

# **CORNWELL<sup>®</sup>** **QUALITY TOOLS**



*The Choice of Professionals<sup>®</sup>*  
*Since 1919*

# Cornwell® Quality Tools

*A Family, Employee Owned Company*



*The employee owners and authorized dealers who make and distribute Cornwell tools thank you, the professional tool user, for choosing Cornwell Quality Tools. We have been manufacturing our hard-line product since 1919. Skilled tradesmen make them one at a time right here in the U.S.A., insuring the quality you demand. You will not find tools made by Cornwell at retail outlets such as hardware or discount stores. Cornwell tools are only available through authorized Cornwell dealers. We make them solely for you - professionals who make their living using tools.*

*Our commitment is to continue to provide you with the highest quality products and the best value in the mobile tool industry. We thank you for your continued support of Cornwell Quality Tools and its independent authorized dealers who are out there every day to service you, our valued customer.*

## **The Cornwell Family of Employees, An Employee Owned Company**

### **HEADQUARTERS**

667 Seville Rd., Wadsworth, Ohio 44281  
330-336-3506  
Toll Free: 800-321-8356  
Fax: 330-336-3337

### **DISTRIBUTION CENTERS**

635 Seville Rd., Wadsworth, Ohio 44281  
330-336-3506  
Clearfield, Utah 84016-0493

### **MANUFACTURING FACILITIES**

Mogadore, Ohio and Albion, Pennsylvania

*The Choice of Professionals®*  
*Since 1919*



**Please visit our website:**

**[www.cornwelltools.com](http://www.cornwelltools.com)**

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# BODY SERVICE APPRENTICE TOOL SETS



Cornwell has designed this for the new body service technician who is looking for a basic mix of Body Service tools. This tool set consists of a variety of hand tools and automotive products, along with a Cornwell Pro Series Service Cart available in Black, Blue, Red, Orange or Yellow.

PART NO.	COMES WITH:
<b>XPBSTSBK</b>	<b>Black Pro Series Cart</b>
<b>XPBSTSBL</b>	<b>Blue Pro Series Cart</b>
<b>XPBSTSNY</b>	<b>Yellow Pro Series Cart</b>
<b>XPBSTSRD</b>	<b>Red Pro Series Cart</b>
<b>XPBSTSRG</b>	<b>Orange Pro Series Cart</b>

<b>CAT250</b>	<b>3/8" Reversible Air Drill</b>
<b>CAT250MVK6</b>	<b>3/8" Air Hammer &amp; 5 Piece Chisel Set</b>
<b>CAT315</b>	<b>Dual Piston Straight Line Sander</b>
<b>CAT317</b>	<b>High Speed Sander</b>
<b>CAT3500HD</b>	<b>3/8" Heavy Duty Air Ratchet</b>
<b>CAT600HD</b>	<b>Deluxe 6" DAQ Sander</b>
<b>CATBGK</b>	<b>4" Blow Gun Kit</b>
<b>CBSMTX34S</b>	<b>34 Piece Master Star Bit/Hex Bit Set</b>
<b>CPL109</b>	<b>5 Piece Deluxe All-Purpose Plier Set</b>
<b>CRW8MS</b>	<b>8 Piece Metric Ratcheting Box Wrench Combination Set</b>
<b>CRW8S</b>	<b>8 Piece SAE Ratcheting Box Wrench Combination Set</b>
<b>CTBMM100</b>	<b>Cornwell Pro Series Cart (Black, Blue, Red, Orange or Yellow)</b>
<b>CTG25TMA</b>	<b>1" x 25 ft. M/E Tape Measure</b>
<b>CTG7000</b>	<b>3 Piece Scraper Set</b>

<b>DEV802343</b>	<b>Auto Painting/Primer System</b>
<b>FA7BTS</b>	<b>7 pc. Body Tool Set</b>
<b>HEWPRK400</b>	<b>4T Portable Ram Kit with Case</b>
<b>JR301</b>	<b>3/8" Ratchet, Industrial Finish</b>
<b>MWSP6716RLS</b>	<b>3 pc Aviation Snips Set</b>
<b>MXCMORGL</b>	<b>CQT Original Mechanix® Gloves - Large</b>
<b>SH77085</b>	<b>Five Pound Dent Puller Set</b>
<b>SH77396</b>	<b>5" Rubber Sanding Block</b>
<b>SH77397</b>	<b>9" Vinyl Sanding Block</b>
<b>TS047SS</b>	<b>47 Piece 1/4" Drive Super Set</b>
<b>TSI242SS</b>	<b>42 Piece 3/8" Drive Super Power Set</b>
<b>UXS8500</b>	<b>Faceshield</b>
<b>VA12385</b>	<b>13 Piece Titanium Drill Bit Set</b>
<b>VG73</b>	<b>3 Piece Plier Set</b>
<b>VMDT6200</b>	<b>5 Piece Door Panel Master Set</b>
<b>ZZCSD8S</b>	<b>8 Piece Screwdriver Set</b>

# APPRENTICE TOOL SETS

Cornwell has designed this for the new automotive technician who is looking for a basic mix of hand tools. This tool set consists of a variety of hand tools and automotive products, along with a Cornwell Pro Series Service Cart available in Black, Blue, Red, Orange or Yellow.

PART NO.	COMES WITH:
<b>XPLMASBK</b>	<b>Black Pro Series Cart</b>
<b>XPLMASBL</b>	<b>Blue Pro Series Cart</b>
<b>XPLMASNY</b>	<b>Yellow Pro Series Cart</b>
<b>XPLMASRD</b>	<b>Red Pro Series Cart</b>
<b>XPLMASRG</b>	<b>Orange Pro Series Cart</b>



<b>CAT250</b>	<b>3/8" Reversible Air Drill</b>
<b>CAT250ARR</b>	<b>1/4" Standard Duty Air Ratchet</b>
<b>CAT350</b>	<b>1/2" Twin Hammer Impact Wrench</b>
<b>CAT351HD</b>	<b>3/8" Impact Wrench</b>
<b>CAT5000HD</b>	<b>3/8" Super Heavy Duty Air Ratchet</b>
<b>CBSMTX34S</b>	<b>34 Piece Master Star Bit/Hex Bit Set</b>
<b>CS5ST</b>	<b>5 Piece Carbon Scraper Set</b>
<b>CTBMM100</b>	<b>Pro Series Cart (Black, Blue, Red, Orange or Yellow)</b>
<b>EB236ST</b>	<b>6 Piece 3/8" and 1/2" Industrial Finish Extension Set</b>
<b>HF327</b>	<b>1/2" x 27" Flex Breaker Bar</b>
<b>JR72</b>	<b>3/8" Fine Tooth Ratchet</b>
<b>PBH4CST</b>	<b>4 Piece Handle Pry Bar Set</b>
<b>SR50</b>	<b>1/2" Ratchet</b>
<b>STI329LMS</b>	<b>9 Piece 1/2" Deep Power Socket Set, 6 point</b>
<b>STLN3ST</b>	<b>3 Piece Lug Nut Set</b>
<b>TE27</b>	<b>Heavy Duty 6 &amp; 12V Circuit Tester</b>
<b>TS047SS</b>	<b>47 Piece 1/4" Drive Super Set</b>
<b>TSI242SS</b>	<b>42 Piece 3/8" Drive Super Power Set</b>
<b>VA12385</b>	<b>13 Piece Titanium Drill Bit Set</b>
<b>VG73</b>	<b>3 Piece Plier Set</b>
<b>VMDT6200</b>	<b>5 Piece Door Panel Master Set</b>
<b>WCM110STSS</b>	<b>10 Piece Full Polish Long Metric Combination Wrench Set, 12 point</b>
<b>ZZCCL4S</b>	<b>4 Piece Cornwell Plier Set</b>
<b>ZZCSD8S</b>	<b>Cornwell 8 Piece Screwdriver Set</b>
<b>ZZVB3TCS</b>	<b>3 Piece Ball Pein Hammer Set</b>

# 112" CUSTOM TOOL STORAGE FEATURES:

- Hemmed edges on drawers.
- Additional metal stiffeners on full width drawers.
- Wide color selection.
- Eight spring-loaded heavy duty casters.
- Extruded trim and decorative trim caps.
- All corner trim assembled with countersunk screws.
- Flush-mounted lock and small key size with Cornwell logo.
- All high chrome handles.
- Stainless steel work surface on cabinet top.
- Solid 4MM thick tacky non-slip drawer liners.

**ALL 112" UNITS ARE DROP SHIP ONLY!**


PART NO.	DESCRIPTION	All Storage Systems in a color of your choice consist of: 1 CTB112B 1 CTB84C 1 CTB112TS
<b>CTB112SSBK</b>	<b>Black Storage System</b>	
<b>CTB112SSBL</b>	<b>Blue Storage System</b>	
<b>CTB112SSBR</b>	<b>Burgundy Storage System</b>	
<b>CTB112SSRD</b>	<b>Red Storage System</b>	
<b>CTB112SSRG</b>	<b>Orange Storage System</b>	

PART NO.	DESCRIPTION
<b>CTB84CBK</b>	<b>Black Canopy</b>
<b>CTB84CBL</b>	<b>Blue Canopy</b>
<b>CTB84CBR</b>	<b>Burgundy Canopy</b>
<b>CTB84CRD</b>	<b>Red Canopy</b>
<b>CTB84CRG</b>	<b>Orange Canopy</b>

UNIT DIMENSIONS			
	WIDTH	DEPTH	HEIGHT
Unit Overall	84.360"	30.300"	24.620"
Overall Capacity:	36.42 cu. ft.		
Weight:	276 lbs.		

PART NO.	DESCRIPTION
<b>CTB112TSBK</b>	<b>Black Top Side</b>
<b>CTB112TSBL</b>	<b>Blue Top Side</b>
<b>CTB112TSBR</b>	<b>Burgundy Top Side</b>
<b>CTB112TSRD</b>	<b>Red Top Side</b>
<b>CTB112TSRG</b>	<b>Orange Top Side</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT
Unit Overall	28.34"	30.30"	25.87"
1 Drawer	23.23"	27.36"	1.77"
3 Drawers	23.23"	27.36"	2.59"
1 Drawer	23.23"	27.36"	5.83"
Overall Capacity:	3,184 sq. in./ 9,012 cu. in.		



**WARNING!**  
 Storage unit can tip during loaded conditions.  
 Do not open more than one drawer at a time.  
 Do not use drawer as a step ladder.  
 Close lid and lock all drawers and doors before moving.  
 Lock all casters to prevent rolling.

# 112" CUSTOM TOOL STORAGE SERIES

Apprentice Sets  
& Tool Boxes

PART NO.	DESCRIPTION
<b>CTB112BBK</b>	<b>Black Cabinet</b>
<b>CTB112BBL</b>	<b>Blue Cabinet</b>
<b>CTB112BBR</b>	<b>Burgundy Cabinet</b>
<b>CTB112BRD</b>	<b>Red Cabinet</b>
<b>CTB112BRG</b>	<b>Orange Cabinet</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT w/CASTERS
Unit Overall	112.41"	30.30"	46.90"
Left Bank:			
1 Drawer	23.23"	27.36"	4.75"
3 Drawers	23.23"	27.36"	1.77"
3 Drawers	23.23"	27.36"	2.59"
1 Drawer	23.23"	27.36"	8.81"
Center Bank:			
1 Drawer	51.23"	27.36"	4.75"
3 Drawers	51.23"	27.36"	1.77"
4 Drawers	51.23"	27.36"	2.59"
1 Drawer	51.23"	27.36"	5.83"
Right Bank:			
1 Drawer	23.23"	27.36"	4.75"
3 Drawers	23.23"	27.36"	1.77"
4 Drawers	23.23"	27.36"	2.59"
1 Drawer	23.23"	27.36"	5.83"
Overall Capacity: ..... 23,448 sq. in./ 65,235 cu. in.			
Ship Weight: ..... 1585 lbs.			



[CTB112SSRG shown]

The printed color may differ from the actual color due to variations in the printing process

# 84" CUSTOM TOOL STORAGE FEATURES:

- Hemmed edges on drawers.
- Additional metal stiffeners on full width drawers.
- Wide color selection.
- Six spring-loaded heavy duty casters.
- Extruded trim and decorative trim caps.
- All corner trim assembled with countersunk screws.
- Center post has Cornwell logo treatment.
- Flush-mounted lock and small key size with Cornwell logo.
- All high chrome handles.
- Stainless steel work surface on cabinet top.
- Solid 4MM thick tacky non-slip drawer liners.

PART NO.	DESCRIPTION
<b>CTB84CBK</b>	<b>Black Canopy</b>
<b>CTB84CBL</b>	<b>Blue Canopy</b>
<b>CTB84CBR</b>	<b>Burgundy Canopy</b>
<b>CTB84CRD</b>	<b>Red Canopy</b>
<b>CTB84CRG</b>	<b>Orange Canopy</b>

UNIT DIMENSIONS			
	WIDTH	DEPTH	HEIGHT
Unit Overall	84.360"	30.300"	24.620"
Overall Capacity: ..... 36.42 cu. ft.			
Weight: ..... 276 lbs.			

PART NO.	DESCRIPTION
<b>CTB6784LBK</b>	<b>Black Locker</b>
<b>CTB6784LBL</b>	<b>Blue Locker</b>
<b>CTB6784LBR</b>	<b>Burgundy Locker</b>
<b>CTB6784LRD</b>	<b>Red Locker</b>
<b>CTB6784LRG</b>	<b>Orange Locker</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT
Unit Overall	24.08"	30.30"	62.82"
1 Shelf	20.40"	27.20"	-
4 Inside Drawers	18.91"	27.36"	3.67"
Overall Capacity: ..... 2,645 sq. in./28,908 cu. in.			
Unit/Ship Weight: ..... 293/338 lbs.			

PART NO.	DESCRIPTION
<b>CTB6784SBK</b>	<b>Black Side</b>
<b>CTB6784SBL</b>	<b>Blue Side</b>
<b>CTB6784SBR</b>	<b>Burgundy Side</b>
<b>CTB6784SRD</b>	<b>Red Side</b>
<b>CTB6784SRG</b>	<b>Orange Side</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT
Unit Overall	19.48"	30.30"	38.96"
1 Drawer	14.31"	27.36"	4.75"
3 Drawers	14.31"	27.36"	1.77"
3 Drawers	14.31"	27.36"	2.59"
1 Drawer	14.31"	27.36"	8.81"
Overall Capacity: ..... 3,132 sq. in./ 9,816 cu. in.			
Unit/Ship Weight: ..... 294/324 lbs.			




# 84" CUSTOM TOOL STORAGE SERIES

Apprentice Sets  
& Tool Boxes

PART NO.	DESCRIPTION
<b>CTB8421BBK</b>	<b>Black Cabinet</b>
<b>CTB8421BBL</b>	<b>Blue Cabinet</b>
<b>CTB8421BBR</b>	<b>Burgundy Cabinet</b>
<b>CTB8421BRD</b>	<b>Red Cabinet</b>
<b>CTB8421BRG</b>	<b>Orange Cabinet</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT w/CASTERS
Unit Overall	84.36"	30.30"	46.90"
Spans across Left Bank to Center Bank:			
1 Drawer	51.23"	27.36"	4.75"
1 Drawer	51.23"	27.36"	2.59"
Left Bank:			
1 Drawer	23.23"	27.36"	1.77"
1 Drawer	23.23"	27.36"	3.42"
3 Drawers	23.23"	27.36"	2.59"
1 Drawer	23.23"	27.36"	5.83"
Center Bank:			
1 Drawer	23.23"	27.36"	1.77"
1 Drawer	23.23"	27.36"	3.42"
3 Drawers	23.23"	27.36"	2.59"
1 Drawer	23.23"	27.36"	5.83"
Right Bank:			
1 Drawer	23.23"	27.36"	4.75"
1 Drawer	23.23"	27.36"	2.59"
1 Drawer	23.23"	27.36"	1.77"
1 Drawer	23.23"	27.36"	3.42"
2 Drawers	23.23"	27.36"	2.59"
1 Drawer	23.23"	27.36"	8.81"
Overall Capacity: ..... 14,905 sq. in./48,077 cu. in.			
Unit/Ship Weight: ..... 1247/1347 lbs.			

**WARNING!**  

 Storage unit can tip during loaded conditions.  
 Do not open more than one drawer at a time.  
 Do not use drawer as a step ladder.  
 Close lid and lock all drawers and doors before moving.  
 Lock all casters to prevent rolling.

[CTB6784SBL, CTB6784LBL, CTB84CBL and CTB8421BBL shown]



The printed color may differ from the actual color due to variations in the printing process

# 67" CUSTOM TOOL STORAGE FEATURES:

- Hemmed edges on drawers.
- Additional metal stiffeners on full width drawers.
- Wide color selection.
- Four spring-loaded heavy duty casters.
- Extruded trim and decorative trim caps.
- All corner trim assembled with countersunk screws.
- Center post has Cornwell logo treatment.
- Flush-mounted lock and small key size with Cornwell logo.
- All high chrome handles.
- Stainless steel work surface on cabinet top.
- Solid 4MM thick tacky non-slip drawer liners.

PART NO.	DESCRIPTION
<b>CTB67CBK</b>	<b>Black Canopy</b>
<b>CTB67CBL</b>	<b>Blue Canopy</b>
<b>CTB67CBR</b>	<b>Burgundy Canopy</b>
<b>CTB67CRD</b>	<b>Red Canopy</b>
<b>CTB67CRG</b>	<b>Orange Canopy</b>

UNIT DIMENSIONS			
	WIDTH	DEPTH	HEIGHT
Unit Overall	67.440"	30.300"	24.620"
Overall Capacity:	29.11 cu. ft.		
Weight:	135 lbs.		

PART NO.	DESCRIPTION
<b>CTB6784LBK</b>	<b>Black Locker</b>
<b>CTB6784LBL</b>	<b>Blue Locker</b>
<b>CTB6784LBR</b>	<b>Burgundy Locker</b>
<b>CTB6784LRD</b>	<b>Red Locker</b>
<b>CTB6784LRG</b>	<b>Orange Locker</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT
Unit Overall	24.08"	30.30"	62.82"
1 Shelf	20.40"	27.20"	-
4 Inside Drawers	18.91"	27.36"	3.67"
Overall Capacity:	2,645 sq. in./28,908 cu. in.		
Unit/Ship Weight:	293 /338 lbs.		

PART NO.	DESCRIPTION
<b>CTB6784SBK</b>	<b>Black Side</b>
<b>CTB6784SBL</b>	<b>Blue Side</b>
<b>CTB6784SBR</b>	<b>Burgundy Side</b>
<b>CTB6784SRD</b>	<b>Red Side</b>
<b>CTB6784SRG</b>	<b>Orange Side</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT
Unit Overall	19.48"	30.30"	38.96"
1 Drawer	14.31"	27.36"	4.75"
3 Drawers	14.31"	27.36"	1.77"
3 Drawers	14.31"	27.36"	2.59"
1 Drawer	14.31"	27.36"	8.81"
Overall Capacity:	3,132 sq. in./9,816 cu. in.		
Unit/Ship Weight:	294/324 lbs.		

PART NO.	DESCRIPTION
<b>CTB67TBK</b>	<b>Black Chest</b>
<b>CTB67TBL</b>	<b>Blue Chest</b>
<b>CTB67TBR</b>	<b>Burgundy Chest</b>
<b>CTB67TRD</b>	<b>Red Chest</b>
<b>CTB67TRG</b>	<b>Orange Chest</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT
Unit Overall	67.44"	30.30"	25.87"
Left Bank:			
4 Drawers	34.31"	27.36"	1.77"
3 Drawers	34.31"	27.36"	2.59"
Right Bank:			
4 Drawers	23.23"	27.36"	1.77"
1 Drawer	23.23"	27.36"	2.59"
1 Drawer	23.23"	27.36"	5.83"
Overall Capacity:	10,395 sq. in./21,619 cu. in.		
Unit/Ship Weight:	586/654 lbs.		

# 67" CUSTOM TOOL STORAGE SERIES

Apprentice Sets  
& Tool Boxes

PART NO.	DESCRIPTION
<b>CTB6712BBK</b>	<b>Black Cabinet</b>
<b>CTB6712BBL</b>	<b>Blue Cabinet</b>
<b>CTB6712BBR</b>	<b>Burgundy Cabinet</b>
<b>CTB6712BRD</b>	<b>Red Cabinet</b>
<b>CTB6712BRG</b>	<b>Orange Cabinet</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT w/CASTERS
Unit Overall	67.74"	30.30"	46.90"
Full Width Top Drawers:			
1 Drawer	62.27"	27.36"	4.75"
1 Drawer	62.27"	27.36"	2.59"
Left Bank:			
5 Drawers	34.31"	27.36"	2.59"
1 Drawer	34.31"	27.36"	5.83"
Right Bank:			
2 Drawers	23.23"	27.36"	2.59"
1 Drawer	23.23"	27.36"	5.83"
1 Drawer	23.23"	27.36"	8.81"
Overall Capacity: ..... 11,592 sq. in./39,941 cu. in.			
Unit/Ship Weight: ..... 750 /848 lbs.			



**WARNING!**

*Storage unit can tip during loaded conditions. Do not open more than one drawer at a time. Do not use drawer as a step ladder. Close lid and lock all drawers and doors before moving. Lock all casters to prevent rolling.*



[CTB67TBK shown]


The printed color may differ from the actual color due to variations in the printing process



[CTB6784SBK, CTB6784LBK, CTB67CBK and CTB6712BBK shown]

# 58" CUSTOM TOOL STORAGE FEATURES:

- Hemmed edges on drawers.
- Additional metal stiffeners on full width drawers.
- Wide color selection.
- Extruded trim and decorative trim caps.
- All corner trim assembled with countersunk screws.
- Center post has Cornwell logo treatment.
- Flush-mounted lock and small key size with Cornwell logo.
- All high chrome handles.
- Stainless steel work surface on cabinet top.
- Solid 4MM thick tacky non-slip drawer liners.



**WARNING!**  
 Storage unit can tip during loaded conditions.  
 Do not open more than one drawer at a time.  
 Do not use drawer as a step ladder.  
 Close lid and lock all drawers and doors before moving.  
 Lock all casters to prevent rolling.

PART NO.	DESCRIPTION
<b>CTB58CBK</b>	<b>Black Canopy</b>
<b>CTB58CBL</b>	<b>Blue Canopy</b>
<b>CTB58CBR</b>	<b>Burgundy Canopy</b>
<b>CTB58CRD</b>	<b>Red Canopy</b>
<b>CTB58CRG</b>	<b>Orange Canopy</b>

UNIT DIMENSIONS			
	WIDTH	DEPTH	HEIGHT
Unit Overall	58.480"	24.300"	24.620"
Overall Capacity:	..... 20.25 cu. ft.		
Unit/Ship Weight:	..... 174/227 lbs.		

PART NO.	DESCRIPTION
<b>CTB58LBK</b>	<b>Black Locker</b>
<b>CTB58LBL</b>	<b>Blue Locker</b>
<b>CTB58LBR</b>	<b>Burgundy Locker</b>
<b>CTB58LRD</b>	<b>Red Locker</b>
<b>CTB58LRG</b>	<b>Orange Locker</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT
Unit Overall	24.08"	24.30"	58.50"
1 Shelf	20.40"	21.20"	-
3 Inside Drawers	18.91"	21.36"	3.67"
Overall Capacity:	..... 1,679 sq. in./21,962 cu. in.		
Unit/Ship Weight:	..... 225/260 lbs.		

PART NO.	DESCRIPTION
<b>CTB58SBK</b>	<b>Black Side</b>
<b>CTB58SBL</b>	<b>Blue Side</b>
<b>CTB58SBR</b>	<b>Burgundy Side</b>
<b>CTB58SRD</b>	<b>Red Side</b>
<b>CTB58SRG</b>	<b>Orange Side</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT
Unit Overall	19.48"	24.30"	34.64"
1 Drawer	14.31"	21.36"	4.75"
1 Drawer	14.31"	21.36"	1.77"
3 Drawers	14.31"	21.36"	2.59"
1 Drawer	14.31"	21.36"	8.81"
Overall Capacity:	..... 1,834 sq. in./6,693 cu. in.		
Unit/Ship Weight:	..... 212/237 lbs.		

# 58" CUSTOM TOOL STORAGE SERIES

Apprentice Sets  
& Tool Boxes

PART NO.	DESCRIPTION
<b>CTB58TBK</b>	<b>Black Chest</b>
<b>CTB58TBL</b>	<b>Blue Chest</b>
<b>CTB58TBR</b>	<b>Burgundy Chest</b>
<b>CTB58TRD</b>	<b>Red Chest</b>
<b>CTB58TRG</b>	<b>Orange Chest</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT
Unit Overall	58.48"	24.30"	25.87"
Left Bank:			
4 Drawers	34.31"	21.36"	1.77"
3 Drawers	34.31"	21.36"	2.59"
Right Bank:			
4 Drawers	14.31"	21.36"	1.77"
1 Drawer	14.31"	21.36"	2.59"
1 Drawer	14.31"	21.36"	5.83"
Overall Capacity: ..... 6,968 sq. in./14,150 cu. in.			
Unit/Ship Weight: ..... 401/451 lbs.			

PART NO.	DESCRIPTION
<b>CTB58BBK</b>	<b>Black Cabinet</b>
<b>CTB58BBL</b>	<b>Blue Cabinet</b>
<b>CTB58BBR</b>	<b>Burgundy Cabinet</b>
<b>CTB58BRD</b>	<b>Red Cabinet</b>
<b>CTB58BRG</b>	<b>Orange Cabinet</b>

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT w/CASTERS
Unit Overall	58.48"	24.30"	41.58"
Full Width Drawers:			
1 Drawer	53.31"	21.36"	4.75"
1 Drawer	53.31"	21.36"	2.59"
Left Bank:			
1 Drawer	34.31"	21.36"	1.77"
3 Drawers	34.31"	21.36"	2.59"
1 Drawer	34.31"	21.36"	5.83"
Right Bank:			
1 Drawer	14.31"	21.36"	1.77"
2 Drawers	14.31"	21.36"	2.59"
1 Drawer	14.31"	21.36"	8.81"
Overall Capacity: ..... 7,169 sq. in./22,764 cu. in.			
Unit/Ship Weight: ..... 589/664 lbs.			



[CTB58TRD shown]



[CTB58CRD, CTB58BRD, CTB58LRD, and CTB58SRD shown]

The printed color may differ from the actual color due to variations in the printing process


# 800 SERIES

PART NO.	DESCRIPTION
<b>CTBMM800BK</b>	<b>Black Mobile Work Center</b>
<b>CTBMM800BL</b>	<b>Blue Mobile Work Center</b>
<b>CTBMM800RD</b>	<b>Red Mobile Work Center</b>
<b>CTBMM800RG</b>	<b>Orange Mobile Work Center</b>

- Heavy-duty welded roll-cage construction, factory assembled. 18 gauge drawer and cabinet shell with 14 gauge top and bottom stiffeners.
- Same height as 67", 84" and 112" Cornwell Custom cabinets. Simply roll the Mobile Work Center next to a tool cabinet for an expanded work surface and a clean line of tool storage.
- Rivals the capacity of a tool cabinet.
- Provides your customers with a ton of tool storage options.
  - 1,950 lb. unit load rating:
  - Lid .....150 lbs.
  - Top tray .....200 lbs.
  - 3" drawers.....200 lbs. each
  - 9" drawer .....400 lbs.
- 6" Deep Locking Top Tray includes secure screwdriver and pry bar storage.
  - Designed to hold a wide variety of pry bar sizes and shapes.
- Built with standard Cornwell Custom drawers and heavy-duty drawer slides.
  - Seven full-width drawers with Cornwell exclusive TLC latching system.
  - Six 3" drawers include full-extension 200 lb. ball bearing slides.
  - 9" bottom drawer has double slides to hold twice the weight.
  - No visible exterior slide lances for increased security and improved appearance.
  - 2 inch "on center" slides maximize drawer configuration options.
- High-strength locking system.
  - Lever lock inside top tray secures drawers.
  - Keyed lid lock includes tubular over-molded key with Cornwell logo.
- Polished cushion-grip handle.
  - Fully assembled for easy attachment to either side of the work center.
- Two Rigid and Two Swivel casters with side brakes.
  - Crowned 6" polyurethane wheels.
  - Load rating over 800 lbs. per caster.
  - Casters meet ICWM (Institute of Caster and Wheel Manufacturers) requirements.
- 15 Gauge stainless steel lid with stiffener doubles as a heavy-duty work surface.
  - Gas struts provide easy opening and closing.
- Heavy-duty embossed drawer and tray liners.



UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT w/o CASTERS
Unit Overall	44.00"	26.00"	47.00"
Locking Top Tray	42.18"	24.25"	6.00"
6 drawers	34.31"	21.36"	2.59"
1 drawer	34.31"	21.36"	9.00"
Overall Capacity: .....	6,055 sq. in., 22,030 cu. in.		
Unit/Ship Weight: .....	375/407 lbs.		

**WARNING!**  

 Close lid and lock all drawers and doors before moving. Lock all casters to prevent rolling.

# 700 SERIES

# 100 SERIES

PART NO.	DESCRIPTION
<b>CTBMM700BK</b>	<b>Black Pro Series Cart</b>
<b>CTBMM700BL</b>	<b>Blue Pro Series Cart</b>
<b>CTBMM700NY</b>	<b>Yellow Pro Series Cart</b>
<b>CTBMM700RD</b>	<b>Red Pro Series Cart</b>
<b>CTBMM700RG</b>	<b>Orange Pro Series Cart</b>

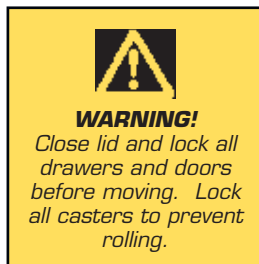
PART NO.	DESCRIPTION
<b>CTBMM100BK</b>	<b>Black Pro Series Cart</b>
<b>CTBMM100BL</b>	<b>Blue Pro Series Cart</b>
<b>CTBMM100NY</b>	<b>Yellow Pro Series Cart</b>
<b>CTBMM100RD</b>	<b>Red Pro Series Cart</b>
<b>CTBMM100RG</b>	<b>Orange Pro Series Cart</b>

- 4 bumpers that help prevent dents and dings.
- Four 5" x 2" casters, 2 locking and 2 non-locking.
- Full extension roller bearing slides.
- Bottom drawer has heavy duty slides (150 lb. capacity).
- Exclusive push handle.
- 2 gas pistons that serve as a lid stay and raise the cart lid when unlocked.
- Load Capacity: 700 lbs.

- 4 bumpers that help prevent dents and dings.
- Four 5" x 2" casters, 2 locking and 2 non-locking.
- Full extension roller bearing slides.
- Exclusive push handle.
- 2 gas pistons that serve as a lid stay and raise the cart lid when unlocked.
- Load Capacity: 500 lbs.

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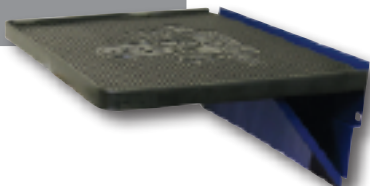
The printed color may differ from the actual color due to variations in the printing process



UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT w/o CASTERS
Unit Overall	38.50"	20.00"	37.375"
Top Tray, Prybar area left and right	33.50"	19.875"	6.50"
1 drawer	29.50"	18.50"	2.75"
3 drawers	29.50"	18.50"	3.25"
2 drawers	29.50"	18.50"	3.50"
1 drawer	29.50"	18.50"	5.75"
Overall Capacity:			18,108 cu. in.
Unit/Ship Weight:			286/341 lbs.

UNIT AND DRAWER DIMENSIONS			
DRAWERS REQUIRED	WIDTH	DEPTH	HEIGHT w/o CASTERS
Unit Overall	38.50"	20.00"	33.75"
Top Tray, Prybar area left and right	33.50"	19.875"	6.50"
2 drawers	13.25"	18.50"	3.00"
1 drawer	28.375"	18.50"	3.00"
1 drawer	28.375"	18.50"	5.00"
Bottom tray:	33.625"	19.875"	3.00"
Overall Capacity:			9,998 cu. in.
Unit/Ship Weight:			178/218 lbs.

## Pro Series Service Cart Side Shelves



- For use with CTBMM100 and CTBMM700 pro series service carts.
- Tray has rubber work surface stamped with Cornwell Logo.
- Dimensions: 19-1/4" x 14-1/4".
- Load Capacity: 40 lbs.
- Available in Black, Blue, Red, Orange and Yellow.

PART NO.	COLOR	PART NO.	COLOR
CTBMMSSBK	Black	CTBMMSSRG	Orange
CTBMMSSBL	Blue	CTBMMSSNY	Yellow
CTBMMSSRD	Red		

## Service Carts

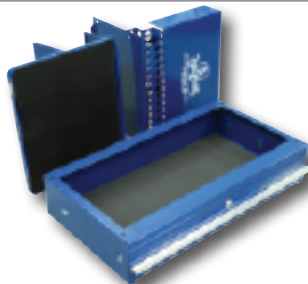
- Dimensions: 16"W x 30L" x 35-5/16"H.
- Cart features chrome legs and locking lids.
- 4" wheels - two locking and two non-locking.
- Load capacity: 350 pounds.
- Available in three colors: black, blue and red.



PART NO.	DESCRIPTION
<b>CTB360BK</b>	Service Cart - Black
<b>CTB360BL</b>	Service Cart - Blue
<b>CTB360RD</b>	Service Cart - Red

## Accessory Kits for CTB360 Series Carts

- Designed for use with CTB360 series carts.
- Available in three colors: black, blue and red.
- Accessory kits include: Side Shelf: 16" deep x 14" wide; Long Tool Holder: 16" x 18-1/2" x 3-7/8" featuring various hole sizes to handle up to 26 items; and Add-On Drawer: 15-3/4" x 28" x 5-3/4" that mounts under top portion of service cart.



[CTB360AKBL shown]

PART NO.	DESCRIPTION
<b>CTB360AKBK</b>	Accessory Kit for CTB360BK
<b>CTB360AKBL</b>	Accessory Kit for CTB360BL
<b>CTB360AKRD</b>	Accessory Kit for CTB360RD

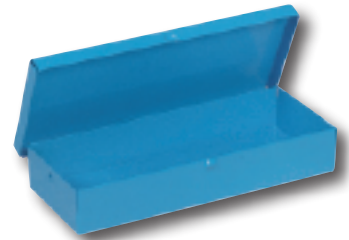
## FB7242 Parts Box

- Features 15 removable dividers to allow compartment sizes to be customized to meet specific storage needs from 9 to 24 compartments.
- Color: Grey with a clear lid.
- Overall dimensions: 15" x 11-3/4" x 2-1/2".



## BX04 Utility Tool Box

- Compact heavy-duty steel box.
- Excellent for storing compression testers, vacuum testers and other similar items.
- Dimensions: 8"W x 6-1/2"D x 1-3/4"H.



## MPTTB Pocket Tool Bag

- Constructed of water resistant, double layered, durable nylon.
- Total of 22 pockets - 12 multipurpose pockets inside, 10 outside pockets for carrying a variety of tools and accessories.
- Reinforced wire rim holds bag open for easy access.
- Heavy duty zipper; padded hollow PE tube handles, and 1-1/2" wide adjustable shoulder strap.
- Reinforced bottom panel.
- Dimensions: 15-1/2"L x 8-1/2"W x 12"H.



## CTBLTBA XL Tote Bag with Handle

- Curved steel handle provides easier access.
- Padded handle for comfort.
- Removable and adjustable shoulder strap.
- 600D material.
- Pockets on inside and outside.
- Embroidered with Cornwell® logo on outside.
- Inside length: 17".
- Overall length: 20".
- Width: 8-1/2".



## LS49960 Locking Air Tool Holder

- Organize air tools with this lockable tool holder.
- Tool can hold up to five pneumatic tools in a 10" space.
- Comes with five slots that fit all popular quick connect fittings from Milton, Lincoln, Amflo and others.
- Can be mounted on a tool box, cart or wall for easy access.
- Locking feature protects your air tools from theft (lock not included).
- Durable powder-coated finish.





**Magnetic Parts Trays**



- Keep small parts, hardware and small tools close at hand.
- Heavy duty rubber covered magnets will not scratch metal.
- Fully magnetized to hold metal fasteners, etc.
- Use in any position - right side up or upside down.
- Stainless steel.

PART NO.	SHAPE	SIZE
MPT1	Round	6" Diameter
MPT2	Rectangular	9-1/2"L x 5-1/2"W x 1-3/4"D
MPT3	Triple Rectangular	13"L x 6"W x 1-3/4"D
MPT4	Quad Square	11-1/2"L x 10-3/4"W x 1"D

**Gripper Wrench Organizers**

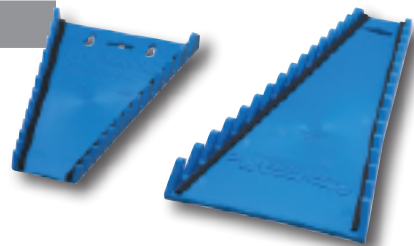
- Flexible blue material holds tools securely for travel.
- Space saver folding handle.
- Mounts easily on a wall.



PART NO.	DESCRIPTION
WRK10S	10 pc. Stubby Wr. Organizer
WRK15	15 pc. Wrench Organizer

**Wrench Holders**

- Professional way to organize wrenches.
- Blue plastic.



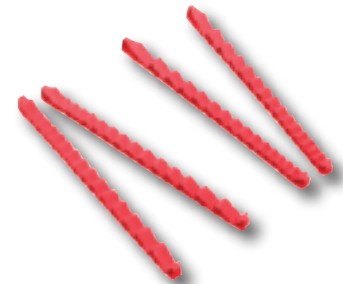
PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
PRWRP12	12 piece	PRWRP112	12 piece, inverted
PRWRP15	15 piece	PRWRP115	15 piece, inverted

**TP76W  
Wrench Organizer**



- Organizes 76 wrenches: 29 Combination wrenches (1/4" to 1" and 6MM to 20MM); 24 Allen wrenches; 20 miniature wrenches; and 3 flare nut wrenches.
- Outer dimensions: 16" x 22".
- Base can be modified to fit any smaller tool chest.
- Made of a durable plastic material.

**WRK6050  
Low Profile Wrench  
Organizers**



- Shake any toolbox but these no-slip rails won't move an inch!
- Perfect fit for all drawers, even the most shallow.
- All wrenches can face forward in a uniform row for easy identification of sizes and any missing tools.
- Comes with two forward and two reverse configuration rails to maximize usage of drawer space.
- Dimensions: 15.7"L x 3/4"H.

**Socket Rack Tray**



- 18" x 6" metal frame with 4 rails and clips.
- Includes a total of 80 clips: (20) 1/4", (30) 3/8", (30) 1/2".
- Holds a wide range of sockets.
- Convenient carrying handle.
- Clips can be arranged as desired.

PART NO.	DESCRIPTION
CTG444	Socket Rack Tray - Blue
CTG444R	Socket Rack Tray - Red

**MSLSTRAY  
Lock-A-Socket Tray**



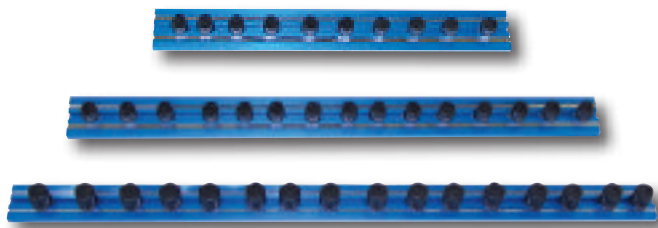
- Tray uses the same concept as the popular Lock-A-Socket; to lock the socket, just turn right 90°, to unlock, simply turn left 90°.
- Allows a variety of drive sizes on one tray.
- Posts are interchangeable for customization and also available separately.
- Rubber pegs are located underneath for surface grip and protection.
- Swivel handles are included for easy carrying.
- Made from 16 gauge powder coated steel for extra strength.
- Dimensions: 20" L x 8-3/4" D.
- Tray consists of: two rows of 14 locking posts for 1/2" drive sockets, two rows of 14 locking posts for 3/8" drive sockets, and one row of 20 locking posts for 1/4" drive sockets.



**WARNING!**

Use approved eye protection when using tools. Always use the right tool for the job. Always use tools correctly. Always discard damaged tools. Clean and lubricate tools periodically. Wear safety goggles while using power tools and while working with pressurized systems. Read operating instructions thoroughly on tools and equipment before use.

## Magrail TL Tool Organization Systems



- Tools are easily removed with a slight tilt and lift.
- Magnetic rail can be customized with interchangeable socket pegs.
- Each socket peg is mounted on a threaded stud and is adjustable to user's preference and drive size.
- Low profile anodized aluminum base is 3/16" tall x 1" wide.
- Strong Neodymium magnets hold sockets to the rail and attach to any metal surface; even work through drawer liners.
- Backside is magnetized to eliminate toolbox slide.
- Will hold fully loaded socket rails.

PART NO.	DESCRIPTION
VMMR8B14A	1/4" Magrail TL 8"
VMMR12B15B	3/8" Magrail TL 12"
VMMR16B16C	1/2" Magrail TL 16"

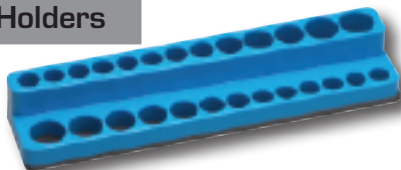
**VMMRSA** 1/4" Magrail TL Studs/T-Bolts (10)

**VMMRSB** 3/8" Magrail TL Studs/T-Bolts (10)

**VMMRSC** 1/2" Magrail TL Studs/T-Bolts (10)

## Magnetic Socket Holders

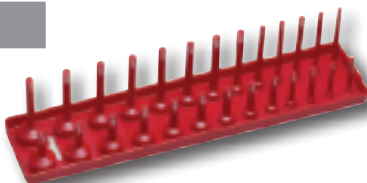
- Designed to hold metric or standard sockets, both short and deep.
- Durable non-stick plastic walls.
- Fuel and oil resistant magnetic base made of Nitrile rubber.
- Strong magnet - holds even over fender mats, strong enough to hold upside down or at an angle.
- Fits most tool boxes and drawers.



PART NO.	COLOR	HOLDS:
MS711	Neon Blue	3/8" Dr. Reg. Length Skt.
MS714	Std. Red	3/8" Dr. Reg. Length Skt.
MS720	Neon Blue	1/4" Dr. Reg. & Dp. Skt.
MS721	Std. Red	1/4" Dr. Reg. & Dp. Skt.
MS777	Std. Red	3/8" Dr. Deep Lgth Skt.
MS784	Neon Blue	3/8" Dr. Deep Lgth Skt.

## Socket Trays

- Organize sockets for quick, easy identification by size and style.
- Made of rugged ABS plastic to resist oil, grease and tool box abuse.
- Holds regular and deep well sockets.
- Each post is marked for socket size.
- Fits virtually all sockets, domestic and imported.



PART NO.	DRIVE SIZE	HOLDS REGULAR AND DEEP LENGTH SOCKETS:
HA1201	1/2"	3/8" to 1-1/4"
HA1202	1/2"	10MM to 27MM
HA1401	1/4"	1/8" to 5/8"
HA1402	1/4"	4MM to 15MM
HA3801	3/8"	1/4" to 1"
HA3802	3/8"	6MM to 20MM

## Lock-A-Socket Socket Holders



- Versatile holder can be used as a peg system for easy access, or as a locking system to keep tools in place.
- To secure your socket in place, turn the socket 90° to the right until it clicks.
- To unlock, simply turn it back to the left until it clicks.
- Ergonomic Design.
- Magnetic backing securely attaches to tool boxes and drawers.
- Available in three sizes: 1/4", 3/8", 1/2".

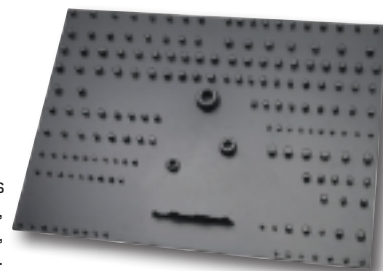
PART NO.	DRIVE	NO. OF PCS.	LENGTH
MSLAS25	1/4"	13	14"
MSLAS38	3/8"	14	18"
MSLAS50	1/2"	16	22"

**MSLAS25LP25** 1/4" Drive Locking Posts (25)

**MSLAS38LP25** 3/8" Drive Locking Posts (25)

**MSLAS50LP25** 1/2" Drive Locking Posts (25)

## TP171S Socket Organizer



- Organizes 171 pieces of socket tools: Standard, Metric, Deep Wells, 1/4", 3/8", 1/2" Drive and ratchets.
- Outer dimensions: 16-1/2" x 22".
- Base can be modified to fit any smaller tool chest.
- Made of a durable plastic material.

## Magnetic Socket Holders

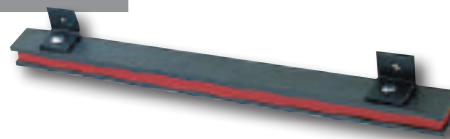


- Organize fractional and metric, standard and deep, sockets in one convenient holder.
- Sockets are exposed for easy identification.
- Powerful magnet holds sockets in tray.
- Made of strong ABS plastic.

PART NO.	DESCRIPTION	HOLDS:
LS40120	1/4" Mag. Skt Hldr, Red	26 pcs
LS40130	1/4" Mag. Skt Hldr, Green	26 pcs
LS40200	3/8" Large Mag. Skt Hldr, Red	28 pcs
LS40210	3/8" Large Mag. Skt Hldr, Green	28 pcs
LS40900	1/2" Magnetic Socket Holder - Red	22 pcs
LS40990	1/2" Magnetic Socket Holder - Green	22 pcs

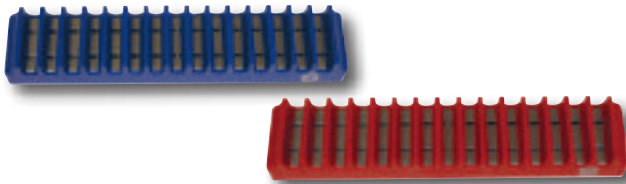
## Magnetic Tool Holders

- Powerful magnet holds even heavy hand tools.
- Mounting screws included.
- Shorter magnet fits nicely on end of most tool boxes.



PART NO.	DESCRIPTION
LS21300	13" long w/2 mounting holes 10" apart
LS21400	24" long w/2 mounting holes 16" apart

**Magnetic Screwdriver Holders**

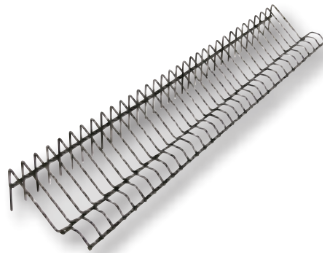


- Holds up to 15 screwdrivers.
- Magnetically attaches to most metal surfaces.
- Available in Blue or Red.

PART NO.	DESCRIPTION
MSSDH15B	Magnetic Screwdriver Holder - Blue
MSSDH15R	Magnetic Screwdriver Holder - Red

**PLR30**  
**30" Plier Rack**

- Rack can be cut to fit smaller drawers.
- Can splice two together for larger drawers.
- Removal and insertion is easy, just pick the pliers up and they slide right back into place.
- Holds 32 pliers.
- Dimensions: 30"W x 2-1/2"H.

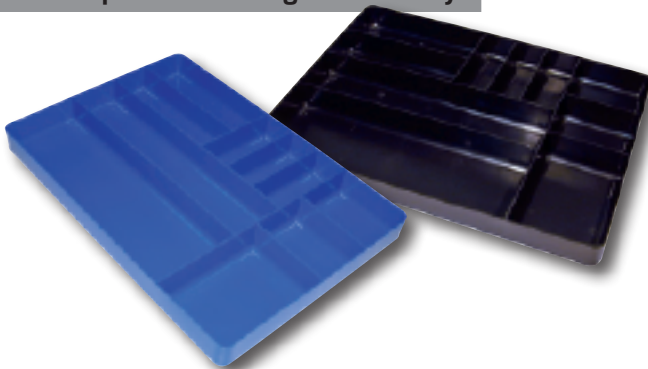


**MSMTS580**  
**Magnetic Bit Holder**



- Designed to hold up to thirty-six different 1/4" bit sizes and types with the socket driver located in the middle.
- Neon blue.

**10 Compartment Organizer Trays**



- Find a place for everything with this fuel and solvent resistant tray organizer.
- Will fit shallow drawers in standard tool boxes.
- Sturdy tray is also stackable - great for workbenches or shelves.
- Rounded corners provide easy retrieval of small items.
- An essential item for projects that require several tools or small parts.
- Keep all tools, parts, and gadgets organized in one place.
- Dimensions: 11" x 16" x 1.5".

PART NO.	COLOR	PART NO.	COLOR
WRK5011	Black	WRK5012	Blue

**Socket Rails and Clips**

- Listed below are the Socket Rails and Clips that are used on the Cornwell Hardline socket sets.
- These may be purchased separately from or in addition to the sets.
- Use to store an assortment of individual sockets for the users convenience.

PART NO.	DESCRIPTION	RECOMMENDED MAX. # OF CLIPS
ST057500	1/4" 5-3/4" Socket Rail and Clips	6
ST070000	1/4" 7" Socket Rail and Clips	10
ST073750	1/4" 7-3/8" Socket Rail and Clips	8
ST092500	1/4" 9-1/4" Socket Rail and Clips	13
ST211750	3/8" 11-3/4" Socket Rail and Clips	13
ST213500	3/8" 13-1/2" Socket Rail and Clips	13
ST214875	3/8" 14-7/8" Socket Rail and Clips	13
ST216250	3/8" 16-1/4" Socket Rail and Clips	13
ST276250	3/8" 7-5/8" Socket Rail and Clips	7
ST287500	3/8" 8-3/4" Socket Rail and Clips	8
ST293750	3/8" 9-3/8" Socket Rail and Clips	8
ST311000	1/2" 11" Socket Rail and Clips	10
ST312000	1/2" 12" Socket Rail and Clips	9
ST314250	1/2" 14-1/4" Socket Rail and Clips	11
ST315000	1/2" 15" Socket Rail and Clips	11
ST316500	1/2" 16-1/2" Socket Rail and Clips	14
ST318000	1/2" 18" Socket Rail and Clips	15
ST320500	1/2" 20-1/2" Socket Rail and Clips	15
ST385000	1/2" 8-1/2" Socket Rail and Clips	7
ST397500	1/2" 9-3/4" Socket Rail and Clips	4

- STONCP 1/4" Sq. Dr. Socket Clips (20/pk.)
- ST2NCP 3/8" Sq. Dr. Socket Clips (20/pk.)
- ST3NCP 1/2" Sq. Dr. Socket Clips (20/pk.)

**Optional Cornwell Socket Set Trays**

Below are optional set trays that are available for use instead of the designated socket rail that come with existing sets.

PART NO.	OPTIONAL TRAY FOR:
ST36	STI3215S
ST37	STI3214LMS, STI3114LMS
ST38	STI2212MS, STI2112MS
ST39	STI2212LMS, STI2112LMS
ST40	STI2212LLMS, STI2112LLMS
ST41	STI3215MS
ST42	STI227LLS, STI217LLS
ST43	STM2213S, STM2113S
ST44	STM2213LS, STM2113LS
ST54	ST2213S, ST2113S
ST60	STI324LMS, STI314LMS
ST62	STI329LMS
ST65	TSUP227RS, TSUP217RS
ST68	TSMUP2210RS, TSMUP2110RS
ST70	TSMUP2213RS, TSMUP2113RS
ST78	STIO212MS, STIO112MS
ST79	STIO212LMS, STIO112LMS
ST80	STI3114MS
ST82	STM0213LS, STM0113LS
ST83	STM0213S, STM0113S

# TOOL BOX ACCESSORIES AND PARTS

CASTERS		
CTB26826A2PA CTB26827A2PA CTBMM100FC CTBRSSWCS CTBRSSWLCS	6" Swivel w/brake 6" Rigid Caster Fixed Swivel Locking Swivel	CTB58" CTB58" CTBMM100 and CTBMM700 series CTBMM100 and CTBMM700 series CTBMM100 and CTBMM700 series
COVERS		
CTB58CCCS CTB58CCCCS CTB58CCPYCS CTB58LCCS CTB58SCCS CTB67CCCS CTB67CCCCS CTB67CCPYCS CTB6784LC CTB6784SC CTB84CCCS CTB84CCPYCS CTB112CCCS CTB112CCPYCS CTBMM800C	Cabinet Cover Cabinet/Chest Cover Cabinet/Canopy Cover Locker Cover Side Cabinet Cover Cabinet Cover Cabinet/Chest Cover Cabinet/Canopy Cover Locker Cover Side Cabinet Cover Cabinet Cover Cabinet/Canopy Cover Cabinet Cover Cabinet/Canopy Cover Mobile Work Center Cover	CTB58" Custom series CTB58" Custom series CTB58" Custom series CTB58" Custom series CTB58" Custom series CTB67" Custom series CTB67" Custom series CTB67" Custom series CTB67" & CTB84" Custom series CTB67" & CTB84" Custom series CTB84" Custom series CTB84" Custom series CTB112" Custom series CTB112" Custom series CTBMM800 Series
HANDLES		
CTBMMHDK	Handle & Bracket Kit	CTBMM100 and CTBMM700 series
LOCKS & KEYS		
CTB83001R CTBM10030A57 CTBM10030A58 CTBM10030A65 CTBM10030A68 CTBRSLKN	Lock and Key Assembly Lock Set Lock Set Lock Set Lock Set Tubular Style Lock	For Old-style Kennedy Boxes CTB58" Lockers CTB58" Side Cabinets CTB58" Cabinets CTB58" Canopies CTBMM100 and CTBMM700 series
PAINT		
CTB37A152 CTB683010 CTB683011 CTB683012 CTB683013 CTB683014 CTBM25077 CTBM25078 CTBM25079 CTBM25080 CTBM25706 CTBRSBKP CTBRSCORORP CTBRSTBBLU CTBRSTBBR CTBRSRDP CTBRSYYP	Red touch-up paint, 0.6 oz. Black touch-up paint, 1 Quart Orange touch-up paint, 1 Quart Burgundy touch-up paint, 1 Quart Blue touch-up paint, 1 Quart Yellow touch-up paint, 1 Quart Black touch-up paint, 0.6 oz. Blue touch-up paint, 0.6 oz. Burgundy touch-up paint, 0.6 oz. Yellow touch-up paint, 0.6 oz. Orange touch-up paint, 0.6 oz. Cart touch-up paint, black Cart touch-up paint, orange Cart touch-up paint, blue Cart touch-up paint, burgundy Cart touch-up paint, red Cart touch-up paint, yellow	
MISCELLANEOUS PARTS		
CTB1005589 CTB518228 CTB518276 CTB518277 CTB518438 CTB518558K CTBMM7HDS CTBMM100RBS CTBRSGP	Drawer Slide Heavy Duty Roller Bearing Slide Set, one left side and one right side Roller Slide Set, one left side and one right side CTB4000 Slide Roller Slide Set, one left side and one right side Ball Bearing Slide Heavy Duty Roller Bearing Slides (pair) Roller Bearing Slides (pr.) Gas Piston	For 46" Elite Cabinets For 60" Drawer, two tabs For Old Style 27" and 29" Units CTB4000 series slide For Narrow Bank 24" product Three tab style CTBMM700 series CTBMM100 series CTBMM100 and CTBMM700 series

Cornwell® has for many years been one of the leaders in manufacturing highly accurate and durable hand tools. When you want wide selection, greater versatility, and hand tools that are known for toughness and durability...specify

# CORNWELL!

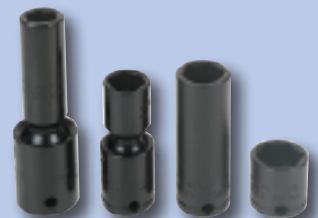
## CHROME SOCKETS AND UNIVERSALS

- **“TDS - TORQUE DISPERSING SYSTEM”** opening design spreads stress evenly and reduces fastener rounding.
- Selection: Available in regular and deep lengths, 6 and 12 point, fractional and metric sizes.
- High quality alloy steel.
- Controlled heat treatment for strength.
- Cold broached for accuracy and tolerances.
- Highly polished and nickel chrome plated for long life.



## POWER IMPACT SOCKETS AND UNIVERSALS

- Selection available in regular and deep lengths, 6 and 12 point, fractional and metric sizes.
- Universal sockets feature a unique ball and spring swivel design that allows a 30° socket angle with 360° rotation for easy fastener gripping.
- Extra tough special alloy steel construction and special heat treatment for longer life.
- Black oxide finish to resist rust.
- **“TDS - TORQUE DISPERSING SYSTEM”** opening design spreads stress evenly and reduces fastener rounding.



## HANDLES AND ATTACHMENTS

- Selection: Chrome and power impact adapters, extensions, flex handles, universal joints, spin handles, ratchet spinners and nut drivers.
- Flex handles feature a swivel flex square head that will rotate through 180° arc to clear obstructions.



## RATCHETS

- Selection: Complete styles of extra long and regular handles, in fixed and flex head designs.
- Some 1/4", 3/8" and 1/2" units available with comfortable non-slip screwdriver type plastic handles.
- High polished nickel chrome plating to resist rust and prolong life.
- Thirty (30) tooth design allows new "bite" to be made with only 12 degree handle movement.
- Our JR72 ratchet offers seventy-two (72) tooth design with a 5 degree handle movement.
- Form fitted handles reduce fatigue and permit prolonged use.



## WRENCHES

- Selection: Long and short handle, 6 and 12 point openings, fractional and metric sizes, chrome finish.
- V-throat design on open end head wrenches allows four (4) sided gripping on the fastener.
- Slim, well balanced style for ease of use.
- **“TDS - TORQUE DISPERSING SYSTEM”** opening design spreads stress evenly and reduces fastener rounding.



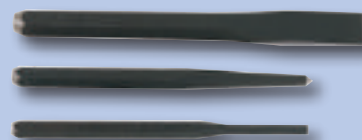
## ANGLE WRENCHES

- Cornwell pioneered and engineered the original angle wrench design.
- For many years these wrenches have been regarded by mechanics and industry as the finest.
- 15° and 60° head angles on the handle allow maximum nut turning in limited access places.
- Design gives you four working positions in small swing areas.



## PUNCHES AND CHISELS

- Cornwell punches and chisels have been recognized for years as superior.
- Punches are designed to withstand the shock of driving hardened pins.
- Chisels are made to hold a fine cutting edge.
- Made from the finest blend of alloy steel.
- Hammer forged and heat treated for long life.



## CARBON SCRAPERS

- Handles are made from slip resistant polycarbonate plastic, especially contoured to fit comfortably in the hand during prolonged use.
- Hammer forged and heat treated for long life.
- Black oxide finish resists rust.
- Blades have precision ground edges which can be sharpened again and again.



# 1/4" DRIVE SOCKET SETS

## TSO47SS

47 Piece Super Set,  
6 Point Sockets

Drive Tools



Set consists of the following Part Numbers and sizes:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
E02	1/4" x 2" Extension	TMO206	1/4" x 6MM Socket
E04	1/4" x 4" Extension	TMO207	1/4" x 7MM Socket
TO206	1/4" x 3/16" Socket	TMO208	1/4" x 8MM Socket
TO207	1/4" x 7/32" Socket	TMO209	1/4" x 9MM Socket
TO208	1/4" x 1/4" Socket	TMO210	1/4" x 10MM Socket
TO209	1/4" x 9/32" Socket	TMO211	1/4" x 11MM Socket
TO210	1/4" x 5/16" Socket	TMO212	1/4" x 12MM Socket
TO211	1/4" x 11/32" Socket	TMO213	1/4" x 13MM Socket
TO212	1/4" x 3/8" Socket	TMO214	1/4" x 14MM Socket
TO214	1/4" x 7/16" Socket	TMO215	1/4" x 15MM Socket
TO216	1/4" x 1/2" Socket	TMO205L	1/4" x 5MM Deep Socket
TO218	1/4" x 9/16" Socket	TMO205.5L	1/4" x 5.5MM Deep Socket
TO206L	1/4" x 3/16" Deep Socket	TMO206L	1/4" x 6MM Deep Socket
TO207L	1/4" x 7/32" Deep Socket	TMO207L	1/4" x 7MM Deep Socket
TO208L	1/4" x 1/4" Deep Socket	TMO208L	1/4" x 8MM Deep Socket
TO209L	1/4" x 9/32" Deep Socket	TMO209L	1/4" x 9MM Deep Socket
TO210L	1/4" x 5/16" Deep Socket	TMO210L	1/4" x 10MM Deep Socket
TO211L	1/4" x 11/32" Deep Socket	TMO211L	1/4" x 11MM Deep Socket
TO212L	1/4" x 3/8" Deep Socket	TMO212L	1/4" x 12MM Deep Socket
TO214L	1/4" x 7/16" Deep Socket	TMO213L	1/4" x 13MM Deep Socket
TO216L	1/4" x 1/2" Deep Socket	TMO214L	1/4" x 14MM Deep Socket
TO218L	1/4" x 9/16" Deep Socket	TMO215L	1/4" x 15MM Deep Socket
TMO205	1/4" x 5MM Socket	TR3	1/4" Drive Ratchet
TMO205.5	1/4" x 5.5MM Socket		

## STO210S

10 Piece Standard Socket Set, 6 Point,  
3/16" to 9/16"



Set consists of the following Part Numbers and sizes:

TO206	3/16"	TO210	5/16"	TO216	1/2"
TO207	7/32"	TO211	11/32"	TO218	9/16"
TO208	1/4"	TO212	3/8"	STO70000	Rail
TO209	9/32"	TO214	7/16"		

## STO110S

10 Piece Standard Socket Set, 12 Point,  
3/16" to 9/16"



Set consists of the following Part Numbers and sizes:

TO106	3/16"	TO110	5/16"	TO116	1/2"
TO107	7/32"	TO111	11/32"	TO118	9/16"
TO108	1/4"	TO112	3/8"	STO70000	Rail
TO109	9/32"	TO114	7/16"		

## STO210LS

10 Piece Deep Socket Set, 6 Point,  
3/16" to 9/16"

Set consists of the following Part Numbers and sizes:



TO206L	3/16"	TO210L	5/16"	TO216L	1/2"
TO207L	7/32"	TO211L	11/32"	TO218L	9/16"
TO208L	1/4"	TO212L	3/8"	STO70000	Rail
TO209L	9/32"	TO214L	7/16"		

## STO110LS

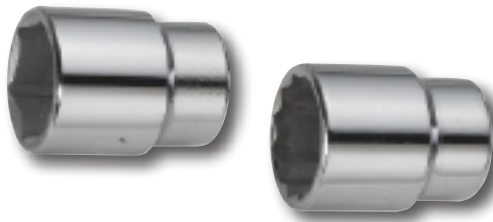
10 Piece Deep Socket Set, 12 Point,  
3/16" to 9/16"

Set consists of the following Part Numbers and sizes:



TO106L	3/16"	TO110L	5/16"	TO116L	1/2"
TO107L	7/32"	TO111L	11/32"	TO118L	9/16"
TO108L	1/4"	TO112L	3/8"	STO70000	Rail
TO109L	9/32"	TO114L	7/16"		

## Standard Sockets, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SOCKET END	HANDLE END
TO206	TO106	3/16"	29/32"	5/32"	5/16"	1/2"
TO207	TO107	7/32"	29/32"	3/16"	11/32"	1/2"
TO208	TO108	1/4"	29/32"	13/64"	3/8"	1/2"
TO209	TO109	9/32"	29/32"	7/32"	7/16"	1/2"
TO210	TO110	5/16"	29/32"	1/4"	15/32"	1/2"
TO211	TO111	11/32"	29/32"	9/32"	1/2"	1/2"
TO212	TO112	3/8"	29/32"	9/32"	35/64"	35/64"
TO214	TO114	7/16"	29/32"	11/32"	39/64"	35/64"
TO216	TO116	1/2"	29/32"	11/32"	11/16"	19/32"
TO218	TO118	9/16"	29/32"	3/8"	49/64"	41/64"

## Deep Sockets, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SOCKET END	HANDLE END
TO206L	TO106L	3/16"	2-1/64"	3/16"	5/16"	1/2"
TO207L	TO107L	7/32"	2-1/64"	7/32"	11/32"	1/2"
TO208L	TO108L	1/4"	2-1/64"	7/32"	3/8"	1/2"
TO209L	TO109L	9/32"	2-1/64"	1/4"	7/16"	1/2"
TO210L	TO110L	5/16"	2-1/64"	1/4"	15/32"	1/2"
TO211L	TO111L	11/32"	2-1/64"	9/32"	1/2"	1/2"
TO212L	TO112L	3/8"	2-1/64"	9/32"	35/64"	35/64"
TO214L	TO114L	7/16"	2-1/64"	3/8"	39/64"	35/64"
TO216L	TO116L	1/2"	2-1/64"	13/32"	11/16"	19/32"
TO218L	TO118L	9/16"	2-1/64"	1/2"	49/64"	41/64"

## TSU028

8 Piece Standard Universal Socket Set, 6 Point, 1/4" to 9/16"



## TSU018

8 Piece Standard Universal Socket Set, 12 Point, 1/4" to 9/16"



Set consists of the following Part Numbers and sizes:

UO208	1/4"	UO212	3/8"	STO73750	Rail
UO209	9/32"	UO214	7/16"		
UO210	5/16"	UO216	1/2"		
UO211	11/32"	UO218	9/16"		

Set consists of the following Part Numbers and sizes:

UO108	1/4"	UO112	3/8"	STO73750	Rail
UO109	9/32"	UO114	7/16"		
UO110	5/16"	UO116	1/2"		
UO111	11/32"	UO118	9/16"		

## Standard Universal Sockets, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SOCKET END	HANDLE END
UO208	UO108	1/4"	1-5/16"	7/32"	25/64"	1/2"
UO209	UO109	9/32"	1-5/16"	7/32"	7/16"	1/2"
UO210	UO110	5/16"	1-5/16"	7/32"	29/64"	1/2"
UO211	UO111	11/32"	1-5/16"	7/32"	1/2"	1/2"
UO212	UO112	3/8"	1-5/16"	1/4"	9/16"	1/2"
UO214	UO114	7/16"	1-11/32"	17/64"	5/8"	1/2"
UO216	UO116	1/2"	1-7/16"	9/32"	11/16"	1/2"
UO218	UO118	9/16"	1-1/2"	11/32"	13/16"	1/2"



## TSUP026S

6 Piece Standard Impact Universal Socket Set, 6 Point, 1/4" to 9/16"

Set consists of the following Part Numbers and sizes:

UPO208	1/4"	UPO214	7/16"	STO57500	Rail
UPO210	5/16"	UPO216	1/2"		
UPO212	3/8"	UPO218	9/16"		

# 1/4" DRIVE SOCKETS AND SETS (SAE AND METRIC)

## Standard Impact Universal Sockets, 6 Point



PART NO.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
UPO208	1/4"	1-27/64"	3/16"	13/32"	5/8"
UPO210	5/16"	1-33/64"	7/32"	1/2"	5/8"
UPO212	3/8"	1-19/32"	15/64"	9/16"	5/8"
UPO214	7/16"	1-11/16"	17/64"	21/32"	5/8"
UPO216	1/2"	1-49/64"	5/16"	23/32"	5/8"
UPO218	9/16"	1-55/64"	11/32"	13/16"	5/8"

## STIO206S

6 Piece Standard Power Impact Socket Set, 6 Point, 1/4" to 9/16"



Set consists of the following Part Numbers and sizes:

PO208	1/4"	PO214	7/16"	STO57500	Rail
PO210	5/16"	PO216	1/2"		
PO212	3/8"	PO218	9/16"		

## STIO206LS

6 Piece Deep Power Impact Socket Set, 6 Point, 1/4" to 9/16"



Set consists of the following Part Numbers and sizes:

PO208L	1/4"	PO214L	7/16"	STO57500	Rail
PO210L	5/16"	PO216L	1/2"		
PO212L	3/8"	PO218L	9/16"		

## Standard Power Impact Sockets, 6 Point



6 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
PO208	1/4"	57/64"	13/64"	3/8"	1/2"
PO210	5/16"	57/64"	1/4"	29/64"	1/2"
PO212	3/8"	57/64"	9/32"	35/64"	35/64"
PO214	7/16"	57/64"	21/64"	39/64"	35/64"
PO216	1/2"	57/64"	21/64"	11/16"	37/64"
PO218	9/16"	57/64"	11/32"	49/64"	41/64"

## Deep Power Impact Sockets, 6 Point



6 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
				SOCKET END	HANDLE END	DIAMETER	DEPTH
PO208L	1/4"	2-1/64"	7/32"	3/8"	1/2"	7/32"	1-21/32"
PO210L	5/16"	2-1/64"	1/4"	15/32"	1/2"	9/32"	1-21/32"
PO212L	3/8"	2-1/64"	9/32"	35/64"	35/64"	11/32"	1-21/32"
PO214L	7/16"	2-1/64"	3/8"	39/64"	35/64"	13/32"	1-21/32"
PO216L	1/2"	2-1/64"	13/32"	11/16"	37/64"	15/32"	1-21/32"
PO218L	9/16"	2-1/64"	1/2"	49/64"	41/64"	17/32"	1-21/32"

## STM0213S

13 Piece Standard Metric Socket Set, 6 Point, 4MM to 15MM



Set consists of the following Part Numbers and sizes:

TMO204	4MM	TMO208	8MM	TMO213	13MM
TMO205	5MM	TMO209	9MM	TMO214	14MM
TMO205.5	5.5MM	TMO210	10MM	TMO215	15MM
TMO206	6MM	TMO211	11MM	STO92500	Rail
TMO207	7MM	TMO212	12MM		

## STM0113S

13 Piece Standard Metric Socket Set, 12 Point, 4MM to 15MM



Set consists of the following Part Numbers and sizes:

TMO104	4MM	TMO108	8MM	TMO113	13MM
TMO105	5MM	TMO109	9MM	TMO114	14MM
TMO105.5	5.5MM	TMO110	10MM	TMO115	15MM
TMO106	6MM	TMO111	11MM	STO92500	Rail
TMO107	7MM	TMO112	12MM		





## STM0212MLS

12 Piece Mid-Length Metric Socket Set,  
6 Point, 5MM to 15MM

Set consists of the following Part Numbers and sizes:

TMO205ML	5MM	TMO209ML	9MM	TMO214ML	14MM
TMO205.5ML	5.5MM	TMO210ML	10MM	TMO215ML	15MM
TMO206ML	6MM	TMO211ML	11MM	STO92500	Rail
TMO207ML	7MM	TMO212ML	12MM		
TMO208ML	8MM	TMO213ML	13MM		

## STM0213LS

13 Piece Deep Metric Socket Set,  
6 Point, 4MM to 15MM



Set consists of the following Part Numbers and sizes:

TMO204L	4MM	TMO208L	8MM	TMO213L	13MM
TMO205L	5MM	TMO209L	9MM	TMO214L	14MM
TMO205.5L	5.5MM	TMO210L	10MM	TMO215L	15MM
TMO206L	6MM	TMO211L	11MM	STO92500	Rail
TMO207L	7MM	TMO212L	12MM		

## STM0113LS

13 Piece Deep Metric Socket Set,  
12 Point, 4MM to 15MM



Set consists of the following Part Numbers and sizes:

TMO104L	4MM	TMO108L	8MM	TMO113L	13MM
TMO105L	5MM	TMO109L	9MM	TMO114L	14MM
TMO105.5L	5.5MM	TMO110L	10MM	TMO115L	15MM
TMO106L	6MM	TMO111L	11MM	STO92500	Rail
TMO107L	7MM	TMO112L	12MM		

### Standard Metric Sockets, 6 and 12 Point



	6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
						SOCKET END	HANDLE END
TMO204	TMO104	4MM	22.86	4.32	7.09	12.70	
TMO205	TMO105	5MM	22.86	4.32	8.13	12.70	
TMO205.5	TMO105.5	5.5MM	22.86	4.75	8.89	12.70	
TMO206	TMO106	6MM	22.86	5.54	9.50	12.70	
TMO207	TMO107	7MM	22.86	5.54	10.72	12.70	
TMO208	TMO108	8MM	22.86	6.35	11.99	12.70	
TMO209	TMO109	9MM	22.86	7.14	13.18	13.18	
TMO210	TMO110	10MM	22.86	7.14	14.10	14.10	
TMO211	TMO111	11MM	22.86	9.53	15.67	15.67	
TMO212	TMO112	12MM	22.86	9.53	16.94	14.61	
TMO213	TMO113	13MM	22.86	9.53	18.47	15.37	
TMO214	TMO114	14MM	22.86	9.53	19.71	16.64	
TMO215	TMO115	15MM	22.86	9.53	20.62	16.64	

PART NO.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
TMO205ML	5MM	31.75	5.16	8.13	12.70
TMO205.5ML	5.5MM	31.75	5.16	8.89	12.70
TMO206ML	6MM	31.75	5.54	9.50	12.70
TMO207ML	7MM	31.75	5.54	10.72	12.70
TMO208ML	8MM	31.75	6.35	11.99	12.70
TMO209ML	9MM	31.75	7.14	13.18	13.18
TMO210ML	10MM	31.75	7.14	14.10	14.10
TMO211ML	11MM	31.75	9.53	15.67	15.67
TMO212ML	12MM	31.75	10.16	16.94	14.61
TMO213ML	13MM	31.75	10.16	18.47	15.37
TMO214ML	14MM	31.75	11.10	19.71	16.64
TMO215ML	15MM	31.75	11.10	20.62	16.64

### Mid-Length Metric Sockets, 6 Point



# 1/4" DRIVE METRIC SOCKETS AND SETS

## Deep Metric Sockets, 6 and 12 Point

	6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
						SOCKET END	HANDLE END
	TMO204L	TMO104L	4MM	51.18	4.75	7.09	12.70
	TMO205L	TMO105L	5MM	51.18	5.16	8.13	12.70
	TMO205.5L	TMO105.5L	5.5MM	51.18	5.16	8.89	12.70
	TMO206L	TMO106L	6MM	51.18	5.54	9.50	12.70
	TMO207L	TMO107L	7MM	51.18	5.54	10.72	12.70
	TMO208L	TMO108L	8MM	51.18	6.35	11.99	12.70
	TMO209L	TMO109L	9MM	51.18	7.14	13.18	13.18
	TMO210L	TMO110L	10MM	51.18	7.14	14.10	14.10
	TMO211L	TMO111L	11MM	51.18	9.53	15.67	15.67
	TMO212L	TMO112L	12MM	51.18	10.16	16.94	14.61
	TMO213L	TMO113L	13MM	51.18	10.16	18.47	15.37
	TMO214L	TMO114L	14MM	51.18	11.10	19.71	16.64
	TMO215L	TMO115L	15MM	51.18	11.10	20.62	16.64



Drive Tools

## TSMU025

5 Piece Standard Metric Universal Socket Set, 6 Point, 8MM to 14MM



Set consists of the following Part Numbers and sizes:

UO208MM	8MM	UO214MM	14MM
UO210MM	10MM	ST057500	Rail
UO212MM	12MM		
UO213MM	13MM		

## TSMU017

7 Piece Standard Metric Universal Socket Set, 12 Point, 7MM to 13MM



Set consists of the following Part Numbers and sizes:

UO107MM	7MM	UO112MM	12MM
UO108MM	8MM	UO113MM	13MM
UO109MM	9MM	ST057500	Rail
UO110MM	10MM		
UO111MM	11MM		



## TSMU0212

12 Piece Standard Metric Universal Socket Set, 6 Point, 5MM to 15MM

Set consists of the following Part Numbers and sizes:

UO205MM	5MM	UO209MM	9MM	UO214MM	14MM
UO205.5MM	5.5MM	UO210MM	10MM	UO215MM	15MM
UO206MM	6MM	UO211MM	11MM	ST092500	Rail
UO207MM	7MM	UO212MM	12MM		
UO208MM	8MM	UO213MM	13MM		

## Standard Metric Universal Sockets, 6 and 12 Point

	6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
						SOCKET END	HANDLE END
	UO205MM		5MM	35.71	5.59	8.36	12.70
	UO205.5MM		5.5MM	35.71	5.59	8.89	12.70
	UO206MM		6MM	35.71	5.59	9.78	12.70
	UO207MM	UO107MM	7MM	35.71	5.59	10.74	12.70
	UO208MM	UO108MM	8MM	35.71	5.59	11.94	12.70
	UO209MM	UO109MM	9MM	35.71	6.60	12.70	12.70
	UO210MM	UO110MM	10MM	35.71	6.60	14.27	12.70
	UO211MM	UO111MM	11MM	36.50	7.37	15.88	12.70
	UO212MM	UO112MM	12MM	38.89	7.37	17.45	12.70
	UO213MM	UO113MM	13MM	38.89	7.62	19.05	12.70
	UO214MM		14MM	38.89	9.14	20.62	12.70
	UO215MM		15MM	39.67	9.14	20.62	12.70



## STI0212MS

12 Piece Standard Metric Power Impact Socket Set, 6 Point, 5MM to 15MM



Set consists of the following Part Numbers and sizes:

PMO205	5MM	PMO209	9MM	PMO214	14MM
PMO205.5	5.5MM	PMO210	10MM	PMO215	15MM
PMO206	6MM	PMO211	11MM	STO92500	Rail
PMO207	7MM	PMO212	12MM		
PMO208	8MM	PMO213	13MM		

## STI0112MS

12 Piece Standard Metric Power Impact Socket Set, 12 Point, 5MM to 15MM



Set consists of the following Part Numbers and sizes:

PMO105	5MM	PMO109	9MM	PMO114	14MM
PMO105.5	5.5MM	PMO110	10MM	PMO115	15MM
PMO106	6MM	PMO111	11MM	STO92500	Rail
PMO107	7MM	PMO112	12MM		
PMO108	8MM	PMO113	13MM		

Drive Tools

## STI0212LMS

12 Piece Deep Metric Power Impact Socket Set, 6 Point, 5MM to 15MM



Set consists of the following Part Numbers and sizes:

PMO205L	5MM	PMO209L	9MM	PMO214L	14MM
PMO205.5L	5.5MM	PMO210L	10MM	PMO215L	15MM
PMO206L	6MM	PMO211L	11MM	STO92500	Rail
PMO207L	7MM	PMO212L	12MM		
PMO208L	8MM	PMO213L	13MM		

## STI0112LMS

12 Piece Deep Metric Power Impact Socket Set, 12 Point, 5MM to 15MM





Set consists of the following Part Numbers and sizes:

PMO105L	5MM	PMO109L	9MM	PMO114L	14MM
PMO105.5L	5.5MM	PMO110L	10MM	PMO115L	15MM
PMO106L	6MM	PMO111L	11MM	STO92500	Rail
PMO107L	7MM	PMO112L	12MM		
PMO108L	8MM	PMO113L	13MM		

### Standard Metric Power Impact Sockets, 6 and 12 Point



	 6 PT.	 12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
						SOCKET END	HANDLE END
PMO205	PMO105		5MM	22.86	4.32	8.13	12.70
PMO205.5	PMO105.5		5.5MM	22.86	4.75	8.89	12.70
PMO206	PMO106		6MM	22.86	5.54	9.50	12.70
PMO207	PMO107		7MM	22.86	5.54	10.72	12.70
PMO208	PMO108		8MM	22.86	6.35	11.99	12.70
PMO209	PMO109		9MM	22.86	7.14	13.18	13.18
PMO210	PMO110		10MM	22.86	7.14	14.10	14.10
PMO211	PMO111		11MM	22.86	9.14	15.67	15.67
PMO212	PMO112		12MM	22.86	9.14	16.94	14.61
PMO213	PMO113		13MM	22.86	9.14	18.47	15.37
PMO214	PMO114		14MM	22.86	9.14	20.62	20.62
PMO215	PMO115		15MM	22.86	9.14	21.44	21.44



**WARNING!**

Use tool only for the job it was designed to do. Wear approved safety goggles when using hand tools.

# 1/4" DRIVE METRIC SOCKETS AND SET

## Deep Metric Power Impact Sockets, 6 and 12 Point



Drive Tools

6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
					SOCKET END	HANDLE END	DIAMETER	DEPTH
PMO205L	PMO105L	5MM	51.18	5.16	8.13	12.70	4.37	42.47
PMO205.5L	PMO105.5L	5.5MM	51.18	5.16	8.89	12.70	4.75	42.47
PMO206L	PMO106L	6MM	51.18	5.54	9.50	12.70	5.31	42.47
PMO207L	PMO107L	7MM	51.18	5.54	10.72	12.70	6.35	42.47
PMO208L	PMO108L	8MM	51.18	6.35	11.99	12.70	7.37	42.47
PMO209L	PMO109L	9MM	51.18	7.14	13.18	13.18	8.33	42.47
PMO210L	PMO110L	10MM	51.18	7.14	14.10	14.10	9.35	42.47
PMO211L	PMO111L	11MM	51.18	9.53	15.67	15.67	10.49	42.47
PMO212L	PMO112L	12MM	51.18	10.16	16.94	14.61	11.51	42.47
PMO213L	PMO113L	13MM	51.18	10.16	18.47	15.37	12.29	42.47
PMO214L	PMO114L	14MM	51.18	11.10	20.62	20.62	13.49	42.47
PMO215L	PMO115L	15MM	51.18	11.10	21.44	21.44	14.68	42.47

## TSMUPO212S

### 12 Piece Metric Impact Universal Socket Set, 6 Point, 5MM to 15MM

Set consists of the following Part Numbers and sizes:



UPO205MM	5MM	UPO209MM	9MM	UPO214MM	14MM
UPO205.5MM	5.5MM	UPO210MM	10MM	UPO215MM	15MM
UPO206MM	6MM	UPO211MM	11MM	ST092500	Rail
UPO207MM	7MM	UPO212MM	12MM		
UPO208MM	8MM	UPO213MM	13MM		

## Metric Impact Universal Sockets, 6 Point



PART NO.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
UPO205MM	5MM	35.56	3.45	8.84	15.88
UPO205.5MM	5.5MM	36.22	3.94	9.65	15.88
UPO206MM	6MM	36.91	4.45	10.44	15.88
UPO207MM	7MM	37.59	4.93	11.18	15.88
UPO208MM	8MM	38.89	5.41	12.70	15.88
UPO209MM	9MM	39.70	5.89	14.27	15.88
UPO210MM	10MM	41.12	6.40	15.88	15.88
UPO211MM	11MM	42.55	6.88	16.79	15.88
UPO212MM	12MM	43.97	7.37	17.45	15.88
UPO213MM	13MM	45.39	7.87	19.05	15.88
UPO214MM	14MM	46.81	8.36	20.62	15.88
UPO215MM	15MM	48.23	8.84	22.23	15.88

## UPJOB

### Power Universal Joint with Ball Retainer



- Ball Type Retainer.
- Overall Length: 1-13/32".
- Handle End Diameter: 5/8".
- Not for Impact Use.

## SAE and Metric Magnetic Spring Loaded Sockets, 6 Point



6 pt.	NOMINAL	O.A. LENGTH	BROACH DEPTH	DIAMETER		BOLT CLEAR. DEPTH	DEPTH TO MAGNET
				SOC. END	HDL. END		
MSSO211R	11/32"	2"	1/4"	1/2"	1/2"	23/32"	1/8"
MMSO207R	7MM	50.80	5.54	11.10	12.70	19.00	1.90
MMSO208R	8MM	50.80	5.54	12.70	12.70	19.79	2.54
MMSO210R	10MM	50.80	6.35	14.27	14.27	24.89	3.43

## Metric Magnetic Self-Tapping Screw Sockets, 6 Point



6 PT.	NOMINAL	OVERALL LENGTH	OUTSIDE DIAMETER		DEPTH TO MAGNET
			SOC. END	HDL. END	
MMCO207	7MM	23.80	11.18	12.70	2.54
MMCO210	10MM	23.80	16.00	17.45	3.43

## GENERAL RATCHET INFORMATION

- Non-flex head ratchets have three moving parts for minimum wear.
- Standard ratchets have a 30 tooth ratcheting design allows new bite with only 12° handle swing.
- Fine tooth ratchets have a 72 tooth design with a 5° handle movement.
- Polycarbonate slip and oil resistant handles on plastic handle ratchets.
- All handles are especially contoured to fit comfortably in the hand during prolonged use.
- Thin head design for close clearance application.
- Black ratchets have an Industrial Black Oxide finish.

## TR2ST

### 2 Piece Ratchet Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
TR3	Chrome Ratchet
TRF4	Chrome Flex Head Ratchet

## TR2HST

### 2 Piece Handle Ratchet Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
TR3H	Handle Ratchet
TRF4H	Handle Flex Head Ratchet

## Ratchets



- 30 tooth design allows only 12° handle movement.
- Form-fitted handle.

PART NUMBER	GEAR TEETH	HEAD THICKNESS	HEAD WIDTH	LENGTH
TR3	30	7/16"	1-1/16"	5"
TR4	30	7/16"	1-1/16"	8"

TR3RK1A 1/4" Ratchet Repair Kit

## TRF4

### Flex Head Ratchet



- Includes a ball and dimple flex joint to hold the head, preventing unwanted movement.

GEAR TEETH	HEAD THICKNESS	HEAD WIDTH	LENGTH
30	7/16"	1-1/16"	6"

TR3RK1A 1/4" Ratchet Repair Kit

## TR72

### Fine Tooth Ratchet



- 72 tooth design with a 5° handle movement.
- Features a form-fitted handle that reduces fatigue and permits prolonged use.
- High polished nickel chrome plating to resist rust and prolong life.

GEAR TEETH	HEAD THICKNESS	HEAD WIDTH	LENGTH
72	31/64"	1-1/16"	5"

TR72RK1A 1/4" Fine Tooth Ratchet Repair Kit

## TR301

### Industrial Finish Ratchet with Ball Retainer



GEAR TEETH	HEAD THICKNESS	HEAD WIDTH	OVERALL LENGTH
30	7/16"	1-1/16"	5"

TR3RK1A 1/4" Ratchet Repair Kit

## TRP3

### Palm Ratchet



- Reversible palm ratchet combines the advantages of a nutdriver with a ratchet.
- Enables both powerful and sensitive work.
- Low profile design.
- 30 gear teeth.
- Length: 2-1/4".

TR3RK1A 1/4" Ratchet Repair Kit

## Plastic Handle Ratchets



PART NO.	GEAR TEETH	HEAD		LENGTH
		THICKNESS	WIDTH	
TR3H	30	7/16"	1-1/16"	6-11/16"
TR4H	30	7/16"	1-1/16"	9-21/32"

TR3RK1A 1/4" Ratchet Repair Kit

# 1/4" DRIVE RATCHETS, ATTACHMENTS AND SET

## TRF4H

### Flex Head Plastic Handle Ratchet



- Includes a ball and dimple flex joint to hold the head, preventing unwanted movement.

GEAR TEETH	HEAD		LENGTH
	THICKNESS	WIDTH	
30	7/16"	1-1/16"	7-11/16"

TR3RK1A 1/4" Ratchet Repair Kit

## TR72H

### Fine Tooth Ratchet



- 72 tooth design with a 5° handle movement.
- Features a contoured handle that fits comfortably in the hand during prolonged use.
- High polished nickel chrome plating to resist rust and prolong life.

GEAR TEETH	HEAD THICKNESS	HEAD WIDTH	LENGTH
72	31/64"	1-1/16"	6-11/16"

TR72RK1A 1/4" Fine Tooth Ratchet Repair Kit

## TR301H

### Plastic Handle Black Ratchet



GEAR TEETH	HEAD		LENGTH
	THICKNESS	WIDTH	
30	7/16"	1-1/16"	6-11/16"

TR3RK1A 1/4" Ratchet Repair Kit

## HZ863Q

### Reversible Palm Ratchet



- Reversible ratchet with T-handle.
- Combines the advantages of a nut-driver with T-handle and a reversible ratchet.
- Enables both powerful and sensitive work.

## RS00

### Ratchet Spinner

- Knob diameter: 7/16".
- Length: 15/16".



#### 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 light oil. Do not immerse sealed ratchet in fluids. Do not replace worn parts individually, use entire contents of the repair kit. Ratchets that slip or break can cause injury.

## HNO2PS

### 6" Rigid Spin Handle



- Rigid handle with 1/4" Female Square Drive.

## JAMF4

### Flexible Extension



- Male drive: 1/4" Square.
- Female drive: 1/4" Square.
- Cable diameter: 1/4".
- Overall length: 4".

## HS016

### Speeder



- Ball type retainer.
- Handle swing: 2-7/8".
- Shank length: 8-1/4".
- Overall length: 16".

## E05ST

### 5 Piece Extension Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
EO2	1/4" x 2" Extension	EO10	1/4" x 10" Extension
EO4	1/4" x 4" Extension	EO14	1/4" x 14" Extension
EO6	1/4" x 6" Extension		

### Extensions (Ball Type Retainer)



PART NO.	LENGTH	SHANK DIAMETER	DRIVE END DIAMETER
EO2	2"	5/16"	31/64"
EO4	4"	5/16"	31/64"
EO6	6"	5/16"	31/64"
EO10	10"	5/16"	31/64"
EO14	14"	5/16"	31/64"
EO24	24"	5/16"	31/64"

## E03LKST

### 3 Piece Locking Extension Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
E03LK	1/4" x 3-1/4" Extension
E07LK	1/4" x 7-1/4" Extension
E015LK	1/4" x 15-1/4" Extension

### Extensions (Locking Type)



PART NO.	SHANK DIAMETER	LENGTH
E03LK	5/16"	3-1/4"
E07LK	5/16"	7-1/4"
E015LK	5/16"	15-1/4"

## E04WDST

### 4 Piece Wobble Drive Extension Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
E01WD	1/4" x 1-1/2" Wobble Dr. Ext.
E02WD	1/4" x 2" Wobble Dr. Extension
E04WD	1/4" x 4" Wobble Dr. Extension
E06WD	1/4" x 6" Wobble Dr. Extension

### Wobble Drive Extensions (Ball Type Retainer)



PART NO.	LENGTH	SHANK DIAMETER	HANDLE DIAMETER
E01WD	1-1/2"	5/16"	31/64"
E02WD	2"	5/16"	31/64"
E04WD	4"	5/16"	31/64"
E06WD	6"	5/16"	31/64"

## EPO4BST

### 4 Piece Power Extension and Universal Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
EPO2B	1/4" x 2" Power Extension
EPO4B	1/4" x 4" Power Extension
EPO6B	1/4" x 6" Power Extension
UPJOB	1/4" Impact-Style Universal Joint w/Ball Retainer

### Power Extensions (Ball Type Retainer)



PART NO.	LENGTH	SHANK DIAMETER	HANDLE DIAMETER
EPO2B	2"	5/16"	31/64"
EPO4B	4"	5/16"	31/64"
EPO6B	6"	5/16"	31/64"

## EBO36LK

### 1/4" x 36" Locking Extension with Industrial Finish



SHANK DIAMETER	LENGTH
3/8"	36"

## UE08

### Universal Extension



- Drive size is 1/4" on both ends. • Chrome plated with a knurled shank.
- Male square end has spring/ball retention. • Overall Length: 8-1/8".
- Male square O.D.: 1/2". • Drive end O.D.: 1/2".

## UJO

### Universal Joint

- Female square: 1/4". • Male square: 1/4". • Length: 1-7/16".
- Handle Diameter: 1/2".



## A02

### Adaptor

- Female Square: 1/4". • Male Square: 3/8". • Length: 63/64".
- Outside Diameter: 31/64".





## TS247SS

### 47 Piece Master Set, 6 Point Sockets

Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
E23	3/8" x 3" Extension	TM2206	3/8" x 6MM Socket
E26	3/8" x 6" Extension	TM2207	3/8" x 7MM Socket
JR30	3/8" Drive Ratchet	TM2208	3/8" x 8MM Socket
T2208	3/8" x 1/4" Socket	TM2209	3/8" x 9MM Socket
T2210	3/8" x 5/16" Socket	TM2210	3/8" x 10MM Socket
T2212	3/8" x 3/8" Socket	TM2211	3/8" x 11MM Socket
T2214	3/8" x 7/16" Socket	TM2212	3/8" x 12MM Socket
T2216	3/8" x 1/2" Socket	TM2213	3/8" x 13MM Socket
T2218	3/8" x 9/16" Socket	TM2214	3/8" x 14MM Socket
T2220	3/8" x 5/8" Socket	TM2215	3/8" x 15MM Socket
T2222	3/8" x 11/16" Socket	TM2216	3/8" x 16MM Socket
T2224	3/8" x 3/4" Socket	TM2217	3/8" x 17MM Socket
T2226	3/8" x 13/16" Socket	TM2218	3/8" x 18MM Socket
T2228	3/8" x 7/8" Socket	TM2219	3/8" x 19MM Socket
T2212L	3/8" x 3/8" Deep Socket	TM2210L	3/8" x 10MM Deep Socket
T2214L	3/8" x 7/16" Deep Socket	TM2211L	3/8" x 11MM Deep Socket
T2216L	3/8" x 1/2" Deep Socket	TM2212L	3/8" x 12MM Deep Socket
T2218L	3/8" x 9/16" Deep Socket	TM2213L	3/8" x 13MM Deep Socket
T2220L	3/8" x 5/8" Deep Socket	TM2214L	3/8" x 14MM Deep Socket
T2222L	3/8" x 11/16" Deep Socket	TM2215L	3/8" x 15MM Deep Socket
T2224L	3/8" x 3/4" Deep Socket	TM2216L	3/8" x 16MM Deep Socket
T2226L	3/8" x 13/16" Deep Socket	TM2217L	3/8" x 17MM Deep Socket
T2228L	3/8" x 7/8" Deep Socket	TM2218L	3/8" x 18MM Deep Socket
		TM2219L	3/8" x 19MM Deep Socket

## CRW21GTS

### 21 Piece Non-Slip Go Thru Socket Set

Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CRWGTRH	Ratchet Handle	CRWGT38	3/8" Go Thru Socket
CRWGT10MM	10mm Go Thru Socket	CRWGT716	7/16" Go Thru Socket
CRWGT11MM	11mm Go Thru Socket	CRWGT12	1/2" Go Thru Socket
CRWGT12MM	12mm Go Thru Socket	CRWGT916	9/16" Go Thru Socket
CRWGT13MM	13mm Go Thru Socket	CRWGT58	5/8" Go Thru Socket
CRWGT14MM	14mm Go Thru Socket	CRWGT1116	11/16" Go Thru Socket
CRWGT15MM	15mm Go Thru Socket	CRWGT34	3/4" Go Thru Socket
CRWGT16MM	16mm Go Thru Socket	CRWGT14ADP	1/4" Adapter
CRWGT17MM	17mm Go Thru Socket	CRWGT38ADP	3/8" Adapter
CRWGT18MM	18mm Go Thru Socket	CRWGT3E	3" Extension
CRWGT19MM	19mm Go Thru Socket		

Also Available:

CRWGT6E 6" Extension



- "Hinge and Snap" blow molded tray snaps together with CRW12MS, CRW12MSF and CRW8SF.
- Heavy duty professional ratchet with go thru sockets allows long bolts to pass through the ratchet and socket for the ultimate bolt clearance.
- Special adapters provided that can be used with most standard sockets.

## ST2213S

### 13 Piece Standard Socket Set, 6 Point, 1/4" to 1"



Set consists of the following Part Numbers and sizes:

T2208	1/4"	T2218	9/16"	T2228	7/8"
T2210	5/16"	T2220	5/8"	T2230	15/16"
T2212	3/8"	T2222	11/16"	T2232	1"
T2214	7/16"	T2224	3/4"	ST213500	Rail
T2216	1/2"	T2226	13/16"		

## ST2113S

### 13 Piece Standard Socket Set, 12 Point, 1/4" to 1"



Set consists of the following Part Numbers and sizes:

T2108	1/4"	T2118	9/16"	T2128	7/8"
T2110	5/16"	T2120	5/8"	T2130	15/16"
T2112	3/8"	T2122	11/16"	T2132	1"
T2114	7/16"	T2124	3/4"	ST213500	Rail
T2116	1/2"	T2126	13/16"		



### ST228LS

8 Piece Deep Socket Set, 6 Point, 3/8" to 13/16"



Set consists of the following Part Numbers and sizes:

T2212L	3/8"	T2218L	9/16"	T2224L	3/4"
T2214L	7/16"	T2220L	5/8"	T2226L	13/16"
T2216L	1/2"	T2222L	11/16"	ST287500	Rail

### ST2213LS

13 Piece Deep Socket Set, 6 Point, 1/4" to 1"



Set consists of the following Part Numbers and sizes:

T2208L	1/4"	T2218L	9/16"	T2228L	7/8"
T2210L	5/16"	T2220L	5/8"	T2230L	15/16"
T2212L	3/8"	T2222L	11/16"	T2232L	1"
T2214L	7/16"	T2224L	3/4"	ST213500	Rail
T2216L	1/2"	T2226L	13/16"		

### ST2113LS

13 Piece Deep Socket Set, 12 Point, 1/4" to 1"



Set consists of the following Part Numbers and sizes:

T2108L	1/4"	T2118L	9/16"	T2128L	7/8"
T2110L	5/16"	T2120L	5/8"	T2130L	15/16"
T2112L	3/8"	T2122L	11/16"	T2132L	1"
T2114L	7/16"	T2124L	3/4"	ST213500	Rail
T2116L	1/2"	T2126L	13/16"		

### Standard Sockets, 6 and 12 Point



	6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
						SOCKET END	HANDLE END
T2208	T2108	1/4"	15/16"	13/64"	13/32"	11/16"	
T2210	T2110	5/16"	15/16"	1/4"	15/32"	11/16"	
T2212	T2112	3/8"	15/16"	9/32"	37/64"	11/16"	
T2214	T2114	7/16"	15/16"	5/16"	43/64"	11/16"	
T2216	T2116	1/2"	15/16"	11/32"	23/32"	23/32"	
T2218	T2118	9/16"	31/32"	3/8"	13/16"	13/16"	
T2220	T2120	5/8"	1-1/32"	25/64"	7/8"	3/4"	
T2222	T2122	11/16"	1-1/16"	13/32"	15/16"	3/4"	
T2224	T2124	3/4"	1-3/32"	7/16"	1"	13/16"	
T2226	T2126	13/16"	1-1/8"	29/64"	1-1/8"	7/8"	
T2228	T2128	7/8"	1-5/32"	1/2"	1-3/16"	15/16"	
T2230	T2130	15/16"	1-7/32"	35/64"	1-1/4"	1"	
T2232	T2132	1"	1-1/4"	9/16"	1-5/16"	1-1/16"	

6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SOCKET END	HANDLE END
T2208L	T2108L	1/4"	2-1/4"	13/64"	13/32"	11/16"
T2210L	T2110L	5/16"	2-1/4"	1/4"	15/32"	11/16"
T2212L	T2112L	3/8"	2-1/4"	9/32"	37/64"	11/16"
T2214L	T2114L	7/16"	2-1/4"	13/32"	43/64"	11/16"
T2216L	T2116L	1/2"	2-1/4"	13/32"	23/32"	23/32"
T2218L	T2118L	9/16"	2-3/4"	1/2"	13/16"	13/16"
T2220L	T2120L	5/8"	2-3/4"	9/16"	7/8"	7/8"
T2222L	T2122L	11/16"	2-3/4"	9/16"	15/16"	15/16"
T2224L	T2124L	3/4"	2-3/4"	21/32"	1"	1"
T2226L	T2126L	13/16"	2-3/4"	11/16"	1-1/8"	1-1/8"
T2228L	T2128L	7/8"	2-3/4"	3/4"	1-3/16"	1-3/16"
T2230L	T2130L	15/16"	2-3/4"	53/64"	1-17/64"	1-17/64"
T2232L	T2132L	1"	2-3/4"	53/64"	1-5/16"	1-5/16"

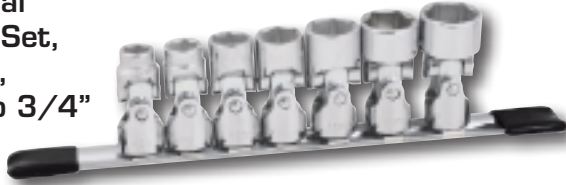
### Deep Sockets, 6 and 12 Point



# 3/8" DR. UNIVERSALS, SPARK PLUG SOCKETS & SETS

## TSU227ST

7 Piece Standard Universal Socket Set, 6 Point, 3/8" to 3/4"



Set consists of the following Part Numbers and sizes:

U2212	3/8"	U2218	9/16"	U2224	3/4"
U2214	7/16"	U2220	5/8"	ST287500	Rail
U2216	1/2"	U2222	11/16"		

## Standard Universal Sockets, 6 Point



6 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
U2212	3/8"	1-21/32"	9/32"	35/64"	3/4"
U2214	7/16"	1-21/32"	9/32"	5/8"	3/4"
U2216	1/2"	1-23/32"	5/16"	23/32"	3/4"
U2218	9/16"	1-23/32"	11/32"	25/32"	3/4"
U2220	5/8"	1-13/16"	3/8"	7/8"	3/4"
U2222	11/16"	1-7/8"	13/32"	15/16"	3/4"
U2224	3/4"	1-29/32"	13/32"	1"	3/4"

## STSP6ST

6 Piece Master Spark Plug Set

Set consists of the following Part Numbers and sizes:

T2218SP	9/16" Std.	U2218LSP	9/16" Univ.
T2220SPA	5/8" Std.	U2220LSPA	5/8" Univ.
T2226SP	13/16" Std.	U2226LSP	13/16" Univ.



## Spark Plug Sockets, 6 and 12 Point



T2218SPXLA  
T2220SPXLA



UP2220LSPRA  
UP2226LSPR



U2218LSP  
U2220LSPA  
U2226LSP



T2218SP  
T2220SPA  
T2226SP



UP2220LSPD  
UP2226LSPD



TM2114SP



TM2218SP

PART NUMBER	PT. SIZE	DESCRIPTION	NOMINAL	MALE HEX	RUBBER INSERT	LENGTH	OUTSIDE DIAMETER	
							SOCKET END	HANDLE END
T2218SP	6 pt.	Standard	9/16"	5/8"	RL18	2-3/8"	25/32"	23/32"
T2220SPA	6 pt.	Standard	5/8"	3/4"	RL20	2-15/32"	7/8"	7/8"
T2218SPXLA	6 pt.	Extra Long	9/16"	—	RL18	6"	25/32"	25/32"
T2220SPXLA	6 pt.	Extra Long	5/8"	—	RL20	6"	7/8"	7/8"
T2226SP	6 pt.	Standard	13/16"	3/4"	RL60	2-7/16"	1-1/16"	27/32"
TM2114SP	12 pt.	Metric	14MM	16MM	RL14	60.32MM	18.08MM	18.08MM
TM2218SP	6 pt.	Metric	18MM	17.46MM	RL18	66.70MM	24.38MM	19.68MM
U2218LSP	6 pt.	Universal	9/16"	—	RL18	3-5/16"	25/32"	3/4"
U2220LSPA	6 pt.	Universal	5/8"	—	RL20	3-5/16"	7/8"	3/4"
U2226LSP	6 pt.	Universal	13/16"	—	RL60	3-5/16"	1-1/16"	3/4"
UP2220LSPRA	6 pt.	Power Impact Universal	5/8"	—	RL20	3-5/8"	7/8"	1"
UP2220LSPD	6 pt.	Double Swivel Universal	5/8"	—	RL20	5-1/32"	7/8"	1"
UP2226LSPD	6 pt.	Double Swivel Universal	13/16"	—	RL60	5-3/32"	1-1/16"	1"
UP2226LSPR	6 pt.	Power Impact Universal	13/16"	—	RL60	3-11/16"	1-1/16"	1"

## CFW12PFS

### 12 Piece Open End Crowfoot Wrench Set, 3/8" to 1"

Set consists of the following Part Numbers and sizes:

CFW12	3/8"	CFW20	5/8"	CFW28	7/8"
CFW14	7/16"	CFW22	11/16"	CFW30	15/16"
CFW16	1/2"	CFW24	3/4"	CFW32	1"
CFW18	9/16"	CFW26	13/16"	SB11	Bar



### Standard Open End Crowfoot Wrenches



PART NUMBER	NOMINAL	HEAD DIAMETER	LENGTH	OPEN END THICKNESS	TOTAL THICKNESS
CFW12	3/8"	1-1/32"	1-1/8"	1/4"	7/16"
CFW14	7/16"	1-1/32"	1-1/8"	1/4"	7/16"
CFW16	1/2"	1-1/32"	1-1/8"	1/4"	7/16"
CFW18	9/16"	1-5/16"	1-3/8"	9/32"	7/16"
CFW20	5/8"	1-5/16"	1-3/8"	9/32"	7/16"
CFW22	11/16"	1-5/16"	1-3/8"	9/32"	7/16"
CFW24	3/4"	1-5/8"	1-5/8"	5/16"	7/16"
CFW26	13/16"	1-5/8"	1-5/8"	5/16"	7/16"
CFW28	7/8"	1-5/8"	1-5/8"	5/16"	7/16"
CFW30	15/16"	1-15/16"	2"	7/16"	7/16"
CFW32	1"	1-15/16"	2"	7/16"	7/16"

## CFWM10ST

### 10 Piece Metric Crowfoot Wrench Set, 6 Point, 10MM to 19MM

Set consists of the following Part Numbers and sizes in a plastic tray:

CFW10MM	10MM	CFW14MM	14MM	CFW17MM	17MM
CFW11MM	11MM	CFW15MM	15MM	CFW18MM	18MM
CFW12MM	12MM	CFW16MM	16MM	CFW19MM	19MM
CFW13MM	13MM				



### Metric Open End Crowfoot Wrenches



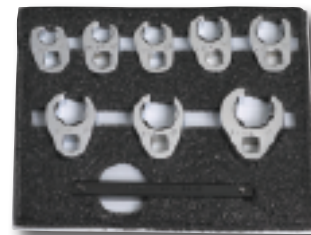
PART NUMBER	NOMINAL	HEAD DIAMETER	LENGTH	OPEN END THICKNESS	TOTAL THICKNESS
CFW10MM	10MM	26.19	28.57	6.35	11.11
CFW11MM	11MM	26.19	28.57	6.35	11.11
CFW12MM	12MM	26.19	28.57	6.35	11.11
CFW13MM	13MM	26.19	28.57	6.35	11.11
CFW14MM	14MM	33.33	34.92	7.14	11.11
CFW15MM	15MM	33.33	34.92	7.14	11.11
CFW16MM	16MM	33.33	34.92	7.14	11.11
CFW17MM	17MM	33.33	34.92	7.14	11.11
CFW18MM	18MM	41.27	41.27	7.94	11.11
CFW19MM	19MM	41.27	41.27	7.94	11.11

## FCW9PFS

### 9 Piece Flare Nut Crowfoot Wrench Set, 3/8" to 13/16"

Set consists of the following Part Numbers and sizes:

FCW12	3/8"	FCW18	9/16"	FCW24	3/4"
FCW14	7/16"	FCW20	5/8"	FCW26	13/16"
FCW16	1/2"	FCW22	11/16"	SB8	Bar



PART NUMBER	NOMINAL	HEAD DIAMETER	LENGTH	THICKNESS	FLARE OPENING
FCW12	3/8"	29/32"	1-13/32"	3/8"	1/4"
FCW14	7/16"	31/32"	1-15/32"	3/8"	17/64"
FCW16	1/2"	31/32"	1-15/32"	3/8"	21/64"
FCW18	9/16"	1-3/32"	1-5/8"	7/16"	25/64"
FCW20	5/8"	1-3/32"	1-5/8"	7/16"	29/64"
FCW22	11/16"	1-9/32"	1-3/4"	1/2"	1/2"
FCW24	3/4"	1-9/32"	1-3/4"	1/2"	9/16"
FCW26	13/16"	1-19/32"	1-31/32"	9/16"	41/64"



### Standard Flare Nut Crowfoot Wrenches, 6 Point



## 3/8" DRIVE SOCKET SETS

### STI228

8 Piece Standard Power Impact Socket Set,  
6 Point, 5/16" to 3/4"

Drive Tools



Set consists of the following Part Numbers and sizes:

P2210	5/16"	P2218	9/16"	ST293750	Rail
P2212	3/8"	P2220	5/8"		
P2214	7/16"	P2222	11/16"		
P2216	1/2"	P2224	3/4"		

### STI228L

8 Piece Deep Power Impact Socket Set,  
6 Point, 5/16" to 3/4"



Set consists of the following Part Numbers and sizes:

P2210L	5/16"	P2218L	9/16"	ST293750	Rail
P2212L	3/8"	P2220L	5/8"		
P2214L	7/16"	P2222L	11/16"		
P2216L	1/2"	P2224L	3/4"		

### STI2210LS

10 Piece Deep Power Impact Socket Set,  
6 Point, 5/16" to 7/8"

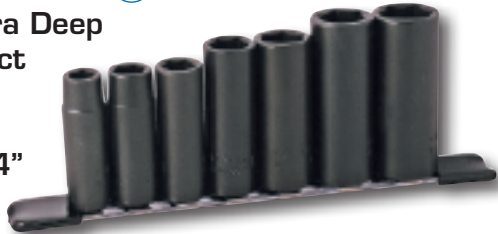


Set consists of the following Part Numbers and sizes:

P2210L	5/16"	P2220L	5/8"	ST211750	Rail
P2212L	3/8"	P2222L	11/16"		
P2214L	7/16"	P2224L	3/4"		
P2216L	1/2"	P2226L	13/16"		
P2218L	9/16"	P2228L	7/8"		

### STI227LLS

7 Piece Extra Deep  
Power Impact  
Socket Set,  
6 Point,  
3/8" to 3/4"



Set consists of the following Part Numbers and sizes:

P2212LL	3/8"	P2218LL	9/16"	P2224LL	3/4"
P2214LL	7/16"	P2220LL	5/8"	ST276250	Rail
P2216LL	1/2"	P2222LL	11/16"		

### STI218

8 Piece Standard Power Impact Socket Set,  
12 Point, 5/16" to 3/4"



Set consists of the following Part Numbers and sizes:

P2110	5/16"	P2118	9/16"	ST293750	Rail
P2112	3/8"	P2120	5/8"		
P2114	7/16"	P2122	11/16"		
P2116	1/2"	P2124	3/4"		

### STI218L

8 Piece Deep Power Impact Socket Set,  
12 Point, 5/16" to 3/4"



Set consists of the following Part Numbers and sizes:

P2110L	5/16"	P2118L	9/16"	ST293750	Rail
P2112L	3/8"	P2120L	5/8"		
P2114L	7/16"	P2122L	11/16"		
P2116L	1/2"	P2124L	3/4"		

### STI2212LLS

12 Piece Extra Deep Power Impact Socket Set,  
6 Point, 5/16" to 1"



Set consists of the following Part Numbers and sizes:

P2210LL	5/16"	P2220LL	5/8"	P2230LL	15/16"
P2212LL	3/8"	P2222LL	11/16"	P2232LL	1"
P2214LL	7/16"	P2224LL	3/4"	ST213500	Rail
P2216LL	1/2"	P2226LL	13/16"		
P2218LL	9/16"	P2228LL	7/8"		

### STI217LLS

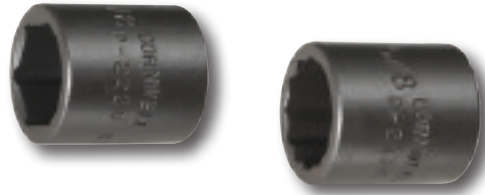
7 Piece Extra Deep  
Power Impact  
Socket Set,  
12 Point,  
3/8" to 3/4"



Set consists of the following Part Numbers and sizes:

P2112LL	3/8"	P2118LL	9/16"	P2124LL	3/4"
P2114LL	7/16"	P2120LL	5/8"	ST276250	Rail
P2116LL	1/2"	P2122LL	11/16"		

## Standard Power Impact Sockets, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SOCKET END	HANDLE END
P2210	P2110	5/16"	7/8"	1/4"	1/2"	11/16"
P2212	P2112	3/8"	7/8"	9/32"	19/32"	11/16"
P2214	P2114	7/16"	7/8"	5/16"	21/32"	3/4"
P2216	P2116	1/2"	15/16"	11/32"	3/4"	3/4"
P2218	P2118	9/16"	15/16"	3/8"	13/16"	13/16"
P2220	P2120	5/8"	1"	25/64"	29/32"	29/32"
P2222	P2122	11/16"	1"	13/32"	1"	1"
P2224	P2124	3/4"	1-1/16"	7/16"	1-1/16"	1-1/16"
P2226		13/16"	1-3/16"	29/64"	1-3/16"	1-3/16"
P2228		7/8"	1-13/64"	1/2"	1-1/4"	1-1/4"
P2230		15/16"	1-15/64"	35/64"	1-5/16"	1-5/16"
P2232		1"	1-9/32"	9/16"	1-3/8"	1-3/8"

Drive Tools

## Deep Power Impact Sockets, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
					SOCKET END	HANDLE END	DIAMETER	DEPTH
P2210L	P2110L	5/16"	1-1/2"	1/4"	1/2"	11/16"	9/32"	1-1/32"
P2212L	P2112L	3/8"	1-1/2"	9/32"	19/32"	11/16"	21/64"	1-1/32"
P2214L	P2114L	7/16"	1-1/2"	5/16"	43/64"	3/4"	13/32"	1-1/32"
P2216L	P2116L	1/2"	1-1/2"	11/32"	3/4"	3/4"	31/64"	1-1/32"
P2218L	P2118L	9/16"	1-1/2"	3/8"	13/16"	13/16"	19/32"	1-1/32"
P2220L	P2120L	5/8"	1-1/2"	25/64"	29/32"	29/32"	37/64"	1-1/32"
P2222L	P2122L	11/16"	1-1/2"	13/32"	1"	1"	41/64"	1-1/32"
P2224L	P2124L	3/4"	1-1/2"	7/16"	1-1/16"	1-1/16"	47/64"	1-1/32"
P2226L		13/16"	1-1/2"	29/64"	1-3/16"	1-3/16"	25/32"	1-1/32"
P2228L		7/8"	1-1/2"	1/2"	1-1/4"	1-1/4"	53/64"	1-1/32"

## Extra Deep Power Impact Sockets, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
					SOCKET END	HANDLE END	DIAMETER	DEPTH
P2210LL		5/16"	2-1/8"	1/4"	33/64"	11/16"	17/64"	1-21/32"
P2212LL	P2112LL	3/8"	2-1/8"	9/32"	19/32"	11/16"	11/32"	1-21/32"
P2214LL	P2114LL	7/16"	2-1/8"	5/16"	43/64"	3/4"	13/32"	1-21/32"
P2216LL	P2116LL	1/2"	2-1/8"	11/32"	3/4"	3/4"	31/64"	1-21/32"
P2218LL	P2118LL	9/16"	2-3/8"	3/8"	13/16"	13/16"	35/64"	1-29/32"
P2220LL	P2120LL	5/8"	2-3/8"	25/64"	29/32"	29/32"	37/64"	1-29/32"
P2222LL	P2122LL	11/16"	2-5/8"	13/32"	1"	1"	43/64"	2-5/32"
P2224LL	P2124LL	3/4"	2-5/8"	7/16"	1-1/16"	1-1/16"	47/64"	2-5/32"
P2226LL		13/16"	2-3/4"	29/64"	1-3/16"	1-3/16"	25/32"	2-7/32"
P2228LL		7/8"	2-3/4"	1/2"	1-1/4"	1-1/4"	53/64"	2-7/32"
P2230LL		15/16"	2-3/4"	35/64"	1-5/16"	1-5/16"	7/8"	2-7/32"
P2232LL		1"	2-3/4"	9/16"	1-3/8"	1-3/8"	15/16"	2-7/32"



**WARNING!**

Use tool only for the job it was designed to do. Wear approved safety goggles when using hand tools.



Follow safety guidelines on pages 399 and 400

# 3/8" DRIVE SOCKET SETS

## TSI242SS

42 Piece Super Power Set,  
6 Point Sockets

Drive Tools



Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
P2210	3/8" x 5/16" Socket	PM2214	3/8" x 14MM Socket
P2212	3/8" x 3/8" Socket	PM2215	3/8" x 15MM Socket
P2214	3/8" x 7/16" Socket	PM2216	3/8" x 16MM Socket
P2216	3/8" x 1/2" Socket	PM2217	3/8" x 17MM Socket
P2218	3/8" x 9/16" Socket	PM2218	3/8" x 18MM Socket
P2220	3/8" x 5/8" Socket	PM2219	3/8" x 19MM Socket
P2222	3/8" x 11/16" Socket	PM2208LL	3/8" x 8MM Xtra Dp Skt
P2224	3/8" x 3/4" Socket	PM2209LL	3/8" x 9MM Xtra Dp Skt
P2212LL	3/8" x 3/8" Xtra Dp Skt	PM2210LL	3/8" x 10MM Xtra Dp Skt
P2214LL	3/8" x 7/16" Xtra Dp Skt	PM2211LL	3/8" x 11MM Xtra Dp Skt
P2216LL	3/8" x 1/2" Xtra Dp Skt	PM2212LL	3/8" x 12MM Xtra Dp Skt
P2218LL	3/8" x 9/16" Xtra Dp Skt	PM2213LL	3/8" x 13MM Xtra Dp Skt
P2220LL	3/8" x 5/8" Xtra Dp Skt	PM2214LL	3/8" x 14MM Xtra Dp Skt
P2222LL	3/8" x 11/16" Xtra Dp Skt	PM2215LL	3/8" x 15MM Xtra Dp Skt
P2224LL	3/8" x 3/4" Xtra Dp Skt	PM2216LL	3/8" x 16MM Xtra Dp Skt
PM2208	3/8" x 8MM Socket	PM2217LL	3/8" x 17MM Xtra Dp Skt
PM2209	3/8" x 9MM Socket	PM2218LL	3/8" x 18MM Xtra Dp Skt
PM2210	3/8" x 10MM Socket	PM2219LL	3/8" x 19MM Xtra Dp Skt
PM2211	3/8" x 11MM Socket	UP2220LSPRA	3/8" x 5/8" Spark Plug Skt
PM2212	3/8" x 12MM Socket	UP2226LSPR	3/8" x 13/16" Sprk Plug Skt
PM2213	3/8" x 13MM Socket	UPJ2SB	Power Universal Joint

## TSUP227RS

7 Piece Standard  
Power Impact  
Universal  
Socket Set,  
6 Point,  
3/8" to 3/4"



Set consists of the following Part Numbers and sizes:

UP2212R	3/8"	UP2218R	9/16"	UP2224R	3/4"
UP2214R	7/16"	UP2220R	5/8"	ST287500	Rail
UP2216R	1/2"	UP2222R	11/16"		

## TSUP217RS

7 Piece Standard  
Power Impact  
Universal  
Socket Set,  
12 Point,  
3/8" to 3/4"



Set consists of the following Part Numbers and sizes:

UP2112R	3/8"	UP2118R	9/16"	UP2124R	3/4"
UP2114R	7/16"	UP2120R	5/8"	ST287500	Rail
UP2116R	1/2"	UP2122R	11/16"		

## TSUP227LRS

7 Piece Deep Power  
Impact Universal  
Socket Set,  
6 Point,  
3/8" to 3/4"



Set consists of the following Part Numbers and sizes:

UP2212LR	3/8"	UP2218LR	9/16"	UP2224LR	3/4"
UP2214LR	7/16"	UP2220LR	5/8"	ST287500	Rail
UP2216LR	1/2"	UP2222LR	11/16"		

## TSUP217LRS

7 Piece Deep Power  
Impact Universal  
Socket Set,  
12 Point,  
3/8" to 3/4"



Set consists of the following Part Numbers and sizes:

UP2112LR	3/8"	UP2118LR	9/16"	UP2124LR	3/4"
UP2114LR	7/16"	UP2120LR	5/8"	ST287500	Rail
UP2116LR	1/2"	UP2122LR	11/16"		

## Standard Power Impact Universal Sockets, Ball Type, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SKT. END	HDL. END
UP2212R	UP2112R	3/8"	2"	13/64"	9/16"	1"
UP2214R	UP2114R	7/16"	2-1/8"	1/4"	21/32"	1"
UP2216R	UP2116R	1/2"	2-1/4"	1/4"	3/4"	1"
UP2218R	UP2118R	9/16"	2-3/8"	3/8"	13/16"	1"
UP2220R	UP2120R	5/8"	2-1/2"	25/64"	7/8"	1"
UP2222R	UP2122R	11/16"	2-9/16"	13/32"	1"	1"
UP2224R	UP2124R	3/4"	2-21/32"	7/16"	1-1/16"	1"

## Deep Power Impact Universal Sockets, Ball Type, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SKT. END	HDL. END
UP2212LR	UP2112LR	3/8"	3"	9/32"	9/16"	1"
UP2214LR	UP2114LR	7/16"	3-1/16"	5/16"	21/32"	1"
UP2216LR	UP2116LR	1/2"	3-1/8"	11/32"	3/4"	1"
UP2218LR	UP2118LR	9/16"	3-3/16"	3/8"	13/16"	1"
UP2220LR	UP2120LR	5/8"	3-1/4"	25/64"	7/8"	1"
UP2222LR	UP2122LR	11/16"	3-5/16"	13/32"	1"	1"
UP2224LR	UP2124LR	3/4"	3-3/8"	7/16"	1-1/16"	1"

## Power Universal Joints, Ball Type



PART NO.	RETAINER TYPE	OVERALL LENGTH	HANDLE END DIAMETER
UPJ2SB*	Ball	1-15/16"	1"
UPJ2SP	Pin	1-15/16"	1"

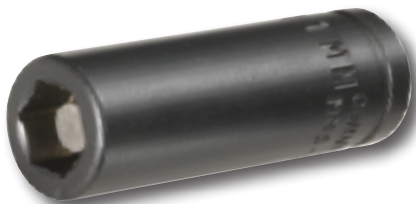
\* Not for Impact Use.

## M2212 Magnetic Socket, 6 Point



NOMINAL	O.A. LENGTH	DIAMETER		DEPTH TO MAGNET
		SKT. END	HDL. END	
3/8"	1-1/8"	43/64"	3/4"	5/32"

## MMS2210R Metric Magnetic Spring Loaded Socket, 6 Point



NOMINAL	O.A. LENGTH	BROACH DEPTH	DIAMETER		BOLT CLEAR DEPTH	DEPTH TO MAGNET
			SOC. END	HDL. END		
10MM	57.15	6.35	16.00	19.05	24.51	3.43



### WARNING!

Use tool only for the job it was designed to do. Wear approved safety goggles when using hand tools.



Follow safety guidelines on pages 399 and 400

## 3/8" DRIVE METRIC SOCKET SETS

### STM2213S

13 Piece Standard Metric Socket Set,  
6 Point, 7MM to 19MM



Set consists of the following Part Numbers and sizes:

TM2207	7MM	TM2212	12MM	TM2217	17MM
TM2208	8MM	TM2213	13MM	TM2218	18MM
TM2209	9MM	TM2214	14MM	TM2219	19MM
TM2210	10MM	TM2215	15MM	ST211750	Rail
TM2211	11MM	TM2216	16MM		

### STM2221

21 Piece Standard Metric Socket Set,  
6 Point, 6MM to 26MM



Set consists of the following Part Numbers and sizes:

TM2206	6MM	TM2214	14MM	TM2222	22MM
TM2207	7MM	TM2215	15MM	TM2223	23MM
TM2208	8MM	TM2216	16MM	TM2224	24MM
TM2209	9MM	TM2217	17MM	TM2225	25MM
TM2210	10MM	TM2218	18MM	TM2226	26MM
TM2211	11MM	TM2219	19MM	ST211750 (2)	Rails
TM2212	12MM	TM2220	20MM		
TM2213	13MM	TM2221	21MM		

### STM2113S

13 Piece Standard Metric Socket Set,  
12 Point, 7MM to 19MM



Set consists of the following Part Numbers and sizes:

TM2107	7MM	TM2112	12MM	TM2117	17MM
TM2108	8MM	TM2113	13MM	TM2118	18MM
TM2109	9MM	TM2114	14MM	TM2119	19MM
TM2110	10MM	TM2115	15MM	ST211750	Rail
TM2111	11MM	TM2116	16MM		

### STM2120

20 Piece Standard Metric Socket Set,  
12 Point, 7MM to 26MM

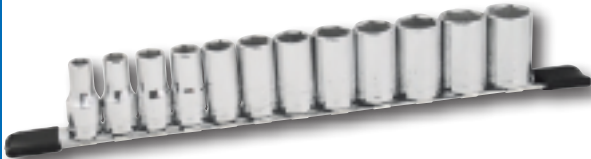


Set consists of the following Part Numbers and sizes:

TM2107	7MM	TM2115	15MM	TM2122	22MM
TM2108	8MM	TM2116	16MM	TM2123	23MM
TM2109	9MM	TM2117	17MM	TM2124	24MM
TM2110	10MM	TM2118	18MM	TM2125	25MM
TM2111	11MM	TM2119	19MM	TM2126	26MM
TM2112	12MM	TM2120	20MM	ST211750 (2)	Rails
TM2113	13MM	TM2121	21MM		
TM2114	14MM				

### STM2212MLS

12 Piece Mid-Length Metric Socket Set,  
6 Point, 8MM to 19MM

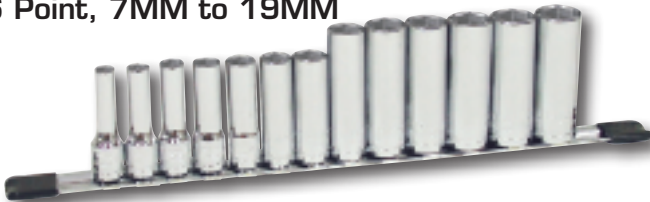


Set consists of the following Part Numbers and sizes:

TM2208ML	8MM	TM2213ML	13MM	TM2218ML	18MM
TM2209ML	9MM	TM2214ML	14MM	TM2219ML	19MM
TM2210ML	10MM	TM2215ML	15MM	ST211750	Rail
TM2211ML	11MM	TM2216ML	16MM		
TM2212ML	12MM	TM2217ML	17MM		

### STM2213LS

13 Piece Deep Metric Socket Set,  
6 Point, 7MM to 19MM



Set consists of the following Part Numbers and sizes:

TM2207L	7MM	TM2212L	12MM	TM2217L	17MM
TM2208L	8MM	TM2213L	13MM	TM2218L	18MM
TM2209L	9MM	TM2214L	14MM	TM2219L	19MM
TM2210L	10MM	TM2215L	15MM	ST211750	Rail
TM2211L	11MM	TM2216L	16MM		

### STM2113LS

13 Piece Deep Metric Socket Set,  
12 Point, 7MM to 19MM



Set consists of the following Part Numbers and sizes:

TM2107L	7MM	TM2112L	12MM	TM2117L	17MM
TM2108L	8MM	TM2113L	13MM	TM2118L	18MM
TM2109L	9MM	TM2114L	14MM	TM2119L	19MM
TM2110L	10MM	TM2115L	15MM	ST211750	Rail
TM2111L	11MM	TM2116L	16MM		



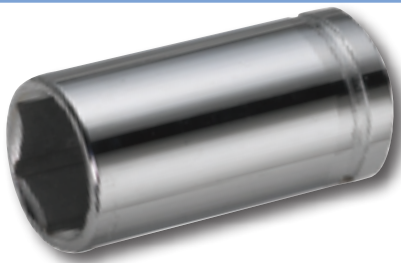
## Standard Metric Sockets, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SOCKET END	HANDLE END
TM2206	TM2106	6MM	24.59	5.54	9.80	17.45
TM2207	TM2107	7MM	24.59	5.54	10.97	17.45
TM2208	TM2108	8MM	24.59	6.35	12.19	17.45
TM2209	TM2109	9MM	24.59	7.14	13.08	17.45
TM2210	TM2110	10MM	24.59	7.14	14.99	17.45
TM2211	TM2111	11MM	24.59	7.14	16.13	17.45
TM2212	TM2112	12MM	24.59	8.38	17.45	17.45
TM2213	TM2113	13MM	24.59	8.38	18.80	18.80
TM2214	TM2114	14MM	24.82	8.38	19.84	19.84
TM2215	TM2115	15MM	24.82	8.38	21.44	21.44
TM2216	TM2116	16MM	25.40	8.38	22.23	19.05
TM2217	TM2117	17MM	26.97	8.38	23.80	19.05
TM2218	TM2118	18MM	26.97	10.16	24.59	20.62
TM2219	TM2119	19MM	28.58	11.10	25.40	20.62
TM2220	TM2120	20MM	28.58	11.51	26.97	22.23
TM2221	TM2121	21MM	28.58	11.71	28.58	23.80
TM2222	TM2122	22MM	29.36	12.45	30.00	25.00
TM2223	TM2123	23MM	30.15	12.70	31.24	26.97
TM2224	TM2124	24MM	30.94	13.84	31.75	26.99
TM2225	TM2125	25MM	31.75	14.02	33.32	28.58
TM2226	TM2126	26MM	32.54	14.61	34.93	28.58

Drive Tools

## Mid-Length Metric Sockets, 6 Point



PART NO.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
TM2208ML	8MM	38.10	6.35	12.19	17.45
TM2209ML	9MM	38.10	7.14	13.08	17.45
TM2210ML	10MM	38.10	7.14	14.99	17.45
TM2211ML	11MM	38.10	8.36	16.13	17.45
TM2212ML	12MM	38.10	10.16	17.45	17.45
TM2213ML	13MM	38.10	11.10	18.80	18.80
TM2214ML	14MM	38.10	12.50	19.84	19.84
TM2215ML	15MM	38.10	12.50	21.44	21.44
TM2216ML	16MM	38.10	14.30	22.23	22.23
TM2217ML	17MM	38.10	14.30	23.80	23.80
TM2218ML	18MM	38.10	14.30	24.59	24.59
TM2219ML	19MM	38.10	16.66	25.40	25.40

## Deep Metric Sockets, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SOCKET END	HANDLE END
TM2207L	TM2107L	7MM	57.15	5.54	10.97	17.45
TM2208L	TM2108L	8MM	57.15	6.35	12.19	17.45
TM2209L	TM2109L	9MM	57.15	7.14	13.08	17.45
TM2210L	TM2110L	10MM	57.15	7.14	14.99	17.45
TM2211L	TM2111L	11MM	57.15	8.36	16.13	17.45
TM2212L	TM2112L	12MM	57.15	10.16	17.45	17.45
TM2213L	TM2113L	13MM	57.15	11.10	18.80	18.80
TM2214L	TM2114L	14MM	69.85	12.50	19.84	19.84
TM2215L	TM2115L	15MM	69.85	12.50	21.44	21.44
TM2216L	TM2116L	16MM	69.85	14.30	22.23	22.23
TM2217L	TM2117L	17MM	69.85	14.30	23.80	23.80
TM2218L	TM2118L	18MM	69.85	14.30	24.59	24.59
TM2219L	TM2119L	19MM	69.85	16.66	25.40	25.40
TM2220L		20MM	69.85	17.27	26.97	26.97
TM2221L		21MM	69.85	17.27	28.58	28.58
TM2222L		22MM	69.85	18.64	30.00	30.00
TM2223L		23MM	70.76	18.64	31.24	31.24
TM2224L		24MM	70.76	18.64	31.75	31.75
TM2225L		25MM	70.76	19.05	33.32	33.32
TM2226L		26MM	70.76	19.05	34.93	34.93

**TSMU226ST**

6 Piece Standard Metric Universal Socket Set, 6 Point, 10MM to 17MM



Set consists of the following Part Numbers and sizes:

U2210MM	10MM	U2214MM	14MM	ST276250	Rail
U2212MM	12MM	U2215MM	15MM		
U2213MM	13MM	U2217MM	17MM		

**TSMU2210**

10 Piece Standard Metric Universal Socket Set, 6 Point, 10MM to 19MM



Set consists of the following Part Numbers and sizes:

U2210MM	10MM	U2214MM	14MM	U2218MM	18MM
U2211MM	11MM	U2215MM	15MM	U2219MM	19MM
U2212MM	12MM	U2216MM	16MM	ST293750	Rail
U2213MM	13MM	U2217MM	17MM		

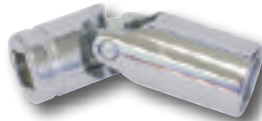
**Standard Metric Universal Sockets, 6 and 12 Point**



	6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
						SOCKET END	HANDLE END
U2210MM		U2110MM	10MM	45.24	7.14	14.35	19.05
U2211MM			11MM	45.24	7.14	15.80	19.05
U2212MM			12MM	46.81	7.14	17.45	19.05
U2213MM			13MM	46.81	7.90	19.05	19.05
U2214MM			14MM	46.81	8.41	19.84	19.05
U2215MM			15MM	49.20	8.41	22.23	19.05
U2216MM			16MM	49.20	9.55	22.23	19.05
U2217MM			17MM	49.99	9.55	23.80	19.05
U2218MM			18MM	49.99	10.16	23.80	19.05
U2219MM			19MM	51.59	11.10	25.40	19.05

**U2213MML**

Deep Metric Universal Socket, 6 Point



NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
			SOCKET END	HANDLE END
13MM	62.69	9.12	19.05	19.05

**FCWM8PFS**

8 Piece Metric Flare Nut Crowfoot Wrench Set, 6 Point, 9MM to 15MM

Set consists of the following in a polyfoam tray:

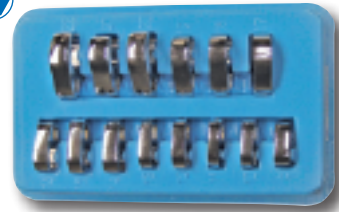


FCW9MM	9MM	FCW13MM	13MM
FCW10MM	10MM	FCW14MM	14MM
FCW11MM	11MM	FCW15MM	15MM
FCW12MM	12MM	SBB	Bar

**FCWM14ST**

14 Piece Metric Flare Nut Crowfoot Wrench Set, 6 Point, 9MM to 22MM

Set consists of the following in a plastic tray:



FCW9MM	9MM	FCW16MM	16MM
FCW10MM	10MM	FCW17MM	17MM
FCW11MM	11MM	FCW18MM	18MM
FCW12MM	12MM	FCW19MM	19MM
FCW13MM	13MM	FCW20MM	20MM
FCW14MM	14MM	FCW21MM	21MM
FCW15MM	15MM	FCW22MM	22MM

**Metric Flare Nut Crowfoot Wrenches, 6 Point**



PART NUMBER	NOMINAL	HEAD DIAMETER	LENGTH	THICKNESS	FLARE OPENING
FCW9MM	9MM	23.02	35.72	9.53	6.25
FCW10MM	10MM	23.02	35.72	9.53	6.25
FCW11MM	11MM	23.02	35.72	9.53	7.26
FCW12MM	12MM	24.61	37.31	9.53	7.26
FCW13MM	13MM	24.61	37.31	9.53	9.27
FCW14MM	14MM	27.78	41.28	11.11	10.26
FCW15MM	15MM	27.78	41.28	11.11	11.15
FCW16MM	16MM	27.78	41.28	11.11	12.34
FCW17MM	17MM	32.54	44.58	12.70	12.95
FCW18MM	18MM	32.54	44.58	12.70	14.55
FCW19MM	19MM	32.54	44.58	12.70	14.55
FCW20MM	20MM	40.48	50.01	14.29	15.62
FCW21MM	21MM	40.48	50.01	14.29	16.26
FCW22MM	22MM	40.48	50.01	14.29	17.27

### STI2212MS

12 Piece Standard Metric Power Impact Socket Set, 6 Point, 8MM to 19MM



Set consists of the following Part Numbers and sizes:

PM2208	8MM	PM2213	13MM	PM2217	17MM
PM2209	9MM	PM2214	14MM	PM2218	18MM
PM2210	10MM	PM2215	15MM	PM2219	19MM
PM2211	11MM	PM2216	16MM	ST211750	Rail
PM2212	12MM				

### STI2112MS

12 Piece Standard Metric Power Impact Socket Set, 12 Point, 8MM to 19MM



Set consists of the following Part Numbers and sizes:

PM2108	8MM	PM2113	13MM	PM2117	17MM
PM2109	9MM	PM2114	14MM	PM2118	18MM
PM2110	10MM	PM2115	15MM	PM2119	19MM
PM2111	11MM	PM2116	16MM	ST211750	Rail
PM2112	12MM				

Drive Tools

### STI2212LMS

12 Piece Deep Metric Power Impact Socket Set, 6 Point, 8MM to 19MM



Set consists of the following Part Numbers and sizes:

PM2208L	8MM	PM2213L	13MM	PM2217L	17MM
PM2209L	9MM	PM2214L	14MM	PM2218L	18MM
PM2210L	10MM	PM2215L	15MM	PM2219L	19MM
PM2211L	11MM	PM2216L	16MM	ST211750	Rail
PM2212L	12MM				

### STI2112LMS

12 Piece Deep Metric Power Impact Socket Set, 12 Point, 8MM to 19MM



Set consists of the following Part Numbers and sizes:

PM2108L	8MM	PM2113L	13MM	PM2117L	17MM
PM2109L	9MM	PM2114L	14MM	PM2118L	18MM
PM2110L	10MM	PM2115L	15MM	PM2119L	19MM
PM2111L	11MM	PM2116L	16MM	ST211750	Rail
PM2112L	12MM				

### STI2212LLMS

12 Piece Extra Deep Metric Power Impact Socket Set, 6 Point, 8MM to 19MM



Set consists of the following Part Numbers and sizes:

PM2208LL	8MM	PM2213LL	13MM	PM2217LL	17MM
PM2209LL	9MM	PM2214LL	14MM	PM2218LL	18MM
PM2210LL	10MM	PM2215LL	15MM	PM2219LL	19MM
PM2211LL	11MM	PM2216LL	16MM	ST211750	Rail
PM2212LL	12MM				

### STI2112LLMS

12 Piece Extra Deep Metric Power Impact Socket Set, 12 Point, 8MM to 19MM



Set consists of the following Part Numbers and sizes:

PM2108LL	8MM	PM2113LL	13MM	PM2117LL	17MM
PM2109LL	9MM	PM2114LL	14MM	PM2118LL	18MM
PM2110LL	10MM	PM2115LL	15MM	PM2119LL	19MM
PM2111LL	11MM	PM2116LL	16MM	ST211750	Rail
PM2112LL	12MM				



**WARNING!**

FOR USE WITH IMPACT TOOLS: Use with impact wrenches and torque control tools according to their designed size and strength. DO NOT HOLD SPINNING SOCKET OR ACCESSORY.

# 3/8" DR. METRIC POWER IMPACT SOCKETS

## Standard Metric Power Impact Sockets, 6 and 12 Point

Drive Tools



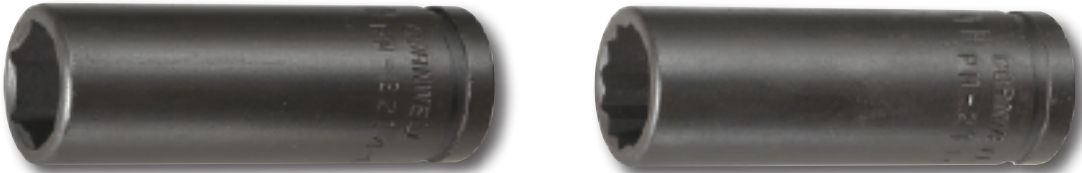
6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SOCKET END	HANDLE END
PM2208	PM2108	8MM	22.22	6.35	13.03	17.45
PM2209	PM2109	9MM	22.22	7.14	14.45	17.45
PM2210	PM2110	10MM	22.22	7.14	15.16	17.45
PM2211	PM2111	11MM	22.22	7.14	16.46	17.45
PM2212	PM2112	12MM	22.22	7.87	19.05	19.05
PM2213	PM2113	13MM	22.22	8.38	19.91	19.91
PM2214	PM2114	14MM	23.80	8.38	20.62	20.62
PM2215	PM2115	15MM	23.80	8.38	22.23	22.23
PM2216	PM2116	16MM	24.59	8.38	23.09	23.09
PM2217	PM2117	17MM	25.40	8.38	25.40	25.40
PM2218	PM2118	18MM	25.40	9.04	26.90	26.90
PM2219	PM2119	19MM	25.40	9.04	26.97	26.97
PM2220		20MM	27.78	9.52	28.57	28.57
PM2221		21MM	27.78	9.52	30.15	30.15
PM2222		22MM	28.57	10.16	31.75	31.75
PM2223		23MM	28.57	10.16	31.75	31.75
PM2224		24MM	29.36	11.10	33.32	33.32

## Deep Metric Power Impact Sockets, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
					SOCKET END	HANDLE END	DIAMETER	DEPTH
PM2208L	PM2108L	8MM	38.10	6.35	13.03	17.45	7.11	26.21
PM2209L	PM2109L	9MM	38.10	7.14	14.45	17.45	8.08	26.21
PM2210L	PM2110L	10MM	38.10	7.14	15.16	17.45	9.09	26.21
PM2211L	PM2111L	11MM	38.10	7.14	16.46	17.45	10.06	26.21
PM2212L	PM2112L	12MM	38.10	7.87	19.05	19.05	10.85	26.21
PM2213L	PM2113L	13MM	38.10	8.38	19.91	19.91	12.04	26.21
PM2214L	PM2114L	14MM	38.10	8.38	20.62	20.62	12.83	26.21
PM2215L	PM2115L	15MM	38.10	8.38	22.23	22.23	13.77	26.21
PM2216L	PM2116L	16MM	38.10	9.55	23.09	23.09	14.55	26.21
PM2217L	PM2117L	17MM	38.10	9.55	25.40	25.40	16.00	26.21
PM2218L	PM2118L	18MM	38.10	10.16	26.97	26.97	16.94	26.21
PM2219L	PM2119L	19MM	38.10	11.10	26.97	26.97	17.91	26.21
PM2220L		20MM	38.10	11.88	28.57	28.57	18.67	23.95
PM2221L		21MM	38.10	12.70	30.15	30.15	20.21	23.46
PM2222L		22MM	38.10	13.48	31.75	31.75	21.03	23.24
PM2223L		23MM	38.10	14.27	31.75	31.75	22.22	22.86
PM2224L		24MM	38.10	15.06	33.32	33.32	23.01	22.63

## Extra Deep Metric Power Impact Sockets, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
					SOCKET END	HANDLE END	DIAMETER	DEPTH
PM2208LL	PM2108LL	8MM	53.98	6.35	13.03	17.45	7.11	42.08
PM2209LL	PM2109LL	9MM	53.98	7.14	14.45	17.45	8.08	42.08
PM2210LL	PM2110LL	10MM	53.98	7.14	15.16	17.45	9.09	42.08
PM2211LL	PM2111LL	11MM	53.98	7.14	16.46	17.45	10.06	42.08
PM2212LL	PM2112LL	12MM	53.98	7.87	19.05	19.05	10.85	42.08
PM2213LL	PM2113LL	13MM	53.98	8.38	19.91	19.91	12.04	42.08
PM2214LL	PM2114LL	14MM	60.33	8.38	20.62	20.62	12.83	48.43
PM2215LL	PM2115LL	15MM	60.33	8.38	22.23	22.23	13.77	48.43
PM2216LL	PM2116LL	16MM	60.33	9.55	23.09	23.09	14.55	48.43
PM2217LL	PM2117LL	17MM	66.68	9.55	25.40	25.40	16.00	54.77
PM2218LL	PM2118LL	18MM	66.68	10.16	26.97	26.97	16.94	54.77
PM2219LL	PM2119LL	19MM	66.68	11.10	26.97	26.97	17.91	54.77
PM2220LL		20MM	66.68	11.88	28.57	28.57	18.67	53.11
PM2221LL		21MM	66.68	12.70	30.15	30.15	19.83	52.90
PM2222LL		22MM	69.85	13.48	31.75	31.75	21.13	55.85
PM2223LL		23MM	69.85	14.27	31.75	31.75	22.22	55.70
PM2224LL		24MM	69.85	15.06	33.32	33.32	23.16	55.57



### TSMUP227RS

7 Piece Standard Metric Power Impact Universal Socket Set, 6 Point, 10MM to 18MM

Set consists of the following Part Numbers and sizes:

UP2210MMR	10MM	UP2215MMR	15MM
UP2212MMR	12MM	UP2217MMR	17MM
UP2213MMR	13MM	UP2218MMR	18MM
UP2214MMR	14MM	ST287500	Rail

### TSMUP2210RS

10 Piece Standard Metric Power Impact Universal Socket Set, 6 Point, 10MM to 19MM



Set consists of the following Part Numbers and sizes:

UP2210MMR	10MM	UP2216MMR	16MM
UP2211MMR	11MM	UP2217MMR	17MM
UP2212MMR	12MM	UP2218MMR	18MM
UP2213MMR	13MM	UP2219MMR	19MM
UP2214MMR	14MM	ST211750	Rail
UP2215MMR	15MM		

### TSMUP2110RS

10 Piece Standard Metric Power Impact Universal Socket Set, 12 Point, 10MM to 19MM



Set consists of the following Part Numbers and sizes:

UP2110MMR	10MM	UP2116MMR	16MM
UP2111MMR	11MM	UP2117MMR	17MM
UP2112MMR	12MM	UP2118MMR	18MM
UP2113MMR	13MM	UP2119MMR	19MM
UP2114MMR	14MM	ST211750	Rail
UP2115MMR	15MM		

### TSMUP2215RS

15 Piece Standard Metric Power Impact Universal Socket Set, 6 Point, 8MM to 24MM



Set consists of the following Part Numbers and sizes:

UP2208MMR	8MM	UP2216MMR	16MM
UP2209MMR	9MM	UP2217MMR	17MM
UP2210MMR	10MM	UP2218MMR	18MM
UP2211MMR	11MM	UP2219MMR	19MM
UP2212MMR	12MM	UP2221MMR	21MM
UP2213MMR	13MM	UP2222MMR	22MM
UP2214MMR	14MM	UP2224MMR	24MM
UP2215MMR	15MM	ST216250	Rail

### TSMUP2113RS

13 Piece Standard Metric Power Impact Universal Socket Set, 12 Point, 8MM to 22MM



Set consists of the following Part Numbers and sizes:

UP2108MMR	8MM	UP2115MMR	15MM
UP2109MMR	9MM	UP2116MMR	16MM
UP2110MMR	10MM	UP2117MMR	17MM
UP2111MMR	11MM	UP2118MMR	18MM
UP2112MMR	12MM	UP2119MMR	19MM
UP2113MMR	13MM	UP2122MMR	22MM
UP2114MMR	14MM	ST214875	Rail



**WARNING!**

FOR USE WITH IMPACT TOOLS: Use with impact wrenches and torque control tools according to their designed size and strength. DO NOT HOLD SPINNING SOCKET OR ACCESSORY.



Follow safety guidelines on pages 399 and 400

## 3/8" DRIVE METRIC UNIVERSAL SOCKET SETS

### TSMUP2210LS

10 Piece Deep Metric Power Impact Universal Socket Set, 6 Point, 10MM to 19MM

Drive Tools



Set consists of the following Part Numbers and sizes:

UP2210MML	10MM	UP2216MML	16MM
UP2211MML	11MM	UP2217MML	17MM
UP2212MML	12MM	UP2218MML	18MM
UP2213MML	13MM	UP2219MML	19MM
UP2214MML	14MM	ST211750	Rail
UP2215MML	15MM		

### TSMUP2110LS

10 Piece Deep Metric Power Impact Universal Socket Set, 12 Point, 10MM to 19MM



Set consists of the following Part Numbers and sizes:

UP2110MML	10MM	UP2116MML	16MM
UP2111MML	11MM	UP2117MML	17MM
UP2112MML	12MM	UP2118MML	18MM
UP2113MML	13MM	UP2119MML	19MM
UP2114MML	14MM	ST211750	Rail
UP2115MML	15MM		

### TSMUP2213L

13 Piece Deep Metric Power Impact Universal Socket Set, 6 Point, 8MM to 22MM



Set consists of the following Part Numbers and sizes:

UP2208MML	8MM	UP2215MML	15MM
UP2209MML	9MM	UP2216MML	16MM
UP2210MML	10MM	UP2217MML	17MM
UP2211MML	11MM	UP2218MML	18MM
UP2212MML	12MM	UP2219MML	19MM
UP2213MML	13MM	UP2222MML	22MM
UP2214MML	14MM	ST216250	Rail

### TSMUP2113L

13 Piece Deep Metric Power Impact Universal Socket Set, 12 Point, 8MM to 22MM



Set consists of the following Part Numbers and sizes:

UP2108MML	8MM	UP2115MML	15MM
UP2109MML	9MM	UP2116MML	16MM
UP2110MML	10MM	UP2117MML	17MM
UP2111MML	11MM	UP2118MML	18MM
UP2112MML	12MM	UP2119MML	19MM
UP2113MML	13MM	UP2122MML	22MM
UP2114MML	14MM	ST216250	Rail

### TSIUP218SS

18 Piece SAE & Metric Power Impact Universal Socket Super Set, 6 Point, 3/8" to 3/4" and 10MM to 19MM





Set consists of the following Part Numbers and sizes:

AP32B	Power Adapter	UP2211MMR	11MM Pwr. Univ.
UP2212R	3/8" Pwr. Univ.	UP2212MMR	12MM Pwr. Univ.
UP2214R	7/16" Pwr. Univ.	UP2213MMR	13MM Pwr. Univ.
UP2216R	1/2" Pwr. Univ.	UP2214MMR	14MM Pwr. Univ.
UP2218R	9/16" Pwr. Univ.	UP2215MMR	15MM Pwr. Univ.
UP2220R	5/8" Pwr. Univ.	UP2216MMR	16MM Pwr. Univ.
UP2222R	11/16" Pwr. Univ.	UP2217MMR	17MM Pwr. Univ.
UP2224R	3/4" Pwr. Univ.	UP2218MMR	18MM Pwr. Univ.
UP2210MMR	10MM Pwr. Univ.	UP2219MMR	19MM Pwr. Univ.

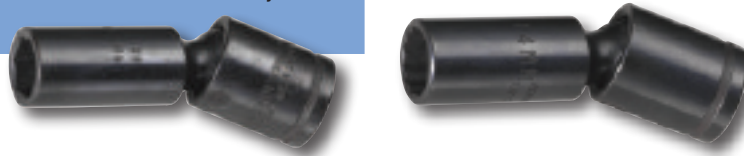
## Standard Metric Power Impact Universal Sockets, 6 and 12 Point





Drive Tools

6 PT. 	12 PT. 	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SOCKET END	HANDLE END
UP2208MMR	UP2108MMR	8MM	49.20	5.31	13.49	25.40
UP2209MMR	UP2109MMR	9MM	50.01	5.31	14.27	25.40
UP2210MMR	UP2110MMR	10MM	50.80	5.31	15.88	25.40
UP2211MMR	UP2111MMR	11MM	53.98	6.35	16.79	25.40
UP2212MMR	UP2112MMR	12MM	55.58	7.87	18.29	25.40
UP2213MMR	UP2113MMR	13MM	57.15	8.38	19.05	25.40
UP2214MMR	UP2114MMR	14MM	60.33	8.38	20.62	25.40
UP2215MMR	UP2115MMR	15MM	61.93	8.38	22.23	25.40
UP2216MMR	UP2116MMR	16MM	63.50	9.53	23.80	25.40
UP2217MMR	UP2117MMR	17MM	65.41	9.53	25.40	25.40
UP2218MMR	UP2118MMR	18MM	66.04	9.53	25.40	25.40
UP2219MMR	UP2119MMR	19MM	67.31	11.10	26.97	25.40
UP2221MMR		21MM	68.58	12.29	30.16	25.40
UP2222MMR	UP2122MMR	22MM	69.85	12.95	31.75	25.40
UP2224MMR		24MM	71.12	14.68	33.32	25.40

## Deep Metric Power Impact Universal Sockets, 6 and 12 Point



6 PT. 	12 PT. 	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SOCKET END	HANDLE END
UP2208MML	UP2108MML	8MM	75.41	6.35	13.49	25.40
UP2209MML	UP2109MML	9MM	75.82	7.14	14.27	25.40
UP2210MML	UP2110MML	10MM	76.20	7.14	15.88	25.40
UP2211MML	UP2111MML	11MM	77.77	7.14	16.79	25.40
UP2212MML	UP2112MML	12MM	78.59	7.87	18.29	25.40
UP2213MML	UP2113MML	13MM	79.38	8.38	19.05	25.40
UP2214MML	UP2114MML	14MM	80.98	8.38	20.62	25.40
UP2215MML	UP2115MML	15MM	81.76	8.38	22.23	25.40
UP2216MML	UP2116MML	16MM	82.55	9.53	23.80	25.40
UP2217MML	UP2117MML	17MM	84.15	9.53	25.40	25.40
UP2218MML	UP2118MML	18MM	84.94	9.53	25.40	25.40
UP2219MML	UP2119MML	19MM	85.73	11.10	26.97	25.40
UP2221MML		21MM	88.90	12.29	30.16	25.40
UP2222MML	UP2122MML	22MM	88.90	12.45	31.75	25.40
UP2224MML		24MM	92.08	14.68	33.32	25.40



**WARNING!**

Use approved eye protection when using tools. Black power sockets are designed for use with power nut runners.



**WARNING!**

FOR USE WITH IMPACT TOOLS: Use with impact wrenches and torque control tools according to their designed size and strength. DO NOT HOLD SPINNING SOCKET OR ACCESSORY.



Follow safety guidelines on pages 399 and 400

## 3/8" DRIVE RATCHET SETS

### JR3ST

#### 3 Piece Ratchet Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
JR30	3/8" Drive Ratchet
JR40	3/8" Drive Long Handled Ratchet
JRF36	3/8" Drive Flex Ratchet

### JRH3ST

#### 3 Piece Handle Ratchet Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
JR30H	3/8" Dr. Handle Ratchet
JRF36H	3/8" Dr. Handle Flex Ratchet
JRF36SH	3/8" Dr. Handle Short Flex Ratchet

### TJS3ST

#### 3 Piece Ratchet Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
TR3	1/4" Drive Ratchet
JR30	3/8" Drive Ratchet
SR50	1/2" Drive Ratchet

### TJSB3ST

#### 3 Piece Ratchet Set (Industrial Finish)



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
TR301	1/4" Drive Ind. Finish Ratchet
JR301	3/8" Drive Ind. Finish Ratchet
SR501	1/2" Drive Ind. Finish Ratchet

### TJS3HST

#### 3 Piece Handle Ratchet Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
TR3H	1/4" Dr. Handle Ratchet
JR30H	3/8" Dr. Handle Ratchet
SR50H	1/2" Dr. Handle Ratchet

### TJSB3HST

#### 3 Piece Handle Industrial Finish Ratchet Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
TR301H	1/4" Dr. Handle Industrial Finish Ratchet
JR301H	3/8" Dr. Handle Industrial Finish Ratchet
SR501H	1/2" Dr. Handle Industrial Finish Ratchet

### TJSF3ST

#### 3 Piece Flex Head Ratchet Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
TRF4	1/4" Drive Flex Head Ratchet
JRF36	3/8" Drive Flex Head Ratchet
SRF76	1/2" Drive Flex Head Ratchet



## TJF2HST

2 Piece Handle Flex Ratchet Set

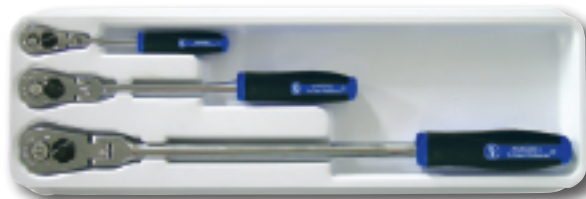


Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
JRF36H	3/8" Drive Handle Flex Ratchet
TRF42H	3/8" Drive Handle Flex Ratchet

## TJSF3HST

3 Piece Handle Flex Head Ratchet Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
TRF4H	1/4" Drive Handle Flex Head Ratchet
JRF36H	3/8" Drive Handle Flex Head Ratchet
SRF76H	1/2" Drive Handle Flex Head Ratchet

Drive Tools

## CTG3RST

3 Piece Swivel Ratchet Set



- Swivel head allows greater access in tight areas.
- 72 tooth ratchet design provides a 5° handle swing.
- Bi-material handles for a comfortable grip.
- Quick release button locks socket in place and quickly releases the socket when the job is done.
- Knurled switch lever allows for quick one hand direction change.
- High polish, chrome plated finish.

Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
CTG25OSWR	1/4" Drive Swivel Head Ratchet
CTG375SWR	3/8" Drive Swivel Head Ratchet
CTG50OSWR	1/2" Drive Swivel Head Ratchet

- CTG25ORK Replacement 1/4" Drive Head
- CTG375RK Replacement 3/8" Drive Head
- CTG50ORK Replacement 1/2" Drive Head

## CTG2RST

2 Piece Swivel Ratchet Set



- Swivel head allows greater access in tight areas.
- 72 tooth ratchet design provides a 5° handle swing.
- Bi-material handles for a comfortable grip.
- Quick release button locks socket in place and quickly releases the socket when the job is done.
- Knurled switch lever allows for quick one hand direction change.
- High polish, chrome plated finish.

Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
CTG25OSWR	1/4" Drive Swivel Head Ratchet
CTG375SWR	3/8" Drive Swivel Head Ratchet

- CTG25ORK Replacement 1/4" Drive Head
- CTG375RK Replacement 3/8" Drive Head

### GENERAL RATCHET INFORMATION

- Non-flex head ratchets have three moving parts for minimum wear.
- Standard ratchets have a 30 tooth ratcheting design allows new bite with only 12° handle swing.
- Fine tooth ratchets have a 72 tooth design with a 5° handle movement.
- Polycarbonate slip and oil resistant handles on plastic handle ratchets.
- All handles are especially contoured to fit comfortably in the hand during prolonged use.
- Thin head design for close clearance application.
- Black ratchets have an Industrial Black Oxide finish.



#### 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 light oil. Do not immerse sealed ratchet in fluids. Do not replace worn parts individually, use entire contents of the repair kit. Ratchets that slip or break can cause injury.

# 3/8" DRIVE RATCHETS

## Ratchets



- 30 tooth ratcheting design allows new bite with only 12° handle swing.
- Form-fitted handle.

PART NO.	GEAR TEETH	HEAD		LENGTH
		THICKNESS	WIDTH	
JR30	30	9/16"	1-5/16"	7-1/8"
JR40	30	9/16"	1-3/8"	10-1/4"
TR32	30	7/16"	1-1/16"	5"
TR42	30	7/16"	1-1/16"	8"

JR30RK1A 3/8" Drive Ratchet Repair Kit

TR32RK1A 3/8" Drive Ratchet Repair Kit

## JRS30

### Stubby Ratchet



GEAR TEETH	HEAD		LENGTH
	THICKNESS	WIDTH	
30	9/16"	1-5/16"	4-7/32"

JR30RK1A 3/8" Drive Ratchet Repair Kit

## Flex Head Ratchets



- 30 tooth ratcheting design allows new bite with only 12° handle swing.
- Ball and dimple flex joint holds head in position preventing unwanted movement.
- Thin head design for close clearance application.
- High polished nickel chrome plating to resist rust and prolong life.

PART NO.	GEAR TEETH	HEAD		FLEX HEAD	LENGTH
		THICKNESS	WIDTH		
JRF36	30	9/16"	1-5/16"	120°	12-3/8"
TRF42	30	7/16"	1-1/16"	120°	6"

JR30RK1A 3/8" Drive Ratchet Repair Kit

TR32RK1A 3/8" Drive Ratchet Repair Kit

## JRFB36

### Bent Handle Flex Ratchet



- Handle Bend: 25°.

GEAR TEETH	HEAD		FLEX HEAD	LENGTH
	THICKNESS	WIDTH		
30	9/16"	1-5/16"	120°	12"

JR30RK1A 3/8" Drive Ratchet Repair Kit

## JRFS36

### Stubby Flex Head Ratchet



GEAR TEETH	HEAD		FLEX HEAD	LENGTH
	THICKNESS	WIDTH		
30	9/16"	1-5/16"	120°	4-47/64"

JR30RK1A 3/8" Drive Ratchet Repair Kit

## JR72

### Fine Tooth Ratchet



- 72 tooth design with a 5 degree handle movement.
- Form fitted handle reduces fatigue and permits prolonged use.
- High polished nickel chrome plating to resist rust and prolong life.

GEAR TEETH	HEAD		LENGTH
	THICKNESS	WIDTH	
72	9/16"	1-5/16"	7-1/8"

JR72RK1A 3/8" Drive Fine Tooth Ratchet Repair Kit

## JR72L

### Long Fine Tooth Ratchet



- 72 tooth design with a 5 degree handle movement.
- Form-fitted handle reduces fatigue and permits prolonged use.
- High polished nickel chrome plating to resist rust and prolong life.

GEAR TEETH	HEAD		LENGTH
	THICKNESS	WIDTH	
72	9/16"	1-3/8"	10-1/4"

JR72RK1A 3/8" Drive Fine Tooth Ratchet Repair Kit

## JRF72

### Fine Tooth Flex Head Ratchet



- 72 tooth design with a 5 degree handle movement.
- Form-fitted handle reduces fatigue and permits prolonged use.
- Especially contoured to fit comfortably in the hand during prolonged use.
- High polished nickel chrome plating to resist rust and prolong life.

GEAR TEETH	HEAD		FLEX HEAD	LENGTH
	THICKNESS	WIDTH		
72	9/16"	1-5/16"	120°	12-3/8"

JR72RK1A 3/8" Drive Fine Tooth Ratchet Repair Kit

## JRS72

### Fine Tooth Stubby Ratchet



GEAR TEETH	HEAD		LENGTH
	THICKNESS	WIDTH	
72	9/16"	1-5/16"	4-7/32"

JR72RK1A 3/8" Drive Fine Tooth Ratchet Repair Kit



#### 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 light oil. Do not immerse sealed ratchet in fluids. Do not replace worn parts individually, use entire contents of the repair kit. Ratchets that slip or break can cause injury.

## JR301

Industrial Finish Ratchet with Ball Retainer



GEAR TEETH	HEAD		LENGTH
	THICKNESS	WIDTH	
30	9/16"	1-5/16"	7-1/8"

JR30RK1A 3/8" Drive Ratchet Repair Kit

### Handle Ratchets



- 30 tooth ratcheting design allows new bite with only 12° handle swing.
- Polycarbonate slip and oil resistant handle.
- Especially contoured to fit comfortably in the hand during prolonged use.
- Thin head design for close clearance application.
- High polished nickel chrome plating to resist rust and prolong life.

PART NO.	GEAR TEETH	HEAD		LENGTH
		THICKNESS	WIDTH	
JR30H	30	9/16"	1-5/16"	8"
JR40H	30	9/16"	1-3/8"	11-25/32"
TR32H	30	7/16"	1-1/16"	6-11/16"

JR30RK1A 3/8" Drive Ratchet Repair Kit

TR32RK1A 3/8" Drive Ratchet Repair Kit

### Handle Flex Head Ratchets



- 30 tooth ratcheting design allows new bite with only 12° handle swing.
- Ball and dimple flex joint hold head in position preventing unwanted movement.
- Thin head design for close clearance application.
- High polished nickel chrome plating to resist rust and prolong life.

PART NO.	GEAR TEETH	HEAD		FLEX HEAD	LENGTH
		THICKNESS	WIDTH		
JRF36H	30	9/16"	1-5/16"	120°	12-3/8"
JRF36SH	30	9/16"	1-5/16"	120°	8-1/2"
TRF42H	30	7/16"	1-1/16"	120°	7-11/16"

JR30RK1A 3/8" Drive Ratchet Repair Kit

TR32RK1A 3/8" Drive Ratchet Repair Kit

## JR72H

Fine Tooth Handle Ratchet



- 72 tooth design with a 5 degree handle movement.
- Polycarbonate slip and oil resistant handle.
- Especially contoured to fit comfortably in the hand during prolonged use.
- High polished nickel chrome plating to resist rust and prolong life.

GEAR TEETH	HEAD		LENGTH
	THICKNESS	WIDTH	
72	9/16"	1-5/16"	8"

JR72RK1A 3/8" Drive Fine Tooth Ratchet Repair Kit

## JR72LH

Long Fine Tooth Handle Ratchet



- 72 tooth design with a 5 degree handle movement.
- Polycarbonate slip and oil resistant handle.
- Especially contoured to fit comfortably in the hand during prolonged use.
- High polished nickel chrome plating to resist rust and prolong life.

GEAR TEETH	HEAD		LENGTH
	THICKNESS	WIDTH	
72	9/16"	1-3/8"	11-25/32"

JR72RK1A 3/8" Drive Fine Tooth Ratchet Repair Kit

## JRF72H

Fine Tooth Flex Head Handle Ratchet



- 72 tooth design with a 5 degree handle movement.
- Polycarbonate slip and oil resistant handle.
- Especially contoured to fit comfortably in the hand during prolonged use.
- High polished nickel chrome plating to resist rust and prolong life.

GEAR TEETH	HEAD		FLEX HEAD	LENGTH
	THICKNESS	WIDTH		
72	9/16"	1-5/16"	120°	12-3/8"

JR72RK1A 3/8" Drive Fine Tooth Ratchet Repair Kit

## JR301H

Industrial Finish Handle Ratchet



- 30 tooth ratcheting design allows new bite with only 12° handle swing.
- Polycarbonate slip and oil resistant handle.
- Especially contoured to fit comfortably in the hand during prolonged use.
- Thin head design for close clearance application.
- Industrial Black Oxide Finish.

GEAR TEETH	HEAD		LENGTH
	THICKNESS	WIDTH	
30	9/16"	1-5/16"	8"

JR30RK1A 3/8" Drive Ratchet Repair Kit

## RS20

Ratchet Spinner

- Knob Diameter: 1-1/2".
- Overall Length: 1-3/16".



Drive Tools

## 3/8" DRIVE ATTACHMENTS, EXTENSION

### HS217

Speeder



TYPE RETAINER	HANDLE LENGTH	SHANK SWING	LENGTH
Ball	16-3/4"	3-1/2"	7"

### HF210

Flex Breaker Bar



- Type Retainer: Ball
- Length: 10-1/4"

### DL21G

Drag Link Adjuster Socket



BLADE WIDTH	BLADE THICKNESS	LENGTH
37/64"	5/64"	1-3/8"

### UJ2

Universal Joint



FEMALE SQUARE	MALE SQUARE	LENGTH	OUTSIDE DIAMETER
3/8"	3/8"	1-7/8"	3/4"

### Adaptors



PART NO.	FEMALE SQUARE	MALE SQUARE	LENGTH	OUTSIDE DIAMETER
A20	3/8"	1/4"	1"	11/16"
A23	3/8"	1/2"	1-3/8"	11/16"

### AP23

Impact Adaptor (Snap Pin)



FEMALE DRIVE	MALE DRIVE	LENGTH	RETAINER ASSEMBLY	OUTSIDE DIAMETER
3/8"	1/2"	1-1/2"	Snap Pin	13/16"

### CTGSAK

3 Piece Adapter Kit

- Permits use of larger drive size sockets without adding length to the driver.
- Knurled edge for easy finger turn.
- Packaged in a plastic tray for easy storage.



Set consists of the following Part Numbers and sizes:

PART NO.	NOMINAL	PART NO.	NOMINAL
CTGA02	1/4" to 3/8"	CTGA35	1/2" to 3/4"
CTGA23	3/8" to 1/2"		

### HR881SET

1/4" and 3/8" T-Handle Speed Drive Set



- Pivoting head allows the drive to get at difficult angles found throughout vehicles.
  - Especially useful in spark plug installation and removal where cylinders can be at odd angles.
  - Pivoting head locks into position.
  - Drive is equipped with a sleeve to lock the socket onto the extension so user does not lose the socket in a tight space.
  - Anodized aluminum sleeve on shaft allows the user to quickly turn the handle; simply hold the shaft and use in conjunction with the T-Handle or a drive.
  - Anodized sleeve spins for speedy tightening or loosening.
  - T-Handle is removable and has a female drive (3/8" on the 3/8" tool, 1/4" on the 1/4" tool), allowing user to use in conjunction with a 3/8" or 1/4" ratchet or air wrench.
  - Adapter holds all 1/4" hex bits so the set works with sockets or hex bits.
- Set consists of the following in a fitted blow molded case.

PART NO.	DESCRIPTION
HR881	1/4" Speed Stick, 11" Length
HR885	3/8" Speed Stick, 11" Length
HR8811	1/4" Bit Adapter

### UE28

Universal Extension



- Chrome plated with a knurled shank.
- Male square end has spring/ball retention.

FEMALE DRIVE	MALE DRIVE	LENGTH	MALE SQ. O.D.	DRIVE END O.D.
3/8"	3/8"	8-5/8"	11/16"	11/16"

## E26ST 6 Piece Extension Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
E22	3/8" x 1-1/2" Extension
E23	3/8" x 3" Extension
E23WD	3/8" x 3" Wobble Dr. Extension
E26	3/8" x 6" Extension
E29	3/8" x 9" Extension
E212	3/8" x 12" Extension

## EB236ST 6 Piece Extension Set (Industrial Finish), 3/8" and 1/2" Drive



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
EB23	3/8" x 3" Extension
EB26	3/8" x 6" Extension
EB212	3/8" x 12" Extension
EB33	1/2" x 3" Extension
EB35	1/2" x 5" Extension
EB310	1/2" x 10" Extension

## EP25ST 5 Piece Power Extension Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
EP23	3/8" x 3" Extension
EP24	3/8" x 4" Extension
EP26	3/8" x 6" Extension
EP29	3/8" x 9" Extension
EP212	3/8" x 12" Extension

## E23LKST 3 Piece Locking Extension Set



Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
E24LK	3/8" Dr. x 4-5/8" Locking Extension
E27LK	3/8" Dr. x 7-5/8" Locking Extension
E213LK	3/8" Dr. x 13-5/8" Locking Extension

## Extensions (Ball Type Retainer)



PART NO.	LENGTH	SHANK DIAMETER	HANDLE DIAMETER
E22	1-1/2"	31/64"	11/16"
E23	3"	31/64"	11/16"
E26	6"	31/64"	11/16"
E29	9"	31/64"	11/16"
E212	12"	31/64"	11/16"
E218	18"	31/64"	11/16"
E224	24"	31/64"	11/16"
E230	30"	31/64"	11/16"

## Wobble Drive Extensions (Ball Type Retainer)



PART NO.	LENGTH	SHANK DIAMETER	HANDLE DIAMETER
E21WD	1-3/4"	31/64"	11/16"
E23WD	3"	31/64"	11/16"
E26WD	6"	31/64"	11/16"

## Extensions (Industrial Finish) (Ball Type Retainer)



PART NO.	LENGTH	SHANK DIAMETER	HANDLE DIAMETER
EB23*	3"	31/64"	11/16"
EB26*	6"	31/64"	11/16"
EB212*	12"	31/64"	11/16"

\* Not For Power Use.

## Power Extensions (Pin Type Retainer)



PART NO.	LENGTH	SHANK DIAMETER	HANDLE DIAMETER
EP23	3"	31/64"	11/16"
EP24	4"	31/64"	11/16"
EP26	6"	31/64"	11/16"
EP29	9"	31/64"	11/16"
EP212	12"	31/64"	11/16"

## Extensions (Locking Type)



PART NO.	SHANK DIAMETER	LENGTH
E24LK	31/64"	4-5/8"
E27LK	31/64"	7-5/8"
E213LK	31/64"	13-5/8"
E225LK	31/64"	25-5/8"
E231LK	31/64"	31-37/64"

## 1/2" DRIVE SOCKETS AND SETS

### ST3215S

15 Piece Standard Socket Set, 6 Point, 3/8" to 1-1/4"

Drive Tools

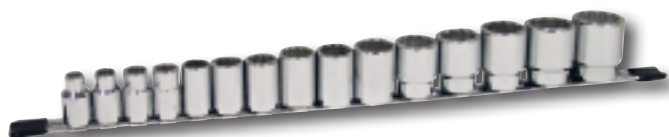


Set consists of the following Part Numbers and sizes:

T3212	3/8"	T3224	3/4"	T3234	1-1/16"
T3214	7/16"	T3226	13/16"	T3236	1-1/8"
T3216	1/2"	T3228	7/8"	T3238	1-3/16"
T3218	9/16"	T3230	15/16"	T3240	1-1/4"
T3220	5/8"	T3232	1"	ST320500	Rail
T3222	11/16"				

### ST3115S

15 Piece Standard Socket Set, 12 Point, 3/8" to 1-1/4"



Set consists of the following Part Numbers and sizes:

T3112	3/8"	T3124	3/4"	T3134	1-1/16"
T3114	7/16"	T3126	13/16"	T3136	1-1/8"
T3116	1/2"	T3128	7/8"	T3138	1-3/16"
T3118	9/16"	T3130	15/16"	T3140	1-1/4"
T3120	5/8"	T3132	1"	ST320500	Rail
T3122	11/16"				

### ST3211LS

11 Piece Deep Socket Set, 6 Point, 1/2" to 1-1/8"



Set consists of the following Part Numbers and sizes:

T3216L	1/2"	T3224L	3/4"	T3232L	1"
T3218L	9/16"	T3226L	13/16"	T3234L	1-1/16"
T3220L	5/8"	T3228L	7/8"	T3236L	1-1/8"
T3222L	11/16"	T3230L	15/16"	ST314250	Rail

### ST3111LS

11 Piece Deep Socket Set, 12 Point, 1/2" to 1-1/8"





Set consists of the following Part Numbers and sizes:

T3116L	1/2"	T3124L	3/4"	T3132L	1"
T3118L	9/16"	T3126L	13/16"	T3134L	1-1/16"
T3120L	5/8"	T3128L	7/8"	T3136L	1-1/8"
T3122L	11/16"	T3130L	15/16"	ST314250	Rail

### Standard Sockets, 6 and 12 Point



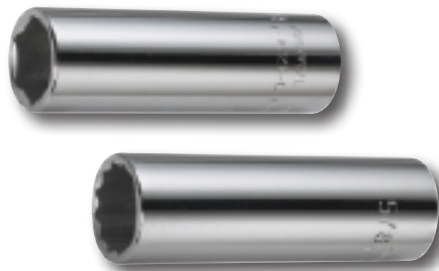
			NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
						SOCKET END	HANDLE END
T3212	T3112		3/8"	1-1/2"	1/4"	37/64"	7/8"
T3214	T3114		7/16"	1-1/2"	9/32"	43/64"	7/8"
T3216	T3116		1/2"	1-1/2"	5/16"	3/4"	7/8"
T3218	T3118		9/16"	1-1/2"	3/8"	53/64"	7/8"
T3220	T3120		5/8"	1-1/2"	13/32"	57/64"	57/64"
T3222	T3122		11/16"	1-1/2"	13/32"	1"	1"
T3224	T3124		3/4"	1-1/2"	7/16"	1-1/16"	1-1/16"
T3226	T3126		13/16"	1-5/8"	29/64"	1-1/8"	1-1/8"
T3228	T3128		7/8"	1-5/8"	1/2"	1-3/16"	1-3/16"
T3230	T3130		15/16"	1-11/16"	17/32"	1-5/16"	1-5/16"
T3232	T3132		1"	1-11/16"	9/16"	1-3/8"	1-3/16"
T3234	T3134		1-1/16"	1-3/4"	21/32"	1-7/16"	1-3/16"
T3236	T3136		1-1/8"	1-15/16"	3/4"	1-1/2"	1-17/64"
T3238	T3138		1-3/16"	1-15/16"	13/16"	1-5/8"	1-3/8"
T3240	T3140		1-1/4"	2"	55/64"	1-11/16"	1-7/16"
	T3142		1-5/16"	2"	55/64"	1-3/4"	1-1/2"
	T3148		1-1/2"	2-1/4"	55/64"	2"	1-5/8"



#### WARNING!

Use tool only for the job it was designed to do. Wear approved safety goggles when using hand tools.

## Deep Sockets, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
					SOCKET END	HANDLE END
T3216L	T3116L	1/2"	3-1/4"	7/16"	3/4"	7/8"
T3218L	T3118L	9/16"	3-1/4"	31/64"	13/16"	7/8"
T3220L	T3120L	5/8"	3-1/4"	9/16"	57/64"	57/64"
T3222L	T3122L	11/16"	3-1/4"	9/16"	1"	1"
T3224L	T3124L	3/4"	3-1/4"	21/32"	1-1/16"	1-1/16"
T3226L	T3126L	13/16"	3-1/4"	11/16"	1-1/8"	1-1/8"
T3228L	T3128L	7/8"	3-1/2"	3/4"	1-3/16"	1-3/16"
T3230L	T3130L	15/16"	3-1/2"	13/16"	1-5/16"	1-5/16"
T3232L	T3132L	1"	3-1/2"	13/16"	1-3/8"	1-3/8"
T3234L	T3134L	1-1/16"	3-1/2"	15/16"	1-7/16"	1-7/16"
T3236L	T3136L	1-1/8"	3-1/2"	63/64"	1-1/2"	1-1/2"

## STDPS8S

### 8 Piece Drain Plug Socket Set



Set consists of the following Part Numbers and sizes:

DPS308	1/4"	DPS314	7/16"	ST397500	Rail
DPS309	9/32"	DPS316	1/2"		
DPS310	5/16"	DPS318	9/16"		
DPS312	3/8"	DPS320	5/8"		

## Drain Plug Sockets



PART NO.	NOMINAL	OVERALL LENGTH	HANDLE END DIAMETER
DPS308	1/4"	1-7/16"	7/8"
DPS309	9/32"	1-7/16"	7/8"
DPS310	5/16"	1-7/16"	7/8"
DPS312	3/8"	1-7/16"	7/8"
DPS314	7/16"	1-7/16"	7/8"
DPS316	1/2"	1-7/16"	7/8"
DPS318	9/16"	1-7/16"	7/8"
DPS320	5/8"	1-7/16"	7/8"

## STI329

### 9 Piece Standard Power Impact Socket Set, 6 Point, 3/8" to 7/8"



Set consists of the following Part Numbers and sizes:

P3212	3/8"	P3220	5/8"	P3228	7/8"		
P3214	7/16"	P3222	11/16"			ST312000	Rail
P3216	1/2"	P3224	3/4"				
P3218	9/16"	P3226	13/16"				

## STI319

### 9 Piece Standard Power Impact Socket Set, 12 Point, 3/8" to 7/8"



Set consists of the following Part Numbers and sizes:

P3112	3/8"	P3120	5/8"	P3128	7/8"		
P3114	7/16"	P3122	11/16"			ST312000	Rail
P3116	1/2"	P3124	3/4"				
P3118	9/16"	P3126	13/16"				

## STI3215S

### 15 Piece Standard Power Impact Socket Set, 6 Point, 3/8" to 1-1/4"



Set consists of the following Part Numbers and sizes:

P3212	3/8"	P3220	5/8"	P3228	7/8"	P3236	1-1/8"
P3214	7/16"	P3222	11/16"	P3230	15/16"	P3238	1-3/16"
P3216	1/2"	P3224	3/4"	P3232	1"	P3240	1-1/4"
P3218	9/16"	P3226	13/16"	P3234	1-1/16"	ST320500	Rail

# 1/2" DRIVE SOCKET SETS

Drive Tools

## STI324L1S

4 Piece Deep Power Impact Socket Set, 6 Point, 1-1/16" to 1-1/4"

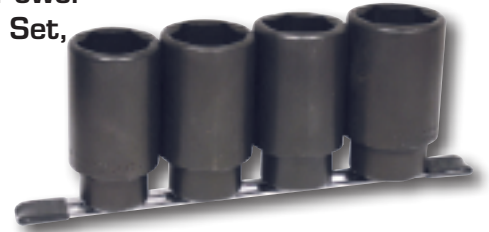


Set consists of the following Part Numbers and sizes:

P3234L	1-1/16"	P3238L	1-3/16"	ST385000	Rail
P3236L	1-1/8"	P3240L	1-1/4"		

## STI324L2S

4 Piece Deep Power Impact Socket Set, 6 Point, 1-5/16" to 1-1/2"



Set consists of the following Part Numbers and sizes:

P3242L	1-5/16"	P3246L	1-7/16"	ST397500	Rail
P3244L	1-3/8"	P3248L	1-1/2"		

## STI327LS

7 Piece Deep Power Impact Socket Set, 6 Point, 3/8" to 3/4"



Set consists of the following Part Numbers and sizes:

P3212L	3/8"	P3218L	9/16"	P3224L	3/4"
P3214L	7/16"	P3220L	5/8"	ST385000	Rail
P3216L	1/2"	P3222L	11/16"		

## STI3211LS

11 Piece Deep Power Impact Socket Set, 6 Point, 3/8" to 1"



Set consists of the following Part Numbers and sizes:

P3212L	3/8"	P3220L	5/8"	P3228L	7/8"
P3214L	7/16"	P3222L	11/16"	P3230L	15/16"
P3216L	1/2"	P3224L	3/4"	P3232L	1"
P3218L	9/16"	P3226L	13/16"	ST314250	Rail

## TSI338SS

38 Piece SAE Power Impact Socket Master Set, 6 Point



Set consists of the following Part Numbers and Sizes:

PART NO	DESCRIPTION	PART NO.	DESCRIPTION
P3212	1/2" x 3/8" Socket	P3212L	1/2" x 3/8" Deep Socket
P3214	1/2" x 7/16" Socket	P3214L	1/2" x 7/16" Deep Socket
P3216	1/2" x 1/2" Socket	P3216L	1/2" x 1/2" Deep Socket
P3218	1/2" x 9/16" Socket	P3218L	1/2" x 9/16" Deep Socket
P3220	1/2" x 5/8" Socket	P3220L	1/2" x 5/8" Deep Socket
P3222	1/2" x 11/16" Socket	P3222L	1/2" x 11/16" Deep Socket
P3224	1/2" x 3/4" Socket	P3224L	1/2" x 3/4" Deep Socket
P3226	1/2" x 13/16" Socket	P3226L	1/2" X 13/16" Deep Socket
P3228	1/2" x 7/8" Socket	P3228L	1/2" x 7/8" Deep Socket
P3230	1/2" x 15/16" Socket	P3230L	1/2" x 15/16" Deep Socket
P3232	1/2" x 1" Socket	P3232L	1/2" x 1" Deep Socket
P3234	1/2" x 1-1/16" Socket	P3234L	1/2" x 1-1/16" Deep Socket
P3236	1/2" x 1-1/8" Socket	P3236L	1/2" X 1-1/8" Deep Socket
P3238	1/2" x 1-3/16" Socket	P3238L	1/2" x 1-3/16" Deep Socket
P3240	1/2" x 1-1/4" Socket	P3240L	1/2" x 1-1/4" Deep Socket
P3242	1/2" x 1-5/16" Socket	P3242L	1/2" x 1-5/16" Deep Socket
P3244	1/2" x 1-3/8" Socket	P3244L	1/2" x 1-3/8" Deep Socket
P3246	1/2" x 1-7/16" Socket	P3246L	1/2" x 1-7/16" Deep Socket
P3248	1/2" x 1-1/2" Socket	P3248L	1/2" x 1-1/2" Deep Socket

REFER TO INDEX FOR A COMPLETE SELECTION OF SOCKET STORAGE.....





