



Tools.

AUTOMOTIVE SPECIALTY TOOLS

KD TOOLS

2010 AUTOMOTIVE SPECIALTY TOOLS CATALOG





Introduction

Since our 1919 beginning, KD tools has been driven by innovation. From our first specialty tool, the Model-T valve spring lifter, to our latest Ratcheting Puller, we've built our reputation with tools that make tough jobs easy.

In this latest editions of the KD Automotive Specialty Tool catalog you'll also find most of our products have been upgraded with new improved features like new dual material handles designed for a more comfortable grip or dual dipped handles on pliers providing more cushion for your hands.

KD Tools are proudly made with the finest components under the most stringent manufacturing guidelines.

Made for everyday use – guaranteed for life.

Better tools mean easier, more efficient work so we constantly evaluate automotive engineering trends allowing us to consistently improve and enhance our tools to better fit professional hands. That's why they are the first choice for thousands of automotive technicians worldwide.



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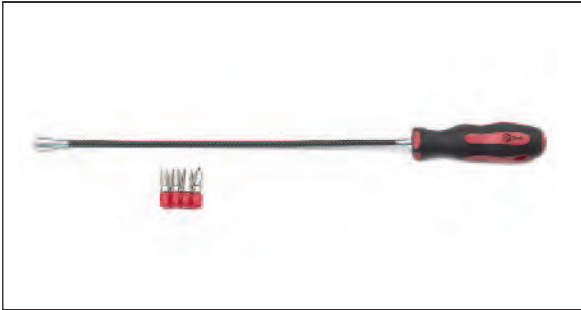




External / Internal Engine Tools



External Engine - Fuel Tools



GM Carburetor Adjusting Tool - 2776

For adjusting Idle/mixture screws on GM and Chrysler Carburetors. Heavy-duty flexible shaft for easy access. Tool is zinc plated to resist rust.

NOTE: Be sure fluted end of filter matches wrench. Four adapters conveniently store in the comfortable handle.

Adapters:

- o Double "D" for GM, '79 through present
- o 4.5mm Hex for '78 and '79 GM
- o 1/4" Hex for pre-'78 GM
- o 3/32" Hex for '78 through present Chrysler, 1.7L-2.2L engines



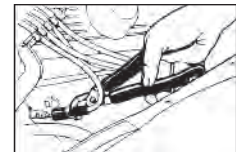
Ford 7.3-L Fuel Cap Tool - 3526

Design allows for easy removal and installation of Ford 7.3L Diesel fuel caps and other Diesel filter systems using the same configuration. Works with fuel caps from 1995 to present. Improves ability to remove and install caps where access is a problem. Patented.



Spark Plug Terminal Pliers - 135

Safely remove spark plug cables and prevent cable damage. Pliers' handles and jaws are coated with a heavy-duty plastic for a sure grip.



Spark Plug Boot Puller - 2568

Use this nonconductive tool to safely remove spark plug boots with the engine running. A flexible shaft makes it easy to reach the spark plug boot. Tool helps you avoid engine burns.



External Engine - Ignition, Battery, Electrical

3/8" Drive 6-Point Spark Plug Sockets

Extra-deep serration sockets with cushion-grip lining hold spark plugs.

Item No.	Size, in.	Length, in.	Weight, oz.
52 1820	5/8	2-5/8	3
52 1844	3/4	2-1/2	4
52 1826	13/16	2-3/4	5



1/2" Drive 6-Point Spark Plug Sockets

Full-depth sockets with cushion-grip lining firmly grip spark plugs for easy installation or removal.

Item No.	Size, in.	Length, in.	Weight, oz.
53 1820	5/8	2-3/4	4
53 1826	13/16	2-3/4	4



Magnetic Swivel Spark Plug Sockets

Magnetic swivel design for easy installation or removal of spark plugs.

Item No.	Size, in.	Length, in.
3927	5/8	4
3928	5/8	6
3929	5/8	11
3930	13/16	6
3931	9/16	2.5
3938	9/16	6



3 Pc. Magnetic Swivel Spark Plug Kit - 41740

Long reach 5/8" "magnetic" swivel spark plug socket set. Lengths of 4", 6", and 11".

Item No.	Description
3927	4 inch 5/8" Magnetic Swivel Spark Plug Socket
3928	6 inch 5/8" Magnetic Swivel Spark Plug Socket
3929	11 inch 5/8" Magnetic Swivel Spark Plug Socket



3 Pc. Magnetic Spark Plug Kit - 41730

This kit contains long reach "magnetic" swivel spark plug sockets. Covers sizes 5/8", 13/16", and the new 9/16" on Ford Triton Engines.

Item No.	Description
3928	6 inch 5/8" Swivel Magnetic Spark Plug Socket
3930	6 inch 13/16" Swivel Magnetic Spark Plug Socket
3931	2.5 inch 9/16" Magnetic Spark Plug Socket



External Engine - Ignition, Battery, Electrical



3 Pc. Exhaust Manifold Socket Kit - 3963

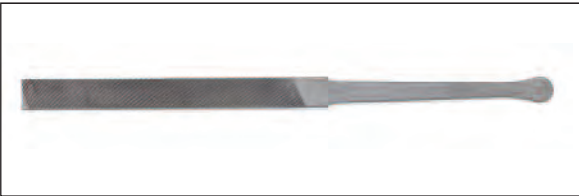


• Features

- Patented cone shaped socket helps to keep springs in place while working the nut down over the stud.
- Includes sizes 12-13mm, 14-15mm, 18mm) commonly found on GM engines.

Works on exhaust manifolds or other applications where a spring needs to be compressed during installation of nut.

Item No.	Description
3964	12-13mm Exhaust Manifold Socket
3965	14-15mm Exhaust Manifold Socket
3966	18mm Exhaust Manifold Socket



Ignition File - 2153

Use tool to file ignition points and other small objects. The thin blade has a fine grid on both sides and is ideal for removing carbon from points.



5.5mm Ford Distributor Module Socket - 3197

Easily remove and replace mounting screws on Ford ignition modules that are attached to the distributor. The module can be replaced without removing the distributor. Use it with 1/2" open or box wrench or 1/4" square drive 1/2" socket. The socket is plated for corrosion resistance.

▲ Caution: For intended use only.



Ford Module Wrench - 3410

Use wrench to remove and install Ford ignition modules without removing or moving distributor. Dual-ended ratchet wrench features both 7/32" (5.5mm) and T-20 Torx® for most Ford applications. Wrench is designed with 25° offset to fit in confined areas.



Distributor Clamp Wrench - 104

Reach around obstructions to turn the distributor lock nut with this double-ended wrench. It fits 1/2 and 9/16" lock nuts. Use an adapter to join wrenches or attach the wrench to a 3/8" ratchet or extension.

- Replacement part: 104-73 Coupler



External Engine - Ignition, Battery, Electrical

Calibrated Ignition Testers

Accurately check for spark in ignition systems without removing spark plug from engine. Testers verify that energy is sufficient for spark plug to fire. Attach spark plug wire to tester end. Clamp tester to engine as ground. Crank engine and check for spark.



Item No. Description

2756	HEI Ignition Tester is Calibrated for High-Energy Systems
2757	Standard Ignition Tester is Calibrated for Standard Ignition Systems

Battery Nut Pliers - 203

Easily loosen and tighten nuts on battery terminal clamps. The handles are offset for working in cramped areas and serrated jaws are designed for a firm grip.



Side Terminal Battery Wrench - 3367

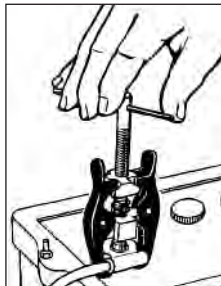
Use wrench for most GM side terminal batteries or any 5/16" battery terminal bolts. It has an insulated handle to reduce risk of electrical shock and reversible 5/16" ratcheting box wrench. Tool is nickel plated for durability and corrosion resistance.



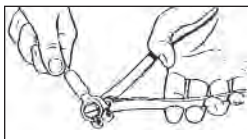
▲ Caution: Do not use with engine running.

Battery Terminal Puller - 202

Use puller to remove the battery terminal clamp without damaging the battery post. Puller will even work on corroded spring-type clamps. To use, loosen the clamp bolt, place jaws under each side of the battery cable clamp and tighten the center screw until the clamp is free.



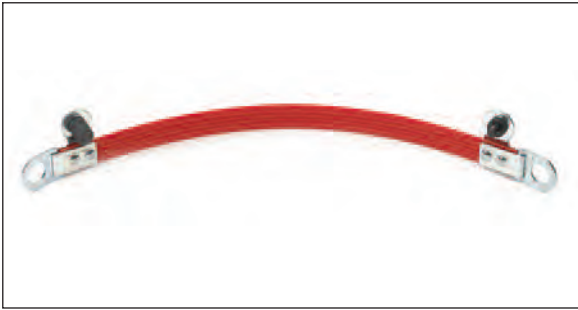
Battery Terminal Spreader and Cleaner - 204



Clean and spread battery cable terminals with this plier-type tool. Sharp teeth effectively clean corrosion from the clamp. Squeeze the handle to spread the clamp.

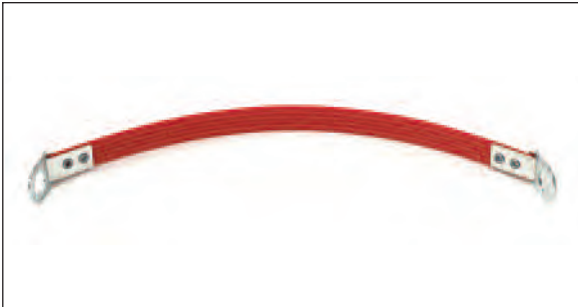


External Engine - Ignition, Battery, Electrical



Battery Carrying Strap - 2279

Carry top and side-mounted terminal batteries with this strong, plastic strap. The ends are marked and sized to accurately fit positive and negative terminals. Battery acid does not harm the strap. It can also be used as a charging adapter on side-mounted terminal batteries. Length: 14".



Battery Carrying Strap - 205

Carry top-terminal batteries with this strong, plastic strap. The ends are marked and sized to accurately fit positive and negative terminals. The strap is not harmed by battery acid. Length: 14"



Battery Brush - 201

Removes corrosion and dirt from battery terminals and cable clamps. High-impact, plastic case will not corrode or soften brush in cleaning solutions. The external brush cleans cable clamps, and the internal brush cleans terminal posts. Plastic case.



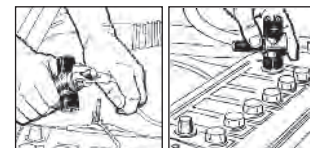
Battery Brush - 206

Use this durable metal brush to remove corrosion and dirt from battery terminals and cable clamps. Rugged steel case has a long life. The external brush cleans cable clamps and the internal brush cleans terminal posts. Metal case.



3-Way Battery Tool - 2173

Sharp steel blades on this tool remove corrosion and put a correct angle on terminal clamps and posts. Use the 6-blade, tapered reamer to quickly clean terminal clamps. Post cleaners are marked positive and negative, and are sized to accurately fit terminal posts and cut the correct angle. Proper cleaning of terminals and posts ensures perfect contact.



Remote Control Starter Switch - 124

Use to bypass the ignition switch on any engine with a solenoid starter switch. The switch lets you crank the engine while working in the engine compartment. Switch is made of heavy-duty construction and has 32"-long leads. To use, connect from the positive battery terminal to the energizing terminal of solenoid. Use the switch for generator, starter, electrical, fuel pump and compression tests and for setting ignition points and adjusting tappets. 6 and 12 Volt use only. Wire rated capacity 8 amp.

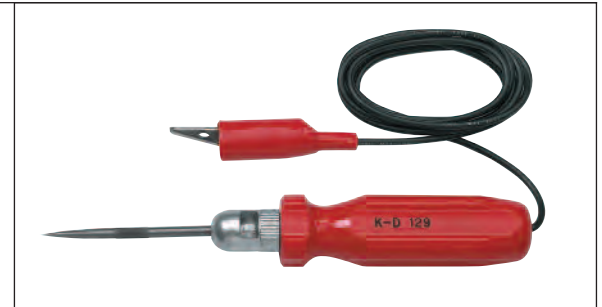


▲ Caution: Care should be taken to keep away from hot or rotating components.

Low-Voltage Circuit Tester - 129

Test for voltage in 6 and 12V systems by grounding the clip and touching the probe to the point being tested. The tester bulb will light if power is present.

- Replacement part: 126-75 GE 1449 Bulb



High-Low Voltage Tester - 126

Check 6 and 12V circuits for voltage and spark plugs for spark. To use, ground the clip and touch the probe to the point being tested. The tester bulb will light if voltage is present. To use as a spark tester, screw the probe into the opposite end of the handle.



- Replacement part: 126-75 GE 1449 Bulb
- Replacement part: 126-78 Neon Bulb



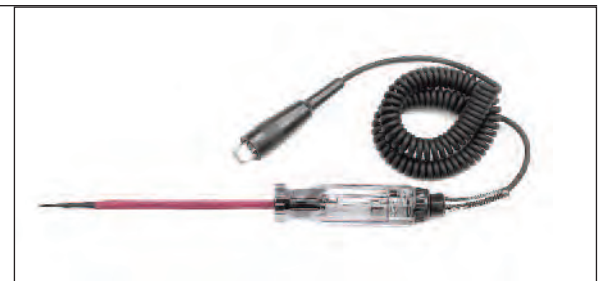
Extra Long, Heavy Duty Circuit Tester with Auto Piercing Probe- 3983



6, 12, 24 Volt Circuit Tester - 3984

Item No. Description

398401	Replacement Bulb (GE 1889)
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External Engine - Ignition, Battery, Electrical



Low-Voltage Circuit Tester - 2646

Circuit tester for 6 and 12V electrical systems is ideal for the home mechanic. It quickly checks headlight, taillight and turn signal circuits, faulty sockets, connections, fuses and broken wires. Tester comes in a tough, durable shock-resistant case. Includes 12V bulb and 36" cable. Uses bulb #1893.



Circuit Continuity Tester - 2647

Designed for the home mechanic, this tool safely tests circuits with power off. Ideal for testing fuses, grounds, shorts, contacts, diodes and open circuits. Includes 36" cable. One AA battery required (not included). Uses bulb #112 Screw-in Design.



Circuit and Spark Plug Tester - 2649

Checks 6 and 12V circuits for voltage and checks spark plug for spark. Place probe in end with regular bulb to check low voltage. Checks headlights, taillights, turn signals and other circuits. Tests for faulty sockets, connections and broken wires. Place probe in end with neon bulb to check for spark voltage. Tester comes in a shock-proof case. Includes 36" cable. Uses bulb #1893.



Current Indicator - 2423

Measures alternator and starter DC current in 6, 12 and 24V systems. Indicates direction of current flow without breaking into lines. Starter current scale: 600-0-600. Alternator current scale: 75-0-75. Place meter on wire. Crank engine to check starter current. Run engine to check alternator current.



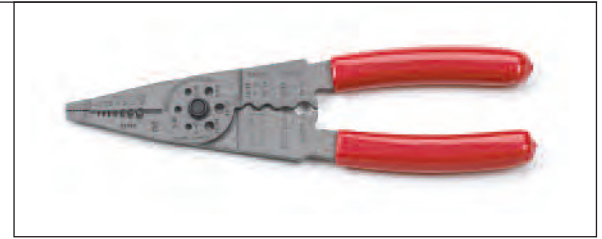
Short Circuit Detector - 2524

Locates short circuits in 6 and 12V systems right through upholstery, body panels and metal door posts. Connect tester across burned out fuse. Move meter along wire routing. Meter needle will oscillate until short is found.

External Engine - Ignition, Battery, Electrical

Electrical Wire Stripper and Crimper - 2162

This all-purpose electrical tool includes a pliers-type nose, crimper, wire cutter, stripper and bolt cutter. The nose has a serrated jaw to pull, loop and twist wire. The crimper works on 7 and 8mm noninsulated terminals and electrical 22-20 to 22-10 insulated terminals. Wire cutters and strippers at the front strip have wire sizes 22-20 and 22-10. The bolt cutter works on bolt sizes 4-40, 5-40, 6-32, 8-32, 10-32 and 10-24. The tool features comfortable cushion-grip handles.



3 Pc. Mini Cutter, Stripper, and Crimper Kit - 3794

Mini Cutter, stripper, and crimper in handy reusable vinyl pouch. Everything you need for easy and stable cutting, stripping and crimping in tight places.

Item No.	Description
3794-71	12-13mm Exhaust Manifold Socket
3794-72	14-15mm Exhaust Manifold Socket
3794-73	18mm Exhaust Manifold Socket



Oil Pressure and Stoplight Switch Socket - 2569

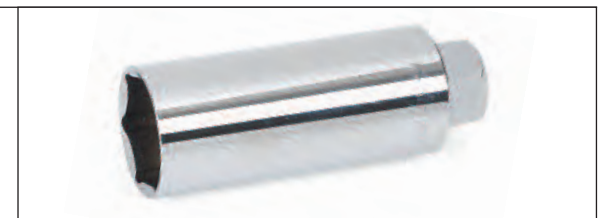
Removes oil pressure sending unit on most engines. Socket has a 1" and 1-1/16" hex opening plus recess to accommodate switch. Socket also fits some brake-light switches. Turn with a 15/16" wrench, or a 3/8" Square Drive Tool. Length: 3".



▲ Caution: Do not use with engine running. Do not use with power tools. For intended use only.

Oil Pressure Sending Unit Socket - 3272

Use to remove and replace oil pressure sending units on 1987 through current GM engines with dash gauges including 2.0, 2.3, 2.5, 2.8 and 3.0 L used in Chevy, Buick, Olds, Pontiac and Cadillac cars. Hex opening is 1-3/16". Turn with 1/2" square drive tools or 15/16" wrench. Length: 3-1/4".



▲ Caution: Do not use with engine running. Do not use with power tools. For intended use only.

Oil Pressure Sending Unit Socket - 3458

Use to remove and install oil pressure switches that require a socket with a 1-1/16" hex and that are 2-3/4" deep. Tool can be used with a 3/8" square drive tool or 15/16" wrench. Overall length is 3-1/4".



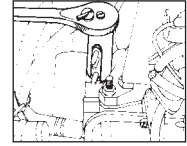
▲ Caution: Do not use with engine running. Do not use with power tools. For intended use only.

External Engine - Ignition, Battery, Electrical



Universal Vacuum PVS, TVS Valve and Oxygen Sensor Socket - 3259

Specially designed socket is for removal and replacement of vacuum switches with a 7/8" hex currently found on Ford, GM, Chrysler and some import vehicles. Also used to remove and replace some oxygen sensors. Use with a 1/2" square drive tool or 7/8" wrench. Socket depth: 3 1/8".



▲ Caution: Do not use with engine running. Do not use with power tools. For intended use only.



Hand-Held Tachometer - 2967

Tachometer checks diesels, pumps, compressors, power take-offs and farm and construction equipment revolution speed. Tool is ideal where electric tachometer cannot be used. To use, hold rubber tip against end of rotating shaft and read revolutions per minute directly from dial. Range is 100 to 4000 rpm (clockwise or counterclockwise). Length: 4-1/4". Diameter: 2-3/4".

- Replacement part: 2967-70 Pointed Rubber Tip
- Replacement part: 2967-71 Flat Rubber Tip
- Replacement part: 2967-72 12" Extension Shaft



8 Pc. Master Sensor Socket Kit - 41720

Designed for the removal and installation of oxygen sensors, oil pressure sending units, and vacuum switches.

Item No.	Description
3919	1-3/16" (29mm) 1/2" Dr. Oil Sensor Socket
3920	7/8" (22mm) Slotted 3/8" Dr. PVS, TVS & O2 Skt
3921	1-1/16" (27mm) 1/2" Dr. GM Thermal Sensor Switch Skt
3922	7/8" (22mm) Oxygen Sensor Socket
3923	1-1/16" Oil Pressure Sending Unit Skt. 3/8" Dr.
3924	7/8" (22mm) Oxygen Sensor Socket
3925	7/8" (22mm) Low Profile Offset Oxygen Sensor Skt
3926	1-1/16" Short access socket 3/8" Dr.



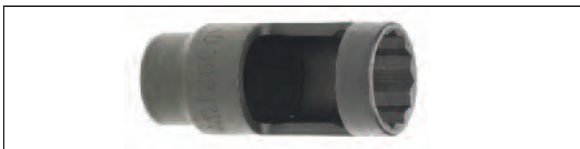
1-3/16" (29mm) 1/2" Drive Oil Sender Socket - 3919

Fits 1-3/16" oil pressure sending units found on late-80's and mid-90's GM vehicles. (90mm Long).



7/8" (22mm) Slotted 3/8" Drive PVS, TVS and O2 Socket - 3920

Removes and installs vacuum switches with a 7/8" hex. Also fits some oxygen sensors (90mm Long).



1-1/16" (27mm) 1/2" Drive GM Thermal Sensor Switch Socket - 3921

Remove and install 1973-1977 GM thermal sensor switch. Also fits some oil pressure sending units. (85mm Long).

External Engine - Ignition, Battery, Electrical

7/8" (22mm) Oxygen Sensor Socket - 3922

Removes and installs oxygen sensors in most domestic and some imported vehicles. Slotted socket allows for wire clearance. (80mm Long).



1-1/16" Oil Pressure Sending Unit Socket 3/8" Drive - 3923

Deep well allows for up to 2-5/8" clearance (74mm Long). Works on most 1991 - Current GM vehicles using oil pressure gauge: 4 cylinder & 3.1 liter V6; 1987 - Current Chrysler vehicles with light and gauge oil pressure switches.



7/8" (22mm) Oxygen Sensor Socket - 3924

Offset end has double Hex 1/2" drive for access (50mm Long).



7/8" (22mm) Low Profile Offset Oxygen Sensor Socket - 3925

Removes and installs oxygen sensors in most domestic and some imported vehicles. (30mm Long).



1-1/16" Short Access Socket 3/8 Drive - 3926

For access to some Chrysler vehicles (54mm Long).



GearWrench®

5 Pc. Tap and Die Drive Tool Set - 3880

Item No.	Description
3881	Tap and Die Ratcheting "T" Wrench
3882	Small Tap Adapter
3883	Medium Tap Adapter
3884	Die Adapter
-	Sliding "T" for adapters

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:

A) 686759 F) 6629477

B) 7231851 G) 6711973

C) 6918323 H) 7311019

D) 7131353 I) 5533427

E) 7185566



GearWrench®

Tap and Die Ratcheting "T" Wrench - 3881

- Vortex™ Drive
- Reversible
- Comfort shape grips

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:

A) 686759 F) 6629477

B) 7231851 G) 6711973

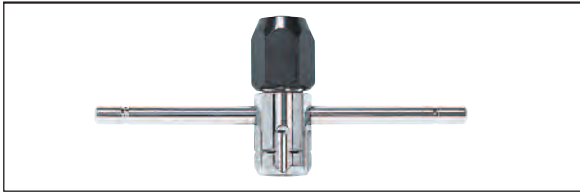
C) 6918323 H) 7311019

D) 7131353 I) 5533427

E) 7185566



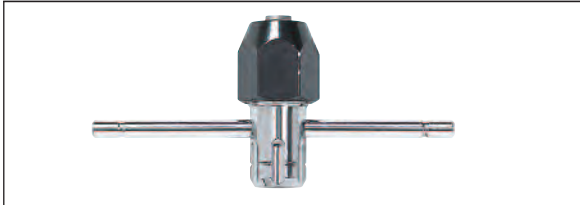
External Engine - Ignition, Battery, Electrical



GearWrench® **Small Tap Adapter - 3882**

- Includes: Small Tap Adapter and Sliding "T" for adapters
- Fits tap ranges from #4 to 3/8" (3mm to 10mm)

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:
A) 686759 B) 7231851



GearWrench® **Medium Tap Adapter - 3883**

- Includes: Medium Tap Adapter and Sliding "T" for adapters
- Fits tap ranges from 3/8" to 1/2" (10mm to 12mm)

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:
A) 686759 B) 7231851



GearWrench® **Die Adapter - 3884**

- Fits 1" diameter hex stock
- Alignment guides keep discs straight

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:
A) 686759 B) 7231851



GearWrench® **40 Pc. Tap and Die Set SAE - 3885**

- Accommodates Taps and Dies from #4 - 1/2"
- Carbon steel
- Tap Holders tilt down for easy access keeping taps secure and organized

Item No. Description

3881	Tap and Die Ratcheting "T" Wrench
3882	Small Tap Adapter
3883	Medium Tap Adapter
3884	Die Adapter

- Sliding "T" for adapters
- 17 taps
- 17 dies
- Thread gauge
- #5 screwdriver

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:
A) 686759 D) 7131353 G) 6711973
B) 7231851 E) 7185566 H) 7311019
C) 6918323 F) 6629477 I) 5533427



GearWrench® **40 Pc. Tap and Die Set Metric - 3886**

- Accommodates Taps and Dies from 3-12mm
- Carbon steel
- Tap Holders tilt down for easy access keeping taps secure and organized

Item No. Description

3881	Tap and Die Ratcheting "T" Wrench
3882	Small Tap Adapter
3883	Medium Tap Adapter
3884	Die Adapter

- Sliding "T" for adapters
- 17 taps
- 17 dies
- Thread gauge
- #5 screwdriver

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:
A) 686759 D) 7131353 G) 6711973
B) 7231851 E) 7185566 H) 7311019
C) 6918323 F) 6629477 I) 5533427

GearWrench®

75 Pc. Tap and Die Set SAE & Metric - 3887

- Accommodates Taps and Dies from #4 - 1/2" & 3-12mm
- Carbon steel
- Tap Holders tilt down for easy access keeping taps secure and organized

Item No.	Description
3881	Tap and Die Ratcheting "T" Wrench
3882	Small Tap Adapter
3883	Medium Tap Adapter
3884	Die Adapter
-	Sliding "T" for adapters
-	34 taps
-	34 dies
-	SAE screw pitch gauge
-	Metric screw pitch gauge
-	#5 screwdriver

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:

A) 686759

D) 7131353

G) 6711973

B) 7231851

E) 7185566

H) 7311019

C) 6918323

F) 6629477

I) 5533427



Backtap™ 10mm

Internal Thread Chaser - 3688

- Cleans and rethreads sparkplug ports from the inside out.
- Uses the good threads at the base of the port.
- Reduces dirt and metal from being driven into the cylinder head.
- Use light grease on the end to trap filings and keep tool easy to use.



Backtap™ 12mm

Internal Thread Chaser - 3689

- Cleans and rethreads sparkplug ports from the inside out.
- Uses the good threads at the base of the port.
- Reduces dirt and metal from being driven into the cylinder head.
- Use light grease on the end to trap filings and keep tool easy to use.



Backtap™ 14mm

Internal Spark Plug Rethread Tool - 3545

Patented design allows for chasing spark plug threads from inside the cylinder head and working outward. The tool uses the better threads at the base of the spark plug port and greatly reduces the chance of debris from falling into the cylinder. Works on 14mm spark plug threads. Length of 6" allows for deep well plugs. Tool can be used with 1/2" socket or wrench.



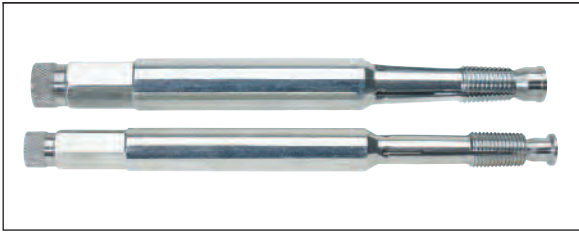
Backtap™ 18mm

Spark Plug Rethread Tool - 3690

- Cleans and rethreads sparkplug ports from the inside out.
- Uses the good threads at the base of the port.
- Reduces dirt and metal from being driven into the cylinder head.
- Use light grease on the end to trap filings and keep tool easy to use.



External Engine - Ignition, Battery, Electrical



2 Pc. Backtap™ 10 & 12mm For Import Vehicles - 3691

- Cleans and rethreads sparkplug ports from the inside out.
- Uses the good threads at the base of the port.
- Reduces dirt and metal from being driven into the cylinder head.
- Use light grease on the end to trap filings and keep tool easy to use.



14mm Cylinder Head Rethreader Kit - 2125

Repair damaged 14mm spark plug threads by opening hole with a reamer/tap and screwing insert onto the spark plug. Use spark plug socket to install spark plug and insert. Remove plug and check that insert is properly seated. Set includes 1 each of 4 inserts: 3/8, 7/16, 1/2 and 3/4" reach and thread locking compound. Tap is designed for aluminum heads only.



14mm Spark Plug Thread Inserts

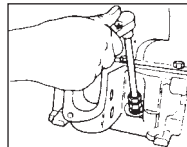
Use to replace damaged 14mm spark plug threads on aluminum head engines only. Use with 2123 reamer/tap to repair holes. Thread locking compound and 1 pair of inserts are included. Inserts are designed for use in holes reworked with reamer/tap listed.

Item No.	Length
2126	3/8"
2127	7/16"
2128	1/2"
2129	3/4"



14mm Spark Plug Thread Chaser - 3379

Tool features extra-long neck for access to recessed spark plug cavities. Groove and O-ring holds tool in socket. Use with 3/8" square drive tool or a 5/8" socket.



14 and 18mm Spark Plug Opening Thread Chaser - 730

Clean and restore spark plug threads with a 13/16" socket. Rubber ring eliminates slipping. Tool services most cars.

14mm Spark Plug Insert Reamer/Tap - 2123

Opens damaged spark plug hole threads prior to using spark plug thread inserts. Use inserts 2126 through 2129 to repair 14mm spark plug holes on aluminum heads only.



1" Hose Cutter - 3986

Item No.	Descriptions
398601	Replacement Blade



Hose Pinch-Off Pliers

Item No.	Description	Length	lbs.
3791	Mini Hose Pinch-Off Pliers 3/4" OD capacity	5.50"	4 oz.
3792	Hose Pinch-Off Pliers 1 1/4" OD capacity	9.25"	12 oz.
3793	Hose Pinch-Off Pliers 2 1/2" OD capacity	14.00"	20 oz.

- Ideal for use on radiator hoses, heater hoses, water, air, vacuum and fuel lines.
- Extra long cushioned hand grips for comfort and control.
- Patented clamping mechanism locks automatically
 - no screws or levers to set or adjust.
- Black oxide coated to resist rust and corrosion.



5 Pc. Low Profile Quick Disconnect Set - 3530

Contains five popular size Air Conditioning and Fuel Line quick disconnect tools for hard-to-reach areas. Flexible plastic design allows for easy application over tubing to access disconnects.

Sizes include: 7/8" (22mm), 3/4" (19mm), 5/8" (16mm), 3/8" (9mm), and 7/16" (8mm).



External Engine - Cooling, Belts & Hoses



12 Pc. Fuel & Transmission Line

Disconnect Tool Kit - 41500

Disconnect tools that separate fittings on fuel, filter, transmission, air conditioning systems and fuel tank return lines on most vehicles, trucks and other heavy equipment.

Item No.	Description
3321	GM & Ford Disconnect Tool
3408	Ford Fuel Line Coupling Tool
3413	Ford Hydraulic Clutch Line Disconnect Tool
3890	Chrysler Quick Disconnect Coupler Tool
3891	Ford EFI Fuel Line with Hair Pin Connector Tool
3892	GM Hydraulic Clutch Line Disconnect Tool
3893	GM Transmission Oil Cooler Line Disconnect Tool
3894	Ford Oil Cooler Line Disconnect Tool
3895	Fuel Line Disconnect - 1/4" (Black)
3896	Fuel Line Disconnect - 5/16" (Red)
3897	Fuel Line Disconnect - 3/8" (Gold)
3898	Oil Cooler Line Disconnect (Blue)
41513	Replacement Bands



Chrysler Quick Disconnect

Coupler Tool - 3890



Ford EFI Fuel Line with Hair Pin Connector Tool - 3891

Works on Ford EFI fuel lines with hair pin connectors; Works on radiator to transmission oil cooler lines for 1987 - Current Cadillac Eldorado, Seville and Concours, Buick Riviera and Reatta, and Olds Toronado; 1989 - Current GM 1/2 ton, 3/4 ton, and 1-ton pick-ups.



GM Hydraulic Clutch Line

Disconnect Tool - 3892

Removes clutch lines from slave cylinders during clutch master cylinder, slave cylinder or clutch assembly service. Bent end applications: NVG3500 manual transmissions on 1966-current full-size 2WD and 4WD trucks, S-10s, and S-15 Blazers/Jimmys. Straight end applications: 1993-current Pontiac Grand Prix, Olds Cutlass Supreme, Buick Regal; 1993-94 Chevy Lumina; and 1995-current Chevrolet Monte Carlo.



GM Transmission Oil Cooler Line Disconnect Tool - 3893

Works on transmission oil cooler lines on: 1987-current Olds Toronado, Buick Riviera and Reatta, Cadillac Eldorado, Seville and Concours; and 1989-current GM 1/2", 3/4", and 1-ton pickups.



Ford Oil Cooler Line Disconnect Tool - 3894

Disconnects transmission to radiator oil cooler line quick connect fittings: 1986-current Sable and Taurus with AOD, ATX, or AXOD transmissions.

External Engine - Cooling, Belts & Hoses

Fuel Line Disconnect - 1/4" (Black) - 3895

1995-96 Mustang



Fuel Line Disconnect - 5/16" (Red) - 3896

1990-current Aerostar, Explorer and Bronco; 1991-current E and F Series; 1992-current Ranger; 1992-current GMs



Fuel Line Disconnect - 3/8" (Gold) - 3897

Same as 5/16", and for new style 3/8" oil cooler lines: 1994-97 Dodge Ram V6 & C8 trucks; 1995-1996 Dodge Ram Van/Wagon. Also works on new style 3/8" oil cooler lines.



Oil Cooler Line Disconnect (Blue) - 3898

Ford Taurus and Escort with AXOD and ATX transmissions.



Hose Push Off Pliers - 3971

• Features

- Easy removal of rubber hoses from pressed on fittings for 3/16" to 1/2" OD hose fittings.
- Ribbed surface digs into steel tube for added grip to push off rubber hose.

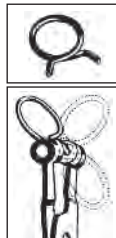


Corbin Style Hose Clamp Pliers - 3975

• Features

- Improved Strength.
- Easier to use locking feature.
- Dual dipped grip for comfort and force.

For Corbin (wire) style hose clamps. Tips trap and hold clamp and swivel for multiple angle access.



Straight Hose Clamp Pliers - 3976

• Features

- Improved Strength.
- Easier to use locking feature.
- Dual dipped grip for comfort and force.



External Engine - Cooling, Belts & Hoses



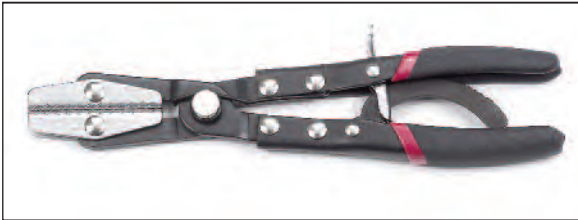
Angled Straight Hose Clamp Pliers - 3977

- **Features**
 - Improved Strength.
 - Easier to use locking feature.
 - Dual dipped grip for comfort and force.



Heavy Duty Large Hose Clamp Pliers - 3978

- **Features**
 - Improved Strength.
 - Easier to use locking feature.
 - Dual dipped grip for comfort and force.
- For flat ear style hose clamps. Tips trap and hold clamp and swivel for multiple angle access.

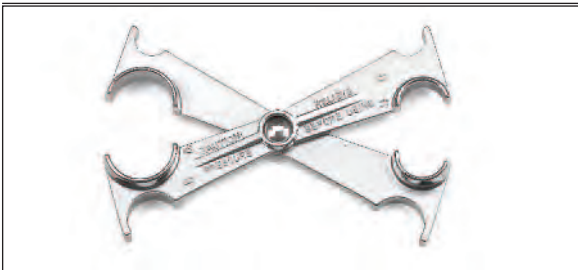


Hose Pinch-Off Pliers - 145



Pliers eliminate the need to drain cooling system when servicing. Pliers squeeze hoses shut and jaws swivel for parallel clamping. Pliers include automatic locking ratchet. Tool can be used to pinch off some emission system hoses.

- Do not use on wire-reinforced hose

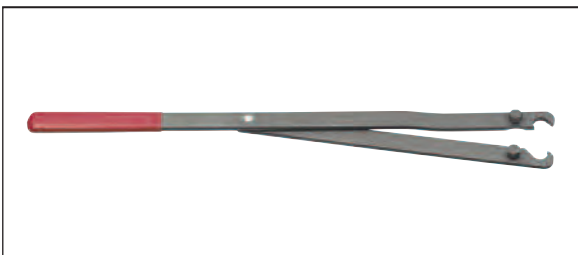


Ford Air Conditioning and Fuel Line Spring Lock Coupling Tool - 3290

Most Ford vehicles are equipped with spring lock couplings on fuel and air conditioning lines. Necessary tool releases locking mechanism on all 4 sizes: A (3/4"), B (5/8"), C (1/2") and D (3/8").

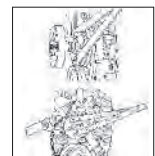


▲ Caution: For intended use only. Do not use with engine running. Release system pressure before disconnecting coupling.



Universal Pulley Holder - 3900

This unique time saving tool is designed to trap and hold bolt-on pulleys by the mounting bolts on most applications. When used in conjunction with fan clutch wrenches it is especially useful in removing and replacing thermostatic fan assemblies while eliminating the need for various size holding wrenches. Applications for use in fan clutch removal include: Ford trucks w/2.8-L, 2.9-L, 3.0-L, 4.0-L, 4.9-L, and 5.0-L engines. Dodge trucks w/3.9-L, 5.2-L, 5.9-L, 8.0-L and V10 engines. GM trucks w/4.3-L, 5.0-L and 5.7-L engines. Jeeps w/5.2-L engines.



Ford Diesel Fan Clutch Wrench, 6.9-L and 7.3-L - 3473

Use in conjunction with the Universal Pulley Holder (3471) to remove and replace the thermostatic fan assembly on Ford 6.9-L, 7.3-L, and 7.3-L DIT diesel engines. Use with 1/2" drive tools and a torque wrench. Refer to Ford factory service manual for torque specifications and thread direction. Wrench opening is 48mm (1.889").



▲ Caution: Do not use with power tools.

Fan Clutch Wrench Set - 3472

• Features

- Universal puller holder eliminates the need for various size holding wrenches

Used to remove and replace thermostatic fan assemblies. Applications include: Ford trucks w/2.8-L, 2.9-L, 3.0-L, 4.0-L, 4.9-L, and 5.0-L engines. Dodge trucks w/3.9-L, 5.2-L, 5.9-L, 8.0-L V10 engines. GM trucks w/4.3-L, 5.0-L and 5.7-L engines. Jeeps w/5.2-L engines.



Replacement Parts

Item No.	Description
3900	Universal Pulley Holder
3422	Wrench (40mm)
3136-76	Wrench (36mm)
3901	Small Pin set (5 x 8mm)

2 Pc. 6.0-L Fan Clutch Pulley Holder - 3950

- Designed for Fan Clutch removal on 2003 and above Ford 6.0-L Powerstroke engines
- Unique Fan Clutch Wrench grips and securely holds the pulley housing
- Fan Clutch Holding Tool to loosen and remove oval or round hole holding nut

Item No.	Description
3951	6.0-L Powerstroke Fan clutch Holding Tool
3950-71	6.0-L Powerstroke Fan clutch Wrench



Fan Clutch Service Kit - 41580

This versatile kit covers most vehicles with bolt on pulleys and also newer Chrysler engines with press on pulleys requiring special pins to hold housing. Features the patented universal pulley holder.

Item No.	Description
3900	Universal Pulley Holder
3901	Pin Set Small (5 x 8mm)
3902	Pin Set Large (Cam Pins, 6 x 10mm, 7.5 x 18mm)
3903	22mm Fan Nut Wrench
3136-76	36mm Fan Nut Wrench
3422	40mm Fan Nut Wrench
3473	47mm Fan Nut Wrench
3904	50mm Fan Nut Wrench



External Engine - Cooling, Belts & Hoses



Compact Universal Pulley Holder Kit - 41530

- **Compact pulley holder**
 - Holds pressed on fan clutch pulleys including single and dual overhead cam sprockets.
- **Small pin set**
- **Large pin set**

Adjustment screw available for position holding.
Pin set can be changed out by screwing pins into the end of each bar.

Replacement Parts

Item No.	Description
3901	Small Pin set (5 x 8mm)
3902	Large Pin set (6 x 10mm, 7.5 x 18mm, Cam Pins)



Northstar Water Pump Socket - 3707

For removal and installation of the water pump impeller used on some GM engines. The impeller is held by a cam lock system that this tool is specially designed to remove by turning the pump impeller 25 degrees.

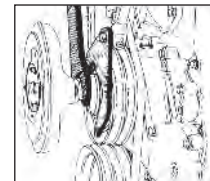
Applications:

Northstar 4.6-L V-8 from 1993 and later
Olds Aurora 4.0 V-8 liter 1997 and later



Ford Fan Clutch Wrench Set - 3136

Set is used to remove and replace the thermostatic fan assembly on Ford 4.9-L E and F series truck engines 1984 through 1993, Ford 4.6-L modular engines, 2.8-L engines 1984 through 1987, 2.9 to 3.0-L Engines, 1988 to current and 4.0-L engines 1990 to current. Use with 1/2" square drive tools and torque wrench. Refer to Ford factory service manual for torque specifications and thread direction. Wrench Openings - Long: 36mm (1.417"), Short: 58mm (2.283").



▲ Caution: Do not use with power tools.

- Replacement part: 3136-76 Long Wrench 36mm
- Replacement part: 3136-77 Short Wrench 58mm



Ford Diesel Fan Clutch Wrench Set, 6.9-L and 7.3-L - 3296

Use set to remove and replace the thermostatic fan assembly on Ford 6.9- and 7.3-L engines. Use with 1/2" drive tools and a torque wrench. Refer to Ford factory service manual for torque specifications and thread direction. Wrench openings - Long: 48mm (1.889"), Short: 83mm (3.250").

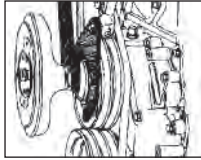
- See KD 3472 and 3473 for expanded coverage.

▲ Caution: Do not use with power tools.

External Engine - Cooling, Belts & Hoses

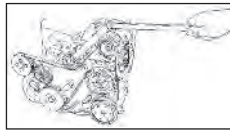
4.9-L Ford Fan Clutch Wrench - 3422

Wrench removes thermostatic fan assembly on 1993 to current 4.9-L Ford Engines. Use in conjunction with 3136-77 58mm Short Wrench or Universal Pulley Holder 3471. Both hold pulley while turning square shaft on fan clutch. Wrench opening is 40mm (1.575").



Serpentine Belt Tool - 3414

Tool is used to release tension on Serpentine Belt Self-Adjusting Idler Pulley. Just push or pull to release tension. Replacement parts are listed in the chart below. Exclusive Crow Foot wrenches provide maximum coverage and access.



Item No.	Description	Fits
3414-80	Long-Handle Wrench	Ford 1.9 and 2.3-L, GM 3.1-L
3414-81	Short Bar	Chrysler 2.5 and 3.0-L, Ford 4.6-L
3/8" Drive		
3414-82	15mm 12-Point Socket	Ford 3.0 and 3.8-L, Chrysler 3.0, 3.3 and 3.8-L, GM 2.2, 2.8, 3.8 and 5.7-L
3414-83	16mm 12-Point Socket	Ford 3.8 and 4.0-L
3414-84	18mm 12-Point Socket	GM3800
3414-85	13mm Crowfoot	GM Quad Four Engine
3414-86	14mm Crowfoot	Saturn Engine
3414-87	15mm Crowfoot	Ford Windstar with 3.8-L Engine
3414-88	13mm 12-Point Socket	European Applications
3414-89	19mm 12-Point Socket	Honda and Toyota Applications

15 Pc. Serpentine Belt Tool Set - 3680

This innovative tool combines the patented innovation of GearWrench® with the requirements of the Serpentine Belt removal tool to provide the Professional and Do-it-yourself user with the best possible combination.

