



AUTOMOTIVE SPECIALTY TOOLS

**THE CHOICE
OF PROFESSIONALS
FOR VEHICLE REPAIR
SINCE 1978**

**2013 Catalog
CTA Manufacturing Corp.**

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HEAVY-DUTY CAP-TYPE OIL FILTER WRENCHES

Built with higher torque specs to service stubborn Oil Filter Filters and Housings. Features extra-thick wall construction and combo 3/8" square and 7/8" hex drive.

No.	Size	Applications
2481	76mm x 14	Ford, Mazda, Mercedes, VW, Audi
2485	64mm x 14	Toyota, Lexus, Honda, Nissan
2487	88mm x 15	Hyundai, Kia
2489	86mm x 16	Volvo



2460 CAP-TYPE OIL FILTER WRENCH TOYOTA / LEXUS / SCION - 64MM X 14

Aluminum die-casting to withstand high torque loads when removing Oil Filter Housing Caps. Fits all 4 types of plastic & aluminum caps. Also fits Nissan & Honda OE filters. Features 1/2" square drive and 1" hex drive.



2465 CAP-TYPE OIL FILTER WRENCH TOYOTA / LEXUS / SCION - 64MM X 14

Highest grade aluminum die-casting features extra "step" with 6 notches to engage tabs on Filter Housing Caps to spread torque loads and prevent damage. Fits all 4 types of plastic & aluminum caps. Features 3/8" square and 1" hex drive.



CAP-TYPE OIL FILTER WRENCHES

Precision-stamped to remove Aftermarket and OE spin-on filters and filter housings. All with 3/8" square drive and black finish.

No.	Size
A250	74/76mm x 15
A251	76mm x 14
A252	93mm x 15
A253	93mm x 36
A254	73mm x 14
A255	65/67mm x 14
A256	68mm x 14
A257	80mm x 15
A258	74mm x 15
A259	90mm x 15
A260	82mm x 15
A261	86mm x 16
A262	100mm x 15
A263	76mm x 8
A264	76mm x 15
A265	64mm x 14
A266	88mm x 15
A267	74.5mm x 14
A268	84mm x 14



Visit website www.ctatools.com for application details.

LOW-PROFILE METRIC CAP SOCKETS

Remove housings with cartridge-type oil & fuel filters. Chrome vanadium steel and 3/8" square drive.

No.	Size	Applications
2570	27mm	Mercedes, Smart, Hyundai, Kia
2571	29mm	Cummins
2572	32mm	Saturn, GM, Mercedes
2573	24mm	Saturn, Cadillac
2574	36mm	BMW, Ford, Mercedes, Mini, VW, Audi



026400 10 PC. OIL & FUEL FILTER SERVICE KIT

For removal of Oil & Fuel Filter Housings and spin-on filters. Includes six Cap Wrenches: A251, A258, A261, A266, A267, 2485 and four Cap Sockets: 2570, 2572, 2573 and 2574.



096950 11 PC. CAP-TYPE OIL FILTER WRENCH KIT

For removal of aftermarket & OE spin-on filters. Includes: A250, A251, A252, A253, A254, A255, A256, A257, A258, A261, A262



025100 33 PC. PROFESSIONAL LUBE SERVICE KIT

The most critical tools needed for complete lube service for both import and domestic vehicles. Includes 20 different Oil Filter Wrenches and 13 Drain Plug Wrenches and Sockets.



8940 TORQUE LIMITING RATCHET WRENCH - 3/8" SQ. DR.

Installs Oil Filter Housing Caps with 25Nm torque specifications. Internal torque limiting device prevents over-tightening of caps. 11-1/2" (290mm) long with soft-grip handle.



OIL FILTER WRENCHES

HEAVY-DUTY SWIVEL-TYPE OIL FILTER WRENCHES

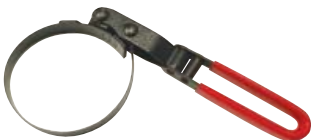
Features extra-thick yoke, expanding link mechanism, adjusting screw to tighten or loosen swivel and thick cushion grip.



No.	Range	Application
2538	57 - 73mm	Sub-compacts & Fuel Filters
2540	65 - 83mm	Small Filters
2545	75 - 95mm	Standard Filters
2548	92 - 111mm	Large Filters
2551	120 - 146mm	Caterpillar/John Deere
2552	100 - 120mm	Cummins/Detroit Diesel

SWIVEL-TYPE OIL FILTER WRENCHES

Rugged construction and swivel design to fit most automotive filters.



No.	Range	Application
A290	70 - 89mm	Compact Filters
A295	76 - 95mm	Standard Filters

2535 HEAVY-DUTY SLOTTED/SWIVEL-TYPE OIL FILTER WRENCH

Features 3-step slotted link and heavy duty handle design. Range: 73 - 111mm



A296 SLOTTED/SWIVEL-TYPE OIL FILTER WRENCH

Features 3-step slotted link and thick cushion grip inside band. Range: 70 - 114mm



NARROW-BAND SWIVEL-TYPE OIL FILTER WRENCHES

For hard-to-reach filters. Features swivel design, locking nut, heavy-duty yoke, link mechanism and vinyl grip.



No.	Range	Application
2587	65 - 83mm	Compact Filters
2588	75 - 95mm	Standard Filters

BAND-TYPE OIL FILTER WRENCHES

Features vinyl grip handle and dimpled band.



No.	Range	Application
2515	64 - 83mm	Compact Filters
2516	83 - 95mm	Standard Filters

A280 SLOTTED-TYPE OIL FILTER WRENCH

Adjusts for wide application range. Handle is vinyl dipped. Range: 76 - 102mm



A230 JAWS-TYPE OIL FILTER WRENCH

Open-ended band allows easier access and serrated band grips the filter. Range: 75 - 108mm



2594 CHAIN-TYPE OIL FILTER WRENCH

Chain allows for diameter adjustment and better gripping. Now with extra-long (5" / 128mm) chain. Range: 70 - 115mm



PLIERS-TYPE OIL FILTER WRENCHES

Removes the most stubborn filters. Adjustable jaws & long handles.

No.	Range	Application
2532	45 - 89mm	Compact Filters
2534	54 - 108mm	Standard Filters
2536	92 - 152mm	Truck Filters



2537 OFFSET PLIERS-TYPE OIL FILTER WRENCH

Angled head for greater access in tight areas. Adjustable jaws & long handles. Range: 64 - 117mm



2530 RATCHETING PLIERS-TYPE OIL FILTER WRENCH

Self-adjusting ratchet for multiple settings. Extra-long handle. Range: 50 - 125mm



SQUARE DRIVE OIL FILTER WRENCHES

Narrow band for tight clearances with 3/8" square drive.



No.	Range	Application
2520	71 - 79mm	Compact Filters
2525	87 - 95mm	Standard Filters

SQUARE DRIVE OIL FILTER WRENCHES - TRUCK

Extra heavy-duty band, yoke and 1/2" square drive for high torque requirements. Services trucks and tractors, including farm and fleet.



No.	Range	Application
2565	104 - 118mm	Cummins/Detroit Diesel
2567	118 - 131mm	John Deere
2569	131 - 144mm	Caterpillar

2507 BI-DIRECTIONAL SPIDER-TYPE OIL FILTER WRENCH

For removal and installation of Oil Filters. Features angled legs to bite into filters and low profile to work in tight areas. 3/8" square drive & 1/2" square drive adapter w/ hex. Range: 50 to 95mm



2505 HEAVY-DUTY SPIDER-TYPE OIL FILTER WRENCH

Three clamping legs are driven by gear mechanism for maximum range and superior gripping. Use with 3/8" drive tools. Range: 61 - 121mm



2506 SPIDER-TYPE OIL FILTER WRENCH

Three short legs, for low-profile applications, are driven by gear mechanism. Use with 3/8" drive tools. Range: 61 - 95mm



CAM-ACTION OIL FILTER WRENCHES

Two thick jaws slide together using a cam mechanism to grab filters. Use with 3/8" square drive tools or 7/8" hex socket.



No.	Range	Application
2550	70 - 76mm	Compact Filters
2555	86 - 98mm	Standard Filters

2595 STRAP-TYPE OIL FILTER WRENCH

2" wide band conforms to all shapes and tightens. Handle is 5-1/2" long with 1/2" square drive. Range: Up to 152mm diameter.



2596 HEAVY-DUTY STRAP-TYPE OIL FILTER WRENCH

Thick 2" wide band is assembled to forged handle with 3/8" and 1/2" drive ends. Range: Up to 229mm diameter.



2490 FUEL FILTER TOOL - FORD 7.3L

Removes and installs Diesel Fuel Caps on '95 - '02 Ford 7.3L. Also works on other Diesel Filter systems using same design. Features combination 3/8" square drive and 7/8" hex drive.



OIL DRAIN TOOLS

Prevents oil spillage during filter change on vehicles that have filter housing caps with one-way valve. Tool screws into cap to drain oil. Features 20" (51cm) hose.



2087

No. Applications

2087	VW, Audi
2088	Toyota, Lexus



2088

DRAIN PLUG

8-1 OIL & LUBE MULTI-WRENCHES

Designed for the automotive industry, these wrenches offer 16 different sizes to fit most Oil Drain, Transfer Case and Differential Plugs. Features offset head design with yoke support for high torque applications, indexing feature to lock socket into position, nickel plating and magnet built into handle. OAL: 10-1/2" / 27cm

No.	Description	Sizes
2495	6-Point Metric	12, 13, 14, 15, 16, 17, 18, 19mm
2497	Male Square & Hex	Square – 8mm, 10mm, 3/8", 1/2" Hex – 10, 12, 14, 17mm



Available packed in box
Order 2495K or 2497K

6-POINT OFFSET DRAIN PLUG WRENCHES

Service male hex drain plugs. Offset head with anti-slip rubber grip, 6 point wrench end plus open end. Chrome vanadium steel.

No.	Size
2581	9/16"
2582	5/8"
2583	3/4"
2576	13mm
2584	14mm
2585	15mm
2586	16mm
2589	17mm
2578	19mm
2579	22mm
2500	7 PC. Set (13mm – 22mm)



METRIC HEX DRAIN PLUG WRENCHES

Long-arm wrenches to service many domestic & import vehicles.

No.	Size
2038	12mm
2041	14mm
2040	17mm



METRIC HEX DRAIN PLUG SOCKETS

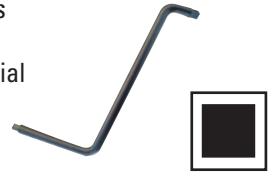
High-torque 2-piece bit socket design with 1/2" square drive.

No.	Size
2052	12mm
2054	14mm
2056	17mm
2058	19mm



2577 SQUARE HEAD DRAIN PLUG WRENCH

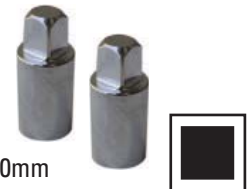
8 x 10mm "S"-type wrench services Transfer Cases, Engine Oil Pans, Manual Transmission and Differential Drain and Fill Plugs found on Ford, Jeep, Volvo, Peugeot and others.



SQUARE HEAD DRAIN PLUG SOCKETS

Same applications as #2577. Single piece socket design with 3/8" square drive.

No.	Size
2036	8mm
2037	10mm
2049	2 PC. Socket Set – 8mm & 10mm



2048 10MM FEMALE SQUARE HEAD DRAIN PLUG SOCKET

Services male square plugs on BMW, Ford, Toyota, Renault. 3/8" square drive.



2039 16MM 12-PT DRAIN PLUG WRENCH - VW/AUDI

Services oil and transmission drain plugs and other fasteners on VW, Audi and Porsche. Also fits Detroit Diesel flywheel bolts, front crank pulleys and head bolts. Socket is tamperproof and 1/2" square drive.



9250 T45 TORX® OIL FILTER TOOL - CADILLAC

Low profile socket accesses oil filter housings and drain plugs on Cadillac CTS '03-'04. 3/8" square drive with 5/8" hex adapter for use with open end wrench.



9573 T70 TORX® DRAIN PLUG SOCKET-SUBARU

Fits late 2004 and up WRX (including 2008 and 2009 WRX) with 5MT, 2003+ 5MT Legacy, 2003+ 5MT Forester, and only model year 2007 STI clutch side transmission bolt). Also services brake rotor retaining bolts on GM C4500 Trucks (2003 and later).



DIFFERENTIAL PLUG EXTRACTORS

For removal of female style plugs with rounded off inserts.

No.	Applications
9035	5/16" plugs w/ 1/4" square hole
9037	1/2" plugs w/ 3/8" square hole
9038	3/4" plugs w/ 1/2" square hole



PROFESSIONAL HEAVY-DUTY GREASE GUNS

For industrial and agricultural applications. Features chrome plating, synthetic rubber plunger, check valve to prevent bypass, variable stroke with push-lock plunger rod assembly and 3-way loading (14 oz. cartridge, pressure filler pump, bulk suction). Packed with hydraulic coupler & 6" pipe.



No. Type

7706 Lever Type – 10,000 psi

7711 Pistol Type – 6,000 psi

7700 STANDARD LEVER-TYPE GREASE GUN

Includes 6" (150mm) steel extension and 4-jaw coupler with ball check. Capacity: 14oz (400gm) cartridge or 500cm cube bulk fill. 1/8" NPT threads. 6,000 PSI



7705 HEAVY-DUTY LEVER-TYPE GREASE GUN

Features bulk loader, air bleeder valve, 6" (150mm) steel extension and 4-jaw coupler with ball check. Capacity: 14oz (400gm) cartridge or 500cm cube bulk fill. 1/8" NPT threads. 10,000 PSI



7710 HEAVY-DUTY PISTOL-TYPE GREASE GUN

Features bulk loader, air bleeder valve, 4" (100mm) steel extension and 4-jaw coupler with ball check. Capacity: 14oz (400gm) cartridge or 500cm cube bulk fill. 1/8" NPT threads. 5,000 PSI



7720 MIDGET PISTOL-TYPE GREASE GUN

Features 4" (100mm) steel extension and 4-jaw coupler with ball check. Handles 3oz cartridges. 1/8" NPT threads. 3,000 PSI



7750 12" GREASE GUN HOSE

Working pressure: 3,500 PSI. Burst pressure: 11,600 PSI. 1/8" NPT threads.



7755 18" GREASE GUN HOSE

Working Pressure: 3,500 PSI / 240 BAR. Burst Pressure: 11,600 PSI / 800 BAR.



7760 GREASE GUN COUPLER

Features 4 jaws and spring loaded ball check. 1/8" NPT threads. Working pressure: 3,000 PSI. / 207 BAR.



7762 RIGHT ANGLE GREASE GUN COUPLER

Use with straight extensions or flexible hoses. 1/8" NPT threads. Working pressure: 3,000 PSI / 207 BAR.



7765 360° SWIVEL COUPLER

Locks at 45° at any position. 1/8" NPT threads. Working pressure: 7,000 PSI / 483 BAR.



7770 INJECTOR NEEDLE

Includes standard grease fittings without ball check and protective plastic holder. Needle thickness: 18 gauge.



7775 NEEDLE NOSE DISPENSER

Allows contact with flush-on and other hard to reach grease fittings. Attaches directly to steel extensions or flexible hoses. 1/8" NPT thread.



7780 8 PC. GREASE FITTING SET – METRIC

Contents: (4) M6 x 1 Straight, (2) M6 x 1 45°, (2) M6 x 1 90°.

7785 8 PC. GREASE FITTING SET – SAE

Contents: (4) 1/4" x 28 Straight, (2) 1/4" x 28 45°, (2) 1/4" x 28 90°.



2900 HEAVY-DUTY GREASE FITTING AND JOINT UNCLOGGER

Opens stuck grease fittings and grease joints with powerful hydraulic impact. Softens dried-out grease inside joints and allows you to grease neglected steering, suspension and driveline joints. For Automotive, Marine, Lawn Maintenance, Farm and Heavy Equipment. Includes auxiliary flex hose for hard-to-reach applications.



2905 GREASE FITTING AND JOINT UNCLOGGER - POCKET TYPE

Smaller version of #2900 is small enough to fit in your pocket, but big enough to do the job right. Hose is not included.



A299 UNIVERSAL BEARING PACKER

Fits all automotive wheel bearings. Forces out old grease and evenly injects fresh grease. Works with standard grease guns. Includes two plastic cones and extension screw with grease fitting.



2245 SEAL PULLER

Removes oil and grease seals on cars and trucks. Two-sided hardened head is assembled to heavy-duty 1/2" bar stock shaft. OAL: 12" (30cm)



2950 BEARING RACE & SEAL DRIVER SET

9 aluminum drivers plus driver tool installs bearing races and seals. Driver sizes: 1.565", 1.750", 1.965", 2.325", 2.470", 2.555", 2.830", 2.995", 3.185"



7460 PAIL OPENER

Large die-cast aluminum alloy tool provides strong leverage to open pails and drum plugs. Lightweight but sturdy, features molded gripping area and hang hole. OAL: 15" (38cm)



7450 OIL EXTRACTOR & FLUID EVACUATOR

Extract or transfer Motor Oil, ATF, Gear Lube, Gasoline, Coolant or Water from inaccessible or confined areas. For cars, boats, trucks, farm equipment or household plumbing. Features low-profile spherical design, 6-liter (6.3 quart) capacity, pour spout and 7' long hose to fit down dipstick tubes. Transfers 4 liters of water per minute.



PLASTIC MEASURES

Handles most automotive fluids. Translucent high density polyethylene plastic container has flexible spout with screw-on cap and screw-on lid. Spout unscrews from body to store inside.

No.	Capacity
7901	1 Quart
7905	5 Quarts



PISTOL-TYPE OILERS

A full range of oilers for liquid dispensing applications. Body and pump are all-steel construction. All with flexible spout.

No.	Capacity
A792	6oz / 200ml
A793	8oz / 300ml
A794	12oz / 400ml
A795	16oz / 500ml
A797	24oz / 700ml



EXTRACTION & FILLING PUMPS

Handle all types of Automotive Fluid, including Brake Fluid. Cylinder body is calibrated (English & Metric) and is clear for viewing volume and fluid condition. Disassembles for easy cleaning, enabling use with multiple fluids. Small pump includes spring-loaded, detachable tube with cap. Large pump includes flow control valve, aluminum tip & gripping band.

No.	Capacity
7075	200cc/0.22qt
7077	1500cc/1.6qt



7075



7077

7050 RADIATOR PRESSURE TESTER KIT

Tests automotive pressurized cooling systems up to 30 PSI. Kit includes pump with gauge, 12" hose and cap adapter to check 3/4" deep filler necks, 1/4" Spacer Washer for testing 1" deep filler necks, plus 3 Radiator Adapters (#7090, #7091 & #7092).

A full range of System Adapters and Cap Adapters are available separately and listed below.

7060 RADIATOR PRESSURE TESTER

Pump and gauge assembly only from kit #7050.



SYSTEM ADAPTERS

No.	General Applications	No.	General Applications
7090	Cadillac, Chevrolet, GEO, GMC, Hummer, Oldsmobile, Pontiac, Saturn	7097	BMW, Range Rover
7091	Acura, Chevrolet, Chrysler, GEO, Honda, Isuzu, Lexus, Mazda, Mitsubishi, Suzuki, Toyota	7098	Audi, Volkswagen
7092	Acura, Chevrolet, Chrysler, Ford, GEO, Honda, Hyundai, Infiniti, Isuzu, Lexus, Mazda, Mitsubishi, Nissan, Subaru, Suzuki, Toyota	7099	BMW, Merkur
7093	Audi, Volkswagen	7100	Buick, Cadillac, Chevrolet, Ford, International, Jaguar, Mercedes, Oldsmobile, Pontiac, Saturn
7094	Jeep, Renault, Saab, Sterling, Volvo	7101	Mercedes
7095	Volkswagen	7102	Ford, Jaguar, Mazda
7096	Ford, Jaguar, Pontiac, Porsche, Range Rover, Saab, Saturn	7103	Toyota
		7117	Dodge
		7118	Mazda, Volvo

CAP ADAPTERS

No.	General Applications	No.	General Applications
7104	BMW, Ford, Jaguar, Merkur, Pontiac, Porsche, Range Rover, Saab, Saturn	7110	Cadillac, Chevrolet, Geo, GMC, Hummer, Oldsmobile, Pontiac, Saturn
7105	BMW, Range Rover	7111	Audi, Volkswagen
7106	Audi, Volkswagen	7112	Acura, Chevrolet, Chrysler, Ford, Geo, Honda, Hyundai, Infiniti, Isuzu, Lexus, Mazda, Mitsubishi, Nissan, Subaru, Suzuki, Toyota
7107	Jeep, Renault, Saab, Sterling, Volvo	7113	Acura, Chevrolet, Chrysler, Geo, Honda, Isuzu, Lexus, Mazda, Mitsubishi, Suzuki, Toyota
7108	Volkswagen	7114	Mercedes
7109	Buick, Cadillac, Chevrolet, Ford, International, Jaguar, Mercedes, Oldsmobile, Pontiac, Saturn	7115	Ford, Jaguar, Mazda
		7116	Toyota

Visit website www.ctatools.com for application details

7070 COOLING SYSTEM PRESSURE TESTER

Pinpoints external leaks caused by loose clamps or leaky hoses, connectors, water pumps or radiators. Diagnoses internal leaks caused by a blown head gasket or damaged block or head. Tests pressure on radiator and coolant bottle caps. Includes pump, 4 cooling system adapters & 2 dual-function cap adapters. Services most US & Asian & some European models.