## Standard Power Impact Sockets, 6 and 12 Point



	6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
						SOCKET END	HANDLE END
	P3212	P3112	3/8"	1-1/2"	1/4"	5/8"	7/8"
	P3214	P3114	7/16"	1-1/2"	9/32"	23/32"	7/8"
	P3216	P3116	1/2"	1-1/2"	5/16"	13/16"	15/16"
	P3218	P3118	9/16"	1-1/2"	3/8"	57/64"	15/16"
	P3220	P3120	5/8"	1-1/2"	13/32"	61/64"	1"
	P3222	P3122	11/16"	1-1/2"	13/32"	1-1/16"	1-1/16"
	P3224	P3124	3/4"	1-1/2"	7/16"	1-5/32"	1-5/32"
	P3226	P3126	13/16"	1-1/2"	29/64"	1-1/4"	1-1/4"
	P3228	P3128	7/8"	1-1/2"	1/2"	1-5/16"	1-5/16"
	P3230		15/16"	1-3/4"	17/32"	1-13/32"	1-13/32"
	P3232		1"	1-3/4"	9/16"	1-7/16"	1-7/16"
	P3234		1-1/16"	2"	21/32"	1-9/16"	1-9/16"
	P3236		1-1/8"	2"	3/4"	1-21/32"	1-21/32"
	P3238		1-3/16"	2"	13/16"	1-11/16"	1-11/16"
	P3240		1-1/4"	2"	55/64"	1-25/32"	1-25/32"
	P3242		1-5/16"	2"	55/64"	1-7/8"	1-7/8"
	P3244		1-3/8"	2"	55/64"	2"	2"
	P3246		1-7/16"	2"	55/64"	2"	2"
	P3248		1-1/2"	2-1/8"	55/64"	2-1/8"	2-1/8"

## Deep Power Impact Sockets, 6 Point



	6 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
					SKT END	HDL END	DIAMETER	DEPTH
	P3212L	3/8"	3-1/4"	1/4"	41/64"	7/8"	21/64"	2-5/8"
	P3214L	7/16"	3-1/4"	9/32"	47/64"	7/8"	13/32"	2-5/8"
	P3216L	1/2"	3-1/4"	7/16"	13/16"	15/16"	15/32"	2-5/8"
	P3218L	9/16"	3-1/4"	15/32"	57/64"	15/16"	33/64"	2-5/8"
	P3220L	5/8"	3-1/4"	17/32"	31/32"	1"	37/64"	2-5/8"
	P3222L	11/16"	3-1/4"	17/32"	1-1/16"	1-1/16"	5/8"	2-5/8"
	P3224L	3/4"	3-1/4"	41/64"	1-5/32"	1-5/32"	45/64"	2-5/8"
	P3226L	13/16"	3-1/4"	21/32"	1-1/4"	1-1/4"	49/64"	2-5/8"
	P3228L	7/8"	3-1/2"	23/32"	1-5/16"	1-5/16"	53/64"	2-7/8"
	P3230L	15/16"	3-1/2"	51/64"	1-13/32"	1-13/32"	55/64"	2-7/8"
	P3232L	1"	3-1/2"	51/64"	1-7/16"	1-7/16"	15/16"	2-7/8"
	P3234L	1-1/16"	3-1/2"	29/32"	1-9/16"	1-9/16"	1"	2-7/8"
	P3236L	1-1/8"	3-1/2"	61/64"	1-21/32"	1-21/32"	1-5/64"	2-7/8"
	P3238L	1-3/16"	3-1/2"	61/64"	1-11/16"	1-11/16"	1-1/8"	2-7/8"
	P3240L	1-1/4"	3-1/2"	1-3/32"	1-25/32"	1-25/32"	1-3/16"	2-7/8"
	P3242L	1-5/16"	3-1/2"	1-3/32"	1-7/8"	1-7/16"	1-1/4"	2-7/8"
	P3244L	1-3/8"	3-1/2"	1-3/32"	2"	1-9/16"	1-21/64"	2-7/8"
	P3246L	1-7/16"	3-1/2"	1-3/32"	2"	1-9/16"	1-3/8"	2-7/8"
	P3248L	1-1/2"	3-1/2"	1-3/32"	2-1/8"	1-11/16"	1-3/8"	2-7/8"

**WARNING!**  
 FOR USE WITH IMPACT TOOLS: Use with impact wrenches and torque control tools according to their designed size and strength. DO NOT HOLD SPINNING SOCKET OR ACCESSORY.

## STI324XLS 4 Piece Extra Deep Power Impact Socket Set, 6 Point, 13/16" to 1"



Set consists of the following Part Numbers and sizes:

P3226XL	13/16"	P3230XL	15/16"	ST385000	Rail
P3228XL	7/8"	P3232XL	1"		

## STI325XLS 5 Piece Extra Deep Power Impact Socket Set, 6 Point, 1/2" to 3/4"



Set consists of the following Part Numbers and sizes:

P3216XL	1/2"	P3220XL	5/8"	P3224XL	3/4"
P3218XL	9/16"	P3222XL	11/16"	ST385000	Rail

# 1/2" DRIVE SOCKETS AND SETS

## Extra Deep Power Impact Sockets, 6 Point

6 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
				SKT END	HDL END	DIAMETER	DEPTH
P3216XL	1/2"	5"	7/16"	13/16"	15/16"	15/32"	4-3/8"
P3218XL	9/16"	5"	15/32"	57/64"	15/16"	17/32"	4-3/8"
P3220XL	5/8"	5"	17/32"	31/32"	1"	37/64"	4-3/8"
P3222XL	11/16"	5"	17/32"	1-1/16"	1-1/16"	41/64"	4-3/8"
P3224XL	3/4"	5"	41/64"	1-5/32"	1-5/32"	45/64"	4-3/8"
P3226XL	13/16"	5"	21/32"	1-1/4"	1-1/4"	25/32"	4-3/8"
P3228XL	7/8"	5"	23/32"	1-5/16"	1-5/16"	27/32"	4-3/8"
P3230XL	15/16"	5"	51/64"	1-13/32"	1-13/32"	7/8"	4-3/8"
P3232XL	1"	5"	51/64"	1-7/16"	1-7/16"	15/16"	4-3/8"

Drive Tools



## P3220LJB

Jacobs Engine Brake Sockets, 6 Point



NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
			SOCKET END	HANDLE END	DIAMETER	DEPTH
5/8"	5"	5/8"	15/16"	15/16"	9/16"	4-3/8"

## STI3311

1/2" Drive 11 Piece Power Impact Socket Set, 8 Point, 3/8" to 1"

Set consists of the following Part Numbers and sizes:



P3312	3/8"	P3320	5/8"	P3328	7/8"
P3314	7/16"	P3322	11/16"	P3330	15/16"
P3316	1/2"	P3324	3/4"	P3332	1"
P3318	9/16"	P3326	13/16"	ST312000	Rail

## Standard Power Impact Sockets, 8 Point



PART NO.	NOM.	O/L	BROACH DEPTH	OUTSIDE DIAMETER	
				SKT END	HDL END
P3312	3/8"	1-1/2"	5/16"	23/32"	7/8"
P3314	7/16"	1-1/2"	3/8"	13/16"	15/16"
P3316	1/2"	1-1/2"	13/32"	59/64"	1"
P3318	9/16"	1-1/2"	7/16"	1"	1"
P3320	5/8"	1-1/2"	1/2"	1-1/8"	1-1/8"
P3322	11/16"	1-1/2"	17/32"	1-3/16"	1-3/16"
P3324	3/4"	1-1/2"	11/16"	1-5/16"	1-5/16"
P3326	13/16"	1-1/2"	5/8"	1-7/16"	1-7/16"
P3328	7/8"	1-1/2"	5/8"	1-1/2"	1-1/2"
P3330	15/16"	1-5/8"	11/16"	1-5/8"	1-5/8"
P3332	1"	1-3/4"	3/4"	1-3/4"	1-3/4"

### THE SIX MAJOR POINTS OF HAND TOOL SAFETY

1. Wear approved eye protection.
2. Choose the right tool for the job.
3. Do not alter a tool in any way, shape, or form.
4. Never abuse or misuse tools.
5. Never exceed tool capacity.
6. Do not use a tool that appears to be damaged or weakened.

## TSUP326RS

6 Piece Standard Power Impact Universal Socket Set, 6 Point, 1" to 1-5/16"



Set consists of the following Part Numbers and sizes:

UP3232R	1"	UP3238R	1-3/16"	ST311000	Rail
UP3234R	1-1/16"	UP3240R	1-1/4"		
UP3236R	1-1/8"	UP3242R	1-5/16"		

## TSUP328RS

8 Piece Standard Power Impact Universal Socket Set, 6 Point, 1/2" to 15/16"



Set consists of the following Part Numbers and sizes:

UP3216R	1/2"	UP3222R	11/16"	UP3228R	7/8"
UP3218R	9/16"	UP3224R	3/4"	UP3230R	15/16"
UP3220R	5/8"	UP3226R	13/16"	ST312000	Rail

Standard Impact Universal Sockets, Ball Type, 6 Point



PART NO.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
UP3216R	1/2"	2-27/64"	1/4"	13/16"	1-3/16"
UP3218R	9/16"	2-35/64"	3/8"	7/8"	1-3/16"
UP3220R	5/8"	2-43/64"	25/64"	15/16"	1-3/16"
UP3222R	11/16"	2-51/64"	13/32"	1"	1-3/16"
UP3224R	3/4"	2-59/64"	7/16"	1-1/8"	1-3/16"
UP3226R	13/16"	2-59/64"	7/16"	1-3/16"	1-3/16"
UP3228R	7/8"	2-59/64"	15/32"	1-5/16"	1-3/16"
UP3230R	15/16"	3-11/64"	31/64"	1-3/8"	1-3/16"
UP3232R	1"	3-1/4"	33/64"	1-3/8"	1-3/16"
UP3234R	1-1/16"	3-5/16"	33/64"	1-7/16"	1-3/16"
UP3236R	1-1/8"	3-5/16"	21/32"	1-1/2"	1-3/16"
UP3238R	1-3/16"	3-5/16"	21/32"	1-5/8"	1-3/16"
UP3240R	1-1/4"	3-7/16"	21/32"	1-11/16"	1-3/16"
UP3242R	1-5/16"	3-7/16"	49/64"	1-3/4"	1-3/16"

## TSUP325LRS

5 Piece Deep Power Impact Universal Socket Set, 6 Point, 1/2" to 3/4"



Set consists of the following Part Numbers and sizes:

UP3216LR	1/2"	UP3220LR	5/8"	UP3224LR	3/4"
UP3218LR	9/16"	UP3222LR	11/16"	ST385000	Rail

Deep Power Impact Universal Sockets, Ball Type, 6 Point



PART NO.	NOMINAL	OVERALL LENGTH	BROACH DEPTH
UP3216LR	1/2"	3-21/32"	11/32"
UP3218LR	9/16"	3-51/64"	3/8"
UP3220LR	5/8"	3-15/16"	25/64"
UP3222LR	11/16"	4-3/32"	13/32"
UP3224LR	3/4"	4-15/64"	7/16"

## UPJ3BST

3 Piece Power Universal Joint Set, Ball Type



• Not for impact use!

Set consists of the following Part Numbers and sizes in a plastic tray:

PART NUMBER	RETAINER TYPE	DRIVE SIZE	OVERALL LENGTH	HANDLE END DIAMETER
UPJOB	Ball	1/4"	1-13/32"	5/8"
UPJ2SB	Ball	3/8"	1-15/16"	1"
UPJ3SB	Ball	1/2"	2-7/16"	1-3/16"

Power Universal Joints, Ball Type



PART NO.	RETAINER TYPE	OVERALL LENGTH	HANDLE END DIAMETER
UPJ3S	Pin	2-7/16"	1-3/16"
UPJ3SB*	Ball	2-7/16"	1-3/16"

\* Not for Impact use!

REFER TO INDEX FOR A COMPLETE SELECTION OF SOCKET TRAYS AND HOLDERS...



# 1/2" DRIVE METRIC SOCKET SETS

## STM3210

10 Piece Standard Metric Socket Set,  
6 Point, 10MM to 19MM

Drive Tools



Set consists of the following Part Numbers and sizes:

TM3210	10MM	TM3214	14MM	TM3218	18MM
TM3211	11MM	TM3215	15MM	TM3219	19MM
TM3212	12MM	TM3216	16MM	ST312000	Rail
TM3213	13MM	TM3217	17MM		

## STM3110

10 Piece Standard Metric Socket Set,  
12 Point, 10MM to 19MM



Set consists of the following Part Numbers and sizes:

TM3110	10MM	TM3114	14MM	TM3118	18MM
TM3111	11MM	TM3115	15MM	TM3119	19MM
TM3112	12MM	TM3116	16MM	ST312000	Rail
TM3113	13MM	TM3117	17MM		

## STM328

8 Piece Standard Metric Socket Set, 6 Point,  
20MM to 27MM



Set consists of the following Part Numbers and sizes:

TM3220	20MM	TM3224	24MM	ST312000	Rail
TM3221	21MM	TM3225	25MM		
TM3222	22MM	TM3226	26MM		
TM3223	23MM	TM3227	27MM		

## STM318

8 Piece Standard Metric Socket Set, 12 Point,  
20MM to 27MM



Set consists of the following Part Numbers and sizes:

TM3120	20MM	TM3124	24MM	ST312000	Rail
TM3121	21MM	TM3125	25MM		
TM3122	22MM	TM3126	26MM		
TM3123	23MM	TM3127	27MM		

## STM3210LS

10 Piece Deep Metric Socket Set,  
6 Point,  
10MM  
to 19MM



Set consists of the following Part Numbers and sizes:

TM3210L	10MM	TM3214L	14MM	TM3218L	18MM
TM3211L	11MM	TM3215L	15MM	TM3219L	19MM
TM3212L	12MM	TM3216L	16MM	ST311000	Rail
TM3213L	13MM	TM3217L	17MM		

## STM3110LS

10 Piece Deep Metric Socket Set, 12 Point,  
10MM to 19MM



Set consists of the following Part Numbers and sizes:

TM3110L	10MM	TM3114L	14MM	TM3118L	18MM
TM3111L	11MM	TM3115L	15MM	TM3119L	19MM
TM3112L	12MM	TM3116L	16MM	ST311000	Rail
TM3113L	13MM	TM3117L	17MM		



**WARNING!**

Use tool only for the job it was designed to do. Wear approved safety goggles when using hand tools.

# 1/2" DRIVE METRIC SOCKETS AND SETS

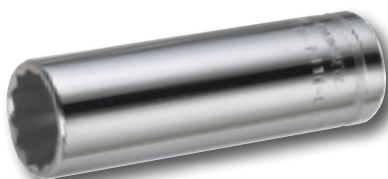
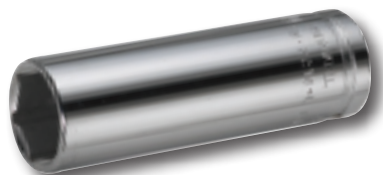
Drive Tools

## Standard Metric Sockets, 6 and 12 Point



	6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
						SOCKET END	HANDLE END
TM3210		TM3110	10MM	38.10	6.35	15.60	22.23
TM3211		TM3111	11MM	38.10	7.14	17.78	22.23
TM3212		TM3112	12MM	38.10	7.62	18.16	22.23
TM3213		TM3113	13MM	38.10	7.92	19.43	22.23
TM3214		TM3114	14MM	38.10	8.71	21.21	22.23
TM3215		TM3115	15MM	38.10	9.53	22.23	22.23
TM3216		TM3116	16MM	38.10	10.31	22.23	22.23
TM3217		TM3117	17MM	38.10	11.10	24.38	24.38
TM3218		TM3118	18MM	38.10	11.89	25.40	25.40
TM3219		TM3119	19MM	38.10	12.70	26.97	26.97
TM3220		TM3120	20MM	38.10	13.08	26.97	26.97
TM3221		TM3121	21MM	41.28	13.08	28.58	28.58
TM3222		TM3122	22MM	41.28	13.49	30.15	30.15
TM3223		TM3123	23MM	41.28	13.89	31.24	31.24
TM3224		TM3124	24MM	42.85	15.09	31.75	31.75
TM3225		TM3125	25MM	42.85	15.88	33.32	28.27
TM3226		TM3126	26MM	44.45	16.66	34.93	28.96
TM3227		TM3127	27MM	44.45	17.45	36.50	30.23

## Deep Metric Sockets, 6 and 12 Point



	6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
						SOCKET END	HANDLE END
TM3210L		TM3110L	10MM	82.55	9.53	15.62	22.23
TM3211L		TM3111L	11MM	82.55	9.53	17.78	22.23
TM3212L		TM3112L	12MM	82.55	11.10	18.16	22.23
TM3213L		TM3113L	13MM	82.55	11.89	19.43	22.23
TM3214L		TM3114L	14MM	82.55	13.08	21.21	22.23
TM3215L		TM3115L	15MM	82.55	13.49	21.95	21.95
TM3216L		TM3116L	16MM	82.55	14.30	22.23	22.23
TM3217L		TM3117L	17MM	82.55	14.30	24.38	24.38
TM3218L		TM3118L	18MM	82.55	14.30	25.40	25.40
TM3219L		TM3119L	19MM	82.55	16.66	26.97	26.97
TM3220L		TM3120L	20MM	82.55	17.27	26.97	26.97
TM3221L		TM3121L	21MM	82.55	17.27	28.58	28.58
TM3222L		TM3122L	22MM	88.90	18.64	30.15	30.15
TM3223L		TM3123L	23MM	88.90	18.64	31.24	31.24
TM3224L		TM3124L	24MM	88.90	18.64	31.75	31.75
TM3225L		TM3125L	25MM	88.90	19.05	33.32	33.32
TM3226L		TM3126L	26MM	88.90	19.05	34.93	34.93
TM3227L		TM3127L	27MM	88.90	23.85	36.50	36.50
TM3228L		TM3128L	28MM	88.90	24.99	37.80	37.80
TM3229L		TM3129L	29MM	88.90	24.99	39.50	39.50
TM3230L		TM3130L	30MM	88.90	24.99	41.28	41.28
TM3231L		TM3131L	31MM	88.90	25.40	42.85	42.85
TM3232L		TM3132L	32MM	88.90	28.58	42.85	42.85

## STI3211MS

11 Piece Standard Metric Power Impact Socket Set, 6 Point, 15MM to 30MM



Set consists of the following Part Numbers and sizes:

PM3215	15MM	PM3219	19MM	PM3224	24MM
PM3216	16MM	PM3220	20MM	PM3227	27MM
PM3217	17MM	PM3221	21MM	PM3230	30MM
PM3218	18MM	PM3222	22MM	ST315000	Rail

## STI3215MS

15 Piece Standard Metric Power Impact Socket Set, 6 Point, 10MM to 27MM



Set consists of the following Part Numbers and sizes:

PM3210	10MM	PM3216	16MM	PM3222	22MM
PM3211	11MM	PM3217	17MM	PM3224	24MM
PM3212	12MM	PM3218	18MM	PM3227	27MM
PM3213	13MM	PM3219	19MM	ST318000	Rail
PM3214	14MM	PM3220	20MM		
PM3215	15MM	PM3221	21MM		

## TSMI338SS

**38 Piece Metric Power Impact Socket Master Set, 6 Point**



Set consists of the following Part Numbers and Sizes:

PM3210	10MM Socket	PM3212L	12MM Deep Socket
PM3211	11MM Socket	PM3213L	13MM Deep Socket
PM3212	12MM Socket	PM3214L	14MM Deep Socket
PM3213	13MM Socket	PM3215L	15MM Deep Socket
PM3214	14MM Socket	PM3216L	16MM Deep Socket
PM3215	15MM Socket	PM3217L	17MM Deep Socket
PM3216	16MM Socket	PM3218L	18MM Deep Socket
PM3217	17MM Socket	PM3219L	19MM Deep Socket
PM3218	18MM Socket	PM3220L	20MM Deep Socket
PM3219	19MM Socket	PM3221L	21MM Deep Socket
PM3220	20MM Socket	PM3222L	22MM Deep Socket
PM3221	21MM Socket	PM3224L	24MM Deep Socket
PM3222	22MM Socket	PM3230L	30MM Deep Socket
PM3224	24MM Socket	PM3231L	31MM Deep Socket
PM3227	27MM Socket	PM3232L	32MM Deep Socket
PM3230	30MM Socket	PM3233L	33MM Deep Socket
PM3236	36MM Socket	PM3234L	34MM Deep Socket
PM3210L	10MM Deep Socket	PM3235L	35MM Deep Socket
PM3211L	11MM Deep Socket	PM3236L	36MM Deep Socket

## STI3114MS

**14 Piece Standard Metric Power Impact Socket Set, 12 Point, 10MM to 24MM**



Set consists of the following Part Numbers and sizes:

PM3110	10MM	PM3115	15MM	PM3120	20MM
PM3111	11MM	PM3116	16MM	PM3121	21MM
PM3112	12MM	PM3117	17MM	PM3122	22MM
PM3113	13MM	PM3118	18MM	PM3124	24MM
PM3114	14MM	PM3119	19MM	ST316500	Rail

## STI324LMS

**4 Piece Deep Metric Power Impact Socket Set, 6 Point, 30MM to 36MM**



Set consists of the following Part Numbers and sizes:

PM3230L	30MM	PM3234L	34MM	ST397500	Rail
PM3232L	32MM	PM3236L	36MM		

## STI314LMS

**4 Piece Deep Metric Power Impact Socket Set, 12 Point, 30MM to 36MM**



Set consists of the following Part Numbers and sizes:

PM3130L	30MM	PM3134L	34MM	ST397500	Rail
PM3132L	32MM	PM3136L	36MM		

## STI329LMS

**9 Piece Deep Metric Power Impact Socket Set, 6 Point, 15MM to 24MM**



Set consists of the following Part Numbers and sizes:

PM3215L	15MM	PM3220L	20MM
PM3216L	16MM	PM3221L	21MM
PM3217L	17MM	PM3222L	22MM
PM3218L	18MM	PM3224L	24MM
PM3219L	19MM	ST312000	Rail

**STI3214LMS** 

14 Piece Deep Metric Power Impact Socket Set, 6 Point, 10MM to 24MM



Set consists of the following Part Numbers and sizes:

PM3210L	10MM	PM3215L	15MM	PM3220L	20MM
PM3211L	11MM	PM3216L	16MM	PM3221L	21MM
PM3212L	12MM	PM3217L	17MM	PM3222L	22MM
PM3213L	13MM	PM3218L	18MM	PM3224L	24MM
PM3214L	14MM	PM3219L	19MM	ST316500	Rail

**STI3114LMS** 

14 Piece Deep Metric Power Impact Socket Set, 12 Point, 10MM to 24MM





Set consists of the following Part Numbers and sizes:

PM3110L	10MM	PM3115L	15MM	PM3120L	20MM
PM3111L	11MM	PM3116L	16MM	PM3121L	21MM
PM3112L	12MM	PM3117L	17MM	PM3122L	22MM
PM3113L	13MM	PM3118L	18MM	PM3124L	24MM
PM3114L	14MM	PM3119L	19MM	ST316500	Rail

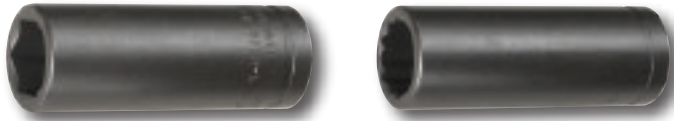
Drive Tools



**Standard Metric Power Impact Sockets, 6 and 12 Point**



			NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
						SOCKET END	HANDLE END
PM3210	PM3110	10MM	38.10	6.35	16.76	22.23	
PM3211	PM3111	11MM	38.10	7.14	18.47	22.23	
PM3212	PM3112	12MM	38.10	7.62	19.89	23.80	
PM3213	PM3113	13MM	38.10	7.92	21.21	23.80	
PM3214	PM3114	14MM	38.10	8.71	22.38	23.80	
PM3215	PM3115	15MM	38.10	9.53	24.26	25.40	
PM3216	PM3116	16MM	38.10	10.31	25.40	25.40	
PM3217	PM3117	17MM	38.10	11.10	26.97	26.97	
PM3218	PM3118	18MM	38.10	11.89	28.58	28.58	
PM3219	PM3119	19MM	38.10	12.70	28.58	28.58	
PM3220	PM3120	20MM	38.10	13.08	30.15	30.15	
PM3221	PM3121	21MM	38.10	13.08	31.75	31.75	
PM3222	PM3122	22MM	38.10	13.49	33.32	33.32	
PM3224	PM3124	24MM	44.45	15.09	34.93	34.93	
PM3227		27MM	50.80	17.45	39.67	39.67	
PM3230		30MM	53.98	17.45	42.85	42.85	
PM3236		36MM	57.15	21.44	53.98	53.98	

**Deep Metric Power Impact Sockets, 6 and 12 Point**



		NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
					SOCKET END	HANDLE END	DIAMETER	DEPTH
PM3210L	PM3110L	10MM	82.55	9.53	16.76	22.23	9.09	66.66
PM3211L	PM3111L	11MM	82.55	9.53	18.47	22.23	9.75	66.66
PM3212L	PM3112L	12MM	82.55	11.10	19.89	23.80	11.10	66.66
PM3213L	PM3113L	13MM	82.55	11.89	21.31	23.80	11.79	66.66
PM3214L	PM3114L	14MM	82.55	13.08	22.38	23.80	12.57	66.66
PM3215L	PM3115L	15MM	82.55	13.49	24.26	25.40	13.49	66.66
PM3216L	PM3116L	16MM	82.55	14.30	25.40	25.40	14.30	66.66
PM3217L	PM3117L	17MM	82.55	14.30	26.97	26.97	15.11	66.66
PM3218L	PM3118L	18MM	82.55	14.30	28.58	28.58	16.56	66.66
PM3219L	PM3119L	19MM	82.55	16.66	28.58	28.58	17.65	66.66
PM3220L	PM3120L	20MM	82.55	17.27	30.15	30.15	18.16	66.66
PM3221L	PM3121L	21MM	82.55	17.27	31.75	31.75	19.33	66.66
PM3222L	PM3122L	22MM	88.90	18.64	33.32	33.32	20.70	73.01
PM3223L		23MM	88.90	18.64	34.11	34.11	21.41	73.01
PM3224L	PM3124L	24MM	88.90	18.64	34.93	34.93	21.12	73.01
PM3230L	PM3130L	30MM	88.90	24.99	42.85	42.85	28.47	73.01
PM3231L		31MM	88.90	25.40	43.69	43.69	28.47	73.01
PM3232L	PM3132L	32MM	88.90	28.58	45.24	35.71	30.68	73.01
PM3233L		33MM	88.90	28.58	46.46	36.09	31.24	73.01
PM3234L	PM3134L	34MM	88.90	28.58	47.63	36.50	32.16	73.01
PM3235L		35MM	88.90	28.58	50.80	41.28	33.35	73.01
PM3236L	PM3136L	36MM	88.90	28.58	50.80	46.02	33.35	73.01

# 1/2" DRIVE METRIC SOCKETS AND SETS

## Extra Deep Metric Power Impact Sockets, 6 and 12 Point



6 PT.	12 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
					SOCKET END	HANDLE END	DIAMETER	DEPTH
PM3215XL	PM3112XL	12MM 15MM	127.00 127.00	11.10 13.49	19.76 24.26	23.80 25.40	12.19 10.36	111.12 111.12

Drive Tools

## TSMUP3210RS

### 10 Piece Metric Power Impact Universal Socket Set, 6 Point, 13MM to 24MM



Set consists of the following Part Numbers and sizes:

UP3213MMR	13MM	UP3219MMR	19MM
UP3214MMR	14MM	UP3221MMR	21MM
UP3215MMR	15MM	UP3222MMR	22MM
UP3216MMR	16MM	UP3224MMR	24MM
UP3217MMR	17MM	ST314250	Rail
UP3218MMR	18MM		

## Standard Metric Power Impact Universal Sockets, 6 Point



PART NO.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
UP3213MMR	13MM	61.49	6.76	20.70	30.15
UP3214MMR	14MM	64.67	8.36	22.23	30.15
UP3215MMR	15MM	67.84	8.36	23.80	30.15
UP3216MMR	16MM	69.42	8.94	23.80	30.15
UP3217MMR	17MM	71.02	9.53	25.40	30.15
UP3218MMR	18MM	72.59	10.13	26.97	30.15
UP3219MMR	19MM	74.19	11.10	28.58	30.15
UP3221MMR	21MM	74.19	12.17	31.75	30.15
UP3222MMR	22MM	76.20	12.17	33.32	30.15
UP3224MMR	24MM	80.16	12.45	34.93	30.15

## STLN3ST

### 3 Piece Lug Nut Set



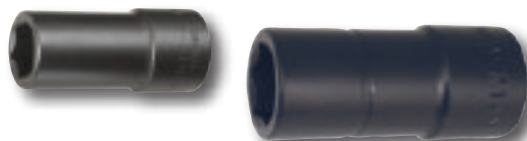
Set consists of the following Part Numbers and sizes:

PART NO.	DESCRIPTION
EB33	1/2" x 3" Industrial Finish Extension
P322426	1/2" Dr. Dual Purpose Wheel Nut Socket (3/4" & 13/16")
PM321921	1/2" Dr. Metric Dual Purpose Wheel Nut Socket (19MM & 21MM)

## THE SIX MAJOR POINTS OF HAND TOOL SAFETY

1. Wear approved eye protection.
2. Choose the right tool for the job.
3. Do not alter a tool in any way, shape, or form.
4. Never abuse or misuse tools.
5. Never exceed tool capacity.
6. Do not use a tool that appears to be damaged or weakened.

## Dual Purpose Wheel Nut Sockets



- 1/2" square female drive is between the openings.
- Use with **EB33** Extension.

PART NO.	HEX OPENINGS
P322426	3/4" and 13/16"
PM321921	19MM and 21MM

## Metric Head Bolt Sockets, 12 Point

- Black oxide finish.

PART NO.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
				SOCKET END	HANDLE END	DIAMETER	DEPTH
PM3110XLHB	10MM	117.42	10.54	16.76	23.80	9.34	14.60
PM3112XLHB	12MM	117.48	10.54	19.05	23.80	11.50	14.68
PM3114XLHB	14MM	117.42	13.08	21.08	23.80	13.48	16.89







**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 light oil. Do not immerse sealed ratchet in fluids. Do not replace worn parts individually, use entire contents of the repair kit. Ratchets that slip or break can cause injury.

Drive Tools

**Ratchets**



PART NO.	GEAR TEETH	HEAD		LENGTH
		THICKNESS	WIDTH	
SR50	30	3/4"	1-3/4"	9-5/8"
SR70	30	3/4"	1-3/4"	15"

SR50RK1A 1/2" Drive Ratchet Repair Kit

**SRF76H**

**Handle Flex Head Ratchet**



- 30 gear teeth provide 12° handle swing angle.
- Ball/dimple design holds head at proper angle.
- Chrome plated head with ergonomic plastic handle.

GEAR TEETH	HEAD SWING	LENGTH
30	180°	17-1/2"

SR50RK1A 1/2" Drive Ratchet Repair Kit

**SRF76**

**Flex Head Ratchet**



- 180° head swing.
- 30 gear teeth provide 12° handle swing angle.
- Overall Length: 17-1/2".
- Ball/dimple design holds head at proper angle.
- Chrome plated handle and head.

SR50RK1A 1/2" Drive Ratchet Repair Kit

**SR501H**

**Industrial Finish Handle Ratchet**



- 30 tooth ratcheting design allows new bite with only 12° handle swing.
- Polycarbonate slip and oil resistant handle.
- Especially contoured to fit comfortably in the hand during prolonged use.
- Thin head design for close clearance application.
- Industrial Black Oxide Finish.

GEAR TEETH	HEAD		LENGTH
	THICKNESS	WIDTH	
30	3/4"	1-3/4"	11-11/32"

SR50RK1A 1/2" Drive Ratchet Repair Kit

**Industrial Finish Ratchets**



PART NO.	GEAR TEETH	HEAD		LENGTH
		THICKNESS	WIDTH	
SR501	30	3/4"	1-3/4"	9-5/8"
SR701	30	3/4"	1-3/4"	15"

SR50RK1A 1/2" Drive Ratchet Repair Kit

**Flex Breaker Bars**



PART NO.	TYPE RETAINER	LENGTH
HF319	Ball	19"
HF327	Ball	27"

**Handle Ratchets**



- 30 tooth ratcheting design allows new bite with only 12° handle swing.
- Polycarbonate slip and oil resistant handle.
- Especially contoured to fit comfortably in the hand during prolonged use.
- Thin head design for close clearance application.
- Chrome plated head with ergonomic plastic handle.

PART NO.	GEAR TEETH	HEAD		LENGTH
		THICKNESS	WIDTH	
SR50H	30	3/4"	1-3/4"	11-11/32"
SR70H	30	3/4"	1-3/4"	17-3/4"

SR50RK1A 1/2" Drive Ratchet Repair Kit

**HF324H**

**Handle Flex Breaker Bar**

- Length: 24".



**D3143**

**Driver with Pin Retainer**



HEX SIZE	SHANK DIA.	LENGTH
7/16"	11/16"	2-3/4"

# 1/2" DRIVE ATTACHMENTS AND EXTENSIONS

## STA6ST

### 6 Piece Adaptor Set

Set consists of the following in a plastic tray:



PART NO.	FEMALE SQ.	MALE SQ.	LENGTH
A02	1/4"	3/8"	1"
A20	3/8"	1/4"	1"
A23	3/8"	1/2"	1-3/8"
A32	1/2"	3/8"	1-7/16"
A35	1/2"	3/4"	1-3/4"
A53	3/4"	1/2"	2-3/16"

### Adaptors



PART NO.	FEMALE SQUARE	MALE SQUARE	LENGTH	OUTSIDE DIAMETER
A32	1/2"	3/8"	1-7/16"	7/8"
A35	1/2"	3/4"	1-3/4"	1"

### Power Adaptors



PART NO.	RET. TYPE	FEMALE DR.	MALE DR.	O/L	OUTSIDE DIAMETER
AP32	Pin	1/2"	3/8"	1-1/2"	1"
AP32B	Ball	1/2"	3/8"	1-1/2"	1"
AP35	Pin	1/2"	3/4"	1-27/32"	1-1/8"

## UJ3

### Universal Joint



FEMALE SQUARE	MALE SQUARE	LENGTH	HANDLE DIAMETER
1/2"	1/2"	2-43/64"	1"

## UPJ32SB

### Power Universal Adapter, Ball Type

- Not for impact use!



FEMALE SQUARE	MALE SQUARE	LENGTH	OUTSIDE DIAMETER
1/2"	3/8"	2-3/8"	1-3/16"

### Extension Adaptors (Ball Type Retainer)



PART NO.	FEMALE SQUARE	MALE SQUARE	LENGTH	SHANK DIAMETER	HANDLE END DIAMETER
EA325B	1/2"	3/8"	5"	21/32"	57/64"
EA3210B	1/2"	3/8"	10"	21/32"	57/64"
EA3224B	1/2"	3/8"	24"	21/32"	57/64"
EA3236B	1/2"	3/8"	36"	21/32"	57/64"

## E34ST

### 4 Piece Extension Set

Set consists of the following Part Numbers in a plastic tray:



PART NO.	DESCRIPTION
E32WD	2" Stubby Wobble Drive Extension
E33	3" Extension
E35	5" Extension
E310	10" Extension

### Extensions (Ball Type Retainer)



PART NO.	LENGTH	SHANK DIAMETER	HANDLE DIAMETER
E32	2"	21/32"	7/8"
E33	3"	21/32"	7/8"
E35	5"	21/32"	7/8"
E310	10"	21/32"	7/8"
E320	20"	21/32"	7/8"
E324	24"	21/32"	7/8"
E330	30"	21/32"	7/8"

## E32WD

### Stubby Wobble Drive Extension



LENGTH	SHANK DIAMETER	HANDLE DIAMETER
2"	21/32"	7/8"

### Extensions (Industrial Finish) (Ball Type Retainer)



PART NO.	LENGTH	SHANK DIAMETER	HANDLE DIAMETER
EB33*	3"	21/32"	1"
EB35*	5"	21/32"	61/64"
EB310*	10"	21/32"	15/16"

\* Not For Power Use.


### Power Extensions (Pin Type Retainer)



PART NO.	LENGTH	SHANK DIAMETER	HANDLE DIAMETER
EP36	6"	21/32"	15/16"
EP310	10"	21/32"	15/16"
EP320	20"	21/32"	1"

## Thinwall Sockets, 12 Point (Industrial Finish), Non-Impact




12 PT. 	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
T5124B	3/4"	1-31/32"	1/2"	1-15/64"	1-9/32"
T5126B	13/16"	1-31/32"	1/2"	1-9/32"	1-9/32"
T5128B	7/8"	1-31/32"	1/2"	1-21/64"	1-21/64"
T5130B	15/16"	1-31/32"	35/64"	1-13/32"	1-13/32"
T5132B	1"	2-1/32"	35/64"	1-15/32"	1-15/32"
T5134B	1-1/16"	2-1/16"	5/8"	1-9/16"	1-9/16"
T5136B	1-1/8"	2-1/8"	21/32"	1-21/32"	1-21/32"
T5138B	1-3/16"	2-1/8"	21/32"	1-45/64"	1-7/16"
T5140B	1-1/4"	2-13/64"	3/4"	1-13/16"	1-9/16"
T5142B	1-5/16"	2-1/4"	49/64"	1-57/64"	1-9/16"
T5144B	1-3/8"	2-1/4"	25/32"	1-57/64"	1-9/16"
T5146B	1-7/16"	2-5/16"	7/8"	2-3/64"	1-9/16"
T5148B	1-1/2"	2-5/16"	55/64"	2-5/64"	1-5/8"
T5150B	1-9/16"	2-7/16"	55/64"	2-3/32"	1-19/32"
T5152B	1-5/8"	2-1/2"	1"	2-3/16"	1-19/32"
T5154B	1-11/16"	2-1/2"	1"	2-19/64"	1-41/64"
T5158B	1-13/16"	2-51/64"	1-1/8"	2-15/32"	1-3/4"
T5164B	2"	3"	1-7/32"	2-43/64"	1-3/4"
T5166B	2-1/16"	3-1/32"	1-7/32"	2-23/32"	1-15/16"
T5176B	2-3/8"	3-1/4"	1-3/8"	3-1/64"	1-15/16"

Drive Tools


## Standard Impact Sockets, 6 Point



6 PT. 	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
I5224	3/4"	2-1/4"	19/32"	1-1/4"	1-5/8"
I5226	13/16"	2-1/4"	39/64"	1-3/8"	1-5/8"
I5228	7/8"	2-1/4"	21/32"	1-1/2"	1-5/8"
I5230	15/16"	2-3/8"	3/4"	1-5/8"	1-5/8"
I5232	1"	2-3/8"	3/4"	1-5/8"	1-5/8"
I5234	1-1/16"	2-1/2"	7/8"	1-11/16"	1-11/16"
I5236	1-1/8"	2-1/2"	7/8"	1-3/4"	1-3/4"
I5238	1-3/16"	2-1/2"	7/8"	1-7/8"	1-7/8"
I5240	1-1/4"	2-5/8"	15/16"	2"	2"
I5242	1-5/16"	2-5/8"	1"	2-1/8"	2-1/8"
I5244	1-3/8"	2-3/4"	1-1/32"	2-1/8"	2-1/8"
I5246	1-7/16"	2-3/4"	1-1/16"	2-1/4"	2-1/4"
I5248	1-1/2"	2-3/4"	1-1/8"	2-5/16"	2-5/16"
I5250	1-9/16"	2-1/2"	1-1/4"	2-25/64"	1-57/64"
I5252	1-5/8"	2-1/2"	1-1/4"	2-7/16"	1-57/64"
I5254	1-11/16"	2-5/8"	1-3/8"	2-1/2"	1-57/64"
I5256	1-3/4"	2-5/8"	1-3/8"	2-5/8"	1-57/64"
I5258	1-13/16"	2-5/8"	1-7/16"	2-23/32"	1-57/64"
I5260	1-7/8"	2-3/4"	1-1/2"	2-13/16"	1-57/64"
I5264	2"	2-7/8"	1-9/16"	3"	1-57/64"

## Deep Impact Sockets, 6 Point



6 PT. 	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER		BOLT CLEARANCE	
				SKT END	HDL END	DIAMETER	DEPTH
I5224L	3/4"	3-1/2"	19/32"	1-1/4"	1-5/8"	23/32"	2-7/16"
I5226L	13/16"	3-1/2"	5/8"	1-3/8"	1-5/8"	49/64"	2-7/16"
I5228L	7/8"	3-1/2"	21/32"	1-1/2"	1-5/8"	53/64"	2-7/16"
I5230L	15/16"	3-1/2"	3/4"	1-5/8"	1-5/8"	55/64"	2-7/16"
I5232L	1"	3-1/2"	3/4"	1-5/8"	1-5/8"	15/16"	2-7/16"
I5234L	1-1/16"	3-1/2"	7/8"	1-11/16"	1-11/16"	63/64"	2-7/16"
I5236L	1-1/8"	3-1/2"	7/8"	1-3/4"	1-3/4"	1-5/64"	2-7/16"
I5238L	1-3/16"	3-1/2"	7/8"	1-7/8"	1-7/8"	1-1/8"	2-7/16"
I5240L	1-1/4"	3-3/4"	15/16"	2"	2"	1-13/64"	2-21/32"
I5242L	1-5/16"	3-3/4"	1"	2-1/8"	2-1/8"	1-9/32"	2-21/32"
I5244L	1-3/8"	3-3/4"	1-1/32"	2-1/8"	2-1/8"	1-21/64"	2-21/32"
I5246L	1-7/16"	3-3/4"	1-1/16"	2-1/4"	2-1/4"	1-3/8"	2-21/32"
I5248L	1-1/2"	3-3/4"	1-1/8"	2-5/16"	2-5/16"	1-3/8"	2-21/32"
I5250L	1-9/16"	3-1/2"	2-5/16"	2-25/64"	1-57/64"	1-17/32"	2-5/16"
I5252L	1-5/8"	3-1/2"	2-5/16"	2-7/16"	1-57/64"	1-19/32"	2-5/16"
I5254L	1-11/16"	3-1/2"	2-5/16"	2-1/2"	1-57/64"	1-21/32"	2-5/16"
I5256L	1-3/4"	3-1/2"	2-1/4"	2-5/8"	1-57/64"	1-23/32"	2-1/4"

### CBPI58ST

8 Piece bluePOWER® Impact Socket Set, 6 Point, 1-9/16" to 2"

### CBPI59ST

9 Piece bluePOWER® Impact Socket Set, 6 Point, 1" to 1-1/2"

Drive Tools



- "TDS" (Torque Dispersing System) spreads stress evenly and reduces fastener rounding.
- High alloy steel (Chromium Molybdenum, SCM440) for strength and durability.
- High visibility laser etching makes size easy to read.
- Countersink on drive end for easier drive tool attachment.
- Chamfered hex ends for easier fastener engagement.
- Black phosphate finish.
- Manufactured to meet/exceed ANSI/ASME specifications.
- Packaged in a blow mold case for easy storage.

Set includes the following Part Numbers and sizes:

PART NO.	NOMINAL	PART NO.	NOMINAL
CBPI523	1-9/16"	CBPI527	1-13/16"
CBPI524	1-5/8"	CBPI528	1-7/8"
CBPI525	1-11/16"	CBPI529	1-15/16"
CBPI526	1-3/4"	CBPI530	2"

CBPI5PRS 3/4" Drive Pin and Ring Set

- "TDS" (Torque Dispersing System) spreads stress evenly and reduces fastener rounding.
- High alloy steel (Chromium Molybdenum, SCM440) for strength and durability.
- High visibility laser etching makes size easy to read.
- Countersink on drive end for easier drive tool attachment.
- Chamfered hex ends for easier fastener engagement.
- Black phosphate finish.
- Manufactured to meet/exceed ANSI/ASME specifications.
- Packaged in a blow mold case for easy storage.

Set includes the following Part Numbers and sizes:

PART NO.	NOMINAL	PART NO.	NOMINAL
CBPI514	1"	CBPI519	1-5/16"
CBPI515	1-1/16"	CBPI520	1-3/8"
CBPI516	1-1/8"	CBPI521	1-7/16"
CBPI517	1-3/16"	CBPI522	1-1/2"
CBPI518	1-1/4"		

CBPI5PRS 3/4" Drive Pin and Ring Set

#### bluePOWER® Standard Impact Sockets, 6 Point



6 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
CBPI510	3/4"	2"	5/8"	1-1/4"	1-5/8"
CBPI511	13/16"	2"	5/8"	1-3/8"	1-5/8"
CBPI512	7/8"	2"	5/8"	1-7/16"	1-5/8"
CBPI513	15/16"	2"	5/8"	1-1/2"	1-5/8"
CBPI514	1"	2-1/16"	11/16"	1-9/16"	1-5/8"
CBPI515	1-1/16"	2-1/16"	7/8"	1-11/16"	1-3/4"
CBPI516	1-1/8"	2-1/16"	7/8"	1-3/4"	1-3/4"
CBPI517	1-3/16"	2-1/16"	7/8"	1-13/16"	1-3/4"
CBPI518	1-1/4"	2-1/4"	1"	1-15/16"	1-3/4"
CBPI519	1-5/16"	2-1/4"	1"	1-15/16"	1-3/4"
CBPI520	1-3/8"	2-1/4"	1"	2-1/16"	1-3/4"
CBPI521	1-7/16"	2-1/4"	1"	2-1/8"	1-3/4"
CBPI522	1-1/2"	2-1/4"	1"	2-3/16"	1-3/4"
CBPI523	1-9/16"	2-5/16"	1"	2-5/16"	1-3/4"
CBPI524	1-5/8"	2-5/16"	1"	2-3/8"	1-3/4"
CBPI525	1-11/16"	2-7/16"	1-1/8"	2-7/16"	1-3/4"
CBPI526	1-3/4"	2-7/16"	1-1/8"	2-1/2"	1-3/4"
CBPI527	1-13/16"	2-7/16"	1-1/8"	2-5/8"	1-3/4"
CBPI528	1-7/8"	2-11/16"	1-5/16"	2-11/16"	1-3/4"
CBPI529	1-15/16"	2-11/16"	1-5/16"	2-3/4"	1-3/4"
CBPI530	2"	2-11/16"	1-5/16"	2-13/16"	1-3/4"

#### bluePOWER® Metric Impact Sockets, 6 Point



6 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
CBPI530MM	30MM	53.00	22.00	46.00	44.00
CBPI536MM	36MM	57.00	25.00	53.00	44.00
CBPI546MM	46MM	62.00	28.00	66.00	44.00
CBPI555MM	55MM	72.00	38.00	77.50	54.00

## CBPI58LST

8 Piece bluePOWER® Deep Impact Socket Set, 6 Point, 1-9/16" to 2"



## CBPI59LST

9 Piece bluePOWER® Deep Impact Socket Set, 6 Point, 1" to 1-1/2"



Drive Tools

- "TDS" (Torque Dispersing System) spreads stress evenly and reduces fastener rounding.
- High alloy steel (Chromium Molybdenum, SCM440) for strength and durability.
- High visibility laser etching makes size easy to read.
- Countersink on drive end for easier drive tool attachment.
- Chamfered hex ends for easier fastener engagement.
- Black phosphate finish.
- Manufactured to meet/exceed ANSI/ASME specifications.
- Packaged in a blow mold case for easy storage.

Set includes the following Part Numbers and sizes:

PART NO.	NOMINAL	PART NO.	NOMINAL
CBPI523L	1-9/16"	CBPI527L	1-13/16"
CBPI524L	1-5/8"	CBPI528L	1-7/8"
CBPI525L	1-11/16"	CBPI529L	1-15/16"
CBPI526L	1-3/4"	CBPI530L	2"

CBPI5PRS 3/4" Drive Pin and Ring Set

- "TDS" (Torque Dispersing System) spreads stress evenly and reduces fastener rounding.
- High alloy steel (Chromium Molybdenum, SCM440) for strength and durability.
- High visibility laser etching makes size easy to read.
- Countersink on drive end for easier drive tool attachment.
- Chamfered hex ends for easier fastener engagement.
- Black phosphate finish.
- Manufactured to meet/exceed ANSI/ASME specifications.
- Packaged in a blow mold case for easy storage.

Set includes the following Part Numbers and sizes:

PART NO.	NOMINAL	PART NO.	NOMINAL
CBPI514L	1"	CBPI519L	1-5/16"
CBPI515L	1-1/16"	CBPI520L	1-3/8"
CBPI516L	1-1/8"	CBPI521L	1-7/16"
CBPI517L	1-3/16"	CBPI522L	1-1/2"
CBPI518L	1-1/4"		

CBPI5PRS 3/4" Drive Pin and Ring Set

### bluePOWER® Deep Impact Sockets, 6 Point



6 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
CBPI510L	3/4"	3-9/16"	1-1/8"	1-1/4"	1-5/8"
CBPI511L	13/16"	3-9/16"	1-1/8"	1-3/8"	1-5/8"
CBPI512L	7/8"	3-9/16"	1-3/16"	1-7/16"	1-5/8"
CBPI513L	15/16"	3-9/16"	1-1/4"	1-1/2"	1-5/8"
CBPI514L	1"	3-9/16"	1-1/4"	1-9/16"	1-5/8"
CBPI515L	1-1/16"	3-9/16"	1-1/4"	1-11/16"	1-3/4"
CBPI516L	1-1/8"	3-9/16"	1-1/4"	1-3/4"	1-3/4"
CBPI517L	1-3/16"	3-9/16"	1-1/4"	1-13/16"	1-3/4"
CBPI518L	1-1/4"	3-9/16"	1-5/16"	1-15/16"	1-3/4"
CBPI519L	1-5/16"	3-9/16"	1-5/16"	1-15/16"	1-3/4"
CBPI520L	1-3/8"	3-9/16"	1-5/16"	2-1/16"	1-3/4"
CBPI521L	1-7/16"	3-9/16"	1-5/16"	2-1/8"	1-3/4"
CBPI522L	1-1/2"	3-9/16"	1-1/2"	2-3/16"	1-3/4"
CBPI523L	1-9/16"	3-9/16"	1-1/2"	2-5/16"	1-3/4"
CBPI524L	1-5/8"	3-9/16"	1-1/2"	2-3/8"	1-3/4"
CBPI525L	1-11/16"	3-9/16"	1-1/2"	2-7/16"	1-3/4"
CBPI526L	1-3/4"	3-9/16"	1-1/2"	2-1/2"	1-3/4"
CBPI527L	1-13/16"	3-9/16"	1-1/2"	2-5/8"	1-3/4"
CBPI528L	1-7/8"	3-9/16"	1-1/2"	2-11/16"	1-3/4"
CBPI529L	1-15/16"	3-9/16"	1-1/2"	2-3/4"	1-3/4"
CBPI530L	2"	3-9/16"	1-1/2"	2-13/16"	1-3/4"

### bluePOWER® Metric Deep Impact Sockets, 6 Point



6 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
CBPI530MML	30MM	90.00	35.00	46.00	44.00
CBPI532MML	32MM	90.00	35.00	48.00	44.00
CBPI533MML	33MM	90.00	35.00	50.00	44.00
CBPI536MML	36MM	90.00	40.00	53.00	44.00
CBPI541MML	41MM	90.00	45.00	59.00	44.00
CBPI542MML	42MM	90.00	45.00	61.00	44.00
CBPI546MML	46MM	90.00	52.00	66.00	44.00
CBPI555MML	55MM	90.00	52.00	77.50	54.00

## 3/4" DRIVE ATTACHMENTS

### Dual Budd Wheel Sockets

- Two openings: 13/16" square and 1-1/2" hex.
- Simultaneous removal or installation of Budd wheel nut and stud cap.



PART NO.	DRIVE SIZE	DIAMETER	LENGTH
I54826BW	3/4" Sq.	2-1/4"	3-5/16"
I64826BW	1" Sq.	2-1/4"	3-3/8"

### HAR5BL

#### Ratchet Head

- Head Width: 2-5/8"
- Length: 6-1/2"



Drive Tools

### HAR501

#### 2 Piece Ratchet, Industrial Finish

- Overall Length: 25-1/2"



Ratchet consists of the following Part Numbers:

HAH5B	21" O.A. Industrial Finish Handle
HAR5BL	3/4" Industrial Finish Ratchet Head

HAR5RK1A 3/4" Drive Ratchet Repair Kit

### Impact Adaptors "O" Ring and Pin



PART NO.	FEMALE DR.	MALE DR.	O/A	RETAINER ASSEMBLY	OUTSIDE DIA.
AP53	3/4"	1/2"	2-7/32"	RIB28, SP22	1-9/16"
AP56	3/4"	1"	2-5/8"	RIB28, SP22	2"

Note: Pin & "O" Ring not included

### Industrial Finish Handles



PART NO.	DIAMETER	LENGTH
HAH5B	7/8"	21"
HAH5LB	7/8"	34"

### Locking Pins and "O" Rings for 3/4" Drive Impact Sockets

PART NO.	DIAMETER	LENGTH
SP22	11/64"	1-3/8"
SP27	11/64"	1-7/8"

PART NO.	SOCKET DIAMETER
RIB27	1-9/16"
RIB28	2-1/16"
RIB32	2-1/4"



### HF521BL

#### Flex Breaker Bar, Industrial Finish



- One piece construction.
- Ball Type Retainer.
- Length: 21"

### EB56

#### Extension (Industrial Finish) (Ball Type Retainer)



LENGTH	OUTSIDE DIAMETER	SHANK DIAMETER
6"	1-7/16"	31/32"

### A53

#### Adaptor



FEMALE SQUARE	MALE SQUARE	LENGTH
3/4"	1/2"	2-3/16"

### THE SIX MAJOR POINTS OF HAND TOOL SAFETY

1. Wear approved eye protection.
2. Choose the right tool for the job.
3. Do not alter a tool in any way, shape, or form.
4. Never abuse or misuse tools.
5. Never exceed tool capacity.
6. Do not use a tool that appears to be damaged or weakened.

**CBPI68ST** 

8 Piece bluePOWER® Impact Socket Set, 6 Point, 1-9/16" to 2"



**CBPI69ST** 

9 Piece bluePOWER® Impact Socket Set, 6 Point, 1" to 1-1/2"



Drive Tools

- "TDS" (Torque Dispersing System) spreads stress evenly and reduces fastener rounding.
- High alloy steel (Chromium Molybdenum, SCM440) for strength and durability.
- High visibility laser etching makes size easy to read.
- Countersink on drive end for easier drive tool attachment.
- Chamfered hex ends for easier fastener engagement.
- Black phosphate finish.
- Manufactured to meet/exceed ANSI/ASME specifications.
- Packaged in a blow mold case for easy storage.

- "TDS" (Torque Dispersing System) spreads stress evenly and reduces fastener rounding.
- High alloy steel (Chromium Molybdenum, SCM440) for strength and durability.
- High visibility laser etching makes size easy to read.
- Countersink on drive end for easier drive tool attachment.
- Chamfered hex ends for easier fastener engagement.
- Black phosphate finish.
- Manufactured to meet/exceed ANSI/ASME specifications.
- Packaged in a blow mold case for easy storage.

Set includes the following Part Numbers and sizes:

Set includes the following Part Numbers and sizes:

PART NO.	NOMINAL	PART NO.	NOMINAL
CBPI623	1-9/16"	CBPI627	1-13/16"
CBPI624	1-5/8"	CBPI628	1-7/8"
CBPI625	1-11/16"	CBPI629	1-15/16"
CBPI626	1-3/4"	CBPI630	2"


PART NO.	NOMINAL	PART NO.	NOMINAL
CBPI614	1"	CBPI619	1-5/16"
CBPI615	1-1/16"	CBPI620	1-3/8"
CBPI616	1-1/8"	CBPI621	1-7/16"
CBPI617	1-3/16"	CBPI622	1-1/2"
CBPI618	1-1/4"		

CBPI60PRS 1" Drive Pin and Ring Set

CBPI60PRS 1" Drive Pin and Ring Set


**bluePOWER® Standard Impact Sockets, 6 Point**



6 PT. 	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
CBPI614	1"	2-3/8"	7/8"	1-11/16"	2-1/8"
CBPI615	1-1/16"	2-3/8"	7/8"	1-3/4"	2-1/8"
CBPI616	1-1/8"	2-7/16"	1"	1-13/16"	2-1/8"
CBPI617	1-3/16"	2-7/16"	1"	1-15/16"	2-1/8"
CBPI618	1-1/4"	2-1/2"	1"	2"	2-1/8"
CBPI619	1-5/16"	2-1/2"	1"	2-1/8"	2-1/8"
CBPI620	1-3/8"	2-5/8"	1-1/16"	2-3/16"	2-1/8"
CBPI621	1-7/16"	2-5/8"	1"	2-1/4"	2-1/8"
CBPI622	1-1/2"	2-5/8"	1"	2-5/16"	2-1/8"
CBPI623	1-9/16"	2-5/8"	1-1/16"	2-3/8"	2-1/8"
CBPI624	1-5/8"	2-11/16"	1-1/16"	2-7/16"	2-1/8"
CBPI625	1-11/16"	2-3/4"	1-3/16"	2-9/16"	2-1/8"
CBPI626	1-3/4"	2-3/4"	1-3/16"	2-11/16"	2-3/8"
CBPI627	1-13/16"	2-13/16"	1-3/16"	2-11/16"	2-3/8"
CBPI628	1-7/8"	2-13/16"	1-3/16"	2-3/4"	2-3/8"
CBPI629	1-15/16"	3"	1-1/4"	2-7/8"	2-3/8"
CBPI630	2"	3-1/16"	1-1/4"	2-15/16"	2-3/8"

**bluePOWER® Metric Impact Sockets, 6 Point**



6 PT. 	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
CBPI633MM	33MM	62.00	26.00	52.50	54.00

### CBPI68LST

8 Piece bluePOWER® Deep Impact Socket Set, 6 Point, 1-9/16" to 2"

### CBPI69LST

9 Piece bluePOWER® Deep Impact Socket Set, 6 Point, 1" to 1-1/2"

Drive Tools



- "TDS" (Torque Dispersing System) spreads stress evenly and reduces fastener rounding.
- High alloy steel (Chromium Molybdenum, SCM440) for strength and durability.
- High visibility laser etching makes size easy to read.
- Countersink on drive end for easier drive tool attachment.
- Chamfered hex ends for easier fastener engagement.
- Black phosphate finish.
- Manufactured to meet/exceed ANSI/ASME specifications.
- Packaged in a blow mold case for easy storage.

Set includes the following Part Numbers and sizes:

PART NO.	NOMINAL	PART NO.	NOMINAL
CBPI623L	1-9/16"	CBPI627L	1-13/16"
CBPI624L	1-5/8"	CBPI628L	1-7/8"
CBPI625L	1-11/16"	CBPI629L	1-15/16"
CBPI626L	1-3/4"	CBPI630L	2"

CBPI61PRS 1" Drive Pin and Ring Set

- "TDS" (Torque Dispersing System) spreads stress evenly and reduces fastener rounding.
- High alloy steel (Chromium Molybdenum, SCM440) for strength and durability.
- High visibility laser etching makes size easy to read.
- Countersink on drive end for easier drive tool attachment.
- Chamfered hex ends for easier fastener engagement.
- Black phosphate finish.
- Manufactured to meet/exceed ANSI/ASME specifications.
- Packaged in a blow mold case for easy storage.

Set includes the following Part Numbers and sizes:

PART NO.	NOMINAL	PART NO.	NOMINAL
CBPI614L	1"	CBPI619L	1-5/16"
CBPI615L	1-1/16"	CBPI620L	1-3/8"
CBPI616L	1-1/8"	CBPI621L	1-7/16"
CBPI617L	1-3/16"	CBPI622L	1-1/2"
CBPI618L	1-1/4"		

CBPI61PRS 1" Drive Pin and Ring Set

### bluePOWER® Deep Impact Sockets, 6 Point



6 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
CBPI614L	1"	4-1/4"	1-3/8"	1-11/16"	2-1/8"
CBPI615L	1-1/16"	4-1/4"	1-3/8"	1-3/4"	2-1/8"
CBPI616L	1-1/8"	4-1/4"	1-3/8"	1-13/16"	2-1/8"
CBPI617L	1-3/16"	4-1/4"	1-3/8"	1-15/16"	2-1/8"
CBPI618L	1-1/4"	4-1/4"	1-3/8"	2"	2-1/8"
CBPI619L	1-5/16"	4-1/4"	1-9/16"	2-1/8"	2-1/8"
CBPI620L	1-3/8"	4-1/4"	1-9/16"	2-3/16"	2-1/8"
CBPI621L	1-7/16"	4-1/4"	1-3/4"	2-1/4"	2-1/8"
CBPI622L	1-1/2"	4-1/4"	1-3/4"	2-5/16"	2-1/8"
CBPI623L	1-9/16"	4-1/4"	1-3/4"	2-3/8"	2-1/8"
CBPI624L	1-5/8"	4-1/4"	1-3/4"	2-7/16"	2-1/8"
CBPI625L	1-11/16"	4-1/4"	1-3/4"	2-9/16"	2-1/8"
CBPI626L	1-3/4"	4-1/4"	1-3/4"	2-11/16"	2-3/8"
CBPI627L	1-13/16"	4-1/4"	1-13/16"	2-11/16"	2-3/8"
CBPI628L	1-7/8"	4-1/4"	1-13/16"	2-3/4"	2-3/8"
CBPI629L	1-15/16"	4-1/4"	1-13/16"	2-7/8"	2-3/8"
CBPI630L	2"	4-1/4"	1-15/16"	2-15/16"	2-3/8"

### bluePOWER® Metric Deep Impact Sockets, 6 Point



6 PT.	NOMINAL	OVERALL LENGTH	BROACH DEPTH	OUTSIDE DIAMETER	
				SOCKET END	HANDLE END
CBPI630MML	30MM	108.00	34.00	49.00	54.00
CBPI633MML	33MM	108.00	38.00	52.50	54.00
CBPI635MML	35MM	108.00	40.00	55.00	54.00
CBPI636MML	36MM	108.00	42.00	56.50	54.00
CBPI638MML	38MM	108.00	42.00	59.00	54.00
CBPI641MML	41MM	108.00	44.00	62.50	54.00



# HAR601

## 2 Piece Ratchet, Industrial Finish

- Overall Length: 25-1/2"



Ratchet consists of the following Part Numbers:

HAH5B	21" O.A. Industrial Finish Handle
HAR6BL	1" Industrial Finish Ratchet Head

HAR6RK1A 1" Drive Ratchet Repair Kit

### Industrial Finish Handles



PART NO.	DIAMETER	LENGTH
HAH5B	7/8"	21"
HAH5LB	7/8"	34"

# HAR6BL

## Ratchet Head

- Head Width: 2-5/8"
- Length: 6-1/2"



# AP65

## Impact Adaptor "O" Ring and Pin



FEMALE DRIVE	MALE DRIVE	OVERALL LENGTH	RETAINER ASSEMBLY	OUTSIDE DIAMETER
1"	3/4"	2-13/16"	RIB32, SP32	2-1/8"

Note: Pin & "O" Ring not included

### Locking Pins and "O" Rings for 1" Drive Impact Sockets

PART NO.	DIAMETER	LENGTH
SP32	7/32"	1-7/8"
SP35	7/32"	2"
SP36	7/32"	2-1/2"

PART NO.	SOCKET DIAMETER
RIB32	2-1/4"
RIB35	2-3/4"
RIB38	3-1/8"
RIB41	3-5/8"
RIB45	4"



REFER TO THE INDEX FOR OUR COMPLETE LINE OF IMPACT WRENCHES

# IR2155QIMAX

## 1" Air Impactool™

- Delivers incredible performance and industrial-grade durability.
- Efficient air motor reduces air consumption.
- Perfect for truck and bus service, construction and agricultural equipment maintenance.
- 1,350 ft.-lb. maximum reverse torque from a compact tool that weighs just 7.4 lbs.
- Built to last and designed to withstand tough use in rugged environments.
- Easy-to-clean inlet screen means less downtime and better tool performance.
- Twin-hammer mechanism utilizes proprietary advanced metallurgy.
- Patented four-position power regulator dial provides a range of forward power settings.
- Patented one-hand forward/reverse for easy operation, steel hammer case for durability and feather-touch trigger for control.
- 7-vane motor.
- Blows per minute: 1,150.



SPECIFICATIONS	
Forward Torque Range	200-900 ft.-lbs.
Maximum Torque (Reverse)	1,350 ft.-lbs.
Net Weight	7.4 lbs.
Length	8.8"
Air Consumption	8.5 CFM
Air Inlet (NPTF)	1/2"
Minimum Hose Size	1/2"
Free Speed	7,000 rpm
Sound Level	91.1 dBA

# CAT37906

## 1" Impact Wrench with 6" Extended Anvil



- Powerful twin hammer mechanism generates 1600 ft.-lbs. of maximum torque.
- Lightweight magnesium housing for easier use and reduced operator fatigue.
- Easy to use reverse lever for quick direction change.

SPECIFICATIONS	
Working Torque Range	150-900 ft.-lbs.
Max. Torque (Reverse)	1600 ft.-lbs.
Capacity (Std. Bolt Size)	1"
Net Weight	13.9 lbs.
Overall Length	18.4"
Air Consumption	7.9 CFM
Air Inlet (NPT)	1/2"
Rec. Hose Size (@90 PSI)	3/4" ID
Maximum Free Speed	4500 RPM
Recommended Air Pressure	90 PSI
Sound Level	94 dBA

## COMBINATION WRENCH SETS

### WCP27ST

7 Piece  
Combination  
Wrench Set,  
6 Point,  
3/8" to 3/4"



Set consists of the following Part Numbers and sizes:

CWSP1212	3/8"	CWSP2020	5/8"
CWSP1414	7/16"	CWSP2222	11/16"
CWSP1616	1/2"	CWSP2424	3/4"
CWSP1818	9/16"		

### WCP17ST

7 Piece  
Combination  
Wrench Set,  
12 Point,  
3/8" to 3/4"



Set consists of the following Part Numbers and sizes:

CWP1212	3/8"	CWP2020	5/8"
CWP1414	7/16"	CWP2222	11/16"
CWP1616	1/2"	CWP2424	3/4"
CWP1818	9/16"		

Wrenches & Striking Tools

### WCP113STSS

13 Piece SAE Wrench Super Set, 12 Point,  
1/4" to 1"



- "Hinge and snap" blow molded tray snaps together with WCM110STSS.

Set consists of the following Part Numbers and sizes:

CWP0808	1/4"	CWP2222	11/16"
CWP1010	5/16"	CWP2424	3/4"
CWP1212	3/8"	CWP2626	13/16"
CWP1414	7/16"	CWP2828	7/8"
CWP1616	1/2"	CWP3030	15/16"
CWP1818	9/16"	CWP3232	1"
CWP2020	5/8"		

### WCB17ST

7 Piece Combination Wrench Set, 12 Point,  
3/8" to 3/4", (Industrial Finish)



Set consists of the following Part Numbers and sizes:

CWB1212	3/8"	CWB2020	5/8"
CWB1414	7/16"	CWB2222	11/16"
CWB1616	1/2"	CWB2424	3/4"
CWB1818	9/16"		






#### WARNING!

Excessive force can cause wrench slippage. Wear Safety Goggles. Always use the right tool for the job. Use tools for their intended uses or applications

## Standard Combination Wrenches

- V-throat open end head allows four sided grip on the fastener to prevent slippage.
- High polished nickel chrome plating on Full Polish wrenches resists rust and enhances the appearance of the tool.
- TDS Torque Dispersing System opening design spreads stress evenly and reduces fastener rounding.



6 Point 		12 Point 		12 Point, Industrial Finish 				
Part Number	Part Number	Part Number	Nominal Size	Overall Length	Head Thickness		Head Diameter	
					Box End	Open End	Box End	Open End
CWSP0808	CWP0808		1/4"	4"	15/64"	3/16"	27/64"	37/64"
CWSP1010	CWP1010		5/16"	4-1/2"	1/4"	13/64"	33/64"	45/64"
CWSP1212	CWP1212	CWB1212	3/8"	5-1/4"	5/16"	13/64"	5/8"	13/16"
CWSP1414	CWP1414	CWB1414	7/16"	6-3/16"	5/16"	15/64"	43/64"	15/16"
CWSP1616	CWP1616	CWB1616	1/2"	7"	21/64"	1/4"	3/4"	1-1/16"
CWSP1818	CWP1818	CWB1818	9/16"	7-3/4"	3/8"	9/32"	27/32"	1-3/16"
CWSP2020	CWP2020	CWB2020	5/8"	8-3/4"	25/64"	5/16"	59/64"	1-5/16"
CWSP2222	CWP2222	CWB2222	11/16"	9-9/16"	29/64"	21/64"	1"	1-7/16"
CWSP2424	CWP2424	CWB2424	3/4"	10-5/8"	15/32"	23/64"	1-3/32"	1-9/16"
	CWP2626	CWB2626	13/16"	11-1/2"	1/2"	23/64"	1-3/16"	1-11/16"
	CWP2828	CWB2828	7/8"	12-1/2"	19/32"	23/64"	1-5/16"	1-25/32"
	CWP3030	CWB3030	15/16"	13-3/4"	9/16"	13/32"	1-3/8"	1-15/16"
	CWP3232	CWB3232	1"	14-1/4"	19/32"	7/16"	1-7/16"	2-1/16"
	CWP3434	CWB3434	1-1/16"	14-3/4"	21/32"	15/32"	1-9/16"	2-3/16"
	CWP3636	CWB3636	1-1/8"	15-5/8"	11/16"	1/2"	1-5/8"	2-5/16"
	CWP4040	CWB4040	1-1/4"	17"	3/4"	17/32"	1-27/32"	2-9/16"
	CWP4242	CWB4242	1-5/16"	18"	25/32"	17/32"	1-15/16"	2-11/16"
	CWP4444	CWB4444	1-3/8"	19"	13/16"	17/32"	2-1/64"	2-13/16"
	CWP4646	CWB4646	1-7/16"	20"	27/32"	9/16"	2-3/32"	2-15/16"
	CWP4848	CWB4848	1-1/2"	21"	7/8"	5/8"	2-3/16"	3-1/16"
	CWP5252		1-5/8"	22"	31/32"	5/8"	2-3/8"	3-5/16"

Wrenches & Striking Tools

## WCP17LST

7 Piece Extra Long Combination Wrench Set, 12 Point, 3/8" to 3/4"



Set consists of the following Part Numbers and sizes:

CWP1212L	3/8"	CWP2020L	5/8"
CWP1414L	7/16"	CWP2222L	11/16"
CWP1616L	1/2"	CWP2424L	3/4"
CWP1818L	9/16"		

## Extra Long Combination Wrenches, 12 Point



PART NO.	WRENCH SIZE	OVERALL LENGTH
CWP1212L	3/8"	7-3/8"
CWP1414L	7/16"	8"
CWP1616L	1/2"	9-1/8"
CWP1818L	9/16"	10"
CWP2020L	5/8"	10-7/8"
CWP2222L	11/16"	11-3/4"
CWP2424L	3/4"	12-5/8"



### WARNING!

Select a wrench whose opening exactly fits the nut. Too large an opening can spread the jaws of an open-end wrench and batter the points of a box or socket wrench. Care should be exercised in selecting fractional wrenches for fractional fasteners and metric wrenches for metric fasteners. Over torquing with wrenches leads to failure and possible injury.



Follow safety guidelines on pages 399 and 400

# SAE & METRIC COMBINATION WRENCHES & SETS

## WCXS16ST

6 Piece Extra Short  
Combination Wrench  
Set, 12 Point,  
7/16" to 3/4"



Set consists of the following Part Numbers and sizes:

CW1414XS	7/16"	CW2020XS	5/8"
CW1616XS	1/2"	CW2222XS	11/16"
CW1818XS	9/16"	CW2424XS	3/4"

## WCXS14ST

4 Piece  
Extra Short  
Combination  
Wrench Set,  
12 Point,  
13/16" to 1"



Set consists of the following Part Numbers and sizes:

CW2626XS	13/16"	CW3030XS	15/16"
CW2828XS	7/8"	CW3232XS	1"

Wrenches & Striking Tools



## WCXS110ST


10 Piece Extra Short Combination Wrench Set,  
12 Point,  
7/16" to 1"

Set consists of the following Part Numbers and sizes:

CW1414XS	7/16"	CW2424XS	3/4"
CW1616XS	1/2"	CW2626XS	13/16"
CW1818XS	9/16"	CW2828XS	7/8"
CW2020XS	5/8"	CW3030XS	15/16"
CW2222XS	11/16"	CW3232XS	1"

## Extra Short Standard Combination Wrenches, 12 Point



Part Number 	Nominal Size	Overall Length	Head Thickness		Head Diameter	
			Box End	Open End	Box End	Open End
CW1414XS	7/16"	4-1/32"	19/64"	15/64"	21/32"	15/16"
CW1616XS	1/2"	4-3/8"	11/32"	17/64"	49/64"	1-5/64"
CW1818XS	9/16"	4-35/64"	23/64"	9/32"	53/64"	1-3/16"
CW2020XS	5/8"	4-7/8"	13/32"	5/16"	15/16"	1-21/64"
CW2222XS	11/16"	5-7/32"	29/64"	11/32"	1-3/64"	1-31/64"
CW2424XS	3/4"	5-25/64"	15/32"	23/64"	1-7/64"	1-9/16"
CW2626XS	13/16"	6"	35/64"	13/32"	1-15/64"	1-49/64"
CW2828XS	7/8"	6-1/4"	37/64"	27/64"	1-9/32"	1-7/8"
CW3030XS	15/16"	6-3/4"	19/32"	7/16"	1-25/64"	1-61/64"
CW3232XS	1"	7-1/4"	21/32"	29/64"	1-33/64"	2-1/16"

## WCM210ST

10 Piece Standard  
Metric Combination  
Wrench Set,  
6 Point,  
10MM to 19MM



Set consists of the following Part Numbers and sizes:

CWS10	10MM	CWS15	15MM
CWS11	11MM	CWS16	16MM
CWS12	12MM	CWS17	17MM
CWS13	13MM	CWS18	18MM
CWS14	14MM	CWS19	19MM

## WCM110STSS

10 Piece Standard  
Metric Combination  
Wrench Set,  
12 Point,  
10MM to 19MM



- "Hinge and snap" blow molded tray snaps together with WCP113STSS.

Set consists of the following Part Numbers and sizes:

CW10	10MM	CW15	15MM
CW11	11MM	CW16	16MM
CW12	12MM	CW17	17MM
CW13	13MM	CW18	18MM
CW14	14MM	CW19	19MM

## WCMP19S

9 Piece Standard Metric Combination Wrench Set, 12 Point, 20MM to 32MM



Set consists of the following Part Numbers and sizes:

CW20	20MM	CW26	26MM
CW21	21MM	CW27	27MM
CW22	22MM	CW30	30MM
CW23	23MM	CW32	32MM
CW24	24MM	K90	Kit Bag

## WCM110LST

10 Piece Extra Long Metric Combination Wrench Set, 12 Point, 10MM to 19MM




Set consists of the following Part Numbers and sizes:

CW10MML	10MM	CW15MML	15MM
CW11MML	11MM	CW16MML	16MM
CW12MML	12MM	CW17MML	17MM
CW13MML	13MM	CW18MML	18MM
CW14MML	14MM	CW19MML	19MM

Wrenches & Striking Tools

### Extra Long Metric Combination Wrenches, 12 Point



Part Number 	Nominal Size	Overall Length	Head Thickness		Head Diameter	
			Box End	Open End	Box End	Open End
CW10MML	10MM	7-3/8"	5/16"	7/32"	5/8"	53/64"
CW11MML	11MM	7-61/64"	5/16"	15/64"	43/64"	15/16"
CW12MML	12MM	8-35/64"	21/64"	1/4"	45/64"	1"
CW13MML	13MM	9-1/8"	21/64"	1/4"	3/4"	1-1/16"
CW14MML	14MM	9-45/64"	3/8"	17/64"	53/64"	1-13/64"
CW15MML	15MM	10-9/32"	3/8"	19/64"	7/8"	1-1/4"
CW16MML	16MM	10-7/8"	25/64"	5/16"	59/64"	1-5/16"
CW17MML	17MM	11-3/4"	29/64"	21/64"	63/64"	1-7/16"
CW18MML	18MM	12-5/8"	15/32"	23/64"	1-3/32"	1-9/16"
CW19MML	19MM	13-1/2"	1/2"	3/8"	1-3/32"	1-37/64"

## WCMB110ST

10 Piece Metric Combination Wrench Set, 12 Point, 10MM to 19MM, (Industrial Finish)



Set consists of the following Part Numbers and sizes:

CWB10	10MM	CWB14	14MM	CWB17	17MM
CWB11	11MM	CWB15	15MM	CWB18	18MM
CWB12	12MM	CWB16	16MM	CWB19	19MM
CWB13	13MM				



## WCMB19S

9 Piece Standard Metric Combination Wrench Set, 12 Point, 20MM to 32MM, (Industrial Finish)

Set consists of the following Part Numbers and sizes:




CWB20	20MM	CWB26	26MM
CWB21	21MM	CWB27	27MM
CWB22	22MM	CWB30	30MM
CWB23	23MM	CWB32	32MM
CWB24	24MM	K90	Kit Bag

# METRIC COMBINATION WRENCHES & SETS

## Standard Metric Combination Wrenches, 6 and 12 Point



Wrenches & Striking Tools

6 Point 		12 Point 		12 Point, Industrial Finish 				
Part Number	Part Number	Part Number	Nominal Size	Overall Length	Head Thickness		Head Diameter	
					Box End	Open End	Box End	Open End
CWS10	CW10	CWB10	10MM	6-5/8"	9/32"	1/4"	5/8"	27/32"
CWS11	CW11	CWB11	11MM	7"	5/16"	7/32"	41/64"	29/32"
CWS12	CW12	CWB12	12MM	7-3/8"	21/64"	1/4"	45/64"	1"
CWS13	CW13	CWB13	13MM	7-3/4"	23/64"	1/4"	3/4"	1-3/32"
CWS14	CW14	CWB14	14MM	8-1/8"	25/64"	9/32"	13/16"	1-11/64"
CWS15	CW15	CWB15	15MM	8-1/2"	13/32"	19/64"	7/8"	1-9/32"
CWS16	CW16	CWB16	16MM	8-7/8"	27/64"	5/16"	59/64"	1-21/64"
CWS17	CW17	CWB17	17MM	9-1/4"	29/64"	21/64"	1"	1-13/32"
CWS18	CW18	CWB18	18MM	9-5/8"	15/32"	11/32"	1-3/64"	1-1/2"
CWS19	CW19	CWB19	19MM	10"	1/2"	23/64"	1-3/32"	1-9/16"
	CW20	CWB20	20MM	10-9/16"	33/64"	3/8"	1-5/32"	1-41/64"
	CW21	CWB21	21MM	11-1/8"	17/32"	25/64"	1-7/32"	1-23/32"
	CW22	CWB22	22MM	11-11/16"	9/16"	9/16"	1-9/32"	1-51/64"
	CW23	CWB23	23MM	12-1/4"	37/64"	27/64"	1-21/64"	1-7/8"
	CW24	CWB24	24MM	12-13/16"	19/32"	27/64"	1-25/64"	1-61/64"
	CW26	CWB26	26MM	13-15/16"	41/64"	29/64"	1-33/64"	2-7/64"
	CW27	CWB27	27MM	14-1/2"	21/32"	15/32"	1-9/16"	2-3/16"
	CW30	CWB30	30MM	16-3/16"	45/64"	1/2"	1-47/64"	2-27/64"
	CW32	CWB32	32MM	17-5/16"	3/4"	33/64"	1-55/64"	2-37/64"

### WCMS110ST

10 Piece Short Metric Combination Wrench Set,  
12 Point, 10MM to 19MM



Set consists of the following Part Numbers and sizes:

CW10MMS	10MM	CW15MMS	15MM
CW11MMS	11MM	CW16MMS	16MM
CW12MMS	12MM	CW17MMS	17MM
CW13MMS	13MM	CW18MMS	18MM
CW14MMS	14MM	CW19MMS	19MM

### WCMS114ST

14 Piece Short Metric Combination Wrench Set,  
12 Point, 6MM to 19MM



Set consists of the following Part Numbers and sizes:

CW6MMS	6MM	CW13MMS	13MM
CW7MMS	7MM	CW14MMS	14MM
CW8MMS	8MM	CW15MMS	15MM
CW9MMS	9MM	CW16MMS	16MM
CW10MMS	10MM	CW17MMS	17MM
CW11MMS	11MM	CW18MMS	18MM
CW12MMS	12MM	CW19MMS	19MM

## Short Metric Combination Wrenches, 12 Point



Part Number	Nominal Size	Overall Length	Head Thickness		Head Diameter	
			Box End	Open End	Box End	Open End
CW6MMS	6MM	4"	15/64"	3/16"	13/32"	9/16"
CW7MMS	7MM	4-1/4"	1/4"	13/64"	29/64"	5/8"
CW8MMS	8MM	4-1/2"	1/4"	7/32"	33/64"	47/64"
CW9MMS	9MM	4-3/4"	17/64"	7/32"	37/64"	25/32"
CW10MMS	10MM	5"	5/16"	15/64"	5/8"	7/8"
CW11MMS	11MM	5-1/4"	5/16"	1/4"	43/64"	15/16"
CW12MMS	12MM	5-15/16"	11/32"	9/32"	45/64"	63/64"
CW13MMS	13MM	6-3/8"	23/64"	19/64"	25/32"	1-3/32"
CW14MMS	14MM	6-3/4"	3/8"	5/16"	53/64"	1-13/64"
CW15MMS	15MM	7-1/8"	3/8"	21/64"	7/8"	1-17/64"
CW16MMS	16MM	7-1/2"	25/64"	21/64"	59/64"	1-5/16"
CW17MMS	17MM	7-7/8"	27/64"	11/32"	31/32"	1-7/16"
CW18MMS	18MM	8-1/4"	29/64"	23/64"	1-1/32"	1-31/64"
CW19MMS	19MM	8-7/8"	15/32"	3/8"	1-3/32"	1-9/16"

Wrenches & Striking Tools

## WCMXS110ST

**10 Piece Metric Extra Short Combination Wrench Set, 12 Point, 10MM to 19MM**

Set consists of the following Part Numbers and sizes:

CW10XS	10MM	CW15XS	15MM
CW11XS	11MM	CW16XS	16MM
CW12XS	12MM	CW17XS	17MM
CW13XS	13MM	CW18XS	18MM
CW14XS	14MM	CW19XS	19MM



## Extra Short Metric Combination Wrenches, 12 Point



Part Number	Nominal Size	Overall Length	Head Thickness		Head Diameter	
			Box End	Open End	Box End	Open End
CW10XS	10MM	3-55/64"	17/64"	7/32"	19/32"	53/64"
CW11XS	11MM	4-1/32"	19/64"	15/64"	21/32"	29/32"
CW12XS	12MM	4-13/64"	5/16"	1/4"	45/64"	63/64"
CW13XS	13MM	4-3/8"	11/32"	17/64"	3/4"	1-5/64"
CW14XS	14MM	4-17/32"	23/64"	9/32"	53/64"	1-5/32"
CW15XS	15MM	4-45/64"	3/8"	19/64"	7/8"	1-1/4"
CW16XS	16MM	4-7/8"	13/32"	5/16"	15/16"	1-5/16"
CW17XS	17MM	5-3/64"	27/64"	21/64"	63/64"	1-13/32"
CW18XS	18MM	5-7/32"	29/64"	11/32"	1-1/32"	1-31/64"
CW19XS	19MM	5-25/64"	15/32"	11/32"	1-3/32"	1-9/16"



### WARNING!

Select a wrench whose opening exactly fits the nut. Too large an opening can spread the jaws of an open-end wrench and batter the points of a box or socket wrench. Care should be exercised in selecting fractional wrenches for fractional fasteners and metric wrenches for metric fasteners. Over torquing with wrenches leads to failure and possible injury.

# BOX WRENCHES & SETS, SPECIAL WRENCHES

## Standard Box Wrenches, 12 Point



Part Number	Nominal Size	Overall Length	Head Depths		Head Diameter	
			Small End	Large End	Small End	Large End
BWP2022	5/8" x 11/16"	10"	7/16"	7/16"	29/32"	1"
BWP3032	15/16" x 1"	15-1/2"	21/32"	21/32"	1-3/8"	1-15/32"

Wrenches & Striking Tools

## WBMB15S

**5 Piece Metric Standard Box Wrench Set, 12 Point, 10MM to 19MM, (Industrial Finish)**



Set consists of the following Part Numbers and sizes:

BWB1011MM	10MM x 11MM	BWB1617MM	16MM x 17MM
BWB1213MM	12MM x 13MM	BWB1819MM	18MM x 19MM
BWB1415MM	14MM x 15MM	K53	Kit Bag

## WBMP15S

**5 Piece Metric Standard Box Wrench Set, 12 Point, 10MM to 19MM**



Set consists of the following Part Numbers and sizes:

BWP1011MM	10MM x 11MM	BWP1617MM	16MM x 17MM
BWP1213MM	12MM x 13MM	BWP1819MM	18MM x 19MM
BWP1415MM	14MM x 15MM	K53	Kit Bag

## Metric Box Wrenches, 12 Point



Industrial Finish	Part Number	Nominal Size	Overall Length	Head Thickness		Head Diameter	
				Large End	Small End	Large End	Small End
				BWB1011MM	BWP1011MM	10MM x 11MM	7-1/2"
BWB1213MM	BWP1213MM	12MM x 13MM	8-3/16"	5/16"	9/32"	3/4"	45/64"
BWB1415MM	BWP1415MM	14MM x 15MM	9-3/32"	11/32"	5/16"	55/64"	13/16"
BWB1617MM	BWP1617MM	16MM x 17MM	10"	7/16"	7/16"	1"	29/32"
BWB1819MM	BWP1819MM	18MM x 19MM	11-1/4"	1/2"	7/16"	1-3/32"	1-1/64"

## Torx® Box Wrenches



- Black oxide finish.

PART NUMBER	OPENING	PART NUMBER	OPENING
VMWTO810	E8 x E10	VMWT1214	E12 x E14

## CWFP20MM

**20MM GM Fuel Line Wrench**



Overall Length	Head Thickness	Head Diameter		Flare Nut Opening
		Open End	Flare Nut End	
7-1/2"	1/2"	1-9/16"	1-3/8"	19/32"



## WBWLHP5ST

**5 Piece Standard Long High Performance Box Wrench Set with Zero Offset, 12 Point, 5/16" to 7/8"**

Set consists of the following Part Numbers and sizes:

BWHP1012L	5/16" x 3/8"	BWHP2224L	11/16" x 3/4"
BWHP1416L	7/16" x 1/2"	BWHP2628L	13/16" x 7/8"
BWHP1820L	9/16" x 5/8"		



### Standard Long High Performance Box Wrenches with Zero Offset, 12 Point



Part Number	Nominal Size	Overall Length	Head Thickness		Head Diameter	
			Large End	Small End	Large End	Small End
BWHP1012L	5/16" x 3/8"	10-1/8"	23/64"	23/64"	5/8"	9/16"
BWHP1416L	7/16" x 1/2"	11-7/16"	3/8"	3/8"	3/4"	45/64"
BWHP1820L	9/16" x 5/8"	14-5/64"	27/64"	27/64"	59/64"	7/8"
BWHP2224L	11/16" x 3/4"	15-25/64"	29/64"	29/64"	1-3/32"	1"
BWHP2628L	13/16" x 7/8"	18-1/64"	31/64"	31/64"	1-19/64"	1-1/4"

Wrenches & Striking Tools

## WBWMLOHP7ST

**7 Piece Metric Long Offset High Performance Box Wrench Set, 12 Point, 8MM to 22MM**

Set consists of the following Part Numbers and sizes:

BWOHP0810MML	8MM x 10MM	BWOHP1718MML	17MM x 18MM
BWOHP1112MML	11MM x 12MM	BWOHP1920MML	19MM x 20MM
BWOHP1314MML	13MM x 14MM	BWOHP2122MML	21MM x 22MM
BWOHP1516MML	15MM x 16MM		



### Metric Long Offset High Performance Box Wrenches, 12 Point



Part Number	Nominal Size	Overall Length	Head Thickness		Head Diameter	
			Large End	Small End	Large End	Small End
BWOHP0810MML	8MM x 10MM	10-1/16"	3/8"	3/8"	19/32"	31/64"
BWOHP1112MML	11MM x 12MM	11-3/8"	7/16"	7/16"	11/16"	5/8"
BWOHP1314MML	13MM x 14MM	12-45/64"	1/2"	31/64"	25/32"	3/4"
BWOHP1516MML	15MM x 16MM	14-1/32"	35/64"	17/32"	7/8"	27/32"
BWOHP1718MML	17MM x 18MM	15-5/16"	5/8"	39/64"	31/32"	15/16"
BWOHP1920MML	19MM x 20MM	16-19/32"	21/32"	41/64"	1-5/64"	1-1/32"
BWOHP2122MML	21MM x 22MM	17-29/32"	11/16"	43/64"	1-3/16"	1-1/8"

### Metric Long High Performance Box Wrenches with Zero Offset, 12 Point (Industrial Finish)



Part Number	Nominal Size	Overall Length	Head Thickness		Head Diameter	
			Large End	Small End	Large End	Small End
BWHB1214MML	12MM x 14MM	12-3/4"	3/8"	3/8"	27/32"	3/4"
BWHB1417MML	14MM x 17MM	14-5/64"	27/64"	27/64"	15/16"	27/32"
BWHB1719MML	17MM x 19MM	16-45/64"	29/64"	29/64"	1-7/64"	1"

# OPEN END AND ANGLE WRENCHES & SETS

## Standard Open End Wrenches, (Industrial Finish)



Part Number	Nominal Size	Overall Length	Head Thickness	Head Diameter	
				Small End	Large End
EWB1214	3/8" x 7/16"	5"	13/64"	13/16"	15/16"
EWB1618	1/2" x 9/16"	6"	1/4"	1-1/16"	1-3/16"
EWB2022	5/8" x 11/16"	8"	5/16"	1-5/16"	1-7/16"
EWB2426	3/4" x 13/16"	9-1/2"	23/64"	1-9/16"	1-11/16"
EWB3032	15/16" x 1"	11-1/2"	27/64"	1-15/16"	2-1/16"

Wrenches & Striking Tools

### ANGLE WRENCH FEATURES:

- Cornwell pioneered and engineered the original angle wrench design.
- For many years these wrenches have been regarded by mechanics and industry as the finest.
- 15° and 60° head angles on the handle allow maximum nut turning in limited access places.
- Design gives you four working positions in small swing areas.

## WA9S

9 Piece Angle Wrench Set, 1/4" to 3/4", (Satin Finish)



Set consists of the following Part Numbers and sizes:

AW0808	1/4"	AW1818	9/16"
AW1010	5/16"	AW2020	5/8"
AW1212	3/8"	AW2222	11/16"
AW1414	7/16"	AW2424	3/4"
AW1616	1/2"	K99	Kit Bag

## WA21S

21 Piece Angle Wrench Set, 1/4" to 1-1/2", (Satin Finish)



Set consists of the following Part Numbers and sizes:

AW0808	1/4"	AW2424	3/4"	AW4040	1-1/4"
AW1010	5/16"	AW2626	13/16"	AW4242	1-5/16"
AW1212	3/8"	AW2828	7/8"	AW4444	1-3/8"
AW1414	7/16"	AW3030	15/16"	AW4646	1-7/16"
AW1616	1/2"	AW3232	1"	AW4848	1-1/2"
AW1818	9/16"	AW3434	1-1/16"	K210	Kit Bag
AW2020	5/8"	AW3636	1-1/8"		
AW2222	11/16"	AW3838	1-3/16"		

## Standard Angle Wrenches (Satin Finish)



PART NUMBER	NOMINAL SIZE	OVERALL LENGTH	HEAD THICKNESS	HEAD DIAMETER
AW0808	1/4"	4-1/4"	5/32"	9/16"
AW1010	5/16"	4-1/2"	11/64"	11/16"
AW1212	3/8"	4-3/4"	3/16"	13/16"
AW1414	7/16"	5"	13/64"	61/64"
AW1616	1/2"	5-1/4"	7/32"	1-1/16"
AW1818	9/16"	5-3/4"	15/64"	1-3/16"
AW2020	5/8"	6-1/4"	15/64"	1-5/16"
AW2222	11/16"	6-3/4"	9/32"	1-7/16"
AW2424	3/4"	7-1/4"	9/32"	1-7/16"
AW2626	13/16"	7-3/4"	9/32"	1-19/32"
AW2828	7/8"	8-1/4"	5/16"	1-11/16"
AW3030	15/16"	8-3/4"	5/16"	1-27/32"
AW3232	1"	9-1/2"	11/32"	2-1/16"
AW3434	1-1/16"	10"	11/32"	2-3/16"
AW3636	1-1/8"	10-1/2"	3/8"	2-5/16"
AW3838	1-3/16"	11"	3/8"	2-7/16"
AW4040	1-1/4"	11-1/2"	3/8"	2-9/16"
AW4242	1-5/16"	12"	3/8"	2-11/16"
AW4444	1-3/8"	12-1/2"	25/64"	2-13/16"
AW4646	1-7/16"	13"	13/32"	2-15/16"
AW4848	1-1/2"	13-1/2"	13/32"	3-1/16"

## WFP25S

5 Piece  
Combination Flare  
Nut Wrench Set,  
3/8" to 5/8"

Set consists of the following Part Numbers and sizes:

CWFP1212	3/8"	CWFP1818	9/16"
CWFP1414	7/16"	CWFP2020	5/8"
CWFP1616	1/2"	K52	Kit Bag



Wrenches & Striking Tools

### Combination Flare Nut Wrenches

- High polished nickel chrome plating on wrenches resists rust and enhances the appearance of the tool.
- Extra thick open end for turning soft nuts without damaging.
- Split box end for tube lines.



PART NUMBER	WRENCH SIZE	OVERALL LENGTH	HEAD THICKNESS	HEAD DIAMETER		FLARE NUT OPENING
				OPEN END	FLARE NUT END	
CWFP1212	3/8"	5-1/4"	11/32"	13/16"	25/32"	1/4"
CWFP1414	7/16"	5-5/8"	3/8"	31/32"	55/64"	9/32"
CWFP1616	1/2"	6"	25/64"	1-3/32"	15/16"	11/32"
CWFP1818	9/16"	6-3/8"	7/16"	1-1/4"	1-1/32"	3/8"
CWFP2020	5/8"	6-3/4"	7/16"	1-3/8"	1-1/8"	7/16"
CWFP2424	3/4"	7-1/2"	1/2"	1-9/16"	1-3/8"	9/16"

## BWFP4ST

4 Piece Double End Flare Nut Wrench Set,  
6 Point, 1/4" to 11/16"



Set consists of the following Part Numbers and sizes:

BWFP0810	1/4" x 5/16"	BWFP1618	1/2" x 9/16"
BWFP1214	3/8" x 7/16"	BWFP2022	5/8" x 11/16"

## BWFB4ST

4 Piece Double End Flare Nut Wrench Set,  
6 Point, 1/4" to 11/16", (Industrial Finish)



Set consists of the following Part Numbers and sizes:

BWFB0810	1/4" x 5/16"	BWFB1618	1/2" x 9/16"
BWFB1214	3/8" x 7/16"	BWFB2022	5/8" x 11/16"

### Double End Flare Nut Wrenches, 6 Point



Industrial Finish		Wrench Size	Overall Length	Head Thickness	Head Diameter		Flare Nut Opening	
Part Number	Part Number				Small End	Large End	Small End	Large End
BWFB0810	BWFP0810	1/4" x 5/16"	5"	1/4"	39/64"	11/16"	5/32"	1/4"
BWFB1214	BWFP1214	3/8" x 7/16"	6"	21/64"	3/4"	27/32"	1/4"	9/32"
BWFB1618	BWFP1618	1/2" x 9/16"	6-7/8"	3/8"	15/16"	31/32"	11/32"	3/8"
BWFB2022	BWFP2022	5/8" x 11/16"	7-5/8"	29/64"	1-5/64"	1-11/64"	7/16"	1/2"

# FLARE NUT & HALF MOON WRENCHES & SETS

## BWFMB6ST

6 Piece Metric  
Double End Flare  
Nut Wrench Set,  
6 Point,  
9MM to 21MM,  
(Industrial Finish)



Set consists of the following Part Numbers and sizes:

BWFB0911MM	9MM x 11MM	BWFB1517MM	15MM x 17MM
BWFB1012MM	10MM x 12MM	BWFB1618MM	16MM x 18MM
BWFB1314MM	13MM x 14MM	BWFB1921MM	19MM x 21MM

## BWFMP6ST

6 Piece Metric  
Double End Flare  
Nut Wrench Set,  
6 Point,  
9MM to 21MM



Set consists of the following Part Numbers and sizes:

BWFP0911MM	9MM x 11MM	BWFP1517MM	15MM x 17MM
BWFP1012MM	10MM x 12MM	BWFP1618MM	16MM x 18MM
BWFP1314MM	13MM x 14MM	BWFP1921MM	19MM x 21MM

Wrenches & Striking Tools

### Metric Double End Flare Nut Wrenches, 6 Point



Part Number	Part Number	Nominal Size	Overall Length	Head Thickness	Head Diameter		Flare Nut Opening	
					Small End	Large End	Small End	Large End
BWFB0911MM	BWFP0911MM	9MM x 11MM	6"	21/64"	3/4"	27/32"	1/4"	9/32"
BWFB1012MM	BWFP1012MM	10MM x 12MM	6-1/2"	11/32"	51/64"	29/32"	1/4"	9/32"
BWFB1314MM	BWFP1314MM	13MM x 14MM	6-7/8"	3/8"	15/16"	1-1/64"	3/8"	13/32"
BWFB1517MM	BWFP1517MM	15MM x 17MM	7-5/8"	29/64"	1-5/64"	1-11/64"	7/16"	1/2"
BWFB1618MM	BWFP1618MM	16MM x 18MM	8-1/16"	15/32"	1-3/32"	1-13/64"	15/32"	9/16"
BWFB1921MM	BWFP1921MM	19MM x 21MM	8-1/2"	33/64"	1-1/4"	1-21/64"	9/16"	5/8"

## WBWMP5SF

5 Piece SAE Half Moon Box Wrench Set,  
12 Point, 3/8" to 13/16"

Set consists of the following Part Numbers and sizes:

BWMP1214	3/8" x 7/16"
BWMP1618	1/2" x 9/16"
BWMP1820	9/16" x 5/8"
BWMP2024	5/8" x 3/4"
BWMP2226	11/16" x 13/16"



### Half Moon Box Wrenches, 12 Point



PART NO.	WRENCH SIZE	OVERALL LENGTH
BWMP1214	3/8" x 7/16"	5-3/32"
BWMP1618	1/2" x 9/16"	6-9/16"
BWMP1820	9/16" x 5/8"	7-17/32"
BWMP2024	5/8" x 3/4"	8-1/4"
BWMP2226	11/16" x 13/16"	8-7/8"

## WBWMM5SF

5 Piece Metric Half Moon Box Wrench Set,  
12 Point, 10MM to 21MM

Set consists of the following Part Numbers and sizes:

BWM1012MM	10MM x 12MM
BWM1113MM	11MM x 13MM
BWM1415MM	14MM x 15MM
BWM1719MM	17MM x 19MM
BWM1821MM	18MM x 21MM



### Metric Half Moon Box Wrenches, 12 Point



PART NO.	WRENCH SIZE	OVERALL LENGTH
BWM1012MM	10MM x 12MM	5-3/32"
BWM1113MM	11MM x 13MM	5-3/4"
BWM1415MM	14MM x 15MM	6-9/16"
BWM1719MM	17MM x 19MM	8-7/32"
BWM1821MM	18MM x 21MM	8-7/8"

## CRW8S

8 Piece SAE Ratcheting Combination Box Wrench Set, 5/16" to 3/4"



- "Hinge and snap" blow molded tray snaps together with CRW8MS, CRW8MSS, or CRW8SS.

Set consists of the following Part Numbers and sizes:

CRW1010	5/16"	CRW1818	9/16"
CRW1212	3/8"	CRW2020	5/8"
CRW1414	7/16"	CRW2222	11/16"
CRW1616	1/2"	CRW2424	3/4"

## CRW8SS

8 Piece SAE Ratcheting Combination Stubby Box Wrench Set, 5/16" to 3/4"



- "Hinge and snap" blow molded tray snaps together with CRW8MS, CRW8MSS or CRW8S.

Set consists of the following Part Numbers and sizes:

CRW1010S	5/16"	CRW1818S	9/16"
CRW1212S	3/8"	CRW2020S	5/8"
CRW1414S	7/16"	CRW2222S	11/16"
CRW1616S	1/2"	CRW2424S	3/4"

Wrenches & Striking Tools

## CRW12S

12 Piece SAE Ratcheting Combination Box Wrench Set, 5/16" to 1"



- "Hinge and snap" blow molded tray snaps together with CRW8DFS, CRW8MDS, CRW12MDFS, CRW12MDS, CRW12MMDS, or CRW15MS.

Set consists of the following Part Numbers and sizes:

CRW1010	5/16"	CRW2222	11/16"
CRW1212	3/8"	CRW2424	3/4"
CRW1414	7/16"	CRW2626	13/16"
CRW1616	1/2"	CRW2828	7/8"
CRW1818	9/16"	CRW3030	15/16"
CRW2020	5/8"	CRW3232	1"

## SAE Ratcheting Combination Box Wrenches, Standard and Stubby



- 72 tooth ratcheting system provides high torque and requires only a 5° swing for operation; great for working in tight areas.
- Made of a special chrome vanadium steel for superior strength and performance.
- Non-slip open end allows easy removal of damaged/worn fasteners.
- Meets or exceeds ANSI specifications.

STANDARD			STUBBY		
PART NO.	SIZE	O.A. LENGTH	PART NO.	SIZE	O.A. LENGTH
CRW1010	5/16"	5-5/8"	CRW1010S	5/16"	3-3/8"
CRW1212	3/8"	6-1/8"	CRW1212S	3/8"	3-3/4"
CRW1414	7/16"	6-1/2"	CRW1414S	7/16"	3-15/16"
CRW1616	1/2"	7"	CRW1616S	1/2"	4-1/4"
CRW1818	9/16"	7-5/16"	CRW1818S	9/16"	4-1/2"
CRW2020	5/8"	8-3/8"	CRW2020S	5/8"	4-3/4"
CRW2222	11/16"	9"	CRW2222S	11/16"	5"
CRW2424	3/4"	9-7/8"	CRW2424S	3/4"	5-3/8"
CRW2626	13/16"	10-3/4"			
CRW2828	7/8"	11-1/8"			
CRW3030	15/16"	11-9/16"			
CRW3232	1"	11-1/2"			

## CRW8MSS

8 Piece Metric Ratcheting Combination Stubby Box Wrench Set, 8MM to 18MM



- "Hinge and snap" blow molded tray snaps together with CRW8MS, CRW8S or CRW8SS.

Set consists of the following Part Numbers and sizes:

CRW8MMS	8MM	CRW14MMS	14MM
CRW10MMS	10MM	CRW15MMS	15MM
CRW12MMS	12MM	CRW17MMS	17MM
CRW13MMS	13MM	CRW18MMS	18MM



### WARNING!

Select a wrench whose opening exactly fits the nut. Too large an opening can spread the jaws of an open-end wrench and batter the points of a box or socket wrench. Care should be exercised in selecting fractional wrenches for fractional fasteners and metric wrenches for metric fasteners. Over torquing with wrenches leads to failure and possible injury.



Follow safety guidelines on pages 399 and 400

# RATCHETING COMBINATION BOX WRENCHES & SETS

## CRW8MS

8 Piece Metric Ratcheting Combination Box Wrench Set, 8MM to 18MM



## CRW12MS

12 Piece Metric Ratcheting Combination Box Wrench Set, 8MM to 19MM



Wrenches & Striking Tools

- "Hinge and snap" blow molded tray snaps together with CRW8MSS, CRW8S or CRW8SS.

Set consists of the following Part Numbers and sizes:

CRW8MM	8MM	CRW14MM	14MM
CRW10MM	10MM	CRW15MM	15MM
CRW12MM	12MM	CRW17MM	17MM
CRW13MM	13MM	CRW18MM	18MM

- "Hinge and snap" blow molded tray snaps together with CRW8SF, CRW12MSF or CRW21GTS.

Set consists of the following Part Numbers and sizes:

CRW8MM	8MM	CRW14MM	14MM
CRW9MM	9MM	CRW15MM	15MM
CRW10MM	10MM	CRW16MM	16MM
CRW11MM	11MM	CRW17MM	17MM
CRW12MM	12MM	CRW18MM	18MM
CRW13MM	13MM	CRW19MM	19MM

## CRW15MS

15 Piece Metric Ratcheting Combination Box Wrench Set, 8MM to 24MM



- "Hinge and snap" blow molded tray snaps together with CRW8DFS, CRW8MDS, CRW12S, CRW12MDFS, CRW12MDS, or CRW12MMDS.

Set consists of the following Part Numbers and sizes:

CRW8MM	8MM	CRW16MM	16MM
CRW9MM	9MM	CRW17MM	17MM
CRW10MM	10MM	CRW18MM	18MM
CRW11MM	11MM	CRW19MM	19MM
CRW12MM	12MM	CRW21MM	21MM
CRW13MM	13MM	CRW22MM	22MM
CRW14MM	14MM	CRW24MM	24MM
CRW15MM	15MM		

### Metric Ratcheting Combination Box Wrenches, Standard and Stubby



- 72 tooth ratcheting system provides high torque and requires only a 5° swing for operation; great for working in tight areas.
- Made of a special chrome vanadium steel for superior strength and performance.
- Non-slip open end allows easy removal of damaged/worn fasteners.
- Meets or exceeds ANSI specifications.

STANDARD			STUBBY		
PART NO.	SIZE	O.A. LENGTH	PART NO.	SIZE	O.A. LENGTH
CRW8MM	8MM	5-5/8"	CRW8MMS	8MM	3-3/8"
CRW9MM	9MM	5-3/4"			
CRW10MM	10MM	6-1/4"	CRW10MMS	10MM	3-13/16"
CRW11MM	11MM	6-3/8"			
CRW12MM	12MM	6-3/4"	CRW12MMS	12MM	4-1/4"
CRW13MM	13MM	7"	CRW13MMS	13MM	4-5/16"
CRW14MM	14MM	7-1/2"	CRW14MMS	14MM	4-1/2"
CRW15MM	15MM	8"	CRW15MMS	15MM	4-11/16"
CRW16MM	16MM	8-1/2"			
CRW17MM	17MM	9"	CRW17MMS	17MM	5"
CRW18MM	18MM	9-3/8"	CRW18MMS	18MM	5-1/8"
CRW19MM	19MM	9-3/4"			
CRW21MM	21MM	10-3/4"			
CRW22MM	22MM	11-1/8"			
CRW24MM	24MM	11-1/2"			

## CRWBXMDL4S

4 Piece SAE Extra Long Ratcheting Box Wrench Set



- 72 tooth ratcheting system provides high torque and only a 5° handle swing for working in tight areas.
- Multi-drive 12 point design can be used on 6 point, 12 point, square, Torx®, spline, and even rounded fasteners.
- Reversible with easy one hand direction change switch lever.
- Full polish, chrome plated finish.
- Packaged in blow mold case for easy storage.

Set consists of the following Part Numbers and sizes.

PART NO.	SIZES	O.A. LENGTH
CRW1012LMDR	5/16" X 3/8"	10"
CRW1416LMDR	7/16" X 1/2"	11.2"
CRW1820LMDR	9/16" X 5/8"	13.8"
CRW2224LMDR	11/16" X 3/4"	15.9"

## CRWBXMDL5MS

5 Piece Metric Extra Long Ratcheting Box Wrench Set



- 72 tooth ratcheting system provides high torque and only a 5° handle swing for working in tight areas.
- Multi-drive 12 point design can be used on 6 point, 12 point, square, Torx®, spline, and even rounded fasteners.
- Reversible with easy one hand direction change switch lever.
- Full polish, chrome plated finish.
- Packaged in blow mold case for easy storage.

Set consists of the following Part Numbers and sizes.

PART NO.	SIZES	O.A. LENGTH
CRW1011LMMDR	10MM X 11MM	10.6"
CRW1213LMMDR	12MM X 13MM	11.8"
CRW1415LMMDR	14MM X 15MM	13"
CRW1618LMMDR	16MM X 18MM	14.8"
CRW1719LMMDR	17MM X 19MM	15.9"

Wrenches & Striking Tools

## CRWBXMDL2MS

2 Piece Metric Extra Long Ratcheting Box Wrench Set



- 72 tooth ratcheting system provides high torque and only a 5° handle swing for working in tight areas.
- Multi-drive 12 point design can be used on 6 point, 12 point, square, Torx®, and spline fasteners.
- Reversible with easy one hand direction change switch button.
- Full polish, chrome plated finish.
- Packaged in plastic tray for easy storage.

Set consists of the following Part Numbers and sizes.

PART NO.	SIZES	O.A. LENGTH
CRW2122LMMDR	21MM X 22MM	16.75"
CRW2427LMMDR	24MM X 27MM	18.3"

## CRW8SF

8 Piece SAE Flex Head Ratcheting Combination Box Wrench Set, 5/16" to 3/4"



- Flex head design wrenches with 72-teeth ratcheting box end.
- Provides high torque and 5 degrees of operation.
- Swivel head design allows the head to work in any position from 0° to 180°.
- Chrome vanadium steel and special heat treat permit thin wall construction with excellent strength.
- "Hinge and snap" blow molded tray snaps together with CRW12MS, CRW12MSF or CRW21GTS.
- Patented.

Set consists of the following Part Numbers and sizes:

CRW1010F	5/16"	CRW1818F	9/16"
CRW1212F	3/8"	CRW2020F	5/8"
CRW1414F	7/16"	CRW2222F	11/16"
CRW1616F	1/2"	CRW2424F	3/4"

## CRW12MSF

12 Piece Metric Flex Head Ratcheting Combination Box Wrench Set, 8MM to 19MM



- Flex head design wrenches with 72-teeth ratcheting box end.
- Provides high torque and 5 degrees of operation.
- Swivel head design allows the head to work in any position from 0° to 180°.
- Chrome vanadium steel and special heat treat permit thin wall construction with excellent strength.
- "Hinge and snap" blow molded tray snaps together with CRW12MS, CRW8SF or CRW21GTS.
- Patented.

Set consists of the following Part Numbers and sizes:

CRW8MF	8MM	CRW14MF	14MM
CRW9MF	9MM	CRW15MF	15MM
CRW10MF	10MM	CRW16MF	16MM
CRW11MF	11MM	CRW17MF	17MM
CRW12MF	12MM	CRW18MF	18MM
CRW13MF	13MM	CRW19MF	19MM

# RATCHETING COMBINATION BOX WRENCHES & SETS

## SAE Flex Ratcheting Combination Box Wrenches, Standard



PART NO.	SIZE	O.A. LENGTH	PART NO.	SIZE	O.A. LENGTH
CRW1010F	5/16"	5"	CRW1818F	9/16"	6-19/64"
CRW1212F	3/8"	5-23/64"	CRW2020F	5/8"	7"
CRW1414F	7/16"	5-25/64"	CRW2222F	11/16"	7-31/64"
CRW1616F	1/2"	6"	CRW2424F	3/4"	8-15/32"

## Metric Flex Ratcheting Combination Box Wrenches, Standard



PART NO.	SIZE	O.A. LENGTH	PART NO.	SIZE	O.A. LENGTH
CRW8MF	8MM	5"	CRW14MF	14MM	6-1/4"
CRW9MF	9MM	5-1/8"	CRW15MF	15MM	6-9/16"
CRW10MF	10MM	5-5/16"	CRW16MF	16MM	7"
CRW11MF	11MM	5-1/2"	CRW17MF	17MM	7-5/16"
CRW12MF	12MM	5-3/4"	CRW18MF	18MM	7-7/8"
CRW13MF	13MM	6"	CRW19MF	19MM	8-3/8"

Wrenches & Striking Tools

- Double flex design allows access in tight areas.
- 72 tooth ratcheting system provides high torque and only a 5 degree handle swing for working in tight areas.
- Multi-Drive 12 point design can be used on 6 point, square, Torx®, and spline fasteners.
- Non-slip open end and special design box end allows for easy removal of damaged or worn fasteners.
- Made of a special chrome vanadium steel for superior strength and performance.
- High polish, chrome plated finish for corrosion protection.

## CRW8DFS

### 8 Piece SAE Double Flex Ratchet Wrench Set

- "Hinge and snap" blow molded tray snaps together with CRW8MDS, CRW12MDS, CRW12MMDS, CRW12MDFS, CRW12S, or CRW15MS.



Set consists of the following Part Numbers and sizes:

CRW1010DF	5/16"	CRW1818DF	9/16"
CRW1212DF	3/8"	CRW2020DF	5/8"
CRW1414DF	7/16"	CRW2222DF	11/16"
CRW1616DF	1/2"	CRW2424DF	3/4"

## CRW12MDFS

### 12 Piece Metric Double Flex Ratchet Wrench Set

- "Hinge and snap" blow molded tray snaps together with CRW8MDS, CRW8MDFS, CRW12MDS, CRW12MDFS, CRW12S or CRW15MS.



Set consists of the following Part Numbers and sizes:

CRW8MDF	8MM	CRW14MDF	14MM
CRW9MDF	9MM	CRW15MDF	15MM
CRW10MDF	10MM	CRW16MDF	16MM
CRW11MDF	11MM	CRW17MDF	17MM
CRW12MDF	12MM	CRW18MDF	18MM
CRW13MDF	13MM	CRW19MDF	19MM

## SAE Double Flex Ratchet Wrenches, Standard



PART NO.	SIZE	O.A. LENGTH
CRW1010DF	5/16"	6-7/16"
CRW1212DF	3/8"	7"
CRW1414DF	7/16"	7-3/8"
CRW1616DF	1/2"	8-1/8"
CRW1818DF	9/16"	8-9/16"
CRW2020DF	5/8"	9-5/8"
CRW2222DF	11/16"	10-3/16"
CRW2424DF	3/4"	11-1/4"

## Metric Double Flex Ratchet Wrenches, Standard



PART NO.	SIZE	O.A. LENGTH
CRW8MDF	8MM	6-7/16"
CRW9MDF	9MM	6-5/8"
CRW10MDF	10MM	7"
CRW11MDF	11MM	7-3/8"
CRW12MDF	12MM	7-3/4"
CRW13MDF	13MM	8-1/8"
CRW14MDF	14MM	8-9/16"
CRW15MDF	15MM	9"
CRW16MDF	16MM	9-5/8"
CRW17MDF	17MM	10-3/16"
CRW18MDF	18MM	10-3/4"
CRW19MDF	19MM	11-1/4"

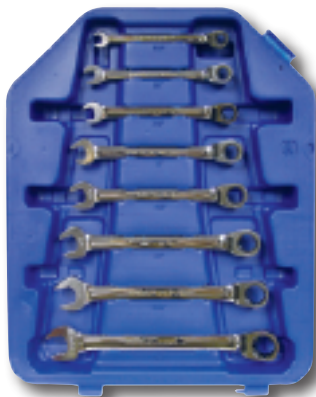


- 72 tooth ratcheting system provides high torque and only a 5° handle swing for working in tight areas.
- Multi-Drive 12 point design can be used on 6 point, 12 point, square, Torx®, and spline fasteners.
- 15° offset box end provides knuckle clearance.
- Reversible with easy one hand direction change switch lever.
- Full polish, chrome plated finish.
- Packaged in blow molded tray for easy storage.

## CRW8MDS

### 8 Piece 15° Offset SAE Reversible Wrench Set

- "Hinge and Snap" to the following sets: CRW12S, CRW15MS, CRW8DFS, and CRW12MDFS.



Set consists of the following Part Numbers and Sizes:

PART NO.	SIZE	PART NO.	SIZE
CRW1010MD	5/16"	CRW1818MD	9/16"
CRW1212MD	3/8"	CRW2020MD	5/8"
CRW1414MD	7/16"	CRW2222MD	1 1/16"
CRW1616MD	1/2"	CRW2424MD	3/4"

## CRW12MDS

### 12 Piece 15° Offset SAE Reversible Wrench Set

- "Hinge and Snap" to the following sets: CRW12S, CRW15MS, CRW8DFS, and CRW12MDFS.



Set consists of the following Part Numbers and Sizes:

PART NO.	SIZE	PART NO.	SIZE
CRW1010MD	5/16"	CRW2222MD	1 1/16"
CRW1212MD	3/8"	CRW2424MD	3/4"
CRW1414MD	7/16"	CRW2626MD	13/16"
CRW1616MD	1/2"	CRW2828MD	7/8"
CRW1818MD	9/16"	CRW3030MD	15/16"
CRW2020MD	5/8"	CRW3232MD	1"

## CRW12MMDS

### 12 Piece Metric 15° Offset Reversible Wrench Set



- "Hinge and snap" blow-molded tray snaps together with CRW8DFS, CRW12MDFS, CRW12S, or CRW15MS.
- 72 tooth ratcheting system provides high torque and only a 5° handle swing for working in tight areas.
- Multi-drive 12 point design can be used on 6 point, 12 point, square, Torx®, spline, and even rounded fasteners.
- 15° offset box end provides knuckle clearance.
- Reversible with easy one hand direction change switch lever.
- Full polish, chrome plated finish.
- Packaged in blow mold tray for easy storage.

Set consists of the following Part Numbers and sizes:

CRW8MMDR	8MM	CRW14MMDR	14MM
CRW9MMDR	9MM	CRW15MMDR	15MM
CRW10MMDR	10MM	CRW16MMDR	16MM
CRW11MMDR	11MM	CRW17MMDR	17MM
CRW12MMDR	12MM	CRW18MMDR	18MM
CRW13MMDR	13MM	CRW19MMDR	19MM

## CRW15MMDS

### 15 Piece Metric 15° Offset Reversible Wrench Set



- 72 tooth ratcheting system provides high torque and only a 5° handle swing for working in tight areas.
- Multi-drive 12 point design can be used on 6 point, 12 point, square, Torx®, spline, and even rounded fasteners.
- 15° offset box end provides knuckle clearance.
- Reversible with easy one hand direction change switch lever.
- Full polish, chrome plated finish.
- Packaged in blow mold tray for easy storage.

Set consists of the following Part Numbers and sizes:

CRW8MMDR	8MM	CRW16MMDR	16MM
CRW9MMDR	9MM	CRW17MMDR	17MM
CRW10MMDR	10MM	CRW18MMDR	18MM
CRW11MMDR	11MM	CRW19MMDR	19MM
CRW12MMDR	12MM	CRW21MMDR	21MM
CRW13MMDR	13MM	CRW22MMDR	22MM
CRW14MMDR	14MM	CRW24MMDR	24MM
CRW15MMDR	15MM		

**Standard and Metric Ratcheting Flex Head Line Wrenches and Sets**

- Get a perfect grip without the slip. • The most technologically advanced combination line wrenches available for use on brake, A/C, fuel, and power steering lines. • As more pressure is applied to the wrench, the grip on the nut tightens. • Durable construction; made from hardened, tempered Chrome Vanadium steel.
- Quick ratcheting action. • Patented ratcheting system for fast tightening and loosening. • Secure grip works great on rounded, worn, and rusted nuts. • Unique open/close head design for secure fit completely around nut. • 90° flex head for tight places.

**SURLW700**

**Four Piece Metric Ratcheting Flex Head Line Wrench Set**



Includes the following part numbers and size ranges:

PART NUMBER	DESCRIPTION
SURLW0809	8MM x 9MM
SURLW1011	10MM x 11MM
SURLW1213	12MM x 13MM
SURLW1415	14MM x 15MM

**SURLW750**

**Six Piece Metric Ratcheting Flex Head Line Wrench Set**



Includes the following part numbers and size ranges:

PART NUMBER	DESCRIPTION
SURLW0809	8MM x 9MM
SURLW1011	10MM x 11MM
SURLW1213	12MM x 13MM
SURLW1415	14MM x 15MM
SURLW1617	16MM x 17MM
SURLW1819	18MM x 19MM

**SURLW800**

**Four Piece Standard Ratcheting Flex Head Line Wrench Set**



Includes the following part numbers and size ranges:

PART NUMBER	DESCRIPTION
SURLW51638	5/16" x 3/8"
SURLW71612	7/16" x 1/2"
SURLW91658	9/16" x 5/8"
SURLW111634	11/16" x 3/4"

**Open End Ratchet Wrench Sets**

- Three piece sets designed for the removal of partially loosened but stubborn nuts, bolts and line fittings trapped in a 30 degree tight spot or greater. • Best for: hydraulics, pneumatics, A/C, plumbing, cable fittings and other line applications. • Made of stainless steel. • Individually hand polished to a mirror-shiny finish, no chrome plating to chip. • Open end ratchet with as little as 30 degrees swing angle for all line fittings.
- Small head size and design suitable for use in tight spaces. • Originally designed for aerospace, the movable head locks the fastener with gripping action creating an interactive grip and increasing grip as more torque is applied.

**CHB56038**

**3 Piece SAE Open End Ratchet Wrench Set**



Set consists of the following:

PART NO.	SIZE	PART NO.	SIZE
CHB56212	9/16" x 1/2"	CHB56258	11/16" x 5/8"
CHB56238	7/16" x 3/8"		

**CHB56039**

**3 Piece Metric Open End Ratchet Wrench Set**



Set consists of the following:

PART NO.	SIZE	PART NO.	SIZE
CHB56268	10MM x 12MM	CHB56288	15MM x 17MM
CHB56278	13MM x 14MM		



**WARNING!**

Select a wrench whose opening exactly fits the nut. Too large an opening can spread the jaws of an open-end wrench and batter the points of a box or socket wrench. Care should be exercised in selecting fractional wrenches for fractional fasteners and metric wrenches for metric fasteners. Over torquing with wrenches leads to failure and possible injury.

**CHANNELLOCK®**

**Chrome Adjustable Wrenches**



- Longer jaws grip better avoiding slippage or nut round off.
- Greater jaw capacity supports larger nuts and bolts.
- Thinner jaws for greater access in tight spaces.
- Precise jaw design grips tight the first time, every time.
- Four thread knurl and non-protruding jaws provide greater capacity; minimal head width improves performance in confined spaces.

PART NO.	LENGTH	ADJ. (O TO ___)
CL804	4.50"(114.30mm)	0.51"(12.95mm)
CL806W	6.25"(158.75mm)	0.938"(23.80mm)
CL808W	8.00"(203.20mm)	1.18"(30.00mm)
CL810W	10.00"(254.00mm)	1.375"(34.90mm)
CL812W	12.00"(304.80mm)	1.50"(38.10mm)
CL815	15.00"(381.00mm)	1.69"(42.93mm)
CL818	18.00"(457.20mm)	2.13"(54.10mm)

**CRW3TWT**

**3 Piece Heavy Duty Professional Twister Adjustable Wrench Set**



- Patented handle design allows you to push on the flat side of the wrench for greater comfort while applying high torque.
- Non-slip design turns damaged or rounded fasteners.
- High polish chrome plated finish for easy clean up and corrosion protection.
- Laser etched markings show opening size in both SAE and metric.

Set consists of the following Part Numbers and sizes:

CRW8TSTW	8"	CRW12TSTW	12"
CRW10TSTW	10"		

Wrenches & Striking Tools

**CL8WCB**

**8" Extra Wide Jaw Adjustable Wrench**



- Over 1-1/2" jaw capacity.
- Durable chrome vanadium steel.
- Perfectly parallel jaw surfaces grip safely, reducing the possibility of fastener damage.
- Measurement scales in both standard and metric for easy sizing.
- Longer, thinner jaws for easy access in confined areas.
- Code Blue® grips for ultimate comfort on the job.
- Precision ground sizing wheel for smooth, accurate sizing.
- Overall Length: 8" (203.20mm).

**OW6969**

**24" Ratcheting Chain Wrench**



- Handle Length: 24".
- Chain grips objects ranging from 3" to 6-1/2".
- Ratcheting action makes it possible to re-grip the object without removing the tool.
- Works on many different-shaped objects, such as square, round, hexagon, oval, etc.

**Cast Iron Pipe Wrenches**



- Constructed from the highest grade cast iron, forged and heat-treated to ensure maximum durability.
- Unique hammer head design provides a flat surface for hammering.
- Easy-spin adjusting nut is heat-treated for durability.
- Wide I-beam handle design provides better weight distribution.
- Drop-forged jaw is heat-treated to resist distortion or breakage.
- Hardened teeth provide tremendous bite.
- Housing constructed of heavy-duty cast iron.

Available in the following sizes:

PART NO.	JAW CAPACITY	LENGTH
VG274102	2"	14"
VG274103	2-1/2"	18"
VG274104	3"	24"
VG274106	2"	12"

**OW7206**

**Multi-Purpose Strap Wrench**



- The 53" long nylon strap won't mar precision surfaces of shafts, pulleys, or other components.
- Useful on small engine pulleys.
- Special head design self-tightens the strap as force is applied.
- Lightweight, with 12" long handle.

**OW305085** Replacement Strap

**CBS9THS**

**9 Piece SAE T-Handle Hex Key Set, 5/64" to 3/8"**



- Ergonomic comfort grip increases turning torque while greatly reducing hand fatigue.
- Unique dual drive ends allow multi task use.

Set consists of the following Part Numbers and sizes:

PART NO.	SIZE	SHAFT LENGTH
CBSTH14	1/4"	5-13/16"
CBSTH18	1/8"	3-15/16"
CBSTH38	3/8"	7-7/16"
CBSTH316	3/16"	5-13/16"
CBSTH332	3/32"	3-15/16"
CBSTH516	5/16"	7-7/16"
CBSTH532	5/32"	5-13/16"
CBSTH564	5/64"	3-15/16"
CBSTH732	7/32"	5-13/16"

**LS28500**

**Strap Wrench**



- Loosen or tighten cylindrical or rectangular objects with this handy, self-tightening strap wrench that won't slip.
- Remove/install timing belt pulleys or sprockets.
- Range from 1" to 6-5/8" round.
- Tensile strength of strap is 1350 p.s.i.
- Handle is made of glass-filled polypropylene which provides superior strength.

# HEX KEY WRENCHES AND SETS

## CBS8THM

**8 Piece Metric T-Handle Hex Key Set, 2MM to 10MM**

- Ergonomic comfort grip increases turning torque while greatly reducing hand fatigue.
- Unique dual drive ends allow multi task use.



Set consists of the following Part Numbers and sizes:

PART NO.	SIZE	SHAFT LENGTH
CBSTH2MM	2MM	3-15/16"
CBSTH2.5MM	2.5MM	3-15/16"
CBSTH3MM	3MM	3-15/16"
CBSTH4MM	4MM	5-13/16"
CBSTH5MM	5MM	5-13/16"
CBSTH6MM	6MM	5-13/16"
CBSTH8MM	8MM	7-7/16"
CBSTH10MM	10MM	7-7/16"

Wrenches & Striking Tools

## CBS7TT

**7 Piece Star T-Handle Hex Key Set, T10 to T40**

- Ergonomic comfort grip increases turning torque while greatly reducing hand fatigue.
- Unique dual drive ends allow multi task use.



Set consists of the following Part Numbers and sizes:

PART NO.	SIZE	SHAFT LENGTH	PART NO.	SIZE	SHAFT LENGTH
CBSTT10	T10	3-15/16"	CBSTT27	T27	5-13/16"
CBSTT15	T15	4"	CBSTT30	T30	5-13/16"
CBSTT20	T20	4"	CBSTT40	T40	7-3/8"
CBSTT25	T25	5-13/16"			

## EK10022

**22 Piece Combination SAE Long and Metric Short Hex Key Set**

- Made of special analysis steel and heat treated for maximum torque stress resistance.



Set includes the following Part Numbers and sizes:

PART NO.	TIP SIZE	ARM LENGTH	PART NO.	TIP SIZE	ARM LENGTH
EK15203	.050"	2.84	EK15220	5/16"	6.00
EK15204	1/16"	3.00	EK15224	3/8"	6.75
EK15205	5/64"	3.19	EK15503	1.5MM	1.73
EK15206	3/32"	3.38	EK15504	2.0MM	1.93
EK15207	7/64"	3.56	EK15505	2.5MM	2.15
EK15208	1/8"	3.75	EK15506	3.0MM	2.42
EK15209	9/64"	3.94	EK15508	4.0MM	2.68
EK15210	5/32"	4.12	EK15510	5.0MM	3.08
EK15212	3/16"	4.50	EK15512	6.0MM	3.46
EK15214	7/32"	4.88	EK15516	8.0MM	3.84
EK15216	1/4"	5.25	EK15520	10.0MM	4.29

## EK10213

**13 Piece SAE Long Hex Key Set, .050" to 3/8"**

- Made of special analysis steel and heat treated for maximum torque stress resistance.



Set includes the following Part Numbers and sizes:

PART NO.	TIP SIZE	ARM LENGTH	PART NO.	TIP SIZE	ARM LENGTH
EK15203	.050"	2.84	EK15210	5/32"	4.12
EK15204	1/16"	3.00	EK15212	3/16"	4.50
EK15205	5/64"	3.19	EK15214	7/32"	4.88
EK15206	3/32"	3.38	EK15216	1/4"	5.25
EK15207	7/64"	3.56	EK15220	5/16"	6.00
EK15208	1/8"	3.75	EK15224	3/8"	6.75
EK15209	9/64"	3.94			

## EK10509

**9 Piece Metric Short Hex Key Set, 1.5MM to 10.0MM**

- Made of special analysis steel and heat treated for maximum torque stress resistance.



Set includes the following Part Numbers and sizes:

PART NO.	TIP SIZE	ARM LENGTH	PART NO.	TIP SIZE	ARM LENGTH
EK15503	1.5MM	1.73	EK15510	5.0MM	3.08
EK15504	2.0MM	1.93	EK15512	6.0MM	3.46
EK15505	2.5MM	2.15	EK15516	8.0MM	3.84
EK15506	3.0MM	2.42	EK15520	10.0MM	4.29
EK15508	4.0MM	2.68			

## EK13222

**22 Piece Combination SAE and Metric Long Balldriver® L-Wrench Set**



Set includes the following Part Numbers and sizes:

PART NO.	TIP SIZE	ARM LENGTH	PART NO.	TIP SIZE	ARM LENGTH
EK18203	.050"	2.84	EK18220	5/16"	6.00
EK18204	1/16"	3.00	EK18224	3/8"	6.75
EK18205	5/64"	3.19	EK18603	1.5MM	3.03
EK18206	3/32"	3.38	EK18604	2.0MM	3.19
EK18207	7/64"	3.56	EK18605	2.5MM	3.48
EK18208	1/8"	3.75	EK18606	3.0MM	3.88
EK18209	9/64"	3.94	EK18608	4.0MM	4.09
EK18210	5/32"	4.12	EK18610	5.0MM	4.57
EK18212	3/16"	4.50	EK18612	6.0MM	5.43
EK18214	7/32"	4.88	EK18616	8.0MM	6.20
EK18216	1/4"	5.25	EK18620	10.0MM	6.58

## EK13213

13 Piece SAE Long  
Balldriver®  
L-Wrench Set,  
.050 to 3/8"



Set includes the following Part Numbers and sizes:

PART NO.	TIP SIZE	ARM LENGTH	PART NO.	TIP SIZE	ARM LENGTH
EK18203	.050"	2.84	EK18210	5/32"	4.12
EK18204	1/16"	3.00	EK18212	3/16"	4.50
EK18205	5/64"	3.19	EK18214	7/32"	4.88
EK18206	3/32"	3.38	EK18216	1/4"	5.25
EK18207	7/64"	3.56	EK18220	5/16"	6.00
EK18208	1/8"	3.75	EK18224	3/8"	6.75
EK18209	9/64"	3.94			

## EK13609

9 Piece Metric Long  
Balldriver®  
L-Wrench Set,  
1.5MM to 10.0MM

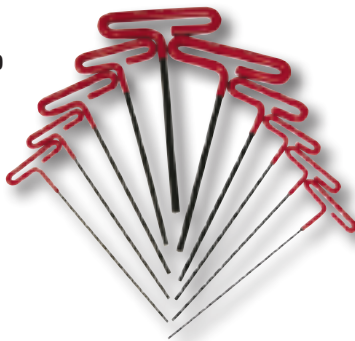


Set includes the following Part Numbers and sizes:

PART NO.	TIP SIZE	ARM LENGTH	PART NO.	TIP SIZE	ARM LENGTH
EK18603	1.5MM	3.03	EK18610	5.0MM	4.57
EK18604	2.0MM	3.19	EK18612	6.0MM	5.43
EK18605	2.5MM	3.48	EK18616	8.0MM	6.20
EK18606	3.0MM	3.88	EK18620	10.0MM	6.58
EK18608	4.0MM	4.09			

## EK53910

10 Piece Cushion Grip  
Hex Key Set - SAE



- 9" Series Cushion Grip Hex T-Key Set with pouch.
- High quality, industrial grade, professional tools.
- Made with Eklind® Alloy Steel.
- Heat treated for optimum strength and ductility.
- Finish with Eklind® Black Finish to resist rust.

Set consists of the following:

PART NO.	SIZE	PART NO.	SIZE
EK51906	3/32"	EK51912	3/16"
EK51907	7/64"	EK51914	7/32"
EK51908	1/8"	EK51916	1/4"
EK51909	9/64"	EK51920	5/16"
EK51910	5/32"	EK51924	3/8"

## EK55198

8 Piece Cushion Grip  
Hex Key Set - Metric



- 9" Series Cushion Grip Hex T-Key Set with pouch.
- High quality, industrial grade, professional tools.
- Made with Eklind® Alloy Steel.
- Heat treated for optimum strength and ductility.
- Finish with Eklind® Black Finish to resist rust.

Set consists of the following:

PART NO.	SIZE	PART NO.	SIZE
EK54920	2MM	EK54950	5MM
EK54925	2.5MM	EK54960	6MM
EK54930	3MM	EK54980	8MM
EK54940	4MM	EK54990	10MM

## WSDHP5IC09

5 Piece Hex-Pro™ SAE  
Swivel Allen Key Set

- Chrome finish.
- Comes in a pouch.

Set includes the following part numbers and sizes:

WSD45009	3/16"
WSD45010	7/32"
WSD45011	1/4"
WSD45012	5/16"
WSD45013	3/8"



## WSDHP6IC10

6 Piece Hex-Pro™ Metric  
Swivel Allen Key Set

- Chrome finish.
- Comes in a pouch.

Set includes the following part numbers and sizes:

WSD45020	3MM
WSD45021	4MM
WSD45022	5MM
WSD45023	6MM
WSD45025	8MM
WSD45026	10MM



## WSDSP6IC15

6 Piece Star-Pro™  
Swivel Allen Key Set

- Chrome finish.
- Comes in a pouch.

Set includes the following part numbers and sizes:

WSD45036	T25
WSD45037	T27
WSD45038	T30
WSD45040	T40
WSD45041	T45
WSD45043	T50



# TORQUE WRENCHES

## PRICW150HM

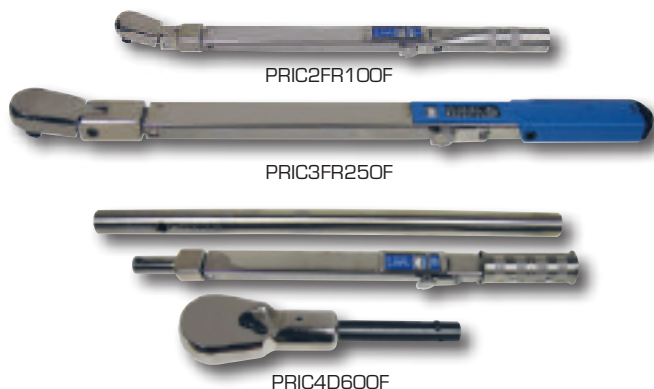
### 3/8" 150 in.-lbs. Dial Torque Wrench

- Provides reliability, accuracy and durability for applications where torque measurement is extremely critical.
- All steel construction.
- 2% clockwise/counterclockwise accuracy.
- Memory Pointer retains highest torque reading for easy reference and for quality control testing, displays the maximum reading obtained to provide an excellent tool for verifying production torque applications.
- Also excellent for determining breakaway torque.
- Patented large shock resistant dial protected by heat-treated dial guard.
- Dial increment layout is derived from the trigonometric interaction of the torsion bar and dial movement.
- Patented virtually friction-free operation because floating connecting beam between the torque measuring element and the dial mechanism has no bearing points.
- Patented torsion bar design.
- Torsion bar is precision CNC machined from aircraft-quality alloy steel.
- Comes in a plastic blow-molded case.



SG. DR.	CAPACITY	GRAD	LENGTH
3/8"	150 in.-lbs.	2.5 in.-lbs.	9-29/32"

### Split-Beam Click Wrenches



- Perfect solution to counter abusive environments that call for robust durability, while maintaining reliable, accurate operation.
- Wrenches work in a clockwise and counterclockwise direction, store easily and include a convenient storage case.
- They break down into three components: ratchet, torque body and extension tube.
- The wrench length is designed to provide the leverage required for maximum torque applications and reach for hard-to-reach places.
- Patented calibration method allows calibration without disassembly.
- High-contrast dial makes it easy to see the setting.
- Ergonomic handle provides more comfort and reduces fatigue.
- Patented "split beam" torque measuring mechanism provides consistent accuracy throughout the torque range.
- Setting torque on adjustable wrenches is fast and easy because there is no spring tension on the adjustment knob.
- 4% clockwise accuracy.

PART NO.	SG. DR.	TYPE	RANGE (ft.-lbs.)	GRAD.	LNTH
PRIC2FR100F	3/8"	Flex	20-100	2	17-5/8"
PRIC3FR250F	1/2"	Flex	40-250	5	22-1/8"
PRIC4D600F	3/4"	Detachable	200-600	10	48"



#### WARNING!

Over torquing can cause breakage. Force against flex stops on flex head can cause head breakage. An out of calibration torque wrench can cause part or tool breakage. Broken hand tools, sockets or accessories can cause injury. Excess force can cause crow foot or flare nut wrench slippage.

### Torque Wrenches



- Heavy duty micrometer-type torque wrench.
- Gold tone, rugged non-slip metal handle.
- Heavy duty ratchet for improved durability.
- Accuracy +/-3% CW and +/-6% CCW.
- Furnished in a fitted case.
- Meets ANSI/ASME B107.14M-1994.
- **CEC97495** features a flex head.

PART NUMBER	RANGE ENGLISH	DRIVE	GRADS ENGLISH	LENGTH (Inches)	WEIGHT (Pounds)
CEC97451	25-250 in.-lbs.	3/8"	1 in.-lb.	13.0	1.5
CEC97452	10-100 ft.-lbs.	3/8"	0.5 ft.-lb.	17.1	2.1
CEC97453	25-250 ft.-lbs.	1/2"	1 ft.-lb.	22.0	2.4
CEC97461A	20-200 in.-lbs.	1/4"	1 in.-lb.	9.75	0.65
CEC97495	10-80 ft.-lbs.	3/8"	0.5 ft.-lb.	17.1	2.1

### Digital Torque Wrenches



- 4 settings: ft.-lbs., in.-lbs., Nm, Kg-cm.
- Ability to use up to 9 pre-set settings.
- Memory for up to 50 readings.
- 12 LED lights provide visual signal and buzzer for audible signal.
- Overload indicator.
- Flex head design.
- Non-slip, comfort grip handle.
- 4 digit LCD display.
- Both track and peak modes.
- Overload indicator.
- Uses AA batteries (included). (Can use standard or rechargeable).
- Low battery indicator.
- N.I.S.T. traceable.
- Accuracy; ± 2% Clockwise, ± 3% Counter Clockwise.
- Operating temperature: 14 to 140° F.
- Storage temperature: -1 to 150° F.
- Auto shut off when idle for 5 minutes.
- 110 hour battery life with continuous use.
- Come in a blow molded case.

PART NO.	SG. DR.	TYPE	RANGE	LENGTH
CTG2000	1/4"	Flex	1.1 - 22.1 ft.-lbs.	15.4"
CTG3000	3/8"	Flex	5 - 99.5 ft.-lbs.	16.3"
CTG4000	1/2"	Flex	12.5 - 250.7 ft.-lbs.	25.6"

Digital Torque Wrenches with Angle Indicators



CTG2000ANG



CTG3000ANG



CTG4000ANG

- Angle indicator for torque plus angle applications.
- $\pm 2\%$  accuracy clockwise.
- 4 settings: Ft.-lbs., In.-lbs., Nm, Kg-cm.
- Flex head design.
- Ability to use up to 9 pre-set settings.
- Memory for up to 50 readings.
- 12 LED lights provide visual signal, and buzzer for audible signal.
- Non-slip, comfort grip handle.
- 4 digit LCD display.
- Both track and peak modes.
- Overload indicator.
- Uses AA batteries (standard or rechargeable) (included).
- Low battery indicator.
- N.I.S.T. traceable.
- Come in a blow molded case.

PART NO.	SQ. DR.	TYPE	RANGE	LENGTH
CTG2000ANG	1/4"	Flex	1.1 - 22.1 ft.-lbs.	15.4"
CTG3000ANG	3/8"	Flex	5 - 99.5 ft.-lbs.	16.3"
CTG4000ANG	1/2"	Flex	12.5 - 250.7 ft.-lbs.	25.6"



**WARNING!**

Over torquing can cause breakage. Force against flex stops on flex head can cause head breakage. An out of calibration torque wrench can cause part or tool breakage. Broken hand tools, sockets or accessories can cause injury. Excess force can cause crow foot or flare nut wrench slippage.

**CTG92TAS**

9 Piece SAE Torque Adapter Set, 12 Point

- 2" center to center dimension ideal for use with torque wrenches.
- High polish chrome plated finish for long lasting corrosion protection.
- Packaged in blow molded case for easy storage and organization.



Set consists of the following Part Numbers and sizes:

PART NO.	SIZE	PART NO.	SIZE
CTG122TA	1/2"	CTG5162TA	5/16"
CTG142TA	1/4"	CTG7162TA	7/16"
CTG342TA	3/4"	CTG9162TA	9/16"
CTG382TA	3/8"	CTG11162TA	11/16"
CTG582TA	5/8"		

**CTG102MTAS**

10 Piece Metric Torque Adapter Set, 12 Point

- 2" center to center dimension ideal for use with torque wrenches.
- High polish chrome plated finish for long lasting corrosion protection.
- Packaged in blow molded case for easy storage and organization.



Set consists of the following Part Numbers and sizes:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CTGM102TA	10MM	CTGM152TA	15MM
CTGM112TA	11MM	CTGM162TA	16MM
CTGM122TA	12MM	CTGM172TA	17MM
CTGM132TA	13MM	CTGM182TA	18MM
CTGM142TA	14MM	CTGM192TA	19MM

Torque Multipliers



- Increases the range of your torque wrench as much as 14 to 1.
- Designed with four pinion gears in a compact housing.
- Frictional losses in the gear train may cause a torque loss of 10% to 20%.

Part No.	Ratio	Drive		Maximum Output Capacity	Weight	Body Length	Reaction Bar Length	Overall Length	Head Measurements
		Input	Output						
CE6380	4:1	1/2"	3/4"	1000 ft.-lbs.	7 lbs.	6.6"	18"	22"	3.50"W x 3.35"D
CE6387	4:1	3/4"	1"	2000 ft.-lbs.	14 lbs.	6.6"	22"	25"	3.75"W x 4.37"D

**LS28100**

Torque Angle Meter

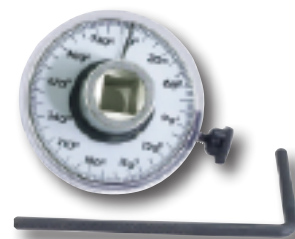
- For all torque-to-yield fastener applications.
- Commonly used for tightening head bolts and other bolts where a torque angle is required.
- Use with 1/2" drive.



**OW4554**

Torque Angle Gauge

- Required when servicing many late model engines that use torque-to-yield fasteners.
- Measures angle of rotation after pre-torque in torque-angle applications.
- The 360° scale is marked in 2° increments and intervals of 10° and 30° and is easily zeroed for next application by turning the tool housing.
- Has 1/2" male and female square drives.



Follow safety guidelines on pages 399 and 400

## Torque and Angle Meters



PART NO.	DRIVE	RANGE
DTSSPA100F	3/8"	10-100 ft.-lbs.
DTSSPA250F	1/2"	25-250 ft.-lbs.

- Designed for simple, precise measurement and feature a real-time display of Torque and Angle readings.
- Ideal for production, industrial, aerospace, automotive and quality control applications.
- Compliant ISO-6789-2003 and ASME B107-28-2005 standard complaint, National Institute of Standards and Technology (N.I.S.T.) certificate.
- Long life Lithium rechargeable battery.
- Operational in both CW and CCW.
- Auto Power-off after 2 minutes.
- Audio tone sound and vibration.
- 3 color LED (Approach/Go/No Go).
- 3 units of torque: in.-lb., ft.-lb. and Nm.
- Not dependent on wrench length.
- 5-digit Alphanumeric display.
- Modes: Track, Peak and Angle.
- Programmable Preset: Torque and Angle.
- Accuracy:  $\pm 1\%$  of Torque and  $\pm 1^\circ$  of Angle.

## KCP17S 17 Piece Punch and Chisel Set



Set includes the following Part Numbers and sizes:

CC0806	Cape Chisel	FC2407	Flat Chisel
CPO605	Center Punch	FC2808	Flat Chisel
CPO806	Center Punch	GCO805	Round Nose Cape Chisel
DC0807	Diamond Chisel	PP0405	Pin Punch
DPO407	Drift Punch	PP0505	Pin Punch
DPO609	Drift Punch	PP0605	Pin Punch
FC1205	Flat Chisel	SP1007	Starter Punch
FC1606	Flat Chisel	SPO806	Starter Punch
FC2006	Flat Chisel	K171R	Kit Bag

## KCP10ST 10 Piece Punch and Chisel Set



Set includes the following Part Numbers in a plastic tray:

CPO605	Center Punch	PP0505	Pin Punch
FC1205	Flat Chisel	PP0605	Pin Punch
FC1606	Flat Chisel	SPO405	Starter Punch
FC2006	Flat Chisel	SPO605	Starter Punch
PP0304	Pin Punch	SPO806	Starter Punch

## KDP6S 6 Piece Long Tapered Drift Punch Set



Set includes the following Part Numbers and point sizes:

DPO407	1/8"	DP1012	5/16"
DPO609	3/16"	DP1214	3/8"
DPO710	7/32"	KBK11	Kit Bag
DPO812	1/4"		

## KFC5S 5 Piece Flat Chisel Set



Set includes the following Part Numbers:

FC1205	3/8" Cut x 5" Flat Chisel
FC1606	1/2" Cut x 6" Flat Chisel
FC2006	5/8" Cut x 6-1/2" Flat Chisel
FC2407	3/4" Cut x 7" Flat Chisel
FC2808	7/8" Cut x 8" Flat Chisel
K55	Kit Bag

## KPP4S 4 Piece Pin Punch Set



Set includes the following Part Numbers in a plastic tray:

PP0605	3/16"	PP1006	5/16"
PP0806	1/4"	PP1206	3/8"

## KPP9S 9 Piece Pin Punch Set



Set includes the following Part Numbers and point sizes:

PP0204	1/16"	PP0705	7/32"
PP0304	3/32"	PP0806	1/4"
PP0405	1/8"	PP1006	5/16"
PP0505	5/32"	PP1206	3/8"
PP0605	3/16"	K58	Kit Bag



### WARNING!

Punches and Chisels can break or chip when struck due to improper grinding or dressing. Wear Safety Glasses. Don't allow striking ends to become badly mushroomed. Dull edges and mushroomed ends should be redressed with a hand file.



## RPP6S

### 6 Piece Roll Pin Punch Set

Set consists of the following Part Numbers and point sizes:

PART NO.	SIZE	LENGTH
RPP3910	3/32"	3-1/2"
RPP3911	1/8"	4"
RPP3912	5/32"	4-3/8"
RPP3913	3/16"	4-7/8"
RPP3914	1/4"	5-3/8"
RPP3915	5/16"	6"



## RPP11ST

### 11 Piece Roll Pin Punch Set

Set consists of the following Part Numbers and point sizes in a plastic tray:

PART NO.	SIZE	LENGTH	PART NO.	SIZE	LENGTH
RPP3908	1/16"	3-1/2"	RPP3914	1/4"	5-3/8"
RPP3909	5/64"	3-1/2"	RPP3915	5/16"	6"
RPP3910	3/32"	3-1/2"	RPP3916	3/8"	6"
RPP3911	1/8"	4"	RPP3917	7/16"	6"
RPP3912	5/32"	4-3/8"	RPP3918	1/2"	6"
RPP3913	3/16"	4-7/8"			



## BRP4ST

### 4 Piece Bearing Race Punch Set

Set consists of the following Part Numbers and dimensions:

BRP7	7"	BRP12	12"
BRP9	9"	BRP20	20"



## ZZBPP4S

### 4 Piece 8" Brass Pin Punch Set

• Knurling in middle of bar for secure grip. • Made in the USA.

Set consists of the following Part Numbers and sizes in a plastic tray:

SH77763	3/8"	SH77765	5/8"
SH77764	1/2"	SH77766	3/4"



## Center Punches



PART NO.	STOCK	LENGTH	POINT
CPO404	1/4"	4-1/4"	1/8"
CPO605	3/8"	5-1/2"	3/16"
CPO806	1/2"	6"	7/32"

## Long Tapered Drift Punches



PART NO.	STOCK	LENGTH	POINT
DPO407	5/16"	7"	1/8"
DPO609	3/8"	9"	3/16"
DPO710	7/16"	10"	7/32"
DPO812	1/2"	12"	1/4"
DP1012	5/8"	12-1/4"	5/16"
DP1214	3/4"	14-1/4"	3/8"
DP1618	7/8"	18"	1/2"

## Pin Punches



PART NO.	STOCK	LENGTH	POINT
PPO204	5/16"	4-1/4"	1/16"
PPO304	5/16"	4-1/2"	3/32"
PPO405	5/16"	4-3/4"	1/8"
PPO505	5/16"	5"	5/32"
PPO605	5/16"	5-1/4"	3/16"
PPO705	3/8"	5-1/2"	7/32"
PP0806	3/8"	5-3/4"	1/4"
PP1006	7/16"	6-1/8"	5/16"
PP1206	1/2"	6-1/2"	3/8"

## Starter Punches



PART NO.	STOCK	LENGTH	POINT
SPO305	5/16"	5-1/2"	3/32"
SPO405	5/16"	5"	1/8"
SPO506	3/8"	6"	5/32"
SPO605	3/8"	5-1/2"	3/16"
SPO806	1/2"	6"	1/4"
SP1007	5/8"	7"	5/16"

## Cape Chisel



PART NO.	STOCK	LENGTH	CUT
CC0806	3/8"	6"	1/4"

# PUNCHES AND CHISELS, PRY BARS

Wrenches & Striking Tools

## Flat Chisels



- Made from the finest blend of tool steel.
- Ground edge for accurate cutting.

PART NO.	STOCK	LENGTH	CUT
FC0805	1/4"	5"	1/4"
FC1205	5/16"	5"	3/8"
FC1606	7/16"	6-1/8"	1/2"
FC1610	7/16"	10"	1/2"
FC2006	1/2"	6-1/2"	5/8"
FC2012	1/2"	12"	5/8"
FC2407	5/8"	7-1/8"	3/4"
FC2412	5/8"	12-1/8"	3/4"
FC2808	3/4"	8-1/8"	7/8"
FC2814	3/4"	14"	7/8"
FC3209	7/8"	9"	1"

## Diamond Chisel



PART NO.	STOCK	LENGTH	CUT
DC0807	1/2"	7"	15/64"

## Round Nose Cape Chisel



PART NO.	STOCK	LENGTH	CUT
GC0805	3/8"	5-1/4"	1/4"

## NNAMA996

### 4 Piece Auto & Metalworking Set

- No hammer needed - lift and release.
- Patented ringed grip no pinch design.
- Striking force up to 3,500 psi.
- Quality hardened steel construction.
- Limited lifetime warranty.
- Mark any material for easy drilling.
- Perfect for working in tight spaces.
- Ideal for removing rivets and rusty screws.
- Self centering punch for precision mounting.
- Professional grade tools.

Set includes the following tools:

PART NO.	DESCRIPTION
NN28R451	High Speed Steel Center Punch
NN32R001	Prick Punch & Center Punch
NN38R041	Self-Centering Center Punch
NN44R101	5/16" Cold Chisel



### WARNING!

Punches and Chisels can break or chip when struck due to improper grinding or dressing. Wear Safety Glasses. Don't allow striking ends to become badly mushroomed. Dull edges and mushroomed ends should be redressed with a hand file.

## SH77243

### Brass Taper Punch



- 5/8" hex tapered to 3/8".
- 8" Overall Length.

## SH77244

### Brass Punch



- 3/4" diameter.
- Both ends chamfered.
- 10" Overall Length.

## SH77603

### Automatic Center Punch



- One handed center punch operation.
- Eliminates need for hammer.
- Fully machined and knurled handle.
- Punch tip heat treated.
- All parts plated.

## LS30280

### Automatic Center Punch



- Automatic action fires to create a dimple when downward pressure is applied.
- No hammer is needed.
- Works on metal, plastic, wood and other materials.
- Pressure can be varied by turning the knurled knob.
- Hardened tool steel punch tip is replaceable.
- Length: 5-1/2".

LS30290 Punch

## VMV160

### Punch and Chisel Holder



- Screw clamps to 3/4" chisels.
- Zinc Oxide.
- 8" Overall Length.

## KD82301

### 3 Piece Pry Bar Set



- Up to 180° indexable head for greater leverage.
- Puts the pry bar where it is needed for best leverage.
- Exceeds ANSI requirements for proven strength.
- 14 locking positions for unmatched access.
- Features smooth profile for precise work.

Set consists of:

PART NO.	DESCRIPTION
KD82208	8" Indexing Pry Bar
KD82210	10" Indexing Pry Bar
KD82216	16" Indexing Pry Bar

## KD82220

18" to 29" Extendable Pry Bar



- Features grooved profile for added traction and knurled grip.

## PB4ST

4 Piece Lady Foot and Pinch Bar Set



Set consists of the following Part Numbers and specifications:

PART NO.	DESCRIPTION	OVERALL LENGTH
PB3	1/2" Hex Pinch Bar	16"
PB5	1/2" Hex Pry Bar	16"
PB6	5/8" Hex Pry Bar	18"
PB8	3/8" Hex Pry Bar	8-5/8"

### Pinch and Pry Bar



PART NO.	STOCK	OVERALL LENGTH
PB3	1/2"	16"

### "Lady Foot" Pry and Lining Up Bars



PART NO.	STOCK	OVERALL LENGTH
PB5	1/2" Hex	16"
PB6	5/8" Hex	18"
PB7	3/4" Hex	24"
PB8	3/8" Hex	8-5/8"

### Pinch and Lining Up Bars



PART NO.	STOCK	OVERALL LENGTH
PB16	1/2" Hex	16"
PB18	5/8" Hex	18"

## PBH4CST

4 Piece Handle Pry Bar with Striking Cap Set



- Polycarbonate slip and oil resistant handle.
- Especially contoured to fit comfortably in the hand during prolonged use.
- Features a contoured striking cap on the end of the handle.

Set consists of the following Part Numbers and specifications:

PART NO.	OVERALL LENGTH	SQ. SHANK SIZE	TIP WIDTH
PBH8C	8"	1/4"	7/16"
PBH12C	12"	3/8"	11/16"
PBH18C	18"	7/16"	13/16"
PBH24C	24"	7/16"	13/16"

### Handle Pry Bars with Striking Caps



PBH30C

PBH30SC

- Polycarbonate slip and oil resistant handle.
- Especially contoured to fit comfortably in the hand during prolonged use.
- Features a contoured striking cap on the end of the handle.



View of Striking Cap

PART NO.	O. A. LENGTH	SQ. SHANK SIZE	TIP WIDTH
BENT TIP			
PBH8C	8"	1/4"	7/16"
PBH12C	12"	3/8"	11/16"
PBH18C	18"	7/16"	13/16"
PBH24C	24"	7/16"	13/16"
PBH30C	30"	5/8"	1-1/8"
PBH36C	36"	5/8"	1-1/8"
PBH42C	42"	5/8"	1-1/8"
STRAIGHT TIP			
PBH30SC	30"	5/8"	1-1/8"
PBH36SC	36"	5/8"	1-1/8"
PBH42SC	42"	5/8"	1-1/8"

## OW7687A

3/8" Drive Pry Bar Head

- Turns any 3/8" drive ratchet or breaker bar into a rolling head pry bar.
- Gives the versatility of a pry bar without the storage problems.



## MH41280

18" Die Separating Bar



- Used to separate and remove dies.
- Made from 5/8" hex steel with a black oxide finish to resist corrosion.
- Length: 18".

**CAT352HD**

**Heavy Duty  
1/4" Pistol Grip  
Impact Wrench**

- Built-in comfort grip.
- Built-in regulator for added versatility.
- Rear handle exhaust for convenience.
- Great power to weight ratio, with up to 60 ft.-lbs. of torque in only a 2 lb. wrench.
- Only 4.8" from front to back for ease of use in tight places.



SPECIFICATIONS	
Working Torque Range .....	5-45 ft.-lbs.
Max. Torque (Reverse).....	60 ft.-lbs.
Capacity (Std. Bolt Size).....	1/4"
Net Weight.....	2.09 lbs.
Length .....	4.80"
Air Consumption.....	1.54 CFM
Air Inlet (NPT) .....	1/4"
Rec. Hose Size.....	3/8"
Free Speed .....	10,000 RPM
Rec. Air Pressure.....	90 PSI
Sound Level .....	70.5 dBA

PR352HDC Air Tool Cover

**CAT351HD**

**Heavy Duty  
3/8" Impact  
Wrench**

- Powerful and compact impact wrench.
- Reverse bias motor for added power in reverse.
- Rear handle exhaust to direct air away from the operator.
- Teasing trigger for total variable speed control.
- Six position power management system for added versatility.
- Comfort grip for added convenience.
- Forged steel hammer housing for supreme durability.



SPECIFICATIONS	
Working Torque Range .....	90-280 ft.-lbs.
Max. Torque (Reverse).....	300 ft.-lbs.
Capacity (Std. Bolt Size).....	1/4"
Net Weight.....	3.3 lbs.
Length .....	5.70"
Air Consumption.....	3.8 CFM
Air Inlet (NPT) .....	1/4"
Rec. Hose Size.....	3/8"
Free Speed .....	12,500 RPM
Rec. Air Pressure.....	90 PSI
Sound Level .....	97 dBA

PR351HDC Air Tool Cover

**CAT352CH**

**1/4" Composite  
Impact Wrench**

- Small size is ideal for use in tight areas such as work under the dashboard and small engine repair.
- Comfortable composite housing is lightweight and provides durability and quiet operation.
- Powerful impact mechanism provides fast, balanced blows.
- Excellent power-to-weight ratio reduces fatigue.
- One hand operation forward/reverse lever.
- Variable speed throttle trigger for maximum control.



SPECIFICATIONS	
Max. Torque .....	35 ft.-lbs.
Capacity (Std. Bolt Size).....	5/16"
Net Weight.....	1.9 lbs.
Length .....	7"
Air Inlet (NPT) .....	1/4"
Rec. Hose Size.....	3/8"
Free Speed .....	12,500 RPM
Rec. Air Pressure.....	90 PSI

**CAT2150**

**bluePOWER®  
3/8" Super Duty  
Impact Wrench**

- Combination Composite and Magnesium body for high strength and light weight, tool weighs only 2.4 lbs.
- High efficiency twin hammer mechanism provides more power.
- Feather trigger for precise speed control.
- Convenient one hand direction change.
- Soft grip for added comfort.
- Handle exhaust directs air away from work.



SPECIFICATIONS	
Breakaway Torque .....	500 ft.-lbs.
Working Torque.....	25-350 ft.-lbs.
Maximum Applied Torque.....	370 ft.-lbs.
Weight.....	2.4 lbs.
Overall Length .....	5-3/4"
Avg. Air Consumption.....	2.5 CFM
Air Inlet (NPT) .....	1/4"
Rec. Hose Size.....	3/8"
Free Speed .....	11,500 RPM
Sound Level .....	93.5 dBA

CAT38RET 3/8" Retaining Ring (10/pk.)  
PR2125C Air Tool Cover/CAT2135, CAT2150

**IRC2115**  
3/8" Heavy Duty  
Impact Wrench

- TwinHammer™ mechanism.
- Powerful 7-vane motor.
- Lightweight composite body.
- 4-position power regulator.
- One-handed forward/reverse.
- Feather-touch trigger.
- Custom grip.
- Through-handle exhaust.
- 360° swivel inlet.



SPECIFICATIONS	
Max. Torq. (Fwd/Rev)	250/300 ft.-lbs.
Net Weight	2.5 lbs.
Overall Length	6"
Avg. Air Consumption	4 CFM
	@ Load 17 CFM
Air Inlet	1/4"
Min. Hose Size	3/8"
Free Speed	15,000 RPM
Sound level	96.6 dBA

PRC2112 Air Tool Cover

**CAT4150**  
bluePOWER®  
1/2" Super Duty  
Impact Wrench



- Combination composite and magnesium body for high strength and light weight, tool weighs only 4 lbs.
- High efficiency twin hammer mechanism.
- Feather trigger for precise speed control.
- Convenient one hand direction change.
- Compact design.
- Handle exhaust directs air away from the work.

SPECIFICATIONS	
Breakaway Torque	1,200 ft.-lbs.
Working Torque	50-500 ft.-lbs.
Maximum Applied Torque	800 ft.-lbs.
Weight	4 lbs.
Overall Length	6-7/8"
Avg. Air Consumption	4.9 CFM
Air Inlet (NPT)	1/4"
Rec. Hose Size	3/8"
Free Speed	7,500 RPM
Sound Level	97.3 dBA

CAT12RET 1/2" Retaining Ring (10/pk.)

PR4150C Air Tool Cover

**IR2115TIMAX**  
3/8" Impact Wrench

- Less than 6" long and weighing less than 2-1/2 pounds allows user greater access to tight spaces and reduces operator fatigue while still delivering MAX performance.
- MAX Power offers 300 ft.-lbs. in reverse.
- MAX control has enhanced power settings, a feather touch trigger and a patented push button forward/reverse.



SPECIFICATIONS	
Working Torque Range	25-230 ft.-lbs.
Max. Torque	300 ft.-lbs. reverse
Capacity (Std. Bolt Size)	7/16"
Net Weight	2.48 lbs.
Length	5.95"
Avg. Air Consumption	4 CFM; @ load 17 CFM
Air Inlet (NPT)	1/4"
Min. Hose Size	3/8"
Free Speed	15,000 RPM
Rec. Air Pressure	90 PSI
Sound Level	96.6 dBA

- IR2112K75 Button Kit
- IR2115A626 Anvil Assembly
- IR2115D93 Trigger Assembly
- IRC2115P32 Air Tool Cover

**CAT4152**  
bluePOWER® 1/2"  
Impact Wrench with  
2" Extended Anvil



- 2" anvil ideal for tire applications.
- Lightweight, combination composite and magnesium body for high strength; tool weighs only 4.3 lbs.
- High efficiency twin hammer mechanism.
- Feather trigger for precise speed control.
- Convenient one hand direction change.
- Compact design.
- Handle exhaust directs air away from the work.

SPECIFICATIONS	
Breakaway Torque	1,100 ft.-lbs.
Working Torque	50-550 ft.-lbs.
Maximum Applied Torque	800 ft.-lbs.
Weight	4.3 lbs.
Overall Length	8-7/8"
Avg. Air Consumption	4.9 CFM
Air Inlet (NPT)	1/4"
Rec. Hose Size	3/8"
Free Speed	7,500 RPM
Sound Level	97.3 dBA

CAT12RET 1/2" Retaining Ring (10/pk.)

PR4150C Air Tool Cover

Power Tools

## AIR WRENCHES

### CAT2135

bluePOWER® 1/2" Compact Impact Wrench



- This compact tool uses a 3/8" housing and a 1/2" drive mechanism.
- High efficiency twin hammer mechanism provides 500 ft.-lbs. of breakaway torque.
- Compact design.
- Combination composite and magnesium body for high strength and light weight; tool weighs only 2.4 lbs.
- Feather trigger for precise speed control.
- Soft grip for added comfort.
- Convenient one hand direction change.
- Variable speed for more control.
- Handle exhaust directs air away from work.

#### SPECIFICATIONS

Breakaway Torque .....	500 ft.-lbs.
Working Torque .....	25-350 ft.-lbs.
Maximum Applied Torque .....	370 ft.-lbs.
Weight .....	2.4 lbs.
Overall Length .....	5-3/4"
Avg. Air Consumption .....	2.5 CFM
Air Inlet (NPT) .....	1/4"
Rec. Hose Size .....	3/8"
Free Speed .....	11,500 RPM
Sound Level .....	93.5 dBA

CAT12RET 1/2" Retaining Ring (10/pk.)

PR2125C Air Tool Cover/CAT2135, CAT2150

### CAT350

1/2" Twin Hammer Impact Wrench



- Twin hammer impact mechanism delivers simultaneous, balanced blows to the anvil, for maximum output with total efficiency and extra smooth operation.
- Steel front hammer case for added durability.
- Ideal for general automotive work, light truck, farm, body shop, tire shop and front end work.
- Self lubricating rotor blades for increased motor life and performance.

#### SPECIFICATIONS

Working Torque Range .....	25-300 ft.-lbs.
Max. Torque @ 90 psi Rev. ....	450 ft.-lbs.
Capacity (Std. Bolt Size) .....	1/2"
Net Weight .....	5.6 lbs.
Length .....	6.75"
Air Consumption .....	4.20 CFM
Air Inlet (NPT) .....	1/4"
Rec. Hose Size .....	3/8"
Free Speed .....	7,000 RPM
Sound Level .....	102 dBA
Rec. Air Pressure .....	90 PSI

PR350C Air Tool Cover

### IRC232A

1/2" Heavy Duty Air Impact Wrench



- Twin hammer impact mechanism for consistent, dependable performance.
- Speed: 9,000 rpm @ 90 PSI; 10,000 rpm @ 100 PSI.
- Durable steel hammer case.
- Built-in power regulator controls or reduces power.
- Built-in lubrication system.
- Protective rubber housing and hammer case bumpers.
- Handle exhaust directs exhaust away from the operator.

#### SPECIFICATIONS

Working Torque Range .....	40-350 ft.-lbs.
Maximum Torque @ 90 PSI .....	625 ft.-lbs.
Capacity (Std. Bolt Size) .....	5/8"
Net Weight .....	5-3/4 lbs.
Length .....	7-5/8"
Air Consumption .....	4.2 CFM
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	101.8 dBA

IR231THK1 Hammer Mechanism Tune Up Kit

IR231TK3 Tune Up Kit

PR232BL Blue Cover

PR232NG Neon Green Cover

PR232NO Neon Orange Cover

### IR2135TIMAX

1/2" Impact Wrench



- The 7-vane power plant drives enough torque to break away a nut tightened to over 1,100 ft.-lbs.
- 780 ft.-lbs. maximum reverse torque.
- Feather-touch trigger; wide range of power regulator settings in forward, always max power in reverse, and patented one-hand forward/reverse control.
- Blows per minute: 1,250.

#### SPECIFICATIONS

Forward Torque Range .....	50-550 ft.-lbs.
Maximum Torque (reverse) .....	780 ft.-lbs.
NBT* .....	1,100 ft.-lbs.
Capacity (Std. Bolt Size) .....	9/16"
Net Weight .....	3.95 lbs.
Length .....	7.35"
Air Consumption .....	.5 CFM
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Free Speed .....	9,800 RPM
Sound Level .....	109 dBA

IR2135K303 Inlet Parts Kit

IR2135K75 Button Kit

IR2135TK2 Tune-Up Kit

IR231BA626 Anvil Assembly

IRC2135P32 Air Tool Cover

\* NBT (Nut Busting Torque) - this tool will loosen nuts tightened to 1,100 ft.-lbs.

# IR2135QTIMAX

1/2" Quiet Impact Wrench



- The 7-vane power plant drives enough torque to break away a nut tightened to over 1,100 ft.-lbs.
- 780 ft.-lbs. maximum reverse torque.
- Feather-touch trigger, wide range of power regulator settings in forward, always max power in reverse, and patented one-hand forward/reverse control.
- Blows per minute: 1,250.

SPECIFICATIONS	
Working Torque Range	50 - 550 ft.-lbs.
Maximum Torque (Reverse)	780 ft.-lbs
NBT*	1,100 ft.-lbs.
Capacity (Standard Bolt Size)	9/16"
Net Weight	4.05 lbs.
Length	7.35"
Avg. Air Consumption	.5 CFM
Air Inlet (NPT)	1/4"
Minimum Hose Size	3/8"
Free Speed	9,800 RPM
Sound Level	86 dBA

- IR2135K303 Inlet Parts Kit
- IR2135K75 Button Kit
- IR2135TK2 Tune-Up Kit
- IR231BA626 Anvil Assembly
- IRC2135P32 Air Tool Cover

\* NBT (Nut Busting Torque) - this tool will loosen nuts tightened to 1,100 ft.-lbs.

# CAT3125

bluePOWER®  
3/4" Super Duty Impact Wrench



- Combination composite and magnesium body for high strength and light weight; tool weighs only 6.85 lbs.
- High efficiency twin hammer mechanism provides 1,200 ft.-lbs. maximum torque.
- Metal switch lever provides convenient one hand direction change.
- Forward/Reverse lever can be changed to accommodate left-handed or right-handed use.
- Feather trigger for precise speed control.
- Handle exhaust directs air away from work.

SPECIFICATIONS	
Breakaway Torque	1,800 ft.-lbs.
Working Torque	100-1,000 ft.-lbs.
Maximum Applied Torque	1,200 ft.-lbs.
Capacity (Std. Bolt Size)	3/4"
Weight	6.85 lbs.
Overall Length	8"
Avg. Air Consumption	6.9 CFM
Air Inlet (NPT)	3/8"
Rec. Hose Size	1/2"
Free Speed	6,000 RPM
Sound Level	97.3 dBA

CAT34RET 3/4" Retaining Ring (10/pk.)

PR3125C Air Tool Cover

# IRC8000

Premium 1/2" Composite Impact Wrench



- TwinHammer™ mechanism.
- Powerful 7-vane motor.
- Lightweight composite body.
- 4-position power regulator.
- Feather-touch trigger.
- New, custom grip.
- Through-handle exhaust.
- 360° swivel inlet.

SPECIFICATIONS	
Max. Torque (Fwd/Rev)	600/780 ft.-lbs.
Net Weight	4.08 lbs.
Overall Length	7.4"
Avg. Air Consumption	.5 CFM
	@ Load 24 CFM
Air Inlet	1/4"
Min. Hose Size	3/8"
Free Speed	9,800 rpm
Sound Level	99.8 dBA

- IR2135K303 Inlet Parts Kit
- IR2135TK2 Tune-Up Kit
- IR231BA626 Anvil Assembly
- IRC2135P32 Air Tool Cover

# IR2145QIMAX

3/4" Air Impactool™



- Delivers incredible performance and industrial-grade durability.
- Efficient air motor reduces air consumption.
- 1,350 ft.-lbs. maximum reverse torque, weighs just 7.4 lbs., and is compact enough to access tight spaces.
- Built to withstand tough use in rugged environments.
- Air motor has easy-to-clean inlet screen.
- Patented Quiet Tool Technology reduces sound levels without compromising performance.
- Twin-hammer mechanism utilizes proprietary advanced metallurgy.
- Patented four-position power regulator dial provides a range of forward power settings.
- Patented one-hand forward/reverse for easy operation.
- Steel hammer case, feather-touch trigger, and 7-vane motor.
- Blows per minute: 1,150.

SPECIFICATIONS	
Working Torque Range	200-900 ft.-lbs.
Maximum Torque (Reverse)	1,350 ft.-lbs.
Free Speed	7,000 rpm
Capacity (Std. Bolt Size)	1"
Net Weight	7.4 lbs.
Length	8.5"
Air Consumption	8.5 CFM
Air Inlet (NPTF)	3/8"
Minimum Hose Size	1/2"
Sound Level	91.1 dBA

- IR2145MBOOT Air Tool Cover
- IR2145TK2 Tune-Up Kit

Power Tools

## IR2155QIMAX

### 1" Air Impactool™

- Delivers incredible performance and industrial-grade durability.
- Efficient air motor reduces air consumption.
- Perfect for truck and bus service, construction and agricultural equipment maintenance.
- 1,350 ft.-lb. maximum reverse torque from a compact tool that weighs just 7.4 lbs.
- Built to last and designed to withstand tough use in rugged environments.
- Easy-to-clean inlet screen means less downtime and better tool performance.
- Twin-hammer mechanism utilizes proprietary advanced metallurgy.
- Patented four-position power regulator dial provides a range of forward power settings.
- Patented one-hand forward/reverse for easy operation, steel hammer case for durability and feather-touch trigger for control.
- 7-vane motor.
- Blows per minute: 1,150.



SPECIFICATIONS	
Forward Torque Range .....	200-900 ft.-lbs.
Maximum Torque (Reverse) .....	1,350 ft.-lbs.
Net Weight .....	7.4 lbs.
Length .....	8.8"
Air Consumption .....	8.5 CFM
Air Inlet (NPTF) .....	1/2"
Minimum Hose Size .....	1/2"
Free Speed .....	7,000 rpm
Sound Level .....	91.1 dBA

## CAT37906

### 1" Impact Wrench with 6" Extended Anvil



- Powerful twin hammer mechanism generates 1600 ft.-lbs. of maximum torque.
- Lightweight magnesium housing for easier use and reduced operator fatigue.
- Easy to use reverse lever for quick direction change.

SPECIFICATIONS	
Working Torque Range .....	150-900 ft.-lbs.
Max. Torque (Reverse) .....	1600 ft.-lbs.
Capacity (Std. Bolt Size) .....	1"
Net Weight .....	13.9 lbs.
Overall Length .....	18.4"
Air Consumption .....	7.9 CFM
Air Inlet (NPT) .....	1/2"
Rec. Hose Size (@90 PSI) .....	3/4" ID
Maximum Free Speed .....	4500 RPM
Recommended Air Pressure .....	90 PSI
Sound Level .....	94 dBA



**WARNING!**

Always read instructions before using power tools. Always wear safety goggles. Wear hearing protection. Avoid prolonged exposure to vibration.

## CAT4000SDR

### 1/4" Super Duty Air Ratchet

- Compact overall design puts out up to 42 ft.-lbs. of torque.
- Specially designed full cage gearing increases durability and provides longer life.
- Free speed: 270 RPM.
- Rear exhaust directs air away from work.
- Built in power regulator to adjust motor speed.
- Tapered valve provides variable speed performance.
- Ergonomic rubber grip provides chemical resistance.



SPECIFICATIONS	
Max. Torque .....	42 ft.-lbs.
Net Weight .....	1.34 lbs.
Length .....	7.36"
Air Consumption .....	3.5 CFM
Air Inlet .....	1/4"-18 NPT
Free Speed .....	270 RPM
Recommend Air Pressure .....	90 PSI
Sound Level .....	101 dBA

CAT4000SDRRHK 1/4" Ratchet Head Kit

## CAT250ARR

### 1/4" Air Ratchet

- Compact overall size provides 30 ft.-lbs. of torque.
- Up to 270 RPM speed provides efficient torque and speed in 1/4" drive.
- Rear exhaust keeps air away from work.
- Rubber comfort grip.
- Built in power regulator to adjust motor speed.



SPECIFICATIONS	
Max. Torque .....	30 ft.-lbs.
Net Weight .....	1.26 lbs.
Length .....	7.36"
Air Consumption .....	3.22 CFM
Air Inlet .....	1/4"-18 NPT
Free Speed .....	270 RPM
Recommend Air Pressure .....	90 PSI
Sound Level .....	89 dBA

CAT250ARRRHK 1/4" Ratchet Head Kit

## CAT1000MRR

### 1/4" Mini Air Ratchet

- Ideal for working in tight areas.
- Unique motor design allows for higher RPM speed (350 RPM) in a small package.
- Maximum torque: 25 ft.-lbs.
- Rubber comfort grip makes this small tool easy to work with.
- Boot on ratchet head provides protection from dust and dirt.
- Tapered valve system allows for some variable speed control.



SPECIFICATIONS	
Max. Torque .....	25 ft.-lbs.
Net Weight .....	0.99 lb.
Length .....	5.12"
Air Consumption .....	3.08 CFM
Air Inlet .....	1/4"-18 NPT
Free Speed .....	350 RPM
Recommend Air Pressure .....	90 PSI
Sound Level .....	91 dBA

CAT1000MRRRHK 1/4" Ratchet Head Kit



## IR1105MAXD2

1/4" MAX Mini Ratchet



- 30 ft.-lbs. of torque combined with 300 RPM provides optimal torque/speed combination for MAX power.
- Easily accessible variable power regulator combined with feather touch lever offers unprecedented control.
- Ergonomic coupling nut improves handle comfort and composite handle insulates against cold.

SPECIFICATIONS	
Maximum Torque.....	30 ft.-lbs.
Capacity (Std. Bolt Size).....	5/16"
Net Weight.....	1.43 lbs.
Length.....	7.36"
Air Consumption.....	3.5 CFM
Air Inlet (NPT).....	1/4"
Minimum Hose Size.....	3/8"
Free Speed.....	300 RPM
Sound Level.....	88.9 dBA

## CAT8000BP

bluePOWER® 3/8" Air Ratchet



- Provides up to 110 ft.-lbs of torque.
- Specially designed full cage gearing increases durability and provides longer life.
- Free Speed: 200 RPM.
- Swivel center exhaust to direct air away from work.
- Precise variable speed trigger for control.
- Captured head design keeps out dust and dirt and prevents head distortion which increases tool life.
- Composite handle provides a comfortable grip.

SPECIFICATIONS	
Max. Torque.....	110 ft.-lbs.
Net Weight.....	3.46 lb.
Length.....	12.4"
Air Consumption.....	4.9 CFM
Air Inlet.....	1/4"-18 NPT
Recommend Air Pressure.....	90 PSI
Free Speed.....	200 RPM
Sound Level.....	101 dBA

CAT8000BPRHK 3/8" Ratchet Head Kit

## CAT4050SDR

3/8" Super Duty Stubby Ratchet



- Compact overall design provides up to 42 ft.-lbs. of torque.
- Specially designed full cage gearing increases durability and provides longer life.
- Rear exhaust directs air away from work.
- Built in power regulator to adjust motor speed.
- Tapered valve provides variable speed performance.
- Ergonomic rubber grip provides chemical resistance.

SPECIFICATIONS	
Max. Torque.....	42 ft.-lbs.
Net Weight.....	1.37 lbs.
Length.....	7.48"
Air Consumption.....	3.5 CFM
Air Inlet.....	1/4"-18 NPT
Recommend Air Pressure.....	90 PSI
Free Speed.....	270 RPM
Sound Level.....	95 dBA

CAT4050SDRRHK 3/8" Ratchet Head Kit

## CAT9000IBP

3/8" bluePOWER® Impact Ratchet



- Pin clutch impacting mechanism provides reaction free torque.
- Tip valve throttle design provides full variable speed control.
- Locking forward/reverse shift knob prevents the tool from inadvertent direction changes.
- Can be used anywhere a regular ratchet can be used without fear of pinning hand against work.
- Great power to size and weight ratio for use in numerous applications, such as the removal of steering arms, water pumps, brake caliper bolts, and alternators.

SPECIFICATIONS	
Working Torque.....	5-80 ft.-lbs.
Maximum Torque.....	85 ft.-lbs.
Weight.....	3 lbs.
Overall Length.....	11-1/4"
Air Consumption.....	4 CFM
Air Inlet.....	1/4" NPT
Free Speed.....	275 RPM
Rec. Air Pressure.....	90 PSI
Sound Level.....	89 dBA

CAT9000HK 3/8" Ratchet Head Kit

## CAT3500HD

3/8" Heavy Duty Air Ratchet



- 85 ft.-lbs. of maximum torque in a quiet housing.
- Smooth action forward/reverse knob for comfortable use.
- Variable speed control.
- Rubber comfort grip handle.
- Rear handle exhaust to direct air away from work.

SPECIFICATIONS	
Maximum Torque.....	85 ft.-lbs.
Capacity (Std. Bolt Size).....	3/8"
Net Weight.....	2.4 lbs.
Length.....	10.6"
Air Consumption.....	4 CFM
Air Inlet (NPT).....	1/4"
Minimum Hose Size.....	3/8"
Recommended Air Pressure.....	90 PSI
Sound Level.....	84 dBA

CAT3500HDRHK 3/8" Ratchet Head Kit

Power Tools

## IR2015MAX

**3/8" Hammerhead Low-Profile Impactool™**



- Offers the power and speed of an impact with the reach of a ratchet.
- The combination of MAX power, MAX control, and MAX access allows tool to be used for virtually any application.
- 180 ft.-lbs. max. torque and 9,000 rpm maximum free speed.
- Feather-touch trigger, two-position forward power regulator, and conveniently located forward/reverse ring to provide precise control.
- Head height of under 2" and reactionless torque to safely use this powerful tool in tight spaces.

**SPECIFICATIONS**

Maximum Torque.....	180 ft.-lbs.
Working Torque Range .....	45-160 ft.-lbs.
Weight.....	3.4 lbs.
Overall Length .....	13.1"
Avg. Air Consumption .....	3.5 CFM
Air Inlet (NPT) .....	1/4"
Rec. Hose Size.....	3/8"
Free Speed (Maximum).....	9,000 RPM
Sound Level .....	96.6 dBA

IR2015B00T Air Tool Cover

## IR1105MAXD3

**3/8" MAX Mini Ratchet**



- 30 ft.-lbs. of torque combined with 300 RPM provides optimal torque/speed combination for MAX power.
- Easily accessible variable power regulator combined with feather touch lever offers unprecedented control.
- Ergonomic coupling nut improves handle comfort and composite handle insulates against cold.

**SPECIFICATIONS**

Maximum Torque.....	30 ft.-lbs.
Capacity (Std. Bolt Size) .....	7/16"
Net Weight.....	1.43 lbs.
Length .....	7.36"
Air Consumption .....	3.5 CFM
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Free Speed .....	300 RPM
Sound Level .....	88.9 dBA

Power Tools

## IRC107XPA

**3/8" Extra Performance Heavy Duty Air Ratchet**



- Variable speed lever-style throttle.
- 360° adjustable exhaust directs air away from operator and work.
- Delivers an extra measure of durability with an advance head design.

**SPECIFICATIONS**

Working Torque Range .....	10-45 ft.-lbs.
Maximum Torque.....	54 ft.-lbs.
Capacity (Std. Bolt Size).....	3/8"
Net Weight.....	2.75 lbs.
Length .....	11"
Air Consumption.....	4 CFM
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Free Speed.....	160 RPM
Sound Level .....	94.4 dBA

IR107B00T Air Tool Cover

IR107TK1 Tune Up Kit

## IR1207MAXD3

**3/8" MAX Air Ratchet**



- Combines best-in-class performance and a full complement of premium features to give professional technicians MAX Power, MAX Control, and MAX Comfort.
- Offers 65 ft.-lbs. of maximum torque to ensure enough power for tough applications.
- Innovative forward/reverse collar, variable-speed power regulator, adjustable exhaust, and feather-touch trigger combine for excellent control.
- Ergonomic composite handle is comfortable for extended use.

**SPECIFICATIONS**

Maximum Torque.....	65 ft.-lbs.
Capacity (Std. Bolt Size).....	3/8"
Net Weight.....	3.2 lbs.
Length .....	10.8"
Air Consumption.....	4 CFM
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Free Speed.....	200 RPM
Sound Level .....	85 dBA

## IR109XPA

**3/8" Extra Performance Super Duty Air Ratchet**



- Durable with optimized gear ratio and airflow for extra performance.
- 360° adjustable exhaust directs air away from work.
- Variable speed button trigger.

**SPECIFICATIONS**

Working Torque Range .....	10-60 ft.-lbs.
Maximum Torque.....	76 ft.-lbs.
Capacity (Std. Bolt Size).....	3/8"
Net Weight.....	3.3 lbs.
Length .....	12"
Air Consumption.....	4 CFM
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Free Speed.....	220 RPM
Sound Level .....	92.4 dBA

IR109B00T Air Tool Cover

## AS1119 3/8" Mini Wobble Air Ratchet



- Wobble drive provides added flexibility to access hard to reach areas.
- Compact and lightweight.
- Ideal tool for confined working areas such as under dashboard work.
- Ergonomically designed black composite body.

SPECIFICATIONS:	
Square Drive.....	3/8" wobble
Maximum Torque.....	16 ft.-lbs.
Capacity (Std. Bolt Size).....	3/8"
Net Weight.....	0.94 lbs.
Length.....	5-1/2"
Air Consumption.....	.4 CFM
Air Inlet (NPT).....	1/4"
Minimum Hose Size.....	3/8"
Free Speed.....	240 RPM
Sound Level.....	91.0 dBA

## IR2025MAX 1/2" Hammerhead Low-Profile Impactool™



- Offers the power and speed of an impact with the reach of a ratchet.
- The combination of MAX power, MAX control, and MAX access allows tool to be used for virtually any application.
- 180 ft.-lbs. max. torque and 9,000 rpm.
- Feather-touch trigger, two-position forward power regulator, and conveniently located forward/reverse ring to provide precise control.
- Head height of under 2" and reactionless torque to safely use this powerful tool in tight spaces.

