 (	684)	3 <sup>13</sup> /16 (97)	
	1	<b>49</b> <sup>1</sup> /8 (1	1,248)	<b>26</b> <sup>15</sup> /16 (	684)	6 (152)	
	1	67 <sup>1</sup> /8 (1	1,705)	26 <sup>15</sup> /16 (684)		4 <sup>7</sup> /8 (124)	
	1	67 <sup>1</sup> /8 (1	1,705)	26 <sup>15</sup> / <sub>16</sub> (684)		2 <sup>11</sup> /16 (68)	
Locker Drawers	4	<b>19</b> <sup>7</sup> /16	(494)	25 <sup>1</sup> / <sub>8</sub> (638)		4 (102)	
Locker Shelves	4	21 <sup>1</sup> /16 (535)		22 <sup>3</sup> /4 (5	78)	Adjustable	
Can Tray	1	17 <sup>7</sup> /8 (	(454)	3 <sup>1</sup> /8 (7	9)	4 (102)	
Top Chest	Narrow	18 <sup>9</sup> /16	(471)	26 <sup>7</sup> /8 (6	83)	4 <sup>1</sup> /8 (105)	
Compartment	Wide	53 <sup>7</sup> /8 (1	1,348)	26 <sup>7</sup> /8 (6	83)	4 <sup>1</sup> /8 (105)	

# **Optional Add-Ons Available**

•	· · · · · · · · · · · · · · · · · · ·						
Top Chest	KRL1232 included						
Side Cab	_						
End Cab	_						
Middle Drawer Section	_						
Locker	2 Included						
Workstation Riser	_						
Hardwood Top	_						
Stainless Top	_						
Protective Cover (roll cab)	KACP1023 option						
Third Caster Set Option	_						
Verticle Storage Option	_						
Overhead	_						

Includes (1) KASR12PV and (1) writing surface

All KRL Series units are available in 10 standard colors. Add suffix to base stock number for special colors.

# Tool Utility Vehicles (TUV)





### **KRLP1023A Series TUV**

Cubic inches (cm³)	Square inch	Square inches (cm²)		Net Weight, Ibs (kg)		Load Capacity, lbs (kg)	
111,477 (1,825,993)	20,27 (130,7			1,975 (896)		6,000 (2,722)	
(1,020,000)	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	26	124 (3,150)		29 <sup>7</sup> / <sub>8</sub> (7 35 for tires		70 (1,778)	
Drawers in	8	14 <sup>5</sup> /8 (	(371) 26 15/16 (684		684)	1 11/16 (43)	
Roll Cab	4	14 <sup>5</sup> /8 (	(371)	26 <sup>15</sup> /16 (	684)	4 (102)	
	1	14 <sup>5</sup> /8 (	(371)	26 <sup>15</sup> /16 (	(684)	6 <sup>3</sup> /16 (157)	
	1	14 <sup>5</sup> /8 (	(371)	26 <sup>15</sup> /16 (	684)	10 5/8 (270)	
	3	30 <sup>1</sup> / <sub>2</sub> (	(775)	26 <sup>15</sup> /16 (	(684)	1 11/16 (43)	
	2	30 <sup>1</sup> / <sub>2</sub> (	(775)	26 <sup>15</sup> /16 (	684)	4 (102)	
	1	30 <sup>1</sup> / <sub>2</sub> (	(775)	26 <sup>15</sup> /16 (	(684)	6 <sup>3</sup> /16 (157)	
	1	49 <sup>1</sup> /8 (1	,248)	26 <sup>15</sup> /16 (	684)	4 <sup>7</sup> /8 (124)	
	1	49 <sup>1</sup> /8 (1	,248)	26 <sup>15</sup> /16 (	684)	2 11/16 (68)	
Locker Drawers	4	19 <sup>7</sup> / <sub>16</sub>	(494)	25 <sup>1</sup> /8 (6	38)	4 (102)	
Locker Shelves	4	21 <sup>1</sup> / <sub>16</sub>	(535)	22 <sup>3</sup> / <sub>4</sub> (5	578)	Adjustable	
Can Tray	1	17 <sup>7</sup> /8 (	(454)	3 <sup>1</sup> /8 (7	79)	4 (102)	
Work Center	Dimensions	71 <sup>3</sup> / <sub>8</sub> (1	.813)	23 3/4 (6	603)	23 (584)	

Includes (1) KAS12PV shelf, (1) KASR12PV screwdriver rack and (1) writing surface

# **Optional Add-Ons Available**

optionat/taa ons/traitable						
Top Chest	_					
Side Cab	_					
End Cab	_					
Middle Drawer Section	_					
Locker	2 Included					
<b>Workstation Riser</b>	KRL7972A Included					
Hardwood Top	KRWT7003A option					
Stainless Top	Included KRSST7003B					
Protective Cover (roll cab)	KACP1023 option					
Third Caster Set Option	_					
Verticle Storage Option	_					
Overhead	KRL7245A option					

### **KRLT1023A Series TUV**

Cubic inches (cm³)		Square inches (cm²)		Net Weight, lbs (kg)		Load Capacity, lbs (kg)	
117,472 (1,924,191)	27,0 (174,			2,350 ,066)		6,000 (2,722)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	41	124 (3	,150)	29 <sup>7</sup> / <sub>8</sub> (7 35 for tires		70 (1,778)	
Drawers in	12	14 <sup>5</sup> /8	(371)	26 <sup>15</sup> /16 (	684)	1 11/16 (43)	
Roll Cab /Top Chest	10	14 <sup>5</sup> /8	(371)	26 <sup>15</sup> /16 (	684)	4 (102)	
Glest	1	14 <sup>5</sup> /8	(371)	26 <sup>15</sup> /16 (	684)	6 <sup>3</sup> /16 (157)	
	1	14 <sup>5</sup> /8	(371)	26 <sup>15</sup> /16 (684)		10 <sup>5</sup> /8 (270)	
	5	30 <sup>1</sup> / <sub>2</sub>	(775)	<b>26</b> <sup>15</sup> /16 (	684)	1 <sup>11</sup> / <sub>16</sub> (43)	
	5	30 <sup>1</sup> / <sub>2</sub>	(775)	<b>26</b> <sup>15</sup> /16 (	684)	4 (102)	
	1	30 <sup>1</sup> / <sub>2</sub> (775)		26 <sup>15</sup> /16 (684)		6 <sup>3</sup> /16 (157)	
	1	49 <sup>1</sup> / <sub>8</sub> (	1,248)	26 <sup>15</sup> / <sub>16</sub> (684)		4 <sup>7</sup> /8 (124)	
	1	49 <sup>1</sup> /8 (	1,248)	26 <sup>15</sup> / <sub>16</sub> (684)		2 <sup>11</sup> /16 (68)	
Locker Drawers	4	<b>19</b> <sup>7</sup> / <sub>16</sub>	(494)	25 <sup>1</sup> / <sub>8</sub> (638)		4 (102)	
Locker Shelves	4	<b>21</b> <sup>1</sup> / <sub>16</sub>	(535)	22 <sup>3</sup> /4 (5	78)	Adjustable	
Can Tray	1	17 <sup>7</sup> /8	(454)	3 <sup>1</sup> /8 (7	9)	4 (102)	
Top Chest	Narrow	18 <sup>9</sup> /16	(471)	26 <sup>7</sup> /8 (6	83)	4 <sup>1</sup> / <sub>8</sub> (105)	
Compartment	Wide	53 <sup>7</sup> /8 (	1,368)	26 <sup>7</sup> /8 (6	83)	4 <sup>1</sup> / <sub>8</sub> (105)	

Includes (1) KASR12PV screwdriver rack and (1) writing surface

# **Optional Add-Ons Available**

- F							
Top Chest	KRL1203B Included						
Side Cab	_						
End Cab	_						
Middle Drawer Section	_						
Locker	2 Included						
Workstation Riser	_						
Hardwood Top	_						
Stainless Top	_						
Protective Cover (roll cab)	KACP1023 option						
Third Caster Set Option	_						
Verticle Storage Option	_						
Overhead	_						









- Do not open multiple drawers
   Read safety precautions on pages W1 to W4

# **MASTERS SERIES**

# Tool Utility Vehicles (TUV)



# **KRLP1022A Series TUV**

Cubic inches (cm³)	Square inch	ies (cm²)		Weight, s (kg)	Load Capacity, lbs (kg)		
98,413	16,86	88		1,582		6,000	
(1,612,005)	(108,7	99)		(718)		(2,722)	
	Drawers	Width, ii (mn		es Depth, inche (mm)		Height, inches (mm)	
Specifications	17	106 (2,	692)	29 <sup>7</sup> / <sub>8</sub> (759) 35 for tires (889)		70 (1,778)	
Drawers in	3	14 <sup>5</sup> /8 (	371)	26 <sup>15</sup> /16 (684)		1 <sup>11</sup> / <sub>16</sub> (43)	
Roll Cab	1	14 <sup>5</sup> /8 (	14 <sup>5</sup> /8 (371)		(684)	4 (102)	
	1	14 <sup>5</sup> /8 (	371)	26 <sup>15</sup> /16 (684)		10 <sup>5</sup> /8 (270)	
	3	30 <sup>1</sup> / <sub>2</sub> (	775)	26 <sup>15</sup> /16 (684)		1 11/16 (43)	
	2	30 <sup>1</sup> / <sub>2</sub> (	775)	26 <sup>15</sup> /16 (684)		4 (102)	
	1	30 <sup>1</sup> / <sub>2</sub> (	775)	26 <sup>15</sup> /16 (	(684)	6 <sup>3</sup> /16 (157)	
	1	49 <sup>1</sup> / <sub>8</sub> (1	,248)	26 <sup>15</sup> /16 (	(684)	4 <sup>7</sup> /8 (124)	
	1	49 <sup>1</sup> / <sub>8</sub> (1	,248)	26 <sup>15</sup> /16 (684)		2 11/16 (68)	
<b>Locker Drawers</b>	4	19 <sup>7</sup> /16 (494)		25 <sup>1</sup> /8 (6	538)	4 (102)	
Locker Shelves	4	<b>21</b> <sup>1</sup> /16	(535)	5) 22 3/4 (578)		Adjustable	
Can Tray	1	17 <sup>7</sup> /8 (	17 <sup>7</sup> /8 (454) 3 <sup>1</sup> /8 (79)		4 (102)		
Work Center	Dimensions	52 <sup>3</sup> / <sub>4</sub> (1	,340)	23 <sup>3</sup> /4 (6	503)	23 (584)	

# **Optional Add-Ons Available**

Top Chest						
ioh ouest	<del>_</del>					
Side Cab						
End Cab	1					
Middle Drawer Section	_					
Locker	2 Included					
Workstation Riser	KRL7954A Included					
Hardwood Top	KRWT7002A option					
Stainless Top	Included KRSST1001B					
Protective Cover (roll cab)	KACP1022 option					
Third Caster Set Option	_					
Verticle Storage Option	-					
Overhead	KRL5445A option					

Includes (1) KAS12PV shelf, (1) 7065JL719 writing surface and (1) KASR12PV screwdriver rack



# **KRLT1022A Series TUV**

Cubic inches (cm³)	Square (cn			Weight, s (kg)	Load Capacity, lbs (kg)		
99,267	21,0			,786		6,000	
(1,626,688)	(135,	715)	(	810)		(2,777)	
	Drawers	Width, i (mi		Depth, in (mm		Height, inches (mm)	
Specifications	27	106 (2,692)		29 <sup>7</sup> / <sub>8</sub> (7 35 for tires		70 (1,778)	
Drawers in	5	14 <sup>5</sup> /8	(371)	26 <sup>15</sup> /16 (	684)	1 <sup>11</sup> /16 (43)	
Roll Cab/Top Chest	4	14 <sup>5</sup> /8 (371)		26 <sup>15</sup> /16 (684)		4 (102)	
Gliest	1	14 <sup>5</sup> /8	(371)	26 <sup>15</sup> /16 (684)		10 <sup>5</sup> /8 (270)	
	5	30 <sup>1</sup> / <sub>2</sub> (775)		26 <sup>15</sup> /16 (684)		1 11/16 (43)	
	5	30 <sup>1</sup> / <sub>2</sub>	(775)	26 <sup>15</sup> /16 (684)		4 (102)	
	1	30 <sup>1</sup> / <sub>2</sub> (775)		26 <sup>15</sup> /16 (684)		6 <sup>3</sup> /16 (157)	
	1	49 <sup>1</sup> / <sub>8</sub> (	1,248)	26 <sup>15</sup> /16 (684)		4 <sup>7</sup> /8 (124)	
	1	49 <sup>1</sup> / <sub>8</sub> (	1,248)	<b>26</b> <sup>15</sup> /16 (	684)	2 11/16 (68)	
<b>Locker Drawers</b>	4	19 <sup>7</sup> /16	(494)	25 <sup>1</sup> / <sub>8</sub> (638)		4 (102)	
Locker Shelves	4	21 1/16 (535)		22 <sup>3</sup> / <sub>4</sub> (578)		Adjustable	
Can Tray	1	17 <sup>7</sup> /8	(454)	3 1/8 (79)		4 (102)	
Top Chest	Narrow	18 <sup>9</sup> /16	(471)	26 <sup>7</sup> /8 (6	i83)	4 <sup>1</sup> /8 (105)	
Compartment	Wide	53 <sup>7</sup> /8 (	1,368)	26 <sup>7</sup> / <sub>8</sub> (683)		4 <sup>1</sup> /8 (105)	

# **Optional Add-Ons Available**

Top Chest	KRL1201A Included
Side Cab	_
End Cab	_
Middle Drawer Section	_
Locker	2 Included
Workstation Riser	_
Hardwood Top	_
Stainless Top	_
Protective Cover (roll cab)	KACP1022
Third Caster Set Option	KACP1022 option
Verticle Storage Option	_
Overhead	_

Includes (1) KAS12PV shelf and (1) writing surface



All KRL Series units are available in 10 standard colors.

Add suffix to base stock number for special colors.



**Tool Utility Vehicles (TUV)** 





**KP1023JS** 

### KATUVGRILL Stainless Steel Front Grill.

• Fits all Snap-on® TUV units

### KATUVFENDER Stainless Steel Fender.

• Fits all Snap-on TUV units

### KATUVBUMPER Stainless Steel Back Bumper.

• Fits all Snap-on TUV units

### KP1023JS Jack Stand.

• Fits all Snap-on TUV units

### KATUVBAR54 Stainless Steel Side Bar.

• 54" step bar fits KRLP1022/KRLT1022 and KRLR1022 series of TUV units

### KATUVBAR72 Stainless Steel Side Bar.

• 72" step bar fits KRLP1023/KRLT1023 and KRLP1032/KRLT1032 series of TUV units

### KATUVBRAKE54 Hydraulic Brake Kit.

• Fits KRLP1022/KRLT1022 and KRLR1022 series of TUV units

### KATUVBRAKE72 Hydraulic Brake Kit.

• Fits KRLP1023/KRLT1023 and KRLP1032/KRLT1032 series of TUV units

# KRLP/KRLT Series Body Guards

Stock No.	Description	Application			
KABGBB54	Back bottom body guard for roll cab (54" TUV)	KRLP1022/KRLT1022			
KABGBB72	Back bottom body guard for roll cab (72" TUV)	KRLP1023/KRLT1023, KRLP1032/KRLT1032			
KABGFB17	Left/Right front bottom body guard for roll cab (17 9/16")	KRLP1022/KRLT1022, KRLP1023/KRLT1023, KRLP1032/KRLT1032			
KABGFB33	Center front bottom body guard for roll cab (33 1/2")	KRLP1022/KRLT1022, KRLP1023/KRLT1023			
KABGFB52	Front bottom body guard for roll cab (52 <sup>1</sup> / <sub>4</sub> ")	KRLP1032/KRLT1032 - All units work on "A" & non-A versions			
KABGFT17	Left/right front top body guard for roll cab (17 9/16")	KRLP1023/KRLT1023, KRLP1032/KRLT1032			
KABGFT51	Front top body guard for roll cab (52 <sup>1</sup> /8")	KRLP1022/KRLT1022			
KABGFT52A	Front top body guard for roll cab (52 1/8")	KRLP1023/KRLT1023, KRLP1032/KRLT1032			
KABGFF17	Front face body guard for tool chest (5 1/16" x 17 3/16")	KRLT1023/KRLT1032			
KABGFF51	Front face body guard for tool chest (5 1/16" x 51")	KRLT1022/KRLT1023/KRLT1032			
KABGFF52	Front face body guard for workcenter (2 7/16" x 52 11/16")	KRLP1022			
KABGFF71	Front face body guard for workcenter (2 7/16" x 71 1/4")	KRLP1023/KRLP1032			
7516X70R	Locker Door Inlay (3 <sup>7</sup> /8" x 46 <sup>7</sup> /8")	KRLP1022/KRLT1022, KRLP1023/KRLT1023, KRLP1032/KRLT1032			

# **KRLP/KRLT Series Diamond Plate Top Mats**

Description	Silver Stock No.	Black Stock No.
Diamond plate top mat set for KRLP1022 Series TUV units	KPP1022DP	KPP1022RP
Diamond plate top mat set for KRLP1023/KRLP1032 Series TUV units	KPP1023DP	KPP1023RP
Diamond plate top mat set for locker tops on KRLT1022/ KRLT1023/KRLT1032 Series TUV units	KPT1023DP	KPT1023RP

# **KRLP/KRLT Series Covers**

Cover Description	Red Stock No.	Black Stock No.	Royal Blue Stock No.
Cover for KRLP1022/KRLT1022 TUV units	KACP1022	KACP1022PC	KACP1022PCM
Cover for KRLP1023/KRLT1023 TUV units	KACP1023	KACP1023PC	KACP1023PCM











- Do not open multiple drawers
   Read safety precautions on pages W1 to W4

# Classic for a Reason.

Tool storage with a future. Built on a solid past.

# More Options. More Opportunities.

Snap-on® Classic Series delivers more than just the basics. Add lockers, end cabs, a workstation riser and overhead storage to create what fits your needs.

**Customizable** — Choose your color from seven standard options, your work surface, your lighting and your protection package. Add skins and other options to make your piece unique.

Affordable — Solid value for your investment. Classic tool storage can grow with you with the addition of top boxes and other storage add-ons. Value is engineered and built into every Classic Series Snap-on makes.

**Lock-n-Roll® Drawers** — Retention system keeps drawers in place for safety and security.

**Reinforced corner gussets** — For strength and durability.

**Double wall construction** — Full-height inner wall is welded in place to ensure durable, consistent performance.



# **Quick Reference Chart**













Roll Cabs		KRA2496	KRA2432	KRA2418	KRA2411	KRA2422	KRA2407
Capacity	Approx. Cubic Inches (cm³)	33,000 (540,773)	33,000 (540,773)	33,000 (540,773)	25,000 (409,677)	25,000 (409,677)	16,000 (262,193)
	Approx. Square Inches (cm²)	8,000 (51,613)	8,500 (54,839)	8,500 (54,839)	6,300 (40,645)	6,300 (40,645)	4,700 (30,322)
	Load Capacity (kg)	2,400 (1,089)	2,400 (1,089)	2,400 (1,089)	2,400 (1,089)	2,400 (1,089)	2,400 (1,089)
Footprint	Width, inches (mm)	73 (1,854)	73 (1,854)	73 (1,854)	55 (1,397)	55 (1,397)	36 (914)
	Depth, inches (mm)	24 (610)	24 (610)	24 (610)	24 (610)	24 (610)	24 (610)
	Height, inches (mm)	39 (991)	39 (991)	39 (991)	39 (991)	39 (991)	39 (991)
Drawers	Drawer Banks	2	2	3	2	2	1
	Drawer Count	12	12	18	11	10	7
	Widest Drawer, inches (mm)	50 (1,270)	50 (1,270)	50 (1,270)	50 (1,270)	50 (1,270)	32 (813)
	Slides, lbs. (kg) (ball bearing)	120 (54)	120 (54)	120 (54)	120 (54)	120 (54)	120 (54)
	Double Slides	Yes (2 drawers)	Yes (5 drawers)	Yes (2 drawers)	Yes (2 drawers)	Yes (2 drawers)	No
Extras	Top Mat	Unidirectional Rubber	Unidirectional Rubber	Unidirectional Rubber	Unidirectional Rubber	Unidirectional Rubber	Unidirectional Rubber
	Writing Surface	Optional	Optional	Optional	Optional	Optional	Optional
Weight	Net Weight, lbs (kg)	555 (252)	547 (248)	547 (248)	412 (187)	412 (187)	320 (145)
	Shipping Weight, lbs (kg)	637 (289)	643 (292)	643 (292)	480 (218)	480 (218)	356 (162)
Optional	Top Chest	KRA2412/KRA2415	KRA2412/KRA2415	KRA2412/KRA2415	KRA2408/KRA2410	KRA2408/KRA2410	KRA2404/KRA2405
Add-ons Available	Side Cab	KRA2406	KRA2406	KRA2406	KRA2406	KRA2406	KRA2406
	Locker	KRA2403	KRA2403	KRA2403	KRA2403	KRA2403	KRA2403
	Workstation Riser w/Door	KRW7572A	KRW7572A	KRW7572A	KRW7554A	KRW7554A	No
	Overhead	KRWL3635 (2)	KRWL3635 (2)	KRWL3635 (2)	KRWL5435	KRWL5435	No
	Hardwood Top	KRWT2418	KRWT2418	KRWT2418	KRWT2411	KRWT2411	KRWT2407
	Stainless Top	KRSST2418	KRSST2418	KRSST2418	KRSST2411	KRSST2411	KRSST2407
	Armor Edge Top	KRBLT2418	KRBLT2418	KRBLT2418	KRBLT2411	KRBLT2411	No
	Third Caster Set Option	No	No	No	No	No	No



Talk to your Snap-on representative about uniquely wrapped tool storage that reflects your personal style.



(Skins shown may not be available for purchase)













• Do not open multiple drawers • Read safety precautions on pages W1 to W4

# **Roll Cabs**





### **CLASSIC Series Roll Cab Drawer Sizes**

	Width Depth Height KRA2496										
Specifications	WI	wiatn		рерти		gnt	KKA2496	KRA2432			
	Inches	mm	Inches	mm	Inches	mm	Drawers	Drawers			
2" Narrow	14 <sup>5</sup> /8	371	21 <sup>7</sup> /8	557	1 <sup>11</sup> /16	43	1	3			
4" Narrow	14 <sup>5</sup> /8	371	21 <sup>7</sup> /8	557	4	102	3	2			
6" Narrow	14 <sup>5</sup> /8	371	21 <sup>7</sup> /8	557	6 <sup>3</sup> /16	157	1	_			
10" Narrow	14 <sup>5</sup> /8	371	21 <sup>7</sup> /8	557	10 <sup>9</sup> /16	270	_	1			
2" Wide	30 1/2	775	21 <sup>7</sup> /8	557	1 <sup>11</sup> /16	43	3	_			
4" Wide	30 <sup>1</sup> / <sub>2</sub>	775	21 <sup>7</sup> /8	557	4	102	2	_			
6" Wide	30 1/2	775	21 <sup>7</sup> /8	557	6 <sup>3</sup> /16	157	1	_			
2" Extra Wide	49 <sup>1</sup> /8	1,248	21 <sup>7</sup> /8	557	1 <sup>9</sup> /16	40	_	1			
4" Extra Wide	49 <sup>1</sup> /8	1,248	21 <sup>7</sup> /8	557	4	102	1	4			
6" Extra Wide	49 <sup>1</sup> / <sub>8</sub>	1,248	21 <sup>7</sup> /8	557	6 <sup>3</sup> /16	157	_	1			
	Total Drawer Count										

### Colors Available



All CLASSIC Series units are available in 8 standard colors.

Add suffix to base stock number for special colors.

# **Roll Cabs**









# **CLASSIC Series Roll Cab Drawer Sizes**

o	Wi	Width		pth	Hei	Height		KRA2418	KRA2411	KRA2407
Specifications	Inches	mm	Inches	mm	Inches	mm	Drawers	Drawers	Drawers	Drawers
2" Narrow	14 <sup>5</sup> /8	371	21 <sup>7</sup> /8	557	1 <sup>3</sup> / <sub>4</sub>	43	1	4	1	_
4" Narrow	14 <sup>5</sup> /8	371	21 <sup>7</sup> /8	557	4	102	1	5	2	_
6" Narrow	14 <sup>5</sup> /8	371	21 <sup>7</sup> /8	557	6 <sup>3</sup> /16	157	_	1	_	_
10" Narrow	14 <sup>5</sup> /8	371	21 <sup>7</sup> /8	557	10 <sup>9</sup> /16	270	1	1	1	_
2" Wide	30 <sup>1</sup> / <sub>2</sub>	775	21 <sup>7</sup> /8	557	1 <sup>3</sup> / <sub>4</sub>	43	3	3	3	3
4" Wide	30 <sup>1</sup> / <sub>2</sub>	775	21 <sup>7</sup> /8	557	4	102	1	2	2	3
6" Wide	30 1/2	775	21 <sup>7</sup> /8	557	6 <sup>3</sup> /16	157	1	1	1	1
4" Extra Wide	49 <sup>1</sup> /8	1,248	21 <sup>7</sup> /8	557	3 <sup>13</sup> /16	97	_	1	1	_
5" Extra Wide	49 <sup>1</sup> /8	1,248	21 <sup>7</sup> /8	557	4 <sup>7</sup> /8	124	1	_	_	_
3" Extra Wide	49 <sup>1</sup> / <sub>8</sub>	1,248	21 <sup>7</sup> /8	557	2 11/16	68	1	_	_	_
-			wer Count	10	18	11	7			

# **Top Chests**



### KRA2415PBO

# **KRA2415 Series Top Chest**

Cubic inches (cm³)	Square inches (cm²)			Weight, s (kg)	Shipping Weight, Ibs (kg)		
28,348 (464,540)	8,174 (	52,735)	49	496 (225)		555 (252)	
	Drawers	rawers Width, i				Height, inches (mm)	
Specifications	15	73 <sup>3</sup> /8 (	1,864)	24 (609)		28 <sup>5</sup> /8 (726)	
Drawers 2" Narrow	4	14 <sup>5</sup> /8	(371) 21 7/8 (55		57)	1 3/4 (40)	
4" Narrow	6	14 <sup>5</sup> /8	(371) 21 7/8 (		57)	4 (102)	
2" Wide	2	30 <sup>9</sup> /16	(775)	775) 21 <sup>7</sup> /8 (557)		1 11/16 (43)	
4" Wide	3	30 <sup>9</sup> /16	(775)	21 <sup>7</sup> /8 (5	57)	4 (102)	
Top Compartment		72 (1,	829)	23 <sup>3</sup> /4 (6	03)	5 (127)	













# **Roll Cabs**



KRA2412PCM (Top Mat Optional)



KRA2410PBO



KRA2408PCM (Top Mat Optional)



KRA2405PC

All CLASSIC Series units are available in 8 standard colors. Add suffix to base stock number for special colors.

# **KRA2412 Series Top Chest**

Cubic inches (cm³)	Square (cm		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)		
17,753 (290,920)	5,229 (3	3,735)	405	405 (184)		455 (206)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	12	73 <sup>3</sup> /8 (	(1,864)	24 (609)		22 (559)	
Drawers	2	14 <sup>5</sup> /8	(371)	21 <sup>7</sup> /8 (5	56)	1 <sup>3</sup> / <sub>4</sub> (43)	
	6	14 <sup>5</sup> /8	(371)	21 <sup>7</sup> /8 (5	56)	4 (102)	
	1	30 <sup>1</sup> / <sub>2</sub>	(775)	21 <sup>7</sup> /8 (5	56)	1 <sup>3</sup> / <sub>4</sub> (43)	
	3	30 <sup>1</sup> / <sub>2</sub>	(775)	21 <sup>7</sup> / <sub>8</sub> (556)		4 (102)	

# **KRA2410 Series Top Chest**

	Chinaina Wainta Chinaina Wainta									
Cubic inches (cm³)	Square inches (cm²)		Net W lbs	leight, (kg)	Shipping Weight, lbs (kg)					
21,283 (348,766)	6,137 (39	9,593)	361	(163)	417 (189)					
	Drawer Description	Drawers	Width, inches (mm)	Depth, inches (mm)	Height, inches (mm)					
Specifications		10	55 (1,397)	24 (607)	28 5/8 (726)					
Drawers	2" Narrow	2	14 <sup>5</sup> /8 (371)	21 <sup>7</sup> /8 (557)	1 11/16 (43)					
	4" Narrow	3	14 <sup>5</sup> /8 (371)	21 <sup>7</sup> /8 (557)	4 (102)					
	2" Wide	2	30 <sup>1</sup> / <sub>2</sub> (775)	21 <sup>7</sup> /8 (557)	1 <sup>11</sup> /16 (43)					
	4" Wide	3	30 <sup>1</sup> / <sub>2</sub> (775)	21 <sup>7</sup> /8 (557)	4 (102)					
<b>Top Compartment</b>		_	54 (1,372)	23 3/4 (603)	5 (125)					

# **KRA2408 Series Top Chest**

Cubic inches (cm³)	Square (cn			Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)	
13,531 (221,700)	3,951 (2	25,490) 310		(140)		361 (164)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	8	55 (1	,397)	24.0 (609)		21 (533)	
Drawers	1	14 <sup>5</sup> /8	(371)	21 <sup>7</sup> /8 (557)		1 <sup>11</sup> /16 (43)	
	3	14 <sup>5</sup> /8	(371)	21 <sup>7</sup> /8 (5	57)	4 (102)	
	1	30 <sup>1</sup> / <sub>2</sub> (775)		21 <sup>7</sup> /8 (557)		1 <sup>11</sup> /16 (43)	
	3	30 <sup>1</sup> / <sub>2</sub>	(775)	21 <sup>7</sup> /8 (557)		4 (102)	

# **KRA2405 Series Top Chest**

Cubic inches (cm³)	Square (cm		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)		
14,333 (234,875)	4,139 (2	6,703) 2		2 (101)		281 (127)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	5	<b>36</b> 3/8	(924)	24 (609)		28 (711)	
Drawers	2	30 <sup>1</sup> / <sub>2</sub>	(775)	21 <sup>7</sup> /8 (5	57)	1 11/16 (43)	
	3	30 <sup>1</sup> / <sub>2</sub>	(775)	21 <sup>7</sup> /8 (5	57)	4 (102)	
<b>Top Compartment</b>	_	35 <sup>3</sup> / <sub>4</sub>	(907)	)7) 23 <sup>3</sup> / <sub>4</sub> (6		5 (125)	

### Colors Available



# **Top Chests**

# **KRA2404 Series Top Chest**

Cubic inches (cm³)		quare inches (cm²)		Net Weight, lbs (kg)		Shipping Weight, lbs (kg)					
9,086 (148,893)	2,672 (1	7,238)	20	0 (91)		254 (115)					
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)					
Specifications	4	36 <sup>3</sup> /8	(924)	24 (60	9)	21 (533)					
Drawers	1	30 <sup>1</sup> / <sub>2</sub>	(775)	21 <sup>7</sup> /8 (557)		1 <sup>11</sup> /16 (43)					
	3	30 <sup>1</sup> / <sub>2</sub>	(775)	21 <sup>7</sup> /8 (557)		4 (102)					



KRA2404PBO (Top Mat Optional)

**Workstation Risers** 

### **Workstation Risers**

- Factory assembled unit complete with door
- Work surface required (See page 381)

Stock Number	KRA2472 Riser	KRA2454 Riser		
Cubic inches (cm³)	22,500 (368,708)	16,945 (277,678)		
Square inches (cm²)	3,625 (23,387)	2,884 (18,606)		
Width, inches (mm)	73 (1,854)	54 <sup>3</sup> /4 (1,391)		
Height, inches (mm)	27 (686)	27 (686)		
Depth, inches (mm)	24 (610)	24 (610)		



# Lockers

# **KRA2403 Series Lockers**

Cubic inches (cm³)	Square inches (cm²)			Net Weight, lbs (kg)		Shipping Weight, lbs (kg)	
17,035 (279,154)	2,509 (16,188)		375 (170)			418 (189)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	3	24 <sup>3</sup> / <sub>4</sub> (635)		24 (610)		61 (1,549) w/casters 54 (1,372) w/out casters	
Drawers	3	20 <sup>3</sup> /8	(518)	(518) 19 <sup>1</sup> / <sub>2</sub> (49		3 <sup>13</sup> /16 (97)	
Shelves/Trays	3	20 <sup>3</sup> /8	(518)	21 <sup>1</sup> / <sub>2</sub> (546)		9 <sup>1</sup> / <sub>2</sub> (241)	

Ball slide capacity 125 lbs per drawer.



# **End Cabinets**

# **KRA2406 Series End Cabinets**

Cubic inches (cm³)	Square inches (cm²)		Net Weight, Ibs (kg)		Shipping Weight, Ibs (kg)				
7,574 (124,115)	1,918 (1	2,374) 22		0 (99)		258 (117)			
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)			
Specifications	6	20 <sup>1</sup> / <sub>4</sub>	(514)	24 (609)		39 <sup>1</sup> / <sub>4</sub> (997)			
Drawers	3	14 <sup>5</sup> /8	(371)	21 <sup>7</sup> /8 (5	57)	1 11/16 (43)			
	2	14 <sup>5</sup> /8 (371)		21 <sup>7</sup> /8 (557)		4 (102)			
	1	14 <sup>5</sup> /8	(371)	21 <sup>7</sup> /8 (557)		10 <sup>9</sup> /16 (270)			

Ball slide capacity 125 lbs per drawer.

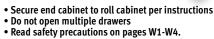














# Snap-on Doesn't Cut Corners. It Reinforces Them.

The Snap-on® Heritage Series delivers exceptional quality at a superior value. For technicians who are just starting out, the Heritage line offers a surprising array of high-end construction elements, allowing you to own a professional quality cab with proven design. Add components at your own pace and build for the future.

# **Every Detail** Adds Up to Value.

**Lock-n-Roll® Drawers** — Premium-quality drawers that won't drift open.

**Double wall construction** — Ensures an outer dent will not affect drawer performance.

**Gas-assisted lifts on top chests** — Quality hydraulic lifts for safety and performance.

Flexible storage options — Interchangeable drawers adjust to the way you work.

**Medium-duty casters** — Impact absorbing wheels with smooth performance.

**Four color options** — Add a range of optional accessories to personalize your tool storage.



# **Roll Cabs**



Roll Cabs	Specifications	KRA5318F	KRA5311F	KRA4813F	KRA4107F	KRA4008F	KRA2007F	KRA2005F
Capacity	Approx. Cubic Inches (cm³)	19,200 (314,632)	20,000 (327,741)	14,000 (229,419)	15,000 (245,806)	10,000 (163,871)	10,000 (163,871)	10,000 (163,871)
	Approx. Square Inches (cm²)	5,000 (32,258)	5,000 (32,258)	4,000 (25,806)	4,250 (27,419)	3,000 (19,355)	2,800 (18,064)	2,400 (15,484)
	Load Capacity, lbs (Kg)	2,400 (1,089)	2,400 (1,089)	2,400 (1,089)	2,400 (1,089)	1,300 (590)	1,100 (499)	1,100 (499)
Footprint	Width, inches (mm)	53 (1,397)	53 (1,397)	40 (1,016)	40 (1,016)	26 (660)	26 (660)	26 (660)
	Depth, inches (mm)	20 (508)	20 (508)	20 (508)	20 (508)	20 (508)	20 (508)	20 (508)
	Height, inches (mm)	38 <sup>1</sup> / <sub>2</sub> (978)	38 <sup>1</sup> / <sub>2</sub> (978)	38 <sup>1</sup> / <sub>2</sub> (978)	38 <sup>1</sup> / <sub>2</sub> (978)	37 (940)	37 (940)	37 (940)
Drawers	Drawer Banks	3	2	2	1	1	1	1
	Drawer Count	18	11	13	7	8	7	5
	Widest Drawer, inches (mm)	35 (880)	48 (1,219)	35 (880)	35 (880)	23 (584)	23 (584)	23 (584)
	Slides, lbs (Kg) (ball bearing)	120 (54)	120 (54)	120 (54)	120 (54)	120 (54)	100 (45)	100 (45)
	Double Slides	Yes (1 drawer)	Yes (1 drawer)	Yes (1 drawer)	Yes (1 drawer)	Optional	Optional	Optional
Extras	Top Mat	Unidirectional Rubber	Unidirectional Rubber	Unidirectional Rubber	Unidirectional Rubber	Unidirectional Rubber	Unidirectional Rubber	Unidirectional Rubber
Weight	Net Weight, lbs (Kg)	371 (168)	349 (158)	297 (135)	275 (125)	183 (83)	170 (77)	162 (73)
	Shipping Weight, lbs (Kg)	454 (206)	400 (181)	327 (148)	305 (138)	252 (114)	239 (108)	231 (105)
Optional Add-ons	Top Chest	KRA5308F	KRA5308F	KRA4114F, KRA4810F	KRA4114F, KRA4810F	KRA4014F	KRA2055, KRA4014F	KRA2055, KRA4014F
Available	Side Cab	KRA4820F, KRA4830F	KRA4820F, KRA4830F	KRA4820F, KRA4830F	KRA4820F, KRA4830F	_	_	_
	Locker	KRA5012F	KRA5012F	KRA5012F	KRA5012F	_	_	_
	Middle Drawer Section	_	_	KRA4860F	KRA4860F	KRA2063	KRA2063	KRA2063
	Hardwood Top	KRWT5300	KRWT5300	KRWT40F	KRWT40F	KRWT26F	KRWT26F	KRWT26F
	Stainless Top	KRSST5300	KRSST5300	KRSST40F	KRSST40F	_	_	_

Customize your Heritage Series tool storage with options like real carbon fiber drawer guards and wrench wheel cover sets.

**Custom color** roll cab KRA5311FP0T shown with optional: Carbon fiber drawer guards KACF5311 Gloss black corner guards KACGB53RC Gloss black drawer front KADFB50X6 and Wheel covers KAWCR-6

WARNING







Custom color roll cab KRA5311FPFT shown with optional: Red corner guards KACG53RCRD Red drawer front KADF50X6RD Red carbon fiber drawer guards KACF5311RD and Caster bolt covers KACAP6RD



- Secure end cab to roll cab per instructions
   Do not open multiple drawers
   Read safety precautions on pages W1 to W4

# **Roll Cabs**









### **HERITAGE Series Roll Cab Drawer Sizes**

ILIVI IAOL 30	icki i Ade Selies kult Cab Diawei Sizes										
Carallinakiana	Wi	dth	De	pth	Hei	ght	KRA5318F	KRA5311F	KRA4813F	KRA4107F	
Specifications	Inches mm	mm	Inches	mm	Inches	mm	Drawers	Drawers	Drawers	Drawers	
2" Narrow	11 <sup>3</sup> /16	285	17 <sup>1</sup> /2	445	1 <sup>5</sup> /8	41	2	3	4	_	
4" Narrow	11 <sup>3</sup> /16	285	17 <sup>1</sup> / <sub>2</sub>	445	3 <sup>5</sup> /8	92	7	1	1	_	
8" Narrow	11 <sup>3</sup> /16	285	17 <sup>1</sup> /2	445	7 <sup>5</sup> /8	193	1	_	_	_	
12" Narrow	11 <sup>3</sup> /16	285	17 <sup>1</sup> / <sub>2</sub>	445	11 <sup>5</sup> /8	295	1	1	1	_	
2" Wide	21 <sup>7</sup> /16	544	17 <sup>1</sup> /2	445	1 <sup>5</sup> /8	41	2	_	2	_	
2" Extra Wide	34 <sup>3</sup> / <sub>4</sub>	881	17 <sup>1</sup> /2	445	1 <sup>5</sup> /8	41	_	1		2	
4" Wide	21 <sup>7</sup> / <sub>16</sub>	544	17 <sup>1</sup> /2	445	3 <sup>5</sup> /8	92	3	_	3	_	
4" Extra Wide	34 <sup>3</sup> / <sub>4</sub>	881	17 <sup>1</sup> / <sub>2</sub>	445	3 5/8	92	1	3	1	4	
8" Wide	21 <sup>7</sup> /16	544	17 <sup>1</sup> /2	445	7 <sup>5</sup> /8	193	1	_	1	_	
8" Extra Wide	34 <sup>3</sup> / <sub>4</sub>	881	17 <sup>1</sup> / <sub>2</sub>	445	7 <sup>5</sup> /8	193	_	1	_	1	
6" Super Wide	47 <sup>3</sup> / <sub>4</sub>	1,214	17 <sup>1</sup> /2	445	5 <sup>9</sup> /16	141	_	1	_	_	
				•	Total Drav	ver Count	18	11	13	7	

### Colors Available



All KRA5000 and KRA4000 Series units are available in 4 standard colors.

Add suffix to base stock number for special colors.

# **Roll Cabs**







KRA4008FPC

KRA2007FPBO

KRA2005FPCM

### **HERITAGE Series Roll Cab Drawer Sizes**

PJK

Width		Vidth	De	Depth		eight	KRA4008F	KRA2007F	KRA2005F			
Specifications	Inches	mm	Inches	mm	Inches	mm	Drawers	Drawers	Drawers			
2" Wide	21 <sup>7</sup> /16	544	17 <sup>1</sup> /2	445	1 <sup>5</sup> /8	41	4	2	_			
4" Wide	21 <sup>7</sup> /16	544	17 <sup>1</sup> /2	445	3 <sup>5</sup> /8	92	3	4	4			
8" Wide	21 <sup>7</sup> /16	544	17 <sup>1</sup> /2	445	7 <sup>5</sup> /8	193	1	1	_			
12" Wide	21 <sup>7</sup> /16	544	17 <sup>1</sup> /2	445	11 <sup>5</sup> /8	295	_	_	1			
Total Drawer Count							8	7	5			

### **Colors Available** Gloss Black Royal Blue Electric Orange

PCM

All KRA5000 and KRA4000 Series units are available in 4 standard colors. Add suffix to base stock number for special colors.

### **Colors Available**



KRA2007and KRA2005 Series units are available in 3 standard colors. Add suffix to base stock number for special colors.

# **Top Chests**

# Snapon

KRA5308FPBO

### Colors Available

•	OIOIO I	wana	JIU	
Red	Gloss Black	Royal Blue	Electric Orange	
PRO	PC	PCM	D IK	١

All KRA5000 and KRA4000 Series units are available in 4 standard colors. Add suffix to base stock number for special colors.

# **KRA5308F Series Top Chest**

Cubic inches (cm³)	Square (cm					ipping Weight, lbs (kg)		
12,970 (212,540)	4,191 (2	27,039) 224		(102)		269 (122)		
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)		
Specifications	8	53 <sup>3</sup> /8 (1,356)		19 <sup>13</sup> /16 (503)		19 <sup>3</sup> /8 (493)		
Drawers	2	11 <sup>1</sup> /8	(283)	17 <sup>1</sup> / <sub>2</sub> (445)		1 <sup>5</sup> /8 (41)		
	2	11 <sup>1</sup> /8	(283)	17 <sup>1</sup> / <sub>2</sub> (445)		3 <sup>5</sup> /8 (92)		
	2	34 <sup>3</sup> / <sub>4</sub>	34 <sup>3</sup> / <sub>4</sub> (881)		45)	1 <sup>5</sup> /8 (41)		
	2	34 <sup>3</sup> / <sub>4</sub> (881)		17 <sup>1</sup> / <sub>2</sub> (445)		3 <sup>5</sup> /8 (92)		
Top Compartment	_	52 <sup>3</sup> / <sub>8</sub> (1,328)		18 <sup>3</sup> /4 (475)		4 <sup>5</sup> /8 (118)		









- Do not open multiple drawers Read safety precautions on pages W1 to W4

# Top Chests



KRA5315FPCM



KRA4810FPJK



KRA4114FPCM



KRA4014FPC

Colors Available



All KRA5000 and KRA4000 Series units are available in 4 standard colors. Add suffix to base stock number for special colors.

# **KRA5315F Series Top Chest**

		<u>'                                      </u>				
Cubic inches (cm³)	Square (cm		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)	
10,758 (176,324)	4,065 (2	6,227) 24		1 (110)		298 (135)
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	15	53 3/8 (1,356)		19 <sup>13</sup> /16 (503)		19 <sup>7</sup> ⁄16 (494)
Drawers	6	11 <sup>1</sup> /8	(283)	17 ½ (445)		1 <sup>5</sup> ⁄8 (41)
	4	11 <sup>1</sup> /8	(283)	17 ½ (445)		3 5/8 (91)
	2	21 3/8	(542)	17 ½ (4	45)	1 5/8 (41)
	2	21 <sup>3</sup> / <sub>8</sub> (542)		17 ½ (445)		3 5/8 (91)
	1	34 <sup>3</sup> / <sub>4</sub>	(881)	17 ½ (445)		3 5/8 (91)

# **KRA4810F Series Top Chest**

Cubic inches (cm³)	Square (cm		Net Weight, lbs (kg)		Shipping Weight, lbs (kg)			
9,359 (153,370)	3,026 (1	9,520)	190	6 (89)		226 (103)		
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)		
Specifications	8	40 (1,016)		19 <sup>13</sup> /16 (503)		19 <sup>7</sup> ⁄16 (494)		
Drawers	2	11 1/8	(283)	17 <sup>1</sup> / <sub>2</sub> (445)		1 <sup>5</sup> /8 (41)		
	2	11 ½	(283)	17 <sup>1</sup> / <sub>2</sub> (445)		3 5/8 (91)		
	2	21 ¾	(283)	17 <sup>1</sup> /2 (4	45)	1 <sup>5</sup> /8 (41)		
	2	21 <sup>3</sup> / <sub>8</sub> (283)		17 <sup>1</sup> /2 (445)		3 5/8 (91)		
Top Compartment	_	39 <sup>7</sup> / <sub>8</sub> (1,013)		18 <sup>1</sup> / <sub>2</sub> (475)		4 <sup>3</sup> /4 (120)		

# **KRA4114F Series Top Chest**

Cubic inches (cm³)	Square inches (cm²)			Weight, (kg)	Shipping Weight, lbs (kg)	
9,746 (159,710)	3,178 (2	(20,500) 183 (8		3 (83)		213 (97)
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	4	40 <sup>1</sup> /16	(1,017)	19 <sup>13</sup> /16 (503)		19 <sup>7</sup> /16 (494)
Drawers	2	34 <sup>3</sup> / <sub>4</sub>	(881)	17 <sup>1</sup> / <sub>2</sub> (445)		1 <sup>5</sup> /8 (41)
	2	34 <sup>3</sup> / <sub>4</sub> (881)		17 <sup>1</sup> /2 (4	45)	3 <sup>5</sup> /8 (91)
Top Compartment	-	39 <sup>7</sup> /8 (	(1,014)	18 <sup>3</sup> /4 (475)		4 <sup>3</sup> / <sub>4</sub> (120)

# **KRA4014F Series Top Chest**

Cubic inches (cm³)	Square (cm		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)				
6,180 (101,270)	1,995 (1	2,870) 119		9 (54)		142 (64)			
	Drawers		lidth, inches (mm) Depth, inc			Height, inches (mm)			
Specifications	4	26 <sup>3</sup> /4	(678)	19 <sup>13</sup> /16 (503)		19 <sup>7</sup> /16 (494)			
Drawers	2	21 <sup>3</sup> /8	(542)	17 <sup>1</sup> / <sub>2</sub> (445)		1 <sup>5</sup> /8 (41)			
	2	21 <sup>3</sup> / <sub>8</sub> (542)		17 <sup>1</sup> / <sub>2</sub> (445)		3 <sup>5</sup> /8 (91)			
Top Compartment	_	26 <sup>5</sup> /8 (675)		18 <sup>3</sup> /4 (475)		4 <sup>3</sup> / <sub>4</sub> (120)			

# **Top Chests**



KRA2055FPBO

KRA4059FPC

# **KRA2055F Top Chest**

Cubic inches (cm³)	Square i (cm		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)		
4,452 (72,955)	1,814 (1	1,703)	90	90 (41)		110 (50)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	5	26 (	660)	14 <sup>3</sup> /4 (373)		17 <sup>1</sup> /4 (437)	
Drawers	4	22 <sup>1</sup> /8	(559)	13 <sup>1</sup> /8 (332)		1 <sup>7</sup> /8 (47)	
	1	22 <sup>1</sup> / <sub>8</sub> (559)		13 <sup>1</sup> /8 (332)		3 <sup>1</sup> /8 (79)	
Top Compartment		25 <sup>13</sup> / <sub>1</sub>	6 (655)	13 <sup>3</sup> / <sub>4</sub> (348)		3 <sup>7</sup> /8 (97)	

**Colors Available** 



# **KRA4059F Series Top Chest**

Cubic inches (cm³)	Square (cm			Weight, s (kg)	Shipping Weight, lbs (kg)		
4,288 (70,268)	1,753 (1	,753 (11,309)		92 (42)		117 (53)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	9	26 (6	660)	14 <sup>3</sup> /4 (373)		17 <sup>3</sup> /16 (436)	
Drawers	6	6 11/16	(169)	13 <sup>1</sup> /8 (332)		1 <sup>3</sup> /4 (44)	
	2	22 1/8 (559)		13 <sup>1</sup> / <sub>8</sub> (332)		1 <sup>7</sup> /8 (47)	
	1	22 <sup>1</sup> / <sub>8</sub> (559)		13 <sup>1</sup> / <sub>8</sub> (332)		3 <sup>1</sup> /8 (79)	
<b>Top Compartment</b>	_	25 <sup>13</sup> /10	6 (655)	13 <sup>3</sup> /4 (348)		3 <sup>7</sup> /8 (97)	

### Colors Available

Red	Gloss Black	Royal Blue	Electric Orange
PB0	PC	PCM	PJK

# **Drawer Sections**



KRA4860FPBO



# **KRA4860F Series Drawer Sections**

Cubic inches (cm³)	Square i (cm			Weight, S (kg)		shipping Weight, lbs (kg)	
3,112 (50,997)	1,216 (7	,845) 115		5 (52)		145 (66)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	2	40 (	1,016)	19 <sup>13</sup> /16 (	503)	9 13/16 (249)	
Drawers	1	34 <sup>11</sup> / <sub>16</sub> (881)		17 % (445)		1 5/8 (41)	
	1	34 11/	16 (881)	17 %16 (4	145)	3 5% (91)	

### **Colors Available**



All KRA5000 and KRA4000 Series units are available in 4 standard colors.

Add suffix to base stock number for special colors.

# **KRA2063F Series Drawer Sections**

Cubic inches (cm³)	Square (cm			Weight, (kg)	Shipping Weight, lbs (kg)		
1,792 (29,365)	1,124 (	7,252)	70	0 (22)		94 (43)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	3	26 (	660)	19 <sup>13</sup> /16 (503)		9 11/16 (246)	
Drawers	3	21 <sup>3</sup> /8	(544)	17 <sup>9</sup> /16 (445)		1 5/8 (41)	

### **Colors Available**



Add suffix to base stock number for special colors.













• Do not open multiple drawers • Read safety precautions on pages W1 to W4

# Lockers

### Colors Available



All KRA5000 and KRA4000 Series units are available in 4 standard colors.

Add suffix to base stock number for special colors.



# **KRA5012F Series Lockers**

Cubic inches (cm³)		Square inches (cm²)		Veight, (kg)	Shipping Weight, lbs (kg)	
10,177 (166,770)	1,480 (	9,548)	119	5 (52)		145 (66)
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	4	16 ½	(419)	19 <sup>13</sup> /16 (503)		51 ½ (1,308)
Drawers	2	11 <sup>3</sup> ⁄16	(288)	17 <sup>9</sup> /16 (445)		1 <sup>5</sup> ⁄8 (41)
	2	11 <sup>3</sup> /16 (288)		17 %16 (445)		3 5/8 (92)
Shelves	3	12 ¾	(315)	18 ¾ (4	75)	11 ¾ (297)

# **End Cabinets**



KRA4820FPC

KRA4830FPBO

# **KRA4820F Series End Cabinets**

Cubic inches (cm³)	Square (cm		Net Weight, lbs (kg)		Shipping Weight, lbs (kg)		
5,094 (83,476)	1,174 (	7,574)	11	7 (53)		147 (67)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	6	16 ½	(419)	19 <sup>13</sup> /16 (503)		32 ½ (815)	
Drawers	2	11 ½	(283)	17 %16 (445)		1 %16 (39.7)	
	3	11 ½	(283)	17 %16 (445)		3 1/2 (88.9)	
	1	11 ½	(283)	17 %16 (4	145)	11 <sup>3</sup> ⁄ <sub>4</sub> (297)	

# **KRA4830F Series End Cabinets**

Cubic inches (cm³)	Square inches (cm²)	Net Weight, lbs (kg)	Shipping Weight, lbs (kg)
8,426 (138,080)	843 (5,439)	76 (35)	97 (44)
	Width, inches (mm)	Depth, inches (mm)	Height, inches (mm)
Specifications	16 ½ (419)	19 <sup>13</sup> /16 (503)	32 <sup>5</sup> ⁄16 (820)
Shelves 2	15 1/16 (381)	18 % (473)	_
Lower Compartment 1	15 ½16 (381)	18 % (473)	_

# **Colors Available**

Red	Gloss Black	Royal Blue	Electric Orange
PB0	PC	PCM	PJK

All KRA5000 and KRA4000 Series units are available in 4 standard colors.

Add suffix to base stock number for special colors.

# Tool Storage (Blue-Point®)



KRB2055FPQP



# **KRB2055F Series Top Chest**

Cubic inches (cm³)	Square (cm		Net Weight, Ibs (kg)		Shipping Weight, lbs (kg)		
4,444 (72,824)	1,818 (1	1,729) 84 (3		(38)		96 (44)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	5	26 (	(660)	14 <sup>3</sup> /4 (373)		17 <sup>7</sup> /16 (436)	
Drawers	4	22 <sup>5</sup> /1	6 (566)	13 <sup>5</sup> /16 (333)		1 <sup>7</sup> /8 (47.2)	
	1	22 5/16 (566)		13 <sup>5</sup> /16 (333)		3 1/8 (79.3)	
<b>Top Compartment</b>	_	25 <sup>13</sup> /1	16 (655)	13 <sup>11</sup> /16 (347)		3 7/8 (98)	

# **KRB2006F Series Roll Cab**

Cubic inches (cm³)	Square (cm		Net Weight, lbs (kg)		Shipping Weight, lbs (kg)		
9,568 (156,791)	2,247 (1	4,496) 165 (		(75)		210 (95)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	6	26	26 (660)		(503)	38 (965)	
Drawers	5	21 <sup>3</sup> / <sub>8</sub> (543)		17 <sup>9</sup> /16 (445)		3 <sup>5</sup> /8 (91.2)	
	1	21 <sup>3</sup> /s	в (543)	17 <sup>9</sup> /16	(445)	7 <sup>5</sup> /8 (193)	

# **MOBILE SOLUTIONS**

# Where Mobility Meets Durability.

You've been there before, stranded with a lightweight roll cart. That's not something you have to worry about with Snap-on. With over a dozen options, this family of carts is designed and built to get you where you're going.

**Mobility** — Heavy Duty Mobile Workstation has 8" x 2" high-strength casters to navigate rough floors and gravel. 40" carts use 6" x 2" monoprene soft vibration-resistant casters to overcome small obstacles.

**Safety** — Lockable wheels, bumpers, rolled drawer edges, radiused corners and fully welded designs keep you and your surroundings safe from damage.

# The Capacity You Need.

From the basic two-tray cart to the Heavy Duty Mobile Workstation, your needs are met with Snap-on® and Blue-Point® carts.

**Heavy Duty Mobile Workstation** — The ultimate high-capacity cart has a work surface that holds up to 1,000 lbs., yet is still smooth enough to write on.

Lock-n-Roll® or InPulse™ Drawers — High capacity drawers hold more tools and won't drift open. Drawer slides can be added to double drawer capacity.

**Lid selection** — Choose from traditional, sliding stainless or permanent reinforced stainless lids to meet your specific needs.



### **Mobile Workstations**











# KRSC100A/KRSC101 Series Mobile Workstations

- Each unit holds 1 ton (2,000 lbs), fully welded body
- 8" semi soft swivel lock casters, extra heavy duty weight capacity will go over obstacles that stop ordinary carts
- Convenience drawer (optional on KRSC100A, standard on KRSC101) large enough for short term storage of work in progress parts
- 1,000 lb capacity, 38 x 26" top work surface (stainless steel) has raised edge all the way around
- 4 and 6" InPulse™ drawers retain up to 20x the weight of standard detents without drifting open
- · Vertical bumper system with soft edges
- Large diameter handle with stainless steel grip

### **KRSC100A Series Mobile Workstations**

Cubic inches (cm³)	Square (cm		Net Weight, lbs (kg)		Load Capacity, lbs (kg)	
7,943 (130,162)	2,362 (1	5,238) 320 (145)		(145)	2,000 (907)	
	Drawers		Width, inches (mm) Depth, inch			Height, inches (mm)
Specifications	2	38 (9	965)	26 (660)		43 <sup>5</sup> /16 (1,100)
Drawers	1	30 <sup>1</sup> / <sub>16</sub> (768)		24 (609)		6 <sup>3</sup> /16 (157)
	1	30 <sup>1</sup> /16	(768)	24 (60	9)	3 <sup>15</sup> /16 (100)
Bottom Tray	1	35 (8	389)	26 (660)		3/4 (19)

KRSC101 Series includes all specifications above plus added convenience drawer 100W16S.

# KRSC100A/KRSC101 Optional Accessories

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Stock No.	Description						
100W16S	6" optional (nonlocking) bottom convenience drawer for KRSC100A (Add proper color suffix)						
KASR12APV	Screwdriver rack						
KAT18APV	Can holder						
KAPR24APV	Pry bar rack						
KAS12PWRPV	Power tool rack (Holds 3 power tools)						
KEWLEDFLEXL	Workstation light, LED, flexible neck, rechargeable						
КАНК6	6" Extended hook						
<b>КАНСКЗ</b>	3" Curved hook						
KAHLK3	3" Loop						
KALS15	Laptop shelf 15"						

### All Weather Mobile Tool Chest

- 22.1" wheel base on the wide corners for stability
- Innovative 4 bar latch system for secure lid closure
- Telescoping handle with higher reach
- Over top hinged lid can be used as a seat when case is closed
- Drawers fully extend on Snap-on® proprietary composite slides
- Usable space interior dimensions: 21.2" W x 11.9" D x 15.4" H
- 4,130 cubic inches of internal space
- Heavy duty butterfly hinges
- · Auto pressure equalization valve
- Large side handles that may be gripped with 2 hands
- Configurable drawers; Interchangeable with other mobile tool chests
- · Heavy duty roll cage ribs; Durable, shock resistant material
- · Stackable design even when fully loaded
- Snap-on padlock holder with 250 lbs of breakin resistance
- Water resistant when submerged to one meter.
- Case material made with Zerust® corrosion inhibitor to help prevent tools from rusting
- Net weight 44 lbs (20 kg)

KMC18043NBK All Weather Tool Chest. 7 drawers. Black. KMC18043NGR All Weather Tool Chest. 7 drawers. Green.

KMC18043NOR All Weather Tool Chest. 7 drawers. Orange.

KMC18043NTN All Weather Tool Chest. 7 drawers. Tan.

Use KMC18062 for 8 drawer versions.

**Optional Accessories:** 

TCK18043BR Tool Control Kit. For 7 drawer units only.

JIKMC18-7NS Nonslip Drawer Liner Kit. For 7 drawer units only.

# **Road Chests**

# KRA6200F/KRA6210F Series Road Chest

- · Wider side walls with added corner gussets to keep corners square
- 3 stiffeners behind front cover with inside padding: strengthens cover and protects drawers
- Cover and front are hinged together for quick and easy access to all tools
- Overlap on lid allows water to flow past without entering the front section
- Handles on KRA6210F Series provide easier lifting (Handle 8 3533, add color suffix)
- 3 friction hinges keep the front cover from slamming

Cubic inches (cm³)	Square (cm		Net Weight, lbs (kg)		Shipping Weight, lbs (kg)	
11,937 (195,612)	3,460 (2	2,323)	282 (128)*		325 (147)*	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	4	*36 (	914)	24 (610)		24 (610)
Drawers	2	30 <sup>1</sup> / <sub>2</sub> (775)		21 <sup>3</sup> / <sub>4</sub> (552)		1 <sup>3</sup> / <sub>4</sub> (44)
	2	30 <sup>1</sup> / <sub>2</sub> (775)		21 <sup>3</sup> / <sub>4</sub> (552)		3 <sup>5</sup> /8 (92)
<b>Top Compartment</b>	_	34 <sup>7</sup> /8 (885)		22 <sup>1</sup> / <sub>2</sub> (571)		5 <sup>1</sup> / <sub>2</sub> (139)

<sup>\*</sup>add 25 lbs for cage on KRA6200F

# **Optional Waterproof Covers**

KRA6200	KAC6200 (Red)	KAC6200PC (Black)
KRA6210	KAC6210 (Red)	KAC6210PC (Black)

Optional 2" steel drawer divider set - KADDS2402





KRA6210FPBO

# Red Gloss Royal Blue Mica Orange Green Red W/ Black Trim

### **Roll Carts**

# **KRSC10F Series Workstation Top Roll Cart**

- Solid stainless steel top holds 600 lbs
- · Rubber donut casters go over obstacles

Cubic inches (cm³)	Square in	nches (cm²)	Net Weight, lbs (kg)		Load Capacity, lbs (kg)		
16,218 (265,765)	2,051	(13,232) 1		179 (81.1)		1,200 (544)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	3	32.7 (83	32.7 (830)		))	41 (1,040)	
Drawers	3	27 <sup>1</sup> /8 (689)		89) 17 <sup>1</sup> / <sub>2</sub> (445)		3 <sup>5</sup> /8 (92)	
Shelves/Trays	1	32 (81	3)	19 <sup>1</sup> / <sub>2</sub> (495)		3 (76)	

### KRSC326F Roll Cart.

- . Similar features to KRSC46F
- More compact width and 4 swivel casters

# KRSC326F Series - Compact 6 Drawer Roll Cart (32" Wide)

		<u> </u>					
Cubic inches (cm³)	Square i	Square inches (cm²)		Net Weight, lbs (kg)		Load Capacity, lbs (kg)	
16,847 (276,073)	3,533	(22,794)	157 (71.2)		1,200 (544)		
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	6	32 <sup>11</sup> /16 (	830)	20 1/2 (520)		43 (1,092)	
Drawers	5	27 <sup>1</sup> / <sub>8</sub> (689)		17 <sup>1</sup> / <sub>2</sub> (445)		3 <sup>5</sup> /8 (92)	
	1	27 <sup>1</sup> /8 (689)		17 <sup>1</sup> /2 (445)		7 <sup>5</sup> /8 (193)	
Top Compartment	_	32 (81	2)	18 <sup>13</sup> /16 (478)		6 <sup>11</sup> /16 (170)	

### Colors Available Candy Apple Midniaht Ultra Electric Flat Black Extreme w/ Black Trim Yellow Green Orange PDG PES PJH P.I.I P.IK POT















• Do not open multiple drawers • Read safety precautions on pages W1 to W4

<sup>\*</sup>Flat Black is only available on KRSC326F Series

# **MOBILE SOLUTIONS**

# **Roll Carts**



### KRSC46F Series Roll Carts.

- One piece, fully welded body is designed for maximum strength
- Inherent strength for storage capacity found only in the best tool storage cabinets
- 7" top compartment uses nonslip liner internally to accommodate heavy tools and parts
- Drawers are 36" wide. Drawer capacity: 100 lbs per drawer; up to 200 lbs with double slide
- Accessory panels (KRSC404APV) can be added to both sides providing slot pattern for accessories
- Accommodates the KRA4830F end cab (KRSC404APV adaptor panel required)
- Snap-on® KRA-style drawers with Lock-n-Roll® so drawers will not drift open
- Optional JKRR40W55-rubber top mat (not included)

### **KRSC46F Series Roll Cart**

Cubic inches (cm³)	Square in	nches (cm²) Net We		Veight, Ibs (kg)		Load Capacity, lbs (kg)	
20,783 (340,572)	4,392	2 (28,335)		265 (120)		2400 (1089)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)	
Specifications	6	40 <sup>1</sup> / <sub>2</sub> (1,	20 (508)			46 (1,168)	
Drawers	5	34 <sup>3</sup> / <sub>4</sub> (882)		2) 17 <sup>1</sup> / <sub>2</sub> (444)		3 <sup>5</sup> /8 (92)	
	1	34 <sup>3</sup> / <sub>4</sub> (882)		32) 17 <sup>1</sup> / <sub>2</sub> (444)		7 <sup>5</sup> /8 (193)	
Top Compartment	_	39 <sup>13</sup> /16 (1	,011)	18 <sup>13</sup> /16 (478)		7 (178)	

### Colors Available



### KRSC416F Series Roll Carts.

- Stainless steel sliding lid is recessed to keep tools in place
- Top section is 7" deep with holes for vertical storage pry bars

# KRSC416F Series - 40" Super Deluxe Shop Carts

Cubic inches (cm³)	ibic inches (cm³) Square inches (cm²)		Net We	eight, lbs (kg)	Load Capacity, lbs (kg)			
20,783 (340,573)	4,392	2 (28,335) 262		2 (118.8)		2,400 (1,088)		
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)		
Specifications	6	40 (1,016)		20 (508)		46 (1,168)		
Drawers	5	34 <sup>3</sup> /4 (8	34 <sup>3</sup> /4 (882)		82) 17 <sup>1</sup> / <sub>2</sub> (444)		L)	3 <sup>5</sup> /8 (92)
	1	34 <sup>3</sup> /4 (882)		17 <sup>1</sup> / <sub>2</sub> (444)		7 <sup>5</sup> /8 (193)		
Top Compartment	_	39 <sup>13</sup> /16 (1,011)		011) 18 <sup>13</sup> /16 (478)		7 (178)		

# Snapan

### KRSC416FPCM

### KRSC46F & KRSC416F Series Roll Cart Accessories.

- Create the ultimate shop cart
- Easier to customize than any shop cart in the industry
- See page 393 for complete list of slotted accessories

Stock No.	Description
KRA412F*	Folding side shelf
KRA4830F*	End cab. Comes equipped with adjustable shelves; optional drawers can also be added
KACSC40PC	Protective nylon cover (black 200 Denier® nylon)
KRSC404APV	Accessory mounting/adaptor panel; also used to mount end cab
6007K0120PV*	Cord wrap
KAS12APV*	12" flat shelf
KALR12PV*	Literature rack: 12" wide, 3" deep
KAT12APV*	12" can rack: 12" wide, 3" deep
KEWLEDFLEXL	Rechargeable LED flexible long neck work light (magnetic base)

<sup>\*</sup>Requires KRSC404APV adaptor panel

Colors Available										
Red	Gloss Black	Royal Blue	Ultra Yellow	Extreme Green	Electric Orange	Midnight Blue	Flat Black w/ Black Trim			
PB0	PC	PCM	PES	PJJ	PJK	PDG	POT			

## **Roll Carts**

### **KRSC33 Series Roll Carts.**

- Entirely welded body and legs for super strength versus bolt together units
- 34" locking drawers
- Large top compartment
- 5 x 2" swivel casters, factory installed
- · Factory assembled, welded tray and leg assembly
- Slots 'N Dots<sup>™</sup> side panels for mounting accessories (see pg 393 for accessories)

Cubic inches (cm³)	Square i	nches (cm²)	Net Weight, lbs (kg)		Load Capacity, lbs (kg)	
9,591 (157,168)	2,110	(13,613)	157 (71.2)		600 (272)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	3	27 <sup>1</sup> / <sub>8</sub> (688)		17 <sup>1</sup> /2 (444)		3 <sup>5</sup> /8 (92)
Top Compartment	_	26 (66	0)	19 <sup>1</sup> / <sub>8</sub> (485)		6 <sup>1</sup> /2 (165)





KRSC33PC

# Roll Carts (Blue-Point®)

### KRBC30TA Roll Cart.

- Portable 20' electrical cord reel with 4 outlets and circuit breakers
- Adjustable personal organizer tray in top compartment (3" deep x 24" wide x 1.5" high)
- One piece rubber bumper for each leg (already installed)
- Bottom corner bump blocks for extra corner protection
- Sturdy, spacious bottom drawer with 2 sets of drawer slides
- · Larger pull handles for easy drawer opening
- Heavy duty padded handle
- · Removable garbage can
- Sturdy side work table
- · Removable spray can holder
- · Comes with casters assembled on cart

Cubic inches (cm³)	Square i	nches (cm²)	Net Weight, Ibs (kg)		Load Capacity, lbs (kg)	
33,952 (556,372)	2,153	(13,890)	180 (81.5)		800 (362)	
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	4	35 (88	9)	21 (533)		41 1/4 (1,048)
Top Compartment	_	24 (61	24 (610)		)	3 (76.2)



KRBC30TAPCM

# Red Gloss Royal Blue PBO PC PCM

### **KRBC10TB Series Roll Carts.**

- Plated fasteners resist corrosion and self locking nuts assure a rigid, secure assembly
- Locking support tabs add strength, increase load capacity and facilitate quick assembly
- Made from heavy gauge steel for superior strength
- Retractable side work table
- Protective rubber bumpers
- · Comes with casters assembled

	Cubic in	ches (cm³)	Square inches (cm²)		Load Capacity, lbs (kg)	
	7,428	(121,700)	2,40	0 (15,480)		540 (245)
	Drawers	Width, in (mm		Depth, inc (mm)	hes	Height, inches (mm)
Specifications	4	30 <sup>1</sup> / <sub>2</sub> (7	75)	20 <sup>1</sup> / <sub>2</sub> (520)		41 <sup>1</sup> / <sub>4</sub> (1,048)
Drawers	2	11 <sup>1</sup> / <sub>2</sub> (2	92)	17 <sup>1</sup> / <sub>2</sub> (444)		2 <sup>1</sup> / <sub>2</sub> (63.5)
	1	24 <sup>1</sup> / <sub>2</sub> (6	i22)	17 <sup>1</sup> / <sub>2</sub> (444)		2 1/2 (63.5)
	1	24 <sup>1</sup> / <sub>2</sub> (6	22)	17 <sup>1</sup> /2 (44	4)	2 1/2 (63.5)
<b>Bottom Shelf</b>	2	30 (76	2)	19 (482)	)	3 1/2 (88.9)
Top Compartment	_	30 (76	2)	19 (482)	)	2 1/2 (63.5)
External Tray (rear)	_	15 <sup>3</sup> /8 (3	90)	4 (101)		3 3/8 (85.9)
<b>External Tray (front)</b>	_	15 <sup>3</sup> /8 (3	90)	4 (101)		2 (50.8)

**BPNCVR10T Roll Cart Cover.** Fits all KRBC10T, KRBC9T and KRBC30T series roll carts. Protects cart from dirty shop conditions. High quality 210 Denier® nylon. Sturdy zipper makes using the cover quick and easy. Waterproof and durable.















- Secure end cabinet to roll cart per instructions
   De not one multiple drawers
- Do not open multiple drawers
- Read safety precautions on pages W1 to W4

# Roll Carts (Blue-Point®)



Colors Available



### **KRBCSST Series Roll Carts.**

- · Padded lid protects finish and provides additional work surface
- · Roller bearing slide drawers, locking slide top and internal pry bar holder
- Dual locking casters keep cart in place during use
- Convenient storage trays on both sides

Cubic inches (cm³)	Square in	iches (cm²)	Net Weight, Ibs (kg)		Load Capacity, lbs (kg)	
15,931 (261,062)	1,618	(26,514) 23		23.5 (56)		300 (136)
	Drawers	Width, inches (mm)		Depth, inches (mm)		Height, inches (mm)
Specifications	2	29 <sup>7</sup> /16 (	747)	20 <sup>5</sup> /8 (524)		38 <sup>11</sup> / <sub>16</sub> (982)
Top Compartment	_	29 <sup>7</sup> /16 (	747)	20 5/8 (524)		6 <sup>13</sup> /16 (171)
Drawers	2	29 <sup>5</sup> /16 (	744)	17 <sup>1</sup> /2 (44	4)	2 <sup>3</sup> /4 (69)
<b>Bottom Compartment</b>		29 <sup>5</sup> /16 (7	744)	17 <sup>1</sup> /2 (444)		3 (75.9)

BPNCVRSST Roll Cart Cover. Fits all KRBCSST series roll carts. Protects cart from dirty shop conditions. High quality 210 Denier® nylon. Sturdy zipper makes using the cover quick and easy. Waterproof and durable.

KRBCSST-CF Graphic Wrap. Customize KRBCSST Series Roll Carts in just a few easy steps. Carbon Fiber pattern. High quality 3M® vinyl. UV clear coating. 3 mm thick. Air channels for easy application with no bubbles. Pressure sensitive permanent adhesive. Complete kit includes 6 pieces.

KRBCSST-CAMO Graphic Wrap. Same as KRBCSST-CF except Camouflage pattern KRBCSST-SSKL Graphic Wrap. Same as KRBCSST-CF except Smoke Skull pattern KRBCSST-FSKL Graphic Wrap. Same as KRBCSST-CF except Flame Skull pattern



KRBCSST-CF





KRBCSST-SSKL

KRBCSST-FSKL

### KRBC15T Series Roll Carts.

- · Padded lid protects finish and provides additional work surface
- · Gas shock for safe closure
- · Removable top chest locks to cart
- · 2 roller bearing slide drawers on both the top chest and cart
- Dual locking casters keep cart in place during use

		Net Weight, lbs (kg)			Load Capacity, lbs (kg)		
		88.2 (40)		300 (136)			
	Drawers			h, inches mm)	Height, inches (mm)		
Specifications	_	26 <sup>3</sup> /8 (670)	18 <sup>9</sup>	/32 (464)	42 <sup>3</sup> /8 (1,077)		
<b>Top Compartment</b>	_	26 (660)	11 <sup>13</sup>	3/16 (300)	4 <sup>7</sup> /16 (112)		
Drawers	2	22 <sup>1</sup> / <sub>2</sub> (571)	15 <sup>3</sup>	/16 (386)	3 <sup>13</sup> /16 (96.5)		
<b>Bottom Shelf</b>	1	26 <sup>1</sup> /4 (667)	17 <sup>15</sup>	<sup>5</sup> /16 (456)	13 (331)		



Colo	rs Ava	ilable
Dad	01	Daniel

Black

Blue

# KRBC15TTC Series Removable Top Chest

		Cubic inches (cm <sup>3</sup> )	Shipping Weight, lbs (kg)			
		2,479 (40,624)		53 (24)		
	Drawers	Width, inches (mm)	Depth, inches (mm)		Height, inches (mm)	
Specifications	_	26 (660)	12	(304)	11 (280)	
Top Compartment	_	26 (660)	11 <sup>13</sup> /	16 (300)	4 <sup>7</sup> /16 (112)	
Drawers	2	2 7/16 (61)	22 7/	16 (569)	10 <sup>1</sup> / <sub>2</sub> (267)	

# **MOBILE SOLUTIONS**

# Roll Carts (Blue-Point®)

### **KRBC7TD Series Roll Carts.**

- 4" zinc plated casters (2 locking, 2 swivel)
- 6 liners on drawer and tray, and 1 rubber mat for side work shelf
- Latch system to unlock all 4 drawers once the top lid has been opened with a key
- · Gas springs on lid for greater control
- Folding side work shelf provides extra work space
- Locking flip top lid with full length piano hinge
- · Locking prybar compartment securely holds all length prybars and screwdrivers

	Net	Weight, lbs (kg)	Load Capacity, lbs (kg)		
		112.2 (50.8)	300 (136)		
	Drawers	Width, inches (mm)	Depth, inches (mm)	Height, inches (mm)	
Specifications	4	35 (889)	17 (431)	41 (1,041)	
Drawers	2	13 <sup>13</sup> /16 (350)	15 <sup>3</sup> /8 (398)	2 (50.8)	
	1	27 <sup>9</sup> /16 (700)	15 <sup>7</sup> /16 (391)	2 (50.8)	
	1	27 <sup>9</sup> /16 (700)	15 <sup>7</sup> /16 (391)	4 (101)	
Bottom Shelf	1	27 <sup>9</sup> /16 (700)	15 <sup>7</sup> /16 (391)	3 (76.2)	

BPNCVR7TB Roll Cart Cover. Fits all KRBC7TB and KRBC7TA series roll carts. Protects cart from dirty shop conditions. High quality 210 Denier® nylon. Sturdy zipper makes using the cover quick and easy. Waterproof and durable.

# KRBC7TDPCM

# Colore Available



Colors Available



	Colors Available							
Red	Gloss Black	Royal Blue	Ultra Yellow	Extreme Green	Electric Orange			
	PC	PCM	PES	PJJ	PJK			



# KRBC2TC



# KRBC3TD Roll Cart.

Specifications

Trays

· Features locking drawer with tubular lock for added tool security

· Trays feature rolled edges for improved strength and rigidity

Net Weight, lbs (kg)

38 (17.2)

Width, inches

30 (756)

30 (756)

KRBC3TD-1 Locking Drawer. Optional add-on locking drawer for KRBC2TC. 350ABMF09 Replacement Add-On Tray. For KRBC2TC/KRBC3TD.

• Maximum load capacity 150 lbs (68 kg) per tray Casters are 4 x 1 1/8" (2 locking, 2 standard)

**Drawers** 

2

- 2 sturdy, 3" deep trays are positioned for convenience
- 150 lb (68 kg) load capacity per tray

**KRBC2TC Series Roll Cart.** • Rugged, general duty dual shelf roll cart

- . Made of heavy gauge steel
- 4 x 1 1/8" casters (2 locking, 2 standard)

,						
	Net	Weight, lbs (kg)	Load Capacity, lbs (kg)			
		65 (29.4)	300 (136)			
	Drawers	Width, inches (mm)	Depth, inches (mm)	Height, inches (mm)		
Specifications	_	30 (762)	17 (428)	36 <sup>1</sup> /4 (920)		
Trays	2	27 (685)	15 <sup>1</sup> / <sub>2</sub> (762)	4 (101)		
Drawer	1	27 (685)	14 <sup>1</sup> / <sub>2</sub> (368)	4 (101)		



Colors Available Roval











Load Capacity, lbs (kg)

300 (136)

**Height, inches** 

36 1/4 (920)

3 (75)

Depth, inches

(mm)

17 (428)

17 (428)

- Do not open multiple drawers Read safety precautions on pages W1 to W4

# **MOBILE SOLUTIONS**

# **Roll Carts**





### KR5000C Heavy Duty Roll Cart.

- Heavy gauge steel shelves/frame
- Solid rubber 4" x 1" casters (2 rigid, 2 swivel with brakes)

	Net Weight, Ibs (kg)		Load Capacity, lbs (kg)	
	53 (24)		500 (227)	
	Drawers	Width, inches (mm)	Depth, inches (mm)	Height, inches (mm)
Specifications	_	36 (914)	24 (610)	38 <sup>1</sup> / <sub>4</sub> (972)
Trays	2	38 31/32 (990)	23 31/32 (609) 37 13/32 (950)	

### **KRP1HD Polymer Roll Cart.**

- Heavy duty polymer construction will not scratch painted surfaces, will not corrode and is nonconductive
- Top slides in either direction to reveal storage compartment and work surface underneath
- Built-in tool holders in handles accept wide variety of screwdrivers, small prybars, pliers and other small to medium hand tools
- Drain plugs in both upper and lower trays facilitate cleanup
- Red trays with grey lid and legs
- · Locking swivel casters
- Each tray has 160 lb (73 kg) load capacity

	Net	Weight, Ibs (kg)	Load Capacity, lbs (kg)		
		37 (16.8)	320 (145)		
	Drawers	Width, inches (mm)	Depth, inches (mm)	Height, inches (mm)	
Specifications	1	43 (1,092)	21 <sup>3</sup> / <sub>4</sub> (552)	38 <sup>1</sup> / <sub>2</sub> (978)	
Top Tray	1	43 (1,092)	21 <sup>3</sup> / <sub>4</sub> (552)	3 <sup>3</sup> /16 (80.9)	
Bottom Tray	1	43 (1,092)	21 <sup>3</sup> / <sub>4</sub> (552)	2 <sup>13</sup> /16 (71.4)	

# **Under Hood Rolling Service Tray**

# **BLPUHST Under Hood Service Tray.**

- · Convenience with less user motion and fatigue
- 24" leg clearance allows the service tray to slide under the hood from the front or the side of vehicle
- · Parts dividers and screwdriver holders built in the tray
- · Protective bumpers included for top tray and support post
- 3" heavy duty swivel casters
- Height adjustable support post adjusts from 35 13/16 to 48 3/8" for the tray to clear the fender or front end of most vehicles
- EVA pads in all tray compartments
- Dimensions (fully assembled): 29 1/2" L x 26" W x 48 3/8" H
- Maximum load capacity: 75 lbs (34 kg)





BLPUHSTPC (matte black)

# **ACCESSORIES**

# We Made it Snap-on. You Make it Yours.

Whether you're looking for something personalized or something practical, Snap-on has plenty of ways for you to customize your Snap-on® tool storage unit.

**Carbon Fiber Drawer Guards** – Made from real resin infused carbon fiber; enhance the appearance while keeping drawer tops clean and protected.

**Corner Guards** – Steel, powder coated gloss black guards that protect the front corners of roll cab. Laser-cut Wrench "S" exposes paint beneath the guard.

**Drawer Front** – Gloss black drawer cover is made from powder coated steel. Cut out Snap-on logo exposes paint beneath the drawer cover



# TOOL STORAGE ACCESSORIES

# **Boxes and Tote Trays**



# Plastic Boxes (Blue-Point®)

Ideal for a wide range of storage needs. YA481 through YA486 are made of tough, injection molded plastic to ensure a precise fitting lid and durability. Top carrying handle, tension latches, tote tray and padlock provision are also featured.

**YA481 Plastic Box.** 14 1/2" W x 7 1/4" D x 4 1/2" H. YA482 Plastic Box. 16 1/2" W x 8 1/4" D x 6 1/2" H. YA483 Plastic Box. 20 1/4" W x 9" D x 7 3/4" H. YA484 Plastic Box. 23 1/8" W x 10 1/4" D x 10 1/2" H. YA486 Plastic Box. 27 1/2" W x 13 3/8" D x 14" H.



YA483



# **Parts Storage Cases**

### KRP5CAB Five Drawer Storage Cabinet.

- Use to store or inventory small tools and parts
- Black, heavy duty polypropylene cabinet with 5 removable drawers (KRP5PB)
- Each drawer features a translucent plastic divider system that allows full customization for individual needs
- Drawers are easily removable for transport to job location
- · Units can be stacked or wall mounted
- · Resistant to common solvents
- Cabinet dimensions are 15 1/2" W x 14 1/2" D x 16" H

### KRP5PB Storage Drawer.

- Plastic storage drawer for KRP5CAB parts storage cabinet
- Each drawer features 16 translucent section dividers for unlimited customizing options (KRP5PB-16 = 16 Dividers)
- Drawer measures 13 5/8" W x 9 5/8" D x 2 1/4" H

### YA402 Parts Storage Case.

- Interchangeable partitions allow customizing from 9 to 24 compartments
- Rugged polypropylene construction
- 14 5/8" W x 10 3/4" D x 2 5/16" H

### YA485 Parts Storage Case.

- Similar to YA402 except interchangeable partitions can form 8 to 32 compartments
- 18" x 12" x 3"



KRP5CAB



KRP5PB



**YA402** 

# **Boxes and Tote Trays**

# Plastic Boxes with Steel Drawers (F.O.D. Design)

- Portable tool chest designed specifically for Foreign Object Damage (F.O.D.) applications
- · Accepts both magnetic and foam tool control systems for tool accountability
- 22 gauge steel drawers are interchangeable for custom configurations
- Standard drawer configuration includes (4) drawers measuring 7 7/8" x 19 9/32" x 1 7/8" and (1) drawer measuring 7 7/8" x 19 9/32" x 4"
- Molded polymer one piece design (handle, latches, strap pins, hinges, and lock clasp) minimizes potential loose pieces that could cause F.O.D. molded recesses in outer case allow vertical and horizontal stacking
- Padded carrying strap for extra comfort
- 24" W x 10 5/32" D x 17 13/32" H; With capacities of 759 sq in and 1,760 cu in; Weight 33 lbs (capacity specifications listed are based on standard drawer configuration)

**KRP825PCA** Grey case and red drawers

KRP825PCC Red case and red drawers

# **Tote Travs**

### **KTA3A Metal Tote Tray.**

- Tubular pull up handle lifts 1 5/8"
- Measures 20 1/4" x 8" x 3 1/4" with handle down

### **KTA8PV Metal Tote Tray.**

- Drops in any 14" wide (4" deep) drawers on KRL1000 and KRL700 series tool storage units
- 4 nonskid rubber feet protect finished surfaces from scratching
- Raised lips hold tray securely in drawer
- Tubular pull up handle raises 1 3/4"
- Measures 10" W x 14 13/16" L x 3 13/16" H with handle down
- · Black textured finish

### KRP1001A Plastic Tote Tray.

- Made of tough, rustproof, nonconductive, chemical resistant polymer
- Includes 2 deep end pockets
- Bottom drawer is divided into 12 compartments and can be opened from either side
- 16 5/8" x 10 1/4" x 6 7/8"

### **Wall Cabinet**

### **KRA276D Wall Cabinet.**

- Snap-on® wall cabinets provide both security and inventory control
- Wall cabinet can be mounted to wall, stationary bench or roll cab
- · Ruggedly built of heavy gauge steel for durability
- Theft resistant cylinder locks and a 2 point locking system provide protection for your tools
- Features PLEXIGLAS® door panels to permit checking tool inventory without opening doors
- Cabinet measures 33 7/8" x 24 3/4" x 6"







**KRP1001A** 



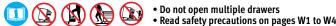












# **TOOL STORAGE ACCESSORIES**



				KN024GD
Stock No.	Cubic Inches (cm)	Square Inches (cm)	Dimensions, inches	Description/Features
KRW184B*	1,851 (30,330)	684 (4,413)	20 <sup>19</sup> / <sub>32</sub> x 8 ½ x 14 ¼ Each Drawer: 17 <sup>13</sup> / <sub>16</sub> x 7 <sup>5</sup> / <sub>16</sub> x 2 ½	4 drawers lock when lid is closed. Tote tray not included. Net weight: 25 lbs
KRA25D	1,568 (25,690)	180 (1,161)	20 1/8 x 8 3/4 x 8 3/4	Includes KTA3A Partitioned Tote Tray
KRW48C*	1,530 (25,070)	476 (3,071)	18 x 10 x 13 ¼	Split top opening for tool access. Cantilever trays on either side of cover, carrying handle.
UT22K	1,444 (23,660)	525 (3,837)	Overall: 22 x 8 x 9 4 Small Trays: 22 x 4 x 2	Opens up to expose 5 storage trays; no trays lift out, no drawers to open. 1 Large Tray: 22 x 8 x 9
KRA21G	996 (16,320)	486 (3,135)	Overall: 20 $^{3}4$ x 8 $^{9}\%_{6}$ x 11 $^{1}4\%_{1}$ Top Drawer: 19 $^{3}4$ x 7 $^{9}4\%_{1}$ x 1 $^{15}\%_{16}$ Bottom Drawer: 19 $^{3}4$ x 7 $^{3}4$ x 2 $^{13}\%_{16}$ Compartment: 20 $^{3}4$ x 8 $^{9}\%_{6}$ x 1 $^{15}\%_{6}$	Includes KTA3A partitioned tote tray. Net weight: 28 lbs
KRW182B*	1,137 (18,630)	_	18 ½ x 8 ½ x 9 ½	Net weight 12.5 lbs. Shipping weight: 14.5 lbs
KRW183C*	1,637 (26,830)	_	Overall: 20 19/32 x 8 ½ x 12 Each Drawer: 17 13/16 x 7 5/16 x 2 ½	Drawers lock when lid is closed. Net weight: 20 lbs
KRU24B*	2,540 (41,623)	670 (4,322)	Trays: 21 ½ x 4 ½ x 11½2 Bottom Section: 23 ½ x 11 ½ x 7 ¼ Overall: 24 x 12 x 12	Lightweight, only 27 lbs (12.3 kg). 4 trays allow organization of smaller items.
KRA24	1,155 (18,930)	154 (994)	19 1/8 x 7 1/4 x 7 1/2	Includes partitioned tote tray.
KRU24GB*	2,540 (41,623)	670 (4,322)	Trays: 21 ½ x 4 5% x 11¾2 Bottom Section: 23 5% x 11 5% x 7 ¼ Overall: 24 x 12 x 12	Lightweight, only 27 lbs (12.3 kg). 4 trays allow organization of smaller items.

<sup>\*</sup>Blue Point®

# **Work Surfaces**

### KRSST761B

Stainless Steel Work Surfaces
Stainless steel tops turn roll cabs into moveable work benches. Constructed from high grade, 16 gauge 304 stainless steel. Raised front lip keeps sockets and parts from rolling off. Tops are 1 7/8" thick.

Stock No.	Applications	Width, inches	Depth, inches
KWSN3010AST	KEXN603A EPIQ Roll Cab	120	30
KWSN3012AST	KEXN725A/KEXP725A EPIQ Roll Cabs	144	30
KWSN3030AST	KEBN301A EPIQ End Cabinet	30	30
KWSN3060BST	EPIQ Series Roll Cabs	60	30
KWSN3068BST	EPIQ Series Roll Cabs	68	30
KWSN3076BST	EPIQ Series Roll Cabs	76	30
KWSN3084BST	EPIQ Series Roll Cabs	84	30
KWSP3060BST	Power Top for EPIQ Series Roll Cabs	60	30
KWSP3068BST	Power Top for EPIQ Series Roll Cabs	68	30
KWSP3076BST	Power Top for EPIQ Series Roll Cabs	76	30
KWSP3084BST	Power Top for EPIQ Series Roll Cabs	84	30
KWSH3076BST	PowerHouse Top for EPIQ Series Roll Cabs	76	30
KWSH3084BST	PowerHouse Top for EPIQ Series Roll Cabs	84	30
KRSST1001B	KRL1022/KRL7022 Roll Cabs	<b>54</b> <sup>3</sup> / <sub>16</sub>	28 <sup>15</sup> / <sub>16</sub>
KRSST7003B KRL1023/KRL1032/ KRL1033/KRL7023 Roll Cabs		72 <sup>13</sup> / <sub>16</sub>	28 <sup>15</sup> / <sub>16</sub>
KRSST7001	KRL1056 Roll Cabs	35 <sup>9</sup> / <sub>16</sub>	28 15/16
KRSST761B			23 7/8
KRSST756	756 KRL756 Roll Cabs		23 7/8
KRSST7011	011 KRL 29" End Cap		28 15/16
KRSST40F	KRA Series 40" Roll Cabs (Square)	39 3/4	19 <sup>1</sup> / <sub>2</sub>
KRSST711	KRL711/KRL715 End Cabs	19 <sup>7</sup> /8	23 7/8
KRSST5000	KRA5000 Series/KRA2306/KRA2300 Series Roll Cabs (Round Corners)	53 <sup>1</sup> / <sub>16</sub>	19 <sup>1</sup> / <sub>2</sub>
KRSST4107	VDA4107/VDA4012/VDA0107/VDA0010		19 <sup>1</sup> / <sub>2</sub>
KRSST2418	KRA2418/KRA2432/KRA2496 Roll Cabs	73 3/8	23 11/16
KRSST2411	KRA2422/KRA2411 Roll Cabs	54 <sup>3</sup> / <sub>4</sub>	23 11/16
KRSST2407	KRA2407 Roll Cabs		23 11/16
KRSST5300	KRA5318/KRA5311 Roll Cabs (Square Corners)	53 <sup>1</sup> / <sub>16</sub>	19 <sup>1</sup> / <sub>2</sub>
KRSST4008	KRA4008, KRA2007	26	19 <sup>1</sup> / <sub>2</sub>



### KRBLT1023

# Steel Work Surfaces

Steel work surface is coated with a substance similar to that used in truck bed liners. Extremely durable, easy to clean, chemical and abrasion resistant, and won't crack or peel. Installation hardware included.

Stock No.	Applications	Width, inches	Depth, inches
KRBLT1023	KRL1023, KRL1032, KRL7023, KRL1033	72 13/16	29
KRBLT1022	KRL1022, KRL7022	<b>54</b> 3/16	29
KRBLT722	KRL722	<b>54</b> <sup>3</sup> / <sub>16</sub>	24
KRBLT1011	KRL1011, KRL7011, KRL1015, KRL7015	19 <sup>7</sup> /8	29
KRBLT711	KRL711, KRL715	19 7/8	24
KRBLT2418	KRA2418, KRA2432, KRA2496	73 3/8	24
KRBLT756	KRL756	36	24
KRBLT2411	KRA2422/KRA2411	54 3/4	23 11/16
KRBLT5311	KRA5311/KRA5318	53 3/4	19 1/2
KWSN3010ABL	KEXN603A EPIQ Roll Cab	120	30
KWSN3012ABL	KEXN725A/KEXP725A EPIQ Roll Cabs	144	30
KWSN3030ABL	KEBN301A EPIQ End Cabinet	30	30
KWSN3060ABL	EPIQ Series Roll Cabs	60	30
KWSN3068ACR	EPIQ Series Roll Cabs	68	30
KWSN3076ABL	EPIQ Series Roll Cabs	76	30
KWSN3084ABL	EPIQ Series Roll Cabs	84	30
KWSN3068ABL	EPIQ Series Roll Cabs	68	30

### **Hardwood Tops**

### KRWT7002A

Northern hard maple butcher block tops allow roll cabs to double as full length workbenches. Tops are 1 3/4" thick.

Stock No.	Applications	Width, inches	Depth, inches
KWSN3010AWT	KEXN603A EPIQ Roll Cab	120	30
KWSN3060AWT	EPIQ Series Roll Cabs	60	30
KWSN3012AWT	KEXN725A/KEXP725A EPIQ Roll Cabs	144	30
KWSN3068AWT	EPIQ Series Roll Cabs	68	30
KWSN3076AWT	EPIQ Series Roll Cabs	76	30
KWSN3084AWT	EPIQ Series Roll Cabs	84	30
KRWT7002A	KRL1022/KRL7022 Roll Cabs	53 <sup>11</sup> / <sub>16</sub>	27 5/8
KRWT7003A	KRL1023/KRL1032/ KRL1033/KRL7023 Roll Cabs	<b>72</b> <sup>5</sup> /16	27 5/8
KRWT7001A	KRL1056 Roll Cabs	35 1/8	27 5/8
KRWT761B	KRL722 Roll Cabs		22 <sup>9</sup> /16
KRWT756A	KRL756 Roll Cabs	35 <sup>1</sup> / <sub>8</sub>	22 <sup>9</sup> /16
KRWT7011A	KRL7011/KRL7015/KRL1011/KRL1015 End Cabs	19 <sup>5</sup> /16	27 5/8
KRWT711A	KRL711/KRL715 End Cabs		22 5/8
KRWT5000A	KRA5213/KRA5319/KRA2306/KRA2300 Series Roll Cabs (Rounded) 53		19 <sup>7</sup> / <sub>16</sub>
KRWT4800B	KRA4107/KRA4813 Roll Cabs (Rounded)	39 3/4	<b>19</b> 7/16
KRWT2411	KRA2422/KRA2411 Roll Cabs	54 <sup>3</sup> / <sub>4</sub>	23 11/16
KRWT2418	KRA2418/KRA2432/KRA2496 Roll Cabs	73 3/8	23 11/16
KRWT2407	KRA2407 Roll Cabs	35 <sup>7</sup> /8	23 11/16
KRWT26F	KRA4008F/KRA2007F (Square)	26	19 <sup>7</sup> /16
KRWT40F	40" RC (Square)	39 3/4	19 <sup>7</sup> / <sub>16</sub>
KRWT5300	KRA5318/KRA5311 Roll Cabs (Square)	53 <sup>1</sup> /16	19 <sup>7</sup> / <sub>16</sub>
KRWT4008	KRA4008E/KRA2007 Roll Cabs (Rounded)	26	<b>19</b> 7/16



### JKRR711CR

## **Nondirectional Rubber Mats**

Nondirectional rubber top mats protect tool storage units from damage. Light weight, fine textured, all rubber construction. Will not shrink, curl or separate. Cleans easily and quickly. Impervious to most oil and chemicals.

Stock No.	Application		
JKRR10011CR	KRL1022/KRL7022 Series Roll Cabs		
JKRR1003CR	KRL1023/KRL1032/KRL7023/KRL1033 Series Roll Cabs		
JKRR1056CR	KRL1056 Series Roll Cabs		
JKRR761CR	KRL722 Series Roll Cabs		
JKRR756CR	KRL756 Series Roll Cabs		
JKRR1010CR	KRL1011/KRL7011/KRL7015/KRL1015 Series End Cabs		
JKRR7012CR	KRL1012/KRL7012/KRLV7012 Series Lockers		
JKRR711CR	KRL711 Series End Cabs		
JKRR712CR	KRL712 Series Lockers		
JKRR3800CR	KRA4107/KRA4800/KRA2107/KRA2212 Series Roll Cabs		
JKRR379ACR	KRA4008/KRA2007 Series Roll Cabs		
JKRR2411CR	KRA2422/KRA2411 Series Roll Cabs		
JKRR2418CR	KRA2418/KRA2432/KRA2496 Series Roll Cabs		
JKRR3820CR	KRA4820/KRA4833 End Cabs, KRA5012 Locker		
JKRR40W55	KRSC40/KRSC46 Roll Carts		
KWSN3060ACR	EPIQ Series Roll Cabs		
KWSN3068ACR	EPIQ Series Roll Cabs		
KWSN3076ACR	EPIQ Series Roll Cabs		
KWSN3084ACR	EPIQ Series Roll Cabs		
KWSN30120ACR	KEXN603A EPIQ Roll Cab		
KWSN30144ACR	KEXN725A/KEXP725A EPIQ Roll Cabs		
JKRRSC30R	KRSC31/KRSC33		

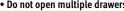












# **TOOL STORAGE ACCESSORIES**

# **Covers**

The KAC series of storage unit covers can be used individually per unit or zipped together with the heavy duty nylon zipper to form a cover combination to match your tool storage combination. Magnets on the locker and end cab covers hold the door flap open to allow entry to the unit without removing the cover itself. Covers are available for roll cabs, roll cabs with top chests, roll cabs with workstation risers/overheads, left and right side end cabs and left and right side lockers.

# **EPIQ Series Roll Cab Covers**

Cover Description	Black Stock No.
KERN60 Cover	KAC304860BK
KERN68 Cover	KAC304868BK
KERP76 Cover	KAC304876BK
KERN84/KERP84 Cover	KAC304884BK
KEXN603 Cover	KAC3048120BK
KEXN725/KEXP725 Cover	KAC3048144BK
60" EPIQ Roll Cab, Workcenter, 1 Locker	KAC307690BK
68" EPIQ Roll Cab, Workcenter, 1 Locker	KAC307698BK
76" EPIQ Roll Cab, Workcenter, 1 Locker	KAC3076106BK
84" EPIQ Roll Cab, Workcenter, 1 Locker	KAC3076114BK
60" EPIQ Roll Cab, Workcenter, 2 Lockers	KAC3076120BK
68" EPIQ Roll Cab, Workcenter, 2 Lockers	KAC3076128BK
76" EPIQ Roll Cab, Workcenter, 2 Lockers	KAC3076136BK
84" EPIQ Roll Cab, Workcenter, 2 Lockers	KAC3076144BK
60" EPIQ Roll Cab, Workcenter, 4 Lockers	KAC3076180BK
68" EPIQ Roll Cab, Workcenter, 4 Lockers	KAC3076188BK
76" EPIQ Roll Cab, Workcenter, 4 Lockers	KAC3076196BK
84" EPIQ Roll Cab, Workcenter, 4 Lockers	KAC3076204BK
60" EPIQ Roll Cab and Workcenter	KAC307660BK
68" EPIQ Roll Cab and Workcenter	KAC307668BK
76" EPIQ Roll Cab and Workcenter	KAC307676BK
84" EPIQ Roll Cab and Workcenter	KAC307684BK
60" EPIQ Roll Cab, Workcenter, Overheads, 2 Lockers	KAC3097120BK
68" EPIQ Roll Cab, Workcenter, Overheads, 2 Lockers	KAC3097128BK
76" EPIQ Roll Cab, Workcenter, Overheads, 2 Lockers	KAC3097136BK
84" EPIQ Roll Cab, Workcenter, Overheads, 2 Lockers	KAC3097144BK
60" EPIQ Roll Cab, Workcenter, Overheads, 4 Lockers	KAC3097180BK
68" EPIQ Roll Cab, Workcenter, Overheads, 4 Lockers	KAC3097188BK
76" EPIQ Roll Cab, Workcenter, Overheads, 4 Lockers	KAC3097196BK
84" EPIQ Roll Cab, Workcenter, Overheads, 4 Lockers	KAC3097204BK
60" EPIQ Roll Cab, Workcenter, Overhead	KAC309760BK
68" EPIQ Roll Cab, Workcenter, Overhead	KAC309768BK
76" EPIQ Roll Cab, Workcenter, Overhead	KAC309776BK
84" EPIQ Roll Cab, Workcenter, Overhead	KAC309784BK

### **KRL7000 Series Covers**

Cover Description	Red Stock No.	Black Stock No.
KRL7022 Cover	KAC7002	KAC7002PC
KRL7022/KRL1201 Combination Cover	KAC72121	KAC72121PC
KRL7022 with KRL7954/KRL5445 Cover	_	KAC702245PC
KRL7023A Cover	KAC7003	KAC7003PC
KRL7023A/KRL1203A Combination Cover	KAC73123	KAC73123PC
KRL7023A with KRL7972/KRL7245 (2) Cover	_	KAC702345PC
KRL7011A/KRL7015A/KRLV7015 Cover (Left Side)	KAC7011L	KAC7011LPC
KRL7011A/KRL7015A/KRLV7015 Cover (Right Side)	KAC7011R	KAC7011RPC
KRL7012/KRLV7012 Cover (Left Side)	KAC7012L	KAC7012LPC
KRL7012/KRLV7012 Cover (Right Side)	KAC7012R	KAC7012RPC

# **KRL1000 Series Covers**

Cover Description	Red Stock No.	Black Stock No.
KRL1065 Cover	KAC1065	KAC1065PC
KRL1024/KRL1043 Cover	KAC1024	KAC1024PC
KRL1022 Cover	KAC1001	KAC1001PC
KRL1022/KRL1201A Combination Cover	KAC100112	KAC100112PC
KRL1022/KRL1201A/KRL1012A Combination Cover	KAC1001TL	KAC1001TLPC
KRL1022/KRL7954/KRL5445 Cover	KAC1001WD	KAC1001WDPC
KRL1022/KRL7954/KRL5445 Cover	-	KAC102245PC
KRL1023/KRL1032/KRL1033 Cover	KAC1003	KAC1003PC
KRL1023 or KRL1032/KRL1203A Combination Cover	KAC13123	KAC13123PC
KRL1023 or KRL1032 with KRL7972/ KRL7245 Cover	KAC1003WD	KAC1003WDPC
KRL1023/KRL7954/KRL5445 Cover	_	KAC102345PC
KRL1056 Cover	KAC1056	KAC1056PC
KRL1056/KRL1251 Combination Cover	KAC161251	KAC161251PC
KRL1011A/KRL1015A Cover (Left Side)	KAC1011L	KAC1011LPC
KRL1011A/KRL1015A Cover (Right Side)	KAC1011R	KAC1011RPC
KRL1012A Cover (Left Side)	KAC1012L	KAC1012LPC
KRL1012A Cover (Right Side)	KAC1012R	KAC1012RPC

- Heavy duty nylon zippers
- High quality 200 Denier® nylon
- Bright silver Snap-on® logo



# **KRL700** and Classic Series Storage Unit Covers

Cover Description	Red Stock No.	Black Stock No.
KRL722/KRA2411Cover	KAC761	KAC761PC
KRL722/KRL791A or KRA2411/KRA2408 Combination Cover	KAC761791	KAC761791PC
Classic 73" Roll Cab/KRA2415 Chest	_	KAC241815PC
Classic 55" Roll Cab/KRA2410 Chest	_	KAC242210PC
KRL722/KRA2411/KRW7554/KRWL5435 Cover	KAC761WD	KAC761WDPC
KRL722/KRL791A/KRL712 Combination Cover	KAC761TL	KAC761TLPC
KRA2407 Roll Cab/KRA2405 Chest Cover	_	KAC240705PC
KRL756 or KRA2407 Cover	KAC756	KAC756PC
KRL756/KRL751, KRA2407/KRA2404 or Combination Cover	KAC756731	KAC756731PC
KRL711/KRL715 Cover (Left Side)	KAC711L	KAC711LPC
KRL711/KRL715 Cover (Right Side)	KAC711R	KAC711RPC
KRL712 Cover (Left Side)	KAC712L	KAC712LPC
KRL712 Cover (Right Side)	KAC712R	KAC712RPC
KRA2418 Cover also KRA2456 or KRA2432	KAC773	KAC773PC
Classic 73" Roll Cab/Chest Cover	KAC773793	KAC773793PC
KRA24182432/2496 with KRW7572 Cover	KAC773WD	KAC773WDPC

# **Heritage Series Covers**

Cover Description	Red Stock No.	Black Stock No.
KRA5000 Series/KRA2300 Series Roll Cab Cover/53" Roll Cabs	KAC5000	KAC5000PC
KRA5000/KRA2300 Series Roll Cab/ Top Chest Cover/53" Roll Cab/Top Chest Combination	KAC530015	KAC530015PC
KRA5012 Locker Cover, Left Side	KAC5012L	KAC5012LPC
KRA5012 Locker Cover, Right Side	KAC5012R	KAC5012RPC
KRA4000/2000 Series 40" Roll Cab Cover	KAC4800	KAC4800PC
KRA4000/KRA2000 Series 40" Roll Cab/Top Chest Combination Cover	KAC48004810	KAC480010PC
KRA4000 Series 40" Roll Cab/Drawer Section/Top Chest Combinations	KAC48006010	KAC486010PC
KRA Series End Cabs Cover, Left Side	KAC4820L	KAC4820LPC
KRA Series End Cabs Cover, Right Side	KAC4820R	KAC4820RPC
KRA4008/KRA2007 Roll Cab Cover	KAC4007	KAC4007PC
<b>KRA4000</b> Series 26" Roll Cab/Top Chest Combination Cover	KAC40074014	KAC40074014PC
KRA4059 Series	KRAC59	_

# **Other Units**

Cover Description	Red Stock No.	Black Stock No.
KRSC40/KRSC416/KRSC46 Carts	_	KACSC40APC
KRSC31/KRSC33	_	KACSC30PC
KRA6200 Road Chest Waterproof	_	KAC56200PCnot
KRA6210 Road Chest Waterproof	_	KAC6210PC

## **Drawer Guards/EPIQ Series**



Protects drawers from dings and scratches. Adds a custom, personalized look to tool storage units. Installs easily. No trimming or fasteners required. Simply remove tape from underside of guard, align guard with drawer, snap in place and press firmly. Constructed from stainless steel with brushed or polished finish. Some sets are available in carbon fiber. Individual replacement guards are available.

#### **Drawer Guards/EPIQ Series**

	•	
Brushed Stock No.	Polished Stock No.	Application
KADGSERN602A	KADGPERN602A	KERN602A Roll Cabs
KADGSERN682A	KADGPERN682A	KERN682A Roll Cabs
KADGSERN762A	KADGPERP762A	KERN762A Roll Cabs
KADGSERP763A	KADGPERP763A	KERP763A Roll Cabs
KADGSERN842A	KADGPERN842A	KERN842A Roll Cabs
KADGSERP842A	KADGPERP842A	KERP842A Roll Cabs
KADGSERN843A	KADGPERN843A	KERN843A Roll Cabs
KADGSERP843A	KADGPERP843A	KERP843A Roll Cabs
KADGSECN602A	KADGPECN602A	KECN602A Top Chests
_	KADGPECN682A	KECN682A Top Chests
_	KADGPECN843A	KECN843A Top Chests
KADGSESN602A	KADGPESN602A	KESN602A Drawer Sections
_	KADGPESN682A	KESN682A Drawer Sections
KADGSESN843A	KADGPESN843A	KESN843A Drawer Sections

## **Drawer Guards/KRL Series**

#### Stainless Steel Drawer Guards/KRL Roll Cabs

		•
Brushed Stock No.	Polished Stock No.	Application
KADG1022	KADGP1022	KRL1022(A-C)
KADG1023	KADGP1023	KRL1023(A-C)
KADG1056	KADGP1056	KRL1056(A), KRL1056B
KADG7022	KADGP7022	KRL7022(A-C), KRLP7022(A-C), KRL722(A-B)
KADG7023	KADGP7023	KRL7023(A-C)
KADGM756	KADGB756	KRL756(A-B)

Gloss black and matte black steel drawer guard sets available for some units.

# Stainless Steel Drawer Guards/KRL Top Chests and End Cabs

Brushed Stock No.	Polished Stock No.	Application
KADG1011A	KADGP1011A	KRL1011A
KADG1201	KADGP1201	KRL1201, KRL1201A, KRL1202
KADG1203	KADGP1203	KRL1203, KRL1203A, KRL1203B
KADG1221	KADGP1221	KRL1221
KADG1232	KADGP1232	KRL1232
KADG1251	KADGP1251	KRL1251
KADG7011A	KADGP7011A	KRL711, KRL711A, KRL7011A
KADG731	KADGP731	KRL731, KRL751
KADG791	KADGP791	KRL791, KRL791A

# Drawer Guards/KRA Series

#### **Drawer Guards/KRA Roll Cabs**

Bushed Stock No.	Polished Stock No.	Application
KADG5311	KADGP5311	KRA5311 Series Roll Cabs
KADG4008	KADGP4008	KRA4008 Series Roll Cabs
KADG4107	KADGP4107	KRA2306/KRA4107 Series Roll Cabs
KADG4813	KADGP4813	KRA4813 Series Roll Cabs
KADG4007	KADGP4007	KRA2007/KRA4007 Series Roll Cabs
KADG2432	KADGP2432	KRA2432 Series Roll Cabs
KADG2418	KADGP2418	KRA2418 Series Roll Cabs
KADG2411	KADGP2411	KRA2411 Series Roll Cabs
KADG2422	KADGP2422	KRA2422 Series Roll Cabs
KADG2496	KADGP2496	KRA2496/KRL1001(A) Series Roll Cabs

#### **KRA Top Chests and End Cabs**

Brushed Stock No.	Polished Stock No.	Application
KADG5315	KADGP5315	KRA5315 Series Top Chests
KADG5208	KADGP5208	KRA5208 Series Top Chests
KADG4114	KADGP4114	KRA4114 Series Top Chests
KADG4014	KADGP4014	KRA4014 Series Top Chests
KADG4810	KADGP4810	KRA4810 Series Top Chests
KADG4820	KANGP4820	KRA4820 Series End Cabs

#### **KADGSHORT**

## **KRA** and **KRL**

# **Drawer Guards/Individual Replacements**

Brushed Stock No.	Polished Stock No.	Application	Length, inches
KADGNARROW	KADGPNARROW	KRL/Classic Narrow Drawer Guard	16
KADGWIDE	KADGPWIDE	KRL/Classic Wide Drawer Guard	32
KADGXWIDE	KADGPXWIDE	KRL/Classic Extra Wide Drawer Guard	50 <sup>1</sup> / <sub>2</sub>
KADGSWIDE	KADGPSWIDE	KRL/Heritage Super Wide Drawer Guard	<b>69</b> <sup>3</sup> /16
KADGSHORT	KADGPSHORT	Heritage Short Drawer Guard	12 <sup>1</sup> / <sub>16</sub>
KADGMEDIUM	KADGPMEDIUM	Heritage Medium Drawer Guard	22
KADGLONG	KADGPLONG	Heritage Long Drawer Guard	35 <sup>9</sup> /16

Use "KADGB" for gloss black; "KADGM" for matte black.

#### Customization

Made of brushed stainless steel. Designed to protect the tool storage unit from solvents and floor cleaning solutions. Custom fit pieces are adhesively applied. Adds a fresh look to newer units. Also complements restoration of older units.

#### **Masters Body Guard Sets**

Stock No.	Application
KABG1022	KRL1022, KRL1001B, KRL7022,
KABGIUZZ	KRL7002
KABG1023A	KRL1023, KRL1003B,
KADU IUZJA	KRL7023(A)(B), KRL7003
KABG1024	KRL1024(A)(B)
KABG1032A	KRL1032(A)
KABG1032B	KRL1032B(C)
KABG1033	KRL1033(A)(B)
KABG722	KRL722, KRL761B
KABG1065	KRL1065(A), KRL7065(A)

#### **EPIQ Body Guard Sets**

Stock No.	Application
KABGSERN602A	KERN602 Series Brushed
KABGSERN682A	KERN682 Series Brushed
KABGSERN842A	KERN842 Series Brushed
KABGSERN843A	KERN843 Series Brushed
KABGSERP762A	KERP762 Series Brushed
KABGSERP763A	KERP763 Series Brushed
KABGSERP842A	KERP842 Series Brushed
KABGSERP843A	KERP843 Series Brushed
KABGPERN602A	KERN602 Series Polished
KABGPERN682A	KERN682 Series Polished
KABGPERN842A	KERN842 Series Polished
KABGPERN843A	KERN843 Series Polished
KABGPERP762A	KERP762 Series Polished
KABGPERP763A	KERP763 Series Polished
KABGPERP842A	KERP842 Series Polished
KABGPERP843A	KERP843 Series Polished



KABG series body guards shown installed on KRL7023A roll cab. Older style casters are shown on roll cab.



