



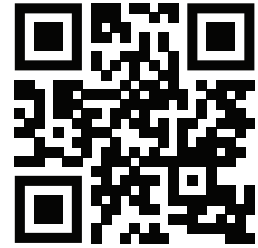
CTA MANUFACTURING
AUTOMOTIVE SPECIALTY TOOLS



2022 Catalog

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SCAN TO SIGN UP



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HEAVY-DUTY CAP-TYPE WRENCHES

Extra thick wall construction w/ combo 3/8" square & 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
2488	85.5mm x 16	Volvo
2489	86mm x 16	Volvo



ALUMINUM DIE-CAST CAP-TYPE WRENCHES

All with combo 3/8" square & 1" hex drive, except #2464 with combo 1/2" square & 1" hex drive.

No.	Size	Applications
2460	64mm x 14	Toyota, Nissan, Honda
2462	84mm x 14	Jeep V6 Diesel, Sprinter, Mercedes
2464	74mm x 14	VW, Audi, Ford, Sprinter, Toyota, BMW Motorcycle
9180	74.5mm x 14	BMW, Mercedes, VW, Audi



1726 TOYOTA/LEXUS/SCION - 4, 6 & 8 CYL. WRENCH

Serves all housing caps on 4, 6 & 8 cyl. Toyota/Lexus/Scion engines. 64mm x 14 with 1/2" drive. Slim design reaches all caps. Long design eliminates need for extension. Fits many Honda, Infiniti & Nissan OE spin-on filters.



2477 TOYOTA/SCION - 4 CYL. ALUMINUM FORGED WRENCH

Low profile design for clearance. Notched design to engage tabs. 64mm x 14. 3/8" square and 27mm hex drive.



2465 TOYOTA/LEXUS/SCION - 6 & 8 CYL. ALUMINUM DIE-CAST WRENCH

Notches to engage tabs. Fits all 4 types of plastic & aluminum caps on 6 & 8 cylinder Toyotas. 64mm x 14. 3/8" square and 1" hex drive.



2475 TOYOTA/LEXUS/SCION - 6 & 8 CYL. STEEL FORGED WRENCH

Heavy-Duty forged and machined 6140 steel. With notches to engage tabs. Fits all 4 types of plastic & aluminum caps on 6 & 8 cylinder Toyotas. Bright chrome finish. 64mm x 14. 3/8" square and 1-1/8" hex drive.



2470 3 PC. TOYOTA/LEXUS/SCION OIL CHANGE KIT

Includes 2475, 2477, and 2088 Oil Drain Hose. Set covers all 4, 6 & 8 cyl. oil filter housing caps on Toyota, Lexus & Scion.



OIL DRAIN HOSES

Prevents spillage for filter change on vehicles with one-way valve housing caps. Tool screws into cap to drain oil. 20" (51cm) hose with plastic end cap. Compare #2087 to Factory Tool: T40057.

No.	Description
2087	VW Audi
2088	Toyota Lexus



OIL FILTER HOUSING CAP INSTALLER

Internal torque limiting device installs oil filter housing caps at specific torque specs, preventing over-tightening. 3/8" drive. OAL: 11-1/2" (290mm). Color coded handle for easy identification.

No.	Torque Setting	Handle
NEW 8930	35Nm (25.8 Ft-lb)	Blue Handle
8940	25Nm (18.5 Ft-lb)	Red Handle



7995 7 PC. LOW-PROFILE METRIC CAP SOCKET SET

Super-low profile for tight clearances. Removes housings with cartridge-type oil & fuel filters. Chrome vanadium steel. 3/8" square drive. Kit includes:

No.	Size	Applications
2570	27mm	Mercedes, Smart, Hyundai, Kia
2571	29mm	Cummins
2572	32mm	Saturn, GM Ecotech, Mercedes
2573	24mm	Ford, Saturn, Cadillac, BMW
2574	36mm	BMW, VW, Audi, Mercedes, Mini, Ford, Toyota, Nissan,
7885	25mm	Cummins
7888	28mm	Cummins



3865 5 PC. OIL FILTER CUP WRENCH SET

Nylon fiber construction for high torque capacity to remove difficult oil filters. Heat resistant. Metal reinforced 3/8" sq drive.

No.	Size
3860	65/67mm x 14
3861	74/76mm x 15
3862	76mm x 14
3863	93mm x 15
3864	76/80/93mm x 30/15/36



CAP-TYPE

Precision-stamped with 3/8" square drive.

No.	Size	No.	Size
A250	74/76mm x 15	A260	82mm x 15
A251	76mm x 14	A261	86mm x 16
A252	93mm x 15	A262	100mm x 15
A253	93mm x 36	A263	76mm x 8
A254	73mm x 14	A264	76mm x 15
A255	65/67mm x 14	A265	64mm x 14
A256	68mm x 14	A266	88mm x 15
A257	80mm x 15	A267	74.5mm x 14
A258	74mm x 15	A268	84mm x 14
A259	90mm x 15	A270	65mm x 14



026400 10 PC. OIL FILTER WRENCH KIT

- CARTRIDGE-TYPE FILTERS
Includes six cap wrenches: A251, A258, A261, A266, A267, 2485, plus four cap sockets: 2570, 2572, 2573 and 2574.



096950 11 PC. CAP-TYPE OIL FILTER WRENCH KIT FOR SPIN-ON FILTERS

Includes: A250, A251, A252, A253, A254, A255, A256, A257, A258, A263, A264.

2506 LOW PROFILE SPIDER TYPE WRENCH

Three short legs for low-profile applications are driven by a gear-mechanism. 3/8" drive. 61-95mm range.



2507 BI-DIRECTIONAL SPIDER TYPE WRENCH

Internal gear to remove & install oil filters. 3/8" square drive & 1/2" square drive adapter w/ hex. 50-95mm range.



OIL FILTER WRENCHES & LUBRICATION

2505 H.D. SPIDER TYPE WRENCH

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



2508 H.D. BI-DIRECTIONAL SPIDER TYPE WRENCH

Internal gear to remove & install oil filters. 3/8" square drive & 1/2" square drive adapter w/ hex. 60-120mm range.



H.D. SWIVEL TYPE WRENCH

Extra-thick yoke w/ expanding link mechanism, adjusting screw to tighten or loosen swivel & thick cushion grip.

No.	Range	Applications
2538	57-73mm	Sub-compact & 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



H.D. SWIVEL TYPE WRENCH SETS WITH STAND

4 and 6 piece oil filter wrench sets with rubber-coated and flanged magnetic-base stands. Available in standard, truck & master sets.

No.	Description	Includes
4325	4 Pc. Standard	2538, 2540, 2545, 2548
4325T	4 Pc. Large/Truck	2545, 2548, 2551, 2552
4326	6 Pc. Master Set	2538, 2540, 2545, 2548, 2551 & 2552
4325X50	Stand Only	
4326X50	Stand Only	



4325



4325T



4326

NARROW BAND SWIVEL TYPE WRENCH

16mm wide band for hard to reach filters. Swivel design, locking nut, heavy-duty yoke, comfort grip and link mechanism.

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



BAND TYPE WRENCH

Comfort grip handle with dimpled band.

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



A280 SLOTTED BAND TYPE WRENCH

Adjusts for wide application range. 76-102mm range.



2594 CHAIN BAND TYPE WRENCH

Chain allows for adjustment and better gripping. 9" (228mm) chain. 70-115mm range.



SQUARE DRIVE - AUTO WRENCH

Narrow band for tight clearance. 3/8" square drive.

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



SQUARE DRIVE - TRUCK WRENCH

Heavy-duty for high torque requirements. 1/2" square drive.

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



PLIERS TYPE WRENCH

Adjustable jaws w/ long, comfort grip handles.

No.	Range	Application
2532	48-89mm	Compact filters
2534	54-108mm	Standard filters
2536	92-152mm	Truck filters



2537 OFFSET PLIERS TYPE WRENCH

Angled head for greater access in tight areas. Adjustable jaws w/ long handles. 64-117mm range.



2530 RATCHETING PLIERS TYPE WRENCH

Self-adjusting ratchet for multiple settings. Extra-long handles. 50-125mm range.



CAM-ACTION WRENCH

Two thick jaws slide using cam mechanism. 3/8" square & 7/8" hex drive.

No.	Range	Application
2550	48-89mm	Compact filters
2555	54-108mm	Standard filters



2595 STRAP TYPE WRENCH

2" wide band on 5-1/2" handle with 1/2" square drive. Up to 152mm range.



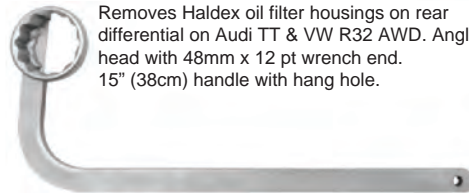
2596 H.D. STRAP TYPE WRENCH

2" wide band assembled on forged handle. 3/8" and 1/2" drive ends. Up to 229mm range.



8766 VW/AUDI HALDEX OIL FILTER WRENCH

Removes Haldex oil filter housings on rear differential on Audi TT & VW R32 AWD. Angled head with 48mm x 12 pt wrench end. 15" (38cm) handle with hang hole.



8-1 OIL & LUBE MULTI-WRENCHES

Fits most oil drain, transfer case, and differential plugs. Features offset head w/ yoke support for high torque applications, indexing feature to lock socket into position, nickle plating and magnet built into handle. OAL: 10-1/2" (27cm). Hang-tab packaging. Order without 'K' suffix for hanging card packaging.

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



4334 CUMMINS OIL FILTER PLUG

Plugs into oil filter preventing oil from spilling when removing oil filter on 2013-2020 Dodge RAM 6.7L Cummins Diesel 2500/3500 trucks. Enables Pre-lube of oil filter before installation. U-handle for easy grip. Ridged side for easy removal from oil filter.



7250 CUMMINS ENGINE OIL SERVICE KIT

Includes the required fluid service tools for 2013+ Dodge RAM 6.7L Cummins Diesel 2500/3500 HD Trucks. Includes:

No.	Description
1021	Oil Filter Plug
4334	Fuel Filter Socket
7888	Water Sensor Wrench



DIPSTICK TUBE EXTRACTORS

Removes broken dipstick tubes without damage. Thread into 5401 adapter to attach to puller for removal.

No.	Application	Image	No.
5401	Puller Adapter - 3/8" x 5/8"-18		5401
5405	Ford 4.6L, 5.4L, 6.2L & 6.8L		5405
5407	Dodge 5.7 & 6.1L		5407
5409	GM 4.8L, 5.3L, 5.7L, 6.0L & 6.2L		5409
5411	2 Pc Set Ford - 5401 & 5405		5407
5412	2 Pc Set Dodge - 5401 & 5407		5407
5413	2 Pc Set GM - 5401 & 5409		5409
5414	4 Pc Master Set		5409



2049 2 PC. SQUARE HEAD DRAIN PLUG SOCKET SET

Services transfer cases, engine oil pans, manual trans & differential drain/fill plugs on Ford, Jeep, Volvo, Peugeot & more. 3/8" drive.

No.	Size
2036	8mm
2037	10mm



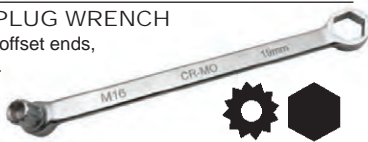
8762 EURO OIL DRAIN PLUG WRENCH - 14MM X 17MM

Services BMW, Benz (107), Audi & VW, including crankcases & transmissions. Double 14mm male hex & 17mm female hex offset ends. Chrome-moly forged steel. OAL: 9-1/2" (24cm).



8764 VW/AUDI OIL DRAIN PLUG WRENCH

16mm x 12 point (XZN) & 19mm hex offset ends, services plugs on VW, Audi, Porsche. Chrome-moly forged steel. OAL: 9-1/4" (23cm).



1136 JEEP TRANSMISSION DRAIN PLUG SOCKET - 14MM HEX

Stubby for clearance on 2012+ Jeep Wrangler 6MT. OAL: 30mm



METRIC HEX DRAIN PLUG SOCKETS

High-torque 2 pc. bit socket design w/ 1/2" drive.

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



2048 10MM FEMALE SQUARE HEAD SOCKET

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



2039 VW/AUDI DRAIN PLUG SOCKET - 16MM XZN TAMPERPROOF

12 point, for oil & transmission drain plugs & fasteners on VW, Audi & Porsche. Fits Detroit Diesel flywheel bolts, front crank pulleys & head bolts. 1/2" drive. Compare to Factory Tool: 3357.



1320 8 PC. DRAIN PLUG KIT

For removing plastic oil, coolant, and other drain plugs. Won't damage drain plugs. Includes a T-handle with a square drive ball lock and 7 adapters. Packed in blow mold case. Visit ctatools.com for application details.

No.	Application
1321	GM (#1)
1322	Ford (#2)
1323	Ford (#3)
1324	Ford/Lincoln (#4)
1325	Mercedes (#5)
1326	Ford/Peugeot/Citroen/Lincoln/Opel/Toyota (#6)
1327	BMW (#7)
1328	VW, Audi, Porsche (#8)



1037 VW/AUDI OIL DRAIN PLUG TOOL

Remove plastic oil drain plugs without damage. Widened thumb-grip allows proper torque. Compare to Audi Factory Tool: T10549. Patent No. D804,264.



8606 BENZ OIL DRAIN PLUG TOOL

Remove new plastic oil drain plugs without damage. Services 2014-2020 Mercedes Benz C-class, CLS, E-class, GLC & S-class.



8607 GM OIL DRAIN PLUG TOOL

Remove new plastic oil drain plugs without damage. Services GM Acadia, Blazer, CT6, Silverado, Sierra, XT4 & XT5.



9250 CADILLAC DRAIN PLUG & OIL FILTER SOCKET - T45 TORX®

Low profile for oil filter housings & drain plugs on Cadillac CTS 2003-2004. 3/8" drive w/ 5/8" hex adapter.



9573 SUBARU/GM DRAIN PLUG SOCKET - T70 TORX®

5MT 2004+ WRX, 2003+ Legacy, Forester, 2007 STI clutch side trans bolt & brake rotor retaining bolts on 2003+ GM C4500.



DIFFERENTIAL PLUG EXTRACTORS

For removal of female style plugs w/ damaged holes. Fluted design.

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



THREAD RE-CONDITIONING TAPS

ISO type alloy steel tap to clean oil pan & other threads, transfer case & transmission drain plugs. Use w/ CTA #9660 & 9665 Tap Holders.

No.	Size	Application
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	14mm 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



1811 5 PC. THREAD CLEANING ASSORTMENT

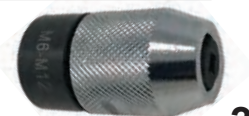
Includes tap sizes: 12mm x 1.25, 12mm x 1.75, 1/2"-20, 14mm x 1.50, 12mm x 1.50, plus one #5070 adjustable tap holder. Packed in plastic tray organizer w/ protective compartments.

No.	Size
18111	12mm x 1.25
18112	12mm x 1.75
18113	1/2" - 20
18114	14mm x 1.50
5070	Adjustable Tap Holder



5070 ADJUSTABLE TAP HOLDER

Adjustable to fit tap sizes: M6 - M12. Use w/ CTA #18111, 18112, 18113, 18114, 18115 & 18116 & other taps. 3/8" square drive.



FLUID SERVICE

7333 20 PC. MASTER OIL FUNNEL KIT

Allows for fast oil filling without spillage or waste. Complete kit includes universal funnel, swivel extension & 17 adapters - providing virtually complete vehicle coverage. Includes tackle box for organization & NEW 7469 Oil Funnel Stand. All parts available separately, as listed below:

No.	Description	No.	Description
NEW! 7469	Oil Funnel Stand	7478	Toyota, Lexus
1045	Ford Escape	7479	Ford, Mazda
3404	Volvo	7482	Toyota, Lexus, Scion, Pontiac
4328	Volvo	7483	GM, Ford, Jaguar, Hyundai, Land Rover, Mazda, Saab
7471	2 Liter Funnel	7485	VW, Audi, Seat, Skoda
7472	Metal Angled Extension	7486	Dodge Cummins
7473	Euro	7487	Dodge
7474	Subaru	7489	Elbow
7475	Toyota	7491	Chrysler
7476	Ford, Mazda, Jaguar, Land Rover		
7477	Dodge, Honda, Acura, Nissan, Jaguar, Ford, Mazda, Jeep, Land Rover		

NEW!



Includes new Oil Funnel Stand



MINI BUNDLES

Subkits available for vehicle make specific applications.

No.	Description	Contents
NEW! 1728	Oil Funnel & Stand	7471, 7469
7480D	Jeep, Dodge, Chrysler	7471, 7477, 7486, 7487
7480E	European	7471, 7473, 7485
7480F	Ford/GM	7471, 7476, 7477, 7479 1045, 7489
7480H	Honda	7471, 7472, 7477
7480M	Mazda	7471, 7476, 7477, 7479
7480S	Subaru	7471, 7474
7480T	Toyota, Lexus	7471, 7472, 7478, 7482

NEW!



1728



7480T

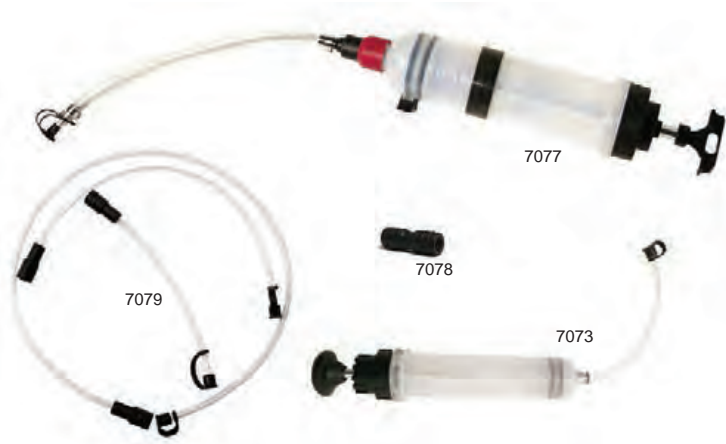
EXTRACTION & FILLING SYRINGES

Handle all types of automotive fluid, including brake fluid. Cylinder body calibrated and clear for viewing volume. Disassembles for easy cleaning, enabling use w/ many fluids. Small pump includes spring loaded, detachable tube w/ cap. Large pump includes control valve, gripping band & aluminum tip.

No.	Description
7073	200cc/0.22qt - w/ extra 1/4" x 7" (18cm) hose
7077	1500cc/1.6qt
7078	ATF Filling Adapter
7079	3 Pc. Hose Adapter Kit
7074	Master Kit - 7075, 7077, 7078, 7079

REPLACEMENT SEALS:

No.	Application (Color)
7075X01	Corrosive Fluids (Grey)
7075X02	Non-Corrosive Fluids (Black)
7077X01	Non-Corrosive Fluids (Black)
7077X02	Corrosive Fluids (Grey)



3150 FLUID TRANSFER TOOL

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



6510 15L FLUID EXTRACTOR TANK

Dual hand or air-operated for fast extraction of fluid. Two different diameter 1.2m extracting tubes are included to suit your particular application, including brake & clutch fluid.

Includes hose storage tube affixed to extractor tank. Features vacuum release button. Specially designed pour spout for mess-free emptying of container. Flip out foot hold for stability while using the extractor with two hands.

No.	Description
6511	3 Pc. Rigid Hose Set



UPDATED

7220U DIESEL EXHAUST FLUID FUNNEL MASTER KIT

For fast & clean filling of DEF. Special threaded adapter fits all standard DEF systems. Special Bue Adapter fits GMC DEF tanks. Elbow adapter creates angle when needed. Shut-off valve, air-bleed line, built-in screen and handle.

No.	Description
7220	DEF Kit (without 7222 GMC Adapter)
7222	GMC Adapter Only



7450 OIL & FLUID EVACUATOR/EXTRACTOR

Extracts/Transfers motor oil, ATF, gear lube, gasoline, coolant or water. For cars, boats, trucks, farm equipment and household plumbing. Low profile, 6 liter (6.35 quart) capacity, spout, & 7' long hose for dipstick tubes. Transfers 4 liters per minute.



HOSE CLAMP PLIERS | NUT DRIVERS | LINE SERVICE

4027 EXTRA-LONG WAFFLE GRID HOSE CLAMP PLIERS
32x19mm head w/ multi-directional slotted pattern. Spring-loaded w/ locking mechanism. Opens to 65mm. OAL: 11-3/4" (28cm).

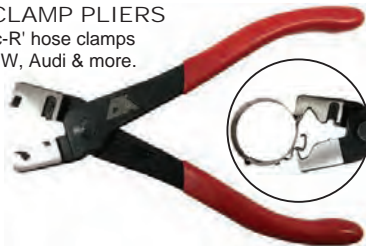


1224 EXTRA-LONG WAFFLE GRID HOSE CLAMP PLIERS - OFFSET
32x19mm Multi-directional slotted pattern working end. Locking mechanism and offset head for servicing applications with limited clearances.



NEW!

4029 CLIC/CLIC-R HOSE CLAMP PLIERS
Locks/unlocks reusable 'Clic' & 'Clic-R' hose clamps on Benz, Fiat, Chrysler, Dodge, BMW, Audi & more. OAL: 7" (17.5cm).



1050 MULTI-DIRECTIONAL HOSE CLAMP PLIERS
65mm extra-wide head w/ bi-directional slotting. Services VW/Audi lines & more. OAL: 8" (20.5cm).



8832 FLAT-BAND HOSE CLAMP PLIERS
Remove & Install flat-band style hose clamps on Ford, GM & more. Spring-loaded ratchet lock. OAL: 9" (23cm).



8834 ANGLED HOSE CLAMP PLIERS
Remove & Install flat-band style hose clamps on hard-to-reach areas. 45° jaws with ribbed design. Spring-loaded ratchet lock. OAL: 10" (25cm).



1048 EXTRA LONG CIRCLE HEAD HOSE CLAMP PLIERS
30mm round head diamond pattern. Spring loaded up to 55mm. 30° bend for easier access. OAL: 13.5" (34.5cm).



1013 MULTI-DIRECTIONAL HENN CLAMP REMOVAL TOOL
Designed for the loosening or opening of HENN clamps found on coolant hoses & charge air hoses. T-Handle features a removable working end. Working end can be adjusted to angled (90°) and straight.



8960 5 PC. E-TORX® FLEX DRIVER SET

Flexible shaft for hard-to-reach areas. Services BMW, Benz, Porsche, Volvo, Saab, VW & Audi Brakes, Transmissions, air intake fasteners, etc. Special no-slip grip. Includes sizes: E4, E5, E6, E7 & E8



8608 5 PC. FLEX NUT DRIVER SET - HEX

Long flex cable shaft. OAL: 10" (25cm). Includes:

1055 - 5mm 1057 - 7mm 5055 - 10mm

1056 - 6mm 1058 - 8mm

1051 - 4 Pc. Flex Nut Driver Set (Size 5mm - 8mm)



7396 3 PC. SPRING-BAND CLAMP LOCKING PIN SET

Low-profile metal clips keep the spring-band clamp held in the open position, freeing up hands and pliers for the next spring-band clamp. Three sizes: 3.81mm (.15"), 8.89mm (.35") & 11.43mm (.45"). Linked onto key ring for easy storage.



1100 2 PC. FLIP SOCKET FLEX NUT DRIVER SET - HEX

Long flex cable shaft. OAL: 10.75" (27cm)

Replacement flip sockets:

1101X01 - 1/4" x 5/16" (8mm)

1102X01 - 6mm x 7mm



3490 2 PC. STEEL LINE

STOPPER SET
Seal steel lines on fuel, brake, AC, power-steering, transmission, and banjo lines. Prevents leaks & contamination. Fits 3/8", 1/2", 5/16" & banjo lines.



8800 HOSE PINCH-OFF PLIERS

Clamp hoses & vacuum lines w/ swivel jaws that maintain parallel clamp. Built-in ratchet mechanism that locks handle position. OAL: 10" (25cm).



8810 HOSE REMOVER PLIERS

Remove fuel, vacuum or heater hoses from 1/4" to 3/4" (6mm to 9mm) diameter. Push pliers between hose end & squeeze handles. Spring-loaded. OAL: 9" (23cm).



FLUID LINE | DISCONNECT TOOLS

3475 8 PC. OFFSET DISCONNECT SET
 Separate fittings on heater, AC, fuel & cooler lines. Includes sizes:
 5/16" 3/4"
 3/8" 7/8"
 1/2" 3/8" w/ notches
 5/8" 3/8" w/ extension



3450 6 PC. FUEL LINE DISCONNECT SET
 Disconnect fuel, transmission, oil cooler & AC lines. Flexible injection-mold plastic. Sizes: 5/16", 3/8", 1/2", 5/8", 3/4" & 7/8"



3476 SUBARU FUEL LINE DISCONNECT TOOL
 Disconnects fuel lines without damage on 2004+ Subaru with 2.0 & 2.5L engines.



A396 OFFSET DISCONNECT TOOL - 3/8" & 5/16"
 Removes fuel line from center port of fuel sending unit.



A378 FUEL LINE DISCONNECT TOOL
 5/16" & 3/8" sizes services connectors on Ford, Mazda & Chrysler.



A379 A/C & FUEL LINE DISCONNECT TOOL
 3/4", 5/8", 1/2" & 3/8" sizes services connectors on Ford & Chrysler.



1810 FORD FUEL LINE DISCONNECT TOOL
 Required due to limited clearance between fuel line connector end & fuel rail on Transit 2.0L, 3.5 GTDI & 6.2L Boss engines.



4332 FORD HEATER HOSE DISCONNECT TOOL
 Disconnects hard-to-turn heater hose fittings located close to firewall, behind the engine. Services Focus, Escape and other 2.0L EcoBoost models.



3478 FORD 6.0L OIL LINE DISCONNECT TOOL
 Offset head for disconnection of oil rail supply line for fuel injector removal on '03+ F-series & Excursion w/ diesel engines. OAL: 6.5" (16.5cm).



3479 FORD TRANSMISSION OIL COOLER LINE DISCONNECT TOOL
 Flexible nylon plastic in two sizes: 3/8" for 2003+ Ford V8 Explorer, 2004+ F150 & Cadillac CTS. 1/2" for Ford Super Duty Trucks: F250, F350, F450



3467 GM/CHRYSLER FUEL LINE RETAINING CLIP TOOL SET
 Releases nylon clip on newer GM & Chrysler w/ in-tank electric fuel pumps. 3/8" & 5/16".



8610 23 PC. DISCONNECT TOOL SET
 Comprehensive disconnect tool set to service a wide range of applications, including Domestic, European & Asian vehicles. Packed in a clear case for easy identification and storage. Included disconnect tools: #1800, #1810, #3450, #3466, #3467, #3468, #3476, #3477, #3478, #3479, #4332, #5071, #A370, #A371, #A378, #A379, #A381 & #A396



1800 TOYOTA/NISSAN FUEL LINE DISCONNECT TOOL
 Disconnects 5/16" main fuel line from fuel rail on Toyota Corolla, Celica, Camry, Echo, Solara, Sequoia, Rav4, Prius, MR2, Matrix, Highlander & Tundra, Scion xA, xB & TC & '04+ Nissan.



3456 TOYOTA A/C DISCONNECT TOOL SET
 Removes A/C spring lock coupling on 2000+ Toyota. High and low side tools.



7399 TOYOTA TACOMA A/C CLAMP TOOL
 Used to remove both High and Low side A/C clamps. Insert fork into the thin slots of clamp to release. Application: Toyota Tacoma



3477 GM 6.6L FUEL LINE DISCONNECT TOOL
 3/16" size for hydrocarbon injection quick connect on 2010+ diesel GMT900 C/K Silverado/Sierra & GMT610 G-van Express/Savana.