SPECIFICATIONS	
Working Torque Range.....	45-160 ft.-lbs.
Maximum Torque.....	180 ft.-lbs.
Weight.....	3.4 lbs.
Overall Length.....	13.1"
Avg. Air Consumption.....	3.5 CFM
Air Inlet (NPT).....	1/4"
Rec. Hose Size.....	3/8"
Free Speed.....	9,000 RPM
Sound Level.....	96.6 dBA

IR2015BOOT Air Tool Cover

## CAT250AHMV Super Duty Air Hammer with Grip



- Feather trigger provides precise speed control.
- Built in air regulator.
- Metal valve improves power and enhances life.
- Cushion grip for added comfort.
- Swivel air inlet.
- Handle exhaust.
- Includes quick change retainer.
- Ideal for rivet cutting, bolt cutting, and overall front end work.

SPECIFICATIONS	
Blows per minute.....	2,200
Shank Opening.....	0.401"
Bore Diameter.....	3/4"
Stroke.....	3-3/4"
Air Pressure.....	90 PSI
Weight.....	5.5 lbs.
Length.....	11.1"
Average Air Consumption.....	.4 CFM
Air Inlet.....	1/4"-18NPT
Minimum Hose Size.....	3/8" I.D.
Sound Level.....	100 dBA
Vibration Level.....	13.9 m/s2

CTG5ACS 5 Piece Air Chisel Set  
PRCAH Air Hammer Cover

## CAT250MVK6 250MM Air Hammer and 5 Piece Chisel Set



- Ideal for rivet cutting, bolt cutting, and overall front end work.
- Kit includes: CAT250AHMV Super Duty 250MM air hammer, quick change chisel retainer, CTG5ACS five piece air chisel set for a wide variety of applications, and a blow molded storage/carrying case.

CTG5ACS 5 Piece Air Chisel Set

## CAT3190AHMV Super Duty Air Hammer with Vibration Reduction



- Patented shock reduction design reduces hand fatigue.
- Feather trigger provides precise speed control.
- Ergonomic T-handle design for greater balance and easy control.
- Cushion grip for added comfort.
- Swivel air inlet.
- Handle exhaust.
- Includes quick change retainer.

SPECIFICATIONS	
Blows per minute.....	2,900
Shank Opening.....	0.401"
Bore Diameter.....	3/4"
Stroke.....	2-5/8"
Air Pressure.....	90 PSI
Weight.....	3.8 lbs.
Length.....	8.6"
Average Air Consumption.....	2.73 CFM
Air Inlet.....	1/4"-18NPT
Minimum Hose Size.....	3/8" I.D.
Sound Level.....	102.8 dBA
Vibration Level.....	4.21 m/s2

CTG5ACS 5 Piece Air Chisel Set  
PRCAHVR Air Hammer Cover/CAT3190AHMV, CAT3250AHMV

Power Tools

# CAT3250AHMV

**Super Duty  
Air Hammer with  
Vibration Reduction**



- Patented shock reduction design reduces hand fatigue.
- Feather trigger provides precise speed control.
- Ergonomic T-handle design for greater balance and control.
- Cushion grip for added comfort.
- 2,000 blows per minute.
- 3-1/2" stroke length.
- Weighs: 4.3 lbs.
- Swivel Air Inlet.
- Handle exhaust.
- Includes quick change retainer.

SPECIFICATIONS	
Blows per minute.....	2,000
Shank Opening .....	0.401"
Bore Diameter .....	3/4"
Stroke.....	3-1/2"
Air Pressure .....	90 PSI
Weight.....	4.3 lbs.
Length.....	10-1/2"
Average Air Consumption.....	2.77 CFM
Air Inlet.....	1/4" - 18NPT
Minimum Hose Size .....	3/8" I.D.
Sound Level.....	101.7 dBA
Vibration Level.....	5.75 m/s <sup>2</sup>

CTG5ACS 5 Piece Air Chisel Set  
PRCAHVR Air Hammer Cover/CAT3190AHMV, CAT3250AHMV

Power Tools

# IR118MAX

**Air Hammer  
with Vibration  
Reduction**



- Long-barrel vibration-reduced air hammer delivers the MAX Comfort, MAX Power, and MAX Productivity needed to accomplish the most challenging material preparation jobs.
- Comfort - Anti-vibration feature reduces tool vibration by over 30% when compared to standard air hammers in it's class.
- Power - 15% increase in impact force over standard air hammer product offering.
- Productivity - Quick-change retainer allows for faster chisel changeovers to get the job done.

SPECIFICATIONS	
Blows per minute.....	2,500
Shank Opening .....	0.401"
Bore Diameter .....	3/4"
Stroke.....	3-1/2"
Air Pressure .....	90 PSI
Weight.....	4.6 lbs.
Length.....	10.5"
Average Air Consumption.....	2.9 CFM
Air Inlet.....	1/4" - NPTF
Minimum Hose Size .....	3/8" I.D.
Vibration Level.....	5.7 m/s <sup>2</sup>
Sound Level.....	94.7 dBA

# CAT3250MVK6

**Air Hammer and  
Five Piece  
Chisel Set**

- Kit includes CAT3250AHMV Super Duty Air Hammer with Vibration Reduction, quick change chisel retainer, and CTG5ACS five piece air chisel set in a custom blow molded storage/carrying case.



CTG5ACS 5 Piece Air Chisel Set

# IR118MAXK

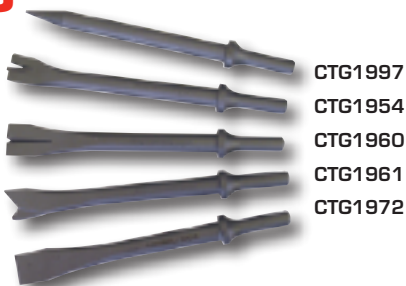
**Air Hammer Kit**

- Kit Includes: air hammer (IR118MAX), quick change retainer, five piece chisel set, and blow molded case.



# CTG5ACS

**5 Piece Air  
Chisel Set**



- .401 shank diameter.
- Overall Length: 7".
- Packaged in protective plastic pouch.

Set consists of:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CTG1954	Panel Cutter	CTG1972	Cold Chisel
CTG1960	Spot Weld Breaker	CTG1997	Taper Punch
CTG1961	Radius Cutter		

*Wear Safety Goggles!*

## KTEART12DX

Pneumatic  
Door Skin Tool Kit



- Easy to use, increases production, requires less painter preparation and uses less materials.
- Door skins applied in less than 10 minutes.
- Replaces hammer and dolly method of pounding the door skin by hand. (Less arm stress).
- Two step process bends door skin over to give an OEM look, no need for body fillers on the outside of the door due to hammer marks.
- Comes with Door Skin Tool with air hammer, an extra spring/chisel assembly, an extra rubber bumper cap, and a blow molded case.

KTE14 Chisel  
KTE32 Retainer Spring

## IR125

Air Needle Scaler



- For surface preparation work involving the cleaning or removal of paint, rust, dirt, or weld slag.
- Durable, dependable, and economical.
- 19 needles.
- Each needle diameter measures 1/8" (3.2MM).

### SPECIFICATIONS

Free Speed .....	4,600 Blows Per Minute
Bore Diameter .....	1" (25MM)
Stroke Length .....	1-1" (28.6MM)
Weight .....	6.2 lbs.
Length .....	18.3"
Avg. Air Consumption .....	.8 CFM
Air Inlet .....	1/4"
Min. Hose Size .....	5/16"
Sound Level .....	99.6 dBA

IRPF22192219 Replacement Needle Set

## CAT317

High Speed Sander

- Small design with comfort grip makes this tool ideal for working in tight places.
- Great for paint and rust removal and comes with 3", 4-1/2" and 5-1/2" size pads for added versatility.
- Built-in handle regulator and variable speed throttle give great operating control.



### SPECIFICATIONS

Free Speed .....	14,000 RPM
Pad Diameter .....	3", 4.5", 5.5"
Net Weight .....	2.3 lbs.
Length .....	8"
Air Consumption .....	.4 CFM
Rec. Air Pressure .....	90 PSI
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	98 dBA

## HU500

3/32" Offset  
6" Palm Sander

- Has a 3/32" offset with a less aggressive sanding action.
- Perfect for pre and post paint sanding and all paint shop applications.
- Offers smooth, low-vibration operation.



### SPECIFICATIONS

Free Speed .....	10,000 RPM
Pad Diameter .....	6"
Net Weight .....	1 lb. 10 oz.
Length .....	5.5"
Air Consumption .....	15.75 CFM @ 90 PSI
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	81 dBA

Power Tools

## HU600

3/16" Offset  
6" Palm Sander

- The 3/16" offset delivers aggressive material removal with comfortable low vibration operation.
- Intended for use by technicians seeking fast, smooth operation.
- Top choice for reliability and performance among professionals from all sanding industries.



### SPECIFICATIONS

Free Speed .....	10,000 RPM
Pad Diameter .....	6"
Net Weight .....	1 lb. 10 oz.
Length .....	5.5"
Air Consumption .....	15.75 CFM @ 90 PSI
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	81 dBA



### WARNING!

Wear safety goggles when using power tools. Only use air tools for their intended purposes and applications. Avoid prolonged exposure to vibration. Always follow proper maintenance procedures. Read operating instructions thoroughly. Do not use grinding wheels, sanding discs or accessories above their maximum rated RPM. Use proper accessories with adequate speed ratings and correct air pressure.

**CAT600HD**  
**Heavy Duty 6" Dual Action Quiet Sander**



- Provides swirl free finishes from dual action pad motion.
- Extra quiet operation with double insulated motor cap design.
- Sealed heavy duty ball bearing construction provides vibration free performance.
- Built in safety lever throttle to prevent accidental starting.
- Adjustable built in regulator for positive speed control.
- Great for feather edging, metal preparation and finish work on body filler.

SPECIFICATIONS	
Free Speed .....	10,000 RPM
Pad Diameter.....	6"
Net Weight.....	4.4 lbs.
Length .....	7.87"
Air Consumption.....	4 CFM
Rec. Air Pressure.....	90 PSI
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	85 dBA

Power Tools

**IR328B**  
**Heavy Duty Geared Orbital Sander**



- Smooth strength and power allows removal of heavy material and body filler on large, flat surfaces leaving a clean, swirl-free finish.
- Dual action pad motion (5/32" orbit).
- Balanced ball bearing construction.
- 8" pad.
- Long-life, low-vibration performance.

SPECIFICATIONS	
Free Speed .....	825 RPM
Pad Diameter.....	8"
Rated Power.....	0.25 HP
Net Weight.....	4.7 lbs.
Length .....	10"
Air Consumption.....	4 CFM
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	90.5 dBA

IR328B8258 8" Pad

**IR4151**  
**Super Duty Vacuum-Ready 3/16" Random Orbital Sander**



- Vacuum-ready, low vibration model produces an ultra-high quality finish.
- Connects easily to central or portable vacuum systems.
- Extracts dust and particles through and around the pad keeping foreign matter away from the motor.
- Durable, lightweight composite design weighs less than 2 lbs.
- 3/16" orbit diameter.

SPECIFICATIONS	
Free Speed .....	12,000 RPM
Rated Power.....	0.2 HP
Pad Diameter.....	6"
Net Weight.....	1.92 lbs.
Avg. Air Consumption.....	8 CFM
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	5/16"
Sound Level .....	81.6 dBA

IR4151A810 Muffler Assembly  
 IRVPAD6 6" Petal Pattern Vacuum Pad

**CAT3320**  
**3/32" Orbital Sander 6"**



- Comfort grip.
- Low profile design for great control.
- 0.3 Horsepower.

SPECIFICATIONS	
Free Speed .....	12,000 RPM
Pad Diameter.....	6"
Net Weight.....	2.85 lbs.
Length .....	8.07"
Air Consumption.....	1.1 CFM
Rec. Air Pressure.....	90 PSIG
Air Inlet.....	1/4" NPT
Maximum Hose Size.....	3/8"
Sound Level .....	80 dBA

**CAT3160**  
**3/16" Orbital Sander 6"**



- Comfort grip.
- Low profile design for great control.
- 0.3 Horsepower.

SPECIFICATIONS	
Free Speed .....	12,000 RPM
Pad Diameter.....	6"
Net Weight.....	2.85 lbs.
Length .....	8.07"
Air Consumption.....	1.1 CFM
Rec. Air Pressure.....	90 PSIG
Air Inlet.....	1/4" NPT
Maximum Hose Size.....	3/8"
Sound Level .....	80 dBA

**WARNING!**  
 Wear safety goggles when using power tools. Only use air tools for their intended purposes and applications. Avoid prolonged exposure to vibration. Always follow proper maintenance procedures. Read operating instructions thoroughly. Do not use grinding wheels, sanding discs or accessories above their maximum rated RPM. Use proper accessories with adequate speed ratings and correct air pressure.

# HU3800

**Orbital Sander 2-3/4" x 16" Pad**



- Versatile, adapts to every Surface Preparation need - heavy duty to feather finishing.
- Powerful air-efficient motor with 5-point suspension guarantees 44 square inches of uniform, full contact sanding.

SPECIFICATIONS	
Strokes per minute .....	8,500+
Pad Dimensions.....	2-3/4" x 16"
Net Weight.....	5 lbs. 7 oz.
Air Consumption.....	11.4 CFM @ 90 PSI
Sound Level .....	89 dBA

HU18025 Replacement Pad

# CAT315

**Dual Piston  
Straight Line  
Sander**



- Two handle design for comfortable operation.
- Strong positive action paper clamps make changing paper quick and easy.
- Balanced needle bearing and alloy gear design for smooth operation.
- Ideal for smoothing body filler, or shaping large flat surfaces.

SPECIFICATIONS	
Strokes per minute .....	2500 RPM
Pad Dimensions.....	16" x 2.5"
Net Weight.....	7 lbs.
Length .....	16"
Air Consumption.....	.8 CFM
Rec. Air Pressure.....	90 PSI
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	93 dBA

# CAT300MSK

**3" Mini Sander Kit**



Set Includes:

- 3" Mini Sander (CAT300MS)
- 3" Disk Holder
- 3" Disk Surface Prep Pads (3-fine, medium, coarse)
- 3" Sanding Discs, 60 Grit (10)
- 3" Sanding Discs, 80 Grit (10)
- 3" Sanding Discs, 120 Grit (10)
- Spanner Wrench
- Blow Molded Case

- CAT300M360 3" Sanding Discs, 60 Grit (10)
- CAT300M380 3" Sanding Discs, 80 Grit (10)
- CAT300M3120 3" Sanding Discs, 120 Grit (10)
- CAT300M3RP 3" Pad

# CAT300MS

**3" Mini Sander**



- Comfort grip.
- 15,000 RPM.
- Built-in speed regulator.
- 3" disk holder included.

SPECIFICATIONS	
Maximum Free Speed.....	15,000 RPM
Air Inlet.....	1/4" NPT
Recommended Hose Size.....	3/8" I.D.
Recommended Air Pressure.....	90 PSIG
Air Consumption.....	.4 CFM
Length .....	3.7"
Weight.....	1.5 lbs.
Sound Level .....	89 dBA

Power Tools

# CAT300MDASK

**3" Mini DA Sander Kit**



Set Includes:

- 3" Mini DA Sander (CAT300MDAS)
- 2" Sanding Discs, 320 Grit (10)
- 3" Sanding Discs, 320 Grit (10)
- 2" Sanding Discs, 400 Grit (10)
- 3" Sanding Discs, 400 Grit (10)
- 2" Sanding Discs, 600 Grit (10)
- 3" Sanding Discs, 600 Grit (10)
- 2" Backing Pad
- 3" Backing Pad
- Removal Tool
- Blow Molded Case

- CAT300DA2320 2" Sanding Discs, 320 Grit (10)
- CAT300DA2400 2" Sanding Discs, 400 Grit (10)
- CAT300DA2600 2" Sanding Discs, 600 Grit (10)
- CAT300DA3320 3" Sanding Discs, 320 Grit (10)
- CAT300DA3400 3" Sanding Discs, 400 Grit (10)
- CAT300DA3600 3" Sanding Discs, 600 Grit (10)
- CAT300M2VP 2" Velcro™ Pad
- CAT300M3VP 3" Velcro™ Pad

# CAT300MDAS

**3" Mini DA Sander**



- Comfort grip.
- 15,000 RPM.
- Built-in speed regulator.
- Includes 2" and 3" backing pads.

SPECIFICATIONS	
Maximum Free Speed.....	15,000 RPM
Air Inlet.....	1/4" NPT
Recommended Hose Size.....	3/8" I.D.
Recommended Air Pressure.....	90 PSIG
Air Consumption.....	.4 CFM
Length .....	4.05"
Weight.....	1.6 lbs.
Sound Level .....	88 dBA

**CAT300MPK**

**3" Mini Polisher Kit**

Set Includes:

- Mini Polisher (CAT300MP)
- 3" Backing Pad
- 3-1/2" Bonnet
- 3" White Compounding Foam Pad
- 3" Yellow Compounding Foam Pad
- Spanner Wrench
- Blow Molded Case

CAT300MPPB1 Polishing Bonnet  
 CAT300MPWF1 White Foam Pad  
 CAT300MPYF1 Yellow Foam Pad



**CAT555K**

**45 Piece Deluxe Gearless Die Grinder Kit**



- Great for hard to reach areas.
- Cushion grip for comfort.
- Adjustable air regulator at the tool inlet.
- Built in lock lever to prevent any accidental start ups.

Set includes:

QTY.	PART NO.	DESCRIPTION
2	CAT10ACQ	1/4" Shank
1	CAT12CG	2" Flap Disc, 40 Grit
1	CAT13CG	2" Flap Disc, 80 Grit
1	CAT14CG	3" Flap Disc, 40 Grit
1	CAT15CG	3" Flap Disc, 60 Grit
1	CAT16CG	2" Stripper Pad
1	CAT17CG	3" Stripper Pad
2	CAT18CG	2" Roloc Pads, 50 Grit
3	CAT19CG	2" Roloc Pads, 36 Grit
1	CAT1ACQ	1/4" Collet
1	CAT1ACQ1	1/8" Collet
1	CAT1BCQ	Male Plug
2	CAT1CCQ	Rotary Tool Wrench
2	CAT20CG	3" Roloc Pads, 50 Grit
3	CAT21CG	3" Roloc Pads, 36 Grit
1	CAT2ACQ	3" Roloc-style Disc Holder
1	CAT2CCQ	2" Roloc-style Disc Holder
1 of ea. Size	CAT4CQ	3/8", 1/2", 3/4" & 1" Sanding Drums
1	CAT555	Gearless Die Grinder
4 of ea. Size	CAT5CCQ	3/8", 1/2", 3/4" & 1" Sanding Papers
1	-	Plastic Carrying Case

**CAT300MP**

**3" Mini Polisher**

- Comfort grip.
- 2,500 RPM.
- Built-in speed regulator.
- Includes 3" backing pad.



SPECIFICATIONS	
Maximum Free Speed.....	2,500 RPM
Air Inlet.....	1/4" NPT
Recommended Hose Size.....	3/8" I.D.
Recommended Air Pressure.....	90 PSIG
Air Consumption.....	.4 CFM
Length.....	4.55"
Weight.....	1.5 lbs.
Sound Level.....	88 dBA

**NBCORNKIT1**

**5 Piece 3" Polishing Kit**

Kit contains one each of the following:

PART NO.	DESCRIPTION
NBJ73T	3" Backing Plate
NB24743	Lambswool Ultra Fine Polishing Pad
NB30340	Blue Foam Fine Polishing Pad
NB23530	Fibral Coarse All Metals Polishing Pad
NB21130	Coarse Twisted Wool All Surfaces Polishing Pad



**NBCORNKIT2HL**

**Plastic Polishing Kit**

- For polishing dull and scratched plastic headlight covers, side marker lights, and taillights or any other hard plastic parts.
- Makes dull and oxidized headlights look like new.

Kit contains one each of the following:

PART NO.	DESCRIPTION
NBJ73T	3" Backing Plate
NB33201	Orange Foam Polishing Pad
NB1050P	Plastic Polishing Compound
NB77439	Buffing Towel



**CAT555**

**Deluxe Gearless Die Grinder**

- Great for hard to reach areas.
- Perfect tool for grinding, polishing, and cleaning jobs.
- Cushion grip for comfort.
- Adjustable air regulator at the tool inlet.
- Built in lock lever to prevent any accidental start ups.
- Bottom handle exhaust to direct air away from the work.



SPECIFICATIONS	
Free Speed.....	23,000 RPM
Collet Size.....	1/4"
Net Weight.....	1.5 lbs.
Overall Length.....	6.75"
Average Air Consumption.....	.3 CFM
Air Pressure.....	90 PSI
Air Inlet (NPT).....	1/4"
Min. Hose Size.....	3/8"
Sound Level.....	80 dBA



## CATD251

### Heavy Duty Industrial Grinder



- 13,500 RPM. • 4" grinding wheel/cutting wheel. • 0.9 HP. • Rear exhaust. • Lightweight, aluminum housing. • Built-in speed regulator. • Safety lever throttle.

SPECIFICATIONS:	
Free Speed .....	13,500 RPM
Collet Size.....	3/8"
Net Weight.....	3.2 lbs.
Length .....	11-15/16"
Recommended Air Pressure.....	90 PSI
Air Consumption .....	4.3 CFM
Air Inlet.....	1/4" NPT
Recommended Hose Size.....	3/8" I.D.
Sound Level .....	89 dBA

## CAT301

### Mini Right Angle Die Grinder



- Compact mini design with 90° angle head for easy access. • Free Speed: 20,000 RPM. • Ideal tool for removing gasket material, grinding dies and valve seats. • For cleaning dies, rotors, back plates and brake pad mounts with safety throttle lever. • Built-in air regulator.

SPECIFICATIONS	
Free Speed .....	20,000 RPM
Maximum Capacity.....	1/4"
Air Pressure .....	90 PSI
Net Weight.....	1.1 lbs.
Overall Length .....	5.5"
Average Air Consumption.....	.3 CFM
Air Inlet.....	1/4" NPT
Min. Hose Size .....	3/8"
Sound Level .....	93 dBA

## CP875

### Mini Angle Die Grinder



- Lock off throttle to prevent accidental start up. • Applications: high speed blending, smoothing, porting and deburring in confined areas. • Compact, lightweight design for easy maneuverability. • 90° angle head allows flexibility in tight quarters. • Complete with 1/4" and 6MM collet.

SPECIFICATIONS	
Free Speed .....	22,500 RPM
Collet Size.....	1/4"
Net Weight.....	1 lbs.
Overall Length .....	4-7/8"
Average Air Consumption.....	5.5 CFM
Air Inlet (NPT) .....	1/4"
Sound Level .....	101.3 dBA

## CAT530

### Heavy Duty Straight Die Grinder



- Ideal to clean dies, rotors, backing plates and brake pad mounts. Grind valve seats, dress welds and enlarge holes. • Built-in safety lever throttle prevents accidental starts. • Use with 1/4" grinding accessories. • Cushion grip for comfort.

SPECIFICATIONS	
Free Speed .....	22,000 RPM
Horsepower.....	0.45
Collet Size.....	1/4"
Net Weight.....	1.3 lbs.
Length .....	7"
Air Consumption.....	.3 CFM
Recommended Air Pressure.....	90 PSI
Air Inlet.....	1/4" NPT
Recommended Hose Size.....	3/8" I.D.
Sound Level .....	82 dBA

## CAT530R

### Heavy Duty Right Angle Die Grinder



- Ideal for high speed grinding and polishing. • Used for finishing dies and metal molds, smoothing and shaping sheet metal and cast iron, weld finishing and other high speed polishing applications. • Use with 1/4" grinding accessories.

SPECIFICATIONS	
Free Speed .....	18,000 RPM
Horsepower.....	0.45
Collet Size.....	1/4"
Net Weight.....	1.5 lbs.
Length .....	7"
Air Consumption.....	.3 CFM
Recommended Air Pressure.....	90 PSI
Air Inlet.....	1/4" NPT
Recommended Hose Size.....	3/8" I.D.
Sound Level .....	82 dBA

## CAT530XL

### Heavy Duty Extra Long Die Grinder



- Extra long design allows access in tight or hard to reach areas. • 22,000 RPM free speed. • Cushion grip handle for added comfort. • Built-in safety lever throttle prevents accidental starts. • Rear exhaust directs air away from the work.

SPECIFICATIONS	
Free Speed .....	22,000 RPM
Collet Size.....	1/4"
Net Weight.....	2.2 lbs.
Length .....	11"
Air Consumption.....	.3 CFM
Recommended Air Pressure.....	90 PSI
Air Inlet.....	1/4" NPT
Recommended Hose Size.....	3/8" I.D.
Sound Level .....	82 dBA

Power Tools

## AIR GRINDERS

### CAT530RXL

#### Heavy Duty Right Angle Extra Long Die Grinder



- Right angle head design for greater access and control.
- Extra long design allows access in tight or hard to reach areas.
- 18,000 RPM free speed.
- Cushion grip handle for added comfort.
- Built-in safety lever throttle prevents accidental starts.
- Rear exhaust directs air away from the work.

SPECIFICATIONS	
Free Speed .....	18,000 RPM
Collet Size.....	1/4"
Net Weight.....	2.2 lbs.
Length .....	10.6"
Air Consumption.....	3 CFM
Recommended Air Pressure.....	90 PSI
Air Inlet.....	1/4" NPT
Recommended Hose Size.....	3/8" I.D.
Sound Level .....	82 dBA

### CAT510

#### Mid-Size Comfort Grip Rear Exhaust Die Grinder



- Comfort grip for greater feel and control.
- Built in safety lever throttle to prevent accidental starts.
- Positive control regulator for greater speed versatility.
- Full ball bearing construction and industrial quality spring steel collet.
- Rear exhaust to direct air away from the work surface.

SPECIFICATIONS	
Free Speed .....	25,000 RPM
Collet Size.....	1/4"
Net Weight.....	1.0 lbs.
Overall Length .....	6.52"
Average Air Consumption.....	2.78 CFM @ 90PSI
Air Inlet (NPT) .....	1/4"
Rec. Hose Size.....	3/8"
Sound Level .....	93 dBA

### CAT511

#### 1/4" Mini Die Grinder



- Smallest die grinder in its class - only 4-3/4" long.
- Extremely lightweight - weighs less than 1 pound.
- Easy to handle.
- Perfect for the tightest, most detailed jobs.

SPECIFICATIONS	
Maximum Rated Speed.....	25,000 RPM
Air Pressure .....	90 PSI
Collet Size.....	1/4"
Air Inlet.....	1/4" NPT
Air Consumption.....	3.0 CFM
Length .....	4.75"
Weight.....	0.81 lbs.
Sound Level .....	95 dBA

### CAT511A

#### Rear Exhaust Die Grinder



- Comfort grip for greater feel and control.
- Built in safety lever throttle to prevent accidental starts.
- Extremely lightweight - weighs less than 1 pound.

SPECIFICATIONS	
Free Speed .....	25,000 RPM
Collet Size.....	1/4"
Net Weight.....	0.81 lbs.
Overall Length .....	6-3/4"
Air Exhaust .....	Front
Air Pressure .....	90 PSI (6.2 bar)
Average Air Consumption.....	3.0 CFM
Air Inlet (NPT) .....	1/4"
Sound Level .....	86 dBA

### CAT520

#### Full-Size Comfort Grip Rear Exhaust Die Grinder



- Extra powerful motor design for greater performance.
- Built-in safety lever throttle to prevent accidental starts.
- Positive control regulator for greater speed versatility.
- Full ball bearing construction and industrial quality spring steel collet.
- Rear exhaust to direct air away from the work surface.
- Built-in comfort grip for greater feel and control.

SPECIFICATIONS	
Free Speed .....	22,000 RPM
Collet Size.....	1/4"
Net Weight.....	1.6 lbs.
Overall Length .....	7.33"
Average Air Consumption.....	3.53 CFM @ 90PSI
Air Inlet (NPT) .....	1/4"
Rec. Hose Size.....	3/8"
Sound Level .....	88 dBA

### CATPDGS

#### Pencil Die Grinder Set



- Lightweight pencil die grinder is great for limited access work.
- Features a 1/8" collet and stone set for added versatility.
- Ideal for cleaning of rotors, backing plates, brake pads, plus many other applications.
- Comes with a 5 foot rear exhaust over hose and built in twist type regulator.
- **MUST** be used with 1/8" shank accessories rated higher than the tool RPM.



#### WARNING!

Wear safety goggles when using power tools. Only use air tools for their intended purposes and applications. Avoid prolonged exposure to vibration. Always follow proper maintenance procedures. Read operating instructions thoroughly. Do not use grinding wheels, sanding discs or accessories above their maximum rated RPM. Use proper accessories with adequate speed ratings and correct air pressure.

## CATAPDG

### Angle Pencil Die Grinder

- Cushion grip handle for added comfort.
- 100° angle is ideal for access in tight areas.



SPECIFICATIONS	
Free Speed .....	70,000 RPM
Collet Size .....	1/8"
Shipping Weight .....	0.5 lbs.
Length without hose .....	5.9"
Hose Length .....	60"
Recommended Max. Air Pressure .....	90 PSI
Air Consumption .....	1.0 CFM
Air Inlet .....	1/4" NPT
Recommended Hose Size .....	3/8" I.D.
Sound Level .....	72 dBA

## CAT412HDG

### 4-1/2" Heavy Duty Grinder

- High torque .7 HP motor for heavy duty performance.
- Safety lever throttle.
- Compact design.
- Removable handle for work in tight areas.
- Grinding wheel included.



SPECIFICATIONS	
Free Speed .....	11,000 RPM
Air Pressure .....	90 PSI
Pad Size .....	4-1/2"
Spindle Size .....	3/8"-24
Air Inlet (NPT) .....	1/4"
Min. Hose Size .....	3/8"
Length .....	9"
Weight .....	4.1 lbs.
Air Consumption .....	.4 CFM
Sound Level .....	89 dBA

## CAT820

### Heavy Duty Rear Exhaust Cut-Off Tool

- Built-in safety lever throttle to prevent accidental starts.
- Positive control regulator for greater speed versatility.
- Rear exhaust to direct air away from the work.
- Built-in comfort grip for greater feel and control.
- Heavy duty metal guard.
- Used for various cutting operations like front wheel drive bearings, quarter panels, brake cables, bolts and studs, and many other applications.



SPECIFICATIONS	
Free Speed .....	22,000 RPM
Net Weight .....	1.68 lbs.
Overall Length .....	7.4"
Rec. Air Pressure .....	90 PSI
Average Air Consumption .....	3.45 CFM
Air Inlet (NPT) .....	1/4"
Rec. Hose Size .....	3/8"
Sound Level .....	90 dBA

## CAT820R

### Reversible Cut-Off Tool

- Reversible to direct sparks and debris away from the user and sensitive work surfaces.
- 3" cut off wheel included.
- Comfort Grip.



SPECIFICATIONS	
Free Speed .....	18,000 RPM
Net Weight .....	1.85 lbs.
Length .....	7.6"
Wheel Size .....	3.0"
Recommended Air Pressure .....	90 PSI
Air Consumption .....	3.6 CFM
Air Inlet .....	1/4" NPT
Recommended Hose Size .....	3/8" I.D.
Sound Level .....	94 dBA

CAT820CW5 3" Cut Off Wheels (5)

## AS209

### In-Line 3" Cut-Off Tool

- Unique in-line design provides greater control.
- Positive control and lock-out throttle protection.
- Adjustable protection guard.
- Chrome plated steel spark guard.
- Variable speed control.



SPECIFICATIONS	
Free Speed .....	15,000 RPM
Air Pressure .....	90-120 PSI
Wheel Size .....	3"
Air Inlet (NPT) .....	1/4"
Min. Hose Size .....	3/8"
Length .....	8-1/4"
Weight .....	2 lbs.
Air Consumption .....	.4 CFM
Sound Level .....	92 dBA

## CAT850XLR

### Reversible Extended Cut-Off Tool

- 6" extended length for greater reach and access.
- Reversing mechanism to direct sparks away from work.
- Low profile head allows for maximum clearance.
- Upgraded 0.9HP motor makes this tool powerful enough to handle heavy duty cutting applications.



SPECIFICATIONS	
Free Speed .....	15,000 RPM
Net Weight .....	1.85 lbs.
Length .....	14.5"
Wheel Size .....	4.0"
Recommended Air Pressure .....	90 PSI
Air Consumption .....	3.5 CFM
Air Inlet .....	1/4" NPT
Recommended Hose Size .....	3/8" I.D.
Sound Level .....	89 dBA

CAT850CW10 4" Cut Off Wheels (10)

**CAT450ASK**

**Air Saw Kit**



Kit consists of the following in a blow molded case:

QTY	PART NO.	DESCRIPTION
1	CAT450AS	Air Saw
1	CAT250AS	1/4" NPT 360° Swivel
3	CATS18T	Air Saw Blades 18 Tooth
3	CATS24T	Air Saw Blades 24 Tooth
3	CATS32T	Air Saw Blades 32 Tooth
1	CAT450FF	Air Saw Flat File
1	CAT450HRF	Air Saw Half Round File
1	CAT450RF	Air Saw Round File
1	CAT450TF	Air Saw Triangle File

Power Tools

**CAT450AS**

**Air Saw**



- Comfort grip. • Safety lever throttle. • Adjustable blade guard to control cutting depth. • Able to cut up to 16 gauge capacity. • Includes 3 bi-metal blades (18T, 24T, 32T).

SPECIFICATIONS	
Strokes per Minute .....	10,000
Stroke Length .....	3/8"
Net Weight .....	1.4 lbs.
Length .....	9-5/8"
Air Consumption .....	1 CFM
Air Inlet .....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	94 dBA

**CATS18T Air Saw Blades, 18 Tooth (5)**

**CATS24T Air Saw Blades, 24 Tooth (5)**

**CATS32T Air Saw Blades, 32 Tooth (5)**

**CAT200AS**

**Mini Air Saw**

- Small size is ideal for work in tight areas. • Cushion grip for added comfort. • Safety lever throttle. • Cuts up to 18 gauge mild steel. • Includes 3 blades (18T, 24T, 32T).



SPECIFICATIONS	
Strokes per Minute .....	7,500
Stroke Length: .....	3/16" (5MM)
Net Weight .....	0.94 lbs.
Length .....	7.7"
Avg. Air Consumption .....	0.7 CFM
Air Inlet .....	1/4"
Recommended Hose Size .....	5/16"
Recommended Air Pressure .....	90 PSI (6.2 Bar)
Sound Level .....	84 dBA

**CAT50PFT**

**Punch and Flange Tool**

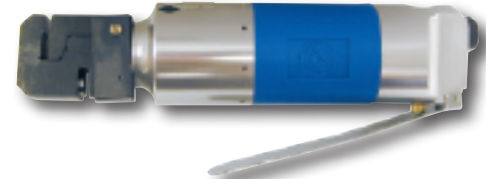


- Hole punch/crimp/flange up to 14 gauge. • Meets ICAR standard. • Head swivels 360° for ease of operation. • Comfort grip sleeve for positive retention.

SPECIFICATIONS	
Punch Hole Size .....	5MM
Net Weight .....	3-1/2 lbs.
Length .....	10"
Air Consumption .....	.4 CFM
Air Pressure .....	90 PSI
Air Inlet (NPT) .....	1/4 NPT
Minimum Hose Size .....	3/8"
Sound Level .....	88.3 dBA

**CAT100PFT**

**Punch and Flange Tool**



- Hole punch/crimp/flange up to 14 gauge. • Meets ICAR standard. • Head swivels 360° for ease of operation. • Comfort grip sleeve for positive retention. • 7/8" Gap.

SPECIFICATIONS	
Punch Hole Size .....	8MM
Net Weight .....	3-1/2 lbs.
Length .....	10"
Air Consumption .....	.4 CFM
Air Pressure .....	90 PSI
Air Inlet (NPT) .....	1/4 NPT
Minimum Hose Size .....	3/8"
Sound Level .....	88.3 dBA

**CAT330AN**

**Air Nibbler**



- Cuts up to 16 gauge stainless steel. • Maximum Air Pressure: 90 PSIG, 6.2 bar. • Variable speed safety lever throttle. • Precise cutting die cuts tight 3/4" radius. • Compact design for work in tight areas. • Easy to remove grease cap for lubricating head. • On board air regulator.

SPECIFICATIONS	
Strokes per Minute .....	2,600
Net Weight .....	1.9 lbs.
Length .....	7.6"
Air Consumption .....	3 CFM
Air Inlet .....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	85 dBA

## DFDF700DX

### Eliminator UnderCoat and Decal Remover

- Clean and strip away paint, undercoating, seam sealer, spray-on bed liner, rust, double sided tape, and large decals.
- Coarse brush strips undercoating and seam sealer easily and cleanly down to the bare metal; the brushes do not clog up.
- Remove rust, scale, and gaskets with the fine brush.
- The two decal erasers will strip a 2' x 2' decal in less than 2 minutes with no paint burn and is ideal for removing the adhesive backing on moldings and badges (one eraser is for water based paints).
- Comes with 6 fiber discs, a double fiber disc holder, and single fiber disc holder (holders are available separately for use on older tools).
- Includes thinner brushes for getting into really tight spaces.



Kit includes the following:

PART NO.	DESCRIPTION
DFDF700T	The Eliminator Tool Only
DFDF702C	Replacement Brush (Coarse)
DFDF702C11	11MM Coarse MBX Replacement Brush
DFDF702F	Replacement Brush (Fine)
DFDF702F11	11MM Replacement Fine Brush
DFDF702H	Adapter Housing for brush and eraser (23MM)
DFDF702H11	Adapter Housing for brush and eraser (11MM)
DFDF705D	Offset Decal Eraser
DFDF710BHD	Hubs for Double Black Wheels
DFDF710BHS	Hubs for Single Black Wheels
DFDF710BW	Clean and Strip Wheels (6)
-	Blow Molded Case

## CAT700MBK

### Blue Blaster Kit

- The Blue Blaster tool is great for removing rust, gaskets, and other types of surface damage.
- Comes with convenient side handle that rotates 180 degrees to allow user different positions.
- Rubber safety guard protects user's hand from sparks.
- Safety lever paddle throttle provides true variable speed performance.
- Kit includes: eraser wheel, paint stripping pad, fine wire wheel, coarse wire wheel, and fine bent tip wire wheel in a blow molded case.



SPECIFICATIONS	
RPM:	4,000
HP:	0.5
Air Consumption:	3 CFM
Air Inlet (NPT):	1/4"
Minimum Hose Size:	3/8"

CAT700MB	Blue Blaster
CAT700MB1	Fine Wire Wheel (2)
CAT700MB1B	Fine Bent Tip Wire Wheel (2)
CAT700MB2	Coarse Wire Wheel (2)
CAT700MB3	Eraser Pad
CAT700MB4	Black Abrasive Pad

## CAT2PST

### Pin Stripe Removal Kit

- Powerful motor provides necessary power with minimal noise and vibration.
- 2600 RPM for easy removal of pin stripes.
- Twin bearing spindle for precise operation.
- Cushion grip for added comfort.
- Lightweight and easy to use.
- Handle included for greater control.
- Three 3-1/2" eraser wheels included (CAT2PST3W).



SPECIFICATIONS	
Free Speed:	2,600 RPM
Net Weight:	2.2 lbs.
Length:	8.8"
Air Consumption:	3.1 CFM
Recommended Air Pressure:	90 PSI
Air Inlet:	1/4" NPT
Recommended Hose Size:	3/8" I.D.
Sound Level:	86 dBA

CAT2PST3W Pin Stripe Eraser Wheels (3)

## CTESWDK

### Spot Weld Drill Kit

- Drill can be set to specific depths which allows spot welds to be drilled while keeping panels intact.

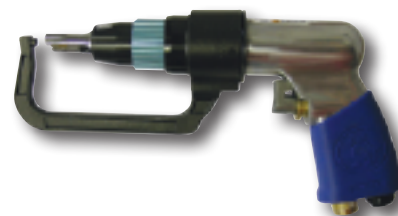


Kit consists of the following in a blow molded case:

QTY	PART NO.	DESCRIPTION
1	-	Spot Weld Drill
1	CTESWDG2	Spot Weld Drill Guard 2"
1	CTESWDG5	Spot Weld Drill Guard 5-1/2"
3	CTESW8	8MM Titanium Spot Weld Drill Bit
1	CTESW65	6.5MM Titanium Spot Weld Drill Bit
1	CTESW10	10MM Titanium Spot Weld Drill Bit
1	-	2.5MM Wrench

## CTESWD

### Spot Weld Drill with 2" Guard



- Drill can be set to specific depths which allow spot welds to be drilled while keeping panels intact.
- 2" guard included.

SPECIFICATIONS	
Free Speed:	650 RPM
Drill Bit Size:	8MM
	Optional 6.5MM & 10MM
Air Inlet:	1/4" NPT
Max. Air Pressure:	90 PSIG
Air Consumption:	6 CFM
Overall Length:	11.75"
Net Weight:	4.6 lbs.
Sound Level:	85.6 dBA

**CAT240**

**1/4" Reversible Drill**

- Composite housing with ergonomic handle.
- Variable speed trigger.
- Free Speed 2,600 RPM.
- Planetary gear system with needle bearings for long life and durability.
- Lightweight design provides comfort and easy control.
- Ideal for use in confined areas.
- Handle exhaust with patented silencer reduces noise.
- Easy, one hand direction change.
- Jacobs® chuck.

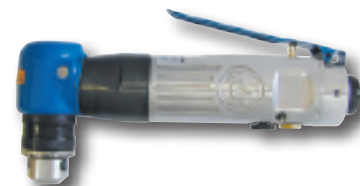


SPECIFICATIONS	
Free Speed .....	2,600 RPM
Chuck Size .....	1/4"
Spindle Size .....	3/8" - 24
Weight .....	1.45 lbs.
Length .....	5.8"
Avg. Air Consumption @ 90 PSI .....	4 CFM
Air Inlet (NPTF) .....	1/4"
Rec. Hose Size .....	3/8"
Sound Level .....	84 dBA

**CAT375RA**

**3/8" Right Angle Reversible Drill**

- Reversible for added versatility.
- 90° angle design for use in restricted areas.
- Rubber head boot for comfort and protection.
- Variable speed lever throttle.
- Ribbed handle for positive grip.
- Ball bearing construction for long life.
- 3/8" Jacobs® chuck included.



SPECIFICATIONS	
Free Speed .....	1,800 RPM
Capacity .....	3/8"
Net Weight .....	2-3/4 lbs.
Length .....	8"
Air Consumption .....	4 CFM
Air Inlet (NPT) .....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	90 dBA

**CAT250**

**3/8" Reversible Air Drill**

- Triple planetary gearing for high torque performance.
- Convenient reversing lever for easy one hand operation.
- Great for general purpose drilling, honing, reaming or hole saw applications.
- Lots of power for driving or removing screws.
- Variable speed throttle and Jacobs® chuck.



SPECIFICATIONS	
Free Speed .....	1,800 RPM
Chuck Size .....	3/8"
Spindle Size .....	3/8" - 24
Weight .....	3 lbs.
Length .....	6-1/2"
Avg. Air Consumption @ 90 PSI .....	4 CFM
Air Inlet (NPTF) .....	1/4"
Rec. Hose Size .....	3/8"
Sound Level .....	93 dBA

**CAT255**

**1/2" Reversible Air Drill**

- Heavy duty side handle included, can mount on either side.
- Convenient reversing lever for easy one hand operation.
- Variable speed throttle and Jacobs® chuck.
- Double reduction planetary gearing.
- Great for general purpose drilling, honing, reaming or hole saw applications.



SPECIFICATIONS	
Free Speed .....	400 RPM
Chuck Size .....	1/2"
Spindle Size .....	3/8" - 24
Weight .....	4 lbs.
Length .....	7-7/8"
Avg. Air Consumption @ 90 PSI .....	4 CFM
Air Inlet (NPTF) .....	1/4"
Rec. Hose Size .....	3/8"
Sound Level .....	93 dBA

**CAT250HD**

**3/8" Heavy Duty Reversible Air Drill**

- Heavy duty double reduction planetary gearing and extra powerful 1/2 HP motor (.30 HP rating).
- Built in comfort grip for added convenience and user comfort.
- Industrial quality Jacobs® "Hand Tite" Keyless chuck for ease of use.
- Variable speed throttle for total control in all applications.
- Convenient reverse lever for easy one hand operation.

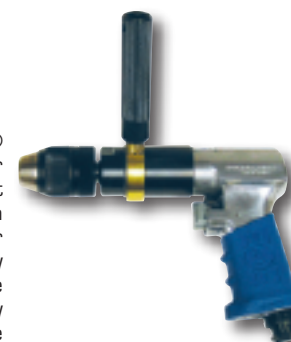


SPECIFICATIONS	
Free Speed .....	1,800 RPM
Chuck Size .....	3/8"
Spindle Size .....	3/8" - 24
Weight .....	3 lbs.
Length .....	7"
Avg. Air Consumption @ 90 PSI .....	4 CFM
Air Inlet (NPTF) .....	1/4"
Rec. Hose Size .....	3/8"
Sound Level .....	90 dBA

**CAT255HDA**

**1/2" Deluxe Heavy Duty Reversible Air Drill**

- Comfort grip.
- Keyless Jacobs® Chuck.
- Variable speed throttle for control in all applications.
- Convenient reverse lever for easy one hand direction change.
- High powered motor for extra torque and performance.
- Heavy duty side handle mounts to either side for added stability.
- Great for heavy duty drilling, honing, reaming, or hole saw applications.



SPECIFICATIONS	
Free Speed .....	400 RPM
Chuck Size .....	1/2"
Spindle Size .....	1/2" - 20
Weight .....	4 lbs.
Length .....	8-1/2"
Avg. Air Consumption @ 90 PSI .....	4 CFM
Air Inlet (NPT) .....	1/4"
Rec. Hose Size .....	3/8"
Sound Level .....	90 dBA

## AS1750K

### Air Scraper Kit

- Removes gaskets, paint, rust and other materials.
- Removes undercoating, seam sealers, etc.
- Built-in regulator.
- Blow molded case for easy storage and transport.



Includes the following blades:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
AS17501	1.77" Wide Blade	AS17503	1" Wide 45° blade
AS17502	1.75" L-Shaped Blade	AS17504	1" Wide Blade

SPECIFICATIONS	
Stroke.....	2"
Weight.....	2 lbs.
Avg. Air Consumption.....	.3 CFM
Air Inlet Thread.....	1/4" NPT
Air Hose I.D. Size.....	3/8"
Free Speed.....	4,500 RPM
Max. Air Pressure.....	90 PSI
Sound Level.....	93 dBA

## ASWINDKO

### Air Windshield Remover Set

- 20,000 oscillations per minute.
- Sealant cutter that cuts around bonded and encapsulated glass.
- Efficiently cleans and smooths moldings after glass removal.
- Teasing throttle and regulator provide easy speed control.
- Flexible blade mount can be positioned in 12 different ways at 30° increments.
- Rear exhaust directs air away from work.
- Safety lever.



QTY.	PART NO.	DESCRIPTION
1	ASWINDKOBE	57MM Bent Blade
1	ASWINDKO8H	52MM Bent Curved Blade
1	ASWINDKO8J	35MM Flat Nose Straight Blade

SPECIFICATIONS	
Cutting Distance.....	3MM
Weight.....	2.3 lbs.
Overall Length.....	8"
Avg. Air Consumption.....	.4 CFM
Air Inlet Thread.....	1/4" NPT
Air Hose I.D. Size.....	3/8"
Free Speed.....	20,000 RPM
Max. Air Pressure.....	90-120 PSI
Sound Level.....	83 dBA

## CATPR14

### 1/4" Pneumatic Rivet Gun

- Designed for heavy duty and industrial applications.
- Designed for setting all types of rivets in 3/32", 1/8", 5/32", 3/16", 7/32" and 1/4" diameters.
- End cap included.



SPECIFICATIONS:	
Capacity.....	Steel Rivets up to 1/4"
Net Weight.....	4.6 lbs.
Air Inlet.....	1/4" NPT
Air Consumption.....	4.5 CFM
Air Pressure.....	85-90 PSI
Sizes.....	3/32", 1/8", 5/32", 3/16", 7/32", 1/4"
Sound Level.....	72.8 dBA

Power Tools

## ASCF10

### 3-Speed Fan

- 3-speed fan switch.
- Built-in overload protection.
- Moves air up to 300 CFM.
- 1/4 horse power.
- Heavy duty, industrial fan.
- For indoor or outdoor use.
- Energy efficient 180 watts under low setting.
- Heavy duty 3-prong plug with 14AWG x 3C gauge wire.
- Heavy duty plastic housing.
- Portable.
- 8.5 ft. cord CSA approved.
- Moving parts of motor and fan enclosed for safety of operation.
- Plastic pads prevent scratching or damage to work surface and blower unit.
- Motor CSA approved.
- Sturdy handle.
- (2) 110V AC outlets.



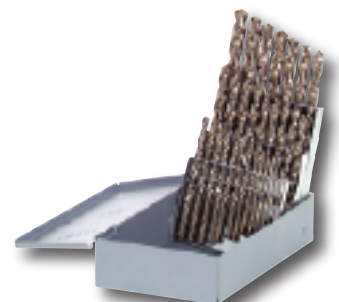
## LS49960

### Locking Air Tool Holder

- Organize air tools with this lockable tool holder.
- Tool can hold up to five pneumatic tools in a 10" space.
- Comes with five slots that fit all popular quick connect fittings from Milton, Lincoln, Amflo and others.
- Can be mounted on a tool box, cart or wall for easy access.
- Locking feature protects your air tools from theft (lock not included).
- Durable powder-coated finish.



FOR OUR COMPLETE LINE OF POWER TOOL ACCESSORIES, PLEASE REFER TO THE INDEX.....



**CCT18IWK**

18V 1/2"  
bluePOWER® Li-Ion  
Impact Wrench Kit



- Uses class leading 3.0Ah Lithium Ion battery for extended use on one charge.
- Less than one hour charging time.
- Under 7 lbs. in weight and balanced design are easy to use for extended periods of time.
- Replaceable carbon brush motor.
- Kit Includes: 18V 1/2" bluePOWER® Li-Ion Impact Wrench, 18V 3.0Ah Li-Ion battery (CCT18LB), Universal Charger (CCTCHRG), and blow molded case.

**SPECIFICATIONS**

Breakaway Torque: .....	600 ft.-lbs.
Max. Torque .....	385 ft.-lbs.
Working Torque.....	280 ft.-lbs.
Weight (with battery).....	6.7 lbs.
Height (with battery).....	10.6"
Length .....	10.5"
Width .....	2.8" (head), 3" (battery)
Free Speed (reverse).....	1,750 RPM
Blows per minute.....	2,100 BPM

CCTCHRG Universal Charger  
CCT18LB 18V Li-Ion Battery, 3.0Ah

**IRW7150K2**

20V 1/2" Impact Two-Battery Kit



- Powered by a high-power Lithium-ion battery, this tool delivers incredible torque and high-speed performance.
- 780 ft.-lbs. reverse torque and 1,100 ft.-lbs. nut busting torque.
- All metal drive train and reinforced housing.
- Ergonomic handle and rubber over-molded grip for increased comfort in extended use.
- Easy-to-use battery interface.
- Kit includes: IRW7150 Impactool™, two (2) Li-Ion Batteries (IRBL2010), Charger (IRBC1120), and carrying case.

**SPECIFICATIONS**

Max. Reverse Torque .....	780 ft.-lbs.
Nut Busting Torque .....	1,100 ft.-lbs.
Impacts per minute.....	2,300 IPM
Length .....	9.4"
Weight (w/battery).....	6.8 lbs.
Free Speed .....	1,900 RPM
Sound Level .....	89 dBA

IRBC1120 IQV20 Battery Charger  
IRBL2010 IQV20 Li-Ion Battery, 3.0Ah

**CCT18IW**

18V 1/2" bluePOWER®  
Li-Ion Cordless Impact  
Wrench



- Uses class leading 3.0Ah Lithium Ion battery for extended use on one charge.
- **Battery and charger not included - sold separately.**
- Less than one (1) hour charging time.
- Under 7 lbs. in weight and balanced design are easy to use for extended periods of time.
- Replaceable carbon brush motor.

**SPECIFICATIONS**

Breakaway Torque: .....	600 ft.-lbs.
Max. Torque .....	385 ft.-lbs.
Working Torque.....	280 ft.-lbs.
Weight (with battery).....	6.7 lbs.
Height (with battery).....	10.6"
Length .....	10.5"
Width .....	2.8" (head) 3" (battery)
Free Speed (reverse).....	1,750 RPM
Blows per minute.....	2,100 BPM

CCTCHRG Universal Charger  
CCT18LB 18V Li-Ion Battery, 3.0Ah

**IRW7150K1**

20V 1/2" Impact One-Battery Kit



- Powered by a high-power Lithium-ion battery, this tool delivers incredible torque and high-speed performance.
- 780 ft.-lbs. reverse torque and 1,100 ft.-lbs. nut busting torque.
- All metal drive train and reinforced housing.
- Ergonomic handle and rubber over-molded grip for increased comfort in extended use.
- Easy-to-use battery interface.
- Kit includes: IRW7150 Impactool™, one (1) Li-Ion Battery (IRBL2010), Charger (IRBC1120), and carrying case.

**SPECIFICATIONS**

Max. Reverse Torque .....	780 ft.-lbs.
Nut Busting Torque .....	1,100 ft.-lbs.
Impacts per minute.....	2,300 IPM
Length .....	9.4"
Weight (w/battery).....	6.8 lbs.
Free Speed .....	1,900 RPM
Sound Level .....	89 dBA

IRBC1120 IQV20 Battery Charger  
IRBL2010 IQV20 Li-Ion Battery, 3.0Ah



## IRD650S

19.2V 1/2" IQv™

### Cordless Drill Driver

- Offers 650 in.-lbs. of torque, providing maximum productivity and durability for professional end users in a wide range of drilling and fastening applications.
- Industrial grade features allow for easy and secure one-handed bit insertion, tightening and removal.
- Two-speed all metal gear train provide superior power and durability.
- Automatic spindle lock.
- Composite housing with metal sub-frame.
- Variable speed trigger.



**SPECIFICATIONS**

Ideal Stall Torque .....	650 in.-lbs.
Weight.....	3.3 lbs.
Li-Ion Weight.....	4.8 lbs.
Length .....	9.2"
Speed .....	360/1,300 RPM
Sound Level .....	70.8 dBA

IRBC20 IQv™ Battery Charger

IRBL192 19.2V IQv™ Lithium Ion Battery, 2.4Ah

## IRD550S

14.4V 1/2" IQv™

### Cordless Drill-Driver

- Offers 550 in.-lbs. of torque, providing maximum productivity and durability for professional end users in a wide range of drilling and fastening applications.
- Industrial grade features allow for easy and secure one-handed bit insertion, tightening and removal.
- Two-speed all metal gear train provides superior power and durability.
- Automatic spindle lock.
- Composite housing with metal sub-frame.
- Variable speed trigger.



**SPECIFICATIONS**

Ideal Stall Torque .....	550 in.-lbs.
Weight.....	3.3 lbs.
Li-Ion Weight.....	4.6 lbs.
Length .....	9.2"
Speed .....	360/1,300 RPM
Sound Level .....	76.1 dBA

IRBC20 IQv™ Battery Charger

IRBL144 14.4V IQv™ Lithium Ion Battery, 2.4Ah

## MKLXT421

18V Li-Ion

### Combo Kit

- LXT® Lithium-Ion battery and optimum charging system produces 430% total lifetime work with 3 times more cycles.
- 1/2" Impact Wrench delivers 325 ft.-lbs. of maximum torque (2,200 IPM and 1,600 RPM).
- 3/8" Impact Wrench packs 155 ft.-lbs. of maximum torque (3,200 IPM and 2,100 RPM).
- 1/2" Driver-Drill has a 4-pole motor for 450 in.-lbs. of torque and weighs only 4 lbs.
- 4-Position Flashlight with Xenon bulbs runs 4 hrs. per charge.
- Makita Lithium-Ion battery provides longer run time, 5 times lower self-discharge (for use any time) and 16 firm holding contact terminals (for constant high power).
- 30-Minute Rapid Optimum Charger communicates with the battery's built-in chip throughout the charging process to optimize battery life by actively controlling current, voltage and temperature; also has a built-in fan to cool the battery to produce more lifetime work.
- Kit includes: 18V 1/2" LXT® Impact Wrench (MKBTW450Z), 18V 3/8" LXT® Impact Wrench (MKBTW253Z), 18V LXT® Driver-Drill (MKBDF452Z), 18V LXT® Flashlight (MKBML185), two LXT® Lithium-Ion 3.0Ah batteries (MKBL1830), 30-Minute Rapid Charger (MKDC18RA), and tool bag.
- MK2339433 Anvil Ring**
- MKBL1830 18V LXT® Lithium-Ion Battery, 3.0Ah**
- MKBML185 18V LXT® Flashlight**
- MKDC18RA 30 Minute Rapid Charger**



Power Tools

## ZNCI3280

18V 1/2" Cordless Impact Wrench Kit

- Ni-MH battery pack lasts up to 40% longer than the standard Ni-Cad battery pack.
- Ni-MH charger will fully charge the older Ni-Cad battery packs.
- Both types of battery packs are interchangeable with tools of the same voltage.
- Increased performance.
- Lug nut buster!
- Composite housing.
- Battery rotates out of the way.
- LED illumination.
- Alloy hammer casing.
- Rubber comfort grip.
- Safety lanyard.
- 1-hour quick charge.
- Kit Includes: 18V 1/2" Cordless Impact Wrench, (2) 18V 2.0Ah Batteries (ZN382253), Battery Cap, 18V Quick Charger (ZN382260), owner's manual, and carrying case with socket storage.



**SPECIFICATIONS**

Max. Torque .....	330 ft.-lbs.
Tool Weight .....	3.95 lbs.
Tool Length.....	9.43"
Free Speed .....	2,000 RPM
Impacts per minute.....	2,600

ZN382260 18V Quick Charger

ZN382253 18V Battery, 2.0 Ah

## MKLCT400W

18V 1/2" LXT®

Li-Ion

4 Piece

Combo Kit



- Kit Includes: 18V Compact Li-Ion Cordless 1/2" Driver-Drill, 18V Li-Ion Cordless Impact Driver, 18V LXT® Li-Ion Flashlight (MKBML185W), 18V LXT® Li-Ion Cordless FM/AM Job Site Radio, two 18V 1.5Ah Li-Ion Batteries (MKBL1815), LXT® Rapid Charger (MKDC18RA), and standard tool bag.

- MKBL1815 18V Lithium Ion Battery, 1.5Ah**
- MKBML185W White Flashlight**
- MKDC18RA Charger**

## CCT144IWK

**14.4V 3/8" Li-Ion Impact Wrench Kit**

- Uses class leading 3.0Ah Lithium Ion battery for extended use on one charge.
- Less than one hour charging time.
- Under 4 lbs. in weight and balanced design are easy to use for extended periods of time.
- Variable speed trigger for better control.
- Kit Includes: 14.4V 3/8" Li-Ion Impact Wrench, 14.4V 3.0Ah Li-Ion battery (CCT144LB), Universal Charger (CCTCHRG), and blow molded case.



**SPECIFICATIONS**

Breakaway Torque .....	275 ft.-lbs.
Max. Torque .....	140 ft.-lbs.
Working Torque.....	115 ft.-lbs.
Weight (with battery).....	3.9 lbs.
Height (with battery).....	10.2"
Length .....	7.8"
Width .....	2.4" (body), 3" (battery)
Free Speed (reverse).....	2,500 RPM
Blows per minute.....	3,000 BPM

CCTCHRG Universal Charger  
CCT144LB 14.4V Li-Ion Battery, 3.0Ah

## CCT144IW

**14.4V 3/8" Li-Ion Cordless Impact Wrench**

- Uses class leading 3.0Ah Lithium Ion battery for extended use on one charge.
- Battery and charger not included - sold separately.
- Less than one hour charging time.
- Under 4 lbs. in weight and balanced design are easy to use for extended periods of time.
- Variable speed trigger for better control.



**SPECIFICATIONS**

Breakaway Torque .....	275 ft.-lbs.
Max. Torque .....	140 ft.-lbs.
Working Torque.....	115 ft.-lbs.
Weight (with battery).....	3.9 lbs.
Height (with battery).....	10.2"
Length .....	7.8"
Width .....	2.4" (body) 3" (battery)
Free Speed (reverse).....	2,500 RPM
Blows per minute.....	3,000 BPM

CCTCHRG Universal Charger  
CCT144LB 14.4V Li-Ion Battery, 3.0Ah

## IRW150KL2

**14.4V 3/8" Impact Li-Ion Starter Pack**



## MKLCT314W

**12V Max Li-Ion Cordless Combo Kit**

- 2-speed driver-drill (0-350 and 0-1,300 RPM) delivers 200 in.-lbs. of torque in an ultra compact size at only 2.2 lbs.
- Variable speed impact driver (0-2,400 and 0-3,200 IPM) provides 800 in.-lbs. of Max. Torque in an ultra compact design at only 2.0 lbs.
- LED Flashlight runs up to 9 hours on a single charge.
- Makita 12V Max Lithium-Ion batteries provide longer run time and lower self-discharge.
- Kit includes: Driver-Drill, Impact Driver, two 12V 1.3Ah Max Batteries (MKBL1014), LED Flashlight (MKLMO1W), Charger (MKDC10WB), and storage case.



MKBL1014 12V Max Li-Ion Battery, 1.3Ah  
MKDC10WB 12V Max Li-Ion Charger  
MKLMO1W 12V Max LED Flashlight

## MKLXDT04CW

**18V Compact Li-Ion Impact Driver Kit**

- 4-pole motor delivers 1,420 in.-lbs. of maximum Torque.
- Variable speed (0-2,300 RPM and 0-3,200 IPM) for a wide range of fastening applications.
- Compact design at only 5-7/16" long; weighs only 2.8 lbs.
- Convenient one-touch 1/4" hex chuck for quick bit changes.
- Rubberized soft grip.
- Built-in LED light with afterglow illuminates the work area.
- Hammer and anvil impact mechanism are manufactured of high quality steel, using a unique heat hardening process.
- Lithium-Ion batteries charge in only 15 minutes in the charger which has a built-in fan to cool the battery.
- Kit includes: Impact Driver, (2) 18V Compact Lithium-Ion Batteries (MKBL1815), Charger (MKDC18RA), Tool Case, Tool Belt Clip.



**SPECIFICATIONS**

Max Torque .....	1,420 in.-lbs.
Net Weight (w/battery).....	2.8 lbs.
Overall Length .....	5-7/16"
Hex Shank .....	1/4"
No Load Speed.....	0-2,300 RPM
Impacts per Minute.....	0-3,200 IPM

MKBL1815 18V Li-Ion Battery, 1.5Ah  
MKDC18RA LXT® Rapid Charger

- Impact mechanism enables the IRW150 Impactool™ to deliver 150 ft.-lbs. of maximum reverse torque with only 14.4 volts.
- Features a steel-reinforced frame. Industrial grade durability.
- Kit includes: 3/8" 14.4V Impactool™ (IRW150), two 14.4V Li-Ion IQv™ batteries (IRBL144), universal IQv™ charger (IRBC20), and carrying case.

**SPECIFICATIONS**

Max. Torque .....	150 ft.-lbs.
Usable Torque Range .....	25-130 ft.-lbs.
Weight.....	3.2 lbs.
Li-Ion Weight.....	4.7 lbs.
Length .....	8.2"
Speed .....	2,200 RPM, 3,000 BPM
Sound Level .....	90.8 dBA

IRBC20 IQv™ Battery Charger  
IRBL144 14.4V IQv™ Lithium Ion Battery, 2.4Ah

Power Tools

## MKLXT311FH

### 18V 1/2" Li-Ion Auto Combo Kit

• 1/2" Driver-Drill features 480 in.-lbs. of torque, 2 speeds: 0-400 and 0-1,500 RPM, built-in LED light, all metal gear construction, weighs 2.8 lbs., and the ergonomic shape fits like a glove. • The 3/8" Impact Wrench features 155 ft.-lbs. of torque, 0-2,100 RPM, built-in LED light, weighs 3.4 lbs., and an ergonomic shape. • The Rapid Charger charges a 3.0Ah battery in 30 minutes. • Kit includes: 1/2" Driver-Drill (MKLXF001Z), 3/8" Impact Wrench (MKBTW253Z), 18V 3.0Ah Li-Ion Battery (MKBL1830), 18V 1.5Ah Li-Ion Battery (MKBL1815), Rapid Charger (MKDC18RA), Flashlight (MKBML185), and tote bag.

**MKBL1815 18V Li-Ion Battery, 1.5Ah**  
**MKBL1830 18V Li-Ion Battery, 3.0Ah**  
**MKBML185 Flashlight**  
**MKDC18RA Charger**



## MKLCT309W

### 12V Max Auto Combo Kit

• 3/8" variable speed Impact Wrench (0-2,400 RPM and 0-3,000 IPM) with 74 ft.-lbs. of torque at only 2.2 lbs. with battery. • 3/8" 2-speed Driver-Drill (0-2,400 and 0-3,200 RPM) delivers 200 in.-lbs. of torque at only 2.2 lbs. with battery. • LED flashlight runs up to 9 hours on a single charge. • Makita 12V Max batteries provide longer run time and lower self discharge. • Kit includes: 3/8" Driver Drill, 3/8" Impact Wrench, LED Flashlight (MKLMO1W), two 12V 1.3Ah Li-Ion Batteries (MKBL1014), Charger (MKDC10WB), and Case.

**MKBL1014 12V Max Li-Ion Battery, 1.3Ah**  
**MKDC10WB 12V Max Li-Ion Charger**



## MKWT01W

### 12V 3/8" Max Impact Wrench Kit

• Motor delivers 74 ft.-lbs. of torque. • Variable speed 0-2,400 and 0-3,200 RPM for a wide variety of applications. • Ultra compact design at only 6-1/2" long and 2.2 lbs. with battery. • Built in LED light illuminates the work area. • Ergonomic shape fits like a glove with even pressure and easy control. • Soft grip handle for added comfort. • Proprietary hammer and anvil are made of the highest quality steel and heat hardened to last longer. • 12V Max batteries provide longer run time and low self discharge. • Kit includes: 3/8" Impact Wrench, two 12V 1.3Ah Li-Ion Batteries (MKBL1014), Charger (MKDC10WB), and case.



**SPECIFICATIONS**

Maximum Torque.....	74 ft.-lbs.
Weight with battery.....	2.2 lbs.
Overall Length.....	6.5"
No Load Speed.....	0-2,400 RPM
Impacts per Minute.....	0-3,000 IPM

**MKBL1014 12V Max Li-Ion Battery, 1.3Ah**  
**MKDC10WB 12V Max Li-Ion Charger**

## ZNCI3240

### 14.4V 3/8" Cordless Impact Wrench Kit

• Ni-MH battery pack lasts up to 40% longer than the standard Ni-Cad battery pack. • Ni-MH charger will fully charge the older Ni-Cad battery packs. • Both types of battery packs are interchangeable with tools of the same voltage. • Increased performance. • Composite housing. • Battery rotates out of the way. • LED illumination. • Alloy hammer casing. • Rubber comfort grip. • Safety lanyard. • 1-hour quick charger. • Excellent for general shop use. • Kit Includes: 14.4V 3/8" Cordless Impact Wrench, (2) 14.4V 2.0Ah Batteries (ZN382239), battery cap, 14.4V Quick Charger (ZN382246), owner's manual, carrying case with socket storage.



**SPECIFICATIONS**

Max. Torque .....	150 ft.-lbs.
Tool Weight .....	2.68 lbs.
Tool Length.....	8.0"
Free Speed.....	2,300 RPM
Impacts per minute.....	3,000 IPM

**ZN382239 14.4V Battery, 2.0Ah**  
**ZN382246 Charger**

## IRR380

### 3/8" 14.4V IQv™ Cordless Ratchet

• Delivers the perfect combination of power, durability, and convenience. • Advanced head design. • Proprietary motor control with variable speed. • Compatible with all 14.4V IQv™ batteries including Lithium-ion.



**SPECIFICATIONS**

Max. Torque .....	70 ft.-lbs.
Usable Torque Range .....	10-60 ft.-lbs.
Net Weight (tool only).....	2.8 lbs.
Weight (w/battery).....	4.1 lbs.
Length .....	12.4"
Anvil Size.....	3/8"
Free Speed.....	225 RPM
Sound Level .....	80.8 dBA

**IRBC20 IQv™ Battery Charger**  
**IRBL144 14.4V IQv™ Lithium Ion Battery, 2.4Ah**

## ZNCI3120

### 12.0V 3/8" Cordless Ratchet Kit

• Maximum torque of 45 ft.-lbs. • Bright LED illumination. • European styling. • Easy reach paddle switch. • Aluminum body and metal alloy ratchet head. • Hand ratcheting capable. • Molded soft grip. • One hour fast charging. • Advanced Ni-Cad battery compatible with other 3000 series 12V tools. • Blow molded case with room for sockets. • Kit includes ratchet, charger, and two batteries.



**SPECIFICATIONS**

Max. Torque .....	45 ft.-lbs.
Bolt Capacity.....	3/8"
Net Weight.....	3.66 lbs.
Length .....	13.5"
Free Speed.....	200 RPM

**ZN382116 12V Battery, 1.2Ah**  
**ZN382109 Charger**

Power Tools

## CORDLESS TOOLS

### CCT108RK

10.8V 1/4" Li-Ion  
Cordless Ratchet Kit

- Max. Torque: 30 ft.-lbs.
- Usable Torque Range: 5-25 ft.-lbs.
- Free Speed: 200 RPM.
- 1.5Ah Lithium battery provides long life and maximum performance on one charge.
- Textured housing provides non-slip grip.
- Weighs less than 2 lbs.
- Easy to use for extended period of time.
- Kit includes: 10.8V 1/4" Li-Ion Cordless Ratchet (CCT108R), 10.8V Charger (CCT108CHRG), 10.8V 1.5Ah Li-Ion Battery (CCT108LB), and soft carrying case.



CCT108CHRG 10.8V Charger  
CCT108LB 10.8V Li-Ion Battery, 1.5Ah

### MKLCT212W

12V 3/8"  
MAX Li-Ion  
Combo Kit



- 2-speed 3/8" driver-drill (0-350 and 0-1,300 RPM) delivers 200 in.-lbs. of max torque in an ultra compact size of only 2.2 lbs.
- Reciprocating saw provides 0-3,300 SPM and a dual-position on/off switch allows for either paddle switch or trigger switch operation.
- Makita 12V Max Li-Ion batteries provide longer run time and lower self-discharge.
- Kit includes: 3/8" Driver-Drill, Reciprocating Saw, (2) 12V Max 1.3Ah Li-Ion batteries (MKBL1014), Charger (MKDC10WB), Contractor Bag, and (2) Reciprocating Saw Blades.

MKBL1014 12V Max Li-Ion Battery, 1.3Ah  
MKDC10WB 12V Max Li-Ion Charger

### CCT108R

10.8V 1/4" Li-Ion Cordless Ratchet



- Powered by a 10.8V 1.5Ah Li-Ion battery (CCT108LB) which provides long life and maximum performance on one charge.
- **Battery and charger not included - sold separately.**
- Textured housing provides non-slip grip.
- Easy to use for extended period of time.

#### SPECIFICATIONS

Max. Torque .....	30 ft.-lbs.
Usable Torque Range .....	5-25 ft.-lbs.
Weight .....	1.6 lbs.
Length .....	9.4"
Free Speed .....	200 RPM

CCT108CHRG 10.8V Charger  
CCT108LB 10.8V Li-Ion Battery, 1.5Ah

### CCT108K

10.8V 1/4" Li-Ion  
Cordless Combo Kit



Kit Includes: Impact Driver (CCT108ID), Hex to square adapter (CBT350SBA), Screwdriver (CCT108SD), 10.8V Charger (CCT108CHRG) and two (2) 10.8V 1.5Ah Li-Ion Batteries (CCT108LB) in a blow molded case.

CBT350SBA Hex to Square Adapter  
CCT108CHRG 10.8V Charger  
CCT108ID 10.8V 1/4" Li-Ion Cordless Impact Driver  
CCT108LB 10.8V Li-Ion Battery, 1.5Ah  
CCT108SD 10.8V 1/4" Li-Ion Cordless Screwdriver

### CCT108ID

10.8V 1/4" Li-Ion  
Cordless Impact Driver

- 1,032 in.-lbs. of maximum torque; working torque of 60-900 in.-lbs.
- Powered by a 1.5Ah Lithium battery which provides long life and maximum performance on one charge.
- **Battery and charger not included - sold separately.**
- Variable speed for precise control.
- Built in trigger activated LED light to show the way in poorly lit areas.
- Hex to square adapter (CBT350SBA) included to allow use as an impact wrench.



#### SPECIFICATIONS

Max. Torque .....	1,032 in.-lbs.
Usable Torque Range .....	60-900 in.-lbs.
Weight (with battery) .....	1.9 lbs.
Height (with battery) .....	7.6 lbs.
Length .....	5.5"
Free Speed .....	1,870 RPM
Battery Type .....	10.8V Li-Ion

CBT350SBA Hex to Square Adapter  
CCT108CHRG 10.8V Charger  
CCT108LB 10.8V Li-Ion Battery, 1.5Ah

### MKLXFD01CW

18V 1/2" Li-Ion  
Cordless Drill Kit



- Makita-built 4-pole motor delivers 480 in.-lbs. of torque.
- 2 speed variable speed 0-400 and 0-1,500 RPM.
- Compact design at only 7-9/16" long.
- Lightweight at only 3.3 lbs. with battery.
- Batteries charge in only fifteen minutes.
- Built in LED light.
- Kit includes: 18V 1/2" Li-Ion Driver Drill, two 18V 1.5Ah Li-Ion Batteries (MKBL1815), Charger (MKDC18RA) and case.

MKBL1815 18V Li-Ion Battery, 1.5Ah  
MKDC18RA Charger

## CCT108SD

10.8V 1/4" Li-Ion  
Cordless Screwdriver



- Powered by a 1.5Ah Lithium battery which provides long life and maximum performance on one charge.
- **Battery and charger not included - sold separately.**
- 12 position clutch.
- Variable speed for precise control.
- Built in trigger activated LED light to show the way in poorly lit areas.
- Compact design is great for work in or around the dash.
- Forward/Reverse lever allows quick one hand direction change.

SPECIFICATIONS	
Max. Torque .....	96 in.-lbs.
Weight (with battery).....	1.9 lbs.
Height (with battery).....	7.6"
Length .....	5.5"
Free Speed .....	400 RPM
Battery Type .....	10.8V Li-Ion

CCT108CHRG 10.8V Charger  
CCT108LB 10.8V Li-Ion Battery, 1.5Ah

## MKFD01W

12V 1/4" MAX  
Driver-Drill Kit



- Compact 2-speed driver-drill delivers 200 in.-lbs. of max torque.
- Variable 2-speed design (0-350 and 0-1,300 RPM) covers a wide range of drilling and driving applications.
- Ultra compact design at only 6-3/16" long and weighs only 2.0 lbs. for reduced operator fatigue.
- Convenient 1/4" hex chuck for quick bit changes.
- Built-in LED light illuminates the work area.
- Kit includes: 12V MAX Li-Ion 1/4" Hex Driver Drill, (2) 12V MAX 1.3Ah Li-Ion Battery (MKBL1014), (1) Battery Charger (MKDC10WB), (1) #2 Double End Phillips® Bit Tip, Tool Holster, and Tool Case.

SPECIFICATIONS	
Max. Torque .....	200 in.-lbs.
Capacities.....	Steel (3/8"), Wood (13/16")
Net Weight (w/Battery).....	2.0 lbs.
Overall Length .....	6-3/16"
Bit Shank.....	1/4" Hex
No Load Speed.....	0-350, 0-1,300 RPM

MKBL1014 12V Max Li-Ion Battery, 1.3Ah  
MKDC10WB 12V Max Li-Ion Charger

## MKDT01W

12V 1/4" MAX  
Impact Driver Kit



- Makita-built motor delivers 800 in.-lbs. max torque in an ultra compact size.
- Variable speed (0-2,400 RPM and 0-3,000 IPM) for a wide range of fastening applications.
- Ultra compact design at only 6-1/8" long and weighs only 2.0 lbs. for reduced operator fatigue.
- Built-in LED light illuminates the work area.
- Convenient 1/4" hex chuck for quick bit changes.
- Kit includes: 12V MAX Li-Ion Cordless Impact Driver, (2) 12V MAX 1.3Ah Li-Ion Battery (MKBL1014), (1) Battery Charger (MKDC10WB), (1) #2 Double End Phillips® Bit Tip, Tool Holster, and Tool Case.

SPECIFICATIONS	
Max. Torque .....	800 in.-lbs.
Net Weight (w/Battery).....	2.0 lbs.
Overall Length .....	6-1/8"
Bit Shank.....	1/4" Hex
No Load Speed.....	0-2,400 RPM
Impacts per Minute.....	0-3,000 IPM

MKBL1014 12V Max Li-Ion Battery, 1.3Ah  
MKDC10WB 12V Max Li-Ion Charger

## MKFD02W

12V 3/8" MAX  
Driver-Drill Kit



- 2-speed driver-drill with 3/8" keyless chuck.
- Makita-built motor delivers 200 in.-lbs. of max torque in an ultra compact design.
- Variable 2-speed design (0-350 and 0-1,300 RPM) covers a wide range of drilling and driving applications.
- Ultra compact design at only 7-7/16" long and weighs only 2.2 lbs. for reduced operator fatigue.
- Built-in LED light illuminates the work area.
- Kit includes: 12V MAX Li-Ion 3/8" Cordless Driver Drill, (2) 12V MAX 1.3Ah Li-Ion Battery (MKBL1014), (1) Battery Charger (MKDC10WB), (1) #2 Double End Phillips® Bit Tip, Tool Holster, and Tool Case.

SPECIFICATIONS	
Max. Torque .....	200 in.-lbs.
Capacities.....	Steel (3/8"), Wood (13/16")
Net Weight (w/Battery).....	2.2 lbs.
Overall Length .....	7-7/16"
No Load Speed.....	0-350, 0-1,300 RPM

MKBL1014 12V Max Li-Ion Battery, 1.3Ah  
MKDC10WB 12V Max Li-Ion Charger

Power Tools

**MKRJ01W**

**12V MAX Li-Ion  
Reciprocating  
Saw Kit**



- Variable speed motor delivers 0-3,300 strokes per minute combined with a 1/2" length stroke to provide faster cutting.
- Makita-exclusive dual-position on/off switch allows for either paddle switch or trigger switch operation.
- "Tool-less" blade change system allows for faster blade installation and removal for increased productivity.
- Compact design at 14" long and only 2.6 lbs. for convenient one-handed operation.
- Includes: 12V Max Li-Ion Cordless Reciprocating Saw, (2) 12V Max 1.3Ah Li-Ion batteries (MKBL1014), Charger (MKDC10WB), and (2) Reciprocating Saw Blades.

SPECIFICATIONS	
Net Weight (w/Battery).....	2.6 lbs.
Overall length.....	14"
Length of stroke.....	1/2"
Max. cutting depth.....	(pipe) 2", (wood) 2"
Strokes per minute.....	0-3,300 SPM

MKBL1014 12V Max Li-Ion Battery, 1.3Ah  
MKDC10WB 12V Max Li-Ion Charger

**MKLM01W**

**12V MAX LED  
Flashlight**



- 800 Lux provides bright illumination.
- Ultra compact LED flashlight runs up to 9 hours per charge.
- Compact design at only 4-3/4" length and weighs only 0.55 lbs. with battery.
- Built-in belt clip for added convenience.
- Soft grip handle provides increased comfort.
- Accepts Makita 12V max Li-Ion battery (NOT included).
- **Battery and charger - sold separately.**

SPECIFICATIONS	
Net Weight (w/Battery).....	0.55 lbs.
Overall Length.....	4-3/4"
Bulb.....	LED
Brightness.....	800 Lux
Continuous Illumination.....	9 hours
Battery.....	12V Max Li-Ion

MKBL1014 12V Max Li-Ion Battery, 1.3Ah  
MKDC10WB 12V Max Li-Ion Charger

Power Tools

**IRTL10**

**High Intensity IQv™ LED  
Task Light**

- State-of-the-art LED technology provides high quality, bright light.
- Onboard microprocessor to work with all IQv™ batteries.
- High quality 4-watt LED output bulb offers up to 50,000 hours of bulb life and up to 10 hours of run-time.
- 160° pivoting, low profile head.
- Drop-resistant housing design features chemical-resistant composite materials.
- Length: 8.3".

IRBC20 IQv™ Battery Charger  
IRBL072 7.2V IQv™ Lithium Ion Battery, 2.4 Ah  
IRBL144 14.4V IQv™ Lithium Ion Battery, 2.4 Ah  
IRBL192 19.2V IQv™ Lithium Ion Battery, 2.4 Ah



**MKBML185W**

**18V Rechargeable  
Compact Flashlight**

- 4-position pivoting head.
- High illumination emits high power at 4,500 Lux.
- Xenon bulb for extra brightness.
- Runs up to 2 hours per charge.
- Compact design, only 11-1/8" length and weighs .75 lbs.
- Accepts all Makita Lithium-ion slide-style batteries.
- Includes: shoulder strap and two (2) flashlight Xenon bulbs.
- **Battery NOT included.**



**MKLXLM03**

**18V LXT® Li-Ion Cordless  
12 LED Flashlight**

- Extra bright 12 LED flashlight provides 240 lumens.
- Flashlight head folds up and down with 7 positive stops and rotates left to right for multiple lighting angles.
- Metal hang hook swivels 360° and folds away for convenience.
- 2-mode on/off switch delivers either full brightness (240 lumens) with 12 LED or half brightness (120 lumens) with 6 LED.
- Up to 22 hours of continuous illumination from a single fully charged battery.
- Slim, compact design at only 15" long and weighs only 2.1 lbs.
- Rubberized soft grip.
- **Battery and charger not included (sold separately).**

MKBL1830 18V LXT® Li-Ion Battery, 3.0Ah  
MKDC18RA 18V LXT® Rapid Charger



**Cordless Tool Rechargeable Flashlights  
(not illustrated)**

PART NO.	DESCRIPTION
MKBML185	18.0V Lithium Flashlight
MKML140	14.4V (uses Pod battery)
MKML903	9.6V (uses Pod battery)

MK1922405 Replacement Bulb/MKML700 (2)  
MK1925461 Replacement Bulb/MKML903  
MK4158075 Replacement Ring/MKML903  
MK4158669 Replacement Lens/MKML903  
MKA90233 Replacement Bulb (2)/MKML140  
MKA90261 Replacement Bulb (2)/MKBML185 & MKML180  
MKGM00000010 Replacement Ring/MKML140  
MKGM00000070 Replacement Lens/MKML140

# MKT00169

## 28 Piece Cordless Impact Drill-Driver Bit Set



Set consists of the following in a storage case:

QTY.	DESCRIPTION	SIZES
1	Hex to Square Drive Adapter	1/4" to 1/4"
4	Magnetic Nutsetters	1/4", 5/16", 3/8", 7/16"
1	3" Stubby Finder/Driver™ Bit	-
15	2" Driver Bits	(2) P1, (4) P2, (2) P3, (1) R1, (3) R2, (1) 6-8, (1) 8-10, (1) T20
7	1" Driver Bits	(1) P1, (2) P2, (1) P3, (1) 6-8, (1) 8-10, (1) R2

# MKT01373

## 38 Piece Cordless Impact Drill-Driver Bit Set



- Works with all drill/drivers and impact drivers.
- Black oxide finish resists corrosion and extends drill bit life. Stays sharper longer.
- Precision, 135° Split Point tip prevents drill bit walking.
- Includes: 1/4" Magnetic Bit Holder, 1/4" Hex to Square Adapter, two Magnetic Nut Drivers (1/4", 5/16"), four Hex Shank Drill Bits (1/16", 1/8", 3/16", 1/4"), twenty-one assorted 1" Insert Bits, six assorted 2" Driver Bits, and three assorted 3.5" Driver Bits.

# JUJC380E

## Cordless Impact Retainer Clips Kit

- Each kit includes clips designed and manufactured to fit all brands of cordless electric tools.
- Each kit contains 3 clips and comes in a 5 pack of kits.



## Cordless Tool Batteries (not illustrated)

PART NO.	DESCRIPTION
CCT108LB	10.8V Li-Ion Battery, 1.5 Ah
CCT144LB	14.4V Li-Ion Battery, 3.0Ah
CCT18LB	18V Li-Ion Battery, 3.0Ah
IRBL144	14.4V IQv™ Lithium Ion Battery, 2.4Ah
IRBL192	19.2V IQv™ Lithium Ion Battery, 2.4Ah
IRBL2010	20V IQV20 Li-Ion Battery, 3.0Ah
MK1939793	9.6VDC Ni-Cd Battery (pod-style-side buttons), 1.3Ah
MKPA14	14.4VDC Ni-Cd Battery (pod-style), 1.3Ah
MKBL1014	12V Max Li-Ion Battery, 1.3Ah
MKBL1815	18V Li-Ion Battery, 1.5Ah
MKBL1830	18V LXT Li-Ion Battery, 3.0Ah
ZN382055	Battery/ZNCI3140, 1.3Ah
ZN382062	Battery/ZNCI3180, 2.0Ah
ZN382116	Battery/ZNCI3120, 1.2Ah

## Cordless Tool Chargers (not illustrated)

PART NO.	DESCRIPTION
CCT108CHRG	10.8V Charger
CCTCHRG	Universal Charger
IRBC20	IQv™ Battery Charger
IRBC1120	20V IQV20 Battery Charger
MKDC10WB	12V Max Li-Ion Charger
MKDC18RA	LXT® Rapid Charger
MKDC1804	Charger
ZN382079	Charger/ZNCI3140
ZN382086	Charger/ZNCI3180
ZN382109	Charger/ZNCI3120

## Cordless Tool Accessories (not illustrated)

PART NO.	DESCRIPTION
MK2319649	Anvil Ring
MK7631981	1/4" Hex Impact Driver Chuck Attachment
MK785517A	3/8" Square x 1/4" Hex Adapter
MKGM00001001	Retaining Ring

**FOR OUR COMPLETE LINE OF POWER TOOL ACCESSORIES, PLEASE REFER TO THE INDEX.....**



# MK9227CX5

**7" Electric Variable Speed Sander/Polisher**



- Fast, powerful polishing for clearcoat finishes.
- Wrap-around hand grip for easy handling at any angle.
- Spindle lock for easy removal of pad.
- Hook-and-Loop back-up pad for easy changing of bonnet.
- Powerful 10 amp motor.
- Convenient speed dial for setting maximum speed.
- Variable Speed 600 - 3,000 RPM for precision sanding and polishing.
- Externally accessible brushes for easy replacement.
- Kit Includes: polisher/sander, 7" foam pad, 7" Hook-and-Loop back-up pad, side handle, loop handle, hex wrench, nylon tool bag, Mechanix Wear® gloves, and four microfiber detail cloths.

Power Tools

SPECIFICATIONS	
Foam Pad.....	7"
Back-Up Pad.....	7"
No Load Speed.....	600 - 3,000 RPM
Spindle Thread.....	5/8" - 11 UNC
AMPS (115V).....	10.0
Overall Length.....	18-1/2"
Net Weight.....	6.6 lbs.

- MK7430525 Backing Pad
- MK743403A 7" Polishing Pad
- MKCB303 Carbon Brush Set

# MKGA4530X

**4-1/2" Angle Grinder**



- Includes 4 additional grinding wheels.
- Powerful 6.0 amp motor delivers 11,000 rpm for the most demanding applications.
- Small circumference barrel grip, only 2-1/4", for added comfort.
- Labyrinth construction seals and protects the motor from dust and debris.
- Refined design at only 3.1 lbs. for increased control.
- Externally accessible brushes for greater serviceability.
- All ball bearing design with metal gear housing for added durability.
- Machined bevel gears provide long service life.

MK74142481 4-1/2" Grinding Wheel

# NB1BP

**Back-up pad for Grip Tite Pads**

- Back-up pad.
- For wool, acrylic, rayon, polyester and foam.



# NB100GT

**Wool Buffing Pad 7-1/2" Grip Tite Pad**

- Deep dish.
- 100% 4 Ply twisted wool.
- Reinforced arbor hole.
- Washable.
- 1-1/2" pile height.
- 7-1/2" diameter.
- Grip tite pad.



# SH77341

**Bonnet Cleaning Tool**

- Cleans and adds lift to buffing pads and bonnets.
- Removes glazed surfaces.
- Fluffs packed wool.
- Cleans without removing pad.
- All steel construction plated for long life and rust resistance.



# MKJR3050T

**Variable Speed Reciprocating Saw with case**



- Variable speed for increased cutting efficiency.
- Powerful 9 AMP motor for continuous operation.
- Long 1-1/8" stroke for faster cutting.
- Internal dust blower system clears debris from the line of cut for better visibility and accuracy.
- Heavy-duty shoe features "tool-less" adjustment.
- All ball and needle bearings for longer tool life.
- Unique clutch system extends tool life by helping to protect the gears should the blade bind.
- Anti-Vibration Technology (AVT™) for 2x less vibration with an exclusive counterbalance design.
- Includes: two blades and plastic tool case.

SPECIFICATIONS	
Length of stroke.....	1-1/8"
Strokes per minute.....	0 - 2800 SPM
AMPS (120V).....	9.0
Overall length.....	17-3/4"
Net Weight.....	7.1 lbs.

- VG372614P5 6" WeldTec™ Bi-Metal Reciprocating Blade, 14 TPI
- VG372618P5 6" WeldTec™ Bi-Metal Reciprocating Blade, 18 TPI
- VG372624P5 6" WeldTec™ Bi-Metal Reciprocating Blade, 24 TPI

# DSWS2000KN

**Work Sharp 2000 with Knife Sharpening System**



- Sharpens chisels, plane irons, gasket scrapers, axes, lawn mower blades, cold chisels, pocket knives, hunting knives, serrated edges, and kitchen knives.
- RPM: 1750; 1/5 Horsepower; air-cooled; 220 grit and 80 grit abrasives included.
- Innovative Edge-Vision™ sharpening method allows cutting edge to be viewed while sharpening or grinding.
- Includes: two slotted Edge-Vision™ wheels, seven abrasives, instructional DVD, and complete Knife Sharpening System.



# TRU-FLATE® NIPPLES AND COUPLERS

• Spring loaded air assisted valve design strengthens coupler seal as line pressure is increased. • Extra locking carbon steel ball bearings provide a tighter fit and accurate alignment for superior performance. • Sleeve guard reduces the potential of accidental disconnect and protects the sleeve under tough working conditions. • A tubular valve support prevents the seal from moving into the air flow path. Also eliminates wear and damage that occurs with competitive blade or knife type valves. (Maximum rated working pressure of 300 PSI.)

## TRU-FLATE® Design "T-Style" Nipples and Couplers

• Very short pilot. • Thickest seal surface. • Wide metal section between ball groove and pilot.

### 1/4" BODY SERIES

#### PL12124 (bulk)

#### PL12125

1/4" Male NPT Nipple



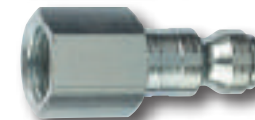
#### PL13125

1/4" Male NPT Coupler



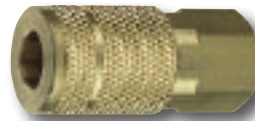
#### PL12135

1/4" Female NPT Nipple



#### PL13135

1/4" Female NPT Coupler



### 3/8" BODY SERIES

#### PL12603

1/4" Male NPT Nipple



#### PL13611

1/4" Female NPT Coupler



## ARO® Design "A-Style" Nipples and Couplers

• 5/16" pilot and ball groove which is nearly round.

### 1/4" BODY SERIES

#### PL12324 (bulk)

#### PL12325

1/4" Male NPT Nipple



#### PL12335

1/4" Female NPT Nipple



#### PL13335

1/4" Female NPT Coupler



## INDUSTRIAL/MILTON® Design "I/M-Style" Nipples and Couplers

• 3/16" pilot and flat bottom V-shaped ball groove. • Conforms to ANSI (NFPA) T3.20.14-1990 dimensions.

### 1/4" BODY SERIES

#### PL12224 (bulk)

#### PL12225

1/4" Male NPT Nipple



#### PL13225

1/4" Male NPT Coupler



#### PL12235

1/4" Female NPT Nipple



#### PL13235

1/4" Female NPT Coupler



#### PL13201

Coupler/Nipple Set

• Consists of one PL12225 (1/4" Male NPT Nipple) and one PL13235 (1/4" Female NPT Coupler).



### 3/8" BODY SERIES

#### PL12527

3/8" Male NPT Nipple



#### PL13527

3/8" Male NPT Coupler



#### PL12537

3/8" Female NPT Nipple



#### PL13537

3/8" Female NPT Coupler



# TRU-FLATE® NIPPLES AND COUPLERS

• Spring loaded air assisted valve design strengthens coupler seal as line pressure is increased. • Extra locking carbon steel ball bearings provide a tighter fit and accurate alignment for superior performance. • Sleeve guard reduces the potential of accidental disconnect and protects the sleeve under tough working conditions. • A tubular valve support prevents the seal from moving into the air flow path. Also eliminates wear and damage that occurs with competitive blade or knife type valves. (Maximum rated working pressure of 300 PSI.)

## LINCOLN® Design "L-Style" Nipples and Couplers

• Long 3/4" pilot. • Round bottomed ball groove.

### 1/4" BODY SERIES

#### PL12425

1/4" Male NPT Nipple



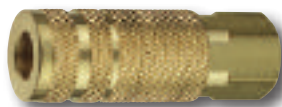
#### PL12435

1/4" Female NPT Nipple



#### PL13435

1/4" Female NPT Coupler

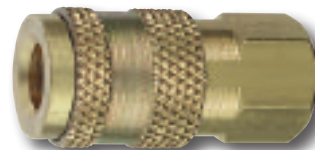


Power Tool Accessories

## PL13511

Universal Coupler

• 1/4" Female NPT coupler fits the three most popular air line plugs. • Can be used with Tru-Flate, Industrial/Milton and Aro Design 1/4" nipples. • Quality, deluxe "push to connect style". • Heavy duty brass construction. • Unique tubular valve construction allows greater air flow.



## AFC90

1/4" Hi-Flo™/HVLP Coupler - Brass

• For use with high air usage air tools, HVLP and conventional paint spray guns. • Solid brass body with hardened steel sleeve for strength and corrosion resistance. • Six-ball locking mechanism. • Max. air flow @ 30 PSI: 15.5 SCFM; @ 80 PSI: 23 SCFM • Pressure drop <2.0 PSI. • Fully automatic "push-to-connect" operation. • 300 PSI maximum working pressure.



## AFCP91

1/4" Hi-Flo™ Plug - Steel

• Ideal for use with sanders, grinders and other high air usage tools. • Zinc plated, heat treated steel construction for long life in demanding applications. • Six-ball locking mechanism for secure connection and better wear distribution. • Max. air flow @ 80 PSI: 23 SCFM • Pressure drop <2.0 PSI • Fully automatic "push-to-connect" operation. • 300 PSI maximum working pressure.



## Color Code System for Standard Interchanges

• 1/4" Body, 1/4" NPT. • Easily match couplers and plugs among the standard interchanges (Automotive = [Milton®] Blue, Industrial = [Tru-Flate®] Red, ARO® = Green). • Color coding hose lines eliminates tool contamination. • Color Coding System makes it easy to connect the correct tool to a specific dedicated hose line. • This product is designed for use on compressed air lines only. Select fittings to match the inside diameter and outside diameter of the hose. If properly matched to the dimensions shown, the resulting connection to the hose will be secure. • Each set includes: (4) Plug FNPT, (6) Plug MNPT, (2) Coupler FNPT, (2) Coupler MNPT.



### LMA71458B

14 Piece Green 1/4" NPT Coupler & Plug Kit

QTY.	PART NO.	DESCRIPTION
2	LMA71410B	Green 1/4" FNPT Coupler
2	LMA71420B	Green 1/4" MNPT Coupler
4	LMA71430B	Green 1/4" FNPT Plug
6	LMA71440B	Green 1/4" MNPT Plug

LMA71410B Green 1/4" FNPT Coupler  
 LMA71420B Green 1/4" MNPT Coupler  
 LMA71430B2PK Green 1/4" FNPT Plug(2/pk)  
 LMA71440B2PK Green 1/4" MNPT Plug(2/pk)

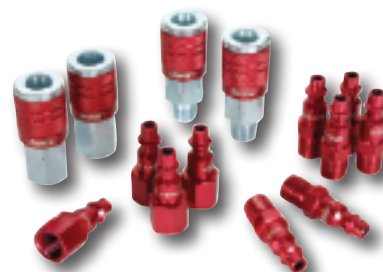


### LMA72458C

14 Piece Blue 1/4" NPT Coupler & Plug Kit

QTY.	PART NO.	DESCRIPTION
2	LMA72410C	Blue 1/4" FNPT Coupler
2	LMA72420C	Blue 1/4" MNPT Coupler
4	LMA72430C	Blue 1/4" FNPT Plug
6	LMA72440C	Blue 1/4" MNPT Plug

LMA72410C Blue 1/4" FNPT Coupler  
 LMA72420C Blue 1/4" MNPT Coupler  
 LMA72430C2PK Blue 1/4" FNPT Plug(2/pk)  
 LMA72440C2PK Blue 1/4" MNPT Plug(2/pk)



### LMA73458D

14 Piece Red 1/4" NPT Coupler & Plug Kit

QTY.	PART NO.	DESCRIPTION
2	LMA73410D	Red 1/4" FNPT Coupler
2	LMA73420D	Red 1/4" MNPT Coupler
4	LMA73430D	Red 1/4" FNPT Plug
6	LMA73440D	Red 1/4" MNPT Plug

LMA73410D Red 1/4" FNPT Coupler  
 LMA73420D Red 1/4" MNPT Coupler  
 LMA73430D2PK Red 1/4" FNPT Plug(2/pk)  
 LMA73440D2PK Red 1/4" MNPT Plug(2/pk)

## COERC071201S

### Green Button Pneumatic Coupler 1/4" Female

- **High flow profile (7.2-7.4 European profile).** • 1/4" FNPT female thread coupler; 1/4" size body. • Maximum working pressure: 175 PSI; Air flow 37.70 SCFM @ 14.5 PSI. • Weight: 7 oz. • Non-marring impact resistant composite-cylindrical design - will not scratch painted or finished surfaces. • Nitrile seals for leak free connection. • Blue body with green button recessed to prevent accidental disconnect. • Easy one handed connection/disconnection. • Applications: Pneumatic Tools, Paint & Body Shops, Pneumatic piping.



## COURC061201S

### Red Button Pneumatic Coupler 1/4" Female

- **Truflate® profile.** • Non-scratch Push Button Pneumatic Coupling. • Fully automatic, easy one handed connection and disconnection. • Cylindrical construction of high composite material with no external metallic parts; nitrile seals prevent scratching of finished surfaces. • "Thru O-ring" design reduces leaks. • Air flow at 90 psi: 36 SCFM. • Blue body/Red button.



## COESIO71201S

### Green Button HVLP Safety Pneumatic Coupler 1/4" Female

- **HVLP (High Flow) profile.** • Innovative quick release coupling for compressed air that avoids all risk of dangerous "hose whip" or accidental disconnection. • Vent the pressure and disconnect pneumatic systems and/or tools with a single push of the button. • Effortless instantaneous coupling. • 1/4" FNPT female thread coupler 3/8" size body. • Maximum working pressure 175 PSI; Air flow 82.20 SCFM @ 14.50 PSI. • Weight: 7 oz. • Heavy duty non-marring composite body material with tough mechanical characteristics. • Resists abrasion, impacts, crushing, vibrations and corrosion. • Nitrile seals for leak free connection. • Black body; Green button. • Anti-static - allows static electricity transfer.



## COARC061201S

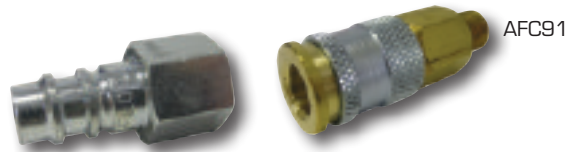
### Gold Button Pneumatic Coupler 1/4" Female

- **ARO 210 Profile.** • Perfect cylindrical design of high impact composite material will not scratch finished surfaces. • Lightweight - 1.75 oz. • Push button system is easily connected and disconnected using one hand, for rapid and effortless use. • O-ring design prevents leakage when connected or disconnected. • Fully interchangeable with all common sockets and plugs with the ARO 210 profile. • Cylindrical design with integrated gold push button prevents any accidental disconnection; the circuit cannot be opened without inserting the plug. • Manufactured of high impact composite material with nitrile seals. • Features single release function, push to connect action, compressed air application, temperature range of +5°F to 160°F, flow capacity @ 90 PSI - 29.20 SCFM, 175 PSI working pressure, and push button locking device.



Power Tool  
Accessories

### 1/4" Coupler and Plug



AFCP90

AFC91

- Quick coupler and plug system provides up to 50% more air flow than conventional couplers with minimal pressure drop. • Unrestricted air flow for maximum performance for air tools, spray guns, and other air powered equipment. • 300 PSI maximum working pressure.

PART NO.	DESCRIPTION
AFC91	1/4" Hi-Flo/HVLP Brass Coupler, 1/4" body x 1/4" MNPT Thread
AFCP90	1/4" Hi-Flo Steel Plug, 1/4" body x 1/4" FNPT Thread

## COIRC061201S

### Silver Button Pneumatic Coupler 1/4" Female

- **Industrial/Milton® profile.** • Fully automatic, easy one handed connection and disconnection. • Cylindrical construction of high composite material with no external metallic parts; nitrile seals prevent scratching of finished surfaces. • "Thru O-ring" design reduces leaks. • Interchangeable with all sockets and plugs meeting the MILC-4109 and ISO 6150/B specifications.



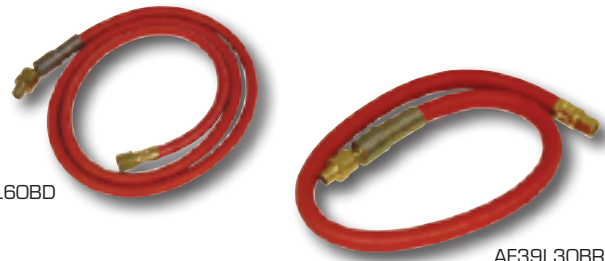
## COISIO61201S

### Blue Button Safety Pneumatic Coupler 1/4" Female

- **Industrial/Milton Profile.** • 1/4" FNPT female thread coupler 1/4" size body. • Maximum working pressure 174 PSI. • Lightweight: 2.6 oz. • Material: Non Marring impact resistant composite-cylinder design. • Nitrile seals for leak free connection. • Black body; Blue button recessed to prevent accidental disconnect. • Safety features conform to ISO 4414 and ISO 6150. • User has to perform just one action, push the button. No mistakes possible. Uses the compressed air on the supply side of the coupling to sustain the first locking phase. Only when the compressed air is purged will it automatically click to the 2nd phase and release the plug. Depending on the volume of compressed air, the purge and release time will be a few seconds for a 35 foot 3/8" hose and practically nothing for an air tool. • Easy one handed connection and disconnection with safety design.



### Swivel End Lead-In Hose Assemblies



AF27L60BD

AF39L30BRET

- 1/4" male NPT ball swivel and 1/4" female NPT hose fitting. • Working pressure of 300 PSI. • Has tension relieving spring guard which prevents kinking and twisting. • 360° solid brass ball swivel fitting.

PART NO.	HOSE I.D.	HOSE LENGTH
AF27L60BD	1/4"	60"
AF39L30BRET	3/8"	30"

# HOSES

## ZillaWhip™ Hoses



- Increases longevity of the main hose.
- Reduces user fatigue by eliminating weight of coupler/plug.
- Ball swivel increases mobility in tight work spaces, 30° tilt in any direction.
- Improves air tool ergonomics.
- Engineered hybrid polymer air hose.
- Extreme all-weather flexibility.
- Temperature range: -40° to 150° F.
- Anodized aircraft aluminum ends.
- 300 PSI maximum working pressure.
- Excellent abrasion resistance.
- Reinforced bend restrictor.
- 3/8" sizes feature female NPT x male NPT ball swivel.
- 1/2" sizes feature female NPT x male NPT swivel.

PART NO.	DESCRIPTION
LMHFZ1202YW3S	1/2" x 2 ft. ZillaWhip™ Hose
LMHFZ1204YW3S	1/2" x 4 ft. ZillaWhip™ Hose
LMHFZ1405YW2B	1/4" x 5 ft. ZillaWhip™ Hose
LMHFZ3802YW2B	3/8" x 2 ft. ZillaWhip™ Hose
LMHFZ3804YW2B	3/8" x 4 ft. ZillaWhip™ Hose
LMHFZ3806YW2B	3/8" x 6 ft. ZillaWhip™ Hose

## FLEXZILLA® Air Hoses



- Offers superior flexibility for tight radius bends in both cold and warm environments.
- Engineered polymer-blend material permits use in environments where general purpose PVC and rubber hoses may become too stiff.
- No memory, lays flat.
- Kink resistant under pressure.
- Extreme all-weather flexibility, even in sub-zero temperatures! (-40° to 150°F).
- Maximum working pressure: 300 PSI.
- 3:1 safety factor.
- Excellent abrasion-resistant outer cover.
- Anodized aircraft aluminum fittings, lead free.
- Includes bend restrictors that reduce wear and tear, prolonging the life of the hose.

PART NO.	HOSE INSIDE DIAMETER	HOSE OUTSIDE DIAMETER	HOSE LENGTH	MNPT FITTINGS
LMHFZ1250YW3	1/2"	0.74"	50 ft.	3/8"
LMHFZ1450YW2	1/4"	0.46"	50 ft.	1/4"
LMHFZ38100YW2	3/8"	0.61"	100 ft.	1/4"
LMHFZ3825YW2	3/8"	0.61"	25 ft.	1/4"
LMHFZ3835YW2	3/8"	0.61"	35 ft.	1/4"
LMHFZ3850YW2	3/8"	0.61"	50 ft.	1/4"

## 3/8" Pneumatic Air Hoses

- Quality heavy duty rubber air hoses for garage, shop, industry, home and many other uses.
- 1/4" NPT fittings.
- 300 PSI.
- Color: red.

PART NO.	DESCRIPTION
AF55225AE	25 ft. - Rubber
AF55250AE	50 ft. - Rubber



## LMHFZW5850YW34

### Flexzilla® Water Hose 5/8" x 50 ft.

- 5/8" x 50 ft. premium hybrid polymer water hose.
- Extreme all-weather flexibility (35° to 150° F).
- Crush proof nickel plated male and female GHT.
- 3/4"-1-1/2 Male and Female GHT.
- Abrasion resistant.
- Rugged bend restrictors.
- Kink resistant - ribbed inner core design.
- Coils easily.



## LMHFZ38250YW

### 3/8" x 250 ft. Bulk Flexzilla® Hose

- 250 ft. spool of Flexzilla® Zillagreen™ air hose.
- Premium hybrid polymer.
- Lays flat, no memory.
- Superior bend radius.
- Kink resistant under pressure.
- Extreme all-weather flexibility, even in sub-zero temperatures! (-40° to 150°F)
- Maximum working pressure: 300 PSI.
- 3:1 safety factor.
- Excellent abrasion-resistant outer cover.
- Includes bend restrictor that reduces wear and tear, prolonging the life of the hose.



**NOTE: Fittings, ferrules, hose crimper, and hose dies not included.**

## LMRP900375

### Reusable End for 3/8" Flexzilla®

- Reusable NPT anodized aluminum fitting for 3/8" Flexzilla® and Flexzilla® PRO air hose.
- Spiral bend restrictor increases hose flexibility.
- Easily repair hose using 2 wrenches.



## LMRP901375

### Reusable Splicer for 3/8" Flexzilla®

- Reusable anodized aluminum hose splicer for 3/8" Flexzilla® and Flexzilla® Pro air hose.
- Easily repair hose using 2 wrenches.



## LMHFZ1250K1

### Flexzilla® 3/4" Impact Accessory Kit

- Most everything needed for 3/4" guns.
- 1/2" hose with 3/8" fittings.
- This kit gives the technician the flow that is needed to operate heavy duty air tools.



Kit includes the following:

QTY.	PART NO.	DESCRIPTION
1	LMHFZ1204YW3S	Flexzilla® Whip Hose 1/2" x 4 ft.
1	LMHFZ1250YW3	Flexzilla® Air Hose 1/2" x 50 ft.
1	LMA76610G	Black 3/8" FNPT Coupler
1	LMA76620G	Black 3/8" MNPT Coupler
2	LMA76630G	Black 3/8" FNPT Plug

LMA76640G Black 3/8" MNPT Plug

## LML8250FZ

3/8" x 50 ft. Flexzilla®

### Hose Reel

HOSE REEL FEATURES: • Auto retract/auto latch hose mechanism. • Hose latches in 18" intervals. • Durable polypropylene. • Adjustable hose stopper. • 3 ft. lead-in hose. • Swivel mounting bracket for wall or ceiling. • Features Flexzilla® premium air hose with bend restrictors.

AIR HOSE FEATURES: • Lays flat, no memory. • Superior bend radius. • Kink resistant under pressure. • Extreme all-weather flexibility, even in sub-zero temperatures (-40° to 150° F). • Maximum working pressure: 150 PSI. • 3:1 safety factor. • Excellent abrasion-resistant outer cover. • Includes bend restrictor that reduces wear and tear, prolonging the life of the hose.



## AF505HRRET

### Retractable Hose Reel

- All steel construction for industrial applications.
- Applications on Air, Water, Oil or Grease.
- Spring powered auto rewind. • Ideal for mounting on the wall, floor or ceiling. • Guide arm adjustable for different angles. • Valve assembly handles up to 250 PSI and 25 CFM. • Locking ratchet brake.
- 3/8" x 50' Hose.



## AF502HRRET

### Non-Retractable Hose Reel

- Spring tension brake. • All steel construction. • Solid brass 1/4" fittings. • Comfortable swivel handle. • Can be mounted in any direction. • Reel capacity is 100' of 5/8" O.D. hose. • Hose not included.



## CAT250AS

1/4" NPT Blue

### Anodized Swivel Fitting

- Connects portable air tools to an air line. • Lightweight, non-marring composite construction. • Swivels 360° at two pivot points. • Industrial quality. • Thread size: 1/4" NPT. • Attaches to tools such as nail guns, impact wrenches, air hammers, ratchets, and drills. • Do not exceed 150 PSI.



## PL21605

### Full Swivel Hose End

- Eliminates kinked and twisted air line by swiveling a full 360°. • Use on air lines, tools and compressor connections. • 1/4" NPT male fitting x 1/4" NPT female fitting. • 150 PSI maximum working pressure.



## AF3404RET

### 3-in-1 Air Manifold

- Strong, lightweight machined aluminum construction. • Accepts three outlet hoses or couplers. • Supply 3 air operated tools from a single supply hose; mount to pipe at workbench or overhead for use by several workers; mount three different style couplers on one manifold. • Inlet Thread: 1/4" NPTF. • Outlet Thread: 1/4" NPTF.



## DEV130525

### QC3 Air Filter and Dryer

- A perfect solution for restoration shops, customizing shops, and hobbyists. • High performance filtration with only 2 PSI pressure drop. • Three-stage filtering with 0.1 micron rating produces clean, oil and humidity free air resulting in outstanding paint finishes by removing water and particulates, oil, and humidity. • Quick change filter cartridge is easy to maintain - bowl removal tool included. • Larger filter media and longer life desiccant than disposable dryers: 4x more filter area, 16x more desiccant, and low life-cycle costs. • Complete air control enabling better color match and coating thickness. • Includes: inlet shut off valve, regulator and gauge, humidity indicator and bowl drain.



DEV130524 Replacement Filter Cartridge

## PL24301

### Compact Air Line Filter

- Removes airborne solid contaminants, pipe scale, rust, condensate, etc. which may cause wear or failure of pneumatic components. • Maximum operating pressure is 150 PSI at 125°F. • Operating temperature range from -10°F to +175°F. • 50 SCFM. • Element: 40 microns. • Port size: 1/4" NPTF. • Drain Type: Manual Float. • Polycarbonate Bowl: 5 oz. capacity. • Overall Height: 6.1".



## DEV130042

### Air Line Control Unit with Regulator

- Prevent costly redo's by keeping out water and dirt. • 5 micron particle filter. • 100 CFM unit with air regulation. • "Tornado" action separator ring swirls incoming air to remove water. • Quick release bowl guard and spin-off filter element provide quick, one-minute filter changes. • "Flex-drain" allows fast removal of water collected in the bowl. • Includes air line filter, regulator, gauge and valve.



## SH77337

### Air Regulator with Gauge

- Prevents harmful pressure changes in the airline. • Controls pressure at the tool. • Incremental reading from 0-160 lbs. • 1/4" female thread on both ends.



## SH77602

### Aluminum Air Regulator

- Increases or decreases pressure as required. • Eliminates line pressure drop at the tool. • 1/4" NPT male x 1/4" NPT female fittings.



## TE98500

### Air Tool Oiler

- Protects pneumatic tools plus ends air line contamination. • Patented, direct to tool oiler ends tool burn out, stops rust, and increases torque. • High quality aircraft aluminum stem, machined to 1/4" NPT. • Oil reservoir fabricated of high impact plastic. • Use on all 3/8" and 1/2" air impact guns, air wrenches, body shop air tools and pneumatic hammers. • 1/4" NPT female outlet x 1/4" NPT male outlet.



# PROTECTION AND MAINTENANCE

## Air Tool Covers [not all illustrated]

- Vinyl material boot, some with ribbed construction, protects tool from external damage.
- Absorbs some tool vibration to help prevent fatigue.



PART NO.	USED FOR:
<b>AIR RATCHET COVERS</b>	
IR107BOOT	Air Ratchet Cover/IRC107XPA
IR109BOOT	Air Ratchet Cover/IR109XPA
IR2015BOOT	Air Ratchet Cover/IR2015MAX, IR2025MAX
<b>IMPACT WRENCH COVERS</b>	
IR2145MBOOT	3/4" Impact Wrench/IR2145QIMAX
IRC2115P32	3/8" Impact Wrench/IR2115TIMAX
IRC2135P32	1/2" Impact Wrench/IR2135TIMAX, IR2135QTIMAX, IRC8000
PR2125C	Air Tool Cover/CAT2135, CAT2150
PR232BL	1/2" Impact Wrench/IRC232A, Blue Cover
PR232NG	1/2" Impact Wrench/IRC232A, Neon Green Cover
PR232NO	1/2" Impact Wrench/IRC232A, Neon Orange Cover
PR3125C	Air Tool Cover/CAT3125
PR350C	1/2" Impact Wrench/CAT350
PR351HDC	3/8" Impact Wrench/CAT351HD
PR352HDC	1/4" Impact Wrench/CAT352HD
PR4150C	1/2" Impact Wrench/CAT4150, CAT4152
PRC2112	3/8" Impact Wrench/IRC2115
<b>AIR HAMMER COVERS</b>	
PRCAH	Air Hammer Cover/CAT250AHMV
PRCAHVR	Air Hammer Cover/CAT3190AHMV, CAT3250AHMV

Power Tool Accessories

## CATMG2

### Mini Grease Gun

- Lubricate hammer mechanisms of impact wrenches with grease-type fittings.
- Needle-nose nozzle fits most flush-type fittings.
- Vacuum primed, lightweight.
- Tube holds up to 3 oz. of lubricant.
- Maintenance free construction.
- One hand operation with easy spring return trigger.
- 0.7MM, 1.0MM, and 1.5MM tips included.

**CATRSMG6210** 1.0MM Tip  
**CATRSMG6215** 1.5MM Tip  
**CATRSMGG07** 0.7MM Tip



## SM16600

### Air Tool Oiler Dispenser

- Adjustable oil nozzle to oil air tools each time they are utilized.
- Align the air tool inlet under oil dispenser head design to oil the air tool or other items in one easy motion.
- The mounting bracket can be adjusted for right-handed, left-handed, or center mounting positions (mounting screws not included).
- An 8 oz. translucent oil reservoir easily locks to the dispenser head allowing the reservoir to be removed so additional oil can be added.
- The adjustment knob on the top of the dispenser head can adjust the oil flow so each air tool can receive the exact amount of oil required (Oil not included).
- Saves time and protects air power tools by correctly applying the proper amount of oil for each tool according to the manufacturer specifications.



## CATLBKT

### Premium Air Tool Lube Kit

- Extend the life of your tool.
- Boost performance.
- Inhibits rust and corrosion while reducing downtime and maintenance cost.
- Works on both metal and composite housing air tools.
- Kit Includes: 4 oz. Air Tool Lubricant, 4 oz. Super Duty Synthetic Impact Wrench Grease, compact screw-on grease gun, and 30° and 50° grease gun tips for added versatility.

**CATATG** 4 oz. SD Impact Wrench Grease  
**CATATL** 4 oz. Air Tool Lubricant



## CATATL12PK

### 4 oz. Air Tool Lubricant



- Removes debris and deposits that slow down the speed of your tool.
- Inhibits rust and prevents moisture build-up.
- Comes in a box of twelve (12) individual 4 oz. bottles.

## IR1001LB

### Impact Wrench Grease

- Designed specifically for Ingersoll-Rand impact wrenches that use grease in the hammer mechanism.
- One pound can.



## Retaining Rings (Not Illustrated)

- To be used on bluePOWER® Impact Wrenches.
- Come in a package of 10.

PART NO.	DESCRIPTION	USED ON
CAT12RET	1/2" Retaining Ring	CAT2135, CAT4150, CAT4152
CAT34RET	3/4" Retaining Ring	CAT3125
CAT38RET	3/8" Retaining Ring	CAT2150

## Retainer Clip and O-Ring Kits

- Each Kit contains clip(s) and O-Ring(s) designed and manufactured to fit all brands of 1/4" to 3/4" air tools. [See chart below].



PART NO.	DRIVE SIZE	BAGS PER KIT	EACH BAG CONTAINS	
			O-RINGS	CLIPS
JUJC2505	1/4"	5	3	3
JUJC38012	3/8"	12	3	3
JUJC50012	1/2"	12	3	3
JUJC7505	3/4"	5	1	1

**JUJC38PB** Peg Board-type Truck Display Rack

## JUJCP135

### Snap Ring Tool Kit

- Tool Kit Contains: Snap Ring Pliers for 1/4", 3/8" and 1/2" tools, Clipad™ for 3/8" and 1/2", removal and installation tips, O-ring removal hook, deburring pads, one 3/8" Snap Ring Kit (3/pk.), one 1/2" Snap Ring Kit (3/pk.), and built-in business card holder.
- Designed to work with all major brands of air and electric impact wrenches.



## JUJCP751

### Snap Ring Tool Kit

- Tool Kit Contains: Snap Ring Pliers for 3/4" and 1" tools, Clipad™ for 3/4" and 1", removal and installation tips, O-ring removal hook, deburring pads, one 3/4" Snap Ring Kit, one 1" Snap Ring Kit, and built-in business card holder.
- Designed to work with all major brands of air and electric impact wrenches.



## LS49960

### Locking Air Tool Holder



- Organize air tools with this lockable tool holder.
- Tool can hold up to five pneumatic tools in a 10" space.
- Comes with five slots that fit all popular quick connect fittings from Milton, Lincoln, Amflo and others.
- Can be mounted on a tool box, cart or wall for easy access.
- Locking feature protects your air tools from theft (lock not included).
- Durable powder-coated finish.

### Ratchet Head Kits (Not Illustrated)

- To be used on CAT-prefixed Air Ratchets.

PART NO.	DESCRIPTION	USED ON
CAT250ARRRHK	1/4" Ratchet Head Kit	CAT250ARR
CAT1000MRRRHK	1/4" Ratchet Head Kit	CAT1000MRR
CAT3500HDRHK	3/8" Ratchet Head Kit	CAT3500HD
CAT4000SDRRHK	1/4" Ratchet Head Kit	CAT4000SDR
CAT4050SDRRHK	3/8" Ratchet Head Kit	CAT4050SDR
CAT8000BPRHK	3/8" Ratchet Head Kit	CAT8000BP
CAT9000HK	3/8" Ratchet Head Kit	CAT9000IBP

### Miscellaneous Parts (Not Illustrated)

PART NO.	DESCRIPTION	USED ON
IR2112K75	Button Kit	IR2115TIMAX
IR2115A626	Anvil Assembly	IR2115TIMAX
IR2115D93	Trigger Assembly	IR2115TIMAX
IR2135K303	Inlet Parts Kit	IR2135TIMAX, IR2135QTIMAX, IRC8000
IR2135K75	Button Kit	IR2135TIMAX, IR2135QTIMAX
IR2135TK2	Tune-Up Kit	IR2135TIMAX, IR2135QTIMAX, IRC8000
IR231BA626	Anvil Assembly	IR2135TIMAX, IR2135QTIMAX, IRC8000

## ZZ4HPS

### 4 Piece Pneumatic Hammer and Punch Set



- Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
OF1972	Cold Chisel	OF1982	4" Long Body Hammer
OF1979	Taper Punch 3/8" Dia. Point	OF1997	Taper Punch 1/8" Dia. Point

## ZZ4MTS

### 4 Piece Pneumatic Chisel Muffler/Tailpipe Set



- Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
OF1965	Muffler-Tailpipe Remover	OF1967	"Outside" Muffler Cutter
OF1966	"Inside" Muffler Cutter	OF1968	Tailpipe Cutoff Tool

## ZZ4SMS

### 4 Piece Pneumatic Chisel Sheet Metal Set



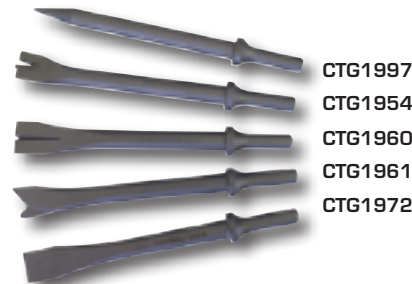
- Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
OF1958	Slotted Panel Cutter	OF1975	Rivet and Bolt Cutter
OF1959	Sheet Metal Cutter	OF1976	Scraper

## CTG5ACS

### 5 Piece Air Chisel Set

- .401 shank diameter.
- Overall Length: 7".
- Packaged in protective plastic pouch.



- Set consists of:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CTG1954	Panel Cutter	CTG1972	Cold Chisel
CTG1960	Spot Weld Breaker	CTG1997	Taper Punch
CTG1961	Radius Cutter		

Wear Safety Goggles!

# AIR CHISELS AND PUNCHES

## Cold Chisels



- Cut bolts, nuts, tees, angles or frame members.
- Every mechanic, whatever his trade, will find dozens of uses.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
OF1972	6" Cold Chisel	OF1973	8" Cold Chisel

## OF1997 Taper Punch



- Has 1/8" diameter point for driving out pins and rivets.
- Length: 6-1/2"; Weight: 6 oz.
- Shank size: .401.

## OF1979 Taper Punch



- 3/8" diameter point.
- Punch holes in sheet metal, drive rivets or hinge pins or use for peening or crimping bodies.
- Length: 6"; Weight: 6 oz.
- Shank size: .401.

## OF1982 Long Body Hammer



- For any hammering operation such as U-joints, ball joints and for body forming work.
- Longer length is needed for many quick change holders to provide a better striking force.
- Length: 4".

## OF1981 Hammer



- For any hammering operation such as U-joints and ball joints and for body forming work.
- 1" diameter.
- Length: 3-1/2".
- .401 Parker shank.

## OF1965 Muffler and Tailpipe Remover



- Separate telescoped tubing without damage to inner section.
- Length: 8-1/4"; Weight: 8 oz.
- Shank size: .401.

## OF1966 "Inside" Muffler Cutter



- Design of the convex cutting edge fits the inside of the muffler.
- Length: 8-1/4"; Weight: 8 oz.
- Shank size: .401.

## OF1967 "Outside" Muffler Cutter



- Concave cutting edge fits the outside of the muffler.
- Length: 8-1/4"; Weight: 8 oz.
- Shank size: .401.

## OF1968 Tailpipe Cutoff Tool



- Thin blade with sharp concave edge cuts off tailpipes with ease.
- Length: 7-3/4"; Weight: 8 oz.
- Shank size: .401.

## OF1958 Slotted Style Panel Cutter



- Leaves a clean and smooth edge with the cut curling up through the slot.
- Length: 6"; Weight: 6 oz.
- Shank size: .401.

## OF1959 Sheet Metal Trimmer



- Not designed to be a panel cutter.
- For use on lighter weight sheet metal.
- Use as an edger without stretch or distortion eliminating much grinding.
- Length: 6"; Weight: 6 oz.
- Shank size: .401.

## OF1975 Rivet and Bolt Cutter



- Shears rivets and bolts in bumpers, grills, frames and brackets.
- Length: 6-1/2"; Weight: 6 oz.
- Shank size: .401.



**OF1976**

**Scraper**



- Removes gaskets, rust, undercoating, paint, remove floor tile, plaster or roof coatings. • 1-1/8" wide blade is offset for hand clearance.
- Length: 8"; Weight: 8 oz. • Shank size: .401.

**OF1995**

**Tie Rod Separator**



- Tapered prongs made from a single piece of alloy heat-treated drop forging. • The specific opening between tines of 21/32" does the job quickly and properly. • .401 Parker shank fits any standard pneumatic gun.

**OF1956**

**Double-Cut Body Ripper**



- Service tool with two cutting edges. • Length: 6"; Weight: 6 oz.
- Shank size: .401.

**OF1996**

**Ball Joint Separator**



- Designed to handle ball joints with a minimum of extra shock to the assembly. • Opening between jaws: 15/16". • .401 Parker shank fits any standard pneumatic gun.

**OF1960**

**Spot Weld Breaker**



- For cutting weld spots, molding, and rivets. • Length: 6-1/4"; Weight: 6 oz. • Shank size: .401.

**OF1986**

**Cold Chisel**



- Cuts bolts, nuts, tees, angles or frame members. • Extra 18" length for hard-to-reach areas; Weight: 1 lb. • Shank size: .401.

**OF1971**

**Splitting Tool**



- Slice through bushings, cylinder sleeves and muffler connections. • Length: 8-1/4"; Weight: 8 oz. • Shank size: .401.

**OF2010**

**1-1/8" Pneumatic Scraper**



- Removes gaskets, rust, undercoating, paint, remove floor tile, plaster or roof coatings. • 1-1/8" wide blade is offset for hand clearance. • Length: 18". • Shank size: .401.

**OF1991**

**Control Arm Bushing Remover**



- Front end tool, pneumatic chisel. • Concave design holds cutting edge against bushing. • Black oxide finish with polished shank. • Length: 6"; Weight: .33 lbs. • .401 Parker shank.

**OF2011**

**3/8" Pneumatic Taper Punch**



- Has 3/8" diameter point for driving out pins and rivets. • Length: 18". • Shank size: .401.

**OF1993**

**Tie Rod Sleeve Breaker**



- Vibration breaks loose rust/corrosion from threads of tie rod assembly to permit easy adjustment or removal. • Length: 3-1/2"; Weight: .28 lbs. • .401 Parker shank.

**OF2012**

**1/8" Pneumatic Taper Punch**



- Has 1/8" diameter point for driving out pins and rivets. • 18" length allows for extended reach. • Shank size: .401.

**CATBGK**

**Five Piece Blow Gun Kit**

- Lightweight, easy to control blow gun made from high impact plastic.
- Rubber tips to seal and clean cavities or bored holes.
- Extended trigger length on blow gun for variable throttle control.



Kit contains the following in a blow molded plastic tray:

PART NO.	DESCRIPTION
CATBGK1	4-1/2" Blow Gun
CATBGK2	Star Tip (complies with OSHA requirements that limits output to 30 psi)
CATBGK3	1/2" Rubber Tip
CATBGK4	1" Rubber Tip
CATBGK5	1-3/8" Rubber Tip

**Blow Guns**



- Lightweight sturdy body for added comfort and durability.
- Resistant to most automotive fluids and solvents.
- Variable flow trigger for precise air control.

PART NO.	DESCRIPTION
CAT1051	4" Blow Gun
CAT1151	13" Blow Gun
CAT1161	13" Bent Blow Gun
CAT1251	20" Blow Gun
CAT1261	20" Bent Blow Gun

Power Tool Accessories

**CATB24G**

**24" Adjustable Blow Gun**



- Includes one OSHA compliant STAR tip (restricted air flow) and one rubber tip, both screw on for positive fit.
- Revolvable angle directional tip.
- Tip of blow gun can be swiveled 360° and locked into place by use of adjusting knob.
- Ideal for hard-to-reach places.
- Patented.
- Tube position switch knob.
- Gentle twist switch.
- Adjustable length: 12-1/2" to 24-1/2" (320MM - 610MM).

CATB24G1 Rubber Tip  
CATB24G2 Star Tip

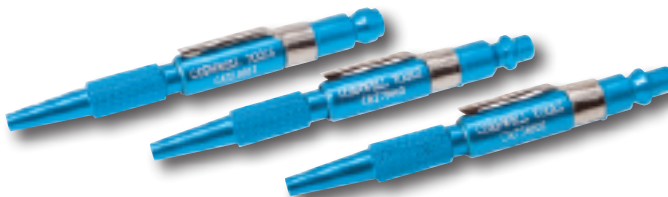
**TE99180**

**In-Line Blow Gun**

- Small, compact, lightweight, durable and easy to use.
- Mounts permanently in line between air hose and coupler.
- Precision machined from aircraft aluminum.
- Air stream nozzle has a natural angle.
- Has OSHA nozzle to meet requirements of special relief hole in nozzle to limit pressure to 30 PSI when dead ended in air line of 150 PSI or less.
- 1/4" NPT Female x 1/4" NPT Female.



**Adjustable Blow Guns**



- Designed to fit 1/4" coupler bodies.
- Adjustable air flow.
- Knurled nozzle and pocket clip.

PART NO.	DESCRIPTION
CAT18601	Fits Tru-Flate® design 1/4" coupler bodies
CAT18603	Fits Industrial/Milton® design 1/4" coupler bodies
CAT18605	Fits Aro® design 1/4" coupler bodies

**CAT201RET**

**Rubber Tipped Blow Gun**



- Clean molds or delicate surfaces where a metal tip might scratch or harm critical areas.
- Rubber tip provides seal between blow gun and fluid line or other openings.

CAT201T Tip/CAT201RET, CAT205ATD

**CAT205ATD**

**Heavy Duty Bent Tip Blow Gun**



- Bent, rubber tipped design for blowing out automatic transmissions and oil passages.
- Clean molds or other delicate surfaces where a metal tip might scratch or harm critical areas.
- Rubber tip provides seal between blow gun and fluid line or other openings.

CAT201T Tip/CAT201RET, CAT205ATD

**CAT220TD**

**Siphon Spray Gun**

- Blows air/liquid mixture (solvent, soap solution) to clean floors, walls, machinery, etc.
- 8 feet of plastic suction tubing.



## ACMA680CS

### Typhoon™ Blow Gun

- Powerful 1/4" NPT blow gun that delivers 34 CFM and 2.1 pounds of thrust at 125 PSI.
- Ideal for heavy-duty clean-up and blow-off of even the heaviest shavings and chips.
- Lightweight, ergonomic sleek design.
- Meets or exceeds OSHA regulations.
- Variable flow trigger.
- Comes with high flow tip (1/2-27 UNS thread).



**SPECIFICATIONS**

Weight.....	6.2 oz.
Dimensions.....	10.5"L x 5.75"W x 2.125"H.
Sound Level @ 140 PSI.....	85 dBA

ACMA680HFMBL High Flow Tip

## LMAG1200KIT

### Cyclone® F3™ Blow Gun Kit

- Ideal for cleaning bench tops, machinery and equipment, garages, and confined spaces.
- Ergonomic pistol grip and trigger reduces user fatigue.
- 1/4" NPT (female) inlet.
- Large storage hook.
- OSHA compliant.
- Durable cast aluminum body.
- High volume.
- Kit includes the following: Cyclone™ F3™ blow gun body, 6" extension, Chip shield, Xtreme-Flo™ safety nozzle, Quiet-Flo™ safety nozzle (satisfies OSHA safety standard for noise reduction), and Tri-Thrust™ safety nozzle.



## ACMA681CS

### Typhoon™ Pro Blow Gun

- Powerful 1/4" NPT chrome-plated aluminum body blow gun that delivers up to 34 CFM and 2.1 pounds of thrust at 125 PSI.
- Ideal for heavy-duty clean-up and blow-off of even the heaviest shavings and chips.
- Lightweight, ergonomic sleek design.
- Meets or exceeds OSHA regulations.
- Variable flow die-cast zinc trigger.
- Comes with high flow chrome plated brass tip (1/2-27 UNS thread).
- Can be disassembled for easy maintenance and internal cleaning.



**SPECIFICATIONS**

Weight.....	12 oz.
Dimensions.....	10.5"L x 5.75"W x 2.125"H.
Sound Level @ 140 PSI.....	85 dBA

ACMA681HFMBL High Flow Tip

## LMAG1502

### Cyclone® F1™ Blow Gun

- 1/4" NPT Blow Gun features an ergonomically superior gun body for maximum comfort and control which reduces operator fatigue.
- A variable flow trigger regulates air flow precisely.
- Delivers maximum flow.
- The durable gun body is ideal for extreme use.
- Unique to Cyclone® is the modular accessory system, allowing the user to customize the gun extension length and tips for a given application.
- Meets or exceeds OSHA standards.
- Xtreme-Flo™ nozzle.
- 35 CFM @ 100 PSI.
- 97 dBA.



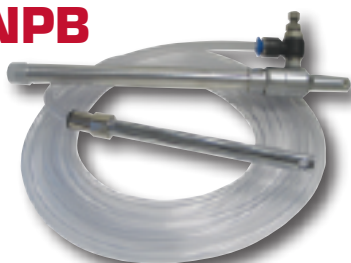
Power Tool Accessories

- LMAG1006 6" Extension Tube
- LMAG1012 12" Extension Tube
- LMAG1090 Xtreme-Flo™ Safety Tip
- LMAG1091 Quiet-Flo™ Safety Tip
- LMAG1093 Tri-Thrust™ Safety Tip

## ACMA680SNPB

### Blow Gun Siphon Tip Kit with 6" Extension

- Ideal for applications which require the distribution of a liquid over a large surface area.
- Appropriate for commercial and residential cleaning applications such as wash-down of engines, machinery, driveways, decks, patios, etc.
- Air volume can be adjusted with the variable flow trigger.
- Liquid can be metered with the flow controller.
- Flow can be regulated from a strong stream to a fine mist, and maximum delivery is approximately 16 gallons per hour.
- Includes an 8 ft. polyvinyl tube, a metal pick-up tube to keep hose in solution, an extension tip and a flow controller.
- Use with ACMA680CS or ACMA681CS 1/4" blow guns.



## LMAG1202

### Cyclone® F3™ Blow Gun

- 1/4" NPT Blow Gun features an ergonomically superior gun body for maximum comfort and control which reduces operator fatigue.
- A variable flow trigger regulates air flow precisely.
- Delivers maximum flow.
- The durable gun body is ideal for extreme use.
- Unique to the Cyclone® is the modular accessory system, allowing the ability to customize the gun extension length and tips for a given application.
- Cyclone® meets or exceeds OSHA standards.
- 48 CFM @ 100 PSI.
- 99 dBA.



- LMAG1006 6" Extension Tube
- LMAG1012 12" Extension Tube
- LMAG1090 Xtreme-Flo™ Safety Tip
- LMAG1091 Quiet-Flo™ Safety Tip
- LMAG1093 Tri-Thrust™ Safety Tip

### LMAG1202 and LMAG1502 Accessories



- The following accessories are to be used with the LMAG1202 Cyclone® F3™ Blow Gun and LMAG1502 Cyclone® F1™ Blow Gun.
- Combine extensions and nozzles as needed, up to 6 ft.

PART NUMBER	DESCRIPTION
LMAG1006	6" Extension Tube
LMAG1012	12" Extension Tube
LMAG1090	Xtreme-Flo™ Safety Tip
LMAG1091	Quiet-Flo™ Safety Tip
LMAG1093	Tri-Thrust™ Safety Tip

**DROP SHIP ONLY!!**  
**SINGLE AND TWO STAGE COMPRESSORS**

**ACC216V**

**5 HP Two Stage Compressor**

- No magnetic starter required.
- Cast iron cylinder. • Stainless steel valves. • 1/2" outlet.
- Dimensions: 29"L x 20"D x 68"H.



**ACC218V**

**5 HP Two Stage Compressor**

- No magnetic starter required.
- Cast iron cylinder. • Stainless steel valves. • 1/2" outlet.
- Dimensions: 39"L x 24"D x 73"H.



**ACC318V**

**5 HP Two Stage Compressor**

- Magnetic starter included.
- Cast iron cylinder. • Stainless steel valves. • 3/4" outlet.
- Dimensions: 39"L x 24"D x 77"H.



**ACC318VL**

**7.5 HP Two Stage Compressor**

- Magnetic starter included.
- Cast iron cylinder. • Stainless steel valves. • 1/2" outlet.
- Dimensions: 39"L x 24"D x 77"H.



**ACC5026VP**

**2 HP Single Stage Compressor**

- No magnetic starter required.
- Cast iron cylinder. • Stainless steel valves. • 1/2" outlet.
- Dimensions: 26"L x 26"D x 51"H.



**ACC6061V**

**3.5 HP Single Stage Compressor**

- No magnetic starter required.
- Cast iron cylinder. • Stainless steel valves. • 1/2" outlet.
- Dimensions: 30"L x 22"D x 68"H.



**ACC3G3HKL**

**14 HP Compressor**

- 14 HP Kohler 2 Stage Gasoline Engine.
- Electric and recoil start. • Cast iron cylinder. • Stainless steel valves. • 3/4" outlet. • Dimensions: 44-1/2"L x 19"D x 45"H.



PART NO.	HP	Pump Stages	Voltage	Max. Pressure	ACFM	Tank Size
ACC3G3HKL	14	2	-	175	25.3 @ 100	30H ASME
ACC216V	5	2	208-230/1PH	165	15.3 @ 100	60V ASME
ACC218V	5	2	208-230/1PH	175	15.3 @ 100	80V ASME
ACC318V	5	2	208-230/1PH	175	18.5 @ 100	80V ASME
ACC318VL	7.5	2	208-230/1PH	175	25.3 @ 100	80V ASME
ACC5026VP	2	1	115-230/1PH	130	7.1 @ 100	26VP ASME
ACC6061V	3.5	1	208-230/1PH	130	12.4 @ 100	60V ASME

**Contact your local Cornwell Dealer for complete details!**

Power Tool Accessories

**Phenolic Backing Discs**

- Reinforced, lightweight with desired flexibility for sanding.
- Contoured center with 7/8" ID hole.
- Max. RPM: 6000.
- Available sizes: 4" and 5".



PART NO.	DESCRIPTION
SH7727800	4" Phenolic Backing Disc
SH7727900	5" Phenolic Backing Disc

**Surface Preparation Discs**

- Thick layer of abrasive grain bonded to a reinforced non-woven nylon pad.
- Recommended for removing heavy rust and oxidation and blending machine marks and other surface flaws.
- Type III - Roll-on/roll-off style.



PART NO.	SIZE	QTY.	GRIT
MACW62777	2"	50	Coarse
MACW62778	2"	50	Medium
MACW62781	3"	25	Coarse
MACW62782	3"	25	Medium

**DA-Sanding Pads**



PART NO.	DESCRIPTION
CAT6NVPAD	6" Non-Vacuum, Vinyl Face DA pad
CAT6NVHPAD	6" Non-Vacuum, Hook Face DA pad
CAT6VHPAD	6" Vacuum, Hook Face DA pad

**SH77519**  
**6" Diameter Sanding Pad**

- Dual action pad features tapered foam molded directly to plastic back.
- Ideal for fine finishing and feathering.
- Low profile with hardened threaded insert.
- Maximum RPM: 10,000.



**SM35400**  
**Super Stripe Stripper**

- Removes pin-striping tape or double faced tape from body and side mouldings.
- Works fast; lasts four times longer than discs requiring high RPM's.
- Works best at low RPM's even on cordless drills (1500 RPM max.).



**Power-Lock Disc Holders**

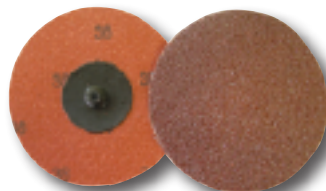
- Medium density holders designed for contour work, feathering and edging into corners.
- Type III - roll-on/roll-off style.

PART NO.	DESCRIPTION
MACW62775	3" Disc Holder
MACW62776	2" Disc Holder



**Abrasive Discs**

- Ideal for stock removal, deburring, blending and cleaning.
- Type III - Roll-on/roll-off style.

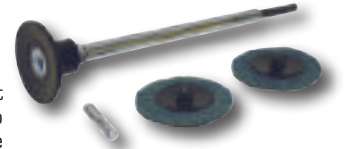


PART NO.	SIZE	QTY.	GRIT	PART NO.	SIZE	QTY.	GRIT
MACW62767	2"	100	36	MACW62771	3"	50	36
MACW62768	2"	100	60	MACW62772	3"	50	60
				MACW62773	3"	50	120

**LS22500**

**Gasket Cleaning Tool**

- Cleans all hard to reach gasket surfaces.
- Use with a die grinder to quickly clean gasket surfaces on Dodge pickups, oil pans, water pumps and other inaccessible applications.
- Equipped with a floating guide shaft so the user can steer the abrasive pad around the gasket surface.



LS22570 Abrasive Pad

**NBJ73T**

**3" Backing Plate**

- Backing plates for 3" Velcro pads.
- Tread size: 5/8" x 11" or 14MM.
- 1/4" shaft.
- 3" diameter.



**NB21130**

**Twisted Wool - Coarse, All Surfaces**

- 100% twisted wool buffing pad.
- 3" with velcro rolox locking system.
- Great for getting into tight areas.
- Diameter: 3".



**NB23530**

**Fibral - Coarse, All Metals Polishing**

- Fibral engineered buff-it material is the latest innovative technology for buffing, incorporating high quality natural and hi-tech fibers with velcro mounting system.
- Diameter: 3".
- Patented wavy edge for closer buffing.



**NB24743**

**Lambs Wool Ultra Fine - Polishing Pad**

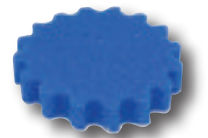
- Genuine black lambs wool pad.
- Diameter: 3".



**NB30340**

**Blue Foam - Fine Polishing Pad**

- Blue foam buffing pad with wavy edge.
- For soft polish.
- Diameter: 3".



**NB33201**

**Orange Polishing Pad**

- Removes scratches.
- Highest quality imported German Polyurethane foam.
- Reticulated breathable foam structure for safe and easy buffing.
- Advanced foam formulas guarantee superior performance.
- Rounded edge contours better to any surface.
- Unique adhesive laminate bonds Velcro permanently to foam.



Power Tool  
Accessories

**NB1BP**

**Back-up pad for Grip Tite Pads**

- Back-up pad.
- For wool, acrylic, rayon, polyester and foam.



**NB100GT**

**Wool Buffing Pad  
7-1/2" Grip Tite Pad**

- Deep dish.
- 100% 4 Ply twisted wool.
- Reinforced arbor hole.
- Washable.
- 1-1/2" pile height.
- 7-1/2" diameter.
- Grip tite pad.



**NB1050P**

**Plastic Polishing Compound**

- For clear and colored plastics, fiberglass, headlight covers and painted surfaces.



**IR328B8258**

**8" Pad**

- To be used on the IR328B Heavy Duty Geared Orbital Sander.



**IR4151A810**

**Muffler Assembly**

- To be used on the IR4151 Super Duty Vacuum-Ready 3/16" Random Orbital Sander.



**SH77616**

**Cut-Off Wheels**

- Ideal for removing clamps, rusted bolts, welds and cutting sheet metal.
- 3" O.D. x 1/16" thick reinforced abrasive wheels.
- Standard 3/8" arbor hole.
- Maximum RPM: 20,372.
- Package of 5.



**ASCW3100**

**Cut-Off Wheels**

- 46 Grit; 3" diameter; 1/16" thickness.
- Designed for cut-off applications involving angle iron, re-bar, pipe and bar stock.
- Also use in cutting sheet metal, metal hardware or fasteners.
- 3/8" arbor hole fits all brands of pneumatic cut-off tools.
- Comes in a plastic bin with 100 wheels per box.



**KD31037**

**JACOBS® Hand-Tite Keyless Chuck**

- 3/8" to 1/2" (3/8"-24M mount).
- Reduces bit changeover time and boosts productivity.
- Patented design achieves higher gripping power than standard keyed chucks.
- No key to misplace.
- Non-rusting, high performance body with sure-grip sleeve for comfort and hand tightening efficiency.



**KD30354**

**3/8" Keyless Chuck**

- Faster bit changes.
- No chuck keys to lose.
- Can also be used on hammer drills.
- Reduces bit slippage.
- 3/8 - 24 mount.
- Capacity: 1/16" - 3/8".



**JACOBS® Multi-Craft® Chucks**

- Features time-tested design normally found in industrial-grade chucks.



PART NO.	DESCRIPTION
KD30247	3/8" Chuck (3/8"-24M) & Key
KD30598	1/2" Chuck (3/8"-24M) & Key

**SWST13**

**Master Chuck Key**

- Opens 1/4" to light duty 1/2" chucks.
- Opens 127 different chucks.
- Save wear on chucks by always having the proper key size.
- Manufactured of treated steel with a black oxide finish.
- Squared center opens standard acetylene tanks.



**Magnetic Chuck Keys**

- Strong neodymium magnets for attachment close to the worksite or toolbox.
- Cast from alloy steel for strength.
- Each key offers 4 different sizes to cover the most popular chucks available.



PART NO.	DESCRIPTION
LS12050	Small Magnetic Chuck Key
LS12060	Large Magnetic Chuck Key

**Drill Chuck Keys**

- For all popular power drill chucks.
- Precision formed heads for accurate fit.
- Hardened and tempered for long life.



PART NO.	DESCRIPTION
VA14907	1/4" and 3/8" Chuck Key - 1/4" Pilot
VA14919	3/8" Chuck Key - 15/64" Pilot

**CCR130**

**Universal Chisel Retainer**

- Holds both standard .401" and "no turn" air chisels.
- Universal thread fits most air hammers.
- Precision ground, hardened steel components ensure safe, long lasting operation.



**SH77440**

**Abrasive Cutting Disc Arbor**

- Convert any die grinder to abrasive disc cutter.
- 1/4" and 3/8" arbor attachments.
- **WARNING:** Use safety guard and always wear safety goggles.



**SH77350**

**Quick Change Retainer Spring**

- One piece high tensile retaining spring for .401 Parker shank tools.
- Fits all hammers; rust resistant finish.
- Remover lever for quick tool change.



Power Tool Accessories

**Nut Setter Master Sets**

- Designed to be used in Quick Change Power Drive Cordless Tools.
- Each set includes Magnetic and Hollow Point Nut-Setters.
- All drivers are 2-9/16" long with 1/4" hex power drive shanks.
- Cold forged tools, high alloy steel, heat treated.
- Handy storage case.

**VMNS100**

**12 Piece SAE  
Nut Setter  
Master Set**



Set consists of the following Nut Setters:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
VMNS250	1/4" Deep Recess	VMNS250M	1/4" Magnetic
VMNS312	5/16" Deep Recess	VMNS312M	5/16" Magnetic
VMNS375	3/8" Deep Recess	VMNS375M	3/8" Magnetic
VMNS437	7/16" Deep Recess	VMNS437M	7/16" Magnetic
VMNS500	1/2" Deep Recess	VMNS500M	1/2" Magnetic
VMNS562	9/16" Deep Recess	VMNS562M	9/16" Magnetic

**VMNSM100**

**12 Piece Metric  
Nut Setter  
Master Set**



Set consists of the following Nut Setters:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
VMNSM8	8MM Deep Recess	VMNSM8M	8MM Magnetic
VMNSM10	10MM Deep Recess	VMNSM10M	10MM Magnetic
VMNSM11	11MM Deep Recess	VMNSM11M	11MM Magnetic
VMNSM12	12MM Deep Recess	VMNSM12M	12MM Magnetic
VMNSM13	13MM Deep Recess	VMNSM13M	13MM Magnetic
VMNSM14	14MM Deep Recess	VMNSM14M	14MM Magnetic

**VG3018006B**

**29 Piece Turbomax Drill Bit Set**

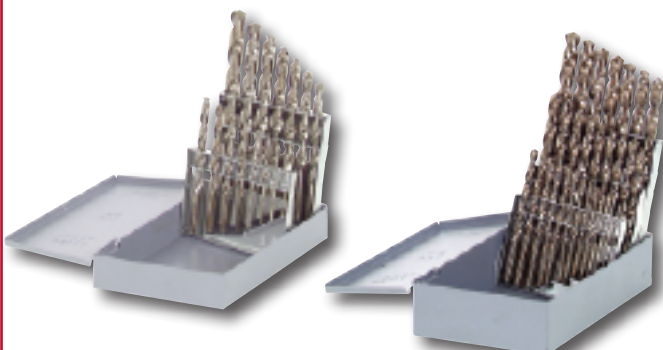
- 29 piece set covers 1/16" through 3/8" in 1/64th increments, plus 25/64" through 1/2" with reduced shanks in 1/64th increments.
- High performance metal drilling for portable drill users, works well on curved surfaces.
- High speed steel features a black body and gold flute.
- Self-centering TURBOMAX tip for clean entry and fast starts; stays sharp longer.
- Three flattened shank on 3/16" and above for better chuck grip.
- Oxide Treatment to resists corrosion, helps prevent bit from rusting.
- TURBOMAX Tip for up to 10 times faster starts.
- Three flattened Shanks above 11/64" eliminates slippage in drill chuck.
- Reduced Shank above 3/8" allows the use of larger drill bits in a 3/8" chuck.



PART NO.	SIZE	TWIST LENGTH	OVERALL LENGTH
VG73104	1/16"	7/8"	1-7/8"
VG73105	5/64"	1"	2"
VG73106	3/32"	1-1/8"	2-1/4"
VG73107	7/64"	1-1/2"	2-5/8"
VG73108	1/8"	1-5/8"	2-3/4"
VG73109	9/64"	1-3/4"	2-7/8"
VG73110	5/32"	2"	3-1/8"
VG73111	11/64"	2-1/8"	3-1/4"
VG73112	3/16"	2-5/16"	3-1/2"
VG73113	13/64"	2-7/16"	3-5/8"
VG73114	7/32"	2-1/2"	3-3/4"
VG73115	15/64"	2-5/8"	3-7/8"
VG73116	1/4"	2-3/4"	4"
VG73117	17/64"	2-7/8"	4-1/8"
VG73118	9/32"	2-15/16"	4-1/4"
VG73119	19/64"	3-1/16"	4-3/8"
VG73120	5/16"	3-3/16"	4-1/2"
VG73121	21/64"	3-5/16"	4-5/8"
VG73122	11/32"	3-7/16"	4-3/4"
VG73123	23/64"	3-1/2"	4-7/8"
VG73124	3/8"	3-5/8"	5"
VG73425	25/64" Red. Shnk.	3-3/4"	5-1/8"
VG73426	13/32" Red. Shnk.	3-7/8"	5-1/4"
VG73427	27/64" Red. Shnk.	3-15/16"	5-3/8"
VG73428	7/16" Red. Shnk.	4-1/16"	5-1/2"
VG73429	29/64" Red. Shnk.	4-3/16"	5-5/8"
VG73430	15/32" Red. Shnk.	4-5/16"	5-3/4"
VG73431	31/64" Red. Shnk.	4-3/8"	5-7/8"
VG73432	1/2" Red. Shnk.	4-1/2"	6"

Power Tool  
Accessories

**Cobalt Drill Bit Sets in Metal Index**



- Designed for drilling stainless steel and other hard abrasive materials.
- Organized for accessibility in rugged steel box with hinged index.
- Bit sizes clearly visible.
- Sizes 1/8" and above 135° split point.

PART NO.	PIECES	DRILL SIZES
VA12638	15	1/16" to 1/2" by 32nds
VA12645	29	1/16" to 1/2" by 64ths

# ATC30520

## 5 Piece Left Hand Cobalt Drill Bit Set

- Constructed of M-42 8 percent cobalt high speed steel for super abrasive resistance in tough metals.
- Heavy duty spiral flute design produces faster chip ejection.
- Shorter cutting lips reduce torque for drilling in high tensile strength materials.
- 135-degree split point reduces feed pressure for easier penetration without work hardening.
- Ideal for use with screw extractors.



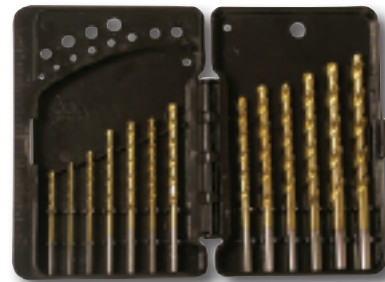
Set consists of the following part number and sizes:

PART NO.	SIZE	PART NO.	SIZE
ATC30505	5/64"	ATC30516	1/4"
ATC30507	7/64"	ATC30519	19/64"
ATC30510	5/32"		

# VA12385

## 13 Piece Titanium Drill Bit Set

- Titanium drill bits offer the best durability and speed for repetitive drilling applications in steel, alloy steel, wood and plastic.
- The titanium coating lasts six times longer than standard high speed steel drill bits.
- Titanium drills can be resharpened.
- Each bit features a 135° split point for fast starts and minimal walking or skating.
- Bit sizes under 1/8" have 118° standard point configuration.
- Grip tight tri-flat shank for positive chuck hold.
- Titanium coating hardens bit surface for improved durability in tough, repetitive applications, as well as acts as lubricant, requiring less torque and provides less heat build-up.
- Speed Helix augers dust away from tip more quickly to reduce heat.
- Set includes one each of bit sizes 1/16" through 1/4" in 1/64" increments.
- Comes in black plastic case.



Power Tool Accessories

# VG4935643

## 12 Piece Hex Shank Drill Bit Set

- 1/4" Hex Shank works in Lock-N-Load Extensions as well as all drill chucks.
- Fits all 3/8" & 1/2" corded and cordless drills.
- Black Oxide coating to reduce corrosion.
- 135° Split Point minimizes bit "walk".
- Applications: Automotive, MRO, portable drills, stationary drill press.



Set consists of the following Part Number and sizes:

PART NO.	DESCRIPTION	Overall Length (in.)	Flute Length (in.)
VG4935632	1/16" Hex Shank Drill Bit	2-5/8"	3/4"
VG4935633	5/64" Hex Shank Drill Bit	2-3/4"	1"
VG4935634	3/32" Hex Shank Drill Bit	3"	1-5/16"
VG4935635	7/64" Hex Shank Drill Bit	3-7/16"	1-1/2"
VG4935636	1/8" Hex Shank Drill Bit (2)	3-1/2"	1-5/8"
VG4935637	9/64" Hex Shank Drill Bit	3-3/16"	1-7/8"
VG4935638	5/32" Hex Shank Drill Bit	3-15/16"	2-1/16"
VG4935639	3/16" Hex Shank Drill Bit	4-1/4"	2-3/8"
VG4935640	7/32" Hex Shank Drill Bit	4-1/2"	2-5/8"
VG4935641	1/4" Hex Shank Drill Bit	4-3/4"	2-7/8"
VG4935703	2" Quick Change Adaptor	-	-

# UN10502

## 3 Piece Unibit® Step Drill Set

- Easy to sharpen, fractional self-starting UNIBIT® HSS step drills.
- Non-skid self-starting tip eliminates skidding and need for center punching and provides sure starts, even on curved surfaces.
- Multiple steps in a single bit; fractional.
- 3 flattened shank prevents slipping in chuck.
- Single-fluted cutting edge helps assure true round holes and allows greater control with less vibration.
- Laser marked sizes.
- Hardened industrial grade high speed molybdenum steel for long life.



PART NO.	NO. OF HOLES	HOLE SIZES/ INCREMENTS(in.)	STEP DEPTH (in.)	SHANK (in.)
UN1	13	1/8 thru 1/2 in 1/32 increments	1/8	1/4
UN2	6	3/16 thru 1/2 in 1/16 increments	3/8	1/4
UN3	9	1/4 thru 3/4 in 1/16 increments	1/8	3/8

PART NO.	WIRE GAUGE	OVERALL LENGTH (in.)	FLUTE LENGTH (in.)
VA12354	1/16	1-7/8	7/8
VA12355	5/64	2	1
VA12356	3/32	2-1/4	1-1/4
VA12357	7/64	2-5/8	1-1/2
VA12358	1/8	2-3/4	1-5/8
VA12359	9/64	2-7/8	1-3/4
VA12360	5/32	3-1/8	2
VA12361	11/64	3-1/4	2-1/8
VA12362	3/16	3-1/2	2-5/16
VA12363	13/64	3-5/8	2-7/16
VA12364	7/32	3-3/4	2-1/2
VA12365	15/64	3-7/8	2-5/8
VA12366	1/4	4	2-3/4

## High Speed Steel Drill Bit Sets

- Organized for accessibility.
- Metal boxes are rugged steel with hinged indexes and bit sizes clearly visible.
- Jobbers length fractional drill sizes.



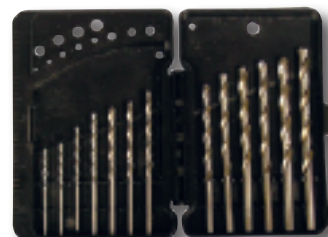
PART NO.	PCS.	DRILL SIZES (in.)
VA10141	21	1/16 to 3/8 by 64ths in metal index
VA10144	29	1/16 to 1/2 by 64ths in metal index

VA10161 Metal Index only/VA10144

# VA10245

## 13 Piece Drill Set

- High speed steel fractional drill bit set for drilling in wood, metal and plastic.
- Each bit is hardened and tempered for long life and high performance in tough applications.
- 118-degree point configuration is ideal for general purpose drilling applications.
- 13 piece set in plastic case includes bit sizes 1/16" through 1/4" in 1/64" increments.





## MKT00169

### 28 Piece Cordless Impact Drill-Driver Bit Set



Set consists of the following in a storage case:

QTY.	DESCRIPTION	SIZES
1	Hex to Square Drive Adapter	1/4" to 1/4"
4	Magnetic Nutsetters	1/4", 5/16", 3/8", 7/16"
1	3" Stubby Finder/Driver™ Bit	-
15	2" Driver Bits	(2) P1, (4) P2, (2) P3, (1) R1, (3) R2, (1) 6-8, (1) 8-10, (1) T20
7	1" Driver Bits	(1) P1, (2) P2, (1) P3, (1) 6-8, (1) 8-10, (1) R2

## MKT01373

### 38 Piece Cordless Impact Drill-Driver Bit Set



- Works with all drill/drivers and impact drivers.
- Black oxide finish resists corrosion and extends drill bit life. Stays sharper longer.
- Precision, 135° Split Point tip prevents drill bit walking.
- Includes: 1/4" Magnetic Bit Holder, 1/4" Hex to Square Adapter, two Magnetic Nut Drivers (1/4", 5/16"), four Hex Shank Drill Bits (1/16", 1/8", 3/16", 1/4"), twenty-one assorted 1" Insert Bits, six assorted 2" Driver Bits, and three assorted 3.5" Driver Bits.

## DSWS2000KN

### Work Sharp 2000 with Knife Sharpening System



- Sharpens chisels, plane irons, gasket scrapers, axes, lawn mower blades, cold chisels, pocket knives, hunting knives, serrated edges, and kitchen knives.
- RPM: 1750; 1/5 Horsepower; air-cooled; 220 grit and 80 grit abrasives included.
- Innovative Edge-Vision™ sharpening method allows cutting edge to be viewed while sharpening or grinding.
- Includes: two slotted Edge-Vision™ wheels, seven abrasives, instructional DVD, and complete Knife Sharpening System.

## DS750X

### Drill Bit Sharpener



- For pro-level sharpening of bits up to 3/4" plus custom point angles and Adjustable Material Take-Off.
- Deluxe model that does everything the DS500X does, plus sharpens 3/32" - 3/4" bits with one heavy-duty chuck.
- Custom Point - choose any angle from 115° to 140°.
- Adjustable Material Take-Off (MTO) so you can touch up a slightly dull bit or deep grind for a heavily damaged bit.
- Comes in a molded polyethylene carrying/storage case with handy User's Guide and instructional DVD.

- DSDA02105PF Left-Hand Drill Chuck
- DSDA31320GF 180 Grit Replacement Wheel
- DSDA70100PF 1/2" - 3/4" Large Drill Chuck
- DSSA02100PA 3/32" - 1/2" Small Drill Chuck

## DS500X

### Drill Bit Sharpener



- For pro-level sharpening of bits up to 1/2".
- Easy, front-loading chuck.
- Sharpens 3/32" - 1/2" standard-twist bits.
- Sharpens split-point bits for faster penetration and less drill bit "walking".
- Creates split-point bits from standard bits.
- Sharpens high-speed steel, masonry, carbide, and TiN-coated bits.
- Variable Alignment lets you adjust chisel and relief angles.
- Quick Change diamond sharpening wheel, no tools needed.
- Durable construction.
- Comes with a handy User's Guide and instructional DVD.

- DSDA02105PF Left-Hand Drill Chuck
- DSDA31320GF 180 Grit Replacement Wheel
- DSDA70100PF 1/2" - 3/4" Large Drill Chuck
- DSSA02100PA 3/32" - 1/2" Small Drill Chuck

### Cobalt Drill Bits



- Specifically designed for drilling stainless steel and other hard abrasive materials.
- Jobbers length; industrial duty.
- Easily withstands high drilling heat.
- 135° split point starts cutting immediately upon contact - no center punch required.
- Ideal for contractors, maintenance, machine shops, mechanics and garages.
- Small diameter drills below 1/8" not split point.

PART NO.	WIRE GAUGE	OVERALL LENGTH (in.)	FLUTE LENGTH (in.)
BOSCO4131	1/16	1-7/8	7/8
BOSCO4132	5/64	2	1
BOSCO4133	3/32	2-1/4	1-1/4
BOSCO4134	7/64	2-5/8	1-1/2
BOSCO4135	1/8	2-3/4	1-5/8
BOSCO4136	9/64	2-7/8	1-3/4
BOSCO4137	5/32	3-1/8	2
BOSCO4138	11/64	3-1/4	2-1/8
BOSCO4139	3/16	3-1/2	2-5/16
BOSCO4140	13/64	3-5/8	2-7/16
BOSCO4141	7/32	3-3/4	2-1/2
BOSCO4142	15/64	3-7/8	2-5/8
BOSCO4143	1/4	4	2-3/4
BOSCO4144	17/64	4-1/8	2-7/8
BOSCO4145	9/32	4-1/4	2-15/16
BOSCO4146	19/64	4-3/8	3-1/16
BOSCO4147	5/16	4-1/2	3-3/16
BOSCO4148	21/64	4-5/8	3-5/16
BOSCO4149	11/32	4-3/4	3-7/16
BOSCO4150	23/64	4-7/8	3-1/2
BOSCO4151	3/8	5	3-5/8
BOSCO4152	25/64	5-1/8	3-3/4
BOSCO4153	13/32	5-1/4	3-7/8
BOSCO4154	27/64	5-3/8	3-15/16
BOSCO4155	7/16	5-1/2	4-1/16
BOSCO4156	29/64	5-5/8	4-3/16
BOSCO4157	15/32	5-3/4	4-5/16
BOSCO4158	31/64	5-7/8	4-3/8
BOSCO4159	1/2	6	4-1/2

## DRILL BITS

### High Speed Steel 3/8" Reduced Shank Drill Bits



- Precision ground bits for drilling steel, wood and plastic.
- Crafted from premium high speed steel.
- Hardened and tempered.
- 118° point for general purpose drilling applications; prevents drill walking.
- Specially designed to fit drills with chucks 3/8" and larger.

PART NO.	DIA. (in.)	OVERALL LENGTH (in.)	FLUTE LENGTH (in.)
VA10481	25/64	5-1/8	3-3/4
VA10482	13/32	5-1/4	3-7/8
VA10483	27/64	5-3/8	3-15/16
VA10484	7/16	5-1/2	4-1/16
VA10485	29/64	5-5/8	4-3/16
VA10486	15/32	5-3/4	4-5/16
VA10487	31/64	5-7/8	4-3/8
VA10488	1/2	6	4-1/2

### High Speed Steel Drill Bits



- Precision ground bits for drilling steel, wood and plastic.
- Precision crafted from premium high speed steel.
- Hardened and tempered for long life and high performance; jobbers length fractional.
- 118° point for general purpose drilling applications.

PART NO.	DIA. (in.)	OVERALL LENGTH (in.)	FLUTE LENGTH (in.)
VA10104	1/16	1-7/8	7/8
VA10105	5/64	2	1
VA10106	3/32	2-1/4	1-1/4
VA10107	7/64	2-5/8	1-1/2
VA10108	1/8	2-3/4	1-5/8
VA10109	9/64	2-7/8	1-3/4
VA10110	5/32	3-1/8	2
VA10111	11/64	3-1/4	2-1/8
VA10112	3/16	3-1/2	2-5/16
VA10113	13/64	3-5/8	2-7/16
VA10114	7/32	3-3/4	2-1/2
VA10115	15/64	3-7/8	2-5/8
VA10116	1/4	4	2-3/4
VA10117	17/64	4-1/8	2-7/8
VA10118	9/32	4-1/4	2-15/16
VA10119	19/64	4-3/8	3-1/16
VA10120	5/16	4-1/2	3-3/16
VA10121	21/64	4-5/8	3-5/16
VA10122	11/32	4-3/4	3-7/16
VA10123	23/64	4-7/8	3-1/2
VA10124	3/8	5	3-5/8

### High Speed Steel Double End Drill Bits



- Bit is constructed of M-2 high speed steel for the best combination of strength, heat resistance, and wear resistance.
- Black Oxide finish for corrosion resistance.
- Drills twice as many holes as a single end drill bit.
- Heavy-duty web for strength and durability.
- For general use in wood, metal, and plastic.
- Ideal for use in stationary drills.
- 135° split point ensures a true start and eliminates bit walking.

PART NO.	SIZE	TWIST LENGTH	OVERALL LENGTH
VG60608	1/8"	5/8"	2"
VG60612	3/16"	5/8"	2-3/16"

## SH77395

### 1/8" High Speed Steel (HSS) Double End Drill Bits



- 135° split point.
- High speed steel.
- Diameter: 1/8".
- Overall length: 2".

## VA12808

### 1/8" Stubby High Speed Steel (HSS) Drill Bit



- Screw machine length fractional drill bit; industrial duty.
- Ideal for sheet metal.
- Special high temperature surface treatment for superior wear resistance and extra long life.
- Stubby length increases rigidity and reduces breakage.
- 135° split point prevents walking.
- Diameter: 1/8".
- Overall length: 1-7/8".
- Flute length: 7/8".

## UN10

### Unibit® Single Hole Size



- For reaming, deburring and cutting through soft wood or plasterboard; ideal for rustproofing applications.
- Perfectly round holes for oil tight push button switches, pilot lights and knockouts for conduit.
- Fractional, self-starting, even on curved surfaces.
- Excellent on materials that often crack with standard twist drills.
- Hole size: 1/2".
- Shank size: 1/4".

## UN20

### Unibit® Hole-Enlarging Bit



- Fractional step drill for reaming, deburring or enlarging medium-sized holes.
- Proper hole size is achieved by simply counting the steps as they penetrate the work.
- Number of holes: 8.
- Hole Sizes: 9/16" thru 1" in 1/16" increments.
- Step Thickness: 1/8".
- Shank Size: 1/2".
- Requires 1/2" pilot hole.

## VA15471

### 1/4" Socket Adapter, 2"



- Use with sockets for fast, easy driving of nuts, bolts and hex head screws.
- Adds versatility to any power drill.
- Fully hardened and tempered for long life.
- Universal 1/4" hex shank with power groove.
- 1/4" sq. drive, 2" length.

## VA15475

### 3/8" Socket Adapter, 2"



- 3/8" Drive.
- Use with sockets for fast, easy driving of nuts, bolts and hex head screws.
- Adds versatility to any power drill by converting it to a socket driver.
- Fully hardened and tempered for long life under constant heavy-duty use.
- Length: 2".

## CHS7ST 7 Piece Handyman's Hole Saw Kit

- Designed for a wide number of applications.
- Bi-material design features high speed steel cutting edge welded to steel body.
- Complete follow through saws.
- Knock out slots for easy core removal.
- Cut depth: 1-1/2".
- Variable tooth design (4-6 teeth per inch).
- Packaged in blow molded box for easy storage.



Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CHS78	7/8" Hole Saw	CHS112	1-1/2" Hole Saw
CHS1	1" Hole Saw	CHS14AA	1/4" Arbor Adapter
CHS118	1-1/8" Hole Saw	CHS14AR	1/4" Round Arbor
CHS114	1-1/4" Hole Saw		

## CHS13ST 13 Piece Journeyman's Hole Saw Kit

- Designed for a wide number of applications.
- Bi-material design features high speed steel cutting edge welded to steel body.
- Complete follow through saws.
- Knock out slots for easy core removal.
- Cut depth: 1-1/2".
- Variable tooth design (4-6 teeth per inch).
- Packaged in blow molded box for easy storage.



Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CHS34	3/4" Hole Saw	CHS214	2-1/4" Hole Saw
CHS78	7/8" Hole Saw	CHS212	2-1/2" Hole Saw
CHS118	1-1/8" Hole Saw	CHS14AR	1/4" Round Arbor
CHS138	1-3/8" Hole Saw	CHS716A	7/16" Hex Arbor
CHS112	1-1/2" Hole Saw	CHS14PD	1/4" Pilot Drill
CHS134	1-3/4" Hole Saw	CHS14AA	1/4" Arbor Adapter
CHS2	2" Hole Saw		

## MKMAV100 Master Cobalt Maintenance Hole Saw Kit

- General purpose kit for plumbing and electrical jobs on pipe and conduit through 2".
- Cuts through wood, metal and plastic.
- Features an M3 high-speed steel cutting edge, electron beam welded to a tough steel backer.
- Caps stand up to abuse and punishment, yet are lighter and easier to use.
- Backer, cutting edge and cap work together for faster, longer-lasting cutting action.
- Positive rake teeth clear chips better for longer life and easier cutting.
- Bi-metal design bonds M3 cutting edge to fatigue backer.
- Teeth stay sharper and make smoother cuts.
- 1-1/2" cutting depth cuts easily through 2 x 4's.



## BE11090CW Rotabroach® Cutter Kit

- Create 5/16" to 3/4" access holes for rustproofers, installing trailer hitches and luggage racks, cutting antenna holes in material up to 1/4" thick.
- For hand-held drills with 1/4", 3/8", and 1/2" chucks.
- Set includes seven cutters, arbor assembly, extra pilot, center punch, hex wrench and washers.



Set consists of:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
BE11122	Arbor with 3/8-24 cutter mounting thread	BE111163	1/2" Cutter
BE111043	5/16" Cutter	BE111203	9/16" Cutter
BE111083	3/8" Cutter	BE111243	5/8" Cutter
BE111123	7/16" Cutter	BE111323	3/4" Cutter

- BE111634 Ejector Spring/BE11122 (3)
- BE111655 Stop Washer/BE11122 (3)
- BE111121 Ejector Pilots/BE11122 (3)

## BE14006CW Fabricators Kit

- For large holemaking in sheet metal and other materials up to 1/8" thick.
- Holcutters™ are not hole saws. They are precision ground, heat treated tools that easily cut through the stock rather than ripping, tearing, and pushing through as do typical holesaws. They can produce holes 3X faster and cleaner than hole saws in sheet metal and have a dramatically extended tool life.
- Holcutters™ produce holes from 11/16" up to 3" diameter in sheet metal, rubber, gasket or fiber materials, and some plastics. Ideal for aftermarket installations, custom fabrication, trailers, or gauge installation.
- Arbor fits 1/2" drill chucks.
- Holcutters™ have a new patented Quad-Lead Thread System for quick cutter changes.



Set consists of:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
BE14609	Arbor Assembly	BE14644	1-3/8" Holcutter™
BE14610	Pilot	BE14656	1-3/4" Holcutter™
BE14628	7/8" Holcutter™	BE14662	2" Holcutter™
BE14636	1-1/8" Holcutter™	BE14674	2-1/2" Holcutter™

Contains one each of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
MKMAV12	3/4" Hole Saw	MKMAV40	2-1/2" Hole Saw
MKMAV14	7/8" Hole Saw	MKMM24K	Arbor, 1/4" Round
MKMAV18	1-1/8" Hole Saw		1/2-20 Thread
MKMAV22	1-3/8" Hole Saw	MKMM44	Arbor, 7/16" Hex
MKMAV24	1-1/2" Hole Saw		1/2-20 Thread
MKMAV28	1-3/4" Hole Saw	MKMM45P	Arbor, 7/16" Hex
MKMAV32	2" Hole Saw		5/8-18 Thread
MKMAV36	2-1/4" Hole Saw	MKMM121	12" Extension

## DFDF1600K

### The Extender Kit



- A spot weld drill bit extension that adds 6-1/2" of length, allowing access to those deep and hard to reach spot welds.
- Use when access is limited or obstructed either by a structural member or other component.
- The plastic sleeve protects any nearby structures from damage and cables from getting tangled.
- Drill point can be stabilized by holding the plastic sleeve.
- Works with any 3/8" drill.
- Recommended not to exceed 1800 rpm.
- Kit Includes: DFDF1600 Extender and DFDF1480 8.0MM HSCo drill bit.

DFDF1480 8.0MM HSCo Spot Weld Drill Bit

DFDF1680T 8.0MM Titanium Spot Weld Drill Bit

DFDF1690 8.0MM Boron Steel Spot Weld Drill Bit

## BE13224CW

### Spotweld Cutter



- Hardened, precision ground cutting tool that makes removing spot welded body panels fast and easy.
- Hollow design cuts around spot welds so hardness does not affect tool sharpness.
- When one end becomes dull, simply unscrew the cutter from the arbor, and reassemble with the new teeth exposed.
- An adjustable depth rod sets the tool so only the outer panel is cut through, leaving the underlying panel undamaged.
- For use in any 1/4", 3/8" or 1/2" chuck hand held drill.
- Includes complete instructions.

BE111003 1/4" Cutter (3)

BE13214 Replacement 3/8" Double End Spotweld Cutters (3)

BE13217 Retractable Pilot (3)

## DF8

### 1/4" Hole Punch

- Deep throat.
- Hole size leaves room on panel edge.
- Cuts easily up to 18 gauge steel.
- Convenient size.
- Replaceable die (DF8DS).



## Metal Cutting Reciprocating Blades



- Cuts all metals including nonferrous pipe conduit, stainless steel and sheet metal.
- Use with materials 1/8" - 1/2" (3.2 - 13MM) thick.
- Bi-metal construction for faster cutting and added durability.
- Precision set teeth for faster, smoother cuts.
- WeldTec™ tooth design makes the blade stronger and last longer.
- Come in packs of five (5).

PART NO.	MATERIAL	LENGTH	TPI	BLADE THICKNESS
VG372614P5	WeldTec™ Bi-Metal	6"	14	.035"
VG372618P5	WeldTec™ Bi-Metal	6"	18	.035"
VG372624P5	WeldTec™ Bi-Metal	6"	24	.035"

## Replacement Files/CAT450ASK



- To be used with the CAT450ASK Air Saw Kit.
- Come 3 per pack.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CAT450FF	Flat Files	CAT450RF	Round Files
CAT450HRF	Half Round Files	CAT450TF	Triangle Files

## SGCB12MB

### 12 Piece Mini Bur Kit in Oak Box

- 1/8" shank.
- Overall length is 1-1/2".
- Cornwell Logo laser-etched on box lid.



Set consists of the following in an oak box:

PART NO.	DESCRIPTION
SG10625	3/32" x 7/16" Cylinder Shape
SG10650	1/8" x 9/16" Cylinder Shape
SG12250	3/32" X 7/16" Cylinder Radius end
SG12275	1/8" x 9/16" Cylinder Radius end
SG12800	1/8" x 1/8" Ball Shape
SG13150	1/8" x 7/32" Oval Shape
SG13700	1/8" x 1/2" Tree Radius end
SG14200	1/8" x 3/8" Tree Pointed end
SG14550	1/8" x 1/4" Flame Shape
SG15700	1/8" x 7/16" Cone 14 deg.
SG16050	1/8" X 3/16" Inverted Cone 10 deg.
SG17950	1/8" x 1/2" Taper 8 deg.

## SGCB8S

### 8 Piece Solid Carbide Bur Set

- Bit heads are made from solid carbide design for use with 1/4" high speed power grinders.
- Clean up burrs on cast iron or sheet metal.
- Bits have chipbreaker cut to provide break down in chips.



Consists of the following in an oak box:

PART NO.	SIZE AND SHAPE	PART NO.	SIZE AND SHAPE
SGSA1	1/4" x 1/4" Cylinder	SGSE5	1/4" x 1/2" Oval
SGSA5	1/4" x 1/2" Cylinder	SGSF5	1/4" x 1/2" Tree/Radius
SGSC1	1/4" x 1/4" Cyl./Radius	SGSL4	1/4" x 1/2" 14° Taper
SGSC5	1/4" x 1/2" Cyl./Radius	SGSM5	1/4" x 1/2" 28° Cone

**SGCB17DISP**  
17 Piece Bur Display in Acrylic Case



Set consists of the following in a clear acrylic display case:

	Part Number	Shape	Shank	Head Dia.	Length of Cut	Max. RPM	
						Cast Iron	Stainless
1	SGSA1	Cylinder	1/4"	1/4"	5/8"	22,000	33,000
2	SGSA5	Cylinder	1/4"	1/2"	1"	16,000	22,000
3	SGSC1	Cyl./Radius	1/4"	1/4"	5/8"	22,000	33,000
4	SGSC3	Cyl./Radius	1/4"	3/8"	3/4"	20,000	24,000
4	SGSC5	Cyl./Radius	1/4"	1/2"	1"	16,000	24,000
5	SGSD3	Ball	1/4"	3/8"	5/16"	20,000	24,000
6	SGSE5	Oval	1/4"	1/2"	7/8"	16,000	24,000
7	SGSF3	Tree/Radius	1/4"	3/8"	3/4"	20,000	24,000
7	SGSF5	Tree/Radius	1/4"	1/2"	1"	16,000	24,000
8	SGSG1	Tree	1/4"	1/4"	5/8"	22,000	30,000
9	SGSG3	Tree	1/4"	3/8"	3/4"	20,000	24,000
10	SGSL3	14° Taper	1/4"	3/8"	1-1/16"	20,000	24,000
10	SGSL4	14° Taper	1/4"	1/2"	1-1/8"	16,000	24,000
11	SGSM5	28° Cone	1/4"	1/2"	7/8"	16,000	24,000
<b>Non-Ferrous Burs:</b>							
5	SG19038	Ball	1/4"	3/8"	5/16"	20,000	24,000
7	SGSF5NF	Tree/Rad.	1/4"	1/2"	1"	16,000	24,000
10	SGSL3NF	Taper	1/4"	3/8"	1-1/16"	20,000	24,000

Power Tool Accessories

**SGCB4P**  
4 Piece Bur Set

- For use on steel, cast iron, and ferrous metals.

Set consists of the following in a vinyl pouch kit:

PART NO.	SIZE AND SHAPE
SGSA1	1/4" x 1/4" Cylinder
SGSF3	1/4" x 3/8" Tree
SGSL3	1/4" x 3/8" Taper Radius
SGSC5	1/4" x 1/2" Cyl. w/Radius End



**SGCB3LSS**  
3 Piece 6" Long Bur Set

- Long shank carbide burs.
- For use on steels, cast iron, and ferrous metals.

Set consists of the following in a vinyl pouch kit:

PART NO.	SHANK	HEAD DIA.	LENGTH OF CUT	SHAPE
SG16350	1/4"	3/8"	3/4"	Cylinder with Radius End
SGSE3L6	1/4"	3/8"	5/8"	Oval
SGSF3L6	1/4"	3/8"	3/4"	Tree with Radius End



**SGCB3AL**  
3 Piece Aluminum Non-Ferrous Bur Set

- For use on aluminum, non-ferrous metals, plastics, or soft materials.

Set consists of the following in a vinyl pouch kit:

PART NO.	SIZE AND SHAPE
SG19038	1/4" x 3/8" Ball
SGSF5NF	1/4" x 1/2" Tree/Rad.
SGSL3NF	1/4" x 3/8" Taper



**SGCB3LSA**  
3 Piece 6" Long Non-Ferrous Bur Set

- Long shank carbide burs.
- For use on aluminum, non-ferrous metals, or soft materials.

Set consists of the following in a vinyl pouch kit:

PART NO.	SHANK	HEAD DIA.	LENGTH OF CUT	SHAPE
SGSC3NFL6	1/4"	3/8"	3/4"	Cylinder
SGSE3NFL6	1/4"	3/8"	5/8"	Oval
SGSF3NFL6	1/4"	3/8"	3/4"	Tree



## BRUSHES

### AN05531

#### Encapsulated Stem Mounted End Brush

- Encapsulated wires for more aggressive action, safety and longer life.
- 2" Diameter. • 1/4" Stem Diameter.
- .010 Wire Size. • 20,000 RPM Maximum Free Speed.



#### Circular Flared End Carbon Stem Mounted Brushes

- Highest quality oil tempered steel wire, densely filled for long life.
- For weld cleaning, mold cleaning, deburring, spot facing, rust and paint removal and polishing of tools, dies and molds.
- 1/4" Stem diameter. • .020 Wire Size. • 7/8" Trim Length.



PART NO.	DESCRIPTION	MAX. SAFE FREE SPEED
AN05891	1-1/2" Diameter	20,000 RPM
AN06071	3" Diameter	15,000 RPM

#### Knot End Brushes



- Applications include weld cleaning, mold cleaning, deburring, spot facing, rust and paint removal and the polishing of tools, dies and molds.
- High quality tempered steel wire. • Superior knot construction is densely filled resulting in a longer brush life.
- Wire size: .020 • Trim length: 7/8"
- Max. Safe Free Speed: 20,000 RPM; However, speeds over 8,000 RPM do not appreciably enhance the operation.

PART NO.	DESCRIPTION
AN10931	3/4" Knot End Brush
AN12081	1-1/8" Knot End Brush

#### Solid End Carbon Wire End Brushes

- High quality oil tempered steel wire. • Densely filled for long life.
- For weld and mold cleaning, deburring, polishing tools, dies and molds, spot facing, and removing rust and paint.
- 1/4" Stem diameter. • .020 Wire Size. • 7/8" Trim length. • Maximum Safe Free Speed: 20,000 RPM.



PART NO.	DESCRIPTION
AN07041	3/4" Diameter
AN07141	1" Diameter

### AN06651

#### 2-3/4" Stem Mounted Wire Cup Brush

- Applications include weld cleaning, mold cleaning, deburring, polishing tools, dies and molds, removing rust and paint, spot facing.
- Quality oil tempered steel wire. • Densely filled. • Wire size: .0118
- Stem diameter: 1-1/4" • Trim length: 7/8"
- Maximum Safe Free Speed: 6,000 RPM.



#### Single Section Flared Cup Carbon Stem Mounted End Brushes

- For I.D. cleaning; more flexible than non-flared single sections.
- Brushes are less aggressive and conform to irregular surfaces better.
- 1/4" Stem Diameter. • Maximum Safe Free Speed: 20,000 RPM.



PART NO.	DESCRIPTION
AN08725	2" Diameter; .008 Wire Size
AN09065	3" Diameter; .014 Wire Size

### AN18215

#### 2-3/4" Hurricane Cable Twist Cup Brush

- Used for weld cleaning, rust and scale removal and other rough applications.
- Innovative wire twist construction enables the brush to work more aggressively and last longer with a smoother operation for less operator fatigue.
- Wire size: .020 • Trim length: 3/4" • Arbor Hole: 5/8 - 11" • Maximum Safe Free Speed: 12,500 RPM.



### LS14020

#### 2-1/2" Wire Cup Brush

- Removes weld scale, rust, paint and corrosion from metal surfaces.
- Brush also gives an excellent surface for painting.
- Made with .014 carbon steel wire and designed for light duty use with an electric drill.
- Maximum safe free speed is 4500 RPMs.



