



ASSENMACHER SPECIALTY TOOLS 2012 CATALOG



ASTTOOL.COM

COLORADO

USA

ASSENMACHER SPECIALTY TOOLS



2012 TOOL CATALOG

2012 TOOL CATALOG

SPECIALTY SOCKET SETS

OIL CHANGE TOOLS

LINE DISCONNECT TOOLS

COOLING SYSTEM

ADAPTERS

STUD REMOVERS

VW/AUDI TOOLS

SPECIALTY APPLICATION TOOLS



WARRANTY INFORMATION

Warranty durations run from the date of documented purchase (the day of purchase by the end user).

All returns must be accompanied by original sales receipt. Call us first for a return goods authorization number.

AST shall not be liable for any injury, loss or damage, consequential or special, arising out of the use of, or the inability to use the product.

AST Products carry a 5-year warranty w/ the exceptions stipulated below:

Sockets marked "For Hand Use Only", will not be warranted if damaged by use w/ a Power/Impact Tool.

Hazet & Stahlwille products carry a one year warranty.

SETS & KITS

If only one item is defective, that item will be replaced, not the entire set. If only a part on a tool is defective, (i.e. gasket, rubber band, etc.) only the part will be replaced.

COOLING SYSTEM ADAPTERS
With plastic tester attachment piece may be repairable for a \$25 fee.

DEFECTIVE PRODUCTS

Should be sent freight prepaid to AST for inspection. Warranty is handled by replacing the defective item, or the defective part on the item. AST will only cover UPS/Ground return shipping, to the customer, for warranty items.

STUD REMOVERS

Produced between 2002-2012 are under warranty. The production year is stamped on the stud remover. If the external body is damaged please return the stud remover for warranty. If only the internal parts of the stud puller need replacing, simply call & specify the AST product number of the stud puller. If the production date is in the range of 2002-2012, we will send out internal replacement parts at no charge. Internal Stud Remover parts are replaceable. The table (below) indicates replacement numbers for the internal parts.



ASSENMACHER SPECIALTY TOOLS

6440 ODELL PLACE, BOULDER, CO 80301, USA

1-800-525-2943

303-530-4720 (FAX)

ASTTOOL.COM

SALES@ASTTOOL.COM



DISTRIBUTOR INFORMATION

As an industry leader in the specialty tool market, the AST name is recognized in automotive repair shops nationwide.

Looking for a local AST distributor in your area? Please let us know.

ELECTRONIC CATALOG

For updated AST product information throughout the year, please visit ASTtool.com or request a catalog on CD. Our CD Catalog is the best solution for accessing our database of tools when you're in the truck, on the go, & need quick & easy access to our tools & their applications.

MADE IN U.S.A.

Many products from AST are made in U.S.A. including our cooling system adapters, engine oil funnels & engine alignment tools. Those that work in U.S. manufacturing are consumers in our local states & cities. If these people continue to manufacture goods, they will continue to make local purchases & support their local economies. As long as businesses thrive, they will require goods & services to meet their daily needs. Independence as a society requires the skill, ability & knowledge to make things ourselves.

INTERNAL REPLACEMENT PARTS FOR STUD REMOVERS

Stud Remover Size	Contains All Internal Parts	Warranty Policy
6mm	60	AST tools are warranted against defects in WORKMANSHIP or MATERIALS for a period of five years. Excluded are: (Hazet & Stahlwille products, service reset tools, copper hammers & dial indicators) All warranty items need a return goods authorization number & are to be shipped freight prepaid to the following address:
8mm	80	
10mm	100	
12mm	120	
1/4"	250	
5/16"	312	Assenmacher Specialty Tools, Inc. 6440 Odell Place Boulder, CO 80301 USA
3/8"	375	
7/16"	437	
1/2"	500	Include name, address, telephone number & a short description of the problem. All items returned will be inspected & if found defective, will be either repaired or replaced at the option of the manufacturer. If an item has already been discontinued, it can only be replaced if stock exists.
9/16"	562	
5/8"	625	



SHOWN HERE ON FORD EXPLORER

SHOWN HERE ON VW DSG TRANSMISSION



BMW TIMING SET FOR N52/N54 ENGINES *BMW 3028

- Covers 2006 & Newer 1, 3 & 5 Series models w/ 3.0L (non-turbo) & 3.0L twin turbo engines
- Includes Carrying Case

See *BMW 3028 on Page 7

9-PIECE DRIVE LINE FILLER SYSTEM *ATF 1100-5

For BMW, Ford, Honda, Mercedes, Nissan, Toyota, VW/Audi & many other universal applications. Includes pump, 5 liter container, hose, shut-off valve & *ATF 101, *ATF 102, *ATF 103, *ATF 104, *ATF 105, *ATF 16 DSG, *ATF 17 CVT, *ATF 129 & *ATFTOY118

See *ATF 1100-5 on Page 5





BUILT TO LAST

At Assenmacher Specialty Tools, we carefully hand inspect our products for quality & durability. We provide the technician dependable, long-lasting tools & we stand behind our products—that's our philosophy.



ORDERING

AST reserves the right to modify pricing, terms of sale & product offerings, i.e. availability, design or construction, without notice. Product improvement is ongoing & descriptions & pictures may not always correspond precisely w/ the latest technical data. We reserve the right to refuse a sale. Orders may be referred to current AST distributors.

MINIMUM ORDER

Each shipment invoiced must meet a **\$15.00** net minimum order requirement, excluding shipping charges.

SHIPMENT

Shipments will normally be sent via UPS Ground. Other shipping options are available upon request.

CLAIMS

All claims must be communicated to the shipper (Assenmacher Specialty Tools, Inc.) within **48 HOURS** of receipt of package.

RETURNED GOODS

Any item returned to AST will only be accepted if accompanied by a RETURN GOODS AUTHORIZATION NUMBER provided by AST.

NOTE THAT AST TOOLS ARE DESIGNED "FOR HAND USE ONLY!"**

****AST impact sockets w/ BLACK FINISH are the exception.**

THE USE OF IMPACT TOOLS WILL AUTOMATICALLY VOID WARRANTY

Warranty durations run from the date of documented purchase (the day of purchase by the end user).

All returns must be accompanied by original sales receipt.

ASTTOOL.COM

Find the most current product information online at ASTtool.com. Easily search AST tools, check applications & much more. We also list tools on our web site that aren't in this catalog. Those tools are usually special order, so if you can't find what you're looking for in the printed catalog, check ASTtool.com, maybe we'll have it there.



TEST, TEST, TEST

We take pride in applications. Whether you use our website or our 800 number to inquire about our tools, or their applications, we take pride in knowing that we've tested the applications that we list, nothing more, nothing less.



ABOUT OUR COMPANY

We manufacture & distribute a full line of Specialty Tools, Cooling System Adapters, Oil Change Products, Cam Alignment Tools & Disconnect Tools for Asian, Domestic & European vehicles. Located in Boulder, Colorado, AST was founded in 1978 by Gerhard Assenmacher & has remained at the forefront of independently owned tool companies since our beginning. Many decades of hands-on industry experience is what makes our team stand above the rest. We build relationships, we know our customers and we know our products. We take pride in the fact that our customers can simply pick up the phone & we are there to help—that's the personal service you'll find at AST.



SPECIALTY TOOLS FROM ASSENMACHER ARE DESIGNED & TESTED W/ THE AUTOMOTIVE TECHNICIAN IN MIND. WE STRIVE TO MAKE THE JOB EASIER. SERVICE APPOINTMENTS ARE SCHEDULED AT DEALERSHIPS OR INDEPENDENT SHOPS. THE TECHNICIAN PLACES THE MOTOR IN POSITION TO GIVE US AN OPPORTUNITY TO VERIFY THE FIT & ACCURACY OF THE TOOLS. OUR TOOLS INCLUDE INSTRUCTIONS & DETAILED IMAGES OF THE TOOLS IN USE. WE PROVIDE HELPFUL TIPS APPLICABLE TO THE JOB—OUR INSTRUCTIONS PROVIDE THE MOST CURRENT INFORMATION TO OUR KNOWLEDGE.



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Exact product specifications may vary depending upon date of purchase & / or date of manufacture. In order to provide a cost efficient tool w/ superior quality, AST manufactures many tools in the U.S., some overseas & some are imported from Germany. Please visit ASTtool.com for the most up to date descriptions of our tools.

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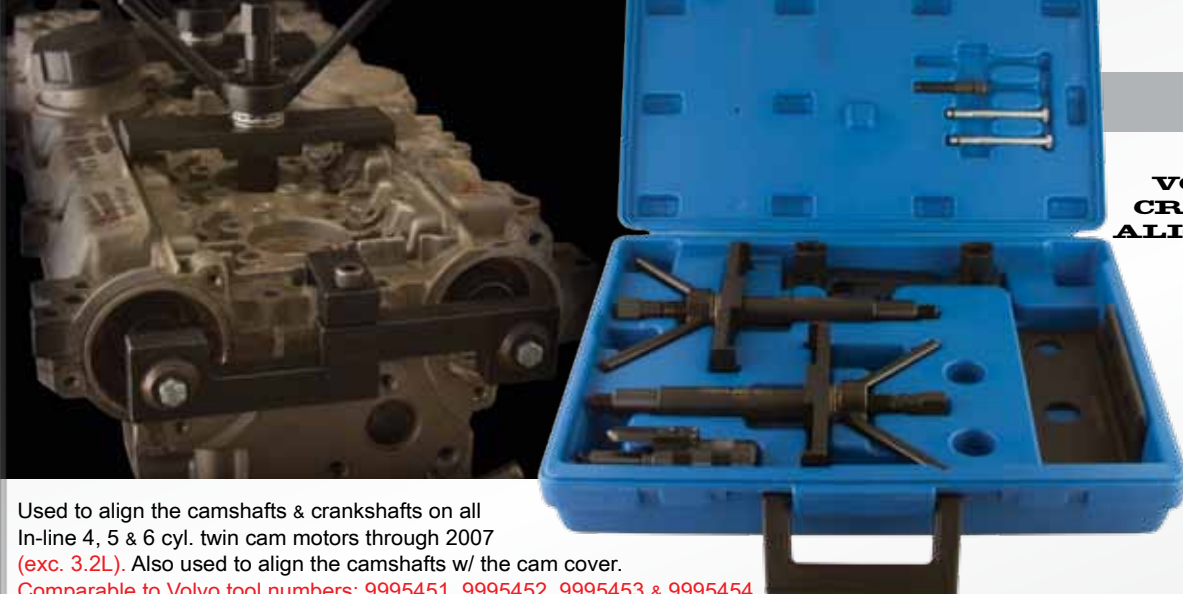
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VW/AUDI TOOLS

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APPLICATION CHARTS

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#V 500

**VOLVO CAM/
CRANKSHAFT
ALIGNMENT SET**

Used to align the camshafts & crankshafts on all In-line 4, 5 & 6 cyl. twin cam motors through 2007 (exc. 3.2L). Also used to align the camshafts w/ the cam cover.
Comparable to Volvo tool numbers: 9995451, 9995452, 9995453 & 9995454.

Applicable to Engines: B6254GS, B6294T, B5234T4, B6294S2, B5244S6, B5204T2, B5234FS, B4184S2, B5254FS M 4.4, B4204T2, B5244S4, B5254T, B5234T9, B4204T3(US)(CDN), B6304S3, B5204T4, B5244S5, B5204T3, B5204FS, B5252FS, B5254FS M 4.3, B4194T, B6294S, B5244T4, B6254FS, B4184S, B5234T6, B5234T2, B6304FS2, GB5252S, B4204S2, B4204T, B5244S2, B5204T5, B5244T7, B4184S9, B4204T4, B6284T, B5234T5, B6304FS, B4204T3, B5244SG2, B6244FS, B4184SJ, B4204T2 CVT, B6304GS, B5254T4, B4184S3, B5234T3, B5244T2, B5244T3, B5244T5, B5254T2, B4204S, B5244S7, B5204FT, B5234FT, B5234T8, B5234T7, B5244S, B4184S10, B4194T2, B5254T3, B5254S DENSO, B4164S, B5254FS LH 3.2, B5244SG, B5244T, B4204T5, B5202FS, B4164S2, & D4192T2

**9-PC. DRIVE LINE
FILLER SYSTEM**

- *ATF 101: 1/8-27 NPT Ford Adapter Plug
- *ATF 102: Universal Applications (front/rear differentials & transfer cases)
- *ATF 103: Short VW Adapter.
Comparable to VW *VAG 1924/1 adapter
- *ATF 104: Long VW/Audi Adapter
- *ATF 105: 10mm x 1.0 VW/Audi Adapter.
Comparable to VW *VAS 6262/2
- *ATF 16 DSG: Fits DSG Transmissions. 24mm x 1.5
- *ATF 17 CVT: Fits CVT Transmissions. 22mm x 1.5
- *ATF 129: 12mm x 1.5 Mercedes-Benz adapter for 722.9 Automatic Transmissions. Applicable to the following chassis w/ 722.9 transmissions: 164, 171, 203, 204, 209, 211, 215, 216, 219, 220, 221, 230 & 251
- *ATFTOY118: Threads into Toyota Automatic Transmissions. 18 x 1.5mm

For BMW, Ford, Honda, Mercedes, Nissan, Toyota, VW/Audi & many other universal applications. Includes pump, 5 liter container, hose, shut-off valve & listed adapters

#ATF 1100-5

**VW/AUDI AXLE
NUT SET**

#6500

- *6500-14
14mm Allen for VW Passat 1996–2001, Audi A4; front & rear axle bolts (AWD)
- *6500-17
17mm Allen for 1998 & later VW Passat, 1999–2004 Audi A6, 2002–2005 Audi A4; front & rear axle bolts (AWD)
- *6500 X-30
30mm 12-Pt. socket for R & R of front axle nuts for mid 1999 & later VW Golf, Jetta, Cabrio & Beetle
- *6500 X-32
32mm 12 Pt. socket w/ 3/4" drive, VW Touareg; front & rear axle nuts

**5 PC. OIL FILTER
SOCKET SET**

#F 2500

- Oil Filter Wrenches are 93mm (36 flutes), 74mm (14 flats) & 76mm (30 flutes)
- Oil Filter Sockets are 24mm & 36mm Hex (6 flats)
- Carrying Case Included
- Set Covers Most 1988–2010 Ford Models
- 5 Year Warranty
- All Tools are 3/8" Drive
- Includes: *M 0219, *F 9336, *F 7630, *2136 & *2124



#EU 2000

**7-PIECE BRAKE
CALIPER/BLEEDER
SERVICE SET**

Includes 7mm, 8mm, 9mm & 11mm brake bleeder wrenches, 3 brake caliper sockets & custom powder-coated metal organizer tray. Wrenches fit bleeder screws on Mercedes, BMW, Volvo & VW/Audi models. Applicable to: Brake caliper bolts on the majority of BMW models, Mercedes S-Class (221), newer C-Class (204), M-Class (164); Volvo cars, & rear caliper bolts on 2006–newer VW Jetta & Passat.

#8110

**10 - PIECE LINE
DISCONNECT
TOOL SET**

*8010: Fits 1995–1996 Ford Mustang; *8012: Applicable to Ford & GM w/ 5/16" Fuel Line; *8013: Fits Ford Models w/ 3/8" Fuel Line; *8014: Fits Ford Taurus & Ford Escort w/ AXOD & ATX transmissions; *8016: Fits Dodge Ram V10 or Cummins Turbo Diesel; *8021: Fits Ford Trucks & S.U.V.s; *8022: Fits 2002–2004 Chevy Tahoe & Suburban; *8023: Fits 2005 Ford 6.0L Turbo Diesel Trucks, 2009 Escape w/ 6F Trans & Ford Edge; *8024: Fits 2007 Ford Explorer & Sport Trac; *8026: Disconnects the Fuel Rail from the Fuel Line on 2004 & Newer Nissan & Toyota Models.

New Disconnect Tool for 2011 GM Duramax Available Separately. See tool *8027.

**4 PC. FLEX NUT
DRIVER SET**

#3700



Includes 5mm, 6mm, 7mm & 8mm Flexible Nut Drivers. Use the *3700 to tighten & loosen the hard-to-reach hose clamps on various makes & models. 5-year warranty. Blue handle constructed of tough composite plastic.



#6800TDI

**VW TDI
TIMING BELT
TOOL SET**

Used for setting & adjusting the cam/crank/pump timing on 1999–2008 VW TDI engines. Includes: **#3359** TDI Lock Pin, **#3428** TDI Cam Lock Bar, **#H 2587-1** & **#H 2587-2** Timing Belt Tensioner Spanner Wrenches, **#T 10115** Tensioner Lock Pins, **#T 10050** Crankshaft Stop & **#T 10100** Oval Pulley Crankshaft Stop. Some contents are U.S. made.