7088 COOLANT SYSTEM FILLING KIT w/ UNIVERSAL ADAPTER

Refill and top off cooling systems quickly and easily during bleeding process. Filler Cone features brass flow valve, air bleeder line and built-in handles. Includes 4 adapters to fit most American, Japanese and Korean cars. #7082 Adapter also converts your Pressure Tester Adapters to Filling Adapters.



- | No. | Description |
|-------------|--|
| 7081 | Filling Cone |
| 7082 | Black Adapter – Ford, GM, Chrysler, Japanese (plus Pressure Tester Adapter applications) |
| 7083 | Red Adapter – Mitsubishi, Ford, Nissan, Mazda |
| 7084 | Blue Adapter – Honda, Toyota, Suzuki |
| 7085 | Orange Adapter – Hyundai, Kia |
| 7086 | 45° Elbow for angled Radiators |

7200 COOLANT & HEATER CORE FLUSH KIT

Flush 5-10 minutes at 15 PSI reverse flow. Uses air to blow out entire system, plus can check system pressure and stuck thermostats. Flush heater cores and free plugged cores. Includes 6' hose with quick disconnect, regulator assembly, 2 adapters, water nozzle with quick disconnect, 2 brass heater hose adapters, 7 hose pieces and hose clamps. All packet in plastic bucket.



A195 ANTI-FREEZE & COOLANT TESTER

Tests all ethylene glycol solutions with radiator hot or cold. Features easy-to-read dual scale for testing freezing point or boiling point of coolant, large rubber bulb & rubber extension hose.



7045 RADIATOR CAP PLIERS

For quick and safe removal of all standard radiator caps.



7400 ATF FILLING SYSTEM

9 liter (10 qt) tank unit dispenses fluid under pressure for fast, safe and clean refilling of ATF reservoirs on most makes & models. Built-in manual pump, with locking feature, adds air above the fluid level to prevent aeration. 1.5 meter (5') clear dispensing hose is removable and features spring protection. Levered ball valve controls flow and includes hang hook. Other tank features include 0 – 35 psi (0 – 2.5 bar) gauge, fill hole, double-handle for carrying, air-valve release and white hanger. Complete range of adapters are available as set or individually. CTA system is compatible with other brands.



ATF FILLING ADAPTERS

Use with CTA #7400 or other brands of filling tanks.

No. Application

- 7409** VW Passat & Tiguan after 2009
- 7410** Ford 1/8 NPT
- 7411** BMW, Honda, Nissan, etc.
- 7412** VW, Audi
- 7413** VW, Audi, Porsche
- 7414** VW, Audi, Mini 10 x 1.0
- 7415** Mercedes 722.9
- 7416** VW, Audi DSG 24 x 1.5
- 7417** VW, Audi CVT 22 x 1.5
- 7418** Volvo 5/16 x 24
- 7419** Toyota, Lexus 18 x 1.5



7405 8 PC. ADAPTER SET

Includes all adapters except #7409, 7418 & 7419.



7420 FORD ATF FILLER ADAPTER

Use with Suction Gun to fill or add fluid to the 5R55W Automatic Transmission on '03 & up Ford



8882 2 PC. HOSE PINCH-OFF TOOL SET

Pinch off fuel, vacuum and brake hydraulic lines up to 5/8" O.D. Knurled collar spins to open and close tool.



8800 HOSE PINCH-OFF PLIERS

Clamp hoses and vacuum lines with special swivel jaws that maintain a parallel clamp. Features built-in ratchet mechanism that locks handles in position. OAL: 10" (255mm)



8832 FLAT-BAND HOSE CLAMP PLIERS

Removes and installs newer style flat-band clamps. Use on hose assemblies found on Ford, GM and various imports. Features spring-loaded ratchet lock and vinyl grip handles. OAL: 9" (23cm)



8834 ANGLED HOSE CLAMP PLIERS

Removes and installs flat-type hose clamps in hard-to-reach areas. Features 45° jaws with ribbed design for extra strength, spring loaded ratchet lock and vinyl grip handles. OAL: 10" (25cm)



8810 HOSE REMOVER PLIERS

Remove Fuel, Vacuum or Heater Hoses from 1/4" to 3/4" (6mm to 19mm) diameter. Quickly and easily reaches into tight areas to access hose. Push pliers between part and hose end, squeeze handles to open pliers and pull away hose. Better than using hands or regular pliers. Features spring-loaded handles with vinyl grips. OAL: 9" (23cm)



3490 STEEL LINE STOPPERS

Seal steel lines found on Fuel, Brake, AC, Power Steering & Transmission Cooling lines, including Banjo lines. Prevents leaks and contamination. For use with all automotive fluids. Fits 3/8", 1/2" & 5/16", plus Banjo lines.



8815 4 PC. HEATER HOSE DISCONNECT TOOL SET

Fills the void in the connector to release the fastener in vehicles with quick-connect hose adapters. 4 sizes to service clips ranging from 5/8" to 1", including GM, Ford large and extra-large clips. 40 degree offset allows user to work around obstructions in tight spaces. Color-coded anodized aluminum design.



3475 8 PC. OFFSET DISCONNECT TOOL SET

For separating fittings on heater, A/C, fuel and cooler lines. Offset design allows for access in confined or obstructed areas. Spring-loaded for easy one-hand operation. Includes 6 sizes in standard design, plus two special 3/8" designs.



No.	Size	No.	Size
3480	5/16"	3484	3/4"
3481	3/8"	3485	7/8"
3482	1/2"	3486	3/8" – w/ notches
3483	5/8"	3487	3/8" – w/ extension



3477 3/16" (4.8MM) FUEL LINE DISCONNECT TOOL – GM 6.6L

Separate the hydrocarbon injection quick connect on 2010 & up diesel engines, including GMT900 C/K Silverado/Sierra and GMT610 G-van Express/Savana. Offset design for improved access and easy use.



3465 2 PC. FUEL LINE DISCONNECT TOOL SET

Removes stubborn fuel lines from high-tech cars and trucks. Two designs offer 90 degree and straight access with tapered openings ranging from 1/8" to 3/4". Lightweight aircraft grade aluminum allows for thin design to access tight areas.



BMW DISCONNECT TOOLS

Anodized aluminum design for strength and durability. Use tapered side of tool against the locking clip.

No. Applications

3466 Power Steering & Transmission Lines
'99 – '11 3 series and X5

3468 Fuel Lines
'06 – '11 3 series
'06 – '09 X3 series



3468

3466

3450 6 PC. FUEL LINE DISCONNECT TOOL SET

Disconnect fuel, transmission, oil cooler, and A/C lines. Tools are flexible injection-molded plastic and color-coded. Sizes: 5/16", 3/8", 1/2", 5/8", 3/4" and 7/8".



3460 2 PC. FUEL LINE DISCONNECT TOOL SET

Includes the two most popular sizes (5/16" & 3/8") from #3450.



A378 FUEL LINE DISCONNECT TOOL

5/16" & 3/8" sizes service connectors found on GM, Ford, Mazda and Chrysler.



A379 A/C & FUEL LINE DISCONNECT TOOL

3/4", 5/8", 1/2" & 3/8" sizes service connectors on Fords and Chryslers.



A396 OFFSET DISCONNECT TOOL - 3/8" & 5/16"

Removes the fuel line from center port of fuel sending unit.



A370 FORD QUICK DISCONNECT COUPLER TOOL

For use with push-lock connectors found on Ford transmission cooler lines and fuel injection systems.



A371 FORD CLUTCH DISCONNECT TOOL

Disconnects the hydraulic clutch line from the clutch slave cylinder.



3478 OIL LINE DISCONNECT TOOL - FORD 6.0L

Special openings and offset head allows the high-pressure oil rail supply line to be disconnected from the fuel rail when removing fuel injectors. Applications include 2003 & up F-series and Excursion with diesel engines. OAL: 6-1/2" / 16.5cm



A372 FORD OIL COOLER LINE DISCONNECT TOOL

Disconnects the oil cooler line without damaging the connector.



A373 GM HEATER LINE DISCONNECT TOOL

Releases the fitting that connects the heater hose to the engine block and thermostat housing.



A374 FORD/CHRYSLER HEATER HOSE DISCONNECT TOOL SET

Disconnects the heater hose from the heater core tube.



A375 FORD FUEL LINE COUPLING TOOL

Separates fuel lines by depressing retaining collar with fingers of tool.



A376 CHRYSLER FUEL LINE DISCONNECT TOOL

Releases fuel rail or quick connect fitting and helps installation of fuel lines.



A377 GM CLUTCH LINE DISCONNECT TOOL

Disconnects the clutch line from the slave cylinder on GM trucks & cars.



A381 GM OIL COOLER LINE DISCONNECT TOOL

Release the fitting found on the transmission/radiator oil cooler line.



3470 8 PC. DISCONNECT TOOL SET

For servicing Fuel, Transmission and Oil Cooler Lines. Includes A370, A372, A375 and A378, plus four color-coded anodized aluminum disconnect tools for 1/4", 5/16" and 3/8" Fuel Lines and 5/16" Oil Cooler Lines.



FAN CLUTCH WRENCHES

Use to remove and install Fan Clutch Assemblies when replacing Water Pumps or doing other Engine Services. Use two wrenches together: one for holding, the other for turning. 1/2" square drive built into most wrenches.

No.	Size	Size	Applications
A868	40mm	1-9/16"	Ford F-Series Truck, E-Series Van
A869	54 x 72mm	2-1/8" x 2-13/16"	Ford, Mercury, Lincoln
A871	68 x 76mm	2-11/16" x 3"	Dodge Pick-up, Van, Dakota
A872	36 x 48mm	1-7/8" x 1-7/16"	Ford, Dodge, GM, Jeep
A873	58 x 83mm	2-1/4" x 3-1/4"	Ford F-Series Truck, E-Series Van
A874	60mm	2-3/8"	GM Pick-ups & SUVs
A878	32mm	1-1/4"	BMW, Audi, VW
A887	22mm		GM, Ford, Dodge, Jeep
A888	50mm		GM, Ford, Dodge, Jeep



A870 2 PC. FORD FAN CLUTCH WRENCH SET

36mm and 58mm wrenches remove and install fan assemblies on 2.8, 2.9, 3.0, 4.0 and 4.9 liter Ford engines. For use with 1/2" square drive tools and torque wrench.



A877 6 PC. FAN CLUTCH WRENCH SET

Includes #A868, A869, A871, A872, A873 & A874 packed in blow mold case.



2850 UNIVERSAL PULLEY HOLDER, FAN CLUTCH & CAMSHAFT HOLDER

Allows removal and installation of the fan clutch while holding the camshaft pulley. Allows for pin widths from 40mm to 220mm. Includes 4 sets of taps: 6mm-10mm, 8mm-11mm, 10mm-12mm, 11mm-16mm, 21-1/2" (55cm) long handle with vinyl grip and set of knurled nuts, all packed in blow mold case.



2705 FAN BELT TIGHTENER

Simple tool makes belt tightening an easy, one-person job. Works on most alternators and other belt-driven units. Special curved design hooks around alternator to lock in position. Use with 1/2" drive tools.



A876 GM TIMING BELT WRENCH

46mm (1-13/16") wrench adjusts tension on timing belts on '82 & up GM 4 cylinder 1.8 & 2.0 engines. Use with 1/2" square drive tools.



A879 GM / DAEWOO TIMING BELT WRENCH

41mm wrench adjusts the tension of the timing belt, by rotating the waterpump. Fits Daewoo Lanos and Chevy Aveo 1.6 liter engines. Use with 1/2" square drive tools.



2105 CRANK STOPPER

4" long x 14mm threaded bolt screws into spark plug port to lock engine in place to allow removal and installation of timing chain, timing belt or harmonic balancer pulleys. Soft brass end protects piston.



2717 TENSIONER ADJUSTER SOCKET - TOYOTA

Special configuration with 6 internal slots to service Toyota since 2000. Use with 1/2" square or 7/8" hex drive tools.



ENGINE-EXTERNAL COMPONENTS

2765 TIMING BELT WRENCH SET – VW / AUDI

6 tools for locking pumps, cams and pulleys during belt tensioning or adjusting. Includes 3 Belt Tensioner Wrenches and 3 Belt Tensioner Lock Pins. Also available individually.



- 2766 Short Wrench
- 2767 Long Wrench/Short Offset
- 2768 Long Wrench/Long Offset
- 2769 3 Pc. Pin Set



2760 ADJUSTABLE TIMING BELT TENSIONER – VW / AUDI

Adjustable handle position allows the tension to be applied directly to the idler roller even with limited access. Pins on tool engage the offset center hub of the timing belt tensioner pulley, allowing a wrench to be placed on the pulley lock nut. Services VW / Audi 4 cylinder 1.5, 1.6, 1.7, 1.8, 1.9 and 2.0L engines. OAL: 7-1/2" / 19cm



2715 TENSION PULLEY SPANNER – MITSUBISHI / HYUNDAI / CHRYSLER

Adjusts timing belts having idler pulleys with pin holes. Pins in offset head of tool engage the pulley to rotate around the retaining bolt.



2780 GM THERMOSTAT WRENCH

Serves GM 3.1 & 3.4 liter V6 engines. '94 to current. 13 mm x 12 point wrench with special bends will easily reach bottom housing bolt.



2700 UNIVERSAL SERPENTINE BELT TOOL KIT

Releases the tension on belts with spring-loaded idler pulleys. 23" / 59cm long handle with 2 extension bars create multiple working angles. Includes five 6-point sockets (13mm, 14mm, 15mm, 16mm, 18mm), three Crow's Foot Wrenches (13mm, 14mm, 15mm) and 2 Male Square Sockets (3/8" & 1/2"). Handle and extension also feature 13mm & 15mm 12-point and 16mm 6-point openings.



A875 SERPENTINE BELT TOOL KIT

A must for removing and installing serpentine belts with spring-loaded idler pulleys. 23" long slender design provides proper reach and prevents damage. Includes 4 metric sockets (13mm, 15mm, 16mm and 18mm), plus 3/8" and 1/2" drives. Also includes 9" extension for longer reach and multiple angle work. Covers GM, Ford, Chrysler and Saturn.



2740 SERPENTINE BELT TOOL

Spring-loaded clamping jaw positions and routes serpentine belts in tight areas without the belt slipping out of the tool. Features long reach (26-1/2" / 67cm) and light-weight alloy steel construction.



STRETCH BELT INSTALLATION TOOLS

Quickly and easily install stretch belts found on many late model vehicles. These drive systems do not have a tensioner and require the proper installation tools to avoid damage. Two sizes to service smaller and larger pulleys.

No.	Type	Applications
2745	Small	Ford, Lincoln, Mercury, Mazda, Chevy, GMC, Hummer, Cadillac, Isuzu, Chrysler, Dodge
2747	Large	BMW, Volvo, Mercedes, Mazda



2745



2747

2070 7 PC. SENSOR & SENDING UNIT SOCKET SET

Full range of specialty sockets will service Oil Pressure Sending Units, Vacuum Switches and Oxygen Sensors. Heat-treated, black finish and packed in blow mold case.



2073 3 PC. OXYGEN SENSOR SOCKET SET

Includes 3 most popular 22mm sockets:
#2062, 2065 & 2069.



2060 COMBINATION VACUUM SWITCH/OXYGEN SENSOR SOCKET

Universal slotted socket will service all 7/8" (22mm) hex vacuum switches and oxygen sensors. Use with 3/8" square drive tools or 7/8" (22mm) wrench.



2065 OFFSET OXYGEN SENSOR WRENCH

Extended crow's foot design allows access to oxygen sensors that are located in the exhaust manifolds. Full slot accommodates connectors on heated oxygen sensors. 7/8" (22mm) hex with 3/8" square drive. 82mm long x 30mm high.



2069 OFFSET OXYGEN SENSOR WRENCH

Stubby crow's foot design with deeper socket. 7/8" (22mm) hex with double 1/2" square drive. 60mm long x 48mm high



2066 HEAVY DUTY OXYGEN SENSOR SOCKET

Thick rib built into middle of socket helps remove the most stubborn sensors. Slot design allows clearance of wire. 7/8" (22mm) hex opening with 1" hex or 1/2" square drive.



2062 NARROW SLOT OXYGEN SENSOR SOCKET

7/8" (22mm) hex socket with narrow slot for extra strength. Combination 3/8" square drive and 1" hex drive. Nickel plated.



2064 THIN-WALL OXYGEN SENSOR SOCKET

Removes and installs 22mm Oxygen Sensors that cannot be accessed with standard sockets. 1/2" square drive and 1" hex drive. OAL: 3-1/2" / 90mm



2067 17MM OXYGEN SENSOR WRENCH – LAND ROVER

Fits all Gems engine Land Rovers, including: Range Rover Classic '87 – '95, Range Rover 4.0/4.6 '95 – '98, Discover 1 '94 – '99, Defender '90, '94 – '97 and Defender 110 '93. 17mm hex with 3/8" square drive.



2068 OXYGEN SENSOR THREAD CHASER

Removes corrosion and straightens damaged threads in Oxygen Sensor holes. M18 x 1.5 size can also be used on same size Spark Plug threads. Use with 3/4" hex socket or 3/8" square drive tools.



2047 IPR SOCKET

Serves the Injector Pressure Regulator (IPR) on 6.0L Ford Diesels. Use with 3/8" drive tools.



2042 OIL PRESSURE SENDING UNIT SOCKET – 1" & 1-1/16"

3" long socket installs and removes Oil Pressure Switches up to 2-5/8" long found on some older GM and Chrysler vehicles. Use with 3/8" square drive or 1" hex tools.



2043 OIL PRESSURE SENDING UNIT SOCKET – 1-1/16"

2-1/2" (63mm) long socket removes and installs sending units. Two-step models will not work where this will. Use with 3/8" square drive tools.



ENGINE-EXTERNAL COMPONENTS

8083 22 PC. ALTERNATOR SERVICE KIT

Complete set of tools to remove and install press-on-type belt-drive Bosch and Denso Alternator Pulleys. Applications include VW, Audi, Seat, Mercedes, Renault, BMW, Ford, Fiat, Honda, Toyota, Porsche, etc. Components include Torx®, Triple-Square and Hex socket bits in standard and short lengths, an assortment of splined and hex reaction nuts and adapters and a 1/2" square drive bit adapter. All packed in blowmold case.



8088 BOSCH ALTERNATOR WRENCH

Two part splined wrench is required for removal and replacement of free-wheel drive pulleys found on Bosch Alternators 10mm x 12 point end locks alternator while 33-spline cylinder on shaft is inserted into pulley locking bolt. Applications include VW, Audi, BMW, Mercedes, Opel, Porsche, Renault and Ford. Use with 1/2" drive tools



8084 POWER STEERING PUMP / ALTERNATOR PULLEY REMOVER / INSTALLER KIT

Removes and installs press-on type belt driven accessory pulleys on pumps with 3/8"-16 threaded shafts. Interchangeable components allow service on almost all domestic makes, including GM Quad 4, GM 3.1L and Ford 4.6L engines. Impact quality tool, complete with instructions packed in blow mold case.



8080 POWER STEERING PUMP / ALTERNATOR PULLEY PULLER

Removes pressed-on 1 or 2 groove pulleys from alternators and power steering pumps without damage. Fits both large and small pulleys found on older domestic and import passenger cars. Features rigid, drop-forged jaws, a solid block body and a fine thread screw for easy pulling.



2750 WATER PUMP SOCKET - GM

Removes and replaces water pumps on '93 and up Cadillac 4.6L V8 Northstar and '95 - '99 Olds 4.0L V8. Use with 1/2" drive tools or breaker bar.