5071 GM FLEX FUEL LINE DISCONNECT TOOL
 Releases fitting connecting heater hose to engine block & thermostat housing.



A381 GM OIL COOLER LINE DISCONNECT TOOL
 Releases fitting on transmission/radiator oil cooler line



2763 BENZ A/C LOW SIDE COUPLER WRENCH
 Removes A/C low side coupler on S-class, E-class, C-class and CLS models ranging from 2002-2014, codes: W221, W211, W204 & W219.



BMW DISCONNECT TOOLS
 Anodized aluminum. Use tapered side of tool against locking clip.

No.	Applications
3466	Power Steering & Transmission lines 1999-2011 3 series, X5
3468	Fuel Lines 2006-2011 3 series 2006-2009 X3 series



1137 MINI COOPER FUEL LINE DISCONNECT TOOL
 Removes low pressure fuel line w/o damage on Mini Cooper Turbo 2007-2013. Die-cast and hinged design. Compare to MINI Factory Tool #130250.



7050 4 PC. RADIATOR PRESSURE TESTER KIT

Tests pressurized cooling systems up to 30 PSI. Kit includes pump with gauge, 12" hose & cap adapter to check 3/4" deep filler necks, 1/4" spacer washer for testing 1" deep filler necks & 3 radiator adapters (#7090, #7091 & #7092).



No.	Description
7060	Radiator Pressure Tester (Pump & Gauge only)

SYSTEM ADAPTERS

No.	Size
7090	52mm x 2.5mm Buttress
7091	2-Tab
7092	2-Tab
7093	48mm x 3mm
7094	47mm x 3mm
7095	54mm x 3mm
7096	52mm x 3mm
7097	51mm x 4mm Buttress
7098	63mm x 3mm Buttress
7099	53mm x 3mm
7100	52mm x 2.5mm Buttress
7101	62mm x 4mm
7102	53mm x 3mm Buttress
7103	34mm x 3mm
7117	46mm x 2.5mm Buttress
7118	49mm x 2.5mm Buttress
7119	52mm x 3mm Buttress
7121	64mm x 3mm
7122	52mm x 2.5mm - Reverse

CAP ADAPTERS

No.	Size
7104	48mm x 3mm
7105	48mm x 4mm
7106	44mm x 3mm
7107	42mm x 3mm
7108	58mm x 3mm
7109	52mm x 3mm
7110	48mm x 2.5mm
7111	65mm x 3mm
7112	32mm
7113	32mm
7114	58mm x 4mm
7115	48mm x 3mm
7116	35mm x 3mm

7055 6 PC. RADIATOR PRESSURE TESTER KIT - EURO

Includes 6 most used European specific pressure tester adapters. Includes #7093, 7094, 7097, 7098, 7101 & 7119 and ID chart.



6520 VACUUM COOLING SYSTEM FILLER KIT

Purges trapped air from cooling system. Tests for coolant system leaks and refills cooling system. Rubber body, with adapters, covers most vehicle radiators.



7057 10 PC. RADIATOR PRESSURE TESTER KIT - USA/ASIAN

Includes 10 most used USA/Asian specific pressure tester adapters. Includes #7090, 7091, 7092, 7096, 7100, 7102, 7103, 7109, 7117 & 7118 and ID chart.



5435 COOLANT PUMP THERMOSTAT KEY

For removal & installation of the coolant pump thermostat on VW/Audi 1.4L direct injection turbo engine. 3/8" Drive. Compare to VW/Audi Factory Tool # T10508. Applications: Golf 2013+, Jetta 2014+ & Audi A3 2013+.



1079 4 PC. RADIATOR PRESSURE TEST KIT

Tester connector & 3 expanding adapters covering diameter range of 17mm to 40mm. Use with #7060 pump.



7120 3 PC. RADIATOR PRESSURE TEST KIT - TRUCK

For older model GM 2.5L "X" body & 1.8L "J" body trucks w/ 2-11/16" OD filler necks. Includes 5/16" plug for testing system & radiator caps.



7045 RADIATOR CAP PLIERS

Quickly & safely removes all standard radiator caps.



7088 COOLANT SYSTEM FILLING KIT W/ UNIVERSAL ADAPTER

Refill & top off cooling systems quickly & easily during bleeding process. Filler cone features metal flow valve, air bleeder line & built in handles. Includes 4 adapters to fit most American & Asian cars and elbow adapter for tight clearances. Black adapter also converts your pressure tester adapters to filling adapters.



A195 ANTI-FREEZE & COOLANT TESTER

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



ATF SYSTEM | FUEL TANK

7400 ATF FILLING SYSTEM
9 liter (10 qt) tank unit dispenses fluid under pressure for fast, safe & clean refilling of ATF reservoirs. Built-in locking manual pump adds air above fluid level to prevent aeration. 1.5m (5') clear dispensing & removable hose featuring spring protection. Levered ball valve controls flow & includes hang hook. 0-35 PSI gauge, fill hole, air-valve release double handle & hanger. Complete range of adapters available as a set or individually.



NEW!

No. Description
7404M ATF Master Filler Kit
Includes #7400 & #3950

3950 19 PC. ATF FILLER ADAPTER KIT
Use with #7400 ATF Filling System. Supersedes #7402.

No. Applications
7409 VW Passat/Tiguan
7410 Ford 1/8 NPT
7411 BMW, Honda, Nissan
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
7420L Ford 5R55W & 5R55S
7425 Infinite 7 speed
7426 Universal
7427 Mini Cooper
7428 Nissan Juke
7429 GM/GMC 12 x 1.75
7430 VW/Audi S Tronic
7431 GM 8L45 & 8L90



NEW!

3403 VW/AUDI DSG FUNNEL
For DSG (6 speed) & 02J (5 Speed) transmission bottom filling. 1 liter capacity funnel w/ built-in mesh screen to prevent contamination. Screw in DSG adapter to drain port & attach hose, Gravity will do the rest. Compare to Factory Tool #VAS6262, but w/ a funnel instead of bottle.



1028 VW/AUDI VAQ PERFORMANCE DIFF. SERVICE TOOL
Screws onto the Haldex fluid bottle (G060175A2). Features open/close valve.



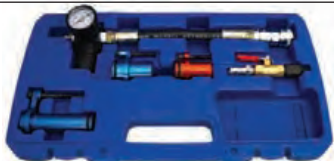
7670 VW/AUDI DSG WRENCH
Offset 24mm x 12 pt wrench for VW/Audi oil filter trans. housing caps without removing the battery, saving time.



3402 BENZ TRANSMISSION FILL & DRAIN KIT
Services 2015+ 725 transmission (9G-Tronic). Use with CTA's ATF Filling Adapter #7415 for a full service transmission fluid flush. Compare to Factory Tools 725 589 02 90 00 & 725 589 00 90 00



7650 TRANSMISSION OIL DRAIN & FLUSH KIT
Fully drains transmission oil by air pressure. Services Benz 722.6 & 722.9, BMW 6HP & 8HP Transmission. Patent No. M 537183.



1017 CHRYSLER TRANSMISSION DIPSTICK
Checks fluid level on 6F24 Auto Transmission on late model Dodge Dart, Fiat 500, Jeep Cherokee, Compass & Patriot. OAL: 6.5" (16.5cm). Compare to #10323A.



1650 NISSAN TRANSMISSION SOCKET - 3 PT
3 Point Nissan Transmission Pump Socket 1/2" Drive. Size: 8TS. OAL: 1.5" (3.8cm)



1808 SPRINTER FUEL TANK RING TOOL
2008+ Sprinter. 12 slot design. 6-1/2" diameter. 3" height. 1/2" sq & 7/8" hex drive.



2214 FORD TRANSIT DIESEL FILTER WRENCH
6 slot design. Slim for clearance. 3/8" square drive.



1041 VW/AUDI FUEL TANK WRENCH
VW, Audi & Porsche. 3 locking points. ID: 120mm, 1/2" drive.



5015 VW/AUDI FUEL SENDER WRENCH
Services 139mm fuel gauge sending unit retainer nut on VR6 Engine, Audi A4, A6 & Porsche 996 & 986. /2" Sq Drive.



5445 VAG FUEL PUMP DRIVE BELT KIT
Secures high-pressure pump sprocket on VW, Audi & Porsche 2.7L & 3.0L TDi engines. Compare to Factory Tools T40135, 3242, T10320 & T40058. Packed in blowmold case.



NEW!

1089 VW/AUDI FUEL PUMP WRENCH
Extra-long w/ offset angle for access. VW: Passat (1998-2005). Audi: A4 (2002-2004 AWD), A6 (1999-2004). OAL: 15.5" (39cm) and 1/2" drive.



2821 BENZ FUEL TANK WRENCH
Removes & Installs plastic fuel tank lid on Benz vehicles from 1976-2000. E-class (W124) 1984-1996. C-class (W202) 1994-2000 & 300D (W123) 1976-1985 models.



1042 BENZ FUEL TANK LID WRENCH
W164, W251 chassis models. 22 slot design. OD: 190mm, ID: 145mm. 1/2" drive.



1043 BENZ/BMW/VW FUEL TANK LID WRENCH
Benz W211, W203, ML230, ML320, ML350, ML430, ML55 AMG, ML550, BMW E36, E46, E39 & VW. 4 slot design. OD: 145mm, ID: 116mm. 1/2" drive.



1044 TOYOTA/LEXUS FUEL TANK LID WRENCH
2004+ Toyota & Lexus. 9-slot design. OD: 173mm, ID: 143mm. 3/8" drive.



2492 FUEL TANK LID WRENCH
2010+ Volvo T4 & 5, BMW F01-02, 10 & 12, Benz W204, W207 & W212, Ford, Chevy, & Chrysler.



2491 BMW/MINI/PORSCHE FUEL TANK WRENCH
MINI, BMW: E31, E34, E36, E38, E39, E46, E53, E60, E63, E64, E65, E70, E83, E85, E90, R50, R52, R53, R55, R56 & R57. Porsche '911 Carrera, 911 GT2, 911 GT3, 911 Turbo, Boxster & Cayman. OD: 137mm, ID: 114mm. 3/8" drive. Compare to Factory Tool #161020.



2493 VOLVO FUEL TANK WRENCH
Late model S60, S80, V70, V70 XC, XC70, XC90 & XC90 left tank unit retaining nut. 1/2" drive. Compare to Factory Tool #9995720



2494 VOLVO FUEL TANK WRENCH
Services XC60, SC70, S40, S80 & V50.



7882 VOLVO FUEL TANK LID WRENCH
Services 240 (85-98), S40 (96-04), V40 (96-04), 850 (92-97), C70 Coupe (97-02), C70 Convertible (98-05), S70 (97-00), V70 (96-00) & V70 XC (00-02).



2740 SERPENTINE BELT TOOL

Spring-loaded clamping jaw positions & routes belts in tight areas w/o slippage.
OAL: 26.5" (67cm)



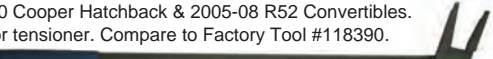
A875 SERPENTINE BELT TOOL KIT

For serpentine belts w/ spring-loaded idler pulleys. 23" long provides proper reach & prevents damage. Includes 13mm, 15mm, 16mm & 18mm sockets, 9" extension.
Applications: GM, Ford, Chrysler & Saturn.



2742 MINI COOPER SERPENTINE BELT TOOL

Relieves tension on belt tensioner for poly-ribbed belt service on naturally aspirated 2002-06 R50 Cooper Hatchback & 2005-08 R52 Convertibles. Includes locking pin for tensioner. Compare to Factory Tool #118390.
OAL: 24" (61cm).



2744 MINI COOPER S SERPENTINE BELT TOOL

Special jaws relieve tension on belt tensioner for poly-ribbed belt service on: R53 Mini Supercharged Hatchback 2002-06, R52 Mini Supercharged Convertibles 2007-08. Compare to Factory Tool #118410.
OAL: 26" (66cm).



1016 MINI COOPER SERPENTINE BELT TOOL SET

Two 22" wrenches to services N12, N14, N16, & N18 engines. Small & large 12 point openings. Comparable to Factory Tool #116210.



1071 VOLVO SERPENTINE BELT TOOL

Fits into idler pulley & turns it to release tension for replacement of serpentine belt. 3/4" head. Services: 850 (1993-1997) S70 (1998), C70 (1998) & V70 (1998).



8760 VOLVO BELT REMOVAL WRENCH

Services belts on Volvo C70, S40, S60, S70, S80, V40, V70, XC70 & XC90. Heavy-duty long bar w/ T60 Torx Bit on one end & T50 Torx Bit on other. 16mm x 12-point opening built into handle. OAL: 42cm / 16-1/2"



7852 FORD BELT INSTALLATION TOOL - 1.5L & 1.6L

Services 2011+ Ford Fiesta. Required for proper installation to avoid damaging the belt.



8064 VW/AUDI CHAIN TENSIONER - 1.8L & 2.0L TFSI

Slackening chain tensioner, required when detaching timing chain from camshaft. Compare to Factory Tool #T40243.



STRETCH BELT INSTALLATION TOOLS

Installs stretch belts found w/ ease. Required to avoid damage.

- No. Type
- 2745 Small (Blue)
- 2747 Large (Red)



3458 BMW A/C BELT INSTALLATION TOOL

Used when no belt tensioner is employed on 2004-2006 BMW V8 N62 engines w/ stretch belts. Comparable to BMW Factory Tool #641040 & 83800494518



2855 CAMSHAFT & CRANKSHAFT PULLEY HOLDER

Holds cam or diesel pump sprockets & gears for removal & tightening of retaining bolts. 7 sets of interchangeable pins - 3.5, 4, 4.5, 5, 6, 7 & 10mm. Wrench range 1-1/4" to 5" (32-27mm).



2857L MASTER CAM KIT

Includes 4 Pc. Cam Clamp Set & Metal Cam Locking Tool. Holds camshafts in position during timing belt replacement.



2715 TENSION PULLEY SPANNER - MITSUBISHI/HYUNDAI/CHRYSLER

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



4333 ADJUSTABLE CAM PULLEY HOLDER

Spring loaded with grooved pins to hold camshaft pulley stationary while loosening & tightening center shaft bolt. Great for transverse mounted V6 Nissan Maxima & Toyota Camry. Adjustable range: 21mm-100mm. Thick metal design for durability and high torque load.



7305 HONDA K-SERIES CAMSHAFT ALIGNMENT TOOL

Aligns & holds cams on Honda & Acura K20 & K24 engine (2002-2017) on RSX, TSX, TLX, ILX, CRV, Element, Odyssey, Accord & Civic. Compare to Factory Tool #07AAB-RWCA120.



3855 SUBARU CAMSHAFT LOCK TOOL - EJ 2.0 & 2.5L

Locks camshafts in position while changing timing belt on 2002-2015 WRX (STI), Legacy, Forester, Outback, Baja, & Saab 9-2X Aero (05-06)



2243 SUBARU CAMSHAFT PULLEY HOLDER

For 2002-05 Impreza 2.0 Turbo & 2000 Forester L F4-2.5L SOHC. Compare to Factory Tool #499207400 & #499207400-A



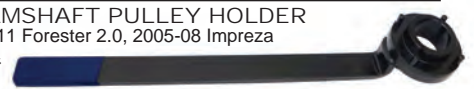
7600 SUBARU CRANKSHAFT PULLEY HOLDER

4-point design for easy removal & installation of crankshaft pulley on 2011+ Subaru Forester, 2014+ WRX, 2013+ Impreza, 2012+ Impreza XV 2.0, & 2008-12 3.6 Tribeca.



7605 SUBARU CAMSHAFT PULLEY HOLDER

4-point design for 2005-11 Forester 2.0, 2005-08 Impreza 1.6/2.0, 2005+ Legacy & 2010-2013 Legacy CVT.



7610 SUBARU CAMSHAFT PULLEY HOLDER - 2200 CC

For SOHC Engines 1993-2012 Impreza, 1999-2012 Forester, 1989-2012 Legacy, 2004-06 Baja & SVX, & 2005-06 Saab 9-2X. Compare to Factory Tool #499207100.



7615 SUBARU CAMSHAFT HOLDER

Holds camshaft sprockets on 2005+ 2.5L Turbo & 3.6L 6-cyl. engines. Comparable to Subaru Factory Tool #499977500.



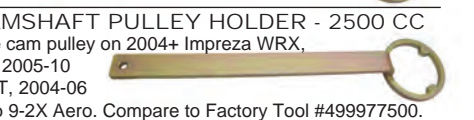
7620 SUBARU CRANKSHAFT PULLEY HOLDER - 12 PT

Remove/install central bolt w/o damaging pulley. Compare to Factory Tool #499207400.



7625 SUBARU CAMSHAFT PULLEY HOLDER - 2500 CC

3-Point for AVICS intake cam pulley on 2004+ Impreza WRX, 2004-2011 Forester XT, 2005-10 Legacy GT & Outback XT, 2004-06 Baja Turbo & 2006 Saab 9-2X Aero. Compare to Factory Tool #499977500.



7630 SUBARU CRANK SOCKET

Socket slips over crank snout, enables engine builder to rotate complete engine w/ 1/2" ratchet or breaker bar. Easily locate TDC. Compare to Factory Tool #499987500.



5305 SUBARU CRANK SOCKET

FB Engine Socket slips over crank snout, enables engine builder to rotate complete engine w/ 1/2" ratchet or breaker bar. Easily locate TDC. Compare to Factory Tool #18252AA000.



1484 SUBARU A/C COMPRESSOR

STRETCH BELT INSTALLER

Services 2.5L 2008-13 Impreza, Forester & Outback.



2670 TOYOTA TIMING BELT TENSIONER COMPRESSOR

For 1995+ T100, Tacoma & 4 Runner trucks. Internal nut to expand tool to compress tensioner plunger. Locking pin holds tensioner plunger while changing belt. Locking pin for hydraulic piston push rod.



2717 TOYOTA TENSIONER ADJ SOCKET

6 internal slots for 1.8L 2000-05 Celica, 1998-2008 Corolla, 2003-08 Matrix, 2000-05 MR2 & more. 1/2" square & 7/8" hex drive.



1086 VW/AUDI CAMSHAFT SETTING BAR - 1.6L & 1.9L

Use during removal & installation of timing belt & diesel injection pump. VW Engines 1V, 1Z, AAB, ACV, AHU, ALH, CS, CY, DE, MD, ME, MF, AAZ & diesel Audi.



1087 VAG CAM HOLDING PLATE - 1.9L

Sets camshaft timing w/o removing cam cover on VW/Audi 1.9SDi/Tdi Diesel Engines Codes: 1.9D Sdi: AGP, AQM, ASY & 1.9D Tdi: AGR, AHF, ASV. Compare to Factory Tool #T10098.



2871 VW/AUDI CAM LOCKING CLAMP SET - 3.0L & 3.2L

Aligns & secures camshafts when setting timing on mid 2000s Audi A4 (A4 Quattro), A6 (A6 Quattro), A8 Quattro, Q7, R8, RS4, S5, S6, S8 & VW Beetle, Jetta, Rabbit & Touareg. Compare to Factory Tool #T40133.



2873 VW/AUDI CAM LOCKING CLAMP SET - 2.5L, 3.2L, 4.2L & 5.2L

Locks camshafts when setting valve timing on Audi 3.2L V6 4v (BKH), 4.2L V8 4v (BAR, BNS, BVJ, BYH & CAUA) 5.2L V10 4v (BXA and BSM) & VW 2.5L I5 (BGP, BGQ, BPR, BPS, CBTA & CBUA). Compare to Factory Tool #T40070.



2875 VW/AUDI CAM ALIGNMENT FIXTURES - 2.8L, 3.2L, 3.6L & 6.0L

Locks camshafts in place on 2001+ VW, Audi & Porsche. Precision cut 4mm thick steel plate. Compare to Factory Tool #T10068A.



2878 VW/AUDI CAM LOCKING CLAMP - 2.0L

Serves 2006-2009 VW/Audi 2.0L Turbo engines. Compare to Factory Tool #T10252.



2879 AUDI CAM LOCKING CLAMP SET - 4.2L

Keeps TDC timing alignment on Audi S4, A6, A8 & all-road Quattro. Compare to Factory Tool #T40046.



VW/AUDI CAMSHAFT HOLDERS

Locks camshafts relative to each other during timing belt and tensioner service or crank bolt removal. Use w/ #2872 TDC Lock Pin Tool.

No.	Description
2867	VW/Audi V6 5-valve/cyl 2.7 & 2.8L
2869	VW/Audi V8 (T40005) 4.2L



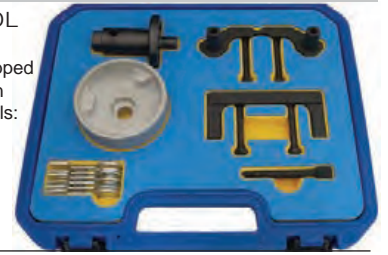
1085 AUDI CAMSHAFT HOLDING TOOL

Assembles & disassembles pulleys on camshaft, vibration damper & oil pump. 2 sets of pins w/ a total of 4 diameters. Holding arm pin range: 2-13cm. OAL: 17" (43cm). Compare to Factory Tool #T10172.



5013 AUDI TIMING TOOL KIT - 4.0L TFSI

Serves Audi A6, A7 & A8 equipped with V8 4.0L TFSI direct injection engine. Compare to Factory Tools: T40272, T40269, T40246 & T40071.



3830 VW/AUDI TIMING BELT TOOL KIT - TDI E288

Serves TDI EA288 diesel engine on 2015+ VW "CVCA" & "CRUA". Includes: Crankshaft Lock (#T10490), HPFP Locking Pin (#T10492), Camshaft Counter Hold Tool (#T10172), HPFP Counter Hold Tool (#T10051), & Camshaft Locking Pin (#T3359).



2889 VW/AUDI TURBO TIMING KIT - 2.0L

For 2009+ turbo. Compare to Factory Tools T10355, T10368, T40196, T40271, 10352, & 6700-3.



1023 VAG TIMING TOOL KIT - 1.8L & 2.0L (TSI/TFSI)

Needed for EA888 Generation III engines but can facilitate work on Gen I & II. Includes: 1032, 2889 & 8064.



1032 3 PC. VAG CAMSHAFT

ADJUSTING SOCKET SET - 2.0L Removal & installation of 4/3 way central valve for camshaft adjustment on 1.8 & 2.0 Gen III TFSI engines. 3/8" drive. Compare to Factory Tool T10352/1.



5440 5 PC. VAG CAMSHAFT

ADJUSTING SOCKET SET For removal & installation of 4/3-way central valve for camshaft adjustment on 1.8L & 2.0L (4v) generation 1, 2 & 3 TFSI engines. 3/8" square drive. Compare to Factory Tools T10352, T10352/1A, T10352/2, T10352/3 & T10352/4. Packed in blowmold case.



7910 VAG TIMING TOOL KIT - 1.8L & 2.0L (TSI / TFSI)

Serves 08+ VW/Audi 1.8L & 2.0L EA888 gasoline engines. Compare to Factory Tools: T40011, T10352, T40271-1, T40271-2, T10170, T40265, T40267, T10355, T10368 & T40196.



2870 AUDI CAMSHAFT HOLDER KIT - 3.0L

Locks & holds camshafts when adjusting left & right camshafts on A4, A6 & A8 (01 - 08) w/AVK engine. Includes holders, Lock Pin Tool, Socket & set of pins. Compare to Factory Tool #T40030.



2872 VW/AUDI TDC LOCK PIN TOOL - 2.7, 2.8L & 4.2L

For use w/ #2865, 2867 & 2869 to lock crankshaft at TDC. Comparable to Factory Tool #T40026 & #T40069.



1722 VW/AUDI SETTING GAUGE - 4.2L

Sets camshaft position sensor rotor ring during timing chain install on 4.2L V8 5v (BAS, BBD, BHF, BNK). Compare to Factory Tool #T40047.



1412 VW/AUDI CRANKSHAFT TURNING SOCKET - 2.4L, 3.2L & 4.2L

Working end: 22mm sq drive & 12mm pivot pin. Drive: Dual 1/2" sq & 24mm hex. Applications 2.4L, 3.2L & 4.2L FSI engines. Compare to Factory Tool #T40058.



1414 VW/AUDI TIMING TOOL KIT - 4.2L

Includes 2872, 2879, 1722 (set of 2) & 1412. Services V8 Audi S4, S6, A6, A8 & S8.



2775 VW TDI TIMING BELT TOOL KIT - 1.9L

Services 1999+1.9L TDI engines w/ ALH code on Golf, Jetta & Beetle. Includes:

No.	Description
2766	Spanner Wrench
2770	Locking Pin
2882	Cam Locking Plate (V159)



2777 VW/AUDI TIMING TOOL KIT - 1.9L & 2.0L

For VAG 1.9 & 2.0L TDI PD DOHC on Audi A4, A6, VW Golf, Jetta & Touareg. Compare to Factory Tools #3387, T10020, T10098A, T10050 / 310085, T10010, 3359 / T20102, T10060/A, T10115 & T40011.

No.	Description
2770	Injection Pump Locking Pin
2858	Crankshaft Holder (Black)
2859	Crankshaft Holder (Silver)



7809 CAMSHAFT LOCKING PLATE - VR6

Required for timing chain replacement on VW 12v VR6 engines found in the MK3 & MK4 Golf (GTI), Jetta, Corrado & Passat (B3 & B4).



1011 VW TSI CRANKSHAFT PULLEY REMOVAL TOOL

Services damper pulley on TSI/TFSI EA888 engines. Includes: Counterhold tool, Tensioning pins, Turning over tool & Knurled nut.



2765 VW/AUDI TIMING BELT WRENCH SET - 1.9L & 2.0L

For TDI engines. Compare to VW Tools #V159, T10020, 3387 & T40011. Includes:

No.	Description
2766	Short Wrench
2767	Long Wrench /Short Offset
2768	Long Wrench /Long Offset
2769	3 Pc. Pin Set



2760 VW/AUDI ADJUSTABLE TIMING BELT TENSIONER

Adjustable handle position to apply tension directly to idler roller. Pins engage offset center hub of timing belt tensioner pulley on VW/Audi 4 cyl. 1.5, 1.6, 1.7, 1.8, 1.9 & 2.0L engines. OAL: 7-1/2" (19cm).



1033 VW/AUDI CAMSHAFT ADAPTER SOCKET - 1.8L & 2.0L

Rotates & holds intake camshaft during timing chain service on VW/Audi 1.8L & 2.0L engines. 3/8" drive. Comparable to VW Factory Tool #T40266.



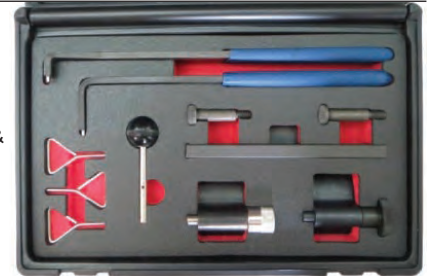
1035 AUDI CAMSHAFT ADJUSTER KEY - 2.0L, 3.0L, 3.2L & 4.2L

Adjusts timing chain through camshaft adjuster on Audi 2005+ A6, A8, A8L, Q7, RS4, S5, S6, S8.



8091 VW TDI TIMING KIT

Sets & adjusts timing on 1999-2008 VW TDI engines. Includes: Lock Pins, Cam Lock Bar, Spanner Wrench & Crankshaft Holders.