#BMW 3028

**BMW
TIMING SET
FOR N52/
N54
ENGINES**

Covers 2006 & Newer 1, 3 & 5 Series models w/ 3.0L (non-turbo) & 3.0L twin turbo engines. Includes carrying case.



#MC 1400

**MINI COOPER
ENGINE
TIMING SET**

Used on 2007–2010 N14 Turbocharged engines. Set contains the following Factory tool numbers #119551, #119552 & #119590. Includes cam & crank timing tools.



#6300

**VW/AUDI/PORSCHE
SOCKET & BIT SET**

- #6300 XL-14** For R & R of Late Model Eurovan Axle Shafts & Ball Joints
- #6300 XL-8** For R & R of Axle Shaft Bolts on Beetle, Jetta TDI & Older VW/Audi Models
- #6300 XL-10** For R & R of Axle Shaft Bolts on 1999–2005 Passat & Golf
- #6300 X-16** For R & R of Manual Transmission Drain Plug & Touareg & Porsche Cayenne Brake Caliper Bolts
- #6300 X-12** For R & R of Axle Shaft Bolts on 1999–2005 Jetta (gas) & Rear Toe Adjustment on 1999 & Later Audi A6
- #6300 X-14** For R & R of Audi TT Differential Bracket & for Bell Housing Bolts w/ Tight Clearance on Various VW Models
- #3424** Spreader for Assisting R & R of Strut Housing on VW & Audi TT



#3101

**8-PC. RADIO
REMOVAL SET**

Includes the **#2040**, **#BMW 050**, **#3344 A** (includes two pairs), **#M 2070**, **#3316**, **#BMW 025** & the **#BMW 010**. Applicable to: Ford & VW models w/ a DIN chassis, BMW models w/ anti-theft radio, Audi A4, A6, A8 & new VW Beetles, 1992 & later Mercedes 129, 140, 163, 202 & 210 models, VW Passat, Jetta & Golf, center console removal on newer BMW Z3, X5 & 5 Series [E39], Multi-Informational Display (MID) removal on BMW X5 & 5 Series [E39].

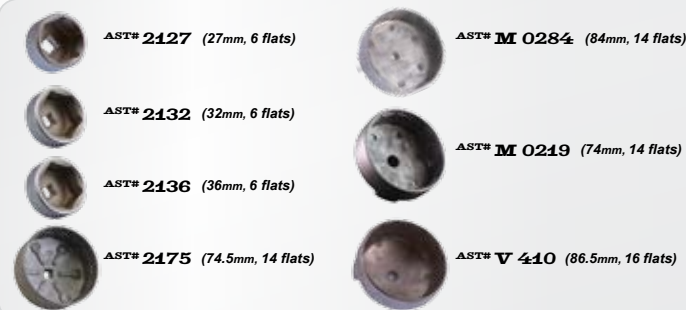
#3200

**DOOR &
HINGE
HANDLE SET**

A compact solution to accessing the special fasteners found on the door hinges & handles of VW/Audi, Mercedes-Benz, & Porsche. Set includes four door hinge bits (less than an inch long) & a slender ratcheting wrench. Also included are the extra long drivers necessary to access the door handles of Mercedes-Benz & VW.

**7-PIECE OIL FILTER
WRENCH SET**

#2101



Contains oil filter wrench sockets for many domestic & foreign applications. Covers all Mercedes-Benz applications. The 27mm, 32mm & 36mm hex sizes covers VW/Audi, BMW, newer Mercedes 4-cyl. engines, Saturn & GM 2.2 L Ecotec engines. Covers Ford Escape Hybrid & Ford OEM #FL 910 & #FL 793. The four cup-style wrenches covers many VW, BMW, Toyota, & Mazda 3. Also covers Dodge Sprinter & Jeep 3.0L CRD engines & 1999–2010 Volvo models.

**AST TECH
TIP**

MANY OF OUR TOOLS COME IN SETS TO FIT THE NEEDS OF THE REPAIR. TO MAKE YOUR JOB EASIER, PURCHASE A SET FROM AST IF AVAILABLE.

#BMW 6208**BMW ENGINE TIMING TOOL SET**

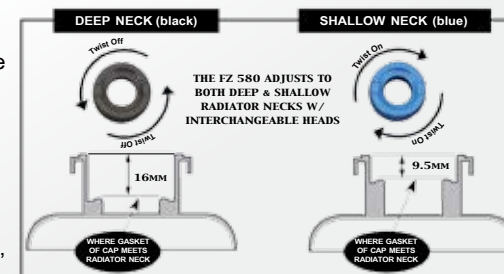
Used to set timing on cams of both cylinder heads. Includes hold down tool for cam fixtures. Crankshaft timing pin included. Applicable to: N62, N62TU & N73 Engines.

**#FZ 1001 A****ASIAN & DOMESTIC COOLING SYSTEM ADAPTER SET**

Includes the following AST tools: **#FZ 34:** Fits 2000–2003 Bentley Arnage; All 1999–2001 Daewoo Models; 1995–1997 Ford Contour; 2000–2006 Focus; 1990–1994 Jaguar w/ male threads on filler neck; 1988–1994 Range Rover; 1995–1997 Mercury Mystique; 1988–1993 Pontiac Le Mans; 1994–1998 Saab 900; 2000 Saturn LS & LS 6 cyl. **#FZ 35 A:** Fits 1992–2009 GM; Freightliner; 2000–2003 Jaguar S Type, Land Rover LR3, Ford Taurus, Explorer, Excursion, Five Hundred; Saab 9³ & Saturn Models. **#FZ 37:** Fits 1998–2001 Ford Contour, 2001–2005 Escape; 2002–2003 Jaguar X Type, 1998–2001 XJ8, 1998–2001 XK8; 2001–2004 Mazda Tribute; 1998–2001 Mercury Mystique. **#FZ 128:** Fits Acura, Chevrolet, Chrysler, Ford, Honda, Hyundai, Isuzu, Mazda, Mercury, Mitsubishi, Nissan, Subaru, Suzuki & Toyota Models w/ small-deep radiator necks. **#FZ 138:** Fits Acura, Chevrolet, Chrysler, GMC, Honda, Isuzu, Lexus, Mazda, Mitsubishi, Scion, Subaru (6-cyl.) & Toyota Models w/ small-shallow radiator necks.

**COOLING SYSTEM ADAPTER SET FOR DEEP & SHALLOW RADIATOR NECKS**

Using the threaded rings & one base, all small-neck tab style radiators & expansion tanks can be pressurized w/ this new product. Simply thread on the taller or shorter ring to accommodate a shallow or deep neck. The broad range of applications include: Acura, Chrysler, Dodge, Eagle, Ford models (Explorer, Festiva, Tempo, Villager, Windstar, Sport-Trac), Geo, Honda, Hyundai, Infiniti, Isuzu, Lexus, Mazda, Mitsubishi, Nissan, Subaru, Suzuki & Toyota.

**#FZ 580****EUROPEAN COOLING SYSTEM ADAPTER SET**

Includes the following AST tools: **#BMW 345:** Fits BMW 2004–2005 3 Series, 2002–2006 7 Series, 2005–2006 X3 & X5, Land Rover: 2002 Discovery & 1995–2004 Range Rover. **#FZ 22:** Fits Porsche 911 (water-cooled, w/ threaded necks) & Boxster; Volvo 670 & VN 430; VW/Audi A8, All 1975–1993 models w/ male threads on exp. tank & S8. **#FZ 25:** Fits all 1987–1990 Jeep models; 2002 Land Rover Freelander; Mini Cooper S; All 1985–1987 Renault Models; 1978–1994 Saab 900 & 1986–1998 9000; All 1987–1991 Sterling models; 1978–2006 Volvo models w/ threaded neck & 1978–2006 Volvo Trucks w/ 47mm x 3mm threads on secondary filler neck. **#BMW 350:** 2006–2009 BMW 3 Series (E90), 2004–2009 5 and 6 Series (E60, E63, E64) & X5 2007–2009 (E70). **#FZ 41:** Fits All Porsche Cayenne & 1999–2011 VW/Audi (exc. Audi 8 Series). **#M 0349:** Fits Mercedes AMG, C class, CL class, CLK class, CLS class, E class, G class, ML 164, R class, S class, SL class & SLK class.

#BMW462 TU**M62TU V8 DOUBLE VANOS SET**

Used in conjunction w/ the **#BMW 480** & the **#BMW 400-1** (sold separately).

Includes: **#BMW 462-14** & **#BMW 462-58:** VANOS Locking Fixtures for fixing camshaft sensor wheel in position during assembly; **#BMW 4630:** Chain Tensioner Tool for tensioning the primary chain when adjusting valve timing; **#BMW 4640:** Vanos Adjusting Pin-Wrench Socket used for adjusting VANOS to left hand stop during assembly; **#BMW 4638:** Block used for screwing in the chain tensioner w/ cover removed; **#BMW 4680:** TDC Pin for locking flywheel at TDC on X5 models; **#BMW 4631:** 2 Locking Pins used for secondary chain tensioner to lock tensioner piston in position.

#6700**VW 1.8T TENSIONER HOLDER SET**

VW/Audi 1.8T Tensioner Holder Set. Contains the **#6700-1** Tensioner Bolt & Washer, the **#6700-2** Tensioner Locking Plate, the **#6700-3** Tensioner Lock Pin, & the **#6700-4** Holding Rod. Used for holding the timing belt tensioner & the accessory belt tensioner. Applicable to VW/Audi models w/ a 1.8 Turbo Motor.

**#201-7****5 PC. METRIC STUD PULLER SET**

Includes the New 7mm stud remover, ideal for BMW manifold studs. Includes 6mm, 7mm, 8mm, 10mm & 12mm stud remover / installers.

#203**7 PC. STANDARD SIZE STUD PULLER SET**

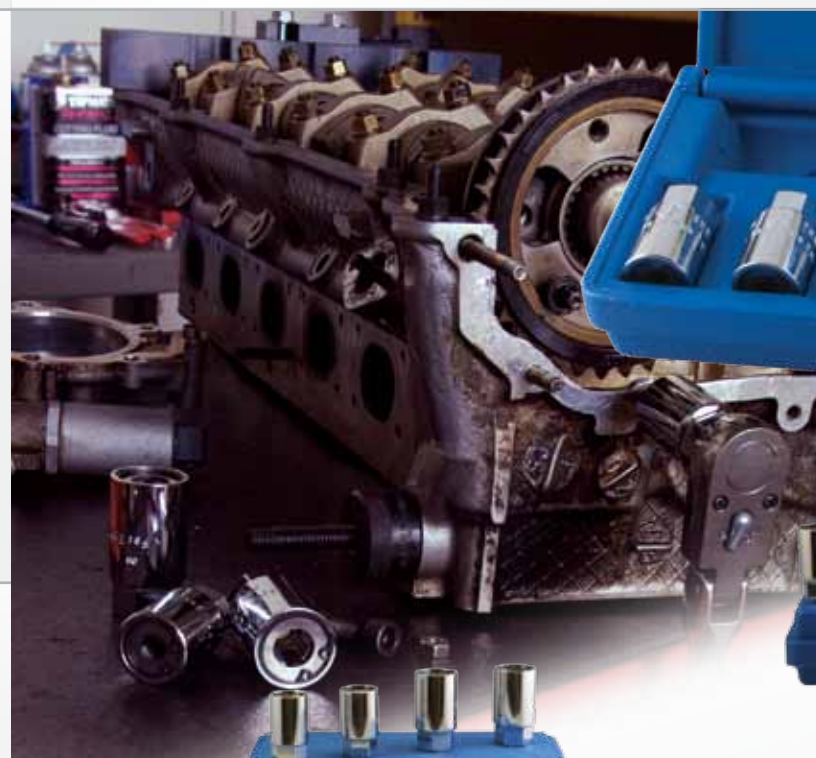
Includes 1/4", 5/16", 3/8", 7/16", 1/2", 9/16" & 5/8" stud remover & installer tools.

#202**5 PC. STANDARD SIZE STUD PULLER SET**

Includes 1/4", 5/16", 3/8", 7/16" & 1/2" stud remover & installer tools.

#201**4 PC. METRIC STUD PULLER SET**

Includes 6mm, 8mm, 10mm & 12mm stud remover & installer tools.



BMW AST SPECIALTY TOOLS

***BMW 6208**
BMW ENGINE TIMING
TOOL SET see pg. 13

***MC 1400**
MINI COOPER ENGINE
TIMING SET see pg. 18

***BMW 3028**
BMW TIMING SET FOR
N52 & N54 ENGINES see pg. 12

***BMW 520**
VANOS ADJUSTMENT
FIXTURE see pg. 16

***BMW 462 TU**
M62TU V8 DOUBLE
VANOS SET see pg. 13

***EU2000**
7-PC. BRAKE
CALIPER/BLEEDER
SERVICE SET see pg. 13

***201-7**
5-PIECE METRIC STUD
PULLER SET see pg. 15

***BMW 522**
CHAIN TENSIONER
TOOL see pg. 16

⇒ CAMSHAFT ALIGNMENT TOOLS

⇒ TRANSMISSION & DIFFERENTIAL FILL TOOLS

⇒ STUD REMOVER / INSTALLER TOOLS

⇒ TRANSMISSION & OIL COOLER LINE DISCONNECT TOOLS



#ATF 1002 BASIC BASIC DRIVE LINE FILLER SYSTEM

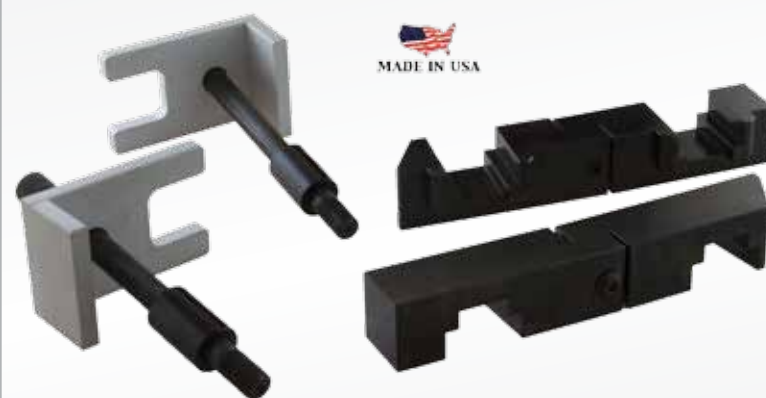
For **BMW**, Honda, Nissan, & many other universal applications. Includes pump, 3 liter container, hose, shut-off valve & #ATF 102

- 5L & 10L Containers Also Available
- Includes Quick Attachment Adapter #ATF 102
- Pump Dispenses Efficiently
- Filler Can Handle 90 Weight Oil
- On / Off Ball Valve w/ Safety Catch
- Container Made of UHDP (ULTRA HIGH DENSITY POLYETHYLENE)
- Includes U.S.A. Made Contents



#BMW 480

V8 CAMSHAFT ALIGNMENT TOOL



Includes 4 blocks (2 for each side) & 2 locking fixtures for setting camshaft timing. Crankshaft locking pin #BMW 400-1 sold separately. Applicable to: **BMW M60, M62, M62TU V8 motors 1994–2003**. Use in conjunction with #BMW 462 TU for M62TU motor. **Comparable to BMW# 112440.**



M62TU V8 DOUBLE VANOS SET

MADE IN USA Used in conjunction w/ the #BMW 480 & the #BMW 400-1 (sold separately).

Includes: #BMW 462-14 & #BMW 462-58: VANOS Locking Fixtures for fixing camshaft sensor wheel in position during assembly; #BMW 4630: Chain Tensioner Tool for tensioning the primary chain when adjusting valve timing; #BMW 4640: Vanos Adjusting Pin-Wrench Socket used for adjusting VANOS to left hand stop during assembly; #BMW 4638: Block used for screwing in the chain tensioner w/ cover removed; #BMW 4680: TDC Pin for locking flywheel at TDC on X5 models; #BMW 4631: 2 Locking Pins used for secondary chain tensioner to lock tensioner piston in position.