2757 WATER PUMP SPROCKET HOLDER - GM ECOTEC

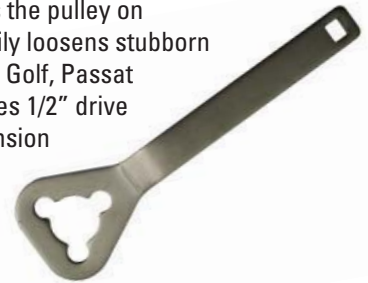
Holds the timing chain and gear when removing or installing waterpump, preventing loss of timing or engine damage. Anodized aluminum body with set of two bolts.



2755 WATER PUMP WRENCH - VW / AUDI

"Lollipop" wrench locks the pulley on the waterpump and easily loosens stubborn bolts found on VW Polo, Golf, Passat and Audi 80/A4. Includes 1/2" drive on handle to allow extension of the tool.

OAL: 10" / 25cm



3700 FUEL PUMP TOOL - SAAB

For removal of Fuel Pumps on most Saabs from '89 - '02, plus 9-5 up to '08. Fits into spaces on fuel pump screw cover and attaches to a 1/2" square drive tool to turn cover.



2029 UNIVERSAL CAMSHAFT BEARING TOOL

Removes and installs Camshaft Bearings on most car and truck engines. Includes driver bar with extension, nylon cone, 5 collet sets with two sets of rubber sleeves, expander assembly and washer.



2862 DUAL CAM CLAMP TOOL

Allows belt replacement by one person and prevents damage caused by mis-timing. Patented tooth design works with a wide range of cam gear sizes (4 – 6" / 101mm – 152mm) and configurations (up to 3" / 76mm apart). Use one on dual cam engines and two on quad cam engines. Features compact size for confined spaces of east/west engine compartments, large locking knobs and industrial-grade polymer construction.



2860 UNIVERSAL SPROCKET LOCKING DEVICE

Locks Dual Overhead Cam (DOHC) sprockets to allow proper belt and chain replacement. Includes large and small sets of rugged plastic wedges, that are locked with adjustable bar, to hold camshaft sprockets in place.



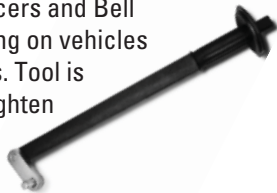
2855 UNIVERSAL CAMSHAFT PULLEY & CRANKSHAFT PULLEY HOLDER

Holds camshaft or diesel pump sprockets and gears for removal and tightening of retaining bolts. Includes 7 sets of interchangeable pins – 3.5, 4, 4.5, 5, 6, 7 and 10mm. Wrench swivels to adjust from 1-1/4" to 5" / 32 – 127mm and includes reinforced 1/2" square drive for use with ratchet or breaker bar.



8100 CRANKSHAFT BOLT REMOVER

Generates up to 600 ft. lbs. of force to service Timing Belts, Crankshaft Seals, Harmonic Balancers and Bell Housings. Saves time when working on vehicles with limited Crankshaft bolt access. Tool is bi-directional to both loosen and tighten bolts. Use with impact sockets. OAL: 24" / 61cm



2249 LONG-REACH HARMONIC BALANCER PULLEY INSTALLER

Used to install Harmonic Balancers on V8s and V6s on '04 - current Ford*, '08 - current GM** & '06 - current Chrysler/Dodge.*** Reduces risk of stripping threads inside the crank or breaking crank bolts.

* M12X1.5 **M16X2.0
***M14X1.5, M12X1.75



2236 HEAVY-DUTY HARMONIC BALANCER PULLER

Includes yoke, 7-1/2" / 19cm center screw, flat & pointed adapter tips and 5 sets of bolts: M8 x 1.25 x 80mm, M10 x 1.50 x 75mm, 3/8"-16 x 4", 3/8"-24 x 2" and 5/16"-18 x 2".



A815 HARMONIC BALANCER PULLER

Includes yoke, 6-1/2" / 165mm center screw, pointed adapter and 4 sets of bolts: 3/8" - 16 x 4", 3/8" - 24 x 2", 5/16" - 18 x 2", M8 x 1.25 x 80mm.



A814 CRANKSHAFT BALANCER PULLER ADAPTER SET - GM

Shoulder bolts prevent them from being installed too deeply to protect the crank sensor and the interrupter rings from damage. Works on '90 and up 3300 & 3800 V6 engines. For use with all flanged-type pullers. Includes spacer adapter to give forcing screw something to push against.



A810 HARMONIC BALANCER PULLER - GM/CHRYSLER/MITSUBISHI

Removes pulleys in tight engine compartments without removing the radiator. Services GM 2000 Generation III 4.8, 5.3, 5.7, 6.0 & 8.1L V8's, Cadillac 4.5, 4.6 & 4.9L V8's from '88, Chryslers from '90, including 2.0, 2.3 L-4's, plus 2.5, 2.7, 3.3, 3.5 & 3.8L V6's, plus Mitsubishi.



A813 HARMONIC BALANCER TOOL - CHRYSLER

Use with #A810 Puller Kit. 3 pins fit into the openings on harmonic balancers found on '90 & up 3.3L V6 vans, '94 & up 3.8L V6, '93-'97 3.3L & 3.5L V6 cars, '98 & up 2.7L, 3.2L & 3.5L V6 cars. Use with 1/2" ratchet or breaker bar.



2248 HARMONIC BALANCER INSTALLER

Installs harmonic balancer or drive pulleys that are pressed on the camshaft. Includes 12 adapters: 7/16-20, 1/2-20, 9/16-18, 5/8-18, 3/4-16, M10-1.5, M12-1.5, M12-1.75, M14-1.5, M14-2.0, M16-1.5, M16-2.0. Services GM, Ford, Chrysler, Nissan and others.



ENGINE-EXTERNAL COMPONENTS

2243 CAMSHAFT PULLEY HOLDER - SUBARU

Holds camshaft pulley on Subaru 2002 – 2005 Impreza w/ 2.0 Turbo and 2000 Forester L F4-2.5L SOHC. 1/2" square drive on end of handle.



2247 CRANKSHAFT HOLDING TOOL - VOLVO

Keeps the crankshaft from turning when changing the timing belt and/or crankshaft seal on '93 – '06 5 & 6 cylinder Volvos.



2242 CRANKSHAFT HOLDING TOOL - VOLVO

Keeps the crankshaft pulley from turning when changing the timing belt and/or crankshaft seal on 1985 – 1993 Volvo 240s. Designed to withstand the torque specs for the crank bolt.



2864 CAM LOCKING TOOL - VOLVO

For alignment of the cam and crankshafts. Also enables correct installation of the camshaft with the cam cover. Works on models 850, 960, S40, S70 & S90.



A812 HARMONIC BALANCER PULLEY TOOL – HONDA/ACURA

Offset 50mm wrench removes and installs the crank bolt on most Honda and Acura engines. Tool holds the harmonic damper pulley from rotating when removing the pulley bolt. Hole in center of tool allows use of a socket to loosen or tighten the pulley bolt. Use with a 1/2" breaker bar or ratchet.



2237 HARMONIC DAMPER PULLEY HOLDING TOOL – TOYOTA/LEXUS

Holds the crankshaft while tightening the crank bolt. Fits Toyota '96 & up 3.0, 3.3, 4.0 V6, 4.7 V8 plus '83 – '95 4 cyl. 22RE, '95 – '04 4 cyl., 2.4 2RZ & 2.7 3RZ, plus Lexus '90 & up 3.0 L6, 3.0, 3.3 V6 & 4.0, 4.3 & 4.7 V8.



2874 CAM CHAIN TENSIONER RETAINER – VW / AUDI

Holds the chain and tensioner in position during assembly and disassembly on many VW & Audi vehicles.



2865 TWIN CAMSHAFT HOLDER – VW / AUDI

Special bars lock camshafts relative to each other during timing belt and tensioner service or when removing crank bolts. Use with CTA #2872 TDC Lock Pin Tool. Applications: VW/Audi V6 w/ 2 valves per cylinder.



2867 TWIN CAMSHAFT HOLDER – VW / AUDI

Special bars lock camshafts relative to each other during timing belt and tensioner service or when removing crank bolts. Use with CTA #2872 TDC Lock Pin Tool. Applications: VW/Audi V6 2.7L & 2.8L w/ 5 valves per cylinder



2869 TWIN CAMSHAFT HOLDER – VW / AUDI

Special bars lock camshafts relative to each other during timing belt and tensioner service or when removing crank bolts. Use with CTA #2872 TDC Lock Pin Tool. Applications: VW/Audi V8 w/ 5 valves per cylinder



2872 TDC LOCK PIN TOOL – VW / AUDI

For use with #2865, 2867 & 2869 Camshaft Holders to lock the crankshaft at TDC.




2870 CAMSHAFT HOLDER KIT – AUDI 3.0L

Locks and holds camshafts when adjusting the left and right camshafts. Services Audi A4, A6, A8 2000 – 2007 w/ AVK engine. Includes holders, Lock Pin Tool, Socket & set of pins.



SPARK PLUG HOLE THREAD CHASERS

Harden steel tool removes carbon and corrosion and straightens damaged threads.

No.	Size	Drive	
2360	10mm x 14mm	5/8" Hex	
2361	14mm x 18mm	13/16" Hex	

2340 14MM SPARK PLUG CYLINDER HEAD RETHREADER KIT


Saves the cost of a new head by repairing damaged threads on aluminum heads. Includes 5/8" hex drive slim-design tap and one each of four sizes of solid steel inserts to replace damaged threads. All parts are available separately.

No.	Description
2341	14mm Tap & Reamer
2342	14mm Inserts – 3/8" Long (Set of 2)
2343	14mm Inserts – 7/16" Long (Set of 2)
2344	14mm Inserts – 1/2" Long (Set of 2)
2345	14mm Inserts – 3/4" Long (Set of 2)



98141 PRO-THREAD 14MM SPARK PLUG REPAIR KIT – TAPERED SEAT

Repairs 14mm tapered seat and gasketed spark plug ports in aluminum and cast iron heads. No drilling required. Includes tap, expanding tool & one each of 3 sizes of inserts.

No.	Contents	
98142	1/4" Insert – 5 each	
98143	3/8" Insert – 5 each	
98144	5/8" Insert – 5 each	
98147	2 each 1/4", 3/8", 5/8" Inserts	

PRO-THREAD SPARK PLUG REPAIR KITS – NON-TAPERED SEAT

Each kit includes tap, installation tool and inserts.

No.	Size	Insert Pack No.	Contents	Tap Only
38109	M10 – 1	28101	10 Pc. 1/2"	38110
38129	M12 – 1.25	28129	5 Pc. 1/2", 5 Pc. 3/4"	38130
38149	M14 – 1.25	28159	2 Pc. 3/8", 2 Pc. 1/2", 2 Pc. 3/4"	38150



2365 3-VALVE FORD TRITON SPARK PLUG EXTRACTOR KIT

Extracts broken-off spark plug sleeves in '04 – '08 4.6, 5.4 & 6.8 engines. Includes 8"/20cm high-speed steel tap, extractor, guide, washer, jam nut and rubber caps to prevent thread chips from entering cylinder bore. May be used with #2364.



2364 3-VALVE FORD TRITON SPARK PLUG PORCELAIN EXTRACTOR KIT

Extracts the broken porcelain from spark plug sleeves that broke during a regular service in '04 – '08 4.6, 5.4 & 6.8 engines. May be used with #2365 kit.



2367 2-VALVE FORD TRITON SPARK PLUG THREAD REPAIR KIT

Installs over-sized, alloy steel inserts to provide new threads on blown spark plugs from aluminum head. Repairs other brand inserts that fail. Applications include '96 – '03 4.6, 5.4 & 6.8, plus some later applications up to '08. Includes 8 inserts, drill, tap, guide & air gun accessory. Written instructions plus DVD also enclosed.



2366 REPLACEMENT INSERT – 14MM

For use with #2367



2368 3-VALVE FORD TRITON SPARK PLUG THREAD REPAIR KIT

Repairs stripped or damaged threads from the result of blown spark plugs or complications from removing a broken spark plug from aluminum head. Applications include '04 – '08 4.6, 5.4 & 6.8 engines. Includes 8 inserts, drill, tap, guide & installation tool.



2370 REPLACEMENT INSERT – 16MM

For use with #2368



2230 CAM-ACTION OVERHEAD VALVE SPRING COMPRESSOR

For removing spring keepers and springs without removing the cylinder head. Adjusts to fit springs on most cars.



2231 OVERHEAD VALVE SPRING COMPRESSOR

Removes valve spring keepers and springs without removing the cylinder head. Adjusts to fit springs on most cars. Sliding "T" handle for close clearances.



2239 THIN-PROFILE OVERHEAD VALVE SPRING COMPRESSOR

Works in the tightest spaces. Offset jaws grip the valve spring in parallel compression without removing the head.



2233 PARALLEL-LIFT VALVE SPRING COMPRESSOR

Services 1" to 2" (25mm to 51mm) spring diameters found on vehicles with L-head and valve-in-head engines. 10" (25cm) opening and 10" (25cm) depth. Will not bend valve stems. Includes offset and straight adjusting jaws.



2228 VALVE SPRING COMPRESSOR

Designed to work in areas of difficult access using direct action compressor lever for better visibility. Includes 2 valve spring adapters, fitting retainers up to 1" / 25mm and 1-3/16" / 30mm. Jaw openings of 1-3/8" to 5-5/8" / 35mm to 142mm, throat clearance of 5-7/8" / 150mm.



2232 RATCHET-HANDLE VALVE SPRING COMPRESSOR

Features automatic locking ratchet design and offset and straight adjustable jaws. Can be used with one hand. 9" (23cm) opening and 9" (23cm) depth.



2234 SMALL ENGINE VALVE SPRING COMPRESSOR

Fits most OHV and L-Head engines. Works on valves as short as 3-1/2" (89mm), and valve spring retainers down to 7/8" (22mm) diameter. 7" / 18cm opening & 5" / 13cm depth. Includes offset and straight adjustable jaws.



2235 UNIVERSAL VALVE SPRING COMPRESSOR KIT

Use with the cylinder head still on the engine and in the car, or with the cylinder head removed. Tool bolts to the head while the lever pivots from the base to compress the spring. Removal and installation of spring retaining keepers is made through the openings on both sides of the compression tube. Services most domestic and import car engines.



2112 VALVE SPRING COMPRESSOR KIT

Replaces valves springs and valve stem oil seals without the need to remove the cylinder head. Applications include BMW, VW, Audi, Hyundai, Toyota, Ford, Renault, Opel, Seat and Clio.



A198 LEVER-TYPE VALVE SPRING COMPRESSOR

Removes springs and valve guide seals without removing cylinder head. Use by removing rocker and fastening tool to stud with nut, then use an air-hold fitting and compressed air to hold valves up.



2205 VALVE STEM SEAL PLIERS

Hardened steel tips allow for easy seal removal. OAL: 10" (25cm)



2211 OVERHEAD VALVE KEEPER TOOL

Removes and replaces valve keepers on all gas and diesel overhead valve engines, including motorcycle, marine and aircraft engines. Tool is spring-loaded with built-in magnet to hold keepers.



2207 VALVE KEEPER REMOVER & INSTALLER SET

Removes and installs valve keepers found on Overhead Valve Engines with valve stems from 4.5 to 7.5mm and 5/16" to 3/8". Magnet in tool holds keepers. New, smaller size for servicing small Toyotas and Chrysler New World Engines.



2210 HYDRAULIC VALVE TAPPET REMOVER

Removes lifters that are not baked in or stuck without removing manifold. Heat-treated teeth hook under groove. OAL: 13" (33.5cm)



VALVE LAPPING TOOLS

For most cars. Features vacuum cup and hardwood handle. OAL: 8-1/2" / 216mm

No.	Diameter
2222	1-3/8" / 35mm
2224	3/4" / 19mm
2119	2 Pc. Set



2219 VALVE GRINDING & LAPPING COMPOUND

Includes 27grams each Coarse Compound for roughing and Fine Compound for finishing. Ideal for seating valves, mating gears, lapping injectors and honing knives. Mix compound with oil to obtain desired consistency. Use with CTA #2222 or #2224.



2218 SMALL ENGINE VALVE TAPPET ADJUSTING TOOL KIT

Serves most motorcycles, ATVs and ATCs. Includes (3) 12-point offset wrenches – 8, 9 and 10mm; and (3) knurled knob tools - 3 and 4mm square, plus slotted.

Applications: Honda & Suzuki - all ATCs and motorcycles with 4 cycle engines and screw type adjusters; Yamaha – SR185/250, XT/TT250, XS400, ST185.



2110 AIR HOLD FITTING SET

For fast overhead valve repairs without removing cylinder head. Fit 14 & 18mm spark plug holes. Accepts 1/4" air hose coupling.



2240 OIL SEAL REMOVER AND INSTALLER KIT

Extracts and installs a new wick-type seal without removing the engine or crankshaft. Includes Wick Seal Remover, Chinese Finger Wire Mesh Installer and Handle.



OIL PUMP PRIMERS

Primes the lubricating system of new and rebuilt engines, sending oil to the internal moving parts before the first start. Use with a 3/8" or 1/2" reversible drill.

No.	Application
2101	GM
2102	Ford - 5/16" hex drive
2103	Ford - 1/4" hex drive



VW/AUDI HEAD BOLT WRENCHES – 6-POINT RIBE

Service head bolts on many VWs and Audis. 1/2" square drive & 5-1/2" (14cm) long for deep-reach applications. Ribe wrenches will also service many other vehicle fasteners, including Trim, Cam Cover and Headlights.

No.	Description
9260	9mm
9262	10mm
9264	12mm
9266	14mm



9259 BMW HEAD BOLT WRENCH – E12 TORX®

Fits cylinder head bolts on M42 and M50 engines. 1/2" square drive with 6" (15cm) shaft.



TOYOTA HEAD BOLT WRENCHES – DOUBLE HEX

12-point wrenches fit Toyota engine head bolts. 8mm applications include Toyota, Lexus & Scion up to '06. 10mm applications include Toyota, Lexus & Scion '07 and up. 3 different bit wrench designs available.



No.	Description
9290	8mm x 1/2" Square Drive w/ long shaft
9292	10mm x 1/2" Square Drive w/ long shaft
9295	2 Pc. 1/2" Square Drive Set (9290 & 9292)
9286	8mm x 10mm Hex Bit
9288	8mm x 3/8" Square Drive w/ long shaft



9258 HEAD BOLT REMOVER – FORD 6.0L

Use with 3/4" drive tools to transmit high torque needed to loosen and tighten head bolts. Allows access to rear head bolts by eliminating the need to remove the cab from the chassis, prevents damage to rear heat shield and eliminates the need to remove the evaporator housing.



PLASTIGAGE®

Measures clearances of engine rod and main bearings without expensive micrometers. Helps choose the proper size replacement bearing inserts. Set of two sizes: (.001" - .003" & .002" - .006"/.025 - .08mm & .05 - .15mm) to cover all auto engines.



No.	Size	Pack Qty
2450	2 Pc. Set	One of each
2450x01	.001 - .003"	100 bulk packed
2450x02	.002 - .006"	100 bulk packed

ENGINE CYLINDER HONES

Resurface cylinder walls so new rings will seat. Eliminate minor cylinder wall imperfections. Adjustable diameter and tension settings. Flex shaft will fit variable speed drill. All with Medium Grit (220) stones.

No.	Range	Stone Length
2300	32 - 89mm	2" / 51mm
2325	51 - 127mm	3" / 76mm
2310	51- 178mm	4" / 102mm



ENGINE HONE REPLACEMENT STONES

Set of three stones, with cotter pins.

No.	Hone No.	Length	Grit
2305	2300/1130	2" / 51mm	Medium - 220
2315	2310	4" / 102mm	Medium - 220
2316	2310	4" / 102mm	Fine - 400
2317	2310	4" / 102mm	Coarse - 100
2318	2310/2325	3" / 76mm	Medium - 220
2319	2310/2325	3" / 76mm	Fine - 400
2320	2310/2325	3" / 76mm	Coarse - 100



FLEX-HONES

Removes cut, torn and folded metal to produce long wearing surface. For engine and brake cylinders, hydraulics, valve guides, lifter bores, diesel cylinders, cam bearings and more. All hones are 180 grit silicon carbide. Order by bore size.

No.	Diameter	No.	Diameter	No.	Diameter
2271	14mm	1144	29mm	1152	57mm
2268	16mm	1145	31.8mm	1153	60mm
2269	18mm	1146	35mm	1154	64mm
2270	19mm	1147	38mm	1155	67mm
1139	20mm	1148	41mm	1156	70mm
1140	22mm	1149	45mm	1157	73mm
1141	23.8mm	1150	51mm	1158	76mm
1142	25.4mm	1151	54mm		



STANDARD-DUTY ENGINE CYLINDER FLEX HONES

All hones are 180 grit silicon carbide.