## AUTDS708

### MaxiDAS® OEM-Level Diagnostic System

- Developed to the same standards as the OE diagnostic equipment.
- Extensive vehicle coverage for more than 30 European, Asian, and Domestic vehicles.
- Full OBDII support including CAN capability.
- Accurate and fast diagnosis of all electronic systems.
- On-screen service tips provide a quick solution.
- Data graphing and graph merging for quick and easy data review and analysis.
- Supports all 9 test modes of the latest J1979 OBDII test specifications.
- Powered by Autel Uni-SCAN™ technology with no need for extra adaptors or “keys”.
- Daylight visible high-resolution 7 inch full color display.
- Easy-to-use with touch screen operation and intuitive navigation.
- Easy automatic Wi-Fi upgrades available in new software releases.
- Hot Key for Quick Wi-Fi Internet Access.
- Automatic Wi-Fi data logging for quick and accurate after-sales service.
- Convenient Wi-Fi printing.
- Multilingual support.
- Modular design allows for future capability expansions.
- Ergonomic design features strong housing and protective rubber grips.

AUTDS708STYLUS Stylus for MaxiDAS®  
 AUTDS708CABLE OBDII Connector for MaxiDAS®



## LCHGDS

### X431 Modular PC Scan Tool

- Full module coding and bi-directional capabilities.
- Offers unrivaled speed in the access and communication of all vehicle systems and their modules. Boot-up and navigation, as well as diagnostic procedures are performed ultra-fast and with superior coverage, both in depth and breadth.
- Coverage for OBDI and OBDII True PC architecture with Windows®XP.
- Next Generation X431 Software Suite with OE-level access to Asian, European and Domestic applications.
- Wi-Fi built-in - browse the Web or your favorite online repair databases, such as ALLDATA®.
- Plug and play video out - allowing for dual screen outputs.
- Integrated printer and large high resolution SVGA touch screen display.
- Wi-Fi one button updates - download the latest software anytime anywhere, no PC necessary.



Diagnostic & Underhood

## LCHX431TOOLP

### X431 Tool Plus

- With this tool, the technician finally has the technology needed to perform OEM-level diagnostics at a fraction of the cost.
- Menu options and module specific programming procedures mirror that of the OEM scan tool, making this tool easy to use from the moment it is powered on.
- Throttle body relearns, steering angle resets, key programming immobilizer and more.
- Single Connector Technology built in - less hassle, easier to use.
- Fast processor - boot-up and navigation is 30% faster than previous models.
- OEM-Level European and Asian coverage.
- Strong Domestic coverage including Ford Cylinder Contribution Test.
- Access virtually all modules.
- Fully bi-directional testing and module coding capabilities.
- Bluetooth wireless connectivity.
- 12 months of FREE software Updates.
- All inclusive package - no additional cables, accessories or software needed.
- Printer built in.

LCHX431SWT 1 Year Software Update Tool



Go to [www.cornwelltools.com](http://www.cornwelltools.com) and click on Scanner Planner for the very latest scan tool product information.

## LCHDIAFULL

### X431/Tool/ Diagun Full

- Designed with the professional automotive technician in mind.
- Featuring a compact main unit, powerful diagnostic functions, and lightning fast boot up!
- Comes with Domestic, Asian and European Software.
- Diagun is "Keyless Technology" - no more missing keys.
- Compact, PDA sized main unit with high resolution LCD Touch Screen.
- Single, wireless Bluetooth® connector good for most OBDII and CAN applications.
- All OBDI and proprietary connectors included with the Full Diagun Kit.
- OEM Level Asian and European coverage.
- Strong Domestic coverage including Ford Key Programming.
- Module coding.
- Full OBDII Test Mode coverage.
- Adaptive resets and relearns.
- Full bi-directional controls.
- ECM-BCM Resets.
- Live Graphing.
- 300+ Web updates a year.



LCHX431SWDF 1 Year Diagun Full Software

Diagnostic &  
Underhood

## OWC3874

### Tech/Force® Deluxe Kit



- Includes: Domestic 2011, Asian 2011, European 2010, with ABS Software and InfoTech 2006 Software with Smart Cable, Domestic OBDI cables, ABS cables.
- Also includes 1 year Extended Warranty (EPP) for a total of 3 years, plus a 2 month trial Identifix®.
- Also includes Asian OBDI cables, ABS cables and European cables.
- All packaged in a deluxe carrying case.



OW239180 Tech/Force® Battery  
 OW342104 Tech/Force® Battery Charger  
 OW34211YX Tech/Force® 1 Year Extended Warranty Plan

## OWC3874D

### Tech/Force® OBDII Kit



- Includes: Domestic 2011, Asian 2011, European 2010 with ABS Software and InfoTech 2006 Software with Smart Cable, with Deluxe Carrying case.
- Also includes 1 year Extended Warranty (EPP) for a total of 3 years, plus a 2 month trial Identifix®.



OW239180 Tech/Force® Battery  
 OW342104 Tech/Force® Battery Charger  
 OW34211YX Tech/Force® 1 Year Extended Warranty Plan

Go to [www.cornwelltools.com](http://www.cornwelltools.com) and click on Scanner Planner for the very latest scan tool product information.



## OWC3418

### Heavy Duty Code Reader

- Reads and Erases Heavy Duty Diagnostic Trouble Codes (DTC's).
- Perfect for Technicians that need a fast "Toolbox Tool" to read and clear heavy duty DTC's.
- Class 4 - Class 8 truck coverage.
- HD J1587/J1708 and J1939 CAN coverage for diagnostic trouble codes.
- Read and clear diagnostic trouble codes.
- Provides on screen DTC definitions for heavy duty standard codes.
- Battery powered for off vehicle use.
- Internet update capable.
- Kit includes: HD Reader tool, 9 Pin Deutsch Cable, 6 Pin Deutsch Cable, Operations Manual, Soft Nylon Carrying Case.



## OWC3417

### Heavy Duty Scan Tool

- A stand alone Heavy Duty Scan Tool with a high resolution color display.
- Reads and clears Heavy Duty codes and displays Live Data.
- Class 4 - Class 8 truck coverage featuring "Automatic Protocol Search".
- HD J1587/J1708 and J1939 CAN coverage.
- Live vehicle data such as: Engine speed, Engine ECU temperature, Percent acceleration pedal position, Engine intercooler temperature, Engine coolant temperature, Battery volts, Alternator volts, Ambient air temperature and Air inlet temperature.
- Read and clear diagnostic trouble codes.
- Global OBDII - All 9 Modes.
- English, Spanish, and French support.
- Battery powered for off vehicle use.
- ScanMate Windows PC software.
- Trilingual Quick Start Guide included to help technicians get started fixing cars FAST.
- CD-based manuals in Spanish, French, and English.
- Customize data views in line graph, LED, or digital format with the push of a button.
- Gasoline and diesel engine coverage.
- Includes six AA batteries for uninterrupted power supply and off-vehicle use.
- Internet upgradeable.
- Kit includes: HD Scan Tool, 9 Pin Deutsch Cable, 6 Pin Deutsch Cable, OBDII cable, Heavy Duty Cable, USB Cable, ScanMate S/W, Operations Manual and Deluxe Carrying Case.



## INN31003

### CarScan Diagnostic Tool™

- Comes with OBDII Freeze Frame and Live-data stream functionality to help in the diagnostic and repair verification process.
- Includes enhanced engine and transmission codes for more comprehensive vehicle coverage.
- Works on all 1996 and newer cars, light trucks, SUVs and minivans - domestic and import including the newest OBDII compliant diesel and hybrid vehicles.
- Features unique patented all-in-one backlit screen display and 3 color LED display for quick State Emissions readiness check.
- Comes with 15 inspection maintenance monitor coverage which is a great way to verify repairs have been completed and the vehicle has run through its complete drive cycle.



## INN31403

### CarScan + OBD1

- Designed to retrieve enhanced and transmission diagnostic codes in all OBDII (1996 and newer) and some of the most popular OBDI (1981 to 1995) vehicles.
- Displays Freeze Frame data and records and plays back OBDII live data graphing on the tool.
- Shows generic (P0, P2, P3, and U0) manufacturer specific (P1, P3, and U1), global, pending and permanent codes as well as the code which caused the freeze frame data to be set.
- Links to all OBDII protocols including CAN to decode "Check Engine" light problems.
- Comes with 15 inspection maintenance monitor coverage which is a great way to verify repairs have been completed and the vehicle has run through its complete drive cycle.



Diagnostic & Underhood

## JPro®

### Heavy Duty Scan Tools by Noregon Systems



JPro® is the solution for testing class 7 & 8 engine, transmission, ABS, chassis and trailer ABS systems. Optional OEM software sets parameters and supports bi-directional testing. Modules available for Ford, GM, and Sprinter. Go to [www.cornwelltools.com](http://www.cornwelltools.com), login and try our HD Scanner Builder. Build your custom heavy duty scan tool to meet your unique needs.

Contact your local dealer for details!

## INN31603

### ABS/SRS + OBD2® Scan Tool

- Professional OBDII generic scan tool for all 1996 and newer cars, light trucks, SUVs - Domestic, Asian and European import.
- Reads and erases ABS and SRS codes on the most popular 1996 and newer GM, Ford, Chrysler, Toyota and Honda vehicles.
- Displays Freeze Frame data and records and plays back OBDII live data graphing on the tool.
- Features unique patented all-in-one backlit screen display and 3 color LED display for quick State Emissions readiness check.
- Comes with 15 inspection maintenance monitor coverage which is a great way to verify repairs have been completed and the vehicle has run through its complete drive cycle.



## INN31703

### CarScan + OBD1 and SRS/ABS

- Designed to retrieve enhanced and transmission diagnostic codes in all OBDII (1996 and newer) and some of the most popular OBDI (1981 to 1995) vehicles.
- Reads and erases ABS and SRS codes on the most popular 1996 and newer GM, Ford, Chrysler, Toyota and Honda vehicles.
- Displays Freeze Frame data and records and plays back OBDII live data graphing on the tool.
- Comes with 15 inspection maintenance monitor coverage which is a great way to verify repairs have been completed and the vehicle has run through its complete drive cycle.
- Shows generic (PO, P2, P3, and UO) manufacturer specific (P1, P3, and U1), global, pending and permanent codes as well as the code which caused the freeze frame data to be set.



## LCHCRECORDII

### CRecorder II

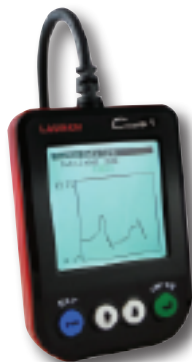
- Collects real-time engine data such as Ignition Timing, Fuel Trim and Engine Speed, among many other OBDII values.
- View and graph data for immediate diagnosis.
- Will also read DTCs for cars compatible with OBDII, EOBD, and CAN.
- Adds an updateable firmware option that older CRecorders were missing. With this added feature, if protocols change, or data communications via PIN designations are modified by car manufacturers, a new firmware will simply be offered for download from the crecorder.com website <http://www.crecorder.com>, free of charge.
- Records and stores entire OBDII Data Stream in a 24 hour continuous loop.
- Captures codes (hard and soft), Freeze Frame Data and Readiness Monitor Status.
- Interfaces via USB to a PC with Client Terminal Software.
- User friendly Plug and Play Tool.
- Excellent for diagnosing intermittent problems.
- Great for monitoring driving habits with time and date stamp.
- Useful for managing fuel economy and safety.



## LCHCREADV

### CReader V

- Small enough to fit in your shirt pocket, this unit packs features such as VIN information, reads and clears trouble codes, gives manufacturer specific code definitions, displays freeze frame data and readiness monitors.
- Has a large, high resolution backlit LCD screen, easy to navigate menu functions and controls and internet upgradeability.
- It provides live data and graphing capabilities and forced EVAP testing.
- I/M Readiness Monitor Status.
- Multiple languages supported - English, Spanish, and French.



## LCHOBD6830

### OBD Book 6830

- View I/M readiness monitors and freeze frame data readings at one time with the dual screen on this unit.
- Alleviates having to toggle back and forth between screens, wasting time and possibly losing valuable data.
- Harness the power of having two screens running simultaneously, plus the ability to record and playback a drive cycle.
- Internet updates are free for the life of the unit to ensure having the latest code libraries and definitions.
- Features a large backlit LCD split-screen, customizable data display, read/clear DTCs with code definitions built-in, View and Graph multiple data streams, special tests such as I/M Readiness, MIL status, O2 Sensor, On-Board Monitors, EVAP test.
- Data record/playback capabilities.
- Multiple languages supported - English, Spanish, and French.



## LCHCREADV

### CReader VI

- Ergonomic design with full color QVGA LCD screen and blazing fast speed for better graphing and live data readings.
- For use on all 1996 and newer domestic and import cars, SUVs and light trucks.
- Communicates with all OBDII protocols/CAN compliant.
- Coverage for the latest modes 1 through 10.
- Generic and manufacturer specific definitions built in.
- O2 sensor and EVAP system tests.
- 2010 and newer permanent code retrieval.
- Blazing fast refresh rate up to two frames per second.
- View and graph live data - up to four color graphs at the same time!
- Record, save and playback live data - up to 8 hours!
- Store up to twenty-nine different recordings.
- Display, record and save codes and freeze frame data.
- Identifies VIN information.
- I/M Readiness monitor status and drive cycle verification.
- Read and clear DTCs.
- Bright backlit color QVGA LCD display.
- Metric/US conversions.
- Free internet updates (USB 2.0).
- Tri-lingual - English, Spanish and French.
- Extra Long OBDII cable.
- Audible beep.



## OWC9500

### ABS/SRS Collision Tool

- Take the guesswork out of engine, ABS, and Airbag (SRS) repairs.
- Quickly and accurately diagnoses the cause of the check engine, ABS and SRS airbag malfunction indicator lights.
- Read, display and erase generic codes and definitions for 1996, and newer vehicles (OBDII & CAN).
- Read, display and erase manufacturer specific codes and definitions for 1996, and newer vehicles (OBDII & CAN).
- Read and display LIVE engine data.
- Read, display and erase ABS codes and definitions for most domestic vehicles 1996 - 2008.
- Read, display and erase Airbag (SRS) codes and definitions for most domestic vehicles 1996 - 2008.
- Code library feature on tool.
- Retains most recent vehicle scan.
- Optional battery power for saving data (battery power not required to use tool).
- Easy to read backlit display.
- Detachable cable.
- Internet updateable.



## AUTAL309

### Code Reader

- Provides easy and quick access to Diagnostic Trouble Codes and their definitions.
- Features a specialized continuous update screen for readiness monitors, and utilizes complete live data functionality.
- Works with all 1996 and later Domestic, European, and Asian vehicles (CAN/OBDII compliant).
- Easily determines the causes of the Check Engine Light (MIL).
- Retrieves generic (PO and UO), manufacturer specific (P1, P3, and U1) codes, and pending codes.
- Turns off Check Engine Light (MIL), clears codes and resets emissions monitors.
- Displays complete OBDII vehicle live data stream.
- Displays Diagnostic Trouble Codes (DTC) and pending code definitions on unit screen.
- Specialized continuous update screen for readiness monitors.
- Views freeze frame data.
- Displays monitor and Inspection Maintenance (I/M) readiness status.
- Multilingual menu and DTC definitions - English, Spanish and French.
- Retrieves vehicle information (VIN, CIN and CVN).
- Supports CAN (Controller Area Network) and all other current OBDII protocols.
- USB Update Cable and User Manual included.



## OWC800

### Pocket Scan Code Reader

- Advanced diagnostic tool that handles DTCs and descriptions, plus much more.
- Also provides Freeze Frame, VIN info and performs the important task of inspection and Maintenance-readiness (I/M) testing by displaying the I/M readiness monitor status.
- Great for use before and after repairs are made.
- The small size makes it perfect for tow trucks or service vehicles as well as home use.
- Dimensions: 2"W x 3.18"H x .65"D. (about the size of an average business card.)
- Cord Length: 31".
- Automatically reads DTCs when connected for fast diagnostics.
- Displays OBDII generic code definitions.
- Reads and displays DTCs.
- Erases DTCs.
- Reads and displays MIL status.
- Reads and displays I/M monitors.
- Reads and displays pending codes.
- Reads and displays freeze frame data.
- Reads and displays VIN (easy way to check vehicle ID number).
- OBDII cable (attached) and manual included.



## INN30203

### CarScan Code Reader™

- Perfect entry-level tech tool where nothing more than basic diagnostic and repair verification information is needed.
- Works on all 1996 and newer cars, light trucks, SUVs and minivans - domestic and import including CAN and the newest OBDII compliant diesel and hybrid vehicles.
- All-in-one backlit display that shows over 20 pieces of vital diagnostic information at any one time.
- Features unique patented all-in-one backlit screen display and 3 color LED display for quick State Emissions readiness check.
- Comes with 15 inspection maintenance monitor coverage which is a great way to verify repairs have been completed and the vehicle has run through its complete drive cycle.



## AUTEBT210

### Electronic Brake Tool

- A multifunction solution specially designed to help technicians replace brake pads more safely and efficiently.
- Eliminates the need to use expensive OE diagnostic tools for electronic brake systems.
- One tool for multiple purposes.
- Deactivates/activates SBC (Sensotronic Brake Control).
- Changes brake fluid/bleeds brake system.
- Inspects air brake system.
- Opens/closes the brake pads.
- Basic setting of rear brake calipers after changing brake discs and pads.
- Reads and clears EPB/SBC trouble codes.
- Easy to use with step-by-step on-screen instructions.
- Multilingual support.
- Ensures workplace safety.
- Avoids installation errors.
- Affordable and reliable.
- Easy to update via a USB cable.
- Coverage: Mercedes Benz models 211, 219, 230, Volkswagen Passat (2005 - present), Audi A6/A8 (2002 - present), and all new Volvo parking brake modules (PBM).



Diagnostic & Underhood

## LCH301050079

### Pocket Tech Pro

- Makes reading and clearing DTCs fast and easy.
- This tool not only reads codes but also allows technicians to view "new" permanent codes, pending codes, freeze frame data, I/M Readiness Status, MIL Indicator, and VIN information.
- OBDII codes and definitions are built-in allowing the technician to perform a quick and easy vehicle diagnosis.



## LCHCRESET

### CResetter

- Service Reminders and Oil and Maintenance Lights are able to be reset without the need for more expensive scan tools.
- Capabilities for Brake Pad and Filter resets are also available, depending on vehicle being serviced.
- Reset Service Reminder Lights.
- Reset Maintenance Lights.
- Reset Oil Service Lights.
- Automatic service and maintenance light reset for most European vehicles.
- Easy to read on screen manual shut off instructions for all other vehicles.



## DRWCARDAQ

### CarDAQ-Plus

- CarDAQ-Plus is a fully featured vehicle communications interface that is capable of reprogramming any J2534 compliant automobile from any automaker.
- The only reprogramming tool needed.
- Technicians can use the this tool for security key system programming on Ford, GM, and Toyota.
- Extruded aluminum enclosure and rugged design built to withstand the toughest environments.
- Support for automotive protocols beyond J2534-I to accommodate the future.
- For reprogramming downloads, customers must log on to vehicle manufacturer's website and pay applicable fees. Downloads are available for the following vehicles: Acura, Audi, BMW, Buick, Cadillac, Chevrolet, Chrysler, Daewoo, Dodge, Ford, GM, GEO, Honda, Infiniti, Isuzu, Jaguar, Jeep, Land Rover, Lexus, Lincoln, Mazda, Mercedes, Mercury, Mitsubishi, Nissan, Oldsmobile, Pontiac, Porsche, Saturn, Toyota, Volkswagen, Volvo.



## OW3421135

### 2011 USA Domestic/ Asian Software Bundle

- Domestic 2011 model coverage for GM, Ford, Chrysler, Jeep, and Saturn with Asian coverage for Toyota, Honda, Nissan, Mazda, Mitsubishi and more. Both include additional system coverage for earlier years. This valuable software bundle also installs the System 5.0 and includes Code-Assist™ experienced-based Confirmed Fixes™ from Identifix®, Pathfinder troubleshooting with Repair-Trac®, Fast fixes™, Automated System Test™, All Systems DTC Scan, Smart Cards, manual, ConnecTech Reader, and the NGIS Windows-based program CD for downloading software updates. **NOTE:** System 4.0, 4GB card minimum required to install.



## OW3421136

### 2011 USA Domestic/ Asian Software with System 5.0 & CF Card

- Domestic 2011 model coverage for GM, Ford, Chrysler, Jeep, and Saturn with Asian coverage for Toyota, Honda, Nissan, Mazda, Mitsubishi and more. Both include additional system coverage for earlier years. This valuable software bundle also includes the System 5.0 4GB Memory Card, Code-Assist™ experienced-based Confirmed Fixes™ from Identifix®, Pathfinder troubleshooting with Repair-Trac®, Fast fixes™, Automated System Test™, All Systems DTC scan, Smart Cards, manual, ConnecTech Reader, and the NGIS Windows-based program CD for downloading software updates.



## OW3421137

### USA Super Bundle Domestic/Asian/ European/System 5.0

- This powerful kit maximizes technician productivity with the four most popular Tech/Force® options at a value price - USA 2011 Domestic/Asian with ABS, European 2010 and Code-Assist™ experienced-based Confirmed Fixes™ from Identifix®. Also, included, the System 5.0 software with a pre-loaded high speed commercial grade 4GB memory card for fast installation.



## OW3421138

### System 5.0 Memory Card 4.0 GB

- The memory card is pre-loaded for your convenience with all Tech/Force® application software. Applications not already authorized require a separate purchase. Kit includes System 5.0 software and a pre-loaded high speed commercial grade 4GB memory card for fast installation.



## OW342167

### USB Card Reader

- Quickly and efficiently transfer the latest, downloaded updates from a PC to a Scan Tool.



## OW342188

### OBDII Smart Cable™

- Has the combined power of over 50 System Smart Inserts.
  - Eliminates the need for many current and future System Smart Inserts.
  - Provides improved test capability and accuracy, resulting in faster diagnosis for higher technician productivity.
- NOTE: System 2.0 or higher required to install.**



## DRWCARDAQM

### CarDAQ-M®

- CarDAQ-M® is a fully featured vehicle communications interface that is capable of reprogramming any J2534 compliant automobile from any automaker.
- The only reprogramming tool needed.
- Technicians can use the this tool for security key system programming on Ford, GM, and Toyota.
- Modular design allows for updating to new protocols when they become available.
- For reprogramming downloads, customers must log on to vehicle manufacturer's website and pay applicable fees.
- Downloads are available for the following vehicles: Acura, Audi, BMW, Buick, Cadillac, Chevrolet, Chrysler, Daewoo, Dodge, Ford, GM, GEO, Honda, Infiniti, Isuzu, Jaguar, Jeep, Land Rover, Lexus, Lincoln, Mazda, Mercedes, Mercury, Mitsubishi, Nissan, Oldsmobile, Pontiac, Porsche, Saturn, Scion, Toyota, Volkswagen, Volvo.



## DRWMONTOY

### MongoosePro® Toyota

- Support for Toyota TECHSTREAM diagnostics and flash reprogramming software.
- TIS TECHSTREAM software is available by subscription direct from Toyota.
- USB Diagnostics tool for CAN, J1850VPW, and ISO9141/KWP2000 vehicles.
- Simple packaging with electronics contained inside the cable.
- The only Toyota approved low cost device on the market for Toyota diagnostics and reprogramming.
- CAN Bus (capable of J1850VPW, ISO9141/KWP2000, ISO 15765, GMLAN, J1939, and ISO14229).
- J2534 and J2534-1 compliant device driver.



## ATQTS551000K

### VT55 OBDII Kit

- Kit includes: TPMS Trigger Tool, OBDII interface module, software included for updating and printing sensor data, USB cable to connect to computer, 24V Wall Charger, TPMS Re-Learn Magnet, TPMS Pressure Check Box, TIA Re-Learn Chart, and Plastic Storage Case.



## ATQVT300000

### Diagnostic Trigger Tool

- A powerful and compact TPMS tool for all car manufactures smart tire pressure devices. • Activates and decodes all current sensors (internet upgradeable). • Update software thru USB interface. • Large LCD display. • Protective holster. • Car manufacturer on-screen selection for faster recognition. • Includes 9 volt Alkaline battery.



## ATQTS551000

### VT55 OBDII Kit

- One button activation mode with automatic scans for TPMS sensor.
- Required for many tire rotations or sensor replacements. • Test wheel sensors and "reset" the TPMS light on all Domestic, European and Asian vehicles. • Fully upgradeable to new sensor protocols through internet. • Remote Keyless Entry (RKE) Test.
- Pocket size. • Easy operation. • Large graphic display. • Upgradeable.
- Internal Li-Ion battery.



## ATQVT150000

### Two Button Trigger Tool

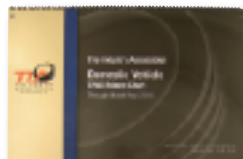
- A powerful and compact TPMS tool for all car manufactures smart tire pressure devices. • Activates and decodes all current sensors (internet upgradeable). • Update software thru USB interface. • Large LCD display. • Protective holster. • Car manufacturer on-screen selection for faster recognition. • Includes 9 volt Alkaline battery.



## ATQCHART0000

### TIA Re-Learn Chart

- Provides Re-Learn procedures for all vehicles and sensor information.



## ATQVB01000

### TPM Check Box

- Check TPM sensors before mounting on the wheels. • For all type of sensors (OE and Aftermarket). • Place the TPM Sensor inside pressure box and check its reading prior to mounting on the wheels.



## OW3834

### TPMS Module Interface for Tech/Force®



## ATQPG01000

### TPM Filling Gauge

- TPM Absolute Pressure Filling Gauge (Tire Inflation/Deflation) reads same pressure as car's computer.
- No more under inflated tires.
- Very accurate reading. • Same pressure reading as displayed on the dashboard. • Large LCD display with backlight. • Sensor with high accuracy (+ 1.5 PSI). • Switch On/Off automatically. • Rubber protector to prevent shock. • Meets ANSI Standards. • Pressure unit switch: Bar/PSI/Kpa • Includes 2 "AAA" batteries.



- The TPMS Reset Tool is a fast and simple to use TPMS activation tool.
- Works on all known TPMS sensors through 2009. • Bright graphic display and simple navigation buttons enable vehicle selection for fast activation. • Automatically adjusts activation output power to eliminate cross activation of nearby sensors. • Easily updated with a wireless connection to the Tech/Force® scan tool when new software is installed on the Tech/Force®. • Combines TPR activation with the power of Tech/Force® Scan due to compatibility with the entire Tech/Force® family of scan tools. • Register new sensor ID's on Asian vehicles. • Use the TPR to activate and decode sensor ID's and transmit them to the Tech/Force™ wirelessly. • Bluetooth® wireless communication adapter included. • Quick reference reset procedures can be quickly accessed on the Tech/Force®. • Includes: TPR handheld, DB25 wireless adapter, carrying case, registration card, user manual for TPR and Tech/Force® interface.

Diagnostic & Underhood

## RL950012B

### Diagnostic Smoke Machine

- Diagnose and repair EVAP leaks, vacuum leaks, oil leaks, and exhaust leaks.
- No need for nitrogen.
- Uses mineral oil (common baby oil).
- Compact design to hang under the hood or chassis and easy storage.
- Now including compound gauge to test vehicles that require vacuum when testing EVAP and verifies safe test pressure and can be used with the flow control valve for leak down (pressure decay) testing to identify small leaks.
- Flow control valve adjusts the amount of smoke to quickly pinpoint the locations of a leak.
- Flow meter provides a quick indication that a leak exists and allows EVAP "Pass/Fail" testing in minutes.
- Thick smoke finds leaks faster.
- Rugged construction of billet aluminum and steel.
- Internally regulated test pressure is pre-set at the EVAP approved test pressure of 12-14"H<sub>2</sub>O (less than 1/2 PSI).
- Connects directly to shop air (up to 170 PSI) and the vehicle battery.
- Comes with assorted caps and plugs, exhaust cone, Schrader® tool, EVAP port adapter, inspection light and instructional DVD.
- Includes an 8 oz. bottle of smoke producing fluid that can do over 1500 tests.
- All accessories included in a plastic carrying case.



## RL950030

### Universal Filler Neck Adapter with Cap-Less Adapter

- For hassle-free EVAP testing.
- Connects to any fuel filler neck in seconds.
- Creates an airtight seal to test EVAP and fuel systems.
- Compatible with any smoke machine.
- Removes easily and cleanly.
- Comes with twelve (12) sealing discs and one (1) RL960054 Adapter for Cap-Less Tanks.



RL960054 Cap-Less Adapter

## ESC595

### Pro Automotive Meter with PC Interface

- A premier automotive diagnostic tool.
- Equipped with the latest testing capabilities, including Milliseconds Pulse Width, for measuring the on time of fuel injectors.
- Can be interfaced to PC or notebook computer for enhanced diagnostics and data presentation.
- Software and computer interface cable are included.
- Includes two sets of test leads, RPM pick-up, temperature probe, software CD, interface cable, protective holster, 9 volt battery, instruction manual and hard storage case.
- Features 58 Test Ranges, 16 Test Functions, huge LCD display with analog bargraph, large digits and brilliant backlighting, Ms Pulse Width for fuel injector on-time, Max/Min function captures high/low readings for better diagnostic capability, 4 step adjustable trigger levels, RS-232 PC Interface, desirable 20 Amp fused test range, special access panels for fuses, and Auto Power-Off to save batteries.
- Inductive RPM pick-up features a five position, adjustable sensitivity switch.



ES601 USB 58" Cable and Software

## RL950054

### Diagnostic Smoke Machine with Built-in Air Compressor

- Built-in micro air compressor: 100% duty cycle.
- Quickly detects leaks down to 0.010".
- Variable flow control.
- Pressure decay/leak down feature.
- Dual operating modes: smoke and air/gas only cycle.
- No glow plug/no nitrogen required.
- Automatically senses when compressed air is connected; suspends internal air compressor.
- Full accessory kit with storage case includes: inspection light, exhaust cone adapter, EVAP service port adapter, Schrader valve removal tool, OEM-approved smoke agent, cap plug kit.
- Additional accessories included: XL truck exhaust cone, universal filler neck connector, easy EVAP capped adapter, extra OEM-approved smoke agent.
- Eliminates the need for shop air or gas tanks.
- Ultra-portable: goes where the technician works.
- Compact, lightweight design (11 lbs.).
- Approximately 5000 typical tests included.
- EVAP testing on Ford's new vehicles with capless gas tanks.
- Perfect for mobile repairs, testing vehicles in the field, and fleet repairs.
- Dimensions: 8" x 10" x 13".



## ESC585M

### Deluxe Automotive Meter

- Professional grade tool used for diagnosing electrical, computer and engine problems on any vehicle.
- 45 test ranges, 14 test functions.
- Analog bargraph display and large digital display.
- 10 Meg/Ohm input impedance.
- Fuse protected safety leads and jacks.
- 30 AMP Fuse Buddy Adapter Adapts a DMM to plug directly into mini fuse socket and allows circuit amperage draw to be read on the DMM.
- Original fuse is replaced in-line during testing, maintaining circuit protection.
- Makes circuit testing easier since the Fuse Buddy adapter end is shaped like a fuse.
- Ideal for electrical troubleshooting at the fuse box.
- Also used to measure all circuit draws up to 20 AMPS.
- Can even be used to test parasitic drains (battery drains).
- Measuring range is determined by DMM - most DMM's have a 10 Amp or 20 Amp test range.
- Measuring Capability: 0 - 20 Amps/ 48V DC or AC.



ES621 10A Replacement Fuse

ES625 .5A Replacement Fuse

## OW6522

### EVAP Smoke Machine

- Find the leak, clear the code, smoke the test.
- Put better technology and portability in the shop.
- 80% of top codes can be diagnosed with smoke technology.
- UltraTrace UV® dye is the only OE approved solution.
- Smoke flow control adjusts for specific applications.
- Detects microleaks™ to and below .010".
- Kit includes: LeakTamer® unit, white/UV combination light with laser pointer, UV glasses for viewing UltraTrace UV® dye, Service port adapter, exhaust adapter cone, cap plug adapters, Schrader® removal/installation tool, and UltraTrace UV® smoke-producing solution.



## ESC501

### Digital Mini Multimeter

- Features a compact design and provides the functions needed for overall convenience.
- Protective holster included.
- 16 test ranges, 6 functions.
- 3-1/2 digit LCD display.
- Fuse protected, safety leads and jacks.
- Removable test leads.
- Battery included.
- Safety leads and receptacles.
- Diode test.



ES645 .2A Replacement Fuse

## FM115

### True RMS Multimeter

- Large 3-1/2 digit display and white LED backlight to work in poorly lit areas more effectively.
- Compact ergonomic design for one-handed operation.
- Min/Max/Average to record signal fluctuations.
- Resistance, continuity, frequency and capacitance.
- True-RMS for more accurate measurements on non-linear loads.
- 10A Current AC/DC.
- 600V AC/DC.
- Resistance to 40M $\Omega$
- Capacitance to 9,999 $\mu$ F
- Frequency to 50 kHz.
- 2V diode.



## FMFLUKE233/AKIT

### Remote Display TRMS

- Perform two man jobs alone. Work in two places at once.
- Measure safely while placing the meter in hazardous areas, in clean rooms or near moving machinery.
- True-rms AC voltage and current for accurate measurements on non-linear signals.
- Measure up to 1000V AC and DC.
- Measure up to 10A (20A for 30 seconds).
- Frequency to 50 kHz.
- Built in thermometer to take temperature readings without having to carry a separate instrument.
- Resistance, continuity and diode test.
- Low power wireless technology allows the display to be carried up to 10 meters (33 ft.) away from the point of measurement for added flexibility.
- The removable magnetic display can be mounted where it is easily seen.
- Auto power off maximizes battery life.
- Min/Max and Average recording to capture variations automatically.
- Test continuity and diodes.



## FM885/AKIT

### 88V Automotive Meter Combo Kit

- Combo Kit includes: 88V multimeter, silicone test leads, long reach alligator clips, test probes, inductive RPM pick-up, magnet and strap, temperature probe, two automotive backprobe pins, insulation piercing probe, durable carrying case, holster, 9V battery (installed), Getting Started Manual, and CD with detailed manual.



- FM80BK Temperature Probe
- FM803293 11A Fuse
- FM943121 .440A Fuse
- FMAC285 Long Reach Alligator Clips
- FMRPM80 Inductive Pick-Up
- FMTL224 1.5m Test Leads
- FMTTP220 Removable Test Probes
- FMTPAK Magnetic Hanger

## ES332

### Pro Laser Phototach

- Ideal tool for easy and accurate measurement of RPM.
- Aim the laser beam at a reflective mark placed on a rotating device, push the button and the RPM reading is immediately displayed.
- Can detect RPM from longer distances of up to 6 feet away.
- Can be used to measure RPM on coil-on-plug and diesel engines, as well as generators, compressors, industrial engines, fans, gears and more.
- Includes zippered case, reflective tape, instructions and 9V battery.
- Test Range: 0 - 99,999 RPM in 1 RPM increments.
- Display: 5 digit LCD with backlighting.



## INN3320

### Auto-Ranging DMM™

- Auto-Ranging eliminates the need to dial in the correct range when making electronic measurements.
- 10 MegOhm input impedance for safe automotive and household uses (i.e., household outlets, fuses, wiring, general-purpose batteries, vehicle battery and charging system, automotive circuits and more).
- Large digital display.
- Single-setting resistance function for voltage (AC & DC).
- Color-coded LED's display battery quick check: GREEN = Good, YELLOW = Weak, RED = Replace.
- Protective rubber corner guards for drop protection.
- Includes attachable test leads, holders and stand.



## INN3340A

### Automotive DMM™

- Pro quality features help pinpoint engine problems.
- Auto-Ranging, auto shut-off, over-load protection.
- Measures inductive RPM pickup and vehicle RPM (including Coil On Plug vehicles).
- 10 MegOhm impedance prevents damage to ECU.
- Tests alternator diodes, duty cycle, solenoids, breaker points, wiring, switches, and more.
- Automatic zero adjustment, reverse polarity protection.
- Measures temperature in both Celsius and Fahrenheit.
- Min/Max and Hold buttons save retrieved data.
- Unit provides hands-free testing and includes test lead holders.
- Rugged corner guards provide drop protection.
- Includes temperature probe, inductive RPM clamp and carrying case.



Diagnostic & Underhood

## OWC3514

### Automotive Meter

- Accurate ms-pulse width function to test on-time for fuel injectors, IAC motors and transmission controls.
- Inductive rpm for 1-8 cylinders (2- or 4-stroke), inductive clamp included in the kit.
- Direct dwell readings and duty cycle. DC volts and mV, AC volts, ohms, continuity, frequency.
- Four step adjustable  $\pm$  trigger.
- 4-1/4 digit display. Analog bar graph, 41 segment.
- Auto ranging, automatic power off and data hold features.
- 10 MEGOHM impedance protects automotive computers circuitry.
- Rugged construction for years of use under the harsh automotive shop conditions.
- Weight: 1 lb., 9 oz.
- Includes analog/digital multimeter, protection holster with stand, safety-designed test lead set, inductive pickup, 9V battery (installed) and user's manual.



## OW3857

### Tech-Scope™

- The Tech-Scope™ is capable of reading 40 million samples per second on each channel with 10M ohm input impedance eliminating the need for special adapters to capture signals from critical components.
- The included InfoTech software provides a vehicle-specific repair information database for testing most common vehicle components.
- Lab scope, ignition scope and digital multimeter display are user selectable.
- Vertical cursors show time difference/frequency between the two cursors and waveform values.
- Automatic record stores waveforms in a circular buffer with 50 screens of data.
- AC/DC coupling.
- Auto setup automatically adjusts the vertical scale, sweep time and trigger point.
- Peak detect captures high speed signals at the maximum sampling rate, even at slow sweep speed and is user selectable.
- Ability to capture the analog and digital glitches, along with the current waveform.
- Selectable glitch sensitivity: low-medium-high.
- Ability to play the recorded files.
- Save screen shots of the display.
- Measures: DC volts, True RMS AC volts, ohms, continuity check with audible beep, frequency, duty cycle, pulse width, auto scale, screen refresh is at the rate of 10 times/sec.
- Ability to view the minimum, maximum and average values.



## ESC685MB

### Current Probe/ Multimeter with Fuse Buddies

- Measure current on parasitic drains, fuel injection systems, fuel pumps, charging systems, electric motors and more.
- Also measures AC/DC volts, resistance, frequency, duty cycle, capacitance, diodes and continuity.
- Capable of measuring as low as 10 milliamps.
- Features 35 testing ranges, auto power off, auto-ranging, data hold, continuity beep, overload protection, 10 Meg/Ohm impedance.
- Includes ES307M and ES308B Fuse Buddy™ current loops.
- Carrying case and 9 Volt battery included.



## FMFLUKE365

### Detachable Jaw True-RMS AC/DC Clamp Meter

- A rugged meter perfect for jobs where access to wires is difficult.
- Thin, small jaw is detachable with a flexible lead, which makes gaining access to wires and viewing the display easy.
- 200A AC and DC current measurement with detachable jaw.
- 600V AC and DC voltage measurement.
- Built-in flashlight/torch allows for easy illumination and identification of wires.
- CAT III 600V.
- Compact design fits in hand and can be used while wearing protective equipment.
- State of the art signal processing allows for use in noisy electrical environments while providing stable readings.
- Large, easy to read, backlight display automatically sets the correct measurement range; no need to change switch positions while taking a measurement.
- Includes a soft carrying case.



## ES695

### Low Amps Adapter

- Great tool for accurate measurement of low current.
- Use with a graphing meter or lab scope to view current waveforms on fuel injectors, fuel pumps, primary ignition coils and digital multimeters.
- Resolution of 10 milliamps is low enough for most parasitic drain testing.
- Jaw opening of 1/2" clamps over most negative battery cables.
- Low battery indication, auto power-off.
- DC Amps: 0-20A, 0-80A (resolution .01A); AC Amps: 0-20A, 0-80A (resolution .01A).



Diagnostic & Underhood

## ES305M

### 30 Amp Fuse Buddy Mini



## ES306B

### 30 Amp Fuse Buddy ATC



- Tests circuit currents up to 30 Amps.
- Two 30 Amp models: ES305M used with Mini size fuses ES306B used with ATC size fuses
- Clever design allows for easy connection into fuse sockets.
- 30 Amp models have resolution of .1A, while 20 Amp models have .01A resolution.
- Fuse Buddy ends are molded into the shape of the fuse itself.
- During testing the fuse is removed and replaced into the Fuse Buddy. This way, the circuit being tested maintains fuse protection.
- The Fuse Buddy stays put and won't fall out of the socket, like test probes do.
- For automotive, marine, small engine, HVAC & Industrial technicians.
- Test circuit current from 0 to 30 Amps/48 volts.
- Resolution .1A (100 milliamps), accuracy + 2%.

## ES655

### High Amp Clamp

- Ideal for all high current applications, especially starting and charging diagnostics.
- Can measure up to 1000 Amps AC or DC.
- Temperature measuring built-in temp probe included.
- Auto power off, auto-ranging, data hold
- Continuity beep.
- Overload protection
- Clamp opening 1.5 inches
- 9 Volt battery and carrying case included.
- Large digital LCD display with backlighting.
- Easy grip housing.



## ES687

### Low Amp Clamp

- Capable of measuring down to 1 milliamp (.001A).
- A great tool for all low current applications, especially for diagnosing parasitic drains.
- Clamp opening is large enough to fit over most negative battery cables.
- Applications: fuel injectors, fuel pumps, electric motors, battery drains, charging systems.
- 35 Test Ranges and 10 Test Functions.
- Auto power off, auto-ranging, and data hold.
- Continuity beep.
- Overload protection.
- Clamp opening 5/8".
- 9 Volt battery and carrying case included.





## SFTA500

### SmartTach + COP Analyzer

- Perform quick and reliable diagnostics of non-starts, misfires, fouled or damaged spark plugs and plug wires by simply placing the 12" flexible antenna probe on top of the coil or over the spark plug wire.
- Compare spark plug voltage and burn time between cylinders.
- Compatible with Coil on Plug, Coil near Plug, distributorless, distributor and magneto ignitions systems.
- Large digital display shows spark plug voltage, burn time, RPM, as well as min/max readings in real time.
- Power source: 9V alkaline battery (included) approximately 20 hours of operation.
- Auto power-off after 3 minutes.
- Measures spark plug voltage from 0 to 50,000 Volts.
- Measures spark burn time from 0 to 10 ms.
- Special antenna sensor allows quick testing of Coil on Plug and Coil near Plug modules, and easy hook-up to spark plug and ignition coil wires.
- For 1 to 12 cylinders and 2,4 cycles with special DIS (Distributor-less or waste spark) mode.
- Measures from 200 to 20,000 RPM on a 4-1/2 digit LCD display.
- Advanced microcontroller technology yields 0.5% accuracy.



## WN76562

### Coil Over Plug Variable Sensitivity Quick Probe

- Verify the firing of a Coil Over Plug ignition coil and spark plug.
- No need for back-probing coil wires and disassembly to test at the coil connector or spark plug.
- Variable sensitivity (VS) for greater diagnostic accuracy and expanded application coverage.
- Press the 7" long antenna probe against the ignition coil and use the thumb-wheel to adjust the sensitivity until the LED's begin flashing.
- Super Bright LED kV Strobe and Green LED Arc Indicator determines if the coil is firing the spark plug consistently, intermittently misfiring or not firing at all.
- Battery operated main unit with 7" probe tip.



## WN76600

### Hi-Vis Volt-Pro

- High visibility, simple to use, one handed dynamic voltage testing.
- Indicates power and grounds.
- Test the circuit's ability to deliver current and identify loose, corroded or broken wires. Capture intermittent spikes or drops in voltage. Take voltage snapshots in any mode, any time.



## FI82

### Advance Timing Light

- Features ELUMINATOR™ Optics with 5 times the brightness of ordinary Timing Lights.
- Durable spark pickup with glass reinforced plastic to resist heat and protect user from electrical shock.
- Dial advance to 60° has calibrated dial to assure accuracy.
- Dial label shows 2 cycle and 4 cycle degrees.
- Durable ABS Housing protects the timing light from accidents.



## PWPP319FTC

### Power Probe 3

- With the press of a switch the user will have an instant hot lead or ground lead.
- Use the hot lead and ground lead simultaneously to activate components.
- Instantly check components for continuity as well as identify positive, negative and open circuits without re-polarizing hook-up clips.
- Locate shorts without wasting fuses.
- The 20 foot lead allows testing from bumper to bumper without jumper leads.
- Audio tone indicates positive with a high pitched tone and negative by a low pitched tone.
- The audio feature can be disabled when testing relays!
- The Power Probe III has 2 cool white LED's that flood the work area with bright light.
- Multitude of testers in one: test light, Audio Tone, Voltmeter, 20 ft. Jumper Lead Set, Bad Ground Indicator, Continuity Tester, Short Circuit Indicator, and Relay and Component Tester.
- Kit includes: Power Probe III, cigarette lighter adapter, 3" probe tip, battery hook-up clips, 20 ft. extension lead, instruction manual, and blow molded case.



## INN5568

### Professional Timing Light

- Four function digital readout on an easy-to-read, dual display backlit LCD: Tachometer: 249 to 9,990 RPM (+/- 1% accuracy); Advance Degrees (2 and 4 cycle): 0° to 90° (+/- 0.5° max accuracy); Dwell: 0° to 180°/2-12 cylinders (+/- 1° max accuracy); and Voltage: 10 to 16 volts DC (+/- 1% accuracy).
- Patented skip circuitry tests up to 9,990 RPM.
- Unit can switch from 2-cycle/distributorless (DIS) to 4-cycle/conventional ignition systems.
- Slim, rotating barrel allows access to the most difficult to reach timing marks.
- Constructed with heavy-duty ABS/polycarbonate shockproof housing, molded boots, and a built-in hand guard to provide maximum protection for the timing light and the user.
- Uses detachable 6-foot insulated wiring test leads with heavy-duty battery clips and a metal inductive pickup capable of accommodating up to 10MM plug wires.
- Features durable rubber buttons.
- Includes a custom molded plastic storage case and instructions in English, French, and Spanish.



## PWPPLS01

### Power Probe Lead Set

- All gold plated connections.
- Works with most multimeters.
- Two self-centering wire piercing probes 28-8AWG.
- 10 gauge super flexible multi strand wires.
- Standard 4MM plugs and jacks.
- Kit includes: 1, 3, and 6 foot leads, banana jack adapter, large piercing probe, small piercing probe, alligator clip adapter, probe, male/male adapter, female/female adapter and case with organizer.



**Power Probe® III**

- Power Probe® III has all the benefits of the Power Probe® I and II, but now features a Voltmeter and a built-in Banana Jack for Lead Set accessories.
- The simplicity of use combined with the numerous variations of connectors and adapters makes either of these kits versatile.
- Just connect the Power Probe® III to a vehicle's battery and a multitude of testers are readily available.

**PWPP3LS01**

**Power Probe® III with Lead Set**



Kit includes:

PART NUMBER	DESCRIPTION
PWPN3015BLK	3" Probe Tip (black)
PWPN3046	PP3 Clip Set
PWPN3048	Cigarette Lighter Adapter
PWPN3049	20 Ft. Extension Lead
PWPNECT057	Alligator Clip Adapter
PWPNLS022	4MM Adapter (male)
PWPNLS02512	1 Foot Lead (red)
PWPNLS02536	3 Foot Lead (red)
PWPNLS02572	6 Foot Lead (red)
PWPNLS029	4MM Adapter (female)
PWPP319FT	Power Probe® III
PWPPPO1	Piercing Probe (small-green)
PWPPPO2	Piercing Probe (large-yellow)

**PWPPKIT03**

**Power Probe® III Master Kit**



Kit includes:

PART NUMBER	DESCRIPTION
PW20014	Universal Adapter
PWAA1	Bulb Adapter
PWAA2	Bulb Adapter
PWAA3	Bulb Adapter
PWAA4	Blade Probe
PWAA6	Back Probe
PWPPECT2000	Transmitter and Receiver
PWPNECT057	Alligator Clip Adapter
PWPN3015BLK	3" Probe Tip (black)
PWPN3046	PP3 Clip Set
PWPN3048	PP3 Cigarette Lighter Adapter
PWPN3049	20 Ft. Extension Lead
PWPNLS022	4MM Adapter (male)
PWPNLS02512	1 Foot Lead (red)
PWPNLS02536	3 Foot Lead (red)
PWPNLS02572	6 Foot Lead (red)
PWPNLS029	4MM Adapter (female)
PWPP319FT	Power Probe® III
PWPPPO1	Piercing Probe (small-green)
PWPPPO2	Piercing Probe (large-yellow)

Diagnostic & Underhood

**PWPPCT**

**Continuity and Voltage Tester**

- "Scream'N" extremely audible sound for working in noisy work areas.
- The volume is adjustable so it can scream or adjust for quieter work environments.
- Emits two distinct tones to differentiate between circuits above or below 10 ohms and also emits a warble tone when detecting over 6 volts.
- 3-Level Continuity Testing.
- Detects voltage.
- Audible indicator.
- Built-in flashlight.
- Self-powered.
- 10 ft. lead.
- 10 ft. extension lead.
- Alligator Clip Adapter.
- Tests: Wire harnesses, bad connections, relays, diodes, fuses and more.
- Powered by two AA batteries (included).
- Automatic shut-off maximizes battery life.



**ES230**

**Short Buddy**

- Helps find shorts to ground, intermittent shorts, and intermittents caused by loose connections.
- Connects at the fuse panel and becomes in series with the test circuit.
- A system of audible beeps helps find the problem and permits hands free troubleshooting.
- Gives continuous re-set/re-power capability.
- Settable AMP levels of 10, 15, 20, 25 and 30 Amps.
- Automatically opens the circuit in event of overload.
- In Auto mode, circuit gets re-powered in 10 seconds.
- In Manual mode, user re-sets power to circuit.
- Includes a blow mold storage case.



**PWPPECT2000**

**Short/Open Circuit Tester**



- Pinpoints short and open circuits through plastic, panels, carpet, molding and more.
- Consists of two units: a "SMART" transmitter and a "SMART" receiver along with several of the most common adapters to connect to any electrical circuit on a vehicle.
- Detects immediately whether a circuit is shorted or open.
- Reception threshold feature allows the user to lock in a preferred distance from the circuit, giving flexibility.
- The "SMART" receiver eliminates guesswork by showing the direction to the short circuit.

## TE25300

### Intermittent Short Circuit Finder

- The number and complexity of electrical wiring systems in modern vehicles is growing.
- Intermittent short circuits are becoming more common and are the most difficult shorts to locate.
- This device with audio signal is used to indicate when intermittent short circuit occurs with vehicle at rest or on road test.
- After faulty system is indicated, use to find short location.
- Works on all 12 volt systems.



## FMTL175

### Twist Guard™ Test Leads

- Adjustable tips enhance safety and versatility length.
- WearGuard™ indicator shows damage or wear to leads.
- Inner contrasting color exposed when the leads are worn.
- Patented extendable tip sheath meets new electrical safety requirements to reduce tip exposure while providing the flexibility needed for most measurements.
- Compatible with standard 4MM shrouded banana plugs.
- Probes always show correct category rating for tip being used.
- Ratings: CAT III 1000V, CAT IV 600V, CAT II 1000V, 10A max., Pollution Degree 2.
- Conforms to EN/IEC 61010-031:2002 +A1:2008.



## FMAC285

### SureGrip™ Alligator Clips

- Multipurpose tooth pattern grips anything from fine gauge wire to a 3/4" nut.
- Nickel plated steel jaws.
- CAT III, 1000V, 5A, CAT-IV 600V, 10A.
- One red, one black.



## SLV134396

### Mini Cable Piercers

- Quick and reliable access.
- For cables 1.0 - 2.5MM with standard 4MM socket to rear.
- Pack of four.



## FMAC89

### Insulation Piercing Clip

- Heavy duty, plunger style, safety grip operation with insulated jaws.
- Small pin pierces 30 to 14 AWG insulated wire.
- CAT III, 1000V, 5A; CAT IV, 600V, 5A.



## FMTL220

### Test Lead Set

- Versatile leads; interchangeable tips; work with other probe tips too.
- Recommended for automotive, electrical and HVAC applications.
- Set consists of silicone-insulated Test Leads (1 red, 1 black), stainless-steel industrial test probes (1 red, 1 black) and industrial alligator clips (1 red, 1 black).
- 63" (1.6m), 1000V, 10A maximum rating.
- Shrouded right-angle connectors.



## FMTL75

### Hardpoint Test Lead Set

- Extremely hard alloy tips resist wear.
- Distinctive comfort grip probes.
- Economical PVC insulated leads.
- CAT III, 1000V, 10A; CAT IV, 600V, 10A.
- 1 red and 1 black, 48" (1.2m).

FMAC72 Slide on Alligator Clips one red, one black



## ES180

### LOADpro® Dynamic Test Leads

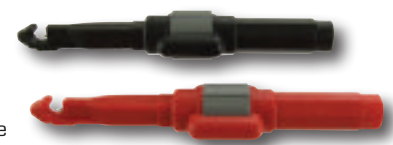
- Test leads load the circuit to see if current can flow.
- LOADpro® finds these problems quicker: High Corrosive Resistance, Shorts to Ground, and Open Circuits.
- By loading the circuit, LOADpro® makes a voltage drop test "on the fly".
- Use LOADpro® with a DMM and follow the test method which finds wiring faults quicker.
- LOADpro® Test Leads feature SteadyPin Probe Tips, which allow the probe to sit firmly on a male ECM or connector pin.
- LOADpro® Test Leads are OEM approved - finds corroded circuits fast.



## SLV134417

### Heavy Duty Cable Piercers

- Designed to penetrate the hardest of cable insulation found in vehicles today.
- Super sharp stainless steel probe easily pierces insulation of 12 thru 22 gauge wire.
- Unique screw design to precisely control needle depth.
- Non-rotating banana jack keeps connected leads from twisting/tangling while piercing.
- Recommended for safe voltage piercing only (<50V).



## SLV501824

### Right Angled Back Probes

- 0.7MM (0.028") O.D. probe pins designed for measurements in confined and restricted space areas.
- Lead length: 22 cm with standard 4MM socket.
- Includes one Red and one Black.



## SLV905278

### Back Probe Pack

- High visibility yellow, red, blue and green .028" O.D. back probe pins are perfect for connecting to fuel injectors, MAP and TPS sensors, as well as any weather pack seal type connectors.
- Modular design is compatible with any industry-standard, 4MM banana plug test leads.



## TH490

### Electrical Backprobe Kit

- Sharp, small diameter probes slide along wire into connector to back probe circuit.
- No need to disconnect connector and terminal.
- Kit contains 20 pin-type back probes in five different colors.



Diagnostic & Underhood

## TH490M

### Assorted Back Probe Kit

• Provides technician with an assortment of back probe pins which allows the technician access to the back probe circuit without any obstructions. • Probes have a longer pin to reach circuits that were previously unreachable. • Kit includes: ten straight pins, five 90 degree pins, and five 45 degree pins in five different colors.



## TH49090

### 90 Degree Back Probe Kit

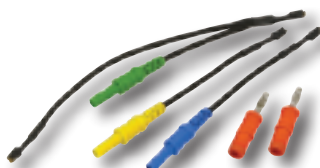
• Provides technician with an assortment of back probe pins which allows the technician access to the back probe circuit without any obstructions. • Probes have a longer pin to reach circuits that were previously unreachable. • Kit includes: ten straight pins, five 90 degree pins, and five 45 degree pins in five different colors.



## LS69200

### Test Lead Kit

• Use with LS56810 or LS60610 to easily and securely connect Relay Test Jumper to a Multimeter. • Use banana plug to pin probe adapter for use with pin probes. • Kit contains two terminal to banana tip wires, two pin tip to banana plug adapters and one terminal to banana tip wire with jumper wire. • Jumper wire may be used between common and open to close the relay circuit for testing and has a test port to easily check voltage. • Also provides access for a clamp-on amp meter.



Diagnostic & Underhood

## WN77065

### Gold Test Lead Master Kit

• Wire products designed specifically for the automotive service technician. • Provides versatility and durability to give a lifetime of service. • Super sharp hardened steel wire piercing tips accept threaded clips and adapters with gold plated ends for a reliable connection. • Crimped hubs and molded strain reliefs. • The Bullet Wire Piercing Probe is designed to pierce wire effectively, to be used with banana plugs or threaded probe tips, and is great for road testing. • Super duty heat and oil resistant coil cord provides a long reach. • Convenient tool box storage. • Set includes: (1) Black Test Lead, (1) Red Test Lead, (1) Black Jumper Lead, (1) Red Jumper Lead, (2) Black Alligator Clips, (2) Red Alligator Clips, (1) Black Bed of Nails, (1) Red Bed of Nails, (2) Bullet Wire Piercing Probes, (2) 4 Inch Flexible Back Probes.



- WN77001 Screw On Alligator Clip Set
- WN77002 Screw On Bed Of Nails Set
- WN77004 Bullet Wire Piercing Probe Set
- WN77005 4" Flexible Back Probe Set
- WN77161 Ultimate Test Lead Set

## SLV905299

### Automotive Back Probing Kit

• Kit includes: Miniature back probes with cable piercing converters (red and black), angled back probes (red and black), double-insulated silicone test leads (red and black). • Packaged in a four pocket tool roll organizer.



## SLV905276

### Automotive Test Lead Kit

• Double-insulated, silicone test leads, 48" length. • Fully insulated croc clips. • Super sharp OEM prods with tip insulators. • Cable piercers. • Back probing probes. • Packaged in a 4 pocket, test lead organizer for convenient storage. • Hybrid safe: Rated 1000V CAT II, 20 Amp.



- SLV501815 48" Test Leads, Red & Black
- SLV501816 Cable Piercers, Red & Black
- SLV501817 OEM Probes, Red & Black
- SLV501818 Back Probes, Red & Black
- SLV501819 Croc Clips, Red & Black

## SLV905277

### Scope Back Probe Kit

• Four, color-coded, .028" O.D. back probe pins are perfect for connecting to fuel injectors, MAP and TPS sensors, as well as any weather pack seal type connectors. • Includes four color-coded, extra long 76", double-insulated silicone test leads (Rated 1000V, CAT III, 20 Amp). • Leads are impervious to extreme temperatures, automotive solvents and remain extremely flexible over time. • Packaged in a four pocket test lead organizer for convenient storage.



- SLV501820 76" Test Lead, Blue
- SLV501821 76" Test Lead, Red
- SLV501822 76" Test Lead, Green
- SLV501823 76" Test Lead, Yellow

## SLV908210

### Universal Vehicle Test Lead Kit

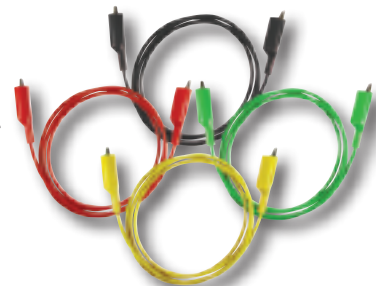
• 20 piece test lead kit features innovative testing accessories that enable fast and reliable diagnostic measurements. • 6.5 ft. double-insulated silicone test leads are compatible with virtually all Digital Multi-Meters. • Choose the ideal determination for the electrical testing task at hand. • Included are 3 re-settable fuse links (10A, 20A, and 30A) that can be tripped manually and reset with a push of the finger. • All items fit securely in the premium foam inserted hard case.



## SLV905320

### Premium Four Color Jumper Set

• High quality 4 ft. jumper leads utilize double insulated, bi-color silicone cables. • Silicone leads can withstand high temperatures and remain flexible in cold environments. • Four contrasting colors ensure the proper connection has been made. • Perfect for making quick jumper lead connections. • Each lead end is terminated with alligator clip, fitted with insulating boot.



## OW3902

### Twin 5 Ft. Jumper Leads

- High visibility black and red leads stretch to over 5 feet in length.
- Superior memory retention and resistance to grease and oil.
- Coil cords constructed from high quality polyurethane.



## OW3904

### Twin 5 Ft. Multimeter Lead Set

- Superior memory retention and resistance to grease and oil.
- Coil cords constructed from high quality polyurethane.
- Includes one black and one red test lead, two multimeter probes, two banana plugs and four alligator clips.



## LS55000

### Wire Holder

- Offers an extra pair of hands when soldering.
- Alligator clamps firmly hold wire and small parts when soldering.
- Flexible design allows different ways to attach and hold wire.
- Clips and base are magnetic and can be attached to any ferrous surface.
- Magnetic arms can be removed and used without the base.
- Base is also hex shaped and can fit in a vise when needed.



## TE22900

### Jumper Twins Test Leads

- Two 30" leads of highly insulated wire.
- Color coded - black and red.
- For "jumping" any part of the electrical system.



## Retractable Test Leads



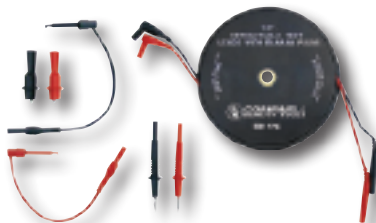
- Used for testing electrical circuits.
- Retractable test leads pull out and stay at desired length.
- Rewind test leads into its own protective case when not in use.
- Includes insulated alligator clips.
- Made from 18 gauge copper wire.
- Choose from 1 to 3 test leads.
- **RB1138** has a magnetic back for mounting on metal surfaces.

PART NO.	DESCRIPTION
RB1129	3 test leads x 10 ft.
RB1130	1 test lead x 30 ft.
RB1137	2 test leads x 30 ft.
RB1138	2 test leads x 30 ft. - Magnetic

## RB1176

### 7 Piece Retractable Test Lead Set

- Included adapters work interchangeably with banana plugs on the 2 x 15 ft. retractable test leads.
- Used for testing electrical circuits in cars, trailers, boats, etc.
- 15 ft. wire allows connection of the leads under the hood and to test from the drivers seat.
- Use with any multimeter, or other device, equipped with standard banana jack connectors.
- Retractable test leads pull out and stay at desired length.
- Different color wires for easy identification.



## TH392

### GM Micro-Pack and Metri-Pack Jumper Wire Sets

- Provide access for testing all components using either Micro-Pack or Metri-Pack connectors on GM vehicles 1985 and up.
- Enables technician to "T" volt/ohm meter in harness for diagnosing computer and sensor problems.
- 10 color coded jumper wires included with 12" test leads.



## TE23100

### Extra Heavy Duty Test Leads

- Two (2) 48" test leads.
- Full flex wire with heavy insulation.
- Heavy duty jacketed alligator clips.
- Ideal when working on late model cars.



## TE21250

### FINGER SAVER® Wire Piercing Guide

- Prevents stabbing finger when using automotive circuit testers.
- Quickly, easily and safely guides the pick point of any circuit tester in the center of all primary automotive electrical wire.
- Holds circuit tester in position allowing technician to work hands free.
- Impervious to gasoline, oil, thinners and other shop chemicals.
- Stores on ground wire of circuit tester.



## RB295A

### MEMOR-EZE Battery Powered

- Designed to maintain the memory of the on-board vehicle computer when the power source is disconnected.
- Prevents loss of certain driveability codes, keyless entry codes, digital radio settings, cellular phone settings, and other memory related functions.
- Prevents loss of radio function in anti-theft radio systems.
- Use with 9-Volt alkaline battery (not included).



## LS32150

### Power/Ground Outlet

- Provides an electrical ground and power source from the vehicle.
- Plugs into cigarette lighter or power accessory receptacle for a ground and a power source on the dash.
- Plug light will come on to signal that it is connected and that both power and ground are available at the posts.
- Connect to the positive (+) terminal for power.
- For electrical ground, attach ground wire from instrument to be grounded to the negative (-) terminal.

LS26270 Repl. Bulb



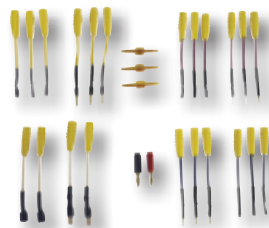
Diagnostic & Underhood

## TERMINAL TOOLS

### WN77202

#### Spade Terminal Probe Adapter Set

- Tips are designed to be a perfect fit for most automotive connector pins.
- Great for "hands free" jumper wire testing.
- Tee Connection Adapter provides a solid connection for road testing, acts like a universal breakout box for virtually any 2 or 3 pin connector on the vehicle.
- Includes 22 assorted spade terminal tips, 2 screw on banana plug test lead adapters and 3 Tee adapters.



### WN77203

#### Round Terminal Probe Adapter Set

- Tips are designed to be a perfect fit for most automotive connector pins.
- Great for "hands free" jumper wire testing.
- Tee Connection Adapter provides a solid connection for road testing, acts like a universal breakout box for virtually any 2 or 3 pin connector on the vehicle.
- Includes 26 assorted round male and female terminal tips, 2 screw on banana plug test lead adapters and 3 Tee adapters.



### JS96033

#### 12 Piece Terminal Tool Kit

- Fits most GM and American Motors computer connectors and terminals.
- Individually handled for easy access into tight places.
- Color Coded for easy identification. Red Anodized Handle: For GM C3 systems - Six individual tools easily remove wires from most GM and American Motors computer connectors and terminals.
- Green Anodized Handle: Six individual tools easily remove wires from terminal blocks without damage to either the wire or terminal; fits most American and some import vehicle models.



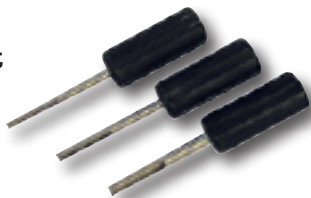
Set consists of:

PART NO.	DESCRIPTION
JS9603301	3.3MM x 28MM Tube, Spring Loaded
JS9603302	1.4MM x 19MM, Square Blade
JS9603303	1.5MM x 24.75MM, Flat Blade
JS9603304	2.0MM x 23MM, Flat Blade
JS9603305	8.0MM x 24MM, Fork Blade
JS9603306	3/16" x 1.0", Flat Blade Screwdriver
JS9603307	3.3MM x 28MM, Tube
JS9603308	4.3MM x 13MM, Tube
JS9603309	3.75MM x 13MM, Tube
JS9603310	3MM x 13MM, Tube
JS9603311	3MM Flat, Twin Blade
JS9603312	1.6MM Flat, Twin Blade

### TH588

#### Terminal Release Tool Kit

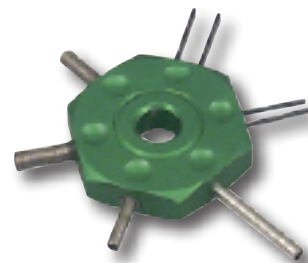
- Designed especially for the professional technician.
- Tools are made of steel.
- Kit Includes the following tools for different sized wire and contacts: 14-16 AWG and size 14 contacts, 16-18 AWG and size 18 contacts, 20-24 AWG and size 20 contacts in a custom pouch.
- Made specifically for Deutsch Connectors.



### LS56500

#### Terminal Tool

- Designed to remove wires from terminals without damage to either.
- Prongs depress the "barbs" on conventional terminals.
- Fits most sizes of terminal blocks of American makes and some imports.



### LS14900

#### Terminal Tool for GM C3 Systems

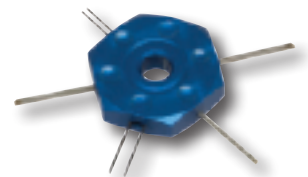
- Designed to remove wires from terminals without damage to either on Pack-Con and Weather-Pack terminals on GM C3 systems.
- Six tools in one - Flat blade to open connectors, Fork blade for ALDL connectors, three different rectangular blades for Pack-Con terminals, and spring-loaded tube for Weather-Pack terminals.
- Can also retrieve trouble codes from engine computer on late model GM vehicles.



### LS57780

#### Terminal Tool for Ford

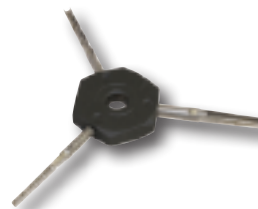
- Quickly and easily releases wires without damage to the wires or terminal blocks.
- The single blades have a bevel ground onto the end for working on small wire terminals found on newer vehicles.



### LS59600

#### Deutsch Terminal Tool

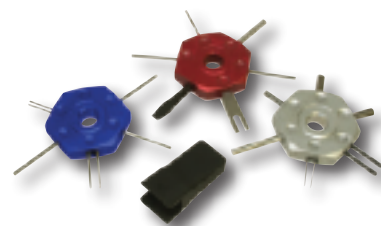
- Works on OEM electrical connectors used on trucks and equipment such as Caterpillar, Kenworth, Peterbilt, Freightliner, Mack and more.
- Also used on some Harley-Davidson connectors.
- Slotted tubes are made out of stainless steel which work and last longer than plastic disconnect tools.



### LS57750

#### Terminal Tool Set with Handle

- Set of three (3) terminal tools and handle for removing wires from terminals without damage.
- Terminal tools work on conventional terminals as well as Pack-Con and Weather-Pack terminals found on many GM vehicles.
- Blue terminal tools fits many Ford applications.
- The handle slips over the probes to protect the technician's hand as well as provide extra leverage.



Set consists of:

PART NO.	DESCRIPTION
LS14900	Terminal Tool for GM (Red)
LS56500	Terminal Tool (Silver)
LS57780	Terminal Tool for Ford (Blue)
LS57790	Handle

CIRCUIT TESTERS

All of these testers feature the following: • Checks 6 and 12 volt systems. • Ergonomic-slim design-clear handle. • Slim style replaceable bulb. • Positive contact molded strain relief. • Heavy-duty stainless steel probe with insulated shaft. • Heavy-duty clip with positive soldered connection.

**OW3630**  
Battery Powered  
Continuity Tester

• Designed to test any type of non-live electrical circuit. • Track down broken wires, bad grounds and blown fuses quickly. • Comes complete with AAA Alkaline battery. • 12 ft. red coil cord.  
**OW363010 Repl. Bulbs (10)**



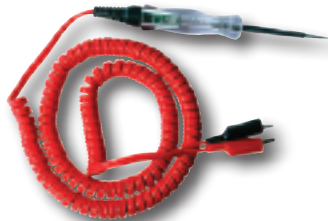
**OW3634**  
Heavy Duty Straight  
Cord Circuit Tester

• Designed for testing electrical circuits and locating shorts, grounds, and open circuits. • 5 foot heavy-duty cord.  
**OW363310 Repl. Bulbs (10)**



**OW3631**  
Heavy Duty Logic  
Probe Tester

• Multi functional design allows testing range of 3-26 volts. • Bright red and green LED's interpret voltage signals such as ground, power and frequency. • Tests fuel injectors, solenoids, presence of serial data and tach reference signals. • Output tests on MAF, Cam, Crank, Hall Effect VRS sensors and more. • High impedance input compatible with computer circuits and sensors. • Air bag safe. • 12 ft. heavy-duty twin clip red coil cord. • Checks 6, 12 and 24 volt systems.



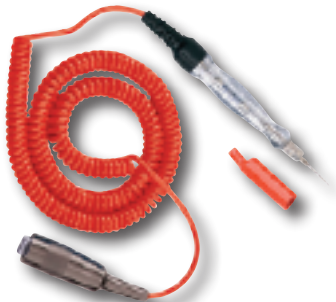
**OW3636**  
Coil Cord  
Circuit Tester

• Locate hot circuits and troubleshoot primary circuits on all 6 and 12 volt systems. • Heavy duty lead, heavy duty clip, and stainless steel probe for fast, safe, and accurate low voltage testing. • 12 ft. coil cord test lead made from durable, high visibility, heat and oil resistant material. • Bright, high intensity bulb for easy visibility. • Molded strain relief prevents broken wires.  
**OW363310 Repl. Bulbs (10)**



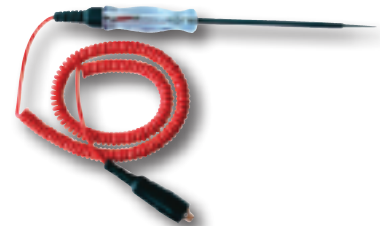
**OW3633**  
Mini Coil Cord  
Circuit Tester

• Locate hot circuits and troubleshoot primary circuits on all 6 and 12 volt systems. • Heavy duty lead and stainless steel probe for fast, safe, and accurate low voltage testing. • Small, ergonomic design for use in tight areas. • Needle-sharp, stainless steel probe for easy wire piercing. • 12 ft. coil cord test lead made from durable, high visibility, heat and oil resistant material. • Threaded probe to add other screw-on type accessories. • Bright, high intensity bulb for easy visibility. • Molded strain relief at both ends prevents broken wires. • Heavy duty clip.  
**OW363310 Repl. Bulbs (10)**



**OW3639**  
Extra Long  
Heavy-duty  
Circuit Tester

• Long 7" probe shank allows access to difficult to reach areas for testing electrical circuits and locating shorts, grounds, and open circuits. • 12 foot heavy-duty red coil cord lead.  
**OW363310 Repl. Bulbs (10)**



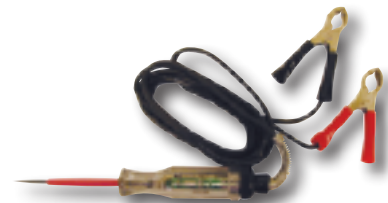
**TE27**  
Heavy Duty  
Circuit Tester

• Checks 6 and 12 volt systems. • Heavy duty grounding clip with insulating boot. • Five feet of tough flexible rubber wire retained in spring supported strain relief. • Lead wire permanently attached. • Clear plastic handle makes bulb highly visible.  
**TE27010 Replacement Bulb**



**TE28100**  
Computer Safe  
Automotive Logic  
Probe

• High impedance - the current draw is less than 7 milliamps to protect all vehicle circuits including computerized engine and body controls, sensitive electronic sensors, microprocessors, electronic ignition components and air bags. • Dual color LED indicates red for power (high) and green for ground (low). • Leads can be attached regardless of polarity. • Can be used as a standard, single lead circuit tester. • For 6, 12 and 24 volt systems. • Insulated probe has an exposed length of 3-3/8". • Includes Protect-A-Terminal®, Probe Adapter to prevent damage to electrical connectors. • Has 6 feet of heavy duty, 18 gauge dual leads with large battery clips for easy hook-up.



Diagnostic & Underhood

## CIRCUIT TESTERS

### LS32900

#### Circuit Tester/Jumper

- Heavy-duty circuit tester for checking low voltage up to 12 volts.
- By depressing the red button, the tester becomes a jumper for powering electrical components or a ground.
- The probe, handle, cord and clamp are reinforced for durability.
- Comes with a strain relief spring on the cord.



### TH121

#### WIREHAWK®

#### Circuit Tester

- Use for 12V/24V circuits, connections, fuses and 2-cycle engine timing.
- Requires just one hand to test circuits in hard-to-reach areas.
- Works two ways: Captures and pierces wire with unique hook design or can be used as an "ice-pick" type tester.
- If circuit is live, bulb in handle lights up.
- Has 16 gauge, 44" ground wire with 50 amp clamp.



### LS24550

#### Computer Safe Circuit Tester

- Also indicates polarity.
- Safe for automotive computers.
- Won't damage sensitive electronic components.
- Draws less than 21 mA. at 12 volts DC.
- Operating range 3-28 volts.
- The red light indicates positive polarity, green indicates negative polarity.



### LS30610

#### Circuit Tester with Ground Adapters

- Heavy-duty circuit tester with multiple options for connecting to a ground source.
- Long, 12 foot cord has a quick coupler to securely connect clamp or power outlet plug.
- Large, strong clamp connects securely.
- Power outlet plug can always be used to provide ground in the cabin.
- For circuits up to 12 volts.



### LS28400

#### Heavy Duty Circuit Tester

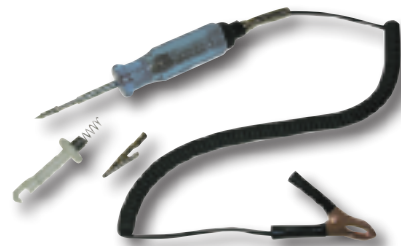
- Quickly tests low voltage up to 12 volts.
- A heavy duty circuit tester for lifetime use.
- The probe, handle, cord and clamp are reinforced for extra durability.
- Comes with a strain relief spring on the cord.
- Cord is 49 inches.



### LS28640

#### Ultimate Circuit Tester Kit

- Heavy duty tester signals with a light and buzzer.
- Tests low voltage up to 28 volts.
- Also finds electrical shorts, checks polarity, detects battery drain, and checks circuits from a distance.
- Heavy duty coil cord extends over 8 feet.
- Detachable, spring-loaded hook pulls the center of the wire into the probe every time.
- Attach alligator clip to the probe when a clip-on connection is needed.



#### LS28760 Replacement Bulb

### SFCT8002

#### Professional Cordless Circuit Tester

- Ideal for autos, trucks, trailers, RV's and boats.
- Solid state electronic voltage detector does not need wire or clip connector to ground.
- Safe to use around automotive microcomputer controllers due to negligible current draw (about 20 microamps).
- High impedance safe with auto electronic control modules.
- Cordless, 1-1/2V "N" batteries installed.
- Operates on positive DC voltages between 3 volts and 24 volts in battery powered systems.
- Chrome plated metal construction with buzzer, LED indicator light for audible and visual signals, and vibration indicator.
- Tester **MUST NOT** be used on AC electrical systems or any voltages higher than 24 volts.



#### IBDRY1390 Repl. "N" Batteries

### IP8005

#### Fuse Saver Kit

- 3 resetting breaker handles- 10,15, and 20 Amps.
- Color matching handles for easy identification.
- Dual type fuse box connector with 10 ft. cord.
- Find short circuits FAST!
- Install radios, CD player, radar detectors and other accessory equipment with ease.
- Allows you to move around the vehicle shake testing wires while looking for the short.
- No more overheating fuse boxes.
- Comes in a blow molded storage case.



- IP800510AMP 10 Amp Fuse Saver Handle
- IP800515AMP 15 Amp Fuse Saver Handle
- IP800520AMP 20 Amp Fuse Saver Handle
- IP80055AMP 5 Amp Fuse Saver Handle
- IP80057 Fuse Saver Cable
- IP8005EXT 10 Foot Fuse Saver Cable Extension



## IP7866

### 4 & 5 Pin Harness Checker

- Easily traces each lighting function to the terminal in question.
- Plugs into the trailer plug.
- Each LED light corresponds to the circuit being energized.
- Provides an easy to connect ground terminal for trailer lighting set-up.



## IP7893

### 7 Flat Pin Trailer Tester

- Quickly and easily tests trailer circuits on most light/medium duty trucks and campers.



## IP7897

### 6 Round Pin Trailer Tester

- Tests trailer circuits on older light/medium duty trucks & RVs.



## LS13120

### Electrical Connector Separator

- Quickly disconnects electrical connectors without damage.
- Engage the tool tip behind the connector clip.
- Push or pull to disconnect.
- The tool is double-ended to fit different access angles.
- Works on Weather Pack and other automotive electrical connectors.



## IP007865

### Circuit Chaser™ for Large Trailer Plugs

- "One-Man Testing" for male and female 7-Pin tractor trailer plugs and much more.
- Troubleshoots tractor trailer circuits.
- One person can test all the lighting alone.
- Allows you to bypass troubled circuits so you can drive away.
- Eliminates guesswork.
- Comes with an extra jumper connector.



## IP8040

### Diamond Grip Terminal Cleaners

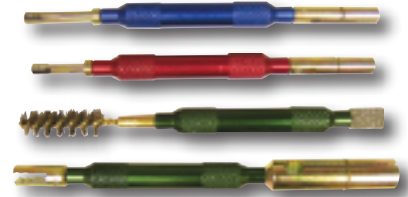
- Three piece set of terminal cleaners (small, medium, and large) designed to extend harness life and reduce diagnostic guesswork.
- Feature highly-durable and abrasive coatings for cleaning flat pin and small spade style electrical connectors.
- Precisely removes corrosion.
- Works on both male and female connectors.
- Connector applications: Computer modules, engine, general transmission, fan, alternator connections, radios, lights, and many more.
- Includes premium quality holster with magnetic clasp.



## IP8025

### Trailer Socket Cleaner Set

- Maintenance tools for automotive connectors and terminals.
  - For male and female connections.
  - For tail and side marker light assemblies.
  - Maintain continuity and prevent circuit failure.
  - Quickly and precisely cut away corrosion.
  - Additional uses: Bullet, butt and standard AWG terminal connectors; Auto, marine and industrial applications.
  - Master kit cleans all these connectors: 3 and 4 pin, 4 and 5 pin, 6 pin round female, 6 pin round male, 7 pin spade female and 7 pin spade male.
- Set consists of:

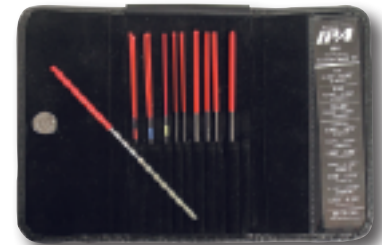


PART NO.	DESCRIPTION
IP8021	4/5 pin socket cleaner
IP8022	6 round pin socket cleaner
IP8023	7-way spade pin socket cleaner

## IP8042

### Round Terminal Cleaners

- Cleans female round electrical pins.
- Each tool features a diamond abrasive coating for precise cleaning, sizing and durability.
- Removes corrosion and extends harness life.
- Common applications include automotive, military, plow and industrial connectors.
- The set includes 12 individual pieces ranging in sizes from 0.030" – 0.120".
- Includes a leather-type holster.
- Each file is marked or color coded for size.



## LS52500

### Mechanic's Stethoscope

- Unique sound chamber and super thin diaphragm greatly amplify sounds.
- Pinpoints source of noise in engines, transmissions, differentials and bearings.

LS52850 Rubber Tip

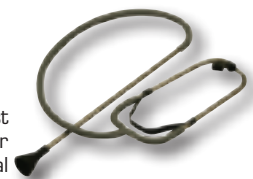


## LS52700

### Audio Stethoscope

- Detects noise from vacuum leaks, exhaust leaks, wind noise and air leaks.
- Detects air induced sounds not detected by conventional stethoscopes.

LS52850 Rubber Tip



## LS52750

### Audio Stethoscope Kit

- Dual purpose set detects both mechanical and air induced sounds.
- Use the black diaphragm chamber and screw-in metal probe to detect mechanical sounds from bearings, engines, transmissions, etc.
- For air induced sounds, attach the vinyl hose to the hollow tube and funnel assembly.
- The funnel amplifier will detect noises from vacuum leaks, exhaust leaks, air leaks and wind noise.
- For hard to reach locations, remove the funnel and use the hollow tube.

LS52850 Rubber Tip



Diagnostic & Underhood

**JS97202****Wireless  
ChassisEAR™**

- Detects squeaks and rattles throughout a car or truck's chassis. • No wires to string.
- Instant Cross-Comparison between all six channels can be made in one short test drive. • Allows technician to put gears, bearings and suspension under load so problems can be detected.
- Quickly pinpoints cause of under-car chassis and suspension problems: squeaks, popping, rattles, groans, clunks, growls and ticking. • Use to isolate faulty fuel injectors.
- Use to pinpoint faulty bearings on drive accessories, alternators, water pumps, A/C compressors and tensioner pulleys. • Kit includes 4 clamp-on inductive sensors which allows technician to perform multiple point tests.

**JS06600****ChassisEAR™**

- Diagnostic system designed to locate problem sounds. • Listen to 6 under-chassis locations in one road test. • Hear noises that can not be duplicated on jack stands. • Super-sensitive microphone in clamps.
- 16 ft. Wire leads (color-coded). • Uses 9 volt battery (included).
- 6-position control switch identifies 6 channels (color-coded). • LED light signals when switch is on. • Adjustable volume control, on/off switch.
- Headphones block outside noise.

**JS06400****TracerEAR™**

- Electronic stethoscope with flexible shaft reaches the tightest areas. • Non-conductive coating protects expensive computer circuitry. • Ultra sensitive microphone and amplifier give full range of sounds needed. • No distortion or unwanted sounds bleed in. • Quickly pinpoints noise and location of bad bearings, bushings, dirty fuel injector, wind and air leaks, noisy valve and lifters. • Comes with stereo headset in a protective handy kit.

**Video Scopes**

Examine difficult-to-reach areas normally hidden from view. All of our video scopes have 5.5MM camera heads for up-close visual inspections in tight areas.

**AUTMV10155****VideoScope with 5.5MM  
Camera**

- Comfortable pistol grip design.
- Auto focus and viewing capacity as close as 1" with crystal clear output.
- Views images in real time. • Color CMOS video camera chip in the tip.
- On-screen horizontal/vertical reverse.
- 2.4" high resolution full color LCD display (480 x 234). • White LED to illuminate the inspection area, with illumination control. • Oil and scratch resistant tempered glass lens.
- 1M (39.4") semi-rigid, but flexible watertight shaft. • Ergonomic and durable tool housing. • Composite video output jack (RCA).
- Includes: magnet and mirror, Composite Video-out cable, four (4) "AA" batteries, and a blow molded case.

**AUTMV20155****Recording VideoScope with  
5.5MM Camera**

- Record digital still images and MPEG2 or MPEG1 video either on the internal flash memory or on the removable SD cards.
- Offers the capability to stream digital video directly to a PC. • 3.5" high resolution full color LCD display (320 x 240). • Easy-to-use, multi-language interface. • On-screen horizontal/vertical reverse. • 2x digital zoom for increased viewing. • White LED to illuminate the inspection area, with illumination control. • Oil and scratch resistant tempered glass lens. • 1M (39.4") semi-rigid, but flexible watertight shaft. • Built-in rechargeable Li-Ion battery with up to 5-6 hours of continuous use. • Ergonomic and durable tool housing. • Audio input jack for recording comments with optional ear bud and microphone attachment. • Can operate the tool while charging the battery.
- Composite video output jack (RCA). • Includes the following: mirror and magnet, USB Cable, Composite Video-out cable, charger, and a blow molded case.

**AUTMV30155****Recording VideoScope  
with 5.5MM Camera**

- Detachable 3.5" TFT-LCD wireless monitor. • Allows for remote inspection up to 32 ft. (10M) from the measurement point.
- Views images in real time.
- Color CMOS video camera chip in the tip. • On-screen horizontal/vertical image reversing. • White LEDs to illuminate the inspection area, with illumination control.
- Views objects as close as 1".
- Oil and scratch resistant tempered glass lens. • 1M (39.4") semi-rigid, but flexible watertight shaft. • Ergonomic and durable tool housing.
- Rechargeable lithium battery in monitor and (4) AA batteries in camera. • Ideal applications: water restoration, HVAC and refrigeration, electrical inspection, automotive, pest control. • Includes: mirror and magnet, Video-out cable, (4) AA batteries.



## LS56810

### Relay Tester Set

- Set of four relay test jumpers make testing relays or live circuits quick and easy.
- Set includes four jumpers to fit the most popular size relays on domestic and import vehicles.
- Simply remove relay to be tested, insert correct jumper and insert relay into jumper.
- When using green four pin jumper be careful to align pins on jumper and relay correctly.
- No need to pierce wires or connect multiple jumper wires.
- Jumpers have tabs for clamping and flat pads to place test leads on.
- Set comes in blow-molded storage case.



Set consists of:

PART NO.	DESCRIPTION
LS56820	Yellow Jumper
LS56830	Red Jumper
LS56840	Blue Jumper
LS56850	Green Jumper

LS69200 Test Lead Kit

## LS60610

### Relay Tester Set II

- Makes testing relays or live circuits quick and easy.
- Includes four jumpers to fit many popular relays on Honda, Nissan, Toyota, newer Ford and GM mini micro relays as well as International trucks.
- Simply remove relay to be tested, insert correct jumper and insert relay into jumper.
- When using gray four pin jumper be careful to align pins on jumper and relay correctly.
- No need to pierce wires or connect multiple jumper wires.
- Jumpers have tabs for clamping and flat pads to place test leads on.



Set consists of the following in a blow-molded storage case:

PART NO.	DESCRIPTION
LS60620	Orange Jumper
LS60630	White Jumper
LS60640	Purple Jumper
LS60650	Gray Jumper

## LS46950

### Relay Pliers

- For removing electrical relays on most domestic and import vehicles.
- Offset handle and thin tips allow access to relays in confined areas.
- Specifically designed tips are angled to fit slots or edge of relay cover, which allows relay to pop free from socket with less chance of damaging the relay.
- Also works on many heavy-duty and industrial applications.



## LS60660

### Master Relay Tester Set

- Includes eight (8) jumpers to fit most popular relays.
- Jumpers have tabs for clamping and flat pads to place test leads on.
- No need to pierce wires or connect multiple jumper wires.
- Includes test lead kit for easily and securely connecting relay test jumpers to a multimeter.
- Jumper wire may be used between common and open to close the relay circuit for testing and has a test port to easily check voltage.
- Provides access for a clamp-on amp meter.
- Relay puller pliers easily remove electrical relays without damage to the relay or electrical box.



Set consists of:

PART NO.	DESCRIPTION
LS56820	Yellow Jumper
LS56830	Red Jumper
LS56840	Blue Jumper
LS56850	Green Jumper
LS60620	Orange Jumper
LS60630	White Jumper
LS60640	Purple Jumper
LS60650	Gray Jumper

## HR76

### Relay Circuit Tester

- Works on 12 or 24 volt systems.
- Used to test relay circuits in late model vehicles.
- Identify the problem in a circuit in seconds without the use of a multi-meter.
- Can jump the relay for compression testing A/C recharge, etc.
- Includes six (6) of the most popular relay adapters plus a universal to configure your own.
- Cuts diagnostic time on relay related problems by up to 75%.
- Instructions included.



## ES190

### Relay Buddy

- A quick go/no-go tester for the most common automotive relays.
- Provides an indication of the general health and functioning of the relay switch contacts and coil.
- Will check the control side of the relay by applying a signal to the relay coil while it checks for proper functioning of the relay contacts.
- Operates the relay several times during each test session as it watches for consistency in every cycle.
- Will fail the relay and light the red LED if any one of the cycles proves unsuccessful during the test session.
- Comes with a zippered storage pouch.
- Settable to 4 and 5 pin relay.
- Switch contacts are loaded to detect excessive resistance.
- Uses vehicle 12 volt battery for power.
- Green light if relay is good; red light if relay is bad.



## IP9036

### Relay Bypass Kit

- Plugs in place of the fuel pump relay and provides direct control over the fuel pump circuit.
- When testing fuel injection systems the relay bypass allows actuation of the fuel pump when the engine is not running for accurate trouble shooting.
- Relay bypass allows a technician to control fuel pump independent of all on board systems.
- Operating Range: 20 Amp continuous, 30 Amp surge (12V).
- Set consists of three sizes: Large - Popular on late model domestic and Japanese vehicles Volkswagen (most models from 1999-2005), Audi (most models from 2004-2006); Medium - Common relay for applications spanning most makes and models from late 1970's through 2009; and Small - 2000 and newer model USA, Korean and Japanese applications.



## IP9037

### Relay Bypass Kit II

- Energize a fuel pump by the push of a switch.
- Simple to use and most importantly helps troubleshoot fuel system and electrical problems.
- Actuates fuel pump when the engine is not running.
- Plugs in place of relay.
- Controls fuel pump independent of "key on" systems.
- Operating range: 20 Amp continuous, 30 Amp surge (12V).
- Rectangular Relay: Acura, Chevrolet, Chrysler, Dodge, Eagle, Geo, Honda, Lexus, Mitsubishi, Nissan, Plymouth, Pontiac, Subaru, Suzuki, and Toyota.
- Large square relay: BMW's and other German applications.
- Round relay: Acura, Cadillac, Chevrolet, Chrysler, Dodge, Eagle, Geo, Honda, Lexus, Mitsubishi, Nissan, Plymouth Pontiac, Saab, Saturn, Scion, Subaru, and Toyota.



## OW3650

### Remote Starter Switch

- Heavy duty, push button design allows technicians to start and crank engines from under the hood.
- Red ready-light glows when the starter switch is connected to a hot circuit.
- Soft rubber grip.
- Heavy-duty oil and grease resistant 12 gauge wire.
- High current clips open to an extra wide 5/8".
- Hot circuit indicator lamp.



## CLS20750

### Remote Starter Switch

- Tough, smooth-working reliable switch.
- Features heavy gauge, rubber-covered copper wire.
- Depress button to jog or start the engine.

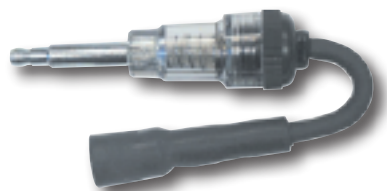


## TE23900

### In-Line Ignition Spark Checker

- Connects between spark plug and spark plug wire to visually check condition of ignition system at each cylinder.
- Frequency and intensity of flash indicates if ignition or fuel delivery problem is present.
- "Flash" can be seen in bright sunlight.
- Clear plastic body can withstand rough use and resists automotive chemicals.
- Protected by mechanical strain relief.

TE23904 Repl. Bulb



## CLSST100

### In-line Spark Tester

- Quickly diagnose problems with all ignition systems including distributorless ignitions.
- To use, connect the tool between the spark plug and the plug wire.
- Double-ended to offer a straight boot and a 90° boot for confined areas.
- With the engine running, the tool flashes a mirror image of ignition spark.
- Shipping weight: 5 oz.

LS20680 Bulb



## LS19380

### Spark Indicator

- Tests spark plugs, spark plug wires and coils without puncturing the wire.
- With the engine running, place the grooved end of the tool over the plug wire; bulb will flash to indicate spark.



## OW6589

### Electronic Ignition Spark Tester

- Check for spark on gasoline engines used in import and domestic cars and trucks, plus small engines.



## TH458

### Coil-On Plug Spark Tester

- Designed for ignition systems with coil-on plugs, including Ford, Chrysler, Chrysler imports, Mitsubishi, Nissan and others, but can be used on any ignition system.
- Test for no-start conditions and measure coil output.
- Plugs into coil boot and has adjustable gap from 0 to 40 kV.
- 12" ground wire and safety shield.



## TE23970

### In-Line Spark Checker Kit

- The one ignition spark checker for troubleshooting virtually all domestic and imported cars, SUV's and trucks.
- A must for testing newer vehicles with recessed spark plugs.
- Also tests conventional and coil on plug ignition systems; test coil directly to ground.
- Frequency and intensity of flash indicates nature of problem.
- Fast and easy to use.
- Installs quickly.
- Features coil tester with male fitting, female x female adapter, battery clip and coil tester extension.



## TH404

### Adjustable Ignition Spark Tester

- For high energy electronic ignition systems to small engines.
- Tests for no start conditions and for spark strength.
- Adjustable gap allows for spark gap requirements from 0-40,000 volts.
- Gauge background makes spark easy to see for precise measurement.
- Alligator clip securely fastens to ground.
- Screw assembly adjusts spark gap.
- Includes safety shield.



## KD135

### Spark Plug Terminal Pliers

- Safely removes spark plug cables.
- Prevents damage to cables.
- Handles and jaws are coated with heavy duty plastic for sure grip.



## LS51750

### Adjustable Spark Plug Tool

- Plier jaws adjust to 5 different positions for easy access to boots.
- Specially shaped, cushioned jaws grip straight on or from the side.
- Plastic handle grips help prevent shock.
- Shipping weight: 12 oz.



## TH492

### Spark Plug Installer/Remover Set



- Set includes 3" and 6" starters.
- 6" length is designed for coil-on plug applications and engines with recessed spark plugs.
- 3" version is for applications where space is limited.
- Both tools are made of flexible, heat-resistant plastic to reach into recessed areas or over, under and around hot manifolds.
- Stepped shaft.
- Non-slip grip.

## TH477

### "Boot Boss" Spark Plug Boot Puller

- Glass filled nylon construction gives the "Boot Boss" strength yet lightweight in design.
- Measuring 5-1/4" in length, this tool will reach and remove recessed spark plug boots.
- Angled lip is designed to reach under the boot to pull off even the most baked on boots without damage to the plug wires.



## LS51600

### Spark Plug Wire Puller

- Plier jaws are made to pull spark plug boots from different angles.
- The double-ended tool also pulls cartridge fuses up to 1" in diameter.
- Made of glass-filled nylon for shock resistance and extra strength.



## JS08310R

### 12" Plug Starter

- Starts spark plug threads without cross threading.
- Reaches those tough to reach plugs.
- Bright red color makes it easy to guide the plug accurately to the hole.
- Flexible shaft bends and holds any angle.
- Cap holds most spark plugs and cannot damage the plug.



## LS51250

### Spark Plug Wire Puller

- Removes spark plug wire boots from plugs.
- Use in hard-to-reach areas such as recessed and obstructed plugs.
- Square shaft prevents slipping.
- Thick plastic handle prevents electric shock and provides greater pulling power.



## LS52990

### Spark Plug Wire Puller

- Two pulling positions help make removing spark plug wires a safe and easy job.
- Specially shaped, cushioned jaws grip the boot straight on or from the side.
- Plastic handle grips help prevent shock.



## JA100

### Spark Plug Hole Rethreader Tap

- For popular 14MM and 18MM internal threads.
- 13/16" hex drive.
- Chase out threads when changing spark plugs, necessary when working on aluminum heads and installing plugs with a longer reach.



## LS20000

### M12-1.25 Spark Plug Chaser

- The narrow profile allows access to spark plug holes in confined areas.
- Use with a 3/8" ratchet and locking extension.
- For use on 2nd Generation Ford Triton Engines 2008 and newer.
- Also use on Mercedes Benz most V6 and some V8 models newer than 2006; Nissan 2.0L 2007 and newer; and Toyota Scion 1.8L 2008 and newer.
- Can also be used on some motorcycles, lawn mowers, snowmobiles and other small engine applications.
- Size: M12 x 1.25.



## LS20020

### Limited Access Spark Plug Chaser

- Fits spark plug holes with limited access.
- The narrow profile and long length allows access to spark plug holes in confined spaces.
- Use with a 3/8" ratchet or extension.
- Size: M14 x 1.25.
- **IMPORTANT:** Use anti-seize.



## LS20200

### Spark Plug Thread Chaser

- Double-ended for both 14MM and 18MM threads.
- Cleans threads in spark plug hole.
- Use with 13/16" spark plug socket.



## HR39100

### Ford Triton Spark Plug Extractor Kit

- Works to extract frozen and broken off spark plug sleeves in 2004 to present Ford Triton Engines.
- Specially machined guide works with extra long tap and extractor to make sure the job is done right.



Diagnostic & Underhood

## HR39300

### Ford Insert Repair Kit

- Designed to aid in the repair of a common problem in the Ford Triton family of motors.
- For use on three valve 5.4L and 6.8L engines built before 10/9/07 and 3-valve 4.6L engines built before 11/30/07 found in many 2004-2008 Ford, Lincoln and Mercury.
- The spark plug tends to break off in the cylinder head during maintenance. If this problem is not repaired properly, it can result in damaged or unusable spark plug threads and in extreme cases the possibility of a spark plug blow out.
- Repair those damaged threads or blowouts in 30 minutes or less per cylinder.

HR393100 Insert



## HR39200

### Spark Plug Porcelain Extractor Kit

- Used to extract the porcelain from broken spark plugs in 2003 to current Ford Triton Engines.
- In some cases the porcelain will break off in the sleeve and will need to be extracted in order for the HR39100 Ford Triton Spark Plug Extractor Kit to function effectively.
- Unlike other tools that tell you to push the porcelain through the sleeve (Ford says specifically not to do this), this tool adheres to the porcelain using a special Loctite® and then allows a user to extract the broken porcelain from the sleeve.

HR39210PACK Pin (10 pk)

HR392190 Loctite® 680™



## HR38900A

### Ford Insert Repair Kit

- Includes eight (8) inserts (HR389100).
- Designed to aid in repairing Ford Modular Cylinder Heads.
- A quality foolproof repair system that is cost effective and fast.
- High quality oversized steel alloy insert will repair other inserts that fail and has no ill effects from heat transfer.
- Total labor time as short as twenty-five minutes.
- For use on 4.6L, 5.4L and 6.8L V-10 Ford Triton two valve engines (1996-2003).
- Includes storage case.

HR389100 Insert



## LS65600

### Broken Spark Plug Remover for Ford Triton 3 Valve Engines

- Removes broken spark plugs from 2004 and newer Triton 3 valve per cylinder engines.
- Includes a unique porcelain pusher tool and a tapered left-hand thread remover for removing the broken spark plug without leaving the porcelain in the engine cylinder.
- Porcelain pusher is used to press the porcelain piece, without breaking the porcelain, farther into the plug tip, providing space for the left hand thread remover to bite into the stainless steel plug tip so it can then be pulled.

Set Includes the following in a blow molded storage case:



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS58980	Gasket (4)	LS65660	Left Hand Hex Nut
LS65610	Puller Housing	LS65670	Porcelain Pusher Assembly
LS65620	Puller Screw		

## SL68450

### Ripped Spark Plug Boot Tool



- Designed to easily remove ripped and stuck on spark plug boots where there is no access to grab the boot for removal.
- Easily saves 30 minutes.
- Separates the rubber from spark plug.
- In usage, this tool goes down in the confined space of the spark plug hole and with hand pressure separates the stuck on piece of rubber boot from the porcelain part of the plug. This spark plug boot tool then slides out with the damaged boot leaving the spark plug exposed and easily removed.
- Made from quality heat treated steel.
- High Tech black finish.

Designed specifically for these engines:

FORD	
4.6L V8 2 valve heads	1997-1999
4.6L V8 2 valve heads	2000 and later
4.6L V8 3 valve heads	2007 and later
5.4L V8 2 valve heads	1997-2004
5.4L V8 3 valve heads	2005 and later
6.8L V10 2 valve heads	1999-2008
6.8L V10 3 valve heads	2008 and later
CHRYSLER	
3.7L V6 2 valve heads	2005 and later
5.7L V8 Hemi 2 valve heads	2004 and later
Works on most other spark plugs with a porcelain diameter smaller than 0.432 of an inch.	

## LS65000

### Spark Plug Repair Kit M14-1.25

- Replaces stripped spark plug threads on aluminum heads with 14MM spark plugs.
- Installs a new spark plug thread insert in original thread location.
- The repair can be completed very quickly and easily.
- Detailed instructions are included.

Set consists of:



PART NO.	DESCRIPTION
LS65010	Drill Tap
LS65020	Long Tap Holder
LS65030	11/16" Threaded Insert
LS65040	Swedger
LS65060	7/16" Threaded Insert
LS65070	Short Tap Holder
LS65080	5/16" Threaded Insert
LS65090	Insert Installer
LS65120	Swedger Handle
LS66160	Set Screw

Spark Plug Sockets, 6 and 12 Point



PART NUMBER	PT. SIZE	DESCRIPTION	NOMINAL	MALE HEX	RUBBER INSERT	LENGTH	OUTSIDE DIAMETER	
							SOCKET END	HANDLE END
T2218SP	6 pt.	Standard	9/16"	5/8"	RL18	2-3/8"	25/32"	23/32"
T2220SPA	6 pt.	Standard	5/8"	3/4"	RL20	2-15/32"	7/8"	7/8"
T2218SPXLA	6 pt.	Extra Long	9/16"	—	RL18	6"	25/32"	25/32"
T2220SPXLA	6 pt.	Extra Long	5/8"	—	RL20	6"	7/8"	7/8"
T2226SP	6 pt.	Standard	13/16"	3/4"	RL60	2-7/16"	1-1/16"	27/32"
TM2114SP	12 pt.	Metric	14MM	16MM	RL14	60.32MM	18.08MM	18.08MM
TM2218SP	6 pt.	Metric	18MM	17.46MM	RL18	66.70MM	24.38MM	19.68MM
U2218LSP	6 pt.	Universal	9/16"	—	RL18	3-5/16"	25/32"	3/4"
U2220LSPA	6 pt.	Universal	5/8"	—	RL20	3-5/16"	7/8"	3/4"
U2226LSP	6 pt.	Universal	13/16"	—	RL60	3-5/16"	1-1/16"	3/4"
UP2220LSPRA	6 pt.	Power Impact Universal	5/8"	—	RL20	3-5/8"	7/8"	1"
UP2220LSPD	6 pt.	Double Swivel Universal	5/8"	—	RL20	5-1/32"	7/8"	1"
UP2226LSPD	6 pt.	Double Swivel Universal	13/16"	—	RL60	5-3/32"	1-1/16"	1"
UP2226LSPR	6 pt.	Power Impact Universal	13/16"	—	RL60	3-11/16"	1-1/16"	1"

Diagnostic & Underhood

**OW6897**

**3 Piece Spark Plug Socket Set**

- Combines the most popular sized spark plug sockets.
- Each socket has a 3/8" drive end for use with a ratchet or breaker bar.
- Socket ends have a soft rubber insert designed to hold and protect the spark plug during removal and installation.

Set consists of:

PART NO.	DESCRIPTION
OW6898	Works on GM, Chrysler, Ford, and many import vehicles with 13/16" spark plugs, 4-7/8" long.
OW6899	Works on GM, Chrysler, Ford, and many import vehicles with 5/8" spark plugs, 4-7/8" long.
OW6900	Works on 2004-newer Ford vehicles with 5.4L, 4.6L, 5.4L, 3-valve Triton V8 & 6.8L Triton V10 engines with 9/16" spark plugs, 5-7/8" long.



**RB4450**

**Spark Plug Gauge (SAE and Metric)**



- Full range coverage for all spark plug gapping requirements from .020 to .080.
- Range includes older model vehicles and late model vehicles including those equipped with distributorless ignition systems.
- Metric gapping scale shown on reverse side.
- Tool includes a recess specifically designed to adjust electrodes.
- Features a handy pocket clip.

**RBF35A**

**"Full-Range" Gauge**

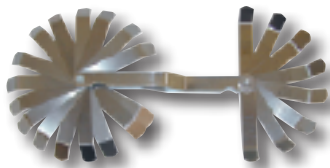


- Thirty-five 3" x 1/2" blades of the following thicknesses: .0015, .002, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025, .026, .027, .028, .029, .030, .031, .032, .033, .034 and .035.

## RBF626

### Master Offset Gauge

• For overhead valves plus other applications where the 5/8" 45° offset makes job easier. • Twenty-six 3" x 1/2" blades of the following thicknesses: .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025, .026, .027, .028, .029 and .030.



## RBF613

### Master GO-NO-GO Gauge

• Twenty-two 3" x 1/2" step-ground blades of the following thicknesses: .004-.006, .005-.007, .006-.008, .007-.009, .008-.010, .009-.011, .010-.012, .011-.013, .012-.014, .013-.015, .014-.016, .015-.017, .016-.018, .017-.019, .018-.020, .019-.021, .020-.022, .021-.023, .022-.024, .023-.025, .024-.026 and .025-.027.



## RBF630MM

### "Full Range" Metric Gauge

• Twenty-five 3" x 1/2" blades of the following thicknesses: 0.04MM, 0.05MM, 0.06MM, 0.07MM, 0.08MM, 0.09MM, 0.10MM, 0.15MM, 0.20MM, 0.25MM, 0.30MM, 0.35MM, 0.40MM, 0.45MM, 0.50MM, 0.55MM, 0.60MM, 0.65MM, 0.70MM, 0.75MM, 0.80MM, 0.85MM, 0.90MM, 0.95MM and 1.00MM.



## RB1610

### 14 Blade Gapping Gauge for Motorcycles

• 14 piece set of 4" x 1/4" feeler gauge blades, thickness .002" through .015". • 1/4" wide gauge blades can be used to check valve clearances of small diameter bucket and shim type valve train systems. • Standard 1/2" wide blades may contact the cylinder head and not provide the proper clearance "feel". • Blades can be quickly and easily removed from and stored in the bi-fold pocketed vinyl pouch with a Velcro® closure. • 4" length allows for extra reach to recessed valve systems. • Straight blades can be bent by the technician for custom applications.



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
RB220562002	.002 feeler blade	RB220562009	.009 feeler blade
RB220562003	.003 feeler blade	RB220562010	.010 feeler blade
RB220562004	.004 feeler blade	RB220562011	.011 feeler blade
RB220562005	.005 feeler blade	RB220562012	.012 feeler blade
RB220562006	.006 feeler blade	RB220562013	.013 feeler blade
RB220562007	.007 feeler blade	RB220562014	.014 feeler blade
RB220562008	.008 feeler blade	RB220562015	.015 feeler blade

## LS67870

### Spark Plug Gauge

• Gauges and gaps all types of spark plugs from .020" to .100" (.50MM to 2.53MM). • Tapered edge for gauging spark plugs. • Specially designed hole with flange adjusts side wire of plug without pressuring center electrode.



## NEMV6400

### Fluid Dispensing System

• Dispenses fluids to fill or top-off master cylinders, coolant reservoirs, automatic transmissions, differentials, and power steering and other reservoirs. • Performs hydraulic brake and clutch bleeding with additional adapter purchase. • Large 1.2 gallon (5-liter) fluid capacity. • Fluid is dispensed under pressure for smooth continual flow. • Integrated manual pump adds air above the fluid level to prevent aeration. • Internal pump components are sealed against exposure to fluids. • On/Off and flow control valve are conveniently located near fluid output. • Utilizes push-to-connect, quick-change style accessory connections. • Pressure gauge indicates fluid dispensing pressure. • Integrated safety and manual pressure relief valve. • Includes: 1.2 gallon (5-liter) fluid reservoir, reservoir lid with integrated manual pump, pressure gauge, and pressure relief valve, 5 ft. fluid dispensing hose with flow control and auto-shutoff valves, fluid dispensing wand, hanging hook, and User's manual (English, French, Spanish, German).



## NEMV6410

### ATF Refill System

• Dispenses fluid to top-off or refill sealed automatic transmissions. • Includes ten (10) adapters to connect to Ford, Toyota, BMW, Honda, Nissan, VW, Audi, Mercedes, and Volvo transmissions. • Large 1.2 gallon (5-liter) fluid capacity. • Fluid is dispensed under pressure for smooth continual flow. • Integrated manual pump adds air above the fluid level to prevent aeration. • Internal pump components are sealed against exposure to fluids. • On/Off and flow control valve are conveniently located near fluid output. • Utilizes push-to-connect, quick-change style accessory connections. • Pressure gauge indicates fluid dispensing pressure. • Integrated safety and manual pressure relief valve. • Includes custom-molded storage case for adapters. • Includes: 1.2 gallon (5-liter) fluid reservoir, reservoir lid with integrated manual pump, pressure gauge, and pressure relief valve, 5 ft. fluid dispensing hose with flow control and auto-shutoff valves, MVA5800 ATF Refill Adapter Kit (includes ten adapters, part numbers MVA580 - MVA589), fluid dispensing wand, hanging hook, and user's manual (English, French, Spanish, German).



## NEMV7241

### Fluid Transfer Pump

• Provides a clean, quick, no-hassle method of transferring or evacuating virtually any non-volatile fluid including engine oil, coolants, transmission fluid, brake fluid, or power steering fluid. • Drain engine oil or transmission fluid directly through the dipstick tube. • Pump is small and lightweight and fits easily in a toolbox or the trunk of a car. • Includes accessories required for fluid transfer/evacuation or inflation. • Durable polyethylene construction won't rust or corrode. • Includes hand pump with intake and discharge ports, two Intake/discharge hoses, two Intake/discharge hose connectors, and inline reducer.



Diagnostic & Underhood



## NEMV7201

### Fluid Evacuator Plus

- At the push of a button, this versatile unit changes from vacuum to pressure for evacuating or dispensing fluids, making it ideal for draining tanks or reservoirs then pumping the used fluid back out for easy disposal.
- Multiple units work great, simply evacuate used fluids with one unit, and then quickly refill with new fluid from a second.
- Utilizes a manual pump so compressed air or electricity is not required, giving superior mobility.
- Accessories included for draining engine oil or transmission fluid directly through the dipstick tubes.
- Features: evacuates or dispenses at the push of a button, convenient manual pump operation, integrated 2.3 gallon (8.8 liter) capacity reservoir, large base with foot stabilizer, durable chemical resistant polyethylene construction, automatic overflow prevention, quick-drain pour spout.
- Includes: fluid evacuator/dispenser, two dipstick tubes, main evacuation tube, tube adapters, and User manual (English/French/Spanish).
- Can be used in conjunction with **NEMVA7205** Fluid Evacuator Brake Bleeding Accessories Kit for evacuating brake fluid.



## NEMV7300

### PneumatiVac™ Air-Operated Fluid Evacuator

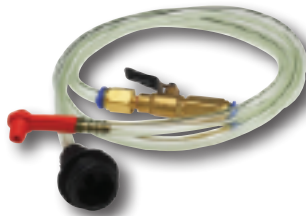
- Operates on compressed air to create a powerful venturi vacuum for draining fluids from tanks and reservoirs.
- Compressed air hose attaches at base for stability.
- Includes accessories for draining engine oil or transmission fluid directly through the dipstick tubes.
- Also includes brake/clutch bleeding kit **NEMVA7205** for vacuum bleeding hydraulic brake and clutch systems.
- Features: operates on compressed air, integrated 2.3 gallon (8.8 liter) capacity reservoir, large base with foot stabilizer, durable chemical resistant polyethylene construction, independent air shut-off valve, quiet muffled exhaust, automatic overflow prevention, and quick-drain pour spout.
- Includes: fluid evacuator; two dipstick tubes, main evacuation tube, brake/clutch bleeding adapter kit, tube adapters, and User manual (English/French/Spanish).



## NEMVA7205

### Fluid Evacuator Brake Bleeding Accessories Kit

- Quickly connects to **NEMV7201** fluid evacuator, converting into one-person vacuum brake or hydraulic clutch bleeder.
- Kit contains a vacuum bleed tube with brass ball valve, universal bleed screw adapter, and adapter for connecting to the evacuator.



## NEMVA7216

### ATF Master Adapter Kit

- Converts the **NEMV7201** Fluid Evacuator Plus into a convenient system for refilling or topping-off today's sealed automatic transmissions.
- Quick-change coupler allows fast adapter changes.
- Brass ball valve controls the flow of fluid.
- Ten (10) adapters fit Ford, Toyota, BMW, Honda, Nissan, VW, Audi, and Mercedes transmissions.
- Includes custom-molded storage case for adapters.
- Connects directly to **NEMV7201** Fluid Evacuator Plus.
- Fluid flow is shut off automatically when coupler is disconnected from adapter.

Set consists of:



## NEMV8500

### Vacuum/Pressure Pump Kit

- Pump produces vacuum along with pressure for a variety of vehicle service applications.
- Pinned connection allows 360° gauge rotation for excellent visibility.
- Rotating knob switches between vacuum and pressure.
- One finger lever-action vacuum/pressure release.
- Pivoting lever action maximizes output with minimal effort.
- Comfortable ergonomic handle reduces hand stress.
- Compound scale displays vacuum or pressure.
- Durable, accurate gearless diaphragm style gauge.
- Powerful in-line piston design.
- Durable die cast metal construction.
- Provides either vacuum or pressure with equal precision and convenience.
- Features modern, ergonomic design for comfortable, long-term use.
- Performs engine performance diagnostics, brake bleeding, fluid transfer, evacuation, sampling, windshield repair and more.
- Includes components needed to perform numerous diagnostic and mechanical tests.
- Field serviceable - standard maintenance kits and replacement parts are available.
- Common applications include emission control systems (EGR, RCV, BPV) testing, turbocharger wastegate testing, vacuum and pressure brake and hydraulic clutch bleeding, ignition system diagnostics, fluid transfer/evacuation, cooling system pressure testing, and automatic transmission service.



- NEMVA6171** Vacuum Gauge (old style)
- NEMVA6172** Vacuum Gauge (new style)
- NEMVA660** Powering Steering Evacuator Plug
- NEMVA6910** Reservoir Jar and Lid
- NEMVM4100** Silverline™ Maintenance Kit

PART NO.	DESCRIPTION
NEMVA580	Ford ATF Refill Adapter, 1/8" NPT Thread
NEMVA581	Toyota ATF Refill Adapter
NEMVA582	Angled ATF Refill Adapter, BMW, Honda, Nissan
NEMVA583	VW ATF Refill Adapter, Short
NEMVA584	VW ATF Refill Adapter, Long
NEMVA585	VW ATF Refill Adapter, 10 x 1.0 Thread
NEMVA586	VW/Audi w/DSC ATF Refill Adapter, 24 x 1.5 Thread
NEMVA587	Audi CVT ATF Refill Adapter, 22 x 1.55 Thread
NEMVA588	Mercedes 722.9 ATF Refill Adapter, 12 x 1.5
NEMVA589	Volvo ATF Refill Adapter, 5/16-24 UNF Thread
NEMVA7210	ATF Refill Hose Assembly

Diagnostic & Underhood

## PBT70910

### Ratchet Pump

- Convert a 3/8" drive air ratchet into a fluid transfer pump.
- Patented "first-use" self-priming design.
- Quickly fill or drain fluids such as brake fluid, power steering fluid, transmission fluid, engine oil, coolant, or gear oils.
- Easily engages with all 3/8" drive air ratchets.
- Pump securely attaches to air ratchet.
- Retaining bracket holds pump during use for one-hand operation.
- Quick couple fittings allow easy hose changes, no drip storage of pump and pump primed for next use.
- Ratchet Pump kit contents: ratchet pump, (500MM) 19" x (8MM) 5/16" ID suction hose, (800MM) 31" x (6MM) 1/4" ID suction hose, (1M) 39" x (8MM) 5/16" ID discharge hose, and blow molded case.



## OW4480

### Basic Fuel Injection Kit

- Performs running, residual, rail and flow rate pressure tests.
- Includes adapters, hoses and fittings to test fuel injection systems.
- Also includes two popular adapters for import vehicles as well as the GM TBI adapter.
- Professional dual scale gauge reads 0-100 PSI and 0-700 kPa with relief valve, fuel discharge hose and rubber boot.
- Packaged in a professional, heavy-duty, blow molded carrying case.



## OWC6550

### Fuel Injection Master Kit

- Test fuel injection systems on most GM's, including GM TBI, Ford, Chrysler, and Jeep vehicles. Also works on imports, including CIS and CISE fuel systems.
- Diagnose fuel-related problems, such as a weak fuel pump or restricted fuel filter, and perform leak-down tests.
- Kit includes 0-100 PSI fuel pressure gauge and 35 of the popular fuel injection adapters, each equipped with a quick-connect Schrader valve for safety. Replacement seal kit also included.

OW518542 Fuel Injection 7/16 x 20 flexible adapter Fitting (GM/Chrysler)



## TH312

### PLUG-ALL® Vacuum and Fuel Line Stoppers

- Stepped design plugs fit all 1/8", 3/16", 1/4", 5/16", 3/8" and 1/2" hoses.
- Tapered caps close tubes from 1/8" to 1/2".
- Use during tune-ups, vacuum tests, fuel pump repairs, etc.
- Bead chain prevents loss.



## HMTU448PB

### Basic Fuel Injection Pressure Tester

- For all systems except Bosch CIS and GM TBI.
- Includes everything in a plastic box required to test the following: Bosch AFC, MPC, Digijet/Digifant - except CIS, Chrysler Corporation, Ford Motor Company, General Motors - except TBI, Japanese Fuel Injection Systems, plus others using Bendix-type fuel injection or a Schrader-type valve, including the small Schrader valve found on Ford products.
- Quick coupler connection at end of gauge hose.
- Dual scale 2-1/2" (65MM) gauge has a 100 PSI/7 bar dial and hook to hang up for hands-free use.
- Has a multitude of adapters, banjo bolts and 1/8" gauge hose assembly.
- Adapter guidebook included.
- Comes in a plastic blow-molded box.



HM41028 Gasket/HM71318

HM41853 Washer/HM71319

HM71318 Adapter for Standard Schrader Valve

HM71319 Ford Adapter for Standard Schrader Valve

HM74440 Gauge

## HMTU1CW

### Deluxe Vacuum & Fuel Pump Tester

- Complete with 2 feet of high quality hose, plus 3 fittings to test domestic and foreign cars and trucks with gasoline engines.
- 3-1/2" compound gauge has a multicolor dual scale dial with ranges from 0-10 PSI, 0-0.7kg/cm<sup>2</sup> pressure; and 0-28inHg/0-70cmHg vacuum.
- Hook on gauge enables technician to hang gauge and hose assembly to free hands.
- Assists in diagnosing: fuel pump pressure, incorrect timing, leaky, burnt or sticky valves, heating and air conditioning controls, leaky intake manifold, windshield wipers, restricted exhaust systems, power brakes, turbo pressures, emission control devices, and worn piston rings.



## HMTU113CW

### Fuel Injection Tester - US & Imports Basic Kit

- Basic fuel injection tester includes large and small Schrader adapters, M6-1.00 O-ring adapter, and tee manifold.
- Includes everything needed to test the following systems: American Motors; Bosch AFC, MPC European and Japanese (except CIS - use HMTU447); Chrysler Corporation; Ford Motor Company; GM (except TBI - use HMTU446); Japanese fuel injection systems and other Bendix-type fuel injection systems; or a Schrader-type valve, including the small Schrader found on TBI and multi-port systems on Ford.
- 2-1/2" gauge has dual scale dial with ranges from 0-100 PSI and 0-7 bar.



## HMTU469CW

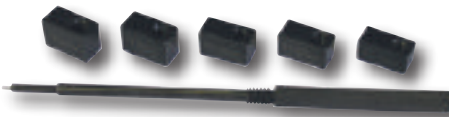
### Fuel Injection Pressure Tester Starter Set

- Enables testing on most major model vehicle platforms with standard or small Schrader valves.
- 3-1/2" gauge has dual scale dial with ranges from 0-100 PSI and 0-7 bar.
- Hook on gauge enables Tech to hang gauge and hose assembly to free his hands.
- Quick coupler connection at end of gauge hose.
- Adapter guidebook included.



## RB3350

### Injector Height Gauge Set for Detroit Diesel Engines



PRODUCT APPLICATIONS			
Size	Series	Engine	Year
78.2MM	60	DDEC I	1986 - 1993
	60 & 50	DDEC II	1986 - 1993
78.8MM	60 & 50	DDEC III	1994 - 1997
	60	DDEC III	Late 1997
80.3MM	60 & 50	DDEC IV	1997 - 1998
	60	DDEC IV	1997 - 1998
81.0MM	60 & 50	DDEC IV	1998 - 1999
	60	Marine	2000 - 2003
82.1MM	60	See service manual	

## HMTU470B

### Fuel Injection Canister Cleaner

- Enables technician to professionally clean the fuel injectors.
- Incorporates anodized bottle with permanent laser etching for a sleeker appearance.
- Reduces potential damage by separating the gauges and manifold from the canister during filling.
- Reduces damage to the O-ring by limiting exposure to cleaning solution.
- Check valve prevents fluid from backing up through the regulator.
- Centrally mounted chain and S-hook provide better balance during cleaning process leaving less unused fluid in the bottle.
- 20 oz. capacity bottle can sit flat for easy filling.
- Large, easy to read pressure gauges have a dual scale dial with ranges from 0-100 PSI and 0-7 bar with redesigned gauge boots for added protection.
- Stainless steel braided Teflon® hose resists solvents and abrasion for longer service life.
- Will restore the original spray pattern, giving improved performance, fuel economy, and emission tests.
- Cleans carbon from intake valves and cylinders using any professional carbon cleaning solution.
- Removes varnish and contaminants from fuel passages and injectors.



## LS22850

### Hose Pinchers

- Provides a quick way to pinch off vacuum lines and fuel lines without damage.



## LS27800

### Universal Noid Light

- Adjustable probes fit all Electronic Fuel Injection systems.
- Tests throttle body injectors, ported fuel injectors and sequential central port injectors.
- One person operation.
- Attach tool to the car body or windshield with suction cup; view the noid light from the front seat while cranking the ignition.
- A flashing light indicates normal pulse; no light or constant light indicates a problem.
- Two probe adapters screw on to form larger diameter probes.



LS27870 Replacement bulb

## OW3050E

### Noid Lite Test Kit

- A proven test device to quickly determine if the electrical signal is present at the fuel injector.
  - Just plug in and turn over the engine; flashing noid indicates good signal.
  - Set of eight Noid Lites cover: GM PFI, Ford TBI, Geo TBI, Bosch PFI, GM TBI, GM SCPI, and applications of Bosch 2 and Multec 2.
  - Kit comes in molded plastic case and includes a harness extension that allows for convenient remote viewing from the driver's seat.
- Set consists of the following in a molded plastic carrying case:



PART NO.	DESCRIPTION
OW6023	GM Multec 2 Noid-Lite
OW6260	Fiber Optic Noid-Lite Extension cable
OW6266	Bosch 2 Noid-Lite
OW7187	GM TBI Noid-Lite
OW7188	Bosch PFI Noid-Lite
OW7601	Ford TBI Noid-Lite
OW7602	GM PFI Noid-Lite
OW7608	Geo TBI Noid-Lite
OW7828	GM SCPI Noid-Lite

### Fuel Line Disconnect Tools



- Special low-profile design works in close quarters on GM, Ford, and Chrysler vehicles where there is limited clearance between the fuel line fittings and fuel filters, fuel rails, or sending units.
- Tools are designed to access the center port on GM fuel tank sending units.

PART NO.	SIZE	APPLICATIONS
OW6509	3/8" x 5/16"	Service 1999-current GM pickups, and 2000-current Suburban, Tahoe, and Yukon gasoline vehicles
OW6511	3/8" x 1/2"	Service 2001-current 3/4- and 1-ton trucks with the Duramax Diesel engines

Diagnostic & Underhood

## DISCONNECT TOOLS

### OW7361

#### Fuel Line Disconnect Tools

- Ideal for working on quick connect fuel lines.
- Fit 5/16" or 3/8" fuel lines on Chrysler, Ford, and GM vehicles without damaging the connectors.
- Set includes one OW7370 (gray, 5/16") and one OW7371 (blue, 3/8") tools.



### OW7337

#### Ford Fuel Line Disconnect Tools Set

- Used to easily disconnect the spring lock couplings of fuel lines on Ford's throttle body and port fuel injection systems on most cars and light trucks from 1986-current.
- Set includes one OW7335 (yellow for 3/8" fuel lines) and OW7336 (green for 1/2" fuel lines).



### KD3321

#### Fuel Line Quick Disconnect

- Releases fuel line locking mechanism on '89 & newer GM, '90 & newer Ford and some newer Mazda vehicles.
- Also fits Chrysler company fuel-injected vehicles (except imports).
- Fits 5/16" and 3/8" fuel lines.



Diagnostic & Underhood

### CWFP20MM

#### 20MM GM Fuel Line Wrench



Overall Length	Head Thickness	Head Diameter		Flare Nut Opening
		Open End	Flare Nut End	
7-1/2"	1/2"	1-9/16"	1-3/8"	19/32"

### LS27490

#### E-4 Torx® Socket

- 1/4" Drive.
- Extra Deep Socket.
- For Electrical Ignition Switches on GM.



### LS37500

#### Fuel Module Disconnect Tool for GM

- Disconnects the Fuel Module on 98 and later GM full size pickups, Suburban and Tahoe.
- The two piece design allows access to the connectors.
- Fits both 3/8" and 5/16" connector sizes. Will also fit all other 3/8" and 5/16" applications.
- Slide the proper size end into the connector. Then rotate and slide the other half in place. Now the module can be disconnected.
- The tool can be clipped together for convenient storage.



### AS7892

#### 8 Piece Fuel and Transmission Line Disconnect Set

- Anodized aluminum.
- Separate fittings on fuel lines, fuel filters and fuel tank return lines.
- Sizes: 1/4", 5/16", 3/8", & 1/2" oil cooler line disconnect tool.
- Separates automatic transmission oil cooler lines on Ford Taurus and Escort with AXOD and ATX transmissions.
- Fuel line disconnect tool allows damage free fuel line quick connect coupler release.
- Fits any 5/16" or 3/8" fuel line found on GM, Ford or Chrysler cars.
- Ford fuel line coupling tool provides easy, damage-free fuel line separation.
- Works on 1990 and newer Ford Ranger and Explorers with 4.OL, 6 cylinder engines.
- Disconnect tool allows quick separation of quick connectors found on radiators, transmissions and power steering lines.
- Releases the fingers on transmission-to-radiator oil cooler line easily without damage to the hose or connector.
- Works on 1986 and newer Ford Taurus and Mercury Sables with an AXOD, AOD or ATX transmission.
- Quick disconnect coupler tool slides down the line and into the connector; separating the clip apart without damaging the quick connect seals allowing removal of clip.
- Works on late model Ford and GM vehicles.



Set consists of:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
AS789201	Quick Disconnect Coupler Tool	AS789205	1/4" Disconnect Tool
AS789202	Oil Cooler Line Tool	AS789206	5/16" Disconnect Tool
AS789203	Fuel Line Coupler Tool	AS789207	3/8" Disconnect Tool
AS789204	Fuel Line Tool	AS789208	Oil Cooler Line Tool

### HR683

#### 29 Piece Master Disconnect Set

- Most complete Disconnect Set available.
- Includes 29 different tools for work on Fuel Lines, Transmission Lines, AC Lines, Heater Lines, Clutch Couplers, etc.
- Comes in a high quality blow molded case with locking hinges.
- Complete applications chart comes with set.



### LS39160

#### Fuel Line Tool Set

- Compact tool design fits tight spaces.
- Two sizes, 3/8" (LS39180) and 5/16" (LS39170), are designed to release the nylon retaining clip used on the fuel lines of newer GM and Chrysler vehicles with in tank electric fuel pumps.



### LS64650

#### Ford Ignition Module Wrench

- For 7/32" hex retaining bolts on Ford Ignition module.
- May be used with 1/2" wrench.



## LS39800

### 26 Piece Master Plus Disconnect Set

• Contains 26 popular Disconnect Tools for A/C, Fuel, Transmission, Oil Cooler and Air Lines. • This complete set of disconnect tools is stored in a handy blow-molded case.



Set consists of:

PART NO.	DESCRIPTION
LS22720	3/8" Jiffy-tite® Disconnect
LS22730	1/2" Jiffy-tite® Disconnect
LS34750	Low Profile Fuel Line Disconnect Set
LS37000	AC/Fuel Line Disconnect Set
LS37500	Fuel Line Quick Disconnect for GM
LS39400	Angled AC/Fuel Line Disconnect Set
LS39930	5/16" x 3/8" Scissor Disconnect
LS39940	Coupler Disconnect
LS39960	Ford Transmission Line Disconnect
LS42100	1/4" Air Line Disconnect
LS42110	3/8" Air Line Disconnect
LS42120	1/2" Air Line Disconnect
LS42130	5/8" Air Line Disconnect

## LS39900

### Master Disconnect Set

• Contains 8 popular Disconnect Tools for A/C & Fuel Lines. • A complete set of disconnect tools that can be stored in a handy blow-molded case.



Set consists of:

PART NO.	DESCRIPTION
LS35000	Flex Fuel Disconnect for GM
LS37000	AC/Fuel Line Disconnect Set
LS37500	Fuel Line Quick Disconnect for GM
LS39400	Angled AC/Fuel Line Disconnect Set
LS39930	5/16" & 3/8" Scissor Disconnect
LS39940	Coupler Disconnect
LS39960	Ford Transmission Line Disconnect Set - which consists of one each of the following: LS39910 1/2" Transmission Oil Cooler Line Disconnect LS39920 3/8" Transmission Oil Cooler Line Disconnect

## HR230

### Fuel Line Disconnect Tool Set

• Designed to remove stubborn fuel lines in a fast and efficient operation. • Simple to use and made of aircraft aluminum which makes them light but still very strong. • The opening is 1/8" to 3/4" which allows for universal applications with just two tools. • Fits all sizes from 1/4" to 5/8". • The tools work in small places so you can use the most force to remove the worst case scenarios.



PART NO.	DESCRIPTION
HR231	Straight Remover
HR232	90° Remover

## LS39400

### Angled Disconnect Tool Set

• Disconnects air conditioning and quick connect fuel lines. • Disconnects spring lock couplings on Ford and Chrysler AC lines. • Works on fuel lines and other quick disconnect couplings on domestic and import vehicles. • The handles are angled to access tight spots. • Made of durable plastic that resists fuels and solvents. • Six sizes: 5/16", 3/8", 1/2", 5/8", 3/4", and 7/8".



Set consists of:

PART NO.	DESCRIPTION
LS39410	5/16" Angled Disconnect
LS39420	3/8" Angled Disconnect
LS39430	1/2" Angled Disconnect
LS39440	5/8" Angled Disconnect
LS39450	3/4" Angled Disconnect
LS39460	7/8" Angled Disconnect

## LS35000

### GM Fuel Filter Disconnect

• Fits GM Flex Fuel Systems. • Disconnects the fuel line from the fuel filter on 5.3L Suburban, Tahoe, Yukon, Avalanche and select Silverados and Sierras. • Insert the two semicircular disconnects into the coupling. Connect the handle and depress to separate the fuel line from the filter.



Diagnostic & Underhood

Set consists of:

QTY.	PART NO.	DESCRIPTION
1	LS34810	Flex Fuel Handle
2	LS34830	Flex Fuel Adapters

## LS39960

### Ford Disconnect Set

• Two sizes, 3/8" and 1/2" are designed to disconnect transmission cooler lines. • 3/8" size is for 2003 and later Ford V8 Explorer, 2004 and later Ford F150 and Cadillac CS. • 1/2" size is for Ford Super Duty Trucks, F250, F350 and F450. • Tip is stepped to fit connector. • Set comes with a bead chain.



Set consists of:

PART NO.	DESCRIPTION
LS39910	1/2" Transmission Oil Cooler Line Disconnect
LS39920	3/8" Transmission Oil Cooler Line Disconnect

## LS39210

### Fuel Line Disconnect Toyota

• Disconnects the 5/16" main fuel line from the fuel rail on many Toyota and Nissan vehicles. • Hinged design and fully tapered end allow tool to be quickly and easily inserted into fuel line quick connector, even in hard-to-reach areas. • Works on Toyota Echo, Scion xB, xA, TC, Solara, Corolla, Sequoia, Celica, RAV 4, Prius, Camry, MR2, Matrix, Tundra and Highlander. • Also for 2004 and newer Nissan models with a 5/16" fuel rail.



## DISCONNECT TOOLS

### AR8110

#### 10 Piece Line Disconnect Tool Set

• For removal and replacement of fuel filter, fuel lines, oil cooler lines and transmission oil cooler lines. • Quick line removal. • Anodized aluminum construction.



Set consists of:

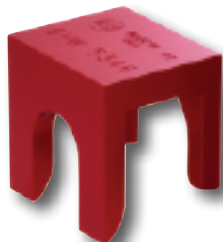
PART NO.	DESCRIPTION
AR8010	1/4" Fuel Line Remover
AR8012	5/16" Fuel Filter Tool
AR8013	3/8" Fuel Line Remover
AR8014	Oil Cooler Line Remover
AR8016	1/2" Cooler Line Remover
AR8021	Oil Cooler Line Remover
AR8022	GM Fuel Filter Disconnect Tool
AR8023	1/2" Oil Cooler Line Remover
AR8024	Ford 1/2" Oil Cooler Line Remover
AR8026	5/16" Nissan Fuel Line Remover

Diagnostic & Underhood

### ARBMW5346

#### BMW Oil and Transmission Cooler Line Disconnect

• Disconnects the 5/16" main fuel line from the fuel rail on many Toyota and Nissan vehicles. • Hinged design and fully tapered end allow tool to be quickly and easily inserted into fuel line quick connector, even in hard-to-reach areas. • Works on Toyota Echo, Scion xB, xA, TC, Solara, Corolla, Sequoia, Celica, RAV 4, Prius, Camry, MR2, Matrix, Tundra and Highlander. • Also for 2004 and newer Nissan models with a 5/16" fuel rail.



### LS34750

#### Low Profile Fuel Line Disconnect Set

• Disconnects the quick connect fuel lines in hard-to reach locations. • 3/8" adapters work on 5.3 liter Suburban, Tahoe, Yukon, Avalanche and select Silverados, Sierras and other GM fuel lines. • 5/16" adapters work on Ford and Chrysler applications.

Set consists of:

PART NO.	DESCRIPTION
LS34740	5/16" Adapter Set (Blue)
LS34810	Handle
LS34830	3/8" Adapter Set (Gold)



### LS46500

#### Carburetor Pin Puller



• For fast, sure removal and installation of carburetor linkage pins. • Also for "E" clips and other small parts.

### OW6594

#### Ford Quick Release Disconnect Tool

• Use to disconnect the high-pressure oil rail supply line from the fuel rail when removing fuel injectors. • Works on the 6.0 diesel engine found in 2003-newer F-250, F-350, F-450, F-550 trucks, and Ford Excursions.



### OW6595

#### Ford Oil Disconnect Wrench

• Use to disconnect the high pressure oil line from the cylinder head. • Works on 1998-2003 Ford vans and trucks with 7.3L direct-injected, turbo-charged (DIT) diesel engines.



### OW6599

#### Universal Fuel Tank Lock Ring Wrench

• Universal design allows tool to fit fuel tank lock rings on Ford, Chrysler, and GM vehicles with gas engines. • Works on: 2004-newer Ford F-150 trucks; 2004-newer Dodge/Chrysler PT Cruiser, Dakota, Durango, and minivans; 2004-newer Chevrolet 1/2-ton and 3/4-ton trucks; and 2005-newer Jeep vehicles. • Easily remove and install the lock ring on the fuel tank while servicing the fuel pump or fuel sending unit. • Use with a 1/2" ratchet or breaker bar.



### LTHLT940

#### 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 re-install old retaining ring.



### LS63000

#### Fuel Tank Lock Ring Tool

• A stout tool to remove and install plastic fuel tank lock rings from 4" to 7-1/4" without damage. • Channel design on body allows the legs to adjust to fit a wide range of applications and keeps the drive centered. • Works on the new smaller GM serrated rings and traditional rings. • The design is compact so the tool is not left hanging over the work area with the potential for hitting other components.



### OW6765

#### Ford 6.0L IPR Socket 3/8" Drive

• For professionals who service the Navistar 6.0L Diesel Engine found in many Ford "PowerStroke" platforms (2003-2007). • This IPR (Injector Pressure Regulator) socket actually combines two OE tools into one.



## LS12230

### Oxygen Sensor Rethreader

- Cleans threads in oxygen sensor holes.
- Use with 3/4" hex socket or 3/8" square drive.
- Size M18 x 1.5.
- Also works on M18 x 1.5 spark plug threads.
- **IMPORTANT:** Use anti-seize.



## LS12390

### Dual-Drive Oxygen Sensor Wrench

- Use with breaker bar to loosen stubborn oxygen sensors.
- Tool has both 1/2" and 3/8" drive.
- Attach a 1/2" breaker bar on the end of the tool to initially loosen stuck sensors; then 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 harnesses.
- Forged, heat-treated steel with six point design will withstand high torque removal applications.



## LS43900

### Pneumatic Oxygen Sensor Remover

- Pneumatic action removes oxygen sensors.
- Use this set with an air hammer to remove stubborn, baked-on oxygen sensors.
- The pneumatic action works where conventional sockets won't.
- The compact design allows easy access under the hood.
- To install sensors, use the socket only with a 3/8" drive ratchet.
- Consists of LS43940 Socket and LS43960 Driver.



## SL66750B

### Shielded O2 Sensor Socket

- Designed to remove and replace "CAN" type shielded oxygen sensors and air fuel sensors currently found on later model vehicles.
- The depth and outer diameter of the socket are critical features, enabling it to fit in the limited space of the heat shield.
- Six point tool of forged steel for maximum strength and comes in the SP High Tech black finish.
- Will work on all oxygen and air fuel sensors that are shielded including: Toyota 2003 and later; Lexus 2006 and later; Honda 2006 and later; Acura 2007 and later; Mazda 2006 and later; Hyundai 2006 and later; Kia 2006 and later; Nissan 2007 and later; and Infiniti 2007 and later.



## SL67750

### 6 & 12 Point O2 Sensor Wrench

- Designed for use with most oxygen sensors no matter what size electrical connectors they have.
- The 12 point side enables the technician twice the number of "clock angle" attachment positions versus all oxygen sensor wrenches available on the market. This gives the technician the maximum accessibility to remove oxygen sensors in difficult areas.
- The new handle design allows the technician greater space and positive leverage in confined areas. With 12 point positioning and pivoting handle this tool will make a tough job easy.
- The back side of the wrench has a 6 point for those stubborn sensors.



## LS12100

### Oxygen Sensor Socket

- Removes and installs oxygen sensors on most Domestic and some Imports.
- Special 7/8" socket with cutaway slot to provide clearance for wire harness.
- Provides adequate depth to fit over sensor.
- Heat-treated alloy steel.
- Use with 3/8" square drive or 1" wrench.



## SL88750A

### Oxygen Sensor Wrench

- Super duty 12 and 6 point socket designed to remove oxygen sensors in confined areas.
- 12 point side provides twice the number of "clock angle" attachment positions for maximum accessibility.
- 6 point side provides maximum holding power for oxygen sensors that are corroded in place.
- Beefy, stronger design fits all configurations of oxygen sensor wire/connectors.
- 3/8" drive, 22MM.



## SL93750A

### Super Duty 2-1/8" Offset Oxygen Sensor Wrench, 6 and 12 Point

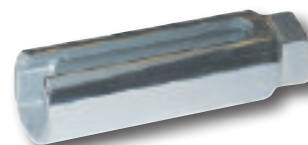
- Includes a 6 point and 12 point socket to provide the ultimate tool for removing oxygen sensors in confined areas.
- The 6 point side provides maximum holding power for oxygen sensors that are corroded in place.
- The 12 point side allows twice the number of "clock angle" attachment positions for maximum accessibility to remove oxygen sensors in difficult areas.
- Fits with all configurations of oxygen sensor wire/connectors.



## T32280S

### Oxygen Sensor Socket

- Remove and install oxygen sensors on computerized engine controlled vehicles in hard-to-reach places.
- 15/16" hex assist on the drive end allows turning by wrench.
- 1/2" Drive x 7/8", 6 Point.
- Chrome plated, heat treated, heavy-walled socket.
- Outside diameter: 1-1/4".
- Overall length: 3-7/8".



## OW4673

### 7 Piece Sensor Socket Set

- Set includes the following:

PART NO.	DESCRIPTION
OW46731	1-3/16" (29MM) Oil Pressure Sending Unit Socket
OW46732	7/8" Universal Vacuum PVS, TVS Valve & Oxygen Sensor Socket
OW46733	1-1/16" (27MM) Oil Pressure Sending Unit Socket
OW46734	7/8" (22MM) Oxygen Sensor Socket
OW46735	1" & 1-1/16" Oil Pressure Sending Unit Socket
OW46736	22MM (7/8") Heated Oxygen Sensor Socket
OW46737	7/8" (22MM) Low Profile Offset Oxygen Sensor Socket

## LS55250

### Carburetor Adjusting Tool

- For adjusting idle/mixture screws on GM and Chrysler.
- Heavy-duty flexible shaft for easy access.
- Four adapters conveniently store in the hollow handle.
- Set includes the following:

PART NO.	DESCRIPTION
LS55300	"Double D" Adapter for GM, '79 through present
LS55310	1/4" Hex Adapter for pre-'78 GM
LS55320	3/32" Hex Adapter for '78 - Present Chrysler 1.7L & 2.2L
LS55330	4/5MM Hex Adapter for '78 and '79 GM
LS55340	"O" Ring replacement



Diagnostic & Underhood

## INN5612

### Digital Compression Tester

- Accurately graphs and measures BAR, PSI, kPa, digital pressure and more on a large, easy-to-read LCD display.
- Pro quality features help graph and analyze compression readings and variance.
- Large digital display shows over 20 pieces of vital information at one time.
- Record/playback memory feature with 5 events per cylinder to 12 cylinders.
- Operating Range: 0-300 PSI, kg/cm<sup>2</sup>, kPa, and BAR.
- Easy to read display with intuitive buttons.
- Carrying case, 10, 12, 14MM and long reach adapters included.
- Three color LED's show poor, potential problems and good compression.
- Measures cylinder pressure (0-300 PSI), Cylinder/Total Cylinders, Cylinder Variance/Relative %, Cylinder Stroke, Battery Level, Cylinder Compression (on bar chart levels).
- Rugged rubber boot provides drop protection.



## HMTU3CW

### Universal Compression Tester

- For gasoline engine compression testing on domestic and foreign cars and trucks.
- Screw-in adapters with o-rings provide professional accuracy.
- Adapters included: 14MM & 18MM short solid, 14MM & 18MM long flex, and 14MM long reach.
- Long flex 12" hose and adapters eliminate having to remove engine accessories to test compression.
- Side release valve allows quick re-testing of cylinder without removing adapter.
- 2-1/2" gauge has dual scale dial with ranges from 0-300 PSI and 0-21 bar.



## HMTU15CW

### Diesel Compression Tester

- For testing cylinder pressure on diesel cars and trucks.
- Release air and automatically reset gauge for repeat testing.
- Swivel end quick coupler for easy connection to adapters.
- 16-1/2" long wire reinforced hydraulic hose.
- Adapters from most other manufacturers are interchangeable with this tester.
- 2-1/4" gauge has a dual scale dial with ranges from 0-1000 PSI and 0-70 bar.



## HMCLT2CW

### Dual Gauge Cylinder Leakage Tester

- Pinpoints bad valves, worn rings, cracked cylinder walls, and blown head gaskets.
- Precision regulator has a 2-1/4" gauge displaying one multi-colored band for measuring low, moderate and high leakage, and a scale range from 0-100%.
- Second gauge (2-1/4") has a dual scale dial with ranges from 0-100 PSI and 0-7 bar and allows monitoring of input air-line pressure.
- Includes 14MM short thread adapter on 26" hose, as well as separate 14MM long adapter for most common applications.



## HMTU30A

### Compression Tester

- Tests compression on all major gasoline vehicle platforms, domestic and foreign, including motorcycles, mini engines, snowmobiles, outboard motors, and more.
- Features patent pending Ford Triton engine compression adapter that fits both the M16 spark plug port and the redesigned M12 spark plug port.
- Quick coupler connection on gauge assembly for fast and easy changing of hose and adapter assemblies.
- Large, easy to read pressure gauge has dual scale with ranges from 0-300 PSI and 0-21 bar with gauge boot for added protection.
- Gauge maintains highest compression test reading and resets to zero with a push button release valve.
- Adapters can be used on either flat or tapered spark plug hole seats.
- Includes: 24" hose assembly with quick coupler, patent pending M12 x M16 hose adapter for Ford Triton engines, 8" long M14 short thread solid adapter for compression testing where spark plug holes are deeply recessed, M14 hose adapter with short thread, M14 hose adapter with long thread, M10 adapter with short thread, separate small engine tester (HMTU21) with M14 x M18 threads and gauge with dual scale dial ranging from 0-200 PSI and 0-14 bar, blow molded case for convenient storage, and instructions and labeling that clearly identifies each product.



- HM70328 14MM Long Hose Assembly
- HM73102 10MM Adapter

## HMTU1551

### Automotive Diesel Compression Test Set

- A basic set for diesel work in the American market.
- Tester has a handy deflator for releasing air and retesting.
- A 16-1/2" wire reinforced hydraulic hose has a quick coupler on a swivel for ease of connection.
- A 2-1/2" gauge with easy to read red and black dial and snap-in lens.
- Records pressures from 0-1000 PSI and 0-70 bar.
- Adapters included for Audi, GM, Isuzu, Lincoln, Ford/Navistar, Mercedes, Peugeot, Toyota, VW, Volvo - Bacharach conversion adapter also included.
- Comes in a red plastic blow molded case with instructions and specifications.



- HMTU1522A Diesel Adapter - Ford/Navistar 7.3L

## OW5606

### Compression Tester

- Designed for complete compression testing on gasoline engines, including domestic, imports, motorcycles, marine, and small engines.
- Extra long 25" flex hose gauge assembly with quick coupler allows easy viewing out of cluttered engine compartment.
- 2-1/2" gauge features chrome bezel and rugged protective outer boot.
- Dual scale gauge reads 0-300 PSI and 0-21 kPa.
- Adapters included are 12" flex-14MM standard reach, 12" flex-14MM long reach, 18MM, 10MM, and 12MM threads.
- Also included: repair parts kit, and blow molded case.

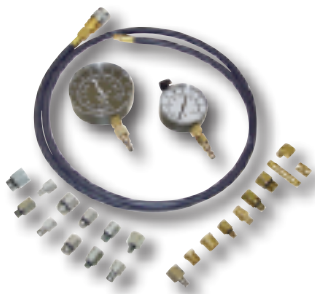




## HMTU16A

### Transmission/ Engine Oil Pressure Tester

- Check engine oil pressure and automatic transmission pressure on cars, trucks, motorcycles, ATVs, boats, and other recreational vehicles, domestic and foreign. Adapters more than double the applications of other test sets on the market.
- Includes 21 total adapters.
- Quick coupler connection on gauge assembly for fast and easy changing of gauges to the hose assembly.
- 2-1/2" gauge has dual scale dial with ranges from 0-100 PSI and 0-7 bar.
- Hook on gauge allows technician to hang gauge and hose assembly out of harms way.
- 3-1/2" gauge has dual scale dial with ranges from 0-400 PSI and 0-28 bar.
- Color-coded standard and metric fittings include 11 aluminum metric, 7 brass NPT, and 3 steel fractional adapters.
- 6-foot hose for easy viewing of gauge and the ability to test the vehicle from the driver's seat.
- Custom blow molded case for convenient storage.



## HMTU12P

### Engine Oil Pressure Tester

- Tests all domestic and most imported cars and light trucks with gasoline engines.
- More accurate than dashboard oil pressure gauges.
- 2-1/2" gauge with hook has a 0-100 PSI/7 bar dial.
- Includes 24" nitrile (oil-proof) hose with fittings.



## HMTU18P

### TDC Whistle with Hose and Adaptor

- Used to locate approximate TDC in cylinder leak testing.
- Can also be used to remount distributor correctly; Will also show if timing belt or chain has slipped.
- Whistles on the compression stroke and stops whistling at approximate TDC.
- Quick coupler connects directly to the cylinder hose.
- For use with **HMCLT2CW**.



## IP007880

### TDC Indicator

- Allows a technician to accurately set any piston to Top Dead Center.
- Just remove the spark plug, screw in the gauge and rotate the engine observing the graduation marks on the sliding shaft.
- Accurately displays piston movement.
- 1/8" graduation marks.
- Installs as easily as a spark plug.
- Made of 1144 steel.
- Stainless steel spring.



## OW7471A

### Cummins Engine Barring Tool

- Makes manually rotating an engine easy. Just insert the tool into the flywheel housing until it engages the ring gear, then attach a 1/2" square drive ratchet or breaker bar and turn. The tool's load-bearing collar provides friction-free operation while rotating the tool in the housing.
- Works on Cummins B and C series diesel engines and 5.9L diesels used in Dodge pickups.



## ZIM980

### Piston Ring Compressor Set

- Complete set of six bands and pliers makes repetitive ring installation easier - particularly when identical size of rings are installed at the same assembly unit.
- Without taking the pliers off the band on which you are working, you can operate it from either a vertical or horizontal position.
- Pliers have a fine ratchet mechanism which permits the bands to be contracted by minute graduations.
- To instantly release bands to regular position, just depress the thumb ratchet.
- Hardened steel for durable wear.
- Sizes range from 2-7/8" to 4-3/8".



## LS21700

### Wrinkle Band Ring Compressor

- Low friction - rings slide in easily.
- Wrinkle band prevents slippage into cylinder.
- Cam Operated - set adjustment screw once for entire set of pistons.
- Range: 3" to 5" (76.2 - 127MM).



## CTHTCS4

### Dead Blow Piston Hammer

- Enables hammer face to be self-healing and dent resistant.
- High quality custom formulated hot cast polyurethane for long life and elasticity.
- Impervious to oil and most chemicals.
- Slimline heads with unique profile for all types of assembly and repair operations.
- Molded in Trucothane™ with shot filled dead blow heads.
- Exclusive textured, non-slip, comfort contoured handle.
- Weight: 32 oz.
- Face diameter: 1-3/4".
- Head Length: 8-1/2".
- Overall Length: 12-3/4".



## LS33500

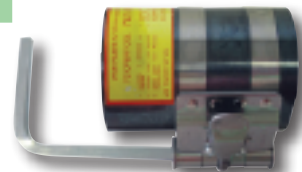
### Piston Ring Installer

- Tapered jaws to remove and install most passenger car and light truck rings from 3/64" to 1/4" (1.2 - 6.3MM).
- Reduces ring breakage.



### Piston Ring Compressors

- Tempered blue spring steel.
- 2-band ratchet type.



PART NO.	DESCRIPTION
ULRC1	2-1/8" to 5" capacity - fits passenger cars.
ULRC2	3-1/2" to 7" capacity - fits light trucks

Diagnostic & Underhood

## KD3271

### Deluxe Universal Valve Spring Compressor

- Removes valve springs on most cars and light trucks.
- Use with the cylinder head on or off of the engine.
- Features a removable handle allowing use with a 5/8" socket or wrench in confined areas and an extra long leg for more applications.
- For best results, use with Air Hold Fittings to pressurize the cylinder and keep the valves in place during removal of the spring and keepers.

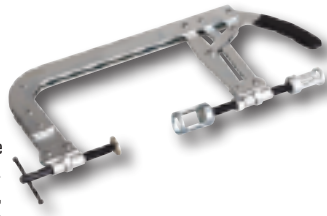
**CAUTION: Wear eye protection. Vehicle must be placed in park/neutral before applying air pressure, otherwise vehicle may move. Keep hands clear of fan, belts and pulleys, since slight crankshaft rotation will occur.**



## OW4572

### Large Valve Spring Compressor

- Designed to compress valve springs on overhead valve engines.
- Includes two valve spring adapters, which fit valve spring retainers up to 1" (25MM) and 1-3/16" (30MM).
- Unique, direct action compressor lever gives better visibility of valve spring retainers located in difficult access areas.
- Jaw opening of 1-3/8" to 5-5/8" (35MM to 142MM); throat clearance of 5-7/8" (150MM).



## LS19700

### Valve Holder

- For both 14MM and 18MM spark plug threads.
- Commonly used when valve springs or valve stem seals are replaced.
- Air pressure helps prevent the valve from falling into the combustion chamber.
- Comes with two-step fitting for both 14MM and 18MM threads.
- Heavy duty 12" flexible hose allows easy access to spark plug hole and air supply.
- Thread fitting to spark plug hole and other end to air supply.



## LS36050

### Valve Keeper Remover and Installer Kit

- Quickly removes and installs valve keepers on most overhead valve engines with valve stems from 4.5 to 7.5MM and 5/16" to 3/8".
- Makes valve component disassembly and reassembly fast and easy.
- Push or tap tool with a hammer to remove valve keepers.
- Magnet in tool body captures keepers for quick removal and valve disassembly.
- To install keepers, load in retainer on valve stem, then push or tap handle to install.
- Can be used on the car or bench.
- Smaller size works on Toyota four cylinder and Chrysler New World Engine applications.



PART NO.	DESCRIPTION
LS36330	Mercedes Adapter
LS36340	Installer
LS36380	Handle Assembly
LS36440	Metric Installer
LS36740	Metric Handle Assembly

## LS24000

### Ring Groove Cleaner

- Comes with two easy-to-set cutter wheels for quick cleaning of grooves.
- Heavy coil spring holds cutter in groove for fast removal of carbon.
- Tool comes with standard (LS24020) cutter blade sizes: 5/64", 3/32", 1/8", 5/32", 3/16" and special (LS24350) cutter blade with sizes 1.5MM, 1/16", 1.75MM, 2MM, and 1/4".
- Handles pistons 2-3/4" to 5" diameter.



PART NO.	DESCRIPTION
LS24020	Cutter Blade
LS24350	Cutter Blade

## LS36200

### Valve Keeper Remover and Installer

- Quickly removes valve keepers on overhead valve engines.
- Makes valve component disassembly and reassembly fast and easy.
- Push or tap tool with a hammer to remove valve keepers.
- A magnet in the tool body captures the keepers for quick removal and valve disassembly.
- To install keepers, load keepers into the installer.
- Push or tap to install.
- Can be used on the car or a work bench.



PART NO.	DESCRIPTION
LS36330	Mercedes Adapter
LS36340	Installer
LS36380	Handle Assembly

## OW7928

### Ford Valve Spring Compressor

- Compresses valve springs for quicker, easier camshaft, valve seal, valve spring, or retainer service due to not having to remove the head from the engine first!
- An OEM-approved tool that is used with a 3/8" ratchet or breaker bar.
- Works on 1991-2004 Ford vehicles with 4.6L, two-valve, V8 engines; 4.6 4V, 5.4 V8 and 6.8 V10.



## SL91400B

### Universal Valve Spring Compressor

- Actuate the compression tube in tight confined locations.
- Separate the lever from the compression tube anywhere along the bar and compress the springs that are confined by brake boosters, AC housings or other factors.
- Remove and install the valve springs with either the cylinder head still on the engine and in the car, or with the cylinder head removed.
- Multipoint adjustable base bolts securely to the head.
- Lever mechanism has 16 multiple adjustment positions and is securely attached to the bar with a positive acting slider mechanism.
- Also has a 3/8" square drive and pivots from the bar thus compressing the spring.
- Depressor tube slides easily to each valve location without changing settings.
- Quick removal and installation of the spring retaining keepers is then easily accomplished through the large openings on both sides of the compression tube.
- Comes complete with an "easy grip" handle, slider, three detent clevis pins, and blow molded storage case.



**VALVE LAPPERS**

- For hand lapping valves. • Unique locking tabs positively secure cups to hardwood handles - eliminates slippage. • Thick handles for easy lapping.



PART NO.	DESCRIPTION
LS21100	Large Valve Lapper, 1-1/8" x 1-3/8" diameter cups
LS21200	Small Valve Lapper, 5/8" x 13/16" diameter cups

- LS21120 Replacement Cup, 1-3/8"
- LS21130 Replacement Cup, 1-1/8"
- LS21220 Replacement Cup, 13/16"
- LS21230 Replacement Cup, 5/8"

**THE FLEX-HONE® TOOLS**

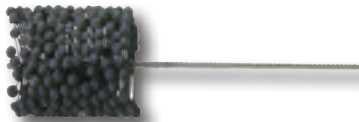
The FLEX-HONE® Tool is a resilient, flexible hone tool with a soft cutting action. The tool is made from 95% pure raw grain abrasive laminated onto flexible nylon filaments. Each tool is self-centering, self-aligning to the bore and self-compensating for wear. It removes peaks from the surface as well as cut, torn, and folded metal left by previous machining operations. The FLEX-HONE® can develop a plateau of over 60 percent while producing an oil holding cross hatch pattern with the required AA. The FLEX-HONE® Tool is available in a wide variety of abrasive types, grit sizes, bore diameters and can be customized to meet a particular requirement.

**(NOTE: Not available for export.)**

**BRGB41/8**

**Standard Duty Spiral FLEX-HONE®**

- Block cylinders. • Silicon Carbide abrasive, 120 grit.
- 13-1/2" O.A. length.
- 4-1/8" (105MM).



**BRDD1**

**Detroit Diesel Injector Brush**



- Detroit Diesel 53/71/92 Injector Brush. • Stainless Steel wire with handle. • Use when changing injector while in truck.



**WARNING!**

Use approved eye protection when using tools. Read operating instruction thoroughly on tools before use. Flex-Hones® shall be securely held in a collet, chuck or similar holding device. Secure unit being honed and position all guards before starting tool. Tool length should be no longer than necessary to perform work.

**SUREGR312**

**EGR Port Cleaning Kit**



- A convenient kit for thoroughly cleaning out clogged EGR ports.
- Flexible, 3/16" spring steel drill bit is designed to easily route through the EGR ports. • Heat-treated tip rips through carbon deposits. • No need to remove the entire intake manifold. • More effective than other methods including use of speedometer cables and coat hangers. • Solves emission problems including high NOx levels and improves engine performance.
- Kit includes: 12" flexible EGR drill bit, two-sided steel pick, steel wire brush and transparent storage tube.

**CF61CS**

**Adjustable Deglazing Hone**

- Works on 2" - 7" diameter cylinders. • Spring tension adjusting nut for adjustable cutting action. • Provides fast accurate honing of cylinders.
- Comes with medium grit stone.



REPLACEMENT STONES			
PART NO.	GRIT	STONE LENGTH	QTY./BOX
CF6112S	Medium	3"	3
CF6114S	Fine	3"	3
CF61100	Coarse	3"	3

**SL96800**

**Universal Camshaft Pulley Holding Tool**

- Designed with grooved pins to hold the camshaft pulley stationary while loosening and tightening the center shaft bolt. • Used on most Asian overhead cam engines and transverse mounted V6 engines such as the VG30 used in Nissan Maximas, as well as the 3VZFE and 1MZFE engines used in Toyota Camrys. The rear pulleys on these models are in very close proximity to the shock tower making removal and replacement difficult without this locking device. • For use on Nissans, Toyotas and other OHC engines.



**LS48500**

**Push Rod Remover**

- Works on GM V6 2.8L, 3.1L, and 3.4L. • Quickly removes push rods so the intake gasket can be replaced.
- No need to loosen and retighten the rocker arm. The tool pivots the rocker arm to compress the valve spring and free the push rod for removal.
- Shorter handle for working in tight quarters on Pontiac Montana, Chevy Venture, Pontiac Aztek and Buick Rendezvous applications. • 3/8" square drive punched in the handle for use with a ratchet if extra leverage is needed.



**OW6667**

**GM/Chrysler Harmonic Balancer Puller**

- Designed for removing damper pulleys in tight engine compartments, without removing the radiator.
- Use on the following: GM 2000 Generation III 4.8L, 5.3L, 5.7L, 6.0L, and 8.1L V8s; Also works on Cadillac 4.5, 4.6, and 4.9L V8s beginning in 1988, Chevrolet trucks 2003-later 4.2L I6, 2004-current 3.5L I5 and 2005-current 2.8L I4; Chrysler engines from 1990-later, including 2.0L, 2.4L-4s; plus 2.5L, 2.7L, 3.3L, 3.5L, and 3.8L V6s; Ford 1995-later V8 engines with 3 spoke pressed on damper; Mitsubishi Eclipse 1995-1999 2.0L DOHC non-turbo. • Kit contains 3-jaw puller, four lengths of forcing rods, and a forcing screw with a 3/8" square drive for ratchet use and a 3/4" hex for wrench or socket use.



**WARNING!**

Wear safety goggles. Read operating instructions thoroughly on tools before use.

Diagnostic & Underhood

## PULLERS

### HR38800

#### Harmonic Balancer Installer

- Designed to properly install harmonic balancers or drive pulleys that are pressed on the crankshaft.
- Instructions included.
- Packaged in blow molded case.



Includes the following adapters:

PART NO.	SIZE	PART NO.	SIZE
HR388400	1/2"-20	HR388110	M14MM 1.5 (black)
HR388500	3/4"-16	HR388120	M16MM 2.0 (black)
HR388600	5/8"-18	HR388160	M10MM 1.5 (black)
HR388700	7/16"-20	HR388170	M14MM 2.0 (black)
HR388800	9/16"-18	HR388180	M16MM 1.5 (black)
		HR388300	M12MM 1.75 (black)
		HR388900	M12MM 1.5 (black)

- HR3882 Center Screw  
 HR38822A 7/8" Hex Nut  
 HR388100 Bearing  
 HR388130 Knurled Nut

### LS51700

#### Harmonic Balancer Puller Set

- Damper puller jaw design provides exceptional strength.
- Clevis pins allow jaw to be quickly removed and replaced.
- This kit features the puller hardware and special pulling screws to remove most automotive harmonic balancers.
- Kit includes a standard harmonic balancer puller, pulling screws and adapters for 3300 and 3800 GM V6 engines, and an updated harmonic damper pulley puller for Chrysler, GM, Mitsubishi and Dodge.



### OWC6505

#### Master Harmonic Balancer Installer Set

- Covers almost every car and light truck application, old or new.
- Installs drive pulleys or harmonic balancers that are press-fit onto the crankshaft.
- Heavy-duty 7/8" diameter forcing screw has internal threads to fit the threaded adapters.
- 13 adapters, in the right reach length to fit most threaded crankshafts
- Storage case and detailed application chart included.



### LS45300

#### GM Harmonic Balancer Puller

- For GM 3300 and 3800 V6 cylinder engines.
- Equipped with special bolts and adapters to pull the harmonic balancer cleanly without damage to the crank sensor.
- Includes (3) bolts, adapter, body, center screw and (3) washers.

- LS45310 Bolt  
 LS45320 Adapter  
 LS45510 Body  
 LS45530 Center Screw



### KD2897

#### Pulley Puller/Installer Set

- Remove pressed-on alternator and power steering pulleys on late-model GM, Ford and Chrysler engines.
- Threaded end installs late-model GM alternator and power steering pulleys, including Quad 4.
- Reverse the jaws to pull the alternator internal bearing.
- Fits some AMC vehicles.



Includes the following:

PART NO.	DESCRIPTION
KD289780	Puller Body
KD289781	Jaw & Sleeve Assembly
KD289782	Jack Screw
KD289783	Button
KD289784	Bearing and Washer
KD289785	Puller Pin for Quad 4
KD289786	Screw Installer/Quad 4
KD289787	Puller Pin/GM 3.1
KD289788	Screw Installer/GM 3.1
KD289789	Screw Installer/Ford 4.6
KD289790	Screw Installer/General Duty

### LS51450

#### Harmonic Damper Pulley Puller

- For Chrysler, GM, Mitsubishi and Dodge.
- Low profile design works in confined spaces eliminating the need to remove the radiator.
- Equipped with magnetic jaw spacers for 5.9 litre Dodge.
- Jaw geometry, slim magnetic spacers and a four rods allow use on 4.2L Trailblazer, Envoy and Bravada '03 and newer, 4.2L Buick Rainier '04 and newer, 3.5L Colorado and Canyon '04 and newer, Hummer H3 '06 and newer, 2.8L Colorado and Canyon '05 and newer.
- Jaws are held in place with a clevis pin and can be removed and replaced easily.



- LS51640 Jaw  
 LS51670 Magnet and Housing Assembly  
 LS51680 6.5" Rod

### HR189

#### Harmonic Balancer Puller

- Designed to pull balancers, vibration dampers, pulleys and gears with tapped holes.
- The four (4) slots in the yoke allow tool to be used for either two (2) or three (3) hole applications.
- The removable floating swivel prevents damage to shaft ends.
- Comes complete with the necessary side screws and center screw.
- Zinc plated.
- Yoke is forged from alloy steel, heat treated.

Set consists of:

PART NO.	DESCRIPTION
HR1891	Yoke Only
HR1892	Replacement Screw
HR1893	Swivel & O-Ring
HR189500	3/8"-24 x 2" Side Screw (3)
HR189600	5/16"-18 x 2" Side Screw (3)
HR189700	3/8"-16 x 4" Side Screw (2)
HR189800	M8 x 1.25 x 80MM Side Screw (3)



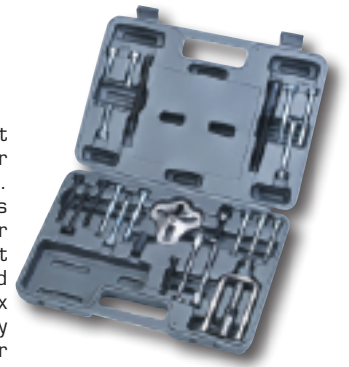
## OW4531 Harmonic Balancer Puller/Installer Set

- For easy removal of most harmonic balancers and drive pulleys which are press-fitted onto the crankshaft.
- A bearing-centered circular 2/3-way and an assortment of metric and fractional bolts and adapters provide wide coverage.
- A heavy-duty 3/4" diameter forcing screw is internally threaded to fit the eight adapters to install harmonic balancers.
- Adapter sizes include: M16 x 2.0, M14 x 1.5, M12 x 1.5, 1/2"-20, 7/16"-20, 3/4"-16, 5/8"-18, and 9/16"-18.
- A blow-molded plastic storage case keeps set contents organized and protected from loss.



## OWC6503 Master Steering Wheel Puller Set

- Removes steering wheels on most domestic or imported vehicles, with or without telescoping steering columns.
- Includes four pairs of cap screws to fit a variety of requirements, puller legs to remove steering wheels without tapped holes, and 4-way flange and three each of 5 sizes of hardened hex head flange bolts for two or three way pulls.
- Covers all lock plates with or without air bags as well as all steering columns, including tilt and telescoping.



OW440478 Steering Wheel Puller

- Storage case and detailed application chart included.

## SL60100A Damper Pulley Holding Tool

- Unique long 4" offset tool developed to aid in the removal and installation of the crank bolt on most Honda and Acura engines.
- Re-engineered to work on 2004 and later new style SUV's with a 50MM damper pulley, as well as all the models listed in the charts provided.
- In operation with the use of a 1/2" breaker bar or ratchet, this tool holds the harmonic damper pulley from rotating when removing and setting the final torque specification on the pulley bolt.
- There is a hole in the center of the tool to allow the use of a socket and extension to break loose or tighten the pulley bolt.



## OWC6508 Power Steering Pump Remover/Installer Kit

- Power Steering Pump Pulley Puller removes power steering pulleys on most Ford, Chrysler, VW and GM vehicles with Saginaw, Thompson, and Ford C2 and C111 power steering.
- Fits 1-1/8", 1-1/4", 1-5/16", and 1-3/8" pulley hub diameters including 1988-1989 GM Quad 4, 1991-1994 GM 3.1 V-6, 1995-newer 3100 and 3400 V-6, 1991-newer Ford 4.6 and 5.4 V-8 engines with metric pump shafts.
- Power Steering Pump Pulley Installer replaces press-fit pulleys on 4 cylinder and V-6 GM as well as GM vacuum pump pulleys.
- 3/8-16 forcing screw installs power steering pulleys on most Ford, Chrysler, VW and GM vehicles with Saginaw, Thompson, and Ford C2 power steering pumps.
- The M8 x 1.25 forcing screw is used to install power steering pulleys on Ford C111 power steering pumps.
- Includes special spacer to install pulley to correct depth on 1996-newer Chrysler Cirrus, Dodge Stratus, and Plymouth Breeze.
- Includes 3/8" adapter to replace pulley on GM and Ford power steering pumps.
- Roller bearing and tool shape prevent damage to pump and internal parts.



Diagnostic & Underhood

OW312347 Forcing Screw

OW7185 Power Steering Pump Pulley Puller

OWC6507 Power Steering Pump Pulley Installer

## HR187 Steering Wheel Puller



- Designed to pull steering wheels on all major makes of automobiles.
- The 5/8" x 4" center screw is equipped with a floating swivel, recessed to prevent damage to horn wire connections.
- Zinc Plated.

Set consists of:

PART NO.	DESCRIPTION
HR1871	Cross Arm Only
HR1872	Replacement Screw
HR1873	Swivel & O-Ring
HR187500	5/16"-18 x 4-1/2" Side Screw (2)
HR187600	5/16"-24 x 3-1/2" Side Screw (2)
HR187700	1/4"-28 x 3" Side Screw (2)
HR189700	3/8"-16 x 4" Side Screw (2)
HR189800	M8 x 1.25 x 80MM Side Screw (2)

HONDA		
Accord	2.2L 4 cylinder	90-97
	2.7L V-6	96-97
	2.3L 4 cylinder	98-02
	2.4L 4 cylinder	03 & later
	3.0L V-6	98 & later
Civic	1.6L 4 cylinder	92-00
	1.7L 4 cylinder	01 & later
	2.0L 4 cylinder	03 & later
CRV	2.0L 4 cylinder	97-01
	2.4L 4 cylinder	02 & later
Del Sol	1.6L 4 cylinder	93-97
	Insight	00 & later
Odyssey	2.2L 4 cylinder	95-97
	2.3L 4 cylinder	98
	3.5L V-6	99 & later
Pilot	3.5L V-6	03 & later
	Prelude	92-01
S2000	2.2L 4 cylinder	92-96
	2.3L 4 cylinder	00-03
Element	2.2L 4 cylinder	04 & later
	Ridgeline	03 & later
	2.4L 4 cylinder	06 & later
	3.5L V-6	

ACURA		
CL	2.2L 4 cylinder	97
	3.0L V-6	97-99
	2.3L 4 cylinder	98-99
	3.2L V-6	00-03
Integra	1.6L 4 cylinder	90-92
	1.7L 4 cylinder	92-93
	1.8L 4 cylinder	93-01
Legend	3.2L V-6	91-95
	MDX	01 & later
RL	3.5L V-6	96 & later
	RSX	02 & later
TL	3.2L V-6	95 & later
	TSX	04 & later
RDX	2.4L 4 cylinder	04 & later
	2.3L 4 cylinder turbo	06 & later

## LS57340

### Steering Wheel Lock Plate Tool

- Fits domestic lock plates, including tilt and telescoping.
- Tool depresses lock plate for easy removal of lock ring.
- Allows access to steering column for repair work.
- Comes with standard and metric adapters, plus two puller frames.
- Works on vehicles with air bags.



## LS19940

### Steering Wheel Pivot Pin Remover

- Removes the pivot pin on GM, Ford, and Chrysler tilt and telescoping Saginaw steering columns.
- Includes extra screw.



LS19970 Replacement Cap Screw

## LS59000

### Ratcheting Serpentine Belt Tool

- Releases tension on serpentine belts with a spring loaded idler pulley.
- Ratcheting head with freewheel position allows maximum leverage.
- Set ratcheting head to the middle or neutral/freewheel position and once maximum travel point is reached, simply click lever into place to lock the ratchet mechanism.
- Comes with extension for hard-to-reach idler pulleys.
- This tool will work where conventional ratchets or breaker bars won't fit due to limited access.
- Comes with a 19MM socket for Honda and Toyota applications.



Includes the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS57390	14MM Socket	LS57560	1/2" Sq. Dr. Socket
LS57440	15MM Socket	LS57580	16MM Socket
LS57450	18MM Socket	LS59100	Extension
LS57500	13MM Socket	LS59140	19MM Socket
LS57530	3/8" Sq. Dr. Socket	LS59190	Handle Assembly

Diagnostic & Underhood

## RB5235

### Power Steering Pulley Kit

- Remove/install press-on type belt drive accessory pulleys.
- Features interchangeable components to work on GM Quad 4, GM 3.1L, and Ford 4.6L engines.
- Features a special holding bar to stop housing from spinning during use with an impact gun.



Includes the following components necessary to remove/install pulleys on pumps with the common 3/8"-16 threaded shaft:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
RB5206	Installer Nut	RB5216	Housing Holder Bar
RB5208	Removal Pin Quad 4	RB5219	Thread Shaft
RB5209	Installer Quad 4	RB5240	Thrust Bearing
RB5210	Installer GM 3.1L	RB5246	Installer Nut Quad 4
RB5211	Installer 3/8-16		
RB5212	Installer Ford 4.6L	RB52480002	Housing
RB5214	Universal Removal Pin	RB13624006	Washer

## LS59800

### Serpentine Belt Tool

- Use to remove and install belts on serpentine belt systems using the spring loaded idler pulley.
- Fits idler pulleys requiring 13MM, 14MM, 15MM, 16MM, 18MM, 19MM hex and both 3/8" and 1/2" square drive sizes.
- For applications with limited access, 13MM and 16MM sockets are built into the handle.
- Covers most domestic and some import applications.
- Comes with extension for hard-to-reach idler pulleys.
- Eight low profile sockets and extension help to fit into tight spots.
- Includes 19MM socket for Honda and Toyota applications.



Includes the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS57390	14MM Socket	LS57560	1/2" Sq. Dr. Socket
LS57440	15MM Socket	LS57580	16MM Socket
LS57450	18MM Socket	LS59100	Extension
LS57500	13MM Socket	LS59140	19MM Socket
LS57530	3/8" Sq. Dr. Socket	LS59780	Handle Assembly

## TH419X

### GM Engine Moving Tool

- For accessing front wheel drive engines.
- Fits GM front wheel drive vehicles with engine torque struts used on most transverse mounted engines.
- Replaces existing torque strut (dogbone) and allows engine to be tilted forward to access spark plugs, distributor, ignition coils, steering gear, etc.
- Easy to install.
- Includes TH419A adapter for 1996 and up GM front wheel drive vehicles.



## OWC4645

### Serpentine Belt Tool

- Fits tensioner pulleys with 13MM - 16MM, 18MM hex or 3/8" and 1/2" square drives.
- For hard to access tensioner; there are 13MM and 15MM 12-point wrenches built into the handle.
- 13MM, 14MM and 15MM crow foot wrenches also included.



## SL94170A

### Serpentine Belt Install Tool



- Provides control and reach when installing both serpentine belts and V-belts in all applications.
- Also designed to help install V-belts and timing belts that tend to be placed in areas that are difficult to reach.
- Three pin design gives convenient belt push/pull capability and the handle gives the twisting control to install belts in difficult areas.
- Made with quality materials for durability with a black finish.

## HR734

### Tru-Grip Serpentine Belt Install Tool



- Clamping jaw allows user to position serpentine belt without the belt slipping out of the tool.
- Tru-grip and long reach allows belt routing in tight access areas that would normally be difficult if not impossible.
- Body made of lightweight alloy steel for durability and strength.
- Ergonomic handle provides comfort and ease in use, acting as an extension of the users hand.

## AR6700

### VW/Audi 1.8T Tensioner Holder Kit

- Used for holding timing belt tensioner and the accessory belt tensioner.
  - Applicable to VW/Audi models with a 1.8 Turbo motor.
- Includes the following:



PART NO.	DESCRIPTION
AR67001	Tensioner Bolt & Washer
AR67002	Tensioner Locking Plate
AR67003	Tensioner Locking Pin
AR67004	Holding Rod

## KD3680

### GearWrench™ Serpentine Belt Tool Set

- Combines the patented innovation of GearWrench™ with the requirements of the Serpentine Belt removal tool to provide the user with the best possible combination.
- Provides coverage for all major vehicles with serpentine belt configuration.
- The versatility and strength of the GearWrench™ allows for unlimited access to serpentine pulley tension arms with added attachments for unlimited coverage.
- Works on domestic and import cars, including Volvo 3/4" square drive requirements.
- Kit comes in a blow molded case for easy storage.



- KD368073 3/8" Adapter
- KD368074 1/2" Adapter
- KD368075 3/4" Adapter

## ARHON1419

### Honda/Acura Serpentine Belt Wrench



- Lightweight and slim design.
- Equipped with 14MM and 19MM, 12 point securing attachments, for engagement every 30 degrees.
- Ideal for strong tensioners used on 2006 and newer Civics.
- Works on most Honda applications.

## ARTOY1914

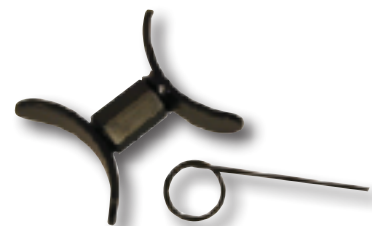
### Toyota Serpentine Belt Wrench



- Lightweight and slim design.
- Equipped with 14MM and 19MM, 12 point securing attachments.
- Applications: 1998-2005 Corolla, 2004 Matrix, 2008 Highlander V6 (Non-hybrid), 2002 RAV4 and 4.7L/5.7L V8 used in Tundra and Sequoia through 2008.
- Works on most Toyota applications (except Hybrids).

## SL97300

### Toyota/Lexus Timing Belt Tensioner Tool



- For replacing timing belt on 5VZ-FE, 3.4L V-6 and 4.0L, 4.3L, 4.7L V-8 engines.
- Compresses hydraulically activated belt tensioner without removing engine components.
- Place tool between belt tensioner and water pump pulleys; turn the inner nut which applies pressure to the hydraulic tensioner, pushing it into a position for the locking pin to be put into hydraulic piston push rod. Once locking pin is in place, remove the tensioner compressor and place the timing belt on all appropriate pulleys.

## HR736

### Stretch Belt Installation Tool

- Quickly and easily installs stretch belts.
- Will not damage stretch belts during installation.
- Stretch belts are being used more often as a means of reducing costs due to elimination of the belt tensioner.
- Installation can be difficult because if the belt is twisted, it can be damaged - this tool prevents that potential damage.



## OW7997

### Timing Belt Wrench

- Correctly adjusts the timing belt tension on the following: 1991-1994 3.0L DOHC Dodge Stealth, 1992-1994 Eagle Summit, 1992-1994 Dodge Colt, and 1984-1991 2.0L Dodge Colt.
- For use with a 1/4" drive ratchet.



Diagnostic & Underhood

**LS59370**

**Stretch Belt  
Installer/Remover**

- Combination removal and installation tool for most stretch belt applications found on many accessory drive systems.
- Unique magnetic faces hold the tool in place on the pulley.
- Helps prevent damage to belt or pulley during removal.



**HR735**

**European Stretch Belt  
Installing Tool**

- Large tool for installation of stretch belts on automobiles with larger pulleys.
- Most of these pulleys are found on European automobiles.



**PBT70990**

**Stretch Belt Mate™ Kit**

- Use for all stretch fit belt applications.
- Universal installation and removal of all stretch fit belts.
- Easily installs all stretch fit belts.
- Allows removal and reuse of stretch fit belts.
- Instructional DVD included.



**LTHLT995**

**Timing Gear  
Pliers**



- Allows mechanic to turn timing gear when timing belt adjustment is needed.
- Aids in removal and replacement of timing gears and serpentine belt pulleys.
- Includes 6 sets of interchangeable composite inserts which safely grip timing gear teeth.
- Helps timing gear removal by preventing rotation of timing gear sprocket while retaining nut or bolt are removed.
- Prevents camshaft rotation during timing gear removal eliminating valve/piston interference and subsequent damage.
- Securely grips all serpentine belt pulleys.

Includes the following inserts:

PART NO.	DESCRIPTION
LTHLT9951	Timing Gear Pliers Insert #1
LTHLT9952	Timing Gear Pliers Insert #2
LTHLT9953	Timing Gear Pliers Insert #3
LTHLT9954	Timing Gear Pliers Insert #4
LTHLT9955	Timing Gear Pliers Insert #5
LTHLT9956	Timing Gear Pliers Insert #6

**KD3259**

**Vacuum Switch  
Socket/Oxygen  
Sensor Switch  
Socket**

- Has a 1/2" square drive and a 7/8" external hex.
- Can be turned with either a ratchet or 7/8" wrench.



**LS13500**

**41MM Water  
Pump Wrench**

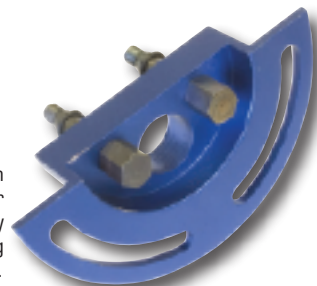
- Use with 3/8" square drive or short extension to easily adjust and hold the water pump when replacing or adjusting timing belt.
- Stubby tool design allows access to timing belt sprocket without interference from vehicle frame.
- Works on 1.6L engines in 2004-current Chevrolet Aveo excluding 2009 with variable timing engine and 1999-2002 Daewoo Lanos.
- Also works on the Chevrolet Optra in markets outside the United States.
- Heat treated alloy steel for strength.



**LS13800**

**Water Pump  
Timing Tool GM  
Ecotec**

- Holds the timing chain and gear in place while removing or installing water pump on Ecotec engines.
- Securely holds water pump sprocket preventing loss of timing or damage to the engine.
- Special half-moon design allows easier access to water pump gear bolts.
- Uses access cover bolts to hold the tool in place.



**LS14440**

**Northstar Water  
Pump Wrench**

- Removes and installs the water pump assembly on GM Northstar 4.0L and 4.6L engines.
- To use, insert the tool over the water pump blades and engage the teeth into the locking tangs. Turn the tool with a 1/2" drive ratchet or breaker bar.
- Angled teeth prevent the tool from slipping.



**OW6616**

**GM Water Pump  
Holding Tool**

- Supports the water pump sprocket and chain during water pump service, eliminating the need to time the balance shaft.
- Applications include: **2.2L VIN F engines** used in Chevrolet 2002-'05 Cavalier, 2003-'07 Malibu, Oldsmobile 2002-'04 Alero, Pontiac 2002-'05 Sunfire, Grand Am, Saturn 2006-'07 Vue, 2003-'07 Ion, 2000-'05 "L" Series and **2.4L VIN B engines** used in Chevrolet 2005-'07 Cobalt, HHR, Pontiac 2006-'07 G6, Pursuit, Solstice.



Diagnostic & Underhood



## PBT70960

### Seal Tool Kit

- Easily remove and install crankshaft and camshaft seals without damage.
- Compact puller with unique extracting hooks engage seal for quick removal.
- Interchangeable sleeves and mandrels allow easy installation of new seal.
- Provides coverage for light commercial and heavy duty vehicles that utilize crankshaft and camshaft seals from 21.5MM - 64MM.