Item No.	Description
3680-71	Long Bar
3680-72	GearWrench® Special Ratcheting Wrench
3680-73	3/8" Adapter
3680-74	1/2" Adapter
3680-75	3/4" Adapter
3680-85	6 pt 13mm Socket
3680-76	6 pt 14mm Socket
3680-77	6 pt 15mm Socket
3680-78	6 pt 16mm Socket
3680-79	6 pt 17mm Socket
3680-80	6 pt 18mm Socket
3680-84	6 pt 19mm Socket
3680-81	13mm Crows Foot
3680-82	14mm Crows Foot
3680-83	15mm Crows Foot



COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:
A) 686759 B) 7231851 I) 5533427

External Engine - Cooling, Belts & Hoses



Power Steering Pump Pulley Kit - 41560

This kit removes and installs power steering pump pulleys off most domestic vehicles.

Item No.	Description
3893	Disconnect Tool
41561	Bushing and Screw Set
41562	Bushing and Screw Set



Master Bolt Grip Kit - 41600

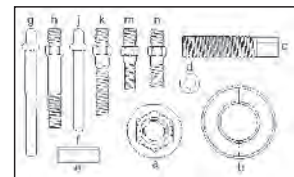
Master Bolt Grip Kit works on harmonic balancers, steering wheels, crankshaft pulleys, and gears. Capable of handling almost every two or three-way bolt pull possible on most cars, pickups, SUV's, and small engines.

Item No.	Description
41601	Two or three way Yoke
41602	4 Pc. Tip Set
41603	Metric Bolt Set
41604	SAE Bolt Set
41605	Center Screw for Puller (2)



Pulley Puller and Installer Set - 2897

Remove pressed-on alternator and power steering pulleys on late-model GM, Ford, Chrysler engines. The threaded end installs late-model GM alternator and power steering pulleys, including Quad 4. Reverse the jaws to pull the alternator internal bearing. The puller fits some AMC's. Will not work on 3.3-L and 3.5-L Chrysler engines. Kit comes in blow mold case.



Item No.	Description
2897-80	Puller Body (A)
2897-81	Jaw and Sleeve Assembly (B)
2897-82	Jackscrew (C)
2897-83	Button (D)
2897-84	Bearing and Washer (E and F)
2897-85	Puller Pin for Quad 4 (G)
2897-86	Screw Installer for Quad 4 (H)
2897-87	Puller Pin for GM 3.1 (J)
2897-88	Screw Installer for GM 3.1 (K)
2897-89	Screw Installer for Ford 4.6 (M)
2897-90	Screw Installer for All Other (N)



8 Pc. Compression Check Kit - 3469

Set includes a compression gauge with protective boot and special air-hold valve for easy reset, one extension, two hand-held adapters and flexible line, with three brass adapters. Includes storage case. Gauge checks from 0 to 300 PSI (0 to 21kg/cm²). Brass adapters are 10mm, 12mm & 14mm and attach to flex line with 14mm & 18mm threads. Kit comes in blow mold case.

For Contents and Replacement Part Listings See Page 202.



4 Pc. Diesel Compression Test Kit - 3468

Set includes a compression gauge with protective boot and special air-hold valve for easy reset and three brass adapters. Includes storage case. Brass adapters are: 24mm x 2.0 to test VW, Volvo, Audi, Dodge, Mercedes & Cummings 5.9-L. 10mm x 1.0 to test GM 4.3-L 6 cyl., 4.3-L & 5.7-L 8 cyl., Ford/Navistar 6.9-L & 7.3-L, International Harvester 6.9-L. 10mm x 1.0 to test GM 6.2-L V8. Gauge checks from 0 to 1000 PSI (0 to 70kg/cm²). Features a quick disconnect from gauge to adapters. Kit comes in blow mold case.



Universal Compression Tester Kit - 3305

This versatile kit provides a quick method to obtain cylinder compression pressure on engines with deep, recessed spark plugs and difficult access. A special air-hold valve is included for easy resetting of the gauge, which is graduated from 10 to 300 PSI (0 to 21kg/cm²). Gauge assembly includes pressure relief valve.



▲ Caution: Do not use with engine running. For intended use only.

Compression Tester - 2428

Tester checks cylinder compression from 0 to 300 PSI (0 to 21 kg/cm²). Adapters fit 14 and 18mm spark plug holes and special air-hold valve is included to reset gauge easily. Tester has 16" rubber hose and is a serviceable product.

- Replacement part: 2428-75 Gauge
- Replacement part: 901 Adapters



External Engine - Fuel Tools



Engine/Automatic Transmission Oil Pressure Check Kit - 3343

Use on all domestic cars and light trucks, as well as most import cars and light trucks. Kit includes: 2-1/2" gauge ranging from 0 to 300 PSI, 6" neoprene (oil-proof) hose, brass adapters for SAE and Metric and an instruction sheet.



Oil Pressure Check Kit - 3289

Test engine oil pressure at the oil filter on most passenger cars and light trucks. Five different adapters are included for both domestic and imported engines. Gauge is calibrated from 0 to 100 PSI.



Mechanic's Stethoscope - 835



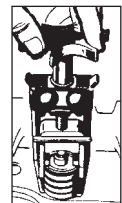
Stethoscope locates the source of engine noise quickly. Listen for trouble by tracing the sound of flowing water, oil, gas or steam. Identify piston slap, worn gears, faulty valves, waterpump failure, damaged gaskets and defective bearings. Stethoscope has a shock-resistant handle and disassembles for storage.

▲ Caution: Keep away from moving, rotating and electrical components.



Universal Overhead Valve Spring Compressor - 2078

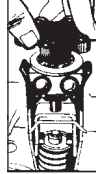
Remove valve springs on most cars with overhead valves without removing the cylinder head. Offset jaws grip the valve spring in parallel compression. Tool maintains constant length as spring is compressed. Use with 901 or 2992 Air Hold Fittings to keep valve in place.



▲ Caution: 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.

Deluxe Universal Overhead Valve Spring Compressor - 3271

Compressor easily removes valve springs on most cars and light trucks. Tool can be used with the cylinder head on or off the engine. Features a removable handle allowing use with 5/8" socket or wrench in confined areas and an extra-long leg for more applications. For best results, use with 901 or 2992 Air Hold Fittings to pressurize the cylinder and keep the valves in place during removal of the spring and keepers.



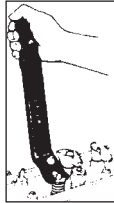
- Replacement part: 3271-75 Long Leg, length 3 15/32"
- Replacement part: 3271-76 Short Leg, length 3 5/32"



▲ Caution: 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.

Valve Spring Compressor - 912

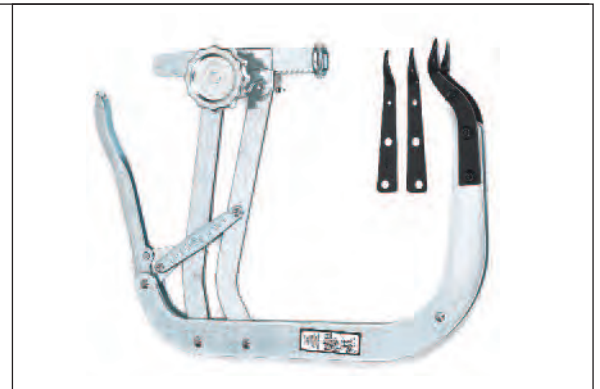
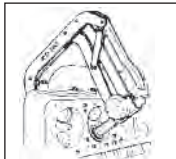
Remove and replace valve springs in GM 8-cylinder engines. Heavy-duty tool replaces weak or broken valve springs and guide seals with cylinder head on the engine. Compressor is used by removing rocker and fastening tool to stud with nut. Pull on the handle to compress spring. Use with 901 or 2992 Air Hold Fittings to keep valve closed. Length: 12-1/2".



▲ Caution: 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.

Valve Spring Compressor - 380

Compress valve springs on overhead valve and L-head engines on cars, trucks and tractors. Tool has a 9-3/4" throat depth and jaw openings 2-3/4 to 7-3/4" fits larger engine sizes. Jaws and plunger bar are easily adjusted. Plunger bar seats on both flat- and cup-shaped valve heads. Offset and straight jaws are included.



Valve Spring Compressor - 383

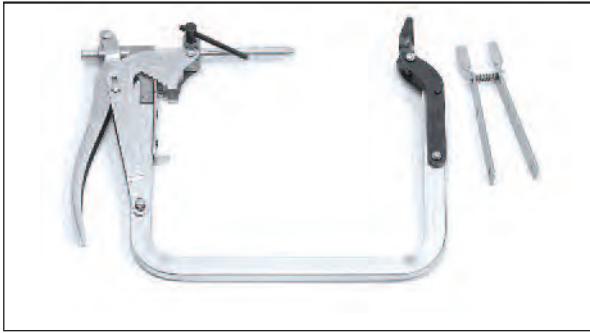
Compressor services overhead valve engines. A handle on the outside of the tool makes it easy to use. It has a throat depth of 7-1/2" and jaw openings 2-3/4 to 5-7/8". Compressor fits most passenger cars and light trucks and will also work on small L-head engines with manifolds removed. 383-70 offset jaws are included.



- Replacement part: 383-70 Jaw Set (newer style)



Internal Engine Tools - Valve



Valve Spring Compressor - 385

Compress valves on small overhead valve or L-head engines. Tool has a throat depth of 6-1/4" and jaw openings of 3 to 5-3/8". It's designed for light-weight valve springs. Compressor works on L-heads with manifolds removed and many industrial engines.



- Replacement part: 385-70 Jaw Set (newer style)



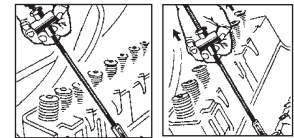
Small Engine Valve Spring Compressor - 379

Long and slender, will reach into small recesses where valve springs and retaining washers are located. Arms are hinged at one end so they are practically parallel at the other end at all points. Jaws are adjustable in width and have edges so thin that they can be forced under and over ends of valve spring to compress it for removal. Operating screw makes ratchets and locks unnecessary. Will work on all Briggs and Stratton engines. Maximum opening 2 3/8".



Quickie Hydraulic Tappet Remover - 2114

Removes valve tappets that are not stuck or baked-in. Tool can be used with most manifolds in place. To use, place jaws into groove on inside of tappet, squeeze knob and T-handle and pull to remove. This tool is patented.



Valve Grinders

Hand grind small and large flat-head unslotted valves. Textured handle and thin wall suction cups make grinding easy. To use, place grinding compound on valve face and put in seat. Put suction cup on valve head and turn handle between hands to grind. There are 2 sizes per tool.

Item No.	Description	Cup Diameter
501	Smaller Valves	5/8" and 13/16"
505	Most Valves	1-1/8" and 1-3/8"



Air Hold Fitting Set - 901

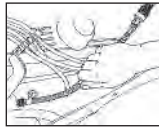
Use to apply air pressure to keep valve closed while replacing valve spring. Set includes 14 and 18mm adapters threaded for 1/4" NPT. To use, remove spark plug and screw air hold into port. Fasten air hose to fitting and apply pressure. Use with 912, 2078, 3087 or 3271 Valve Spring Compressors.

▲ Caution: 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.

Internal Engine Tools - Valve

14/18mm Air Hold Extension Hose - 2992

A 14"-long hose incorporates special 14 and 18mm stepped fitting with O-ring seals for universal fit and 1/4" NPT fitting for easy connection to air lines. Used with Valve Spring Compressors 912, 2078, 3087 and 3271, long hose is ideal for reaching deep set spark plug holes.



▲ Caution: 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.

Gasket Scraper - 485

Scrape surfaces clean for installing new gaskets. Use tool before installing water pump, thermostat, cylinder head, crankcase and timing chain cover gaskets. Scraper is made of forged steel for rugged service and has a comfort-grip handle. Overall length: 10 1/2". Blade length: 1".



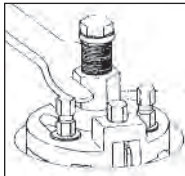
1-1/4" Scraper - 2425

Stiff tempered-steel blade is ideal for scraping dirt, carbon and paint and for applying putty. Blade is ground to a mirror finish.



Engine Cylinder Ridge Reamer - 2389

Reamer removes ridges from top of engine cylinders with bore diameters 3 to 5" (77 to 127mm). Tungsten carbide cutters and fine-thread feed-up ensure smooth cutting action. Unique design lets you change from one cylinder to another without readjusting.



- Replacement part: 2389-78
Cutter Blade

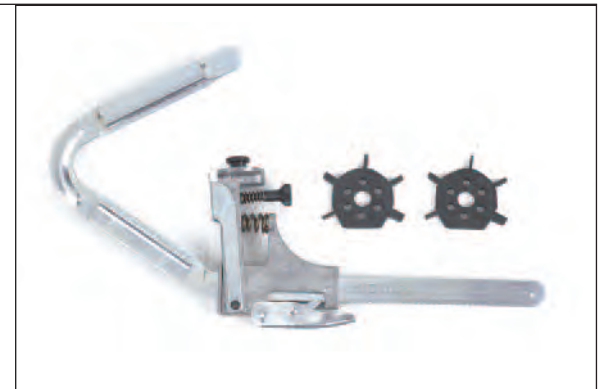


Piston Ring Groove Cleaner - 1722

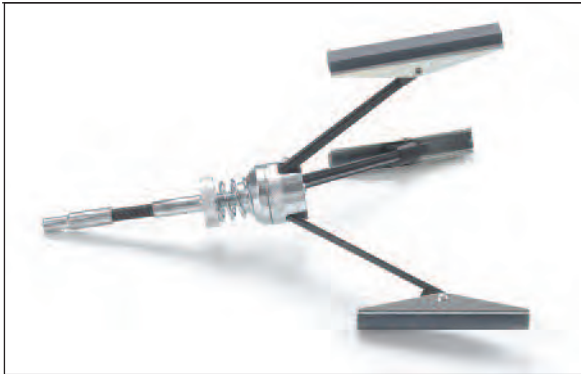
Effectively removes carbon from ring grooves on pistons 2 to 5" (51 to 127mm). The two 6-bladed cutters cover all major piston ring grooves in SAE and metric sizes. Cutters rotate to any selected size, locking in place with hold-down nut.

- Replacement part: 1722-71 Cutter Blade Kit
(includes both SAE and metric sizes)

Blade 1 (Sizes)	Blade 2 (Sizes)
1/16"	2mm
5/64"	2.5mm
3/32"	3mm
1/8"	4mm
5/32"	4.5mm
3/16"	1/4"

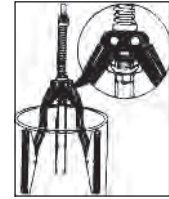


Internal Engine Tools - Valve



Engine Cylinder Hone - 2833

Hone and remove glaze from engine cylinders from 2" to 7" (51 to 177mm) in diameter. Adjust spring tension for positive cutting action and set diameter with spread limiter. Hone includes medium grit stones No. 240.



Replacement Stones

Stones are for 2833 Engine Cylinder Hone.

Item No.	Purpose	Length	Grit	Grit No.
2834	For Rough Honing	4"	Coarse	100
2835	For General-Purpose Honing and Glaze Breaking	4"	Medium	240
2836	For Hydraulic Cylinders	4"	Fine	400
3157	For General-Purpose Honing and Glaze Breaking	3"	Medium	240

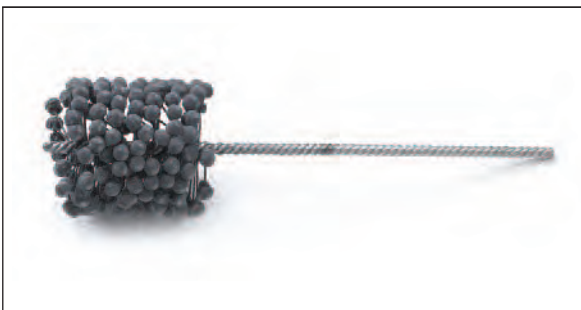


Economy Brake and Engine Cylinder Hone Set - 3029

Multi-purpose set includes 3 complete hones and 1 set of 2" stones.

Set includes:

- Complete hone for brake, master and wheel cylinders 3/4 through 2-1/2" capacity, with 1-1/8" medium-grit stones
- Complete hone for small car brake wheel cylinders 1/2 through 1-3/4" capacity, with two 1-1/8" medium-grit stones
- Complete hone for disc brake caliper honing. 1-1/4 through 3-1/2" capacity, with 3/4" medium-grit stones; also ideal for lawn and garden small-engine cylinder honing when used with three 2" medium-grit stones (included)
- Replacement part: 3029-75 three 2" Cylinder Hone Stones



Standard-Duty Engine Cylinder Flex-Hones®

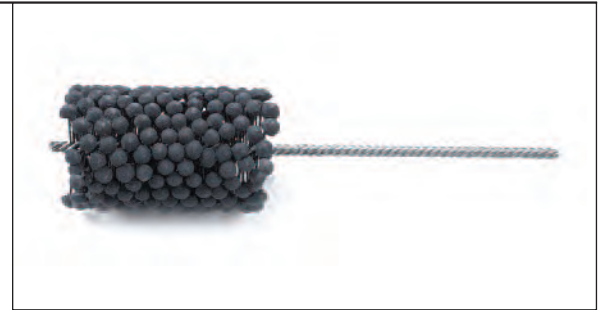
Hone engine cylinders 3-1/4 to 4-1/8" (83 to 105mm) in diameter to produce a plateaued finish for fast ring seating and better oil retention for longer engine life. Hone life is in excess of 1000 cylinders. Requires no setup. Use variable-speed 3/8" electric hand drill and move the Flex-Hone® up and down in the cylinder until desired results are obtained.

Item No.	Hone Size	Recommended Minimum Working Diameter	Grit
2486	3-1/2" Dia. Hone (89mm)	3-1/4" (83mm)	120
2487	3-3/4" Dia. Hone (95mm)	3-1/2" (89mm)	120
2488	4-1/8" Dia. Hone (105mm)	3-3/4" (95mm)	120

Heavy-Duty Engine Cylinder Flex-Hones®

Heavy-duty hone engine cylinders, 2-3/4 to 4-1/2" (70 to 114mm) in diameter, deliver the same plateaued finish as the standard-duty, but are longer lasting.

Item No.	Hone Size	Recommended Minimum, Working Diameter	Grit
2489	3" (76mm)	2-3/4" (70mm)	120
2490	3-1/4" (82mm)	3" (76mm)	120
2491	3-1/2" (89mm)	3-1/4" (82mm)	120
2492	4" (101mm)	3-1/2" (89mm)	120
2493	4-1/2" (114mm)	4" (101mm)	120



Piston Ring Filer - 870

File piston rings with this portable rotary filer. Use to accurately size any make or diameter ring. Filer includes extra-hard, fine-grit carbide-coated cutter file.



Carbide-Coated Cutter File - 872

Use this replacement file with 870 Piston Ring Filer to accurately cut piston rings. Cutting face is coated with extra-hard carbide for long life. Use with hand-crank filer only.



Piston Ring Compressor Set - 850

Install pistons from 2-7/8 to 4-3/8" (73 to 111mm). Pliers can be used parallel or perpendicular to the cylinder block. Fine-tooth ratcheting lock allows you to compress bands in small increments. Set works by placing a band around the piston, covering the rings and hooking pliers into the band and squeezing. With the band tightly around the piston, insert piston into cylinder and tap lightly with hammer handle to install. Set includes pliers and 7 bands, 1119 through 1125.



Piston Ring Compressor Bands

Use these bands with 1114 Pliers to compress piston rings from 2-7/8 to 4-5/8" in diameter. Band width: 1-1/2".

Item No.	Size
1119	2-7/8" to 3-1/8" (73mm to 79mm)
1120	3-1/8" to 3-3/8" (79mm to 85mm)
1121	3-3/8" to 3-5/8" (85mm to 92mm)
1122	3-5/8" to 3-7/8" (92mm to 98mm)
1123	3-7/8" to 4-1/8" (98mm to 104mm)
1124	4-1/8" to 4-3/8" (104mm to 111mm)
1125	4-3/8" to 4-5/8" (111mm to 117mm)



Internal Engine Tools - Piston



Piston Ring Compressor Pliers - 1114

Use these pliers to install pistons from 2-5/8 to 5-7/8" (67 to 149mm) in diameter. A self-locking ratchet allows you to compress rings in small increments. Pliers can be used parallel or erpendicular to the cylinder block on most bands.



Heavy-Duty Piston Ring Compressor - 2284



Use compressor to install pistons 2-1/8 to 5" (54 to 127mm) in diameter. Positive lock action provides positive compression and fingertip release. To compress piston ring into grooves, slip the tool over the piston and tighten with L-shaped wrench. Insert piston into cylinder and tap with a hammer to install. Enlarged crimped edge prevents compressor from entering the cylinder.



Piston Ring Compressor - 1720

Use compressor to install pistons 2-1/8 to 5" (57 to 127mm) in diameter. A dependable friction-type brake holds rings in compressor. Tool is beaded along lower edge to prevent compressor from entering the cylinder.



Piston Ring Compressor - 1723

Use compressor to install pistons 3-1/2 to 6-1/2" (89 to 164mm) in diameter on trucks and tractors. Positive lock action provides positive compression and fingertip release. Heavy spring steel compresses the stiffest rings evenly. Tool is beaded along lower edge to prevent compressor from entering the cylinder.

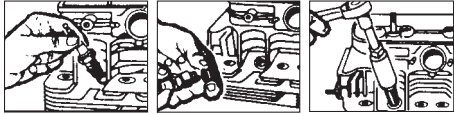


Diesel Piston Ring Compressor - 1724

Use to install pistons 3-1/2 to 7" (89 to 177mm) in diameter on trucks and tractors. This 6-1/2" high positive lock compressor has 4 tension bands and compresses diesel upper and lower rings. Bands are made of spring steel and beaded along lower edge to prevent compressor from entering the cylinder.

14mm Cylinder Head Rethreader Kit - 2125

Repair damaged 14mm spark plug threads by opening hole with a reamer/tap and screwing insert onto the spark plug. Use spark plug socket to install spark plug and insert. Remove plug and check that insert is properly seated. Set includes 1 each of 4 inserts: 3/8, 7/16,



1/2 and 3/4" reach and thread locking compound. Tap is designed for aluminum heads only.



14mm Spark Plug Insert Reamer/Tap - 2123

Opens damaged spark plug hole threads prior to using spark plug thread inserts. Use inserts 2126 through 2129 to repair 14mm spark plug holes on aluminum heads only.



14mm Spark Plug Thread Inserts

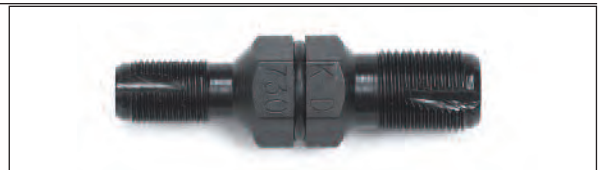
Use to replace damaged 14mm spark plug threads on aluminum head engines only. Use with 2123 reamer/tap to repair holes. Thread locking compound and 1 pair of inserts are included. Inserts are designed for use in holes reworked with reamer/tap listed.

Item No.	Length
2126	3/8"
2127	7/16"
2128	1/2"
2129	3/4"



14 and 18mm Spark Plug Opening Thread Chaser - 730

Clean and restore spark plug threads with a 13/16" socket. Rubber ring eliminates slipping. Tool services most cars.



3 Pc. Oil Pump Primer Kit - 41770

Oil Pump Primers protect freshly rebuilt or modified engines from premature wear caused by a dry start.

Item No.	Description
3446	GM Oil Pump Primer
3447	Ford Oil Pump Primer 1/4" Hex Dr.
3448	Ford Oil Pump Primer 5/16" Hex Dr.



Oil Pump Primers

Use primers to protect a freshly rebuilt or modified engine from premature wear caused by a dry start. Design includes a machined aluminum collar that simulates the distributor and helps to eliminate damaging side loading of the oil pump drive while priming.

Item No.	Description
3446	GM Oil Pump Primer
3447	Ford Oil Pump Primer - 1/4" Hex Drive
3448	Ford Oil Pump Primer - 5/16" Hex Drive

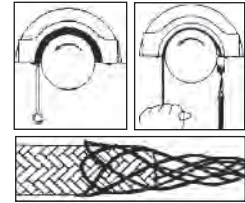


Internal Engine Tools - General Service



Oil-Seal Remover and Installer - 492

Tool removes and installs upper rear main oil seals with engine and crank-shaft in place. It works on both wick- and neoprene-type seals. Chinese Finger-type grip won't slip from the seal during installation. Set includes a wick seal remover, installer, guide funnels, pusher, offset trimmer and neoprene seal punches.



Harmonic Balancer Puller Kit - 41750

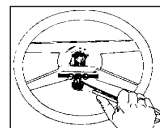
Removes and installs the harmonic balancer on most popular Chrysler, Hyundai and Mazda without removing the radiator.

Item No.	Description
41751	Puller Body
41752	Pin Set
41753	Holding Ring

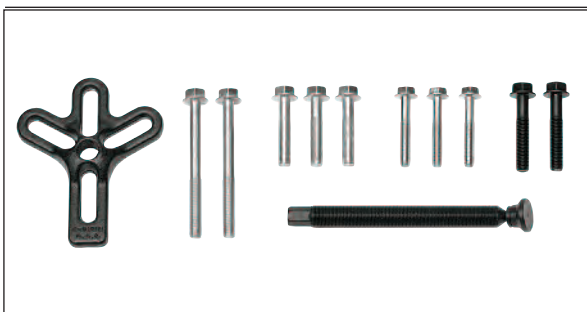


Crankshaft Pulley Puller (Steering Wheel Puller) - 2291

Puller removes crankshaft pulleys on Chrysler 2.2 and 2.5-L engines and pulls steering wheels on most US and import cars. The floating swivel on the center screw prevents damage to the steering column. Five sets of side bolts include 3/8-16 UNC, 5/16-18 UNC, 5/16-24 UNF and 8mm x 1.25.



- Replacement part: 2286-76 Load Screw
- Replacement part: 2291-80 5/16-18 UNC Hex Head Washer Bolt, 1 per package



Harmonic Balancer Puller - 2286

Puller removes balancers, pulleys, and gears with tapped holes. A floating swivel prevents damage to the shaft end. Four slots in the yoke allow for 2- or 3-hole applications. Tool bolts to balancer with center screw on the end of the crankshaft. Tighten while tapping on the screw head to remove balancer. Puller includes 3/8-24 UNF, 5/16-18 UNC, 3/8-16 UNC and 10mm x 1.5 screws for most American and imported cars.

- Replacement part: 2286-75 Yoke and Screw Swivel
- Replacement part: 2286-76 Center Screw
- Replacement part: 2286-77 Screw Assortment

Harmonic Balancer Installer - 36790

Installs Drive Pulleys on Harmonic Balancers
 - Complete range of adapters
 - Comes with thrust bearing for ease of use

Item No.	Size
3679-71	14mm x 1.5
3679-72	16mm x 2.0
3679-73	1/2" x 20
3679-74	3/4" x 16
3679-75	5/8" x 18
3679-76	7/16" x 20
3679-77	9/16" x 18
3679-78	12mm x 1.5
3679-79	Center Screw
3679-81	Bushing & Washer Kit
3679-82	10mm x 1.5
3679-83	12mm x 1.75
3679-84	14mm x 2.0
3679-85	16mm x 1.5



Serrated Wrenches

Install and remove 12-point (triple square) metric socket-head screws by turning with a socket or wrench. They are made from heat-treated alloy steel.

Item No.	Size	Hex Size	Length
2304	8mm	5/16"	3"
2305	10mm	1/2"	3 1/4"
2306	12mm	1/2"	3 3/4"



Fly Wheel Turner - 2270

Hook this tool into flywheel teeth to rotate the crankshaft. Use when working on clutches, transmissions, installing rings or other jobs that require the crankshaft to be in a specific position. Spring tension aids tool engagement on the flywheel.



33 Pc. Fuel Injection System Tool Kit - 3467

Set includes fuel line pressure gauges, adapters, and other components required to work on Fuel Injection Systems. Includes storage case.

For Contents and Replacement Part Listings See Page 161.

Also Available [3467-31](#) Expanded Completer Set

For Contents and Replacement Part Listings See Page 161.



Internal / External Engine Tools - General Service



EFI Pressure Tester Multiport Fuel Injection - 3386

Tests fuel pump pressure on all AMC, Chrysler, Ford, Honda, GM and Mazda vehicles. Tester can also be used on most foreign vehicles not equipped with Bosch CIS. Gauge - 3 3/4" diameter, 145 PSI. Kit comes in blow mold case.

For Contents and Replacement Part Listings See Page 202.



EFI Ford Adapters

Allows use of the 3386 EFI Pressure Tester on Ford multiport EFI systems. Use the 3386-70 with 1/2" spring lock-type access fitting. Use the 3386-71 with hairpin-type access fitting.

Item No.	Description
3386-70	EFI Ford Spring Lock Fitting Adapter
3386-71	EFI Ford Adapter



Fuel Pump Vacuum and Pressure Tester - 2521

Test for fuel line pressure and vacuum leaks and check for leaky valves, timing, fuel pump vacuum and pressure and gas line leakage. Tester is equipped with an easy-to-read gauge with a 3" hose and a vacuum hose adapter fitting. Gauge measures vacuum from 0 to 28" Hg in 1" increments (0 to 700mm Hg in 50mm increments). It also measures pressure from 0 to 15 psi in 1/2 psi increments (0 to 1 kg/cm² in 0.1 kg/cm² increments). Gauge diameter 2 11/16".

▲ Caution: Not for use on fuel injected vehicles.



Honda & Acura Crankshaft Holding Tool - 3970

• Features

- Holds crankshaft in place allowing for removal of hard-to-loosen crankshaft damper bolts.
- Proper angle ensures easy access to crankshaft damper bolts.
- Fits most Honda & Acura 4-cylinder applications from 1990 and up.
- Easy to use one man operation tool speeds up repair.
- Works with 1/2" square drive.



Torque Angle Gauge - 3336

Use this mechanical gauge with a 1/2" drive tool to install various engineering fasteners that require a specified angle application after a pre-torque load has been applied. Tool is calibrated in 5° increments with a rotating pointer. 1/2" male and female square drive and adjustable holding rod hold the gauge in position during use. Gauge is packaged in a convenient storage pouch.

▲ Caution: Do not use with power tools. For intended use only.



Oil Filter Wrenches



GearWrench® Magnetic Oil Drain Plug Sockets



GearWrench® 7 Pc. Magnetic Plug Socket Set - 3870

Item No.	Description
3872	13mm Plug Socket - RED
3873	14mm Plug Socket - GREEN
3874	15mm Plug Socket - PURPLE
3875	16mm Plug Socket - GOLD
3876	17mm Plug Socket - BLACK
3877	19mm Plug Socket - BLUE
235080GR	3/8" (20mm) Drive GearRatchet™ Handle

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:
 A) 686759 D) 7131353 G) 6711973
 B) 7231851 E) 7185566 H) 7311019
 C) 6918323 F) 6629477 I) 5533427



GearWrench® 6 Pc. Magnetic Plug Socket Set - 3871

Item No.	Description
3872	13mm Plug Socket - RED
3873	14mm Plug Socket - GREEN
3874	15mm Plug Socket - PURPLE
3875	16mm Plug Socket - GOLD
3876	17mm Plug Socket - BLACK
3877	19mm Plug Socket - BLUE

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:
 A) 686759 B) 7231851



GearWrench® Magnetic Plug Socket Open Stock

Item No.	Description
3872	13mm Plug Socket - RED
3873	14mm Plug Socket - GREEN
3874	15mm Plug Socket - PURPLE
3875	16mm Plug Socket - GOLD
3876	17mm Plug Socket - BLACK
3877	19mm Plug Socket - BLUE

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:
 A) 686759 B) 7231851



6 Piece Oil Canister Socket Set Service Kit (3/8" Drive) - 41890

Item No.	Description
3932	32mm Oil Filter Cap Wrench
3933	27mm Oil Filter Cap Wrench
3934	36mm Oil Filter Cap Wrench
3935	24mm Oil Filter Cap Wrench
3936	29mm Oil Filter Cap Wrench
3939	38mm Oil Filter Cap Wrench

Oil Filter Wrenches

Pro Swivoil™ Filter Wrenches

- 180 degree swivel action
- Cushion grip dual material handle provides greater comfort and better gripping force.
- Stainless and plated steel material band for lifetime corrosion resistance
- Dimpled for extra gripping power
- Specially designed to fit today's oil filters

Item No.	Diameter Range
3941	Small 2.52" to 2.99" (64 to 76mm)
3942	Medium 2.87" to 3.27" (73 to 83mm)
3943	Large 3.50" to 3.90" (89 to 99mm)
3944	Extra Large 3.78" to 4.37" (96 to 111mm)



Swivoil™ Filter Wrenches

Wrenches are made of high-quality steel with a zinc-plated yoke and a blackened band for resistance to rust and corrosion. The Plastisol-dipped handle will not slide off during use. Even hard-to-reach oil filters will come off easily with this swivel-handle oil filter wrench. The unique yoke and link assembly allows a good grip, but will not crush the filter. Wrenches' swivel tension is adjusted easily by using the nut and bolt on the handle.

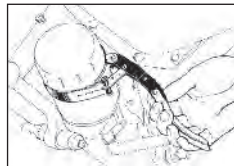


Item No.	Diameter Range
3527	3-7/8 to 4-3/8" (96mm to 111mm)
3082	3-1/2 to 3-7/8" (88.9mm to 98.4mm)
3083	2-7/8 to 3-1/4" (73mm to 82.5mm)
3324	2-1/2 to 3" (63.5mm to 76mm)



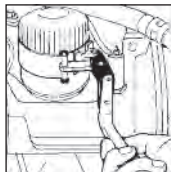
Universal Oil Filter Wrench - 190

Wrench removes oil filters 3-7/16" to 3-3/4" (87 to 95mm) in diameter. Its positive grip lets you exceed normal torque requirements. The band will not puncture or crush filter.



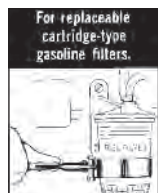
Oil Filter Wrench - 191

Use wrench to remove oil filters 3-1/16" to 3-7/16" (78 to 87mm) in diameter. Its positive grip lets you exceed normal torque requirements. The band will not puncture or crush filter.



Fuel and Oil Filter Wrench - 192

Wrench removes gasoline and oil filters 2-1/4" to 2-9/16" (57 to 65mm) in diameter. Design prevents crushing of the filter case.



Oil Filter Wrenches



Truck and Tractor Oil Filter Wrench - 2010

Tool removes oil filters 4" to 4-3/8" (102 to 111mm) in diameter found on most tractors and trucks. Positive grip lets you exceed normal torque requirements. Band will not crush filters.



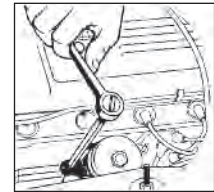
Adjustable Oil Filter Wrench - 2187

With notched link set to 1 to 3 positions, this wrench removes oil filters from 2-3/4" to 3-3/4" (70 to 95mm) in diameter. Wide range of sizes makes this wrench very universal.



Square Drive Oil Filter Wrench - 2029

For hard-to-reach areas, use this wrench in place of 190 to remove filters 3-7/16" to 3-3/4" (87 to 95mm) in diameter. To use, turn filter with 3/8" square drive tools. Band will not crush filter.



▲ Caution: Do not use with power tools.



Heavy-Duty Oil Filter Wrenches

Wrenches are designed for high torque requirements of truck filters and used with 1/2" square drive tools. They have 1-1/2" wide bands for added strength and increased grip area.

Item No.	Description
2320	Removes Truck Oil Filters from 3-3/4" to 4-1/2" (95 to 115mm) in Diameter; Fits Ford 6.9-L Diesel Oil and Fuel Filters and Most Mack Truck Filters
2321	Removes Truck Oil Filters from 4-1/2" to 5-1/4" (115 to 135mm) in Diameter
2322	Removes Truck Oil Filters from 5-1/4" to 5-3/4" (135 to 150mm) in Diameter

▲ Caution: Do not use with power tools.



Heavy Duty Oil Filter Wrenches, Wide Band

Extra wide 3" band for better grip and reduced canister damage.

Item No.	Description
2320W	Fits 4-1/8" to 4-1/2" (105 to 115mm)
2321W	Fits 4-3/8" to 5-1/4" (110 to 130mm)
2322W	Fits 4-3/4" to 5-1/2" (120 to 140mm)

Not for use with impact guns.

Oil Filter Wrenches

3" End Cap Oil Filter Wrench - 2790

Specially designed wrench removes and installs hard-to-reach 3" (76mm) oil filters with a 15-flute end. It fits various flute designs found on AC/Delco, Fram, Wix, STP, NAPA, Sears, Gard, Montgomery Ward, VW, Motorcraft and other filters. Use with 3/8" square drive tool or a 1" wrench. Durable steel wrench is zinc plated to resist rust. Be sure fluted end of filter matches wrench.



▲ Caution: Do not use with power tools.

5 Pc. Filter Cap Wrenches - 3865

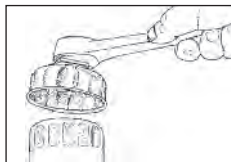
- Provides high torque capacity
- Handles 140 ft.-lbs. of torque to remove even the most stubborn filters.
- Competitive filter cap wrenches do not even come close to this capacity.
- Metal drive insert will not deform or break even after years of service.
- Set comes in blow mold case

Item No.	Description
3860	65/67 mm, 14 flute - Plast. Cup
3861	74/76 mm, 15 flute - Plast. Cup
3862	76 mm, 14 flute - Plast. Cup
3863	93 mm, 15 flute - Plast. Cup
3864	76/80/93 mm, 36 flute - Plast. Cup



3-3/4" End Cap Oil Filter Wrench - 2991

Wrench removes and installs 3-3/4" (95mm) diameter filters with 15-flute ends. It is designed for use with a 3/8" square drive tool or a 1" wrench. Tool is zinc plated to resist rust. Be sure fluted end of filter matches wrench.



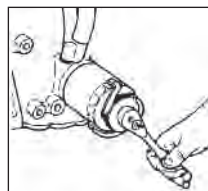
65mm End Cap Oil Filter Wrench - 3253

Wrench removes and installs 14-flute, 65mm factory oil filters on late-model Toyota Tercel, MR2, Celica and 1988 Camry. Use with a 3/8" drive tool or a 1" wrench.



Universal 3-Jaw Oil Filter Wrench - 3288

Remove all passenger car and light-duty truck spin-on type filters with this wrench. Sizes range from 2-1/2" to 3-3/4". Use with 3/8" square drive tool.



Oil Filter Wrenches



Adjustable Oil Filter Wrench Pliers - 3508

Pliers cover a complete range of filter removal from 2" to 5" (50mm to 125mm) in diameter. Ratchet and lock mechanism allow for multiple settings for sure fit, eliminating slippage. Jaws are grooved for better holding of the filter. Forged for superior strength. Plastisol coated handles provide a firm grip.



Oil Filter Wrench Pliers

Pliers remove stubborn, on-tight filters. Unique, dual-handle styling allows for better leverage to bear down harder. Tool is forged for superior strength and plastisol coated handles provide a firm grip.

Item No.	Diameter Range	Joint
3368	2-1/2" to 3-7/8"	Slip
3369	2-1/4" to 3-1/2"	Slip
3368F	2-11/16" to 3-3/4"	Fixed
3369F	2-1/2" to 3-1/4"	Fixed



Nylon Strap Oil Filter Wrench - 3149

Use wrench on oil filters up to a 6" (152mm) diameter. Strong nylon belt will not slip. Use with 1/2" square drive tools.



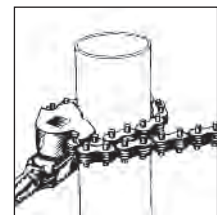
Heavy Duty Oil Filter Strap Wrench - 3529

Strap is made of high strength oil resistant nylon and handle is made of forged steel. Chrome plated 3/8" and 1/2" drive engagement. Handles filters with diameters up to 9" (229mm) especially high torque requirements on truck and tractors.



Chain Wrench - 2595

To effectively apply torque, wrap tool around any shape item from 5/8" to 5" (16 to 127mm) in diameter. Turn with 1/2" square drive tools. Chain length - 16-1/4".





Steering, Suspension & Drive Train



Steering, Suspension & Drive Train



Steering Wheel Puller Kit - 41620

This kit has what it takes to remove a steering wheel from most domestic and import cars with or without telescoping tilt columns. Use the puller legs with the steering wheel puller to remove steering wheels on late model GM vehicles. Steering wheel lock-plate depressor also included.

Item No.	Description
2291	Puller Yoke and Screw Extension Bushing
3509	Lock Plate Removal Tool
3510	2 Pc. Puller Leg Package
3906	Pivot Pin
41623	Lock Plate Depressor Frame
41624	Lock Plate Remover Collars & Nut Washer
41625	Screw Package



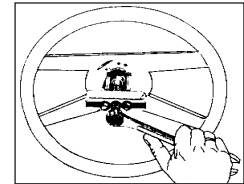
Pivot Pin Remover - 3906

Tilt steering columns are much easier to service when your tool box has one of these pivot pin removers in it. Works on 1969-current GM, Chrysler, and Ford vehicles with Saginaw steering columns.

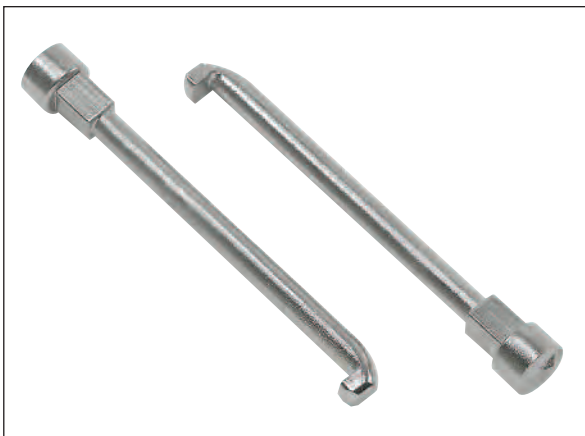


Steering Wheel Puller (Crankshaft Pulley Puller) - 2291

Tool pulls steering wheels on most US and imported cars. It includes special (5/16"-18 UNC) bolts for use on GM vehicles with S.I.R. units to avoid damaging electrical components. A floating swivel on center screw prevents damage to steering column. Five sets of bolts include the following: 3/8-16" UNC, 5/16-18" UNC, 5/16-24" UNF, 1/4-28" UNF and 8 x 1.25mm. It will also remove crankshaft pulleys on Chrysler 2.2 and 2.5L engines.



- Replacement part: 2286-76 Load Screw
- Replacement part: 2291-80 5/16"-18 UNC Hex Head Washer Bolt, 1 per package



GM Steering Wheel Puller Legs - 3510

Use in conjunction with the 2291 Steering Wheel Puller to remove steering wheels on late model GM vehicles that are not pre-drilled to receive standard bolts.

Applications Include:

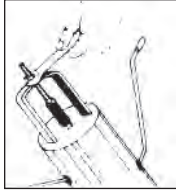
Cadillac	1997 and new Catera
Chevrolet/GMC	1997 and newer Malibu, Corvette 1998 and newer C- and K-series trucks, full-sized vans, Astro/Safari vans
Buick	1997 and newer Park Avenue and Regal Oldsmobile
Oldsmobile	1997 and newer Cutlass
Pontiac	1988-1993 LeMans 1997 and newer Grand Prix and Trans Sport Van

Includes bushing to cover the following applications:

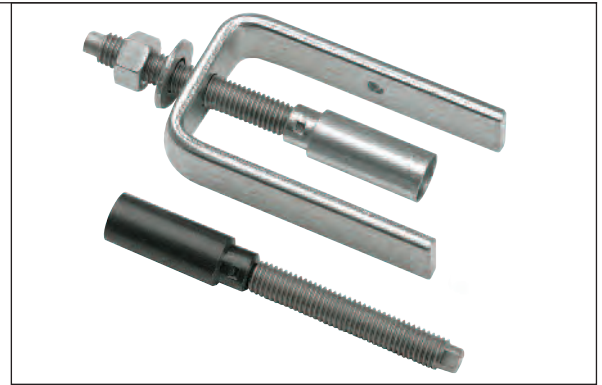
Ford	1997-Current Explorer, Ranger, Pickups
Chrysler	1999 Jeep Grand Cherokee

Steering Wheel Lock-Plate Remover and Installer - 3509

Features a redesigned puller yoke to fit late model GM cars with (S.I.R.) air bags. (1992 to Present). Works on older GM, Chrysler and AMC vehicles previously serviced by the 2414. Narrower yoke prevents damage to the lock plate. Separate SAE (black) and Metric (zinc) threaded collars screw to the center steering column. Center screw uses a 3/8" wrench flats to turn collars onto center column. Zinc and black oxide for corrosion resistance.