2274	3-1/4" / 83mm
2276	3-1/2" / 89mm
2278	3-3/4" / 95mm
2280	4-1/8" / 105mm
2282	4-5/8" / 118mm



HEAVY-DUTY ENGINE CYLINDER FLEX HONES

All hones are 180 grit silicon carbide.

No.	Diameter	No.	Diameter
2284	3" / 76mm	2297	5" / 127mm
2286	3-1/4" / 83mm	2298	5-1/2" / 140mm
2288	3-1/2" / 89mm	2400	6" / 152mm
2290	3-3/4" / 95mm	2401	6-1/2" / 165mm
2292	4" / 101mm	2402	7" / 178mm
2294	4-1/4" / 108mm	2403	7-1/2" / 190mm
2296	4-1/2" / 114mm	2404	8" / 203mm



2212 HEAVY-DUTY RIDGE REAMER

Removes ridges from top of cylinder to achieve smooth wall surface on engine bores from 3 - 5" / 76 - 127mm. Works on canted and short stroke types. Tungsten carbide blade. Reamer can be set to change from one cylinder to another without readjusting.



2020 PISTON RING COMPRESSOR SET

Installs piston rings from 2-7/8 - 4-3/8" / 73-111mm. Includes ratcheting pliers and 6 sizes of 1-1/2" wide compressor bands. Works either parallel or perpendicular to cylinder block.



PISTON RING COMPRESSORS

Service cars, trucks and tractors. Features ratchet mechanism with square drive tool to adjust diameter, enlarged crimped edge to prevent compressor from entering cylinder and spring steel construction with double band design.



No.	Application	Depth	Range
2025	Passenger Cars	3-1/2" / 89mm	2-1/8 - 5" / 54 - 127mm
2027	Cars/Light Trucks	3-1/2" / 89mm	3-1/2 - 7" / 89 - 178mm
2026	Diesel Trucks & Tractors	6-1/2" / 165mm	3-1/2 - 7" / 89 - 178mm

2032 PISTON GROOVE CLEANER

Removes carbon from ring grooves on pistons from 2-1/2 to 5" / 65 to 127mm. Controls depth of cut and blade alignment. Slide flanges allow use on slotted pistons. Cutter wheel sizes: 1/16", 5/64", 3/32", 1/8" & 3/16".



2035 PISTON GROOVE CLEANER

Removes carbon from ring grooves on pistons from 2 - 5" / 51 - 127mm. Includes 2 cutter wheels: SAE - 1/16, 5/64, 3/32, 1/8, 5/32, 3/16 & 1/4" & Metric - 2, 2.5, 3, 4 & 4.5mm.



2028 PISTON RING INSTALLER

Installs and removes piston rings without breakage. Spring loaded. Range: 2-1/2 - 6-1/4" / 64 - 159mm.



2012 UNIVERSAL COMPRESSION TESTER KIT

Test compression from lawn mowers to trucks. Includes 8" (20cm) flex hose with 14 & 18mm threaded end, 10, 12 & 14mm long adapters, straight extension, offset and straight adapters with tapered cones, and gauge head with pressure release valve and threaded end. Gauge head is 2-1/2" (64mm) diameter with dual calibration (0-300 PSI / 0-21 kg/cm²).



2006 COMPRESSION TESTER - FLEX HOSE & QUICK DISCONNECT

15" flex hose allows access to all cylinders. Side release valve permits multiple readings without removing tester. Includes brass quick disconnect coupler and 14 & 18mm spark plug fittings. Gauge is 2-1/2" (64mm) diameter with dual calibration (0-300 PSI / 0-21 kg/cm²).



2004 COMPRESSION TESTER - FLEX HOSE

15" flex hose allows access to all cylinders. Side release valve permits multiple readings without removing tester. Includes 14 & 18mm spark plug fittings. Gauge is 2-1/2" (64mm) diameter with dual calibration (0-300 PSI / 0-21 kg/cm²).



2002 OFFSET COMPRESSION TESTER

Allows for quick and easy seating in all spark plug holes. 2-1/2" (64mm) diameter gauge with dual calibration (0-300 PSI / 0-21 kg/cm²).



2011 COMPRESSION TESTER ADAPTER - FORD TRITON

12mm & 16mm threaded male ends fit spark plug ports on Ford Triton engines. 8-1/2" / 22cm long flex hose for easy accessibility. Works with #2004, 2006 & 2012 testers.



2001 AUTOMATIC TRANSMISSION & ENGINE OIL PRESSURE TESTER

Serves most cars and trucks. Includes 2-1/2" (65mm) diameter gauge with dual calibration (0-300 PSI / 0-21kg/cm²), 6' / 1.8m hose and SAE & Metric brass adapters.



2013 FUEL PUMP VACUUM & PRESSURE TESTER

Checks for leaky, sticky or burnt valves, incorrect timing, accurate fuel pump vacuum and pressure and gas line leakage. Gauge is calibrated from 0-30 in Hg for Engine Vacuum readings and from 0-15 PSI (0.1 – 1.0kg/cm²) for Fuel Pump Pressure readings. Includes rubber hose and tapered brass fitting.



2010 CYLINDER LEAKAGE TESTER

Measures the ability of an engine cylinder to hold compressed air using shop air pressure and supplements a compression tester. Helps detect bad valves, worn rings, cracked cylinder walls and blown head gaskets. Includes precision regulator with combination M14 and M18 adapter, with a 26" hose assembly. Dual gauges allow monitoring of input air-line pressure.



2800 DIESEL COMPRESSION TEST KIT

Includes 13" / 33 cm flexible hose with 2-1/2" / 63mm diameter gauge with dual calibration (0-1,000 PSI / 0 - 70kg/cm²), side release valve for multiple readings without removing adapter, swivel end quick coupler and 3 adapters (2800x01, x02 & x03). Applications include GM 4.3L 6 cyl., 4.3L & 5.7L 8 cyl., Ford/Navistar 6.9L & 7.3L, Intl. Harvester 6.9L 10mm x 1.0 Glow Plugs, VW, Volvo, Audi, Dodge, Mercedes & Cummins 5.9L (24mm x 2.0) Injectors & GM 6.2L V8 10mm x 1.0 Glow Plugs.



DIESEL COMPRESSION ADAPTERS



Visit website www.ctatools.com for application details.

3300 FUEL INJECTION PRESSURE TESTER

Checks PFI and TBI systems on most vehicles. Includes 3-1/2" gauge with dual calibrations (5-145 PSI / 25-1,000 kPa), 2-1/2" gauge with dual calibrations (0-15 PSI and 0-1.00 kg/cm²) and complete range of adapters and hose assemblies.



3355 FUEL INJECTION TEST UPDATE KIT

Upgrades CTA #3300 with following adapters.

Hyundai, Kia, Mitsubishi Style

11mm Fuel Rail Adapter
15mm Fuel Rail Adapter
16mm Fuel Rail Adapter

Hair Pin Adapters

1/4" (6mm) Honda/Ford
5/16" (8mm) Toyota/Prius 90°

Schrader Type Adapters

.308 x 32 – 90° Ford/BMW
7/16 x 20 – 90° GM/Chrysler
8mm Volvo



3350 FUEL INJECTION PRESSURE TESTER

Serves most USA (except GM TBI) and Japanese systems. Contains both large and small Schrader type test fittings, inline and end of line hose fittings, 24" hose extension and 3-1/2" (90mm) gauge head with dual calibration (5-145 PSI / 25 – 1,000 kPa).



3420 FUEL INJECTION PRESSURE TESTER (BOSCH K-JETRONIC C.I.S.)

Detect bad fuel pumps, bad pressure regulators, leaking injectors and clogged fuel filters. Includes 3-1/2" (90mm) gauge with dual calibration (5-145 PSI / 25-1,000 kPa), hose assembly and brass adapters.



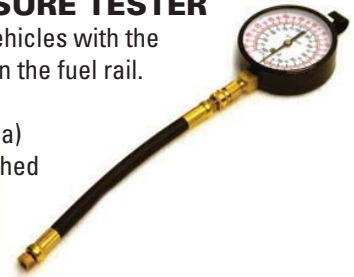
3425 FUEL INJECTION PRESSURE TESTER (NON- BOSCH & GM TBI)

Test Chrysler, Ford, GM (non-TBI), Japanese makes, Bosch AFC, MPC, Digijet / Digifant (non-CIS), plus others using Bendix-type fuel injection or a Schrader-type valve, including the small Schrader valve found on Fords. Includes 3-1/2" (90mm) gauge with dual calibration (5-145 PSI / 25-1,000 kPa), hose assembly and brass adapters



3445 FORD/BMW/VOLVO FUEL PRESSURE TESTER

Takes fuel pressure on vehicles with the Schrader-type test port on the fuel rail. Features 3-1/2" gauge (5 – 145 PSI / 25 – 1000 kPa) with quick couplers attached to both gauge and hose assembly to allow for additional adapter use.



3430 GM FUEL INJECTION TESTER

Test vehicles with Multi-port fuel injection. Features 3-1/2" (90mm) gauge with dual calibration (5-145 PSI / 25-1,000 kPa) and hose with quick disconnect.



3435 CHRYSLER FUEL INJECTION TESTER

Test vehicles with TBI and Multi-port fuel injection. Features 3-1/2" (90mm) gauge with dual calibration (5-145 PSI / 25-1,000 kPa) and 3 hose assemblies.



3440 FORD FUEL INJECTION TESTER

Test vehicles with Multi-port and TBI systems. Features 3-1/2" (90mm) gauge with dual calibration (5-145 PSI / 25-1,000 kPa) and 3 hose assemblies.



3360 FUEL INJECTION CLEANING CANISTER

Use with CTA's Fuel Injection sets and adapters. Canister is filled with cleaning fluid and attached to gauge head and adapters to enter fuel system and injectors. Includes 3-1/2" (90mm) gauge with dual calibration (5-145 PSI / 25-1,000 kPa) and 5' (1.5m) hose assembly with 1/8" NPT hose end to adapt to different fittings. Use with shop air.



3370 FUEL INJECTION CLEANING SET

Use with either cleaning hose or canister with hose assemblies and fittings for cleaning of injectors on most gasoline engines. Includes disconnect tools, hose clamps, tube nuts and application chart.



3145 GM SIDE TERMINAL BATTERY WRENCH – 5/16"

Reversible ratcheting box wrench design with insulated handle to prevent shock. OAL: 5" (127mm)



3147 EXTRA LONG BATTERY WRENCH – 5/16"

9-1/2" (24cm) long wrench offers extra reach for hard-to-access applications.



3149 SIDE TERMINAL BATTERY WRENCH – 10MM

6 point metric wrench services many imports and domestic (except GM) vehicles. Vinyl grip protects against electrical shock. OAL: 5-1/2" (140mm)



3130 HEAVY-DUTY BATTERY TERMINAL PULLER

Jaws are thick gauge steel with sharp ends and center screw to handle high torque requirements.



A330 BATTERY TERMINAL PULLER

For basic battery terminal removal jobs.



3125 BATTERY TERMINAL SPREADER & CLEANER

Sharp milled teeth for effective cleaning. Die-cast construction with vinyl grips. OAL: 7" (178mm)



3135 BATTERY NUT PLIERS

Offset head and sharp milled teeth will service any stubborn battery nut. OAL: 8" (203mm)



3110 BATTERY CARRIER

Jaws lock onto battery to grab, lift and carry. Works on both side-terminal and top-post batteries.



A339 BATTERY CARRIER STRAP

12" (30cm) vinyl strap fits all 6 and 12 volt top terminal batteries.



A340 2 PC. HEAVY-DUTY BATTERY CLAMP SET

Set of heavy-duty clamps allows easy repair of jumper cables. Solid copper connectors rated at 400 amps.



3150 FLUID TRANSFER TOOL

Resistant to automotive fluids, use to service batteries, master cylinders, etc. 6" long, rigid plastic nozzle.



3120 4-WAY BATTERY TERMINAL CLEANER

Removes corrosion from battery clamps and posts.



3115 BATTERY BRUSH

Cleans battery terminals and posts. Rugged plastic molded body.



A337 BATTERY BRUSH

Cleans battery terminals and posts. Metal body.



099133 24/Fishbowl

099135 12/Fishbowl



A338 SIDE TERMINAL BATTERY BRUSH

One side designed to clean recessed terminals, other side cleans cable bolts and connectors.



8700 RATCHETING CABLE CUTTER

Cuts copper and aluminum cables up to 32mm (1-1/4") diameter. Hardened steel blades ensure consistent cuts and long term durability. Rounded blade design minimizes cable distortion during cutting.



2369 SPARK PLUG SOCKET - 9/16" x 6 POINT

Service Ford Triton V8 & V10 Engines
2-1/2" long with 3/8" square drive.



2385 SPARK PLUG SOCKET - 9/16" x 6 POINT

Service Ford Triton V8 & V10 Engines. 6" long with swivel extension and 3/8" square drive.



2390 SPARK PLUG SOCKET - 9/16" x 6 POINT

Service Ford Triton V8 & V10 Engines.
10" long with 3/8" square drive.



2376 SPARK PLUG SOCKET - 14MM x 12 POINT

Thin-wall socket services BMW - '07 & up 335, 535 3.0L.
2-1/2" long with 3/8" square drive.



2375 SPARK PLUG SOCKET - 5/8" x 6 POINT

5" long with 3/8" square drive and 3/4" hex drive.



2380 SPARK PLUG SOCKET - 5/8" x 6 POINT

Service Toyota hemi-style plugs, plus marine, small engine and specialty motors. 10" long with 3/8" square drive.



T-HANDLE SPARK PLUG SOCKETS

Swivel head allows work in the tightest areas.

No.	Size
A350	5/8"
A355	13/16"



3055 VW / AUDI SPARK PLUG CABLE TOOL

For vehicles with steel spark plug boots. Tool engages the ears of the boot shield to remove and install. Saves wires from damage and saves time (no need to remove the intake manifold). Extra-long shaft for deep reach and T-handle for pulling power.
OAL: 14" (35cm)



3052 SPARK PLUG WIRE BOOT PLIERS

Removes spark plug wires safely. Handles and jaws are insulated and small indentations in the jaws allow gripping even a bare terminal with engine running. OAL: 8" (20cm)



3054 LONG-JAW OFFSET SPARK PLUG PLIERS

3" / 76mm jaw for hard to reach spark plug boots. Jaws are also ribbed for extra strength and vinyl coated for protection.
OAL: 11" (28cm)



3064 RELAY PLIERS - STRAIGHT JAWS

For safe installation and removal of relays. Nylon handles are spring loaded. Services many USA, Asian and European makes.



3066 RELAY PLIERS - 60° JAWS

For safe installation and removal of relays. Nylon handles are spring loaded. Services many USA, Asian and European makes.



3060 BULB & FUSE PLIERS

Remove and install hard to reach bulbs and fuses, including small instrument cluster bulbs, xenon, halogen and filament bulbs. Better than screwdrivers or fingers. Plastic body with cushioned inserts embedded in tips protect bulbs.



A365 HARNESS CONNECTOR RELEASE TOOL SET

Opens most plastic multiple-wire connectors by accessing connector latches from either direction.



2820 GLOW PLUG REMOVAL TOOL

Removes damaged or stuck glow plugs in diesel engines without removing cylinder head. Includes 10mm & 12mm split nuts and 3 spacers. Services 6.9 & 7.3L Ford and 6.2 & 6.4L GM, plus many agricultural and construction diesel applications.



3575 FORD IGNITION MODULE WRENCH

25° offset ratcheting dual-end wrench containing thin-wall 7/32" (5.5mm) hex socket and T20 Torx® bit to service Ford Ignition Modules without removal of or tampering with the distributor.



9578 GM IGNITION SWITCH SOCKET - E-4 TORX®

Extra deep socket for use on some GM ignition switches. 1/4" drive.



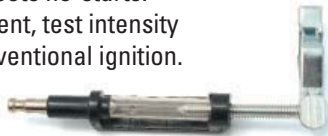
3018 SPARK PLUG WIRE TESTER

Tests for the presence of spark without risk of shock and without damaging wires. Identifies badly fouled spark plugs. Includes 48" (122cm) lead, hooded alligator clip and inductive tester with LED.



3020 UNIVERSAL IGNITION SPARK TESTER

Quickly and safely troubleshoots no-starts. See and hear if spark is present, test intensity or test spark timing with conventional ignition.



3029 CIRCUIT TESTERS WITH 12' WIRE

Features retractable wire, sharp, plated probe, high impact body, spring strain relief and heavy duty ground clip with insulator. Great for automotive, industrial, agricultural, marine, fleet, aviation and snowmobiles. Bulb is replaceable (GE # 1889).



3023 HEAVY-DUTY LOW VOLT CIRCUIT TESTER

For 6 & 12 volt systems. Features heavy duty ground clip and insulator, 5' / 1.5m rubber wire with spring supported strain relief and extra thick Lexan body.



3024 LOW VOLT CIRCUIT TESTER

Tests for shorts, grounds, open circuits, broken wires and bad connections in 6 & 12 volt systems. Features 42" / 107cm long wire, impact resistant body and sharp probe.



3022 HIGH & LOW VOLTAGE CIRCUIT TESTER

Tests high voltage in spark plugs, plug wires and distributor caps. Test 6 & 12 volt systems for shorts, grounds and open circuits with power on. Features 42" / 107cm long wire, impact resistant body and sharp probe.



3026 CONTINUITY TESTER

Test all circuits with POWER OFF. Ideal for testing fuses, grounds, shorts, contacts, diodes and all circuit components. Uses one AA battery (not included). Features 42" / 107cm long wire, impact resistant body and sharp probe.



3031 COMPUTER-SAFE AUTO LOGIC PROBE

High impedance tester protects computer circuitry, drawing less than 7 milliamps. Dual color LED indicates red for power (high) and green for ground (low). Services 6, 12 and 24 volt systems. Features insulated probe 6' / 1.8m long heavy duty wire, 18 gauge dual leads with battery clips, high-impact plastic body and spring-strain relief.



3025 COMPUTER-SAFE CIRCUIT TESTER

Safely tests standard primary automotive circuits and onboard computer controlled electrical systems (from 3-15 volts) without damaging the micro-processor. Includes bulb to indicate polarity. Supplied with 42" / 107cm ground wire.



3032 12V & 42V HYBRID CAR CIRCUIT TESTER

Compatible with standard 12V systems plus new 42V systems found on Hybrid cars. Also checks high volt diesel injector circuits found on Ford 6.0L, 6.4L and others. Safe for low current circuits as tester only draws 3 milliamps at 12V. Automatic volt identification: Blue for 12V, Red for 42V. Features 2 bright LEDs, crystal clear handle for 360° visibility, 3 meter (10') heavy-duty cable with hooded alligator clip and high-impact body with spring-strain relief.



3006 VOLTAGE TESTER

Checks voltage on any electrical component or connection, including total battery voltage in DC systems up to 16 volts. Large case with easy-to-read scale, 36" / 91cm leads and heavy-duty clamp and probe.



A300 14-FUNCTION ANALOG MULTI-TESTER

For basic troubleshooting of cars, appliances, home wiring and hobby electronics. Includes 22" (56cm) leads, mirror scale and one AA Battery.

Functions: DC Amps – 0.5mA / 50mA / 500mA
 DC Volts – 10V / 50V / 250V / 1000V
 AC Volts – 10V / 50V / 250V / 1000V
 Resistance – 10 / 100 / 1K Ohms



A303 20-FUNCTION DIGITAL MULTI-TESTER

Handles a wide range of applications with great accuracy. Includes 48" / 122cm

leads, K-type Thermocouple, one 9V battery.

Functions: DC Amps – 2000u / 20mA / 200mA / 10A
 DC Volts – 200mV / 2000mV / 20V / 200V / 1000V
 AC Volts – 200V / 750V
 Resistance – 200 / 2000 / 20K / 200K / 2000K Ohms
 Diode Check / Temperature / hFE / NPN-PNP



A305 17-FUNCTION DIGITAL ENGINE ANALYZER & MULTI-TESTER

For basic Automotive Diagnostic and Electrical Testing. Includes 48" / 122cm leads, one 9V battery and instructions.