FUEL LEVEL SENSOR LOCK RING TOOL



Used to remove the fuel level lock ring. Applicable to all **BMW & Mini Cooper Models: 1988–2011 E31, E34, E36, E38, E39, E46, E53, E60, E63, E64, E65, E83, E85, E90, R50, R52, R53, R55, R56 & R57**. **Comparable to BMW #161020.**

#BMW 4622



BMW CLUTCH CENTERING TOOL SET



3-Piece Set. For centering clutch disc on flywheel while installing self-adjusting clutch (SAC). Applicable to the following transmissions: **S5D 200G, S5D 250G, S5D 260Z, S5D 310Z, S6S 420G, S6S 560G, GS6-37BZ & GS6-37DZ (H-Transmissions).**

#BMW 6240

#BMW 3028



BMW TIMING SET FOR N52/N54 ENGINES

Covers 2006–Newer 1, 3 & 5 Series Models w/ 3.0L Non-Turbo & 3.0L Twin Turbo Engines

BMW POWER STEERING PUMP DRIVE BELT TOOL



Used for installing the drive belt that is a stretch belt & no belt tensioner is used. Applicable To: **2004–2005 BMW N62 (V8) Motors w/ the stretch belt**. **Comparable to BMW #641040 & #83800494518.**

#BMW 0062

7-PC. BRAKE CALIPER/BLEEDER SERVICE SET

Includes 7mm, 8mm, 9mm & 11mm brake bleeder wrenches, 3 brake caliper sockets & custom powder-coated metal organizer tray. Wrenches fit bleeder screws on Mercedes, BMW, Volvo & VW/Audi models. Applicable to: Brake caliper bolts on the majority of **BMW models**, Mercedes S-Class (221), newer C-Class (204), M-Class (164); Volvo cars, & rear caliper bolts on 2006–newer VW Jetta & Passat

#EU2000



#BMW 6208

BMW ENGINE TIMING TOOL SET



Used to set timing on cams of both cylinder heads. Includes hold down tool for cam fixtures. Crankshaft timing pin included. Fits N62, N62TU & N73 Engines. Applicable to **BMW: 2004–2005 545, 2006–2007 550, 2008–2010 550i, 2004–2005 645Ci, 2006–2010 650i, 2002–2005 745i, 2003–2005 745Li, 2006–2008 750i & 750Li, 2005–2006 760i, 2003–2008 760Li, 2007–2008 Alpina B7.**

AST TECH TIP

THE HOLE LOCATION FOR THE #BMW 420-1 IS LOCATED NEAR THE DRIVER'S SIDE BOTTOM OF THE BLOCK ON BMW N52 & N54 ENGINES.

HOLE LOCATION FOR #BMW 420-1

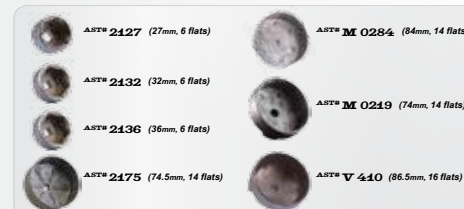
DRIVER'S SIDE BOTTOM OF BLOCK

#100-30 A 30MM DEEP SOCKET

30mm Deep thin-walled socket. Used for R & R of transmission drive shaft flange nut & pinion shaft flange nut of differential. Applicable to: **Many BMW models including E90 325 rear wheel drive 30mm axle nuts.**

#2124 24MM OIL FILTER SOCKET

- 24mm w/ 6 Flats
- **Applicable to BMW Models 2004–2011 w/ V8 (N62)**
- Steel Construction



Contains oil filter wrench sockets for many domestic & foreign applications. Covers all Mercedes-Benz applications. The 27mm, 32mm & 36mm hex sizes covers VW/Audi, **BMW**, newer Mercedes 4-cyl. engines, Saturn & GM 2.2 L Ecotec engines. Covers Ford Escape Hybrid & Ford OEM #FL 910 & #FL 793. The four cup-style wrenches covers many VW, **BMW**, Toyota, & Mazda 3. Also covers Dodge Sprinter & Jeep 3.0L CRD engines & 1999–2010 Volvo models.

7-PIECE OIL FILTER WRENCH SET**#2101****#2136 36MM OIL FILTER SOCKET**

- 36mm w/ 6 Flats
- **Applicable to BMW M52, M60, M62, M70, M73 Engines & Mini Cooper**
- Steel Construction

**#2175 74.5MM OIL FILTER SOCKET WRENCH**

- 74.5mm w/ 14 Flats
- Metal Construction
- **Applicable to BMW M44, 1.9 L**

**32MM OIL FILTER SOCKET**

32mm w/ 6 flats. Applicable to: 2010–2011 3.0L Turbo-Diesel. Fits new **2010 & later BMW (M57)** 6 cyl. diesel engine.

**#2132****#201-7****5 PC. METRIC STUD PULLER SET**

Includes the New 7mm stud remover, ideal for BMW manifold studs. Includes 6mm, 7mm, 8mm, 10mm & 12mm stud remover / installers.

#6500 X-36 36MM 12-POINT SOCKET

36mm 12-point 3/4" drive socket. Applicable to: **BMW E38, E39, E46, E53, X5 (front & rear), the 5 Series E60 & E90 All Wheel Drive 36mm front & rear.** For R & R of axle nuts. **For E90 RWD, see #100-30 A.**

#8032 32MM FAN CLUTCH WRENCH

32mm x 380mm long wrench used for the R & R of any 32mm fan clutch nuts. Applicable to: VW, Audi & **BMW models w/ 32mm fan clutch nuts.**

EUROPEAN COOLING SYSTEM ADAPTER SET

This set contains the following adapters: **#BMW 345, #FZ 22, #FZ 25, #BMW 350, #FZ 41 & #M 0349.**

**#FZ 1002****8-PC. RADIO REMOVAL SET**

Includes the **#2040, #BMW 050, #3344 A** (includes two pair), **#M 2070, #3316, #BMW 025** & the **#BMW 010.**

Applications include: Ford & VW models w/ a DIN chassis, **BMW models w/ anti-theft radio**, Audi A4, A6, A8 & new VW Beetles, 1992 & later Mercedes 129, 140, 163, 202 & 210 models, VW new body Passat, Jetta & Golf. **Center console removal on newer BMW Z3, X5 & 5 Series (E39), Multi-Informational Display (MID) removal on BMW X5 & 5 Series (E39).**

#BMW 010 T-10 TORX DRIVER

T10 Torx Driver. For center console removal on **newer BMW Z3, X5 & 5 Series (E39)**, Multi-Informational Display (MID) removal on **BMW X5 & 5 Series (E39).**

**#BM 1276****OIL FILTER WRENCH FOR BMW MOTORCYCLES**

76mm, 12 flutes, 3/8" drive, R & R of oil filter on **BMW Motorcycles 2007–2011 w/ oil filter #11 42 7 673 541.** Also R & R of older Mercedes OEM oil filters w/ 12 flutes.

**#BMW 025 2.5MM HEX DRIVER**

2.5mm Hex Driver. For center console removal on **newer BMW Z3, X5 & 5 Series (E39)**, Multi-Informational Display (MID) removal on **BMW X5 & 5 Series (E39).**

**#BMW 060 BMW TORX FLYWHEEL SOCKET TOOL**

For removal & replacement of flywheel bolts. Applicable to: **BMW E34 & E39 V8 4.0L & 4.4L w/ standard transmission.** Comparable to BMW #114180.

TANK ADAPTER**#BMW 345**

For pressurizing cooling system. Applicable to: **1988–2005 BMW models (exc. new 5 & 6 Series).** Also fits Land Rover Range Rover 1995–2004 & Discovery 2002.

**BMW TANK ADAPTER****#BMW 350**

For pressurizing cooling system. Applicable to: **2006 & newer BMW 3 Series (E90), 2004 & newer 5 & 6 Series (E60, 63, 64), 2007 & newer X5 (E70), & 2010–2011 7 Series.**

**#BMW 050 SPECIALTY DRIVER**

For removal & replacement of **BMW** antitheft radios. **Applicable to many BMW models.**

**#V 410 86.5MM OIL FILTER WRENCH**

- 86.5mm w/ 16 Flats
- Metal Construction
- **Applicable to 2006–2009 BMW Models w/ 6 Cyl. Engines, 335i, 535i, X5, X6 & All Twin-Turbo Models**

**CAP ADAPTER****#BMW 352**

For pressurizing cooling system pressure cap. Applicable to: **2006 & newer BMW 3 Series (E90), 2004 & newer 5 & 6 Series (E60, 63 & 64), 2007 & newer X5 (E70), & 2007–2011 7 Series.**

**ADAPTER**

For brake master cylinder or clutch master cylinder reservoirs. Used in conjunction w/ pressure bleeder (pressure bleeder attachment thread size of 1/4" NPT).



***BMW 377 7MM ALLEN SOCKET**

7mm, 3/8" Drive allen socket. Applicable to: **BMW E36, E46, E39 & E31 models**, Mercedes S-Class (221) & C-Class (204). For R & R of rear caliper bolts.

***BMW 400-1 TDC PIN ONLY**

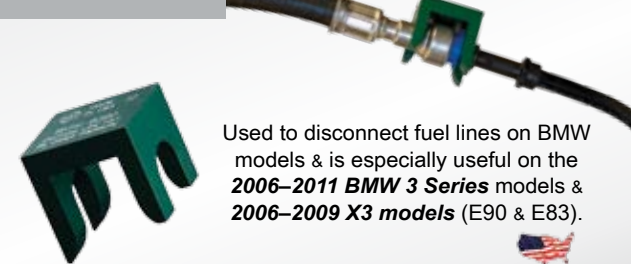
For setting crankshaft TDC. Included in ***BMW 400** Set. Applicable to: **M21, M40, M41, M42, M43, M43TU, M44, M47, M47TU, M50, M51, M52, M52TU, M54, M56, M57, M57TU, M60, M62, M62TU, M70, M73, S50B30, S50B32, S54 & S62 engines**. Comparable to BMW ***112300**. For M62TU in X5, see ***BMW 4680**.

***BMW 518 SPROCKET TURNER**

For turning sprockets when removing & installing VANOS adjustment unit. Applicable to: **BMW M50, M52, S50US, & S52US engines**. Comparable to BMW ***115490**.

BMW 5346*BMW LINE DISCONNECT TOOL**

Made of red-anodized aluminum, used for power steering & transmission oil cooler line removal. Applicable to: **1999-2009 BMW 3 Series (E46 & E90) & X5**.

***BMW 8390**

Used to disconnect fuel lines on BMW models & is especially useful on the **2006-2011 BMW 3 Series** models & **2006-2009 X3 models** (E90 & E83).

***H 2760 OIL DRAIN & FILLER PLUG WRENCH**

14mm Allen, 17mm box wrench used for the R & R of the differential oil filler plug on **many BMW & Mercedes-Benz** models.

BMW 432*VANOS SOLENOID SOCKET**

32mm socket used for removing & installing the **BMW Vanos** Solenoid valves on 1999-2005 M52TU, M54 & M62TU motors. Comparable to ***116420**.

***BMW 432**
SHOWN HERE
IN USE

BMW 520*VANOS ADJUSTMENT FIXTURE**

Used during installation of cylinder head or camshafts. Applicable to: **BMW models 1999-2005 w/ M52TU, M54 & M56 engines w/ twin VANOS**. Comparable to BMW ***116150**. The ***BMW 400** required at back of camshafts. ***BMW 522** Also Recommended.

***BMW 522****CHAIN TENSIONER TOOL**

Used during installation of cylinder head or camshafts. Applicable to: **BMW 1996-1999 M52, 1999-2002 M52TU, 2001-2005 M54 & M56 engines**. Comparable to BMW ***114220**.

***BMW 524****SPROCKET ALIGNMENT PLATE**

Applicable to: **BMW M52TU, M54 & M56 engines w/ Double Vanos**. Comparable to BMW ***116 180**.

BMW 2200*HUB HOLDER**

For holding the water pump hub during removal of fan clutch. Used in conjunction w/ the ***8032**. Applicable to: **All BMW engines M10, M20 & M30 w/ 32mm fan clutch nut**.

BMW 2260*HUB HOLDER (V8)**

For holding water pump hub during removal of fan clutch. Used in conjunction w/ tool ***8032**. Applicable to: **BMW M60 & M62 V8 engines**.

**VW, AUDI, MERCEDES & BMW OIL FILLER*****OFA UD1000**

- Fits 1996 & Later BMW 6 cyl. & 8 cyl.
- Fits Dodge Sprinter
- Fits Mercedes 112 (V6) & 113 (V8) Engines
- Fits VW/Audi Engines: 1.8T, 1.9L TDI, 2.0T, 2.8L (30v), 3.0L (30v), 3.2L, 3.6L, & 4.2L (40v)
- No More Mess

**TDC PIN*****BMW 4680**

Used for setting crankshaft TDC. Applicable: **1999-2003 M62TU motors in BMW X5**.

E42 TORX SOCKET***H 2925**

Used for outside torx headbolts on **BMW M42 & M50 engines**.

TORX SOCKET INSERT***H 2223 LG T-30**

Used for the R & R of the airbag from the steering wheel. Applicable to: **many BMW, Mercedes-Benz, Saab & VW models**.

BMW E46 TAIL LIGHT HARNESS TERMINAL TOOL***S 1578 K-2**

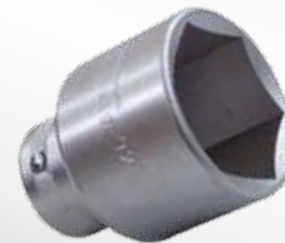
Used for extracting terminals from a connector on the tail light wiring harness. Applicable to: **1999-2005 BMW E46 3 Series**.

WIRE TERMINAL EXTRACTOR***S 1553 N**

Used to remove flat terminals w/ one release tang from the connector plug. **Applicable to many BMW models**.

CAMSHAFT ALIGNMENT TOOL***BMW 400**

Used in conjunction with ***BMW 520 & *BMW 522** on BMW M52TU & M54 motors, found in 1999-2005 BMW 6 cyl. motors. Includes 2 blocks, swivel lock & crankshaft locking pin. For setting camshaft timing. Comparable to BMW ***113240 & *112300**. Applicable to: **M42, M44, M50, M52, M52TU, M54, M56, S50US & S52US engines**.

46MM, THIN-WALL, 3/4" DRIVE SOCKET***S 55-46**

46mm, 6-Point thin-wall socket, 3/4" drive. For R & R of front wheel bearing retainer nut on **BMW E24, E28, E32 & E34 Chassis**.

36MM, 6-POINT DEEP SOCKET, 3/4" DRIVE***S 56-36**

For R & R of transmission output flange nut on BMW. Applicable to: **2001 & newer BMW models E46 & E39 w/ 6 cyl. engines w/ standard transmission S5D 260Z/310Z/320Z**. (exc. M3 or M5).

SPARK PLUG SOCKET***SP1412**

***SP1412**
SHOWN HERE ON
BMW SPARK PLUG

14mm, 12-Point Spark Plug Socket w/ 3/8" drive. Applicable: **2007 & later BMW 135, 335, 535 & X6 w/ 3.0L twin-turbo motors**. Also works on 2007 & newer Turbocharged Mini Coopers. Comparable to BMW tool ***121 220**. **NOTE: Spark Plug Socket is slender in design to fit application**.

WIRE TERMINAL EXTRACTOR***S 1591 N**

1.65mm wide, 2.8mm apart & 18mm long. Used to remove flat terminals w/ two release tangs from the connector plug. **Applicable to many BMW models**.

***MC 1400**

MINI COOPER ENGINE TIMING SET

Includes cam & crank timing tools. Used on **2007-2010 N14 Turbocharged engines**. Set contains the following factory tool numbers: **#119551, #119552 & #119590.**



***SP1412**

SPARK PLUG SOCKET

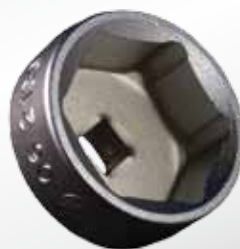


14mm, 12-Point Spark Plug Socket w/ 3/8" drive. Applicable: **2007 & newer Turbocharged Mini Coopers**. Comparable to BMW tool #121220. **NOTE:** Spark Plug Socket is slender in design to fit application.

***2136**

36MM OIL FILTER SOCKET WRENCH

- 36mm w/ 6 Flats
- Applicable to BMW M52, M60, M62, M70, M73 Engines & **Mini Cooper through 2006**
- Steel Construction



***FZ 25**

TANK ADAPTER

- **Fits Mini Cooper w/ 47 x 3mm Threads on the Filler Neck through 2007**
- Used for Pressurizing the Cooling System



***MC 103**

MINI COOPER NATURALLY ASPIRATED SERPENTINE BELT TOOL



Mini Cooper Serpentine Belt Tool used for relieving tension on belt tensioner on **naturally aspirated motors through 2006**. Comparable to #118390.