- Replacement part: 3509-71 Lock Plate Yoke
- Replacement part: 3509-72 Lock Plate Collar Package



▲ Caution: Always consult dealership service manual prior to servicing vehicles with air bags.

Suspension Service Kit - 62326

For removal of tie rods and ball joints on most U.S. and Import vehicles.

Item No.	Description
2287	Ball Joint Separator
2288	Tie Rod Separator
2289-71	Pitman Arm Puller Yoke
2289-72	Pitman Arm Puller Center Screw
3312	Deluxe Inner Tie Rod Tool



Pneumatic Tie Rod / Ball Joint Separator Kit - 41610

Kit Features:

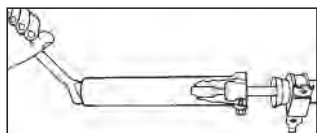
- **Includes most popular sizes**
 - 1-1/8", 15/16", and 11/16".
- **Chrome plated**
 - Protects against corrosion and improved visibility.
- **Knurled handle**
 - Improves grip.
- **Storage case**

Works with hand and pneumatic air systems to remove Tie rods, ball joint and pitman arm assemblies.



Deluxe Inner Tie Rod Tool - 3312

Remove and install inner tie rods on many GM and some Chrysler products that have a complete hex with a ball socket or just 2 flats on the inner end that measure 1-7/16" across. Tool can also be used on all inner tie rods with 1-3/16" and 1-5/16" hex sizes.



▲ Caution: Do not use with power tools. For intended use only.

Steering, Suspension & Drive Train



Tie Rod Separator - 2288

This powerful tool separates tie rods. Insert 21/32" opening between parts and strike with hammer to separate. Separator is forged to withstand hard usage. Overall length: 12".

▲ Caution: For intended use only.



Ball Joint Separator - 2287

Tool separates ball joints from steering knuckles. To use, insert 15/16" opening between parts and strike with hammer. Separator is forged to withstand hard usage. Overall length: 12".

▲ Caution: For intended use only.



Pitman Arm Puller - 2289

Puller removes full-size Pitman arms. To use, mount jaws over Pitman arm and turn center screw with wrench until tight. Strike center screw with hammer to release Pitman arm. No other tools are needed. Puller has a drop-forged and heat-treated steel yoke. Screw size 5/8"-18 thread.

▲ Caution: Do not use with power tools.



Front End Service Kit - 41690

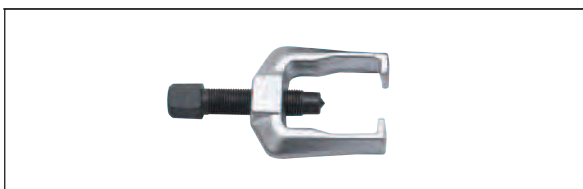
This versatile set allows for easy removal of the most popular types of Pitman arms, tie rods, and ball joints.

Item No.	Description
2289	Pitman Arm Puller 22 x 140mm
3533	Tie Rod Puller
3916	Universal Ball Joint Separator
3917	Tie Rod End Puller and Pitman Arm Puller
3918	Universal Tie Rod End Remover



Universal Ball Joint Separator - 3916

For separating the ball joint from the spindle support arm on domestic and import front wheel drive vehicles. Adjustable for different size ball joints. 1-1/8" & 2-1/8" (30 & 56mm) maximum opening capacity.



Tie Rod End Puller and Pitman Arm Puller - 3917

Use as a Pitman arm remover for many small domestic rear wheel drive vehicles, or as a tie rod end puller for many domestic and import vehicles. 1-1/16" & 2-1/8" (27 & 56mm) maximum opening capacity.

Ford Ball Joint Cam Tool - 3316

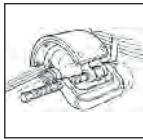
Easily remove ball joint alignment cams by simply placing prongs of fork under flange of cam and tapping with hammer. Cam is pulled from tapered seat and can be rotated for alignment, adjustment or replacement. Fork opening: 1-3/8".



▲ Caution: For intended use only.

Ball Joint / U-Joint / Brake Anchor Pin Press Set - 3421

Set is used for the removal and installation of press-fit parts such as ball joints, U-joints and truck brake anchor pins without resorting to



makeshift methods. Set contains 1 C-frame press, 3 receiver tubes (2-3/4" ID x 3" OD, 2-1/4" ID x 2-1/2" OD, 1-3/4" ID x 2" OD)

and installation and removal adapters. This tool will even remove rusted and corroded parts. Kit comes in blow mold case.



Item No. Description

3421-71	C-Frame Press Yoke
3421-72	Forcing Screw
3421-73	3 Pc. Receiver Tube Set: Contains (1-3/4" ID x 2" OD, 2-1/4" ID x 2-1/2" OD & 2-3/4" ID x 3" OD)
3421-74	2 Pc. Removal Adapter & Installation Adapter Set

Four Wheel Drive Ball Joint Adapter Kit - 3478

Use in conjunction with 3421 Ball Joint/U-Joint/ Anchor Pin Press Set to remove and install upper and lower ball joints on Dana 44 front axles. Applications: 1967 and newer 1/2 and 3/4 ton 4WD Ford, GM, Dodge, IHC and Jeep vehicles.



Dodge Ram/Jeep Ball Joint Adapter Set - 3479

Use in conjunction with 3421 Ball Joint/U-Joint/Anchor Pin Press Set to remove and install both original equipment and after-market upper and lower ball joints, including offset type used to change caster and camber. Applications: 1994 and newer Dodge Ram 1/2 ton 4WD pickup; and the following Jeep vehicles: 1984 and newer "downsized" Wagoneer and 4WD Cherokee and Comanche; 1987 and newer Wrangler; 1990 and newer Renegade; 1993 and newer Grand Cherokee.

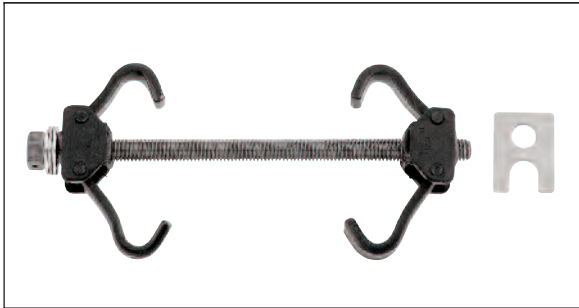


Ford E-Van Ball Joint Adapter - 3480

Use in conjunction with 3421 Ball Joint/U-Joint/Anchor Pin Press Set to remove lower ball joints on Ford vans. Applications: 1992 and newer Ford E-250 and E-350 3/4 and 1 ton full size vans.

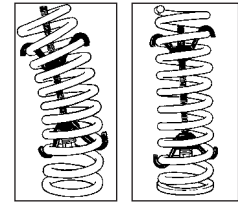


Steering, Suspension & Drive Train



Coil Spring Compressor - 3450

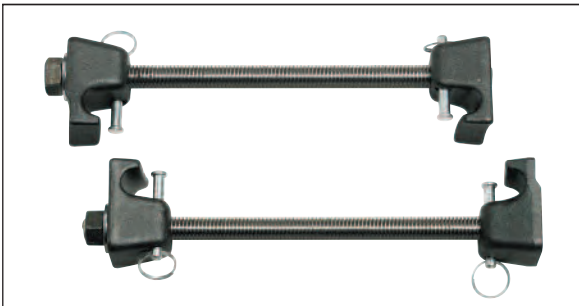
Use tool to remove and install automotive coil springs up to 5-5/8" outside diameter. Designed to grasp a spring with a maximum 3/4" wire diameter. Can be used on straight or curved springs. Forged alloy steel arms hug contour of helix.



Replacement part available:

- Replacement part: 3450-71 Clip

▲ Caution: Read all instructions carefully before using this tool. For intended use only. Do not use with power tools.



Macpherson Strut Spring Compressor - 3387

Use this tough tool for quick and easy replacement of struts, springs and shock absorbers. Lets you compress springs both on or off the vehicle with hand or power tools. Maximum capacity: 6" OD. Wire diameter: 5/8".

▲ Caution: Follow instructions provided with this tool.



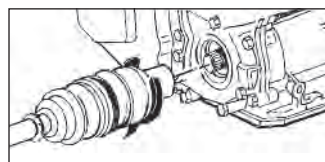
Flange-Type Axle Puller - 2300

Tool pulls rear axle on American made cars and 1/2-ton trucks with flange-type axle. Yoke fits axles with 4, 5 or 6 studs in a circle from 4-1/2 to 5-1/2" in diameter. A 5-lb slide hammer makes removal easy. Slide hammer and yoke are 5/8"-18 UNF thread.

- Replacement part: 2300-71 Yoke (standard)
- Replacement part: 2300-75 Yoke (compacts) 3-3/4 to 4-1/2" Bolt Circle



Inner CV Joint Puller - 3164



Used with 2-1/2 lb slide hammer (2290), this tool will pull most CV joints that use a hidden snap ring to hold them in the transaxle. Inner CV Joint Puller fits slide hammer with 1/2"-13 UNC threads. Works on GM and some Ford vehicles.



CV Boot Clamp Tool - 3955

• Features

- Allows for proper installation of CV boot.
- Crimps joints while with center pushing feature.
- Works with hand, 1/2" drive ratchets, or torque wrench .
- High leverage design.

3 Pc. CV Boot Service Kit - 3954

Complete kit for installing and removing CV boot bands without damage to CV Boot.

Item No.	Description
3955	CV Boot Clamp Tool
3956	45 Degree CV Boot Band Cutter
3191	CV Joint Boot Clamp Tightening Wrench

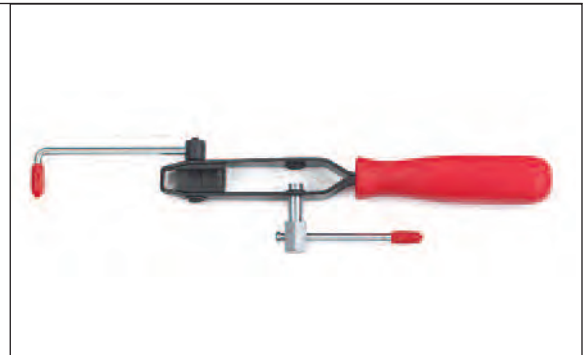


CV Joint Boot Clamp Tightening Wrench - 3191

• Features

- Works with hand or ratchets with 1/2" drive.
- Includes built in cutter.

Use wrench to securely fasten Band-it® style free end clamps, roll band and clips or Band-it Jr.® style pre-formed CV Boot Clamps. The tool is used by turning the winding mandrel with a 1/2" socket, wrench or by hand. The mandrel tightens the clamp, holding it in place until the ears of the clamp are folded down. Use built in cutter to remove excess band material.



45 Degree CV Boot Band Cutter - 3956

• Features

- Removes old bands without damage to boot.
- 45 degree offset for better access.

Cuts with out damage to CV boot. Hardened patented cutting edge for clean cut. Cutting tip reduces risk of CV boot damage.



Steering, Suspension & Drive Train



Clutch Aligning Set - 2420

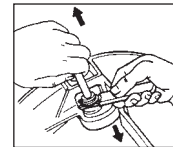
Align single disc clutches on American and imported cars, light trucks and tractors. Adapter fits through clutch plate and into pilot bushing or bearing. Tapered cone fits into clutch hole and aligns clutch plate properly. Set includes shaft and 8 two-stepped pilot bearing adapters covering 16 sizes. The plate aligning cone has 1-1/8" maximum diameter taper.

Description	Sizes
Pilot Bushing Cone Taper	0.734" to 1.17" (18.64mm to 29.72mm)
Zinc Adapters for Import	0.472" & 0.500" (12mm & 12.7mm) 0.622" & 0.641" (15.8mm & 16mm) 0.688" & 0.710" (17.4mm & 18mm) 0.826" & 0.875" (21mm & 22.2mm)
Black Adapters for Domestic	0.561" & 0.590" (14.2mm & 15mm) 0.749" & 0.787" (19mm & 20mm) 0.812" & 0.874" (20.6mm & 22.2mm) 0.984" & 1.181" (25mm & 30mm)



Hydraulic Clutch Quick Disconnect Tool - 3413

This tool is used to release fingers that hold clutch line to the clutch sleeve cylinders. Works on hard to access couplings found on Ford light-duty trucks, Bronco II, Ranger, Explorer and 1989 to current Thunderbird and Cougar vehicles with hydraulic clutch. Will also work on the following vehicles with hydraulic clutch; 1993 to current Pontiac Grand Prix, Oldsmobile Cutlass Supreme, Buick Regal; 1993-94 Chevy Lumina; and 1995 to current Chevrolet Monte Carlo.



HubTamer Master Bearing Service Set - 3531

From start to finish - complete front wheel bearing service, on the car, with one set of tooling! It takes off the hub, removes the old bearing and installs the new one, then replaces the hub. All while the knuckle assembly stays on the car! Fast, efficient, and profitable.

- Works on virtually all floating rotors on U.S. domestic cars and light trucks and many trapped rotors found on popular imports.
- Cut almost 50 percent off the service time when replacing front wheel bearings. Impact wrench compatible to save time and money.
- The HubTamer pushes on the steering knuckle, not the rotor.
- No need to remove the knuckle assembly and use a shop press to replace the bearings ... eliminate unnecessary front end alignments.
- Takes care of noise and driveability problems.
- Most complete and up-to-date front wheel bearing service set available.
- Compact, one-piece design fits easily behind the rotor and leaves plenty of room for positioning the tool and wrench. No sliding arms to adjust.
- Full set includes: Front Hub installers for use on various Ford/Mercury vehicles, and the inner bearing Race/Outer Tie Rod Remover.
- Entire set comes in heavy duty, compartmentalized organizer case.



Free up the knuckle assembly...



Assemble the forcing screw, the HubTamer and adapters...



Let your impact wrench do the rest. Replace the bearing using adapters and tools included in the set.

For Contents and Replacement Part Listings See Page 202.

Automatic Transmission

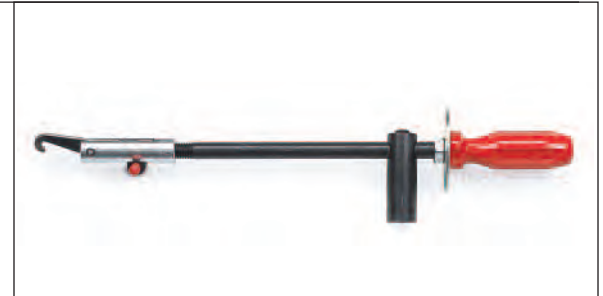
Clutch Spring Compressor - 2398

Tool compresses automatic-transmission clutch springs on some GM, Ford, Toyota and other transmissions. It permits easy removal and installation of snap rings. Job can be completed without removing center shaft and clutch assembly from transmission housing. To use, force legs in and catch jaws inside transmission drum groove. Loosen wing nuts and adjust pushers. Tighten screw until lock ring is free to be removed.



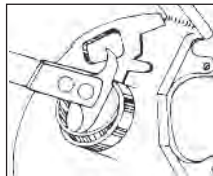
Seal and Pilot Bearing Puller - 2824

Hooked end removes seals and pilot bearings without breaking. Roll hook under edge of seal and hit striking block with hammer. Hook can be used on slide hammer for frozen seals. Puller has 1/2"-13 UNC threads. Puller is not recommended for caged needle bearings. Damage to caged needle bearings may occur.



Seal Puller - 3245

Use tool to remove oil and grease seals on automobiles and light trucks. Puller has 2 tip sizes for most applications. To use, insert tip behind seal and use leverage to remove.



▲ Caution: Do not use as a striking tool. For intended use only.

Angle Finder - 2968

Use finder to measure angles of most parts such as frame angle (pitch forward or backward) for setting truck front ends. A magnet in the base holds tool in place. It is graduated in 1/2° increments.



Ramo-Matic Zerk Fitting Tool - 416

Tool clears grease fittings of hardened matter. It fits straight and angled zerk-type fittings. To use, fill with oil or grease, hold against zerk fitting and strike with a hammer to clear away debris.



Steering, Suspension & Drive Train



General Purpose Bushing Driver Kit - 41780

Perfect for removing and inserting bushings in cars, trucks, buses, tractors, construction and off-road equipment. This set includes small, medium, and large drivers and bushing adapters from 3/8" to 1-3/8".

Item No.	Description
41781	Bushing Adptr. (3/8"-7/16")
41782	Bushing Adptr. (7/16"-1/2")
41783	Bushing Adptr. (15/32"-17/32")
41785	Bushing Adptr. (1/2"-5/8")
41786	Bushing Adptr. (9/16"-11/16")
41687	Bushing Adptr. (5/8"-11/16")
41688	Bushing Adptr. (5/8"-3/4")
41689	Bushing Adptr. (11/16"-13/16")
41790	Bushing Adptr. (3/4"-7/8")
41791	Bushing Adptr. (13/16"-15/16")
41792	Bushing Adptr. (7/8"-1")
41793	Bushing Adptr. (15/16"- 1-1/16")
41794	Bushing Adptr. (1"-1-1/8")
41795	Bushing Adptr. (1-1/16"- 1-3/16")
41796	Bushing Adptr. (1-1/8"- 1-1/4")
41797	Bushing Adptr. (1-3/16"- 1-5/16")
41798	Bushing Adptr. (1-1/4"- 1-3/8")
41799	Driver #1
41800	Driver #2
41801	Driver #3
41802	Driver Nut #1 and #2



9 Pc. Bushing Remover & Installer Set - 31430

Use sets to remove and insert bushings such as those in cars, trucks, buses, tractors, construction and off-road equipment. Sizes are stamped on each bushing adapter. To use, select proper size adapter and drive bushing into place. Sizes range from 1-5/16" to 1-3/4".

Replacement Parts for 31430:	Description
• Replacement part: 31430-71	1-5/16 to 1-7/16" Bushing Adapter
• Replacement part: 31430-72	1-11/32 to 1-1/2" Bushing Adapter
• Replacement part: 31430-73	1-7/16 to 1-9/16" Bushing Adapter
• Replacement part: 31430-74	1-1/2 to 1-5/8" Bushing Adapter
• Replacement part: 31430-75	1-9/16 to 1-11/16" Bushing Adapter
• Replacement part: 31430-76	1-9/32 to 1-3/4" Bushing Adapter
• Replacement part: 31430-77	1-3/4" Bushing Adapter
• Replacement part: 31430-78	Driver
• Replacement part: 31430-79	Driver Nut

Brake & Wheel Tools



8 Pc. Metric and SAE Stud Removal Kit - 41760

Complete SAE and Metric stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

Item No.	Description
41761	Remover Skt: 6mm 3/8" Dr.
41762	Remover Skt: 8mm 3/8" Dr.
41763	Remover Skt: 10mm 1/2" Dr.
41764	Remover Skt: 12mm 1/2" Dr.
41765	Remover Skt: 3/8" 1/2" Dr.
41766	Remover Skt: 7/16" 1/2" Dr.
41767	Remover Skt: 5/16" 3/8" Dr.
41768	Remover Skt: 1/4" 3/8" Dr.



Brake Bleeder Tank - 3795

Diaphragm-type bleeder for conventional and anti-lock brake systems allows for one-man operation. Diaphragm keeps brake fluid and air separated. Custom adaptors available for many makes and models. Holds approximately 4 gallons. Includes combination quick coupler plus automatic fluid shut-off. Steel construction.

- 37951 - Adapter converts classic 2222 brake bleeder tank to new 3700 series master cylinder adapters
- 37952 - Adapter converts new 3795 brake bleeder tank to classic KD master cylinder adapters

▲ Caution: For use with DOT 2, 3, 4 and 5 brake fluids only. Not for use with any other brake / hydraulic fluid.

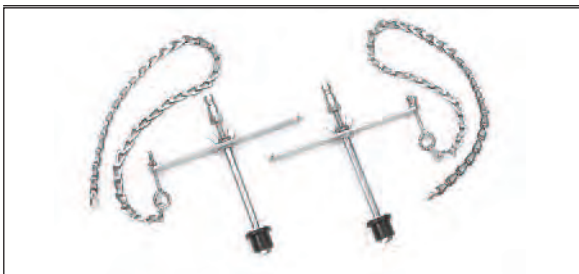


Brake Bleeder Tank - 2901

Safe, portable tank fills and pressurizes standard and power brake systems. It operates from hand pump pressure, eliminating the need for an air compressor. Only a few pumps are needed to build pressure to 10 to 15 PSI; excessive pressure cannot build up. Tank is serviceable and features quick disconnect coupler and shut-off valve that is used as a source for brake fluid when topping off master cylinders with brake bleeder adapter attached. It has a 4-qt. capacity and a 10-1/2" hose. Adapters are available for many cars.

- Replacement part: 2222-73 Pressure Gauge
- Replacement part: 2222-76 Quick Disconnect Coupler
- Replacement part: 2901-71 Valve
- Replacement part: 2901-01 O-Ring

▲ Caution: For use with DOT 2, 3, 4 and 5 brake fluids only. Not for use with any other brake / hydraulic fluid.



GM Bypass Adaptor - 3796

Adapter Pressurizes brake systems on most GM applications. Adapter for use with 3795 and 2901 brake bleeding tanks.

▲ Caution: For intended use only.

Brake & Wheel Tools

Dual Bleeding Attachment - 3787

Use for pressurizing brake systems when bleeding dual round top reservoirs. Features quick disconnect fittings for fast setup. Adapter for use with 3795 and 2901 brake bleeding tanks.



▲ Caution: For intended use only.

Universal Adaptor - 3.25" Diameter Adaptor - 3788

Adapter Pressurizes brake systems on many applications across many makes. Use with 3-1/2" round reservoirs. Adapter for use with 3795 and 2901 brake bleeding tanks.



▲ Caution: For intended use only.

Universal Adaptor - 3.75" x 7.75" - 3789

Adapter Pressurizes brake systems on many applications across many makes. Use with rectangular reservoirs under 3.75" x 7.75", common on trucks and full sized vehicles. Adapter for use with 3795 and 2901 brake bleeding tanks.



▲ Caution: For intended use only.

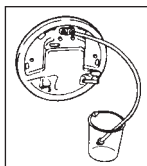
Universal Round Adaptor - 4 1/8" - 3790

Adapter Pressurizes brake systems on many applications across many makes. Use with 4-1/8" round reservoirs. Adapter for use with 3795 and 2901 brake bleeding tanks.



▲ Caution: For intended use only.

One-Man Brake Bleeder - 2538



Attach bleeder to loosened bleeder screw and pump brake pedal until all air bubbles are removed from the hose. Two adapters fit most bleeder screws and prevent leakage while keeping the hose in place.



Brake & Wheel Tools



Kit Features:

- **Upgraded heavy duty brake spreader**
- Use with both a 5/16" socket wrench or use by hand.
- **Brake lining thickness gauge**
- Color coded brake gauge identifies thickness levels for brake lining inspection.

Brake Service Kit - 41520

Kit works on both disc and drum brake systems. Use to adjust clearance between drum brakes and shoe, remove and install shoe return springs and brake pads.

Item No.	Description
287	Drum Brake Adjusting Tool
298	Brake Spring Pliers
2774	Universal Brake Shoe Retaining Spring Tool
3163	Disc Brake Piston Tool
3355	GM-Ford Disc Brake Piston Tool
3525	Disc Brake Pad Spreader
3962	Brake Lining Thickness Gauge
58707	7mm Hex Socket
58708	8mm Hex Socket
58710	10mm Hex Socket
58832	1/4" Hex Socket
58835	3/8" Hex Socket
58911	T-40 Torx® Socket
58913	T-45 Torx® Socket
58914	T-50 Torx® Socket



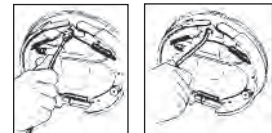
Brake Lining Thickness Gauge - 3962

- **Features**
 - Color coded brake gauge identifies thickness levels for brake lining inspection.
 - Metric - 8, 10, & 12mm (Green), 4, 5, 6mm (Yellow), 2 & 3mm (Red).
 - SAE - .3150 to .4720" (Green), .1575 to .2382" (Yellow), .0787 to .1181" (Red).



Bendix Drum Brake Spring Tool - 280

Tool removes and installs return spring on Bendix drum brakes. To use, place socket end over spring anchor and twist to remove. Hook notched end through spring and over the post, then lift to install.



Brake Shoe Retaining Spring Tool - 285

Tool removes and installs retaining springs 11/16 to 7/8" in diameter. Special socket grips retaining washer. Push and turn to remove or install.



Deluxe Brake Spring Tool - 3841



Features a special ramped spring adapter that saves you time and money by "turning" the springs on drum brake systems off the spring posts making the removal and installation much easier. Also features a retractable spring installer end that allows the spring to slide over the posts and then pop into place when the installer is retracted into the handle.



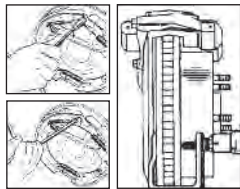
Universal Brake Shoe Retaining Spring Tool - 2774



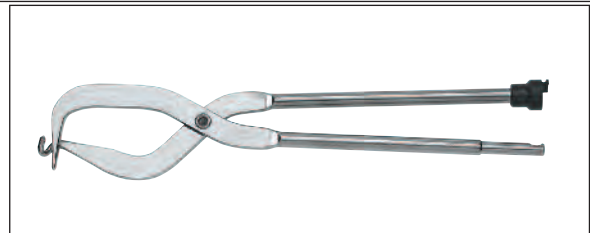
Double-ended tool removes and installs small and large car drum brake retaining springs. Tool fits sizes 5/8 to 11/16" and 11/16 to 7/8" diameter. Special sockets grip retaining washers. Push and turn to remove or install.



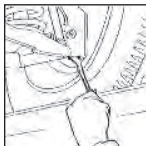
Brake Spring Pliers - 298



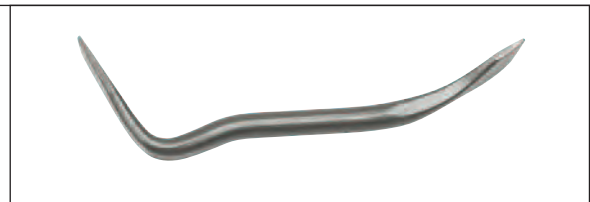
Tool easily removes and installs shoe return springs on most drum brakes. Socket end removes spring from anchor stud and notched end installs spring on anchor. Tool is chrome plated to resist rust and provides easy cleanup.



Drum Brake Adjusting Tool - 295



Tool adjusts clearance between drum brake and brake shoe. It fits through a slot in the backing plate and turns the star wheel. Ends of tool are offset for hard-to-reach areas on small cars.



Drum Brake Adjusting Tool - 287



Tool adjusts clearance between drum brake and brake shoe. It fits through a slot in the backing plate and turns the star wheel in many drum brakes.



Rear Brake Caliper Kit - 41540

Set designed for vehicles with brake pistons that are mechanically tied to the parking brake and require a turning action to push back. Set covers most domestic and import vehicles.

Item No.	Description
41541	Applicator & Pad
41542	Adapter 0: 2-1/2", 1 Pin
41543	Adapter 2: 2", 3 Pin
41544	Adapter 3: 2-1/4", 3 Step
41545	Adapter 4: 1-1/4", 2 Pin
41546	Adapter 5: 1-3/8", 2 Pin 3/8" Dr.
41547	Adapter 6: 1-5/8", 2 Pin (L)
41548	Adapter 7: 1-5/8", 2 Pin (S)
41549	Adapter 8: 1- 7/8", 1 Pin
41550	Adapter P: 2-1/4", 1 Pin



Brake & Wheel Tools



3 Pc. Allen Hex Bit Brake Caliper Set - 58663

Set is used on disc brake calipers to remove and install brake pads. Heat-treated and precision-machined set includes 1/4", 3/8" and 8mm hex bit sockets. For use with 3/8" square drive tools.

- Replacement parts: Allen # 58832 1/4" Hex Socket
- Replacement parts: Allen # 58835 3/8" Hex Socket
- Replacement parts: Allen # 58708 8mm Hex Socket



3 Pc. Allen Torx® Bit Brake Caliper Set - 58891

Set is used on disc brake calipers to remove and install brake pads. Heat-treated and precision-machined set includes T-40, T-45 and T-50 Torx® Bit Sockets. For use with 3/8" square drive tools.

- Replacement parts: Allen # 58911 T-40 Torx® Socket
- Replacement parts: Allen # 58913 T-45 Torx® Socket
- Replacement parts: Allen # 58914 T-50 Torx® Socket



9 Pc. Allen Torx®/Hex Brake Service Set - 58893

Set is used on disc brake calipers to remove and install brake pads. Heat treated and precision-machined. Set includes: 3/8" square drive sizes: 1/4", 3/8", 7mm, 8mm, 10mm, T-40, T-45, T-50 and 1/2" square drive size T-60.



Heavy Duty Brake Pad Spreader - 3525

Tool helps to move front disc brake pistons back into position while installing new brake shoes. Works with most all Disc Brake Systems with single piston caliper. Features heavy duty center screw and pressure plate for extended use. Use with a 1/2" wrench or socket. Not for use with an impact wrench.

- Upgraded with a knob that allows for use with both a 5/16" socket wrench or use by hand.
- Heavy duty plate to reduce bending.
- Solid swivel foot will not collapse or crush under pressure.



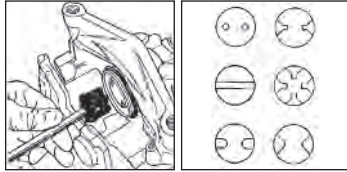
Disc Brake Pad Spreader - 3376

Pushes the caliper piston back on disc brakes that do not have the parking brake mechanism as part of the disc brake caliper.

▲ Caution: For intended use only.

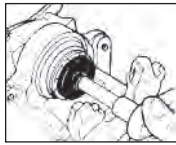
Disc Brake Piston Tool - 3163

Designed to rotate the parking-brake-activated piston back into the caliper cylinder when replacing worn pads on vehicles equipped with 4-wheel disc brakes. Tool will function on most domestic and import vehicles.



▲ Caution: Do not use with power tools.

GM-Ford Disc Brake Piston Tool - 3355



Tool rotates the piston back on GM and Ford vehicles equipped with rear wheel disc brakes. Fits GM vehicles with 2-1/8" and 1-7/8" pistons and Ford vehicles 1987 to current with rear disc brakes. Use in conjunction with 3/8" square drive tool.

Ford Applications:

1987 to current: T-Bird

1988 to current: Continental, Mark VII

1990 to current: Probe, Taurus/Sable

1991 to current: Town Car

1992 to current: Crown Victoria, Cougar, Grand Marquis



▲ Caution: For intended use only.

Brake Lining Gauge - 2324

Gauge measures bonded brake lining from 0 to 1/2" in 1/64" graduations. Place gauge over brake shoe to take reading.



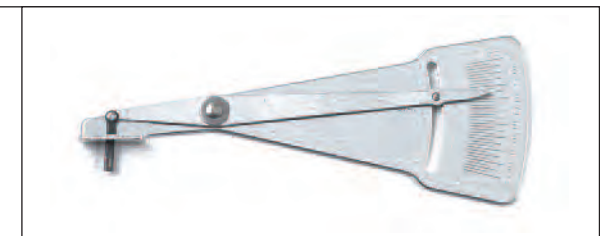
Disc Brake Lining Wear Gauge - 2116

Gauge measures brake lining remaining on bonded pads in fractions from 1/16 to 5/8" in 1/32" graduations. Tool checks measurement without removing caliper. Tool is patented.

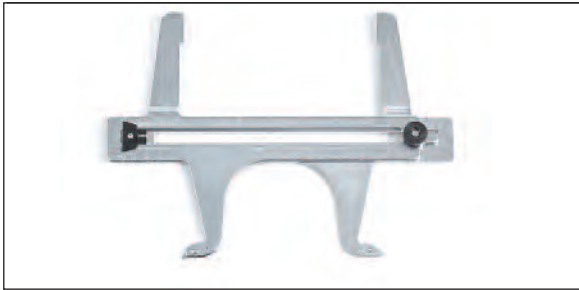


Tire Tread and Brake Lining Gauge - 2326

Measure the amount of lining remaining on riveted drum shoes and disc brake pads. Gauge measures tire tread depth up to 9/16" in graduations of 1/64".

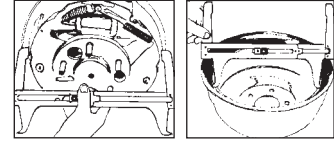


Brake & Wheel Tools



Brake Resetting Gauge - 3377

This quality tool is used to set the proper clearance between brake lining and drum prior to assembly. Inside calipers measure drum diameters and outside calipers transfer measurement to brake shoes. Knurled knob locks tool at measurement. Diameter range: 6-1/2 to 14-1/4". Calibrated in 1/32" (1mm) increments.



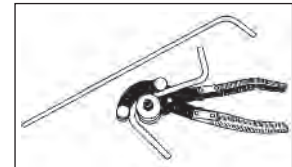
Tubing Bender - 2517

Bend 3/16, 1/4, 5/16, and 3/8" diameter tubing without kinking. Place tubing in groove and turn the handle to bend. Heavy-duty construction provides years of service.



Tubing Bender - 2189

Bend 3/16, 1/4, 5/16 and 3/8" copper and steel tubing. Tool makes tight bends without the tube collapsing. Roller adapters are included for each tubing size. Place tubing between the adapter and studs and squeeze the handles to bend.



Mini Tubing Cutter - 2107

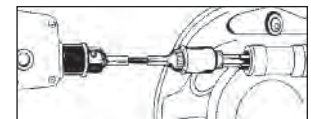


Cut thin-wall steel, plastic, copper and brass tubing from 1/8 to 5/8" in diameter. Two rollers provide burr-free cut. Small size allows cutter to fit into tight areas.



Brake Cylinder Hone - 265

Tool hones drum brake wheel cylinders and disc brake calipers from 3/4 to 2-1/2" (19 to 64mm) in diameter. Its sleeve makes insertion in cylinder easy and protects stones when not in use. Use with a variable-speed drill. Use 2004 Stone Set for disc brake honing and 266 for drum brake honing.



Economy Brake and Engine Cylinder Hone Set - 3029

Multi-purpose set includes 3 complete hones and 1 set of 2" stones. Set includes:

- Complete hone for brake, master and wheel cylinders 3/4 through 2-1/2" capacity, with 1-1/8" medium-grit stones
 - Complete hone for small car brake wheel cylinders 1/2 through 1-3/4" capacity, with two 1-1/8" medium-grit stones
 - Complete hone for disc brake caliper honing. 1-1/4 through 3-1/2" capacity, with 3/4" medium-grit stones; also ideal for lawn and garden small-engine cylinder honing when used with three 2" medium-grit stones (included)
- Replacement part: 3029-75 three 2" Cylinder Hone Stones

Replacement Stones

Stones fit brake cylinder hones 265, 2544 and 267.

Item No.	Stones	No. of Description Grit	Size	Stone
266	3	For 265 and/or 2544 Drum Brake Cylinder Hone	320	1"
2004	3	For Converting 3-Legged 265 or 2544 Cylinder Hone to Disc Brake Hone	400	3/4"



Hand Bearing Packer - 2775

Self-contained bearing packer saves time and can be used anywhere. No air line or grease gun required. Packs 50 to 60 bearings without refilling. Transparent, impact resistant cup allows grease level check. Use on all cage-type roller and ball bearings up to 2" bore.



2 Pc. Valve Stem Torque Tools Set - 3967

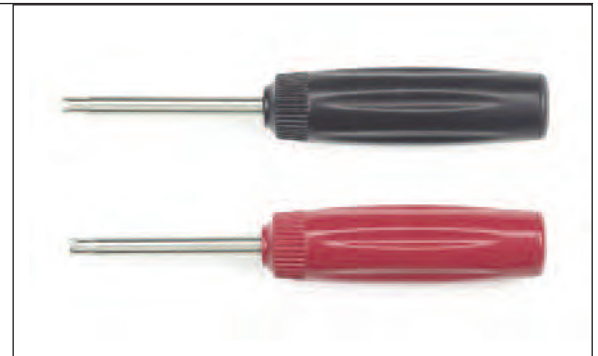
• Features

- Black handle is designed for TRC1 torque specifications.
- Red handle is designed for use on lighter grade plastic / nylon stems.

Use to properly apply torque to valve stems. Includes preset torque wrenches for two separate settings.

Offers the Valve Core Torque Tool for the standard TRC1 valve core that requires a torque specification between 3-5 inch pounds established by the Tire and Rim Association (T.R.A.)

Characterized by a black handle, the tool is calibrated to 4 inch pounds which will properly torque all TRC1 valve cores to specifications, including the nickel plated valve cores in all the TPMS sensors.

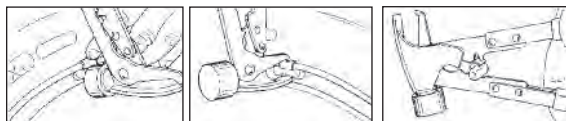


Open Stock Items

Item No.	Description	Accuracy within range
3968	45NCM (4 inch lbs) (Black)	40 to 50 NCM
3969	25NCM (2 inch lbs) (Red)	17 to 34 NCM

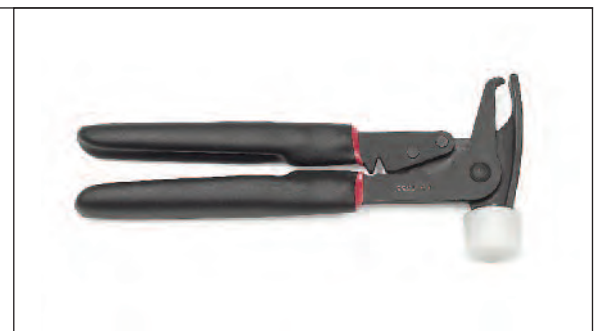
Wheel Weight Tool - 3358

Tool installs, removes, trims and tightens all types of clip-on wheel weights. It features a special plastic-type material on the hammer head for safe, mar-free installation of specially coated wheel weights used on alloy wheels. Tool has a plastisol-dipped handle for comfort.



Replacement part available:

- Replacement part: 3358-04 Plastic Tip



▲ Caution: For intended use only.

Brake & Wheel Tools



▲ Caution: For intended use only.

Master Axle Spindle Rethreading Kit - 3481

12-piece thread restoring die set for proper repair or renewal of damaged threads in stub axles/spindles on most vehicles (refer to automotive manuals for correct size for applications). Rethreading dies are made from high tempered steel for strength and durability and are hex shaped for use with a socket or wrench (not for use with impact gun). Dies will remove nicks and burrs in existing threads and are intended for "chasing" - not cutting new threads. Dies are packaged in a plastic case and include the following 12 most popular sizes: 3/4"-16, 3/4"-20, 13/16"-20, 27/32"-20, M16 x 1, M16 x 1.5, M20 x 1, M20 x 1.5, M22 x 1.5, M24 x 1.5, M24 x 2, M27 x 2.

- Replacement part: 3481-1 3/4"-16 Rethreading Die
- Replacement part: 3481-2 3/4"-20 Rethreading Die
- Replacement part: 3481-3 13/16"-20 Rethreading Die
- Replacement part: 3481-4 27/32"-20 Rethreading Die
- Replacement part: 3481-5 M16 x 1 Rethreading Die
- Replacement part: 3481-6 M16 x 1.5 Rethreading Die
- Replacement part: 3481-7 M20 x 1 Rethreading Die
- Replacement part: 3481-8 M20 x 1.5 Rethreading Die
- Replacement part: 3481-9 M22 x 1.5 Rethreading Die
- Replacement part: 3481-10 M24 x 1.5 Rethreading Die
- Replacement part: 3481-11 M24 x 2 Rethreading Die



Brake Cylinder Flex-Hones®

Tool hones drum brake wheel cylinders from 0.787 to 1-3/8" (20 to 35mm) in diameter. It develops a plateaued finish for excellent brake fluid retention. Use with a variable-speed drill.

Item No.	Hone Size	Rec. Min. Working Diameter	Grit	Length of Beaded Section	Overall Length
2480	7/8" (22mm)	0.787V (20mm)	180	3"	8"
2481	1" (25mm)	7/8" (22mm)	180	3"	8"
2482	1-1/8" (29mm)	1" (25mm)	180	3"	8"
2483	1-3/8" (35mm)	1-1/8" (29mm)	180	3"	8"



6 Pc. Spindle Nut Kit - 41660

These 6 chrome vanadium steel 1/2" drive sockets are for most 4WD SUV and light truck axle locknut applications. Use with a torque wrench, ratchet, or breaker bar.

Item No.	Description
2467	4-Lug 4WD Spindle Nut Skt 1/2 to 3/4 - Ton Dana 44
2770	6-Lug 4WD Spindle Nut Skt 3/4 to 1-Ton Dana 44
3195	4-Lug with Extension 1/2-Ton Dana 80
3910	4WD Spindle Puller
3911	Toyota Lock Nut Tool
3937	4-Lug 4WD Spindle Nut Skt 1/2 -Ton Dana 50

4-Wheel-Drive Spindle Nut Wrench - 2467

4-lug wrench removes spindle nuts on 1/2 and 3/4 ton 4-Wheel drive vehicles. It features uniquely designed lugs for maximum strength. Use with 1/2" square drive tool. Will work on Ford Vehicles with ratcheting type lock nuts on front axle.

Dimensions :Outside diameter: 2.370, Inside diameter: 2.00, Length: 2.940, Inside Depth: 2.375

Applications:

- 1959-1980 Ford 1/2 and 3/4 Ton, Bronco
- 1984-Newer Ford Ranger and Bronco II with manual hubs
- 1993-Newer Ford Ranger, Bronco II and Explorer with manual hubs
- 1980-1996 Ford F150, Bronco, F250 and 350 with Dana 44 Axle or ratcheting lock nut
- 1960-1990 GM 1/2 Ton, Full size Blazer/Jimmy
- 1969-89 Dodge 1/2 Ton with manual hubs
- 1990-93 Dodge with Dana 44 Axle with automatic lock hubs



▲ Caution: Do not use with power tools.

4-Wheel-Drive Spindle Nut Wrench - 3246

4-lug wrench removes spindle nuts on 4-wheel drive vehicles. It features uniquely designed lugs for maximum strength. Use with 1/2" square drive tool. Will work on Ford vehicles with ratcheting type lock nuts on front axle.

Dimensions :OD: 2.63, ID: 2.27, Length: 3.24, Inside Depth: 3.0.

Application:

- 1981-1997 Ford F250-350, Bronco with Dana Axle, or Dana 50IFS or model 60 monobeam axle outer adjusting nut.
- 1982-1990 GM Heavy Duty 3/4 and 1 ton trucks



▲ Caution: Do not use with power tools.

4-Wheel-Drive Spindle Nut Wrench - 2770

This 6-lug wrench removes spindle nuts on 4-wheel drive vehicles. It features uniquely designed lugs for maximum strength. Use with 1/2" square drive tool.

Dimensions :OD: 2.60, ID: 2.23, Length: 2.94, Inside Depth: 2.375.

Application:

- 1973-1981 GM 3/4 and 1 Ton 4WD Trucks
- 1978-1984 Ford F250-350 Trucks
- 1984-1992 Ranger, Bronco with manual hubs
- 1990-1993 Dodge Trucks with Dana 44



▲ Caution: Do not use with power tools.