Functions: Amps – 10A
 DC Volts – 2V / 20V / 200V
 Resistance – 200 / 20K / 200K / 20M Ohms
 Dwell – 4 / 5 / 6 / 8 Cylinders
 Tacho – 4 / 5 / 6 / 8 Cylinders
 Diode Check



3401 8 PC. ELECTRONIC FUEL INJECTION TEST KIT

6 EFI testers check if individual injectors are getting proper voltage or for no-start conditions. Also includes 2 Idle Air Control testers

No.	Applications
3405	Bosch
3410	GM TBI
3411	Ford TBI
3412	GM PFI
3413	GEO TBI
3414	GM Vortec SCPI



3012 REMOTE CONTROL STARTER SWITCH

Controls any engine with solenoid starter switch when making adjustments and repairs. 3' / 91cm leads, with hooded clamps.



3002 COMPUTER MEMORY SAVER

Saves the memory of the on-board vehicle computer when the battery is disconnected. Plugs into cigarette lighter. Use with 9V alkaline battery (not included).



3028 TEST LEADS

Two 36" (91cm) jumper leads of 16 gauge stranded wire in heavy insulation for all-purpose applications.



3280 IGNITION FILE

Long, thin blade for precision filing of points and other small objects. OAL: 5-1/4" (13cm)



SPARK PLUG & FEELER GAUGES

3235 SPARK PLUG GAPPER

Ramp gauge measures gaps from .020 to .100" (.50 to 2.5mm).



099500

099500 25 Pc. Assortment
3235B Bulk Pack 25/Bag

WIRE-TYPE SPARK PLUG GAUGES

Accurately measure spark plug gaps.

No. **Wire** **Sizes**

3238 9 .025, .030, .035, .040, .044, .045, .050, .055, .060"

A326 6 .025, .030, .034, .035, .040, .045"

A328 6 .040, .044, .045, .050, .060, .080"



A327 WIRE-TYPE SPARK PLUG GAUGE

Accurately measure spark plug gaps.

Sizes: .031, .035, .041, .043, .045, .050, .060"



A315 9-BLADE STANDARD FEELER GAUGE

3" straight blades - .002, .003, .004, .006, .008, .012, .013, .020, .025", plus steel ruler. Metric markings included.



A316 15-BLADE STANDARD FEELER GAUGE

3" straight blades - .002, .003, .004, .005, .006, .008, .011, .012, .013, .014, .016, .018, .020, .022, .025", plus steel ruler. Metric markings included.



A317 26-BLADE STANDARD FEELER GAUGE

3" straight blades - .0015, .002, .0025, .003 through .025" by thousandths. Metric markings included.



A318 32-BLADE STANDARD FEELER GAUGE

4" straight blades - .0015, .002, .0025, .003 through .026" and .028, .030, .032, .035 and .010" brass blade. Metric markings included.



A312 15-BLADE METRIC FEELER GAUGE

3" straight blades - .06, .07, .08, .10, .15, .20, .25, .30, .35, .40, .45, .50, .55, .60, .70mm.



A314 25-BLADE METRIC FEELER GAUGE

3" straight blades - .04, .05, .06, .07, .08, .09, .10, .15, .20, .25, .30, .35, .40, .45, .50, .55, .60, .65, .70, .75, .80, .85, .90, .95, 1.00mm.



A319 COMBINATION TUNE-UP FEELER GAUGE

6 brass blades - .006, .008, .010, .012, .014, .016"
 12 steel blades - .010, .012, .015, .016, .017, .018, .019, .020, .022, .024, .025, .026"
 6 wire blades - .025, .030, .034, .035, .040, .045"



A310 12-BLADE OFFSET FEELER GAUGE

.008, .010, .012, .013, .014, .015, .016, .018, .019, .020, .025, .026". Metric markings included. Offset blades for easy insertion on valve tappets and other difficult access applications.



A309 16-BLADE OFFSET FEELER GAUGE

.005 through .020" by thousandths. Metric markings included. Offset blades for easy insertion on valve tappets and other difficult access applications.



A308 OFFSET VALVE TAPPET GAUGE SET

Speeds valve lash adjustment. Install the proper blades for intake and exhaust settings. Offset blades for easy insertion. Metric markings included. 11 sizes from .004" to .014".



A307 22-BLADE GO-NO-GO FEELER GAUGE

3-1/2" step-ground blades allow for precise measurements, on clearances from .004 to .027" / .10 to .69mm.



Sizes:

In./In.	In./In.	In./In.	In./In.
.004 / .006	.010 / .012	.016 / .018	.021 / .023
.005 / .007	.011 / .013	.017 / .019	.022 / .024
.006 / .008	.012 / .014	.018 / .020	.023 / .025
.007 / .009	.013 / .015	.019 / .021	.024 / .026
.008 / .010	.014 / .016	.020 / .022	.025 / .027
.009 / .011	.015 / .017		

A306 TUNE-UP FEELER GAUGE

9 straight blades - .002, .003, .004, .006, .008, .012, .013, .020, .025,
 5 1" blades - .025, .030, .035, .040, .044".



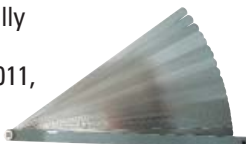
A322 17-BLADE MINI FEELER GAUGE

1-1/2" blades - .010, .012, .013, .015, .016, .017, .018, .019, .020, .022, .024, .025, .026, .028, .030, .032, .035". Metric markings included.



A311 25-BLADE EXTRA LONG FEELER GAUGE

For long reach applications, especially diesel. 12" blades - .0015, .002, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .025, .027, .030, .040".



BRAKE & WHEEL

7010 VACUUM BRAKE BLEEDER

Removes fluid through the bleeder nipple with shop air. 1 liter capacity, 1 meter (39") long tube with universal adapter, gun with locking trigger and quick-connect.



7015 PRESSURE BRAKE BLEEDER

Creates pressure to push brake fluid through the system. 3 liter capacity tank with pressure release valve, filling hole with screw cap, 0 – 70 PSI gauge and 1 meter (39") hose with quick-disconnect coupler.



MASTER CYLINDER ADAPTER KITS

For use with CTA #7015. Adapts to other brands with special quick-coupler. All adapters available individually.

7020 11 PC. ADAPTER KIT Includes:

No.	Applications
7022	Japanese
7023	GM / Chrysler
7024	GM / Chrysler
7025	Nissan Commercial
7026	BMW / Audi
7027	GM / Chrysler
7028	European
7029	European – VW, Volvo, Saab, Porsche, Renault, Alfa, Audi, BMW,
7030	Honda Accord
7031	Nissan, Mitsubishi, Subaru
7043	Quick-Coupler Adapter



7021 10 PC. ADAPTER KIT Includes:

No.	Applications
7032	Honda
7033	Honda
7034	European
7035	Ford
7036	Diahatu
7037	Mitsubishi
7038	Nissan
7039	Nissan Altima
7040	Ford Escape
7043	Quick-Coupler Adapter



Additional Adapters not included in kits:

No.	Applications
7041	Toyota Lexus
7042	3-1/2" Round Universal



7042

7041

Visit website for details on individual adapters.

7000 BRAKE BLEEDER & VACUUM TEST KIT

Bleeds brakes, tests Vacuum Gauges, transfers fluid and more. 360° rotating gauge head displays inches Hg and kpa. Complete range of adapters and hoses included.



1238 ONE MAN BRAKE BLEEDER HOSE

Check valve keeps air from flowing back into caliper or wheel cylinder when brake pedal is released, eliminating the need for a helper. 2' long / 61cm clear hose with spring clamp.



1250 ONE MAN BRAKE BLEEDER KIT

Services calipers, wheel cylinders and master cylinders. Includes fluid collection bottle with magnet, set of hoses and special tapered fittings.



BRAKE BLEEDER WRENCHES

Loosens bleeder screws to allow bleeding of air from brake cylinders. Forged, offset design. OAL: 9" (23cm)

No.	Size
A141	1/4 x 3/8"
A143	5/16 x 3/8"
A145	8 x 10mm



BRAKE BLEEDER SCREW REPAIR KITS

Repairs frozen or broken bleeder screws, eliminating the need to replace the caliper or wheel cylinder. Use with drill and tap. Two sizes fit all applications.

No.	Bleeder Screw Sizes
1230	1/4, 5/16", 7 & 8mm
1235	3/8, 7/16" & 10mm



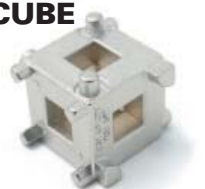
1465 DISC BRAKE PAD SPREADER

Helps install pads by compressing inner pad and resetting caliper piston.



1455 DISC BRAKE PISTON CUBE

For relining rear disc brakes by rotating pistons back into brake calipers when replacing pads. 5 drive pin configurations fit most applications. Use with 3/8" drive tools.



1462 REAR DISC BRAKE PISTON WIND-BACK TOOL KIT

For relining rear disc brake calipers with screw-type parking brake mechanisms. 15 adapters fit USA, European & Asian cars with 4-wheel discs. Includes right and left-hand helix bolts.



BRAKE CALIPER BOLT SOCKETS

2-piece socket design. Use with 3/8" drive tools.

No.	Size
1470	T40 Torx (BMW, Dodge, Ford, VW)
1471	T45 Torx (Ford)
1472	T50 Torx (GM, Ford)
1473	T55 Torx (GM)
1474	T60 Torx (GM)
1476	3/8" Hex (GM)
1477	7mm Hex (Audi, Ford, Jeep, VW, Volvo)
1478	8mm Hex (GM, Ford)
1489	9mm Hex (Ford/Mazda)
1479	10mm Hex (GM)



1485 9 PC. BRAKE CALIPER SOCKET SET

Includes: 1/4, 3/8", 7, 8, 10mm hex and T40, T45, T50, T60 Torx®. All 3/8" drive, T60 is 1/2" drive.



BRAKE CYLINDER HONES

Removes deposits and corrosion in brake cylinders. Use with electric drill.

No.	Type	Length	Diameter Range
1110	Standard	22mm	19 - 64mm
1120	Small Car	22mm	13 - 57mm
1130	Disc Brake	19mm	19 - 64mm



REPLACEMENT STONES FOR HONES

Includes cotter pins. Will also fit other brands.

No.	Qty	Length	Grit
1115	3	22mm	Medium
1116	3	22mm	Coarse
1117	3	22mm	Fine
1125	2	22mm	Medium
1135	3	19mm	Fine



FLEX HONES® FOR ROTORS

Reduces brake noise caused by spiral grooves on the braking surface. Ideal for new or re-turned rotors and flywheels. Use at low speed only (500 – 600 RPM).



No.	Grit
1170	Coarse
1172	Medium
1174	Fine

1440 BRAKE ROTOR & DRUM REMOVAL TOOLS

Services European and Japanese cars with 10mm threaded holes in rotors and drums. Turn by hand with knob or by wrench with hex shaft. Avoids damages to rotors with magnetic ABS sensors and sealed wheel bearings.



1488 HONDA/ACURA BRAKE DRUM & ROTOR TOOL

No. 3 Phillips socket driver works on high-torque applications. Use with 3/8" drive tools.



1410 BRAKE SPRING COMPRESSOR

Removes and replaces brake shoe hold-down springs. OAL: 6" / 15cm



BRAKE SPRING PLIERS

Removes and installs shoe return springs on most drum brakes.

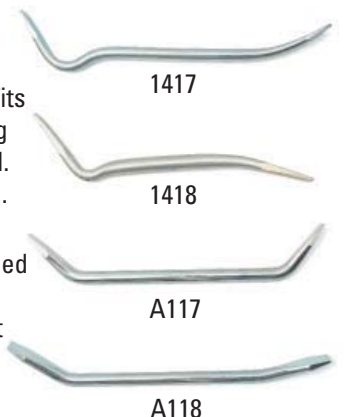
No.	Description
1415	Heavy-Duty
A115	Standard



BRAKE ADJUSTERS

Adjusts clearance between brake drum and brake shoe. Fits through the slot in the backing plate and turns the star wheel. Tools vary by angle and width.

No.	Slot Sizes
1417	5/8" Flat x 5/8" Beveled
1418	1/2" Flat x 1/2" Flat
A117	7/16" Flat x 7/16" Flat
A118	3/8" Flat x 3/8" Flat



BRAKE & WHEEL

THIN-WALL IMPACT SOCKETS

Chrome Moly sockets are color-coded with anodized finish. Protective plastic sleeves prevent scratching of wheels and lug nuts. Internal magnetic inserts are removable to service longer bolts. All 1/2" drive.

No.	Size
A173	13/16"
A174	7/8"
A175	1"
A176	1-1/16"
A177	17mm
A178	19mm
A179	21mm
A159	7 Pc. Set



A159

THIN-WALL IMPACT FLIP SOCKETS

For servicing recessed wheel nuts. 1/2" drive in center allows socket to "flip" from one size to another. Available as "thin-wall" or "extra thin-wall". OAL: 3" / 76mm

No.	Size	Style
A162	3/4" x 13/16"	Thin-Wall
A164	19mm x 21mm	Thin-Wall
A166	3/4" x 13/16"	Extra Thin-Wall
A168	19mm x 21mm	Extra Thin-Wall



LUG NUT REMOVER SOCKETS

Available individually or in sets. Features patented reverse tapered thread to remove stripped lug nuts or lug nuts with missing keys. Use with 1/2" drive impact wrench.

No.	Description
A146	3/4"
A147	13/16"
A148	1"
A149	1-1/8"
A154	4 Pc. Set
A155	2 Pc. Set – 13/16" & 1"
A157	3 Pc. Set – 13/16", 1" & 1-1/8"



A146

A147

A148

A149



A154

4710 10-POINT TUNER LUG NUT SOCKET

5" / 125mm long with 1/2" square drive



WHEEL STUD CLEANING BRUSHES

For quickly cleaning debris and rust from wheel studs when changing tires. Two sizes to service different diameter studs. Removable cap for using male brush end.

No.	Diameter
4800	7/16"
4810	9/16"
4815	2 Pc. Set



4900 4 PC. INNER BUDD NUT & WHEEL STUD REMOVER SET

Patented internal tapered reverse threads lock onto damaged stud or nut and easily pulls off using impact wrench. Wheel Stud Removers for 5/8" & 3/4" sizes are 3/4" hex drive. Budd Nut Removers for Left & Right Hand Threads are 1-1/8" hex drive.



AXLE NUT SOCKETS

For removing and installing front hub/axle nuts. All with 1/2" drive.

No.	Size	Point
A427	24mm	6
A417	27mm	6
A428	29mm	6
A420	30mm	6
A421	30mm	12
A422	32mm	6
A423	32mm	12
A418	33mm	6
A424	34mm	6
A431	34mm	12
A429	35mm	6
A425	36mm	6
A432	36mm	12
A419	38mm	6
A426	39mm	12
4145	43mm	6
4229	9 Pc. Set (29, 30, 32, 33, 34, 35, 36, 38mm x 6 pt & 30mm x 12 pt)	4229



WHEEL BEARING LOCKNUT SOCKETS

For removing and installing rounded or hex nuts. Use with 1/2" drive tools.

No.	Size	Applications
4180	2-1/2" Round	'95-'01 Ford F series, full size Broncos w/Automatic Locking Hubs
4182	2-3/4" Round	3/4 & 1 Ton Ford F250, F350 & F550 Trucks w/ Automatic Locking Hubs
4184	2-3/8" Hex	'84-'92 Ford Rangers & Bronco II's w/ Automatic Locking Hubs
4186	2-9/16" Round	'90-'93 Dodge Trucks w/ Dana 60 Manual Hubs
4188	2-3/8" Round	'90-up Ford Rangers, Bronco II's & Explorers w/Automatic Locking Hubs
4190	55mm Hex	Toyota FJ, LN & RN models w/ Front Adjusting Nuts
4192	2-1/2" Hex	Rear Axle & Front Axle applications on Light-Duty Trucks



Visit website www.ctatools.com for application details.



4135

WHEEL BEARING LOCKNUT SOCKETS

Varying lug designs fit the locknuts on many vehicles. Use with 1/2" drive tools.



4140



4150



4155



4160



4165



4166



4170



4175



4177

No.	OAL	Inside Depth	I.D.	O.D.	Applications
4135	3-1/16"	2-1/2"	2-1/4"	2-5/8"	'81-'97 Ford F150 & Bronco with Dana 44 outer locking nut
4140	1-9/16"	1"	2-3/32"	3-5/32"	'95-up 4WD Tacomas, '96-up 4WD T100 and 4Runners, all w/ lockout hubs
4150	3-3/16"	2-5/8"	2-1/16"	2-5/8"	'93-up Ford Ranger, Bronco II & Explorer w/ manual hubs '95-up Ford F-series 1/2, 3/4 & 1 ton trucks & full size Broncos w/ manual hubs '59-'85 Ford F-series 1/2 & 3/4 ton truck & full size Bronco '60-'90 GM 1/2 ton truck & full size Blazer & Jimmy '69-'72 International 1/2 ton trucks '69-'89 Dodge 1/2 ton trucks w/ manual hubs
4155	3-1/16"	2-1/2"	2-1/4"	2-5/8"	'78-'84 Ford F-series Heavy-Duty 3/4 & 1 ton 4WD trucks '73-'81 GM 3/4 & 1 ton 4WD trucks
4160	3-11/32"	2-3/4"	2-1/16"	2-3/8"	'84-'92 Ford Ranger & Bronco II w/ manual hubs. '86-'95 Ford F-series 1/2 ton truck and full-size Bronco w/ Dana 44 front axle '90-'93 Dodge trucks w/ Dana automatic hubs
4165	3-5/32"	2-3/4"	2-5/16"	3"	'85-'95 Ford F-series Heavy-Duty 3/4 & 1 ton Dana 50 IFS or Dana 60 front axle '85-'95 Ford F-series 1/2 ton truck & full size Bronco w/ Dana 28 front axle '82-'90 GM Heavy-Duty 3/4 & 1 ton trucks
4166	3-17/32"	2-3/4"	1"	2-3/4"	'03 & up Ford F250, F350 & F450 Super Duty trucks w/ 10-1/2" rear axle
4170	3-1/4"	2-5/8"	1-15/16"	2-1/4"	'88-up Isuzu Trooper, Rodeo, Amigo & pick-ups '89-up Honda Passport & Jeep J20 pick-ups w/ Dana 60 axle
4175	3-17/32"	2-3/4"	2-1/4"	2-3/4"	'85-up Ford F250 & F350 w/ Dana 80 rear axle, '87-up Ford E350 w/ Dana 80 rear axle, '88-up Ford F super duty w/ Dana rear axle & 10-1/4" ring gear
4177	2-7/8"	2-3/32"	1-1/8"	2-5/8"	'46 & up Chevy & GMC 5,200 & 7,200 lb. axles

Visit website www.ctatools.com for application details.

STEERING & SUSPENSION

1500 STEERING WHEEL & LOCK PLATE SERVICE KIT

Services most steering wheels, including telescopic tilt columns. Includes 4 sets of cap screws, two yokes, metric & SAE lock plate adapters and washers.



1515 HEAVY DUTY STEERING WHEEL PULLER

Includes 5 sets of side bolts: 5/16" - 18, 5/16" - 24, 3/8" - 16, 1/4" - 28 & 8mm - 1.25, plus yoke and center screw with pointed / removable adapter.



1512 STEERING WHEEL PULLER

Includes 3 sets of side bolts: 5/16" - 18, 5/16" - 24 and 3/8" - 16, plus yoke and center bolt with flat adapter.



1520 STEERING WHEEL PULLER LEGS

Use with any Steering Wheel Puller, when steering wheels do not have tapped holes. Applications include Cadillac, Chevy / GMC, Buick, Olds, Pontiac, Jeep Cherokee, Ford P/U's and Explorer. OAL: 5" (127mm)



1504 STEERING WHEEL LOCK PLATE REMOVER / INSTALLER TOOL

Adapter flips to fit both 9/16" - 18 and 14mm threads to service tilt-wheel and telescoping columns. Narrow yoke is 5" (127mm) deep.



A150 STEERING PIVOT PIN TOOL

Removes the Pivot Pins found on both tilt and telescopic steering columns. Works on GM, Ford and Chryslers with Saginaw steering columns.



4008 STEERING KNUCKLE SPREADER

For removal and fitting of shock absorbers without damaging the aluminum or cast iron knuckle. Tool adjusts for centered or non-centered slot. Applications include Audi, BMW, VW, Ford, Seat, Renault, Peugeot and Japanese vehicles.



4014 INNER TIE ROD TOOL

Removes inner tie rods without removing outer tie rods. Will service tie rods with flats and smooth tie rods. Slide tool over end and tighten collar to allow access with a 3/8" drive extension.



4012 INNER TIE ROD TOOL KIT

For removal and installation of inner tie rods without removing the rack. Extra-long 20" (51cm) socket with 7 crows-foot inserts. Use with 1/2" drive tools. Insert sizes: 1-13/16", 1-1/4", 1-5/16", 1-7/16", 14mm, 17mm, 33.6mm.