## Drawer Front, "S", Magnetic

Brushed Stock No.	Polished Stock No.	Application
		Magnetic Snap-on® "S" logo 10" x 6"
KADFMBS	KADFMPS	fits narrow bottom drawers on all KRA & KRL Roll Cabs



#### Masters Series Stainless Steel Drawer Front Sets

Stock No.	Description
KADFKRLSTDA	Brushed Drawer Front Kit, 3 pc
KADFPKRLSTDA	Polished Drawer Front Kit, 3 pc
KADFP50X5	All Masters Top Drawer: KRA2422 Top Drawer

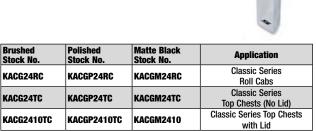
#### **Classic and Masters Stainless Steel Drawer Fronts**

- Brushed and polished stainless steel drawer fronts for Classic and Masters series roll cabs and top chests
- Fronts for 50" top drawers and 32" x 6" drawers feature a precision cut Snap-on logo in panel that allows the paint color to show through the logo
- Fronts for 16" x 10" deep drawers feature a precision cut *Snap-on* logo "S" in panel that allows the paint color to show through the logo
- Fronts for 32" x 4" and 16" x 4" drawers do not have any logo
- All drawer fronts are applied with double sided 3M® 300LSE tape with flanges and bending tabs to hold them in place

Brushed Stock No.	Polished Stock No.	Application
KADF2411	KADFP2411	Set: 50" x 4", 16" x 10", 32" x 6" Classic Drawers
KADF2418	KADFP2418	Set: 50" x 4", 16" x 10", 16" x 4", 32" x 6" Classic Drawers
KADF50X4	KADFP50X4	50" drawers on all Classic Series Roll Cabs
KADF32X6	KADFP32X6	32" x 6" drawers on all Masters and Classic Series Roll Cabs
KADF32X4	KADFP32X4	32" x 4" drawers on all Masters and Classic Series Roll Cabs and Top Chests
KADF16X4	KADFP16X4	16" x 4" drawers on all Classic Series Roll Cabs and Top Chests
KADF16X10	KADFP16X10	16" x 10" deep drawers on all Masters and Classic Series Roll Cabs

## Stainless Steel Corner Guards, Classic Series

- Fits all Classic series roll cabs and top chests
- Available in brushed and polished stainless steel plus gloss black and matte black coated steel
- Designed to cover the Classic series front edges vertically (top to bottom)
- Custom wrench S stamped into top and bottom
- Applied with double sided 3M 300LSE tape and has a flange on top and bending tabs on the bottom to securely hold them in place



Use "KACGB" prefix for gloss black corner guards.





KADF35X8

#### **Stainless Steel Drawer Fronts, Heritage Series**

- Drawer front guards are available in brushed stainless steel and polished stainless steel (polished units contain "P" in part number)
- Each drawer and corner guard is applied with double sided 3M® 300LSE tape and with flanges and/or bending tabs to hold them in place

Brushed Stock No.	Polished Stock No.	Application
KADF35X8	KADFP35X8	Fits all KRA4107, 5311, KRSC46
KADF35X4	KADFP35X4	Fits all KRA4107, Top chest KRA4114 & KRSC46
KADF22X8	KADFP22X8	Fits all KRA2007, 4008, 4813 & 5319
KADF12X11	KADFP12X11	Fits 12" deep, narrow drawers on all Heritage

## Carbon Fiber Drawer Fronts (Masters, Classic & Heritage)

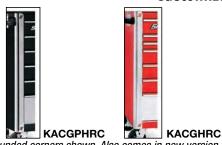
	•
Description	
12" x 11" Heritage Drawer Front	
16" x 10" Classic & Masters Drawer Front	
16" x 4" Classic & Masters Drawer Front	
22" x 8" Heritage Drawer Front	
32" x 6" Classic & Masters Drawer Front	
35" x 4" Classic & Masters Drawer Front	
35" x 8" Heritage Drawer Front	
50" x 4" Classic & Masters Drawer Front	
50" x 5" Classic & Masters Drawer Front	
50" x 6" Heritage 5311 Drawer Front	
8" x 11" Drawer Front	
	12" x 11" Heritage Drawer Front 16" x 10" Classic & Masters Drawer Front 16" x 4" Classic & Masters Drawer Front 22" x 8" Heritage Drawer Front 32" x 6" Classic & Masters Drawer Front 35" x 4" Classic & Masters Drawer Front 35" x 8" Heritage Drawer Front 50" x 4" Classic & Masters Drawer Front 50" x 4" Classic & Masters Drawer Front 50" x 6" Heritage 5311 Drawer Front



#### **Carbon Fiber Drawer Guards**

	Stock No.	Description		
Sets	KACF2411	Carbon Fiber Drawer Guard Set KRA2411		
<del>-</del>		Carbon Fibor Bratter dada d Cot late 2 1 1 1		
	KACF2410	Carbon Fiber Drawer Guard Set KRA2410		
	KACF2422	Carbon Fiber Drawer Guard Set KRA2422		
	KACF2418	Carbon Fiber Drawer Guard Set KRA2418		
	KACF5311	Carbon Fiber Drawer Guard Set KRA5311		
	KACF46	6 Piece Carbon Fiber Set for 35" Drawer, KRA Heritage Series, KRSC46, KRSC416		
	KACF1022	13 Piece Drawer Guard Set for KRL1022 Series Roll Cabs		
	KACF1023	22 Piece Drawer Guard Set for		
	KAUF I UZ3	KRL1023 Series Roll Cabs		
	KACF722	11 Piece Drawer Guard Set for		
	ICAOI 722	KRL722 Series Roll Cabs		
	KACF4107	7 Piece Drawer Guard Set for		
	10101 4107	KRA4107 Series Roll Cabs		
	KACF4114	4 Piece Drawer Guard Set for		
		KRA4114 Series Roll Cabs		
	KACF2410	KRA2410 Top Chest		
Individual	KACFHWIDE	35" Heritage Drawer 1 Piece		
Replacements	KACFHXWIDE	49" Heritage Drawer 1 Piece		
	KACFHMED	22" Heritage Drawer 1 Piece		
	KACFHNRW	11" Heritage Drawer 1 Piece		
	KACFCMED	Classic/Masters		
	KACFCXWIDE	Classic/Masters		
	KACFCNRW	Classic/Masters		

# **Customization**



Rounded corners shown. Also comes in new version square corner KACG53RC and KACGP53RC

#### **Stainless Steel Corner Guards, Heritage Series**

- · Corner guards are available in brushed and polished stainless steel
- Corner guards are designed to cover top to bottom vertically
- Custom wrench S machined into top and bottom
- Each corner guard is applied with double-sided 3M 300LSE tape and has a flange on top and bending tabs on the bottom to hold them in place

•		
Brushed Stock No.	Polished Stock No.	Application
KACGHRC	KACGPHRC	Fits all Heritage roll cabs with rounded corners (2 sides included)
KACG53RC	KACGP53RC	Fits all Heritage roll cabs with square corners
KACGHTC	KACGPHTC	Fits all Heritage top chests with rounded corners (2 sides included)
KACG53TC	KACGP53TC	Fits all Heritage top chests with square corners

#### **Gloss Black Steel Drawer Fronts**

- Gloss black drawer fronts are made from powder coated steel
- Provide a nice contrast to HOT tool storage colors like Flat Black, White, Midnight Blue, Purple and Red
- Laser cut Snap-on® logo reveals paint color

Stock No.	Dimensions, inches	Application	
KADFB50X4	50 x 4	Masters/Classic - Extra Wide Drawers	
KADFB12X11	12 x 11	Heritage Series - Deep, Narrow Drawers	
KADFB16X10	12 x 11	Heritage Series - Deep, Narrow Drawers	
KADFB22X8	22 x 8	Heritage Series - Medium Width Drawers	
KADFB32X6	32 x 6	Masters/Classic Series - Wide Drawers	
KADFB35X4	35 x 4	Heritage Series and KRSC Series Roll Carts - Deep Drawers	
KADFB35X8	35 x 8	Heritage Series and KRSC Series Roll Carts - Deep Drawers	
KADFB50X5	50 x 5	Masters Series - Extra Wide Drawers	
KADFB50X6	50 x 6	KRA5311 Series - Top Drawer	
KADFB8X11	8 x 11	KRA2318/KRA5318 Series - Bottom Drawer	

#### **Gloss Black Steel Corner Guards**

- Gloss black corner quards are made from powder coated steel
- Provide a nice contrast to HOT tool storage colors like Flat Black, White, Midnight Blue, Purple and Red
- Laser cut Snap-on "S" reveals paint color

Stock No.	Application		
KACGB24RC	KRA2407, KRA2411, KRA2422, KRA2418 plus all other		
KAUUDZ4NU	Classic Series Roll Cabs		
KACGB24TC	KRA2404, KRA2408, KRA2412 plus all other Classic Series		
KAUGDZ41U	Top Chests		
KACGB53TC	KRA2412 Only		
KACGB53RC	All Square Corner F Series Heritage Roll Cabs		
KACGBHRC	Heritage Series Roll Cabs with radiused corners		
KACGBHTC	Heritage Series Top Chests with radiused corners		
KACGB2410TC	KRA2405, KRA2410 and KRA2415 Only		



- Do not open multiple drawers
- Read safety precautions on pages W1 to W4

#### **Wheel Cover Sets**

## Wrench Wheel Cover Sets, Heritage Series

	•
Stock No.	Description
KAWCR-6	Red, 6 pc
KAWCB-6	Black, 6 pc
KAWC-6	Chrome, 6 pc



# **Tool Storage Lighting**



## **LED Light Bars**

KEWLED4

- Automatic on/off: durable and strong contacts provide positive engagement
- Magnetic installation of the light bar and the power switch provides easy installation and maneuverability
- Create a lighting experience that outshines anything in the shop
- Top quality materials and construction
- Low energy use
- Best heat dissipation
- High output LED system uses application specific LED technology with a 3 year unlimited warranty

Stock No.	Useful Light Output (lumen)	LED Input Power (W)	System Input Power (W)	System Efficacy (lumen/W)
KEWLED2	540	6.6	8	67
KEWLED4*	1,733	21.7	25.5	68
KEWLED5*	2,080	26	30.6	68
KEWLED3P4**	1,733	21.7	25.5	68
KEWLED4P5**	2,080	26	30.6	68

\*LEDs are in individual ports for premium light dispersion.

\*\*LEDs are grouped with fewer ports for a more economical solution.
KEWLED Series Bars fit: EPIQ Series KEWN Work Centers, KEHN Overheads,
KELN Lockers (KEWLED2). Masters Series KRL7972 (KEWLED5) and
KRL7954 (KEWLED4).



## LED Snap-on® Logo Display Panels

- Can be mounted to steel surface via included rare earth magnets
- Use AC or DC power comes with 110 V AC plug and battery pack
- Acrylic panel is dipped and coated for abrasion resistance

Stock No.	Size, inches	Description
KALED28X7R	28 x 7	Red Light
KALED28X7B	28 x 7	Blue Light
KALED28X7G	28 x 7	Green Light



**KEWLEDFLEXL** 

#### LED Workstation Desklight KEWLEDFLEXL Flexible Workstation Desklight.

- 18" shaft, magnetic base, rechargeable 2,600 mAL Li-ion battery
- 110 V AC charger
- · Great for carts





**KALEDBLUE** 

**KALEDRED** 

#### **LED Light Kits**

- 13" LED strips are lightweight and can be attached to any surface using 2 way soft tape
- LED strips can be connected in a straight line
- Connecting the LED strips with the included short connector cord allows the 13" LED strips to be placed around corners or at different levels from each other
- Each kit has a white 6 way terminal to allow up to 5 additional LED add on kits
- Kit includes (3) 13" LED strips, (2) short connector cords, (1) 6 way terminal and 2 way soft tape
- Add on kits contain (3) 13" LED strips, (2) short connector cords, (1) 6' cord and 2 way soft tape

` '	•	•	
Stock No.	Color	Stock No.	Color
KALEDWHITE	White	KALEDWHITE-1	White add on kit
KALEDBLUE	Blue	KALEDBLUE-1	Blue add on kit
KALEDGREEN	Green	KALEDGREEN-1	Green add on kit
KAI FORFO	Red	KAI FORFO-1	Red add on kit



KALED24

## **LED Light Box**

#### KALED24 Stainless Steel LED Lighted Panel.

- 28" x 7" polished stainless steel case with laser cut Snap-on logo and a mirror like finish
- Internal LED system contains (2) 27" strips lined with high quality LEDs
- Use on inside top chest and roll cart lids plus back riser walls
- Polished stainless steel case with laser cut Snap-on logo
- 2 cool white extra bright internal LED strips pre-assembled in case
- White diffuser
- · Wall outlet/switch adaptor included
- Compatible with U.S. and Canadian electrical requirements
- Bright LED lighting with low power use
- Includes LED Flexible Light Strip (2" x 27") and 110-240 V AC Power Adaptor with Switch

#### **Decals**

#### **Logo and Racing Decals** (Background is not a part of decal.)

Logo and racing decals show customers that you use the best while supporting Snap-on® Racing™ programs.

Stock No.	Description	Size, inches	Suggested Tool Storage Unit Color	Logo Color	Racing Color	Checker Color
SS2751A	Snap-on Logo Decal	43 x 8	_	White	_	_
SS2752A	Snap-on Logo Decal	43 x 8	_	Black	_	_
SS2753A	Snap-on Logo Decal	43 x 8	_	Silver	_	_
SS2809A	Snap-on Logo Decal	43 x 8	_	Red	_	_
SS3266A	Snap-on Logo Decal	23 x 4	_	White	_	_
SS2231A	Snap-on Logo Decal	23 x 4	_	Silver	_	_
SS2232A	Snap-on Logo Decal	23 x 4	_	Black	_	_
SS2808A	Snap-on Logo Decal	23 x 4	_	Red	_	_
SS2201A	Snap-on "S" Decal	13 x 8 <sup>1</sup> / <sub>2</sub>	_	White	_	_
SS2240A	Snap-on "S" Decal	13 x 8 <sup>1</sup> / <sub>2</sub>	_	Black	_	_
SS2241A	Snap-on "S" Decal	13 x 8 <sup>1</sup> / <sub>2</sub>	_	Silver	_	_
SS2810A	Snap-on "S" Decal	13 x 8 <sup>1</sup> / <sub>2</sub>	_	Red	_	_
SS2935A	Snap-on "S" Decal	23 x 15	_	White	_	_
SS2936A	Snap-on "S" Decal	23 x 15	_	Silver	_	_
SS2937A	Snap-on "S" Decal	23 x 15	_	Black	_	_
SS2938A	Snap-on "S" Decal	23 x 15	_	Red	_	_
SS2440B	Snap-on Racing Decal (Small)	17 x 6	Black	White	Red	Grey
SS2441B	Snap-on Racing Decal (Small)	17 x 6	Red/Green	White	Yellow	Black
SS2442B	Snap-on Racing Decal (Small)	17 x 6	Blue	White	Red	Black
SS2443B	Snap-on Racing Decal (Small)	17 x 6	Yellow/Orange	Black	Red	Black
SS3131B	Snap-on Racing Decal (Small)	17 x 6	White	Red	Yellow	Black
SS3132A	Snap-on Racing Decal (Large)	36 x 12	White	Red	Yellow	Black
SS3262A	Snap-on Racing Decal (Large)	36 x 12	Black	White	Red	Grey
SS3263A	Snap-on Racing Decal (Large)	36 x 12	Red/Green	White	Yellow	Black
SS3264A	Snap-on Racing Decal (Large)	36 x 12	Blue	White	Red	Black
SS3265A	Snap-on Racing Decal (Large)	36 x 12	Yellow/Orange	Black	Red	Black





SS3266A

SS2201A





SS2440B

SS2441B





SS2442B

SS2443B

Note: Decals shown on Suggested Tool Storage Unit Color.

# **Hand Tool Organization**









# **Socket Rails and Clips**

Stock No.	Rail Length, inches	Clip Size
A265A	7 <sup>3</sup> / <sub>8</sub>	1/4" drive
A267A	13 <sup>3</sup> / <sub>8</sub>	3/8" drive
A269C	10 <sup>3</sup> / <sub>8</sub>	3/8" drive
A270A	16 ³/ <sub>4</sub>	1/2" drive
A271B	_	1/4" drive (Pkg of 25)
A272A	1	3/8" drive (Pkg of 25)
A273A	_	1/2" drive (Pkg of 25)
A274C	_	3/4" drive (Pkg of 25)

#### A264A Socket Rail Hold Down Clip.

- · Mounts to drawer, tote tray or wall board
- . Snaps open to release socket rail
- · Package of 10

#### 63A5000 Hardware Clips Package.

- · Assorted socket rail clips in bag
- Fits Slots-N-Dots<sup>™</sup> system (included with workstation risers)

#### A278 Mounting Clips.

- 5/16 to 3/4"
- Screws into 1/8" holes
- Package of 10

#### A279 Mounting Clips.

- 5/8 to 1 1/4"
- Screws into 1/8" holes
- Package of 10





LSR3812A

## Socket Rails (with Quick Release Locking Clips)

- Push button, spring loaded clips provide for quick, easy release of socket even with greasy hands
- Extruded aluminum socket rail for light weight and durability
- Detent ball at bottom of clip permits clip to be easily positioned on rail
- Rail also features laser engraved Snap-on logo

Stock No.	Square Drive, inches	Clips	Rail Color	Overall Length, inches
LSR1406	1/4	6	Black	7 <sup>3</sup> /8
LSR1412	1/4	12	Black	10
LSR3812A	3/8	12	Black	12
LSR1213	1/2	13	Black	14



**YA438B** 

#### Movable Peg Socket Rails

- 18" rails feature adjustable pegs to organize sockets
- Pegs can be stacked for extra storage
- Adhesive backed rail

YA425B Socket Rail. 1/4" square drive (20 pegs). YA438B Socket Rail. 3/8" square drive (18 pegs). YA450B Socket Rail. 1/2" square drive (14 pegs).



# **Hand Tool Organization**



#### **Socket Holders with Posts**

- · All sockets are easily visible
- Each post is marked for correct socket size
- · Sockets are easily removed with one hand
- Use for hand, power and impact sockets
- High impact plastic resists oil and grease
- Socket must have a through hole (Some smaller Snap-on® sockets manufactured before 1983 do not have through holes

Stock No.	Color	Square Drive, inches	Stores Socket Sizes (deep and shallow)	Overall Dimensions, inches	
YA12FR	Red	1/2	3/8" to 1 1/4" in 1/16" increments	18 x 4 x 3 <sup>3</sup> / <sub>4</sub>	
YA12MET	Grey	1/2	10 to 27 mm in 1 mm increments (excluding 26 mm)	20 <sup>1</sup> / <sub>2</sub> x 3 <sup>1</sup> / <sub>2</sub> x 3 <sup>3</sup> / <sub>4</sub>	
YA14FR	Red	1/4	1/8" to 5/8" in 1/16" increments	9 x 2 <sup>1</sup> /8 x 2 <sup>1</sup> / <sub>2</sub>	
YA14MET	Grey	1/4	4 to 15 mm in 1 mm increments	9 x 2 <sup>1</sup> /8 x 2 <sup>1</sup> / <sub>2</sub>	
YA38FR	Red	3/8	1/4" to 1" in 1/16" increments	11 <sup>3</sup> / <sub>4</sub> x 3 x 3	
YA38MET	Grey	3/8	6 to 20 mm in 1 mm increments	13 <sup>1</sup> / <sub>8</sub> x 3 x 3	





**BPMVSR38A** 



**BPMVSR12A** 

#### Magnetic Vertical Socket Rails

- View socket sizes quickly and easily with these new magnetic vertical socket rails
- . Magnet backing (with protective foam covering) allows sockets to be attached to any metal surface
  • Allows sockets to be placed on rack so size is visible
- Posts replaceable if lost or broken
- · Can be laid down flat in drawer if necessary

BPMVSR14A Magnetic Vertical Socket Rail. 1/4" drive. BPMVSR38A Magnetic Vertical Socket Rail. 3/8" drive. BPMVSR12A Magnetic Vertical Socket Rail. 1/2" drive.







A288B

**KTA500** 

#### Multi-Row Socket Trays

- · Steel panel units have socket rails attached and a carrying handle A263B Socket Holder.
- · Fits in top, below pallet
- For square drive tools to 4" deep
- Holds (4) 10 3/8" rows and (2) 3 1/2" rows of sockets
- 5 row organizer measures 10 1/8" x 8 1/4" (U.S. Patent No. 5,284,245)

#### A286C Socket Holder.

• 7 row organizer measures 14 1/2" x 11 7/16" (U.S. Patent No. 5,284,245)

#### A288B Socket Holder.

- 10 row organizer measures 14 1/2" x 17 3/16".
- 2 handles (U.S. Patent No. 5,284,245)

#### KTA500 Multi-Row Socket Tray.

- Holds up to 80 sockets in 1/4, 3/8 and 1/2" drive sizes
  Features 1 rail with (16) 1/4" drive clips, 2 rails with (16)
- 3/8" drive clips each and 2 rails with (16) 1/2" drive clips each
- Aligns sockets for fast, easy selection
- · Use on roll carts and will fit into most roll cab/tool chest drawers
- . Overall length of 20'
- 17 1/2" L x 7 9/16" W x 2 1/2" D
- Made of heavy gauge steel

#### KTA600 Multi-Row Socket Tray (Blue-Point).

- Holds up to 80 sockets in 1/4, 3/8 and 1/2" drive sizes
- 5 rails with (16) 1/4" drive clips, (32) 3/8" drive clips and (32) 1/2" drive clips
- Fits into most roll cab/tool chest drawers
- · Sturdy handles on either side for easy carrying

#### BPSKTRLSTRY Multi-Row Socket Tray (Blue-Point®).

- Holds up to 80 sockets in 1/4, 3/8 and 1/2" drive sizes
  4 rails with (20) 1/4" drive clips, (30) 3/8" drive clips and (30) 1/2" drive clips
- Low profile design to fit most drawer sizes
- · Sturdy handle for either hanging or carrying the tray

#### YAURSET Socket Organizer.

- Accommodates up to 60 tools in 1/4, 3/8 and 1/2" drive sizes
- Complete economical socket system organizes sockets in the tool box drawer or on peg board; individual rails lift out for easy portability

# • Includes ratchet extension storage YA38UR 3/8" Drive Socket Organizer.

- . Holds up to 15 sockets
- Economical socket organizer rail fully adjusts to fit a wide variety of socket configurations

#### YAURCMH Horizontal Cart Mount Kit.

- . Holds up to 30 sockets
- · Easily attaches to the side of mobile tool carts

#### YAURCMV Vertical Cart Mount Kit.

- . Holds up to 15 sockets or wrenches
- Easily attaches to the side of mobile tool carts

## **Hand Tool Organization**

#### Magnetic Socket Trays

- Hold metric or fractional sockets in these molded ABS plastic travs
- · Handle for easy movement to job sites

# MR1426 Magnetic Socket Tray. • For 1/4" drive sockets • 26 compartments

- Storage for 13 standard. 13 deep sockets

MR1426BL. Black.

# MR3828 Magnetic Socket Tray. • For 3/8" drive sockets • 28 compartments

- Storage for 14 standard. 14 deep sockets

MR3828BL. Black.



MR1426



MR3828BL



**KMAGBIT37B** 



KMAGBIT37R



YA38HTD

# Magnetic Hex Bit Holders/Rubber Base (Blue-Point®)

- Magnetic base affixes to any ferrous metal without scratching surface
- Bits will stay in holder even in upside down applications
- · Nontransferable magnetic material will not magnetize tools or damage onboard automotive computers or other related circuitry
- Resists most shop chemicals
- Rubber base won't mar finishes
- Holds up to 37 bits
- Bits not included

KMAGBIT37B Magnetic Hex Bit Holder. Black. KMAGBIT370 Magnetic Hex Bit Holder. Orange. KMAGBIT37R Magnetic Hex Bit Holder. Red.

#### **Socket Driver Tray** YA38HTD Socket Driver Tray.

- Organizes the most commonly used 3/8" drive hex and TORX® socket drivers
- · Use only with chrome hand socket drivers
- · Sizes are clearly indicated on the holder
- Stores fractional hex drivers in 1/8 to 3/8" range (1/8, 9/6, 5/3, 3/1, 7/3, 1/4, 5/16 and 3/8"), metric hex drivers in 4 to 10 mm range (4, 5, 6, 7, 8, 9 and 10 mm) and TORX drivers from T27 to T60 sizes (T27, T30, T40, T45, T47, T50, T55 and T60)
- 3 open pockets for additional sockets
- Overall dimensions of 9 1/4" x 3 5/16" x 1/16"
- Made of durable, lightweight ABS plastic



KMAG14SD26B



KMAG38S12O



KMAG38D12R



KMAG38SD24B

## Magnetic Socket Holders (Blue-Point)

- · Magnetic base affixes to any ferrous metal without scratching surface
- Sockets will stay in holder even in upside down applications
- Nontransferable magnetic material will not magnetize tools or damage onboard automotive computers or other related circuitry
- Resists most shop chemicals
- Rubber base won't mark finishes

KMAG14SD26B Magnetic Socket Holder. Holds 13 shallow and 13 deep 1/4" drive sockets (1/4 to 9/16" and 4 to 14 mm). Black.

KMAG14SD26O Magnetic Socket Holder. Holds 13 shallow and 13 deep 1/4" drive sockets (1/4 to 9/16" and 4 to 14 mm). Orange.

KMAG14SD26R Magnetic Socket Holder. Holds 13 shallow and 13 deep 1/4" drive sockets (1/4 to 9/16" and 4 to 14 mm). Red.

KMAG38S12B Magnetic Socket Holder. Holds 12 shallow 3/8" drive sockets (up to 1"). Black.

KMAG38S12O Magnetic Socket Holder. Holds 12 shallow 3/8" drive sockets (up to 1"). Orange.

KMAG38S12R Magnetic Socket Holder. Holds 12 shallow 3/8" drive sockets (up to 1"). Red.

KMAG38D12B Magnetic Socket Holder. Holds 12 deep 3/8" drive sockets (up to 1"). Black.

KMAG38D12O Magnetic Socket Holder. Holds 12 deep 3/8" drive sockets (up to 1"). Orange.

KMAG38D12R Magnetic Socket Holder. Holds 12 deep 3/8" drive sockets (up to 1"). Red.

KMAG38SD24B Magnetic Socket Holder. Holds 12 shallow and 12 deep 3/8" drive sockets (up to 1"). Black.

KMAG38SD24O Magnetic Socket Holder. Holds 12 shallow and 12 deep 3/8" drive sockets (up to 1"). Orange.

KMAG38SD24R Magnetic Socket Holder. Holds 12 shallow and 12 deep 3/8" drive sockets (up to 1"). Red.



# **Hand Tool Organization**



**BPTRYLAS** 



**BPSSTRYLAS** 

# Lock-A-Socket Trays (Blue-Point®) BPTRYLAS Lock-A-Socket Tray.

- · Holds a variety of drive sizes on one tray
- Tray measures 8 3/4" x 20"
- Sockets are locked by turning to the right 90°, unlocked by turning to the left 90°
- 8 clips are included for ratchets and other attachments
- Rubber pegs are located underneath for surface grip and protection
- Swivel handles included for easy carrying
- Manufactured from 16 gauge powder coated steel for extra strength
- Lock-A-Socket posts are available separately and are interchangeable for customization

**BPSSTRYLAS Lock-A-Socket Tray.** Same features as BPTRYLAS, manufactured from 16 gauge stainless steel for extra strength.

MTSLAS50LP25 Lock-A-Socket Posts. 1/2" drive posts for BPTRYLAS. Pack of 25.

MTSLAS38LP25 Lock-A-Socket Posts. 3/8" drive posts for BPTRYLAS. Pack of 25.

MTSLAS25LP25 Lock-A-Socket Posts. 1/4" drive posts for BPTRYLAS. Pack of 25.



MAGRAK10

WRM10





BPS14MWH

BPM14MWH

# Magnetic Wrench Organizers (Blue-Point) MAGRAK10 Magnetic Wrench Organizer.

- 10 angular slots provide storage for most wrenches
- A ridge at the base prevents wrenches from contacting tool storage surfaces
- . Mount magnetically for instant wrench access
- Black

# MAGRAK10R Magnetic Wrench Organizer. Red. WRM10 Adjustable Wrench Organizer.

- Holds 10 wrenches
- · Adjusts to hold a variety of wrench sizes
- · Magnets secure individual wrenches to rack
- Individual magnets hold each wrench securely at its center allowing easy one hand removal
- Magnetic holders slide on aluminum rail to adjust wrench spacing
- Base magnets secure the wrench rack to tool storage unit or other ferrous metal surfaces
- Base is made of nonscratch, heavy duty anodized aluminum
- Red



KRA15A

#### **Wrench Organizers**

Includes a pair of 24" long plastic organizers. Cut to desired length and attach to any drawer with foam backing.

KRA15A Wrench Organizer. For smaller wrenches. KRA22A Wrench Organizer. For larger wrenches. WRM10-B Adjustable Wrench Organizer. Holds 10 wrenches. Blue.

WRM15 Adjustable Wrench Organizer. Holds 15 wrenches. Red.

#### **BPS14MWH Magnetic Wrench Holder.**

- Holds sizes 1/4" to 1" wrenches
- · Strong magnets secure wrenches in place during movement
- · Entire unit is magnetized to hold rack to drawer
- Blue

**BPM14MWH Magnetic Wrench Holder.** Same as BPS14MHW except it holds 8 to 21 mm wrench sizes. Black.



## Wrench Organizers (Blue-Point)

- The wrench holding tabs on the YA389 series are the reverse of the YA381 series so 2 or more sets can be stored side by side with all wrenches facing forward
- 6 1/4" x 2 1/2" x 9 1/2" long

YA381A Wrench Organizer. Red, holds up to 12 wrenches. YA381ABL Wrench Organizer. Black, holds up to 12 wrenches. YA389A Wrench Organizer. Red, holds up to 12 wrenches. YA389ABL Wrench Organizer. Black, holds up to 12 wrenches.

# **Hand Tool Organization**





## Soft Grip Stubby Wrench Racks (Blue-Point®)

- Easily stores and organizes wrenches
- Fits all 2" deep drawers in Snap-on® tool storage units
- Mounting holes align with the Slots-N-Dots™ system on Snap-on workstation riser units
- · Molded handle allows easy transport of loaded rack
- Red and black color schemes allow user to easily differentiate fractional from metric sizes
- Racks may be trimmed for use with smaller wrench sets
- · Flexible plastic material will not corrode or mar wrench finish

YA384SSG7B Stubby Wrench Rack.

Holds 7 stubby wrenches. Black.

YA384SSG7R Stubby Wrench Rack.

Holds 7 stubby wrenches. Red.

YA384SSG10B Stubby Wrench Rack.

Holds 10 stubby wrenches. Black.

YA384SSG10R Stubby Wrench Rack.

Holds 10 stubby wrenches. Red.



# Magnetic Nut Holder YA207 Nut Holder.

- Flexible stainless steel body with pivoting magnetic head clips onto open end and box end wrenches
- Holds nut on sizes 3/8 to 3/4" (10 to 19 mm)



# Crowfoot Wrench Holder

- For 3/8" drive crowfoot wrenches
- Conveniently organize and store your crowfoot wrenches on this holder
- 2 pc design snaps apart for access to desired size
- 8 3/4" long

#### **Soft Grip Wrench Racks**

- Design holds wrench securely yet provides quick and easy release
- · Easily stores and organizes wrenches
- Fits all 2" deep drawers in Snap-on tool storage units
- Mounting holes align with the Slots-N-Dots system on Snap-on workstation riser units
- Molded handle allows easy transport of loaded rack
- Red and grey color schemes allow user to easily differentiate fractional from metric sizes
- Racks may be trimmed for use with smaller wrench sets
- Flexible plastic material will not corrode or mar wrench finish
- Available in standard and reverse styles for convenient side by side mounting in tool drawers (U.S. Patent 5,638,964 applies)

Standard configuration (Red):

YA381SG8 Soft Grip Wrench Organizer.

Holds up to 8 wrenches.

YA381SG12 Soft Grip Wrench Organizer.

Holds up to 12 wrenches.

YA381SG15 Soft Grip Wrench Organizer.

Holds up to 15 wrenches.

Reverse configuration (Grey):

YA389SG8 Soft Grip Wrench Organizer.

Holds up to 8 wrenches.

YA389SG12 Soft Grip Wrench Organizer.

Holds up to 12 wrenches.

YA389SG15 Soft Grip Wrench Organizer.

Holds up to 15 wrenches.



#### Wrench Racks

- Specifically designed to hold up to 13 *Snap-on* wrenches from 7 to 19 mm sizes
- · Wrench size is clearly visible on rack
- Fits 2" deep KRL drawers and most 2" deep KRA drawers
- · Retaining tabs for convenient vertical mounting or carrying

YA381FRA Wrench Rack. Red, holds 1/4 to 1" sizes. YA381MET Wrench Rack. Grey, holds 7 to 19 mm sizes.



# **Hand Tool Organization**

## **Drawer Liners/Adhesive Spray**

#### JIKRL35F Drawer Liner.

- Foam drawer liner can be cut to size for lining drawers, roll cab tops, etc. 48" x 25" sheets
- Pack of 10

#### JIKRL35NS Drawer Liner.

- Non slip drawer liner can be cut to size for lining drawers, roll cab tops, etc. 48" x 25" sheets
- Pack of 10

#### **KRL1F Drawer Liner.**

- 1/16" thick black polyethylene can be cut to size for lining drawers, roll cab tops, etc
- 48" x 25" sheets (1 each)

#### AS6 Adhesive Sprav.

- Ideal for securing KRL1 drawer liner
- 12 oz spray can
- Also available in 6 pack containers (order 6)
- · Not included with sets



#### **Tool Control Kits**

- · Custom design and organize your tool drawers
- Each kit contains 6 self adhesive sheets of top and base material, 1 cutting tool and 1 roll of tracing paper
- Top is 1/2" thick, base is 1/8" thick

#### Top is black, base is red.

TCK1827BBR Tool Control Kit. 18" x 27".

TCK3627BBR Tool Control Kit. 36" x 27".

TCK4020BBR Tool Control Kit. 40" x 20".

Top is blue, base is yellow.

TCK1827BUY Tool Control Kit. 18" x 27".

TCK3627BUY Tool Control Kit. 36" x 27".

TCK4020BUY Tool Control Kit. 40" x 20".

## Magnetic Accessories



**BLP2CANHLDR** 



**BLP3CANHLDR** 

# **BLPPTHLDR KACUPHOLDA**

# **BLPPTHLDR Magnetic Roll Towel Holder.**

- · Ideal for use on side of tool box or service cart
- . Holds 2 spray cans and 5 screwdrivers
- Spray can slot is 3" diameter
- 6 powerful cushioned magnets resist surface scratching

Magnetic Can / Bottle Holder (Blue-Point®) BLP2CANHLDR Magnetic Can/Screwdriver Holder.

- Heavy gauge 0.80 mm black powder coated steel construction
- Weight: 1.92 lbs
- Dimensions: 5" W x 8.5" L x 5.12" H

#### **BLP3CANHLDR Magnetic Can/Screwdriver Holder.**

- · Ideal for use on side of tool box or service cart
- Holds 3 spray cans and 7 screwdrivers
- Spray can slot is 3" diameter
- 8 powerful cushioned magnets resist surface scratching.
- Heavy gauge 0.80 mm black powder coated steel construction.
- Weight: 2.62 lbs
- Dimensions: 5" W x 11.75" L x 5.12" H



#### Magnetic Tool Silhouettes KRSA30 Magnetic Tool Silhouettes.

- (30) 1" x 1 1/2" magnetic tool silhouettes Apply anywhere on tool storage unit to visually aid in tool organization
- · Magnetic; leaves no sticky adhesive

- Ideal for use on side of tool box or service cart
- Holds roll of shop towels (set of 2 holders)
- Powerful cushioned magnet resists surface scratching
- Heavy gauge 0.80 mm black powder coated steel construction Weight: 1.38 lbs Dimensions: 4" W x 5 1/8" L x 3 1/4" H (each piece)

#### **KACUPHOLDA Magnetic Adjustable** Can/Bottle Holder.

- Magnetic adjustable can and bottle holder can be used with cleaners, lubricants, spray paint cans, beverages and more
- Adjustable strap will fit oval or odd shaped bottles or cans from 2 to 3 5/8"
- · Easily attaches to roll cabs, top chests, end cabs, carts or any other ferrous metal
- Large 1 5/8" x 4 1/2" magnet grips securely
- Minimum container height: 3 3/8"
- Available in red only



#### Flexible Magnetic Strip KRDDMAG130 KRDDMAG130 Flexible Magnetic Strip.

- · Magnetic, adhesive backed strip allows easy drawer divider attachment
- 1" wide, 30' long

# **Magnetic Accessories**



#### **Magnetic Panels**

- Magnetic base attaches to riser, tool box, cart, creeper or any ferrous surface in seconds
- Tools are easily positioned on the magnetic panel
- Ideal for holding fasteners during removal and assembly operations
- · High strength magnets
- Made from 16 gauge steel. 3/16" thick
- · Will not magnetize tools

KAMM1212 Magnetic Panel. Measures 12" x 12". KAMM126 Magnetic Panel. Measures 12" x 6".

KAMM612 Magnetic Panel. Measures 6" x 12". KAMM122 Magnetic Panel. Measures 2" x 10 5/8".



## Magnetic Bar Tool Holders

Magnet holds tools for easy access.

YA161 Magnetic Tool Bar Holder. Black finish, 24" long. YA162 Magnetic Bar Tool Holder. Black finish, 13" long. KAMR123 Magnetic Bar Tool Holder.

• Can magnetically mount to metal surface or can be screw mounted

**YA209** 

- Measures 11 3/4" L x 2 1/4" W x 7/8" D
- Housing is black finish with chrome finished magnet plate

YA209 Magnetic Bar Tool Holder. Chrome finish, 24" long.



**MAGWRENCH** 

#### BPMST135 Storage Tray (Blue-Point).

- Create additional workspace for your toolbox or roll cart
- Strong magnetic panel inside tray holds a variety of metal objects like sockets, nuts, bolts, extensions and parts
- . Hangs easily on the side of a drawer or toolbox tray
- Made of heavy duty powder coated steel
- Measures 2" H x 2" D x 13 1/2" L

#### MAGWRENCH Magnetic Bar Tool Holder (Blue-Point).

- Industrial strength magnets keep it secured to a metal surface
- · Holds tools for quick and easy access
- Chrome plated steel bar with chrome plated nylon ends
- Overall size is 20" (with approximately 12" of magnetic holding space)



# Magnetic Trays and Dishes (Blue-Point®) MRB5A Magnetic Bowl.

- · Round stainless steel dish features powerful mounting magnet
- · Securely holds small parts and tools
- 5 3/8" ID

#### MRB10A Magnetic Tray.

- · Rectangular magnetic tray holds metal parts and small tools
- Magnetically attaches to any flat iron or steel surface
- Measures 9 1/2" x 5 1/2"

#### MRB12A Magnetic Tray.

- · Rectangular magnetic tray holds metal parts and small tools
- Magnetically attaches to any flat iron or steel surface
- Features (3) 3 1/8" diameter magnets that are rubber coated to prevent scratching
- Measures 6 5/16" x 14 7/32"

#### MRPB10MP5 Magnetic Dish (5 pack).

- Each tray measures 9 1/2" L x 5 1/2" W x 1 1/8" D
- Molded plastic design coupled with rubber base helps prevent damage to vehicle finish
- Fully magnetized to hold contents and adhere to ferrous surfaces
- Use upside down or on the side of the vehicle. Each tray weighs 1.4 lbs
- Package of 5 trays includes one tray each in the following high visibility colors: red, orange, green, yellow and blue

#### MRB15A Magnetic Tool Tray.

- Keep tools or parts within easy reach with this magnetic tray
- Stainless steel with 4 large rubber based magnets on the bottom to resist scratching
- 11 5/8" L x 10 3/4" W x 1/2" D



#### **BLPMPTSETA**

#### Magnetic Parts Trays (Blue-Point).

- Tray attaches to a cart or box with full length magnets that cover the entire backside of tray
- Holds nuts, bolts, sockets or a variety of other tools and hardware
- Tray won't scratch paint and attaches to any flat metal surface
- · Corrosion resistant finish

BLPMPT6A Magnetic Parts Tray. 6" long.

BLPMPT8A Magnetic Parts Tray. 8" long.

BLPMPT10A Magnetic Parts Tray. 10" long.

BLPMPT12A Magnetic Parts Tray. 12" long.

BLPMPTSETA Set. 1 each of BLPMPT6A, BLPMPT8A, BLPMPT10A and BLPMPT12A.



# **Drawer Organization**





#### KDDU2A

## Plastic Drawer Dividers/2" Drawer Height

KDD52-6A Drawer Divider Rail. 5" long. Pack of 6.
KDD72-6A Drawer Divider Rail. 7" long. Pack of 6.
KDD122-6A Drawer Divider Rail. 12" long. Pack of 6.
KDD2-20A Drawer Divider Rail Clips. Rail divider clips.
Use to attach divider rails to perimeter rails or to other divider rails.
Pack of 20.

KDD2C-4A Perimeter Rail Corner Clips. Perimeter rails and corner clips. Pack of 4.

KDD2L-2A Drawer Divider Rail. 35" long universal drawer divider rails. Can be cut to any length. Pack of 2.

**KDDU2A Drawer Divider Set.** Fits 1 drawer deeper than 1 1/2". Includes: perimeter rail set (4 pcs w/corner clips), 26" divider rails (3 each), 12" divider rails (3 each), 7" divider rails (3 each), 5" divider rails (3 each) and divider clips (14 each).

KDDP2A Perimeter Rail Set. 35" rails (4 each) and corner clips (4 each).

Stock No.	Drawer Style	Inside Drawer Dimensions, inches	Box Depth, inches
KDD402A	KRA medium	1 19/ <sub>32</sub> H x 21 W x 17 D	Ali Kra
KDD412A	KRA wide	1 19/32 H x 34 1/2 W x 17 D	Ali Kra
KDD702A	KRL narrow	1 19/32 H x 14 7/16 W x 21 1/2 D	24
KDD712A	KRL narrow	1 19/32 H x 14 7/16 W x 26 1/2 D	29
KDD722A	KRL medium	1 19/32 H x 30 3/16 W x 21 1/2 D	24
KDD732A	KRL medium	1 19/32 H x 30 3/16 W x 26 1/2 D	29

ALL SETS (except KDDU2A) - Each set is designed to fit specific KRA and KRL drawers. Set includes 4 precut perimeter rails that fit along the inside wall of drawers, 4 corner clips to attach perimeter rails to each other and an assortment of precut adjustable divider rails and divider clips that match the size of the specified drawer. KDDU2 SET ONLY - Universal set that fits any *Snap-on*tool storage drawer. Rails can be cut to desired length.

# Plastic Drawer Dividers KRA17B Drawer Divider.

KRA17B

SPP804-2

- Partition drawers by cutting divider to desired length
- Attach to drawer with foam backing
- 24" long

#### KRA27B Drawer Divider.

- · Same as KRA17B
- 31" long

# **Plastic Parts Tray Drawer Inserts**

- Lightweight but tough reinforced polymer construction
- Each compartment has an area for labeling, if desired
- Use in tool drawers or cart to organize fasteners, clips, etc
- Fits into a 2" narrow drawer, such as on KRL722, KRA2411 and KRA2418 models

#### SPP804-2 Parts Tray.

- 35 compartments
- 1 5/16" H x 14 9/16" W x 21 7/16" D

#### SPP804-1 Parts Tray.

- 14 compartments
- 1 5/16" H x 14 9/16" W x 21 7/16" D



### Plastic Drawer Dividers/4" Drawer Height

KDD54-6 Drawer Divider Rail. 5" long. Pack of 6.
KDD74-6 Drawer Divider Rail. 7" long. Pack of 6.
KDD124-6 Drawer Divider Rail. 12" long. Pack of 6.
KDD4C-4 Perimeter Rail Corner Clips. Perimeter rails and corner clips. Pack of 4.

**KDD4-20 Drawer Divider Rail Clips.** Rail divider clips. Use to attach divider rails to perimeter rails or to other divider rails. Pack of 20

**KDD4L-2 Drawer Divider Rail.** 35" long universal drawer divider rails. Can be cut to any length to fit any drawer storage need. Pack of 2.

#### **KDDU4 Drawer Divider Set.**

- Includes: perimeter rails that fit along the inside wall of drawers,
   4 corner clips to attach perimeter rails to each other, and an assortment of adjustable divider rails and divider clips that fit any Snap-on® tool storage drawer
- All rails must be cut to desired length

**KDDP4 Perimeter Rail Set.** 35" rails (4 each) and corner clips (4 each).

Stock No.	Drawer Style	Inside Drawer Dimensions, inches	Box Depth, inches
KDD404	KRA medium	3 <sup>19</sup> / <sub>32</sub> H x 21 W x 17 D	AII KRA
KDD414	KRA wide	3 <sup>19</sup> / <sub>32</sub> H x 34 <sup>1</sup> / <sub>2</sub> W x 17 D	AII KRA
KDD704	KRL narrow	3 <sup>19</sup> / <sub>32</sub> H x 14 <sup>7</sup> / <sub>16</sub> W x 21 <sup>1</sup> / <sub>2</sub> D	24
KDD714	KRL narrow	3 <sup>19</sup> / <sub>32</sub> H x 14 <sup>7</sup> / <sub>16</sub> W x 26 <sup>1</sup> / <sub>2</sub> D	29
KDD724	KRL medium	3 19/32 H x 30 3/16 W x 21 1/2 D	24
KDD734	KRL medium	3 <sup>19</sup> / <sub>32</sub> H x 30 <sup>3</sup> / <sub>16</sub> W x 26 <sup>1</sup> / <sub>2</sub> D	29

KDD404, KDD414, KDD704, KDD714, KDD724, KDD734 SETS ONLY - Each set includes 4 pre-cut perimeter rails that fit along the inside wall of drawers, 4 corner clips to attach perimeter rails to each other and an assortment of precut adjustable divider rails and divider clips that match the size of the specified drawer. KDDU4 SET ONLY - Same as other sets except rails are not precut. All rails must be cut to desired length. Fits any *Snap-on* tool storage drawer.

KADDS2404 4" Drawer KADDS2402 2" Drawer



#### **Drawer Dividers, Steel**

- Designed to be used in all KRL Masters Series (24 and 29" deep), Classic Series (24" deep) and KRA6200 Series road chests
- Simply place the side edges and front/back edges around the perimeter of the drawer and then locate middle dividers and divider tabs wherever they are needed (in 3, 5, 7, 10 and 15" width increments).
- Additional individual components for KRL1000 and KRL7000 Series (29" deep) available at www.snapon.com/toolstorage.

KADDS2404 Drawer Divider Kit, 4". Use on KRA2407, KRA2411, KRA2418, KRL722, KRL756 Series.

**KADDS2402 Drawer Divider Kit, 2".** Use on KRA2407, KRA2411, KRA2418, KRL722, KRL756, KRA6200 and KRA6210.

#### **Workcenter Accessories**



## Workcenter Accessories

- Use these quality accessories to enhance the organization and storage capabilities of the KRL7000 workstation series
- All accessories designed to work with the Slots-N-Dots™ mounting system

Looped Tool Organizer (Blue-Point®). Loops hold screwdrivers, extensions, ratchets, pliers and other small hand tools. YA3086A 6" long.

YA3123A 12" long.

YA3089A 9" long.

# YA3182A 17 1/2" long. KAT12APV Spray Can Rack (12").

- Holds 3 to 4 spray cans
- 12" long

#### KAT18APV Spray Can Rack (18").

- Holds 5 to 6 spray cans
- 18" long

#### KASR1ŽAPV Screwdriver Rack.

- Holds up to 7 screwdrivers or other tools
- 12" long

#### KALR12APV Literature Bin.

- · Stores manuals, magazines, papers and other printed materials

## KAS12PWRPV Power Tool Rack.

- · Holds 3 units
- Fits all slotted walls found on carts and workstation.

#### KAMS18PV Shop Manual Stand.

- Shop manual stand with page holder
- 18" wide

#### KAT12PVA Flat Utility Shelf.

• 12" wide shelf for miscellaneous items

#### KAFL148 Task Light.

- Screw mounts under the top riser/shelf of workstation
- Uses standard 40 W fluorescent bulb (not included) and 6' cord

#### ECU4250A (120 V AC) 15 W Fluorescent.

- Resists grease, oil and vapors
- Not immersible
- Plug in ballast, light reflectors, hanging hook, and 3 conductor extension cord included
- Floating, molded nylon sockets absorb shock for longer bulb life
- UL®/CUL® listed

#### ECU44255A Magnetic Utility Light Clamp.

- Features an expandable clamp on a magnetic base
- Can be used with any of our fluorescent utility lights (except ECU410)

KAPR24PVA Prybar Rack. Holds prybars up to 48". Mounts to all EPIQ, Masters, Classic and KRSC100 series. Black textured finish. KALS15. 15" Laptop Stand. Mounts to *Slots-N-Dots* system. KAHCK3. 3" Hook up accessory. Mounts to *Slots-N-Dots* system. **KAHK6.** 6" Hook up accessory. Mounts to *Slots-N-Dots* system. KAHLK3. 3" Loop accessory. Mounts to Slots-N-Dots system.

KATR12PV. 12" T-Handle rack. Mounts to Slots-N-Dots system.

# Shelves, Trays and Racks

#### KRA412FPBO Folding Shelf.

- · Fits all KRA tool storage units
- Bracket slips over raised lip of roll cab
- . Shelf is hinged to bracket, which has drilled mounting holes
- Full length piano hinge
- · Folds down when not in use
- 18 1/4" x 18" x 1/4" rim
- Red







KRA412FPC

**KRA412FPCM** 

KRA412FPC Folding Shelf. Same as KRA412FPB0 except black. KRA412FPCM Folding Shelf. Same as KRA412FPB0 except blue. **KRA412FPV Folding Shelf.** Same as KRA412FPBO except textured black. JKRR412AR Rubber Mat. Fits KRA412FPB0 folding shelf.

## Shelves, Travs and Racks











1003X36PV

#### **KRA16AAPV Valve Rack.**

- (16) 11/16" holes provide easy access to valves
- Hang on roll cab or tool chest with 1/4" or more lip
- This handy unit hooks over the lip of any Snap-on® roll cab
- · Black textured finish

#### **KR294AAPV** Prybar Rack.

- · Hang up to 4 prybars or long tools with handles
- · Notched angle plate keeps tools from shifting
- Suspend from roll cab or tool chest with 1/4" or more lip
- · Black textured finish

#### KAPR24PVA Prybar Rack.

- Prybar rack for use on KRL1000, KRL7000, classic, KRSC100 and KRSC101 series mobile workstations hold large prybars
- · Black textured finish

#### KR295 End Cab (Red). KR295PV Textured Black.

- End cabs offers 28 holes in various diameters for safe and secure storage of small prybars and other long tools
- Hole specifications; 8 holes (5/8"), 10 holes (3/4"), 4 holes (7/8"), 4 holes (1") and 2 holes (1 1/4")

#### KRJC23AAPV Creeper Hanger.

- · Secures creepers to roll cabs
- Hanger hooks over lip of roll cab and screws down
- Adjustable to 4 different creeper widths
- 2 hook bolts and a lock rod are included so creeper can be padlocked (not included) (U.S. Patent 5,407,170)
- 16 13/16" length
- · Black textured finish

KR14 Screwdriver Rack. Keeps frequently used screwdrivers accessible.

#### KRA19 Hang-on Parts Tray.

• Organize small parts or spray cans

KRA19

- Hang on roll cabs or tool chest with 1/4" or more lip
- Also for use in drawers as storage trays
- Measures 15" x 3" x 2 1/4"

KRA20 Hang-on Parts Tray. Same as KRA19.

Measures 25" x 3" x 2 1/4".

Sliding Trays. Provide additional work or storage surface.

KA41X36 Sliding Tray. Maximize your 36" drawer space.

Fits common Heritage and KRSC series 36" drawers.

KA41X36-6 Tray Divider Set. Set includes 6 additional dividers for the KA41X36 sliding tray.

KA31X36 Sliding Tray. Maximize your 31" drawer space. Fits Masters and Classic series.

761XL36PV Sliding Tray. Fits KRL and classic.

Measures 29 7/8" W x 6" D x 1 1/8" H.

1001XL36PV Sliding Tray. Fits KRL and classic.

Measures 14 1/8" W x 6" D x 1 1/8" H.

1003X36PV Sliding Tray. Fits KRL.

Measures 14 5/8" W x 6" D x 1 1/8" H.

# **Locking Bars**



#### **Locking Bars**

Serve as a secondary locking system when ultimate protection is called for. Padlock must be purchased separately. Hardware included. KRBL2 Lock Bar. 32" long. For use on KRL722, KRA2411, KRA2418.

KRBL4 Lock Bar. 36 13/32". For use on KRL1022 and KRL1023. KRABL2 Lock Bar. 32" long. For use on all KRA Series Roll Cabs

except KRA2400 series.

8-26836A Lock Bar. Hinged secondary lock bar fits side of low profile KRL roll cabs such as KRL756 series (similar to 8-27336A). 8-27336A Lock Bar. Fits all Heritage and Blue-Point® hinged manual lock bar. Secondary lock system uses padlock for extra security (not included).

## **Padlocks**



#### **Padlocks**

Master Lock® padlocks. Brass cylinders, nickel/silver pin tumblers and brass locking levers for maximum locking protection.

ML1A Padlock. 1 3/4" steel case, 5/16" diameter.

ML3A Padlock. 1 1/2" steel case, 9/32" diameter. ML7A Padlock. 1 1/4" steel case, 3/16" diameter.

#### ML1504DA Combination Padlock.

- Case hardened 9/32" steel shackle offers protection against cutting and sawing
- · Secure 3 digit combination
- Automatic locking lever

www.snapon.com/toolstorage

# **Tote Bags**



#### **Tote Bags**

- Rugged, versatile tote bags are constructed from heavy duty 600 x 300 D-polyester
- · Water resistant PVC backing
- Reinforced top hem
- Wide top opening for easy access
- Padded handles and shoulder strap
- · Embroidered logos

#### TB10A Collapsible Tote Bag.

- Folds flat for convenient storage using Velcro® with metal snap corner closures
- Multiple interior and exterior pockets
- Fold down interior bin dividers
- Molded plastic bottom for strength
- Overall dimensions: 18" L x 8" W x 9" D

#### TB20A Tote Bag.

- Multiple interior and exterior pockets
- Removable plastic parts storage bin accessed via lower side storage pocket
- Overall dimensions: 15" L x 10 1/2" W x 12" H

#### TB30 Tote Bag.

- Ultimate small tool organizer
- Multiorganizing pockets
- · Heavy duty zippers
- Overall dimensions 13" x 10" x 8"

#### TB40 Tote Bag.

- · Lots of cargo space for air tools, etc
- · Heavy duty shoulder strap
- Overall dimensions 17" x 9" x 11"

#### TB50 Tote Bag.

- Multipockets inside and out
- Easy grip handle
- · Special hard body design
- Overall dimensions 20" x 11" x 9"

#### CTTOTEA Tote Bag.

- · Wide opening for easy access to tools
- Extra padding to protect tools
- Durable 600 Denier® outside for strength
- Interior pockets and compartments for tool organization
- Padded handles for comfortable transport
- · Reinforced bottom for strength
- Six external pockets for extra storage
- Approximate inside bag dimensions, open:
   18" L x 8" W x 11 1/2" D. EU GB

#### **BPTOTE Tote Bag (Blue-Point®).**

- Rugged and versatile
- Constructed from heavy duty 600 x 300 D-polyester
- Water resistant
- Embroidered *Blue-Point* logo
- · Wide top opening for easy access
- Multiple interior and external pockets for tool organization
- Overall dimensions: 16 1/2" L x 10 1/2" W x 12 1/4" H

#### Miscellaneous



# Step Stool KASS13 step stool/seat.

- · Versatile step stool, seat and storage unit all in one
- Holds up to 305 lbs and has nonskid rubber grommets for stability
- Large interior storage capacity with built in tote tray
- · Has a handle for mobility that folds flat when used as a stool
- 13" H x 22" W x 15" D



#### Accessory Box KRA444A Accessory Box.

- Lockable box mounts inside roll cab or tool chest for protection of valuables
- 8 1/4" x 4 3/4" x 1 1/4"
- Requires 2" minimum drawer depth

#### **KRA444APV** Accessory Box.

Same as KRA444A with black textured finish

#### Floor Lock Kits

For roll cabs that require better roll cab immobilization

#### KRFL6A Adjustable Floor Lock Kit.

- For KRL Masters series
- 29" deep, 54" wide and larger

#### Leather Tool Pouches YA869 Leather Tool Sheath (Blue-Point®).

- 1 pocket sheath attaches to any work belt
- 8 1/2" x 2"

# Keychain (*Blue-Point*) GA155A Keychain.

- Spring retractable, 24" chain
- Clips onto belt or pocket







# Floor and Kneeling Mats



JKAFM3672DP

## **Anti Fatigue Diamond Plate Floor Mats**

- Skid resistant chrome diamond plate mat surface
- Flexible anti-fatigue material with extra padding
- Durable, easy to clean and damage resistant

	Stock No.	Size, inches
Diamond Plate	JKAFM3636DP	36 x 36
Anti-Fatigue Floor Mat	JKAFM3648DP	36 x 48
	JKAFM3654DP	36 x 54
	JKAFM3660DP	36 x 60
	JKAFM3672DP	36 x 72
	JKAFM36102DP	36 x 102
	JKAFM36120DP	36 x 120

## **Kneeling Mats**

#### MAT19PK Kneeling Mat.

- Kneeling mat is constructed from 3 layers of high density foam for comfort
- Black with Snap-on® logo
- Handle for ease of carrying
- Pack of 5

#### MAT13PK Kneeling Mat.

- Cushioned floor mat can help reduce fatigue, protect clothing and increase comfort
- Multilayered closed foam construction is durable and tear resistant
- Resistant to most shop chemicals
- Measures 8 1/2" x 13" x 1 1/8" thick
- Pack of 5

#### MAT38PK Kneeling Mat.

- Cushioned creeper mat can be used on a creeper or on the floor
- Multilayered foam construction is durable and tear resistant
- Resistant to most shop chemicals
- Measures 15 3/4" x 38 1/2" x 1 1/8" thick
- Pack of 5



Snap-on.

JKAFM2436BK

JKAFM2448BR

#### **Cushioned Floor Mats**

- · Exceptional anti-fatigue properties
- Eases lower back stress and leg and foot discomforts from prolonged standing on hard surfaces
- Under padding hugs the smoothest floor surfaces to prevent mat slippage
- Skid resistant diamond plate mat surface provides sure footing
- Mat resists most shop chemicals
- Graphics are inlaid PVC for greater wear resistance

	Stock No.	Size, inches
Black Mat with Red	JKAFM2436BK	24 x 36
<i>Snap-on</i> logo	JKAFM2448BK	24 x 48
	JKAFM2460BK	24 x 60
	JKAFM2472BK	24 x 72
	JKAFM3636BK	36 x 36
	JKAFM3648BK	36 x 48
	JKAFM3660BK	36 x 60
	JKAFM3672BK	36 x 72
Black Mat with	JKAFM2436BR	24 x 36
Red Border/Red	JKAFM2448BR	24 x 48
Snap-on logo	JKAFM2460BR	24 x 60
	JKAFM2472BR	24 x 72
	JKAFM3636BR	36 x 36
	JKAFM3648BR	36 x 48
	JKAFM3660BR	36 x 60
	JKAFM3672BR	36 x 72



MAT13PK

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# **Drawer Maintenance**







8-88HBRK

#### **Detent Kits**

Detent kits for ball bearing slides. Kits include standard detents for normal use or firmer retrofit detents to help prevent unlocked drawers from inadvertently rolling open.

**8-88CWRK Detent Kit.** 2 pair of wide detents. Grey pair for increased stiffness. Off white pair for standard stiffness.

8-88HBRK Detent Kit. A pair of heavy duty standard cabinet member bumper kits for use with latch (black).

**8-88HDRK Detent Kit.** A pair of heavy duty cabinet member detent kits for use without latch (grey).

**8-88HSRK Detent Kit.** A pair of heavy duty intermediate member sequencing detent kits for use with/without latch (black). **8-88ANRK Detent Kit.** A pair of narrow, firm stiffness detent kits for drawers without latch (grey).

**8-88RRK Detent Kit.** A pair of firm stiffness detent kits for over under slide used on KR Series Units (grey).

**8-88ASNRK Detent Kit.** A pair of narrow, standard stiffness detent kits for drawers without latch (black) .

**8-88SWRK Detent Kit.** A pair of wide, standard stiffness detent kits (black).

8-88WRK Detent Kit. A pair of wide, firm stiffness detent kits (grey).



## **Ball Bearing Drawer Slides**

**8-05088ALRS Drawer Slide Set.** Left/right slide kit with screws. For KRL700 series tool storage units.

8-05188ALRS Ball Bearing Slide Set. Left/right slide kit for 2400 series.

**8-05288ALRS Ball Bearing Slide Set.** Left/right slide kit with screws. For all narrow and wide drawers in KRA2000/KRA4000/KRA5000 series units and KRSC series carts.

**8-05388ALRS Drawer Slide Set.** Left/right slide kit with screws. For KRL1000/KRL7000 series tool storage units.

**8-05488AS Ball Bearing Slide Set.** Includes 2 slides and screws. For KRL712 series lockers and KRL7015 series end cabs. **8-05588AS Ball Bearing Slide Set.** Includes 2 slides and screws. For KRL1012/KRL7012 lockers and KRL1015/KRL7015/KRLV7015 end cabs only.

#### **KRL Series Drawer Control (Special Order)**

Available for new KRL series roll cabs and top chests. Drawer control permits only 1 drawer per bank to be opened at a time, reducing the chance of the unit tipping. Existing units cannot be retrofitted. Special order.

#### **Drawer Latches**

10-185B Lock-n-Roll® Latch (Narrow Bank). Drawer latch for narrow bank drawers on KRL700/KRL1000/KRL7000 series tool storage units.

**10-285B** *Lock-n-Roll* Latch (Wide Bank). Drawer latch for wide bank drawers on KRL700/KRL1000/KRL7000 series tool storage units and KRA4000 series 40" wide drawers.

**10-385B** *Lock-n-Roll* **Latch (Extra Wide Bank).** Drawer latch for extra wide bank drawers on KRL700/KRL1000/KRL7000 series tool storage units.

**10-485B** *Lock-n-Roll* **Latch (Narrow Bank).** Drawer latch for narrow bank drawers on KRA4000 series tool storage units.

**10-885B** *Lock-n-Roll* **Drawer Latch (Wide).** Drawer latch for narrow bank drawers on KRA4000 series 26" wide and wide bank of 40" wide units.

**10-01085A** *Lock-n-Roll* **Drawer Latch (Super Wide).** Drawer latch for wide bank drawers on KRL1032B(C) and KRL1033(A) roll cabs.

**10-01185A** *Lock-n-Roll* **Drawer Latch.** Drawer latch for KRL1099).

# **Tool Storage Unit Maintenance**

# Touch-up Paint

Color	1/2 oz Bottle Stock No.	12 oz Spray Can Stock No.	PPG® Powder No.	PPG Ditzler Wet Spray No.
Red	PN2-83408	REP12A	AR320 Resin	73504
Black (High Gloss)	PN2-84208	PN12-84208	PCU-90200	9895 (9300)
Black (Textured)	_	PN12-86908	PCU-90106	9817
<b>Royal Blue</b>	PN286308	PN1286308	PCU-50134	19026
Cranberry	PN2-84508	PN12-84508	PCU-60139	51797
Ultra Yellow	PN2-87808	PN12-87808	PCU-30115	84199
Green Mica	PN286708	PN1286708	PCU-43100	47767
Deep Purple	PN2-87408	PN12-87408	PCU-60122	52560
Candy Apple Red	PN2-809508A	PN12-809508A	PCU-60137	902979
Electric Orange	PN2-809908A	PN12-809908A	PCU-30132	90621
Arctic Silver	PN2-810208A	PN12-810208A	PCU-73120	910517
Extreme Green	PN2-809808A	PN12-809808A	PCU-40134	906120
Tractor Green	PN2-85308	PN12-85308	PCU-40400	47403
White	PN285208	PN1285208	PCU-80103	91207
Midnight Blue	PN2-87308	PN12-87308	PCU-50117	191009
Flat Black	PN2-811308A	PN12-811308A	PCUP-90105	_
Clear	PN2-CLEAR	PN12-CLEAR	_	_







REP12A PN1286308

PN286308



- Do not open multiple drawers
- Read safety precautions on pages W1 to W4

## **Tool Storage Unit Maintenance**



#### Casters

Replacement casters for Snap-on® Tool Storage Roll Cabs.

Stock No.	Description	Capacity, lbs	Size, Inches	Material	Application
8-20739	Heavy Duty (Swivel)	900	6 x 2	GLA-NYL	KRL1056A, KRL722, KRL756A
8-20839	Heavy Duty (Rigid)	900	6 x 2	GLA-NYL	KNL1030A, KNL122, KNL130A
8-30939	Extra Heavy Duty, ISO-Ride (Rigid)	1,700	6 x 2	GLA-Polymer	KRL1022A, KRL1033, KRL1024A, KRL1023A, KRL1043A,
8-30839 8-26939A-SL	Extra Heavy Duty, ISO-Ride (Swivel) Pivot Lock for 8-26939A Caster	1,700 –	6 x 2 -	GLA-Polymer –	KRL1053A, KRL1065A, KRL7022A, KRL7023A, KRL7065A
8-27980A	Heavy Duty (Rigid)	900	6 x 2	GLA-Polymer	KRL1056B, KRL722A, KRL756B
8-28039A	Heavy Duty (Swivel)	900	6 x 2	GLA-Polymer	MILIOSOD, MILIZZA, MILISOD
8-28139A	Medium Duty (Swivel)	600	6 x 2	Monoprene (Soft)	KRA2407, KRA2411, KRA2418, KRA2432, KRA4107D,
8-28239A	Medium Duty (Rigid)	600	6 x 2	Monoprene (Soft)	KRA4813D, KRA5213D, KRA5319D, KRSC40A, KRSC41, KRA2422, KRA5311
8-26139A	Medium Duty (Swivel)	330	5 x 2	Cast Iron w/Rubber	KRA2106A, KRA2107A, KRA2212, KRA2306, KRA2312,
8-26439A	Medium Duty (Rigid)	330	5 x 2	Cast Iron w/Rubber	KRA4008E, KRSC31, KRSC40, KRA2005, KRA2007 (Replace all 4)
8-30539A	EPIQ Caster, Swivel with Pivot Lock	2,000	7 x 2	GLA/NYL	KERP763B, KERP843B, KERP762B, KERP842B, KERN842B,
8-30639A	EPIQ Caster, Rigid	2,000	7 x 2	GLA/NYL	KERN843B, KERN602B, KERN682B
8-21839A	Donut Aluminum Hub Kingpinless (Swivel)	500	6 x 2	Aluminum w/Rubber	KRSC10, KRL756B, Classic, Heritage
8-21939A	Donut Aluminum Hub (Rigid)	500	6 x 2	Aluminum w/Rubber	KRL756B, Classic, Heritage
8-30439AR	Heavy Duty Swivel with Rigid Lock	900	8 x 2	Steel w/Polymer	KRSC100, KRSC40, KRSC41, KRSC46
8-31039A	Donut Aluminum Hub Standard (Swivel)	500	6 x 2	Aluminum w/Rubber	KRSC10, also fits Classic and Heritage
8-31139A	Soft Wheel, Black Horn (Rigid)	600	6 x 2	Monoprene (Soft)	Classic, Heritage, KRSC carts
8-31239A	Soft Wheel, Black Horn (Swivel)	600	6 x 2	Monoprene (Soft)	Classic, Heritage, KRSC carts
8-24239A	Soft Wheel, Swivel with Lock	330	5 x 1.25	Monoprene (Soft)	
8-24339A	Soft Wheel, Rigid	330	5 x 1.25	Monoprene (Soft)	KRA2005, KRA2007





KACAP6BK

KACAP6BU





**KACAP6RD** 

#### **Custom Caster Bolt Covers**

- Fits all Snap-on casters current models and most past models
- Caps fit all current Snap-on roll cabs
- · Also fits the bolt on the caster horn found on all EPIQ and Masters Series roll cabs
- Also fits Classic 6" x 2" caster bolt
- Machined aluminum with custom Snap-on wrench S marking
- 6 pc sets (2 for each swivel caster one for each rigid)
- Includes set screw for positive attachment (includes Allen Wrench for install)

KACAP6BK Powder Coated Black Caster Bolt Covers (6 pcs) Powder coated black aluminum.

KACAP6BU Anodized Blue Caster Bolt Covers (6 pcs) Blue anodized aluminum.

KACAP6RD Anodized Red Caster Bolt Covers (6 pcs) Red anodized aluminum.

# **Heavy Duty Brass Replacement Locks**

- Can be used to replace all Snap-on round key (K-Series) locks
- Replace standard locks subject to abnormal usage, exposure to shop fluids or extreme temperature and humidity fluctuations
- Ideal for multishift/user situations
- Hard brass cylinder plug for a longer life cycle
- Highly finished brass cylinder plug for smoother operation
- More secure retention in the tool storage unit
- Tested to operate smoothly over 25,000 cycles
- 200 different cylinder plugs available as replacement items

K1HLA 1 lock assembly with 2 keys.

**K2HLA** 2 keyed alike lock assemblies with 2 keys.

K3HLA 3 keved alike lock assemblies with 2 kevs.

**K4HLA** 4 keyed alike lock assemblies with 2 keys.

**K5HLA** 5 keved alike lock assemblies with 2 kevs.

K6HLA 6 keyed alike lock assemblies with 2 keys.

**K7HLA** 7 keyed alike lock assemblies with 2 keys.



#### Tubular Lock Assemblies

- High security tubular tool storage locks with rotating collars are harder to pick and are more resistant to vandalism
- Key alike any number of *Snap-on* tool storage units
- Older units can be converted to this new style lock
- · Each lock has an individual combination
- · Lock kits include mounting nut and lock washer

K1LA 1 lock assembly with 2 keys.

K2LA 2 keyed alike lock assemblies with 2 keys.

K3LA 3 keyed alike lock assemblies with 2 keys.

**K4LA** 4 keyed alike lock assemblies with 2 keys.

K5LA 5 keyed alike lock assemblies with 2 keys.

K6LA 6 keyed alike lock assemblies with 2 keys.

K7LA 7 keyed alike lock assemblies with 2 keys.



# YOU NEED ANSWERS SNAP-ON HAS THEM

Snap-on® diagnostic tools help you quickly get to the heart of complex problems

#### **Platforms**

From scan tools and oscilloscopes to internet capable multifunction tools, *Snap-on* diagnostics can help you manage the repair and your business

**SCAN TOOLS** — ETHOS® offers OEM specific coverage for dozens of systems on 40 makes, while SOLUS Ultra® also includes real-world troubleshooter tips and timesavers



# **DIAGNOSTICS**

**OSCILLOSCOPE** — Vantage PRO<sup>™</sup> puts guided component tests in your hands, plus the accuracy of over 8 million data samples per second

MULTIFUNCTION TOOLS —VERDICT™ offers the freedom of Wi-Fi®, Windows®, a wireless scope, scan tool and display tablet. VERUS® also adds a big ten-inch display screen and 4-channel ignition test capabilities

#### Software and Accessories

The right software and accessories help you take advantage of all the power your diagnostic tools are designed to deliver

**SOFTWARE UPGRADES** — Snap-on offers regularly scheduled software upgrades with up-to-date information on today's vehicles

**EUROPEAN SOFTWARE** — Get the in-depth scanner coverage that is critical for servicing European makes

**ACCESSORIES** — From adaptors to secure storage to advanced testing tools, a comprehensive line of accessories will help match the tool to your work

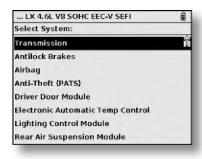


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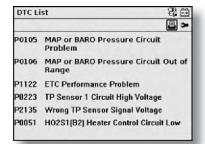
#### ETHOS® Scan Tool



**EESC312** *ETHOS* **Scan Tool.** Gives VIN specific coverage that goes way beyond generic. First time users will love it for its straightforward operation, complete trouble code definitions and attractive price. Veteran users will love it for its lightning fast boot up and ability to quickly read and clear codes and graph live data.



VIN specific codes and live data graphing for major vehicle systems.



Read and clear OEM proprietary and global codes in just seconds with easy operation and simple code definitions.



Switch between English and Spanish language on the fly. Easy Y/N navigation saves time.

#### **Features:**

- 4.7" backlit monochrome display
- . Fast 4 second boot up
- Easy year/make/model selection
- Bilingual (English and Spanish)
- Quick release protective display shield
- Graphs 4 live data parameters; or 9 parameters in digital mode
- User selectable hotkey for instant access to frequently used function
- Plug & play USB printing

- Store codes, screenshots and up to 230 frame movies for all data parameters
- · Save and recall 20 previous vehicles
- 1983-later VIN specific codes and data for 33 U.S. and Asian makes\*
- Deep coverage for dozens of systems: engine, transmission, hybrid control, transfer case, ABS, airbag, body, HVAC, instruments, TPMS, antitheft and more
- Optional software for Audi®, BMW®, Land Rover®, Mercedes®, MINI®, Volkswagen®, SMART Car® and Volvo® vehicles

#### Includes:

- VIN specific U.S. and Asian software
- U.S. and Asian adaptor set, 1996 to current
- · Hands on training video and user guide
- AC and DC power adaptors
- USB cable for PC connection
- 6 AA batteries

\*Note: Some pre-1996 applications require optional adaptors

#### **SOLUS Ultra® Scan Tool**



**EESC318 SOLUS Ultra SCAN TOOL.** Brings together a full range of scan tool functions, without any baggage to slow you down. No Personality Keys. No long boot ups. Combine that with the high resolution data graphing, detailed code definitions and OEM specific coverage and you have productivity and simplicity working together in perfect harmony.



Easy to read icons on big 7" display operate all functions from the 4 way keypad or the touch screen (even when wearing gloves).



Powerful bidirectional tests. Control vehicle functions while viewing live data results on the screen.



Exclusive Fast-Track® Troubleshooter provides expert code tips, symptom tips, tests and timesavers.

#### **Features:**

- Never stop to charge. "Steady charge" battery technology charges directly from vehicle
- Best in class display. Big 7" widescreen has 800 x 480 pixels; 50% larger than competitors
- Never change keys. A single, keyless adaptor covers all OBD-II applications
- Unique Cause and Effect Diagnostics. Control vehicle functions with bidirectional controls while viewing live data results on the screen
- Fast boot up. Ready to work in only 10 seconds
- Fast and easy icon navigation operates completely by touchscreen, or use the 4 way keypad and Y/N button
- Enhanced coverage for 1980-newer vehicles without the cost and complexity of factory scan tools
- Codes, live data (PIDS), functional tests, relearns, adaptations for 40 makes (European coverage optional)
- OEM specific coverage for dozens of vehicle systems, including the new systems techs need, like hybrids, TPMS, steering, body controls, EVAP, clean diesels and more

- Fast-Track Troubleshooter provides experience based fast fixes to get through repairs quickly. Real world advice from technicians, including code tips, symptom tips, tests and timesavers
- Read and clear trouble codes; Display detailed trouble code descriptions on screen
- Graph from 1 to 4 live data parameters (PIDs) simultaneously; view up to 7 data parameters in text mode
- Print/save/share/view results on PC via ShopStream™ Connect software
- Custom controls: user programmable shortcut key, PID trigger, zoom, freeze frame, custom data list, screen capture, movies and cursor functions
- Powerful functional tests and bidirectional controls provide control of vehicle systems for repair validation and a confident diagnosis

#### Includes:

- SOLUS Ultra scan tool
- Upgradable software on microSD card
- Keyless data cable for all OBD-II vehicle applications
- Li-ion battery pack
- 110 V AC power adaptor and cord
- · USB cable for PC connection
- · Custom fit blow molded carrying case
- Safety instructions; Quick start guide; User manual on CD

Note: Some applications require optional adaptors.









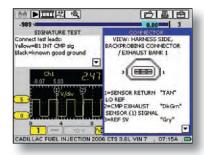


• Read safety precaution on pages W1 to W4

# Vantage PRO™ Power Graphing Meter



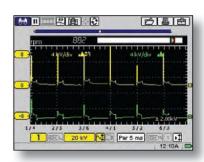
**EETM303** *Vantage PRO* **Meter.** Unparalleled component diagnostics with a high speed scope and graphing multimeter. Get the answers needed for confident diagnosis including 2 million component tests, and 8 million samples per second of data. Compare live readings with known good data and sample waveforms. Simply select the vehicle and component and *Vantage PRO* will configure the meter and guide user through the test.



Graphing meter and advanced scope based test information for over 2 million components.



Guided test procedures include connector locations, component operations, meter presets, common faults and expected values.



Lab scope, ignition scope and graphing multimeter allow you to test everything from sensors to multicylinder ignition.

#### Features:

- Big 5.7" backlit color display is easy to read
- Removable high power NiMH battery for over 5 hours continuous use
- Fast boot; ready to go in 10 seconds
- Store over 1,000 screens of data
- Up to 57 hours of continuous recording
- Peak detect clearly displays glitches and dropouts other scopes miss

# **Component Test Information:**

- Component database for 40 U.S., Asian and European makes, 1979 to current
- Navigate by year/make/model or select a specific component or system
- Coverage for sensors, solenoids, ignition, injectors and much more

- Tips and tutorials including component locator, test procedures, connection diagrams, presets and reference values
- Waveform Library; compare live data with known good values

# 2-Channel Lab Scope and Ignition Scope:

- Sample rate 8 megasamples/sec/channel;
   Bandwidth 3 MHz; Scales 0-100 mV to
   0-200 V, 50 kV secondary ignition; plus dedicated shunt amps channel
- Sweep rate 50 microseconds to 20 seconds
- Secondary ignition scope with single/ multicylinder, raster, parade and superimposed views (multicylinder adaptors optional)

# Digital/Graphing Volt-Ohm Meter:

- Auto scaling; 0-100 mV to 0-400 V scales, 0-100 mA to 0-10 A scales; 10 Megohm high impedance, 50 mS glitch capture, min/max capture
- DC volts, AC volts, amps, ohms, duty cycle, frequency, pulse width
- Sweep rates from 1 sec to 5 min

#### Includes:

- Component database for U.S., Asian, European makes
- 2 shielded scope leads, 2 insulated alligator clips and 2 probe tips
- · Hands on training video and user guide
- Protective carrying case
- · Rechargeable NiMH battery pack
- · Battery charging station
- AC power adaptor

# VERDICT™ Modular Diagnostic & Information System

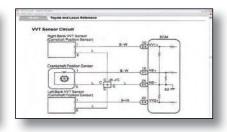






EEMS324 VERDICT Diagnostic System. Incudes a wireless display, scanner and meter to let you be in more places at once. View all of your readings and control the scanner and scope remotely from the display. Have everything you want, use only what you need.





High resolution display shows detailed graphing of up to 12 data parameters for precise results.

Wireless Component Test Meter features automatic presets, guided test procedures and known good values and waveforms.

Hotlinks to Fast-Track® reference material including valuable TSBs, component locator and wiring diagrams.

#### **Features:**

- · Wireless display, scanner and meter lets technicians be in more places at once
- Real world answers in your hands from anywhere in the shop: codes, live data, bi-directional controls, Fast-Track guided component tests, Internet and Troubleshooter
- 0EM specific scanner coverage for 1980-newer vehicles
- · High speed 2 channel scope and graphing meter
- Keyless scanner module for quick, simple connection
- Wi-Fi® and Internet browser to access web resources
- Windows® operating system
- Internal hard drive
- Touch screen operation

## **VERDICT D7 Display Tablet Features:**

- Big, bright 7" color touchscreen
- Windows multitasking
- · Internet browser and Wi-Fi
- Wireless: Long-range Class 1 Bluetooth®
- 1 touch navigation shortcuts
- 60 GB internal hard drive
- · Built-in 2 mega pixel camera
- · Li-ion battery pack for up to 4 hours of continuous operation

# **VERDICT** S3 Scanner

#### **Module Features:**

- · Wireless remote control from the **VERDICT D7** Display Tablet
- Keyless adaptor for OBD-II applications
- 0EM specific coverage for 40 makes (European optional)
- Fast-Track Troubleshooter code tips. symptom tips and repair timesavers
- Fast-Track database of reference values. TSBs, wiring diagrams and more
- View up to 12 live data graphs at once

### VERDICT M2 Scope/Meter Module Features:

- High speed 2 channel lab scope and digital/graphing meter
- Fast-Track guided component tests for 40 U.S., Asian and European models
- · Use alone or by wireless remote control from display tablet
- 20 megasamples/sec on each channel
- Scale range: 0-100 mV to 0-1000 V DC
- Sweep rate: 50 microseconds to 20 seconds. Up to 60 minutes in meter mode
- · 2 MHz bandwidth
- 1/4 VGA full color display
- · High speed glitch capture
- 10 Megohm high impedance meter
- V DC, V AC, ohms, continuity, frequency, capacitance, duty cycle, pulse width and diode test
- CATIII and CATIV certified to 1,000 V
- NiMH battery pack for up to 12 hours continuous operation

Note: Some applications require optional adaptors.













· Read safety precaution on pages W1 to W4

# **VERUS® Wireless Diagnostic & Information System**





EEMS325

**EEMS323** *VERUS* **Wireless and Information System.** Puts the answers you need at your fingertips, to manage the complete job from start to finish. With true Windows® multitasking, Wi-Fi® and an internet browser, you won't have to leave the service bay to access technical forums, OEM websites, online parts suppliers or the optional ShopKey® repair information system.



Complete Fast-Track Troubleshooter and quick links to the onboard reference database.

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Windows XP® multitasking provides the flexibility to use and view several tools at once.

Direct links take you from the scan tool function to the integrated *ShopKey* Repair Information System (*ShopKey* subscription optional).

#### **Features:**

- 10.4" high resolution XGA 1024 x 768 touchscreen color display
- Save time with one click shortcuts to diagnostic applications
- Replaceable Li-ion battery pack for up to 4 hours of continuous power
- 802.11b/g Wi-Fi and web browser
- Connectivity and expandable storage;
   VGA, LAN, AUX, audio and USB ports
- Big 250 GB hard drive to store test results, vehicle records and software applications

#### **Scanner:**

- Freedom to scan from anywhere in the bay with wireless scan module
- Custom data lists, freeze frame, PID sorting, pause, zoom, PID trigger, snapshot and cursor functions
- Graph 16 live data parameters; or view up to 50 in digital mode
- Detailed code definitions, live data, functional tests, and relearns/adaptations
- 0EM specific vehicle communication for 1980-newer models

#### Optional coverage for European makes Audi®, BMW®, Land Rover®, MINI®, Mercedes®, SMART®, Volvo® and VW® vehicles

#### **Component Test Information:**

- Component database for 40 U.S., Asian and European makes, 1979-current
- Guided diagnostics including component locator, test procedures, connection diagrams, presets and reference values
- Coverage for sensors, solenoids, ignition, injectors and much more
- Waveform Library compares live readings with known good values

# 4-Channel Lab Scope and Ignition Scope:

- Automatic scaling, presets and custom configurations for easy setup
- Sample rate 6 megasamples/sec;
   Bandwidth 3 MHz; scales 0-100 mV to 0-400 V, 50 KV secondary ignition
- Sweep rate 50 microseconds to 20 seconds
- Secondary ignition scope (multicylinder ignition adaptors optional)

# Digital/Graphing Volt-Ohm Meter:

- Auto scaling; 0-100 mV to 0-400 V scales, 0-100 mA to 0-10 A scales; 10 Megohm high impedance, 50 mS glitch capture, min/max capture
- DC volts, AC volts, amps, ohms, duty cycle, frequency, pulse width
- Amps, vacuum, pressure functions (probes optional)
- Sweep rates from 1 second to 5 minutes

#### Includes:

- VIN specific U.S. and Asian Software
- U.S. and Asian adaptor set, 1996 to current
- 4 shielded scope leads, clips
- Hands on training video and user guide
- Protective carrying case
- Rechargeable Li-ion battery pack
- AC power adaptor

Note: Some applications require optional adaptors.

# **Quick Reference Chart**

	Vantage PRO™	ETHOS®	SOLUS Ultra®	VERDICT™	VERUS® Wireless
			State of Sta		
	EETM303	EESC312	EESC318	EEMS324	EEMS325
Touchscreen Operation			X	X	Х
10" Color Backlit Display					Х
7" Color Backlit Display			X	Х	
5.7" Color Backlit Display	Х				
4.7" Monochrome Backlit Display		Х			
Reads and Clears Codes & Data		Х	Х	X	Х
Live Data Graphing Display		Х	Х	Х	Х
Functional Tests/Bidirectional Controls			Х	Х	Х
Relearns & Initializations			Х	Х	Х
Fast-Track Troubleshooter			Х	Х	Х
Keyless Scanner Adapter			Х	Х	Х
Wireless Scanner				Х	Х
2 Channel High Speed Oscilloscope	х			Х	
4 Channel High Speed Oscilloscope					Х
Ignition Scope	Х				Х
Graphing/Digital Multimeter	Х			Х	Х
Wireless Scope/Meter				Х	х
Bilingual (English/Spanish)		Х			
High Capacity Internal Hard Drive				Х	Х
HCD Door	v	v	v	V	v
USB Port	X	X	X	X	X
Wi-Fi Enabled & Internet Browser High-Energy Rechargeable Battery	X		X	X	X
Windows Operating System	^		^	X	X
Fast-Track Guided Component Tests	v				
(U.S., Asian and European)	Х			Х	X
OEM Specific 1980-newer U.S. Scanner Coverage		х	χ	Х	х
OEM Specific 1983-newer Asian Scanner Coverage		х	X	X	X
OEM Specific European Scanner Coverage		0	0	0	0
Global OBD-II Coverage for all Makes		Х	Х	Х	Х
User Programmable Function Key	х	Х	Х	Х	Х
ShopKey Repair Information System				0	0
ShopKey Manager SE Viewer				0	0

X = Standard Equipment 0 = Optional









#### Accessories





#### EAK0294B21A VERUS Wireless Conversion Kit.

- Wireless Scan Module adds wireless freedom and keyless simplicity to EEMS323
   Diagnostic and Information System
- Simplicity, no more searching for keys. Keyless scan module covers OBD-II applications with a single adaptor
- Scan wirelessly with remote control of the Scan Module; Get codes, live data, functional tests, relearns and adaptations while moving freely around the vehicle
- Includes: Wireless scan module, OBD-II data cable, data cable for adaptors, USB cable and instructions
- Note: Requires VERUS diagnostic unit with Software Bundle 10.4 or higher



#### EAA0354L40A Velcro® Handgrip.

 Secure, adjustable Velcro strap makes it easy to hold VERUS diagnostic unit with one hand. (VERUS shown not included)



#### Silicone Protective Skins.

- Personalize and protect your VERUS diagnostic unit in choice of colors
- Custom fit, nonslip silicone rubber protective skin keeps VERUS diagnostic unit clean and safe

EAC0101L70A1 - Black EAC0101L70A2 - Blue EAC0101L70A3 - Red (VERUS shown not included)



#### Stylus (3 pack).

- High polished chrome stylus or durable black nylon stylus
- Soft tip to protect touchscreen

**3-06206A01** - Nylon **3-07406A01** - Chrome



# EAK0294B02A Charging Station with USB Hub.

- Secure benchtop workstation for VERUS diagnostic unit
- Charges VERUS battery when used with standard VERUS power adaptor
- Internal USB hub joins up to 4
  USB devices when connected
  to VERUS diagnostic unit with
  standard USB cable (included).
  (VERUS shown not included)



# EAE0059L07A External Battery Charger.

- Smart charger for up to 2 VERUS battery packs
- Automatic fast charge and trickle mode
- Includes 110 V AC power supply



# EAA0354L12A VERUS Battery Pack.

- Keep a diagnostic tool on duty all day long with a spare high energy Li-ion battery
- · Built in LEDs show charge status



# 2-02539A 110 V AC Power Supply.

- Powers VERUS diagnostic unit and quick charges battery pack
- Requires 6-06321A power cord



#### 6-06321 AC cord for 110 V Power Supply.

Line cord for AC power adaptor



#### EAK0253B02A Replacement Air Filters (5 pack).

 Help to keep VERUS electronic components cool and clean



#### EAK0294B08A Maintenance Kit.

 Includes 3 screen protectors, 3 nylon touchscreen stylus and 5 air filters



# EAC0101L69A1 Screen Protector Film (3 pack).

- Crystal clear sheets protect screen from scratches, solvents and dirt
- Easy peel and stick application

#### **Accessories**







#### **VERDICT** Accessories

#### EAA0365L01A Docking Station.

- Convenient and secure charging station for the VERDICT Diagnostic System
- Keep the VERDICT Diagnostic System powered up and charged up all day long

EAA0365L01A

- Uses standard power adapter included with VERDICT Diagnostic System
- USB hub to connect up to 4 USB devices
- 15 pin video connector displays *VERDICT* results on external big screen monitors
- Multiposition stand, as an angled folding stand, laid flat to fit in tool storage drawer or in a vertical orientation
- LED indicates when docking station is receiving power
- · Simple drop-in docking for fast grab and go portability

#### EAA0365L03A Battery Pack.

- · Removable battery pack for fresh power in a snap
- Keep VERDICT Diagnostic System on-duty all day long with a spare battery pack
- Calibrated power meter on VERDICT toolbar shows state of charge
- Multicell battery pack provides up to 4 hours of nonstop use
- Li-ion battery cells for long charge life, long cycle life and quick recharge

#### EAC0107L03A5 Screen Protector Sheets.

- Includes 3 removable screen protector sheets
- Easy peel and stick application
- Simply peel off old protector sheet and press on a new one
- Help to keep VERDICT touchscreen clean and protected
- · Helps maintain touchscreen sensitivity
- Protects screen from scratches, solvents and dirt
- Crystal clear protection for optimum viewing inside the shop or outside in the sun

#### EAA0365L06A Battery Pack.

- Extended charge life battery pack
- Work longer without a recharge; 6 cell battery offers twice the charge life of standard 3 cell VERDICT battery
- Up to 8 hours of nonstop use with VERDICT D7 Display
- No extra bulk, fits in the standard VERDICT battery slot
- Removable battery pack for fresh power in a snap
- Keep VERDICT Diagnostic System on duty all day long with a spare battery
- Calibrated power meter on VERDICT toolbar shows state of charge
- Li-ion battery cells for long charge life, long cycle life and quick recharge



#### 2-02839A AC Power Supply with Cord.

• For VERDICT D7 display (standard with VERDICT diagnostic unit)



#### EAK0301L01A1 AC Power Supply with Cord.

• For VERDICT M2 meter (standard with VERDICT diagnostic unit)



# EAK0301L03A Replacement Scope/Meter Test Leads.

• With alligator clip set (standard with VERDICT diagnostic unit)



#### **EEMS324PSA Pressure Transducer Adaptor.**

 Adapts VERDICT M2 meter to EEPV302AL, EEPV302AT and EEPV302AH pressure transducers (not included)











- Do not use in environment with explosive vapor
- Read safety precaution on pages W1 to W4

# **DIAGNOSTICS**

#### **Accessories**

# SOLUS UItra®



# SOLUS ULTRA Accessories EAC0111L40A3 Screen Guards.

- Includes 3 removable screen protector sheets
- Simply peel off old protector sheet and press on a new one
- · Helps maintain touchscreen sensitivity
- Protects screen from scratches, solvents and dirt for a clear view



# EAX0068L10A Extended Length OBD-II Data Cable.

 Extend your diagnostic range and mobility with 9' OBD-II data cable



2-04650A SOLUS Ultra Spare Battery.



#### **Protective Skin**

- Soft, sturdy and flexible thermoplastic rubber
- Protects SOLUS Ultra diagnostic unit from dirt, grease and other automotive fluids; keep your tool looking like new
- Give SOLUS Ultra diagnostic unit a personal touch with your choice of colors
- Forms a nonslip grip over outside of your SOLUS Ultra platform
- Designed with access openings for screen, connectors and cooling vents for unimpeded operation

EAC0111L50A1 - Black EAC0111L50A2 - Red



#### 2-35466A 110 V AC Power Supply.

Quick charges battery pack (power cord sold separately)



#### 6-06321A AC Line Cord.

Power cord for 110 V power supply

# **SOLUS**PRO®



# EAA0352L35A Replacement Display Window.

- Keep the display looking new and easy to see
- Easy snapfit replacement



#### **Protective Skin**

 Personalize and protect your SOLUS PRO diagnostic unit with custom fit, nonslip rubber skin

**EAC0098L01A1** - Black **EAC0098L01A2** - Red

# EAK0290L10A Screen Protector Film (5 pack).

- Crystal clear sheets protect screen from scratches, solvents and dirt
- Easy peel and stick application (SOLUS PRO diagnostic unit shown not included)



#### EAK0276B02A 110 V AC Power Supply.

 Provides power and quick charge battery pack



Spare Battery Pack for SOLUS PRO.

 Keep a spare, high energy NiMH battery charged and ready to go

#### **Accessories**

# **ETHOS**



#### **EAC0093L01A Replacement** ETHOS Data Cable.

· Replacement data cable for global **OBD-II** applications



#### EAC0089L07A Replacement ETHOS DB25/DB15 Adaptor Cable.

· Replacement data cable for OBD-I and **OBD-II VIN** specific applications



#### EAK0287L03A Replacement Display Window.

- · Keep the display looking new and easy to see
- · Easy snap fit replacement

#### EAK0287L04A Screen Protector Film (5 pack).

- · Crystal clear sheets protect screen from scratches, solvents and dirt
- · Easy peel and stick application (ETHOS diagnostic unit shown not included)



#### **EAK0287L05D ETHOS Extended Adaptor Set.**

. Optional OBD-II connectors for VIN specific U.S. and Asian vehicle applications



tage PRO™



#### EAK0276L10A Replacement Display Window.

- · Keep the display looking new and easy to see
- · Easy snapfit replacement



#### EAK0276L11A Screen Protector Film (5 pack).

- · Crystal clear sheets protect screen from scratches, solvents and dirt
- Easy peel and stick application (Vantage PRO diagnostic unit shown not included)



#### EAK0276B02A 110 V AC Power Supply.

Provides power and quick charge battery pack



#### **EETM303A01 Spare Battery Pack** for Vantage PRO.

· Keep a spare, high energy NiMH battery charged and ready to go











- Do not use in environment with explosive vapor
- Read safety precaution on pages W1 to W4

# **DIAGNOSTICS**

#### **Accessories**





2-35466A 110 V AC Power Supply.

Adaptor powers *MODIS* and quick charges battery pack (power cord sold separately).



6-06321A AC Cord for 110 V Power Supply. Line cord for AC power adaptor.



EEMS301A01 MODIS
Battery Pack. Keep

MODIS on duty all day long with a spare high energy NiMH battery charged and ready to go.



EAK0253B02A Replacement Air Filters (5 pack).

Helps to keep *MODIS* electronic components cool and clean.



# EEMS301A02 External Battery Charger with 110 V AC Converter.

- Faster, cooler charge for long battery life
- · Keep a spare battery on charge, ready for action
- Includes 110 V AC power supply and cord.

# Screen Protector Film (5 pack)

Crystal clear sheets protect screen from scratches, solvents and dirt. Easy peel and stick application.

**EAK0253B20A** - Pre-2006 *MODIS* **EAK0253L62A** - 2006-later

(with removable window)
(MODIS diagnostic unit shown not included)

#### **Service Banners** -

#### **Service Banners**

2' H x 8' W.

Show your customers that the shop is well equipped and qualified with these sturdy reinforced vinyl banners.



EAZ0003B58B MODIS Banner



EAZ0003B66A MODIS Banner (Spanish)



EAZ0042B17A ShopKey® Banner



EAZ0063L28A VERDICT™ Service Banner



EAZ0060L19A SOLUS PRO Banner (Spanish)



EAZ0042B18A VERUS™ Banner



EAZ0075L22A SOLUS Ultra® Banner

# Scan Tool Accessories: Specific Applications Listed Below



#### EAA0355L46C Replacement **OBD-II** Key Adaptor.

- For U.S. and Asian vehicle applications
- Accepts "K" personality keys
   Fits VERUS<sup>®</sup>, MODIS™ and SOLUS PRO™ diagnostic units



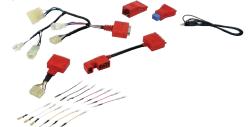
#### EAX0066L50A Replacement Data Cable.

- · For connection between scan tool and vehicle adaptors
- For VERUS, MODIS, SOLUS PRO and SOLUS Ultra® diagnostic units only



#### EAX0066L30A OBD Data Cable Extension.

- . Extend scan tool reach by 6'
- Fits VERUS, MODIS, SOLUS PRO and ETHOS® diagnostic units



• Includes: Chrysler1, Chrysler2, Multi2, Jeep1, Hyundai2 adaptors,

• Fits VERUS, VERUS Wireless, VERDICT™, SOLUS PRO, SOLUS

EAK0288B04B OBD-I Vehicle Adaptor Kit 2.

• For U.S. and Asian applications

ground leads and jumper leads

Ultra, MODIS and ETHOS diagnostic units



#### EAA0355L68A DL-16 Key Adaptor-European Vehicles.

- Replacement adaptor for European vehicle applications
- Accepts "S" personality keys
  Fits VERUS, MODIS, SOLUS PRO and ETHOS diagnostic units



#### **European Vehicle Adaptor Kit** EAK0301B07B

- Fits VERUS Wireless, VERDICT, SOLUS Ultra diagnostic units EAK0267B01H
- Fits VERUS, MODIS, SOLUS PRO, ETHOS diagnostic units
- · European vehicle adaptor kit
- Includes VW1, MB1, MB2A, BM1B adaptors (includes keys where applicable)
- Requires European Vehicle Software Activation
- Covers the most popular 1992-newer European vehicles

#### EAK0294B34A Key Kit for Land Rover® vehicles.

• Set of personality keys required for complete Land Rover coverage with VERUS, MODIS, SOLUS PRO and ETHOS diagnostic units



#### EAK0301B08A OBD-I Vehicle Adaptor Kit 1.

- OBD-I vehicle adaptor kit includes the most U.S. and Asian vehicles
- Kit includes data cable and the: Multi1, Ford1B, Ford4, GM1, Toyota1, Toyota2, Nissan1, Nissan2, Mazda1, Honda1, Mitsubishi1 adaptors
- Optional for VERDICT and SOLUS Ultra



#### EAX0068L00B Replacement OBD-II Data Cable.

• Fits VERUS Wireless, VERDICT and SOLUS Ultra diagnostic units



#### EAX0068L01A Replacement Data Cable for OBD-I and European Adaptor Applications.

• Fits VERUS Wireless, VERDICT and SOLUS Ultra diagnostic units











- Do not use in environment with explosive vapor
- Read safety precaution on pages W1 to W4

# Scope & Meter Accessories: VERUS®, VERUS Wireless, MODIS™ & Vantage PRO™ only



#### **Pressure Transducer Kits.**

- Record, plot and monitor pressure in real time
- Typical applications include ABS, PS, transmissions, hydraulics and fuel systems
- VERUS, Vantage PRO and MODIS require EEMS301A05
- VERDICT requires EEMS324PSA

**EEPV302AL** - 0-100 psi **EEPV302AT** - 0-500 psi

**EEPV302AH** - 0-5000 psi



#### EAX0024B40A Transducer "Y" Adaptor Cable.

• Enables simultaneous use of 2 pressure transducers for multiple point comparison testing



#### **EETA108B Extra Long** Scope Lead Set (2 pack).

• 10' leads extend the reach of scope/meter leads for testing hard to reach components



#### **EETA308D Low AMP Probe.**

- · Hall effect technology gives accurate nonintrusive circuit testing
- Perform precision testing of parasitic draw, injectors, pumps, relays, and more
- 20/60 A ranges



#### EEMS301A05 Split Lead Adaptor.

- Enables simultaneous use of 2 pressure transducers and rpm pickup
- Fits VERUS, VERUS Wireless, Vantage PRO and MODIS



#### **EESX306A Waveform Demonstration Tool.**

- Versatile scope training/demo tool
- · Use with any scope
- · Simulates good waveforms, bad waveforms and glitches
- · Square wave, variable duty, FI pattern, AC signal, secondary ignition pattern
- Adjustable frequency, voltage, rpm and amplitude













#### Test Leads.

- · Shielded, soft, flexible leads for meter and scope measurement
- · Stackable, right angle ground plug attached
- **6-03022A** Channel-1 (Yellow)
- 6-03122A Channel-2 (Green) **6-03222A** - Channel-3 (Blue)
- 6-03322A Channel-4 (Red)

#### Alligator Clips.

- Spring loaded clips provide secure, insulated connection for meter and scope measurements
- 2-06433A1 Black
- 2-06433A2 Red
- 2-06433A3 Blue
- 2-06433A4 Yellow 2-06433A5 - Green

#### MT3000430ASR **Backprobe Adaptors.**

- Used for adapting wire harness terminals to alligator clip type test leads
- Helps prevent accidental grounding

#### EAX0024B30A 6' Transducer Cable Extension.

 Extends the reach of EEPV302AL/AT/AH pressure transducers by 6'

# Scope & Meter Accessories: VERUS®, VERUS Wireless, MODIS™ & Vantage PRO™ only



## Multi-cylinder Secondary Ignition Scope Adaptors

Exclusive kV ignition adaptors make for easy connection and testing of secondary ignition on coil-on-plug (COP) and coil-in-cap (CIC) systems. Custom fit to vehicle ignition systems. Requires EAK0294B09A ignition scope lead kit.

EAC0056L00A General-purpose COP/CIC Single Flag Pick-up. Single cylinder pickup. Use with 3 flag pickup for V8 engines. EAC0056L02A General-purpose COP/CIC Three Flag Pick-up. 3 cylinder pickup. Use 2 for V6 engines or use 2 with single cylinder pickup for V8 engines.

EAC0056L03A General-purpose COP/CIC Stick Pick-up. For inline 4 cylinder engines.

EETM306A03 COP-1 Ignition Pick-up for Ford® Vehicles.

EETM306A04 COP-2 Ignition Pick-up for Chrysler® Vehicles.

EETM306A07 COP-3 Ignition Pick-up for VW®/Audi® Vehicles.

EETM306A08 COP-4 Ignition Pick-up for Acura®/Honda®/Isuzu® Vehicles.

EETM306A09 COP-5 Ignition Pick-up for Volvo®/BMW® Vehicles.

EETM306A10 COP-6 Ignition Pick-up for Mercedes® Vehicles.

EETM306A11 COP-7 Ignition Pick-up for Mercedes Vehicles.

EETM306A12 COP-8 Ignition Pick-up for BMW Vehicles.

EETM306A13 COP-9 Ignition Pick-up for Lexus® Vehicles.

EETM306A14 COP-11 Ignition Pick-up for Chrysler/Jeep®/Lexus/Toyota® Vehicles.

EETM306A06 CIC-1 HEI CIC Pick-up for GM® Vehicles.

EETM306A05 CIC-2 CIC Pick-up for Toyota/Honda Vehicles.



#### EAK0294B09A Ignition Scope Lead Kit.

- For multicylinder secondary ignition testing
- Includes inductive rpm pickup trigger, coil adaptor lead and secondary kV clip on probe
- Ideal for distributor systems, and for COP/CIC systems using optional COP/CIC adaptors



#### EETA309A15 SIA 2000 Multi Ignition Adaptor.

- Ideal for waste spark ignition systems up to 8 cylinders
- · Simply clamps directly to plug wires
- Also for COP/CIC systems (COP/CIC adaptors sold separately)



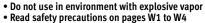












# 5-Gas Analyzer: VERUS®, MODIS™ or PC







#### EEEA305A FGA Flexible Gas Analyzer.

- Completely portable 5-Gas Analyzer with rechargeable internal battery
- Exhaust gas analysis helps pinpoint engine, emissions, catalytic converter and related system problems
- Live graphing and digital display of CO, O<sub>2</sub>, CO<sub>2</sub>, HC, NO<sub>x</sub>, Air/Fuel ratio and Lambda
- Heavy duty sensors with automatic water removal system
- Includes probe, hose, power adaptors and RS-232 cable
- . VERUS and PC applications also require EEEA305ASW software sold separately







# Hand Held Gas Analyzer

#### HHGA5A Hand Held Gas Analyzer Kit (5 Gas).

- Fully portable 5-Gas Analyzer goes anywhere, can be used anywhere
- 110 V AC and 12 V DC powered
- The internal rechargeable battery provides up to 1 hour use
- Ideal for road testing and mobile use
- $\bullet$  Measures exhaust emissions for CO, CO $_2$  , HC, O $_2$  , NO $_x$  and AFR/Lambda
- Provides an instant assessment of an engine vehicle exhaust and catalytic converter
- MODIS, VERDICT™ and VERUS Link for enhanced real time viewing
- Add a 5-Gas Analyzer function to MODIS, VERUS and VERDICT
- Set up required with included software on USB stick
- Gather all the evidence required for effective and accurate vehicle diagnostics on one screen in real time
- Gas Analysis

- Component tests
- · Scope readings
- Digital graphing function
- Scanner results
- · View, graph, save and recall data
- Monitor and reduce vehicle emissions; improve driveability and fuel efficiency
- Truly handheld about the size and weight of a DMM offering true portability
- Compatible with gasoline, CNG, propane and diesel fuel types
- Very sensitive and pulls only 1/14th the exhaust volume of competing analyzers. This means no problems with water ingress and pumps last longer

TECHNICAL SUPPORT 1-888-717-1333

# **Storage**

### **Custom Fit Foam Organizers**

- Turn a tool cart into a high power mobile workstation
- Set of drawer organizers holds diagnostic platform and all standard accessories, plus room for many optional accessories

Drawer organizers to fit roll carts KRSC30, KRSC31, KRSC33 and KRSC326: **VERUSFOAM3** Foam drawer organization for VERUS® and adaptors. **VERUSWFOAM3** Foam drawer organization for *VERUS* Wireless and adaptors. **VERDICTFOAM3** Foam drawer organization for VERDICT™ and adaptors.

**MODISFOAM3** Foam drawer organization for MODIS™ and adaptors. **SOLUSVPFOAM** Foam drawer organization for SOLUS PRO™ and Vantage PRO™ and adaptors.

SOLUSUFOAM3 Foam drawer organization for SOLUS Ultra® and Vantage PRO and adaptors.



KRSC40 cart sold seperately. Tools not included.

Drawer organizers to fit roll carts KRSC40, KRSC42 and KRSC46: **VERUSFOAM4** Foam drawer organization for *VERUS* and adaptors. **VERUSWFOAM4** Foam drawer organization for *VERUS Wireless* 

**VERDICTFOAM4** Foam drawer organization for *VERDICT* and adaptors. **MODISFOAM4** Foam drawer organization for *MODIS* and adaptors. SOLUSUFOAM4 Foam drawer organization for SOLUS Ultra and Vantage PRO and adaptors.





### EAK0294B04A - Leather Travel Case.

- Ultimate in portability and protection
- Multiple zippered compartments to organize diagnostic platform and accessories
- Handle and sturdy nylon shoulder strap for easy
- For VERUS, VERDICT, SOLUS PRO, SOLUS Ultra, Vantage PRO and ETHOS® diagnostic units (not included)





EAK0294B17A

### EAK0294B17A - Low Profile Organizer Case.

- Protect and organize your diagnostic tool and accessories for easy storage and portability
- Includes foam inserts to fit VERUS, MODIS, SOLUS PRO or SOLUS Ultra (diagnostic tool not included)
- Custom fit foam organizer for standard accessories; adaptors, cables, battery, charger, etc.
- Textured fabric exterior with semi rigid shell case
- Padded handle and shoulder strap included
- Low profile to fit in toolbox drawer 5.5" D x 14" W x 25" L













### **Software and Information Systems**

### Diagnostic Software Upgrades - for VERUS®, VERUS Wireless, VERDICT™, MODIS™, SOLUS PRO™, SOLUS Ultra®, Vantage PRO™ and ETHOS®

- Continue to improve your productivity with regularly scheduled software upgrades from Snap-on featuring updated coverage for new vehicles, expanded coverage for earlier models and the latest enhancements that add capabilities to your tool
- You'll access thousands of new vehicle systems, trouble codes and live data parameters, as well as thousands of new experience based troubleshooter tips, functional tests, adaptations and component tests for platforms with those functions
- For details on the latest software upgrade, see your Snap-on representative

### European Vehicle Activation for VERUS, VERUS Wireless, VERDICT, MODIS, SOLUS PRO, SOLUS Ultra and ETHOS

- Comprehensive OEM specific coverage is critical for servicing European makes, from fault codes and data for dozens of vehicle systems, to functional tests, relearns and adaptations for vehicles with those features
- Coverage for Audi<sup>®</sup>, BMW<sup>®</sup>, Land Rover<sup>®</sup>, Mercedes<sup>®</sup>, MINI<sup>®</sup> SMART®, Volvo® and Volkswagen® vehicles as far back as 1992
- See your Snap-on representative



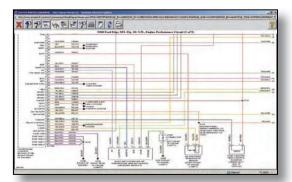
### EETA113B Pass Thru Pro II.

- Reprogram vehicle control modules like the OEMs
- Updates software/firmware in vehicle electronic control units (ECU)
- For J2534 compliant 2004-later vehicles
- Includes OEM approved programming interface, cables and software
- Requires internet access, OEM data subscription or a PC

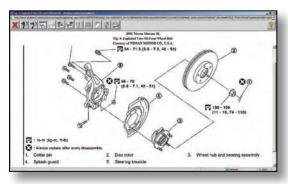


ShopKey Repair Information System
ShopKey Medium Truck
ShopKey Tractor-Trailer and REPAIR>CONNECT **ShopKey Service Writer/Shop Management** 

- The most trusted source of automotive repair information available, ShopKey is loaded with features to make you more efficient and your repair job easier
- Access tools such as ShopKey live tips, enhanced TSB's, the industry's only scalabale vector graphic color wiring diagrams and vintage information dating back to 1960
- With ShopKey online access you're always up to date on the latest vehicle coverage and industry changes
- Whether it's repair and estimating for Light Duty vehicles, Medium Truck, Tractor-Trailer, Service Writer or Shop Management software vou're looking for. ShopKev has you covered
- Access ShopKey on your Snap-on® VERDICT, VERUS or VERUS Wireless platform and you'll never have to leave the service bay again to access the information you need to get the job done
- For details on how to make ShopKey a part of your daily diagnostic and repair routine, see your Snap-on representative or visit diagnostics.snapon.com/shopkey



Full color OEM wiring diagrams simplify even the most difficult procedures.



Become an instant expert on millions of different repairs.

### **OBD-II Scan Tools**

### EESC717PRO MICROSCAN® Pro (Blue-Point®) Global OBD-II Scanner.

- With internal battery power and automatic code display in as little as 10 seconds
- . Covers all 10 modes of OBD-II
- Codes, live data, experience based code tips and timesavers for a confident diagnosis
- Easy Y/N buttons and icon shortcuts for frequently used functions
- 2 PID graphing to compare two live data streams side by side
- Big 7 line backlit display shows easy to read results and complete code definitions in plain language
- Exclusive code tips point to common causes and get to the root cause of a trouble code faster
- Record and playback 64 point data files
- · Save vehicle ID and diagnostic results for 25 vehicles
- Enhanced engine codes for complete driveability diagnostics on GM®, Ford®, Chrysler® vehicles
- ABS brake system codes for GM, Ford and Chrysler vehicles
- OBD-I coverage for GM, Ford, Chrysler, and select Toyota® vehicles (requires optional EAK0302L01A adaptor kit)





### MICROSCAN Accessories EAK0302L01A MICROSCAN (Blue-Point) OBD-1 Adaptor Kit.

 Connect MICROSCAN PRO to pre-1996 GM, Ford, Chrysler and Toyota vehicles Note: For MICROSCAN PRO scanner only. Not applicable to Snap-on® brand scan tools



- Works on new 2010 Diesel emissions systems and Hybrids
- Backlit display
- Vehicle Health Status LEDs confirm if a vehicle will pass or fail an emissions/ smog test
- Mini USB



# 8-07324A MICROSCAN (Blue-Point) Travel Bag.

- Padded nylon soft case, custom fit for *MICROSCAN* scanner
- Keeps MICROSCAN scanner and all standard accessories organized and protected



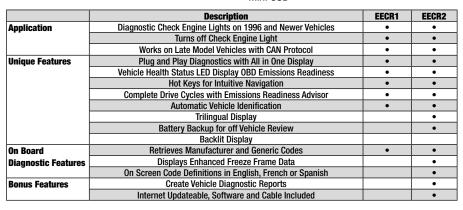
# EAC0106L18A MICROSCAN (Blue-Point) Custom Fit Silicon Skin.