Ford Spindle Nut Wrench - 3195

Specially designed wrench removes Ford high-shear ratcheting lock nut on popular F250/350 series trucks. Special feature includes a centering snout to help locate special axle nut and uniquely designed lugs for maximum strength. Use with 1/2" drive tool.

Dimensions :OD Cup: 2.73, ID Cup: 2.40, Length Cup: 2.0, Inside Depth Cup: 1.625, Tube-OD: 1.53 Tube-ID: 1.26

Application

- 1985 to current Ford F250-350 with Dana 80 Rear Axle, and 10 1/4" ring gear
- 1987 E350 to current with Dana 80 rear axle and 10 1/4" ring gear
- 1988 to current F super duty with Dana 80 rear axle and 10 1/4" ring gear



▲ Caution: Do not use with power tools.

Brake & Wheel Tools



7 Pc. Axle Nut Kit - 41650

These 7 extra long 1/2" drive 6 point metric sockets are ideal for heavy-duty use in removing and installing axle nuts. Use with a ratchet, breaker bar, impact wrench, or torque wrench.

Item No.	Description
3161	30mm Axle Nut Socket
3162	36mm Axle Nut Socket
3270	32mm Axle Nut Socket
3449	34mm Axle Nut Socket
3907	29mm Axle Nut Socket
3908	35mm Axle Nut Socket
3909	38mm Axle Nut Socket



4WD Spindle Puller - 3910

Removes front spindle to access needle bearing when lubricating and aligning front wheels. 5/8"-18 fine thread permits use with slide hammer. Fits spindle thread sizes 2"-16, 1-5/8"-16, and 38mm-1.5 Applications: Full-size GM, Ford, Jeep and International pickups with Dana front axles, plus Ranger and Bronco II.



Toyota Lug Nut Socket - 3911



55mm Lock Nut 1/2" Drive - 3912

55mm lock nut 1/2" Drive.



4-Lug 4WD Spindle Nut Socket 1/2-Ton Dana 50 - 3937

Remove and install 4-slot front axle locknuts on 1981-97 Ford F250-350, Bronco with Dana Axle, or Dana 50IFS or model 60 monobeam axle outer adjusting nut; 1982-90 GM Heavy Duty 3/4- and 1-Ton trucks.

7 Pc. Locknut Kit - 41670

Perfect for late model Ford, Dodge, and Toyota trucks. This versatile kit contains seven of the most popular wheel bearing locknut sockets.

Item No.	Description
2432	2-3/8" Hex Locknut Socket
2434	2-3/8" Rounded Hex Locknut Socket
2435	2-1/2" Hex Locknut Socket
2436	2-9/16" Rounded Hex Locknut Socket
3455	2-1/2" Rounded Hex Locknut Socket
3456	2-3/4" Rounded Hex Locknut Socket
3912	55mm Hex Locknut Socket



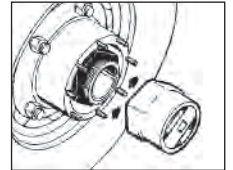
Truck Spindle Nut Wrenches

Wrenches remove 6- and 8-point spindle nuts on trucks. Turn with 3/4" square drive tool. Depth: 2-7/8" Wall Thickness: .200" Overall Length: 3-7/16"

Item No.	Size, in.
2430	2-3/32 Hex
2431	2-1/4 Hex
2432	2-3/8 Hex
2434	2-3/8 Rounded Hex (Dana)
2435	2-1/2 Hex
2436	2-9/16 Rounded Hex (Dana)
2437	2-9/16 Hex
2438	2-9/16 Octagon
2439	2-5/8 Hex
2440	2-3/4 Hex
2441	2-3/4 Octagon
2442	2-7/8 Hex
2444	3 Hex
2445	3 Octagon
2448	3-1/4 Hex
2449	3-1/4 Octagon
2451	3-1/2 Hex
2453	3-3/4 Octagon
2455	3-13/16 Octagon
2456	3-7/8 Hex
2457	3-7/8 Octagon
2458	4 Hex
2459	4-1/8 Hex



▲ Caution: Do not use with power tools.



7 Pc. Locknut Kit - 41670

Item No.	Size, inch	Drive Size
2460	2-3/8" Hex Spindle Nut Wrench	1/2"
2461	2-3/8" Round Hex Spindle Nut Wrench	1/2"
2462	2-1/2" Hex Spindle Nut Wrench	1/2"
2463	2-9/16" Round Hex Spindle Nut Wrench	1/2"

Brake & Wheel Tools



Free up the knuckle assembly...



Assemble the forcing screw, the HubTamer and adapters...



Let your impact wrench do the rest. Replace the bearing using adapters and tools included in the set.

HubTamer Master Bearing Service Set - 3531

From start to finish - complete front wheel bearing service, on the car, with one set of tooling! It takes off the hub, removes the old bearing and installs the new one, then replaces the hub. All while the knuckle assembly stays on the car! Fast, efficient, and profitable.

- Works on virtually all floating rotors on U.S. domestic cars and light trucks and many trapped rotors found on popular imports.
- Cut almost 50 percent off the service time when replacing front wheel bearings. Impact wrench compatible to save time and money.
- The HubTamer pushes on the steering knuckle, not the rotor.
- No need to remove the knuckle assembly and use a shop press to replace the bearings ... eliminate unnecessary front end alignments.
- Takes care of noise and driveability problems.
- Most complete and up-to-date front wheel bearing service set available.
- Compact, one-piece design fits easily behind the rotor and leaves plenty of room for positioning the tool and wrench. No sliding arms to adjust.
- Full set includes: Front Hub installers for use on various Ford/Mercury vehicles, and the inner bearing Race/Outer Tie Rod Remover.
- Entire set comes in heavy duty, compartmentalized organizer case.

For Contents and Replacement Part Listings See Page 202.

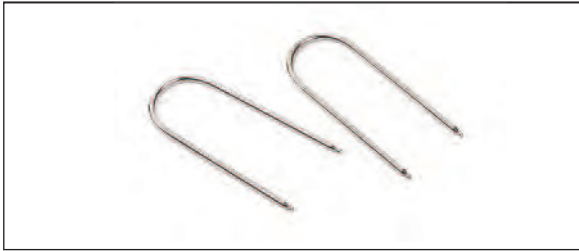


Rear Axle Bearing Puller Kit - 41710

Three pullers designed to make the removal of semi-floating rear axle bearings easier on most domestic cars.

Item No.	Description
41711	1" x 1-7/8" Puller
41712	1-5/16" x 2-3/8" Puller
41713	1-3/8" x 2-7/8" Puller

Specialty Application Tools



2 Pc. U-Hooks - 3913

For radio removal on Ford, VW, & Audi. Works on 1987 - Current Mustang; 1988 - Current Tempo/Topaz; 1989 - Current Continental; 1990 - Current Taurus/Sable, Probe, Ranger/Bronco II, Crown Victoria/Grand Marquis, Lincoln Town Car, Mark VII, and Thunderbird/Cougar.



Radio Removal Keys - 3914

For New VW Beetle, Audi, Mercedes Benz, VW, Allen® Hex Wrench for BMW, Special Pentagon Pin for BMW.



Antenna Nut Sockets - 3915

Covers most import and domestic antenna nuts that require removal over the antenna stem. Also for recessed mounted nuts.



Extendable Pry Bar - 3959

- Features
 - Tool extends from 20 to 32 Inches.
 - Patented interlock system.
 - 20 degree offset head for leverage.
 - Pointed chisel on handle end for alignment.



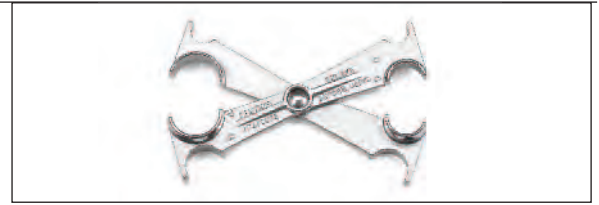
Patented interlock system.

Specialty Application Tools

Ford Air Conditioning and Fuel Line Spring Lock Coupling Tool - 3290



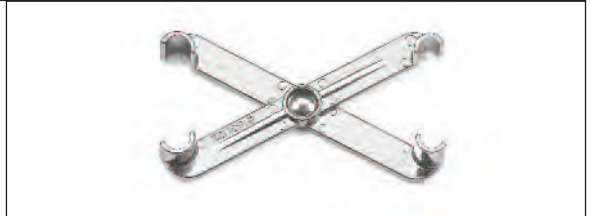
Most Ford vehicles are equipped with spring lock couplings on fuel and air conditioning lines. Necessary tool releases locking mechanism on all 4 sizes: A (3/4"), B (5/8"), C (1/2") and D (3/8").



▲ Caution: For intended use only. Do not use with engine running. Release system pressure before disconnecting coupling.

Fuel Line Quick Disconnect Tool - 3321

Tool releases the fuel line locking mechanism on 1989 and newer GM, 1990 and newer Ford and some 1990 and newer Mazda vehicles. Fits 5/16" and 3/8" fuel lines.



2 Pc. Fuel Line Kit - 61059

Set includes disconnect tools for use on many Ford, GM and Mazda vehicles. Also used on Chrysler and Ford A/C Line Adapters. Tools also available individually.

Item No.	Description
3321	Fuel Line Quick Disconnect Tool
3290	Ford Air Conditioning and Fuel Line Spring Lock Coupling Tool



▲ Caution: Relieve system pressure before using. For intended use only.

Ford Fuel Line Disconnect Tool - 3408

Use on 1990 and newer Ford Rangers and Explorers with 4.0-L, 6-cylinder engines. Provides easy, damage-free fuel line separation, at the fuel pressure regulators.



▲ Caution: Relieve system pressure before using. For intended use only.

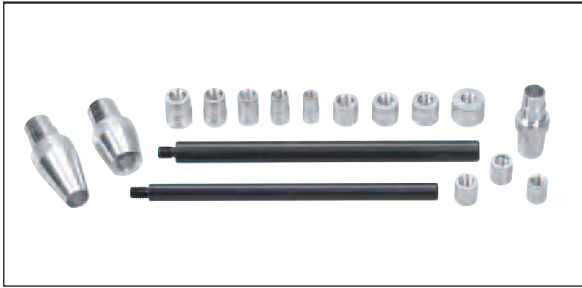
5 Pc. Low Profile Quick Disconnect Set - 3530

Contains five popular size Air Conditioning and Fuel Line quick disconnect tools for hard to reach areas. Flexible plastic design allows for easy application over tubing to access disconnects.

Sizes include: 7/8" (22mm), 3/4" (19mm), 5/8" (16mm) 3/8" (9mm) and 7/16" (8mm).



Specialty Application Tools



SAE & Metric Clutch Alignment Kit - 41810

Aligns single disc clutches on domestic and imported cars, light trucks, and tractors.

Item No.	Description
41811	2 Pc. Driver Bars: SAE & Metric
41812	3 Pc. Cone Set: SAE & 2 Metric
41813	7 Pc. Bushing Set: SAE
41814	5 Pc. Bushing Set: Metric



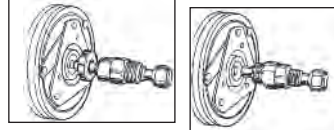
GM Clutch Plate Remover and Installer - 2416

Remove and install clutches on GM air conditioning compressors. Remove clutch plate without removing retaining ring and install clutch plate with compressor on car. Use it on all A-6 and R-4 compressors. Tool will not work on metric threads.



GM Clutch Plate Remover and Installer for GM DAG and V5 Compressor Clutches - 3340

Remove and install clutches on GM air conditioning DA6 and V5 compressor clutches without removing retaining ring. Install clutch plate with compressor on car. Metric threads.



▲ Caution: For intended use only.

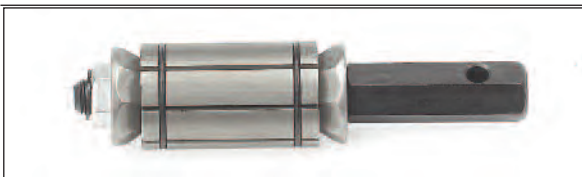


SAE Impact Driver Set - 1140



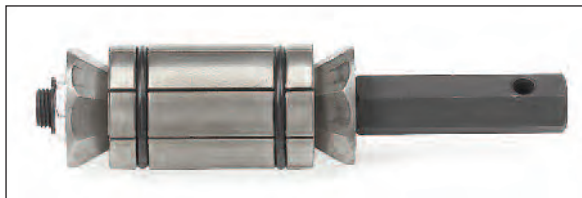
Free frozen bolts and screws by twisting the tool in the direction of the rotation and holding while striking with a hammer. Reverse action to tighten bolts. Set is standard 3/8" square drive and includes a 3/8" square drive adapter for 5/16" hex bits. Four-bit set includes a No. 2 and No. 3 Phillips and a 5/16" and 9/32" slotted. Set is a serviceable product and replacement bits are available individually.

- Replacement part: 412402 No. 2 Phillips
- Replacement part: 412403 No. 3 Phillips
- Replacement part: 412410 5/16" Slotted
- Replacement part: 412406 9/32" Slotted



Exhaust and Tailpipe Expanders

Flare, shape and expand tailpipes to ensure a tight fit and prevent exhaust leaks. Turn handle to adjust the expander to the diameter of the pipe.



Item No.	Pipe Size
2070	1-1/8" to 1-3/4" (29mm to 44mm)
2071	1-1/2" to 2-1/2" (38mm to 63.5mm)

Exhaust and Tailpipe Cutter - 2031

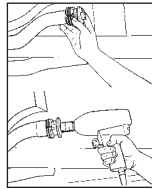
Use tool to cut pipes 3/4" to 3" (19 to 76mm) in diameter. Fifteen blades effectively cut pipe so only 1/4 turn is needed for a complete cut. Patented, serviceable tool works in hard-to-reach areas. It will not cut double-wall pipes. Keep well oiled. Not for use on stainless steel.

- Replacement part: 2031-82 Cutter Chain Assembly



Heavy-Duty Tailpipe Expanders

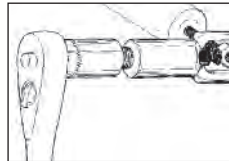
These tools are used to remove clamp grooves and round out crushed or bent exhaust pipes to ensure a tight fit, eliminating exhaust leaks. The hex end allows for the use of a combination wrench to remove clamp grooves or small imperfections or an impact wrench to expand pipes. Imperfections are forced outward rather than forward, eliminating possible damage to component parts. No holding fixture is necessary.



Item No.	Description
3441	1-3/8 to 1-15/16" (35 to 48mm) Heavy-Duty Tailpipe Expander
3442	1-13/16" to 2-1/2" (46 to 63.5mm) Heavy-Duty Tailpipe Expander

Nut Cracker - 710

Splits most stubborn nuts 7/16" (11mm) through 3/4" (19mm) across the flats. Ideal for work on shocks, mufflers and tailpipes. Consists of a hardened steel chisel driven by a large steel screw. Simply tighten the screw until the nut splits. Do not use on heat-treated nuts. Length: 4".



Universal Nut Cracker - 715

Splits most stubborn nuts 7/16" (11mm) through 3/4" (19mm) across the flats. Works in channels not accessible to other tools. Parallel action of pusher cracks nuts without damaging bolt threads. Chisel rotates 360° to line up parallel to bolt. Simply tighten the screw until the nut splits. Has rugged drop-forged frame. Do not use on heat-treated nuts. Length: 6-3/4". This is a serviceable product.



Item No.	Description
715-72	Screw
715-73	Bearing
715-74	Chisel
715-75	Plunger

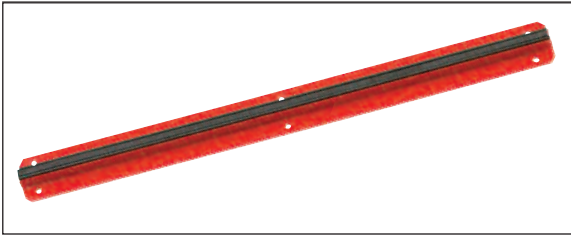
Socket Cap Set - 3435

Three-piece set includes 1 each of 1/4, 3/8 and 1/2" drive socket caps. These tools are used to turn sockets with a wrench or by hand in limited access areas.

Item No.	Description
3435-71	1/4" Drive Socket Cap
3435-72	3/8" Drive Socket Cap
3435-73	1/2" Drive Socket Cap



Specialty Application Tools



Mag-Rail Magnetic Tool Holders - 3155

Neatly stores sockets, screwdrivers or other tools. Magnetic rail can be mounted on wall or in tool box through predrilled holes. Length: 17".

Item No.	Description
2530	Socket Clip Rail, 1/4"
2531	Socket Clip Rail, 3/8"
2532	Socket Clip Rail, 1/2"
2533	Socket Clip Rail Set
3363	15 Pc. Wrench Rack



Serrated Wrenches

Install and remove 12-point (triple square) metric socket-head screws by turning with a socket or wrench. They are made from heat-treated alloy steel.

Item No.	Size	Hex Size	Length
2304	8mm	5/16"	3"
2305	10mm	1/2"	3 1/4"
2306	12mm	1/2"	3 3/4"



11 Pc. Mini Punch & Chisel Set - 3714

- Interchangeable Punch and Chisel Tips
- Most popular bits with single holder
- Protects hands in tight access areas
- Blow mold case for easy storage

Includes:

- 3714-01: Handle
- 3714-02: Flat Chisel: 13 mm width of blade, overall length: 21.7 cm
- 3714-03: Flat Chisel: 10 mm width of blade, overall length: 21.7 cm
- 3714-04: Cape Chisel: 4 mm width of blade, overall length: 22.5 cm
- 3714-05: Taper Punch: 2 mm width of blade, overall length: 21.4
- 3714-06: Taper Punch: 3 mm width of blade, overall length: 21.4
- 3714-07: Taper Punch: 4 mm width of blade, overall length: 21.4
- 3714-08: Center Punch: 0 mm width of blade, overall length: 21.4 cm
- 3714-09: Center Punch: 3 mm width of blade, overall length: 21.4 cm
- 3714-10: Pin Punch: 3 mm, width of blade, overall length: 21.4 cm
- 3714-11: Pin Punch: 4 mm, width of blade, overall length: 21.4 cm
- 3714-12: Pin Punch: 5 mm, width of blade, overall length: 21.4 cm

Screw Extractor Kit - 720

Removes broken studs, set screws, pipe and Alemite fittings. Drill a hole in the screw and place extractor into hole. Tap lightly with hammer and turn counterclockwise with tap wrench to remove the screw. Features undercut flutes for more positive grip. Includes the following screw extractors, which are also available individually (see chart).

Item No.	Screw Size	Drill Size	Minimum Depth, Hole	Pipe Size
1109	1/4", 5/16"	1/8"	3/8"	-
1110	3/8"	3/16"	1/2"	-
1111	7/16"	15/64"	1/2"	1/8"
1112	1/2", 9/16"	5/16"	1/2"	1/4"
1113	5/8"	3/8"	5/8"	3/8"



Spiral Screw Extractor Kit - 2419

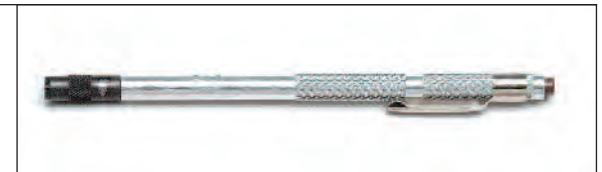
Removes screws, broken studs, set screws, pipe and Alemite fittings. Drill a hole in the screw and place extractor into hole. Tap lightly with hammer and turn counterclockwise with tap wrench to remove the screw. Spiral blades grip screw. Extractors fit the following (see chart).

Item No.	Screw, Bolt or Stud Size	Drill Size
2419-71	No. 12 to 5/16"	7/64"
2419-72	5/16" to 7/16"	5/32"
2419-73	7/16" to 9/16"	1/4"
2419-74	9/16" to 3/4"	17/64"



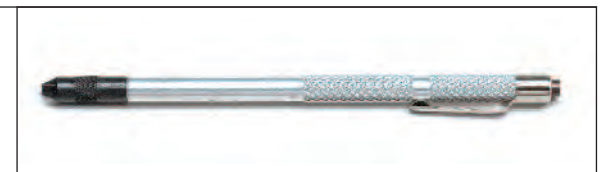
Slotted Screw Starter - 2282

Holds screw securely for use in hard-to-reach areas. Twist the bit to hold screw for easy starting. Strong magnet on opposite end picks up dropped parts. Also includes a pocket clip. Length: 5-5/8".



Phillips Screw Starter - 2283

Twist bit to firmly hold Phillips screws for easy starting in hard-to-reach areas. Strong magnet on opposite end retrieves dropped parts. Includes a pocketclip. Length: 5-5/8".



Stud Extractor - 1708

Removes 1/4" (6mm) to 3/4" (19mm) studs. Cam wheel grips within 9/32" of flat surface to hold stud. Drive socket will not bind. Use 1/2" square drive tools to operate.



Vibro Engraver - 2520

Use to identify valuables permanently. Carbide tip engraves metal, plastic, wood, glass and other surfaces. Variable speed knob controls the depth of engraving. Tool operates on 115VAC.



Specialty Application Tools



External Thread Restorer Files

Restore external threads by filing. Overlap several good threads with file and file-damaged ones. Files both right- and left-hand threads. Features long-lasting, fast-cutting teeth.

Item No.	Description	Pitch Sizes
2228	Metric Thread Restorer File	0.75, 1.00, 1.25, 1.50, 1.75 2.00, 2.50, 3.00mm
2229	SAE Thread Restorer File	11, 12, 13, 14, 16, 18, 20, 24
2249	SAE Thread Restorer File	9, 10, 12, 16, 20, 27, 28, 32



GearWrench® 5 Pc. Tap and Die Drive Tool Set - 3880

Item No.	Description
3881	Tap and Die Ratcheting "T" Wrench
3882	Small Tap Adapter
3883	Medium Tap Adapter
3884	Die Adapter
-	Sliding "T" for adapters

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:

A) 686759	D) 7131353	G) 6711973
B) 7231851	E) 7185566	H) 7311019
C) 6918323	F) 6629477	I) 5533427



GearWrench® 40 Pc. Tap and Die Set SAE - 3885

- Accommodates Taps and Dies from #4 - 1/2"
- Carbon steel
- Tap Holders tilt down for easy access keeping taps secure and organized

Item No.	Description
3881	Tap and Die Ratcheting "T" Wrench
3882	Small Tap Adapter
3883	Medium Tap Adapter
3884	Die Adapter
-	Sliding "T" for adapters
-	17 taps
-	17 dies
-	Thread gauge
-	#5 screwdriver

COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:

A) 686759	D) 7131353	G) 6711973
B) 7231851	E) 7185566	H) 7311019
C) 6918323	F) 6629477	I) 5533427

GearWrench®

40 Pc. Tap and Die Set Metric - 3886

- Accommodates Taps and Dies from 3-12mm
- Carbon steel
- Tap Holders tilt down for easy access keeping taps secure and organized

Item No.	Description
3881	Tap and Die Ratcheting "T" Wrench
3882	Small Tap Adapter
3883	Medium Tap Adapter
3884	Die Adapter
-	Sliding "T" for adapters
-	17 taps
-	17 dies
-	Thread gauge
-	#5 screwdriver



COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:

- | | | |
|------------|------------|------------|
| A) 686759 | D) 7131353 | G) 6711973 |
| B) 7231851 | E) 7185566 | H) 7311019 |
| C) 6918323 | F) 6629477 | I) 5533427 |

GearWrench®

75 Pc. Tap and Die Set SAE & Metric - 3887

- Accommodates Taps and Dies from #4 - 1/2" & 3-12mm
- Carbon steel
- Tap Holders tilt down for easy access keeping taps secure and organized

Item No.	Description
3881	Tap and Die Ratcheting "T" Wrench
3882	Small Tap Adapter
3883	Medium Tap Adapter
3884	Die Adapter
-	Sliding "T" for adapters
-	34 taps
-	34 dies
-	SAE screw pitch gauge
-	Metric screw pitch gauge
-	#5 screwdriver



COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS:

- | | | |
|------------|------------|------------|
| A) 686759 | D) 7131353 | G) 6711973 |
| B) 7231851 | E) 7185566 | H) 7311019 |
| C) 6918323 | F) 6629477 | I) 5533427 |

Specialty Application Tools



Master Axle Spindle Rethreading Kit - 3481

12-piece thread restoring die set for proper repair or renewal of damaged threads in stub axles/spindles on most vehicles (refer to automotive manuals for correct size for applications). Rethreading dies are made from high tempered steel for strength and durability and are hex shaped for use with a socket or wrench (not for use with impact gun). Dies will remove nicks and burrs in existing threads and are intended for "chasing" - not cutting new threads. Dies are packaged in a plastic case and include the following 12 most popular sizes: 3/4"-16, 3/4"-20, 13/16"-20, 27/32"-20, M16 x 1, M16 x 1.5, M20 x 1, M20 x 1.5, M22 x 1.5, M24 x 1.5, M24 x 2, M27 x 2.

Item No.	Description
3481	Master Axle Spindle Rethreading Kit
3481-1	3/4"-16 Rethreading Die Replacement Part
3481-2	3/4"-20 Rethreading Die Replacement Part
3481-3	13/16"-20 Rethreading Die Replacement Part
3481-4	27/32"-20 Rethreading Die Replacement Part
3481-5	M16 x 1 Rethreading Die Replacement Part
3481-6	M16 x 1.5 Rethreading Die Replacement Part
3481-7	M20 x 1 Rethreading Die Replacement Part
3481-8	M20 x 1.5 Rethreading Die Replacement Part
3481-9	M22 x 1.5 Rethreading Die Replacement Part
3481-10	M24 x 1.5 Rethreading Die Replacement Part
3481-11	M24 x 2 Rethreading Die Replacement Part



Mechanic's Stethoscope - 835

Stethoscope locates the source of engine noise quickly. Listen for trouble by tracing the sound of flowing water, oil, gas or steam. Identify piston slap, worn gears, faulty valves, water pump failure, damaged gaskets and defective bearings. Stethoscope has a shock-resistant handle and disassembles for storage.



▲ Caution: Keep away from moving, rotating and electrical components.

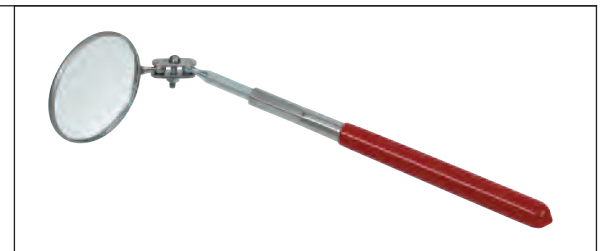
Telescoping Mirror - 2108

Inspect hidden areas with this 2-1/8 x 3-1/2" rectangular mirror that swivels to almost any position. Mirror has a comfortable vinyl grip. Closed length: 11-1/4". Extended length: 15-1/4".



Telescoping Mirror - 2109

Inspect hidden areas with this 2-1/4" diameter mirror that swivels to almost any position and has a comfortable vinyl grip. Closed length: 10". Extended length: 14".



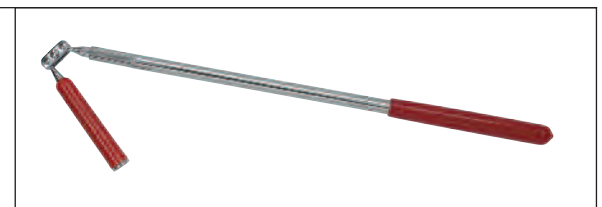
1-1/4" Round Magnifying Mirror with Pocket Clip and Telescoping Handle - 2840

Perfect for inspecting hidden areas, the mirror swivels to almost any position. Overall length: 17".



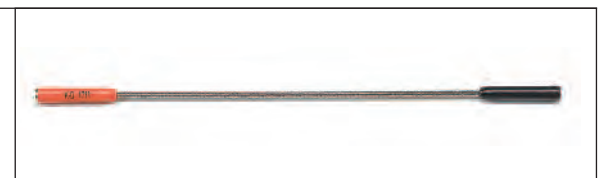
Telescoping Magnetic Retrieving Tool - 2281

Tool extends from 16-3/4 to 26-3/4" to pick up hard-to-reach ferrous metal parts and tools. It has a comfortable vinyl grip and the magnet rotates to any position. Maximum lifting power is 16 oz. Magnet length: 2 3/4", 1/2" diameter.



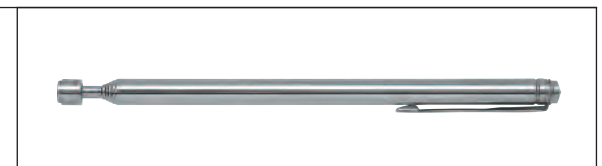
Magnetic Pickup Tool - 1711

Retrieve small, ferrous metal parts easily. Nickel-plated tool has a powerful, permanent magnet (and an easy-grip knurled handle). Shaft flexes to go around corners. Length: 18". Magnet diameter: 1/2".

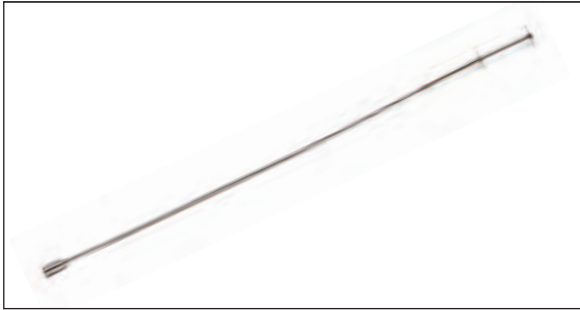


Telescoping Magnetic Pickup Tool - 2593

Tool extends up to 25-9/16" to pick up hard-to-reach ferrous metal parts or tools up to 1-1/2 lbs. It includes a pocket clip.



Specialty Application Tools



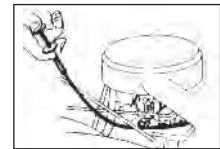
On/Off Magnetic Retrieving Tool - 3437

This 22"-long flexible retrieving tool is able to lift 1-1/2 lbs. The spring-operated magnet will not stick to metal areas until activated, which is achieved by simply pushing the plunger. Tool is flexible for snaking through difficult areas.



23" Flexible Retrieving Tool - 2391

Retrieve small objects from hard-to-reach places. Push the button to open the claws and release to grab.



O-Ring and Seal Pick - 2554

Remove and install O-rings and small oil seals. Hardened tip keeps a sharp point. Tool is ideal for transmission, power steering pump, disc brake and air conditioning repairs.



Hook and Pick Set - 3121

Five-piece set includes a 5" aluminum handle knurled for a sure grip. It also includes the following heat-treated, high carbon steel picks: O-ring, 90°, straight and hook. Use picks to pull O-rings, seals, cotter pins and brushes quickly and easily.

Heavy-Duty Hook and Pick Set - 3476

The set includes part numbers 3470, 3474 and 3475. The tools included are ideal for use anywhere a hook/removal tool, spring removal tool or a sharp punch is required. All three tools feature corrosion resistant zinc plating and a high visibility orange robust handle.

Item No.	Description
3470	Heavy-Duty Hook and Cotter Pin Puller
3474	Heavy-Duty Spring Hook Tool
3475	Heavy-Duty Scratch Awl



7 Pc. Hook & Pick Set - 3708

This kit combines both small and large picks to do a wide range of jobs.

Kit Contains:

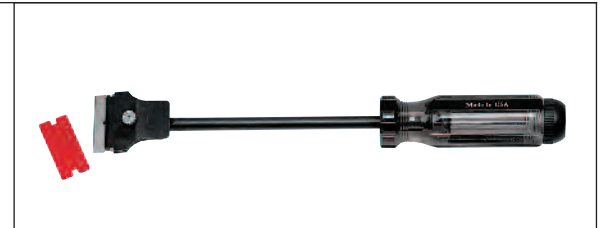
Item No.	Description
3470	Large Cotter Pin
3474	Large Spring Hook
3475	Large Scratch Awl
3708-71	Small Scratch Awl
3708-72	Small 90° Angle Pick
3708-73	Small Spring Hook
3708-74	Small Seal Pick



Long Reach Scraper - 3528

7" long reach scraper is ideal for use where added extension is needed, such as deep recessed dash boards in mini-vans. Contains two replacement blades, including one plastic blade which will not harm coated windows.

Replacement plastic blade part: 3528-70



All-Purpose Scraper and Sticker Remover - 2106

Remove inspection stickers, dealer price labels and paint from glass. Tool locks into 3 operating positions to reach hard-to-get-at slanting windshields and uses single-edge razor blades. Cutting edge folds into the handle for safe storage.

- Replacement part: 2106-75 Blades (package of 5)



▲ Caution: Not for use on plastic-coated windshields.

Specialty Application Tools



Mini Scraper - 3390

Use for light scraping on wood, metal and glass. Small size allows for scraping in confined areas. Scraper includes plastic sleeve handle for comfort. Comes in convenient standard pack of 30 in countertop merchandiser. Orders must be placed in multiples of 30.



Gasket Scraper - 485

Scrape surfaces clean for installing new gaskets. Use tool before installing water pump, thermostat, cylinder head, crankcase and timing chain cover gaskets. Scraper is made of forged steel for rugged service and has a comfort-grip handle. Overall length: 10-1/2". Blade width: 1".



3 Pc. Scraper Set 40mm razor, 3", and 1-1/4" Scraper - 41900

All purpose razor scraper removes inspection stickers, dealer price labels and paint from glass. Flexible steel blade is ground to a mirror finish and is ideal for applying putty and for light scraping. Stiff tempered-steel blade is ideal for scraping dirt, carbon and paint and for applying putty. Blade is ground to a mirror finish.

Item No.	Flexible Shaft Length
41901	40mm Razor
2425	1-1/4" Scraper
2426	3" Scraper



Scriber - 2979

Sharp, tempered point scribes metal. Hooked end removes O-rings, seals and gaskets. It has a 90° hook. Length: 8".



Master Tubing Service Kit - 41590

For tubing service. No other kit does all this: Double Flare, Bend, Cut, Ream, and Deburr.

Item No.	Description
2107	Mini Tubing Cutter
2189	Tubing Bender
3905	Deburring Tool
41594	Flaring Adapter Kit
41595	Holding Bar
41596	Yoke

Double Flaring Tool Kit - 41860

- Features
 - Complete double flaring tool assortment.
 - Slots on yoke firmly engage with bar assembly.
 - Includes corresponding adapters for forming double flares.
 - Storage case with full instructions.
 - Forged alloy steel.
 - Through hardened.

Precisely flares tubing up to 0.040 wall thickness to SAE 45° flares. Hardened bar assembly clamps 7 tubing sizes: 3/16", 1/4", 5/16", 3/8", 7/16", 5/8", and 1/2".

Do not use on stainless steel tubing.

Set Contains:

SAE Bar Assembly, Yoke Assembly, Reamer, 3/16" Flaring Tool Adapter, 1/4" Flaring Tool Adapter, 5/16" Flaring Tool Adapter, 3/8" Flaring Tool Adapter, 7/16" Flaring Tool Adapter, 1/2" Flaring Tool Adapter, and 5/8" Flaring Tool Adapter.



Item No.	Description
41594	7 Pc. Flaring Adapter Set
41597	Universal Yoke
3905	Deburring Tool
41595	Holding Bar

Bubble Flaring Tool Kit - 41870

- Features
 - Complete bubble flaring tool assortment.
 - Slots on yoke firmly engage with bar assembly.
 - Includes corresponding adapters for forming double flares.
 - Storage case with full instructions.
 - Forged alloy steel.
 - Through hardened.

Precisely flares tubing up to 0.040 wall thickness to Metric 45° flares. Hardened bar assembly clamps 4 tubing sizes: 4.7, 6, 8, & 10mm.

Do not use on stainless steel tubing.

Set Contains:

Metric Bar Assembly, Yoke Assembly, Reamer, 4.7mm Flaring Tool Adapter, 6mm Flaring Tool Adapter, 8mm Flaring Tool Adapter, and 10mm Flaring Tool Adapter.



Item No.	Description
41599	4 Pc. Bubble Flaring Adapter Kit
41597	Universal Yoke
3905	Deburring Tool
41598	Bubble Flaring Tool Holding Bar

Specialty Application Tools



Double / Bubble Flaring Tool Kit - 41880

• Features

- Complete double and bubble flaring tool assortment.
- Slots on yoke firmly engage with bar assembly.
- Includes corresponding adapters for forming double flares.
- Storage case with full instructions.
- Forged alloy steel.
- Through hardened.

Precisely flares tubing up to 0.040 wall thickness to SAE/Metric 45° flares. Hardened bar assembly clamps 11 tubing sizes: 3/16", 1/4", 5/16", 3/8", 7/16", 5/8", 1/2", 4.7, 6, 8, and 10mm.

Do not use on stainless steel tubing.

Set Contains:

SAE Bar Assembly, Metric Bar Assembly, Yoke Assembly, Reamer, Cutter, 3/16" Flaring Tool Adapter, 1/4" Flaring Tool Adapter, 5/16" Flaring Tool Adapter, 3/8" Flaring Tool Adapter, 7/16" Flaring Tool Adapter,

1/2" Flaring Tool Adapter, 5/8" Flaring Tool Adapter, 4.7 mm Flaring Tool Adapter, 6mm Flaring Tool Adapter, 8mm Flaring Tool Adapter, and 10mm Flaring Tool Adapter.

Item No.	Description
41594	7 Pc. Flaring Adapter Set
41599	4 Pc. Bubble Flaring Adapter Kit
41597	Universal Yoke
3905	Deburring Tool
41595	Holding Bar
41598	Bubble Flaring Tool Holding Bar
2107	Cutter



Deburring Tool - 3905

Deburring tool for removing rough edges for better flaring tube fit.



Tubing Bender - 2517

Bend 3/16, 1/4, 5/16 and 3/8" diameter tubing without kinking. Place tubing in groove and turn the handle to bend. Heavy-duty construction provides years of service.



Tubing Bender - 2189

Bend 3/16, 1/4, 5/16 and 3/8" copper and steel tubing. Tool makes tight bends without the tube collapsing. Roller adapters are included for each tubing size. Place tubing between the adapter and studs and squeeze the handles to bend.

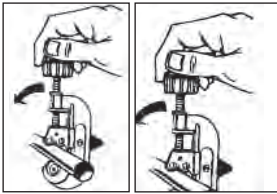
Mini Tubing Cutter - 2107



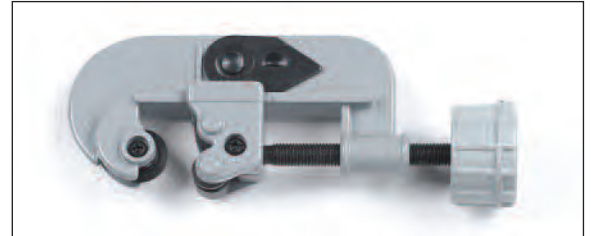
Cut thin-wall steel, plastic, copper and brass tubing from 1/8 to 5/8" in diameter. Two rollers provide burr-free cut. Small size allows cutter to fit into tight areas.



Tubing Cutter - 3457



Tool cuts tubing, copper, brass, aluminum and thin wall conduit. Features an 1/8 to 1-1/8" capacity and has a reamer blade to clean off and smooth any sharp edges. Both the cutter wheels and reamer are made of hardened alloy steel.



Parts Cleaning Brush - 242

Brush removes grease and dirt from automotive parts. Strong handle with durable polypropylene bristles will hold up under repeated use in cleaning solvents.



Curved Handle Wire Scratch Brush - 2310

Clean carbon, dirt and paint from metal and other surfaces with this wooden-handle brush. Overall length: approximately 14". Bristle area: 3 x 19 rows, 1-1/8" trim and 6" long.



Stainless Steel Brush - 2309

Brush has hand-tied stainless steel tufts for cleaning corrosion from parts without scratching. Brush size: 3/8 x 1-3/8". Handle length: 7".



Shoe Handle Wire Scratch Brush - 2311

Use this hardwood-handle brush to clean dirt, carbon and rust from metal and other surfaces. Bristles are densely packed over 5-1/4". Overall length: approximately 10". Bristle area: 4 x 16 rows and 1-1/8" trim.



1" Knot-Type Wire-End Brush - 2312

Brush removes rust, carbon and paint from metal and other surfaces. It is designed for heavy-duty use and consists of industrial tempered straight twisted wire 0.020". Use with electric drills, pneumatic tools or flexible shaft equipment. Face diameter: 1". Shank diameter: 1/4". Maximum safe free speed: 20,000 rpm.



Specialty Application Tools



1" Crimped Wire-End Brush - 2313

Brush removes dirt, rust and paint from metal and other surfaces. It is designed for general-purpose cleaning with 0.020" industrial crimped wire. Use in electrical drills, pneumatic tools or flexible shaft equipment. Face diameter: 1". Shank diameter: 1/4". Maximum safe free speed: 20,000 rpm.



2-1/2" Wire Cup Brush - 2314

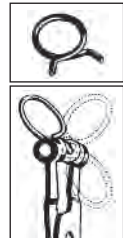
Brush removes light scale, rust and paint from surfaces. It is designed for light-duty use with 0.014" high carbon steel wire. Use in electric drills or flexible shaft equipment. Face diameter: 2-1/2". Shank diameter: 1/4". Maximum safe free speed: 5000 rpm.



Corbin Style Hose Clamp Pliers - 3975

- Features
 - Improved Strength.
 - Easier to use locking feature.
 - Dual dipped grip for comfort and force.

For Corbin (wire) style hose clamps. Tips trap and hold clamp and swivel for multiple angle access.



Straight Hose Clamp Pliers - 3976

- Features
 - Improved Strength.
 - Easier to use locking feature.
 - Dual dipped grip for comfort and force.



Angled Straight Hose Clamp Pliers - 3977

- Features
 - Improved Strength.
 - Easier to use locking feature.
 - Dual dipped grip for comfort and force.

Heavy Duty Large Hose Clamp Pliers - 3978

- Features
 - Improved Strength.
 - Easier to use locking feature.
 - Dual dipped grip for comfort and force.
- For flat ear style hose clamps. Tips trap and hold clamp and swivel for multiple angle access.



Hose Push Off Pliers - 3971

- Features
 - Easy removal of rubber hoses from pressed on fittings for 3/16" to 1/2" OD hose fittings.
 - Ribbed surface digs into steel tube for added grip to push off rubber hose.



Hose Pinch-Off Pliers - 145

Pliers eliminate the need to drain cooling system when servicing. Pliers squeeze hoses shut and jaws swivel for parallel clamping. Pliers include automatic locking ratchet. Tool can be used to pinch off some emission system hoses.

- Do not use on wire-reinforced hose



Hose Pinch-Off Pliers

Item No.	Description	Length	lbs.
3791	Mini Hose Pinch-Off Pliers 3/4" OD capacity	5.50"	4 oz.
3792	Hose Pinch-Off Pliers 1 1/4" OD capacity	9.25"	12 oz.
3793	Hose Pinch-Off Pliers 2 1/2" OD capacity	14.00"	20 oz.

- Ideal for use on radiator hoses, heater hoses, water, air, vacuum and fuel lines.
- Extra long cushioned hand grips for comfort and control.
- Patented clamping mechanism locks automatically
 - no screws or levers to set or adjust.
- Black oxide coated to resist rust and corrosion.



6 Pc. Cam-lock™ Convertible Snap Ring Pliers Set - 3859

Exclusive patented design allows quick change-over from internal or external ring applications. Simply push button on knob and rotate pivot. Fits internal and external rings from 1/4" to 2". Features three popular tip diameters (0.038", 0.047, 0.070") in 18° or 90° angled tips. Cushioned grip handles for comfort. Kits include custom molded impact resistant storage case. Made in USA.

Tip Item No.	Tip Angle	Type Diameter	Internal	External
3853	18°	.038	X	X
3854	90°	.038	X	X
3855	18°	.047	X	X
3856	90°	.047	X	X
3857	18°	.070	X	X
3858	90°	.070	X	X

Packaged separately for retail display

3851	18°	.038	X	X
3852	18°	.070	X	X



Specialty Application Tools



12 Pc. Fixed Tip Combination Snap Ring Pliers Set - 3495

This deluxe set includes the four most popular tip sizes in straight, 45° and 90° angle configurations. These versatile, heavy-duty pliers are designed for the removal and installation of either internal or external snap rings on a wide range of applications. Pliers feature a cushion plastisol dipped handle and are designed for heavy duty use. The set is packaged in a rugged plastic case which makes storage secure and convenient.