## HR750

### ADP/OWC Alternator Tools

- These tools are designed to aid in the installation and removal of Alternator Decoupler Pulleys (ADP), either One Way Clutch (OWC) or Overrunning Alternator Decoupler (OAD).
- Kit includes tools needed to make technician's job simpler.
- Features a combination of hex bits, Torx® bits, spline sockets and specialty bits to work in conjunction to remove pulleys from alternator. In these pulleys, the tools must secure an outer fastener (either hex, spline, or specialty), then also secure either a hex or Torx® connected to the alternator. There are many different potential combinations of these items depending on manufacturer of the pulley/alternator, or the make of vehicle.
- Will service vehicles included but not limited to the following list: Audi, BMW, Buick, Cadillac, Chevrolet, Chrysler, Citroen, Dodge, Fiat, Ford, Honda, Lexus, Mercury, Mercedes-Benz, Opel, Pontiac, Peugeot, Porsche, Renault, Saturn, Seat, Scion, Toyota, and Volkswagen.



## PBT70865

### Power Bar



- This crankshaft bolt removal tool reduces service time on vehicles with limited crankshaft bolt access.
- Generates up to 600 ft.-lbs. of force.
- Bi-directional force loosens or tightens bolts.
- Saves repair time - no need to remove parts to access the crankshaft bolt or harmonic balancer pulley.
- Use where impact guns won't fit.
- Impact force "shocks" bolts loose.
- No compressed air required for operation.
- Use with impact sockets.
- Optimum operating angle: 90° - 120°.
- Length: 560MM.
- 1/2" square drive.
- Destruction tested up to 600 ft.-lbs.
- Force and torque output is directly related to the weight of hammer and striking force.
- Constructed from high quality tempered tool steel.
- Molded rubber hand guard.
- Replaceable pivot pin and square drive.
- Alternative to an air impact wrench if space or access to compressed air is an issue.

## LS38220

### Universal Cam Adjuster



- Tool is designed to both hold and turn cam sprockets.
- Tool is needed to turn the cam sprockets to adjust the cam position.
- Also can be used to hold the cam sprocket in place when removing the cam bolt.
- Will work on all single and dual overhead cam sprockets with holes.

## LS18000

### Universal Camshaft Bearing Kit



- One complete set that will remove or insert camshaft bearings in nearly all engines from compact cars to heavy trucks. Range of 1.125" to 2.69".
- The expander has a neoprene sleeve over which the split driving plugs are mounted and expanded to size.
- Two sets of rubber sleeves supplied with it for each expanding collet. The brown sleeves are used when driving thin wall bearings (.065). The black sleeves should be used when driving thick wall bearings (.090).
- Instruction sheet provides complete, illustrated operating instructions and parts list.
- Includes: Driving shaft, driving shaft extension, expander unit, five (5) expanding collets, five (5) sleeve sets, two (2) driving collars, centering cone and blow molded case.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS18020	Collet Set	LS18230	Driver Extension
LS18040	Collet Set	LS18270	Expander Shaft
LS18060	Collet Set	LS18280	Expander Cone
LS18080	Collet Set	LS18330	Expander Assembly
LS18100	Collet Set	LS18340	Expander Shaft & Cone
LS18120	Rubber Sleeve	LS18350	Expander Segment Set (4)
LS18140	Rubber Sleeve	LS18390	Nylon Cone
LS18160	Rubber Sleeve	LS18410	Rubber Sleeve
LS18180	Rubber Sleeve	LS18420	Large Washer
LS18200	Rubber Sleeve	LS18430	Small Washer
LS18220	Driver Bar		

## OW6489

### Ford Master Cam Tool Set

- Set includes 22 cam tools covering over 50 Ford applications from 1992 through 2004.
- Molded storage case included.



Includes the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
OW6009	Cam Positioning Tool	OW6475	Crankshaft TDC Timing Pin
OW6020	Cam Positioning Tool	OW6476	Cam Positioning Tool Set
OW6466	Crankshaft Sensor Positioner	OW6477	Cam Holding Tool
OW6467	Cam Sensor Sync Tool	OW6478	Cam Gear Holding Tool
OW6468	Cam Pulley Holding Tool	OW6479	Crankshaft Holding Tool
OW6469	Cam Sensor Sync Tool	OW6480	Cam Holding Tool Adp.
OW6470	Cam Sensor Sync Tool	OW6481	Cam Holding Tool
OW6471	Cam Sensor Sync Tool	OW6482	Cam Gear Hldg Tool Adp.
OW6472	Cam Sensor Sync Tool	OW6483	Cam Sensor Sync Tool
OW6473	Cam Sensor Sync Tool	OW6484	Timing Chain Tensioning Tool
OW6474	Cam Alignment Tool	OW6485	Cam Gear Bolt Skt & Ext.

Note: Cam tools ensure proper cam timing when servicing timing belts, chains, head gaskets, or other valve train repairs. Some applications require more than one tool to accomplish the task.

## COMPARTMENT TOOLS

### OW6472

#### Ford Camshaft Sensor Synchronizer

• Included in OW6489. • Works on: 1995-1997 3.0L V6 Windstar, Aerostar, Ranger; 1996-1997 3.0L 2-valve V6 Ford Taurus and Mercury Sable; and 1996-1998 4.0L V6 Aerostar, Ranger, Explorer. • Same as Ford 303-529 (T95T-12200-A). • Used to synchronize the camshaft sensor to the No.1-cylinder.



### OW6473

#### Ford Camshaft Sensor Synchronizer

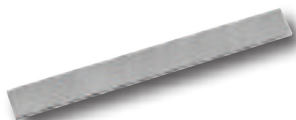
• Included in OW6489. • Works on 1998-2001 3.0L V6 Ford Taurus, Mercury Sable, Ranger pickup and Windstar van. • Same as Ford 303-589. • Used to synchronize the camshaft sensor to the No.1-cylinder.



### OW6474

#### Ford Camshaft Tool

• Included in OW6489. • Works on 1994-2002 2.0L 4 cylinder DOHC Zetec, Contour, Mystique. • Same as Ford 303-465.



### OW6475

#### Crankshaft TDC Timing Pin

• Included in OW6489. • Works on 1997-2002 Mystique 2.0L 4 cylinder DOHC Zetec. • Same as Ford 303-574 (T97P-6000-A).



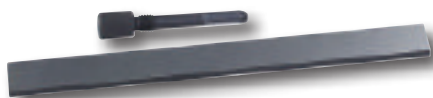
### OW6486

#### Ford Cam Tool Kit

• For 2.0L Zetec engines in Contour, Mystique and Focus. Includes one of each of the following:

PART NO.	DESCRIPTION
OW6474	Cam Alignment Tool
OW6475	Crankshaft TDC Timing Pin

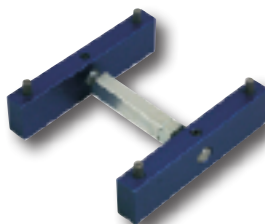
Note: Cam tools ensure proper cam timing when servicing timing belts, chains, head gaskets, or other valve train repairs.



### LS36880

#### Dual Overhead Cam (DOHC) Lock Tool

• Locks camshaft sprockets in place during belt/chain replacement. • Unique design uses knurled pins to hold against the inside of the cam sprockets. • Two parallel bars "float," allowing the knurled pins to align with the sprockets. • Preserves the engine timing during belt or chain replacement.



### LS23800

#### Flywheel Turner

• Used to hold the flywheel or flexplate when torquing the flywheel or harmonic balancer bolts on most vehicles. • Also used to turn the flywheel to rotate the engine. • Folds for easy storage.



### PBT70900

#### CamClamp® Set

• Use on single, dual or quad overhead cam engines to hold valve timing during belt replacement. • Ideal for Diesel injection pump belt replacement. • Easy to use and installs in seconds. • Patented 'Uni-Fit' positive lock tooth design. • Constructed from high strength industrial grade non-corrosive materials. • Fits timing gear diameters from approximately 4" (101MM) to 6" (152MM). • Fits gear spacings from approximately 1/16" (1.6MM) to 3" (76MM). [NOTE: Will vary dependent on gear diameter.] • Set contains Dual CamClamp® (PBT70896), four CamClamp® Singles (PBT70899) with 2 bolt extensions and an impact resistant tray for easy storage.

PBT70896 Dual CamClamp®



Diagnostic & Underhood

### OW6613

#### Variable Pin Spanner Wrench Set

• Universal design fits many different types of pulleys having slots or holes, including camshaft pulleys and crankshaft pulleys. • Wrench is adjustable from 1-1/4" to 5". • Works with a 1/2" drive ratchet or breaker bar.



### LTHLT735

#### Chrysler/Dodge Minivan Universal Joint Steering Shaft Assembly Roll Pin Remover

• Works on all Chrysler/Dodge minivans plus most other front wheel drive universal joint steering shaft assemblies. • Works with air impact tools. • Magnetic tip aids in removal and insertion of roll pins. • Machined from hardened tool steel.



## LS48700

### Throttle Pedal Depressor



- Holds throttle at a constant RPM.
- To use, engage the nylon hook under the steering wheel. Then extend the depressor rod to the accelerator pedal. Use the adjustment screw to fine-tune the RPM level.
- Overall length: 40"

## OW4681

### Power Steering Pump/Alternator Remover/Installer Tool

- Reversible 2-in-1 tool removes and installs press-fit alternator and power steering pump pulleys.
- Also removes and installs other press-fit pulleys with a hub diameter of 1-1/8" (28MM), 1-1/4" (32MM), 1-5/16" (34MM), or 1-3/8" (35MM).



## OW7005

### Power Steering Pump Pulley Installer

- Ideal companion to the OW7185 power steering pump pulley puller for Chrysler, VW, and GM vehicles.
- Internal roller bearing allows for easy turning.
- Threads are 3/8"-16 to match pulley shafts.



## SH7775604

### Freeze Plug Tool Kit



- Complete kit including straight and formed driver, all adapters and coupling nut.
  - All parts quality machined and plated.
- Kit consists of the following in a blow molded case:

PART NO.	DESCRIPTION
SH77031	18" Bent Shaft Freeze Plug Driver
SH77032	Coupling Nut
SH77033	1-3/4" Adapter
SH77034	1-1/2" Adapter
SH77035	1-1/4" Adapter
SH77036	1" Adapter
SH77037	3/4" Adapter
SH77473	8" Straight Freeze Plug Driver

## ATD11500

### Battery Replacement Reset Procedures Manual

- Covers Domestic and Import Vehicles 2000-2010.
- Designed for the professional technician.
- Features minimum text and numerous simplified illustrations that will save the user time.
- Battery access and service locations.
- Battery disconnection precautions.
- Power windows, locks and sunroof programming.
- Convenience accessory programming.
- Supplemental restraint, ABS system precautions.
- Engine and body control system resetting.



## ATD11170

### Timing Chains and Gears 2011

- Features general removal and installation instructions of timing chains and gears, as well as valve timing procedures for Domestic and Imported vehicles from 1997-2011.
- Valve timing procedures for Domestic and Imported vehicles.
- Chain and gear replacement.
- General removal and installation instructions.
- Safety precautions.
- Special tools.
- Tightener adjustments.
- Tightening torques.
- Timing marks.
- Valve timing instructions.
- Tensioner release and reset methods.
- Chain routing and sprocket/gear valve timing marks.



Diagnostic & Underhood

## ATD12340

### Domestic Trouble Code Manual 2012

- Covers Domestic Cars from 1998-2012.
- Code retrieval techniques are described using concise text and clear illustrations in separate sections for each model.
- Trouble codes - accessing and erasing.
- System faults - locations and probable causes.
- Code types - MIL, OBDI, OBDII.
- Based on Vehicle Manufacturers' information.
- Data Link connector locations.



## ATD12350

### Import Trouble Code Manual 2012

- Covers Import Cars from 1998-2012 (European and Asian Vehicles).
- Code retrieval techniques are described using concise text and clear illustrations in separate sections for each model.
- Trouble codes - accessing and erasing.
- System faults - locations and probable causes.
- Code types - MIL, OBDI, OBDII.
- Based on Vehicle Manufacturers' information.
- Data Link connector locations.



## MIDC7100

### 12V Economy Battery Charger/Starter

- Provides all of the basic features demanded by the professional garage environment.
- Two-hour timer with hold position for continuous charging application.
- Rugged professional quality handle and steel housing.
- Heavy-duty cable set is grounded, oil resistant, and built to last.
- High efficiency all-copper transformer windings.
- Professional automatic reset overload and short-circuit protection.
- Multiple applications including auto/light truck, SUV's, more.



## MIDC7300

### 6/12 Volt, Professional Battery Charger, Starter and Tester

- 10/60 Amp.
- 60/10 Continuous amps, 60 Amp fast charge, 80 Amp boost, and 250 Amp engine start.
- Voltmeter for testing battery state of charge and alternator output.
- Two-hour timer with hold position for continuous charging application.
- Rugged professional quality handle.
- 8" rubber wheels make movement a snap.
- Heavy duty cable set is grounded, oil resistant, and built to last.
- High efficiency all-copper transformer windings.
- Professional automatic reset overload and short-circuit protection.
- Ammeter.



**SPECIFICATIONS**

Operating Range:.....	2 amp trickle charge
.....	40 amp fast charge
.....	60 amp boost
.....	200 amp engine start
Power requirements: .....	120 volt, 60 HZ
Voltage Range:.....	12 volts
Display: .....	Analog ammeter

## ASDESS6008MSCW

### TurboCharger Plus Battery Charger

- Electrical Stability System (ESS™) technology turns charger into a 70A stable power supply for extended service procedures or re-flashes. Nominal 13.7V DC Output.
- Memory Saver Mode 15A.
- Program for deep discharge recovery of flooded batteries.
- Patented diagnostics indicate weak or defective batteries.
- Designed for AGM, Gel Cell, sealed, and standard flooded batteries including Spiral Cell, Orbital™, or Optima™ batteries.
- Dead battery override control.
- Analog Meter and 3 LED display indicating charge status.
- UL listed.



**SPECIFICATIONS:**

Continuous Rating.....	60 Amps / 70 Amps in Power Supply Mode
.....	20 Amp Memory Saver Port
Voltage.....	12V
AC Cord.....	6 ft., 16-3
DC Leads .....	6.5 ft., 4 AWG
Clamp Rating .....	400A
Shipping Dimensions .....	30"H x 17"W x 16"D
Weight.....	49 lbs.

Diagnostic & Underhood

## MIDC7200

### 6/12 Volt Professional Battery Charger and Starter

- 2/10/40 Amp.
- 2 Amp trickle charge, 40 Amp fast charge, 10 Amp slow charge, 80 Amp boost charge, and 225 Amp engine start.
- Two-hour timer with hold position for continuous charging application.
- Rugged professional quality handle.
- 8" rubber wheels make movement a snap.
- Heavy duty cable set is grounded, oil resistant, and built to last.
- High efficiency all-copper transformer windings.
- Professional automatic reset overload and short-circuit protection.
- Ammeter.



## ASD6050CW

### TurboCharger Battery Charger

- 40/45 Amp continuous rating at 6/12 volts.
- 90 minute timer with HOLD.
- Appeals to the small shop owner and the "Do-It-Yourself" end user.
- Fan cooling mechanism prevents overheating.
- Convenient handle and quality steel foot for long lasting use.
- CSA listed for US and Canada.
- "Safe In Any Weather" operation.



**SPECIFICATIONS**

Continuous Rating.....	40/45/10A
Voltage.....	12V
Manufacturer Boost Rating.....	330A
UL Cranking Assist Rating.....	220A
AC Cord.....	6 ft., 16-3
DC Leads .....	6.5 ft., 6.5 AWG
Clamp Rating .....	400A
Shipping Dimensions .....	24"H x 15"W x 13.5"D
Weight.....	35 lbs.

## CLRJNC4000CW

### 1100 Amp 12V Jump Starter

- 1100 Peak Amps and 325 Cranking Amps of starting power in this 12 Volt Portable Jump Starter; combining power and ease of use in a rugged, reliable unit.
- Has the PROFORMER battery specifically designed for vehicle jump starting to deliver peak professional performance.
- Built-in charger, convenient battery status gauge, and impact resistant case.
- 23" heavy-duty #4 gauge cable leads.
- Industrial grade clamps penetrate corrosion on battery terminals.
- Voltmeter provides detailed state of charge information for internal battery.
- DC outlet to power 12V accessories.
- Battery type: Sealed Lead Acid (AGM).
- Charger: 500 mA.
- Weight: 18 lbs.



## ECMS4000

### Super Memory Saver OBDII

- Saves all driveability codes and settings when disconnecting/ changing a vehicle's starter battery.
- Direct wired OBDII connector plugs directly into the vehicles OBDII port.
- 12 volt, 4.5 amp hour sealed lead acid battery included inside unit.
- Power on/power off switch.
- Green LED indicates connection to circuit.
- Amber LED indicates when the internal battery is 11.6 volts or lower and requires charging soon.
- Protected by a 4 amp circuit breaker.
- Includes 120V AC "smart" charger.
- Also protects settings and codes for: Anti-theft radios, clocks, keyless entry systems, alarms, cellular phone settings, GPS memory, TPMS, other memory related functions.



## CLRJNC660CW

### 1700 Amp 12V Jump Starter

- 1700 Peak Amps and 425 Cranking Amps of starting power in this 12 Volt Portable Jump Starter.
- Ideal for use in automotive, marine and industrial environments.
- Has the PROFORMER battery specifically designed for vehicle jump starting to deliver peak professional performance.
- Built-in charger, convenient battery status gauge, and impact resistant case.
- 46" heavy-duty #4 gauge cable leads.
- Industrial grade clamps penetrate corrosion on battery terminals.
- Voltmeter provides detailed state of charge information for internal battery.
- DC outlet to power 12V accessories.
- Battery type: Sealed Lead Acid (AGM).
- Charger: 500 mA.
- Weight: 18 lbs.



## OW3181

### 130 Amp Battery Load Tester

- Applying an industry-leading 130 amp load, this ergonomically designed, heavy-duty battery tester provides accurate, reliable test results in just 10 seconds.
- Includes uniquely designed clamps for a positive grip on top and side post batteries and an extra large, easy-to-read display with zero adjust.
- 0-16 volt range.
- Works on both 6V and 12V batteries.
- Ergonomic handle design.
- Side tabs for on-tool clamp storage.
- Back brackets for tool storage on wall or toolbox.



Diagnostic & Underhood

## MIDC2205

### 12 Volt 10/2/55 Amp Auto Battery Charger

- Specially designed for multiple vehicle applications including recreation, car, truck, RV and marine.
- 55 Amp cranking assist for jump starting discharged batteries.
- Dual charging rate (10 amp & 2 amp) for charging all battery sizes.
- Dual charging algorithms; starting batteries or deep cycle/gel batteries.
- LED state of charge indicates when charge is complete.
- Fully automatic: Charging stops when complete to eliminate overcharging or damage to the battery.
- Safe to use: Charger will not charge if polarity reversed.
- Rugged thermoplastic case protects your vehicle from scratches and enhances safety.
- Portable design makes it easy to take the charger to the vehicle.



## ES725

### Battery and Charging System Tester

- For automotive, marine, small engine, HVAC and industrial technicians.
- Easy and accurate results.
- 6 and 12 volt battery tester.
- 12 and 24 volt charging system tester.
- Tests battery condition and the starting/charging system.
- Guided test sequence covers: battery, cranking volts and charging system.
- Charging system test checks the alternator voltage and the AC ripple voltage for bad diodes.
- Battery test results include the State of Health actual battery CCA and % age, State of Charge battery voltage and % age, and actual CCA capacity (test range 40-2000 CCA).
- Diagnosis of battery condition also displayed.
- Tester removes surface charge prior to battery test resulting in more accurate results.
- 2 line LCD display in 7 languages.
- Tests discharged batteries down to 1.5V.
- Rating systems: SAE, DIN, EN, IEC, JIS.



## ECMSBD28

### Auto Memory Saver

- Prevent the loss of electronic memory when disconnecting the vehicle's battery.
- High visibility coiled cord stretches to eight feet.
- LED indicates power source is connected.
- OBDII connection uses positive and ground pins only, will not interfere with fault codes.
- Coiled cord prevents tangles.
- In line fuse.
- Cigarette lighter input.
- 12 volt power source not included.



## ES720

### Digital Battery Tester

- For 12 Volt only.
- Simple to use.
- For automotive, marine, small engine, HVAC and industrial technicians.
- Tester removes surface charge prior to battery test for accurate results.
- Tests discharged batteries down to 1.5 volts.
- Range of testing - 200 to 1200 CCA.
- Test results indicate actual CCA capacity of battery with pass/fail diagnosis.
- Automatic temperature compensation.
- Tests SAE, DIN, EN, IEC and CA(MCA) battery classifications.



## MIDPBT300

### 12 Volt Battery and Electrical System Analyzer

- Wide test range for complete electrical system diagnostics.
- Brings battery and electrical system testing technology to the technician's hand.
- Measurement range from 100 - 1400 CCA.
- Green and red LEDs give fast decisions on starter and charging system testing.
- Starter system testing: pressing the down arrow displays the captured voltage from cranking the engine.
- Charging system testing: pressing the up arrow displays the captured high voltage from the alternator.



## MIDMDXPBT300

### 12 Volt Battery and Electrical System Analyzer with Printer

- Wide test range for complete electrical system diagnostics.
- Brings battery and electrical system testing technology to the technician's hand.
- Measurement range from 100 - 1400 CCA.
- Green and red LEDs give fast decisions on starter and charging system testing.
- Starter system testing: pressing the down arrow displays the captured voltage from cranking the engine.
- Charging system testing: pressing the up arrow displays the captured high voltage from the alternator.



MIDA095 6 Pack Paper/MIDMDXP300

## ES710

### Carbon Pile Load Tester



- 500 Amp adjustable load carbon pile.
- Great tool for simulating actual cranking loads.
- Tests 12 volt batteries rated as high as 1000 CCA or 160 Amp hour.
- Can also test alternators, regulators and starters.
- Large dual meters display battery voltage and load current simultaneously during the test.
- 500 amp side terminal clamps and heavy duty stranded copper cables.
- Meters are color coded for simple pass or fail diagnostics.
- Includes temperature compensation chart.

## ECSP101

### Battery Hydrometer



- Designed to see the state of the battery acid.
- Temperature compensating.
- Obtain direct, accurate readings.
- Wide range: 1.100 to 1.300 sg.
- Unbreakable, easy to read, economical.

## ECBMK1914

### 7 Piece Battery Tool Kit



Includes the following:

PART NO.	DESCRIPTION
ECBK703	5/16" Battery Terminal Ratchet
ECBK705	5/16" Battery Terminal Ratchet Extended
ECBK706	Battery Terminal Puller
ECBK708	10MM Battery Terminal Ratchet
ECBK720IM	Battery Terminal Spreader/Cleaner
ECBK725	Battery Pliers
ECBK541	4-in-1 Battery Post Cleaner

## ECS501

### Top Terminal and Battery Post Cleaner

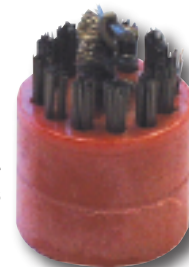
- Brush will not twist loose.
- Protective cover fits both ends.
- Clean top terminals and top posts.
- Great for any type of cable end.
- Ensures a great connection.



## ECS516

### Side Terminal Battery Brush

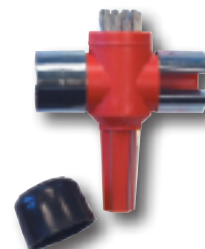
- Clean away corrosion, and black insulation without removing the battery from vehicle.
- Small center brush cleans threaded area, while circular brushes clean contact area.
- Shines and cleans corrosion from cable end, including threaded area (with stud removed).
- Use 1/4" ratchet handle or air impact drill.



## ECS541

### 4-in-1 Battery Post Cleaner

- Clean four different battery connections with one tool.
- Clean side terminal, marine, Group 31 truck battery posts and cable ends and standard top post.
- Saves storage space, time and costs while covering all of the above polishing jobs with one tool.



## ECS504

### Top Post/Top Terminal Cleaner/Reshaper

- Reshape positive and negative battery cable ends.
- Firm staple cloth removes corrosion from top posts.
- Ensures a great connection.
- Steel blades stay sharp.
- Protective cover fits both ends.
- Made from durable polypropylene.



## LS54150

### Battery Terminal and Wiper Arm Puller

- Dual purpose puller.
- Removes stuck battery terminals.
- Tighten knurled cone to force jaws under the cable clamp.
- Turn center screw to lift clamp off terminal.
- Also removes bolted on windshield wiper arms that fit over a tapered spline.
- Puller screw pad is designed to fit the top of the spline post for easy pulling.



## CCL307

### Cornwell Parrot Nose Pliers

- Made of specially treated drop forged steel.
- Lower jaw combines with reinforced rib to prevent handles from contacting each other.
- Neon orange comfort grips.
- Jaw Capacity: 5/8" (16MM).
- Length: 7" (175MM).



## STBC3

### Slim-line Style Battery Cable Cutter

- Prepares battery cable for terminals.
- Works well on bundled small wires.
- Cuts soft cable cleanly, with no distortion.
- Thin, sharp blades for firm hold.
- Ground blade guide to minimize deflection.
- Standard finish is conversion coat black oxide.
- Long handles with broad vinyl cushion red grips.
- Positive fastener (jamb not on joint) to maintain even pressure on ground inside surface of blades.
- NOT FOR USE ON STEEL WIRES - cutters bear this caution!
- Overall length: 7-1/2"; Handle length: 6"; Width: 1-1/4"; Thickness: 3/4".
- Weight: 9 oz.; Capacity: 3/0 cable.



### Battery Wrenches



- Designed for removal of 5/16" GM side terminal battery bolts.
- Reaches most battery side terminals.
- Nickel-chrome plated for quality and appearance.
- Vinyl grip insulated handles.
- Reversing lever for accessibility.
- Critical parts are heat-treated to ensure safety and long service.
- Works on all GM 1994 to present vehicles and on the following cars, but not limited to: W-Body: Buick Regal, Chevrolet Lumina, Pontiac Grand Am and Grand Prix; Oldsmobile Cutlass.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
RB6523	5-3/4" Wrench	RB6525	9-3/4" Extra Long Wrench

## LS55410

### Battery Clamp Spreader

- Dual use pliers spread battery post clamps and tapered, ribbed tips remove corrosion and build-up from inside the clamp.
- Tips are made from strong heat-treated steel.
- Applications: For most popular clamp sizes. Tapered tips provide range and squeezing the handles expands the tips to cover many clamp sizes.



## LS57850

### Battery Carrier

- Lift and carry batteries safely.
- Sturdy steel jaws securely hold batteries.
- Spring-action handle turns lifting power into battery gripping pressure.
- Form-fitting handle provides a solid gripping surface.
- Carrier works on nearly all batteries, from motorcycles to boats.
- Saw-tooth jaw tips provide no-slip battery gripping power.
- Carrier grips the battery just below the top lip for good balance.
- A heavy-duty tool that is built to last.
- Opens up to 10".



## LS57920

### Battery Carrying Strap

- Makes carrying side-mount and top terminal batteries safe and easy.
- Heavy-duty 14 plastic strap resists damage from battery acid.
- The ends of the strap are marked for easy identification of positive and negative terminals.
- The built-in studs can also be used to attach a charger to side-mounted terminals.



## ECS520

### Side Battery Lifter

- Lifts side terminal and top post terminal batteries, including group 65 batteries.
- Lightweight but strong.
- All steel construction.
- Notched cross-member to prevent slippage.
- Adjusts to pick up batteries 4-1/2" to 7-1/2" wide.
- Pads are adhered with super strong adhesive.
- Non-slip vinyl covered insulated handle for firm, comfortable handhold.



## PL75033

### Battery Filler - Syringe Style

- Ideal for all fluids including battery acid.
- Full 6 oz. capacity with 6" flex spout.
- Rubber bulb remains pliable in cold weather.



## RAC34788

### High Efficiency Auto Recovery, Recycle, Recharge Machine with database

- Automatic Function allows unit to be programmed to recover, vacuum, leak test, charge, and then walk away without having to operate panel valves.
- Vacuum Leak Test will monitor the vacuum level after an evacuation, and inform the technician of a possible leak in the vehicle's A/C system.
- Automatic Refrigerant Refill feature means never having to stop in the middle of a job to change refrigerant tanks because the unit maintains a user selectable amount of refrigerant in an internal vessel, and signals when it's time to change the supply tank, so no monitoring is required.
- Automatic Air Purge eliminates damaging air without any monitoring of gauges or opening of valves.
- Automatic Oil Drain feature drains system oil captured during recovery; the display reminds technician to empty the bottle and graduations on the container clearly show how much oil needs to be replaced.
- Refrigerant Charging is easy; select a charge mode from either the high side, low side, or both and the accuracy feature eliminates guesswork.
- Refrigerant Management system displays refrigerant use and monitors remaining filter life; prompts appear when 1/3 of filter life remains.
- Vacuum Function defaults to 15 minutes, but is programmable up to 99 minutes; remaining vacuum time is displayed on the screen.



SPECIFICATIONS	
Voltage.....	115V 60 Hz
Refrigerant Container On-board.....	30 lb. (14 kg)
..... vessel (source tank not included)	
Operating Range.....	50° to 120°F (11° to 49°C)
Recycling Filter-Drier .....	43 cu. in. spin-on type
Pump Free Air Displacement.....	3 CFM (142 L/min)
Dimensions.....	44"H x 34"W x 23"D (127 cm x 86.4 cm x 58.4 cm)
Shipping Weight .....	235 lbs. (106.6 kg)

**RA34724 Replacement Filter/RAC34288, RAC34788**

## RAC34288

### R134a Refrigerant/ Recovery Machine

- Combines simple operation with superior accuracy.
- Recovers, recycles, evacuates, leak tests, and recharges R134a quickly and accurately.
- Semi-automatic operation means less attention is needed!
- The Automatic Air Purge eliminates damaging air without any monitoring of gauges or opening of valves.
- Automatic Oil Drain drains system oil captured during recovery, and the display reminds the user to empty the bottle.
- Graduations on the container clearly show how much oil needs to be replaced.
- Refrigerant charging is simple - just select a charge mode from either the low side, or low side and high side and the accuracy feature eliminates guesswork (manual operation uses panel valves).
- The easy-to-read 4 x 20 display features multilingual capability - select either English, Spanish, or French languages.
- Refrigerant management system displays refrigerant use and monitors remaining filter life.
- A prompt appears when 1/3 of filter life remains.
- The vacuum function defaults to 15 minutes, but is programmable up to 99 minutes.
- Remaining time is displayed on the screen.

**RA34724 Replacement Filter/RAC34288, RAC34788**



## MCL69100 AC Recovery System

- Compact, lightweight system that works with all refrigerants.
- High performance 1/2 HP oil-less compressor with built-in high volume cooling fan.
- Compressor is protected by an automatic low pressure cut-off switch to eliminate risk of compressor failure.
- Includes oil separator and filter dryer to cleanse the refrigerant during the recovery process.
- Color-coded gauges with pressure readings in PSI, BAR and MPA.
- Stainless steel ball valve manifold design controls refrigerant flow.
- Liquid compatible head-valve system.
- Safety high pressure cut-off switch.
- Fully reinforced hard plastic casing.
- Includes 30 lb. DOT tank.



SPECIFICATIONS	
Voltage.....	115V, 60Hz
Operating Temperature Range .....	32-122°F
.....	0-50°C
Weight.....	38 lbs.
Dimensions.....	17"L x 10"W x 12"H

**MCL69500DR Filter**

## MCL98315

### Wireless Refrigerant Charging Scale with Solenoid

- Wireless unit prevents unwanted tangles in wires.
- Easily store the remote in the body of the platform.
- Keypad provides synchronization and zeroing.
- Extremely accurate weight sensor.
- Magnet on remote allows easy placement on fixtures.
- Battery life symbol for platform and remote constantly displayed on LCD.
- Wireless signal strength indicator conveniently displays on remote.
- Features Charge Programming to set desired quantities and has an alarm that will sound before charge is complete to allow ample time to turn off refrigerant supply.
- Also has a Pause/Charge feature to stop and continue charging and a Repeat function to charge previously stored amount.
- Empty/Full tank feature shows the amount of refrigerant in the tank at any time.
- Automatic Shut-Off after 3 hours.
- Battery Life Monitor: approximately 20 hours; Platform: approximately 30 hours.
- Accepts all US and EU standard cylinders.



SPECIFICATIONS	
Capacity: .....	243 lbs.
Accuracy: .....	± 0.01 lb./± 0.005 kg or 0.1% of reading whichever is greater
Resolution: .....	0.02 lb./0.01 kg
Operating Temperature Range .....	32 to 120°F (0 to 49°C)
Platform dimensions: .....	31cm x 31cm



#### **WARNING!**

*It is important to note that R12 and R134a refrigerants can not be mixed, because the PAG oil in R134a is not compatible with R12. This has required the automotive industry to use special fittings to prevent cross-contamination between the two types of systems, or in some cases, dedicated service equipment for each refrigerant. Please use extreme caution when servicing air conditioning systems for proper refrigerant use. Wear safety goggles, shield and protective clothing when working with refrigerant equipment and systems.*



## MCL98310

### Wireless Refrigerant Charging Scale without Solenoid



- Wireless unit prevents unwanted tangles in wires.
- Easily store the remote in the body of the platform.
- Keypad provides synchronization and zeroing.
- Extremely accurate weight sensor.
- Magnet on remote allows easy placement on fixtures.
- Battery life symbol for platform and remote constantly displayed on LCD.
- Wireless signal strength indicator conveniently displays on remote.
- Features Charge Programming to set desired quantities and has an alarm that will sound before charge is complete to allow ample time to turn off refrigerant supply.
- Empty/Full tank feature shows the amount of refrigerant in the tank at any time.
- Automatic Shut-Off after 3 hours.
- Battery Life Monitor: approximately 20 hours; Platform: approximately 30 hours.
- Accepts all US and EU standard cylinders.

SPECIFICATIONS	
Capacity:	243 lbs.
Accuracy:	± 0.01 lb./± 0.005 kg or 0.1% of reading whichever is greater
Resolution:	0.02 lb./0.01 kg
Operating Temperature Range	32 to 120°F (0 to 49°C)
Platform dimensions:	31cm x 31cm

## MCL98210A

### Refrigerant Scale



- Electronic refrigerant scale constructed with a rugged aluminum cast body.
- Offers programming capabilities such as charging, tank capacity, repeat function to charge previously stored amounts.
- Has a platform level eye and adjustable leveling feet.
- 3 hours Auto Off function.

SPECIFICATIONS	
Capacity	240 lbs.
Accuracy	±0.16 oz., ±0.01 lb., ±0.01 kg or 0.1% of reading (whichever is greater)
Resolution	0.01 kg/0.02 lb.
Operating Temperature	32° to 120°F (0 to 49°C)
Battery Life	approximately 40 hrs.
Platform size	9" x 9" (22 x 22cm)

## MCL81290

### Universal Large Bore Valve Core Remover



- Universal large bore valve remover for R12/R134a standard and JRA/EATON large bore R134a valve cores.

## MCL91290

### Universal Valve Core Remover



- Double ended for easy replacement of standard and GM R12 large bore valve cores.

## RA34430

### Quick Change Filter



- Specially blended for maximum acid and moisture removal.
- For older RA17700A, RA34450, RA34700 series.

## MCL82375

### A/C Oil Injector R134a



- Excellent method for adding refrigerant oil or large amounts of UV leak detection dye to the A/C system.
- Add oil by allowing vacuum to pull it in after evacuation process or use refrigerant to push it in using the recharge system.
- Rugged all metal 2 oz. canister.
- Standard design model uses a needle style valve attached between the manifold gauge set or charging equipment and A/C hose.
- 1/2" ACME-M x 1/2" ACME-F.

## TCTD440A

### Refrigerant Gas Leak Detector



- Features a long life heated sensor technology that is designed to detect the more current and difficult HFC refrigerants such as R134a in addition to all HCFC and CFC refrigerants including hydrocarbon "blends".
- Unique digital leak size indicator takes the guesswork out of whether or not to repair a small leak.
- Digital display is independent from the audio alarm and sensitivity level, allowing the precise pinpointing of the leak source.
- Does not require rechargeable batteries.
- Long life, stable sensor.
- Unique numeric leak size indicator.
- Automatic calibration and reset to ambient levels.
- Visual LED leak alarm located near sensor.
- True mechanical pump.
- Low battery indicator.
- Uses 4 AA alkaline batteries.
- Audio mute function.
- Comfortable neoprene grip.
- Meets the SAE J2791 requirements.
- CE certified.
- Rugged carrying case included.

SPECIFICATIONS	
Sensitivity	0.05 oz./yr R134a
Sensor Life	>300 hours
Response Time	Instantaneous
Power Supply	4 AA Alkaline batteries
Battery Life	8 hours continuous
Warm up time	<20 seconds
Probe length	17 inches
Numerical Display	7 segment digital display (1 to 9)
Weight	1.5 lbs.

TCTACSEN0009A Sensor with Filter

## MCL91200

### R134a & R12 Air Vacuum Pump



- Requires 4.5 CFM/90 PSI shop air.
- No moving parts.
- No oil required.
- 1.3 CFM air displacement venturi type pump will pull up to 29 inches of vacuum (Hg.) at sea level.
- Includes 1/4" flare (R12) connection and 1/2" ACME (R134a) connection.

A/C & Cooling

- High volume cooling fan provides cool air to motor and pump.
- Vapor discharge/oil fill port is easily removable, contains internal check valve to prevent escape of liquid oil.
- Non-slip cushion handle.
- Includes T-Fitting with 1/4" Flare and 1/2" ACME ports.
- Cooling fins to keep temperature cooler during extended motor operation.
- Manifold valve isolates pump from the system while testing for leaks.
- Includes 3 inlet ports, 1/4", 3/8" SAE and 1/2" ACME.

## MCL90062A 3 CFM Vacuum Pump



## MCL90066A 6 CFM Vacuum Pump



### SPECIFICATIONS

No. of stages .....	1
Free Air Displacement .....	3 CFM
Ultimate Vacuum .....	.75 Microns
Motor .....	1/4 HP
Pump Speed .....	1720 RPM
Electrical Specs .....	110V/60HZ
Shipping Weight .....	17 lbs.
Dimensions in cm .....	33 x 13.5 x 25.5

### SPECIFICATIONS

No. of stages .....	1
Free Air Displacement .....	6 CFM
Ultimate Vacuum .....	.75 Microns
Motor .....	1/4 HP
Pump Speed .....	1720 RPM
Electrical Specs .....	110V/60HZ
Shipping Weight .....	22 lbs.
Dimensions in cm .....	35 x 14.3 x 26.5

## MCL55200

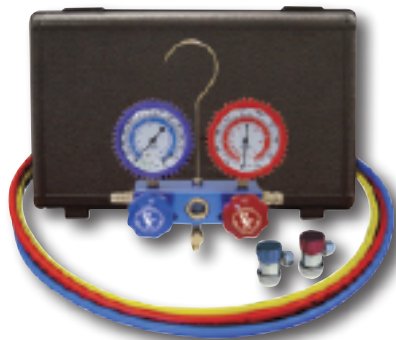
### "Inspector™" 2-in-1 Electronic/UV Leak Detector

- Perform electronic and UV Leak Detection with one tool.
- Incorporating both electronic and UV technology into one unit insures that even the toughest leaks can be found.
- Offers six levels of sensitivity (15 levels of detection) with a tri-colored LED indicator.
- Pin-point leaks as small as 1/10 oz. (3 gr) per year.
- Ultra bright UV light is built into the end of the probe, allowing easy access into tight areas.
- Ultra Bright UV/Blue LED light.
- UV safety glasses.
- Mute function.
- Includes custom molded carrying case.



## MCL89660A

### R134a Manifold Gauge Set



- Aluminum R134a set comes complete with 60" hoses and R134a manual couplers.
- Comes in custom molded carrying case.

<b>MCL82834</b>	High Side Manual Coupler
<b>MCL82934</b>	Low Side Manual Coupler
<b>MCL84601</b>	R134a Hose, Blue
<b>MCL84602</b>	R134a Hose, Yellow
<b>MCL84603</b>	R134a Hose, Red
<b>MCL85000</b>	R134a Manifold Overhaul Kit
<b>MCL85350CH</b>	R12/R134a Low-Side Replacement Gauge
<b>MCL85500CH</b>	R12/R134a High-Side Replacement Gauge
<b>MCL93253E</b>	Blue Small Gauge Guard
<b>MCL93503E</b>	Red Small Gauge Guard

## MCL98660A

### R12/R134a Dual Manifold Gauge Set



- Professional extruded aluminum block.
- Silicone dampened gauges.
- Set of (3) R134a nylon barrier hoses.
- Set of (3) R12 nylon barrier hoses.
- Professional R134a manual couplers.
- Recalibrateable gauges.
- Custom molded carrying case.

<b>MCL82834</b>	High Side Manual Coupler
<b>MCL82934</b>	Low Side Manual Coupler
<b>MCL84601</b>	R134a Hose, Blue
<b>MCL84602</b>	R134a Hose, Yellow
<b>MCL84603</b>	R134a Hose, Red
<b>MCL85000</b>	R134a Manifold Overhaul Kit
<b>MCL85350CH</b>	R12/R134a Low-Side Replacement Gauge
<b>MCL85500CH</b>	R12/R134a High-Side Replacement Gauge
<b>MCL93253E</b>	Blue Small Gauge Guard
<b>MCL93503E</b>	Red Small Gauge Guard
<b>MCL99601</b>	R12 Hose, Blue
<b>MCL99602</b>	R12 Hose, Yellow
<b>MCL99603</b>	R12 Hose, Red

## MCL99872A

### R134a Digital Manifold Kit

- Offers a large easy-to-read LCD that displays temperature, pressure and vacuum readings for R134a.
- Performs systems leak check at the conclusion of the evacuation process.
- The manifold case is constructed of ABS material and protected by a rugged rubber boot.
- A fully functional manifold with the intelligence to quickly access and deliver accurate information.
- Includes refrigerant and oil capacities for over 1000 vehicle makes and models.
- Large, easy to read pressures and vacuum readings.
- Heavy-duty hook folds back into unit for compact storage.
- Aluminum block manifold with double O-ring free floating piston valves.
- Keypad Control.
- Kit includes manifold with a set of 3-72" hoses and a set of manual couplers (MCL82834 & MCL82934) in a blow molded case.



#### SPECIFICATIONS

Refrigerant .....	R134a
Pressure & Vacuum Display	
Low Side .....	PSI, Bar, MPa, Kg/cm2 & InHg
High Side .....	PSI, Bar, MPa, Kg/cm2
Temperature Display .....	-40 to 200°F (-4 to 93°C)
Response Time .....	250 mSec.
Connection .....	1/2" ACME or 1/4" flare
Operating Temperature .....	32 to 122°F (0 to 45°C)
Power .....	9V DC battery
Battery Life .....	350 hours continuous use
Low Battery Indicator .....	Special ICON on LCD
Capable of Software Upgrade	

## MCL83272

### R1234yf Aluminum Ball Valve Manifold Gauge Set

- Anti-flutter gauges smooth out needle movement.
- Easy to read temperature scales on gauge face.
- Easy to recalibrate gauges to insure accuracy.
- Extra large sight glass for visual checks of refrigerant.
- Easy grip front-facing knobs.
- Piston type free-floating valves reduce O-ring wear.
- 1/4 turn stainless steel ball valve manifold block assembled with three (3) 12MM-F fittings per SAE J2888.
- Red and blue nylon barrier hoses with 12MM-M fitting on both sides meets SAE J2888, EPA, SAE and UL standards.
- Yellow hose 12MM fitting on one side and 1/2" x 16 ACME on the other meets SAE J2888.
- R1234yf high and low side couplers with extended disconnect protection sleeve meet SAE J639 and J2888.



### R134a Manual Couplers

- Adjust easily to R134a service ports with varying dimensions.
- All metal construction.
- Patented spring loaded depressor will not damage service valves.
- Can be removed from service port without losing refrigerant regardless of knob position.
- Meets SAE, UL and EPA requirements for containment of refrigerant.
- Color coded.



PART NO.	COLOR	DESCRIPTION
MCL82834	Red	High Side, 14MM-F x 16MM
MCL82934	Blue	Low Side, 14MM-F x 13MM

## MCL85200

### Deluxe A/C Service Repair Kit

- Replacement gaskets, depressors, O-rings and nylon guides for charging hoses and adapters.

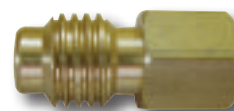


Kit Includes the following in a plastic box:

QTY.	PART NO.	DESCRIPTION
10	MCL42010	1/4" Gasket
10	MCL42014	1/4" Depressor
10	MCL80034	O-Ring for MCL82834
5	MCL800341	High Side Nylon Guide
10	MCL80134	O-Ring for MCL82934
5	MCL801341	Low Side Nylon Guide
10	MCL82010	Gasket for R134a Hose
10	MCL82336	Gasket for MCL82335
10	MCL83341	O-Ring for R134a Hose
10	MCL90336	Gasket for R-12 Shut-Off Valve

## MCL82634

### Straight Adapter



- 1/4 FFL (7/16"-20) x 1/2 ACME-M.
- Includes access valve core (0377-001) — (90-110 PSI Opening).

## MCL91207

### Gasket and Depressor Assortment

- Replacement gaskets, O-rings, and depressors for charging hoses and adapters.



Includes the following:

PART NO.	QTY.	DESCRIPTION
MCL42010	3	1/4" Gasket
MCL42014	3	1/4" Depressor
MCL90341	3	1/8" O-ring
MCL90368	3	3/16" Depressor
MCL90369	3	3/16" Gasket

## MCL85530

### 3-in-1 Side Mount Can Tap Valve (US Standard)



- Covers 2-7/8" (R134a), 2-1/2" (R12) and 2" (OIL) charge cans.
- Includes 1/2" ACME-M and 1/4" FL-M ports.
- Internal safety check valve prevents system backflow.

MCL8553210 Gaskets

A/C & Cooling

## MCL85510

### R134a Can Tap Valve

- Screw-on design for R134a ACME male can taps; specially designed for 16-ounce and smaller R134a cans.
- All metal construction for durability and long life.
- Gasket assures leak proof operation.
- Built-in safety check.
- Exclusive "full grip" valve knob.
- 1/2" ACME-M.



## OW7238

### A/C Spring Lock Coupling Tools

- Set includes four sizes for use on 3/8", 1/2", 5/8", and 3/4" tubes.
- Allows quick, safe disconnect of spring lock couplers on late model Ford systems and Tecumseh HR980 compressors.



PART NO.	SIZE	PART NO.	SIZE
OW7239	3/4" - white	OW7241	1/2" - blue
OW7240	3/8" - red	OW7242	5/8" - black

## CLS37000

### Air Conditioning/Fuel Line Disconnect Tool Set

- Easily disconnect air conditioning lines and quick connect fuel lines.
- Set of 6 tools which disconnect the spring lock coupling on Ford and Chrysler air conditioning lines.
- Works on fuel line quick connect couplings found on GM, Ford and Chrysler.
- 5/16" size fits on push lock connectors found on Ford radiators and transmission lines.
- Set includes sizes: 5/16", 3/8", 1/2", 5/8", 3/4" and 7/8".

- LS37010 7/8" Disconnect Tool
- LS37020 3/4" Disconnect Tool
- LS37030 5/8" Disconnect Tool
- LS37040 1/2" Disconnect Tool
- LS37050 3/8" Disconnect Tool
- LS37060 5/16" Disconnect Tool



## OW6073

### Toyota Air Conditioning Disconnect Tool

- Releases plastic quick-connect fittings on air conditioning lines at the evaporator on Toyotas.
- Easy to use: rotate plastic fitting, insert tangs into two release holes, and push.



## ARTOY200

### A/C Clamp Remover



- Fits both Toyota A/C clamps, used on high and low pressure lines.
- Applicable to: 1998 and newer Toyota models with the new style A/C clamps.
- Stainless steel release pins.
- Identification and instructions are laser marked on the handle.

## RA17595

### Flush Gun Kit

- Economical means of flushing contaminants and scale from A/C system components.
- Flush gun uses dry shop air to pressurize the solvent.
- Thoroughly cleans and removes oil, any refrigerant contaminants and residue.
- Attached nozzle directs the flow of solvent without spray-back.



## MCL91000A

### Deluxe A/C Clutch Hub Puller/Installer Kit

- Use to remove and install A/C clutch hubs on GM, Ford, Chrysler, and imports.
- Includes a compressor identification chart in a custom-molded box.



- MCL90454 GM Clutch Plate Remover
- MCL90458 GM Clutch Plate Installer
- MCL90902 Sankyo Clutch Plate Puller
- MCL91122 Clutch Plate Remover
- MCL91195 GM Clutch Plate Remover Arbor
- MCL91212 GM DA6 Clutch Plate Remover
- MCL91260 Clutch and Plate Arbor
- MCL92260 Cone

## OWC4535

### A/C Clutch Hub Remover/Installer Set

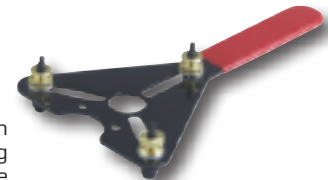
- For damage-free removal and installation of the clutch hubs on these air conditioning compressors: GM-Harrison DA-6, HR-5, V-5, A-6 and early R4; Nippondenso Ford/Chrysler A590, C171, FS-6, 6P148A (new style); Sanden & Sankyo; York/Tecumseh HR980; Zexel/Mitsubishi CH series.
- Set includes a removing flange, plus forcing screws and adapter assemblies to remove and install virtually all clutch hubs.
- Includes blow-molded plastic case.



## OWC4537

### A/C Clutch Holding Tool

- This three-stud spanner wrench keeps the A/C clutch from turning when loosening or tightening the retaining nut.
- Adjusts quickly with brass thumbscrews to fit various styles of A/C compressors used on GM, Ford, and Chrysler vehicles.
- Also fits a variety of other pulleys.



## RB404

### A/C and Refrigeration Ratcheting Box Wrench



- "Finger tip" reversing feature on both ends.
- Opening sizes: 3/8"-5/16" square x 1/4"-3/16" square.
- Overall Length: 5-1/2".

## MCL92311

### Deluxe A/C Orifice Tube Service Kit

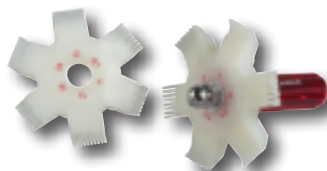
- Five piece universal kit for removing and installing any style orifice tubes.
- Comes in a custom molded box.



## RA18403

### Multi-Head Fin Straightener Set

- Clean and straighten condenser and evaporator coils.
- Compact design for confined spaces.
- The straightener head is 3-1/8" in diameter; the handle is 3-1/2" long.
- Includes 12 clearly marked combs: Wheel 1 has 8, 9, 10, 12, 14, and 15 fins per inch; Wheel 2 has 10.5, 11, 13, 18, 20, and 22 fins per inch.



### Dial Thermometers



- Rugged pocket thermometers with case and clip.
- Recalibration nut.
- Plastic watertight lens.
- Stainless steel construction.
- UET220/3 has a sturdy clip that attaches securely to cups or pitchers.

PART NO.	DIAL SIZE	TEMPERATURE RANGE	DIVISION ACCURACY
UET220	1"	0 to 220°F	±2
UET220/3	1-3/4"	0 to 220°F	±1

## RA43230

### Swivel Head Digital Thermometer

- Head swivels 180° for easy reading of surface, liquid or air temperature at any angle.
- Compact, easy to carry and store.
- Switch selects Celsius or Fahrenheit.
- Sampling time is just one second; HOLD button freezes display for accuracy.
- Durable case includes a pocket clip.
- Ranges of -58 to 302°F (-50 to 150°C).
- Accuracy ±2°F between -4° and 248°F (±1°C between -20° and 120°C); otherwise ±4°F (±2°C).
- Easy to read display.
- Uses one 1.5V battery (included) size LR44.
- Automatic power off after 10 minutes if ON/OFF is not pressed.



**WARNING!**

*Wear safety goggles, shield and protective clothing when working with refrigerant equipment and systems. Read operating instructions thoroughly.*

## MCL52224

### Infrared Thermometer with Target Laser

- Offers laser targeting accuracy, enhanced back-lit LCD display and an expanded temperature range of -50°C to 500°C, -58°F to 932°F.
- Compact design is simple to use and easy to store.
- Includes two "AAA" batteries, instruction manual, dial thermometer, and custom molded box.



SPECIFICATIONS	
LCD Display .....	Extra Large backlit
Field of view .....	12:1
Target Indicator .....	Single laser spot
Temperature Range (non-contact) .....	-58 to 932°F, -50 to 500°C
Automatic power-off .....	after 15 seconds
Response time .....	0.5 seconds
Battery .....	Two "AAA"

## MCL52224C

### Infrared Thermometer with Dual Laser

- Accurately hits target with dual laser technology.
- Compact design is simple to use and easy to store.
- Includes two (2) "AAA" batteries, instruction manual, carrying case.
- Emissivity: 0.98.
- Resolution: 0.5°F/0.5°C.
- Accuracy: ±2°C (4°F) or ±2% of reading.
- Battery life: Approximately 180 hours.



SPECIFICATIONS	
LCD Display .....	Extra Large backlit
Field of view .....	12:1
Target Indicator .....	Dual laser spot
Temperature Range (non-contact) .....	-58 to 932°F, -50 to 500°C
Automatic power-off .....	after 15 seconds
Response time .....	0.5 seconds
Battery .....	Two "AAA"

## MCL53351

### 50 Watt UV Kit



- Professional UV Leak Detector Kit for A/C, Cooling, Oil, Transmission, and Fuel Systems.
- Kit comes complete with: 12 Volt/50Watt UV Leak Detector, **MCL53609** 1 oz. Coolant Dye, **MCL53610** 1 oz. Oil/ATF/Fuel Dye, **MCL53810** Mini Dye Injector (10 Applications of Universal A/C Dye, compatible with R134a and R12 systems), Dye Remover, R12 Adapter, UV Enhancing Safety Glasses, A/C Connection hose with R134a Coupler, and 12 Service Labels.
- MCL53609** 1 oz. Coolant Dye
- MCL53610** 1 oz. Oil/ATF/Fuel Dye
- MCL53810** Air Conditioning Dye Cartridge (10 applications)

A/C & Cooling

## WGTP8621CW

**LeakFinder™ Kit**



- Complete LeakFinder™ Kit. • Pinpoints A/C, Oil, Fuel, ATF, PS, Hydraulics and Coolant Leaks. • Includes **WGTP8620CW** 6-LED, economy leak detection flashlight, syringe A/C dye injector with hose for R134a and R12 adapter/purge fitting, 1 oz. bottle of co-solvent free universal A/C dye - services up to 4 vehicles, 1 oz. bottle of Dye-Lite® All-In-One™ standard oil dye - services 1 vehicle, 1 oz. bottle of Dye-Lite® coolant dye - services 1 vehicle, 8 oz. bottle of GLO-AWAY™ dye cleaner, fluorescence-enhancing glasses and case.

**WGTP8620CW** 6-LED Leak Detection Flashlight  
**WGTP3400001CS** 1 oz. All-in-One Oil Dye  
**WGTP38400001CS** 1 oz. Universal A/C Dye

## WGTP8620CW

**UV Flashlight and Glasses**



- Cordless 6-LED leak detection flashlight - portable and affordable. • Power comparable to a 50-watt lamp. • Inspection range of up to 2 feet (0.6M) or more. • 100,000 hour bulb life. • Includes three "AA" batteries and fluorescence-enhancing glasses.

## WGTP8640CW

**Mini UV Flashlight and Glasses**



- Cordless fluorescent leak detection flashlight with high intensity LED technology. • Power comparable to a 75-watt lamp providing over 4 hours of peak performance. • Compatible with all leak detection dyes. • Includes three "AA" batteries and fluorescence-enhancing glasses.

## WGTP150CW

**Super High Intensity UV LED Light**



- Cordless and rechargeable. • Very high intensity LED technology. • Fifteen times brighter than regular LED lights. • Power comparable to super-high intensity 150W lamps. • Inspection range of up to 20 feet or more. • Compatible with all standard leak detection dyes. • Fluorescence-enhancing glasses and charger included.

## WGTPACCW

**A/C Leak Detection Kit**

- Pinpoints A/C leaks fast. • Includes: **WGTP8620CW** 6-LED leak detection flashlight, WGTP9881 Syringe A/C dye injector with R134a hose/coupler and R12 adapter/purge fitting, **WGTP38400001CS** 1 oz bottle co-solvent free universal A/C dye, services up to 4 vehicles, and WGTP9940 fluorescence-enhancing glasses.



**WGTP8620CW** 6-LED Leak Detection Flashlight  
**WGTP38400001CS** 1 oz. Universal A/C Dye

## UVC332010

**Spotgun™ Jr. LED-Lite Kit**

A leak detection kit with "LED-Lite", a compact UV fluorescent leak detection light with 6 LEDs to illuminate all UV leak detection dyes. • Includes: Spotgun Jr. injector; LED fluorescent leak detection light with 6 LEDs (3 AA batteries included), universal A/C dye cartridge (SAE-J2297 certified and OEM approved dye) that services up to 10 vehicles, R134a and R12 adapters, UV enhancing glasses, service stickers, and storage case.



## UVC332220

**Spotgun™ Jr. Pico-Lite™ Kit**

• Professional injection system to inject dye into a pressurized A/C system quickly and easily. • Small dye cartridges are convenient for shops to easily control dye inventory. • Combines the popular Spotgun™ Jr. injection system and the compact high-intensity leak detection Pico-Lite™ light that fluoresces all UV dyes. • Includes: a 1 Watt Luxeon® LED leak detection light (3 AA batteries included), Spotgun™ Jr. injector, universal A/C Dye cartridges (SAE-J2297 certified and OEM approved dye) that service up to 20 vehicles, R134a and R12 adapters, UV enhancing glasses, service stickers, and storage case.



**WARNING!**

*Wear safety goggles, shield and protective clothing when working with refrigerant equipment and systems. Read operating instructions thoroughly.*

## UV413025

### NEO™ UV LED Light

- Finds leaks others miss.
- High Output UV LED.
- Adjustable focusing lens.
- Optimized UV wavelength fluoresces dyes brighter than blue LED lights.
- Rechargeable lithium-ion battery.
- Durable aluminum construction.
- Compact design.
- Includes: UV Phazer NEO™ light, UV enhancing glasses, rechargeable battery, battery charger, and wrist strap.



## UV413010

### LED-Lite with UV Glasses

- Professional compact fluorescent leak detection light with 6 LEDs.
- Works on all UV leak detection dyes.
- UV enhancing glasses and 3 AA batteries included.



## UV413020

### Pico-Lite™ with UV Glasses

- Utilizing a powerful 1 Watt Luxeon® LED bulb, the latest in high intensity LED technology.
- Works on all UV leak detection dyes.
- UV enhancing glasses and 3 AA batteries included.



## UV471112

### UV Enhancing Glasses



## UV413070A

### UV-Phazer 18 LED

- Leading edge technology with the use of 18 True-UV LEDs.
- Powerful beam of UV light illuminates UV dyes brighter than ever!
- LEDs do not produce heat making them safer to use for continuous operation.
- Features 18 True-UV LEDs and provides cordless freedom for ease of use.
- Kit includes: 18 UV LED Cordless Lite, UV enhancing glasses and four (AA) batteries.



## UV399020

### AC Dye for Spotgun™ Jr. Kits

- Easy to use replacement cartridges.
- No mess or spills.
- Four 1 oz./30ml. cartridges.
- 40 applications/10 per bottle.
- Service stickers included.



## CTG6400

### 30 LED and UV Rechargeable Work Light

- 30 LED provides bright light for work up to 100,000 hours.
- Top of light features an Ultra bright UV 6 LED light for leak detection.
- Also has a flash mode.
- Uses 3.6V - 3300mah nickel-metal hydride rechargeable batteries.
- 4.5 hour battery life before recharge.
- Adjustable hanging hook.
- Impact resistant molded body.

- CTG6400CH Charger
- CTG6400HK Hook
- CTG6400LN Lens



## MXN00224

### Pro UV LED Inspection Penlight

- For daily use in a demanding shop, manufacturing or maintenance environments.
- This light is brighter than ordinary UV penlights due to a unique high performance UV LED.
- Great for A/C refrigerant dye leak detection and numerous other applications.
- Clips easily and comfortably into any pocket.
- Produces a powerful beam of UV light that works with all fluorescent dyes.
- Tough T6 aluminum body has Type II anodizing in a bright shade of violet for easy identification and is virtually indestructible.
- Knurled surfaces provide good grip.
- Threaded joints have rubber O-ring seals for water resistance.
- Rugged tailcap switch is rated at 100,000 cycles and is sealed to avoid contamination by dirt and grit.
- Includes three AAAA alkaline batteries.
- 2 hour run time with alkaline batteries to half brightness and 4 hours usable light with typical intermittent use.
- Custom reflector design with a bright center spot and an orange peel (OP) surface for an even spill beam.
- Head diameter: 9/16".
- Body diameter: 7/16".

**NOTE: Wear 100% UVA blocking safety glasses when using the WorkStar 224. Do not shine the light in anyone's eyes.**



## MXN00524

### UV LED Leak Detection Light

- For daily A/C refrigerant dye leak detection in demanding repair shop, manufacturing, industrial and maintenance environments.
- Cordless, compact LED light produces a powerful beam of UV light that works with all fluorescent dyes and can also be used for a wide variety of other applications.
- Unlike fragile UV bulbs, the LED is virtually indestructible.
- Clips comfortably into any pocket.
- The tough T6 aluminum body is anodized in a bright shade of violet, so it is easily identified.
- Knurled surfaces provide a good grip.
- Threaded joints have rubber O-ring seals so it is water resistant.
- Rugged tailcap switch is rated at 100,000 cycles and is sealed with a black rubber cap to avoid contamination by dirt and grit.
- Once the rear switch is activated, there is a handy secondary on/off switch at front of the body, which provides convenient control when hand-held.
- Includes two (2) CR123A lithium batteries.
- Run time with lithium batteries is 1.5 hours with typical intermittent use.
- Custom designed spot reflector with orange peel (OP) finish.
- Overall length: 5-3/8" (13.6 cm).
- Head Diameter: 1" (25MM).
- Body Diameter: 7/8" (22MM).
- Weight: 5 oz. (142 grams) with batteries.

**NOTE: Wear 100% UVA blocking safety glasses when using the WorkStar 524. Do not shine the light in anyone's eyes.**



## COOLING

### RA75240

#### Coolant and Battery Refractometer



- For measuring the freezing point of either propylene or ethylene glycol based cooling systems.
- Also used for checking the strength of electrolyte solution in batteries.
- Features high-quality optics with ultra smooth focusing.
- Scale range: 32° F to -60° F (0°C to -51°C).

### UV550000

#### AIRLIFT™ Radiator Air Purge and Refill

- Eliminates airlocks in vehicle cooling systems and refills the entire system including the Heater Core in seconds.
- "Fits-All" cone adapter easily connects onto any vehicle, including cars, trucks and off-road vehicles. Rugged metal body design stands up to the rigors of a shop environment.
- Comes with body assembly with gauge and ball valve control, Venturi connector and hose, fill hose with filter, various size rubber adapters, and rugged storage case.



### UV550500

#### AIRLIFT™ II Radiator Air Purge and Refill

- Refills entire cooling systems without airlocks in seconds, including the Heater Core!
- Eliminate time consuming bleeding and purging.
- Check for system leaks under vacuum - shop air operation draws a fast and powerful vacuum.
- Compact size, light weight, easy to work around tight areas.
- Push-button valve eliminates the need to change hoses.
- Works on all systems (including light and heavy duty trucks) with "Fits-All" heavy-duty cone adapter.



### UV560000

#### Leak Tester Kit

- Test for combustion leaks from head gaskets, cylinder heads, and engine blocks in both gasoline and diesel engines.
- Features a dual-chamber design for higher accuracy to eliminate false readings.
- First chamber will filter out any alkaline particles that could result in a false indication of a combustion leak; second chamber provides true indication of a combustion leak.
- Kit includes: dual chamber tester, 16 oz. tester fluid and operating instructions.



UV560500 Repl. Leak Tester Fluid (16 oz.)

### LS75500

#### Combustion Leak Detector Kit



- Checks for combustion leaks caused by bad head gaskets, cracked blocks, and cracked or warped heads.
- Fluid changes from blue to yellow when exposed to combustion gases in the radiator.
- Hose connects to any vacuum line.
- Place tapered end of tool into radiator opening after draining off some coolant.
- With the engine running, the vehicle vacuum or the vehicle's vacuum pump draws vapors through the indicating fluid for testing.

LS75630 Leak Indication Fluid, 16 fluid oz.

LS75730 Leak Indication Fluid for Diesel, 16 fluid oz.

### Vacuum Assist Coolant Refillers

- Use shop air (80+ psi) to create a vacuum and refill a drained cooling system in less than five minutes.
- Hands free on/off air valve allows preparation of coolant solution while vacuum is created.
- Eliminates "airlocks", filling the cooling system completely the first time.
- No hose swapping.
- Gauges equipped with internal shock dampener.

### MSM201CR

#### Vacuum Assist Coolant Refiller Universal

- **Recommended for the technician who does not have cooling system adapters.**
- No adapters required.

Seals to cooling systems with included molded cones.- Fits 99% of cars and light trucks in the field.
- Securely fits small neck cooling systems typically found on Asian vehicles.
- Packaged in a durable molded plastic carrying case.



### MSM202CR

#### Vacuum Assist Coolant Refiller

- **Recommended for the technician who already has cooling system adapters.**
- Seals to cooling system using widely available positive fit cooling system adapters.

- Recommended for large trucks with big diameter cooling system filler necks requiring cooling system adapters.
- Packaged in a durable molded plastic carrying case.



MSM200CR415 15 ft. Intake Hose/MSM201CR, MSM202CR



## MSM100K

### Cooling System Tester Kit

- Test cooling systems and caps up to 30 psi.
- Head includes a pressure release handle that when turned clockwise, releases pressure build-up before removing the head from the cooling system.
- Gauge equipped with internal shock dampener.
- Pump includes the three most commonly required cooling system adapters plus an adapter application guide, all packaged in a durable molded plastic carrying case.
- The pump is compatible with all existing MSM-series, Stant, and AST adapters.



Includes the following:

PART NUMBER	DESCRIPTION
MSM100P	Cooling System Pump
MSM10006	Spacer Washer
MSM10036	Domestic Radiator Adapter
MSM10128	32MM ID x 15MM Deep Radiator Adapter
MSM10138	32MM ID x 9.5MM Deep Radiator Adapter

MSM10001 Pressure Gauge  
 MSM10004 Cap Assembly  
 MSM10005 Tester Seal

## MSM1400P

### Cooling System Adapter Set

- Designed as an add-on for the MSM100K Cooling System Tester Kit.
- Carrying case comes with 14 composite cooling system adapters.
- When added to the MSM100K with its pump and three adapters, the combination will pressure test the cooling systems of all modern cars and light trucks through 2006.



Includes the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
MSM10022P	Adapter - 48MM	MSM10048P	Adapter - 34MM
MSM10025P	Adapter - 45MM	MSM10052P	Adapter - 50MM
MSM10031P	Adapter - 56.5MM	MSM10056P	Adapter - 40MM
MSM10034P	Adapter - 52MM	MSM10245P	Adapter - 52MM
MSM10041P	Adapter - 63MM	MSM10345P	Adapter - 52MM
MSM10044P	Adapter - 62MM	MSM10445P	Adapter - 52MM
MSM10046P	Adapter - 52MM	MSM14503	Adapter - 2-3/16"

MSM10032P Cooling System Adapter, 52MM x 2.5MM threads  
 MSM10035P Cooling System Cap Adapter, 52MM x 2.5MM threads

## MSM10450

### Truck Adapter Kit

- APPLICATIONS: Trucks/Heavy Duty vehicles with large "B" size fill neck (2-11/16" O.D.).



## MSM1C029

### Toyota Cap Adapter

- APPLICATIONS: Acura: '90-'93 Integra, '95-'98 5 cylinder TL, '91-newer NSX; Chevrolet: '85-'88 Nova, Spectrum and Sprint; Chrysler/Dodge/Eagle/Plymouth: '84-'92 Colt, '91-'97 Laser/Talon, '91-'96 Stealth; Ford/Lincoln/Mercury: '89-'92, '93-'97 V6 Cougar/Thunderbird, '91 Escort/Tracer, '95-2001 Explorer, '88-'93 Festiva, '89-'97 Probe, '92-'94 Tempo/Topaz, '93-present Villager, '95-present Windstar; Geo: '89-'94 Metro, '89-'92 Prism, '89-'93 Tracker; Honda: '90-'93 Accord, '88-'91 Civic, '91-newer Motorcycles, '94 to 2002 Passport, '90-'98 Prelude; Hyundai: all models '87-present; Infiniti: all models '92-present; Isuzu: all models '92-'97; Lexus: '94-'99 ES300, '90-'99 LS400, '96-'99 LX 450/470; Mazda: '85-'99 Protege with 1.5L; Mitsubishi: '91-'98 3000GT, '92-'95 Diamante, '85-'93 Galant, '85-'92 Mirage, '89-'98 Montaro, '89-'93 Starion; Nissan: all models '87-present; Subaru: all models with small filler neck '84-present; Suzuki: models with 1.5MM deep filler neck '83-'95; Toyota: '86-'95 4 Runner, '95-present Avalon, '83-'89, '90-'91 exc. V6 A/T, '94-'99 4 cylinder Camry, '85-'92 Celica, '83-'92 Corolla, '85-'92 Cressida, '87-present Land Cruiser, '83-'92 Pickup, '89-'97 Previa, '98-'99 Sienna, '99 Solera, '83-'84 Starlet, '86-'92 non turbo Supra, '95-'98 T100, '95-present Tacoma, '83-'90 Tercel.



## PBT70888

### Deluxe Cooling System Pressure Tester

- Suits most passenger and light commercial vehicles.
- System pressure bleed screw and overflow hose mean the pressure can be relieved and the coolant collected safely to comply with EPA regulations.
- Also for marine and motorcycle applications.
- Only four cap adaptors needed to test eight caps.
- Universal fitment.
- Test cap relief pressure and seal condition.
- Fluid drain tube allows coolant to be returned to the coolant reservoir or safely collected in a container for recycling.
- Locate leaks from head gaskets, radiator and heater cores, welch plugs and housings, and water pumps and hoses.
- Bladder is cycle tested to over 1500 inflations.
- Suits neck diameter of up to 45MM (Thread or Bayonet).
- Tester constructed from high strength fibre reinforced synthetic polymer.
- Maximum pump pressure: 30 psi.
- Kit includes: analyzer, pressure pump with 0-30 psi gauge, air supply hose, drain hose, spare bladder, instruction manual, three neck extensions, four cap adapters, and blow-molded storage case.



A/C & Cooling

## NEMVM4506

### Universal Radiator Adapter

- Expands the versatility of standard cooling system pressure testers and replaces numerous special or custom manufactured radiator and expansion tank adapters.
- Attach the radiator adapter from a standard kit to the inlet side of this universal adapter to create a pressure tester compatible with the majority of cars, trucks and SUVs.
- Universal design fits most automotive radiators and expansion tanks.
- Inlet fits standard adapter available on all brands of pressure testers.
- Easy to service and requires no inflation or conditioning.
- User manual (English/French/Spanish).



## NEMV4510

### Motorcycle Cooling System Test Kit

- Designed for testing motorcycles and other recreational, sports, and utility vehicles with liquid cooled engines.
- Economical, accurate and simple method to find common causes of overheating.
- Pinpoints external leaks caused by loose clamps or leaky hoses, connectors, water pumps or radiators.
- Diagnoses internal leaks caused by a blown head gasket or damaged block or head.
- Test radiator and coolant bottle caps to ensure they are maintaining the correct pressure.
- Specially designed low-profile test adapter fits into areas with tight or limited access, requiring less component disassembly.
- Application specific adapter fits the radiator or coolant bottle like the original cap.
- Durable, accurate gearless diaphragm style gauge that displays psi and kPa units.
- Powerful in-line piston design.
- One finger lever-action vacuum release.
- Durable, lightweight, non-corrosive PVC construction.
- Pivoting lever action maximizes output with minimal operator effort.
- Comfortable ergonomic handle reduces hand stress.
- Includes: Cap Test Adapter, System Test Adapter, Hose.



## NEMV4560

### Cooling System Test Kit

- Makes automotive cooling system testing simple, efficient, and economical to find common causes of overheating.
- Combines a unique hand pressure pump with four cooling system test adapters and two dual-function cap test adapters to quickly reveal external cooling system leaks and detect internal leaks and defective caps.
- Pinpoints external leaks caused by loose clamps or leaky hoses, connectors, water pumps, or radiators.
- Diagnoses internal leaks caused by a blown head gasket or damaged block or head.
- Test radiator and coolant bottle caps to ensure they are maintaining the correct pressure.
- Contains adapters to test the cooling system and caps of most US and Asian cars and light trucks, as well as many European vehicles.
- Application specific adapters fit the radiator or coolant bottle like the original cap.
- Durable, accurate gearless diaphragm style gauge that displays psi and kPa units.
- Powerful in-line piston design.
- One finger lever-action vacuum release.
- Durable, lightweight, non-corrosive PVC construction.
- Pivoting lever action maximizes output with minimal operator effort.
- Comfortable ergonomic handle reduces hand stress.
- Includes: Small Bayonet (shallow neck), Small Bayonet (deep neck), Large Bayonet, Large and Small Cap Test Adapters, Threaded Bayonet, Hose.



## MSM6000

### Heavy Duty Cooling System Adapter Kit

- Compatible with most cooling system pressure tester pumps.
- For large truck cooling systems.



Kit includes the following 6 adapters:

PART NO.	APPLICATION
MSM14505	For large trucks with "B" half turn twist on filler neck, 2-11/16" O.D.
MSM10036P	For International, Freightliner, Sterling and other trucks with 52MM x 2.5MM threaded filler neck
MSM10027P	For Volvo trucks with 63MM x 3MM threaded filler neck
MSM10022P	For Volvo trucks with 48MM x 3MM threaded filler neck
MSM10054P	For Freightliner trucks with 60MM x 3MM threaded filler necks
MSM10032P	For late model Kenworth, Freightliner, and Peterbilt trucks with 52MMx 2.5MM threaded filler necks

## RL9507001

### Universal Radiator Adapter Set with Pump

- This combination SmartFit™ radiator adapter set and pressure pump enables technicians to quickly and easily test cooling systems in passenger vehicles and light trucks.
- The pump is compatible with most cooling system adapters and cooling system cap adapters.
- The pressure gauge reads up to 30 PSI and includes scalars to measure pressure in KPa as well as in Bars.
- Eliminates the need to ever buy or own any other adapter again.
- Works with any Stant type standard pressure pump.
- Employs three sizes of elastomeric adapters.
- Varying durameter ratings for the different adapters to expand to fit every radiator and/or plastic reservoir and ensure maximum versatility and performance.
- Professional grade: solid brass, anodized aluminum, and high-quality engineered rubber.



## MSM300K

### Heavy Duty Cooling System Pressure Tester

- Pressure pump uses shop air to generate pressure in large truck cooling systems.
- Used to test pressure relieving caps found on large trucks.



Set includes the following 3 adapters:

PART NO.	CAP ADAPTER APPLICATION
MSM1C052	Tests caps from "A" size (2-3/16" O.D.) filler necks
MSM14504	Tests caps for "B" size (2-11/16" O.D.) filler necks
MSM1C035P	Tests caps with 52MM x 2.5MM thread

## RL9507501

### Universal Radiator Adapter Set

- This SmartFit™ radiator adapter set enables technicians to quickly and easily test cooling systems in passenger vehicles and light trucks.
- Eliminates the need to ever buy or own any other adapter again.
- Works with any Stant type standard pressure pump.
- Employs three sizes of elastomeric adapters.
- Varying durameter ratings for the different adapters to expand to fit every radiator and/or plastic reservoir and ensure maximum versatility and performance.
- Professional grade: solid brass, anodized aluminum, and high-quality engineered rubber.



## HR244

### Radiator Disconnect Tools Set



- Disconnect tools for vehicles with quick connect hose adapters. • Unlike most disconnect tools, these tools will fill the void in fittings keeping the tool from getting stuck or not working. • 40° offset to work in tight spots. • Made of aircraft aluminum for a lightweight yet very durable tool. • Four disconnect tools in various sizes to depress clips from 5/8" to 1".

Set consists of the following:

PART NO.	DESCRIPTION
HR240	Ford Radiator Tool (Blue)
HR241	GM Radiator Tool (Gold)
HR242	Large Radiator Tool (Green)
HR243	Extra Large Radiator Tool (Red)

## OW6046

### GM Heater Line Disconnect Tool

- Specifically designed for separating quick-connect fittings on heater lines of 1999-2004 Chevy and GMC C/K trucks. • Tool snaps around the hose and simultaneously depresses the locking tabs to disengage the fitting. • Application: C/K truck: the 0.75 inch (3/4") heater lines coming from the I.P. have quick connect style fittings; the access is very limited and the connectors have four tangs to depress at the same time; slide disconnect tool over the heater line, clamp tool over line, and then press tool into the connector to release.



## LS62200

### Heater Hose Coupler Remover

- Removes broken heater hose couplers. • To use, drive the tool into the broken coupler. The splines cut their way into the coupler, allowing you to turn it out with a 5/8" socket or wrench.



## LS62450

### Heater Hose Coupler Repair Kit

- Kit contains a heater hose coupler remover that can be driven into couplers and then turned out with a 5/8" socket or wrench. • When the coupler is extremely corroded, the special tapered reverse drill can be used to remove the remaining connector. Then the tap can be used to restore the original threads. • For use on GM quick disconnect heater hose fittings found on many GM models using the 3.1L, 5.0L, 5.7L and 6.5L engines. • Includes storage case with tray.

Set consists of:

PART NO.	DESCRIPTION
LS62200	Heater Hose Coupler Remover
LS62260	Left Hand Piloted Drill
LS62290	Pipe Thread 1/2-14 NPT Tap

## LS44180

### Fan Clutch Spanner Wrench

- For GM, Jeep and Dodge trucks, vans and SUVs with pressed on water pump pulleys. • The double-ended spanner wrench fits the holes in pressed-on water pump pulleys. • Hold the pulley firm with the spanner wrench. Use the appropriate open end wrench to turn the fan clutch nut.



## LS41800

### Ford Fan Clutch Wrench Set

- Removes fan clutch on most all Ford vehicles. • Removes and installs Ford fan clutches when repairing or replacing the water pump, timing chain or fan clutch. • Set includes two holding wrenches and two open-end wrenches. • The double-ended wrench and small holding wrench work on 2.8, 2.9, 3.0, 4.0, and 4.9 liter engines. • The larger open-end wrench and larger holding wrench fit 6.9 and 7.3 liter diesel engines.

Set includes:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS41810	36MM/1-9/16" Wrench	LS41860	1-7/8" Wrench
LS41820	58MM Wrench	LS41870	3-1/4" Wrench



## LS43300

### Pneumatic Fan Clutch Wrench Set

- Quickly removes and installs the fan clutch when repairing the water pump or fan clutch. • No holding wrench is necessary. • Set includes seven driving wrenches that fit Ford, GM, Chrysler and Jeep. • Includes 7/8", 32MM, 36MM, 40MM thin and 47MM size to fit Ford 6.0L and 6.4L Powerstroke diesel pickup. • 1-7/8" and 2" are also included in the set. • Use with an air hammer.

Includes the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS43370	Handle Assembly	LS43420	2" Driving Wr.
LS43380	32MM Driving Wr.	LS43430	7/8" Driving Wr.
LS43390	36MM Driving Wr.	LS43440	40MM Driving Wr.
LS43410	1-7/8" Driving Wr.	LS43530	47MM Driving Wr.



## SL61200

### Fan Clutch Wrench Set

- Two piece kit gives the professional technician the ability to service all fan clutches that have bolt on pulleys on the water pump. • Consists of the **SL95210** Dual End Fan Clutch Wrench and the **SL61600** Universal Fan Clutch Pulley Holder. • Works with Chrysler, GM, Ford, Land Rover and Mazda (not including the 4.9 liter 6 cylinder Ford).



## SL95210

### Dual End Fan Clutch Wrench

- 36MM/48MM Open End Combination wrench.



## SL61600

### Universal Fan Clutch Pulley Holder

- Specially designed contour for easy use on vehicles using bolt-on pulleys; No adjusting needed - just hook on the pulley bolt and hold.



## SL62100

### BMW Fan Clutch Wrench

- Services BMWs when used with the **SL61600** Universal Fan Clutch Pulley Holder.



## SL99800A

### GM/Chrysler Five Pin Wrench

• Specially designed tool used on vehicles using pressed on pulleys which have holes instead of bolt heads for use in securing the pulley from rotating while removing or installing the fan clutch assembly. • Used on the following applications: GM - 4.8 liter V-8, 5.3 liter V-8 and 6.0 liter V-8 1999 and later; Chrysler - 3.7 liter V-6, 3.9 liter V-6, 4.7 liter V-8, 5.2 liter V-8, 5.9 liter V-8, 8.0 liter V-10 1998 and later; and Chrysler engines using factory replacement water pumps for the following engines: 3.9 liter V-6, 5.2 liter V-8, 5.9 liter V-8 1993 and later, 8.0 liter V-10 1997 and later.



### 4.5 Gallon Drain Pans



• 4.5 gallon capacity drain pan for recovery of oil, antifreeze and other automotive fluids potentially harmful to the environment and for easy transfer of liquids. • Built-in ribs for draining filters in the pan. • High-density polyethylene material is resistant to chemicals and solvents, and is easy to clean. • 1" wide diameter spout for quick and easy pouring. • The anti-splash lip and baffles help prevent spilling when carrying or pouring. • Comes with large, easy-grip handles.

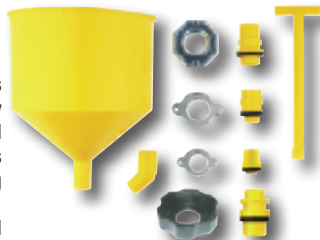
**WARNING!** These products are not intended for storage of flammable or other dangerous liquids.

PART NO.	COLOR	APPLICATION
CLS17942	Black	Oil Drain Pan
CLS17952	Green	Antifreeze Recovery Drain Pan

## LS24610

### SPILL-FREE™ Funnel Kit

• Eliminates spills and mess; eliminates trapped air pockets which usually cause erratic cooling system and heater performance. • Controls proper amount of coolant entering system, enables unattended filling, and eliminates squeaky belts caused by coolant overflow. • Angled neck for angled radiator caps. • Fits most domestic and import cars and light duty trucks. • Includes threaded cap and adapter for GM "threaded style" radiator openings.



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS22210	Funnel	LS22390	Medium Adapter B with Gasket
LS22280	45° Elbow	LS22410	Small Cap C
LS22300	Fluid Stopper	LS22450	Small Adapter C with Gasket
LS22330	Large Cap A	LS24640	Threaded Cap D for GM
LS22340	Medium Cap B	LS24650	Threaded Adapter D with Gasket
LS22370	Large Adapter A with Gasket		

LS22310 Large Gasket  
 LS22320 Medium Gasket  
 LS22400 Small Gasket

## TH423

### Universal Radiator Petcock Socket

• Fits petcocks used in radiators, engine blocks, liquid storage tanks, etc. • Use with 1/4" drive ratchet or 7/8" wrench. • O-ring on socket helps hold wrench in place, allows one hand operation for use in confined areas. • Two slot design allows for use on all types and prevents damage to ears on petcock.



## OW4521

### Hose Removal Tool

• Unique tip easily fits between hose and fitting to break stubborn hoses loose. • Large handle provides a good grip on tool during hose removal. • Works on radiator hoses, heater hoses, transmission lines or any place a rubber hose is clamped to a fitting.



## PU7046

### Radiator Hose Tool

• Designed for radiator and heater hose removal. • Insert tool point between hose and radiator outlet. • By moving tool around the outlet, hose is loosened for easy removal. • Bright luster plate blade with fluted plastic handle.



## LS24700

### Radiator Cap Wrench GM

• Fits threaded plastic radiator caps on newer GM engines. • Provides an extra grip to remove stubborn radiator caps. • Use with 3/8" square drive for extra leverage. • For use on many Chevrolet, GMC, Pontiac, Oldsmobile and Buick vehicles with threaded plastic radiator caps including Cavalier, Malibu, Trailblazer and some pickups, Sunfire, G6, Alero and LeSabre.



### Hose Clamp Visers

• Used to relieve clamp spring pressure in very tight spots. • Vise is often left in place, with the clamp compressed, during service. • Ramp on jaws guides tab of clamp into correct position and traps it in the slot for safety. • Tighten knurled knob by hand or use 1/4" drive ratchet. • Compact design works great in confined spaces. • The small size works especially well on heater hose clamps.



PART NO.	SIZE	LENGTH	OPENS TO:
LS44480	Large	3-5/8"	2-1/8"
LS44500	Small	3"	1-1/2"

## LS34350

### Water Sensor Wrench for Duramax

• Removes and installs the water sensor on 2001 and newer 6.6L Duramax Diesel Engines. • Use when replacing the fuel filter or when servicing the water sensor. • Plastic sensor has a 12 sided design that is easily damaged by tools, like pliers, that do not specifically fit the sensor.



## ECSP102

### Antifreeze Hydrometer

• Tests ethylene glycol solutions. • Temperature compensating. • Direct, accurate readings. • Range: -60°F to 32°F. • Fahrenheit and Celsius scales. • Virtually unbreakable; easy to read. • Tests Dex-Cool®. • Weight: 4 oz.



## TH106

### COLD-CHEK®

• Ethylene Glycol coolant tester (requires careful handling and disposal). • Large professional size (16-1/4") tester is accurate at all temperatures. • Tests coolant, hot or cold. • Celsius and Fahrenheit scales. • Features a "6th disc" to show over protection and loss of cooling efficiency.



Screwdriver Sets

### CSD4S

#### 4 Piece Phillips® Screwdriver Set



Set includes the following in a plastic tray:

PART NO.	BLADE TYPE	POINT SIZE/ TIP WIDTH	BLADE DIA.	BLADE LENGTH	OVERALL LENGTH
CSD103P	Phillips®	#1	3/16"	3"	7-1/4"
CSD204P	Phillips®	#2	1/4"	3-15/16"	8-5/8"
CSD206P	Phillips®	#2	1/4"	5-29/32"	10-5/8"
CSD306P	Phillips®	#3	5/16"	5-29/32"	11-5/8"

### CSD5S

#### 5 Piece Screwdriver Set



Set includes the following in a plastic tray:

PART NO.	BLADE TYPE	POINT SIZE/ TIP WIDTH	BLADE DIA.	BLADE LENGTH	OVERALL LENGTH
CSD103P	Phillips®	#1	3/16"	3"	7-1/4"
CSD204P	Phillips®	#2	1/4"	3-15/16"	8-5/8"
CSD306P	Phillips®	#3	5/16"	5-29/32"	11-5/8"
CSD503	Flat Tip	3/16"	3/16"	3"	7-1/4"
CSD804	Flat Tip	1/4"	1/4"	3-15/16"	8-5/8"

- Blasted tips provide better grip and prevent chrome peel.
- Hex bolster allows use of wrench for greater torque.
- Bi-material handle provides comfortable, non-slip grip.
- High polish, chrome plated finish provides corrosion protection.

### CSD7S

#### 7 Piece Star Screwdriver Set



Set includes the following in a plastic tray:

PART NO.	BLADE TYPE	POINT SIZE/ TIP WIDTH	BLADE DIA.	BLADE LENGTH	OVERALL LENGTH
CSDT8	Star	T8	5/32"	3"	7-1/4"
CSDT10	Star	T10	3/16"	3-15/16"	8-1/4"
CSDT15	Star	T15	3/16"	3-15/16"	8-1/4"
CSDT20	Star	T20	3/16"	3-15/16"	8-1/4"
CSDT25	Star	T25	1/4"	3-15/16"	8-5/8"
CSDT27	Star	T27	1/4"	3-15/16"	8-5/8"
CSDT30	Star	T30	1/4"	3-15/16"	8-5/8"

### CSD8S

#### 8 Piece Screwdriver Set

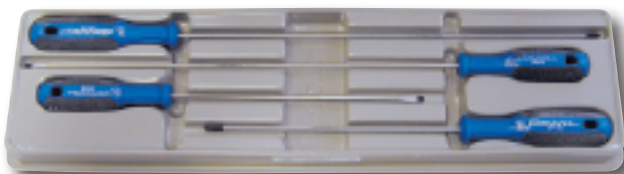


Set includes the following in a plastic tray:

PART NO.	BLADE TYPE	POINT SIZE/ TIP WIDTH	BLADE DIA.	BLADE LENGTH	OVERALL LENGTH
CSD103P	Phillips®	#1	3/16"	3"	7-1/4"
CSD204P	Phillips®	#2	1/4"	3-15/16"	8-5/8"
CSD206P	Phillips®	#2	1/4"	5-29/32"	10-5/8"
CSD306P	Phillips®	#3	5/16"	5-29/32"	11-5/8"
CSD503	Flat Tip	3/16"	3/16"	3"	7-1/4"
CSD804	Flat Tip	1/4"	1/4"	3-15/16"	8-5/8"
CSD1006	Flat Tip	5/16"	5/16"	5-29/32"	10-5/8"
CSD1208	Flat Tip	3/8"	3/8"	7-7/8"	13-5/8"

### ZZCSD4CS

#### 4 Piece Cabinet Screwdriver Set



Set includes the following in a plastic tray:

PART NO.	BLADE TYPE	POINT SIZE/ TIP WIDTH	BLADE DIA.	BLADE LENGTH	OVERALL LENGTH
CSP108	Phillips®	#1	5/32"	8"	12"
CSP114	Phillips®	#1	5/32"	14"	18"
CSS508	Flat Tip	5/32"	-	8"	12"
CSS514	Flat Tip	5/32"	-	14"	18"

## SCREWDRIVERS AND SETS

### ZZCSD4LS

#### 4 Piece Long Screwdriver Set



Set includes the following in a plastic tray:

PART NO.	BLADE TYPE	POINT SIZE/TIP WIDTH	BLADE DIA.	BLADE LENGTH	OVERALL LENGTH
CSP212	Phillips®	#2	1/4"	12"	16"
CSP218	Phillips®	#2	1/4"	18"	22"
CSS1012	Flat Tip	5/16"	-	12"	17-1/4"
CSS1018	Flat Tip	5/16"	-	18"	28"

### ZZCSD5S

#### 5 Piece Screwdriver Set



Set includes the following in a plastic tray:

PART NO.	BLADE TYPE	POINT SIZE/TIP WIDTH	BLADE DIA.	BLADE LENGTH	OVERALL LENGTH
CSP103	Phillips®	#1	5/32"	3"	8-1/4"
CSP204	Phillips®	#2	1/4"	4"	9-3/8"
CSP306	Phillips®	#3	1/4"	6"	11-1/4"
CSS503	Flat Tip	3/16"	-	3"	7-7/8"
CSS804	Flat Tip	1/4"	-	4"	9-3/8"

### ZZCSD8S

#### 8 Piece Screwdriver Set



Set includes the following in a plastic tray:

PART NO.	BLADE TYPE	POINT SIZE/TIP WIDTH	BLADE DIA.	BLADE LENGTH	OVERALL LENGTH
CSP103	Phillips®	#1	5/32"	3"	5-1/4"
CSP204	Phillips®	#2	1/4"	4"	9-3/8"
CSP207	Phillips®	#2	1/4"	7"	12-1/2"
CSP306	Phillips®	#3	1/4"	6"	11-1/4"
CSS503	Flat Tip	3/16"	-	3"	7-7/8"
CSS804	Flat Tip	1/4"	-	4"	9-3/8"
CSS1006	Flat Tip	5/16"	-	6"	11-3/8"
CSS1208	Flat Tip	3/8"	-	8"	13-1/4"

### ZZCSP4S

#### 4 Piece Phillips® Screwdriver Set



Set includes the following in a plastic tray:

PART NO.	BLADE TYPE	POINT SIZE/TIP WIDTH	BLADE DIA.	BLADE LENGTH	OVERALL LENGTH
CSP103	Phillips®	#1	5/32"	3"	5-1/4"
CSP204	Phillips®	#2	1/4"	4"	9-3/8"
CSP207	Phillips®	#2	1/4"	7"	12-1/2"
CSP306	Phillips®	#3	1/4"	6"	11-1/4"

### CSP201

#### 1" x #2 Phillips® Screwdriver - Blue Handle



### CSP201BR

#### 1" x #2 Phillips® Screwdriver - Orange Handle



- Point Size: #2.
- Blade Diameter: 1/4".
- Blade Extension: 1".
- Overall Length: 3-1/4".

### VMTDI100

#### 6 Piece Torx® Screwdriver Set, T10 to T30



- Screwdrivers feature blue ergo handles with 4" blades.

Set consists of the following:

PART NO.	TIP SIZE	PART NO.	TIP SIZE
VMTDI10	T10	VMTDI25	T25
VMTDI15	T15	VMTDI27	T27
VMTDI20	T20	VMTDI30	T30

### EK92200

#### 10 Piece Torx® Precision Screwdriver Set



- High quality, industrial grade, professional tools.
- Made with Eklind® alloy steel.
- Heat treated for optimum strength and ductility.
- Finished with Eklind® black finish to resist rust.
- Torx® keys will drive Torx®, Torx Plus® and star recess fasteners.
- Large handles and a soft overmold for greater comfort and ergonomics.
- Includes large spinner cap for precise control.
- Size permanently marked on spinner cap.
- Precision machined tip.
- Color coded green for Torx®.
- Packaged in a clear pouch.

Set includes the following Torx® Precision Screwdrivers:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
EK92203	T3	EK92208	T8
EK92204	T4	EK92209	T9
EK92205	T5	EK92210	T10
EK92206	T6	EK92215	T15
EK92207	T7	EK92220	T20

**Heavy Duty Screwdrivers**



PART NUMBER	BLADE LENGTH	STOCK SIZE	TIP WIDTH	OVERALL LENGTH
SSD824P	21-7/16"	1/4" Sq.	5/16"	25-23/32"
SSD1619P	19"	1/2" Sq.	5/8"	24-11/16"

**CTG17ISS**

**17 Piece Detachable Insulated Screwdriver Set**



- 1,000 volt protection.
- Bi-material handle provides comfort and a non-slip grip.
- Slotted, Phillips®, Pozidriv®, and Star tips for a wide range of applications.
- Packaged in a foam tray for easy organization and storage.

Set contains one each of the following Insulated Screwdrivers:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CTG25IS	2.5MM Slotted	CTGPZ1IS	#1 Pozidriv®
CTG40IS	4.0MM Slotted	CTGPZ2IS	#2 Pozidriv®
CTG55IS	5.5MM Slotted	CTGT8IS	T8 Star
CTG65IS	6.5MM Slotted	CTGT10IS	T10 Star
CTGISHDL	Detachable Handle	CTGT15IS	T15 Star
CTGPH0IS	#0 Phillips®	CTGT20IS	T20 Star
CTGPH1IS	#1 Phillips®	CTGT25IS	T25 Star
CTGPH2IS	#2 Phillips®	CTGT30IS	T30 Star
CTGPZOIS	#0 Pozidriv®		

**MH66305**

**2 Piece Flex-Driver Set**



- Flexible front section bends into position.
- 24" overall length.
- Get to hard to reach spots with any bit.
- 1/4" bit holder will accept all standard bits.
- 1/4" drive for 1/4" sockets.
- Two-composite handle for comfortable grip and reduced fatigue.

MH45016 1/4" Bit Driver  
MH45017 1/4" Socket Driver

**SURLHD454**

**Lock-N-Hold Flex Driver Set**



- Multipurpose drivers perfect for hose clamps, hex bits, and more.
- Set consists of the following in a storage pouch:

PART NO.	DESCRIPTION
SURLHD14	1/4" Lock-N-Hold Flex Driver
SURLHD7	7MM Lock-N-Hold Flex Driver
SURLHD516	5/16" Lock-N-Hold Flex Driver

- Designed to be used in Quick Change Power Drive Cordless Tools.
- Each set includes Magnetic and Hollow Point Nut-Setters.
- All drivers are 2-9/16" long with 1/4" hex power drive shanks.
- Cold forged tools, high alloy steel, heat treated.
- Handy storage case.

**VMNS100**  
**12 Piece SAE Nut Setter Master Set**

**VMNSM100**  
**12 Piece Metric Nut Setter Master Set**



Set consists of the following Nut Setters:

PART NO.	DESCRIPTION
VMNS250	1/4" Deep Recess
VMNS312	5/16" Deep Recess
VMNS375	3/8" Deep Recess
VMNS437	7/16" Deep Recess
VMNS500	1/2" Deep Recess
VMNS562	9/16" Deep Recess
VMNS250M	1/4" Magnetic
VMNS312M	5/16" Magnetic
VMNS375M	3/8" Magnetic
VMNS437M	7/16" Magnetic
VMNS500M	1/2" Magnetic
VMNS562M	9/16" Magnetic

Set consists of the following Nut Setters:

PART NO.	DESCRIPTION
VMNSM8	8MM Deep Recess
VMNSM10	10MM Deep Recess
VMNSM11	11MM Deep Recess
VMNSM12	12MM Deep Recess
VMNSM13	13MM Deep Recess
VMNSM14	14MM Deep Recess
VMNSM8M	8MM Magnetic
VMNSM10M	10MM Magnetic
VMNSM11M	11MM Magnetic
VMNSM12M	12MM Magnetic
VMNSM13M	13MM Magnetic
VMNSM14M	14MM Magnetic

**MN45142**

**1/4" Hex Socket Adapter**



- Inserts into magnetic screwdriver to allow the use of 1/4" square drive sockets.

**Screw Starters**

- 1" permanent magnet to retrieve dropped washers, screws or nuts.
- Aluminum handles with pocket clips.



PART NO.	DESCRIPTION	O/A LENGTH
ULPD10	Phillips®	5-3/4"
ULD2	Standard Slotted	5-5/8"

**UL5**  
**Magnetizer/Demagnetizer**

- Magnetizes and demagnetizes screwdrivers and other small tools.
- Speeds up repair and assembly jobs.
- Picks up screws, nuts, metallic parts, cleans up filings and scraps, starts screws.
- Overall size: 1-1/16" x 1-1/16" x 1-1/16".



Common Service

## HR668

### Lighted Ratcheting Screwdriver with Pistol Grip



- Pivoting handle switches from standard to pistol grip for extra torque.
- Soft, solvent resistant handle cover material provides a positive gripping surface.
- Forward/reverse ratcheting lever for quick directional changes.
- Cap also functions as a bit holder that stores up to six bits (includes four Phillips® bits and two slotted bits).
- Ergonomic handle shape provides comfort and control.
- Two bright LED lights for tight dark areas.

- HR668SET 1/4" Bit Holder Set (contains 1 each of the following):**  
**HR6681 1/4" Flex Bit Holder - 10.125"**  
**HR6682 1/4" Bit Holder - 8.5"**  
**HR6683 1/4" Bit Holder - 2.625"**  
**HR6684 1/4" Bit Holder - .625"**

## SKC5200

### Skewdriver® with bits



- Five sided comfort grip handle.
- Integrated snap cap bit storage compartment.
- Magnetic bit holder.
- Upgraded capacity drive components.
- Provides precise, clickless ratchet action and the ultimate in comfort, efficiency and long life.
- Features new and improved Skewdriver® Pro with locking 12 positioning stabilizer.
- Used in areas where there is insufficient space.
- Enables the user to maintain the efficiency and speed of a straight screwdriver with rotational handle motion through the use of bevel gears in a 1:1 ratio.

## SKPGS5110

### Stubby Ratcheting Screwdriver with Collet



- 2"-long Pentogrip™ contoured drive handle.
- Silent, ratchet-action precision drive clutch.

## ZZS210S

### 10 Piece 3/8" Drive Impact Driver Bit Set



Set consists of the following in a blow molded case:

PART NO	DESCRIPTION
BSB2210S	3/8" Dr. x 5/16" Hex Bit Socket
JAIMP210	3/8" Dr. Impact Driver
MNIMP8	8 Piece S2 Bit Set - which consists of one each of the following bits: MN27191 1/4" Flat Bit MN27194 5/16" Flat Bit MN27195 3/8" Flat Bit MN27196 1/2" Flat Bit MN35352A #1 Phillips® Bit MN35353 #2 Phillips® Bit MN35354 #4 Phillips® Bit MN48280A #3 Phillips® Bit

## JAIMP210

### Hand Impact Driver

- 3/8" Drive.
- Length: 4-3/4".



## MNIMP8

### 8 Piece S2 Bit Set



- Designed as a replacement bit set for hand impacts.
  - Set includes: P1, P2, P3, P4 Phillips® and 1/4", 5/16", 3/8", 1/2" Flat Bits.
  - Impact quality S2 Bits.
  - 5/16" Hex.
  - Length: 1.25"
  - Packaged in a blue plastic holder with Cornwell Logo.
- Set Includes:

PART NO.	SIZE	PART NO.	SIZE
MN27191	1/4" Flat	MN35352A	#1 Phillips®
MN27194	5/16" Flat	MN35353	#2 Phillips®
MN27195	3/8" Flat	MN35354	#4 Phillips®
MN27196	1/2" Flat	MN48280A	#3 Phillips®

## LS29200

### 3/8" Impact Tool Set



- Loosens rusted, frozen nuts, bolts, and screws.
- Unique design delivers over 200 ft.-lbs. of "Shock Torque".
- Can be reversed to tighten.
- Can also be used with impact sockets.

Set includes:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS29000	3/8" Impact Tool	LS29550	#3 Phillips® Bit
LS29520	3/8" Bit Holder	LS30190	#4 Phillips® Bit
LS29630	#1 Phillips® Bit	LS30170	3/8" Straight Slot Bit
LS30180	#2 Phillips® Bit		

## LS30200

### 1/2" Impact Tool Set



- Loosens rusted, frozen nuts, bolts, and screws.
- Unique design delivers over 200 ft.-lbs. of "Shock Torque".
- Can be reversed to tighten.
- Can also be used with impact sockets.

Set includes:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS30000	1/2" Impact Tool	LS29550	#3 Phillips® Bit
LS30150	1/2" Bit Holder	LS30190	#4 Phillips® Bit
LS29630	#1 Phillips® Bit	LS30170	3/8" Straight Slot Bit
LS30180	#2 Phillips® Bit		

## TE14950

### 3/8" Drive Impact Driver Bit Set



- Loosen and tighten screws, nuts and bolts.
  - Includes 3/8" square x 5/16" hex bit holder.
  - Driver is reversible for tightening applications.
  - Handle reduces risk of injury when striking driver with hammer.
- Set includes the following hex bits:

PART NO.	DESCRIPTION	DIMENSIONS
TE14952	#2 Phillips®	1-3/8" x 5/16"
TE14953	#3 Phillips®	1-3/8" x 5/16"
TE14954	5/16" Slotted	1-3/8" x 5/16"
TE14955	3/8" Slotted	1-3/8" x 5/16"
TE14956	#2 Phillips®	3-1/8" x 5/16"
TE14957	#3 Phillips®	3-1/8" x 5/16"
TE14958	5/16" Slotted	3-1/8" x 5/16"
TE14959	3/8" Slotted	3-1/8" x 5/16"

TE14964 Driver Only



**Power Bit Extensions**



- Fast changing of power tool accessories in just seconds.
- Features ALL-HEX™ technology to accept any 1/4" hex shank product with or without power groove.
- Takes all 1/4" shank standards: ANSI, DIN, JIS.
- Fits all keyed and keyless chucks.
- Holds any 1/4" hex shank accessory over 1" in length.
- Replaces all magnetic and non-magnetic bit holders.
- Each extension includes one PH2 Power Groove bit and one PH2 Plain Hex bit.

PART NO.	DESCRIPTION
IBX87506	6" Power Bit Extension
IBX87512	12" Power Bit Extension

**RB5278**  
**7 Piece Ratcheting Box Wrench Set**

- Designed for installing or removing screws quickly and easily.
- Ideal for home, auto, marine and hobbies.
- Angled ratcheting bit wrenches access various locations.
- Magnet in each wrench securely holds 1/4" hex bits.
- Tool parts are heat treated and nickel plated.
- Vinyl grips for comfort.
- Consists of three 1/4" bit wrenches (two offset and one flat) and one of each of the following 1/4" bits: #1 Phillips®, #2 Phillips®, 1/4" slotted, and 9/32" slotted.



**RB5370**  
**5 Piece Bit Ratcheting Screwdriver Set**

- Designed for installing or removing screws quickly and easily.
- Ideal tool for home, auto, marine, or hobby use.
- Tool parts are heat treated and nickel plated for durability, appearance, and long tool life.
- Set includes ratcheting screwdriver and four (4) bits: #1 Phillips, #2 Phillips, 1/4" slotted, and 9/32" slotted.



**CBS44FBD**  
**4" Ratcheting Flex Bit Driver**



- Precision ratcheting bit driver ideal for access in tight areas.
- 72 tooth flex head ratchet provides 5° handle swing.
- Driver holds bits firmly in place.

**VMHBR4**  
**1/4" Hex Bit Ratchet with Handle**

- Small, low profile head.
- Quick disk on the drive head allows for quick tightening or loosening of fasteners when ratcheting is not required.
- Reversible 52-tooth gear head requires only 7 degrees of sweep.
- Polished chrome - heat treated alloy steel.
- Works with all 1/4" hex bits.



**EC4S12**  
**Quarter Stick 1/4" Combination Drive**

- Great for tight spots under dashboards and bumpers.
- Features 1/4" square drive and 1/4" magnetic bit drive.
- Custom reversible switch.
- Knurled low profile thumb wheel for extra precision.
- Push button quick release.
- 180° flexible heads at each end for multiple angles.
- High polished chrome finish.
- 11.75" long.



Common Service

**CBS44ST**  
**44 Piece Mini Ratchet and Bit Set**

- Precision ratcheting bit driver ideal for access in tight areas.
- 72 tooth ratchet provides 5° handle swing.
- Driver holds bits firmly in place.
- Full range of bit styles for a wide range of applications.
- All 1/4" bits are made of S2 steel for durability.
- Packaged in aluminum case with foam insert for easy storage and organization.



Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CBT14	1/4" x 1/4" Sl Bit	CBTPZ0	Anti slip PZ0 Pozidriv® Bit
CBT18	1/4" x 1/8" Sl Bit	CBTPZ1	Anti slip PZ1 Pozidriv® Bit
CBT316	1/4" x 3/16" Sl Bit	CBTPZ2	Anti slip PZ2 Pozidriv® Bit
CBT350SBA	Bit Adapter	CBTPZ3	Anti slip PZ3 Pozidriv® Bit
CBT532	1/4" x 5/32" Sl Bit	CBTQCC	Quick Chng Chck/CBS350S
CBTH14	1/4" x 1/4" Hex Bit	CBTT8	T8 Star Bit
CBTH18	1/4" x 1/8" Hex Bit	CBTT8H	T8H Tamperproof Bit
CBTH316	1/4" x 3/16" Hex Bit	CBTT10	T10 Star Bit
CBTH332	1/4" x 3/32" Hex Bit	CBTT10H	T10H Tamperproof Bit
CBTH532	1/4" x 5/32" Hex Bit	CBTT15	T15 Star Bit
CBTH564	1/4" x 5/64" Hex Bit	CBTT15H	T15H Tamperproof Bit
CBTH732	1/4" x 7/32" Hex Bit	CBTT20	T20 Star Bit
CBTHM2	2MM Hex Bit	CBTT20H	T20H Tamperproof Bit
CBTHM3	3MM Hex Bit	CBTT25	T25 Star Bit
CBTHM4	4MM Hex Bit	CBTT25H	T25H Tamperproof Bit
CBTHM5	5MM Hex Bit	CBTT27	T27 Star Bit
CBTHM6	6MM Hex Bit	CBTT27H	T27H Tamperproof Bit
CBTHM8	8MM Hex Bit	CBTT30	T30 Star Bit
CBTPH0	Anti slip #0 Phillips Bit	CBTT30H	T30H Tamperproof Bit
CBTPH1	Anti slip #1 Phillips Bit	CBTT40	T40 Star Bit
CBTPH2	Anti slip #2 Phillips Bit	CBTT40H	T40H Tamperproof Bit
CBTPH3	Anti slip #3 Phillips Bit	CBS44BD	4" Ratcheting Bit Driver

CBS44BD 4" Ratcheting Bit Driver

# CBSD560S

## 56 Piece Bit Set with Ratchet Driver



- Fine tooth ratcheting mechanism.
- Bi-material handle provides comfortable non-slip grip.
- Bits made of S2 steel for longer life.
- Wide range of bits for almost any application.
- Non-slip design on Phillips® and Pozidriv® bits.

# CBTRD

## Fine Tooth Ratchet Driver



- Designed for use with **CBSD560S**.

Kit contains the following in a blue blow-molded case:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CBTRD	Fine Tooth Driver	CBTPH2	#2 Phillips® Anti-Slip
CBT14	1/4" Slotted	CBTPH2L	2" Long #2 Phillips®
CBT14L	2" Long 1/4" Slotted	CBTPH3	#3 Phillips® Anti-Slip
CBT18	1/8" Slotted	CBTPZO	#0 Pozidriv® Anti-Slip
CBT316	3/16" Slotted	CBTPZ1	#1 Pozidriv® Anti-Slip
CBT316L	2" Long 3/16" Slotted	CBTPZ2	#2 Pozidriv® Anti-Slip
CBT350SBA	Bit Adapter	CBTPZ3	#3 Pozidriv® Anti-Slip
CBT532	5/32" Slotted	CBTQCC	Quick Change Chuck
CBT732	7/32" Slotted	CBTSO	S0 Square
CBT932	9/32" Slotted	CBTS1	S1 Square
CBTD290BA	Bit Adapter	CBTS2	S2 Square
CBTH14	1/4" Hex	CBTS3	S3 Square
CBTH18	1/8" Hex	CBTT8	T8 Star
CBTH316	3/16" Hex	CBTT8H	T8H Tamperproof
CBTH332	3/32" Hex	CBTT10	T10 Star
CBTH532	5/32" Hex	CBTT10H	#10 Tamperproof
CBTH564	5/64" Hex	CBTT15	T15 Star
CBTH732	7/32" Hex	CBTT15H	#15 Tamperproof
CBTH764	7/64" Hex	CBTT20	T20 Star
CBTHM2	2MM Hex	CBTT20H	#20 Tamperproof
CBTHM3	3MM Hex	CBTT25	T25 Star
CBTHM4	4MM Hex	CBTT25H	#25 Tamperproof
CBTHM5	5MM Hex	CBTT27	T27 Star
CBTHM6	6MM Hex	CBTT27H	#27 Tamperproof
CBTHM8	8MM Hex	CBTT30	T30 Star
CBTPHO	#0 Phillips® Anti-Slip	CBTT30H	#30 Tamperproof
CBTPH1	#1 Phillips® Anti-Slip	CBTT40	T40 Star
CBTPH1L	2" Long #1 Phillips®	CBTT40H	#40 Tamperproof

# CBSD410S

## 41 Piece Bit Set with Ratcheting Driver



- Kit includes a PVC holder and the following in a blue blow-molded case:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CBSGD	Gearless Driver	CBTPH1	#1 Phillips® Anti-Slip
CBT14	1/4" Slotted	CBTPH1L	2" Long #1 Phillips®
CBT14L	2" Long 1/4" Slotted	CBTPH2	#2 Phillips® Anti-Slip
CBT18	1/8" Slotted	CBTPH2L	2" Long #2 Phillips®
CBT316	3/16" Slotted	CBTPH3	#3 Phillips® Anti-Slip
CBT316L	2" Long 3/16" Slotted	CBTPZO	#0 Pozidriv® Anti-Slip
CBT350SBA	Bit Adapter	CBTPZ1	#1 Pozidriv® Anti-Slip
CBT532	5/32" Slotted	CBTPZ2	#2 Pozidriv® Anti-Slip
CBT732	7/32" Slotted	CBTPZ3	#3 Pozidriv® Anti-Slip
CBT932	9/32" Slotted	CBTQCC	Quick Change Chuck
CBTD290BA	Bit Adapter	CBTSO	S0 Square
CBTH14	1/4" Hex	CBTS1	S1 Square
CBTH18	1/8" Hex	CBTS2	S2 Square
CBTH316	3/16" Hex	CBTT10H	#10 Tamperproof
CBTH332	3/32" Hex	CBTT15H	#15 Tamperproof
CBTH532	5/32" Hex	CBTT20H	#20 Tamperproof
CBTH564	5/64" Hex	CBTT25H	#25 Tamperproof
CBTH732	7/32" Hex	CBTT27H	#27 Tamperproof
CBTH764	7/64" Hex	CBTT30H	#30 Tamperproof
CBTPHO	#0 Phillips® Anti-Slip	CBTT40H	#40 Tamperproof

# CBS350S

## 35 Piece 1/4" Dr. Power Bit Assortment



Kit includes the following in a PVC holder:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CBT14	1/4" Slotted	CBTPH2	#2 Phillips® Anti-Slip
CBT18	1/8" Slotted	CBTPH3	#3 Phillips® Anti-Slip
CBT316	3/16" Slotted	CBTPZO	#0 Pozidriv® Anti-Slip
CBT350SBA	Bit Adapter	CBTPZ1	#1 Pozidriv® Anti-Slip
CBT532	5/32" Slotted	CBTPZ2	#2 Pozidriv® Anti-Slip
CBT732	7/32" Slotted	CBTPZ3	#3 Pozidriv® Anti-Slip
CBT932	9/32" Slotted	CBTQCC	Quick Change Chuck
CBTH14	1/4" Hex	CBTSO	S0 Square
CBTH18	1/8" Hex	CBTS1	S1 Square
CBTH316	3/16" Hex	CBTS2	S2 Square
CBTH332	3/32" Hex	CBTT10H	#10 Tamperproof
CBTH532	5/32" Hex	CBTT15H	#15 Tamperproof
CBTH564	5/64" Hex	CBTT20H	#20 Tamperproof
CBTH732	7/32" Hex	CBTT25H	#25 Tamperproof
CBTH764	7/64" Hex	CBTT27H	#27 Tamperproof
CBTPHO	#0 Phillips® Anti-Slip	CBTT30H	#30 Tamperproof
CBTPH1	#1 Phillips® Anti-Slip	CBTT40H	#40 Tamperproof

# CBSGD

## Gearless Driver



- Designed for use with **CBSD410S**.



**WARNING!**

*Wear safety goggles. Read operating instructions thoroughly.*

## VG3057034

### 34 Piece Fastener Drive Tool Set

- Manufactured from industrial grade tool steel and tested to meet the highest standards for hardness and torque.



Set includes the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
VG4935703	2" Quick Change Adapter	VG93318	T10 Pwr. Bit 1-15/16"
VG4935704	6" Quick Change Adapter	VG93360	T15 Pwr. Bit 3-1/2"
VG93003ZR	#1 Phillips® 2"	VG93361	T20 Pwr. Bit 3-1/2"
VG93007ZR	#2 Phillips® 2"	VG93362	T25 Torx® 3-1/2"
VG93011	#3 Phillips® 2"	VG93364	T30 Torx® 3-1/2"
VG93023	#1 Phillips® 3-1/2"	VG93368	T15 Torx® 6"
VG93025	#2 Phillips® 3-1/2"	VG93369	T20 Torx® 6"
VG93029	#3 Phillips® 3-1/2"	VG93370	T25 Torx® 6"
VG93037	#2 Pozidriv® 3-1/2"	VG93371	T27 Torx® 6"
VG93040	#2 Pozidriv® 6"	VG93372	T30 Torx® 6"
VG93063	#1 Phillips® 6"	VG93761	1/4" Skt. Adptr. 2"
VG93067	#2 Phillips® 6"	VG93784	3/8" Skt. Adptr. 2"
VG93069	#3 Phillips® 6"	VG93795	1/2" Skt. Adptr. 2"
VG93073	#1 Pozidriv® 2"	VG94712	1/4" Magnetic Nutsetter 1-7/8"
VG93077	#2 Pozidriv® 2"	VG94732	5/16" Magnetic Nutsetter 1-7/8"
VG93079	#3 Pozidriv® 2"	VG94752	3/8" Magnetic Nutsetter 1-7/8"
VG93312	T8 Pwr. Bit 1-15/16"		
VG93315	T9 Pwr. Bit 1-15/16"		

## CBS16QC

### 16 Piece Quick Change Automotive Kit

- Allows for easy removal and chucking of three different style bits, Phillips Anti-Slip, Pozi Anti-Slip, and Star Bits.



Set consists of the following:

PART NO.	DESCRIPTION
CBS6QCE	6" Quick Change Extension
CBS14BA	1/4" Bit Adapter
CBS25QCC	2-1/2" Quick Change Chuck
CBS38BA	3/8" Bit Adapter
CBS516MN	5/16" Magnetic Nutsetter
CBTPH1XL	PH1 Anti Slip Bit 6"
CBTPH2XL	PH2 Anti Slip Bit 6"
CBTPZ2L	PZ2 Anti Slip Pozi Bit 3-1/2"
CBTPZ2XL	PZ2 Anti Slip Pozi Bit 6"
CBTQCPH1L	PH1 Anti Slip Bit 3-1/2"
CBTQCPH2L	PH2 Anti Slip Bit 3-1/2"
CBTT15L	T15 Star Bit 3-1/2"
CBTT20L	T20 Star Bit 3-1/2"
CBTT25XL	T25 Star Bit 6"
CBTT27XL	T27 Star Bit 6"
CBTT30XL	T30 Star Bit 6"

## CBSDBC7S

### 7 Piece Disc Brake Caliper Set

- Ideal for most brake applications.
- S2 industrial strength bits.
- Chrome plated sockets for corrosion resistance.
- Heavy duty blow mold box for easy organization.



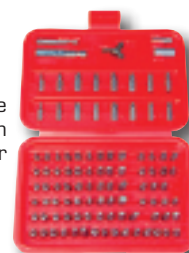
Set consists of the following:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBS142	3/8"	1/4"	CBST402	3/8"	T40
CBS382	3/8"	3/8"	CBST452	3/8"	T45
CBS5162	3/8"	5/16"	CBST502	3/8"	T50
CBSM82	3/8"	8MM			

## AS9448

### 100 Piece Security Bit Set

- Essential for car, machine tool, household appliance and electronics repairs, etc.
- Chrome vanadium adapters with satin finish.
- Blow molded case for easy storage and transport.



## CBS702S

### 7 Piece 1/4" & 3/8" Dr. Short Hex Bit Socket Set



Set consists of the following Short hex bit sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBS142	3/8"	1/4"	CBS5162	3/8"	5/16"
CBS180	1/4"	1/8"	CBS5320	1/4"	5/32"
CBS382	3/8"	3/8"	CBS7322	3/8"	7/32"
CBS3160	1/4"	3/16"			

## CBS702SXL

### 7 Piece 1/4" & 3/8" Dr. Extra Long Hex Bit Socket Set



Set consists of the following Extra Long hex bit sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBS142XL	3/8"	1/4"	CBS5162XL	3/8"	5/16"
CBS180XL	1/4"	1/8"	CBS5320XL	1/4"	5/32"
CBS382XL	3/8"	3/8"	CBS7322XL	3/8"	7/32"
CBS3160XL	1/4"	3/16"			

Common Service

## BIT SOCKET SETS

### CBSM702S

7 Piece 1/4" & 3/8" Dr.  
Metric Short Hex Bit  
Socket Set



Set consists of the following  
Metric Short hex bit sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSM40	1/4"	4MM	CBSM82	3/8"	8MM
CBSM50	1/4"	5MM	CBSM92	3/8"	9MM
CBSM60	1/4"	6MM	CBSM102	3/8"	10MM
CBSM72	3/8"	7MM			

### CBSM723S

7 Piece 3/8" & 1/2" Dr.  
Metric Short Hex Bit  
Socket Set



Set consists of the following  
Metric Short hex bit sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSM62	3/8"	6MM	CBSM143	1/2"	14MM
CBSM82	3/8"	8MM	CBSM173	1/2"	17MM
CBSM102	3/8"	10MM	CBSM193	1/2"	19MM
CBSM123	1/2"	12MM			

### CBSM702SXL

7 Piece 1/4" & 3/8" Dr.  
Extra Long Metric Hex Bit  
Socket Set



Set consists of the following  
Extra Long hex bit sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSM40XL	1/4"	4MM	CBSM82XL	3/8"	8MM
CBSM50XL	1/4"	5MM	CBSM92XL	3/8"	9MM
CBSM60XL	1/4"	6MM	CBSM102XL	3/8"	10MM
CBSM72XL	3/8"	7MM			

### CBS1402S

14 Piece 1/4" and  
3/8" Dr. Fractional  
and Metric Hex Bit  
Socket Set



Set consists of the following hex bit sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBS142	3/8"	1/4"	CBSM40	1/4"	4MM
CBS180	1/4"	1/8"	CBSM50	1/4"	5MM
CBS382	3/8"	3/8"	CBSM60	1/4"	6MM
CBS3160	1/4"	3/16"	CBSM72	3/8"	7MM
CBS5162	3/8"	5/16"	CBSM82	3/8"	8MM
CBS5320	1/4"	5/32"	CBSM92	3/8"	9MM
CBS7322	3/8"	7/32"	CBSM102	3/8"	10MM

### CBS723S

7 Piece 3/8" & 1/2" Dr.  
Short Hex Bit Socket  
Set



Set consists of the following  
Short hex bit sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBS123	1/2"	1/2"	CBS5162	3/8"	5/16"
CBS343	1/2"	3/4"	CBS7162	3/8"	7/16"
CBS382	3/8"	3/8"	CBS9163	1/2"	9/16"
CBS583	1/2"	5/8"			

### CBS1402SXL

14 Piece 1/4" and  
3/8" Dr. Extra Long  
Fractional and Metric  
Hex Bit Socket Set



Set consists of the following hex bit sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBS142XL	3/8"	1/4"	CBSM40XL	1/4"	4MM
CBS180XL	1/4"	1/8"	CBSM50XL	1/4"	5MM
CBS382XL	3/8"	3/8"	CBSM60XL	1/4"	6MM
CBS3160XL	1/4"	3/16"	CBSM72XL	3/8"	7MM
CBS5162XL	3/8"	5/16"	CBSM82XL	3/8"	8MM
CBS5320XL	1/4"	5/32"	CBSM92XL	3/8"	9MM
CBS7322XL	3/8"	7/32"	CBSM102XL	3/8"	10MM



#### WARNING!

Wear safety goggles. Read operating instructions thoroughly.

## CBS1802SS

18 Piece 1/4" & 3/8" Dr. Standard and Universal SAE and Metric Stubby Hex Bit Socket Set



Set consists of the following hex bit sockets:

PART NO.	DESCRIPTION	DRIVE	SIZE
CBS180S	Standard	1/4"	1/8"
CBS142S	Standard	3/8"	1/4"
CBS382S	Standard	3/8"	3/8"
CBS3160S	Standard	1/4"	3/16"
CBS5162S	Standard	3/8"	5/16"
CBS5320S	Standard	1/4"	5/32"
CBS7322S	Standard	3/8"	7/32"
CBS9640S	Standard	1/4"	9/64"
CBSM30S	Standard	1/4"	3MM
CBSM40S	Standard	1/4"	4MM
CBSM50S	Standard	1/4"	5MM
CBSM60S	Standard	1/4"	6MM
CBSM72S	Standard	3/8"	7MM
CBSM82S	Standard	3/8"	8MM
CBSM102S	Standard	3/8"	10MM
CBSMU50S	Universal	1/4"	5MM
CBSMU60S	Universal	1/4"	6MM
CBSMU102S	Universal	3/8"	10MM

## CBS2802S

28 Piece 1/4" and 3/8" Dr. Standard and Extra Long SAE and Metric Hex Bit Socket Set



Set consists of the following hex bit sockets:

SAE			
STANDARD	EXTRA LONG	DRIVE	SIZE
PART NO.	PART NO.		
CBS142	CBS142XL	3/8"	1/4"
CBS180	CBS180XL	1/4"	1/8"
CBS382	CBS382XL	3/8"	3/8"
CBS3160	CBS3160XL	1/4"	3/16"
CBS5162	CBS5162XL	3/8"	5/16"
CBS5320	CBS5320XL	1/4"	5/32"
CBS7322	CBS7322XL	3/8"	7/32"
METRIC			
STANDARD	EXTRA LONG	DRIVE	SIZE
PART NO.	PART NO.		
CBSM40	CBSM40XL	1/4"	4MM
CBSM50	CBSM50XL	1/4"	5MM
CBSM60	CBSM60XL	1/4"	6MM
CBSM72	CBSM72XL	3/8"	7MM
CBSM82	CBSM82XL	3/8"	8MM
CBSM92	CBSM92XL	3/8"	9MM
CBSM102	CBSM102XL	3/8"	10MM

## CBSB702SB

7 Piece 1/4" & 3/8" Dr. Ball Hex Bit Socket Set



- Ball design allows access to fasteners in hard to reach locations.
- S2 bits provide strength and durability.
- Chrome plated socket for corrosion protection.
- Packaged in a blow molded box for easy storage.

Set consists of the following hex bit sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSB142	3/8"	1/4"	CBSB5162	3/8"	5/16"
CBSB180	1/4"	1/8"	CBSB5320	1/4"	5/32"
CBSB382	3/8"	3/8"	CBSB7322	3/8"	7/32"
CBSB3160	1/4"	3/16"			

## CBSMB702SB

7 Piece 1/4" & 3/8" Dr. Metric Ball Hex Bit Socket Set



- Ball design allows access to fasteners in hard to reach locations.
- S2 bits provide strength and durability.
- Chrome plated socket for corrosion protection.
- Packaged in blow molded box for easy storage.

Set consists of the following metric hex bit sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSMB40	1/4"	4MM	CBSMB82	3/8"	8MM
CBSMB50	1/4"	5MM	CBSMB92	3/8"	9MM
CBSMB60	1/4"	6MM	CBSMB102	3/8"	10MM
CBSMB72	3/8"	7MM			

## CBSB702SXL

7 Piece 1/4" and 3/8" Dr. Extra Long Ball Hex Bit Socket Set



- Industrial strength S2 steel bits.
- Chrome vanadium sockets.

Set consists of the following:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSB142XL	3/8"	1/4"	CBSB5162XL	3/8"	5/16"
CBSB180XL	1/4"	1/8"	CBSB5320XL	1/4"	5/32"
CBSB382XL	3/8"	3/8"	CBSB7322XL	3/8"	7/32"
CBSB3160XL	1/4"	3/16"			

## CBSMB702SXL

7 Piece 1/4" and 3/8" Dr. Extra Long Metric Ball Hex Bit Socket Set



- Industrial strength S2 steel bits.
- Chrome vanadium sockets.

Set consists of the following:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSMB40XL	1/4"	4MM	CBSMB82XL	3/8"	8MM
CBSMB50XL	1/4"	5MM	CBSMB92XL	3/8"	9MM
CBSMB60XL	1/4"	6MM	CBSMB102XL	3/8"	10MM
CBSMB72XL	3/8"	7MM			

Common Service

**CBSSPS90S**

**9 Piece 1/4" Dr. Stubby Screwdriver Bit Socket Set**

- 1" overall length allows access in tight areas.
- S2 bits for long lasting durability.
- Packaged in a blow molded box for easy storage.



PART NO.	DRIVE	SIZE	TYPE
CBSP00S	1/4"	#0	Phillips®
CBSP10S	1/4"	#1	Phillips®
CBSP20S	1/4"	#2	Phillips®
CBSP30S	1/4"	#3	Phillips®
CBSS140S	1/4"	1/4"	Slotted
CBSS180S	1/4"	1/8"	Slotted
CBSS380S	1/4"	3/8"	Slotted
CBSS3160S	1/4"	3/16"	Slotted
CBSS5160S	1/4"	5/16"	Slotted

**CBSMTX34S**

**34 Piece 1/4", 3/8" & 1/2" Dr. Master Star Set**

- Industrial strength S2 steel bits.
- Meets ANSI standards for performance.



Set consists of one of each of the following Bit Sockets:

PART NO.	DRIVE	SIZE
CBST80	1/4"	T8
CBST100	1/4"	T10
CBST150	1/4"	T15
CBST200	1/4"	T20
CBST250	1/4"	T25
CBST270	1/4"	T27
CBST300	1/4"	T30
CBST402	3/8"	T40
CBST452	3/8"	T45
CBST472	3/8"	T47
CBST502	3/8"	T50
CBST553	1/2"	T55
CBST603	1/2"	T60
CBST10HO	1/4"	T10H Tamperproof
CBST15HO	1/4"	T15H Tamperproof
CBST20HO	1/4"	T20H Tamperproof
CBST25HO	1/4"	T25H Tamperproof
CBST27HO	1/4"	T27H Tamperproof
CBST30HO	1/4"	T30H Tamperproof
CBST40H2	3/8"	T40H Tamperproof
CBST45H2	3/8"	T45H Tamperproof
CBST50H2	3/8"	T50H Tamperproof
CBST55H3	1/2"	T55H Tamperproof
CBSE40	1/4"	E4 Inverted Star
CBSE50	1/4"	E5 Inverted Star
CBSE60	1/4"	E6 Inverted Star
CBSE70	1/4"	E7 Inverted Star
CBSE80	1/4"	E8 Inverted Star
CBSE102	3/8"	E10 Inverted Star
CBSE122	3/8"	E12 Inverted Star
CBSE142	3/8"	E14 Inverted Star
CBSE162	3/8"	E16 Inverted Star
CBSE183	1/2"	E18 Inverted Star
CBSE203	1/2"	E20 Inverted Star

**CBSMTH37S**

**37 Piece 1/4", 3/8" & 1/2" Dr. Star Hex Bit Set**

- Industrial strength S2 steel bits.
- Meets ANSI standards for performance.



Set consists of one of each of the following Bit Sockets:

PART NO.	DRIVE	SIZE
CBST80	1/4"	T8
CBST100	1/4"	T10
CBST150	1/4"	T15
CBST200	1/4"	T20
CBST250	1/4"	T25
CBST270	1/4"	T27
CBST300	1/4"	T30
CBST402	3/8"	T40
CBST452	3/8"	T45
CBST472	3/8"	T47
CBST502	3/8"	T50
CBST553	1/2"	T55
CBST603	1/2"	T60
CBST10HO	1/4"	T10H Tamperproof
CBST15HO	1/4"	T15H Tamperproof
CBST20HO	1/4"	T20H Tamperproof
CBST25HO	1/4"	T25H Tamperproof
CBST27HO	1/4"	T27H Tamperproof
CBST30HO	1/4"	T30H Tamperproof
CBST40H2	3/8"	T40H Tamperproof
CBST45H2	3/8"	T45H Tamperproof
CBST50H2	3/8"	T50H Tamperproof
CBST55H3	1/2"	T55H Tamperproof
CBS180	1/4"	1/8"
CBS5320	1/4"	5/32"
CBS3160	1/4"	3/16"
CBS7322	3/8"	7/32"
CBS142	3/8"	1/4"
CBS5162	3/8"	5/16"
CBS382	3/8"	3/8"
CBSM40	1/4"	4MM
CBSM50	1/4"	5MM
CBSM60	1/4"	6MM
CBSM72	3/8"	7MM
CBSM82	3/8"	8MM
CBSM92	3/8"	9MM
CBSM102	3/8"	10MM

Common Service

# CBSMTH62S

## 62 Piece 1/4", 3/8" and 1/2" Dr. Master Deluxe Star/Hex Bit Set

- S2 industrial strength bits. • Chrome plated sockets for corrosion resistance.
- Heavy duty blow mold box for easy organization.



Set Includes one each of the following:

PART NO.	DESCRIPTION	DRIVE	SIZE	PART NO.	DESCRIPTION	DRIVE	SIZE
CBS142	SAE Hex Bit Socket	3/8"	1/4"	CBSM102	Metric Hex Bit Socket	3/8"	10MM
CBS180	SAE Hex Bit Socket	1/4"	1/8"	CBSM40XL	Metric Hex Bit Socket X-Long	1/4"	4MM
CBS382	SAE Hex Bit Socket	3/8"	3/8"	CBSM50XL	Metric Hex Bit Socket X-Long	1/4"	5MM
CBS3160	SAE Hex Bit Socket	1/4"	3/16"	CBSM60XL	Metric Hex Bit Socket X-Long	1/4"	6MM
CBS5162	SAE Hex Bit Socket	3/8"	5/16"	CBSM72XL	Metric Hex Bit Socket X-Long	3/8"	7MM
CBS5320	SAE Hex Bit Socket	1/4"	5/32"	CBSM82XL	Metric Hex Bit Socket X-Long	3/8"	8MM
CBS7322	SAE Hex Bit Socket	3/8"	7/32"	CBSM92XL	Metric Hex Bit Socket X-Long	3/8"	9MM
CBS142XL	SAE Hex Bit Socket X-Long	3/8"	1/4"	CBSM102XL	Metric Hex Bit Socket X-Long	3/8"	10MM
CBS180XL	SAE Hex Bit Socket X-Long	1/4"	1/8"	CBST10H0	Star Bit	1/4"	T10H Tamperproof
CBS382XL	SAE Hex Bit Socket X-Long	3/8"	3/8"	CBST15H0	Star Bit	1/4"	T15H Tamperproof
CBS3160XL	SAE Hex Bit Socket X-Long	1/4"	3/16"	CBST20H0	Star Bit	1/4"	T20H Tamperproof
CBS5162XL	SAE Hex Bit Socket X-Long	3/8"	5/16"	CBST25H0	Star Bit	1/4"	T25H Tamperproof
CBS5320XL	SAE Hex Bit Socket X-Long	1/4"	5/32"	CBST27H0	Star Bit	1/4"	T27H Tamperproof
CBS7322XL	SAE Hex Bit Socket X-Long	3/8"	7/32"	CBST30H0	Star Bit	1/4"	T30H Tamperproof
CBSE40	Star Bit	1/4"	E4 Inverted Star	CBST40H2	Star Bit	3/8"	T40H Tamperproof
CBSE50	Star Bit	1/4"	E5 Inverted Star	CBST45H2	Star Bit	3/8"	T45H Tamperproof
CBSE60	Star Bit	1/4"	E6 Inverted Star	CBST50H2	Star Bit	3/8"	T50H Tamperproof
CBSE70	Star Bit	1/4"	E7 Inverted Star	CBST55H3	Star Bit	1/2"	T55H Tamperproof
CBSE80	Star Bit	1/4"	E8 Inverted Star	CBST80	Star Bit	1/4"	T8
CBSE102	Star Bit	3/8"	E10 Inverted Star	CBST100	Star Bit	1/4"	T10
CBSE122	Star Bit	3/8"	E12 Inverted Star	CBST150	Star Bit	1/4"	T15
CBSE142	Star Bit	3/8"	E14 Inverted Star	CBST200	Star Bit	1/4"	T20
CBSE162	Star Bit	3/8"	E16 Inverted Star	CBST250	Star Bit	1/4"	T25
CBSE183	Star Bit	1/2"	E18 Inverted Star	CBST270	Star Bit	1/4"	T27
CBSE203	Star Bit	1/2"	E20 Inverted Star	CBST300	Star Bit	1/4"	T30
CBSM40	Metric Hex Bit Socket	1/4"	4MM	CBST402	Star Bit	3/8"	T40
CBSM50	Metric Hex Bit Socket	1/4"	5MM	CBST452	Star Bit	3/8"	T45
CBSM60	Metric Hex Bit Socket	1/4"	6MM	CBST472	Star Bit	3/8"	T47
CBSM72	Metric Hex Bit Socket	3/8"	7MM	CBST502	Star Bit	3/8"	T50
CBSM82	Metric Hex Bit Socket	3/8"	8MM	CBST553	Star Bit	1/2"	T55
CBSM92	Metric Hex Bit Socket	3/8"	9MM	CBST603	Star Bit	1/2"	T60

Common Service

# VA15798

## 5 Piece Impact Quality Torx® Bit Set



- Fracture resistant tips for long life. • Use with an impact or air gun.
- Made of industrial quality steel. • Vinyl bit holder keeps bits handy and prevents loss.

Set consists of the following:

PART NO.	SIZE	PART NO.	SIZE
VA15740	TX40	VA15750	TX50
VA15745	TX45	VA15755	TX55
VA15747	TX47		

# LS26550

## 9 Piece Torx® Bit Set



- All Torx® bits are made of heat-treated alloy steel.
- Set includes the following:

PART NO.	SIZE	DRIVE	PART NO.	SIZE	DRIVE
LS26560	T10	1/4"	LS26610	T30	1/4"
LS26570	T15	1/4"	LS26620	T40	3/8"
LS26580	T20	1/4"	LS26630	T45	3/8"
LS26590	T25	1/4"	LS26640	T50	3/8"
LS26600	T27	1/4"			

## BIT SOCKET SETS

### LS27200

12 Piece Torx® Bit Set



- All Torx® bits are made of heat-treated alloy steel.
- Set includes the following:

PART NO.	SIZE	DRIVE	PART NO.	SIZE	DRIVE
LS26560	T10	1/4"	LS26620	T40	3/8"
LS26570	T15	1/4"	LS26630	T45	3/8"
LS26580	T20	1/4"	LS26500	T47	3/8"
LS26590	T25	1/4"	LS26640	T50	3/8"
LS26600	T27	1/4"	LS26650	T55	3/8"
LS26610	T30	1/4"	LS26520	T60	1/2"

### LS27530

T70 Torx® Bit

- 1/2" drive.
- Large Torx® bit size.
- Fits the torque converter drain plug on 2003 and later Subaru Legacy, Forester, Impreza and brake rotor retaining bolts on GM C4500 trucks.



### CBSTX1302S

13 Piece 1/4" & 3/8" Dr. Star Bit Socket Set

- Industrial strength S2 steel bits.
- Meets ANSI standards for performance.



Set consists of the following Star Bit Sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBST80	1/4"	T8	CBST402	3/8"	T40
CBST100	1/4"	T10	CBST452	3/8"	T45
CBST150	1/4"	T15	CBST472	3/8"	T47
CBST200	1/4"	T20	CBST502	3/8"	T50
CBST250	1/4"	T25	CBST552	3/8"	T55
CBST270	1/4"	T27	CBST602	3/8"	T60
CBST302	3/8"	T30			

### CBSTX1302SXL

13 Piece 1/4" & 3/8" Dr. Long Star Bit Socket Set

- Long length provides greater access.
- S2 bits for long lasting durability.
- Chrome plated sockets for long lasting corrosion protection.
- Overall Length: 4".
- Packaged in a blow molded box for easy storage.



Set includes the following Bit Sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBST80XL	1/4"	T8	CBST402XL	3/8"	T40
CBST100XL	1/4"	T10	CBST452XL	3/8"	T45
CBST150XL	1/4"	T15	CBST472XL	3/8"	T47
CBST200XL	1/4"	T20	CBST502XL	3/8"	T50
CBST250XL	1/4"	T25	CBST552XL	3/8"	T55
CBST270XL	1/4"	T27	CBST602XL	3/8"	T60
CBST302XL	3/8"	T30			

### CBSTXS90S

9 Piece 1/4" Dr. Stubby Star Bit Socket Set

- 1" overall length allows access in tight areas.
- S2 bits for long lasting durability.
- Packaged in a blow molded box for easy storage.



Set includes the following Bit Sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBST80S	1/4"	T8	CBST250S	1/4"	T25
CBST90S	1/4"	T9	CBST270S	1/4"	T27
CBST100S	1/4"	T10	CBST300S	1/4"	T30
CBST150S	1/4"	T15	CBST400S	1/4"	T40
CBST200S	1/4"	T20			

### CBSTE62LS

6 Piece 3/8" Dr. Inverted Star Hex Bit Socket Set

- 5" overall length ideal for access to recessed fasteners.
- S2 bits for added durability.
- Chrome plated sockets for corrosion resistance.
- Packaged in blow mold case for easy storage.



Set consists of the following Bit Sockets:

PART NO.	DESCRIPTION
CBSTE42L	E4 Inverted Star Hex Bit Socket
CBSTE52L	E5 Inverted Star Hex Bit Socket
CBSTE62L	E6 Inverted Star Hex Bit Socket
CBSTE72L	E7 Inverted Star Hex Bit Socket
CBSTE82L	E8 Inverted Star Hex Bit Socket
CBSTE92L	E9 Inverted Star Hex Bit Socket

## THE SIX MAJOR POINTS OF HAND TOOL SAFETY

1. Wear approved eye protection.
2. Choose the right tool for the job.
3. Do not alter a tool in any way, shape, or form.
4. Never abuse or misuse tools.
5. Never exceed tool capacity.
6. Do not use a tool that appears to be damaged or weakened.



## CBSTXI2202S

22 Piece  
1/4", 3/8", &  
1/2" Dr. Star  
and Inverted Star  
Bit Socket Set

- Industrial strength S2 steel bits.
- Meets ANSI standards for performance.



Set consists of the following Bit Sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBST80	1/4"	T8	CBST552	3/8"	T55
CBST100	1/4"	T10	CBST603	1/2"	T60
CBST150	1/4"	T15	CBSE40	1/4"	E4 Inverted
CBST200	1/4"	T20	CBSE50	1/4"	E5 Inverted
CBST250	1/4"	T25	CBSE60	1/4"	E6 Inverted
CBST270	1/4"	T27	CBSE70	1/4"	E7 Inverted
CBST302	3/8"	T30	CBSE82	3/8"	E8 Inverted
CBST402	3/8"	T40	CBSE102	3/8"	E10 Inverted
CBST452	3/8"	T45	CBSE122	3/8"	E12 Inverted
CBST472	3/8"	T47	CBSE142	3/8"	E14 Inverted
CBST502	3/8"	T50	CBSE162	3/8"	E16 Inverted

## CBSTP13023S

12 Piece 1/4", 3/8" &  
1/2" Dr. Star Plus  
Bit Socket Set

- Designed for use on Torx Plus® fasteners.
- S2 steel bits for added durability.
- Chrome plated socket for long lasting corrosion protection.



Set consists of the following bit sockets in a Cornwell blow-molded case:

PART NO.	DRIVE SIZE	DESCRIPTION
CBSTP80	1/4"	TP8 Star Plus Bit Socket
CBSTP100	1/4"	TP10 Star Plus Bit Socket
CBSTP150	1/4"	TP15 Star Plus Bit Socket
CBSTP200	1/4"	TP20 Star Plus Bit Socket
CBSTP250	1/4"	TP25 Star Plus Bit Socket
CBSTP270	1/4"	TP27 Star Plus Bit Socket
CBSTP302	3/8"	TP30 Star Plus Bit Socket
CBSTP402	3/8"	TP40 Star Plus Bit Socket
CBSTP452	3/8"	TP45 Star Plus Bit Socket
CBSTP502	3/8"	TP50 Star Plus Bit Socket
CBSTP553	1/2"	TP55 Star Plus Bit Socket
CBSTP603	1/2"	TP60 Star Plus Bit Socket

## CBSTXI11023S

11 Piece 1/4", 3/8" &  
1/2" Dr. Inverted Star Bit  
Socket Set

- For use on external Torx® fasteners.
- Chrome plated finish for long lasting corrosion resistance.
- Packaged in a blow molded box for easy storage.



Set includes the following Bit Sockets:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSE40	1/4"	E4	CBSE122	3/8"	E12
CBSE50	1/4"	E5	CBSE142	3/8"	E14
CBSE60	1/4"	E6	CBSE162	3/8"	E16
CBSE70	1/4"	E7	CBSE183	1/2"	E18
CBSE82	3/8"	E8	CBSE203	1/2"	E20
CBSE102	3/8"	E10			

## CBSTP1202SXL

12 Piece 1/4" &  
3/8" Dr. Long  
Tamperproof  
Star Bit Socket Set

- Long length provides greater access.
- S2 bits for long lasting durability.
- Chrome plated sockets for long lasting corrosion protection.
- Overall Length: 4".
- Packaged in a blow molded box for easy storage.



Set includes of the following:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBST8HOXL	1/4"	T8H	CBST30H2XL	3/8"	T30H
CBST10HOXL	1/4"	T10H	CBST40H2XL	3/8"	T40H
CBST15HOXL	1/4"	T15H	CBST45H2XL	3/8"	T45H
CBST20HOXL	1/4"	T20H	CBST50H2XL	3/8"	T50H
CBST25HOXL	1/4"	T25H	CBST55H2XL	3/8"	T55H
CBST27HOXL	1/4"	T27H	CBST60H2XL	3/8"	T60H

Common  
Service

## VMHCT105003

10 Piece 1/4" Dr.  
1/2 Cut Torx®  
Driver Set

- Torx® length cut to 1/2 the normal depth, increases strength and improves fastener engagement.
- 1/4" square drive with 3/4" overall length.
- Also drive TORX Plus®.
- S2 steel, heat treated to 60-62 RC.
- Satin chrome plated drivers packaged in plastic case.
- Knurled body for fingertip control.



Set includes the following:

PART NO.	DRIVE	DESCRIPTION
VMHCT1004	1/4"	1/2 Cut Torx® Driver - T10
VMHCT1504	1/4"	1/2 Cut Torx® Driver - T15
VMHCT2004	1/4"	1/2 Cut Torx® Driver - T20
VMHCT2504	1/4"	1/2 Cut Torx® Driver - T25
VMHCT2704	1/4"	1/2 Cut Torx® Driver - T27
VMHCT3004	1/4"	1/2 Cut Torx® Driver - T30
VMHCT4004	1/4"	1/2 Cut Torx® Driver - T40
VMHCT4504	1/4"	1/2 Cut Torx® Driver - T45
VMHCT4704	1/4"	1/2 Cut Torx® Driver - T47
VMHCT5004	1/4"	1/2 Cut Torx® Driver - T50

## BIT SOCKET SETS

### CBSTP1102S

11 Piece  
1/4" and 3/8" Dr.  
Tamperproof  
Bit Socket Set



- Industrial strength S2 steel bits.
- Meets ANSI standards for performance.

Set consists of the following:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBST8HO	1/4"	T8H	CBST30H2	3/8"	T30H
CBST10HO	1/4"	T10H	CBST40H2	3/8"	T40H
CBST15HO	1/4"	T15H	CBST45H2	3/8"	T45H
CBST20HO	1/4"	T20H	CBST50H2	3/8"	T50H
CBST25HO	1/4"	T25H	CBST55H2	3/8"	T55H
CBST27HO	1/4"	T27H			

### CBSTSH1102S

11 Piece 1/4" and 3/8" Dr.  
5 Star Tamperproof  
Bit Socket Set



- Special 5 Star design.
- Set contains tamperproof sizes T8-T55.
- For use on fasteners found in many interior, trim, and dashboard applications.
- S2 industrial strength bits.
- Chrome plated sockets for corrosion resistance.
- Heavy duty blow mold box for easy organization.

Set consists of the following:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSTS8HO	1/4"	TS8H	CBSTS30HO	1/4"	TS30H
CBSTS10HO	1/4"	TS10H	CBSTS40H2	3/8"	TS40H
CBSTS15HO	1/4"	TS15H	CBSTS45H2	3/8"	TS45H
CBSTS20HO	1/4"	TS20H	CBSTS50H2	3/8"	TS50H
CBSTS25HO	1/4"	TS25H	CBSTS55H2	3/8"	TS55H
CBSTS27HO	1/4"	TS27H			

Common  
Service

### CBSM82TSS

8 Piece 3/8" Dr.  
XZN Triple Square Bit  
Set



- For use on Audi, Mercedes, VW, Porsche and other import cars.
- Compact, one piece design.
- Satin finish, chrome plated with black tips.
- Packaged in a blow molded case for easy storage.

Set consists of the following:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSM42TS	3/8"	4MM	CBSM102TS	3/8"	10MM
CBSM52TS	3/8"	5MM	CBSM122TS	3/8"	12MM
CBSM62TS	3/8"	6MM	CBSM142TS	3/8"	14MM
CBSM82TS	3/8"	8MM	CBSM162TS	3/8"	16MM

### CBSMTSL923S

9 Piece 3/8" & 1/2" Dr.  
Long XZN Triple Square  
Bit Set



- For use on Audi, Mercedes, VW, Porsche and other import cars.
- 4" overall length for greater access to recessed fasteners.
- Satin finish, chrome plated with black tips.
- Packaged in a blow molded case for easy storage.

Set consists of the following:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSMTSL42	3/8"	4MM	CBSMTSL122	3/8"	12MM
CBSMTSL52	3/8"	5MM	CBSMTSL142	3/8"	14MM
CBSMTSL62	3/8"	6MM	CBSMTSL163	1/2"	16MM
CBSMTSL82	3/8"	8MM	CBSMTSL183	1/2"	18MM
CBSMTSL102	3/8"	10MM			

### CBSR222S

22 Piece 3/8" Dr.  
Ribe Power Bit  
Socket Set



- Ribe (or polydrive) is a bit pattern used on most European cars and light trucks and is fast becoming more common with U.S. manufacturers.
- Ribe bits are used on cylinder heads, headlights, and transmission fill plugs.
- Bits made of S2 steel for added durability.
- Chrome plated socket ends provide long lasting corrosion protection.

- Packaged in blow mold case for easy storage.
- Set includes: Standard 2" length in sizes M4-M14 and Long 4" length in sizes M4-M14.

PART NO.	LGTH	DR.	SIZE	PART NO.	LGTH	DR.	SIZE
CBSRM42	2"	3/8"	M4	CBSRM42XL	4"	3/8"	M4
CBSRM52	2"	3/8"	M5	CBSRM52XL	4"	3/8"	M5
CBSRM62	2"	3/8"	M6	CBSRM62XL	4"	3/8"	M6
CBSRM72	2"	3/8"	M7	CBSRM72XL	4"	3/8"	M7
CBSRM82	2"	3/8"	M8	CBSRM82XL	4"	3/8"	M8
CBSRM92	2"	3/8"	M9	CBSRM92XL	4"	3/8"	M9
CBSRM102	2"	3/8"	M10	CBSRM102XL	4"	3/8"	M10
CBSRM112	2"	3/8"	M11	CBSRM112XL	4"	3/8"	M11
CBSRM122	2"	3/8"	M12	CBSRM122XL	4"	3/8"	M12
CBSRM132	2"	3/8"	M13	CBSRM132XL	4"	3/8"	M13
CBSRM142	2"	3/8"	M14	CBSRM142XL	4"	3/8"	M14

## CBSM523TSL

**5 Piece**  
**3/8" & 1/2" Dr.**  
**Long Triple Square**  
**Metric Bit Socket Set**

- For use on VW, Audi, Mercedes, Porsche, and other import cars.
- S2 industrial strength bits.
- Chrome plated sockets for corrosion resistance.
- Heavy duty blow mold box for easy organization.



Set consists of:

PART NO.	DESCRIPTION
CBSM62TSL	3/8" x 6MM Long Triple Square Bit Socket
CBSM82TSL	3/8" x 8MM Long Triple Square Bit Socket
CBSM103TSL	1/2" x 10MM Long Triple Square Bit Socket
CBSM123TSL	1/2" x 12MM Long Triple Square Bit Socket
CBSM143TSL	1/2" x 14MM Long Triple Square Bit Socket

## CBSM82TPTSS

**8 Piece 3/8" Dr.**  
**Tamperproof XZN**  
**Triple Square Bit Set**

- For use on Audi, VW, and Mercedes.
- Compact, one piece design.
- Satin finish, chrome plated with black tips.
- Packaged in a blow mold case for easy storage.



Set consists of the following:

PART NO.	DESCRIPTION
CBSM42TPTS	4MM Tamperproof XZN Driver
CBSM52TPTS	5MM Tamperproof XZN Driver
CBSM62TPTS	6MM Tamperproof XZN Driver
CBSM82TPTS	8MM Tamperproof XZN Driver
CBSM102TPTS	10MM Tamperproof XZN Driver
CBSM122TPTS	12MM Tamperproof XZN Driver
CBSM142TPTS	14MM Tamperproof XZN Driver
CBSM162TPTS	16MM Tamperproof XZN Driver

## VMXZNS412

**1/4" Dr. XZN Stubby**  
**Triple Square Drive Set**

- For use on all German vehicles.
- Satin chrome plated, impact quality.
- Assembled on a 4" Magrail TL Magnetic Socket Organizer.
- S2 steel, fully heat treated.
- Compact one piece design.

Set includes the following:

PART NO.	DESCRIPTION
VMXZNS4	4MM XZN Stubby Driver
VMXZNS5	5MM XZN Stubby Driver
VMXZNS6	6MM XZN Stubby Driver
VMXZNS8	8MM XZN Stubby Driver
VMXZNS10	10MM XZN Stubby Driver
VMXZNS12	12MM XZN Stubby Driver



## INSERT BITS

In some cases, several bits may be stamped with the same identifying mark so it is necessary to know the hex size, overall length, and tip width to determine which bit may be needed.

### Hex Insert Bits



- The following can be used to replace bits in the CBS350S, CBSD410S and CBSD560S sets.

PART NUMBER	HEX SHANK	POINT SIZE	LENGTH
CBTH14	1/4"	1/4"	1"
CBTH18	1/4"	1/8"	1"
CBTH316	1/4"	3/16"	1"
CBTH332	1/4"	3/32"	1"
CBTH532	1/4"	5/32"	1"
CBTH564	1/4"	5/64"	1"
CBTH732	1/4"	7/32"	1"
CBTH764	1/4"	7/64"	1"

### Metric Hex Bits



- The following can be used to replace bits in the CBSD560S set.

PART NUMBER	HEX SHANK	POINT SIZE	LENGTH
CBTHM2	1/4"	2MM	1"
CBTHM3	1/4"	3MM	1"
CBTHM4	1/4"	4MM	1"
CBTHM5	1/4"	5MM	1"
CBTHM6	1/4"	6MM	1"
CBTHM8	1/4"	8MM	1"

### Hex Bit Sockets



- The following can be used to replace bits in the CBS702S, CBS723S, CBS1402S, CBS1802SS, CBS2802S, CBSDBC7S, CBSMTH37S and CBSMTH62S sets.

PART NUMBER	HEX SHANK	POINT SIZE	LENGTH
CBS123	1/2"	1/2"	2-3/16"
CBS142	3/8"	1/4"	2"
CBS142S	3/8"	1/4"	1-3/8"
CBS180	1/4"	1/8"	2"
CBS180S	1/4"	1/8"	1"
CBS343	1/2"	3/4"	2-1/8"
CBS382	3/8"	3/8"	2"
CBS382S	3/8"	3/8"	1-3/8"
CBS583	1/2"	5/8"	2-3/16"
CBS3160	1/4"	3/16"	2"
CBS3160S	1/4"	3/16"	1"
CBS5162	3/8"	5/16"	2"
CBS5162S	3/8"	5/16"	1-3/8"
CBS5320	1/4"	5/32"	2"
CBS5320S	1/4"	5/32"	1"
CBS7162	3/8"	7/16"	2"
CBS7322	3/8"	7/32"	2"
CBS7322S	3/8"	7/32"	1-5/8"
CBS9163	1/2"	9/16"	2-1/8"
CBS9640S	1/4"	9/64"	1"

Common Service

## BIT SOCKETS

### Extra Long Hex Bit Sockets



- The following can be used to replace bits in the CBS702SXL, CBS1402SXL, CBS2802S and CBSMTH62S sets.

PART NUMBER	HEX SHANK	POINT SIZE	LENGTH
CBS142XL	3/8"	1/4"	4"
CBS180XL	1/4"	1/8"	4"
CBS382XL	3/8"	3/8"	4"
CBS3160XL	1/4"	3/16"	4"
CBS5162XL	3/8"	5/16"	4"
CBS5320XL	1/4"	5/32"	4"
CBS7322XL	3/8"	7/32"	4"

### Metric Hex Bit Sockets



- The following can be used to replace bits in the CBSDBC7S, CBSM702S, CBSM723S, CBSMTH37S, CBSMTH62S, CBS1402S, CBS1802SS, and CBS2802S sets.

PART NUMBER	HEX SHANK	POINT SIZE	LENGTH
CBSM30S	1/4"	3MM	1"
CBSM40	1/4"	4MM	2"
CBSM40S	1/4"	4MM	1"
CBSM50	1/4"	5MM	2"
CBSM50S	1/4"	5MM	1"
CBSM60	1/4"	6MM	2"
CBSM60S	1/4"	6MM	1"
CBSM62	3/8"	6MM	1-7/8"
CBSM72	3/8"	7MM	2"
CBSM72S	3/8"	7MM	1-3/8"
CBSM82	3/8"	8MM	2"
CBSM82S	3/8"	8MM	1-3/8"
CBSM92	3/8"	9MM	2"
CBSM102	3/8"	10MM	2"
CBSM102S	3/8"	10MM	1-3/8"
CBSM123	1/2"	12MM	2-1/8"
CBSM143	1/2"	14MM	2-1/8"
CBSM173	1/2"	17MM	2-1/8"
CBSM193	1/2"	19MM	2-1/8"

### Extra Long Metric Hex Bit Sockets



- The following can be used to replace bits in the CBSM702SXL, CBS1402SXL, CBS2802S and CBSMTH62S sets.

PART NUMBER	HEX SHANK	POINT SIZE	LENGTH
CBSM40XL	1/4"	4MM	4"
CBSM50XL	1/4"	5MM	4"
CBSM60XL	1/4"	6MM	4"
CBSM72XL	3/8"	7MM	4"
CBSM82XL	3/8"	8MM	4"
CBSM92XL	3/8"	9MM	4"
CBSM102XL	3/8"	10MM	4"

### Universal Stubby Metric Hex Bit Sockets



- The following can be used to replace bits in the CBS1802SS set.

PART NUMBER	HEX SHANK	POINT SIZE	LENGTH
CBSMU50S	1/4"	5MM	1-5/8"
CBSMU60S	1/4"	6MM	1-5/8"
CBSMU102S	3/8"	10MM	2-3/8"

### Ball Hex Bit Sockets



- The following can be used to replace bits in the CBSB702SB set.

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSB180	1/4"	1/8"	CBSB142	3/8"	1/4"
CBSB5320	1/4"	5/32"	CBSB5162	3/8"	5/16"
CBSB3160	1/4"	3/16"	CBSB382	3/8"	3/8"
CBSB7322	3/8"	7/32"			

### Extra Long Ball Hex Bit Sockets



- The following can be used to replace bits in the CBSB702SXL set:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSB180XL	1/4"	1/8"	CBSB142XL	3/8"	1/4"
CBSB5320XL	1/4"	5/32"	CBSB5162XL	3/8"	5/16"
CBSB3160XL	1/4"	3/16"	CBSB382XL	3/8"	3/8"
CBSB7322XL	3/8"	7/32"			

### Metric Ball Hex Bit Sockets



- The following can be used to replace bits in the CBSMB702SB set:

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSMB40	1/4"	4MM	CBSMB82	3/8"	8MM
CBSMB50	1/4"	5MM	CBSMB92	3/8"	9MM
CBSMB60	1/4"	6MM	CBSMB102	3/8"	10MM
CBSMB72	3/8"	7MM			

### Extra Long Metric Ball Hex Bit Sockets



- The following can be used to replace bits in the CBSMB702SXL set.

PART NUMBER	HEX SHANK	POINT SIZE	LENGTH
CBSMB40XL	1/4"	4MM	4"
CBSMB50XL	1/4"	5MM	4"
CBSMB60XL	1/4"	6MM	4"
CBSMB72XL	3/8"	7MM	4"
CBSMB82XL	3/8"	8MM	4"
CBSMB92XL	3/8"	9MM	4"
CBSMB102XL	3/8"	10MM	4"

**Star Bit Sockets**



- Industrial strength S2 steel bits.
- Meets ANSI standards for performance.
- Can be used to replace bits in the CBSMTH37S, CBSMTX34S, CBSTX1302S, CBSDBC7S, CBSMTH62S and CBSTX12202S sets.

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBST80	1/4"	T8	CBST452	3/8"	T45
CBST100	1/4"	T10	CBST472	3/8"	T47
CBST150	1/4"	T15	CBST502	3/8"	T50
CBST200	1/4"	T20	CBST552	3/8"	T55
CBST250	1/4"	T25	CBST553	1/2"	T55
CBST270	1/4"	T27	CBST602	3/8"	T60
CBST300	1/4"	T30	CBST603	1/2"	T60
CBST302	3/8"	T30	CBST703	1/2"	T70
CBST402	3/8"	T40			

**Stubby Star Bit Sockets**



- Industrial strength S2 steel bits.
- Meets ANSI standards for performance.
- Length: 1".
- Can be used to replace bits in the CBSTXS90S set.

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBST80S	1/4"	T8	CBST250S	1/4"	T25
CBST90S	1/4"	T9	CBST270S	1/4"	T27
CBST100S	1/4"	T10	CBST300S	1/4"	T30
CBST150S	1/4"	T15	CBST400S	1/4"	T40
CBST200S	1/4"	T20			

**Long Star Bit Sockets**



- Industrial strength S2 steel bits.
- Meets ANSI standards for performance.
- Length: 4".
- Can be used to replace bits in the CBSTX1302SXL set.

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBST80XL	1/4"	T8	CBST402XL	3/8"	T40
CBST100XL	1/4"	T10	CBST452XL	3/8"	T45
CBST150XL	1/4"	T15	CBST472XL	3/8"	T47
CBST200XL	1/4"	T20	CBST502XL	3/8"	T50
CBST250XL	1/4"	T25	CBST552XL	3/8"	T55
CBST270XL	1/4"	T27	CBST602XL	3/8"	T60
CBST302XL	3/8"	T30			

**Star Plus Bit Sockets**



- Can be used to replace bits in the CBSTP13023S set.

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSTP80	1/4"	TP8	CBSTP402	3/8"	TP40
CBSTP100	1/4"	TP10	CBSTP452	3/8"	TP45
CBSTP150	1/4"	TP15	CBSTP502	3/8"	TP50
CBSTP200	1/4"	TP20	CBSTP553	1/2"	TP55
CBSTP250	1/4"	TP25	CBSTP603	1/2"	TP60
CBSTP270	1/4"	TP27			
CBSTP302	3/8"	TP30			

**Tamperproof Star Bit Sockets**



- Industrial strength S2 steel bits.
- Meets ANSI standards for performance.
- Can be used to replace bits in the CBSMTX34S, CBSMTH37S, CBSMTH62S, and CBSTP1102S sets.

STAR PART NO.	DRIVE	SIZE
CBST8HO	1/4"	T8H
CBST10HO	1/4"	T10H
CBST15HO	1/4"	T15H
CBST20HO	1/4"	T20H
CBST25HO	1/4"	T25H
CBST27HO	1/4"	T27H
CBST30HO	1/4"	T30H
CBST30H2	3/8"	T30H
CBST40H2	3/8"	T40H
CBST45H2	3/8"	T45H
CBST47H2	3/8"	T47H
CBST50H2	3/8"	T50H
CBST55H2	3/8"	T55H
CBST55H3	1/2"	T55H

**Long Tamperproof Star Bit Sockets**



- Industrial strength S2 steel bits.
- Length: 4".
- Can be used to replace bits in the CBSTP1202SXL set.

STAR PART NO.	DRIVE	SIZE
CBST8HOXL	1/4"	T8H
CBST10HOXL	1/4"	T10H
CBST15HOXL	1/4"	T15H
CBST20HOXL	1/4"	T20H
CBST25HOXL	1/4"	T25H
CBST27HOXL	1/4"	T27H
CBST30H2XL	3/8"	T30H
CBST40H2XL	3/8"	T40H
CBST45H2XL	3/8"	T45H
CBST50H2XL	3/8"	T50H
CBST55H2XL	3/8"	T55H
CBST60H2XL	3/8"	T60H

**5 Star Bit Sockets**



- Industrial strength S2 steel bits.
- Meets ANSI standards for performance.
- Can be used to replace bits in the CBSTSH1102S set.

5 STAR PART NO.	DRIVE	SIZE
CBSTS8HO	1/4"	TS8H
CBSTS10HO	1/4"	TS10H
CBSTS15HO	1/4"	TS15H
CBSTS20HO	1/4"	TS20H
CBSTS25HO	1/4"	TS25H
CBSTS27HO	1/4"	TS27H
CBSTS30HO	1/4"	TS30H
CBSTS40H2	3/8"	TS40H
CBSTS45H2	3/8"	TS45H
CBSTS50H2	3/8"	TS50H
CBSTS55H2	3/8"	TS55H

Common Service

# BIT SOCKETS AND BITS

## Ribe Power Bit Sockets



- Ribe (or polydrive) is a bit pattern used on most European cars and light trucks and is fast becoming more common with U.S. manufacturers.
- Made of S2 steel for added durability.
- Can be used to replace bits in the CBSR222S sets

PART NO.	LGTH	PART NO.	LGTH	DR.	SIZE
CBSRM42	2"	CBSRM42XL	4"	3/8"	M4
CBSRM52	2"	CBSRM52XL	4"	3/8"	M5
CBSRM62	2"	CBSRM62XL	4"	3/8"	M6
CBSRM72	2"	CBSRM72XL	4"	3/8"	M7
CBSRM82	2"	CBSRM82XL	4"	3/8"	M8
CBSRM92	2"	CBSRM92XL	4"	3/8"	M9
CBSRM102	2"	CBSRM102XL	4"	3/8"	M10
CBSRM112	2"	CBSRM112XL	4"	3/8"	M11
CBSRM122	2"	CBSRM122XL	4"	3/8"	M12
CBSRM132	2"	CBSRM132XL	4"	3/8"	M13
CBSRM142	2"	CBSRM142XL	4"	3/8"	M14

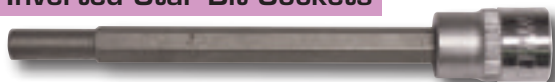
## Inverted Star Bit Sockets

- Meets ANSI standards for performance.
- Can be used to replace bits in the CBSMTH62S, CBSMTX34S, CBSTX11023S and CBSTX12202S sets.



PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSE40	1/4"	E4 Inverted Star	CBSE102	3/8"	E10 Inverted Star
CBSE50	1/4"	E5 Inverted Star	CBSE122	3/8"	E12 Inverted Star
CBSE60	1/4"	E6 Inverted Star	CBSE142	3/8"	E14 Inverted Star
CBSE70	1/4"	E7 Inverted Star	CBSE162	3/8"	E16 Inverted Star
CBSE80	1/4"	E8 Inverted Star	CBSE183	1/2"	E18 Inverted Star
CBSE82	3/8"	E8 Inverted Star	CBSE203	1/2"	E20 Inverted Star

## Long Inverted Star Bit Sockets



- Meets ANSI standards for performance.
- Length: 5".
- Can be used to replace bits in the CBSTE62LS set.

PART NO.	DRIVE	SIZE
CBSTE42L	3/8"	E4 Inverted Star
CBSTE52L	3/8"	E5 Inverted Star
CBSTE62L	3/8"	E6 Inverted Star
CBSTE72L	3/8"	E7 Inverted Star
CBSTE82L	3/8"	E8 Inverted Star
CBSTE92L	3/8"	E9 Inverted Star

## Pozidriv® Insert Bits



- The following can be used to replace bits in the CBS350S, CBSD410S, CBSD560S, and CBS16QC sets.

PART NUMBER	HEX SHANK	POINT SIZE	LENGTH
CBTPZ0	1/4"	No. 0	1"
CBTPZ1	1/4"	No. 1	1"
CBTPZ2	1/4"	No. 2	1"
CBTPZ2L	1/4"	No. 2	3-1/2"
CBTPZ2XL	1/4"	No. 2	6"
CBTPZ3	1/4"	No. 3	1"

## Slotted Insert Bits and Bit Sockets



- The following can be used to replace bits in the CBS350S, CBSD410S, and CBSD560S sets.

PART NUMBER	HEX SHANK	BLADE WIDTH	BLADE THICKNESS	POINT SIZE	LENGTH
CBT14	1/4"	1/4"	.040	6-8	1"
CBT14L	1/4"	1/4"	.040	6-8	2"
CBT18	1/4"	1/8"	.026	1-2	1"
CBT316	1/4"	3/16"	.034	4-5	1"
CBT316L	1/4"	3/16"	.034	4-5	2"
CBT532	1/4"	5/32"	.032	3-4	1"
CBT732	1/4"	7/32"	.036	5-6	1"
CBT932	1/4"	9/32"	.042	6-8	1"

- The following can be used to replace bits in the ZZS210S and MNIMP8 sets.

PART NUMBER	HEX SHANK	BLADE WIDTH	BLADE THICKNESS	POINT SIZE	LENGTH
MN27191	5/16"	1/4"	.040	6-8	1-1/4"
MN27194	5/16"	5/16"	.050	12-14	1-1/4"
MN27195	5/16"	3/8"	.055	14-16	1-1/4"
MN27196	5/16"	1/2"	.080	16-18	1-1/4"

- The following can be used to replace bits in the CBSSPS90S sets.

PART NUMBER	HEX SHANK	BLADE WIDTH
CBSS140S	1/4"	1/4"
CBSS180S	1/4"	1/8"
CBSS380S	1/4"	3/8"
CBSS3160S	1/4"	3/16"
CBSS5160S	1/4"	5/16"

## Phillips® Insert Bits and Bit Sockets



- The following can be used to replace bits in the CBS350S, CBSD410S, CBSD560S, CBSSPS90S, CBS16QC, MNIMP8 and ZZS210S sets.

PART NUMBER	HEX SHANK	POINT SIZE	LENGTH
CBSP00S	1/4"	No. 0	1"
CBSP10S	1/4"	No. 1	1"
CBSP20S	1/4"	No. 2	1"
CBSP30S	1/4"	No. 3	1"
CBTPH0	1/4"	No. 0	1"
CBTPH1	1/4"	No. 1	1"
CBTPH1L	1/4"	No. 1	2"
CBTPH1XL	1/4"	No. 1	6"
CBTPH2	1/4"	No. 2	1"
CBTPH2L	1/4"	No. 2	2"
CBTPH2XL	1/4"	No. 2	6"
CBTPH3	1/4"	No. 3	1"
CBTQCPH1L	1/4"	No. 1	3-1/2"
CBTQCPH2L	1/4"	No. 2	3-1/2"
MN35352A	5/16"	No. 1	1-1/4"
MN35353	5/16"	No. 2	1-1/4"
MN35354	5/16"	No. 4	1-1/4"
MN48280A	5/16"	No. 3	1-1/4"

## Tamperproof Bits



- The following can be used to replace bits in the CBS350S, CBSD410S, and CBSD560S sets.

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBTT8H	1/4"	T8H	CBTT25H	1/4"	T25H
CBTT10H	1/4"	T10H	CBTT27H	1/4"	T27H
CBTT15H	1/4"	T15H	CBTT30H	1/4"	T30H
CBTT20H	1/4"	T20H	CBTT40H	1/4"	T40H

## Star Insert Bits



- The following can be used to replace bits in the CBS16QC and CBSD560S sets.

PART NUMBER	HEX SHANK	POINT SIZE	LENGTH
CBTT8	1/4"	T8	1"
CBTT10	1/4"	T10	1"
CBTT15	1/4"	T15	1"
CBTT15L	1/4"	T15	3-1/2"
CBTT20	1/4"	T20	1"
CBTT20L	1/4"	T20	3-1/2"
CBTT25	1/4"	T25	1"
CBTT25XL	1/4"	T25	6"
CBTT27	1/4"	T27	1"
CBTT27XL	1/4"	T27	6"
CBTT30	1/4"	T30	1"
CBTT30XL	1/4"	T30	6"
CBTT40	1/4"	T40	1"

## Insert Bits for Square Recess Screws



- The following can be used to replace bits in the CBS350S, CBSD410S and CBSD560S sets.

PART NUMBER	HEX SHANK	POINT SIZE	LENGTH
CBTS0	1/4"	S0	1"
CBTS1	1/4"	S1	1"
CBTS2	1/4"	S2	1"
CBTS3	1/4"	S3	1"

## Specialty Bits



PART NUMBER	TYPE	HEX SHANK	BLADE WIDTH/ POINT SIZE	LENGTH
CBSS123	Slotted	1/2"	1/2"	1"
CBSS583	Slotted	1/2"	5/8"	1"
MN35376	Torx®	5/16"	T50	1-1/4"
MN37175	Torx®	5/16"	T45	1-1/4"
MN42898	Torx®	5/16"	T40	1-1/4"
MN44963	Red. Dia. Phillips®	1/4"	No. 2R	1"
MN45190	Phillips®	1/4"	No. 2	1"
MN45191	Phillips®	1/4"	No. 3	1"

## Triple Square Bit Sockets



- The following can be used to replace bits in the CBSM523TSL set.

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSM62TSL	3/8"	6MM	CBSM123TSL	1/2"	12MM
CBSM82TSL	3/8"	8MM	CBSM143TSL	1/2"	14MM
CBSM103TSL	1/2"	10MM			

## XZN Triple Square Bit Sockets



- The following can be used to replace bits in the CBSM82TSS set.

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSM42TS	3/8"	4MM	CBSM102TS	3/8"	10MM
CBSM52TS	3/8"	5MM	CBSM122TS	3/8"	12MM
CBSM62TS	3/8"	6MM	CBSM142TS	3/8"	14MM
CBSM82TS	3/8"	8MM	CBSM162TS	3/8"	16MM

## XZN Tamperproof Triple Square Bit Sockets



- The following can be used to replace bits in the CBSM82TPTSS set.

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSM42TPTS	3/8"	4MM	CBSM102TPTS	3/8"	10MM
CBSM52TPTS	3/8"	5MM	CBSM122TPTS	3/8"	12MM
CBSM62TPTS	3/8"	6MM	CBSM142TPTS	3/8"	14MM
CBSM82TPTS	3/8"	8MM	CBSM162TPTS	3/8"	16MM

## Long XZN Triple Square Bit Sockets



- The following can be used to replace bits in the CBSMTSL923S set.

PART NO.	DRIVE	SIZE	PART NO.	DRIVE	SIZE
CBSMTSL42	3/8"	4MM	CBSMTSL122	3/8"	12MM
CBSMTSL52	3/8"	5MM	CBSMTSL142	3/8"	14MM
CBSMTSL62	3/8"	6MM	CBSMTSL163	1/2"	16MM
CBSMTSL82	3/8"	8MM	CBSMTSL183	1/2"	18MM
CBSMTSL102	3/8"	10MM			

## MSMTS580 Magnetic Bit Holder



- Designed to hold up to thirty-six different 1/4" bit sizes and types with the socket driver located in the middle.
- Neon blue.

## HAMMERS AND SETS

### ZZVB3TCS

#### 3 Piece Ball Pein Hammer Set



- Set consists of the following in a polyfoam tray:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
VBTC016	16 oz. Hammer	VBTC308	8 oz. Hammer
VBTC224	24 oz. Hammer		

#### Ball Pein Hammers



- Drop forged tempered head. • Polished face, bevel, and pein. • Rust resistant black finish on smooth ground sides. • Compression wedged hickory handle.

PART NO.	HEAD	LENGTH	REPL. HANDLE
VBTC016	16 oz.	13-3/4"	VB62162
VBTC120	20 oz.	15"	VB62242
VBTC224	24 oz.	15-1/4"	VB62242
VBTC308	8 oz.	11-3/4"	VB62082
VBTC432	32 oz.	15-3/4"	VB62402
VBTC504	4 oz.	10-1/4"	VB62062
VBTC640	40 oz.	16"	VB62402
VBTC848	48 oz.	16"	VB62402
VBTC2012	12 oz.	12"	VB62122

#### Solid Steel Handle Ball Pein Hammers

- All solid steel handle hammer ball peins have the patented hickory and rubber SHOCK-BLOK® plug in the hammer head eye. • This takes the sting (vibration) out of steel handle hammer strikes.



PART NO.	DESCRIPTION
VBRO16	16 oz. Solid Steel Handle Ball Pein
VBR224	24 oz. Solid Steel Handle Ball Pein
VBR432	32 oz. Solid Steel Handle Ball Pein

#### Dead Blow Ball Pein Hammers

- Dead blow steel face ball pein hammer heads are tempered alloy steel with crowned faces for more accuracy - No bounce back. • Steel reinforced handles provide added strength and safety, resist breaking on overstrike. • Dead blow function uses steel shot.



PART NO.	WEIGHT	HEAD LENGTH	FACE DIA.	OVERALL LENGTH
CTH16BP	16 oz.	4-3/16"	1"	12-3/4"
CTH24BP	24 oz.	4-1/2"	1-1/4"	13"
CTH32BP	32 oz.	5"	1-3/8"	13-5/8"
CTH40BP	40 oz.	5"	1-3/8"	16-1/2"

#### Dead Blow Hammers

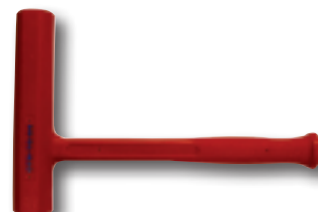
- High quality custom formulated hot cast polyurethane for long life and elasticity. • Enables hammer face to be self-healing and dent resistant. • Impervious to oil and most chemicals. • Standard head design is ideal for industrial, automotive and construction operations. • Molded in Trucothane™ with shot filled dead blow heads. • Exclusive textured, non-slip, comfort contoured handle.



PART NO.	WEIGHT	FACE DIA.	HEAD LENGTH	OVERALL LENGTH
CTHTCO	13 oz.	1-1/4"	3-1/8"	10-1/8"
CTHTC1	21 oz.	1-3/4"	3-3/4"	11-1/4"
CTHTC2	26 oz.	2"	4-1/8"	12-3/4"
CTHTC3	45 oz.	2-1/4"	4-5/8"	14-3/8"

### CTHTCS4

#### Dead Blow Piston Hammer



- High quality custom formulated hot cast polyurethane for long life and elasticity. • Enables hammer face to be self-healing and dent resistant. • Impervious to oil and most chemicals. • Slimline heads with unique profile for all types of assembly and repair operations. • Molded in Trucothane™ with shot filled dead blow heads. • Exclusive textured, non-slip, comfort contoured handle. • Weight: 32 oz. • Face diameter: 1-3/4". • Head Length: 8-1/2". • Overall Length: 12-3/4".

### CTHTC7

#### Dead Blow Sledge Hammer



- High quality custom formulated hot cast polyurethane for long life and elasticity. • Enables hammer face to be self-healing and dent resistant. • Impervious to oil and most chemicals. • For heavy duty construction projects, off road machinery and concrete work. • Molded in Trucothane™ with shot filled dead blow heads. • Custom comfort handle and stand up head. • Weight: 5-1/2 lbs. • Face diameter: 2-3/4". • Head Length: 7". • Overall Length: 20".

#### BFH Sledge Hammers



- High carbon content, double face steel head. • Precision forged and heat treated for durability and safety. • High resin content fiberglass handle with continuous filament fiberglass from tool grip to head; for a handle that is stronger than wood, chemical resistant, and unaffected by moisture. • Handle is manufactured in a two step process with injected molded cover protecting the fiberglass core. • Specially formulated polypropylene cover protects tool from overstrikes. • SG style hand grip is molded into handle. • Offers ergonomic comfort and sure gripping even when wearing gloves.

PART NUMBER	DESCRIPTION
NUBFH4	Li'l BFH 4 lb. Sledge Hammer, 14"
NUBFH12	BFH 12 lb. Sledge Hammer, 32"



**B.A.S.H™ Sledge Hammers**



- Unbreakable Technology - Steel core eliminates breaking during overstrikes.
- Hi-Vis Head - Drop forged 46 HRC steel head endures the most demanding applications.
- Safety Plate - Secures head to handle preventing head dislodging.
- Ergonomic Handle - Shaped and thickened for improved comfort and less vibration.
- No-Slip Grip - Vulcanized rubber handle for secure grip while striking.
- Lanyard Hole - Safely secure hammer to wrist or stationary object.

PART NUMBER	DESCRIPTION
WT20212	2-1/2 lb. 12" B.A.S.H™ Sledge Hammer
WT20412	4 lb. 12" B.A.S.H™ Sledge Hammer
WT20416	4 lb. 16" B.A.S.H™ Sledge Hammer
WT20824	8 lb. 24" B.A.S.H™ Sledge Hammer

**WT30316**  
**B.A.S.H™ Cross**  
**Pein Sledge**  
**Hammer**



- Built for a lifetime of work.
- Unbreakable handle is made with tempered spring steel rods, surrounded by abrasive resistant rubber.
- Ergonomic handle design absorbs shock and vibration, reducing fatigue and injuries, and is slip resistant.
- High visibility yellow head promotes easy identification and job site safety.
- Head weight: 3 lbs.
- Handle length: 16".

**VBSS4**  
**4 lb. Double Face**  
**Sledge Hammer**



- 16" long.
  - Polished faces with generous bevels.
  - Rust resistant black finish on sides.
  - Flame treated hickory handle.
- VB62402 Replacement Handle**

**Blacksmith**  
**Hammers**



- Drop Forged.
- Tempered face and cross pein.
- Rust resistant black finish on smooth ground sides.
- Large face and wide bevel minimize chipping.
- Flame treated hickory handle, "Sure-Lock" wedged in tapered eye.

PART NO.	HEAD	LENGTH	REPL. HANDLE
VBS32	32 oz.	14-1/2"	VB62242
VBS40	40 oz.	15-1/2"	VB62402
VBS48	48 oz.	16"	VB62402

**VBRHD3**  
**3 lb. Hand Drilling**  
**10.75" Hammer**



- The right hammer for striking star drills, cold chisels, brick chisels and punches.
- Broad, polished striking face with generous bevels.
- Rust resistant black finish on smooth ground sides.
- Solid Steel Handle.
- Length: 10.75".

**VBHD3**  
**3 lb. Hand**  
**Drilling Hammer**



- 10-1/4" long.
  - Great for striking star drills, cold chisels, brick chisels, and punches.
  - Broad, polished striking faces with generous bevels.
  - Rust resistant black finish on smooth ground sides.
  - Select, flame treated hickory handle.
- VB63032 Replacement Handle**

**Black Rubber Mallets**



- Use for pounding small fender dents and other types of work to avoid marring surfaces.
- Smooth black rubber head won't turn off.
- Lacquered hickory handles.

PART NO.	FACE	HEAD	HANDLE	WEIGHT
SH77287	1-13/16"	3-1/2"	12"	16 oz.
SH77288	2-1/8"	4"	14"	24 oz.
SH77289	2-1/2"	4-1/2"	14"	32 oz.

**Solid Brass Mallets**



- Deliver firm blows without damage to parts being struck.
- Fitted with hickory handles.

PART NO.	FACE DIA.	LENGTH	WEIGHT
VBBM100	1"	10"	3/4 lb.
VBBM150	1-1/2"	11"	2 lbs.
VBBM200	2"	13"	3-3/4 lbs.

**Hammer Handles**



- Wood hammer handles.
- Complete with wood and metal wedge.

PART NO.	LENGTH	DESCRIPTION
LK40119	10"	For 4 to 6 oz. Ball Pein Hammers
LK40302	12"	For 8 to 12 oz. Ball Pein Hammers
LK40502	14"	For 16 to 20 oz. Ball Pein Hammers
LK40702	16"	For 24 to 28 oz. Ball Pein Hammers
LK40902	18"	For 32 to 48 oz. Ball Pein Hammers
LK42102	14"	For 1-1/2 to 2-1/2 lb. Engineer or Blacksmith Hammers, oval eye 7/8" x 5/8"
LK42302	16"	For 3 to 4 lb. and heavier Engineer or Blacksmith Hammers, oval eye
LK43002	14"	For 2 to 3 lb. Engineer or Blacksmith Hammers, flat eye 1-3/16" x 11/16"

**Vaughn & Bushnell Hammer Handle Cross**  
**Reference Chart (not illustrated)**

- The following are supreme grade replacement handles made of top-of-the-line hickory with weather resistant clear lacquer finish. Density = 48 lbs. per cubic foot or more.

PART NO.	USED ON:
VB62062	VBTC504
VB62082	VBTC308
VB62122	VBTC2012
VB62242	VBS32, VBTC120, VBTC224
VB62402	VBS40, VBS48, VBSDF40, VBSDF48, VBTC432, VBTC640, VBTC848, VBSS4
VB63032	VBHD3

Common Service

## MSC20060A

### Industrial Ink Pen



- Quality, rugged anodized aluminum construction.
- Cornwell® logo custom imprinted on outer cover.
- Tip retracts.

MSC209 Blue Ink Pen Refill (2)

## FW72730005

### Metal Etching Pen



- A "must" for any tool room and machine shop for general marking purposes.
- Use on copper, copper alloy, stainless steel, hardened steel tools and castings, etc.
- Use it to initial personal tools or to restore graduations on rules, height gages, calipers, micrometers, etc.
- Low-cost, disposable felt tip design offers limitless applications.
- Overall length: 6-1/4".

## UL1810

### Double Pointed Scriber



- Straight and 90° angle points for marking in awkward places.
- Heat treated, polished, high carbon needle steel points.
- Knurled aluminum handle.
- Length: 9-1/4".