- Keeps MICROSCAN scanner clean and protected from grease, solvents and dirt
- Comfortable, cushioned nonslip silicone rubber

### **EECR2 CarScan-Diagnostics.**

- Plug and play diagnostics
- ABS DTCs
- Internal batteries, on screen DTC library in English and Spanish
- USB and software are included
- Freeze frame data and manufacturer specific definitions
- Mini USB

TECHNICAL SUPPORT 1-877-447-6276







EECR1

EECR2













### DIAGNOSTICS

### iQ™ Heavy Duty Scan Tools



# TECHNICAL SUPPORT



### EEHD188001 Pro-Link® iQ Kit.

Smarter. Easier. Essential. The recognized standard in diagnostic scan tools. *Pro-Link iQ* kit is designed to help diagnose engine, brake and transmission failures. This easy to use, advanced tool is engineered to support today's commercial vehicles as well as the more complex vehicles of tomorrow. Using clear menus and message screens, the *Pro-Link iQ* kit guides technicians through the most complicated vehicle tests.

### **Key Functions and Features:**

- · Large, sharp color graphics
- Information clearly displayed
- Fast data downloads
- · Portable and powerful

### Kit Includes:

Pro-Link iQ Scan Tool. EEHD889008 iQ Heavy Duty Standard Application. EEHD501002 Power and Data Cable. EEHD488099 Power Supply. EEHD488024 6 Pin Deutsch Adaptor. EEHD488028 9 Pin Deutsch Adaptor. EEHD4001018 2 Cell Battery Pack. EEHD850089 CD Manual/Driver. EEHD1402813 Stylus Pen (1 in kit). EEHD210007 Carrying Case. EEHD889008 Heavy Duty Standard J1939\* EEHD888076 OBD II Software\*. EEHD481013 OBD II/J1962 Adaptor\*. EEHD909008 Fault Code Guide\*

EEHD181030S Pocket *iQ*Scan Tool (Blue-Point®).
The quick and convenient way to gather critical truck performance data.
Whether covering a large fleet or monitoring just a truck or 2, the compact *Pocket iQ* scan tool makes it easy to collect operating information. With its advanced capabilities, touchscreen technology and clear message and menu screens, the *Pocket iQ* scan tool reports critical engine, brake and transmission functions. It also stores and accesses vital facts and figures, fault codes and more.

### **Key Functions and Features:**

- Monitors all vehicle data
- Checks engine speed and load, pressures, temperatures and more
- Reads active fault codes
- · Reads and clears inactive fault codes
- Displays trip data
- Collects and stores data from multiple vehicles
- Stores data in PDF or text format
- Supports J1708 and J1939 communication
- Supports OBD-II communication\*

### Kit Includes:

EEHD501002 Power and Data Cable. EEHD488024 6 Pin Deutsch Adaptor. EEHD488028 9 Pin Deutsch Adaptor. EEHD481013 OBD II/J1962 Adaptor\*. EEHD403098 USB Cable. EEHD181030-2 Battery Pack. EEHD181030PB Soft Storage Case. EEHD1402813 Stylus Pen (1 in kit). SS3241 Instructional DVD\*. EAK0276B02A AC Power Adaptor.

Fault Code

<sup>\*</sup>Included exclusively in the Snap-on® and Blue-Point versions.

# iQ™ Heavy Duty Scan Tools

EEHD681004 Extreme Heavy Duty Pro-Link® iQ Kit. Smarter. Easier. Essential. The recognized standard in diagnostic scan tools.

This kit includes all current available software for diagnostics, the most common adaptors, the fault code guide, and includes the hardened case to protect your investment.

### Key Functions and Features:

- · Large, sharp color graphics
- Information clearly displayed
- Fast data downloads
- Portable and powerful
- 1 Year Warranty

Accessories Included:

EEHD481009 HD/1962 GM® Truck for GM Truck

CAT® Engine Adaptor.

EEHD481003 12 Pin Connector\*.

EEHD909008 Heavy Duty Fault Code Guide\*.

EEHD219006 Extreme Heavy Duty Case\*.

EEHD219006-1 Foam\*.

### Kit Includes:

EEHD188001 Pro-Link iQ Scan Tool.

EEHD889008 J1939 Heavy Duty Standard\*\*. EEHD888008 J1708/J1587 Heavy Duty Standard\*\*.

EEHD888076 OBD-II for Light and Medium Trucks.

EEHD501002 Power and Data Cable.

EEHD488099 110 V Power Adaptor.

EEHD488028 9 Pin Deutsch Adaptor.

EEHD488024 6 Pin Deutsch Adaptor.

EEHD481013 OBD-II/J1962 Adaptor.

EEHD4001018 2 Cell Battery Pack.

EEHD1402813 Stylus Pen (1 in kit). EEHD850089 CD Manual/Drivers.



Software Included:

EEHD681004

EEHD889015 For DDEC VI Software (2007-2009) for Detroit Diesel® Electronic Systems.

EEHD888015 For DDEC Software Suite - DDEC III, IV and V (1995-2006) for Detroit Diesel Electronic Controls.

ÈEHD889031 For Detroit Diesel MBE Engines (Pre-EPA07).

EEHD880024 For Caterpillar® ACERT® 2.0 (2003-2009) for Diesel Engines.

EEHD889024 For *CAT* Electronic Engines (1990-2003). EEHD888005 Allison® Software Suite - GEN IV, 1K/2K, 3K/4K, CEC1 for *Allison* Engines.

EEHD888014 WABCO Suite for Air and Hydraulic Diagnostic Systems.

EEHD881048 LMT Software - Enhanced for Ford®, GM and Isuzu® Vehicles.

EEHD880010 International® Engines Software 2.0

(1994-2006) for International Engines\*\*.

EEHD881009 For Navistar® MaxxForce® (2007-2009) Diesel Engines\*\*.

*iQ* Software

### **Engines**

**Detroit Diesel Engine Applications** EEHD889015 DDEC VI/MBE Software (2007-2009) for Detroit Diesel Engines. EEHD888015 DDEC Suite III, IV, V Software (1995-2006) for Detroit Diesel Engines. ÈEHD889031 DDEC MBE Software (2001-2006) for Detroit Diesel Engines. EEHD481003 12 Pin Adaptor, DDEC I & II for **GM** Engines.

### International-Navistar Engine Applications

EEHD881009 For Navistar MaxxForce (2007-2009) Diesel Engines. EEHD880010 International Engines Software v2.0 (1994-2006) for International Engines.

EEHD880010U International Engines Software v2.0 Upgrade (1994-2006) for International Engines.

### Caterpillar Engine Applications

EEHD880024 Caterpillar ACERT Software v2.0 (2003-2009) for Caterpillar Engines.

EEHD880024U Caterpillar ACERT Software v2.0 Upgrade (2003-2009) for Caterpillar Engines.

EEHD889024 For Caterpillar Engines (1990-2003). EEHD401015 9 Pin for Caterpillar Deutsch Engines

(1990-1995). Required. EEHD401014 9 Pin for Caterpillar "T" Engines (1990-1993).

### Mack®, Volvo®, *Cummins* and Other Applications

Snap-on is pleased to offer the Heavy Duty Standard application for use with Mack, Volvo, Cummins and other engines.







### **Transmissions**

# Heavy Duty Transmission Applications

Heavy Duty Transmission applications allow viewing of proprietary information and the running of tests.

EEHD888005 Allison Transmission Suite GEN IV, 1K/2K, WTEC, CEC1.



### **Brakes**

### **Heavy Duty ABS Applications**

Heavy Duty ABS applications provide diagnostic ABS information for both tractors and trailers. Allow viewing of proprietary information and running of special tests.

EEHD888014 Meritor WABCO Air and Hydraulic Diagnostic Systems. **EEHD889013 For Bendix Air ABS Brake Systems.** 

EEHD601020 PLC Converter Kit (2002-Current) for ABS Powerline Carriers.

Required for newer trailers.



EEHD601020

<sup>\*</sup> Cummins® support for these applications limited to basic codes and data

<sup>\*\*</sup> New to the Extreme Kit. (Not in the old RWD Master Kit).

# **DIAGNOSTICS**

# **Heavy Duty Vehicle Diagnostics**

Light and Medium Truck (LMT) Applications EEHD881048 Light/Medium Duty Trucks for Ford®, GM® and Isuzu® (2001-2010) vehicles.

EEHD881048U Light/Medium Duty Trucks for Ford, GM and Isuzu Upgrade (2001-2010) vehicles.

EEHD888076 For Light/Medium Duty Trucks (1996-2011) **OBDII Scanner.** 

Enhanced coverage for gas and diesel engines, including the following: Ford

- 7.3 Liter Powerstroke
- 6.4 Liter Powerstroke
- 6.0 Liter Powerstroke
- Transmission and ABS coverage:

Ford Brakes and

- **Transmission** • F250-F750
- E250-E450

### GM and Isuzu

- 8.1 Liter
- 6.6 Liter Duramax
- 7.8 Liter Diesel
- 5.2 Liter Diesel

### **GM** Brakes and Transmission

- C1500-C7500 P chassis
- T4500-T7500 Workhorse

### Isuzu Brakes and **Transmission**

- NPR/NF3
- NQR/NRR



### **Heavy Duty Standard Applications**

Snap-on offers Heavy Duty Standard (HDS) generic applications covering engines, transmissions and brakes that provide access to limited, nonproprietary diagnostic information. HDS capabilities:

- · Read active fault codes
- · Read and clear inactive fault codes
- View nonproprietary parameters
- Read trip information

EEHD889008 Medium/Heavy Duty Standard J1939 (2004-Current). Heavy Duty Standard J1708. Medium/Heavy Duty Trucks 1989-2009 Included.

### Pro-Link iO<sup>™</sup> Cables and Accessories



EEHD488024 6 Pin Deutsch Adaptor.



EEHD488099 AC Adaptor.



EEHD2450801A Screen Protector.



**EEHD481003** 12 Pin Adaptor.



EEHD401015 9 Pin Deutsch Adaptor for Caterpillar Engines.



EEHD501003 Data Cable.



EEHD488028 9 Pin Deutsch Adaptor.



EEHD1402813 Stylus Pens (3-Pack).



EEHD210007 Carrying Case.



EEHD401012 8 Pin AMP Adaptor.



EEHD401016 9 Pin AMP Adaptor.



**EEHD501004** Power Cable.



EEHD481009 HD/J1962.



EEHD4001018 2 Cell Battery Pack.



EEHD219006 **Extreme Carrying Case.** 



EEHD401013 2 Pin Adaptor for Cummins® Engine.



**EEHD421001** J560 PLC Cable.



EEHD481013 OBD II/J1962.



EEHD4001019 4 Cell Battery Pack.



EEHD219006-1 2 pc Protective Foam.



EEHD401014 T 9 Pin Adaptor for Caterpillar® Engine.



EEHD501002 Power and Data Cable.

**TECHNICAL SUPPORT** 1-800-639-6774

# **SHOP & TECHNICIAN TOOLS**



# IT'S ABOUT TIME... AND MONEY

Whether a shop owner or a technician, Snap-on has productivity solutions to save you time and help increase revenue

**Equipment for the Shop** 

Expand your shop's capabilities and productivity, keeping business where it belongs—with you

**ROI** — From welders built to withstand tough shop environments to battery chargers that perform a variety of functions, your investment is rewarded



# **SHOP & TECHNICIAN TOOLS**



# **SPECIALTY METERS & ANALYZERS**

### **Enhance Your Senses.**

Whether it's getting a closer look at a problem with a videoscope, detecting the slightest engine noise with a listening device or diagnosing a complex electrical problem with a multimeter, Snap-on gives you capabilities to see, hear and analyze. They deliver pinpoint accuracy and results you can take to your customers with confidence.

### Measure and Detect.

Problems come in many forms. Snap-on helps reduce the time and effort it takes to find the source, whether it's related to amps, volts, HC, CO2, CO, O2, NOx, degrees, grounds, short or open circuits, watts, rpm, decibels, compression, cylinder leakage or vacuum.











HYBRID INN \* VATION

Videoscopes

**BK5500A** 



# **BK5500A Video Inspection Scope.**

- Time saving inspection tool: - Ideal for engine, A/C, under dash, suspension and transmission work
- Simple to use:
  - Single On/Off button and battery indicator
  - Convenient thumb control for LED light intensity
  - 8.5 mm diameter imager head fits into most spark plug holes
  - High intensity LEDs direct light where it is needed
  - 36" long obedient shaft for added reach
  - .75" shaft bend radius for great flexibility
- · Excellent image quality:
  - 320 x 240 display resolution
- 720 x 480 imager resolution when using the video-out port to an external monitor
- 2.4" color LCD provides a larger viewing image than eyepiece borescopes
- Close focus range from 0.5 to 12"
- Video out port
- ( E

# BK6000/BK5500A Applications:

- Ideal for engine, A/C, under dash, suspension and transmission work
- Inspect cylinder bores and valves through the spark plug hole

BK6000 Video/Still Recording Digital Borescope.

• 3 1/2" display offers large viewing screen and 2x digital zoom

· Control handle disengages to allow greater maneuverability

Audio input jack for recording comments with optional ear bud

· Records and plays back still images and video clips

· Mini USB connector for uploading images and video

· Removable, rechargeable Li-ion battery pack

· Easy to use, multi language interface

• External SDHC card slot

• ( E

and microphone attachment

Can operate BK6000 while charging the battery

- Examine for gear wear in differentials and manual transmissions
- View inside door and body panels to check for malfunctions, defects and hidden damage
- Inspect under dash for electrical routing, HVAC actuator operation and radio code verification
- · Locate fluid leaks without a direct line of sight

### BK6000/BK5500A Shared Features:

- 8.5 mm diameter imager head fits into most spark plug holes
- High intensity LEDs direct light where it is needed
- 36" long obedient shaft for added reach
- 3/4" shaft bend radius for great flexibility
- 320 x 240 display resolution
- 720 x 480 imager resolution when using the video-out port to an external monitor
- Close focus range from 1/2 to 12"
- Quick change connector enables use of optional length, specialized purpose imagers

· Integrated stand and hanger for flexible positioning













BK5500-7

BK5500-9

BK5500-10

BK5500-12

BK5500-13

BK5500-15

Stock No.	Description	Included with BK5500A	Included with BK6000	Accessory for BK5500A	Accessory for BK6000
BK5500-1	36" Imager (8.5 mm head)	•			
BK5500-2	Mirror and Magnet	•	•		
BK5500-6	Blow Molded Case			•	
BK5500-7	72" Imager (8.5 mm head)			•	•
BK5500-8	Video Out Cable	•			
BK5500-9	120" Imager (8.5 mm head)			•	•
BK5500-10	36" Blue Light / UV Imager (8.5 mm head)			•	•
BK5500-12	Dual Imager (mm head)			•	•
BK5500-13	36" View Imager (5.5 mm head)			•	•
BK5500-15 <sup>†</sup>	30" Dual Imager (12.5 mm head)			•	•
BK6000-1	Battery, Li-ion		•		
BK6000-2	S-Hook		•		
BK6000-6	Blow Molded Case		•		
BK6000-10	Battery Charger		•		
BK6000-11	Earbud and Microphone				•
BK6000-12	USB Cable		•		
BK6000-13	Kick Stand		•		
_	(4) AA Batteries	•			
_	Warranty	2 years	2 years		
_	Instruction Manual	•	•		











- Do not use in environment with explosive vapor
- Read safety precautions on pages W1 to W4

# **Digital Multimeters**

# **Select the Meter For Your Needs**

7 Year Limited Warranty









### **CHECK YOUR NEEDS**

Specifications	<b>√</b>	EEDM596DK †	EEDM525D <sup>†</sup>	EEDM504D <sup>†</sup>	EEDM503D †
Certificate of Calibration Model		EEDM596DCRT	_	EEDM504DCRT	_
Display Count		40,000	4,000	4,000	2,000
AC Volts		750	750	750	750
DC Volts		1,000	1,000	1,000	1,000
Basic DC Accuracy		0.10%	0.50%	0.50%	0.50%
AC Amps		10	10	10	10
Micro Amps		Yes	Yes	Yes	Yes
DC Amps		10	10	10	10
True RMS (Root Mean Square)		Yes	Yes	1	_
Resistance		40M Ohm	40M Ohm	40M Ohm	20M Ohm
Capacitance		Yes	Yes	Yes	_
Frequency		Yes	Yes	Yes	_
Insulation Test		No	No	No	No
Analog Bar Graph		Yes	Yes	Yes	_
Auto Range		Yes	Yes	Yes	_
Data Hold		Yes	Yes	Yes	Yes
Min/Max		Yes	Yes	Yes	_
Backlight		Yes	Yes	1	_
Auto Power Off		Yes	Yes	Yes	_
RPM (*opt.)		Yes	EEDMRPMG*	EEDMRPMG*	EEDMRPMG*
Adj. Trigger Level		Yes	1	1	_
Noise Red. Circuit		Yes	-	1	_
Temperature (*opt.)		Yes	Yes	EEDM506C*	EEDM506C*
Duty/Dwell		Yes	Duty Only	Duty Only	_
mS Pulse Width		Yes	_	1	_
Comp. Output (USB)		Yes, Included	1	1	_
UL Listed		cULus 61010-1	cULus 61010-1	cULus 61010-1	cULus 61010-1
CAT Rating		CATII 750 V AC CATIII 1000 V DC CATIII 600 V AC/DC	CATII 750 V AC CATIII 1000 V DC CATIII 600 V AC/DC	CATII 750 V AC CATIII 1000 V DC CATIII 600 V AC/DC	CATII 750 V AC CATIII 1000 V DC CATIII 600 V AC/DC
Easy Open Battery and Fuse Door		Yes	Yes	Yes	Yes
Glitch Capture		Yes	_	_	_
Low Pass Filter (LPF)		Yes	Yes	_	_
Blown Fuse Identifier		Yes	Yes	Yes	Yes
Dimensions (w/Boot), inches		7 <sup>3</sup> /4 x 3 <sup>3</sup> /4 x 1 <sup>1</sup> / <sub>2</sub>	7 <sup>3</sup> /4 x 3 <sup>3</sup> /4 x 1 <sup>1</sup> / <sub>2</sub>	7 <sup>3</sup> /4 x 3 <sup>3</sup> /4 x 1 <sup>1</sup> / <sub>2</sub>	7 <sup>3</sup> /4 x 3 <sup>3</sup> /4 x 1 <sup>1</sup> / <sub>2</sub>
Case		MT586BK1	MT586BK1	EEDM503B3	_
Replacement Fuses		EEDM504B1 EEDM504B2	EEDM525D6 EEDM525D7	EEDM504B1 EEDM504B2	EEDM503B2 EEDM504B2

**TECHNICAL SUPPORT** 1-888-382-6522

<sup>†</sup> **( €**\*Certified and UL listed

# **Digital Multimeters**

# HYBRID INNOVATION











7 Year Limited Warranty on Snap-on® meters 5 Year Limited Warranty on Blue-Point® meters

### CHECK VOUR NEEDS

					CHECK YOUR	<u> </u>
C <sup>†</sup>	EEDM650C	MT454C** <sup>†</sup>	MT501C** <sup>†</sup>	MT574C** †	Specifications	1
	EEDM650CCRT	_	_	MT574CCRT	Certificate of Calibration Model	
	4,000	4,000	2,000	4,000	Display Count	
	1,000	600	600	600	AC Volts	
	1,000	600	600	600	DC Volts	
	±0.1% + 2 digits	0.50%	0.75%	0.30%	Basic DC Accuracy	
	400mA	_	_	400mA	AC Amps	
	Yes	_	_	_	Micro Amps	
	400mA	_	_	400mA	DC Amps	
	Yes	_	_	_	True RMS (Root Mean Square)	
tance)	40M 0hm	40M Ohm	2K Ohm	40M 0hm	Resistance	
	Yes	_	_	_	Capacitance	
	Yes	_	_	_	Frequency	
	Yes	No	No	No	Insulation Test	
	_	_	_	_	Analog Bar Graph	
	Yes	Yes	_	Yes	Auto Range	
	Yes	_	Yes	Yes	Data Hold	
	Yes	_	_	Yes	Min/Max	
	Yes	_	_	_	Backlight	
	Yes	Yes	_	Yes	Auto Power Off	
/IG*	EEDMRPMG*	_	EEDMRPMG*	EEDMRPMG*	RPM (*opt.)	
	_	_	_	_	Adj. Trigger Level	
	Yes	_	_	_	Noise Red. Circuit	
В	Yes	_	EEDM506C*	EEDM506C*	Temperature (*opt.)	
	_	_	_	_	Duty/Dwell	
	_	_	_	_	mS Pulse Width	
	_	_	_	_	Comp. Output (USB)	
10-1	cULus 61010-1	cULus 3111	cULus 3111	cULus 3111	UL Listed	
00 V 0 V	CATIII 1,000V CAT IV 600V	CATIII 600 V	CATIII 600 V	CATIII 600 V	CAT Rating	
	Yes	_	_	_	Easy Open Battery and Fuse Door	
	Yes (0.25 mS)	_	_	_	Glitch Capture	
	Yes	_	_	_	Low Pass Filter (LPF)	
	Yes	_	_	_	Blown Fuse Identifier	
2 13/32	9 x 4 <sup>1</sup> / <sub>4</sub> x 2	6 x 3 x 2	6 x 3 x 2	6 x 3 x 2	Dimensions (w/Boot), inches	
(1*	MT596AK1	_	_	_	Case (*optional)	
C1 C2	EEDM604C1	_	_	EEDM504B1	Replacement Fuses	

† C €
\*Certified and UL listed
\*\*Blue-Point











- Do not use in environment with explosive vapor
- Read safety precautions on pages W1 to W4

TECHNICAL SUPPORT 1-888-382-6522

# **Digital Multimeter Accessories**



EETA501C



EETA502C



EETA503C



**EEMD5030** 





EEDM575D

### **EETA501C Clamp on Amp Probe.**

- . Measures AC and DC currents greater than 10 A without breaking the circuit
- Ideal for measuring starter (A) and automotive current draw
- . Used with DMMs that have 2 V and 200 mV AC and DC ranges
- Range: 0 to 20 A on 200 mV AC or DC, 0 to 400 A on 2 V AC or DC

### EETA502C Clamp on Amp Probe.

 Similar to EETA501C except range is 0 to 2,000 A AC or DC

### **EETA503C Low Current Adaptor.**

- AC/DC low current adaptor for digital multimeters with DC mV Range and 10 mA impedance
- Measures parasitic current draw on battery cable when key is in off position to indicate component failures or shorts
- Quickly measures branch circuit draw to isolate problem area
- Safely measures current draw of electrical fuel pumps
- Measures from 10 mA to 60 A

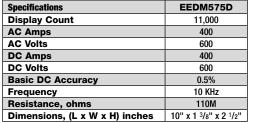
### **EEDM5030 Pressure Adaptor.**

- Measure pressure from 1 to 500 psi and vacuum from 1 to 29 inHg
- Output is 1mV DC per psi or inHg
- Ideal for measuring transmission or hydraulic pressure

  • 1/4" NPT fitting on pressure transducer
- Sensor compatible for air or liquid
- 6 1/2' cable length

### **EEDMRPMG Gasoline Engine** RPM Adaptor.

- Ideal for small, single cylinder, 2 and 4 stroke gas engine applications
- Use with any digital multimeter that has DC mV ranges to measure gasoline engine rpm
- Plug adaptor into DMM (set to DC mV function), clip lead above engine spark plug boot and multiply reading by 10
- Range is 300 to 6,000 rpm
- Output is 1 DCmv per 10 rpm
- Powered by 9 V battery (included)





**EEDMRPMD** 

### **EEDMRPMD Diesel Engine RPM Adaptor.**

- · Ideal for small diesel engine applications
- Measures diesel engine rpm
- Plug adaptor into the DMM (set to IP), attach transducer to fuel line leading to an injector and read rpm on the meter
- Range is 300 to 4,000 rpm
- · Resolution is 1 rpm, powered by 9 V battery (included)



**EEDM5997** 

### EEDM5997 DMM RPM Adaptor.

- · For motorcycles, outboard motors, snowmobiles and ATVs with limited or no ignition shielding
- Use with 2 or 4 stroke engines
  Internal circuitry filters out noise
- Pick up features dual tapped coils to help eliminate errors on negative polarity ignitions

**EEDMDVA Direct Voltage Adaptor.** 

Converts outboard marine, motorcycle and

other small engine ignition pulse signals

 Adaptor helps identify secondary ignition problems like failed individual coil packs or



**EEDMDVA** 



EEDM5830 Amp Adaptor.

into DC voltage signals

poor spark

- · Allows DMMs to accurately measure up to 30 A AC/DC by converting the signal to millivolts
- · Measure current draw of individual circuits from fuse box on automobiles, trucks and buses
- Measure the parasitic load on the battery
- Requires no internal/external power supply
- Range of 0 to 30 A





### **EETA106B Inductive Pick Up** (Blue-Point®).

- Nonintrusive pickup slides over to secondary ignition spark plug wire and snaps shut for quick hook-ups without directly connecting to ignition circuit
- Used on most engines with 2 and 4 cycle ignition systems including small engines and waste spark systems

EETA106B

# Digital AC/DC Clamp On Meters EEDM575D Digital Clamp On Meter.

- True RMS meter that provides accurate measurements of nonlinear current
- . Designed to measure starting current to 400 A, as well as volts, resistance and frequency
- Use to diagnose wheel speed sensors, injector control signals, cam and crank outputs, test cables, connections and fuses LCD display and analog bar graph enhance viewing of fast signal changes
- Records maximum and minimum values of RMS current, frequency or other measurements with Min/Max/Rec function
- Meets UL®, IEC and cULus61010 safety standards
- Includes test leads, temperature probe, soft carrying case, battery and instruction manual

### **Test Leads/Probes**

### **Temperature Probes and Adaptor**

### **EEDM506D Temperature Adaptor.**

- Adds temperature capabilities to multimeters that do not have built-in temperature functions
- Provides dual temperature and differential temperature measurements for multimeters
- Output equals 1mV per degree
- Use with any multimeter with 200 mV DC and/or 2 V DC ranges
- Provides readings from -50 to 1,800 °F. Includes 2 beaded K-type temp probes. Low battery indicator light. Accuracy: ±0.75% of full scale + one digit

**EETH501C Temperature Probe.** Measures temperature in fluids and soft materials.

EETH502B Temperature Probe. Measures surface temperatures. 8" tip.

**EETH503B Temperature Probe.** Measures air temperatures. 8" tip.

MT586B1 Temperature Probe Meter Adaptor. Use for most contact, air or liquid measurements. Flexible cable.



### MTTL501 Probe Extension.

- 8" probe extension for EEDM504B3
- · Reach connectors under dash or deep in engine compartment
- Alligator clips (not included) screw on to probe ends
- · Fully insulated for user safety



### MTTL504 Fused Test Leads.

- 48" fused test leads help protect unfused digital multimeters from electronic damage
- · Provides additional protection when measuring high voltage
- · Includes test lead set with alligator clips and 5 extra fuses
- Overall length is 48"

### MTTL5041 5 A Fuses.

 3 pack of replacement 5 A fuses for MTTL504 fused test leads



MTTL502

### MTTL502 Insulation Piercing Test Probes.

- Use probes on threaded probe tips
- Banana adaptors included so probes can be used on banana plug lead sets



### EEDM504B3 Test Lead Set w/Alligator Clips.

- Standard vinyl jacketed set of test leads with screw on alligator clips for basic application testing needs
- Screw on probe protectors limit the metal probe shaft from touching during testing for safety (remove the protectors when using alligator clips or adaptors)



EETA107B

### EETA107B Shielded Test Lead.

- · Shielded test leads block out radio frequency interference (RFI)
- . 6' leads are heat and oil resistant



### MTTL7005PK Backprobes.

- · Color coded for easy identification
- Bendable stainless steel tips
- Nonintrusive probes slide behind terminals
- Modular ends attach quickly

MTTLBOOT Replacement Boot Kit. 5 red, 5 black, 5 green, 5 blue and 5 gray.



### EETA108B Shielded Test Lead.

- Shielded test leads block out radio frequency interference (RFI)
- 10' leads are heat and oil resistant



### TL2A

### TL2A Test Lead Set.

- · High grade test lead pair fits all meters using standard banana plug jacks
- Nonslip prodding probes have stainless steel points
- . Coiled cords stretch to more than 60"
- · Screw on alligator clips convert the leads to jumper wires



### TL3A Test Leads.

- · Heavy duty pair of jumper leads
- Use to connect a power source or a ground to test a fixture in automobile
- · Heavy duty alligator clips feature the "bed of nails" concept
- Banana plug screws allow use with most multimeters



### TL4A

### **TL4A Multimeter** Test Leads.

- · High grade test leads offer excellent coil memory and can be used with most popular test meters
- Leads feature the "bed of nails" concept, wire piercing probe and alligator style all in one tips













- . Do not use in environment with explosive vapor
- Read safety precautions on pages W1 to W4

### **Test Leads**



### TLS7B Test Lead and Adaptor Kit.

- Quick attach probes and mini alligator clips press onto the straight PVC jacketed lead set
- Threaded hook clips, standard plugs and alligator clips thread onto the probe ends
- Provides an economical set for conducting various tests



### MTTL300 Test Lead Kit.

- 4 color coded test leads help reduce the chance of wrong connections
- Use as test lead, jumper wires or for shorting out components when performing ignition system tests
- Each lead is 4' long



### MTTL301 Test Lead Kit.

- Contains 12", 18", 24", and 10' jumper leads
- Use as extension leads or for shorting out components when testing ignition



# High Grade Test Leads (For Digital Multimeters)

### MTTL500 Test Lead Kit.

- Interchangeable probes permits wider range of testing possibilities
- Right angle 48" long test leads are made from double insulated silicone super flex wire
- Spring hooks for use on 16 gauge and smaller bare wire
- Alligator clips for attachment to bolts and large wire conductors
- Spade terminals for use on terminal blocks and prods for probing wire ends

Stock No.	Description	MTTL500	MTTL600	MTTL700
MTA20	Prods - Modular	•		
MTA24	Test Leads Silicone Jacket - Modular	•		
MTA75	Alligator Clips - Medium - Modular	•		
MTA80	Spring Hooks - Modular	•		
MTA85	Alligator Clips - Heavy Duty - Flanged	•		
MTTL7001	Test Leads Silicone Jacket - Threaded			•
MTTL7002	Banana Plugs - Screw-on		•	•
MTTL7003	Alligator Clips - Large - Modular		•	•
MTTL7004	Insulation Piercing Prods - Modular		•	•
MTTL7005	Backprobe Adapters - Needle - Modular		•	•



# MTTL800 † Test Lead Kit. Kit includes:

Stock No.	Description	Overall Length, inches (cm)	Tip Size, inches (mm)		
MTTL7005PK	Back Probes	4 <sup>1</sup> /2 (11.5)	Diameter: 1/32 (1)		
MTTL800-1	Modular Test Leads	48 (122)	Tip Ends: Modular push-on		
MTTL800-3	Crocodile Clips	3 1/4 (8.3)	<sup>1</sup> / <sub>4</sub> (7) x 1 <sup>1</sup> / <sub>4</sub> (31.75)		
MTTL800-4	Piercing Probes	3 <sup>1</sup> / <sub>4</sub> (8.3)	1/4 (7) x 1/4 (7)		
MTTL800-5	Grabbers 90°	7 (17.8)	3/8 (10) x <sup>1</sup> / <sub>4</sub> (7)		
MTTL800-6	Prods	5 (12.7)	1/16 (2)		
MTTL800-7	Spring Hooks 90°	7 (17.8)	<sup>3</sup> /16 (1)		
MTTL800-PB	Storage Pouch	31 (78.7) Width: 10 (25.4)	N/A		

† **( E** 



### MTA70 Alligator Clip Set.

- Screw on style alligator clips for use with EEDM504B3
- Do not use with MTA24



- Grabber leads slide in to grab wire or terminal ends in tight areas
- Recommended for use with MTTL500 modular test lead set or MTTL700 with the MTTL7002 screw on banana plug adaptors
- Use with any threaded test lead set using the MTTL7002
- Finger grip and plunger placement provides technician controlled placement of the jaws even under extreme conditions
- Jaw gripping pressure securely bites on the target terminal or wire
- Plunger and finger grip allow maximum jaw opening with minimum pressure for ideal placement, enabling a good contact
- Safety CAT III 1000 V, 10 A rating. cULus 61010 and IEC61010 listed



### MTTL700 Test Lead Kit.

- Includes screw on banana plug adaptors, needle backprobe adaptors, large alligator clips and insulation piercing prods
- Test leads with interchangeable tips are 50" long
- Double insulated silicone wire is heat and flame resistant and flexible in extreme cold conditions



### MTTL600

### MTTL600 Test Lead Kit.

 Includes screw on banana plug adaptors, needle backprobe adaptors, large alligator clips and insulation piercing prods

### Test Leads



### High Visibility Jump Leads

TL Series High Visibility Jump Leads.

- High grade test leads offer the highest heat and oil resistance and exceptional coil memory
- Leads feature a removable "bed of nails" concept
- After removal, probe end with 8-32 brass thread allows use of other product accessories

**TL616AO Test Leads.** Hi-vis orange color, 16' extended length. TL624AG Test Leads. Hi-vis green color, 24' extended length. TL648AR Test Leads. Hi-vis red color, 48' extended length.



### Retractable Test Leads (Blue-Point®) YA1175KIT Retractable Test Lead Kit.

- Includes YA1175
- Retractable test leads, YA1175-1 probes (pair), YA1175-2 alligator Clips (pair) and YA1175-3 spring hooks (pair)
- Retractable test leads pull out and stay at desired length
- Rewind test leads when not in use for compact storage
- 18 gauge copper wire and interchangeable tips
- ( E

### Coiled Jump Leads MTTL310 Coiled Jump Lead Set.

- 4 distinct colors facilitate easy identification of test circuits
- Crocodile clips on both ends securely grip terminal connections
   Coiled cord stretches to 48" (122 cm) for extra reach
- Coil cords recoil requiring minimum storage space and less tangling
- Heavy duty but flexible boots provide safety insulation and strain relief
- Soldered and clamped connections provide low signal loss and prolongs life

Stock No.	Coiled Length, inches (cm)	Stretched Length, inches (cm)	Crocodile Clip Opening, inches (cm)	Color
MTTL310-1	20 (51)	48 (122)	<sup>1</sup> / <sub>2</sub> (1.27)	Black
MTTL310-2	20 (51)	48 (122)	1/2 (1.27)	Red
MTTL310-3	20 (51)	48 (122)	1/2 (1.27)	Green
MTTL310-4	20 (51)	48 (122)	1/2 (1.27)	Yellow

# MTTL311 Coiled Jump Lead Set.

- 4 sizes facilitate various applications that make the job easier to complete
- Alligator clips on both ends securely grip terminal connections
- Coil cords recoil requiring minimum storage space and less tangling
- Heavy duty vet flexible rubber boots provide safety insulation strain relief
- Soldered and clamped wire connections to alligator clips provides low signal loss

Stock Number	Coiled Length, Inches (cm)	Stretched Length Inches (cm)
MTTL311-1	10" (25)	12" (30.5)
MTTL311-2	11" (28)	18" (46)
MTTL311-3	13" (33)	24" (61)
MTTL311-4	24" (61)	10' (305)



### Intrusive Circuit Testing Adaptors

- High quality "bed of nails" wire piercing adaptors
- These alligator style clips allow circuit testing when back probing is not desired or practical

**TLB6B Adaptor.** Straight nose test clip with black boot. **TLR6B Adaptor.** Straight nose test clip with red boot. TLBL6B Adaptor. Straight nose test clip with blue boot. **TLBB6B Adaptor.** 15° bent nose test clip with black boot. **TLBR6B Adaptor.** 15° bent nose test clip with red boot. **TLBBL6B Adaptor.** 15° bent nose test clip with blue boot.



### **Battery Adaptor**

TLS4A Battery Adaptor.

- 12 V accessory adaptor supplies power to circuit testers and scanners as well as to most other 12 V powered devices like car phones and lights
- Copper coated alligator clips with vinyl grips attach to battery terminals
- · 3' cord length













- Do not use in environment with explosive vapor
- Read safety precautions on pages W1 to W4

### **Circuit Testers**



- 6 and 12 Volt Circuit Testers
   Used to detect power and ground, also to find shorts and breaks
- Patented Instinct® Handle for style and comfort
   Molded internal contact links with the LED assembly
- top dimple for low loss signal transfer

  Smart LED deign has more brilliant light output and longer life than traditional bulb
- Copper Clip is a superior quality component for maximum
- electrical signal transfer • Low power consumption smart circuit design
- Convenient circuit board and spring assembly



		LL01000			
Specifications:	EECT2H †	EECT4H †	EECT300HG †	EECT300HR †	EECT300HO †
Voltage	6 & 12	6 & 12	6 & 12	6 & 12	6 & 12
Cord Type/Color	Straight Cord/Black	Straight Cord/Black	Coiled Cord/Green	Coiled Cord/Red	Coiled Cord/Orange
Cord Material/Wire Gauge	Rubber/18	Rubber/18	PolyUrethane/18	PolyUrethane/18	PolyUrethane/18
Outside wire diameter, mm	4.0	4.0	4.0	4.0	4.0
Cord length, inches (extended)	70	70	135	135	135
Replacement Cord Assembly	EECTCORDBLS	EECTCORDBLS	EECTCORDG	EECTCORDR	EECTCORDO
Replacement LED and Spring Assembly/Color	EECT2HLED/White	EECT4HLED/White	EECT300HGLED/Green	EECT300HRLED/Red	EECT300H0LED/0range
Handle Size/Color	Mini <i>Instinct</i> /Clear	Medium <i>Instinct</i> /Clear	Medium Instinct/Clear	Medium <i>Instinct</i> /Clear	Medium <i>Instinct</i> /Clear
Termial End	Heavy duty - copper clip	Heavy duty - copper clip	Heavy duty - copper clip	Heavy duty - copper clip	Heavy duty - copper clip
Replacement Clip	EECTCLIP2	EECTCLIP	EECTCLIP	EECTCLIP	EECTCLIP
Boot	EECTB00T2	EECTB00T	EECTB00T	EECTB00T	EECTB00T
Stainless Steel Shank Length, inches	2	3 <sup>5</sup> /8	3 <sup>5</sup> /8	3 <sup>5</sup> /8	3 <sup>5</sup> /8

\* Note: In low voltage situations LED light will not dim as significantly as incandescent bulb style. †(E

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Specifications:	EECT313H †	EECT301H †	EECT24H †	EECT314H †	EECT3HL
Voltage	6 & 12	12 only	18 & 24	12 to 42	6 to 12
Cord Type/Color	Straight Cord/Black	Coiled Cord/Black	Straight Cord/Black	Coiled Cord/Black	Straight Cord/Black
Cord Material/Gauge	Rubber/18	PolyUrethane/Dual 18	Rubber/18	PolyUrethane/18	Rubber/18
Outside wire diameter, mm	4.0	4.5	4.0	4.0	4.0
Cord length, inches (extended)	70 plus 72" extension	125	70	125	70
Replacement Cord Assembly	EECTCORDBLJ	EECTCORDBLP	EECTCORDBLS	EECTCORDBL	EECTCORDBLS
Replacement LED Spring Assembly/Color	EECT4HLED/White	EECT301HLED/ Red (Power) Green (Ground)	EECT24HLED/White	EECT314HLED/ Blue (12-17 V) Red (18-42 V)	2-5130 Bulb
Handle style & size	Medium Instinct/Clear	Medium Instinct/Clear	Medium Instinct/Red	Medium <i>Instinct</i> /Clear	Mini <i>Instinct</i> /Clear
Termial End	Banana plug on terminal end	cigarette lighter adaptor	Heavy duty - copper clip	Heavy duty - copper clip	Heavy duty - copper clip
Replacement Clip	_	_	EECTCLIP	EECTCLIP	EECTCLIP
Boot	_	_	EECTB00T	EECTB00T	EECTB00T
Stainless Steel Shank Length, inches	1	3 <sup>5</sup> /8	3 <sup>5</sup> /8	3 <sup>5</sup> /8	3 <sup>5</sup> /8
Additonal components	nonintrusive accessories and carrying case	_	_	_	_
Replacement Carrying Case	EECT313HBAG	_	_	_	_

<sup>\*</sup> Note: In low voltage situations LED light will not dim as significantly as incandescent bulb style.

### **Circuit Testers**



### Specialty Circuit Testers

### CTS42V Circuit Tester (Blue-Point®).

- Quickly finds broken wires, blown fuses, bad switches and more
   Microprocessor controlled current leading capability for tests of
- Microprocessor controlled current loading capability for tests of powers and grounds
- Unit features all the advantages of an incandescent test light while being computer and air bag safe
- Super bright LED headlamp for working under dash, under hood or behind door panels
- Dual audible tone and bicolor LED indicate power, ground or open circuits
- 42 V



### **EEDMRACKM**

- Convenient rack to hold circuit testers, DMM lead sets, amp clamps, temperature probes and other accessories for multimeters
- Can be mounted to wall with screws or placed on rollcab with magnetic block



### CTN10001 Circuit Tester.

- · Cordless unit with no ground wire to deal with
- Red LED indicator and audio signal to verify power
- · Computer and air bag safe
- 3 to 24 V DC range



### YA11167 OBD-II Breakout Box (Blue-Point).

- Provides easy access to all 16 OBD-II terminals and connection to scan tool
- Eliminates guessing which terminals are being probed
- Eliminates damage to vehicle terminals from probing
- Tester probes plug in securely so you are free to diagnose
- No more crawling under the dash
- · Great for diagnosing inoperative communication links

### Dynamic Test Leads EECT180 LOADpro® Dynamic Test Leads.

### LOADpro finds these problems fast:

- High corrosive resistance
- Shorts to ground
- Open circuits

### **Specifications:**

- LOADpro applies 40 mA/V dynamic load with each load test
- Works with any DMM with standard banana plugs
- Test leads are 60" in length
- Alligator clips included
- For use on circuits up to 28.5 V
- . Do not use on computer ECM input circuits
- LOADpro Dynamic Test Leads work with any DMM

- LOADpro performs a voltage drop test with press of a button
- Steady pin probe tips small recess allows probe to sit on connector pin
- This simple test finds hidden problems, like corroded wire/connections, bad grounds
- Reading loaded voltage is the difference that helps prevent parts swapping episodes and cut wires
- Pressing the switch applies a load of 40 mA per volt across the circuit (example: 40 mA x 12 V = .48 A of load)
- Start doing voltage drop tests now
- Related item ESI182 trouble shooting guide (available through RWD)
- Automotive, Heavy duty, Marine, RV and equipment





### EEFF500

### Data Bus Fault Finder EEFF500 Data Bus Fault Finder.

- Modern vehicles have 15 to 20 computers talking to each other on shared circuits that can fail
- Technicians can waste hours searching for a serial data circuit failure or use this product
- The "go to" tool to diagnose scan tool communication failures
- User controlled elimination of modules to isolate defects and find failure location
- Eliminate rogue/defective modules that lock up data bus via 12 switchable data circuits
- LED indicators that light amber for short to ground and red for short to power, plus a self test upon powering on
- 12 standard banana jacks for DMM probing
- Communicates via Data Bus Network Connector
- U.S. Patent 7,664,579
- 2 year warranty

TECHNICAL SUPPORT 1-888-704-9201

### EEFF500-1 GM Star Cable.

GM Star Cable for EEFF500 Data Bus Fault Finder

### EEFF500-2 GM Double Stack Cable.

- GM Double Stack Cable for EEFF500 Data Bus Fault Finder EEFF500-3 Breakout/Pigtail Cable.
- Breakout/Pigtail Cable for EEFF500 Data Bus Fault Finder EEFF500-4 DC Power Cord.
- Power Cord for EEFF500 Data Bus Fault Finder **EEFF500-PB Storage Case.**
- Storage Case for EEFF500 Data Bus Fault Finder













- Do not use in environment with explosive vapor
- Read safety precautions on pages W1 to W4

### Circuit Testers (Blue-Point®)



**EECT60660** 

### Relay Kit EECT60660 Deluxe Relay Test Kit.

- · Kit makes testing relays or live circuits quick and easy
- Includes 8 jumpers to fit most popular relavs
- · Includes test lead kit for easily and securely connecting relay test iumpers to a multimeter
- Relay puller pliers easily remove electrical relays without damage to the relay or electrical box



### **Fuse Buddy Kits** EEFB310 Fuse Buddy® Pro Test Kit.

- Great tool for reading circuit amperage draws and troubleshooting up to 30 A
- Includes: 1 meter with 3 interchangeable test functions: 30 A MINI circuit current testing, 30 A ATC circuit current testing and 30 A all purpose current test
- Plugs directly into MINI and ATC fuse sockets
- Original fuse is replaced in line, thereby maintaining circuit protection
- Measuring range: 0-30 A/48 V DC 10 seconds
- Accuracy: ±2% of reading
- Resolution: 100 mA



EEFB315

### EEFB315 Max Fuse Buddy Kit.

- . MAXI circuit testing capability up to 80 A
- Works with ATC and MINI circuits (adaptors included)
- Unit features peak hold functions and one touch zero function
- Use on antilock brake circuits, car stereo circuits, power distribution circuits, marine and automotive branch circuits, rear window defogger circuits, solar power dc branch circuits, traction control circuits, solar charge controller circuits and heavy duty equipment circuits
- Amps: 0-80 A DC
- Resolution: 0.1 A
- Accuracy: ±2.0% of reading + 4 digits



YA111KITA

### **Short Circuit Locator** YA111KITA Relay Shorting Plua Kit.

- · Plugs close normally open contacts and instantly determine which half of an output circuit is suspect
- · Eliminates guessing which terminals
- Significantly reduces diagnostic time
- · Kit works on all vehicles using standard 4 and 5 pin relays
- Avoids damage to relay socket as a result of probing

YA111-10A Relay Shorting Plug. 10 A

YA111-15A Relay Shorting Plug. 15 A

YA111-20A Relay Shorting Plug. • 20 A



YA8006

### Fuse Savers

### YA8006 Master Fuse Saver Kit.

- Dual type fuse box connector with 10<sup>th</sup> cord allows you to move around the vehicle shake testing wires while looking for the short
- No wasted fuses
- Includes: 5, 10, 15, 20 and 30 A resetting breaker handles, buzz alert module and 6 fuse adaptors
- Use when installing radios. CD players, radar detectors and other accessory equipment
- ( €



YA8005

### YA8005 Fuse Saver Kit.

- Dual type fuse box connector with 10' cord allows you to move around the vehicle testing wires while looking for the short
- Includes: 10, 15 and 20 A resetting breaker handles
- Use when installing radios, CD players, radar detectors and other accessory equipment

### **Accessories** YA8005-EXT 10' Extension Cord.

• 10' extension cord

### YA8005-11 Buzz Alert Adaptor.

• Buzz alert sound module

### **Circuit Testers**



### **Trailer Harness Testers and Adaptors** YA8026 Towing Maintenance Kit.

- Use for 4/5 pin vehicle side circuit testing and cleaning
- Test, clean and repair truck and trailer connections
- Great preventative maintenance tool
- Extends harness life
- Eliminate guesswork, reduce down time and improve safety
- Kit includes: 4/5 pin tester, terminal cleaning tool and 2 mL tube of DeoxIT® electric contact cleaner
- · Packaged in compact clamshell

### YA8027 Towing Maintenance Kit.

- Use for 6 round pin vehicle side circuit testing
- Test, clean and repair truck and trailer connections plus light assemblies
- Great preventative maintenance tool
- Extends harness life
- · Eliminate guesswork, reduce down time and improve safety
- Kit includes: 6 round pin tester, (2) terminal cleaning tools and 2 mL tube of DeoxIT electric contact cleaner
- Packaged in compact clamshell

### YA8028 Towing Maintenance Kit.

- Use for 7 spade pin vehicle side circuit testing and cleaning
- Test, clean and repair truck and trailer connections
- Great preventative maintenance tool
- Extends harness life
- Eliminate guesswork, reduce down time and improve safety
- Kit includes: 7 spade pin tester, (2) terminal cleaning tools and 2 mL tube of *DeoxIT* electric contact cleaner
- · Packaged in compact clamshell

### YA8029 Towing Maintenance Kit.

- Use for 7 round pin vehicle side circuit testing and cleaning plus 7 round pin connector cleaning
- Test, clean and repair truck and trailer connections
- Great preventative maintenance tool
- Use as a pin wear gauge on trucks and trailers
- Eliminate guesswork, reduce down time and improve safety
- Kit includes: YA3197B 7 round pin tester, IPA8024-AS1 and IPA8024-AS2 2 round pin terminal cleaners plus 2 mL tube of DeoxIT electric contact cleaner
- · Packaged in compact clamshell



### **AC Voltage Sensor MTAC110** MTAC110 AC Voltage Sensor.

- Nonintrusive AC sensor detects voltage from 110 to 600 V AC
- Use to ensure the absence of current before working on a circuit
- Move probe tip along an insulated wire, near an outlet or near a circuit breaker and tip will glow if voltage is present



### TLT8003 Trailer Plug Adaptor (Blue-Point®).

- Converts 12 V feed at the back of a truck or SUV trailer socket to a dual 12 V power outlet
- Powers 12 V test equipment, charging equipment and work lights in shop environment
- Recreation purposes such as running air pumps, radios or TVs while tailgating and camping
- Plugs into any 7 way spade pin trailer connection

### TLT8000 3 Way Trailer Adaptor.

- Adapts 7 way connection to 6 round pin and 4/5 pin connections
- Sealed plugs to keep road debris from corroding connections
- Winged grip for easy installation and removal
  Use on medium/light duty trucks, 1/2, 3/4 and 1 ton pickups, campers and other heavy duty applications

### **TLT5 Trailer Harness Tester.**

- Easily locates electrical problems in the tow vehicle
- · Checks both 4 and 5 pin flat trailer connectors with LED indicator lights
- Tests left and right signals, brake lights and running lights

### **TLT6 Trailer Harness Tester.**

- Checks 6 pin round trailer connectors with LED indicator lights
- Same applications as TLT5

### **TLT7 Trailer Harness Tester.**

- · Checks 7 pin round trailer connectors with LED indicator lights.
- Same applications as TLT5



### YA3179B

### YA3179B Circuit Chaser.

- Round pin circuit chaser for semi trailers
- Test the semi trailer plug and cable
- Both male and female ends so technician can isolate a fault to trailer or cable
- · Can temporarily repair short circuits in the shop or on the road
- Includes: 5 jumper tabs and 1 replacement prong



### **Electrical Brushes** AC41C Taillight Socket Brush.

Stiff carbon steel wire bristles

- 6 5/8" long

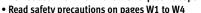














### EELD100 Diagnostic Smoke Machine (EVAP).

• General purpose smoke machine

### **EELD100 Applications:**

Oil leaks, EGR valve, wind and water leaks, PCV valve and hoses, air cleaner assembly, mass air flow meter, vacuum switches, loose clamps, throttle body shaft, diaphragms, air valves, map sensors, exhaust manifolds, exhaust pipes and mufflers, vacuum hoses, intake gaskets, air ducts, carburetor base gasket, injector 0-rings.

**EELD100 Standard Accessories:** 

EELD301A2 Cap Plug Kit.

EELD301A3 Exhaust Cone Adaptor.

EELD301A4 Wind/Water Leak Adaptor.

EELD100-4 Combo Light.

EELD302A1 Nitrogen Hose (optional on EELD100).

EELD302A2 EVAP Port Adaptor (Standard Service).

EELD302A3 EVAP Port Adaptor (Ford® Service-optional on EELD100).

EELD302A4 Schrader Valve Core Tool.

### **TECHNICAL SUPPORT**

1-800-901-1988

# Portable Diagnostic Smoke Machine EELD500 Portable Smart Smoke® Machine.

- Portability, take it under and around vehicle with optional 14.4 V
   Ni-Cad or 18 V Lithium battery and operate using cordless remote control or connect to vehicle 12 V battery
- Necessity, 8 of the top emission DTC codes can be diagnosed with Smart Smoke technology
- Computerized digital readout displays leak sizes down to 0.001" -LPM and Pressure/vacuum in H<sub>2</sub>O
- Smart, self calibrates for .010, .020, .040" and automatically preforms EVAP pass/fail test
- One touch EVAP testing with automatic pass or fail
- · Low flow mode makes it easier to find leaks
- Vacuum port adaptor to diagnose Chrysler ESIM and NVLD systems
- Find leaks, the evaporative emissions diagnostic smoke machine delivers EVAP testing and general purpose applications
- Conveniently functions with 0EM specified nitrogen, portable C02 bottle or shop air
- Patented UltraTraceUV® dye solution pinpoints leaks
- OEM approved smoke technology
- Smoke solution is safe and does not produce unpleasant odor in the shop
- Unit ships with enough smoke solution to perform 250 tests -EELD500-1
- · 3 button control display select, Orifice select and Start
- Combo LED and UV light in one and remote control are included
- Convenient hanger for under car and under hood use
- Lightweight and compact stores in large bottom roll cab drawer or hang with optional cover to protect from shop dirt and dust
- Product support: 3 year warranty, instructional video SS3229
- Patents 6,526,808 6,439,031 6,392,227
- Other patents pending

### Includes:

EELD500-1 8 oz Bottle of UltraTraceUV Dye Solution.

EELD500-2 Large Adaptor Cone.

EELD500-3 Vacuum Adaptor.

EELD500-4 Combination LED UV Light and Yellow Glasses.

EELD500-5 Removable Battery Clamp Lead Set.

**EELD500-REM Remote Control.** 

**EELD500-Z User Manual.** 

EELD301A2 Assorted Cap Plug Set.

EELD301A3 Exhaust Cone (1" x 3.5" Diameter/6" Long).

EELD301A4 Smoke Diffuser (for finding wind/water leaks).

EELD302A2 EVAP Service Port Adaptor Fitting - Standard Size.

EELD302A4 Dual Size Schrader Removal/Installation Tool.

**Optional Accessories for EELD500:** 

EELD500C02 C02 Bottle and Regulator.

**EELD500CVR Protective Cover.** 

CTC620 Battery Charger.

CTB4187 18 V Slide on Battery.

EELD500-1 Additional 8 oz Bottle of *UltraTraceUV* Dye Solution.

EELD500-6 2nd Smoke Hose.

YA4000B Vacuum Pump.

**EELDGASCAP Gas Cap Adaptor (3 pack).** 

EELDGASBMW BMW Gas Cap Adaptor (1 each).

Specifications	EELD500 †	EELD100 †
Power Supply	12 V DC	12 V DC
Power Consumption	12/18 V DC, 25 A	15 A
Supply Volume	10 I/min	10 I/min
Line Length/Smoke Supply, ft (mm)	8 (2.44)	10 (3)
Line Length/Power Supply, ft (mm)	8 (2.44)	10 (3)
Line Length/Remote Control, ft (mm)	50' Range	10 (3)
Weight, lbs (kg)	11.5 (5.25)	19 (8.6)
Dimensions, inches (mm)	12 W x 9 D x 12 H (310 H x 230 D x 310 H)	13 H x 13 L x 12 W (305 H x 330 L x 254 W)

### Leak Detectors

### Evaporative Emissions Diagnostic Smoke Vapor Producing Machines - Feature Comparison

	EELD100	EELD500
Has patented STAR technology inside: the only OEM approvied smoke technology	•	•
Patented UltraTraceUV® dye solution: the only dye solution approved by any OEM, deposits dye at exact leak location	•	•
Designed with an electronic safety valve that automatically shuts off air flow into the vehicle's EVAP system every time the machine turns off. This stops gasoline fumes from possibly continually exiting the EVAP system and filling the work bay	•	•
Meets spec if OEM requires nitrogen to produce the smoke when testing the EVAP system and can use shop air for all other, non-EVAP leak testing	•	•
Approved for Flex Fuel vehicle testing	•	•
Pressure decay	•	•
Extra supply port for smoke or to apply vacuum to system being tested. EONV NVLD ESIM and other EVAP systems		•
One touch EVAP testing automatically combined and performs pass/fail test on EVAP systems with .010, .020 and .040"		•
Low flow pulsating mode finds leaks easier because its more effective than a steady low flow stream		•
Computerized digital display "orifice leak size" testing, down to zero leak size (capable of testing PZEV)		•
Computerized digital display pressure/vacuum in H20 for in depth diagnostic ability		•
Computerized digital display pressure/vacuum decay in H2O		•
Sleep mode with memory so you will not lose test results if machine shuts down after 8 minutes		•
Connect to car battery or go portable with 14.4 or 18 V Ni-Cad or lithium battery		•
Cordless remote		•
Warranty	2 year	3 year







EELD302REG



EELD302010



EELD500-1

### **EELDGASCAP1** Fuel Tank Filler Neck Adaptor (Blue-Point®).

- Quickly pops on virtually any filler neck
- · Costly replacement seals are no longer needed
- One size fits all (new model vehicles may be subject to change)

### **EELDGASCAP Fuel Tank Filler Neck Adaptor.**

• 3 pack of EELDGASCAP1

### EELD302REG Gas Flow Regulator (Blue-Point).

- 100 psi preset regulator guarantees proper operating pressure for any smoke machine
- Easily connects to nitrogen cylinder (optional)

### **EELDGASBMW Fuel Tank Filler Neck Adaptor.**

• Single for BMW® vehicles

### EELD302010 Upgrade Kit, .010.

- Follow the steps to install this kit into your EELR302B smoke machine
- EELD302B smoke machine will now measure leaks to .010"
- Includes solenoid assembly, o-ring and O'Keefe orifice

### EELD301A1 UltraTraceUV Smoke Solution.

- UltraTraceUV brand scent-free smoke producing solution for use with EELD301A/EELD302B smoke machines
- Single 12 oz bottle

### EELD500-1 UltraTraceUV Smoke Solution.

Single 8 oz bottle

### Carbon Monoxide Analyzer

### MT706A Carbon Monoxide Analyzer (Blue-Point).

- Monitor and test adjustments affecting carbon monoxide emissions from gas powered vehicles, propane powered forklifts plus other combustion style equipment
- Flow indication warns of restricted emissions flow due to clogged or pinched lines
- . Backlit display for ease of reading in dim light
- Range is 0 to 10% CO (approx. 100,000 PPM)
- Response time is 90% of reading in less than 60 seconds

• C E

ACT790 Combustible Gas Detector. Find leaks in fuel and exhaust systems plus verify integrity of fuel storage containers. Detectable compounds include acetylene, iso-butane (R600a), methane, ethane (R170), propane (R290), hydrogen, acetone, methanol and gasoline. Probe length of 17". Uses (4) AA alkaline batteries. Conforms with SAEJ1627 and is designed to conform with SAEJ2791.

Body length of 10 3/8". Includes storage case.

- Audio mute function
- Automatic calibration
- Comfortable neoprene grip
- Intrinsic safety certified • C E
- Numeric leak size indicator 3 levels of sensitivity
  - · Flashing probe LED visual leak indicator
  - Long life sensor
  - High impact injected molded instrument case
  - 2 year warranty on detector, 2 years on sensor



TECHNICAL SUPPORT 1-888-382-6522



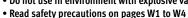














### **Hand Held Gas Analyzers**

HHGA5A Hand Held Gas Analyzer Kit (5 Gas).

Independent Hand Held 5 Gas Analyzer or use with MODÍS™ Link, VERDICT® and VERUS™ Bluetooth link.

- Fully Portable 5 Gas Analyzer, go anywhere, use anywhere
- 110 V AC and 12 V powered
- Internal rechargeable battery, up to 1 hour use
- Ideal for road testing and mobile use
- Measures exhaust emissions for CO, CO2, HC, O2, NOx and AFR/Lambda
- Provides an instant assessment of an engine vehicle exhaust and catalytic converter
- MODIS, VERDICT and VERUS Link for enhanced real time viewing
- Add a 5 Gas Analyzer function to MODIS, VERDICT and VERUS
- Set up required with included software on USB stick
- Gather all the evidence required for effective and accurate vehicle diagnostics on one screen in real time
- Now see the "Big Picture"
- · Gas analysis
- Component tests
- Scope readings
- Digital graphing function
- Scanner results
- · View, graph, save and recall data
- Monitor and reduce vehicle emissions, improve driveability and fuel efficiency
- Snap-on® HHGA5A is truly handheld, about the size and weight of a DMM offering True Portability
- Links to MODÍS, VERUS, VERDICT and other suitable Bluetooth devices
- There are 255 memory locations in the analyzer to track and print data for the same or many different vehicles
- HHGA5A is compatible with gasoline, CNG ,propane and diesel fuel types
- HHGA5A is very sensitive and pulls only 1/14th the exhaust volume of competing analyzers. This means no problems with water ingress and pumps last longer
- Service is handled at Crystal Lake Northern Repair- Annual Cal and sensor replacement. Meets required industry standard.



1-888-717-1333



- Problems in ignition system (Spark plugs, wires)
- Engine compression problems
- Temperature sensor malfunction
- EGR Valve problems
- Dirty air filter
- Obstructed intake valve ports
- Lambda Sensor failure
- Excessive Fuel Consumption
- Misfire
- · Rusted exhaust (Internal or external rust)
- Nonhomologated exhaust (Wrong back pressure)
- Melted catalytic converter
- Worn out catalytic converter
- Obstructed exhaust or catalytic converter

HHGA5A-1 Serial Lead. HHGA5A-SP Soft Pouch.

HHGA5A-Z User Manual, HHGA5A.

HHGA5A-13 Water Trap Bung.

HHGA5A-14 Probe Connector.



HHGA4X

### HHGA4X Hand Held Gas Analyzer Kit.

- 5 gas analyzer tests vehicle exhaust emissions for Nitrogen Oxide (NO<sub>x</sub>), Carbon Monoxide (CO), Hydrocarbons (HC), Carbon Dioxide (CO<sub>2</sub>), Oxygen (O<sub>2</sub>) and AFR/LAMDA
- Provides ideal funtionality for diagnostic work, pre-compliance testing and servicing vehicles to manufacturer's specifications
- Helps diagnose engine problems and catalytic converter failure
- Onscreen commands in 8 languages
- Can be powered by AC or 12 V
- Fully portable and is ideal for on road testing
- Magnet on analyzer and printer allows mounting almost anywhere
- · Print records to infrared printer



# HHGA-8 Motorcycle

### Exhaust Probe.

 Optional motorcycle exhaust probe for HHGA series gas analyzers



HHGA-16

### HHGA-16 Ac Adaptor.

Designed for use in the service bay



HHGA-5

### **HHGA-5 Infrared Printer.**

Infrared printer for HHGA series gas analyzers



HHGA-9

# HHGA-9 Five Gas Exhaust Probe.

 5 gas exhaust probe for HHGA series gas analyzers

### HHGA-11 Filters.

 Filters for HHGA Series gas analyzers



### HHGA-17 12 V Adaptor.

 Designed for use in the service bay or on the road

### HHGA-18 Paper Roll.

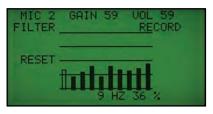
 Replacement paper roll for HHGA-5 infrared printer

### **Stethoscopes**

Quickly pinpoint the source of noise or vibration in underhood, undercar and vehicle interiors. 6 selectable channels allow placement of sensors in various locations to pick up bearing, gear, engine, suspension, drive accessory and wind noises.



Wave Form Viewer-displays a visual representation of the audio signal



Band Pass Filter-tunes out unwanted background noises



### LD6900 THEBIS™ Diagnostic Unit.

- Under Chassis: Differentials/CV joints, transmission/transfer cases, U-joints plus bearings, gears and suspensions
- Under Hood: Faulty fuel injectors, vacuum leaks, noisy valves and lifters
- Body: Wind and vent noise, dashboards and instrument panels
- Operate as an electronic noise and vibration detector using the inductive clamp or vent microphone attachments
- Operate as an electronic stethoscope using the listening wand and contact probe attachments
- Recorded files are stored on included USB memory stick for easy playback on PC



### YA6890KT Electronic Squeak and Rattle Finder (Blue-Point®).

- Quickly pinpoints source and location of noises emanating from under chassis, under hood, transmission, differential/CV joint, faulty fuel injectors and bearings, gears and suspension parts
- Helps detect and isolate squeaks, rattles, groans, cowl "pops", clunks, growls, thumps, rumbling and ticking noises
- Wireless transmitters feature magnetic body with versatile clip
- Wireless channel receiver isolates six different transmitter locations
- LED lights indicate the strength of signal of the active channel
- Illuminated button indicates active channel at a glance

### YAH6890KT European Version.

- YA6895 Transmitter (Channel 5) (Blue-Point).
   Optional transmitter for YA6890KT. Operates on channel 5
- YA6896 Transmitter (Channel 6) (Blue-Point).
- Optional transmitter for YA6890KT. Operates on channel 6



### YA6930 Electronic Engine Stethoscope.

- · Electronic Stethoscope amplifies sound during diagnosis or verification of proper vehicle operation
- Use to pinpoint faulty bearings, injectors, squeaks, rattles and more
   Mode selection switch with LED indicator easily switches between the sound and vibration functions
- Noise cancellation feature eliminates background noise
- Studio style headphone set with tangle free cord
- · Detachable flex wand with LED illuminated tip
- Rotary volume control
- · Lightweight and balanced with ergonomic comfort grip
- ( Ĕ









### **Stethoscopes**







### YA6910 Mini Electronic Stethoscope (Blue-Point®).

- Convenient diagnostic tool can pinpoint location of noise caused by bad bearings, bushings, dirty fuel injectors, wind and air leaks, noisy valves and lifters
- Allows user to monitor gears, bearings and suspension components under load so problems can be more accurately diagnosed
- Sensor clamp helps to detect noises during vehicle test drive that cannot be duplicated in the work bay
- Sensor tip mounted on 6" flexible shaft allows access to hard to reach areas
- 5" inductive metal probe allows user to pinpoint source of noise or vibration
- · Ultra sensitive microphone provides a full range of sound
- Features a rotary style adjustable volume control
- ( E

### YA6920 Electronic Marine Stethoscope (Blue-Point).

- Unique diagnostic listening device specifically designed to pinpoint squeaks, rattles and other troublesome noises in most marine vessels and watercraft with inboard or outboard motors
- Test for noise and harmonic vibration on bearings, under dash areas, control cables, fuel injectors, cabinets and compartments, alternators, switches, pumps, final drives, steering gears, gear cases, steering pumps, hulls and compressors
- 14' long, water resistant wire loom harness allows user to diagnose hard to reach problem areas
- 6 spring loaded, color coded stainless steel sensor clamps with built-in super sensitive microphone in the tips for optimal sound detection
- Heavy duty professional headphones block any unwanted sounds





# MST100 GA111D

# YA6800 Electronic Stethoscope (Blue-Point).

- Features 7 level sound control settings, A/B tone control, high/low volume controls, and battery check position on control stick
- Supersensitive microphone in top is attached to a flexible 9" shaft for hard to reach areas
- · LED light signals when switch is on
- Earphones block outside noise
- Adjustable volume controls

# MST100 Mechanic's Telescoping Stethoscope.

- Stainless steel shaft extends to a 36 1/2" overall length
- for easy access to hard to reach areas
- Aluminum sound chamber produces a more natural sound than plastic chambers
- Flexible tubing to ear piece aids positioning
- Rigid shaft extends, keeping hands away from heat and moving parts
- Soft comfortable ear piece is replaceable
- Comfortable soft grip handle
- Probe reverses to fit inside chamber for safe, compact storage
- Length closed with probe reversed 11"
- Length closed 15"
- Length extended 36 1/2"

### GA111D Mechanic's Stethoscope.

- Locates any engine sound such as bearing noise, knocks and squeaks in fan or water pump, and valve tappets
- Sound amplifying diaphragm and a 12" probe to locate trouble

### **Infrared Thermometers**

These infrared thermometers safely monitor hot, hazardous or hard to reach materials without contamination or damage to the surface. Simply point at target, pull the trigger and read the temperature on the large, backlit LCD display.

### Applications:

- Pinpointing radiator core restrictions
- · Checking exhaust and emission control problems
- Measuring catalytic converter temperatures
- Diagnosing exhaust manifolds for combustion problems
- Measuring tire temperatures
- Measuring race track temperatures
- Measuring bearing, rotor, drum or brake temperatures for potential problems
- HVAC-Use for temperature room balancing, check supply/return registers duct work, monitor steam traps, furnace performance plus use in energy audits
- Check bearing, rotor, brake and drum temperatures
- Food Safety: perform HaCCP temperature measurements at receiving docks, take cooking temperatures, check hot and holding temperatures, ensure storage temperatures on freezers, ovens and ranges









Features	RTEMPB4* †	RTEMPB120*	RTEMPB3A* †	RTEMPB2A*
Temperature Range	-67° to 428 °F (-55° to 220 °C)	-7° to 248°F (-22° to 120 °C)	-58° to 932 °F (-20° to 500 °C)	0° to 500 °F (-18° to 260 °C)
Temperature Display	Selectable for °F or °C	Selectable for °F and °C	Selectable for °F and °C	1 °F or .5 °C
Response Time	0.5 Seconds	Less than 0.5 Seconds	0.5 Seconds	500 mSec, 95% Response
Emmissivity	Adjustable, set to 0.95	Pre-Set 0.95	0.98	Pre-Set 0.95
Power	3 V Lithium (Included)	CR2032 Battery	9 V Alkaline or Ni-Cad Battery	9 V Alkaline or Ni-Cad Battery
Accuracy	±2% of Reading	2% of Reading or ±3.5 °F, whichever is greater	±2% of Reading or ±2 °C (±4 °F)	±2% of Reading or ±2 °C (±3.5 °F)
Distance To Spot Ratio	1:1	1.3:1	12:1	6:1
<b>Ambient Operating Range</b>	32° to 104 °F (0° to 40 °C)	32° to 104 °F (0° to 40 °C)	32° to 105 °F	32° to 120 °F (0° to 50 °C)
<b>Protective Case</b>	_	<u> </u>	Storage Case	Optional (RTEMPBPK)

† ( E

\*Blue-Point®







Features	RTEMPB5*	RTEMP25PB	RTEMP30PBA
Temperature Range	-76° to 1,400 °F (-60° to 760 °C)	-25° to 999 °F (-32° to 535 °C)	-32° to 545 °C (-25° to 950 °F)
Temperature Display	Selectable for °F and °C	Selectable for °F and °C	0.2°C (0.5 °F)
Response Time	1 Second	Greater Than 0.5 Seconds (95% of Reading)	500 mSec
Emmissivity	Adjustable, set to 0.95	Pre-Set 0.95	Pre-Set 0.95
Power	(2) AAA Batteries	9V Alkaline or Ni-Cad Battery	9V Alkaline or Ni-Cad Battery
Accuracy	±1% of Reading	(-25 to -15 °F/-32 to -26 °C) ±5 °F (±3 °C) (-15 to -0 °F/-26 to -18 °C) ±4 °F (±2.5 °C) (0 to 73 °F/-18 to 23 °C) ±3 °F (±2 °C) (73 to 950 °F/23 to 510 °C) ±1% of Reading or ±2 °F(±1 °C) whichever is greater (Above 950 °F/510 °C) ±1.5% of Reading	±1% of Reading or ±1 °C (±2 °F)
Distance To Spot Ratio	30:1	Optimized for use at 8"; Approx. 16:1 at Focus Point	12:1
<b>Ambient Operating Range</b>	32° to 104 °F (0° to 40 °C)	32° to 120 °F (0° to 50 °C)	0° to 50 °C (32° to 120 °F)
Protective Case	Storage Case	Storage Case	Protective Hard Case

\*Blue-Point









### **Tachometers**







**EEDMRPMD500** 

### EEDMRPM500 Digital Tachometer (Gas Engines).

- Use to digitally read RPM on single cylinder, 2 or 4 stroke gas engines
- Choose between 2 or 4 stroke engines and 1 or 2 spark ignition systems
- Unit provides MIN/MAX readings with 8 storage locations to save readings for future reference
- Range is 300 to 10.000 rpm
- Powered by 9 V battery (included)
- Overall dimensions are 2 3/4" x 5 3/4" x 1"

### **EEDMRPMD500 Diesel Engine Adaptor.**

- Optional diesel engine adaptor for the EEDMRPM500 digital tachometer
- Use on diesel engines only
- Range is 300 to 6,000 rpm

# **Diesel Timing Meter**

### MT257B Diesel Pulse Adaptor (Blue-Point®).

- Test injector timing or engine rpm on diesel engines equipped with 1/4" or 6 mm external steel fuel injector lines
- Enables use with inductive pick up timing light to test engine timing
- Not for use on diesels with common rail fuel systems







### **EEDMTACH1** Digital Tachometer.

- Combination contact/noncontact tachometer with Minimum (MIN), Maximum (MAX) and LAST or current reading
- Noncontact operation uses photoelectric sensor and reflective tape (included)
- Contact measurements are taken with 1 of 3 contact adaptors; cone, concave wheel or large wheel
- Current data will remain until the next reading is taken
- Memory figures will remain until the next recorded reading is taken Ranges:

Photo Tach: 5 - 30,000 rpm Contact Tach: 0.5 - 19,999 rpm

Surface Speed: 0.2 - 6,560 ft/min or 0.5 - 1,999 m/min

MTTACH1A1 Photo Tape.

Reflective photo tape for the EEDMTACH1 Tachometer.



# **Specialty Meters and Small Testers**



# Automotive Relay Tester

### **RELAYTEST1** Automotive Relay Tester.

- · Quickly and accurately test 4 and 5 terminal electromechanical relays used on many U.S. and imported automobiles
- Will interrogate and identify an unknown relay terminal configuration then self configure its own internal circuitry to perform all required test functions automatically
- Can be used to perform the following tests: coil resistance, surge supression device (resistor or diode), open/closed contact integrity, contact cyclic testing for intermittent failure detection, loaded contact continuity, relay contacts stuck open or closed and time to contact closure and opening
- Unit automatically indicates test results with a series of red, green and yellow performance lights



### Coil-on-Plug (COP) Probe

### YA76562 Ignition Quick Probe (Blue-Point).

- Quickly verify the firing of a coil on plug (COP) ignition coil and spark plug
- Eliminates the need for back probing coil wires and disassembly to test at the coil connector or spark plug
- Variable sensitivity (VS) thumbwheel for greater diagnostic accuracy and expanded application coverage
- Super bright KV and ARC indicator LEDs

### **Timing Lights**

TECHNICAL SUPPORT 1-877-447-6276

### EETL500 Digital Tach/Advance Timing Light.

**EETL500 Timing Light** 

- Clearly view each flash with patented skip circuitry for tachometers readings up to 9,900 rpm, adjust engine rpm
- View, set and adjust ignition advance and retard: 0 to 90° Set Base Timing, Overall Advance and View Ignition Retard
- Measure and adjust ignition dwell: 0 to 180° / 1 to 12 cylinders Points Ignitions
- Measure battery and charging voltage: 10 to 16 V with quick references LEDs
- Set Ignition Timing; Works on DIS, conventional and most aftermarket ignition systems without solid
- Measure Engine RPM and Ignition Advance- Also measure dwell on older points-type Ignition Systems
- Check battery voltage provides a quick visual indication of the current state of the battery
- Measure and display kV readings, view individual cylinder firing voltage, perform snap throttle and
- Patented pivoting head with Xenon strobe and dual LED flashlight makes it easy to get into tight spots and see
- Large blue backlit graphic LCD screen, clearly view the displayed information
- Timing on both 2 and 4 Cycle (DIS and Conventional) engines, 1-12 cylinders, no adaptors required
- Replaceable heavy duty test leads
- Bright high intensity flash
  Nostalgic look with diamond plate chrome underside
- · Comes with a hard case for storage and protection
- Full 2 year warranty
- Patents D377,622, 4,594,886 and 5,767,681 apply

EETL500-2 Inductive Pickup Leads.

EETL500-PB Storage Case.

EETL500-Z Instruction Manual for EETL500.

### EETL5568 Digital Timing Light (Blue-Point®).

- Multifunction timing light works on all distributorless and conventional ignition systems
- Skip circuitry tests tachometer readings up to 9,900 rpm
- View, set and adjust ignition advance and retard from 0 to 90°
- Measure and adjust ignition dwell from 0 to 180°/ 2 to 12 cylinders
- Measure battery and charging voltage from 10 to 16 V
- Dual display backlit screen allows clear viewing of tachometer and ignition advance reading
- Pivoting barrel allows easy access and a clear view to ignition timing marks MT125A Self Powered Timing Light.

- Self powered timing light features a single 6' inductive pick up
- Quick attachment to spark plug wires on motorcycles, marine motors, snowmobiles, jet skis, small engines and other equipment that do not have easy access to a battery power source
- Can be used for automotive applications as well
- On/Off switch is located within thumb reach

### EESM500 Memory Saver.

MT125A

EETL500

**EETL5568** 

- Provides 12 V power to vehicle's computer system to save settings for the radio, seat position, DTCs, keyless entry and more when 12 V battery is disconnected for service
- . Connects to the vehicle through the built in 42" OBDII cable (18 ga.) or 12 V accessory cable (EESM500-3); both store neatly and conveniently in zippered pouches
- Informative and intelligent LED control panel
  - LED panel shows 3 color display when test button is pushed
  - Red-Yellow-Green or ALL indicate internal battery charge level
  - Red blinks when internal battery needs charging
  - Charging LED will light amber when ac charger is plugged in
  - Blue indicates full charge at 100%
- On/Off switch ensures unit is off for storage and transport
- Wall charger (EESM500-4) included to keep the internal battery ready
- Soft side case will not scratch or dent vehicle's interior and console like a traditional unit's hard plastic housing
- Nonskid bottom will not slip and it protects vehicle surfaces
- Lightweight soft side case is easy to carry and store
  Unit measures 13" W x 8" H x 7 1/2" D and weighs 7.7 lbs
- . Battery capacity is 5 Ahr

General Repair, Body, Road Side Assistance Trucks, Battery Specialists, OEMs, National Accounts, Motorcycle/ Marine, Electrical Car stereo, Schools, Fleets with 12 V, Government,

Auto Part Stores and more EESM500-1 DC Battery Clamp.

Optional DC Battery Clamp for EESM500 Memory Saver
 EESM500-2 USB Accessory Cable.
 Optional USB Accessory Cable for EESM500 Memory Saver

EESM500-3 12V Accessory Cable.

• 12 V Accessory Cable for EESM500 Memory Saver. Male to Male, 48" long **EESM500-4 110V Charger.** 

**Computer Memory Savers** 

EESM500

**TECHNICAL SUPPORT** 

1-888-704-9201

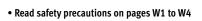
• 110 V Automatic Charger for EESM500 Memory Saver. UL® Listed. Input: 100 to 240 V. Output: 16.5 V/.65 A











### **Computer Memory Saver**



**VA960** 

YA961

# Computer Memory Savers YA960 Computer Memory Saver.

- Prevents memory loss on digital radios, clocks, door locks, and computers when disconnecting vehicle battery
- Plugs into cigarette lighter socket
- Uses a 9 V battery to keep "memories" alive for up to four continuous hours
- Use YA961 on Chrysler products

### YA961 Computer Memory Saver.

- Similar in function to YA960 except its power source is any 120 V AC outlet
- · Will work on all vehicles





EECS5MEM

### TLM12AO Computer Memory Saver.

- Saves computer memory on clocks, radio settings and fuel injection systems
- Simply plug into 12 V accessory, then attach battery clamps to spare battery

### EECS5MEM OBDII Memory Cord, 5'.

- Use in conjunction with a jump starter to preserve vehicle codes and electronic presets while a vehicle's battery is disconnected
- Turns any jump starter with a 12 V power port into a memory saver
- Interface connector between a jump starter and a vehicle's OBD II port
- Prevents electronic memory loss when disconnecting a vehicle's battery
- LED confirms a proper connection has been made to OBD II port



YAGM1

### Service Light/Airbag Resetting Tools YAGM1 Air Bag Release Tool.

 Tool will quickly and easily release the retention springs for the removal of the SIR module on certain late model

GM® vehicles

Applications: Cadillac®, Buick® Park Avenue, Pontiac® Grand Am®, minivans and trucks

### **Electrical**





**FZ4B Fuse Tongs.** Delrin tongs pull fuses up to 15/16" in diameter. A 1/8" hook on the handle pulls short fuses. Tongs have high insulating qualities and are resistant to oil, water and heat up to 300 °F. Hand stops prevent slipping.

**FZ7A Fuse Tongs.** Nylon tongs remove auto high tension wires and pull cartridge fuses from 15/16 to 1" in diameter. Has hooks on handles and jaws. Tongs have high insulating qualities and are resistant to oil, water and heat up to 300 °F. Hand stops prevent slipping.

YA9811 Relay/Fuse Pliers. Remove/install relays and fusible links. Designed to reach into confined access areas. Features convenient slip joint design to enable use for a variety of sizes. Coated pliers tip securely grips corner of relay or fusible link. Black industrial finish with red cushioned grip handles. 8" in length.

### Wire Installation Tools

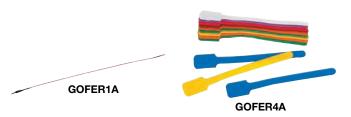
**GOFER1A Wire Installation Tool.** Designed for quick installation of wires for stereo systems, alarm systems, cellular phones, vacuum hoses and air shock supply lines. Conical shaped collet provides secure wire retention when threading wires. Will push or pull wires through openings.

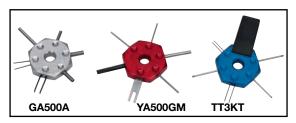
GOFER4A Holding Straps. 1/2" wide by 8" long Velcro® fastening holding straps. Use to organize and hang tools in the shop, or to separate or retain hoses or wires during engine service. Also helpful for sorting wiring during test, for holding scope or meter leads together, or a multitude of other applications. 12 straps included in 8 different colors.



### Multifunction Switch Tools for GM vehicles

**GMSTB25 Multifunction Switch Tool for** *GM* **vehicles.** Reduces the time it takes to replace the multifunction switch (turn signal/dimmer/windshield wiper switch). Tool includes a low profile 1/4" bit wrench with a T25 Ball Torx® bit that allows better control and access in restricted areas. Conveniently remove/install the multifunction switch on *GM* vehicles. Allows the multifunction switch to be removed and installed without removing the air bag, steering wheel and clock spring. Reversible ratchet action speeds tightening/loosening. Heat treated for strength and durability. Chrome plated for great appearance and wear resistance. Magnetic bit retention to allow for easy replacement of bits. Please visit www.snapon.com for the full application listing.







**GA500A Wire Terminal Tool.** 

• Prongs depress the "barbs" on conventional terminals

### YA500GM Wire Terminal Tool.

 Designed for use for Pack-Con and Weather-Pack terminals on GM® C3 systems

YA500F Terminal Tool for Ford® Vehicles (Blue).
• Use on Ford terminals

### TT3KT Terminal Tool Set.

- Comprehensive set covers the majority of today's popular terminals
- Includes: GA500A, YA500GM, YA500F and TT3-1 handle that slips over probes to protect technician's hands and provides extra leverage

YA13120 Electrical Connector Separator. Disconnect electrical connectors without damage. Double ended to fit different access angles. Easy to use. Simply engage the tool tip behind the connector clip and push or pull to disconnect. Works on weather pack and other automotive electrical connectors.

TT600 Terminal Tool Kit. Includes 6 tools for removing terminals from harness blocks: pin vise, square probe, wedge probe, tube probe, flat probe, and hook probe. Tools come in a vinyl pouch.

TT12KT C3/Wire Terminal Tool Kit for GM vehicles. Applications include most GM and other U.S. computer connectors and terminals. Individual handles for easy access in tight places. Designed for weather pack and Pack-Con terminals with flat blade to open connectors and fork for ALDL connectors to access trouble codes. Color coded: Red handle for GM and Green for wire terminal tools. Includes molded storage case.

TT1201 3.3 X 28 mm terminal tool.

TT1202 1.4 X 28 mm square terminal tool.

TT1203 1.5 X 24.75 mm flat terminal tool.

TT1204 2.0 X 22 mm flat terminal tool.

TT1205 8.0 X 24 mm fork terminal tool.

TT1206 3/16" X 1.0" flat screwdriver.

TT1207 3.3 X 28 mm tube terminal tool.

TT1208 4.3 X 13 mm tube terminal tool.

TT1209 3.75 X 13 mm tube terminal tool.

TT1210 3 X 13 mm tube terminal.

TT1211 3 mm flat 2 blade terminal tool.

TT1212 1.6 mm flat 2 blade terminal tool.

### TT1213 blow molded case.

Kit includes these GM C3 System terminal tools (red handle): tube, spring loaded, 3.3 x 28 mm square blade, 1.4 x 19.00 mm flat blade, 1.5 x 24.75 mm flat blade, 2.0 x 23.00 mm fork blade, 8.0 x 24.00 mm flat blade screwdriver. 3/16" x 1.00"

Kit includes these wire terminal tools (green handle): tube, 3.30 x 28.0 mm tube, 4.30 x 13.0 mm

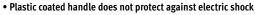
tube, 3.75 x 13.0 mm tube, 3.00 x 13.0 mm

flat twin blade, 3.0 mm flat twin blade, 1.6 mm

**WARNING** 







Read safety precautions on pages W1 to W4



SGTT106A



SGTT110

### **Soft Grip Terminal Tools**

Easily remove terminals from electrical connectors found on mid-1990s and later U.S. and import vehicles. Terminal tools incorporate a stainless steel design with ergonomic "soft grip" handles.

SGTT1A Soft Grip Terminal Tool. Use on PCM and transmission harnesses found on Chrysler®, Hyundai®, Kia® and Mitsubishi® vehicles. 4 13/16" long.

SGTT2A Soft Grip Terminal Tool. Provides robust narrow width blade with fulcrum for easier access to release tabs found on newer terminal blocks. General purpose release tool for U.S. and import vehicles, 5 1/8" long.

SGTT3A Soft Grip Terminal Tool. Use on underhood sensors such as coolant temperature and throttle position sensors. For use on Ford, GM (including Cadillac®), Chrysler, Mitsubishi and Hyundai vehicles. 4 13/16" long.

SGTT4A Soft Grip Terminal Tool. Use for cutting open wire harnesses for easy access to troubleshooting and replacement applications. Easily slits harness sheathing without piercing the wires inside. 4 3/8" long.

SGTT5A Soft Grip Terminal Tool. Use on 55 pin ABS ECU's found on *Ford, GM*, Jaguar<sup>®</sup>, Jeep<sup>®</sup>, Volvo<sup>®</sup>, VW<sup>®</sup>, BMW<sup>®</sup>, *Hyundai, Kia* and Mercedes<sup>®</sup> vehicles. 4 13/16" long.

SGTT6A Soft Grip Terminal Tool. Use on 35 pin ABS ECU's found on Audi®, *BMW*, *Chrysler*, *Ford*, *GM*, Infiniti®, Isuzu®, *Jaguar*, Mazda®, *Mercedes*, *Mitsubishi*, Nissan®, Porsche®, Subaru®, Saab®, Volvo and VW vehicles. 4 13/16" long.

SGTT7 Soft Grip Terminal Tool. Applications:

Powertrain Control Modules (PCM) on Acura®, Audi, Chrysler, Ford, Hyundai, Jaguar, Kia, Mercedes, Mazda, Toyota® and Volkswagen vehicles. 4 27/32" long.

SGTT8 Soft Grip Terminal Tool. Applications:

Powertrain Control Modules (PCM) on Acura, Audi, Buick®, Chrysler, Ford, GM, Honda, Jaguar, Mercedes, Mazda, Toyota and Volkswagen vehicles. 4 27/32" long.

SGTT9 Soft Grip Terminal Tool. Applications:

Powertrain Control Modules (PCM) on Acura, Audi, Chrysler, Jaguar, Hyundai, Kai, Mercedes, Toyota and Volkswagen vehicles. 4 27/32" long.

SGTT10 Soft Grip Terminal Tool. Applications:

Open connector clips and sides of clips on Acura, Audi, Chrysler, Honda®, Mercedes, and Volkswagen. 4 27/32" long.

SGTT106A Soft Grip Terminal Tool Set. Includes SGTT1A thru SGTT6A (6 pcs) in kit bag.

SGTT110 Soft Grip Terminal Tool Set. Includes SGTT1A thru SGTT10 (10 pcs) in storage tray.

# **FUEL AND ENGINE SYSTEMS**

### **Compression Gauge Sets and Adaptors**



EEPV500

### Compression Gauge Sets

- Intended for use on spark ignited gasoline engines that do not exceed 300 psi compression
- Uses hose adaptors that thread into the spark plug hole and connect at the gauge hose's quick coupler
- · Maintains highest compression test reading and resets to zero with a push button release valve
- Gauge displays individual cylinder pressure
- Test range: 0 to 300 psi (0 to 2,000 kPa) in 10 psi (50 kPa) increments

### **Compression Gauge Adaptors**

- 10 1/4" overall length unless otherwise noted
- Standard reach applies to flat and tapered spark plug hole seats; long reach applies to servicing motorcycle engines



EEPV503

### **EEPV500 Compression Gauge Set.**

- Test late model cars and trucks with hard to access spark plug ports
- Gauge assembly includes 2 3/4" diameter gauge and 27" flexible hose with quick coupler
- Includes EEPV5G12L, EEPV5G14L and EEPV5G14S

### EEPV503 Motorcycle Compression Gauge Set.

- Test motorcycles and recreational vehicles with hard to access spark plug ports
- Gauge assembly includes 2 3/4" diameter gauge and 18" flexible hose with quick coupler
- Includes EEPV5G10L, EEPV5G12L and EEPV5G14L



Long reach (M10 x 1.0 pitch)

**EEPV5G10L Compression** 

### EEPV5G14L Compression EEPV5G18S Compression Gauge Adaptor.

EEPV5G14L

- Long reach (M14 x 1.25 pitch)
- Thread length .73 inch



# Gauge Adaptor.

- Standard reach (M18 x 1.5 pitch)
- Thread length .44 inch



# **EEPV5G10S Compression**

- Gauge Adaptor. • Standard reach (M10 x 1.0 pitch)
- Thread length .43 inch



Thread length .70 inch

Gauge Adaptor.

**EEPV5G14S Compression** 

- Gauge Adaptor. • Standard reach (M14 x 1.25 pitch)
- Thread length .36 inch

### EEPV5G16T **Compression Gauge** Adaptor.

EEPV5G16T

- Long reach (M16 x 1.5 pitch) for Ford® 5.4 L Triton® engines
- 18" length



### **EEPV5G12L Compression** Gauge Adaptor.

- Long reach (M12 x 1.25 pitch)
- Thread length .68 inch



### **EEPV5G12T Compression** Gauge Adaptor.

- Main application 2nd generation Ford Triton engines 2008 and later
- Tests cylinder compression up to 300 psi
- Additional applications include: Mercedes® (most V6 and some V8 models newer than 2006), Nissan® (2.0 L 2007 and later) plus Toyota® Scion (1.8 L 2008 and later) vehicles
- 18" length
- Thread length .71 inch

# Cone Type Compression Gauge

- MT27C Cone Type Compression Gauge.

   Dial reads from 0 to 250 psi in 5 psi increments (0 to 1,700 kPa in 20 kPa increments) and is specially designed for Type I VW® vehicles
- Offset stem overcomes clearance problems
- Check valve located at bottom of unit to avoid interference with cooling shroud sheet metal

### MT27BR Service Kit.

- Included with MT27C gauge
- Contains cone tip, valve and sealing ring in drawstring bag



MT27C

# **FUEL AND ENGINE SYSTEMS**

### **Diesel Compression**

### **EEPD500 Diesel** Compression Gauge.

- Dial reads from 9 to 800 psi and from 0 to 5,500 kPa
- . Gauge includes 18" hose with release valve



### EÉPV313A Diesel Compression Gauge Adaptor.

For 1998 to 2007 Dodge® 24 valve 5.9 L Cummins® plus 5.9 L and Cummins ISB and ISBE diesel engines plus the 2007 newer 6.7 L

EEPD500

- M3540A Compression Adaptor.
- For Cummins 855 cu in and NH 903 V8 L10 diesel engines
- M3543A Diesel Compression Gauge Adaptor.
- For Detroit<sup>®</sup> 53, 71, 92 and 8.2 L diesels

### M3542A Diesel Compression Gauge Adaptor.

 For Volkswagen®, Mercedes-Benz®, Volvo® and Audi® 5000 diesel engines M24 x 2.0

### M3571 Diesel Compression Gauge Adaptor.

 For 21 mm injectors and Bosch® type injectors on the following diesel engines: Allis® Chalmers® 433, 649, and 670, Allis/Fiat® 3 cylinder, John Deere® 404, 466, 531 and 619, Navistar® 361 and 407, Perkins 4.203, 4.236, 4.248, 6.354, and 8.540, Wisconsin Engine® 340, 350, 430, 660, 670, 750, 860 and 1000, White Engine® D2000, D2300, D3000, D3400, and D4800, Mack 673, 674, 675, 864, 865 and 866, Waukesha® diesel engines, Ford® Tractor diesel engines, Scania® DN11 and DS11



### M3572 Diesel Compression Gauge Adaptor.

 For pencil type injectors on the following: Caterpillar® 3208 and 1100 Series, Case® 70 Series, 188 and 207, John Deere early 300, 400 and 500 Series, 276, 404 and 531 diesel engines

### M3574 Diesel Compression Gauge Adaptor.

 For 17 mm injectors on Navistar DT466 and 9L, 312, 360, 414, 436 and 446 diesel engines

### M3584 Compression Adaptor.

• For Case/Cummins Series "B" 2.9, 3.9 and 5.9 L diesel engines

### M3585 Compression Adaptor.

For Case/Cummins Series "C" 8.3 L engines



### Compression Adaptors - Glow Plug Style

- All "M" series glow plug style adaptors plus the EEPV312A adaptor require the use of either the M3569 or M3570 guick coupler
- EEPV314A, EEPV315A and EEPV317A couple directly to the EEPD500

### **EEPV312A Glow Plug Compression Adaptor.**

- For GM® Duramax 6600 and Isuzu 6.6 L diesel engines
- **EEPV314A Glow Plug Compression Adaptor.**
- For Ford/Navistar 7.3 L Powerstroke diesel engines

# **EEPV315A Glow Plug Compression Adaptor.**• For *Volkswagen* 1.9 L TDI diesel engines

### **EEPV317A Glow Plug Compression Adaptor.**

 For Ford Powerstroke 6.0 L and Navistar®/International® 6.0 L VT365E engines with 14M x 1.25 glow plug size

### M3545B Glow Plug Compression Adaptor.

- For GM 4.3 and 5.7 L plus Navistar 6.9 and 7.3 L diesel engines
- Replacement valve core is M3545A4

### M3569A Quick Coupler.

• 45° offset

# Glow Plug Style



### M3570A Quick Coupler.

• 90° offset

### M3564 Glow Plug Compression Adaptor.

• For GM 6.2 and 6.5 L diesel engines

M3565A Glow Plug Compression Adaptor.
• For Isuzu® 1.8 and 2.2 L diesel engines and Toyota® 1.8 L diesel engine

### M3566 Glow Plug Compression Adaptor.

• For Toyota and Nissan® 2.2 L diesel engines, plus Mitsubishi® 2 and 3 cylinder engines

### M3576 Glow Plug Compression Adaptor.

• For BMW<sup>®</sup> 2.4 L engines used in 1984 and 1985 Lincoln<sup>®</sup>, Mark VII and Continental models; Peugot® 1978 to 1984, 2.0 and 2.3 L engines; VW, Audi, and Volvo 1.5, 1.6, 2.0 and 2.6 L engines

# Adaptors

Stock No.	Thread	A inch (mm)	B inch (mm)	C inch (mm)	D inch (mm)	E (Hex)
EEPV312A	M10 X 1.25	4.12 (104.65)	3.00 (76.20)	2.50 (63.50)	.320 (8.13)	12 mm
EEPV314A	M10 X 1.0	3.33 (84.58)	2.78 (70.61)	2.31 (58.67)	.315 (8.00)	10 mm
EEPV315A	M10 X 1.0	2.05 (52.07)	1.50 (38.10)	1.03 (26.16)	.315 (8.00)	10 mm
M3545B	M10 X 1.0	1.78 (45.20)	1.06 (26.92)	.38 (9.65)	.385 (9.77)	3/8 in
M3564	M10 X 1.0	2.46 (62.48)	.79 (20.00)	.25 (6.35)	.325 (8.25)	3/8 in
M3565A	M10 X 1.25	2.50 (63.50)	1.61 (26.92)	.866 (21.99)	.320 (8.13)	12 mm
M3566	M10 X 1.25	1.96 (49.78)	1.27 (32.26)	.39 (9.14)	.315 (8.00)	12 mm
M3576	M12 X 1.25	1.77 (44.95)	1.08 (27.43)	.300 (7.62)	.305 (7.75)	12 mm











- . Do not expose gasoline or fuel to flames, sparks or other sources of ignition
- Use only in well ventilated areas
   Read safety precautions on pages W1 to W4

# **FUEL AND ENGINE SYSTEMS**

### **Cylinder Leakage/Engine Vacuum Gauges and Tester**



### EEPV509 Cylinder Leakage Tester.

- Use on all U.S. and import engines
- Input pressure gauge displays input air pressure for proper cylinder leakage test set up and accurate results
- Pressure gauge range is 0-100 psi (0-700 kPa) in 2 psi (20 kPa) increments
- Cylinder leakage gauge displays leakage as a percentage of input pressure with 3 distinctive zones of high, moderate and low



### EEPV511 Vacuum Pressure Gauge Set.

- Use for almost all basic vacuum pressure testing needs in the shop
- Perform engine vacuum tests on gasoline engines as well as exhaust back pressure tests on applications with an oxygen sensor
- Test vacuum accessories and emission control devices such as EGR valves canister purge systems, air switching and divert valves, vacuum delay and check valves, heater and A/C controls and cruise control systems
- Multicolor gauge face with scales of inch, Hg, psi, negative kPa and positive kPa



### EEPV508 Automatic Transmission Pressure Gauge Set.

- Use on all major manufactured U.S. and import vehicles
  High pressure gauge (0-500 psi/0-3,500 kPa over pressure protected to 1,500 psi) assembly includes 3 1/2" diameter gauge and 10" flexible hose with fluid coupler
- Low pressure gauge (0-100 psi) assembly includes 2 1/2" diameter gauge and 6' flexible hose with fluid coupler



### **EEPV507 Oil Pressure Gauge Set.**

- Use on diesel and gasoline engines
- Includes standard and metric adaptors for most U.S. and import cars, trucks, tractors and stationary engines
- Includes: 0-100 psi (0-700 kPa) gauge assembly

Stock No.	Description	EEPV508	EEPV507
EEPV5F-1	2" Pipe Nipple	•	•
EEPV5F-2	1/4"M x 1/8"F Hex Bushing	•	•
EEPV5F-3	3/8"M x 1/8"F Hex Bushing	•	•
EEPV5F-4	1/8"FNPT Coupling	•	•
EEPV5F-5	1/8"M x 1/8"F Street Elbow	•	•
EEPV5F-6	1/8"-28 BSPT	•	•
EEPV5F-7	M10 x 1.0 Tapered Thread	•	•
EEPV5F-8	M10 x 1.0 Adaptor	•	•
EEPV5F-9	M10 x 1.25 Adaptor	•	•
EEPV5F-10	M12 x 1.5 Adaptor	•	•
EEPV5F-11	M12 x 1.75 Adaptor	•	•
EEPV5F-12	M14 x 1.5 Adaptor	•	•
EEPV5F-13	M16 x 1.5 Adaptor	•	•
EEPV5F-14	M18 x 1.5 Adaptor	•	•
EEPV5F-15	5/16"-24 Adaptor	•	•
EEPV5F-16	7/16"-20 Adaptor	•	•
EEPV5F-17	1/16"-27 Adaptor	•	_
EEPV5F-18	M8 x 1.0 Tapered Thread	•	_
EEPV5F-19	M8 x 1.0 Adaptor	•	_
EEPV5F-20	M8 x 1.25 Adaptor	•	_
EEPV5F-0	Male Quick Connect Plug	•	•
EEPV5F-100G	100 PSI Gauge and Boot	•	•
EEPV5F-BOOT1	100 PSI Gauge Boot	•	•
EEPV5F-500G	500 PSI Gauge and Boot	•	
EEPV5F-BOOT2	500 PSI Gauge Boot	_	_

### **Vacuum Pumps and Testers**

### YA4000B Automotive Test Kit (Blue-Point®)

- Produces vacuum or pressure at the turn of a switch
- Comfortable ergonomic design
- One finger trigger vacuum/pressure release
- Durable, accurate diaphragm style pressure/vacuum gauge
- ( E

### Applications:

Vacuum and pressure related engine performance diagnostics and tune-ups. Brake bleeding and fluid transfer/evacuation.



**Fuel Systems** 

### **EEFI Series Adaptor Sets**

### EEFI500 Master Fuel Injection Pressure Gauge Set.

- Tests fuel injection pressure on major U.S., European and Asian model multiport fuel systems
- Convenient label shows image of components, part numbers and applications for quick easy identification and storage
- Fully detailed user manual includes test connection illustrations and application charts
- Set contains a tee manifold with shut off valve, a 3 1/2" diameter gauge assembly with a blow down valve and the adaptors needed to test most fuel injection systems
- Blow molded case with special removable lid allows for convenient storage in 4" deep drawer and easy access to components
- Pressure gauge rating of 0 to 100 psi

### **EEFI500CORE Core Fuel Injection Pressure Gauge Set.**

- For basic fuel injection pressure service needs
- Individual components or the EEFI500ADD set can be purchased to build up to master set
- Includes:
  - EEFI5001 gauge and hose assembly with bleed-off valve
  - EEFI5002 standard schrader hose assembly (Chrysler®, GM®, M-B, Porsche®, Saab® and Saturn® vehicles)
  - EEFI5003 small schrader hose assembly (BMW®, Ford®, Jaguar®, Kia®, Lincoln®, Mazda®, Mercury®, Mini®, Volvo® and VW® vehicles)
  - EEFI5004 standard schrader right angle adaptor (Chrysler, GM, M-B, Porsche, Saab and Saturn)
  - EEFI5005 small schrader right angle adaptor (BMW, Ford, Jaguar, Kia, Lincoln, Mazda, Mercury, Mini, VW and Volvo vehicles)
  - EEFI5006 Tee adaptor with 1/4", 5/16" and 3/8" diameter hoses and clamps (Chrysler, Infiniti®, Isuzu®, Mazda, Nissan, Saturn and Suzuki® vehicles)
  - EEFI5006-1 replacement hoses and clamps
  - EEFI5007 spare parts service kit for EEFI5001 thru EEFI5006

### **EEFI500ADD Set**

 Combine the components of the EEFI500ADD set with the EEFI500CORE set to form the EEFI500 master fuel injection pressure gauge set



**EEFI500** 



EEFI500CORE

Stock No.	Description
EEFI5008	Tee Hose Assembly - 3/s" Quick Connect
EEFI5009	3/8" Quick Connect Double Male - GM vehicles
EEFI50010	5/s" Spring Lock Male - Ford, Mazda vehicles
EEFI50011	5/8" Spring Lock Female - Ford, Mazda vehicles
EEFI50012	5/16" Quick Connect Male - Acura, Chrysler, Ford, Mazda, Toyota vehicles
EEFI50013	5/16" Quick Connect Female - Acura, Chrysler, Ford, Mazda, Toyota vehicles
EEFI50014	5/16" Male Hose Adaptor- BMW, Chrysler, Infiniti, Nissan, VW vehicles
EEFI50015	5/16" Hose Adaptor- BMW, Chrysler, Infiniti, Nissan, VW vehicles
EEFI50016	M14 x 1.5 Inverted Flare Male- Geo, Infiniti, Toyota vehicles
EEFI50017	M14 x 1.5 Inverted Flare Female- Geo, Infiniti, Toyota vehicles
EEFI50018	M14 x 1.5 Ball Seat Female- Audi, Hyundai, Jaguar, Land Rover, Porsche, Volvo, VW vehicles
EEFI50019	M14 x 1.5 Ball Seat Male- Audi, Hyundai, Jaguar, Land Rover, Porsche, Volvo, VW vehicles
EEFI50020	16 mm 0-Ring Adaptor- <i>Hyundai, Mitsubishi</i> vehicles
EEFI50021	11 mm 0-Ring Adaptor- Infiniti, Kia, Mitsubishi, Nissan vehicles
EEFI50022	M12 x 1.0 Pulse Dampener Adaptor- <i>Acura, Honda</i> vehicles
EEFI50023	M12 x 1.5 Banjo Bolt Adaptor- <i>Audi, Porsche, Saab</i> vehicles
EEFI50024	M12 x 1.25 Banjo Bolt Adaptor- Honda, Hyundai, Isuzu, Lexus, Toyota vehicles
EEFI50025	M6 x 1.0 Filter Adaptor- Acura, Honda vehicles
EEFI50026	Spare part service kit for 5009 thru 50025 adaptors

### EEFI50030 Universal Fuel Pressure Adaptor.

 Allows owners of MT337, EEFI301 and EEFI307 series fuel pressure gauges to increase applications by using components from the EEFI500 master fuel injection pressure set





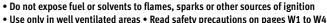
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**TECHNICAL SUPPORT** 1-800-342-5080



**EEFI5CLEANER** 



FIH500







# General Purpose Fuel System Cleaners EEFI5CLEANER Fuel Injection System Cleaner.

- Cleans deposits from fuel injectors, fuel rail and intake valves to restore engine performance, lower emissions and smooth idle
- Canister style cleaner accepts preferred or required fuel injection system cleaner (sold separately)
- Check vehicle fuel pressure with right hand gauge and easily set cleaning pressure with the left hand gauge
- Stainless steel braided Teflon® hose resists solvents
- Conveniently hangs under hood with center chain
- Compatible with EEFI500 series adapters (sold separately)
- See user manual for vehicle make details

# Specialty Service Tools FIH500 Fuel Module Disconnect Tool.

- GM® fuel module disconnect tool for 1998 and later GM full size pickups, Suburban and Taho vehicles
- 2 piece design permits easy access to the connectors
- Slide proper end into the connector, rotate and slide the other half in place to disconnect module
- Fits both 3/8" and 5/16" connector sizes
- Tool segments can be clipped together for convenient storage

### YA76462 Universal EFI Quick Probe (Blue-Point®).

- Quickly detects electronic fuel injector functions on any gas or diesel engine
  - Specifically designed to detect vibrations emitted when electronic injector fires
- No hunting for injector wires to test at connector
- No need to remove injector for testing
- Includes: bright LED strobe, 7" removable probe tip, user guide, battery operation and sensitivity thumb wheel

# **Fuel Pressure Testers**

### **EEDF500 Fuel Pressure Test Set.**

- Designed for testing diesel fuel pressure and vacuum on GM 6.6 L Duramax® engines
- Gauge assembly includes a compound gauge with a 0-15 PSI (0-100 kPa) pressure plus 0-30 inHg vacuum scale and a protective rubber boot
- Long 6' flexible hose with quick coupler for fast and easy connection to the engine
- Convenient protective storage and carrying in a slide lid case that fits easily into a 4" drawer

### **EEDF501 Fuel Pressure Test Set.**

- Designed for diesel fuel pressure and restriction testing on engines with Compucheck test ports
- 3 1/2" compound gauge has a 0-15 PSI (0-100 kPa) pressure and 0-30 inHq vacuum scale
- 2 1/2" pressure gauge has a 0-300 PSI (0-2000 kPa) scale in 10 PSI (50 kPa) increments
- Includes female Compucheck quick coupler with 6' hose, pressure bleed off, and quick connect for easy interchange of the 2 gauges
- Includes separate male Compucheck test port for installation in vehicles without Compucheck test ports
- Convenient protective storage and carrying in a slide lid case that fits easily into a 4" dawer



Carburetor Adjustment Tools

2006IT Carburetor Adjusting Set. Includes: S6137E, S6138E, S6139, TM64, TM83A, TM85 S6137E Idle Adjusting Hex Head Driver.

- For 1978 and later Chrysler® vehicles
- 3/32" hex driver is 1 9/16" long
- Nickel-chrome finish socket
- 7/16" OD
- 1/4" drive industrial finish bit

### S6138E Idle Adjusting Driver.

- For Ford® feedback carburetors
- 7/16" OD
- 1/4" drive
- Bit has a 3/16" x 1/32" flat tip, 2" long
- · Nickel-chrome finish socket, industrial finish bit

### S6139 Double "D" Carburetor Adjusting Socket.

- For 1978 and later GM<sup>®</sup> idle adjusting screw
- OD drive end is 7/16"
- · Nickel-chrome finish
- 3.5 mm across flats
- 1/4" drive
- 13/16" long

### TM64 Rigid Adjusting Tool.

- Rigid elbow bend rather than flexible feature
- · Use with carburetor drivers for making carburetor and point adjustments
- · Rigid shaft
- Overall length is 18 1/4, 1/4" drive

### TM65 Flexible Adjusting Tool.

- Flexible shaft end for working in restricted areas
  Overall length is 19 3/4, 1/4" drive
- Ideal for working in tight spaces when servicing window type distributors
- Knob markings allow for counting turns

#### TM615 Flexible Driver.

- 1/4" drive
- Designed for carburetor work, this driver can also access buried distributors
- 1/4" drive at the end of a tough but flexible spring steel shank
- 18 5/8" long
- For low torque applications
- · Ideal to access buried adjusting screws
- Cable length is 15"; overall length is 18 5/8"

#### TM83A Recessed Blade Carburetor Screwdriver.

- 1/4" drive
- Use with TM64 or TM65 and other 1/4" square drive handles
- · Blades are recessed in outer socket wall to self center
- Nickel-chrome finish

# • 3/8 x 1/32" blade TM84 Recessed Blade Carburetor Screwdriver.

- Use with TM64 or TM65 and other 1/4" square drive handles
- Blades are recessed in outer socket wall to self center
- · Nickel-chrome finish
- 7/16 x 1/32" blade

### TM85 Recessed Blade Carburetor Screwdriver.

- 1/4" drive
- Use with TM64 or TM65 and other 1/4" square drive handles
- Blades are recessed in outer socket wall to self center
- · Nickel-chrome finish
- 9/32 x 1/32" blade for adjusting late model Quadrajet carburetors

### TAM3E Metric Hex Head Driver.

- · Use to make carbon monoxide adjustments on 1976 Dasher®, 1974 to 1976 Audi® and Volvo®, and 1975 and 1976 Fiat® and Saab® vehicles
- 3 mm bit size, 1/4" drive
- 6 7/8" long
- Nickel chrome finish

### Carburetor Service Tools ACT1370 Disconnect Set.

- Convenient plastic holder included
- Useful on air conditioning spring couplings as well as push lock connectors on radiator and transmission lines
- Includes 6 tools for disconnecting spring couplings on Ford, GM, and Chrysler air conditioning lines
- Works on fuel lines and can be used as push lock connectors on radiator and transmission lines

Included sizes are 5/16, 3/8, 1/2, 5/8, 3/4 and 7/8"



ACT1370













# **Fuel Systems**



#### FID8838A

# **Injector Harness Testers**

### FID8838A Injector Harness Tester Set.

- · Plugs into solenoid harness to identify electrical or fuel system malfunctions
- · Includes 8 testers and injector harness extension in a storage case

### FID8320 Injector Harness Tester.

 Use on GM<sup>®</sup> TBI models 100, 200, 220, 300, 400 and 500 used on various cars and trucks

#### FID8329 Injector Harness Tester.

• Use on Bosch PFI injectors used on various GM, Ford® and Chrysler® vehicles with PFI

#### FID8339 Injector Harness Tester.

• Use on GM Multec 1 injectors and the "bottom feed" injectors used on 2.2 L 4 cvl. "J" and "L" cars from 1989 to 1993

#### FID8340 Injector Harness Tester.

• Use on GM SCPI truck engines 4.3 L V6, 5.0 L V8, and 5.7 L V8 (1996 and later) plus 4.8 L V8, 5.3 L V8, and 6.0 L V8 (1999) and later)

# Fuel Inlet/Fuel Filter/Fuel Pump Tools YA997 Swivel Handle Fuel Filter Wrench.

· Designed to access hard to reach fuel filters

- Fits fuel filters 2 1/4 to 2 9/16"

### FIH940 Gas Tank Fuel Pump Removal Tool.

- · Removes plastic fuel pump retaining rings
- · Universal adjustable design fits most plastic retaining rings
- · Prevents damage to original pump retaining ring
- Use with 1/2" drive extension and ratchet
- Use to reinstall old retaining ring

### FID9210 Injector Harness Tester.

• Designed for Geo® TBI sytems (1992 and later)

### FID8838A1 Injector Harness Tester.

• Use on GM Multec 2 injectors found in 1999 and later 2.4 L 4 cylinder engines in Oldsmobile® Intrigue and Cutlass, Chevrolet® Cavalier and Malibu and Pontiac® Sunfire vehicles

#### FID8838A2 Injector Harness Tester.

• Use on Bosch 2 injectors used in 2000 and later Cadillac® 4.6 L V8 engines and Oldsmobile 4.0 L V8 engines

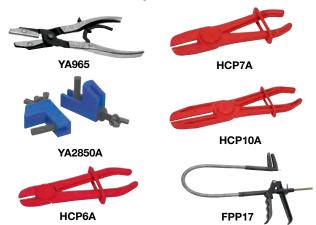
### FID8838A3 Injector Harness Extension.