Includes part numbers 3483, 3484, 3485, 3486, 3487, 3488, 3489, 3490, 3491, 3492, 3493 and 3494.



6 Pc. Fixed Tip Combination Snap Ring Pliers Set - 3497

This unique set includes three of the most popular tip sizes in straight and 90° angle configurations. The versatile pliers are designed for the removal and installation of both internal and external snap rings on a wide range of applications. These heavy duty tools also feature a cushion plastisol dipped handle and come packed in a rugged low-profile case.

Includes part numbers 3483, 3485, 3486, 3488, 3489, 3491.



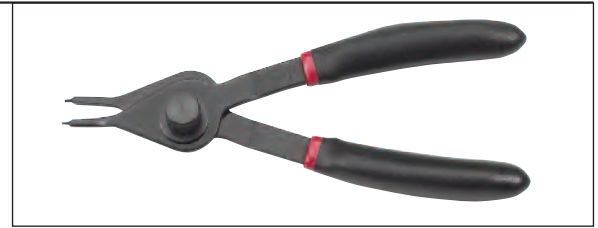
Fixed Tip Snap Ring Pliers

These versatile, heavy duty pliers are designed for the removal and installation of either internal or external snap rings on a wide range of applications. Pliers feature a cushion plastisol dipped handle and are designed for heavy duty use.

Item No.	Description
3483	.038" tip size, straight tip angle
3484	.038" tip size, 45° tip angle
3485	.038" tip size, 90° tip angle
3486	.047" tip size, straight tip angle
3487	.047" tip size, 45° tip angle
3488	.047" tip size, 90° tip angle
3489	.070" tip size, straight tip angle
3490	.070" tip size, 45° tip angle
3491	.070" tip size, 90° tip angle
3492	.090" tip size, straight tip angle
3493	.090" tip size, 45° tip angle
3494	.090" tip size, 90° tip angle

Combination Snap Ring Pliers - 1715

Remove and install internal and external snap rings. Pliers are designed for heavy-duty use. Tips spread up to 1.25". Tip diameter: 0.070". Individually display packaged.



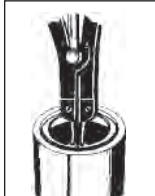
Mini Combination Snap Ring Pliers - 3451

Tool removes and installs internal and external snap rings. Its small size allows for use in hard-to-reach areas. Pliers feature comfortable, Plastisol-dipped handles. Tips spread up to 0.75". Tip diameter: 0.038". Individually display packaged.



Internal Snap Ring Pliers Set - 445

Remove and install internal snap rings 3/8 to 1-3/4" in diameter. Set includes 5 pairs of interchangeable points in the following sizes: 0.39" diameter, 15° angle; 0.048" diameter, 15° angle; 0.074" diameter, 15° angle; 0.039" diameter, 45° angle and 0.047" diameter, 90° angle. Use 447 and 448 point sets with these pliers. Use 5/64" hex key when replacing points.



- Replacement part: 1445-75 Clamps and Screws



External Snap Ring Pliers Set - 446

Remove and install external snap rings 1/4 to 1-7/16" in diameter. Set includes 5 pairs of interchangeable points in the following sizes: 0.039" diameter, 15° angle; 0.048" diameter, 15° angle; 0.074" diameter, 15° angle; 0.039" diameter, 45° angle and 0.047" diameter, 90° angle. Use 447 and 448 point sets with these pliers. Use 5/64" hex key when replacing points.



- Replacement part: 1445-75 Clamps and Screws



Heavy-Duty Combination Snap Ring Pliers - 2012

Remove and install heavy-duty internal snap rings from 2-7/16 to 3-1/2" in diameter and external snap rings from 1-1/2 to 4" in diameter. Pliers include 3 pairs of interchangeable points sizes: 0.108" diameter, 15° angle; 0.108" diameter, 45° angle and 0.123" diameter, 45° angle. Points lock securely into the jaws. Screw-type design maintains jaw position during use. Overall length without tips: 9 1/2". Hex stock size of tips: .156".

- Replacement part: 1455-75 Clamps and Screws



Specialty Application Tools



Universal Convertible Retaining Ring Pliers - 3150

Easy to convert from internal to external rings - simply move levers to switch. No pins to push!

- Hex shaped locking guides firmly hold tips.
- Tough steel construction for durability and strength.
- Ergonomic anti-slip sealed air pocket grips for comfort.
- Spring loaded to speed the work.
- Black Oxide finish resists rust and corrosion

For up to 1.0" diameter rings

Includes five pairs of color-coded precision-group tips and Allen® wrench in convenient storage pouch.

(2) 0.024" red tips	(2) 0.047" green tips
(2) 0.038" yellow tips	(2) 0.047" green 90° tips
(2) 0.038" yellow 90° tips	

- 3150-77 replacement tip kit



Universal Convertible Retaining Ring Pliers - 3151

Easy to convert from internal to external rings - simply move levers to switch. No pins to push!

- Hex shaped locking guides firmly hold tips.
- Tough steel construction for durability and strength.
- Ergonomic anti-slip sealed air pocket grips for comfort.
- Spring loaded to speed the work.
- Black Oxide finish resists rust and corrosion

For up to 2.0" diameter rings

Includes five pairs of color-coded precision-group tips and Allen® wrench in convenient storage pouch.

(2) 0.038" red tips	(2) 0.047" green 90° tips
(2) 0.038" yellow tips	(2) 0.070" copper tips
(2) 0.047" green tips	

- 3151-77 replacement tip kit



Extra- Large Convertible Internal and External Snap Ring Pliers - 3152

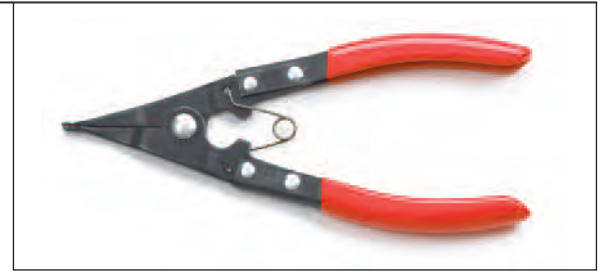
Easily convert for either external or internal use on snap rings. Unique push-button feature allows for effortless change. Tool comes with heavy-duty cushion-grip handles to provide comfort and broached jaws for tip control and stability.

Use on large internal and external snap rings including automatic transmissions. Pliers fit internal rings 1-13/16 through 4" (46 through 101.6mm) and external rings 1-1/2 through 4" (38.1 through 101.6mm). Pliers feature ratchet lock to hold the snap ring in desired position and includes 6 pairs of color-coded alloy steel tips in sizes 0.090, 0.108 and 0.120 bent to 15° and 90°. Hex stock size of tips .156".

- Replacement part: 3152-77 Point Kit (includes 2 each of 6 different sizes: 0.090 15°, 0.090 90°, 0.108 15°, 0.108 90°, 0.120 15° and 0.120 90°)

Lock-Ring Pliers - 2534

Remove and install snap rings without holes used on brakes, transmissions, pedal and clutch shafts. Scored jaws hold rings securely.



Interchangeable Points Set - 447

Set includes 5 pairs of interchangeable points and 1 pair of point clamps with 2 screws for snap ring pliers 2011, 445 and 446. Set includes 1 pair each of the following sizes: 0.039 15°, 0.047 15°, 0.074 15°, 0.039 45° and 0.047 90°. Use a 5/64" hex key when replacing points. Hex stock size of tips .092".



Interchangeable Points Set - 448

Set includes 9 pairs of interchangeable points and 2 retaining screws for snap ring pliers 445, 446 and 2011. Set includes 1 pair each of the following sizes: 0.039 15°, 0.047 15°, 0.074 15°, 0.039 45°, 0.047 45°, 0.074 45°, 0.039 90°, 0.047 90° and 0.074 90°. Use a 5/64" hex key when replacing points. Hex stock size of tips .092".



Heavy-Duty Interchangeable Points Set - 457

Set includes 3 pairs of interchangeable points and 1 pair of point clamps with 2 screws for heavy-duty snap ring pliers 454, 455, 456 and 2012. Set includes 1 pair each of the following sizes: 0.108 15°, 0.108 45° and 0.123 45°. Use a 3/32" hex key when replacing points. Hex stock size of tips .156".



Telescoping Blow Gun - 3546

Specialty blow gun for use in a variety of automotive applications. Blow gun will extend from 10" to 32" and a safety valve prevents over extension. Great for manifold and fuel service.

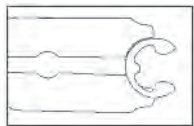


Specialty Application Tools

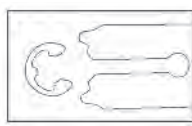


E Ring Installer and Removal Kit - 3953

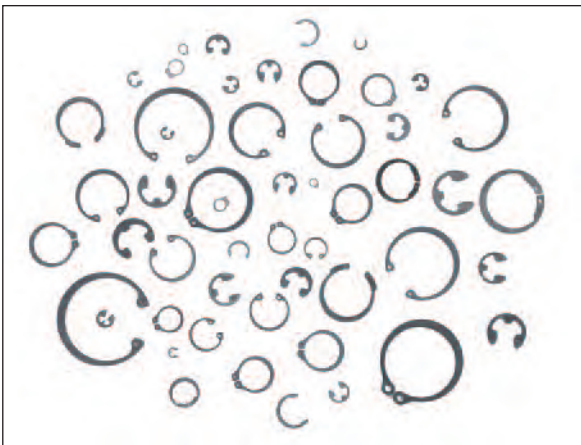
- Features
 - Holds "E" rings in position for both installation and removal.
 - Performs installation and removal on "E" ring sizes 6, 7, 8 & 9mm clips.



Install



Remove



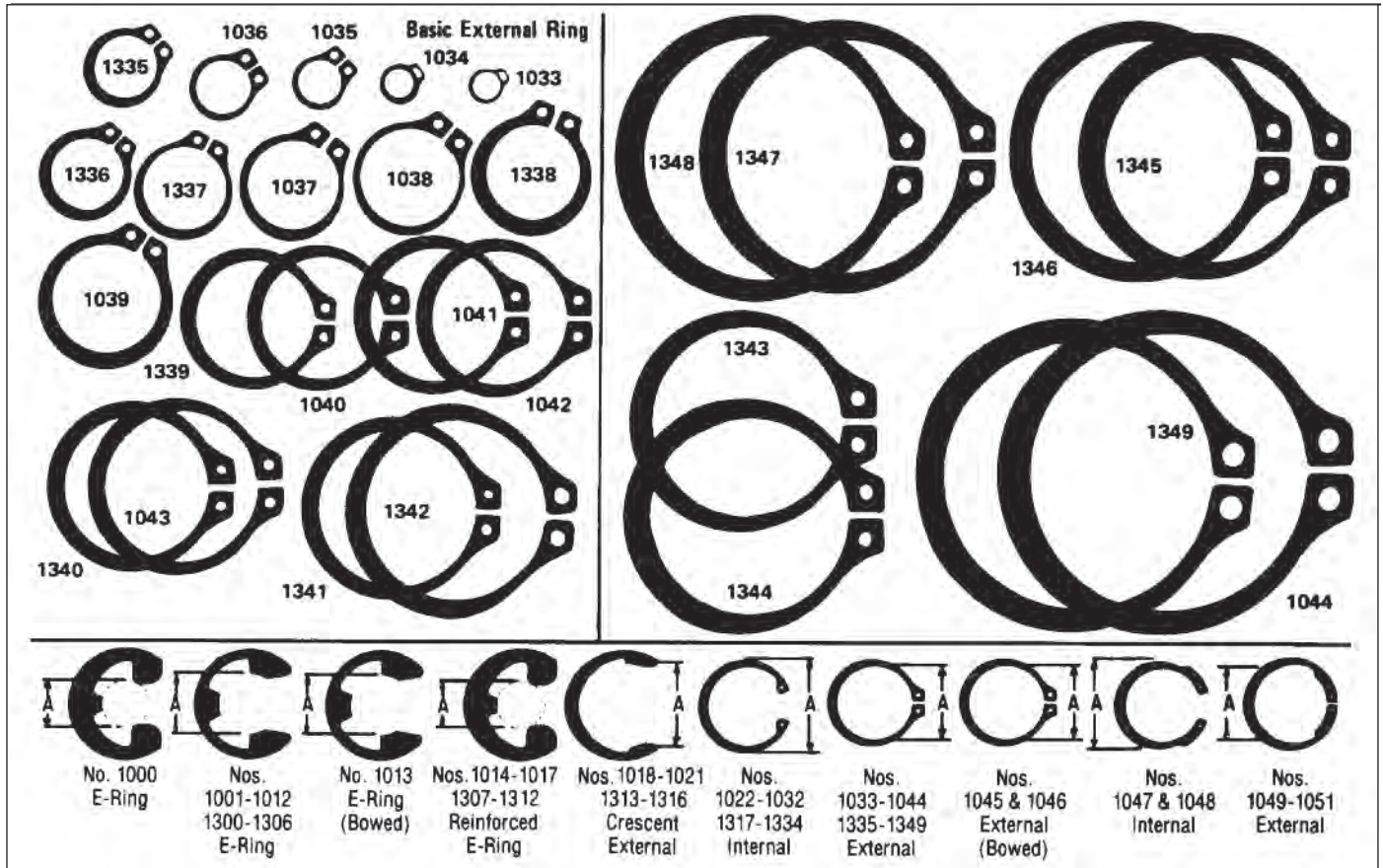
Emergency Snap Ring Assortment - 985

Set includes the 52 most popular internal and external snap rings for emergency repairs on autos, industrial equipment and home appliances. Actual-size silhouette chart is packed with each set for easy identification of snap rings.



Snap Ring Assortment - 2550

This starter assortment includes 107 different size internal and external snap rings in a molded plastic case. Actual-size silhouette chart in the lid makes identification easy. This is an ideal assortment for jobbers and dealers to keep on hand. Refills are available. Overall case size: 18 x 13 x 2-1/2".



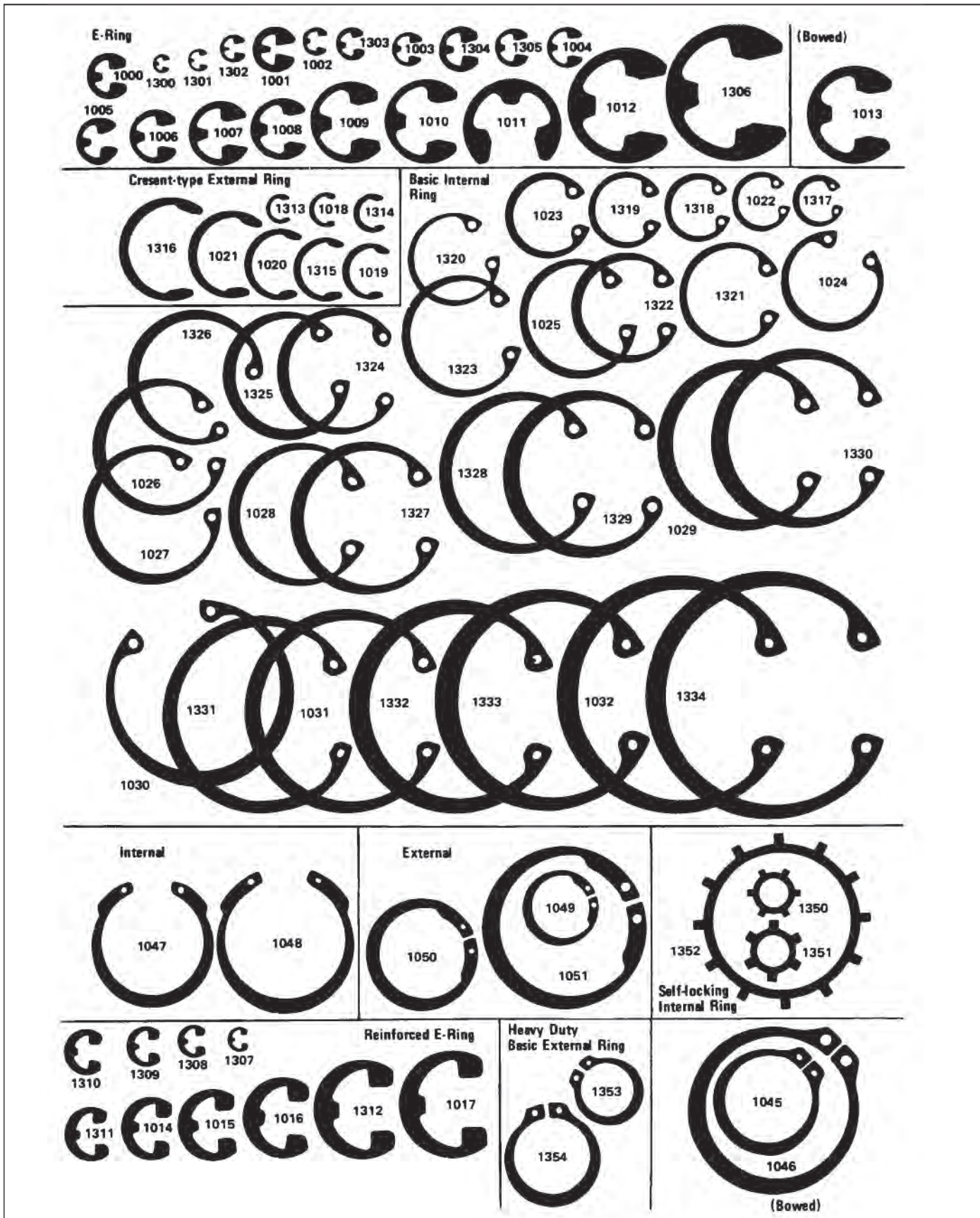
Snap Rings

Item No.	Shaft Diameter, in.	Housing Diameter, in.	Free Diameter (A)
1000	5/32	—	0.113
1001	7/64	—	0.076
1002	1/8	—	0.094
1003	5/32	—	0.114
1004	3/16	—	0.145
1005	3/16	—	0.122
1006	7/32	—	0.185
1007	1/4	—	0.207
1008	5/16	—	0.243
1009	3/8	—	0.300
1010	7/16	—	0.337
1011	1/2	—	0.392
1012	5/8	—	0.480
1013	1/2	—	0.392
1014	1/4	—	0.204
1015	5/16	—	0.242
1016	3/8	—	0.292
1017	9/16	—	0.430
1018	7/32	—	0.188
1019	3/8	—	0.328
1020	1/2	—	0.441
1021	5/8	—	0.553
1022	—	7/16	0.482
1023	—	5/8	0.694
1024	—	3/4	0.831
1025	—	7/8	0.971
1026	—	1	1.111
1027	—	1.023	1.136
1028	—	1-1/16	1.180
1029	—	1-1/4	1.388
1030	—	1-3/8	1.526
1031	—	1-1/2	1.660
1032	—	1-3/4	1.941
1033	5/32	—	0.142
1034	3/16	—	0.168
1035	1/4	—	0.225

Item No.	Shaft Diameter, in.	Housing Diameter, in.	Free Diameter (A)
1036	5/16	—	0.281
1037	1/2	—	0.461
1038	0.551	—	0.509
1039	5/8	—	0.579
1040	11/16	—	0.635
1041	3/4	—	0.693
1042	25/32	—	0.722
1043	27/32	—	0.780
1044	1-9/16	—	1.446
1045	25/32	—	0.722
1046	1-1/4	—	1.156
1047	—	1	1.081
1048	—	1-1/8	1.217
1049	1/2	—	0.461
1050	3/4	—	0.693
1051	1-1/8	—	1.041
1300	0.062	—	0.051
1301	0.093	—	0.073
1302	0.093	—	0.069
1303	0.140	—	0.102
1304	0.187	—	0.122
1305	0.171	—	0.125
1306	0.750	—	0.574
1307	0.093	—	0.072
1308	0.125	—	0.093
1309	0.156	—	0.113
1310	0.187	—	0.143
1311	0.219	—	0.182
1312	0.500	—	0.385
1313	0.187	—	0.161
1314	0.250	—	0.211
1315	0.437	—	0.386
1316	0.750	—	0.665
1317	—	0.375	0.415
1318	—	0.512	0.560
1319	—	0.562	0.620

Item No.	Shaft Diameter, in.	Housing Diameter, in.	Free Diameter (A)
1320	—	0.688	0.763
1321	—	0.777	0.859
1322	—	0.812	0.901
1323	—	0.901	1.000
1324	—	0.920	1.020
1325	—	0.938	1.041
1326	—	0.970	1.100
1327	—	1.125	1.249
1328	—	1.181	1.319
1329	—	1.218	1.344
1330	—	1.312	1.456
1331	—	1.438	1.596
1332	—	1.562	1.734
1333	—	1.625	1.804
1334	—	1.812	2.012
1335	0.375	—	0.338
1336	0.438	—	0.395
1337	0.469	—	0.428
1338	0.562	—	0.521
1339	0.669	—	0.621
1340	0.812	—	0.751
1341	0.875	—	0.810
1342	1.000	—	0.925
1343	1.062	—	0.982
1344	1.125	—	1.041
1345	1.188	—	1.098
1346	1.250	—	1.156
1347	1.312	—	1.214
1348	1.375	—	1.272
1349	1.500	—	1.387
1350	—	0.437	—
1351	—	0.500	—
1352	—	1.437	—
1353	—	—	0.437
1354	—	—	0.615

Specialty Application Tools

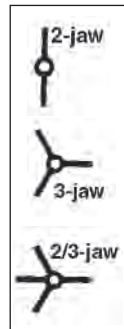
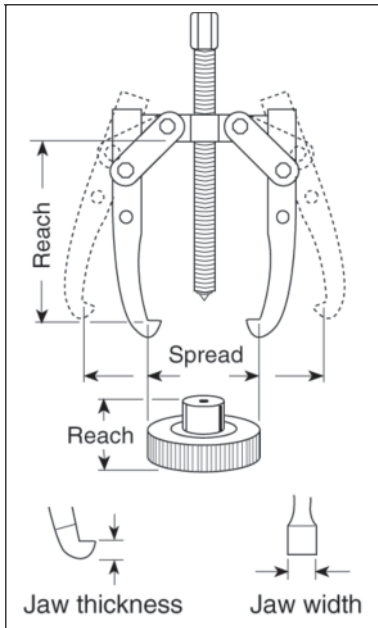




Pullers & Puller Sets



Pullers & Puller Sets



Pullers are forged from quality steel, heat treated, and subject to rigorous tests which exceed their rated capacity

How to select the “Right” Puller

ONE: Determine the type of puller or puller combination.

Which puller type is best for “getting a grip” on the part? Is a combination of puller types required?

TWO: Determine the “REACH” needed. The puller you select must have a “reach” equal to or larger than the corresponding sizes of the part.

THREE: Determine the “SPREAD” needed. The width of the part to be pulled will determine the “Spread” required.

FOUR: Estimate the force required. A puller with the proper “reach” and “spread” will usually have enough power. When in doubt, always use the next largest size. More power may be needed for rusted parts, or when the “area of resistance” is large.

General Rule of Thumb:

Manual pullers require that the puller screw be at least half as large (in diameter) as the shaft of the pulling job.



Ratcheting Pullers

Ratcheting Pullers have a time-saving, indexing-jaw design. The legs index into position and stay in place, letting you easily support the puller and quickly connect each jaw one at a time to the pulley—without help. The pullers can also be converted to two- and three-leg pullers and the jaws reversed from external to internal style in seconds. Available in 2, 5, and 7-ton models. Maximum spread of 10 inches. Also available: 5-Ton Ratcheting Short / Long Leg Puller.

Item No. Description

3624	2-Ton Ratcheting Puller
3625	5-Ton Ratcheting Puller
3626	7-Ton Ratcheting Puller
3628	5-Ton Ratcheting Short / Long Leg Puller

Replacement Items

362401	2-Ton Ratcheting Puller Legs Replacement (3pc.)
362402	2-Ton Ratcheting Puller Yoke Replacement
362403	2-Ton Ratcheting Puller Screw Replacement
362501	5-Ton Ratcheting Puller Legs Replacement (3pc.)
362502	5-Ton Ratcheting Puller Yoke Replacement
362503	5-Ton Ratcheting Puller Screw Replacement
362601	7-Ton Ratcheting Puller Legs Replacement (3pc.)
362602	7-Ton Ratcheting Puller Yoke Replacement
362603	7-Ton Ratcheting Puller Screw Replacement
362801	5-Ton Ratcheting Puller Long Legs Replacement (3pc.)

Item No.	Ton	Max Reach	Max Spread	Screw Size	Screw Length	Jaw Thickness	Jaw Width	Weight
3624	2	2-5/8	3-1/4	3/8-24	4-1/2	3/8	5/8	14 oz.
3625	5	4	5	9/16-12	8-1/4	9/16	11/16	3 lb., 2 oz.
3626	7	6-3/4	10	3/4-12	12	9/16	11/16	6 lb., 5 oz.
3627	2 & 5	See above for Part Numbers KDS3624 and KDS3625						
3628	5 Ton Reg & Long Jaw Set							
	5	4	5	9/16-12	8-1/4	9/16	11/16	6 lb.
	5	6-3/4	7-1/2	9/16-12	8-1/4	9/16	11/16	6 lb.

2-Ton and 5-Ton Ratcheting Puller Set - 3627

Item No. Description

3624	2-Ton Ratcheting Puller
3625	5-Ton Ratcheting Puller

5-Ton Ratcheting Puller with Regular and Long Jaws - 3628

Item No. Description

3628	5-Ton Reg & Long Jaw Set
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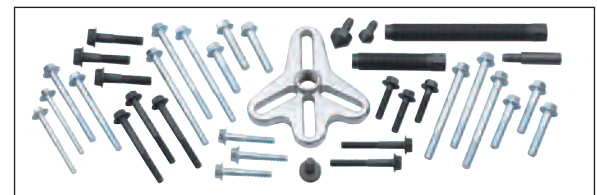
Item No.	Ton	Max Reach	Max Spread	Screw Size	Screw Length	Jaw Thickness	Jaw Width	Weight
3624	2	2-5/8	3-1/4	3/8-24	4-1/2	3/8	5/8	14 oz.
3625	5	4	5	9/16-12	8-1/4	9/16	11/16	3 lb., 2 oz.
3628	5 Ton Reg & Long Jaw Set							
	5	4	5	9/16-12	8-1/4	9/16	11/16	6 lb.
	5	6-3/4	7-1/2	9/16-12	8-1/4	9/16	11/16	6 lb.

Master Bolt Grip Kit - 41600

Master Bolt Grip Kit works on harmonic balancers, steering wheels, crankshaft pulleys, and gears. Capable of handling almost every two or three-way bolt pull possible on most cars, pickups, SUV's, and small engines.

Item No. Description

41601	Two or three way Yoke
41602	4 Pc. Tip Set
41603	Metric Bolt Set
41604	SAE Bolt Set
41605	Center Screw for Puller (2)



Steering Wheel Puller Kit - 41620

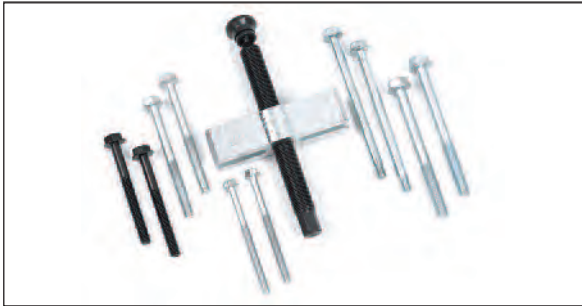
This kit has what it takes to remove a steering wheel from most domestic and import cars with or without telescoping tilt columns. Use the puller legs with the steering wheel puller to remove steering wheels on late model GM vehicles. Steering wheel lock-plate depressor also included.

Item No. Description

2291	Puller Yoke and Screw Extension Bushing
3509	Lock Plate Removal Tool
3510	2 Pc. Puller Leg Package
3906	Pivot Pin
41623	Lock Plate Depressor Frame
41624	Lock Plate Remover Collars & Nut Washer
41625	Screw Package



Pullers & Puller Sets



Crankshaft Pulley Puller (Steering Wheel Puller) - 2291

Puller removes crankshaft pulleys on Chrysler 2.2 and 2.5-L engines and pulls steering wheels on most US and import cars. The floating swivel on the center screw prevents damage to the steering column. Five sets of side bolts include 3/8-16 UNC, 5/16-18 UNC, 5/16-24 UNF and 8mm x 1.25.



- Replacement part: 2286-76 Load Screw
- Replacement part: 2291-80 5/16-18 UNC Hex Head Washer Bolt, 1 per package



GM Steering Wheel Puller Legs - 3510

Use in conjunction with the 2291 Steering Wheel Puller to remove steering wheels on late model GM vehicles that are not pre-drilled to receive standard bolts.

Applications Include:

- Cadillac** 1997 and newer Catera
- Chevrolet/GMC** 1997 and newer Malibu, Corvette
1998 and newer C-and K-series trucks, full-sized vans, Astro/Safari Vans
- Buick** 1997 and newer Park Avenue and Regal Oldsmobile
- Oldsmobile** 1997 and newer Cutlass
- Pontiac** 1998-1993 LeMans
1997 and newer Grand Prix and Trans Sport Van

Includes bushing to cover the following applications:

- Ford** 1997-Current Explorer, Ranger, Pickup
- Chrysler** 1999 Jeep Grand Cherokee



Combination (2 & 3 Jaw) Reversible (Internal/External)

Replacement parts available for 3561:

- Replacement part: 3561-74 Yoke for 2 Ton 2/3 Jaw Puller

Item No.	Ton	Max Reach	Max Spread	Screw Size	Screw Length	Thickness Upper/Lower	Width Upper/Lower	Tip Protectors	Weight	Pack Style
3561	2	3-1/2"	5"	3/8 x 24	4-7/8"	3/16 - 1/8	5/16 - 1/2	N/A	1 lb., 5 oz.	Plastic Box
3562	5	5-3/4"	8"	9/16 x 20	7"	1/4 - 5/16	3/8 - 3/4	3613-72	2 lbs., 12 oz.	Plastic Box
3563	7	5"	9"	11/16 x 18	7-1/2"	3/8 - 3/8	1 - 1	3614-72	6 lbs., 2 oz.	Plastic Box

Combination 2 Jaw Reversible (Internal/External)

Replacement parts available for 3551:

- Replacement part: 3551-71 Replacement Jaw
- Replacement part: 3551-72 Center Screw
- Replacement part: 3551-73 Screw and Link Package
- Replacement part: 3551-74 Yoke for 2 Ton 2 Jaw Puller

Replacement parts available for 3553:

- Replacement part: 3553-74 Yoke for 7 Ton 2 Jaw Puller



Item No.	Ton	Max Reach	Max Spread	Screw Size	Screw Length	Thickness Upper/Lower	Width Upper/Lower	Tip Protectors	Weight	Pack Style
3551	2	3-1/2"	5"	3/8 x 24	4-7/8"	3/16 - 1/8	5/16 - 1/2	N/A	14 oz.	Pouch
3552	5	5-3/4"	8"	9/16 x 20	7"	1/4 - 5/16	3/8 - 3/4	3613-72	1 lb., 12 oz.	Pouch
3553	7	5"	9"	11/16 x 18	7-1/2"	3/8 - 3/8	1 - 1	3614-72	4 lbs., 8 oz.	Pouch

Reversible-Jaw Slide Hammer - 2256

Puller with 5 lb. Hammer, 2-way and 3-way head, 27" long. Wt: 8 lbs.

Here is an extremely versatile puller which will accomplish many pulling jobs involving gears, bearings, outer races, grease retainers, oil seals, etc. Either two or three puller jaws may be used to handle "inside" pulling jobs such as bearing cups and outer races, as well as regular "outside" pulling jobs. In addition to these uses, the basic slide hammer unit can be removed and used independently.



Replacement parts available:

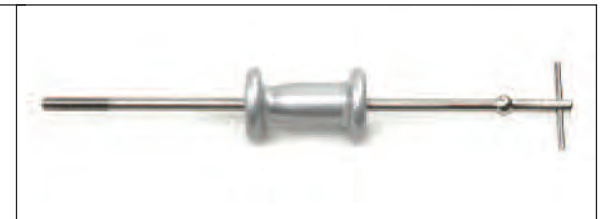
- Replacement part: 2156-72 Puller Arm
- Replacement part: 2156-73 2-Way Puller Head
- Replacement part: 2156-74 3-Way Puller Head
- Replacement part: 2156-75 Adjusting Cone
- Replacement part: 2156-76 Nut and ScREW Package

2-Jaw Spread				3-Jaw Spread				Thread	Overall Length
Inside		Outside		Inside		Outside			
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
1-1/4"	3-1/2"	1"	4-1/2"	1-1/2"	4-1/4"	1-1/2"	4-1/2"	5/8-18	27"

24" Basic Slide Hammer Unit - 3591

With 5 lb. Hammer and 5/8" - 18 threaded end. Wt. 7 lbs. 4 oz.

May be used with an internal pulling attachment with female or male-female threaded adapters.



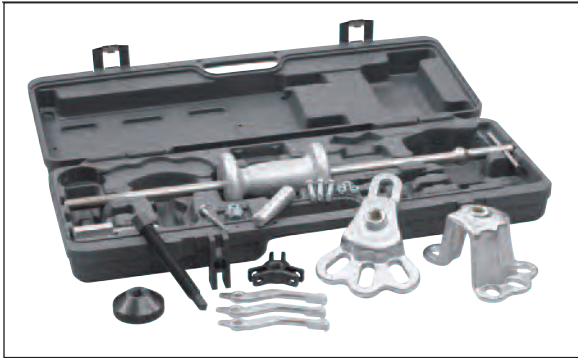
Pilot Bearing Pullers

These very versatile pullers are built specially for inside pulling jobs, and particularly for removing flywheel pilot bearing on automobiles, trucks, and tractors. Also very practical for pulling motor, generator, and magne-to bearings.

Item No.	Reach	I.D. Spread		Weight
		Min.	Max.	
3573	3/4"	1/2"	1-1/2"	4 lbs., 14 oz.
3574	1"	7/8"	2-1/8"	4 lbs., 14 oz.



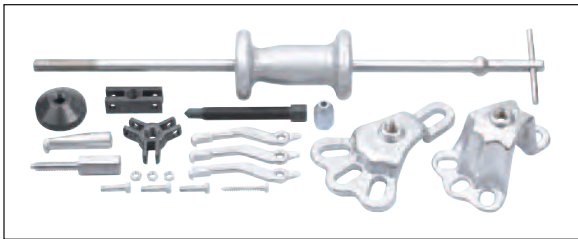
Pullers & Puller Sets



Slide Hammer Puller Kit - 41700

This kit provides a wide range of puller applications such as: Flange-type axles, oil seals & other press fit parts. Jaws can be set up for 2 or 3 jaw internal or external pulling jobs.

Item No.	Description
2300-71	Shallow Flange
2300-75	Deep Flange
3591	Slide Hammer
41704	2 Way Yoke
41705	3 Way Yoke
41706	Center Bolt and Cone
41707	3 Pc. Adapter Set
41708	Leg Package with Screws



Flange-Type Axle Puller - 2300

Tool pulls rear axle on American made cars and 1/2-ton trucks with flange-type axle. Yoke fits axles with 4, 5 or 6 studs in a circle from 4-1/2 to 5-1/2" in diameter. A 5-lb. slide hammer makes removal easy. Slide hammer and yoke are 5/8"-18 UNF thread.

Replacement parts available:

- Replacement part: 2300-71 Yoke (standard)
- Replacement part: 2300-75 Yoke (compacts) 3-3/4 to 4-1/2" Bolt Circle



Heavy-Duty Universal Wheel Hub Puller - 2251

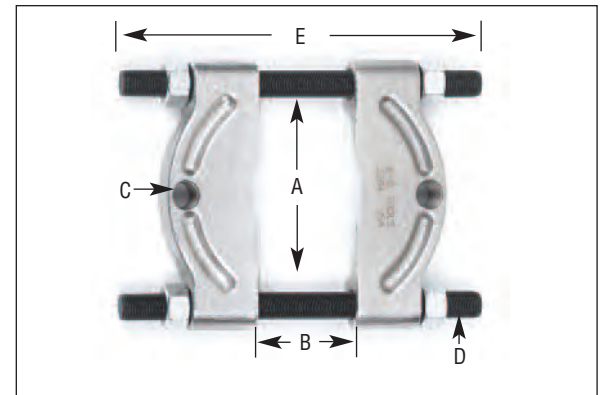
Use to pull wheel hubs where the bolt circle does not exceed 7-1/2". Tool quickly adjusts to fit any hub, regardless of the number of wheel studs.

- Replacement part: 2251-74 Striking Wrench

Split Bearing Attachments

Attachments are used for the removal of bearings, thin-faced and cone-shaped gears. Beveled edge allows insertion behind pulleys, gears or bearings where space limits the use of a standard puller jaw. To use, grip the part to be pulled, then pull with the gear puller.

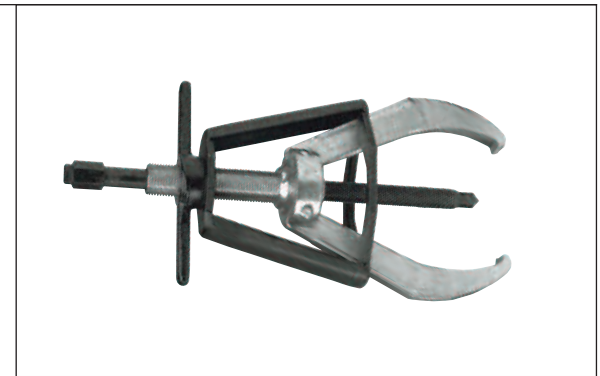
Item No.		A Min.	B Max.	C	D	E
2263	2 7/16"	0	2 1/4"	3/8-24"	7/16-204"	3/4"
2264	4 3/8"	0	4 1/4"	5/8-18"	5/8-188"	9/16"
2265	6	1/2"	8 5/8"	5/8-18"	3/4-161"	4-1/4"



Posi Lock™ Pullers - 3 Jaw Locking Puller

Item No.	Ton	Reach	Spread	Tip Protector	Weight
POL102	1	2-1/4"	3-1/4"	N/A	10 oz.
POL103	2	3"	4-1/2"	N/A	1 lb. 5 oz.
POL104	5	4"	5"	POLP4	4 lbs.
POL106	10	6"	7"	POLP6	8 lbs.
POL108	17	8"	12"	POLP10	14 lbs.
POL110	20	9-5/8"	15"	POLP10	16 lbs.
POL113	30	12"	18"	POLP1316	44 lbs.
POL116	40	14"	25"	POLP1316	68 lbs.

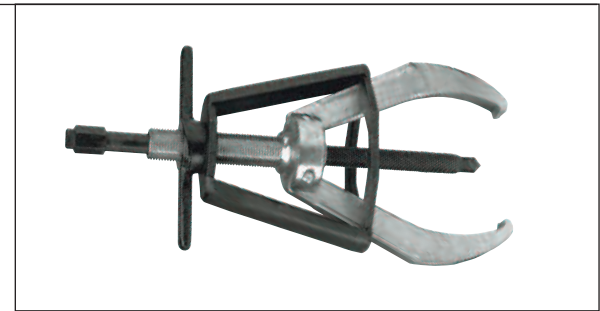
For Replacement Part Listings See Page 203.



Posi Lock™ Pullers - 2 Jaw Locking Puller

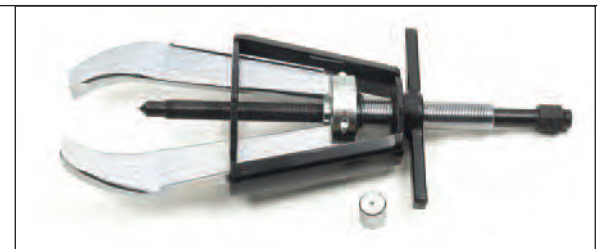
Item No.	Ton	Reach	Spread	Tip Protector	Weight
POL202	1	2-1/4"	3-1/4"	N/A	8 oz.
POL203	2	3"	4-1/2"	N/A	1 lb. 2 oz.
POL204	2	4"	5"	POLP4	4 lbs.
POL206	6	6"	7"	POLP6	7 lbs.
POL208	12	8"	12"	POLP10	12 lbs.
POL210	14	9-5/8"	15"	POLP10	13 lbs.
POL213	25	12"	18"	POLP1316	38 lbs.
POL216	35	14"	25"	POLP1316	57 lbs.

For Replacement Part Listings See Page 203.

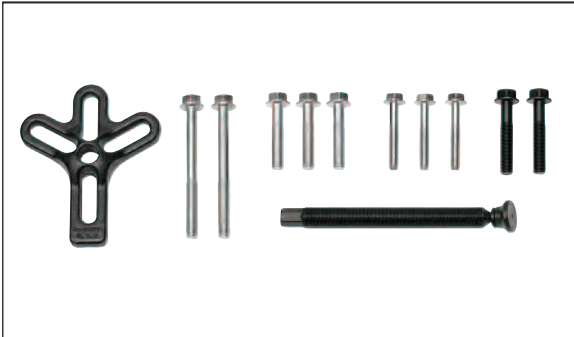


Posi Lock™ 2 & 3 Jaw Transmission Bearing Puller

Item No.	Reach	Spread	Tip Protector	Weight
POLTJ1	9-1/4"	14-3/4"	POLP10	12 lbs.
POLTJ2	6"	7"	POLP6	8 lbs.



Pullers & Puller Sets



Harmonic Balancer Puller - 2286

Puller removes balancers, pulleys, and gears with tapped holes. A floating swivel prevents damage to the shaft end. Four slots in the yoke allow for 2- or 3-hole applications. Tool bolts to balancer with center screw on the end of the crankshaft. Tighten while tapping on the screw head to remove balancer. Puller includes 3/8-24 UNF, 5/16-18 UNC, 3/8-16 UNC and 10mm x 1.5 screws for most American and imported cars.

- Replacement part: 2286-75 Yoke and Screw Swivel
- Replacement part: 2286-76 Center Screw
- Replacement part: 2286-77 Screw Assortment



Harmonic Balancer Installer - 36790

Installs Drive Pulleys on Harmonic Balancers
 - Complete range of adapters
 - Comes with thrust bearing for ease of use

Item No.	Size
3679-71	14mm x 1.5
3679-72	16mm x 2.0
3679-73	1/2" x 20
3679-74	3/4" x 16
3679-75	5/8" x 18
3679-76	7/16" x 20
3679-77	9/16" x 18
3679-78	12mm x 1.5
3679-79	Center Screw
3679-81	Bushing & Washer Kit
3679-82	10mm x 1.5
3679-83	12mm x 1.75
3679-84	14mm x 2.0
3679-85	16mm x 1.5



Rear Axle Bearing Puller Kit - 41710

Three pullers designed to make the removal of semi-floating rear axle bearings easier on most domestic cars.