1036 VW/AUDI CAMSHAFT ADJUSTER SOCKET - 9MM

Polybit drive services camshaft adjuster bolts, where clearance is critical on 2.0L Turbo BPG & BPY. Not for impact use. Compare to Factory Tool #T40080.



2874 VW/AUDI CAM CHAIN TENSIONER RETAINER - 1.8L, 2.7L & 2.8L

Holds chain & tensioner in position during assembly and disassembly. Comparable to Audi Factory Tool #3366.



2876 VW/AUDI V-BELT TENSIONING BOLT TOOL - 2.0L

Special 50mm long bolt with washer for loosening V-Belt tightening device on 2.0L Turbo FSI engines.



2762 VW/AUDI CAMSHAFT DRIVE BELT PULLEY PULLER KIT

Services 5 & 6 spoke gears on 4 & 6 cyl. TDI, V6 & V8 engines. Low profile. Compare to VW Tools #T40001, T40001-6 & T40001-7.



PORSCHE TIMING TOOLS

3804 PORSCHE VIBRATION DAMPER COUNTER HOLDER

Counter holds crankshaft pulley on Porsche 970 & 92A. Services 4.8L V8 (2010-2018). Compare to Factory Tool #9679/1.



7458 PORSCHE CAMSHAFT SPROCKET HOLDING TOOL - 993

19mm bushed socket to prevent slippage and rounding off of the cam bolt. Services 1996-1998 Porsche 911, 3.6L Flat 6 engine. Compare to Factory Tool #P9582.

NEW!



7463 PORSCHE CAMSHAFT SPROCKET HOLDING TOOL - 964/993

19mm bushed socket to prevent slippage & rounding off of the cam bolt. Services 1980-1995 Porsche 911, 3.2L Flat 6 engine. 1/2" drive. Compare to Porsche Factory Tool #P9191.

NEW!



4022 PORSCHE TIMING KIT - 996

Services Porsche 996 (1997-2006). Includes:

No.	Description
3886	Cam Adj. Blocks
3888	Auxiliary Chain Tensioner Set
3889	Intake Cam Socket Holder
3890	Exhaust Cam Sprocket Holder
3891	Cam Adj. Holding Bracket



3889 PORSCHE INTAKE CAMSHAFT SOCKET HOLDER - 996 TURBO

Holds intake camshaft sprocket during timing service. OAL: 25cm/250mm (9.85"). Services Porsche 911 Turbo (996). Compare to Factory Tool #9653.



3890 PORSCHE EXHAUST CAMSHAFT SPROCKET HOLDER - 996 TURBO

Holds exhaust camshaft sprocket during timing service. OAL: 25cm/250mm (9.85"). Services Porsche 911 Turbo (996). Compare to Factory Tool #9653/1.



3887 PORSCHE ENGINE LOCK TOOL - 928

Holds the flywheel when reinstalling automatic or manual transmission. Compare to Factory Tool #00072191611. Services Porsche 928 (1983-1995).



3891 PORSCHE CAMSHAFT TIMING ADJUSTING DEVICE - 996 TURBO

Holds camshaft in position during valve timing adjustment. Use in conjunction with CTA #3886. Compare to Factory Tool #9661.



3886 PORSCHE CAM ADJUSTING BLOCKS - 996 TURBO

For the proper assembly of camshaft drive pinions in timing position. Use in conjunction with #3891. Compare to Factory Tool #9661/1 (000 721 966 11).



3888 2 PC. PORSCHE AUXILIARY CHAIN TENSIONER SET

Tensions cam chains while adjusting cam timing. Services Porsche 911, 993, 964, & 996 GT3.



5021 PORSCHE CAM TIMING TOOL - 997

Services Porsche M96.03 3.6L H6 engine - 986, 987, 996 & 997: 911 Carrera S, 4, 4S, Targa, Targa 4, Targa 4S & Anniversary Edition (02-08). Boxster Base (Roadster), S, Limited Edition, S Limited Edition, & RS 60 Spyder (03-08). Cayman Base & S (06-08).



3803 PORSCHE TIMING TOOL KIT - 987, 981, 997 & 991

Used for holding camshafts in timing position during gearwheel installation & for turning crankshaft during service. Compare to Factory Tools #9595/1, 9772, 9773 & 9775.



5017 PORSCHE CAM TIMING KIT - 986 & 996

Properly setup and service the engine timing. Services Porsche Boxster 986 (97-02) & 911/Carrera & Carrera 4 996 (99-01). Packed in blow mold case.



5018 PORSCHE CAM ALIGNMENT TOOL KIT - 986 & 996

Properly setup & service the engine timing, and install the piston pins. Services Porsche Boxster 986 (97-02) & 911/Carrera & Carrera 4 996 (99-01)



7089 PORSCHE PISTON KIT - 986, 987, 996 & 997

Used to install the piston pin circlip on 986, 987, 996 & 997 (1997-2012). Both tools included in #5018 kit. Includes:

No.	Description
5018X05	Pin Driver & Extension Tool
5018X06	Alignment Tool



5020 PORSCHE CAYENNE & PANAMERA CAM ALIGNMENT KIT

Services engine timing on Porsche 4.8L V8, 3.0L Supercharged V6 & 3.6L V6. Services Cayenne V6 (03-06, 08-18), Cayenne S V6 (14-18), Cayenne S Hybrid V6 (10-14), Cayenne S E-Hybrid V6 (14-18), Cayenne GTS V6 (15-2018), Cayenne S V8 (02-06, 08-14), Cayenne S Titanium Edition V8 (06), Cayenne S Transsiberia V8 (09), Cayenne GTS V8 (08-14), Cayenne GTS Porsche Design Edition 3 V8 (09), Cayenne Turbo V8 (02-06, 08-18), Cayenne Turbo S V8 (06, 08-18), Panamera S V8 (09-16), Panamera 4S V8 (09-16), Panamera GTS V8 (09-16), Panamera Turbo V8 (09-16), & Panamera Turbo S V8 (09-16).



2885 BMW 4 & 6 CYL. CAM ALIGNMENT SET

Includes jig to align camshaft & TDC pin to align flywheel. Services M42, M44, M50, M52, M52TU, M54, M56, S50US & S52US. Compare to Factory Tools #113240 & #112300.



2890 BMW TDC PIN

Adjust flywheel. Included in #2885. Services M21, M40, M41, M42, M43, M43TU, M44, M47, M47TU, M50, M51, M52, M52TU, M54, M56, M57, M57TU, M60, M62, M62TU, M70, M73, S50B30, S50B32, S54 & S62 Engines



2886U BMW TIMING KIT - N51-N55

Sets cam, valve & VANOS timing on 2006+ 1, 3, 5, 6 series, X1, X3, X5, X6 & Z4).

No.	Description
2886	N51-N54 Timing Kit (does not include 2898)
2898	N55 Camshaft Bridge Compare to Factory Tool #3028 & #114285



2887 BMW TIMING KIT - M60, M62 & M62TU

Includes 4 blocks & 2 locking fixtures for setting camshaft timing on 530i, 540i, 740i, 740iL, 840Ci, X5 & Range Rover. Compare to Factory Tool #112440 & Land Rover #LRT-12-223 & 303-1012.



2888 BMW TIMING KIT - N62, N62TU & N72

Properly aligns & locks camshaft in TDC position when adjusting or checking timing or replacing camshaft or timing chain on N62, N62TU & N73 engines. Includes complete set of tools, including hold-down tool and crankshaft timing pin.



2893 BMW TIMING KIT - N63

Services all N63 V8's including 2009+ 750i, 2011+ Alpina B7, 2010+ 550i & 2012+ 650i. Packed in blow mold case.

No.	Description
2893X05	Crankshaft Holding Tool Services N63 & S63



2894 BMW TIMING KIT - M60 & M62

1990s - 2000s BMW 530i, 540i, 740i, 740Li, 840Ci, X5, Z8 & Range Rover. Compare to BMW Factory Tool #116462. Packed in blow mold case.



2895 BMW TIMING KIT - M52, M54 & M56

Applications include Early to Mid 2000s 3, 5, X3, X5, Z3 & Z4 series. Compare to BMW Factory Tools #116150, 116180, 114220, 113292 & 113450. Packed in blow mold case.



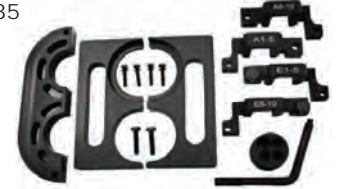
2896 BMW TIMING KIT - S65

Aligns camshaft at TDC. Also holds crankshaft at TDC when adjusting camshaft timing on BMW M3 2008-2013. Packed in blow mold case.



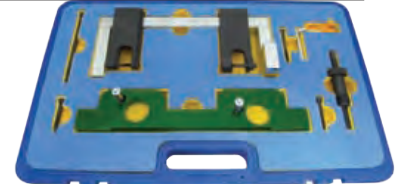
2897 BMW TIMING KIT - S85

Services S85 V-10 engines. Includes: cam alignment fixtures & jigs, flywheel alignment pin, additional fixtures for valve timing & VANOS setting & VANOS timing socket. Packed in blow mold case.



7675 BMW TIMING KIT - N20/N26

Aligns camshaft timing at TDC position on N20/N26 engines. Compare to Factory Tools #83302212831, 83302212830, 83302219548 & 1197340.



5410 BMW/MINI TIMING KIT - N13 & N18

Includes: camshaft locking blocks, flywheel locking pins, timing chain tension block & upper chain tension locks. Compare to Factory Tools #117440, 119590 & 119340.



2805 BMW TIMING KIT - B38/B48

Locks crankshaft & camshafts to set timing position while servicing 1.5L & 2.0L B38/48. Compare to Factory Tools #2358122 & 2288380. Packed in blow mold case.



3870 BMW/FORD 22MM X 16 PT. SOCKET

Removes later style central valve on BMW Vanos Hubs and Ford VCTs. 22mm x 16 Points. 1/2" Square Drive. Chrome molybdenum. Services BMW B38, B48, B58, MINI Vanos, and Ford VCT modules. Compare to BMW Factory Tool #2-450-487 & Ford Factory Tool #303-1661-3.



7676 BMW OIL SEAL REPAIR KIT - N20

Repair balancer shaft, holding chain sprocket & remove & install oil pump, chain & sprocket. Includes (2) screws - PH3 M6 x 1.0, Hex drive size 10 (length: 26mm). Compare to Factory Tools #83302318117 & 83302212825.



2801 BMW FLYWHEEL HOLDER - N20/N26

Secures crankshaft w/ trans installed. Holds flywheel to release/tighten central bolts on vibration damper. Compare to Factory Tool: 8330222742.



5009 BMW COUNTER BALANCE TOOL - B38/B48

Locks crank & camshafts in timing position. Compare to Factory Tool: 2288943, 2358646



2806 BMW CRANK ALIGNMENT TOOL - B38/B48

Set crankshaft at TDC on Longitudinally installed Auto Trans. Compare to Factory Tool: 2365488



2807 BMW ACTUATOR TOOL - B38/B48

Removes & installs magnetic actuator. Compare to Factory Tool #2 0360 895



BENZ | VOLVO | LAND ROVER TIMING TOOLS

1214 4 PC. BENZ TIMING KIT - M157/M276/M278

Compare to Benz Factory Tool #276589014000. Services 60° V6 2011-2019: M157, M276, M278 engine.

NEW!



1216 MASTER BENZ TIMING KIT - M157/M276/M278

Designed to align the camshaft timing angle for correct position & removing injectors using T-bar tool on 4.7L to 5.5L engines. Services: M133, M152, M157, M270, M274, M276, M278 engines.

NEW!



No.	Description
1214	Benz Timing Kit
3472	Benz Injector Remover
7840	Benz Camshaft Socket - T100

5190 BENZ TIMING KIT - M133/M270/M274

Positions camshafts in TDC position slackens & tightens bolts attached to camshaft gears. Compare to Factory Tool #270 589 01 6100.



5080 BENZ TIMING KIT - M156

Services CLK63 AMG, CLS63 AMG, E63 AMG, ML63 AMG, R63 AMG, CL63 AMG, S63 AMG & C63 AMG.



7840 BENZ CAMSHAFT SOCKET - M270/M271 - T100 TORX®

Aligns camshaft pulley. Carbon steel. 1/2" Drive. Services: SLK250, C250, C230 & H.D. Truck cyl head bolts, wheel lugs & shock absorbers. Compare to Factory Tool #177589000900.



1073 BENZ/JEEP DIESEL TIMING KIT

For 2007+ Benz OM651: A, B, C, CLA, CLS, E, GLK, M, S, SLK Class, Sprinter & Jeep Compass & Dodge Caliber.



7890 3 PC. BENZ TIMING SET - M642

Attaches to camshafts to hold in position when replacing timing chain on M642 CDI. OAL: 17.5cm (6-7/8"). Compare to Factory Tool #642 589 00 31.



No.	Description
1097	2 Pc. Benz Timing Set
1098	Benz Chain Guide

7895 BENZ/JEEP TIMING SET - M651

Locks crank & holds balance shaft in timed positions.

No.	Description
1105	Benz/Jeep Crank Holder
1106	Benz/Jeep Balance Shaft Holder



1095 BENZ TIMING CHAIN RIVETING TOOL SET

Splits & reconnects single & double row timing chains on Benz gas & diesel engines. Also services some Saab & BMW vehicles.

No.	Description
1095X17	Mounting Guide Link
1095X19	Mounting Link 3 (Duplex Chains)



3892 BENZ TIMING CHAIN RIVETING TOOL - M276/M278

Splits and reconnects single & double row timing chains. Use in conjunction with CTA 1095. Services M276 & M278.



3845 2 PC BENZ CRANKBOLT SERVICE KIT - M271

Includes crankshaft pulley holder to hold vibration damper (A 271 030 00 03) while using 27mm crankbolt socket to loosen crank bolts. Kit includes:

No.	Description
1068	27mm Crank Bolt Socket
3998	Benz Crankshaft Pulley Holder



1195 2 PC BENZ CRANKBOLT SERVICE KIT - M112, M113, M137, M275 & M385

Includes crankshaft pulley holder & 27mm crankbolt socket.

No.	Description
1068	27mm Crank Bolt Socket
7270	Benz Crankshaft Pulley Holder

NEW!

NEW!



7066 VOLVO/LAND ROVER CAMSHAFT TIMING KIT - T6

Services T6 (3.0T & 3.2T) 2007+. Compare to Volvo Factory Tools #9997257, 9997261, 9997263, 9997264, 9997272, 9997271, 9997266, 9997267. Applications: Land Rover, Jaguar & Volvo S80, XC90, XC60 & XC70.



7067 VOLVO MOUNTING BRACKET TOOL

Supports engine when performing timing service. Found in #7066 Volvo Camshaft Alignment Kit. Compare to Factory Tool #9997271. Applications: Land Rover, Jaguar & Volvo S80, XC90, XC60 & XC70.



7068 VOLVO CRANKSHAFT WRENCH

Used for adjusting the camshafts when performing timing service. Found in #7066 Volvo Camshaft Alignment Kit. Compare to Factory Tool #9997257. Applications: Land Rover, Jaguar & Volvo S80, XC90, XC60 & XC70



7380 VOLVO TIMING KIT - TG-81SC

For 8-speed auto TG-81SC trans. Kit Services 2.0L - S60, S80, V60, 70, XC60, XC70 & XC80. Compare to Factory Tools #9997490, 9997493, 9997495, 9997496 & 9997497.



2863 VOLVO CAM/CRANK ALIGNMENT KIT

For alignment of cam & crankshafts & allows correct installation of camshafts w/ cam cover. Compare to Factory Tools: 9995451, 9995452, 9995453, 9995453 & 9995454.



2864 VOLVO CAM LOCKING TOOL

For alignment of cam & crankshafts on S40, S60, S70, S80, S90, V40, V50, V70, V90, XC70, XC90, 850, 960 & C30. Also enables correct installation of camshaft with cam cover.



2242 VOLVO CRANKSHAFT HOLDING TOOL

Keeps crankshaft pulley from turning when changing timing belt and/or crankshaft seal. Designed to withstand torque specs for crank bolt on 85-93 240.



7635 VOLVO CRANKSHAFT COUNTER HOLDER

Used to release & tighten center bolt. Services Volvo C30, C70, S40, S60, S70, S80, V40, V50, V60, V70, XC60, XC70 & XC90 & Ford Focus. Compare to Factory Tool #999 5433.



2883 VOLVO CAM LOCKING TOOL

For 1998 & earlier 5 cyl. Volvos w/o CVVT. Holds camshaft in place during timing belt replacement. Made from 3/8" anodized aluminum plate w/ 3/16" dowel pins.



3872 CHEVY FLYWHEEL HOLDING TOOL

Holds the flywheel in place. Mounts in place of the starter and engages the flywheel ring gear teeth. Services Cadillac ATS (2013-2014), CTS (2014), Chevy Malibu (2013-2014), Impala (2014), & Buick Regal (2011-2017).



5455 DURAMAX FLYWHEEL HOLDER

Locks flywheel in place when removing harmonic balancer on 6.6L Duramax w/ Allison automatic transmission. 36mm 12-point socket w/ 3/4" square drive. Services Chevrolet Silverado 2500, 3500, 4500 & 5500.



7459 GM TIMING GEAR RETAINER WEDGE - ATLAS

Keeps lower timing gear locked while cylinder head is removed from engine. Services I4, I5 & I6 (Atlas) engines. Compare to Factory Tool #EN-48464.



5475 GM FLYWHEEL HOLDING TOOL - ATLAS

Holds flywheel securely while servicing balancer retaining bolt. Services GM Atlas I4 & I5 engines (also know as Vortec: 2800, 2900, 3500 & 3600). Compare to Factory Tool #EN-46547.



5480 GM TIMING TOOL KIT - ATLAS

Services: I4 2.8L 2800, I5 3.5L 3500, I5 3.7L 3700. Compare to Factory Tools EN-48464, J-44221 & EN-46547. Includes:

No.	Description
7459	Timing Gear Wedge
5047	Camshaft Holding Tool
5475	Flywheel Holding Tool



5460 GM BELT TENSION COMPRESSOR TOOL

Compresses the belt tensioner spring. Applications: GM 2.4L EcoTec (Hybrid) 2011-2016: Buick Regal, LaCrosse, Chevrolet Malibu, Impala & Captiva



1046 GM TIMING KIT

- 1.4L ECOTEC
For 2011 & up GM 1.4L Ecotec engine. Compare to Factory Tools EN-49977-100, EN-49977-200, EN-49978, KM-952, KM-953-A, & KM-955.



5054 GM CAM PHASER LOCKING TOOL - 2.0L & 2.4L ECOTEC

A pass-through hole on each side allows a socket to to remove/install phaser bolt. Compare to Factory Tool EN-48953.



7728 4 PC. GM CAM HOLDER SET - 2.8L, 3.6L, 3.6L & 4.2L

Services the left & right head for 2006+ 2.8L, 3.0L & 3.6L V6 & 2004+ 3.5L I5 & 4.2L I6 GM engines



No.	Description
5047	GM Cam Holding Tool
7677	3 Pc. GM Cam Holder Set

5047 GM CAMSHAFT HOLDING TOOL - 3.5L & 4.2L

Position over the ends of the camshaft to prevent rotation. Services 4.2L I6 & 3.5L I5 engines. Compare to Factory Tool #T0058.



7677 3 PC. GM CAM HOLDER KIT - 2.8L & 3.6L

Services the left & right side head for 2006+ V6 GM engines. Prevents rotation during timing chain service.



1802 2 PC. GM CAM HOLDER KIT - 2.8L & 3.6L

Services left & right side head for V6 engines through 2006. Prevents rotation during timing chain service.



1228 GM CAMSHAFT HOLDING TOOL - 1.5L

Services Buick Encore 2016-2017, Chevy Cruze 2017, Malibu, Trax, & Volt 2016-2017. Compare to Factory Tool #EN-51367.



4161 CHEVROLET CAM LOCKING KIT - 1.6L & 1.8L

Locks the camshafts in position on GM 1.6L & 1.8L engines. Also services 1.6L & 1.8L 16V Alfa Romeo and Fiat 2003-2012. Packed in blow mold case.



3925 2 PC. CHRYSLER CAM PHASER HOLDING TOOL SET - PENTASTAR VVL 3.6L

For VVL (Variable Valve Lift) only. Services Pentastar VVL 3.6L engines. Compare to Factory Tools #2025001090 & 2025002090



No.	Description
3920	Cam Phaser Holder - Left
3921	Cam Phaser Holder - Right

1205 5 PC. CHRYSLER CAM PHASER HOLDING TOOL SET - PENTASTAR VVL 3.6L

Services 2016+ Grand Cherokee, 2018+ Wrangler (JL), 2020+ Gladiator (JT), 2016+ Durango, 2016+ Pacifica & 2020+ Voyager.

No.	Description
3920	Cam Holder - Left
3921	Cam Holder - Right
5005	Cam Locking Set
5006X04	L Shaped Pin



5000 CHRYSLER CAM PHASER & TIMING CHAIN LOCKING/HOLDING SET - 3.0, 3.2 & 3.6L

Includes 2 camshaft phaser holders and 3 timing chain holders. Services: 2011+ Chrysler, Dodge & Jeep. Compare to Factory Tools: 10202, 10200A & 10369A.

No.	Description
5005	Camshaft Phaser Locking Set
5006	Camshaft Phaser & Timing Set



5005 CHRYSLER CAMSHAFT PHASER LOCKING TOOL SET - 3.0, 3.2 & 3.6L

Services on 3.6L Pentastar engine on 2011+ Chrysler, Dodge & Jeep models. Compare to Factory Tools: 10202 & 10200A.



5006 CHRYSLER CAM PHASER & TIMING CHAIN LOCKING SET - 3.0, 3.2 & 3.6L

Services 2011+ Chrysler, Dodge & Jeep models. Compare to Factory Tools: 10200A & 10200-A.



5040 TIMING CHAIN WEDGE - CHRYSLER 4.7L V8

Locks timing chains against hydraulic tensioners to prevent tensioner ratcheting & piston extension during service procedures. Services Chrysler/Dodge/Jeep - 4.7L PowerTech V8: 1999-2006 Jeep Grand Cherokee 4.7L V8, 2006 Jeep Commander 4.7L V8, 2000-2006 Dodge Durango 4.7L V8, 2000-2006 Dodge Dakota 4.7L V8, 2002-2006 Dodge Ram Truck 4.7L V8.



1018 CHRYSLER TIMING BELT TENSION TOOL

Tensions timing belts on early Chryslers w/ 2.2L & 2.5L engines. Special 7-point working end.



2221 13 PC FORD/MAZDA TIMING KIT - 1.4, 1.5, 1.6, 2.0, 2.3, 2.5, & 3.0L
Services Ford, Mazda & Lincoln from mid-90's through today. Includes #1025, #1026, #1090, #1804, #1806, #2223, #2880, & #2884.



5063 17 PC. FORD/MAZDA TIMING KIT - 1.4, 1.5, 1.6, 2.0, 2.3, 2.5, 3.0L & 3.5L
Services Ford, Mazda & Lincoln from mid-90's through today. Includes #1025, #1026, #1090, #1804, #1806, #2223, #2822, #2880, #2884, & #5062



2743 FORD ECOBOOST ENGINE SERVICE KIT
Kit includes timing and seal service tools for services on the 1.6L EcoBoost engine. Includes #1806 - Crankshaft Vibration Damper Alignment Tool, #1810 - Fuel Line Disconnect Tool, #2822 - Cam Locking Plate & #5062 - Flywheel Holder.



5068 FORD TIMING TOOL SET - 1.6L
Includes #1090 VCT Alignment Tool, #2880X03 T.D.C. Crank Timing Pin & #1806 Crankshaft Vibration Damper Alignment Tool. Services: Escape, Fiesta, Fusion & Transit Connect. Compare to Factory Tools: 303-748, 303-1097 & 30-1550.



5067 FORD TIMING TOOL KIT - ECOBOOST 2.0L
Includes #2880X04 T.D.C. Crank Timing Pin, #1026L Camshaft Alignment Tool, & #1804 Crankshaft Positioning Tool. Services: Edge, Escape, Explorer, Focus, Fusion, Taurus, XF, Evoque, MKC, MKT & MKZ. Compare to Factory Tools #303-507, 303-1521 & 303-1565.



5062 FORD/MAZDA TIMING KIT - 1.4, 1.5, 1.6, 2.0, 2.3, 2.5, 3.0L & 3.5L - UPDATE
Services: Escape, Fiesta, Fusion & Transit Connect. Compare to Factory Tool: 303-393A, 303-393-01 & 303-393-02.



1090 FORD 1.6L VCT ALIGNMENT TOOL
Services 2011-2014 Fiesta, 2013-2014 Escape, Fusion & Transit. Can be used with CTA #2880. Comparable to Ford Tool #303-1097



1806 FORD CRANKSHAFT VIBRATION DAMPENER ALIGNMENT TOOL
Services EcoBoost B-Max 1.6L. Compare to Factory Tool #303-1550. Use in conjunction with #1026.



1804 FORD CRANKSHAFT POSITIONING TOOL
Services alignment of Crank Sensor on 2010+ 2.0L & 2.3L Ford EcoBoost 4 cylinder engines. Compare to Ford Factory Tool #303-1521.



1026L FORD CAMSHAFT ALIGNMENT TOOL
For 2010+ Ford 2.0L engines. Special milled thickness & includes crank timing pin. Comparable to Ford Factory Tool #303-1565.



2223 3 PC FORD/MAZDA TIMING WEDGE SET
Use while performing timing service on Sigma platform engines, 1.4L & 1.6L Duratec 16V engines 2000+. Applications include Ford Fiesta, Focus, Puma, C-MAX, Fusion (Mondeo), Mazda 2 & more. Compare to Ford Factory Tool #303-1556.



2880 FORD/MAZDA CAM TIMING SET - 1.4L, 1.5L, 1.6L & 2.0L
To lock & position camshaft, crankshaft & injection pump sprocket. Services HWDA, HWDB, & HXDA engines.



2884 FORD/MAZDA CAM ALIGNMENT TOOL
Services Ford/Mazda 2.0L & 2.3L twin cam turbo engines, 1.8L Duratec-HE (M14), 1.8L Duratec-SCI (M14) & 2.0L Duratec-HE (M14). Compare to Ford Factory Tool #303-1061.



2822 FORD/MAZDA CAM LOCKING PLATE - 1.6L
For rear camshafts on EcoBoost when VCT phasers have been removed. Services Focus, Fiesta, Fusion, Escape, C-Max & Transit Connect 2010-2017. Compare to Factory Tool #303-1552.



5043 FORD CRANKSHAFT DAMPER HOLDER TOOL - 2.5L, 2.3L & 2.0L
Services: Fusion, Transit, Milan, MKZ, Escape, Ranger, Mariner & Hybrid models. Compare to Factory Tool #303-1416.



5050 FORD CRANKSHAFT POSITIONING TOOL
Services: 93-04 Ford 4.2L 2 valve, 4.6L 4-valve, 5.4L V8, & 6.8L V10 engines.



5051 FORD CRANKSHAFT VIBRATION DAMPENER ALIGNMENT TOOL
Services: 93-04 4.2L 2 valve, 4.6L 4-valve, 5.4L V8, & 6.8L V10 engines installing timing chains.



No.	Description
5050	Crankshaft Positioning Tool
7640X01	Camshaft Sprocket Locking Tool

7997 FORD TIMING KIT - 4.0L SOHC V6
Services: 97-02 Ranger, Explorer & Mercury Mountaineer. Compare to Factory Tools: 303-564, 303-573, 303-576, 303-577, 303-578, 303-571, 303-565, 303-575.