4011 OUTER TIE ROD REMOVER & BALL JOINT SEPARATOR

Pulls tie rod ends without hammering or prying. 2-1/2" / 64mm spread and 2-1/4" / 57mm reach to service tie rods, gears, pulleys and ball joints.



A412 TIE ROD END REMOVER

Services imports and many FWD vehicles, including SUV's with rack and pinion steering. Swivel tipped forcing screw aligns to the rod stud to prevent damage.



A470 FORD LOCK PIN REMOVER

Removes the retaining pin on the inner tie rod socket to disassemble the tie rod from steering gear rack. For rack & pinion steering systems.



A410 TIE ROD SEPARATOR

Separates tie rod ends from steering knuckles, idler arm and Pitman arms. Prevents damage to steering components. OAL: 16" / 40cm



A415 BALL JOINT SEPARATOR

Separates ball joints from the steering knuckle making replacement and disassembly of front suspensions easy. Prevents damage to suspension and steering components. Opening: 1" / 25mm. OAL 12" / 30cm.



4018 5 PC. PICKLE FORK SET

For separating Ball Joints, Tie Rods and Pitman Arms. Includes 3 Forks with 1-1/8", 15/16" and 11/16" openings and 2 handles for manual and air operation.



4004 BALL JOINT SERVICE KIT

Contains press, 3 receiver tubes, installation and removal adapters, plus 4WD adapters to service '67 thru current 1/2 and 3/4 ton vehicles with Dana 44 front axles. Also services U-joints and heavy-duty truck brake anchor pins.



4000 BALL JOINT SERVICE SET

Same as #4004, but without 4WD adapters.



CHRYSLER BALL JOINT SOCKETS

Remove and install screw-in type ball joints. 3/4" drive.

No.	Size	Applications
4006	1-59/64"	Mid-size, rear-wheel drive cars
4007	2-9/64"	Light trucks & vans



4013 BALL JOINT SEPARATOR

Separates the ball joint from the spindle support arms found on many front wheel drive vehicles. Adjusts up to 2" / 51mm for different size ball joints.



4340 FORD DRIVE-LINE IMPACT SOCKET

Services U-Joints on 80's & up Mustang, Crown Vic, Taurus, Explorer, Ranger, F150 & Mercury equivalents. Chrome Vanadium socket is 1/2" drive with 12-point x 12mm swivel head.



2059 VW / AUDI SUSPENSION SYSTEM SOCKET

14mm x 12-point XZN socket with tamper-proof head services various '03 & up VW, Audi & Porsche Axle Bolts, Differential Bolts and Transmission Drain Plugs. 1/2" drive.



3755 LOWER REAR CONTROL ARM SOCKET - HONDA/ACURA

10 point x 19mm socket services selected Honda/Acura rear trailing arms. 1/2" drive.



4020 PITMAN ARM PULLER

Removes the pitman arm from most vehicles. Center screw with pointed tip and 3/4" hex head. Opening: 1-5/16" / 33mm. Depth: 2-1/2" / 64mm.



4025 SMALL PITMAN ARM PULLER

Services smaller Pitman arms, also pulls some Tie Rod Ends. Center screw with pointed tip and 3/4" hex head. Opening: 1-1/8" / 29mm. Depth: 2-1/4" / 57mm.



A440 STRUT TOOL KIT

Complete set of tools to service struts on many makes & models, including GM, VW, Audi, Volvo, Ford, Nissan, Toyota.



A446 VOLVO STRUT NUT SOCKET SET

Use for removing and installing the top shock retaining nut on S40, S60, S70, S80, S90 models. Includes holding socket and double-D axle center socket.



A445 GM10 STRUT TOOL

Replace strut cartridge without jacking car or compressing spring. Services 1988-up Grand Prix, Buick Regal, Cutlass Supreme and 1990-up Chevrolet Lumina. Use with 1/2" drive tools.



A450 UNIVERSAL STRUT NUT REMOVER

Removes the top nut on most MacPherson struts. Drivers hold strut piston rod while deep socket is used to remove nut. Includes 3/4" adapter plus 4 drivers : 6.5mm Hex x "Double D", 7.5mm Hex x "Double D", T50 star; 10mm internal Hex x "Double D".



A444 VW/AUDI STRUT NUT SOCKET

Services FWD VW & Audi with top shock-retaining nut recessed inside the strut tower. Tool's center bore holds the strut shaft to keep from turning. Use with a 22mm / 7/8" socket.



4400 STRUT ALIGNMENT LEVEL

Restores vehicle camber setting after strut repair or installation. Allows vehicle use before making a more precise alignment. Works on all vehicles with MacPherson Struts. Also use for CV Joint, ball joint or tie rod end service. Powerful magnet for mounting. Includes camber settings from 6° to +6°.



A430 GM SHOCK ABSORBER SOCKET

"Double-D" socket holds shock piston stem while deep socket is used to remove the nut. 3/8" drive.



4037 HEAVY-DUTY MACPHERSON STRUT SPRING COMPRESSOR

Compresses the coil spring to replace the shock absorber unit or spring. Works on bent struts, strut tubes and damaged pieces. Forged constructions, Acme threaded rod, and built-in detent pins to help lock the coil in place. Clamshell Pack.

4037K Packed in plain box.



4035 MACPHERSON STRUT SPRING COMPRESSOR

Compresses the coil spring to replace shock absorber or spring sets, or to repair damaged spindles. Includes safety hooks. Clamshell Pack.

4035K Packed in plain box.



4030 COIL SPRING COMPRESSOR - INTERNAL

Removes, installs and compresses coil springs that can be reached through the center of the coil. Features Acme threaded rod and forged, heat-treated alloy hooks.



4036 COIL SPRING COMPRESSOR - EXTERNAL

Removes and installs coil springs where removal through the center of the spring is not possible.



4210 CV JOINT BOOT CLAMP PLIERS - EARED TYPE

Install Oetiker-type clamps used on many GM CV joint boots. Built-in 1/2" square drives in each arm for use with torque wrench and breaker bar, when high torque is required. OAL: 11-1/2" / 29cm.



4215 CV JOINT BOOT CLAMP PLIERS - EARLESS TYPE

Installs earless clamps, including those found on GM inboard CV joints. OAL: 7-1/2" (19cm).



4230 CV JOINT BOOT CLAMPING TOOL

Installs free-end clamps #4240 or pre-formed clamps on CV Joint Boots. Operate with 1/2" hex drive or T-handle.



4240 CV JOINT BOOT CLAMP SET

Set of free-end clamps for banding CV Joint Boots.

Use with #4230

Banding Tool. Includes two 10" / 25cm & two 19" / 48cm clamps for any CV Joint application.



A480 FRONT WHEEL DRIVE SERVICE SET

For servicing axles and CV Joints. Includes slide hammer assembly with 5/8"-18 thread, 17-1/2" long slide hammer extension, CV Joint puller, front hub installer, front hub puller, rear axle pulling plate and center screw for using flanged yokes w/o slide hammer.



4245 CV JOINT PULLER

Pulls CV joints with hidden retaining rings without damaging the roller bearing inside the joint. Use with #4310 Axle Puller.



A485 REAR AXLE SERVICE SET

For rear axle and bearing removal. Includes slide hammer assembly with 5/8"-18 thread, rear axle puller plate, 3 sizes of rear axle bearing pullers and puller hook for removing oil seals and bearings.



4310 FLANGE TYPE AXLE PULLER

Works on most cars and light trucks. Can use as a wheel puller with #4245 CV Joint Puller or #4300 Front Wheel Hub Puller and other 5/8"-18 threaded adapters. Features 5lb. (2.3kg) hammer and 4-slot forged yoke for use on 4, 5 or 6 bolt or stud applications.



A488 REAR AXLE BEARING SERVICE SET

For removing semi-floating rear axle bearings. 3 sizes service most vehicles. Use with 5/8"-18 UNF thread slide hammers. Fits minimum bearing tube I.D.'s from 1" - 1-3/8" (25mm - 35mm) and maximum axle tube I.D.'s from 1-7/8" - 2-7/8" (48mm - 73mm).



4320 UNIVERSAL HUB PULLER

Removes wheel hubs mounted on tapered axles and press-fit rear drum brakes. Adjustable legs can be extended to an 8" / 20cm diameter bolt circle.



4300 FRONT WHEEL HUB PULLER

Separates the FWD hub/steering knuckle from the drive axle on vehicles having independent front suspension. Includes 3/4" hex drive center screw with jam nut, for use with slide hammer.



4330 HUB REMOVAL TOOL

Thread onto the hub retention stud and strike tool to remove hub from the back. Services Ford Super Duty and Dodge Ram 2500, '91 to current. Features knurled handle and replaceable brass cap.



7550 A/C COMPRESSOR/CLUTCH SERVICE KIT

For removing and installing Clutch Hubs and troubleshooting Compressors and Clutches. Includes 5 remover/installer tools and clutch holding wrench to work on the following:

- * Delphi/Harrison A6/R4 SAE
- * Delphi/Harrison DA6/V5, HR6/R4 Metric
- * Chrysler C171, Ford FS6, Hitachi MF, Tecumseh HR980, Nippondenso 6P/10P
- * Zexel (Diesel Kiki), Mitsubishi
- * Sanden SD5 & 7



7500 A/C CLUTCH PLATE REMOVER & INSTALLER

Removes and installs clutches on GM DA6 and V5 compressor clutches with 8mm and 9mm threads, without removing the retaining ring.



7539 GM A/C COMPRESSOR CLUTCH REMOVER / INSTALLER

Services GM A6 and R4 compressors with SAE threads. Not for clutches with metric threads.



3454 4 PC. A/C DISCONNECT TOOL SET

Separate spring-lock refrigerant pressure lines on A/C systems on Ford, Chrysler and Jeep vehicles. Spring-loaded design. Includes the following sizes: 3/8", 1/2", 5/8", 3/4"



A934 BI-METAL THERMOMETER

Reads temperature of air conditioning systems and radiators. 1" dial gauge reads from 0° to 220° Fahrenheit. Stainless steel stem is 5" / 13cm.



HOG RING PLIERS

Used for upholstery work on most vehicles. Two types will service all "hog ring" fasteners. Spring loaded with cushion grips.

- | No. | Description |
|-------------|-------------|
| 5302 | Offset 45° |
| 5304 | Straight |
| 5300 | 2 Pc. Set |



5310 CLIP REMOVAL PLIERS

Tapered forks slide under most type of auto body clips for easy removal. Simply squeeze handles to pop out clips. Spring loaded with vinyl handles.



5205 BODY CLIP PLIERS

Steel levers are embedded in glass-filled nylon tips for removal of any clip found on trim, bumpers, etc. on most makes and models. Tips have special angle and size for complete coverage.



5210 PUSH PIN PLIERS

Removes plastic push pins found under hood and in trunk without damage to pins or anchors. Features sharpened/hardened jaws and spring-loaded handles with vinyl grips. OAL: 9-1/2" / 24cm



A575 DOOR PANEL FASTENER REMOVER

Removes common plastic fasteners found on door panels. Features offset head for easy access and leverage with large handle.



5175 DOOR HANDLE CLIP TOOL

Removes door handle spring clips. Tapered jaws retain clip in handle for easy reinstallation. Reverse end removes door panels. Will not damage upholstery OAL: 7"(18cm)



5160 EXTRA-LONG TRIM TOOL & PRY BAR

For use on Instrument Panels, Door Thresholds, Interior Trim, Trunk Panels, etc. Nylon plastic body will not mar or scratch surfaces. 400mm / 15-3/4" long for extra reach.



5150 5 PC. AUTO BODY REMOVER KIT

Remove all types of automotive plastic fasteners, molding and parts. Lightweight but strong, the all-plastic body will not mar or damage interior parts.



5250 WINDSHIELD WIPER ARM PULLER

Removes wiper arms on all makes and models. Works in tight spaces and will not damage wiper arm or paintwork. Turning knob for fast work and forged body for strength. Better than using prybars or screwdrivers.



A579 WINDSHIELD REMOVAL TOOL

Removes windshields by cutting butyl adhesive caulking compound. Services GM & Chrysler vehicles. Features special handle for extra leverage and tempered steel blade.



5200 WINDSHIELD LOCKING STRIP TOOL

For inserting the locking strip around windshields and other windows on most cars. Will work on two strip sizes. OAL: 8" (20cm)



9575 WINDOW REGULATOR SOCKET - BMW

Special "flat-cut" E12 Torx® socket services 5 & 7 Series Regulators. 3/8" square drive.



A581 FORD REARVIEW MIRROR REMOVAL TOOL

Releases retaining clips of inside mirror when inserting between mounting button and mirror. Services '91 & up Ford Explorers.



A585 FORD MIRROR REMOVAL TOOL

Removes mirrors without damage or having to remove the mirror assembly. Works on outside door mirrors on '96 & up Fords and '99 & up Ford interior rearview mirrors with screwless mount.



5320 DOOR ALIGNING BAR

Use with breaker bar to easily align doors. Thick steel construction for durability. Compact size for easy storage.



5220 GM DOOR SPRING COMPRESSOR

Remove and install door hinge springs.



A580 FORD RADIO REMOVAL TOOL SET

Removes radios by inserting into holes on radio faceplate found on many older Fords.



5400 18 PC. RADIO REMOVAL TOOL KIT

9 sets of tools for removing radios on VW, Ford, Audi, Porsche, Mercedes, BMW, Opel and more. Also services Blaupunkt, Becker and Grundig systems.



5605 3/8" SPOT WELD CUTTER

Quickly drills out spot welds on fenders, doors, etc. Retractable pilot assures accurate cut. Double-edged cutting blade for extra-long life.



5605 3Pc. Replacement blade set

5115 BODY DENT PULLER

Removes dents in doors or fenders with sliding 2-1/2 lb. (.9kg) hammer. Includes self-threading screw and hook attachments. OAL: 16" (41cm).



PULLERS & PULLER SETS

GEAR PULLERS

Forged from alloy, heat-treated steel, with fine-threaded center screws for extra pulling power. Jaws are adjustable and/or reversible to broaden applications.

2-JAW ADJUSTABLE/REVERSIBLE

No.	Spread	Reach	Screw Length	Capacity
8000*	4"	3-1/2"	5"	2 Tons
8010*	7"	5-1/2"	7"	5 Tons

2-JAW REVERSIBLE

No.	Spread	Reach	Screw Length	Capacity
8005*	6"	3-1/2"	7"	5 Tons
8015*	9"	5-1/2"	9"	7 Tons

2-JAW ADJUSTABLE

No.	Spread	Reach	Screw Length	Capacity
8020	10"	9"	9"	7 Tons
8025	12"	11"	13"	13 Tons
8030	15"	15"	13"	13 Tons

3-JAW ADJUSTABLE/REVERSIBLE

No.	Spread	Reach	Screw Length	Capacity
8035*	4"	3-1/2"	5"	2 Tons
8045*	8"	5-1/2"	7"	5 Tons

3-JAW REVERSIBLE

No.	Spread	Reach	Screw Length	Capacity
8040*	7"	3-1/2"	7"	5 Tons
8050*	10"	5-1/2"	9"	7 Tons

3-JAW ADJUSTABLE

No.	Spread	Reach	Screw Length	Capacity
8055	11"	9"	9"	7 Tons
8057	14"	11"	13"	13 Tons
8059	17"	15"	13"	13 Tons

*Packed in Clamshell. Add "B" for Bulk Pack. All others packed in Box.

HEAVY-DUTY QUICK-CHANGE GEAR PULLERS

Adjusting knob controls spring for quick jaw removal to convert puller from external to internal or 2-jaw to 3-jaw.

No.	Range	Reach	Capacity
8066	3" - 4"	3-1/2"	4 Tons
8068	3" - 7"	5-1/2"	7 Tons

COMBINATION GEAR PULLER KITS

Convert from 2-jaw to 3-jaw puller. Includes two yokes, center screw and 3 legs.

No.	Spread	Reach	Capacity
A830	3"	3-1/2"	1 Ton
A840	4"	4-1/2"	1 Ton



8000-8010



8005-8015



8020-8025-8030



8035-8045



8040-8050



8055-8057-8059



8097 LARGE GEAR & PULLEY PULLER

Remove parts with tapped holes with 8-1/4" / 21cm yoke and 11-5/8" / 30cm long forcing screw. Puller spreads from 2" to 7-3/4" / 5 to 20cm.



8095 TIMING GEAR PULLER

Pull parts with two tapped holes, including gears, fan pulleys, balancers and cam gears. Cross-arm is 1" square and 5" long, with 3/8" - 16 side bolts.



1550 FLANGE-TYPE PULLER SET

Two yoke sizes and 4 sets of side screws for all types of pulling jobs. Use for Gears, Harmonic Balancers, Pulleys, Steering Wheels and more. Also includes 2 center screws and 2 swivel tips.



A490 8-WAY SLIDE HAMMER SET

Service rear axles, bearings, oil seals and press-fit parts. Includes reversible jaws for internal/external work, 3 jaws, 5 lb. slide hammer, rear axle pulling plate, screw, hook, dent puller adapter, cone and other adapters.



8090 SLIDE HAMMER PULLER SET

Remove bearings, gears, bushings, seals, grease retainers, etc. Includes 4 jaw assemblies for internal/external and 2/3 jaw pulling. 3 jaw range: 1-1/2 to 4-1/2" / 38 to 114mm outside, 1-5/16 to 4-3/4" / 33 to 121mm inside. 2 jaw range: 1 to 4-1/2" / 25 to 114mm outside, 1-1/4 to 3-3/8" / 32 to 86mm inside.



8092 SLIDE HAMMER PULLER

Remove bearings, gears, bushings, seals, etc. Features 5 lb. hammer and 3-Jaw assembly.



8099 PUSH PULLER

For use with CTA and other brands of Bearing Splitters when removing and installing Gears, Bearings, Shafts, Pulleys and other press-fit parts.

Capacity: 10 Tons
Spread: 2-1/8 - 7-1/4"
Screw Size: 3/4 - 16 x 12
Reach: 8- 1/4"



8070 PILOT BEARING PULLER - SCREW TYPE

Removes fly wheel pilot bearings and bushings up to 7-1/2" / 19cm long.

Replacement Jaws

8070x06 Standard
Range: 1/2 to 1-1/2"
13 to 38mm I.D.

8070x07 Small
Range: 3/8 to 1-3/8"
9.5mm to 35mm I.D.



8075 PILOT BEARING PULLER - SLIDE HAMMER

For inside pulling jobs, jaws will remove flywheel pilot and other bearings.

Range: 1/2" - 1-1/2" (13mm - 38mm)



8077 PILOT BEARING PULLER - SLIDE HAMMER

Similar to #8075 but extra long 20-1/2" for added reach.



BEARING SEPARATORS

Remove generator gears, bearings, bearing cones and similar parts where ordinary puller jaws will not reach. Knife-like edges minimize damage to parts.

No.	Range
8060	Up to 2-1/4" / 57mm
8065	Up to 4-1/4" / 108mm
8150	Up to 6" / 15cm
8155	Up to 8" / 20cm



CLUTCH

6125 UNIVERSAL CLUTCH ALIGNMENT TOOL KIT

All steel tools service most cars and light trucks. Includes center shaft, tapered cone and 8 bushing sizes: 12/12.7mm, 15.8/16mm, 17.4/18mm, 21/22mm, .561/.59", .75/.787", .812/.874" & .984/1.181".



CLUTCH ALIGNMENT TOOLS - CARS & LIGHT TRUCKS

Precision tools for accurate alignment of the clutch disc and pilot bearing. Special grade injection molded plastic tools are exact replicas of the transmission input shafts. Fits most passenger cars, light trucks, vans and sport utility vehicles.