Item No.	Description
41711	1" x 1-7/8" Puller
41712	1-5/16" x 2-3/8" Puller
41713	1-3/8" x 2-7/8" Puller

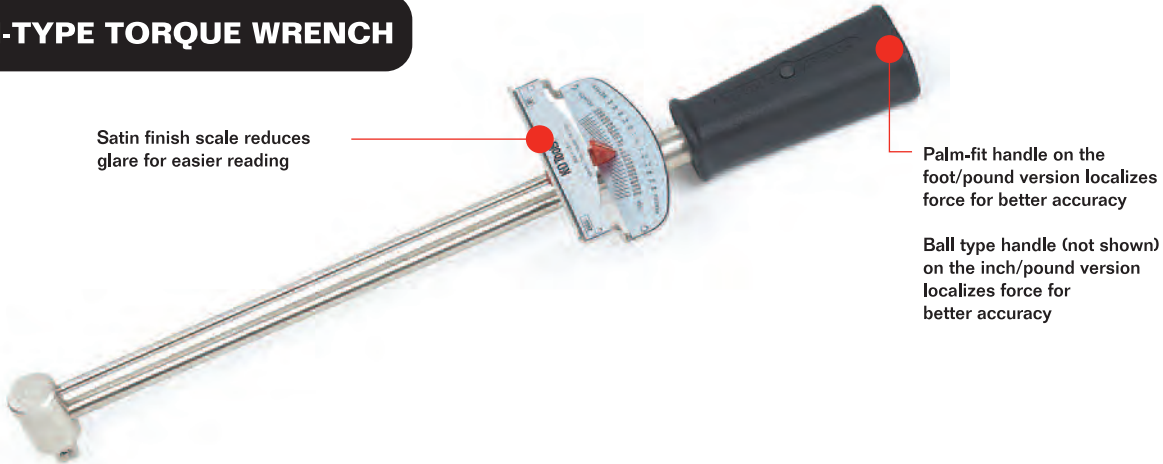


Torque & Measuring Tools



Torque & Measuring Tools

BEAM-TYPE TORQUE WRENCH



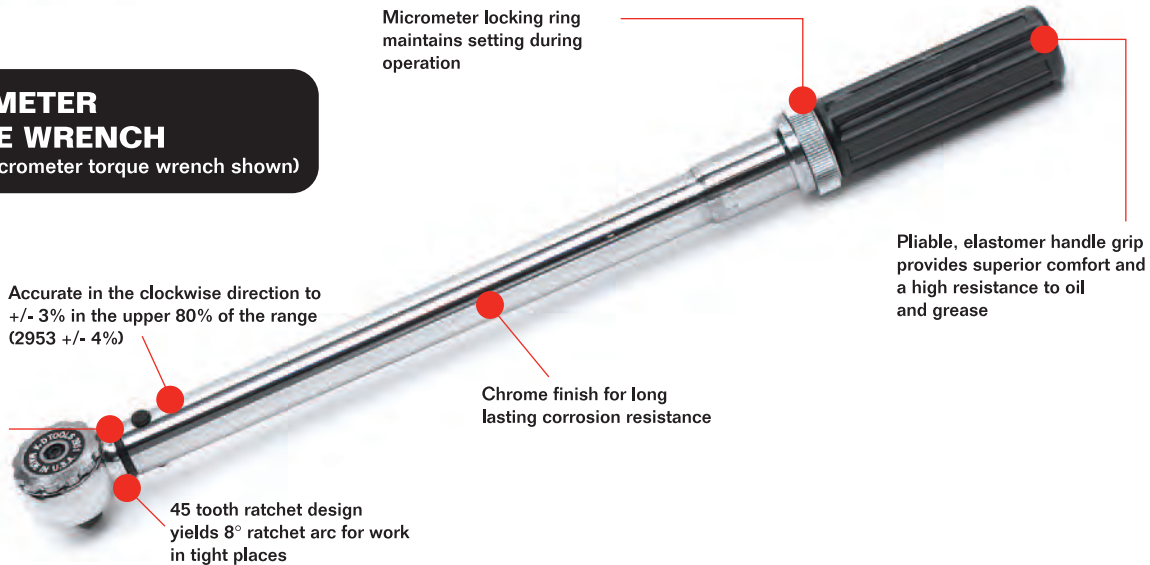
Satin finish scale reduces glare for easier reading

Palm-fit handle on the foot/pound version localizes force for better accuracy

Ball type handle (not shown) on the inch/pound version localizes force for better accuracy

MICROMETER TORQUE WRENCH

(Standard micrometer torque wrench shown)



Micrometer locking ring maintains setting during operation

Pliable, elastomer handle grip provides superior comfort and a high resistance to oil and grease

Accurate in the clockwise direction to $\pm 3\%$ in the upper 80% of the range (2953 $\pm 4\%$)

Rubber dust seal at neck keeps dirt out of inner mechanism

Chrome finish for long lasting corrosion resistance

45 tooth ratchet design yields 8° ratchet arc for work in tight places

TORQUE-RITE™ TIRE SHOP TORQUE WRENCHES



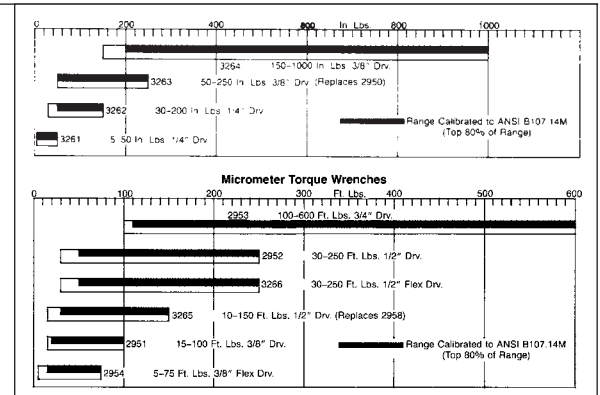
Specially designed, pliable handle offers outstanding performance in tire service environments

Protective head for use in working the harsh working environments

Torque Wrench Chart

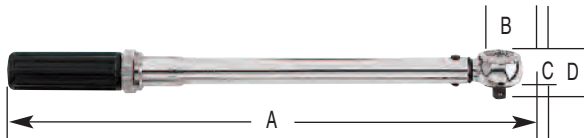
Use the chart as a quick reference guide to choosing the correct torque wrench for the job. As indicated, torque wrenches are calibrated (ANSI B-107.14) at the maximum of their range or to 20% of their maximum range (i.e. Item No. 3283 20% x 250 maximum = 50 minimum). Wherever possible, torque wrenches should be selected so that the intended use (torque value to be measured) falls roughly in the middle of its total range.

There are 2 types of torque wrenches available from KD: micrometer and beam; 4 drive-end sizes: 1/4, 3/8, 1/2, and 3/4; scales in English and metric units on most torque wrenches; and units of measurement in in.-lb. and Newton meters. The chart shows the type of torque wrench, the drive-end size, the range of measurement and the corresponding part number.



Micrometer Torque Wrenches

These wrenches permit precise tightening of fasteners to manufacturers' specifications. Micrometer-type setting adjusts by rotating the hand-grip. Wrenches indicate desired torque by feel and sound and are accurate to +/-3% clockwise in the upper 80% range. Wrenches are chrome finished and stamped with an English scale. Some are stamped with a metric scale. Pliable, elastomer handgrip resists damage from impact or contact with automotive fluids. The ratchet head features a 45-tooth ratchet design requiring only 8° of hand travel for indexing. The direction cannot be changed accidentally after you select the driving direction with the reversing ring. Rapidly run down the fastener by turning the spinner wheel. Wrenches include a unique palm-pad top for safer operation. Hand pressure on the flat top keeps the socket and fastener firmly engaged and prevents slipping. Wrenches are serviceable and include a storage box. Repair and calibration services are available by returning the torque wrench to an authorized repair facility. See price sheet for repair location.



Item No.	English Range	Metric Range, Nm	O/L	Head Diameter	Head Thickness W/O Drive Tang	Head Thickness W/Drive Tang	English Grads	Metric Grads
			A	B	C	D		
1/4" Ratchet Drive								
3261	5 to 50 in.-lb.	—	7.9"	1.1	0.7	1.1	1 in.-lb.	—
3262	30 to 200 in.-lb.	—	9.6"	1.1	0.7	1.1	1 in.-lb.	—
3/8" Ratchet Drive								
2951	10 to 100 ft.-lb.	23.7 to 138.9 Nm	17.2"	1.6	1.03	1.53	0.5 ft.-lb.	0.68 Nm
3263	50 to 250 in.-lb.	—	9.6"	1.1	0.7	1.1	1 in.-lb.	—
3264	150 to 1000 in.-lb.	19.78 to 115.83 Nm	17.2"	1.6	1.03	1.53	5 in.-lb.	—
3/8" Ratchet Drive, Flex-Head								
2954	5 to 75 ft.-lb.	10.7 to 105.06 Nm	17.25"	1.3	1	1.45	0.5 ft.-lb.	0.68 Nm
1/2" Ratchet Drive								
2952	25 to 250 ft.-lb.	47.45 to 345.68 Nm	20.5"	1.75	1.04	1.75	1 ft.-lb.	1.36 Nm
3265	10 to 150 ft.-lb.	20.33 to 210.12 Nm	20.5"	1.75	1.03	1.75	1 ft.-lb.	1.36 Nm
1/2" Ratchet Drive, Flex-Head								
3266	25 to 250 ft.-lb.	47.45 to 345.68 Nm	22"	1.75	1.2	1.75	1 ft.-lb.	1.36 Nm
3/4" Ratchet Drive								
2953	100 to 600 ft.-lb.	153 to 830 Nm	41.25"	2.45	1.7	2.63	2.5 ft.-lb.	3.4 Nm

Torque & Measuring Tools



Micrometer Torque Wrenches

Fast, accurate and easy to use torque wrenches have accuracy +/-4% right hand (clockwise) and +/-6% left hand (counter clockwise). Reversible ratchet head features a 45-tooth ratchet design requiring only 8° of hand travel for indexing. English and metric markings are color coded for easy reading. Ball bearing-mounted internal torque control mechanism provides proper lubrication, high accuracy, prolonged calibration life and consistent results. Positive, spring-loaded locking mechanism automatically locks in the selected reading to prevent accidental change. Packaged in a clamshell.

Item No.	English Range	Metric Range, Nm	O/L	Head Diameter A	Head Thickness W/O Drive Tang B	Head Thickness W/Drive Tang C	English Grads D	Metric Grads
3/8" Ratchet Drive								
3459	25 to 250 in.-lb.	3.61 to 29.03	13.1"	1.6	1	1.53	1 in.-lb.	.11 Nm
3460	10 to 100 ft.-lb.	16.9 to 138.9	17.4"	1.6	1.07	1.75	.5 ft.-lb.	.7 Nm
1/2" Ratchet Drive								
3461	25 to 250 ft.-lb.	43.4 to 348.4	20.5"	1.75	1.07	1.75	1 ft.-lb.	1.4 Nm



Torque-Rite™ 1/2" Ratchet Drive Tire Shop Torque Wrench - 3498

This tool is specifically for checking wheel lug nuts to exact manufacturer recommended torque value. Use in addition to torque limiters to tighten lugs to precise manufacturer recommendations. Helps prevent the warpage of brake rotors caused by over torquing. New and improved STEEL lock ring with heavy duty lock mechanism. Tough "tire tread" rubber cover on head, lock ring and handle provides cushioning effect to reduce operator fatigue and tool damage. Micrometer-type setting adjusts by rotating the hand-grip. Heavy duty chrome finish is stamped with English and metric scales. Calibration services are easily available through our authorized repair facility. The ratchet head features a 45-tooth ratchet design requiring only 8° of hand travel for indexing. Wrench indicates desired torque by feel and sound and is accurate to +/- 3% clockwise in the upper 80% range. Weight: 3 lbs.

Item No.	English Range	Metric Range	O/L	Head Diameter A	Head Thickness W/O Drive Tang B	Head Thickness W/Drive Tang C	English Grads D	Metric Grads
3498	25 to 250 ft.-lb.	47.45-345.68 Nm	21.38	1.75	107	1.75	1 ft.-lb.	3.36 Nm



Beam-Type Torque Wrenches

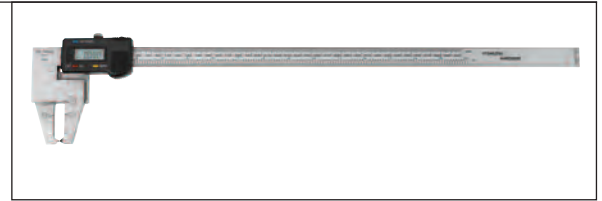
These wrenches directly measure a variety of torque values when tightening fasteners. Pointer moves clockwise or counterclockwise (+/-4%) to measure torque in English and metric. Satin finish scale reduces glare. Inch-pound models feature ball-type handles that localize force, ensuring accuracy. Foot-pound version has a comfortable palm-fit handle to provide a natural grip for a smooth, accurate pull. Palm-fit handle pivots on beam to maintain constant distance from drive point to load point for precise measurement. Wrenches are serviceable products that can easily be calibrated by bending pointer to zero before use.

Item No.	English Range	Metric Range	English Grads	Metric Grads	Overall Length	Weight
1/4" Fixed, Nonratchet Drive						
2955	0 to 60 in.-lb.	0 to 7 Nm	2.5 in.-lb.	0.25 Nm	11"	0.8 oz.
3/8" Fixed, Nonratchet Drive						
2956	0 to 600 in.-lb.	0 to 68 Nm	50 in.-lb.	*	16"	1 lb.
*Converts to Metric at 100 in.-lb. intervals						
1/2" Fixed, Nonratchet Drive						
2957	0 to 150 ft.-lb.	0 to 190 Nm	5 ft.-lb.	*	20"	2.5 lb.
*Converts to Metric at 20 ft.-lb. intervals						

Digital Brake Drum Gauge - 3777

Features:

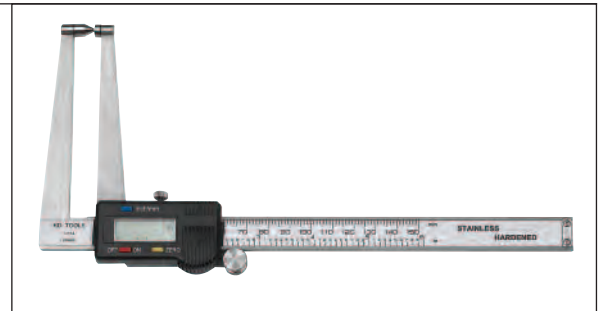
- 3" to 16"
- Preset at 1-1/2" depth with indicators for .5" and 1"
- Manual power on/off
- Metric/Inch system interchange at any position
- Zero setting at any position
- Data output interface
- Measure wear dimension of the brake drum
- Resolution / repeatability .0005" X 0.01mm
- Storage case



Digital Brake Rotor Gauge - 3774

Features:

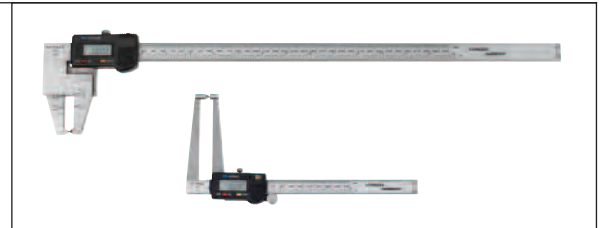
- 0 to 6"
- Manual power on/off
- Metric/Inch system interchange at any position
- Zero setting at any position
- Data output interface
- Measure wear dimension of the brake rotors
- Resolution / repeatability .0005" X 0.01mm
- Storage case



2 Pc. Digital Brake Drum and Rotor Gauge Kit - 3778

Features:

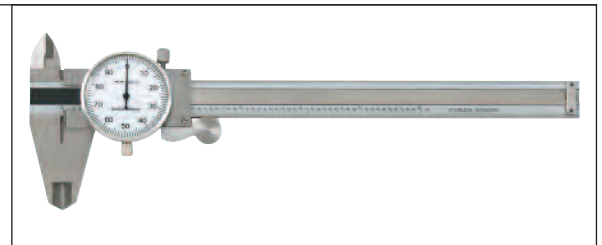
Combining the 3774 Brake Rotor Gauge and the new 3777 Digital Brake Drum Gauge into one package. Includes storage case.



6" SAE Dial Micrometer - 3750

Features:

- Stainless steel fully hardened frame, satin chrome finish
- Reading Single revolution dial graduated .001"
- Four measurements, inside, outside, depth & step
- Covered rack - thumb roll - lock screw
- Measuring faces hardened, ground and lapped
- Fitted in a plastic box

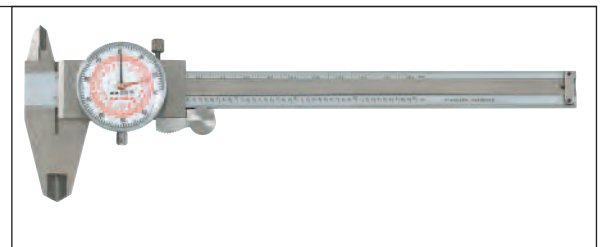


Double Scale SAE & Metric Dial Caliper - 3751

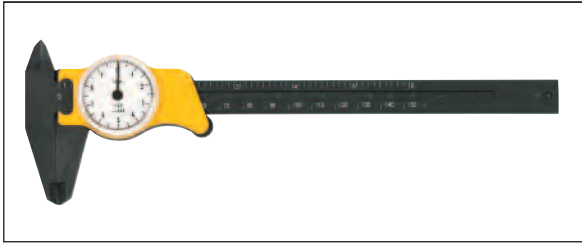
Features:

- Dial graduated with two scales, black scale inch, red scale metric
- Reading Single revolution dial graduated .100" (2mm)
- 0-6" (0-150mm)
- Dial with two needles for direct inch or metric reading off the dial face
- Beam with double scale inch and metric for quick approximate reading
- Fitted in a plastic box

For work in close quarters. Expertly machined serration on the round face.



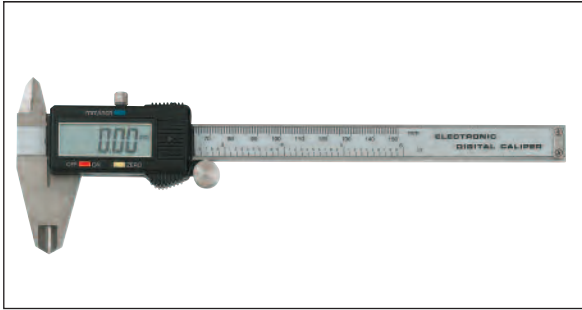
Torque & Measuring Tools



Carbon Fiber Composites Dial Caliper - 3752

Features:

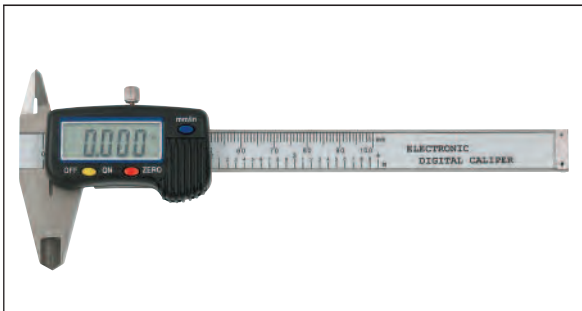
- 6" capacity
- Range 1/.01 Revolution



6" Digital Caliper with Large LCD window - 3756

Features:

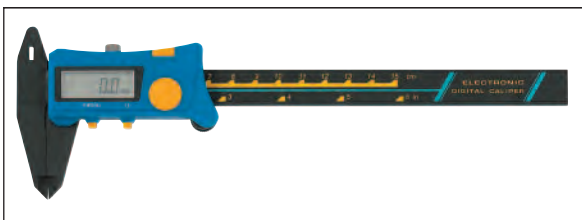
- LCD displays up to 5 digits
- Glass window over LCD is clearer and does not wear out
- Color coded Off, On/Zero and Inch/mm
- Stainless steel frame with hardened jaws, graduated scale and thumb roll
- 4 way measurement, inside, outside, depth & step
- Resolution / repeatability .001" x 0.01mm
- Data output interface
- Fitted in a plastic box



4" Digital Caliper - 3754

Features:

- Color coded Off, On/Zero and Inch/mm
- Glass window over LCD is clearer and does not wear out
- Stainless steel frame with hardened jaws, graduated scale
- 4 way measurement, inside, outside, depth & step
- Resolution / repeatability .0005" x 0.01mm
- Data output interface
- Fitted in a plastic box



Carbon Fiber Composites Digital Caliper - 3757

Features:

- Manual power on/off
- With data output interface
- .01", .1mm



3 Pc. Machinist Tool Kit - 3753

Features:

- Stainless steel fully hardened frame, satin chrome finish
- 6" Single revolution dial caliper graduated .001
- Measuring faces hardened, ground and lapped
- Outside Mic. with ratchet stop 0-1" (.0001 Grad)
- Carbide tipped - Ratchet Stop - Lock lever
- 6" stainless rule
- Fitted in a plastic box

2 Pc. Digital Machinist Tool Kit - 3758

Features:

- Glass window over LCD is clearer and does not wear out
- 6" (150mm) Caliper with Color coded Off, On/Zero and Inch/mm
- Resolution / repeatability .0005" x 0.01mm
- Data output interface
- Outside Mic. 0-1", (0-25mm) Grad. .00005", .001mm
- Carbide faces
- Auto power on/off, seven Key Functions
- Fitted in plastic case



4 Pc. Outside Micrometer Set - 3734

Features:

- Industrial quality, Swiss style, with ratchet stop
- Enamel finish
- Carbide tipped - Ratchet Stop - Lock lever
- Each piece fitted in a box with instructions and zero adjusting key

Item No.	Sizes
3730	0-1" (.0001" Grad.)
3731	1"-2" (.0001" Grad.)
3732	2"-3" (.0001" Grad.)
3733	3"-4" (.0001" Grad.)



Brake Rotor Micrometer - 3735

Features:

- Industrial quality, Swiss style, with ratchet stop
- 0.3-1.3" Carbide Pointed tip
- 3-1/2" Deep Throat Deep Throat
- Fitted in a storage box with instructions and zero adjusting key
- Fitted in a plastic box
- Max Anvil Opening 1 - 5/16"



Digital Outside Micrometer - 3740

Features:

- 0-1", (0-25mm) Grad. .00001" , .001mm
- Carbide faces
- Auto power on/off
- Seven Key Functions
- Metric/Inch system interchange at any position
- Zero setting at any position
- Relative and absolute measurement interchange at any position.
- Display predetermination function
- Data holding function
- Fitted in a plastic box



Torque & Measuring Tools



Electronic Digital Rotor Micrometer - 3745

Outside Micrometer:

Features:

- Manual power on/off
- 0-1.3", (0-76mm) Grad. .0005", .01mm
- 3 - 1/2" Deep Throat
- Metric/Inch system interchange at any position
- Zero setting at any position
- With data output interface
- Measures thickness of inside groves
- Fitted in a plastic box



Rotor/Ball Joint Set with Locking Pliers - 3763

Features:

- Measure wear and runout on Brakes and tires
- 2-1/4 Dia. Dial face
- Range: 0- 1.3 Graduations: .001
- Special Locking plier accessory
- Flexible extension
- Case



Dial Indicator Set with Small Stand - 3760

Features:

- English dial gauge Range: 0-1.3 Graduations: .001
- 2-1/4 Dia. face
- Universal dovetail clamp for Dial Test Indicators
- Grips flat or curved surfaces
- Swivel adapter to mount all AGD Dial Indicators with lug backs



Dial Indicator Set with on/off Stand - 3761

Features:

- English dial gauge Range: 0-1.3 Graduations:
- .001 Centered V-magnet for strongest grip on round or flat surfaces
- Powerful 130 lbs pull
- Two magnetic mounting surfaces: bottom and back
- Swivel adapter to mount all AGD Dial Indicators with lug backs
- Universal dovetail clamp for Dial Test Indicators
- On / Off switch
- Center rod 1/2" diameter x 7" high

Dial Indicator Set with Digital Dial Indicator - 3762

Features:

- Zero setting at any position, Metric/Inch system
- Interchange at any position, Data output interface, Data holding function
- Fast tracing of minimum value or maximum value during measurements
- Auto power on/off
- Comes with deluxe on/off stand
- Range 0-.500" (0-12.7mm)



Dial Indicator - 3766

Features:

- 2-1/4" face
- 3/8" Dia. Shank
- English dial gauge Range: 0-1.3
- Graduations: .001



Digital Dial Indicator - 3767

Features:

- Zero setting at any position
- Metric/Inch system
- Interchange at any position
- Data output interface
- Data holding function
- Fast tracing of minimum value or maximum value during measurements
- Auto power on/off
- Range 0-.500" (0-12.7mm)



On / Off Stand - 3765

Features:

- Powerful 130 lbs pull
- Centered V-magnet for strongest grip on round or flat surfaces
- Two magnetic mounting surfaces: bottom and back
- Swivel adapter to mount all AGD Dial Indicators with lug backs
- Universal dovetail clamp for Dial Test Indicators
- On / Off switch
- Center rod .475" diameter x 7" high
- Size rod .375" diameter x 5" high



Torque & Measuring Tools



Mini Stand - 3764

Features:

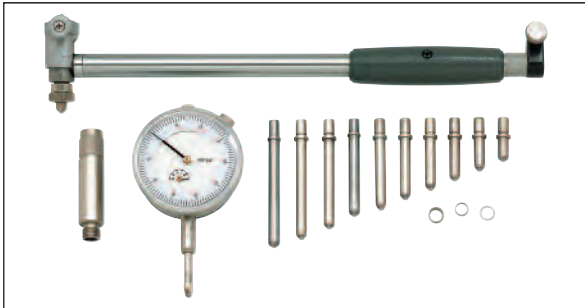
- Grips flat or curved surfaces
- Swivel adapter to mount all AGD Dial Indicators with lug backs
- Universal dovetail clamp for Dial Test Indicators



Depth Micrometer - 3746

Features:

- 0-3" Range
- 4" wide base
- Satin Chrome finish
- Fitted case with rods



Cylinder Bore Gauge - 3769

Features:

- 0-6" Range
- Satin Chrome finish
- Fitted case with rods



6 Pc. Telescoping Gauge Set - 3771

Features:

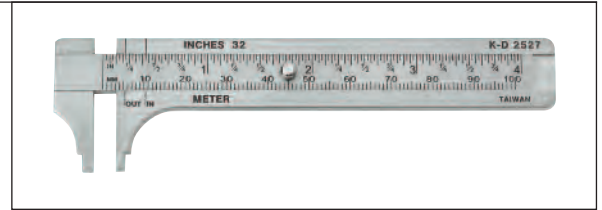
- Measure slot or recess from 5/16" – 6"
- Plunger expands in hole to be measured
- Knurl locks the setting for sizing with micrometer or caliper
- Satin chrome finish
- In plastic folding pouch

Torque & Measuring Tools

Pocket Slide Caliper - 2527

Features:

- 4" Stainless Steel
- One side – 32nd inch, one side – 1mm.



6" Pocket Stainless Steel Rule - 2522

Features:

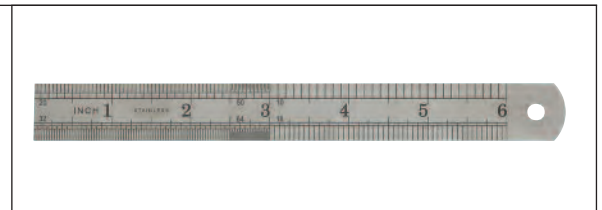
- Stainless steel flexible blade
- One side – 32nd inch, one side – 1mm



6" Stainless Stiff Rule - 3773

Features:

- Stainless steel stiff blade
- One side - 32nd and 64th
- One side – .5mm and 1mm.



Tape Measures

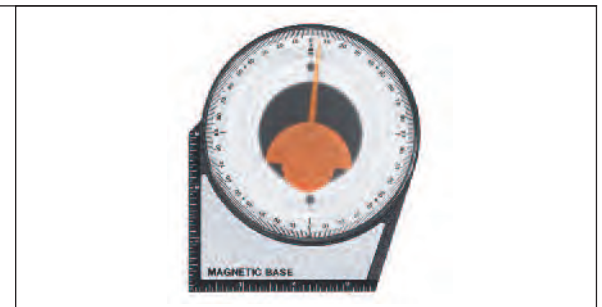
Precision steel tape measures with ClearSight polycoat blade are highly resistant to abrasion, chipping and most acids, alkalies and oils. Replacement blades are easily changeable. Exclusive no-drift locking action holds accurate readings for marking and repeat measuring. Sliding end hook self-adjusts to true zero for inside or outside measuring. Case is lightweight with removable belt clip.

Item No.	Length, ft.	Color
3011	16	Neon Yellow
3012	25	Neon Yellow



Angle Finder - 2968

Measures angle of most parts such as frame angle (pitch forward or backward) for setting truck front ends. Magnetic base holds tool in place. Tool is graduated in 1/2° increments.



Hand-Held Tachometer - 2967

Tachometer checks diesels, pumps, compressors, power take-offs and farm and construction equipment revolution speed. Tool is ideal where electric tachometer cannot be used. To use, hold rubber tip against end of rotating shaft and read revolutions per minute directly from dial. Range is 100 to 4000 rpm (clockwise or counterclockwise). Length: 4-1/4". Diameter: 2-3/4".

- Replacement part: 2967-70 Pointed Rubber Tip
- Replacement part: 2967-71 Flat Rubber Tip
- Replacement part: 2967-72 12" Extension Shaft



Torque & Measuring Tools



Deluxe Feeler Gauge - 161

Gauge measures clearances from 0.0015 to 0.035" (0.038 to 0.889mm). It also includes one 0.010" brass blade to use with electronic ignitions.

Blade Lengths: 3-5/16" long, Blade Width: 1/2"

Inches	Millimeters	Inches	Millimeters
0.0015	0.038	0.015	0.381
0.002	0.051	0.016	0.406
0.0025	0.063	0.017	0.432
0.003	0.076	0.018	0.457
0.004	0.102	0.019	0.483
0.005	0.127	0.020	0.508
0.006	0.152	0.021	0.533
0.007	0.178	0.022	0.559
0.008	0.203	0.023	0.584
0.009	0.229	0.024	0.610
0.010	0.254	0.025	0.635
0.010 (Brass)	0.254	0.026	0.660
0.011	0.279	0.028	0.711
0.012	0.305	0.030	0.762
0.013	0.330	0.032	0.813
0.014	0.356	0.035	0.889



Feeler Gauge - 162

Gauge measures clearances 0.002 to 0.025" (0.051 to 0.635mm). It includes a 2-1/2" rule and 15 blades (see chart below).

Blade Lengths: 3-5/16" long

Inches	Millimeters	Inches	Millimeters
0.002	0.051	0.013	0.330
0.003	0.076	0.014	0.356
0.004	0.102	0.016	0.406
0.005	0.127	0.018	0.457
0.006	0.152	0.020	0.508
0.008	0.203	0.022	0.599
0.011	0.279	0.025	0.635
0.012	0.305		



Metric Feeler Gauge - 2274

25-blade gauge measures clearances from 0.04 to 1mm. Blade sizes: 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95 and 1mm.

Blade Lengths: 3" long

Mini Feeler Gauge - 2062

Miniature 16-blade feeler gauges are only 1/4" wide and measure clearances from 0.010 to 0.035" (0.254 to 0.889mm).

Blade Lengths: 1-3/4" long

Inches	Millimeters	Inches	Millimeters
0.010	0.254	0.022	0.559
0.012	0.305	0.024	0.610
0.015	0.381	0.025	0.635
0.016	0.406	0.026	0.660
0.017	0.432	0.028	0.711
0.018	0.457	0.030	0.762
0.019	0.483	0.032	0.813
0.020	0.508	0.035	0.889



Valve-Tappet Feeler Gauge - 163

11-blade gauge measures valve tappet clearances from .008" to .026". Offset blades provide easy access. See chart for sizes.

Blade Lengths: 3-3/4" long

Inches	Millimeters	Inches	Millimeters
0.008	0.203	0.016	0.406
0.010	0.254	0.018	0.457
0.012	0.305	0.019	0.483
0.013	0.330	0.020	0.508
0.014	0.356	0.026	0.660
0.015	0.381		



Non-Magnetic Feeler Gauge - 2223

6-blade gauge measures clearance in electronic ignition systems where non-magnetic blades are required. These hard brass blades will not magnetize. See chart for sizes.

Blade Lengths: 3-5/16" long

Inches	Millimeters
0.006	0.152
0.008	0.203
0.010	0.254
0.012	0.305
0.014	0.356
0.016	0.406



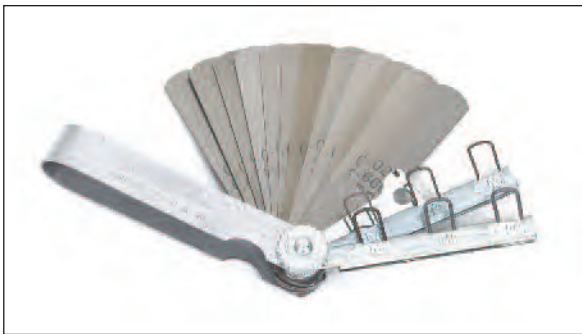
Torque & Measuring Tools



Go-No-Go Feeler Gauge - 2424

Gauge checks clearance measurements with a 0.002" range. Stepped blades quickly indicate if clearance fails within the specified range. Twenty-two etched blades cover the complete range of sizes from 0.004 to 0.027" (0.10 to 0.69mm).

Blade Lengths: 3-5/16" long



Spark Plug Gap and Feeler Gauge Set - 164

Use to set and measure spark plug gaps plus other ignition clearances from 0.010 to 0.045" (0.254 to 1.143mm). Six wire gauges check spark plug gaps and 12 straight blades check other clearances. It includes a double-ended electrode tool for easy adjustments. See chart for sizes.

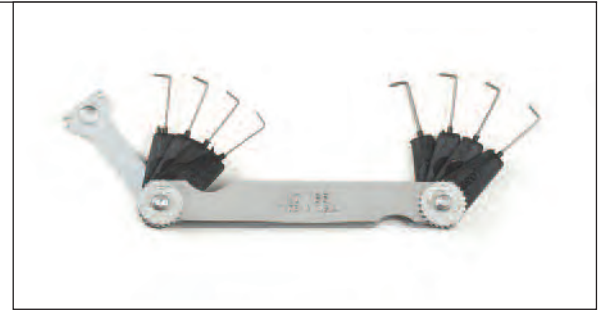
Blade Lengths: 3-5/16" long

Inches	Millimeters
Wire Gauge	
0.025	0.635
0.030	0.762
0.034	0.864
0.035	0.889
0.040	1.016
0.045	1.143
12-Blades	
0.010	0.254
0.012	0.305
0.015	0.381
0.016	0.406
0.017	0.432
0.018	0.457
0.019	0.483
0.020	0.508
0.022	0.559
0.024	0.610
0.025	0.650
0.026	0.660

Spark Plug Gap Wire Gauge - 165

Gauge measures spark plug gaps from 0.015 to 0.045" (0.381 to 1.143mm). Double-ended tool is included for adjusting electrodes. See chart for wire sizes.

Inches	Millimeters
0.020	0.508
0.025	0.635
0.028	0.711
0.030	0.762
0.032	0.813
0.034	0.864
0.035	0.889
0.040	1.016



Spark Plug Gap Wire Gauge - 166

Use gauge to measure spark plug electrode gaps from 0.025 to 0.045" (0.635 to 1.143mm). Gauge includes 2 electrode adjusting tools. See chart for wire gauge sizes.

Inches	Millimeters
0.025	0.635
0.030	0.762
0.034	0.864
0.035	0.889
0.040	1.016
0.045	1.143



Spark Plug Gap Gauge - 2327

Gauge measures spark plug electrode gaps on gap plugs from 0.040 to 0.080" (1.016 to 2.032mm). It includes 2 electrode adjusting tools. Refer to chart for gauge sizes.

Inches	Millimeters
0.040	1.016
0.044	1.118
0.045	1.143
0.050	1.270
0.060	1.524
0.080	2.032



Torque & Measuring Tools



Spark Plug Gap Gauge - 3293

Circular coin-type ramp gauge easily measures spark plug gaps from 0.020 to 0.100" (0.635 to 1.143mm).



Body Tools



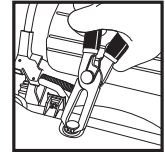
Body Tools



Push Pin Pliers - 3729

Features:

- Specially designed for removal of push pins with center locking pin.
- Quickly removes plastic anchors that have center pins 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.
- Patent Pending.
- New Push Pin Plier fits into pin slots and under the center pin.
- Double cushion grip handle
- Tapered end for easy access
- 30° Offset



Push Pin Pliers 80° - 3888

Features:

- Specially designed for removal of push pins with center locking pin.
- Quickly removes plastic anchors that have center pins 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.
- New Push Pin Plier fits into pin slots and under the center pin.
- Double cushion grip handle.
- Tapered end for easy access and 80° offset.
- Patent Pending.



2 Pc. Push Pin Pliers Set - 41840

Item No. Description

3888	80° Push Pin Pliers
3729	30° Push Pin Pliers



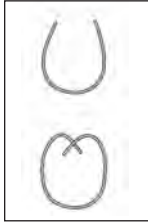
3 Pc. Body Clip Set - 41850

Item No. Description

3888	80° Push Pin Pliers
3729	30° Push Pin Pliers
3705	Panel Clip Pliers with "V" design for removal of standard clips without center pins.

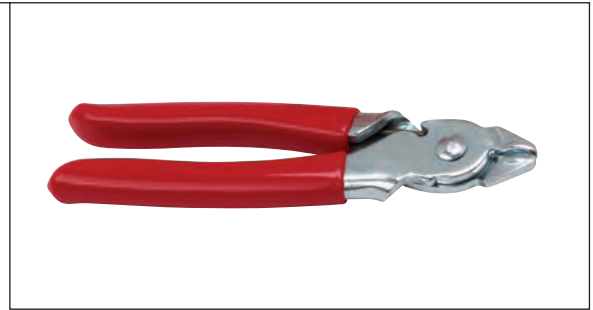


Hog Ring Pliers Straight - 3703

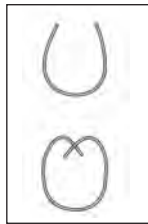


Used for upholstery work on most all Domestic and Foreign cars.

- Specially made to grip and mold Hog Rings for closure.
- Spring loaded to hold hog ring in jaws during use.
- Cushion Grip Handle.



Hog Ring Pliers 45 Degree - 3704

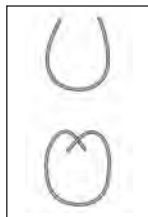


Used for upholstery work on most all Domestic and Foreign cars.

- 45 degree for added access
- Specially made to grip and mold Hog Rings for closure.
- Spring loaded to hold hog ring in jaws during use.
- Cushion Grip Handle.



2 Pc. Hog Ring Pliers Set - 3702



Used for upholstery work on most all Domestic and Foreign cars.

- 45 Degree Hog Ring Plier
- Straight Hog Ring Plier
- For installation of "Hog Ring" fasteners
- Specially made to grip and mold Hog Rings for closure.
- Spring loaded to hold hog ring in jaws during use.
- Cushion Grip Handle.



Panel Clip Pliers - 3705

This new product features a unique two-step tip that provides better support under the clip head than conventional panel clip pliers. The added support provided by the two-step design allows removal of panel clips without damaging the clip.



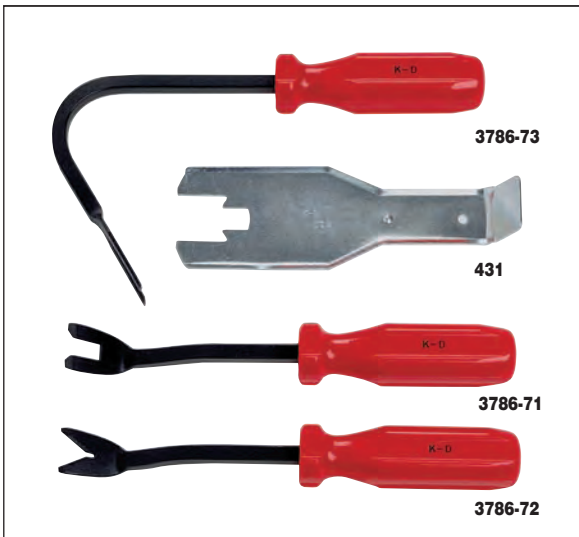
Body Tools



Radio Removal Kit & Antenna Wrench Kit - 41680

Kit includes the tools needed to remove the radio from the dash on many domestic and import vehicles without damage to the radio or the dash panel. Antenna nut sockets fit over antennas and down into deep well locations.

Item No.	Description
3913	Ford Radio Removal Tool
3914	Key Set
3915	Antenna Nut Socket Set



4 Pc. Body Trim Set - 3786

Set contains a selection of the most popular door, handle and trim tools covering a wide range of service applications, which allow you to get the job done faster. Trim Tools feature the new Heavy duty handle design and black oxide shanks.

Door Panel Remover - 3786-71 For plastic clips on GM and VW door panels. Unique square groove design makes the removal of door panels and other selected trim easier. Notch slips under plastic trim clips to easily pop them out while minimizing damage to panels.

Door Panel Remover - 3786-72 For plastic clips on most foreign and domestic door panels.

Door Trim Pad Tool - 3786-73 Unique "V" groove design makes the removal of door panels and other selected trim easier. Notch slips under plastic trim clips to easily pop them out while minimizing damage to panels. For GM vehicles. Special v-notch groove permits user to engage and quickly remove a variety of body and trim fasteners. Bent shank provides additional leverage to easily remove difficult trim fasteners without damage.

Door Handle and Window Lift Tool - 431 Tool compresses door handle spring clip to remove handle with clip intact. Works on most GM, Ford and other vehicles using spring clips.



Trim Pad Removing Tool - 2822

Tool reaches behind trim panel on GM and other cars. It grips plastic fastener and removes trim without damage.



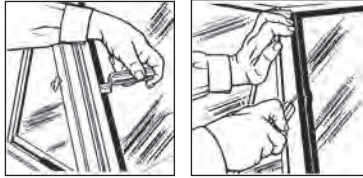
Door Handle and Window Lift Remover - 431

Compresses the door handle spring clip far enough so that the handle can be removed while the spring clip remains on the handle. Use tool's reverse end to disengage clip holding door upholstery panels. Fits GM, Ford and other cars using type of clip shown.



Window Moulding Remover - 2037

Removes clips and spreads rubber gasket on Chrysler windows. Rounded point spreads zipper-type gaskets.



Window Moulding Remover - 2038

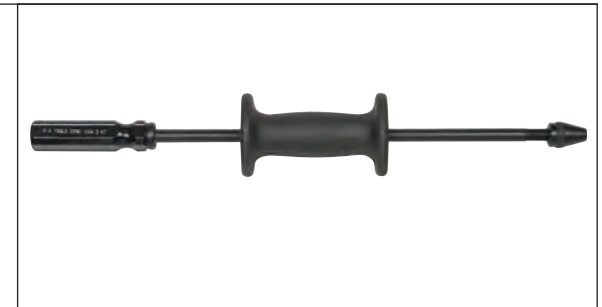
Removes window molding clips on GM, Ford and AMC vehicles. Place jaw flat against glass. Locate clips and roll them out with tip, keeping jaw flat to glass.



Body Dent Remover - 2290

Pulls dented sheet metal back into place. To use, drill a hole in the deepest part of the dent, insert the hook or self-threading screw tip and tap lightly with the 2 lb. slide hammer to remove the dent. 16.5"-long shaft (including handle) enables high pulling force. Slide hammer shaft has a 1/2-20 UNC thread. Handle Length: 4.75".

- Replacement part: 2290-70 Hook and Screw package
- Replacement part: 2290-76 Nose Nut

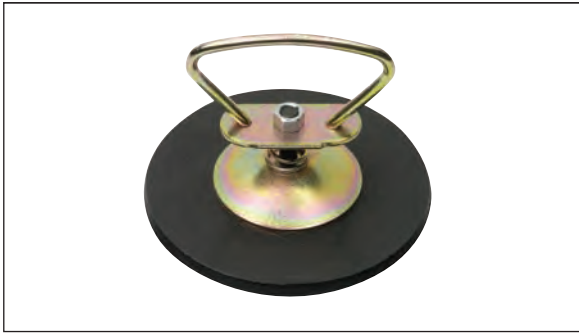


Tapered Reamer - 2043

Tool reams as well as deburrs, aligns and enlarges holes 1/8 to 1/2" in diameter. Accurately ground tempered "Steel Tool" with 3-1/2" blade. Always turn clockwise and use cutting oil for best results. Reamer comes with a comfortable plastic-grip handle.



Body Tools



Deluxe 6" Dent Puller - 2761

Puller easily pops dented hoods, doors and fenders into place. 6"-diameter suction disc with steel handle and steel support plates enables strong pull. It works on nearly every dent where the sheet metal has not been creased. Lift edge to release suction. Puller also functions as a glass holder.