- Injector harness extension line for all FID series injector harness testers
- · Use when injector is in a lower position in manifold or cylinder head

#### FID8838A4 Plastic Case.

Storage case for the FID8838A injector harness tester set

# Shut offs/Hose Pinching Pliers (Blue-Point®)



#### YA965 Hose Pinching Pliers.

- · Eliminates need to drain cooling system when repairing thermostat or water pump
- Use to pinch off emission control hoses, flexible brake lines and rubber hose fuel lines
- · Jaws swivel for positive clamping

### YA2850A Hose Pinchers.

- For diagnosing problems that require rubber or plastic fuel, vacuum and air lines to be temporarily closed
- · Effectively seals lines without disconnecting
- Set of 2

#### **HCP6A Hose Pinching Pliers.**

- For sealing hose sizes 1/8 to 5/16"
- · For use on brake lines, fuel lines and vacuum hoses
- 6" long

### **HCP7A Hose Pinching Pliers.**

- For sealing hose sizes 1/2 to 3/4"
- For use on heater hoses and vacuum lines
- 7" long

# **HCP10A** Hose Pinching Pliers.

- For sealing hose sizes 3/4 to 2 1/4"
- · For use on radiator hoses
- 10" long

### **HCP3KT Hose Pinching Pliers Set.**

• HCP6A, HCP7A and HCP10A (6, 7, 10") in storage pouch

### **FPP17 Hose Pinching Pliers.**

- Ideal for truck/tractor applications
- · Quickly and easily pinch off difficult to reach vacuum lines, water hoses, etc.
- 17" semi rigid shaft allows prepositioned, 1 hand use
- · Heavy duty steel clamp sleeves are heat treated to 48-52 RC to provide strong clamping
- Fine tooth ratchet allows precision clamping and locks into place for ease of use
- · Pull bar and thumb lock made of high carbon steel for extended tool life
- 2 1/4" jaw opening for use in a wide range of applications

# **Distributor Service Tools**

### **Fuel Line Disconnect Tools**

### Fuel Line Coupling Release Tool Sets.

 Designed to service special quick connect couplings found on fuel feed and return lines located at the engine

# FIH9055 Fuel Line Coupling Release Tool Set.

Includes a FIH9055-1 (5/16") and a FIH9055-2 (3/8") tool for GM® fuel lines

### FIH9056 Fuel Line Coupling Release Tool Set.

Includes FIH9056-1 (1/2") and FIH9056-2 (5/8") for fuel and air conditioning quick connect couplers on most late model Ford® and Mazda® Navaio vehicles.

#### YA9457 Fuel Line Disconnect Tool Set.

- Designed for reach and access to fuel line couplers
- Use on GM, Cadillac®, Northstar® engines (1993 and later) and Ford E and F Series trucks (1991 and later)
- Includes YA9457-1 (5/16") and YA9457-2 ( 3/8")

#### LDTF2 Fuel Line Disconnect Tool.

- Disconnect the fuel line from the fuel filter on 5.3 L Suburban,
   Tahoe, Yukon, Avalanche plus select Silverado and Sierra vehicles
- Can be used on other Flex Fuel systems

#### LDT8 Master Disconnect Set.

 For spring lock and quick disconnect couplings used on air conditioning and fuel lines on Ford, GM and Chrysler® vehicles

#### LDT6 Disconnect Set.

- Disconnects air conditioning, quick connect fuel lines and spring lock couplings on Ford and Chrysler AC lines
- Works on fuel lines and other quick disconnect couplings on U.S. and import vehicles
- Angled to access tight spots
- · Durable plastic resists fuels and solvents
- Includes 6 sizes from 1/2 to 7/8"

### LDT14 Master Plus Disconnect Set.

- Contains all the tools in the LDT8 master disconnect set
- 3/8 and 1/2" Jiffy-Tite® disconnect tools from the LDTSP4 set
- Blue 5/16" fuel line adaptor from the LDTF2 fuel line disconnect set
- Set of 4 air line push pull disconnect tools that work on heavy duty trucks and industrial applications
- Label inside cover of carrying case shows images and applications



# Steel Line Stoppers (Blue-Point®) SLS8KT Steel Line Stopper Kit.

- Use to seal steel lines once disconnected
- · Prevents fluid leaks and contamination during service
- Use with all automotive fluids
- Installs in seconds

### SLS-BANJO Banjo Steel Line Stopper.

- Use to seal banjo fittings on steel lines once disconnected SLS-38 3/8" Steel Line Stopper.
- Use to seal 3/8" steel lines once disconnected

### SLS-516 5/16" Steel Line Stopper.

• Use to seal 5/16" steel lines once disconnected

### SLS-12 1/2" Steel Line Stopper.

• Use to seal 1/2" steel lines once disconnected



LDT6





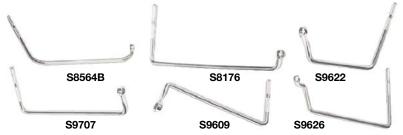




- Plastic coated handle does not protect against electrical shock
- Read safety precautions on pages W1 to W2

LDT14

# **Distributor Service Tools**



### U.S. Distributor Wrenches

Stock No.	Wrench Size, inches	
S8564B		
S9707	1/2	
M3515	9/16	
S8176	9/16	
S9609	9/16	
S9622	9/16	
S9626	9/16	

#### S8564B Distributor Wrench.

 Ford®. Lincoln® and Mercury® engines: clears leads and coils

### S9707 Distributor Wrench.

- Ford, Mercury and Cadillac® engines
- M3515 Distributor Wrench.
- GM® V6 and V8 trucks

#### S8176 Distributor Wrench.

• Pontiac® and Oldsmobile® engines

### S9609 Distributor Wrench.

Chevrolet® V8 engines

#### S9622 Distributor Wrench.

• 1977 and later full size GM cars with V8 engines

### S9626 Distributor Wrench.

• GM V6 engines



### Metric Distributor Wrenches S6134 Metric Distributor Wrench.

- 1982 and later Cadillac 4.1 L V8 engines, GM 2.8 L V6 engines, and 1985 VW® Golf engines
- 15 mm



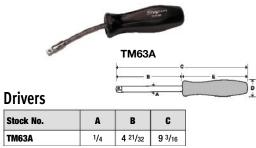
### **Ignition Tools** YA6465 Ignition Modulator Wrench for Ford Vehicles.

• Use to remove 7/32" (5.5 mm) hex retainer bolts on Ford ignition modules



## **Cleaning Brush** ACD12B Distributor Cleaning Brush (Blue-Point®).

- · Wire brush cleans terminal connections on distributors and coils
- 5 1/4" long with a 4" long handle
- Wire diameter is .012"



### TM63A Flexible Driver.

- 1/4" drive
- For low torque applications
- For use on Delco-Remy® window type distributors







### IT100

## Ignition Testers YA2700 Ignition Module Tester.

- For testing *Chrysler* 4 pin and 5 pin modules; *GM* 4 pin, 5 pin, and 7 pin modules; plus Ford 3 pin and "grommet" style modules
- · LED indicator gives a simple "good" or "bad" reading

### ITHE100 Ignition Tester.

Same as IT100 but for use on HEI systems

#### IT100 Ignition Tester.

- · For standard ignition systems
- · Check for spark without removing spark plug from engine
- . Testers attach to spark plug lead and spring clip attaches to appropriate ground

# Oxygen and Fuel Sensor Tools



# **Fuel Sensor Wrenches GANM27 Fuel Sensor Wrench.**

- Use to remove the high pressure fuel sensor on the 3.6 FSI engine found on the VW Touareg and CC models plus Audi® Q7
- 12 point crowfoot socket engages every 30° for better access in restricted areas
- Special alloy steel provides the highest match of strength and durability
- 3/8" drive. 27 mm



GANM27

# Oxygen and Fuel Sensor Tools



## Oxygen Sensor

### S6176 Oxygen Sensor Socket.

- For service on most Nissan®, Mazda®, Honda® and Acura® vehicles

# Slotted side clears projections 22 mm 1/2" drive, 3 7/8" long S6150 Oxygen Sensor Wrench.

- Special crowfoot wrench design provides strength necessary for removal/installation
- 12 point, 7/8" wrench size, 1/2" drive
- Nickel-chrome finish

### S6154 Oxygen Sensor Wrench.

- For use on oxygen sensors on 2007 Acura RDX. 22 mm
- 12 point wrench opening, 1/2" drive
- Nickel-chrome finish

#### SWR1 Oxygen Sensor Wrench.

- Designed for all oxygen sensors with a 7/8" hex
- Flex head offers essential clearance for removal/installation of oxygen sensors when sensor is positioned upward and inward to the floorboard or when leverage is needed around an exhaust pipe
- Ford® Contours and 4.6 and 5.4 L Ford Modular engines used in trucks and SUVs have this application
- Other applications include 7/8" and 22 mm knock sensors used on mid size trucks, SUVs and vans
- Flank Drive® wrenching system for greater applied torque
- Chrome finish for easy cleanup and protection against corrosion
- · Compact, low clearance head
- Overall length: 10 3/4". Hex: 7/8" 6 point. Head diameter: 1 9/16". Slot width: 1 5/16"

## SWR2 Oxygen Sensor Socket.

- For oxygen sensors located in the exhaust manifolds of 1981 and later cars and light trucks, including VW®
- 3/8" drive with 7/8" hex size
- 1/2" opening for easy access to oxygen sensor
- Flank Drive wrenching system for greater applied torque with less effort
- · Ball detent in square drive for secure retention
- Industrial finish

### SWR4 Oxygen Sensor Wrench.

- Use on oxygen sensors with a 22 mm (7/8") hex
- Bent handle design with flex head offers extra clearance for removal and installation of shielded oxygen sensors and air/fuel sensors
- Chrome finish for easy cleanup and protection against corrosion
- · Depth of socket and wall diameter of socket is critical for limited space inside heat shield
- Overall length: 10 3/4". Hex: 7/8" 6 point. Head diameter: 1 3/16". Slot width: 1/2"

### **Applications**

- Toyota®: 2003 and later
- Acura®: 2005 and later
- Lexus®, Honda®, Hyundai® and Kia®: 2006 and later
- Nissan®, Mazda®: 2007 and later

### SWR102 Oxygen Sensor Wrench Set.

SWR1 and SWR2 (2 pcs) in storage tray.

### YA1239 Dual Drive Oxygen Sensor Wrench (Blue-Point®).

- 1/2 and 3/8" drive
- Attach 1/2" breaker bar on the end of the tool to initially loosen stuck sensors, use a 3/8" ratchet on the top for fast removal and installation
- · Fits oxygen sensor applications with a heat shield
- Slotted body allows clearance for wire harness
- Forged, heat treated steel with 6 point design will withstand high torque removal applications

#### YA9385 Oxygen Sensor Socket (Blue-Point).

- Use to install and remove oxygen and vacuum sensors on most domestic and import vehicles
- · Can be used with impact wrench
- 1 1/4" external hex. 19/32" x 2 3/4" slot to clear obstructions. 22 mm, 1/2" drive
- Black industrial finish

### YA9375A Oxygen Sensor Wrench (Blue-Point).

- For oxygen sensors on GM LT1 and LT5 5.7 L V8 engines
- Further applications on 2007 and later Harley-Davidson® motorcycles
- Eliminates need to unhook exhaust system when removing or reinstalling oxygen sensor
- 3/8" drive with 2 1/8" hex size
- Industrial finish

### YA6675 Shielded Oxygen Sensor Socket (Blue-Point).

- For use on late model Toyota and Lexus
- Depth and outer diameter are critical for limited space inside heat shield
- 12 point double hex
- Forged for maximum strength

# YA6775 Oxygen Sensor Wrench (Blue-Point).

- Designed for use with most oxygen sensors no matter what size electrical connectors they have
- Double sided design, 6 and 12 point configuration
- Pivoting handle design allows positive leverage in confined areas















# **BATTERY SERVICE**



### EEBC500 Battery Charger Plus.

- · Adaptive: Standard automotive, deep cycle, AGM and gel cell batteries each require a different charging cycle
- Versatile: Charges 6, 12 and 24 V batteries with 4, 15 and 60 A charging rates
- Convenient: GFCI outlets for auxiliary power to lights and other accessories: handy storage compartment for optional battery hand tools
- · Smart: Fully automatic operation: microprocessor controlled algorithms optimize the charge cycle without overcharging. Includes manual mode for timed charging
- Powerful: 300 A engine starting power
- Hi tech: Exclusive flash reprogramming power supply maintains consistent OEM specified voltage up to 60 A
- Informative: Digital display: voltage, % of charge and alternator % of performance
- Professional: Rugged, streamlined design, Higher working height handle helps relieve stress on lower back
- SS3151 product information DVD



#### EEBC100 Manual Charger (Blue-Point®)

- Manually set charging time as required
- 200 A 12 V and 100 A 6 V engine start available for emergency starting
- 40 A rapid charge charges in .5 to 1.0 hours
- 10 A fast charge charges in 3 to 5 hours
- Rugged retractable handle provides convenient storage
- UL<sup>®</sup> listed



EEBC100



EEBC500CVR



**EEBC5CABLE-A** 



**EEBC5CABLE-E** 



EEBC5CABLE-U

### **EEBC500CVR Battery** Charger PLUS Cover.

 Protective cover for the EEBC500 battery charger PLUS series

### **EEBC5CABLE-A**

 Power supply, Australia. Use only with EEBC500INT

### **EEBC5CABLE-E**

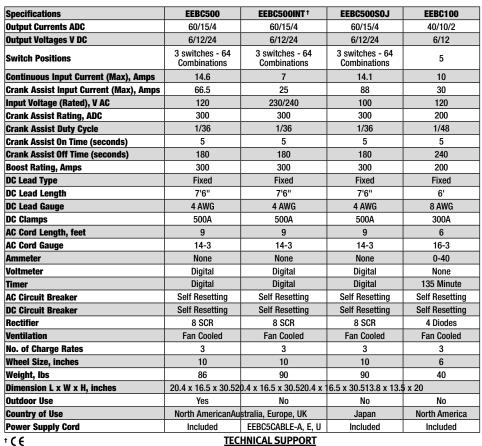
 Power supply, Europe. Use only with EEBC500INT

## **EEBC5CABLE-U**

• Power supply, United Kingdom. Use only with EEBC500INT

#### EEBC500-15 Lead Set.

• 15' for EEBC500 series





1-866-713-6007











- Charger must be OFF when connecting or disconnecting leads
- Avoid overcharging batteries
- Read safety precautions on pages W1 to W4



# **Bench Chargers**

# EEBC61210 Bench Top Battery Charger (Blue-Point®).

- Automatic operation plus an intelligent microprocessor controlled charging sequence for use on a wide variety of battery types
- Charge conventional, maintenance free, AGM, gel cell, deep cycle and marine batteries
- Simply select the correct battery size: Charger will initiate the automatic charging process

Specifications	EEBC61210	
Input	120 V AC, 60 Hz, 4.4 A	
Output	6 or 12 V DC, 1 to 10 A	
Battery Range (Optimal)	25-200 AH	
Charging Cable Length, ft	6	
Dimensions, inches	10.75 L x 4.5 W x 7.875 H	
Shipping Weight, lbs (kg)	4.94 (2.24)	



# **Battery Maintainers**

# EEBM500 4A 6/12 Volt Battery Maintainer.

- Fully automatic 6/12 V operation, 4 A charging rate
- Compatible with conventional, maintenance free, AGM, gel cel, spiral wound and deep cycle batteries
- · LED charging status indication
- Includes quick connect output cord with clamp set, ring terminal set and 12 V adaptor output accessories
- Ergonomic design with large buttons for easy use while wearing gloves
- · Reverse polarity and battery fault warnings

EEBM500-1 Clamp Set EEBM500-2 Ring Kit EEBM500-3 12 V Plug



**EEPI175** 



Power Inverter EEPI175 Power Inverter.

- 175 W
- Powers cell phones, computers, Nintendo® DS, DVD players, iPods® and more
- Plugs into vehicle 12 V power outlet, fits in cup holder
- Provides 110 V AC household power inside your vehicle
- Provides 2 USB ports to power to small electronic devices

### **EEPI2250** Power Inverter.

- 2,250 W of continuous power and 4,500 W peak power to run a wide variety of tools, electronics and appliances
- Stable, clean and reliable power with high surge capacity for use in the most demanding applications
- Precise electronics to enable proper charging of electronics: laptops, cell phones and gaming devices
- (3) 120 V AC outlets
- · For tow trucks, fleets, construction vehicles and military use
- Unit must be hard wired into vehicle

# D-TAC™ Battery System Diagnostic Tester/Charger/Engine Starter

#### EECS306C D-TAC Elite

- D-TAC Elite is a diagnostic charger, battery, starting and charging system tester, engine starter, DMM, cable voltage drop tester with flash reprogram mode and more
- EECS306C D-TAC Elite includes EECS304C MicroVATTM ELITE Tester, EECS306C-5 Battery Test Cables (10'), EECS306C-6 Post Adaptors and EECS500-1 Printer Paper Roll
- Integrated printer and cart
- Multitasking, once a diagnostic charge session has been started, the MicroVAT Elite (top analyzer) can be removed from the charger and used to diagnose other vehicles while the charger continues to diagnose and charge the original battery
- Conductance and deep scan battery test technology with 150 A load capability (clicking sound heard when load is applied)
- Diagnostic Charge Cycle continuously monitors battery watching trends while maximizing charge acceptance minimizing charge time
- No wasted time trying to charge defective batteries
- Temperature (temperature sensor built into unit)
- Will not damage a battery during the charging process
- Charging System Test uses the most innovative and decisive method, digital signal processing
- Cable Voltage Drop Test determines health of vehicle battery cables (with optional EECS306C-3 Cables)
- Built-in Printer provides test results and custom shop information
- 3.5" large full color 1/4" VGA display, Color icons and test result graphs
- Visual and voice prompts in English, Spanish, French, Italian, Dutch or German help you through the diagnostic process

• Digital Multimeter (with optional EECS306-4 Lead Set)

- Low Volt Automotive, Amps, Ohms, Diode and Basic Oscilloscope

 Temperature via built-in infrared sensor or optional probes (EETH501C fluids, EETH502B surface, EETH503B air)

- USB and Infrared (IR) connectivity
- USB software upgradeable for future enhancements like Hybrid
- IR & Certificate printing on PC with optional EECS306C-7
- Heavy duty ready for more accuracy and capability add the optional EECS306C-2 Dual Range Amp Clamp and EECS306C-3 Cable Voltage Drop Test Cables
- UL®/CUL® listed
- · Patents pending
- SS3241 How to use DVD



EECS306C

# TECHNICAL SUPPORT 1-866-592-8052





- · Complete battery, starting and charging system tester
- Charging system test uses the most innovative and decisive method, digital signal processing
- Test 6 and 12 Volt batteries and 12 or 24 V systems
- Unit is included with *D-TAC* ELITE above

• ( €



EECS304C

# D-TAC/MicroVAT Accessories

## 2-6342-1 High Amp Probe.

- Clamp on inductive high amp probe for old EECS306B Series D-TAC plus battery systems testers and EECS304B1B MicroVAT
- 0 to 1,500 A range for testing high current circuits
- 5' length;1 A resolution

### 2-6442-1 Low Amp Probe.

- Clamp on inductive low amp probe for old EECS306B series D-TAC plus battery systems testers and EECS304C MicroVAT
- 0 to 15 A range for testing low current circuits
- 5' length; 10 mA resolution

#### EECS306C-2 Dual Range Amp Clamp.

High (0-700 A); Low (0- 70 A) (optional)

**EECS306C-3 Cable Voltage Drop Test cables.** Cable voltage drop test cables for EECS306C *D-TAC* Elite and EECS304C *MicroVAT* Elite. (optional)

**EECS306C-4 Digital Multimeter Probe Set.**Digital multimeter probe set for EECS306C *D-TAC* Elite and EECS304C *MicroVAT* Elite. (optional)

**EECS306C-5 Battery Test Cables.** Battery test cables for EECS306C *D-TAC* Elite and EECS304C *MicroVAT* Elite. 10' long. (included)

**EECS306C-6 Post Adaptors.** Included with *D-TAC* Elite.

**EECS306C-7 IR Dongle.** IR dongle with installation CD template for EECS306C *D-TAC* Elite and EECS304C *MicroVAT* Elite. (optional)

EECS304C-1 Soft Storage Case. Soft sided carrying case for EECS304C *MicroVAT* Elite. (optional) EECS500-1 Printer Paper. For EECS304C and EECS306C.

**8-00910A Printer Paper.** *D-TAC* plus battery system tester. Old version EECS306B.

**5-08826A Printer Paper.** *MicroVAT* battery system diagnostic tester 2-22566. For EECS304B.



EECS304C-1

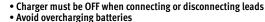












# **BATTERY TESTERS**

The battery system testers use conductance technology to quickly provide the technician with the state of health of the battery, the starting system and the charging system. Select from 4 models for a good, better, best line up. One unit has a built in printer and another uses a wireless infrared printer. Some include on screen commands in up to 7 languages. (Wireless tester on next page)

**Electronic Battery Testers** 



Features	EECS500 †	YA2636 †	YA2624 †	YA2612B †
CCA Range	100-1,400	100-3,500	390-1,700	100-1,400
Testing Method	Conductance	Conductance	Conductance	Conductance
Displays Battery % Available Capacity	CCA	% and CCA	%	%
Displays Battery Condition	•	•	•	•
Tests Discharged Batteries	•	•	•	•
Displays Battery State of Charge	•	•	•	•
Tests 12 V Batteries	•	•	•	•
Test 6V & 12 V Batteries	•	•	•	_
Tests Flooded/AGM/Gel Cell Batteries	•	•	•	•
Battery Recharge Indicator	•	•	•	•
Reverse Polarity Protection	Protect and detect	•	•	•
Detects and Displays Bad Cell	•	•	•	•
Surface Charge Warning	•	•	Displays volts	Displays volts
Tests 12 V Starter/Charging Systems	Displays volts	•	Displays volts	Displays volts
Tests 12/24/36 V Starter/Charging Sytems	_	•	Displays volts	
Internal Lead Set Diagnostics	•	_	_	_
Detects Alternator Ripple		•	_	_
Temperature Compensation	•	•	_	_
Loose Lead Detection	•	•	_	_
International Unit Conversion EN, JIS, EIC, DIN	•	•		_
Tests Parallel & Series (24 V) Battery Packs		•	_	_
Printer Capable	Infrared Internal Printer	IR Printer	_	_
Store Test Data for Review and Print Out	•	•	_	_
English, Spanish, French Languages	7 Languages	•	_	_
Custom Header with Date and Time	•	•	_	_
Display	2 line 16 character	16 character LCD	4 digit LED	3 digit LED
Cable Length, inches (mm)	36 (914.4)	48 (1,219.2)	48 (1,219.2)	24 (609.6)
Parasitic Drain Function	_	•	•	_
Retention Magnet	•	•	•	_
Product Information DVD	SS3152	_	_	_

†(€

### YA2636-4 Infrared USB Adaptor.

- Use to store and print YA2636 test results to a PC or laptop
- · Custom software on CD included with kit

### **HHGA-5 Infrared Printer.**

• Infrared printer for YA2636 tester

#### HHGA-18 Replacement Paper Roll.

- 4 pack of replacement rolls for HHGA-5 infrared printer
- EECS500-1 Replacement Paper Roll.
- · Paper rolls for EECS500 printer





TECHNICAL SUPPORT 1-866-592-8052



HHGA-5

- Wireless Battery Tester

  First in the Industry Test battery, starting and charging systems wirelessly

  New found freedom Techs can now move around the vehicle, rev engine and operate load controls while viewing the hand held units screen
- Versatile Test lead acid, flooded, AGM and Gel- 6 and 12 V batteries plus 6, 12, 24 and 36 V starter and charging systems including starter draw, alternator output (loaded/unloaded), diode ripple and parasitic drain

  • Tester will display battery or battery pack condition as available % capacity,
- rated capacity (i.e. CCA's), state of charge voltage and good, marginal or replace status
- . Wireless Micro LCD features both a Radio and an IR wireless printer output for remote printout of the test results. Test results can be sent to either a Microsoft® PC (sold separately) via USB Adaptor (included) or stand alone IR printer (optional HHGA-5 or 2-22566)
- Unit displays in English, Spanish, French, German, Dutch and Italian
- Patented conductance technology
- · No conversion tables needed
- · Bad cell is detected and displayed
- Custom header with company name, date and time
- · Loose lead detection
- Temperature Compensation
- Reverse polarity protection
- Auto shutoff feature
- Tests both series and parallel batteries

EECS400 includes:

• Hand held receiver, battery module with leads, USB adaptor for PC printing, Microsoft PC data template CD, brass post adaptors and carrying case

YA2636-1 Female Brass Post Adaptors Set. YA2636-2 Male Brass Post Adaptors Set. EECS400-PB Carrying Case. SS3228 EECS400 Product DVD.



**TECHNICAL SUPPORT** 

1-800-222-0956

# **Wireless Battery System Testers**



EECS400

Specifications	EECS400	
Battery Size Range	100 CCA to 3,500 CCA	
DC Voltage: Range/Accuracy	3.0 V to 49.9 V/+/-2%	
LCD Display	2 Line / 16 Character	
Power Supply	9 V (Internal Battery)	
Cable length, inches (mm)	24 (609.6) Battery Module	
Wireless Signal	900 MHz (Custom Protocol)	
Weight, Ibs (kg)	1.5 (.68)	
Warranty	2 Years	
Wireless Range	Approximately 50' (depending on environment)	

# **Portable Booster Packs**

#### TECHNICAL SUPPORT 1-866-713-6007

• Complete jump pack line up: basic 12 V, 24 V and one for hunting, camping and emergency 110 V AC power









Specifications	EEJP500	EEJP500V24	EEJP500iCAMO	EEJP100*
Battery Size / Volt	22 aH/12 V	22 aH (2 each) / 12 / 24 V	22 aH / 12 V	18 aH / 12 V
Peak Amps	2,250	4,500	2,250	1,800
Cranking Amps	330	500	330	280
Cold Cranking Amps	275	415	275	225
Built in Charger (Use HD Shop Cord)	•	•	•	•
Charger	3 110 V AC	3 110 V AC	3 110 V AC	3 110 V AC
Automatic	•	•	•	•
12 V Cord Included EEJP500-8	•	•	•	•
Cable Length (Positive and Negative)	60"	60"	48"	48"
Cable Gauge	4 gauge	2 gauge	4 gauge	4 gauge
Charge Indicator	Digital	Digital	Digital	Red/Green/Yellow LED
12 Volt Outlet	•	•	•	•
Weight, lbs	28	44	34	18.5
Reverse Polarity Warning	Audible	Audible	Audible	_
On/Off Switch	•	•	•	•
Digital Readout	•	•	•	_
Volt Meter for Internal Battery	Digital	Digital	Digital	_
Alternator Voltage	•	•	•	_
% of Charge Indicator	•	•	•	•
Vent/Cooling Fan	•	•	•	•
Dual 110 V AC Recepticles, 400 W Inverter	_	_	•	_
USB Port	_	_	•	_
Flex Light EEJP500LITE	_	_	•	_

\*Blue-Point®











- Charger must be OFF when connecting or disconnecting leads
- Avoid overcharging batteries
- · Read safety precautions on pages W1 to W4

# **BATTERY SERVICE TOOLS**

# **Booster Packs/Booster Cables/Clamps**



EECS309B

**TECHNICAL SUPPORT** 1-866-328-2921

# Portable Booster Pack

## **EECS309B Portable Booster Pack.**

- 1,700 peak for quick starting power works on deeply discharged batteries
- 2 LED charge level indicator provides charging status at a glance
- 30" 4 gauge clamp leads (included) are detachable, via heavy duty brass sockets for easy field replacement of cables
- 2 insulated posts provide secure separation and storage for the clamps
- 12 V power outlet socket allows recharging, and also provides a 12 V source to power external devices, such as radios, lights; 5' power cord included
- Fast recharge via 120 V 4 A wall charger; includes charging status indicator lights

#### **EECS309B Optional Accessories:**

EECS309B-5. Positive Lead and Clamp 60".

EECS309B-6. Negative Lead and Clamp 60".

EECS309B-9. Motorcycle Leads (positive and negative). EECS660 Portable Booster Pack (Blue-Point®).

- 1,700 peak for starting power in heat or cold
- Long reach 46" 4 gauge cables
- · Industrial grade clamps grab and hold on battery terminals
- Quickly plug heavy duty shop extension cord into front of unit for built-in charging
- 12 V DC power for convenience



BC20500



BC25500P



**YA169A** 



EECS660

# Cables/Clamps

- Professional quality booster cables with heavy gauge 100% copper stranding
- · Clamp bodies are fully insulated and have recessed copper jaws to minimize the chance of sparking if the cables touch
- · Heavy duty clamp springs bite securely on top or side battery posts

### BC20500 Booster Cable Set.

20' long, 4 ga., 413 strands copper wire

### BC15500 Booster Cable Set.

15' long, 4 ga., 329 strands copper wire YA159A Cable Clamp Set.

1 pair of heavy duty, copper jaw clamps. 500 A clamps, 100% copper live jaw.

YA169A Side Post Battery Terminal Extenders.

Solid copper.

#### **BC25500P Plug In Style Booster Cables.**

- · Starting cable and connection harness
- Heavy gauge 25' cables plug into bumper mounted socket to reach any stalled vehicle without having to lift the truck's hood
- · Polarized socket mounts to service truck bumper and connects to truck battery
- 500 A clamps are fully insulated with vinyl 4 ga., 413 strands of copper wire

# **Battery Service Tools**



2005BSKA

# Service Kits

All components are described and illustrated on the following page

2005BSKA Battery Service Kit. 5 pcs.

208CCP Angle nose pliers. B260A Cable clamp pliers. BTC10 Side terminal cleaner. BTC7B Terminal cleaner. CJ92 Self locking cable clamp. CO506 Kit bag.



2004BSKA

2004BSKA Battery Service Kit. 4 pcs.

208CCP Angle nose pliers. BTC10 Side terminal cleaner. BTC3A Terminal brush. YA249 GM battery terminal wrench. • Housing protects switch from dirt CO410B Vinyl kit bag.



MT302BR

### Remote Starter Solenoid Switch MT302BR Remote Starter Solenoid Switch.

- 5' leads allow cranking engine from sides or beneath auto while keeping hands away from moving belts and parts
- and moisture
- · Heavy duty switch reduces arcing; includes safety shield
- 35 A at 12 V; 20 A at 24 V
- Patented Instinct® comfort handle



# **BATTERY CHARGING AND TESTING**









**CJ92** 

# Cable Clamp Tools 208CCP Angle Nose Pliers.

- Rounded nose protects battery from damage
- . Jaws are offset 30° for better leverage
- 7 3/4" long

### **B260A Cable** Clamp Pliers.

- · Spreads and cleans cable clamps
- Prvbar on one end
- 7 3/8" long

### **GA486A Cable** Clamp Puller.

- · Removes cable clamps without damaging posts
- 4" long

### CJ92 Cable Clamp Puller.

- · Self locking jaws securely grip terminal and pull without damage to post
- 1 3/4" spread









**YA249** 

YA249L

# Terminal Tools (Blue-Point®). BTC3A Terminal Brush.

- Stiff wire bristles thoroughly clean posts and clamps
- 3 3/8" long

### BTC7B Terminal Cleaner.

- · Cleans posts and cable clamps
- Includes a small, circular wire brush with protective cap to clean side terminals
- · Plastic body

- **BTC8A Terminal Cleaner.** Cleans posts and cable clamps
- · Plastic body
- 3 1/2" long

### **BTC10 Side Terminal Cleaner.**

- Cutters on one side clean battery contacts: brush cleans cable contact
- 4 1/2" long

### YA9484 Battery Terminal Crimper.

- Ideal for replacing or repairing battery cable terminal ends
- Design helps prevent overcrimping
- Terminal sizes 6 ga, through 4/0

### YA249 Battery Terminal Wrench for GM Battery.

- Ratcheting box wrench design for use on GM® side terminal batteries
- 5/16" hex, 5 1/2" long

### YA249L Side Battery Terminal Wrench (5/16").

- Extra long (9 3/4") for connecting/ disconnecting battery side terminals on 1994 and later Ford® Aerostar vans and GM vehicles including: 1994 and later Pontiac® Grand AM, Grand Prix, "W" body cars, plus Buick® Regal, Oldsmobile® Cutlass, Chevrolet® Lumina and Lumina APV
- 5/16" wrench size



# Hvdrometers (Blue-Point) BT101 Battery Hydrometer.

- Determines specific gravity from 1.100 to 1.300
- No temperature tables required or difficult float reading to observe
- · Design enables both customer and technician a viewing opportunity to see the state of the battery acid

### BB4C Hydrometer/Thermometer.

- Measures specific gravity from 1.100 to 1.300 and includes a quick reference, color coded "poor," "fair" or "good" scale plus a temperature correction scale
- 14 3/4" long



- 6 oz fluid capacity
- · Hard rubber stem features an overflow for dripless filling
- 10 1/2" long

# **GA207A Automatic Filler.**

- Insert spout into fill hole and press down
- · Fills without overflow

# Carrier (Blue-Point) **BL1B Battery Carrier.**

BB6

• For top post and side terminal batteries

BL1B

- Rubber pads securely grip battery widths from 5 to 7"
- Plastic hand grip provides a firm hold







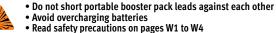














# **AIR CONDITIONING & COOLING**

# More Business In-House Means More Business. Period.

Snap-on offers the latest technology in air conditioning (A/C) and cooling system products along with complete cooling system coverage. From cooling system pressure testers and radiator cap adapters, to cooling system fillers, Snap-on will help you cool any vehicle on the road.

From A/C equipment that does most of the work automatically, to hand held equipment that delivers quick, accurate results—it doesn't take long to see a return on your investment.

A/C recyclers and leak detectors — Designed and manufactured to meet all current EPA and SAE standards, Snap-on® recyclers prove themselves to your customers. They also reduce refrigerant usage in your shop and protect the ozone while SAE J2791 certified detectors uncover the smallest of leaks.

**System coverage** — From vacuum pumps and manifold sets to UV leak detection kits and digital thermometers, your A/C needs are covered.

# Reducing Call Backs.

The last thing you want to do is the same job twice. When you use *Snap-on* A/C service equipment, accuracy will be your calling card. With microprocessor-controlled operation and automatic detection mechanisms, you're working with smarter equipment.

Service tools — From sets to individual tools, Snap-on offers a full range of safe equipment you can count on.





# Recycling/Recharging Systems (R134a)





97 TAHOE FRONT & REAR (	A/C T
97 TRHOE COMPONENT OIL	CAP
ACCUMULATOR	2.002 4



# ECO™ PLUS A/C Service Center (R134a)

## EEAC324B A/C Service Center.

- Great performance at a semi automatic value price
- Intuitive interface uses up/down screen menu options
- Menu display guides technician through service process

	· · · · · · · · · · · · · · · · · · ·
Specifications	EEAC324B / EEAC325B
Temperature Range	50 to 120 °F (10 to 49 °C)
Relative Humidity	Up to 80% non condensing
Operating Pressure	450 psi
Storage Temperature Range	-4 to 140 °F (-20 to 60 °C)
Compressor	1/3 HP, 1.1 CFM reciprocating
Vacuum	28" Hg at sea level
Vacuum Pump (EEAC324B)	1/4 HP, 1.5 CFM, reciprocating, 40 microns
Vacuum Pump (EEAC325B)	1/3 HP, 3.0 CFM, reciprocating, 40 microns
Gauge Ranges	High Side: 500 psi (34 BAR) Low Side: 350 psi (24 BAR)
Recovery Amount	23 lbs (10.43 kg)
Recovery Rate	1 lb per minute
Refrigerant Charge Amount	0-22 lbs (9.98 kg)
<b>Onboard Refrigerant Capacity</b>	30 lbs (14 kg)
Charge Oil Bottle	12 oz (360 mL)
Drain Oil Bottle	12 oz (360 mL)
Dimensions	34 D x 46 H x 24" W
UV Oil Dye Injection	Yes
Warranty	2 Year
Vehicle Database (EEAC324B)	No
Vehicle Database (EEAC325B)	Yes

TECHNICAL SUPPORT

### KOOL KARE™ PLUS

# A/C Service Center (R134a)

EEAC325B A/C Service Center.

- · Complete auto sequence programmability
- Larger gauges, larger 4 x 20" display and vacuum leak test

EEAC324B/EEAC325B Standard Accessories:

EEAC325A1 Spin on filter dryer.

EEAC325B2 High side service hose.

EEAC325B3 Low side service hose.

EEAC325A4 Oil drain bottle.

EEAC325A5 High side service coupler.

EEAC325A6 Low side service coupler.

#### EEAC324B/EEAC325B Shared Features:

- Fully automatic air purge and built-in oil injection
- Meets SAE J-2788 standard of 95% refrigerant recovery and ± .5 oz charge accuracy
- 20% increase in refrigerant recovery saves refrigerant
- Increased charge accuracy reduces A/C repair call backs
- Extra long 11 1/4' hoses for heavy duty applications
- Microprocessor controlled operation
- SAE<sup>®</sup>, UL<sup>®</sup> and CSA<sup>®</sup> listed
- Simple, menu driven operation
- Automatic high pressure and tank shutoff
- · Automatic purge of air and other noncondensable gases
- Multilingual (English, Spanish, French)

### **EEAC325B Only Features:**

- Vehicle database from 1995-2009 for refrigerant and oil specifications
- Imports charge capacity directly into charge mode
- · Programmable vacuum hold time
- Upgradeable software

EEAC325A1 — Spin on filter dryer for EEAC324A/EEAC324B and EEAC325A/EEAC325B A/C Recyclers. Avoid A/C recycler downtime. Keep extra EEAC325A1 filters on hand, since the new SAE J-2788 standard requires filter dryer replacement after 150 lbs of refrigerant used. Filter life prompt occurs when 100 lbs of refrigerant have been filtered. Mandatory filter lockout will occur after 150 lbs of refrigerant have been filtered.



### SS444E

# Air Conditioning Sales SS444E A/C Merchandising Banner.

- · Durable, weather resistant plastic
- Measures 82 x 34"
- Includes 60" ropes at corners



EEAC325ACV

# **EEAC325ACV A/C Service** Center Cover.

 Protects EEAC324A, EEAC324B, EEAC325A and EEAC325B from dust, moisture and shop environments



EEAC325B2009

# EEAC325B2009 Database Update Card.

- Database update for EEAC325B Snap-on® KOOL KARE plus recycler
- Updated vehicle database now includes A/C charge and oil lubricant amounts for many U.S. and import vehicles through 2009
- Helps a technician accurately charge a vehicle with the proper amount of refrigerant by putting information right at their finger tip
- Saves money and potential A/C system problems by preventing overcharging
- SD card contains updated database of vehicle A/C capacities (oil and refrigerant) for U.S. and import vehicles







- Wear safety shield (user and bystander)
- Read safety precautions on pages W1 to W4

# AIR CONDITIONING

# **Recycling/Recharging Accessories**

# **Service Center Accessories**

# ACTFILTERPL A/C Filter (Blue-Point®).

- Filters and separates A/C sealants, dyes, debris, lubricants and other contaminants
- . Damage results from Type I sealants or Type II entering A/C service equipment from a vehicle during servicing
- ACFILTERPL not required or recommended for J2788 certified EEAC324A/EEAC325A and EEAC324B/EEAC325B recyclers

# **ACTFILTER1 Replacement Filter Kit.**

Replacement filter for ACTFILTERPL

# Filter Dryers

### EEAC325A1 Filter Drver.

- Use on EEAC324A/EEAC324B and EEAC325A/EEAC325B
- Mandatory filter lock out will occur after filtering 150 lbs of refrigerant

### EAK0095C01AB Filter Dryer.

• Use on EEAC307C, EEAC308C and EEAC310A (R12 side)

#### EAK0095C02AB Filter Dryer.

Use on EEAC310A (R134a side)

### EAK0030C02AB Master Dryer Kit.

• Use on EEAC313A (R134a side)

# **Master Drver Kit** EAK0030C01AB Master Drver Kit.

- Filter/dryer should be changed regularly depending on usage of unit
- · Kit includes filter and instructions
- Use on EEAC301B. EEAC304D. EEAC313A (R12 side), EEAC316A, EEAC318A, EEAC319A and EEAC320A

EAK0029C00AB Compressor Kit.

EAK0029C01AB Compressor Kit.

EEAC324B AND EEAC325A/EEAC325B

EEAC316A, EEAC318A, EEAC324A/

Use on EEAC308C, EEAC319A

Use on EEAC310A, EEAC313A,

Includes 2 gts of oil, parts



EAK0030C01AB



EAK0029C01AB



#### and instructions ACT71-0A Vacuum Pump Kit.

• 32 oz bottle

Oil Change Kits

and FFAC320A

# Service Equipment (R134a and R12)



# **Refrigerant Gas Leak Detectors ACT795UVA Heated Sensor**

#### Leak Detector.

- Patented 3 LED UV lights 385-415 nm wavelength for optimum air conditioning dye fluorescence
- No UV enhancement eye glasses needed
- · Detects all commercially available dyes
- Unique digital alarm with numeric leak size indicator
- . Long life, stable sensor
- Automatic and manual\* calibration and reset to ambient levels
- · 3 adjustable sensitivity levels
- True mechanical pump
- · Low battery indicator
- SAE® J2791 (R134a) and SAE J2913\* Certified
- Mute feature



### ACT785B Heated Sensor Leak Detector.

- Unique digital alarm with numeric leak size indicator
- · Long life, stable sensor

**ACTFILTERPL** 

- · Automatic and manual\* calibration and reset to ambient levels
- 3 adjustable sensitivity levels
- True mechanical pump
- · Low battery indicator
- SAE J2791 (R134a) and SAE J2913\* (HF0-1234yf) Certified, EN14624 Certified
- Mute feature
- · Garage tough
- · Visual LED leak alarm near sensor
- · Carrying case included
- Inspection light utilizing bright 6,000 MCD LEDs\*



### **ACT760B Heated Sensor** Refrigerant Leak Detector.

- Heated Sensor Technology
- · Long life, stable sensor
- · Automatic and manual calibration and reset to ambient levels
- · 3 adjustable sensitivity levels
- · True mechanical pump
- · Low battery indicator
- SAE J2791 (R134a) and SAE J2913\* (HFO-1234vf) Certified
- · Mute feature
- · Garage tough

Specifications	ACT795UVA †	ACT785B <sup>†</sup>	ACT760B <sup>†</sup>
Sensitivity Range	.05 oz/yr (R134a), .025 oz/yr (R22)	.05 oz/yr (R134a), .03 oz/yr (R22)	.05 oz/yr (R134a), .03 oz/yr (R22)
UV Mode/Wavelength	3 UV LEDs/395-415 nm		_
Sensor Life	>300 hours	>300 hours	>300 hours
Power Supply	4 AA Alkaline batteries	4 AA Alkaline batteries	4 AA Alkaline batteries
Battery Life	8 hours continuous	8 hours continuous	8 hours continuous
Warm Up Time	<20 seconds	<20 seconds	<20 seconds
Auto & Manual Calibration	Yes	Yes	Yes
Probe Length	17 inches	17 inches	17 inches
Weight, lbs (kg)	1.5 (.68)	1.5 (.68)	1.5 (.68)
Warranty	3 years (2 on sensor)	3 years (2 on sensor)	3 years (2 on sensor)
Numerical Display	7 segment digital display (1 to 9)	7 segment digital display (1 to 9)	_
Alarm Near Sensor	Visual probe LED	Yes	_
Carrying Case	Included	Included	_

Service Equipment (R134a and R12)

## **Electronic Charging Scale ACT120A Electronic** Refrigerant Scale.

. Use with R12 or R134a refrigerants

Specifications

Accuracy Resolution Operating emperature

Platform **Power Supply** 

**Battery Life** 

Capacity, lbs (kg)

- · Reads transfer amount during charging or recovery operations
- · Reads in pounds or kilograms
- · Auto off function after 3 hours



ACT120A
ACT120A
240 (110)
oz (±0.01 kg) or 0.1% of reading
(whichever is greater)
0.01 lb (0.01 kg)
2 °F to 120 °F (0 °C to 49 °C)
9" (228.6 mm) square
9 V battery (included)

Approx. 40 hrs

### **ACTUVPROKT Metered UV** Injection Kit.

- New technology dye injection solution
- 1 precise squeeze of trigger per application
- More accurate than caulk style guns
- Includes high capacity 12 oz cartridge that covers 96 applications

### **ACTUVPRO12**

• 12 oz dye cartridge for ACTUVPROKT

### **ACTUVPRO**

Injection gun only for ACTUVPROKT



**ACTUVPROKT** 





Ultraviolet Leak Detector Kits (LED Light) (Blue-Point®) **ACTUVQUADKT UV Leak Detection Kit.** 

• Includes 4 LED UV light, mini dye injector, A/C dye cartridges, hose with R134a coupler, R12 adaptor, 1 oz of coolant dye, 1 oz of oil/fuel/ATF dye, 10 A/C service labels and UV glasses

### ACTUVMINI4 Mini LED UV Flex Light and UV Goggles Kit.

• Bright LED light with 12" flexible probe gets in tight spots

±.16

- Comfort grip light handle with conveniently located On/Off button
- Includes flex light and UV safety glasses

### **ACTUVLED LED UV Light Kit.**

• Includes rechargeable ultra bright LED UV cord free swivel light (ACTUVLED8) plus rechargeable battery, battery charger and UV glasses ACTUVC10 Dye Cartridge.

• 10 application dye cartridge with 10 A/C service labels

# **Ultraviolet Leak Detector Kits** (High Intensity Light) **ACTUVDYEKIT UV Leak**

Detection Kit (Blue-Point). Includes high intensity light (ACTUVDYEKIT1), dye injector and cartridge with 25 applications, hose w/R134a coupler

(ACTUVDYEKIT2), R12 adaptor (ACTUVDYEKIT4), (25) A/C service labels (ACTUVDYEKIT5), dye cleaner (CLEAN1SM), UV safety glasses (GLASS20BKY) and storage case (ACTUVDYEKIT6).

### **ACTUVDYEKT1 High Intensity UV Light.**

- High intensity 12 V DC/50 W compact light gets in tight spots
- Coiled cord extends to 14' with clips for attachment to battery

#### **ACTUVDYEKT2 Injection Hose.**

• Hose with R134a coupler for ACTUVDYEKIT

### **ACTUVDYEKT3** Replacement Injector Handle.

- Replacement injector handle for dye injector in ACTUVDYEKIT ACTUVDYEKT4 R12 Adaptor.
- R12 adaptor for ACTUVDYEKIT

#### ACTUVDYEKT5 A/C Service Labels.

Pack of 25 A/C service labels for ACTUVDYEKIT

#### ACTUVC25 Dve Cartridge.

25 application dye cartridge with (25) A/C service labels

# GLASS20BKY Safety Glasses.

· Black frame with amber lens





R134a adaptor

· Service stickers

#### ACTUVINJKT A/C Leak Detection Kit (Blue-Point).

- Detects A/C refrigerant leaks quickly and easily
- Universal A/C dye is SAE® certified and OEM approved Includes:
- Universal A/C dve to service up to 40 vehicles ACTUVKITRHT for refills
- Exclusive oun style injector and dve cartridge
- Powerful 1 W Luxeon® light
- Compatible with fluorescent dyes
- UV Glasses
- · Convenient storage case

# ACTUVKITHRT (Blue-Point).

. Consists of (4) 1 oz cartridges



# Ultraviolet Leak Detector Kits

- Inject dye in low side port on automotive A/C system, circulate and check for leaks with the UV Mini Light
- Detect leaks as slow as 1/4 oz per year
- Use optional dves to check for leaks in engines, transmissions. hydraulic systems and power steering systems

ACTUVKITA R12/R134a UV Leak Detection Kit (Blue-Point) Includes:

ACTUVGUN3 Injection gun.

ACTUVGUN5 R134a Injection gun adaptor. ACTUVGUNA9 R12 System injection gun adaptor. ACTUVGUNA8 Universal dye cartridge (8 oz).

ACTUVLITE4 UV enhancing glasses.

ACTUVLITEA8 Swivel head UV light (12 V, 50 W). ACTUVLITEA9 Storage case.

ACTUVGUNA Injection Gun Kit (Blue-Point) Includes: ACTUVGUN3 Injection gun.

ACTUVGUN5 R134a Injection gun adaptor. ACTUVGUNA9 R12 System injection gun adaptor. ACTUVGUNA8 Universal dye cartridge (8 oz).







· Wear safety shield (user and bystander)

**ACTUVDYEKIT** 

· Read safety precautions on pages W1 to W4

# Service Equipment (R134a and R12)

# Ultraviolet Leak Detector Dye Cartridges/Accessories

Stock No.	Description	
ACTUVGUN3	Injection Gun	
ACTUVGUN5	R134a Injection Gun Adaptor	
ACTUVLITEA8	12 V, 50 W UV Swivel Head Mini Light	
ACTUVGUNP1	PAG Oil Cartridges/46 Viscosity (6, 8 oz)	
ACTUVGUNP2	PAG Oil Cartridges/100 Viscosity (6, 8 oz)	
ACTUVGUNP3	PAG Oil Cartridges/125 Viscosity for GM Vehicles (6, 8 oz)	
ACTUVGUNP4	PAG Oil Cartridges/150 Viscosity (6, 8 oz)	
ACTUVGUNE1	Ester Oil Cartridges/100 Viscosity (6, 8 oz)	
ACTUVGUN2	Universal A/C Dye Cartridge (4 oz)	
ACTUV10PAK	Universal Dye Cartridges (10, 1/4 oz)	
YAUVCOOL	Coolant Dye Cartridges. (6, 1 oz)	
YAUV4N1	Engine/Transmission/Hydraulic/Power Steering	
IAUVTILI	Accessory Dye Cartridges (6, 1 oz)	
ACTUVKITJR1	A/C Dye Cartridges (6, 1/4 oz)	
ACTUVKITJR2	A/C Dye Cartridges (6, 1 oz)	

### Ultraviolet Flashlights (Blue-Point®) ECFUVLITE Ultra Compact UV Leak Detection Flashlight Kit.

- High intensity LED bulb with 100,000 hour service life
- Comparable to high intensity 75 W lamps
- Inspection range of up to 6'
- (3) AAA batteries and fluorescence enhancing glasses are included

### ECFUV150 UV Leak Detection Flashlight.

- Very high intensity LED technology
- 15x brighter than regular LED lights
- Power comparable to 150 W lamps
- Inspection range of up to 20'
- Compatible with all standard dyes
- Fluorescence enhancing glasses and charger included

### **ECFUVDUAL UV Leak Detection Flashlight.**

- Pinpoints A/C, oil, fuel, ATF, PS, hydraulics, coolant and auto body leaks
- Use with blue lamp with fluorescent dye, white lamp for general component inspection
- 100,000 hour LEDs never need replacing
- UV inspection range up to 6' (1-8 m)
- Powered by (3) AAA alkaline batteries (included)
- Flashlight, holster and fluorescence enhancing glasses included

# ECFUVDUAL

ECFUV150

# Digital Manifold Gauges (R134a) (Blue-Point) ACTR5150A Digital Manifold Gauge Set (R134a).

- · Displays refrigerant and oil capacities
- Large easy to read LCD screen displays pressure and vacuum readings for R134a
- · High quality aluminum block manifold
- Performs system leak check at conclusion of the evacuation process
- · Heavy duty hook folds and stores on back
- Rubber boot for added protection
- Includes digital manifold, (3) 72" hoses and (2) manual couplers in a storage case



ACTR5150A

## Manifold Test Gauges (R134a) ACTR5134A Manifold Gauge Set.

- Extra large
- 80 mm gauge face and oversized sight glass for better visibility
- Large, 1/4 turn open/close manifold ball valves
- Manual high and low couplers for quick connections
- 72" red and blue nylon barrier hoses meet EPA®, SAE® and UL® standards
- 96" yellow charging hose

#### ACTR4151A Manifold Gauge (Blue-Point).

- Manual couplers are spring loaded to eliminate service valve damage
- · Extruded aluminum body with solid brass fittings
- High side and low side silicon anti flutter gauges (65 mm) reduce vibration
- Sight glass permits visual monitoring of refrigerant flow
- 96" yellow charging hose plus 72" red and blue hoses

# ACTR4131A A/C Manifold Set (Blue-Point).

- Anti flutter gauges smooth out needle movement
- Easy grip all metal side mounted knobs
- Piston type free floating valves reduce 0-ring wear
- Manual R134a couplers
- 60" red, blue and yellow inner nylon layer hoses meet EPA, SAE, and UL standards
- Yellow hose includes shut off valve

# ACTR4772-3 High Side Quick Coupler. ACTR4772-2 Low Side Quick Coupler.

## Manifold Test Gauge (R134a/R12) ACT51234A R12/R134a Manifold Test Gauge.

- 3 sets of hoses (72" red and blue plus 96" yellow) permit true interchange between R12 and R134a refrigerants
- Large, 1/4 turn positive open/close manifold ball valves
- · Oversize sight glass for easy flow viewing
- Extra large 80 mm gauge face for better visibility
- Manual high and low couplers for quick connections
- Nylon barrier hoses meet *EPA*, *SAE*, and *UL* standards

### ACTR1234YF Manifold Gauge Set.

- For vehicles using upcoming 1234yf refrigerant
- Red and blue nylon barrier hoses with 12 mm-m fittings on both ends
- . R1234yf high and low side couplers

# Manifold Service Kit (Blue-Point) ACT1234PKT Manifold Repair Kit.

- Includes various replacement lens, knobs, O-rings, gaskets and more
- Use to service ACTR4151, ACT9500C, ACTR5134 and ACT51234 manifold gauges



ACTR5134A



ACTR4151A



ACTR4131A



ACT51234A



ACTR1234YF



ACT1234PKT

# Service Equipment (R134a and R12)











ACTRB72

ACTRY96

# Replacement Hoses (R134a)

- Low permeation hoses for internal equipment connections
- 1/2" ACME® fittings
- Hoses comply with SAE® J2197

ACTRR72 Red, 6' length ACTRR96 Red, 8' length ACTRB72 Blue, 6' length ACTRB96 Blue, 8' length ACTRY72 Yellow, 6' length ACTRY96 Yellow, 8' length



- 6' hoses include 1/4 turn manual shutoff valves
- Comply with SAE J2196
- 6' and 8' hoses also available with automatic shutoff valves

ACTB72 Blue, 6', 1/4 turn manual shutoff valve ACTB72A Blue, 6', automatic shutoff valve ACTR72A Red, 6', automatic shutoff valve Yellow, 6', 1/4 turn manual shutoff valve ACTY72 ACTY72A Yellow, 6', automatic shutoff valve







ACT28B

ACT9103

**ACT9106** 





**ACT9006** 



**ACT2100** 

ACTMAN2100

# A/C Hose Crimping Tools

### ACT2100 Hydraulic A/C Hose Crimper Set (Blue-Point®).

- · Recrimp or install most barbed and beaded fittings
- Allows user to create standard or custom length A/C hoses
- Set contains the hand operated hydraulic crimping tool (ACT21001), (4) sets of dies for standard fittings and (4) sets of dies for reduced barrier fittings

## ACTMAN2100 Manual A/C Hose Crimper Set (Blue-Point).

- Manual version of the ACT2100 hydraulic hose crimper
- · Easily mounts to workbench or held securely in a vise
- Includes a complete set of dies covering standard #6, #8, #10 and #12 hose sizes
- ( €

### **ACT21001 Crimping Tool.**

· Hand operated hydraulic A/C hose crimper used to recrimp or install new fittings on A/C hoses

Stock No.	Description	Fitting Size	Hose Size
ACT21003	Standard Die Set	#8	13/32"
ACT21004	Standard Die Set	#10	1/2"
ACT21005	Standard Die Set	#12	5/8"
ACT21006	Reduced Barrier Die Set	#6	5/16"
ACT21007	Reduced Barrier Die Set	#10	1/2"
ACT21008	Reduced Barrier Die Set	#12	5/8"

# Vacuum Pumps (R134a/R12) (Blue-Point)

(M25 / M22) (5:00 / 6:11)					
Specifications	ACT28B	ACT9005	ACT9103	ACT9106	ACT9006
No. of Stages	_	1	1	1	2
Free Air Displacement	Air Operated	1.5 CFM	3 CFM	6 CFM	6 CFM
Ultimate Vacuum	28 inHg	75 Microns	75 Microns	75 Microns	15 Microns
Motor	_	1/6 HP	1/4 HP	1/4 HP	1/3 HP
Pump Speed	_	3,450 rpm	1,720 rpm	1,720 rpm	3,440 rpm
Electrical Specs	_	110 V 60 Hz	110 V 60 Hz	110 V 60 Hz	110/220 V 50/60 Hz
Shipping Weight (lbs)	5	16	17	22	24.6

### ACT9005 Vacuum Pump.

- High efficiency, single stage 1.5 CFM pump
- Ultimate vacuum of 100 microns
- 3 inlet port sizes: 1/4, 3/8 SAE and 1/2" ACME
- Gas ballast valve helps prevent oil contamination
- · Easy access oil fill port
- 1/6 HP
- 120 V AC motor
- Weight: 16 lbs, oil capacity: 6 oz

### ACT9006 Vacuum Pump.

- High efficiency, 2 stage 6 CFM pump
- Ultimate vacuum is 25 microns
- 3 inlet port sizes: 1/4, 3/8 SAE and 1/2" ACME
- · Easy access oil fill port
- 1/3 HP 120 V AC motor
- · Weight: 38 lbs, oil capacity: 8 oz









- Wear safety shield (user and bystander)
- Read safety precautions on pages W1 to W4

# **AIR CONDITIONING**

# Service Equipment (R134a and R12)

### Valve Core Tools (R134a/R12) ACT1297 Master Valve Core Tool Set (R134a/R12).

- Unique design offers locking device to hold shaft in place when removing or installing valve core
- · Makes removal and installation of Shrader valve cores possible on fully charged systems Includes:
- High side R12 adaptor for GM<sup>®</sup>/Ford<sup>®</sup> vehicles (1/4" x 3/16")
- High side R12 adaptor for Ford vehicles (1/4" x 1/8")
- R134a high side connector (16 mm)
- R134a low side connector (13 mm)
- 1/4" FL swivel connector
- · Box for set component storage
- Large bore valve core remover/installer assembly for GM vehicles
- JRA R134a valve core remover/installer assembly
- Eton R134a low side valve core remover/installer assembly
- Eton R134a high side valve core remover/installer assembly

### ACT2105 Orifice Tube Service Kit.

- Install and remove any style orifice tube
- · Remove broken screens and tubes
- · Includes auger point shaft puller, for GM vehicles, brass extension, puller, remover arbor, remover nut and storage case



ACT1297

ACT2105

### Can Tapper Valve ACT413A Can Tap Valve.

- Fits R134a (2 7/8"), R12 (2 1/2") and Oil (2") U.S. standard charge cans
- Includes 1/2" ACME®-M and 1/4" FL-M ports
- · Internal safety check valve prevents system backflow
- Composite construction with brass ports
- · Includes insert for smaller cans



# Oil Injector (R134a) ACTR82375 Oil Injector.

- · Use to add refrigerant oil or large amounts of UV leak detection dyes to A/C systems
- · Quickly adapts to manifold gauge sets or charging equipment
- 1/2" ACME male x 13 mm R134a low side female threads
- 2 oz capacity
- · R134a use only

### Seal and Clutch Service ACT1300B A/C Clutch Remover Set.

- Simplifies removal/installation of A/C compressor clutch and clutch plates
- · Provides access to shaft seals
- For use with Ford, Chrysler® and GM vehicle A/C compressors



**ACTR82375** 



### Thermometers

### TEMP2A Digital Thermometer (Blue-Point®).

- Use on A/C systems, cooling systems and other applications
- · Reads temperature of liquids, solids and gases
- Easy to read display in °F and °C
- Magnet: cover holds unit in place
- Tip cover protects probe during storage

### TEMP3A Digital Thermometer (Blue-Point).

- View center vent air temperature from under hood by placing external sensor in center vent
- Compare outside temperature with A/C discharge temperature
- · Built-in internal sensor
- External sensor with 10' extension wire
- MIN/MAX memory for both sensors
- Uses standard AAA battery (included)
- Large, backlit display with clock feature



_	_	R #	D	2	,
	E	м	ч	3	F

Specifications	TEMP2A †	TEMP3A †
<b>Temperature Range</b>	-58 to 300 °F (-50 to 150 °C)	-58 to 158 °F (-50 to 70 °C)
Resolution	± 0.1°F (± 0.1°C)	± 0.1°F (± 0.1°C)
Accuracy	± 2.0 °F (± 1.0 °C)	± 1.8 °F (± 1.0 °C)
Response Time	Updates every 1.5 seconds	Updates every 1.5 seconds
Battery	MTACDC1-1	AAA
<b>Battery Saver</b>	35 minute auto power off	1
Probe Length	3 1/2" (89 mm) —	
Overall Length	7" (178 mm) with case —	

† ( E

### **TEMP10 Pocket Digital** Thermometer (Blue-Point).

- Measures liquid, air and surface temperatures via sturdy stainless steel probe
- Digital display for easy viewing
- Angled viewing head can be rotated 180°
- Convertible from Fahrenheit (F) to Centigrade (C)
- Temperature ranges: -58 °F to 300 °F (-50 °C to 150 °C)
- · Plastic carrying sheath



### **ACT73A Dual Scale Dial Type** Thermometer (Blue-Point).

- Range 0 °F to 220 °F in 2° increments
- Checks temperature of condenser, outside air and cooling power

#### ACT73A • 1 3/4" diameter ACT83A Dial Type Thermometer (Blue-Point).

- Range 0 °F to 220 °F in 2° increments
- Immerse stem about 2" in liquids, 4" in gases
- 1" diameter



ACT2030 A/C Temperature Tester (Blue-Point).

- Quickly and easily determine A/C system performance
- · Microprocessor compares temperature at the A/C vent and outside ambient temperature
- Automatic shutoff
- · Includes diagnostic chart and tech tips
- Powered by 9 V battery (included)
- Range 32 to 120 °F



ACT2030



## Adaptors/Valves/Connectors **ACT106B Expansion Tube Remover.**

- For most GM® vehicle models
- 4" long

### ACT1009A Orifice Tube Remover.

- Use as CCOT and FFOT screen extractor
- Use in conjunction with ACT106B

#### ACT1008Á Orifice Tube Tool.

- Services A/C systems

# • 6 1/4" long ACT119 Quick Connect Set.

- · Simplifies connecting to core valve service fittings
- Includes straight coupler and a 90° coupler that accept either of 2 adaptors

### Service Tools ACT1046C Flush Kit.

- · Pressure flush condensers, evaporators and refrigerant lines after A/C system is completely discharged
- Designed to work with any lightweight flushing material that can be mixed with pressurized air
- · Includes flush gun, hose, canister and canister adaptor

#### **ACT111B Compressor Oil Injector Adaptor.**

- Aluminum body holds up to 2 oz of oil
- Uses pressure differential of the high and low side of A/C system

### ACT118B Spring Lock Coupler Set (Blue-Point®).

- · 4 pc set aids in disconnecting refrigerant line couplings on many 1981 and later Ford® vehicle A/C systems
  • Color coded: red, 3/8"; blue, 1/2"; black, 5/8"; and beige, 3/4"

### TR109 Valve Core Tool.

- Use to remove or replace valve cores on A/C systems (large bore)
- 6 3/4" long

#### ACT1290A Universal Valve Core Service Tool.

· Removes and replaces standard size Schrader style valve cores plus the larger size found in GM vehicle systems

## ACT81290 Universal Valve Core Service Tool.

 Use on R12/R134a standard valve cores and JRA/EATON large bore R134a valve cores

### ACT499A Spanner Wrench.

- Adjustable 3 stud design for R-4 compressors in GM vehicles
   Applications on some GM, Warner®, Pitts® and Ogura® vehicle clutches

# R404 Refrigeration Ratcheting Box Wrench.

- 4 popular square sizes: 3/16, 1/4, 5/16 and 3/8"

# Quick ratcheting action with reverse levers at both ends RF818SC Refrigerant Ratcheting Box Wrench.

- 9/16" 6 point for servicing compressor valve caps on 1 end
- 1/4" female square on other end for vehicles without Schrader valves

### TLE80A 1/4" Drive Torx® 6 Point Socket.

• Service size E8 Torx fasteners on many compressors

### TLE60A 1/4" Drive Torx 6 Point Socket.

• Service size E6 Torx fasteners on 1977 and later Eaton® and York® compressors

## ACT407 Fin Straightener and Cleaner.

- Multihead tool handles 8, 9, 10, 12, 14 and 15 fins per inch

# • 4 1/4" long EECT4H Circuit Tester.

- Used to detect power and ground, also to find shorts and breaks
- Patented Instinct® Handle for style and comfort
- Molded internal contact links with the LED assembly top dimple for low loss signal transfer
- Smart LED design has more brilliant light output and longer life than traditional bulb
- Finger turn screw on strain relief is easy on/off, has flexible wire protection at the critical bending point and is O-ring sealed
- Low power consumption smart circuit design
- Copper clip is a superior quality component for maximum electrical signal transfer
- Superior flex wire glides past components and remains flexible even in cold conditions
- Rubber Boot material stays flexible
- Technical Support: 1-888-382-6522
- ( €

### **GOGGLE1 Protective Goggles.**

- Durable molded frame with flexible elastomer seals comfortably for a custom fit around nose, cheeks and forehead
- Quick adjust headband clips permit fast and easy fitting
- Indirect ventilation system channels and directs airflow over the lens
- Uvex® 4C+™ lens coating protects against fogging, scratches and ultraviolet rays
- ANSI® Z87.1-1989

### ACT1370 Disconnect Set (Blue-Point).

- Includes (6) tools for disconnecting spring couplings on fuel lines
- · Convenient plastic holder
- Useful on A/C spring couplings as well as push lock connectors on radiator and transmission lines
- Includes 6 tools for disconnecting spring couplings on Ford, GM and Chrysler® vehicle A/C lines
- Works on fuel lines and can be used as push lock connectors on radiator and transmission lines
- Included sizes are 5/16, 3/8, 1/2, 5/8, 3/4 and 7/8"









# **AIR CONDITIONING**

## **Radiator Tools**











SVTSRAD262A

SVTSRAD262U

**RADKITPLUSA** 

**RADKITPLUSJR** 

YA4505

### Vacuum Cooling System Filler SVTSRAD262A Vacuum Cooling System Filler.

- · Eliminates cooling system air locks that cause overheating
- · Ideal for vehicle specific shops or municipal garages
- Expands the versatility of SVTS262C cooling system tester
- · Adaptors available separately for virtually all import and domestic vehicles
- · Liquid filled gauge provides an accurate reading
- Includes main body assembly, Venturi® and hose assembly, suction hose assembly, instruction manual with complete adaptor list

### SVTSRAD262U Universal Cooling System Filler.

- Universal version does not require cooling system adaptors
- Includes 2 universal style cones to cover most applications

### RADKITPLUSA Cooling System Vacuum/Filler.

- · Easily eliminate cooling system air locks that can cause overheating
- · Vacuum test checks for system leaks prior to filling
- · Gauge protector helps prevent damage to gauge housing
- · Push button vacuum valve for easy operation
- · Fills system quickly by siphoning directly from the mix container
- Requires 90 psi (4.2CFM) air supply
- Includes Venturi assembly gauge and gauge protector, refill hose assembly, adaptors for most applications, universal fit cone adaptor, hose assembly and instruction manual with complete adaptor list in storage case

### **RADKIT5 Radiator Neck Adaptor Kit.**

- Radiator neck fitting adaptor kit for RADKITPLUSA

# • Includes 4 adaptors in sizes .54, 1.36, 1.57 and 1.86" RADKITPLUSJR Vacuum Cooling System Refiller.

- · Reduces system filling time, eliminates airlocks and checks for system leaks
- · Compact size allows access in restricted underhood areas
- · Cone adaptor ensures unit will work on most U.S. and import passenger vehicles and light trucks
- Push button control valve eliminates the need to interchange hoses
- Shop air (90 psi) quickly draws a powerful vacuum
- · Eliminates system bleeding and purging

#### YA4505 Universal Radiator Adaptor (Blue-Point®).

- 95% application coverage on cars and light trucks
- Replaces as many as 25 other costly radiator adaptors
- Compatible with radiator necks or reservoir tanks
- Can be used with RADKITPLUSA or RADPLUSA cooling system fillers, YA4000B vacuum and pressure pump and SVTS262A, SVTS262B and SVTS262C cooling system testers











# Radiator and Freeze Plug Tools

### YA2090 Radiator Cap Wrench (Blue-Point).

- Grips and removes radiator caps with or without wings
- 7 1/2" in length

### YA9190 Universal Radiator Drain Plug Socket (Blue-Point).

- Double slotted end of this 3/8" drive socket will fit most radiator drain plugs that have thumb wings
- Will fit Acura®, Honda®, Toyota®, Lexus® and other import vehicles 2009FPI Freeze Plug Installer Kit.
- 18 1/2" long installing tool with ball type swivel for easy positioning
- 7 installer heads in 20, 25, 30, 35, 40, 45, and 50 mm sizes

#### YA7747 Pneumatic Adaptor (Blue-Point).

- Speeds freeze plug installation
- Use with 2009FPI Installer Kit
- 401" Parker style shank enables use with air hammers

### CG25 Freeze Plug Puller.

- Freeze plugs up to 2" in diameter
- 1/4" thick yoke receives 2 7/8" long self tap screw
- Drill 17/64" hole first

### LDTSP4 Quick Disconnect Fittings Set.

- Includes sizes 3/8, 1/2, 5/8"-30% and 5/8"-39%
- Applications: 1996 and newer GM® vehicles, many 2004 and newer Daimler Chrysler® vehicles, some 2005 and newer Mercedes® vehicles, V-Rod®, Freightliner®, Peterbilt®, Volvo® and White®. Handy spring-action keeps the tool on the line for ease of use. Teeth fit perfectly into tight tolerance of Jiffy-tite® connectors. When rotated, allows the line to be pulled without damage to the connector or retaining clip. Fits the most popular Jiffy-tite fittings found on oil cooler lines used on transmissions and radiators and on other applications

# **Cooling System Testers**



# Antifreeze and Coolant Testers AF102 Antifreeze Hydrometer (Blue-Point®).

- Degree of protection indicated by direct reading; no temperature compensating scales required
- Range of -60 °F to 32 °F
- Range of -51 °C to 0 °C
- . Tests hot and cold solutions

### EETA305B Refractometer (Blue-Point).

- Quickly and accurately determines the freezing point of propylene and ethylene glycol-based antifreeze
- Gives indication of the charge level in battery acid
- Focusing eyepiece provides an easy to read scale
- Includes steel and glass constructed head and prism, rubber finger grip and focusing eyepiece with eyecup
- Specification range: -50 °F to 32 °F propylene glycol, with 10° divisions; -60 °F to 32 °F ethylene glycol, with 10° division



# Cooling System Testers SVTS262C Cooling System Tester.

- Test pressure caps and cooling systems for leaks on a wide variety of domestic and import vehicles
- Cap has rotating lever for fine pressure adjustment
- Set features hand pump and tester head with 12" hose that reads in both psi and kPa
- Improved material in pump head is corrosion resistant
- Includes SVT262-28A, TA36GMA and TA38C radiator adaptors plus storage case
- Reference SVT262C instruction sheet for complete listing of applications







EETA305B

YAUVCOOL

GDCT16

# Leak Testers YAUVCOOL Leak Detector Fluid (Blue-Point).

- (6) 1 oz bottles of dye for coolant systems for use with ACTUVLITEA GDCT16 Combustion Leak Tester.
- Easy and quick way to diagnose engine overheating problems
- Check for leaks between the combustion chamber and the cooling system
- Test head and gasket for combustion leaks before removing radiator
- · For use on water cooled gas and diesel engines
- Kit includes complete test chamber, 16 oz bottle of testing fluid and instructions

#### GDCT161 Leak Detector Fluid.

 16 oz bottle of leak testing fluid for the GDCT16 combustion leak tester



# SVTS263A Cooling System Pressure Tester, Air Powered.

- Air powered upgrade to the highly successful SVTS262C Hand Pump cooling system tester
- Uses pressure regulated shop air to pressure test cooling systems for leaks
- Sensitive pressure regulation allows safe testing of small systems
- Sufficient capacity to fill large systems in seconds
- Composed of rugged, tested components for maximum durability
- Stainless steel and chrome plated components ensure a lasting finish
- Compatible with most commonly used cooling system adaptors
- Pressure gauge has internal shock absorber protection and rubber boot for durability
- Safety spring release cap assembly limits pressure to no more than 32 psi
- Convenient swivel hook allows unit to be hung from under vehicle hood
- Includes 3 of the most common cooling system adaptors: TAB10036, SVT262-28A, and TA38C







# **Cooling System Tester Accessories**



# **Cooling System Tester Accessories**

Radiator adaptors and cap adaptors listed below can be used with the SVTS262 Series and SVTS263 Series cooling system testers. See SVTS262C cooling system tester instruction manual for complete listing of specific model year applications.

Radiator Adaptor	Cap Adaptor	Vehicle Applications
SVT262-28A	SVT262-29	Acura, Chevrolet, Chrysler/Dodge/Eagle/Plymouth, Ford/Lincoln/Mercury, Geo, Honda, Hyundai, Infiniti, Isuzu, Lexus, Mazda, Mitsubishi, Nissan, Subaru, Suzuki and Toyota
TA16B	TA23A	Pre 2000 Audi, Porsche, 911, Cayman Boxster, Smart Car, Pre 1990 VW
TA18B	TA26A	Volvo, Saab, Jeep, Sterling and Renault
TA27	_	Volvo large trucks with 63 mm x 3 mm threaded filler neck
TA31A	TA30A	1990s <i>VW</i>
TA32A	ТАЗЗА	GM, Ford, Land Rover, Infiniti, Nissan, Freightliner, Kenworth, International and Peterbilt
TA34A	TA246A	GM, Ford, Jaguar, Range Rover, Saab and Suzuki
TA36GM	TA37	GM (most models, 1994-current), Freightliner, Isuzu and Mazda
TA38C	ТАЗ9А	Acura, Chevrolet, Chrysler, Geo, Honda, Isuzu, Lexus, Mazda, Mitsubishi, Suzuki and Toyota. Use with TA39A cap adaptor
TA41	TA40	Audi, Bentley, Lamborghini, VW, Porshe: Cayenne and Panamera
TA44	TA45	Mercedes
TA46	TA47	Ford, Jaguar and Mazda. Use with TA47 cap adaptor
TA48	TA49	Toyota
TA50	_	Volvo large trucks with 48 mm x 3 mm male thread on filter neck

Radiator Adaptor	Cap Adaptor	Vehicle Applications
TA52	TA53	Mazda 3 (2004-current), Most Volvos (2004-current), Ford Fiesta (2012), Land Rover LK2 (2008)
TA54	_	Freightliner trucks with 60 mm x 3 mm male thread on filter neck
TA56	TA57	Cobalt SS (2005 and later) and Saturn lon Redline (2004 and later) with Supercharger cooling systems
TA58	TA59	Dodge (2007-2012), Mercedes Sprinter Van
TA445	TA446	BMW 3-series (2006 and later) and 5 and 6-series (2005 and later), All BMWs by 2009
TA4503	_	1980s <i>GM</i> X and J body cars
TA245A	TA246A	BMW and Mercury. Use with TA246A cap adaptor
TA345A	TA346A	BMW (most 1990-2005) and Range Rover
TA450A	Truck Adaptor Set	For trucks with "B" size (2 11/16" OD) filler neck adaptors. Includes A450-1A rubber plug.
TA4505	TA4504	For trucks with "B" size (2 11/16" OD) filler neck adaptors
A450-1A	Rubber Plug	Use with TA450A truck adaptor kit or as a replacement plug for A4503A <i>GM</i> adaptor kit
A450-2A	Rubber Gasket	Use with TA450A truck adaptor kit or as a replacement gasket for A4503A <i>GM</i> adaptor kit
A4503A	GM Adaptor Set	Tests system pressure on closed cooling systems on GM 2.5 L "X" body cars and 1.8 L "J" body cars

# **Cooling System Tester Accessories**

















TAB10022

TAR10025

TAB10031

TAB10034

**TAB10036** 

TAB10041

0041 TAB10044

310044 TAB10046

# Cooling System Adaptor Sets (Blue-Point®)

• •	•
Radiator Adaptor	Vehicle Applications
TAB10022	Pre 1990, VW, Audi and Porsche: Boxster, Cayman, 911
TAB10025	Volvo, Saab and Jeep
TAB10031	<i>VW</i> 1990-1998
TAB10034	Ford, Jaguar, Saab and Saturn
TAB10036	GM, Ford, Jaguar, Mazda and Nissan
TAB10041	VW, Audi and Porsche
TAB10044	Mercedes-Benz and Chrysler
TAB10046	Ford, Jaguar and Mazda
TAB10048	Some Lexus, Scion, Toyota (especially Hybrids)
TAB10052	Mazda 3, most Volvos, Range Rover and 2012 Ford Fiesta
TAB10056	Chevrolet Cobalt and Saturn Ion
TAB10245	Pre-1988 BMW and Merkur
TAB10345	Most BMW (1998-2006) and Range Rover
TAB10445	BMW 2005 and later



TAB10048

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TAB10052



TAB10056



TAB10245



TAB10345



**TAB10445** 



SVTA17000

# Cooling System Adaptor Set SVTA17000 Cooling System Adaptor Set.

- Supplemental adaptor set to the SVTS262C cooling system tester kit
- (17) high quality metal construction adaptors cover vehicles through 2006
- Includes SVT262-28A, TA16B, TA18B, TA31A, TA34A, TA36GM, TA38C, TA41, TA44, TA46, TA48, TA52, TA56, TA245A, TA435, TA445 and TA4503 adaptors
- Storage case (PBSVTA1417) has extra storage compartments for the pump and gauge assembly from the SVTS262C kit

#### PBSVTA1417 Storage Case.

WARNING

- Storage case for SVTAB1400 and SVTA17000 sets
- Removable cover for display

# Truck Cooling System Adaptor Sets SVTA6100 Large Truck Cooling System Adaptor Set.

- Designed for use with the SVTS262C but compatible with virtually any cooling system tester
- Ideal for servicing large trucks (Volvo®, Kenworth®, Freightliner® and more)
- Pressure test the 8 different filler necks found on modern large trucks when combined with the pump and TAB10036 adaptor from the SVTS262B, SVTS262C or SVTS263A sets
- Can also be combined with the SVTS263A air powered cooling system pressure tester to provide virtually 100% truck coverage
- Includes TA27, TA50, TA54, TA32A, TA4505 and TA58 adaptors plus instruction manual in PBSVTA600 storage case



**SVTAB1400** 

#### SVTAB1400 Cooling System Adaptor Set (Blue-Point).

- TAB series adaptors feature a composite metal/plastic construction for a lower cost option
- Includes (14) radiator composite metal/plastic radiator adaptors
- Storage case has extra storage compartments to accommodate the pump and gauge assembly and original 3 adaptors from the SVTS262C set
- Includes all TAB series adaptors (except TAB10036) plus TA4503 adaptor
- See instruction manual for a complete listing of all applications



SVTA6100







# **Testers/Service Tools**



SVT275

# Cooling System Testers (Bladder Sealing System) (Blue-Point®) SVT275 Cooling System Tester.

- Inflatable bladder sealing system enables use with most passenger and light commercial vehicles
- · Tests header tanks and radiator systems as well as thread type and bayonet style caps
- Locate leaks from head gaskets, radiator and heater cores, Welch plugs and housings, water pumps and hoses
- Test cap relief pressure and seal condition
- Suitable for marine applications
- Fluid drain tube allows coolant to be returned to reservoir or safely collected for recycling
- Cycle tested to over 1,500 inflations
- Set includes SVT2751 thru SVT27514 (14 pcs) plus air supply hose and instruction manual in storage case

04 1-	_	
Stock No.	Description	Application
SVT27515	Pressure Pump	_
SVT2752	Gauge, 0 to 30 psi (0 to 207 kPa)	_
SVT2753	Spare Bladder	_
SVT27516	Valve Seal Kit	_
SVT27517	Head Assembly	_
SVT2756	Neck Extension (Blue)	VW header tanks
SVT2757	Neck Extension (Red)	Japanese micro vehicles
SVT2758	Neck Extension (Black)	Audi/VW header tanks
SVT2759	Cap Adaptor (Blue)	Standard bayonet, <i>Ford</i> header tank, <i>GM</i> N-body
SVT27510	Cap Adaptor (Yellow)	Jeep, Saab, Audi/VW external thread header tanks
SVT27511	Cap Adaptor (Green)	Small Japanese deep, Audi/VW internal thread header tanks
CUTOTEAG	Con Adonton (Dod)	Small Japanese shallow, late model Audi/VW external thread
SVT27512	Cap Adaptor (Red)	header tanks
SVT27513	Cap Adaptor (Orange)	Late model BMW, Land Rover and Range Rover
SVT27514	Cap Adaptor (Gray)	Late model <i>Mercedes</i> with thread type









## Hose Cutters and Removers (Blue-Point) YA9344 Heater Hose Disconnect Tool.

- Removes heater hoses with 3/4 or 5/8" quick disconnect couplings from rear heater core on 1987 and later Dodge® Caravan and Plymouth® Voyager vans
- Gets into difficult access area next to firewall on 1986 and later Ford Aerostar vans plus 1990 and later Ford Econoline vans

#### YA1000A Multi Cutter.

- Ideal for cutting heater hoses, fuel line hoses, copper wiring, PVC pipes, wiper hoses and air brake hoses, plus any resilient or semi resilient material with a 0 to 1 1/8" diameter
- · Comfort contoured handles with plastic grips
- Wire loop for safe storage: 9 5/8" long

# PWC60 Compound Leverage Hose Cutter.

- 8 1/2" compound action multiplies normal hand pressure to easily slice through rubber and plastic hose up to 1 1/8" in diameter
- Includes stainless steel cutter blades and internal components

### **HCR1 Heater Hose Coupler Removal Tool.**

- Removes broken heater hose couplers on GM vehicles
- Can be used with an impact wrench

# Fan Clutch Wrenches/Pulley Holders (Blue-Point) YA9325 Ford Fan Clutch Wrench Set.

- 36 and 58 mm set
- Includes YA9325-1 and YA9325-2

Applications: E-Series trucks 4.9 L (1984-1991), F-Series trucks 4.9 L (1984-1992), Bronco II and Ranger 2.8 L (1984-1985), Ranger 2.9 L (1986-1992), Aerostar 3.0 L (1986-1988), Aerostar and Ranger 4.0 L OHV (1990 and later), Explorer 4.0 L OHV (1991 and later), Mazda® Navajo 4.0 L OHV (1991-1994), *Mazda* B4000 4.0 L OHV (1995 and later), Explorer 4.0 L V6 SOHC (1997 and later) and Mountaineer 4.0 L V6 SOHC (1998 and later)

YA9325-1 Metric Flat Wrench. 36 mm wrench size, 343 mm long YA9325-2 Crowfoot Wrench. 58 mm wrench size, 58.7 mm long YA9521 Flat Wrench. 36/48 mm wrench size, 356 mm long.



# Fan Clutch Wrenches/Pullev Holders (Blue-Point®)

# YA9526 Fan Clutch Wrench for Ford® Vehicles.

- 40 mm open end wrench
- Use with YA9325-2 or YA9522
- Applications include 4.9 L Econoline vans (1992-1996) and 4.9 L F-Series pickups (1993-1996)

### YA9980 Water Pump Fan Clutch Pulley Holder.

- Use on vehicles with pressed on pulleys
- Use on GM<sup>®</sup> (6.0 L V8 1999 and later) and Chrysler<sup>®</sup> (3.9 L V6, 4.7 L V8, 5.2 L V8, 5.9 L V8, 8.0 L V10 1998 and later)
- Cannot be used on Chrysler 4.7 L V8 using factory replacement water pumps

YA6120 Fan Clutch Wrench Set. Ford/Lincoln®/Mercury® Applications: E-Series trucks 4.9 L (1984-1991), F-Series trucks 4.9 L (1984-1992). Bronco II and Ranger 2.8 L (1984-1985). Ranger 2.9 L (1986-1992), Aerostar 3.0 L (1986-1988), Aerostar and Ranger 4.0 L OHV (1990 and later), Explorer 4.0 L OHV (1991 and later), Mazda® Navajo 4.0 L OHV (1991-1994), Mazda B4000 4.0 L OHV (1995 and later), Explorer 4.0 L V6 SOHC (1997 and later) and Mountaineer 4.0 L V6 SOHC (1998 and later).

GM Applications: Astro and Safari vans 4.3 L, Blazer, Jimmy and Bravada SUV 4.3 L, S10, Sonoma and Isuzu® Hombre pickups with 2.2 L 4 cylinder and 4.3 L V6, C1500, C2500, C3500, K1500, C1500/ C2500/C3500/K1500 Sierra pickups, G1500/G2500 Chevrolet® Express, G1500/G2500 Savana vans 4.3 L V6, 5.0 L V8 and 5.7 L V8; and Suburban, Tahoe, Yukon, Escalade, Denali and Envoy 5.7 L V8.

### YA6160 Universal Fan Clutch Pulley Holder.

- · Removes and replaces the fan clutch on vehicles using "bolt on" water pump pulleys
- · Reverse pulley holder for assembly operations
- Use with YA9521 36/48 mm wrench or YA9526 40 mm wrench for many Chrysler, Ford, Lincoln, Mercury and GM applications

### YA6210 Fan Clutch Wrench for BMW<sup>®</sup>/Audi<sup>®</sup>/VW<sup>®</sup> Vehicles.

- 32 mm fan clutch wrench is used with YA6160 fan clutch pullev holding tool to service Audi vehicles (1996 and later), VW Passat 3.0 L V6 (1998 and later) plus *BMW* 3, 5, 6, 7, 8, X and Z series vehicles
- YA6160 works on all models listed except 4.0 L and 4.4 L V8 engines
- · Made from heat treated steel
- Overall length of 17" (431.8 mm)



# FCT706

## Fan Clutch Wrenches FCT706 Fan Clutch Wrench.

- Fan clutch wrench for heavy duty truck engines
- Hole pattern on tool aligns with fasteners on fan hub
- Use with open end wrench to remove fan clutch
- 24 1/2" length for maximum leverage
- Applications: International® (VT365, T444E, DT466, DT350 and HT530), Ford Power Stroke (7.6 and 6.0 L), Detroit Diesel® (Series 40) and John Deere®

#### YA6180 Fan Clutch Wrench (Blue-Point).

- Use on GM and Ford diesel and gas engines with a 48 mm fan
- · Provides extra leverage needed to remove the fan clutch nut
- Overall length of 20 1/8" (511.2 mm)
- Head width of 4 1/8" (104.8 mm)
- Head thickness of 3/8" (9.5 mm)





## HCP10 Mobea Heater Hose Clamp Pliers (Blue-Point).

- 9" length
- Same as HCP9, except for new style hose clamps found on GM. Ford, VW, BMW, Toyota, Volvo and Audi cars

### HCP10RK Service Kit (Blue-Point).

• Includes 1 pair of replacement tips plus a replacement spring

### for HCP10

- HCP20 Mobea Heater Hose Clamp Pliers (Blue-Point). For heater and radiator hoses found on 1988-1990 GM. Ford. Chrysler and most imports
- Jaws pivot to almost any angle







# **HCP48CF Mobea Hose Clamp Pliers.**

- 3 position joint gives wider jaw spread
- For 3/4 to 2" diameter clamps
- Radial jaw serrations allows user to grip and adjust hose

### HCP9 Corbin Heater Hose Clamp Pliers (Blue-Point).

- 9" length
- Removes or replaces all spring wire hose clamps
- Deep slotted jaws swivel 180° and lock in 3 different positions







- Plastic coated handle does not protect from electric shock
- Read safety precautions on pages W1 to W4

HCP9

# **AIR CONDITIONING**

## **Service Tools**



- 8" in overall length

### PHP1 Hose Clamp Pliers.

- Clamp off hoses up to 1 1/4" in diameter
- Swivel jaws for parallel clamping action
- 9 1/4" in overall length

### PHP2 Hose Clamp Pliers.

- Clamp off hoses up from 1 1/4 to 2 3/4" in diameter
- · Swivel jaws for parallel clamping action
- 4 3/8" iaw length
- 14" long

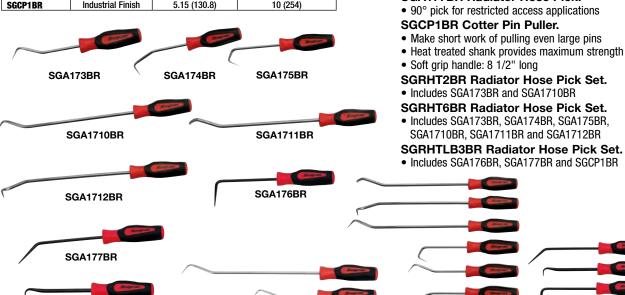
#### PHP3 Hose Clamp Pliers.

- Clamp off hoses up to 3/4" in diameter
- Swivel jaws for parallel clamping action
- 1 1/4" jaw length
- 5 1/2" long
- · Black industrial finish

## Soft Grip Hose Picks

- Ideal for removing and replacing hoses and clamps
- Unique hose blade design for getting around the most difficult obstacles
- Soft, solvent resistant handle material provides a sure, comfortable grip

Stock No.	Finish	Blade Length, inches (mm)	Length, inches (mm)
SGA173BR	Chrome	5.43 (137.9)	10.33 (262.4)
SGA174BR	Chrome	4.94 (125.5)	9.84 (249.9)
SGA175BR	Chrome	4.61 (117.1)	9.51 (241.6)
SGA1710BR	Chrome	11.66 (296.1)	16.56 (420.6)
SGA1711BR	Chrome	10.89 (276.6)	15.79 (401.1)
SGA1712BR	Chrome	11 (279.6)	15.91 (404.1)
SGA176BR	Industrial Finish	5.62 (142.9)	10.50 (266.7)
SGA177BR	Industrial Finish	5.19 (131.8)	10.09 (256.2)
SGCP1BR	Industrial Finish	5.15 (130.8)	10 (254)



SGRHT2BR

SHCP1

- Bi mold grips provide more comfort and control while reducing hand fatique
- · Cable snap provides an easy storage feature

SHCP1 Hose Clamp Pliers.

- Round base ratcheting system provides a larger catching surface area on the locking feature
- Lock lever has 2 matched locking gears with a deep cut to prevent slipping and wearing
- · Flexible cable reaches into tight places with minimal effort

### SGA173BR Radiator Hose Pick.

• Use for easy access applications

### SGA174BR Radiator Hose Pick.

Perfect for tight access firewall applications

#### SGA175BR Radiator Hose Pick.

Ideal for getting behind hoses and pulling

### SGA1710BR Radiator Hose Pick.

Longest pick for extra reach

### SGA1711BR Radiator Hose Pick.

· Length and angle are designed for tight access and long reach firewall applications

#### SGA1712BR Radiator Hose Pick.

Long pick easily maneuvers around obstacles

#### SGA176BR Radiator Hose Pick.

• 45° pick for restricted access applications

### SGA177BR Radiator Hose Pick.

SGCP1BR

SGRHT6BR

SGRHTLB3BR

# **UNDER CAR SERVICE**

# Expanding the Reach of Your Business.

It's the tools and equipment you use every day, so you need it to be as efficient as possible.

Snap-on provides the versatility to work on a wide variety of vehicles—ensuring jobs that come to your shop, stay at your shop.

Whether it is adding a new business or upgrading existing equipment, **Snap-on® Tire Changers** and **Wheel Balancers** will allow shops to service high-end tire and wheel packages as well as the everyday drivers. Complete these jobs and add an additional service opportunity with a tire pressure monitoring tool and related accessories to service these critical systems.

Technicians will appreciate service tools like torque sticks and lug nut sockets to quickly and accurately perform the job. The *Snap-on* Ball Joint Press will allow you to remove and install ball joints with ease, minimizing lost time.



# WHEEL BALANCING

### **Wheel Balancers**

Snap-on® Wheel Balancers use a patented Virtual Plane Measurement® system to achieve accuracy and repeatability. A variety of weight placement options such as Static, Dynamic, five ALU modes, ALU-S, hidden spoke and match mounting optimization modes provide the versatility for these balancers in a variety of applications on passenger cars, light trucks and commercial vehicles.





# Motorized Wheel Balancer EEWB304D Motorized Wheel Balancer.

- 2 parameter auto entry to measure rim offset and distance by touching the distance gauge to the rim
- Molded weight tray has 16 weight storage pockets

# Hand Spin Wheel Balancer EEWB305D Hand Spin Wheel Balancer.

- Single parameter auto entry to measure rim offset by touching the distance gauge to the rim
- Molded weight tray has 12 weight storage pockets

#### **Specifications** EEWB304D EEWB305D Operation Motorized Handspin Accuracy, oz (grams) 0.10(2) 0.10(2) Rim Diameter, inches (mm) 8-30 (203-762) 6-30 (152-762) Rim Width, inches (mm) 3-25 (76-635) 1-20 (25-508) Maximum Tire Diameter, inches (mm) 44 (1,118) 44 (1,118) **Maximum Wheel Width, inches (mm)** 20 (508) 19 (482) Maximum Tire/Wheel Weight, lbs (kg) 154 (69) 120 (54) **Shaft Speed at Calculation, rpm** 200 119 Cycle Time, seconds <7 <15 **Electrical Requirements** 115 V, single phase, 60 Hz, 15 A single phase, 60 Hz, 15 A 325 (148) 230 (105) Shipping Weight, lbs (kg) Required Floor Space, inches 62 W x 65 D 60 W x 48 D

# Standard Accessories - 40 mm Shaft

Stock Number	Description
EAM0003J05A	Small Cone - 1 11/16 to 2 17/32"
EAM0003J06A	Medium Cone - 2 3/16 to 3"
EAM0003J07A	Large Cone - 2 13/16 to 3 19/32"
EAM0003J08A	Truck Cone - 3 3/8 to 5 1/32"
EAA0263G66A	Quick Nut 40 mm
EACO058D08A	Pressure Disk
EACO058D15A	Rubber Protector
EAM0021D90A	Stub Shaft 40 mm
WWPR13A	Wheel Weight Pliers (Optional)
EAA0247G21A	Rim Width Caliper
EAA0346J75A	Optional 1" Extension Flange
EAA0346J76A	Optional 2" Extension Flange
EAK0221J64A	AC Adaptor (EEWB305D only)

TECHNICAL SUPPORT 1-800-225-5786

# **Accessories and Changers**

### **Balancer Pin Plate Sets**

- Pin plate kits accurately align and center the rim to the wheel balancer
- Eliminate misalignment and save time by balancing accurately the first time
- Works with wheel balancers that have a 40 mm shaft (EEWB305C and D. EEWB304C and D)
- Optional EAA0255J33A Upgrade Kit for older Snap-on® Balancers with 28.5 mm shaft (EEWB304A and B and EEWB305A and B)

EEWB3-1 Car, Lt. Truck and SUV Pin Plate Kit (Blue-Point®). EEWB3-2 Lt. Truck and SUV Pin Plate Kit (Blue-Point). EEWB3-04 Stand for Pin Plate Kits.

### KRD401A Wheel Weight Cabinet.

- Storage for a wide assortment of wheel weights
- 36 compartments, each measuring 3 7/8" x 3 7/8"

### WWPR13A Right Angle Wheel Weight Pliers.

- Easily removes and replaces wheel weights as well as cutting and crimping
- Made of heat strengthened steel
- Comfortable vinvl handle grips and replaceable hard plastic hammer tip

### WWH13LG Wheel Weight Hammer.

- Designed for use on steel and zinc clip on wheel weights
- Soft hammer face to avoid scratches and dings
- Solid Nuplaglas® handle resists most shop chemicals and has a nonslip grip
- · Replaceable cold rolled steel hook assembly to ensure long service life
- Works best on U.S. brands that use traditional dimension dismounting holes

### WWH13SM Wheel Weight Hammer.

- Designed for use on steel and zinc clip on wheel weights
- Soft hammer face to avoid scratches and dings
- Solid Nuplaglas handle resists most shop chemicals and has a nonslip arip
- Replaceable cold rolled steel hook assembly to ensure long service life
- Specially designed small diameter dismounting hook is used on wheel weights with smaller dimension dismount holes

### WWPR13-3 Replacement Hammer Tip.

• For WWPR13A



Component Description	EEWB3-1	EEWB3-2
EEWB3-11 Adaptor Plate #1	•	
EEWB3-12 Adaptor Plate #2	•	
EEWB3-13 Adaptor Plate #3	•	
EEWB3-14 Adaptor Plate #4	•	
EEWB3-21 Adaptor Plate SUV Lt Trk #1		•
EEWB3-22 Adaptor Plate SUV Lt Trk #2		•
EEWB3-01 Stud A (1 each)	8X	6X
EEWB3-02 Stud B (1 each)	8X	6X
EEWB3-03 Stud C (1 each) 5	5X	
EEWB3-04 Stand	Optional	Optional

TECHNICAL SUPPORT 1-800-242-6687

# **Motorcycle Wheel Balancer and Tire Changer**

### **EEWB308D Motorcycle Wheel Balancer.**

- · Quickly, easily and accurately balance motorcycle tire and wheel assemblies
- Hand spin operation with features similar to EEWB305D

#### **EEWH310B Motorcycle Tire Changer.**

- Configured to change tires on most motorcycle wheels
- Raised clamping laws to allow for hub clearance
- Optional safety restraint arm provides additional tire/ wheel retention when seating beads

3		
Specifications	EEWB308D	
Accuracy, oz (grams)	0.10 (2.8)	
Cycle Time (15" wheel)	<8 seconds	
Shaft Measuring Speed	<100 rpm	
Shaft Capacity, lbs (kg)	60 (27.2) maximum	
Rim Diameter, inches (mm)	6-30 (152-762)	
Rim Width, inches (mm)	1-20 (25-508)	
Tire Diameter, inches (mm)	44 (1,117) maximum	
Tire Width, inches (mm)	16 (406.4) maximum	
<b>Electrical Requirements</b>	120 V AC, 60 Hz	
Shipping Weight, Ibs (kg)	225 (102)	





LLWBSOOD	EEWH310B
	Motorcycle Tire Changer
Outside Clamping Range, inches	8-21 <sup>†</sup>
Inside Clamping Range, inches	12-20
Rim Width, max, inches	12/10 <sup>†</sup>
Tire Diameter, max, inches	39
Tire Width, max, inches	10/13*
Bead Breaking Width, max, inches	13
Bead Breaking Force, lbs @150 psi	3,300
Air Requirement, psi	140-170
Voltage Requirements	120 V AC, 60 Hz
Net Weight, lbs	306
Overall Height, inches	67 H x 30 W x 28 D
+40,401 0,451 15,45,041 1	

<sup>† 10-18&</sup>quot; car, 8-15" scooter, 15-21" motorcycle

TECHNICAL SUPPORT 1-800-225-5786

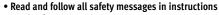












· Read safety precautions on pages W1 to W4

<sup>\* 13&</sup>quot; car. 10" motorcycle

# **TIRE CHANGERS**

# **Tire Changers**

Snap-on® Tire Changers come in a variety of models to fit each individual shop's needs. The Tilt Back Tire Changer handles a variety of tire sizes and configurations, with a tower that tilts back to allow for wider tire and wheel assemblies and features a Pneumatic Bead Assist arm to assist the operator when mounting low profile tires. The Workhorse Tire Changer has basic features for a shop that is new in the tire business or as an additional unit in a high volume shop.



EEWH306A



EEWH311A

# Common Features for all Snap-on Tire Changers

- Mount/dismount head adjusts to correct position and is designed to avoid direct contact with the rim
- 6 point contact rim clamping jaws provide additional slip resistance. Side mounted bead breaker for virtually all rim configurations
- Side mounted bead breaker for virtually all rim configurations
- Plastic rim protection guards on the clamping jaws along with the mount/dismount head minimize wheel damage
- Provides added air assistance for seating stubborn beads

- Twin cylinder clamping offers more clamping force and provides a uniform clamping pressure on the rim
- Optional accessories available to increase clamping capability (+4 adaptors)
- Optional safety restraint arm provides additional tire/wheel retention when seating beads

	EEWH306A	EEWH311A	EEWH317A	EEWH315A
	Workhorse Tire Changer	Tilt Back Tire Changer	Deluxe Tire Changer	Deluxe AIR/AIR Tire Changer
Туре	Swing	Tilt	Swing	Swing
Pneumatic Bead Assist	EAA0329G33B*	Included	Included	Included
Outside Clamping Range, inches	10-18	10-24	10-24	10-24
Inside Clamping Range, inches	12-20	12-24	12-24	12-24
Rim Width, max, inches	12	14	13	13
Tire Diameter, max, inches	39	39	39	39
Tire Width, max, inches	13	14	13	13
Bead Breaking Force, lbs @150 psi	3,300	3,300	3,300	3,300
Air Requirements, psi	140-170	140-170	140-170	140-170
Voltage Requirements	120 V 60 Hz, 20 A	120 V 60 Hz, 20 A	120 V 60 Hz, 20 A	1
Net Weight, lbs	449	719	661	558
Overall Height x Width x Depth, inches	68 x 41 x 49	69 x 41 x 55	75 x 39 x 45	75 x 39 x 45
+4 Adaptors	ST4029446*	EAA0332G91A*	EAA0304G76A*	EAA0304G76A*
Safety Restraint Arm	EAA0270J11A*	EAA0304G72A*	EAA0270J14A*	EAA0270J14A*

<sup>\*</sup> Optional

TECHNICAL SUPPORT 1-800-225-5786

# Tire Pressure Monitoring

Snap-on® Tire Pressure Monitoring tools work with most foreign and U.S. systems that are both direct and indirect. Whether it is an automotive repair shop, tire store, body shop, fleet repair facility or lube bay,

these TPM tools are essential to servicing the customer's needs.

### **TPMS3 Tire Pressure Sensor System Tool Kit.**

- Covers U.S., European and Asian vehicle TPM systems
- Model specific sensor testing and verification
- On screen display of sensor information
- Includes database of step by step vehicle specific relearn procedures
- Properly reset TPM systems after sensor replacement or tire rotation
- Reprogram sensor IDs on Asian vehicles through OBDII connector
- Tests key FOBs for proper signal strength
- · Updateable via USB and PC
- Built-in Li-ion rechargeable battery
- Kit includes TPMS3 Tool, Charging Cradle, OBDII Connector and Cable, Magnet and USB Cable
- $\epsilon$



Diagnoses and tests **OE TPM Sensors** 



Make, model and year specific relearn procedures



**TPMS2 Tire Pressure Monitor Tool.** 

sensor activation and testing

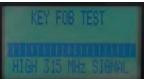
· Simple to use activation and resetting of TPM sensors and systems · Vehicle selection interface quickly configures the TPMS2 for fast

Interactive PC Software included to display vehicle specific TPMS

Note: Requires Bluetooth capable PC for wireless communication

service procedures and sensor specific information Wireless communication capability via Bluetooth® technology\* between the TPMS2 and PC for information transfer or with

Kit includes TPMS2 Tool, PC software and USB Cable



Wireless Key FOB test



**TECHNICAL SUPPORT** 1-888-621-8767









Repair procedures by vehicle

### TPMS2EZ EZ-Sensor® **Programming Module** Update Kit.

supplied USB cable

- Provides the ability to program EZ-sensor using TPMS2
- · Used to replace a sensor with low battery life or one that is nonfunctioning
- Also used to install a duplicate set of sensors in a summer/winter set of tires
- · Minimize sensor inventory costs, one sensor for multiple vehicle models Note: Sensor and TPMS2 not included









Optional TPMS2 Accessories

• Charges TPMS2 when not in use

TPMS2-5 TPMS2 Charging Station.

**TECHNICAL SUPPORT** 

1-888-498-7671





- · Read and follow all safety messages in instructions
- · Read safety precautions on pages W1 to W4

# TIRE AND WHEEL

### **TPMS Tools**







# **TPMS Tools**

## TPMS3BOX TPMS Sensor Bench Tester.

- Tests TPMS sensors without having to mount in a tire/wheel assembly
- · Pressurizes sensor to simulate actual conditions
- Used with Tire Pressure Monitoring System Tools
- · Saves time in mounting/dismounting tire

### **QDTPMS Valve Core Torque Tool.**

- Specifically designed to be used as a core remover and precise installer for TPMS tire valve to eliminate risk of damaging expensive TPMS sensors
- Preset to 4 ft lb to prevent over or undertorquing
- Preset torque setting also helps prevent valve core leaks that lead to low tire pressure and TPMS alerts

### VSC4KT TPMS Valve Stem Cap Set.

- Quickly evacuate air without removing Valve Cores
- Replace a standard sized valve cap with this tool, will depress the valve stem for rapid deflation
- Return your wheels to the original position without resetting the TPMS
- Caps are clearly marked for easy identification for the reinstall
- Blue anodizing makes caps easily visible on most rims or tires
- Knurling provides sure grip even in greasy situations
- Back side of the tool allows for valve cap storage while the tools are in use
- Vinyl holder included to keep valve stem caps together when not in use
- Kit includes VSC4KT-1, VSC4KT-2, VSC4KT-3 and VSC4KT-4 Valve Stem Caps

# **Inflators**



### Inflators

# TPGDL1000 Digital Tire Pressure Gauge/Inflator (Blue-Point®).

- Measures from 5 to 150 psi
- Displays reading in psi, BAR kPa or kg/m
- 1/4" NPT fitting for inlet air connection
- Shockproof rubber guard to prevent damage when dropped
- On/Off button for display light
- · Clip on air chuck and dual foot chuck included
- Batteries included
- ±1% accuracy



# TPGIF1600 Tire Gauge and Inflator (Blue-Point).

- 10 to 120 psi in 2 lb increments
- 1/4" FNPT air inlet fitting
- Swiveling hose for easy gauge positioning
- · Zinc body with heavy duty brass valves
- Easy to read sight glass featuring psi and kPa readings
- ±1% accuracy



#### - ----

# TGIFS1 Tire Gauge Inflator.

- Snap-on® exclusive design
- Heavy duty billet machined aluminum body
- Dual swivel point hose for ease of use
- 20 to 160 psi range
- Modular design for easy replacement of worn parts
- Double sealed scale avoids contamination from air supply
- ±1% accuracy



## TIFHD160 Truck Tire Inflator (Blue-Point).

- Inflate heavy duty truck tires quickly and safely
- Gauge measures from 6 to 160 psi (40 to 1100 KPA)
- Includes 14" Dual Foot Budd Chuck with locking threads
- High quality 48" extended rubber hose (Tested to 300 psi)
- 1/4" NPT Brass fitting for inlet air connection
- 360° swiveling gauge for easy reading
- Rubber Gauge Guard for added shock resistance
- Rugged Geared Gauge Construction (not bourdon tube like most dial gauges) for added durability
- 48" hose and chuck allow a tire technician to stand outside of the trajectory zone as noted in OSHA1019.177 standards, servicing multipiece and single piece rim wheels. This standard requires a "sufficient length of hose" exist between the chuck and valve

# Tire Pressure Gauges (Blue-Point®)



## **Digital Tire Pressure Gauges** TPGD150 Digital Tire Pressure Gauge.

- Ranges from 5 to 150 psi in 0.5 increments
- Flexible 11" braided hose with dual foot chuck helps access hard to reach tire valves
- · Black ribbed gauge guard provides a sure gripping surface and helps protect the gauge if dropped
- · Auto shutoff extends battery life
- 1% accuracy



### TPGDL150 Digital Tire Pressure Gauge.

- Backlit for easier measurement reading
- · Auto shutoff extends battery life
- 5 to 150 psi reading
- Shockproof rubber guard to prevent damage when dropped
- Molded finger grips for added comfort
- · Heavy die cast faceplate
- · Includes steel belt clip and batteries
- ±1% accuracy







TPRG60

# **Dial Type Pressure Gauges** TPRG60 TPMS/Racing Tire Gauge.

- Ideal for applications requiring precise readings like TPMS gauge testing and performance driving
- PowerFlex<sup>™</sup> movement is both durable and accurate
- ±1% accuracy

## PG160 Dial Type Pressure Gauge.

- Calibrated in 1 psi increments from 10 to 160 psi
- 2 1/2" diameter dial gauge with shock resistant gauge movement
- 12" flex hose for hard to reach valves (16" with chuck)
- Bleeder valve to relieve excess pressure to achieve proper inflation
- · Dual foot chuck
- ±1% accuracy

#### **TPDLIF150 Dual Tire Inflator.**

- Fill 2 large truck tires simultaneously
- Set desired pressure, lock on the air chucks and walk away
- System includes (2) 4' flexible hoses and 2 lock on air chucks (1 standard, 1 dual foot)
- Large, easy to read air gauge/regulator allows user to set desired pressure
- Gauge is calibrated in 5 psi increments from 0 to 150 psi and 0.2 kg/cm<sup>2</sup> increments from 0 to 10 kg/cm<sup>2</sup>
- · Includes mounting bracket

### **TPG15 Low Pressure Tire Gauge.**

- Low pressure gauge for ATVs, lawnmowers, motorcycle fork tubes
- Unique design offers superior shock resistance: movement from socket is isolated, reducing effects of shock
- · Silicone dampened gears and enhanced vibration dampening design cushion movement for extended gauge service
- Clear and concise, easy to read 1 to 15 psi gauge displays in 1/4 psi increments
- ±1% accuracy

Best results when tire gauge is used in the middle of pressure scale \* 1% accuracy = 1% of pressure scale







- Do not exceed rated pressure
  - Read safety precautions on pages W1 to W4

# TIRE AND WHEEL

# **Tire Pressure Gauges**



Pencil Tire Pressure Gauges PGP45LQ PGP120 Pressure Gauge (Blue-Point®).

- Calibrated in 2 psi increments from 10 to 120 psi and in 10 kPa increments from 100 to 800 kPa
- · Chrome body
- 1% gauge accuracy
- 5 3/4" long

# PGP45LQ Air Liquid Pressure Gauge (Blue-Point).

- Calibrated in 1 psi increments from 5 to 45 psi
- Can be used on any standard or liquid solution filled tires
- Spring retracts into gauge, causing pump action to expel tire liquid
- Chrome body
- 1% gauge accuracy
- 5 15/16" long

### PGPL150 Tire Gauge (Blue-Point).

- Calibrated in 2 psi increments from 10 to 150 psi
- Straight dual foot is well suited for Budd truck style tires
- 30° angle reverse foot assists in hard to reach areas
- · Includes hanging clip
- Chrome body
- 1% gauge accuracy
- 12" long

### PGP50 Pressure Gauge (Blue-Point).

- Calibrated in 1 psi increments from 5 to 50 psi and 5 kPa increments from 50 to 350 kPa
- Chrome body
- 1% gauge accuracy
- 5 3/4" long

### TGS1 Sight Glass Test Gauge.

- Gauge is accurate enough to use for TPMS applications
- Rugged sight glass design for better durability and readability
- 1% Master Gauge Accuracy, with certificate of accuracy included
- Durable billet machined 6061-T6 aluminum body
- Dual Foot Budd Chuck
- 10 to 160 psi
- Unique comfort grip for easy use
- Can be calibrated in the field (Instruction included)

Best results when tire gauge is used in the middle of pressure scale

Note: 1% accuracy = 1% of pressure scale

## **Closed Air Chucks**

# Closed Air Chucks GA296B Angled Air Chuck (Blue-Point).

- 1/4"-18 female NPT
- Rubber gasket included

# GA358 Air Chuck.

- Screwdriver style black handle
- Thread size of 1/4" NPT
- Overall length of 7"

### GA359 Dual Foot Air Chuck.

- Easily access hard to reach inner tandem wheels
- Tilt lock feature locks onto the valve
- 30° reverse angle chuck can be used on outside tires
- Screwdriver style handle
- Thread size of 1/4" NPT
- . Overall length of 12"

# For use on air lines only. Do not use on inflators.



# YA173A Clip on Style Angled Air Chuck (Blue-Point).

- 1/4"-18 female NPT
- Spring loaded, trigger operated valve stem clip
- Maximum operating pressure is 200 psi GA356B Dual Foot Air Chuck (Blue-Point).
- 1/4"-18 female NPT with 5/8" hex nut
- Straight foot works well on Budd style wheel rims
- 30° angle reverse foot is helpful in limited access situations
- 6 1/2" long

# GA460B Dual Foot Air Chuck (Blue-Point).

- 1/4"-18 female NPT
- 6 1/8" long

# TPDF14 Long Reach Dual Foot Air Chuck (Blue-Point).

- 14" Long reach dual chuck
- Straight on chuck with 30° reverse chuck
- All metal components
- Work well for reaching dual wheel truck tires
- Compatible with Snap-on® and Blue-Point inflators

# **Open Air Chucks**



### GAOC356

### Open Air Chucks GAOC356 Dual Foot Air Chuck (Blue-Point).

- 1/4"-18 female NPT with 5/8" hex nut
   Straight foot works well on Budd style wheel rims
- 30° angle reverse foot is helpful in limited access situations
- 6 1/2" long

# For use on inflators only. Do not use on air lines.



# GAOC460 Dual Foot Air Chuck (Blue-Point).

- 1/4"-18 female NPT
- 6 1/8" long



## TPDFOC14

# TPDFOC14 Long Reach Dual Foot Air Chuck (Blue-Point).

- 14" Long reach dual chuck
- Straight on chuck with 30° reverse chuck
- All metal components
- Work well for reaching dual wheel truck tires
- Compatible with Snap-on and Blue-Point inflators

Maximum rating on all Snap-on air chucks is 150 psi

## **Wheel Torque Tools**



#### Valve and Stem

#### TR107A Valve Core Tool.

- For installation and removal of standard valve cores
- · Screwdriver style handle
- 6 1/4" long

#### TR108 Valve Core Tool.

- Similar to TR107A.
- 4 3/4" long

#### TR109 Valve Core Tool.

- Use to remove or replace valve cores on air conditioning systems (large bore)
- 6 3/4" long

## TR117O Valve Core Remover/Installer Tool.

- Valve core remover/installer tool
- 6 1/4" long

## **Tread Depth Gauge**

#### GA599A Tread Depth Gauge.

- Measures to a depth of 1" in 1/32" increments
- · Plastic body with aluminum probe and sliding gauge
- Includes pocket clip

#### TDG1 Tread Depth Gauge.

Same as the GA599A but the gauge is color coded for easy tread wear diagnosis.