ULH4WA Replacement Straight Tip  
ULH4WB Replacement 90° Tip

## MSC600KIT

### 4 Piece Precision Pocket Tool Kit

- All tools made from aircraft quality materials.
- All tools are retractable.
- Used by customers in the automotive, education, arts and crafts, aerospace, fire and rescue, and manufacturing industries.
- Includes pocket protector imprinted with Cornwell® Quality Tools Logo.

Set consists of the following:

PART NO.	DESCRIPTION
MSC20060A	Industrial Ink Pen
MSC2005AP	Knife with .080 Blade
MSC2005AXP	Knife with .170 Blade
MSC6003AP	Automatic Center Punch

MSC200047 Replacement 9B Blade/MSC2005AP  
MSC200051 Replacement Super 9B Blade/MSC2005AXP  
MSC6001A Replacement Center Punch Point/MSC6003AP



## SCA805

### Scratch Awl



- Plastic handle for comfortable grip.
- For punching, marking and lining-up work.
- Length: 9-5/16".

## YOMMFS36

### Steel Figure Stamps Set



- Nine piece figure stamps set, 0-8 (6 used as a 9).
- 3/16" figures.
- Has thumb groove to get positive grip and to make your mark with no mistake.
- Fine quality steel, special heat treatment for hardness.
- Sharp characters in gothic style.
- Crown hammer end.
- Packed in sturdy wooden box with lid.

Y005091 Individual figures - Add 0 to 8 to part number for each figure; (6 used as a 9)

## DE29001

### Engraver



- Protect valuables.
- Creative engraving on metal, glass, wood, plastic and ceramics.
- Letter/number template included for professional-looking results.
- 7,200 strokes per minute, 115 volt motor and carbide point.

DE9924 Carbide Point

## RBGP11

### 11 Piece Gasket Cutter Set

- Designed to cut holes and internal radii in gaskets and other soft material such as rubber, lead foil, linoleum, felt fiber.
- Set contains one 5-3/8" long driving mandrel and ten punches sized from 1/4" to 1".
- Packaged in an attractive molded plastic storage box.



- Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
RB741	1/4" Hollow Punch	RB747	5/8" Hollow Punch
RB742	5/16" Hollow Punch	RB748	3/4" Hollow Punch
RB743	3/8" Hollow Punch	RB749	7/8" Hollow Punch
RB744	7/16" Hollow Punch	RB750	1" Hollow Punch
RB745	1/2" Hollow Punch	RB7400002	5-3/8" Mandrel
RB746	9/16" Hollow Punch		

## CMP4MPBST

### 4 Piece Mini Pick Set



Set comes in a plastic tray:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CMPPC45B	45° Pick	CMPPH1B	Hook Pick
CMPPC90B	90° Pick	CMPPS1B	Straight Pick

Common Service

## CTG4HDHPS

### 4 Piece Heavy Duty Hook and Pick Set



- Comfortable bi-material handles.
- Picks made from high-strength chrome vanadium steel.
- Length: 15".

Set consists of the following:

PART NO.	DESCRIPTION
CTG4HDP1	Heavy Duty Straight Pick
CTG4HDP2	Heavy Duty 90° Pick
CTG4HDP3	Heavy Duty Offset Pick
CTG4HDP4	Heavy Duty Pick Hook

## CTG4PPS

### 4 Piece Precision Hook and Pick Set



- Comfortable bi-material handles.
- Picks made from high-strength chrome vanadium steel.
- Length: 6".

Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CTGPSP	Precision Straight Pick	CTGPOFP	Precision Offset Pick
CTGP9OP	Precision 90° Pick	CTGPHP	Precision Hook Pick

## CTG8HPS

### 8 Piece Hook and Pick Set



- Comfortable bi-material handles.
- 9-3/4" picks made from high-strength stainless steel.

Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CTG8P1	Hook Pick	CTG8P5	Combination Pick
CTG8P2	Complex Pick	CTG8P6	45° Pick with Flat Tip
CTG8P3	90° Pick	CTG8P7	Double Angle Pick
CTG8P4	Straight Pick	CTG8P8	Half Circle Pick

## MH60000

### 4 Piece Heavy Duty Hook & Pick Set



- Composite handle is ergonomically designed for a comfortable and secure grip.
- Overall length: 10".

Set consists of:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
MH42000	Scratch Awl	MH42002MAY	Curved Hook
MH42001	90° Hook	MH42003	Complex Hook

## ULCHP4LT

### 4 Piece LED Lighted Hook and Pick Set



- Bright LED light illuminates working end of picks for separating wires, O-rings, removing fuses, or marking metal in dark, hard-to-reach areas.
- Push button switch on end of handle turns high intensity LED on/off.
- Measures 9-3/4" long.
- Durable high carbon steel picks.
- Ergonomically contoured soft grip handle.
- Includes (4) AG3/LR41 cell batteries.

Set includes the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
ULCHP4LT1	Hook Pick	ULCHP4LT3	Straight Pick
ULCHP4LT2	90° Pick	ULCHP4LT4	Complex Pick

## ULCHP6L

### 6 Piece Hook and Pick Set



Set consists of:

PART NO.	DESCRIPTION
ULCHP4LA	9-3/4" Hook Pick with Cushion Grip
ULCHP4LB	9-3/4" 90° Pick with Cushion Grip
ULCHP4LC	9-3/4" Straight Pick with Cushion Grip
ULCHP4LD	9-3/4" Complex Pick with Cushion Grip
ULCHP6LI	9-3/4" Combination Pick with Cushion Grip
ULCHP6LJ	9-3/4" Double Angle Pick with Cushion Grip

## ULCHP4L

### 4 Piece Hook and Pick Set



- Ideal for removing small fuses, "O" rings, adjusting, positioning, retrieving small parts, and removing transmission seals and clips.
- Each pick is 9-3/4" long with a cushion grip, allowing the user to work in awkward, hard to reach areas.
- Contains one of each of the following: 90° pick, hook pick, complex pick, and straight pick.
- Packaged in a sturdy vinyl pouch.

Set consists of:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
ULCHP4LA	Hook Pick	ULCHP4LC	Straight Pick
ULCHP4LB	90° Pick	ULCHP4LD	Complex Pick

## LS80380

### 5 Piece Hose Remover Set



- Set of five hose removers with many uses.
- Contains long and short, standard and offset hooks.
- Can be used to remove hoses, moldings, clips, clamps, seals, O-rings, cotter pins, gaskets, etc.
- Long pullers are 13" long.
- Handles are dual material for comfort and grip.
- Rods are heat-treated for strength and plated for durability.

Set includes the following:

PART NO.	DESCRIPTION
LS80210	Short Hose Remover
LS80220	Long Hose Remover
LS80230	Short Offset Remover
LS80240	Long Offset Remover
LS80290	Short Double Offset Remover

Common Service

## SCRAPERS

### CS5ST

#### 5 Piece Carbon Scraper Set



• Carbon Scrapers are also available individually. Order by individual part number as listed below. • **CAUTION:** Plastic handles are not insulators. Set consists of:

PART NO.	BLADE WIDTH	BLADE LENGTH	BLADE ANGLE	OVERALL LENGTH
CS5	1"	3-1/8"	10°	7"
CS7A	5/8"	4"	12°	7-7/8"
CS8A	9/16"	4-3/8"	45°	8-1/4"
CS10	1"	7-3/4"	10°	11-5/8"
CS12S	3/4"	8-1/8"	Straight	12"

### ECMS1900

#### 19" Monster Scraper



• Ideal for inspection stickers, body moldings, gaskets, and decals. • Rugged aluminum body. • Comfortable polyfoam grip. • Change blade fast using large thumb screw design; handle stores up to 15 blades. • Angled head insures maximum scraping power.

SH77242 Repl. Single Edge Razor Blades

### ECMS600

#### 6" Monster Scraper



• Remove windshield stickers, body molding and decals; scrape away old gasket material. • Accommodates standard single edge razor blades, steel or plastic. • Quick, easy blade change. • Angled head insures maximum leverage.

ECMS60010PK Jar of 6" Monster Scrapers (10/jar)

SH77242 Repl. Single Edge Razor Blades

### ECMS400

#### 4" Mini Scraper

• Accommodates standard, single edge razor blades (steel or plastic). • Quick and easy blade change. • Angled head ensures maximum leverage. • Remove stickers, molding, paint, decals, etc.

SH77242 Repl. Single Edge Razor Blades



### LS52400

#### Fold Up Scraper

• Blade folds into the handle for safe, convenient storage. • The fold-up scraper features three arm positions and a slanted blade for proper scraping. • Great for removing decals, bumper stickers, labels, etc. • The quick change blade holder firmly holds a single edge razor blade. • Includes one single edge razor blade. • Overall length: 7-3/4".

LS52150 Repl. Stainless steel, single edged razor blades (100/pack)



### TE87965

#### Extra Long Sticker Scraper



• Access steep, sloping windshields and other hard-to-reach places, like corners and curved surfaces. • Comes with five standard steel razor blades and one plastic blade for laminated windows and plastic bumpers. • Blade in holder can be reversed for storage; others store in handle. • Heavy duty construction. • 16" overall length.

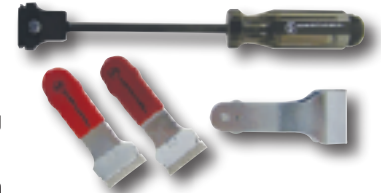
SH77242 Repl. Single Edge Steel Razor Blades

### HR52600

#### Scraper Combination

• 7" reach covers all scraping jobs from windows to paint, including long sloping windshields. • Storage handle contains (1) plastic and (2) single edged razor blades. • "Scrapermate" folding scraper pivots to three locking positions and folds 180° into handle for storage.

SH77242 Repl. Single Edge Razor Blades



### HR52250

#### Razor-Mate™ Mini-Scraper 50-Count Merchandiser

• Versatile pocket-sized mini-scrappers in assorted colors. • Scrape stickers, labels, paint, etc. • Great for detail and body work. • Features stainless steel reversible blade, blade locks in place with thumbscrew.

SH77242 Repl. Single Edge Razor Blades



### CTG7000

#### 3 Piece Scraper Set

• High polish, stainless steel blades. • Stainless steel handle bolster. • Comfortable bi-material handle design.



Set contains the following in a plastic tray:

PART NO	DESCRIPTION
CTG700	1-1/4" Scraper
CTG700B	1-1/4" Bent Scraper
CTG702	2" Scraper

### CTG7100

#### 3 Piece Putty Knife Set

• Flexible blades: 1-1/4", 2" and 3" wide. • High polish, stainless steel blades. • Comfortable bi-material handle design.



Set contains the following in a plastic tray:

PART NO	DESCRIPTION
CTG705	1.3" Putty Knife
CTG706	2" Putty Knife
CTG707	3" Blade

## ZZCCL4S 4 Piece Plier Set



- Neon orange comfort grip handles.

Set consists of the following:

PART NO.	DESCRIPTION
CCL317	7-1/2" Long Nose Plier
CCL337	7" Diagonal Cutting Plier
CCL420	9-1/2" Tongue & Groove Plier
CCL516	6" Slip Joint Plier

## ZZCCL4TGS 4 Piece Tongue & Groove Plier Set



- Neon orange comfort grip handles.

Set consists of the following in a plastic tray:

PART NO.	DESCRIPTION
CCL420	9-1/2" Tongue & Groove Plier
CCL424	4-1/2" Tongue & Groove Plier
CCL426	6-1/2" Tongue & Groove Plier
CCL440	12" Tongue & Groove Plier

## ECKWP2 2 Piece Kiwi Plier Set



- Needle-nose pliers at an angle.
- More powerful grip with less effort.
- Better hand alignment provides a clear line of sight.
- Curved handles fit your hand more comfortably.
- Internal spring opens the pliers jaws.
- Made from heat treated long lasting quality steel.

Set consists of the following:

PART NO.	DESCRIPTION
EC6KWP	6" Kiwi Plier
EC8KWPLN	8" Kiwi Plier

## KXC2000 3 Piece Cobra Plier Set



- Excellent for service work, maintenance and general equipment repair.
- Patented pushbutton adjustment mechanism automatically maintains jaw size.
- Unique self gripping jaw provides a non-slip grip and won't round off nuts and bolts.
- Self gripping jaw requires only one-handle downward pressure; no handle squeezing necessary.
- Box joint construction for greater tool strength.
- Pinch guard prevents operator's fingers from being pinched.
- Textured handle surfaces offer a more comfortable grip.
- Forged from oil-hardened, chrome vanadium electric steel for longer tool life.

Set consists of the following:

PART NO	DESCRIPTION	JAW CAPACITY
KXC1100	7" Cobra Plier	1-1/8"
KXC1150	10" Cobra Plier	1-3/8"
KXC1200	12" Cobra Plier	1-7/8"

## KXC2100 3 Piece Alligator Plier Set



- Excellent for service work, maintenance and general equipment repair.
- Unique self gripping jaw provides a non-slip grip and won't round off nuts and bolts.
- Self gripping jaw requires only one-handle downward pressure; no handle squeezing necessary.
- Box joint construction for greater tool strength.
- Pinch guard prevents operator's fingers from being pinched.
- Textured handle surfaces offer a more comfortable grip.
- Forged from oil-hardened, chrome vanadium electric steel for longer tool life.

Set consists of the following:

PART NO	DESCRIPTION	JAW CAPACITY
KXC1350	7" Alligator Plier	1-1/8"
KXC1400	10" Alligator Plier	2"
KXC1450	12" Alligator Plier	1-7/8"

## CPL102 5 Piece 11" Long Reach Plier Set



- Manufactured to exceed ANSI performance specifications.
- Chrome Vanadium steel with high polished finish.
- Neon orange comfort grip handles.

Set consists of the following in a zippered pouch:

PART NO.	DESCRIPTION
CPL1220	11" Long Nose Plier
CPL1225	11" 22° Bent Nose Plier
CPL1230	11" 45° Bent Nose Plier
CPL1235	11" 90° Bent Nose Plier
CPL1240	11" Duck Bill Plier

## CPL103 5 Piece Multi-Purpose Plier Set



- Manufactured to exceed ANSI performance specifications.
- Chrome Vanadium steel with high polished finish.
- Neon orange comfort grip handles.

Set consists of the following in a zippered pouch:

PART NO.	DESCRIPTION
CPL1275	8" Slip Joint Plier
CPL1280	10" Tongue and Groove Plier
CPL1285	6" Long Nose Plier with cutter
CPL1290	6" Linesman Plier
CPL1295	6" Diagonal Plier



**WARNING!**

Vinyl or plastic plier handles do not protect from electrical shock.

**CPL104**

**10 Piece Multi-Purpose Plier Set**

- Manufactured to exceed ANSI performance specifications.
- Chrome Vanadium steel with high polished finish.
- Neon orange comfort grip handles.

Set consists of the following in a zippered pouch:



PART NO.	DESCRIPTION
CPL1200	Mini Long Reach Diagonal Plier
CPL1205	Mini Long Reach Duck Bill Plier
CPL1210	Mini Long Reach Long Nose Plier
CPL1215	Mini Long Reach 22° Bent Long Nose Plier
CPL1220	11" Long Nose Plier
CPL1230	11" 45° Bent Nose Plier
CPL1240	11" Duck Bill Plier
CPL1260	11" Small Gripper Plier, 5/16"
CPL1265	11" Medium Gripper Plier, 1/2"
CPL1270	11" Large Gripper Plier, 3/4"

**CPL106**

**3 Piece 11" Long Reach Gripper Plier Set**

- Manufactured to exceed ANSI performance specifications.
- Chrome Vanadium steel with high polished finish.
- Neon orange comfort grip handles.

Set consists of the following in a zippered pouch:



PART NO.	DESCRIPTION
CPL1260	11" Small Gripper Plier, 5/16"
CPL1265	11" Medium Gripper Plier, 1/2"
CPL1270	11" Large Gripper Plier, 3/4"

**CPL109**

**5 Piece Deluxe All Purpose Plier Set**

- Manufactured to exceed ANSI performance specifications.
- Chrome Vanadium steel with high polished finish.
- Neon orange comfort grip handles.

Set consists of the following in a zippered pouch:

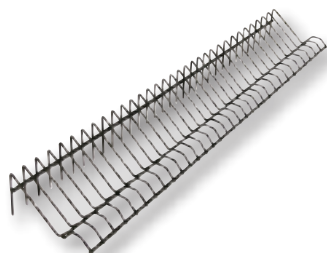


PART NO.	DESCRIPTION
CPL1275	8" Slip Joint Plier
CPL1280	10" Tongue and Groove Plier
CPL1395	7-1/2" Bent Wide Jaw Diagonal Plier
CPL1400	8" Long Nose Plier
CPL1405	7" Linesman Plier

**PLR30**

**30" Plier Rack**

- Rack can be cut to fit smaller drawers.
- Can splice two together for larger drawers.
- Removal and insertion is easy, just pick the pliers up and they slide right back into place.
- Holds 32 pliers.
- Dimensions: 30"W x 2-1/2"H.



**CPL111**

**10 Piece Precision Plier Set**

- Manufactured to exceed ANSI performance specifications.
- Chrome Vanadium steel with high polished finish.
- Neon orange comfort grip handles.

Set consists of the following in a zippered pouch:



PART NO.	DESCRIPTION
CPL1315	4-1/2" Mini Bent Nose Plier, 45°
CPL1320	4-1/2" Mini Long Nose Plier with Cutter
CPL1325	4" Mini Diagonal Plier
CPL1330	4" Mini End Cutter
CPL1335	5" Mini Needle Nose Plier
CPL1370	4-1/2" Duck Bill Plier
CPL1375	4-1/2" Narrow Nose Duck Bill Plier
CPL1380	4-1/2" Linesman Plier
CPL1385	4-1/2" Snap Ring Plier
CPL1390	4" Narrow Nose Diagonal Plier

**CPL112**

**3 Piece Offset Plier Set**

- Manufactured to exceed ANSI performance specifications.
- Chrome Vanadium steel with high polished finish.
- Neon orange comfort grip handles.

Set consists of the following in a zippered pouch:



PART NO.	DESCRIPTION
CPL1395	7-1/2" Bent Wide Jaw Diagonal Plier
CPL1410	8" Bent Slip Joint Plier
CPL1415	8" Bent Long Nose Plier

**CPL113**

**5 Piece Slip Joint and Tongue & Groove Plier Set**

- Manufactured to exceed ANSI performance specifications.
- Chrome Vanadium steel with high polished finish.
- Neon orange comfort grip handles.

Set consists of the following in a zippered pouch:



PART NO.	DESCRIPTION
CPL1410	8" Bent Slip Joint Plier
CPL1420	8" Straight Jaw Tongue & Groove Plier
CPL1425	9-1/2" Curved Jaw Tongue & Groove Plier
CPL1430	6" Slip Joint Plier
CPL1435	10" Slip Joint Plier



**WARNING!**

Vinyl or plastic plier handles do not protect from electrical shock.

**Tongue and Groove Pliers**

- Neon Orange comfort grips.
- Right angle teeth grip in all directions.
- Undercut tongue-and-groove design.
- Reinforcing edge minimizes stress breakage.

**CCL410**

**Tongue and Groove Plier**



- Four adjustments, slip joint.
- Length: 9-1/2" (241.30MM).
- Jaw capacity: 1-1/8" (28.45MM).

**CCL420**

**Tongue and Groove Plier**



- Five adjustments, slip joint.
- Length: 9-1/2" (241.30MM).
- Jaw capacity: 1-1/2" (38.10MM).

**CCL424**

**Tongue and Groove Plier**



- Three adjustments, slip joint.
- Length: 4-1/2" (114.30MM).
- Jaw capacity: 1/2" (12.70MM).

**CCL426**

**Tongue and Groove Plier**



- Five adjustments, slip joint.
- Length: 6-1/2" (165.10MM).
- Jaw capacity: 7/8" (22.10MM).

**CCL440**

**Tongue and Groove Plier**



- Seven adjustments, slip joint.
- Length: 12" (304.80MM).
- Jaw capacity: 2-1/4" (57.15MM).

**CCL460**

**Tongue and Groove Plier**



- Eight adjustments, slip joint.
- Length: 16-1/2" (419.10MM).
- Jaw capacity: 4-1/4" (107.95MM).

**CCL480**

**Tongue and Groove Plier**



- Twelve adjustments, slip joint.
- Length: 20-1/4" (514.35MM).
- Jaw capacity: 5-1/2" (139.70MM).

**Cobra® Pliers**



- Adjustment at the touch of a button directly on the workpiece.
- Fine adjustment for optimum adaptation to different sizes of workpieces and a comfortable handle width.
- Self-locking on pipes and nuts - no slipping on the workpiece and low hand force required.
- Gripping surfaces with special hardened teeth, teeth hardness approximately 61 HRC - low wear and stable gripping.
- Box-joint design - low wear and stable gripping.
- Reliable catching of the hinge bolt - no intentional shifting.
- Guard prevents operator's fingers being pinched.
- Chrome vanadium electric steel, forged and oil hardened.

PART NUMBER	LENGTH	NO. OF ADJ.	WORKING CAPACITY
KXC1100	7" (180MM)	18	Up to 1-1/2"
KXC1150	10" (250MM)	25	Up to 2"
KXC1200	12" (300MM)	30	Up to 2-3/4"
KXC1250	22" (560MM)	20	Up to 4-1/2"

**KX8721250**

**10" Cobra Quick Set Pliers**



- Adjusts two ways: Just slide the handles to the closed position (allows the user to grip things that can't be seen and grip things that couldn't be reached before), or press the push-button and slide the handles to the closed position.
- Self-gripping jaw won't slip on the work piece.
- Patented push-button maintains jaw size.
- Pinch guard prevents finger pinching.
- Box joint construction for greater strength.
- Twenty eight (28) position adjustment assures a precise fit.
- Maximum jaw capacity is 2".

**Alligator® Pliers**



- Self-locking on pipes and nuts - no slipping on the workpiece and low hand force required.
- Gripping surfaces with special hardened teeth (approx. 61 HRC).
- Box-joint design for high stability because of double guide. Robust construction, insensitive to dirt and particularly suited for outdoor work.
- Guard prevents operators' fingers being pinched.
- Chrome vanadium electric steel, forged and oil hardened.

PART NUMBER	LENGTH	NO. OF ADJ.	WORKING CAPACITY
KXC1400	10" (250MM)	9	Up to 2"
KXC1450	12" (300MM)	9	Up to 2-3/4"

**CCL307**

**Parrot Nose Plier**



- Specially treated drop forged steel.
- Lower jaw with reinforced rib.
- Neon Orange comfort grips.
- Two adjustments.
- Length: 7" (177.80MM).
- Jaw capacity: 5/8" (16.00MM).

Common Service

**Slip Joint Pliers**

- Cross hatching on jaws grabs work tightly.
- Made of polished high carbon drop forged steel.
- Neon Orange comfort grips.

**CCL516**  
Slip Joint Plier



- Thin nose design, shear-type wire cutter. • Length: 6-1/2" (165.10MM).

**CCL537**  
Slip Joint Plier



- Precision tool with fine side cutter. • Length: 7-5/8" (193.80MM).

**CCL548**  
Slip Joint Plier



- Heavy duty design for industrial use, shear-type wire cutter. • Length: 8" (203.20MM).

**CCL5410**  
Slip Joint Plier



- Heavy duty design for industrial use, shear-type wire cutter. • Length: 10" (254.00MM).

**CCL357**  
End Cutting Plier



- Polished, high carbon drop forged steel. • Perfectly mated cutter, heat treated to hold its edge. • Neon Orange comfort grips. • Length: 7.50" (190.50MM).

**CCL748**  
8" Long Reach  
End Cutter Plier



- Precision matched jaws. • Perfectly mated cutter, heat treated to hold its edge. • Designed for use in confined areas. • Electronic coating to prevent rusting. • Polished high carbon drop forged steel. • Orange comfort grip handles. • Length: 8" (203.20MM) end cutter.

**KXC600**  
8" Lever  
Action Cutter



- Small 8" hand held bolt cutter; lever action provides easy cutting of hardened materials. • Cutting performance is 20x higher than the applied hand force because of the special lever action design. • Center cutting design produces easier cutting action. • Cutting edges are induction hardened separately (64 HRC) for longer tool life. • Designed for effortless cutting of hardened materials; solid or stranded wire. • Maximum cutting capacities: 13/64" Medium/Hard; 5/32" Hard.

**KXC625**  
8" Angled Head  
Lever Action  
Cutter



- Exceptional cutting performance with minimal effort due to effective lever action design that guarantees a favorable lever ratio with low friction. • 20° angled head and joint construction allows almost flush cutting. • Easily cuts bolts, nails and rivets up to 5.2MM diameter. • Precision cutting edges for soft, hard, and piano wire. • The handles, which run at an angle to the cutting blades, offer ample space for gripping. • Slim dual component handles with wide contact surface at the end of the handle for better distribution of pressure. • Integrated opening spring with comfortable locking device. • Locks with a spring clip for secure transport. • Cutting edges induction hardened at approximately 64 HRC. • Black atramentized high performance chrome vanadium steel, forged, oil-hardened and tempered. • Plastic coated handles.

**Diagonal Cutting Pliers**

- Polished, high carbon drop forged steel.
- Perfectly mated cutters, heat treated to hold its edge.
- Neon Orange comfort grips.

**CCL337**  
Diagonal Cutting  
Plier



- High leverage, heavy-duty construction. • Lap joint. • Length: 7" (177.80MM).

**CCL338**  
Diagonal Cutting Plier



- High leverage, heavy-duty construction. • Lap joint. • Length: 8" (203.20MM).

**CCL436**  
Diagonal Cutting Plier



- Box joint. • Length: 6" (152.40MM).

**CCL437**  
Diagonal Cutting Plier



- Box joint. • Length: 7" (177.80MM).

**CCL447**  
Curved Diagonal  
Cutting Plier



- Box joint. • Length: 7-3/4" (196.85MM).



## KXC650

### 5-1/2" Diagonal Cutter



- Small flush cutting diagonal cutter.
- Non-beveled edges produce a true flush cut.
- For cutting plastic ties or soft metal; not meant for cutting steel.
- Integrated handle spring forces handles open for easy gripping/holding.
- Compact size works in tight spaces.
- Maximum cutting capacities: 13/64" Medium/Hard; 5/32" Hard.

## CCL909

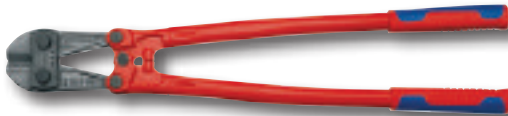
### Crimping and Cutting Tool



- Designed for crimping and cutting of both insulated and non-insulated solderless connections and terminals.
- Handles wire from 10 to 22 AWG.
- Features precision crimping dies and cutters.
- Slim nose shaped for tight spaces.
- Neon orange comfort grips.
- Length: 9-1/2" (241.30MM).

## KX7172610

### 24" Large Bolt Cutter



- High cutting performance with minimal effort due to cutting edge angle and transmission ratio - cutting capacity up to 48 HRC.
- Blades made from high performance chrome vanadium steel with precision induction hardened cutting edges (approximately 62 HRC), oil-hardened and tempered.
- Joints forged from tool steel.
- Forged-in stopper, with elastomer insert, cushions the cutting stroke.
- Good access due to flat construction of head and joint area.
- Sturdy non-slip, two-color, dual component, ergonomically angled handles made of powder coated steel tubing.
- Replaceable bolted cutter head (atramentised).
- Precise adjustment (12 positions) of blades by eccentric bolts.
- Head width: 3-1/4" (83MM); Head thickness: 1-1/4" (33MM); Cutting edge length: 1-3/8" (34MM); Overall length: 24" (610MM).

KX7179610 Spare cutter head

## High Leverage Diagonal Cutters



- The essential cutting tool for versatile use.
- High quality material and precise workmanship for long service life.
- Precision cutting edges additionally induction hardened (cutting edge hardness approx. 62 HRC) for soft and hard wire.
- Clean cutting of thin copper wires, also at the cutting-edge tips.
- Narrow head style for use in confined areas.
- Vanadium electric steel; forge and oil hardened.

PART NO.	LENGTH	CAPACITIES
KXC700	7" (180MM)	5/32" Medium/Hard; 7/64" Hard
KXC750	8" (200MM)	11/64" Medium/Hard; 1/8" Hard
KXC800	10" (250MM)	3/16" Medium/Hard; 9/64" Hard

## Bent Diagonal Cutters



- 12 degree angled head offers easy access and positioning.
- Forged axle rivet provides longer tool life.
- Induction hardened blades provide precision cutting.
- Chrome vanadium electrical steel offers lighter weight and greater strength.
- Polished head and plastic coated handles.

PART NO.	LENGTH	CAPACITIES
KXC850	8" (200MM)	11/64" Medium/Hard; 1/8" Hard
KXC900	10" (250MM)	3/16" Medium/Hard; 9/64" Hard

## KLT311PG

### Long Reach 11" Diagonal Offset Cutting Plier



- Red cushion vinyl hand grips.
- High leverage and long reach cutting capability.

## CCL911 Cable Cutter Plier



- Cuts up to 4/O aluminum and up to 2/O soft copper. (Not designed for steel or ACSR.)
- Induction hardened cutting edges are made from special grade carbon steel.
- Neon orange comfort grips.
- Length: 9-1/2" (241.30MM).

## CLS11420

### Hose Cutter

- Cuts flexible hose up to 1-1/4".
- Cut heater hoses, fuel lines, and other flexible hoses.
- Stainless steel blade is reversible.
- Plier made of glass filled nylon.

LS11450 Replacement Blade



## HR76700 Pipe and Hose Cutter



- Cuts industrial air hose, multipurpose hose, heater and washer hose, vacuum hose, non-metallic fuel line hose, PVC pipe, battery cables, copper tractor trailer cable and non-metallic air brake hose, up to 1 1/2" in diameter.
- Features a quick release mechanism to quickly and easily open pliers for use.
- Ratcheting action makes cutting easy.
- Also features a locking mechanism in handle for storage.

HR767100 Replacement Blade

Common Service

## VG1078TRAY

### 10 Piece Vise-Grip® Locking Pliers Set

• High grade alloy steel heat treated for maximum durability. • Hardened teeth to grip at any angle and broached for maximum durability. • "CR" series self-energizing lower jaw for gripping power with no slipping or stripping on any style nut or bolt head; "R" series straight jaw provides maximum contact on flat, square, or hex materials; and "LN" series provides easy access in narrow, hard to reach places. • Hex key adjusting screw for exacting pressure offers controlled release. • Guarded release trigger protects from accidental release and releases quickly.



Set consists of one of each of the following in a storage tray:

PART NO.	DESCRIPTION
VG5WR	5" Curved Jaw Locking Pliers w/wire cutter
VG6LN	6" Long Nose Locking Pliers
VG6R	6" Locking C-Clamp w/regular tips
VG7CR	7" Curved Jaw Locking Pliers
VG7R	7" Straight Jaw Locking Pliers
VG7WR	7" Curved Jaw Locking Pliers w/wire cutter
VG9LN	9" Long Nose Locking Pliers
VG10CR	10" Curved Jaw Locking Pliers
VG10R	10" Straight Jaw Locking Pliers
VG11R	11" Locking C-Clamp w/regular tips

## VG68

### 5 Piece Vise-Grip® Plier Set

Set consists of one of each of the following in a kit bag:

PART NO.	DESCRIPTION
VG5CR	5" Curved Jaw Plier
VG6LN	6" Long Nose Plier
VG7WR	7" Curved Jaw Plier with cutter
VG10R	10" Straight Jaw Plier
VG10CR	10" Curved Jaw Plier



## VG73

### 3 Piece Vise-Grip® Plier Set

Set consists of one of each of the following and a kit bag:

PART NO.	DESCRIPTION
VG5CR	5" Curved Jaw Plier
VG6LN	6" Long Nose Plier
VG10WR	10" Curved Jaw Plier w/Cutter



## VG4935580

### 3 Piece Original Locking Pliers Set

• Ideal for tightening, clamping, twisting and turning. • Constructed of high-grade heat-treated alloy steel for maximum toughness and durability. • Classic Trigger Release designed to provide maximum locking force. • Hardened teeth are designed to grip from any angle.

Set consists of the following:

PART NO.	DESCRIPTION
VG5CR	5" Curved Jaw Locking Plier
VG7CR	7" Curved Jaw Locking Plier
VG10CR	10" Curved Jaw Locking Plier



## VG74

### 5 Piece Vise-Grip® Clamp Set with T-shirt

Set includes the following:

QTY.	PART NO.	DESCRIPTION
2	VG6R	6" Locking C-Clamp
1	VG10R	10" Straight Jaw Locking Pliers
2	VG11R	11" Locking C-Clamp
1	-	Vise-Grip® T-Shirt, XL



## VG12L3

### Large Jaw Locking Pliers

• Ideal for freeing stubborn oil filters, exhaust work, removing radiator hoses, aligning water pump flanges and changing shock absorbers. • Large heavy duty curved jaws, with hardened tooth design, grip around work of all shapes. • High-grade alloy steel construction; locks onto work without slipping. • Easy locking, quick-release action. • Length: 12". • Jaw Opening: 3-1/8".



### Long Nose Locking Pliers with Wire Cutter

• Classic trigger release designed to provide maximum locking force. • Long straight jaw provides easy access in narrow, hard-to-reach places.

PART NO.	LENGTH	JAW CAPACITY
VG4LN	4" (100MM)	1-5/8" (41MM)
VG6LN	6" (150MM)	2" (51MM)
VG9LN	9" (225MM)	2-3/4" (70MM)



**Curved Jaw Locking Pliers**

- Classic trigger release designed to provide maximum locking force.
- Self-energizing lower jaw provides three times more gripping power, with no slipping or stripping on any style nut or bolt head.



PART NO.	LENGTH	JAW CAPACITY
VG5CR	5" (125MM)	1-1/8" (29MM)
VG7CR	7" (175MM)	1-1/2" (38MM)
VG10CR	10" (250MM)	1-7/8" (48MM)

**Curved Jaw Locking Pliers with Cutter**

- Classic trigger release designed to provide maximum locking force.
- Curved jaw with built-in wire cutter is great for a variety of applications and material shapes.



PART NO.	LENGTH	JAW CAPACITY
VG4WR	4" (100MM)	1" (25MM)
VG5WR	5" (125MM)	1-1/8" (29MM)
VG7WR	7" (175MM)	1-1/2" (38MM)
VG10WR	10" (250MM)	1-7/8" (48MM)

**Straight Jaw Locking Pliers**

- Classic trigger release designed to provide maximum locking force.
- Straight jaw provides maximum contact on flat, square or hex materials.



PART NO.	LENGTH	JAW CAPACITY
VG7R	7" (175MM)	1-1/2" (38MM)
VG10R	10" (250MM)	1-7/8" (48MM)

**VG2OR**  
Locking Chain Clamp

- Holds and locks around any shape, any size.
- Adjusts quickly for ratchet action in either direction.
- Length: 9" (225MM).
- Chain length: 18" (455MM).



**Replacement Springs (Not Illustrated)**

PART NO.	USED WITH:
VG4008	1OCR, 10LW, 1OR, 10WR, 11R, 11SP, 12LC, 2OR
VG4022ZR	7CR, 7LW, 7R, 7WR, 8R, 9LN, 9R, 9R
VG4052ZR	5WR, 6LN, 6R, 6SP

**ML700E**  
3 Piece Mini Electrical Tool Set

- Up-front working elements on small tools provide easy and stable means of cutting, stripping and connecting wires in tight places.
  - Tools provided include a hardened cutter for stranded and solid copper or aluminum wire, a precision ground stripper for 10-22AWG stranded and 8-18AWG solid copper wire, and a crimper for insulated and non-insulated electrical connections.
  - Ergonomic handles reduce operator fatigue.
  - Tools are 5-1/2" overall length.
  - Packaged in a reusable plastic pouch.
- Set includes the following:



PART NO.	DESCRIPTION
ML701E	Mini Wire Cutter
ML702E	Mini Wire Stripper
ML703E	Mini Wire Crimper

**CTG15E**  
Multi-Purpose Electrical Pliers

- Strips 10/12/14/16/18/20 AWG wire.
- Strips 0.8/1.0/1.3/1.6/2.0/2.6 MM wire.
- Heat treated, precision ground blades.
- Handle lock and embossed wire size descriptions.
- Plastic grips for comfort only.
- Black oxide finish.
- Return spring and scissor-style cutter.
- Length: 6".



**CTG3300**  
Crimper/Cutter

- Two precision ground wire cutters.
- Four versatile crimping dies.
- Five common size bolt cutters.
- Crimping: Trapezoid type die for 22-14 AWG insulated terminals and 12-10 insulated terminals; Indentor type die for 22-10 AWG non-insulated terminals.
- Bolt cutting: 10-32, 10-24, 8-32, 6-32, 4-40.
- Wire stripping: Strips stranded wire 22 to 10 AWG and solid wire 18 to 8 AWG.
- Easy to read engraved markings.
- Cushioned grip handle provides a comfortable grip.



**ML23E**  
Ignition Crimping Tool

- Crimps 7 & 8MM ignition terminals, high tower right angle ignition terminals, "W" or "F" crimp distributor terminals, right angle spark plug terminals.
- Crimps all solderless terminals, butted seam, brazed seam, PVC and nylon.
- Extra broad blade for cutting all types of ignition and primary wire.
- Strips 7 & 8MM ignition and #10 through 18 gauge primary wire.
- Cushion grip handles.
- Length: 9-1/2" (242MM).



**ML2E**  
Wire Stripper, Cutter and Crimper

- AWG and Metric, full 1/2" scissor type cutting blades.
- Stripping stations for 22 to 10 and .5MM to 5.3MM.
- Perfect rethread and bolt cutting on 6/32, 8/32, 10/32 plus 3.5MM, 4MM, and 5MM.
- Crimping of both insulated and non-insulated terminals; also 7-8MM auto ignition.
- Air cushion vinyl grips.
- Length: 9-1/2".



Common Service

**CTG22E**

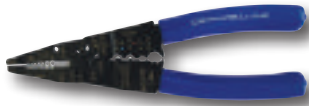
**Terminal Crimper/  
Wire Stripper**



- Insulated terminal crimper, stripper and wire cutter for terminals 12-10 (yellow) and 22-14 (red and blue).
- Cleanly cuts bolt sizes 10-24, 10-32, 8-32, 6-32 and 4-40.
- Pivot joint made of hardened steel.
- Black oxide finish with plastic grips.
- Length: 7-1/2".

**CTG46E**

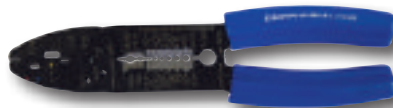
**Wire Stripper**



- Pliers nose for working small nuts and pulling wire.
- 6 stripping stations for both solid and stranded wire; 10-22 AWG.
- Crimps 10-22 gauge barrel type insulated and non-insulated terminals.
- Crimps 7-8MM automotive terminals.
- Screw cutting/sizing stations for 10-24, 6-32, 8-32, 10-32, 4-40, and 5-40 screws.
- Screw cutting/sizing stations tighter to pivot to improve leverage and reduce force required to shear screws.

**CTG52E**

**Wire Stripper**



- Cutter in front for wires in tight areas.
- Crimping stations for insulated and non-insulated terminals.
- Screw sizing stations (for 5 most popular screws) are around the pivot for greater leverage/less effort.
- Stripping stations for solid and stranded wire.
- 7-8MM auto ignition crimp.

**CTG19000A**

**Adjustable Wire  
Cutter-Stripper**



- Cuts and strips solid or stranded wire.
- Handles 12-22 gauge wire with single or multiple conductor.
- Automatically adjusts to wire size.
- ABS handle with 15% fiberglass.
- Excellent stripping blade alignment.
- Steel and heat treated cutting blades can cut 0.03" MIG wire.
- Central pivot point has a bolt with copper bushing to provide a more consistent structure.
- Adjustment knob will not loosen when turned to release.

**TE19100**

**Wire Stripper for  
Recessed Areas**



- Strips 22-12 gage single or multiple stranded conductor wire.
- Lightweight and easy to use.
- Adjustable strip length guide.
- Built-in wire cutter.
- Automatically adjusts to wire size.
- Hardened steel stripping blades.
- Storage lock (keeps wire stripper in closed, compact position for storage).
- Before using, be sure there is no power to the wire.
- For copper wire only.
- This tool is not designed to strip Teflon® or similar insulations.

**CTG56EB**

**Wire Cutter/Stripper**



- Pliers nose is great for working small nuts and pulling wire.
- Stripping stations for 10-18 AWG solid and 12-20 AWG stranded wire.
- Screw sizing stations for 6-32 and 8-32 screws.
- Lock protects cutting edges when stored.
- Return spring to speed work.
- Opening stop prevents spring from being disengaged.
- Long, ergonomic shaped handles for greater leverage and comfort.

**ECB790C**

**Hammer Indent  
Crimping Tool**



- Place end wire in crimping area; release crimping pin, then use hammer or vise on crimping pin.
- Spring loaded pin.
- Compact and lightweight.
- 8 gauge to 4/0 AWG.
- Made from cast steel.
- Weight: 2 lbs.

**TE18920**

**Ratcheting Terminal  
Crimping Kit**



- Versatile kit includes 5 dies for virtually all uses.
- Die sets quickly interchange for a wide range of applications.
- Crimping tool has a steel frame with contoured grips.
- Supplied in a durable, plastic molded storage case with carrying handle.

**TE18930**

**Ratcheting  
Weatherpack  
Terminal Crimper**



- For most Weatherpack terminals and non-insulated open barrel connectors 22-10 AWG.
- Ensures a perfect crimp every time.
- Crimping tool has a steel frame with contoured grips.
- Can be used with die sets found in **TE18920** Ratcheting Terminal Crimper Kit.
- Interchangeable with the crimper in the **TE18920** set (only difference is the handle color).

**TE18900**

**Ratcheting Terminal  
Crimper**



- Ratcheting action ensures a perfect crimp every time.
- Eliminates damaged or distorted terminals.
- Crimps 10-22 gage insulated terminals.
- Superior design and construction outperforms other crimpers.
- Die is not changeable.

**CTG5008**

**Self Adjusting  
Wire Stripper**



- Self-adjusts to most 10-26 gauge solid or stranded wire.
- Strips for splicing without damage to wire.
- Crimps terminals 10-22 gauge.
- Color coded crimping jaws with precision blade cuts.
- Cushioned insulated handles for comfort and safety.

Common Service



**WARNING!**

Vinyl or plastic plier handles do not protect from electrical shock.

## CTG5020A

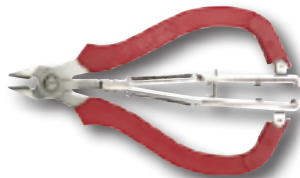
### Heavy Duty Easy Stripper



- Compound leverage for user comfort.
- Automatically adjusts to strip AWG 10 to 24 gauge (or even smaller using the micro adjust knob) without damage to the conductors.
- Crimps insulated terminals 10-22 AWG, non-insulated terminals 10-22 AWG, and 7-8MM auto ignition terminals.

## IPO07870

### 2 in 1 Cutter Wire Stripper



- Strip and cut wire from 14 to 26 gauge with a quick squeeze of the handles.
- Cuts with one end, strips with the other.
- Self adjusts.
- Use with soft copper (electronic) wire.
- Made from surgical steel.

## WHPT11

### Parallel Action Crimper



- Provides the most popular professional crimping cavities on a cost effective parallel-jaw pliers frame, which keeps terminals from rocking out of position as the crimp is being made.
- Designed for the occasional user who needs precision-machined crimp cavities to make a proper crimp.
- Five cavities perform "B" type conductor and insulation crimps.
- Conductor crimp maximum range is 22-12 AWG.
- Insulation crimp maximum range is 24-14 AWG.
- Uses the same five crimp cavities as the professional Delphi/Packard 12085271 tool, but is built on a less expensive, cost effective frame.

## FDMFM01

### Wire Feed Tool



- Made to insert wires, cables and hoses inside plastic split loom tubing, including Flexo™ F6, the flexible, semi-rigid wrappable split braided tube from Techflex.
- Also known as a "fish tool" or "wire feed tool".
- Tool works left-handed or right-handed.
- This tool helps the technician work more efficiently, reduces labor costs, increases billable output, prevents wear and tear on hands, and becomes a reliable cable management tool that will get used on a regular basis.
- Industry uses: Airlines, automotive, audio and video, telephone, networking, and manufacturing.
- Virtually any technician or skilled laborer required to feed wire through split-flex tubing will benefit from using this tool.
- Used for cable management and as a cable organizer.
- Loom sizes from 3/8" thru 1-1/2".
- Handle wires, cables and hoses and gages, and up to 4 gage PowerAmp/Generator cable.

## KXC500

### 8" Long Nose Plier with Cutter



- For holding, gripping and bending; for use in confined spaces and precision applications.
- Serrated gripping surfaces provide a precise, secure grip.
- Special steel construction allows jaws to maintain shape under heavy load conditions.
- Integrated cutter with induction-hardened edges permits easy cutting of soft to medium-hard wire.
- Coated handles for a more secure and comfortable grip.

## KXC550

### 8" Long Nose Bent Plier with Cutter



- For holding, gripping and bending, especially when the application demands an offset or angled approach; for use in confined spaces and precision applications.
- 40° angled jaws allow easy access in offset applications.
- Serrated gripping surfaces provide a precise, secure grip.
- Special steel construction allows jaws to maintain shape under heavy load conditions.
- Integrated cutter with induction-hardened edges permits easy cutting of soft to medium-hard wire.
- Coated handles for a more secure and comfortable grip.

### LONG NOSE PLIERS

- Perfectly mated cutters, heat treated to hold edges.
- Cross hatching on jaws.
- Polished high carbon drop forged steel.

## CCL317

### Long Nose Plier with Cutter



- Length: 8" (203.20MM).

## CCL318

### Long Nose Plier with Cutter



- Heavy Duty.
- Length: 8-3/8" (212.25MM).

## CL386

### Bent Long Nose Pliers



- Slender, perfectly mated jaws with no side wobble provide a firm grip on fine work in tight places.
- Polished high carbon drop forged steel.
- CHANNELLOCK BLUE® comfort grips.
- Length: 5-3/4" (146.05MM).

## CL718

### Long Reach Flat Nose Plier



- Designed for use in confined areas.
- Polished drop high carbon forged steel.
- Precision matched jaws.
- Perfectly mated cutter, heat treated to hold edges.
- Crosshatch teeth pattern.
- CHANNELLOCK BLUE® grips.
- Length: 7-7/8" (200.15MM).



#### WARNING!

Vinyl or plastic plier handles do not protect from electrical shock.

## ML625R

### 6 Piece QuarterTurn™ Retaining Ring Plier Set

- Unique design provides stability and converts from internal/external use with only a 1/4 turn of the pivot.
- Pivot will not loosen.
- Cushion grip handles.
- Will service internal/external rings from 1/4" to 2".
- Packaged in a custom molded case.

Set contains all of the following:

PART NUMBER	TYPE	TIP DIAMETER
ML1202R	Straight	.038"
ML120290R	90° Angle	.038"
ML3202R	Straight	.047"
ML320290R	90° Angle	.047"
ML3402R	Straight	.070"
ML340290R	90° Angle	.070"



## ML43R

### 12 Piece Convertible Retaining Ring Plier Set

- Covers complete range of rings from 1/4" to 3-1/2" of both internal and external pliers.
- Twelve convertible pliers tips diameter .038, .047, .070 and .090 with straight, 45° and 90° bend.
- Comfortable vinyl grips.
- Packed in a shock resistant plastic case with handle and storage space for spare rings.



PART NUMBER	TYPE	TIP DIAMETER
ML12	Straight	.038
ML1245	45° Angle	.038
ML1290	90° Angle	.038
ML32	Straight	.047
ML3245	45° Angle	.047
ML3290	90° Angle	.047
ML34	Straight	.070
ML3445	45° Angle	.070
ML3490	90° Angle	.070
ML56	Straight	.090
ML5645	45° Angle	.090
ML5690	90° Angle	.090

## ML1225R

### 12 Piece QuarterTurn™ Retaining Ring Plier Set

- Unique design provides stability and converts from internal/external use with only a 1/4 turn of the pivot.
- Pivot will not loosen.
- Cushion grip handles.
- Will service internal/external rings from 1/4" to 3-1/2".
- Packaged in a custom molded case.

Set contains all of the following:

PART NUMBER	TYPE	TIP DIAMETER
ML1202R	Straight	.038"
ML120245R	45° Angle	.038"
ML120290R	90° Angle	.038"
ML3202R	Straight	.047"
ML320245R	45° Angle	.047"
ML320290R	90° Angle	.047"
ML3402R	Straight	.070"
ML340245R	45° Angle	.070"
ML340290R	90° Angle	.070"
ML5602R	Straight	.090"
ML560245R	45° Angle	.090"
ML560290R	90° Angle	.090"



## OW4512

### Snap Ring Plier Set, Internal/External

- For internal or external snap rings; thumbscrew permits quick conversion.
- Made of heavy-gauge tempered steel.
- Includes two stainless steel handled picks.
- Contained in a blow-molded plastic storage case.



Set consists of the following:

PART NO.	TIP	ANGLE
OW45121	.090" tip	straight pliers
OW45122	.090" tip	90° pliers
OW45123	.070" tip	straight pliers
OW45124	.070" tip	90° pliers
OW45125	.047" tip	straight pliers
OW45126	.047" tip	90° pliers
OW45127	.038" tip	straight pliers
OW45128	.038" tip	90° pliers
OW45129	-	Straight tip pick
OW451210	-	90° tip pick

Common Service

## ML690R

### 6 Piece Convertible Retaining Ring Set

- Handles a wide range of sizes of internal and external retaining rings.
- Converts from internal to external by moving screw over.
- Heat treated; comfortable vinyl grips.



Set consists of the following:

PART NO.	LENGTH	TIP SIZE	TIP ANGLE
ML12	6"	.038	Straight
ML1290	6"	.038	90°
ML32	6"	.047	Straight
ML3290	6"	.047	90°
ML34	7-3/4"	.070	Straight
ML3490	7-3/4"	.070	90°

## OW4513

### Heavy-Duty Snap Ring Plier Set



- Heat treated steel "circlip" pliers for large equipment repair.
  - Replaceable tips and spring ratchet locking mechanism to securely hold against snap ring tension.
  - Internal plier's capacity 3-1/16" to 6-1/4" (78MM to 159MM) snap rings.
  - External plier's capacity 3-1/2" to 6-1/2" (89MM to 165MM) snap rings.
  - Blow-molded storage case includes extra sets of replaceable 0.12" (3MM) diameter tips: straight, 45°, and 90°.
  - Weight: 7 lbs., 3 oz.
- Set consists of the following:

PART NO.	DESCRIPTION
OW45131	H.D. Internal Snap Ring Plier
OW45132	H.D. External Snap Ring Plier
OW45133	Straight Tip
OW45134	45° Tip
OW45135	90° Tip
OW45136	Tip Mounting Screws

### Convertible Retaining Ring Pliers

- Handles a wide range of sizes of internal and external retaining rings.
- Converts from internal to external by moving screw over.
- Heat-treated; comfortable vinyl grips.



PART NUMBER	LENGTH	TIP SIZE	TIP ANGLE
ML12	6"	.038	Straight
ML1245	6"	.038	45°
ML1290	6"	.038	90°
ML32	6"	.047	Straight
ML3245	6"	.047	45°
ML3290	6"	.047	90°
ML34	7-3/4"	.070	Straight
ML3445	7-3/4"	.070	45°
ML3490	7-3/4"	.070	90°
ML56	8"	.090	Straight
ML5645	8"	.090	45°
ML5690	8"	.090	90°

## ML7

### Large Internal Retaining Ring Plier



- For internal retaining rings from 3-1/16" to 6" in diameter.
- Double tooth ratchet safety device prevents rings from releasing their tension and permits assembly and removal of rings without having to maintain pressure on the handles.
- Comes with replaceable straight tips.
- Length: 16".

ML790 90° Repl. Tips (pr.)  
ML78 Straight Repl. Tips (pr.)

## ML47R

### External Lock Ring Plier



- Designed for standard applications.
- Jaws are scored on the outside to hold rings securely on removal and installation.
- Right angle tip.
- Length: 8-1/2".

## ML48R

### External Lock Ring Plier



- Thin nose design for work in close clearance areas.
- Jaws scored on outside to hold rings securely on removal and installation.
- Straight tip.
- Length: 8-1/2".

## ML22

### Fixed Tip Retaining Ring Plier, External



- Come with grips but without spring and stop.
- Tip Size: .038".
- Tip Angle: Straight.

## ML4936R

### Horseshoe Snap Ring Plier



- Extra large lock ring plier with replaceable tips.
- Maximum tip spread: 2-1/2".
- Vinyl cushion grips.
- Length: 14" (350MM).

ML41R Replacement tips (pr.)

## ML602R

### Snap Ring Plier



- Remove/install snap rings with reverse bevel end, used to locate bearing on shafts of transmissions, differentials, etc.
- Maximum spread: 1-7/16".
- Spring closure, vinyl grips.
- Black oxide finish.
- Length: 9".

## WKG705

### Lock Ring Plier



- Spreads snap lock rings on brakes, transmission, and machine tools.
- Thin jaws open in parallel plane.
- Compound leverage.
- Length: 10".

## LS44900

### Lock Ring Pliers



- For removing and installing all types of lock rings.
- Spreads lock rings commonly found on transmissions, master cylinders, brakes and other applications.
- Specially designed jaws are knurled on the end to prevent slipping.
- Jaw range: 3/32" closed, 15/16" open.

Common Service

## PLIERS - HOSE

### PSGHRP

#### Hog Ring Plier

- 8" Overall length.
- Handles hog rings up to 1.75"
- Soft foam cushion grip handle coverings for comfortable prolonged usage.
- Includes multi-functioned hardened jaw teeth for long life and solid gripping on almost any surface.
- Unique design reduces fatigue and improves use in many applications.



### CCL558

#### 8" Hose Clamp Plier

- Polished high carbon drop forged steel.
- Electronic coating to prevent rusting.
- Wire cutting shear.
- Heavy duty construction.
- Orange comfort grip handles.
- Length: 8" (203.20MM).



### MH28650

#### Flexible Hose Clamp Plier

- Utilizes a flexible cable with a precision machined clamp at the end to reach where other pliers can not.
- Flexibility to reach, remove and lock clamps into the open position.
- Remove plastic self-tightening or metal hose clamps with diameters from 11/16" to 2-1/2" (18MM to 54MM).
- Locking mechanism on the pliers allows user to release the hose clamp plier and work with both hands.



MH28651 Repl. cable only/MH28650, MH45650  
MH28654 Repl. sheath, cable & clamp/MH28650, MH45650

### MH45650

#### Hose Clamp Pliers

- Solid, one piece construction.
- Handles standard and space saver clamps up to 2-3/32".
- Locking device for control and comfort.



MH28651 Repl. cable only/MH28650, MH45650  
MH28654 Repl. sheath, cable & clamp/MH28650, MH45650

### ASHCP949

#### Hose Clamp Pliers

- Double gear lock lever with wider and deeper gears for secure locking.
- Enhanced cable assembly with large cable and strong connection for maximum strength.
- Cable adjuster and multiple gear lock provide accurate and secure locking for any clamp position between minimum and maximum range.
- Allows for removal of plastic and/or metal self-tightening hose clamps with diameters of 11/16" to 2-1/2" (18MM to 54MM).
- Precision clamp on end of flexible cable allows for an extended reach.



AS9409ACA Cable Assembly  
AS9409A03 Wire Assembly

### KD3976

#### Flat Band Hose Clamp Pliers

- For Corbin (wire) style hose clamps.
- Tips trap and hold clamp and swivel for multiple angle access.
- For flat ear style hose clamps.
- Improved strength.
- Easier to use locking feature.
- Dual dipped grip for comfort and force.



### KD3977

#### Angled Hose Clamp Pliers

- For Corbin (wire) style hose clamps.
- Tips trap and hold clamp and swivel for multiple angle access.
- For flat ear style hose clamps.
- Improved strength.
- Easier to use locking feature.
- Dual dipped grip for comfort and force.



### KD3978

#### Large Hose Clamp Pliers

- Tips trap and hold clamp and swivel for multiple angle access.
- For flat ear style hose clamps.
- Improved strength.
- Easier to use locking feature.
- Dual dipped grip for comfort and force.



### AC875G

#### Hose Clamp Plier

- For removing and installing spring wire hose clamps.
- Fingertip feature makes it possible to lock plier in any one of three positions.
- Jaws swivel through 180°.
- Deep slots in jaws hold clamp securely.
- All working parts tempered steel, zinc plated.



### ML54Z

#### Mini Hose Pinch-Off Plier

- Ideal for use on radiator hoses, heater hoses, water, air, vacuum and fuel lines.
- Patented clamping mechanism locks automatically - no screws or levers to set or adjust!
- Made from high carbon heat treated steel for extended life.
- Black oxide coated to resist rust and corrosion.
- Cushioned hand grips.
- Robust and reliable performance - tested to 50,000 cycles without failure.
- 3/4" OD capacity.
- Length: 5-1/2"; Weight: 4 oz.



### ML55Z

#### Hose Pinch-Off Plier

- Patented mechanism provides positive clamping without springs or manual adjustments.
- Heat treated steel construction; black oxide finish.
- Cushioned hand grips.
- Length: 9"; Weight: 11.7 oz.
- 1-1/2" OD capacity.





## ML56Z

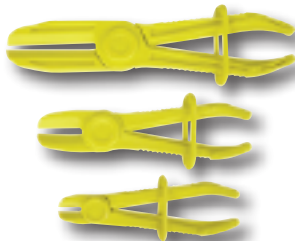
### Large Hose Pinch-Off Pliers



- Great for radiator and heater hoses, vacuum and fuel lines.
- Tested to 50,000 cycles without failure for reliable performance.
- Patented clamping mechanism; no adjustment needed, simply squeeze to lock.
- Cushion hand grips.
- 2-1/2" O.D. capacity.

## PBT70713

### Line Clamp Master Pack



- Light weight, non-conductive, highly visible material.
- One-handed operation.
- Adjustable closing pressure.
- Eliminates damage to hoses due to radiused jaw design, and pre-set maximum crush.

Set consists of:

PART NO.	SIZE	DESCRIPTION & RANGE
PBT70035	Small	Seals flexible brake and fuel lines; smooth rounded edges to ensure no damage to the internal reinforcement of hydraulic brake lines; Range: 1/8" to 5/16" (3MM - 8MM)
PBT70533	Medium	Seals heater hose; Range: 1/2" to 3/4" (13MM - 19MM)
PBT70684	Large	Seals radiator hose; Range: 3/4" to 2-1/4" (19MM - 57MM)

## LS47900

### Hose Remover Pliers



- For easy removal of 5/32" to 1/2" vacuum and fuel hoses that are difficult to remove due to cramped engine compartments or from being "baked on" due to high engine temperatures.
- Engage line with sharpened black jaw to "dig" into line, squeeze, and silver jaw easily pushes off hose.

## VC71006

### 2.5" Wide Tube Grip



- 14-gauge steel Tube-Grip™ designed to dispense and apply material supplied in plastic or aluminum tubes, including RTV sealants and gasket makers, adhesives, etc.
- Provides a mechanical advantage compared to squeezing a tube by hand.
- Creates more pressure and squeezes 35% more material out of the tube.
- Eliminates most clean-up.
- Increases precision in application.
- Because of the pressure generated, even the thickest materials can be dispensed through very small nozzle openings for very fine-line patterns or press a wide nozzle opening nearly flat against a surface to obtain a very wide, flat ribbon pattern.

## HL48550000

### Deluxe Hacksaw



- Professional Grade.
- Die-Cast Aluminum handle.
- Heavy duty chrome-plated tube.
- Easy release wing nut.
- Storage space for extra blades.
- 45° and 90° cutting angles.
- Can be used as key hole saw.

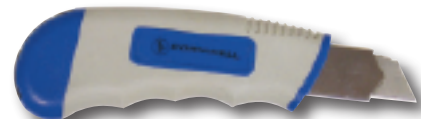
HL32212180 18T Bimetal Hacksaw Blade

HL32212240 24T Bimetal Hacksaw Blade

HL32212320 32T Bimetal Hacksaw Blade

## HR536

### Jumbo Box and Hose Cutter



- Extra large grip for added control.
- Bi-material handle for a sure grip.
- Equipped with a "Quick Change Blade System".

HR5361 Replacement Blades (10)

## CTGUK

### Folding Utility Knife with Carabiner



- Heavy duty design.
- Folding design locks in place for use.
- Textured handle for non-slip grip.
- Cornwell® Tools branded on handle in white.
- Features a Carabiner clip.

GN11P Replacement Utility Knife Blades (5)

## GN12113

### Folding Lock-Back Utility Knife



- Lightweight aluminum, blue handle with clip.
- Quick change screw locked blade.
- One hand spring blade release.

GN11P Replacement Utility Knife Blades (5)

## GN12119

### Quick Change Lock-Back Utility Knife



- Quick change lock blade.
- Spring blade release.
- Lightweight PVC handle with belt clip.
- Accepts all standard utility blades.
- Includes six blades.
- Extra blade storage in handle.
- Cuts vinyl tile, trims carpet for installation, cuts auto hoses and plastics, plus many more uses.

GN11P Replacement Utility Knife Blades (5)

## PHCCQA376

### QuickBlade® Autoload Utility Knife



- A versatile fully featured cutter, enabling blade change without tools and/or possible injuries due to blade handling.
- The form fitting handle is zinc die-cast and powder coated.
- The auto-loading feature enables a blade change in seconds. Just remove the blade from the front, then retract the slider into the handle and it is ready to cut.
- Quick "no tool" required blade change.
- Autoloading side load chamber.
- Includes five (5) blades.

## HR53630BL

### Mini Snap Knife Display



- Durable pocket-sized mini snap razor knife with steel inset for strength.
- Blue/black body branded with Cornwell® in black.
- Comes in a 30 pack merchandiser.

## CKT2012R

### 2012 Master Knife Display

- Locking steel "Diamond Plate" and Plexiglas® display includes storage.
- Use it on a wall or on a counter.
- Elastic strap and post system allows versatile planning of knife display.



Display consists of the following:

QTY.	PART NO.	DESCRIPTION
2	CKT2900	Heiho™ Folder, Razor-Sharp Cutting Edge
2	CKT6064	Trapper, Pocket Classic, Burnt Amber Finish
2	CKT6480	Pazoda™, Razor-Sharp Cutting Edge
2	CKT6850	Ignitor®, Razor-Sharp Edge
2	CKT6865	Ignitor®, Combo Cutting Edge, Black Scales
2	CKT7131	Lake Thunderbolt 2, Combo Cutting Edge
2	CKTM1601Z	Carson M16®, Spear Point, AutoLAWKST™
2	CKTM2112G	M21™-12G, G10 Scales, Veff™ Serrations
2	CKTM402	Carson M4™, Bone & G10, OutBurst®
2	CKTVEFF1	VeffSharp™, Sharpener with 600 Grit Diamond

### Smith & Wesson® M&P® M.A.G.I.C Assist Knives

- M.A.G.I.C stands for Multipurpose, Assisted, Generational, Innovative Cutlery.
- Assisted opening with safety.
- Stainless 4034 Stainless Steel.
- Handle: Aluminum with rubber outlay.
- Blade length: 2.8".
- Closed length: 4.2".
- Weight: 4.1 oz.
- Liner lock.
- Safety lock.
- Glass breaker and pocket clip.

## TYSWMP3B

### Smith & Wesson® Black M&P® M.A.G.I.C Assisted Opening Knife

- Features a smooth edge Tanto point stainless steel coated blade.



## TYSWMP3BS

### Smith & Wesson® Black M&P® M.A.G.I.C Assisted Opening Knife

- Features a partially serrated Tanto point stainless steel coated blade.



## TYCK105BL

### Blue Handle Extreme Ops® Knife

- Lightweight aluminum blue handle.
- 7Cr17 high carbon stainless steel blade with liner lock and thumb knob.
- Blade: 3.2".
- Handle: 4".
- Weight: 2.9 oz.
- Includes pocket clip.



## CSC00001

### Knife & Scissors Sharpener

- Diamond sharpened carbide for the ultimate edge.
- Excellent for sharpening knives, scissors, serrated knives, meat cleavers, electrical knives, razor blade knives, and all V-Blade instruments.



## VMWS55

### 5-1/2" Work Shears Multipurpose with Sheath

- Excellent for cutting just about anything: rubber, leather, nylon, paper, rope, wire, even battery cables.
- High carbon stainless steel blades.
- Heat treated to HRC 58-60.
- Serrated blade grips materials.
- Two component soft grip handles.
- Includes heavy duty sheath with snap on belt loop.



## DSWSKTS

### Work Sharp Knife and Tool Sharpener

- Heavy-duty sharpening system with flexible premium abrasive belts and precision sharpening guides for speed, ease, and repeatability.
- Sharpening guides are purpose built for kitchen knives, outdoor knives, scissors and serrated knives.
- Can be used to sharpen garden pruners, lawn mower blades, shovels, and other bladed shop and garden tools.
- Hand held design.
- Can run on a small 12V power inverter in a truck or RV (inverter not included).
- Replaceable abrasive grit belts.
- Precision sharpening guides for repeatable results.
- Won't burn or damage blade steel.
- Kit includes: Work Sharp power platform with quick lock belt tensioner, flexible abrasive belt, belt tracking knob, sharpening cassette, power switch, contoured handle, and 6 ft. power cord; Outdoor knife sharpening guide: serrated knife guides - 25° angle per bevel (total 50° angle) and scissor guide - 65° bevel angle (single bevel); Kitchen knife sharpening guide: knife guides - 20° angle per bevel (total 40° angle); six piece belt kit (belts are 1/2" x 12") - (2) P80 Coarse Grit, (2) P220 Medium Grit, and (2) 6000 Fine Grit; User's guide and instructional video.



DSWSSA0002012 Replacement Belt Kit

## GT10005

### Edgemate™ Five Stone Sharpening System

- This ultimate knife sharpening system will sharpen all kitchen, sport, and utility cutlery including knives and cutting tools with serrated blades.
- Includes knife clamp/angle guide, extra-coarse sharpening hone, coarse sharpening hone, medium sharpening hone, fine sharpening hone, serrated knife sharpening hone, and honing oil in a custom case.
- Hones are 5" long and 3/4" wide for efficient, fast sharpening.



## GT60016

### Tri-Seps® Serration and Knife Sharpener

- Triangular shaped, portable ceramic sharpener has built-in angle guide to restore a razor-sharp edge to serrations, plain edges, entrenching tools, scissors, darts, pointed instruments, fish hooks, ics picks, etc.
- Two radius sizes for both large and small serrations.
- Made from premium grade 96% alumina ceramic.
- Includes military-spec bead chain and clasp.
- Overall length: 4.50".



## GT40001

### Carbide Pocket Sharpener

• Engineered to ensure a fast, safe method to restore a sharp cutting edge to dull blades. • Precision crafted from 6061-T6 structural grade aluminum with tungsten carbide sharpening bits set at a 35° angle. • Handle is CNC checked for a secure grip. • Not recommended for sharpening serrated blades. • Overall length: 5".



## GT40003

### Diamond/Carbide Sharpener

• For fast reshaping of all knife blades including serrated. • The twin carbide sharpening blades will restore a sharp cutting edge in 3 to 4 strokes. • Tapered diamond serration sharpening rod stores in handle when not in use. • Precision machined from 6061-T6 aircraft aluminum with a knurled handle for a sure grip. • Weight: 2.1 oz. • Length: 5.75". • Diameter: .500". • 3.75" tapered grooved diamond rod for sharpening all serrated blades.



## AR3810

### 6 Piece File Set

• All file lengths are 6" and are packaged in a plastic pouch. • Set comes with a round file, square file, triangle file, flat-square front file, flat-taper front file and half-round file.



## ZZF6S

### 6 Piece File Set

Set consists of one each of the following:

PART NO.	DESCRIPTION
HL7314300	6" Mill File
HL7314550	8" Mill File
HL7314950	12" Mill File
HL7332100	10" Half-Round File
HL7339600	6" Round File
HL7339850	8" Round File
KBK11	Kit Bag



### Single Cut Mill Files



• For sharpening saws, shears, lawn mowers, axes and for draw filing, lathe work and general shop use. • Tapers slightly in width. • Bastard cut-coarse teeth for rapid stock removal.

PART NO.	DESCRIPTION
HL7314300	6" x 19/32" x 7/64"
HL7314550	8" x 25/32" x 9/64"
HL7314950	12" x 1-5/32" x 7/32"

### Double Cut Round Files



• Designed for enlarging circular holes or rounded grooves. • Tapers toward the point. • Bastard cut-coarse teeth for rapid stock removal.

PART NO.	DESCRIPTION
HL7339600	6" x 7/32"
HL7339850	8" x 5/16"

## HL7332100

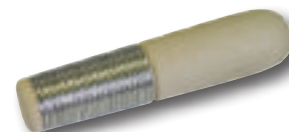
### Double Cut Half-Round File



• For filing out concave surfaces and crevices, and rounding out holes. • Spiral cut enables removal of metal and leaves smooth finish. • Bastard cut-coarse teeth for rapid stock removal. • 10" x 15/16" x 9/32".

### Friction Fit File Handles

• A tangled file should always be used with a handle. • A properly fitted handle will encourage better work and make the job easier and safer. • Wood handles absorb hand moisture more readily for even greater safety. • PLEASE NOTE: These file handles are friction fit - Not threaded.



PART NO.	USE FOR
HL73992000	3" to 6" Files
HL73992050	4" to 8" Files
HL73992100	6" to 10" Files
HL73992150	8" to 12" Files
HL73992200	12" to 18" Files

## RBCT1019B

### Kneeling Pad

• Aid for comfort and cleanliness when kneeling or sitting on hard surfaces such as garage or home floors, gardens, patios, driveways, etc. • Can double as a seat cushion for hard chairs, sporting events, hunting/fishing, and shop roller chairs, etc. • High durability - manufactured from closed cell, cross-linked polyethylene foam. Tear resistant. • Fine cell structure resists grease, oil, and dirt. Easily cleaned with hose and water. • Lightweight - easy to transport, store, or hang up. • Layers are heat fused to help eliminate the possibility of delamination. • Dimensions: 10" x 19".



## SH77640

### Knee Pads (pr.)

• Comfortable double elastic straps with Velcro® fasteners. • Smooth, hard plastic cups for easy knee swivel. • Tough, super light outer fabric. • Thick neoprene rubber interior for maximum comfort.



Common Service

## ERG5050

### Handy Mat II 14" x 21"

- Designed for severe kneeling conditions such as cold hard steel, concrete, grating, gravel, etc.
- Reduces knee trauma and low back stress.
- Pain free kneeling increases productivity.
- Made of heavy, resilient, closed-cell foam rubber, not plastic.
- Will not compression set.
- Will not absorb liquids.
- Impervious to petroleum products.
- Thick 1" foam.
- Self extinguishing.
- Silicone free.
- Built-in handle, easy to carry.
- Hangs up, easy to store.



## CRMFC

### Magnetic Fender Cover

- White Cornwell logo screen printed on a black background.
- PVC material with magnets.
- Easy to clean surface.
- Sewn binding and sturdy construction for durability.
- Approximate size: 32-1/2"W x 24"H.



## LS95002

### Fold Up Creeper

- Padded vinyl creeper adds comfort and protection on the job.
- Works great on off road situations and under a vehicle where no jacks or lifts are used.
- Folds up and hangs for convenient storage.
- Dimensions: Unfolded - 18" x 48"; Folded - 18" x 24".



### Low Profile Plastic Creepers



- Body-fitting design for comfort.
- Six 2" pop-in style urethane rollers are inserted into steel bushings which are molded into the creeper body.
- Resistant to solvents, greases and fuels.
- Dimensions: 38" long x 17-1/2" wide x 4" high, 7/8" floor clearance.

PART NO.	COLOR	PART NO.	COLOR
LS92102	Red	LS94102	Blue

LS92132 Replacement Pop-In Wheel  
LS96412 Replacement Head Rest

## CR406

### 6 Wheel Knock-Out Creeper



- Fixed headrest.
- Padded black tubular powder coated frame.
- Six (6) 2-1/2" casters.
- Sides have been knocked out to allow easy access on both sides.
- Dimensions: 40"L x 18"W x 5.75"H.

CRRSMCC Caster/CR406, CR406ADJ

## CR406ADJ

### 6 Wheel Adjustable Knock-Out Creeper



- Adjustable headrest.
- Padded black tubular powder coated frame.
- Six (6) 2-1/2" casters.
- Sides have been knocked out to allow easy access on both sides.
- Dimensions: 40"L x 18"W x 5.75"H.

CRRSMCC Caster/CR406, CR406ADJ

## CRMTLV6A

### V-Drop™ Creeper - Plywood



- Durable plywood construction is 40% stronger than standard MDF board.
- Designed to maximize strength as well as comfort.
- 3/4" tubular steel frame.
- Powder coat epoxy is used on framework to prevent rusting.
- Fully upholstered blue leatherette pad for maximum comfort.
- Six 2-1/2" casters with extended wheel covers.
- Frame incorporates four supporting cross rails.
- Dimensions: 4-1/2"H x 17"W x 40"L.

CRMTL25BLACK 2-1/2" Black Caster

## CRMTLVMONLO

Monster V-Drop™ Extra Wide Creeper - Plywood



- 40" metal frame creeper is an extra-wide 20".
  - 1" steel tube frame runs the length of the pad for strength.
  - Heavy-duty plywood board.
  - Four 4" oil-resistant rollers with covers.
  - Fully padded with raised headrest.
  - Powder coated to resist rusting.
  - Overall dimensions: 20" x 40".
  - Weight: 24 lbs.
  - Ground clearance: 3/4".
- CRMTLVMON4 4" Black Caster

## CRMTLVADJA

6 Wheel Adjustable Headrest Creeper - Plywood



- Durable plywood construction is 40% stronger than standard MDF board.
  - Six position adjustable headrest.
  - Either hand adjustment.
  - 3/4" steel tubular V-Drop™ frame specifically made for broad shoulders.
  - Powder coated finish.
  - Six 2-1/2" casters with extended wheel covers.
  - Fully covered black leatherette pad.
  - Dimensions: 4-1/2"H x 17"W x 40"L.
- CRMTL25BLACK 2-1/2" Black Caster

## CRRC1000

Racing Creeper



- 45" fully integrated steel framework inside covered with foam and vinyl.
- Six 2-1/2" inline rollers provide smooth maneuverability; polyurethane material.
- Heavy-duty vinyl is easy to clean.
- Seat belt holes make carrying easy.
- Two end caps on the bottom provide protection to the vinyl.
- Ground clearance: 2-3/4"
- Overall dimensions: 21-1/2" x 45".
- Weight: 22 lbs.

CRRC10004 Caster

## RSC1100

Wide Body Creeper



- Huge 5" casters glide even over rough terrain.
- Giant 18" wide deck includes molded orthopedic supports.
- Outriggers drop down to provide low level clearance despite huge casters.
- Black vinyl with Cornwell® logo.

Contact your local Cornwell Dealer for complete details!

## RSC3100

Foldable Topside Creeper



- Patented design reduces stress on back, legs, and knees.
- Slip resistant steps.
- Powder coated steel frame construction for durability.
- Folds for easy storage.
- Three position locking angle adjustment for easier engine compartment access.
- Heavy-duty three inch locking casters helps reduce movement while working above engine.
- Climbing section: 19.5".
- Adjustable from 48" to 64".
- Weight: 72 lbs.
- Working limit: 400 lbs.

Contact your local Cornwell Dealer for complete details!

## CRCCS

Convertible Creeper Seat

- Finger release converts creeper to a seat with one hand.
- Positive lock when in the seat position.
- 3/4" steel tubular frame with a powder coat finish.
- Six 2-1/2" oil resistant wheels.
- Fully padded blue leatherette seat offers great lower back support.
- Seat height: 17".
- Seat pad measures: 10-1/2" x 11".
- Back support measures: 9" x 11".
- Overall dimensions: 40"L x 17"W x 7"D.
- Weight: 28 lbs.

CRMTL25BLACK 2-1/2" Black Caster



Common Service

**CRHRS**

**Deluxe High Rise Creeper Seat**

- Wide black leatherette seat bottom and higher seat provides comfort and back support for sitting extended periods of time.
- Large roller "footprint" for stability.
- 3" common swivel casters.
- Powder coat epoxy framework.
- Replaceable seat.
- Comes fully assembled and includes a magnetic strip in tray for holding small metal parts.
- Seat Height: 16-1/4". Seat Backrest Height: 23-3/4". Seat Width: 18-1/4". Seat Length: 16".

CRHRSI Caster insert  
CRHRS202 3" Black Caster



**CRHRS2A**

**High Rise Creeper Seat - Plywood**

- Durable plywood construction is 40% stronger than standard MDF board.
- Black leatherette seat provides comfort for sitting extended periods of time.
- Large roller "footprint" for stability.
- 3" common swivel casters.
- Powder coat epoxy framework.
- Replaceable seat.
- Comes fully assembled and includes a magnetic strip in tray for holding small metal parts.
- Seat Height: 16". Seat Width: 9". Seat Length: 14". Seat Pan: 15" x 15".

CRHRSI Caster Insert  
CRHRS202 3" Black Caster



**CRSPPA**

**Creeper Seat - Plywood**

- Durable plywood construction is 40% stronger than standard MDF board.
- Heavy duty 1" steel square tubing frame.
- Fully padded blue seat.
- 3 section tool tray.
- Powder coat finish.
- Four 2" oil resistant wheels.
- Shipped fully assembled.
- Dimensions: 14"H x 17-1/2"D x 17-1/2"W.

CRSPP25BLACK 2-1/2" Black Caster



**SM20350**

**Pro Step Adjustable Work Stand**

- Heavy duty 32" x 16" platform with 500 lb. capacity.
- Foam bumpers protect vehicle finish.
- Spring loaded retractable wheels - you can push it with your foot.
- Extra-wide (23") base rails for stability.
- Height adjustable from 6-1/2" to 22-1/2".
- Heavy duty construction.
- Weight: 45 lbs.

SM20353 Replacement Caster



**FW74101175**

**Poly-Cal® Electronic Caliper**

- Inch/Metric/Fraction.
- Polycarbonate frame.
- Large easy-to-read display.
- Absolute/incremental measurement.
- Direct inch/metric/fraction conversion.
- 4 way measuring.
- Range: 6"/150MM.
- Resolution: .0005"/.01MM (fractions by 1/64" increments).
- Accuracy: ±.008".
- Supplied with vinyl pouch.



**FW741011502**

**Electronic Caliper**

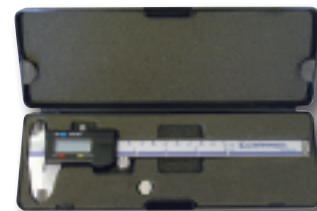
- Accuracy: ±.001/.02MM.
- Range: 6"/150MM.
- Resolution: .0005"/.01MM.
- Direct inch/metric conversion.
- 4-way measurement - inside, outside, depth and step.
- Stainless steel frame.
- Large, easy to read display.
- Includes molded case.



**CEC3C301**

**Electronic Digital Caliper - Large Scale**

- 0-6" / 0-150MM.
- Easy to read digital display reduces errors.
- Thumb wheel for precise control.
- Hardened stainless steel frame.
- Inch / metric conversion at the push of a button.
- Comes in plastic case with extra battery.



Common Service

**CRHDTSA**

**Adjustable Heavy Duty Creeper Seat**

- Extremely comfortable, solid feeling heavy duty creeper seat with tractor style black bucket seat.
- Provides stability and ease of motion with large capacity tool / parts storage area / caster base.
- Seat height adjustable from a low 17" to a high of 21-3/4" by way of an easy to operate air cylinder.
- 5 Casters for easy, solid mobility - 2 locking, 3 non-locking.

CRHDTSLC 3" Locking Caster  
CRHDTSNLC 3" Non-Locking Caster  
CRHDTSS Replacement Seat  
CRRSTSAC Replacement Air Cylinder



**CRHRAS**

**High Rise Adjustable Seat**

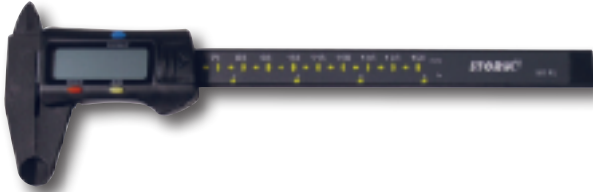
- Adjustable over 5".
- Finger tip adjust mechanism.
- Improved overall seating area.
- Seat swivels 360 degrees.
- Replaceable cover.
- 3" casters.
- Height: 16-1/2" to 21-1/2" Depth: 16-1/2" Width: 18-1/4"

CRHRSI Caster insert  
CRHRS202 3" Black Caster



## CE3C351

### Carbon Fiber Digital Caliper



- Composite material for superior reliability and durability.
- Digital display with decimal inch, decimal metric and fractional readout.
- Push button conversion.
- Range: 6"/150MM with .0005"; .01MM; 1/64" resolution.
- Four measurements: inside, outside, depth and step.
- Large LCD panel for easier reading.
- Two (2) LR44 1.50V batteries included.

## FW72520700

### Anyform and Rotor Combination Kit



- Provides a combination of holding applications.
- Combo kit includes a Disc and Rotor/Ball Joint Gage and the Anyform Magnetic Base.
- Use the vise grip and 12" flex arm to check ball joint wear, brake and rotor runout.
- Attach the flex arm to the Anyform base for magnetically mounting on virtually any metallic surface.
- Indicator features 0-1" travel and .001" graduations.
- Rigid one piece construction and 40 lb. pull.
- Packed in a convenient, shop-hardened case.

## Caliper Gauges



- Features inch/metric/fraction reading.
- Robust housing.
- Large LCD display.
- Reading: .01"/.1MM/1/64ths.
- Accuracy: .01"/.3MM/1/64ths.
- Battery: CR2032 (included).
- Spring loaded with locking nut.

PART NO.	DESCRIPTION	RANGE
FW74554630	Outside Caliper Gauge	0-6"/150MM
FW74554730	Inside Caliper Gauge	0.5-6"/150MM

## CEC3M430

### Electronic Digital Rotor Gage

- Hardened and tempered stainless steel gage.
- Large figures in LCD display for ease of reading.
- Metric or Imperial read-out.
- Zero setting control allows for comparative measurement.
- Supplied in carrying case.



SPECIFICATIONS	
Resolution .....	0.01MM (0.0005 inch)
Range.....	0-150MM (0-6 inch)
Accuracy.....	+ 0.02MM (+ 0.001)
Functions .....	Zero set, MM/inch select
Battery type.....	SR44/LR44/AG13 (1.5V)
Operating temperature .....	0 to +40°C

## FW74150004

### Rotocal® Electronic Rotor Gage with Twin Conical Anvils

- Range: 5.5"/140MM.
- Reads in inch, metric, and fractions.
- Direct inch/metric/fraction conversion.
- Resolution: .0005"/.01MM (fractions in 1/64" increments).
- Water resistant to IP54 standards.
- Dust and oil resistant.
- Conical anvils measure scored surfaces.
- 3.5" jaw depth for larger rotors.
- Includes molded case.



## FW74150006

### Rotocal® Electronic Rotor Gage

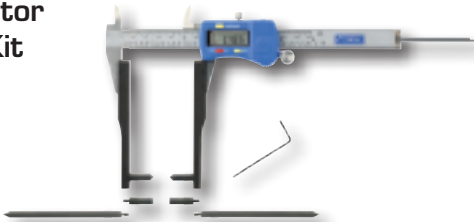
- Range: 0 - 5.5"/140MM.
- Reads in inch, metric, and fractions.
- Direct inch/metric/fraction conversion.
- Resolution: .0005"/.01MM (fractions in 1/64" increments).
- Water resistant to IP54 standards.
- Conical anvil for groove measurement.
- 3.5" jaw depth for larger rotors.
- Includes molded case.



## FW74101777

### Drum and Rotor Measuring Kit

- Measures disc brakes and up to 12" on brake drums.
- Includes a set of clamps, four sets of set screws, one Allen wrench, a set of 3-3/4" contact points, a set of 3/4" cone contact points and a set of 3/4" flat contact points in a plastic tube.
- When measuring brake drums only, add 8" to measurement - allows for long cone and jaw widths.
- For use with 6" and 8" calipers.
- Range: 6".
- Stainless steel frame, large easy to read display, .0005" resolution, direct inch/metric conversion, 4-way measurement.
- Includes molded case.



## FW72520757

### Economy Disc Rotor/ Ball Joint Gage Set

- Checks ball joint wear and disc rotor runout.
- Meets requirements of all state inspection stations.
- All purpose gage can also be used to check tire and wheel runout, gear backlash, valve guide and camshaft wear.
- Indicator features 0-1" travel and .001" graduations.
- Flexarm can be rigidly locked in any position up to 12".
- Includes shop-hardened case.



Common Service

## MEASURING TOOLS

### FW72641300

#### Flex Arm Base and Dial Indicator Combo

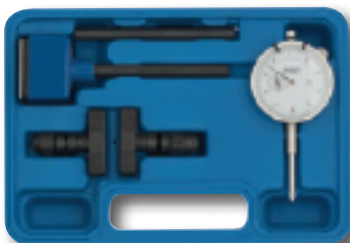
- Multipurpose tool with 12-1/2" flexible arm which can be set in any desired plane, great for precision measurements on engines.
- Base features an 85 lb. pull, On-Off lever release mechanism and V-base for placing on round surfaces.
- 2-1/4" white face dial indicator measures has 1" travel reading in .001" graduations.
- Indicator has revolution counter and tolerance indicators.
- Includes: gage, contact tip, locking flexible arm and on/off magnetic base.
- Furnished in fitted case.



### FW72522101

#### Magnetic Base and Dial Indicator Set

- Includes 1" indicator and magnetic base, plus rods, swivel clamp and case.
- The 2-1/4" diameter .001" indicator features satin chrome finish, tolerance hands, lug back and revolution counter.
- 6" magnetic base features a 1.5" x 1.5" x 1.75" 50 lb. pull base and 4.5" long sidearm.
- All exposed metal is finished in anodized black for corrosion resistance.
- Includes shop-hardened case.



### CE3D101

#### 0-1" Dial Indicator Set

- For precise direct measurements.
- Powerful compact magnetic base.
- Furnished in fitted case.
- Range: 0-1" • Graduations: .001"



### FW72585155

#### X-Proof® Water Resistant Indicator Set

- Dust, water and oil resistant.
- Magnetic base features fine adjustment, 85 lb. pull, on-off lever release magnet, V-base for placing on round surfaces and has a base dimensions of 2" x 2-11/32" x 1-13/16".
- Base also mounts test indicators with 1/4" post.
- X-Proof® Indicator offers 1" Travel, .001" reading, 0-100 Continuous reading, tolerance markers, AGD Group 2, 2-1/4" diameter, lugback and carbide point, a robust, shockproof design, rubber bellows on stem, O-ring seal on safety cap, O-ring protection for bezel and rotating dial, and a sealed back plate.



### CE3M201

#### Digital Micrometer 0-1"

- 0-1" Range.
- .0001" graduations.
- Easy to read mechanical digital display.
- Comes in plastic case.
- Carbide measuring face.



### FW72646400

#### Cylinder Bore Gage Set

- Carbide anvils.
- Easy-to-read.
- Economical.
- Chrome plated handle.
- Easily adjustable.
- Insulated grip.
- Includes extension holder and fitted case.
- Range: 1.4 - 6"; Graduations: .0005".



### CE6554

#### 6 Piece Telescoping Gage Set

- Self centering, heavy duty.
- Checks slots, grooves, recesses, cylinders.
- Handles are up to 5-1/2" long.
- Satin chrome finish.
- Both contacts release or lock by turning knob at end of handle.
- Read measurement with micrometer.
- Set consists of the following gages (ranges): 4349 (5/16" - 1/2"), 4350 (1/2" - 3/4"), 4351 (3/4" - 1-1/4"), 4352 (1-1/4" - 2-1/8"), 4353 (2-1/8" - 3-1/2"), and 4354 (3-1/2" - 6").



#### 6" Flexible Pocket Rules



- Top quality stainless steel, precision ground and tempered, clear etched graduations.
- Spring pocket clip.

PART NO.	GRADUATIONS	PART NO.	GRADUATIONS
CE6514	32nds & 64ths	CE6515	64ths & 1MM

### CTG3TMSA

#### 3 Piece Tape Measure Set

- SAE and Metric graduations.
- Quick read design for easy reading of fractions.
- Cushioned case for non-slip grip and protection when dropped.
- Easy to use Lock/Unlock button.
- Two (2) buttons allow user to easily hold blade in place.



Set consists of the following:

PART NO.	DESCRIPTION
CTG12TMA	5/8" x 12 ft. M/E Tape Measure
CTG16TMA	3/4" x 16 ft. M/E Tape Measure
CTG25TMA	1" x 25 ft. M/E Tape Measure

### FW744224501

#### Mini-Mag Protractor

- Provides instant 360° digital inclination display of any angle with the unique feature of embedded magnets on both sides and the bottom which makes it ideal for a variety of measurements.
- Embedded magnets have 35 lb. pull.
- Uses standard 9V battery (250 hrs.).
- Measuring range: 360° (4 x 90°).
- Display inverts.
- Resolution: .05°.
- Accuracy: ±2°.
- Repeatability: .05°.
- Hold feature.



- Dimensions: 2.375"L x 1.375"W x 2.375"H.



## FW72483888

Universal  
Deburring,  
Cleaning and  
Countersink  
Set



- A complete kit for the Auto Repair Professional.
- Set Includes: universal handle, (2) adapters, (2) deburring blades, countersink for 20MM/.47" diameter, countersink for 30MM/1.18" diameter, (4) cleaner blades, for sheet metal, small ridges, relieving corners and for narrow slots.
- Comes in a compact molded case.

## FW72483777

4 Piece Deburring  
Cutter Set

- Colored sleeves rotate to lock and unlock blades for easy changing.
- Unique rounded head blades for safe deburring of drilled and machined holes, end milled areas, tubing, backside of holes and many other uses.
- Curved blades swivel freely to automatically follow shapes, contours and holes.
- Color coded for use: Yellow for plastic, Blue for steel, Red for brass, and Green for aluminum.



### Self Aligning Tap and Die Sets

- No more set-screw needed, simply twist to insert and remove die.
- Ergonomic handles for more control and comfort when threading.
- Drive with dies stock, 3/8" ratchet or T-Handle included.
- Drive with adjustable jaw.
- Die adapter accommodates standard 1" hex dies.
- Self aligning taps and dies start and thread straight every time.
- Additional strength - more steel at critical points.

## ATC4935355

SAE and Metric Self Aligning Tap and Die Set

Consists of the following five (5) sets:

PART NO.	DESCRIPTION
ATC4935055	Perf. Thread. Sys. Drive Tool Module
ATC4935058	SAE Die Set - No. 4 to 1/2" w/NC & NF thread pitches
ATC4935059	Met. Die Set - 3MM to 12MM w/Coarse & Fine thread pitches
ATC4935352	SAE Tap Set - No. 4 to 1/2" with NC & NF thread pitches
ATC4935353	Met. Tap Set - 3MM to 12MM with Coarse & Fine thread pitches



## ATC4935356

SAE Self Aligning Tap and Die Set

Consists of the following three (3) sets:

PART NO.	DESCRIPTION
ATC4935055	Perf. Thread. Sys. Drive Tool Module
ATC4935058	SAE Die Set - No. 4 to 1/2" w/NC & NF thread pitches
ATC4935352	SAE Tap Set - No. 4 to 1/2" with NC & NF thread pitches



## ATC4935357

Metric Self Aligning Tap and Die Set

Consists of the following three (3) sets:

PART NO.	DESCRIPTION
ATC4935055	Perf. Thread. Sys. Drive Tool Module
ATC4935059	Met. Die Set - 3MM to 12MM w/Coarse & Fine thread pitches
ATC4935353	Met. Tap Set - 3MM to 12MM with Coarse & Fine thread pitches



Common  
Service

# ATC4935055

## Performance Threading System Drive Tools Module



Module contains the following:

PART NO.	DESCRIPTION
ATC4935052	Tap Driver – Small: Adj. Tap Socket drives taps sizes NO. 4 (3MM) TO 1/4" (6MM)
ATC4935053	Tap Driver – Medium: Adj. Tap Socket drives taps sizes 1/4" (3MM) TO 1/2" (12MM)
ATC4935054	Die Stock: Drives 1" Hex Dies with and without alignment feature, accepts small and medium adj. tap socket to drive taps
ATC11018ZR	SAE Pitch Gauge
ATC1775311	Die Spacer Bulk, Hex
ATC1775312	T-Bar for adj. tap socket Bulk
VG11016ZR	Metric Pitch Gauge

- No more set-screw needed, simply twist to insert and remove die.
- Ergonomic handles for more control and comfort when threading.
- Drive with die stock, 3/8" ratchet or T-handle included.
- Drive with adjustable jaw.
- Die adapter accommodates standard 1" hex dies.

### Self Aligning Tap Modules



### Self Aligning Die Modules



- Self-aligning taps start and thread straight every time.
- Chip breaking technology cuts chips easier.
- Self-aligning dies start and thread straight every time.
- Additional strength - more steel at critical points.

PART NO.	DESCRIPTION
ATC4935352	SAE Set - No. 4 to 1/2" with NC & NF thread pitches
Set contains the following SAE taps:	
ATC4935222	4-40NC ALIGN
ATC4935223	6-32NC ALIGN
ATC4935224	8-32NC ALIGN
ATC4935225	10-24NC ALIGN
ATC4935226	10-32NF ALIGN
ATC4935227	12-24NC ALIGN
ATC4935228	1/4"-20NC ALIGN
ATC4935229	1/4"-28NF ALIGN
ATC4935230	5/16"-18NC ALIGN
ATC4935231	5/16"-24NF ALIGN
ATC4935232	3/8"-16NC ALIGN
ATC4935233	3/8"-24NF ALIGN
ATC4935234	7/16"-14NC ALIGN
ATC4935235	7/16"-20NF ALIGN
ATC4935236	1/2"-13NC ALIGN
ATC4935237	1/2"-20NF ALIGN
VG1902ZR	1/8"-27NPT TAPER
ATC4935353	Metric Set - 3MM-12MM w/Coarse & Fine thread pitches
Set contains the following Metric taps:	
ATC4935238	3MM - .50 ALIGN
ATC4935239	4MM - .70 ALIGN
ATC4935240	4MM - .75 ALIGN
ATC4935241	5MM - .80 ALIGN
ATC4935242	5MM - .90 ALIGN
ATC4935243	6MM - 1.00 ALIGN
ATC4935244	7MM - 1.00 ALIGN
ATC4935245	8MM - 1.00 ALIGN
ATC4935246	8MM - 1.25 ALIGN
ATC4935247	9MM - 1.00 ALIGN
ATC4935248	9MM - 1.25 ALIGN
ATC4935249	10MM - 1.25 ALIGN
ATC4935250	10MM - 1.50 ALIGN
ATC4935251	11MM - 1.50 ALIGN
ATC4935252	12MM - 1.25 ALIGN
ATC4935253	12MM - 1.75 ALIGN
ATC1911ZR	1/8"-28 BSP PIPE

PART NO.	DESCRIPTION
ATC4935058	SAE Set - No. 4 to 1/2" with NC & NF thread pitches
Set contains the following SAE 1" Hex dies:	
ATC4935018	4-40NC
ATC4935019	6-32NC
ATC4935020	8-32NC
ATC4935021	10-24NC
ATC4935022	10-32NF
ATC4935023	12-24NC
ATC4935024	1/4"-20NC
ATC4935025	1/4"-28NF
ATC4935026	5/16"-18NC
ATC4935027	5/16"-24NF
ATC4935028	3/8"-16NC
ATC4935029	3/8"-24NF
ATC4935030	7/16"-14NC
ATC4935031	7/16"-20NF
ATC4935032	1/2"-13NC
ATC4935033	1/2"-20NF
VG6702	1/8"-27 NPT 1 SH HANSON
ATC4935059	Metric Set - 3MM-12MM w/Coarse & Fine thread pitches
Set contains the following Metric 1" Hex dies:	
ATC4935035	3MM - .50
ATC4935036	4MM - .70
ATC4935037	4MM - .75
ATC4935038	5MM - .80
ATC4935039	5MM - .90
ATC4935040	6MM - 1.00
ATC4935041	7MM - 1.00
ATC4935042	8MM - 1.00
ATC4935043	8MM - 1.25
ATC4935044	9MM - 1.00
ATC4935045	9MM - 1.25
ATC4935046	10MM - 1.25
ATC4935047	10MM - 1.50
ATC4935048	11MM - 1.50
ATC4935049	12MM - 1.25
ATC4935050	12MM - 1.75
VG6711	1/8"-28 BSP 1 SH HANSON

Common Service

## VG1813816

### 75 Piece SAE/Metric Tap and Die Set

- Includes: Performance threading drive tools, plug-style machine screw, fractional, metric and pipe taps, 1" hex dies in sizes: #4 to 1/2".



## VG1813817

### 116 Piece Machine Screw Metric/ Fractional Tap and Die Set

- Includes: Performance threading drive tools, plug-style machine screw, fractional, metric and pipe taps, 1" hex dies in sizes: #4 to 1/2", and a 41 piece drill bit/screw extractor set.



PART NO. [TAP]	PART NO. [DIE]	SIZE
VG1112ZR	VG6412ZR	4-40 NC
VG1118	VG6418	6-32 NC
VG1124	VG6424	8-32 NC
VG1128ZR	VG6428	10-24 NC
VG1131	VG6431	10-32 NF
VG1132	VG6432ZR	12-24 NC
VG1420	VG6520ZR	1/4-20 NC
VG1423ZR	VG6523ZR	1/4-28 NF
VG1427	VG6527	5/16-18 NC
VG1429ZR	VG6529	5/16-24 NF
VG1434ZR	VG6534ZR	3/8-16 NC
VG1436	VG6536	3/8-24 NF
VG1439ZR	VG6539	7/16-14 NC
VG1440	VG6540	7/16-20 NF
VG1444ZR	VG6544	1/2-13 NC
VG1445	VG6545	1/2-20 NF
VG1902ZR	VG6702	1/8-27 NPT
VG1911ZR	VG6711	1/8-28 BSP
VG1712ZR	VG6612ZR	3MM x 0.50
VG1717ZR	VG6617	4MM x 0.70
VG1718ZR	VG6618	4MM x 0.75
VG1722ZR	VG6622	5MM x 0.80
VG1723ZR	VG6623	5MM x 0.90
VG1727	VG6627	6MM x 1.00
VG1731ZR	VG6631	7MM x 1.00
VG1733ZR	VG6633ZR	8MM x 1.00
VG1734ZR	VG6634	8MM x 1.25
VG1736	VG6636	9MM x 1.00
VG1737	VG6637	9MM x 1.25
VG1739	VG6639	10MM x 1.25
VG1740ZR	VG6640	10MM x 1.50
VG1741ZR	VG6641	11MM x 1.50
VG1743ZR	VG6642ZR	12MM x 1.50
VG1744ZR	VG6644	12MM x 1.75
PART NO.	DESCRIPTION	
VG4935054	Die Stock for 1" Hexagon Dies	
ATC1775311	Die Spacer for 1" Dies	
ATC4935052	Tap Wrench for tap sizes No. 4 through 1/4"	
ATC4935053	Tap Wrench for tap sizes 1/4" through 1/2"	
ATC1775312	T-handle Tap Wrench	
ATC11018ZR	Thread Gauge 18-leaf standard	
VG11016ZR	Thread Gauge 16-leaf metric	

PART NO. [TAP]	PART NO. [DIE]	SIZE
VG1112ZR	VG6412ZR	4-40 NC
VG1118	VG6418	6-32 NC
VG1124	VG6424	8-32 NC
VG1128ZR	VG6428	10-24 NC
VG1131	VG6431	10-32 NF
VG1132	VG6432ZR	12-24 NC
VG1420	VG6520ZR	1/4-20 NC
VG1423ZR	VG6523ZR	1/4-28 NF
VG1427	VG6527	5/16-18 NC
VG1429ZR	VG6529	5/16-24 NF
VG1434ZR	VG6534ZR	3/8-16 NC
VG1436	VG6536	3/8-24 NF
VG1439ZR	VG6539	7/16-14 NC
VG1440	VG6540	7/16-20 NF
VG1444ZR	VG6544	1/2-13 NC
VG1445	VG6545	1/2-20 NF
VG1902ZR	VG6702	1/8-27 NPT
VG1911ZR	VG6711	1/8-28 BSP
VG1712ZR	VG6612ZR	3MM x 0.50
VG1717ZR	VG6617	4MM x 0.70
VG1718ZR	VG6618	4MM x 0.75
VG1722ZR	VG6622	5MM x 0.80
VG1723ZR	VG6623	5MM x 0.90
VG1727	VG6627	6MM x 1.00
VG1731ZR	VG6631	7MM x 1.00
VG1733ZR	VG6633ZR	8MM x 1.00
VG1734ZR	VG6634	8MM x 1.25
VG1736	VG6636	9MM x 1.00
VG1737	VG6637	9MM x 1.25
VG1739	VG6639	10MM x 1.25
VG1740ZR	VG6640	10MM x 1.50
VG1741ZR	VG6641	11MM x 1.50
VG1743ZR	VG6642ZR	12MM x 1.50
VG1744ZR	VG6644	12MM x 1.75
PART NO.	DESCRIPTION	
VG4935054	Die Stock for 1" Hexagon Dies	
ATC1775311	Die Spacer for 1" Dies	
ATC4935052	Tap Wrench for tap sizes No. 4 through 1/4"	
ATC4935053	Tap Wrench for tap sizes 1/4" through 1/2"	
ATC1775312	T-handle Tap Wrench	
ATC11018ZR	Thread Gauge 18-leaf standard	
VG11016ZR	Thread Gauge 16-leaf metric	
ATC26377POUCH	41 Piece Drill Bit/Screw Extractor Set	

Common  
Service

## TAP AND DIE SETS

### VG1835091

#### 40 Piece Fractional Tap and Die Set

- Includes: Performance threading drive tools, plug-style machine screw, fractional, and pipe taps, 1" hex dies in sizes: #4 to 1/2".



### VG1835092

#### 40 Piece Metric Tap and Die Set

- Includes: Performance threading drive tools, plug-style machine screw, metric and pipe taps, 1" hex dies in sizes: #4 to 1/2".



PART NO. (TAP)	PART NO. (DIE)	SIZE
VG1112ZR	VG6412ZR	4-40 NC
VG1118	VG6418	6-32 NC
VG1124	VG6424	8-32 NC
VG1128ZR	VG6428	10-24 NC
VG1131	VG6431	10-32 NF
VG1132	VG6432ZR	12-24 NC
VG1420	VG6520ZR	1/4-20 NC
VG1423ZR	VG6523ZR	1/4-28 NF
VG1427	VG6527	5/16-18 NC
VG1429ZR	VG6529	5/16-24 NF
VG1434ZR	VG6534ZR	3/8-16 NC
VG1436	VG6536	3/8-24 NF
VG1439ZR	VG6539	7/16-14 NC
VG1440	VG6540	7/16-20 NF
VG1444ZR	VG6544	1/2-13 NC
VG1445	VG6545	1/2-20 NF
VG1902ZR	VG6702	1/8-27 NPT
PART NO.	DESCRIPTION	
VG4935054	Die Stock for 1" Hexagon Dies	
ATC1775311	Die Spacer for 1" Dies	
ATC4935052	Tap Wrench for tap sizes No. 4 through 1/4"	
ATC4935053	Tap Wrench for tap sizes 1/4" through 1/2"	
ATC1775312	T-handle Tap Wrench	
ATC11018ZR	Thread Gauge 18-leaf standard	

PART NO. (TAP)	PART NO. (DIE)	SIZE
VG1712ZR	VG6612ZR	3MM x 0.50
VG1717ZR	VG6617	4MM x 0.70
VG1718ZR	VG6618	4MM x 0.75
VG1722ZR	VG6622	5MM x 0.80
VG1723ZR	VG6623	5MM x 0.90
VG1727	VG6627	6MM x 1.00
VG1731ZR	VG6631	7MM x 1.00
VG1733ZR	VG6633ZR	8MM x 1.00
VG1734ZR	VG6634	8MM x 1.25
VG1736	VG6636	9MM x 1.00
VG1737	VG6637	9MM x 1.25
VG1739	VG6639	10MM x 1.25
VG1740ZR	VG6640	10MM x 1.50
VG1741ZR	VG6641	11MM x 1.50
VG1743ZR	VG6642ZR	12MM x 1.50
VG1744ZR	VG6644	12MM x 1.75
VG1911ZR	VG6711	1/8-28 BSP
PART NO.	DESCRIPTION	
VG4935054	Die Stock for 1" Hexagon Dies	
ATC1775311	Die Spacer for 1" Dies	
ATC4935052	Tap Wrench for tap sizes No. 4 through 1/4"	
ATC4935053	Tap Wrench for tap sizes 1/4" through 1/2"	
ATC1775312	T-handle Tap Wrench	
VG11016ZR	Thread Gauge 16-leaf metric	

Common Service

### VA21741

#### 75 Piece Fractional and Metric Master Tap and Die Set



- Seventy-five piece fractional and metric tap and die set.
- Taps and dies are tooled to exacting specifications to ensure that bolts fit tightly and anchor securely.
- Taps are rust and tarnish resistant for greater durability and more accurate fitting.
- Components are furnished in plastic case that includes the following:

PART NO.	DESCRIPTION
VA21901	Tap Wrench for Tap sizes No. 4 through 1/2"
VA21906	T-handle Tap Wrench for tap sizes No. 0 through 1/4"
VA21907	T-handle Tap Wrench for tap sizes 1/4" through 1/2"
VA21922	Die Stock for 1" Round or Hexagon Dies
VA21938	Thread Gauge - metric thread counts .45MM to 2.50MM
VA21939	Thread Gauge for 10 to 40 US threads
—	No. 5 Screwdriver

PART NO. (TAP)	PART NO. (DIE)	DESCRIPTION	PART NO. (TAP)	PART NO. (DIE)	DESCRIPTION	PART NO. (TAP)	PART NO. (DIE)	DESCRIPTION
VA20058	VA20758	4-40 NC	VA20071	VA20771	5/16-24 NF	VA21129	VA21229	6MM x 1.00
VA20060	VA20760	6-32 NC	VA20023	VA20773	3/8-24 NF	VA21131	VA21231	7MM x 1.00
VA20061	VA20761	8-32 NC	VA20025	VA20775	7/16-20 NF	VA21135	VA21235	8MM x 1.25
VA20062	VA20762	10-24 NC	VA20027	VA20777	1/2-20 NF	VA21138	VA21238	9MM x 1.00
VA20064	VA20764	12-24 NC	VA20351	VA20798	1/8-27 NPT	VA21139	VA21239	9MM x 1.25
VA20018	VA20768	1/4-20 NC	VA21112	VA21212	3MM x 0.50	VA21141	VA21241	10MM x 1.25
VA20020	VA20770	5/16-18 NC	VA21113	VA21213	3MM x 0.60	VA21142	VA21242	10MM x 1.50
VA20022	VA20772	3/8-16 NC	VA21117	VA21217	4MM x 0.70	VA21144	VA21244	11MM x 1.50
VA20074	VA20774	7/16-14 NC	VA21118	VA21218	4MM x 0.75	VA21147	VA21247	12MM x 1.50
VA20026	VA20776	1/2-13 NC	VA21123	VA21223	5MM x 0.80	VA21148	VA21248	12MM x 1.75
VA20063	VA20763	10-32 NF	VA21124	VA21224	5MM x 0.90	VA21181	VA21281	1/8-28 BSP
VA20069	VA20769	1/4-28 NF						

## VA21729

### 40 Piece Super Mechanic's Tap and Die Set

• Forty piece tap and die set in plastic case that includes the following:



PART NO. (TAP)	PART NO. (DIE)	SIZE	PART NO. (TAP)	PART NO. (DIE)	SIZE
VA20058	VA20758	4-40 NC	VA20026	VA20776	1/2-13 NC
VA20060	VA20760	6-32 NC	VA20063	VA20763	10-32 NF
VA20061	VA20761	8-32 NC	VA20069	VA20769	1/4-28 NF
VA20062	VA20762	10-24 NC	VA20071	VA20771	5/16-24 NF
VA20064	VA20764	12-24 NC	VA20023	VA20773	3/8-24 NF
VA20018	VA20768	1/4-20 NC	VA20025	VA20775	7/16-20 NF
VA20020	VA20770	5/16-18 NC	VA20027	VA20777	1/2-20 NF
VA20022	VA20772	3/8-16 NC	VA20351	VA20798	1/8-27 NPT
VA20074	VA20774	7/16-14 NC			

PART NO.	DESCRIPTION
VA21922	Die Stock for 1" Round or Hexagon Dies
VA21901	Tap Wrench for Tap sizes No. 4 through 1/2"
VA21906	T-handle Tap Wrench for tap sizes No. 0 through 1/4"
VA21907	T-handle Tap Wrench for tap sizes 1/4" through 1/2"
VA21939	Thread Gauge for 10 to 40 US threads
—	No. 5 Screwdriver

## VA21749

### 40 Piece Metric Super Mechanic's Tap and Die Set

• Forty piece metric tap and die set in plastic case that includes the following:



PART NO. (TAP)	PART NO. (DIE)	SIZE	PART NO. (TAP)	PART NO. (DIE)	SIZE
VA21112	VA21212	3MM x 0.50	VA21138	VA21238	9MM x 1.00
VA21113	VA21213	3MM x 0.60	VA21139	VA21239	9MM x 1.25
VA21117	VA21217	4MM x 0.70	VA21141	VA21241	10MM x 1.25
VA21118	VA21218	4MM x 0.75	VA21142	VA21242	10MM x 1.50
VA21123	VA21223	5MM x 0.80	VA21144	VA21244	11MM x 1.50
VA21124	VA21224	5MM x 0.90	VA21147	VA21247	12MM x 1.50
VA21129	VA21229	6MM x 1.00	VA21148	VA21248	12MM x 1.75
VA21131	VA21231	7MM x 1.00	VA21181	VA21281	1/8-28 BSP
VA21135	VA21235	8MM x 1.25			

PART NO.	DESCRIPTION
VA21901	Tap Wrench for Tap sizes No. 4 through 1/2"
VA21906	T-handle Tap Wrench for tap sizes No. 0 through 1/4"
VA21907	T-handle Tap Wrench for tap sizes 1/4" through 1/2"
VA21922	Die Stock for 1" Round or Hexagon Dies
VA21938	Thread Gauge - metric thread counts .45MM to 2.50MM
—	No. 5 Screwdriver

## WX18001

### Tap Extractors Set

• Remove broken taps and save the threads! • Remove broken taps without drilling, lasers, damaged threads, scrapped parts or repair inserts. • The hardened steel fingers fit in the flutes of a broken tap to back it out simply and safely. This effective method has been used since 1908. • Available in a handy set or individual pieces. • Will fit both NC and NF taps. • Used in a wide range of industries. • Set includes one each 3/16", 1/4", 5/16", 3/8", 7/16" and 1/2" tap extractors.



- WX12104 3/16" Replacement Fingers (12)
- WX12254 1/4" Replacement Fingers (12)
- WX12314 5/16" Replacement Fingers (12)
- WX12374 3/8" Replacement Fingers (12)
- WX12434 7/16" Replacement Fingers (12)
- WX12504 1/2" Replacement Fingers (12)

## RB2599

### 20 Piece Spindle Thread Restorer Die Set

• Will repair or renew damaged threads on stub axles/spindles on most vehicles. • Dies are made from high-tempered steel for strength and durability. • Packaged in plastic blow-molded case for protection and easy use.



Set includes the following sizes:

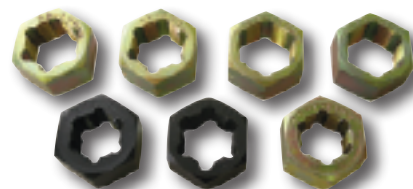
PART NO.	SIZE	PART NO.	SIZE
RB542671	11/16"-24	RB542692	M19-1.50
RB542696	3/4"-16	RB542693	M20-1.00
RB542676	3/4"-20	RB542673	M20-1.25
RB542688	27/32"-20	RB542678	M20-1.50
RB542677	13/16"-20	RB542674	M22-1.00
RB542697	7/8"-14	RB542679	M22-1.50
RB542698	1"-14	RB542675	M24-1.50
RB542689	M16-1.00	RB542680	M24-2.00
RB542690	M16-1.50	RB542681	M25-1.50
RB542691	M18-1.50	RB542682	M27-2.00

Common Service

## JA52

### 7 Piece Spindle and Axle Die Rethreader Set

• Designed not to cut a new thread but to chase out mushroomed, corroded, rusted threads. • Creates a fit just like new with no undercut. • All dies use same wrench for 1-1/2" hex. Set consists of the following in a plastic pouch:



PART NO.	SIZE	PART NO.	SIZE
JA7520	3/4"-20	JAMD22C	22 x 1.5MM
JAB120	13/16"-20	JAMD24C	24 x 1.5MM
JAMD20C	20 x 1.5MM	JAMD24E	24 x 2MM
JAMD22A	22 x 1MM		

# JA2053

## 53 Piece Universal Rethreading Set

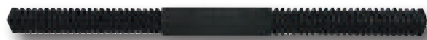
- Designed never to undercut or damage existing threads.
- For long life, always oil cutting edges of the tool before each use.
- Do not use on hardened threads or to cut new threads.
- All taps and dies are color coded: Silver - NC-USS Coarse, Black - NF-SAE Fine, Gold - Metric.



TAPS AND DIES		
SILVER (NC-USS)		
TAPS	DIES	SIZE
JATC1	JA1/4CD	1/4"-20
JATC2	JA5/16CD	5/16"-18
JATC3	JA3/8CD	3/8"-16
JATC4	JA7/16CD	7/16"-14
JATC5	JA1/2CD	1/2"-13
JATC6	JA9/16CD	9/16"-12
	JA5/8CD	5/8"-11
BLACK (NF-SAE)		
JATF1	JA1/4FD	1/4"-28
JATF2	JA5/16FD	5/16"-24
JATF3	JA3/8FD	3/8"-24
JATF4	JA7/16FD	7/16"-20
JATF5	JA1/2FD	1/2"-20
JATF6	JA9/16FD	9/16"-18
	JA5/8FD	5/8"-18
GOLD (METRIC)		
JAMT6A	JAMD6A	6 x 1.00MM
	JAMD6B	6 x 1.25MM
	JAMD7A	7 x 1.00MM
	JAMD8A	8 x 1.00MM
JAMT8B	JAMD8B	8 x 1.25MM
JAMT8C	JAMD8C	8 x 1.50MM
JAMT10A	JAMD10A	10 x 1.00MM
JAMT10B	JAMD10B	10 x 1.25MM
JAMT10C	JAMD10C	10 x 1.50MM
JAMT11C	JAMD11C	11 x 1.50MM
JAMT12B	JAMD12B	12 x 1.25MM
JAMT12C	JAMD12C	12 x 1.50MM
JAMT12D	JAMD12D	12 x 1.75MM
JAMT14C	JAMD14C	14 x 1.50MM
JA1	Nu-Thred® File 11-24 tpi with JA12 handle	
JAB	Metric Nu-Thred® File 0.80-3.00 Pitch with JA12 handle	

JA12 Plastic Handle

### Thread Files



- High quality files with cross-cut and depth proportional to thread pitch; will not skip or jump out of fine pitches.
- Renew damaged external threads of any diameter, right or left-hand.
- Eight (8) pitches; 7/16" Sq. x 8-1/2" long, 6 oz.

PART NO.	PITCHES (TPI)
JA1	11, 12, 13, 14, 16, 18, 20 & 24
JA2	9, 10, 12, 16, 20, 27, 28 & 32
JAB	0.75, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50 & 3.00MM

# AENES1015

## Combination Thread Repair Set

- Replace a huge array of taps and dies for cheaper, faster maintenance.
- One hand tool restores Inch or Metric, right hand or left hand fastener threads.
- Self adjusting to any pitch and size within range.
- No need for calibration or identifying fastener thread type.
- Automatically chases good thread sections to repair the damaged parts.
- External Range: 5/32" - 11/16".
- Internal Range: 5/16" - 5/8".
- Hardened cutting blades (HSS).
- Removes rust and burrs.
- Yellow nylon pads avoid marring softer metals or plastics.



Set includes the following:

PART NO.	DESCRIPTION	RANGE
AENES1A	External Thread Repair	5/32"-3/4"
AENES21	Internal Thread Repair	5/16"-7/16"
AENES22	Internal Thread Repair	1/2"-5/8"

# AENES01044

## 3 Piece ThreadMate™ Set

- External Range: 5/32" - 1/2".
- Internal Range: #12 - 5/16".
- Quality hand tool designed to repair and restore damaged external threads.
- For household repairs, cars, bikes, pipes, lawnmowers, heating and ventilation equipment.
- Will handle threads of any diameter, pitch, Metric or non-Metric.
- Left hand or right hand.
- Easy and simple to use.
- No thread knowledge required.
- No prior calibration required.



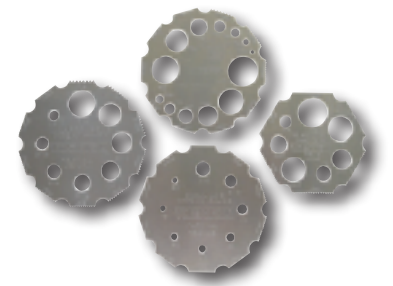
Set includes the following:

PART NO.	DESCRIPTION	RANGE
AENES06040	External ThreadMate™	5/32" - 1/2"
AENESTM20	Internal ThreadMate™	#12 - 5/16"
AENESTM21	Internal ThreadMate™	5/16" - 1/2"

# TH432

## Universal Thread Gauges

- Identifies bolts, fittings, pipe threads and spark plugs with US or metric threads.
- Aluminum gauges identify: US threads from #5 to 3/4" and pitch of 10TPI to 44TPI; Metric threads from 2.5 to 22MM and pitch of .45 to 2.5MM; Pipe threads 1/16" to 1/2" with 14TPI to 27TPI; and Spark plug threads 10 to 18MM.



**WARNING!**

*Wear safety goggles. Drilling pilot holes, inserting extractors and using extractors can cause flying chips. Extractors can break if overloaded.*

Common Service

**Stud Remover/Installer Sets**

- Designed to reach studs in difficult work areas.
- High polish, chrome plated finish for corrosion protection.
- Heavy duty blow molded box.

**CBS4SRIS**  
4 Piece Fractional Stud Remover/Installer Set



Set consists of:

PART NO.	DESCRIPTION
CBSRSR142	1/4" Stud Remover - 3/8" Dr.
CBSRSR162	5/16" Stud Remover - 3/8" Dr.
CBSRSR383	3/8" Stud Remover - 1/2" Dr.
CBSRSR7163	7/16" Stud Remover - 1/2" Dr.

**CBS4MSRIS**  
4 Piece Metric Stud Remover/Installer Set



Set consists of:

PART NO.	DESCRIPTION
CBSMSR162	6MM Stud Remover - 3/8" Dr.
CBSMSR182	8MM Stud Remover - 3/8" Dr.
CBSMSR103	10MM Stud Remover - 1/2" Dr.
CBSMSR123	12MM Stud Remover - 1/2" Dr.

**LS19250**  
6 Piece Bolt, Nut, and Stud Remover Set

- Removes standard and metric bolts, nuts, and studs from 1/4" to 9/16" (6MM to 14MM).
- To use, drive the proper size remover over the bolt head, nut, or stud. The remover spine cuts into the bolt head or threads for a sure grip.



Set consists of one of each of the following:

PART NO.	DESCRIPTION	NOMINAL
LS19260	Remover #1	1/4" (6MM)
LS19270	Remover #2	5/16" (8MM)
LS19280	Remover #3	3/8" (10MM)
LS19290	Remover #4	7/16" (11MM)
LS19300	Remover #5	1/2" (13MM)
LS19310	Remover #6	9/16" (14MM)

**MH29895**  
Stud Extractor

- Will remove rusted, broken, smooth, threaded and stripped studs.
- Adjustable to fit studs from 1/4" to 1/2" and 6MM to 12MM.
- Can be used to insert studs.
- Works with a 3/8" impact wrench. The impact wrench can be inserted directly into the stud extractor.



**LS71200**

**Stud Remover**

- Removes studs from engine blocks, exhaust manifolds, cylinder heads and other applications.
- Allows for easy removal of studs.
- Tool has two holes, 1/2" (14MM) and 3/4" (19MM) for optimum fit, minimizing damage to threads.
- Range: 3/8" (10MM) - 3/4" (19MM).
- Design allows tool to grip flush with mounting surface of the stud so it can grab studs that are broken off very close to the mounting surface.
- Use with 1/2" square drive.



**LS62900**

**Super Out Set**

- Super strong extractor set made of a special hardened, shock-resistant tool steel.
- Works on both left and right hand threads.
- Cut straight into bolts, eliminating wedging or further tightening of frozen bolts and screws.



Set consists of the following:

PART NO.	BOLT SIZE	DRILL SIZE	PART NO.	BOLT SIZE	DRILL SIZE
LS62560	1/4"	1/8"	LS62580	7/16"	9/32"
LS62570	5/16"	11/64"	LS62590	1/2"	3/8"
LS62730	3/8"	15/64"			

**LTH4600**

**13 Piece 3/8" Drive Twist Socket Kit**



- Easily removes damaged nuts, studs, pipe nipples and bolts.
- Comes mounted on a 3/8" rail.

Set consists of the following twist sockets:

PART NO.	SIZE	PART NO.	SIZE
LTH4510	10MM	LTH4517	17MM
LTH4511	11MM, 7/16"	LTH4519	19MM, 3/4"
LTH4512	12MM	LTH4620	3/8"
LTH4513	13MM	LTH4621	1/2"
LTH4514	14MM	LTH4622	9/16"
LTH4515	15MM	LTH4623	11/16"
LTH4516	16MM, 5/8"		

**LTHLT4700**

**13 Piece Deep Twist Socket Set**



- 3/8" Drive.
- Easily removes damaged nuts, studs, pipe nipples and bolts.
- Ideal for times when a deep well socket is needed.
- Sockets are mounted on a 3/8" rail.

Set consists of the following:

PART NO.	SIZE	PART NO.	SIZE
LTHLT4510D	10MM	LTHLT4517D	17MM
LTHLT4511D	11MM, 7/16"	LTHLT4519D	19MM, 3/4"
LTHLT4512D	12MM	LTHLT4620D	3/8"
LTHLT4513D	13MM	LTHLT4621D	1/2"
LTHLT4514D	14MM	LTHLT4622D	9/16"
LTHLT4515D	15MM	LTHLT4623D	11/16"
LTHLT4516D	16MM, 5/8"		

Common Service

## TWIST SOCKETS, EXTRACTOR SETS

### LTH4501

#### 9 Piece 3/8" Drive Twist Socket Kit

• Easily removes damaged nuts, studs, pipe nipples, and bolts. • Comes in a blow molded case and includes 3/8" punch (LTH4007).



Set includes:

PART NO.	SIZE	PART NO.	SIZE
LTH4510	10MM	LTH4515	15MM
LTH4511	11MM, 7/16"	LTH4516	16MM, 5/8"
LTH4512	12MM	LTH4517	17MM
LTH4513	13MM	LTH4519	19MM, 3/4"
LTH4514	14MM	LTH4007	3/8" punch

### LTH4400

#### 6 Piece 1/2" Drive Twist Socket Kit

• Easily removes damaged nuts, studs, pipe nipples and bolts. • Comes mounted on a 1/2" rail and includes LTH4007 Extractor Punch.



Set consists of the following twist sockets:

PART NO.	SIZE	PART NO.	SIZE
LTH440030	19MM, 3/4"	LTH440045	15/16"
LTH440035	13/16"	LTH440050	1"
LTH440040	7/8"	LTH4007	Extractor Punch

### ZZ7332ST

#### 5 Piece Fluted Type Screw Extractor Set

• Five extractors with sharp undercut edges to provide solid grip in studs, set screws, pipe and Alemite fittings. • Come in a plastic tray.



Set consists of the following:

PART NO.	BOLT SIZE	PART NO.	BOLT SIZE
OF6961	1/4" - 5/16"	OF6964	1/2" - 9/16"
OF6962	3/8"	OF6965	5/8"
OF6963	7/16"		

### ATC53226

#### 10 Piece Screw Extractor Set



Set consists of the following:

PART NUMBER	SIZE	PART NUMBER	SIZE
ATC53201	1/8"	ATC53206	9/32"
ATC53202	5/32"	ATC53207	5/16"
ATC53203	3/16"	ATC53208	11/32"
ATC53204	7/32"	ATC53209	3/8"
ATC53205	1/4"	ATC53210	13/32"

### ATC53227

#### 25 Piece Screw Extractor Set



Set consists of the following:

PART NO.	SIZE	PART NO.	SIZE	PART NO.	SIZE
ATC53201	1/8"	ATC53210	13/32"	ATC53218	21/32"
ATC53202	5/32"	ATC53211	7/16"	ATC53219	11/16"
ATC53203	3/16"	ATC53212	15/32"	ATC53220	23/32"
ATC53204	7/32"	ATC53213	1/2"	ATC53221	3/4"
ATC53205	1/4"	ATC53214	17/32"	ATC53222	25/32"
ATC53206	9/32"	ATC53215	9/16"	ATC53223	13/16"
ATC53207	5/16"	ATC53216	19/32"	ATC53224	27/32"
ATC53208	11/32"	ATC53217	5/8"	ATC53225	7/8"
ATC53209	3/8"				

### ATC53228

#### 15 Piece Screw Extractor Set

• Designed to remove broken studs, bolts, sockets, screws and fittings. • For use with sockets and flat wrenches.



Set includes the following:

PART NO.	DRILL BIT DIA.	BOLT DIA.	PART NO.	DRILL BIT DIA.	BOLT DIA.
ATC53201	1/8"	#12	ATC53209	3/8"	11/16"
ATC53202	5/32"	1/4"	ATC53210	13/32"	3/4"
ATC53203	3/16"	5/16"	ATC53211	7/16"	13/16"
ATC53204	7/32"	3/8"	ATC53212	15/32"	7/8"
ATC53205	1/4"	7/16"	ATC53213	1/2"	15/16"
ATC53206	9/32"	1/2"	ATC53214	17/32"	1"
ATC53207	5/16"	9/16"	ATC53215	9/16"	1-1/16"
ATC53208	11/32"	5/8"			

### ATC11119

#### 10 Piece Drill Bit/Extractor Set

• Aggressive spiral designed extractors for extra grip on stubborn broken bolts. • Left hand cobalt fractional mechanics length series drill bits are designed for use with spiral screw extractors. • Drill bits have heavy duty web, 135° split point, and are made of cobalt high speed steel (HSS) for use in tough metals.



Set includes the following in a metal index:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LEFT-HAND COBALT DRILL BITS		EXTRACTORS	
ATC30505	5/64"	ATC52401	1, use 5/64" drill size
ATC30507	7/64"	ATC52402	2, use 7/64" drill size
ATC30510	5/32"	ATC52403	3, use 5/32" drill size
ATC30516	1/4"	ATC52404	4, use 1/4" drill size
ATC30519	19/64"	ATC52405	5, use 19/64" drill size



## ATC11135

### 35 Piece Screw Extractor/ Drill Bit Set

- Removes broken studs, bolts, socket screws and fittings.
- Extractors have aggressive left-hand spiral design for extra gripping power; Extractor size and recommended drill bit size are etched on each tool for easy identification.
- Spiral screw extractors are made from rugged, high carbon steel to handle the stress of removing broken bolts.
- Multi-spline screw design creates a greater gripping area for more torque; Tough C4150 alloy steel construction.
- Left hand cobalt fractional mechanics length series drill bits are designed for use with screw extractors; Have 135° split point, heavy duty web, and are made of cobalt high speed steel (HSS) for use in tough metals.

Set includes the following in a plastic case:

PART NO.	SIZE	PART NO.	SIZE	PART NO.	SIZE
ATC30505	5/64"	ATC30528	7/16"	ATC53203	3/16"
ATC30507	7/64"	ATC30530	15/32"	ATC53204	7/32"
ATC30508	1/8"	ATC30532	1/2"	ATC53205	1/4"
ATC30510	5/32"	ATC31520	5/16"	ATC53206	9/32"
ATC30512	3/16"	ATC52401	EX-1	ATC53207	5/16"
ATC30514	7/32"	ATC52402	EX-2	ATC53208	11/32"
ATC30516	1/4"	ATC52403	EX-3	ATC53209	3/8"
ATC30518	9/32"	ATC52404	EX-4	ATC53210	13/32"
ATC30519	19/64"	ATC52405	EX-5	ATC53211	7/16"
ATC30522	11/32"	ATC52406	EX-6	ATC53212	15/32"
ATC30524	3/8"	ATC53201	1/8"	ATC53213	1/2"
ATC30526	13/32"	ATC53202	5/32"		



## ATC54113

### 13 Piece Bolt Extractor Set, 1/4" to 3/4" (8MM to 19MM)

- Removes damaged or rounded nuts and bolts.
- Works with 3/8" drive socket wrench or standard wrench.
- Choose the bolt extractor that corresponds to the nut or bolt to be removed.
- Works on both standard and metric fasteners.

Set consists of the following:

PART NO.	SIZE	PART NO.	SIZE
ATC53901	1/4"	ATC53908	13MM
ATC53902	5/16" or 8MM	ATC53909	9/16" or 14MM
ATC53903	3/8"	ATC53910	5/8" or 16MM
ATC53904	10MM	ATC53911	17MM
ATC53905	7/16" or 11MM	ATC53912	11/16"
ATC53906	12MM	ATC53913	3/4" or 19MM
ATC53907	1/2"		



## VA21822

### 5 Piece Spiral Fluted Screw Extractor Set

- Set of five screw extractors.
- Remove broken screws, pipes, bolts and studs.
- Tough, durable tool steel, heat-treated.
- Drill size permanently marked on shank.
- Meet Government specification GGG-E-936C.

PART NUMBER	SCREW EXT. NUMBER	REMOVE DIAMETER SCREW	DRILL SIZE (IN.)
VA21801	1	3/32 to 5/32	5/64
VA21802	2	5/32 to 7/32	7/64
VA21803	3	7/32 to 9/32	5/32
VA21804	4	9/32 to 3/8 and 1/8 pipe	1/2
VA21805	5	3/8 to 5/8 and 1/4 pipe	17/64



## ATC54125

### 5 Piece Bolt Extractor Set, 3/4" to 1" (19MM to 24MM)

- Removes damaged or rounded nuts and bolts.
- Works with 1/2" drive socket wrench or standard wrench.
- Choose the bolt extractor that corresponds to the nut or bolt to be removed.
- Works on both standard and metric fasteners.

Set consists of the following:

PART NO.	SIZE	PART NO.	SIZE
ATC53914	3/4" or 19MM	ATC53917	15/16" or 24MM
ATC53915	13/16" or 21MM	ATC53918	1"
ATC53916	7/8" or 22MM		



## ATC3101010

### 48 Piece Master Extractor Set

- Six spiral flute extractors for use on common fasteners where lower torque is adequate.
- Thirteen multi-spline extractors for use when higher torque or a lower profile tool is needed.
- Thirteen bolt extractors for use when part of the fastener is exposed.
- Sixteen left-hand cobalt drill bits to drill out the interior of the fastener and often extract the fastener by themselves.

Set includes the following in a blow molded storage case:

PART NO.	SIZE	PART NO.	SIZE
SPIRAL FLUTE EXTRACTORS			
ATC52401	EX-1	ATC52404	EX-4
ATC52402	EX-2	ATC52405	EX-5
ATC52403	EX-3	ATC52406	EX-6
MULTI-SPLINE EXTRACTORS			
ATC53201	1/8"	ATC53208	11/32"
ATC53202	5/32"	ATC53209	3/8"
ATC53203	3/16"	ATC53210	13/32"
ATC53204	7/32"	ATC53211	7/16"
ATC53205	1/4"	ATC53212	15/32"
ATC53206	9/32"	ATC53213	1/2"
ATC53207	5/16"		
BOLT EXTRACTORS			
ATC53901	1/4"	ATC53908	13MM
ATC53902	5/16"-8MM	ATC53909	9/16"-14MM
ATC53903	3/8"	ATC53910	5/8"-16MM
ATC53904	10MM	ATC53911	17MM
ATC53905	7/16"-11MM	ATC53912	11/16"
ATC53906	12MM	ATC53913	3/4"-19MM
ATC53907	1/2"		
LEFT-HAND COBALT DRILL BITS			
ATC30505	5/64"	ATC30519	19/64"
ATC30507	7/64"	ATC31520	5/16"
ATC30508	1/8"	ATC30522	11/32"
ATC30510	5/32"	ATC30524	3/8"
ATC30512	3/16"	ATC30526	13/32"
ATC30514	7/32"	ATC30528	7/16"
ATC30516	1/4"	ATC30530	15/32"
ATC30518	9/32"	ATC30532	1/2"



Common Service

## AD3719P

### 3 Piece X-OUT® Screw Remover Set

- For removing damaged #6 to #14 screws. • Use with a 3/8" variable speed drill or a 1/4" hex multi bit screwdriver (not provided).



Includes the following in a plastic case:

PART NO.	DESCRIPTION/USE
AD3701P	#1 — (removes #6 to #8 screws)
AD3702P	#2 — (removes #8 to #10 screws)
AD3703P	#3 — (removes #10 to #14 screws)

## LS70500

### 1/4" and 3/8" Drive Tap Socket Set



- Designed for use in restricted areas. • Ideal in areas where a T-handle will not fit. • Fits all number and fractional M.C.T.I. standard taps through 1/2". • Also fits 1/8" NPT taps and metric taps through 12MM manufactured to M.C.T.I. standards. • Set consists of one each of the following:

PART NUMBER	SOCKET	FITS INCH	FITS METRIC	SHANK DIA.	SQ. SIZE
LS70520	1/4" #1	#1, 2, 3, 4, 6, 8	1.6, 1.8, 2, 2.2, 2.5, 3, 3.15, 3.5	.141	.110
LS70540	1/4" #2	#8	4	.168	.131
LS70560	1/4" #3	#10	4.5, 5	.194	.152
LS70580	1/4" #4	1/4	6, 6.3	.255	.191
LS70600	3/8" #5	5/16, 7/16	7, 8	.323	.242
LS70620	3/8" #6	3/8	10	.381	.286
LS70640	3/8" #7	1/2	12, 12.5	.367	.275
LS70660	3/8" #8	1/8 NPT		.437	.328

## LS70940

### 1/2" Drive 3 Piece Tap Socket Set

- Fit larger taps. • For larger, fractional M.C.T.I. standard taps. • Ideal for use where a T-handle won't fit, especially in restricted areas. • Supplements the LS70500 set and extends the range to 3/4".



Set consists of one each of the following:

PART NUMBER	SOCKET	FITS INCH	FITS METRIC	SHANK DIA.	SQ. SIZE
LS70860	#9	5/8	16MM	.480	.360
LS70880	#10	11/16	18MM	.542	.406
LS70900	#11	3/4	-	.590	.442

## ULHTDISP

### Mirror and Magnetic Pick-Up Tools Display



- Magnetic Retrieving Tools feature POWERCAP™ for greater lifting power. • Package weight: 5 lbs., 6 oz. • Features of the ULHTC2, ULHTE2 and ULHTS2 Inspection Mirrors: Clear glass mirror for perfect reflection; All-angle ball joint holds mirror firmly for 360° viewing; Mirror encased in rugged, corrosion resistant, brushed stainless steel; Stainless steel telescoping handle is strong, long, and lightweight; Comfortable textured cushion grip keeps handle secure even in wet or oily hands.

Includes three (3) of each of the following:

PART NO.	DESCRIPTION
ULHT1	Magnetic Retrieving Tool
ULHT2	Magnetic Retrieving Tool
ULHT3	Magnetic Retrieving Tool
ULHTC2	2-1/4" Inspection Mirror (Telescopes from 6-1/2" to 36-3/8")
ULHTE2	1-1/4" Inspection Mirror (Telescopes from 6-1/2" to 35")
ULHTS2	3-1/4" Inspection Mirror (Telescopes from 6-1/2" to 29-1/2")

## ULHTLTDISP

### 15 Piece Lighted Magnetic Pick-Up Tool and Inspection Mirror Display



- Stainless steel extension. • Cushion handles will not slip in wet or oily hands. • Eye-catching counter or shelf display with two Velcro strips on back for quick and easy wall placement.

Display holds three (3) each of the following:

PART NO.	DESCRIPTION	TELESCOPES FROM
ULHTC2LT	2-3/8" LED case illuminates dark areas for viewing in less restricted areas.	6-3/4" to 37"
ULHTE2LT	1-3/8" LED case illuminates dark areas for viewing in tight areas.	6-3/4" to 35-1/2"
ULHTLP1	LED Lighted Magnetic Pick Up Tool with a rotating head retrieves metal objects weighing up to 8 pounds.	6-3/4" to 32-3/4"
ULHTLP2	LED Lighted Magnetic Pick Up Tool lifts 8 pounds and the sides will not attach to unwanted metal surfaces.	8" to 32-3/4"
ULHTS2LT	3-3/8" LED case with three lights illuminates dark areas for the brightest clearest viewing.	6-3/4" to 30-1/4"

## ULHTK2LT LED Lighted Rectangular Telescoping Inspection Mirror

- Rectangular inspection mirror (2-1/4" x 3-1/2") with three rotating LED lights.
- Telescopes from 6-3/4" to 30-1/4".
- Lighted head can be adjusted to needed angle for inspection in tight dark areas.
- All-angle ball joint holds the lighted mirror head firmly for perfect viewing.
- Stainless steel handle is long, strong, and lightweight for fast accurate inspection.
- Cushioned handle will not slip in wet or oily hands.
- Comes with two (2) CR2032 batteries.



## UL15XDISP 30 Piece Magnetic Pick Up Tool Display



- Cardboard display contains: (10) UL15X Chrome Plated Magnetic Pick-Up Tools, (10) UL15XOR Orange Magnetic Pick-Up Tools, (10) UL15XGR Green Magnetic Pick-Up Tools
- Each of the Magnetic Pick-Up Tools telescopes from 5-5/8" to 25-9/16" and lifts 2 lbs.
- The colorful display has Velcro® strips on the back to help position it on the truck.

## ULMG2LT LED Lighted Telescoping Magnifying Glass



- Two (2) high intensity LED's.
- 2" viewing diameter.
- 4X magnifying strength.
- All-angle ball joint holds the lighted magnifying head firmly for perfect viewing.
- Stainless steel handle telescopes from 6-3/4" to 30" for fast accurate inspection.
- Cushioned handle will not slip in wet or oily hands.
- Comes with two (2) CR1220 batteries.

## ULHT5R Pocket Magnetic Pick-Up Tool



- Stainless steel handle.
- Telescopes 5-1/2" to 25-1/2".
- Comfortable textured cushioned grip.
- Handy pocket clip.
- Lifts 1-1/2" lbs. without Powercap™.
- Powercap™ shields sides from attracting other metal surfaces and increases magnetic lifting power by 45%.

## ULK2 Inspection Mirror



- All angle telescoping ball joint rectangular mirror with brushed finish mirror back.
- Double ball joint links swivel mirror 360°
- Links are tempered spring steel to hold desired position.
- Non-rotating inner hex rod prevents mirror from swinging out of alignment when in use.
- Insulating vinyl grip.
- 2-1/8" x 3-1/2" mirror.
- Overall Length: 11-1/4", extends to 15-1/4".

ULK2R Refill Mirror Only

## ULGM2 MegaMag Magnetic Pick-Up Tool



- Stainless steel antenna telescopes from 7-1/8" to 30-1/4" and lifts 16 lbs.

### Telescopic Magnetic Retrieving Tools



- Made of stainless steel and have a comfortable textured cushioned grip that prevents the handle from slipping even in wet or oily hands.
- Feature Powercaps™ that increase magnet lifting power by at least 45% and block the sides from attaching to metal surfaces.

PART NO.	LIFTS	TELESCOPING RANGE
ULHT1	1-1/2 lbs.	6-1/2" to 30-1/4"
ULHT2	3-1/2 lbs.	6-5/8" to 33-1/4"
ULHT3	5 lbs.	6-5/8" to 33-1/4"

### THE SIX MAJOR POINTS OF HAND TOOL SAFETY

1. Wear approved eye protection.
2. Choose the right tool for the job.
3. Do not alter a tool in any way, shape, or form.
4. Never abuse or misuse tools.
5. Never exceed tool capacity.
6. Do not use a tool that appears to be damaged or weakened.

Common  
Service

## INSPECTION AND PICK UP TOOLS

### Super Strength Pocket Telescopic Magnetic Retrieving Tools



- Neodymium-Iron-Boron extra high flux magnet for pick-up of ferrous metal objects up to 1-1/2 pounds.
- Super adjustable telescoping action.
- Bright chrome plated brass handle.
- 5-7/8" pocket length extends out to 25-9/16".

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
UL15X	Std. tool	UL15XOR	Std. tool-Neon Orange handle
UL15XGR	Std. tool-Green handle		

### UL16

#### Flexible Claw Spring



- Bright plated steel spring reaches into inaccessible places.
- Press plunger and four spring steel claws expand; release plunger and claws retract.
- Grasp hot utensils, dropped machine parts, etc.
- Length: 23-1/2".

### UL16MLT

#### Flexible LED Lighted Magnetic Pick-Up Tool



- Tightly wound spring snakes into tight dark areas to retrieve dropped objects.
- Convenient side switch turns bright LED light on/off as needed.
- Press plunger and jaws open/release plunger and jaws clamp shut.
- Two (2) CR2032 lithium batteries included.
- Powerful magnet lifts up to 5 lbs.
- Measures 25-3/8" long.

### ULHT2FL

#### Flex Magnetic Pick Up Tool



- Length: 29".
- Aluminum shaft can be bent at any angle to retrieve dropped metal objects in hard to reach areas.
- Powercap™ slides over the magnet and shields the sides from attaching to unwanted metal surfaces.
- Lifts up to 5 lbs. with the Powercap™.
- Textured cushion pistol grip will not slip in wet or oily hands.

### UL14X

#### Flex Magnetic Retrieval Tool



- Retrieves lost ferrous metals, nuts, bolts and tools.
- Flexible aluminum shaft remains in position.
- Super strength Neodymium-Iron-Boron extra high flux magnet for greater pick up power - powerful enough to pick up objects weighing 1-1/2 pounds under correct conditions.
- Sturdy knurled aluminum handle.
- 21-9/16" long.

### CE3S600

#### Lighted Tweezer Set



- Built in LED lights work area.
- Retrieve lost parts in dark, tight places.
- Improve dexterity for delicate tasks.
- Start screws and nuts.
- Leaves one hand free.
- Three (3) different tip configurations to meet a wide range of needs.
- Industrial stainless steel construction.
- Convenient storage case with extra set of batteries.
- Compact size easily fits in pocket.

PART NO.	DESCRIPTION
CE3S60001	Pointed Tweezer with light
CE3S60002	Tapered Tweezer with light
CE3S60003	Offset Tweezer with light
-	LR41 or AG3 Batteries (9)

CE3S60004 Bulb/CE3S60001, CE3S60002, CE3S60003

### SL67700

#### Magnetic Washer Remover



- Dual ended tool has small magnets that are designed to aid in the removal of hard to reach washers that are around most types of studs.
- Can be used to help technician in the removal of valve adjusting buckets and pucks.
- Manufactured from light weight and durable glass filled nylon plastic.



**WARNING!**  
Wear safety goggles.

**Stylus® Pen Lights**



- Convenience of a penlight with the power of a high-intensity LED.
- Tough, durable, safety rated. • Ideal for a variety of tasks, from reading a map on a camping trip, inspecting hard-to-see places, or forensic investigations and tactical law enforcement operations.
- Battery life is 20x greater than a standard flashlight. • High-intensity LED lasts 100,000 hours. • Output: 11 lumen typical (white LED).
- Powered by 3 "AAAA" alkaline batteries (included). • Features a momentary blink or constant on switching. • Runs up to 60 continuous hours. • IPX4 Rated for water resistant operation. • Individually serialized for easy identification. • Pocket clip. • Includes Glare Guard protector.
- Anodized, machined aluminum housing. • Length: 6.21". • Weight: 1.1 oz.

PART NO.	COLOR	PART NO.	COLOR
STL95003	Silver	STL95005	Red
STL95004	Black	STL95006	Blue

STL65030 "AAAA" Batteries  
STL65098 Switch Kit/Stylus® Pen Lights

**Stylus Pro® Pen Lights**



- C4® LED technology, with a 50,000 hour lifetime. • Unbreakable and scratch resistant polycarbonate lens. • C4® LED (white): 1,033 candela peak beam intensity; 48 lumens measured system output; 6.25 hours runtime. • Powered by two (2) "AAA" alkaline batteries (included).
- Push button tail switch - momentary or constant on operation. • Tailcap switch for momentary on/off. • O-ring sealed, shock proof and drop-tested construction. • Water resistant per IPX4; in accordance with specification EN 60529:1992. • Tear resistant nylon holster. • Unbreakable pocket clip. • Length x Diameter: 5.3" x .6" [134 x 15MM]. • Weight: 1.64 oz. with battery.

PART NO.	DESCRIPTION	COLOR
STL95008	Stylus Pro® Pen Light	Black
STL95009	Stylus Pro® Pen Light	Red
STL95010	Stylus Pro® Pen Light	Blue
STL95011	Stylus Pro® Pen Light	Orange
STL95012	Stylus Pro® Pen Light	Lime Green

STL660023 Switch Kit/Stylus Pro® Pen Lights  
STL6600231 Switch Kit - Blue/STL95010  
STL6600232 Switch Kit - Red/STL95009  
STL6600236 Switch Kit/STL95011  
STL6600237 Switch Kit/STL95012

**MicroStream™ Pen Lights**



- C4® LED technology, with a 50,000 hour lifetime. • Unbreakable and scratch resistant polycarbonate lens. • Up to 683 candela peak beam intensity, 28 lumens typical, 2.25 hours runtime. • One (1) "AAA" alkaline battery (included). • Features push button tail switch with momentary or constant on operation, O-ring sealed, shock proof and drop-tested construction. • Water resistant per IPX4 (in accordance with specification EN 60529:1992). • High strength "Break Away" safety lanyard.
- Unbreakable pocket clip. • Dimensions: 3.5" Length x 0.6" Diameter. • Weight: 1.04 oz.

PART NO.	DESCRIPTION	COLOR
STL95013	MicroStream™ Penlight	Black
STL95063	MicroStream™ Penlight	Red

**MXN00220 Penlight Inspection Light**



- Offers the illumination of a work light or drop light, without the inconvenience of being tethered by a cord to a 115V power source. • A state-of-the art LED brightly illuminates the work area with a flood of brilliant white light to easily see problem areas. • Designed with a wide angle beam that provides a wide field of view when working up close. • The beam provided is free of "hot" and "dark" spots, making it easy to clearly see what is being inspected. • The compact, 6" long tool weighs only 2 ounces, and clips easily and comfortably to any pocket. • The tough T6 aluminum body has Type II anodizing and is virtually indestructible. • The rugged tailcap switch is rated at 100,000 cycles and is sealed to avoid contamination by dirt and grit. • Threaded joints have rubber O-ring seals for water resistance. • Knurled surfaces provide a good grip. • Designed for daily use by technicians in demanding shops, manufacturing or maintenance environments. • Includes three (3) "AAAA" alkaline batteries and a pen clip.

**LightStar™ 80 Penlights**



- Rugged, momentary forward-click switch that can take abuse. • Super strong clip can be used to clip on a cap. • Rubber Bite Grip allows hands to be free to accomplish the task at hand. • High CRI (Color Rendering Index) LED that makes work area appear in full color. • 80 lumen output. • 5 hours runtime. • Comes with 2 "AAA" alkaline batteries and high tension, reversible pocket clip. • Momentary on, click for constant on/off. • Water resistant. • Aircraft grade aluminum. • Length: 5.5 in. • Diameter: .625 in. • Weight 2.24 oz. • Available in titanium or high visibility orange.

PART NO.	DESCRIPTION	COLOR
TLTLF802AAABK	LightStar™ 80 Penlight	Titanium
TLTLF802AAAOR	LightStar™ 80 Penlight	Orange

Lighting

## LIGHTING

### CST19355

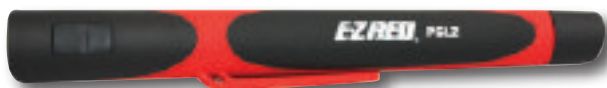
#### A9 Stainless Steel Penlight



- Sleek A-Series A9 flashlight easily fits into a shirt pocket.
- Weighs only 1.6 oz and is pencil-thin at just 0.37" in diameter.
- Almost indestructible stainless steel body.
- Projects 23 lumens of pure white light in a flood circle that is perfect for thousands of uses, whether it's under the hood or under a sink.
- Runs up to 14 hours on three "AAAA" batteries (included) and projects a beam up to 65-1/2 ft., providing a maximum amount of light with no dark spots.
- Comes with a pocket clip and the recessed rear switch.
- Length: 7.03".

### ECPCL2

#### Twin Beam LED Spot Light



- Unique pocket LED light with laser pointer.
- Powered by 3 "AAA" batteries (included).
- Laser pointer located under twin LEDs.
- Convenient pocket clip.
- 12 Lumen light output.
- Up to 5 hour run time.
- Durable ABS housing.

### STL75073

#### Blue Stinger® PiggyBack® Kit



- Light source is a Xenon gas-filled bi-pin bulb with 30 hour life.
- Spare bulb stored in the end cap.
- Variable spot to flood beam.
- Unbreakable polycarbonate lens with scratch-resistant coating; O-ring sealed.
- 11,000 candela peak beam intensity and 210M beam distance when focused to spot (90 lumens measured system output).
- 3 cell, 3.6 Volt 1.8Ah nickel cadmium sub-C battery, rechargeable up to 1,000 times.
- Push-button on/off head switch, momentary or constant on.
- IPX4 rated design - water resistant operation, two meter impact resistance tested.
- Machined aluminum housing is anodized against corrosion inside and out.
- Serialized for positive identification.
- Charger holder mounts in any position.
- LED charge-continuity indicator on charger holder.
- Dimensions: 7.38"L x 1.6"W x 1.08"D.
- Weight: 10 oz.
- Color: Blue.
- Includes: 120V AC and 12V DC charge cords, a PiggyBack® charger that mounts in any position, two nickel cadmium 3.6V 1.8Ah batteries, and a 3.7V xenon gas filled bulb.

- STL75074 Flashlight Only
- STL22051 Cigarette Lighter Charge Cord/STL75200
- STL22311 AC Charge Cord/STL75200/STL90010
- STL750009 Lens
- STL75027 Infrared Lens
- STL75140 Switch Module
- STL75200 PiggyBack® Charger
- STL75175 Battery
- STL75906 Ring Holder
- STL75914 Bulb
- STL75956 Lens/Reflector Assembly
- STL76090 Nylon Holster

### Stinger® LED PiggyBack® Flashlight Kits

[STL95049 Kit shown here]



PART NO.		COLOR
Stinger® LED PiggyBack® Kit	Stinger® LED PiggyBack® Flashlight Only	
STL95033	STL95031	Red
STL95034	STL95032	Blue
STL95049	STL95048	Lime Green
STL95066	STL95064	Orange

- Powerful, long-range, long-running flashlight with a wide peripheral circle of bright white light coupled with an intense spot of light.
  - C4® LED technology, impervious to shock with a 50,000 hour lifetime.
  - Unbreakable polycarbonate lens with scratch-resistant coating.
  - Deep-dish parabolic reflector.
  - 3-Cell, 3.6 Volt sub-C Nickel cadmium battery is rechargeable.
  - Multi-function, easy access head mounted push-button switch designed for extremely long life.
  - Ultra-bright, far-reaching beam and multiple lighting modes, including strobe.
  - IPX4 rated for water resistant operation.
  - One meter impact resistance tested.
  - Serialized for positive identification.
  - LED Charge-continuity indicator on charger base.
  - Compact, snap-in charger mounts in any position.
  - Anodized, machined aluminum housing (O-ring sealed) with non-slip rubberized comfort grip.
  - Runtime: High: Up to 2 continuous hours; Medium: Up to 3.75 continuous hours; Low: Up to 7.25 continuous hours; Strobe: Up to 5.50 continuous hours.
  - Light output: 17,000 candela, 180 lumens.
  - Length: 8.41 inches.
  - Weight: 12.4 oz.
- STL22051 Cigarette Lighter Charge Cord/STL75200
  - STL22311 AC Charge Cord/STL75200, STL90010
  - STL757009 Lens
  - STL75200 PiggyBack® Charger
  - STL75175 Battery
  - STL75768 K2 Switch/LED Reflector Kit
  - STL75906 Ring Holder
  - STL757047 Lens/Reflector Assembly
  - STL75927 Holster

### STL75702

#### Anti-Roll Sleeve

- Keeps flashlight from rolling when placed on a flat surface.
- To be used on Stinger®, Polystinger®, Stinger XT®, Stinger® LED and Stinger DS® LED.



**Strion® LED Flashlight Kits**

[STL95069 Kit shown here]



PART NO.		COLOR
Strion® LED Kit	Strion® LED Flashlight Only	
STL74350		Pink
STL95015		Black
STL95069	STL95068	Red
STL95071	STL95070	Blue
STL95072	STL95073	Lime Green
STL95076	STL95077	Purple

- Rechargeable, ultra-compact and powerful LED technology.
- Multi-function, push-button tactical tail switch.
- One-handed operation of momentary, variable intensity: high, medium, low, or strobe modes.
- C4® LED technology, impervious to shock with a 50,000 hour lifetime.
- Borofloat high temperature glass lens, gasket sealed.
- Light Output: High - 10,000 candela (peak beam intensity), 160 lumens; Medium - 5,000 candela (peak beam intensity), 80 lumens; Low - 2,500 candela (peak beam intensity), 40 lumens.
- Lithium Ion battery with on-board safety control circuit is rechargeable up to 500 times.
- Run times: High - Up to 2 continuous hours; Medium - Up to 4 continuous hours; Low - Up to 7.5 continuous hours; Strobe - Up to 5.5 continuous hours.
- Multi-function, push-button tactical tailswitch.
- LED charge-continuity indicator on charger base.
- Compact, snap-in charger mounts in any position.
- IPX4 rated design for water resistance.
- Serialized for positive identification.
- Anodized, machined aluminum housing.
- Length: 5.9".
- Weight: 5.22 oz.

STL74102 Charger Holder/Strion® Series  
STL747013 Switch Kit/Strion® Series

**STL95038**

**Stinger® DS LED Piggyback® Flashlight Kit**



PART NO.		COLOR
Stinger® DS LED PiggyBack® Kit	Stinger® DS LED PiggyBack® Flashlight Only	
STL95038	STL95037	Black

- Powerful, long-range, long-running flashlight with a wide peripheral circle of bright white light coupled with an intense spot of light.
- Has a full-feature tailcap switch in addition to the head-mounted push-button switch.
- C4® LED technology, impervious to shock with a 50,000 hour lifetime.
- Unbreakable polycarbonate lens with scratch-resistant coating.
- Deep-dish parabolic reflector.
- 3-cell, 3.6 Volt sub-C Nickel cadmium battery is rechargeable.
- Multi-function, easy access head mounted push-button switch for extremely long life and a second multi-function push-button tactical tailswitch where both switches offer full feature control independent of each other.
- Ultra-bright, far-reaching beam and multiple lighting modes, including strobe.
- IPX4 rated for water resistant operation.
- One meter impact resistance tested.
- Serialized for positive identification.
- LED Charge-continuity indicator on charger base.
- Compact, snap-in charger mounts in any position.
- Anodized, machined aluminum housing (O-ring sealed) with non-slip rubberized comfort grip.
- Runtime: High: Up to 2 continuous hours; Medium: Up to 3.75 continuous hours; Low: Up to 7.25 continuous hours; Strobe: Up to 5.50 continuous hours.
- Light output: 17,000 candela, 180 lumens.
- Length: 8.65 inches.
- Weight: 12.8 oz.

STL22051 Cigarette Lighter Charge Cord/STL75200

STL22311 AC Charge Cord/STL75200, STL90010

STL757009 Lens

STL75200 PiggyBack® Charger

STL75175 Battery

STL75768 K2 Switch/LED Reflector Kit

STL75906 Ring Holder

STL757047 Lens/Reflector Assembly

STL75851 Stinger® DS LED Tailcap Switch

STL75927 Holster

**CST19267**

**Stainless 6 Chip Light**

- Max Beam Optic System.
- White flood beam.
- Cyclone™ Heat Sink System.
- Stainless steel casing.
- Front switch.
- Unbreakable LED lasts 100,000 hours.
- Light output: 149 lumens.
- Runtime: 5 hours.
- Beam distance: 229 feet (70 meters).
- Length: 3.67".
- Three (3) "AAA" batteries (included).
- Nylon storage case included.



**CST19271**

**7736D Dual Color Light**

- Max Beam Optic System.
- Nichia LGS LEDs; white flood beam and red spot beam (red preserves night vision).
- Lightweight tactical aluminum casing.
- Front dual switch.
- Unbreakable LED lasts 100,000 hours.
- White Light output: 109 lumens.
- Runtime: 5 hours.
- Beam distance: 196.85 feet (60 meters).
- Length: 3.7".
- Three (3) "AAA" batteries (included).
- Nylon storage case included.



**CST19247**

**A25 Stainless Steel Focusing Flashlight**

- Durable and easy to clean.
- A quick cycle switch allows selection between a high output setting of 226 lumens, a high powered strobe mode, or a low output of 44 lumens.
- The Pure Beam Focusing Optic System with Fingertip Speed Focus Control provides superior beam consistency from spot to flood, with no dark rings typically associated with focusing flashlights.
- The Bulls Eye spot beam pattern gives a great focused spot with a maximum beam distance of 205 meters (672 feet), while producing an outer ring of flood light to see a broader area for added side vision.
- Built tough, an impact-resistant, stainless steel casing resists rust and corrosion.
- Tested and rated to ANSI/FL1 standards.
- Features an unbreakable LED and rubberized O-ring for reliable water resistance and durability.
- Runtime: High - 5 hours; Low - 24 hours 15 minutes.
- Beam distance: High - 205 meters (672 ft.); Low - 71 meters (232 ft.).
- Includes (4) "AAA" batteries.
- Weight: 10.4 oz. (with batteries).
- Length: 5.5".
- Diameter: Body - 1.13"; Bezel - 1.42".



Lighting

## LIGHTING

### STL68202

#### 4AA 7 LED ProPolymer® Flashlight

- Impact and shock resistant LED flashlight that provides 155 hours of run time.
- Seven 100,000 hours of life LED's.
- Unbreakable polycarbonate lens with scratch resistant coating.
- 67 lumens typical.
- Includes: 4 "AA" alkaline batteries.
- Momentary "blink" or constant "on" tail switch.
- Waterproof O-ring sealed.
- Features a wrist lanyard connection (lanyard not included).
- Length: 6.5".
- Weight: 6.3 oz.



### STL71500

#### Streamlight Jr.® LUX® LED Flashlight



- Ultra-compact light weight flashlight features the latest in power LED technology.
- The C4® LED produces 55% more light than the previous LED, while maintaining the same run time and is impervious to shock with a 50,000 hour lifetime.
- 3,800 candela peak beam intensity, 123M beam distance and 85 lumens measured system output.
- Textured parabolic reflector produces an even, wide beam hotspot.
- IPX4 rated for water resistant operation. All openings O-ring sealed.
- 1 meter impact resistance tested.
- Solid state circuitry provides regulated light output throughout battery life.
- Unbreakable polycarbonate lens.
- Machined aluminum black anodized case with non-slip knurled grip.
- Push button tail switch - momentary or constant on operation.
- Run time: 4 continuous hours to 10% lumen output level with Alkaline cells, 5.25 hours with (L91) Lithium cells.
- Runs on two (2) "AA" size, Alkaline batteries (included) or Lithium batteries (not included).
- Also includes a black nylon flapless holster and removable pocket clip.
- Length: 6.5 in.
- Weight: 4.1 oz. with alkaline batteries.

### PT™ Series Professional Tactical Lights

STL88032



STL88033



- Compact and powerful.
- Offers high and low intensity modes, strobe mode and the latest in power LED technology.
- The combination of small size and output from the C4® LED results in one of the brightest tactical personal carry lights for its size.
- Case Material: 6000 series machined aircraft aluminum with anodized finish.
- Solid State power regulation provides maximum light output throughout battery life.
- Rubber push button tail cap switch.
- IPX7 rated design; waterproof to 1 meter for 30 minutes.
- Impact-resistant tempered glass lens.
- Removable unbreakable pocket clip.
- Anti-roll head.
- Includes nylon holster.
- Serialized for positive identification.

PART NO.	DESCRIPTION	SPECIFICATIONS
STL88032	PT™ 1AA Flashlight	C4® LED illumination output and run times: High - 50 lumens/1.75 hours; Low - 6 lumens/22 hours; Strobe - 4 Hours; includes 1 AA alkaline battery; Length: 3.97"
STL88033	PT™ 2AA Flashlight	C4® LED illumination output and run times: High - 120 lumens/1.75 hours; Low - 14 lumens/21 hours; Strobe - 4 Hours; Includes 2 AA alkaline battery; Length: 5.97"

STL880097 Tailcap Assembly/STL88033

### STL99140

#### Streamlight Mobile Truck Display



Display consists of the following:

QTY	PART NO.	DESCRIPTION
2	STL33202	ProPolymer®3C LED w/White LEDs - Yellow
2	STL51006	Task-Light 3AA - Black
2	STL51018	Twin-Task® 3C UV - (6) 390 nm LEDs - Titanium
2	STL51072	Multi Ops™ AAA - Black
2	STL61052	Septor® - rubber and elastic straps - Yellow
2	STL61080	Trident HP® - white LEDs, rubber & elastic straps, Yellow
2	STL61400	Enduro® - visor clip and elastic strap - Black
2	STL68202	4AA LED w/White LEDs - Yellow
2	STL71500	Streamlight Jr.® LED - Black
2	STL88853	PolyTac® LED - Yellow
2	STL95004	Stylus® w/White LED - Black
2	STL95007	Stylus Reach® - Black
2	STL95009	Stylus Pro® w/White LED - Red
2	STL95013	MicroStream® w/White LED - Black

#### STL99141 Mobile Truck Display Refill Pack

- Includes one each of all lights listed above in STL99140 Truck Display.

### ECFL1701

#### 18 LED Rechargeable Flip Light

- An "anywhere" cordless LED Light.
- Includes 120 volt "smart" charger and pouch.
- 18 Super bright floodlight style LEDs.
- Easy on/off, open/close.
- Strong - made from high grade polycarbonate composition.
- Ratcheting hinge for multiple angle settings.
- Up to 7 hour cordless use between charging.
- Rugged hook offers stationary positioning; can easily be put flush into the housing.
- Length: Closed: 3-5/8"; Open: 6-3/4".
- 128 lumens.



#### ECFL1701CAC Wall Charger



## OBF8100

### Joey Flashlight

- The perfect light for: emergency responders, police officers, firefighters, search and rescue, emergency preparedness, truckers, hunters, outdoor enthusiasts, and farmers.
- Three lighting modes: high intensity flashlight, magnetic work light, and red signal light.
- Magnetic base.
- 1-Watt LED.
- Lumens: 70.
- Size: 8"L x 1.5"W.
- Weight: 6.2 oz.
- 3 "AAA" batteries (included).
- Nylon Lanyard
- Display of 12 Flashlights.



## MKLM01W

### 12V MAX LED Flashlight

- 800 Lux provides bright illumination.
- Ultra compact LED flashlight runs up to 9 hours per charge.
- Compact design at only 4-3/4" length and weighs only 0.55 lbs. with battery.
- Built-in belt clip for added convenience.
- Soft grip handle provides increased comfort.
- Accepts Makita 12V max Li-Ion battery (NOT included).
- Battery (MKBL1014) and charger (MKDC10WB) sold separately.



SPECIFICATIONS	
Bulb.....	LED
Brightness.....	800 Lux
Continuous Illumination.....	9 hours
Battery.....	12V max Li-Ion
Overall Length.....	4-3/4"
Net Weight (w/Battery).....	0.55 lbs.

## MKBML185W

### 18V Rechargeable Compact Flashlight

- 4-position pivoting head.
- High illumination emits high power at 4,500 Lux.
- Xenon bulb for extra brightness.
- Runs up to 2 hours per charge.
- Compact design, only 11-1/8" length and weighs .75 lbs.
- Accepts all Makita Lithium-Ion slide-style batteries.
- Includes: shoulder strap and two (2) flashlight Xenon bulbs.
- Battery NOT included.



## IRTL10

### High Intensity IQv™ LED Task Light

- State-of-the-art LED technology provides high quality, bright light.
  - Onboard microprocessor to work with all IQv™ batteries.
  - High quality 4-Watt LED output bulb offers up to 50,000 hours of bulb life and up to 10 hours of run-time.
  - 160° pivoting, low profile head.
  - Drop-resistant housing design features chemical-resistant composite materials.
  - Length: 8.3".
- IRBC20 IQv™ Battery Charger  
 IRBL072 7.2V IQv™ Lithium Ion Battery, 2.4 Ah  
 IRBL144 14.4V IQv™ Lithium Ion Battery, 2.4 Ah  
 IRBL192 19.2V IQv™ Lithium Ion Battery, 2.4 Ah



## Cordless Tool Rechargeable Flashlights (not illustrated)

PART NO.	DESCRIPTION
BOSFL10	12V Max Litheon Rechargeable Flashlight
MKBML185	18V Lithium Flashlight
MKML140	14.4V (uses Pod battery)
MKML903	9.6V (uses Pod battery)

- MK1922405 Replacement Bulb/MKML700 (2)
- MK1925461 Replacement Bulb/MKML903
- MK4158075 Replacement Ring/MKML903
- MK4158669 Replacement Lens/MKML903
- MKA90233 Replacement Bulb (2)/MKML140
- MKA90261 Replacement Bulb (2)/MKBML185 & MKML180
- MKGM00000010 Replacement Ring/MKML140
- MKGM00000070 Replacement Lens/MKML140

## ECCXL3000R

### Rechargeable Cordless LED Shop Light

- 30 Super Bright 100,000 hour Floodlight style LED's.
- Shatter resistant ABS case.
- 10 hour cordless use between charging.
- Replaceable lens cover.
- Battery Pack has 1000 charge cycles.
- Super strong swivel hook keeps light on the subject, not in your eyes.
- Powered by rechargeable NiMH battery pack.
- Protective grip and guards.
- 360° swivel hook (ECLHOOK).
- Smart charge light - lets you know there are 4 hours of light left before it is time to charge - will not overcharge.
- Charging port - Circuit overload protection when charging.

- ECLCHARGER Charger
- ECLHOOK Replacement Hook



## NM64030

### Pistol LED Light

- Ratchets 0° - 180°.
- LED rechargeable worklight.
- Breakthrough ergonomic design.
- 21 LEDs in body plus 5 LEDs in the base.
- Independent power switches for body and base.
- Includes AC wall charger and DC car charger.
- Shatterproof polycarbonate lenses.
- Lights for 5 hours per charge.
- Unique magnetic base.
- Swing hook.

- NM640302 Car Charger
- NM640303 Wall Charger



## ECPCLED6

### Pocket LED Light Stick

- Six brilliant high power LEDs.
- Produces a floodlight effect as well as directional.
- Molded clip to stay in pocket.
- Water resistant.
- Rugged, made to last.
- Three (3) AAA batteries included.



Lighting

## LS70340

### LED Rechargeable Flashlight with Flexible Magnetic Holder

- Flexible magnetic holder provides a third hand.
- Bright, rechargeable flashlight will run all day.
- Powerful 3 watt LED flashlight provides 120 lumens and will run continuously for 6 hours.
- Flashlight recharges in 5 hours with AC charger.
- Flashlight is water resistant with O-ring seals and will withstand a drop of at least 1M.
- Flashlight is 5.635" in length and 1.385" at the maximum diameter (barrel is 1").
- The flexible magnetic holder allows the light to be conveniently located, has powerful 2" diameter, 50 lb. magnet built-in and is 7-3/4" in overall length.
- The holder's flexible joints bend up to nearly 90° in any direction.
- The holder will hold a variety of flashlight diameters.

LS70390 LED Rechargeable Flashlight

LS70420 3.7V mAh Li-Ion Battery

LS70430 Charger

LS70440 Flexible Flashlight Holder with Magnetic Base



## FW72630451

### Mini Flex Bar with LED Flashlight

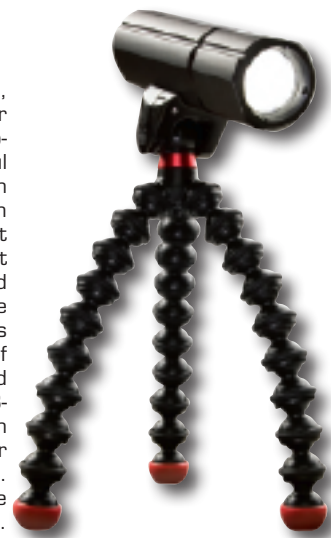
- Ideal for focused industrial and automotive applications.
- 14 LED ultra-bright flashlight.
- Powerful, low-profile magnetic base.
- Slim, articulating flex bar allows easy and accurate positioning.
- Quick release mounting bracket clamp.
- Three (3) AAA batteries included.



## JBYFL301AM

### Gorillatorch® Blade™

- An adaptable, high-performance, rechargeable flashlight designed for the mechanic, outdoorsman and do-it-yourself enthusiast.
- Powerful CREE LED light output with 130-lumen power boost to illuminate hard-to-reach places.
- Fully-adjustable light - just twist lens to customize beam from spot to flood.
- Spot light for flat detailed work and flood for work on reflective surfaces.
- Pan and tilt head delivers 360° of horizontal and over 180° of vertical movement for virtually unlimited hands-free range of motion.
- USB-rechargeable lithium-ion battery can be charged directly from computer, or use the AC adapter for extended use.
- White and blue LED lights indicate when battery is low or recharging.
- Flashlight can be easily removed from the stand for tactical applications.
- Durable aircraft-quality machined aluminum casing with anodized finish, durable TPE grip rings, and high-quality ABS plastic legs are scratch and drop-resistant.
- Bendable, wrappable legs and Neodymium magnetic feet attach to almost any surface.
- Compact design is perfect for use in tight spaces.
- Brightness: 65 lumens standard and 130 lumens power boost.
- Water Resistance: IPX5.
- Dimensions: 158MM x 76MM x 34MM.
- Average Battery Life: 65 lumens standard = 6.5 hrs.; 130 lumens power boost = 2.5 hrs.



## NM60025

### X3 Work Light



- Economical, work light.
- 13 amp power outlet.
- Hinged lens for easy bulb replacement.
- Ratcheting magnet.
- 360° swivel hook.
- 25 ft. 16/3 SJTOW cord - oil and water resistant.

NM9MH001 Magnetic Tool Holder

NM600252 Replacement Lens/NM60025, NM60R30

NM6002510 Replacement Top Hook/NM60025, NM60R30

NMNEF13RS 13 Watt Rough Service Bulb

## JBYFL101AM

### Gorillatorch™

- Flexible, wrappable legs and magnetic feet allow user to attach this light to just about anything.
- Illuminates any target while keeping hands free.
- Adjustable intensity up to 65 lumens which allows user to dictate the level of brightness.
- Integrated dimmer switch to control power and brightness with a twist of the wrist.
- Rubberized ring and foot grips provide enhanced stability on slick or uneven surfaces and won't scratch paint.
- Water resistant.
- Shines in the most extreme environments.
- Compact and lightweight.
- Adaptable form enables user to stow it anywhere.
- Perfect for auto repair, home improvement, camping/outdoor, and creative lighting.
- Brightness: 65 lumens/1 watt.
- Ultra-bright CREE LED bulb.
- Three AA batteries (included).
- Size: 8" x 5" x 2.75".
- Weight: 8.9 oz.
- Average Battery Life: Maximum = 20 hrs.; Optimum = 50 hrs.; Economy = 80 hrs.



## NM60R30

### X3 Work Light on Reel



- Economical work light with reel.
- 13 amp power outlet.
- Hinged lens for easy bulb replacement.
- Ratcheting magnet.
- 360° swivel hook.
- 30 ft. 16/3 SJTW cord - oil and water resistant.

NM9MH001 Magnetic Tool Holder

NM600252 Replacement Lens/NM60025, NM60R30

NM6002510 Replacement Top Hook/NM60025, NM60R30

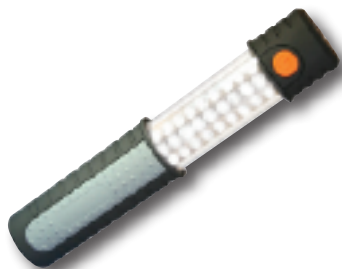
NMNEF13RS 13 Watt Rough Service Bulb

## NM75033

### Lumetric™ 27+6 LED Work Light

• Utilizes Lumetric™ LEDs, the next step in rechargeable work lights with more efficient LEDs and nearly 3X the brightness of ordinary LED rechargeable worklights. • Outshines many conventional flashlights while providing a wider spread of useable light. • Oval cross shape prevents rolling, fits in pockets more easily than round lights. • 6 hours flashlight head, 4 hours with floodlight. • Unique telescoping housing - floodpanel lights when open, turns off when closed. • Separate sealed button switch independently operates LED flashlight head. • Lens and floodpanel are protected when not in use. • Strong magnetic base lets this light "stand on its own". • Kick stand/multi-function hook. • AC wall charger (NM750334) included. • DC car charger (NM750332) sold separately. • Face of slider: 154 lumens. • Flashlight head: 29 lumens.

NM750334 AC Wall Charger



## UV413310

### iView™ LED Work Light



• Wide angle lens offers 120 degree viewing angle with no need to reposition light while working. • Single strip LED provides consistent power from a single light source which illuminates the work area with no shadows or hotspots and offers technicians a wider, brighter light. • Ergonomic and durable rubber grip. • Impact resistant housing won't get damaged if dropped. • Long life battery consistently puts out three hours of full light per charge. • Smart Charger senses full battery and never overcharges, preserves battery life. • Multiple LED array technology for over 330 lumens of brilliant white light, the equivalent of a 75 watt incandescent bulb, in a cordless package.

## STL44900

### Waypoint™ LED Spot Light

• Pistol-grip spotlight features three modes: High, low, strobe. • C4® LED Illumination Output: High - 115,000 candela peak beam intensity/210 lumens; Low - 10,000 candela peak beam intensity/20 lumens. • Runtime (using alkaline batteries): High - 8.5 hours; Low or Strobe - 120 hours. • Unlimited runtime using 12V DC power cord. • Powered by 4 "C" batteries or 12V DC power cord (included). • High impact polycarbonate housing. • Deep-dish parabolic reflector produces a long-range targeting beam with optimum peripheral illumination. • Includes lanyard. • Integrated stand for scene lighting.



## ULRT2LT

### Rotating Magnetic LED Work Light

• Sturdy aluminum housing with 24 high intensity LED Lights. • Head rotates to adjust beam to needed angle. • Strong magnetic base attaches to any metal surface in seconds. • Bridges a work light with a high quality flashlight. • Comes with three (3) AAA batteries.



ULRT2LT6PK Rotating Magnetic LED Work Light Display (6/pk.)

## ULRT48LT

### 48 LED Rotating Magnetic Work Light

• 48 high intensity LED lights. • Sturdy aluminum housing. • Rotates 360°. • Strong magnetic base attaches to any ferrous metal. • Rotating head pivots to direct light to needed angle. • Includes (3) "AA" batteries.



## CEL13250R25

### 13W Drop Cord Light with 25' Reel

• 13 Watt compact light to fit limited access areas; 11" Long. • 18/2 SJTOW cord type is 25' and oil and water resistant. • Swivel hanging hook.



CEL1100617 13 Watt Rough Service Bulb

## CEL13250

### 13 Watt Drop Cord Light

• 13 Watt compact light to fit limited access areas; 9" Long. • 18/2 SJTOW cord type is 25' and oil and water resistant. • Swivel hanging hook.

CEL1100617 13 Watt Rough Service Bulb  
CEL6240686 Housing Assembly



## CEL15250

### 15 Watt Drop Cord Light

• 15 Watt, 25' Cord length. • 18/2 SJTOW cord type is oil and water resistant. • Shatter resistant. • Adjustable hanging hooks. • 20" Long.

CEL1056001 15 Watt Fluorescent Replacement Bulb  
CEL6140171 Housing



## CEL11013

### Angle Drop Light

• 13W 25 ft. Angle Drop Light has unique impact and solvent resistant construction. • Patented angle style. • Patented "Bounce-Bulb" for superior impact protection. • Magnetic clamp with Velcro strap. • Recessed power switch and 13 amp power outlet.

CEL13503 Magnet/CEL11013, CEL11013RG  
CEL1062118000 Lens/CEL11013, CEL11013RG  
CEL1100617 13W Rough Service Bulb/CEL11013, CEL11013RG



## LIGHTING

### CTG6400

#### 30 LED and UV Rechargeable Work Light



- 30 LED provides bright light for work up to 100,000 hours.
- Top of light features an Ultra bright UV 6 LED light for leak detection.
- Also has a flash mode.
- Uses 3.6V - 3300mAh nickel-metal hydride rechargeable batteries.
- 4.5 hour battery life before recharge.
- Adjustable hanging hook.
- Impact resistant molded body.

CTG6400CH Charger

CTG6400HK Hook

CTG6400LN Lens

### LED Rechargeable Work Lights

- Rechargeable 7.4V, 1,400mAh Lithium Ion battery.
- Over charge and low battery protection.
- 360° swivel ratcheting hook.
- Impact proof housing and shield.
- 110V UL approved AC charger.
- Push button On/Off switch.
- Magnetic holder for added versatility.

### CTG6800

#### 32 LED Rechargeable Work Light



- 32 LED provides bright light for work up to 80,000 hours.
- Run time 7.5 hours, recharges in 3.5 hours.

CTG6800CAP End Cap with hook/CTG6800

CTG6800CH Charger/CTG6800, CTG7200

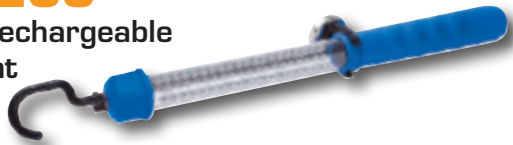
CTG6800HK Hook/CTG6800, CTG7200

CTG6800LN Lens/CTG6800

CTG6800MG Magnet/CTG6800, CTG7200

### CTG7200

#### 60 LED Rechargeable Work Light



- 60 LED provides bright light for work up to 80,000 hours.
- Run time 4.5 hours, recharges in 3.5 hours.

CTG6800CAP End Cap with hook/CTG6800

CTG6800CH Charger/CTG6800, CTG7200

CTG6800HK Hook/CTG6800, CTG7200

CTG6800MG Magnet/CTG6800, CTG7200

CTG7200LN Lens/CTG7200

### ECDBXL5000

#### Double LED Worklight

- Rechargeable double head LED work light with laser pointer.
- Two light heads for a total of 37 LEDs and one laser.
- 18 LEDs on top and 19 LEDs on the bottom.
- Three position switch for LEDs: top head on, both heads on, off.
- Separate laser pointer on/off switch.
- Provides a wider span of illuminated area most other conventional LED work lights.
- 222 Lumen light output.
- Up to 10 hours of cordless use between charging.
- Water resistant.
- Laser = Max output: <math>< 5\text{mW}</math>.
- Wavelength: 630 - 650 nm, Class IIIa.
- Extremely durable shatter resistant ABS housing.
- Tested for operation between -4°F to 95°F.
- Replaceable lenses and hook (hook is molded from super strong glass reinforced resin).

ECDBXHOOK Hook

ECDBXLENS Replacement Lens



### STL90627

#### Knucklehead® Rechargeable Work Light with Charger/Holder



- Articulating head designed to put light where it is needed.
- Engineered optics feature dual parabolic reflectors within a larger textured reflector optimizing light on target in conjunction with an overall smooth flood pattern.
- Shockproof dual C4® premium LED technology delivers 200 lumens.
- 4 modes: High (1150 candela peak beam intensity, 200 Lumens, 3.5 hour runtime), Low (350 candela peak beam intensity, 63 lumens, 16 hour runtime), Moonlight (20 day runtime) and Flash (8 hour runtime).
- Dual power source accepts rechargeable NiCd battery pack or 4 "AA" alkaline batteries.
- Rubber dome push-button actuator is easy to operate even when wearing heavy gloves.
- Removable magnet with 135 lbs. of pull strength features a replaceable rubber boot.
- Optimized electronics provide regulated intensity.
- High-impact, super-tough nylon polymer construction for exceptional durability.
- Integrated, stowable hook.
- 2 meter impact-resistant tested.
- IPX4 rated for water-resistance.
- Serialized for positive identification.
- 9.2 in. (23.4 cm); NiCd 23.1 oz. (655 grams); Alkaline 18.3 oz (519 grams).

STL90010 Steady Charge Plug-In Charger Holder

STL22311 A/C Charge Cord

### STL90633

#### Knucklehead® Rechargeable Piggyback® Kit



- Designed to put light where it is needed.
- Comes with 120V AC/DC charger cords.
- Engineered optics feature dual parabolic reflectors within a larger textured reflector optimizing light on target in conjunction with an overall smooth flood pattern.
- C4® LED technology.
- Features a 210° articulating head that rotates a full 360°.
- 4 modes: High - 150 candela peak beam intensity, 200 lumens, 3.5 hour runtime; Low - 350 candela peak beam intensity, 63 lumens, 16 hour runtime; Moonlight - 20 day runtime; Flash - 8 hour runtime.
- Dual power source: accepts rechargeable NiCd battery pack or four "AA" alkaline batteries.
- Rubber dome push-button actuator.
- Removable magnet with 135 pound pull strength and hangs from stowable hook for hands-free use.
- High-impact, super-tough nylon polymer construction for exceptional durability.
- 2 meter impact-resistance tested.
- IPX4 rated for water-resistance.
- 9.2" (23.4 cm).
- Weight: NiCd 17.7 oz. (655 grams); Alkaline 18.3 oz. (519 grams).

STL90110 Steady Charge Piggyback® Charger

STL22311 A/C Charge Cord

### ULRT2LTCH

#### 24 LED Rechargeable Rotating Magnetic Work Light



- 24 high intensity LED lights.
- Sturdy aluminum red housing.
- Rotates 360°.
- Strong magnetic base attaches to any ferrous metal.
- Rotating head pivots to direct light to any needed angle.
- Includes a 110 volt charger.

ULRT2LTCH6PK Rechargeable Magnetic Work Light Display (6/pk.)

## CWTLWL132R

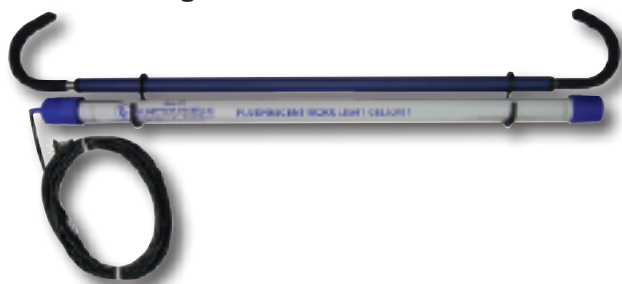
Rechargeable Underhood Light - 132 LED



- Freedom from power cords promotes safety in the workshop while providing hands free lighting of the entire engine compartment.
- High performance 7.4V 2400mAh Li-Ion rechargeable battery provides up to five hours of continuous light on a single charge.
- Super bright LED provides 5000-7000 MCD light power.
- Comes with a 110 volt charger, cigarette lighter adapter and battery clips.

## CEL63403

Under Hood Light with LitePerch™



- Gives hands-free lighting of entire engine compartment.
- Avoid awkward and dangerous halogen lights.
- Works on all passenger cars and light duty trucks.
- Under Hood light features 25 watt, cool running, fluorescent bulb and extra thick shatterproof housing.
- 25' 18/2 SJTOW cord is oil and water resistant for superior life.
- Light is 44" long.
- LitePerch™ opens up from 4" to 6"6" and works on all cars and light duty trucks.
- Self adjusts to fit the hood.
- Light is easily positioned on LitePerch™ to better illuminate the work area.
- Covered arms protect the hood from scratches.