Heavy-Duty Hook and Pick Set - 3476

The set includes part numbers 3470, 3474 and 3475. The tools included are ideal for use anywhere a hook/removal tool, spring removal tool or a sharp punch is required. All three tools feature corrosion resistant zinc plating and a high visibility orange robust handle.

Item No.	Description
3470	Heavy-Duty Hook and Cotter Pin Puller
3474	Heavy-Duty Spring Hook Tool
3475	Heavy-Duty Scratch Awl



Door Hinge Adjuster- 3985

This tool is capable of adjusting the alignment of doors with bolted or welded hinges. To operate, position the pin end of the tool into the door latch, closing the door until the tool engages the door striker. Lift or lower the tool handle to align the door. Dual dipped grip provides excellent grip and leverage. Includes a universal pin adapter for large and small door latches.

MADE IN
USA

ALLEN

Hex & Torx® Fastening Tools / Hex Keys



Hex Keys



13 Pc. Torx® Key Set - 59950



Item No.	Description
57982	T7 Torx® Short Arm Keys
57983	T8 Torx® Short Arm Keys
57984	T9 Torx® Short Arm Keys
57985	T10 Torx® Short Arm Keys
57986	T15 Torx® Short Arm Keys
57987	T20 Torx® Short Arm Keys
57988	T25 Torx® Short Arm Keys
57989	T27 Torx® Short Arm Keys
57990	T30 Torx® Short Arm Keys
57991	T40 Torx® Short Arm Keys
57992	T45 Torx® Short Arm Keys
57993	T50 Torx® Short Arm Keys
57994	T55 Torx® Short Arm Keys



Duracast® Fold-ups

Item No.	No. Of Keys	Key Sizes (Inch)	Handle Length (Inch)
56346	9	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16	3 1/2
56347	9	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	4 1/4

Duracast® Metric Fold-up

Item No.	No. Of Keys	Key Sizes (mm)	Handle Length (Inch)
56349	7	1.5, 2, 2.5, 3, 4, 5, 6	3 1/2



Duracast® Torx® Fold-up



Item No.	No. Of Keys	Key Sizes (Torx®)	Handle Length (Inch)
56348	7	T-10, T-15, T-20, T-25, T-27, T-30, T-40	4 1/4



Duracast® Ball End Fold-up

Item No.	No. Of Keys	Key Sizes (Inch)	Handle Length (Inch)
56382	9	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	4 1/4

Hex Keys

Duracast® Hex Key/Screwdriver Fold-up

Item No.	No. Of Keys	Key Sizes (mm)	Handle Length (Inch)
56384	6	2, 4, 5, 6 Phillips screwdriver blade Slotted screwdriver blade	4 1/4



Standard Fold-ups

Item No.	Type	No. Of Keys	Key Sizes (Inch)	Handle Length (Inch)
59930	carded	9	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16	3 3/8
59931	carded	9	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	3 3/4



Metric Standard Fold-ups

Item No.	Type	No. Of Keys	Key Sizes (Inch)	Handle Length (Inch)
59945	carded	7	1.5, 2, 2.5, 3, 4, 5, 6	3 3/4 (95mm)

Standard Hi-Vis Fold-ups (Hi-Vis Orange)

Item No.	Type	No. Of Keys	Key Sizes (Inch)	Handle Length (Inch)
56391	carded	9	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16	3 3/8

Metric Standard Hi-Vis Fold-ups (Hi-Vis Blue)

Item No.	Type	No. Of Keys	Key Sizes (Inch)	Handle Length (Inch)
56395	carded	7	1.5, 2, 2.5, 3, 4, 5, 6	3 3/4 (95mm)



Hex Keys



Long Fold-ups

Item No.	Type	No. Of Keys	Key Sizes (Inch)	Handle Length (Inch)
59932	carded	5	3/16, 7/32, 1/4, 5/16, 3/8	6 3/8
56318	carded	9	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	6 3/8

Metric Long Fold-ups

Item No.	Type	No. Of Keys	Key Sizes (Inch)	Handle Length (Inch)
59946	carded	5	4, 5, 6, 8, 10	6 3/8 (162mm)



Long Hi-Vis Fold-ups (Hi-Vis Orange)

Item No.	Type	No. Of Keys	Key Sizes (Inch)	Handle Length (Inch)
56394	carded	9	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	6 3/8

Metric Long Hi-Vis Fold-ups (Hi-Vis Blue)

Item No.	Type	No. Of Keys	Key Sizes (mm)	Handle Length (Inch)
56396	carded	5	4, 5, 6, 8, 10	6 3/8 (162mm)



Torx® Fold-up

Item No.	Type	No. Of Keys	Key Sizes (Torx®)	Handle Length (Inch)
59947	carded	7	T-10, T-15, T-20, T-25, T-27, T-30, T-40	3 3/4



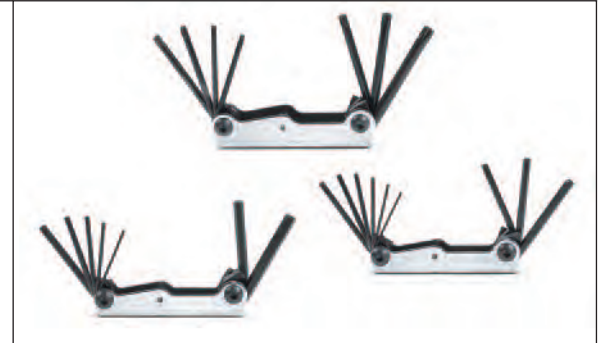
Torx® Hi-Vis Fold-ups (Hi-Vis Green)

Item No.	Type	No. Of Keys	Key Sizes (Torx®)	Handle Length (Inch)
56392	carded	7	T-10, T-15, T-20, T-25, T-27, T-30, T-40	3 3/4

3 Pc. Fold-up Set - 59949

Contains:

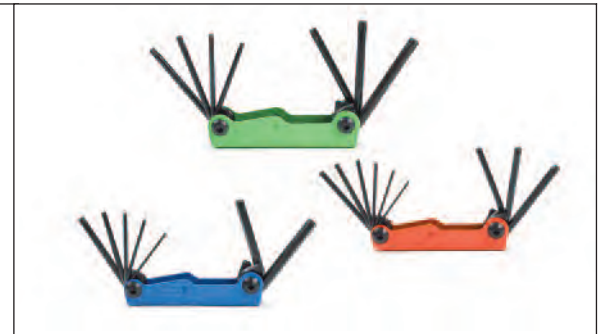
Item No.	No. Of Keys	Key Sizes
59930	9	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16
59945	7	1.5, 2, 2.5, 3, 4, 5, 6
59947	7	T-10, T-15, T-20, T-25, T-27, T-30, T-40



3 Pc. Hi-Vis Fold-up Set - 56301

Contains:

Item No.	No. Of Keys	Key Sizes
56391	9	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4
56395	5	4, 5, 6, 8, 10
56392	7	T-10, T-15, T-20, T-25, T-27, T-30, T-40



Short Arm Sets - Pouch



Item No.	No. Of Keys	Key Sizes (Inch)
56100	6	.028, .035, .050, 1/16, 5/64, 3/32
59815	7	5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4
56122	9	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4
56030	11	.050, 1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8
56032	15	.028, .035, .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8
56011	20	.028, .035, .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4



Metric Short Art Set - Pouch

Item No.	No. Of Keys	Key Sizes (mm)
56015	9	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10

Short Arm Sets - Plastic Holder

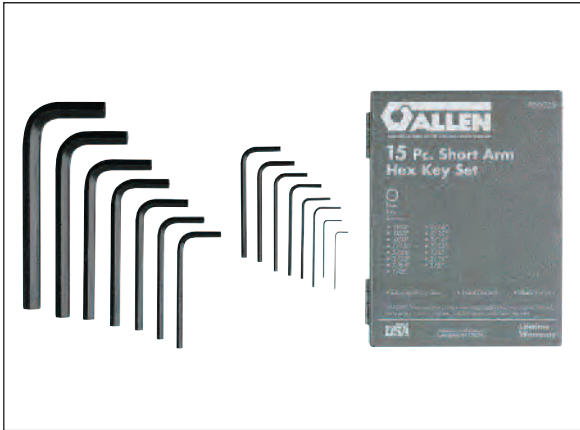
Item No.	No. Of Keys	Type	Key Sizes (Inch)
59816	7	carded	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16
59817	13	carded	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8

Metric Short Arm Set - Plastic Holder

Item No.	No. Of Keys	Type	Key Sizes (mm)
59830	9	carded	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10



Hex Keys



Short Arm Sets - Metal Box

Item No.	No. Of Keys	Key Sizes (Inch)
56028	15	.028, .035, .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8
56026	18	.028, .035, .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 1/2, 9/16, 5/8

Metric Short Arm Sets - Metal Box

Item No.	No. Of Keys	Key Sizes (mm)
56038	12	0.7, 0.9, 1.3, 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10
56036	15	0.7, 0.9, 1.3, 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10, 12, 14, 17



Torx® Short Arm Set - Pouch



Item No.	No. Of Keys	Key Sizes (Torx®)
59950	13	T-7, T-8, T-9, T-10, T-15, T-20, T-25, T-27, T-30, T-40, T-45, T-50, T-55



Individual Short Arm

Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)
57002	.028	57018	9/64	57032	1/2
57004	.035	57020	5/32	57034	9/16
57006	.050	57022	3/16	57036	5/8
57008	1/16	57024	7/32	57038	3/4
57010	5/64	57026	1/4	57040	7/8
57012	3/32	57028	5/16	57042	1
57013	7/64	57030	3/8		
57014	1/8	57031	7/16		

Metric Individual Short Arm

Item No.	Key Sizes (mm)	Item No.	Key Sizes (mm)	Item No.	Key Sizes (mm)
57116	1.5	57126	5	57133	12
57118	2	57128	6	57134	14
57120	2.5	57130	8	57138	17
57122	3	57132	10	57142	19
57124	4				

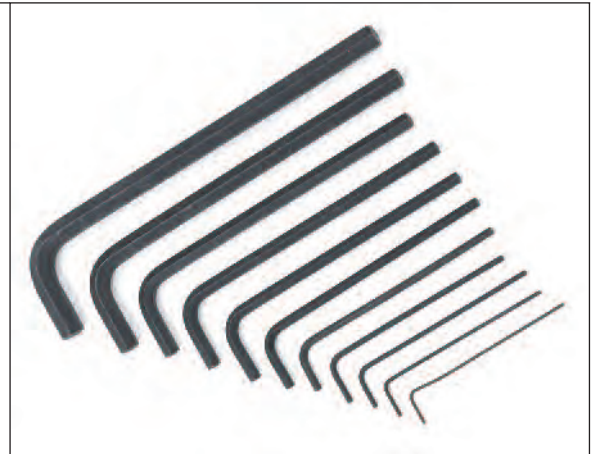
Torx® Individual Short Arm

Item No.	Key Sizes (Torx®)	Item No.	Key Sizes (Torx®)	Item No.	Key Sizes (Torx®)
57981	T-6	57986	T-15	57991	T-40
57982	T-7	57987	T-20	57992	T-45
57983	T-8	57988	T-25	57993	T-50
57984	T-9	57989	T-27	57994	T-55
57985	T-10	57990	T-30		



Long Arm Sets - Pouch

Item No.	No. Of Keys	Key Sizes (Inch)
56150	11	.050, 1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8
56013	13	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8
56014	15	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 1/2, 9/16, 5/8, 3/4



Metric Long Arm Sets - Pouch

Item No.	No. Of Keys	Key Sizes (mm)
56018	9	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10
56083	15	0.9, 1.3, 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10, 12, 14, 17, 19

Torx® Long Arm Set - Pouch

Item No.	No. Of Keys	Key Sizes (Torx®)
56900	6	T-10, T-15, T-20, T-25, T-27, T-30

Long Arm Sets - Plastic Holder

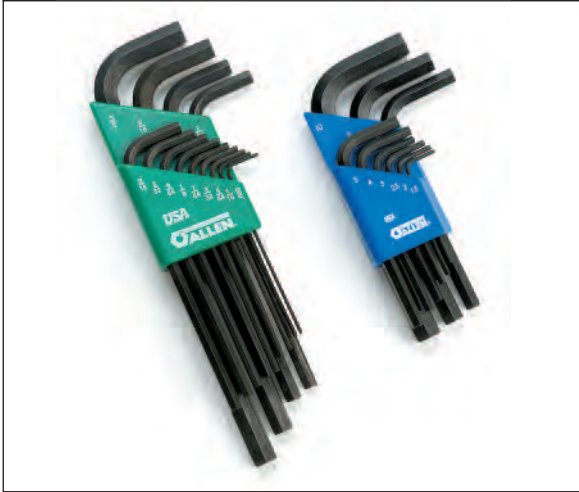
Item No.	No. Of Keys	Type	Key Sizes (Inch)
59845	7	carded	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16
56152	12	carded	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16
59846	13	carded	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8

Metric Long Arm Sets - Plastic Holder

Item No.	No. Of Keys	Type	Key Sizes (mm)
59860	9	carded	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10



Hex Keys



22 Pc. Long Arm SAE and Metric Combo Hex Key Set - 59800

Contains:

Item No.	No. Of Keys	Key Sizes
59846	13	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8
59830	9	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10

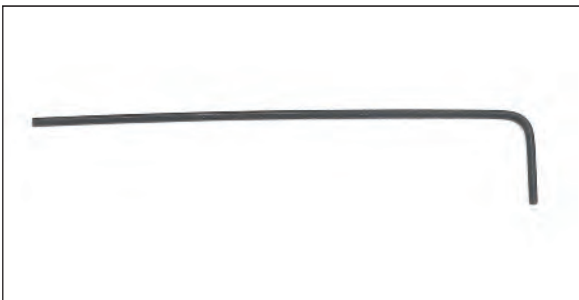


Long Arm Set - Metal Box

Item No.	No. Of Keys	Key Sizes (Inch)
56128	13	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8, 1/2

Metric Long Arm Set - Metal Box

Item No.	No. Of Keys	Key Sizes (mm)
56085	10	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10, 12



Individual Long Arm

Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)
58003	.050	58012	5/32	58024	1/2
58001	1/16	58014	3/16	58026	9/16
58002	5/64	58016	7/32	58028	5/8
58004	3/32	58018	1/4	58030	3/4
58005	7/64	58020	5/16	58032	7/8
58006	1/8	58022	3/8	58034	1
58010	9/64	58023	7/16		

Metric Individual Long Arm

Item No.	Key Sizes (mm)	Item No.	Key Sizes (mm)	Item No.	Key Sizes (mm)
58050	1.5	58058	4	58064	8
58052	2	58060	5	58066	10
58054	2.5	58062	6	58068	12
58056	3				

Hex Keys

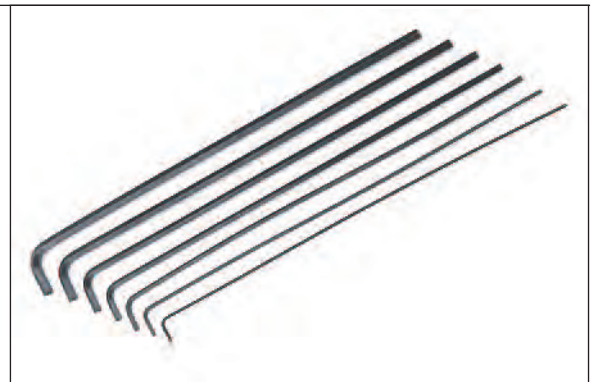
6" Hex Key Set

Item No.	No. Of Keys	Key Sizes (Inch)
56034	9	5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8



12" Hex Key Set

Item No.	No. Of Keys	Key Sizes (Inch)
56110	7	5/64, 3/32, 1/8, 5/32, 3/16, 7/32, 1/4



Torx® Individual Long Arm

Item No.	Key Sizes (Torx®)	Item No.	Key Sizes (Torx)
58926	T-10	58929	T-25
58927	T-15	58930	T-27
58928	T-20	58931	T-30



Individual 6" Hex Keys

Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)
58070	5/64	58078	3/16
58072	3/32	58080	7/32
58073	7/64	58082	1/4
58074	1/8	58020	5/16
58075	9/64	58086	3/8
58076	5/32		



Individual 12" Hex Keys

Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)
58200	5/64	58208	3/16
58202	3/32	58210	7/32
58204	1/8	58212	1/4
58206	5/32		

Hex Keys



BALL PLUS

Hex Key Sets

Item No.	No. Of Keys	Type	Key Sizes (Inch)
59900	7	caddy - carded	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16
56195	8	pouch	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32
56197	10	pouch	1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4
59901	13	caddy - carded	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8

BALL PLUS

Metric Hex Key Sets

Item No.	No. Of Keys	Type	Key Sizes (mm)
59915	9	caddy - carded	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10
56199	6	pouch	1.5, 2, 2.5, 3, 4, 5

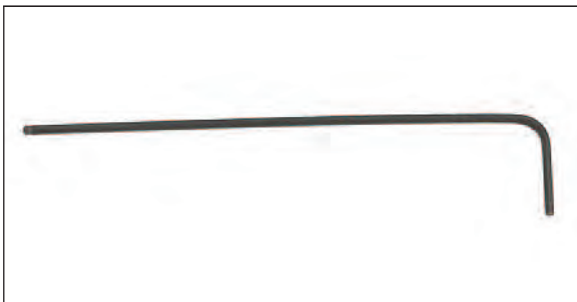


BALL PLUS

22 Pc. Fractional/Metric Combo Set - 59801

Contains:

Item No.	No. Of Keys	Key Sizes
59901	13	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8
59915	9	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10



BALL PLUS

Individual Hex Keys

Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)
59300	.050	59318	7/32
59302	1/16	59320	1/4
59304	5/64	59322	5/16
59306	3/32	59324	3/8
59308	7/64	59326	7/16
59310	1/8	59328	1/2
59312	9/64	59330	9/16
59314	5/32	59332	5/8
59316	3/16	59334	3/4

BALL PLUS

Metric Individual Hex Keys

Item No.	Key Sizes (mm)	Item No.	Key Sizes (mm)
59100	1.5	59112	6
59101	1.27	59113	7
59102	2	59114	8
59104	2.5	59115	9
59106	3	59116	10
59107	3.5	59117	11
59108	4	59118	12
59109	4.5	59120	14
59110	5	59122	17
59111	5.5	59124	19

Hex Keys

BALLPLUS

Cushion Grip T-Handle Sets

Item No.	No. Of Keys	Type	Key Sizes (Inch)	Key Sizes (mm)
56131	6	pouch	5/32, 3/16, 7/32, 1/4, 5/16, 3/8,	
56130	10	pouch	3/32*, 7/64*, 1/8, 9/94, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	
56134	11	pouch	5/32, 3/16, 7/32, 1/4, 5/16, 3/8	4, 5, 6, 8, 10

*Hex End Only



BALLPLUS

Metric Cushion Grip T-Handle Sets

Item No.	No. Of Keys	Type	Key Sizes (mm)
56133	5	pouch	4, 5, 6, 8, 10
56132	7	pouch	2.5*, 3, 4, 5, 6, 8, 10

*Hex End Only

BALLPLUS

Individual Cushion Grip T-Handles

Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)
57602*	3/32	57612	3/16
57604*	7/64	57614	7/32
57606	1/8	57616	1/4
57608	9/64	57618	5/16
57610	5/32	57620	3/8

*Hex End Only

BALLPLUS

Metric Individual Cushion Grip T-Handles

Item No.	Key Sizes (mm)	Item No.	Key Sizes (mm)
57632*	2.5	57640	6
57634	3	57642	8
57636	4	57644	10
57638	5		

*Hex End Only



Hex Keys



BALL PLUS

Screwdriver Handle Sets

Item No.	No. Of Keys	Type	Key Sizes (Inch)
56180	8	pouch	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32
56181	8	roll	7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16
56182	13	pouch	.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32,
56183	7	pouch	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16

BALL PLUS

Metric Screwdriver Handle Sets

Item No.	No. Of Keys	Type	Key Sizes (mm)
56185	6	pouch	1.5, 2, 2.5, 3, 4, 5
56186	7	pouch	1.27, 1.5, 2, 2.5, 3, 4, 5
56187	9	pouch	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10



BALL PLUS

Screwdriver Handles

Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)
57650	.050	57658	3/16
57651	1/16	57659	7/32
57652	5/64	57660	1/4
57653	3/32	57661	5/16
57654	7/64	57662	3/8
57655	1/8	57663	7/16
57656	9/64	57664	1/2
57657	5/32		

BALL PLUS

Metric Screwdriver Handles

Item No.	Key Sizes (mm)	Item No.	Key Sizes (mm)
57670	1.27	57678	5
57671	1.5	57679	5.5
57672	2	57680	6
57673	2.5	57681	7
57674	3	57682	8
57675	3.5	57683	9
57676	4	57684	10
57677	4.5		

Hex Keys

BALL PLUS

Long Length Screwdriver Handle Set

Item No.	No. Of Keys	Type	Key Sizes (Inch)
56184	11	pouch	5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8

BALL PLUS

Metric Long Length Screwdriver Handle Set

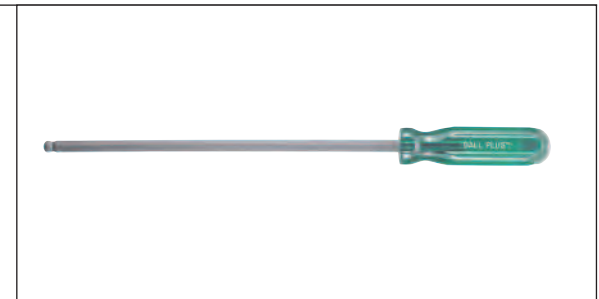
Item No.	No. Of Keys	Type	Key Sizes (mm)
56188	8	pouch	2, 2.5, 3, 4, 5, 6, 8, 10



BALL PLUS

Long Length Screwdriver Handles

Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)
57750	5/64	57754	9/64	57758	1/4
57751	3/32	57755	5/32	57759	5/16
57752	7/64	57756	3/16	57760	3/8
57753	1/8	57757	7/32		



BALL PLUS

Metric Long Length Screwdriver Handles

Item No.	Key Sizes (mm)	Item No.	Key Sizes (mm)	Item No.	Key Sizes (mm)
57770	2	57773	4	57776	8
57771	2.5	57774	5	57777	10
57772	3	57775	6		

Individual Cushion-Grips

Item No.	Key Sizes (Inch)	Key Length (Inch)	Item No.	Key Sizes (Inch)	Key Length (Inch)
57300	3/32	6	58250	3/32	9
57302	7/64	6	58252	7/64	9
57304	1/8	6	58254	1/8	9
57306	9/64	6	58256	9/64	9
57308	5/32	6	58258	5/32	9
57310	3/16	6	58260	3/16	9
57312	7/32	6	58262	7/32	9
57314	1/4	6	58264	1/4	9
57316	5/16	6	58266	5/16	9
57318	3/8	6	58268	3/8	9

Metric Individual Cushion-Grips

Item No.	Key Sizes (mm)	Key Length (mm)	Item No.	Key Sizes (mm)	Key Length (mm)
57841	2	150	57848	5	150
57842	2.5	150	57850	6	150
57844	3	150	57852	8	150
57846	4	150	57854	10	150



Hex Keys



Cushion-Grip Sets - Pouch

Item No.	No. Of Keys	Key Sizes (Inch)	Key Length (Inch)
59959	8	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	6
56164	8	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4	9

Metric Cushion-Grip Set - Pouch

Item No.	No. Of Keys	Key Sizes (mm)	Key Length (Inch)
59974	5	2.5, 3, 4, 5, 6	6



Cushion-Grip Sets - Metal Stand

Item No.	No. Of Keys	Key Sizes (Inch)	Key Length (Inch)
59960	10	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	6
56163	10	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	9

Metric Cushion-Grip Set - Metal Stand

Item No.	No. Of Keys	Key Sizes (mm)	Key Length (Inch)
59975	8	2, 2.5, 3, 4, 5, 6, 8, 10	6



Individual 6" Loop Handle

Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)
57320	3/32	57325	3/16
57321	7/64	57326	7/32
57322	1/8	57327	1/4
57323	9/64	57328	5/16
57324	5/32	57329	3/8

Metric Individual 6" Loop Handle

Item No.	Key Sizes (mm)	Item No.	Key Sizes (mm)
57860	2	57864	5
57861	2.5	57865	6
57862	3	57866	8
57863	4	57867	10

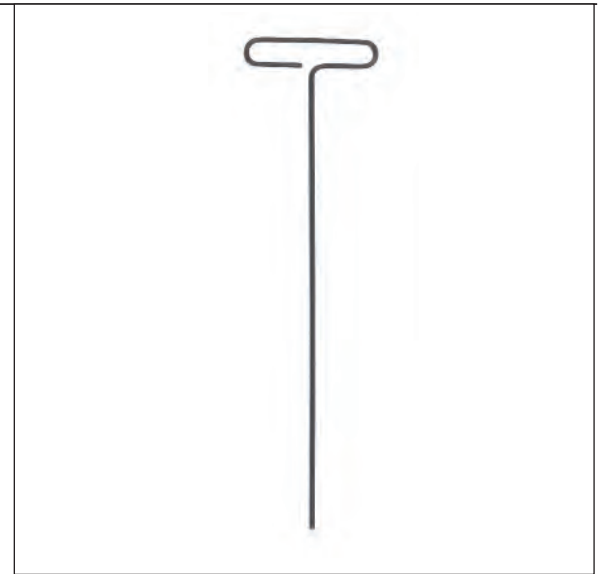
Hex Keys

Individual 9" Loop Handle

Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)
58270	3/32	58275	3/16
58271	7/64	58276	7/32
58272	1/8	58277	1/4
58273	9/64	58278	5/16
58274	5/32	58279	3/8

Metric Individual 9" Loop Handle

Item No.	Key Sizes (mm)	Item No.	Key Sizes (mm)
58280	2	58284	5
58281	2.5	58285	6
58282	3	58286	8
58283	4	58287	10

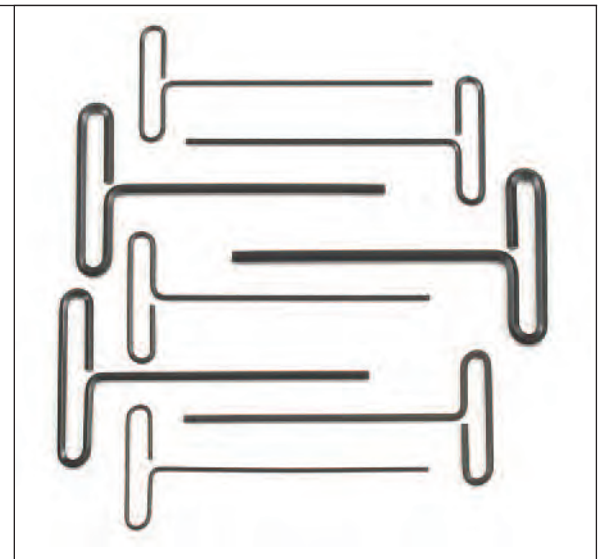


6" Loop Handle Sets - Pouch

Item No.	No. Of Keys	Key Sizes (Inch)
56257	8	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4
56255	10	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8

Metric 6" Loop Handle Sets - Pouch

Item No.	No. Of Keys	Key Sizes (mm)	Key Length (mm)
56261	5	2.5, 3, 4, 5, 6	152
56259	8	2, 2.5, 3, 4, 5, 6, 8, 10	152

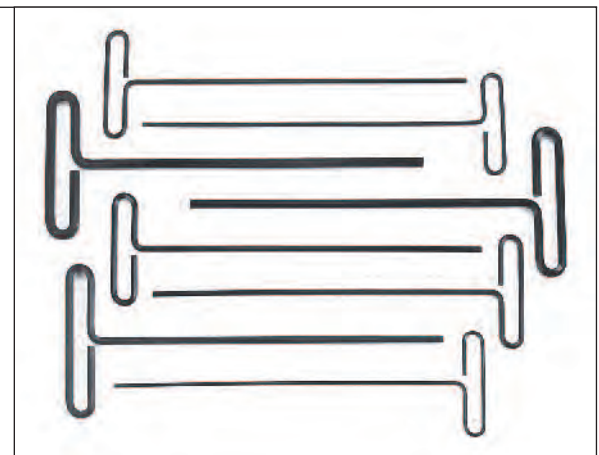


9" Loop Handle Sets - Pouch

Item No.	No. Of Keys	Key Sizes (Inch)
56258	8	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4
56256	10	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8

Metric 9" Loop Handle Sets - Pouch

Item No.	No. Of Keys	Key Sizes (mm)	Key Length (mm)
56262	5	2.5, 3, 4, 5, 6	229
56260	8	2, 2.5, 3, 4, 5, 6, 8, 10	229



Hex Keys



Individual Plas-T-Key®

Item No.	Key Sizes (Inch)	Key Length (Inch)	Item No.	Key Sizes (Inch)	Key Length (Inch)
57500	3/32	1 7/8	58404	1/8	4 1/2
57502	7/64	2 1/8	58406	9/64	4 1/2
57504	1/8	2 5/16	58408	5/32	4 1/2
57506	9/64	2 1/2	58410	3/16	4 1/2
57508	5/32	2 11/16	58412	7/32	4 1/2
57510	3/16	3 3/32	58414	1/4	4 1/2
58400	3/32	4 1/2	58416	5/16	4 1/2
58402	7/64	4 1/2	58418	3/8	4 1/2

Metric Individual Plas-T-Key®

Item No.	Key Sizes (mm)	Item No.	Key Sizes (mm)
57830	2	57836	4
57832	2.5	57838	5
57834	3	57840	6



Plas-T-Key® Set - Metal Stand

Item No.	No. Of Keys	Key Sizes (Inch)	Key Length (Inch)
56112	10	3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8	6



Individual Handi-Hex™ Drivers

Handi-Hex Drivers are designed for general use and production assembly operations using socket screw products. Versatile drivers feature adjustable, replaceable Allen Bits. Each handle identified by bit size. Includes key for bit change or adjustment.

Item No.	Key Sizes (Inch)	Item No.	Key Sizes (Inch)
57400	.028	57410	3/32
57402	.035	57412	7/64
57404	.050	57414	1/8
57406	1/16	57416	9/64
57408	5/64		

Hex Keys

Replacement Straight Bits

Item No.	Key Sizes (Inch)	Key Length (Inch)	Item No.	Key Sizes (Inch)	Key Length (Inch)
57900	.028	2	57926	1/8	3
57902	.035	2	57201	1/8	5
57904	.050	3	57932	9/64	3
57906	1/16	3	57203	9/64	5
57908	1/16	6	57205	5/32	5
57910	5/64	3	57942	5/32	6
57912	5/64	6	57207	3/16	6
57914	3/32	3	57209	7/32	6
57197	3/32	5	57211	1/4	6
57918	3/32	6	57213	5/16	7
57920	7/64	3	57215	3/8	7
57199	7/64	5			



ALLEN® System 4 Open Stock Hex Key and BALL-PLUS Storage System - 19999

The Allen Key Storage System includes four drawers and allows easy access to open stock replacement keys. Each compartment is identified and comes stocked with a standard pack quantity of each key.

System 4 Features:

- Easy Reference
- Bar Coded
- Includes most popular sizes
- Additional sizes available. See complete open stock listing on price sheet.



Drawer #1

19984 Open stock storage #1
SAE Short and Long Arm Hex Keys

Size	Short	Pk	Long	Pk
0.50	57002	10	58003	5
1/16	57008	10	58001	10
5/64	57010	10	58002	10
3/32	57012	10	58004	10
7/64	57013	10	58005	10
1/8	57014	10	58006	10
9/64	57018	10	58010	10
5/32	57020	10	58012	10
3/16	57022	5	58030	5
7/32	57024	5	58032	5
1/4	57026	5	58034	5

Drawer #2

19985 Open stock storage #2
Metric Short and Long Arm Hex Keys

Size	Short	Pk	Long	Pk
1.5	57116	10	58050	10
2.0	57118	10	58052	10
2.5	57120	10	58054	10
3	57122	10	58056	10
4	57124	10	58058	10
5	57126	10	58060	10
6	57128	10	58062	10
8	57130	5	58064	5
10	57132	3	58066	3

Drawer #3

19986 Open stock storage #3
SAE long arm Ball-Plus Hex Keys

Size	Long	Pk
0.50	59300	5
1/16	59302	10
5/64	59304	10
3/32	59306	10
7/64	59308	10
1/8	59310	10
9/64	59312	10
5/32	59314	10
3/16	59316	10
7/32	59318	10
1/4	59320	10

Drawer #4

19987 Open stock storage #4
Metric Long Arm Ball-Plus Hex Keys

Size	Long	Pk
1.5	59100	10
2.0	59102	10
2.5	59104	10
3	59106	10
4	59108	10
5	59110	10
6	59112	10
8	59114	5
10	59116	5

Drawer #5

19988 Open stock storage #5
SAE Short and Long Arm Hex Keys, and Long Arm Ball-Plus Keys

Size	Short	Pk	Long	Pk
5/16	57028	5	58020	5
3/8	57030	5	58022	5
Ball-Plus				
5/16			59322	5
3/8			59324	5

OPTIONAL - Not Included in System 4 Assortment

Hex Keys

Jacobs
CHUCK

Jacobs® Drill Chucks & Accessories



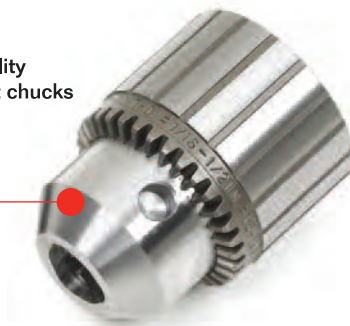
HAND-TITE® KEYLESS CHUCK

Easy to install kits to upgrade your drill from keyed to keyless



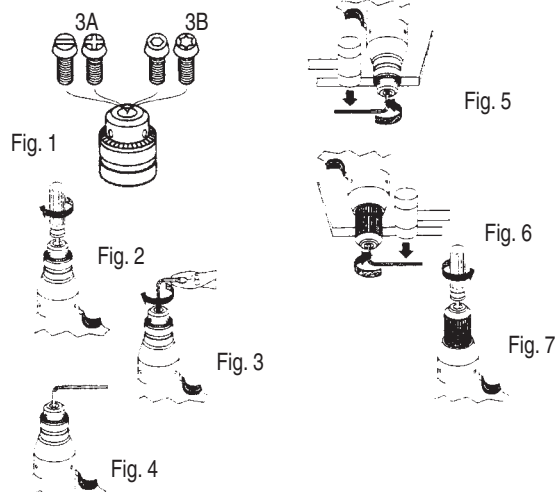
JACOBS® PROFESSIONAL CHUCKS

Highest quality replacement chucks



Drill Chuck Replacement Instructions

1. Unplug drill or remove battery pack.
2. Open chuck jaws completely and determine type of retaining screw fastened to the drill spindle (**Fig. 1**) (may be Hex, Torx®, Straight Slotted or Phillips). If screw is Hex or Torx®, Go to STEP 3B. If there is no retaining screw, go to step 4.
- 3A. If slotted or Phillips, use appropriate screwdriver and holding drill vertically (**Fig. 2**), remove retaining screw by turning clockwise (it is reverse threaded).
Save the retaining screw.
- 3B. If the retaining screw is Hex or Torx® headed, use the enclosed Allen® 1/8" Hex or T15 Torx® wrench by placing the long end into the chuck and engage the head of the screw. Take pliers or vise grip and holding drill vertically grasp the end of the wrench and turn clockwise (**Fig. 3**) to remove the retaining screw (it is reverse threaded). Save the retaining screw.
4. To remove chuck from spindle, tighten the short end of 1/4" Allen wrench into the chuck (**Fig. 4**).
5. Place drill on a table with the chuck facing you and strike the end of the Hex wrench sharply 2 to 3 times counterclockwise (**Fig. 5**) with a soft-ended hammer or mallet.
6. Continue to loosen and remove the old chuck from the spindle by hand. Remove the 1/4" Allen from the old chuck.
7. Thread new chuck clockwise onto the spindle. Tighten short end of 1/4" Allen wrench in new chuck. Strike sharply 2 to 3 times with hammer clockwise to tighten chuck onto spindle (**Fig. 6**).
8. Remove Allen wrench from chuck. Open chuck completely and replace retaining screw by tightening counterclockwise with either screwdriver, 1/8" Hex or T15 Torx® wrench (**Fig. 7**).



Jacobs® Hand-Tite® Keyless Chucks

The Jacobs® technically advanced keyless chucks are the most exciting innovations in drill chucks ever. They significantly reduce bit changeover time and boost productivity. Based on an exclusive patented design, the Jacobs® keyless chuck achieves higher gripping torque than standard keyed chucks, and there is never a key to misplace. They feature a nonrusting, high-performance body with a unique sure-grip sleeve for maximum user comfort and hand tightening efficiency.



Item No.	Description
30354	3/8" Hand-Tite® Keyless Chuck (3/8-24)
31038	1/2" Professional-Duty Hand-Tite® Keyless Chuck (1/2-20)
31037	1/2" Professional-Duty Hand-Tite® Keyless Chuck (3/8-24)
31237	1/2" Hammer Drill Chuck, Keyless (1/2-20)

Jacobs® Multi-Craft Chucks

The most popular chuck sold in the world, features a time-tested design normally found only in industrial-grade chucks. Available in 1/4, 3/8 and 1/2" sizes to satisfy a broad range of demand.



Item No.	Description	Key No.	Key Style
30243	1/4" Multi-Craft® Chuck (3/8-24) and Key	30249	KG1
30247	3/8" Multi-Craft® Chuck (3/8-24) and Key	30249	KG1
30598	1/2" Multi-Craft® Chuck (3/8-24) and Key	30250	KK
30602	1/2" Multi-Craft® Chuck (1/2-20) and Key	30250	KK

Jacobs® Industrial Chucks

Heavy and medium duty models for threaded or taper mounting. Jaws center-ground for absolute straightness and alignment. One-piece sleeve eliminates crack between driving teeth often found in other designs. Through-hardened sleeve teeth, plus hardened nose and keyholes provide outstanding wear resistance.



Item No.	Description	Key No.	Key Style
6279	1/2" Drive Medium Duty 33J Taper Mount Ind. Chuck and Key	30251	K32
14445	1/2" Drive Heavy Duty 33J Taper Mount Ind. Chuck and Key	31136	K3
6287	1/2" Drive Thread Mount Ind. Chuck (1/2-20) and Key	30251	K32
30728	3/8" Drive Thread Mount Ind. Chuck (3/8-24) and Key	30825	K30

Jacobs® Professional Chucks

Chucks provide professional quality and accuracy for the tradesman or serious home craftsman. These tough 3/8 and 1/2" chucks are standard equipment on many of the worlds finest commercial grade drills.



Item No.	Description	Key No.	Key Style
30246	3/8" Professional Duty Chuck (3/8-24) and Key	30250	KK
31052	1/2" Professional Duty Chuck (1/2-20) and Key	30250	KK

Jacobs® Drill Chucks & Accessories



Jacobs® Adapt-A-Drive® Chuck

This chuck converts any cordless screwdriver into a multipurpose mini-drill in a snap. Adapt-A-Drive® is great for light drilling operations, starter holes and hard-to-reach spaces.

Item No.	Description	Key No.	Key Style
30248	1/4" Adapt-A-Drive® Chuck and Key	30249	KG1



Jacobs® Keys and Accessories

Build profitable replacement and impulse sales with the Jacobs® assortment of quality keys and holders. The Jacobs® line covers all the most popular sizes of keys and holders that fit 1/4, 3/8 or 1/2" capacity chucks and keys.

Item No.	Description	Key Style
30826	1/4" Key, 5/32" Pilot	K1
30249	1/4 and 3/8" Key, 1/4" Pilot	KG1
030605	1/4 and 3/8" L Chuck Key, 1/4" Pilot	KGA
30827	1/4 and 3/8" Key, 13/64" Pilot	
30825	3/8" Key, 15/64" Pilot	K30
3659	3/8" Key, 7/32" Pilot	K7
30251	1/2" Key, 1/4" Pilot	K32
30250	1/2" Key, 9/32" Pilot	KK
30253	Chuck Key Holder	
30252	1/4 and 3/8" Key Holder	
30259	3/8 and 1/2" Key Holder	



Automotive Service Kits



Automotive Service Kits



15 Pc. Serpentine Belt Tool Kit - 3680

This innovative tool combines the patented innovation of GearWrench® with the requirements of the Serpentine Belt removal tool to provide the Professional and Do-it-yourself user with the best possible combination.

Item No.	Description
3680-71	Long Bar
3680-72	GearWrench® Special Ratcheting Wrench
3680-73	3/8" Adapter
3680-74	1/2" Adapter
3680-75	3/4" Adapter
3680-85	6 pt 13mm Socket
3680-76	6 pt 14mm Socket
3680-77	6 pt 15mm Socket
3680-78	6 pt 16mm Socket
3680-79	6 pt 17mm Socket
3680-80	6 pt 18mm Socket
3680-84	6 pt 19mm Socket
3680-81	13mm Crows Foot
3680-82	14mm Crows Foot
3680-83	15mm Crows Foot



12 Pc. Fuel & Transmission Line Disconnect Tool Kit - 41500

Disconnect tools that separate fittings on fuel, filter, transmission, air conditioning systems and fuel tank return lines on most vehicles, trucks and other heavy equipment.

Item No.	Description
3321	GM & Ford Disconnect Tool
3408	Ford Fuel Line Coupling Tool
3413	Ford Hydraulic Clutch Line Disconnect Tool
3890	Chrysler Quick Disconnect Coupler Tool
3891	Ford EFI Fuel Line with Hair Pin Connector Tool
3892	GM Hydraulic Clutch Line Disconnect Tool
3893	GM Transmission Oil Cooler Line Disconnect Tool
3894	Ford Oil Cooler Line Disconnect Tool
3895	Fuel Line Disconnect - 1/4" (Black)
3896	Fuel Line Disconnect - 5/16" (Red)
3897	Fuel Line Disconnect - 3/8" (Gold)
3898	Oil Cooler Line Disconnect (Blue)
41513	Replacement Bands



Power Steering Pump Pulley Kit - 41560

This kit removes and installs power steering pump pulleys off most domestic vehicles.

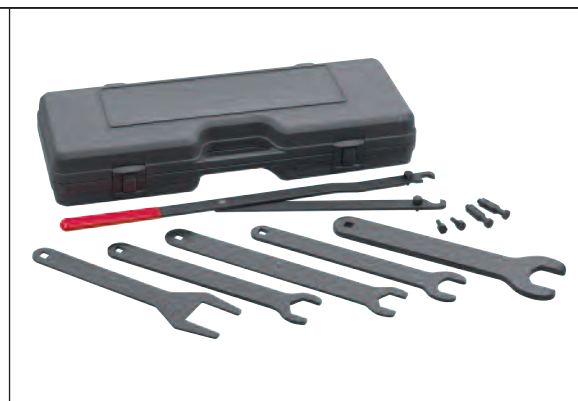
Item No.	Description
3893	Disconnect Tool
41561	Bushing and Screw Set
41562	Bushing and Screw Set

Fan Clutch Service Kit - 41580

This versatile kit covers most vehicles with bolt on pulleys and also newer Chrysler engines with press on pulleys requiring special pins to hold housing. Features the patented universal pulley holder.

Item No.	Description
3900	Universal Pulley Holder
3901	Pin Set Small (5 x 8mm)
3902	Pin Set Large (Cam Pins, 6 x 10mm, 7.5 x 18mm)
3903	22mm Fan Nut Wrench
3136-76	36mm Fan Nut Wrench
3422	40mm Fan Nut Wrench
3473	47mm Fan Nut Wrench
3904	50mm Fan Nut Wrench

PATENTED



8 Pc. Master Sensor Socket Kit - 41720

Designed for the removal and installation of oxygen sensors, oil pressure sending units, and vacuum switches.