#### VT1A Valve Stem Inserter.

- Simplify installation of valve stem in tubeless tire rim
- Notched shank to accommodate various rim styles
- · Comfortable screwdriver type handle

## GA143B Valve Core and Stem Tool (Blue-Point®).

- 4 function tool inserts and removes cores, taps inner stem threads and chases outer threads
- 1 7/8 x 13/16"

## VT14 Universal Valve Core Tool (Blue-Point).

- Double ended bit removes and installs large and small valve cores
- Reverse the double ended wrench in the tool body to fit both large and small valve cores
- Use the cup end to remove valve caps

#### **QDTPMS Valve Core Torque Tool.**

- Specifically designed for TPMS<sup>®</sup> tire valve cores to eliminate risk of damaging expensive TPMS sensors
- Preset to 4 in lbs to prevent over or under torquing and valve core leaks that lead to low tire pressure and TPMS alerts









## Wheel Torque Tools (Blue-Point®)



**BTQS500** 



**BTQS600** 



**BTQS1000** 



BTQSHD400



305TSKTA

## **Torque Sticks/Standard Duty**

- Strobe marks stop turning at precisely the right torque
- Engineered for rugged professional environments
- Manufactured with heat treated Swedish spring steel in a solid one piece design
- Sticks are individually packaged
- Sets come with a color coded torque chart showing the correct stick for nearly every foreign and U.S. vehicle
- · Lifetime guarantee

Set Contains:

Stock No.	Size, mm	Color	Torque Limit, ft IbsDrive, inches				
BTQS12A	21	Brown	100	1/2			•
BTQS12AA	22	Orange	75	1/2		•	
BTQS12B	21	Lt. Brown	80	1/2	•		•
BTQS12BB	21	Charcoal	147	1/2	•		•
BTQS12C	19	Gray	100	1/2	•		•
BTQS12D	21	Black	60	1/2			
BTQS12E	19	Blue	80	1/2			•
BTQS12EE	22	Turq.	140	1/2	•		•
BTQS12F	19	Yellow	65 1/2			•	
BTQS12G	17	Red	80	1/2		•	
BTQS12H	17	Green	55	1/2		•	
BTQS12HH	22	Medium Brown	110	1/2			
BTQS12I	22	White	120	1/2	•		•
BTQS12K	17	Lt. Yellow	113	1/2		•	
BTQS12KK	21	Red-Orange	110	1/2			
BTQS12MM	17	Off White	90	1/2		•	
BTQS12NN	19	Lt. Tan	90	1/2			
BTQS1200	19	Quartz	120	1/2			
BTQS12T	24	Lt. Green	140	1/2			•
BTQS12UU	14	Mud	80	1/2			
BTQS12XX	21	Lt. Purple	160	1/2			•
BTQS12Y	22	Lt. Blue	100	1/2			•

BTQSWC10 Wall Chart. Color wall chart for service bays

Sets shown include storage case

## **Torque Sticks/Heavy Duty**



Stock No.	Size inches, (mm)	Color	Torque Limit, ft lbsD	rive, inches	
BTQSHD34114	11/4	HD Red	250	3/4	
BTQSHD3433M	(33)	HD Brown	475	3/4	
BTQSHD1114	11/4	HD Red	250	1	•
BTQSHD133M	(33)	HD Brown	475	1	•
BTQSHD1112	11/2	HD Black	475	1	•
BTQSHD11316	13/16 SQ.	HD Yellow	475	1	•

Set shown includes storage case

## **Torque Sticks/Special Application**



Stock No.	Size, mm	Color	Torque Limit, ft lbs	
TSS2TT	22	Pink	150	•
TSS2QQ	22	Salmon	95	•

#### **Torque Extensions**

- Help eliminate overtorqued lug nuts, broken or damaged studs and distortion of rotors, drums and wheels
- Color coded low friction sleeve for quick reference
- · Cold formed special alloy steel for greater accuracy and strength
- 1/2" male and female square drive for use with appropriate impact socket
- Female square drive designed for improved retention on impact wrenches
- Male square drive has friction ring for secure socket retention

Set Contains:

Stock No.	Color	Torque Limit, ft lbs	
TSKT65A	Yellow	65	•
TSKT80A	Blue	80	•
TSKT100A	Gray	100	•
TSKT120A	White	120	•
TSKT140A	Teal	140	•

Set shown includes storage case

LSR2500PL

## Lug/Retaining Nut Sockets (Blue-Point®)

### Lug Nut Sockets

#### LSR1500 Standard/Twist Wheel Flip Socket Set.

- 5 sockets for use on the most popular lug nut sizes (17, 19 mm, 3/4", 21 mm, 13/16" and 7/8")
- 6 point Flank Drive® wrenching system at one end and a 6 fluted twist socket for removal of damaged wheel lugs at the other end
- Flip the socket when encountering a damaged head
- · Knurling identifies twist socket end
- Sockets and 3" extension are all 1/2" drive for use with hand drivers or impact wrenches
- · Black oxide finish
- Storage case

#### LSR2000 Thinwall Wheel Flip Socket Set.

- Covers the 4 most popular lug nut sizes
- (3/4 and 13/16", 19 and 21 mm) Flank Drive wrenching configuration
- 1/2" square drive located at center of socket
- Use with hand driver or impact wrench
- Includes LSR1150 and LSR1250 lug nut sockets and 3" extension in a custom case
- · Black industrial finish



LSR1500

LSR2000

#### LSR2000PLUS Lug Nut Flip Socket Set.

- 3 flip sockets in 3/4 and 13/16, 7/8 and 15/16" plus 19 and 21mm
- All sockets are 3" long
- 1/2" square drive located at center of socket
- · Use with hand driver or impact wrench
- · Custom case
- Black industrial finish on all components
- Requires use of optional LSR1000EXT extension (not included)

LSR2000PLUS

#### LSR1150 Thinwall Wheel Flip Socket.

- Thinwall wheel flip socket covers 3/4 and 13/16" wheel lug sizes
- Use with hand driver or impact wrench
- 3" long

LSR1150

#### LSR1250 Thinwall Wheel Flip Socket.

- Thinwall wheel flip socket covers 19 and 21 mm wheel lug sizes
- Use with hand driver or impact wrench

#### LSR2500 Lug/Lock Flip Twist Socket Set.

- Quickly and easily remove damaged wheel lugs (6 flute end) or damaged wheel locks with damaged or lost keys (12 flute end)
- 1/2" square drive located at center of socket
- Use with hand driver or impact wrench
- Includes LSR2501 and LSR2502 lug/lock sockets and 3" extension in a custom case



#### LSR2501 Lug/Lock Flip Twist Socket.

- 3/4" 19 mm twist socket quickly and easily removes damaged wheel lugs (6 flute end) or damaged wheel locks with damaged or lost keys (12 flute end)
- Use with hand driver or impact wrench
- Black industrial finish: 2 5/8" long



LSR2501

#### LSR2502 Lug/Lock Flip Twist Socket.

• Same as LSR2501 except in 7/8" size

#### LSR2503 Lug/Lock Flip Twist Socket.

• Same as LSR2501 except in 17 mm size

#### LSR2500PLUS Lug/Lock Flip Twist Socket Set.

- Quickly and easily remove damaged wheel lugs (6 flute end) or damaged wheel locks with damaged or lost keys (12 flute end)
- 1/2" square drive located at center of socket
- · Use with hand driver or impact wrench
- Includes LSR2501, LSR2502 and LSR2503 lug/lock sockets in a custom case
- · Black industrial finish
- LSR1000EXT is optional 3" extension for the set

#### LSR1450 Thinwall Wheel Flip Socket.

- Covers 17 and 19 mm wheel lug sizes
- Flank Drive wrenching configuration
- 1/2" square drive located at center of socket (requires optional extension LSR1000EXT)
- Ideal companion to LSR2000 and LSR2000PLUS
- Black industrial finish
- Major O.D.: 1.03" (26.3 mm) Minor O.D.: 0.94" (23.9 mm)
- Length: 3" (76.2 mm)

#### LSR1580 Thinwall Lug Nut Flip Socket.

- 21 and 22 mm socket size: 3" long
- Use with hand driver or impact wrench
- Requires use of optional LSR1000EXT extension
- 1/2" square drive located at center of socket

#### LSRM2000 Metric Flip Socket Set.

- Includes LSR1580 and LSR1450 sockets plus LSR1000-EXT 3" extension
- Designed for 2005 and later vehicles
- Includes 17, 19, 21 and 22 mm sizes

Applications: Dodge® Pickup 1500, Dodge SRT-10, Honda® Odyssey, Land Rover® L3, Range Rover and Sport, Lexus® LX470 and Toyota® Land Cruiser vehicles

#### LSR1560 Flip Socket.

- 7/8 and 1" socket size: 3" long
- Use with hand driver or impact wrench
- Expands LSR2000 and LSR2000PLUS sets
- Requires use of LSR1000EXT extension (not included)
- 1/2" square drive located at center of socket

Applications: (7/8") Chevy®, GMC® vans, Dodge 1500 Ram Pickup, Ford® E250/350, Ford Super Duty, Hummer® H1, Lincoln® Blackwood, Lexus LX470, Toyota Land Cruiser, Jaguar® XJ Series, (7/8 and 1") Chevy/GMC Pickups and SUVs, (1") Plymouth® 1 ton vans

#### LSR1570 Flip Socket.

- 15/16 and 1 1/16" socket size: 3" long
- Use with hand driver or impact wrench
- · Expands LSR2000 and LSR2000PLUS sets
- Requires use of optional LSR1000EXT extension
- 1/2" square drive located at center of socket Applications: (15/16") Dodge Ram 2500, 3500, (1 1/16") Land Rover, Range Rover Discovery II, Ford E300/350, Ford F300/350











## TIRE AND WHEEL

### **Lug/Retaining Nut Sockets**



· Use with socket retainers

#### YA1005C Locking Lug Nut Remover Kit (Blue-Point®).

- Removes locking lug nuts and locking hubcaps on most vehicles including the new Chrysler® hubcap locks. Updated set includes new turbo lug nut socket to easily remove damaged 3/4", 13/16", 19 and 21 mm lug nuts
- Tapered swirl in socket bites into damaged lug nut for quick removal
- Intended for hand use only, except for turbo lug nut socket, which should be used with an impact wrench

#### 2003LN Double Ended Lug Nut Socket Set.

 Set includes A98A socket, A98M socket, and IMX32B extension bar (3 pcs)

#### A98A 6 Point Lug Nut Socket.

- 1/2" square drive is recessed between (2) 6 point wrench openings: 3/4 and 13/16"
- Length 2 3/4"; Diameter 13/16"

#### A98M 6 Point Socket.

- 1/2" square drive is recessed between (2) 6 point wrench openings: 19 and 21 mm
- Length 2 3/4"; Diameter is 13/16"

#### IMX32B Impact Extension.

- 1/2" square drive, 5/8" shank diameter; 3" long
- Snap ring locking mechanism

#### TSR1000 Lug Nut Socket Set (Blue-Point).

- Set includes TSR500 and TSR600 lug nut sockets plus YA1005-7 extractor punch
- Use TSR500 on late model OEM and aftermarket lug nuts
- Dual sided design allows use on 3/4", 13/16", 19 and 21 mm lug nuts
- TSR600 removes most locking lug nuts and has a 2 in 1 flip socket design
- For use with 1/2" drive tools
- Fluted socket design provides extra grip

#### TSR500 Lug Nut Remover Socket (Blue-Point).

- Use on late model OEM and aftermarket lug nuts
- Dual sided design allows use on 3/4", 13/16", 19 and 21 mm lug nuts
- Use with 1/2" drive impact wrench
- Fluted socket design helps remove most stubborn lug nuts
- Includes extractor punch

#### TSR600 Locking Lug Nut Socket (Blue-Point).

TSR1230

- 1/2" square drive is located in the center of the socket
- Use included pin to dislodge lug nut if wedged in socket
- Removes most locking lug nuts and has 2 in 1 flip socket design
- For use with impact wrench
- Fluted for extra grip

#### TSR700 Lug Nut Remover Socket (Blue-Point).

- Use on late model OEM and aftermarket lug nuts
- Dual sided design allows use on 7/8", 1", 22 and 25 mm lug nuts
- Use with 1/2" drive impact wrench
- 6 flute socket design helps remove most stubborn hex lug nuts

#### TSR800 Lug Nut Remover Socket (Blue-Point).

- Use on late model OEM and aftermarket lug nuts
- Dual sided design allows use on 7/8", 1", 22 and 25 mm lug nuts
- Use with 1/2" drive impact wrench
- 12 flute socket design helps remove most stubborn rounded lug nuts

#### TSŘ1230 Lug Nut Removal Socket Set.

- Set includes TSR1240, TSR1250, TSR1260 and TSR1270 Dual Flip sockets plus YA1005-7 Extractor Punch in custom vinyl bag
- Works great on lugs that are rusted, have missing caps or are missing caps altogether

#### TSR1240 Lug Nut Removal Socket.

• 21/21.5 mm socket, use for *Chrysler* and Dodge® applications

#### TSR1250 Lug Nut Removal Socket (Blue-Point).

- Dual flip 1/2" drive impact socket design
- · Removes lug nuts with missing or distorted caps
- 19.5 mm side fits distorted 19 mm chrome caps found on many GM® and Chrysler vehicles
- 18.5 mm side fits rusted lug nuts missing chrome covers

## TSR1260 Lug Nut Removal Socket. • 22/22.5 mm socket, use for *Dodge* 16 to 17" aluminum wheels

TSR1270 Lug Nut Removal Socket.
1 1/16"/27.5 mm socket, use for Range Rover and Land Rover applications

## **Lug/Retaining Nut Sockets**

SIMML210



**203FLSM** 

## Lug Nut Sockets (3/8" drive)



Stock No.	Square Drive, inches	Wrench size (mm)	Overall Length, inches	
FLSM1719	3/8	17 & 19	3	•
FLSM2122	3/8	21 & 22	3	•
FLS2426	3/8	3/4 & 13/16	3	•

#### Wheel Lock Sockets (Blue-Point®) LSR1000A Wheel Lock Removal Socket Set.

- Easily removes most lug nuts and wheel locks on most U.S. and import passenger vehicles and light trucks
- Use with hand driver or impact wrench
- Some sockets cover specific GM®, Ford® and Chrysler® applications
- Set includes 11 sockets, extension and extractor punch in storage case



LSR1000A

Long Lug Nut Sockets SIMML210 Lug Nut Socket.

- Long socket designed to fit lug nut applications where an extension would be needed
- Flank Drive® wrenching configuration where the socket grips the fastener on the flanks/flats increasing torque by up to 15 to 20%
- Forged from tough alloy steel to increase safety, impact sockets are heat treated to a lower hardness to add impact resistance and ductility
- One piece design



### Lug Nut Socket (Magazine Loading) (Blue-Point)

- Allow easy multiple lug nut removal up to 5 lug nuts at a time
- Eliminates rolling or lost lug nuts and wasted motion
- Ideal for use in tire and brake shops
- Adjust type 9,12 and 16 cu in air chambers that are equipped with 1/2 to 20" threaded rod and 3/4" nut

Stock No.	Wrench Size, inches (mm)	Square Drive, inches	Outside Dia., inches	Overall Length, inches
LMS24	3/4 (19)	1/2	1	5 <sup>5</sup> /16

## **Wheel Hangers**

Allow faster, safer and easier balancing of wheels when attempting to insert and tighten wheel bolts.

Stock No.	Thread Size	Hex Size, mm	Applications
WHM1	M12 x 1.5	10	Mercedes-Benz, BMW, Mini, Cadillac Catera, Chrysler Crossfire
WHS1	M14 x 1.5	15	Current Mercedes-Benz, current Dodge Sprinter trucks, Freightliner Sprinter trucks from 2002 to 2004
WHV1	M14 x 1.5	10	Volkswagen, Audi, Mercedes ML Class, BMW 7 and X5 Series, Porsche

WHM2 Wheel Hanger Set (Mercedes-Benz®/BMW®). Set of (2) WHM1 wheel hangers. WHS2 Wheel Hanger Set (Dodge®/Freightliner® Sprinter). Set of (2) WHS1 wheel hangers.

WHV2 Wheel Hanger Set (VW®/Audi®). Set of (2) WHV1 wheel hangers.

#### Torque Wrenches BRUTUS3R250D U.S. Adjustable Click Type Torque Wrench.

- Tougher for longer life cycle
- · Hourglass shaped cam: less friction reduces wear, retains lubricant
- Thrust bearing resists wear
- "Gorilla-Proof" positive stop prevents accidental disassembly (Caution: Do not wind below lowest scale mark)
- · Larger, tougher load screw helps prevent damage due to impact
- · High strength, sealed head
- Long handle provides more leverage
- ASME® specifications, traceable to N.I.S.T. at no charge











## **Lug/Retaining Nut Sockets**







**ANS1938** 



**ANS1900B** 





Use with a torque wrench to service truck wheel bearing lock nuts.

### Axle Nut Sockets (Blue-Point®)

	Stock No.	Nominal Size	Ctulo
1/oll Carrore Drive		2 1/2"	Style 6 Point
1/2" Square Drive	ANS1937	2 3/8"	6 Point
	ANS1939*		6 Point
24.11.2	ANS1938	2 3/4"	6 Point
3/4" Square Drive	ANS1900B	2 <sup>1</sup> /8"-54 mm	6 Point
	ANS1933A**	59 mm	6 Point
	ANS1901A	2 3/32"	6 Point
	ANS1920A	2 1/4"	6 Point
	ANS1902A	2 3/8"	6 Point
	ANS1903A	2 3/8"	8 Point
	ANS1921A*	2 1/2"	6 Point
	ANS1928A*	2 <sup>9</sup> /16"	6 Point
	ANS1905A	2 <sup>9</sup> /16"	8 Point
	ANS1904A	2 <sup>9</sup> /16"	6 Point
	ANS1922A	2 5/8"	6 Point
	ANS1923A	2 3/4"	6 Point
	ANS1924A	2 3/4"	8 Point
	ANS1926A	2 13/16"	8 Point
	ANS1932A	2 7/8"	6 Point
	ANS1906A	3"	6 Point
	ANS1907A	3"	8 Point
	ANS1908A	3 1/4"	6 Point
	ANS1909A	3 1/4"	8 Point
	ANS1910A	3 1/2"	6 Point
	ANS1911A	3 1/2"	8 Point
	ANS1925A	3 3/4"	8 Point
	ANS1927A	3 13/16"	8 Point
	ANS1912A	3 7/8"	6 Point
	ANS1913A	3 7/8"	8 Point
	ANS1914A	4"	6 Point
	ANS1915A	4 1/8"	6 Point
	ANS1916A	4 3/8"	6 Point
	ANS1917A	4 3/8"	8 Point
	ANS1918A	4 7/8"	6 Point
	ANS1919A	4 7/8"	8 Point
	ANGIGION	7 /0	O I OIIIL

Fits special "rounded" hex nuts on Dana axles of some Ford trucks.

GM® Axle	Nut Set	(1/2"	' Driv	<u>'e)</u>	Set Conta	ains:	m
Stock No.	Size, mm	A	В	C	D	E	
SIMM290	29	41.3	41.3	71.6	88.9	21.3	•
SIMM300	30	42.9	42.9	71.1	88.9	21.6	•
SIMM340	34	49.3	44.5	72.8	88.9	22.6	•
SIMM350	35	50.8	45.8	72.8	88.9	22.9	•
SIMM360	36	50.8	45.8	72.8	88.9	22.9	•





S6109A

S8695C

S6146

#### S6109A Axle Nut Socket 6 Lug.

- For front wheel bearing retaining nut on 3/4 ton vehicles with heavy duty suspension
- Designed for use on GM, Ford® and Dodge® trucks with Dana® 70 Series axle
- 1/2" square drive: 3 3/4" long
- · Industrial finish

#### S8695C Axle Nut Socket 4 Lug.

- 1/2" square drive: 3 3/4" long
- For 1/2 ton vehicles with manual locking nuts
- Use on front wheel bearing retaining nut on Dana 44 Series Axle used on 1959 and later GM, Ford, Dodge, and AMC®
- · Industrial finish
- Railroad applications: use to install or remove point detector bushing found on WABCO-M23B switch machines

#### S6146 Axle Nut Socket 4 Lug.

- For front wheel bearing retaining nut on 3/4 ton vehicles with Dana 60 Series axle used on GM, Ford and Dodge trucks
- 1/2" square drive: 3 3/4" long
- Industrial finish

## **Spanner Sockets**



ANS1929A

For use with a torque wrench when servicing Chevrolet®, GM and Ford axles.

Stock No.	Square Drive, inches	No. of Lugs	Outside Dia., inches	Applications
ANS1929A*	3/4	6	2 5/8	Chevy/GMC with 5,200 and 7,200 lb axles.
ANS1930	3/4	6	2 7/8	Chevy/GMC with 11,000 and 13,500 lb axles.
ANS7269A	1/2	4	2 3/4	1985 and later Ford F250/F350 with floating rear axle.
*Blue-Point				

<sup>\*\*</sup> For 1/2 ton vehicles with automatic locking nuts. Designed for late model Ford vehicles. 3/4" square drive, 59 mm nominal size. Industrial finish.





SIMDM300





**Axle Nut Sockets** 

# Special Application Axle Nut Sockets, mm (1/2" Drive) SIMDM300 12 Point Axle Nut Socket.

• 1/2" square drive

Applications: Axle nut removal for Toyota®: Avalon, Camry,

Highlander and Matrix Lexus®: ES300

Pontiac®: Vibe

VW®: Beetle, Jetta and Golf (1999 and later)

Dodge®: Dodge/Freightliner Sprinter vans with 215 mm rear axle (2004 and newer)

Applications: automatic transmission tail output shafts for

Chrysler®: 300C and Crossfire (2004)

Dodge®: Magnum (2004)

Jeep®: Grand Cherokee V6 models (2005) Mercedes®: Many years of coverage



SIM540A

## Special Application Axle Nut Sockets, inches SIM540A 6 Point Axle Nut Socket.

- Remove or install 1996 and later Dodge truck axle nuts
- Or use on other truck and bus wheel applications
- Flank Drive® wrenching design
- 1/2" square drive

# Applications: Flange nuts on transmission drive shaft and pinion shaft differential BMW® 3 series E90.

IMDM390 12 Point Metric Shallow Impact Socket.

- Use on front axle hub of 2007 Toyota Tundra 4WD
- 1/2" drive

#### IMDM320 12 Point Metric Shallow Impact Socket.

1/2" drive applications:

Drive shaft nuts - VW Touareg 2003 and later

Axle nuts - Mercedes W140 chassis 1992 to 1999 SC and SL Class

Axle nuts - Porsche® Boxster, Cayenne and 944

Axle nuts - BMW X3, X5 and X6 Series 2007 and later

Stock Number	Size	Style	A	В	C	D	E
SIMDM300	30 mm	12 point	-	_	64 mm	88.9 mm	22.2 mm
IMDM320	32 mm	12 point	45.7 mm	45.7 mm	36.8 mm	50.8 mm	20.6 mm
IMDM390	39 mm	12 point	53.8 mm	39.6 mm	36.8 mm	50.8 mm	22.3 mm
SIM540A	1 11/16"	6 point	2 1/2"	1 <sup>5</sup> /8"	2 7/8"	3 1/2"	7/8"



SPS10

### **Shackle Pin Impact Sockets**

 Oval shaped wrench opening services shackle pins on International® and Kenworth® semi tractors

**SPS10 Shackle Pin Socket.** 1/2" square drive. Socket opening is 21/32" x 1 3/32". 1 3/4" long.

**SPS11 Shackle Pin Socket.** 1/2" square drive. Socket opening is 21/32" x 1 17/32". 1 3/4" long.

## **General Lug Nut Usage**

Lug Nut Size	3/4" Drive	1" Drive	Applications
7/8" Hex Deep	SIM282	_	Medium to light truck general usage
15/16" Hex Deep	SIM302	_	Medium to light truck general usage
1" Hex Deep	SIM322	_	Medium to light truck general usage
1 1/16" Hex Deep	SIM342	SIM343	General usage, <i>Ford</i> F700 8 hole wheels
1 1/8" Hex Deep	SIM362	_	Various
1 3/16" Hex Deep	SIM382	SIM383	Various
1 1/4" Hex Deep	DW402C*	SIM403	Heavy duty Dayton style trailers, spoke wheel type
1 5/16" Hex Deep	SIM422	SIM423	Various
1 1/2" Hex Deep	SIM482	SIM483B	Stud piloted Budd style wheel applications
1 3/4" Hex Deep	SIM562	SIM563	Construction and off road equpment applications
<sup>13</sup> /16" Square	BW626A	BW726A	Inner nuts on Budd style wheel applications
30 mm Hex Deep	SIMM302	SIMM303	Medium duty trucks, small 8 lug wheel sizes
32 mm Hex Deep	SIMM322	SIMM323	European truck applications
33 mm Hex Deep	SIMM332	SIMM333	General hub piloted wheel applications
35 mm Hex Deep	SIMM352	_	Import truck applications
36 mm Hex Deep	SIMM362	_	Import truck applications
38 mm Hex Deep	SIMM382	SIM383	Import truck applications
41 mm Hex Deep	SIMM412	_	Stud piloted Budd style wheel applications
1 1/2" Hex - 13/16" Square	BWD482	BWD483	Stud piloted Budd style wheel applications
41 mm Hex - 21 mm Square	BWDM412	-	Stud piloted Budd style wheel applications

<sup>\*</sup> Thin walled extra deep.

# Heavy Duty Truck Wheel Lug Sockets HDLUGSET1 Heavy Duty Lug Socket Set.

- Includes: SIM383, SIM403, SIM483B, SIMM333, SIMM383 plus BW726A and BWD483
- Flank Drive wrenching system
- Alloy steel combines strength and durability
- All sockets 1" square drive

### HDLUGSET2 Heavy Duty Lug Socket Set.

- Includes: SIM342, SIM482, SIMM332, SIMM382, SIMM412, DW402C, plus BW626A, BWD482 and BWDM412 in a PAKPB063 storage case
- Flank Drive wrenching system
- Alloy steel combines strength and durability
- All sockets 3/4" square drive







## TIRE AND WHEEL

#### Sockets and Bead Breakers





**BWD482** 

**BWDM412** 

#### **Dual Opening Impact Sockets**

- 6 point and square openings combined
- Use with socket retainers below
- Industrial finish

## BWD482 Dual Opening Socket.

- 1 1/2" hex, 13/16" square, 3/4" drive
  Hex opening depth is 5/8"; square opening depth is 2 1/4"; hex clearance is 1 1/4"

### BWD483 Dual Opening Socket.

- Similar to BWD482 except 1" square drive
- BWDM412 Dual Opening Socket. • 3/4" square drive with 41 mm hex and
- 21mm square beneath the hex Length: 108 mm

Application: For 1986 and later Nissan® and Isuzu® classes 4, 5, 6, and 7.





**BW626A** 

#### Stud Remover and Installer BWS1316A Stud Remover (Blue-Point®).

## Use on 13/16" studs on Budd wheels WSK755 Light Truck Wheel Stud Kit (Blue-Point).

- Use on most U.S. and import light trucks and SUVs
- · Self centering units permit quick installation the first time
- · Will not damage threads: use with impact wrenches
- Clamshell container for storage
  Includes 9/16"-18, 1/2"-20, 12 mm-1.75 and 14 mm-1.5 installers plus spacer and washer

#### WSK938 Automotive Wheel Stud Kit.

- . Use on most U.S. and import cars
- · Self centering units permit quick installation the first time
- · Will not damage threads: use with impact wrenches
- Clamshell container for storage
- Includes 7/16"-20, 1/2"-20, 12 mm-1.25 and 12 mm-1.5 installers plus spacer and washer

## Impact Sockets

- Use with socket retainers listed below
- Industrial finish

maddia mion										
Stock No.	Square Drive, inches	Wrench Size	Length							
BW626A	3/4	13/16" square	4"							
IM562	3/4	1 3/4" hex	2 3/4"							
SIMM332	3/4	33 mm hex	82.6 mm							
BW726A	1	13/16" square	2 1/4"							
SIMML332	3/4	33 mm hex	152.4 mm							
SIMML333	1	33 mm hex	152.4 mm							

## Impact Socket Retainers -

### 3/4" Drive

IM182R Rubber Locking Ring.

 For all 3/4" drive units IMR2 Socket Retainer.

#### 1" Drive

#### IM243P Steel Locking Pin.

- For use with IM243R
- Fits IM35

#### IM243R Synthetic Rubber Locking Ring.

For IM35, IM243 to IM443 and SIM223 to SIMM353

#### **IMR3 Socket Retainer.**

- . For all 1" drive sockets
- 1 piece retention system holds socket to impact wrench anvil

#### Bead Breakers



### TR200 Bead Breaker.

- · For bus, truck or tractor tires
- Sliding hammer weighs 13 lbs
- Stroke length is 16"; overall length is 46" closed and 62" expanded BH102 Hammer.
- 9 1/4 lb 32" long handle gives force and leverage for bead breaking on auto and large truck tires
- Rubber hand grip

BH102-1 Replacement Hammer Handle.

#### **General Service Tools**

#### Portable Air Tanks AIRTANK10 10 Gallon Portable Air Tank.

- 10 gal capacity provides ample air source to inflate tires
- · Port to drain moisture from tank
- Easy to read heavy duty 160 psi gauge with 4' long (200 psi) hose to easily reach valve stems
- · Popoff valve provides safety from over inflation
- Meets OSHA standard 1915.172
- Heavy 14 gauge steel construction with powder coat paint finish for long lasting durability
- Air line shutoff valve reduces air leakage when not in service
- Carrying handle provides easy portability Applications:

Race pits and paddocks for dialing in tire pressure. Tow trucks and shops that need mobility to inflate flat tires. Car lots and garages where the compressed air line hose won't reach.





## Carrier Assembly

## Socket for Toyota®/Lexus® vehicles B2193 Spare Tire Carrier Assembly Socket, 5 point for Toyota/Lexus.

- Tough nickel chrome plating provides corrosion resistance
- Special alloy steel provides the highest match of strength and durability
- Overall length: 4" long

#### Applications:

Great time saver for PDI (Pre-Delivery Inspection) when selling a new vehicle and you want to check the air pressure of the spare tire.

Saves time when doing an oil change and the air pressure of the spare tire is checked as part of the service.

### General Service Tools

388CF

SGCP1BR

S9094B

CP9



- One end is angled; the other is straight
- 19 1/8" long with 9/16 and 5/8" wide ends

#### TR102 Rim Tool.

- For drop center rims
- 18" long with a 1 3/8" wide end

#### TSP813 Motorcycle Tire Spreader.

- Permits 1 person installation of tubed tires on street motorcycles. dirt bikes, small farm equipment and industrial equipment
- Easily access valve stem hole when installing 90° valve stems on tubed tires
- · Screwdriver style handle for comfort and control
- All metal, heavy duty construction: industrial black finish helps resist corrosion



#### S6129 Seal Puller.

- Designed to pull wheel bearing or other small seals
- 7" long: industrial finish

#### YA105 Seal Puller.

- For removing rubber seals
- 2 tips designed to reach in and fit nearly all seal applications
- 12 5/8" long

#### SRT1 Seal Removal Tool.

- · Saves time and labor by eliminating prying against bearings or driving out seals
- · Grabs seal only, leaving bearings undamaged
- Seals remain intact allowing for complete failure analysis
- Wedges and long handle provide exceptional leverage
- Heavy duty construction for long life and dependability
- Works with steering, drive and trailer wheel seals on the largest heavy duty wheels

## **Cotter Pin Pullers**

## 388CF High Leverage Diagonal Cutters.

- High leverage cutter pulls cotter pins with ease
- 1 1/16" iaw length
- 8 5/16" long
- Vinyl grips

#### SGCP1BR Cotter Pin Puller.

- · Heat treated shank provides maximum strength
- Soft grip handle: 10" long

#### S9094B Cotter Pin Puller.

- Pins removed by hitting anvil sharply
- · Side handle ensures a firm grip
- 10" long
- · Replaceable steel hook

#### S9094A2X Replacement Hook and Rivet Set.

For S9094B

#### **CP9 Cotter Pin Pliers.**

- 38° angle end pries cotter pin loose
- 105° angle end pulls it out
- 10" long



## Mallets (Blue-Point®)

#### BF620C Rubber Head Mallet.

- Solid rubber head is 3 3/4" long and 2 1/4" diameter
- 11" hardwood handle
- Ideal for replacing hubcaps, bodywork, etc.

#### **BF623 Soft Blow Mallet.**

- · Designed to reduce marring and denting
- Use in assembly applications and on all types of surfaces including metal, glass, plastic and wood
- Special polymer head resists dynamic fatigue, creep and compression set, even at extreme temperatures

#### Hubcap HCH1A Hubcap Remover/Installer.

#### Wide angled prving end for removing hubcaps and built-in mallet for replacement

- · Comfortable, screwdriver style handle
- 16" long

#### **HCH2 Center Hub Cap** Remover (Blue-Point).

- Double ended prybar removes center hub caps on most chrome and aluminum wheels without damaging the wheel
- Tool ends dipped in PVC to protect wheel surface
- · Works on both metal and plastic center hub caps





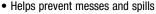
SRT1

HCH1A

HCH<sub>2</sub>

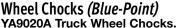
- Tapered jaws of tool fit behind the crimped edge of grease cap
- 1 handle designed for prying hub caps loose





- TWP8 Fits rims with 13 3/4" inside diameter or larger for use on most large trucks and trailers
- . Holds 88 oz of oil
- · Pan will not warp if oil is warm
- · Compartment above handles holds hub nuts





- · Heavy duty truck chocks are connected by a 10' nylon rope and measure 8" wide and 8" high overall
- Nonslide design









## WHEEL ALIGNMENT

## **Ball Joint**

### **Ball Ioint Presses**

BJP1 Master Ball Joint/Universal Joint Press Set. Master ball joint press set covers 95% of current U.S. SUVs. light trucks and passenger cars. Applications: Ford® (43 models). GM® (53 models), Dodge®/Daimler-Chrysler® (54 models) and Jeep® (16 models) vehicles. Installs and removes ball joints with pre-fitted straight grease fittings. Press frame features large throat for increased ball joint applications and vise mount capability for U-joint applications. Locking cup design holds cup in place. Large, coarse thread pressure screw for extra strength and maximum force. Grease zerk fitting for smooth screw action. Includes full ball joint/universal joint application chart and storage/carrying case. Visit www.snapon.com for full information on all application guides.

#### BJP1F Press Frame.

- 7 13/16" throat opening; 3 1/2" depth; 6" height; 10 13/16" length ME7A207 Retaining Ring.
- Retaining ring included in BJP1 and UJP1 sets

#### ME7A208A Large Snap Ring.

· Large snap ring included in BJP1 and UJP1 sets

#### ME7A209 Small Snap Ring.

Small snap ring included in BJP1 and UJP1 sets

#### ME9A34 Steel Ball.

· Steel ball included in BJP1 and UJP1 sets

#### PAKPB061 Storage Case.

#### BJP1-18 Receiver Adaptor.

- Use with BJP1 for guick removal and installation of lower ball joints on Dodge/Mercedes® Sprinter van models from 2003 to 2007
- Tools required for lower ball joint removal/installation include: install ram (BJP1-11), install receiver (BJP1-13), removal ram (BJP1-6) and removal receiver (BJP1-18)
- No upper ball joint applications apply to this tool

Stock No.	BJP1 Set Components	IDOD, inches	Length, inches
BJP1-1	Sleeve Adaptor	1 9/32 - 1 <sup>21</sup> /32	2 1/8
BJP1-2	Pressure Screw, 1 1/8 -7 UNRC thread, 7/8 hex	_	9 3/4
BJP1-3	Pressure Pad (Ball Joint)	NA - 1 <sup>19</sup> / <sub>32</sub>	3 <sup>3</sup> /16
BJP1-4	Pressure Pad (Universal Joint)	NA - 7/8	3 <sup>3</sup> /16
BJP1-5	Adaptor	29/32 - 1 11/32	1 <sup>13</sup> / <sub>16</sub>
BJP1-6	Adaptor/Extension	1 1/4 - 1 21/32	2 1/16
BJP1-7	Adaptor	1 11/16 - 1 29/32	1 <sup>1</sup> /8
BJP1-8	Adaptor	1 25/32 - 2	1
BJP1-9	Adaptor, Front face angled 4.5°	1 <sup>27</sup> / <sub>32</sub> - 2	1 1/4
BJP1-10	Adaptor, Front face angled 4.5°	2 11/32 - 2 21/32	2 1/8
BJP1-11	Adaptor	2 - 2 1/4	2 1/8
BJP1-12	Adaptor	2 1/4 - 2 1/2	2 3/4
BJP1-13	Adaptor	2 7/16 - 2 3/4	<b>1</b> 11/16
BJP1-14	Adaptor	2 11/16 - 2 15/16	2 3/4
BJP1-16	Adaptor	2 1/4 - 2 1/2	1 <sup>1</sup> /8
BJP1-17	Grease Fitting (for BJP1F Press Frame)	2 1/4 - 2 1/2	1 1/8



#### BJP1HONDA Adaptor Set for Honda® Vehicles.

• For removal and installation of upper/lower ball joints on many Honda and Acura® vehicles: must be used with BJP1 master ball joint/universal joint press set. Includes BJP1-22 and BJP1-24 ball joint adaptors plus (2 each) ME7A208 O-rings

#### BJP1-22 Adaptor.

 For removal and installation of upper/lower ball joints on many Honda and Acura vehicles: must be used with BJP1 master ball joint/universal joint press set

#### BJP1-24 Adaptor.

• For removal and installation of upper/lower ball joints on many Honda and Acura vehicles: must be used with BJP1 master ball ioint/universal ioint press set

#### BJP1-25 Receiver Adaptor.

• Use with the BJP1 master ball joint/universal joint press set for quick removal and installation of ball joints on Ford® F450 and F550 trucks from 2005 to 2007

#### BJP1-26 Adaptor.

• This new, optional adapter is to be used with the BJP1 Master Ball Joint/Universal Joint Press Set. Use BJP1-26 in combination with BJP1-4 to remove or install front axle U Joints for 2002 to present Dodge Ram 2500 and 3500 Series with the American 9.25 axle

#### BJP1-27 Adaptor.

- · Adaptors required to work on the 1995 to 2008 Ford Explorer
- · Lower Ball Joint: Install ram - BJP1-6 and BJP1-12. Install receiver - BJP1-16, Remove ram - BJP1-3, Remove receiver -BJP1-27



1658C

## Ball Joint/ Tie Rod Separators

Stock No.	Jaw Opening, inches	Overall Length, inches
A204	5/8	12
A200	13/16	18
A201	1	12
A203	1 1/4	12

### **Ball Joint Sockets** S9365B Ball Joint Socket.

A204

- For medium size Chrysler cars
- 3/4" square drive
- Wrench size is 1 59/64", length is 2" S9479A Ball Joint Socket.
- For *Dodge/Chrysler* pickups and vans
- 3/4" square drive
- Wrench size is 2 9/64", length is 2"

#### S9613 Ball Joint Socket.

- Use on 4-5B axles such as found on Dodge, Ford, Chevrolet®, GMC® and International® 4 wheel drive trucks
- Adjusts the sleeve in the top of the yoke on the front suspension
- 1/2" square drive, 1" OD, 2 1/8" long

### **General Service Tools**



#### **General Service Tools** SIML160 6 Point Extra Deep Impact Socket.

- Use to remove or replace fuel tank retaining strap nuts
- · Also has applications on emergency brake adjustment nuts and stabilizer retainers
- 1/2" square drive; 1/2", 6 point wrench opening
- 5" long

## General Service Tools (Blue-Point®)

1658C Pinch Bar, 16" long. 2420A Pinch Bar. 20" long.

2430C Pinch Bar. Tapered point on one end and a chisel type edge on the other, 7/8" edge, 7/8" stock, 38" overall length.

#### YA7970 Hub Clamp Expander.

- Designed for hubs and clamping style struts and ball joint mounts
- Allows easy removal and installation of struts and ball joints
- Interchangeable spreaders prevent damage to aluminum or cast iron hubs
- · Adjustable for use on hubs with centralized or noncentralized slot
- · Allows for on the vehicle repair











#### **General Service Tools** TC90A Tail Pipe Cutter.

- Handles on the car cutting from 3/4 to 3 1/2" diameter
- 16 link cutter chain is 12" long
- Threaded shaft with cross piece provides elasticity to help prevent chain wheels from breaking
- · Ideal for cutting the strut assembly to enable servicing of the strut cartridge

#### TC90A1 Chain Assembly.

. Includes 1 wheel and 1 roll pin

#### BF620C Rubber Head Mallet (Blue-Point®).

- Solid rubber head is 3 3/4" long, 2 1/4" diameter
- 11" hardwood handle
- Ideal for replacing hubcaps, bodywork, etc.

#### GCP10 Grease and Dust Cap Tool.

- Tapered jaws fit behind the crimped edge of grease cap
- One handle designed for prving hub caps loose

#### **B240B Brake and Accelerator Pedal Jack** (Blue-Point).

- · Holds throttle at a constant RPM
- · Easily adjusts to desired length
- Adjustment screw fine tunes desired RPM
- · Rubber tip keeps the tool firmly positioned
- Overall length of 40" (102 cm)
- Can also be used as a pedal depressor

#### YA6510 Bushing Extractor (Blue-Point).

• Used on Acura® Integra (1994 to 2001) plus various Honda® vehicles (1988 to 2001)

#### YA6510-2 Bushing Extractor Adaptor (Blue-Point).

• Enables the YA6510 bushing extractor to be used on 1990 to 1993 Integra vehicles



**B240B** 

YA6510

## Shock Absorber

# **Shock Absorber Sockets**

Stock No.	Square Drive, inches	Wrench Oval Width	Wrench Oval Diameter	Length
A137	3/8	1/4"	5/16"	29/32"
A138	3/8	15/64"	21/64"	29/32"
A139	3/8	6 mm	8 mm	23 mm

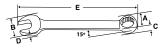


### **Caster Camber**

#### Wrenches

Metric combination wrenches. Long handle design for access.

	Stock No.	A	В	C	D	E
17	OEXLM17B	25	35	11	8	298
18	OEXLM18B	27	37	12	8	314
19	OEXLM19B	28	39	12	9	330



#### CC6630 Camber/Caster Alignment Tool.

- Works on 2003 and later GM® "G" Series Chevy® Express and GMC® Savanna vans
- Eliminates need to use the front 21 mm eccentric bolt, which is difficult to access behind a steel shield
- Hook tool on the top "A" arm and, with locking nut loosened, push or pull for easy caster and camber adjustment
- Saves about 15 minutes per side





CC6630

Tie Rod



#### **WA13A**

### Tie Rod Adjusting Tools WA12A Tie Rod Adjusting Tool.

- · For large cars and light trucks
- 1/2" square drive: 3 3/4" long

#### WA13A Tie Rod Adjusting Tool.

- For compact and medium cars
- 1/2" square drive: 3 3/4" long

#### WA16 Tie Rod Adjusting Tool.

- For large trucks
- 1/2" square drive: 4 7/64" long



#### WA17 Tie Rod Adjusting Tool.

- Designed to permit 360° rotation of the adjusting sleeve even in tight quarters
- Use on 1 7/8" sleeves on full size 3/4 and 1 ton pickups, including Ford® Super Duty
- Use with 1/2" square drive ratchet or breaker bar
- Chrome finish: 4 3/4" long



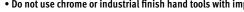
#### YA2218 Tie Rod Adjusting Wrench.

- For U.S. and import vehicles with rack and pinion steering using tie rods with knurled or 17.0 to 18.5 mm hex aripping sections
- · Spring loaded jaws and comfort grip handle









Read safety precautions on pages W1 to W4

## WHEEL ALIGNMENT

#### Tie Rod











YA2222



YA3000C

**WA14A** 

**WA800** 





YA3500



WW500



## Tie Rod Adjusting Tools

#### YA2222 Tie Rod Adjusting Wrench.

- · For U.S. and import vehicles with rack and pinion steering using tie rods with knurled or 12 mm hex gripping sections
- Spring loaded jaws and comfort grip handle
- 10 1/2" long

#### YA2223 Tie Rod Adjusting Wrench.

- For rack and pinion steering using 14 to 15.5 mm tie rods
- · Spring loaded jaws and comfort grip handle
- Applications: 1995 and later Dodge® Dakota and Caravan, 1998 and later *Dodge* Durango, *Dodge* Viper and most 1999 and later GM® 1/2, 3/4 and 1 ton trucks

#### WW600 Heavy Duty Rack Wrench (Blue-Point®).

- New larger size provides added coverage for U.S. and import trucks and SUVs
- Suits multiple rack ends and sizes (hex drive, round with 2 flats. round with no flats)
- · Fixed position rings provide added strength
- Patented cam design increases force as load is applied
- Universal design suits rack end diameters from 38 to 46 mm (1 1/2 to 1 7/8")
- Use on vehicles with limited access to avoid the need to remove the rack assembly
- WW600 expands upon the already available WW500 which does 33 mm to 41 mm (1 5/16 to 1 9/16") tie rods

## Tie Rod Removal/Installation Tools

#### YA3000C Inner Tie Rod Tool (Blue-Point).

- · Removable crowfoot adaptors are placed on hex of tie rod
- Engages crowfoot for removal or installation of tie rod
- Includes crowfoot adaptors in 1 3/16, 1 1/4, 1 5/16, 1 7/16, 1 1/2" and 33.6 mm sizes

#### WA14A Tie Rod End Socket.

- · For removing tie rod ends
- Fits most cars and some trucks
- U-shaped opening measures 1 3/8" x 3/4"
- Use with 1/2" square drive handles. 1 15/16" ID, 2 1/4" long

#### WA15 Tie Rod End Socket.

- Similar to WA14A
- For tie rod servicing on most any truck in the Class 2 to 6 range
- U-shaped opening measures 1 7/8 x 15/16"
- Use with 1/2" square drive handles. 2 1/2" ID, 2 7/8" long

#### WA800 Heavy Duty Truck Tie Rod Socket.

- Use on most Class 7 and 8 heavy duty trucks with 9,000 to 20,000 lb axles
- U-shaped slot measures 1 7/8 x 1 1/2"
- Inside diameter 3"
- Overall length 3 1/2"

#### ITRS22 Tie Rod Bushing Socket (Blue-Point).

- Use to access the inner tie rod bushings on Chrysler LHS/Concorde and *Dodge* 300M/Intrepid featuring the LH body style
- Low profile design provides easy access to install or remove the 7/8" or 22 mm hex head bolts
- A conventional socket cannot be used in this application

#### YA3300 Universal Tie Rod Set (Blue-Point).

- A faster, easier and more secure way to replace tie rods
- Quick on/off interchange between the two knuckles
- Easy self adjusting and cinching in various shapes and sizes
- No more guesswork or fuss with crowfeet style tools

#### YA3300-1 Large Head. Large head (40 to 45 mm)

for YA3300 Universal Tie Rod Set.

YA3300-2 Medium Head. Medium head (35 to 40 mm) for YA3300 Universal Tie Rod Set.

YA3300-3 Tube. Tube for YA3300 Universal Tie Rod Set. YA3300-CASE Blow Molded Case. Blow molded

#### storage case for YA3300 Universal Tie Rod Set. YA2224 Tie Rod Adjusting Wrench.

- Similar in design to YA2222 but for 10.5 to 12 mm diameter tie rods like those found on Ford® Escort, GM® Geo, and smaller Nissan® vehicles with rack and pinion steering
- · Spring loaded jaws and comfort grip handles
- 9 1/2" long

#### YA3500 Universal Inner Tie Rod Wrench (Blue-Point).

- Removes inner tie rods equipped with completely round end sockets or flats
- Designed to remove and install all inner tie rod sockets up to 1 15/32"
- · Wrench head has 3 set screws that tighten against the socket
- Includes 1/4" short head hex wrench
- Lifetime warranty

#### WW500 Rack Wrench (Blue-Point).

- Use on steering racks to service inner tie rod ends
- · Fits rack end with hex drive, round with 2 drive flats or round with no drive flats
- Universal fit from 33 to 41 mm (1 15/16 to 1 9/16") and hex sizes from 31 to 35 mm (1 1/4 to 1 3/8"), 19 mm (3/4") hex drive
- · Clamp force increases as load is applied

#### YA6870 Rear Toe Adjustment Kit for Subaru® Vehicles.

- Includes 2 wrenches: each 16" long for extra reach
  - YA6870-1: 6 point, 22 mm wrench with the correct 0° offset to securely hold the cam bolt
  - YA6870-2: 6 point, 17/19 mm dual ended wrench designed to meet the high torque levels required when loosening/tightening the cam bolt retaining nut
- Used on all Subaru vehicles 1990 and later
- YA6870-1 fits Subaru vehicles 1990 and later: YA6870-2 fits 1990-2008 Subaru vehicles (17 mm) and 2009 and later (19 mm)
- High quality steel is specially heat treated for torque requirements

#### YA6870-1 Toe Adjustment Wrench for Subaru.

- · Cam bolt wrench for Subaru
- YA6870-1 fits Subaru vehicles 1990 and later

#### YA6870-2 Toe Adjustment Wrench for Subaru.

- Cam bolt retaining nut wrench for Subaru
- YA6870-2 fits 1990-2008 Subaru vehicles (17 mm) and 2009 and later (19 mm)

#### Strut



## MacPherson/Coil Spring Compressors

#### WA92 Coil Spring Compressor.

- · Holds coil spring at desired tension for removal of other parts
- 11" screw
- · Liberally lubricate threads with anti seize compound

#### MSC1 Master MacPherson Strut Tool (Blue-Point®).

- Designed to quickly and easily compress most MacPherson strut springs
- Compresses up to 5/8" coil diameter
- · Broad spring contact for stable compression
- ACME® threaded rod and built in detent latches to help lock coil in place
- Forged construction for strength and durability

#### MSC2 Coil Spring Compressor (Blue-Point).

- Removes and installs coil springs quickly and safely
- · Compresses coil springs on all passenger cars and pickup trucks
- Features ACME threaded rod
- · Includes instructional card

## MSCS1000 Master Spring Compressor Set.

• Includes MSC1 and MSC2 in storage case



## LOWER CONTROL Arm Tool (Blue-Point) LCAT1A Lower Control Arm Tool.

- 1 man operation performs the job faster and easier
- Makes strut replacement easier and removes ball joints without damage



VA 0720

## Strut Nut Socket for VW®/Audi® Vehicles

YA8730 Strut Nut Socket for VW/Audi Vehicles.

• For late model front wheel drive vehicles to remove the top strut retaining nut

# Strut Tools for Ford® and GM® Vehicles YA9260 Front Strut Cartridge Tool Set for GM Vehicle.

- Removes and installs front oil or gas filled strut cartridge on 1988 and later GM W-platform vehicles
- Works on both manufacturer's stock oil filled shocks and gas filled aftermarket shocks

#### YA9260-1 Strut Cartridge Nut Wrench.

• Strut cartridge nut wrench from YA9260 set

#### YA9260-2 Strut Jounce Bumper Wrench.

• Strut jounce bumper wrench from YA9260 set

#### WA7500 Strut Cartridge Tool for GM Vehicles.

- Replaces strut cartridge through the body shock tower on GM 10 Series ("W" Car) vehicles
- Includes 1988 and later Pontiac® Grand Prix, Oldsmobile® Cutlass and Buick® Regal; 1989 and later Chevrolet® Lumina



YA6810

## Bushing Tool *(Blue-Point)* for Honda®/ Acura® Vehicles

## YA6810 Bushing Tool Kit for *Honda/Acura* Vehicles.

 Used in removing and installing Honda and Acura lower control arm bushings without the need of a press Applications:

#### Honda:

- Civic 2001 to 2005
- CRV 2002 to 2006Element 2003 to 2006
- Pilot 2003 and later
- Odyssey 2005 and later
- Ridgeline 2006 and later
- Accord 2003 to 2007

#### Acura:

- MDX 2000 to 2006
- TL 2000 to 2007







- Do not use chrome or industrial finish hand tools with impact driver
- Make sure sping compressor is properly engaged with spring before applying force
  - Read safety precautions on pages W1 to W4

## WHEEL/AXLE PULLERS AND DRIVE LINE

## **King Pin Pullers**



CG430HYC



## **Set Components**

# 20 Ton Capacity Hydraulic CG430HYC Hydraulic King Pin Press Set.

- CG420A hydraulic ram and pump delivers up to 20 ton of controlled power to remove stubborn king pins on large vehicles with king pin diameters up to 1 1/4"
- Also removes brake shoe anchor pins on trucks
- · Wide side arm construction
- Uses 3 pilots: 7/8 x 4", 7/8 x 6", and 7/8 x 8"
- Includes 2 guide bushings: 1 3/8 x 7/8" and 1 3/8 x 3 1/4"

#### CG430HYC2S Hydraulic King Pin Press Set.

CG430HYC Set with CG420A2S ram and 2 stage pump

## 35 Ton Capacity Hydraulic CG730HY Hydraulic King Pin Press.

- For use on large trucks and semitrucks with king pin diameters from 1 to 2"
- Similar to CG430HYC except it uses 35 ton hydraulic power components (CG720 ram, CG420-2A pump, CG420-3-1 hose, and CG420-4 quick coupler)
- Includes 3 guide bushings and 7 pilots

#### CG730HY2S King Pin Press Set.

CG730HY Set with CG420A2S ram and 2 stage pump

#### CG730 King Pin Press Set.

• CG730HY Set less the hydraulic power components

## Manual Set for 3/4 and 1 Ton CG230A Truck King Pin Press Set.

- Spread 5 1/8"; Reach 12 3/16"
- Includes: 1 1/4" bushing guide, adaptor and 4 7/8" diameter pilots 2, 4, 6 and 8"

#### Applications:

Heavy trucks, buses and vans having king pins larger than 7/8", including Ford® 3/4 ton and 1 ton trucks and vans.

Stock No.	Pressure Screw	Yoke Adaptor	Work Head	Yoke Post (2)	Post Nut (2)	Pilot Guide	1 <sup>3</sup> / <sub>8</sub> x <sup>7</sup> / <sub>8</sub> " Bushing	1 <sup>3</sup> / <sub>8</sub> x 3 <sup>1</sup> / <sub>4</sub> " Bushing	Expansion Plug	Hydraulic Power Pack	7/8" Diameter Pilots
CG430HYC	CG430-1	CG430-2	CG430-3	CG430-4	CG45-2	CG430-6	CG430-7	CG430-8	CJ91-2A	CG420A	CG230-9 (6")
_	_	_	_	_	_	_	_	_	_	_	CG230-8 (4")
_	_	_	_	-	_	_	_	_	_	_	CG230-10 (8")

CG430HYC2S CG430HYC set with CG420A2S ram and 2 stage pump.

Stock No.	Pressure Screw	Yoke Adaptor	Work Head	Yoke Post (2)	Pilot Guide	Post Nut (2)	1 <sup>15</sup> / <sub>16</sub> " Bushing	1 9/16" Bushing	1 <sup>13</sup> / <sub>16</sub> " Bushing	Hydraulic Power Pack	Pilots
CG730HY	CG730-1	CG730-2	CG730-3	CG730-4	CG730-6	CG750-7	CG730-7	CG730-8	CG730-9	CG420A	CG730-12 (6 3/4")
_	_	_	_	_	_	_	<b> </b>	-	_	_	CG730-10 (2 1/4")
_	_	_	_	_	_	_	_	_	_	_	CG730-11 (4 1/2")
_	_	_	_	_	_	_	_	<b> </b>	_	_	CG730-15 (6")
_	_	_	_	_	_	_	_	<b> </b>	_	_	CG730-13 (9")
_	<b> </b>	_	_	_	_	-	<b> </b>	<b> </b> —	_	_	CG730-16 (9 1/2")
_	<b> </b>	_	_	_	_	_	_	_	_	_	CG730-14 (11 1/4")

CG730HY2S CG730HY set with CG420A2S ram and 2 stage pump.

Stock No.	Spread, inches	Reach, inches	Pressure Screw	Screw Yoke	Screw Yoke Post (2)	Post Nut (2)	General Use Head	1 1/4" Bushing	1" Bushing	Pilots
CG212A	3	6 <sup>1</sup> / <sub>2</sub>	CG21A	CG21B	CG21D	CG21J	CG21P5	CG21P3	CG21P2	CG21E Long (3/4" dia.)
_	_	_	_	_	_	_	_	_	_	CG21F Short (3/4" dia.)
_	_	<b> </b>	_	_	_	_	_	_	_	CG21G Long (5/8" dia.)

Stock No.	Spread, inches	Reach, inches	Pressure Screw	Screw Yoke	Screw Yoke Post (2)	Post Nut (2)	General Use Head	1 1/4" Bushing	7/8" Diameter Pilots	Adaptor
CG230A	5 <sup>1</sup> / <sub>8</sub>	12 <sup>3</sup> / <sub>16</sub>	CG230-1	CG230-2	CG230-4	CG230-5	CG230-3	CG230-6	CG230-9 (6")	CG230-11
_	_	_	_	_	_	_	_	_	CG230-7 (2")	_
_	_	_	_	_	_	_	_	_	CG230-8 (4")	_
_	_	_	_	_	_	_	_	_	CG230-10 (8")	_



# Wheel Hub Removal Adaptor DHP1 Wheel Hub Removal Adaptor for Dodge® Vehicles.

- Designed to remove the front hubs found on 3/4 ton (2500 series) and 1 ton (3500 series) Dodge pickup trucks
- Cut the flat rate for changing out U joints, front differential service, ball joints and any front hub service
- On average it takes 3.4 hours to do both sides using a sledge hammer, torch or heavy duty slide hammer. With the DHP1, it takes about 1 hour to do both sides
- No broken rotors when using a sledge hammer
- . No heavy slide hammers to use
- · Wheel bearing and seal will not get damaged

#### FHP1 Wheel Hub Removal Adaptor for Ford® Vehicles.

- Designed to take off the front hubs found on the F250 and F350 series Ford pickup trucks
- Cut the flat rate for changing out U joints, front differential service, ball joints and any front hub service
- · Soft insert of socket will not damage the studs



CJ1250

## Slide Hammer and Shaft CJ1250 12 Ib Slide Hammer.

• Designed to pull rear axles

- Slide hammer is approximately 25 1/4" long with a 5/8"-18 thread
- Can be used with the YA498A hub puller



#### **Pullers**

#### CJ129A Universal Wheel Hub Puller.

- Remove front wheel/axle assembly on all front wheel drive Ford, GM®, Chrysler®, and most imported cars
- Also use to remove rear brake drums on tapered axles such as those found on AMC® and Chrysler vehicles
- Removable anvil fits over 1 1/8" hex on pressure screw
- Includes adjustable legs

#### YA498A Front Wheel Drive Hub Puller.

- For most U.S. and import vehicles with independent front suspension
- Pressure screw size is 5/8" 18 x 5 1/2"

#### 4567SH Bolt-on Axle Shaft Puller.

- Breaks axles loose on Ford and GM vehicles and light trucks with flange type axles
- Includes housing, 3 removable jaws, 10 lb slide hammer and 1 1/2"-12 x 23 1/2" slide screw with a 1 1/2" hex
- Fits any bolt pattern with a 4 to 7" bolt circle

## –Differential



A176



M3548A







M3587



**IMDM360** 

#### **Differential Service Tools**

#### A176 Differential Adjusting Wrench.

- For most differentials where 9/32 and 17/32" adjustment nuts are found
- Useful on transmissions, steering gears and some water pumps where adjustable spanner wrench is required
- 10" long

#### M3548A Diesel Pinion Nut Impact Socket.

· Use on pinion nuts only

#### M3586 Pinion Nut Impact Socket.

- Use to remove pinion nut on Dana® 80 series axles on late model Ford and Dodge trucks
- Designed to handle the specific application
- Flank Drive® wrenching system
- Industrial finish for extra corrosion protection

#### M3587 Pinion Nut Impact Socket.

- Use to remove pinion nut on 2005 Cadillac® CTS, 2003 GM and 2004 Dodge trucks with 11.5" AAM axles
- Additional applications: removal of late model BMW<sup>®</sup> axle shafts plus BMW E38, E39, M3 and SUVs with 36 mm 12 point axle nuts
- Designed to handle the specific application
- Flank Drive wrenching system
- Wrench size: 36 mm. Drive size: 3/4". OD Wrench end: 2". OD Drive end: 1 3/4". Bolt clearance: 1 9/16". Hex depth: 1". Overall length: 2 1/4"
- Industrial finish for extra corrosion protection

#### IMDM360 Impact Socket.

Applications:

Duramax® diesel front crankshaft bolt. Late model *BMW* axle shafts. Use to remove pinion nuts on 2003 *GM* and 2004 *Dodge* trucks with 11.5 AAM® axles.

#### Wrench Drive **OD** Wrench **OD Drive** Bolt Hex Overall Stock No. Clearance Depth Size, Length, inches, (mm) inche inches, (mm) inches, (mm) inches, (mm) inches, (mm) inches, (mm) M3548A 1 9/16 2 3/4 3/4 1 9/16 2 3/8 2 3/4 3 3/4 M3586 3/4 1 3/4 1 7/8 1 1/8 2 3/4 2 3/8 2 M3587 3/4 1 3/4 1 9/16 (36)2 1/4 IMDM360 1/2 (50.8) (22.2) (36)(46)(41.3)(57.2)







- Screen puller and press applications
- Read safety precautions on pages W1 to W4

#### **Transmission**



### **Boot and Joint Tools**

#### YA3050 Boot Clamp Pliers.

 For earless type clamps, including those found on late model GM® inboard CV universal joints

#### YA3080 Boot Clamp Pliers.

- · For ear type clamps
- Sturdy enough for ear type clamps, including late model *GM* outboard CV universal joints
- Use with a torque wrench to meet required specifications

#### YA3085 Boot Banding Tool.

• For reinstallation of Band-it® or Band-it Jr.® boot bands

#### KD3191 Joint Clamp (Blue-Point®).

- Use to wind up the free end of the clamping band
- Holds tension until band can be clipped down
- For use with Band-it style free end clamps, roll band, and clips or Band-it Jr. style preformed clamps
- Socket with ratchet is used to turn the actuating screw for adjustment

#### FBG1 Flex CV Boot Installer (Blue-Point).

- Reduce CV boot installation to less than 20 minutes
- Tool stretches the CV boot, allowing it to slip over the trunion for rapid installation and reduced fatigue
- Includes flex boot Installer, FBGAR air regulator and storage case
- Use CV boots listed on this page

## Boot and Joint Tools (Blue-Point) FBGAR Air Regulator.

• Air regulator for FBG1 flex CV boot installer

### CVBOOTKIT Complete CV Boot Replacement Kit.

- 6 each CVBOOTSM
- 4 each CVB00TLG
- 2 each CVB00TRP

#### **CVBOOTXS ATV Replacement Boot.**

- Fits most ATV boot applications
- Includes boot, clamps and grease

#### CVBOOTXSPK ATV Replacemnt Boot Kit.

Package of 12 CVB00TXS

#### **CVBOOTLG Large CV Boot.**

- Fits most cars and SUVs with large CV boots
- · Includes boot, clamps and grease

#### **CVBOOTLGPK Large CV Boot Kit.**

Package of 12 CVB00TLG

#### CVBOOTSM Small CV.

- · Fits most cars and SUVs with small CV boots
- Includes boot, clamps and grease

#### CVBOOTKSMPK Small CV Boot Kit.

Package of 12 CVBOOTSM

#### CVBOOTRP Universal Rack and Pinion Kit.

- Fits rack and pinion boots on most cars
- · Includes boot, clamps and grease

#### CVBOOTRPPK Universal Rack and Pinion Boot Kit.

- Package of 12 CVB00TRP
- Includes boot, clamps and grease



HST100-1

#### Half Shaft Removal Tools HST100-1 Half Shaft Removal Tool.

- 0.900" diameter
- Easily removes half shaft on most U.S. and import front wheel drive vehicles with gentle tap from brass mallet

#### HST100-2 Half Shaft Removal Tool.

- 0.940" diameter
- Easily removes half shaft on most U.S. and import front wheel drive vehicles with gentle tap from brass mallet







YA2220

## Front Wheel Drive Service Tools FABLM8E Metric Long Ball Hex Driver.

- 8 mm hex, 3/8" drive
- For 1978 and later Dodge® Omni and Plymouth® Horizon standard transmission drive axle flange bolts

## **Spindle Puller**

#### YA2220 Spindle Puller.

- 3 step threaded (1 1/2, 1 5/8, and 2") for most front spindles on 4 wheel drive vehicles
- Use with 1/2"-20 and 5/8"-18 slide hammers

#### **Transmission**



### **Transmission Service Tools**

#### YA321 Sealing Cap Set (Blue-Point®).

- 5 polyethylene caps to service all U.S. and most import transmissions when the drive shaft is removed
- Caps keep dirt out of the transmission and prevent fluid loss

## YA2340 Sealing Cap Set.

- Retain transmission fluid by sealing transmission and transaxles when drive shaft or drive axle is removed on most U.S. and import vehicles
- Side gear centering for Ford® transaxles
- 5 caps cover a range of 1 to 2 3/16"
- Segmented design prevents caps from slipping

#### YA7244A Quick Connect/Disconnect Tool.

- For late model Ford vehicles using push lock connectors on transmission cooler lines as well as on fuel lines
- Diameter is 1 1/4"

#### XLE1012A Torx® Box Wrench.

- Box end *Torx* sizes are E10 and E12
- Drive shaft must be removed when towing 1980 Chevrolet® Corvette and 1/2, 3/4 and 1 ton GMC® and Chevrolet trucks
- · Designed to access drive line fasteners
- Also services AMC® drive lines

#### \$5902 Oil/Transmission Plug Wrench.

- Box ends are 17 mm, 6 point and 21 mm, 12 point
- Designed for VW® transmission drain plugs
- 258 mm long

#### YA322 Seal Driver Kit (Blue-Point).

- 15 different drivers install front and rear transmission seals
- · Includes a master driver
- Each driver is numbered for specific transmission applications

## **EEPV508 Automatic Transmission Pressure Gauge Set.**

- Use on all major manufacturer U.S. and import vehicles
- Includes: 2 gauge assemblies for high and low pressure ranges,
   9 adaptors to test a wide variety of U.S. and import automatic transmissions, comprehensive instruction manual with applications table and storage case
- 4 special fittings are also included for connection to hard to reach test ports in areas requiring a 45° or 90° angle
- High pressure gauge assembly includes 3.5" diameter gauge and 10' flexible hose with fluid coupler
- Low pressure gauge assembly includes 2.5" diameter gauge and 6' flexible hose with fluid coupler

#### SLEPL200 Low Profile Torx Plus® Socket.

- For removal and installation of low profile drive plate and flywheel bolts on QR25 Nissan® motors with automatic transmissions
- Similar to the J-45816 Nissan specialty tool
- Size is 20EPL
- 1/2" drive
- For flywheel bolts on QR25 Nissan motors with manual transmissions, use the 3/8" drive FTX50TPE male T50 Torx Plus Socket

#### LDT3812 Transmission Oil Cooler Line Disconnect Tool.

- 2 sizes (3/8" and 1/2") designed to disconnect transmission cooler lines
- Use 3/8" size for 2003 and later Ford V8 Explorer plus 2004 and later Ford F150 and Cadillac® vehicles
- Use 1/2" size for Ford F250, F350 and F450 Super Duty trucks

#### LDTM3812 Camshaft Seal Kit.

- Easily removes and installs camshaft and crankshaft seals without damage
- Compact puller with unique extracting hooks engage seal for quick removal
- Interchangeable sleeves and mandrels allow easy installation of new seal
- Fits seals from 21.5 to 64 mm

#### FIH9057B Transmission Line Quick Disconnect Tool.

- For 3/8 and 1/2" O.D. transmission and fuel lines on certain Ford and Cadillac models
- Constructed from durable 30% glass filled nylon allows more pressure to be applied and delivers a longer tool life
- Compact design allows access in tight quarters Applications:

Ford: Explorer (2002 and later with 5 speed automatic transmission), F150 trucks (2003 late production series with four speed automatic transmission), F150 trucks (2004 and later - all models), Thunderbird and Lincoln® LS (2003 and later), F250/F350 truck series (2004 and later)

Cadillac: SRX (2004 and later), CTS (2003 and later), STS (2005 and later)







#### Transmission



#### Low Profile Hex Sockets

**207FHRM** 

SRP4

PRT600A

Stock No.	Drive Size, inches	External Hex, mm	Length, inches (mm)
FHRM7	3/8	7	1 (25.4)
FHRM8	3/8	8	1 (25.4)
FHRM10	3/8	10	1 (25.4)
FHRM12	3/8	12	1 (25.4)
FHRM13	3/8	13	1 (25.4)
FHRM14	3/8	14	1 (25.4)
CPT110A	3/8	17	1 (25.4)

207FHRM Low Profile Sokcet Set. Includes FHRM7 through FHRM14 (7 to 14 mm) plus CPT110A (17 mm) Low Profile Hex Sockets (7 pcs).

Snap Ring Pliers SRP400A Snap Ring Pliers Set.

• Includes the following 4 snap ring pliers in a storage tray

- SRP1B Snap Ring Pliers.
   For output shaft on GM® transmissions
- Serrated jaws bent at a 90° angle
- 1/16" wide tip; Measures 8 15/16" long SRP2A Snap Ring Pliers.

• 3/32" wide ends with 1/8" diameter

- Jaws are angled at 90° dimple for snap rings with tabs
- 8 7/8" long ASME®/ANSI® B107.19-1993

### SRP3A Snap Ring Pliers.

- 3/32" wide straight tips and 1/16" thick ends
- 8 7/8" long
- ASME/ANŠI B107.19-1993

#### SRP5B Snap Ring Pliers.

- 7 rivet action for high leverage tip expansion
- Straight tip ends. 5/32" wide. are dimpled for snap ring tabs
- 10 1/8" long

#### SRP4 Snap Ring Pliers.

- 3/32" wide ends with 1/8" diameter dimple for snap rings with tabs
- Jaws bent at a 90° angle
- 14" long

#### PRT600A Transmission Service Set.

- For Chrysler®, GM and Ford® vehicles
- Includes:

#### PRT21 High Range Seal Tool.

- 2 1/2 x 1/2" spring steel blade
- 7 1/2" long

#### PRT22 High Range Seal Tool. .015" high carbon wire loops on each end

- 6 1/2" long SRPC3800 Convertible
- **Retaining Ring Pliers.** Straight .038" tips
- 6 7/16" long

#### SRPC7000 Convertible Retaining Ring Pliers.

- Straight .007" tips
- 7 7/16" long
- PR15 External Snap Ring Pliers.
- Wide (1/16") tips are angled at 90°
  8 3/4" long

#### PR16 External Snap Ring Pliers.

- Wide (3/16") notched tips
- 8 3/4" long



#### Transmission Service Tools CPT110A Drain Plug Socket.

- Use on VW® transmission drain plugs
- Additional applications include removing front wheels on Triumph® Daytona® and America® motorcycles
- 17 mm, 6 point socket is for VW transmission drain plugs
- 3/8" drive. 1" long





S8673C1

S8673B3

### Bushing/Oil Seal Pullers and Driver

- Designed to easily remove or replace transmission rear extension housing bushings and oil seals on most Ford, GM, Chrysler and AMC ® automatic transmissons
- · Refer to chart below for specifications and applications

#### S8673C1 Bushing Driver.

 Handle screws onto one end; bushing is placed on the other end and driven into shaft housing with a few light hammer blows

#### S8673B3 Oil Seal Installer.

- · Slide onto the driver head
- · Use to replace oil seals
- Reversible

Stock No.	Type0.	., inchesDept	h, inches	Application
S8673C1	Driver	_	<b>1</b> <sup>15</sup> /16	Ford C-4 Series, GM 200, 350, and 375 Series
S8673B3	Seal Installer	2 3/4	<b>1</b> <sup>15</sup> / <sub>16</sub>	Ford C-4 Series, GM 200, 350, and 375 Series





CJ193

CJ193-1-1

## Transmission Pump Puller

#### CJ193 Transmission Pump Puller.

- Removal of front pump on *GM*, *Ford* and *Chrysler* transmissions requires 2 pullers
- Includes 1 1/4 lb slide hammer and 3/8"-16 x 14" slide screw Applications:

Most GM, Ford C-4, C-5 AOD (Automatic Overdrive), and Chrysler TF904-72 ON.

#### CJ193-1-1 Optional Adaptor.

- M10-1.5 male end is designed to work on Ford and Chrysler transmission pumps
- 3/8"-16 female end screws onto slide screw of CJ193
- 2 1/4" long





#### Seal/Bushing Installers and Removers YA9348 Transmission Seal Remover/Installer for GM vehicles.

- Removes and installs *GM* transmission shift selector shaft seals without draining the fluid
- 5/8" drive size. 3/8"-16 UNC-2B thread
- Remover bolt has a 9/16" head and 3/8"-16 UNC-2A thread

#### YA9648 Removal/Installation Tool.

• Applications on 1996 and later GM trucks and Astro vans with 4L60E and 4L80E transmissions

#### Drive Shaft

### **Magnetic Angle Locator** (Blue-Point®)

#### YA328A Angle Locator.

- · Precise, accurate tool to determine angle measurements
- Ideal for checking drive shaft angle
- · Red degree indicator located behind numbers for exact reading
- Fractional and metric scales molded into base of tool in 1/8" and CM
- Large 1 7/8 x 7/8" magnet in base for secure retention



**YA328A** 

#### **Universal Ioint Tools**

UJP1 Universal Joint Press Set. Press frame features large throat and vise mount capability for U-joint applications. Locking cup design holds cup in place. Large, coarse thread pressure screw for extra strength and maximum force. Grease Zerk fitting for smooth screw action. Adaptor hardness of 42-46 Rc. Includes application chart. Includes storage case.

BJP1F Press Frame. 7.80" throat, 10.80" length.
BJP1-1 Sleeve Adaptor. 2.12" length.

BJP1-2 Pressure Screw. 1 1/8-7 UNRC. 7/8" hex.

**BJP1-4 Pressure Pad.** Universal Joint, 3 3/16" length.

BJP1-5 Adaptor. .90-1.33

**BJP1-7 Adaptor.** 1.68-1.89

BJP1-8 Adaptor. 1.78-2.00 BJP1-17 Grease Fitting.

ME7A207 Retaining Ring. ME7A208 Large Snap Ring. ME7A209 Small Snap Ring.

ME9A34 Steel Ball. PAKPB061 Storage Case.



Clutch



YA7646





A37M



Clutch Service Tools

#### GA454A Adjusting Wrench for Spicer® Clutch.

- For internal adjustment of Spicer angle spring and multiple lever clutches
- Eliminates the need for prybars that could damage clutch parts

#### SP2031 Pilot Bearing Puller.

- Attaches to slide hammer shafts with 3/4"-16 or 5/8"-18 threads
- · Pressure screw adaptor is made of stress resistant steel
- Industrial finish

#### YA7646 Clutch Coupling Tool for Ford Vehicles.

- Reach and disconnect the hydraulic clutch line from the clutch slave cylinder without damage to the coupling or clutch line
- Same as Ford No. T88T-70522-A

#### Applications:

Current Ford vehicles with hydraulic clutch including light duty trucks, Bronco II, Ranger, Explorer and 1989- later Thunderbird and Mercury® Cougar with manual transmission and hydraulic clutch

#### A144A Flywheel Turner.

- Use when replacing clutch pressure plate
- Turns flywheel to predetermined point that might be bypassed when "bumping" with starter
- 12 1/8" long

#### ATS2987 Automatic Transmission Clutch Spring Compressor (Blue-Point).

- Use to compress clutch springs on most automatic transmission clutch units
- Packaged in ATS2987-21 storage case

#### A37M Clutch Aligner Set.

- · For vehicles with standard transmissions, including many import cars
- · Allows quick aligning for complete range of single disc clutches (16 collet sizes ranging from 0.465 to 1.181")
- · Packaged in PB21 storage case

#### A145 Clutch Aligner Set.

- Smaller companion to A37M
- Includes 5 double ended collets ranging in size from .578 to .810"

lacks

#### YA1715 Motorcycle Jack (Blue-Point).

- 1,500 lb capacity
- Low height of 4 1/2", maximum height of 14 3/4"
- Double rubber lined pad provides extra protection to motorcycle
- Pull handle assists user to maneuver lack into position
- 1' operation for ease of use
- Safety straps to secure motorcycle



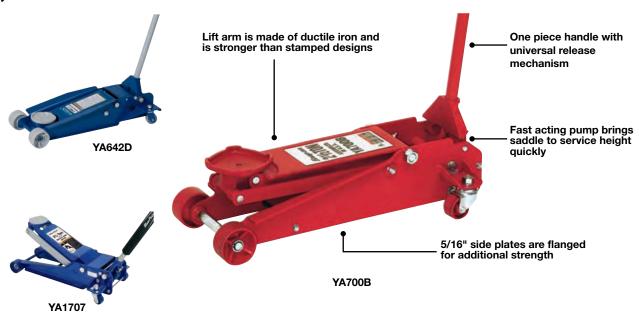






## LIFTING

## Jacks





## **Short Chassis Service Jacks**

Stock No.	Capacity, tons	Max Lift Height, inches	Low Height, inches	Saddle Size, inches	Frame Length, inches	Handle Length, inches	Warranty	Weight, lbs
YA700B	2 1/2	23	4 3/4	5 <sup>3</sup> / <sub>4</sub>	30 1/2	45 <sup>3</sup> / <sub>4</sub>	2 Years	96
YA642D*	2	20	3 3/4	5 1/2	29 3/4	49 7/8	1 Year	95
YA1707*	3 1/2	21 5/8	4	4 1/4	29 7/8	50	1 Year	103
YA1716*	2	20	3	4 1/4	30 1/4	40	1 Year	97
*Blue-Point®			•					

## **Aluminum Service Jacks**







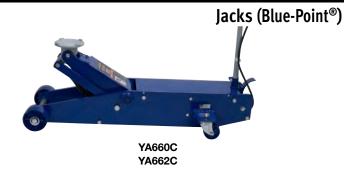
### Aluminum Service Jacks (Blue-Point)

- Dual pump design quickly brings saddle to service height
- Diamond cut, slip resistant handle with foam bumper pad protects vehicles

Stock No.	Capacity, tons	Max Lift Height, inches	Low Height, inches	Saddle Size, inches	Frame Length, inches	Handle Length, inches	Warranty	Weight, Ibs
YA1713	3	18 <sup>1</sup> / <sub>4</sub>	4	5	30	49 1/2	1 Year	72
RACEJACKSET*	1 1/2	17 3/8	3 1/2	5	25 1/8	<b>47</b> <sup>1</sup> / <sub>2</sub>	1 Year	46
YA786	2	17 1/2	3 1/2	5	25 1/2	48 1/16	1 Year	45

<sup>\*</sup> Includes ALUMSTAND on P. 510





- Long Chassis Service Jacks
   YA667C and YA662C feature an air actuated pump to raise lift arm quickly
   Hydraulic pump mechanism is operated by handle or foot pedal pump
- Knob style load release in handle end for precise control
- T-handle provides additional positioning assistance

Stock No.	Туре	Capacity, tons	Max Lift Height, inches	Low Height, inches	Saddle Size, inches	Frame Length, inches	Handle Length, inches	Minimum Operating Pressure, psi	Warranty	Weight, Ibs
YA657C	Hydraulic	4	24	5	5 1/2	50 <sup>5</sup> /8	42 <sup>1</sup> / <sub>8</sub>	_	1 Year	156
YA667C	Air/Hydraulic	4	24	5	5 1/2	50 <sup>5</sup> /8	42 1/8	140	1 Year	159
YA660C	Hydraulic	10	27	7	7 3/8	54 <sup>3</sup> / <sub>4</sub>	42 1/8		1 Year	427
YA662C	Air/Hydraulic	10	27	7	7 3/8	54 <sup>3</sup> / <sub>4</sub>	42 1/8	140	1 Year	441





- Adjustable extension screw raises saddle height
- Uses standard shop air supply (110 to 175 psi)
- · Rubber wheels allow ease in positioning



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Stock No.	Capacity, tons	Low Height, inches	Maximum Lift Height, inches	Power Raise, inches	Screw Extension, inches	Handle Length, inches	Base Size, inches	Minimum psi (for rated load)	Weight, lbs
YA1731A	22	9 7/8	20 1/4	6 3/8	4	48 3/4	22 <sup>7</sup> /8 x 12 <sup>1</sup> / <sub>2</sub>	150	78
YA731B	20	9 3/8	17 <sup>5</sup> /8	5 1/2	2 3/4	<b>39</b> 1/2	8 x 5 <sup>1</sup> / <sub>2</sub>	140	69





YA1229A





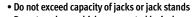
YA1228

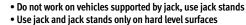
**Hydraulic Bottle Jacks** 

Stock No.	Capacity, tons	Low Height, inches	Maximum Height, inches	Screw Extension, inches	Base Size, inches	Handle Length, inches	Cap Diameter, inches	Operating Force, lbs
YA1228	8	8 7/8	17 5/8	2 3/4	4 3/4 x 4 3/4	18 <sup>1</sup> / <sub>8</sub>	1 3/8	101
YA1229A	12	9 1/2	18 5/8	3 1/8	5 1/4 x 5 1/8	18 <sup>1</sup> /8	1 3/4	102
YAS1229A*	12	6	10 5/8	1 <sup>5</sup> /8	5 1/4 x 5 1/8	18 <sup>1</sup> / <sub>8</sub>	1 3/4	89
YA1233A	20	9 1/2	18 5/8	3 1/8	6 <sup>1</sup> / <sub>4</sub> x 5 <sup>7</sup> / <sub>8</sub>	18 <sup>1</sup> / <sub>8</sub>	2	109
YAS1233A*	20	6 1/2	11 1/4	1 5/8	6 <sup>1</sup> / <sub>4</sub> x 5 <sup>7</sup> / <sub>8</sub>	18 <sup>1</sup> / <sub>8</sub>	2	101

<sup>\*</sup>Low profile model













## **Stands**



## Jack Stands (in pairs)

Stock No.	Capacity, tons	Low Height, inches	Maximum Height, inches		
YA874B	3 (per pair)	12	19		
YA875B	6 (per pair)	16 <sup>3</sup> / <sub>8</sub>	25 3/8		
YA512*	12 (per pair)	17 <sup>1</sup> / <sub>2</sub>	27 1/2		
ALUMSTAND*	3 (per pair)	10 3/8	15 <sup>3</sup> / <sub>8</sub>		
YA4712*	12 (per pair)	19 3/4	30 1/4		
YA4716*	6 (per pair)	15 <sup>3</sup> / <sub>4</sub>	24 3/8		

<sup>\*</sup>Blue-Point®

#### YA4712 and YA4716 Pnuematic Jack Stands.

- · Pneumatic cylinder automatically raises saddle to service height
- Saddle raises by pressing lever, automatically locks into place upon release

### **Utility Stand** (Blue-Point)

- Slim design maximizes work spaces and storage
- Acme screw allows for precise height adjustment

Stock No.	Capacity, tons	Low Height, inches	Maximum Height, inches	Base Size, inches	Cap Size, inches
YA779B	3/4	53 1/4	80	12 (diameter)	5 <sup>5</sup> /16 x 2 <sup>7</sup> /16

## **Wheel Dolly**

**YA779B** 



## Hydraulic Wheel Dolly (Blue-Point)

- Provides smooth, positive power for the removal and installation of single, tandem and duplex tires and wheels
- Lift arms can be adjusted to handle different wheel combinations

Stock No.	Capacity, tons	Lift Range, inches	Lifting Arm (length), inches	Lifting Arm (spread), inches	Length, inches	Width, inches	Height, inches
YA765D	3/4	2 1/2 to 8 3/8	26	27 1/2	45 <sup>1</sup> / <sub>8</sub>	39 1/2	34 <sup>5</sup> / <sub>8</sub>

## **Transmission Jacks**

# Transmission Jacks (Blue-Point®) YA714D 1/2 Ton High Lift Transmission Jack.

- Crank for precise and easy alignment of saddle
- 4 adjustable load support arms fit most transmission pan flanges
- Foot pedal pump permits hands free operation
- · Wide base and 4 casters for stability

#### YA715A 1/2 Ton Air/Manual Hydraulic Transmission Jack.

- Uses air for speed of operation and manual pump for precise control
- Extra wide base lowers center of gravity and promotes stability
- Rugged steel wheels and full swivel ball bearing casters
- · Adjustable ratchet style saddle
- Unique, handy release pedal provides controlled lowering of load



**YA727B** 

#### YA727B 1 Ton Wishbone Hydraulic Transmission Jack.

- Use on bus, truck, farm, automotive and construction vehicles
- · Load restraint chain included
- 2 heavy cast adjustable mounting plates
- 4 wedges to support load

#### YA876C 1/2 Ton Hydraulic Transmission Jack.

- Adjustable head can be tilted for optimum alignment of transmission bolt patterns
- · 4 wheel caster design allows easy movement and positioning
- Rugged steel wheels and full swivel ball bearing casters
- User friendly 360° rotating pumping socket for maximum directional operation

### **Transmission Jack Specifications**

Stock No.	Cap., tons	Max. Ht., inches	Saddle Base, inches	Lifting Head Size, inches	Handle Length, inches	Chassis Length, inches	Chassis Width, inches	Tilt	Min. Ht., Inches	Exp. Saddle Area, Inches	Jack Size, Inches	Net Weight, Ibs
YA714D	1/2	76 <sup>3</sup> /8	8 <sup>7</sup> /8 x 7 <sup>1</sup> /8	15 <sup>1</sup> / <sub>2</sub> x 15 <sup>1</sup> / <sub>2</sub>	11	_	33 1/2	12°	33	21 x 21	34 <sup>1</sup> / <sub>8</sub> L x 36 <sup>1</sup> / <sub>8</sub> W	161
YA715A	1/2	78 <sup>1</sup> / <sub>8</sub>	8 <sup>7</sup> /8 x 7 <sup>1</sup> /8	9 x 9	11	_	20	12°	37 <sup>7</sup> /8	21 x 21	34 <sup>1</sup> / <sub>8</sub> L x 36 <sup>1</sup> / <sub>8</sub> W	196
YA727B	1	44 3/4	18 <sup>5</sup> /8 x 12 <sup>1</sup> /4	15 <sup>1</sup> / <sub>2</sub> x 15 <sup>1</sup> / <sub>2</sub>	19 <sup>1</sup> / <sub>2</sub>	48	29 7/8	44° (fwd) 39° (rear) 13° (left and right)	10	20 <sup>1</sup> / <sub>2</sub> L x 18 <sup>1</sup> / <sub>2</sub> W	47 <sup>1</sup> / <sub>2</sub> L x 28 <sup>1</sup> / <sub>4</sub> W	309
YA876C	1/2	24 3/4	12 <sup>5</sup> /8 x 7 <sup>7</sup> /8	9 x 9	22 1/2	31	15	60° (fwd) 18° (rear) 12° (left and right)	8 1/2	17 x 9 3/8	31 <sup>1</sup> /8 x 15	106

## **Transmission Jack Accessories**

YA715A

**YA876C** 

#### YA780 Transmission Jack Bracket.

- Used with a transmission jack
- . Fits most FWD and RWD automatic transmissions
- Use to stabilize transmission when being removed or installed



YA780

#### **Fuel Tank Stand** YA712A Fuel Tank Stand.

- · Easily service fuel tank, fuel pumps and other components
- Handles fuel tanks up to 40 gal (empty)
- Includes anchoring straps and grounding wire
- Measures 9 1/4" H x 32" L x 15 3/8" W



## Air Operated End Lifts

Specifications	YA696D	YA692D
Capacity, tons	2 1/2	10
Low Height, inches	10 1/4	18 <sup>1</sup> / <sub>2</sub>
Maximum Lift Height, inches	35 <sup>3</sup> /8	50 1/2
Power Raise, inches	24 3/4	28
Saddle Spread, inches	28 to 53	25 to 53
Minimum psi (for rated load)	200	200
Clearance (lifting column to saddle front), inches	19	17
Net Weight, Ibs (kg)	210 (95)	641 (290)













- Do not exceed capacity of jacks or jack stands
- Do not work on vehicles supported by jack, use jack stands
- · Use jack and jack stands only on hard level surfaces
- · Read safety precautions on pages W1 to W4

### **Battery Lift**



### **Battery Lift**

#### YA785 Hybrid Battery Lift.

- Removes and installs battery assemblies on most Hybrid vehicles
- Accommodates battery packs with a special harness to adapt to specific lift points
- · Provides a safe alternative to manual lifting
- · Minimizes potential damage to vehicle interior
- Compact design, easily folds down requiring minimal storage space
- Harness is designed specifically for Hybrid electrical batteries and rotates 360°



## Engine Hoists and Slings/Bottle Jacks (Blue-Point®) -



#### **Engine Hoist and Sling**

#### YA778 Engine Hoist.

- Lift arm extends from 27 to 55", height of 94.5"
- · External remote pump with fine adjustment
- 25" x 33" footprint when folded for easy storage
- 360° swivel hook allows mobility
- . Maximum 2 ton lifting capacity

#### A238 Engine Sling.

 40" flexible cable each end with a fitting drilled for 1/2" diameter bolts

#### YA554A Engine Lift Plate.

- Bolts to intake manifolds on U.S. 2 or 4 barrel carbureted V6/V8 engines and throttle body V6/V8 engines
- 1 1/2 ton lift capacity

### **GA197A Lifting Pulling Tool.**

- Maximum lift of 6', minimum of 2'
- Anchored hook swivels a full 360°





#### YA2670A Engine Support Kit and Hoist.

- Ideal for FWD transmission removal and installation
- Supports engine and provides 15° adjustability in each direction

YA2670A

- Rests on drip rails between fenders across engine bay
- Accommodates engine compartments from 46 to 61 1/2"
- Includes YA2671A Lifting Assembly

#### YA2671A Lifting Assembly.

Replacement Lifting Assembly for YA2670A

#### **Optional Accessories:**

#### YA2673A Offset Lifting Bar.

- Attaches to the YA2670A and radiator core support
- Provides additional lifting and support

#### YA2674A W-Car Offset Bar for GM® Vehicles.

• Designed to assist with GM W-Car body style

#### YA2675A Swivel Adaptor Set.

- · Provides the ability for the leg plates to swivel
- · Ideal for engine compartments that are wider at the windshield

#### YA2676A Leg Plates for Honda® Vehicles.

- Adapts to fenders on Honda vehicles
- Used with YA2675A Swivel Adaptor Set

## Welding Equipment That Works as Hard as You Do.

The many Snap-on® MIG or TIG welders and accessories, plasma cutters, oxygen-acetylene torch kits, protective safety equipment and welding tools do their job so you can keep doing yours.

**Performance** — Longer weld times, higher duty cycles and wider amperage ranges contribute to industry-leading performance.

**Durability** — Metal wire feeder assemblies, copper-on-copper transformer construction and integral cooling fans provide increased longevity.

**Safety** — Protect yourself with safety equipment that gives you a natural feel as you work. From basic masks to auto-darkening visors to protective sleeves and gloves.

Snapan



## Snap-on® Muscle MIG/MIG Wire Feed Welders

Snap-on MIG Welders have higher duty cycles at maximum amperage providing added weld times and performance that surpasses the competition. Ideal for many applications including automotive repair, collision, heavy duty truck, farm and metal fabrication shops. Added capabilities include a detachable feeder assembly, spot stitch (some models), along with the optional TIG accessory and aluminum spool gun packs.



#### 230 V MIG Welders

Specifications	MIG220	MM250SL	MM350XL	
Output Amperage Max, amps	220	270	350	
Duty Cycle Rating	185A-60%	185A-100%	300A-100%	
Welding Capacity, inches	5/16	3/8	7/16	
Voltage Settings, MIG/TIG	12/4	8/4	8/4	
Spot Stitch	No	Yes	No	
Detatchable Feeder	No	Yes	Yes	
Wire Size, inches	0.023-0.045	0.023-0.045	0.023-0.0625	
Torch Length, ft	10	10	12	
Feeder Cable Length, ft	1	15	15	
Ground Cable Length, ft	10	15	15	
Power Input Cable Length, ft	20	20	20	
Input Voltage	208/230 V AC, 50/60 Hz	208/230 V AC, 50/60 Hz	208/230 V AC, 50/60 Hz	
Input Amperage (recommended)	31/28	26/24	46/42	
Gas Regulator Flowmeter	Yes	Yes	Yes	
Warranty*	2 Years	2 Years	2 Years	

\*Does not include cable or torch

TECHNICAL SUPPORT
1-800-ABC-WELD

## Portable MIG/MIG/Muscle MIG Welders

Snap-on® MIG welders can be used as straight polarity with shielding gas or reverse polarity without shielding gas for flux cored wire. MIG125 and MIG135 are compact and portable for use on the work site.



### 115 V MIG Welders

115 V MIIO WCIGCIS				
Specifications	MIG125	MIG135	MIG140	MM140SL
Output Amperage Max, amps	125	135	140	140
Duty Cycle Rating	80A-20%	90A-20%	140A-60%	140A-100%
Welding Capacity, inches	3/16	3/16	1/4	1/4
Voltage Settings, MIG/TIG	4/-	7/-	6/3	8/4
Spot Stitch	No	No	No	Yes
Detatchable Feeder	No	No	No	Yes
Wire Size, inches	0.023-0.035	0.023-0.035	0.023-0.035	0.023-0.045
Torch Length, ft	7	9	10	10
Feeder Cable Length, ft	_	_	_	15
Ground Cable Length, ft	8	8	10	15
Power Input Cable Length, ft	6	6	20	20
Input Voltage	115 V AC, 50/60 Hz	115 V AC, 50/60 Hz	115 V AC, 50/60 Hz	115 V AC, 50/60 Hz
Input Amperage (recommended)	20	20	30	30
Gas Regulator Flowmeter	Regulator	Regulator	Yes	Yes
Warranty*	2 Years	2 Years	2 Years	2 Years

<sup>\*</sup>Does not include cable and torch

#### **TECHNICAL SUPPORT** 1-800-ABC-WELD

## **Accessories - MIG Welders**

Image	Stock No.	Description	MM140SL	MM250SL	MM350XL	MIG220	MIG140
	MHG5A	Aluminum Spool Gun • Converts welders listed to aluminum welding				•	•
	MHG5B		•	•	•		
	CKSTP2125A	DC TIG Pack				•	•
	FLEXTIG25	Adds DC TIG welding capability for welding ferrous metals	•	•	•		
OF THE PROPERTY OF THE PROPERT	CKS2TK	Twin Cylinder Rack • Converts models listed to carry 2 cylinders		•	Standard	•	
	CKS15FN1030	Flexible Neck Torch • Flexible neck torch for welding exhaust systems	•	•	•	•	•











- Wear face shield and protective clothing while welding and cutting
   Do not allow bystanders while welding and cutting
   Read safety precautions on pages W1 to W4

## Muscle MIG/MIG Welder Parts and Accessories



CKSMPK\*

CKSMPK10

# Snap-on® MIG Welder Consumable Kits

Contains a selection of parts to repair Snap-on MM series, MIG220, MIG140, YA212AIND and FM140A welders along with MHG series spoolguns.

#### CKSMPK1 MIG Welder Parts Kit.

 Standard MIG consumables such as contact tips, 0-rings, nozzles, insulator and diffuser

## CKSMPK10 Master MIG Welder Parts Kit.

 Contains CKSMPK1 contents along with additional parts for aluminum spoolguns

## Parts and Consumables - MIG Welders

Stock No.	Description	MIG140	MM140SL	MIG220	MM250SL	MM350XL
CKS15TG1030	10 ft Cable and Torch (.030 wire)	std	std	opt	opt	_
CKS15TG1035	10 ft Cable and Torch (.035 wire)	opt	opt	std	std	_
CKS35XL1235	12 ft Cable and Torch (.035 wire)		_ Opt			std
CKS15TG1025	10 ft Cable and Torch (.025 wire)	opt	opt	opt	opt	- stu
CKS15TG1230	12 ft Cable and Torch (.030 wire)	opt	opt	opt	opt	_
CKS15TG1235	12 ft Cable and Torch (.035 wire)					_
	, ,	opt	opt	opt	opt	
CKS15TG1535	15 ft Cable and Torch (.035 wire)	opt .	opt	opt	opt .	-
CKS25SG1035	10 ft Cable and Torch (.035 wire)	opt	opt	opt	opt	opt
CKS35XL1245	12 ft Cable and Torch (.045 wire)	-	-		-	opt
CKS35XL1535	15 ft Cable and Torch (.035 wire)	-	-	-	-	opt
CKS35XL1545	15 ft Cable and Torch (.045 wire)	-	-		-	opt
CKSM103LB	Liner for 10 ft Torch (.020030)	std	std	opt	opt	-
CKSM123LB	Liner for 12 ft Torch (.020030)	opt	opt	opt	opt	opt
CKSM104LN	Liner for 10 ft Torch (.030045)	opt	opt	std	std	-
CKSM124LN	Liner for 12 ft Torch (.030045)	opt	opt	opt	opt	std
CKSM3T2510	Contact Tip (.025), 10 ea	opt	opt	opt	opt	opt
CKSM3T3010	Contact Tip (.030), 10 ea	std	std	std	std	opt
CKSM3T3510	Contact Tip (.035), 10 ea	opt	opt	opt	opt	std
CKSM3T4510	Contact Tip (.045), 10 ea	opt	opt	opt	opt	opt
CKSM3TN50	1/2" Adjustable Nozzle	std	std	std	std	_
CKSM6C62	Nozzle with 5/8 ID	_	_	-	-	std
CKSM3TB2	Insulators (2 ea) w/0-rings, 6 ea	std	std	std	std	ı
CKSM3TBR3	Insulator 0-rings	std	std	std	std	-
CKSM3TD	Gas Diffuser	std	std	std	std	_
CKSM6D	Gas Diffuser	_	_	ı	_	std
CKSM6B	Insulated Nozzle Bushing	_	-	-	-	std
CKSGRFM	Regulator Flowmeter	std	std	std	std	std

std = Standard

opt = Optional



## MIGCARTA Welder and Plasma Cutter Cart (Blue Point®).

- 21" x 14.5" top tray for storage of MIG welders and plasma cutters
- Includes multiposition cylinder bracket for various bottle sizes
- Includes 2 hooks for cable storage

### **Portable MIG Welder Parts and Consumables**

Stock No.	Description	MIG125	MIG135
CKSGR115	Regulator	std	std
MIG023	Contact Tip (.023), 10 ea	std	std
MIG030	Contact Tip (.030), 10 ea	opt	opt
MIG035	Contact Tip (.035), 10 ea	opt	opt
MIG1151	Tapered Nozzle	std	std
MIG1152	Spot Weld Nozzle	opt	opt
MIG1153	Steel Liner	std	std
MIG1154	Nozzle Spring	std	std
MIG1155	9 ft Cable and Torch	-	std
MIG1156	Diffuser	std	std
MIG1157	Teflon Liner (for aluminum wire)	opt	opt
and Oracala ad			

std = Standard

opt = Optional

## **Aluminum Spool Parts and Consumables**

	<u> </u>		
Stock No.	Description	MHG5A	MHG5B
CKSM5C62	5/8" Nozzle	std	std
CKSM5NB	Nozzle Body	std	std
CKSM5B	Insulated Nozzle Bushing	std	std
CKSM35NA62	Nozzle Assembly	std	std
CKSM35D	Gas Diffuser	std	std
CKSMGT2510	Contact Tip (.025) 10 ea	opt	opt
CKSMGT3010	Contact Tip (.030) 10 ea	opt	opt
CKSMGT3510	Contact Tip (.035) 10 ea	std	std
CKSMGT36410	Contact Tip (3/64) 10 ea	opt	opt
CKS404330	Aluminum Wire (Size .030) 1 lb	opt	opt
CKS404335	Aluminum Wire (Size .035) 1 lb	std	std
CKS4043364	Aluminum Wire (Size 3/64") 1 lb	opt	opt

std = Standard opt =

opt = Optional

#### **TIG Pack Parts and Consumables**

Stock No.	Description	CKSTP2125A	FLEXTIG25
CKS3T116	Tungsten 3" - size 1/16"	-	std
CKS3T332	Tungsten 3" - size 3/32"	std	std
CKS3T418	Tungsten 3" - size 1/8"	std	opt
CKS3C116	Collet for 1/16" Tungsten	-	std
CKS3C332	Collet for 3/32" Tungsten	std	std
CKS3C418	Collet for 1/8" Tungsten	std	opt
CKS3CB116	Collet Body for 1/16" Tungsten	-	std
CKS3CB332	Collet Body for 3/32" Tungsten	std	std
CKS3CB418	Collet Body for 1/8" Tungsten	std	opt

std = Standard

opt = Optional

## **TIG Welders**

Welds a variety of metals including steel, aluminum, stainless steel and chromoly.



Specifications	TIG150i	TIG255i
Torch	Gas Cooled	Water Cooled
Input Voltage	208/230 V AC	208/230 V AC
Input Current, A	30	30
Output Current, Range	5-150 A	5-220 A
Duty Cycle, Rating	110 A-60%	130 A-60%
Torch Lead Length, ft	25	25
Ground Cable Length, ft	25	25
Power Cord Length, ft	12	12
Shipping Weight, lb (kg)	57 (26)	180 (82)

Stock No.	Description	TIG150i	TIG255i
TIGINVFS	Remote Foot Switch	std	std
CKSGRFM	Regulator-Flowmeter	std	std
TIG150GCA	Ground Cable Assy.	std	std
TIG150TA	Torch Assembly	std	_
TIG255TA	Torch Assembly	_	std
CKSKITTIG250	Consumable Kit	std	std
TIGINVFP	Foot Pedal Amperage Control	opt	opt
TIGINVRAD	Clip On Torch Amperage Control	opt	opt
TIG250EH	Stick Electrode Holder	opt	opt
TIG250HC25	Leather Cable Cover	opt	opt

std = Standardopt = Optional

## **TIG Welders**

- Welding Process Versatility: select between AC TIG, DC TIG or Stick Electrode welding options
- Amperage Control: fine adjustment range to weld extremely thin materials to maximum thicknesses
- TIG 2 or 4 stage continuous and pulse modes
- AC Balance Adjustment: penetration, balanced and cleaning
- Pulse and background amperage adjustment
- AC frequency adjustment
- Upslope/Downslope as well as post as flow adjustment
- High frequency/scratch starting modes

#### TIG150i TIG Welder.

- Full featured 150 A TIG welder that's ideal for everyday shop use TIG255i TIG Welder.
- Full featured 255 A TIG welder with a water cooled torch for longer weld times, cooler operation and enhanced dexterity
- Ideal for production welding environments













- Wear face shield and protective clothing while welding and cutting
- Do not allow bystanders while welding and cutting
- Read safety precautions on pages W1 to W4

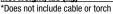
## WELDING

## **Plasma Cutters**

Snap-on® plasma cutters are ideal for cutting ferrous (steel, stainless steel) metals as well as nonferrous metals (aluminum) and new high strength steels. Uses clean, dry compressed air, includes air regulator for accurate adjustment of air pressure for the best quality cut. Compact torch handle for accessing tight areas.



Specifications	PLASMA60i	PLASMA50	PLASMA30i	PLASMA25
Output Amperage, max, A	Adjustable 20 to 55	30 or 50	Adjustable 5 to 25	25
Cut Thickness, inches	3/4	1/2	3/8	1/4
Sever Thickness, inches	1	3/4	1/2	3/8
Primary Input, V	208/230 V AC 50/60 Hz	208/230 V AC 50/60 Hz	115 or 230 V AC 50/60 Hz	115 V AC 50/60 Hz
Primary Input, A	40 A	30 A	30 A 115 V or 20 A 230 V	20 A
Duty Cycle Rating	40 A-60%	50 A-40%	22 A-60%	25 A-20%
Compressed Air Requirements, min	68 psi @ 7 CFM	88 psi @ 7 CFM	50 psi @ 7 CFM	88 psi @ 5 CFM
Torch Cable Length, ft	18	18	12	12
Ground Cable Length, ft	18	18	12	12
Warranty*	2 Years	2 Years	2 Years	2 Years
Net Weight, Ibs (kg)	44 (20)	137 (62)	29 (13)	55 (25)



PLASMA2304







PLASMA2306



**TECHNICAL SUPPORT** 1-800-ABC-WELD

PLASMA5005

#### Plasma Cutter Consumables

Plasina Cullei Consuma	เทเธว					
Description	PLASMA115	PLASMA230	PLASMA25	PLASMA50	PLASMA30i	PLASMA60i
Complete Torch Assembly	PLASMA1153	PALSMA23010	PLASMA2503	PLASMA5007	PLASMA3007	PLASMA5007
Metal Diffuser	_	_	PLASMA5005*	PLASMA5005*	_	PLASMA5005*
Short Nozzle (0.9 m) 35 A	PLASMA2306 †	PLASMA2306 †	_	_	_	_
Short Nozzle (1 mm) 30-35 A	PLASMA2301 †	PLASMA2301 †	_	_	_	_
Electrode	PLASMA1151 †	PLASMA2305 †	PLASMA5004 †	PLASMA5004 †	PLASMA3004 †	PLASMA5004 †
Long Electrode	PLASMA1152*	PLASMA2307 †	_	_	_	_
Nozzle (0.7 mm)	_	_	_	_	PLASMA3002 †	_
Nozzle (0.9 mm) 35 A	_	_	PLASMA2502 †	PLASMA2502 †	_	PLASMA2502 †
Nozzle (1.1 mm) 55 A	_	_	PLASMA5002 †	PLASMA5002 †	_	PLASMA5002 †
Long Nozzle (0.9 mm) 35 A	PLASMA2308 †	PLASMA2308 †	_	_	_	_
Long Nozzle (1 mm) 35-50 A	PLASMA2302**	PLASMA2302**	_	_	_	_
Nozzle Holder	PLASMA2304	PLASMA2304	PLASMA5001	PLASMA5001	PLASMA3001	PLASMA5001
Spacer Spring	_	PLASMA2309 †	_	_	_	_
Swirl Ring	PLASMA23031	PLASMA23031	PLASMA5003*	PLASMA5003*	PLASMA5003*	PLASMA5003*
Torch Head Body	_	PLASMA23011	PLASMA5006	PLASMA5006	PLASMA3006	PLASMA5006
Two Point Snacer		_	PLASMA2504	PLASMA2504	_	PLASMA2504

<sup>1</sup> each per package unless otherwise noted
\* 2 each per package
\*\* 3 each per package
† 5 each per package

PLASMA2504

## Gas Welding (Blue Point®)





- · Use for auto repair, construction, fabrication, manufacturing and maintenance
- · Forged brass regulator is durable and strong
- Regulator diameter 2 1/4" allows precise control of gas
- Internal filter keeps particles from entering regulator
- PTFE Teflon® seal
- · Handle shut off valve color coding allows ease in identifying the corresponding gas control
- 2 piece cutting tip is easier to clean
- · High quality hose offers reduced tear resistance and increased flexibility



#### WE200A Standard Duty Welding Kit.

• Cuts up to 1" and welds up to 1/8". Cuts up to 4" and welds up to 1/2" with optional tips

#### WE250A Medium Duty Welding Kit.

• Cuts up to 1" and welds up to 1/8". Cuts up to 5" and welds up to 1/2" with optional tips

## **Kit Components**

Stock No.	Description		
HRC1401340	85 Weld Handle with Check Valves	std	std
HRC1300380	72-3 Cut Attach	std	std
HRC9100614	D-85 Weld Mixer	std	std
HRC4300557	3/16 x 20 Twin Hose	std	std
HRC4304482	Cover Goggle	std	std
HRC9004486	Striker	std	std
WE200A1	Oxygen Regulator	std	-
WE200A2	Acetylene Regulator	std	_
WE250A1	Oxygen Regulator	-	std
WE250A2	Acetylene Regulator	_	std
HRC1502172	6290-1 #1 AC Cut Tip	std	std
HRC1600890	23-A-90-5 #5 Weld Tip	std	std
HRC1600870	23-A-90-3 #3 Weld Tip	std	std
HRC1600850	23-A-90-1 #1 Weld Tip	std	std

Contains:

std = Standard opt = Optional

## **Optional Accessories**

Optional Ac	CC33011C3 Contains:	* /	*
Stock No.	Description		
HRC1800710	J-63-1 Heating Assembly	opt	opt
HRC1600840	23-A-90-0 #0 Weld Tip	opt	opt
HRC1600860	23-A-90-2 #2 Weld Tip	opt	opt
HRC1600880	23-A-90-4 #4 Weld Tip	opt	opt
HRC1502170	6290-00AC #00AC Cut Tip	opt	opt
HRC1502171	6290-0AC #0AC Cut Tip	opt	opt
HRC1502173	6290-2AC #2AC Cut Tip	opt	opt
HRC1502174	6290-3AC #3AC Cut Tip	opt	opt
HRC1502175	6290-4AC #4AC Cut Tip	-	opt
HRC4302202	Torch Flash Arrestor (Pair)	opt	opt
HRC9000160	E-9 Tip Cleaner (2 pc tip)	opt	opt
HRC9004484	Replacement Flints	opt	opt

std = Standard opt = Optional

## Welding Gloves/Sleeves (Blue Point)



#### YA427B Welding Gloves.

- · Helps protect hands from sparks when welding
- · Leather construction with added insulation for heat protection
- · Reinforced palm for durability



#### YA4282 TIG Welding Gloves.

- Ideal for TIG welding processes
- · Pigskin material for precise control
- Helps protect hands from heat and sparks
- Thick leather cuff for wrist protection



#### YA4280 Welding Sleeves.

- · Helps protect arms from sparks when welding or cutting
- Elastic bands at each end of sleeve
- · Constructed of flame retardant fabric











- Wear face shield and protective clothing while welding and cutting
- Do not allow bystanders while welding and cutting
- Read safety precautions on pages W1 to W4

## **Accessories**

Welding Helmets (Auto Darkening)
Auto darkening welding helmets are triggered automatically by UV light sources. Some models have adjustable sensitivity for various light conditions and an adjustable delay setting to maintain dark state for extended periods of time. Fixed shade helmets offer a fixed #10 shade triggered automatically by UV light. Clear shade provides operator visibility to line up work prior to welding.











YA4606	

YA4601

YA4602

YA4603

Specifications	YA4606 †	YA4604 †	YA4601 †	YA4602* †	YA4603* †
Shade	#9-13	#9-13	#9-13	#9-13	#10
Sensitivity	Adjustable	Adjustable	Adjustable	Adjustable	Fixed
Delay	Adjustable	Adjustable	Adjustable	Fixed	Fixed
Clear Shade	#3.5	#3.5	#3.5	#3.5	#3.5
Viewing Area, inches	3.74 x 3.35	3.81 x 2.40	3.81 x 2.40	3.81 x 1.88	3.81 X 1.38
Viewing Area, square inches	12.53	9.14	9.14	7.16	5.26
Number of Sensors	4	4	4	2	2
Delay Time, seconds	0.1-1.0	0.1-1.0	0.2-1.0	0.1-1.0	0.25-0.045
Switching Speed, miliseconds	0.04	0.04	0.04	0.04	0.04
Power Supply	Solar-Lithium	Solar-Lithium	Solar-Lithium	Solar	Solar
Applicable Standards	ANSI, DIN, EN, CSA, AS/NZS	ANSI, DIN, EN, CSA, AS/NZS	ANSI, DIN, EN, CSA	ANSI, DIN, EN, CSA	ANSI, DIN, EN, CSA
Opt. Magnifying Lens 1.5x/2.0x	YA4600MAGKT †	YA4600MAGKT†	YA4600MAGKT †	YA4600MAGKT †	YA4600MAGKT †
Warranty	2 Years	2 Years	2 Years	1 Year	1 Year

<sup>\*</sup>Blue Point®

**Welding Helmets (Fixed Shade)**Fixed shade welding helmets offer shade #10 protection. Hinged mask can be adjusted for hands free drop down.