CEL1056026 25 Watt Replacement Bulb (3)  
CEL63402 LitePerch™/CEL63401 and CEL63403

## NM30025A

32" Canopy Light



- Works on tool storage hutches from 55" to 85".
- Lights up entire work area.
- Doubles as a fluorescent work light.
- Bright, white 18 watts of light.
- 25 ft. SJTOW oil and water resistant cord.
- Two magnets included for securing to hutch, yet allows for easy removal.
- Has an electronic ballast for flicker free instant-on in sub-zero climates.



**WARNING!**

Electrical shock can result from absence of grounding prong. Do not remove or bypass the grounding prong in any electrical plug.

## NM25000

25W Extend-A-Lite™



- 25 powerful watts of fluorescent light to be attached nearly anywhere the user wants.
- Special removable straps allow light to be used without the included light-bar apparatus.
- This light will fit anywhere, even under a hood.

NM25002 Replacement Rubber Straps (2)  
NMNEFF25T830CW 25W Replacement Bulb

## NM75044

8 LED Extend-A-Lite™



- 8 watt super bright LUMETRONIC™ LEDs.
- Special LEDs emit very wide usable light for broader work areas.
- Cushioned pivoting, "Hinge-Hooks" allow maximum conformity to grip most areas without scratching.
- Extraordinary brightness - over 300 lumens.
- Shock resistant.
- Unbreakable polycarbonate tube.
- Industrial grade 18/2 SJTOW cord.
- Spring loaded and self-centering adjustable aluminum bar.

## CST19268

7468 Dimming Headlamp



- Max Beam™ Optic System with Bulls Eye spot beam.
- Dimming function.
- Z Cord in headband.
- Adjustable elastic straps.
- Easy to operate front power switch.
- Light output: High-153 lumens, Low-3 lumens.
- Runtime: High-5 hours, Low-74 hours, 30 minutes.
- Beam distance: High-370 feet (113 meters), Low-52 feet (16 meters).
- Three (3) "AAA" batteries (included).
- Nylon storage case included.

## IMI308G2W

Master Vision G2 Cap Light



SPECIFICATIONS	
Bulbs .....	3 ultra bright LEDs
Batteries .....	(2) 2032 Lithium coin cell
Weight.....	1.0 oz. with batteries
2-Way action....	Blinking/Constant
Burning Time:	
Blinking .....	Approx. 600+ hours
Constant .....	Approx. 75+ hours



Hat not included!

- Lightweight, compact cap light.
- Engineered to withstand extreme conditions and rugged use.
- An essential tool for the professional and recreational outdoorsman, mechanic, hobbyist or anyone who needs ultra bright, hands-free light.
- Powered by two lithium coin cell batteries for 75+ hours of burn time each.
- Weighs only 1.0 ounces with batteries (Included).
- Water resistant.
- Attaches to any style brimmed cap for the most practical, hands-free light source available.

Lighting

## LIGHTING

### SGL05282001

#### Veratti® LED Butterfly Clip Light (2)



Shown with glasses for illustration purposes only - glasses not included.



- Compact, lightweight, removable LED light for more comfort.
- Butterfly clips attach to frame of safety glasses.
- On/Off switch button to increase battery life.
- Rotates up to 360° for more precision.
- Equivalent brightness 40W for better vision in dark environments.
- Includes: (2) LED Lights and (2) sets of extra batteries.

### LED Light Bulb Upgrades



- Energy efficient, long lasting, unbreakable.
- LED's never need replacing.
- Extends battery life.
- Electronically regulated for constant light output.
- Maintains Maglite® focus.
- Pure white light.
- TLTL6EX and TLTL6EXB have ultra focus for long distance.
- Increases performance and efficiency over incandescents.

PART NO.	FITS LIGHTS:	DESCRIPTION
TLTL6EX	4-6 cell "C" & "D" Maglite®	MiniStar5™, 3 Watt LED, 140 Lumens, batteries last 20 times longer
TLTL6EXB	2-3 cell "C" & "D" Maglite®	MiniStar5™, 3 Watt LED, 140 Lumens, batteries last 20 times longer

### STL95007

#### Stylus Reach®



- Unbreakable 100,000-hour high intensity white LED bulb never needs replacing.
- 20 times longer battery life than standard flashlights.
- Up to 60 hours of run time.
- 14 inches of reach (folds to a compact 7 inches).
- Flexible cable (copper core) shielded and insulated with PVC.
- Momentary 'blink' or constant 'on' switching.
- Waterproof.
- Aircraft aluminum casing.
- Non-slip grip.
- Pocket clip allows hands-free use.
- Includes three (3) "AAAA" size alkaline batteries.
- Weight: 1.7 oz.

### JS10150A

#### 16" Pro Bend-A Light®



- High intensity flexible light tool with 3/16" diameter spring-loaded bulb.
- Flexible 1/8" diameter 10" brass shaft with heavy duty switch.
- Heavy duty plastic barrel handle.
- Protective cover and 2 "AA" alkaline batteries included.

JS12100 Repl. 3/16" dia. bulb

### General Purpose Batteries (not illustrated)

PART NO.	TYPE	SIZE	VOLT	PKG. QTY.
IBDRY0003	Alkaline	"AA"	1.5	8
IBDRY0035	Alkaline	"AAA"	1.5	4
IBDRY0067	Alkaline	-	9	8
IBDRY0080	Alkaline	"C"	1.5	12
IBDRY0085	Alkaline	"D"	1.5	12
IBDRY1390	Alkaline	"N"	1.5	2
STL65030	Alkaline	"AAAA"	1.5	6
STL85175	Lithium	CR123		2

### TLTLEST1EX

#### Ministar ST/XT LED Upgrade Kit



- For 3.6 volt rechargeable Streamlight® Stinger®, Stinger XT® and Polystinger® Flashlights.
- Smart electronics for exceptional battery life and constant light output.
- 300 Lumens.
- Over 2 times brighter than standard bulbs.
- Up to 120 minute runtime. 50% longer than standard bulbs.
- LED won't burn out.
- Includes heavy duty heat sink and high quality TIR replacement lens.
- Damage to a Stinger® attributed to its use is not covered by the Streamlight® lifetime warranty.

NOTE: TerraLUX® is not affiliated with Streamlight, Inc., which owns the STREAMLIGHT® trademark and the STINGER® line of trademarks. Streamlight Inc.'s trademarks are used here only to identify the flashlights with which TerraLUX® intends its products to work. TerraLUX®'s products are not made, endorsed, or sponsored by Streamlight, Inc.

### THE SIX MAJOR POINTS OF HAND TOOL SAFETY

1. Wear approved eye protection.
2. Choose the right tool for the job.
3. Do not alter a tool in any way, shape, or form.
4. Never abuse or misuse tools.
5. Never exceed tool capacity.
6. Do not use a tool that appears to be damaged or weakened.

**“Swivel Grip” Oil Filter Wrenches**

- Swivel handle, gripper “teeth”, and 1” wide stainless steel band.
- Vinyl covered handle.
- Handle swivels to clear obstructions.



PART NO.	TYPE/RANGE	APPLICATIONS
CLS53500	Standard 3-1/2" to 3-7/8" (88.9-98.4MM)	Fits standard 3-5/8" filters.
CLS53700	Small 2-7/8" to 3-1/4" (73-82.5MM)	Fits late model GM and other models using small 3" filters.

**Swivel Grip Oil Filter Wrenches**

- Features swivel handle, gripper “teeth”, and 1” wide stainless steel band.
- Vinyl covered handle swivels to clear obstructions.



PART NO.	TYPE/RANGE	APPLICATIONS
LS53200	4-3/4" to 5-3/16" (120.7-131.8MM)	Works on John Deere.
LS53250	Large 4-1/8" to 4-1/2" (104.7-114.3MM)	Fits most models of Mack Trucks, Ford Caterpillar, Case and Allis Chalmers tractors.
LS54200	4-5/16" to 4-3/4" (109.5-120.7MM)	Works on Cummins and Detroit Diesel engines.
LS54300	5-1/4" to 5-3/4" (133.5-146MM)	Works on Caterpillar engines.

**Swivel-Gripper™ “No-Slip” Filter Wrenches**

- Tough, stainless steel band with permanently bonded textured coating for superior gripping power, won't slip.
- Swivel handle makes it easy to turn in tight spots.
- Handle swivels more than 180° with adjustable tension.
- Tension adjusting nut allows swivel pressure to be regulated, no more floppy filter wrenches.
- Patent pending coating process adds many additional gripping points to securely grab the filter.



PART NO.	SIZE/RANGE	APPLICATION
LS57010	Extra Small 2.375" - 2.625" (60.3 - 66.7MM)	For small oil and fuel filters. Special narrow 1/2" band fits in tight spots.
LS57020	Small 2.875" - 3.25" (73 - 82.5MM)	Fits a common smaller filter size found on many domestic and foreign vehicles.
LS57030	Regular 3.5" - 3.875" (88.9 - 98.4MM)	Fits most popular 3.625" standard filters.
LS57040	Large 4.125" - 4.5" (104.7 - 114.3MM)	Fits most tractors and other farm implement products.



**WARNING!**

*Wear safety goggles. Crush oil filters only, one at a time. Do not crush fuel filters. Read operating instructions thoroughly.*

**LS54400**

**Fuel Filter/  
Oil Filter  
Wrench**



- For small oil and fuel filters.
- Tough stainless steel band with special “teeth” for extra gripping power...won't slip.
- Special narrow 1/2" band fits in tight spots.
- Handle swivels to clear obstructions and makes it easy to turn in hard to reach locations.
- Vinyl covered handle.
- Covers a range of 2-3/8" to 2-5/8" (60.3-66.7MM).

**HR25101**

**Four-in-One Swivel  
Filter Wrench Kit**

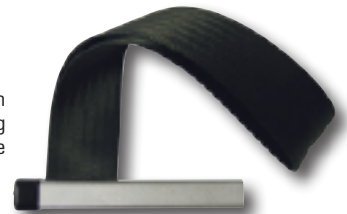
- Handles filters from 2-3/8" to 4-3/8" (61MM-111MM) with one kit.
- One swivel handle assembly with four interchangeable bands.



**HR814**

**Strap Filter Wrench**

- Adjusts quickly to fit any spin on filter up to 6-in. diameter.
- Strong nylon web belt will not slip.
- Use with 1/2" drive wrench.



**HR27600**

**3 Legged Oil Filter  
Wrench**

- Features gear driven legs to grip and turn the tightest filters.
- Designed for use with 3/4" driver or 3/4" hex wrench.
- Compact design allows for use in tight spaces.
- Removes filters from 2-3/8" - 3-3/4" range (60-95MM).
- Can also be used to tighten filters as well.



**HR27700**

**Spider Filter Wrench**

- Three legged design is ideal for removing spin-on filters in tight areas.
- No handle to interfere with removal.
- Long serrated legs driven by a 3/8" extension and ratchet wrap around filter.
- Fits filters with diameter of 2-1/2" to 4-3/4" (64-121MM).



**HR27800**

**Heavy Duty Strap Filter  
Wrench**

- Designed to grab and remove filters up to 9".
- Cordura strap is tough and oil resistant.
- Can be used with a 3/8" or a 1/2" drive.
- Excellent for use in heavy duty and on the toughest filters.



Undercar & Wheel

## ARTOY640

### 64MM Toyota Oil Filter Wrench

- 64MM oil filter wrench with 14 flats.
- Applicable: 2007-2009 Toyota 3.5L V6, 2008-2010 Toyota V8 5.7L, and new 3.5L V6 and 5.7L V8.
- Fits 2010-2011 4.6L V8.
- Also fits 2005-2007 Avalon (V6).
- Fits filter housing #15620-31050.



## LS54930

### 65MM/14 Flute End Cap Wrench

- For 65MM diameter oil filters and canisters with 14 flutes.
- Works on several Toyota applications including: Toyota Avalon 2005-2008; Camry 2007-2009; RAV4 2006-2008; Sienna 3.5L 2007-2008; Tundra 5.7L 2007-2008; Matrix 2009; Corolla 2009; Lexus GS, IS, LS 2006-2008; Lexus ES, RX 2007-2008; Pontiac Vibe 1.8L 2009.



## AR5063

### 63MM Oil Filter Wrench

- 63MM with 14 flats.
- Fits Honda, Nissan, and Yamaha factory filter #5GH-13440-00 and Kawasaki factory filter #16097-0003, used in their Powersports products.



## ARHY8815

### Hyundai Oil Filter Wrench

- 22MM Hex, 88MM with 15 flats.
- Made of Aluminum.
- Used on 2006-newer Hyundai, Azera, Santa Fe and Sonata models equipped with a V6 and with a paper cartridge oil filter.



## LS54950

### 88.4MM Filter Wrench

- 15 flute end cap.



## PBT71115

### 3 Piece Oil Filter Wrench Kit

- Complete service kit for Toyota/Lexus oil change service.
- Oil filter wrenches provide multiple contact points that engage the filter housing cap securely allowing easy removal.
- Hose assembly allows oil to be drained from the filter housing before removal.

Kit contains the following:

PART NO.	DESCRIPTION
PBT71110	Toyota/Lexus Oil Filter Wrench - 4 cylinder
PBT71113	Toyota/Lexus Oil Filter Wrench - 6 & 8 cylinder
PBT71114	Toyota/Lexus Oil Filter Drain Hose Assembly



## OW6903

### Ford/Mazda and Toyota 2.3L Oil Socket

- 75.6MM, 14 Flutes.



Ford/Mazda	
Designed to fit new 2.3L 4-cylinder engines. Works on Ford Fusion, Mercury Milan, Mazda 3, Mazda 5, and Mazda 6.	
Toyota	
Avalon	2005-2007 V6 3.5L (2GR-FE), 1995-2004 V6 3.0L (1MZ-FE)
Camry	2007 V6 3.5L (2GR-FE), 2004-2006 V6 3.3L (3MZ-FE), 1994-2006 V6 3.0L (1MZ-FE)
Camry Solara	2004-2007 V6 3.3L (3MZ-FE)
Highlander	2004-2007 V6 3.3L (3MZ-FE) - also works on the hybrid version of this engine
RAV4	2001-2003 V6 3.0L (1MZ-FE)
Sienna	2006-2007 V6 3.5L (2GR-FE)
	2007 V6 3.5L (2GR-FE), 2004-2006 V6 3.3L (3MZ-FE), 1998-2003 V6 3.0L (1MZ-FE)

## OW6904

### Hyundai/Kia 3.3L Oil Socket

- 88.22MM, 15 Flutes.
- Works on 2006 Hyundai Sonata and Santa Fe 3.3L V6 engines.
- Works on 2007 Hyundai Azera, Veracruz and Entourage 3.8L V6 engines.
- Works on 2007 Kia Amanti, Sedona and Sorrento 3.8L V6 engines.



## LS63250

### Wide Range Oil Filter Wrench

- Fits filters from 3-1/8" to 3-7/8".
- Steel jaws grip filter without slipping.
- Works in tight spots from the front of the filter using 3/8" drive.
- Shipping weight: 14 oz.

LS63630 Spring Clip



## ARTOY730

### Oil Filter Wrench

- 73MM with 14 flats.
- Applicable to Toyota 4.7L V8 engines.
- Metal construction.
- Fits 1992-2006 Lexus ES 300 and 330.



## ARBM1276

### BMW Motorcycle Oil Filter Wrench

- 76MM, 12 flutes, 3/8" drive.
- Applicable to BMW motorcycles 2007-2011 with oil filter #11 42 7 673 541.
- Also for removal and replacement of older Mercedes OEM oil filters with 12 flutes.





## CLS63600

### Cornwell Import Car Oil Filter Wrench

- Fits 2-1/2" Toyota oil filter. • Removes all oil filters from 2-1/2" to 3-1/8" in diameter.
- Extra large range enables the tool to fit most import car filters plus the common 3" domestic car filters. • Steel jaws grip filter without slipping. • Work in tight spots from the front of the filter using 3/8" drive.

LS63630 Spring



## TCC100

### Oil Filter Wrench Set

- Each tool acts like a socket to remove hard-to-reach or stubborn oil filters. • Largest size range available. • Specific sizes for popular import OEM and replacement filters.
  - Use with 3/8" drive or with extensions to reach difficult filters: protects mechanic from hot oil contact. • Will not crush filter can or cause oil spillage and cleanup expense. • Glass reinforced engineered composite material.
  - Provides high torque capacity which handles 140 ft.-lbs. of torque to remove even the most stubborn filters (competitive plastic cup wrenches don't even come close to this torque capacity).
  - Metal drive insert will not deform or break even after years of service.
- Set consists of the following in a blow molded case:



PART NO.	DESCRIPTION
TCC100B	65/67MM, 14 Flute Oil Filter Wrench
TCC100I	74/76MM, 15 Flute Oil Filter Wrench
TCC100J	76MM, 14 Flute Oil Filter Wrench
TCC100Q	93MM, 15 Flute Oil Filter Wrench
TCC100Z	76/80/93MM, 30/15/36 Flute Oil Filter Wrench

## AR2101

### 7 Piece Oil Filter Tool Set

- Contains oil filter wrench sockets for many domestic and foreign applications. • Covers all Mercedes-Benz applications. • 27MM, 32MM and 36MM hex sizes covers VW/Audi, BMW, newer Mercedes 4-cylinder engines, Saturn & GM 2.2 L Ecotec engines. • Covers Ford Escape Hybrid and Ford OEM #FL910 and #FL793. • The four cup-style wrenches cover many VW, BMW, Toyota, and Mazda 3. • Also covers Dodge Sprinter and Jeep 3.0L CRD engines and 1999-2010 Volvo Models.

Kit contains the following:

PART NUMBER	DESCRIPTION
AR2127	27MM Oil Filter Socket
AR2132	32MM Oil Filter Socket
AR2136	36MM Oil Filter Socket
AR2175	74.5MM Oil Filter Wrench
ARMO219	Oil Filter Wrench
ARMO284	Oil Filter Wrench 3.0L CRD Sprinter
ARV410	Oil Filter Wrench



## LS54920

### Cap Style Filter Wrench Set

- Ten 3/8" drive cap wrenches that fit many domestic and import automotive applications. • Complete set comes in a handy 10" x 13" plastic case. • Shipping weight: 5 lbs. 7 oz.



Set includes the following:

PART NO.	SIZE	FLUTES	PART NO.	SIZE	FLUTES
LS54700	65/67MM	14	LS54800	93MM	36
LS54720	80MM	15	LS58330	68MM	14
LS54740	74/76MM	15	LS58340	76MM	30
LS54760	76MM	14	LS58350	86MM	16
LS54780	93MM	15	LS58360	100MM	15

## LS54980

### European Filter Wrench Set

- Includes eight (8) end caps and four (4) sockets. • A useful set of end cap filter wrenches and filter canister sockets for use on the most popular European vehicles such as BMW, Mercedes, VW/Audi and more. • Use with 3/8" drive.



Set includes the following Part Numbers and sizes:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS13310	24MM low profile hex	LS54760	76MM - 14 flutes
LS13320	27MM low profile hex	LS54780	93MM - 15 flutes
LS14500	36MM low profile hex	LS54940	86MM - 14 flutes
LS14700	32MM low profile hex	LS54970	96MM - 18 flutes
LS54360	93MM - 45 flutes	LS58330	68MM - 14 flutes
LS54740	74/76MM - 15 flutes	LS58350	86MM - 16 flutes

## LS54990

### Asian Cap Filter Wrench Set

- Includes 11 end cap wrenches.
- A collection of end cap filter wrenches for use on the most popular Asian vehicles such as Toyota, Honda, Nissan, Suzuki, Hyundai, Kia and more. • Use with 3/8" drive.



Set includes the following Part Numbers and sizes:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS54370	74MM - 14 flutes	LS54800	93MM - 36 flutes
LS54380	82MM - 15 flutes	LS54930	65MM - 14 flutes
LS54720	80MM - 15 flutes	LS54950	88.4MM - 15 flutes
LS54740	74/76MM - 15 flutes	LS58330	68MM - 14 flutes
LS54760	76MM - 14 flutes	LS58340	76MM - 30 flutes
LS54780	93MM - 15 flutes		

## LS53100

### Adjustable Oil Filter Wrench

- For trucks and tractors.
- Fits John Deere, Case, Caterpillar, Mack, Detroit Diesel and others.
- Tough, stainless steel band with special "teeth" for extra gripping power, won't slip.
- Professional quality.
- 1/2" square drive.
- Range: 4-3/8" - 5-5/8" (111.1-142.8MM).



### Truck Oil Filter Wrenches

- Heavy duty square drive band-type oil filter wrenches for truck and tractor applications.
- Feature heavy duty yoke and 1-1/2" steel band.
- Designed for high torque requirements.
- Use with 1/2" sq. drive extension.



PART NO.	DESCRIPTION
HR280	4-1/8" to 4-21/32" (104MM to 118MM)
HR281	4-21/32" to 5-5/32" (118MM to 131MM)
HR282	5-5/32" to 5-21/32" (131MM to 144MM)

## HR238

### Extra Large Truck Oil Filter Wrench

- Fits most John Deere tractors.
- Also works on some Case, Case/IHC, Allis Chalmers tractors and other farm implement products.
- Heavy duty swivel grip handle.
- Tough steel band with special teeth for extra gripping power.
- Tubular steel handle for added strength.
- Range: 4-3/4" to 5-3/16".



## HR25200

### Truck and Tractor Fuel Filter Wrench

- Low profile wrench to access those tough fuel filters in tight quarters.
- Use for removal and installation on the Ford Power Stroke Diesel and International/Navistar Diesel engines.



## HR29200

### 2 Piece Oil Filter Pliers Set



- Manufactured with heavy duty forged levers with cushioned grips.
- Spring loaded, easily adjusted.
- One-hand operation.

Set consists of one each of the following:

PART NO.	DESCRIPTION	RANGE	O.A. LENGTH
HR28300	Oil Filter Pliers	2-1/2" to 5-1/4"	13-1/4"
HR29900	Truck and Tractor Filter Pliers	3-3/4" to 7"	18-1/2"

## CLS50750

### Slip Joint Oil Filter Pliers

- Two-position slip joint handle for greater range.
- Jaws are bent at a 20° angle to fit more applications.
- Sure grip teeth prevent slipping.
- Cushioned handles add comfort.
- Overall range: 2-1/4" to 4".



### Tongue and Groove Filter Pliers

- Oil filter pliers with right angle teeth to grip in all directions.
- Neon orange comfort grip handles.



PART NO.	SIZE	# of ADJUSTMENTS.	CAPACITY
CCL212	12"	5	2-3/4" to 4-1/4"
CCL215	15-1/2"	6	2-1/2" to 5-1/2"

## CCL209

### 9" Oil Filter/PVC Plier

- Right angle teeth grip in all directions.
- High carbon drop-forged steel.
- Patented PermaLock® fastener eliminates nut and bolt failures.
- Orange comfort grips.
- Adjustments: 4; Length: 9"; Capacity: 1-3/4" to 3-1/2".



## T22400F

### GM Oil Filter Socket, 1-1/4"

- 3/8" drive.
- Chrome-plated 6 point socket.
- A 3/8" drive torque wrench can be used to reinstall filters.
- Applications: GM 2.2 Ecotech engine installed on Saturn L-Series from 2001, Saturn Ion/Vue, Chevy Cavalier, Sonoma and S-10 from 2002 and Malibu from 2004, Pontiac Sunfire and Grand Am, and Oldsmobile Alero.



## LS13300

### 5 Piece Filter Socket Set

- Set of five low profile oil and fuel filter canister sockets in one handy case.
- Contains very low profile, 6 point 24MM, 27MM, 29MM, 32MM, and 35/36MM sockets for use on oil and fuel filter canisters when replacing the element.
- Use with 3/8" drive.

Set includes:



PART NO.	DESCRIPTION
LS13310	24MM for Cadillac and some BMW
LS13320	27MM for 2003 and later Mercedes 1.8L, Smart and some VW
LS14500	35/36MM for Ford 6.0L diesel fuel and oil filter housing, Mini Cooper and some BMW oil filter housings, and Mack Truck oil filter housing
LS14600	29MM (1-1/8") for Dodge Cummins fuel filter housing
LS14700	32MM (1-1/4") for GM Ecotec, 2.0L, 2.2L and 2.4L four cylinder oil filter housing; some Saturn and Saab

## LS14650

### Filter Socket Set

- Three low profile sockets in one convenient case.
- Can be used for a variety of filter housing applications.
- All sockets are 3/8" drive.



Set Includes the following:

PART NO.	SIZE	APPLICATIONS
LS14500	35/36MM	Ford 6.0L Diesel Fuel and Oil Filter Housings, Mini Cooper and some BMW Oil Filter Housings, and Mack Truck Oil Filter Housing
LS14600	29MM	Dodge Cummins Fuel Filter Housing
LS14700	32MM	GM Ecotec, 2.0L, 2.2L, and 2.4L Four Cylinder Oil Filter Housing; Some Saturn and Saab

## OW6784

### European/GM Oil Socket Kit

- Popular oil filter wrenches for GM, BMW, Audi, and VW.
- High quality, 3/8" drive, forged sockets.
- Kit contains three sockets: a 27MM socket for the Cadillac STS 3.2L V6 and the Mercedes-Benz 1.8L I4; a 32MM socket for the 2.2L GM Ecotec and Saab; and a 36MM for the BMW M52, M60, M62, M70, and M73 engines, M-B OM604, 605, and 606 engines, and VW/Audi VR6 engine.



## LS58850

### Oil Pan Plug Rethreading Kit

- Removes damaged thread and taps a new oversize thread.
  - This set includes a piloted drill, spring-loaded tapping tool and 5 magnetic drain plugs.
  - The unique tapping tool ensures the new thread will be perpendicular to the gasket surface to prevent leakage.
  - Works on soft steel and aluminum oil pans with 1/2", 12MM, and 14MM threads.
  - Can be used on the vehicle when room permits.
- LS58650 Oil Drain Plugs (5)**  
**LS58880 Piloted Drill Assembly**  
**LS58900 Tap**



## LS34000

### Oil Filler Cap Wrench for Dodge

- Fits threaded plastic oil filler caps on newer Dodge V8 engines.
- Helps loosen stubborn oil filler caps by providing leverage.
- Can be used with 3/8" square drive.
- Works great in hard-to-reach areas.
- For use on many Dodge Ram, Dakota and Durango as well as some Jeep Liberty, Grand Cherokee and Commander with threaded plastic oil filler caps.



## RB538

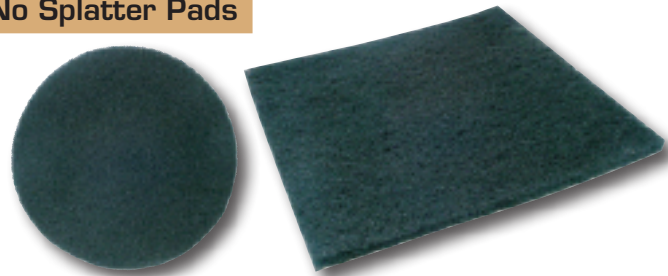
### Ford Fuel and Oil Filter Socket

- Works on various fuel filters for Ford diesel, some International/Navistar trucks, some VW.
- Blue anodizing for easy visual identification.
- 36MM hex, combined with 6 notches allow this tool to do the work of two.
- 3/8" drive.



### No Splatter Pads

- Protects floors and work area from messy oil splatter.
  - Insert 15" diameter pad in funnel or oil pan or insert 22" pad in transmission drain funnels or larger oil drain pans before oil change to eliminate splatter.
  - Porous material allows fluid to quickly pass through into funnel or pan.
  - Pad material resists engine oil, transmission fluid, coolant, brake fluid, brake cleaner, gear oil and other solvents.
  - 15" pad fits all standard oil lift drain funnels and oil pans.
  - 22" square pad fits all standard transmission drain funnels and larger size drain pans.
  - Pad can be trimmed for perfect fit.
- IMPORTANT: Not for coolants or fluids that will be recycled in the vehicle. Material fibers may contaminate the fluid.**



## LS69000

### Dual Drive Stubby Metric Hex Bit Set

- Unique, dual-drive stubby design for use on many import vehicle drain plugs and other applications.
  - Works great in tight spots.
  - Bits can be turned with a 1/2" square drive from the end or by using a 1" open end, box end or ratcheting wrench.
  - Collar keeps wrench from slipping.
  - Bits are made of heat-treated alloy steel for strength and are stamped with the drive size.
  - Length: 1.63"
- Set consists of the following in a vinyl holder:



PART NO.	DESCRIPTION
LS69120	10MM Dual Drive Stubby Hex Bit
LS69130	12MM Dual Drive Stubby Hex Bit
LS69140	14MM Dual Drive Stubby Hex Bit
LS69150	17MM Dual Drive Stubby Hex Bit

## LS17922

### Multi-Drain Tub

- 30 quart, all purpose, heavy duty, plastic drain tub for draining radiator, crankcase, transmission or differential.
- Apron for washing and sorting parts.
- Dimensions: 33"L x 22"W x 8"D.

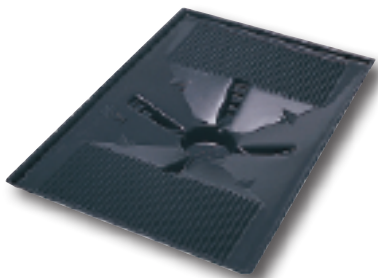


Undercar & Wheel

## LS17902

### Super Transmission Drain Funnel

- Heavy-duty plastic drain funnel extends the catch area of any lift drain.
- Funnel catches any loose parts.
- Flexible - will return to original shape.
- Made to accommodate extra large transmissions like the Ford E 4OD and others.
- Fluted for draining oil filters.
- Extra large 24" x 36" size.



## LS11102

### Eight Gallon Oil Lift Drain

- Large 15" funnel with strainer.
- Wide working range 36-1/2" to 74".
- Quick release lock ring for fast raising/lowering of upper tube.
- Heavy duty adjustment clamp.
- Large handle and big pour spout with threaded cap for pouring ease.
- Lower center of gravity for increased stability.
- Four 2-1/2" ball bearing swivel wheels.
- Special shaped translucent eight gallon jug.
- Reinforced base will not warp with hot oil.

LS11012 3" Repl. Wheel

LS11052 Black Cap

LS11302 Funnel

LS11602 Replacement Wheel Assembly



## 4.5 Gallon Drain Pans



- 4.5 gallon capacity drain pan for recovery of oil, antifreeze and other automotive fluids potentially harmful to the environment and for easy transfer of liquids.
- High-density polyethylene material is resistant to chemicals and solvents, and is easy to clean.
- 1" wide diameter spout for quick and easy pouring.
- The anti-splash lip and baffles help prevent spilling when carrying or pouring.
- Comes with large, easy-grip handles.

**WARNING!** These products are not intended for storage of flammable or other dangerous liquids.

PART NO.	COLOR	APPLICATION
CLS17942	Black	Oil Drain Pan
CLS17952	Green	Antifreeze Recovery Drain Pan

## LS17892

### Transmission Drain Funnel

- Heavy duty plastic lift drain funnel.
- Extends catch area of any lift drain.
- Funnel catches any loose parts.
- Flexible, returns to original shape if bent.
- Dimensions: 22" by 23".



## CR501

### Funnel Buddy

- Keeps funnel where you can find it and free of dust.
- Safely drains all residual fluids into the collection for proper disposal. Mounts to toolboxes and most surfaces.
- Transparent funnel and collection bottle are included.
- Great for garage or workshop.
- Overall dimensions: 20-1/2" x 5-5/8" x 5-1/2".
- Weight: 2 lbs.



## LS19802

### Two Piece Super Funnel

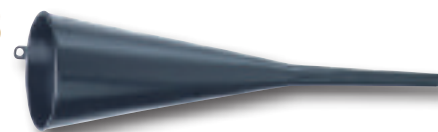
- A threaded oil/transmission funnel for hands-free filling on threaded valve cover openings.
- Two-piece design can be used separately or threaded together for a long super funnel.
- Larger section screws into threaded oil filter openings found on many Ford pickups and Dodge, Jeep and Chrysler cars, mini vans, and SUVs.
- The small funnel is narrow to fit even the smallest applications including transmission filler holes.



## PL75068

### Super Funnel

- All purpose utility funnel.
- Extra long neck to reach out of the way spots.
- 2 quart capacity.
- 18" overall length, 5" diameter, 1/2" O.D. tip.



## PL75074

### Funnel with Flexible Spout

- Two-piece, multi-purpose funnel with 12" detachable flexible spout.
- Triple threaded spout for 1 quart oil bottles, antifreeze and windshield washer containers, and 4-5 quart bottles.
- Easy grip handle.
- 15" overall length, 6" diameter with 3/4" O.D. tip.



## WRK960

### Harley Davidson® Oil Funnel



- Keeps oil from damaging the rubber engine mount.
- Drip-free - drain oil with no mess.
- For all current Harley-Davidson® Touring, Dyna®, Softail®, Sportster® and forward control models.
- Hangtab for use on pegboards.
- Punch and drain tube extension - included for lower faring.

\* Harley Davidson®, Dyna®, Softail®, and Sportster® are registered trademarks of Harley Davidson Inc.

## LS19732

### 6 Quart Oil Dispenser

- Translucent polyethylene material enables the user to read the liquid level on the container.
- Marked with both quarts and liters.
- Flexible, removable 8" pouring spout enables easy transfer of liquid.

LS19742 White Spout and threaded collar  
LS19792 Black Cap



## LS19702

### 8 Quart Oil Dispenser

- Large size for trucks, SUVs and other engines with greater oil capacity.
- Many large SUVs and trucks now require more than 6 quarts of oil.
- Translucent polyethylene material enables the user to read the oil level on the container up to 8 quarts.
- Marked in both quarts and liters.
- Flexible, removable 8" pouring spout.
- Lid may not fit older 8 quart dispensers.

LS19682 Lid  
LS19692 Spout Cap



### Form-A-Funnel™ Draining Tools

NP18609

NP18611



- Works with oil, fuel, water, antifreeze, brake fluid, windshield fluid, battery acid and most chemicals.
- Use with cars, trucks, boats, cycles, tractors, lawn equipment, 4-wheelers, industrial equipment and forklifts.
- Mold, bend and twist into custom shapes to create leakproof channels for draining fluids.
- Can be formed into funnels, drip trays and other liquid management tools.
- Soft rubber edge forms a leakproof seal around filters or drains and stays in place for hands-free draining and channeling.
- Thick, pliable nitrile rubber coating encases a thin, bendable layer of lead.
- Reshape and reuse thousands of times without fading it.
- Highly compatible nitrile ensures safe handling when used with common vehicle liquids and chemicals.
- Works in temperatures from -30°F to 450°F.
- Cleans easily with a rag.
- Compatible with cleaners and degreasers.
- Easily drain hard-to-reach oil filters!
- Store flat or roll up to take along in tool box or glove compartment.

PART NUMBER	SIZE
NP18609	14.5"L x 6.5"W
NP18611	29"L x 5"W

### Epoxy Finish Pistol Oilers



- Drawn steel bodies with epoxy finish to resist rust.
- 6" spouts.
- Rigid non-detachable spout has .15" diameter ledge-cone machined tips to lift oil filler dust caps.
- Zinc-plated detachable flexible spout has a base thread of 1/4"-28.

PART NO.	CAPACITY	SPOUT	BASE
PL50515	6 oz.	Rigid, non-detachable	yes
PL50516	6 oz.	Flexible	yes
PL50573	1 pint	Flexible	no

## AROFHON1033

### Honda Threaded Funnel

- Made of durable ABS plastic.
- Threads and seals onto the valve cover, preventing an unwanted mess.
- Fits Honda Accord, Civic, Element, Fit (through 2008), NSX and S2000.
- All Acura models (except MDX and RDX).
- Fits most Nissan models.
- Fits Dodge Cummins Turbo diesel and Neon.
- Ford F150, Turbo Diesel trucks and power stroke engines (6.9L, 7.3L, 6.0L, 6.4L).
- Fits some Jaguar models.

AROFH33 Funnel Adapter



## AROFTOY1038

### Threaded Toyota Oil Filler

- Made of durable ABS plastic.
- Threads and seals onto the valve cover.
- Used on all Toyota, Lexus and Scion motors with a threaded oil cap. (except Prius and Yaris).
- Fits Pontiac Vibe.

AROFT38 Funnel Adapter



## CTGPGGG

### Pistol Grip Grease Gun

- 16 oz. bulk fill, 14 oz. cartridge.
- 3 way filling (cartridge, bulk, filler pump).
- Heavy duty 1.7MM thick seamless barrel.
- Special ACME threads machined in barrel for better seal.
- Barrel features special textured finish.
- Aluminum head reduces the overall weight for easier use.
- Air vent plug standard on head.
- Heavy duty 18" flexible nylon hose, and 6" metal spout with coupler.
- Chrome plated tapered end cap.
- Heavy duty "T" handle with finger grooves.
- Chrome plated pistol grip handle with cushion grip.



Undercar & Wheel

## CTGCSGGA

### Continuous Shot Air Grease Gun

- Continuous grease feed with one trigger pull.
- Heavy duty cast aluminum body for durability and long life.
- 3-way loading — bulk, 14 oz. cartridge, filler pump.
- Locking plunger for force priming the gun.
- Bleeder valve for purging unwanted air.
- Working pressure: 40 PSI - 100 PSI.
- 3,800 PSI output pressure.
- Pump ratio: 40:1.
- Weight (empty) 3.5 lbs.
- Includes 18" high pressure grease hose and 6" bent metal spout.



## CTGSSAGG

### Single Shot Air Grease Gun

- Pistol style grease gun.
- Heavy duty composite body for lighter weight and easier use.
- 3-way loading — bulk, 14 oz. cartridge, filler pump.
- Bleeder valve for purging unwanted air.
- Working pressure: 40 PSI - 100 PSI.
- 3,600 PSI output pressure.
- Pump ratio: 40:1.
- Weighs only 2.2 lbs. (empty).
- Includes 12" high pressure grease hose and 6" bent metal spout.



## NE1134

### Pro Pistol Grip Grease Gun

- Convenient one-hand operation.
- Extremely rugged design provides strength and durability.
- Comfortable design reduces fatigue.
- Develops 7,500 PSI (520 bar).
- Jam-proof handle return mechanism.
- Variable stroke allows high greasing pressures using short strokes or high volume with full strokes.
- Extra heavy follower spring ensures positive priming and uninterrupted pumping action.
- Exclusive "flip-over" follower to eliminate grease bypass.
- Filler nipple/bleeder valve combination.
- Three-way loading: cartridge, suction or bulk.



### Hand Grease Gun Hoses



- For hand operated grease guns.
- Steel 1/8" NPT male fittings on each end.
- Recommended working pressure 5,000 PSI.

PART NO.	LENGTH	PART NO.	LENGTH
PL10212	12"	PL10219	18"

## Lock-n-Load™ Grease Guns

- Lock-n-Load™ Technology is a first in the industry concept that allows for fast grease reloading.
- Features threadless quick connect barrels that significantly reduces downtime when tightening and un-tightening conventional grease gun barrels.
- Never worry about crossing threads on barrels again. Simply slide the Lock-n-Load™ switch to disengage or reconnect the barrel.

## LML1175L

### Workforce® PRO Lock-n-Load™ Grease Gun

- Designed for heavy-duty service with quality features for durability and easy to use.
- Services automotive, industrial, marine, agriculture or heavy duty contractors.
- Variable stroke equals high pressure on demand.
- Rivals others in quality, function and pressure output while maintaining the convenience of one hand operation.
- Lock-n-Load™ threadless quick connect barrel.
- Automatic Bleeder bleeds air when reconnecting barrel to head, reduces air locks and priming problems.
- Deluxe combination filler nipple/air bleeder valve for purging unwanted air and allows for 3-way loading: bulk, filler nipple or cartridge.
- 12 inch flexible extension for hard to reach grease fittings.
- Heavy duty cast aluminum pump head.
- Heavy gauge knurled steel barrel for better grip.
- 4-Jaw coupler.
- Positive grip follower handle.
- Ergonomic handle design.
- Compatible with the MEGA LUBE® System Pumps.



## LML1185L

### MegaBoost™ Lock-n-Load™ Grease Gun

- Offers a full range of innovative features and superior benefits.
- Dual-piston design allows the MEGA BOOST® to reach pressures of 10,000 PSI to clear clogged fittings.
- Has extreme cold weather performance as well as ergonomically designed MegaGrip handle.
- Delivers more grease per stroke.
- Dual piston design provides the gun with two modes of operation: Volume mode for normal greasing (delivers 20% more grease per stroke) and Boost mode for high pressure demands.
- Lock-n-Load™ threadless quick connect barrel.
- Automatic bleeder bleeds air when reconnecting barrel to head and reduces air locks and priming problems.
- Oversized inlet passage allows grease to flow in cold temperatures for superior cold weather performance.
- Deluxe combination filler nipple/air bleeder valve for purging unwanted air and allows for 3-way loading: bulk, filler nipple or cartridge.
- Heavy duty cast aluminum pump head.
- Lightweight aluminum barrel with firm grip knurling.
- Slotted head design will accommodate a hook for storage or a shoulder strap for enhanced portability.
- High pressure super grip 4-Jaw coupler.
- Positive grip follower handle.
- Ergonomic handle design.
- Compatible with the MEGA LUBE® System Pumps.



## CTGSGG

### Suction Gun



- 16 oz. capacity.
- 12" clear tube.
- Heavy duty 1.7MM thick seamless barrel.
- Chrome plated tapered end cap.
- Heavy duty "T" handle with finger grooves.

## PL05025

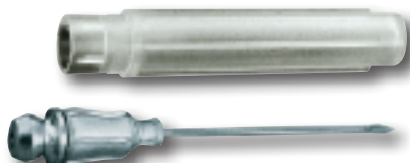
### 4" Needle Nose Adapter



- Perfect for use on trucks, vans or RV's. • For converting jaw-type lube couplers to steel needle points. • Dispenses fine line of grease through the needle nose. • Includes both small and large sleeves to fit all standard couplers. • Overall length: 7-1/8", tip diameter .046", body diameter .250". • For hand operated grease guns only.

## PL05037

### Grease Injector Needle



- Lubricates in very tight places like universal joints and sealed bearing. • Stainless steel 18 gauge x 1-1/2" long needle. • Equipped with standard grease fitting and protective plastic holder. • For hand operated grease guns only.

## NE5807

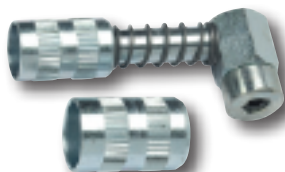
### Grease Injection Needle



- A safe, efficient and effective alternative to common grease needles. • Flexible line design keeps hands away from the needle when attaching and detaching the grease coupler. • The flex line prevents needles from becoming bent or broken. • Great for fixing noisy sealed bearings, joints, chassis pivot points, dry splines, etc. and provides a way to apply a long-lasting lubricant into difficult-to-reach areas. • Includes a quick-connect coupler to limit grease by-pass and a threaded protective cap that removes and reattaches safely and easily. • Quickly attaches to all 3- and 4-jaw grease couplers. • Ideal for automotive, truck, RV's, agriculture and industrial applications. • For hand grease guns only. • 2,000 PSI Maximum.

## PL05059

### 90° Grease Coupler



- For hard to reach grease fittings on cars, trucks, and equipment. • Ideal for lubrication of late model front wheel drive vehicles. • Comes with large and small sleeves. • Recommended working pressure - 4,500 PSI. • For hand operated grease guns only.

## TH418

### Right Angle Grease Coupler



- Fits standard grease guns. • Seal and slot in housing designed to provide 90° access into minimal clearance areas. • Eliminates need for flexible hoses. • Ideal for lower ball joints on Chrysler K-cars.

## PL05031

### Grease Gun Coupler

- Standard jaw-type coupler features spring loaded ball check valve. • Fits all 1/8" NPT threads. • For all hand operated lube equipment only. • Recommended working pressure 4,500 PSI.



## LS11750

### Ford Clutch Coupling Remover



- Disconnects Ford hydraulic clutch lines. • Easily disengages the hydraulic clutch line from the clutch slave cylinder on some Ford manual transmissions. • Tool prongs fit around clutch line above nylon sleeve. • For 1989 and newer Mercury Cougars and Thunderbirds; 1988 and newer small trucks including Explorer, Ranger and Bronco II.

## X9010

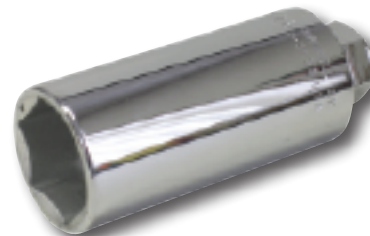
### Oil Sending Unit and Stoptlight Switch Socket



- Dual purpose 3/8" square drive or 3/4" external hex socket. • Two openings: 1" and 1-1/16". • Designed to fit the oil pressure sending units and stoptlight switches on late model cars. • Length: 2-3/4".

## X9038

### Oil Pressure Sending Unit Socket



- Designed for late model GM vehicles using 1-3/16" socket hex oil pressure sending units (for vehicles equipped with gauges). • Overall length: 4-1/64". • 1-5/8" O.D. • 3/8" square drive; 7/8" hex drive. • Chrome plated.

## LS13200

### Oil Pressure Switch Socket



- One socket with the correct length to fit 1" and 1-1/16" oil pressure switches up to 1-5/8" long (for vehicles equipped with warning lights). • 1-7/8" overall height for clearance. • Use with 3/8" drive or 1-1/8" hex.

## LS13250

### Oil Pressure Switch Socket



- Fits 1-1/16" switches up to 2-5/8" long on oil pressure sending units (gauge type) found on most 1991 and newer GM vehicles. • Also fits 1987 and newer Chrysler vehicles with combination light and gauge oil pressure switches. • Use with 3/8" drive or 1-1/8" hex.

## CLSBP1

### Bearing Packer

- Quickly flushes out old grease, and repacks bearings with less mess.
- Includes easy-to-grip dust cover to keep stored grease like new.
- Works on bearings up to 3-1/2" O.D.
- To pack a bearing and remove old grease: Place the bearing with the small taper down over the stem on piston. Put cap onto center bearing. There is no need to screw the cap onto the piston to pack bearings. Place the bearing packer on a flat, solid surface and press down on the cap until the old grease is forced out and new grease shows on top of the bearing.



## LS65250

### Universal Bearing Packer

- Fast, efficient, thorough.
- Simply place the bearing between the plastic cones, tighten, and apply grease through the fitting on the end of the threaded shaft.
- Forces out old grease and evenly injects fresh grease.
- Cone diameter is 4-1/2".



## NE5805

### Impact Fitting Cleaner Kit

- Clears hardened grease from fittings and joints.
- Eliminates the need to disassemble joints or replace fittings.
- Flushes lightweight oil through clogged lubrication points to clear passages of dried or separated grease.
- Includes: steel drive cylinder, hardened piston, safety shield, high pressure hose for hard-to-access fittings, spare drive seals, and coupler (NE5852) in a convenient storage case.



#### WARNING!

*Wear safety goggles. Read operating instructions thoroughly.*

## LS55600

### Clutch Pilot Bushing Remover

- Uses hydraulic pressure to remove brass and bronze bushings.
- Screw the self-tapping tip 2-3 threads into the brass or bronze bushing, then pump out the bushing with a grease gun.
- Made of case hardened steel.
- Fits brass or bronze bushing from 1/2" to 3/4" I.D.
- Not for use on steel bearings.



## OWC4505

### Bushing Driver Set

- Remove/install bushings ranging from 3/8" to 1-3/8" in diameter, as used in cars, trucks, tractors, construction equipment, electric motors, and many other components having bushings.
- Includes: Large, medium, and small driver handles with nuts; sixteen bushing adapters ranging from 3/8" to 1-3/8" in a blow-molded storage case.



- OW45051 Large Nut Driver
- OW45052 Medium Nut Driver
- OW45053 Small Nut Driver
- OW45054 9 pc. Bushing Adapter Set
- OW45055 7 pc. Bushing Adapter Set

## OW6604

### Ford Transmission Fluid Fill Adapter

- This is a required tool to fill or add fluid to the 5R55W automatic transmission used on 2003-newer Ford Explorer.



## ARCRY933

### Chrysler/Dodge/Jeep Transmission Dipstick

- Used on all vehicles equipped with a NAG1, 42RLE, CVT transmission and the 62TE transaxle.
- Chrysler, Dodge and Jeep Applications.
- Charts included.



## OW6593

### Ford Transmission Disconnect Set

- Snap around cooler line, push into the fitting, fitting releases; cooler line can then be removed.
- 3/8" disconnect (OW307441) is used on 2003-newer Ford Explorers with the 5R55W transmission.
- 1/2" disconnect (OW307459) is used on 2003-newer Ford Super Duty Trucks with the 4R100 transmission.

Set consists of:

PART NO.	DESCRIPTION
OW307441	3/8" Disconnect Tool
OW307459	1/2" Disconnect Tool



## LS22710

### Disconnect Set for Jiffy-tite® Connectors

- Handy spring-action of the stainless steel tool keeps the tool on the line.
- Teeth of the tool fit perfectly into tight tolerance of Jiffy-tite® connectors so they can be reused.
- Disengages the line from Jiffy-tite® Quick-Connect fittings without removal of the clip.
- Applications: 1996 and newer GM vehicles, many 2004 and newer Daimler Chrysler vehicles, some 2005 and newer Mercedes vehicles, Harley-Davidson V-Rod, Freightliner, Peterbilt, Volvo, and White.

Set consists of:

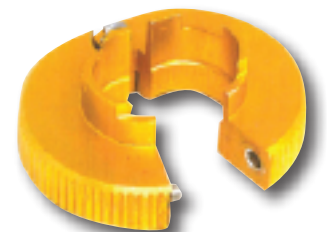
PART NO.	DESCRIPTION
LS22720	3/8" Jiffy-tite® Disconnect
LS22730	1/2" Jiffy-tite® Disconnect
LS22740	5/8" 39% Jiffy-tite® Disconnect
LS22750	5/8" 30% Jiffy-tite® Disconnect



## LS22930

### 3/8" Jiffy-tite®

- Disengages the line from Jiffy-tite® quick connect fittings without removal of the clip.
- Teeth of the tool fit perfectly into tight tolerance of Jiffy-tite® connectors and when rotated allow the line to be pulled without damage to the connector of retaining clip so they can be reused.
- Tool fits the 3/8" Jiffy-tite® fitting found on oil cooler lines used on transmissions and radiators and other applications.





## SNYJT4KIT

### 4 Piece Quick Disconnect Tool

- Designed to remove mated lines from Jiffy-tite® fittings on all 1996 and newer General Motors vehicles.
- Jiffy-tite® fittings are typically found at the transmission, engine and radiator for cooler lines.
- Also used to service transmission line fittings on most 2004 Chrysler minivans and 300 series cars and all 2005 Chrysler cars and trucks.
- Will disconnect mated lines from fittings within 2 to 3 seconds saving the end user between 2 to 20 minutes of shop time for every disconnected line.
- Made of 440C stainless steel.

Set consists of one each of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
SNYJT38LP	3/8" tool	SNYJT58DT	5/8" tool
SNYJT12DT	1/2" tool	SNYJT58DT30	5/8" 30% tool

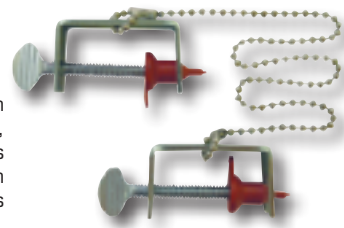
- SNYJT38C 3/8" Spring Clip (10)
- SNYJT12C 1/2" Spring Clip (10)
- SNYJT58C 5/8" Spring Clip (10)
- SNYJT5830C 5/8" 30% Spring Clip (10)



## TH319

### Transmission Cooler Line Plugs

- Seals male or female transmission or fuel line fittings with 1/4", 5/16", and 3/8" tubes.
- Eliminates loss of transmission fluid.
- 16" chain keeps plugs together and serves as a tube support.



## LS22100

### Flywheel Holder and Socket for 6.6L Duramax Engines

- Locks flywheel in place when removing harmonic balancer on 6.6L Duramax engines with Allison automatic transmissions.
- Saves time by locking the flywheel at the transmission instead of having to remove the starter for water pump replacement.
- On 2500 and 3500 pickups, remove metal spring-loaded inspection plate on the bottom of the transmission. Tool should slide into opening toward engine with the top of the tool engaging the teeth of the flywheel.
- On 4500 and 5500 trucks, remove the rubber inspection cap on the bottom of the transmission. Insert the tool at the front of the opening to engage the flywheel and hand tighten bolt to hold tool in place.
- Use 36MM 12-point socket with 3/4" square drive to remove harmonic balancer bolt and retorque on installation.

LS22090 36MM 12 Point Socket



## SNYJT5KIT

### 5 Piece Quick Disconnect Tool

- Designed for use with Jiffy-tite® fittings found on all 1996 and newer General Motors vehicles, Chrysler 2002 Prowler, 2004 LX, and all Daimler Chrysler minivans built after January 1, 2004.
- Disengages tube from fitting without removal of clip from fitting.
- Designed in conjunction with fitting manufacturer for exact fit.
- Tool design is hinged, opens to slip over tube, closes to travel down line to the fitting.
- Made of solid, 440C high carbon stainless steel.

Set includes the following in a blow molded case.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
SNYJT38LP	3/8" tool	SNYJT58DT30	5/8" 30% tool
SNYJT12DT	1/2" tool	SNYJT34DT	3/4" tool
SNYJT58DT	5/8" tool		

- SNYJT38C 3/8" Spring Clip (10)
- SNYJT12C 1/2" Spring Clip (10)
- SNYJT58C 5/8" Spring Clip (10)
- SNYJT5830C 5/8" 30% Spring Clip (10)



## TORX® Box Wrenches

- Black oxide finish.

PART NUMBER	OPENING	PART NUMBER	OPENING
VMWT0810	E8 x E10	VMWT1214	E12 x E14



## LS23400

### Transmission/Transaxle Plugs

- Stops loss of transmission fluid.
- Set of five stepped plugs fit both transmissions and transaxles on most import and domestic cars and pickups.
- Stepped design prevents slipping.
- Adapter LS23450 includes side gear centering for Ford Transaxles.
- Plugs cover a range of 1" to 2.180" (25.4MM to 55.37MM).

Set includes the following plugs:

PART NO.	I.D. NO.	SIZE RANGE
LS23410	1	1"-1.250" (25.4MM-31.75MM)
LS23420	2	1.300"-1.550" (33.02MM-39.37MM)
LS23430	3	1.600"-1.850" (40.64MM-46.99MM)
LS23440	4	1.925"-2.180" (48.895MM-55.37MM)
LS23450	5	For Ford Transaxles



## OW4528

### Clutch Alignment Tool Set

- Essential for clutch installation on virtually all cars and light-duty trucks.
- Aligns clutch plate properly by using tapered cones and pilot adapters.
- Includes seven fractional pilot adapters, one clutch disc centering adapter and one alignment shaft.
- Includes five metric pilot adapters, two clutch disc centering adapters and one alignment shaft.
- Housed in a blow-molded storage case.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
OW45281	SAE Pilot Set	OW45283	Metric Pilot Set
OW45282	SAE Shaft/Aligner Set	OW45284	Metric Shaft/Aligner Set



## OW7028

### Clutch-Adjusting Wrench for SPICER®-Built Heavy Duty Clutches

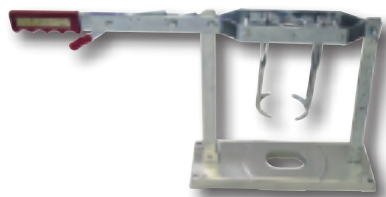
- Use for the internal adjustment of multiple lever and Spicer® angle-spring clutches.



Undercar & Wheel

## HGKB20

### Automatic Transmission Clutch Spring Compressing Tool



- For use on all types and models of American and foreign car Automatic Transmission Clutch Drums.
- Open design allows complete visual, hand, and tool access to snap ring and clutch plate.
- Crescent shaped pads protect thin pressure plates.
- Lightweight; about eight pounds.
- Self locking and quick release.
- Special long pressure bar extensions work on low, medium, high profile, deep drum and shaft extended models.
- Compact; portable or bench mounted.
- Specially designed pressure bar and base allows shaft to extend up or down through it.

## OWC6530

### Ball Joint Super Set



- Allows for the removal and installation of press-fit ball joints on many GM and Ford light-duty trucks, vans and SUVs through 2003; Dodge light trucks through 1998; Dodge vans, Durango and Dakota through 2003; and Honda Accord, Civic, del Sol, and Prelude through 2001.
- Combines several popular ball joint sets into one SUPER set.
- The C-frame tool can be used alone to remove and replace universal joints.
- Comes complete with an application cross reference and instructions in a blow-molded case.

Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
OW7248	C-Frame Press	OW305228	Removing Adapter
OW29503	Receiving Tube	OW313444	Ball Joint Remover
OW29504	Receiving Tube	OW313967	Remover Cup
OW29505	Receiving Tube	OW313968	Remover
OW38354	Receiving Cup	OW313969	Installing Cup
OW38355	Installing Cup	OW313970	Installer
OW39976	Receiving Cup	OW314392	Live Center
OW204508A	Receiving Cup		Forcing Screw Plug
OW222304	Receiving Tube	OW314425	Receiving Cup
OW222305	Receiving Tube	OW314426	Removing Adapter
OW222306	Receiving Tube	OW314427	Receiving Cup
OW222307	Receiving Tube	OW314428	Installing Adapter
OW305227	Installing Adapter		

## OW7249

### Ball Joint Service Tool Set



- Removes and installs press-fit parts such as ball joints, universal joints, and truck brake anchor pins.
- Contains 3 receiver tubes, plus installation and removing adapters.

Set consists of the following:

PART NO.	DESCRIPTION
OW7248	C-Frame Press
OW29503	Receiver Tube (3" O.D. x 2-3/4" I.D.)
OW29504	Receiver Tube (2-1/2" O.D. x 2-1/4" I.D.)
OW29505	Receiver Tube (2" O.D. x 1-3/4" I.D.)
OW305227	Installing Adapter
OW305228	Removing Adapter

## OW6731

### Ford Ball Joint Update Kit



- Use this three piece tool kit, along with (OW7918) Ball Joint Kit or (OWC6530) to remove and install upper and lower ball joints on the following vehicles: F-150 1997-2003, F-250 1997-2004, F-350 1992-2004, F-450 1999-2002, F-550 1999-2002, Excursion 2000-2004, Expedition 1997-2002, Explorer 1995-2004, and Ranger 1998-2004.

## OW7704

### 4WD Adaptor Set



- Use with (OWC6530, OW7248, and OW7249) ball joint service sets to remove and install upper and lower ball joints on 1967 to 1992 1/2- and 3/4-ton 4WD vehicles fitted with Dana 44 front axles (found on Ford, Dodge, GM, International, and Jeep vehicles).

## OW7825

### Ford Ball Joint Remover



- Enables technician to quickly remove the lower ball joint on 1992 to current 3/4- and 1-ton vans (E-250 and E-350) when used with (OW7249) ball joint service set.

## OW8032A

### Ford Ball Joint Kit



- Allows easy removal and installation of the lower ball joint on 1996-2004 Ford Taurus and Mercury Sable vehicles.
- Lower ball joint can now be replaced without having to replace the entire spindle assembly.
- Adapters are used with (OW7248) C-frame.

## OW6529

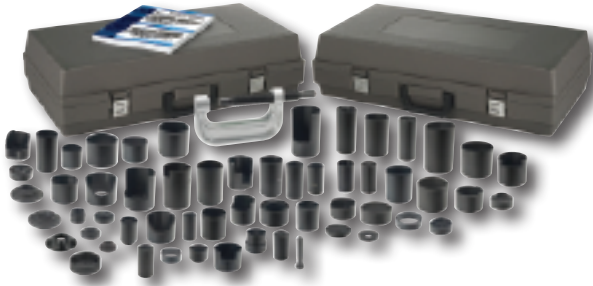
### Car Ball Joint Master Kit



- 70% of the OEM's have cars with press-in ball joints and this kit is designed to cover the vehicles that require ball joint replacement.
- Stop searching for make-shift solutions for those car applications because everything required is laid out in this complete 50+ piece set.
- The comprehensive manual puts information readily available to the user, including diagrams with instructions to eliminate guessing which adapters are required.
- Kit and manual (OW6529MAN-08) covers vehicles thru 2008.

## OW6539

### Truck Ball Joint Master Kit



- This 55+ piece kit covers press-in ball joints on the following Truck/Van/SUV applications; Toyota, Hyundai, Kia, Infiniti, Isuzu, Nissan, Chrysler, Dodge, Jeep, Plymouth, Mitsubishi, Ford, Lincoln, Mercury, Mazda, Chevrolet, Buick, Oldsmobile, Pontiac, Cadillac, GMC, Hummer.
- The comprehensive manual includes diagrams with instructions, eliminating guesswork of which adapters are required.
- Kit and manual (OW6529MAN-08) cover vehicles thru 2008.

## ML601

### Retaining Ring Plier

- For use on automobile transmission rings.
- 9-1/2" long with vinyl grips.



## ML15

### Lock Ring Pliers

- For use on external, lightweight rings without pick-up holes.
- Jaws are scored on outside face and angled at 90°.
- For GM and Ford output shafts and intermediate carriers and other uses.
- Comfort cushion-grip handles with spring-return for ease of operation.
- Heat treated.
- Black oxide finish.



## ML21Z

### Lip Seal Installation Tool

- For use on transmission service.
- Lightweight zinc plated steel tubing with stainless steel blade; precision engineered for the application.



## ML22Z

### Lip Seal Installation Tool

- Precision engineered to service transmission.
- Constructed from lightweight zinc plated steel tubing with stainless steel wire ends.



## PBT70970

### Hub Clamp Expander

- Remove the most stubborn struts and ball joints with ease.
- 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 non centralized slot.
- Allows for on the vehicle repair.



## OWC3010

### Pitman Arm Trio Set

- Three Pitman Arm pullers to remove most automotive and light truck Pitman Arms used on today's vehicles.
- OW6496 removes all Pitman Arms but is specifically designed for low-clearance areas found on light trucks and SUV's.
- Heavy duty conical style pullers will not spread.
- Two sizes included for compact and full size cars and light trucks.



PART NO.	DESCRIPTION
OW6496	Pitman Arm Puller
OW8149	Small Conical Pitman Arm Puller
OW8150	Large Conical Pitman Arm Puller

## OW7311A

### Pitman Arm Puller

- Adjustable with special replaceable forged jaws.
- Two clamp bolts lock jaws on Pitman arm.
- Can perform other pulling jobs.
- Services cars and light trucks to 3/4-ton.



## OW6497

### Super Duty Pitman Arm Puller

- Works on 2005 and newer Ford F-250 and F-350 four-wheel drive Super Duty trucks.
- Allows the Pitman arm to be removed from the steering gear while the steering gear is still in the vehicle.
- Two clamp bolts lock the jaws on the Pitman arm, ensuring a solid grip.
- Maximum jaw spread is 3-1/4".



## LS41970

### Ford Pitman Arm Puller

- For 2005 and later Ford F250 and F350.
- A heavy-duty puller for the large Pitman arms on Ford 250 and 350 trucks.
- Jaws are forged and heat-treated for strength.
- Position puller jaws under the Pitman arm, turn center screw to remove.
- Opening: 1.70".
- Inside length: 2-5/8".
- Width: 3.08".
- Overall length: 3-9/16".



## LS41900

### Pitman Arm Puller

- Heavy duty puller works on most cars and trucks.
- Designed to work on even the most stubborn Pitman arm pulling jobs.
- Position puller jaws over Pitman arm; turn center screw to free Pitman arm.
- Puller body is drop-forged and heat-treated for strength.



Undercar & Wheel

## LS28890

### Anchor Pin Bushing Remover

- Truck anchor pin bushing driver. • Also removes truck leaf spring bushings.
- Pneumatic bushing driver set removes and installs truck and trailer anchor pin bushings and stuck anchor pins. • Drive the bushing out with the smaller cone. • Use the larger cone to install bushing to the proper depth.



## SL65130

### Honda/Acura Bushing X-Tractor®

- Removal and installation tool.
- Comes with an adapter ring to fit between the existing cup and bushing for Acura Integra 1990-1993. • Easily and quickly remove and install trailing arm bushings in 15 minutes per side.
- No removing the trailing arm from the vehicle and using a hydraulic press. • No need to disconnect brake parts such as calipers, rotors, brake shoes, brake fluid lines and emergency brake cables. • Works on: Honda - Civic 1988-2000, CRV 1997-2001, CRX 1988-1991, Del Sol 1993-1997; Acura - Integra 1994-2001, Integra 1990-1993.



## OWC6275

### 5 Piece Tie Rod Adjusting Tool Set

- Permits 360° rotation of the adjusting sleeve where space is limited.
- Accommodates 1/2" drive ratchet or breaker bar.



Set consists of the following in a blow-molded storage case:

PART NO.	APPLICATION
OW6084	Pitman arm adjusting tool for Ford F-250 thru F-450 trucks with 1-7/16" diameter adjusting sleeves
OW6274	For heavy-duty Ford 3/4-ton and 1-ton trucks with 1-13/16" diameter adjusting sleeves
OW7095	For compact cars with 3/4" dia. adjusting sleeves
OW7096	For full size cars with 7/8" dia. adjusting sleeves
OW7097	For light trucks with 1-1/8" dia. adjusting sleeves

## HR946

### Tie Rod End Tool

- Loosens inner tie rod end without having to loosen outer tie rod. • Use on all vehicles with front wheel drive inner tie rods.
- Loosens end smoothly and easily by tightening u-bolt around inner end and breaking loose with extension.



## LS46800

### Inner Tie Rod Master Set

- Works on inner tie rods with inaccessible wrench flats. • Includes nine (9) crows feet to work on many applications. • The long socket slips over the tie rod end and crowfoot engages on socket for easy removal and installation. • The inner tie rod can be removed and installed without removing the rack. • The kit comes in a molded case for storage. Kit includes the following:



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS45670	33.6MM Crowfoot	LS45830	1-5/16" Crowfoot
LS45700	1-3/16" Crowfoot	LS45840	1-1/4" Crowfoot
LS45770	Tube, Coupler, Plate Assembly	LS46160	1-1/2" Crowfoot
LS45810	Retainer	LS46270	29MM Crowfoot
LS45820	1-7/16" Crowfoot	LS46280	32.5MM Crowfoot
		LS46300	1-3/8" Crowfoot

## LS46600

### Inner Tie Rod Tool

- Removes inner tie rods equipped with a completely round end socket.
- Fits inner tie rod sockets with flats.
- The universal wrench is designed to remove and install all inner tie rod sockets up to 1-31/64" regardless of the rod socket configuration. • The wrench head has three set screws that tighten against the rounded tie rod socket or socket flats. • Comes with a 1/4" short head hex wrench for tightening set screws in hard-to-reach areas. • Use 1/2" drive. • No-flat applications include: 2000-2003 Dodge Neon, 2000-2001 Plymouth Neon and 2001-2003 Dodge and Chrysler Minivans. • Fits some no-flat applications on Ford and Nissan. • Includes 1/4" short head hex key and 1/2-20 socket head set screw.



- LS46570 1/4" Short Head Hex Key
- LS46620 1/2-20 Socket Head Set Screw

## LS45750

### Inner Tie Rod Tool

- Works on tie rods with inaccessible wrench flats.
- The rounded socket ends prevent access to the wrench flats. • This tool utilizes six crows feet to engage the wrench flats. • Long socket slips over tie rod end and connects to the crows foot.
- The inner tie rod can be removed and installed without removing the rack. • Includes 1-1/2" crows foot for Chevrolet Colorado and GMC Canyon.



- LS45670 33.6MM Crows Foot
- LS45810 Retainer
- LS45820 1-7/16" Crows Foot
- LS45830 1-5/16" Crows Foot
- LS45840 1-1/4" Crows Foot
- LS46160 1-1/2" Crows Foot

## LS46270

### 29MM Crows Feet

- Use with LS45750 Inner Tie Rod Tool.
- New size works on: Toyota 2002-2006 Camry, 2006 Avalon, 1997-2006 Corolla, 2000-2003 Highlander, 1999-2006 Echo, 1999-2005 Celica, 2000-2006 Prius, 2002-2006 Matrix.



## LS46280

### 32.5MM Crows Feet

- Use with LS45750 Inner Tie Rod Tool.
- New size works on: Ford 2004 Escape AWD, 2005-2006 Escape 2WD & 4WD, 2004-2005 Focus, 1999-2002 Cougar with 14" or 15" wheels, 2005-2006 Mercury Mariner 2WD & 4WD.



## LS54500

### Large Inner Tie Rod Tool

- Works on inner tie rods with inaccessible wrench flats on many trucks and SUVs.
- The long socket slips over tie rod end and crowsfoot engages on socket for easy removal and installation.
- Comes with four crowsfeet to fit many Toyota, Nissan, Ford, Lincoln, Mercury and Chevrolet truck and SUV applications.
- Also fits some Cadillac Escalade, Hummer H2, Honda Passport and Jeep Liberty applications.



Includes the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS54510	Socket	LS54570	1-7/16" Crowsfoot
LS54550	Retainer	LS54580	38.4MM Crowsfoot
LS54560	33.6MM Crowsfoot	LS54590	42MM Crowsfoot

## LS54490

### 40MM Crowsfoot for GM

- Use with LS54500 Large Inner Tie Rod Tool.



## LS46700

### Tie Rod Puller for Ford

- For use on 2002 and newer Ford SUVs with independent rear suspension.
- Removes tie rod by inserting the angled tips between the tie rod and boot.
- Use with a slide hammer to pull rear suspension link or tie rod end from the rear knuckle assembly.
- Helps eliminate damage to tie rods by pulling straight out rather than prying or hitting the tie rod with a hammer.



## MH29910

### Universal Inner Tie Rod Tool

- Used to remove and mount inner tie rods on vehicles.
- Fits 35-45MM tie rods with no additional interchangeable adapters.
- For use on round, hexagonal, and octagonal tie rods.
- Extended shaft and narrow profile allows for use in hard-to-reach and confined spaces.
- Overall length: 16-1/2".



## OW7023

### Tie Rod Adjusting Tool

- Permits 360° rotation of sleeve for required adjustment.
- Four-position feature places tool correctly to properly grip sleeve even when access is limited.
- Services most models of compact and standard-size passenger cars and light trucks.



## OW6299

### Tie Rod Ball Joint Separator Set

- Features five popular "Pickle Forks" in a blow-molded case.
- Used to remove shock linkage, tie rods, and ball joints.
- For general service on many cars and light trucks.



Set consists of:

PART NO.	DESCRIPTION
OW6531	11" x 1-1/8" Fork Spreader
OW6532	11-3/4" x 1-5/8" Fork Spreader
OW6533	11-5/8" x 1-7/16" Fork Spreader
OW6534	16" x 11/16" Fork Spreader
OW6535	16" x 15/16" Fork Spreader

## LS18520

### Stepped Tie Rod Separator

- Stepped design keeps tool from bouncing back.
- This tool is used to replace worn out tie rods.
- Also can be used to separate shock absorber links.
- Insert fork between parts and strike tool with hammer to separate.
- The opening between the tines is 11/16".
- Length is 11-5/8".
- This heavy-duty tool is drop forged and heat-treated for long use.
- Steps can be sharpened if needed.



## LS18530

### Stepped Ball Joint Separator

- Stepped design keeps tool from bouncing back.
- This tool is used to replace worn out ball joints.
- Also can be used to remove CV drive shafts on FWD vehicles.
- Insert fork between parts and strike tool with a hammer to separate.
- The opening between the tines is 15/16".
- Length is 11-7/8".
- This heavy-duty tool is drop forged and heat-treated for long use.
- Steps can be sharpened if needed.



## LS41400

### Stepped Pickle Fork Kit

- Step design helps keep tool from bouncing back when separating ball joints, steering dampeners, tie rods, pitman arms and other applications.
- Six tools in one.
- Three forks and two handles.
- Forks are threaded to interchange with either handle.
- One handle for hammering; one for use with an air hammer (.401" shank).
- Forks are heavy-duty heat-treated alloy steel forgings.
- Steps can be resharpened if needed.



Set consists of one each of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS41410	1-1/8" Stepped Fork	LS41510	Handle
LS41420	11/16" Stepped Fork	LS41520	Pneumatic Driver
LS41430	15/16" Stepped Fork		

Undercar & Wheel

## LS41500

### Pickle Fork Kit

- For separating ball joints, tie rods, pitman arms and other uses.
- Kit consists of three forks and two handles; one for hammering, the other for use with an air hammer (.401" shank).
- All forks are threaded to interchange with either handle.
- Forks are heavy-duty forgings, handles are heat-treated alloy steel.

Set consists of one each of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS41510	Handle	LS41540	15/16" Fork
LS41520	Pneumatic Driver	LS41550	11/16" Fork
LS41530	1-1/8" Fork		



## LS18980

### Pneumatic U-Joint Driver

- Quickly removes the U-Joint Cap from the drive shaft on most rear wheel drive vehicles.
- Use the driver with an air hammer to remove U-joint caps up to 1-5/16" diameter.
- Prevents damage to drive shaft and axle shaft ears, when presses or chisels are used.
- On some vehicles, the U-joint is retained with plastic from the factory; the plastic must be removed prior to driving out the U-joint caps.



## LS54640

### Pneumatic Tie Rod Rattler

- Loosens bolts and clamps on tie rods for removal or adjustment.
- Use with an air hammer to vibrate seized clamps and bolts on many sizes of tie rods.
- Works especially well on Ford F-Series trucks and SUVs.
- Standard .401" shank.



## OW7491C

### GM Upper Control Arm Knock-Out Tool

- Remove the inserts on the upper control arm alignment brackets of light-duty GM trucks.
- Features an indexed forcing bolt that pulls straight and evenly and works with off-center knock-outs.
- For use on 1989-2001 Chevrolet and GM 1/2, 3/4, and 1-ton trucks, 2 or 4-wheel drive. Can also be used on 1990-2001 all-wheel drive Chevrolet Astro vans and GMC Safari vans.



## OW6007

### Lower Control Arm Tool

- Use in conjunction with any 7/8" diameter pry bar.
- Makes installing a ball joint on a lower control arm a one-person job.



## OWC6295

### Front End Service Set



- Allows for easy removal of the most popular types of Pitman arms, tie rods, and ball joints.
- Press-type ball joint separator allows for ball joint removal without the damage to boots and other parts that fork-type removers may cause.

Kit includes the following in a plastic blow-molded case:

PART NO.	DESCRIPTION
OW6296	Pitman arm/Tie rod end puller
OW6297	Ball Joint separator
OW7314A	Pitman arm puller
OW7315A	Tie rod end remover
OW7503	Outer tie rod remover/ball joint separator

## OW6065

### Tie Rod Socket

- Heavy-duty tool for removing tie rod ends on Chrysler, Ford, and GM 1-ton trucks.
- Also works on many medium-duty trucks, Class 2 through 6.
- Accommodates a 1/2" drive impact wrench.



## OW7080

### Ball Joint Spanner Wrench

- Designed for removal and installation of ball joint adjusting sleeves on 1/2-, 3/4-, and 1-ton Dana 44 open yoke front axles found on Chrysler, Ford, GM, International, and Jeep 4WD vehicles.
- Permits easy torquing with 1" socket for correct upper ball-joint preload.



## LS41110

### 22MM Caster/Camber Wrench

- For 22MM aftermarket replacement applications which are different than the 21MM original equipment.
- Unique shape and double-ended 22MM socket allow easy access to hard-to-reach caster/camber adjusting bolts.



## JDTC614

### T.O.M.C.A.T. Camber Adjustment Tool

- Makes camber adjustment a one-man job.
- Works on many GM and Chrysler vehicles using two-bolt lower strut mounts.
- Inflatable air bladder fits between tire and strut for easy and controlled adjustment of camber settings.
- Camber can be easily set with wheels on the ground.
- Eliminates the need for special camber bolts.
- Includes: 2 foot air hose and bladder, low pressure pop-off valve to prevent overinflating, air control valve for inflating and controlled deflating.



## LS20400

### Universal Shock Absorber Tool

- Remove/install shock nuts.
- Fits most domestic models and some Ford OEM shock nuts.
- Place stem socket over shock stem.
- Hex nut socket fits the nut.
- Hold one, turn the other for removal.

Includes the following:

PART NO.	DESCRIPTION
LS20410	Double Ended Stem Socket
LS20420	Hex Nut Socket
LS20460	Stem Socket



## OW7822A

### GM Torsion Bar Unloading Tool

- Built for the GM K-3500 series trucks with heavy duty chassis and a larger torsion bar.
- Features a larger C-Frame opening to accommodate beefier torsion bars.
- Holds the torsion bar while adjustments are made.
- Also works on 1988 to 2003 GM and Chevrolet 1/2, 3/4, and 1-ton pickups; the S-10 Blazer and S-15 Jimmy, 4WD pickups with 4.3L V-6 engines; and 1991 to 2001 Oldsmobile Bravada.



## OW6591

### Strut Tamer Extreme

- Simply the most effective compressor for virtually any straight, conical, or offset spring.
- Extreme duty design to handle the heavier springs found on mid- and some full-size truck strut assemblies.
- Frame includes cross bracing at arm mount locations, eliminating frame flex when compressing heavier springs.
- 2:1 reduction gearbox, eliminating arms from spreading or sliding when compressing offset or unique strut configurations.
- Four-point locking jaws securely hold the spring in place.
- Open-ended design means strut can be taken in and out quickly and easily.
- Arms adjust in and out, up and down, to accept many sizes of springs (2-1/2" to 10" diameter and 2-1/2" to 24" vertical stroke).
- Extra long 3-bar handle gives the leverage needed to compress heavier strut springs.
- No need to change shoes for different size springs.
- Easy to transport when mounted on optional stand (OW6582).
- Comes with OW6583 Bridge accessory to be used on springs that cannot be compressed enough to remove the retaining nut.



## OW6582

### StrutTamer Elite Stand

The OTC StrutTamer Elite stand features steel frame construction with two wheels that allow you to easily tilt the stand back and move the entire unit to the work area. To keep it firmly in place during compression, the wheels lift off the floor, and four no-slip rubber pads keep the stand firmly in place during operation. The stand is narrower for easier mobility between vehicles in the shop.

Height 44" (1118MM)  
Width 22-1/2" (572MM)  
Depth 32" (813MM)



Contact your local Cornwell dealer for complete details!

## HR90200

### Master Spring Compressor Kit

- Removes and installs coil springs quickly and safely.
- Compress coil springs on all passenger cars and pickup trucks.
- Heavy duty forged hooks with built-in safety pins to lock around coil.
- Alloy steel ACME threaded rod to minimize warranty issues.
- Quickly compress coil spring for work on strut cartridge.



## HR91500

### Coil Spring Compressor

- Remove and install automotive coil springs quickly.
- Grips a maximum 3/4" wire diameter spring.
- Use on coil springs up to 5-5/8" outside diameter.
- Fits inside straight and curved coil springs.
- Heavy-duty ACME threaded rod.
- Forged alloy steel arms.
- Read all instructions before using.

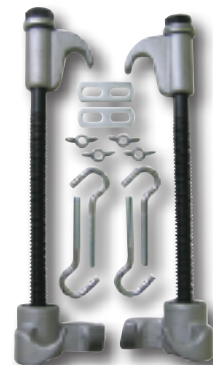


## TE63000

### MacPherson Strut Coil Spring Tool

- Easy to use tool with ACME threads for work on struts or shocks.
- Quickly and easily work on domestic or imported vehicles.
- Features a one piece cold headed bolt made of chromium molybdenum alloy steel; nuts are Grade 5.
- Use with impact wrench or hand tool on or off the car.
- Contains instructions and safety hooks.

NOTE: Not for use on unusually large MacPherson strut springs which exceed 6" outside coil diameter or 5/8" wire diameter. Do not use on GM "A", "C", "J" or "X" body cars.



## OW6494

### Strut Spring Compressor

- Fits a wide range of struts and requires no special adapter shoe.
- Safety locking pins hold the compressor jaws in place.
- Tool compresses springs of 4" to 9" O.D. with wire diameters of 7/16" to 11/16".
- Built to use with an impact wrench.



Undercar & Wheel

## TE61800

### Strut Alignment Level



- Used to restore a vehicle's camber setting after strut repair or installation.
- Allows technician or customer to safely drive the vehicle before a more, precise wheel alignment can be performed.
- Also useful for repairs on CV joints, ball joints and tie rod ends.
- Super strong magnet - mounts on brake rotor, spindle or steering knuckle.
- Easy to read, unbreakable bubble level.
- Camber settings from -3° to +3° for additional adjustment.
- Works on all vehicles equipped with MacPherson struts.
- Can remain on the vehicle during repair, or can be removed.
- Easy to use.

## OWC4579

### 9 Way Puller Set

- Pulls flange-type rear axles and most front-wheel drive hubs.
  - Internal and external jaws provide a variety of combinations to pull bearings, gears and seals.
  - Two- and three-way cross blocks and cone provide the perfect jaw configuration for most jobs.
  - Set also includes a grip wrench adapter and a dent puller attachment for sheet metal or other unique pulling requirements.
  - Packaged in blow-molded case.
- Set consists of:



QTY.	PART NO.	DESCRIPTION
1	OW7208A	Front Hub Puller
3	OW10384	Jam Nut (5/16"-24)
3	OW22021	Cap Screw (5/16"-24 x 1-1/8")
1	OW24544A	3 Way Cross Block
1	OW24545A	Cone
1	OW27241	2 Way Cross Block
1	OW27315A	Puller Hook Attachment
1	OW34331A	5 lb. Hammer
3	OW34698A	Jaw
1	OW63106	Blow molded Case
1	OW205377	Dent Puller
1	OW205378	Grip Wrench Adapter
1	OW208627	T-Bar
1	OW519376	Rear Axle Puller Flange

## OW4532

### Large General Purpose Puller Set

- General purpose puller kit with large jaws and capacity for a wide range of pulling jobs, including: bearings, alternators, generators, power steering and harmonic balancers.
- Features a seven ton pull capacity with 7-1/4" to 9-5/8" spread and 5-1/2" to 9-1/2" reach.
- Two forcing screws with live centers.
- Compliments the **OWC4534** Multipurpose Bearing and Pulley Puller Set by supplying the next series of sizes.
- Accepts shorter jaws from the **OWC4534**.



## OW522

### Long Gear and Pulley Puller

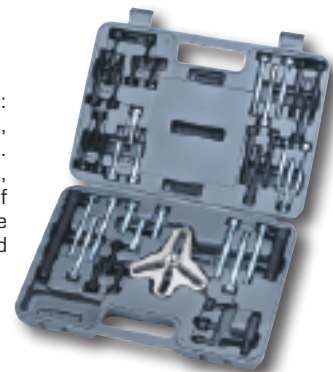
- Removes a wide range of gears, pulleys, or other parts that have tapped holes.
- The puller will spread from 2" to 7-3/4".
- Block is 8-1/4" wide, and forcing screw is 3/4"-16 x 11-5/8" long.
- Accommodates any cap screws up to 1/2" diameter.



## OWC6501

### Master Bolt Puller Set

- For use on a variety of jobs: harmonic balancers, steering wheels, crankshaft pulleys, and gear pulleys.
- Covers most cars, pickups, SUV's, and small engines.
- Capable of handling almost every two or three way bolt pull.
- Storage case and detailed application chart included.



## OWC4534

### Multipurpose Bearing and Pulley Puller Set

- For a wide range of pulling jobs, including: bearings, alternators, generators, power steering and crankshaft pulleys, timing gears, and harmonic balancers.
- Set includes drop-forged components, which can be used in a variety of combinations.
- Spread: 3" to 5", Reach: 1" to 2-1/4".
- Set consists of: two forcing screws (live center): 3/4"-16 x 6-11/16" and 3/4"-16 x 5", two Cross-bar yokes: 3 pin-hole @ 3-1/4" to 5-1/2" and 2 pin-hole @ 2-3/8" to 3-3/8", two Clamp bolts, three pairs of puller jaws: 1-3/8" Max, 1-5/8" Max, 1-3/4" Max, one pair of jaw pins with ball spring, and three pairs of capped bolts housed in a blow-molded plastic storage case.



## OW1182

### Lock-On, Jaw Type Puller Set

- Easily removes gears, bearings, timing gears, harmonic balancers and other press-fitted parts.
- Assemble components to create several versatile puller versions for internal and external tasks.
- Set includes 2 and 3-way puller head, 3 short and 3 long puller jaws, and plastic storage case.



#### WARNING!

Wear safety goggles. Read operating instructions thoroughly.



## OW525

### Flange Type Puller Combination Set

- Two specialty pullers in one box.
- Flange type puller - for removal of harmonic balancers, timing gears and other parts with two or three tapped holes.
- Also includes a steering wheel, pulley and flywheel puller.
- Comes with four sets of cap screws.



## OW6930

### Flange Type Puller

- Pulls harmonic balancers, timing gears and parts having two or three tapped holes.
- Slotted holes in puller body permit cap screws to be positioned to handle bolt circle diameters from 1/2" to 4-5/8". Reach of puller is 4-1/4".
- Includes 3 cap screws 3/8"-24 x 3", and 3 cap screws 3/8"-16 x 3".



## HR526

### Front Hub Puller

- For use on domestic and import cars and light trucks.
- Range is 3-3/4" to 4-1/2".
- For use on 4, 5, or 6 bolt stud design and all non-C lock GM axles.
- May be used on most Flange Type Pullers.



## HR94800

### Universal Hub Puller

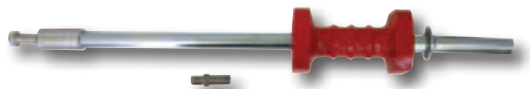
- Tool will remove wheel hubs mounted on tapered axles and press fit rear brake drums.
- Can be adjusted by legs to an 8" diameter bolt circle.
- Made of alloy steel and drop forged.
- Center screw 1"-14 x 9" with a 1-1/8" hex head.



## SH77790

### Hub/Rotor/Axle Puller

- Designed for the tough pulling jobs - hubs, rotors and axles.
- 10 pound slide hammer with unique adapter assembly to lock the pulling plate tightly.
- Fits adapters with 5/8"-18 thread.
- Made in USA.



## PBT70897

### Universal Steering Rack Wrench

- Universal tool to service inner tie rod.
- Works on tie rods with hex, round, or flats.
- Suits any diameter from 33MM to 41MM.
- Suits hex sizes from 31MM to 35.5MM.



## PBT70950

### Heavy Duty Wrack Wrench™

- Service all inner tie rods with this versatile tool.
- Large size provides coverage for domestic and import light trucks and SUVs.
- Suits multiple rack ends and sizes (hex, round with two flats, round with no flats).
- Fixed position rings provide added strength.
- Patented cam design increases force as load is applied.
- Universal design suits inner tie rods from 38MM (1-1/2") to 48MM (1-7/8").
- Cam design increases force as load is applied.
- 1/2" square drive.



## OW6575

### Hub Grappler™

- The complete solution for servicing wheel hubs and bearings on the vehicle without removing the steering components or knuckle.
- This eliminates unnecessary alignments or the use of a shop press, cutting service time dramatically.
- The Hub Grappler™ Puller is specifically designed to apply maximum force with minimal effort from an impact gun to also minimize service time.
- The jaws are designed and sized to properly fit hub applications and can be quickly located on the puller bar without the use of fasteners.
- The 3/4" custom drive screw, coupled with the special equalizer washer, provides smooth operation while the proprietary heat treating extends its life 5-10 times longer than similar designs.
- Adapters provide application coverage up to 2009 model year.
- Includes tie rod/ball joint tool and Ford axle installers.
- The Hub Grappler™ Application Guide is the most comprehensive hub and bearing service guide on the market, developed to be the first tool used in the kit to provide quick reference to the other tools in the kit required to do the job, eliminating guesswork and saving time.

OW6575MAN09 Hub Grappler™ Manual



## OW65752

### Hub Tamer™ Update Kit

- Includes everything to update the previous Hub Tamer Kit (OW6537) to the new Hub Grappler™ Kit (OW6575).
- Includes the Hub Grappler™, six (6) new adapters, miscellaneous hardware and the new Hub Grappler™ Application Guide.



Undercar & Wheel

## PULLERS AND SETS

### LS38210

#### Hub Removal Kit for Dodge

- Separates the frozen hub assembly from the steering knuckle on Dodge vehicles.
- Tool drives against loosened retaining bolts to separate assembly.
- Prevents damage to the knuckle and complete hub assembly.
- Tool drives on the bolt flange, so the head of the retaining bolt is not destroyed.



Kit contains the following:

PART NO.	DESCRIPTION	USE FOR:
LS39250	Hub Remover 03-09 Dodge	2003 and newer 4-wheel drive 3/4 ton and 1 ton Dodge pickups
LS39300	Front Hub & Knuckle Separator	Older, smaller applications

### LS39250

#### Hub Remover Tool

- Separates the frozen hub assembly from the steering knuckle on Dodge vehicles.
- For 2003 and newer 4-wheel drive 3/4 ton and 1 ton Dodge pickups.



### LS39300

#### Front Hub and Knuckle Separator

- Prevents damage to bearing and other components when removing front hub.
- The tool drives against loosened retaining bolts to separate the hub from the knuckle.
- Used on Dodge and GM pickups, Cadillac, Jeep and other applications.
- Tool drives on the bolt flange, so the head of the retaining bolt is not destroyed.
- Made of super strong tool steel for durability.



### OW6290

#### Front Hub Puller for 4WD Vehicles

- For removal of the front hub assembly.
- Services most 1/2-ton, 3/4-ton, and 1-ton GM 1988-2000 trucks and SUV's; 1994-2000 Dodge Ram; 1997-2000 Ford; and 1985-2001 Jeep Cherokee.



### OW8342

#### Hub Resurfacing Kit

- Fits a power drill to quickly sand rust off lug studs and rotors on the hub assembly.
- Sanding pads attach with half turn thread.
- For most domestic and import vehicles with either front or rear disc brakes.
- Includes holder and five sanding discs.
- Run at speeds of 10,000 RPM or less for best results.
- (DO NOT EXCEED 10,000 RPM)



OW552948 Replacement Sanding Pads (10/pk.)

## Hub Bearing Removers



- For use with an air hammer to remove the hub bearings that are rusted to the steering knuckle, without removing the steering knuckle from the vehicle or the CV axle assembly.
- Does not require the use of a press, when utilized properly.
- Available in two sizes to fit any hub bearing with 12MM x 1.75 or 14MM x 1.5 thread.
- Each tool has a hex on the shaft to help install or remove the hub bearing.

PART NO.	THREAD SIZE	WORKS ON
SL69610	12MM x 1.75	Chrysler, GM, Ford, Mazda, Saturn, Volvo, Saab and other vehicles with 12MM x 1.75 thread.
SL69630	14MM x 1.5	Chrysler, GM, Ford, Honda, Nissan, Infinity, VW, Audi, Mazda, Volvo, Mitsubishi, Kia, Hummer, and other vehicles with 14MM x 1.5 thread.

### HR90100

#### 4WD Hub Tool

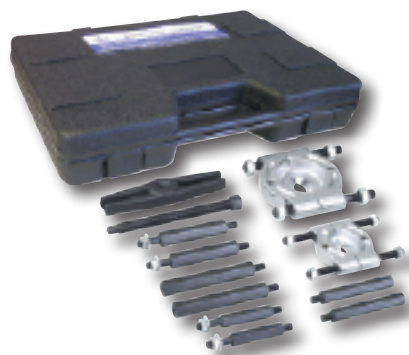


- Designed for removing the hub assembly from Ford 4-wheel drive pickup trucks when replacing ball joints, without causing damage to the wheel bearings.
- Enables the technician to drive wheel bearings out from the back of the hub assembly by threading the tool over the hub assembly stud.
- The tool has threads that match those of the four 1/2" hub assembly studs.
- Includes adapter for Dodge applications.

### OWC4518

#### Bearing Separator/ Push Puller Set

- This combination set includes two of the most popular bearing "splitters" (2" and 3"), four sets of hex push-puller legs and a bar-type puller head with a 9/16" forcing screw.
- Separator tools are used with bar puller and legs for a wide variety of pulling jobs.
- The 5" puller cross-bar with a 6-1/4" forcing screw or each of the bearing separators may also be used separately or in combination with other pullers or tools.
- A blow-molded plastic storage case keeps set contents organized and protected from loss.



OW45181 Cross Block and Forcing Screw

OW45182 Small Bearing Splitter

OW45183 Large Bearing Splitter

OW45184 Push-Puller Legs



#### WARNING!

*Wear safety goggles. Puller parts under stress can break. Do not heat puller jaws which can change jaw strength. Do not overload pullers. Use multiple jaw pullers whenever possible. Never use any puller with worn or damaged parts. Read operating instructions thoroughly.*

## OW4520

### Differential Side Bearing Puller

- Use to remove differential side carrier bearing.
- Works on a wide variety of cars and light-duty trucks.
- Includes four step plate adapters to fit carrier bearings.
- Reach: 1-5/8".
- Spread: 2-5/8" to 3-3/8".
- Forcing screws: 3/4"-16MM x 6-11/16" long.

Set includes the following:



PART NO.	DESCRIPTION
OW45201	Forcing Screw/Cross Block Assembly
OW45202	Puller Jaws/Pins (set of two each)
OW45203	Puller Jaws Retaining Yoke
OW45204	Step Plate Adapters (set of four)

## OW4517

### 7 Ton Bar-Type Puller/Bearing Separator Set

- Includes bearing splitter with 4" capacity, two sets of hex push puller legs, and 8" bar type puller head mated with a custom thread forcing screw.
- Provides service and maintenance professionals with a puller/bearing set for tough jobs up to 7-tons, larger applications, and greater reach 8" to 16".
- Can be used as a stand alone puller/bearing splitter set or as a compliment to the OWC4518 Bearing Separator/Push Puller Set for expanded capability.



## OW4527

### 5 Ton Bearing Puller Set

- Unique pressure beam gives service professionals another option for tough pulling assignments.
- Single point of adjustment allows quick attachment of splitter to the application.
- Pressure beam provides the ultimate in secure gripping surface.
- Push Puller is thread matched to the splitter.
- Interchangeable legs shorten or lengthen the range of pull.
- Designed of high quality tool grade materials for a lifetime of use.
- For use on most bushing or bearing jobs up to 3" in diameter.



## OW1123

### Bearing Splitter - 1/2" to 4-5/8"

- Features knife-like edges which are easily placed behind the part to secure a gripping surface, even when clearances are extremely limited.
- Max. Spread: 4-5/8".
- Min. Spread: 1/2".
- Thread of tapped holes in adapter: 5/8"-18.
- Distance between adjusting screws: 4-3/8".
- Use with puller numbers: OW1035, OW1036, OW1037, OW1038, and OW927.



## OW1130

### Bearing Splitter 1/2" - 9"

- Features "knife-like" edges which are easily placed behind the part to secure a gripping surface, even when clearances are extremely limited.
- When used with a "Grip-O-Matic®" puller, puller jaws grip attachment's outer edge; when used with a Push-Puller, puller legs are threaded into the attachment's two tapped holes.
- Maximum spread: 9".
- Minimum spread: 1/2".
- Thread of tapped holes in adapter: 5/8"-18.
- Distance between adjusting screws: 6".
- Use with puller numbers: OW1035, OW1040, OW1041, OW1042, OW1065, OW1063 and OW938.



## OW7494A

### Rear Axle Bearing Pullers Set

- Allows removal of semi-floating rear axle bearings.
- Includes three pullers to service most domestic cars.
- Use with a slide hammer with 5/8"-18 UNF thread.



Set consists of the following three sizes in a storage case:

PART NO.	DESCRIPTION
OW7495A	Fits minimum bearing tube I.D. of 1" and maximum axle tube I.D. of 1-7/8"
OW7496A	Fits minimum bearing tube I.D. of 1-5/16" and maximum axle tube I.D. of 2-3/8" including 1988-1997 Chevrolet and GMC 8-1/2", 1/2-ton rear axle bearing
OW7497A	Fits minimum bearing tube I.D. of 1-3/8" and maximum axle tube I.D. of 2-7/8"

## OW4581

### Blind Hole Bearing Puller Set

- For pulling jobs requiring an internal pull, such as pilot bearings.
- Set includes four collets which fit a wide range of applications.
- Select the appropriate sized collet by comparing it with the application.
- Insert the collet, expand it to fit the hole, then attach the slide hammer assembly.
- Four collet sizes: 3/8" to 1/2", 9/16" to 11/16", 5/8" to 1", 1" to 1-1/4".
- Set includes a 2-1/2 pound slide hammer with T-handle.
- Includes a blow-molded plastic storage case.
- Weight: 7 lbs., 2 oz.

Set consists of the following:



PART NO.	DESCRIPTION
OW45811	1/2" Collet and Pin Assembly
OW45812	3/4" Collet and Pin Assembly
OW45813	1" Collet and Pin Assembly
OW45814	1-1/4" Collet and Pin Assembly
OW45815	Slide Hammer Assembly

## PULLERS

### HR31

#### Bearing Puller

• When working space is limited, this type of puller is needed to remove flywheel pilot bearings from automobiles, trucks, and tractors. • Only 7-1/2" long. • Can be used to pull bearings or bushings from generators and starters. • Includes 1/2" to 1-1/4" (13-32MM) I.D. capacity jaws.

HR311 Yoke

HR312 Body

HR313 Center Screw with Handle

HR316 Jaws



### OW7507

#### Universal Inner CV Joint Puller

• Use with OW34331A slide hammer, OW7508 extension, or both.



### OW7508

#### 17.5" Slide Hammer Extension



• 17-1/2" long slide hammer extension. • Use with OW7507 Universal Inner CV Joint puller.

### LS56920

#### 3/8" Seal Puller

• Use with 3/8" drive for hard-to-reach oil and grease seals. • Simply insert hook behind seal and pull. • Two hook sizes to fit most oil and grease seals. • Can also be used with a breaker bar for extra reach or leverage. • If the puller tips wear, sharpen on a grinding wheel.



### OW1266

#### Adjustable Gland Nut Wrench

• Designed to fit hydraulic cylinders on most farm and construction equipment. • Fits gland nuts from 2" to 6" diameter pin to pin. • Reversible to fit 1/4" and 5/16" diameter pinholes. • Accommodates a 3/4" drive ratchet or breaker bar.

OW204928 Replacement Pin



### SM71410

#### Axle Popper Kit

• Half shafts are sometimes difficult to break loose with a pry bar. • The Axle Popper Kit is quick and sure every time and will save time. • Breaks loose half shafts from transaxle on front wheel drive vehicles. • Insert fork between transaxle case and half shaft. Strike the end of the fork to release the half shaft. • Shim included in kit to fill larger gap found on some vehicles. • Applies even pressure to both sides of shaft. • Safer and surer than a pry bar. • Valuable tool for transmission shops, garages, tire shops and body shops.

Kit Includes:



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
SM71411	Fork	SM71412	Shim

### Grip-O-Matic Pullers

• Mechanical Grip-O-Matic Pullers remove and install parts for fast, effective repairs. • The pullers are forged from quality steel, heat treated, and subjected to rigorous tests which exceed their rated capacity.

### OW1023

#### 2-Ton, 2/3-Jaw Puller (Reversible)

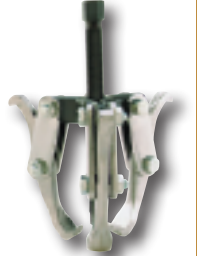
• 2-Ton, 2/3-Jaw (reversible jaws). • Maximum reach: 3-1/4". • Maximum spread: 4-3/4". • Screw size: 3/8"-24 x 4-7/8". • Jaw thickness: Upper 3/16", Lower 1/8". • Jaw width: Upper 1/4", Lower 1/2".



### OW1026

#### 5-Ton, 2/3-Jaw Puller (Reversible)

• 5-Ton, 2/3-Jaw (reversible jaws). • Maximum reach: 3-1/4". • Maximum spread: 7". • Screw size: 9/16"-20 x 6-15/16". • Jaw thickness: Upper 5/16", Lower 1/4". • Jaw width: Upper 3/8", Lower 3/4".



### OW1027

#### 5-Ton, Long 2/3-Jaw Puller (Reversible)

• 5-Ton, Long 2/3-Jaw (reversible jaws). • Maximum reach: 5-1/2". • Maximum spread: 7". • Screw size: 9/16"-20 x 6-15/16". • Jaw thickness: Upper 5/16", Lower 1/4". • Jaw width: Upper 3/8", Lower 3/4".



### OW464

#### 2-Ton, 4" Griplock Puller

• Three-in-one "Griplock" puller. • Rigorous specifications ensure quality. • Pressure bearing yoke cap holds jaws in place for ease of set up in any orientation. • Yoke arms are designed with two positions for jaw placement, enhancing spread control and providing optimal pulling force. • Configuration conversions take just seconds. No wrenches required. • 2 or 3 jaw application. • Maximum reach: 4". • Maximum spread: 3" to 4". • Both external and internal pulling action. • "Live center" action forcing screw. • Professional finish for long lasting durability.



### OW5190

#### Heavy Duty Universal Joint Puller

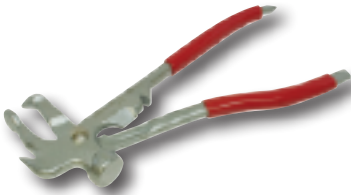
• The ideal tool for disassembling drivelines. • May be used with up to a 1" impact wrench. • Quickly and easily removes sealed U-Joint cups without the need for hammering or heat. • Will not damage the driveshaft, yoke, bearing cups, or joints. • Fits practically all Class 7 and 8 trucks, including: Spicer drivelines 1610, 1710, 1760, 1810, 1880 Spicer SPL 140, 170, and 250 "Life" Series Meritor (Rockwell) 16N, 17N, 18N, 1710 Meritor RPL 20 and 25 "Permalube" Series.



## LS68130

### Wheel Weight Tool

- Works on many applications.
- Removes, trims and installs clip-on wheel weights.
- Includes lever and offset flat tip for removing wheel covers.



## CPP5

### Cotter Pin Puller

- Blade is made of durable steel with black finish.
- Length: 8".



## KD3358

### Wheel Weight Tool

- Installs, removes, trims and tightens all types of clip-off wheel weights.
- Features a special plastic-type material on hammer head for safe, mar-free installation of specially coated wheel weights used on alloy wheels.
- Plastisol-dipped handle for comfort.



## PCLQUBE4

### Electronic Tire Inflator

- Consistent cost effective provision of high levels of safe air inflation services.
- Low lifetime costs - long product life with robust design and proven electronics.
- Plug and play tire inflator with 3 pre-selectable application modes.
- Fits all applications - general, tire shop and Nitrogen (N2).
- Low and simple maintenance.
- Guaranteed accuracy with individual testing.



- 3 modes in one inflator: Mode 1 - Standard Inflate/Deflate, Mode 2 - Tire shop mode with overpressure, and Mode 3 - N2 fill and air to N2 conversion.
- Electronic pressure preset.
- Auto-start inflation.
- Touch screen technology.
- Clear display for easy customer usage.
- Space-saving and lightweight design.
- Robust, high reliability engineering plastic housing.
- Ceramic sensor - Accuracy to  $\pm 0.5\%$  of full scale reading.
- Hose length: 16 ft.
- With molded AC power cord for geographic regions.
- SPECIFICATIONS: • Temperature Range: Operating:  $-20^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ ; Storage:  $-30^{\circ}\text{C}$  to  $80^{\circ}\text{C}$ .
- Chuck type: Single lock-on.
- Pressure Measurement: Accuracy exceeds California 2 PSI standard (to  $\pm .05\%$  of full scale reading); Reading Accuracy: 1 PSI; Max Inflation Pressure: 145 PSI; Max Inlet Pressure: 217 PSI.
- Inflation flow: 88 CFM @ 145 PSI.
- Dimensions: 6"L x 6"W x 3-1/2"D; Weight: 5 lbs.

## AS3018

### Digital Tire Inflator

- 3.5" digital tire inflator with 21" hose.
- Easy change chuck system.
- One button operation.
- Auto shut-off for increased battery life.
- Displays kgf, bar, PSI, kPa measurements.
- Large face LCD digital read-out.
- Unit covered with rubber sleeve for extra comfort and durability.
- On power button, auto shut-off in 90 seconds if not in use.
- LCD back light.
- Allows accurate reading of tire pressure, assisting with TPMS (Tire Pressure Monitoring Systems).
- Two position lever: First position deflates, second position inflates.
- Works on a nitrogen system.



## PCLDAC1A08

### Digital Tire Inflator, 6 ft. hose with Clip-on Chuck

- Handheld electronic tire inflator, suitable for tire shops, garages, car dealers and transport depots.
- Developed with rugged engineering plastics to meet the exacting specifications of high volume and intensive applications.
- Lightweight design improves the ability to withstand shock to increase operating life.
- The biomorphic handle, together with the direct valve mechanism, provide comfort and excellent rates of inflation and deflations.
- The pressure is measured by a ceramic sensor allowing precise measurement with tolerances well above the industry standard.
- Accuracy, speed and fine metering are enhanced by the advanced software, and the clear digital display reduces the risk of errors.
- Robust electronic design.
- Ceramic sensor.
- Clear and easy to read digital display.
- Modern, lightweight and shock resistant construction.
- Proprietary software increasing accuracy, fine metering and eliminating the chance of false readings.
- Direct valve design increasing inflation and deflation rates.
- Individually tested and certified.
- Built in swivel and hanging device.
- Over-pressure warning if pressure exceeds 174 PSI.
- Long life battery.
- Low battery warning light.
- Dimensions: 9.84"L x 4.33"W.
- 100% tested and calibrated - certificate included.



## ATQPG01000

### TPM Filling Gauge

- TPM Absolute Pressure Filling Gauge (Tire Inflation/Deflation) reads same pressure as car's computer.
- No more under inflated tires.
- Very accurate reading.
- Same pressure reading as displayed on the dashboard.
- Large LCD display with backlight.
- Sensor with high accuracy (+ 1.5 PSI).
- Switch On/Off automatically.
- Rubber protector to prevent shock.
- Durable design.
- Meets ANSI Standards.
- Pressure unit switch: Bar/PSI/Kpa
- Includes 2 "AAA" batteries.



## PSIDT105

### Digital Pocket Tire Pressure Gauge

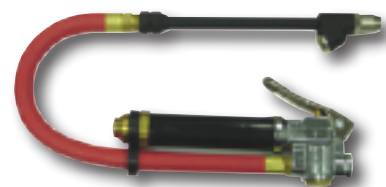
- Compact, lightweight gauge with ergonomic design provides instant reading.
- Display holds reading for 15 seconds.
- Reads in PSI, BAR, and KPA.
- Pressure range: 3-100 PSI.
- Displays to .5 PSI.
- +/-1.0% accuracy.
- Temperature and pressure compensation.
- Shock resistant solid state electronics.
- Long battery life.
- Fits easily in pocket.



## AF101HD

### Dual Foot Inflator Gauge

- Heavy chrome plated castings with protective sleeve over dial tube.
- Plated steel handle is riveted to body.
- Solid brass bar is calibrated 10-120 PSI in 2 PSI increments.
- Comes standard with 12" hose and black epoxy coated straight-on dual foot chuck.



#### **WARNING!**

*Wear safety goggles. Read operating instructions thoroughly.*

## DIGITAL TIRE PRESSURE GAUGES

- Improve tire performance, increase fuel mileage and increase tire life.
- Large, easy to read LCD numbers for precise readings.
- Easy to use with digital pinpoint accuracy.
- Polyurethane shock cover on gauge head.
- Shock resistant solid state electronics.
- Operating temperature: 0°F to 100°F.
- Long battery life with low battery indicator.

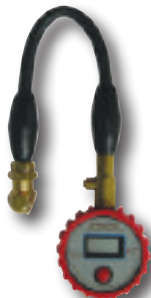
### PSIDT15001C

- Reads in PSI, BAR, and KPA.
- Pressure range: 3-100 PSI.
- Resolution displays to .5 PSI.
- Operating temperature: 0°F to 100°F.
- +/-1.0% accuracy.



### PSIDT15034CV

- Convenient air bleed release button.
- Pressure range: 3-100 PSI.
- Resolution displays to .5 PSI.
- +/-1.0% accuracy.
- Heavy duty, easy-to-seal, tire chuck.
- Protection "boots" at each end of hose.
- Temperature and pressure compensation.



### PSIDT15038CV

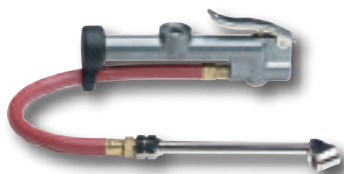
- Professional truck tire pressure gauge.
- Straight push, 30° reverse, dual foot chuck and convenient hose whip.
- Convenient air bleed release button.
- Pressure range: 3-160 PSI.
- Resolution displays to .5 PSI up to 100 PSI, 1.0 PSI resolution over 100 PSI.
- +/-1.0% accuracy.
- Protection "boots" at each end of hose.
- Automatic electronic temperature and atmospheric pressure compensation.



### PL17850 Deluxe Inflator Gauge

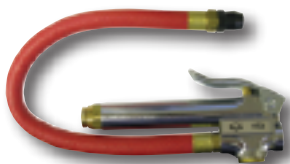
- High quality, heavy duty inflator gauge with 12" hose and dual foot chuck.
- Rugged zinc casting with rubber bumper guard to protect against damage.
- Easy to read recessed sight glass.
- Replaceable valve assembly and gauging cartridge.
- Calibrated 10-120 PSI in 2 lb. steps.

PL17720 12" Hose Assembly



### AF150ERET Tire Gauge

- Has 12" hose with straight-on chuck.
- Tapered chuck nut fits wheel cover holes on cars and light trucks.
- Ideal for use on wells and reels.
- Chrome plated castings with all brass internal parts.
- Plated steel handle riveted to body.
- Calibrated in 10-90 PSI in 2 PSI increments.



### PL17551

#### Dial Tire Gauge

- Professional type dial in a drawn steel casing with a nickel plated brass chuck.
- Easy to read dial calibrated 10 to 60 PSI in 1 lb. increments and 50 to 400 kPa in 10 kPa increments.
- Automatic reset.
- Pressure release valve.
- Use for passenger cars, vans and light trucks.



### PL17517

#### Tractor Tire Gauge

- For air and liquid filled tires.
- Includes special oiling and cleaning features to clean out corrosive fluids.
- For tractors, heavy equipment, farm and construction vehicles.
- Calibrated 5-45 PSI in 1 lb. units.



### PL17521

#### Low Pressure Tire Gauge

- Perfect for home garden tractors, golf carts, air springs and ATV's.
- Calibrated 1-20 PSI in 1/2 lb. units.
- Easy-to-read square nylon bar with dual calibration - PSI and kPa highlighted.



### PL17525

#### Dual Foot Truck Gauge

- For dual wheels; hard to reach valves.
- Fits in pocket yet has a wide range to handle both cars and trucks.
- Calibrated in 20 to 120 PSI in 2 lb. units and from 160 to 880 kPa in 20 kPa units.



## TIRE PRESSURE GAUGES

- Recessed deflator pin cast into chuck head.
- Handy pocket clip.
- Cornwell Blue finish with white Cornwell logo.
- Convenient one-hand operation.

### PL17509

#### Standard Tire Gauge

- For passenger cars, vans and light trucks.
- Calibrated 2 sides 10-50 PSI in 1 lb. units and 70-350 kPa in 10 kPa units.



### PL17519

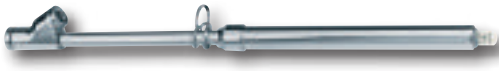
#### Truck Tire Gauge

- Ideal for higher pressure applications on step vans, lightweight trucks (1/2 to 2-1/2 tons), pickups and air shocks.
- Calibrated 2 sides 20-120 PSI in 2 lb. units and 150-840 kPa in 10 kPa units.



**PL17545****Dual Foot  
Service  
Tire Gauge**

- For heavy-duty use required at the service level. • For dual wheels and hard to reach valves on pickups, RV's, heavy trucks and off-road equipment.
- Chrome plated brass with die cast chuck. • Calibrated in 10 to 150 PSI in 2 lb. increments and from 100 to 1040 kPa in 20 kPa increments.
- Complete with handy hang-up hook.

**PL17565****Straight-On Dual  
Foot Service  
Tire Gauge**

- For the difficult to reach inner dual. • Straight-on chuck for inside wheel and 30° reverse angle for outside wheel. • Calibrated 10-150 PSI in 2 lb. units.

**PL40395****Tire Tread  
Depth Gauge**

- Measures tread thickness remaining on tires. • Steel indicator bar.
- Calibrated 0" to 1" in 1/32" markings. • Complete with handy pocket clip.

**FW74225500****Digital Tire Tread Depth Gauge**

- For tire tread wear measurement. • Reads in inch, metric and fractions. • Spring-loaded and hold measurement button for ease-of-use. • Super-large display. • Range: 1"/25MM. • Resolution: .0005"/.01MM, fractions in 1/64" increments.
- Supplied in vinyl holster.

**PL17395****Locking Straight  
On Dual Foot  
Chuck**

- Direct air line ball foot chuck with built-in shut-off valve (cannot be used on inflator gauges). • 1/4" Female NPT. • 150 PSI maximum air line pressure. • Comes with threaded deep well lock nut which locks on valve when tilted.

**PL17383****Dual Foot Chuck**

- Direct air line ball foot chuck with built-in shut-off valve (cannot be used on inflator gauges). • 1/4" Female NPT. • 150 PSI maximum air line pressure. • Standard dual foot extension for valves on tractors, trucks or buses.

**PL17351****Ball Foot Chuck**

- Direct air line ball foot chuck with built-in shut-off valve (cannot be used on inflator gauges).
- 1/4" Female NPT. • 150 PSI maximum air line pressure.

**PL17355****Clip-On  
Chuck Clip**

- Direct air line ball foot chuck with built-in shut-off valve (cannot be used on inflator gauges). • 1/4" Female NPT. • 150 PSI maximum air line pressure. • Converts any single foot chuck to a clip-on chuck.

**PL17730****Clip-On Chuck**

- **For inflator gauges ONLY!** Do not use on direct air lines where a shut-off valve is required in the chuck head. • 1/4" Female NPT, with universal adapter.

**AF41067TF****Four-in-One Valve Tool**

- Removes cores, restores damaged threads and removes broken cores.

**MTS444****Combination  
Valve Core Tool**

- For easy removal and insertion of valve cores. • One end for large bore, other end for standard bore valve cores. • Heavy duty, firm grip.

**LS18810****Valve Core Torque Tool**

- Properly installs and removes valve cores, including late model vehicles with the tire pressure monitoring system (TPMS). • Torque tool is set to 4 in.-lbs., to prevent under and over torquing the valve core.
- Helps prevent valve core leaks causing low tire pressure and possible TPMS alerts. • Slim design allows access in tight spots.

**JS96129****Valve Core  
Torque Tool**

- A calibrated precision tire core torque tool. • Prevents over or under torquing. • A must for the TPMS valves to maintain proper pressure.
- Both a core remover and precise installer. • Prevents triggering TPMS due to low pressure. • Prevents premature tire failure due to leaking valves. • Easy and simple to use.

**WARNING!**

*Wear safety goggles. Read operating instructions thoroughly.*

## PL41506

### Tubeless Tire Valve Inserting Tool



- Used for installation and removal of rubber snap-in valves.
- Notched handle for sure grip and proper alignment.

## NSLSSKAP

### Auto Deluxe 60 Tire Repair Kit

- A unique method of repairing all types of pneumatic tubeless tires.
- Invented over 35 years ago and continually improved upon.
- 24 plies of a custom made high tensile (350 lb. break strength) chemical resistant nylon yarn.
- Each yarn is immersed in a unique proprietary rubber sealant system - 250% rubber to yarn.
- An equal amount of rubber sealant (250% rubber to yarn) through-out the Safety Seal® Repair.
- Superior tools to aid in the proper insertion of the Safety Seal® repair into the puncture.
- Kit contains: sixty 4" (10cm) repairs, metal T-handle insertion tool, extra insertion needle, wrench and set screw, metal T-handle spiral probe, jar of lube, and instructions in a durable impact resistant carrying case.



- NSLSSL Safety Seal Lube/NSLSSKAP, NSLSSKTP
- NSLSSNA Auto Insertion Needle/NSLSSTA
- NSLSSPN Auto Spiral Probe Needle/NSLSSPS
- NSLSSPS Auto Spiral Probe/NSLSSKAP
- NSLSSRA Auto Safety Seal Refills (60)/NSLSSKAP
- NSLSSTA Auto Insertion Tool/NSLSSKAP

## LS19860

### Tire Deflator Set for TPMS Valve Stems

- Quickly evacuates air from tires without removing the valve core.
- Simply replace a standard sized valve cap with this handy tool and the special design will depress the pin in the valve core.
- Large openings on the sides of the tool allow air to escape quickly from the tire.
- Tools are marked so tires can be returned to their original position on the vehicle so TPMS will not need to be reset.
- Saves time since the valve core has not been removed from the sensor.



## PU206

### Seal Puller

- Designed for difficult to reach seals and others such as transmission seals and axle seals.
- For removal of most stubborn seals.
- Black oxide finish.



## OW6697

### Ford Wheel Seal Installer

- Correctly installs the seal onto the axle shaft and into the wheel knuckle, preventing front hub vacuum leaks that would cause the 4WD to not engage.
- Works on 2005-newer Ford F-250, F-350, 4x4s having the vacuum-operated front axle.



## LS56950

### Pinion Shaft Seal Driver

- Double sided adapter to fit multiple seal sizes.
- Hollow adapter allows driver to slide over shaft to drive seal.
- Neodymium magnets on both driver faces hold the seal in place.
- Works on many applications, especially Ford pickup and SUV pinion seals.
- Can also be used on standard seals.
- Tool is made from aluminum to make it lightweight and allow more driving power to transfer.
- Metal cap is replaceable.



## LS38060

### Axle Shaft Seal Installer - Ford

- Drives the axle seal into place on the vacuum operated front axles on 1998 to 2004 4-wheel drive Ford F-Series super duty trucks.
- Aluminum tool efficiently transfers striking power; light and easy to use.
- Use with a hammer to install the axle seal onto the axle shaft.
- Then press the axle shaft into the wheel knuckle to help prevent vacuum leaks.
- Cap is made of steel so it can be replaced if needed.



#### LS38070 Cap

## LS12800

### Master Bearing Race and Seal Driver Set

- Set includes 11 drivers to fit automobiles and trucks up to 1 ton.
- Also includes 2 handles, one for hammering and a pneumatic handle for use with an air hammer.
- Use the tapered driver side for bearing races; reverse to the flat side for seals.
- Packaged in a molded case.
- Set contains the following drives and sizes:



DRIVER NO.	SIZE	DRIVER NO.	SIZE	DRIVER NO.	SIZE
LS12610	1.565	LS12650	2.555	LS12810	4.625
LS12620	1.750	LS12690	2.830	LS12930	3.813
LS12630	1.965	LS12700	2.995	LS12970	3.180
LS12640	2.325	LS12710	2.470		

#### LS12730 Handle

#### LS12820 Pneumatic Handle

## LS12980

### Bearing Race and Seal Driver Master Set

- Insert wheel bearing race and seals without damage to race and axle housing.
- Turn driver over to drive seals.
- Includes handle and nine driver sizes (Range: 1.565" to 3.180") to fit most standard wheel bearings in a plastic blow molded case.



DRIVER NO.	SIZE	DRIVER NO.	SIZE	DRIVER NO.	SIZE
LS12610	1.565	LS12640	2.325	LS12700	2.995
LS12620	1.750	LS12650	2.555	LS12710	2.470
LS12630	1.965	LS12690	2.830	LS12970	3.180

#### LS12660 Handle

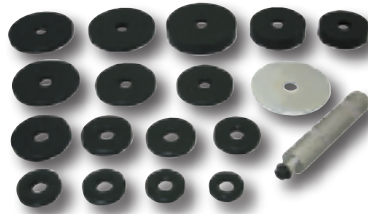
#### LS12940 Blow Molded Case



## LS24800

### Seal Driver Kit

- Quickly drives seals without damage.
- Set includes handle, washer and sixteen adapters for seals up to 3-3/8" diameter.
- Includes special adapters for "shielded" seals.



## LS59400

### Pinion Bearing Race Driver Set

Driver No.	Size
LS59410	2-11/16"
LS59420	2-27/32"
LS59430	2-7/8"
LS59440	3"
LS59450	3-1/4"
LS59460	3-1/2"
LS59470	3-3/4"
LS59480	4-1/8"



- Set includes 8 drivers for driving inner and outer pinion bearing races on 1/2 and 3/4 ton Ford, Dodge and GM Pickups.
- Use the extended, two-piece handle for driving rear pinion bearing races.
- A pneumatic handle is also included for use with an air hammer.
- Packaged in a molded case.

LS59530 Handle Extension  
LS59540 Handle

## LS58430

### Shaft In Seal Puller

- Removes Cam Shaft and Crank Shaft seals without damage to the shaft.

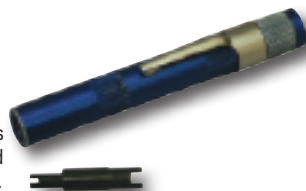
LS58500 Replacement Hook



## LS14100

### Valve Cap and Core Tool

- Removes and installs valve cores and valve core caps.
- Double ended core driver reverses in the tool body.
- Reversible driver fits both large and small valve cores.
- Use the reverse end to remove and install valve core caps.
- Long tool handle will access inside dual wheels.
- Lightweight aluminum body is equipped with a pocket clip.



## CLS56750

### Seal Puller

- Pops oil and grease seals every time, fast and easy.
- Two size tips reach in and fit nearly all seal applications.



## LS56650

### Adjustable Seal Puller

- Head adjusts to five positions.
- Two hook sizes easily remove most oil and grease seals.
- Where clearance is a problem, remove the pin to reposition the head.
- The adjustable head works great on front wheel drive transaxles.
- Also works on front crankshaft seals without removing the radiator.



## OW6695

### Ford Vacuum Seal Installer

- Works on 1998-2004 Ford F-250, F-350, F-450, and F-550 4x4s having the vacuum-operated front axle.
- Correctly installs the seal onto the axle shaft and into the wheel knuckle, preventing front hub vacuum leaks that would cause the 4WD to not engage.



## LTHLT950

### Valve Core and Stem Cap Removal Tool

- Easily removes and replaces tire valve stem caps and valve stem cores for all tire and wheel applications.
- Dual purpose pen shaped tool is convenient pocket size.



## OW7077

### Axle Stud Cone Plier

- Removes the tapered cone from studs used on medium and heavy duty truck rear axles.
- Gives leverage needed to expand cone and remove it from the stud for axle removal.



## LS22200

### 4WD Spindle Puller

- Stepped design fits all common 4WD 1-1/2", 1-5/8" and 2" pick-up spindles.
- Use with either a 1/2"-20 or 5/8"-18 slide hammer.



### Wheel Bearing Lock Nut Sockets



- Remove and install five popular sizes of wheel bearing lock nuts.
- Use with 1/2" drive to remove and install wheel bearing lock nuts on trucks and vans.
- Four of the sockets are for the rounded hex nuts.
- One is for the popular 2-1/2" hex nut.

PART NO.	DESCRIPTION
LS33150	2-3/8" Round Hex Wheel Bearing Lock Nut Socket
LS33160	2-1/2" Round Hex Wheel Bearing Lock Nut Socket
LS33170	2-3/4" Round Hex Wheel Bearing Lock Nut Socket
LS33180	2-1/2" Hex Wheel Bearing Lock Nut Socket
LS33190	2-9/16" Round Hex Wheel Bearing Lock Nut Socket

## LS28000

### Ratcheting Lock Nut Tool

- Double-ended.
- Small end fits Ford 1986 to 1994 light trucks with Dana 44 front axle.
- Large end fits 1985 and newer Ford F150 - F350 trucks with the Dana 80 full floating rear axle.
- Press tool into lock nut; rotate to release ratchet inside the lock nut.
- Use 1/2" square drive torque wrench when installing.



## TIRE AND WHEEL

### OW4542

#### 7 Piece Locknut Set

- For use with 1/2" ratchet or breaker bar.



Set consists of the following:

PART NO.	DESCRIPTION	APPLICATION
OW5190971	2-3/8" hex	1984-1992 Ford Rangers and Bronco II's with automatic locking hubs.
OW5190972	2-9/16" rounded hex	1990-1993 Dodge trucks with Dana 60 manual hubs.
OW5190973	2-1/2" hex	Fits hex nut found on rear axles and various front axle applications on light-duty trucks.
OW5190974	2-3/4" rounded hex	3/4-ton and 1-ton Ford F-250 and F-350 trucks with automatic locking hubs.
OW5190975	2-1/2" rounded hex	1995-1996 F-150 trucks and full-sized Broncos with automatic locking hubs.
OW5190976	2-3/8" rounded hex	1990-newer Ford Rangers, Bronco II's, and Explorers with automatic locking hubs.
OW5190977	55MM hex	Front wheel adjusting nuts found on Toyota models FJ, LN, and RN.

### OWC4543A

#### 6 Piece 4WD Locknut Socket Set

Set includes three sizes of sockets for removing and installing the front wheel bearing locknuts on older 4WD trucks and SUVs with Dana axles.

- Also includes a socket for removing and installing the front wheel bearing locknuts on 1995-newer Toyota Tacoma, 1996-newer Toyota T100 and 4Runner.
- Comes with an additional socket for removing and installing the rear axle nut on Ford 1985-newer F-250 and F-350 with Dana 80 rear axles.
- Comes with a spindle remover adapter to be used with a slide hammer to remove the front spindle after the wheel bearings have been removed; works on older 4WD trucks and SUVs having Dana axles, Ford Rangers, and Bronco II's.

Includes the following in a plastic, blow-molded storage case:



PART NO.	APPLICATION
OW4543A1	Toyota 4-Lug Locknut Socket
OW4543A2	Ford 4-Lug Locknut Socket
OW4543A3	4-Lug Socket "F" Series
OW4543A4	6-Lug Socket
OW4543A5	4-Lug Socket/Ranger, '93 Bronco
OW4543A6	FWD Front Spindle Puller

### OW7090A

#### Front Wheel Bearing Locknut Socket

- Special 6-lug design services 1978-1984 Ford F-series H.D. 3/4-ton and 1-ton 4WD trucks and 1973-1981 GM 3/4 and 1-ton 4WD trucks.
- 1/2" square drive.



### OWC4547A

#### 7 Piece Front Wheel Drive Axle Nut Socket Set

- 1/2" Drive, 6 point, deep sockets designed to remove and install the axle nut on most foreign and domestic front wheel drive cars and SUVs.
- Includes seven sockets: 29MM, 30MM, 32MM, 34MM, 35MM, 36MM, 38MM.

Includes the following in a plastic, blow-molded storage case:



PART NO.	SIZE	PART NO.	SIZE
OW4547A29	29MM	OW4547A35	35MM
OW4547A30	30MM	OW4547A36	36MM
OW4547A32	32MM	OW4547A38	38MM
OW4547A34	34MM		

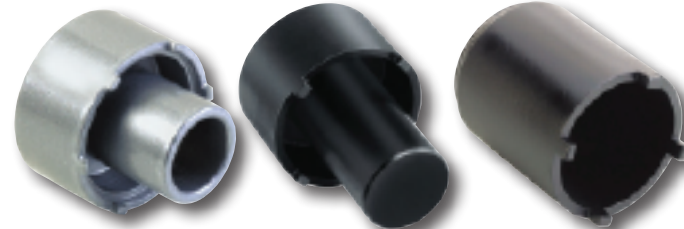
#### Locknut Sockets



OW1904  
OW1908  
OW1910

OW1917  
OW1925  
OW1938

OW1920  
OW1922



OW1929

OW7269

OW7270A

- Wheel bearing locknuts are easy to remove or install with these specially designed sockets.
- Fits special "rounded" hex nut found on Dana axles of some Ford trucks.
- Depth of locknut sockets is 5".
- High-grade truck wheel bearing locknut sockets.
- Made of high-strength steel.
- Measure from flat to flat to determine size of locknut, then consult chart to select a socket.

**NOTE: Sockets are designed for use with 3/4" square drive manual tools only. Impact tool use voids socket's warranty.**

PART NO.	SIZE	POINT SIZE	PART NO.	SIZE	POINT SIZE
OW1904	2-9/16"	6 pt.	OW1925	3-3/4"	8 pt.
OW1908	3-1/4"	6 pt.	OW1929	2-5/8"	8 pt.
OW1910	3-1/2"	6 pt.	OW1938	4-1/2"	8 pt.
OW1917	4-3/8"	8 pt.	OW7269	2-3/4"	-
OW1920	2-1/4"	6 pt.	OW7270A	2-3/8"	-
OW1922	2-5/8"	6 pt.			

### OW6006

#### Dodge Locknut Socket

- Services 1994 and newer Dodge 1/2-ton 4x4 pickups with Dana 44 axle and Dana 60 axle with vacuum disconnect front axle.
- 1/2" drive size.



**OW1909****Truck Wheel Bearing Locknut Socket**

• This high-grade truck wheel bearing locknut socket is made of high-strength steel. • NOTE: Sockets are designed for use with 3/4" square-drive manual tools only. **Impact tool use voids sockets' warranty.** • Opening size (8 pt.) 3-1/4".

**OW1914****Truck Wheel Bearing Locknut Socket**

• This high-grade truck wheel bearing locknut socket is made of high-strength steel. • NOTE: Sockets are designed for use with 3/4" square-drive manual tools only. **Impact tool use voids sockets' warranty.** • Opening size (6 pt.) 4".

**SL65400****Toyota and Lexus Axle Lock Nut Remover Kit**

• Combines a 30MM, 12 point special depth 1/2" drive impact socket with an axle nut lock ring release tool to unlock the 30MM axle nut found on many Toyota and Lexus vehicles. • Patent pending unique angle allows the technician to easily unlock the 30MM axle nut. • Made from heat treated steel. • Caution: Wear safety goggles when striking.



Works on:

Toyota	Avalon (2002 and later), Camry (2002 and later), Corolla (2003 and later), Prius (2001 and later), Sienna (2002 and later), Solara (2004 and later)
Lexus	ES300 (2002-2003), ES330 (2004-2006), ES350 (2007 and later), RX300 (1999-2003), RX330 (2004-2006), RX350 (2007 and later)

**LTHLT730****Subaru Axle Pin Removal Tool**

• Removes and installs roll pins for easy axle removal. • Has a magnetized tip to help the roll pin from falling into hidden access areas around axle. • Magnetized tip holds new roll pin for easy alignment and insertion into new axle. • Works on all AWD Subaru trans-axle assemblies.

**LS19852****Truck and Trailer Wheel Pan**

• Catches oil from wheel hubs after removing cap. • Fits rims with 13-3/4" inside diameter and larger. • Handle compartments hold hub nuts out of the oil. • Made of polypropylene for durability. • Will not warp if oil is warm. • Capacity: 88 oz.

**LS22800****Wheel Stud Installer**

• Easily installs new wheel studs. • Use with a ratchet or impact wrench to pull the new stud securely in place. • Works on most automotive and light-duty truck wheel studs, import and domestic.

LS22820 Repl. Bearing and Dust Shield

**LS28950****Truck Wheel Stud Installer**

• Installs most truck wheel studs in seconds. • Use with an impact wrench or ratchet. • The tool body is equipped with a thrust bearing to easily pull the new wheel stud into place. • Fits truck wheel studs up to 22MM (7/8") in diameter. • Use the lug nut to tighten against the tool body to pull the stud in position.

**LS30950****CV Joint Banding Tool**

• For all Band-It® and Band-It Jr.® style clamps. • Use 5/8" socket or wrench to wind and crimp new band on boot. • Tool is easily disengaged from the band after the band is tightened. Band-It® and Band-It Jr.® are trademarks of Band-It-IDEX, Inc.

**LS30500****CV Boot Clamp Pliers (Earless-Type)**

• For Earless-Type clamps including those found on late model GM inboard CV joints.

**LS30800****CV Boot Clamp Pliers (Ear-Type)**

• For all ear-type clamps including GM FWD outboard CV joints. • Designed for use with a torque wrench, as required for stainless steel bands.

**LS30600****Offset Boot Clamp Pliers**

• Crimps ear-type clamps in hard-to-reach areas. • Work from the side (head is turned 90 degrees) unlike traditional tools that work from the end. • The unique offset design allows the technician to work on clamps on larger size boots. • The top plate on the pliers flattens the crimp. • Works on most ear-type clamps except those requiring a torque reading.

**VMV216****Hub and Dust Cap Pliers**

• Removes all types of decorative wheel covers. • Removes and replaces stubborn dust caps. • Jaws are ground for firm bite on dust cap either in front or behind flange. • Also grips dust caps without flanges. • Hammer head replaces dust caps. • Alloy steel, heat treated and zinc plated.



## TIRE AND WHEEL

### Dual Budd Wheel Sockets

- Two openings: 13/16" square and 1-1/2" hex.
- Simultaneous removal or installation of Budd wheel nut and stud cap.



PART NO.	DRIVE SIZE	DIAMETER	LENGTH
I54826BW	3/4" Sq.	2-1/4"	3-5/16"
I64826BW	1" Sq.	2-1/4"	3-3/8"

### OW1944

#### 5 Piece Budd Wheel Socket Set

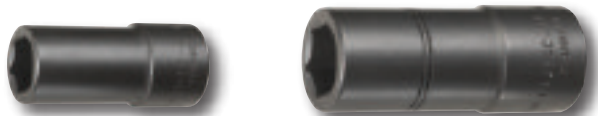
- Use with a 1" square drive impact wrench.
- Extra deep design allows removal of both nut and stud with just one socket.
- Metric sizes work on the import truck Budd wheels, and the 1-1/2" hex is for American-made trucks with dual rear wheels.
- Packaged in a convenient storage box.

Kit includes:



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
OW1945A	35MM hex	OW1948A	33MM hex
OW1946A	38MM hex	OW1949A	1-1/2" hex
OW1947A	41MM hex		

### Dual Purpose Wheel Nut Sockets



- 1/2" square female drive is between the openings.
- Use with EB33 Extension.

PART NO.	HEX OPENINGS
P322426	3/4" and 13/16"
PM321921	19MM and 21MM

### EB33

#### Extension (Industrial Finish) (Ball Type Retainer)



- Use in conjunction with P322426 or PM321921 Dual Purpose Wheel Nut "Flip" sockets.
- Shank Diameter: 21/32".
- Handle Diameter 1".
- Overall Length: 3".
- **Not For Power Use.**

### PM3236

#### Volkswagen Rear Axle Nut Socket, 6 Point



- Designed for use in power applications to remove and replace VW rear axle nuts.
- 1/2" Square Drive.
- 36MM Male Hex.
- Industrial finish.
- Length: 2-1/4".



#### WARNING!

Wear safety goggles. Read operating instructions thoroughly.

### LS39510

#### 30MM 12 Point Axle Nut Socket

- Removes and installs axle nuts and automatic transmission tail output shafts.
- Heat-treated alloy steel, impact quality, extra deep, 1/2" drive.
- Applications: Chrysler: 300C, Crossfire 2004; Dodge: Freightliner Sprinter vans with 215MM rear axle 2004 and up, Magnum 2004; Jeep: Grand Cherokee V6 models 2005; Lexus: ES300; Pontiac: Vibe; Mercedes: many models; Toyota: Avalon, Camry, Highlander, Matrix; and VW: Beetle, Jetta, Golf 1999 and up.



### LS39650

#### 39MM 12 Pt. Axle Nut Socket

- Removes and installs axle nuts on 4WD axle hubs on Toyota/Lexus SUV models.
- Durable, impact-grade heat-treated alloy steel.
- Extra deep to fit over various axle lengths.
- Works where standard sockets won't.
- Use with 1/2" drive.
- Applications: 2008-2010 Toyota Land Cruiser, 2008-2010 Toyota Sequoia, 2007-2010 Toyota Tundra, 2008 Lexus LX 570.



### ARSU070

#### Drain Plug Socket



- 1/2" Drive, T70.
- For removal and replacement of transaxle drain plug.
- Used on 2003 and newer Subaru's with manual transmissions.
- Length: 105MM.

### STLN3ST

#### 3 Piece Lug Nut Set



Set consists of the following Part Numbers and sizes:

PART NO.	DESCRIPTION
EB33	1/2" x 3" Industrial Finish Extension
P322426	1/2" Dr. Dual Purpose Wheel Nut Socket (3/4" & 13/16")
PM321921	1/2" Dr. Metric Dual Purpose Wheel Nut Socket (19MM & 21MM)

### LTHLT1230

#### Chrome Cap Buster Kit

- Dual flip 1/2" drive impact socket design.
- Includes 4 lugnut removal tools.
- Use these dedicated sockets to remove lugnuts.
- Includes an extractor punch.
- Comes in a vinyl pouch.

Set consists of the following:



PART NO.	DESCRIPTION
LTHLT1240	21/21.5MM Lug Nut Skt. (Chrysler and Dodge)
LTHLT1250	18.5/19.5MM Lug Nut Skt. (GM, Chrysler vehicles)
LTHLT1260	22/22.5MM Lug Nut Skt. (Dodge 16"-17" Aluminum Wheels)
LTHLT1270	11/16"/27.5MM Lug Nut Skt. (Range Rover, Land Rover)

## LTHLT4300

### Three Piece Twist Socket Lugnut Removal Set

- For the removal of damaged 3/4" & 19MM, 13/16", and 21MM lugnuts and the majority of OEM and after market locking lugnuts.
- Sockets are dual sided.
- Works with a 1/2" impact gun or breaker bar for service calls.
- Includes an extractor punch.



## OW5047

### Lug Nut Cover Pliers

- This tool avoids problems caused to chrome-plated lug nut caps found on many heavy duty trucks and trailers that are easily damaged if pried off or by using any ordinary cap remover.
- Ruggedly built and features specially coated jaws that won't slip off the caps, no matter how much squeezing is applied.
- Features cushioned handles.



## CBS9TWNPSR

### 9 Piece Extra Thin Nut Protector Power Socket Set, 1/2" Drive



Set consists of one each of the following:

PART NO.	SIZE	PLASTIC SLEEVE & INSERT
CBSTW3217R	17MM	CBSRSPT17
CBSTW3219R	19MM	CBSRSPT3/4
CBSTW3221R	21MM	CBSRSPT13/16
CBSTW3224R	3/4"	CBSRSPT3/4
CBSTW3226R	13/16"	CBSRSPT13/16
CBSTW3228R	7/8"	CBSRSPT7/8
CBSTW3230R	15/16"	CBSRSPT15/16
CBSTW3232R	1"	CBSRSPT1
CBSTW3234R	1-1/16"	CBSRSPT11/16

## JS75032

### Hubcap and Wheel Removal Kit

- Remove and replace GM, Ford, Chrysler and McGard hubcap locks and aftermarket wheel lug locks without damaging the lock or stud.
- Kit includes: GM hubcap lock remover, oversize McGard wheel lock remover, lug nut remover punch, durable plastic carrying case, GM sprocket hubcap lock remover, large universal locking lug nut remover, large wheel cover lock remover (also fits stripped 18MM lug nuts), Corvette, GM "N" and "F" body wheel lock remover, and directions for use.



**WARNING!**

*Wear safety goggles.  
Read operating instructions thoroughly.*

## LTHLT1460

### 5 Piece 1/2" Drive Wheel Torque Extension Set

- For torquing wheel nuts on most foreign and domestic cars and light trucks to the correct torque with thin wall or regular lug nut sockets.
- Does the work of 13 regular torque sockets.
- Helps eliminate damage to wheels when torquing wheel nuts.



Set consists of the following in a blow molded case:

PART NO.	DESCRIPTION
LTHLT1400C	1/2" 100 ft.-lb. Wheel Torque Extension (Gray)
LTHLT1400E	1/2" 80 ft.-lb. Wheel Torque Extension (Blue)
LTHLT1400F	1/2" 65 ft.-lb. Wheel Torque Extension (Yellow)
LTHLT1400I	1/2" 120 ft.-lb. Wheel Torque Extension (White)
LTHLT1400G	1/2" 140 ft.-lb. Wheel Torque Extension (Aqua)

## LTH1593

### 9 Piece Wheel Torque Master Kit

- Designed for use with a 1/2" drive impact wrench.
- Comes in a custom molded case with a color wall chart.



Set consists of the following:

PART NO.	DESCRIPTION
LTH1500A	13/16" - 100 ft.-lbs. torque socket (Brown)
LTH1500B	21MM - 80 ft.-lbs. torque socket (Orange)
LTH1500BB	21MM - 150 ft.-lbs. torque socket (Turquoise)
LTH1500C	3/4" - 19MM 100 ft.-lbs. torque socket (Gray)
LTH1500E	3/4" - 19MM 80 ft.-lbs. torque socket (Blue)
LTH1500F	19MM - 65 ft.-lbs. torque socket (Yellow)
LTH1500G	17MM - 80 ft.-lbs. torque socket (Red)
LTH1500I	7/8" - 120 ft.-lbs. torque socket (White)
LTH1500Q	7/8" - 140 ft.-lbs. torque socket (Aqua)

## LTH1550

### 4 Piece Domestic Wheel Torque Master Kit

- Designed for use with a 1/2" drive impact wrench.
- Comes in a custom molded case with a color wall chart.



Set consists of the following:

PART NO.	DESCRIPTION
LTH1500A	13/16" - 100 ft.-lbs. torque socket (Brown)
LTH1500C	3/4" - 19MM 100 ft.-lbs. torque socket (Gray)
LTH1500E	3/4" - 19MM 80 ft.-lbs. torque socket (Blue)
LTH1500I	7/8" - 120 ft.-lbs. torque socket (White)

# DAN105431

**Portable Bead Seater**



- A revolutionary portable bead seating and inflation device specifically designed for tubeless tires.
- Blasts a powerful air burst between the tire and rim to help seat stubborn beads fast.
- Used in conjunction with an inflation hose, unit forces a high powered compressed air blast into the tire body which forces the sidewalls to seal on the wheel allowing the inflation hose to pressurize the tire.
- Has a large welded steel ASME certified surge tank for all the inflation power needed.
- Non-marring, flared nozzle tip.
- ASME certified steel tank.
- Precision micro-smooth slide valve allows complete tank discharge in less than 1/100 of a second.
- Portable and easy to carry.
- Equipped with a pre-set safety release valve.
- Pneumatic check valve for safe refilling of the tank.
- Easy to view pressure gauge to accurately monitor tank air volume.
- Durable nylon discharge barrel features a contoured tab that locks securely on the edge of the rim for better control during air discharge.

SPECIFICATIONS	
Tank Capacity:	6 gallons.
Length:	23".
Height:	13.25".
Width:	10.5".
Pressure:	150 PSI.
Weight:	27 lbs.

# AUTEBT210

**Electronic Brake Tool**

- A multifunction solution especially designed to help technicians replace brake pads more safely and efficiently.
- Eliminates the need to use expensive OE diagnostic tools for electronic brake systems.
- One tool for multiple purposes.
- Deactivates/activates SBC (Sensortronic Brake Control).
- Changes brake fluid/bleeds brake system.
- Inspects air brake system.
- Opens/closes the brake pads.
- Basic setting of rear brake calipers after changing brake discs and pads.
- Reads and clears EPB/SBC trouble codes.
- Easy to use with step-by-step on-screen instructions.
- Multilingual support.
- Ensures workplace safety.
- Avoids installation errors.
- Affordable and reliable.
- Easy to update via a USB cable.



COVERAGE	
Mercedes-Benz	Models 211, 219, 230
Volkswagen	Passat (2005 - present)
Audi	A6/A8 (2002 - present)
Volvo	All new Volvo parking brake modules (PBM)

# TH804

**US/Metric Master Cylinder Bleeder Kit**



- Kit comes with an assortment of economical plastic adapters.
- Fits import and domestic vehicles using USS (English) or metric master cylinder threaded fittings.

Kit includes:

QTY.	ADAPTERS	QTY.	ADAPTERS	QTY.	ACCESSORIES
2	3/8"-24	4	10MM x 1.00	4	20" Urethane Tubes
1	7/16"-24	2	10MM x 1.25	1	Thread Gauge
1	9/16"-18	1	11MM x 1.50	1	Instruction Sheet
1	9/16"-20	2	12MM x 1.00	1	Tube Holder
2	1/2"-20	1	12MM x 1.50		
		1	13MM x 1.50		

# OW4809

**Brake Bleeder Hose Kit**



- Save time removing air from brake system by doing all the wheels at the same time; also eliminates the need for an assistant.
- Hoses easily attach to bleeder screws, which hold hoses in place and prevent leaking.
- Check valve on end of hoses prevents air from entering brake system when pumping brake pedal.
- Includes four **OW4599** Brake Bleeder Hoses.

**OW4599 Brake Bleeder Hose**

# Brake Bleeder Wrenches



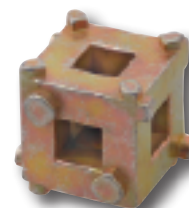
- Designed for hand clearance and extra leverage on brake bleed nipples.
- Feature a strong 6 point hex to keep fittings from stripping.
- Alloy steel, heat treated, black oxide plated.

PART NO.	DESCRIPTION
VMB456	5/16" x 3/8" Hex Openings for GM, Ford, Chrysler
VMB457	8MM x 10MM Hex Openings for GM, Datsun, Honda
VMB460	7MM x 9MM Hex Openings

# LS28600

**Disc Brake Piston Tool**

- Rotates piston in the caliper when replacing pads.
- Fits domestic and some import applications.
- Use on vehicles with four wheel disc brakes.
- Use with 3/8" drive ratchet and extension.



# LS49000

**Truck Spring Cage Bolt Socket**

- Extra deep 3/4" socket loosens the cage bolt to quickly unlock air brakes on trucks.
- Also removes the air brake booster for replacement.
- Use with a 1/2" drive or 7/8" hex.
- Can be used with an impact wrench.



## PBT70850

### Vacuum Brake Bleeder



- Allows one man operation.
- Fast efficient vacuum bleeding.
- 500ml (18.5 fl. oz.) container equipped with overflow check valve.
- Quick release locking trigger.
- Universal rubber bleed screw fitting.
- 700MM (28") bleeder hose.
- Convenient hanging hook.
- Operates on shop air.
- Compact and portable design fits into wheel arch area.
- Pulls 25" of vacuum at 100 PSI.
- Suits all braking systems (including ABS).
- When not in use, the unit can be sealed to eliminate accidental spillage.

**SPECIFICATIONS**

Air Pressure .....	Min. 80 PSI - Max. 130 PSI
Air Consumption .....	Max. 10 CFM at 100 PSI
Vacuum .....	24in. Hg at 100 PSI
Thread Connection .....	1/4"
Container Capacity .....	500ml

## PBT70856

### Brake Bleeding Kit



- The ultimate one-man brake bleeding system.
- Vacuum Brake Bleeder features:**
  - Compact size fits easily in the wheel area.
  - Universal rubber fitting holds securely on brake bleed screw.
  - Convenient hanging hook and quick release trigger allows hands free operation.
  - Internal overflow valve prevents brake fluid spray if container reaches capacity.
  - Clear drain hose provides visible inspection of old fluid during bleeding.
  - On-off switch prevents spills when not in use.
  - Operates on shop air.
  - Container Capacity: 500ml (18.5 fl. oz.).

**Brake Fluid Reservoir Refiller features:**

- Automatically refills brake fluid reservoir during brake bleeding.
- Retaining clip provides positive clamping to all master cylinder reservoir types.
- Height adjustment positions filler spout to maintain correct fluid level during brake bleeding; prevents running brake fluid reservoir dry.
- Positive venting system supplies unbroken continual fluid flow.
- On-off tap allows use and storage plus eliminates brake fluid spills.
- Container Capacity: 600ml (20.0 fl. oz.).

## PBT70895

### Auto-Fill Reservoir Refiller



- Easy attachment retaining clip provides positive clamping to all Master Cylinder Reservoir types.
- Positive Venting system supplies unbroken, continual fluid flow.
- Height adjustment for maintaining required maximum fluid level.
- On/Off tap allowing fitment and storage without spilling.
- Components manufactured from non-corrosive, workshop friendly materials.
- Automatically fills brake fluid reservoirs during brake bleeding.
- Enhances existing vacuum break bleeding procedures.
- Prevents running Master Cylinder reservoirs empty.
- Fast and efficient, saving time and money.
- Eliminates accidental spills within the work environment or paint work.
- Suitable for use on any level controlled re-filling application.
- Container Capacity: 600ml (20 fl. oz.).

## NEMV6840

### Pressure Bleed System



- A professional hydraulic brake and clutch bleeding system that includes the NEMV6400 Fluid Dispenser and seven (7) master cylinder adapters.
- Forces new brake fluid down through the master cylinder, while air and old fluid are expelled through the bleed screw(s).
- A pressure gauge on the dispenser allows control of the system pressure, and the pressurized reservoir allows the operator hands-free movement to the bleed screws.
- An integrated manual pump dispenses fluid by pressurizing the 1.2-gallon (5-liter) reservoir.
- Fluid is continually dispensed as long as there is pressure in the reservoir, freeing-up the operator's hands. (Pumping is only required to build additional pressure.)
- The pump tube is sealed to prevent exposure to chemicals, and cleans easily between fluid changes.
- The pump introduces air above the fluid level to reduce aeration.
- The fluid dispensing hose has a built-in valve to manually shut off and control the flow of fluid.
- For convenience and speed, push-to-connect, quick-change style couplers are used at both ends of the fluid dispensing hose.
- Couplers have an integrated valve that automatically shuts off the flow of fluid when disconnected.
- A pressure gauge displays critical dispensing pressure.
- A thumb-operated tilt valve is conveniently located for manual pressure relief, and doubles as a safety valve to prevent over pressurization.

Includes the following:

ADAPTER	TYPE	APPLICATION
NEMVA800	Locking Collar	Toyota, Lexus
NEMVA801	3-tab Camlock	Chrysler, Dodge, Jeep, Plymouth
NEMVA802	3-tab Camlock	Chrysler, Dodge, Jeep, Plymouth
NEMVA803	3-tab Camlock	Most late model GM cars (Buick, Cadillac, Chevrolet, GMC, Hummer, Oldsmobile, Pontiac) some Mazda.
NEMVA804	45MM Thread	Most European cars (Alfa Romeo, Audi, BMW, Jaguar, Land Rover, Mercedes, Peugeot, Porsche, Renault, Saab, VW, Volvo), Chrysler Crossfire, Daewoo, Late model Ford, Kia, some Mazda, and Mini.
NEMVA808	3-tab Camlock	All Hyundai, Mitsubishi, Nissan, and Subaru, some Chrysler/Dodge, some Ford/Lincoln.
NEMVA810	Universal Round Cone Secured with chain	All Acura, Honda, Isuzu, and Suzuki, some Mitsubishi, Master cylinders w/large round necks from 1-3/4" (50MM) to 3-5/16" (80MM) internal diameter.

## NEMV6830

### Vacuum Brake Bleeder



- Portable, compressed-air operated professional-grade brake and clutch bleeder.
- Integrated 1.9 quart (1.8 liter) capacity fluid collection reservoir.
- Variable flow thumb throttle.
- Swivel air inlet with quick disconnect.
- Quick disconnect coupler for quick accessory changes.
- Quiet, muffled exhaust.
- Automatic overflow prevention.
- Includes: brake bleeder, 6 ft. bleed hose assembly, 4 ft. fluid evacuation hose, molded base with screws for bench mounting, automatic fluid refill kit (MVA6825), hanging hook, three universal bleed screw adapters and user manual.

**SPECIFICATIONS**

Weight .....	4.8 lbs.
Working Press. ....	60-150 PSI
Vacuum @ 90 PSI (6.2 bar) .....	26 in. hg (88kpa)
Air Cons. @ 90 PSI (6.2 bar) .....	4.3 CFM (2.0 l/s)
Inlet Thread Size .....	1/4" NPT
Size: .....	9" x 6.5" diameter

Undercar & Wheel

**PBT70915**

**4-in-1 Brake Pad Spreader™**

- This one tool handles all four caliper types: Fixed Caliper (dual and quad) and Floating Caliper (single and dual).
- Prevents damage to pistons, hubs or calipers.
- Ensures parallel piston retraction on dual and quad piston calipers.
- Plate swivels 180° for easy left and right side use.
- Generates over 1600 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.



**LS24300**

**Quick Disc Brake Pad Tool**

- Compresses disc brake pistons in seconds.
- Can be used while four piston caliper is still attached to the vehicle hub.
- Makes brake pad replacement a quick and easy job.



**LS25750**

**Dual Piston Brake Pad Spreader**

- Compresses Dual Brake Pistons simultaneously.
- Squeeze the tool handle until the plunger contacts the inboard brake pad. Continue squeezing to compress both pistons.
- Makes dual piston pad replacement a simple job.



**LS29100**

**Quick Quad Piston Spreader**

- Squeeze the handle and the fast acting plunger to compress disc brake pistons in seconds.
- Quick quad pad spreader simultaneously compresses all pistons on four piston brake calipers.
- Can be used while four piston caliper is still attached to the vehicle hub.
- Works on single, double, quad and six piston applications.
- Makes brake pad replacement a quick and easy job.



**CLS24400**

**Disc Brake Pad Spreader**

- Designed for installing pads on most domestic and import cars and light trucks.
- Compresses disc brake piston for easy pad installation.



**OW7034**

**Disc Brake Pad Spreader**

- Fits between the two new pads being installed and expands to retract the piston.
- Frees hand to start the caliper over the rotor.
- Works on all standard and four-piston caliper disc brakes.



**OW6093**

**Disc Brake Pad Spreader**

- Can be used on or off the vehicle during brake pad replacement to push the piston back into the caliper.
- Thick pushing plate 3/16" and wide, threaded collars are designed for heavy-duty applications.
- Works on: 1998-2001 Chevrolet Lumina, 1998-2004 Chevrolet Monte Carlo, 2000-2004 Chevrolet Impala, 1998-2004 Buick Regal, 1998-1999 Oldsmobile Cutlass, 1998-2004 Pontiac Grand Prix, and 1997-2004 Ford F-250, F-350, F-450 Trucks.



**RB279**

**4-in-1 Brake Caliper Spreader**

- Works on twin and quad piston 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 so that the spreader may be placed at any position.
- Extended reversing lever allows for easy change from spreading to retracting.



**LTHLT770**

**Dual Piston Brake Press**

- For pressing in dual brake pistons and single brake pistons.
- Universal applications for most cars, light and heavy trucks.
- Single piece operation - eliminates nuts and bolts to assemble and disassemble on brake assemblies.



**OW7661**

**Caliper Hanger Set**

- Designed to hold brake calipers out of your way during brake, bearing, suspension, or axle work.
- Makes the job easier and faster, and reduces possible brake hose damage.





## CTGBC18

### Disc Brake Caliper Set

• Assists in replacement of brake pads. • Adaptors for a wide variety of vehicles including: GM, Ford, Toyota, Honda, Nissan, BMW, VW, Mercedes, Volvo, Saab, Renault, Jaguar, etc. • Packaged in blow molded case for easy storage.



Set consists of the following:

PART NO.	DESCRIPTION
CTGBCA	32MM/1-1/4" Drive Key Ford
CTGBCHO10	Disc
CTGBCHO11	31MM/1-13/32" Adptr. Mazda/Toyota
CTGBCHO12	51MM/2" Adaptor
CTGBCHO13	55MM/ 2-3/16" Adaptor
CTGBCHO14	42MM/1-21/32" S Adaptor
CTGBCHO15	42MM/1-21/32" L Adaptor Nissan/VW
CTGBCHO16	32MM/1-1/4" Adaptor
CTGBCHO17	63MM/2-1/2" Adaptor GM
CTGBCHO18	54MM/2-5/32" Adaptor GM
CTGBCHO19	43MM/1-7/8" Adaptor GM
CTGBCHO20L	Rotating Caliper Left Side Threads
CTGBCHO20R	Rotating Caliper Right Side Threads
CTGBCHO21	42MM/1-21/32" Drive Key Toyota
CTGBCHA	30MM/1-3/16" Drive Key Renault
CTGBCHB	32MM/1-1/4" Drive Key Renault
CTGBCK	53MM/2-3/32" Drive Key
CTGBCL	32MM/1-1/4" Drive Key Saab

## LS25000

### Universal Disc Brake Caliper Tool

• For rotating brake pistons back into the caliper to provide clearance for new pads. • Includes five adaptors for use in both 2 and 4-wheel rear disc brake assemblies of most domestic and import cars. • Tool may be used on or off car. • Helps prevent damage to the piston and boot. • Use with a ratchet and 3/8" drive extension. **NOTE:** Some pistons turn clockwise while others turn counter-clockwise; Consult your shop manual for the car you are servicing. For the counterclockwise rotation the 1" Hex Nut must be turned at a faster rate of rotation in order to keep the adaptor engaged with the piston.

Includes the following adaptors:

PART NO.	DESCRIPTION
LS25080	1-1/2" adaptor (narrow pins) for most Hondas, Mazdas, Dodge Conquests, Mitsubishi Starions and 1-1/2" GM's (wide pins) for most Fords, Toyotas and Fieros
LS25110	1-5/8" adaptor for most Nissans/Datsuns and Subarus
LS25130	1-7/8" GM adaptor
LS25150	2-1/8" GM adaptor
LS25170	2-1/2" GM adaptor

LS25470 Screw and Body



## LS65450

### Pneumatic Rear Brake Caliper Tool Kit

• For rotating pistons back into the caliper to provide clearance for new pads. • Pneumatic cylinder pushes adapter against brake caliper piston. • Pivoting handle provides leverage to rotate stubborn pistons back into the caliper. • Includes 5 adapters for use in both 2 and 4-wheel disc brake assemblies of most domestic and import cars. • Tool may be used "on" or "off" the car. • Fits Mazda 3 and Mini Cooper applications. • Set comes in blow molded case for storage. Set consists of:

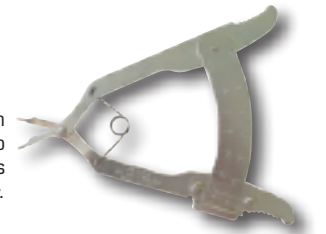


PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS25080	1-1/2" Adapter	LS25170	2-1/2" Adapter
LS25110	1-5/8" Adapter	LS65390	3/8" Sq. Head Repair Kit
LS25130	1-7/8" Adapter	LS65420	Seal Repair Kit
LS25150	2-1/8" Adapter	LS65460	Pneumatic Tool

## KD2116

### Disc Brake Lining Wear Gauge

• Measures brake lining remaining on bonded pads in fractions from 1/16" to 5/8" in 1/32" graduations. • Checks measurement without removing caliper.



## JS97844

### 8 Piece Manual Brake Gauge

• Constructed of 20 gauge sheet metal. • Durable powder coat finish. Brake Gauge Measurements are:

Red:	2MM/0.0787" 3MM/0.1181"
Yellow:	4MM/0.1575" 5MM/0.1969" 6MM/0.2362"
Green:	8MM/0.3150" 10MM/0.3937" 12MM/0.4724"



## OW6516

### 8 Piece Brake Tool Set

• Set contains the most popular brake tools for servicing drum brakes on many import and domestic vehicles. • Includes three different brake spoons to adjust most brake drums and five different brake spring tools that will service most drum brakes. • Features BMC and high quality handles.



- OW5191961 5/8" Brake Spring Removal Tool
- OW5191962 Brake Adjusting Spoon
- OW5191963 Brake Spring Tool
- OW5191964 Brake Spring Pliers
- OW5191965 Brake Retainer Spring Remover
- OW5191966 Notched Brake Adjusting Tool
- OW5191967 Brake Spring Removal Tool 3/4" and 13/16"
- OW5191968 Mini Brake Adjusting Tool



**WARNING!**

Wear safety goggles.  
Read operating instructions thoroughly.

## HR36700

### Brake Shoe Installer Tool



- Offers technicians a more efficient method for changing brake shoes on an S-Cam drum brake assembly.
- Tool is comprised of a steel shaft with a u-shaped fork on one end to stretch the retaining spring so that both halves of the brake shoes are held together, which enables the user to hook up the pin.
- An S-shaped device on the opposite end enables the user to position the brake shoes in a way that allows leverage for installation of the rollers.
- The hooked end pulls the brake shoes apart so that the rollers can be installed faster and more safely.

## LS51300

### Parking Brake Adjusting Spoon for Ford Trucks



- Double ended tool speeds star wheel adjusting on Ford F-150.
- Also works on Ford F-250/F-350 Super Duty trucks with Dana 80 rear axles.
- Tool adjusts star wheel through access slot in backing plate.
- Squared tip works on F-250 and F-350.
- Angled tip with cutout for extra clearance works on F-150 pickups.
- Use on drum in hat parking brake mechanism that is mounted inside the disc brake assembly.

## LS51400

### Brake Spoon for Ford



- Works from the top to speed star wheel adjusting on 2001-2006 Ford Taurus, Windstar and Mercury Sable and other drum brakes with top mounted adjuster.
- Insert tool through slot in backing plate.
- Angled ends for easy access.

## LS40750

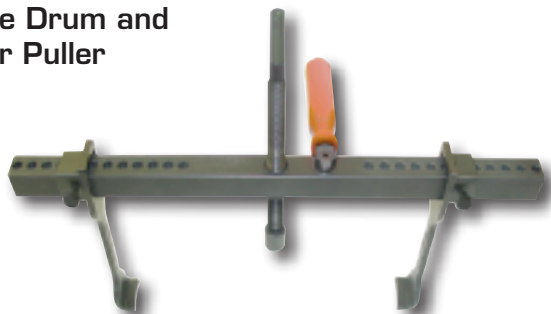
### Parking Brake Cable Remover



- Allows technician to remove parking brake cable by compressing the spring.
- Tool can be used when cable is still attached to parking brake assembly.
- Ends of tool are angled to allow easier access.
- Slots on each end allow tool to slip over cable instead of feeding the cable through the end of the tool.
- Especially useful on Ford F-Series, Expeditions, Excursions, etc.

## RB833

### Brake Drum and Rotor Puller



- Saves time and reduces damage to the wheel bearing by eliminating the need to repeatedly strike or heat the brake drum to free it from the hub.
- Adjustable with a 17" spread and 6" reach to accommodate the most common drum sizes.
- Includes specially designed jaws to maximize surface contact ensuring uniform grip even on deteriorated drums.

## RB7578

### 7/16" Ratchet Wrench for Haldex Slack Adjusters



- Used for brake adjustment on heavy duty trucks equipped with Haldex slack adjusters.
- C2 wrench with extra long handle makes the wrench comfortable when doing the job of overcoming the anti-reverse mechanism (22-25 lbs/ft.).
- 7/16" single hex wheel fits the drive on Haldex slack adjusters.

## RB8569

### Bendix® Slack Adjuster Wrench



- 9/16" extra long wrench for brake service and slack adjuster installation on heavy-duty trucks equipped with Bendix®.
- Extra deep hex allows reach to recessed adjusters.

## RB4651

### 2 Piece Automatic Slack Adjuster Release Tool and Wrench



- For adjusting Rockwell® Automatic Slack Adjusters.
- Set consists of a forked-end tool to release the tensioner button, and a 5/16" double square offset reversible wrench with E-Z Grip handle.
- Insert the Automatic Slack Adjuster Release Tool under the button of the pull-pawl on the Automatic Slack Adjuster to release the anti-reverse mechanism without prying.
- Spring tension of the pull-pawl will hold the tool in place.
- Use the Automatic Slack Adjuster Wrench to adjust the brake to drum clearance.
- Comfortable, E-Z Grip, screwdriver-style handle allows user to apply more turning power with less pressure and fatigue to the hand.

## LS50600

### Single Spring Brake Tool for GM



- Releases tension on both large and small GM Single Spring Brakes during servicing.
- Many GM brakes use a heavy single spring. This tool engages the spring and quickly releases the spring tension. The brake can then be disassembled to replace brake shoes, emergency brake cable or service the brake cylinder.
- Also works on older C and H body vehicles with single brake springs.

**APPLICATIONS**

Smaller Spring	1991 to current GM H Body, Bonneville, LaSabre, Delta 88; 1995 to current Chevrolet Lumina and Monte Carlo; 1992 to current GM C & H Body, Buick Electra, Olds 88, Cadillac Fleetwood, Cadillac DeVille, Chevrolet Lumina APV, Pontiac Trans Sport, Olds Silhouette
Larger Spring	2005 to current Chevrolet Silverado. 2004 to current Chevrolet Colorado; includes 2007 models.

**OW6980**

**Heavy Duty Brake Drum and Rotor Puller**

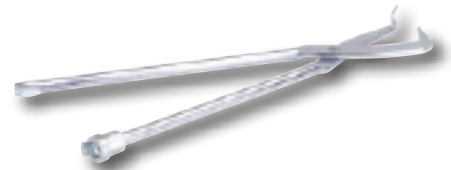
• Handles large components such as brake drums, rotors, drive wheels, gears, flywheels, and pulleys. • One person can easily set the tool in place and use for tough pulls even where there is little access to insert the jaws. • Spread to 12-3/4" and 5" of reach. • Seven tons of force. Weighs less than 10 pounds. • Can be used with air tools to reduce time and fatigue.



**OW4590**

**Brake Spring Pliers**

• Effectively removes and replaces shoe return springs of drum brakes on domestic cars and trucks. • Thin, narrow point provides straight, in-line pull on spring. • Robust handle provides powerful leverage. Double-ended design. • Plated steel resists corrosion.



**CLS45100**

**Brake Spring Tool**

• Designed for import car brake return springs. • Removes and installs import brake return springs. • Also works on domestic brakes that don't use an anchor pin. • Engage brake spring in tool head, turn handle to lock on spring, and expand spring to install or remove.



**LS49100**

**Brake Prybar Spring Remover**

• Quickly and easily releases tension on large and small single spring brakes on GM vehicles. • The tool design uses the hook to grab onto the spring while the tool tip is used as a fulcrum to pry the spring free. Used to re-install the w spring also.



**LS44800**

**Heavy Duty Brake Spring Tool**

• Removes and installs larger brake return springs. • Works on brakes with or without an anchor pin. • Engage brake spring in tool head. Turn rear handle to lock on spring. • Expand spring to install or remove. • Front handle can be removed when working in tight places.



**VMB10**

**Truck Brake Shoe Retainer Spring Tool**

• Designed to remove and replace the brake shoe retainer spring on trucks. • Provides good leverage to engage or disengage the hook arm of the spring. • Offset handle keeps clear of brake. • Length: 7".



Works on:

Ford Trucks	F250, F350, P250, P350, P400
Dodge Trucks	B300, D300, P300, D200, P200
International Trucks	Series 1200 and 1300

**OW5081**

**S-Cam Air Brake Spring Tool**

• Safely replace brake shoes on heavy-duty tractors and trailers. • Simply hook the retaining spring loop and press down against the axle.



**LS13410**

**Brake Caliper Wire Brush**

• Cleans brake caliper mounting surfaces. • Removes brake dust, rust and other debris from brake caliper castings. • Brush is made with heavy-duty steel wire and is angled to fit into tight places. • Brush comes with molded handle grip for easy use.



**LS47400**

**Brake Spring Washer Tool**

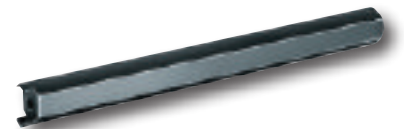
• Fits both large and small washers. • Troublesome brake shoe retaining spring washers can now be easily removed and then reinstalled. • Wide "window" allows better visibility to align the nail and washer slot.



**OW7299**

**Ford Brake Caliper Pin Remover**

• Removes brake caliper pins on 1986-88 Aerostars, Broncos, and E and F-series pickups; 1983-88 Rangers; and 1984-88 Bronco II's without damaging the pin. • Weight: 7 oz.



**OW4592**

**Heavy Duty Truck Brake Spring Pliers**

• Designed to remove and install the brake shoe return springs on medium-duty and heavy-duty drum brakes.



**LS48400**

**Import Car Brake Clip Tool**

• Designed for import cars with brake shoe hold-down clips. • Removes and installs the brake clip and nail on brake shoes in seconds. • Set tool head in the brake clip groove; push tool to depress brake clip; turn handle 1/4 turn to disengage clip from nail. • Reverse to install.



Undercar & Wheel

## LS42400

### Air Line Disconnect Set

- Disconnects quick connect push-in connectors found on heavy-duty truck air systems and more.
- Smallest size also works on automatic adjusting air suspension systems for automobiles.
- Disconnects air systems on brakes, suspension, steering, engine, transmission and other auxiliary equipment.
- Also disconnects other quick connect push-in fittings, including: flow control valves, check valves, shuttle valves, quick exhaust valves and other function control fittings in compressed air systems.
- Set comes with five popular sizes: 1/8-5/32", 1/4", 3/8", 1/2", 5/8".
- Each tool is double-ended to disconnect air lines even in hard-to-reach areas.
- Angled end allows maximum leverage.
- Smaller end fits in tight spots.



## TH450

### Emergency Brake Cable Housing Pliers

- Used on domestic and import vehicles that utilize an emergency brake cable at the rear wheels, including drum brake applications and some rear disc brake vehicles.
- Used to remove emergency brake cable housing from backing plate.
- Hardened steel construction.
- Soft touch handle grips.



## TH451

### Emergency Brake Cable Removal Tool

- Used on domestic and import vehicles that utilize an emergency brake cable at the rear wheels with cable connector under the vehicle, including drum brake applications and most rear disc brake vehicles.
- Place brake cable in slot of pliers and use blade of pliers to push the cable out of the cable connector.
- Hardened steel construction for durability.
- Soft touch handle grips.



## TH365

### Emergency Brake Tool

- Compresses the spring on the emergency brake cable for replacing the brake shoe arm.
- Fits all vehicles using a cable/spring emergency brake assembly.
- Eliminates pinched fingers.
- Frees one hand for replacing brake shoe lever.



### Natural Rubber Silencers

- "AMMCO-type" silencer made of high quality rubber and neoprene; reduces and suppresses chatter.
- For use on all drums and/or rotors while turning.



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
SB69	Rotor Silencer	SB80B	Drum Silencer

## SB06210

### Carbide Cutting Bits

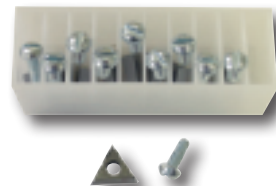
- "AMMCO-type" bits made of high quality grade of carbide and guaranteed to perform up to OEM standards.
- Complete with screws.



## SB40710

### Carbide Cutting Bits

- "FMC-type" bits made of high quality grade of carbide and guaranteed to perform up to OEM standards.
- Complete with screws.



## CF64

### Brake Hone (Foreign Cars)



- Adjustable tension hone for 12.7MM (1/2") to 57MM (2-1/4") diameter cylinders.
- Self-aligning and self-centering.

CF641 Replacement Stone Set, Medium Grit

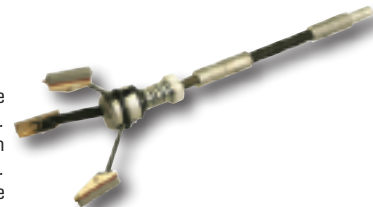
CF6414 Replacement Stone Set, Fine Grit

## LS10400

### Disc Brake Hone

- For 1-1/2" to 3-1/8" disc brake cylinders (38.1 to 79.3MM).
- Special abrasive pads polish the cylinder without cutting.
- Controlled pressure, three abrasives and flexible driver give good stability and speed.
- Stones are 1" long.

LS10490 Set of Replacement Stones



### THE FLEX-HONE® TOOL

The FLEX-HONE® Tool is a resilient, flexible hone tool with a soft cutting action. The tool is made from 95% pure raw grain abrasive laminated onto flexible nylon filaments. Each tool is self-centering, self-aligning to the bore and self-compensating for wear. It removes peaks from the surface as well as cut, torn, and folded metal left by previous machining operations. The FLEX-HONE® can develop a plateau of over 60 percent while producing an oil holding cross hatch pattern with the required AA. The FLEX-HONE® Tool is available in a wide variety of abrasive types, grit sizes, bore diameters and can be customized to meet a particular requirement. **(NOTE: Not available for export.)**

### Brake Cylinder FLEX-HONES®



- 180 Grit, silicone carbide abrasive.
- 8" D.A. length.

PART NO.	SIZE	PART NO.	SIZE
BRBC14MM	.552"	BRBC7/8	22MM
BRBC20MM	.787"		

## BRRMFH120Z25

### Medium FLEX-HONE® for Rotors

- Produce the ideal surface finish on disc brake rotors and flywheels.
- Last longer than abrasive pads.
- Produce a non-directional pattern.
- Lowers harmonic vibrations.
- Ideal for new or re-turned rotors and flywheels.
- Secure in a collet, chuck or similar holding device.



#### WARNING!

*Wear safety goggles when using such tools as punches, chisels, hammers, power impact tools and cutting tools. Operate Flex-Hones® only while hone is within cylinder. Read operating instructions thoroughly.*

## VMV386

### Pedal Press



- Holds brake or clutch pedal in any desired position.
- Spring loaded column will follow brake pedal during bleeding operation.
- Allows one person to do jobs normally requiring two!
- Length: 29", compresses to 24".
- **WARNING: Do not use on accelerator pedal!**

## LS48700

### Throttle Pedal Depressor



- Holds throttle at a constant RPM.
- To use, engage the nylon hook under the steering wheel. Then extend the depressor rod to the accelerator pedal. Use the adjustment screw to fine-tune the RPM level.
- Overall length: 40".
- Shipping weight: 1 lb., 7 oz.

## LS21520

### Truck Pedal Depressor



- Depresses and holds clutch pedals and brake pedals.
- The two-piece, telescoping tool extends to the pedal and locks in position.
- Brace the formed plate against the seat or the steering wheel for firm support.
- Tool extends from 18-1/2" to 34-1/2".

LS45980 Replacement Rubber Tip

## MCL71475

### Master Flaring Kit

- Universal hydraulic flaring tool set.
- Fabricates Push Connect 1/4", 5/16", and 3/8"; GM Fuel Line Flare, Brake Lines and Transmission 5/16" and 3/8"; Flare/Double Flare 3/16", 1/4", 5/16", 3/8", and 1/2", and Metric Bubble Flaring 4.75MM, 6MM, 8MM, and 10MM.
- Comes in a custom molded box.



## TC93FB

### Double Flaring Tool Kit

- For 3/16", 1/4", 5/16", 3/8", and 1/2" O.D. tubing.
- Recommended for Bundy and other annealed soft steel tubing (wall thickness to .035").
- Makes single or double flares in soft copper or aluminum tubing.
- Small, lightweight, easy to handle.
- Forged steel yoke; swivel-type hardened steel, chrome-finished flaring cone.
- Ball thrust bearing in flaring cone minimizes friction, makes operation easier.
- Bar provides positive grip of tubing.
- Includes plastic tool case.

- TCS32638 Yoke Assembly
- TCS32640 Compressor Cone
- TCS38381 Bar Assembly
- TCS38388 3/16" Adapter
- TCS68012 1/4" Adapter
- TCS68013 5/16" Adapter
- TCS68014 3/8" Adapter
- TCS68015 1/2" Adapter



## TC293F

### Metric Bubble Flaring Tool Kit

- For soft steel or Bundy tubing 4.75MM (3/16"), 6MM, 8MM, or 10MM O.D. tubing.
- Forms international standard bubble flare in one fast operation.
- Flares metric hydraulic brake lines used on European, Japanese and American automobiles and light trucks.
- Will flare soft double wall steel tubing with a wall thickness up to .028".
- Can be used with soft copper and aluminum tubing.

- TCS73938 Stud
- TCS8694401 Wing Nut Assembly (2)
- TCS8770901 Bar Assembly
- TCS8771001 Yoke Assembly
- TCS8771301 10MM Adapter
- TCS8771601 8MM Adapter
- TCS8771701 6MM Adapter
- TCS8771801 4.75MM Adapter



## HR154

### Flaring Tool Set Metric

- Works for double flares on 4.75MM, 5MM, and 6MM tubing.
- Low profile design allows for use on or off the vehicle.
- Designed to be used with a ratchet to make flares easier.
- 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.



## HR161

### Automotive In-Line Flaring Tool Kit

- Works for double flares on 4.75MM and 3/16" tubing.
- Low profile design allows for use on or off the vehicle.
- Designed to be used with a ratchet to make flares easier.
- 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.



## HR164

### Flaring Tool Set SAE

- Works for double flares on 3/16", 1/4" and 5/16" tubing.
- Low profile design allows for use on or off the vehicle.
- Designed to be used with a ratchet to make flares easier.
- 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.



Undercar & Wheel

## RA42071

### Ratcheting Tubing Cutter

- Designed for confined spaces.
- Unique ratcheting action operates like a socket ratchet but cuts copper, aluminum, stainless steel, and PVC.
- Spring-loaded adjusting screw applies continuous pressure while cutting.
- For cutting 1/8" to 1/2" tubing.

RA42073 Replacement Wheel



## TC1000

### HI-DUTY® Tube Cutter

- Rollers have flare cut-off groove, fold away reamer and spare cutting wheel.
- For 1/8" to 1-1/8" (4 to 28MM) O.D. tubing, (1/8" to 1" nom.).
- Length: 4-15/16". • Weight: 6-1/2 oz.

TC75015 Repl. Cutting Wheel



## TC1050

### IMP® Tube Cutter

- Repositioned rollers to bottom of tool allow for easier cutter engagement on tubing.
- Enclosed feed-screw minimizes contamination, assuring continued free operation.
- Requires only 1-1/4" swing radius. (Requires only 1-3/8" swing radius with 5/8" tube).
- For 1/8" to 5/8" (4 to 15MM) O.D. tubing, (1/8" to 1/2" nom.).
- Size: 1-3/4" x 1-1/4" x 1/2". • Weight: 2-1/2 oz.

TC32633 Repl. Cutting Wheel



## RA18548

### Tube Bender

- Bends soft or annealed tubing without crimping, flattening or scratching.
- Bends four sizes: 3/16", 1/4", 5/16" and 3/8" tubing.
- Handles are 8-1/2" long so extensions are not needed.
- Calibration allows duplication of any angle.
- Glass/plastic construction combines strength with lightweight durability.



## TC470FH

### Tubing Bender

TUBE O.D. (in.)	RADIUS TO CENTER OF TUBE (in.)
3/16	7/16
1/4	9/16
5/16	11/16
3/8	15/16

- Triple head 180° tube bender with Roto-Lok™ indexing handle.
- Bends 3/16", 1/4", 5/16" and 3/8" O.D. tubing.
- Patented, quick-action indexing lever repositions two-stage handle midway through bend when both handles begin to meet. This feature allows easy fabrication of bends up to 180° with reduced effort, better control and no crossing of handles.
- Optimum bending radius for each tubing size.
- Calibrated markings for making accurate left-hand, right-hand and offset bends.
- Compact design for working in tight spaces.
- Cushion grips for comfort and stability.
- Made of lightweight, die-cast aluminum.



### Tubing Bender Pliers



LS44150



LS44070

- Bends brake lines without kinking or flattening, especially in tight spots.
- Bends all types of 3/16" and 1/4" OD tubing.
- Unique head design bends tubing without collapsing the tube.
- Won't mark tube surface.
- The handles are more than 3-1/4" apart for proper leverage when handling even steel tubing and unique head design on the LS44070 keeps handles in line with the tubing.

PART NO.	DESCRIPTION
LS44150	3/16" Tubing Bender Pliers
LS44070	1/4" Tubing Bender Pliers

## SURTP14316

### 3/16" and 1/4" Tubing Benders



- The hardened square face on the back acts as a guide to cut 3/16" or 1/4" brake tube.
- Allows a tight 90 degree bend on the tubing right at the nut.
- Large jaw design makes sharp bends without kinking lines.
- Wide grip cushioned handle helps provide maximum leverage.
- Specially designed to grip and hold tubing.
- Works with S.U.R.&R. E-Z Bend and steel brake line tubing.

## SURTS14316

### Tubing Straightener and Bending Pliers

- Make professional grade lines instantly.
- Two tools in one.
- Straighten or bend lines on or off the car.
- Works great on Easy Bend alloy, steel, stainless steel, and poly-coated materials.
- Wide grip handle provides maximum leverage.
- Durable, heavy-duty construction for long lasting performance.
- Works with both 3/16" and 1/4" sizes.



## PBT71106

### Steel Line Stopper Kit



- Four piece kit used to seal steel lines once disconnected.
- Prevents fluid leaks and contamination during service.
- Use with all automotive fluids.
- Suitable for: fuel rails and lines, flare type steel brake, fuel and A/C lines, Banjo fittings on brake, power steering and transmission cooler lines.
- Installs in seconds.
- PBT71101 Stopper for 3/8" Line
- PBT71102 Stopper for 5/16" Line
- PBT71103 Stopper for 1/2" Line
- PBT71104 Banjo Stopper
- PBT71105 Rubber Insert Kit

**WARNING!**  
 Wear safety goggles when using brake tools and equipment.  
 Always use caution and proper safety practices.  
 Read operating instructions thoroughly.

Undercar & Wheel

### Tailpipe Expanders

- Remove clamp grooves and round out pipes.
- Step design gives big range.



PART NO.	DESCRIPTION
LS32500	1-5/8" to 2-7/16" (41.3 to 61.9MM)
LS32750	2-3/8" to 3-1/4" (60.3 to 82.5MM)

LS32030 "O" Ring Kit/LS32500  
 LS32740 "O" Ring Kit/LS32750

### LS17350

#### Tailpipe Expander

- Stretches all pipe including stainless steel.
- Use with an impact wrench to quickly stretch pipes.
- Collet sets expand pipes from 1-5/8" to 4-1/4".
- The tool can be used on the vehicle.
- The pipe stretcher is a convenient, inexpensive alternative to hydraulic pipe expanders.
- The kit comes in a molded case for storage.



Kit includes the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS17510	Extender #1	LS17720	O Ring #2
LS17520	Extender #2	LS17730	O Ring #3
LS17530	Extender #3	LS17740	O Ring #4
LS17540	Extender #4	LS17750	O Ring #5
LS17550	Extender #5 (must be used with LS17530)	LS34400	Pipe Stretcher
		LS34490	Large O Ring
LS17710	O Ring #1	LS34500	Small O Ring

### LS34400

#### Exhaust/Tailpipe Stretcher

- Stretches all types of exhaust pipe including stainless steel.
- Use impact wrench to stretch pipes for connection.
- Two collet sets fit pipes from 1-5/8" to 2-7/16".
- Can be used on the car.
- Convenient alternative to hydraulic pipe expanders.



- LS17510 2-3/8" Extender Assembly
- LS17520 2-3/4" Extender Assembly
- LS17530 3-1/8" Extender Assembly
- LS17540 3-1/2" Extender Assembly
- LS17550 3-7/8" Extender Assembly [must be used with LS17530]
- LS34490 Large O-ring
- LS34500 Small O-ring

### LS13000

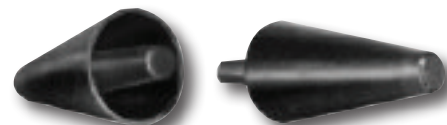
#### Exhaust Manifold Spreader

- For reinstalling the manifold on small block Chevrolets.
- Expand a warped manifold so all bolt holes are accurately aligned.
- Helps prevent cross-threading of manifold bolts.
- Works best when used in pairs, or install before removing manifold to prevent misalignment.



### LS32000

#### Pipe End Shaper



- Rounds out exhaust pipes that are crushed or bent.
- Reshapes pipes bent or flared out by placing big end over pipe.
- Range: 1-1/2" to 3-5/8" (38.1 - 92MM).

### OW4576

#### Nut Splitter

- Forged and heat-treated frame with offset handle works where ordinary nut splitters may fail.
- Smooth action cracks nuts without damaging bolt threads.
- Chisel rotates to line up parallel to bolt.
- Splits non-heat-treated nuts of 7/16" (11MM) through 3/4" (19MM) diameter.
- Tool is 6-3/4" in length.



### HR77000

#### Exhaust and Tailpipe Cutter

- New diameter 19MM cutters to eliminate "Bottoming out".
- Cuts thin and thick walled pipe from 3/4" to 3-1/4" in diameter (19MM to 83MM).
- Gets into tight spots for easy cutting.
- Cutting wheels on every pivot for smooth tracking.
- Keep chain well oiled for long term use.
- Spread pliers; wrap chain around pipe; hook at tightest link possible; gradually tighten pliers; work back and forth, let the wheels do the work.