Item No.	Description
3919	1-3/16" (29mm) 1/2" Dr. Oil Sensor Socket
3920	7/8" (22mm) Slotted 3/8" Dr. PVS, TVS & O2 Skt
3921	1-1/16" (27mm) 1/2" Dr. GM Thermal Sensor Switch Skt
3922	7/8" (22mm) Oxygen Sensor Socket
3923	1-1/16" Oil Pressure Sending Unit Skt. 3/8" Dr.
3924	7/8" (22mm) Oxygen Sensor Socket
3925	7/8" (22mm) Low Profile Offset Oxygen Sensor Skt
3926	1-1/16" Short access socket 3/8" Dr.



3 Pc. Magnetic Spark Plug Kit - 41730

This kit contains long reach "magnetic" swivel spark plug sockets. Covers sizes 5/8", 13/16", and the new 9/16" on Ford Triton Engines.

Item No.	Description
3928	6 inch 5/8" Swivel Magnetic Spark Plug Socket
3930	6 inch 13/16" Swivel Magnetic Spark Plug Socket
3931	2.5 inch 9/16" Magnetic Spark Plug Socket



3 Pc. Magnetic Swivel Spark Plug Kit - 41740

Long reach 5/8" "magnetic" swivel spark plug socket set. Lengths of 4", 6", and 11".

Item No.	Description
3927	4 inch 5/8" Magnetic Swivel Spark Plug Socket
3928	6 inch 5/8" Magnetic Swivel Spark Plug Socket
3929	11 inch 5/8" Magnetic Swivel Spark Plug Socket



Automotive Service Kits



Harmonic Balancer Puller Kit - 41750

Removes and installs the harmonic balancer on most popular Chrysler, Hyundai and Mazda without removing the radiator.

Item No.	Description
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41751	Puller Body
41752	Pin Set
41753	Holding Ring



3 Pc. Oil Pump Primer Kit - 41770

Oil Pump Primers protect freshly rebuilt or modified engines from premature wear caused by a dry start.

Item No.	Description
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3446	GM Oil Pump Primer
3447	Ford Oil Pump Primer 1/4" Hex Dr.
3448	Ford Oil Pump Primer 5/16" Hex Dr.



SAE & Metric Clutch Alignment Kit - 41810

Aligns single disc clutches on domestic and imported cars, light trucks, and tractors.

Item No.	Description
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41811	2 Pc. Driver Bars: SAE & Metric
41812	3 Pc. Cone Set: SAE & 2 Metric
41813	7 Pc. Bushing Set: SAE
41814	5 Pc. Bushing Set: Metric



6 Piece Oil Canister Socket Set Service Kit (3/8" Drive) - 41890

Item No.	Description
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3932	32mm Oil Filter Cap Wrench
3933	27mm Oil Filter Cap Wrench
3934	36mm Oil Filter Cap Wrench
3935	24mm Oil Filter Cap Wrench
3936	29mm Oil Filter Cap Wrench
3939	38mm Oil Filter Cap Wrench

Automotive Service Kits



7 Pc. Axle Nut Kit - 41650

These 7 extra long 1/2" drive 6 point metric sockets are ideal for heavy-duty use in removing and installing axle nuts. Use with a ratchet, breaker bar, impact wrench, or torque wrench.

Item No.	Description
3161	30mm Axle Nut Socket
3162	36mm Axle Nut Socket
3270	32mm Axle Nut Socket
3449	34mm Axle Nut Socket
3907	29mm Axle Nut Socket
3908	35mm Axle Nut Socket
3909	38mm Axle Nut Socket



6 Pc. Spindle Nut Kit - 41660

These 6 chrome vanadium steel 1/2" drive sockets are for most 4WD SUV and light truck axle locknut applications. Use with a torque wrench, ratchet, or breaker bar.

Item No.	Description
2467	4-Lug 4WD Spindle Nut Skt 1/2 to 3/4 - Ton Dana 44
2770	6-Lug 4WD Spindle Nut Skt 3/4 to 1-Ton Dana 44
3195	4-Lug with Extension 1/2-Ton Dana 80
3910	4WD Spindle Puller
3911	Toyota Lock Nut Tool
3937	4-Lug 4WD Spindle Nut Skt 1/2 -Ton Dana 50



7 Pc. Locknut Kit - 41670

Perfect for late model Ford, Dodge, and Toyota trucks. This versatile kit contains seven of the most popular wheel bearing locknut sockets.

Item No.	Description
2432	2-3/8" Hex Locknut Socket
2434	2-3/8" Rounded Hex Locknut Socket
2435	2-1/2" Hex Locknut Socket
2436	2-9/16" Rounded Hex Locknut Socket
3455	2-1/2" Rounded Hex Locknut Socket
3456	2-3/4" Rounded Hex Locknut Socket
3912	55mm Hex Locknut Socket



Steering Wheel Puller Kit - 41620

This kit has what it takes to remove a steering wheel from most domestic and import cars with or without telescoping tilt columns. Use the puller legs with the steering wheel puller to remove steering wheels on late model GM vehicles. Steering wheel lock-plate depressor also included.

Item No.	Description
2291	Puller Yoke and Screw Extension Bushing
3509	Lock Plate Removal Tool
3510	2 Pc. Puller Leg Package
3906	Pivot Pin
41623	Lock Plate Depressor Frame
41624	Lock Plate Remover Collars & Nut Washer
41625	Screw Package

Automotive Service Kits



Front End Service Kit - 41690

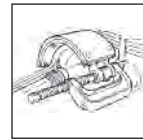
This versatile set allows for easy removal of the most popular types of Pitman arms, tie rods, and ball joints.

Item No.	Description
2289	Pitman Arm Puller 22 x 140mm
3533	Tie Rod Puller
3916	Universal Ball Joint Separator
3917	Tie Rod End Puller and Pitman Arm Puller
3918	Universal Tie Rod End Remover



Ball Joint / U-Joint / Brake Anchor Pin Press Kit - 3421

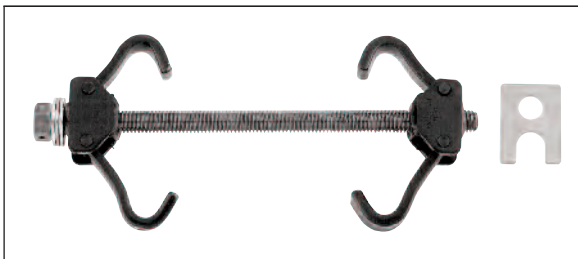
Set is used for the removal and installation of press-fit parts such as ball joints, U-joints and truck brake anchor pins without resorting to makeshift methods.



Set contains 1 C-frame press, 3 receiver tubes (2-3/4" ID x 3" OD, 2-1/4" ID x 2-1/2" OD, 1-3/4" ID x 2" OD)

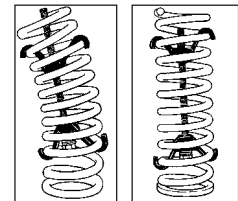
and installation and removal adapters. This tool will even remove rusted and corroded parts. Kit comes in blow mold case.

Item No.	Description
3421-71	C-Frame Press Yoke
3421-72	Forcing Screw
3421-73	3 Pc. Receiver Tube Set: Contains (1-3/4" ID x 2" OD, 2-1/4" ID x 2-1/2" OD & 2-3/4" ID x 3" OD)
3421-74	2 Pc. Removal Adapter & Installation Adapter Set



Coil Spring Compressor - 3450

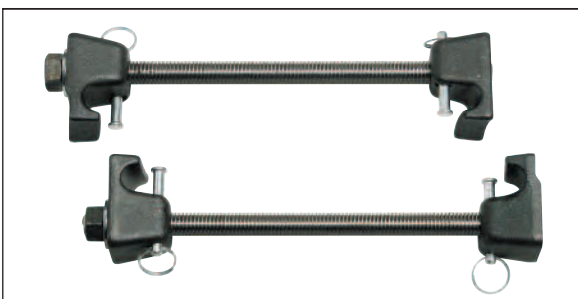
Use tool to remove and install automotive coil springs up to 5-5/8" outside diameter. Designed to grasp a spring with a maximum 3/4" wire diameter. Can be used on straight or curved springs. Forged alloy steel arms hug contour of helix.



Replacement part available:

- Replacement part: 3450-71 Clip

▲ Caution: Read all instructions carefully before using this tool. For intended use only. Do not use with power tools.



Macpherson Strut Spring Compressor - 3387

Use this tough tool for quick and easy replacement of struts, springs and shock absorbers. Lets you compress springs both on or off the vehicle with hand or power tools. Maximum capacity: 6" OD. Wire diameter: 5/8".

▲ Caution: Follow instructions provided with this tool.

Suspension Service Kit- 62326

For removal of tie rods and ball joints on most U.S. and Import vehicles.

Item No.	Description
2287	Ball Joint Separator
2288	Tie Rod Separator
2289-71	Pitman Arm Puller Yoke
2289-72	Pitman Arm Puller Center Screw
3312	Deluxe Inner Tie Rod Tool



Pneumatic Tie Rod / Ball Joint Separator Kit - 41610

Works with hand and pneumatic air systems to remove Tie rods, ball joint and pitman arm assemblies.



Brake Service Kit - 41520

Kit works on both disc and drum brake systems. Use to adjust clearance between drum brakes and shoe, remove and install shoe return springs and brake pads.

Item No.	Description
287	Drum Brake Adjusting Tool
298	Brake Spring Pliers
2774	Universal Brake Shoe Retaining Spring Tool
3163	Disc Brake Piston Tool
3355	GM-Ford Disc Brake Piston Tool
3525	Disc Brake Pad Spreader
3962	Brake Lining Thickness Gauge
58707	7mm Hex Socket
58708	8mm Hex Socket
58710	10mm Hex Socket
58832	1/4" Hex Socket
58835	3/8" Hex Socket
58911	T-40 Torx® Socket
58913	T-45 Torx® Socket
58914	T-50 Torx® Socket



Automotive Service Kits



Rear Brake Caliper Kit - 41540

Set designed for vehicles with brake pistons that are mechanically tied to the parking brake and require a turning action to push back. Set covers most domestic and import vehicles.

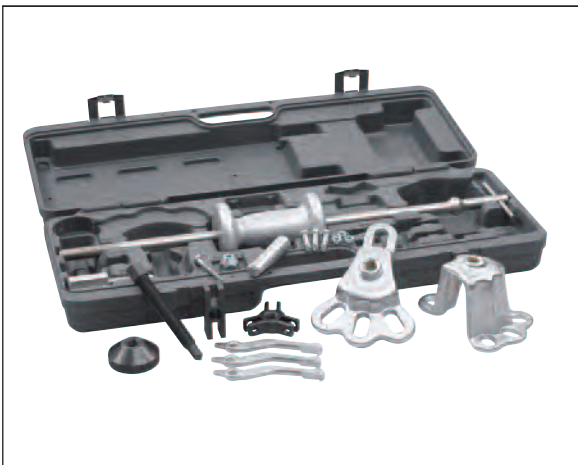
Item No.	Description
41541	Applicator & Pad
41542	Adapter 0: 2-1/2", 1 Pin
41543	Adapter 2: 2", 3 Pin
41544	Adapter 3: 2-1/4", 3 Step
41545	Adapter 4: 1-1/4", 2 Pin
41546	Adapter 5: 1-3/8", 2 Pin 3/8" Dr.
41547	Adapter 6: 1-5/8", 2 Pin (L)
41548	Adapter 7: 1-5/8", 2 Pin (S)
41549	Adapter 8: 1- 7/8", 1 Pin
41550	Adapter P: 2-1/4", 1 Pin



Master Bolt Grip Kit - 41600

Master Bolt Grip Kit works on harmonic balancers, steering wheels, crankshaft pulleys, and gears. Capable of handling almost every two or three-way bolt pull possible on most cars, pickups, SUV's, and small engines.

Item No.	Description
41601	Two or three way Yoke
41602	4 Pc. Tip Set
41603	Metric Bolt Set
41604	SAE Bolt Set
41605	Center Screw for Puller (2)



Slide Hammer Puller Kit - 41700

This kit provides a wide range of puller applications such as: Flange-type axles, oil seals & other press fit parts. Jaws can be set up for 2 or 3 jaw internal or external pulling jobs.

Item No.	Description
2300-71	Shallow Flange
2300-75	Deep Flange
3591	Slide Hammer
41704	2 Way Yoke
41705	3 Way Yoke
41706	Center Bolt and Cone
41707	3 Pc. Adapter Set
41708	Leg Package with Screws

Rear Axle Bearing Puller Kit - 41710

Three pullers designed to make the removal of semi-floating rear axle bearings easier on most domestic cars.

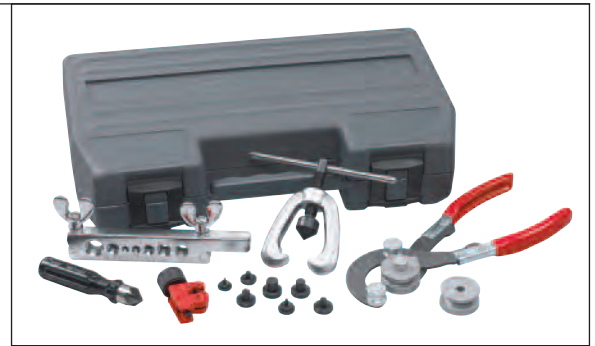
Item No.	Description
41711	1" x 1-7/8" Puller
41712	1-5/16" x 2-3/8" Puller
41713	1-3/8" x 2-7/8" Puller



Master Tubing Service Kit - 41590

For tubing service. No other kit does all this: Double Flare, Bend, Cut, Ream, and Deburr.

Item No.	Description
2107	Mini Tubing Cutter
2189	Tubing Bender
3905	Deburring Tool
41594	Flaring Adapter Kit
41595	Holding Bar
41596	Yoke



Double Flaring Tool Kit - 41860

Precisely flares tubing up to 0.040 wall thickness to SAE 45° flares. Hardened bar assembly clamps 7 tubing sizes: 3/16", 1/4", 5/16", 3/8", 7/16", 5/8", and 1/2".

Do not use on stainless steel tubing.

Set Contains:

SAE Bar Assembly, Yoke Assembly, Reamer, 3/16" Flaring Tool Adapter, 1/4" Flaring Tool Adapter, 5/16" Flaring Tool Adapter, 3/8" Flaring Tool Adapter, 7/16" Flaring Tool Adapter, 1/2" Flaring Tool Adapter, and 5/8" Flaring Tool Adapter.

Item No.	Description
41594	7 Pc. Flaring Adapter Set
41597	Universal Yoke
3905	Deburring Tool
41595	Holding Bar



Automotive Service Kits



Bubble Flaring Tool Kit - 41870

Precisely flares tubing up to 0.040 wall thickness to Metric 45° flares. Hardened bar assembly clamps 4 tubing sizes: 4.7, 6, 8, & 10mm.

Do not use on stainless steel tubing.

Set Contains:

Metric Bar Assembly, Yoke Assembly, Reamer, 4.7mm Flaring Tool Adapter, 6mm Flaring Tool Adapter, 8mm Flaring Tool Adapter, and 10mm Flaring Tool Adapter.

Item No.	Description
41599	4 Pc. Bubble Flaring Adapter Kit
41597	Universal Yoke
3905	Deburring Tool
41598	Bubble Flaring Tool Holding Bar



Double / Bubble Flaring Tool Kit - 41880

Precisely flares tubing up to 0.040 wall thickness to SAE/Metric 45° flares. Hardened bar assembly clamps 11 tubing sizes: 3/16", 1/4", 5/16", 3/8", 7/16", 5/8", 1/2", 4.7, 6, 8, and 10mm.

Do not use on stainless steel tubing.

Set Contains:

SAE Bar Assembly, Metric Bar Assembly, Yoke Assembly, Reamer, Cutter, 3/16" Flaring Tool Adapter, 1/4" Flaring Tool Adapter, 5/16" Flaring Tool Adapter, 3/8" Flaring Tool Adapter, 7/16" Flaring Tool Adapter,

1/2" Flaring Tool Adapter, 5/8" Flaring Tool Adapter, 4.7 mm Flaring Tool Adapter, 6mm Flaring Tool Adapter, 8mm Flaring Tool Adapter, and 10mm Flaring Tool Adapter.

Item No.	Description
41594	7 Pc. Flaring Adapter Set
41599	4 Pc. Bubble Flaring Adapter Kit
41597	Universal Yoke
3905	Deburring Tool
41595	Holding Bar
41598	Bubble Flaring Tool Holding Bar
2701	Cutter

Bearing Race and Seal Kit - 41630

Allows you to install tapered bearing races and seals without damage to the component or housing.

Includes a driver handle plus 9 popular bearing and seal drivers ranging from 1.565" to 3.180".

Item No.	Description
41631	Driver Handle
41632	1.565" Driver
41633	1.750" Driver
41634	1.961" Driver
41635	2.325" Driver
41636	2.470" Driver
41637	2.555" Driver
41638	2.830" Driver
41639	2.995" Driver
41640	3.180" Driver



Radio Removal Kit & Antenna Wrench Kit - 41680

Kit includes the tools needed to remove the radio from the dash on many domestic and import vehicles without damage to the radio or the dash panel. Antenna nut sockets fit over antennas and down into deep well locations.

Item No.	Description
3913	Ford Radio Removal Tool
3914	Key Set
3915	Antenna Nut Socket Set



8 Pc. Metric and SAE Stud Removal Kit - 41760

Complete SAE and Metric stud remover set offers the best professional extractors available. Designed and tested to reach studs in difficult work areas.

Item No.	Description
41761	Remover Skt: 6mm 3/8" Dr.
41762	Remover Skt: 8mm 3/8" Dr.
41763	Remover Skt: 10mm 1/2" Dr.
41764	Remover Skt: 12mm 1/2" Dr.
41765	Remover Skt: 3/8" 1/2" Dr.
41766	Remover Skt: 7/16" 1/2" Dr.
41767	Remover Skt: 5/16" 3/8" Dr.
41768	Remover Skt: 1/4" 3/8" Dr.



Automotive Service Kits



General Purpose Bushing Driver Kit - 41780

Perfect for removing and inserting bushings in cars, trucks buses, tractors, construction and off-road equipment. This set includes small, medium, and large drivers and bushing adapters from 3/8" to 1-3/8".

Item No.	Description
41781	Bushing Adptr. (3/8"-7/16")
41782	Bushing Adptr. (7/16"-1/2")
41783	Bushing Adptr. (15/32"-17/32")
41785	Bushing Adptr. (1/2"-5/8")
41786	Bushing Adptr. (9/16"-11/16")
41687	Bushing Adptr. (5/8"-11/16")
41688	Bushing Adptr. (5/8"-3/4")
41689	Bushing Adptr. (11/16"-13/16")
41790	Bushing Adptr. (3/4"-7/8")
41791	Bushing Adptr. (13/16"-15/16")
41792	Bushing Adptr. (7/8"-1")
41793	Bushing Adptr. (15/16"- 1-1/16")
41794	Bushing Adptr. (1"-1-1/8")
41795	Bushing Adptr. (1-1/16"- 1-3/16")
41796	Bushing Adptr. (1-1/8"- 1-1/4")
41797	Bushing Adptr. (1-3/16"- 1-5/16")
41798	Bushing Adptr. (1-1/4"- 1-3/8")
41799	Driver #1
41800	Driver #2
41801	Driver #3
41802	Driver Nut #1 and #2



Compact Universal Pulley Holder Kit - 41530

Compact pulley holder holds pressed on fan clutch pulleys including single and dual overhead cam sprockets. Adjustment screw available for position holding. Pin set can be changed out by screwing pins into the end of each bar.

Replacement Parts

Item No.	Description
3901	Small Pin set (5 x 8mm)
3902	Large Pin set (6 x 10mm, 7.5 x 18mm, Cam Pins)



Merchandiser Displays



Merchandiser Displays



Three Specialty Tool Merchandisers

**4 Foot Waterfall -
81423**

Includes 82 of the Most Popular KD Products.

**8 Foot Waterfall -
81424**

Includes 150 of the Most Popular KD Products.

**KD-X Foot Waterfall -
81425**

Includes the Most Popular KD Products unique to KD Tools.

All three displays include all hardware needed to set up as a free-standing display. Also fits on one 48" Gondola.



19980



19983

Jacobs
CHUCK



81037



Merchandise Contents

81423

Part#	Description	Qty
126	High-Low Voltage Tester	1
129	Low-Voltage Circuit Tester	1
135	Spark Plug Terminal Pliers	1
145	Hose Pinch-Off Pliers	1
161	Deluxe Feeler Gauge	1
162	Feeler Gauge	1
163	Valve-Tappet Gauge	1
164	Spark Plug Gap and Feeler Gauge Set	1
165	Spark Plug Gap Wire Gauge	1
166	Spark Plug Gap Wire Gauge	1
190	Universal Oil Filter Wrench	1
201	Battery Brush	1
204	Battery Terminal Spreader and Cleaner	1
206	Battery Brush	1
242	Parts Cleaning Brush	1
287	Drum Brake Adjusting Tool	1
298	Brake Spring Pliers	1
445	Internal Snap Ring Pliers Set	1
446	External Snap Ring Pliers Set	1
485	Gasket Scraper	1
501	Valve Grinder (5/8", 13/16" Diameter)	1
505	Valve Grinder (1-1/8", 1-3/8" Diameter)	1
720	Screw Extractor Kit	1
730	14mm and 18mm Spark Plug Open Thread Chaser	1
1140	SAE Impact Driver Set	1
1715	Combination Snap Ring Pliers	1
2010	Truck and Tractor Oil Filter Wrench	1
2031	Exhaust and Tailpipe Cutter	1
2078	Universal Overhead Valve Spring Compressor	1
2106	All-Purpose Scraper and Sticker Remover	1
2107	Mini Tubing Cutter	1
2108	Telescoping Mirror	1
2109	Telescoping Mirror	1
2129	3/4" Spark Plug Thread Inserts	1
2153	Ignition File	1
2281	Telescoping Magnetic Retrieving Tool	1
2284	Heavy Duty Piston Ring Compressor	1
2286	Harmonic Balancer Puller	1
2287	Ball Joint Separator	1
2289	Pitman Arm Puller	1
2304	Serrated Wrench (8mm)	1
2310	Curved Handle Wire Scratch Brush	1
2391	Flexible Retrieving Tool	1
2396	External Snap Ring Pliers	1
2419	Spiral Screw Extractor Kit	1
2425	1-1/4" Scraper	1
2428	Compression Tester	1
2517	Tubing Bender	1
2531	3/8" Socket Holder Rack	1
2554	O-Ring and Seal Pick	1
2595	Chain Wrench	1
2647	Circuit Continuity Tester	1
2756	HEI Ignition Tester	1
2757	Standard Ignition Tester	1
2774	Universal Brake Shoe Retaining Spring Tool	1
2790	3" End Cap Oil Filter Wrench	1
2833	Engine Cylinder Hone	1
2834	4" Replacement Stones (Course Grit)	1
2835	4" Replacement Stones (Medium Grit)	1
2836	4" Replacement Stones (Fine Grit)	1
2840	1-1/4" Round Magnifying Mirror with Pocket Clip	1
2897	Pulley Puller and Installer Set	1
2991	3-3/4" End Cap Oil Filter Wrench	1
3121	Hook and Pick Set	1
3149	Nylon Strap Oil Filter Wrench	1
3150	Universal Convertible Small Retaining Ring Pliers	1
3151	Large Convertible Internal/External Snap Ring Pliers	1
3163	Disc Brake Piston Tool	1
3253	65mm End Cap Oil Filter Wrench	1
3259	Universal Vacuum PVS. TVS Valve & Oxygen Sensor Socket	1
3288	Universal 3-Jaw Oil Filter Wrench	1
3290	Ford A/C and Fuel Line Spring Lock Coupling Tool	1
3293	Spark Plug Gap Gauge	1
3321	Fuel Line Quick Disconnect Tool	1
3324	Swivoil Filter Wrench (Range 2-1/2" to 3")	1
3358	Wheel Weight Tool	1
3472	Pulley Holder / Fan Clutch Tool Kit	1
3680	Ratcheting Wrench Serpentine Belt Tool	1
3729	Push Pin Removal Pliers	1
3840	Cam Clamp	1
3943	Swivoil Filter Wrench (Range 89-99)mm	1
3976	Straight Hose Clamp Pliers	1

81424

*Includes all items in 81423 plus the following:

Part#	Description	Qty
124	Remote Control Starter Switch	1
192	Fuel and Oil Filter Wrench	1
265	Brake Cylinder Hone	1
266	Three Replacement Stones	1
280	Bendix Drum Brake Spring Tool	1
285	Brake Shoe Retaining Spring Tool	1
431	Door Handle and Window Lift Remover	1
1708	Stud Extractor	1
1724	Diesel Ring Compressor	1
2038	Window Molding Remover	1
2116	Disc Brake Lining Wear Gauge	1
2123	14mm Spark Plug Insert Reamer/ Tap	1
2125	14mm Cylinder Head Rethreader Kit	1
2162	Electrical Wire Stripper and Crimper	1
2173	Three-way Battery Tool	1
2189	Tubing Bender	1
2228	Metric External Thread Restorer File	1
2229	SAE External Thread Restorer File	1
2282	Slotted Screw Starter	1
2288	Tie Rod Separator1	1
2291	Crankshaft Pulley Puller (Steering Wheel Puller)	1
2306	Serrated Wrench (12mm)	1
2309	Stainless Steel Brush	1
2311	Shoe Handle Wire Scratch Brush	1
2312	1" Knot-Type Wire-End Brush	1
2314	2-1/2" Wire Cup Brush	1
2320	Heavy Duty Oil Filter Wrench	1
2321	Heavy Duty Oil Filter Wrench	1
2322	Heavy Duty Oil Filter Wrench	1
2395	Internal Snap Ring Pliers	1
2467	4-Wheel-Drive Spindle Nut Wrench	1
2521	Fuel Pump Vacuum and Pressure Tester	1
2522	6" Stainless Steel Rule	1
2532	1/2" Socket Holder Rack	1
2533	Socket Holder Rack Set	1
2534	Lock-Ring Pliers	1
2538	One-Man Brake Bleeder	1
2568	Spark Plug Boot Puller	1
2649	Circuit and Spark Plug Tester	1
2775	Hand Bearing Packer	1
2822	Trim Pad Removing Tool	1
2979	Scriber	1
3029	Economy Brake and Engine Cylinder Hone Set	1
3083	Swivoil Filter Wrench (Range 2-7/8" to 3-1/4")	1
3162	GM 36mm Deep 1/2" Dr. Axle Nut Socket	1
3191	CV Joint Boot Clamp Tightening Wrench	1
3245	Seal Puller	1
3246	4-Wheel Drive Spindle Nut Wrench	1
3367	Side Terminal Battery Wrench	1
3368	Oil Filter Wrench Pliers (Range 2-15/16" to 3-5/8")	1
3376	Disc Brake Pad Spreader	1
3379	14mm Spark Plug Rethreader	1
3387	MacPherson Strut Spring Compressor	1
3414	Serpentine Belt Tool	1
3437	On/Off Magnetic Pickup Tool	1
3508	Ratcheting Oil Filter Pliers	1
3526	Ford 7.3L Fuel Filter Tool	1
3529	HD Oil Filter Strap Wrench	1
3530	6 piece Low Profile Fuel Line Disconnect Set	1
3551	2 Ton 2 Jaw Reversible Puller	1
3552	5 Ton 2 Jaw Reversible Puller	1
3703	Hog Ring Pliers Straight	1
3705	Panel Clip Pliers	1
3900	Universal Pulley Holder	1
3955	Replacement Part CV Boot Clamp	1
3975	Corbin Style Hose Clamp Pliers	1
3977	Angled Hose Clamp Pliers	1
61059	2 Piece Fuel Line Kit	1

81425

Part#	Description	Qty
145	Hose Pinch-Off Pliers	1
190	Universal Oil Filter Wrench	1
192	Fuel and Oil Filter Wrench	1
204	Battery Terminal Spreader and Cleaner	1
206	Battery Brush	1
285	Brake Shoe Retaining Spring Tool	1
416	Ramo-Matic Zerk Fitting Tool	1
445	Internal Snap Ring Pliers Set	1
446	External Snap Ring Pliers Set	1
720	Screw Extractor Kit	1
1708	Stud Extractor	1
1715	Combination Snap Ring Pliers	1
2010	Truck and Tractor Oil Filter Wrench	1
2029	Square Drive Oil Filter Wrench	1
2038	Window Molding Remover	1
2108	Telescoping Mirror	1
2116	Disc Brake Lining Wear Gauge	1
2123	14mm Spark Plug Insert Reamer/ Tap	1
2125	14mm Cylinder Head Rethreader Kit	1
2128	1/2" Spark Plug Thread Inserts	1
2129	3/4" Spark Plug Thread Inserts	1
2153	Ignition File	1
2162	Electrical Wire Stripper and Crimper	1
2189	Tubing Bender	1
2228	Metric External Thread Restorer File	1
2229	SAE External Thread Restorer File	1
2274	Metric Feeler Gauge	1
2309	Stainless Steel Brush	1
2320	Heavy Duty Oil Filter Wrench	1
2321	Heavy Duty Oil Filter Wrench	1
2322	Heavy Duty Oil Filter Wrench	1
2324	Brake Lining Gauge	1
2326	Tire Tread and Brake Lining Gauge	1
2391	Flexible Retrieving Tool	1
2395	Internal Snap Ring Pliers	1
2396	External Snap Ring Pliers	1
2419	Spiral Screw Extractor Kit	1
2520	Vibro Engraver	1
2522	6" Stainless Steel Rule	1
2530	1/4" Socket Holder Rack	1
2531	3/8" Socket Holder Rack	1
2532	1/2" Socket Holder Rack	1
2533	Socket Holder Rack Set	1
2756	HEI Ignition Tester	1
2834	4" Replacement Stones (Course Grit)	1
2835	4" Replacement Stones (Medium Grit)	1
2836	4" Replacement Stones (Fine Grit)	1
2840	1-1/4" Round Magnifying Mirror with Pocket Clip	1
2991	3-3/4" End Cap Oil Filter Wrench	1
3029	Economy Brake and Engine Cylinder Hone Set	1
3121	Hook and Pick Set	1
3151	Large Convertible Internal / External Snap Ring Pliers	1
3152	Extra-Large Convertible Internal / External Snap Ring Pliers	1
3246	4-Wheel-Drive Spindle Nut Wrench	1
3358	Wheel Weight Tool	1
3367	Side Terminal Battery Wrench	1
3379	14mm Spark Plug Rethreader	1
3437	On/Off Magnetic Pickup Tool	1
3472	Pulley Holder / Fan Clutch Tool Kit	1
3476	3 Pc. Hook and Pick Set	1
3526	Ford 7.3L Fuel Filter Tool	1
3529	HD Oil Filter Strap Wrench	1
3550	Large Rubber Hose Cutters	1
3551	2 Ton 2 Jaw Reversible Puller	1
3552	5 Ton 2 Jaw Reversible Puller	1
3703	Hog Ring Pliers Straight	1
3704	Hog Ring Pliers 45 Degree	1
3705	Panel Clip Pliers	1
3888	Push Pin Pliers -80 Degree	1
3941	Pro Swivoil Filter Wrench -Small (64 to 76mm)	1
3942	Pro Swivoil Filter Wrench -Medium (73 to 83mm)	1
3943	Pro Swivoil Filter Wrench -Large (89 to 99mm)	1
3962	Brake Lining Thickness	1
3971	Hose Push Off Pliers	1
3975	Hose Clamp Pliers	1
3976	Flat Band Hose Clamp Pliers	1
3977	Angled Hose Clamp Pliers	1
3978	Large Hose Clamp Pliers	1

19980

Part#	Description	Qty
59800	22Pc Combo Set (SAE LG & MET SHT)	2
59801	22Pc Combo Set - Ball Style	2
59817	13pc Short Arm Hex Key (Caddy)	2
59830	9pc Metric Short Arm Hex Key (Caddy)	2
59845	7pc Long Arm Hex Key (Caddy)	2
59846	13pc Long Arm Hex Key (Caddy)	2
59860	9pc Metric Long Arm Hex Key (Caddy)	2
59900	7pc Ball Plus SAE (Caddy)	2
59901	13PC Ball plus SAE (Caddy)	2
59915	9pc Metric Ball Plus Hex Key (Caddy)	2
59930	9pc SAE Fold-up, Small	2
59931	9pc SAE Fold-up, Med	2
59932	5pc SAE Fold-up, Large	2
59945	7pc Metric Fold up,	2
59946	5pc Large Metric Fold up,	2
59947	7pc Torx® Key Fold-up	2
59949	3pc Fold Up Hex Key Set	2

19983		
Part#	Description	Qty
59817	13pc Short Arm Hex Key (Caddy)	2
59830	9pc Metric Short Arm Hex Key (Caddy)	2
59846	13pc Long Arm Hex Key (Caddy)	2
59860	9pc Metric Long Arm Hex Key (Caddy)	2
59901	13PC Ball plus SAE (Caddy)	2
59915	9pc Metric Ball Plus Hex Key (Caddy)	2
59930	9pc SAE Fold up, Small	2
59931	9pc SAE Fold-up, Med	2
59932	5pc SAE Fold up, Large	2
59945	7pc Metric Fold up,	2
59946	5pc Large Metric Fold up,	2
59947	7pc Torx® Key Fold-up	2

81037		
Part#	Description	Qty
30247	CHK&KEY 3/8 M CRFT CD	4
30249	KEY 1/4 PILOT KG1 CD	6
30250	KEY 9/32 PILOT KK CD	6
30251	KEY 1/4 PILOT K32 CD	6
30253	HLDR CHK KEY CD	5
30354	CHK HNDTITE KEYS 3/8 CD	4
30602	CHK&KEY 1/2 M CRFT 20M CD	3
30605	L KEY 1/4&3/8 CD	6
30825	CHK KEY 3/8 15/64 PILOT C	6
30826	CHK KEY 1/4 5/32 PILOT CD	6
30827	CHK KEY 1/4&3/8 13/64 PIL	6
31038	CHK KEYS 1/2-20 HD	3

Content Listings

3467	
Replacement Parts Available	
3467-01	2111 Gauge
3467-02	2118 Schrader Hose
3467-03	2119 Schrader Hose
3467-04	2159 Blow Down Hose
3467-05	2156 Single End Hose
3467-06	2155 Double End Hose
3467-07	2203 CIS/TBI Hose
3467-08	2206 Male CIS Fitting
3467-09	2207 Male CIS Fitting 10mm
3467-10	2210 Female CIS Fitting
3467-11	2211 Swivel Fitting
3467-12	2209 10mm x 1 Fitting
3467-13	2208 8mm x 1.0 Male
3467-14	2252 6mm 1.0 Fuel Bolt
3467-15	2253 8mm 1.0 Fuel Bolt
3467-16	2254 10mm x 1.0 Fuel Bolt
3467-17	2255 12mm x 1.25 Fuel Bolt
3467-18	2256 12mm x 1.50 Fuel Bolt
3467-19	2305 Union
3467-20	2302 Fem 16mm x 1.5 tube nut
3467-21	2301 Male 16mm x 1.5 tube nut
3467-22	2303 Male 5/8 18 Tube Nut
3467-23	2420 Spring Lock Hose
3467-24	2400 Hair Pin Hose
3467-25	2308 Fem Adpt 14mm x 1.5
3467-26	2307 Male Adpt 14mm x 1.5
3467-27	6235 Gauge Protector 2.5
3467-28	6245 Gauge Protector 3.5
3467-29	2116 Quick Coupler Body
3467-30	2350 Low Pressure Gauge
3467-31	2004 Exp. Completer Kit Contains the Following:
3467-32	2204 8mm long adpt
3467-33	2225 14mm swivel adpt
3467-34	2226 16mm swivel adpt
3467-35	2227 1/4 BSPT Swivel adpt
3467-36	2262 14mm fuel bolt
3467-37	2410 3/8 Hair pin hose
3467-38	2706 14mm plug

3468	
Replacement Parts Available	
3468-01	6235 Gauge Protector
3468-02	6604 Replace Hose
3468-03	6611 Gauge Only
3468-04	6612 Valve Core
3468-05	6616 Quick Coupler
3468-06	6623B Adapter - Volvo
3468-07	6633 Adapter
3468-08	6634C Adapter
3468-09	6635 Adapter
3468-10	6636 Adapter
3468-11	6638 Adapter
3468-12	6640D Adapter
3468-13	6642 Adapter
3468-14	6644 Adapter
3468-15	6646 Adapter
3468-16	6648 Adapter
3468-17	6650 Adapter
3468-18	6652 Adapter
3468-19	6654 Adapter
3468-20	6660 Adapter
3468-21	6661 Adapter
3468-22	6662 Adapter
3468-23	6663 Adapter
3468-24	6664 Adapter
3468-25	6665 Adapter

3469	
Replacement Parts Available	
3469-01	6206 Replacement Gauge
3469-02	6212 Valve Core
3469-03	6214 O ring 14mm
3469-04	6218 O-ring 18mm
3469-05	6220 Adapter 14mm
3469-06	6225 Adapter 12mm
3469-07	6230 Adapter 10mm
3469-08	6814 Rubber hose cone
3469-09	6904 Ext. Assembly
3469-10	6909 Repl. Hose Assembly.
3469-11	6914 Straight Adapter
3469-12	6915 Bent Adapter
3469-13	6923 Gauge & Valve

3531	
Replacement Parts Available	
3531-01	314300 Tube
3531-02	314299 Tube
3531-03	311882 Tube
3531-04	311883 Tube
3531-05	503004 FWD Hub Puller
3531-06	314308 Bearing Installer
3531-07	314311 Bearing Installer
3531-08	314310 Bearing Installer
3531-09	314309 Bearing Installer
3531-10	314307 Bearing Installer
3531-11	503902 Small Assembly Adpt
3531-12	10204 Hex Nut
3531-13	10048 Hex Head
3531-14	314305 Bearing Installer
3531-15	314306 Bearing Installer
3531-16	314304 Bearing Installer
3531-17	314302 Bearing Installer
3531-18	314301 Adapter (2Step)
3531-19	503052 Forcing Screw
3531-20	22301 Hex Nut
3531-21	311885 Bearing Installer
3531-22	311886 Bearing Installer
3531-23	311888 Wheel Hub Installer
3531-24	311887 Bearing Remover
3531-25	311884 Adapter (2Step)
3531-26	503633 Sleeve
3531-27	502622 Sleeve
3531-28	503634 Sleeve
3531-29	502623 Sleeve
3531-30	311881 Forcing Nut Screw
3531-31	219646 Washer
3531-32	503896 Race Puller
3531-34	314288 Forcing Screw
3531-35	Instruction Book
3531-36	Storage Box

3682	
Replacement Parts Available	
3682-71	Cap Adapter A (BLUE)
3682-72	Cap Adapter B (YELLOW)
3682-73	Cap Adapter C (GREEN)
3682-74	Cap Adapter D (RED)
3682-71A	Adapter A Securing Ring

Contents Listing

Posi Lock™ Pullers

Replacement Parts Available

POL202 POL20255 POL10254 POL10256 POL10258 POL203 POL20355 POL10354 POL10356 POL10358 POL204 POL20455 POL10454 POL10456 POL10458 POL206 POL20655 POL10654 POL10656 POL10658 POL208 POL20855 POL10854 POL11056 POL10858 POL210 POL21055 POL11054 POL11056 POL11058 POL213	1 Ton 2 Jaw Locking Puller Jaw Head Assembly for 202 Puller Jaw for 102/202" Puller Roll Pin for 102/202" Puller Center Bolt for 102/202 Puller 2 Ton 2 Jaw Locking Puller Jaw Head Assembly for 203 Puller Jaw for 103/203 Puller Roll Pin for 103/203 Puller Center Bolt for 103/203" Puller 2 Ton 2 Jaw Locking Puller Jaw Head Assembly for 204 Puller Jaw 104/204/105 Puller Ball Lock Pin for 104/204 Puller Center Bolt for 104/204" Puller 6 Ton 2 Jaw Locking Puller Jaw Head Assembly for 206 Puller Jaw for 106/206 Puller Ball Lock Pin for 106/206 Puller Center Bolt for 106/206" Puller 12 Ton 2 Jaw Locking Puller Jaw Head Assembly for 208 Puller Jaw for 108/208 Puller Puller Jaw for 108/208 Center Bolt for 108/208 Puller 14 Ton 2 Jaw Locking Puller Jaw Head Assembly for 210 Puller Long Jaw for 110/210 Puller Ball Lock Pin for 110/210 Puller Center Bolt for 110/210 Puller 25 Ton 2 Jaw Locking Puller	POL21355 POL11354 POL11356 POL11358 POL216 POL21655 POL11654 POL11356 POL11658 POL102 POL10254 POL10255 POL10256 POL10258 POL103 POL10354 POL10355 POL10356 POL10358 POL104 POL10454 POL10455 POL10456 POL10458 POLP4 POL106 POL10654 POL10655 POL10656 POL10658 POLP6	Jaw Head Assembly for 213 Puller Jaw for 113/213 Puller Ball Lock Pin for 113/213 Puller Center Bolt for 113/213" Puller 35 Ton 2 Jaw Locking Puller Jaw Head Assembly for 216 Puller Jaw for 116/216 Puller Ball Lock Pin for 113/213 Puller Center Bolt for 116/216 Puller 1 Ton 3 Jaw Locking Puller Jaw for 102/202" Puller Jaw Head Assembly for 102 Puller Roll Pin for 102/202" Puller Center Bolt for 102/202 Puller 2 Ton 3 Jaw Locking Puller Jaw for 103/203 Puller Jaw Head Assembly for 103 Puller Roll Pin for 103/203 Puller Center Bolt for 103/203" Puller 5 Ton 3 Jaw Locking Puller Jaw 104/204/105 Puller Hub Ball Lock Pin for 104/204 Puller Center Bolt for 104/204" Puller Replacement Tip 9-1/6 x 20 Centers 10 Ton 3 Jaw Locking Puller Jaw for 106/206 Puller Jaw Head Assembly for 106 Puller Ball Lock Pin for 106/206 Puller Center Bolt for 106/206" Puller Replacement Tip 11/16 x 18 Centers	POL108 POL10854 POLP10 POL10855 POL11056 POL10858 POL110 POL11054 POL11055 POL11056 POL11058 POL113 POL11354 POL11355 POL11356 POL11358 POL116 POL11654 POL11655 POL11356 POL11658 POLCH3 POLCH10451 POLCH704 POLTB1045 POL1104 POL1105 POLT 1 POLT	17 Ton 3 Jaw Locking Puller Jaw for 108/208 Puller Replacement Tip 3615-16 Locking Puller Jaw Head Assembly for 108 Puller Puller Jaw for 108/208 Center Bolt for 108/208 Puller 20 Ton 3 Jaw Locking Puller Long Jaw for 110/210 Puller Jaw Head Assembly for 110 Puller Ball Lock Pin for 110/210 Puller Center Bolt for 110/210 Puller 30 Ton 3 Jaw Locking Puller Jaw for 113/213 Puller Jaw Head Assembly for 113 Puller Ball Lock Pin for 113/213 Puller Center Bolt for 113/213" Puller 40 Ton 3 Jaw Locking Puller Jaw for 116/216 Puller Jaw Head Assembly for 116 Puller Ball Lock Pin for 113/213 Puller Center Bolt for 116/216 Puller Harmonic Damp Pulley Puller Jaw Head for CH-3 Center Bolt for CH-3 Internal / External Slide Hammer Puller Set 5 Ton 3 Jaw Locking Puller
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Merchandise Contents

POLPMW

Part#	Description	Qty
POL102	1 Ton 3 Jaw Locking Puller	1
POL202	1 Ton 2 Jaw Locking Puller	1
POL103	2 Ton 3 Jaw Locking Puller	1
POL203	2 Ton 2 Jaw Locking Puller	1

POLPM4

Part#	Description	Qty
POL104	5 Ton 3 Jaw Locking Puller	1
POL106	10 Ton 3 Jaw Locking Puller	1
POL206	6 Ton 2 Jaw Locking Puller	1
POL110	20 Ton 3 Jaw Locking Puller	1
POLP4	Replacement Tip 9-1/6 x 20 Centers	1
POLP6	Replacement Tip 11/16 x 18 Centers	2
POLP10	Replacement Tip 3615-16	1



POLPMW



POLPM4

A

A/C and Fuel Line Spring Lock Coupling Tool- Ford.....	20
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