***MC 100**

MINI COOPER SERPENTINE BELT TOOL



Mini Cooper Serpentine Belt Tool used for relieving tension on belt tensioner on **super-charged motors through 2006**. Comparable to #118410.

***BMW 4622**

FUEL LEVEL SENSOR LOCK RING TOOL

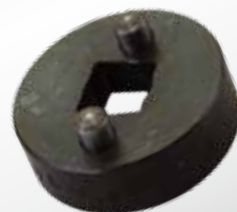
Used to remove the fuel level lock ring. Comparable to BMW factory tool number #161020. Applicable: 1988-2011 BMW & **Mini Cooper**; E31, E34, E36, E38, E39, E46, E53, E60, E63, E64, E65, E83, E85, E90, R50, R52, R53, R55, R56 & R57.



***V 450**

MINI COOPER BRAKE PISTON ADAPTER

3/8" Drive. For turning in the rear brake caliper piston. Applicable to: 2005 & newer Volvo 40 & 50 Series, Mazda 3, 2002-2006 **Mini Cooper**, Mercury Milan, Ford Fusion, Jaguar S-Type, Lincoln MKZ & Saab 9-3.



8-PIECE RADIO REMOVAL SET

***3101**



Includes the **#2040, #BMW 050, #3344 A** (includes two pair), **#M 2070, #3316, #BMW 025** & the **#BMW 010**. Applications to: Ford & VW models w/ a DIN chassis, BMW models w/ anti-theft radio, Audi A4, A6, A8 & new VW Beetles, 1992 & later Mercedes 129, 140, 163, 202 & 210 models, VW new body Passat, Jetta & Golf, center console removal on newer BMW Z3, X5 & 5 Series (E39), Multi-Informational Display (MID) removal on BMW X5 & 5 Series (E39).



EUROPEAN DOOR/HINGE HANDLE SET

***3200**



A compact solution to accessing the special fasteners found on the door hinges & handles of VW/Audi, Mercedes-Benz, & Porsche. Set includes four door hinge bits (less than an inch long), & a slender ratcheting wrench. Also included are the extra long drivers necessary to access the door handles of Mercedes-Benz & VW.

RADIO REMOVAL TOOL

***3344 A**



Used for radio removal on Audi A4, A6, A8 & VW new Beetle w/ horizontally aligned key slots. Two pair of **#3344 A's** are required for most newer VW/Audi models. Comparable to VW #T 10057.

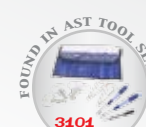


SPECIALTY ALLEN DRIVER

***BMW 050**



For removal & replacement of all BMW anti-theft radios. Applicable to many BMW models.



RADIO REMOVAL TOOL

***M 2070**



Used for radio removal on 1992 & later Mercedes models. Applicable to Mercedes models 140, 129, 202 & 210.



HARD BLACK WEDGE SET

***MW 35**



Constructed of strong black polycarbonate, this set of three wedge-style dash panel removal tools allows installers to remove oil pans, timing covers, rocker covers & more, without causing damage.



RADIO REMOVAL TOOL

***2040**



Radio removal tool for VW, Audi, Ford, & Saab radios w/ DIN chassis.



RADIO REMOVAL KEYS

***3316**



Used for removing the factory-installed radio. Applicable to new body style VW Passat, Jetta & Golf w/ vertically aligned key slots.



***3810**

6-PIECE FILE SET



Includes six files & a protective case.



SOFT ORANGE WEDGE SET

***MW 34**



Constructed of soft orange polyethylene, this set of three wedge-style dash panel removal tools allows installers to remove dash trim bezels & other vehicle interior moldings including door panels, without causing damage. Great for electronics installation work.

THOREX COPPER HAMMER

***T 314**



Approximate weight 4lbs. 1 3/4" Face Diameter (44mm). Overall length 12".

#8027

FUEL LINE RELEASE TOOL

- **Applicable to 2011 GM w/ 6.6 V8 Turbo Diesel Duramax**
- Made of Orange-Anodized Aluminum
- Used for removing the fuel line from the indirect fuel injector



#8010

1/4" FUEL LINE REMOVER

- Black-Anodized Aluminum Construction
- **Applicable to 1995–1996 Ford Mustang**



#8012

5/16" FUEL FILTER REMOVER

- Red-Anodized Aluminum Construction
- **Applicable to Ford & GM w/ 5/16" Fuel Line**



#8013

3/8" FUEL LINE REMOVER

- Gold-Anodized Aluminum Construction
- **Applicable to Ford Models w/ 3/8" Fuel Line**



#8014

5/16" SPECIAL OIL COOLER LINE REMOVER

- **Applicable to Ford Taurus & Ford Escort w/ AXOD & ATX transmissions**
- Blue-Anodized Aluminum Construction



#8016

1/2" OIL COOLER LINE REMOVER

- Green-Anodized Aluminum Construction
- **Applicable to Dodge Ram V10 or Cummins Turbo Diesel**



#8021

3/8" OIL COOLER LINE REMOVER

- Purple-Anodized Aluminum Construction
- **Applicable to Ford Trucks & S.U.V.s**
- **Fits 2007–2008 Ford F150**



#8022

GM FUEL FILTER DISCONNECT TOOL

- **Applicable to 2002–2004 Chevy Tahoe & Suburban**
- Made of Flexible Plastic for Extremely Tight Application



#8023

1/2" OIL COOLER LINE REMOVER

- Orange-Anodized Aluminum Construction
- **Applicable to 2005–2008 Ford F Series Turbo Diesel Trucks, 2009 Escape w/ 6F Trans & Ford Edge**



#8024

1/2" OIL COOLER LINE REMOVER

- Black-Anodized Aluminum Construction
- **Applicable to 2007 Ford Explorer & Sport Trac**



#8026

5/16" NISSAN/TOYOTA FUEL LINE DISCONNECT TOOL

- Green-Anodized Aluminum Construction
- **Disconnects the Fuel Rail from the Fuel Line on 2004 & Newer Nissan & Toyota Models**



#8021 SHOWN HERE IN USE

#8023 SHOWN HERE IN USE

#8110

10 - PIECE LINE DISCONNECT TOOL SET**FEATURES:**

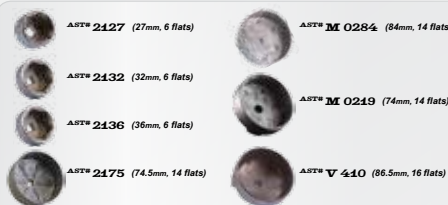
- The #8110's Nissan & Toyota Flared Fuel Line Application is Not Found in Other Sets
- #8023 Fits Ford 6.0 Turbo Diesel Transmission Oil Cooler Lines & New Escape & Edge
- 3/8" Transmission Oil Cooler Line Tool for Ford & Cadillac CTS
- Tahoe & Suburban Fuel Filter Removal Tool
- 2006 & 2007 Ford Explorer Transmission Oil Cooler Line Disconnect Tools
- Original 1/4", 5/16" & 3/8" Ford & GM Disconnect Tools Also Included



#8026 SHOWN HERE IN USE

#2101

7-PIECE OIL FILTER WRENCH SET



Contains oil filter wrench sockets for many domestic & foreign applications. Covers all Mercedes-Benz applications. The 27mm, 32mm & 36mm hex sizes covers VW/Audi, BMW, newer Mercedes 4-cyl. engines, **Saturn & GM 2.2 L Ecotec engines**. Covers **Ford Escape Hybrid & Ford OEM #FL 910 & #FL 793**. The four cup-style wrenches covers many VW, BMW, Toyota, & Mazda 3. Also covers **Dodge Sprinter & Jeep 3.0L CRD engines** & 1999–2010 Volvo models.



#F 7630

76MM OIL FILTER WRENCH



76mm, 30 Flutes. 3/8" Drive. Applicable to **1981–2009 Ford Models w/ Motorcraft filter #FL400S**; Fits **2009–2010 Ford Models w/ Motorcraft filter #FL500S**; Also Fits **2000–2004 Ford Models w/ Motorcraft filter #FL2005**

#F 9336

93MM OIL FILTER WRENCH



93mm, 36 Flutes. Applicable to: **1991–2010 Ford Models w/ Motorcraft filter #FL820S**



#H 4550-2

19MM FUEL LINE WRENCH



Applicable: 16 & 20 Foot Mercedes Diesel Trucks; Lines at Delivery Pump on **Cummins Turbo Diesel 5.2L**.

#2132

32MM OIL FILTER SOCKET

- 32mm w/ 6 Flats
- Steel Construction
- **Applicable to GM, Chevy, Pontiac & Saturn Models w/ 4-cyl. Ecotec Engines**



#2124

24MM OIL FILTER SOCKET

24mm, 6 Flats. Applicable to: 2004–2011 BMW 5 Series, 7 Series & X5 w/ V8 motor (N62). **2008 Saturn Astra w/ 1.8L eco-tec engine**. Used for R & R of the oil filter housing cap. Also used for R & R of fuel filter housing on **2004–2010 Ford E & F Series**.



#2136

36MM OIL FILTER SOCKET

- 36mm w/ 6 Flats
- Steel Construction
- **Applicable to 2004 & Later Ford F Series 6.0L Turbo-Diesel Oil & Fuel Filter**
- **Used for R & R of Fuel Filter housing on 2004–2010 Ford E & F Series**



#2175

74.5MM OIL FILTER WRENCH

- 74.5mm w/ 14 Flats
- Metal Construction
- **Applicable to Dodge Sprinter w/ 2.7L 5-cyl.**



#M 0284

84MM OIL FILTER WRENCH

- 84mm w/ 14 Flats, 22mm Hex
- **Applicable to: 2007–2009 Dodge Sprinter, the 2007–2009 Jeep Cherokee w/ the 3.0L V6 CRD (Common Rail Diesel) Engines**



#M 0219

74MM OIL FILTER WRENCH

- 74mm w/ 14 Flats
- **Applicable to Ford Focus & Fusion, Chrysler Crossfire, 2007 Dodge Sprinter w/ 3.5L V6 & Ford Escape Hybrid**
- Metal Construction



#TOY 730

73MM TOYOTA OIL FILTER WRENCH

- 73mm, 14 Flats
- **Applicable to Mercury 4-Stroke (Marine Application) 220 & 225 Motors**
- Metal Construction



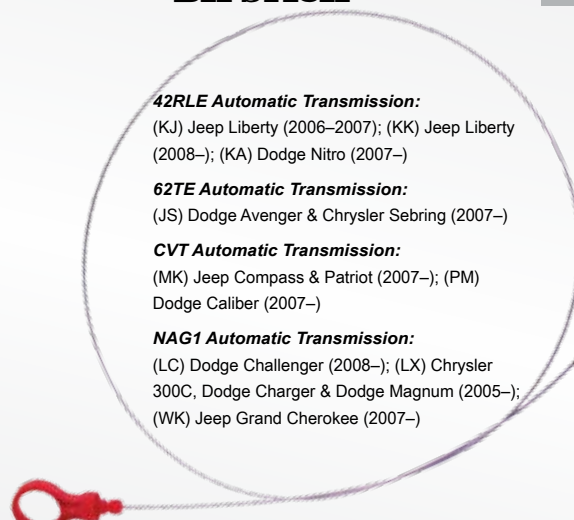
#OFHON1033

DODGE / FORD OIL FUNNEL



- Fits: Honda Accord, Civic, Element, Fit, NSX & S2000. All Acura Models (exc. MDX & RDX)
- Fits Most Nissan Models
- **Fits Dodge Cummins Turbo Diesel & Neon**
- **Ford Power Stroke engines (6.9L, 7.3L, 6.0L & 6.4L)**
- Fits Some Jaguar & Jeep Models
- Made of Durable ABS Plastic
- No More Mess
- Threads & Seals Onto the Valve Cover

CHRYSLER TRANSMISSION DIPSTICK



- 42RLE Automatic Transmission:** (KJ) Jeep Liberty (2006–2007); (KK) Jeep Liberty (2008–); (KA) Dodge Nitro (2007–)
- 62TE Automatic Transmission:** (JS) Dodge Avenger & Chrysler Sebring (2007–)
- CVT Automatic Transmission:** (MK) Jeep Compass & Patriot (2007–); (PM) Dodge Caliber (2007–)
- NAG1 Automatic Transmission:** (LC) Dodge Challenger (2008–); (LX) Chrysler 300C, Dodge Charger & Dodge Magnum (2005–); (WK) Jeep Grand Cherokee (2007–)

Used on all vehicles equipped w/ a NAG1, 42RLE, CVT Transmission & the 62TE Transaxle. **Note: This tool supersedes the original #9336 A & will work on all previous applications.**

#CRY933

SPRINTER TRANSMISSION DIPSTICK



Dodge Sprinter & Chrysler Crossfire Transmission Dipstick. Use in conjunction w/ factory repair literature to get correct fluid level measurements.

#SPR 886

GM/FORD OIL FUNNEL

- **Fits the New 2011 Ford 6.7L Turbo-Diesel**



- Attaches Directly to the Engine Oil Filler Neck or Valve Cover
- **Applicable to: Cadillac CTS; Chevy Cobalt, Silverado, Tahoe, Trailblazer & Vans; Ford Explorer, F150, Mustang & Taurus; GMC: Envoy & Sierra; Mercury Mountaineer; Pontiac G6 Grand Prix; Saturn SL1**
- Fits Some Jaguar Models
- Made of Durable ABS Plastic
- No More Mess

#FZ 1001 A**COOLING SYSTEM ADAPTER SET FOR ASIAN & DOMESTIC VEHICLES**

Set contains a carrying case & the following adapters:
#FZ 34, #FZ 35 A, #FZ 37, #FZ 128 & the #FZ 138.

**#FZ 29****CAP ADAPTER**

- Applicable to Chevy, Chrysler, Ford, Mercury & Many Others
- Fits Older Ford Ranger, Windstar & Escort

**#FZ 32 A****TANK ADAPTER**

- Works w/ Many Domestic Vehicles
- Applicable to Various Ford, Lincoln, Cadillac & Saturn Models

**TANK ADAPTER**

- Applicable to Older Ford Contour & Focus

**#FZ 34****TANK ADAPTER****#FZ 35 A**

- Applicable to Various Cadillac, Chevrolet, Ford, GM, Oldsmobile, Pontiac, Saturn & Many Other Models

**#FZ 25****TANK ADAPTER**

Used for pressurizing cooling system.
Applicable to: 1987–1990 Jeep models w/ 47 x 3mm threads on the filler neck.

**#FZ 55****TANK ADAPTER FOR DODGE SPRINTER**

- Used for Pressurizing the Cooling System
- Applicable to 2007–2009 Dodge Sprinter Van

**CAP ADAPTER**

- Applicable to Various GM & Ford Models

**#FZ 36****TANK ADAPTER****#FZ 37**

- Applicable to Ford: Escape 2001–2005, 1998–2001 Mercury Mystique & Contour

**#2040****RADIO REMOVAL TOOL**

Radio removal tool for VW, Audi, Ford, & Saab radios w/ DIN chassis.

**#3101****8-PIECE RADIO REMOVAL SET**

Set includes the #2040, #BMW 050, #3344 A (includes two pair), #M 2070, #3316, #BMW 025 & the #BMW 010. Applications include: Ford & VW models w/ a DIN chassis, BMW models w/ anti-theft radio, Audi A4, A6, A8 & new VW Beetles, 1992 & later Mercedes 129, 140, 163, 202 & 210 models, VW new body Passat, Jetta & Golf, center console removal on newer BMW Z3, X5 & 5 Series (E39), Multi-Informational Display (MID) removal on BMW X5 & 5 Series (E39).

#S 3054 X-10**10MM 12-POINT SOCKET**

10mm 12-Point Socket, 140mm long. Used for R & R of cylinder head bolts. Applicable to: OM 601, OM 602 & OM 603; 2003–2007 Pontiac Vibe, 2003–2007 Toyota Matrix w/ 1.8 L I-4. Also used on VW & Audi head bolts that are 10mm, 12-point. Most VW & Audi applications 1998 & later require the #3462 Head Bolt Socket.

#V 450**BRAKE PISTON ADAPTER**

3/8" Drive. For turning in the rear brake caliper piston. Applicable: Ford Fusion, Mercury Milan, 2005 & newer Volvo 40 & 50 Series, Mazda 3, Mini Cooper, Jaguar S-Type, Lincoln MKZ & Saab 9-3.