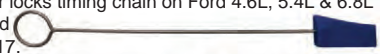
3800 FORD/LINCOLN CAMSHAFT TIMING TOOL SET - 3.5L
Services: Ford 2018-2019 Expedition EcoBoost, 2017-2019 F-150 EcoBoost, 2017-2019 GT, & 2018-2019 Lincoln Navigator EcoBoost.



7641 FORD/MAZDA CAMSHAFT TIMING TOOL SET
Services: Ford Edge, Explorer, F150, Flex, Fusion, Mustang, Police Interceptor & Taurus, Lincoln MKS, MKT, MKZ & Navigator & Mazda CX9. Compare to Ford Factory Tools #303-1248 & 303-1530.



7640 FORD CAMSHAFT LOCKING TOOL KIT
One tool locks camshaft & other locks timing chain on Ford 4.6L, 5.4L & 6.8L 3V engines. Comparable to Ford Factory Tools #567614 & 567617.



No.	Description
7640U	Master Kit (Includes #7639 Valve Spring Compressor)



FAN CLUTCH WRENCHES

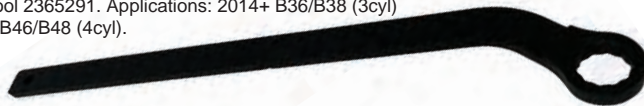
Use to remove & install fan clutch assemblies when replacing water pumps or doing other engine services. Use two wrenches together, one for holding & the other for turning. 1/2" drive built into most wrenches.

No.	Size	Applications
A872L	36 x 48mm	Ford, Dodge, GM, Jeep
A872M	2 Pc. USA Set	Includes #A872L & #7647
7647	Holding Tool	Ford, Dodge, GM, Jeep
A878	32mm	BMW, Audi, VW
A879	41mm	GM, Daewoo, 1.6L
A881	40mm Holding Tool	Mercedes
A883	36mm	Mercedes
1059	2 Pc. Benz Set	Includes #A881 & #A883
A884	65mm	Mercedes
A886L	32mm & Holding Tool	BMW 323i, 325i, 328i, 330i, Audi A6 & VW



3884 BMW ALTERNATOR BELT TENSIONER RELEASE TOOL

Services serpentine belt on B36, B38, B46 & B48 engines. Compare to Factory Tool 2365291. Applications: 2014+ B36/B38 (3cyl) & B46/B48 (4cyl).



8088 BOSCH ALTERNATOR WRENCH

2-part splined wrench required for removal & replacement of free-wheel drive pulleys on Bosch Alternators on VW, Audi, BMW, Benz, Porsche, Renault & Ford. 10mm x 12 point end locks alternator & 33-spline cylinder shaft inserts in pulley locking bolt. 1/2" drive.



1072 BENZ ALTERNATOR WRENCH

Services 1998+ Benz, including 606 (210), 648 (211, 164), 642 (211, 164) & E300 (1996-1999). Splined sleeve O.D. 19.4mm. 1/2" drive.



8089 ALTERNATOR PULLEY SOCKET

For free-wheel pulleys w/ Bosch Alternators. 2-part design w/ 33 spline end & hex. Use w/ long 12-point XZN or Torx wrenches. Comparable to Factory Tools #9995760 & #602-589-00-10-00.



8080 ALTERNATOR PULLEY & POWER STEERING PUMP PULLER

Removes pressed-on 1 or 2 groove pulleys w/o damage. Fits large & small pulleys on older domestic & import passenger cars. Drop-forged jaws, solid block body & fine thread screw.



8084 ALTERNATOR PULLEY & POWER STEERING PUMP REMOVER & INSTALLER KIT

For press-on type belt driven accessory pulleys on pumps w/ 3/8"-16 threaded shafts. Interchangeable components f or most domestic makes, including GM Quad 4, GM 3.1L & Ford 4.6L engines. Impact quality.



8083 22 PC. ALTERNATOR SERVICE KIT

To remove & install press-on-type belt-drive Bosch & Denso Alternator Pulleys on VW/Audi, Benz, BMW, Ford, Honda, Toyota Porsche & more. Includes: Torx, Triple-Square & Hex socket bits in std & short lengths, splined & hex reaction nuts & adapters & 1/2" drive bit adapter.



8069 FORD WATER PUMP PULLEY TOOL - 3.0L

Removes & installs water pump pulley on 3.0L DOHC engines, including Escape, Fusion, MKZ, Mariner, Milan & Sable. Includes: Forcing screw, pulley removal plate, 2 hex head cap screws, & forcing screw. Compare to Factory Tools: 303-S455, 303-009, & 303-457.



2750 WATER PUMP SOCKET - GM

Removes & replaces water pumps on 1993+ Cadillac 4.6L V8 Northstar & 1995-1999 Oldsmobile 4.0L V8. Use with 1/2" drive tools or breaker bar.



2755 VW/AUDI WATER PUMP WRENCH

Locks pulley on waterpump & loosens stubborn bolts on VW Polo, Golf, Passat & Audi 80/A4. Includes 1/2" drive on handle to allow extension. OAL: 10" (25cm).



1020 DURAMAX WATER SENSOR WRENCH - 12 POINT

For replacing the fuel filter or servicing water sensor w/o damaging parts on 2001-2011 6.6L Duramax diesel engines.



1021 CUMMINS/DURAMAX WATER SENSOR WRENCH - 6 POINT

For replacing the fuel filter or servicing water sensor w/o damaging parts on Cummins & 2012+ 6.6L Duramax.



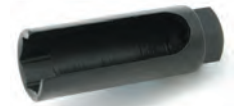
1022 DURAMAX WATER SENSOR WRENCH - 6 POINT NOTCH

For replacing the fuel filter or servicing aftermarket water sensor w/o damaging parts on 2001-2011 6.6L Duramax diesel engines.



2060 VACUUM SWITCH/OXYGEN SENSOR SOCKET

Wide slotted socket services 7/8" (22mm) hex vacuum switches & oxygen sensors. 3/8" square & 7/8" hex drive.



2062 OXYGEN SENSOR SOCKET - NARROW SLOT

7/8" (22mm) socket w/ narrow slot for extra strength. 3/8" square & 1" hex drive.



2064 OXYGEN SENSOR SOCKET - THIN-WALL

Services 7/8" (22mm) hex vacuum switches & oxygen sensors. Slotted w/ 3/8" square & 7/8" hex drive.



2066 OXYGEN SENSOR SOCKET - THICK WALL

Allows extra torque to remove stubborn sensors. 7/8" (22mm) hex opening. 1/2" square & 1" hex drive.



2065 OFFSET OXYGEN SENSOR WRENCH - EXTENDED

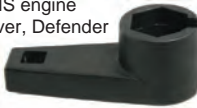
Extended crow's foot design allows access to oxygen sensors in exhaust manifolds. Full slot accommodates connectors on heated oxygen sensors. 7/8" (22mm) hex w/ 3/8" square drive. 82mm long x 30mm high.



ENGINE SERVICE

2067 17MM O2 SENSOR WRENCH - LANDROVER

Services: GEMS engine Classic, Discover, Defender & Defender 110. 3/8" drive.



2069 OFFSET O2 SENSOR WRENCH - STUBBY

Crow's foot w/ deep socket. 7/8" (22mm) hex w/ double 1/2" drive. 60mm long x 48mm high.



2073 3 PC. OXYGEN SENSOR SET

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



2075 27MM DIESEL INJECTOR SOCKET

27mm socket with window. Services injectors on BMW, Ford, Fiat, Nissan, VW, Mercedes, etc. 1/2" sq. drive.



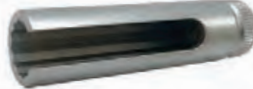
2068 OXYGEN SENSOR THREAD CHASER

Removes corrosion & straightens damaged threads in oxygen sensor holes. M18 x 1.5 w/ combo 3/4" hex & 3/8" sq drive.



7854 VW/AUDI ACTUATOR SOCKET - 2.0L DIESEL

Removes and installs actuator on VW/Audi 4 cylinder 2.0L common rail diesel engines. Compare to VW Factory Tool #T10422A.



7457 FORD FLOW SENSOR SOCKET - 19MM UPDATE

Clears sensor connection bracket for easy removal of Fuel & Engine Temperature Flow sensor on 2010+ Ford Transit Connect. Thin-wall. 3/8" Drive. OAL: 3".



7850 FORD FLOW SENSOR SOCKET - 19MM

Required thin-wall design to clear sensor connection bracket. 3/8" Drive. OAL: 3". Application: 2010-2017 Ford Transit Connect.



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

Services 2-5/8" switches GM & Chrysler. 3/8" sq & 1" hex drive. OAL: 3"



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

OAL: 2-1/2" (63mm). 3/8" square drive.



1024 HIGH PRESSURE OIL RAIL BALL TUBE INSTALLER

Services Oil Manifolds on 2004.5-2007 Powerstroke 6.0L. Can use as alignment tool. 22.75mm hex w/ 20mm I.D. hole. Use with 7/8" hex socket.



7262 HARMONIC BALANCER PULLER - GM/CHRYSLER

Removes harmonic balancers without tapped holes. Services V6 & V8 GM (5.3L, 5.7L 6.0L, 6.2L & 7.0L), Chrysler, Dodge & Jeep (3.5L, 3.7L, 4.7L, 5.7L & 6.1L) engines.



1025 HARMONIC BALANCER PULLER - FORD

Holds Harmonic Balancer in place when removing or installing center bolt or Ford Taurus Pulley Extension. For 2.5 & 3.0L V6 Duratec engines 1990's to 2007. Won't warp balancer & no need to lock flywheel!



A815 HARMONIC BALANCER PULLER

Includes: Yoke, 6-1/2" center screw, adapter & 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.



2236 H.D. HARMONIC BALANCER PULLER

Includes: Yoke, 7-1/2" center screw, Flat & Pointed adapter tips & 4 sets of bolts: M8 x 1.25 x 80mm, 3/8" - 16 x 4", 3/8" - 24 x 2" & 5/16"-18 x 2".



A810 GM/CHRYSLER/MITSUBISHI HARMONIC BALANCER PULLER

Features 3-jaw puller, forcing bolts & center bolt w/ 3/8" square drive 3/4" hex head. For GM 2000 Generation III 4.8, 5.3, 5.7, 6.0 & 8.1L V8s, 1988+ Cadillac 4.5, 4.6 & 4.9L V8s, 1990+ Chrysler 2.0, 2.3 L-4s & 2.5, 2.7, 3.3, 3.5 & 3.8L V6 & Mitsubishi.



2248 HARMONIC BALANCER PULLER INSTALLER

Includes 12 adapters: M16-2.0, M16-1.5, M14-2.0, M14- 1.5, M12-1.75, M12-1.5 M10-1.5, 3/4-16, 5/8-18, 9/16-18, 1/2-20 & 7/16-20.



2249 HARMONIC BALANCER PULLEY INSTALLER - LONG

For V8s & V6s on 2004+ Ford, 2008+ GM, 2006+ Chrysler/Dodge. Sizes M12 x 1.5 - 6", M16 x 2.0 - 8-1/4", M14 x 1.5 - 9", M12 x 1.75 - 8-1/4".



5048 ENGINE BARRING TOOL - MX 13

Services Mack E7 & Cat 3208. 8 Splines x 1.725"(43.815mm). Compare to Factory Tool: 0508477.



5073 ENGINE BARRING TOOL - CUMMINS 5.9L

Services: Dodge Pickups 3.9L, 5.9L, 6.7L & 8.3L diesel engines & Cummins B/C Series diesel engines.



1210 ENGINE BARRING TOOL - PACCAR

2011-2016 Kenworth & Peterbilt T880 w/ MX, MX PMCI-2, MX-13 PCI & MX-13. Compare to Factory Tool #1903018.



1218 FLYWHEEL BARRING TOOL - VOLVO/MACK

Services 2008-2018 Volvo D11, D13 & D16, & Mack MP7, MP8 & MP10. Compare to Factory Tool # 88800014 & 88840317.



1069 3 PC. CRANK BOLT SOCKET SET

Counter-weighted design for high torque. OAL: 89mm. 1/2" drive.

No.	Size	Application
1064	17mm	Honda, Kia
1065	19mm	Honda, Acura, Saturn, Toyota
1066	21mm	Chevy, Chrysler, Dodge, Ford, GM, Jeep and Mazda



1067 CRANK BOLT SOCKET - 22MM

Counter-weighted design for high torque applications. Services crank bolts on BMW, Dodge, Ford, Toyota, Isuzu, Kia, Nissan, Jeep & Subaru. 1/2" square drive.



1184 CRANK BOLT SOCKET - 24MM

Counter-weighted design for high torque applications. Services GM (LS engines) & Land Rover. OAL: 89mm. 1/2" square drive.



1068 CRANK BOLT SOCKET - 27MM

Counter-weighted design for high torque applications. Services crank bolts on Benz, Dodge & Nissan. 1/2" square drive.



A812 CRANK BOLT PULLEY TOOL - HONDA/ACURA

Offset 50mm wrench removes & installs crank bolt on most 1990+ Honda & Acura engines. Tool holds harmonic damper pulley from rotating when removing pulley bolt. Use with a 1/2" breaker bar or ratchet.



2237 CRANK BOLT PULLEY TOOL - TOYOTA/LEXUS

Holds crankshaft while tightening crank bolt on Toyota 1999+ 3.0, 3.3, 4.0 V6, 4.7 V8, 1983-1995 4 cyl. 22RE, 1995-2004 4 cyl. 2.4 2RZ, 2.7 3RZ, Lexus 1990+ 3.0 L6, 3.0, 3.3 V6, 4.0, 4.3 & 4.7 V8.



5083 6 PC. EGT SENSOR SOCKET SET

Remove without damaging connection wire, housing & sensor threads. Opening in hex end for clearance. 3/8" sq drive. Packed in case. Sizes 13mm, 14mm, 17mm angled & straight.



2112 VALVE SPRING COMPRESSOR KIT

Replaces valve springs & valve stem oil seals w/o the need to remove the cylinder head. Applications include: BMW, VW, Audi, Hyundai, Toyota & Ford. Includes: lever bar, adapters, notched pulling tool, hook pulling tool, 2 connectors & extension.



2235 VALVE SPRING COMPRESSOR KIT

Use w/ cylinder head still on or removed. Tool bolts to head while lever pivots from base to compress spring. Removal & installation of spring retaining keepers made through openings on both sides of compression tube.



7637 CHRYSLER ROCKER ARM REMOVER & INSTALLER - 3.7L & 4.7L

Services 1999-2013 Jeep, Dodge & Chrysler w/ 3.7L & 4.7L engines including DR, DS, HB, HG, KA, KJ, KK, ND, WK & XK systems. 3/8" drive.



7638 CHRYSLER VALVE SPRING COMPRESSOR - 3.7L & 4.7L

Services: Dodge Durango, Dakota, Aspen, Jeep Grand Cherokee & Commander. Services DR, HB, KA, KJ, KK & ND systems. 3/8" drive.



1092 FORD VALVE SPRING COMPRESSOR - 4.6L

Compresses valve springs w/o having to remove head. Forged construction w/ 3/8" square drive & built-in jaws. Services 1991+ Ford 4.6L, 2-valve, V8 engines. Comparable to Factory Tool #303-567.



2823 FORD VALVE SPRING COMPRESSOR - 4.0L & 4.6L

Services Ford 4.0L SOHC V6 engines and some 4.6L V8's including Explorer, Mountaineer, Crown Victoria, Grand Marquis & Marauder. Detachable end enables access in tight areas. Extra wedge required for some applications. Compare to Ford Factory Tool #T95T-6565-A.



7639 FORD VALVE SPRING COMPRESSOR - 4.6L, 5.4L & 6.8L

Allows quicker, easier service for camshaft, valve seal, valve spring or retainer on Ford vehicles w/ 4.6L 5.4L & 6.8L 3V engines. Included in #7640U Kit (page 12).



5042 FORD VALVE SPRING COMPRESSOR - 3.0L

Services: Fusion, Milan, MKZ, Escape, Mariner, Five Hundred & Hybrid models. Compare to Factory Tool: 303-473.



2228 VALVE SPRING COMPRESSOR

Direct action compressor lever for better access. Includes 2 valve spring adapters, fitting retainers up to 1" (25mm) & 1-3/16" (30mm). Jaw range: 1-3/8" to 5-5/8" (35mm - 142mm), throat clearance: 5-7/8" (150mm)



2231 OVERHEAD VALVE SPRING COMPRESSOR

Removes valve spring keepers & springs w/o removing cylinder head. Adjusts to fit springs on most cars. Sliding "T" handle for close clearances.



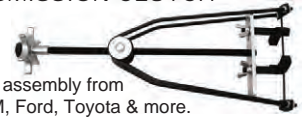
2239 THIN-PROFILE OVERHEAD VALVE SPRING COMPRESSOR

Offset jaws grip valve spring in parallel compression. No need to remove head. Extra long jaws for high performance engines. Hex head center screw & sliding "T" handle.



6500 AUTOMATIC TRANSMISSION CLUTCH SPRING COMPRESSOR

Remove & install snap-ring on long reverse piston & return spring w/o removing center shaft & clutch assembly from transmission housing. Services GM, Ford, Toyota & more.



7646 VOLVO DIFFERENTIAL SEALING NUT WRENCH

Services Volvo 850, 940, 940SE, 960, S60, S70, S80, V70, V70XC, XC70 & XC90. Comparable to Volvo Factory Tool #9995371.



2205 VALVE STEM SEAL PLIERS

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



1060 VALVE STEM PLIERS W/ LONG REACH JAW

Removes valve stem seals from overhead camshaft engines. Long reach jaws (3-1/4" / 8cm) access recessed valves on 4 valve per cyl. motors. Inside of jaws serrated for improved gripping. Heavy-duty steel construction. OAL: 11" (21cm).



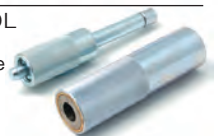
A198 LEVER-TYPE VALVE SPRING COMPRESSOR

Removes springs & valve guide seals w/o removing cylinder head. Removes rocker & fastening tool to stud w/ nut, then use an air-hold fitting & compressed air to hold valves up.



2211 OVERHEAD VALVE KEEPER TOOL

Removes & replaces valve keepers on gas & diesel overhead valve engines, including motorcycle, marine & aircraft engines. Spring-loaded w/ built-in magnet to hold keepers.



2207 VALVE TOOL SET

Removes and installs valve keepers on Overhead Valve Engines w/ valve stems from 4.5 to 7.5mm and 5/16" to 3/8". Magnet in tool holds keepers. Updated smaller size for Toyotas & Chrysler late model World Engines.



2210 HYDRAULIC VALVE TAPPET REMOVER

Removes lifters that are not baked in or stuck w/o removing manifold. Heat-treated teeth hook under groove. OAL: 13" (33.5cm).



9780 2 PC VALVE LAPPING TOOL SET

Features vacuum cup & hardwood handles. Two working ends on each tool for maximum coverage. Includes:

No.	Description
9781	Large - 1-1/8" x 1-3/8" Cups
9782	Small - 5/8" x 13/16" Cups



2110 AIR HOLD FITTING SET

For fast overhead valve repairs w/o removing cylinder head. Fits 14 & 18mm spark plug holes. Accepts 1/4" air hose coupling.



OIL PUMP PRIMERS

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

No.	Application
2101	GM
2102	Ford - 5/16" Hex Drive
2103	Ford - 1/4" Hex Drive



ENGINE SERVICE

VW/AUDI HEAD BOLT WRENCHES - 6 PT RIBE

Long for deep-reach applications. Ribe wrenches service many other vehicle fasteners, including Trim, Cam Cover & Headlights. 1/2" drive.

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



9255 3 PC. VW/AUDI HEAD BOLT WRENCH SET

150mm long wrenches for VW/Audi. Includes 10mm & 12mm Triple-Square "XZN" 12-Point & #9 Ribe/Poli-drive. 1/2" drive.

No.	Size
9252	#9 Ribe
9253	10mm XZN
9254	12mm XZN



5075 VW TDI INTAKE MANIFOLD SOCKET - XZN 10

Special rounded end. Services 2.0L 4V Turbocharged common rail TDI 13-18 VW Golf & Audi A3. 1/2" Drive. Compare to Factory Tool: T10501.



9259 BMW HEAD BOLT WRENCH - E12 TORX®

BMW M42 & M50. 1/2" drive & 6" (15cm) shaft.



9245 2 PC. BMW HEAD BOLT WRENCH SET

200mm & 230mm extra-long T50 & T60 Torx® wrenches reach N52 non-Turbo & N54/N55 Turbo. Both sizes required. 1/2" drive. Comparable to BMW Factory Tool #114420.

No.	Size	No.	Size
9243	T50	9244	T60



9257 BENZ HEAD BOLT WRENCH - T55 TORX®

Services 98-05 M112/M113 & 2007 2.4L Dodge Caliber w/ New World Engine. OAL: 5-7/8" (150mm). 1/2" drive.



7280 SUBARU HEADBOLT SOCKET

Services 1999-2020 Subaru Baja, Forester, Impreza, Legacy, Outback & Saab 9-2X Aero. OAL 2.5" (63.60mm) optimized to clear valve-train components. 14mm x 12 Pt.



1420 CYLINDER HEAD BOLT REPAIR KIT - 11.5MM x 1.5

Designed for Honda (B16 engine), Toyota & more. Longer thread inserts for maximum engagement on specific applications. Includes (1) HSS drill bit, (1) STI tap & (5) 1.5D solid inserts. Packed in plastic tray case.

No.	Description
1421	11mm x 1.5 Solid Insert (5 Pack)
1422	M11 - 1.5 HSS STI Tap
1423	11.5mm HSS Drill



TOYOTA HEAD BOLT WRENCHES - DOUBLE HEX

12-point wrenches fit Toyota engine head bolts. 8mm applications include Toyota, Lexus & Scion up to 2006. Use 10mm for 2007+ applications.

No.	Size
9290	8mm x 1/2" Drive - OAL: 4.5"
9292	10mm x 1/2" Drive - OAL: 4.5"
9295	2 Pc. Set (9290 & 9292)
9288	8mm x 3/8" Drive - OAL: 4"



9258 FORD 6.0L HEAD BOLT REMOVER

3/4" drive to transmit high torque needed to loosen & tighten head bolts. Allows access to rear head bolts w/o removing cab from chassis, prevents damage to rear heat shield w/o removing evaporator housing.



2450 2 PC. PLASTIGAGE® SET

Measures clearances of engine rod & main bearings w/o expensive micrometers. Helps choose proper size replacement bearing inserts. Sets of two sizes: (.001" - .003" & .002" - .006"/.025 - .08mm & .05 - .15mm) covers all auto engines.

No.	Size	Pack Qty
2450X01	.001 - .003"	100 bulk
2450X02	.002 - .006"	100 bulk



2028 PISTON RING INSTALLER

Installs & removes piston rings w/o breakage. Spring loaded. 2-1/2 to 6-1/4" (64 - 159mm) range.



2020 PISTON RING COMPRESSOR SET

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



PISTON RING COMPRESSORS

Ratchet mechanism w/ square drive tool to adjust diameter, enlarged crimped edge prevents compressor entering cylinder. Spring steel w/ double band design.

No.	Depth	Range
2025	3-1/2" (89mm)	54mm to 127mm
2026	6-1/2" (165mm)	89mm to 178mm
4021	3" (75mm)	60mm to 175mm
4023	4" (100mm)	53mm to 175mm
4024	6" (150mm)	60mm to 175mm



NEW!

5082 BENZ / BMW RAIL PIN SLIDE HAMMER SET

Includes: Slide hammer w/ bolts. Sizes: M6x150mm, M6x100mm, M6x50mm, M8x150mm, M8x50mm, M10x100mm & M24x1.5mm. Services: ML350, E320, E420, E500, CL600, S350, SL320, SL500, SL600, Sprinter 2500 & more. Compare to Factory Tool: 156589003400



7645 BENZ/BMW GUIDE RAIL PIN PULLER

Removes stubborn pins from cylinder head. 85mm OAL for access in tight areas where slide hammers won't fit. Services Benz M102, M110, M115, M116, M117, M130, OM601, OM602, OM603, OM615, OM616 & OM617.



ENGINE CYLINDER HONES

Resurface cylinder walls. Adj diameter & tension settings. Flex shaft fits variable speed drill. Medium grit (220).

No.	Range	Stone Length
2300	1.25-3.5" (32-89mm)	2" (51mm)
2325	2-5" (51-127mm)	3" (76mm)
2310	2-7" (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	2300/2325	3" (76mm)	Medium - 220
2319	2300/2325	3" (76mm)	Fine - 400
2320	2300/2325	3" (76mm)	Coarse - 100



FLEX HONES

Removes cut, torn, & folded metal on engine & brake cylinders, hydraulics, valve guides, and more! All stones are 180 grit silicon carbide.



No.	Diameter	No.	Diameter	No.	Diameter	No.	Diameter
2271	.55"/14mm	1142	1.00"/25.4mm	1149	1.77"/45mm	1154	2.52"/64mm
2268	.62"/16mm	1144	1.14"/29mm	1150	2.01"/51mm	1155	2.64"/67mm
2269	.71"/18mm	1145	1.25"/31mm	1151	2.13"/54mm	1156	2.76"/70mm
2270	.75"/19mm	1146	1.40"/35mm	1152	2.24"/57mm	1157	2.87"/73mm
1139	.79"/20mm	1147	1.50"/38mm	1153	2.36"/60mm	1158	2.99"/76mm
1140	.87"/22mm						

ENGINE CYLINDER FLEX HONES

No.	Diameter	No.	Diameter	No.	Diameter
2274	3.27"/83mm	2278	3.74"/95mm	2282	4.64"/118mm
2276	3.5"/89mm	2280	4.13"/105mm		

H.D. ENGINE CYLINDER FLEX HONES

No.	Diameter	No.	Diameter	No.	Diameter	No.	Diameter
2284	2.99"/76mm	2292	3.98"/101mm	2298	5.51"/140mm	2402	7.0"/178mm
2286	3.27"/83mm	2294	4.25"/108mm	2400	5.98"/152mm	2403	7.5"/190mm
2288	3.5"/89mm	2296	4.49"/114mm	2401	6.50"/165mm	2404	8.0"/203mm
2290	3.74"/95mm	2297	5.00"/127mm				

VOLVO CAM SEAL INSTALLERS

See website for applications. Factory Tool # in parentheses.

No. Description
9171 Rear Camshaft Seal Installer (999 5450-5)

9173 Front Camshaft Oil Seal Installer (999 5718-5)

9174 Rear Camshaft Oil Seal Installer (999 5719-3)



3881 BMW CRANKSHAFT FRONT OIL SEAL INSTALLER

- B37, B47, B48, B57, B58, N47 & N57

Replaces front crankshaft seal on BMW B37, B47, B48, B57, B58, N47 & N57 engines. Compare to BMW Factory Tool 118 800.



3882 BMW CRANKSHAFT REAR OIL SEAL INSTALLER

- B37, B47, B48, B57, B58, N47 & N57

Replaces the rear crankshaft seal on BMW B37, B47, B48, B57, B58, N47 & N57 engines. Compare to BMW Factory Tool 118 810, 118 811, 118 812, 118 813 & 118 815.