YA551B

**EFPBONEHEDA** 

**EFPSTRIKERA** 

**EFPHANNIBALA** 

**EFPNSTLKRA** 

Specifications	YA551B	EFPBONEHEDA †	EFPSTRIKERA †	EFPHANNIBALA †	EFPNSTLKRA †
Lens Style	Flat	180° Peripheral	180° Peripheral	180° Peripheral	180° Peripheral
Shade	#10	#10	#10	#10	#10
Viewing Area, inches	5.25 X 4.50	_	_	_	_
Viewing Area, square inches	23.63	35.6	35.6	35.6	35.6
Applicable Standards	ANSI	ANSI	ANSI	ANSI	ANSI
Lens (included)	YA551-5	EFPCLLENSREP	EFPCLLENSREP	EFPCLLENSREP	EFPCLLENSREP
Opt. Magnifying Lens 1.5x	YA555MAG1.5*	_	_	_	_
Opt. Magnifying Lens 2.0x	YA555MAG2.0*	_	_	_	_
Opt. Auto Darkening Lens	_	EFPADFLENSA	EFPADFLENSA	EFPADFLENSA	EFPADFLENSA
Warranty	2 Years	1 Year	1 Year	1 Year	1 Year

<sup>\*</sup> requires YA551MAGADP

<sup>†</sup> **( E** 

¹ ( €

#### **Accessories**

### **EFP Series Welding Lenses**

Optional auto darkening lens available for all EFP series helmets

EFP3WLDLENS #3 Welding Lens.

EFP5WLDLENS #5 Welding Lens. EFP8WLDLENS #8 Welding Lens.

EFP10WLDLENS #10 Welding Lens. EFP12WLDLENS #12 Welding Lens.

**EFPADFLENSA Auto Darkening Lens.** 

# Welding Lenses YA4600MAGKT Magnifying Lens Kit.

- Comes complete with 1.5X and 2.0X magnifying lenses and lens holder
- Optional accessory provides additional magnification for YA4601, YA4602, YA4603, YA4604 and YA4606 welding helmets only



**EFPADFLENSA** 





**GAC1100C** 

#### Welding Goggles (Blue-Point®) GAC1100C Safety Goggles.

· Green tinted lens for acetylene torch work

#### **Marking Set** YA247 Welder's Marking Set. Includes:

- YA247-2 soapstone marker for making temporary markings
- YA247 scribe with a sharp, tough carbide tip for making permanent markings
- Replaceable soapstone
- · Each tool has a tough aluminum barrel
- · Soapstone marker includes built in sharpener
- · Convenient storage pouch



## **Welding Hammer**

WCH3 Welder's Chipping Hammer.

• Features pick end and 3/4" chisel head end

· Heat treated high alloy steel for long life

• Overall length is 11"

Head length is 7 1/2"



## **Welding Clamps**

## **C-Clamps**

- Equipped with antispatter spindles, precision cut from hardened steel
- Forged frames have extra deep throats for additional strength and work capacity
- · Grooved anvil, in combination with a serrated pad, provides nonslip grip on various metal surfaces
- Spindles, handles and pads are copper plated to avoid collecting spatter

Stock No.	Capacity, inches	Throat Depth, inches
CL402A	0-2	2
CL403A	0-3	2 1/2
CL404A	0-4	2 7/8
CL406A	0-6	3 5/8
CL408A	0-8	4 1/2
CL410A	2-10	5 5/8
CL412A	2-12	5 3/4



**CL402A** 











- Wear face shield and protective clothing while welding and cutting
- Do not allow bystanders while welding and cutting
- Read safety precautions on pages W1 to W4

## Clamps/Vises (Blue-Point®)



VGP12212

### Large Jaw

Stock No.	A inch (mm)	B inch (mm)	
VGP12212	3 15/16 (100)	12 (300)	

 Multi purpose tool with larger jaw capacity for general maintenance and screw in oil filter removal

### **Locking C-Clamps**

 Quick and easy handling clamps for auto body and metal fabrication applications

	Stock No.	A inch (mm)	B inch (mm)
Standard Tip	VGP12406	2 5/16 (60)	6 (152.4)
	VGP12412	3 15/16 (100)	12 (304.7)
	VGP12418	10 <sup>1</sup> / <sub>4</sub> (260)	18 (457.2)
	VGP12424	15 <sup>11</sup> /16 (400)	24 (609.6)
Swivel Tip	VGP22406	1 <sup>5</sup> /16 (50)	6 (152.4)
	VGP22412	3 <sup>15</sup> /16 (100)	12 (304.7)
	VGP22418	9 7/16 (240)	18 (457.2)
	VGP22424	15 <sup>11</sup> /16 (400)	24 (609.6)
Long Reach	VGP13420	10 5/8 (270)	20 (508)
Aluminum Alloy	VGP14412	3 1/2 (90)	12 (304.7)
Locking U-Clamp	VGP12509	2 5/16 (60)	9 (228.6)
<b>Self-Leveling Jaws</b>	VGP23312	3 15/16 (100)	12 (304.7)
Sheet Metal Clamp	VGP12808	1 3/4 (45)	8 (203.2)
Plugweld Pliers	VGP13709	1 9/16 (40)	9 (228.6)



#### VGP12509 Locking U-Clamps

 U-shaped jaws allow access and visibility when welding



#### VGP13709 Locking Pliers/Plugweld

 Copper alloy knurled pad prevents burnthru when plugwelding thin sheet metal



#### VGP22418 Locking C-Clamps/Swivel Tip

 Swivel pads allow parallel clamping while preventing denting or gouging on delicate surfaces



#### VGP23312 Locking Clamps/Self Leveling Jaws

 Swivel pads and narrow jaw profile firmly grip tapered surfaces in areas where c-clamps cannot fit

## Auto Body/Welding Sets VGP104 Autobody/Welding Locking Pliers Set.

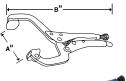
 Includes VGP23312 self leveling jaws pliers, VGP13709 plugweld pliers plus VGP14412 and VGP12406 c-clamp pliers (4 pcs) in VGP1041 kit bag



## **CL408VIS High Visibility C-Clamps**

- Similar to CL series C-clamps
- High visibility models conform to OSHA safety color standard for physical hazards regulation #19110.144
- 3/4" spindle diameter

Stock No.	Capacity, inches	Throat Depth, inches	
CL404VIS	0-4 1/2	3 1/4	
CL406VIS	<b>0-6</b> <sup>1</sup> / <sub>16</sub>	<b>3</b> 5/8	
CL408VIS	0-8 1/4	5	





VGP12412

## VGP12412 Locking C-Clamps

 Quick and easy handling clamps for auto body and metal fabrication applications



VGP13420

#### VGP13420 Locking C-Clamps/Long Reach

 Wide profile with perforated jaws allows clamping around large objects with uniform tension distribution



## VGP12808 Locking Clamps/ Sheet Metal

 Wide jaws allow clamping, bending, forming and crimping of sheet metal without gripping effort



#### VGP14412

#### VGP14412 Locking C-Clamps/Aluminum Alloy

- Lightweight aluminum jaw will not bend or distort body panels
- Welding pellets will not adhere to jaw



MG2000K

## Welding Clamps/Miniature

- Micro size for optimal access into confined spaces
- Aluminum alloy body ensures robustness with minimal weight while resisting splatter and corrosion
- Design permits exertion of 1/2 ton of force without deformation
- Perforated jaw allows attachment to fixtures and connection of ground cables
- One handed "no pinch" clamping and release
- MG2000K Micro Grip Locking Clamp Set.
- Includes 4 micro grip clamps



#### YA22300A

#### YA22300A Standard Duty Spot Welder.

- Produces spot welds for collision repair
- Squeeze type action produces factory style welds
- Optional accessories can increase welding capability

#### YA223001 Welding Tip.

Long spot welding tip for YA22300A

#### YA223002 Welding Tip.

Short spot welding tip for YA22300A

#### YA223003 Welding Tip.

 Replacement drip rail welding tip for the YA223004 welding cable assembly

#### YA223004A Welding Cable Assembly.

- Accessory welding cable assembly for the YA22300A
- · Allows welding from a single side such as door skins and other applications

#### YA223005A Dent Puller Kit.

· Fast, effective dent repair without drilling holes or using draw pins

#### YA223006 Welding Tip.

 Replacement welding tip for the YA223004 welding cable assembly YA223009 Welding Tip.

Drip rail spot welding tip for YA22300A

#### YA22356 Handle.

- New style handle to house the improved YA22357 switch
- · Can be retrofitted to older models

#### YA22357 Switch.

- · Improved metal encased switch for increased durability
- Can be retrofitted to older models



**Spot Welders** 



Wheelhouse Electrode



Long Reach Electrode

YA22355

#### YA22355 Heavy Duty Liquid Cooled Spot Welder.

- Designed to produce factory type spot welds in collision repair
- Squeeze type action produces factory style welds
- Pneumatic gun welds through primers, sealers and adhesives
- Features coolant circulation throughout the welding tips for consistent weld penetration
- Included accessories: 14" long reach electrode and wheelhouse electrode

Specifications	YA22300A	YA22355	
Primary Voltage, V AC	208/230	208/230	
Line Fuse, A	50	60	
Max Output, A	2,800	6,000	
Max Thickness, ga.	2 pcs 20	3 pcs 20	
Coated Metal Capability	No	Yes	
KVA Rating	4	6	
Shipping Weight, Ibs	120	300	

## **Dent Pullers/Accessories**



#### **Stud Gun Dent Pullers**

#### YA22345KT Stud Gun Dent Puller Kit.

- · Kit includes stud gun, welding tips, slide hammer and T-puller
- Used to pull dents by welding pins to work piece
- Stud gun uses minimal heat to reduce burn through

#### YA223451 Draw Pins (2 mm).

- . Soft for easy flexing and grinding
- Delivers 500 lb pull
- Pack of 500

#### YA223452 Draw Pins (2.5 mm).

- · Soft for easy flexing and grinding
- Delivers 500 lb pull
- Pack of 500

#### YA223454 T-Puller.

- · Compact for small damage repair on lightweight metal
- Helps reduce overpull



#### YA223453 Magna Clamp.

- · Features wing nut and is self tightening
- Locks onto draw pins for pulling dents

#### YA233455 Slide Hammer.

- Polished steel bar with rubber handle ensures positive pulling action YA223456 Shrinking Electrode.
- · Provides fast heat

#### YA223457 Pin Electrode.

Holds all standard size pins

#### YA223458 Trim Rivets.

- Used to repair metal trim strips
- Weld onto panel and provide permanent retention to trim strip
- Pack of 500

#### YA223459 Rivet Electrode.

- For use with YA223458 trim rivets
- · Retains trim rivet for welding
- Wear face shield and protective clothing while welding and cutting
- Do not allow bystanders while welding and cutting
- Read safety precautions on pages W1 to W4











## **Dent Puller Systems**





## Portable Dent Pulling System

- Easily pulls dents on roofs, hoods and side panels
- Star tip design eliminates the need to drill holes or cut pin heads
- Built-in slide hammer speeds up the pulling process (YA22350C only)



Specifications	YA22350C	YA22375	YAH22350C	YAH22375
Туре	Star Tip	T-handle	Star Tip	T-handle
Primary Voltage	120 V AC 50/60 Hz	120 V AC 50/60 Hz	208/230 V AC 50/60 Hz	208/230 V AC 50/60 Hz
Line Fuse	30A	30A	30A	30A
Input Power Cable Length (ft)	25	25	25	25
Power Lead Length (ft)	7	10	7	7
Ground Cable Length (ft)	7	7	7	7
Shipping Weight (lbs)	64	64	64	64

#### Portable Dent Puller Accessories

YA2235CART Accessory Cart. Adds additional height and portability. YA2355 Star Tips. Replacement tips (10 ea) for the YA22350C, YAH22350C and YA223005.

YA2351 Welding Tip. Optional long stud welding tip.
YA2352 Welding Tip. Optional molding rivet welding tip.

YA2353 Heating Tip. Replacement heat shrink heating tip.

YA2358 Magnetic Base. Replacement magnetic ground clamp.

YA22357 Trigger Switch. Replacement switch.

YA223008 Pry Bar. Replacement pry bar for YA22375 and AH22375, optional for YA22350C and YAH22350C.



## **Quick Claw Dent Pulling Set**

YA22351 Quick Claw Dent Pulling Set.

- Used with YA22350C, YAH22350C, YA22375 and YAH22375
- Used to establish multiple pull points along dents
- Independent finger action of claw varies the pulling force at multiple points
- · Can pull by hand, slide hammer or chain
- · Comes with claw, 2 tips and 24 wires

YA22352 Claw Handle. 4 finger "claw" pulling handle. 1 included in set.

YA22353 Welder Tips. Welding tips for YA22354 welding wires. 2 included in set.

YA22354 Weld Wires. 1/2 lb welding wires. 24 included in set.



#### Flashlights (Non-Rechargeable)

#### High Output LED Flashlights

- Precision machined aircraft aluminum
- Crush resistant 2000+ lbs
- . 0-ring provides ultra tight seal
- Shock proof and water resistant
- 3 way tactical switch (momentary on/constant on/lockout mode)



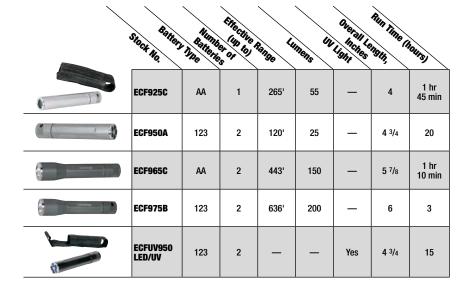
#### **ECFHEAD1A LED Headlight** (Blue-Point®).

- Bright 1 W LED never needs replacing
- · Pivoting head and adjustable headband
- Water resistant
- 30 hours continuous run time on (3) AAA alkaline batteries



#### **ECFSN1AAF** Focusing "AA" LED Flashlight.

- Exclusive Focus-Lock system
- One handed slide focus
- . 100 lumens of light output from a single AA alkaline battery
- 2.5 hours continuous operation
- 426' beam distance
- 4.5" long, 1" diameter
- · Flashlight features newest technology high output LEDs
- Antiroll design keeps flashlight in place
- Rubberized nonslip grip is great for both hot and cold weather use
- · Limited lifetime warranty from defects in materials or workmanship





**ECFSN2AAA** 

#### **ECFSN2AAA 2 "AAA"** Inspection Light.

- High output 65 lumen LED in a compact pocket light
- · Antiroll design, fixed beam focus
- 200' beam distance
- 3 hour continuous operation
- 5.75" length, 0.6" diameter
- Uses (2) AAA alkaline batteries
- Flashlight features newest technology high output LEDs
- Antiroll design keeps flashlight in place
- · Rubberized nonslip grip is great for both hot and cold weather use
- · Limited lifetime warranty from defects in materials or workmanship



**ECFSN4AAAF** 

#### **ECFSN4AAAF Focusing "AAA"** Inspection Flashlight.

- Ultra high output 200+ lumens
- One handed slide focusing & focus lock system
- Antiroll design
- Dual level light output 1 click 100%, 2nd click 50%
- 700' beam distance
- 64 hour continuous operation
- 5.5" long, approximately 1.5" diameter
- Uses (4) AAA batteries
- Flashlight features newest technology high output LEDs
- Antiroll design keeps flashlight in place
- Rubberized nonslip grip is great for both hot and cold weather use
- · Limited lifetime warranty from defects in materials or workmanship



#### ECFB200S ECFB200BL/ECFB200S Penlight

ECFB200BL

- (Blue-Point). · High intensity 3 W, 100 lumen penlight
- 6.25" length, 1/2" diameter
- Includes pocket clip and protective rubber tip
- Comes in blue (ECFB200BL) and silver (ECFB200S)
- Includes (3) AAA batteries



#### **ECF35 Explosion Proof Flashlight** (Blue-Point).

- Powered by (2) D cells (not included)
- Features battery decks to isolate batteries from the bulb
- High impact plastic body for durability
- · Channel gasket that waterproofs the lens and lens cap
- UL® and Bureau of Mines approved
- U.S. Federal and Military Specs. MX-992/U. Type II, Style 1, except color



ECF201A

#### **ECF201A Aluminum Police** Style Flashlight (Blue-Point).

- 3 W LED flashlight features K2 Luxeon LED produces 130 lumens
- Aerospace grade extruded aluminum body
- Average run time of 10 hours on (2) D alkaline batteries (not included)

#### **Laser Flashlights**

#### ECFLASER90 90 Lumen Flashlight with Red Laser.

- High output white light flood beam LED flashlight with red laser illuminates and pinpoints vehicle work area
- Switch positions: white light only, white with laser and laser only
- · Anodized aluminum barrel for corrosion resistance and durability
- · Features high quality 3 W Cree LED
- "Technician designed" for underhood, underdash "close quarters" work



**ECFLASER90** 

#### Rotating Flashlights (Blue-Point®)



# ECFLED48 48 LED Rotating Magnetic Work Light.

- 48 high output LEDs produce more than 2,000 lux at 24"
- Strong magnet mounts securely on any ferrous surface
- Pivoting ball joint base permits positioning at any angle
- Includes (3) AA alkaline batteries
- 2x as bright as the original 24 LED version



# ECFLED24R 24 LED Rechargeable Rotating Magnetic Work Light.

- Rechargeable version of ECFLED24 LED light
- Strong magnet mounts securely on any magnetic surface
- Mounts underhood, underdash and undercar wherever it is needed
- Keeps hands free to do the work, while lighting the work area
- Direct light to any angle using rotating magnetic base
- · Provides 45 lumens light output
- · Fully charges in 5 hours



# ECFLED24 Rotating Magnetic LED Work Light.

- 24 high output LEDs provide bright illumination
- Sturdy blue aluminum housing for durability
- Rotating head allows directional positioning
- Powerful magnetic base for secure mounting
- Includes (3) AAA batteries

#### Flashlights/Spotlights/Utility Lights (Rechargeable) (Blue-Point)



#### **Rechargeable Flashlights**

- 20 LEDs provide up to 4 hours light output
- IP65 rated: resistant to water and dust infiltration
- 180° folding design offers the ultimate in flexible positioning
- · Rechargeable and cordless for convenient use
- Includes 110 V wall charger and 12 V car charger
- Robust construction will survive rough environments
- Stand support on back; swivel hook on the top
- 800 lux at 0.5 m
- Battery Capacity: 1,200 mAh, 3.7 V Li-ion
- Charge time 4 hours
- Run time 4 hours

ECFBP20 Rechargeable Shop Light. Blue.
ECFBP20BLK Rechargeable Shop Light. Black.
ECFBP20G Rechargeable Shop Light. Green.
ECFBP20O Rechargeable Shop Light. Orange.
ECFBP2R Rechargeable Shop Light. Red.

#### **LED Pocket Lights**

- 20 high output LEDs produce 1,600 lux output at 0.5 m
- 360° folding design offers the ultimate in flexible positioning
- Belt/pocket clip to keep the light handy at all times
- Includes 110 V AC charger
- Charges completely in approximately 4 hours
- Strong Li-ion battery provides up to 4 hours of continuous light
- Rare earth magnet in base
- UL®/CSA® listed

ECFPKT20 High Output LED Pocket Light. Blue.
ECFPKT20R High Output LED Pocket Light. Red.
ECFPKT20G High Output LED Pocket Light. Green.
ECFPKT20BLK High Output LED Pocket Light. Black.
ECFPKT20O High Output LED Pocket Light. Orange.









- Do not remove or bypass the grounding prong on any electrical plug
- Read safety precautions on pages W1 to W4



ECFPKT20



#### **Rechargeable Utility Lights**



#### ECFSP200A High Output Bar LED Shop Light.

- 120° wide viewing angle
- · High output LED BAR
- Includes 110 V charger cord and charge base
- Professional black finish to maintain a cleaner look in tough environments
- · Battery capacity 1,300 mAh
- LED life time approximately 15 years
- Continuous operation for up to 3 hours
- UL®/CSA® listed



#### ECFSP30A Cordless 30 LED Utility Light.

- Full charge provides continuous operation for up to 8 hours
- Versatile light positioning swivel hook, stand on end and lay on side
- 7.2 V NiMH 1300 mAh battery; 120 V AC charger input
- Impact resistant housing and shatterproof polycarbonate lens



#### ECFLED215 Rechargeable 21 LED Shop Light (Blue-Point®).

- Rechargeable and cordless compact shop light that can be taken anywhere
- 21 front facing LEDs provide high light output to work surfaces
- 5 LED spot light provides up to 15 hours of continuous illumination
- Multifunction switch toggles between front and top LED illumination
- 180° folding design offers the ultimate in flexible positioning
- · Dual magnetic design for parallel use or multi angle
- Includes both 110 V AC charger and 12 V in car charger



# ECFLED2HOUV High Output Rechargeable Shoplight (Blue-Point).

- 2 high output LEDs produce 1,200 lux output at 0.5 m
- High output UV top spotlight LED for leak detection
- 180° folding design offers the ultimate in flexible positioning
- Includes both 110 V AC charger and 12 V car charger for added convenience
- · Scratch resistant front lens cover
- Dual magnet design for parallel or multiangle use
- 2 rear hooks for underhood or undercar applications
- UL/CSA Listed



# ECFLED2HO High Output Rechargeable Shoplight (Blue-Point).

- 2 high output LEDs produce 1,200 lux output at 0.5m
- . Hight output top spotlight LED provides up to 8 hours runtime
- 180° folding design offers the ultimate in flexible positioning
- Includes both 110 V AC charger and 12 V car charger for added convenience
- · Scratch resistant front lens cover
- Dual magnet design for paralel or multi-angle use
- 2 rear hooks for underhood or undercar applications
- UL/CSA Listed

#### Flashlights/Spotlights/Utility Lights (Rechargeable)



#### ECUB9500 Cordless Rechargeable LED Underhood Light (Blue Point®).

- 95 ultra bright LEDs provide 900 lux output at 0.5 m
- Extends from 47 to 71" to cover a wide range of vehicles
- Rubber coated hooks protect paintwork
- 4,400 mAh battery provides 5 hours of constant light output



#### ECF495 High Output Rechargeable LED Flashlight Kit (Blue Point).

- Increased brightness and run time with 117 lumen Cree LED
- · Body constructed of reinforced polymer nylon for ultra durability
- · Rubber molded grip for sure handling
- 2 NiMH rechargeable battery sticks (4.8 V 900 mAh) included
- . Battery charger with LED indicator that turns off when fully charged
- UL listed (in US & Canada) AC adaptor and DC adaptor included
- Pushbutton ON/OFF switch
- · Convenient carry holster

#### ECFH1 AA/AAA Flashlight Holder.

- . Magnetic base offers secure hold of AA/AAA flashlights
- Ball joint permits 360° rotation and pivots 70°
- Enables light beam of flashlight to be positioned as needed

#### ECFH2 D-Cell Flashlight Holder.

- Magnetic base offers secure hold of D cell flashlights
- Ball joint permits 360° rotation and pivots 70°
- Enables light beam of flashlight to be positioned as needed

#### ECFH3 C-Cell Flashlight Holder.

- . Magnetic base offers secure hold of C cell flashlights with width of 3/4 to 1 1/8"
- Ball joint permits 360° rotation and pivots 70°
- Enables light beam of flashlight to be positioned as needed



#### **ECUB6HO Cordless Rechargeable** LED Underhood Light (Blue Point).

- 6 high output LEDs provide 1,600 lux light output at 0.5 m
- Over 50% brighter than original cordless under hood light
- · Cordless design provides added convenience and safety
- 4,400 mAh battery provides approximately 4 hours of constant light output
- 47 to 71" extendable lightweight aluminum holder covers wide range of vehicles
- · Rubber coated hooks protect paintwork from damage
- · LED light distribution provides coverage of complete engine bay
- UL®/CSA® listed



#### **ECFDUXLED Rechargeable LED Spotlight** (Blue Point).

- 2 high intensity Cree LEDs produce up to 204 lumens
- Heavy duty overmold grips for sure handling
- Trigger On/Off switch with side lock mechanism
- Includes 110 V AC and 12 V DC chargers





ECFH3

Flashlight not included.







- . Do not remove or bypass the grounding prong on any electrical plug
- Read safety precautions on pages W1 to W4

#### **Utility Lights**

#### Single Tube

#### ECU4250A 15 W Fluorescent Utility Light.

- Uses a single tube 15 W fluorescent bulb (ECU42501)
- 25' 3 conductor extension cord included
- UL®/CUL® listed

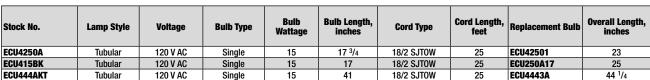
#### ECU415BK 15 W Fluorescent Utility Light.

- Uses a single tube 15 W fluorescent bulb (ECU250A17)
- High impact material in handle and top cap for durability
- . Cord length 25'

#### ECU444AKT Underhood Utility Light.

- Fits hood widths from 47 to 80"
- Uses a single 15 W fluorescent tube (ECU4443A)
- Padded hooks prevent damage to hood
- Flexible 25' cord resists oil and water

#### Single Tube Specifications













#### Twin Tube

#### ECU325BK 13 W Compact Fluorescent Utility Light.

- · High impact material in handle and top cap for durability
- Diffuser optimally spreads light transmission
- Metal hanging hook for flexibility

#### ECU350BK 13 W Compact Fluorescent Utility Light.

- · High impact material in handle and top cap for durability
- · Diffuser optimally spreads light transmission
- Metal hanging hook for flexibility

#### ECU4325A 13 W Compact Fluorescent Utility Light.

- Instant On/Off switch provides "light on command"
- · Hanging hooks for portability
- UL/CUL listed

#### ECU4425A 13 W Angle Head Fluorescent.

- Angle design improves lighting in tight areas
- · Instant start cold weather bulb
- 25' subzero premium cord is flexible to -58 °F
- 13 A power outlet in handle

#### Twin and Quad Tube Specifications

#### ECU4450A 13 W Angle Head Fluorescent.

- Angle design improves lighting in tight areas
- Instant start cold weather bulb
- 50' subzero premium cord is flexible to -58 °F
- 13 A power outlet in handle

#### ECU425ABK 13 W Angle Head Fluorescent

- Case and lens made from impact resistant proprietary material
- Ratcheting metal hanging hook for better positioning
- 25' cold weather cord is flexible to -58 °F, resists chemicals and abrasions
- Uses ECU325-4 rough service bulb

#### ECU325-4 Rough Service Bulb.

- Silicon cocoons internal components in base to extend starter life
- · Superior durability in harsh conditions
- Fits most twin tube 13 W lights

Stock No.	Lamp Style	Voltage	Bulb Type	Bulb Wattage	Bulb Length, inches	Cord Type	Cord Length, feet	Replacement Bulb	Overall Length, inches
ECU325BK	Tubular	120 V AC	Twin	13	7	18/2 SJT0W	25	ECU325-4	13
ECU350BK	Tubular	120 V AC	Twin	13	7	18/2 SJT0W	50	ECU325-4	13
ECU4325A	Tubular	120 V AC	Twin	13	7	18/2 SJT0W	25	ECU43251A	12 <sup>1</sup> / <sub>2</sub>
ECU4425A	Angle Head	120 V AC	Twin	13	7 1/4	16/3 SJE0W	25	ECU43251A	16
ECU425ABK	Angle Head	120 V AC	Twin	13	7	16/3 SJ0W	25	ECU325-4	14
ECU4450A	Angle Head	120 V AC	Twin	13	7	16/3 SJT0W	50	ECU43251A	16
ECU4000	Flat Head	120 V AC	Quad	26	7	16/3 SJTOW	25	ECU43251A	16



#### **Utility Lights**



# Quad Tube ECU4000 Dual Twin Utility Light.

- 4 tube, 26 W, 13 A fluorescent bulb for high light output
- Comfortable, sure grip handle with fingertip switch
- · Grounded outlet in handle base
- 25' cord
- UL®/CUL® listed

#### ECU43251A Replacement Bulb.

• 13 W, twin tube, flicker free cold temperature bulb

ECU43251A









ECURO2350A

#### **Reel Type Utility Lights**

#### ECUR4500A 15 W Heavy Duty Reel Light.

· Cord reel mounts to wall or ceiling

ECUR4500A

- 360° swivel hook plus 2 horizontal hooks for flexibility
- 23" long, shatter resistant tube assembly and housing
- UL/CUL listed

#### ECUR2450A Heavy Duty Reel Angle Head Light.

- 13 W fluorescent light on 50' reel
- 13 A, 3 prong outlet in handle
- 180° swivel hook on lamp
- UL/CUL listed

#### ECURO2350A 13 W Heavy Duty Reel Light.

- Compact 13 W twin tube design
- · Cord reel mounts to wall or ceiling
- Automatic switch activates light when cord is extended, deactivates when retracted
- UL/CUL listed

#### ECRB4430 Incandescent Reel Light (Blue-Point®).

- 75 W incandescent light with 30' reel
- Adjustable cord stop for convenience
- 3 prong grounded outlet for auxiliary power source

# ECRB4430 ECUR4000

ECUR4000 26 W Fluorescent Reel Light.

- Dual twin tube, 26 W fluorescent light on 50' cord reel
- 13 A power outlet in handle
- 360° ratcheting swivel hanging hook for multiple location usage
- UL/CUL listed

#### **Reel Type Specifications**

<i>7</i> 1 1										
Stock No.	Lamp Style	Voltage	Bulb Type	Bulb Wattage	Bulb Length, inches	Cord Type	Cord Length, feet	Power Lead Length, feet	Replacement Bulb	Overall Length, inches
ECUR4500A	Tubular	120 V AC	Single	15	17 <sup>3</sup> / <sub>4</sub>	16/3 SJT0W	50	2	ECU42501	23
ECUR2450A	Angle Head	120 V AC	Twin	13	7	16/3 SJT0W	50	2	ECU43251A	16
ECUR02350A	Tubular	120 V AC	Twin	13	7	16/3 SJT0W	50	2	ECU43251A	12 <sup>1</sup> / <sub>2</sub>
ECRB4430	Incandescent Metal Shield	120 V AC	Incandescent	75 max.	_	16/3 SVT	30	2	_	12
ECUR4000	Twin (2 bulbs)	120 V AC	Twin	26	7	16/3 SJT0W	50	2	ECU43251A	16







- Do not remove or bypass the grounding prong on any electrical plug
- Read safety precautions on pages W1 to W4

#### **Utility Lights**



# Fluorescent Utility Light ECU4007 Twin Tube Utility Light.

- 13 W twin tube light works with any standard extension cord
- · 360° swivel hook for hanging flexibility
- Replacement bulb is ECU43251A



# Utility Light Accessories ECU300 Magnetic Utility Light Clamp.

- Expandable clamp on a magnetic base
- Can be used with many fluorescent utility lights or "D" cell flashlights

# ECU44255A Magnetic Utility Light Clamp.

- Expandable clamp on a magnetic base
- Can be used with many fluorescent utility lights

#### **Extension Cords and Reels**





ECU4007





#### Multi-Outlet Strips and Reels ECR4300A 50' Multi Outlet Cord Reel.

- · Reel mounts on wall or ceiling with 180° swivel bracket
- 2' power cord has 3 grounded outlets
- Includes mounting hardware

#### ECRB4300 30' Multi Outlet Cord Reel (Blue-Point).

- Reel mounts on wall or ceiling with 180° swivel bracket
- 2' power cord has 3 grounded outlets
- · Includes mounting hardware

# Extension Cords (Blue-Point®) EC267D Extension Cord.

- 25', 16/3 gauge SJTW cord stays flexible in cold weather
- Oil and water resistant

#### EC268D Extension Cord.

- 50', 16/3 gauge SJTW cord stays flexible in cold weather
- · Oil and water resistant

#### Flexible Lights/Magnifiers



# Flexible Lights (Blue-Point) ECF1600 Bendable Light.

- 10" flexible shaft with high intensity lamp
- Heavy duty barrel handle and switch
- Includes (2) AA batteries



#### YA5100B

#### YA5100B Bendable Light.

- 15" flexible shaft with 24" extension cover for added reach
- Brilliant krypton lamp runs on (2) AA cells

#### YA5100-2 Flashlight Bulb.

Replacement bulb for YA5100B

#### YA5100B-1 Flashlight Switch.

Replacement switch for YA5100B

# Magnifier

#### YA537 Pocket Magnifier.

 Folding magnifier includes dual 3x lenses for combined 6x effect



# ECFB960 60 Lumen High Output 9" Flex Light (Blue Point).

- High output flex light produces 60 lumens
- 9" flexible Coax cable for extended reach
- · Positive pushbutton switch for added convenience
- Durable and lightweight aluminum barrel
- Includes (2) AA alkaline batteries
- · High quality pocket clip for added utility
- Excellent light projection due to high quality, high output LED
- Rubberized flex cable for longer life and durability
- Overall length 16" including flex light barrel
- 2 hour run time







### ECF28 Slim Flex Light (Blue Point).

- Slim Flex Light gets into tight spaces with extended reach and features a high quality 100,000 hour LED
- Insulated flexible shaft allows for over 20" total reach
- Anodized aluminum barrel has a tail switch designed for 1 hand operation
- Pocket clip for added utility
- Rubberized flex cable for longer life and durability
- End cap switch allows constant on and momentary on features
- Overall length 23.5" including flex light barrel
- Flex cable length 14.5"
- . Uses (3) AAA alkaline cell batteries
- Do not remove or bypass the grounding prong on any electrical plug
- Read safety precautions on pages W1 to W4

# **SHOP EQUIPMENT**

#### Make Complex Jobs Simple.

Snap-on is known for innovation—and you'll find it throughout the entire selection of shop equipment. Whether it's reducing the time it takes to change a bushing, or change the way you think about body work, Snap-on simplifies the job.

**Abrasive blasting equipment** — Stationary and portable blasting equipment designed to handle a wide range of jobs. From hand held units to industrial-sized cabinets, Snap-on has what your shop needs to get the job done.

**The basics** — To build the business, you need a foundation. Creepers, air compressors, fluids, lubrication and measuring tools are a good place to start.









535

#### **FLUID MAINTENANCE**

#### Fluid Transfer Service Equipment





EEFS304AC4

EEFS106AC2







VAC300

#### **Fuel System Maintenance**

EEFS505012 Fuel System Cleaning Fluid (Blue-Point®). (12) 17 oz cans of fuel system cleaning fluid for Fuel System

#### **EEFS304AC4 Engine Cleaner.**

- Use an all around cleaner, as a top engine cleaner and in cleaning machines
- Removes carbon, dirt, gum and varnish harmful to critical engine components
- Detergent based solution is not harmful to critical engine components
- · Case of 32 oz bottles

Decarbonizer EEFS505A.

• Use with EEFS100 series of decarbonizing equipment

#### **EEFS106AC2** Diesel Engine Detergent.

- Professional detergent for cleaning diesel engines
- (4) 32 oz bottles
- · Use to remove contaminants in engines and fuel systems
- Includes (6) units of 3 step cleaner
- Each unit include (1) bottle of air intake cleaner, (1) bottle of combustion chamber cleaner and (1) bottle of fuel conditioner
- Use with EEFS103 series of diesel tune decarbonizing equipment

**EEFS308A5.** Replacement filter pack for EEFS305A FuelKare™ Fuel Service System.

**AEC061004011.** (4) 1 L bottles of fuel system cleaning solution for the EEFS305A *FuelKare* Fuel Service System.

#### Fluid Evacuators and Transfer Pumps

Easily remove engine gear and transmission oil, coolant and brake fluids. Unit creates vacuum, providing a clean, fast and simple way to evacuate or dispense a wide range of fluids. 8 L auto shut off prevents overflow. 2.3 gal (8.8 L) total capacity. Durable polyethylene construction is impervious to automotive and household chemicals.

#### VAC201 Manual Fluid Evacuator/Dispenser.

- No electrical or compressed air required
- Sturdy base with exterior pump helps prevent tipping
- Complete system includes manual fluid evacuator, main hose assembly (5/16 l.D. x 54" long) plus 2 rigid dipstick tubes for engine oil removal (3/16 l.D. x 34" and 1/8 l.D. x 34")

#### VAC300 Pneumatic Fluid Evacuator.

- Quiet operation results from air muffler on the Venturi<sup>®</sup> pump
- Unit can be used away from air source by creating a vacuum, closing both shut off valves and transporting unit to the job
- · Connect tubing and release valves to evacuate fluid
- Complete system includes air operated fluid evacuator with Venturi and air shutoff valve on base, main pour spout connector, main hose assembly (5/16 I.D. x 58" long), brake bleeding hose assembly with in line fluid control (1/4 I.D. x 60" long) plus 2 rigid dipstick tubes for engine oil removal (3/16 I.D. x 34 and 1/8 I.D. x 34")

TECHNICAL SUPPORT 1-877-776-8486



#### **FLUIDPUMP**

#### Fluid Transfer Pump.

- Transfer/siphon all types of fluids including coolant, oil, transmission fluid and water
- Use to inflate sports balls, bicycle tires, flotation devices and more
- Durable, noncorrosive polyethylene
- Includes pump, (2) 4' lengths of fluid hose, (2) intake/discharge hose connectors, air pressure hose, dipstick tube and dipstick/fluid hose adaptor

#### Oil Filter











Easy to maneuver around hot exhaust manifolds

• 32 teeth jaws adjust to 2 sizes for optimum grip

and secondary fuel filter caps on these vehicles

• 23" long with tremendous holding power

plus fuel sending units and more

S3624 Filter Flip Socket.

Econoline vans and Excursions

• 3/8" drive; Not for impact use

6-cylinder engine

of canister

in storage trav

listed on p. 238

Length: 1.73" (43.9 mm)

A127 Oil Filter Socket.

Mercedes 1.8 L 4 cylinder engines

• 1 1/16" wrench size, 3/8" drive OFSKIT Oil/Fuel Filter Socket Set.



YA4022 Long Reach Oil Filter Pliers (Blue-Point).

Removes stubborn and overtightened oil, fuel and hydraulic filters

• One tool will remove/install all 3 filter caps on Ford® 6.0 L power

stroke diesel powered vehicles like super duty series pickups,

Use for removal and installation of the oil filter cap plus primary

Additional 24 mm Applications: Buick®: VVT-V6 Rendezvous Ultra, LaCrosse CSX, Cadillac®: VVT-V6 CTS, STS, SRX, Saturn: L-3000 V6

BMW®: 6, 8 and 12 cylinder engines, Mercedes®: diesel engines,

• 3/8" drive, wrench sizes: 24 and 35/36 mm; Flank drive wrenching

• Remove and install 27 mm (1 1/16") oil filters on 2003 and later

 Includes: A127 and A106 oil filter sockets, S3624 filter flip socket and A129 fuel filter socket for Cummins® Diesel (4 pcs)

Additional applications: aftermarket oil filters with 1" nut at the top

Applications: S3624, A127 and A106 are listed on this page; A129 is

system, O.D. major: 1.80" (45.7 mm); O.D. minor: 1.38" (34.9 mm);

• Requires 3/8" drive extension (FX1 or FXWP1 1-1/2" long)

Additional 35/36 mm Applications: Audi®/VW®: VR6 engine,

Mini-Cooper®, Volvo®: 40 and 50 series, XC90 with 3.2 L,





**OFSKIT** 

#### Filter Pliers/Filter Sockets YA4050B Oil Filter Pliers (Blue-Point®).

- · Grips oil filters for easier removal
- Jaws are offset 20° from handle to increase accessibility
- Jaw opening range of 2 1/4 to 4"
- 12" long

#### YA4275 Oil Filter Pliers (Blue-Point).

- Use on filters from 4 1/4 to 7" (108-178 mm) diameter
- · Spring action size adjustment assures a solid grip on filter
- Offset handle offers increased accessibility
- · Heavy duty forged levers
- Cushioned grips for comfort
- Industrial black finish
- Overall length 19"

Applications: Include truck, tractor and high torque diesel engines YA4250 Oil Filter Pliers (Blue-Point).

- Slip joint design provides jaw opening range of 3 5/8 to 6"
- 12" long

#### YA4274 Oil Filter Pliers (Blue-Point).

- Use on filters from 2 1/2 to 5 1/4" diameter
- Spring action size adjustment ensures a solid grip
- Offset handle offers increased accessibility
- Heavy duty forged levers
- · Cushioned grips for comfort
- Industrial black finish
- Overall length 13 1/2"

Applications: Use on automotives and trucks

#### A106 Oil Filter Socket.

- Low profile (1.68 O.D. x 1.04" long) 6 point design to remove the plastic oil filter on GM® Ecotec, 2.0, 2.2 and 2.4 L, 4 cylinder engines
- Features the Flank Drive® wrenching system
- Chrome finish for longer life and easy clean up

 Wrench size: 1 1/4" (32 mm); 3/8" square drive Applications: Saturn®: L-Series (2001), Ion, and Vue (2002 and later), GM: Cavalier, Sunfire, Grand Am, Sonoma, S10, Alero, (2002 and later), Pontiac®: G6 and Solstice (2006), Chevrolet®: HHR, Cobalt, Cobalt SS (2006), Malibu (2002 to 2006), Saab®, some general applications

A91E











YA995 Oil Filter Wrenches

YA342C

OFW12418

**GA333C** 

FW656714A

Oit Tittel V							
Stock No.	Size	Steps	Flats	Style	Sq. Dr., inches	Application	
YA995*	3"	2	15	Cup	3/8	Fram, AC, Wicks, NAPA, Sears, Motorcraft, Hastings, and Baldwin filters. Has 1" external hex	
YA996*	76/80 mm	2	14/15	Cup	3/8	OEM and Purolator filters on VW, Nissan, and Toyota. Has 1" external hex	
A91E	_	_	_	Strap	3/8, 1/2	Large diameter oil filters 1 to 6". Includes both 3/8" and 1/2" square drives	
YA342C*	_	_	-	Band	1/2	For 4 5/8 to 5 1/4" diameter filters	
0FW12418*	_	_	_	Band	1/2	For 4 1/8 to 4 21/32" (105 to 118 mm) oil filters	
0FW125532*	_	_	-	Band	1/2	For 5 5/32 to 5 21/32" (130 to 143 mm) oil filters. Similar to 0FW12418	
GA333C*	_	_	-	Band	Handle	For 2 <sup>7</sup> / <sub>8</sub> to 3 <sup>1</sup> / <sub>4</sub> " diameter oil filters	
GA340A*	_	_	-	Band	Handle	For 3 1/2 to 3 7/8" diameter oil filters. Similar to GA333C above	
YA341A*	_	_	-	Band	Handle	For 4 1/8 to 4 7/16" diameter oil filters. Similar to GA333C above	
FWA6296A*	62/96 mm	_	-	Adjustable	3/8	Adjustable filter wrench for 62 to 96 mm diameter oil filters. 3/8" square drive, 3/4" external hex	
FWA62121A*	62/121 mm	_	-	Adjustable	3/8	Adjustable filter wrench for 62 to 121 mm diameter oil filters. 3/8" square drive, 3/4" external hex	
FW656714A*	65/67 mm	2	14	Cup	3/8	Fram-PH4386, PH4967, PH6017, PH6018, and PH6607	
FW7614A*	76 mm	1	14	Cup	3/8	Champion, Champ, Lee, Purolator, Mopar, VW, Porsche, BMW, Mercedes	
FW9315A*	93 mm	1	15	Cup	3/8	Casite, Champ, Champion, GM, Fram, Hastings, Purolator, Wix, Nissan, VW, Porsche, Renault	
FW757715A*	75/77 mm	2	15	Cup	3/8	NAPA, AC Delco, Castrol, STP, Penske	
FW7630A*	76 mm	1	30	Cup	3/8	Fram, IAPCO, Motorcraft, Parts Plus, Pennzoil	
FW8015*	80 mm	1	15	Cup	3/8	Motorcraft, Parts Plus, Penska, Purolator	











#### **LUBRICATION**

#### Oil Filter



#### Swivel Oil Filter Wrenches (Blue-Point®) OFW1 Oil Filter Wrench.

Fits small oil and fuel filters 2 3/8 to 2 5/8"

#### OFW2 Oil Filter Wrench.

- Fits smaller filter size on many U.S. and imported vehicles 2 7/8 to 3 1/4" OFW3 Oil Filter Wrench.
- Fits most popular 3.625" filters 3 1/2 to 3 7/8"

#### OFW4 Oil Filter Wrench.

Fits most tractors and other farm implement equipment 4 1/8 to 4 1/2"

#### OFW4KT Oil Filter Wrench Set.

• Set includes OFW1, OFW2, OFW3 and OFW4 Swivel Oil Filter Wrenches





**CRUSH1A** 

#### FWK7A Oil Filter Wrench Set (Blue-Point).

- · Wrenches in set cover 95% of U.S. and import automobile and light truck oil filters
- Storage/carrying case keeps wrenches together for quick access
- Includes laminated application chart
- FWK7A set includes FW656714A, FW757715A, FW7614A, FW7630A, FW8015, FW9315A and FWA62121A oil filter wrenches



### Pan Plug Wrench

#### S9615A

#### S9615A 12 Point Fractional/Metric Box Wrench.

- 9/16" and 15 mm 12 point box ends fit most popular GM® drain plugs
- 10° offset at each end for maximum clearance
- Both box ends feature Flank Drive® wrenching system
- 9 23/32" long

#### Oil Filter Crushers (Blue-Point) CRUSH1A Oil Filter Crusher.

- Removes approximately 95% of excess oil from spent filters
- Features self lubricating seal
- 10,000 lb of crushing force with simple hookup to 60 to 120 psi air line
- 10 to 15 second time cycle
- Pivoting door prevents oil from dripping into work area when loading or unloading filters
- Won't operate when door is open
- Crushing chamber is 8 1/2 H x 6" square

• Height 23"; Weight 70 lb CRUSH1EX100 Air Filter.

#### Grease and Oil -

#### Drains

#### YA743 Waste Oil Drain.

- Fits standard 16 gal drum
- · Includes: float gauge in drum cover, telescopic drain bowl adjustable from 42 3/4 to 70" and roll around base (drum not included)

#### YÀ749 Drain.

- 24 1/2" diameter
- Fits 6" or larger drain bowls
- · Prevents spillage when removing transmission pans



**YA749** 



#### Drum Plug

#### A172A Drum Plug Socket.

- One socket removes virtually all screw in drum plugs or caps
- Spring loaded inner wrench handles smaller plugs and recesses automatically when removing large plugs

  • Use with a 1/2" drive ratchet or impact wrench

#### Oilers (Blue-Point) OC5A Oiler.

- 5 1/2" small pressure oiler has a long, tapered spout with a screw on tip
- 1 7/8" 0.D.
- · Includes base holder
- 5 oz capacity

#### OCF5 Oiler.

Similar to OC5A Oiler with a flexible spout





OC5A

#### Oil Filter



















FUNN1

FUNN2

FUNN15

GA96B

OFTOY38

OFHON33

**OFGMFORD** 

**OFHARLEY** 

**OFHD** 

#### **Funnels/Spouts**

Stock No.	Size	Neck Style	Screw Caps	Color
FUNN1*	1 pint	Small	•	Orange
FUNN2*	1.25 qt	Large	•	Blue
FUNN15*	1.5 qt	Large	•	Red

\*Blue-Point®

GA96B Transmission Filler (Blue-Point). 8 1/2" oval funnel with filter screen. 30" long.

OFTOY38 Oil Filler for Toyota®/Lexus®/Scion®. Fits all Toyota, Lexus and Scion models (except Toyota Prius) with threaded oil filler cap. Prevents unwanted mess by sealing onto filler neck. **OFHON33 Threaded Oil Filler.** 

· Prevents unwanted mess by sealing onto filler neck Applications:

Honda® (Accord, Civic, Element, Fit, S2000) vehicles; Acura® (All models except MDX and RDX); Nissan® (most models); Dodge® Cummins® Turbo Diesels from 2001 to 2008; Ford® Turbo Diesel trucks (9.0, 6.4, 6.9 and 7.3 L)

OFGMFORD Threaded Oil Filler. Applications: Chevy: Cobalt, Silverado, Tahoe, Trailblazer and Vans; GMC®: Sierra, Envoy; Pontiac®: Grand Prix, G6; Saturn®: SL1; Cadillac®: CTS; Ford: Explorer, F150, Mustang; Mercury®: Mountaineer. Prevents unwanted mess by sealing onto filler neck.

#### OFHARLEY Oil Filler for Harley Davidson® Motorcycles.

- Prevents any unwanted mess; fastens and seals onto filler neck
- No need to hold funnel while pouring in oil
- · Can fill funnel with almost 1 qt of oil
- . Made of strong ABS plastic
- Smooth surface will not scratch painted surface
- For Harley Davidson Touring bikes and Dyna® series motorcycles 2007 to present

#### OFHD Oil Filler for Harley Davidson Motorcycles.

- Oil filler for 1999-2006 Harley Davidson Touring Motorcycles with the "Push in Style" oil caps
- Prevents any unwanted mess; fastens and seals onto filler neck
- No need to hold funnel while pouring in oil
- Can fill funnel with almost 1 gt of oil
- . Made of strong ABS plastic
- Smooth surface will not scratch painted surface



#### **Grease Guns**

	Stock No.	YA734A*	YA728A*	YA4190A*	GA471*	GA472*	GA473A*
Manual	Specification	Pistol Grip	Lever	Mini	Pistol Grip	Pistol Grip	Lever
	PSI	6,000	6,000	_	4,500	5,000	10,000
	Loading	Bulk or Cartridge	Bulk or Cartridge	Cartridge	Bulk, Cartridge, or Filler Pump	Bulk, Cartridge, or Filler Pump	Bulk, Cartridge, or Filler Pump
	Capacity	16 oz Bulk and 14 1/2 oz Cartridge	16 oz Bulk and 14 1/2 oz Cartridge	3 oz	3 oz	14 oz	14 oz
	Flexible Hose	18"	18"	_	_	_	_
	Rigid Extension	6"	6"	_	5-1/2"	3 1/2"	5 3/8"
	Nozzle	_	_	_	8 1/4"	13 1/4"	19 ¹/4"

	Stock No.	YA775	YA771B*	YA772B*
Air Powered	PSI	6,000	6,000	4,000
	Air Operating PSI	100	35 - 80	40 - 100
	<b>Pump Ratio</b>	60:1	40:1	40:1
	Loading	Bulk, Filler Pump, or Cartridge	Bulk, Filler Pump, or Cartridge	Bulk, Filler Pump, or Cartridge
	Capacity	14 oz Cartridge	14 oz Cartridge	14 oz Cartridge
	Flexible Hose	_	18"	18"
	Rigid Extension	7 1/2"	6"	6"
	Nozzle	_	_	_

\*Blue-Point







# **LUBRICATION/ENGINE SERVICE**

#### Grease and Oil



YA7500

#### Dispensing Accessories (Blue-Point®)

#### YA7500 Grease Dispensing Accessory Pack.

Includes YA760-YA757 (except YA750) (10pcs) in a storage tray

#### YA760 Universal Swivel.

- · High pressure swivel
- 1/2"-27 male x 1/4" NPT(m) threads
- 5,000 psi maximum working pressure

#### YA761 Needle Nozzle Coupler.

 This is the YA750 with a locking sleeve adaptor for quick attachment to a hydraulic coupler

#### YA751 Flex Whip Hose.

- For powered and hand operated grease guns
- 1/8" NPT(m) both ends
- 4,500 maximum psi
- 12" long

#### YA752 Flex Whip Hose.

• 18" long version of YA751

#### YA758 Flex Whip Hose.

- · For hand operated grease guns only
- 1/8" NPT(m) both ends
- 18" long

#### YA753 Heavy Duty Coupler.

- 1/8" NPT(f) thread
- · Fits all hydraulic type grease fittings

#### YA755 Coupler.

- 1/8" NPT(f) thread
- Fits all hydraulic type grease fittings

#### YA756 Extension Coupler.

- Lubricates recessed fittings
- Locking sleeve adaptor allows quick attachment to hydraulic coupler of any control valve or lever gun
- 6" long



**UFREE1** 

#### **Grease Fitting Cleaner**

#### **UFREE1 Grease Fitting Cleaning Tool.**

- Quickly and easily frees up joints and fittings for proper greasing and lubrication
- . Inject light viscosity oil into the grease joint via the grease fitting to break up and remove dirt, rust and debris
- · Pump in new grease after freeing the joint
- Includes injection cleaning tool, 4 3/4" long flexible hose to access tight places and storage case





#### YA747 Grease Control Valve.

- 1/4" NPT(f) inlet, 7,500 psi maximum working pressure
- Includes 6" extension tube and YA753 coupler

#### YA801 Needle Type Adaptor.

- For universal joint fittings, water pumps and metal covered springs
- 4 7/8" long

#### YA754 Swivel Coupler.

- 1/8" NPT(f) thread
- Swivels 360°, locks in position every 45°

#### YA757 Angle Lube Adaptor.

- 90° head allows fast and complete lubrication of steering and suspension systems on late model front wheel drive vehicles
- 4 1/2" long

- YA799 Right Angle Grease Gun Adaptor.

   Use on Chrysler®, Dodge® and Plymouth® FWD vehicle ball joints and other restricted access locations
- · Attach to any standard grease gun
- Metal construction with industrial black finish
- Measures 1 1/2 x 1 x 3/4

#### YA750 Needle Nozzle.

- 1/8" NPT(f) thread
- 2 3/4" long

#### GA472-2 Grease Fitting Coupler.

- Push on design with neoprene nipple and ball
- Features spring check valve

#### GA472-9 Flexible Polybraid Hose.

• Oil, grease and solvent resistant with brass end fittings



### Oil Spray and Suction Guns

#### YA746 Oil Spray Gun.

- Siphon type
- Use for spraying lubricating oils, cutting oils and cooling oils
- Includes 6' vinyl suction hose with strainer

#### YA745A Oil Spray Gun (Blue-Point).

- 16 oz capacity
- Fast, clean method for removing or adding transmission and gear oil
- · Special follower is impervious to oil, grease and water
- Flexible nozzle

#### **Bearing Packers**

#### A180A Manual Bearing Packer.

- Simultaneously pressure packs inner and outer wheel bearings 3/4" minimum ID and 4" maximum 0.D.
- Use with pressurized lube equipment or hand grease gun
- Includes dust cover

#### YA470B Manual Bearing Packer (Blue-Point).

- Packs 50 to 65 bearings with 1 grease filling
- Apply manual pressure to flush and pack bearing with grease
- Includes dust cover
- 4 1/2" high

#### YA742 Manual Bearing Packer.

- Unit features large packer head
  Handles bearings to 9 1/2" O.D. and minimum 9/16" I.D.
- Includes adaptor to service smaller bearings of 1 to 1 3/4" O.D.

# **LUBRICATION/ENGINE SERVICE**

#### Grease and Oil



#### Grease and Gear Oil Pumps/Manual YA739 Manual Gear Oil Pump.

- Fits any 25 to 50 lb original refinery container
- Delivers 1 oz per stroke using SAE 90 gear oil at 70 °F
- Includes 5' of 1/2" low pressure hose with dispensing nozzle

#### YA737 Manual Operating Grease Pump.

- Clamps securely to any 25 to 50 lb original refinery container
- Handles any ball or roller bearing with 5/8 to 1 1/2" I.D. and 3 1/4"
- · Primes and pumps even when using heavy grease at low temperatures
- · Follower plate prevents funneling of grease

#### YA738 Manual Gear Oil Pump.

- Fits any 120 lb original refinery container
  Powerful 50:1 ratio pump with 20 cu in displacement
- Includes rollaround base, straight swivel, 7' of 1/4" high pressure hose, quick connect air coupler, follower plate, YA747 grease control valve, and YA760 universal swivel



#### **Dollies**

#### YA762 Band Dolly.

- Provides mobility for 25 to 50 lb original refinery containers
- Includes jam swivel casters and screw clamp for secure adjustment





#### Grease Pumps/Air

#### YA736 Air Powered Grease Pump.

- Fits any 20 to 50 lb original refinery container
- Powerful 50:1 ratio pump utilizes 20 cu in displacement
- Includes: 6' of 1/4" high pressure hose, quick connect air coupler, follower plate, YA747 grease control valve, and YA760 universal swivel

#### YA759 Air Powered Grease Pump.

- 50:1 ratio pump
- Uses 120 lb container size and handles all grades of lubricant
- Features internal muffler for quiet operation and a prelubricated air motor requiring no external oiler
- Exclusive microlapped hardened steel air valve and seat to assure a long and productive service life, no packings to wear out
- Shovel type foot valve adds mechanical priming to normal suction
- Casters offer unit mobility
- · Does not include barrel



#### Transmission Tables PBT5X29 Transmission Table (Shown with Optional Drawer).

• 5' long

#### PBT2120 Drawer.

- · Optional drawer
- 20 x 20 x 5"

**Service Tools** 



ECK9





YA8662

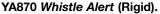
### Engine Calibration and Setup Kit (Blue-Point®)

ECK9 Engine Calibration and Setup Kit.

 Includes: YA871/YA870 Whistle Alert™ tools, YA866/YAL866 TDC indicators, YA868 compression gauge extension, YA865 engine lock and YA8661/YA8662 spark plug hole thread adaptors YA871 Whistle Alert (Flexible).

• Insert Whistle Alert into any 14 mm spark plug hole, turn the

engine over and listen for the whistle to locate top dead center for the compression stroke



 Same as YA871 except it can also be used with YA866 compression gauge extension

YA8661 Spark Plug Hole Adaptor.
• Adapts the 14 mm thread on YA866/YAL866 TDC Indicators, YA868 compression gauge extension and YA865 engine lock to accommodate 18 mm spark plug threads

YA8662 Spark Plug Hole Adaptor.

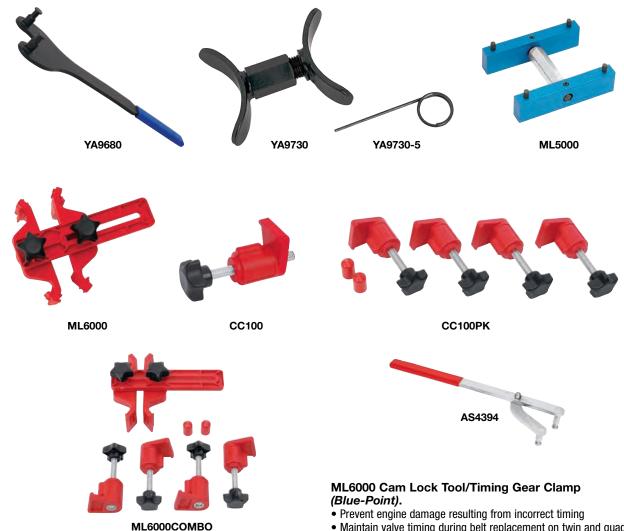
 Adapts the 14 mm thread on YA866/YAL866 TDC Indicators and YA868 compression gauge extension to accommodate 12 mm spark plug threads







#### **Service Tools**



#### **Timing**

#### YA9680 Camshaft Pulley Tool (Blue-Point®).

- Designed to hold the camshaft pulley in place while turning the center shaft bolt
- Extremely useful on transverse mounted V6 engines such as Nissan® Maxima/VG30 engine and Toyota® Camry/3VXFE and 1MZFE engine
- Rear pulleys on these vehicles are located in close proximity to the shock tower making it difficult to remove/replace the center shaft without this tool

# YA9730 Timing Belt Tensioner Compressor (Blue-Point).

- For 1995 and later T-100, Tacoma and 4Runner
- Turn square compress tensioner, then install locking pin (YA9730-5 included with YA9730)

#### ML5000 DOHC Lock Tool (Blue-Point).

- Locks cam shaft sprockets in place to preserve engine timing during belt or chain replacement
- Knurled pins on unit lock on to the groove on the inside of the cam wheel
- · Unit base is constructed from anodized aluminum
- · Pins are steel
- · Works with most import and U.S. cars and light trucks

- Maintain valve timing during belt replacement on twin and quad cam engines
- Compact design allows access in transverse engines
- Fits timing gear diameters from approximately 4 to 6" (101 to 152 mm)
- Fits gear spacing approximately 0.06 to 3" (1.6 to 76 mm)

#### CC100 Single Cam Clamp (Blue-Point).

- Single cam clamp can be used on engines where the dual clamp ML6000 will not fit
- · Compact design permits easy operation in confined engine areas
- Prevent engine damage resulting from incorrect timing
- Maintain valve timing during belt replacement on twin and quad cam engines
- Simple and easy to use
- Manufactured from high strength industrial polymers which will not corrode or damage engine pulleys

#### CC100PK Single Cam Clamp Set (Blue-Point).

• Set of (4) CC100 single cam clamps in storage tray

#### ML6000COMBO Cam Clamp Set (Blue-Point).

 Includes 4 CC100 single cam clamps and (1) ML6000 dual cam clamp in storage tray

#### AS4394 Camshaft Sprocket Holding Tool.

- Use as a counter holder when loosening or tightening sprocket retainer bolts
- Used on all models with sprocket holes larger than 1/2" (12 mm)

#### Timing

#### **AS4145 Engine Timing Setting/Locking Kit** for GM® Vehicles.

- Avoid unnecessary retiming
- Covers both the locking of the quad cams and the crankshaft
- Includes the special timing gauge essential for this application Applications:

V6 Cadillac® Catera, Saab® 900, 9000 and 9.5, Saturn® L300 vehicles AS4645 Engine Timing Setting/Locking Kit.

 Comprehensive selection of special service tools for maintaining engine timing position during timing belt replacement and valve train service work

Applications:

Chrysler®: Cirrus, Sebring convertible 2.5 V6, Daytona Shelby, Dynasty E Class, Laser, LeBaron vehicles Dodge®: Avenger 2.5 V6, Colt Wagon 2.4, Stealth 4WD 3.0 V6, Stratus 2.5 V6, Colt 1.6, Aries, Caravan, Dakota, Daytona/Shelby, Dynasty Lancer, Mini Ram Van, Omni, Shadow, Spirit 2.2/2.5 vehicles Plymouth®: Colt Vista 2.4, Colt 1.6/200, Laser 2.0, Reliant, Acclaim, Caravelle, Duster, Horizon, Scamp, Sundance, TC3, Turismo,

Voyager vehicles Acura®: 2.2 CL, 2.3 CL, 3.0 CL, 3.2 TL vehicles

Honda®: Accord 2.2, 2.3, 3.0 V6; Prelude 2.2, 2.2VTEC, 2.3;

Odyssey 2.2, 2.3, 3.5 V6 vehicles

Hyundai®: Elantra 1.6 - 1.8, Sonata 2.0 vehicles Isuzu®: Oasis 2.2 - 2.3, Amigo 2.2, Rodeo 2.2 vehicles Mitsubishi®: Diamante 3.0 V6, 3.5 V6; 3000GT 3.0 V6; Eclipse/Spyder 2.0, 2.4, 3.0; Galant 2.0, 2.4, 3.0; Expo 2.4;

Montero Sport 2.4, 3.0, 3.5 V6 vehicles





AS4645

#### AS4660 Master Engine Timing Setting/Locking Kit.

A comprehensive selection of special service tools for maintaining engine timing position during timing belt replacement and valve train service work.

Applications for *GM* vehicles:

Chevrolet®: Lumina, Monte Carlo, 3.4 V6 Oldsmobile®: Cutlass Supreme, 3.4 V6

Pontiac®: Grand Am, Le Mans, Sunbird 2.0, Grand Prix 3.4 V6 Daewoo®: Lanos, Nubria 1.6

Applications for Ford® vehicles:

Ford: Contour, Escort Z2X, Escape, Focus, Probe 2.0, Ranger 2.5,

Taurus 3.2 V6

Mercury®: Mystique 2.0, Cougar 2.0

Mazda®: B2300, B2500

Applications for *Chrysler*/Dodge® vehicles:

Chrysler. Cirrus, Sebring convertible 2.5 V6, Daytona Shelby, Dynasty E Class, Laser, LeBaron

Dodge: Avenger 2.5 V6, Colt wagon 2.4, Stealth 4WD 3.0 V6, Stratus 2.5 V6, Colt 1.6, Aries, Caravan, Dakota, Daytona/Shelby, Dynasty Lancer, Mini Ram Van, Omni, Shadow, Spirit 2.2/2.5

Plymouth: Colt Vista 2.4, Colt 1.6/200, Laser 2.0, Reliant, Acclaim, Caravelle, Duster, Horizon, Scamp, Sundance, TC3, Turismo, Voyager

Applications for Asian Imports:

Acura: 2.2 CL, 2.3 CL, 3.0 CL, 3.2 TL

Honda: Accord 2.2, 2.3, 3.0 V6; Prelude 2.2, 2.2VTEC, 2.3; Odyssey 2.2, 2.3, 3.5 V6

Hyundai: Elantra 1.6-1.8, Sonata 2.0

Isuzu: Oasis 2.2-2.3, Amigo 2.2, Rodeo 2.2

Mitsubishi: Diamante 3.0 V6, 3.5 V6; 3000GT 3.0 V6; Eclipse/Spyder 2.0, 2.4, 3.0; Galant 2.0, 2.4, 3.0; Expo 2.4; Montero Sport 2.4, 3.0, 3.5 V6











#### **ENGINE SERVICE**

#### **Service Tools**



#### Oil Pressure/Oil Pump

#### EEPV507 Oil Pressure Gauge Set.

- · Use on diesel and gasoline engines
- Includes standard and metric adaptors for most popular U.S. and import cars, trucks, tractors and stationary engines
- Features bright, easy to read gauge with red protective boot

• realures bright, easy to read gauge with red protective bu					
Part Number	Description				
EEPV5F-1	2" Pipe Nipple				
EEPV5F-2	1/4" M x 1/8" F Hex Bushing				
EEPV5F-3	3/8" M x 1/8" F Hex Bushing				
EEPV5F-4	1/8" FNPT Coupling				
EEPV5F-5	1/8" M x 1/8" F Street Enbow				
EEPV5F-6	1/8-28 BSPT				
EEPV5F-7	M10 x 1.0 Tapered Thread				
EEPV5F-8	M10 x 1.0 Adaptor				
EEPV5F-9	M10 x 1.25 Adaptor				
EEPV5F-10	M12 x 1.5 Adaptor				
EEPV5F-11	M12 x 1.75 Adaptor				
EEPV5F-12	M14 x 1.5 Adaptor				
EEPV5F-13	M16 x 1.5 Adaptor				
EEPV5F-14	M18 x 1.5 Adaptor				
EEPV5F-15	5/16-24 Adaptor				
EEPV5F-16	7/16-20 Adaptor				
EEPV5F-0	Male Quick Connect Plug				
EEPV5-100G	Gauge and Boot				
EEPV5-B00T1	Gauge Boot				
EEPV507-H	Hose Assembly				
EEPV507-PB	Plastic Box - not shown				
EEFVJU/-FD	Figsuc box - Hot shown				





#### A121A Oil Pressure Sender Switch Socket.

- For 1987 and later Ford®, GM® and Chrysler® vehicles
- 1 3/16", 12 point wrench size, 3/8" drive
- 3 11/16" long

#### A119B Oil Pressure Sender Switch Socket.

- For 1986 and earlier Ford, GM and Chrysler vehicles
- 1 1/16" special wrench configuration, 3/8" drive
  2 1/16" long

#### A120 Oil Pressure Sender Switch Socket.

- For 1987 and later Ford, GM and Chrysler vehicles
- Can also be used for 1999 Mitsubishi® Eclipse with the 2L DOC nonturbo 420A engine
- Same design as A119B but longer
- 1 1/16" special wrench configuration, 3/8" drive
- 3 11/16" long

#### S6152 Oil Pressure Sender Switch Crowfoot Wrench.

- Same applications as A119B but designed for switches with difficult
- 1 1/16" wrench opening, 3/8" drive

#### YA6555 Oil Pump Removal Tool for GM Vehicles (Blue-Point®).

- Designed to work on most GM V6 engines
- No need to remove the intake manifold
- Makes removal of the oil pump drive fast and easy Applications: GM 2.8 L V6 (1987 to 1989), 3.1 L V6 (1990 to 1994), 3100 V6 (1994 to 2005), 3.4 L V6 (1999 and later)



**PMP410A** 





#### **Drain Plugs**

#### **PMP410A Internal Metric Pipe** Plug Socket.

- 10 mm female square
- For removing or replacing standard transmission drain plug
  • 3/8" drive, 3/4" 0.D., 1" long
- Female pipe plug socket (for Renault® LeCar)

#### PMM410A External Pipe Plug Socket.

- 10 mm male square
- For removing or replacing oil pan plug
- 3/8" drive, 11/16" 0.D., 1" long

#### \$5902 Oil/Transmission Plug Wrench.

- Box ends are 17 mm, 6 point and 21 mm, 12 point
- Designed for transmission drain plugs in VW® vehicles
- 10 1/4" long



#### Cylinder Head (Blue-Point®) **GDCT16 Combustion Leak Tester.**

- · Provides an easy and quick way to diagnose engine overheating problems
- Checks for leaks between the combustion chamber and the cooling system
- Test head and gasket for combustion leaks before removing the radiator
- Double chamber in testing unit provides a high level of accuracy
- · For use on water cooled gas and diesel engines
- Kit includes complete test chamber, 16 oz bottle of testing fluid and instructions

#### GDCT161 Leak Detector Fluid.

• 16 oz bottle of leak testing fluid for the GDCT16 combustion leak tester

#### S6132A Metric Valve Cover Bolt Socket.

- For GM® vehicles, 1976 and later Honda® vehicles and other import and U.S. vehicles
- 10 mm, 12 point wrench size
- · Allows access to head bolts, valve and rocker covers and oil pan bolts
- Deep clearance for bolts with extended tip as used on spark plug wire harness
  • 3/8" drive; 11/16" 0.D.
- 4 1/8" long

#### S6160 Extra Long Impact Head Bolt Socket.

- Use on 1986 and later Nissan® engines with 12 mm head bolts
- 8" length reaches past cam and rocker assembly to service head bolts
- Thin profile socket and shank will reach through the access hole and past overhead camshaft
- Additional high torque applications: removal and installation of universal joint flange bolts on Ford®/Mercury® vehicles such as Mustang, Crown Victoria and Lincoln plus Ford® Explorer, Ranger and F150/F250 trucks
- 8" long, 12 point, industrial finish, 1/2" square drive S6194 Head Bolt Socket.

- Use on Toyota® and Nissan vehicles and pickups plus Honda vehicles with 12 mm head bolts
- 4" length reaches past cam and rocker assembly to service head bolts
- Thin profile socket and shank will reach through the access hole and past overhead camshaft
- Additional high torque applications: removal and installation of universal joint flange bolts on Ford Explorer, Ranger and F150/F250 trucks
- 4" long, 12 point, industrial finish
- 1/2" square drive

#### S6193 Head Bolt Socket.

- Use on all 1981 and later *Toyota* and *Nissan* cars and pickups and 1976 and later *Honda* vehicles and other import and U.S. cars with 10 mm head bolts
- Additional uses include drive shaft universal joint attaching bolts for Ford vehicles
- 4 1/2" length reaches past cam and rocker assembly to service head bolts
- Thin profile socket and shank will reach through the access hole and past overhead camshaft
- 12 point, industrial finish, 1/2" drive S6195 Head Bolt Socket.

Same as S6193 except for 14 mm head bolts

#### YA6611 Head Handler.

- Convenient and balanced T-handle design helps move cylinder heads faster and easier
- No need to "bear hug" the cylinder head during movement
   Attached floating washer for increased surface contact
- · Comfortable, secure gripping surfaces for hands
- M6 x 1.0 threads

# • Package of 2 YA6612 Head Handler.

- Same as YA6611 except has 1/4" x 20 threads
- · Package of 2

#### YA6613 Head Handler.

- Same as YA6611 except has M8 x 1.25 threads
- · Package of 2

- FRT10 Spark Plug Insert Installer Set.

   Use to repair damaged heads from blown spark plugs with an alloy steel insert in as little as 15 to 45 minutes
- Services modular cylinder heads on 4.6, 5.4 and 6.8 L engines in Ford vehicles
- Quality, foolproof repair system is fast, cost effective and simple to use
- Includes tap (FRT10-1), core drill (FRT10-2), guide (FRT10-3), storage case (FRT10-CASE), instructional DVD (FRT10-DVD) and spark plug insert (FRT10-INS)

#### S6214 Head Bolt Socket.

- Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability
- · Nickel-chrome plating helps protect against corrosion and makes it easy to wipe clean
- 54.1 mm length, 14 mm size, 1/2" drive, 12 point

#### FRT12 3 Valve Insert Kit for Ford Vehicles.

- Repair cylinders without removing the head
- Custom guide, tap and drill for quick and simple repair of damaged threads
- Unique insert installer makes the job quick and easy
  Works on 3 valve 5.4 and 6.8 L engines built before 10/9/2007
- Also works on 3 valve 4.6 L engines built before 11/30/2007 found on many 2004 to 2008 Ford, Lincoln and Mercury vehicles
- Set includes Tap (FRT-1), Core Drill (FRT-2), Guide (FRT-3), Insert Installer (FRT-4), Insert (FRT1-INS) and Storage Case (FRT-CASE)







- . Do not use chrome or industrial finish hand tool with impact drivers
- Read safety precautions on pages W1 to W4

#### **ENGINE SERVICE**

#### **Service Tools**





S6192/

**CJ113B** 

# Power Steering/Alternator/Water Pump S6192A Water Pump Socket.

- 1/2" square drive socket features dovetail design to deliver positive engagement when applying high torque
- · Black industrial finish

Applications: 1992 to 1998 Cadillac® Northstar 4.6 L V8; 1997 to 1998 Oldsmobile® Aurora 4.0 L

#### S6192A-1 Water Pump Socket Stabilizing Strap.

- Bolts on water pump to secure S6192A water pump socket in place during water pump removal and replacement
- Includes (2) M6 x 12 bolts for securing strap to water pump
- Black industrial finish

Applications: 1992 to 1998 Cadillac Northstar 4.6 L V8; 1997 to 1998 Oldsmobile Aurora 4.0 L

#### CJ113B Power Steering/Alternator Pulley Installer.

- Designed for U.S. vehicles
- 1" pulley driver hex, 7/16" pressure screw hex, and 3/8"-16 thread
  4 5/8" long

#### CJ113C4 Pulley Installer Shaft (Optional).

• Thread size of 5/8"-18UNF (puller end), 3/8"-16UNC (alternator end)

#### CJ117C Power Steering and Alternator Pulley Puller.

- Includes short adaptor to remove small flange type pulley: use long adaptor on GM® 200/Platform vehicles
- Can also remove alternator pulleys with double grooves in Chrysler® vehicles
- Replace pulleys with CJ113B installer
- Long adaptor included to handle pulleys on GM mini vans
- Nickel-chrome finish, industrial finish screw
- Designed for most U.S. cars (replace pulley with CJ122 sets)





# Belt Tensioning Tools SBIT1 Stretch Belt Tool.

- Allows belt to be rotated onto pulley without twisting the belt, which can cause damage to the belt
- Low profile to allow for tight access applications
- Groove on underside of tab fits on outer lip of pulley to prevent tool from slipping off the pulley

#### Applications:

2007-2009 Ford/Lincoln® (Edge, MKZ/MKX) 3.5 L used on water numn

2009 *Chevroletl GMCl Cadillac* (Express, Silverado, Tahoe, Suburban, Colorado, Avalanche, Sierra, Savana, Yukon, Canyon, Escalade) 4.8, 5.3, 6.0, 6.2 L used on air conditioner compressor.

2008-2009 Hummer  $^{\circ}$  (H3, H3T, H2) 5.3 and 6.2 L used on air conditioning compressor.





CJ117C CJ147A

- CJ122 Power Steering Pulley Installer Set.

   Includes CJ113B installer and CJ113C4 pulley installer shaft
- 3/8"-18 UNF-2A

#### CJ124A Power Steering/Alternator Pulley Puller.

- Larger version of CJ117C
- Designed for Chrysler, Ford® and earlier GM vehicles

# CJ147A Power Steering Gear Lower Pinion Bearing Puller.

- Required tool to comply with GM Recall Bulletins #02049 and #03062 regarding power steering gear lower pinion bearing separation
- To correct the problem, inspect the condition of the lower pinion bearing and replace the lower pinion bearing
- In a few cases, replacement of the rack and pinion steering gearing assembly may be necessary
- Instructions included

#### Applications:

Buick®: Regal 1996-1998, Chevrolet® Cavalier 1996-1998, Lumina 1997-1998, Lumina APV 1996, Malibu 1997-1998, Monte Carlo 1997-1998, Venture 1997-1998

Oldsmobile: Cutlass 1997-1998, Cutlass Supreme 1996-1998, Silhouette 1996-1998, Intrigue 1998, Pontiac® Grand Prix 1996-1998, Sunfire 1996-1998, Trans Sport 1996-1998





SBT2KT



#### SBIT2 Stretch Belt Tool.

Easily install stretch belts on late model European vehicles. Allows belt to be rotated onto pulley without twisting the belt and causing damage.

Low profile to allow for tight access applications.

Groove on underside of tab fits on outer lip of pulley to prevent tool from slipping off the pulley.

#### Applications:

BMW<sup>®</sup>: Models 118, 120, 318, 320, 325, 330, 335, 520, 525, 530, 535, 635, 730, X3 and X5; Volvo<sup>®</sup> vehicles: Models C30, S40 and V50; Mercedes<sup>®</sup>: 3.0 L Diesel Engines

# SBTR Stretch Fit Belt Removal Tool. SBTI Stretch Fit Belt Install Tool.

- · Universal removal of all stretch belts
- · Easy to use process
- · Allows removal and reuse of stretch fit belts

#### SBT2KT Stretch Fit Belt Kit.

- · Universal installation and removal of all stretch belts
- Easy to use process for both removal and installation
- · Allows removal and reuse of stretch fit belts
- Includes SBTI Install Tool, SBTR Removal Tool and informative instructional DVD

#### Service Tools



#### **Belt Tensioning Tools**

#### YA9025 Belt Tensioning Tool (Blue-Point®).

- For 1988 and later Tempo and Topaz with 2.3 L engines and 1986 to current Taurus and Sable with 2.5 L engines
- Reaches down and around alternator to reach spring loaded serpentine belt tensioner

#### SRD6 Belt Tensioner Release Tool.

- 6" long adaptor with 1/2" male square
  Female triple square drive allows the user more flexibility to work around obstacles by coming in at different angles with a 1/2" breaker bar
- Similar to Snap-on® 6" torque adaptors but with a male square
- If using with a torque wrench, please refer to *Snap-on* part# SS307G Torque Chart for formula to obtain the correct applied torque

Heavy Duty Applications: Serpentine belt tensioners with a 1/2" square drive opening found on Series 60 Detroit Diesel® and Caterpillar® engines or buses and delivery vans where the doghouse or engine shrouding make accessibility difficult.

Automotive Applications: 1/2" serpentine belt tensioners on Dodge®/ Chrysler® vehicles (2.0 and 3.0 L engines); Ford®, Lincoln® and Mercury® vehicles (2.3, 3.0, 4.2 and 4.6 L engines); GM® vehicles (2.5, 4.7, 5.0 and 5.7 L engines)

#### **Belt Tensioning Tools (Blue-Point)**

#### SBT26 Serpentine Belt Tool.

- Works on all serpentine belts
- Clamping jaw allows user to position serpentine belt without the belt slipping out of the tool
- Positive grip allows belt routing in tight access areas
- Ergonomic handle provides comfort and ease in use
- Lightweight steel body for durability and strength

#### YA9417 Belt Tensioning Tool.

- General use belt tool for installation and removal of V-belts and timing belts
- 2 pin design and long length allow user to push and pull belts as needed for access in restricted areas

#### SBTL33 Serpentine Belt Tool.

- Flexibility allows for easy adjustment of belt around various pulley positions
- LED lighted portion of tool ensures easy visibility in dark engine compartments
- Extra long 33" length allows for deeper reach around crank shaft pulley
- Reverse gripping feature allows for 2 handed positioning of tool

#### YA9350B Ratcheting Belt Tensioning Wrench Set.

- Allows direct access to belt tensioners without removing engine accessories or frame components
- Covers almost 90% of all vehicles equipped with spring loaded serpentine belt tensioners
- Includes YA9350B1 wrench (15 mm) and YA9350-2 to YA9350-9 adaptors
- All adaptors feature a 15 mm external hex drive for use with the YA9350B1 wrench

Applications: Chrysler (Dodge and Plymouth), Ford (Lincoln and Mercury), GM, Isuzu®, Jeep®, Lexus®, Mazda®, Mitsubishi®, Saturn®,

Toyota®, VW® vehicles YÁ9350B1 Belt Tensioning Wrench. 15 mm single hex. YA9350-2 Adaptor. 14 mm single hex. 15 mm external hex drive. YA9350-3 Adaptor. 18 mm single hex. 15 mm external hex drive. YA9350-4 Adaptor. 3/8" square drive. 15 mm external hex drive.

YA9350-5 Adaptor. 1/2" square drive. 15 mm external hex drive. YA9350-6 Adaptor. 13 mm single hex. 15 mm external hex drive. YA9350-7 Adaptor. 16 mm single hex. 15 mm external hex drive.

YA9350-8 Adaptor. 15 mm single hex. 15 mm external hex drive. YA9350-9 Adaptor. 19 mm single hex. 15 mm external hex drive.

#### YA9340 Serpentine Belt Wrench.

- Use to release any serpentine belt tensioner with 1/2" square drive opening
- Ratcheting action allows for better positioning of the tool, offering
- more swing angle than a solid type serpentine belt wrench Reversible ratchet head is only 1" thick and will fit between the tensioner face and the fan blades on a Series 60 *Detroit Diesel* and some Caterpillar engines
- Great for working on buses and delivery vans where the doghouse or engine shrouding make the work area very tight
- Compact length keeps handle from coming in contact with radiator hoses, charged air cooler pipes, hydraulic lines or frame rails
- Vinyl grip for comfort
- 13" overall length

#### **GA424A Belt Tension** Gauge (Blue-Point).

- Range is 30 to 180 lb (130 to 800 N•m)
- · Squeeze handle, place gauge on drive belt, release handle and read













#### **ENGINE SERVICE**

#### **Service Tools**



#### YA7200 Ignition Module Wrench for Ford® Vehicles.

- For 1982 and later Ford ignition modules
- Ratcheting ends are offset 25°

# One end has 7/32", 6 point; other end a T20 Torx® bit YA8640 Cam Belt Wrench for VW®/Audi® Vehicles.

- For adjusting camshaft spur belts that have idler pulleys with pin holes
- Vinyl handle grip

#### YA6760 Timing Belt Pulley Holder for VW/Audi.

- · Holds crank pulley stationary for crank bolt removal and installation to the factory torque requirement
- 3 bolt design for secure holding
- 1/2" drive for use with a breaker bar
- · Heat treated for strength with high quality black finish Applications: 1.8 L 4 cylinder turbo: *VW* and *Audi* vehicles 1998-2006; 2.0 L 4 cylinder: *VW* vehicles 1993-2005; 2.0 L 4 cylinder turbo: *VW* and *Audi* vehicles 2006 and later

#### YA9870 Tension Pulley Spanner Wrench.

- · Easily adjust camshaft spur belts having idler pulleys with pin holes on Mitsubishi®, Plymouth® and Eagle® vehicles
- Protruding pins on the wrench grip the center of the idler pulley and rotate it around its off center retaining bolt
- Rotation allows for the camshaft spur belt tension adjustment
- Designed for use on: 1990-1993 Mitsubishi® Eclipse, *Eagle* Talon and *Plymouth* Laser 2.0 L DOHC (nonturbo); 1990-1993 *Plymouth* Laser 2.0 L DOHC (turbo); 1990 and later *Mitsubishi* Eclipse and Eagle Talon 2.0 L DOHC (turbo); 1994-1996 Mitsubishi Montero 3.5 L DOHC; 1994 and later Mitsubishi Montero 3.5 L SOHC; 1994 and later Mitsubishi Galant 2.4 L SOHC; and 1994 and later Mitsubishi Mirage 1.8 L SOHC vehicles

#### YA4590A Hood Prop.

- 3 pc telescoping shaft locks in any position
- Range is 20 to 48 1/2"
- Will work on front or sides of any car or truck
- Made of steel tubing and features locking levers on each section
- Includes holding support to prevent slippage

#### YA45904 Hood Prop Adaptor.

#### YA65500 Cam Seal Remover.

- Special tool speeds camshaft seal removal on most V6 engines in Toyota® and Lexus® vehicles
- Unique press and pull cup design eliminates the difficult
- Use on Toyota 3.0 and 3.3 L V6 (1996 and later) and Lexus 3.0 and 3.3 L V6 (1990 and later) vehicles
- Kit includes cup, press rod, washer, nut and large stud
- Heat treated alloy steel

#### YA6551 Cam Seal Remover/Installer.

- · Kit provides accurate and fast camshaft seal removal and installation on *Toyota* (1996 and later) and *Lexus* (1990 and later) 3.0 and 3.3 L V6 engines
- Eliminates possibility of camshaft damage
- Heat treated alloy steel and high quality hardware
- Includes removal cup, press rod, washer, nut and large stud

#### YA7960 Camshaft Seal Kit.

- Easily removes and installs camshaft and crankshaft seals without damage
- Compact puller with unique extracting hooks engage seal for quick removal
- Interchangeable sleeves and mandrels allow easy installation of new seal
- Suits seals from 21.5 to 64 mm

#### Service Tools







#### Harmonic Balancer

#### YA188G Harmonic Balancer Installer (Blue-Point®).

- Includes 7 adaptors for use on a wide range of engines
- Adaptor sizes: 7/16"-20, 1/2"-20, 9/16"-18, 3/4"-16, M12 x 1.5, M14 x 1.5 and M16 x 2.0

#### YA188-13C Metric Adaptor.

• Optional M10 x 1.5 for YA188G

#### **YA6010 Harmonic Dampener Pulley** Holding Tool (Blue-Point).

- Saves time during removal and installation of the crank bolt on most engines in Honda® and Acura® vehicles
- When used with a 1/2" drive breaker bar or ratchet, prevents the pulley from rotating when removing/installing the pulley bolt
- · Can be used on most Honda (Accord, Civic, CRV, Del Sol, Insight, Odyssey, Prelude and S2000) and Acura (CL, Integra, Legend, NSX, RL and TL) engines
- Verify exact model year/engine size coverage with tool instructions CJ146 GM® Crankshaft Harmonic Balancer Kit for GM® Vehicle.
- Remove the crankshaft harmonic balancer on 1990 and later 3.3 and 3.8 L engines on GM vehicles
- Shoulder bolt adaptors provide correct installation depth, preventing damage to the crank sensor and interrupter rings
- Includes 3 CJ146-1 adaptors and 1 CJ146-2 extension plus vinvl storage pouch
- Requires Snap-on® CJ98-1 yoke and CJ83-3 pressure screw for use (not included)

#### YA6470 Harmonic Dampener Pulley Holding Tool.

- Harmonic dampener pulley holding tool for GM trucks and SUVs
- Easily removes and installs the bolt holding the pulley
- Industrial black finish helps protect against corrosion

1999 and later GEN III 4.6, 5.3 and 6.0 L V8 engines



S9842A

#### Thermal Vacuum Switch S9842A Thermal Vacuum Switch Socket.

- For U.S. vehicles through 1988
- 7/8", 6 point wrench opening, 1/2" drive
- 3 1/8" long

#### HIW3 Hand Impact Wrench (Blue-Point).

- Remove/replace harmonic balancer pulleys without removing the radiator
- · Accesses restricted areas where an air impact wrench won't fit or when air supply is unavailable
- Use with any 1/2" impact socket
- · Molded rubber hand guard
- Max torque: 600 ft lbs
- Overall length: 22 1/16"

#### YA6490 Harmonic Damper Pulley Puller (Blue-Point).

- Use on many engines in Chrysler®, Mitsubishi® and GM vehicles
   In most applications this compact tool eliminates the need to remove the radiator prior to removing the pulley
- Includes 4 push rods for use on crankshafts that are not drilled full depth

#### Applications:

GM: 2.8 L Straight 4 cylinder Chevy® Colorado, GMC® Canyon (2005 and later); 3.5 L Straight 5 cylinder Chevy Colorado. GMC Canyon (2004 and later), Hummer® H3 (2006 and later); 4.2 L Straight 6 cylinder: *Chevy* Trailblazer, *GMC* Envoy, Oldsmobile® Bravada (2003 and later), Buick® Rainier (2004 and later); 5.7 L V8 (Gen III): Camaro, Corvette, Firebird and Trans-Am (1997 and later); Gen III trucks and SUVs with 4.8 L V8, 5.3 L V8, 6.0 L V8 and 8.1 L V8 (2000 and later)

Chrysler: 2.0 L 4 Cylinder, 2.4 L 4 Cylinder and 2.5 L V6 (1985 and later automobiles); 2.7 L DOHC V6, 3.2 L SOHC V6 and 3.5 L SOHC V6 (1998 and later automobiles); 3.3 L V6: (1990 and later vans); 3.3 and 3.5 L V6 (1993-1997 automobiles; 3.8 L V6 (1994 and later vans) 4.7 L V8 (1998 and later); 8.0 L V10 (1994 and later pick-ups) Cadillac®: 4.5 L V8: (1988-1992); 4.6 L V8: (1993 and later); 4.9 L V8: (1991-1995); 6.0 L V8: Escalade

Mitsubishi: 2.0 L DOHC non-turbo: Eclipse (1995-1999) Oldsmobile: 4.0 L V8: (1995 and later)

#### YA6491 Harmonic Damper Pulley Puller Update Kit.

- Updates earlier YA9740 pullers to the same applications as the new YA6490
- Kit will also update other pulley pullers that are similar to the YA9740 Series



S6158

#### Turning/Moving S6158 Engine Barring Socket.

- Use 4 through 6.6 L small block V8s in Chevrolet vehicles
- . Designed to turn the engine over when it is on engine stand
- 1/2" drive









### **Lifters/Compressors**



# Valve Lifters (Blue-Point®) CF811B C-Clamp Compressor.

1 to 2" capacity. For "t" head, valve in head, high compression engines and vehicles with overhead valves. Activating mechanism prevents cocking of valve spring as it is compressed.



# Valve Spring Compressors (Blue-Point) YA9140A Universal Valve Spring Compressor.

Removes/installs the valve spring without removal of the cylinder head from the engine. U.S. and import servicing of single and double overhead cam engines, including Audi®, Chrysler®, Infiniti®, Honda, Hyundai®, Lexus®, Mazda®, Mitsubishi®, Nissan®, Porsche®, Saturn®, Toyota®, Volvo® and VW® vehicles.



#### CF19B C-Clamp Compressor.

This compact model includes CF19-3A jaws for 1/4 to 1 1/16" diameter springs on small, air cooled engines and CF19A5 jaws for both 17 and 20.8 mm diameter springs on Honda® engines.



#### YA3271 Valve Spring

Compressor. For most cars and trucks with overhead valves. Works with cylinder head on or off the engine. Removable hand wheel provides option to use 5/8" socket or wrench in confined guarters.



#### CF700B Valve Spring Compressor.

7/8 to 2 1/2" capacity. Operates on 90 to 150 psi, but develops up to 3x output pressure. Tool measures 1 x 8".

**CF22E Replacement Jaw Set.** Medium, offset jaws with 1 to 2" capacity. For CF811B and CF700B.

**CF21B Optional Jaw Set.** Small, straight jaws with 7/8 to 1 7/8" capacity. For CF811B and CF700B.

**CF23A Optional Jaw Set.** For CF811B and CF700B. Large, straight jaws with 1 1/2 to 2 1/2" capacity.



# VST100 Cam Operated Valve Spring Compressor. Eliminates the need for cylinder removal and the need to readjust tool to each spring. Works on most overhead valve engines.



#### CG90 Valve Spring Depressor.

Self leveling action compensates for any helix angle spring. Jaw length can be adjusted. Pulls with equal pressure on both jaws.

#### Valve Service Tools



#### **Valve Spring Replacement Tools**

M2112PK Timing Chain Holder For Lexus vehicles (2 pk).

- Lexus V6 Valve Spring Replacement Tool
- For Lexus safety recall ALE
- M2112PK includes (2) M2112s as 2 are required to hold timing chain

Application:

M2112PK holds timing chain during valve spring replacement or any other service requiring camshaft removal. Saves technician time as the engine can be turned over with the cam shaft out and with the timing chain installed.



M2113

#### M2113 For VVT Gear Holder Lexus Vehicles.

- Lexus V8 Valve Spring Replacement Tool
- For Lexus engine designation 1 UR-FSE 4.6L V8
- For *Lexus* safety recall ALE

Application:

M2113 holds the intake VVT gear during valve spring replacement. Saves technician time as the engine can be turned over with the cam shaft out and with the VVT gear in and timing chain installed. M2113 can be used instead of using wire ties.

#### **Service Tools**



#### Valve Keeper Tools (Blue-Point®) **GA318A Overhead Valve Tool.**

- · Removes and replaces valve keepers on all gas and diesel overhead valve engines, even VW® Rabbit, motorcycle, marine and aircraft engines
- Magnetically retains keepers and won't bend valve stems
- Use in place of c-clamp or other type of compressor
- · Use only with a soft faced hammer

#### GA317 Metric Valve Keeper Remover/Installer.

- Quickly removes and installs valve keepers on most overhead cam engines with valve stems from 4.5 to 7.5 mm
- Push or tap tool with hammer to remove valve keepers.
- · Magnet in tool body captures keepers for quick removal and valve disassembly
- To install keepers, load keepers then push or tap to install
- Used on vehicle or on workbench



#### **General Service (Blue-Point)**

#### YA8230 Valve Stem Seal Pliers.

- · Removes valve stem seals from overhead camshaft engines including 4 valve per cylinder engines that have restricted access to the valve stem seal
- . Gripping serrations in the pliers tip easily grab both OEM and aftermarket seals with ease
- · Easy grip handles

#### GA264A Oil Deflector Set.

- For engines with pressure lubricated push rods
- Deflectors clip onto rockers and deflect oil from feed holes to return oil to engine and eliminate splash
- 16 deflectors clipped to a metal storage panel

#### Valve Holders.

- Each includes 2 rubber suction cups for use when hand grinding flat head unslotted valves
- Hardwood handle

VL2 Valve Holder. 5/8 and 13/16" diameter suction cups. **VL3 Valve Holder.** 1 1/8 and 1 3/8" diameter suction cups.





GA285

YA6380

#### Camshaft/Crankshaft Tools (Blue-Point) GA285 Camshaft Bearing Remover and Inserter Set.

- · Removes and inserts bearings in all engines
- 5 driving plugs handle a range of 1.475 to 2.690"
  Fits slightly undersized or oversized bearings
- Sturdy storage box

#### YA6380 Camshaft Seal Installer Set.

· Quickly and easily install the crankshaft seal on most 4 cylinder and V6 engines that have 10 and 12 mm x 1.25 cam bolts



#### YA6290 Valve Stem Seal Pliers.

- Use in restricted areas with a clearance problem above the cylinder head
- Pliers head rotates from 0 to 90°
- Jaw tip features a thin edge for hooking under stubborn valve stem seals
- · 4 vertical ridges on jaws aid in holding the valve stem seal
- Vinyl handle grips for comfort and control

#### Valve Guide Service Tools



#### PHG83A

#### Metric Valve Guide Removers

- Designed for use with Snap-on® air hammers
- Can also be used as drift punches

PHG96A Valve Guide Remover. 6.9 mm pilot. 189 mm long. PHG83A Valve Guide Remover. 7.7 mm pilot. 190 mm long.

PHG97A Valve Guide Remover. 5.2 mm pilot. 189 mm long. PHG86A Valve Guide Remover. 9.3 mm pilot. 190 mm long.



# Valve Guide Brushes (Blue-Point) • Brush wire is woven into twisted wire strands

- · Each features a fluted, wooden handle

AC10A Valve Guide Brush. 5/16" diameter brush. AC11A Valve Guide Brush. 11/32" diameter brush. AC12A Valve Guide Brush. 3/8" diameter brush.





#### **Service Tools**



YA8830 Cylinder Head Stand. Holds cylinder head up and away from the workbench, allowing clearance for the manifolds. Steel bar clamps to a bench vise. Simply slide on the movable arms, which adjust to almost any steel or aluminum head configuration.



**KRA16AAPV** 

**KRA16AAPV Valve Rack.** (16) 11/16" holes provide easy access to valves. Hang on roll cab or tool chest with 1/4" or more lip.



Metric Jam Nut Type Adjustment Tools (Blue-Point®)

Include an idle adjustment screwdriver within a socket and handle for holding adjustment screw in place while the jam nut is tightened. Handle pivots from one side to the other so the socket "window" is always visible.

YA8895 Valve Adjustment Tool. For all cars with 10 mm jam nut valve screws. YA8880 Valve Adjustment Tool. For all cars with 12 mm jam nut valve screws.



S6132A

**Cover Bolt Socket** 

S6132A Metric Valve Cover Bolt Socket. For GM® and 1976 and later Honda®; other imports and U.S. 10 mm, 12 point wrench size. Allows access to head bolts, valve and rocker covers, and oil pan bolts. Deep clearance for bolts with extended tip as used on spark plug wire harness. 3/8" drive; 11/16" 0.D. 4 1/8" long.



Valve Adjustment Tools (Blue-Point)

Valve adjusting tools for current VW® vehicles. These 2 tools are designed to be used together on all late models requiring the VW #2078 tool, which includes all current 5 cylinder VWs and Audi® 5000.

YA8825 Valve-Adjusting Tool. For Toyota® and other overhead camshaft engines using spacer shims. Shim pliers push between the shim and camshaft, allowing the included YA8825-1 wedge tool to be placed between the valve lifter ledge and camshaft for easy shim replacement.

YA8825-1 Wedge Tool. Wedge tool to be placed between the valve lifter ledge and camshaft for easy shim replacement.

#### Hones



# Standard Duty (Blue-Point®) CF61CS Cylinder Hone. • For 2 to 7" diameter cylinders

- Self centering and self bottoming with spread limiters to control hone diameter
- Spring action gives correct tension when using with an electric drill
- Includes (3) 220 medium grit stones
- All available stones are 3" long

CF61-100 Stone Set. (3) 100 coarse grit stones. CF61-12S Stone Set. (3) 220 medium grit stones. CF61-14S Stone Set. (3) 400 fine grit stones.

CF62CS Cylinder Hone. Similar to CF61CS but for 2 to 6 3/4" diameter cylinders with larger stones. Includes (3) 220 medium grit stones. All available stones are 4" long.

CF62-100 Stone Set. (3) 100 coarse grit stones. CF62-12S Stone Set. (3) 220 medium grit stones. CF62-14S Stone Set. (3) 400 fine grit stones.

#### **Cylinder Service Tools**



WR30A

#### Ridge Reamer (Blue-Point) WR30A Ridge Reamer.

- Lathe type reamer is for 3 to 5" diameter cylinders
- · Centers itself in cylinder

WR30A10 Replacement Cutter Bit.



#### Cylinder Bores GA3627 Cylinder Bore Gauge.

- Measure cylinder wear without removing pistons
- · Check cylinder diameter when used with micrometer
- Range is 2.6 to 7" in .001" increments and measures to a bore depth of 8"

**GA3627** 

 Includes gauge, 6 extensions (0.2, 0.4, 0.6, 0.8, 1.0 and 2.0") plus storage case

**Piston Service Tools** 



PRS8



**PRS10** 

#### Ring Expanders

#### PRŠ8 Piston Ring Expander.

- Installs piston rings from 3/64 to 1/4" thick
- · Eliminates breakage or distortion of rings

#### PRS10 Piston Ring Expander.

- 2 3/4 to 4 1/4" ring capacity
  Remove or install both step cut and diagonal cut rings
- Spring tension eliminates the need for adjustment

#### PRS12 Piston Ring Expander.

- Similar to PRS10 but with 4 1/2 to 7" ring capacity
- Excellent for heavy duty diesel applications









- . Operate bore only while it is within cylinder
- · Read safety precautions on pages W1 to W4

#### **Piston Service Tools**



#### **Ring Compressors**

Clutch control holds tension band in position as piston is inserted into cylinder. 1/2" wide spring bands equalize tension over belt width so ring assembly may be compressed into groove until flush with piston. "V" beads on lower edge of belt keep tool from entering cylinder. RC40C can be used upside down for Chevrolet®, Mercury® and Ford® trucks with angled blocks.

RC150A Ring Compressor. 4 band. 3 1/2 to 7" capacity. 7" deep.

RC50C Ring Compressor. 2 band. 3 1/2 to 7" capacity. 3 1/2" deep.

RC40C Ring Compressor. 2 band. 2 1/8 to 5" capacity. 3 1/2" deep.

RCL30 Ring Compressor. 1 band. 2 1/2 to 5" capacity. May be disassembled and removed from around connecting rod when used on small aircraft, motorcycle or other engines that require the cylinder to be pushed over the piston during assembly.

RCW60 Ring Compressor. 1 band. 3 to 5" capacity. 1 1/2" deep. Low friction wrinkle band construction with thumbscrew for precise adjustment. Also used on small aircraft and motorcycle engines where cylinders are pushed over piston during assembly. RC980 Ring Compressor Set. Works both horizontally and vertically with pliers grip handle. Fine tooth ratcheting mechanism.

vertically with pliers grip handle. Fine tooth ratcheting mechanism. Includes 6 hardened steel bands: 2 7/8 to 3 1/8", 3 1/8 to 3 3/8", 3 3/8 to 3 5/8", 3 5/8 to 3 7/8", 3 7/8 to 4 1/8", and 4 1/8 to 4 3/8".

RC980-7 Optional Band. 4 1/2 to 4 3/4" capacity. RC980-8 Optional Band. 4 3/4 to 5" capacity. RC980-9 Optional Band. 5 to 5 1/4" capacity. RC980-10 Optional Band. 5 1/2 to 5 3/4" capacity. RC980-11 Replacement Pliers.

#### **Ring Groove Cleaners**

RC500 Piston Ring Groove Cleaner. For pistons with grooves of 5/64, 3/32, 1/8, 5/32 and 3/16" with diameters from 2 1/2 to 5".

RC500-1 Replacement Cutter Blade. Replacement cutter blade.

**RC500-11 Optional Cutter Blade.** For 1/8, 1/4, 5/16, 2.5 and 3 mm grooves.

**RC510A Piston Ring Groove Cleaner.** For pistons with grooves of 5/64, 3/32, 1/8, 5/32 and 3/16" with diameters from 1 to 5".

RC510-1 Replacement Cutter Wheel. RC510-6 Replacement Knurled Nut.

RC510-3 Adaptor. Adapts RC510A for use on pistons with diameters of 1 to 2 3/4".

RC510-7M Replacement Metric Cutter Wheel.



#### Dead Blow Hammer

**HLE24 Piston Dead Blow Hammer.** Made of material that won't damage the piston. Shot filled head drastically reduces rebound. Head length is 7 3/4". Diameter is 1 1/4 to 1 1/2" with a reach of 5 1/2" to the handle shoulder. Overall length is 12 3/4".

#### Inserter/Remover Set

A57-3

ME4A2



#### A57Q Bushing Remover/ Inserter Set.

- · For standard and specialized bronze, steel, rubber or Enlox bushings
- Range of adaptor sizes covers nearly all shackle and steering bushings
- New bushings are inserted by tightening screw, which forces the bushing into place without hammering
- Sleeve permits forcing out of
- old bushings

  Useful where limited space prevents driving them out
- 5 smallest adaptors are used only with the smallest driver

A57-37	ESD1428	A57-36
	( <del>-0</del> )	
A57-27	A57-15	A57-16
A57-18	A57-14A	A57-8
A57-5	A57-11	A57-46
A57-20	A57-45	A57-42
A57-48	A57-44	A57-43
176		00

A57CA

Stock No.	Description
A57CA	Screw (1/2"-20)
A57-35	Screw (5/8"-18)
ME4A2	Nut (1/2"-20)
ME4A4	Nut (5/8"-18)
A57-3	Washer (1/2" I.D., 1 1/4" O.D.)
A57-37	Sleeve Adaptor (.500" I.D. x .625" O.D.)
A57-39	Sleeve Adaptor (.640" I.D. x 2.047" O.D.)
A57-41	Sleeve Adaptor (1.000" I.D. x 2.047" 0.D.)
A57-38	Sleeve Adaptor (1.500" I.D. x 2.047" O.D.)
ESD1428	Bearing (1/2" I.D., 1" O.D.)
ME11A1	Bearing (5/8" I.D., 1 1/8" O.D.)
A57-36	Sleeve (4 15/16" long, 2 1/16" l.D.)
A57-27	Puller (1/8"-27 taper thread)

Stock No.	Dimension, inches 0.D.	Dimension, inches Small O.D.	Dimension, inches Large I.D.	Dimension, inches Large O.D	
A57-15	Bushing	Driver for Adaptors A57-16 to		rough A57-26	
A57-16	.339	.434	_	-	
A57-17	.430	.497	_	-	
A57-26	.492	.622	_	ı	
A57-18	-	.493	_	.559	
A57-25	_	.554	_	.684	
A57-14A	Bushin	g Driver for Ada	ptors A57-8 thro	ough A57-20	
A57-8	.555	.622	_	ı	
A57-19	.601	.668	_	1	
A57-7	.618	.747	_	-	
A57-6	.678	.809	_	_	
A57-5	.728	.856	_	ı	
A57-24	.742	.997	_	1	
A57-10	.789	.918	_	1	
A57-11	_	.851	_	.980	
A57-22	-	.907	_	1.046	
A57-12A	_	.919	_	1.027	
A57A13		.993	_	1.122	
A57-46	_	1.034	_	1.136	
A57-20	_	1.055	_	1.184	
A57-23A	_	1.101	_	1.230	
Large Adaptors					
A57-45	_	1.250	1.125	_	
A57-42	_	1.406	1.187	_	
A57-48	1.206	1.500	_	_	
A57-29	1.222	1.372			
A57-40	1.367	1.625	_	_	
A57-44		1.812	1.375		
A57-43		_	1.625	2.000	
A57-47	_	_	1.859	2.000	
A57-49		_	_	13/16 opening	
A57-51				17/32 opening	
A57-50	_	_	_	1 3/8 opening	





A57-51

A57-49

# **BUSHING/SEAL**

#### **Driver Sets**



A1310A

# Bearing Race and Seal Driver Set A1310A Bearing Race and Seal Driver Set (Blue-Point®).

- · Collars fit most standard wheel bearing sizes
- 3 largest sizes fit most late model 4 wheel drive vehicles



A157C

# Standard Bushing Driver Set A157C Standard Bushing Driver Set.

- · Adaptors held on drivers with knurled nut
- Small and medium drivers (A157-3 and A157-2) fit all smaller bushings (A157-6 through A157-12); large driver (A157-1) fits remaining bushings (A157-13 through A157-22)
- Set comes packaged in PB20 storage box



A158B

# Heavy Duty Bushing Driver Set A158B Heavy Duty Bushing Driver Set.

- Includes 8 basic adaptors for servicing bushings on trucks, tractors and buses
- Adaptors are secured to threaded driver shaft by knurled nut
- Industrial finish
- · Set comes packaged in PB34 storage box



A257

# Complete Heavy Duty Bushing Driver Set A257 Complete Heavy Duty Bushing Driver Set.

- Complements the A157C set by adding 27 larger adaptors for transmission work as well as many other automotive and industrial applications
- Industrial finish
- Set is arranged in PB27 storage box

#### A1310A Set Components

Stock No.	Description				
A1306-1	Handle (5 3/4" long)				
A1306-2	Collar (1 9/16" long)				
A1306-3	Collar (1 3/4" long)				
A1306-4	Collar (1 31/32" long)				
A1306-5	Collar (2 5/16" long)				
A1306-6	Collar (2 17/32" long)				
A1306-7	Collar (2 15/32" long)				
A1310-1	Collar (2 <sup>27</sup> / <sub>32</sub> " long)				
A1310-2	Collar (3" long)				
A1310-3	Collar (3 3/16" long)				

#### A157C Set Components/Adaptors

Stock No.	I.D., inches	0.D., inches	Stock No.	I.D., inches	0.D., inches
A157-1	Large Driver Handle	_	A157-11	5/8	3/4
A157-2	Medium Driver Handle	_	A157-12	11/16	13/16
A157-3	Small Driver Handle	_	A157-13	3/4	7/8
A157-4	Driver Nut, 5/16"-24	_	A157-14	13/16	15/16
A157-5	Driver Nut, 1/2"-20	_	A157-15	7/8	1
A157-6	3/8	7/16	A157-16	15/16	<b>1</b> <sup>1</sup> / <sub>16</sub>
A157-22	15/32	17/32	A157-17	1	1 <sup>1</sup> /8
A157-7	7/16	1/2	A157-18	<b>1</b> <sup>1</sup> / <sub>16</sub>	1 <sup>3</sup> /16
A157-8	1/2	5/8	A157-19	<b>1</b> 1/8	1 1/4
A157-9	9/16	11/16	A157-20	1 <sup>3</sup> / <sub>16</sub>	<b>1</b> 5/16
A157-10	5/8	11/16	A157-21	1 1/4	1 3/8

#### **A158B Set Components/Adaptors**

Stock No.	I.D., inches	0.D., inches	Stock No.	I.D., inches	0.D., inches
A257-1	Large Driver Handle	_	A257-26	1 1/2	1 <sup>5</sup> /8
A157-5	Driver Nut, 1/2"-20	_	A257-27	1 9/16	1 11/16
A257-23	<b>1</b> 5/16	<b>1</b> <sup>7</sup> / <sub>16</sub>	A257-28	1 <sup>5</sup> /8	1 3/4
A257-24	1 3/8	1 1/2	A257-29	1 11/16	1 <sup>13</sup> / <sub>16</sub>
A257-25	<b>1</b> <sup>7</sup> /16	<b>1</b> 9/16	A257-30	1 3/4	1 7/8

#### A257 Set Components/Adaptors

Stock No.	I.D., inches	0.D., inches	Stock No.	I.D., inches	0.D., inches
A257-1	Large Driver Handle	_	A257-36	2 1/8	2 1/4
A157-5	Driver Nut, 1/2"-20	_	A257-37	2 3/16	2 5/16
A257-23	1 <sup>5</sup> / <sub>16</sub>	1 7/16	A257-38	2 1/4	2 3/8
A257-24	1 3/8	1 1/2	A257-39	2 5/16	2 7/16
A257-25	1 7/16	1 9/16	A257-40	2 3/8	2 1/2
A257-26	1 1/2	1 5/8	A257-41	2 7/16	2 9/16
A257-27	1 9/16	1 11/16	A257-42	2 1/2	2 5/8
A257-28	1 5/8	1 3/4	A257-43	2 9/16	2 11/16
A257-29	1 11/16	1 13/16	A257-44	2 5/8	2 3/4
A257-30	1 3/4	1 7/8	A257-45	2 11/16	2 13/16
A257-31	1 13/16	1 <sup>15</sup> / <sub>16</sub>	A257-46	2 3/4	2 7/8
A257-32	1 7/8	2	A257-47	2 13/16	2 15/16
A257-33	1 <sup>15</sup> /16	2 1/16	A257-48	2 7/8	3
A257-34	2	2 1/8	A257-49	2 15/16	3 1/16
A257-35	2 <sup>1</sup> / <sub>16</sub>	2 3/16			

#### **Driver Sets**

#### **A160M Set Components**

	, , , , , , , , , , , , , , , , , , ,		
Stock No.	Description	Stock No.	Description
A157-1	Large Driver Handle	A160M6	Adaptor (18-20 mm)
A157-2	Medium Driver Handle	A160M7	Adaptor (20-22 mm)
A157-3	Small Driver Handle	A160M8	Adaptor (22-24 mm)
A157-4	Driver Nut, 5/16"-24	A160M9	Adaptor (25-27 mm)
A157-5	Driver Nut, 1/2"-20	A160M10	Adaptor (28-30 mm)
A160M1	Adaptor (10-12 mm)	A160M11	Adaptor (30-34 mm)
A160M2	Adaptor (12-14 mm)	A160M12	Adaptor (32-36 mm)
A160M3	Adaptor (14-16 mm)	A160M13	Adaptor (35-40 mm)
A160M4	Adaptor (15-17 mm)	A160M14	Adaptor (38-42 mm)
A160M5	Adaptor (16-18 mm)		



A160M

# Standard Metric Bushing Driver Set A160M Metric Bushing Driver Set. • Includes 3 driver handles and adaptors in

- 10 to 42 mm sizes
- · Packaged in PB118 storage box

#### **A261M Set Components**

Stock No.	Description	Stock No.	Description
A257-1	Large Driver Handle	A261M5	Adaptor (50-53 mm)
A157-5	Driver Nut, 1/2"-20	A261M6	Adaptor (55-60 mm)
A26M1	Adaptor (40-44 mm)	A261M7	Adaptor (60-65 mm)
A261M2	Adaptor (42-45 mm)	A261M8	Adaptor (65-70 mm)
A261M3	Adaptor (45-48 mm)	A261M9	Adaptor (70-75 mm)
A261M4	Adaptor (48-52 mm)	A261M10	Adaptor (75-80 mm)



A261M

# Metric Heavy Duty Bushing Driver Set A261M Metric Bushing Driver Set. • Includes an extra large driver handle and adaptors in 40 to 80 mm sizes

- · Packaged in PB117 storage box

#### **YA2480 Seal Driver Set Components**

Stock No.	Description	Stock No.	Description
A1306-1	Knurled Handle	YA2480-8	Adaptor (#8)
A1306-1-1	Adaptor Mounting Bolt	YA2480-9	Adaptor (#9)
YA2480-17	Steel Back up Washer	YA2480-10	Adaptor (#10)
YA2480-1	Adaptor (#1)	YA2480-11	Adaptor (#11)
YA2480-2	Adaptor (#2)	YA2480-12	Adaptor (#12)
YA2480-3	Adaptor (#3)	YA2480-13	Adaptor (#13)
YA2480-4	Adaptor (#4)	YA2480-14	Adaptor (#14)
YA2480-5	Adaptor (#5)	YA2480-15	Adaptor (#15)
YA2480-6	Adaptor (#6)	YA2480-16	Adaptor (#16)
YA2480-7	Adaptor (#7)		









#### **Fender/Seat Covers**

High density sponge rubber is laminated to vinyl, providing better protection and adherence to the fender. Less susceptible to creasing.