COOLING SYSTEM ADAPTER SET FOR DEEP & SHALLOW RADIATOR NECKS**5 PC. OIL FILTER SOCKET SET****#F 2500**

- Oil Filter Wrenches are 93mm (36 flutes), 74mm (14 flats) & 76mm (30 flutes)
- Oil Filter Sockets are 24mm & 36mm Hex (6 flats)
- Carrying Case Included
- Set Covers Most 1988–2010 Ford Models
- 5 Year Warranty
- All Tools are 3/8" Drive
- Includes: #M 0219, #F 9336, #F 7630, #2136 & #2124

**TANK ADAPTER****#FZ 138**

- Applicable to Chevy, Chrysler, & Many Others

**DEEP NECK (black)**

Twist Off

NO 16MM

16MM

WHERE GASKET OF CAP MEETS RADIATOR NECK

16MM

WHERE GASKET OF CAP MEETS RADIATOR NECK

16MM

WHERE GASKET OF CAP MEETS RADIATOR NECK

SHALLOW NECK (blue)

Twist On

NO 9.5MM

9.5MM

WHERE GASKET OF CAP MEETS RADIATOR NECK

9.5MM

WHERE GASKET OF CAP MEETS RADIATOR NECK

9.5MM

WHERE GASKET OF CAP MEETS RADIATOR NECK

Using the threaded rings & one base, all small-neck tab style radiators & expansion tanks can be pressurized w/ this new product. Simply thread on the taller or shorter ring to accommodate a shallow or deep neck. The broad range of applications include: Acura, Chrysler, Dodge, Eagle, Ford models (Explorer, Festiva, Tempo, Villager, Windstar, Sport-Trac), Geo, Honda, Hyundai, Infiniti, Izuzu, Lexus, Mazda, Mitsubishi, Nissan, Subaru, Suzuki & Toyota.

AST GENERAL TOOLS



#MW 34
SOFT ORANGE
WEDGE SET see pg. 29



#3004X
4-PIECE, 12-POINT
1/4" DRIVE SET see pg. 28

#8027
FUEL LINE RELEASE
TOOL see pg. 30



⇒ **SPECIAL BITS & BIT SETS**

⇒ **STUD REMOVER / INSTALLER TOOLS**

⇒ **LINE DISCONNECT TOOLS**

⇒ **ALUMINUM SOFT JAWS, HAMMERS & FILE SETS**



#3000
40-PIECE SOCKET SET
WITH 1/4" DRIVE see pg. 28



#203
7-PIECE STANDARD
STUD PULLER SET see pg. 29

#ALSJ05
ALUMINUM SOFT JAW
VISE BLOCKS see pg. 29





#3000

40-PIECE SOCKET SET WITH 1/4" DRIVE

Contains: T-6 through T-45 6-Point Tamperproof® Torx; T-10 through T-50 6-Point Standard Torx; 4mm, 5mm, 6mm & 8mm 12-Point; 2.5, 3, 4, 5, 6 & 8 Allen Drivers; 5/32"-5/16" Straight Blade Drivers; #1, #2 & #3 Phillips Drivers



#3000-4 K

4-PIECE ALLEN SOCKET BIT SET



4-Piece Allen Socket Bit Set. Includes: 4mm, 5mm, 6mm & 8mm 1/4" drive sockets.

#3000-6 K

6-PIECE ALLEN SOCKET BIT SET



6-Piece Allen Socket Bit Set. Includes: 2.5mm, 3mm, 4mm, 5mm, 6mm & 8mm 1/4" drive sockets.

#3004X

4-PC, 12-PT, 1/4" DRIVE SET



4-Piece, 12-Point, 1/4" Drive Socket Set. Includes: 4mm, 5mm, 6mm & 8mm sockets. 1-Piece steel construction

#T 314

THOREX COPPER HAMMER



Approximate weight 4lbs. 1 3/4" Face Diameter (44mm). Overall length 12".

#1200

UNIVERSAL TIE ROD END/BALL JOINT PULLER



This tool's unique screw joint offers a wide gripping range. Well-suited for the job because of the #1200's parallel arrangement of the top & bottom jaw plates.

#3900

5 LOBE TAMPER-PROOF BIT SET

5 Lobe Bits, 1/4" Drive Bit Holder. Includes: T-10, T-15, T-20, T-25, T-27, T-30, T-40, T-45 & T-50



#H 2223 LG T-30

TORX SOCKET INSERT



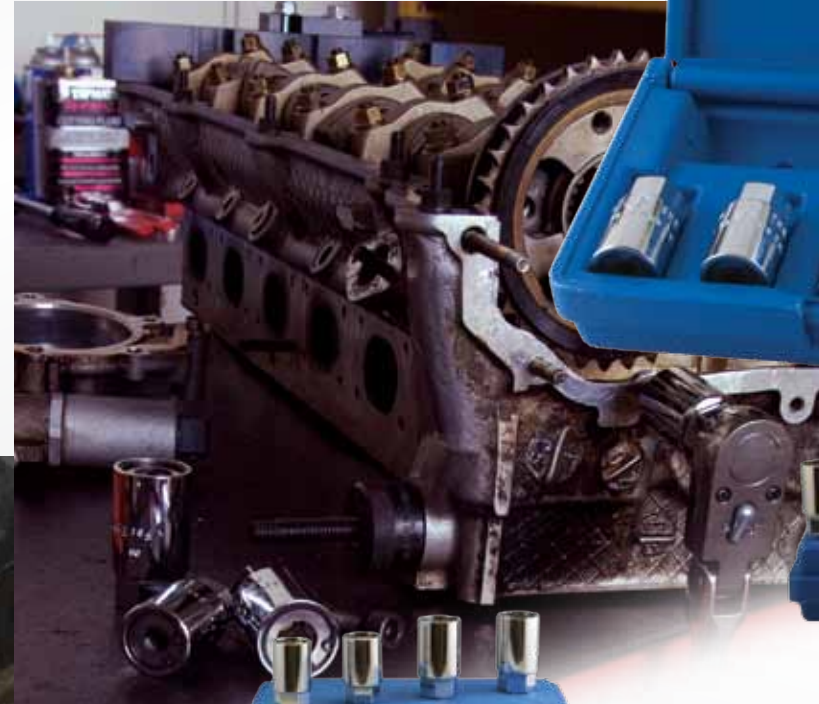
T-30 torx used for R & R of the airbag from the steering wheel. Applicable to: Many BMW, Mercedes-Benz, Saab & VW/Audi models.

#1201

UNIVERSAL TIE ROD END & BALL JOINT PULLER



Universal Tie Rod End & Ball Joint Puller. Opens from 5 to 54mm, w/ a 28.75mm inside opening & an overall outside size of 47mm. Comparable to VW #3287A



#201

4 PC. METRIC STUD PULLER SET

Includes 6mm, 8mm, 10mm & 12mm stud remover & installer tools.



#201-7

5 PC. METRIC STUD PULLER SET

Includes the New 7mm stud remover, ideal for BMW manifold studs. Includes 6mm, 7mm, 8mm, 10mm & 12mm stud remover / installers.



#203

7 PC. STANDARD SIZE STUD PULLER SET

Includes 1/4", 5/16", 3/8", 7/16", 1/2", 9/16" & 5/8" stud remover & installer tools.



#202

5 PC. STANDARD SIZE STUD PULLER SET

Includes 1/4", 5/16", 3/8", 7/16", & 1/2" stud remover & installer tools.



INDIVIDUAL STUD REMOVERS / INSTALLERS

#200-9/16 & #200-5/8 are 27mm Hex, No Square Drive

6mm	8mm	10mm	12mm	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"
#200-6	#200-8	#200-10	#200-12	#200-1/4	#200-5/16	#200-3/8	#200-7/16	#200-1/2	#200-9/16	#200-5/8

CAMSHAFT PULLEY HOLDER



Comes w/ 3 sets of interchangeable pins. Pins may be threaded in two different locations, based on application access. Overall length 18". 12" Spread between pins at tip of arms, when pivot arm is at 90°. Holding pins are Made in USA.

#7200

#7200 SHOWN HERE IN USE

MADE IN USA

SOFT ORANGE WEDGE SET



Constructed of soft orange polyethylene, this set of three wedge-style dash panel removal tools allows installers to remove dash trim bezels & other vehicle interior moldings including door panels, without causing damage. Great for electronics installation work.

#MW 34

MADE IN USA

HARD BLACK WEDGE SET



Constructed of strong black polycarbonate, this set of three wedge-style dash panel removal tools allows installers to remove oil pans, timing covers, rocker covers & more, without causing damage.

#MW 35

ALUMINUM SOFT JAW VISE BLOCKS

Pair of 5" soft jaws machined from aluminum. V-slots put a better grip on round objects. Each jaw has a small & large vertical slot. A large horizontal slot runs the length of each jaw. Strong magnets attach soft jaws firmly to 4", 5" & 6" vises.



#3810

6-PIECE FILE SET

Includes six files & a protective case.



#8027

**FUEL LINE
RELEASE TOOL**MORE
94
INFO

- Applicable to 2011 GM w/ 6.6 V8 Turbo Diesel Duramax
- Made of Orange-Anodized Aluminum
- Used for removing the fuel line from the indirect fuel injector

#8010

**1/4" FUEL LINE
REMOVER**

- Black-Anodized Aluminum Construction
- Applicable to 1995–1996 Ford Mustang

MORE
93
INFO

#8013

**3/8" FUEL LINE
REMOVER**

- Gold-Anodized Aluminum Construction
- Applicable to Ford Models w/ 3/8" Fuel Line

MORE
93
INFO

#8016

**1/2" OIL COOLER LINE
REMOVER**

- Green-Anodized Aluminum Construction
- Applicable to Dodge Ram V10 or Cummins Turbo Diesel

MORE
92
INFO

#8022

**GM FUEL FILTER
DISCONNECT TOOL**

- Applicable to 2002–2004 Chevy Tahoe & Suburban
- Made of Flexible Plastic for Extremely Tight Application

MORE
90
INFO

#8024

**1/2" OIL COOLER LINE
REMOVER**

- Black-Anodized Aluminum Construction
- Applicable to 2007 Ford Explorer & Sport Trac

MORE
94
INFO

#8012

5/16" FUEL FILTER REMOVER

- Red-Anodized Aluminum Construction
- Applicable to Ford & GM w/ 5/16" Fuel Line

MORE
93
INFO

#8014

**5/16" SPECIAL OIL COOLER
LINE REMOVER**

- Applicable to Ford Taurus & Ford Escort w/ AXOD & ATX transmissions
- Blue-Anodized Aluminum Construction

MORE
93
INFO

#8021

**3/8" OIL COOLER LINE
REMOVER**

- Purple-Anodized Aluminum Construction
- Applicable to Ford Trucks & S.U.V.s

MORE
93
INFO

#8023

**1/2" OIL COOLER LINE
REMOVER**

- Orange-Anodized Aluminum Construction
- Applicable to 2005 Ford 6.0L Turbo Diesel Trucks, 2009 Escape w/ 6F Trans & Ford Edge

MORE
94
INFO

#8026

**5/16" NISSAN/TOYOTA FUEL
LINE DISCONNECT TOOL**

- Green-Anodized Aluminum Construction
- Disconnects the Fuel Rail from the Fuel Line on 2004 & Newer Nissan & Toyota Models

#8027 SHOWN
HERE IN USE ON
2011 SIERRA#8021 SHOWN
HERE IN USE#8023 SHOWN
HERE IN USE

#8110

**10 - PIECE LINE
DISCONNECT TOOL SET****FEATURES:**

- The #8110's Nissan & Toyota Flared Fuel Line Application is Not Found in Other Sets
- #8023 Fits Ford 6.0 Turbo Diesel Transmission Oil Cooler Lines, & New Ford Escape & Edge
- 3/8" Transmission Oil Cooler Line Tool for Ford & Cadillac CTS
- Tahoe & Suburban Fuel Filter Removal Tool
- 2006 & 2007 Ford Explorer Transmission Oil Cooler Line Disconnect Tools
- Original 1/4", 5/16" & 3/8" Ford & GM Disconnect Tools Also Included

#8026 SHOWN
HERE IN USE

#5063

HONDA/NISSAN
OIL FILTER
WRENCH

MADE IN USA

MORE
91
INFO#5063 SHOWN
HERE ON FILTER

- 63mm w/ 14 Flats
- Fits Honda Models through 2011 (exc. S2000)

#HO10PT

10-POINT
SOCKET

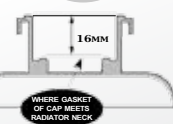
10-Point Socket.
Applicable to: *Honda*
rear lower control arms.

#FZ 128

TANK
ADAPTER

MADE IN USA

- Applicable to 1990–1993 Honda Accord, 1988–1993 Civic, 1991–2006 Honda Motorcycles; & 1990–1993 Acura Integra
- Used for Pressurizing the Cooling System

MORE
91
INFO

#FZ 138

TANK ADAPTER

MADE IN USA

- Applicable to 2008 Honda Element & S 2000, 1994–2009 Accord, 1994–2005 Civic, 2004 Civic Hybrid, 2009 CRV & Fit, 1999–2009 Odyssey, 2003–2008 Pilot; 1994–1999 Acura Integra, 1991–1996 Legend
- Used for Pressurizing the Cooling System

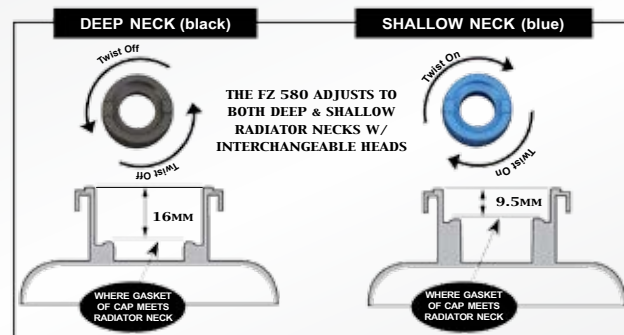
MORE
91
INFO

#FZ 580

COOLING SYSTEM ADAPTER
SET FOR DEEP & SHALLOW
RADIATOR NECKS

- The #FZ 580 Covers All 1990–2010 Honda Models

MADE IN USA



Using the threaded rings & one base, all small-neck tab style radiators & expansion tanks can be pressurized w/ this new product. Simply thread on the taller or shorter ring to accommodate a shallow or deep neck. The broad range of applications include: Acura, Chrysler, Dodge, Eagle, Ford models (Explorer, Festiva, Tempo, Villager, Windstar, Sport-Trac), Geo, *Honda*, Hyundai, Infiniti, Izuzu, Lexus, Mazda, Mitsubishi, Nissan, Subaru, Suzuki & Toyota.

#HON1419

HONDA SERPENTINE
BELT WRENCH

Equipped w/ 14mm & 19mm, 12 pt. secured sockets, for engagement every 30°. Ideal for strong tensioners used on 2006 & newer *Honda Civic*. Also applicable to *Accord*, *Odyssey* & *Pilot*.



#ATF 1002 BASIC

BASIC DRIVE LINE
FILLER SYSTEM

Ideal for Honda Pilot differential fills. For BMW, *Honda*, Nissan & many other universal applications. Includes pump, 3 liter container, hose, shut-off valve & #ATF 102

(INSET) SHOWN HERE IN
USE ON HONDA PILOT
DIFFERENTIAL

- 5L & 10L Containers Also Available
- Includes Quick Attachment Adapter #ATF 102
- Pump Dispenses Efficiently
- Filler Can Handle 90 Weight Oil
- On / Off Ball Valve w/ Safety Catch
- Container Made of UHDP (ULTRA HIGH DENSITY POLYETHYLENE)

#OFHON1033

ASIAN/DOMESTIC
OIL FUNNEL

MADE IN USA

- Fits: *Honda Accord, Civic, Element, Fit, NSX & S2000. All Acura Models* (exc. MDX & RDX)
- Fits Most Nissan Models
- Fits Dodge Cummins Turbo Diesel & Neon
- Ford Power Stroke engines (6.9L, 7.3L, 6.0L & 6.4L)
- Made of Durable ABS Plastic
- No More Mess
- Threads & Seals Onto the Valve Cover

#8007

FAN CLUTCH HOLDER



Fan clutch holder for **Land Rover** w/ V8 engines.