7643 BMW CRANK SHAFT FRONT & REAR REMOVAL & INSTALLER KIT

Removes & installs front & rear crankshaft seal on N40, N42, N45, N45T, N46, N46T, N52, N52K, N53, N54 & N55. Compare to Factory Tools: 119220, 119230, 119235 & 110370. Individual components available:

No.	Size
7643X05	N54 Front Engine Seal Remover
7643X10	N55 Seal Installer



2241 BMW SEAL KIT - N20/N26

Removes & installs front & rear crankshaft seal on BMW N20 & N26 engines.

Comparable to BMW factory tools: 110 371, 110 372, 2 212 822/119, & 231/119 233. Packed in blow mold case. Individual components available:

No.	Size
2241X05	Seal Installer



3801 BMW SEALING TOOL

Used to squeeze the contents of Loctite 193140 liquid sealing compound bottle when sealing engine bed plate. Also used for applying sealant to the corners of a front crankshaft seal. Services BMW 1, 2, 3, 4, 5, 6, 7, X1, X3, X4, X5, X6, Z4, M2, M3, M4, M5, M6, & 1 Series M.



5012 VW/AUDI CRANKSHAFT REAR SEAL INSTALLER KIT

For assembling crankshaft PTFE seal & flywheel end. TSI engine only. Includes: 2 guide pieces, 3 thrust pieces & crankshaft seal installer. Compare to Factory Tools: T10122/1, T10122/2, T10122/3, T10122/4, T10122/5, T10122/6a & T10122C.



5002 FORD/VOLVO DRY TYPE TRANSMISSION OIL SEAL TOOL KIT

Services: DPS6 & DPS6/6DCT250 Transmission, including: Ford Fiesta (2011-2018), Focus (2010-2018) & Focus RS (2016-2018). Compare to Factory Tools: 307-671, 307-672, 307-673 & 307-674.



7468 4 PC. INJECTION WRENCH SET

Removes injector lines on diesel engines. 12 Pt Crows Foot sizes 14, 17, 19 & 22mm. For auto, truck & industrial applications.

No.	Size
2220X14	14mm
2220X17	17mm
2220X19	19mm
5069	22mm
7815	2 Pc. Set (19 & 22)
2220	3 Pc. Set (14, 17 & 19)



7398 DETROIT DIESEL INJECTION LINE SOCKET

Removes & installs injector feed line. 19mm hex w/ crow foot for clearance. Offset 3/8" drive for easy service of confined cylinder #6. Services DD13, DD15, DD16, DD5 & DD8.



1809 5 PC. FLEX SOCKET SET

Flexes to grip direct fuel line. Great for BMW N54/N55/N63 & other Euro apps. Individual assembled units available:

No.	Size	No.	Size
1821	11mm	1825	15mm
1823	13mm	1827	17mm
1824	14mm		



8612 CUMMINS WEAR SLEEVE & CRANK SEAL INSTALLER KIT

Wear sleeve installer, required when seal has wear sleeve. Crank seal installer services seals #3937111, #3904353 & seal in kit #3802820. Services: Paccar PX-6, 89-16 Cummins 4BT 3.9L B Series 5.9L, ISB 5.9L 6.7L & QSB 5.9L 6.7L.

No.	Description
5041	Crank Seal Installer
5046	Wear Sleeve Installer



3880 REAR CRANKSHAFT SEAL R&I TOOL

- CUMMINS 3.5L, 3.9L, 5.9L & 6.7L

Removes & installs seals with & without wear sleeves. Services Cummins 3.5L, 3.9L, 5.9L & 6.7L (1989-2016), including: 4BT 3.9L, B Series 5.9L, ISB 5.9L & 6.7L, QSB 5.9L & 6.7L, & Paccar/Cummins PX-6.



3877 DAMPER/CRANK OIL SEAL INSTALLER - 7.3L POWERSTROKE & T444E

Installs both the front seal and the damper. Services F-250, F-350, F-450 & F-550 Super Duty 7.3L (Powerstroke & T444E) engine. Use the screw to gradually and smoothly install instead of using a hammer, preventing damage to all components. Compare to Ford Factory tool 303-484



3878 REAR CRANKSHAFT SEAL INSTALLER - 6.6L DURAMAX DIESEL

Press fit rear seal to engine block & crankshaft for proper fitment of inner & outer seal body. Services GM/SUZUKI 6.6L Duramax 2001+ GMT800, 2500HD & 3500. Compare to GM Factory tool J-44642.



3879 FRONT CRANKSHAFT SEAL INSTALLER - 6.6L DURAMAX DIESEL

Press fit front seal to engine block & crankshaft for proper fitment of inner & outer seal body. Services GM/SUZUKI 6.6L Duramax 2001+ GMT800, 2500HD & 3500. Compare to GM Factory tool J-44645.



SEAL INSTALLERS | INJECTOR SERVICE

7314 FRONT CRANKSHAFT SEAL INSTALLER

- FORD 6.7L POWERSTROKE
Services Ford Super Duty F-250, F-350, F-450, F-550, F-650 & F750. Compare to Ford Factory Tool 303-1509

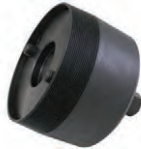
NEW!



7315 REAR CRANKSHAFT SEAL REMOVER

- FORD 6.7L POWERSTROKE
Services Ford Super Duty F-250, F-350, F-450, F-550, F-650 & F750. Compare to Ford Factory Tool 303-1513

NEW!



7316 FRONT CRANKSHAFT SEAL REMOVER

- FORD 6.7L POWERSTROKE
Services Ford Super Duty F-250, F-350, F-450, F-550, F-650 & F750. Compare to Ford Factory Tool 303-1510

NEW!



7317 REAR CRANKSHAFT SEAL INSTALLER

- FORD 6.7L POWERSTROKE
Services Ford Super Duty F-250, F-350, F-450, F-550, F-650 & F750. Compare to Ford Factory Tool 303-1514

NEW!



7320 4 PC MASTER SEAL INSTALLER SET - FORD 6.7L POWERSTROKE

No.	Size
7314	Front Installer
7315	Rear Remover
7316	Front Remover
7317	Rear Installer

NEW!



3871 FORD FUEL INJECTOR SEAL INSTALLER

Properly installs injector seal. Services Ford 1.6L, 2.0L, 2.3L, 3.5L, and 3.7 GTDI Engines. Compare to Factory Tools 310-207 & 303-1567.



5008 SUBARU/GM FUEL INJECTOR SEAL TOOL

Replaces Teflon seals on GM 2.0L & 3.6L w/ Hitachi fuel injectors (10-17) & 2.0L, 2.5L, 5.3L & 6.2L engines w/ Bosch, Continental & Delphi fuel injectors (12-17), Subaru 2.0L & 2.4L turbo boxer engines (14-19). Compare to Factory Tool: GM EN-49245, EN-51105 & Subaru 18683AA000.



3873 FORD FUEL INJECTOR SLEEVE CUP TOOL - 4.5L & 6.0L

Removes & installs fuel injector sleeve cup w/o removing heads. Services VT275 24 Valve, VT365 32 Valve, 2006-2009 6.0L Powerstroke Diesel, & 2004-2010 4.5L Diesel: Low Cab Forward E-Series, F-250, F-350, F-450, F-550, F-650, F-750 Super Duty Excursion. Compare to Factory Tools 303-767 & 303-768.



3874 FORD FUEL INJECTOR SLEEVE CUP TOOL - 6.4L

Removes & installs fuel injector sleeve cup w/o removing heads. Services 2008-2010 Ford 6.4L Powerstroke Diesel on F-250, F-350, F-450 & F-550. Also services 2008-2010 Maxforce 7. Compare to Factory Tools 303-1262 & 303-1263.



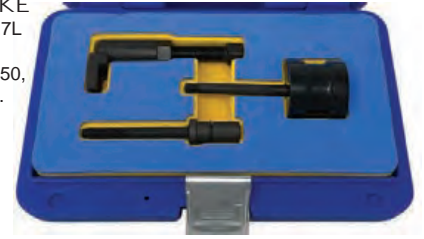
3875 FORD FUEL INJECTOR SLEEVE CUP TOOL - 7.3L

Removes & installs fuel injector sleeve cup. Services F-250, F-350, F-450 & F-550 Super Duty 7.3L. Compare to Factory Tools 303-DS105 D94T-9000-B & 303-D109 D94T-9000-C.



3876 FORD FUEL INJECTOR REMOVER

- 6.7L POWERSTROKE
Removes fuel injector on 6.7L Power Engines. Services 2011-2021 Ford F-250, F-350, F-450, F-550 & Super Duty. Compare to Factory Tool 310-230.



1027 HIGH PRESSURE RAIL ADAPTER SOCKET

Removes & installs Fuel Injector Adapter from High Pressure Rail to service O-rings on International Trucks, including DT466, DT570 & HT 570. 1" outer hex w/ 20mm diameter hole. 1/2" drive.



2746 CUMMINS HIGH PRESSURE CONNECTOR REMOVER

Services: 06-14 Dodge 5.9L 24-valve & 6.7L Cummins turbo diesel engines.



1094 BENZ CDI COMMON RAIL INJECTOR PULLER

Removes injectors w/o disassembling cyl head. Includes slide hammer, puller jaw & set of threaded adapters & swivel adapter. Services engines: 611, 612, 613, 646, 647 & 648.



7255 BENZ INJECTOR ADAPTER - 642

Required for removal of Mercedes Benz 642 Injectors Services OM642 3.0L V6 CDI/BlueTEC Diesel engine found in Benz, Dodge, Jeep, Chrysler, and Freightliner Use with CTA 1094 CDI Common Rail Injector Puller Kit Compare to Mercedes Benz factory tool 642-0133

NEW!



1096 BENZ INJECTOR NOZZLE PULLER SET

Removes damaged diesel inj on Sprinter & E-Class engines. Includes: puller tool, 29mm slotted inj wrench, support rings & 10mm hex tamper bit for removing center piece of injector.



1074 BENZ CDI ENGINE GLOW PLUG TOOL

Unscrew & disassemble 10mm glow plugs w/o removing cyl head on Benz engine codes: 611, 612, 613 & more. 3/8" drive.



3806 BENZ INJECTOR NOZZLE REMOVAL KIT

Includes T-bar/Slide hammer to remove injector nozzle and injector nozzle installer. Factory Tool in paranthesis. Includes:

No.	Size
3472	Injector Remover (271 589 02 33 00)
2213	Injector Installer (272 589 00 43 00)



7644 BMW FUEL INJECTOR REMOVER & INSTALLER KIT

Services N20, N47, N54, N55, N57 & N63 engines. Compare to Factory Tools: 130180, 130270, 130320 & 2249115. Includes #7658 R&I Tool.



7658 BMW FUEL INJECTOR REMOVER & INSTALLER TOOL - N20/N55

Removes fuel injector found on BMW N20 & N55 engines. Included in #7644 kit. Compare to Factory Tool #130 320.



2250 BMW FUEL INJECTOR OIL SEAL KIT

Services N13, N14, N18, N20, N26, N43, N53, N54, N55, N63, N73, S55, S63, B38 & B48. Packed in blow mold case. Compare to Factory Tools 83300495756 & 130190.



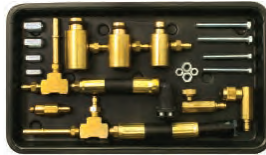
8877 VW/AUDI FUEL INJECTOR REMOVER/INSTALLER KIT

R&I on high pressure injectors & installs combustion chamber seal in late model VW/Audi w/ direct inj FSI systems. Compare to Factory Tool T10133



3355 FUEL INJECTION TESTER UPDATE KIT

Upgrades CTA #3300 w/ 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, 5/19" (8mm) Toyota/Prius 90° & Schrader Type.



3350 FUEL INJECTION PRESSURE TESTER

Services most USA (except GM TBI) & Japanese systems. Contains large & small Schrader type test fittings, inline & end of line hose fittings, 24" hose extension & 3.5" (90mm) gauge head w/ dual calibration (5-145 PSI / 25 - 1,000 kPa).



3850 BOSCH K-JETRONIC C.I.S. FUEL INJECTION PRESSURE TESTER MASTER KIT

Detect bad fuel pumps, pressure regulators, injectors & fuel filters. 3.5" (90mm) gauge w/ dual calibration (5-145 PSI & 25-1,000 kPa), hose assembly & brass adapters.

Early CIS Fuel Injection systems & later model BMW.

No.	Description	
3420	Basic K-Jetronic Kit	3422
3422	CIS Adapter Set	



3445 FORD/BMW/VOLVO FUEL PRESSURE TESTER

For Schrader-type test ports. 3.5" gauge dual calibrated (5-145 PSI & 25-1,000 kPa) w/ quick couplers attached to gauge & hose assembly.



3440 FORD FUEL INJECTION TESTER

Multi-port/TBI - 3.5" gauge dual calibrated (5-145 PSI & 25-1,000 kPa). 3 hose assemblies.



3430 GM FUEL INJECTION TESTER

Multi-port. 3.5" gauge w/ dual calibration (5-145 PSI/ 25-1,000 kPa). Hose w/ quick disconnect.



3448 VOLVO FUEL RAIL TEST KIT

For Schrader-type fittings. 3.5" gauge (5-145 PSI & 25-1000 kPa), 10" hose w/ quick-coupler end. 90° small Schrader adapter & Volvo 8mm Schrader adapter.



3360 FUEL INJECTION CLEANING CANISTER

Use w/ CTA Fuel Injection sets & adapters. Fill canister w/ cleaning fluid & attached to gauge head & adapters to enter fuel system & injectors. Use with shop air. Includes 3.5" gauge w/ dual calibration (5-145 PSI / 25-1,000 kPa) and 5' hose assembly w/ 1/8" NPT hose end to adapt to different fittings.



3370 FUEL INJECTION CLEANING SET

Services injectors on most gas engines. Includes disconnect tools, hose clamps, tube nuts & app chart.



3300 FUEL INJECTION PRESSURE TESTER

Checks PFI & TBI systems. 3.5" gauge w/ dual calibrations (5-145 PSI & 25-1,000 kPa), 2.5" gauge w/ dual calibrations (0-15 PSI & 0-1.00 kg/cm²), adapters & hose assemblies.



5171 AIR SUSPENSION PRESSURE TESTER

Displays air suspension pressure during service. Detects leaks and irregularities. Dual PSI & 100XkPa Gauge. Hose length: 20" (51cm). 8mm x M1.0 working end services many makes and models, including Benz W220 S-Class & W211 E-Class.



2004 COMPRESSION TESTER - FLEX HOSE

15" flex hose. Side release valve for multiple readings w/o removing tester. Includes 14 & 18mm spark plug fittings. 2.5" (64mm) gauge w/ dual calibration (0-300 PSI / 0-21kg/cm²).



2012 MASTER COMPRESSION TESTER KIT

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

No.	Description
2012X10	10mm Adapter
2012X12	12mm Adapter



2006 COMPRESSION TESTER FLEX HOSE W/ 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 w/ dual calibration (0-300 PSI / 0-21kg/cm²).



2002 OFFSET COMPRESSION TESTER

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



2011 FORD TRITON COMPRESSION TESTER ADAPTER

12mm & 16mm threaded male ends fit spark plug ports on Ford Triton engines. 8.5" flex hose. Works with #2004, 2006 & 2012 testers.



2001 AUTOMATIC TRANSMISSION & ENGINE OIL PRESSURE TESTER

Services most cars & trucks. Includes 2-1/2" (65mm) diameter w/ dual calibration (0-300 PSI / 0-21kg/cm²). 6' hose plus SAE & Metric adapters.



2013 FUEL PUMP & VACUUM PRESSURE TESTER

Checks for leaky, sticky, or burnt valves, incorrect timing, accurate fuel pump vacuum, pressure & gas line leakage. Gauge calibrated 0-30 Hg for engine vacuum readings & 0-15 PSI (0.1 - 1.0kg/cm²) for fuel pump pressure readings. Includes rubber hose & tapered fitting.



2010 CYLINDER LEAKAGE TESTER

Measures ability of engine cylinder to hold compressed air using shop air. Supplements a compression tester. Detects bad valves, rings, cylinder walls & blown head gaskets. Includes precision regulator w/ M14 & M18 adapter, 26" hose assembly & dual gauges to monitor input air-line pressure.



2800 DIESEL COMPRESSION TEST KIT
2.5" gauge w/ dual-calibration (0-1,000 PIS & 0-70kg/cm2). Side-release valve for multiple readings. 13" flex hose w/ swivel end quick coupler. Includes adapters for GM, Ford/Navistar, Int Harvester Glow Plugs, VW, Volvo, Audi, Dodge, Benz & Cummins 5.9L 24mm x 20, & GM 10mm x 10 Glow Plugs.



* 30 adapters available separately - visit ctatools.com for details

7912 TURBO SYSTEM LEAKAGE TEST KIT
Locate air leaks in components by plugging into output side of turbo and plugging intake inlet. Air is applied through end of adapter to show presence of leaks within the system. Features pressure gauge, shut off valve & pressure regulator. Includes 6 pairs of stepped adapters size 12-90mm. Can also be used on cooling system hoses. Packed in blow mold case



7397 HD TURBO SYSTEM LEAKAGE TEST KIT
Features a pressure gauge, shut off valve and pressure regulator. Comes with 3 pairs of stepped adapters to fit Heavy Duty size hoses. This setup can also be used on cooling system hoses. Includes adapters, sizes: 105mm / 110mm, 115mm / 120mm & 125mm / 130mm.



7808 INJECTOR PULLER KIT
Removes stuck injectors w/o removing electrical part, reducing work time. Services Denso, Siemens, Bosch & Delphi common rail or piezo injectors 1999+. Includes connectors (M12 and M14) incase original coupling can't be removed. Remove injector by rotating w/ handle or w/ axial extraction. Kit includes: (1) slide hammer shaft & 1.5 kg (3.3 lbs) slide hammer, (1) articulator w/ foam handle, (1) M12 connector, (1) M14 connector, (2) spacers & (1) threaded extractor.



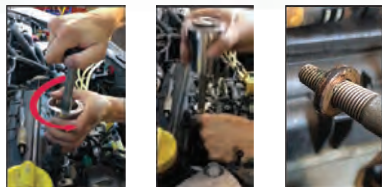
Scan for Video!



7806 INJECTOR SEAL EXTRACTOR KIT
Removes stuck diesel injector seals. 1 Kg (2.2 lbs) slide hammer removes difficult seals. Slide hammer designed w/ integrated hexagonal socket to screw extractor into seal. Includes: (2) conical removers w/ double thread entry that services passenger & light-duty utility vans & trucks. Quick & easy removal w/o adjustments or risk of dropping parts into cylinder. Packed in blow mold case.



Scan for Video!



7810 INJECTOR SEAT & HOLE CLEANING SET
Cleans injector seat and hole prior to installing new injector, a crucial step in the installation process. Includes: (2) metal brushes (Ø 20mm & 25mm) for injector hole cleaning, (2) front brushes for injector seat cleaning, (1) front brush extension, (2) seal plugs to close injector hole while cleaning, (1) seal plug holder to place & remove plug & (1) sanding kit w/ paper and paper support.



Scan for Video!



7804 GLOW PLUG PULLER KIT
Removes glow plugs, even when compartment is not easily accessible, including narrow engine bays & engines w/ glow plugs on firewall side. Enables removal of broken glow plugs on top of cylinder head w/o damage. Includes (1) electrode puller, (1) electrode reinforced drill w/ (2) guides, (2) specially centered mills w/ one mill support preventing damage to head, (1) tap & (1) slide hammer extractor to pull out broken glow plugs, (3) refreshing taps sizes: M8, M10x100 & M10x125 w/ hex drive.



Scan for Video!



7802 GLOW PLUG TIP PULLER KIT
Removes broken glow plug tips stuck in cylinder head. Tap, drill bit & extractor holders fitted to body of original plug & slide in for proper centering. Self-centering industrial taps w/ "stop-block" reduce risk of damage to cylinder head. Kit services limited clearances, for firewall sided glow plugs. Includes: (4) easily identifiable guides & punch for flared tips, (1) punch, (1) foam grip slide hammer, (2) drill supports, (2) tap supports, (2) puller supports & (1) magnetic flex puller.

Scan for Video!



7730 GLOW PLUG THREAD REPAIR KIT
- M8, M9, M10X100, M10X125

Repairs Glow Plug threads quickly & permanently. Designed for limited clearance & tight access. Includes 2 Cylinder Head Reamers (9mm & 11mm), 4 Taps, 4 Installers, and 4 each Thread Repair Inserts, sizes M8 x 100 (short & long), M9, M10 x 100, M10 x 125. Reamers & Taps are self-guided. No need for glue or thread seal. Ream! Tap! Replace!



2375 SPARK PLUG SOCKET

- 5/8" X 6 PT - 6" LONG
Dual 3/8" square & 3/4" hex drive.



5061 5 PC. SPARK PLUG SOCKET SET

Comprehensive set Includes:

No.	Size	OAL
1730	5/8" x 12 Pt	6"
2376	16mm	2.5"
2380	5/8" x 6 Pt	10"
2390	9/16" x 6 Pt	10"
2394	14mm x 6 Pt	10"



1730 SPARK PLUG SOCKET - CHRYSLER

- 5/8" X 12 PT - 6" LONG
Thin wall magnetic socket services 2000s Jeep Grand Cherokee & Commander, Dodge Dakota, Durango & Ram 1500, Chrysler Aspen & Mitsubishi Raider.



2380 SPARK PLUG SOCKET

- 5/8" X 6 PT - 10" LONG
Deep-reach w/ recessed magnet. Services Dodge Ram 1500 4.7L, Honda & Toyota. 3/8" drive.



2395 SPARK PLUG SOCKET - BMW

- 5/8" X 6 PT - 14" LONG
Extra-long for hard-to-reach plugs found on 2006-2015 BMW N52, N53, M54 In-line 6 engines (except turbocharged). Internal magnet, chrome plated, knurled end & 3/8" drive.



2369 SPARK PLUG SOCKET - FORD

- 9/16" X 6 PT
For Ford Triton V8 & V10 Engines. 2.5" long & 3/8" drive.



2385 SPARK PLUG SOCKET SWIVEL - FORD

- 9/16" X 6 PT - 6" LONG
For Ford Triton V8 & V10 Engines. 3/8" drive w/ plastic holding insert.



2390 SPARK PLUG SOCKET - FORD

- 9/16" X 6 PT - 10" LONG
For Ford Triton V8 & V10 Engines. Deep reach & 3/8" drive.



1180 MAGNETIC SPARK PLUG SOCKET - 14MM X 12 PT

Services BMW, MINI, Mercedes, Porsche, Ford, Nissan, Infiniti, Toyota, Scion, Subaru, & more. Thin-wall design for clearance. Built in magnet provides easy extraction. OAL: 63.18mm, OD: 18.45mm, 3/8" Square Drive. Compare to BMW Factory Tool #121220.



2376 SPARK PLUG SOCKET - 14MM X 12 PT

Thin-wall socket for many late model BMW, Mini, Benz & more. 2.5" long & 3/8" drive. Comparable to Factory Tool: 121220.



2394 SPARK PLUG SOCKET - TOYOTA

- 14MM X 6 PT - 10" LONG
Deep-reach. Internal magnet holds spark plug firmly. For Toyota/Lexus/Scion 1.8L, plus Nissan, Land Rover, Jaguar & more. 3/8" drive.



3020 UNIVERSAL IGNITION SPARK TESTER

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



2030 4 PC. METRIC SWIVEL SPARK PLUG SOCKET SET

Comprehensive set Includes:

No.	Size	OAL
1061	14mm x 12 Pt	3.6"
4329	16mm x 12 Pt	3.6"
7654	14mm x 12 Pt	8.7"
7656	16mm x 12 Pt	8.7"



SPARK PLUG SOCKETS - THIN WALL SWIVEL

Required for BMW N54, N55 & N63, Benz, and other Euro applications. Rubber insert to hold spark plug. 3/8" square drive. 3.6" OAL.

No.	Size
1061	14mm
4329	16mm



SPARK PLUG SOCKETS - LONG SWIVEL EXTENSION

12 Point spark plug sockets w/ 15-20° degree swivel extension. OAL: 8.7" (22cm).

No.	Size
7654	14mm
7656	16mm



7290 SPARK PLUG SOCKET W/ SWIVEL - 18MM X 6 PT

Use for installation and removal of 18mm spark plugs found Street-touring-motorcycles, Street-sport-motorcycles, Off-road-motorcycles, Street-cruiser-motorcycles, Snowmobiles, Utility-vehicles, ATVs, Street-motor-scooters & Marine-personal-craft. Drive: 3/8".



NEW!

7392 6 PC. SPARK PLUG & GLOW PLUG SOCKET SET

Services spark plugs, glow plugs & pressure sensor glow (PSG) plugs.

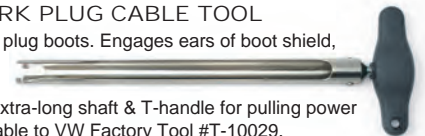
All 6-point hex w/ O-ring (except magnetic 14mm x 12-pt). 15-20° swivel range for access in tight fitting areas. Includes 5 plug protectors for PSG plugs.

No.	Size
7392X01	8mm
7392X02	9mm
7392X03	10mm
7392X04	12mm
7392X05	14mm
7392X06	16mm



3055 VW/AUDI SPARK PLUG CABLE TOOL

For vehicles w/ steel spark plug boots. Engages ears of boot shield, saves wires from damage & saves time (no need to remove intake manifold). Extra-long shaft & T-handle for pulling power OAL: 14" (35cm). Comparable to VW Factory Tool #T-10029.



3052 SPARK PLUG WIRE BOOT PLIERS

Removes spark plug wires safely. Insulated handles & jaws. Small indentations in jaws allow gripping a bare terminal w/ engine running.



5303 BENZ IGNITION LOCK REMOVER

Removal & replacement of main ignition switch retaining ring Compare to Benz Factory Tool #129 589 00 007 00.



1088 5 PC. VW/AUDI TRIANGLE BOLT SOCKET SET

Fits triangular tamperproof fixings on VW Audi TDi, Bosch injector & pump seals, or adjust VW TDi injection pump timing on 1996-2003 TDi injection pumps. Accesses fuel temperature sensor by removing screws on top pump cover. Includes sizes: M5 (8mm), M6 (10mm), M8 (12mm), M10 (15mm) & M12 (16.5mm). 1/2" drive on metal rail. Chrome vanadium.



3280 IGNITION FILE

Long, thin blade for precision filing of points & other small objects. OAL: 5.25" (13cm).



3018 SPARK PLUG WIRE TESTER

Tests presence of spark w/o risk of shock or damage to wires. Identifies badly fouled spark plugs. Includes: 48" (122cm) lead, hooded alligator clip & inductive tester w/ LED.



7990 4 PC. IGNITION COIL PULLER KIT

Serves many VW/Audi coil configurations. T-shaped handles for better leverage. Compare to Factory Tools: T10094A, T10095A, T10166 & T40039.

No.	Description
7991	4 Cylinder (T10094A)
7992	8 & 12 Cylinder (T10166)
7993	6 Cylinder gas (T10095A)
7994	Direct Injection 2.0L engines (T40039)



7390 VW/AUDI IGNITION COIL PULLER

Removes coils without damage. Compare to Factory Tool #T10530. Serves VW/Audi 2013+ models with the 1.8T & 2.0T MQB Platform engines



3012 REMOTE CONTROL STARTER SWITCH

Controls any engine w/ solenoid starter switch when making adjustments & repairs. 3' (91cm) leads, w/ hooded clamps.



3023 H.D. LOW VOLT CIRCUIT TESTER

For 6 & 12 volt systems. Heavy duty ground clip & insulator, 60" (152cm) rubber wire w/ spring supported strain relief & extra thick Lexan body.