### LS38350

#### Exhaust Removal Pliers

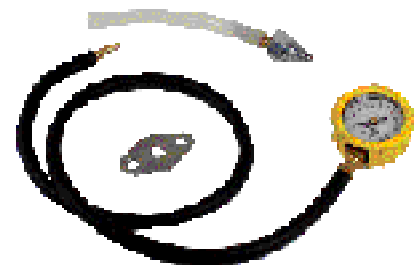
- Separates exhaust hanger brackets from rubber supports.
- Works on all import and domestic car and truck exhaust systems that use the rubber hanger supports.
- Simply squeeze the plier handles to force the bracket from the rubber support.



### WNBPT02

#### Exhaust Back Pressure Tester

- Quickly test back pressure and clogged or obstructed catalytic converters.
- Three stage adapter has 12MM and 18MM thread sizes to fit most domestic and import vehicle's oxygen sensor ports.
- The standard 1/4"-20 tip provides the ability to test through the exhaust pipe when O2 sensor ports are inaccessible. (pipe tap set not included.)
- High temperature silicone hose prevents damage to tester from high exhaust temperatures.
- Kit includes: 0-15 PSI gauge, 6" high temperature silicone tube, 3-stage adapter, flange adapter, and blow-molded carrying case.



Undercar & Wheel

## HEWPRK400

4 Ton Body Repair Kit



- A must for body collision repair use.
- Designed for applications of pushing, spreading, and pressing of vehicle body panels as well as various component parts assemblies.
- A variety of attachments are included.
- Passes ANSI 2009 standards.
- Has a custom fitted, rugged blow-molded storage case.

COMPONENTS		
4 Ton Hydraulic Pump	Ram Toe	16-1/2" Extension Tube
4 Ton Hydraulic Ram	Plunger Toe	8-1/2" Extension Tube
6 ft. Hose w/coupler	Wedge Head	6" Extension Tube
Rubber Head	90° V Base	3" Extension Tube
Flat Base	Serrated Saddle	Male Connector
1/2 Ton Spreader	19-1/2" Extension Tube	Plastic Case

## HEWPRK1000

10 Ton Body Repair Kit

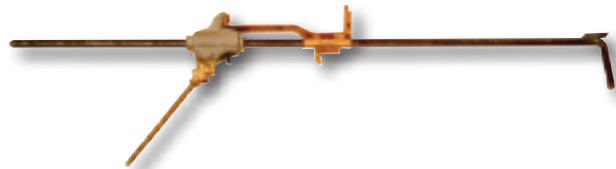


- A must for body collision repair use.
- Designed for applications of pushing, spreading, and pressing of vehicle body panels as well as various component parts assemblies.
- A variety of attachments are included.
- Passes ANSI 2009 standards.
- Has a custom fitted, rugged blow-molded storage case with wheels for easy movement.

COMPONENTS		
10 Ton Hydraulic Pump	Plunger Toe	27" Extension Tube
10 Ton Hydraulic Ram	1/2 Ton Spreader	18" Extension Tube
6 ft. Hose w/coupler	Serrated Saddle	10" Extension Tube
Male Connector	90° V Base	4" Extension Tube
Flat Base	Ram Toe	Mobile Case
Rubber Head	Wedge Head	

## SH77043

4 Piece Jack Set



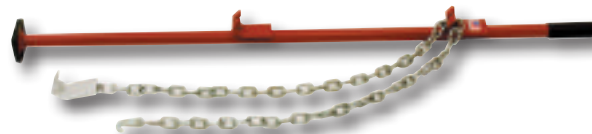
- Versatile tool - pushes, pulls, aligns, spreads, straightens.
- 55" long solid alloy 3/4" rod eliminates need for extension tubes.
- Friction jack has 5 hardened friction plates for minute adjustments - up to 3000 lbs. push/pull power.
- Multiple position handle for hard to reach areas.
- Made in U.S.A.

Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
SH77044	Jack Head	SH77046	Multi-Purpose Hook
SH77045	Friction Rod	SH77047	Extension Handle

## SH77175

Hustler Stick



- Indispensable when versatility of a chain hookup is needed.
- Aligns bumpers, panels, hoods, decks and brackets.
- Heavy duty 1-1/4" diameter tubing with two welded hooks for strength and versatility.
- 1/4" chain, 6' long, hooks on both ends.

## POFBU0190

BITE-TITE™ Clamp

- Pulls narrow lips and seams, as well as works around flanges, channels, beads and corners.
- Heat-treated forged steel jaws and link.
- Easily reversible jaws.
- Combination tooth design for firm, positive gripping.
- 100% made in the U.S.A.
- 3-Ton capacity.
- Overall length: 6-1/4".
- Weight: 2-1/4 lbs.



## POFCL0690

Extended Nose Bite-Tite™ Clamp

- Extended "long" nose design for reaching confined areas.
- Greater depth of teeth for additional gripping power.
- Self-tightening, multi-angle.
- Aggressive cross-hatch tooth design for maximum gripping.
- Swivel pull ring minimizes chain twist.
- Capacity: 3 tons.
- Gripping surface: 1-1/4" wide x 27/32" deep.
- Overall length: 8".
- Weight: 2-3/8 lbs.
- Minimum throat clearance: 15/16".
- 100% made in U.S.A.



**WARNING!**

*Wear safety goggles. Read operating instructions thoroughly before using tools.*



## POFCL0390SP

### Small Frame Gripper Clamp

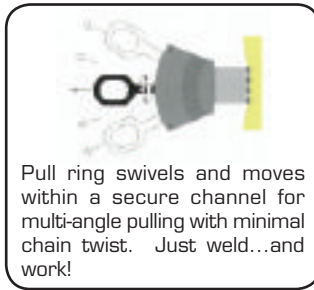
- ADI (austempered ductile iron) cast jaws for extra strength and greater wear.
- Cross-hatch tooth design.
- Spring loaded.
- "Captured" bolt heads for easy tightening.
- Has side pull adapter.
- 5 Ton capacity.
- 3-3/4" wide x 1/2" deep.
- Weight: 3-3/4 lbs.



## POFCL1490

### Weld and Work Multi-Angle Clamp Kit

- Versatile clamp.
- Designed for hard and/or impossible to clamp or hold pulls.
- Pull ring utilizes a contoured dovetail channel that allows both multi-angle pulling for more "in-line" pulls and swiveling that minimizes chain twisting.
- ADI (Austempered Ductile Iron) cast body.
- Heat treated forged alloy steel pull ring.
- Three ton capacity.
- Overall Length: 9".
- Weight: 3-1/4 lbs.



Pull ring swivels and moves within a secure channel for multi-angle pulling with minimal chain twist. Just weld...and work!

Set consists of the following:

PART NO.	DESCRIPTION	QTY.
POFCL149601	1" Pull Plate	2
POFCL149602	1-1/2" Pull Plate	2
POFCL149603	3" Pull Plate	2

POFCL149601 (1) Replacement 1" Pull Plate  
 POFCL149602 (1) Replacement 1-1/2" Pull Plate  
 POFCL149603 (1) Replacement 3" Pull Plate  
 POFCL1499 Pull Plate Package - Includes 10 each of the POFCL149601, 5 each of the POFCL149602 and 5 each of the POFCL149603

## SM21890

### Skin Zipper™

- Skin a door in less than ten minutes with this patented air hammer driven tool!
- Fits all standard air hammers.
- Durable steel shaft.
- Self-lubricating reinforced nylon head.
- Crimps regular or adhesive bonded skins.
- Crimps tightly for a professional finish with no damage to the skin in an easy two step process.
- Step 1 will form the edge of door skin to an initial 45° angle - no hammer or dolly work required here.
- Step 2 completes the final form by using the tool at a 45° angle; two slot widths are included for thick or thin sheet metal skins.
- Each head will skin approximately ten door skins and is easy to replace when it wears out.
- 60# Maximum Air.
- Instructional video in every package.



SM21891 Skin Zipper Replacement Head

## SM20037

### Flange Lever



- Quick realignment of frame flanges, door and hood edges, radiator supports and much more.
- Move quickly along damaged area instead of having to unlock and relock locking pliers.
- Features multiple angles for maximum leverage in various applications.
- Thick hardened alloy steel doesn't get bent out of shape.
- Use flat portion of bar for easy manual alignment.
- 35° angle for easy access to difficult areas.
- 1/4" hook space for bending most metal edges.

## KTEART903M

### Tram Gauge



- Telescoping aluminum tram gauge.
- Metric and English readings.
- Measures from 29" to 116".
- Comes with 4 pointers with 2 nylon storage bags.

## POFCACHA1

### Universal Cluster Hook Assembly

- Tool eliminates need for different tie-down chain assemblies and most applications for other adaptors/plugs/hooks.
- 3/8" Grade 70 chain with a working load limit of 6600 lbs., proof test of 26,400 lbs., and 3 ton capacity.
- Manufactured in accordance with NACM specifications, ASTM standards A391 and A413 for grade 70 carbon steel chain.
- Yellow zinc di-chromate finish provides a long lasting finish with better protection against oxidation.
- Comes with "J" hook for most universal tie-downs - use on SUV's and light trucks, "R" hook that fits General Motors tie-down holes, "T" hook that fits Ford tie-down holes, and a Grab hook which allows for easy securing and/or addition of lengths of chain.
- Weight: 4 pounds.



## PI4145

### Double Grab Hook Assembly



- For easy 3/8" chain connection.
- Overall Length: 8-3/4".
- Weight: 3 lbs.
- Capacity: 10 tons.

Body Service

## PI6311

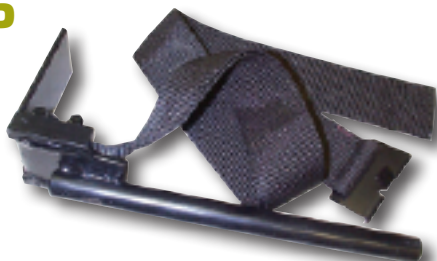
### Ford "T" Tie-Down Hook, 3/8" Chain

- Fits existing tie-down holes in vehicles.
- Overall Length: 12". • Weight: 2 lbs.
- Capacity: 5 tons.



## SM20055

### Fender Fixer



- Collision force to one front fender often travels through the hood to push out the top of the opposite fender. • This tool rolls that fender top back into shape in just minutes.

## SM20033

### Quarter Puller II

- With 6" bars for small openings, pulls tail light openings, radiator supports, pillars, etc. • Two curvatures (one on each side) will fit almost all cars. • Easier, faster than clamps or jacks. • Pulls without bulging.



## SM20014

### Stud Lever™



- Accurate controlled pulls every time. • Grips studs (pull pins) quickly and easily. • Standard tool works on 2.0, 2.2 and 2.6MM studs as close as 3/8" apart. • Black adjustable pivoting base helps compress crown as dent is pulled. • Includes SM20003 Straight Edge for matching original contours.

## HS4550

### Stud Welding Starter Plus Kit

- Powerful lightweight stud gun.
- Super sensitive trigger in handle for one-handed operation. • Built-in overload protection.
- Grounded 3-wire cable. • Never drop a stud again with Stud Ease Technology that holds stud in welder for easy out-of-position welding and is exclusive to UNI-SPOTTER™ Stud Welders.
- Increase accuracy when pulling small dents. • Weld studs easier and faster. • Kit Includes: HS4550 Starter stud welder with exclusive Stud Ease Technology, HS1016 "T" handle slide hammer, and a package of 500 Flexpert welding studs.



HS1001 "Flexpert" Welding Studs 2.2MM

## HS1095

### Mini Pull'r

- Allows user to "feel the pull".
- Eliminates overpulling. • One handed operation. • Quick release cam.



## HS5500

### Stinger Plus Stud Welder Kit

Kit consists of the following in a custom molded box:

PART NO.	DESCRIPTION
HS1000	Blackhead Studs
HS1001	Flexpert Studs
HS1003	Mold Rivets
HS1004	Stud Welding Tip
HS1005	Mold Rivet Tip
HS1007	Shrink Tip
HS1016	Deluxe Slidehammer
HS1040	Eliminator
HS1095	Mini Pull'r
HS5590	Stud Gun

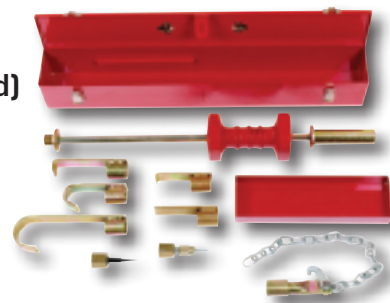


- HS1002 2.6 MM Welding Studs (500)
- HS1004 Stud Welding Tip
- HS1007 Shrink Tip
- HS1016 Deluxe Slidehammer

## SH77081

### Twelve Pound Knocker Set (Boxed)

- 12 lb. dent puller set.
- Square slide hammer does not roll out of reach. • Solid 5/8" high carbon steel slide shaft. • All attachments are heat treated and plated.
- 3/4" pipe end nose adapter is machined and plated. • Hex broached nose piece. • Heavy gauge steel red enamel full hinged storage box. • Made in U.S.A.



Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
SH77068	Hammer and shaft	SH77073	Hook and Chain
SH77069	Claw	SH77074	Straight Driver
SH77070	Short Hook	SH77075	Nose Piece
SH77071	Deep Hook	SH77080	Tool Box
SH77072	Door Edge Tool	SH77771	Threaded Adapter

## SH77085

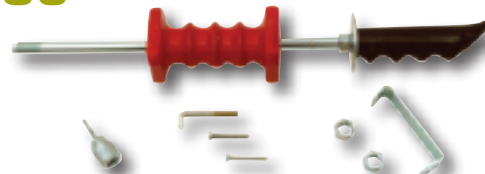
### Five Pound Dent Puller Set

- Sure grip handle with square hammer design. • Solid shaft with all attachments fully plated.

Set consists of the following:

PART NO.	DESCRIPTION
SH77086	Hammer and Shaft
SH77088	Nose Piece
SH77089	"L" Puller and Screw (2)
SH77090	Door Edge Tool and Nut (2)

SH7708710PK Sheet Metal Screws (10)



## LTHLT820

### Paintless Dent Remover



- Easy to master.
- Training DVD included.
- Patented stainless steel solid rod construction with EDM lockable swivel tips. A breakthrough in PDR technology.
- Thirteen interchangeable stainless and plastic tips - swivel head action.
- Replaces a hundred plus obsolete PDR tools.
- Magnetic reflector board included.

## ZZFA4FBHS

### 4 Piece Fiberglass Body Hammer Set



Set consists of the following in a blow molded case:

PART NO.	DESCRIPTION
FA153FGB	Curved Cross Chisel Hammer with Fiberglass Handle
FA158FG	General Purpose Pick Hammer with Fiberglass Handle
FA164FG	Utility Pick Hammer with Fiberglass Handle
FA170FG	Door Skin Hammer with Fiberglass Handle

## OW898A

### Dent Puller



- Eliminates the most time consuming part of dent removal and installation of interior panels and upholstery. Simply drill a hole at the base of the dent and thread in the tool's self-tapping screw. A few sharp blows of the slide hammer will pull the dent out.
  - Puller is 17" long with Pyralin handle grip.
  - Replaceable self-tapping screw.
  - Instructions included.
- OW11200 Replacement screw**

## FA153FGB

### Curved Chisel Hammer with Fiberglass Handle



- Excellent for finishing.
- Cross peen used for working in sharp corners around mouldings and for caulking.
- Well balanced curved chisel for work in close places.
- Round Face - 1-9/16" diameter; Chisel - 3" Long; Weight .85 lbs.

## FA7BTS

### 7 Piece Body Tool Set

Set consists of the following:

PART NO.	DESCRIPTION
FA153GB	Cross Chisel
FA162G	Curved Hammer
FA162G	Shrinking Hammer
FA164G	Utility Pick Hammer
FA1036	Light Dinging Spoon
FA1058	Toe Dolly Block
FA1059	Heel Dolly Block
FA1060	General Purpose Dolly Block



## FA153G

### Cross Chisel Hammer

- Excellent for finishing.
- Cross peen used for working in sharp corners around mouldings and for caulking.
- Dimensions: Round Face: 1-9/16" diameter; Chisel: 3" long; Weight: .87 lbs.



## FA153GB

### Curved Cross Chisel Hammer

- Excellent for finishing.
- Cross peen used for working in sharp corners around mouldings and for caulking.
- Well balanced curved chisel for work in close places.
- Dimensions: Round Face: 1-9/16" diameter; Chisel: 3" long; Weight: .85 lbs.



## FA4BTS

### 4 Piece Body Tool Set

Set consists of the following:

PART NO.	DESCRIPTION
FA153GB	Cross Chisel Curved Hammer
FA158G	General Purpose Pick Hammer
FA1036	Light Dinging Spoon
FA1058	Toe Dolly Block



## FA153S

### Cross Chisel Shrinking Hammer

- Extra wide faces are cross grooved and used for shrinkage on large surfaces.
- Chisel end used on sharp corners.
- Dimensions: Flat Round Face: 1-9/16" diameter; Chisel: 3" long; Weight: .87 lbs.



Body Service

## BODY HAMMERS

### FA155G

#### Fender Bumper

- For bumping where hand and dolly cannot reach.
- Ample clearance for obstructions.
- Also used as a caulking iron. Dimensions: Length of head: 8-3/4"; Weight: 2.8 lbs.



### FA164FG

#### Utility Pick Hammer with Fiberglass Handle

- Blunt point, short reach.
- For low spots in high-crown panels and other work with small clearance.
- Face: 1-9/16" round point; 5/32" radius.
- Length of pointed end: 2" head, 4" overall.
- Weight: .75 lbs.



### FA158FG

#### General Purpose Pick Hammer with Fiberglass Handle

- Finish Point Body Hammer.
- Medium size point and reach for general work.
- Low crown strawberry point for perfect balance.
- Face: 1-9/16" round point, 3/32" radius.
- Length of pick end: 3-3/4".
- Weight .91 lbs.



### FA164G

#### Utility Pick Hammer

- Blunt point, short reach.
- For low spots in high-crown panels and other work with small clearance.
- Dimensions: Face: 1-9/16", round point, 5/32" radius; Length of pointed end: 2" head, 4" overall; Weight: .75 lbs.



### FA158G

#### General Purpose Pick Hammer

- Medium size point and reach for general work.
- Low crown strawberry point for perfect balance.
- Dimensions: Face: 1-9/16" round point, 3/32" radius; Length of pick end: 3-3/4"; Weight: .91 lbs.



### FA170FG

#### Door Skin Hammer with Fiberglass Handle

- For high crown work and finishing, without poking holes in thin sections.
- 6-1/2" overall length; 12" handle; Weight: .94 lbs.



### FA170G

#### Door Skin Hammer

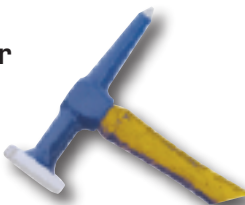
- For high crown work and finishing, without poking holes in thin sections.
- Dimensions: Overall Length: 6-1/2"; Handle: 12"; Weight: .94 lbs.



### FA158GMS

#### Sharp Point Finishing Hammer

- Sharp point - long reach.
- For low spots on high crown panels and other work with long reach.
- Dimensions: Round face: 1-9/16" diameter; Sharp point: 3" long; Weight: .79 lbs.



### FA162G

#### Shrinking Hammer

- For work in close quarters.
- Expertly machined serrations on the round face.
- Dimensions: Plain square face: 1-1/8"; Round serrated face: 1-1/4"; Diameter: 4" overall; Weight: .78 lbs.



### Replacement Hammer Handles

PART NO.	DESCRIPTION
FAHH42B	Hickory handle for FA-prefixed body hammers
FAHH45	Hickory handle for FA155G hammer
FAHHBFFG	Fiberglass handle for all body hammers with 12" handle.
SH55090	For ALL SH-prefixed wood handle hammers
SH55092	For the following SL-prefixed hammers: SL104, SL143, SL160 and SL173
SH55093	For the following SL-prefixed hammers: SL102, SL103, SL105, SL111, SL112, SL114, SL121, SL131, SL137, SL158, SL164 and SL166
SH55095	For ALL SH-prefixed fiberglass handle hammers

## CAT3250MVK6

### Air Hammer and Five Piece Chisel Set

• Kit includes CAT3250AHMV Super Duty Air Hammer with Vibration Reduction, quick change chisel retainer, and CTG5ACS five piece air chisel set in a custom blow molded storage/carrying case.

CTG5ACS 5 Piece Air Chisel Set



## SM20046

### Panel Shaper Kit

• An air hammer driven set of three self lubricating nylon reinforced heads that allow the technician to easily access deep reach areas and badly deformed sheet metal surfaces to form them back to original shapes. • Three unique head shapes with arbors allow each tool to be attached to an air hammer to fix body lines, concave areas and flat surfaces. • Chisel head works with door, body lines, corner shaping and fender edges. • Rounded head straightens out wheel house and quarter panels. • Flat head straightens out floors, trunk floors and provides stress relief in the repair process. • Fits all standard air hammers. • When used with an air hammer, it gives needed vibration along the damaged frame areas providing stress relief and molecular realignment in the frame structure. • Allows technician to form custom shape patch panels and to fabricate panels. • Heads can be customized by grinding the head to any specific angle and shape required to perform the repair.



SM20047 Replacement Chisel Head  
 SM20048 Replacement Rounded Head  
 SM20049 Replacement Flat Head

## CAT250MVK6

### 250MM Air Hammer and 5 Piece Chisel Set

• Ideal for rivet cutting, bolt cutting, and overall front end work. • Kit includes: CAT250AHMV heavy duty 250MM air hammer, quick change chisel retainer, CTG5ACS five piece air chisel set for a wide variety of applications, and a blow molded storage/carrying case.

CTG5ACS 5 Piece Air Chisel Set



## SM20017

### Super SeamBuster

• Attaches to any air hammer to separate spot welded or bonded panels. [Note: Spot welds must still be drilled out first before using Super SeamBuster or any SeamBuster product] • Designed for faster and more efficient separating of quarter panels, rockers, bonded door skins and any other pinchwelds. • Sharpened on two edges for easy penetration and separation of pinchweld. • Reduces technician arm fatigue and speeds the operation over traditional hammer and chisel removal techniques. • Made of super tough alloy steel and has a cushioned handle that absorbs the shock.



PLEASE REFER TO THE INDEX FOR OUR FULL LINE OF AIR HAMMERS

## SM20000

### Pull Rod Set

• Super tough alloy steel is precisely heat treated for maximum strength. • Factory tested under a 500 pound (228 kg) load. • Vinyl coated handle is comfortable to use. • Use two at a time for pulling.

Set includes the following with instruction sheet:

QTY.	PART NO.	DESCRIPTION
4	SM20001	Pull Rods with formed shank
2	SM20002	Pick Pulls with straight shank
1	SM20003	Stainless Steel Straight Edge
1	SM20004	HS Split Point Drill Bit

### SeamBusters



• Easily separate spot welded or bonded panels. • Save up to 15 minutes per panel replacement. • For quarter panels, rockers and any other pinchweld. • Sharpened on two edges. [The sharp end allows for penetration between the panels and the side edge allows for side impact to drive the panels apart without damage.] • Super tough alloy steel. • Cushioned handle absorbs shock.

PART NUMBER	DESCRIPTION
SM20015	Straight Seam Buster
SM20016	Right Angle Seam Buster

Body Service

**SH55115**

**Shot Dolly**

- Heavy duty leather pouch filled with 2-1/2 pounds of shot.
- Shapes to any body panel curve.
- 3-3/4" wide by 6" long.
- Weight: 2 lbs. 10 oz.



**SH55116**

**Rubber Heel Dolly**

- Weighted hard rubber to match weight of hammer - absorbs shock.
- Works well on newer, thinner sheet metal.
- Moves rather than stretches the metal and absorbs shock.
- Dimensions: 2-1/2"L x 3"W x 1-1/2"H.
- Weight: 17 oz.
- Made in U.S.A.



**SH55120**

**Large Rubber Dolly**

- Absorbs hammer shock and reduces stretching of sheet metal.
- Also reduces hand fatigue.
- Dimensions: 5"L x 3"W x 1-1/2"H.
- Weight: 1 lb. 8 oz.
- Made in U.S.A.



**FA1057**

**Light Toe Dolly**

- Designed for flat surfaces.
- All the features of a toe dolly.
- Size: 4-3/4" x 2-1/4" x 11/16".
- Weight: 1.8 lbs.



**FA1058**

**Toe Dolly**

- Thinness and length provide easy accessibility to narrow pockets.
- Large, flat face is frequently used in shrinking and dinging flat panels.
- The flat sides furnish a convenient anvil for repairing flanges.
- Size: 4-3/4" x 2-3/8" x 1-1/8".
- Weight: 3.0 lbs.



**FA1059**

**Heel Dolly**

- Design makes it possible to reach easily into sharp corners and wide radii.
- These features are exclusive to the Heel Dolly and continue its high demand.
- Size: 3-1/4" x 2-1/2" x 1-7/16".
- Weight: 2.7 lbs.



**FA1060**

**General Purpose Dolly**

- Provides convenient and comfortable hand hold during heaviest blows.
- Weight, balance and several differently crowned working faces, together with two beading and flange lips, for broad general use.
- Size: 2-7/8" x 2-3/8" x 2-1/4".
- Weight: 3 lbs.



**FA1024**

**Surfacing Spoon**

- Excellent spoon for fender spring hammering, finishing and shaping.
- Curve gets behind inner construction between panels that are close for removal of dents.
- Molds panels.
- Blade fully polished.
- Blade Length: 9", Width: 2-1/8", Overall Length: 15-1/8", Weight: 2.5 lbs.



**FA1036**

**Light Dinging Spoon**

- To ding ridges smooth and level.
- When held against ridge and struck with hammer, spreads blow over large area making smooth job and preventing damage to metal or finish.
- Not made for prying.
- Overall Length: 10", Face: 2" x 4-5/16", Weight: .50 lbs.



**Slapping Files**

- Formed files for panel shrinking and metal removal.
- Shaped for easy hand use.
- Fully heat treated.



PART NO.	DESCRIPTION	CUT
SH77505	Medium	2nd Cut
SH77506	Coarse	Bastard Cut

**FA1052**

**Spoon Dolly**

- Long handle permits many uses in places otherwise inaccessible.
- Can be driven between reinforcements and outer panel, then used to pry outward as the metal is dinged.
- Excellent forming and caulking tool for the deep pockets of doors, quarter-panels, rear fenders and lower trunk panels.
- Length: 13-3/4", Head Size: 2-1/2" x 1" x 3", Weight: 4.2 lbs.



**DFDF903**

**Ring Hammer**

- Get into the tightest spaces.
- Use as dolly inside a door panel. Light enough to always be on your finger.
- Heavy enough at nine ounces to get the job done.
- Shrink, pin and wide hammer face.



Body Service



**WARNING!**

*Wear safety goggles. Do not strike dolly block with a hammer or use as a hammer. Dolly block can chip; flying chips can cause injury.*

## MWSP6716RLS

### 3 Piece Aviation Snips Set

- Regular models in three blade patterns, with both top and bottom serrated blades.
- They have the capacity of cutting 18 ga. cold-rolled sheet metal and 22 ga. stainless steel sheet metal.
- Compound leverage snips with hot drop forged blades.
- Nominal length: 9-3/4".



Set consists of:

PART NO.	DESCRIPTION	Cutting Length
MWSP6716L	Left Cut Aviation Snip	1-1/4"
MWSP6716R	Right Cut Aviation Snip	1-1/4"
MWSP6716S	Straight Cut Aviation Snip	1-3/8"

## CAT820R

### Reversible Cut Off Tool



- Reversible to direct sparks and debris away from the user and sensitive work surfaces.
- 3" cut off wheel included.
- Comfort Grip.

SPECIFICATIONS	
Free Speed .....	18,000 RPM
Net Weight .....	1.85 lbs.
Length .....	7.6"
Wheel Size .....	3.0"
Recommended Air Pressure .....	90 PSI
Air Consumption .....	3.6 CFM
Air Inlet .....	1/4" NPT
Recommended Hose Size .....	3/8" I.D.
Sound Level .....	94 dBA

CAT820CW5 3" Cut Off Wheels (5)

## CAT450AS

### Air Saw



- Comfort grip.
- Safety lever throttle.
- Adjustable blade guard to control cutting depth.
- Able to cut up to 16 gauge capacity.
- Includes 3 bi-metal blades (18T, 24T, 32T).

SPECIFICATIONS	
Strokes per Minute .....	10,000
Stroke Length .....	3/8"
Net Weight .....	1.4 lbs.
Length .....	9-5/8"
Air Consumption .....	1 CFM
Air Inlet .....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	94 dBA

CATS18T Air Saw Blades, 18 Tooth (5)  
 CATS24T Air Saw Blades, 24 Tooth (5)  
 CATS32T Air Saw Blades, 32 Tooth (5)

## CAT50PFT

### Punch and Flange Tool



- Hole punch/crimp/flange up to 14 gauge.
- Meets ICAR standard.
- Head swivels 360° for ease of operation.
- Comfort grip sleeve for positive retention.

SPECIFICATIONS	
Punch Hole Size .....	5MM
Net Weight .....	3-1/2 lbs.
Length .....	10"
Air Consumption .....	4 CFM
Air Pressure .....	90 PSI
Air Inlet (NPT) .....	1/4 NPT
Minimum Hose Size .....	3/8"
Sound Level .....	88.3 dBA

## CAT100PFT

### Punch and Flange Tool



- Hole punch/crimp/flange up to 14 gauge.
- Meets ICAR standard.
- Head swivels 360° for ease of operation.
- Comfort grip sleeve for positive retention.
- 7/8" Gap.

SPECIFICATIONS	
Punch Hole Size .....	8MM
Net Weight .....	3-1/2 lbs.
Length .....	10"
Air Consumption .....	4 CFM
Air Pressure .....	90 PSI
Air Inlet (NPT) .....	1/4 NPT
Minimum Hose Size .....	3/8"
Sound Level .....	88.3 dBA

## CAT330AN

### Air Nibbler



- Cuts up to 16 gauge stainless steel.
- Maximum Air Pressure: 90 PSIG, 6.2 bar.
- Variable speed safety lever throttle.
- Precise cutting die cuts tight 3/4" radius.
- Compact design for work in tight areas.
- Easy to remove grease cap for lubricating head.
- On board air regulator.

SPECIFICATIONS	
Strokes per Minute .....	2,600
Net Weight .....	1.9 lbs.
Length .....	7.6"
Air Consumption .....	3 CFM
Air Inlet .....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	85 dBA

Body Service

## CUTTING TOOL, LOCKING TOOLS

### DF8

#### 1/4" Hole Punch

- Deep throat. • Hole size leaves room on panel edge.
- Cuts easily up to 18 gauge steel. • Convenient size.
- Replaceable die (DF8DS).



PLEASE REFER TO THE INDEX FOR OUR FULL LINE OF AIR CUTTING TOOLS

### VG9AC

#### Locking Panel Clamp



- Provides quick clamping and alignment of auto body panels. • Jaw capacity: 2-3/4" (70MM).
- Length: 9" (225MM).

### VG8R

#### Locking Sheet Metal Tool



- Makes bending, forming and crimping sheet metal jobs easier. • Length: 8" (200MM).
- Jaw capacity: 3-1/8" (78MM).

### VG12L3

#### Large Jaw Locking Pliers



- Heavy duty jaws grip all shapes. • Ideal for plumbers, mechanics, welders, and large jobs. • Length: 12" (300MM).
- Jaw capacity: 3-1/8" (78MM).

### VG9R

#### Locking Welding Clamp



- U-shaped jaw provides enhanced visibility and more working space. • Length: 9" (225MM).
- Jaw capacity: 2-3/4" (70MM).

#### Replacement Springs (Not Illustrated)

PART NO.	USED WITH:
VG4008	10CR, 10LW, 10R, 10WR, 11R, 11SP, 12LC, 20R
VG4022ZR	7CR, 7LW, 7R, 7WR, 8R, 9LN, 9R, RR
VG4052ZR	5WR, 6LN, 6R, 6SP

### Locking "C" Clamps



- Wide opening jaws provide greater versatility in clamping a wide variety of shapes. • Classic trigger release and adjusting screw.

PART NO.	LENGTH	JAW CAPACITY
VG9DR	9" (225MM)	4-1/2" (114MM)
VG18DR	18" (455MM)	7-1/2" (190MM)

### Locking "C" Clamps



- Wide opening jaws provide greater versatility in clamping a wide variety of shapes. • Original classic locking or Fast Release™.

PART NO.	TRIGGER RELEASE	LENGTH	JAW CAPACITY
VG6R	Fast	6" (150MM)	2-1/8" (54MM)
VG11R	Fast	11" (275MM)	4" (102MM)
VG18R	Original	18" (455MM)	8" (203MM)
VG24R	Original	24" (605MM)	10" (254MM)

### Locking "C" Clamps with Swivel Pads

- Swivel pads hold tapered work, awkward fabricating jobs and delicate projects without damaging the work surface.



PART NO.	LENGTH	JAW CAPACITY
VG4SP	4" (100MM)	1-5/8" (41MM)
VG6SP	6" (150MM)	2-1/8" (54MM)
VG9SP	9" (225MM)	4-1/2" (114MM)
VG11SP	11" (275MM)	4" (102MM)
VG18SP	18" (455MM)	8" (203MM)
VG24SP	24" (605MM)	10" (254MM)

### SM20085

#### EZPull™ Pliers

- Grip and pull multiple pull pins (studs) as well as vertical and horizontal flanges. • 3.5" jaw provides evenly distributed pulling force while pulling multiple pull pins or flanges. • Two large pulling rings for light pulling (up to 2,000 lbs.). • Top 3" ring for pulling multiple pull pins and horizontal flanges. • Bottom 1-1/2" ring for pulling vertical flanges. • Wide serrated jaw for gripping.





**1/4" Riveters**



- Easily sets five sizes of aluminum and steel rivets: 1/8" (3.2MM), 5/32" (4.0MM), 3/16" (4.8MM), 7/32" (6.0MM) and 1/4" (6.4MM).
- Versatile and easy to use. • Long handles for greater leverage.
- Comfortable handle grips. • Metal construction and simple design with few moving parts to ensure years of service. • Lightweight plastic bottle catches rivet stems. • Nosepieces thread into handles for convenient storage.

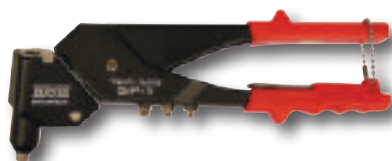
PART NO.	DESCRIPTION
TE19800	Super Duty Riveter with 2-1/4" nose reach
TE19830	Super Duty Extended Nose Riveter with 5-3/4" nose reach

TE19809 Jaw Set (3)/TE19800 and TE19830

TE19820 5-3/4" Extended Nose Kit/TE19800

**MR39005**

**Swivel Head Rivet Tool**



- Features a positive-ratchet locking mechanism which will allow the swivel head section of the tool to turn 360° and hold in place in any of the forty plus positions.
- The high strength steel body and cast aluminum head complement this design in a swivel head riveting tool. • Includes built-in threaded nosepiece storage holes and a service wrench. • Sets up to 3/16" steel rivets.

**MR39000**

**Hand Riveter**



- Square shoulder fulcrum pin of cold-formed, heat-treated steel prevents pin rotation.
- Precision die-cast high-strength aluminum alloy body, drop forged carbon steel upper handle, thick cushion-molded vinyl grips. • Sets up to 3/16" steel rivets.
- Includes four nosepieces (3/32", 1/8", 5/32", 3/16") mounted on riveter plus service wrench.

MR39123 Repl. Jaws (pr.)

**MR39001**

**Hand Riveter Kit**

- Contains the **MR39000** Hand Riveter and an assortment of popular size automotive rivets in a durable molded plastic case.



MR39112 1/8" Trim Clip™ Nosepiece

**MR39302**

**Thread Setter Kit**

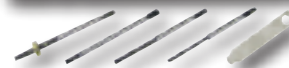
- Includes Thread-Setter™ tool in molded plastic case with 8-32, 10-32, and 1/4-20 mandrels and nosepieces, wrench and instructions. • Contains 12 each of 8-32, 10-24, and 10-32 and 16 each of 1/4-20 Klik® Poly-Nuts.



**MR39303**

**Metric Thread Setter Kit**

- Includes Thread-Setter™ tool in molded plastic case with 4MM, 5MM, 6MM and 8MM mandrels and nosepieces, wrench and instructions. • Contains 25 each of 4MM and 5MM, 15 each of 6MM and 10 each of 8MM Klik® Poly-Nuts.



**HBPR75K**

**Hand Plastic Riveter Kit**

- Designed for one-hand operation and will set most plastic rivets up to 6.6MM in one stroke.
- Provides access to areas not accessible with lever type tools. • Includes riveter and four starter packages of plastic rivets (5.0MM for Ford/GM, 5.0MM for Chrysler, 6.3MM for Ford/GM/Chrysler, and 6.6MM for GM) in a plastic case.



**HBPR75**

**Plastic Rivet Tool**

- Sets most rivets in one stroke without regripping. • Won't break stem before rivet is set. • Won't damage painted, plated or easily marred surfaces.



**DFDFCT887**

**Slim-Line Plastic Riveter Kit**

- Compact and perfect for tight places. • Use on vehicles where plastic rivet clearance is minimal.
- Plier is 1" tall and requires 2" clearance to fully pull rivets. • No pumping needed. • Saves time and disassembly effort. • Includes plastic case and rivets.



Body Service

## CATPR14

### 1/4" Pneumatic Rivet Gun

- Designed for heavy duty and industrial applications.
- Designed for setting all types of rivets in 3/32", 1/8", 5/32", 3/16", 7/32" and 1/4" diameters.
- End cap included.

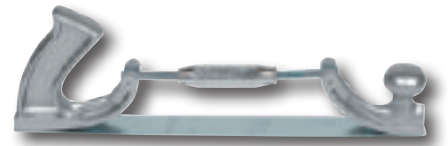


## SH77348

### Adjustable Body File Holder

- Use with 14" body files.
- Handle designed for both right and left hand use.
- Turnbuckle design permits flexing.
- Durable cast aluminum and plated steel construction.

SH77347 8 Tooth Flat File

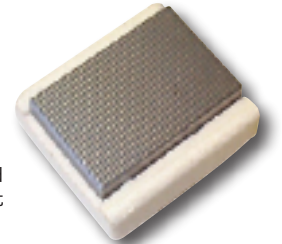


SPECIFICATIONS:	
Capacity .....	Steel Rivets up to 1/4"
Net Weight.....	4.6 lbs.
Air Inlet.....	1/4" NPT
Air Consumption.....	4.5 CFM
Air Pressure.....	85-90 psi
Sizes.....	3/32", 1/8", 5/32", 3/16", 7/32", 1/4"

## SM35260

### Spec-Out Fine Nib File

- Removes runs and dirt nibs.
- Honed tips of teeth shave off high spots in paint without digging into surrounding surface.
- 1-1/4" wide.



## HU5501

### Speed File

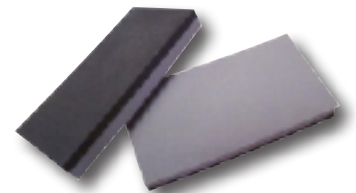


- Light, nearly indestructible Cycloc plastic for flexibility and long life.
- Flat surfaces or curves.
- Wet or dry sanding.
- Uses standard 2-3/4" x 17-1/2" sandpaper.

## SM35300

### Double Density Sanding Blocks

- Designed for wet or dry sanding.
- Two-colored sides: Dark Gray Side - soft and pliable for sanding irregular surfaces; Light Gray Side - stiff for faster sanding on curved surfaces.
- Sandpaper sticks to block without adhesive.
- Dimensions: 2-1/2" x 5-5/8".
- Package of 2.



## HU5502

### Speed File



- Wet or dry sanding.
- Tempered aluminum with cushioned base.
- Uses 2-3/4" x 17-1/2" sandpaper.

## SH77396

### Rubber Sanding Block

- Rubber flat bottom, 2-3/4" x 5".
- Uses standard 3" x 8" abrasive paper.
- Molded nails secure paper on each end.



## HU5504

### Speed File



- Specification aluminum base with rubber cushion for grab.
- For all-purpose sanding.
- Ideal for wet or dry sanding.
- Uses 2-3/4" x 11" sandpaper sheets.

## SH77397

### Vinyl Sanding Block

- Suction cup bottom, 2-3/4" x 9".
- Uses standard 9" x 11" abrasive paper cut into thirds.
- Molded nails secure paper on each end.



## TAAF44L

### 6 Piece Dura-Block® Set

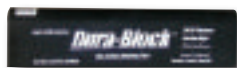


- The perfect sanding tool.
  - A favorite among the professionals when blocking all surfaces.
  - Durable, high intensity EVA foam.
  - Follows contours or flat panels on any car.
- Kit contains one each of the following:

PART NO.	DESCRIPTION	SIZE
TAAF4400	Standard Block	3/4"H x 1-3/8"W x 11"L
TAAF4401	1/3 Block	1-1/2"H x 2-5/8"W x 5-1/2"L
TAAF4402	2/3 Block	1-3/8"H x 2-5/8"W x 11"L
TAAF4403	Full Size Block	1-3/8"H x 2-5/8"W x 16"L
TAAF4404	Round Block	11"L, Thickness: 1-1/4"
TAAF4405	Scruff Block	1/2"H x 2-1/2"W x 5-3/8"L

## TAAF4406

### Tear Drop Sanding Block



## TAAF4411

### Disk Sanding Block



## STY0701

### Soft-Sanders

- Designed to sand almost any shape on materials such as plaster, metal, fiberglass and wood.
- Use with adhesive-backed sandpaper, non-adhesive wet or dry sandpaper.
- Soft, rounded edges virtually eliminate gouging; blocks glide over varying surface levels like a car wash mitt without flipping over.
- Zero-fatigue blocks are super lightweight and comfortable in any position.
- Soft, pliable blocks are extremely durable and resistant to most solvents.
- Tapered edges permit sanding up to and underneath hard-to-access areas.
- Corner-N'Cove™ block with its offset handle allows for a clear view of the surface being sanded.
- Package of six blocks in three different densities that vary in firmness, but are soft enough to be distorted or compressed into hard to sand places.
- Recommend using adhesive-backed 2-3/4" x 5" (70MM x 127MM) sandpaper.



## CAT315

### Dual Piston Straight Line Sander



- Two handle design for comfortable operation.
- Strong positive action paper clamps make changing paper quick and easy.
- Balanced needle bearing and alloy gear design for smooth operation.
- Ideal for smoothing body filler, or shaping large flat surfaces.

SPECIFICATIONS	
Strokes per minute .....	2500 RPM
Pad Dimensions.....	16" x 2.5"
Net Weight.....	7 lbs.
Length.....	16"
Air Consumption.....	8 CFM
Rec. Air Pressure.....	90 PSI
Air Inlet (NPT).....	1/4"
Minimum Hose Size .....	3/8"
Sound Level .....	93 dBA

## CAT2PST

### Pin Stripe Removal Kit



- Powerful motor provides necessary power with minimal noise and vibration.
- 2600 RPM for easy removal of pin stripes.
- Twin bearing spindle for precise operation.
- Cushion grip for added comfort.
- Lightweight and easy to use.
- Handle included for greater control.
- Three 3-1/2" eraser pads included [CAT2PST3W].

SPECIFICATIONS	
Free Speed.....	2,600 RPM
Net Weight.....	2.2 lbs.
Length.....	8.8"
Air Consumption.....	3.1 CFM
Recommended Air Pressure.....	90 PSI
Air Inlet.....	1/4" NPT
Recommended Hose Size.....	3/8" I.D.
Sound Level .....	86 dBA

CAT2PST3W Pin Stripe Eraser Wheels (3)

## CTG7000

### 3 Piece Scraper Set

- High polish, stainless steel blades.
- Stainless steel handle bolster.
- Comfortable bi-material handle design.



Set contains the following in a plastic tray:

PART NO	DESCRIPTION
CTG700	1-1/4" Scraper
CTG700B	1-1/4" Bent Scraper
CTG702	2" Scraper

Body Service

## CSEBB50

### 50 Pound Bucket Blaster

- Siphon feed blaster with Model F gun (with 1/4" ID nozzle and 1/8" ID air jet).
- Use dry abrasives only.
- 3/8" I.D. x 7 ft. hose.
- Free standing open top tank.
- Lightweight and portable.
- Easy to use with professional results.
- Includes hood and safety goggles.



SPECIFICATIONS	
Air pressure:	80-125 PSI
Steel nozzle size:	13/64", 1/4", 5/16" (1 ea.)
Air jet size:	5/64", 1/8", 5/32" (1 ea.)
Blast time:	40 minutes
Container volume:	3 gallons
Minimum Air Volume:	7-15-20 CFM
Approximate sand capacity:	50 lbs.
Height:	18"
Shipping Weight:	8 lbs.

## SH41600

### 100 lb. Pressure Blaster

- Full size heavy duty Deadman handle.
- Uses large Type 1 nozzle.
- 1/2" plumbing assembly - more power.
- 8 ft. x 1/2" I.D. abrasive hose - more power.
- Pneumatic tires.
- Sturdy front leg with plate for secure stability.
- Pressure release valve.
- Holds 100#.



## UM59425

### DYNO™ KWICK™ Pick

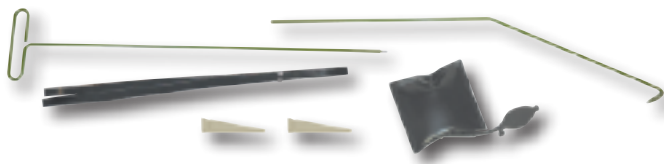


- Ideal for automobile, equipment, truck, home, office, padlocks, etc.
- Made of lightweight aluminum alloy.
- Extra fine feel pick conveniently retracts into protective housing.
- Knurled and tapered nut for easy pick replacement.
- Spring loaded sure lock in/out position.
- Pocket clip releases by turning knurled set screw; acts as tension wrench.

UMDKL1 Replacement Rake

## LTHLT140

### 2 Piece Easy Access and Inflate-A-Wedge™ Kit



- 2 piece easy access tool comes apart for easy storage.
- 53" long with a rigid design for easy through-the-window reach.
- Allows you to open the vehicle with the door handle, lock button, or electric lock switch.
- Includes: Plastic Slip Jim (LT100), Easy Access Tools (LT1353A and LT1353B), two Plastic Door Wedges (LT271) and Inflate-A-Wedge™ (LT275).
- Comes in a heavy duty vinyl bag.

- LTHLT1353A Handle End
- LTHLT1353B Easy Access "L" End
- LTHLT271 Plastic Wedge

## LTHLT145

### Super Multi-Piece Easy Access and Inflate-A-Wedge™ Kit



- Four piece easy access tool collapses for easy storage and screws together without a coupler for easier access.
- Middle extension piece (LT1353D1) provided to go across the car and for long reach applications.
- Also includes a shorter tip (LT1353C) for easier use with lock buttons.
- LT1353B and LT1353C come with glow-in-the-dark tips.
- Rigid design for easy through-the-window reach.
- Allows you to open the vehicle with the door handle, lock button, or electric lock switch.
- Includes: Plastic Slip Jim (LT100), 4-piece Easy Access Tools (LT1353A, LT1353B, LT1353C and LT1353D1), two Plastic Door Wedges (LT271) and Inflate-A-Wedge™ (LT275).
- Comes in a heavy duty vinyl bag.

- LTHLT1353A Handle End
- LTHLT1353B Easy Access "L" End
- LTHLT1353C 7" Tip Rod
- LTHLT1353D1 15" Extension
- LTHLT271 Plastic Wedge

## LTH275

### Inflate-A-Wedge™



- Allows for safe separation of the door frame from the vehicle body to insert a tool and unlock a vehicle.

## SM32900

### Classic BigEasy™ Lockout Tool Kit



- Actuate door handle, manual lock button or electric lock button on most cars and trucks.
- High visibility pink powder coating - 55" long.
- Improved non-marring wedge is wider, longer and smoother.
- Lock knob lifter for cars with flat lock knobs at the top of the door.
- Paint protector reduces friction between the car door and the BigEasy™.
- Includes BigEasy™ Classic, non-marring wedge, paint protector and lock knob lifter.

## SM32903

### BigEasy™ Loop



- Clips to any BigEasy™ to allow grabbing of door handles and locks.
- Glows in the dark.

## LTHLT340A

### AutoMaster Super Lock Pick Set



- Twenty-five piece automotive lock pick set consisting of six (6) piece set of rocker picks for European and Japanese vehicles [not for use on transponder based anti-theft ignition systems], five (5) piece pick set for door and trunk locks of Ford, Lincoln and Mercury cars, vans and trucks 1969-1999 picks [not for use on transponder based passive anti-theft ignition systems], six (6) piece pick set for door and trunk locks including tilt columns of Chrysler 1969-1999 vehicles [not for use with the Smart Key anti-theft ignition systems], six (6) piece European and Asian picks for foreign wafer locks [not for use on transponder based anti-theft ignition systems], a tension wrench and gas cap pick tool.
- Comes in a custom leatherette case with operating instructions.

## CTG1009S

### 2 Piece Big Hook Set



- Use to remove radiator hoses, cotter pins, and to retrieve small parts.
- Can also be used on body clips, O-Rings and washers, moldings and windshield seals.
- Bi-material handle provides comfortable, non-slip grip.
- Full polish, chrome plated shanks for long lasting corrosion resistance.
- Packaged in plastic tray for easy storage.

Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CTG1007	Big Hook	CTG1008	Extra Long Hook

## SM21825

### Door Bushing Tool

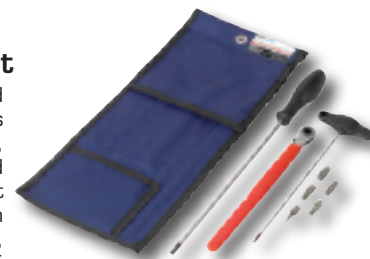


- Remove and install door hinge bushings with a hammer and punch.
- Offset design allows for easy access to all door hinges.
- Easily punch out bushings.
- Helps to align bushings when reinstalling.
- Saves up to 20 minutes per repair and breaks fewer bushings.
- Super tough alloy steel.

## OW6785

### Euro Door Handle Kit

- Provides the tools needed to service most door hinges and door handles on Audi, Mercedes-Benz, Porsche, and Volkswagen vehicles.
- Kit includes: a ratchet wrench with three 12-point bits (4MM, 8MM, 10MM) and two T45 TORX® bits, a T30 TORX® long handled driver, and a T20 TORX® T-handle driver.



## LS65800

### Door Adjuster



- Adjusts door hinges on most cars and light trucks with either bolted or welded hinges.
- Comes with two-headed pin adapter for both large and small latches.
- Specially designed handle for optimum leverage.
- Simple to use - slide pin end of tool into door latch and close door until tool engages door striker, then raise or lower tool handle to align door.

## TH445

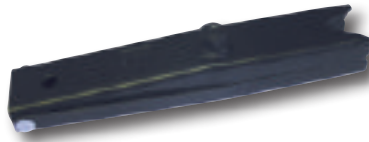
### Door Buzzer Sanity Tool II

- Designed for all domestic and import vehicles with door buzzer located on post behind front door.
- Eliminates irritating door buzzer when performing service with vehicle door open and ignition switch on.
- Made of heavy duty spring steel.
- Suction cup provides excellent adherence to vehicle surface.
- Includes bright orange warning flag.



**SM21910**

**Light Truck Door Spring Tool**



- Compresses coil springs in GM light truck doors for easy, safe removal and installation.
- Sides safely enclose spring.
- Heat treated, high carbon steel.

**SM21835**

**Door Hinge Pin Popper**



- Removes door hinge pins fast; drives out even stubborn hinge pins.
- Clearance for door panels.
- Direct Impact.
- Works on all GM cars with removable hinge pins.
- Includes pin puller to remove loosened pins.

**LS35200**

**Windshield/Door Pliers**



- For removing most windshield molding clips and door handle clips.
- Releases clips to remove chrome molding on most windshields and rear glass.
- Offset handle permits easy access to molding clips.
- Slips under door handle without damage to panel material.

**VMDT6200**

**5 Piece Door Panel Master Set**



- Tools handle all styles of clips, trim and tack tools for removing trim, molding, emblems or for small prying jobs, plus a hinge side door panel removal tool.
- High polished stainless steel heat treated blades are rigid and clean easily.
- Wide blades are less likely to damage painted and upholstered surfaces.
- Ergonomic two component handles with thumb stop for maximum control.

Includes one of each of the following in a plastic tray:

PART NO.	DESCRIPTION
VMV614	Door Panel "V" notch Clip Tool
VMV615	Door Panel "U" notch Clip Tool
VMDT616A	U Small Molding Trim and Tack
VMDT617A	V Small Molding Trim and Tack
VMDT618	Door Panel Tool

**VMDT20**

**Dual Purpose Window and Door Handle Clip Removal Tool**



- Designed so that the handle end can be used as an upholstery tucking tool for headliner installation.

**CTG1010S**

**4 Piece Upholstery Tool Set**



- Complete set ideal for removing door panel fasteners, even in tight spaces.
  - Bi-material handle provides comfortable, non-slip grip.
  - Full polish, chrome plated shanks for long lasting corrosion resistance.
  - Packaged in plastic tray for easy storage.
- Set consists of the following:

PART NO.	DESCRIPTION
CTG1001	Door Upholstery and Clip Remover
CTG1002	Bent Door Upholstery and Clip Remover
CTG1003	Mini Clip Remover
CTG1004	Long Door Upholstery and Clip Remover

**KD3729**

**Push Pin Pliers**



- Specially designed for removal of push pins with center locking pin.
- Quickly removes plastic anchors that have a center pin without damage to pins or anchor.
- Tool lifts the center pin and pulls anchor in one simple step.
- Anchors common on Honda, Toyota, GM, Ford, Chrysler and many other late model vehicles.

**JTCZ326**

**CLIP-ZIP Tool**



- For removal of clips on hood insulation, door trim, wiring stays, body trim molding, bumper covers, and wheel well mud shields.
- Manufactured with high carbon steel; Heat treated for strength.
- Zinc coated for corrosion protection.
- Has a unique return spring.

**SM21720**

**Sure Grip Trim Clip Pliers**



- Easy way to remove trim clips without breaking them.
- Grip the stem of the clip not the head so clips do not break.
- Lever action for faster, easier removal.
- Work on trim pads, hood insulation, etc.

**HR55**

**Body Clip Pliers**



- Specially designed and patented pliers will remove any clip found on almost every vehicle, inside and out including trim, bumpers, etc.
- Steel levers enclosed in PMS plastic to prevent scratches.
- Tips have a special angle and size that make them the most versatile tool in the clip removal category.
- No need to buy 3 pliers for different applications - this one does it all.

## HR531

### Professional Urethane Cut Out Knife



- Extra reach to cut hardened urethane down to the dash line.
- 18" Long.
- Heavy duty steel and aluminum construction.
- Use with standard utility razor blade.
- Ergonomic foam grip cushion-handle.

## LS35150

### Window Belt Molding Remover



- Quickly removes all window belt moldings.
- Slide the powder-coated tool downward between the window exterior and the door.
- The channel side of the tool should face the door.
- When the tool channel is below the belt molding, push or pull the tool upward.
- The tool quickly removes the belt molding without damage to the window or the molding.
- Fits most domestic and import vehicles.

## SM21500

### Universal Molding Release Tool



- Cleanly release molding.
- Slide tool left or right under the molding until it hooks a retaining clip, then rock tool with a twist of the wrist to release the clip.
- Heat-treated, high-carbon steel.

## SM21542

### E-Z Strip II Molding Tool



- Molding tool with a 3" non-marring blade and steel air hammer arbor to remove body side moldings.
- Durable non-marring wedge design made from polypropylene removes moldings without damaging the molding or scratching paint surfaces.
- Includes an additional wedge.
- Wedges can be trimmed to remove molding imbedded in body lines.

SM21543 Replacement Wedge

## SM21730

### Easy Pry



- Non-marring wedge has a 1" blade with a curved clip end that allows easy access and removal of plastic bezels, moldings, trim and panels without scratching the surface.
- Great for removing weather-stripping.

## LS59250

### Molding Remover Set



- Quickly removes body moldings.
- Two spring steel blades, 2" and 3-1/2", are included for all sizes of body moldings.
- Use with the conventional handle, or for tough jobs, attach the pneumatic driver for use with an air hammer set at 40 psi or less.
- The replaceable blades flex to follow the body contour.

LS59300 3-1/2" Blade

LS59310 2" Blade

## OWC4489

### Trim Fastener and Molding Removal Set

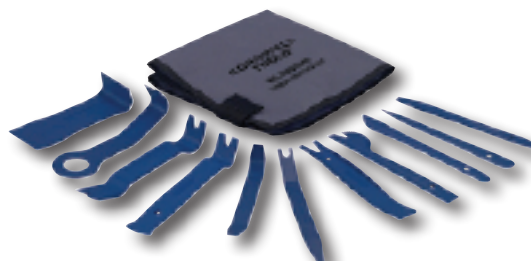


- Designed for the easy removal of trim fasteners, molding and wheel hubs.
  - Tools are made of plastic to prevent damage to trim, moldings, alloy wheels or vehicle paint.
  - Can be used on trim fasteners and molding inside or outside the vehicle.
- Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
OW44891	Wide Molding Remover	OW44894	Molding Remover
OW44892	Puller Molding Remover	OW44895	Clip Molding Remover
OW44893	Narrow Molding Remover		

## OWC6642

### 11 Piece Trim Tool Kit



- Designed to remove trim strips, panels, wheel caps, bezels, liners, shrouds, fascia, and more.
- Tools are constructed of durable, impact-resistant nylon that will help prevent damage to non-metal interior trim surfaces.
- Cloth pouch rests flat on a dashboard or fender for easy access to tools and then folds up with tools inside for storage.
- Kit has multiple applications in the automotive, aviation, marine, and other industries.

## JE401

### 4" Molding Cutter



- Delivers quick, clean cuts on auto trim, belts and hoses, plastic tubing, rubber, weather stripping, nylon and much more!
- Replaceable stainless steel blades.
- Convenient blade storage in the handle; blade tray slips into handle to store extra blades.

JE40178 Replacement Blade/JE401 (3 pk.)

**LS64250**

**Right Angle Ratcheting Screwdriver**

- Easy to remove and install molding around fender wells and other tight places.
- Fit straight slot or Phillips® bit assemblies, place handle over bit and turn, reverse handle on bit to tighten.
- Can also be used with 1/4" round shaft screwdriver.
- Ratcheting action with infinite settings.

LS64300 Straight Slot Bit Assembly  
LS64330 No. 2 Phillips® Bit Assembly



**LS65750**

**Wiper Arm Remover**

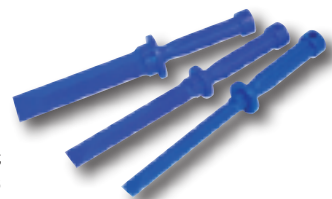
- Makes wiper arm removal and replacement an easy job.
- Easily removes wiper arms without damage to car finish.



**LS81200**

**Plastic Chisel/Scraper Set**

- Plastic chisels for removing emblems and adhesive backed trim without damaging the surface.
- Removes stick-on weights from aluminum wheels.
- Also used to remove gaskets from aluminum, without marring.
- One piece high impact plastic can be used with a hammer and has a molded hand guard.
- Plastic blade can be re-sharpened as needed.
- Set includes 3/4", 1", and 1-1/2" blade widths.



**KTEART13**

**Regulator Activator**

- Complete control of window regulator without jumper leads.
- Reverses polarity with rocker switch.
- Activates other 12 volt systems.
- Headlight illuminates dark areas.
- Complete with probes, crocodile clips and wire piercing clips.



**SH77130**

**Vacuum Suction Disc**

- Pull panel dents without drilling holes.
- Lipped edge provides strong hold yet allows easy release of vacuum.
- No trigger to gum up or break off.
- All steel parts gold plated.
- 6" diameter cup handles sheet metal, glass, or plastic.



**SH77374**

**Windshield Removing Tool**

- Removes windshields with ease.
- Cuts butyl adhesive caulking compound around windshields of GM and Chrysler vehicles.
- Pull hand swivels for extra leverage.
- Tempered steel blade.

SH77375 Replacement Blade  
SH77470 Super Blade (For windshields sealed with urethane)



**VMV620**

**GM Seat Rail Socket**

- This tool is designed to fit in the seat track and remove the special nut that retains the seat track on 2000 GM pick-ups.
- 3/8" sq. drive.



**LS63900**

**Window Holders**

- Holds door glass while working on window regulator on cars and trucks with a top door frame.
- To use, loop cable over frame and attach suction cups to each side of glass to secure glass while work is performed.



**OW4676**

**Windshield Wiper Arm Remover**

- Removes wiper arms on many foreign and domestic cars and light trucks.
- Will not damage wiper arm or hood cowling during removal.
- Simply place puller feet under wiper arm and tighten forcing screw against wiper shaft.



**OW6676**

**Heavy Duty Windshield Wiper Arm Puller**

- Designed to remove aluminum arm from steel stud, which often galvanizes and locks arm and stud together.
- Investment cast design is strong, easier to use - saves time.
- Live center end allows for more precise alignment - saves labor.
- Works on these and many other vehicles: Jeep Liberty, Grand Cherokee, Dodge Caravan, Stratus, Ram Diesels, Dakota, PT Cruiser, Chrysler LHS, Town & Country, Saturn Vue, Buick Rendezvous, Cadillac CTS, Ford Focus, Ford Windstar, Honda Civic, Odyssey and Toyota Camry.



**SH77264**

**Suction Cup Dent Puller**

- 4-1/2" diameter cup provides powerful suction.
- Lip design holds tight.
- Perfect for pulling metal panels.
- Handles sheet metal, glass or plastic.





## ASWINDKO

### Air Windshield Remover Set

- 20,000 oscillations per minute.
  - Sealant cutter that cuts around bonded and encapsulated glass.
  - Efficiently cleans and smooths moldings after glass removal.
  - Teasing throttle and regulator provide easy speed control.
  - Flexible blade mount can be positioned in 12 different ways at 30° increments.
  - Rear exhaust directs air away from work.
  - Safety lever.
- Includes the following blades:



QTY.	PART NO.	DESCRIPTION
1	ASWINDKO8E	57MM Bent Blade
1	ASWINDKO8H	52MM Bent Curved Blade
1	ASWINDKO8J	35MM Flat Nose Straight Blade

SPECIFICATIONS	
Cutting Distance.....	3MM
Weight.....	2.3 lbs.
Overall Length.....	8"
Avg. Air Consumption.....	.4 CFM
Air Inlet Thread.....	1/4" NPT
Air Hose I.D. Size.....	3/8"
Free Speed.....	20,000 RPM
Max. Air Pressure.....	90-120 PSI

## LS47000

### Windshield Locking Strip Tool

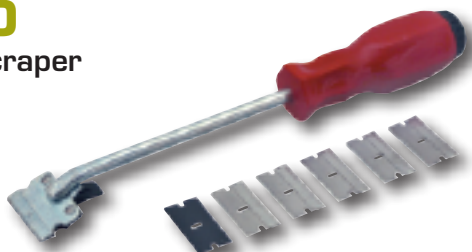
- Two double-ended tips (47030 T-shape, 47040 Standard).
- Unique design allows tip to swivel 90° in either direction.
- Select tip with opening that most closely fits locking strip, then feed strip into eyelet.



## LS52000

### Razor Blade Scraper

- Designed to reach in tight places.
  - Comes with 5 stainless steel blades and 1 plastic blade for use on safety plastic laminated windshields.
  - Spring-release allows easy interchange of blades.
  - Reverse blade in holder for storage.
  - Hollow handle stores all blades.
- LS52080 Repl. Plastic Blades  
 LS52150 Repl. Stainless steel, single edged razor blades (100/pack)  
 SH77242 Repl. single edge Razor Blades



**WARNING!**

Wear safety goggles. Read safety/operating instructions thoroughly before using tools.

## SM71510

### Super Scraper

- Works like a chisel.
- Tough plastic handle can be hit with a hammer.
- Resharpen when needed with a file.
- Removes decals from coated glass.
- Scrape aluminum heads without damage.



## DFWK20

### Plastic Lever Scraper Tool

- This non-damaging plastic scraper can be used to remove leftover urethane on glass, stickers, last bits of molding glue, balancing weights, and more.



## SM71515

### EZ Scraper™

- Right angle edge for gouge-free scraping.
- Tough, dual-edged stainless steel scraper can be sharpened.
- Removes stuck gaskets from engines and transmissions as well as separating engine components.
- Removes old paint, seam sealers from body panels, windshield sealer, moldings, weather stripping, urethane, and other tough adhesive items.



## AS1750K

### Air Scraper Kit

- Removes gaskets, paint, rust and other materials.
- Removes undercoating, seam sealers, etc.
- Built-in regulator.
- Blow molded case for easy storage and transport.

Includes the following blades:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
AS17501	1.77" Wide Blade	AS17503	1" Wide 45° blade
AS17502	1.75" L-Shaped Blade	AS17504	1" Wide Blade

SPECIFICATIONS	
Free Speed.....	4,500 RPM
Air Inlet Thread.....	1/4" NPT
Air Hose I.D. Size.....	3/8"
Max. Air Pressure.....	90 PSI
Stroke.....	2"
Avg. Air Consumption.....	3 CFM
Sound Level.....	93 dBA
Weight.....	2 lbs.

## LS29650

### Antenna Nut Socket Set



- Remove/replace automotive antennas.
- Four double ended sockets to fit eight common domestic and import antenna nuts.
- Three smaller sockets are 7/8" hex; largest socket is 1-1/4" hex.
- Made of heat-treated alloy steel.

Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
LS29600	#4 - smallest	LS29820	#2 - medium
LS29810	#1 - small	LS29830	#3 - large

## SM21600

### Universal Antenna Nut Wrench



- Fits most antenna bezel nuts, both foreign and domestic.
- Simple and compact.
- Rugged steel construction.

## OWC4711

### Antenna/Radio Socket Set



- Eleven piece kit in molded case.
- Universal antenna wrench.
- Ford radio removal tool.
- Deep sockets to remove and install the tamper-proof radio nuts from many GM, Chrysler, and other aftermarket radios.
- Antenna nut sockets cover most import and domestic antenna nuts.

## OW4712

### Euro Radio Removal Kit

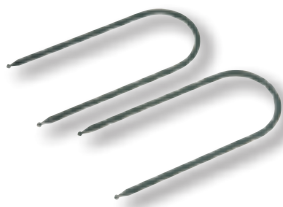
- Includes the popular tools needed to remove the radio from the dash on the following European vehicles: BMW, VW, Audi, and Mercedes-Benz.
- Easily removes the radio without damaging the radio or the dash panel.



## CLS11770

### Ford Radio Removal Tool

- Disengages/releases radio retaining clips without damage on Ford vehicles and some Saab, VW, and Audi and other import applications.
- Set of two tools serves as handles for removing the radio from the panel.
- Also works on some DIN mountings found on import vehicles.



## SIRST9015

### Radio Removal Tool Kit

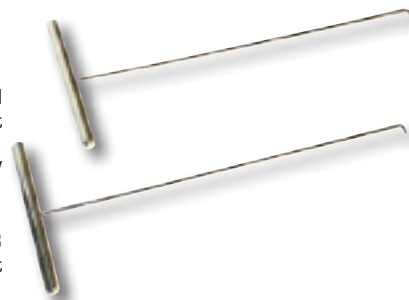
- This Radio Removal Tool Kit features a "Switch Blade" key design which allows for a "Double Fisted" pulling action.
- Features: BMW (pentagon) 5 sided driver, BMW E38 & E39 (hex) driver, Mercedes & NEW Porsche with Becker radio, late model Audi & VW with 2 or 4 key slots, early model Audi & Volkswagen, barbed hooks, Ford, Chevy, Land Rover, Saab, etc.
- Applications: Audi (all), BMW (most), Chevrolet, Ford, Land Rover, Mercedes, Porsche 996 & Boxter with Becker radios, Saab, Volkswagen, and more.



## ARM0333

### Puller Set

- Used for removal and replacement of instrument cluster on Mercedes models.
- Applicable to Mercedes W 107, 116, 123, 124, 126, 129, 140, 168, 170, 201, 202, 208, 210 and 463 models.
- Includes one set of two (2) hooks.



## OW4715

### Deluxe European Radio Tool Set

- Eighteen (18) piece set of tools used to remove radios on most European vehicles sold in the U.S. and Europe.
- Quickly and easily removes the radio from the dash without damage to the radio or dash.

Set includes:

PART NO.	DESCRIPTION
OW47151	Removal keys (4 pc.): Audi, Becker, Mercedes-Benz, VW
OW47152	Removal keys (2 pc.): Becker, Mercedes-Benz, Porsche
OW47153	Removal keys (2 pc.): VW
OW47154	Removal keys (2 pc.): Skoda
OW47155	Removal keys (2 pc.): Becker
OW47156	Pentagon Wrench: BMW
OW47157	Bent U-hook (2 pc.): Blaupunkt
OW47158	U-hook (2 pc.): Audi, Blaupunkt, Ford, Grundig, VW
OW47159	Allen Hex Wrench: BMW, Opel



#### WARNING!

*Wear safety goggles. Read safety/operating instructions thoroughly before using tools.*

## LS14400

### Headlight Adjuster

- Fits 4MM hex headlight adjusting bolts.
- Works on Ford, Mercury and Lincoln cars and pickups with aerodynamic headlights.



## LS14540

### Headlight Adjusting Ratchet for Ford

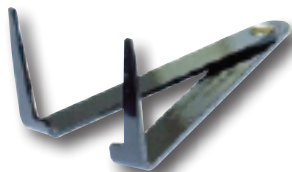


- Works on Ford aerodynamic headlights with rear mounted adjusters.
- Extra long handle allows easy access to hard-to-reach spaces.
- Has a 4MM hex with a roller clutch for infinite settings.

## LS55150

### Air Bag Module Release GM

- Easily release SIR module retention springs on GM cars, minivans and light trucks.
- Unlike other air bag release tools, this tool is heat-treated to resist bending on truck retention springs.
- Tips of tool are tapered to make removal easier.



## OW5945

### Air Bag Release Tool Kit

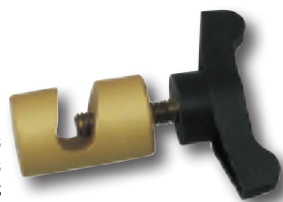
- Use to remove the air bag module from the steering wheel.
- Works on many GM, Ford and Mercedes Benz vehicles.
- Applications: Ford 2000-2004 Taurus/Sable, 1999-2003 Windstar Van, GM 1999-2005 Chevrolet Impala, Lumina, Monte Carlo, Venture, Pontiac Bonneville, Grand Prix, Montana, Buick LeSabre, Century, Regal, Olds Intrigue, Cadillac El Dorado, Deville, STS, SLS Mercedes Benz Models 107, 123, 124, 126, 129, 140, 163, 164, 170, 201, 202, 203, 208, 209, 210, 211, 215, 219, 220, 221 and 463.



## LS44870

### Universal Lift Support Clamp

- Holds gas charged lift supports found on hoods, tailgates, hatchbacks and trunks.
- Securely holds weak lift supports in the extended position to allow access to the engine compartment or luggage area.
- Aluminum body and brass threads prevent damage to the lift support shaft.
- Colorful flag serves as a reminder to remove the clamp before closing.



## TH430

### Universal Hood/Tailgate Prop

- Clamps to weak gas cylinder lifts to hold up hood or tailgate.
- Won't damage cylinder rod.
- Eliminates clumsy sticks or props.



## CLS45900

### Hood Prop



- Works on all makes of cars and trucks.
- Three-piece telescoping design allows the mechanic to hold the hood in desired position.
- Telescopes from 18-1/2" to 46-3/4".
- Use from the side of car for better access to the engine compartment.
- Also great for body or repair work on doors, trunk lids, or hatchbacks.

- LS45710 Repair Kit
- LS45980 Large Rubber Tip
- LS45990 Small Rubber Tip

## VMV387

### Hood Holder



- Holds hood, door or trunk lid open during repair work.
- Open hood or door and place large end of column in stable location and position small telescoping rod on secure spot under hood or on door; extend telescoping rod to desired opening.
- Pressure of hood or door secures Hood Holder in position.
- Lift free end of trigger to disengage.
- Range: 28" telescoping to 46".
- Not for use as heavy duty supporter - 50 pounds maximum.

## VMV388

### Telescoping Hood Holder



- Expands from 20" to 46" long.
- Features three stages that lock with a twist action.
- Can be used to hold up hoods, trunks, cargo doors, and hatch backs.

## ECHH1000

### "Monster" Hood and Tailgate Holder



- Telescopes from 25" to 5 feet.
- Holds sport utility or mini-van gates 100% open.
- Exclusive double locking system.
- Special guide channel ensures the button lock to line up every time.
- Constructed of tubular aluminum.
- Stores in most tool box drawers.
- Weight: 13 oz.

## SM17100

### Hatch Jammer

- Allows body shop technicians to hold lift gate or hatch in a partially open position for sanding, painting or buffing, including being able to work on the edges of the panel.
- Easily adjusts the work angle of the hatch door to a comfortable and secure position to repair and paint the outer skin of the hatch.
- Hatch doors are easily positioned by attaching the metal J hook end to the striker and latching the larger loop end of the extender bar to the door latch.
- Adjustable 11-1/2" slide bar gives up to 24" to adjust the angle and is secured by tightening the two adjustment knobs.
- Stabilizes the hatch for easier prep and painting of the outer skin away from the bumper and improves the visibility of the panel for the technician.
- Saves up to 10 minutes of set-up time by eliminating the need to continually adjust wooden blocks that shift during the repair operations, improving quality of work.
- Reduces back stress from bending over or kneeling to sand and buff the lower portion of the hatch.



## SM35660

### Paint 'N Stick Side View Mirror Holder

- Allows you to paint all the angles.
- Two powerful magnets to attach to wall of booth, or hang it up for drying.
- Magnets hold to any metal surface.



## SHCPB

### Portable Work Stand

- For use in painting, sanding, refinishing, glass work, welding, grinding and upholstery.
- 3/8" thick blue foam padding to prevent scratches and tears.
- Capable of handling loads up to 400 lbs.
- Adjustable height and width.
- Some assembly required.



## ZZ4SMS

### 4 Piece Pneumatic Chisel Sheet Metal Set



- Set consists of the following:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
OF1958	Slotted Panel Cutter	OF1975	Rivet and Bolt Cutter
OF1959	Sheet Metal Cutter	OF1976	Scrapper

## OF1956

### Double-Cut Body Ripper



- Service tool with two cutting edges.
- Length: 6"; Weight: 6 oz.
- Shank size: .401.

## OF1958

### Slotted Style Panel Cutter



- Leaves a clean and smooth edge with the cut curling up through the slot.
- Length: 6"; Weight: 6 oz.
- Shank size: .401.

## OF1959

### Sheet Metal Trimmer



- Not designed to be a panel cutter.
- For use on lighter weight sheet metal.
- Use as an edger without stretch or distortion eliminating much grinding.
- Length: 6"; Weight: 6 oz.
- Shank size: .401.

## OF1960

### Spot Weld Breaker



- For cutting weld spots, molding, and rivets.
- Length: 6-1/4"; Weight: 6 oz.
- Shank size: .401.

## DEV802342

### Auto Painting and Touch Up System

- System consists of HVLP Spray Gun (finish coats) 1.3MM, HVLP Spray Gun (touch up) 1.0MM, one 600 cc (20 oz.) cup, one 250 cc (8.5 oz.) cup, fluid tip and needle - 1.8MM, cleaning brushes, wrench, air adjusting valve with gauge.



SPECIFICATIONS		
	DESCRIPTION	AIR INLET
Spray Gun:	30 psi inlet pressure delivers 10 psi air cap pressure at 13 CFM air volume	1/4" NPS
Touch Up Gun:	30 psi inlet pressure delivers 10 psi air cap pressure at 8 CFM air volume	1/4" NPS

DEV802346 600cc Metal Gravity Feed Cup

DEV802347 250cc Metal Gravity Feed Cup

## DEV802343

### Auto Painting and Primer System

- System consists of HVLP Spray Gun (finish coats) 1.3MM, HVLP Spray Gun (primer) 1.8MM, two 600 cc (20 oz.) cups, fluid tip and needle - 1.5MM, cleaning brushes, wrench, air adjusting valve with gauge.



SPECIFICATIONS		
	DESCRIPTION	AIR INLET
Spray Gun:	30 psi inlet pressure delivers 10 psi air cap pressure at 13 CFM air volume	1/4" NPS

DEV802346 600cc Metal Gravity Feed Cup

## DEV903348

### Binks HVLP Gravity Gun Kit

- For topcoats.
- Lightweight and economical.
- Packaged in a molded carrying case.
- Kit contains a full range of accessories, including a 1.3MM tip on the gun and a separate 1.4MM tip and needle.
- HVLP compliant at 30 PSI inlet pressure.
- Produces an 11" pattern and requires only 13 CFM.
- The gun is waterborne compatible when used with plastic or disposable cups.
- Fully supported with service parts.
- Comes with HVLP gravity feed spray gun (1.3MM tip on gun), 1.4MM fluid tip and needle, 1000cc aluminum cup, air adjusting valve with gauge, gun wrench and cleaning brush, fluid strainer and molded carrying case.



## DEV802789

### 3 Gun Starting Line Gravity Feed Spray Gun Kit



Kit contains: HVLP Spray Gun (finish coats) 1.3MM, HVLP Spray Gun (primers) 1.8MM, HVLP Spray Gun (detail) 1.0MM, two 600 cc (20 oz.) cups, one 130 cc (4 oz.) plastic cup, Cleaning brush, wrench, and Air adjusting valve with gauge.

DEV802425 Starting Line Full Size Gun Repair Kit

DEV802426 Starting Line Touch Up Gun Repair Kit

## DEV802851

### CVi® Lightweight Gravity Spray Gun

- Comfortable and lightweight, ergonomic design means reduced painter fatigue.
- Includes: Two air caps (#505 - HVLP for base coats, clearcoats, primers, single stage, and low VOC and #510 - Trans-Tech High Efficiency Technology for Primers, base coats, clearcoats, single stage, and low VOC), 1.3MM fluid tip, 1-Liter aluminum gravity cup with push-on lid, spray gun lube, fluid filter, gun hook, air valve assembly tool.



## DEV703489

### TEKNA® HP Gun with Cup

- TEKNA® Copper limited edition spray gun.
- Superior performance and productivity for elite refinish painters.
- Delivers power for optimal atomization of all coatings including base and clears; solvent and waterborne.
- The performance of the gun transfers efficiency equal to or better than HVLP.
- Superior metallic control, slicker clears.
- Versatility with the 1.2MM and 1.3MM set ups included.
- Includes digital air adjusting valve.
- Includes the following: Copper-anodized TEKNA® high efficiency gravity gun, 1.3MM on the gun, 1.2MM needle/nozzle set, 7E7 air cap, digital air adjusting valve (HAV-555), gun wrench, color ID rings, and 900cc aluminum cup.

TEKNA® High Efficiency Spray Guns are approved for use in nearly all regulated areas, including SCAQMD®.

DEV803291 Digital Gauge with Air Adjusting Valve



## DEV803559

### FinishLine® Value Kit

- Enhanced atomization technology for the latest coatings.
- Soft uniform spray patterns.
- Precision machined air caps and fluid nozzles provide a quality finish.
- HVLP high transfer efficiency.
- Waterborne compatible with anodized internal passages, easy to clean anodized finish, and high grade stainless steel components.
- Includes multiple fluid tips, cup, and air adjusting valve with gauge.
- Max Air Pressure: 100 PSI.
- Gun Body: Forged Aluminum.
- Fluid Path: Anodized Aluminum and Stainless Steel.
- Fluid Inlet: 3/8" BSP Female.
- Air Inlet: 1/4" NPS Male.
- Aircap: Machined Brass.



## DEV703517

### TEKNA® Prolite without Cup

- Optimized performance in climates varying from hot and humid to cold and dry.
- Packaged as a solution with multiple components allowing the painter to adapt to changing environments.
- Excellent for solvent-based coatings and a must for waterborne.
- Fully protected outside and inside for high corrosion resistance. Gun coating has non-stick properties.
- High transfer efficiency for material savings.
- Unique "no kick" co-axial air valve make blends and fades easier.
- Ultimate control with fan and fluid controls designed for smooth operation.
- Engineered for ultimate comfort, the trigger profile offers an easy wrap around finger grip when triggered or at rest.
- Ergonomically designed lightweight aluminum gun body provides curved handle resulting in unmatched comfort for increased performance and reduced painter fatigue.
- Extra needle/nozzle set, digital gauge with air adjusting valve (DEV803291), gun wrench and color identification rings.



## DEV702576

### TEKNA® Cup 900cc

- Cup size: 900cc Aluminum.
- Application: All TEKNA® guns.
- Includes: (1) cup, (1) lid, and (1) Cup Filter.



## PSGSGH

### Spray Gun Holder

- Black powder coated finish.
- Holds all types of gravity feed spray guns while not in use, full sized and touch-up guns.
- Can be mounted on a wall or a counter.
- Paint strainer attachment included.



Body Service

**DeVilbiss® DeKups® Disposable Paint Cup System**

- A complete cup system for most paint guns.
- Better fluid flow for greater color match.
- Positive locking gun connections.
- **A gun adapter may be required to use with the DeKups® system - ask your dealer for more details.**

**DEV802759**

**Reusable Sleeve and Lid 24 oz.**

- Use over and over again with the DEV802101 cups and lids that get thrown out after each use.
- Saves clean-up time and wash thinner cost.
- Package of 2.

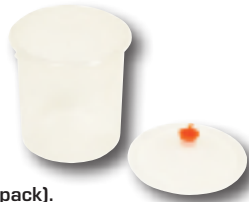


**DEV802101**

**Disposable Cups and Lids 24 oz.**

- Used with the DEV802759 Reusable Sleeve and Lid.
- Saves clean-up time and wash thinner cost.
- Package of 32.

DEV803474 Disposable Lid 24 oz. (32/pack).



**DEV192316**

**Cleaning Bottle**

- Makes for quick cleaning putting your cleaning fluid where it is needed with an easy squeeze.



- DEV802976 125 Micron Disc Filter/waterborne paints only (24/pk.)
- DEV802107 Fine 300 Micron Cup Filter/solvent paints only (10/pk.)
- DEV802109 Disposable Funnel (24/pk.)
- DEV803510 3 oz. Disposable Cup and Lid (24/pk.)

**SGSCTK**

**Spray Gun Maintenance Kit**

- Contains seven piece Micro Needle set (including handle), five piece precision mini brush set with split ring holder, 1/2" body cavity brush, two piece end brush set with handle, power brass pick up tube brush, 12" pick up tube brush, 1/4" HVLP brush, tapered brush, nylon general purpose brush, 1/2 oz. bottle spray gun lube and spray gun pick.



**SGSCPT**

**Spray Gun Cleaning Kit**



- Kit contains: 1/2" nylon body cavity brush, seven (7) piece stainless steel needle set with handle, 12" pick up tube brush, three (3) piece precision mini brush set with split ring holder, 3/16" end brush with handle, 1/4" nylon HVLP brush, nylon general purpose brush, and clear plastic storage tube.

**DEV803291**

**Digital Gauge with Air Adjusting Valve**

- Lightweight.
- Gives precise air control, especially important with waterborne materials.
- Simple to use.
- To see if calibration is needed, turn the gauge on when it is not pressurized. If it reads "0.0", there is no need to calibrate. On the infrequent occasions where calibration is required, follow the simple instructions on the gauge or the package.
- Accuracy to +/- 0.5 PSI.
- UL/CSA approved.
- Gauge range: 2.5 to 160 PSI.
- Auto off after 45 seconds to preserve battery life.
- Up to four (4) years of battery life, depending on usage.
- Ideal for HVLP or high efficiency guns - high air flow/low pressure drop.
- Solvent resistant.



**DEVHARG510**

**Air Regulator and Gauge**

- Diaphragm-relieving which reduces air pressure surge when gun is first triggered.
- Fits any professional spray gun.
- Lightweight design comfortable for use by right or left handed painters.
- Precise air control at the gun for better color match capability.
- Swivel adapter for fast installation.
- Can be used with HVLP guns.



Max. Inlet Pres.	Max. Reg. Pres.	Max. Oper. Temp.	Air Inlet	Air Outlet
175	100 PSI	150°F	1/4" NPS (M)	1/4" NPS (F)

**DEVHAV500**

**Air Adjusting Valve**

- Fits any professional spray gun.
- Lightweight design is comfortable for use by right or left handed painters.
- Provides finer air control at the gun enhancing color matching capability.
- Swivel top allows for easy and fast installation.
- Can be used with HVLP guns.



**DEVHAV511**

**Air Adjusting Valve with Gauge**

- Precise air control at the gun for best, consistent results.
- Impact resistant gauge and break resistant lens.
- Lightweight design that fits any professional spray gun.
- Inlet - 1/4" NPS (M), Outlet - 1/4" NPS (F)
- Gauge range: 0-160 psi.



**DEVHAF507K2**

**Whirlwind Disposable Air Line Filter**

- Excellent filtering capabilities for a disposable air filter.
- Strongest thread and housing design and highest solvent resistance of any disposable filter on the market.
- Housing material is tough, solvent-resistant DELRIN®.
- Maximum operating pressure of 125 psi.
- Comes in a package of two.



## DEV130525

### QC3 Air Filter and Dryer

- Cost effective.
- Use anywhere.
- Complete Air Control.
- A perfect solution for restoration shops, customizing shops, and hobbyists.
- High performance filtration with only 2 PSI pressure drop.
- Three-stage filtering with 0.1 micron rating produces clean, oil and humidity free air resulting in outstanding paint finishes by removing water and particulates, oil, and humidity.
- Quick change filter cartridge is easy to maintain - bowl removal tool included.
- Larger filter media and longer life desiccant than disposable dryers: 4x more filter area, 16x more desiccant, and low life-cycle costs.
- Complete air control enabling better color match and coating thickness.
- Includes: inlet shut off valve, regulator and gauge, humidity indicator and bowl drain.

DEV130524 Replacement Filter Cartridge



PLEASE REFER TO THE INDEX FOR OUR FULL LINE OF SAFETY EQUIPMENT

## STE34134

### Variable Temperature Heat Gun



## SH77442

### Air Water Separator

- Unique bronze filter separates water from air at the gun.
- Allows painter to shoot dry.
- Eliminates costly water spots.
- See-through high grade plastic housing.
- 1/4" male inlet; 1/4" female outlet.



## UX351011

### Economy Paint Spray Respirator with Organic Vapor/N95 Filters

- Durable and comfortable half-mask design.
- Large, pliable sealing area provides excellent fit.
- Angled, self adjusting nose bridge conforms to a variety of nose shapes and sizes.
- Yoke design gives a snug, secure fit, and reduces faceplate slippage, yet permits easy donning and doffing.
- Organic Vapor cartridge.
- N95 Pre-Filter - 95% efficient against particulate aerosols free of oil.

UX106010 Bulk Replacement N95 Pre-Filters (24)

UX106184 Replacement Cartridge/Filter Pack (Comes with two Organic Vapor Cartridges and two N95 Pre-Filters)

UXB100100 Bulk Replacement OV Cartridges (6)



## UX776184

### Full Face Spray Respirator with Organic Vapor/N95 Filters

- Silicone skirt offers exceptional durability and comfort.
- All straps are attached to the rim of the facepiece, rather than the silicone skirt, to reduce pressure points and distortion of the sealing surface when tightened.
- Replaceable, high impact resistant polycarbonate lens treated with anti-scratch coating.
- Mask designed with a wide viewing area offering distortion free visibility and optical clarity.
- Molded-in speaking diaphragm provides improved audio transmission for communication.
- Organic Vapor cartridge.
- N95 Pre-Filter - 95% efficient against particulate aerosols free of oil.

UX106010 Bulk Replacement N95 Pre-Filters (24)

UX106184 Replacement Cartridge/Filter Pack (Comes with two Organic Vapor Cartridges and two N95 Pre-Filters)

UX702028 Replacement Peel-Off Lens Cover (25)

UXB100100 Bulk Replacement OV Cartridges (6)



## STE34130

### Dual Temperature Heat Gun

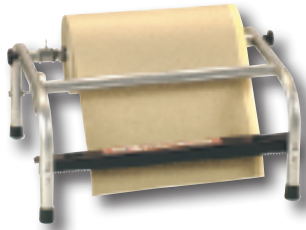


- General purpose heat gun that offers longer life, greater reliability and more consistent output than competitive models.
- Features a heating element tested at over twice the useful life of competitive models.
- Two temperature settings: Low 600° F and High 950° F.
- Voltage: 120V, 60 Hz.
- 1300 Watt.
- UL and CSA (C-UL) listed and double insulated for safety.

**SH78002**

**18" Masker**

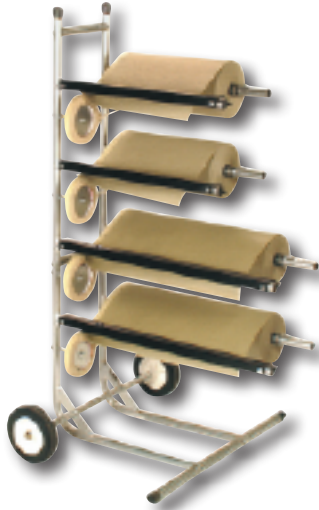
- Holds 18" paper (does not include paper or tape).
- Lightweight.
- Uses very little floor space.



**SH78007**

**4 Roll Masker**

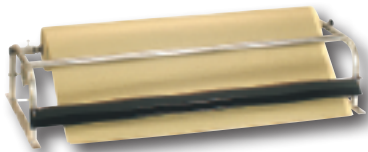
- Holds two rolls of 18" paper and two rolls of 12" paper or smaller.
- Narrow 22" profile rolls between cars in shop.
- Does not include paper or tape.



**SH78009**

**36" Wall Mount Masker**

- Great to dispense plastic.
- Does not attract dirt from the floor.
- Mounts on wall - out of the way.
- Does not take up floor space.
- Does not include paper or tape.



**BCR2S**

**Spirit Airbrush**



- Side feed, internal mix, dual action airbrush.
- Features new "tensionsense" trigger action, "stopset" trigger setting system, exact taper micro-precise paint tips, "pointperfect" carbide polished needles, "smartcenter" nozzle assemblies, the most precise paint tips and linear air flow needle angles.
- For use in extremely tight-detail oriented custom auto graphic applications.
- Set includes one Spirit airbrush, one additional regulator, one side feed color cup with cap, one attachable one-ounce glass jar with metal adapter cap, one 1/8" hose adapter.
- Packaged in an attractive, protective foam-lined carrying case.

**BC175CT**

**Crescendo Air Brush Kit**



- Includes: Crescendo Model 175 Air Brush, trigger pad, extra heavy needle, tip, and regulator, air brush hanger, 6 ft. braided air hose, protective cap, 3/4 oz. (22cc) jar with jar adapter, instruction manual, two 2 oz. (60cc) paint jars, 1/4 oz. (7cc) color cup, and foam lined plastic carrying case.
- Bottom feed, dual action and internal mix.
- Self-lubricating Teflon® needle bearing enables continuous proper paint flow and prevents needle wear.
- Winged back lever design for easy reassembly and smooth trigger control.
- Snap-off handle for quick needle changes and cleaning.

**BC18015**

**Air Brush Compressor**

- Excellent for moderate frequency use.
- Portable and powerful.
- Maintenance free.
- Auto shut-off.
- Hinged handle.
- Six foot cord.
- On/off toggle switch.
- 1/8" hose connection.
- Includes 1/8" to 1/4" hose adaptor.



**SPECIFICATIONS**

Horsepower: .....	1/6 HP
Displacement: .....	81 CFM (23L/min)
Max. Pressure: .....	57 PSI (4 bar)
AMP (110V): .....	1.0A
Weight: .....	7.93 lbs. (3.6 Kgs)

**BC502011**

**Braided Air Brush Hose with Fitting**



- Heavy duty 10 ft. (3.05 meters) braided air brush hose.
- Constructed of a rubber core and nylon braided skin that is strong and flexible for maximum efficient use.
- Swivel metal couplings at both ends: one end for air brush, other 1/4" female pipe thread (50-023) for use with compressor or CO<sub>2</sub> tank only.



## CSESJ350A

### 3-1/2 Ton "Big Blue Monster" Service Jack



- 3-1/2 Ton Capacity.
- Super low height of only 3-1/2".
- 6 pumps lift from low height to high height.
- Extra large front wheels.

SPECIFICATIONS	
Low Height .....	3-1/2"
High Height.....	20-1/4"
Length .....	30.1"
Chassis Width.....	14-3/16"
Saddle Diameter.....	4-11/16"
Handle Length.....	50"

CSESR35B20 Hydraulic Unit (Drop Ship Only)

### Truck Jacks

- Meets ASME/PALD standards.
- Heavy gauge steel side plates prevent twisting.
- Front wheels feature roller bearings and the rear casters are ball bearing mounted for stability and easy maneuvering.
- Hydraulic power unit constructed for increased strength and leak prevention.
- Wiper seals protect hydraulic system from contamination.
- Overload and bypass safety valves prevent use beyond rated capacity and ram over extension.
- Foot pump to raise the lift arm to load quickly.
- T-handle pumps jack under load.
- Lever allows handle to be locked in 3 positions.



PART NUMBER	DESCRIPTION
CSETJ500	5 Ton Truck Jack
CSETJ1000	10 Ton Truck Jack

## CSETJ2200

### 22 Ton Air/Hydraulic Truck Jack

- 22 ton capacity @100 PSI.
- Meets ASME/PALD standards.
- Narrow chassis design fits between tandem wheels.
- 8" diameter pneumatic wheels for easy maneuverability.
- Wiper seals protect hydraulic system from contamination.
- Overload and bypass safety valves prevent use beyond rated capacity and ram over extension.
- Self-retracting ram.
- Handle can be locked in 3 positions.
- Integrated filter protects air motor.
- Four adaptors (1.875" and 2.625" diameter saddles, 2" and 4" extension adaptors) with handle mounted saddle holder included for greater versatility.



## HEWVS300

### 3 Ton Vehicle Stands

- Sturdy welded construction with a one piece, multi-position ductile iron ratchet bar.
- Counter-weighted pawl locks ratchet bar securely in place.
- Must have if you are using a service jack.
- Sold and to be used in pairs only.
- Meets or exceeds ANSI 2009 standards.



SPECIFICATIONS	
Capacity .....	3 Ton
Min. Height.....	11-1/2"
Max. Height.....	17"
Saddle Size.....	3-1/2" x 1"
Base Size (L x W) .....	6-3/4" x 7-3/4"
Gross Weight.....	16 lbs.

## HEWVS600

### 6 Ton Vehicle Stands

- Sturdy welded construction with a one piece, multi-position ductile iron ratchet bar.
- Counter-weighted pawl locks ratchet bar securely in place.
- Must have if you are using a service jack.
- Sold and to be used in pairs only.
- Meets or exceeds ANSI 2009 standards.



SPECIFICATIONS	
Capacity .....	6 Ton
Min. Height.....	15-3/8"
Max. Height.....	24-1/4"
Saddle Size.....	4-1/4 x 1-1/4"
Base Size (L x W) .....	9-1/4" x 10-5/8"
Gross Weight.....	32 lbs.



#### WARNING!

Use extreme caution when using engine stands/lifting equipment to prevent tipping. Comply with warning labels for safe and proper use. Position jack properly before lifting vehicle. Use jacks only on hard, strong, and level surfaces.

## HEW1250ES

1250 lb. Engine Stand



- Constructed from heavy-gauge welded square tubular steel.
- Head plate rotates 360° with ease.
- Meets or exceeds ANSI 2009 standards.
- Extra long handle.

SPECIFICATIONS	
Capacity .....	1,250 Lbs.
Base Size (L x W) .....	33-3/8" x 33-7/8"
Overall Height.....	42-3/4"
Head Plate.....	7-1/2" x 6-1/2" x 5/8" x 10-1/2"
Head Plate Thickness .....	5/8"
Wheel Diameter .....	3-1/2"
Handle Length.....	20-1/4"
Gross Weight.....	87 Lbs.

## HEW1250FES

1250 lb. Folding Engine Stand with Rotating Head

- Constructed from heavy-gauge welded square tubular steel.
- Features foldable legs.
- Head plate rotates 360° with ease.
- Meets or exceeds ANSI 2009 standards.
- Extra long handle.



SPECIFICATIONS	
Capacity .....	1,250 Lbs.
Base Size (L x W) .....	41-3/4" x 23-5/8"
Overall Height.....	42-3/4"
Head Plate.....	7-1/2" x 6-1/2" x 5/8" x 10-1/2"
Head Plate Thickness .....	5/8"
Wheel Diameter .....	3-1/2"
Handle Length.....	20-1/4"
Gross Weight.....	93 Lbs.

## HEW4000EC

2 Ton Foldable Engine Crane



- Heavy duty welded construction built with rugged reinforced tubular steel.
- Metered control release valve for lowering boom at a controlled rate of speed.
- Meets or exceeds ANSI 2009 standards.

SPECIFICATIONS				
Boom Capacity @ Length	Hook Height		Boom Length	Gross Weight
	Min.	Max.		
2 Ton	0"	59-1/4"	48-5/8"	264 Lbs.
1-1/2 Ton	0"	63"	55-5/8"	
1 Ton	0"	66-5/8"	62-7/8"	
1/2 Ton	0"	70-1/2"	69-7/8"	

## HEW44100

1000 Lb. Engine Support Bar



- Designed to safely support engine up to 1000 pounds.
- Assists the removal of transaxle easily by supporting engine of front wheel drive vehicle.
- Heavy duty steel frame helps prevent distortion and twisting.
- Compliance with factory standards ensures safety, strength and stability.

SPECIFICATIONS			
Capacity	Boom Length Expand	Hook Thread Length	Shipping Weight
1000 LB.	61"	12.5"	31 lbs.

## OW7100

Lifting Brackets (Pair)

- Attach directly to component for easy lifting.
- Adds versatility to a variety of lifting jobs.
- Ideal for engine removal and installation.
- Pair of lifting brackets, 4,000 lb. capacity.
- 1/2" diameter mounting holes.



## CSE1500

### 1,500 Pound Capacity Engine Sling

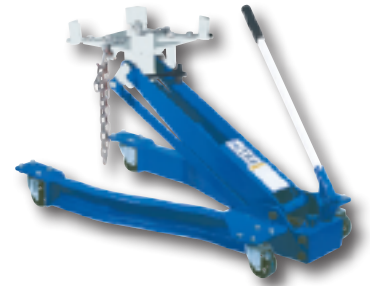
- Closed link for ease of use with standard hoist hook.
- ACME thread for strength and ease of adjustment.
- Includes four chains and angle brackets for mounting.
- Chain diameter: 1-1/2".
- Chain length: 1 foot.



## CTJ1200LP

### 1,200 Pound Capacity Low Profile Transmission Jack

- Open frame design for greater versatility.
- Low lift height of only 5-3/4", which accommodates most applications.
- Versatile saddle design allows for adjustments in every direction.
- Saddle tilt 12° side to side, 65° forward tilt and 12° backward tilt.
- 360° rotation of pumping handle for ease of use.



## CTJ1000TTJB

### 1,000 Pound Capacity Telescopic Transmission Jack

- Handles passenger car, van, and light truck automotive transmissions, front wheel drive transaxles, and air cooled VW engines.
- Telescopic 2 stage hydraulics for greater lifting range, precise load control, and rapid lift.
- Convenient foot operated pump and release pedals allow mechanic to use both hands to position and align saddle with transmission.
- Wide base with 4 swivel caster wheels, 2 locking.
- Deluxe saddle can be tilted 10 degrees left or right, 15 degrees forward, 20 degrees back.
- Fully adjustable ratcheting saddle allows quick adjustment of four fingers to the transmission saddle pan configuration.
- Heavy duty nylon straps to secure load to lifting saddle.
- Convenient hand grip for pushing load when in the lowered position.



SPECIFICATIONS			
Capacity .....	1,200 lbs.	Low Height .....	5-3/4"
Base .....	36-3/4" x 18-1/4"	High Height.....	31-1/2"
Net Weight.....	110 lbs.	Shipping Weight .....	122 lbs.

CTJ7750A35BL2 Hydraulic Unit (Drop Ship Only)

## HEW4000TS

### 2 Ton Tripod Stand

- Heavy gauge steel frame helps prevent distortion or twisting to provide partial support for components.
- Fast and safe technology for professional mechanics.
- Meets or exceeds ANSI 2009 standards.



SPECIFICATIONS			
Capacity .....	1,000 lbs.	Low Height .....	35-1/2"
Length of base .....	36"	High Height.....	74"
Width of base .....	30-1/2"	Shipping Weight .....	170 lbs.

CTJRS7140C21 Non-locking Caster  
CTJRS7140C22 Locking Caster

## CTJ1000ATTJB

### 1,000 Pound Capacity Air Operated Telescopic Transmission Jack

- Handles passenger car, van, and light truck automotive transmissions, front wheel drive transaxles, and air cooled VW engines.
- Foot activated pedal raises ram to load in seconds. Manual pump second stage raises saddle to precise work height.
- Foot activated pedal for slow controlled lowering of load for first stage, and hydraulic release knob for 2nd stage.
- Convenient foot operated pump allows mechanic to use both hands to position and align saddle with transmission.
- Wide base with 4 swivel caster wheels, 2 locking.
- Deluxe saddle can be tilted 12 degrees left or right, 37 degrees forward, 26 degrees back.
- Fully adjustable ratcheting saddle allows quick adjustment of four fingers to the transmission pan configuration.
- Heavy duty nylon straps to secure load to lifting saddle.
- Convenient hand grip for pushing load when in the lowered position.
- Required air pressure: 100 PSI.



SPECIFICATIONS	
Capacity .....	2 Ton
Min. Height.....	66-1/2"
Max. Height.....	75-3/4"
Saddle Size .....	5-1/4" x 1-1/2"
Base Size .....	24" x 24" x 24"
Gross Weight.....	54 lbs.

SPECIFICATIONS			
Capacity .....	1,000 lbs.	Low Height .....	35"
Length of base .....	30-1/2"	High Height.....	75"
Width of base .....	30-1/2"	Shipping Weight .....	185 lbs.

CTJRS7140C21 Non-locking Caster  
CTJRS7140C22 Locking Caster



#### WARNING!

Use extreme caution when using engine stands/lifting equipment to prevent tipping. Comply with warning labels for safe and proper use. Position jack properly before lifting vehicle. Use jacks only on hard, strong, and level surfaces.

## HEW1500S

### 3/4 Ton Auxiliary Stand with Foot Pedal

- Fast and safe technology for professional mechanics.
- Heavy gauge, steel frame helps prevent distortion or twisting.
- Auxiliary stands provide partial support for components.
- High reach supplementary stand prevents tipping and rocking of vehicle.
- Foot pedal gives an additional 1-1/8" of fine tune height adjustment to install parts and align bolts.
- Meets or exceeds ANSI 2009 standards.



SPECIFICATIONS	
Capacity .....	1,500 lbs.
Min. Height.....	53-3/4"
Max. Height.....	78-7/8"
Saddle Size .....	5-1/4" x 1-1/2"
Base Size .....	12" Diameter
Gross Weight.....	40 lbs.

## HEW1500AS

### 3/4 Ton Auxiliary Stand

- Heavy gauge, steel frame helps prevent distortion or twisting to provide partial support for components.
- Fast and safe technology for professional mechanics.
- Meets or exceeds ANSI 2009 standards.



SPECIFICATIONS	
Capacity .....	1,500 lbs.
Min. Height.....	53-3/4"
Max. Height.....	78-7/8"
Saddle Size .....	5-1/4" x 1-1/2"
Base Size .....	12" Diameter
Gross Weight.....	33 lbs.

## CTJ1000PPJ

### 1,000 Pound Professional Pit Jack

- Super low height and great high lift point.
- Foot operated pump for ease of use.
- Slow release knob conveniently located.
- 23° saddle tilt forward, 16° saddle tilt backward, and 7° saddle tilt lateral.

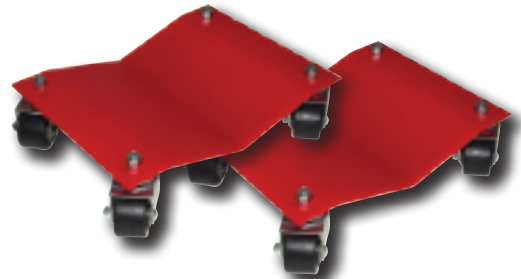


SPECIFICATIONS	
Maximum lifting head size .....	18-1/2" x 18-1/2"
Low Height .....	43-5/8"
High Height.....	73-1/4"
Weight .....	145 lbs.

CTJ6645BL2 Hydraulic Unit (Drop Ship Only)

## MERM998104

### Auto Dolly HD 12" x 16"



- Handy tools for garages, shops, and showrooms.
- Allows one person to move automobiles, trucks, boats and trailers, lawn mowers, jet skis, airplanes, and most other heavy vehicles with ease.
- Free up storage space in garage or shop by moving items right up against a wall or into a corner.
- Perfect for a wide range of modern passenger and truck tires.
- Heavy duty casters contain mar-resistant polyolefin wheels that feature a crown profile for less rolling resistance and help pinch small debris out of the path to avoid coming to an abrupt halt.
- Made of super-strong 1/4" steel.
- Individual dolly has a weight capacity of 2,500 lbs. (5,000 lbs. per pair, 10,000 lbs. per set of 4).
- Powder coated finish.
- Sold in a set of two (2).



**WARNING!**

Use extreme caution when using engine stands/lifting equipment to prevent tipping. Comply with warning labels for safe and proper use. Position jack properly before lifting vehicle. Use jacks only on hard, strong, and level surfaces.

## CSEBB50

### 50 Pound Bucket Blaster

- Siphon feed blaster with Model F gun (with 1/4" ID nozzle & 1/8" ID air jet).
- Use dry abrasives only.
- 3/8" I.D. x 7 ft. hose.
- Free standing open top tank.
- Lightweight and portable.
- Easy to use with professional results.
- Includes hood and safety goggles.
- Two year warranty.
- Made in the U.S.A.



#### SPECIFICATIONS

Air pressure:	80-125 PSI
Steel nozzle size:	13/64", 1/4", 5/16" (1 ea.)
Air jet size:	5/64", 1/8", 5/32" (1 ea.)
Blast time:	40 minutes
Container volume:	3 gallons
Minimum Air Volume:	7-15-20 CFM
Approximate sand capacity:	50 lbs.
Height:	18"
Shipping Weight:	8 lbs.

## SH41600

### 100 lb. Pressure Blaster

- Full size heavy duty Deadman handle.
- Uses large Type 1 nozzle.
- 1/2" plumbing assembly - more power.
- 8 ft. x 1/2" I.D. abrasive hose - more power.
- Pneumatic tires.
- Sturdy front leg with plate for secure stability.
- Pressure release valve.
- Holds 100 pounds.



## SH4001544

### Porta Blaster

- Use abrasives or liquids.
- Hose length: 10 ft.
- Unlimited capacity.
- 7 CFM @ 80 psi minimum.
- 1/4" steel nozzle.



## SH4001244

### Bottle Blaster

- Use abrasives or liquids.
- One quart capacity.
- 15 CFM @ 80 psi.
- 1/4" steel nozzle.
- Lightweight and portable.



## SH4001344

### Spot Blaster

- Self recycling - dust free.
- One pound of abrasive included.
- 5/16" steel nozzle.
- Perfect for small jobs.
- Optional head accessories available.



## CTGAIRVAC

### Air Vacuum Kit

- Comfortable, lightweight composite gun body.
- Dual function: vacuum or blow.
- Ideal for vehicle media installation shops.
- Great for cleaning glass chips, stones, sawdust, sand, steel chips, etc.
- Kit includes: flexible hose for access in tight areas, flat tube for engine cleaning, small bore vacuum tube for cleaning in small places, multi-angle brush for vehicle interiors, and dust bag with two layers of material for added durability and zipper bottom for quick removal of debris.



#### SPECIFICATIONS

Weight:	1.5 lbs.
Avg. Air Consumption:	3.36 CFM
Air Inlet Thread Size NPTF:	1/4"
Minimum Air Hose Size:	5/16"
Sound Level (@ Free Speed)	84 dBA
Vibration:	0.4 m/S2
Recommended Air Pressure:	90 PSI
Suction:	9 cmHg

## PL18225

### Pistol Grip Spray Cleaner

- Air operated siphon cleaning gun handles most cleaning fluids.
- For mixing water or soap solutions for pressure cleaning of parts, engines, machinery, floors and walls.
- Lightweight, easy to handle.
- Dual air inlet for handy connection from overhead or underbench floor air use.
- 1/4" Female NPT threads.
- Must be used on regulated air line with a pressure setting not to exceed 30 PSI.
- Includes 8 ft. of clear 1/4" vinyl tubing with a weighted strainer screen and fluid control valve.
- 10" length spray nozzle.



### Solvent Parts Washer Brushes

- Non-slip grip.
- Indestructible barb.
- Contain premium bristles.
- Guaranteed not to mushroom.
- Penetrating tip for better cleaning.
- Nylon bristles for petroleum based solvents.



PART NO.	DESCRIPTION
KTK8169	Solvent Parts Washer Brush
KTK7945	Solvent Parts Washer Brush with Hose

## AN30452

### Parts Cleaning Brush

- Excellent for cleaning engine and miscellaneous parts.
- Seamless steel ferrule.
- Foam handle.
- Chisel trim.
- Fill material: Crimp Nylon.
- Bristles: 1" Diameter, 2-1/2" length.



## BR93APD

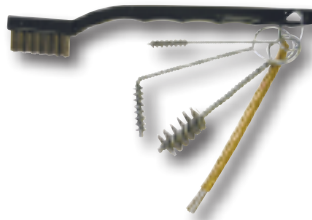
### General Purpose Brush



- For thread cleaning, weld cleaning.
- 7-1/4" tooth-brush style Poly handles.
- Stainless .006 steel wire fill.

## BKBAT01

### Electrifix Brush Set



- Five specially designed tools to remove oxidation and corrosion and to clean electrical connectors.
- Includes the following on a metal ring: general purpose brush, bullet connector brush, fuse holder brush, lamp sockets grounds brush, and inside lamp sockets and small male connectors brush.

### Small Scratch Brushes



- Plastic handles.
- For general and light-duty cleaning in the plating and metal finish industries.
- Ideal for use in aluminum welding with inert arc.

PART NO.	FILL MATERIAL	TRIM LENGTH	BRISTLE LENGTH	NO. OF ROWS
AN33761	.006 Stainless Steel	1/2"	1-7/8"	3 x 7
AN73706	.006 Brass	1/2"	1-7/8"	3 x 7

## AN43001

### Bent Handle Wire Filled Maintenance Brush



- Use for removing paint, rust, scale, solder chips and dirt, and for cleaning metal parts and thread files.
- Brush length: 6" (3 x 19 rows of 1-1/8" bristles.)
- Overall length: 13-1/4".

## AN50079

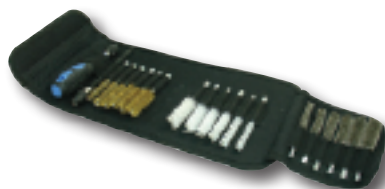
### Shoe Handle Carbon Scratch Brush



- Use for cleaning metal parts, paint removal, rust and scale removal and thread and file cleaning.
- Brush length: 5-1/2" with 4 x 16 rows of 1-1/8" bristles.
- Overall length: 10".

## AS9020

### Wire Brush Set

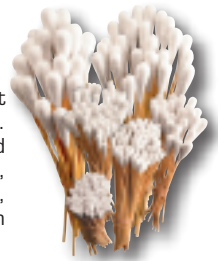


- Choice of stainless steel, brass and nylon brushes makes this twenty piece kit ideal for repairing, polishing, and cleaning areas of autos, machines, etc.
- Includes an extension adapter for use with power tools.
- Ergonomically designed handle provides a soft, comfortable grip.
- All brushes have a 1/4" hex shaped quick disconnect shank (no tools needed to switch the brushes).
- Set includes one of each brush in stainless steel, brass and nylon in the following sizes: 1/4", 3/8", 1/2", 5/8", 3/4", and 1".

Shop Equipment

## IP9010

### Swab-Eez 325 Piece Assortment



- Industrial grade swabs for the removal of dirt and the precise application of shop chemicals.
- Lubricate, clean, and paint bores, fittings, head bolt holes, tubing, threads, gaskets, grease guns, pipes, dirt and debris.
- Industry applications: paint, detailing, and PBE.
- Low lint, industrial strength with high absorption.

Kit includes the following:

PART NO.	DESCRIPTION	QUANTITY
IP9011	3" stick, 5MM head	100
IP9012	6" stick, 5MM head	100
IP9013	6" stick, 8.5MM head	50
IP9014	6" stick, 12MM head	25
IP9015	9" stick, 16MM head	25
IP9016	9" stick, 20MM head	25

## LS21260

### Arm Glove



- Total hand and arm burn protection.
- The heat resistant Kevlar® material protects hands and arms from hot surfaces.
- This enables work on hot engines and exhaust systems without waiting.
- Works on both right and left hands.
- The glove portion is coated with a vinyl tread for greater gripping power.
- Extends to 24".
- Washable.

## LS18700

### Hot Sleeve

- Durable, heat-resistant Kevlar® sleeve protects arms from burns while working around the engine.
- Double wall construction to protect hand and forearm from hot objects.
- Works on either right or left arm.
- Washable.



## RGCKS

### Kevlar®

### Heat Sleeve (pr.)

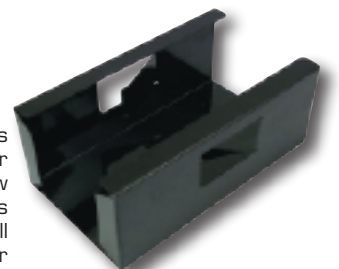
- One piece, dual layer design comfortably helps protect the forearms from burns, cuts and abrasions.
- Baked on coating helps repel hot liquids.
- Thumb cut prevents twisting.
- Gloves can easily be worn in conjunction with sleeves.
- Sold in pairs.
- One size fits all.



## LS20130

### Mechanic's Glove Box Holder

- Conveniently attaches to tool boxes or any ferrous metal surface. Or mount it on a wall using the screw slots provided.
- Two large magnets hold the dispenser in place.
- Fits all common sizes of disposable rubber glove boxes, including 25, 50 and 100 packs.
- Three adjusting springs can be adjusted as necessary to hold various box sizes.
- Made of powder coated steel.
- Shipping weight: 1 lb., 10 oz.



## Disposable Gloves

**Diamond Grip™  
Latex Gloves  
(Powder Free)**


• Thicker and longer than typical latex gloves for added protection where you need it most. • Textured fingers for a secure grip in wet or dry conditions. • Premium, low-modulus latex glove for a true fit, comfort and reduced hand fatigue.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
MRXMF300S	Small (100)	MRXMF300L	Large (100)
MRXMF300M	Medium (100)	MRXMF300XL	Extra Large (100)

**SafeGrip® Latex  
Gloves  
(Powder Free)**


• Low modulus profile allows for a comfortable fit resulting in reduced hand fatigue over long periods of wear. • Up to 4 times thicker than standard latex gloves for greater overall protection, • Extended cuff for increased protection over the wrist and forearm. • Textured fingers for a secure grip in wet or dry conditions.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
MRXSG375S	Small (50)	MRXSG375L	Large (50)
MRXSG375M	Medium (50)	MRXSG375XL	Extra Large (50)

**Supreno® SE  
Nitrile Gloves  
(Powder Free)**


• Soft and durable nitrile formulation for improved strength, durability and greater comfort. • Interior polymer coating makes glove easy to don. • 100% nitrile to alleviate the potential for adverse reactions associated with natural latex protein. • Textured fingers allow for reliable grip in wet and dry conditions. • Gradient dipping provides added protection where you need it most.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
MRXSU690S	Small (100)	MRXSU690L	Large (100)
MRXSU690M	Medium (100)	MRXSU690XL	Extra Large (100)

**Nitron One®  
Nitrile Gloves  
(Lightly  
Powdered)**


• Longer and thicker than typical synthetic disposable gloves for greater overall protection and over the wrist. • 100% synthetic, not made from natural rubber latex. • Textured for wet and dry gripping. • Lightly powdered with absorbable cornstarch (USP) for easier donning.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
MRXNO123S	Small (100)	MRXNO123L	Large (100)
MRXNO123M	Medium (100)	MRXNO123XL	Extra Large (100)

**DURA FLOCK™ Nitrile Gloves**


• Keep your hands dry, comfortable, and protected with Dura Flock™ gloves. • 8 mil nitrile 25% thicker than standard disposable gloves for increased durability and superior protection. • Extremely comfortable to wear for extended periods reducing hand fatigue. • Exclusive ultra-thin moisture-absorbing flock-lining keeps hands dry. • Fully-textured for a firm, reliable grip. • 100% nitrile, latex-free.

Available in the following sizes:

PART NUMBER	DESCRIPTION
MRXDFK608M	Medium (50)
MRXDFK608L	Large (50)
MRXDFK608XL	X-Large (50)

**MidKnight™ Nitrile Gloves**


• Offer the superior combination of durability and protection against day-to-day hazards, in a comfortable nitrile glove. • Powder-Free Nitrile glove is non-sterile, has ambidextrous design, and is for single use only. • Provides an exceptional balance of performance, comfort and durability. • Designed specifically with a distinct color that resists stains. • 100 gloves per box. • Recommended for use when day-to-day hazards require the best combination of durability and consistency, when working in environments that demand firm grip and reliability, and when precise contact requires enhanced tactile sensitivity.

PART NO.	DESCRIPTION
MRXMK296M	Medium (100)
MRXMK296L	Large (100)
MRXMK296XL	X-Large (100)

**Nitrile Coated Gloves**


• Ergonomically pre-curved design. • Nitrile dipped nylon shell. • High abrasion resistance. • Incredible grip and dexterity on wet or dry surfaces. • 9 gauge medium weight nylon shell. • Custom Cornwell Logo.

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
RGCNM3	Medium (3)	RGCNXL3	X-Large (3)
RGCNL3	Large (3)		

**WARNING!**

Wear safety goggles and protective clothing. Use in well ventilated area. Do not expose solvent to flames, sparks or other sources of ignition. Read safety/operating instructions thoroughly before using equipment.

## SAFETY EQUIPMENT

### Black Lightning Nitrile Gloves

- Made to match healthy skin's natural 5.5 pH levels to ensure the most comfortable fit.
- Unique formulation reduces excess perspiration.
- Quadruple washed - no excess chemicals lingering on the glove.
- Super strength and stretch to avoid tearing.
- Approved for medical use.
- Powder free nitrile glove.
- Latex free.
- Textured grip.
- Ambidextrous.
- Box of 100.



PART NO.	DESCRIPTION
ZLGBLM	Black Lightning Nitrile - M
ZLGBLL	Black Lightning Nitrile - L
ZLGBLXL	Black Lightning Nitrile - XL
ZLGBLXXL	Black Lightning Nitrile - XXL

### White Lightning Latex Gloves

- Extra thick 8 mil latex glove.
- Provides superior protection against chemicals and hazards.
- Gloves are processed to remove extra latex proteins from the glove, which may reduce risk of latex allergies.
- Medical quality.
- Super strength.
- Powder free.
- Textured grip.
- Ambidextrous.
- Box of 100.



PART NO.	DESCRIPTION
ZLWLM	White Lightning Latex - M
ZLWLL	White Lightning Latex - L
ZLWXL	White Lightning Latex - XL

### ROC Polyurethane Coated Gloves

- Durable polyurethane coated palm provides unmatched grip.
- Ideal for jobs requiring maximum dexterity without the fatigue associated with heavier, bulkier gloves.
- Seamless nylon shell for extra comfort and extended wear.
- Knit wrist keeps dirt out.
- Not liquid proof.
- Machine washable.



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
MGROC20TM	Medium	MGROC20XL	X-Large
MGROC20TL	Large		

### Ironflex® Polar Gloves

- Industrial Winter Work Gloves with superior warmth and dexterity.
- Designed with superior hand mobility and gripping power.
- Perfect for tool handling and work activities in cold climates.
- Durable grain pigskin palms stay soft and flexible in wet conditions.
- Waterproof, windproof Heatloc® insulated lining keeps hands dry.
- Elastic wrist and pull out knit sleeve adds warmth and protection.
- Omnidirectional Spandex for flexibility and comfort.
- Protective neoprene knuckle guard.
- Reinforced padded thumb saddle adds strength at stress points.
- Anti-slip textured finger and palm reinforcements.



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
SNRP2452X	Jumbo	SNRP245X	X-Large
SNRP245L	Large		

### M-Pact®2 Gloves

- Two-ply synthetic leather palm with anatomically die cut EVA foam padded impact zones.
- Hook and loop closure with molded TPR (Thermal Plastic Rubber) pull-tab secures fit.
- Stretch Spandex cuff insert provides maximum adjustability while sealing out dirt.
- Streamlined knuckle panel with high-density accordion design reduces impact.
- Finger and thumb grippers made from non-slip rubberized Zeus™ Clarino® improve grip and control.
- Non-slip rubberized Zeus™ Clarino® palm panel provides grip and longer wear.
- High-profile, impact absorbing molded TPR (Thermal Plastic Rubber) finger protection.
- Neoprene cuff allows easier access with additional wrist protection and comfort.
- Machine washable.



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
MXCMP2S	Small	MXCMP2XL	X-Large
MXCMP2M	Medium	MXCMP2XXL	XX-Large
MXCMP2L	Large		

### M-Pact® Gloves

- Anatomically shaped, die-cut, multi-layer synthetic leather palm with EVA interior foam padding.
- Anatomically-designed, Thermal Plastic Rubber (TPR) molded panels provide additional protection.
- Two-way, stretch Spandex padded back.
- Lycra® finger panels.
- Two-ply fingertips and thumb reduce wear and increase protection.
- Ultra-sensitive fingertip design with reduced seams.
- Concealed interior seam stitching.
- Streamlined elastic cuff with hook and loop closure.
- Machine washable.



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
MXCMP5	Small	MXCMPXL	X-Large
MXCMPM	Medium	MXCMPXXL	XX-Large
MXCMPL	Large		

### Original Mechanix Gloves

- Synthetic leather fingertip reinforcements provide strength and protection.
- Concealed interior seam stitching prevents snagging.
- Two-way stretch Spandex padded back.
- Streamlined elastic cuff with hook and loop closure.
- Supple, breathable, durable Clarino® palm.
- Machine washable.



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
MXCMGS	Small	MXCMGXL	X-Large
MXCMGM	Medium	MXCMGXXL	XX-Large
MXCMGL	Large		



## Veratti® 2000 Bifocal Safety Glasses

- Wrap-around comfort, sleek weightless design, and cool temples provide excellent fit and function.
- Flexible polycarbonate and offers advanced optics with bifocal diopters.



PART NO.	DESCRIPTION
SGL5777002	Bifocal Safety Glasses/Clear w/Clear +1.5 Lens
SGL5777003	Bifocal Safety Glasses/Clear w/Clear +2.0 Lens
SGL5777004	Bifocal Safety Glasses/Clear w/Clear +2.5 Lens

## NASCAR® GT Safety Glasses

- Weightless racy design.
- Frameless, translucent wrap-around design.
- Soft rubber temple tips.
- Scratchcoat™ coating.
- A variety of frame and lens colors available.
- ANSI Z87.1-1989 / CSA Z94.3-1999.



PART NO.	DESCRIPTION
SGL5328004	NASCAR® GT Safety Glasses/Clear w/Clear Lens
SGL5328224	NASCAR® GT Safety Glasses/Black w/Gray Lens
SGL5328334	NASCAR® GT Glasses/Amber w/Amber Lens
SGL5328424	NASCAR® GT Glasses/Black w/Silver Lens

## V2000 Safety Glasses

- Incorporates three important principles needed in today's work environment; Extreme Safety, Extreme Fashion, and Extreme Value.
- Wrap-around comfort, sleek weightless design, and cool new temples provide the ultimate experience in fit and function.
- 100% flexible polycarbonate frame.
- Telescopic adjustable temples.
- 8 degree base spherical lens.
- Scratchcoat® coating on lens.
- ANSI-Z87.1-2003 Certified.



PART NO.	DESCRIPTION
SGL5778004	Clear/Clear
SGL5778424	Gray/Silver
SGL5778774	Gray/Indoor-Outdoor

## V1000 Safety Glasses

- 100% polycarbonate frame.
- 8 degree base spherical hard coat lens.
- ANSI Z87 certified.
- Telescopic adjustable temples for custom fit.
- Lightweight frame.



PART NO.	DESCRIPTION
SGL5258014	V1000 Safety Glasses/Black w/Clear Lens
SGL5258214	V1000 Safety Glasses/Black w/Gray Lens
SGL5258432	V1000 Safety Glasses/Silver w/Mirror Lens

## UXHD701

Harley-Davidson®  
Gunmetal/Clear



- Double 8-base frame features spring-hinged temples for superior comfort.
- Premium gunmetal frame with Harley-Davidson® Signature logo on temples.
- Harley-Davidson® Bar and Shield logo on lens.
- Polycarbonate hard-coated lenses are impact resistant, distortion free, and scratch resistant.
- Meets ANSI Z87+ Standard.

SPERIAN

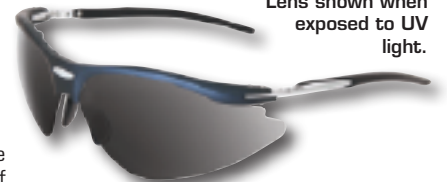


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**WARNING:** Not intended for use when riding a motorcycle. Improper use may result in serious personal injury or death.

## UXS4025

Uvex Milan  
Photochromic  
Safety Glasses



Lens shown when  
exposed to UV  
light.

- Provides the convenience of using the same pair of safety eyewear for both indoor and outdoor applications.
- The stylish, sport-inspired design features lenses that automatically adapt to changes in light conditions.
- When exposed to ultraviolet (UV) light, the lenses darken to minimize sunlight and glare that can cause eyestrain and fatigue.
- As the UV light is removed, the lenses return to their light state, ideal for general purpose indoor use.
- Frame color: Silver/Blue.
- Lens tint: Photochromic.
- Coating: Hardcoat.
- Changes from light to dark in 8 seconds (Visible Light Transmission of 21%).
- Changes from dark to light in 60 seconds (Visible Light Transmission of 86%).
- 8-base dual lens design provides superior coverage and a sleek, stylish look.
- Scratch-resistant coating extends the life of the lenses.
- Lightweight frame for all day comfort.
- Spring-hinge temples for frame stress relief and durability.
- Wire-core temples flex and bend for a personalized fit.
- Adjustable saddle pad nosepiece provides a comfortable fit and reduces slippage.
- Microfiber storage bag is included and doubles as a cleaning cloth.
- Meets ANSI Z87+ (High Impact); does not meet CSA Z94.3 standards.

## Harley-Davidson® Sports Eyewear



- Lightweight, black frame features popular Harley-Davidson® logos on both temples.
- Flame-orange nose pads and temple tips for H-D® styling and superior comfort.
- Combines comfort, safety features and Harley-Davidson® look.
- Meets ANSI Z87+ Standard.

PART NO.	DESCRIPTION
UXHD1201	Harley-Davidson® Sports Eyewear/Gray Hardcoat Lens
UXHD1202	Harley-Davidson® Sports Eyewear/Orange Mirror Hardcoat Lens

SPERIAN



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**WARNING:** Not intended for use when riding a motorcycle. Improper use may result in serious personal injury or death.

**Harley-Davidson® Safety Eyewear**

ALL MODELS FEATURE:

- Impact-resistant polycarbonate lenses.
- 99.9% UV protection.
- Scratch resistant hardcoat.
- Variety of lens tints.



**UXHD100**

**Safety Eyewear - Silver/Blue Mirror**



- Contemporary, wrap-around sport styling with a dual lens look, molded in side shields and brow guards.
- Legendary Harley-Davidson® name on lens and frame.
- Meets new ANSI Z87+ Standard.

**UXHD400**

**Safety Eyewear - Black/Clear**



- High-tech, high-style protective eyewear wraps around the face to provide 180 degrees of panoramic vision and excellent side and brow coverage.
- Black, break-away, adjustable H-D® retainer cord shipped with frame.
- Harley-Davidson® logo on lens and frame.
- Meets new ANSI Z87+ and CSA Z94.3.

**UXHD503**

**Safety Eyewear - Silver/Silver Mirror**



- Silver matte metal frame with special nickel-free coating complements a 10-base dual lens for optimal field of vision.
- Spring hinge temples provide the wearer with a secure and comfortable fit.
- Harley-Davidson® name featured on the lens and temples.
- Meets new ANSI Z87+ Standard.



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**SGL05282001**

**Veratti® LED Butterfly Clip Light**



SHOWN WITH GLASSES FOR ILLUSTRATION PURPOSES ONLY! GLASSES NOT INCLUDED!



- Compact, lightweight, removable LED light for more comfort.
- Butterfly clips attach to frame of safety glasses.
- On/Off switch button to increase battery life.
- Rotates up to 360° for more precision.
- Equivalent brightness 40W for better vision in dark environments.
- Includes: (2) LED Lights and (2) sets of extra batteries.



**WARNING!**

Safety spectacle lenses and frames are NOT unbreakable. They will not provide protection against severe impact hazards such as (but not limited to) fragmenting grinding wheels, abrasive discs, exploding devices nor against hazardous materials, molten metal, arc welding splatter or chemical splash. Additional guards or other protective devices MUST be used where these hazards exist.

**Boot Socks**

- Comprised of 80% cotton/20% polypropylene.
- Reinforced for maximum durability while wearing steel toe, work and casual shoes or boots.
- Available in Black or White.



Available in the following sizes:

PART NO.	DESCRIPTION	UK Size	USA Size
RBBBLKSOCKM	Black Boot Sock - Medium	5-9	6-10
RBBBLKSOCKL	Black Boot Sock - Large	9-15	10-16
RBB SOCKRBM	White Boot Sock - Medium	5-9	6-10
RBB SOCKRBL	White Boot Sock - Large	9-15	10-16

**Coolmax Socks**

- Made of 20% Coolmax/70% cotton/10% stretch nylon.
- Designed to effectively repel moisture away from the skin and keep feet cool and dry while fighting those blistering hot days.



Available in the following sizes:

PART NO.	DESCRIPTION	UK Size	USA Size
RBB SOCKMMM	Coolmax Sock - Medium	5-9	6-10
RBB SOCKMML	Coolmax Sock - Large	9.5-15	10.5-14

**CTAGCCREW**

**White Crew Socks**

- Performance over the calf socks with heel and toe construction.
- Knit in Cornwell® logo.
- 80% Acrylic/20% Nylon.
- Size: 10-13.
- One pair.



**CTAGCANK**

**White Ankle Socks**

- Performance low cut socks with lightweight, mesh upper and arch support.
- Knit in Cornwell® logo.
- 80% Acrylic/20% Nylon.
- Size: 10-13.
- One pair.



**Easy Escape Black Slip On Boots - Soft Toe**



SOFT TOE

- 6" soft toe boot.
- Full-grain black leather.
- Easy on/Easy off Slip-on design.
- Oil/acid/slip resistant.
- TPU/PU soles for sure footing on any terrain.
- PU shock absorbing midsoles cradle the foot to reduce arch sagging and prevents foot strain, fatigue and related leg and back pain.
- Pull-on loops.
- Tougher, more supple leather.
- Foot smart design.
- Footbed insulation.
- Anatomic support.
- Support system.
- Unique heel reinforcement.

Available in the following sizes:

PART NUMBER	US MEN SIZE	PART NUMBER	US MEN SIZE
RBBUBBK7	8	RBBUBBK10	11
RBBUBBK7.5	8.5	RBBUBBK10.5	11.5
RBBUBBK8	9	RBBUBBK11	12
RBBUBBK8.5	9.5	RBBUBBK11.5	12.5
RBBUBBK9	10	RBBUBBK12	13
RBBUBBK9.5	10.5		

**Easy Escape Black Slip On Boots - Steel Toe**



STEEL TOE

- 6" steel toe boot.
- Full-grain black leather.
- Easy on/Easy off Slip-on design.
- Oil/acid/slip resistant.
- TPU/PU soles for sure footing on any terrain.
- PU shock absorbing midsoles cradle the foot to reduce arch sagging and prevent foot strain, fatigue and related leg and back pain.
- Pull-on loops.
- Tougher, more supple leather.
- Foot smart design.
- Footbed insulation.
- Anatomic support.
- Support system.
- Unique heel reinforcement.

Available in the following sizes:

PART NUMBER	US MEN SIZE	PART NUMBER	US MEN SIZE
RBBUSBK7	8	RBBUSBK10	11
RBBUSBK7.5	8.5	RBBUSBK10.5	11.5
RBBUSBK8	9	RBBUSBK11	12
RBBUSBK8.5	9.5	RBBUSBK11.5	12.5
RBBUSBK9	10	RBBUSBK12	13
RBBUSBK9.5	10.5		

**Outback Lace-Up Boots - Soft Toe**



SOFT TOE

- 6" soft toe lace-up boots.
- 100% full-grain black leather.
- Oil/acid/slip resistant.
- TPU/PU soles.
- Padded tongue and collar help prevent blistering and provide comfort to the foot.
- Removable foam insole adds extra cushion to our shock absorbing midsole and is constructed with an anti-fungal lining to wick away moisture.

Available in the following sizes:

PART NUMBER	US MEN SIZE	PART NUMBER	US MEN SIZE
RBBUABK8	9	RBBUABK10	11
RBBUABK8.5	9.5	RBBUABK10.5	11.5
RBBUABK9	10	RBBUABK11	12
RBBUABK9.5	10.5		

**Outback Lace-Up Boots - Steel Toe**



STEEL TOE

- 6" steel toe lace-up boots.
- 100% full-grain black leather.
- Oil/acid/slip resistant.
- TPU/PU soles.
- Padded tongue and collar help prevent blistering and provides comfort to the foot.
- Removable foam insole adds extra cushion to our shock absorbing midsole and is constructed with an anti-fungal lining to wick away moisture.

Available in the following sizes:

PART NUMBER	US MEN SIZE	PART NUMBER	US MEN SIZE
RBBUSABK8	9	RBBUSABK9.5	10.5
RBBUSABK8.5	9.5	RBBUSABK10	11
RBBUSABK9	10		

**Leather Lined Comfort Insoles**



- For people who work on their feet, this shock absorbing insole distributes the stress of foot impact more evenly, helping to reduce leg pain and foot fatigue.
- Conforms to the shape of foot with built in arch support and a dished heel cup to correct posture and reduce stress on back and legs.
- Leather lined insole gives maximum "wicking" capabilities to keep feet dry and comfortable.

Available in the following sizes:

PART NUMBER	US MEN SIZE	PART NUMBER	US MEN SIZE
RBBINSOLE6	7	RBBINSOLE10	11
RBBINSOLE7	8	RBBINSOLE11	12
RBBINSOLE8	9	RBBINSOLE12	13
RBBINSOLE9	10		

**Shoe Laces**



- High quality, long life laces.

Available in the following colors and sizes:

PART NUMBER	SIZE	EYELETS	COLOR
RBBRBLACEBK30	30"	3-4	Black
RBBRBLACEBK45	45"	5-6	Black
RBBRBLACEBR30	30"	3-4	Brown
RBBRBLACEBR45	45"	5-6	Brown

## SAFETY EQUIPMENT

### RBBRBTOECAP

#### Boot Saver

- Easy-to-apply, toe caps can add life to any work boot.
- Won't mark floors.
- Includes two (2) black toe caps.



### RBBRBLPRES

#### Leather Preservative

- For preserving the long life of Redback boots.
- An easy to apply natural beeswax based preservative.
- With regular application it reduces the appearance of nicks and scratches, helps keep leather soft, supple, water repellent and adds a rich luster to boots.
- 4 oz. can.



### Leather Scratchproof Belts



- 1-1/2" full-grain leather belt features a fully covered brass buckle to prevent the buckle from scratching the work surface.
- NOTE: When ordering add 2" to the size when buying a men's belt. If waist size is 34, purchase a 36 belt.

Available in the following sizes:

PART NUMBER	US MEN SIZE	PART NUMBER	US MEN SIZE
RBBMBLT28	28	RBBMBLT40	40
RBBMBLT30	30	RBBMBLT42	42
RBBMBLT32	32	RBBMBLT44	44
RBBMBLT34	34	RBBMBLT46	46
RBBMBLT36	36	RBBMBLT48	48
RBBMBLT38	38	RBBMBLT50	50

### Leather Scratchless Belt

- Black, 35MM genuine leather strap.
- Scratchless buckle with hook closure.
- No metal buckle to scratch paint when working on car.
- Embossed Cornwell® logo on buckle.



PART NUMBER	SIZE	PART NUMBER	SIZE
CTAABSBS/M	30-32	CTAABSXL/2XL	42-44
CTAABSBM/L	34-36	CTAABS3XL	46-48
CTAABSBL/XL	38-40		

### MO30650

#### #10 Fixed Shade Welding Helmet

- Natural contours to deflect welding sparks.
- Extended throat to provide additional neck protection.
- Lightweight engineered thermoplastic resin withstands up to 350°F.
- Ratchet headgear and a soft, form-fitting headband for optimum comfort.
- 4.5" x 5.25" vertically placed fixed front viewing window.
- IRUV Shade #10 hardened glass filter lens (non-electronic filter plate).
- Clear polycarbonate cover lens.

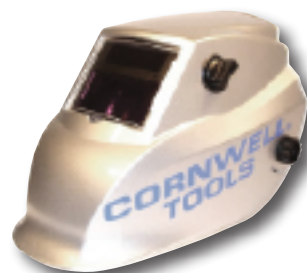
MO3002936 Repl. 4.5" x 5.25" Clear polycarbonate cover lens



### CWEWH300

#### Welding Helmet Auto with Adjustable Shade

- Designed with safety and comfort of the wearer in mind.
- Features full-time UV/IR, adjustable DIN, sensitivity and delay time with padded adjustable headband for stability and silver exterior coating to reflect radiant heat.
- Impact resistant, light-weight shell (0.95 lbs).
- Comfortable, adjustable, padded, locking ratchet headband.
- Wide viewing area: 3.82" x 1.85" (7.1 sq. in.).
- Full time UV/IR protection; 16 DIN.
- Light shade set-up: 3.5 DIN.
- Adjustable darkness: 9-13 DIN.
- Adjustable sensitivity with dual arc sensors.
- Adjustable delay time (0.1~1.0s).
- High speed switching: 1/25,000th second.
- Auto On/Off-solar powered, no batteries.
- Replaceable lens covers interior/exterior.
- Approvals: ANSI Z87.1-2003, CSA Z94.3, CE, EN, DIN, ISO.



- CWEWH220 Clear Outer Lens
- NT102N2100 Head Gear and Band/CWEWH300
- NT102N2103 Adjustable Knob/CWEWH200
- NT102N2104 Forehead Pad/NT102N2100
- NT102N2106 Adjustable Knob/NT102N2301
- NT102N2301 Solar Unit/CWEWH300
- NT102N4797 Inner Lens/CWEWH300 (5/pk.)
- NT102N9112 Outer Lens/CWEWH300 (5/pk.)

### MO23282

#### Variable Auto Darkening Filter 9-13 Welding Helmet

- Enables welders to adapt to the vast working environments.
- Gives the welder the ability to control the shade of the lens, by adjusting the darkness to their preferred setting. The sensitivity setting allows a welder to account for ambient light sources and different environments, while the delay setting allows a welder to increase or decrease the amount of time it takes the lens to transform from dark to light state.
- All of these features allow the welder to customize their settings, resulting in overall increased efficiency.
- Economical lens for the consumer welder.
- Solar powered - always on and ready to weld.
- Features variable shade 9-13, sensitivity and delay adjustments.
- Screen size viewing area: 42MM x 96MM.
- Two independent sensors.
- Meets ANSI Z87.1 and CSA Compliant.

MO29127 Replacement Lens Kit - (5) front and (2) rear safety plates.  
MO23442 Replacement Head Gear/MO23282 and MO23286



### MO23286

#### Shade 10 Auto Darkening Filter Welding Helmet

- Eliminate the need to raise the welding helmet.
- Allow novice welders to experience the genuine attributes of an auto-darkening filter without breaking the bank.
- The dynamic benefits will be revealed the first time the welder looks through the lens and sees the exact position of the gun before the arc is struck, then the instantaneous change of the filter to a dark state upon striking the arc. The welder can now monitor the weld pool and give an immediate visual inspection of the weld as the lens changes back to the clear state - all without having to lower and raise the welding hood.
- Economical lens for the consumer welder.
- Solar powered.
- Fixed shade 10 lens with two independent sensors.
- Screen size viewing area: 42MM x 96MM.
- Meets ANSI Z87.1, CSA Compliant and CE Marked.

MO23440 Replacement Lens Kit - (5) front and (2) rear safety plates.  
MO23442 Replacement Head Gear/MO23282 and MO23286



## MO14988

### Professional Variable Auto Welding Helmet

- Features variable shade 9-12, sensitivity and delay adjustments.
- Battery powered, solar assisted with two independent sensors in 1.75" x 3.75" viewing area.
- Technology allows the unit to detect welds less than 5 amps.
- Low voltage indicator light - requires two (2) AAA batteries (included).
- Compatible with HLX 100 and HSL 100 shell.
- Hard Hat adaptable.
- Helmet weight: 1.45 lbs.
- Meets ANSI Z87.1 and CSA Compliant.



MO20696 Replacement Headgear  
MO24082 Professional Lens Kit

## MO29371

### HLX/Truesight/ Welding Helmet

- Designed by welders for welders.
- Navigate through multiple modes with the touch of a gloved hand.
- LED display makes setting up an ADF easy.
- Four (4) independent sensors strategically placed to see the arc.
- 30% larger viewing area with clear shade 3 enhances view (3.25" x 4").
- Amber bandpass filters reflected rays, illuminating weld puddle increasing vision and comfort.
- Multiple modes (torch, grind, and weld): simply push the appropriate icon to change modes.
- Power supply: Solar, 2 replaceable AAA batteries (included).
- Helmet weight: 1.8 lbs.



MO20696 Replacement Headgear  
MO30320 Truesight External Safety Lens (10/pk.)  
MO30321 Truesight Internal Safety Lens (10/pk.)

## MO18935

### Welding Helmet Bag

- Made of heavy-duty denier fabric with drawstring closure.
- Features Velcro close front lens pocket and two side mesh tool pockets.
- Fits all JACKSON SAFETY® helmets.



## UX11380048

### Face Shield Headgear

- Constructed of tough thermoplastic with heat resistant browguard.
- Features ratchet headband adjustment with a tension knob to allow easy sizing and adjustment for individual visor positioning.
- Designed with a chemical splash drip edge to prevent fluids from splashing down inside the visor.
- Visor features easy attachment without snaps, posts or levers., reinforced edge to resist cracking, universal hole pattern which allows visor to be used with other popular manufacturers' headgear.
- Meets ANSI Z87+ and CSA Z94.3 safety standards.

UX11390064 Face Shield Visor Clear  
UX11390068 Face Shield Visor Shade 5.0



## MO20696

### Headgear

- Oversized ratchet with soft rubber grip for easy adjustment.
- Comfort Cradle pivoting headpad hugs head for the ultimate in comfort.
- In-out slider adjusts distance of lens from eyes for precise vision.
- Vertical lock-in eliminates helmet creeping.
- For use with Halo X, HSL 100, or 590 series.



## UXS8500

### Black Matte Faceshield

- Lightweight and balanced ergonomic design combines superior protection and all-day comfort.
- Highly adjustable headgear with 2,784 possible positions tilts visor nearer or farther from face.
- Shell offers built-in chin protection, extended top-of-head coverage and has comfortable cell foam on back of headgear.
- Easy-to-set, ratcheting headgear locking mechanism assures comfortable, secure fit.
- Enhanced protection from airborne debris and excellent optics for increased visibility.
- Secure, easily replaceable visor attachment offers dual position choices.
- Breathable, removable, washable headband.
- Black matte finish.
- Comfortably worn with most goggles and respirators.
- Faceshield offers secondary protection and must be worn with spectacles or goggles.
- Passes ANSI Z87+ and CSA Z94.3 standards.
- Comes with clear polycarbonate uncoated visor.



UXS8550 Replacement clear polycarbonate uncoated visor  
UXS8555 Replacement clear polycarbonate hardcoat/anti-fog visor for most indoor work applications.  
UXS8565 Replacement Shade 5.0 - uncoated visor for welding, brazing and cutting.

## MO18633

### The Shield™ 5.0 IR/UV

- Ideal for protection when chipping, drilling, riveting, crushing, hammering, unpacking, woodworking, cutting, sanding and grinding.
- Full face protection which detaches from goggle.
- Curved faceshield conforms to shape of face offering better protection.
- Polycarbonate shield for long lasting protection.
- Compact size is ideal for storage and work in confined space.
- Provides dust, splash and impact protection.
- Anti-fog lenses and features a flame retardant adjustable headband.
- Meets ANSI Z87.1 2003+ standards.



## MO25671

### Nemesis™ 5.0 IR/UV Safety Glasses

- Ideal for protection when chipping, grinding, machining, torch soldering, glare, riveting or sanding.
- Sleek, sporty lightweight design.
- Soft touch temples for comfortable fit.
- Single polycarbonate lens with wrap-around protection.
- 99.9% UV protection.
- Meets ANSI Z87.1+ and CE EN 166 standards.



**Wildcat™ Goggles**



Amber and Shade 5.0, AF Shown

- Extreme performance vision protection.
- Material does not melt, drip, or ignite at 350°F for 5 minutes.
- Dual anti-fog lenses.
- Lightweight and comfortable goggle ideal for any work environment.
- Pivot headband for optimal comfort placement.
- Cushioned eye cups for comfortable fit.
- Adjustable side vents to increase air flow.
- Flame retardant head band.

PART NO.	DESCRIPTION
MO20525	Wildcat™ Goggle - Clear lens
MO20526	Wildcat™ Goggle - Smoke lens
MO20527	Wildcat™ Goggle - Amber lens
MO20529	Wildcat™ Goggle - Shade 5.0, AF lens

**SM23240**

**MIG Light**

- MIG Torch LED light attachment to illuminate area to be welded.
- Flexible mounting bracket attaches to the neck of standard (1/2" to 3/4") MIG welding torches.
- Long lasting durable LED light is powered by one AAA battery (included).
- Plastic shield to protect LED.
- Easy-to-use on/off switch (auto shut-off after 30 minutes).



**UXRWS53005**

**AM/FM Radio with Hearing Protection**

- Perfect for lawn mowing, working indoors/outdoors or any shop environment.
- Listening to your favorite music makes doing any job more enjoyable.
- Provides protection from harmful noise.
- Audio jack connects to MP3 players, iPod® devices, scanners and other audio devices.
- Superior stereo sound quality.
- Auto shut-off after four hours.
- Includes 2 AA batteries, 140 hours of battery life.
- Includes AUX connection cord.
- NRR 25 (Noise Reduction Rating).
- Adjustable, quick-click ventilated headband.
- Soft, comfortable foam ear cushions.
- Easy access controls: volume, station selector, AM/FM toggle, and On/Off switch.



**AS7660**

**Electronic Safety Earmuffs**

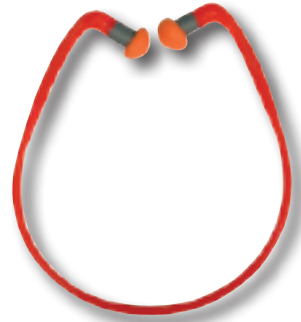
- LED Power Indicator.
- On/off switch with volume control.
- Solid-state circuit.
- Built-in microphone amplifies low level sound.
- Eliminates noise over 85 decibels.
- Comfortable ear cushions and headband.
- Powered by 2 AA batteries (not included).



**UXQB3HYG**

**Banded Earplugs**

- Super soft pods rest outside the ear for outstanding comfort.
- Patented band design prevents ear pods from touching dirty or contaminated surfaces.
- Lightweight and portable - designed especially for environments with intermittent noise hazards.
- Noise Reduction Rating (NRR): 23 dB.
- Includes extra pair of replacement pods.
- Comes in a package of ten (10).



**DFDF601**

**Surge Protector**

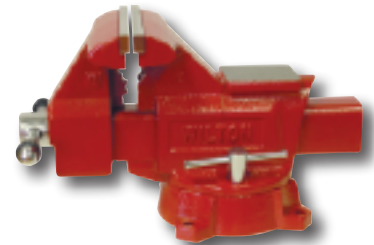
- Acting like a sponge to soak up electrical surges, this unit protects sensitive electronic components when MIG and spot welding on a vehicle.
- An absolute must when jump starting.
- No need to disconnect the battery for protection.
- An LED indicates that the device is working and correctly connected.



**WT11128**

**6-1/2" Utility Workshop Vise**

- Perfect for use in utility and light duty applications.
- Formed steel channel beam and 30,000 PSI body casting.
- Replaceable, serrated steel top jaws for a tight grip.
- Built-in pipe jaws to handle various pipe sizes.
- 180° swivel base with locknut.
- Large anvil with plenty of work surface.



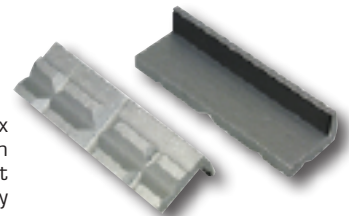
SPECIFICATIONS			
Jaw Width.....	6-1/2"	Throat Depth .....	3-13/16"
Jaw Opening .....	5-1/2"	Pipe Capacity .....	1/8" to 2-1/2"

WT11128S41 Jaws (2)

**LS48000**

**Aluminum Vise Jaw Pads**

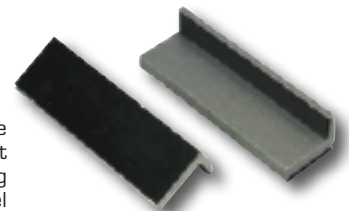
- Ideal for holding round and hex parts securely.
- V-shaped aluminum surface holds and helps protect round or hex parts.
- Specifically designed ledge supports flat parts while clamping.
- Strong nitrile magnets will attach to any steel vise jaws.



**LS48100**

**Rubber Face Vise Jaw Pads**

- Rubber jaw pads protect delicate parts from damage.
- Works great for holding irregular shapes.
- Strong nitrile magnets attach to any steel vise jaw.



## CWEMG140

### 145 Amp MIG Welder, 115 Volt

- Professional 145 amp 6-step output system with 115 Volt input power.
- Capable of welding #24 gauge to 3/16" with steel wire and up to 5/16" with flux-cored wire from .023" to .030" diameter.
- Spool gun ready for aluminum from 22 gauge to 1/8".
- Includes: machine, SL15 ergonomic MIG gun with 10 ft. cable assembly, direct-connect earth clamp and cable, brass gas regulator and hose, mild-steel welding wire and complete operator instruction manual.



#### SPECIFICATIONS

Input Voltage.....	115VAC @ 20 Amps
Dimensions.....	10.8"W x 18.5"D x 14.0"H
Output Amperage.....	20VDC @ 145 Amps
Duty-Cycle.....	90 Amps @ 30%
Power Settings.....	Six Position Rotary
Weight.....	64 lbs.

## CWEMG170

### 180 Amp MIG Welder, 230 Volt

- Professional 180 amp 6-step output system with 230 Volt input power is capable of welding #24 gauge to 1/4" with steel wire and up to 3/8" with flux-cored wire from .023" to .030" diameter.
- Spool gun ready for aluminum from 22 gauge to 3/16".
- Includes: machine, SL15 ergonomic MIG gun with 10 ft. cable assembly, direct-connect earth clamp and cable, brass gas regulator and hose, mild-steel welding wire and complete operator instruction manual.



#### SPECIFICATIONS

Input Voltage.....	230VAC @ 20 Amps
Dimensions.....	10.8"W x 18.5"D x 14.0"H
Output Amperage.....	22VDC @ 180 Amps
Duty-Cycle.....	130 Amps @ 30%
Power Settings.....	Seven Position Rotary
Weight.....	64 lbs.

## CWEMG130

### 130 Amp MIG Welder 115 Volt

- The perfect compact MIG welding system for light automotive or industrial applications.
- Completely portable and runs on any 115 volt outlet.
- Machine has maximum output of 120 Amps and can easily weld materials to 3/16".
- System comes complete with #15 MIG gun, ground clamp, gas regulator and mild-steel welding wire.



#### SPECIFICATIONS

Input Voltage.....	115VAC @ 60Hz
Input Current.....	20 Amps
Power Setting.....	4-Position
Output Current (max.).....	120 Amps
Duty-Cycle.....	90 Amps @ 20%
Wire Sizes:.....	.023" - .040" (0.6MM - 1.0MM)
Weight.....	56 lbs.
Dimensions.....	17.0"D x 10.5"W x 11.0"H

## CWEMG260

### 250 Amp MIG Welder 240 Volt

- Automotive shop machine capable of welding thin gauge (#24) to heavy gauge (5/8") materials with one of two available torch drives. Dual drive system allows the flexibility to change from welding steel to welding aluminum with just the flip of a switch.
- 100% duty-cycle shop MIG welding system comes standard with heavy-duty casters, padded tool tray, dual gas bottle supports, gas regulator, spare contact tips, welding wire, 250 amp MIG welding torch and ground clamp with 10 foot direct connect cable assemblies.



- FEATURES:**
- 100% duty-cycle air-cooled cabinet.
  - Infinite wire speed feed control, spot-weld timer and auto-reset overload sensor.
  - 14-position rotary cam-lock power selector switches and dual chokes.
  - Dual wire feed drives and shield gas systems with switch-on-the-fly selection capability.
  - Heavy-duty 250 amp ground clamp with UV/IR Dinse connect welding cable.
  - 250 amp professional MIG gun with 10 foot euro-connect cable assembly.
  - Optional 180 amp aluminum spool gun with 20 foot euro-connect cable assembly (CWESG185).

#### SPECIFICATIONS

Input Voltage.....	208-240VAC @ 60Hz
Input Current.....	47 Amps
Power Setting.....	14 steps
Output Current (max.).....	250 Amps
Duty-Cycle.....	250 Amps @ 25%
.....	190 Amps @ 40%
.....	140 Amps @ 100%
Wire Sizes.....	.023" - .045" (0.6MM - 1.2MM)
Weight.....	275 lbs.
Dimensions.....	32.0"D x 15.0"W x 26.0"H

Contact your local dealer for complete details!

## CWESG185

### Aluminum MIG Spool Gun

- Compact gun with wire-feed motor, rollers and enclosed 4" spool holder for aluminum or steel wires.
- Direct-connect to CWEMG260 welder allows for switch on-the-fly operation without removing the MIG gun.
- 20' integral power/gas/control cable assembly allows for maximum flexibility.
- Ideal for all automotive, truck and trailer, farm equipment, food service and industrial jobs.
- Package includes Spool Gun with .030" contact tip and 20' direct-connect cable assembly.



Contact your local dealer for complete details!

# CWEMWCBC

MIG Welding Cart - Blue



- 14 gauge heavy-duty steel construction.
- Overall height: 26-3/4".
- Tank area: 13" x 11-1/2".
- Three 13" wide shelves: Top shelf: 21-1/4", middle shelf area: 7" x 21", bottom shelf area: 14" x 33".
- Bottom shelf area is enclosed and features a lock for storage of welding accessories.
- MIG gun and ground lead holders on both sides.
- Cylinder holding chains included.
- Rear wheels are 8" x 2".
- Front swivel wheels are 3" x 3/4".

# CWETG155

DC Inverter Tip TIG Welder, 230 Volt



- Compact 230-volt DC Inverter TIG welder, rated at 155 Amps.
- Weighs less than 18 lbs.
- Perfect for all types of steels common in automotive and light-industrial applications.
- **Does not weld aluminum.**
- Inverter power supply provides for portability and infinitely adjustable smooth power operation.
- Produces a full 140 Amps of welding power for an extended 30% duty-cycle on standard 230 volt outlet and is capable of TIG welding mild and stainless steels from #14GA to 3/16".
- Lift-Arc start.
- Attach the STICK torch and weld thicker metals using 3/32" and 1/8" electrodes.
- Package includes machine, SR17V TIG torch with gas valve and 12 foot cable assembly, 300 Amp work clamp and cable, stick electrode holder and cable, gas regulator, AK-2 accessory kit and complete operator instruction manual.

SPECIFICATIONS

Input Voltage	230VAC @ 60Hz
Input Current	19 Amps
O.C. Voltage	100 VDC
Dimensions	5.5"W x 10.2"D x 14.5"H
Output Voltage	25 VDC
Output Current	150 Amps
Duty-Cycle	30% @ 40°C
Weight	17 lbs.

Requires a welding gas tank. (NOT INCLUDED)  
 [Machine includes a gas regulator and kit with three sizes of tungsten rods and accessories to weld at various power levels.]

# CWETG1710

Portable AC/DC Inverter TIG Welder



- Full-featured 230-volt AC/DC Inverter TIG welder, rated at 160 amps.
- Designed for all types of steels and aluminum common in automotive and light-industrial applications.
- Inverter power supply provides for portability and the touch-pad electronic control includes independently adjustable power, slope, wave, frequency, ignition and gas flow timing.
- Produces a full 160 amps of welding power for an extended 35% duty-cycle on standard 230-volt outlet and is capable of TIG welding mild and stainless steels as well as aluminum from #14GA to 3/16" maximum.
- HF or Lift-Arc start.
- Just attach the STICK torch and weld thicker metals using 1/8" and 3/32" electrodes.
- Package includes machine, SR17 TIG torch with 12 ft. cable assembly, 200 amp work clamp and cable stick electrode holder and cable, gas regulator, AK-2 accessory kit and complete operator instruction manual.

SPECIFICATIONS

Input Voltage:	230VAC@60Hz
Input Current:	26 Amps
O.C. Voltage:	103VDC
Output Voltage:	18VDC
Output Current:	160 Amps
Duty-Cycle:	35% @40°C
Dimensions:	8.7"W x 15.5"D x 18.1"H
Weight:	25 lbs.

Drop Ship Only

## Welder Accessories (Not Illustrated)

- The following items below are to be used with welders.

PART NO.	DESCRIPTION
NT140N0005	MIG #25 Contact Tip .023" (10/pk.)
NT140N0008	MIG #15 Contact Tip .023" (10/pk.)
NT140N0051	MIG #25 Contact Tip .030" (10/pk.)
NT140N0059	MIG #15 Contact Tip .030" (10/pk.)
NT145N0075	MIG Nozzle Conical/CWEMG130, CWEMG140, CWEMG170
NT145N0076	MIG Nozzle Conical/CWEMG260 (2/pk.)
NTER5356030	Wire Aluminum .030 (1 lb.)
NTER70S6030	Wire Steel .030 (8" roll, 11 lbs.)
NTER70S603002	Wire Steel .030 (2 lbs.)



**WARNING!**

Electric welding or plasma cutting cause ultra violet rays and weld spatter. Bystanders will be exposed to ultraviolet rays and weld spatter. Wear welding helmet with appropriate shade lens while using electric welders or plasma cutters. Do not allow bystanders while welding or cutting. Wear safety shield and protective clothing. Read and follow instruction manual.



# CWEPC580240

1/2" Plasma Cutter, 230V



- Industrial grade plasma cutting machine.
- 230-volt @ 30 amp input system; 1/2" Genuine, 7/8" Severance.
- Provides up to 48 amps of cutting power to Genuine cut 1/2" mild steel.
- Weight: 27 lbs.
- High efficiency electronic inverter power supply.
- Clean-cut infinitely adjustable output power.
- Professional grade duty-cycle performance.
- Microprocessor control with LED indicators.
- Continuous pilot arc ignition for all surfaces.
- Adjustable air regulator/filter with gauge.
- Ergonomic torch with trigger guard.
- Heavy-duty earth clamp.
- Includes the following: 5-48 amp inverter power source with adjustable air regulator filter dryer, 3-wire UL power cord, NPT40 plasma torch and heavy duty work clamp with 13 ft. UVIR welding cable, Spare cutting tips and electrodes, and operator manual.

**SPECIFICATIONS**

Input Voltage: .....	230VAC@ 60 Hz
Input Current: .....	30 Amps
Air Supply (min.) .....	70 psi (4.8 bar)
Output Power: .....	48 Amps
Air Volume: .....	3.5 scfm (95 l/min.)

- NT907N0111 Electrode
- NT907N1170 Extended Tip

## Plasma Cutters Accessories (Not Illustrated)

- The following items below are to be used with the Plasma Cutters.

PART NO.	DESCRIPTION
NT165N7015	Plasma O Ring Shield Cup Base
NT907N0010	Plasma Standoff/NTCT55
NT907N0110	Plasma Electrode (3/pk.)
NT907N1160	Plasma Shield Cup
NT907N1167	Plasma Cutting Tip (5/pk.)/NTCT120V
NT907N1168	Plasma Cutting Tip (5/pk.)/NTCT230V
NT907N1169	Plasma Cutting Tip (5/pk.)/NTCT55

# CWEPC380 Series Plasma Cutters



- Inverter plasma cutting system offering the highest output power possible for the greatest cutting capacity in a completely portable cutting system.
- Units feature adjustable output power, LED diagnostics, adjustable air regulator/dryer with pressure gauge, welding style earth clamp with UVIR cable and 13 ft. Nu-Tec® NPT 40 plasma torch with trigger guard.
- Compact cutting system @ 16.5 lbs.

PART NO.	DESCRIPTION
CWEPC380120	3/16" Genuine - 1/4" Severance

**SPECIFICATIONS**

Input Voltage: .....	120VAC@ 60 Hz
Input Current: .....	20 Amps
Air Supply (min.) .....	70 psi (4.8 bar)
Output Power: .....	15 Amps
Air Volume: .....	3.5 scfm (95 l/min.)

PART NO.	DESCRIPTION
CWEPC380240	5/16" Genuine - 3/8" Severance

**SPECIFICATIONS**

Input Voltage: .....	240VAC@ 60 Hz
Input Current: .....	20 Amps
Air Supply (min.) .....	70 psi (4.8 bar)
Output Power: .....	30 Amps
Air Volume: .....	3.5 scfm (95 l/min.)



**WARNING!**

Electric welding or plasma cutting cause ultra violet rays and weld spatter. Bystanders will be exposed to ultraviolet rays and weld spatter. Wear welding helmet with appropriate shade lens while using electric welders or plasma cutters. Do not allow bystanders while welding or cutting. Wear safety shield and protective clothing. Read and follow instruction manual.

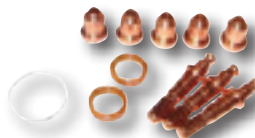
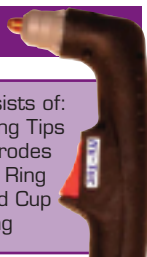
## Plasma Cutter Spare Parts Kits



- NT907N1179**  
NTCT 20 Amp Spare Parts Kit (New Style)
- NT907N1180**  
NTCT 30 Amp Spare Parts Kit (New Style)
- NT907N1181**  
NTCT 50 Amp Spare Parts Kit (New Style)

**NEW STYLE**

- Set consists of:
- (5) Cutting Tips
  - (3) Electrodes
  - (1) Swirl Ring
  - (1) Shield Cup
  - (1) O-Ring



- NT907N2030**  
NTCT230V Spare Parts Kit (Old Style)
- NT907N2040**  
NTCT55 Spare Parts Kit (Old Style)

**OLD STYLE**

- Set consists of:
- (5) Cutting Tips
  - (3) Electrodes
  - (2) Swirl Rings
  - (1) Safety Spring



Shop  
Equipment

## US5600HT

### Airless Plastic Welder

- Repair cracks and holes in virtually any type of plastic!
- Use on cars, motorcycles, airplanes, snowmobiles, boats, RVs, trucks, ATVs, lawn equipment, farm equipment, industrial equipment, and household goods.
- Repair "problem plastics" like TPO and Polypropylene with the revolutionary FiberFlex universal repair rod.
- Reinforce a repair by melting stainless steel reinforcing mesh directly into the plastic.
- Includes seven types of plastic welding rods for repairing virtually all automotive and agricultural plastics.
- Welding tip temperatures exceed 1000°F (538°C) for faster welding.
- Includes instructional DVD to learn how to do any type of plastic repair quickly and easily.

Kit Includes:



PART NO.	DESCRIPTION	QTY.	PART NO.	DESCRIPTION	QTY.
US2045W	Stainless Reinforcing Mesh	1	US5003R7	Polycarbonate Welding Rod	4 ft.
US5003R1	Polyurethane Welding Rod	15 ft.	US5003R10	FiberFlex Flat Repair Sticks	15 ft.
US5003R2	Polypropylene Welding Rod	15 ft.	US6007	Heating Element	1
US5003R3	ABS Welding Rod	15 ft.	US6027HT	Tube Welding Tip	1
US5003R4	Polyethylene Welding Rod	15 ft.	US6028RT	Round Welding Tip	1
US5003R5	TPO Welding Rod	15 ft.	US6124WB	Stainless Wire Brush	1
US5003R6	Nylon Welding Rod	15 ft.	DVD-01	Instructional DVD	1
			-	Welder Stand	

## CWEPW115

### Plasti-Weld System

- A complete plastic repair tool for the automotive professional.
- With 65 amps of output power, the technician can imbed the stainless steel staples in all types of plastics.
- Once the staple "stitch" has been completed, the legs of the staples are easily removed (breaking off below the repaired surface) with one simple twist due to their custom scored-wire design.
- Due to the clean leg removal, with no wire sticking up through the surface, the final repair step of re-flowing the plastic over the staples to secure them in place is easily accomplished with the Plasti-Weld melt knife blade attachment.
- Includes: 4-step power supply to 65-amps with 115-volt power cord, compact hand-held torch for tight spaces, 75 of the most popular stainless steel scored-leg staples, melt-knife attachment to reflow "set" staple and operator manual in a heavy-duty case with convenient staple storage bins.

CWEP50C Plasti-Weld Staple "C"  
 CWEP50S Plasti-Weld Staple "S"  
 CWEP50Z Plasti-Weld Staple "Z"



## ECPRK6

### Hot Stapler

- Three (3) heat settings for different plastics.
- Three (3) different staple types included.
- Staples can be re-profiled for easy access to tight and hard to reach areas.
- Finished repair is strong and flexible.
- Great for repairing broken locator pins, door panel clips, and tabs.
- Expensive plastic parts can be saved.

ECPU6 6MM U Shape Staple  
 ECPUB 8MM U Shape Staple  
 ECPV8 8MM V Shape Staple



## UWKR350

### Medium Duty Oxyacetylene Outfit

- Dependable V-Style Outfit with RUH series regulators, WH350 torch handle and CA350 cutting attachment.
- Outfit includes 1 cutting tip and 1 welding tip, 20 ft. twin hose, goggles, and flint lighter.



## PWPPMTKIT01

### Micro Torch Kit

- Use for light brazing, soldering, etc.
- Features an electronic ignition and flame adjustment from 1/2" to 2-1/2".
- Easily refillable with butane and will last up to 2 hours between refills.
- Maximum temperature up to 2500°F (when used as a torch).
- Comes complete with: PWPPMT Micro Torch and base, heat injection tip, hot knife, soldering tip, heat shield for shrink tubing, one tube of rosin core solder, and blow molded case with organizer.

PWPPMT Micro Torch



## PWPPSK

### Power Probe Soldering Kit

- Easy start electronic ignition.
- Butane powered - no cored or batteries.
- 120W, 500 BTU.
- Kit includes the following in a case: soldering tool, 3 soldering tips, 1 heat injection tip, 1 hot knife tip, 1 heat shield, 1 tube of rosin core solder.



## WCLG400C

### Soldering Gun

- 150-400 Watts, 120 volt heavy duty soldering gun for rugged use.
- Features a dual heating element that heats tip quickly and maintains high tip temperature during use.
- Trigger control provides instant response and power savings.
- Balanced pistol-grip and built-in probe light make work easier.
- Comes with 1/4" diameter pyramid tip.
- Maximum tip temperature: 1000°F.
- Length: 9-1/4".
- Weight: 15 oz.

WCLG400TE 1/4" Tip and Element assembly



## IIIMD700

### Mini-Ductor II™ Kit

- Portable 1000 watt, 110V hand held induction heater for the flameless heating of fasteners and hardware.
- Electromagnetic field induces an electrical current within the work piece that generates heat.
- Stop causing collateral damage with a torch.
- Use on old rust, frozen or threadlock compound nuts.
- Instantly heat nuts red hot.
- The heating of nuts and fasteners allows the part to expand and break the rust or threadlock compound bond so it can spin right off.
- Can also be used to remove vinyl graphics, body side moldings, name plates/emblems and stress relieve dents for ease of repair.

Kit includes: Mini Ductor II™ power supply, IIIMD99601 Preformed coil, IIIMD99602 U-form coil, IIIMD99603 Bearing Buddy coil, Instruction manual, warranty card, and carrying case with custom foam inserts.



- IIIMD99601 Nutz Off Coil
- IIIMD99602 U-Form Coil
- IIIMD99603 Bearing Buddy Coil
- IIIMD99604 Mini Pad
- IIIMD99650 Coil Kit

## SNR37246NG

### Welding Blanket

- Protects interiors, glass, and other areas from damage caused by nearby welding and grinding.
- Made of heat-cleaned fiberglass for economical, high temperature protection. Material is very pliable.
- Takes temperatures up to 1,000° F.
- Provides light to moderate splash protection.
- Size: 4 ft. x 6 ft.
- Weight: 18 oz.
- Tan in color.



## SNR31646

### Velvet Shield® Welding Blanket

- Velvet Shield® welding blanket is made with a carbon fiber fabric that was developed from NASA technologies and is extremely fire and heat resistant.
- Versatile 48" x 72" blanket is soft and lightweight, providing incredible ease-of-use.
- Provides protection from direct contact with weld splatter.
- Tough, tear-resistant material.
- Easy to clean — just shake, vacuum or blow metal particles out.
- Withstands temperatures up to 3000°F.
- ASTM E84-97a scores: Flame Spread Index = 7; Smoke Index = 4
- Meets and exceeds all standards of NFPA 701 (standard method of fire tests for flame resistant textiles and films\*).

\*As tested by ITS. Copies available upon request.



## SM23230

### Plugweld Pliers

- Unique copper alloy backing plate will not stick to welds.
- Clamp panels at the precise spot and still allow for welding.
- Copper alloy pad prevents burn through, allows higher welding temperature and better penetration.
- Copper alloy swivel pad is replaceable.



### Welding Tip Cleaners



- Each set consists of 13 cleaners with file in sizes #6 through #26 for cleaning Drill Size 77-49.

PART NO.	DESCRIPTION
VI14230016	Standard length
VI03870487	Jumbo set, extra long

## VI14230026

### Round File Spark Lighter

- Single Flint Spark Lighter.



VI14230032 Spark Lighter Flints for Single Flint Lighter (5)

## VI14230050

### Triple Flint Striker

- Triple Flint Spark Lighter



VI14230052 Triple Flint Replacement (2)

## RF7121100

### RapidFix™ Dual Adhesive System

- Incorporates an instant adhesive and a welding powder, providing a combination that instantly repairs almost anything!
- The professional adhesive bonds most materials instantly, such as rubber, glass, copper, aluminum, steel and most plastics.
- The welding powder is used to repair all types of holes, cracks, gaps and can produce a strong weld seam to support the repair, just like solder or welded joints.
- The dual adhesive system has a wide range of applications and can bond almost any material to itself or to another material.
- High strength, bonds in seconds.
- Will not dry out in the container.
- Instantly drilled, sanded, and painted.
- Dries crystal clear.
- Convenient, non-clog, nozzles allow for pin-point application of adhesive and welding powder.
- Adhesive activates by pressing parts together, removing the air, and creating the bond; wipe away any excess adhesive with a paper towel.
- Provides instant repairs for: Rubber (Emergency repairs to plumbing, seals and hoses; super-strong bonds quickly and easily), Wood (Repair furniture, doors, anything; dries instantly- apply, then fill, drill, tap, sand and paint), Plastics (repair breaks, splits and holes; adhesive dries clear; fix appliances, toys, sunglasses), Ceramic and glass (invisible repairs to ceramics, ornaments, and tiles), Metal (bond and fill copper, steel and aluminum; no need for soldering; no heat required), Fiberglass (boats, surfboards, etc.), and Hobbies (sports equipment, bikes, fishing, model-making).

RF7121101 RapidFix® Counter Display



## Black Welding Jackets

- Protection for the serious welder.
- 9 oz. black 100% cotton sateen fabric is processed and treated to be permanently flame resistant.
- Maintains flame resistance for as many as 50 home washings or 25 commercial washings, without taking away from its natural lightweight, comfortable characteristics.
- Anti-static, rot and mildew resistant.
- Cooler, lighter, economical solution for light exposure to sparks and spatter.
- Adjustable stand-up mandarin style collar.
- Scribe and pencil/marker pockets.
- Anodized non-reflective snaps.
- Snap front closure with leather reinforced snaps.
- Relaxed full cut fit with elongated front.
- Adjustable snap cuffs.
- Large inside pocket.



PART NO.	SIZE	PART NO.	SIZE
SNR11602	L	SNR11604	2XL
SNR11603	XL		

## SNRKKSPS Welding Beanie

- 100% cotton center and side panels.
- Elastic gathered back.
- One size fits most.



## SNR0229L Goatskin TIG Welding Gloves

- This grained leather glove combines a good sense of touch and durability.
- Goatskin contains natural oils that help keep gloves soft and comfortable.
- Sewn in a gun cut pattern with a straight thumb and seamless index finger.
- Gloves have a 3" pigskin cuff.
- Unlined for maximum feel.
- Size: Large.



## SNR2519Y Welding Gloves, Blue

- Combines comfort and protection at an economical price.
- Full cotton lining with foam back.
- Made from select split cowhide - fully welted to protect the seams.
- One piece back - sewn in a gun-cut pattern with a wing thumb.
- Thumb strap increases durability at key wear point.
- Sewn with Kevlar thread.
- Cornwell Blue with Cornwell Ironman Logo.



## MIG/Stick Welding Gloves

- Grain pigskin back.
- Reversed grain pigskin palm for better grip.
- Foam insulated back and cotton lined palm.
- Kevlar® sewn.
- Fully welted.
- Reinforced thumb strap.
- 5" cuff.

PART NO.	SIZE
SNRP760L	L
SNRP760X	XL



## DEV192218

### Scrubs® Hand Cleaner Towels

- Scrubs® are a premoistened hand cleaner towel that goes wherever you go!
- No water needed.
- One-step cleaning process!
- Deep-cleaning scrubbers remove paint and embedded soil easily.
- Will not re-transfer paint and soil back to hands.
- Residue free.
- Silicone free.
- Bucket of 72.



## SSC30362

### Hand Cleaner

- Extra Heavy Duty cleaning of grease, oil, ink, and carbon black.
- Contains all natural, biodegradable walnut shell scrubbers.
- Very good skin compatibility, gentle to the skin.
- Four 1/2 gallon bottles per case.
- Controlled dispensing.
- No dispenser needed.



## SSC33989

### Kresto® Valu-Pak

- Includes one Kresto® Cleaner 2000ml Softbottle and SSC59808 Black Dispenser.

SSC34874 Kresto® Cleaner (2/pk)



## SSC34874

### Kresto® Cleaner

- For extra heavy cleaning of grease, oil, ink and carbon black.
- Contains all-natural, biodegradable walnut shell scrubbers to remove even ground-in dirt.
- Low solvent content, good skin compatibility.
- 2000ml Softbottle.
- 2 per package.



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### PRODUCT

*Cornwell reserves the right to discontinue or make changes in design and construction, of any and all products listed in this catalog without incurring any obligation to make such changes in products previously sold or transferred.*

### SAFETY

*Cornwell encourages safety...Warnings are used throughout this catalog as a convenience to our customers only. For specific tool use precautions, refer to the manufacturers instructions when provided.*

### WARNING

*Cornwell can not be responsible for damage or injury caused by tools which have been badly worn, abused, improperly repaired, improperly used or altered in any way.*

**Information contained herein supersedes that of any previous  
Cornwell® Quality Tools Catalog.**





Warnings are used throughout this catalog as general tool safety guidelines. Specific safety precautions furnished by individual manufacturers for specific tool use should always be followed!

**GENERAL SAFETY PRECAUTIONS**

Use approved eye protection when using tools.  
 Always use the right tool for the job.  
 Always use tools correctly.  
 Always discard damaged tools.  
 For longer tool life and safe operation, clean and lubricate tools periodically.  
 Wear safety goggles while using power tools.  
 Wear safety goggles while working with pressurized systems.  
 Read operating instructions thoroughly on tools and equipment before use.

**AIR CONDITIONING/COOLING SYSTEMS**

It is important to note that R-12 and R-134a refrigerants can not be mixed, because the PAG oil in R-134a is not compatible with R-12.  
 This has required the automotive industry to use special fittings to prevent cross-contamination between the two types of systems, or in some cases, dedicated service equipment for each refrigerant. Please use extreme caution when servicing air conditioning systems for proper refrigerant use.  
 Wear safety goggles, shield and protective clothing when working with refrigerant equipment and systems.

**AIR COMPRESSORS**

Do not use air from compressor as a breathing supply.  
 Relieve pressure before servicing.  
 Do not modify/repair/rework pressure vessel or change safety relief pressure setting.  
 Do not use without all guards in place.  
 High voltage will create an electrical shock; disconnect all power before servicing.

**AIR TOOLS**

Use only impact sockets and accessories.  
 Only use air tools for their intended purposes and applications.  
 Wear hearing protection.  
 Do not use grinding wheels, sanding discs or accessories above their maximum rated RPM.  
 Do not operate cutting tools without guard.  
 Use safety guard with die grinders.  
 Couplers and nipples are intended for use on compressed air lines only.  
 Avoid prolonged exposure to vibration.  
 Always follow proper maintenance procedures.  
 Use proper accessories with adequate speed ratings and correct air pressure.  
 Disconnect power tools before changing chuck or bits.

**BATTERY SERVICE**

Wear safety goggles when using electrical equipment and batteries.  
 Charger must be off when connecting or disconnecting leads.  
 Keep flames and sparks away from batteries.

**BODY SERVICE**

Do not use eyebolt of the G-clamps for pulling.  
 Use frame holes only.  
 Do not use chipped, mushroomed or cracked hammers.  
 Strike squarely and avoid glancing blows.  
 Use only for striking sheet metal; do not strike hard surfaces.  
 Do not strike dolly block with a hammer or use as a hammer.  
 Dolly block can chip; flying chips can cause injury.  
 Riveting and nut setting tools can cause flying chips.

**BRAKE SERVICE**

Read operating instructions and Material Safety Data sheets thoroughly.  
 Never pour other chemicals or substances into the brake washer.  
 Never use brake washers as a catchall for disposing of chemicals or solvents.  
 Always wet the shoes and inside of the drum thoroughly before removing or striking the drum with a hammer.  
 Always maintain the minimum requirement of solution in the tank.  
 Never use the brush to clean brakes which will not be replaced since the brush may have grease or oil on it. Use the injector nozzle for washing brakes during brake inspection.

**DIAGNOSTIC**

Working with batteries can be hazardous.  
 Sparks can occur when connecting or disconnecting leads.  
 Keep flames and sparks away from batteries.  
 Grounding prong on electrical accessories should never be bypassed so as to engage the plug in a non-grounding type receptacle, as doing so could result in electrical shock. Read all instructions thoroughly before using testers and equipment.

**ENGINE EQUIPMENT**

Use only in well ventilated areas.  
 Do not expose gasoline, solvents, etc. to flames, sparks or other sources of ignition.  
 Pressurized systems can leak.  
 Flammable liquid and fumes can ignite.  
 Read all instructions thoroughly before using testers and equipment.  
 Use extreme caution when using engine stands/lifting equipment to prevent tipping.  
 Comply with warning labels for safe and proper use.  
 Wear protective clothing when working with pressurized systems.

**EXTRACTORS**

Drilling pilot holes, inserting extractors and using extractors can cause flying chips.  
 Extractors can break if overloaded.

**HAMMERS**

Do not use COMPOTHANE® or urethane hammers near liquid oxygen.  
 Do not use chipped, mushroomed or cracked hammers.

**HAND TOOLS**

Do not use chrome or industrial finish hand tools with power drivers.  
 Use only impact sockets and accessories with impact wrenches.  
 Use only power sockets and accessories with power wrenches.

**HANDLES AND ATTACHMENTS**

Plastic handles are not insulators.  
 Do not use on live electrical circuits.

**HONES**

Operate only while hone is within cylinder.  
 Flex-Hones® shall be securely held in a collet, chuck or similar holding device.  
 Secure unit being honed and position all guards before starting tool.  
 Tool length should be no longer than necessary to perform work.

**IMPACT SOCKETS**

For use with impact tools - use with impact wrenches and torque control tools according to their designed size and strength.  
 Do not hold a spinning socket or accessory.

**KNIVES**

Wear safety gloves to protect hands against sharp edges.



Warnings are used throughout this catalog as general tool safety guidelines. Specific safety precautions furnished by individual manufacturers for specific tool use should always be followed!

## LIFTING EQUIPMENT

Use extreme caution when using engine stands/lifting equipment to prevent tipping.  
Comply with warning labels for safe and proper use.  
Position jack properly before lifting vehicle.  
Use jacks only on hard, strong and level surfaces.  
Use jack stands in pairs.  
Do not exceed rated capacity of jack or jack stand.

## LIGHTING

Electrical shock can result from absence of grounding prong.  
Do not remove or bypass the grounding prong in any electrical plug.

## OIL AND LUBE

Crush oil filters only, one at a time.  
Do not crush fuel filters.

## PARTS WASHERS

Do not use washer without fusible link or safety valve intact.  
Do not expose solvent to flames, sparks or other sources of ignition.  
Do not direct air or fluid stream at body.  
Use in well ventilated area.

## PLIERS

Vinyl or plastic plier handles do not protect from electrical shock.  
Vinyl plier handle covers are not intended to act as insulators.

## PULLERS

Puller parts under stress can break.  
Do not heat jaws of pullers which can change jaw strength.  
Do not overload pullers.  
Use the proper size for the proper task.  
Use multiple jaw pullers whenever possible.  
Always be sure the center screw threads are clean and well lubricated.  
Always be sure the puller is seated properly and not cocked at an angle.  
Always be sure of hand positions when using slide hammer pullers.  
Protect bystanders and yourself by screening puller operations.  
Never use any puller with worn or damaged parts.  
Frequently inspect all tools for wear.  
Make sure all pullers are mounted straight and properly seated.  
Do not use an axle nut or spanner socket with impact drivers.

## PUNCHES AND CHISELS

Punches and Chisels can break or chip when struck due to improper grinding or dressing.  
Don't allow striking end to become badly mushroomed.  
Dull edges and mushroomed ends should be redressed with a hand file.

## RATCHETS

Worn and dirty ratchet mechanism can cause slippage and breaking.  
For longer life, clean and lubricate.  
Replace worn parts with authorized repair kits.

## SANDBLASTING

Do not operate sand blast equipment without filters or with doors/covers open.  
Only use appropriate sand blasting media, consult equipment guide for proper media.  
Do not direct air or fluid stream at body.  
Use in well ventilated area.

## SCREWDRIVERS

Do not use a screwdriver as a pry bar, chisel or punch.  
Nutdriver and screwdriver handles are not intended to act as insulation and do not protect from electrical shock.

## SPECIAL SOCKETS

Black power sockets are designed for use with power nut runners.  
Do not use with impact tools.  
Do not hold a spinning flexible socket or swivel joint during use.

## RETHREADING TOOLS

Threading and rethreading tools can cause flying chips which can cause eye injury.  
Discard tool immediately if any chipping or cracking has occurred.

## TIRE AND WHEEL

Make sure all pullers are mounted straight and properly seated.  
Do not use an axle nut or spanner socket with impact drivers.  
Clean the gripping surfaces of sockets and locks.

## TOOL BOXES

Storage units can tip during loaded conditions.  
Do not open more than one drawer at a time.  
Do not use drawers as a step ladder.  
Close lid and lock all drawer and doors before moving.  
Lock all casters to prevent rolling.

## WELDING

Wear welding helmet with appropriate shade lens while using electric welders or plasma cutters.

## WRENCHES

Over-torquing with wrenches leads to failure and possible injury.  
Select a wrench whose opening exactly fits the nut.  
Too large an opening can spread the jaws of an open-end wrench and batter the points of a box or socket wrench.  
Care should be exercised in selecting fractional wrenches for fractional fasteners and metric wrenches for metric fasteners.  
Excessive force can cause wrench breakage or slippage.  
If possible, always pull on a wrench handle and adjust your stance to prevent a fall.

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