#BMW 345

TANK ADAPTER

- Applicable to 1988–2005 BMW (exc. new 5 & 6 Series); 1995–2004 Land Rover Range Rover & 1999–2004 Discovery Series 2
- For Pressurizing Cooling System



#FZ 32 A

TANK ADAPTER

- Applicable to 2005 Land Rover Freelander, 2005–2007 LR3, & 2006 Range Rover Sport
- Used for Pressurizing the Cooling System



#FZ 25

TANK ADAPTER

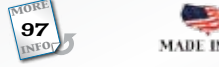
- Applicable to: 2002–2004 Land Rover Freelander
- Applicable to: Models w/ 47 x 3mm Threads on the Filler Neck
- Used for Pressurizing the Cooling System



#FZ 34

TANK ADAPTER

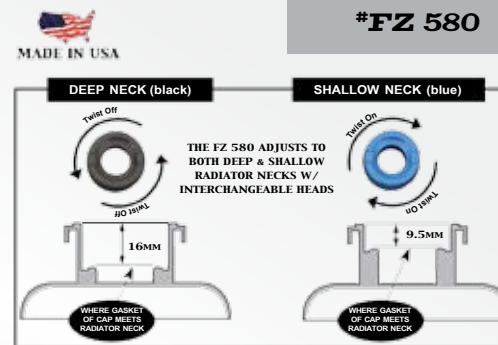
- Applicable to 1989–1998 Land Rover Discovery Series 1
- Used for Pressurizing the Cooling System



COOLING SYSTEM ADAPTER SET FOR DEEP & SHALLOW RADIATOR NECKS



Using the threaded rings & one base, all small-neck tab style radiators & expansion tanks can be pressurized w/ this new product. Simply thread on the taller or shorter ring to accommodate a shallow or deep neck. The broad range of applications include: Acura, Chrysler, Dodge, Eagle, Ford models (Explorer, Festiva, Tempo, Villager, Windstar, Sport-Trac), Geo, Honda, Hyundai, Infiniti, Isuzu, Lexus, **Mazda**, **Mitsubishi**, Nissan, Subaru, Suzuki & Toyota.



#FZ 580

EUROPEAN COOLING SYSTEM ADAPTER SET



This set contains the following adapters: #BMW 345, #FZ 22, #FZ 25, #BMW 350, #FZ 41 & #M 0349.

#FZ 1002

ASIAN & DOMESTIC COOLING SYSTEM ADAPTER SET



Set contains a carrying case & the following AST cooling system adapters: #FZ 34, #FZ 35 A, #FZ 37, #FZ 128 & the #FZ 138.



#FZ 47

TANK ADAPTER

- Applicable to Land Rover LR2 & 2004–2006 Mazda 3
- Used for Pressurizing the Cooling System



#FZ 128

TANK ADAPTER

- Applicable to 1985–1999 All Mazda Models (exc. Protege, 2004 Mazda 6, 2000–2001 Protege (automatic); & 1991–1998 Mitsubishi 3000 GT, 1992–1995 Diamante, 1985–1993 Galant, 1985–1992 Mirage, 1989–1998 Montero, 2004 Outlander
- Used for Pressurizing the Cooling System
- For Cap Adapter see #FZ 29



#M 0219

74MM OIL FILTER WRENCH

- 74mm w/ 14 Flats
- Applicable to: 2004–2006 Mazda 3 (2.3L), 2005–2007 Mazda 5 (2.3L), Mazda 6 (2.3L), 2006–2007 Mazdaspeed 3 & 2006–2007 Mazdaspeed 6
- Metal Construction



#M 0129 SHOWN HERE ON FILTER HOUSING



#FZ 138

TANK ADAPTER

- Applicable to 1995 Mazda Protege (1.5L), 2000–2001 Protege (manual); & 1996–1998 Mitsubishi Diamante, 2002 Eclipse (Spyder), 1994–2003 Galant, 1993–1999 Mirage, 1997–1999 Montero Sport
- Used for Pressurizing the Cooling System



#JA 9015

OIL FILTER WRENCH

- Applicable to 2010–2011 5.0L V8 Jaguar Models



#JA 9015 SHOWN HERE ON FILTER HOUSING



ASIAN/DOMESTIC OIL FUNNEL



- Made of Durable ABS Plastic
- No More Mess
- Threads & Seals Onto the Valve Cover
- Fits 2002 & Older Land Rover, Discovery & Defender w/ 3.5L, 3.9L, 4.0L, 4.2L & 4.6L Engines
- Fits Jaguar 4.2L Engines

#OFHON1033

JAGUAR OIL FUNNEL



- Made of Strong Polycarbonate
- No More Mess
- 1/4-Turn & Seals Onto the Valve Cover
- Fits 2003 & Newer Jaguar & Land Rover (exc. 3.0L V6)

#3200 T-30

T-30 TORX SCREWDRIVER

Used for R & R as well as adjustments of headlamps on 1999–2004 Audi A6. Also used to access the door handle fasteners on some Mercedes-Benz models. Applicable to: **2000–2004 Mercedes S-Class w/ 220 chassis.**

#H 2771

17MM VALVE ADJUSTMENT WRENCH



Offset 17mm Wrench is used for valve adjustment on **Mercedes-Benz M110 gas engines** (dual camshaft 6 cyl). Also used to pry off the spark plug connectors from the spark plugs on **112 & 113 engines.**

#H 2223 LG T-30

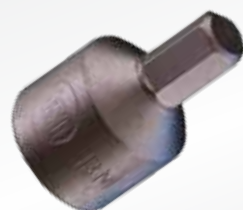
TORX SOCKET INSERT



This T-30 torx is for the R & R of the airbag from the steering wheel & is applicable to many BMW, **Mercedes-Benz**, Saab & VW models.

#BMW 377

7MM ALLEN SOCKET



7mm, 3/8" Drive Allen socket. Applicable to: BMW E36, E46, E39 & E31 models, **Mercedes S-Class (221) & C-Class (204).** For R & R of rear caliper bolts.

#M 0734

GUIDE RAIL PIN PULLER

Used for removing the most stubborn pins from the cylinder head. Unlike the short slide hammer previously used to attempt this job, the **#M 0734** incorporates a thrust bearing to ease the pulling action. Overall length is 85mm, which allows access to tight problem areas. Applicable to: **Mercedes engines M 116, M 117, OM 601, OM 602, OM 603, OM 615 & OM 616.** Can be used on M 272 & M 273 but shims and/or spacers are necessary.



#H 1012 T-100

T-100 3/4" DRIVE SOCKET



Used to remove the plug, for accessing the parking pawl detent on the **722.9 Mercedes transmission.**

#H 2760

OIL DRAIN & FILLER PLUG WRENCH



14mm Allen, 17mm Box Wrench. Used for the R & R of the differential oil filler plug on many BMW & **Mercedes-Benz models.**

#H 4550

17MM INJECTION LINE WRENCH



17mm Injection Line Wrench is an offset, 3/8" drive fuel injection line wrench.

#H 992 SLG-T55

HEAD BOLT SOCKET FOR MERCEDES



T-55 Torx head bolt socket for Mercedes. Applicable to: **Mercedes-Benz models w/ motors M112, M113, M120 & M137.**

#M 3857

PIN WRENCH SOCKET FOR MERCEDES M-CLASS



3/4" drive Pin Wrench Socket used to secure the retaining ring during R & R of ball joints. Applicable to: **Mercedes 163 M-Class front & rear axles.**



#M 9004

PULLEY HOLDER

Crankshaft harmonic balancer holder. Used for the R & R of the front crankshaft bolt. Applicable to: **M112 (V6) & M113 (V8) engines.**



#S 3054 X-10

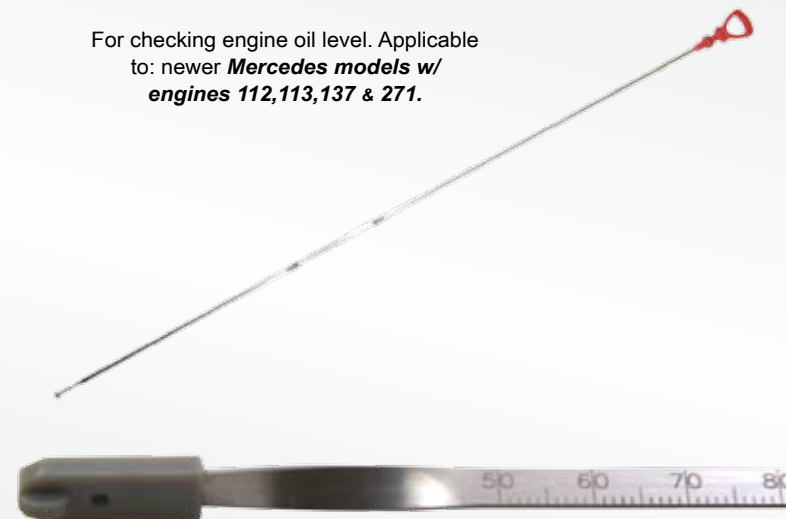
10MM 12-POINT SOCKET



140mm Long Socket. Used for R & R cylinder head bolts. Applicable to: **OM 601, OM 602 & OM 603;** 2003–2007 Pontiac Vibe, 2003–2007 Toyota Matrix w/ 1.8L I-4. Also used on VW/Audi head bolts that are 10mm, 12-point.

ENGINE OIL DIPSTICK

For checking engine oil level. Applicable to: newer **Mercedes models w/ engines 112,113,137 & 271.**



#M 0721

722.6 TRANSMISSION DIPSTICK

For checking ATF level. Applicable to: **Mercedes-Benz models 1997 & newer w/ 722.6 transmission.**



#ATF 1100-5

9-PIECE DRIVE LINE FILLER SYSTEM



For BMW, Ford, Honda, **Mercedes**, Nissan, Toyota, VW/Audi & many other universal applications. Includes pump, 5 liter container, hose, shut-off valve & **#ATF 101, #ATF 102, #ATF 103, #ATF 104, #ATF 105, #ATF 16 DSG, #ATF 17 CVT, #ATF 129 & #ATFTOY118.**

#ATF 1004-5 MB

MERCEDES DRIVE LINE FILLER SYSTEM



For filling fluids in the 722.9 Automatic Transmissions using a 12mm x 1.5 adapter. Includes pump, container, hose, shut-off valve & **#ATF 129.**

12MM x 1.5 DRIVE LINE FILLER SYSTEM ADAPTER FOR MERCEDES-BENZ



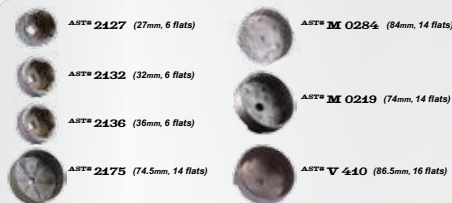
12mm x 1.5 Mercedes-Benz Adapter used in conjunction w/ the ATF Filler System. Applicable to: **722.9 automatic transmissions.** Individual adapter included (does not include pump, container, hose, or shut-off valve). For the complete ATF Mercedes Filler System Set, see **#ATF 1004-5 MB.**

#ATF 129

#M 7226

#2101

7-PIECE OIL FILTER WRENCH SET



Contains oil filter wrench sockets for many domestic & foreign applications. Covers all Mercedes-Benz applications. The 27mm, 32mm & 36mm hex sizes covers VW/Audi, BMW, newer **Mercedes 4-cyl. engines**, Saturn & GM 2.2 L Ecotec engines. Covers Ford Escape Hybrid & Ford OEM #FL 910 & #FL 793. The four cup-style wrenches covers many VW, BMW, Toyota, & Mazda 3. Also covers Dodge Sprinter & Jeep 3.0L CRD engines & 1999–2010 Volvo models.



MADE IN USA
PATENT PENDING

#OFAUD1000

VW, AUDI, MERCEDES & BMW OIL FILLER

- Fits 1996 & Later BMW 6 cyl. & 8 cyl.
- Fits Dodge Sprinter
- Fits 1998 & Newer Mercedes Motors 112, 113, 271, 272 & 273 (V6 & V8)
- Fits VW/Audi Engines: 1.8 T, 1.9L TDI, 2.0 T, 2.8L (30v), 3.0L (30v), 3.2L, 3.6L & 4.2L (40v)
- No More Mess



#M 0E24

E24 FEMALE TORX SOCKET



Female torx socket. Applicable to: Front axle nut on **Mercedes 4Matic** models, new C-Class (204), New E-Class (212), new S-Class (221).

#BM 1276

76MM OIL FILTER WRENCH

- 76mm, 12 Flutes, 3/8" Drive
- Applicable to M102 & M103 Mercedes Engines w/ 12 Flute OEM Oil Filter
- Metal Construction



#2127

27MM OIL FILTER SOCKET

- 27mm w/ 6 Flats
- Applicable to Newer Mercedes Models w/ 4 Cyl. Engines
- Steel Construction



#2136

36MM OIL FILTER SOCKET

- 36mm w/ 6 Flats
- Applicable to Mercedes Diesel 604, 605 & 606 Engines
- Steel Construction



FUEL LINE PLIERS

#MVW2050F

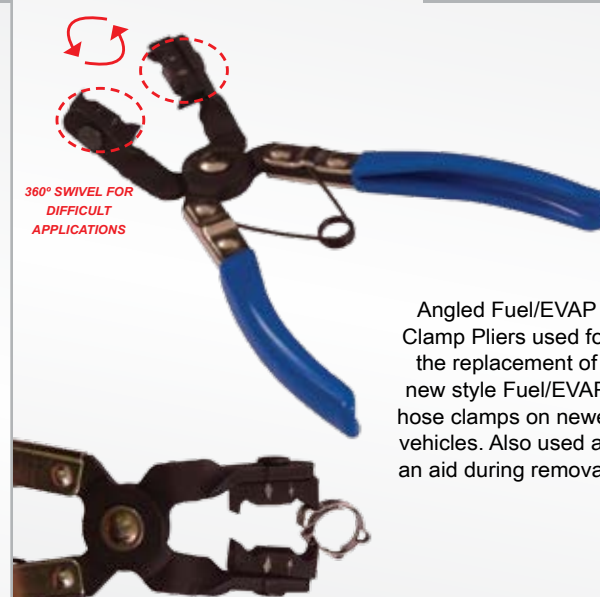
*MVW2050F SHOWN HERE ON FUEL FILTER



Fuel line pliers for VW fuel lines w/ plastic snap-together connectors & for **Mercedes-Benz 163 M-Class fuel filters**.

SWIVEL JAW FUEL/ EVAP CLAMP PLIERS

#M2010ACP



Angled Fuel/EVAP Clamp Pliers used for the replacement of new style Fuel/EVAP hose clamps on newer vehicles. Also used as an aid during removal.

#M 0219

74MM OIL FILTER WRENCH

- 74mm w/ 14 Flats
- Applicable to 1998–2006 Mercedes Models w/ V6 (112) & V8 (113)
- Metal Construction



#M 0284

84MM OIL FILTER WRENCH

- 84mm w/ 14 Flats, 22mm Hex
- Applicable to: 2007–2009 Dodge Sprinter, 2007–2011 Mercedes-Benz Turbo-Diesel & the 2007–2009 Jeep Cherokee w/ the 3.0L V6 CRD (Common Rail Diesel) Engines



#M 3200 A

CAM ALIGNMENT PLATES FOR MERCEDES



Used for cam alignment. Applicable to: **1998 & later Mercedes including M 112 & M 113 engines (exc. AMG models);** Chrysler Crossfire (exc. SRT6).

#M 0333

PULLER SET (PAIR OF HOOKS)

Used for the R & R of the instrument cluster on Mercedes models. Applicable to: **Mercedes W 107, 116, 123, 124, 126, 129, 140, 168, 170, 201, 202, 208, 210 & 463 models.**



#S 1553 N

WIRE TERMINAL EXTRACTOR



This tool is used to remove flat terminals w/ one release tang from the connector plug.

#S 1591 N

WIRE TERMINAL EXTRACTOR



This tool is used to remove flat terminals w/ two release tangs from the connector plug. 1.65mm wide, 2.8mm apart

4 PC. FLEX NUT DRIVER SET

#3700



Includes 5mm, 6mm, 7mm & 8mm Flexible Nut Drivers. Use the **#3700** to tighten & loosen the hard-to-reach hose clamps on various makes & models. 5-year warranty. Blue handle constructed of tough composite plastic.



#FZ 1002

EUROPEAN COOLING SYSTEM ADAPTER SET



MADE IN USA

Includes the following AST tools: **#BMW 345:** Fits BMW 2004–2005 3 Series, 2002–2006 7 Series, 2005–2006 X3 & X5, Land Rover: 2002 Discovery & 1995–2004 Range Rover. **#FZ 22:** Fits Porsche 911 (water-cooled, w/ threaded necks) & Boxster; Volvo 670 & VN 430; VW/Audi A8, All 1975–1993 models w/ male threads on exp. tank & S8. **#FZ 25:** Fits all 1987–1990 Jeep models; 2002 Land Rover Freelander; Mini Cooper S; All 1985–1987 Renault Models; 1978–1994 Saab 900 & 1986–1998 9000; All 1987–1991 Sterling models; 1978–2006 Volvo models w/ threaded neck & 1978–2006 Volvo Trucks w/ 47mm x 3mm threads on secondary filler neck. **#BMW 350:** 2006–2009 BMW 3 Series (E90), 2004–2009 5 & 6 Series (E60, E63, E64) & X5 2007–2009 (E70). **#FZ 41:** Fits All Porsche Models; 2006 Audi A3, 1996–2009 A4, 2007 A4 Wagon, 1998–2009 A6, 2000–2002 TT, 1999–2009 VW Golf, 1999–2008 Jetta, 2005.5 Jetta (new body), 1998–2004 New Beetle, 1998–2004 Passat, Q7 (3.6L), 2004–2009 Touareg. **#M 0349:** Fits **All 1996 & newer Mercedes** w/ threaded cap [exc. 1998–2005 M-Class (163)].