3024 LOW VOLT CIRCUIT TESTER

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



3022 HIGH & LOW VOLTAGE CIRCUIT TESTER

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



3026 CONTINUITY TESTER

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



3031 COMPUTER SAFE AUTO LOGIC PROBE

High impedance tester protects computer circuitry, drawing less than 7 milliamps. Dual color LED. Serves 6, 12 & 24 volt systems. Insulated probe, 72" H.D. wire, 18 gauge dual leads w/ battery clips, high-impact plastic body & spring-strain relief.



2830 12/24/48V AUDIBLE CIRCUIT TESTER

Digital display for accurate voltage value and audible tone when current is detected. LED illuminates when grounded. Stainless steel test probe.



3028 TEST LEADS

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



3002 COMPUTER MEMORY SAVER

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



5059 DIGITAL CIRCUIT TESTER

Checks voltage values on 6, 12 & 48V systems. Range: 4V - 60V. Small testing current < 10mA. Coil cord stretches 12'. Digital display reads accurate voltage value. LCD screen displays power (Red) & ground (Green). Includes: Piercing probe w/ banana socket, Insulated cable piercing probe w/ banana socket, Test probe w/ 4mm banana socket & Alligator clip.



7662 92 PC. MASTER LINE KIT

Comprehensive testing kit for cars, trucks, tractors, ATVs, Motorcycles, boats & more. Effortlessly analyze voltage, continuity, impedance and current. Stainless steel probe tips & polypropylene coating. 1000V & 30 Amps plus CE certified w/ best heat insulation on market. Includes (2) 5KΩ variable resistor potentiometers (2), alligator clips (2), acicular probes (4), LED stroboscope (2), SRS Connector (2), 1 to 2 connector (2), 1 to 1 ext cable (4), probe (2), terminals w/ banana sockets (72).



5078 6 PC. SUPER THIN PROBE SET

Easily access back of connector between insulator & weather seal. 0.7mm thin w/ straight, 45° & 90° angles. 2mm female end connects to digital multimeter without need for other adapters.



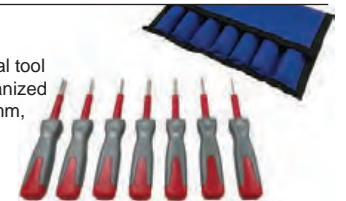
9812 26 PC. TERMINAL TOOL SET

Most extensive terminal tool set on market. High quality steel won't damage terminals. For both import and domestic vehicles and trucks, plus special tools for coolant sensors, wiring harnesses and terminal blocks on most vehicles.



2246 7 PC. DEUTSCH TERMINAL TOOL SET

Includes most current Deutsch terminal tool removers. Packaged in pouch for organized storage. Full circle sizes: 4.6mm, 4.0mm, 2.9mm & 1.8mm. Semi-circle sizes: 5.6mm, 4.1mm & 2.9mm.



3060 FUSE & BULB PLIERS

For hard to reach bulbs & fuses, including small instrument cluster bulbs, xenon, halogen, & filament bulbs. Better than screwdrivers or fingers. Plastic body w/ cushioned inserts to protect bulbs.



1012 MINI BULB PLIERS

Securely & safely grips all types of bulbs. Angled to fit in tight areas. Rubber coated gripping area for secure & safe use. Tongs withstand heat up to 212° F (100° C).



1034 VW/AUDI CONNECTOR REMOVAL TOOL

Removes VW/Audi push & pull connectors, on MAF/MAP Sensors, coil packs, headlights/foglights & level sensors. T-handle design w/ built-in hang-hole.



1070 VOLVO ECU REMOVAL TOOL

Removes ECU from body mount on. Made from spring steel w/ special grooves. Comparable to Volvo Factory Tool # 9995722.



SPARK PLUG HOLE THREAD CHASERS

Hardened steel tool removes carbon & corrosion to straighten 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 cost of a new head by repairing damaged threads on aluminum heads. 5/8" hex drive slim-design tap & one each of four sizes 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 - 3/8" Long (Set of 2)



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

Repairs 14mm tapered seat & gasketed spark plug ports in aluminum & cast iron heads w/o drilling. Includes tap, expanding tool & 3 sizes of inserts.

No.	Description
98142	1/4" Insert - 5 Each
98143	3/8" Insert - 5 Each
98144	5/8" Insert - 5 Each
98147	1/4", 3/8", 5/8" - 2 Each



PRO-THREAD SPARK PLUG REPAIR KIT - NON-TAPERED SEAT

Each kit includes tap, installation tool & inserts.

Kit No.	Size	Contents	Inserts	Tap Only
38109	M10-1	10 Pc. 1/2"	28109	38110
38129	M12-1.25	5 Pc. 1/2"	28129	38130
38149	M14-1.25	2 Pc. 3/8"	28159	38150
		2 Pc. 1/2"		
		2 Pc. 3/4"		



***STANDARD REPAIR KITS - SEE PAGE 42**

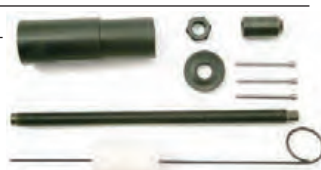
2365 3-VALVE FORD TRITON SPARK PLUG EXTRACTOR KIT

Extracts broken-off spark plug sleeves in 2004-2008 Ford 4.6, 5.4 & 6.8 engines. Includes: 8" (20cm) high-speed steel tap, extractor, guide, washer, jam nut & rubber caps to prevent thread chips from entering cylinder bore. May be used with #2364.



2364 3-VALVE FORD TRITON SPARK PLUG EXTRACTOR KIT PORCELAIN

Extracts broken porcelain from spark plug sleeves that broke during a regular service. Services: 2004-2008 Ford 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: 1996-2003 Ford 4.6, 5.4 & 6.8 & some later applications up to 2008. Includes: 8 inserts (OD: 0.75" or 18.9mm & ID: 0.50" or 12.75mm), drill, tap, guide & air gun accessory, written instructions & DVD.

No.	Description
2366	Replacement Insert - 14mm



3235 SPARK PLUG GAPPER

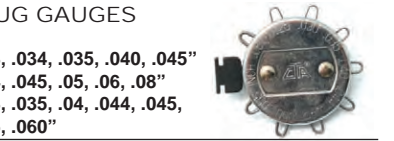
Ramp gauge from .02 to 0.1" (.5 - 2.5mm).

No.	Description
099500	25 Pc. Set on Stand
3235B	Bulk Pack 25/Bag



WIRE-TYPE SPARK PLUG GAUGES

No.	Wires	Sizes:
A326	6	.025, .03, .034, .035, .040, .045"
A328	6	.04, .044, .045, .05, .06, .08"
3238	9	.025, .03, .035, .04, .044, .045, .05, .055, .060"



A315 9-BLADE STANDARD FEELER GAUGE

3" straight blades: .002, .003, .004, .006, .008, .012, .013, .020, .025", plus steel ruler w/ metric markings.



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 marking ruler w/ metric markings.

A317 26-BLADE STANDARD FEELER GAUGE

3" straight blades: .0015, .002, .0025, .003 through .025" by thousandths w/ metric markings.

A318 32-BLADE STANDARD FEELER GAUGE

4" straight blades: .0015, .002, .0025, .003 through .026" & .028, .030, .032, .035 and .10" brass blade w/ metric markings.

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, .70, .75, .80, .85, .90, .95 & 1.00mm.

A310 12-BLADE OFFSET FEELER GAUGE

For valve tappets & difficult access applications. Sizes: .008, .010, .012, .013, .014, .015, .016, .018, .019, .020, .025, .026" w/ metric markings.



A309 16-BLADE OFFSET FEELER GAUGE

For valve tappets & difficult access applications. Sizes: .005 through .020" by thousandths w/ metric markings.

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".



A322 17-BLADE MINI FEELER GAUGE

1.5" blades: .010, .012, .013, .015, .016, .017, .018, .019, .020, .022, .024, .025, .026, .028, .030, .032, .035" w/ metric markings.



A319 COMBINATION TUNE-UP FEELER GAUGE

6 gold colored blades: .006, .008, .010, .012, .014, .016". 12 steel blades: .010, .012, .015, .016, .017, .017, .018, .019, .020, .022, .024, .025, .026". 6 wire blades: .025, .030, .034, .035, .040, .45".



A308 OFFSET VALVE TAPPET GAUGE SET

Speeds valve lash adjustment. Installs proper blades for intake & exhaust settings. Offset blades for easy insertion. W/ metric markings. 11 sizes from .004" to .014".



BATTERY | BRAKE

3145 GM SIDE TERMINAL BATTERY WRENCH - 5/16"
5/16" reversible ratchet box wrench w/ insulated handle to prevent shock. OAL: 5" (127mm).



3125 BATTERY TERMINAL SPREADER & CLEANER
Sharp milled teeth for effective cleaning
Die-cast construction with comfort grips.



3110 BATTERY CARRIER
Jaws lock onto battery to grab, lift & carry.
Works on both side-terminal & top-post batteries.



A339 BATTERY CARRIER STRAP
12" (30cm) strap fits all 6 & 12V top terminal batteries.



A340 2 PC. H.D. BATTERY CLAMP SET
Allows for easy repair of jumper cables.
Copper plated steel clamps.



3120 3-WAY BATTERY TERMINAL CLEANER
Removes corrosion from battery clamps and posts.



3115 BATTERY BRUSH
Cleans battery terminals & posts.
Rugged plastic molded body.



A337 BATTERY BRUSH
Cleans battery terminals & posts.
Durable metal body.



A338 SIDE TERMINAL BATTERY BRUSH
One side designed to clean recessed terminals, other side cleans cable bolts and connectors.



7000 BRAKE BLEEDER & VACUUM TEST KIT

Bleeds brakes, tests Vacuum Gauges, transfers fluid & more. Large (2") 360° rotating diaphragm style gauge head displays inches Hg & kPa. Ergonomic & comfortable handle. Large & powerful inline piston design produces vacuum quickly. One finger lever-action vacuum release. Pivoting lever action designed to maximize output w/ minimal operator effort. Complete range of adapters & hoses included.



1250 ONE MAN BRAKE BLEEDER

Services calipers, wheel cylinders, & master cylinders. Includes: fluid collection bottle w/ magnet. Set of hoses & tapered fittings.



7010 VACUUM BRAKE BLEEDER

Removes fluid through bleeder nipple w/ shop air. 1 liter capacity, 1 meter (39") long tube w/ universal adapter. Gun w/ locking trigger & quick-connect.



1238 ONE MAN BRAKE BLEEDER HOSE
Check valve keeps air from flowing back into caliper of wheel cylinder when brake pedal is released. Eliminates need for a helper. 2' (61cm) long w/ spring clamp.



3930 11 PC. PRO-SERIES BRAKE BLEEDER ADAPTER SET

All metal construction adapters. Most adapters have a 90° swivel fitting for limited clearance. Covers latest applications. Use with #7015 Pressure Bleeder Tank. Adapters come equipped with standard European (Nitto) fittings, but also includes a standard National (Milton) fitting adapter for use with other tanks.

No.	Applications	No.	Applications
3931	Toyota	3936	Nissan
3932	Hyundai, Mitsubishi	3937	Chrysler, Dodge, Jeep
3933	Honda	3938	Tesla X & S, GM
3934	Euro	3939	Tesla 3 & Y, GM
3935	Mazda, Suzuki	3940	Milton M-Style Connector



1275 ADAPTER SET & TANK BUNDLE

No.	Description
3930	11 Pc Adapter Set
7015	Brake Bleeder Tank



7015 PRESSURE BRAKE BLEEDER TANK

Creates pressure to push brake fluid through the system. 3 liter capacity tank w/ pressure release valve. Filling hole w/ screw cap. 0-70 PSI gauge. Updated longer, 10 foot hose w/ Nitto quick-disconnect coupler for reach.



7300M 13 PC. BRAKE BLEEDER ADAPTER SET

No.	Application
7022	Japanese
7023	GM/Chrysler
7024	GM/Chrysler
7025	Nissan
7027	GM/Chrysler
7029	European
7030	Honda
7031	Mitsubishi, Subaru, Nissan



No.	Application	No.	Application
7032	Honda	7041	Toyota/Lexus
7039	Nissan Altima	7043	Quick-coupler Adapter
7040	Ford Escape		

OPEN STOCK ADAPTERS NOT INCLUDED IN 7300M

No.	Applications	No.	Applications
7019	Dodge/Chrysler	7036	Daihatsu
7026	BMW, Audi	7037	Mitsubishi
7028	European	7038	Nissan
7033	Honda	7042	3.5" Round
7034	European	7044	Ford Mustang
7035	Ford		

7310M ADAPTER SET & TANK BUNDLE

No.	Applications
7300M	13 Pc. Master Adapter Set
7015	IBrake Bleeder Tank



7786 2 PC BRAKE BLEEDER SET

Allows user to complete brake service quickly, without mess or damage. Nipple top opening for placement of tubing, also vents bottle, eliminating need to loosen cap & risk spilling fluid. Built-in Heavy-Duty magnets for secure placement. Wire & hook for additional security when anchored to a nearby suspension.



1945 8 PC. BRAKE BLEEDER WRENCH KIT

Wrenches seal to bleeder valve to tighten & loosen valves w/o breaking seal. Check valve eliminates drip & air/old fluid from entering system. Includes 6-point hex wrench sizes:

No.	Size
1946	3/8"
1947	7mm
1948	8mm
1949	9mm
1950	10mm
1951	11mm
1952	12mm
1955	4' Silicon Hose



1465 DISC BRAKE PAD SPREADER

Compresses inner pad & resetting caliper position.



1455 DISC BRAKE PISTON CUBE

Relines rear disc brakes. 5 drive pin configurations. Use with 3/8" drive tools.



1462 REAR DISC BRAKE PISTON WIND BACK TOOL KIT

Relines rear disc brake calipers w/ screw-type parking brake mechanisms. 15 adapters fit most cars w/ 4-wheel discs. Includes right & left-hand helix bolts.



1457 2-PIN BRAKE PISTON WIND BACK ADAPTER

Rotates pistons back into caliper. 3/8" drive. Compare to Factory Tool: 346309 & 346301.



1458 3-PIN BRAKE PISTON WIND BACK ADAPTER

For late model VW, Audi & BMW Electro-mechanical Parking Brakes (EPB). Compare to Factory Tool: 83302320299.



1437 VW/AUDI BRAKE RELEASE TOOL

Special bends allows separation of brake servo push rod from the brake pedal. Fits most 2008+ VW/Audi.



7394 18 PC. EURO BRAKE CALIPER SOCKET SET

Comprehensive kit includes newest & most common sizes:

No.	Size
5025	7 Pt. x 14mm
5027	7 Pt. x 22mm
5029	10 Pt. x 11.5mm
5031	10 Pt. x 15mm
5033	10 Pt. x 20mm
9880	5 Pt. 10mm (Male)
9881	5 Pt. 12.5mm
9882	5 Pt. x 14mm
9883	5 Pt. x 19mm
9884	5 Pt. x 10mm
1331	6 Pt. x 7mm (Short)
1332	6 Pt. x 7mm
1333	6 Pt. x 7mm (Long)
1334	6 Pt. x 8mm



No.	Size
1335	6 Pt. x 9mm (Short)
1336	6 Pt. x 9mm (Long)
1337	6 Pt. x 11mm (Long)
1338	12 Pt. x 14mm Tamper-Proof

5035 5 PC. VAG BRAKE CALIPER SOCKET SET

Serves VW, Audi & Porsche. 1/2" drive. Includes:

No.	Slot Sizes
5025	7 Pt. - Small
5027	7 Pt. - Large
5029	10 Pt. x 11.5
5031	10 Pt. x 15
5033	10 Pt. x 20



7811 11 PT. BRAKE CALIPER SOCKET

Serves: Knorr-Bremse calipers found on Volvo, DAF, Foden, MAN, Benz, Scania, BOVA, plus BPW & SAF Trailers. 11 point x 3/8" x 26mm long.



1489 DISC BRAKE CALIPER SOCKET - 9MM HEX

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



1488 HONDA/ACURA BRAKE DRUM & ROTOR TOOL

No. 3 Phillips bit w/ 5/16" hex shank assembled to 3/8" square drive bit holder for high-torque applications such as Honda Brake Rotors.



1440 BRAKE ROTOR & DRUM REMOVAL TOOLS

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



1430 MANUAL BRAKE GAUGE SET

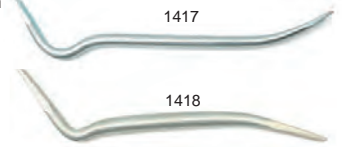
For accurate measurement of remaining brake lining between the pad & rotor. 8 color-coded sizes: Red/Danger: 2 & 3mm, Yellow/Warning: 4, 5 & 6mm, Green/Good: 8, 10 & 12mm. All steel construction.



BRAKE ADJUSTERS

Adjusts clearance between brake drum & brake shoe. Fits through slot in backing plate & turns 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



A115 BRAKE SPRING PLIER

Removes & installs shoe return springs on most drum brakes.



1459 DRUM BRAKE SPRING PLIERS

Offset head w/ special curved ends grips washer for removal & re-installation of small return springs. Spring loaded adjusts to wide range of diameters. Open design allows clear view of washer.



5077 BRAKE CALIPER FILE

Extra slim design removes brake dust & rust from caliper. Flat file end for scraping crude residue surfaces. 10mm wide file.



BRAKE CYLINDER HONES

Removes deposits and corrosion in brake cylinders. Use w/ electric drill.

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



REPLACEMENT STONES FOR HONES

Includes cotter pins. Fits most brands.

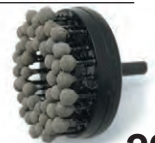
No.	Qty	Length	Grit
1115	3	22mm	Medium
1117	3	19mm	Fine
1125	2	22mm	Medium
1135	3	19mm	Fine



FLEX HONES® FOR ROTORS

Reduces brake noise caused by spiral grooves on braking surface. Ideal for new or re-turned rotors and flywheels.

No.	Grit	No.	Grit
1170	Coarse	1174	Fine
1172	Medium		



BRAKE | WHEEL

7435 10 PC. WHEEL HANGER SETS

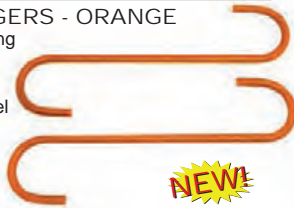
Threads into wheel hub for vehicles w/ lug bolts instead of wheel studs. Allows easier alignment & installation of wheel onto hub. OAL: 6" (15cm). Includes #5465, 8871, 8872, 8874 & 8876.

No.	Size
5465	16MM x P1.5 (Promaster)
8871	M12 x P1.25
8872	M12 x P1.5
8874	M14 x P1.5
8876	M14 x P1.25
7076	8 Pc Euro Set - Includes 1/ea #8871, 8872, 8874, & 8876



5470 2 PC. BRAKE CALIPER HANGERS - ORANGE

Holds brake calipers out of the way while working on brakes. Also hangs other automotive parts & tools. Sturdier than zip ties or wires. Reduces damage to calipers & other parts. 1/4" thick steel for strength and durability. OAL: 7-3/4" (20cm). Bright orange for visibility in dark work areas.



7312 1/2" DRIVE SOCKET EXTENSION

1/2" Drive Socket Extension. 3" OAL. Use with any 1/2" drive sockets.



4815 2 PC. WHEEL STUD CLEANING BRUSH SET

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

No.	Diameter	Color
4800	7/16"	Red
4810	9/16"	Blue



THIN-WALL IMPACT FLIP SOCKETS

For servicing recessed wheel nuts. 1/2" drive in center allows socket to "flip" from one size to another. Half metric required for damaged chrome capped lug nuts poor service, overtorquing, or improper leverage.

No.	Description	No.	Description
A162	3/4" x 13/16"	4222	22mm x 22.5mm
A164	19mm x 21mm	1778	7/8" x 15/16"
A166**	3/4" x 13/16"	1799	21mm x 21.5mm
A168**	19mm x 21mm	7301	17mm x 17.5mm
4217	22mm x 24mm	7304	27mm x 27.5mm
4221	18.5mm x 19.5mm	** Extra Thin-Wall	



7307 7 PC. HALF METRIC FLIP SOCKET SET



No.	Description
1799	21mm x 21.5mm
4221	18.5mm x 19.5mm
4222	22mm x 22.5mm
A168**	19mm x 21mm
7301	17mm x 17.5mm
7304	27mm x 27.5mm
7312	1/2" Drive Extension



1463 5 PC. HALF METRIC FLIP SOCKET SET

No.	Description
1799	21mm x 21.5mm
4221	18.5mm x 19.5mm
4222	22mm x 22.5mm
A168**	19mm x 21mm
7312	1/2" Drive Extension



1190 4 PC. FLIP SOCKET SET

No.	Description
1778	7/8" x 15/16"
A162	3/4" x 13/16"
A164	19mm x 21mm
7312	1/2" Drive Extension



4218 MERCEDES THIN-WALL IMPACT SOCKET

17mm x 6-point "Flower Design" for 2009+ Benz lug bolts. 85mm long w/ protective plastic sleeve. 1/2" drive. Compare to Mercedes Benz Factory Tool #0009905407.



THIN-WALL IMPACT SOCKETS

Chrome Moly color-coded socket w/ anodized finish. Protective plastic sleeve prevents scratching of wheels & lug nuts. Removable internal magnetic insert. 1/2" drive.

No.	Size	No.	Size
A173	13/16"	A177	17mm
A174	7/8"	A178	19mm
A175	1"	A179	21mm
A176	1-1/16"	A180	22mm



1014 4 PC. THIN WALL METRIC SOCKET SET

Includes #A177, A178, A179 & A180.



A159 7 PC. THIN WALL SOCKET SET

Includes #A173, A174, A175, A176, A177, A178 & A179.



7800 9 PC. THIN WALL IMPACT SOCKET SET

Includes #A173, A174, A175, A176, A177, A178, A179, A180 & 4218.



4001 5 PC. LUG NUT REMOVER SOCKET SET

Internal reverse tapered thread to remove stripped lug nuts or lug nuts w/ missing keys. Use w/ 1/2" drive impact wrench. Heavy duty threads make these sockets reusable!

No.	Description
A146	3/4"
A147	13/16"
A148	1"
A149	1-1/8"
4002	15/16"



1775 LUG DRILLER

Removes difficult locking nuts quickly, safely & w/o damage. Great for import vehicles w/ lost locking lug nut keys. Includes (4) internal centering guides, (3) external centering guides, (1) centering guide for free turning lugs, (2) ultra hard drills, (4) extractors, (1) impact extractor holder, & (1) impact extractor remover.



Scan for Video

7069 3 PC. EXTENDED LUG NUT SOCKET SET

Sleeve & insert prevents damage. 150mm OAL w/ 1/2" Drive. Great for deep offset wheels. Includes:

No.	Description
7069X17	17mm
7069X19	19mm
7069X21	21mm



4710 10-POINT TUNER LUG NUT SOCKET

Services tuner lug nuts & some import OE lug nuts. Bit-in-socket design for extra torquing power. 5" (25mm) long. 1/2" drive.



5072 LAMBORGHINI LUG NUT REMOVER - T80 TORX

Removes Lamborghini Lugs on 1999+ models. 1/2" Drive. Compare to Factory Tool: 900000385.



LOCK NUT SOCKETS

For removing & installing rounded or hex nuts. All w/ 1/2" drive.

No.	Size
4180	2-1/2" Round
4182	2-3/4" Round
4184	2-3/8" Hex
4186	2-9/16" Round
4188	2-3/8" Round
4190	55mm Hex
4192	2-1/2" Hex



5016 PORSCHE CENTER LOCK NUT SOCKET - 991 & 997

Removes & installs center-lock wheel nuts on Porsche 911 Carrera 997 and 991 performance models. A torque wrench or torque multiplier tool is necessary for proper use.

Compare to Factory Tool: 99136106900.



5415 HD LUG NUT INDICATOR REMOVAL TOOL

Easily removes difficult to remove loose wheel nut indicators off of wheel lugs on HD trucks.

Deep reach for easy access with limited clearances.



1720 BMW FRONT WHEEL HUB BEARING TOOL

For BMWs w/ stub axle. Guides wheel hub & bearing assembly on & presses bearing into place on E28, E36, E46, E53, E60, E61, E67, E83, E85, E86, E90, E91, E92. M30X1.5 Threads.

Compare to Factory Tool #83300491905.



AXLE NUT SOCKETS

For removing & installing front hub/axle nuts. All w/ 1/2" drive*.

No.	Size	Point
4995	24mm	12
A417	27mm	6
A418	33mm	6
A419	38mm	6
A420	30mm	6
A421	30mm	12
A422	32mm	6
A423	32mm	12
A424	34mm	6
A425	36mm	6
A426	39mm	12
A427	24mm	6
A428	29mm	6



No.	Size	Point
A429	35mm	6
A431	34mm	12
A432	36mm	12
A433	46mm	6
4145	43mm	6
4146	46mm	12 *(3/4" drive)

4219 BENZ FRONT AXLE NUT SOCKET - E24 TORX®

Fits special conical style lug bolts. Impact grade w/ 1/2" square drive. Services 4MATIC models including new C-Class (204, E-Class (212) & S-Class (221).



4026 DODGE WHEEL HUB REMOVAL TOOL

Removes stuck front hubs on 2500 (3/4 ton) and 3500 (1 ton) Dodge P/U's (Late 1990+). Place against hub bolt & turn power steering against tool. Faster and safer than sledge hammer. Solid steel cylinder w/ 3/4" hex opening. OAL: 4-3/4" (12cm).



1200 INNER BEARING RACE PULLER

For precision removal of inner bearing races from wheel hub. Ideal for Transmission Shops & Truck Repair. Includes: Puller, Collet Chuck (48-52mm) for Ford Transit, T330, Collet Chuck (52-56mm) For VW/Audi, Spindle, Reaction Handle, Clamp Nut, Wrench & Pressure Pieces. In blowmold case.



WHEEL BEARING LOCKNUT SOCKETS

Varying lug designs fit the locknuts on many vehicles. All 1/2" drive, (1724 - 3/4" drive).

No.	Applications
NEW 1083	Ford Transit 2014+
1212	Dodge Ram 2019+
1724	Toyota Sequoia, Tundra & 4Runner
3828	Dodge 292AA (11.5") Rear Hub
4135	F150 & Bronco w/ Dana 44 outer lock nut
4140	Toyota 4WD w/ lockout hubs
4150	Ford, GM, & Dodge 1/2 ton w/ manual hubs
4155	Ford & GM Heavy-Duty 3/4 & 1 ton 4WD
4160	Ford w/ manual hubs, Dana 44 front axle, & Dodge w/ Dana auto hubs
4165	Ford F-series HD Dana 50 IFS & 60 front axle, 28 front axle, & GM HD 3/4 & 1 ton
4166	F-Series Super Duty w/ 10-1/2" rear axle
4168	GM/Chevy 2 & 4WD w/ 10-1/2 - 11-1/2" ring gears
4170	Isuzu, Honda & Jeep J20 pick-ups w/ Dana 60
4175	Ford F-Series Dana 80 rear axle
4177	Chevy & GMC 5,200 & 7,200 lb axles (*3/4" Drive)
5045	Dodge RAM 1500-4500.