No.	Dia. x Spline	No.	Dia. x Spline	No.	Dia. x Spline	No.	Dia. x Spline	No.	Dia. x Spline
6200	1" x 24	6228	7/8" x 21	6254	1-1/8" x 26	6282	1-3/8" x 10	6290	1" x 23
6202	13/16" x 18	6230	3/4" x 23	6256	1-1/4" x 10	6284	1-1/6" x 20	6291	1-1/4" x 10
6204	1" x 23	6232	7/8" x 21	6258	1-3/8" x 10	6285	1-1/8" x 21	6292	1-3/16" x 14
6206	1" x 14	6234	7/8" x 20	6262	13/16" x 21	6286	15/16" x 21	6293	3/4" x 19
6208	15/16" x 22	6236	7/8" x 20	6264	1" x 24	6287	15/16" x 24	6294	1-1/8" x 10
6210	13/16" x 24	6238	1" x 24	6268	1" x 23	6288	1" x 24	6298	1-3/8" x 10
6212	1-1/8" x 21	6240	13/16" x 18	6269	13/16" x 24	6289	1" x 14		
6214	15/16" x 21	6242	1" x 23	6270	7/8" x 10				
6216	13/16" x 19	6244	1-1/16" x 10	6271	15/16" x 10				
6218	7/8" x 20	6246	7/8" x 20	6272	1" x 21				
6220	13/16" x 18	6248	1-1/16" x 10	6274	3/4" x 18				
6222	1" x 24	6250	1-1/8" x 10	6279	1" x 23				
6224	13/16" x 19	6252	1" x 14	6281	1-1/32" x 24				



For complete application information, check website www.ctatools.com

CLUTCH ALIGNMENT TOOLS - TRUCK

No.	Dia. x Spline x Pilot Dia.	No.	Dia. x Spline x Pilot Dia.
6300	1-1/2" x 10 x .980"	6312	1-3/4" x 10 x .980" - AEX
6302	1-1/2" x 10 x .750"	6314	1-3/4" x 10 x 1.18" - Long
6304	1-1/2" x 10 x .980" - Short	6315	2" x 10 x 1.18"
6305	1-3/4" x 10 x 1.18"	6317	2" x 10 x 1.18" - Long
6310	1-3/4" x 10 x .980"		



CLUTCH ALIGNMENT TOOLS - AGRICULTURAL

No.	Dia. x Spline / Dia. x Spline	No.	Dia. x Spline / Dia. x Spline
6400	15/16" x 10 / 1-3/8" x 19	6414	1-1/8" x 10 / 1-3/4" x 10
6402	1-1/8" x 10 / 1-5/8" x 10	6416	1-1/8" x 21 / 1-5/8" x 25
6404	1" x 10 / 1-7/8" x 29	6418	1-1/8" x 10 / 1-5/8" x 25
6406	1" x 1/16" x 16 / 1-11/16" x 26	6424	1-3/4" x 10
6408	1-1/4" x 19 / 1-7/8" x 29	6428	1" x 15 / 1-7/8" x 29
6410	1-1/8" x 10 / 1-3/4" x 16	6430	1" x 15
6412	1-1/4" x 10 / 1-3/4" x 27	6432	1-9/16" x 14



3750 CLUTCH PRESSURE PLATE SPACER - SAAB

Necessary for any clutch repair on an '84 - '93 Saab 900. With 2 people, you can place ring into the pressure plate teeth while the clutch pedal is depressed, simplifying removal of the disc/pressure plate/slave.



9592 DRIVE PLATE / FLYWHEEL BOLT SOCKET - NISSAN

Low-profile E20 Torx® socket removes and installs the low-profile bolts found on Nissan QR25's with automatic transmissions. 1/2" drive.



3757 FLYWHEEL BOLT SOCKET - MITSUBISHI / DODGE

10 Point x 12mm socket services clutch pressure plate bolts on Mitsubishi 3000 and Dodge Stratus clutch assemblies 3/8" square drive.



4380 SPARE TIRE TOOL KIT

Removes and installs spare tires mounted under vehicle quickly and safely, without damage to pulley systems. Set of 8 color-coded tools, each with a unique working end to engage the pulley, to service many makes and models. Also includes special offset hand-crank plus color-coded wall rack for storage.

No.	Type / Color	Application
4351	Pin Head / Yellow	Japanese Pick-ups
4352	Hex Head / Red	'98 - '01 Dodge Full size Pick-ups
4353	Flat Head / Purple	GM S-10, Blazer, Jimmy
4354	12mm Square / Orange	Ford F150, Expedition, Explorer
4355	Slotted Square / Green	Early model Dodge Durango
4356	Standard Square / Violet	Early model Fords
4359	3/8" Square / White	Late model Ford F & E Series
4360	Hook / Light Green	Late model Chevys
4357	Hand Crank	
4358	Tool Rack	



1937 AUTOMOTIVE TIRE GAUGE

Four-sided nylon indicator bar is dual calibrated from 10 - 50 PSI / 75 - 325 kPa. Anodized steel body with pocket clip. OAL: 6" / 15cm



1933 DUAL FOOT TIRE GAUGE

For use on dual wheels and other hard-to-reach valves. Four-sided nylon indicator bar is dual calibrated from 20 - 120 PSI / 150 - 800 kPa. OAL: 6" / 15cm



1935 HEAVY-DUTY DUAL FOOT TIRE GAUGE

Extra-long gauge reaches inside and outside wheels. Built for use in heavy-duty environments. Two-sided nylon indicator bar is dual calibrated from 10 - 150 PSI / 100 - 1,000 kPa. Includes hang-up ring. OAL: 11" / 28cm



1929 DUAL FOOT AIR CHUCK EXTENSION

Direct air line chuck for hard-to-reach valves on trucks, buses and tractors. 1/4" female NPT. OAL: 6" / 15cm



1931 BALL FOOT AIR CHUCK

Direct air line chuck for standard applications. All brass construction with 1/4" female NPT and 3/4" hex drive.



1930 STRAIGHT LOCK-ON AIR CHUCK

Click locks onto valve while inflating tire. 1/4" Female NPT and 3/4" hex. Brass construction.



1936 EXTRA-LONG 14" DUAL FOOT AIR CHUCK

For hard-to-reach valves, straight-on chuck with 30 degree reverse angle. 1/4" Female NPT and 5/8" hex.



1925 4-WAY TIRE VALVE REPAIR TOOL

Repairs and conditions inside and outside valve threads. Also removes and installs valve cores.



1990 BLOW GUN WITH 5 NOZZLES

Includes blow gun with rubber tip, long tapered nozzle, stubby tapered nozzle and two needle-nosed nozzles. 1/4" NPT Female inlet.



TUBING

9170 MULTI-GROOVE TUBE BENDER

Bends 3/16, 1/4, 5/16 & 3/8" (4.8, 6.4, 7.9 & 9.5mm) O.D. tubing without kinking or collapsing. OAL: 8" / 20cm



9172 PLIERS-TYPE TUBE BENDER

Bends 3/16, 1/4, 5/16 & 3/8" (4.8, 6.4, 7.9 & 9.5mm) O.D. tubing without kinking or collapsing. Includes 2 roller adapters. OAL: 10" / 25cm



A978 TUBE BENDER - SMALL

Bends copper, brass, brake lines, Bundy welding tube, etc. up to 1/4" / 6.4mm O.D. up to 360°. OAL: 5" / 12.5cm



9179 TUBE BENDER - LARGE

Bends tubing from 1/8 to 1/2" / 3 to 13mm O.D. up to 360°. OAL: 9" / 23cm



9175 HEAVY-DUTY MINI TUBE CUTTER

Cuts aluminum, brass or copper tubing from 1/8 to 5/8" / 3 to 16mm O.D. Cutting wheel is on bottom jaw for precision cutting.



A975 MINI TUBE CUTTER

Cuts aluminum, brass or copper tubing from 1/8 to 5/8" / 3 to 16mm O.D. Cutting wheel is on bottom jaw for precision cutting.



2631 TAILPIPE CUTTER

Cuts pipes from 3/4 to 3" / 19 to 76mm O.D. Carbide cutting wheels with spacers for superior tracking.



TAILPIPE EXPANDERS

For flaring and expanding tailpipes.

No. **Range**

2622 1-1/2 to 2-1/2" / 38 to 64mm I.D.

2624 2-1/8 to 3-1/2" / 54 to 89mm I.D.



9210 BUBBLE/ISO IN-LINE FLARING TOOL

For use on 4.75, 6 & 8mm tubing including thin walled steel and copper tubing. Low profile design allows use on vehicle.



IN-LINE FLARING TOOLS

Aligns the adapters, cone & tube to make perfect flares. Low-profile allows use on the vehicle. Less risk of breaking adapters. Offers same results as hydraulic or vise-type tools at a fraction of the cost.

No. **Description**

9212 SAE - 3/16", 1/4", 5/16"

9214 Metric - 4.75mm, 5mm, 6mm



A970 SINGLE FLARE TOOL KIT - SAE

Flares copper, aluminum and steel tubing.

Sizes: 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 & 5/8".



A974 DOUBLE FLARE TOOL SET - SAE & METRIC

Double flares soft steel tubing up to .040" / 1mm wall thickness. Single flares soft copper, aluminum and brass tubing. Sizes: 1/2, 1/4, 3/16 (4.75mm), 5/16" (8mm), 5, 6, & 10mm.



9200 DOUBLE FLARE TOOL SET - SAE

Double flares soft steel tubing up to .040" / 1mm wall thickness. Single flares soft copper, aluminum and brass tubing. Sizes: 3/16, 1/4, 5/16, 3/8 & 1/2"



FLARE NUT WRENCHES

Service fuel, vacuum, hydraulic and refrigeration lines. Offset hex-head will not round soft flare nuts.

No. **Sizes**

A855 3/8 x 7/16"

A857 1/2 x 9/16"

A859 5/8 x 11/16"

A850 3 Pc. Set (A855, A857, A859)

No. **Sizes**

A861 9 x 11mm

A862 10 x 12mm

A864 13 x 14mm

A867 15 x 17mm

A860 3 Pc. Set (A861, A862, A864)



HEAVY-DUTY SNAP-RING PLIERS

Includes 4 pairs of interchangeable tips: .039" / .99mm and .074" / 1.88mm Straight, .047" / 1.20mm Bent 45° and .047" / 1.20mm Bent 90°. OAL: 7" / 18cm

- No.** **Style**
- 8845** Internal
- 8846** External



SNAP-RING PLIERS

Includes 4 pairs of interchangeable tips: .039" / .99mm and .074" / 1.88mm Straight, .047" / 1.20mm Bent 45° and .047" / 1.20mm Bent 90°. OAL: 6" / 16cm

- No.** **Style**
- A845** Internal
- A846** External
- A844** 2 Pc. Set



A842 INTERNAL/EXTERNAL SNAP-RING PLIERS SET

Includes pliers and 4 tip assemblies: 45°, 90° and 2 straight. Range: 3/8 - 2" / 10 - 50mm



8850 CONVERTIBLE SNAP-RING PLIERS

Push-button mechanism converts pliers from internal to external. Includes interchangeable tips: Straight (.036" / .9mm, .047" / 1.20mm, .070" / 1.80mm) and 90° (.036" / .9mm, .047" / 1.20mm). Range: Internal - 3/8 to 2" / 10 to 48mm; External - 1/4 to 2" / 7 to 48mm.

OAL: 7-1/2" / 19cm



8860 10 PC. FIXED-POINT SNAP-RING PLIERS SET

Service internal and external rings with 8 sizes of convertible pliers. Straight Tip: .038, .047, .070 & .090". 72° Tip: .038, .047, .070 & .090". Also includes 2 picks.



8870 2 PC. HEAVY-DUTY SNAP-RING PLIERS SET

Extra-large 16" / 40cm Internal and External Pliers. Includes 6 pairs of tips. Range: Internal- 3-1/16 to 6-1/4" / 78 to 159mm; External - 3-1/2 to 6-1/2" / 89 to 165mm.



8840 LOCK RING PLIERS

Spread snap rings found on transmissions, brakes, clutch shafts, etc. Spring loaded with single piece forged jaws. OAL: 9" / 23cm



A848 HEAVY-DUTY LOCK RING PLIERS

For external lock rings used in truck and tractor transmissions. Spring-loaded handles and 2 sets of tips. Range: 3" / 75mm. OAL: 13" / 33cm



SPECIALTY BITS & SOCKETS

TORX® BIT SOCKETS

Service standard Torx® fasteners. 2-piece design for high-torque applications.

No.	Size	Drive	No.	Size	Drive
9561	T10	1/4"	9569	T47	3/8"
9562	T15	1/4"	9570	T50	3/8"
9563	T20	1/4"	9571	T55	3/8"
9564	T25	1/4"	9572	T60	1/2"
9565	T27	1/4"	9573	T70	1/2"
9566	T30	1/4"			
9567	T40	3/8"			
9568	T45	3/8"			



9630 12 PC. TORX® BIT SOCKET SET

Sizes: T10 through T60



9560 10 PC. TORX® BIT SOCKET SET

Sizes: T10, T15, T20, T25, T27, T30, T40, T45, T50, T55



9542 MAGNETIC SCREWDRIVER W/ TORX® BITS

Includes 7 bits, T8 through T30, plus screwdriver with magnetic shaft. Bits store in handle (handle color may vary).



TAMPER-PROOF TORX® BIT SOCKETS

2-piece design for high-torque applications. Tamper-hole for security fasteners.

No.	Size	Drive
9481	T10	1/4"
9482	T15	1/4"
9483	T20	1/4"
9484	T25	1/4"
9485	T27	1/4"
9486	T30	1/4"
9487	T40	3/8"
9488	T45	3/8"
9489	T50	3/8"
9490	T55	3/8"
9491	T60	1/2"
9480	11 Pc. Set	



TAMPER-PROOF TORX® BITS

Hex drive bits with precision heads to service security fasteners.

No.	Size	Drive
9501	T10	1/4"
9502	T15	1/4"
9503	T20	1/4"
9504	T25	1/4"
9505	T27	1/4"
9506	T30	1/4"
9507	T40	1/4"
9508	T45	5/16"
9509	T50	5/16"
9510	T55	7/16"



9500 8 PC. TAMPER-PROOF TORX® BIT SET

Sizes: T10 through T40, plus #9301 bit holder.



BIT HOLDERS

No.	Size
9301	1/4" Hex x 1/4" Square Drive
9302	1/4" Hex x 3/8" Square Drive
9309	5/16" Hex x 3/8" Square Drive



EXTERNAL TORX® SOCKETS

For servicing inverted E-series fasteners. Sand-blast finish.

No.	Size	Drive
9579	E4	1/4"
9580	E5	1/4"
9581	E6	1/4"
9582	E7	1/4"
9583	E8	1/4"
9585	E10	3/8"
9586	E12	3/8"
9587	E14	3/8"
9588	E16	3/8"
9589	E18	1/2"
9591	E20	1/2"



9640 11 PC. EXTERNAL TORX® SOCKET SET

Packed on vinyl rail. Sizes: E4 through E20



9590 7 PC. EXTERNAL TORX® SOCKET SET

Packed on vinyl rail. Sizes: E6 through E16



A989 8 PC. EXTERNAL TORX® SOCKET SET

Nickel plated. Packed on socket rail. Sizes: E6 through E18



E-SERIES TORX® SOCKETS - W/ U-JOINT

Includes hard-to-find sizes up to E24. Great for many European makes, e.g. BMW Brakes, Transmissions, etc. U-joint design allows access in difficult areas.

No.	Description
9221	E4 x 1/4" Dr.
9222	E5 x 1/4" Dr.
9223	E6 x 1/4" Dr.
9224	E7 x 1/4" Dr.
9225	E8 x 1/4" Dr.
9226	E10 x 3/8" Dr.
9227	E12 x 3/8" Dr.
9228	E14 x 3/8" Dr.
9229	E16 x 3/8" Dr.
9230	E18 x 1/2" Dr.
9231	E20 x 1/2" Dr.
9232	E22 x 1/2" Dr.
9233	E24 x 1/2" Dr.
9220	13 Pc. Set



TORX PLUS® SOCKETS

For elliptical-shaped Torx Plus® fasteners. Torx Plus® will not fit standard Torx® fasteners. Standard Torx® tools will strip if used in Torx Plus® applications.

No.	Size	Drive
9610	TP10	1/4"
9611	TP15	1/4"
9612	TP20	1/4"
9613	TP25	1/4"
9614	TP27	1/4"
9615	TP30	1/4"
9616	TP40	3/8"
9617	TP45	3/8"
9618	TP50	3/8"
9619	TP55	3/8"
9620	TP60	1/2"
9605	11 Pc. Set	



EXTERNAL TORX PLUS® SOCKETS

New design services elliptical-shaped fasteners now found on many vehicle applications. Standard Torx® or Ribe designs will not fit these fasteners. Black finish and impact quality.

No.	Size	Drive
9651	EP6	1/4"
9652	EP7	1/4"
9653	EP8	1/4"
9654	EP10	3/8"
9655	EP12	3/8"
9656	EP14	3/8"
9657	EP16	3/8"
9658	EP18	1/2"
9650	8 Pc. Set	



TORX PLUS® TAMPER-PROOF SOCKETS – 5 POINT

2-piece design for high-torque applications. 5-point head and tamper-hole for security fasteners.

No.	Size	Drive
9681	TS8	1/4"
9682	TS10	1/4"
9683	TS15	1/4"
9684	TS20	1/4"
9685	TS25	1/4"
9686	TS27	1/4"
9687	TS30	1/4"
9688	TS40	3/8"
9689	TS45	3/8"
9690	TS50	3/8"
9691	TS55	3/8"



9680 11 PC. TORX PLUS® TAMPER-PROOF SOCKET SET

Sizes TS8 through TS55. Packed on socket rail.




9695 7 PC. TORX PLUS® TAMPER-PROOF SOCKET SET


Sizes TS8 through TS30. Packed on socket rail.




9670 30 PC. MASTER TORX PLUS® SOCKET SET

Full range of 3 styles of Torx Plus® Sockets, all packed in blow-mold case.

Includes: 11 TP Series – TP10 through TP60 

11 TS Series – TS8 through TS55 

8 EP Series – EP6 through EP18 



SPECIALTY BITS & SOCKETS

12-POINT TRIPLE SQUARE "XZN" WRENCHES - STUBBY

For tight access applications. 6 & 8mm sizes are 2" long x 3/8" drive; 10, 12 & 16mm are 2-1/4" long x 1/2" drive.

No.	Size	No.	Size
8511	6mm	8514	12mm
8512	8mm	8515	16mm
8513	10mm	8510	5 Pc. Set



12-POINT TRIPLE SQUARE "XZN" WRENCHES - LONG

Highest quality, 2-pc. construction with extra-long shaft.

No.	Size	OAL	Sq. Dr.
9351	8mm	3-1/2" / 89mm	3/8"
9352	10mm	4-1/8" / 105mm	1/2"
9353	12mm	4-5/8" / 117mm	1/2"
9354	14mm	4-7/8" / 124mm	1/2"
9355	16mm	4-7/8" / 124mm	1/2"
9350	5 Pc. Set		



12-POINT TRIPLE-SQUARE "XZN" WRENCHES

3" bit wrenches with hex shaft.

No.	Size	No.	Size
9281	6mm	9287	12mm
9283	8mm	9280	4 Pc. Set
9285	10mm		



12-POINT TRIPLE-SQUARE "XZN" TAMPER-PROOF WRENCHES - STUBBY

Service fasteners on VW, Audi, Porsche and some Detroit Diesel engines. 2-piece design for high torque applications, and precision machined for exact fit. 1/2" square drive x 2-1/2" long.

No.	Size	No.	Size
2059	14mm	2089	18mm
2039	16mm	2095	3 Pc. Set



12-POINT TRIPLE-SQUARE "XZN" TAMPER-PROOF WRENCHES - LONG

Service fasteners on VW, Audi, Porsche and some Detroit Diesel. 2-piece design for high torque applications, and precision machined for exact fit. 1/2" square drive x 5" long.

No.	Size	No.	Size
9274	14mm	9278	18mm
9276	16mm	9270	3 Pc. Set



9 PC. BALL-END HEX KEY WRENCH SETS

For working up to 20° angles. Packed in hanging case.

No.	Sizes
A827	1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 1/4, 5/16, 3/8"
A829	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm



LARGE METRIC HEX BIT SOCKETS

High-torque 2-piece 2-1/2" long sockets with 1/2" square drive.

No.	Size	No.	Size
2052	12mm	2056	17mm
2054	14mm	2058	19mm



METRIC HEX SOCKET BITS - LONG

4" / 102mm long for deep-reach applications. 2-piece construction for high torque applications. 5mm to 7mm are 3/8" drive, 8mm to 14mm are 1/2" drive.

No.	Size	No.	Size
8545	5mm	8550	10mm
8546	6mm	8552	12mm
8547	7mm	8554	14mm
8548	8mm		



6-POINT RIBE BIT SOCKET WRENCHES

Service head bolts on many VWs and Audis. 1/2" square drive & 5-1/2" (14cm) long for deep-reach applications. Ribe wrenches will also service many other vehicle fasteners, including Trim, Cam Cover and Headlights.

No.	Size	No.	Size
9260	9mm	9266	14mm
9262	10mm		
9264	12mm		



8755 4 PC. CLUTCH-HEAD BIT SOCKET SET

Hard-to-find bit-sockets to service "Figure 8" screws on old Chevy cars and trucks. Applications include headlight buckets, horn rings, hood braces, steering columns, gas door and filler neck and more.