#FZ 32 A

TANK ADAPTER

- **Applicable to: 1998–2005 Mercedes M Class (M163)**
- Used for Pressurizing the Cooling System



#FZ 36

CAP ADAPTER

- For Testing Pressure Relief in Cooling System Cap
- **Applicable to: 1998–2005 Mercedes-Benz M-Class (M 163)**



#M 0349

TANK ADAPTER

- **Applicable: Mercedes Models w/ a Threaded Filler Neck (exc. M-Class, 163 body)**
- Used for Pressurizing the Cooling System



#M 2070

RADIO REMOVAL TOOL

Used for radio removal on **1992 & later Mercedes** models. Applicable to: **Models 140, 129, 202 & 210.**



#H 4550-2

19MM FUEL LINE WRENCH

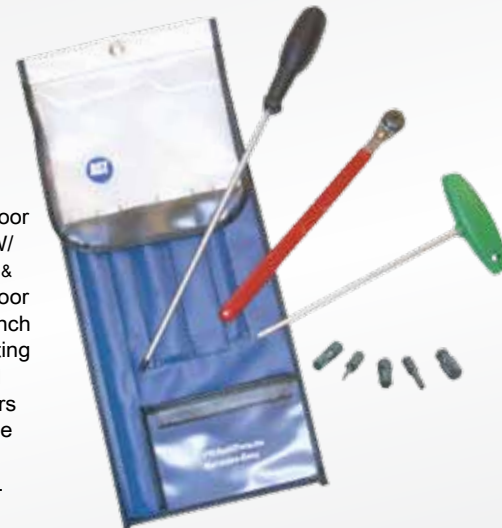


Applicable: 16 & 20 Foot **Mercedes Diesel Trucks**; Lines at Delivery Pump on Cummins Turbo Diesel 5.2L.

#3200

EUROPEAN DOOR/HINGE HANDLE SET

Compact solution to accessing the special fasteners found on the door hinges & handles of VW/Audi, **Mercedes-Benz** & Porsche. Includes four door hinge bits (less than an inch long), & a slender ratcheting wrench. Also included are the extra long drivers necessary to access the door handles of Mercedes-Benz & VW.



SOCKET

#H 4556



Used for the R & R of the delivery valve on **Mercedes-Benz Diesel** injection pumps. Applicable to: **Diesel engines 601, 602, 603, 605, 606, 615, 616 & 617.**



30MM DEEP SOCKET

#100-30 A



30mm Deep thin-walled socket used for R & R of transmission drive shaft flange nut & pinion shaft flange nut of differential.

BRAKE BLEEDER WRENCH

#EU 2007



7mm Brake Bleeder Wrench



BRAKE BLEEDER WRENCH

#EU 2008

8mm Brake Bleeder Wrench



BRAKE BLEEDER WRENCH

#EU 2009



9mm Brake Bleeder Wrench



BRAKE BLEEDER WRENCH

#EU 2011

11mm Brake Bleeder Wrench



#EU 2000

7-PIECE BRAKE CALIPER/ BLEEDER SERVICE SET



Includes 7mm, 8mm, 9mm & 11mm brake bleeder wrenches, 3 brake caliper sockets & custom powder-coated metal organizer tray. Wrenches fit bleeder screws on **Mercedes**, BMW, Volvo & VW/Audi models. Applicable to: Brake caliper bolts on the majority of BMW models, **Mercedes S-Class (221)**, **newer C-Class (204)**, **M-Class (164)**; Volvo cars, & rear caliper bolts on 2006–newer VW Jetta & Passat.

⇒ **STUD REMOVERS**

⇒ **OIL FILTER SOCKETS & WRENCHES**

⇒ **CUSTOM FUNNELS**

⇒ **SPECIAL BITS & BIT SETS**

***201-7**
5 PC. METRIC
STUD PULLER
SET see pg. 47



***3000**
40-PIECE SOCKET
SET see pg. 44



***M 0219**
OIL FILTER
WRENCH see pg. 46



***203**
7-PIECE STANDARD
STUD PULLER
SET see pg. 47



***OFHD35**
HARLEY OIL
FUNNEL see pg. 45



AST **MOTORCYCLE TOOLS**





#3000

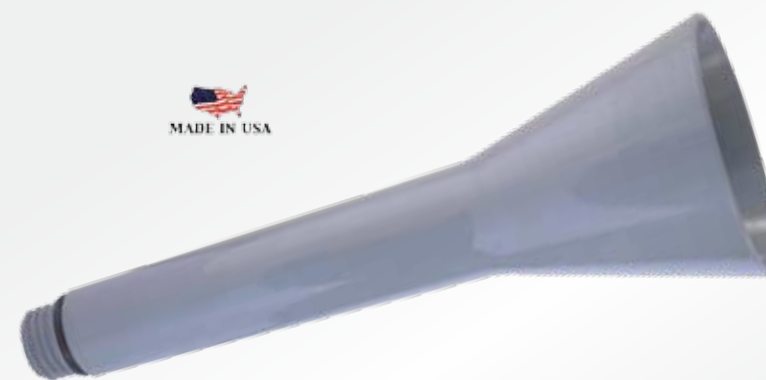
**40-PIECE SOCKET SET
WITH 1/4" DRIVE**

Contains: T-6 through T-45 6-Point Tamperproof® Torx; T-10 through T-50 6-Point Standard Torx; 4mm, 5mm, 6mm & 8mm 12-Point; 2.5, 3, 4, 5, 6 & 8 Allen Drivers; 5/32"-5/16" Straight Blade Drivers; #1, #2 & #3 Phillips Drivers.

**HARLEY-DAVIDSON
OIL FUNNEL**

#OFHD35

- Made of Durable ABS Plastic
- No More Mess
- Threads & Seals Just like the Factory Cap
- Fits All 2007–2011 Harley-Davidson Dyna & Touring Models
- For Threaded Caps



#3810

**6-PIECE
FILE SET**

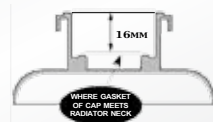
Includes six files & a protective case.



#FZ 128

TANK ADAPTER

- Used for Pressurizing the Cooling System
- For Deep Necks
- Fits Many Asian Motorcycles



#FZ 138

TANK ADAPTER

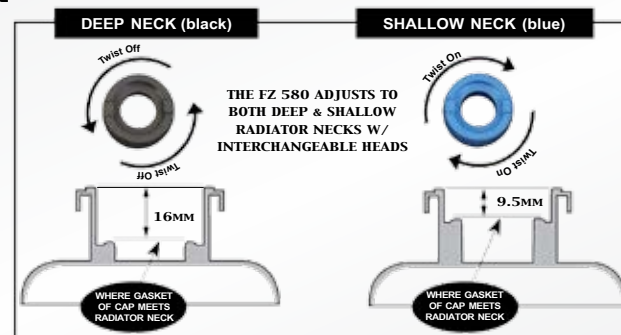
- Used for Pressurizing the Cooling System
- For Shallow Necks
- Fits Many Asian Motorcycles



#FZ 580

**COOLING SYSTEM ADAPTER
SET FOR DEEP & SHALLOW
RADIATOR NECKS**

- Fits Most Asian Motorcycles



Using the threaded rings & one base, all small-neck tab style radiators & expansion tanks can be pressurized w/ this new product. Simply thread on the taller or shorter ring to accommodate a shallow or deep neck. The broad range of applications include: Acura, Chrysler, Dodge, Eagle, Ford models (Explorer, Festiva, Tempo, Villager, Windstar, Sport-Trac), Geo, Honda, Hyundai, Infiniti, Izuzu, Lexus, Mazda, Mitsubishi, Nissan, Subaru, Suzuki & Toyota.

#OFHD419
SHOWN HERE IN USE**HARLEY-DAVIDSON
OIL FUNNEL**

#OFHD419

- Made of Durable ABS Plastic
- No More Mess
- Seals Just like the Factory Cap
- Fits All 1999–2006 Harley-Davidson Touring Models
- Used on Push-Type Oil Caps



#BM 1276

OIL FILTER WRENCH FOR BMW MOTORCYCLES

#BM 1276 SHOWN HERE ON FILTER



MORE 85 INFO

76mm, 12 flutes, 3/8" drive, R & R of oil filter on **BMW Motorcycles 2007-2011 w/ oil filter #11 42 7 673 541.** Also R & R of older Mercedes OEM oil filters w/ 12 flutes.



#5040

66.5MM OIL FILTER WRENCH

- 66.5mm w/ 14 Flats
- **Applicable to: Yamaha filter #5GH-13440-20 & Buell Models XB9 & XB12**



MORE 104 INFO



#5063

HONDA/NISSAN OIL FILTER WRENCH

- 63mm w/ 14 Flats
- **Applicable to: Yamaha ATV, Yamaha Filter #5H-13440-00 G & Kawasaki Filter #16097-0003**



MORE 109 INFO



#M 0219

74MM OIL FILTER WRENCH



MORE 89 INFO

Applicable to **Older BMW filter #1142 1460845** including: 1987-1997 K 75; 1990-1997 K 75 RT; 1986-1997 K 75 S; 1999-2004 R 850, R 850 C/R/GS/Boxer/RT; 1983-1994 K 1, K 100, K 100LT/RS/RT; 1992-1999 K 1100LT; All R1100; 1999-2005 R 1150GS; 1997-2007 K 1200 RS/C/LT; 1999-2004 R 1200 C/CL; & **New 2010 BMW Filter #1142 7721779** including: 2010 K 1200 S, K 1300 S, K 1200 R/Sport, K 1200 GT

#TOY 730

73MM TOYOTA OIL FILTER WRENCH

- 73mm w/ 14 Flats
- **Applicable to Yamaha Marine Outboard Engines I-4 & V6 & Yamaha Filter #69J-13440-00**

#TOY 730 SHOWN HERE ON FILTER



MORE 109 INFO



#HD 1474

OIL FILTER WRENCH



MORE 94 INFO

Applicable to: Harley Davidson Motorcycles w/ a spin on oil filter



#HD 1474 SHOWN HERE ON FILTER

#201-7

5 PC. METRIC STUD PULLER SET

Includes the New 7mm stud remover, ideal for BMW manifold studs. Includes 6mm, 7mm, 8mm, 10mm & 12mm stud remover / installers.

#203

7 PC. STANDARD SIZE STUD PULLER SET

Includes 1/4", 5/16", 3/8", 7/16", 1/2", 9/16" & 5/8" stud remover & installer tools.

#202

5 PC. STANDARD SIZE STUD PULLER SET

Includes 1/4", 5/16", 3/8", 7/16", & 1/2" stud remover & installer tools.

#201

4 PC. METRIC STUD PULLER SET

Includes 6mm, 8mm, 10mm & 12mm stud remover & installer tools.

INDIVIDUAL STUD REMOVERS / INSTALLERS

#200-9/16 & #200-5/8 are 27mm Hex, No Square Drive

6mm	7mm	8mm	10mm	12mm	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"
#200-6	#200-7	#200-8	#200-10	#200-12	#200-1/4	#200-5/16	#200-3/8	#200-7/16	#200-1/2	#200-9/16	#200-5/8

4-PIECE ALLEN SOCKET SET

#3000-4 K



This 4 piece allen socket set includes: 4mm, 5mm, 6mm & 8mm 1/4" drive sockets. Rail Included.

6-PIECE ALLEN SOCKET SET

#3000-6 K



This 6-piece allen socket set includes: 2.5mm, 3mm, 4mm, 5mm, 6mm & 8mm 1/4" drive sockets. Rail Included.

4-PIECE, 12-POINT, DRIVE SET

#3004X



This 4-piece, 12-point, 1/4" drive socket set includes: 4mm, 5mm, 6mm & 8mm sockets. 1-Piece steel construction.

#5063

**HONDA/NISSAN
OIL FILTER WRENCH**#5063 SHOWN
HERE IN USE

- 63mm w/ 14 Flats
- **Applicable to:** Nissan: 1997–2011 Altima, 1994–2011 Maxima, 1995–2011, 2002–2011 Murano, 1995–2007 Pathfinder, 1997–2007 Pick-up, 2007 Sentra, 2004–2011 X-Trail (Canada), 2007 Xterra; & Infiniti: 2004–2007 M35 & M45 w/ VQ35DE engine



#8026

**5/16" NISSAN/TOYOTA
FUEL LINE
DISCONNECT TOOL**

- **Applicable to 2004 & Newer Models w/ 5/16" Fuel Rail**
- Used for Disconnecting the Fuel Line from the Fuel Rail
- Green-Anodized Aluminum Construction



#FZ 29

**CAP ADAPTER
FOR NISSAN**

- **Applicable to Nissan:** 1987–2004 All Models, 2004 350Z, 2006 Altima, 2004–2011 Frontier, 2000–2011 Maxima, 2004 Murano, 2004 Quest, 2000–2011 Sentra & 2004 X-Terra
- Used for Testing Pressure Relief in the Cooling System Cap



#FZ 32 A

**NISSAN COOLING
SYSTEM
TANK ADAPTER**

- **Applicable to:** Nissan Armada & Titan through 2011
- Used for Pressurizing the Cooling System



#FZ 128

**COOLING SYSTEM ADAPTER
FOR NISSAN**

- **Applicable to Nissan:** 1987–2004 All Models, 2004 350Z, 2006 Altima, 2004–2011 Frontier, 2000–2011 Maxima, 2004 Murano, 2004 Quest, 2000–2011 Sentra & 2004 X-Terra
- Used for Pressurizing the Cooling System



#FZ 36

**NISSAN CAP
ADAPTER**

- **Applicable to:** Nissan Armada & Titan through 2011
- Also Fits Various GM & Ford Models
- Used for Testing Pressure Relief in the Cooling System Cap



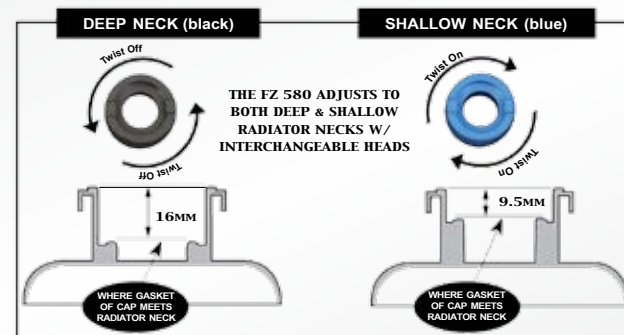
#SU 8015

**OIL FILTER
WRENCH**

80mm, 15 Flats. Applicable to: Nissan vehicles using filter #15208H8903 & #1520855Y00 (found in older Sentra & Trucks).



#FZ 580

**COOLING SYSTEM ADAPTER
SET FOR DEEP & SHALLOW
RADIATOR NECKS**

Using the threaded rings & one base, all small-neck tab style radiators & expansion tanks can be pressurized w/ this new product. Simply thread on the taller or shorter ring to accommodate a shallow or deep neck. The broad range of applications include: Acura, Chrysler, Dodge, Eagle, Ford models (Explorer, Festiva, Tempo, Villager, Windstar, Sport-Trac), Geo, Honda, Hyundai, Infiniti, Izuzu, Lexus, Mazda, Mitsubishi, **Nissan**, Subaru, Suzuki & Toyota.

Covers all Nissan through 2011 (exc. Armada & Titan)

**ASIAN/
DOMESTIC OIL
FUNNEL**

#OFHON1033



- **Fits Most Nissan Models**
- Made of Durable ABS Plastic
- No More Mess
- Threads & Seals Onto the Valve Cover
- Also Fits Honda Accord, Civic, Element, Fit, NSX & S2000; All Acura Models (exc. MDX & RDX); Dodge Cummins Turbo Diesel & Neon; & Ford Power Stroke Engines (6.9L, 7.3 L, 6.0L & 6.4L)

**5 LITER BASIC
DRIVE LINE
FILLER SYSTEM**

- 5 Liter Capacity
- Additional 3 & 10 Liter Drums also available
- Quick Attachment Adapter
- Pump Dispenses Efficiently
- On/Off Ball Valve w/ Safety Catch
- Container Made of UHDP (Ultra High Density Polyethylene)
- Hose Length 4 ft. 10 in.