WHEEL | SUSPENSION

8650M WHEEL BEARING & HUB R & R MASTER KIT



Comprehensive master kit for rear wheel hub & bearing on German vehicles & front wheel hub & bearing on USA, Asian & German vehicles. Includes:

No.	Description
8650	Wheel Hub Kit - Standard
8672	45mm BMW Adapter
8675	4 Pc. Large Bearing Kit

1222 WHEEL BEARING KIT - FORD/LAND ROVER/VOLVO

Services up to 82mm diameter wheel bearings on new Gen 2. Extract bearing without removing ABS Sensor. Applications: 2006+ Ford Focus, Fusion, Land Rover Freelander 2, Volvo S80, V70, XC60 & XC70.



NEW!

4028 TOYOTA WHEEL BEARING LOCK RING PLIERS

Special angles & tips engage ears for easy removal & replacement of pressed-in locking rings.



4300 FRONT WHEEL HUB PULLER

Separates FWD hub/steering knuckle from drive axle on vehicles having independent front suspension. Includes 3/4" hex drive center screw with jam nut for use with slide hammer. 5/8" - 18 thread.



4305 LARGE HUB PULLER

Widened hole footprint to accommodate larger 5 x 120mm lug patterns. Internally machined yoke to fit over larger flanges. 75mm recessed opening & 90mm (7-1/2") long bolt for more applications, including most BMW's. 5/8" - 18 thread.



4320 UNIVERSAL HUB PULLER

Removes wheel hubs mounted on tapered axles & press-fit rear drum brakes. Adjustable legs extend up to 8" (20cm) diameter bolt circle. Hub clearance 5" high & legs 6" long.



4245 CV JOINT PULLER ADAPTER

Pulls CV joints w/ hidden retaining rings w/o damaging roller bearing inside the joint. Use w/ #4310 Axle Puller. 5/8" - 18 threaded hole, 1-7/8" (48mm) wide opening.



1040 CV JOINT PULLER ADAPTER - WIDE

63mm (2-1/2") wide opening allows proper fitment on larger applications, including Ford F150 4WD & others. 5/8" - 18 threaded hole works w/ #4310 Puller plus other standard pulling tools.



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.



4230 CV JOINT BOOT CLAMPING TOOL

Installs free-end clamps like the #4240 - CV Joint Boot Clamp Set - or pre-formed clamps on CV Joint Boots. Operate w/ 1/2" hex drive or T-handle.



5056 DRIVE SHAFT PULLER KIT

For pulling drive shafts into hubs. Includes adapters: M16 x 1.5 (Subaru), M20 x 1.5 (VW/Audi/Porsche), M22 x 1.5 (BMW E30), M24 x 1.5 (BMW E36 & Benz W203), M27 x 1.5 (BMW E32/E34/E38/E39/E53) and M30 x 1.5 (BMW E32/E36/E34).



4210 CV JOINT BOOT CLAMP PLIERS

Install Oetiker-type clamps used on GM CV joint boots. Built-in 1/2" square drives in each arm for use w/ torque wrench & breaker bar. OAL: 11-1/2" (29cm).



4040 GM TORSION BAR

Holds torsion bar while making adjustments. Services: 1988 - 2010 GMC, Chevrolet 1/2 ton, 3/4 ton & 1 ton pickups, S-10 Blazer, S-15 Jimmy, 4WD pickups w/ 4.3L V6 engine & 1991-2001 Oldsmobile Bravada.



4045 GM TORSION BAR - LARGE

Holds torsion bar while making adjustments. Services 2011 & up HD C/K trucks.



4017 2 PC. AXLE POPPER KIT

Separates half-shafts from transaxle. Shim tool fills gaps on some applications. Both 14" (36cm) w/ 2" (5.1cm) opening. Machine forged.



A446 VOLVO STRUT NUT SOCKET SET

Removes & installs top shock retaining nut on S40, S60, S70, S80 & S90. Includes holding socket & double-D axle center socket. Double-D: 8mm "flat-to-flat".



A445 GM10 STRUT TOOL

Replace strut cartridge w/o jacking car or compressing spring on 1988+ Grand Prix, Buick Regal, Cutlass Supreme & 1990+ Chevrolet Lumina. Use with 1/2" drive tools.



A444 VW/AUDI STRUT NUT SOCKET

For FWD VW & Audi w/ top shock-retaining nut recessed inside strut tower. Center bore holds strut shaft to keep from turning. Use w/ 7/8" (22mm) socket.



1080 BENZ STRUT NUT SOCKET

Removes & installs top shock retaining nut on W203. 2-pin design w/ 22mm hex body.



4005 VW/AUDI STRUT NUT SOCKET

Oval shaped bit for suspension strut housing nuts on newer VW/Audi. After removing pinchbolt this tool will spread wheel bearing carrier clamp. Turn 90° & leave in place while replacing strut. Also fits BMW, Seat, Renault, Peugeot & more. Also great for turning struts. 5.5mm x 8.2mm oval. 3/8" square drive. Note: Late model pinch bolts need a 14 mm triple square driver to remove - use #2059. Comparable to VW Factory Tool #VW-342OE-MIG.



A430 SHOCK ABSORBER SOCKET

"Double-D" socket holds shock piston stem while deep socket is used to remove nut. ID: .33" x .25" x .3" deep. 3/8" drive OAL: 31.75mm. OD: 13.8mm at "Double-D" end.



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 w/ 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°.



4038 REBOUND SPRING STRUT SERVICE KIT

Allows piston to be held in extended position while replacing internal rebound spring shock absorber. Includes Telescopic Puller, Puller Base Plate, Puller Handle, Piston Shaft Clamp w/ Nylon Jaws, 34mm & 59mm Piston Clamp Bolt Sets, 6mm Hex Key. Applications: BMW, Ford, Fiat, Mercedes, Nissan, & Toyota.



4037 H.D. MACPHERSON STRUT SPRING COMPRESSOR

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



4035K MACPHERSON STRUT SPRING COMPRESSOR

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



4030 COIL SPRING COMPRESSOR

Removes, installs & compresses coil springs reached through center of coil. Acme threaded rod & forged, heat-treated alloy hooks.



4036 COIL SPRING COMPRESSOR - EXTERNAL

Removes & installs coil springs where removal through center of spring is impossible. Services Straight & Curved Coil Springs. Includes S-bolts & wing nuts.



3802 LOWER CONTROL ARM PULLING TOOL

Used for installing a ball joint on a lower control arm. Eliminates the need for an extra pair of hands. Works with any 7/8" diameter pry bar. Services Domestic, Euro & Asian vehicles Larger hook end grabs hold of the control arm and the smaller 3/4 circle is use with a pry bar.



8920 BMW REAR CONTROL ARM BUSHING KIT

Press tool removes & installs control arm bushings without removing control arm from car on E38, E39, E52, E53, E60, E61, E63, E64, E65 & E66. Packed in blow mold case.



3755 LOWER REAR CONTROL ARM SOCKET - HONDA/ACURA

10 Point x 19mm socket services Honda & Acura rear trailing arms. 1/2" drive. Applications: 2001+ Acura RSX & Honda Civic.



7880 BMW SWING ARM TOOL KIT

Designed for keeping bushes compressed while pressed into suspension control arm. Services: BMW 330xi, E90, E91, E92 3 Series & all X Series. Supersedes #4080.



7642 BMW TRAILING ARM BUSHING REMOVAL & INSTALLATION TOOL

For E36 & E46 (3 Series only). This tool will not service some E36 with newer bushing style.



7466 15 PC. SHOCK & STRUT TOOL KIT

For removing and installing shocks & struts. Ratchet & socket are thin enough to clear camber plate & deep to reach nut. Use w/ 1/2" drive sliding T-bar for better torque. Includes:

No.	Description
7510	16mm Socket
7511	17mm Socket
7512	18mm Socket
7513	19mm Socket
7514	21mm Socket
7515	22mm Socket
7516	24mm Socket
7517	H5 Extension
7518	H6 Extension



No.	Description
7519	H7 Extension
7520	H8 Extension
7521	5 x 8mm DD Socket
7522	6 x 8mm DD Socket
7523	Ratchet
7524	Sliding Bar

8692 BMW BUSHING REMOVER & INSTALLER

Remove & install rear axle carrier ball joint w/ carrier in place on BMW E38, E39, E52, E53, E60, E61, E63, E64, E65, E66. Packed in blow mold case.



8690 BENZ BUSHING REMOVER & INSTALLER

Remove & replace metallic bushings on Most 1984+ Benz rear axles. Pressure piece provides correct position of bushing & cut-out in cap allows sighting of bushing position. Packed in blow mold case.



2059 VW/AUDI SUSPENSION SYSTEM SOCKET

14mm x 12-point XZN socket w/ tamper-proof head services many VW, Audi & Porsche axle bolts, differential bolts & transmission drain plugs. 1/2" drive.



8881 SUBARU BALL JOINT PULLER

Removes front suspension ball joints. on Subaru Impreza 1993-2014, Forester 1998-2015, Legacy & Outback 1994-2014, Baja 2003-2006 & Saab 9-2X 2005-2006



5450 BALL JOINT SEPARATOR

Separates lower control arm ball joint from steering knuckle on 2007-2013 Ford, Lincoln & Mercury models.



7395 BALL JOINT HAMMER NUT KIT

Use for breaking free steering knuckle & suspension joints using an impact hammer. For preventing damage to threads or boot. Sizes: M12 x 1.25, M12 x 1.5, M14 x 1.5 & M16 x 1.5.



1082 BENZ BALL JOINT SOCKET - 4 LUG

M-Class (W163/W164) 3/4" drive. OD: 63mm & ID: 50mm.



1084 BENZ BALL JOINT SOCKET - 6 LUG

Sprinters. 3/4" drive. OD: 68mm & ID: 50mm.



1732 BENZ/BMW BALL JOINT SOCKET

41mm x 12 Point for lower ball joint on Benz and BMW.



1031 AUDI BALL JOINT SOCKET

2009+ A4, 2008+ A5, 2012+ A6, 2010+ A7 & 2009+ Q5. Turns ball joint after releasing pinch bolt. 27mm hex w/ 18mm diameter hole. 1/2" drive.



CHRYSLER BALL JOINT SOCKETS

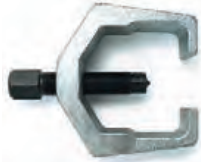
Remove & install screw-in type ball joints. 3/4" drive.

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



4020 PITMAN ARM PULLER

Pointed tip center screw & 3/4" hex head. Opening: 1-5/16" (33mm). Depth: 2-1/2" (64mm).



5044 MACK TRUCK KING PIN SOCKET

Designed to fit the slotted adjusting screw on tapered king pins found on most Mack front axles (12,000lbs, 16,000lbs, 18,000lbs & 20,000lbs). Designed to reduce camming or walking action caused by other methods. 1/2" square drive.



4013 BALL JOINT SEPARATOR

Separates ball joint from spindle support arms found on many front wheel drive vehicles. Adjusts up to 2" for different size ball joints. Compare to VW Factory Tool #3287.



4019 VOLVO BALL JOINT INSTALLER & REMOVER KIT

For lower control arm ball joint. Includes 4 slide hammer puller adapters: M12 x 1.75, M14 x 1.5, M14 x 2.0 & 5/8" x 18. Services: 2001-2009 S60, 1999-2006 S80, 2001-2007 V70, 2003-2007 XC70 & 2003-2014 XC90.



4004 BALL JOINT SERVICE KIT

Contains press, 3 receiver tubes, installation, removal adapters, plus 4WD adapters to service 1967+ 1/2 & 3/4 ton vehicles w/ Dana 44 front axles. Also services U-joints & heavy-duty truck brake anchor pins.



A415 BALL JOINT SEPARATOR

Separates ball joints from steering knuckle. 1" (25cm) opening. OAL: 12" (30cm).



A410 TIE ROD SEPARATOR

Separates tie rod ends from steering knuckles, idler arm & Pitman arms, preventing damage. OAL: 16" (40cm).



4340 FORD DRIVE-LINE IMPACT SOCKET

Services U-Joints on 1980+ Mustang, Crown Vic, Taurus, Explorer, Ranger, F150 & Mercury. Chrome Vanadium, 1/2" drive w/ 12-point x 12mm swivel head.



A412 TIE ROD END REMOVER

Swivel tipped forcing screw aligns to tie rod stud to prevent damage. Heavy-duty forged body. Services imports & many FWD vehicles, including SUV's w/ rack & pinion steering.



4011 TIE ROD REMOVER & BALL JOINT SEPARATOR

Pulls tie rod ends w/o hammering or prying. 2-1/2" (64mm) spread & 2-1/4" (57mm) reach. Services tie rods, gears, pulleys, and ball joints.



4014 INNER TIE ROD TOOL

Removes inner tie rods w/o removing outer tie rods. Will service tie rods w/ flats & smooth tie rods. Slide tool over end & tighten collar to allow access w/ a 3/8" drive extension.



A150 STEERING PIVOT PIN TOOL

Removes Pivot Pins found on tilt & telescopic steering columns. Works on GM, Ford & Chryslers w/ Saginaw steering columns.



1504 STEERING WHEEL LOCK PLATE REMOVER/INSTALLER TOOL

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



4008 STEERING KNUCKLE SPREADER

For removal & fitting of shock absorbers w/o damaging aluminum or cast iron knuckle. Tool adjusts for centered or non-centered slot. Services: Audi, BMW, Volkswagen, Ford, Seat, Renault, Peugeot and many Japanese vehicles.



1063 TOYOTA STEERING RACK TOOL

Removes & installs cylinder end stopper on 2004-2009 Lexus RX330 & RX350, plus 2004-2007 Toyota Highlander. Allows steering rack to remain in vehicle w/o using screwdriver or hammer, preventing damage. 3/8" drive.



1500 STEERING WHEEL & LOCK PLATE SERVICE KIT

Services most steering wheels, including telescopic tilt columns. Includes: 4 sets of cap screws, 2 yokes, Metric & SAE lock plate adapters & washers. A must for removing/installing steering wheel lock plate for directional signal switch replacement or other steering column repairs.



1515 H.D. STEERING WHEEL PULLER KIT

Removes steering wheel for replacement or repair directional signal switch, horn contacts, etc. Will not damage steering wheel or column. Includes: 5 sets of side bolts: 5/16"-18, 5/16"-24, 3/8"-16, 1/4"-28 & 8mm-1.25. Yoke & center screw w/ removable pointed adapter.



1512 STEERING WHEEL PULLER KIT

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



1520 STEERING WHEEL PULLER LEGS

Use w/ any steering wheel puller, when steering wheels do not have tapped holes. OAL: 5" (127mm). Applications include: Cadillac, Chevy/GMC, Buick, Oldsmobile, Pontiac, Jeep Cherokee & Ford Pick ups & Explorer.



1076 VOLVO HEATER BLOWER MOTOR TOOL

Removes & installs climate control blower motor on Volvo 2011-2016 S60, 2007-2016 S60L, 2007-2016 S80, 2008-2016 S80L, 2015-2016 V60, 2008-2016 V60 Cross Country, 2008-2010 V70, 2008-2016 XC60 & 2008-2016 XC70. Also services Land Rover 2008-2015 LR2 & 2011-2016 Range Rover Evoque.



CLUTCH ALIGNMENT TOOLS - CARS & LIGHT TRUCKS

Precision tool for accurate alignment of clutch disc & pilot bearing. Special grade injection molded plastic tool is an exact replica of transmission input shafts.

No.	Dia. x Spline	No.	Dia. x Spline	No.	Dia. x Spline
6200	1" x 24	6242	1" x 23	6277	5/16" x 23
6202	13/16" x 18	6244	1-1/16" x 10	6278	15/16" x 22
6204	1" x 23	6246	7/8" x 20	6279	1" x 23
6206	1" x 14	6248	1-1/16" x 10	6281	1-1/32" x 24
6208	15/16" x 22	6250	1-1/8" x 10	6282	1-3/8" x 10
6210	13/16" x 24	6252	1" x 14	6284	1-1/16" x 20
6212	1-1/8" x 21	6254	1-1/8" x 26	6285	1-1/8" x 21
6214	15/16" x 21	6256	1-1/4" x 10	6286	15/16" x 21
6216	13/16" x 19	6258	1-3/8" x 10	6287	15/16" x 24
6218	7/8" x 20	6262	13/16" x 21	6288	1" x 24
6220	13/16" x 18	6264	1" x 24	6289	1" x 14
6222	1" x 24	6268	1" x 23	6290	1" x 23
6224	13/16" x 19	6269	13/16" x 24	6291	1-1/4" x 10
6228	7/8" x 21	6270	7/8" x 10	6292	1-3/16" x 14
6230	3/4" x 23	6271	15/16" x 10	6293	3/4" x 19
6232	7/8" x 21	6272	1" x 21	6294	1-1/8" x 10
6234	7/8" x 20	6274	3/4" x 18	6295	15/16" x 23
6236	7/8" x 20	6275	7/8" x 28	6298	1-3/8" x 10
6238	1" x 24	6276	1-13/64" x 28		
6240	13/16" x 18				



CLUTCH ALIGNMENT TOOLS - TRUCKS

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



8809 BMW FLYWHEEL LOCKING TOOL

Locks flywheel while transmission is removed for service on BMW M47TU, M54, M57T2, M57TU, N40, N42, N43, N54, N45T, N46, N46T, N51, N52, N53, N54, N62, N73, S85 & W17 engines. Compare to BMW Factory Tool #119260.



9592 NISSAN DRIVE PLATE/FLYWHEEL

BOLT SOCKET - E20 TORX®
Low-profile for bolts on Nissan QR25's w/ automatic transmissions. 1/2" drive.



3757 MITSUBISHI/DODGE FLYWHEEL

BOLT SOCKET - 10-POINT
12mm for clutch pressure plate bolts on Mitsubishi Eclipse 3000 & Dodge Stratus clutch assemblies. 3/8" drive.



3759 BMW FLYWHEEL MOUNT BOLT WRENCH - T60 TORX®

140mm long for clearance on dual mass flywheel mount bolts, off-center to access point, especially from wear. Services E34 or E39 V8 4.0 & 4.4L w/ standard transmission & manual transmission, including: 1993-1995 530i w/ dual mass flywheel & 1993-2003 540i w/ dual mass flywheel, Ford Edge & Mazda CX-9 Rear Bearing Assembly mounting bolts. 1/2" drive.



1936 EXTRA-LONG 14" DUAL FOOT AIR CHUCK

For hard-to-reach valves, straight-on chuck w/ 30 degree reverse angle. 1/4" female NPT and 5/8" hex. Maximum Pressure 150 lbs.



1933 DUAL FOOT TIRE GAUGE

For use on dual wheels & other hard-to-reach valves. Four-sided nylon indicator bar, dual calibrated 20-120 PSI (150-800 kPa). OAL: 6" (15cm).



1935 H.D. DUAL FOOT TIRE GAUGE

Extra-long gauge reaches inside & outside wheels. Two-sided nylon indicator bar, dual calibrated 10-150 PSI & 100 -1,000. w/ hang up ring. OAL: 11" (28cm).



1929 DUAL FOOT AIR CHUCK EXTENSION

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



1930 STRAIGHT LOCK-ON AIR CHUCK

Locks onto valve while inflating tire. Closed-flow design. 1/4" female NPT & 3/4" hex. Not Threaded. 150 PSI Rating.



1931 BALL FOOT AIR CHUCK

Direct air line chuck. 1/4" female NPT & 3/4" hex.



4380 SPARE TIRE TOOL KIT

Removes & installs spare tires mounted under vehicle quickly & safely, w/o damage to pulley systems. Set of 8 color-coded tools, each w/ unique working end to engage the pulley of 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	1998 – 2001 Dodge Full size Pick-ups
4353	Flat Head/Purple	GM S-10, Blazer, Jimmy
4354	12mm Square/Orange	Expedition, Explorer
4355	Slotted Square/Green	Dodge Durango
4356	Standard Square/Violet	Ford
4359	3/8" Square/White	Ford F & E Series
4360	Hook/Light Green	Chevy
4357	Hand Crank	
4358	Tool Rack	



4357

PULLERS

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/REVERSIBLE

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 "K" suffix for Bulk Pack. All others packed in box.



8000-8010



8005-8015



8035-8045



8040-8050



8020-8025-8030



8055-8057-8059

8097 LARGE GEAR & PULLEY PULLER

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



8494 THIN-JAW BEARING REMOVER

For use in tight spaces. 3.5" (9cm) long hardened jaws. Adjusting width from 1.2" - 3.5" (3cm - 9cm).



8099 PUSH PULLER

For use w/ bearing splitters when removing & installing gears, bearings, shafts, pulleys & other press-fit parts.

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



BEARING SEPARATORS

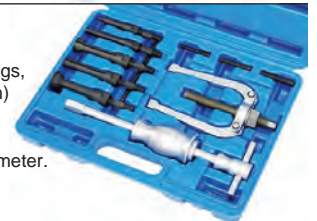
Remove generator gears, bearings, bearing cones & similar parts where ordinary puller jaws will not reach. Knife-like edges minimize damage.

No.	Range
8060	Up to 2-1/4" (57mm)
8065	Up to 4-1/4" (108mm)
8150	Up to 6" (150mm)
8155	Up to 8" (200mm)



8492 INTERNAL BEARING REMOVER SET

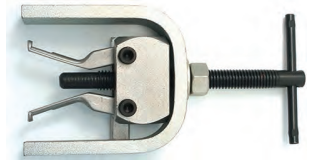
Removes captured bearings, pilot bearings, bushings, etc. Includes Puller, 11" (29cm) slide hammer, 5 expanding adapters & 3 attachments: M6 x 1.0P, M8 x 1.25P, M10 x 1.5P. Working range: 8-34mm diameter.



8070L PILOT BEARING PULLER - SCREW TYPE

Removes fly wheel pilot bearings & bushings up to 7-1/2" (19cm long). Better control for precision pulling in tight areas. Replacement Jaws:

No.	Description
8070X06	1/2 to 1-1/2" (13-38mm I.D.)
8070X07	3/8 to 1-3/8" (9.5-35mm I.D.)



8075 PILOT BEARING PULLER - W/ SLIDE HAMMER

For inside pulling jobs, jaws will remove flywheel pilot & other bearings. Range: 1/2" to 1-1/2" (13-38mm). OAL: 17.75" (45cm).



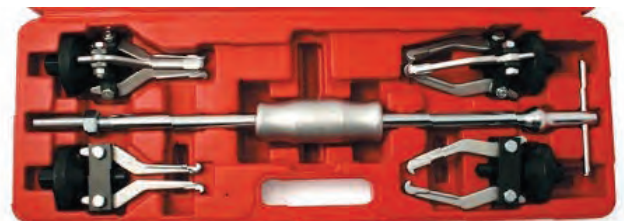
8077 PILOT BEARING PULLER - W/ SLIDE HAMMER

For inside pulling jobs, jaws will remove flywheel pilot & other bearings. Range: 1/2" to 1-1/2" (13-38mm). OAL: 20.5" (52.1cm).



8090 SLIDE HAMMER PULLER KIT

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



1550 FLANGE-TYPE PULLER SET

Two yoke sizes & 4 sets of side screws for all types of pulling jobs. Use for gears, harmonic balancers, pulleys, steering wheels & more! Also includes 2 center screws & 2 swivel tips.



A575 DOOR PANEL FASTENER REMOVER

Removes common plastic fasteners found on door panels. Features offset head for easy access & improved leverage.



5160 EXTRA-LONG TRIM TOOL & PRY BAR

For use on instrument panels, door thresholds, interior trim, trunk panels, etc. Nylon plastic body won't mar or scratch surfaces. 15-3/4" (400mm) 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. OAL: 8" (20.5cm).



5170 7 PC. PLASTIC PRY BAR SET

For prying, scraping, fastener removing & more! Plastic design prevents scratching & marring of sensitive surfaces. Each is 7" (18cm) long. Built-in hang hole.



1010 ERASER WHEEL W/ ARBOR ADAPTER

3.5" diameter wheel quickly & cleanly removes pinstripes, decals, adhesive & double-faced tape from vehicle surfaces. Molded rubber body with 5/16"-24 thread arbor. Maximum 4000 RPM.



1093 VW/AUDI PULLER HOOK

Extra-thin shaft w/ short hook removes interior lighting shades, interior lining, & more for many VW/Audi vehicles. Hard plastic handle w/ hang hole. OAL: 8-1/2" (22cm).



8061 VW ROOF GRAB TOOL

Offset forked working end removes roof grab handle on VW Tiguan 2016+, Golf 2013+, & Golf Estate 2014+. Compare to VW Factory Tool T10518A. OAL: 10" (25.4cm).



8880 PLUGWELD PLIERS

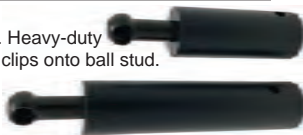
Spring-loaded clamping action allows easy plugging of small holes when using a MIG welder. Copper alloy backing plate prevents burn through. Weld won't stick to copper alloy. Heavy duty w/ spring-loaded locking handle. OAL: 9" (23cm).



No.	Description
8880X05	Replacement Head

1077 BMW HOOD EXTENDERS

Raises hood higher for better service access. Heavy-duty plastic sleeves assembled to ball socket end clips onto ball stud. Update with shorter size. OAL: 5.5" & 3.8" Applications: E70 & 2007-13 X5. Compare to BMW factory tool #83300495830



5360 LIFT SUPPORT CLAMP

Clamps onto lift support to safely keep hood or trunk open while working. Anodized aluminum body w/ plastic handle.



5250 WINDSHIELD WIPER ARM PULLER

Works in tight spaces & won't damage wiper arm or paintwork. Turning knob for fast work & forged body. Better than using prybars or screwdrivers.



A579 WINDSHIELD REMOVAL TOOL

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



5200 WINDSHIELD LOCKING STRIP TOOL

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



1019 WINDOW BELT MOLDING REMOVER

Removes window belt moldings without damaging glass, connection points or molding. Slim design for tight spaces & angled for easy access.



A581 FORD REARVIEW MIRROR REMOVER

Releases retaining clips of inside mirror when inserting between mounting button & mirror on 1991+ Explorers.



A585 FORD MIRROR REMOVAL TOOL

Removes mirrors w/o damage or removing mirror assembly on 1996+ outside door mirrors & 1999+ interior rearview mirrors w/ screwless mount.



5240 DOOR HINGE PIN REMOVER

Special bend to clear door panels. Removes hinge pins on GM vehicles w/ removable hinge pins. Includes pin puller to remove loose pins. Remove threaded end cap, slide punch upwards through hinge & screw back end cap. Use a mallet to gently tap punch to draw out pin.



5320 DOOR ALIGNMENT BAR

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



5220 GM DOOR SPRING COMPRESSOR

Remove & install door hinge springs.



A580 FORD RADIO REMOVAL TOOL KIT

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



5400 18 PC. RADIO REMOVAL KIT

Removes radios on Euro & Domestic vehicles, as well as Blaupunkt, Becker & Grundig systems.



3751 2 PC. HONDA SEAT TRACK SOCKET SET - 10 PT.

8mm & 10mm sizes for 2009+ Odyssey & Pilot seat tracks. Both sizes required for driver & passenger side tracks. 1/4" square drive.



5115 BODY DENT PULLER

Removes dents in doors or fenders w/ sliding 2.5 lbs (.9kg) hammer. Includes self-threading screw & hook attachments. OAL: 16" (41cm).



TUBING | PLIERS

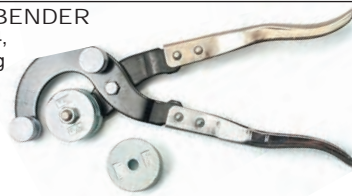
9170 MULTI-GROOVE TUBE BENDER

Bends 3/16, 1/4, 5/16 & 3/8" (4.8, 6.4, 7.9 & 9.5mm) O.D. tubing w/o 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 w/o 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., 360°. OAL: 5" (12.5cm).