Sizes: 5/32", 3/16", 1/4", 5/16", all with 3/8" square drive.



8752 4 PC. CLUTCH-HEAD SCREWDRIVER SET

Hard-to-find screwdrivers to service "Figure 8" screws on old Chevy cars and trucks. Applications include headlight buckets, horn rings, hood braces, steering columns, gas door and filler neck and more.

Sizes: 5/32", 3/16", 1/4", 5/16"



MICROMETER CLICKER-TYPE TORQUE WRENCHES

Micro-adjustable, with bi-directional ratchet head and sliding collar for setting torque. Tube is chrome-plated. All wrenches are serviceable. Packed in blow-mold case.

No.	Drive	Range	OAL
8950	3/8"	10 - 100 Ft. Lb. 16.9 – 138.9 Nm	11-1/2" / 44cm
8952	3/8"	25 - 250 In. Lb. 3.61 – 29.03 Nm	13" / 33cm
8955	1/2"	25 - 250 Ft. Lb. 43.4 – 348.4 Nm	23" / 58cm



8970 3/4" DRIVE 600 FT. LB. TORQUE WRENCH

Features easy-to-read scale, knurled handle and heavy-duty construction. Range: 100 to 600 Ft. Lb. / 135 – 815 Nm. OAL: 43" / 109cm. Wrench is serviceable. Packed in blow mold case.



MICROMETER TORQUE WRENCHES

Reversible ratchet type with chrome-plated tube, knurled handle and knurled locking nut for holding torque setting. Packed in blow mold case.

No.	Drive	Range	OAL
8895	1/4"	20 – 200 In. Lb.	10" / 25cm
8900	3/8"	5 - 80 Ft. Lb.	14" / 36cm
8905	1/2"	10 - 150 Ft. Lb.	18" / 46cm
8910	1/2"	25 - 250 Ft. Lb.	25" / 64cm



8940 TORQUE LIMITING RATCHET WRENCH – 3/8" SQ. DR.

Installs Oil Filter Housing Caps with 25Nm torque specifications. Internal torque limiting device prevents over-tightening of caps. 11-1/2" (290mm) long with soft-grip handle.



A899 BEAM-TYPE TORQUE WRENCH

For fast torque settings. Range: 0 - 140 Ft. Lb. / 0 - 20 MKg. 1/2" sq. dr. OAL: 19" / 48cm



8975 TORQUE ANGLE METER

Use for accurate tightening of head and manifold bolts whenever a torque angle is required by the manufacturer's specification. Also called "torque to yield". Battery-type clamp frees up hand. Use with 1/2" drive tools.



8980 TORQUE ANGLE METER

Use for accurate tightening of head and manifold bolts whenever a torque angle is required by the manufacturer's specification. Also called "torque to yield". Use with 1/2" drive tools.



THREAD REPAIR & FASTENER

PRO-THREAD THREAD REPAIR KITS & INSERTS

Repairs damaged threads in most automotive, motorcycle and outdoor power equipment systems. Coiled inserts create a permanent and wear-resistant thread in the parent material. Special oversize taps are to international specifications. Standard taps cannot be used.

Thread Size	Kit No.*	Insert Pack No.**	Tap
UNC			
10 - 24"	33609	23609	33610
1/4 - 20"	33049	23049	33050
5/16 - 18"	33059	23059	33060
3/8 - 16"	33069	23069	33070
7/16 - 14"	33079	23079	33080
1/2 - 13"	33089	23089	33090
UNF			
10 - 32"	34609	24609	34610
1/4 - 28"	34049	24049	34050
5/16 - 24"	34059	24059	34060
3/8 - 24"	34069	24069	34070
7/16 - 20"	34079	24079	34080
1/2 - 20"	34089	24089	34090
Metric			
M5 - 0.8	35059	25059	35060
M6 - 1	35069	25069	35070
M8 - 1.25	35089	25089	35090
M9 - 1.25	35099	25099	35100
M10 - 1.25	37109	27109	35110
M10 - 1.5	35109	25109	35130
M12 - 1.75	35129	25129	37110
M14 - 1.5	37149	27149	37150



Typical Kit



Typical Insert Pack

* Each Kit includes Tap, Installation Tool and 3 Inserts, except #35099 has 5 inserts & 37149 has 10 inserts

** All insert packs include 10 Inserts except No. 27149 has 5 Inserts.

SPARK PLUG REPAIR KITS – see page 17

DRILL BITS FOR PRO-THREAD KITS

High-speed Steel Jobber Length Drill Bits as specified on the kits.

No.	Size	For Use with Kit No.
18213	13/64"	33609, 34609, 35059
18216	1/4"	35069
18217	17/64"	33049, 34049
18221	21/64"	33059, 34059, 35089
18224	3/8"	35099
18225	25/64"	33069, 34069
18226	13/32"	37109
18229	29/64"	33079, 34079
18231	31/64"	35129
18233	33/64"	33089, 34089
18236	9/16"	37149



THREAD RE-CONDITIONING TAPS

Alloy steel taps clean common oil pan threads. Also for Transfer Case & Transmission Drain Plugs.

No.	Size	Applications
18111	12mm x 1.25	Infiniti, Lexus, Nissan, Toyota
18112	12mm x 1.75	Ford, GM, GMC, Saturn
18113	1/2" - 20	Dodge, Ford, GM, GMC, Jeep, Mitsubishi
18114	4mm x 1.50	Ford, Honda, Hyundai, Kia, Mazda
18115	12mm x 1.50	BMW, Mercedes Benz
18116	14mm x 1.25	Jeep, Ford Truck
18117	16mm x 1.50	Dodge, Jaguar
18118	18mm x 1.50	Dodge Truck, Toyota, Volvo
18119	22mm x 1.50	Dodge Truck, BMW

Note: Use above #'s for clam-shell pack. For polybag pack, order with "B" suffix, i.e. 18111B



TAP HOLDERS

For use with CTA Thread Reconditioning Taps. Holds tap for proper alignment in any direction and frees hand. 3/8" square drive and black finish.

No.	Description
9660	Small - use with #18111, 18112, 18113, 18115
9665	Large - use with #18114, 18116



THREAD RESTORING FILES

Restores damaged threads on bolts and shafts. Files are cross-cut and depth proportional to the thread pitch, so will not skip or jump out of fine pitches. All are 7/16" square x 8-3/8" long.

No.	Type	Pitch Sizes
8231	Metric	0.80, 1.00, 1.25, 1.50, 1.75, 2.00, 2.50, 3.00mm
8233	SAE	11, 12, 13, 14, 16, 18, 20, 24 TPI (Threads per inch)
8235	SAE	9, 10, 12, 16, 20, 27, 28, 32 TPI (Threads per inch)



8237 UNIVERSAL 60° THREAD RESTORING FILE

Single blade file renews all 60° threads, including metric. OAL: 9" / 23cm



8230 4 PC. THREAD RESTORING FILE SET

Includes 3 Thread Files (#8231, #8233 & #8235) plus #8237 Universal Thread File.



8240 53 PC. UNIVERSAL RETHREADING SET

Includes thread files #8231 and #8233 plus the following color-coded Taps & Dies:

Tap & Die Sets

Metric- 6 x 1.00, 8 x 1.25, 8 x 1.50, 10 x 1.00, 10 x 1.25, 10 x 1.50, 11 x 1.50, 12 x 1.25, 12 x 1.50, 12 x 1.75, 14 x 1.50mm

NC-USS- 1/4" - 20, 5/16" - 18, 3/8" - 16, 7/16" - 14, 1/2" - 13, 9/16" - 12

NF-SAE- 1/4" - 28, 5/16" - 24, 3/8" - 24, 7/16" - 20, 1/2" - 20, 9/16" - 18

Dies (only)

Metric - 6 x 1.25, 7 x 1.00, 8 x 1.00mm

NC-USS- 5/8" - 11

NF-SAE- 5/8" - 18



8245 8 PC. SPINDLE RETHREADER DIE SET

Includes 6 Metric Dies: 20 - 1.25, 20 - 1.50, 22 - 1.00, 22 - 1.50, 24 - 1.50, 24 - 2.00mm and 2 Fractional Dies: 3/4" - 20 & 13/16" - 20.



RETHREADER DIE SETS

No.	Type	Size
8250	NC (Coarse)	3/4", 7/8" - 9, 1" - 8, 1-1/8" - 7, 1-1/4" - 7
8255	NF (Fine)	3/4", 7/8" - 14, 1" - 14, 1-1/8" - 12, 1-1/4" - 12



9015 NUT SPLITTER

Splits rusted or seized nuts up to 3/4" / 19mm across flats. Offset, forged body with swivel head. Use with 3/4" hex drive tools.



9311 IMPACT WRENCH KIT - 3/8" SQUARE DRIVE

Loosens rusted screws, nuts and bolts. Use with hammer to provide maximum torque action.

Includes 3/8" square drive tool, hex bit adapter and four 5/16" impact hex bits: 9/32" & 5/16" Slotted, #2 & #3 Phillips.



IMPACT BITS

5/16" hex shank bits for use with CTA #9311.

No.	Size
9325	9/32" Slotted
9326	5/16" Slotted
9327	3/8" Slotted
9331	#1 Phillips
9332	#2 Phillips
9333	#3 Phillips
9334	#4 Phillips
9320	4 Pc. Set - includes #9325, 9326, 9332, 9333



9011 STUD REMOVER & INSTALLER

Fits hard-to-reach areas.

Range: 1/4 to 3/4" / 6-19mm. Use with 1/2" drive tools.



9040 5 PC. SPIRAL SCREW EXTRACTOR SET

Removes broken studs, set screws and pipe fittings. Chrome-moly steel with reverse tapered threads.

No.	Bolt, Stud or Screw Size	Drill Size	Pipe Size
9041	1/8" - 1/4"	5/64"	-----
9042	1/4" - 5/16"	7/64"	-----
9043	5/16" - 7/16"	5/32"	-----
9044	7/16" - 9/16"	7/32"	-----
9045	9/16" - 3/4"	7/64"	1/8" - 1/4"



9030 5 PC. FLUTED SCREW EXTRACTOR SET

Removes broken studs, set screws, pipes and fittings. Hardened extractors are tapered with special 4-point ends to bite into fastener.

No.	Bolt, Stud or Screw Size	Drill Size	Pipe Size
9031	1/4" - 5/16"	1/8"	-----
9032	3/8"	3/16"	-----
9033	7/16"	15/64"	1/8"
9034	1/2" - 9/16"	5/16"	1/4"
9035	5/8"	3/8"	3/8"



GENERAL SERVICE

WIRE POWER BRUSHES

For heavy-duty applications in removing corrosion, carbon, paint or rust. All with high carbon steel wire and 1/4" shank.

No.	Description	Diameter	Max RPM
9805	Knotted End Brush	1" (25cm)	20,000
9809	Crimped End Brush	1" (25cm)	20,000
9807	Cup Brush	2-1/2" (64cm)	5,000



9810 STAINLESS STEEL SCRATCH BRUSH

4 X 19 row brush with hardwood handle. OAL: 13-3/4" / 35cm



WIRE SCRATCH BRUSHES

1" steel wire with hardwood handle.

No.	Length	Wire
9811	14" / 35cm	3 x 19 rows
9813	9-1/2" / 24cm	4 x 16 rows



9801 PARTS CLEANING BRUSH

Poly bristles and wooden handle, for automotive cleaning applications.



9990 FLOW-THRU PARTS BRUSH W/ TUBE

For parts washing sinks with circulating solvent systems. Features Trialoy® double-duty filaments, heavy-duty grooved handle and 28" / 71cm long tube.



9992 PARTS WASH BRUSH

For hand use in a parts washing sink or solvent container. Features Trialoy® double-duty filaments and heavy-duty grooved handle. OAL: 9-1/2" (25cm)



INSPECTION MIRRORS

For inspecting hidden areas. Double ball joint design links mirror to handle for 360° viewing.

No.	Max. Length / Type	Mirror Size
9450	21" Telescopic	1-1/4"
9452	8" Non-Telescopic	1-1/8"
9454	14" Telescopic	2-1/4"



MAGNETIC PICK-UP TOOLS

For picking up ferrous tools, parts, nuts, bolts, etc.

No.	Max. Length / Type	Magnet Strength
9432	8" Non-Telescopic	6 oz.
A935	25" Telescopic	1/2lb
9425	25" Telescopic	1-1/2lb.
9433	26" Telescopic	5 lb.
9439	21" Flex Shaft	1-1/2 lb.
9427	29" Flex Shaft	5 lb.



9435 FLEX MECHANICAL FINGERS - 24" LONG

Retrieve tools, parts, papers, etc. with 4 powerful spring jaws.



9437 FLEX MECHANICAL FINGERS - 48" LONG

Retrieve tools, parts, papers, etc. with 4 powerful spring jaws. Thick cable design allows for extra-long size.



9900 5 PC. HOOK & PICK SET

For separating wires, removing small fuses, "O" rings, retrieving washers and parts, scribing on metal parts. High carbon steel points screw into aluminum handle with magnetic end. OAL: 6-3/4" / 17cm



9910 4 PC. UTILITY HOOK & PICK SET

High carbon steel ends with hex shaft. Styles: Straight, Complex, 90° and Hook. OAL: 7" / 18cm



097900 24 PC. ASSORTMENT

6 of each displayed in clear stand-up tube.

9920 4 PC. DENTAL PICK SET

Sharp dental style picks, with various angles, get into tight places. OAL: 6-1/2" / 16.5cm



9905 DOUBLE POINTED SCRIBER

2 working ends with knurled handle in center. OAL: 9" / 23cm



2080 GASKET SCRAPER

Removes shellacked gaskets, paint, grease and carbon. 1" wide forged alloy steel blade with chisel edge. Can be re-sharpened. OAL: 9-3/4" (25cm)



9964 SWIVEL-HANDLE RAZOR SCRAPER

Blade holder swivels out from inside handle and locks in 3 positions. Includes 1 blade.



9968 EXTENDED RAZOR SCRAPER

11" / 28cm long. Handle stores extra razors. Includes 2 standard and 1 plastic blade.



UTILITY RAZOR SCRAPER

Offset head with vinyl grip. Razor reversed in handle for safety. OAL: 4-1/2"

No. Pack Type
9969 1/Blister Card
093600 50/Fishbowl
093610 24/Fishbowl



STEEL RAZOR BLADES

For use with all standard scrapers.

No. Pack Type
9961 5/Blister Card
9963 100/Clamshell
9963K 100/Plain Box
099130 50 5-Packs/Fishbowl



PLASTIC RAZOR BLADES

For scraping sensitive surfaces (chrome, paint, etc.). Fits standard scrapers.

No. Pack Type
9962 5/Blister Card
9962H 100/Clamshell



LARGE SNAP BLADE KNIFE

Snap-off blade inside colorful plastic handle with lock feature. Bulk pack

No. Pack Type
097600 48/Display Box
099203 24/Fishbowl



SMALL SNAP BLADE KNIFE

Snap-off blade inside colorful plastic handle with lock feature. Bulk pack

No. Pack Type
097610 60/Display Box
099208 100/Fishbowl



8982 CHAIN BREAKER & RIVETING TOOL KIT

Will break chains from #35 to #530, including cam chains and drive chains. Kit includes 3 anvils, 3 pins, riveter, spring, press plate, lever, handle and chain press. Recommended for light to medium duty use. Complete with instructions and packed in blow-mold case.



8480 CHAIN BREAKER

For use on 420, 428, 520, 525 and 530 chains. First bolt locks chain in place while second bolt turns to drive pin completely through the link. Folding handle for storage.



2015 MECHANIC'S STETHOSCOPE

Accurately and quickly locates trouble in engines and other moving parts or for checking flow of water, oil, gas, steam, etc. Sensitive probe picks up vibrations.



T-HANDLE DEEP SOCKETS

For servicing fasteners on motorcycles, ATVs and ATCs. 12" / 30cm long for deep reach. T-handle slides for quicker use.

No.	Size
8470	10mm
8475	12mm



A885 24" CHAIN WRENCH

Powerful wrench grabs and turns objects of almost any shape and up to 7" / 18cm diameter. Knurled grip handle and 24" / 61cm heavy-duty chain.



A990 BRASS PUNCH - TAPERED

For non-sparking and soft metal applications. Size: 3/8" x 16"



A995 BRASS PUNCH - BAR

For non-sparking and soft metal applications. Size: 3/4" x 10"



1600 12 PC. PUNCH & CHISEL SET

Includes 1 Center Punch, 3 Taper Punches, 1 Diamond Punch, 2 Pin Punches, 4 Cold Chisels and 1 Cape Chisel, packed in pouch.



1620 CLAW RIPPER

Made from alloy steel with .401" shank for air tools.



8600 ADJUSTABLE GLAND NUT WRENCH - SMALL

Fits hydraulic cylinders on vehicles with gland nuts from 1" to 3-3/4" / 25 to 95mm. Reverses to work on 1/4" or 7/32" pinholes. Use with 1/2" square drive tools.



8605 ADJUSTABLE GLAND NUT WRENCH - LARGE

Fits hydraulic cylinders on vehicles with gland nuts from 2" to 6" / 51 to 152mm (pin to pin). Reverses to work on 17/64" or 21/64" pinholes. Use with 3/4" square drive ratchet or breaker bar.



8990 ENGINE CHAIN HOIST

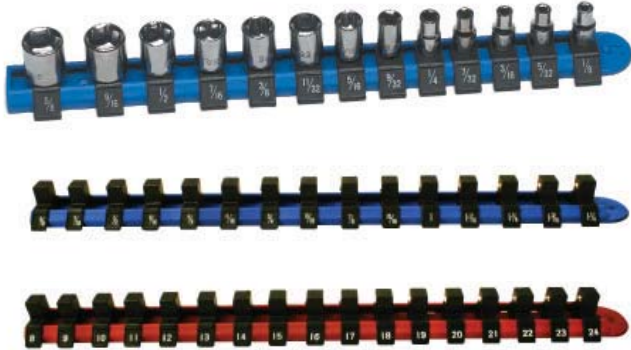
28" / 71cm long chain assembly helps lift engines and other heavy parts up to 1,000 pounds / 455 kg. Heat-treated alloy steel.



SOCKET HOLDERS W/ SIZE I.D.

Nylon rails are pre-printed with socket sizes for easy identification. Available in both Fractional & Metric in 1/4", 3/8" & 1/2" drive sizes. Features recessed springs to hold the socket. Rails include mounting holes.

No.	Description	Socket Size	No. Holders
9720	1/4" Drive - Inch	1/8" - 5/8"	13
9725	1/4" Drive - Metric	4mm - 15mm	13
9730	3/8" Drive - Inch	1/4" - 1"	13
9735	3/8" Drive - Metric	8mm - 20mm	13
9750	1/2" Drive - Inch	3/8" - 1-1/4"	15
9755	1/2" Drive - Metric	8mm - 24mm	17



SOCKET HOLDERS

Steel racks with 16 slide-on clips hold sockets tightly. Includes mounting holes. OAL: 17" / 43cm

No.	Size
9593	1/4" Drive
9595	3/8" Drive
9597	1/2" Drive



4-1 FARMER'S PLIERS

High-polished multi-tool will stand up to all conditions and uses. Features a Slip-Joint Pliers, Wire Cutter, Adjustable Wrench and Prybar/Screwdriver.

No.	Pack Type
10500	Blister Card
10500-8	8 Pc. Shelf Pack



10600 SAFETY HAMMER

Breaks glass, cuts seatbelt, to get you out of your car in an emergency. Lightweight handle with double-headed hammer and recessed razor.



TEFLON TAPE - 1/2" X 260"

Prevents leaks in plumbing and air lines.

No.	Type
A700B	Bulk Pack-10/Bag
099148	48/Fishbowl



ELECTRICAL TAPE - 3/4" x 66'

UL-approved high quality PVC insulating tape for electrical service. For up to 600V and 80° C / 176° F.

No.	Type
A713B	Bulk Pack-10/Sleeve
099225	20/Fishbowl



FINGERNAIL BRUSH

All nylon plastic construction for cleaning hands, parts, etc.

No.	Pack Type
A938B	Bulk
099198	24/Fishbowl



5555 LOW-PROFILE PLASTIC CREEPER

Custom-molded body is light-weight but durable. Countered fit provides comfort and allows for working in tight areas. Features built-in headrest and 6-wheel construction.

Dimensions: 36" x 17" x 4-1/2" / 91cm x 43cm x 11.4cm



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