JCKS6A

JCKS7A

JCK7DBL

#### JCKS6A Fender Cover.

- Measures 21" W by 30" L
  Raised ribbing along the center section provides tool holding space

#### JCKS7A Fender Cover.

- Measures 22 1/2" W by 30" L
- For use on vehicles with broad fenders
- · Raised ribbing along the center section provides tool holding space

#### JCK7DBL Fender Cover.

- Measures 26" W by 36" L
- For use on shorter fenders of most new vehicles
- Raised ribbing

JCK7D Fender Cover. Same as JCK7DBL in red.



JCK8



JCK15D



KAC1224TCA

#### JCK8 Fender Cover.

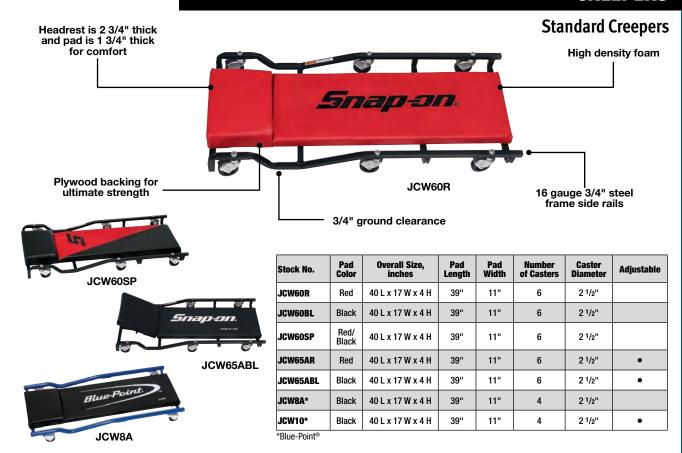
- Measures 26" W by 36" L
  Nonslip, nonabsorbent surface conforms to the fender of any vehicle
- Red material with white lettering
- · Easy to clean with soap and water

#### JCK15D Fender Cover.

- Heavy duty vinyl material protects all surfaces
- Measures 29" W x 52" L

#### **KAC1224TCA Motorcycle Gas Tank** Cover.

- Fits Harley-Davidson® Dyna, Softail and Touring models
- Fits various models of Yamaha®, Victory®, Triumph® and Kawasaki® motorcycles plus many more
- Protects the finish while you perform routine maintenance
- · Keeps dust and dirt off the gas tank
- Nonmarring cover uses a nonabrasive inner liner that won't slide off



### **Heavy Duty Creepers**









JCW11A

- \*Blue-Point
   Do not stand on or use as a cart
- Read safety precautions on pages W1 to W4

#### **Seat Creepers**



Stock No.	Pad Color	Overall Size, inches	Seat Size, inches	Drawer Size, inches	Adjustable	Adjustment Range
JCW80R	Red	14 <sup>1</sup> / <sub>4</sub> L x 19 W x 15 H	10 L x 14 <sup>1</sup> /4 W	9 <sup>7</sup> / <sub>8</sub> L x 11 <sup>1</sup> / <sub>2</sub> W x 1 <sup>3</sup> / <sub>4</sub> D		_
JCW80BL	Black	14 <sup>1</sup> / <sub>4</sub> L x 19 W x 15 H	10 L x 14 <sup>1</sup> / <sub>4</sub> W	9 <sup>7</sup> / <sub>8</sub> L x 11 <sup>1</sup> / <sub>2</sub> W x 1 <sup>3</sup> / <sub>4</sub> D		_
JCW85R*	Red	17 <sup>3</sup> / <sub>4</sub> L x 15 W x 23 H	17 <sup>3</sup> / <sub>4</sub> L x 10 W x 8 H	9 <sup>7</sup> / <sub>8</sub> L x 11 <sup>1</sup> / <sub>2</sub> W x 1 <sup>3</sup> / <sub>4</sub> D		_
JCW85BL*	Black	17 <sup>3</sup> / <sub>4</sub> L x 15 W x 23 H	17 <sup>3</sup> / <sub>4</sub> L x 10 W x 8 H	9 <sup>7</sup> / <sub>8</sub> L x 11 <sup>1</sup> / <sub>2</sub> W x 1 <sup>3</sup> / <sub>4</sub> D		_
JCW90ABL	Black	15 L x 15 W x 21 <sup>1</sup> / <sub>2</sub> H	13 <sup>3</sup> /4 L x 13 <sup>3</sup> /4 W	_	•	14 to 19 1/4"
JCW95AR*	Red	17 <sup>3</sup> / <sub>4</sub> L x 15 W x 28 <sup>1</sup> / <sub>4</sub> H	17 <sup>3</sup> / <sub>4</sub> L x 10 W x 8 H	_	•	14 to 19 1/4"
JCW95ABL*	Black	17 <sup>3</sup> / <sub>4</sub> L x 15 W x 28 <sup>1</sup> / <sub>4</sub> H	17 <sup>3</sup> / <sub>4</sub> L x 10 W x 8 H	_	•	14 to 19 1/4"
JCW9**	Black	17 L x 20 <sup>1</sup> / <sub>2</sub> W x 15 H	7 L x 14 W	_		_



JCW95AR

JCW90ABL



**Specialty Creepers/Accessories** 



#### JCP38 Plastic Creeper.

- Body fitting design38" L x 17" W x 4" H



- Constructed from 1" 16 gauge steel tubing
  Overall dimensions: 39" L x 29" W x 9 1/2" H





#### KRJC23AAPV Creeper Hanger.

- · Secures creepers to roll cabs
- Adjustable to 4 different creeper widths
- Hanger hooks over lip of roll cab and screws down
- Includes 2 hook bolts and a lock rod



#### JCW50R Wishbone Creeper.

- Frame allows additional shoulder and leg clearance
- High density 80 lb foam over a plywood bed for strength
  Pad length of 39", 11" width
  (4) 2 1/2" ball bearing swivel casters

<sup>\*</sup> Bucket seats

#### **Micrometers and Sets**



MIC1B

# **Digital Micrometers, inches**• Standard reading in .001" increments

- on digit display
- Vernier style reading in .0001" increments
- Large easy to handle insulated frame, carbide tipped anvils, positive locking clamp and ratchet stop thimble

Stock No.	Range, inches	Increments, inches
MIC1B	0-1	.0001
MIC2B	1-2	.0001
<b>МІСЗВ</b>	2-3	.0001
MIC4B	3-4	.0001
MIC5B	4-5	.0001

MIC103B SAE Set (Blue-Point®). MIC1B, MIC2B and MIC3B in fitted case with standards.





MIC103B

MIC103MB

#### Digital Micrometers, mm

- Standard reading in .01 mm increments on mechanical digital display
- Large easy to handle insulated frame, carbide tipped anvils, positive locking clamp and ratchet stop thimble

Stock No.	Range, mm	Increments, mm
MIC1MB	0-25	0.01
MIC2MB	25-50	0.01
МІСЗМВ	50-75	0.01
MIC4MB	75-100	0.01
MIC5MB	100-125	0.01

MIC103MB Digital Metric Micrometer Set (Blue-Point). MIC1MB, MIC2MB and MIC3MB in fitted case with standards.



MICB1B



MICB103B

#### **Outside Micrometers, inches**

- Standard reading in .001" increments on handle
- Vernier style reading in .0001" increments
  Large easy to handle insulated frame, carbide tipped anvils, positive locking clamp and ratchet stop thimble

•	• •	
Stock No.	Range, inches	Increments, inches
MICB1B	0-1	.0001
MICB2B	1-2	.0001
MICB3B	2-3	.0001
MICB4B	3-4	.0001
MICB5B	4-5	.0001

MICB103B SAE Set (Blue-Point). Includes: MICB1B, MICB2B, MICB3B (3 pcs) in fitted case with standards.









MICINSIDE12

#### MICINSIDE12 Inside Micrometer Set.

- Range is 2 to 12" in .001" increments
- Includes inside micrometer head and a series of coil spring pressure contact rods



MICED1B

#### MICED1B Electronic Digital Micrometer (Blue-Point).

- Display reads to 0.00005" (0.001 mm)
- Zero set for absolute and incremental measuring modes
- Auto shutoff after 10 minutes
- Insulated frame, hardened body, carbide tipped anvil, positive locking clamp and ratchet stop thimble



DM6

#### DM6 Depth Micrometer Set.

- . Measure depths of slots, counterbores, holes and keyways up to 6" in depth

  4" satin chrome base for greater stability
- Graduated in .001" increments

Stock No.	Description
DM61	4" rod
DM62	5" rod
DM63	6" rod
DM64	7" rod
DM65	8" rod
DM66	9" rod
DM67	Micrometer Head



#### Micrometer Test Gauges

- · Test gauges are used as micrometer standards
- Accuracy meets Federal Specifications

MIC22 . 2" MIC32 <u>-</u>" MIC42 MIC52 4" 25 mm MIC2M2 MIC3M2 50 mm

#### **Small Hole/Telescoping Gauge Sets**



MROUND4

#### **Small Hole Gauge Set**

#### MROUND4 Small Hole Gauge Set.

 Knurled knob at handle for size adjustment Full round gauging surface with flat bottom

Stock No	Range, inches
CM4311	0.125 - 0.200
CM4312	0.200 - 0.300
CM4313	0.300 - 0.400
CM4314	0.400 - 0.500



MTEE6

#### Telescoping Gauge Set MTEE6 Telescoping Gauges.

Measurable depth is 4 to 5'

Set of 6, packaged in a plastic pouch

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Stock No.	Range, inches	
CM4349	5/16 - 1/2	
CM4350	1/2 - 3/4	
CM4351	3/4 <b>- 1</b> 1/4	
CM4352	<b>1</b> <sup>1</sup> / <sub>4</sub> - <b>2</b> <sup>1</sup> / <sub>8</sub>	
CM4353	2 <sup>1</sup> /8 - 3 <sup>1</sup> / <sub>2</sub>	
CM4354	3 1/2 - 6	

#### Calipers/Magnetic Bases/Divider



#### Calipers (Blue-Point®) **MCAL6A Electronic** Digital Caliper.

- Range is 0 to 6" (0 to 150 mm) in 0.0005" (0.01 mm) resolutions
- Use for inside, outside, depth and step measurements
- Inch/metric conversion with one button
- Large LCD display
- · Hardened stainless steel frame

#### MCAL12A

#### **MCAL12A Electronic** Digital Caliper (Blue-Point).

- · Essential tool for working on larger vehicles, trucks, tractors and earth moving equipment
- Range is 0 to 12" (0 to 305 mm) in 0.0005" (0.01 mm) resolutions
- · Use for inside, outside, depth and step measurements
- Inch/metric conversion with one button
- · Large LCD display with floating zero set
- Locking nut and thumb roll for smooth



#### PMF147A U.S./Metric Dial Type Caliper.

- Range is 0 to 6" (0 to 150 mm) in 0.001" (0.1 mm) increments
- Includes storage case



#### **Magnetic Base** CM6416 Holder.

- Magnet has On/Off switch
- Base is 2 3/8" x 1 7/8" x 2 1/2"
  Post 7" x 15/16"; Rod 6" x 25/64"
- Will grip flat or curved metal surfaces

#### Levels -



#### TL900L 9" Aluminum Lighted Level (Blue-Point).

- Lighted level for more accurate readings under all conditions
- Machined Billet Aluminum for added durability
- · Rare earth magnets attach to ferrous surfaces
- 45°, 90° and 180° scales for flexibility
- Uses 2 AAA alkaline cells (included)
- · Auto shut off feature after 10 minutes extends battery life



**YA328A** 

#### YA328A Angle Locator (Blue-Point).

- Precise, accurate tool to determine angle measurements
- · Ideal for checking drive shaft angle
- Red degree indicator located behind numbers for exact reading of graduations
- Fractional and metric scales molded into base of tool in 1/8" and centimeters
- Large 1 7/8 x 7/8" magnet in base for secure retention

#### **Timing/Dial Test Indicators Gauges**

# Timing Gauges GA3625A Timing Gauge.

- 2 cycle and small engine timing gauge
- 0-1" indicator with .0005" graduations
- Easy to read white on black dial face
- 14 and 18 mm adaptors included
- For finding top dead center

#### **Dial Test Indicator Sets**

#### GA3400 Universal Dial Test Indicator Set.

- · Small dial indicator set
- .200" range with .001" graduations
- · Easy to read white on black dial face
- Traditional fixed clamp style attachment
- Excellent choice for machining applications

#### GA3640 Long Range Dial Test Indicator Set. GA3645 Long Range Dial Test Indicator Set. GA3634 Ball Joint/Disc Brake Test Indicator Set.

- · All purpose indicator sets
- · Perfect for general use
- Indicator with 0-1" range and .0005" graduations
- · Easy to read white on black dial face
- . GA3640 uses a fixed magnetic base
- GA3645 uses a conforming magnetic base for more mounting options
- GA3634 uses locking pliers and a flexible gooseneck for nonmagnetic applications and difficult areas
- Ideal for brake and undercar work

#### GA3450 Universal Pinion Depth Gauge.

- · Rear pinion depth gauge
- Accurate pinion depth setup for vehicles up to 1 ton
- Premeasure pinion depth to use with OEM gear sets

#### GA3460 Master Rear Axle Set.

- · Master rear end setup set
- Includes everything needed to set up a replacement rear end and check axles
- · Multiple mounting methods
- · White on black easy to read dial face
- For U.S. and import rear ends up to 1 ton

#### **Dial Test Indicator Set Specifications**

Stock No.	Range	Graduations	Reading
GA3400	.200"	.001"	0-100
GA3640	1.00"	.0005"	0-50
GA3645	1.00"	.0005"	0-50
GA3634	1.00"	.0005"	0-50
GA3450	0.00 to 4.00"	.0005"	0-50
GA3460	0.00 to 1.00" (0.00 to 4.00" with extension)		0-50

# GA3625A GA3400 GA3640







GA3450



GA3634

# Contact Points and Extensions GA3601 Dial Indicator Extension.

- Use with GA3400, GA3634, GA3640 and GA3645 dial test indicators
- 4-48 female thread allows the extension of any contact point for special applications
- 6" long

#### **GA3609 Contact Point Set.**

- Use with GA3400, GA3634, GA3640 and GA3645 dial test indicators
- 4-48 female thread allows the extension of any contact point for special applications
- Extensions can be joined together to extend reach
- Contact points feature a polished tip with radius end and are manufactured from hardened steel
- Includes (4) 1" extensions, 4 contact points (0.2", 0.4", 0.6" and 0.8") plus holder for set components









## **MEASURING**

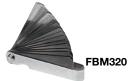
## Feeler Gauges (Blue-Point®)











**General Use** 

Stock No.	No. of Blades	Blade Dimensions, inches	Blade Size	Increments	Description
FB310B	13	1/2 x 3	.001", .0015", .002" to .008", .010", .012", .013", .015"	_	Double stamped with fractional and metric sizes
FB325A	25	1/2 x 3	.0015", .002" to .025"	.001"	General Use Feeler Gauge (25 blades)
FB335	35	1/2 x 3	.0015", .002" to .035"	.001"	Swedish Steel Feeler Blade
FBL325A	25	¹/2 x 12	.0015", .002" to .021", .025", .027", .030", .040"	.001"	Long blade, double stamped with U.S. and metric sizes
FBM320	20	1/2 x 3	.05 to 1 mm	.05 mm	Metric Feeler Gauge Set







FB326B

#### Ignition

Stock No.	No. of Blades	Blade Dimensions, inches	Blade Size	Increments	Description
FB316B	18	1/4 x 1 3/4	.010", .012", .013", .015" to .022", .024" to .026", .028", .030", .032", .035"	.001"	Short Blade, Ignition/Spark Plug Gauge Set, double stamped with U.S. and metric sizes
FB326B	26	¹/2 x 3	.008", .010", .012", .013", .015", 017", .018", .020", .022", .024" to .026", .028", .030", .032", .035"	.001"	Double stamped with fractional and metric sizes



FB300A









## **Bent and Step Blades**

Stock No.	No. of Blades	Blade Dimensions, inches	Blade Size	Increments	Description
FB300A	25	¹/2 <b>x 3</b>	.006" to .030"	.001"	Feeler Gauge Set, blade ends are angled at 45°
FB308D	12	¹/2 x 3	.008"010", .011"013", .013"015", .014"016", .015"017", .017"019", .018"- .020", .020"022", .023"025", .025"027", .026"028", .028"030"	.001"	Step Feeler Gauge Set
FB322	22	<sup>1</sup> /2 x 3 <sup>3</sup> /8	.004"006" to .025"027"	.001"	"Go-No Go" blades with 2 sizes each
FB328A	2	1/2 x 3	.011"013", .013"015"	_	For valve adjustment on <i>GM</i> 8.2 L engines, double stamped with fractional and metric sizes
FBM322	2	¹/2 <b>x 3</b>	.2030 mm, .4050 mm	_	10 <sup>3</sup> /4" long bent handle



#### FB307D

Stock No.	No. of Blades	Blade Dimensions, inches	Blade Size	Increments	Description
FB307D	14	1/2 x 4 1/2	.008", .011" to .014", .016" to .018", .020", .023" to .025", .027", .029"	.001"	Bent Blade <i>Cummins</i> Diesel, blade ends are bent at 90° angle: blades are secured on FB307C1 ring

Diesel

## Feeler/Spark Plug Gauges









**Specialty Feeler Gauges** 

FB333O FBP10

FBS5

Stock No.	No. of Blades	Blade Dimensions, inches	Blade Size	Increments	Description
FB305A	6	1/2 x 3	.006", .008", .010", .012", .014", .016"	.002"	Nonmagnetic, double stamped fractional and metric sizes

**FB3330 Easy Grip Feeler Gauge Set.** Double stamped with fractional and metric sizes. Includes 10 feeler gauges with orange screwdriver type handles. Blades are 4" long and feature a 45° offset for use on valve tappets and air gapping applications. Set is displayed in the FB33301 wood box. Blades included: .010, .012, .014, .016, .018, .020, .022, .024, .027 and .030". 25 blades available in all (.006 to .030") in .001" increments.

**FBP1O Pocket Feeler Blade.** Flat, ramp style feeler gauge handles full range of spark plug gapping requirements from .020 to .080". Reverse side has metric scale to 2 mm. Orange screwdriver type handle with pocket clip. 5 1/2" length.



Spark Plug Gauges/Gappers (Blue-Point)

FB301A Wire Gap for Point Ignition Systems Gauge. Includes 8 wires in sizes .020, .022, .025, .028, .030, .032, .035 and .040". Also includes an electrode bender.

FB302A Wire Gap for Aircraft, Motorcycle, and Small Engines Gauge. Similar to FB301A. Includes 8 wires in sizes .015, .016, .018, .020, .025, .028, .030 and .035". Also includes an electrode bender.

FB303B Wire Gap for Electronic Ignition Systems Gauge. Similar to FB301A. Includes 6 wires in sizes .044, .045, .050, .054, .060 and .080". Also includes an electrode bender.

**GA461C Gap for Point Ignition Systems Gauge.** Includes 6 wires protruding 1/4" from edge of metal disc. Wire sizes included are .025, .030, .034, .035, .040 and .045". Built in electrode bender. Double stamped with decimal and metric sizes.

**FB360C** Gap for Electronic Ignition Systems Gauge. Includes 6 wire sizes: .040, .044, .045, .050, .060 and .080". Double stamped with decimal and metric sizes.

**FB361A Gapper Gauge.** Pocket size gapper features an inclined ramp for setting gap. 1 1/2" diameter. Range .020 to .100". Double stamped with decimal and metric sizes.

#### Feeler/Gap Gauge Set

FBS5 Feeler and Gap Gauge Set. 5 pc set includes: FB300A bent blade feeler gauge, FB305A nonmagnetic feeler gauge, and FB325A general use feeler gauge, plus GA461C and FB360C spark plug gap gauges in the FBS5-1 kit bag.

#### FB6B040

# Feeler Blades and Holder (Blue-Point®) FB6B0015 thru FB6B040 (12") Feeler

Gauge Blades. Includes 34 blades as follows:

Stock No.	Blade Size, Inches	Stock No	Blade Size, Inches
FB6B0015	.0015	FB6B017	.017
FB6B002	.002	FB6B018	.018
FB6B0025	.0025	FB6B019	.019
FB6B003	.003	FB6B020	.020
FB6B004	.004	FB6B021	.021
FB6B005	.005	FB6B022	.022
FB6B006	.006	FB6B023	.023
FB6B007	.007	FB6B024	.024
FB6B008	.008	FB6B025	.025
FB6B009	.009	FB6B026	.026
FB6B010	.010	FB6B027	.027
FB6B011	.011	FB6B028	.028
FB6B012	.012	FB6B029	.029
FB6B013	.013	FB6B030	.030
FB6B014	.014	FB6B032	.032
FB6B015	.015	FB6B035	.035
FB6B016	.016	FB6B040	.040

#### **Decimal/Metric Conversion Chart**

Decimal, inches	Metric, mm	Decimal, inches	Metric, mm	Decimal, inches	Metric, mm	Decimal, inches	Metric, mm	Decimal, inches	Metric, mm	Decimal, inches	Metric, mm
0.0010	0.025	0.007	0.178	0.015	0.381	0.023	0.584	0.031	0.787	0.042	1.067
0.0015	0.038	0.008	0.203	0.016	0.406	0.024	0.610	0.032	0.813	0.044	1.118
0.0020	0.051	0.009	0.229	0.017	0.432	0.025	0.635	0.033	0.838	0.046	1.168
0.0025	0.064	0.010	0.254	0.018	0.457	0.026	0.660	0.034	0.864	0.052	1.321
0.0030	0.076	0.011	0.279	0.019	0.483	0.027	0.686	0.035	0.889	0.054	1.372
0.0040	0.102	0.012	0.305	0.020	0.508	0.028	0.712	0.036	0.914	0.056	1.422
0.0050	0.127	0.013	0.330	0.021	0.533	0.029	0.737	0.038	0.965	0.060	1.524
0.0060	0.150	0.014	0.356	0.022	0.559	0.030	0.762	0.040	1.016	0.080	2.032

#### Measuring Sets/Straight Edges/Steel Rules



#### **SQUAREB12**

#### Measuring Sets (Blue-Point®)

#### SQUARECOMB12 Combination Measuring Set.

 Includes SQUAREB180 protractor, RULER12BSQ steel rule plus SQUAREB90 and SQUAREB45 sliding heads in fitted storage case

#### SQUAREB12 Machinist's Measuring Set.

 Includes SQUAREB90 sliding head and RULER12BSQ steel rule in fitted storage case

#### SQUAREB90 Sliding Head (90°).

• 90° square head with bubble level and scriber points

#### SQUAREB180 Protractor Head (180°).

- Protractor is graduated 180° in both directions
- · Includes bubble level

#### RULER12BSQ Steel Rule (12").

- Precision ground and hardened steel blade for greater accuracy
- Graduated in 1/8 and 1/16" increments on one side and 1/32 and 1/64" increments on the other

#### SQUAREB45 Sliding Head (45°).

Center head for 45° angles only

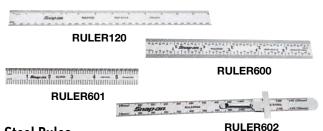
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#### **GA438A**

#### **Precision Straight Edges**

- Use with feeler gauges to check for distortion in engine blocks, cylinder heads, flywheels, main bearing saddles, cam bearing saddles, cam covers and bell housings
- Precision working edge ground to within .0002" per 12" in length
- Great stability with 1/4" thickness and 1 1/2" width
- Convenient hanging hole and edge protector

GA435 18" long. GA438A 24" long. GA535 35" long.



#### **Steel Rules**

#### RULER120 U.S./Metric Steel Rule.

- 12" stainless steel rule
- 1/32" increments for first 3", 1/16" increments for last 9"
- · Metric edge is etched with mm and cm increments

#### RULER600 Steel Rule.

- 6" stainless steel rule
- Graduated in 1/32 and 1/64" increments

#### RULER601 Steel Rule (6").

- 6" stainless steel rule
- Graduated in 1/10 and 1/50" increments on one side, 1/32" and mm increments on the other

#### RULER602 U.S./Metric Pocket Rule (6").

- . 6" stainless steel rule with pocket clip
- 1/32 and 1/64" increments on one side, mm and cm increments on the other



#### **Auto-Retracting Tape Rules**

TPMA10 Tape Rule (10'). 1/2" x 10' tape. Includes inch/metric scale with fractions.
TPMA12 Tape Rule (12'). 3/4" x 12' tape. Includes inch scale with 16" stud markings.
TPMA25 Tape Rule (25'). 1" x 25' tape. Includes inch scale with 16" stud markings.
TPMAM5 Tape Rule (5 m). 19 mm x 5 m tape. Includes metric scale.
TPMA25EM Tape Rule (25'). 1" x 25'/7 m tape. Includes inch/metric scale with fractions.

# Steel Housing Tape Rule TPM100 Tape Rule (Blue-Point).

- Includes inch/metric scale
- · Quick rewind design for ease of use
- Rewinding lever conveniently stored in housing
- Nonslip grip provides confidence and comfort

#### Lighted Mirrors (Blue-Point®)



- Mirror size is 1 1/8 x 2 1/8" with 1X magnification
- Thumb wheel adjustment on handle
- Light at base of 18" long flexible handle powered by 2 (AA) batteries (included)

YA51601 Replacement Mirror. 1X. YA51602 Replacement Mirror. 2X. YA5160A3 Replacement Bulb.



YA5160A

#### Telescoping Mirrors (Blue-Point)

**UIM125 Telescoping Inspection Mirror.** 

1 1/4" diameter mirror. 6 1/2" long, and extends to 35".

**UIM225 Telescoping Inspection Mirror.** 2 1/4" diameter mirror. 6 1/2" long, and extends to 35".

**UIM225RD Telescoping Inspection Mirror.** Same as UIM225 but with red handle.

**UIM225GR Telescoping Inspection Mirror.** 

Same as UIM225 but with green handle. **UIM225OR Telescoping Inspection Mirror.** 

Same as UIM225 but with orange handle.

UIM325 Telescoping Inspection Mirror. 3 1/4" diameter mirror. 6 1/2" long, and extends to 29 1/2". TKSS01MIR Telescoping Hinged Steel Mirror.

Steel mirror won't shatter if dropped

- Hinged for accurate positioning, telescopes from 7 to 28 1/2" (177.8 to 723.9 mm)
- Mirror surface is 3.12 x 2" (79.4 x 50.8 mm)
- In retracted position, it will easily fit in shirt pocket

#### **UIM2LM Magnifying Inspection Mirror.**

- Stainless steel handle telescopes from 11 1/2 to 51 1/2"
- 2 1/4" magnifying mirror enlarges viewing area
- All angle ball joint holds mirror head tightly at any angle



#### Pocket Mirrors (Blue-Point) PTM143 Round Pocket Mirror.

Handle extends from 4 1/2 to 17". 1 1/4" in diameter.

Hinge mechanism allows 360° adjustment. Includes pocket clip. CF143MA Round Pocket Magnifying Mirror.

Handle extends from 4 1/2 to 17". 1 1/4"in diameter. Hinge mechanism allows. Includes pocket clip. 360° adjustment.

PTM147 Round Pocket Mirror. Handle extends from 4 1/2 to 17". 3/4" in diameter. Hinge mechanism allows 360° adjustment. Includes

PTM157 Oval Pocket Mirror. Handle extends from 4 1/2 to 17". 1" x 2" oval. Hinge mechanism allows 360° adjustment. Includes pocket clip.



#### **Hinged Mirrors** (Blue-Point) UIM2FL Flexible Inspection Mirror.

- 32" aluminum shaft can easily be bent to any angle
- 2 1/4" mirror is encased in a rugged stainless steel head
- · All angle ball joint holds mirror head tightly at any angle
- · Textured cushion grip will not slip in wet or oily hands

#### GA294 Rectangular Mirror.

- Double ball joints allow mirror to swivel 360°
- Electrolytic plated copper backing
- · Nonrotating telescoping rods
- Vinvl grip
- 2 1/8 x 3 1/2" mirror
- Closed length is 11 1/4"; extended length is 15 1/4"

GA295 Round Mirror. Similar to GA294 except with a 2 1/4" diameter mirror. Closed length is 10"; extended length is 14".

Stock No.	Overall Length, inches	Mirror Size, inches	Glass Replacement Mirror	Plastic Replacement Mirror
GA51B	16 <sup>1</sup> / <sub>2</sub>	1 11/16 x 2 9/16	GA51B1	GA51B1P
GA52B	11	1 <sup>3</sup> /16 x 1 <sup>1</sup> /2	GA52B1	_
GA53A	16 <sup>1</sup> / <sub>2</sub>	2 5/16 x 3 3/8	GA53A1	GA53A1P



## **LED Telescoping Mirrors (Blue-Point)**

**UIM1LT Lighted Inspection Mirror.** 

Telescopes from 6 3/4 to 35 1/2". Mirror is 1 3/8" diameter.

**UIM2LT Lighted Inspection Mirror.** 

Telescopes from 6 3/4 to 37". Mirror is 2 3/8" diameter.

**UIM3LT Lighted Inspection Mirror.** 

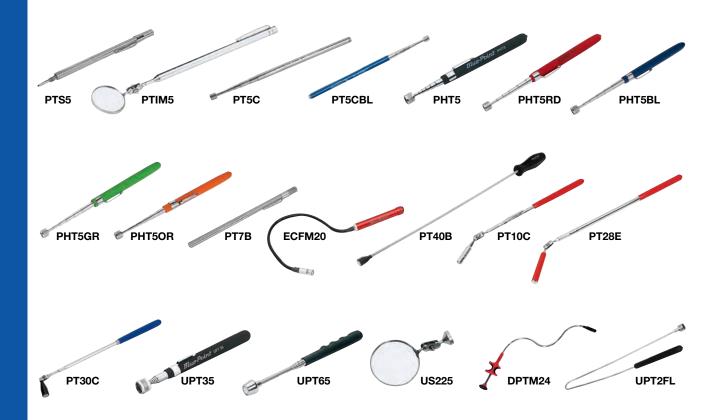
Telescopes from 6 3/4 to 30 1/4". Mirror is 3 3/8" diameter. **UIM2RSLT LED Lighted Inspection Mirror.** 

Telescopes from 6 3/4 to 30" for fast, accurate inspections. Mirror is 3 1/4 x 1 1/8".









#### Magnetic (Blue-Point®)

PTS5 Magnetic Pick Up Tool/Scribe. Magnet in one end and a replaceable carbide steel scribe tip at the other. Includes pocket clip . 5" long. Do not use as a pry bar or punch.

**PTIM5 Pick Up and Inspection Tool.** Magnet end lifts 1 1/2 lbs includes pocket clip. Length is 26 3/4" extended, closes to 5 7/8". Mirror end is 1 1/4" in diameter

**PT5C Telescopic Magnetic Pick Up Tool.** 5 7/8" extends to 25 9/16". Chrome. Magnet lifts up to 2 lbs. Includes pocket clip.

PT5CBL Telescopic Magnetic Pick Up Tool.

Same as PT5C except blue.

**PHT5 Magnetic Pick Up Tool.** Lifts 2 1/2 lbs. Chrome plated shaft extends from 5 1/2 to 25 1/2". Black cushion grip will not slip in oily or wet hands. Includes pocket clip.

PHT5RD Magnetic Pick-up Tool (Red). Pocket Telescopic pick up tool with Powercap®. Tool lifts 2 1/2 lbs. Telescopes from 5 1/2 to 25 1/4". *Powercap* shields sides of magnet for focused lifting. Red Handle.

PHT5BL Magnetic Pick-up Tool (Blue). Same as PHT5RD except blue handle.

PHT5GR Magnetic Pick-up Tool (Neon Green). Same as PHT5RD except neon green handle.

PHT5OR Magnetic Pick-up Tool (Orange). Same as PHT5RD except orange handle.

PT7B Magnetic Pick Up Tool. Lifts 1 lb. 6" long. ECFM20 Flexible Magnetic Pick Up Tool.

18" (457.2 mm) flexible shaft gets in tight places. Long lasting, bright LED light source. Anodized aluminum housing for lightweight and resistance to corrosion. Powerful neodymium magnet lifts 1.1 lbs (0.5 kg). Powered by 3 "N" alkaline 1.5 V batteries (included).

**PT40B Flexible Magnetic Pick Up Tool.** Magnet lifts 3 1/2 lbs. Length is 21", including a 14" flexible section.

PT10C Pick Up Tool. Lifts 1 lb. 8 5/8" long.

**PT28E Pick Up Tool.** Lifts 2 lbs. 16 3/4" long and extends to 26 3/4". Aluminum head. Probe 0.D. is 1/2".

PT30C Pick Up Tool. Lifts 6 1/2 lbs. 17" long and extends to 27 1/8".

**UPT15 Telescoping Magnetic Pick Up Tool.** Lifts 2 lbs. 6 5/8" long and extends to 33 1/4"

**UPT35 Telescoping Magnetic Pick Up Tool.** Lifts 4 1/2 lbs. 6 5/8" long and extends to 33 1/4".

**UPT50A Telescoping Magnetic Pick Up Tool.** Lifts 10 lbs. 6 5/8" long and extends to 33 1/4".

**UPT65 Telescoping Magnetic Pick Up Tool.** Goblet shaped magnetic head directs the flux to the front of the magnet to lift 16 lbs. Head shields the sides of the magnet from attaching to unwanted ferrous surfaces. Telescopes from 9 to 34 1/4".

**UPTM65K Magnetic Inspection Kit.** Includes UPT65 pick up tool and US225 inspection mirror in vinyl pouch

**US225 Inspection Mirror.** Attaches to UPT65 pick up tool. Dual ball adjustment provides. 2 1/4" diameter infinite positioning.

**DPTM24 Flexible Magnetic Pick Up Tool.** When retracted, magnet will not adhere to untargeted ferrous metals. Depress plunger to expose magnet from shroud and grab desired object. 24" flexible shaft easily maneuvers through tight spots. Cushion grip handle provides comfort and control.

**UPT2FL Flexible Magnetic Pick Up Tool.** 29" aluminum shaft can be easily bent at any angle. Power cap slides over the magnet and shields its sides from attaching to unwanted metal surfaces. Will pick up 5 lbs with power cap.



#### Lighted Pick up Tools (Blue-Point®)

**UPT1LT LED Magnetic Pick up** 

**Tool.** Steel magnetic head lifts 8 lbs and will not attach to unwanted metal surfaces. Telescopes from 6 3/4 to 27 3/4".

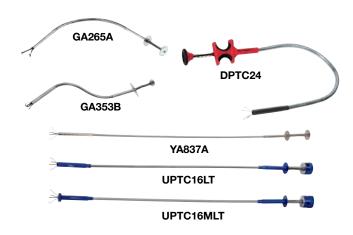
**UPT2LT LED Magnetic Pick up Tool.** Rotating magnetic heads lift up to 8 lbs. Telescopes from 8 to 32 3/4".

#### UPTLP2 Pen Light Pick up Tool.

- Newly designed steel magnetic head lifts 8 lbs and shields the sides from attaching to unwanted metal surfaces
- · LED light illuminates dark areas
- Stainless steel handle telescopes from 8 to 32 3/4"

## **UPTC16MLT Lighted Flexible Spring Claw.**

- Magnet able to pick up a maximum of 5 lbs
- 4 jaw claw opens wide to secure hard to reach objects
- Heavy duty aluminum plunger with convenient side switch turns on/off bright LED light as needed
- Tightly wound, flexible spring snakes into tight areas
- Comes with 2 round CR2032 lithium batteries
- 25 11/16" long



#### Claws (Flexible)

Stock No.	No. of Claws	Max. Jaw Opening, inches	Flexible Section Length, inches	Overall Length, inches	
GA265A	2	1	8	17 <sup>3</sup> / <sub>4</sub>	
YA837A	4	<sup>3</sup> / <sub>4</sub>	16	23 <sup>1</sup> / <sub>2</sub>	
GA353B	4	1	8	17 <sup>1</sup> /2	
DPTC24	4	1 <sup>1</sup> /4	18	24 <sup>1</sup> / <sub>2</sub>	
UPTC16LT	4	1	16 <sup>3</sup> /4	26	
UPTC16MLT	4	1	16 <sup>3</sup> /4	25 <sup>11</sup> /16	

#### **Brake Service Tools**



## Vacuum Pressure Pump Kit (Blue-Point) YA4000B Automotive Test Kit.

- Produces vacuum or pressure at the turn of a switch
- Comfortable ergonomic design
- One finger trigger vacuum/pressure release
- Durable, accurate diaphragm type pressure/vacuum gauge
- Handheld vacuum/pressure pump with 2" compound gauge and rubber boot
- 12 oz fluid reservoir bottle with fluid transfer and storage lids plus fluid pick up tube
- 6 tapered adaptors for connecting to tubing from .09 to .50" ID
- 2 tapered manifold plugs
- · 2 universal bleed screw adaptors
- 12 vacuum cap plugs, vacuum line T-adaptor
- (2) 1/4" ID x 24" long connection tubes with quick change connector
- 5/32" ID x 1/4" ID tubing adaptor
- 5/32" ID x 3" long vacuum test tube
- · Rubber cupped adaptor
- · Master cylinder refill kit

#### Applications:

Vacuum and pressure related engine performance diagnostics and tune ups; brake bleeding; fluid transfer, evacuation and sampling.





## **Brake Lathes and Accessories YA189 YA180A Brake Lathes** YA180A On The Car Disc Brake Lathe. • Use for machining of FWD disc brake rotors Vehicle engine turns disc during the machining process Mounts in place of the caliper, special mounting fixture reduces Includes extension kit for most 4 wheel drive vehicles, 1 ton trucks and other large rotor applications • Rotor diameter range 4 to 16", maximum rotor thickness 1 5/8" Add optional accessories below to expand versatility YA180A Brake Lathe shown with optional YA189 Power Cutter Feed and YA280 Power Drive. **YA280** YA189 Power Cutter Feed. · Automatically feeds cutter assembly across rotor face • 115 V AC. 60 Hz YA280 Disc Brake Power Drive. • Eliminates the need to use vehicle's engine to turn rotor Allows YA180A to be used on FWD vehicles with rear disc brakes • Fully adjustable drive hub fits most 4, 5 and 6 bolt hubs **TECHNICAL SUPPORT** Adjustable from 33 to 56" working height 800-553-5953 • 120 V AC, 60 Hz, single phase YAH280-50 Disc Brake Power Drive. 220 V AC 50 Hz version of YA280

#### Carbide Insert Bit Kits

#### YAK109109223 Positive Rake Carbide Bits - 10 Pack.

• For all Kwik-Way® lathes as well as older Snap-on® lathe models (YA282, YA278A and YA277 Series)

AMMCO9069141 Negative Rake Carbide Bits - 10 Pack. Use for EEBR309A, EEBR312A and Ammco® brake lathes

AMMCO9076816 Positive Rake Carbide Bits - 6 Pack.

• Use for EEBR310A, EEBR312A and Ammco brake lathes

AMMCO940410 Positive Rake Carbide Bits - 10 Pack. · Use for JBC brake lathes

AMMCO940435 Positive Rake Carbide Bits - 10 Pack.

Use for Accu-Turn® brake lathes

AMMCO940610 Positive Rake Carbide Round Toolbits - 10 Pack.

Round tool bits for AMMC0940630 tool holder



AMMCO905280

#### AMMCO940630 Positive Rake Round ToolHolder Set.

BTK10A

• RH & LH used with EEBR308A, EEBR309A and EEBR312A for AMMC0940610 tool bits

#### BTA10 Carbide Bits.

• For *Ammco* models 3000, 4000, 4100, 6900, 7000, and 7700 BTF10 Carbide Bits.

For all FMC lathes

#### BTK10A Carbide Bits.

• For all Kwik-Way lathes as well as older Snap-on lathe models (YA282, YA278A and YA277 Series)

#### Silencers

AMMCO901175 Rotor Silencer.

• Clip on rotor silencer for OTV lathes AMMCO901180 Rotor Silencer.

• Clip on rotor silencer for bench lathes

AMMCO905280 Silencer Band.

• For passenger car/light truck drums

#### AMMCO905290 Silencer Band.

For truck drums, 2 3/4"

#### AMMCO906920 Silencer Band.

For ventilated rotors

#### AMMCO906921 Silencer Band.

- For nonvented rotors 6 1/2" diameter
- Package of 2

#### AMMCO906922 Silencer Band.

- For nonvented rotors 9 1/4" diameter
- Package of 2

#### AMMCO909800 Spring Silencer Assembly.

For ventilated rotors

## Vacuum Type Brake Bleeders (Blue-Point®) BB700 Vacuum Brake Bleeder/Flusher.

- Unique dual mode throttle control allows dual fluid control: twist in one direction for vacuum bleed/flush mode, twist in the opposite direction for low pressure to return fluid into auto/truck system or to empty canister
- Bleed valve kit can be used when disconnected from air for mobile operation
- Dual use as either bleeder/flusher or fluid evacuator
- Unique hose disconnect system features a push ring for fast disconnections
- Hose wraps around head and locks on knob plus straw clamps in holder for easy toolbox or shelf storage
- Drains remaining fluid in hose after use to avoid messy cleanups
- 2.7 qt capacity canister
- Quiet operation
- 0-ring seals for multiple fluids
- Seal ring opens and stays at top for easy service

#### BB700REF Refiller Bottle.

- · Eliminates need to check fluid levels
- · Guards against air entering into the brake system
- Facilitates effective 1 person bleeding process

#### Diaphragm Type Brake Bleeder Adaptors (Blue-Point)

Stock No.	Description
BB300B19	VW <sup>®</sup> Water Cooled Adaptor
BB300B20	Dual Bleeding Attachment
BB300B21	Pop off Valve
BB300B22A	Adaptor set, 7 pcs
BB300B26G	Universal Adaptor
BB300B29G	3 <sup>1</sup> /4" Universal Round Adaptor
BB300B35G	Universal Adaptorn (required to use BB300B22A)
BB300B36G	GM® Dual Reservoir Adaptor
BB300B39GC	GM/Chrysler® Plastic Reservoir Adaptor
BB300B41-G9	Universal Rectangular Adaptor
BB300B42G	Universal Adaptor
BB300B45-G9	Universal Round Adaptor
BB300B47G	Chrysler Adaptor

# **Brake Bleeder Kits BB700** BB5002 BB700REF BB5001

#### Vacuum Type Brake Bleeders BB500 Brake Bleeder Kit.

 Includes: BB5001 vacuum brake bleeder and BB5002 auto refiller bottle

#### BB5001 Vacuum Brake Bleeder.

- · Fast, efficient 1 person vacuum bleeding
- Large 3 pint (1.5 liter) container. Generates 25 in Hg vacuum with air pressure of 100 psi
- Specially formulated seals allow unit to be used with a variety of fluids
- On/Off valve and flow regulator: seals when not in use to prevent spillage
- Quick release locking trigger, safety shutoff valve, overfill check valve
- · Compact design fits under wheel well
- 19 1/2" suction hose
- · Universal brake screw fitting

#### BB5002 Auto Refiller Bottle.

- Automatically keeps reservoir filled to the correct level
  20 fluid oz (592 ml) container
- Retaining clip for positive attachment
- · Compact design fits under hood
- Positive venting system supplies continuous flow
   Fits virtually all master cylinder reservoirs: can be sealed when not in use to prevent spillage
- On/Off valve

**Brake Bleeder** (Blue-Point)



#### Non-Diaphragm Type Brake Bleeder BB100C Nondiaphragm Type Brake Bleeder.

- 1 gal capacity
- · Self contained, hand pressurized pump
- More than 10' of hose with shut off, pressure gauge and quick coupler for use with other brake bleeder adaptors (such as any of the BB300B adaptors)
- Use only D.O.T. 3 or D.O.T 4 automotive brake fluid



# Master Cylinder Pressure Cap YA8925 Master Cylinder Pressure Cap.

- M45 x 3.50 thread adapts to fluid reservoir and 1/4"-18 and 3.5 mm thread for pressure bleeder
- For Mercedes®, BMW®, Audi® and Porsche®











#### **Brake Service Tools**



#### General Service Sets **BCS70A Disc Brake** Caliper Driver Set.

- For U.S. vehicles (except Chrysler®)
- 7 pcs

•	
Stock No.	Description
FA8E	1/4" Hex Driver
FA10E	5/16" Hex Driver
FA12E	3/8" Hex Driver
FAM8E	8 mm Hex Driver
FTX40E	T40 Torx® Driver
FTXB45E	T45 Torx Driver
FTXB50E	T50 Torx Driver



#### **BTK7A General Brake** Service Set.

7 pcs in storage trav

B1356E

Stock No.	Description
B1356E	Spring Tool
B1458C	9" Bleeder Wrench
B1461	8 1/4" Adjusting Tool
B3404B	Adjusting Tool (for Bendix®
	self adjusting brakes with star
	adjusting nut)
BT11	Spring Tool
S6112	Bleeder Wrench
D4 407A	Bleeder Wrench (for GM®, Ford®,
B1467A	and Chrysler)

#### BTK5 General Brake Service Set.

5 pcs

Stock No.	Description				
131A	Spring Pliers				
B1461	8 5/16" Adjusting Tool				
S6110A	Bleeder Wrench ( For <i>GM</i> , Datsun®, and Honda®)				
S6118A	1/4" Drive Spring Cap Socket				
SGT4BR	1/4" Drive, 5 3/4" Long				
	Shank Driver				



# Brake Spring Tools BT27 Single Spring Brake Tool (GM) (Blue-Point®).

**BT9** 

 Tool releases tension on both large and small GM single brake springs during servicing

**RT11** 

Large Spring Applications:

2005 and later Chevrolet® Silverado, 2004 and later Chevrolet Colorado.

#### Small Spring Applications:

1991 and later GM H body (Bonneville, LeSabre and Delta 88), 1992 and later GM C and U body (Buick® Electra, Olds 88, Cadillac® Fleetwood and DeVille, Chevy Lumina APV, Pontiac® Tran Sport and Olds Silhouette), and 1995 and later Chevy Lumina and Chevy Monte Carlo vehicles.

#### BT11 Brake Spring Tool.

- Services Bendix brake springs and any spring attached to post
- Socket end removes; hook end replaces

# • 9 3/4" long 131A Brake Spring Pliers.

- Removes or replaces Bendix, Lockheed® and other hydraulic and mechanical brake springs
- Steel hook on jaw is replaceable
- · Handles provide socket type spring remover and hook end replacer
- 13 1/4" long

#### 31-3B Replacement Hook.

· Replacement hook for 131A brake spring pliers

#### S6118A Spring Cap Socket.

- 1/4" drive double ended socket designed for subcompact brake spring on one end and larger domestic cars and light trucks on the other
- · Industrial finish
- · Use with TM4B driver

#### BT19A Heavy Duty Brake Spring Tool (Blue-Point).

- Heavy duty design
- Remove or install import and U.S. brake springs with or without anchor pins
- Maximum wire I.D. is 1/4", overall length is 8 7/8" **BT9 Brake Spring Tool** (*Blue-Point*).

- Quickly and easily removes or replaces springs
- Allows mechanics to press spring into place with one simple motion, replacing the slide mechanism
- Includes 2 mechanisms to allow easy removal and replacement of springs on brakes
- 8 3/4" long

#### **B1356E Brake Retainer Spring Tool.**

- For use on 3/4" retainer spring caps found on most newer vehicles BT15 Remover.
- For removing brake springs on full size cars and pickups with drum style brakes
- Industrial finish

## • 8 15/16" long BT17A Retainer Spring Tool.

- For use on 5/8" diameter retainer springs found on most newer vehicles
- Industrial finish
- 8 15/16" long

## **Disc Brake Gauges and Micrometers** RM130 Rotor Micrometer (Blue-Point). • Range of .30 to 1.3" in .001" graduations

- 3 1/2" deep frame
- Pointed anvil for checking grooves
- Includes 1" checking standard and storage case



RM130

#### **Brake Service Tools**



#### GA3634 Ball Joint/Disc Brake Test Indicator Set.

- · Check ball joint wear, brake rotor runout, gear backlash, valve guide and camshaft wear
- Locking pliers clamp securely to any convenient object
- Eliminates vibration problems and false readings
- Includes CM6563450 storage case



#### Brake Drum/Rotor Gauges (Blue-Point) DG530 Digital Drum Gauge.

- · Measures automotive and heavy duty brake drums
- Pointed anvils and 4 1/4" long arms allow increased measurement accuracy and coverage
- Selectable depth stops for easier use
- Range 6 to 20.65" (150 to 515 mm): graduations are .0005" (.01 mm)

#### **RG430 Digital Rotor Gauge.**

- Measures brake rotors and ball joints
- Pointed anvil and 3 1/2" long arms for increased measurement accuracy and coverage
- Selectable depth stops for easy use
- Range 0 to 5.50" (0 to 140 mm): graduations are .0005" (.01 mm)



#### BT4651

#### **Truck Brake Adjusting Tools** S9523 Brake Adjuster.

- Star nut turning tool for Chevrolet® trucks with overload springs
- Different angles at each end of tool for clearance
  Blades are 17/32" wide: tool is 5 1/4" long

- B1468 Brake Adjuster.
   For use on GMC® and Chevrolet 1 1/2 and 2 ton trucks
- Tips on each end are bent 45° and then twisted 45° to allow access to brake adjusting mechanism

#### BT4651 Heavy Truck Slack Adjuster Set.

- Automatic slack adjuster tool set includes offset, reversible automatic release tool
- Release tool slides under the button of the pull-pawl on the automatic slack adjuster until fully seated while the wrench is used to adjust the brake to drum clearance
- · Screwdriver handle for performance and comfort

#### **HSA716 Slack Adjuster Wrench.**

- · For brake service and slack adjuster installation on heavy duty trucks equipped with Haldex® automatic slack adjusters
  • Use to turn the manual adjuster hex
- Extra deep 7/16" hex allows reach to recessed adjusters
- 14 5/8" overall length helps to overcome the anti reverse mechanism
- · Protective vinyl boot helps keep contaminants out of the ratchet mechanism for extended tool life



#### **Automotive Brake Adjusting Tools** S9153B Brake Adjuster.

- Designed to work around obstructions on GM<sup>®</sup> vehicles
- Blades are 1/2" wide; tool is 7 7/8" long
   B1462A Brake Adaptor.

- For rear brakes of those cars and trucks with trailing arm bolts
- Tang at each end is set at 68°, but in opposite directions for use on left and right hand sides

# • 8 1/2" long B3404B Brake Adjuster.

- For Bendix® self adjusting brakes and other brakes with star adjusting nut (except Chevrolet)
- Blades are 17/32" wide with 1/32" tip thickness
- 8 3/16" long

#### B1461 Brake Adaptor.

- One end has a wide tang set at a 29° angle for rear brakes; other end is set at a 45° angle for front brakes

- 8 1/4" long **S5912 Brake Adjuster.** For use on VW®, Mazda®, Omni and Horizon
   Each tang tapers to a 1/4" tip width
- One tang is straight; other is offset 45°

# • 8 1/2" long S6004 Brake Adjuster.

- For use on 1969 and later Toyota<sup>®</sup> when self adjusting brakes are being dismantled
- One end is offset 15°; other is 60°
- Tapers to 1/4" tips
- 5 1/4" long

#### S6005 Brake Adjuster.

- · Similar to S6004
- For use on 1969 and later *Toyota* when a complete dismantling of the self adjusting brakes is required
- One end is angled at 60°; other end features a special offset
- Each tang tapers to a 1/4" tip width
- 5 1/4" long



#### **BSA916**

#### BSA916 Slack Adjuster Wrench.

- · For brake service and slack adjuster installation on heavy duty trucks equipped with Bendix automatic slack adjusters
- Use to turn the manual adjuster hex
- Extra deep 9/16" hex allows reach to recessed adjusters
  14 1/2" overall length helps to overcome the
- anti reverse mechanism
- Protective vinvl boot helps keep contaminants out of the ratchet mechanism for extended tool life













## Disc Brake Tools MPBS11400 Prybar/Brake Tool.

- Designed specifically for prying/aligning brake applications such as brake pistons, calipers or rotors
- Strong 3/8" square alloy steel bar with straight tip
- 11" total length with 40° offset ensures access into tight wheel wells
- Large, comfortable, high visibility orange handle with striker cap allows a good grip unlike small, hard to hold brake adjustment tools
- Handle length: 5 1/2". Exposed bar length: 5 1/2"; bar: 3/8"; tip width: 3/8"; Tip type: Straight tip

#### YA8610B Universal Brake Caliper Tool Set (Blue-Point®).

- Assists in replacement of brake pads on most 4 wheel disc brake cars
- Tool and adaptors position brake piston back into caliper to allow clearance for newer, thicker brake pads
- Designed for most Audi<sup>®</sup>, Chrysler<sup>®</sup>, Ford<sup>®</sup>, GM<sup>®</sup>, Honda<sup>®</sup>, Jaguar<sup>®</sup>, Mazda<sup>®</sup>, Mini Cooper<sup>®</sup>, Mitsubishi<sup>®</sup>, Nissan<sup>®</sup>, Saturn<sup>®</sup>, Subaru<sup>®</sup>, Toyota<sup>®</sup>, VW<sup>®</sup> and Volvo<sup>®</sup> vehicles
- Set includes 1 tool and 6 adaptors in a storage case

YA6730 Brake Caliper Tool Set (*Blue-Point*). Combines the main body from the YA8610B set and the YA8610B-7 adaptor.

YA8610B-7 Brake Caliper Tool Adaptor (*Blue-Point*). Use on *Mazda* 3 (2004 and later), *Mazda* 5 (2006 and later), *Mini Cooper* (all 2002 and later), *Volvo* S40 (2004 1/2 and later), *Volvo* V50 (2006 and later), *Volvo* C30 (2007 and later), *Pontiac* Solstice (2006 and later), *Saturn* Sky (2007 and later) and *Jaguar* X type (2006 and later).

YA2440 Pad Spreader (*Blue-Point*). For use on most U.S. and import cars and light duty trucks with single piston disc brakes without parking brakes. Compresses the disc brake piston for easy pad installation.

GA395 Spreader (Blue-Point). For standard 4 piston caliper disc brakes. Frees hands to assemble caliper over rotor. 6 3/4" long. BL55A Brake Cylinder Retainer Remover. Use on late model GM cars including X-body cars. Expands and holds retainer for cylinder disassembly or assembly.

**FTSM4E Metric Triple Square Driver.** Use on *VW/Audi* door handle screws 1998 and later, brake drum fasteners on *VW* Toureg plus many other 4 and 5 mm triple square applications.

FTSM5E Metric Triple Square Driver. Use on *VW/Audi* door handle screws 1998 and later plus many other 4 and 5 mm triple square applications. Also use on 2003 to 2008 *Porsche* Cayenne to lossen the cover on the adjustment cable for the emergency brake.

FTSM6E Metric Triple Square Driver. For VW disc brake caliper.

#### YA9329A Piston Rotation Tool (Blue-Point).

- Use to rotate piston back into caliper cylinder when replacing pads
- Also rotates parking brake cylinder back into the caliper cylinder on vehicles with 4 wheel disc brakes
- For 1975 and later *Ford* and Mercury® plus some imports vehicles **BT350A Brake Piston Press** (*Blue-Point*).
- · Presses single or dual pistons
- Quick and easy to use: no nuts or bolts involved in pressing operations

Applications: most cars plus light and heavy duty trucks

YA6425 Universal Brake Caliper Tool (*Blue-Point*). Left hand thread is essential to service brake calipers on newer *Ford* models such as Freestyle, *Ford* 500 and *Mercury* Montego. Includes #2 adaptor.

#### BTG8 Brake Pad/Shoe Gauge Set (Blue-Point).

- Color coded gauges provide instant feedback: Red indicates service required, yellow indicates caution and green indicates an OK situation
- Constructed from 20 gauge sheet metal with durable powder coat finish

Red 2 mm (0.0787")	Yellow 4 mm (0.1575")	Green 8 mm (0.3150")
Red 3 mm (0.1181")	Yellow 5 mm (0.1969")	Green 10 mm (0.3937")
_	Yellow 6 mm (0.2362")	Green 12 mm (0.4724")

#### BTCP1 Brake Caliper Press (Blue-Point).

- Works on both fixed and floating calipers
- Generates more than 1,600 ft lbs of force to retract the toughest caliper pistons
- Single lever mechanism used to apply and release force for ease of operation and faster service
- · Prevents damage to pistons, hubs or calipers
- Ensures parallel piston retraction on dual and guad piston calipers
- Easy left and right side use

#### BTCP500 Brake Caliper Press (Blue-Point).

- Works on twin and quad piston fixed calipers as well as single and twin piston floating calipers
- Centrally located ratchet evenly spreads force in a parallel manner to prevent misalignment of pistons
- Ratchet technology gives a full 360° swing
- Extended reversing lever allows for easy change from spreading to retracting



#### Truck Brake Tools

#### B1359B Brake Retainer Spring Tool.

- For Chrysler® and Ford® 3/4 ton trucks equipped with Bendix® brakes
- U-shaped end is offset 30 to 45° for easy removal of brake shoe to backing plate spring

#### BT518 Brake Shoe Tool.

- For large trucks and trailers with air brakes with "S" cam design
- Provides leverage to back out brake shoe and remove roller cam
- Industrial finish

#### BT12 Brake Spring Tool.

- Services brake shoe retracting springs on trucks using *Bendix*, Wagner® and Kelsey-Hayes® systems
- Unique shape permits access and leverage

#### YA9070A Rear Brake Adjusting Tool.

- For single axle Lucas-Girling brakes found on 1984 and later F-600 and larger Ford trucks and buses
- Has all the right angles to reach through the backing plate
- Industrial finish

#### BT1360 Brake Spring Tool.

- Remove brake shoe retaining springs from heavy duty *Ford*, GM<sup>®</sup>, Dodge® and International® trucks
- Large, comfortable handle
- · Constructed for strength and durability

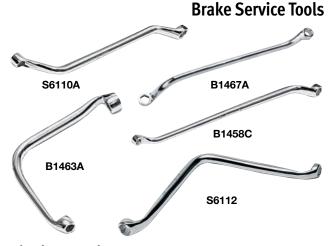
Applications: Ford: F250, F350, P250, P350, P400 GM: 1 ton, some 1/2 ton *Dodge:* B300, D200, D300, P200, P300

# International: 1200 Series, 1300 Series trucks BT400 Brake Spring Tool (Heavy Duty) (Blue-Point®).

- For brake springs on 3/4 ton and heavier trucks
- T-handle for generating maximum torque when encountering stiff springs
- Head may be rotated 360° to clear obstacles
- Overall length of 7 3/4"

#### TAP1 Truck Anchor Pin and Bushing Press.

- Designed to remove brake anchor pins and bushings on 16 1/2" "Q type" S-cam tractor and trailer brake systems from Dana-Spicer®, ArvinMeritor® (Rockwell®), Eaton®, Timkin® and Fruehauf®, Removes brake pins and bushings without removing wheel hub
- · Pressure pad retaining rings hold pads firmly in place
- 2 hand operation
- Interchangeable pressure pads allow removal of bushing alone or simultaneous pin/bushing removal
- · Zerk grease fitting lubricates and flushes dirt from pressure screw for long life
- Designed for use with 3/4" impact guns
- Storage case



#### **Bleeder Wrenches**

#### S6110A Bleeder Wrench.

- For GM, Nissan® and Honda®
- 8 mm. 6 point box end: 10 mm on the other
- Ends are offset for clearance
- 192 mm long

#### B1460B Bleeder Wrench.

- Similar to S6110A
- 3/8" box end for brake bleeding work and a 7/16" box end for brake shoe eccentric bolt adjustment
- Offset clears drag link arm and recessed backing plate on front wheel
- 9 1/2" long

#### B1467A Bleeder Wrench.

- For GM, Ford and Chrysler vehicles
- Similar to S6110A
- 5/16" and 3/8" single hex box ends are offset for access to bleeder fittings

## • 8 1/2" long S6143 Bleeder Wrench.

- For most imports
- Similar to S6110A
- 7 and 9 mm, 6 point box ends are offset for clearance
- 252 mm long

#### B1458C Bleeder Wrench.

- Includes 1/4" and 3/8" single hex box ends
- 9" long

#### B1463A Bleeder Wrench.

- 1/4 to 3/8", 6 point box ends are tapered for clearance
- 3 3/4" long arms (for smaller bleeder fittings on most compact cars)

#### S8184 Bleeder Wrench.

- For fittings on most GM vehicles
- Similar to B1463A
- 3/8 and 5/16", 6 point box openings
- 4" long arms

#### B1470 Bleeder Wrench.

- Similar to B1463A
- For late model *GM* and most imports vehicles
- 8 mm, 6 point box end; 10 mm on the other
- Wrench has a 90° bend for access
- Arms are approximately 100 mm long

#### S6112 Bleeder Wrench.

- For some *GM* and Toyota® vehicles, plus select imports
- Similar to B1463A
- 8 mm, 6 point box on one end; 10 mm on the other
- Wrench has 90° bend for access
- Arms are 130 mm long

#### S6111 Bleeder Wrench.

- Covers 90% of late model U.S. applications including late model Chrysler, Dodge, Ford, GM, Audi®, Mercedes® and WW® vehicles

  10 and 11 mm 6 point Flank Drive® wrenching configuration
- Ends are offset for extra clearance
- 235 mm long







- . Do not use chrome or industrial finish hand tools with impact drivers · Read safety precautions on pages W1 to W4

#### **Brake Service Tools**



#### Wrenches and Sockets

**PMP406A Internal Metric Pipe Plug Socket.** For rear brake adjustments on 1973 to 1986 Subaru. 3/8" drive, 6 mm internal square socket.

Stock No.		A	В	
6	PMP406A	17.2	25.8	

## Brake/Throttle Depressor B240B Throttle Depressor (Blue-Point®).

- Holds throttle at a constant RPM, easily adjusts to desired length
- · Adjustment screw fine tunes desired RPM
- Rubber tip keeps the tool firmly positioned on the accelerator pedal
- Overall length of 40"

#### YA2780 Brake Resetting Gauge.

- Automatically sets brake shoe size when measuring against drum walls
- · Positive locking section ensures an accurate reading every time
- Improved range of 6 1/2 to 13 1/4"



#### **Emergency Brake**

#### SIML160 6 Point Extra Deep Impact Socket.

- Use for removing or replacing fuel tank retaining strap nuts
- Also has applications on emergency brake adjustment nuts and stabilizer retainers
- 1/2" square drive; 1/2", 6 point wrench opening
- 5" long

#### SIML180 Socket.

• Same design as SIML160, except hex size is 9/16"

## Emergency Brake (Blue-Point) BT22A Parking Brake Cable Tool.

- Designed to remove parking brake cables from the brake backing plate and chassis mounting bracket
- Double ended tool has Ford<sup>®</sup> Escort, Topaz and Tempo<sup>®</sup> applications on one end while the larger end services most other vehicles

#### **BR1 C-Ring Pliers.**

 Opens the C-ring on the emergency brake actuation lever when changing rear brake shoes on many domestic cars, trucks and imports

#### **BR2 C-Ring Pliers.**

• Holds the C-ring without slipping during installation

## Hones (Blue-Point)



#### 2-Arm Hone and Stone Sets

**JT64 2-Arm Hone.** For 1/2 to 2 1/4" diameter cylinders. Includes 2 medium grit stones, each 1 1/8" long.

**JT64-1 Stone Set.** Set of 2 medium (220 grit) stones for JT64. 1 1/8" long.

**JT64-14 Stone Set.** Set of 2 fine (400 grit) stones for JT64. 1 1/8" long.



#### **3-Arm Hones and Stone Sets**

CF63 3-Arm Hone. For 3/4 to 2 1/2" diameter cylinders. Adjustable thumb nut to control tension.

**CF68 3-Arm Hone.** For 1 1/4 to 3 1/2" diameter cylinders. Adjustable thumb nut to control tension.

#### **Stone Sets**

Stock No.	Grit (Qty)	Length, inches	
CF63-100	100 (3)	1 <sup>1</sup> /8	
CF63-1	240 (3)	1 <sup>1</sup> /8	
JT63-21	220 (3)	2	
CF63-34	240 (3)	3/4	
CF63-14	400 (3)	1 <sup>1</sup> /8	
JT63-24	400 (3)	2	

#### **Body Repair**



#### **Pullers**

#### CJ107 Body Dent Puller.

- Slide hammer action pulls out dent for filling
- . "L" hook included for larger jobs
- 4 lb slide hammer

#### CJ114 Body Dent Puller.

- · Mainly for rocker, quarter, back and door panels
- Includes screw for puncturing sheet metal plus a bodyman hook and seal hook for larger jobs
- 3 lb slide hammer

#### YA2002 Quarter Panel Puller.

- · Removes dents from rear quarters and wheel wells
- (2) 12" tubes (with different dimensions) fit most wheel well openings
- Use with chain attached to frame machine or portable power unit

#### CJ1200 Slide Hammer Puller Set.

 Contains a 12 lb, contour formed slide hammer and a variety of attachments for auto body repair work

#### Body Repair Kits (Blue-Point®) YA1544A Body Repair Kit.

- 4 ton capacity kit includes hydraulic unit, 5 "Snap-Set" extensions, spreader and a full selection of attachments for most push applications: 18 pc kit includes durable storage case
- Auto pump overload system protects against damage to rams and equipment
- 1/2 ton capacity hydraulic spreader has 2" jaw and spreads from 5/8 to 3 3/4"
- Flex head includes permanently molded rubber pad
- · Heavy walled extension tubes stand up to the toughest loads
- Long handle reduces required pumping effort

#### YA1545 Body Repair Kit.

- 10 ton capacity kit includes: hydraulic unit, 4 extensions (4, 10, 18 and 27"), spreader and full selection of attachments in custom fitted, rugged and wheeled storage case
- Pumps rated from 8,000 to 10,000 psi
- · Portable for use on the road or in the shop

Applications: pushing, spreading and pressing of vehicle body panels as well as various component parts and assemblies





#### **Alignment Bar**

#### BM175 Alignment Bar.

- Use to align bumpers, window posts, wheel wells, panels, hoods, decks and brackets
- 6', 1/4" chain has hooks welded to each end for easy attachment to body components





## Push-Pull Jack BM101 Push-Pull Jack.

- Capable of 3,000 lb push-pull power
- · Aligns, straightens and removes dents
- Multi purpose hook on jack head, plus a hook on the 55" long friction rod
- Friction rod flexes to maintain constant pressure without bending, while the grooved end prevents slipping
- 3 position handle













- . Operate hone only while it is within cylinder
- Read safety precautions on pages W1 to W4

#### **Hammers**



#### **Hammers**

#### BF618B Wide Nose Peen Hammer.

· Bumps odd fender contours

#### BF632B Door Panel Hammer.

- For door and body panel bumping
- Smaller diameter head is offset 45°
- · Fiberglass handle

#### BF611B Picking and Dinging Hammer.

· Smooths small dents and general dinging

#### BF603B Long Spot Pick Hammer.

 For bumping when filing or where metal is covered with soundproofing material

#### BF630B Spot Pick Hammer.

Same design as BF603B except with blunted pick end
 Same design as BF603B except with blunted pick end

BF604B Wide Nose Cross Peen Hammer.
• For finishing and caulking

#### BF617B Shrinking Hammer.

- Extra large faces for large area work
- Serrated for shrinking and smooth for finishing

#### BF614B Long Picking Hammer.

· For turret and fender work

#### BF610B Hammer Shrinking.

- Same design as BF617B except serrated shrinking face is square
- · Finishing head on other end

#### BF608B Short Curve Cross Peen Hammer.

- Use under fenders with rolled edges: use finishing face for dinging BF631B Cross Peen Shrinking Hammer.
- Combines pick end of BF604B and serrated face of BF617B

#### BF635 Door Skin Hammer.

- For door skin replacement
- Narrow, rectangular faces work in tight flange area
- High crown straight head with 1 5/16" radius for finishing thin sections without poking holes
- Medium crown head with 25° offset and 3 1/2" radius for working on narrow flanges against the door structure
- · Fiberglass handle offers excellent balance and high strength

#### **Hammer Specifications**

Stock No.	Head Length, inches	Round Face Diameter, inches	Peen End Size, inches	Handle Length, inches	Head Weight, oz.
BF618B	5	<b>1</b> <sup>9</sup> /16	<sup>3</sup> /16 <b>x</b> <sup>7</sup> /8	12	12 <sup>1</sup> /2
BF632B	6 <sup>5</sup> /8	1 <sup>1</sup> /4 - 1 <sup>5</sup> /8	_	13	16
BF611B	4	1 <sup>15</sup> /32	_	12	8
BF603B	6 <sup>1</sup> /8	1 <sup>19</sup> /32	<sup>1</sup> /16 X <sup>7</sup> /16	13	12 <sup>1</sup> /2
BF630B	6	1 <sup>19</sup> /32	<sup>1</sup> /4 X <sup>7</sup> /16	13	12 <sup>1</sup> /2
BF604B	5 <sup>1</sup> /2	1 <sup>5</sup> /8	<sup>5</sup> /8	13	11 <sup>1</sup> /2
BF617B	4 <sup>1</sup> / <sub>2</sub>	1 <sup>7</sup> /8	_	13	16
BF614B	8 <sup>5</sup> /8	1 <sup>5</sup> /8	_	17	16
BF610B	4 <sup>1</sup> /4	1 <sup>7</sup> /8	_	13	16
BF608B	5 <sup>5</sup> /16	1 <sup>5</sup> /8	<sup>5</sup> /8 x <sup>1</sup> /16	13	11 <sup>1</sup> /2
BF631B	5 <sup>1</sup> / <sub>2</sub>	1 <sup>7</sup> /8	<sup>5</sup> /8	13	11 <sup>1</sup> /2
BF635	7	1 <sup>7</sup> /16 - 1 <sup>5</sup> /8	<sup>5</sup> /8 x 1 <sup>1</sup> /2 <sup>5</sup> /8 x 2	12	16

#### **Hickory Handles**

Stock No.	Length, inches	Hammers Used On		
BF603-2R	13	BF603B, BF604B, BF608B, BF617B, BF610B, BF630B, BF631B, BF633, BF634		
BF611-2R	12	BF611B, BF615, and BF618B		
BF614-2R	17	BF614B		

#### **Body Tool Sets**

#### **Body Tool Sets**

#### 2005BFA Body Tool Set.

 Contains CJ114 body dent puller plus BF608B and BF611B body hammers, BF716B dinging spoon and BF711B heel dolly (5 pcs)

#### 2007BFB Body Tool Set.

• 7 of the most common tools necessary for professional body work: BF716B spoon; BF608B, BF611B, and BF617B body hammers; and BF710B, BF711B and BF712B dollies





2007BFB

#### Snips (Blue-Point®)



Tin Snips

Cut straight, circular or irregular patterns; right or left cuts.
CD7A Duckbill Snips. 1 1/2" blades, 7" long.
CD10A Duckbill Snips. 2 1/4" blades, 10" long.
CD12A Culture Crises 10 1/2" blades 16" long. CD16A Bulldog Snips. 2 1/2" blades, 16" long.



## **Light Duty and All Purpose Snips**

#### SNP2A Angled Multipurpose Heavy Duty Shears.

- · For leather, cloth, plastic, rubber, cardboard, gasket material, rope and other materials
- Ergonomic handles can be used right or left handed: soft molded grip for comfort and control
- Blade is notched for hard wire and twine
- · Locking switch ensures safety during storage
- Control switch allows blades to be held in a tighter position for easier handling
- Angled shears allow easier cutting through flat materials

#### **Aviation Snips**

- Offset blades allow cut material to flow beneath your hand without curling
- Maneuverable for angle cutting or pattern configurations

DAR9A

- Cuts up to 18 gauge mild steel

• 1 1/8" cutting edge
• 9 1/2" long

DAR9A Snips. Green handled. Right hand cut. DAL9A Snips. Red handled. Left hand cut.

## **Shears/Cutters (Blue-Point)**



## Shop Shears **HDSCISSORS**

#### **Heavy Duty Shop Scissors.**

- · For leather, cloth, plastic, rubber, cardboard, gasket material, rope and many other materials
- Ergonomic handles can be used right or left handed



**HDSCISSORS** 

**YA444B** 

#### Metal Cutting Shears DAS30 Metal Cutting Shears Set.

- Serrated cutting blades
- Narrow bodies allow metal to pass over shears
- Oil and grease resistant grips
- Each shear is 10 1/4" long

DAS10B Shears. Yellow handled. Straight cut. DAR10B Shears. Green handled. Right hand cut. DAL10B Shears. Red handled. Left hand cut.

## Vinyl Cutter

#### YA444B Vinyl Cutter.

- · Cleanly cuts plastic, rubber, vinyl, upholstery, leather, hoses and rope
- Ergo® grip handle with safety lock
  Blade storage in handle
- Includes 3 stainless steel replacement blades (YA444B-1)

YA444B1 Replacement Blades.

Includes 3 replacement blades and anvil for YA444B





- Do not use chipped, mushroomed, or cracked hammers
- Strike squarely, avoid glancing blows
- Do not strike hard surfaces, use only for striking sheet metal · Read safety precautions on pages W1 to W4

#### **Spoons and Dollies**

#### Spoons

#### BF715B Spoon Dolly.

· For caulking and forming deep pockets in doors and panels

 Head size is 2 1/2" x 1" x 3": 14" total length

#### BF716B Light Dinging Spoon.

Smoothes and levels ridges

Not for prying

• Head size is 4 1/4" x 2"; 10" total length











**BF711B** 

**BF712B** 

**BF740** 

**HP320** 

#### Steel Dollies B173.5 -1991 applies to all dollies.

BF710B Toe Dolly.

- For dinging flat surfaces
- Measures 4 3/4" x 2 1/4" x 11/16"
- 2 1/2 lb

#### BF707 Heel Dolly.

- For use in sharp corners and wide radii
- · Rubber coating provides cushioning effect
- Measures 3" x 2 1/2" x 1 1/2"

#### BF740 Shot Dolly.

- Heavy duty leather pouch is filled with 2 1/2 lbs of shot
- Essential for supporting irregular shapes and contours on doors. fenders, and other body panels
- Thin profile to get in tight areas
  Will not scratch surface; 3 3/4" W x 5 3/4" L

#### BF711B Heel Dolly.

- · For use in sharp corners and wide radii
- Measures 3" x 2 1/4" x 1 3/8"; 2 1/4 lb BF712B General Purpose Dolly.

- · For deep, skirted fenders and shrinking when using heat
- Measures 3" x 2 1/4" x 1 3/8"
- 2 1/4 lb

#### Riveting



Specifications	HP301C	HP302C	HP310	HP320
Recommended Air Pressure, psi	85-95	85-95	85-95	85-95
Air Consumption, average, cfm	5 (36)	4 (29)	5 (36)	4 (29)
(scfm) [l/min]	[141.58]	[113.27]	[141.58]	[113.27]
Air Inlet Thread Size	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT
Traction Power. Ibs	3,300	1,985	3,055	1,983
Stroke, inches (mm)	<sup>5/8</sup>	<sup>5/8</sup>	<sup>9/16</sup>	<sup>9/16</sup>
	(15.8)	(15.8)	(14.3)	(14.0)
Overall Length, inches (mm)	12	11	12	11
	(304.8)	(279.4)	(304.8)	(279.4)
Weight, lbs (kg)	6.6	4.2	4.2	3.3
	(3.0)	(.91)	(.91)	(.50)

**HP302C** 

# Riveting Tools (Blue-Point®) HP2 Rivet Tool.

- 4 nosepieces for 3/32 to 3/16" diameter rivets
- For 1/8 to 5/8" thickness
- Made of aluminum alloy

#### **HP30N Optional Rivet Nosepiece.**

- Use with HP2 rivet tool to replace OEM welded studs on trim moldina
- For rivets with 1/8" body diameter
- 7/32" head diameter

- HP301C Pneumatic/Hydraulic Rivet Tool.

  Sets structural rivets, Klik-Fast® rivets from 5/32 to 1/4" diameter in all alloys plus *Klik-Fast*Monobolt® rivets from 3/16 to 1/4"

  Requires only 85 to 95 psi 1/2" NPT threads
- Delivers 3,300 lbs of work force at 5/8" stroke
- Includes 5/32, 3/16 and 1/4" nosepieces plus mandrel collection bottle
- Overall weight 6.6 lbs

#### HP302C Pneumatic/Hydraulic Rivet Tool.

- Smaller, lighter version of HP301C
- Sets blind rivets from 1/8 to 3/16" diameter in all alloys plus 3/16" Klik-Fast and Monobolt rivets
- Includes 1/8, 5/32 and 3/16" nosepieces plus mandrel collection bottle

#### HP310 Pneumatic/Hydraulic Rivet Tool.

- Sets 3/32 to 1/4" diameter rivets in all materials
- Can also set T-Rivet®/Klik-Split, Klik-Lock™ and all other structural rivets
- Includes 3/32, 1/8, 3/16, 5/32 and 1/4" nosepieces plus mandrel collection bottle

#### HP320 Pneumatic/Hydraulic Rivet Tool.

- Sets 1/8 to 3/16" diameter rivets in all materials
- Includes: 1/8, 5/32 and 3/16" nosepieces plus mandrel collection bottle

#### Riveting

# Riveting Tools (Blue-Point®) HPS202 Rivet Tool.

- Head swivels 360° to rivet at any angle
  Fasten metal, leather, canvas and vinyl
- Sets 3/32, 1/8, 5/32 and 3/16" rivets
- 4 interchangeable nosepieces store in handle when not in use

#### Rivet Kits (Blue-Point) HP200A Riveter Kit.

• Includes: HP2 rivet tool, 1/8" drill bit and 200 assorted rivets in 1/8 and 3/16" diameters plus a 120° countersink

#### **HPKL2 Plastic Rivet Kit.**

- · For plastic rivets that hold fascia strips, inner fenders and other plastic parts on GM®, Ford®, Chrysler® and VW® vehicles
  • Includes: rivet setter and 4 styles of plastic rivets (2) 5 mm types,
- (2) 6.3 mm types

- HP300 Large Blind Rivet Kit.
   Extra long 21" handled riveter includes 3 nosepieces
- Includes a bag of 50 Klik-Split<sup>®</sup> rivets
- Reorder quantities of Klik-Split and Klik-Fast® rivets are packaged 50 per bag



**Nut Setting** 

# Nut Setting/Thread Setting Kits (Blue-Point) HP650M Metric Thread Setter Kit.

- . Metric version of the HP650 with metric polynuts, including 25 each 4 and 5 mm, (15) 6 mm and (10) 8 mm threads
- Includes thread setter tool, required nosepieces and mandrels packaged in a storage case

#### HP650 Thread Setter Kit.

- Includes: rugged thread setter tool and an assortment of fractional Klik Poly-Nuts: 12 each 8-32, 10-24, 10-32; (8) 1/4"-20 and (6) 5/16"-18 threads
- Includes required nosepieces and mandrels for setting the above sizes
- · Packaged in a storage case



**Files** 



#### Nib File BF193 Nib File.

BF193

- · Removes unwanted paint runs, helps eliminate dribbles and drops
- Gently shaves run without digging into surface



#### Flexible Curved Tooth Files

14V Curved Tooth File. 14", 8 teeth per inch. Rough cut. Use with BF775C Handle.

14V12 Curved Tooth File. 14", 12 teeth per inch. Fine cut. Use with BF775C Handle.



#### File Handles (Blue-Point)

· Wooden, twist on handles with case hardened threaded steel inserts

GA616 File Handle. For 8CT curved tooth file. GA617 File Handle. For 10CT curved tooth file. GA618 File Handle. For 12CT curved tooth file. BF775C Flexible File Holder.

· Light and rigid with a large aluminum handle, adjustable turnbuckle and permanently attached strap









#### Window and Windshield



## Window and Windshield Removal Tools (Blue-Point®) GA243 Molding Release Tool.

Use to remove window and windshield moldings on cemented glass

#### YA109C Windshield Removal Tool.

- Steel cable pull handle
- Replaceable steel cutting blades can be resharpened
- For GM®, Chrysler® vehicles and other cars with windshields set in place with sealant

#### WK100 Windshield Knife.

- · Cuts hardened urethane down to the dash
- Flush blade retention screw helps prevent damage to the dash and moldings
- · Rigid aluminum shaft will not flex
- · Long length provides cutting leverage and reach
- Cushion grip handle for extra comfort
- Includes 1 blade
- Uses YA1860 replacement blades
- 18" long



Window Scrapers (Blue-Point)

YA5200A Razor Blade Scraper. Unique shape fits into tight spots such as the area between dash and windshield. Use any standard, single edge razor blade. Storage for extra blades in screwdriver style handle. 11" long.

WSC2 Plastic Blade Window Scraper. Scrapes windows, windshields and more. Includes a plastic blade or use any standard, single edge razor blade. 8" long tool folds to only 4 5/8".



#### WK200 Windshield Knife.

- Cuts hardened urethane down to the dash
- Flush blade retention screw helps prevent damage to the dash and moldings
- Rigid aluminum shaft will not flex
- Long length provides cutting leverage and reach
- Vinyl grip handle for extra comfort
- Includes 1 blade
- 24" long
- Uses YA1860 replacement blades

#### YA208A Windshield Locking Strip Installation Tool.

- Wedge openings in 2 widths make short work of installing nearly all locking strips
- Includes special tip for Dodge® truck applications
- 4" contoured handle and 4" metal shank



## Window and Windshield Removal Tools A192 Windshield Wiper Arm Removal Tool.

- Easily remove wiper arms on most vehicles
- Both wide and narrow prying ends
- Do not use on wiper arms bolted to the shaft

#### S9610 Window Sash Nut Spanner Socket.

- 3/8" drive and 15/32" long
- For GM and Chrysler cars and light trucks



#### Window Holder (Blue-Point) YA6390 Window Holder.

- · Holds side window glass up when working on the regulator
- Suction cups are attached to both sides of the glass with a cable over the door frame, preventing the glass from falling down the door

## Door Tools (Blue-Point®)







#### **Door Hinge Tools**

#### DHW1 Ratcheting Bit Wrench.

- Reverse lever positioned for one hand operation.

  10 3/4" overall length for leverage
  Knurled wheel for fingertip control

- Low head clearance gets in tight spots
- Internal ring in square drive provides more secure bit retention than the magnetic type EU - GB

Stock No.	Description	Description Size		Length, inches
BMAS60	Triple Square Bit	6 mm	<sup>5</sup> /16	<sup>13</sup> / <sub>16</sub>
BMAS80	Triple Square Bit	8 mm	<sup>5</sup> /16	<sup>13</sup> / <sub>16</sub>
BMAS100 Triple Square Bit		10 mm	<sup>5</sup> /16	<sup>13</sup> / <sub>16</sub>
BMAS120	MAS120 Triple Square Bit		<sup>5</sup> /16	<sup>13</sup> / <sub>16</sub>
SDMTAS30	Torx Bit T30		<sup>5</sup> /16	<sup>13</sup> / <sub>16</sub>
SDMTAS40	Torx Bit	T40	<sup>5</sup> /16	<sup>13</sup> / <sub>16</sub>
SDMTAS45	Torx Bit	T45	<sup>5</sup> /16	<sup>13</sup> / <sub>16</sub>



#### **DHS108 Door Hinge Removal Set.**

- Door hinge applications include VW®, Audi®, Jeep® Cherokee
  (1007) (1997 and 1998) and early model Ford® Escort

  • Various applications on *Audi*, *VW*, and Mercedes® vehicles plus
- Mercedes rear toe adjustment and head bolts on some early models
- Set includes DHW1 ratcheting bit wrench, BMAS60 through BMAS120 triple square sockets (6 to 12 mm) and SDMTAS30 through SDMTAS45 Torx sockets (T30 to T45)
- Plastic storage pouch and bit holder included EU GB

#### YA6620 Door Hinge Bushing Installer for GM® Vehicles.

- Use on *GM* vehicles with replaceable silicon bronze door hinge bushings
- Tool provides easy access to restricted areas of the hinge
- Accurately guides and holds the bushing in place while tapping with a hammer or squeezing with pliers Applications: Chevrolet® S10 and Sonoma (1982-2004), 1/2 and 3/4 ton trucks (1980-1999), 1 ton trucks (1980-2001), Blazer (1980-2005), Suburban (1980 and later), Tahoe (1980 and later), Astro and Express (1980 and later) and Avalanche (2002 and later)











**BF272** 

LOS145

## Lock Picks/Lockout Tools

#### LPK620 Master Lock Pick Set.

• 37 pc set includes 6 pc import rocker pick set, 12 pc pick set for GM vehicles, 5 pc Ford automotive rocker lock pick set, 6 pc Chrysler® lock pick set, 6 pc set for wafer locks on import vehicles, harpoon pick for removing broken keys, tweezer type universal lock turning wrench and a gas cap pick tool

#### YA511 Lockout Tool Set.

- Contains 17 specialized tools for unlocking car, van and truck locks. Includes many of the components of the YA501E set plus additional service components
- Also includes a penlight and instruction manual in a multicompartment kit bag

#### YA501E Lockout Tool Set.

- · Contains 15 specialized tools for unlocking car, van, and truck locks
- Includes J-tool for Japanese vehicles, as well as GM tool to Includes 5-tool for Sapariese verifices, as well as *clif* tool to service Caprice, Buick® and Oldsmobile® vehicles
   Included *Chrysler* tool also services Toyota® Camry vehicles
- BF272 Inflatable Wedge and instruction manual also included

#### YA521 Lockout Tool Guide.

· Comprehensive and illustrated guide showing the best tool and method for unlocking most current model vehicles

#### YA610A Lock Opening Reforming Tool.

 Reforms damaged lock openings to original contour on GM, Ford, Chrysler and most import cars

#### BF272 Inflatable Wedge.

- . Offers safe entry in a lock out situation without damage to the body finish
- Slip the deflated unit between door frame and body, inflate wedge by slowly applying pumping pressure to pull the door away from vehicle body
- Can also be used to gain entry by separating the weather stripping from the vehicle window or to adjust body panels

#### YA520 Door Lockout Kit.

 Includes: 2 plastic wedges to create gap between door and frame. Day-Glo® yellow easy access Jim to reach inside door handles and plastic slim Jim for use on door knobs

#### LOS145 Door Lockout Set.

- No danger of airbag activation or disconnected door linkages
- Actuate the door handle, manual lock button or electric lock button on most cars and trucks
- Includes: 4 pc door unlocking tool that screws together without couplers for easy assembly and storage, plastic slim jim, 2 glow in the dark tips, 2 plastic wedges to create gap between door and frame without damaging door or weather stripping and BF272 inflatable wedge
- Use the BF272 to easily separate door from body without damage to the vehicle
- Unlocking tool features a middle extension piece to reach across the car in extended use applications
- For sale to registered locksmiths, police and bona fide repair professionals only







- Do not use "cheater bars" on handles
- Read safety precautions on pages W1 to W4

#### **Door Tools**



#### Upholstery and Trim Tools (Blue-Point®)

- Remove door and trim panels quickly without damage
- · Wide blades on door tools reduce risk of damage during panel removal
- Stainless steel blades are heat treated for rigidity
- Comfortable composite handles feature a contour thumb stop for maximum control



#### Specialty Door Tools (Blue-Point)

#### YA331 Clip Removal Tool.

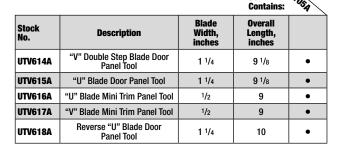
- Tapered forks slide under most types of auto body clips
- A squeeze of the handles pops the clips out

#### YA1201 Door Panel Remover.

- For GM® and Ford® vehicles
- Designed to prevent plastic barbed fasteners from being pulled through the panel



ASGDL1BR





#### YA214 Door Hinge Adjuster.

- Adjusts door hinge position on most vehicles
- Works on either bolted or welded hinges
- 2 headed pin adaptor allows adjustment on doors with both small and large latches
- 24" overall length

#### Soft Grip Trim Pad Tools

- Remove fasteners that secure door panels and trim pieces without damage to panel or trim
- Soft grip handles with contour thumb stop
- Distinct pivot point is designed for appropriate leverage and to discourage twisting that may damage panel or trim piece



Stock No.	Opening Size, inches	Blade Width, inches	Overall Length, inches	
ASG185BR	7/32	9/16	10	•
ASG186BR	3/8	13/16	10	•
ASG187BR	3/8	13/16	20	•
ASG188BR	7/16	13/16	10	
ASG189BR	7/16	13/16	20	
ASG190BR	3/8	13/16	20	

#### Soft Grip Dished Trim Pad Tools

- Smooth dish profile and wide gap to fit vehicles utilizing conical x-mass style retainers for quick removal without damage
- Dished blade for better door panel clip and retainer contact
- Soft grip handle for comfort and control
- Chrome finish helps prevent corrosion and facilitates cleanup

Applications: Ford, GM, Toyota® and more



Stock No.	Opening Size, inches	Blade Width, inches	Overall Length, inches	
ASGD1BR	7/16	13/16	10	•
ASGDL1BR	7/16	13/16	20	•

#### Door Handle/Trim Pad/Trim Nuts **DPT7A Door Tool Set.**

- Includes the 7 most needed tools for removing or replacing door trim, trim pads and handles
- Storage tray

#### A159 Door Handle Tool.

- For most GM® cars and trucks (except Cadillac®), plus some Ford® cars
- Plastic dipped offset handle
- 10 7/8" long

#### A161B Trim Pad Remover.

- For GM. Ford and Chrysler® vehicles
- Features a screwdriver type handle
- 7 3/4" long

#### A177A Trim Pad Remover.

- For GM vehicles and most imports
- Same design as A161B except for different applications
- 7 1/2" long

#### A179A Trim Pad Remover.

- For all GM door trim panels
- · Curved blade helps remove plastic clips and nail type clips without damage to either the clips or the trim

#### S9614A Trim Nut Driver.

- For GM vehicles
- Similar to S6103A but is for use with 5/16" internal hex trim nuts
- 1/4" drive, 1 7/8" long overall

#### S9538A Door Handle Tool.

- For most late model Chrysler vehicles
- · Hook end is designed for use on older style handles

#### S6103A Door Trim Palnut Driver.

- For Ford and GM vehicles
- For easy servicing of 3/8" internal hex trim nuts used on door trim panels and molding
- 1/4" drive, 1 7/8" long overall

#### A181 Trim Pad Remover.

- Services plastic trim fasteners on Honda®, Toyota®, Acura®, Hyundai® and some Ford trucks
- Similar in design to A161B. 7 1/2" long
- . Not included in DPT7A set

## Body Clip Tools (Blue-Point®)

#### YA335 Body Clip Pliers.

- Steel levers enclosed in PMS plastic to prevent scratches
- Tips have a specified angle and size that deliver the most versatile clip tool on the market
- · Eliminates need to buy multiple sets of trim clip pliers for different applications
- · Specially designed and patented pliers will remove any clip found on trim, bumpers, etc.

#### YA336 Body Clip Pliers.

- Will remove almost any clip type from trim, bumpers, etc.
- Ergonomic tool with special angled tips for access to tight spaces
- Steel levers encased in glass filled nylon for lightweight comfort
- Length: 9"; Jaw length: 1 1/2"

#### **Suction Cups**

#### BF801 Heavy Duty Suction Tool.

- · Pull out dents or handle glass
- · Handle increases pulling power
- 5" suction cup

#### BF802 Heavy Duty Dual Suction Cup Tool

- For pulling more stubborn dents or lifting larger materials
- Handle has plenty of room for 2 hands
- Trigger releases both 4" cups simultaneously

#### BF803 Suction Cup.

- · 2 finger grips for easy lifting, 2 projecting tabs for quick release
- 3 1/4" diameter







## **Door Tools/Specialty Tools**



#### Picks/Rods BF200 Pull Rod Set.

• Drill 9/64" holes and pull metal to shape

- Includes 4 pull rods, 2 pick pulls, a straight edge and a drill bit
- · Rods lift metal without distortion
- · No need to remove upholstery

#### 102STMML Long Socket Set

- Long sockets handle the long thread of bumper cover fasteners where deep sockets cannot
- 10 and 11mm are the most popular fastener sizes for bumper cover bolts found on most European and U.S. vehicles
- Flank Drive® wrenching configuration where the socket grips the fastener on the flanks/flats increasing torque by up to 15 to 20%
- Manufactured from special alloy steel, precision forged and heat treated for optimum strength and durability
- · Nickel-chrome plating helps protect against corrosion and makes it easy to wipe clean

#### FLCE120 TORX® Socket with Countersink

- Use to remove/install fasteners that hold window regulators in place for BMW® 5 and 7 Series
- FLCE120 Torx socket with a shallow countersink is designed for use on the BMW Torx fasteners so you can engage the fastener
- Most standard Torx sockets will not engage the special BMW *Torx* fasteners











• Plastic handle does not protect against electric shock Read safety precautions on pages W1 to W4

FLCE120

#### **Specialty Tools**





**BF190 BF195** 



#### Sanding (Blue-Point®) BF185A Sanding Block.

For flat or curved surfaces with wet or dry sandpaper

5 x 2 3/4"

#### BF189A Sanding Block.

For flat or curved surfaces with wet or dry sandpaper

5 x 2 3/4"

#### BF190 Sanding Block.

All purpose, multi radius, edge and flat sander

Flexible body conforms to most sanding surfaces

• 5 1/2" long

#### BF192A Sanding Block.

Double sided, wet/dry sanding blockSoft side sands irregular surfaces

· Stiff side sands flat and curved surfaces

#### BF195 Sanding Block.

· Multi purpose, radius, groove angle and corner sander

Flexible body conforms to most surfaces; 5 1/2" long

#### **Bumper Cover Paint Stands**

## BFS1000B Bumper Cover Painting Stand. • Stand holds the bumper cover securely for painting

• 5 different locking positions on the stand and full 90° rotation provide maximum versatility

Lightweight at 23 lbs and compact to store

· Casters provide full mobility

#### Water Body Dye

#### YAUVWATÉR Water Body Dye.

Ideal for use by auto body and glass repair shops

· Fluorescent dye easily detects gaps causing wind noise plus leaks around sunroofs, door trim, trunk lids, window seals and windshields

Simply mix bottled dye with water and spray over outer area

Check for leaks with UV lamp

· Easily cleaned off with water after repair

Recommended for use with ACTUVLITEA UV light kit

#### Mastic Removal Tools

#### NYZ7007HD Manual Mastic Removal Kit.

 Manual kit contains an assortment of 15 Nyroc<sup>®</sup> blades and an ergonomic rubber handle

Ideal for aviation, automotive and industrial use, especially for delicate jobs and limited access scraping applications

Nyroc blades are easily sharpened with sandpaper, small stone or optional pneumatic sharpener

• Includes: (6) 1" Nyroc blades, (6) 1/2" Nyroc blades, (3) 1/4" Nyroc blades and (1) ergonomic rubber handle





**RRT105** 





S9605B

#### Mirror and Radio Trim Sockets YA7575 Radio Removal Tool for Ford® Vehicles (Blue-Point).

· Insert tool components into holes on the radio faceplate to release the retaining clips on the radio

 Same as Ford No. T87P-19061-A Applications: 1987 and later Mustang, 1988 and later Tempo®/Topaz, 1989 and later Continental, 1990 and later Taurus/Sable, Ranger Bronco II, Probe, Lincoln Town Car, Mark VII, Crown Victoria/Grand Marguis, Thunderbird/Cougar, F-Series pickups, E-Series vans, 1991 and later Explorer and 1995 and later Windstar vehicles

#### RRT105 Car Stereo Removal Tool Kit.

· Includes: 6 tools for car stereo removal

• Enclosed instruction sheet lists exact model application for each manufacturer

• EU - GB

Applications: Audi®, BMW®, *Ford*, Land Rover®, *Lincoln*, Mazda®, Mercedes®, Mercury®, Merkur®, Porsche®, Saab® and VW®

#### S8703 Remote Control Mirror Socket.

Hollow socket clears adjustment lever; 2 prong socket has a 3/8" square drive
19/32" diameter on drive end; 21/32" diameter on socket end
2 1/16" long

Nickel chrome finish

· Services many Ford and VW vehicles

#### S9605B Radio Trim Nut Socket.

Similar in appearance and function to S8703. 1/4" square drive. 7/16" diameter on drive end; 9/16" diameter on socket end. 2 5/16" long. Services some GM and Ford vehicles.

#### Antenna



S6166

#### **Antenna Nut Socket** S6166 Antenna Nut Socket.

- 3 prong socket with 11/16" external hex
  3/4" diameter, 1 1/2" long
  Services 1987 later Chrysler® vehicles



#### 2160ANT

#### 2160ANT Antenna Wrench (Blue-Point®).

- · 4 configurations will fit most antenna bezel nuts on U.S. and imported vehicles
- 10 mm opening for removing mast type antennas
- Measures 7 1/4" x 1 1/2" x 1/8"
- Anodized finish

#### **General Service Tools**



#### **Heat Guns** ET1400 Heat Gun.



UL® / CSA® listed

Up to 1,050 °F with 3 way switch



ET1400

#### Infrared Curing Light

#### BFLIGHT1500A Infrared Curing Lamp (120 V AC).

- Use to cure paint, primer, body filler, bonding adhesive and plastic repair products
- Adjustable lamp height and pivot
- 4 swivel casters for easy maneuverability
- UL listed

Cure times at 18" from surface: 10 minutes - 2 K primers, waterborn base coat, filler/stoppers 15 minutes - 2 K plastic repair, plastic body fillers, acrylic enamels

30 minutes - 2K top coats, high build primers, structural adhesives

35 minutes - polyurethane, synthetic enamels, high solids clear

## **Headlamp Aiming**



**B4A14** 







## **Headlight Aiming Adaptors**

**B4A13 Large Aerodynamic Adaptors.** 

For large lamps (one pair)

**B4A14 Small Aerodynamic Adaptors.** 

For small lamps (one pair)

**B4A5** Rectangular Adaptor.

• For 4" x 6 1/2" lamps with aiming pads in 4 lamp systems **B4A10 Rectangular Adaptor**.

• For 5 1/2" x 8" lamps in 2 lamp systems

#### Headlamp Adjusters

RBYF445 Ratcheting Headlight Wrench.

• 8" overall length allows access to headlight adjustment screws Applications work on most late model Ford® vehicles with 4 and 4.5 mm adjusters (found on aerodynamic designs) and headlights with rear mount adjusters



HE52B

#### **Headlamp Spring Tools** HE52B Headlamp Spring Tool.

- For servicing alignment springs
- 3/16" diameter shank anchored in a screwdriver style handle
- 7" long











#### Spray Guns (Blue-Point®)

A new generation of *Blue-Point* spray guns for primer, base and clear coat. Designed for the automotive refinishing painter. Lightweight and well balanced while delivering a quality, first class automotive finish. Lowest trigger pull among guns in its class. Unmatched spray pattern size and quality repair kits. Optional interchangeable 125, 250 and 600 cc aluminum cups are available. Optional 3M® PPS adaptor is available. Full 1 year warranty.



#### Full Size/Ministure - HVI P

rull Size/Milliature - HVLF					
Stock No.	BLP13HVLP	BLP14HVLP	BLP15HVLP	BLP18HVLP	BLP10MHVLP
Fluid Tip, mm	1.3	1.4	1.5	1.8	1.0
Air Consumption, scfm	9.5	9.5	9.5	9.5	7.0
Max. Inlet HVLP psi (bar, kPa)	29 (2.0, 200)	29 (2.0, 200)	29 (2.0, 200)	29 (2.0, 200)	29 (20, 200)
Dry Weight without Cup, oz (grams)	12.6 (359)	12.6 (359)	12.6 (359)	12.6 (359)	11.4 (322)
Air Inlet Thread Size, NPSM	1/4"	1/4"	1/4"	1/4"	1/4"
Cup Size, cc	600	600	600	600	125
Application	High solids, colors and clears	High solids, colors and clears	Medium solids, colors and clears	Primer, high viscosity materials	Primer, base and clear



#### **Economy - HVLP**

Stock No.	Fluid Tip, mm	Air Consumption, SCFM	Air Inlet Thread Size, NPSM	Air Pressure Range, psi	Fluid (Water) Delivery	Cup Size, cc
BLPK14HVLP	1.4 mm	14.5	1/4" NPSM	30 to 43	190 to 250 ml/min	600 ml

#### **Full Size - Conventional**

Stock No.	Fluid Tip, mm	Air Consumption, SCFM	Max. Inlet HVLP psi (bar, kPa)	Dry Weight without Cup, oz. (grams)	Air Inlet Thread Size	Cup Size, cc	Application
BLP14CONV	1.4 mm	9.5	_	12.6 (359)	1/4" NPSM	600	All automotive colors and clears

#### **BLP14CONV**

## **Spray Gun Accessories**



#### Air/Fluid Hoses

#### BF7130 Air/Fluid Hose Kit.

• 6' hose kit for the BF652 pressure cup

Kit includes 5/16" I.D. air hose with 1/4" FPT connectors and 1/4" I.D. fluid hose with 3/8" FPT connectors

BF7220 Fluid Hose. 25' x 3/8" I.D. fluid hose with

3/8" FPT connectors.

#### Air Caps and Service Kits

BF16111 Air Cap. General duty cap (red ring). BF16113 Air Cap. Clear coat cap (gold ring).

**BF16114 Air Cap.** Material organizer cap (blue ring). **BF501RK Service Kit.** For BF501 spray guns.

BF590RK Service Kit. For BF590 spray guns.

#### **Spray Gun Accessories**

#### **Pressure Cups and Tanks** BF602 Low Pressure Cup Assembly.

- 32 oz capacity
- Recessed check valve to maintain cup pressure and relief valve to relieve cup pressure
- For use with previous models BF595SYS30 and BF595SYS45 paint guns

#### BF511 Detail Cup.

- 6 oz capacity
- · Tough, translucent and high density polyethylene
- For use with BF510/BF515HVLP detail guns

#### BF503 Universal Siphon Cup.

- 32 oz capacity
- Fits all leading spray guns
- · Won't drip in any position
- 3/8" NPT(f) swivel nut attachment





#### **Gravity Feed Cups BF7505 Aluminum Miniature** Gravity Feed Cup.

- 4 oz (125 cc) capacity
- Miniature aluminum gravity feed cup
- Includes adaptor to fit Snap-on® HVLP gravity feed spray guns plus previous model BF814Å Non-HVLP gravity feed spray gun







#### Air Filters/Air Control Units **BF521A Air Control Unit.**

- . Includes regulator with 160 psi inverted gauge and air cock
- 2 regulated outlets
- 1 filtered main line outlet
- Air Inlet: 1/2" NPT(f). Filter Capacity: 75 CFM
- Regulator capacity: 50 CFM

#### BF520A Air Filter.

- Reusable edge type 5 micron filter element
- Highly effective at removing water, oil and other contamination
- Air Inlet: 1/2" FPT Air Outlets: 3/8" FPT and 1/4" FPT (plugged). Filter Capacity: 75 CFM

#### BF530A Air Filter.

- Reusable edge type 5 micron filter element
- Highly effective at removing water, oil and other contamination
- Air Inlet: 1/2" FPT Air Outlet: 2 outlets @ 3/8" FPT FIter Capacity: 120 CFM

#### BF540A Mechanic's Air Filter.

- · Portable, mounts easily anywhere
- Designed for use with quick couplers
- Air Inlet: 1/4" FPT Air Outlets: 1/4" FPT and 1/4" FPT (plugged). Filter Capacity: 75 CFM



#### Air Valves/Air Regulators BF525 Air Pressure Regulator.

- · 2 regulated outlets
- Includes 160 psi air gauge and air cock (1/4" MPT)
- Capacity: 50 CFM

#### BF555 Air Adjusting Valve (with Gauge).

- Designed for use with HVLP spray guns
- Includes 160 psi pressure gauge
- Air Inlet: 1/4" MPT Air Outlet: 1/4" FPT (swivel nut)

#### BF550 Air Adjusting Valve.

- Precision tapered valve
- Full open to close with approximately 4 turns: infinitely adjustable
- Large, easy to handle knob
- Air Inlet: 1/4" MPT Air Outlet: 1/4" FPT (swivel nut)

#### BF1210 "Green Zone" Air Regulator.

Reads both inlet pressure and air cap pressures

#### BF7000 Disposable InLine Filter.

- Disposable filter removes contaminants that condense in the air hose between wall mounted filter and spray gun
- · Reduces paint defects
- Easy installation
- · Card of 2 filters







BF1400

BF1410

**YA999** 

#### Air Pressure Regulators BF1400 Air Pressure Regulator.

- · Self relieving diaphragm
- Maximum 100 psi inlet pressure
- 0 to 10 psi regulated pressure to cup
- 0 to 30 psi air pressure gauge

#### BF1410 Air Pressure Regulator.

- Small, lightweight, true diaphragm miniregulator attaches to any spray gun (including HVLP models) for accurate air pressure regulation
- Push/Pull lock pressure setting
- Features easy to read 0 to 160 psi gauge
- Capacity of 22 CFM (158 SCFM) [623 L/MIN.]

#### YA999 Air/Water Separator.

- Separates water from compressed air
- · Includes drain valve for periodic draining
- 3 1/2" L. 1 1/2" diameter









#### **Spray Gun Accessories**





AHCCP90C

#### High Volume Hose Connectors AHCC90C Quick Coupler.

- High volume 1/4" female quick coupler
- Designed to deliver high volumes of air to spray guns and air tools

#### AHCC91C Quick Coupler.

- High volume 1/4" male quick coupler
- Designed to deliver high volumes of air to spray guns and air tools AHCCP90C Nipple.

- Quick connect 1/4" female nipple
- Designed to deliver high volumes of air to spray guns and air tools

#### AHCCP97C Impact Wrench Adaptor.

• Use with AHCC98C high flow coupler to improve low pressure performance of 1/2" drive impact wrenches and other high air consumption tools





#### Paint Gun Hooks / Holders MRB20 Magnetic Paint Gun Hook.

- · Eliminates having to drill holes in your paint booth to hang your paint gun
- 160 lbs of magnetic force

#### BF9893 Spray Gun Holder.

- Stand holds up to 3 gravity feed paint spray guns at one time for refilling
- Ädjustable strainer holder
- Steel construction



BF9893

#### Air Brushing



#### BF180B Air Compressor.

- Portable 1/10 HP oil-less diaphragm type compressor features internal bleed
- Compact, lightweight and guiet
- Maximum running pressure of 33 psi 115 V, 60 Hz, 2.5 A



#### BF360 Airbrush Set.

- · Rotating paint reservoir allows gravity or bottom feed
- Engineered to require only 1 size tip, regulator and needle for application of any properly reduced medium including acrylics gouache, inks, dyes, enamels, lacquers and stains
- Includes: airbrush, (2) 2 oz jars, (1) 3/4 oz jar, 6' braided hose, extra needle and tip plus foam lined storage case



BF175TA

#### BF175TA Airbrush Set.

- · Dual action, internal mix, bottom feed airbrush
- Choice of fine, medium or heavy needle/heads
- · Sprays a wide range of properly reduced acrylics, enamels, lacquers, glazes and airbrush ready paints
- Includes: airbrush, mixing jars, air hose, color cup, airbrush hanger, extra tip, spray regulator, needle and instruction manual in a storage case



#### BF170A Airbrush Set.

- · Dual action, internal mix, bottom feed airbrush
- Single needle/nozzle design sprays a variety of reduced acrylics, enamels, lacquers, glazes and airbrush ready paints
- Excellent choice for multiple applications
- Includes: airbrush, mixing jars, air hose, color cup, airbrush hanger, extra needle and instruction manual



#### BF171 Airbrush Set.

- **BF171**
- Single action, external mix, bottom feed airbrush
- Air and paint mix outside the airbrush, creating a larger, coarser dot pattern while providing a heavier spray volume
- For base coating, touch up projects and automotive painters
- Sprays higher viscosity materials like glazes, stains, enamels and lacquers
- Includes: airbrush, mixing jars, air hose and instructions



BF105

#### BF105 Gravity Feed Airbrush Set.

- Ideal for graphic arts and automotive illustration
- Dual action, internal mix, gravity feed airbrush for professional results
- Precise performance for tight line detail
- Single needle, single tip configuration
- 1/3 oz permanently mounted color cup
- · Sprays any properly reduced paints
- Operates with lower pressure
- 10 to 15 psi
- Optional needle, regulator and tip available to create a finer spray
- Ergonomically balanced for hours of comfortable spraying

## PAINT SPRAY/ABRASIVE BLAST SYSTEMS

FLAMMABLE

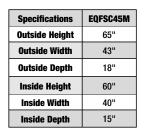
#### **Paint Gun Cleaners**

#### **Cabinet Style Paint Gun Cleaner** PGC500A Paint Gun Cleaner.

- · Cleans paint guns in less than 2 minutes
- Meets SCAQMD air quality rule 1171
- Air safety switch on lid
- · Features a high torque rotary vane air motor that requires only 7 CFM at 60 psi
- Regulator and gauge are included
- Seal less magnetic drive pump supplies powerful cleaning action, no seals to wear out or replace
- Sprays solvent at 85 psi
- Reduces solvent consumption up to 90%. Measures 30" H, 26" L and 24" W in the top







**EQFSC45M** 





# Paint Gun Cleaning Brushes (Blue-Point®) YA7327 Paint Gun Cleaning Brush (Set of 5).

- For "external" paint guns
- Can be used with commonly used cleaning solvents (don't use with solvents marked "corrosive")
- Nylon bristles
- 7 1/2" L

#### YA7329 Paint Gun Cleaning Brush (Set of 5).

- Similar to YA7327 but designed for "fluid tip" paint guns

#### BFCB101 Paint Gun Cleaning Brush Kit.

- · General purpose spray gun cleaning kit
- Includes 7 pc stainless steel needle set with handle, 5 pc precision minitwisted brush set, 3/8" pick up tube brush (12" L), 3/16" nylon end brush, 1/2" nylon body cavity brush, nylon bristle exterior body brush and 1/4" nylon HVLP brush

#### Flammables Storage Cabinet

#### **EQFSC45M Flammables Storage Cabinet.**

- Store volatile liquids like paints, solvents, alcohol, acetone, gasoline and other chemicals
- 16 gauge walls with full 2" air walls. 45 gallon capacity with 5 gallon spill pan
- Removable fork lift channels for convenient movement and placement of cabinet
- Complies with OSHA #29 CFR 1910, NFPA Code #30, and UFC Code #79
- Spill containment exceeds 5 gallon EPA requirement

## **Portable Pressure Blast Systems**

## Air Powered Portable Pressure Blast Systems

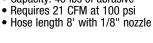
#### YA441 Pressure Blast System.

- For cleaning jobs on large surface areas · Cleans a variety of materials such as
- concrete, stone, brick and steel Unit has a convenient remote control
- shut down at nozzle handle
- Wheels provide mobility on job site
- Hose length 25', with 1/4" nozzle
  Capacity: 250 lbs of abrasive
  Requires 80 CFM at 100 psi

#### YA448 Pressure Blaster System.

- · For cleaning jobs where a minimal capacity of media is required
- Cleans a variety of materials such as concrete, stone, brick and steel

  • Media is controlled by stainless steel
- ball valve at nozzle handle
- . Capacity: 40 lbs of abrasive





**YA441** 



#### YA449A Pressure Blast System (Not Shown).

- Cleans a variety of materials such as concrete, stone. brick and steel
- Media is controlled by stainless steel ball valve at nozzle handle
- . Capacity: 100 lbs of abrasive
- Requires 21 CFM at 100 psi
- Hose length 10' with 1/8" nozzle

#### Gravity Fed Portable Pressure Blast Systems YA432 Gravity Feed Siphon Sandblast System.

- Portable design is ideal for quick spot cleanups or larger jobs such as body and frame restorations
- Capacity: 40 lbs of abrasive
- Hose length 10' with 5/16" nozzle
- . Requires 10 to 18 CFM at 100 psi















- . Do not direct air or fluid stream at body
- Use in well ventilated area
- Do not expose solvent to flames, spark or other sources of ignition
- Read safety precautions on pages W1 to W4

## **ABRASIVE BLAST SYSTEMS**

## **Cabinet Type Abrasive Blast Systems**

Snap-on® abrasive blast systems effectively clean metal parts right down to the bare substrate. The applications vary from automotive, manufacturing, restoration to tool and die shops, marine repair and electric motor rebuilders. Cabinet sizes vary from medium sized to larger pressure fed systems.