TAILPIPE EXPANDERS

For flaring & expanding tailpipes.

No. **Range**
2622 1-1/2 to 2-1/2" (38-64mm) ID
2624 2-1/8 to 3-1/2" (54-89mm) ID



9212 SAE IN-LINE FLARING TOOL KIT

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



9200 DOUBLE FLARING TOOL SET - SAE

Double flares soft steel tubing up to .04" (1mm) wall thickness. Single flares soft copper, aluminum & brass tubing. Sizes: 3/16, 1/4, 5/16, 3/8 & 1/2".



A850 3 PC. FLARE NUT WRENCH SET

Service fuel, vacuum, hydraulic & refrigeration lines. Offset hex-head will not round soft flare nuts. Includes sizes: 3/8 x 7/16", 1/2 x 9/16" & 5/8 x 11/16".



8850 CONVERTIBLE SNAP-RING PLIERS

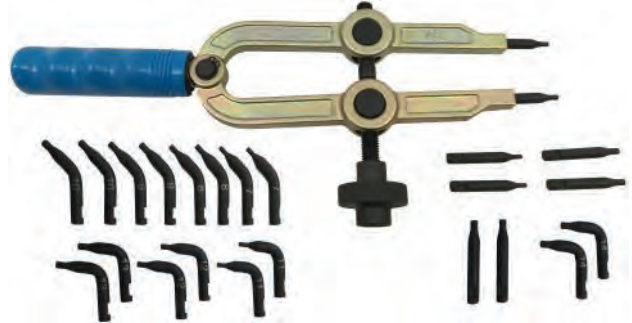
Push-button mechanism converts pliers from internal to external. Interchangeable tips, Straight: .036" (.9mm), .047" (1.2mm), .070" (1.8mm), 90°: .036" (.9mm), .047" (1.20mm). Range, Internal: 3/8 to 2" (10-48mm); External: 1/4 to 2" (7-48mm). OAL: 7-1/2" (19cm).



4031M H.D. LOCK RING TOOL - MASTER KIT

Safest, strongest tool for lock ring service. Hold single handle then adjust screw mechanism to control forged jaws to remove & install lock rings securely & quickly. Services CV shaft, wheel hub, axle shaft, cam shaft, etc. Includes 12 pairs of tips sizes: 2.5mm, 3mm, 3.5mm, 3.8mm (straight, 45° & 90° angles). OAL: 12" (30cm).

No. **Description**
4031 Lock Ring Tool w/ 3 Pair Tip Set (#4031X10)
4031X10 3 Pair Replacement Kit: 2.5mm, 3mm, 3.5mm
4031X50 9 Pair Expansion Pack: 2.5mm (45° & 90°), 3mm (45° & 90°), 3.5mm (45° & 90°), 3.8mm (Straight, 45°, 90°)



7878 SWAY BAR LINK PARROT NOSE PLIERS

Holds and removes sway bar link. Clamps and grips rusted or stripped nuts, pipes, screws and more. Adjustable to clamp on different sizes. Chromium-molybdenum steel. OAL: 8.5" (21.6cm).



8840 LOCK RING PLIERS

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



A848 H.D. LOCK RING PLIERS

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



5300 2 PC. HOG RING PLIER SET

Used for upholstery work on most vehicles. Offset 45° and straight angle will services all "hog ring" fasteners. Spring loaded with cushion grips.

No. **Description**
5302 Offset 45°



5310 CLIP REMOVAL PLIERS

Tapered forks slide under most types of auto body clips for easy removal. Spring loaded & w/ comfort grip handle.



5205 BODY CLIP PLIERS

Steel levers embedded in glass-filled nylon tips for removal of clips found on trim, bumpers, etc. on.



5210 PUSH PIN PLIERS

Removes plastic push pins found under hood & trunk w/o damage to pins or anchors. Sharpened/hardened jaws & spring-loaded. OAL: 9-1/2" (24cm)



SPECIALTY BITS & SOCKETS

9630 12 PC. TORX® BIT SOCKET SET

Sizes T10-T60. 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"	*5072	T80	1/2"
9567	T40	3/8"	*9574	T90	1/2"
9568	T45	3/8"	*7840	T100	1/2"



9574 T90 TORX® BIT

For special applications found on commercial vehicles & agricultural machinery. 3/4" hex drive.



9480 11 PC. TAMPER-PROOF TORX® BIT SOCKET SET

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

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



9640 11 PC. E-SERIES TORX® SOCKET SET

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

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



2476 E10 TORX® U-JOINT SOCKET

- 1/4" DRIVE

Designed with 1/4" drive for tight clearances on many Euro applications.



9220 13 PC. E-SERIES TORX® SOCKET W/ U-JOINT SET

Great for many European makes, e.g. BMW Brakes, Transmissions, etc. U-joint design allows access in difficult areas.

No.	Size	Drive	No.	Size	Drive
9221	E4	1/4"	9228	E14	3/8"
9222	E5	1/4"	9229	E16	3/8"
9223	E6	1/4"	9230	E18	1/2"
9224	E7	1/4"	9231	E20	1/2"
9225	E8	1/4"	9232	E22	1/2"
9226	E10	3/8"	9233	E24	1/2"
9227	E12	3/8"			



9605 11 PC. TORX® PLUS SOCKET SET

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

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



5420 15 PC. EP-SERIES TORX® PLUS SOCKET SET

Comprehensive set of elliptical-shaped fasteners found on many new vehicles.



No.	Size	Drive	No.	Size	Drive
9651	EP6	1/4"	9659	EP20	1/2"
9652	EP7	1/4"	9662	EP22	1/2"
9653	EP8	1/4"	9664	EP24	1/2"
9654	EP10	3/8"	5426	EP26	1/2"
9655	EP12	3/8"	5428	EP28	1/2"
9656	EP14	3/8"	5430	EP30	1/2"
9657	EP16	3/8"	5432	EP32	1/2"
9658	EP18	1/2"			



9650L 8 PC. EP-SERIES TORX® PLUS SOCKET SET

Sizes EP6 to EP18 from kit #5420.



9666 3 PC. EP-SERIES TORX® PLUS SOCKET SET

Includes EP20, EP22 & EP24 service fasteners found on Ford Super-Duty, Honda Civics, Nissan Altima & Rogue & many more. All sizes found in kit #5420.



9680 11 PC. TAMPERPROOF TORX® PLUS SOCKET SET

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

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



SPECIALTY BITS | SOCKETS

1220 15 PC. 5 PT. EPR TORX® PLUS SOCKET SET

Note: 5 Point Torx® Plus EPR sockets are not to be confused with standard Torx® Plus EP 6 PointTorx. Packaged on metal rail. Includes the following sub sets:

No.	Drive	EPR Sizes
5064	1/4"	6, 7, 8, 10, & 11
5065	3/8"	12, 14, 16, 18, & 20
5066	1/2"	22, 24, 26, 28, & 30

NEW!



3805 10 PC. 10MM SOCKET SET

5 most popular styles of 10mm sockets in 1/4" and 3/8" drives. Includes stubby, standard, deep, flex, and magnetic impact sockets. Knurled non-slip ring (except on U-Joint Sockets) for maximum grip. Polished chrome finish.



5058 9 PC. STUBBY TORX® BIT SET

Ultra stubby design for limited clearance applications. OAL: 20mm. 12mm hex drive. Sizes: T10, T15, T20, T25, T27, T30, T40, T45 & T50. Packed in plastic case with carry clip.



5057 7 PC. STUBBY METRIC HEX SET

Ultra stubby design for limited clearance applications. OAL: 20mm. 12mm hex drive. Sizes: 3mm, 4mm, 5mm, 6mm, 7mm, 8mm & 10mm. Packed in plastic case with carry clip.



9770 7 PC. STUBBY PHILLIPS BIT SET

Low profile design allows access into tight areas. Titanium-nitrate skin for extra durability. Packed on plastic rail. OAL: 19.35 mm (0.76"). Includes:

No.	Size
9771	Phillips #1 (2 each)
9772	Phillips #2 (3 each)
9773	Phillips #3 (2 each)



8560 7 PC. 12-PT "XZN" DUAL-DRIVE BIT SET

19mm long sockets w/ combo 1/4" square & 1/2" hex drive to work in tight spaces. Special titanium-nitrate skin to reduce surface fractures.

No.	Size	No.	Size	No.	Size
8561	4mm	8564	8mm	8566	12mm
8562	5mm	8565	10mm	8567	14mm
8563	6mm				



8510 5 PC. 12 PT. "XZN" SOCKET SET

6 & 8mm 2" long x 3/8" drive. 10, 12 & 16mm are 2-1/4" long x 1/2" drive.

No.	Size
8511	6mm
8512	8mm
8513	10mm
8514	12mm



3038 10 PC. 12 PT "XZN" SOCKET SET

2-piece design for high torque, triple square "XZN" working end.

Size	Drive
4mm	1/4"
5mm	1/4"
6mm	1/4"
8mm	3/8"
9mm	3/8"
10mm	3/8"
12mm	3/8"
*14mm	1/2"
*16mm	1/2"
*18mm	1/2"

*Tamperproof



9025 4 PC. 12 PT. "XZN" "L" WRENCH SET

Set of XZN Triple Square "L" Wrenches (12-Point). Used for service on VW, Audi, Porsche, BMW, Volvo, Benz, Detroit Diesel engines and many more!

No.	Size
9021	10mm
9022	12mm
9023	14mm
9024	16mm



3999 14 PC. "XZN" & "L" WRENCH SET

No.	Description
3038	10 Pcs. "XZN" Socket Set
9025	4 Pcs. "XZN" Wrench Set

NEW!



9350 5 PC. 12 PT "XZN" SOCKET SET - LONG

2-piece construction w/ extra-long shaft. 8mm 3/8" drive, 10-16mm 1/2" drive.

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



2095 3 PC. 12-PT "XZN" TAMPER-PROOF SOCKET SET - STUBBY

14mm x 12-point XZN w/ tamper-proof head for VW, Audi & Porsche axle & differential bolts & transmission drain plugs. 1/2" drive.

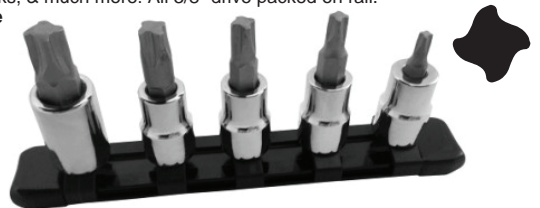
No.	Size
2059	14mm
2039	16mm
2089	18mm



8140 5 PC. MORTORQ® SUPER SOCKET SET

Services MorTorq® fasteners found on GM, Chrysler, BMW, Nissan, Honda, Fiat & more. Applications: bell housings, door frames & hinges, body, brake rotors, seat tracks, & much more! All 3/8" drive packed on rail.

No.	Size
8141	M0
8142	M1
8145	M2
8143	M3
8144	M4



1189 17 PC. DEEP METRIC HEX SOCKET SET



120mm long sockets provide access to recessed areas w/ extra long bolts including glow plugs, Benz rear bumper covers, BMW valve cover bolts & gaskets. Includes 3/8" x 1/4" & 3/8" x 1/2" drive adapters.

No.	Size	No.	Size	No.	Size
1175	6mm	1712	12mm	1718	18mm
1176	7mm	1713	13mm	1177	19mm
1708	8mm	1714	14mm	1178	20mm
1709	9mm	1715	15mm	1179	21mm
1710	10mm	1716	16mm	1438	3/8" x 1/4" Adapter
1711	11mm	1717	17mm	1439	1/2" x 3/8" Adapter



1099 11 PC. DEEP METRIC HEX SOCKET SET

No.	Size	No.	Size
1708	8mm	1717	17mm
1709	9mm	1718	18mm
1710	10mm	1438	3/8" x 1/4" Low Profile Adapter
1711	11mm		
1712	12mm		
1713	13mm		
1714	14mm		
1715	15mm		
1716	16mm		

1700 5 PC. DEEP METRIC HEX SOCKET SET

No.	Size
1708	8mm
1710	10mm
1711	11mm
1712	12mm
1714	14mm

1030 2 PC. DEEP METRIC HEX SOCKET SET

Compare to Factory Tool: 118620.

No.	Size
1710	10mm
1712	12mm

10100 69 PC. EURO/METRIC SOCKET SET

Complete range of metric & Torx® sockets for servicing European vehicles. Includes: 14 Pcs. 6-Pt. Deep Metric 8-21mm, 19 Pcs. 6-Pt. Short Metric 6-24mm, 7 Pcs. Metric Hex Bit 3-10mm, 12 Pcs. E-Torx® E4-E20, 12 Pcs. T-Torx® T10-T60. Also includes 3/8" Drive Ratchet, 6" & 10" extensions, U - Joint, & 1/2" to 3/8" Drive Adapter w/ Breaker Bar Hole.

METRIC HEX BIT SOCKETS - SHORT

2-piece design for high torque. OAL: 2-1/2". 1/2" drive.

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

METRIC HEX BIT SOCKETS - LONG

4" long for deep-reach & 2-piece design for high torque. 5-7mm 3/8" drive. 8-14mm 1/2" drive.

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

8541 VW LONG HEX BIT SOCKET - 6MM X 14"

14" long to access 2.5L intake manifold bolts & 6 speed manual gear box (0A5 & 02N) & right stub axle. 1/2" drive.

2752 5 PC. PENTAGON SOCKET SET

Services Brakes, Fuel Pumps, Rear Trailing arms, and industrial, diesel, & small engines. Sizes:

No.	Size
9880	5 Pt. 10mm (Male)
9881	5 Pt. 12.5mm
9882	5 Pt. x 14mm
9883	5 Pt. x 19mm
9884	5 Pt. x 10mm

*All components also found in #7394 - 18 Pc. Brake Caliper Socket Set, Page 29

9880 5 PT. 10MM SOCKET - FEMALE

Special design for injectors on small diesel engines. Length: 36.85mm, Broach depth: 14.30mm. 1/2" square drive.

8755 4 PC. CLUTCH-HEAD BIT SOCKET SET

Services "Figure 8" screws on old Chevy cars & trucks, including headlight buckets, horn rings, hood braces, steering columns, gas door, filler neck & more. Sizes: 5/32, 3/16, 1/4 & 5/16", with 3/8" drive.

8752 4 PC. CLUTCH-HEAD SCREWDRIVER SET

Sizes: 5/32, 3/16, 1/4 & 5/16" screwdriver. Heavy duty handle. 5/32, 3/16 & 1/4" w/ 4" shaft. 5/16" w/ 6" shaft.

4223 6 PC. MINI FLIP SOCKET SET

12 point semi deep mini flip sockets with 1/4" drive include two hex sizes in each. Each pairing is designed to reduce work time. Services: Brake bleeder nuts, battery terminals, under belly pans/trays, intake fasteners, body panels & much more.

No.	Size
4224	8mm/10mm
4225	9mm/11mm
4226	12mm/14mm
4227	13/15mm
4223X03	Hex to Square Adapter - 3"
4223X05	Hex to Square Adapter - 5"

1000 VIBROSHOCK IMPACT TOOL KIT

Removes frozen/rusted screws, nuts, bolts or plugs w/o damage. Great for Brakes, Exhaust, Glow Plugs, Clamp-on Injectors, Lug Nuts & more! 3/8" drive w/ "Internal Edge." Bolts rest on internal edge, directing vibration to head of bolt, preventing damage & breakage. Includes: Flex wrench w/ Vibrobar & Clip and 7 sockets size 8, 9, 10, 11, 12, 13 & 14mm.



Scan for video



TORQUE WRENCHES | FASTENER SERVICE | THREAD REPAIR

MICROMETER TORQUE WRENCHES

Reversible ratchet type w/ chrome-plated tube, knurled handle & knurled locking nut holding torque setting.

No.	Drive	Range	OAL
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)



TORQUE ANGLE METERS

Tightens head & manifold bolts when torque angle is required. 8975 Battery-type clamp frees up hand. Both use with 1/2" drive tools.

No.	Type
8975	Battery Style/Long
8980	Standard/Short



9040 5 PC. SPIRAL SCREW EXTRACTOR SET

Removes broken studs, set screws & fittings. Chrome-moly steel w/ reverse tapered threads. #9045 pipe size 1/8" - 1/4". Included in set:

No.	Size
9041	#1
9042	#2
9043	#3
9044	#4
9045	#5

Additional sizes available.

9046	#6
9047	#7



9030 5 PC. FLUTED SCREW EXTRACTOR SET

Removes broken studs, set screws, & fittings. Hardened extractors tapered w/ 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"

Additional sizes not included in set:

9037	1/2 - 3/8"
9038	3/4 - 1/2"



9011 STUD REMOVER & INSTALLER

Fits hard-to-reach areas. Range: 1/4" to 3/4" (6-19mm) Use w/ 1/2" drive tools.



THREAD RESTORING FILES

Restores damaged threads on bolts & shafts. Files cross-cut & depth proportional to thread pitch. Won't skip or jump out of fine pitches. 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)



PRO-THREAD THREAD REPAIR KITS & INSERTS

Pro-Thread Kits offer a cost effective method of repairing & strengthening threads in various materials such as cast iron, steel, aluminum & other metals & plastics. Effective for automotive repair, spark plug ports, outdoor power equipment, motorcycle repairs, farm equipment, and more! Easy to install, just **DRILL, TAP, INSERT, SNAP!** Inserts provide a permanent wear resistant internal thread. Stainless steel inserts resist the effects of temperature & corrosion. Wire inserts help compensate for thread & pitch angle errors. Repaired threads are generally stronger than original parent material thread.

Thread Size	Kit No.*	Insert Pack No.**	Tap No.
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
5/8-11"	33119	23119	33120
3/4-10"	33129	23129	33130
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
3/4-16"	34129	24129	34130
Metric			
M5-0.8	35059	25059	35060
M6-1	35069	25069	35070
M7-1	35079	25079	35080
M8-1.25	35089	25089	35090
M9-1.25	35099	25099	35100
M11-1.5	35119	25119	35120
M12-1.5	35149	25149	35150
M10-1.25	37109	27109	37110
M10-1.5	35109	25109	35110
M12-1.75	35129	25129	35130
M14-1.5	37149	27149	37150

NEW!

NEW!

NEW!

NEW!

NEW!

* Insert Quantity vary by part number. for details visit ctatools.com

**Spark Plug Thread Repair Kits (Page 27)

2299 UNIVERSAL 60° THREAD RESTORING FILE

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



8185 4 PC. THREAD RESTORING FILE SET

Includes 3 Thread Files & Universal Thread File Packed in square plastic sliding case.



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 & 2 Fractional Dies: 3/4" - 20 & 13/16" - 20.

No.	Description
8245X04	Die - 22 x 1.5mm



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



8240 53 PC. UNIVERSAL RETHREADING SET

Includes thread files #8231 & #8233 plus the following color coded taps & dies:

Tap & Die Sets:

Metric: 6 x 1.00, 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 1.00

NC-USS: 5/8" - 11

NF-SAE: 5/8" - 18



3838 E-Z CHAMFER TOOL

Efficiently removes burrs & ridges from bolts, pipe, threaded rod, bar & dowels. Suitable on mild (Grade: U.S. 2/Metric 4.8) & hardened (Grade: U.S. 5/Metric 8.8) steels, stainless (300 Series) steel, 12.9 bolts, copper, brass, timber, fiberglass and plastics. M2-HSS recommended RPM according to size: 8-12mm (800RPM), 12-18mm (600RPM) and 18-22mm (400RPM).



Scan for Video



MAGNETIC PICK-UP TOOLS

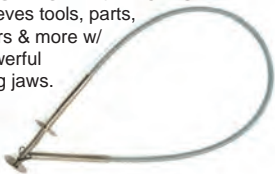
For picking up tools, parts, nuts, bolts & more!

No.	Strength	Max Length/Type
9425	1-1/2 lb	25" Telescopic
9439	1-1/2 lb	21" Flex Shaft



9435 FLEX MECHANICAL FINGERS - 24" LONG

Retrieves tools, parts, papers & more w/ 4 powerful spring jaws.



9437 48" FLEX MECHANICAL FINGERS

Retrieves tools, parts, papers & more w/ 4 powerful spring jaws. Thick cable design allows for extra-long size.



9905 DOUBLE POINTED SCRIBBER

2 working ends w/ knurled handle in center. OAL: 9" (23cm).



9900 5 PC. HOOK & PICK SET

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



9920 4 PC. DENTAL PICK SET

Sharp dental style picks w/ various angles. OAL: 6-1/2" (16.5cm).



2900 H.D. GREASE FITTING & JOINT UNCLOGGER

Unclogs grease fittings & joints w/ hydraulic impact on neglected steering suspension, driveline joints & more.



2554 2 PC. O-RING & LIP SEAL PULLER SET

High quality steel blades w/ 4 different patterns for removal & installation of O-Rings, Oil Seals & more. Tips angled for hard-to-reach areas found around Brakes, A/C & Transmissions. Tips feature pointed & blunt ends to prevent damage to O-Rings.



2080 GASKET SCRAPER

Removes shellacked gaskets, paint, grease & carbon. 1" wide forged alloy steel blade w/ chisel edge. OAL: 9-3/4" (25cm).



9964 SWIVEL-HANDLED RAZOR SCRAPER

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



9968 EXTENDED RAZOR SCRAPER

11" (28cm) long. Handle stores razors. Includes 2 metal & 1 plastic blade.



2245 SEAL PULLER

Removes oil & grease seals on cars & trucks. OAL: 12" (30cm)



9990 FLOW-THRU PARTS WASH BRUSH W/ TUBE

For parts washing sinks w/ circulating solvent systems. Features Trialoy® double-duty filaments, heavy-duty grooved handle & 28" (71cm) long rubber tube.

No.	Description
9990H	Handle Only



9992 PARTS WASH BRUSH

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



9454 14" TELESCOPIC INSPECTION MIRROR

Inspect hidden areas. Double ball joint links 2-1/4" diameter mirror to handle for 360° viewing.



GENERAL SERVICE

HEAVY DUTY CHAIN WRENCHES

Powerful wrenches grab and turn objects of almost any shape. Rubber knurled handle for comfort and grip. Dual action head allows use in either direction. Thick bar stock. Ratcheting action also makes it possible to re-grip without removal.

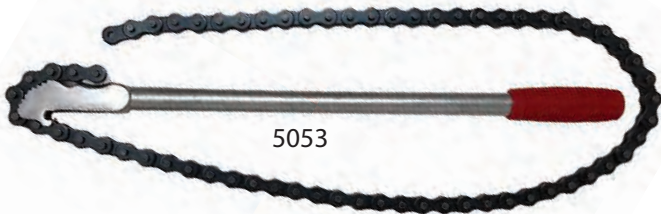
No.	Description
A885	24" H.D. Chain Wrench
5052	36" H.D. Chain Wrench
5053	48" H.D. Chain Wrench



A885



5052



5053

SOCKET HOLDERS W/ SIZE I.D.

Nylon rails pre-printed w/ socket sizes. Rails include mounting holes.

No.	Description	Socket Size	OAL	No. Holders
9720	1/4" Drive - SAE	1/8 - 5/8"	12"	13
9725	1/4" Drive - Metric	4-15mm	12"	13
9730	3/8" Drive - SAE	1/4 - 1"	12"	13
9735	3/8" Drive - Metric	8-20mm	12"	13
9750	1/2" Drive - SAE	3/8 - 1-1/4"	18"	15
9755	1/2" Drive - Metric	8-24mm	18"	17



SOCKET HOLDERS

Steel racks w/ 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



8982 CHAIN BREAKER & RIVETING TOOL KIT

Will break chains from #35 to #530, including cam chains & drive chains. Includes 3 anvils, 3 pins, riveter, spring, press plate, lever, handle & chain press. For light to medium duty use.

Pin No.	Size
8982X02	2.2mm
8982X03	2.9mm
8982X04	3.8mm



8480 CHAIN BREAKER

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



8600 ADJUSTABLE GLAND NUT WRENCH - SMALL

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

No.	Description
8600X01	Replacement Pin



8605 ADJUSTABLE GLAND NUT WRENCH - LARGE

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

No.	Description
8605X01	Replacement Pin



8062 EXHAUST HANGER TOOL

Easily remove exhaust hanger brackets from rubber supports. Services tailpipe, muffler and exhaust pipe on import and domestic car and truck exhaust systems w/ rubber hanger supports. Squeeze plier handles to force bracket out of rubber support. Offset handle for easy access in restricted areas.



8120 PIN SPANNER SET

Loosens & tightens bolts & nuts in tight spaces. Includes 4 pairs of interchangeable 2-sided pins providing 8 different sizes: 2.5mm / 4mm, 3mm / 5mm, 6mm / 8mm & 7mm / 9mm. Thumb-screw design expands range from 25/32" to 3-15/16" (20-100mm). OAL: 9-3/4" (25cm).



8990 ENGINE CHAIN HOIST

28" (71cm) long chain assembly helps lift engines & other heavy parts up to 1,000 lbs (455 kg). Heat-treated alloy steel.



10600 SAFETY HAMMER

The ultimate escape tool designed to get you out of your seat belt & out of your car safely in the event of a roadside emergency. Lightweight but durable plastic. Recessed razor on one end to easily cut seatbelts. Double-headed hammer on other end to break windows. Mounting bracket included.



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1100	5	2242	14	3458	9	5025-5035	29	7314-7320	22	8492-8494	36	A885	44
1105-1106	14	2243	9	3466-3468	6	5040	15	7333	4	8510-8514	40	A886L	17
1110-1135	29	2245	43	3472	14, 22	5041	21	7380	14	8541-8552	41	A978	38
1136	3	2246	26	3475-3479	6	5042	19	7390	26	8560-8567	40	10100	41
1137	6	2248-2249	18	3490	5	5043	16	7392	25	8600-8605	44	10600	44
1139-1158	20	2250	23	3751	37	5044	34	7394	29	8606-8607	3	23049-27149	42
1170-1174	29	2268-2298	20	3755	33	5045	31	7395	33	8608	5	28109-98147	27
1175-1179	41	2299	42	3757-3759	35	5046	21	7396	5	8610	6	33049-37150	42
1180	25	2300-2325	20	3800	16	5047	15	7397	24	8612	21	18111-18118	3
1184	18	2340-2367	27	3801	21	5048	18	7398	21	8650-8675	32	026400-096950	1
1189	41	2369-2395	25	3802	33	5050-5051	16	7399	6	8690-8692	33	099500	27
1190	30	2400-2450	20	3803-3804	12	5052-5053	44	7400-7431	8	8752-8755	41		
1195	14	2460-2475	1	3805	40	5054	15	7435	30	8760	9		
1200	31	2476	39	3806	22	5055	5	7450	4	8762-8764	3		
1205	15	2477-2488	1	3828	31	5056	32	7457	18	8766	2		
1210	18	2491-2494	8	3830	10	5057-5058	40	7458	12	8800	5		
1212	31	2495K-2505	2	3838	43	5059	26	7459	15	8809	35		
1214-1216	14	2506-2507	1	3845	14	5061	15	7463	12	8810-8834	5		
1218	18	2508-2552	2	3850	23	5062-5063	26	7466	33	8840-8850	38		
1220	40	2554	43	3855	9	5064-5066	40	7468	21	8871-8876	30		
1222	32	2555-2569	2	3860-3865	1	5067-5068	16	7469-7491	4	8877	23		
1224	5	2570-2574	1	3870	13	5069	21	7510-7524	33	8880	37		

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