#### **Clamshell Blast Cabinet**

- Features a clamshell lid to assist in loading heavy parts
- · Side door for loading smaller parts
- · Variable output blast gun with trigger style control
- High efficiency 135 CFM dust collection system
  - Provides user excellent visibility during blasting
  - Separates dust from useable media minimizing waste
  - Lower noise output
- · Heavy duty steel grating in work area for heavier parts
- Dual fluorescent lights in work area for increased visibility
- Includes 25 lbs of glass bead abrasive

TECHNICAL SUPPORT 1-800-253-3661









	YA3825	YA3423	YA3626*	YA4826P	YA3220*
Inside Dimensions, inches	16 to 24 H x 37 <sup>1</sup> / <sub>2</sub> W x 26 D	11 to 21 H x 32 W x 21 <sup>1</sup> /4 D	23 H x 35 <sup>1</sup> / <sub>2</sub> W x 23 <sup>1</sup> / <sub>2</sub> D	14 to 23 H x 48 W x 24 D	8 to 16 H x 30 W x 20 D
Side Door Dimensions, inches	12 H x 17 <sup>1</sup> / <sub>2</sub> W	I	12 H x 18 W	13 H x 19 W	_
Top Opening Dimensions, inches	20 H x 37 <sup>1</sup> / <sub>2</sub> W	16 H x 34 W	14 H x 37 W	24 H x 48 W	11 H x 28 W
Overall Dimensions, inches	70 H x 38 W x 26 D	65 H x 36 W x 24 D	58 H x 36 W x 24 D	60 H x 52 W x 25 D	28 H x 32 W x 20 D
Dust Collection Size in CFM	135	135	100	135	**
Air Supply Required	18 CFM @ 100 psi	18 CFM @ 100 psi	18 CFM @ 100 psi	45 CFM @ 100 psi	18 CFM @ 100 psi
Electrical Requirements	120 V AC, 60 Hz	120 V AC, 50/60 Hz	120 V AC, 50/60 Hz	120 V AC, 60 Hz	120 V AC, 60 Hz
European Models	YAH3825EUR †	YAH3423EUR †	_	_	_

NOTE: European model is 230 V AC, 50/60 Hz, Single Phase. \*Blue-Point\*

\*\*Optional dust collector YAD3976, also available YA3220-1 optional stand

#### **Cabinet Type**

#### **Industrial Style Blast Cabinets**

- · Dust collection system provides user with excellent visibility and features polysateen bags to capture dust and debris
- Dual fluorescent lights in work area for increased visibility
- Heavy duty steel grating in work area to support heavier parts



#### YA4224 Abrasive Blast Cabinet with Foot Control.

- · Right hand door for smaller parts and top opening lid for larger parts
- Foot pedal control for media delivery reduces operator fatique



#### YA435 Abrasive Blast Cabinet.

- · Right hand door for smaller parts and full front opening door for larger parts
- · Variable output blast gun with trigger style control



## YA437 Large Abrasive Blast Cabinet with Foot Control.

- · Features a turntable to assist in cleaning larger or multiple parts easily
- · Right and left hand doors allow access to turntable
- Foot pedal control for media delivery reduces operator fatique

				1-800	-253-3661		
Stock No.	Inside Dimensions, inches	Dust Collector	Side Door Dimensions,	Top Opening Dimensions,	Overall Dimensions,	Air Supply Required	Eld Regi

Stock No.	Inside Dimensions, inches	Dust Collector Size, CFM	Side Door Dimensions, inches	Top Opening Dimensions, inches	Overall Dimensions, inches	Air Supply Required		European Models
YA4224	29 H x 41 W x 23 D	135	17 H x 18 W	12 H x 39 <sup>1</sup> / <sub>2</sub> W	73 H x 43 W x 24 D	25 CFM @ 100 psi	120 V AC, 60 Hz	YAH4224EUR †
YA435	15 to 23 H x 40 W x 26 D	270	13 H x 17 W	39 x 24	66 H x 40 W x 27 D	18 CFM @ 100 psi	120 V AC, 60 Hz	YAH435-EUR †
YA437	33 H x 42 <sup>1</sup> / <sub>2</sub> W x 44 D	405	35 H x 42 W	_	78 H x 44 W x 44 D	25 CFM @ 100 psi	120 V AC, 60 Hz	YAH437-EUR †

**TECHNICAL SUPPORT** 

NOTE: European model is 230 V AC, 50/60 Hz, single phase.

† ( E

## **Sandblasters**



**YA428A** 

#### Vacuum Sandblaster YA428A Vacuum Sandblaster.

- Blasts away rust, dirt and paint quickly
- Features a vacuum recovery system at the blast nozzle to eliminate mess
- · Media is recycled for continuous use
- Dust is captured in container for ease of disposal
- · Wheels and casters offer ease in mobility
- Vacuum recovery system's 90 CFM
- Measures 49" x 18" x 18 1/2"
- Requires 14 CFM at 100 psi and 120 V AC 60 Hz
- European model: YAH428AEUR C € 230 V AC 50/60 Hz

#### Small Sandblasters **PSB500AR Portable** Sandblasting Gun.

- · For cleaning small areas quickly
- Lightweight aluminum construction
- Flat base provides an upright resting position
- · Media capacity 4 lb
- Requires 5 to 12 CFM at 100 psi PSB100R Speed Blaster.

- · For cleaning small areas quickly
- · Overhead gravity fed media container
- Adjustable material flow valve
- Operating pressure is 60 to 125 psi
  Requires 12 CFM at 125 psi

#### **PSB2020 Spot Blast Recovery** System.

 Converts PSB100 Series speed blasters into spot blasters with recovery systems



PSB500AR



PSB100R



PSB2020











• Use in well ventilated area

## ABRASIVE BLAST SYSTEMS/VISES

#### **Sandblasting Accessories**







#### **Blast System Accessories**

Stock No.	Nozzle	Air Jets	Blast Gun	Blast Gloves	Window Film Replacement	Replacement Filter
YA3626	YAD105	YAD104	YAD100A	YADOO7A	YAD20061	YADV723A
YA4826P	YAD2304	_	_	YADOO7A	YAD20061	YADV723A
YA3825	YAD105	YAD104	YAD100A	YADOO7A	YAD20061	YAD714
YA4224	YAD10104A	YAD10105A	YAD10102A	YADOO7A	YAD20061	YAD674
YA3423	YAD105	YAD104	YAD100A	YADOO7A	YAD20061	YAD714
YA435	YAD115	YAD104	YAD100A	YADOO7A	YAD20061	YADO19
YA437	YAD10104A	YAD10105A	YAD10102A	YADOO7A	YAD20061	YADO18
YA3220	YAD105	YAD104	YAD100A	YADOO7A	YAD20061	N/A





#### **Abrasives**

YAD4000 Steel Grit Abrasive. For rough cleaning and removing rust and scale. 50 lb bucket.

YAD4003 Steel Shot Abrasive. For peening and cleaning castings and forgings. 50 lb bucket.

YA428-1 C-Garnet Abrasive. Does not break down as quickly as silica

sand. Creates less dust. 50 lb bucket.

YA461A Glass Bead Abrasive (Coarse). For coarse satin finish with

minimum surface removal. 40 to 60 coarse grit, 50 lb bucket.

YA462A Glass Bead Abrasive (Medium). For medium satin finish with

minimum surface removal. 60 to 100 medium grit, 50 lb bucket.

YA463A Glass Bead Abrasive (Fine). Use for fine satin finish with minimum surface removal. 100 to 200 fine grit, 50 lb bucket.

YA466A Aluminum Oxide Abrasive. A tough abrasive used for fast removal of heavy oxidation and burrs. Low dust formula. 50 lb bucket.



**YA414** 

#### Helmets/Hoods YA414 Cotton Twill Hood.

- Bump cap protects head, face and neck from dust
- Light duty protector for use in well ventilated areas

#### Vises



**BLPMV5** 

- Bench Vises (Blue-Point®)
   Single piece steel blocks for higher load capacity
- Extended anvil
- · Lubrication points for maintenance
- · Optional swivel base
- · Capacity range from 3.5 to 9 ton at maximum opening
- Reinforced cantilever support
- Interchangeable jaws
- Diamond ground for better grip
- · Heavy duty cast iron construction
- Precise jaw alignment
- Rolled thread spindle for easy locating and tightening parts
- Protected spindle

BLPMV4 Bench Vise. 4" jaws. BLPMV5 Bench Vise. 5" jaws.

BLPMV6 Bench Vise. 6" jaws.



#### **High Visibility Safety Vises**

- Coated in high visibility yellow, which conforms to the OSHA safety color standard for physical hazards regulation #1910.144
- Powder coat finish resists scratches and gives a tough, durable finish
- Handles and lockdowns are black oxide coated for additional corrosion resistance
- Units feature a straight line design with totally enclosed spindle and nut, replacement pipe and serrated vise jaws
- 360° swivel base

Stock No.	Jaw Width, inches	Maximum Opening, inches	Pipe Capacity, inches
WV1550VIS	5	5 <sup>1</sup> /4	<sup>1</sup> /4 - 2 <sup>1</sup> /2
WV1560VIS	6	5 <sup>3</sup> /4	1/4 - 3 <sup>1</sup> /2





#### Mechanic's Vises

- · For general purpose service and maintenance shops
- Replaceable, reversible top jaws (one serrated steel, one smooth), built-in pipe jaws, swivel base and large anvil

Stock No.	Jaw Width, inches	Maximum Opening, inches	Pipe Capacity, inches	Throat Depth, inches	Copper Jaw Cap
WV1745	4 <sup>1</sup> /2	4	3 <sup>1</sup> /4	3	WV4044
WV1755	5 <sup>1</sup> /2	5	<sup>3</sup> /8 - 3	3 <sup>3</sup> /4	WV4045
WV1765	6 <sup>1</sup> /2	6 <sup>1</sup> /2	<sup>3</sup> /8 - 3 <sup>1</sup> /2	4	WV4046
WV1780A	8	7	<sup>1</sup> /8 - 3 <sup>1</sup> /2	4 <sup>3</sup> /4	WV4046





#### **Machinist's Vises**

- · Choice of swivel or nonswivel base
- Large anvil, totally enclosed spindle and nut
- 60,000 psi high ductile iron for main stress parts
- Swivel models feature slip proof 360° base, serrated teeth and double lockdowns

Stock No.	Jaw Width, inches	Maximum Opening, inches	Throat Depth, inches	Base
WV300N	3	4 <sup>3</sup> /4	2 <sup>5</sup> /8	Stationary
WV400N	4	6 <sup>1</sup> /2	3 1/2	Stationary
WV450N	4 <sup>1</sup> / <sub>2</sub>	7 <sup>1</sup> /2	4	Stationary
WV500N	5	8	4 <sup>1</sup> /4	Stationary
WV600N	6	10	5 <sup>1</sup> /2	Stationary
WV800N	8	12	5 <sup>13</sup> /16	Stationary
WV300S	3	4 <sup>3</sup> /4	2 <sup>5</sup> /8	Swivel
WV350S	3 1/2	5 <sup>1</sup> /4	2 <sup>3</sup> / <sub>4</sub>	Swivel
WV400S	4	6 <sup>1</sup> /2	3 1/2	Swivel
WV450S	4 <sup>1</sup> /2	7 <sup>1</sup> /2	4	Swivel
WV500S	5	8	4 <sup>1</sup> /4	Swivel
WV600S	6	10	5 <sup>1</sup> / <sub>2</sub>	Swivel
WV800S	8	12	5 13/16	Swivel





#### **Utility Vises**

- Regular duty utility vises can be used for a variety of shop applications
- Replaceable serrated jaws, built-in pipe jaws, swivel base and large anvil to handle a variety of jobs

Stock No.	Jaw Width, inches	Maximum Opening, inches	Pipe Capacity, inches	Throat Depth, inches		
WV674*	4 <sup>1</sup> /2	3 <sup>3</sup> /4	<sup>1</sup> /8 - 2	2 <sup>5</sup> /8		
WV675	5 <sup>1</sup> / <sub>2</sub>	4 <sup>3</sup> /4	1/8 - 2	3 <sup>7</sup> /16		
WV676	6 <sup>1</sup> /2	5 <sup>3</sup> /4	1/8 - 2 1/2	3 <sup>11</sup> /16		
WV656	6	6	1/8 - 3	4 <sup>1</sup> /4		
WV648*	8	7 1/2	1/8 - 3	4 <sup>1</sup> / <sub>2</sub>		

\*Features built-in pipe jaws, replaceable steel vise jaw inserts, a locking swivel base and rugged 30,000 psi body casting.

#### Pipe and Bench Vises (Blue-Point®)

- · Large anvil, totally enclosed spindle and nut
- 60,000 psi high ductile iron for main stress parts
- Replaceable steel vise jaw inserts and milled steel pipe jaws
- Alloy steel slide bar

Stock No.	Jaw Width, inches	Maximum Opening, inches	Pipe Capacity, inches	Throat Depth, inches
WVCO	3 <sup>1</sup> /2	4	1/8 - 2 1/2	4 <sup>1</sup> /2
WVC2	5	7	<sup>1</sup> /8 - 4 <sup>1</sup> /2	5 <sup>5</sup> /16
WVC3	6	9	<sup>3</sup> /8 - 6	6 <sup>5</sup> /8



#### Forged Bench Vises (Blue-Point)

- Hardened reversible jaws can be reversed for nonmarring applications or replaced when worn
- Competitive forged units do not offer replaceable jaws
- 360° swivel base increases versatility because vise can be locked in virtually any position
- Jaw adjustment screws ensure proper alignment and accuracy

Stock No.	Jaw Width, inches	Maximum Opening, inches	Pipe Capacity, inches
WVE104RT	4	3 <sup>15</sup> /16	1/4 - 3/4
WVE105RT	5	5 <sup>7</sup> /8	1/2 - 2 1/2
WVE106RT	6	7 <sup>7</sup> /8	<sup>1</sup> /2 - 3
WVE107RT	7	8 <sup>7</sup> /8	<sup>3</sup> /4 - 4





## **VISES/WORKBENCHES**

#### **Jaw Caps**



Stock No.	Description	Size, inches			
WVA Series. Aluminum grooved caps hold uneven and circular pieces.					
WVA4	Aluminum Alloy Face	4			
WVA5	Aluminum Alloy Face	5			
WVA6	Aluminum Alloy Face	6			
WVF Series. Caps with heat resistant, laminated fibers help prevent outside materials from being absorbed.					
WVF4	Fiber Face	4			
WVF5	Fiber Face	5			
WVF6	Fiber Face	6			
WVP Series. Pris	m caps have horizontal and vertical grooves for marking out, center punching, light tapping	g, and thread cutting			
WVP4	Prism Face				
WVP5	Prism Face	5			
WVP6	Prism Face	6			
WVR Series. Cap	s have rubber covers.				
WVR4	Rubber Face	4			
WVR5	Rubber Face	5			
WVR6	Rubber Face	6			

#### **C-Clamps**



# Medium Duty C-Clamps • Maximum strength ribbed iron frame

- Steel screw with full standard threads and sliding T-handle
- Large anvil and steel swivel pad to ensure secure clamping
- Deep throat style

Stock No.	Throat Depth, inches	Capacity, inches	Spindle Diameter, inches		
CL537A	4 3/4	2 1/2	5/16		
CL546A	6 1/4	2 1/2	3/8		

#### **Work Benches**



#### Work Benches and Tables EQG2223K5 Open Leg Work Bench.

- Heavy 12 gauge steel with die formed legs welded into a 1 pc unit for superior strength
- Includes storage drawer for mounting on an end or at the center of the bench
- 5' W x 29" D x 33 1/2" H



#### **BPWORKBENCH Heavy Duty** Workbench (Blue-Point®).

- · Full bottom shelf and superior powder coat finish
- Net weight: 139 lbs
- Weight capacity: 1,200 lbs
- Top panel: 13 gauge steel
- Bottom shelf: 13 gauge steel
- · Steel support: 12 gauge steel
- 60 1/16" W x 30 3/4" D x 34 1/16" H



#### EQG245U5 Pedestal Work Bench.

- Manufactured with a heavy 12 gauge top surface and an integral back flange
- 4 drawer pedestal is designed with roller drawer rails for smooth, nonbinding operation
- 5' W x 27 1/2" D x 34 1/8" H

## **Hydraulic Floor and Bench Presses**

Hydraulic (50, 35, 20, 10, and 4 ton) presses will handle many pressing, straightening and assembling jobs. Rams may be moved in any lateral position. Two work blocks, included with each unit, are held in place by extended bosses at the bottom. Work rails can be raised or lowered in 7" increments on 50 ton unit, 5" increments on 35 ton unit, 3" increments on 20 ton unit, and 4" increments on the 10 ton bench models.



**50 Ton Floor Presses CG570BHY 50 Ton Floor Press.**Includes: table lifting mechanism, frame, ram, pump and work blocks. **CG570BHY2S.** CG570BHY with the 2 stage pump.



35 Ton Floor Presses CG770HY 35 Ton Floor Press. Includes: table lifting mechanism, frame, ram, pump and work blocks. CG770HY2S. CG770HY with the 2 stage pump.

CG770HY



CG473HY 20 Ton Floor Press.
Includes: table lifting mechanism, frame, ram, pump and work blocks.
CG473HY2S. CG473HY with the 2 stage pump.
CG470BHY. CG473HY without the table lifting mechanism.
CG470BHY2S. CG470BHY with the 2 stage pump.

20 Ton Floor Presses



10 Ton Bench Press CG170HY 10 Ton Bench Press. Includes: frame, ram, pump and work blocks.



4 Ton Bench Press CG105HY 4 Ton Bench Press. Includes: frame, ram and pump.









- Shield or screen press applications
   Dead of the presentions on page 1974 to be
- Read safety precautions on pages W1 to W4

#### **Hydraulic Floor and Bench Presses**

	Overall		Work Area	Channel Width, inches		Working Dist., inches			Pressure	Step	Table	Bull Nose Adaptor		
Stock No.	Height, inches	Area, feet	Width, inches	Side Beam	Head Rail	Work Rail	(min.)	(max.)	V Block	Screw "V" Adaptor	Plate Set	Lifting Mechanism	Stock No.	Size, inches
50 ton														
CG570BHY	72	3 x 3 <sup>1</sup> / <sub>2</sub>	36	8	10	10	3 <sup>3</sup> /4	39 <sup>1</sup> / <sub>4</sub>	CG471-2 (2)	_	CG471A	Included	CG550-13	1
CG570BHY2S	_	_	_	_	_	_	_	_	_	_	_	_	CG550-14	1 <sup>1</sup> /2
35 ton	75 ton													
CG770HY	69	2 <sup>1</sup> / <sub>2</sub> x 3	28	5	10	10	2 <sup>1</sup> /4	40 <sup>7</sup> /8	CG471-2 (2)	_	CG471A	Included	CG770-1	7/8
CG770HY2S	_	_	_	_	_	_	_	_	_	_	_	_	CG770-2	1 <sup>1</sup> /8
20 ton	20 ton													
CG473HY	60	2 x 3	20 <sup>1</sup> / <sub>2</sub>	5	5	5	4	39 <sup>3</sup> / <sub>4</sub>	CG471-2 (2)	CG471-1 (2)	CG471A	Included	CG471-3	1/2
CG473HY2S	_	_	_	_	_	_	_	_	_	_	_	_	CG471-4	3/4
CG470BHY	60	2 x 3	20 <sup>1</sup> / <sub>2</sub>	5	5	5	4	39 <sup>3</sup> / <sub>4</sub>	CG471-2 (2)	CG471-1 (2)	CG471A	CG472	CG471-3	1/2
CG470BHY2S	_	_	_	_	_	_	_	_	_	_	_	_	CG471-4	3/4
10 ton								•						
CG170HY	32 <sup>1</sup> / <sub>2</sub>	1 x 2	18	3	4	4	3 <sup>1</sup> /4	19 <sup>1</sup> /4	CG170-14 (2)	CG170-15	CG173	_	CG170-16	3/8
_	_	_	_	_	_	_	_	_	_	_	_	_	CG170-17	3/4
4 ton	ton													
CG105HY	18	11 x 6	9	2	2	2	4	12	_	CG105-7	_	_	_	_

#### **Step Plates**

Use step plates for the pressing of bearings, bushings and general pressing applications.

#### CG173 Step Plate Set.

5 pc includes (components described in table at right):

CG173-1 CG173-4 CG173-2 CG173-5

CG173-3

#### CG471A Step Plate Set.

13 pc includes (components described in table at right):

CG471-5 CG471-9 CG471-12 CG471-15 CG471-16 CG471-10 CG471-13 CG471-16 CG471-7 CG471-11 CG471-14 CG471-17

CG471-8



CG471-9

#### **Step Plates**

Diameter, inches	Stock No.	Diameter, inches
<sup>5</sup> /8 and 1	CG471-9	1 <sup>3</sup> /4 and 2 <sup>3</sup> /16
<sup>3</sup> /4 and 1 <sup>1</sup> /8	CG471-10	1 <sup>7</sup> /8 and 2 <sup>5</sup> /16
<sup>7</sup> /8 and 1 <sup>1</sup> /4	CG471-11	2 and 2 7/16
1 and 1 <sup>3</sup> /8	CG471-12	2 <sup>1</sup> /8 and 2 <sup>5</sup> /8
1 <sup>1</sup> /8 and 1 <sup>1</sup> /2	CG471-13	2 <sup>1</sup> /4 and 2 <sup>3</sup> /4
1 <sup>1</sup> /4 and 1 <sup>5</sup> /8	CG471-14	2 <sup>3</sup> / <sub>8</sub> and 2 <sup>7</sup> / <sub>8</sub>
1 <sup>3</sup> /8 and 1 <sup>3</sup> /4	CG471-15	2 <sup>1</sup> / <sub>2</sub> and 3
1 <sup>1</sup> /2 and 1 <sup>7</sup> /8	CG471-16	2 <sup>3</sup> /4 and 3 <sup>1</sup> /4
1 <sup>5</sup> /8 and 2 <sup>1</sup> /16	CG471-17	3 and 3 <sup>1</sup> / <sub>2</sub>
	5/s and 1 3/4 and 1 1/s 7/s and 1 1/4 1 and 1 3/s 1 1/s and 1 1/2 1 1/4 and 1 5/s 1 3/s and 1 3/4 1 1/2 and 1 7/s	5/s and 1

#### **Arbor Presses**



#### 3 Ton Arbor Press

**CG100.** Frame is 2" steel channel. Bolts to work bench. Gearing multiplies handle pressure up to 3 ton force. Set includes arbor press frame, CG100-14 utility punch, CG100-15 work block, and CG100-16 adaptor to convert 1/2" drive to 5/16" round drive.

Specifications	Diameter, inches
Dimensions	18 high, 11 <sup>1</sup> /8" wide
Pressure, tons	3
Base Size	11 <sup>1</sup> /8 x 6 <sup>1</sup> /8"
Vertical Capacity	12 <sup>3</sup> /4"
Opening Width	9"
Width Between Work Brackets	9"
Pressure Shaft Stroke	9" (when utility punch is attached)

Optional Accessories for CG100: The adaptors from A57Q bushing driver set can be used with CG100-16 5/16" round drive adaptor. The CJ951 bearing separator fits neatly between the work support brackets.

# AIR COMPRESSORS













BRAC560V

**BRA5140H** 

BRA517V

**BRA7180V** 







**BRA8180V** 

BRARS8180H

BRA9G3B

BRA10312H

BRA15312H

# **Snap-on® Signature Series Air Compressors**

Stock No.	HP	Pump Stages	Tank Gallons	Tank Style	Electrical Requirement	Amp Service Requirement	Mag Starter	Hour Meter	Auto Drain	Air Delivery SCFM@psi	Max psi
BRA5DV30VP	5	Single	30	Portable	120 or 220 V, 1 phase	30 @ 120 V 15 @ 220 V	Not Req.	No	No	7 @ 125	125
BRAC560V	5	Single	60	Vertical	208/230 V, 1 phase	20 @ 208/230 V	Not Req.	No	No	13.5 @ 140	140
BRA5140H	5	Dual	40	Horizontal	208/230 V, 1 phase	30 @ 208/230 V	Not Req.	No	No	14.0 @ 175	175
BRA517V	5	Dual	70	Vertical	208/230 V, 1 phase	40 @ 208/230 V	Yes	No	No	17.5 @ 175	175
BRA7180V	7	Dual	80	Vertical (2)	208/230 V, 1 phase (1)	40 @ 208/230 V	Yes	Yes	Yes	23.5 @ 175	175
BRA7180VEM*	7	Dual	80	Vertical	208/230 V, 1 phase	40 @ 208/230 V	Yes	No	No	23.5 @ 175	175
BRA8180V	8	Dual	80	Vertical (2)	208/230 V, 1 phase (1)	40 @ 208/230 V	Yes	Yes	Yes	27.0 @ 175	175
BRARS8180H	8	Rotary Screw	80	Horizontal	208/230 V, 1 phase (1)	40 @ 208/230 V	Yes	Yes	Yes	35.0 @ 125	125
BRA9G3B	9	Dual	30	Horizontal	Gas Engine, Electric Start	_	_	No	No	23.0 @ 175	175
BRA10312H	10	Dual	120	Horizontal	208/230 V, 3 phase (3)	40 @ 208/230 V	Yes	No	Yes	36.0 @ 175	175
BRA15312H	15	Dual	120	Horizontal	208/230 V, 3 phase (3)	75 @ 208/230 V	Yes	No	Yes	48.0 @ 175	175
BRA20312H*	20	Dual	120	Horizontal	208/230 V, 3 phase (3)	100 @208/230 V	Yes	No	Yes	75.0 @ 175	175

<sup>(1) 3</sup> phase motor available (2) Horizontal tank available (3) 440/460 V wiring available







\*Not pictured





- Use pressure regulator, lubricator and moisture filter on air line
- Follow maintenance requirements
- Read safety precautions on pages W1 to W4

# **AIR COMPRESSORS**

# **Air Processing Equipment**

# Quick Clamp® Regulators, Filters and Valves

- System utilizes modular design of filters, regulators, lubricators and accessories
- · Allows installation and removal of the AHR services units and accessories without breaking a pipe connection
- · Clamping device holds AHR product components in rigid combinations



- · When fluid reaches full level it activates the float and drains unwanted oil and water automatically
- Can be used in place of a manual drain on the following units: AHR424 and AHR430



- Excellent water removal characteristics
- · Standard depth type 40 mm filter element
- Particle removal per ISO 8573-1, Class 5 and Class 3
- Inlet/outlet port size is 1/2" NPT(f)



- Features full flow gauge ports and standard relieving regulators
- Low torque, nonrising pressure adjustment knob has integral locking device
- Balanced valve minimizes effect of variation in inlet pressure on the outlet pressure
- Inlet/outlet port size is 1/2" NPT(f)
- Gauge port is 1/4" NPT(f)

#### AHR428 Oil Filter Lubricator.

- · Features a quick release bayonet bowl, a high visibility prismatic lens and a liquid level indicator
- Lubricates a single tool, cylinder or other air powered device
- Inlet/outlet port size is 1/2" NPT(f)

## AHR430 General Purpose Filter/Regulator.

- Low torque, nonrising pressure adjustment knob has integral locking device
- Standard depth type 40 µm filter element
- Particle removal per ISO 8573-1, Class 5 and Class 3
- Inlet/outlet port size is 1/2" NPT(f)
- Gauge port is 1/4" NPT(f)

#### AHR438 Wall Mount Bracket.

- . Made of heavy duty metal
- Can be used on the following units: AHR424, AHR426, AHR428 and AHR430



**AHR423** 



**AHR424** 





AHR428



AHR430



**AHR438** 

# Filters/Regulators

Stock No.	Maximum Inlet Pressure, psi (bar)	Temperature Range, °F (°C)	Flow, scfm	Drain Connection Manual	Drain Connection Automatic
AHR424	250 (17.2)	175 (79)	150	<sup>7</sup> / <sub>16</sub> "-24 UNS (m)	1/8" NPT(f)
AHR426*	300 (20.7)	0-175 (-18-79)	_	_	_
AHR428	250 (17.2)	175 (79)	3.5-100	<sup>7</sup> /16"-24 UNS	_
AHR430	250 (17.2)	0-175 (-18-79)	_	<sup>7</sup> /16"-24 UNS	1/8" NPT(f)

<sup>\*</sup>Blue-Point®

# Regulators, Filters and Valves

Stock No.	Inlet/Outlet Port Size	Adjustable Pressure Range	Maximum Service Pressure	Oil Capacity	Operating Temperature Range
AHRB200	<sup>1</sup> /2" NPT (f)	5-120 PSIG (.5-8.5 kgf/cm²)	140 PSIG (9.7 bar)	80 ml	41-140 °F (5-60 °C)



AHRB200

# 

Snap-on has what it takes to keep your shop clean and safe.

Cleaning equipment — A clean garage is a safe, efficient garage. Snap-on has the answer for dirt, grease and grime. Keeping you and the shop in top form.

**Safety equipment** — From basic safety glasses and ear protection to face protectors on the cutting edge of design, Snap-on helps you do your job safely and comfortably.

Parts washers — Whether your shop needs solvent based or aqueous units, Snap-on carries a full line to meet your cleaning demands.

Snap-an

Why pay a service fee to have used solvent carried away? A Snap-on® parts washer is an investment in your shop and the environment.



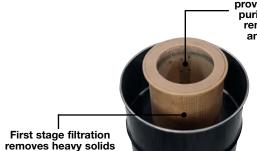
# **PARTS WASHERS**

# **Solvent Based**

Snap-on® dual filter parts washers provide a clean supply of solvent for washing parts. Filtration system virtually eliminates solvent changes.

# **Dual Filter Washer**

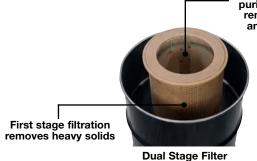
- · Composite dual stage filter provides continuous filtration of solvent
- Tubs are constructed of 16 gauge steel and feature an added lip for strength
- Complete with work lamp and flexible spout (except for PBD34A) • Use PBA760 Solvent on pg 604







PBD3222A













**PBC4828** 

PBD34A

**PBD2622A** 

PBC3222A

**PBC16** 

Specifications	PBD3222A	PBC4828	PBD34A*	PBD2622A	PBC3222A	PBC16
Filtration	Dual	Dual	_	Dual	Dual	_
Base	Drum	Square	Drum	Drum	Square	_
Interior Dimensions, inches	10 H x 32 W x 22 D	14 H x 48 W x 28 D	7 H x 28 W x 22 D	7 H x 26 W x 17 D	10 H x 32 W x 22 D	6 H x 15 W x 16 D
Fluid Requirements, gallons	20	20	10	10	20	5
Input Power Requirements	120 V AC, 60 Hz					
Pump Volume, gallons/hour	325	325	210	210	325	210
Output Pressure, psi	50	50	50	50	50	50
Overall Dimensions, inches	39 H X 36 W X 26 D	45 H X 52 W X 32 D	35 H X 31 W X 23 D	34 H X 30 W X 21 D	39 H X 36 W X 26 D	10 H x 17 W x 23 D
Open Height, inches	63	75	60	53	63	23
Replacement Filter	PBD3209	PBD3209	1	PBD3202	PBD3209	_
European Models	PBDH3222AEUR †	PBCH4828EUR †	_	PBDH2622AEUR †	PBCH3222AEUR †	_
PBD1751 Parts Tray	Included	Included	Optional	_	Included	_
PBA720A Drain Table	Optional	Optional	Optional	_	Optional	_

<sup>\*</sup>Blue-Point® European Model - (230 V AC, 50 Hz)

# **Aqueous Based**



# Electric/Medium Duty PBC42A High Pressure Parts Washer.

- · Fully enclosed aqueous parts washer
- · Blast parts clean with a high pressure wand
- Soap solution is heated for additional effectiveness
- · Automatic soak cycle loosens up grime
- Screen and contaminant trap to separate oil and grease from soap solution
- Includes 25 lbs of YADW896B powdered soap

Specifications	PBC42A
Power Source	Electric
Depth, inches	24
Reservoir Capacity, gal	12
Electrical Requirements	230 V AC, 60 Hz
Pump Motor, hp	3/4
Output Pressure, psi	500
Volume, gal/h	180
Heater, watts	1,500
Open Height, inches	67
Inside Dimensions, inches	16 to 26 H x 40 W x 24 D
Overall Dimensions, inches	62 H x 46 W x 27 D

European Model - PBCH42A-EUR<sup>†</sup> (230 V AC, 50 Hz)

#### 1(6

# Electric/Heavy Duty PBC57A High Pressure Automatic Parts Washer.

- Automatically cleans engine blocks, cylinder heads, transmission cases and small parts
- Heated and pressurized soap solution
- 18 high pressure nozzles
- Turntable rotates and pulls out for ease of part loading
- Integral oil skimmer removes oil and grease from the soap solution
- Includes 25 lbs of YADW896B powdered soap

European Model - PBCH57AEUR† (230 V AC, 50 Hz) †  $\mathbf{C}$ 

## PBC55-1 Parts Basket.

- Perforated steel basket for holding small parts **PBC55-3 Parts Tree.**
- Welded steel tube rack for hanging smaller parts



# PBC33A Standard Heated Aqueous Parts Washer.

- · Clean parts with a pressurized cleaning spout
- · Heated for additional effectiveness
- · Polysateen drain filter to remove solids
- Heavy wall polyethylene tub and solid base
- Integral oil skimmer removes oil and grease from the cleaning solution
- Includes 5 gallons of PBA733 cleaning solution

-			
Specifications	PBC33A		
Power Source	Electric		
Depth, inches	28		
Reservoir Capacity, gal	20		
Electrical Requirements	120 V AC, 60 Hz		
Output Pressure, psi	50		
Volume, gal/h	325		
Heater, watts	1,500		
Open Height, inches	65		
Inside Dimensions, inches	10 H x 21 W x 31 1/2 D		
Overall Dimensions, inches	42 H x 37 W x 28 D		

European Model - PBCH33AEUR† (230 V AC, 50/60 Hz)

†C6





PBC55-1











- . Do not direct air or fluid stream at body . Do not expose solvent to flames, sparks or other sources of ignition
- Use in well-ventilated area Do not use washer without fusible link or safety valve intact
- Read safety precautions on pages W1 to W4

# **PARTS WASHERS**

# **Parts Washer Accessories**







YA452

**GA501A** 

**PBA733** 

# Parts Cleaning Brushes/Solvent & Aqueous Based (Blue-Point®)

## YA452 Parts Cleaning Brush.

- Stiff bristles with contoured, nonslip plastic handle
- Attaches to most parts washers
- Flared hose end fits 1/4" spouts: 24" long hose has internal spring to prevent kinking
- 35 1/4" overall length

## GA501A Parts Cleaning Brush.

• Similar to YA452 without hose: 11 1/4" long





• For use in PBC57, PBC57A, PBC42 and PBC42A parts washers

• Comes in a 25 lb container - makes 60 to 120 gal solution

PBA733 Certified Green Concentrate Solution.

· Specially formulated solution does not absorb oil and dirt

Aqueous Based Cleaning Solution and Powder



**PBA760** 

## Petroleum Based Solvent Cleaners PBA760 Solvent Cleaner.

- · Excellent for removing oil and grease
- Petroleum based cleaner with 140 flash point
- · For solvent based parts washers only
- · Comes in a 5 gallon container

# Solvent Based Parts Washer Accessories

## PBA725 Parts Basket.

· Hangs inside solvent based parts washers

YADW896B Powdered Soap Cleaner.

• For use in PBC33, and PBC33A parts washers

Low foaming powdered soap solution

## PBD1751 Parts Tray.

- Attaches to outside of parts washer
- Measures 12 1/2" W x 18 1/2" D

## PBA720A Drain Table.

- Attaches to outside of parts washer
- Measures 25-1/2" W x 18-1/2" D

# Parts Cleaning



**YA730D** 



**YA729B** 







NOZZLE360A **GA299** 

## Hose Reels YA730D Heavy Duty Air/Water Hose Reel.

- 50' of 3/8" ID low pressure rubber hose
- Adjustable ball stop
- 24" connecting hose
- · High carbon steel retraction spring
- · Guide arm adjusts to 4 positions

#### YA729B Hose Reel.

- 30' of 3/8" ID low pressure rubber hose
- Adjustable ball stop
- 12" connecting hose
- Metal construction
- Max. pressure 300 psi
- Max. water temperature 200 °F

# YA571 **YA297** Water Nozzles and Hoses

# YA571 Water Spray Nozzle.

- . Sprays hot or cold water
- Clip locks spray at desired setting
- Nose bumper prevents scratches to auto paint
- · Fits standard garden hose threads

## YA297 Water Saving Hose Nozzle (Blue-Point).

- Provides concentrated pressure stream
- · Features special rocker actuated check valve
- · Fits standard garden hose threads
- 9" long

# **NOZZLE360A Water Spray Nozzle** (Blue-Point).

- Turns any standard 5/8" hose into a multi function cleaning tool
- 5 different spray patterns
- 360° jetted nozzle is engineered from rugged extruded aluminum, forged stainless steel, high grade fiberglass and comfort grip santoprene
- 2 way shut off

## GA299 Air Solvent Gun.

- Used for degreasing or applying oils
- · Quickly converts to long wanded air gun
- Includes 8' hose for siphoning chemicals into aun
- Operates on 35 to 175 psi

**Cold Water** 

Includes ceramic plunger pump with stainless steel valves, trigger gun, chemical injection and adjustable pressure.



## **Electric Powered**

Adjustable 0 to 60° spray nozzle and GFCI protection with 35' power cord.

Specifications	SEPW1500P	SEPW1500USA	SEPW1000	SEPW1500SM
Style	Hand Carry	Cart Mounted	Cart Mounted	Wall Mounted
PSI (bar)	1,450 (100)	1500	1,000 (69)	1,450 (100)
GPM (Ipm)	2 (7.6)	2	2 (7.6)	2 (7.6)
HP	2	2	1.5	2
Voltage	120 V/20 A/1 ph	120 V/17 A	120 V/15 A/1 ph	120 V/20 A/1 ph
Chemical Tank Cap.	_		1 gal	_
Pump Max. Temp.	140 °F	140 °F	140 °F	180 °F
Thermal	Mechanical	Mechanical	Mechanical	Mechanical
Hose Length (feet)	26	25	50	40
Dimensions (L x W x H)	18" x 12" x 11"	30" x 21 1/2" x 36"	21" x 16" x 36"	20" x 12" x 20"
Shipping Wt., Ibs	68	150	65	98

# **Gas Engine**

Interchangeable or adjustable 0 to 40° spray nozzle plus powder coated tube frame cart with pneumatic tires.

Specifications	SEPW1600G	SEPW2700G
Style	Cart Mounted	Cart Mounted
PSI (bar)	1,600 (110.4)	2,700 (183.3)
GPM (lpm)	3 (11.4)	3 (11.4)
HP	5	6.5
Engine	Honda GC	Honda GC
Fuel Tank Cap.	1.9 qts	3.9 qts
Chemical Tank Cap.	3 gal	3 gal
Thermal	165 °F	165 °F
Hose Length (feet)	50	50
Dimensions (L x W x H)	30" x 21 1/2" x 36"	30" x 21 1/2" x 36"
Shipping Wt., lbs	87	108

# **Oil Fired Hot Water**

Heats water to 200 °F. Includes ceramic plunger pump with stainless steel valves, trigger gun, interchangeable nozzles, chemical injection, adjustable pressure, stainless steel cold wrap around coil, poly fuel tanks and GFCI protection. Powder coated tube frame cart with pneumatic tires for extra durability.



# **Electric Power**

Specifications	SEPW14SHDE	SEPW15SHDE	SEPW20SHDE	SEPW30SHDE
PSI (bar)	1,450 (100)	1,500 (103.5)	2,000 (138)	3,000 (207)
GPM (lpm)	2 (7.6)	3 (11.4)	4 (15.2)	4 (15.2)
HP	2	3	5	7.5
Voltage	120 V/20 A/1 ph	230 V/20 A/1 ph	230 V/25 A/1 ph	230 V/34 A/1 ph
Burner Fuel Capacity	5 gal	5 gal	5 gal	5 gal
Dimensions (L x W x H)	34" x 27" x 47"	34" x 27" x 47"	34" x 27" x 47"	34" x 27" x 47"
Shipping	350	350	570	600



SEPW3000QH

# **Gas Engine**

Specifications	SEPW3000QH
PSI (bar)	3,000 (207)
GPM (lpm)	4 (15.2)
HP	13
Engine	Honda
Fuel Tank Capacity	6.9 qt
<b>Burner Fuel Capacity</b>	5 gal
Dimensions (L x W x H)	54" x 32" x 49"
Shipping Wt., Ibs	600











- . Do not direct air or fluid stream at body
- · Read safety precautions on pages W1 to W4

# **VACUUMS/SHOP FANS**

# **Wet/Dry Vacuums**

Industrial strength full wet and dry cleaning/drying machines combine the highest degree of suction/ airflow with ruggedly durable motors. Highest quality materials ensure long life. Ball bearing motor designed for strong performance with less motor strain. Engineered for easy portability and long life.



Specifications	YA1023	YA1105	YA1009SS	BLPVAC5*
Tank	23 Gal Poly	Corrosion Resistant	Corrosion Resistant	5 Gal Polypro
Casters	Large Rear/Swivel Front	4 Swivel	Large Rear/Swivel Front	4 Metal Casters
Waterlift	91"	84"	84"	65"
Motor	2 Stage	2 Stage	2 Stage	1 Stage
CFM	142	78	78	117
Approval	UL® and CUL	<i>UL</i> and CUL	<i>UL</i> and CUL	<i>UL</i> and CUL
Operation	Full Wet and Dry	Full Wet and Dry	Full Wet and Dry	Full Wet and Dry
Filter Assembly	YAT90448	YAT24519	YAT90445	- (Washable Cartridge Filter)
Includes	1.5" Wet/Dry Tool Set (hose w/swivel end, crevice tool, upholstery tool, (2) straight extensions, floor tool housing with carpet face, brush face, squeegee face)	1.5" Wet/Dry Tool Set (hose w/swivel end, crevice tool, upholstery tool, (2) straight extensions, floor tool housing with carpet face, brush face, squeegee face)	1.5" Wet/Dry Tool Set (hose w/swivel end, crevice tool, upholstery tool, (2) straight extensions, floor tool housing with carpet face, brush face, squeegee face)	7' hose (1 1/4" dia.), (3) extension wands, washable cartridge filter, reusable foam sleeve, 10" floor/squeegee nozzle, utility nozzle with brush and crevice tool

<sup>\*</sup>Blue-Point®



## Handheld Vacuums

#### AV1000A

# AV1000A Deluxe Air Vacuum Kit (Blue-Point).

- · Ideal for vehicle media body shops or any applications in need of picking up dust, metal shavings or broken glass
- Includes 8.7" aluminum extension tube, pointed nozzle, flexible tube and crevice tool with brush
- · Large collection bag includes a debris baffle and sliding bag clamp for emptying debris
- · Lightweight ergonomic handle design

Specifications	AV1000A
Air Consumption, Average, DFM (SCFM) [I/min]	3 (21) [84.95]
Sound Level, Free Speed, dBa	81.2
Sound Level, Working, dBa	81.2
Recommended Hose Size, inches	3/8
Length (without bag), inches (mm)	13 (330)
Brush Head Size, inches (mm)	1 1/8 x 2 5/8 (28.5 x 66.7)
Bag Size, inches (mm)	6 <sup>1</sup> / <sub>2</sub> x 11 <sup>1</sup> / <sub>4</sub> (165 x 285)
Weight, lbs (kg)	0.88 (0.4)

# **Shop Fans**

## WIND100 Heavy Duty Air Mover.

- For heavy duty air circulation applications
- Use for drying carpets, upholstery or hard floors plus removing vapors from enclosed spaces
- Maximum 2,500 CFM output
- · 3 position discharge adjustment
- · 3 speed switch



**Portable Spotter** YA1102 Portable Spotter.

- · Use on carpeting, seat fabrics and other cleaning needs
- Durable molded tank
- · Large 2 gallon capacity
- Powerful 55 psi solution pump motor
- Strong recovery with 94 CFM vacuum rating
- · Quick disconnect solution hose at body
- Includes hose and hand tool
- Use with CLEAN1A cleaner solution (32 oz) sold separately
- . UL and CSA® listed
- ETL and ETL-c listed
- 84" waterlift
- . Bypass 1.2 HP motor



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Specifications	WIND100	
Power	120 V AC/60 Hz	
Speeds	3	
Air Delivery	1,600 - 2,000 - 2,500 CFM	
Air Flow Direction	0°/30°/90°	
High Output Fan Size	10 <sup>3</sup> / <sub>4</sub> diameter x 10 <sup>1</sup> / <sub>2</sub> W	
Motor	.5 Hp	
Motor Rating	Continuous Duty	
Power Cord	15' (18/3)	
Size, (LxWxD), inches	18 H x 14 W x 20 <sup>1</sup> / <sub>2</sub> D	

# **Back Supports**

Stock No.	Size	Color
BACK1M	Medium 31 to 36" waist	Red
BACK1L	Large 35 to 40" waist	Red
BACK1XL	X-Large 39 to 44" waist	Red
BACK1XXL	XX-Large 43 to 48" waist	Red
BACK1SBK	Small 27 to 32" waist	Black
BACK1MBK	Medium 31 to 36" waist	Black
BACK1LBK	Large 35 to 40" waist	Black
BACK1XLBK	X-Large 39 to 44" waist	Black





**BACK1LBK** 

**BACK1XL** 

# **Back Supports**

- Curved, firm support pads help reduce back fatigue
- Unique patented lumbar pad design to firmly support the lower back
- Not a replacement for proper workplace design and proper training in lifting, twisting and bending movements

# Arm Protectors/Knee Pads



#### **HS700A Arm Protector.**

- · Protects arm from burns when working around engines
- Fits either right or left arm, protecting hand and forearm
- 2 layer heat resistant Kevlar® for extra protection
- Washable
- 15" (381 mm) overall length



## KNEEPAD2 Kneepads.

- Polypropylene cap protects against floor debris
- · Outer cap is securely attached to padded nylon inner pad for maximum comfort
- Extra wide Velcro® straps for easy On/Off
- Lightweight



**KNEEPAD3** 

### **KNEEPAD3** Gel Cushioned Kneepads.

- Wide neoprene rear lower flap reduces chafing
- · Gel cushioned for maximum comfort
- Velcro straps for easy On/Off, secure fit and comfort
- Hinged pad extensions for a comfortable fit

# Mitchell1® Service Programs

# Mitchell1 Service Manuals **SKECAG12 Emission Control Application** Guide Mitchell1 Manual.

Coverage:

1966 - 2012 U.S. Vehicles

1968 – 2012 Import Vehicles

1984 - 2012 Diesel Applications

- · Diesel Applications
- Traction Control Disable Procedures
- · Comprehensive Import Coverage
- Emission Control Systems and Devices
- Timing Specifications
- EGR Function Testing
- EPA Emission Recalls
- Service Reminder Indicator Procedures











# **SHOP SUPPLIES**

# Lubrication



AS8

# Synthetic Lubricant **ULUBE1 Synthetic Lubricant.**

- Easy to apply spray extends tool life
- Specially formulated for use with bearings and other rotating devices
- Case of (12) 5.5 oz cans

# Antiseize Lubricant

- Premium general purpose copper/graphite blend antiseize compound
- Formulated to prevent seizing and galling at high temperatures (resistant to 1.800 °F)
- Lubricates and protects against corrosion
- Eases assembly and disassembly of metal parts while reducing friciton and wear

**AS4 Antiseize Lubricant.** 4 oz bottle with applicator brush attached to cap.

**AS8 Antiseize Lubricant.** 8 oz bottle with applicator brush attached to cap.

**AS16 Antiseize Lubricant.** 16 oz bottle with applicator brush attached to cap.

# **Auto Care/Detailing**



# Cleaners, Polishes and Sealants **CLEAN1A** Cleaning Solution.

- · Fresh scent
- Multisurface cleaner for tires, aluminum and alloy wheels, carpets, seats and other interior fabrics
- · Recommended for easy removal of UV dyes from air conditioning units
- Designed to work alone or with Snap-on® YA1102 dirt and stain extractor
- Case of (12) 32 oz spray bottles

# **Buffing Kits (Blue-Point®)** BUFF3KIT1 Foam Pad.

- 3" diameter wavy foam pads for fine polishing applications
- 5 pads in storage tube EU GB

# **BUFF3KIT2 Lambswool Pad.**

- 3" diameter lambswool pads for ultra fine polishing applications
- 5 pads in storage tube EU GB

## **BUFF3KIT3 Twisted Wool Pad.**

- 3" diameter twisted wool pads for aggressive buffing applications
- 5 pads in storage tube EU GB

### **BUFF3KIT4 Fibreral Wavy Pad.**

- 3" diameter fibreral wavy pads for ultra coarse buffing applications
- 5 pads in storage tube EU GB

## BUFF3KIT5 Shur-Grip Pad Holder (3" diameter).

- Use with buffing/polishing pads in the BUFF3KIT series
- 1/4" shaft
- 3" diameter
- EU GB



**BUFF3KIT** 

## **BUFF3KIT Miniature Buffing Kit.**

- Ideal for buffing and polishing autos, boats, motorcycles, aircraft and more
- Use on all painted surfaces, metal, chrome and wood
- Varied pad selection from ultra fine to very aggressive
- Wavy edge allows user to reach tight places
- Hook and loop retention system for quick, easy and secure pad/driver connection
- Includes (1) 1/4" shaft, 3" diameter Shur-Grip pad holder and 1 each of the following: blue wavy foam pad (fine polishing), black lambswool pad (ultra fine polishing), twisted wool pad (aggressive buffing) and fiberal wavy pad (ultra coarse buffing)
- EU GB

# **Hand Cleaners**



WOD303CSA



WOD503CSA

## **Medicated Hand Cleaners**

 Quickly dissolves and removes stubborn dirt and stains while antiseptic properties protect the skin

# WOD303CSA Medicated Hand Cleaner.

- · Fresh orange scent
- Case of (4) 4 1/2 lb cans

## WOD503CSA Medicated Hand Cleaner.

• Case of (4) 4 1/2 lb cans

# **Hand Cleaners**

# **Pumice Hand Cleaners**

 Extra strength pumice hand cleaner with antiseptic ingredient

### WOD423CSA Pumice Hand Cleaner.

- · Fresh orange scent
- Case of (4) 4 1/2 lb cans

#### WOD623CSA Pumice Hand Cleaner.

• Case of (4) 4 1/2 lb cans

## WOD1050CSA Pumice Hand Cleaner.

- Fresh orange scent
- Case of (4) 1 gal bottles











WOD1050CSA

















**WOD507** 

WOD1027

**WOD1027HT** 

WOD8307

**Hand Cleaner Dispensers** WOD507 Heavy Duty Hand Cleaner Dispenser.

- Convenient for wall mounting
- 4 1/2 lb cans of hand cleaner

## WOD1027 Pump Style Hand Cleaner Dispenser.

• Wall mounted, pump style dispenser for WOD2025ACSA or WOD2325ACSA hand cleaners in 84 oz bottles

# WOD1027HT Pump Style Hand Cleaner Dispenser.

 Wall mounted, pump style dispenser for WOD2025ACSA or WOD2325ACSA hand cleaners in 84 oz bottles

# WOD8207 Automatic Hand Cleaner Dispenser.

- Auto dispensing portion control, no waste, dripping or cross contamination
- Over 900 washes per refill bottle
- Auto dispenser eliminates grease and grime accumulating on dispenser
- (4) D-size batteries will last 30,000 cycles, over 30 refills, or over 18 months battery life
- Sleek ergonomic and attractive design, less than 4" wide, meeting the fire marshal code for hallways
- Uses WOD2115ACSA refill (case 4)

## WOD8307 Manual Hand Cleaner Dispenser.

- Proprietary unit, refills only from your authorized Snap-on<sup>®</sup> franchisee (Refill: WOD2115ACSA)
- 2 ml dispenses with each activation and 750 hand washes per refill

AC5C Hand Scratch Brush. Stainless wire bristles for use where

AC58E Wire Brush. Curved scratch brush. Carbon steel bristles.

AC59C Curved scratch brush. Stainless steel bristles. 13 3/4" long AC64B Shoe Handle Scratch Brush. Carbon steel bristles.

- Sleek ergonomic and attractive design, less than 4" wide, meeting the fire marshal code for hallways
- Tamper resistant and keyless locking cover

Specialty Brushes (Blue-Point®)

corrosive materials are found. 7 7/8" long.

• Dispense from bottom, eliminating unused hand cleaner in refill

## Water Activated Hand Cleaners

- · Soybean based, water activated and concentrated formula with fibril scrubbers
- Contains antiseptic ingredient and conditioners for maximum skin protection
- Redline hand cleaner offers the highest performance skin cleaning with fibril/pumice double scrubbing action

# WOD2025ACSA Water Activated Hand Cleaner.

- . Case of (4) 84 oz bottles

# Requires W0D1027 pump dispenser W0D2325ACSA Redline Hand Cleaner.

- · Case of (4) 84 oz bottles

# Requires W0D1027HT pump dispenser W0D2018ACSA Water Activated Hand Cleaner.

- Portable size is perfect for a tool box, cart or at home
- Squeeze bottle with no drip nozzle
- Case of (12) 18 oz bottles

#### WOD2115ACSA Nitro-Gold Hand Cleaner.

- For use in WOD8207 auto dispenser or WOD8307 manual dispenser
- · Case of 4

# Hand and Shop Towels

# WOD5020 Hand and Tool Cleaning Towels.

- Convenient hand towels for cleaning tools or hands of oil and grease
- Towels contain lanolin and rust preventatives



WOD5020

# Fingernail/Hand Brush WOD1000 Fingernail Brush.

Use with any "WOD" series hand cleaner



WOD1000





10" x 1 1/16", 5" long.

13 3/4" long.





- . Do not ingest or use on face
- Read safety precautions on pages W1 to W4

# **SHOP SUPPLIES**

# **Wire Brushes**









# Wire Brushes

- Ergonomic cushion grip handle designed for maximum comfort and control
- Use with both hands to maximize pressure
- Heavy 28 gauge stainless steel gives units maximum strength and durability
- Choice of brush width and length allows you to cover a wide range of applications

#### Applications:

Ideal for cleaning rusted threads, battery terminals and gaskets. Removes body rust prior to welding on various metal parts. Cleans off caulk and interpanel arindina welds

Stock No.	Description			
WBBS2	2" miniature brass wire brush			
WBSS2	2" miniature stainless steel wire brush			
WBSS3	3" stainless steel wire brush			
WBSS5	5" stainless steel wire brush			
WBSS8	7 3/4" stainless steel wire brush			
WBSS9	8 3/4" stainless steel wire brush			
WBSS14	6 3/4" stainless steel wire brush			
WBSS5CAL	5" stainless steel wire caliper brush			
WBSET	Includes (2) WBBS2 miniature brass wire brushes and (1) WBSS2 miniature stainless steel wire brush			
WBMSSET	Includes (1) WBBS2 miniature brass wire brush, (1) WBSS2 miniature stainless steel wire brush, (1) WBSS3 stainless steel wire brush, (2) WBSS8 stainless steel wire brush, (1) WBSS14 stainless steel wire brush and (2) WBSS14 stainless steel wire brush.			
WBSSSET	Includes (1) WBBS2 miniature brass wire brush, (1) WBSS2 miniature stainless steel wire brush, (1) WBSS3 stainless steel wire brush, (1) WBSS8 stainless steel wire brush and (1) WBSS14 stainless steel wire brush.			
WBSS2BKT	Includes (25) WBSS2 stainless steel wire brushes			
WBBS2BKT	Includes (25) WBBS2 brass wire brushes			

# Wire Wheels







AC48ADAPT1



# Crimped Heavy Duty (Non-tempered Wire)

Stock No.	Brush Diameter, inches	Width, inches	Arbor Hole, inches	Maximum Safe Free Speed, RPM
AC26E	6	29/32	5/8, 3/4, 1	6,000
AC28E	8	<b>1</b> 1/8	5/8, 3/4, 1	4,500



#### AC614B **Twisted Tuft**

Tufts are 1 1/4" long and are twisted about 2/3 of the way.

Stock No.	Wheel Diameter, inches	Wheel Width, inches	Wire Size, inches	Arbor Hole, inches	Maximum Safe Free Speed, RPM
AC614B	6	1/2	.016	1/2, 5/8	9,000

# Crimped Wire Wheels

- · Crimped bristles help prevent bending or breaking and are anchored wihthout welds or crimps in flanges
- .014" wire size

## AC48ADAPT3/4

Adapts the AC48A to a 3/4" shaft

#### AC48ADAPT1

Adapts the AC48A to a 1" shaft



# **Crimped Industrial (Tempered, High Density Wire)**

Stock No.	Brush Diameter, inches	Width, inches	Arbor Hole, inches	Maximum Safe Free Speed, RPM
AC48A	8	1	5/8	4,500



- Individual wire tips are encased in synthetic elastomer material (gradually wears away to expose only wire tips) for consistent stiff brushing action
- Ideal for auto body and surface applications

Stock No.	Wheel Diameter., inches	Wheel Width, inches	Wire Size, inches	Arbor Hole, inches	Maximum Safe Free Speed, RPM
AC207A	2	1/4	.014	3/8, 1/2	18,000
AC217A	3	1/4	.014	3/8, 1/2	18,000

**Encapsulated** 

# **SHOP SUPPLIES/SAFETY EQUIPMENT**

**Grinder Discs and Accessories** 

## Grinder Accessories (Blue-Point®) WD12 Grinding Wheel Dresser.

- · Removes glaze and trues up wheel
- · New cutters can be easily inserted
- · Hood protects cutter

#### WD13 Grinder Wheel Dresser.

- Helps true up arinding wheels
- · Hardened and serrated steel disks
- 11" long, 1.5" diameter wheels



## Gloves

# SuperCuff™ Gloves

- Patented SuperCuff design provides a super comfortable, snug and secure wrist closure design while not restricting wrist and hand movement
- Low profile TPR (Thermal Plastic Rubber) logo treatments
- Heavy Lycra® panels between fingers allows for greater comfort and fit
- Hidden interior stitching enhances glove life
- · Gloves are machine washable. Air dry only

# Technician's SuperCuff Gloves (Glove 500 Series)

- Dual fingertip layers for protection and control
- Single piece palm protects hands from nicks and bruises

# Impact SuperCuff Gloves (Glove 501 Series)

- Dual fingertip layers for protection and control
- Thermal plastic rubber protection panels help eliminate cuts
- Built in tool rest provides extra support with pneumatic tools
- · Gel padding in palm reduces impact

	Stock No.	Color	Size
Technician's SuperCuff	GLOVE500BSA †	Black	Small
Gloves	GLOVE500BMA †	Black	Medium
	GLOVE500BLA †	Black	Large
	GLOVE500BXLA †	Black	XL
	GLOVE500BXXA †	Black	XXL
	GLOVE500RSA †	Red	Small
	GLOVE500RMA †	Red	Medium
	GLOVE500RLA†	Red	Large
	GLOVE500RXLA †	Red	XL
	GLOVE500RXXA †	Red	XXL
Impact	GLOVE501BSA †	Black	Small
<i>SuperCuff</i> Gloves	GLOVE501BMA†	Black	Medium
	GLOVE501BLA †	Black	Large
	GLOVE501BXLA†	Black	XL
	GLOVE501BXXA †	Black	XXL
	GLOVE501RSA †	Red	Small
	GLOVE501RMA†	Red	Medium
	GLOVE501RLA†	Red	Large
	GLOVE501RXLA†	Red	XL
	GLOVE501RXXA†	Red	XXL



GLOVE500BXLA



**GLOVE500RLA** 





**GLOVE501RLA** 

# Heavy Duty SuperCuff Gloves (Glove 502 Series)

- Dual fingertip layers for protection and control
- Thermal plastic rubber protection panels help eliminate cuts
- Built-in tool rest provides extra support with pneumatic tools
- Gel padding in the palm reduces impact
- 5 mm EVA foam
- Accordion style knuckle protection

	Stock No.	Size	
Heavy Duty SuperCuff Gloves	GLOVE502BSA †	Black	Small
	GLOVE502BMA †	Black	Medium
	GLOVE502BLA †	Black	Large
	GLOVE502BXLA †	Black	XL
	GLOVE502BXXA †	Black	XXL
	GLOVE502RSA †	Red	Small
	GLOVE502RMA †	Red	Medium
	GLOVE502RLA †	Red	Large
	GLOVE502RXLA †	Red	XL
	GLOVE502RXXA †	Red	XXL



GLOVE502BXL



GLOVE502RL

† ( E

# SuperCuff Heavy Duty Carbon Knuckle

- Hard Carbon Knuckle helps protect from heavy impacts in knuckle and back of the hand area
- 2 layer palm with nonslip panels on thumb, index and middle fingers allows the user to perform the most extreme tasks without losing control
- · Gel palm padding reduces vibrations without compromising dexterity

	Stock No.	Size
Heavy Duty	GLOVE503RCS †	Small
Carbon Knuckle	GLOVE503RCM †	Medium
	GLOVE503RCL †	Large
	GLOVE503RCXL †	XL
	GLOVE503RCXX †	XXL



† **( E** 

# SuperCuff Cold Weather

- MOSSY OAK® poly spandex fleece top lined with Bremberg® for additional insulation
- Lined genuine leather palm and index finger which offers incredible dexterity and durability along with added insulation from cold weather

	Stock No.	Size
<b>Cold Weather</b>	GLOVELMOSSM	Medium
	GLOVELMOSSL	Large
	GLOVELMOSSXL	XL
	GLOVELMOSSXX	XXL



**GLOVELMOSS** 







. Do not use wire wheels above their maximum rated rpm Read safety precautions on pages W1 to W4



# **Gloves**

# High Visibility SuperCuff™ Gloves

- Provide additional hand protection plus HI-VIZ yellow color keep hands visible while performing all tasks at hand
- Patented SuperCuff design provides a comfortable, snug and secure wrist closure design while not restricting wrist and hand movement
- 2 layer palm with non slip fingertip panels on thumb, index and middle fingers allows the user to perform the most extreme tasks without losing control (Impact and Carbon Knuckle only)
- Tough synthetic leather palm
- Low profile TPR (Thermal Plastic Rubber) logo treatments
- Heavy Lycra panels between fingers allows for greater comfort and fit
- Gloves are machine washable. Air dry only



GLOVE501HLA



OVE503HCL



**GLOVE500HLA** 

#### Stock No. Size GLOVE500HMA Medium Technicians GLOVE500HLA † Large GLOVE500HXLA † ΧL XXL GLOVE500HXXA † **Impact** GLOVE501HMA † Medium GLOVE501HLA† Large GLOVE501HXLA † GLOVE501HXXA † XXL **Carbon Knuckle** GLOVE503HCM † Medium GLOVE503HCL † Large GLOVE503HCXL † GLOVE503HCXX † XXI † **( E**

# Cold Weather Gloves

- · Comfortable and durable heavyweight fleece top is breathable and warm
- Wind resistant lining keeps cold and cutting wind at bay
- Extra layers of rubberized material on fingers and palm for improved durability, grip and protection



Stock No.	Size
GLOVE303CGS	Small
GLOVE303CGM	Medium
GLOVE303CGL	Large
GLOVE303CGXL	XL
GLOVE303CGXX	XXL

Stock No.

GLOVE100M

**GLOVE100L** 

GLOVE100XL

## **Unlined Leather Work Gloves**

- · Use for heavy duty work and wear
- · Comfort fit thumbs for dexterity and flexibility
- Embossed Snap-on® logo on reverse



GLOVE100L

# M-Pact® Impact Gloves (Glove 301 Series)

- · Designed for extra protection
- Antivibration palm protection and reinforced fingers
- Molded TPR (Thermal Plastic Rubber) top helps prevent cuts. scrapes and bruises

# M-Pact II Impact Gloves (Glove 302 Series)

- Deliver extra protection and durability
- Molded TPR (Thermal Plastic Rubber) top helps prevent cuts, scrapes and bruises
- · Extra palm padding for extra comfort



GLOVE301RM



GLOVE302RM

Stock No.	Color	Size
GLOVE301RS †	Red	Small
GLOVE301RM †	Red	Medium
GLOVE301RL †	Red	Large
GLOVE301RXL †	Red	XL
GLOVE301RXX †	Red	XXL
GLOVE302RS †	Red	Small
GLOVE302RM †	Red	Medium
GLOVE302RL †	Red	Large
GLOVE302RXL †	Red	XL
GLOVE302RXXL †	Red	XXL

†(E

**Impact** 

Gloves (M-Pact

Series)

**Impact** 

Gloves (*M-Pact* 

Ìl Series)

## Fast Fit Technician Gloves

- Easy on/off for ultimate in convenience
- · Great fit and feel, excellent value
- Performance plus economy
- Synthetic leather palm, stretch panels between the fingers
- 2 way stretch spandex padded back



Stock No.	Size
GLOVE300S †	Small
GLOVE300M †	Medium
GLOVE300L †	Large
GLOVE300XL†	XL
GLOVE300XXL †	XXL

†(E

## **Lined Leather Work Gloves**

- · For heavy duty work and wear
- · Lined for protection and warmth
- Embossed Snap-on logo on reverse



Stock No.	Size
GLOVE101L	Large
GLOVE101XL	XL

GLOVE101L

Size

Medium

Large

ΧI

# Technician's Gloves

## **Cut Resistant Gloves**

- Abrasion, blade and tear resistant
- Great for tear down work, salvage yards, sheet metal work
- Provides excellent protection while maintaining great dexterity
- Level 4 abrasion resistance
- · Level 3 blade cut resistance
- · Level 4 tear resistance
- Level 4 puncture resistance



GLOVE410L

Stock No.	Size
GLOVE410M	Medium
GLOVE410L	Large
GLOVE410XL	XL



GI OVF400I

# Abrasion Resistant Nitrile Gloves (Blue-Point®)

- Nitrile dipped coating for protection on dirty jobs
- Ergonomically pre curved design for comfort
- High abrasion resistance protects hand on sharp edges
- Incredible grip and dexterity on wet and dry surfaces

Stock No.	Quantity	Size
GLOVE400S	3 Pack	Small
GLOVE400M	3 Pack	Medium
GLOVE400L	3 Pack	Large
GLOVE400XL	3 Pack	XL
GLOVE400XXL	3 Pack	XXL



**GLOVE103MA** 

# Washable Work Gloves (Blue-Point)

- · Stretch knit with padded back for extra feel and flexibility
- Extra knuckle protection
- Heat resistant synthetic double layered leather palm

Stock No.	Color	Quantity	Size
GLOVE103MA	Black	1 pair	Medium
GLOVE103LA	Black	1 pair	Large
GLOVE103XLA	Black	1 pair	XL

## Glove Dispenser GLOVEHOLDERB Latex Glove Dispensing Rack.

- Holds GLOVE1, GLOVE3, GLOVE5, GLOVE6, GLOVE7 and GLOVE8 series gloves
- · Metal construction prevents damage
- Magnetic base allows attachment to tool storage unit or other ferrous metal surface
- 3 "springs" secure box firmly in holder
- Mounting holes for attachment to non ferrous surfaces
- 10" x 5 5/8" x 3 7/8"
- Black



**GLOVEHOLDERB** 





**GLOVE6LB** 

**GLOVE1MB** 

**GLOVE3LC** 

	Stock No.	Quantity	Size	ı			
Black Nitrile	GLOVE8MA	Box of 100	Medium	ı			
Technician Gloves	GLOVE8LA	Box of 100	Large	•			
	GLOVE8XLA	Box of 100	XL	ı			
Nitrile	GLOVE5MB	Box of 100	Medium	ı			
Technician Gloves	GLOVE5LB	Box of 100	Large	ı			
	GLOVE5XLB	Box of 100	XL	ı			
<b>Heavy Duty Nitrile</b>	GLOVE7MB	Box of 50	Medium	ı			
Technician Gloves	GLOVE7LB	Box of 50	Large	l			
	GLOVE7XLB	Box of 50	XL	ı			
Latex Technician	GLOVE1 MB	Box of 100	Medium	ı			
Gloves	GLOVE1LB	Box of 100	Large	ı			
(Light Powder)	GLOVE1XLB	Box of 100	XL	ı			
Latex Technician	<b>GLOVE3MBC</b>	Box of 100	Medium	ı			
Gloves	GLOVE3LC	Box of 100	Large	ı			
(Powder Free)	<b>GLOVE3XLBC</b>	Box of 100	XL	ı			
Heavy Duty	GLOVE6MB	Box of 50	Medium	ı			
Latex Technician	GLOVE6LB	Box of 50	Large	ì			
Gloves	GLOVE6XLA	Box of 50	XL	l			
I ofference at a large VI A called							



**GLOVE5MB** 

**GLOVE7LB** 

(Leftover stock on XLA only)

# **Black Nitrile (Glove 8 Series)**

- Powder free plus excellent tear resistance
- Use for mechanical repairs, spray painting and refinishing applications
- · Resists auto detailing chemicals

# Nitrile (Glove 5 Series)

- Gloves resist nicks, cuts and abrasions and protect against chemical splashes
- 3X the puncture resistance of natural latex or vinyl gloves
- · Light powdering facilitates removal with minimal residue
- Micro textured for better gripping

# **Heavy Duty Nitrile (Glove 7 Series)**

- Use for paint mixing, parts cleaning, transmission rebuilds and more
- Superior puncture resistance to that of natural latex or vinyl gloves
- Resists nicks, cuts, and abrasions and protects against chemical splashes
- Thick 8 mil nitrile construction
- Extra long "sleeve" for additional protection
- Powderfree. Textured for better gripping.

# Latex (Light Powder) (Glove 1 Series)

- Hypoallergenic gloves reduce the chance of allergic reaction
- Protects hands from paint, grease and harsh chemicals
- Light powder. Disposable. 6 mil thick

# Latex (Powder Free) (Glove 3 Series)

- Hypoallergenic gloves reduce the chance of allergic reaction
- Protects hands from paint, grease and harsh chemicals
- 6 mil thick

# **Heavy Duty Latex (Glove 6 Series)**

- 14 mil thickness for heavy duty usage
- Textured fingers and palm for maximum grip
- · Lightly powdered for easy on/off
- Will resist most shop chemicals
- · Long cuff





# SAFETY EQUIPMENT

# **Ear and Face Protection**









# **Ear Protection**

Specifications	GA3000B*	GA3200*	YA160A	BLPEP1
Noise Reduction Rating, dB	25	28	25	21
Headband	Cushioned	Cushioned	Plastic	Plastic
Ear Piece	Cushioned	Cushioned	Foam	Foam
Adjustable Ear Pieces	•	•	_	_
Ear Piece Replacements	_		YA160A1	BLPEP1-1
Weight, Ibs	.49	.77	.06	.05

<sup>\*</sup>Blue-Point®













# **Face Protection**

Tace Flutection						
Specifications	GA224B	GA225*	EFPBONEHEDA	EFPSTRIKERA	EFPNSTLKRA	EFPHANNIBALA
Shield Style	Flat	Flat	180° Peripheral	180° Peripheral	180° Peripheral	180° Peripheral
Shield Size	8" x 12" x 0.04"	7 <sup>3</sup> /4" x 15 <sup>1</sup> /4"	35 1/2 sq in Viewing Area			
Headband	•	•	•	•	•	•
Adjustable Headband	•	•	•	•	•	•
Impact Resistance	•	•	•	•	•	•
Shield Included	Clear	Clear	Clear and #10 Welding	Clear and #10 Welding	Clear, #10 Welding	Clear, #10 Welding
Replacement Shields	GA224B1 (Clear) GA224B1G (Dark Green)	GA225-1 (with PETG) GA225-2 (with PC)	EFPCLLENSREP (Clear) EFP10WLDLENS (#10 Welding) EFP3WLDLENS (#3 Welding) EFP5WLDLENS (#5 Welding) EFP8WLDLENS (#5 Welding) EFP2WLDLENS (#5 Welding) EFP12WLDLENS (#12 Welding)	EFPCLLENSREP (Clear) EFP10WLDLENS (#10 Welding) EFP3WLDLENS (#3 Welding) EFP5WLDLENS (#5 Welding) EFP5WLDLENS (#8 Welding) EFP8WLDLENS (#8 Welding) EFP12WLDLENS (#12 Welding)	EFPCLLENSREP (Clear) EFP10WLDLENS (#10 Welding) EFP3WLDLENS (#3 Welding) EFP5WLDLENS (#5 Welding) EFP8WLDLENS (#6 Welding) EFP8WLDLENS (#8 Welding) EFP12WLDLENS (#12 Welding)	EFPCLLENSREP (Clear) FP10WLDLENS (#10 Welding) EFP3WLDLENS (#3 Welding) EFP5WLDLENS (#5 Welding) EFP8WLDLENS (#8 Welding) EFP8WLDLENS (#8 Welding) EFP12WLDLENS (#12 Welding)

<sup>\*</sup>Blue-Point

**Eye Protection** -













# Safety Glasses/Glass 1, 4, 5, 6 Series

Specifications	GLASS1R	GLASS1BK	GLASS4A	GLASS5A	GLASS6A	GLASS6AAM
Lens	Clear	Clear	Clear XTR	Expresso XTR	Mirror XTR	Amber XTR
Frame	Red	Black	Black (Nylon)	Black (Nylon)	Black (Nylon)	Black (Nylon)
<b>Antifog Lens Coating</b>	•	•	•	•		•
Antiscratch Lens Coating	•	•	_	_	_	_
Temple Length Adjustment	•	•	3 Position	3 Position	3 Position	3 Position
Tilt Adjustment	•	•	_	_	_	_
Design	Contemporary & Lightweight	Contemporary & Lightweight	6 base lens curve and folded back lens	6 base lens curve and folded back lens	6 base lens curve and folded back lens	6 base lens curve and folded back lens
Lens Replacement Available	•	•	_	_	_	_
Meets Requirements	ANSI Z87.1, CSA Z94.3- 1992, EN166	ANSI Z87.1, CSA Z94.3- 1992, EN166	ANSI Z87.1	ANSI Z87.1	ANSI Z87.1	ANSI Z87.1
Additional Info	_	-	Increased peripheral vision and protection	Increased peripheral vision and protection	Increased peripheral vision and protection	Increased peripheral vision and protection

# **Eve Protection**











# Safety Glasses/Glass 9, 10, 11, 12, 13 Series

Specifications	GLASS9BK	GLASS10BK	GLASS11BK	GLASS12BKA	GLASS13CPA
Lens	Clear	Brown	Mirror	Clear	Brown
Frame	Black	Black	Black	Black Ear Pieces	Black Ear Pieces
<b>Antifog Lens Coating</b>	•	•	_	_	_
<b>Antiscratch Lens Coating</b>	•	•	_	_	_
Temple Adjustment	•	•	•	5 Position	5 Position
Design	Contemporary, sporty wraparound	Contemporary, sporty wraparound	Contemporary, sporty wraparound	Frameless, Sleek, Contemporary	Frameless, Sleek, Contemporary
Lens Replacement Available	•	•	•	_	_
Meets Requirements	ANS/ Z87.1	<i>ANSI</i> Z87.1	ANSI Z87.1	<i>ANSI</i> Z87.1	ANSI Z87.1



# Safety Glasses/Glass 20 Series

Specifications	GLASS20BK	GLASS20R	GLASS20BKY	GLASS20RM	GLASS20BLM	GLASS20BKW	GLASS20BL
Lens	Clear	Clear	Amber	Mirror	Mirror	Dark Green (Shade #5)	Clear
Frame	Black	Red	Black	Red	Blue	Black	Blue
Lens Replacement Available	_	_	_	_	_	GLASS20LENSW	_
Additional Info	White <i>Snap-on</i> Logo on Temples	White <i>Snap-on</i> Logo on Temples	White <i>Snap-on</i> Logo on Temples	White Snap-on Logo on Temples	White <i>Snap-on</i> Logo on Temples	White <i>Snap-on</i> Logo on Temples	White <i>Snap-on</i> Logo on Temples

ANSI Z87.1, CSA Z94.3 and MIL-STD-662.







Lightweight

ear canals

and adjustablility

absorb 99.9% UV

· Built-in ear protection

of tethered ear plugs



**GLASS40CEAR** 

# Safety Glasses/Glass 30 and 31 Series

Specifications	GLASS30R	GLASS30BK	GLASS31R	GLASS31BK
Lens	Clear	Clear	Clear	Clear
Frame	Red	Black	Red	Black
Antifog Coating	•	•	•	•
Antiscratch Coating	•	•	•	•
Ventilation Channel	•	•		

ANSI Z87.1

# **Protective Eyeshields**

# **GLASSVIS** Protective Eyeshields.

- Will fit over prescription glasses or can be worn alone
- · Wraparound side shields, impact resistant and antiglare guard
- · Clear uncoated lens with black frames
- ANSI Z87.1, CSA Z94.3 and MIL-STD-662

## **GLASSIBOTG Protective Eyeshields.**

- Single panoramic lens offers increased visibility
- · Protective coating resists fogging, scratching, static and UV rays

WARNING

- · Side impact protection
- Universal nose bridge
- Snap-on<sup>®</sup> logo on ear piece
- ANSI Z87.1













• ANSI Z87.1 GLASS40CEAR Clear Lens.

**GLASS40YEAR Amber Lens.** 

GLASS40GEAR Gray Lens.

GLASS40-1 Replacement Ear Plugs.

Safety Glasses with Ear Plugs (Blue-Point®)

Contemporary design with polycarbonate lens that

• Nylon slide allows for easy extension and retraction

• Ear plugs extend over 4 1/2" for easy insertion into

· Soft plastic nose bridge provides added comfort

# **SAFETY EQUIPMENT**

# **Eve Protection**



GOGGLE2ATOR

# Safety Goggles

## GAC1575B Dust/Impact Goggles.

- Plastic lenses conform to American National Safety Standards and OSHA requirements for high mass and high impact tests
- Soft, perforated, vent style form fitting plastic frame

# • ANSI® Z87.1 GOGGLE1 Protective Goggles.

- · Durable molded frame with soft and flexible elastomer that seals for a custom fit
- · Quick adjust headband clips permit fast and easy fitting
- Indirect ventilation system channels and directs airflow over the lens, minimizing fogging and improving vision potential while providing superior splash and impact protection
- Uvex 4C+™ lens coating to protect against fogging, scratches and **UV** rays
- ANSI Z87.1

# **GOGGLE2ATOR Safety Goggles.**

- · Durable molded frame with soft and flexible elastomer that seals
- · Quick adjust headband clips permit fast and easy fitting
- · Indirect ventilation system channels and directs airflow over the lens, minimizing fogging and improving vision potential while providing superior splash and impact protection
- Uvex 4C+TM lens coating to protect against fogging, scratches and UV ravs
- ANSI Z87.1



## **Respirators and Filters** YA127C Half Mask Respirator.

- · Includes organic vapor cartridges and N95 prefilters
- Approved by NIOSH and meets OSHA regulations governing particulate respirators under 42 CFR 84
- Large sealing surface and advanced yoke design for excellent non slip fit
- Helps protect against organic vapors. dusts and mists when used with YA1991 N95 pre filter and YA1992 organic vapor cartridge
- . Do not exceed maximum use concentrations established by regulatory standards





YA127C9

#### YA127C9 Prefilter/Filter Set.

• Includes plastic cover, YA1991 N95 pre filter and YA1992 organic vapor cartridge



YA1991

#### YA1991 N95 Prefilter.

- 95% filter efficiency level
- · Effective against particulate aerosols free of oil
- Includes 6 pair
- Do not exceed maximum use concentrations established by regulatory standards





**GAC1150A** 

**GAC1125** 

**GAC1175A** 



**GAC1100C** 

# **Biker Style Safety Goggles**

- · Adjustable side vent for increased airflow
- · Lightweight and comfortable with wide pivot headband to allow optimal placement
- · Cushioned eye cups for extra comfort, anti fog lens is standard
- Folds easily for compact storage
- ANSI Z87.1

GAC1125 Safety Goggles. Amber anti fog lens.

GAC1150A Safety Goggles. Smoked anti fog lens.

GAC1175A Safety Goggles. Clear anti fog lens.

GAC1100C Safety Goggles. Green tinted lens for acetylene torch work.



## **YA199**

#### YA199 Full Face Respirator.

- · Includes 2 organic vapor cartridges and 2 N95 prefilters
- Provides a comfortable fit with durable silicone face piece standard nose cup to prevent fogging and exceptional wide view antiscratch lens
- · Helps protect against organic vapors, dusts and mists when used with YA1991 N95 prefilter and YA1992 organic vapor cartridge
- · Do not exceed maximum use concentrations established by regulatory standards



YA1992

# YA1992 Organic Vapor Cartridge.

- · Protects against organic vapors
- Includes 1 pair
- Do not exceed maximum use concentrations established by regulatory standards
- Do not use with isocyanates







# Important Words About Safety

for Users and Bystanders

Following these basic safety rules is a good start toward protecting yourself — and others in the vicinity — from injury while using tools.

Wear safety goggles
Use the right tool
Use the tool properly
Maintain the tool regularly
Keep tools away from children
Do not use tools on live electrical circuits
unless specifically designed for such use
Read and follow instructions



THIS SYMBOL INDICATES PROHIBITED ACTION



DO NOT OVER-TORQUE NO PIPES OR LEVER EXTENSIONS



**NO HAMMERING** 



**NO PRYING** 



DO NOT STRIKE HARD OBJECTS



NO IMPACT/POWER DRIVE



DO NOT STEP IN OR ON DRAWERS



DO NOT OPEN MULTIPLE DRAWERS



**DO NOT PULL TO MOVE** 



**KEEP CHILDREN AWAY** 



THIS SYMBOL INDICATES MANDATORY ACTION



MANDATORY EAR PROTECTION



MANDATORY FACE SHIELD



MANDATORY MASK



MANDATORY RESPIRATOR



MANDATORY PROTECTIVE CLOTHING



MANDATORY PROTECTIVE GLOVES



MANDATORY EYE PROTECTION



MUST READ INSTRUCTIONS BEFORE USE





**VIBRATION HAZARD** 



**RISK OF EXPLOSION** 



OVERHEAD/OVERLOAD HAZARD



RISK OF ELECTRIC SHOCK



**RISK OF FIRE** 



RISK OF ENTANGLEMENT

Safety messages in this catalog use the guidelines of the American National Standard ANSI Z535.4 for Product Safety Signs and Labels and ANSI Z535.3 Criteria for Safety Symbols. Messages associated with specific products use a triangular hazard alert symbol, signal word (CAUTION, WARNING, DANGER) and how to avoid the hazard. Each message refers to pages (W1 to W4) which provides additional safety symbols and three part messages advising of:

The hazard

# How to avoid the hazard

The probable consequence of not avoiding the hazard

PLEASE READ AND FOLLOW these messages to avoid injury to yourself and bystanders.

## **Adaptors**



#### WARNING



· Adaptors can break from over-torque Do not use with impact drivers. Do not exceed the torque stamped on adaptor. Broken adaptor can cause injury.

## **AVR Battery Testers**



#### WARNING



· Batteries produce explosive gases and can explode and ignite Wear safety goggles. (User and bystanders) Keep flames and sparks away



from batteries. Battery explosion and Ignited gases can cause injury.

## Battery Chargers, Testers (AVR), **Portable Booster Packs**

Do not overcharge battery.



#### WARNING



· Batteries produce explosive gases and can explode Wear safety shield. (User and bystanders)



Keep flames and sparks away from batteries.



. Sparks occur when connecting or disconnecting leads while charger is ON



Charger must be OFF when connecting or disconnecting leads.

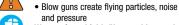
Do not allow leads on Booster Packs to contact each other.

Battery explosion or ignited gases can cause injury.

#### **Blow Guns**



#### WARNING





Wear safety shield. (User and bystanders) Do not direct air at yourself or bystanders. Wear hearing protection. (User and



Keep out of reach of children. Vented:

Do not use if air supply is above 135 psig. Do not obstruct vents.

Do not use if air supply is above 30 psig. Flying particles, noise and high velocity air can cause injury.

#### **Brake Tools**



#### WARNING



· Brake cylinder hones can fly apart if used outside cylinder



Wear safety goggles. (User and bystanders) Operate only while hone is within cylinder. Flying parts can cause injury.

## **Butane Mini-Torches**



#### WARNING



· Butane can explode Store at a temerature below 120° F. Dispose of butane in accordance with regulations.



Explosion or flames can cause injury.

#### Compressors



#### WARNING



· Air from compressors may contain oil mist and other harmful materials for breathing Do not use air from this compressor as a breathing supply.

Oil and other impurities in breathing supply air can cause injury.

· Compressor systems contain air under pressure which can create a high pressure stream or ruptured vessel

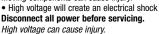


Wear safety goggles. (User and bystanders) Relieve pressure before servicing. Do not modify/repair/rework pressure vessel or change safety relief pressure setting.

A pressurized air stream or rupturing pressure vessel can cause injury. Moving components inside



Do not use without all guards in place. Moving components can cause injury.



#### **Cordless Tools**



#### WARNING



· Battery packs present a risk of fire, explosion and electric shock Charge battery pack only with charger provided.

Do not store battery packs at



temperatures above 120° F (49° C). Do not discard used batteries; return them to a Snap-on repair center for recycling. Follow all safety messages in User's manual.



Fire or explosion or electric shock can cause iniury.

## **Diagnostic Equipment**



# WARNING



 Use of diagnostic equipment on rotating engine poses risk of flying particles and entanglement Wear safety goggles.



Use caution in routing cables.



Flying particles can cause injury. Poorly routed cables and test leads can cause entanglement and injury.



• Use of diagnostic equipment can cause electrical shock, fire and explosion.



Use caution and proper procedures when connecting and disconnecting leads. Diagnostic equipment must be located 18" or more above floor level.



Avoid sparks and other sources of ignition. Electrical shock, flames and explosion can cause serious injury.



• Improper use can cause hazardous conditions Read and follow all safety precautions accompanying the product

Unexpected electrical, thermal or mechanical occurrences can cause injury.

#### **Fuel System Tools**



## WARNING



· Flammable liquid and fumes can ignite Wear safety shield. (User and by standers) Use only in well ventilated areas Flames or explosion can cause injury.



## **Geared Head Torque Multipliers** WARNING



Use of gear head torque multipliers for torque control may result in inaccurate torque application

For accurate control of torque use an Electrotork®, a Torqometer® or other measuring device located directly on the fastener.

Limited accuracy of the torque ratio of a geared head torque multiplier may cause improper preload of the fastener if it is used for torque control.

## Grinders, Grinding Wheels, **Power Tool Accessories**

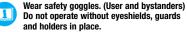
(drill bits, wire brushes, grinding burrs, abrasive wheels, grinding wheels, valve grinders, valve arinding wheels)



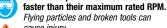
#### WARNING

· Grinding causes flying particles





Do not operate without eyeshields, guards and holders in place. Do not use power tool accessories at speeds



Flying particles and broken tools can

cause injury.

• Wire bristles can break and fly off Wear safety goggles. (User and bystanders)

Flying particles can cause injury. • Force on the side of grinding wheels or discs can break them

Do not grind on the side of a grinding wheel or disc.

Broken grinding wheel or disc can cause injury.

#### **Hammers**

(See Striking and Struck Tools)

#### **Hand Tools** Handles



# WARNING

· Handles can break if overloaded Do not use "cheater bars" on handles. Pull, do not push, on handles. Broken handle or a fall can cause injury.

Sockets, Accessories



# WARNING

· Sockets and accessories can break if used with an impact wrench

Do not use chrome or industrial finish hand tools with impact drivers.

Broken sockets or accessories can cause injury.

# Impact Wrenches



WARNING · Impact wrenches can cause breakage of sockets or accessories



Wear safety goggles. (User and bystanders Do not use hand sockets with impact wrenches.

Flying objects can cause injury.

#### **Knives**



#### WARNING





 Blades can break causing flying objects Wear safety goggles. (User and bystanders)
Do not pry or bend blade.

Keep away from children.

Sharp edges and flying objects can cause injury.

#### **Leak Detectors**



#### WARNING

explode or ignite



Do not expose fluids or fumes to flames, sparks or other sources of ignition. Wear safety goggles or safety shield. Use only in well ventilated areas.

· Gases, fluids or accumulated fumes may



Explosion or flames can cause injury. Fumes can cause breathing difficulty.

### Lift Equipment

Jacks, Jack Stands



#### WARNING



· Vehicles supported by jacks or jack stands may fall if used improperly



Do not exceed rated capacity of jack or jack stand. Do not work on vehicle supported by jack,



use jack stands; use jack stands in pairs. Use jack and jack stands only on hard level surface

Lift and support vehicle only on its designated lift points.

Failure of jack or jack stand or falling of vehicle can cause serious injury or death.

#### Lifts, Hoists



#### WARNING



 Vehicles supported on lifts or hoists may fall if lifts are improperly installed, used or maintained Do not exceed rated capacity of the lift.



Lift must support vehicle only on its designated lift points.



Lifts must be installed by qualified installer. Lifts must be inspected and maintained in accordance with User's Manual. Follow all instructions for proper use and all

safety messages in User's Manual. Failure of the lift or vehicle falling off of lift due

to use of improper lift points can cause serious injury or death.

#### Lighting



#### WARNING



· Electrical shock can result from absence of grounding prong



Do not remove or by-pass the grounding prong in any electrical plug.

Disconnect power before servicing. Electrical shock can cause injury

#### **Pliers/ Cutters**



#### WARNING



· Broken tips or cut material can fly Wear safety goggles. (User and bystanders) Flying material can cause injury.

#### **Power Tools**

(impact wrenches, ratchets, hammers, sanders, grinders)



#### WARNING



• Power tools can cause flying particles Wear safety goggles. (User and bystanders)



Flying particles can cause injury. · Power tools generate noise Wear hearing protection. (User

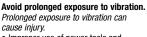


and bystanders) Prolonged exposure to noise can cause



hearing loss.

Power tools vibrate



· Improper use of power tools and accessories can cause broken tools Do not use without all guards in place. Use accessories rated at tool RPM or higher. Read and follow instructions before using power tools.

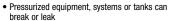
. Broken tools can cause injury.

## **Pressure Equipment** and Pressure Gauges

(all equipment using pressurized air or hydraulic fluid such as tanks, spray guns and blow guns)



#### WARNING





Do not exceed the maximum pressure rating of equipment. Wear safety goggles or shield and protective clothing appropriate to the fluid. Pressurized fluid striking the body can cause



personal injury. Flammable fluids such as gasoline, propane, etc. can ignite or explode and cause injury. · Fluids can leak or escape

Use only in well ventilated areas.



Breathing vapors or fluids from leaks can cause illness or injury.

• Pressurized air or fluid stream can propel dust



or particles Do not direct air or fluid stream at your body



Flying particles, air or fluid entering body can cause injury. · Improper use or maintenance of pressurized



equipment can cause leaks or rupture Read and follow instructions.

Leaking of pressurized equipment can cause injury.

## **Prybars**



#### WARNING

or at others.



· Prying can cause flying chips. Chipped or cracked prybars can cause flying chips



 Prybars can chip if struck Wear safety goggles. (User and bystanders)



Do not use pipe or lever extension. Do not use a prybar if chipped or cracked. Do not use a prybar as a punch or hammer. Flying chips can cause injury.

# **Pullers, Presses**



#### WARNING



· Puller or press parts under stress can break Wear safety goggles. (User and bystanders) Use the proper type and size puller or press. Screen the puller or press operation. Broken parts can cause injury.

## **Punches / Chisels** (See Striking and Struck Tools)

#### Ratchets



#### WARNING

- · Ratchet mechanism may slip or break if dirty
- · Mismatched or partially worn parts can cause ratchet to slip or break Frequently inspect, clean and lubricate

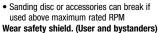
all non-sealed ratchet mechanisms with liaht oil.

Do not immerse sealed ratchet in fluids. Do not replace worn parts individually, use entire contents of the service kit. Ratchets that slip or break can cause injury.

#### Sanders



# WARNING





Do not use sanding discs or accessories above their maximum rated RPM. Do not use grinding wheels on sanders. Broken sanding disc or accessories can cause injury.



Wear hearing protection. (User and bystanders)



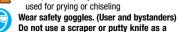
· Some dust created by sanding, grinding and drilling activities contains chemicals known to cause cancer, birth defects and other reproductive harm

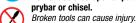
Wear dust mask or respirator.

#### **Scrapers**



#### WARNING · Scrapers and putty knives can break if





## Screwdrivers



#### WARNING

· Screwdrivers can break if used as prybar, chisel or punch Wear safety goggles. (User and bystanders)



Do not use a screwdriver as a prybar, chisel or punch. Broken screwdriver can cause injury.



· Plastic screwdriver handles do not provide electrical insulation Do not use on or near live electrical circuits.

# Electrical shock can cause injury.

Socket Usage Select the proper type of socket for the application.

- Hand Sockets All chrome plated sockets and black finished sockets identified as hand sockets are for hand use only
- · Power Sockets Sockets designed and intended for use with power nut runners; do not use with impact drivers
- Impact Sockets Sockets designed for durability when used with impact drivers: use only impact sockets with impact drivers

## Sockets, Power



#### WARNING

• Power sockets or accessories can break if used on impact drivers



Wear safety goggles. (Users and bystanders) Do not use power sockets or accessories with impact drivers.



Broken tools can cause injury.

· Flexible sockets and swivel joint tools rotate under power during use

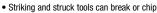
Wear safety goggles. (Users and bystanders) Do not hold flexible sockets and swivel joint tools during use.

Rotating power tools can cause injury.

### Striking and Struck Tools. Punches/Chisels



## **WARNING**





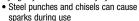
· Chipped or mushroomed punch and chisel ends or metal weakened by improper grinding can fragment

· Oversized hammer can chip the punch or chisel

Wear safety goggles. (Users and bystanders) Do not use punch or chisel having mushroomed ends; dress edges or mushroomed ends to original shape with a hand file.

Do not misuse a chisel as a punch. Hammer head diameter should be approximately 3/8" larger than head of punch or chisel.

Flying objects can cause injury.





Do not use near flammable substance. Flammable substances can ignite causing injury.

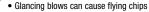
#### **Hammers**



#### **WARNING**



· Hammers can cause flying chips. Chipped, mushroomed or cracked hammers can cause flying chips





· Striking hard surface can cause flying chips

. Body hammers can chip or break if struck against hard surfaces

Wear safety goggles. (Users and bystanders) Do not use chipped, mushroomed or cracked hammers.

Strike squarely and avoid glancing blows. Do not strike other hammers or similar hard surfaces.

Use body hammers only for striking automotive type sheet metal; do not strike hard surfaces.

Flying chips can cause injury.

· Steel hammers can cause sparks during use Do not use near flammable substance.

Flammable substances can ignite causing injury.

 COMPOTHANE® or urethane hammers can. rupture or ignite if exposed to liquid oxygen

Do not use COMPOTHANE or urethane hammers near liquid oxygen.

Ruptured and/or ignited COMPOTHANE or urethane can cause injury.

## **Tire Changers**



## WARNING Tires can explode



Wear safety goggles. Do not over-pressurize tire. Read and follow all safety precautions in User's Manual



Exploding tire can cause serious injury.



## **Tool Storage Units**

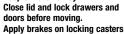
WARNING



· Storage units can tip or strike you Do not open more than one loaded drawer at a time.



Keep children away.





when not moving unit. Do not step in or on drawers. Secure units together with fasteners.



Read and follow instruction manual. Tipping of storage unit or unit striking you can cause injury. · Units edges can cut or pinch



Do not pull; push to move. Wear gloves when lifting by edges. Keep feet and fingers clear of edges when stacking, hanging or moving units. Unit edges can cause injury.

## **Torque Testers**



## WARNING · Calibration weights can cause tester and



Wear safety goggles. (Users and bystanders) Counterbalance or anchor mounting base.

Tipping base can cause injury.

## **Torque Wrenches**



## WARNING

its base to tip



• Overtorquing can cause breakage Wrench can break while breaking



fasteners loose · Force against flex stops on flex head torque wrenches can cause head breakage



· An out of calibration torque wrench can cause part or tool breakage



Wear safety goggles. (Users and bystanders)

Do not exceed rated torque. Do not use a torque wrench to break fasteners loose.

Do not force head of flex head torque wrenches against stops.

Periodic recalibration is necessary to maintain accuracy.

Broken tools can cause injury.

## Unibody and Frame Straightening Equipment



#### WARNING

· Improper usage can damage or break equipment

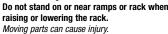


Read and follow all instructions in User's Manual. Broken parts of the frame straightener



or vehicle can cause personal injury. · Risk of entanglement





· Parts under high stress can break Do not exceed maximum capacity of lowest rated component of pull system. Broken parts can cause injury.

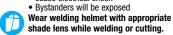
## Welders, Cutters



#### Electric, Plasma

# **DANGER**

#### · Electric welding or plasma cutting causes ultra violet rays, localized magnetic fields, sparks, weld spatter and hazardous vapors and may cause electrical shock



shade lens while welding or cutting. Wear gloves and protective clothing. Use only in well ventilated area. Do not allow bystanders in area while

welding or cutting.

Do not operate this equipment if you have an implanted electromechanical device. Never coil electrode/torch lead around your body.



Read and follow all safety precautions in instructions.

Ultra violet rays will burn eyes, magnetic field may affect operation of medical devices. Weld spatter, electrical shock or sparks can cause burns or other injuries.

#### Gas, Welding and Plasma Cutting WARNING



Welding and cutting produce heat, weld spatter and hazardous vapors

Wear face shield and protective clothing. Use only in well ventilated area. Do not allow bystanders in immediate area. Read and follow all safety precautions in instructions.

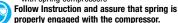
Byproducts of welding or cutting can cause burns or other bodily injuries.

## **Wheel Alignment Tools**



# WARNING

· Suspension springs can slip out of engagement with spring compressors





Wrenches

Wear safety goggles. (User and bystander) . WA92 can break or disengage from spring if

torqued over 30 lb ft Do not torque WA92 over 30 lb ft. Broken compressor or disengaged spring can

#### cause injury.



#### **WARNING**

· Excess force can cause crowfoot or flare nut wrench slippage



Do not over torque, no pipes or "cheater bars".



Use only moderate force on crowfoot and flare nut wrenches.

Broken or slipping wrenches can cause injury. · Slimline wrenches can break if overloaded

Wear safety goggles. (Users and bystanders)

Broken wrench jaw can cause injury.

· User can slip or fall if wrench breaks or fastener breaks loose

Pull, do not push, on wrench handle. Injury can occur if user loses balance

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During the applicable duration of the warranty, at its option, Snap-on will repair or replace its products which fail to give satisfactory service due to defective workmanship or materials, or provide a refund by repaying or crediting customer with an amount equal to the purchase price of such products. Repair, replacement or refund shall be at the election and expense of Snap-on, and is customer's exclusive remedy in place of all other rights and remedies. Any products or parts replaced or for which Snap-on has provided a refund are the property of Snap-on and will not be returned.

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## Snap-on Incorporated 2801 80th Street Kenosha, Wisconsin 53143

#### Your Safety Is Important To Us

Personal safety and the proper use of tools and equipment are reflected in safety statements found throughout this catalog. More safety precautions for these products are detailed on pages W1 to W4. Using the right tool and using it properly for the job it is designed for are both very important. It will help to safeguard the user as well as the tools and equipment.

## **Important Notice**

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Dimensions shown in this catalog have been rounded to the nearest fractional size or nearest tenth millimeter and are not exact product specifications. Ask your Snap-on representative for product specifications if required.

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Snap-on's Quality Management System, including merchandised product procurement, is certified to ISO 9001

#### ISO 14001/OHSAS 18001 Certified

Snap-on facilities are guided by the Snap-on Environmental, Health and Safety Management System which is certified to ISO 14001 and OHSAS 18001.

Certificated Firm

REGISTERED FIRM

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# **CONVERSION CHART**

# **Showing Millimeter Sizes, Fractional and Decimal Inch Sizes, and Drill Number Sizes**Note: To convert from inches to millimeters, multiply by 25.4; to convert from millimeters to inches, multiply by 0.03937

М	DE	F	DN	м	DE	F	DN	м	DE	F	DN	М	DE	F	DN	М	DE	F	м	DE	F
		_	DI				DIN	<u> </u>		_				-							•
0.10	0.0039		=	1.85	0.0728		49	4.25	0.1660 0.1673		19	7.25	0.2854 0.2874			13.49 13.50	0.5313	17/32	35.00 36.00	1.3780	6 <u> </u>
0.13	0.0039		=	1.90	0.0730		<del>4</del> 3	4.23	0.1693		=	7.30	0.2900		L	13.89	0.5469	35/64	36.51	1.4375	1 7/16
0.25	0.0098	_	_	_	0.0760	_	48	_	0.1695	- 1	18	7.40	0.2913	_	_	14.00	0.5512		37.00	1.4567	
0.30	0.0118	_	_	1.95	0.0768	_		4.37	0.1719	11/64			0.2950	_	М	14.29	0.5625	9/16	38.00	1.4961	
	0.0135	_	80	1.98	0.0781	5/64	_		0.1730	_	17	7.50	0.2953	<u> </u>	_	14.50	0.5709	_	38.10	1.5000	1 1/2
0.35	0.0138	_		_	0.0785	_	47	4.40	0.1732	_	_	7.54	0.2969	19/64	_	14.68	0.5781	37/64	39.00	1.5354	
0.40	0.0145	1/01	79	2.00	0.0787	_	_	4.50	0.1770	_	16	7.60	0.2992	-		15.00	0.5906	10/22	39.69	1.5625	1 9/16
0.40	0.0156	1/64		2.05	0.0807	=	46	4.50	0.1772		15	7.70	0.3020	=	N —	15.08 15.48	0.5938	19/ <sub>32</sub> 39/ <sub>64</sub>	40.00	1.5748	=
-	0.0160	_	78	_	0.0820	_	45	4.60	0.1811	_	_	7.75	0.3051		_	15.50	0.6102		41.28	1.6250	1 5/8
0.45	0.0177	_	_	2.10	0.0827	_	_	_	0.1820	_	14	7.80	0.3071	_	_	15.88	0.6250	5/8	42.00	1.6535	
	0.0180	_	77	2.15	0.0846	_		4.70	0.1850	_	13	7.90	0.3110	_	_	16.00	0.6299	_	42.86	1.6875	1 11/16
0.50	0.0197	_	_	<u> </u>	0.0860	_	44	4.75	0.1870	_ "		7.94	0.3125	5/16	_	16.27	0.6406	41/64	43.00	1.6929	<u> </u>
	0.0200	_	76	2.20	0.0866	_	_	4.76	0.1875	3/16	_	8.00	0.3150	_	_	16.50	0.6496	_	44.00	1.7323	_
<u> </u>	0.0210	_	75	2.25	0.0886	_		4.80	0.1890	_	12	-	0.3160	_	0	16.67	0.6563	21/32	44.45	1.7500	1 3/4
0.55	0.0217		74	2.20	0.0890	_	43	4.00	0.1910	_	11	8.10	0.3189	_		17.00	0.6693	13/01	45.00	1.7717	8
0.60	0.0225		74	2.30	0.0906	=	_	4.90	0.1929 0.1935		10	8.20	0.3228	=	<u> </u>	17.07 17.46	0.6719 0.6875	43/ <sub>64</sub> 11/ <sub>16</sub>	46.00 46.04	1.8110	1 13/16
-	0.0230		73	2.55	0.0925		42		0.1960		9	8.25	0.3248			17.50	0.6890	/16	47.00	1.8504	1 19/16
_	0.0250	_	72	2.38	0.0938	3/32		5.00	0.1969	_	_	8.30	0.3268	_	_	17.86	0.7031	45/64	47.63	1.8750	1 7/8
0.65	0.0256	_	-	2.40	0.0945	_		_	0.1990	_ ,	8	8.33	0.3281	21/64	_	18.00	0.7087		48.00	1.8898	_
_	0.0260	_	71		0.0960	_	41	5.10	0.2008	_	_	8.40	0.3307	_	_	18.26	0.7188	23/32	49.00	1.9291	
0.70	0.0276	_	_	2.45	0.0965	_	_	_	0.2010	_	7	_	0.3320	_	Q	18.50	0.7283	_	49.21	1.9375	1 15/16
_	0.0280	_	70		0.0980	_	40	5.16	0.2031	13/64	_	8.50	0.3346	_	_	18.65	0.7344	47/64	50.00	1.9685	
	0.0292	_	69	2.50	0.0984	_	_	_	0.2040	_	6	8.60	0.3386	_	_	19.00	0.7480	_	50.80	2.0000	2
0.75	0.0295	_		_	0.0995	_	39	5.20	0.2047	_	_	0.70	0.3390	_	R	19.05	0.7500	3/4	51.00	2.0079	_
0.79	0.0310	1/32	68	2.60	0.1015	=	38	5.25	0.2055	_	<u>5</u>	8.70 8.73	0.3425	11/32	_	19.45 19.50	0.7656 0.7677	49/64	52.00 52.39	2.0472	2 1/16
0.80	0.0315	-/32	=	2.00	0.1024		37	5.30	0.2087		=	8.75	0.3445	-1732		19.84	0.7813	25/32	53.00	2.0866	2 1/16
	0.0320	_	67	2.70	0.1063	_		-	0.2090	_	4	8.80	0.3465	_	_	20.00	0.7874	-732	53.98	2.1250	2 1/8
_	0.0330	_	66	_	0.1065	_	36	5.40	0.2126	_	_	_	0.3480	_	S	20.24	0.7969	51/64	54.00	2.1260	_
0.85	0.0335	_	_	2.75	0.1083	_	_	_	0.2130	_	3	8.90	0.3504	_		20.50	0.8071	_	55.00	2.1654	_
_	0.0350	_	65	2.78	0.1094	7/64	-	5.50	0.2165		_	9.00	0.3543	_	_	20.64	0.8125	13/16	55.56	2.1875	2 3/16
0.90	0.0354	_	_	_	0.1100	_	35	5.56	0.2188	7/32	_	-	0.3580	_	T	21.00	0.8268	-	56.00	2.2047	
	0.0360	_	64	2.80	0.1102			5.60	0.2205	-	_	9.10	0.3583	22/	_	21.03	0.8281	53/64	57.00	2.2441	- 0.1/
0.95	0.0370	_	63	_	0.1110		34	5.70	0.2210	_	2	9.13	0.3594	23/64		21.43 21.50	0.8438 0.8465	27/32	57.15 58.00	2.2500	2 1/4
0.95	0.0374	=	62	2.90	0.1130 0.1142			5.75	0.2264			9.25	0.3642	=		21.83	0.8594	55/64	58.74	2.3125	2 5/16
_	0.0390	_	61		0.1160	_	32	-	0.2280		1	9.30	0.3661	_	_	22.00	0.8661	-	59.00	2.3228	_
1.00	0.0394	_	_	3.00	0.1181	_		5.80	0.2283	_	_		0.3680	_	U	22.23	0.8750	7/8	60.00	2.3622	_
_	0.0400	_	60	i — i	0.1200	_	31	5.90	0.2323	_	_	9.40	0.3701	_	_	22.50	0.8858	_	60.33	2.3750	2 3/8
_	0.0410	_	59	3.10	0.1220	_		_	0.2340	_	Α	9.50	0.3740	_	_	22.62	0.8906	57/64	61.00	2.4016	<u> </u>
1.05	0.0413	_	_	3.18	0.1250	1/8	. —	5.95	0.2344	15/64		9.53	0.3750	3/8	_	23.00	0.9055	- ·	61.91	2.4375	2 7/16
_	0.0420	_	58	3.20	0.1260	_	_	6.00	0.2362	_	_		0.3770	_	V	23.02	0.9063	29/32	62.00	2.4409	
110	0.0430	_	57	3.25	0.1280	_		-	0.2380	_	В	9.60	0.3780	_	_	23.42	0.9219	59/64	63.00	2.4803	0.1/-
1.10	0.0433	=		3.30	0.1285	=	30	6.10	0.2402	_		9.70	0.3819		=	23.50 23.81	0.9252	15/16	63.50 64.00	2.5000 2.5197	2 1/2
1.13	0.0455		56	3.40	0.1233			6.20	0.2420		_	9.80	0.3858			24.00	0.9449		65.00	2.5591	
1.19	0.0469	3/64	_	-	0.1360	_	29	6.25	0.2460	_	D	_	0.3860	_	W	24.21	0.9531	61/64	65.09	2.5625	2 9/16
1.20	0.0472	_		3.50	0.1378	_	_	6.30	0.2480	_	_	9.90	0.3898	_	_	24.50	0.9646	_	66.00	2.5984	_
1.25	0.0492	_	<u> </u>		0.1405		28	6.35	0.2500	1/4	E	9.92	0.3906	25/64	<u> </u>	24.61	0.9688	31/32	66.68	2.6250	2 5/8
1.30	0.0512	_		3.57	0.1406	9/64	_	6.40	0.2520		_	10.00	0.3937	_	] —	25.00	0.9843	_	67.00	2.6378	
	0.0520	_	55	3.60	0.1417	_		6.50	0.2559	- 1			0.3970	_	X	25.00	0.9844	63/64	68.00	2.6772	_
1.35	0.0531	_	_	-	0.1440	_	27	_	0.2570	_	F		0.4040	10/	Υ	25.40	1.0000	. 1	68.26	2.6875	2 11/16
1.40	0.0550		54	3.70	0.1457 0.1470	_		6.60	0.2598	_	<u>—</u>	10.32	0.4063	13/32	_	26.00	1.0236	1 1/40	69.00	2.7165	23/4
1.40	0.0551	=	=	3.75	0.1476	=	26 —	6.70	0.2610		<del>-</del>	10.50	0.4130			26.99 27.00	1.0625 1.0630	1 1/16	69.85 70.00	2.7500	2 3/4
1.50	0.0571			J.73	0.1475		25	6.75	0.2656	17/64		10.72	0.4219	27/64		28.00	1.1024		71.00	2.7953	_
_	0.0595	_	53	3.80	0.1496	_	_	6.75	0.2657	_	_	11.00	0.4331	-	_	28.58	1.1250	1 1/8	71.44	2.8125	2 13/16
1.55	0.0610	_	_	_	0.1520	_	24	_	0.2660	_	Н	11.11	0.4375	7/16	_	29.00	1.1417	_	72.00	2.8346	_
1.59	0.0625	1/16	_	3.90	0.1535	_	_	6.80	0.2677	_	_	11.50	0.4528		_	30.00	1.1811	_	73.00	2.8740	_
1.60	0.0630	_	_	_	0.1540	_	23	6.90	0.2717	_	_	11.51	0.4531	29/64		30.16	1.1875	1 3/16	73.03	2.8750	2 7/8
<u> </u>	0.0635	_	52	3.97	0.1563	5/32	_	_	0.2720		L	11.91	0.4688	15/32	_	31.00	1.2205	<b>—</b>	74.00	2.9134	<u> </u>
1.65	0.0650	_	_	<u> </u>	0.1570	_	22	7.00	0.2756	_	_	12.00	0.4724		_	31.75	1.2500	1 1/4	74.61	2.9375	2 15/16
1.70	0.0669	_	<u>-</u>	4.00	0.1575	_		710	0.2770	_	J	12.30	0.4844	31/64		32.00	1.2598		75.00	2.9528	_
1.75	0.0670	_	51	=	0.1590	_	21	7.10	0.2795		<u> </u>	12.50	0.4921	1/2	_	33.00 33.34	1.2992	1 <sup>5</sup> / <sub>16</sub>	76.00	2.9921	3
1./5	0.0689	_	50	4.10	0.1610 0.1614		<u>20</u>	7.14	0.2810 0.2813	9/32		12.70 13.00	0.5000 0.5118	1/2	_	34.00	1.3125 1.3386	I 3/16	76.20	3.0000	3
1.80	0.0700	=	_	4.20	0.1654		Ξ	7.14	0.2835	- 132	_	-	0.5156	33/64	=	34.93	1.3750	1 3/8		0	
				100					mher/Lette				0.0100	1 707		000		. 70			

M = Millimeters, DE = Decimal Equivalents, F = Fractional, DN = Drill Number/Letter

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Aircraft Basic Maintenance Tool Set N024	Sioux Production Air Screwdrivers N192	Swaging Dies
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Aircraft Basic Sheet Metal Set	Wera Bitholding ScrewdriversN189	Tire Valve Core Deflating Tool
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BNDCAT1200i 7/2012 125M Printed in U.S.A.