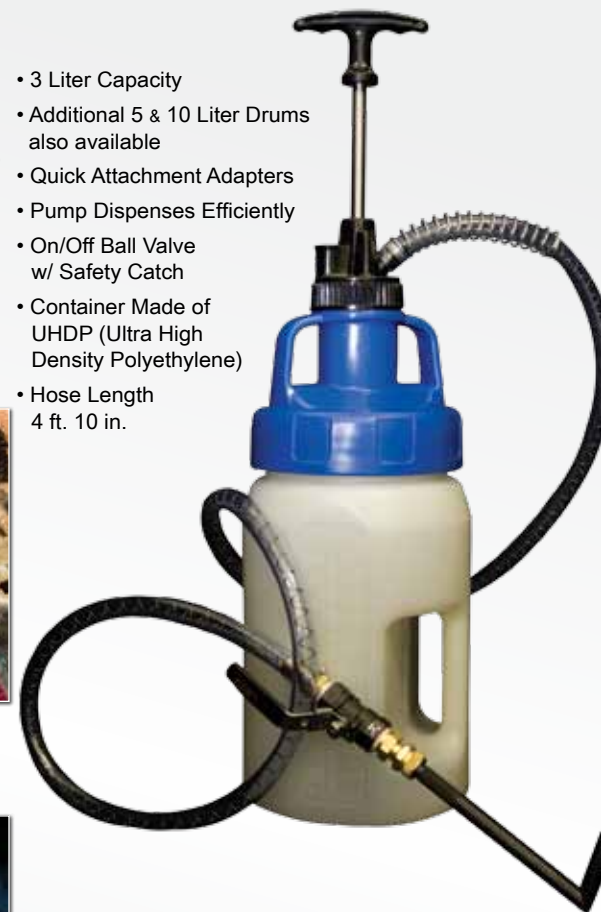


#ATF 1002-5 BASIC

**BASIC DRIVE
LINE FILLER
SYSTEM**

#ATF 1002 BASIC

- 3 Liter Capacity
- Additional 5 & 10 Liter Drums also available
- Quick Attachment Adapters
- Pump Dispenses Efficiently
- On/Off Ball Valve w/ Safety Catch
- Container Made of UHDP (Ultra High Density Polyethylene)
- Hose Length 4 ft. 10 in.



For BMW, Honda, **Nissan** & many other universal applications. Includes pump, 3 liter container, hose, shut-off valve & **#ATF 102**.

→ **CUSTOM DIPSTICKS**

→ **OIL FILTER SOCKETS & WRENCHES**

→ **CUSTOM FUNNELS**

→ **DRIVE LINE FILLER SYSTEMS**

**9 PC. DRIVE
LINE FILLER
SET**
see pg. 53

***OFHON1033
ASIAN/DOMESTIC
OIL FUNNEL**
see pg. 56

***2101
7-PIECE OIL FILTER
WRENCH/SOCKET
SET**
see pg. 55

***OFAUD1000
EURO 1/4 TURN OIL
FILLER**
see pg. 56

***OFSU1042
SUBARU OIL
FUNNEL**
see pg. 56

***ATF 108 V
VOLVO
ATF ADAPTER**
see pg. 52

***OFHD35
HARLEY OIL
FUNNEL**
see pg. 57

***OFTOY1001
TOYOTA OIL
FUNNEL**
see pg. 56

AST OIL CHANGE TOOLS

ATF 16 DSG*VW/AUDI "DSG"
DRIVE LINE FILLER
ADAPTER**

VW/Audi DSG Drive Line Adapter used w/ the AST ATF Filler System. The attachment has a 24mm x 1.5 thread. For the complete ATF VW Filler System Set, see ***ATF 1033-5 VW**.

***ATF 101****DRIVE LINE FILLER
SYSTEM ADAPTER
FOR FORD W/
1/8-27 NPT PLUG**

Ford Adapter used in conjunction w/ the ATF Filler System. Individual adapter included (does not include pump, container, hose, or shut-off valve). For the complete Ford Set, see ***ATF 1001 FORD**. For the complete ATF Filler System Set, see ***ATF 1100-5**.

ATF 103*SHORT DRIVE LINE
FILLER SYSTEM
ADAPTER
FOR VW/AUDI**

VW/Audi Adapter used in conjunction w/ the ATF Filler System. Individual adapter included (does not include pump, container, hose, or shut-off valve). For the complete VW/Audi Set, see ***ATF 1033-5 VW**. For the complete ATF Filler System Set, see ***ATF 1100-5**.

ATF 105*10MM x 1.0 DRIVE
LINE FILLER SYSTEM
ADAPTER FOR VW/
AUDI & MINI**

10mm x 1.0 VW/Audi Adapter used in conjunction w/ the ATF Filler System. Fits Mini Cooper w/ Aisin transmission. Individual adapter included (does not include pump, container, hose, or shut-off valve). For the complete VW/Audi Set, see ***ATF 1003-5 VW**. For the complete ATF Filler System Set, see ***ATF 1100-5**.

ATF 129*12MM x 1.5 DRIVE
LINE FILLER SYSTEM
ADAPTER FOR
MERCEDES-BENZ**

12mm x 1.5 Mercedes-Benz Adapter used in conjunction w/ the ATF Filler System. Applicable to 722.9 automatic transmissions. Individual adapter included (does not include pump, container, hose, or shut-off valve).

ATF 100102*STORAGE LID**

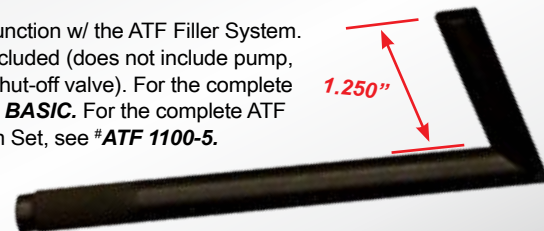
Storage Lid
for ATF Filler
System

***ATF 17 CVT****VW/AUDI "CVT"
DRIVE LINE
FILLER ADAPTER**

VW/Audi CVT Drive Line Adapter used w/ the AST ATF Filler System. The attachment has a 22mm x 1.5 thread. For the complete ATF VW Filler System Set, see ***ATF 1033-5 VW**.

***ATF 102****DRIVE LINE FILLER SYSTEM
ADAPTER FOR BMW, HONDA
& NISSAN**

Adapter used in conjunction w/ the ATF Filler System. Individual adapter included (does not include pump, container, hose, or shut-off valve). For the complete Set, see ***ATF 1002 BASIC**. For the complete ATF Filler System Set, see ***ATF 1100-5**.

***ATF 104****LONG DRIVE LINE FILLER
SYSTEM ADAPTER FOR
VW/AUDI**

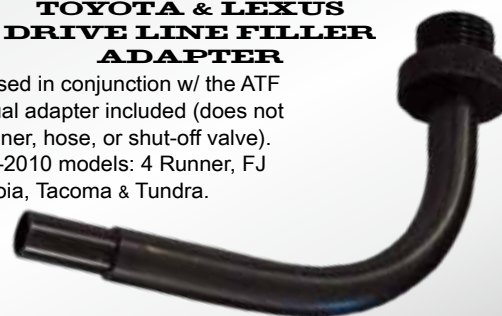
Long VW/Audi Adapter used in conjunction w/ the ATF Filler System. Individual adapter included (does not include pump, container, hose, or shut-off valve). For the complete VW/Audi Set, see ***ATF 1033-5 VW**. For the complete ATF Filler System Set, see ***ATF 1100-5**.

ATF 108V*VOLVO DRIVE
LINE FILLER
ADAPTER**

Drive Line Filler Adapter applicable to some 2007 & newer Volvo models that use a 5/16 - 24 threaded plug.

***ATFTOY118****TOYOTA & LEXUS
DRIVE LINE FILLER
ADAPTER**

18mm x 1.5 Adapter used in conjunction w/ the ATF Filler System. Individual adapter included (does not include pump, container, hose, or shut-off valve). Applicable to: 2005-2010 models: 4 Runner, FJ Cruiser, Sequoia, Tacoma & Tundra.

***ATF 101003*****ATF 101005*****ATF 101010****ATF
CONTAINERS**

Containers Available Individually
3 Liter – ***ATF 101003**
5 Liter – ***ATF 101005**
10 Liter – ***ATF 101010**



KEY FEATURES

– "After using the factory & other aftermarket fillers, the ATF system from Assenmacher is the cleanest & most efficient."

- Used only to Fill, Not to Drain—So Clean Fluid Stays Clean
- 5L & 10L Containers Also Available
- Works w/ Quick Attachment Adapters
- Pump Dispenses Efficiently
- Filler Can Handle 90 Weight Oil
- On / Off Ball Valve w/ Safety Catch
- Container Made of UHDP (ULTRA HIGH DENSITY POLYETHYLENE)

***ATF 1002 BASIC**
Shown Here

**9-PIECE DRIVE LINE
FILLER SYSTEM*****ATF 1100-5**

For BMW, Ford, Honda, Mercedes, Mini, Nissan, Toyota, VW/Audi & many other universal applications. Includes pump, 5 liter container, hose, shut-off valve & ***ATF 101**, ***ATF 102**, ***ATF 103**, ***ATF 104**, ***ATF 105**, ***ATF 16 DSG**, ***ATF 17 CVT**, ***ATF 129** & ***ATFTOY118**

***ATF 1033-5 VW****VW/AUDI
DRIVE LINE
FILLER
SYSTEM**

For VW/Audi & many other universal applications. Includes pump, 5 liter container, hose, shut-off valve & ***ATF 103**, ***ATF 104**, ***ATF 105**, ***ATF 16 DSG** & ***ATF 17 CVT**.

***ATF 1004-5 MB****MERCEDES DRIVE
LINE FILLER
SYSTEM**

For filling fluids in the 722.9 Automatic Transmissions using a 12mm x 1.5 adapter. Includes pump, container, hose, shut-off valve & ***ATF 129**.

***ATF 1008-5 EURO****EURO DRIVE LINE
FILLER SYSTEM**

For BMW, Honda, Nissan, Mercedes & Volvo. Includes pump, 3 liter container, hose, shut-off valve & ***ATF 102**, ***ATF 103**, ***ATF 129**, ***ATF 108V**, ***ATF 16 DSG**, ***ATF 17 CVT**, ***ATF 105** & ***ATF 104**.

**BASIC DRIVE
LINE FILLER
SYSTEM**

For shops servicing European makes, ask about the ***ATF 1008-5 EURO**

***ATF 1002 BASIC**

For BMW, Honda, Nissan & many other universal applications. Includes pump, 3 liter container, hose, shut-off valve & ***ATF 102**.



#TOY 300**TOYOTA OIL FILTER WRENCH SET****Factory# Cross Reference**

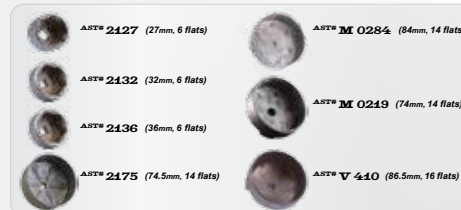
Factory Filter#	AST Tool#
#04152-38010	#TOY 640
#04152-YZZA1	#TOY 640
#04152-YZZA2	#TOY 640
#04152-YZZA3	#TOY 640
#04152-YZZA4	#TOY 640
#04152-YZZA5	#TOY 640
#04152-YZZA6	#TOY 640
#90915-YZZD1	#TOY 730
#90915-YZZD3	#TOY 730
#90915-YZZF1	#TOY 640
#90915-YZZF2	#TOY 640
#90915-YZZG1	#M 0219



***TOY 730**
SHOWN HERE ON
FILTER

This set includes our tool numbers **#TOY 640**, **#TOY 730** & **#M 0219**. w/ the **#TOY 300** you have every gas engine **Toyota** model covered between 1983 & 2011. Aluminum Construction. Hard Plastic Carrying Case Included.

***TOY 640**
SHOWN HERE ON
FILTER HOUSING



Contains oil filter wrench sockets for many domestic & foreign applications. Covers all Mercedes-Benz applications. The 27mm, 32mm & 36mm hex sizes covers VW/Audi, BMW, newer Mercedes 4-cyl. engines, Saturn & GM 2.2 L Ecotec engines. Covers Ford Escape Hybrid & Ford OEM #FL 910 & #FL 793. The four cup-style wrenches covers many VW, BMW, Toyota, & Mazda 3. Also covers Dodge Sprinter & Jeep 3.0L CRD engines & 1999–2010 Volvo models.

7-PIECE OIL FILTER WRENCH SET**#2101****OIL FILTER WRENCH****#2176**

Applicable to: Mazda 2.0L engines & Filter #LF05-14-302A

**#2124****24MM OIL FILTER SOCKET**

- 24mm w/ 6 Flats
- Applicable to BMW Models 2004–2008 w/ V8 (N62) & Saturn 1.8L Ecotec
- Steel Construction

**#2127****27MM OIL FILTER SOCKET**

- 27mm w/ 6 Flats
- Steel Construction
- Fits Mercedes 271 Motor

**OIL FILTER WRENCH****#HD 1474**

***HD 1474**
SHOWN HERE ON
FILTER



Applicable to: Harley Davidson Motorcycles w/ a spin on oil filter.

OIL FILTER WRENCH**#SU 8015**

80mm, 15 Flats. Applicable to: Subaru cars w/ the H6 using factory oil filter #15208AA031, Hyundai cars w/ 4 cyl. & Nissan vehicles using filter #15208H8903 & #1520855Y00 (found in older Sentra & Trucks)

**#2132****32MM OIL FILTER SOCKET**

- 32mm w/ 6 Flats
- Steel Construction
- Fits GM Ecotec Engine
- Fits 2011 VW TDI

**#2136****36MM OIL FILTER SOCKET**

- 36mm w/ 6 Flats
- Fits BMW, Ford & VW
- Steel Construction

**84MM OIL FILTER WRENCH****#M 0284**

- 84mm w/ 14 Flats, 22mm Hex
- Applicable to: 2007–2009 Dodge Sprinter, 2007–2011 Mercedes-Benz Turbo-Diesel & the 2007–2009 Jeep Cherokee w/ the 3.0L V6 CRD (Common Rail Diesel) Engines

**OIL FILTER WRENCH FOR SMART****#5040**

- 66.5mm w/ 14 Flats
- Fits US Model Smart

**#2175****74.5MM OIL FILTER SOCKET**

- 74.5mm w/ 14 Flats
- Metal Construction
- Fits VW 1.8T & 2.0L Non-turbo Engines

**#BM 1276****76MM OIL FILTER WRENCH**

- 76mm, 12 Flutes, 3/8" Drive
- Metal Construction
- Fits 2007–2011 BMW Motorcycles

**HONDA/NISSAN OIL FILTER WRENCH****#5063**

- 63mm w/ 14 Flats
- Metal Construction
- Fits All Honda Models through 2011 (exc. S2000)

**HYUNDAI OIL FILTER WRENCH****#HY 8815**

- 22mm Hex, 88mm w/ 15 Flats
- Fits 2006 & Newer Hyundai Models equipped w/ a V6 & w/ a paper cartridge oil filter Including Azera, Santa Fe & Sonata
- Metal Construction

**#M 0219 74MM OIL FILTER WRENCH**

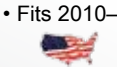
- 74mm w/ 14 Flats
- Fits 2005–2011 VW 2.5L Engines
- Fits Mercedes, Toyota, & Mazda

**#V 410****86.5MM OIL FILTER WRENCH**

- 86.5mm w/ 16 Flats
- Metal Construction
- Fits Volvo & Newer BMW 6 Cyl.

**TOYOTA OIL FILTER WRENCH****#TOY 640**

- 64mm w/ 14 Flats
- Applicable to: 2007–2009 Toyota 3.5L V6, 2008–2010 Toyota V8 5.7L, New 3.5L V6 & 5.7L V8
- Fits 2010–2011 Toyota 4.6L V8

**73MM TOYOTA OIL FILTER WRENCH****#TOY 730**

- 73mm w/ 14 Flats
- Metal Construction
- Fits Toyota 4.7L V8



#OFHON1033**ASIAN/DOMESTIC
OIL FUNNEL**

- Made of Durable ABS Plastic
- No More Mess
- Threads & Seals Onto the Valve Cover
- Fits: Honda Accord, Civic, Element, Fit, NSX & S2000. All Acura Models (exc. MDX & RDX)
- Fits Most Nissan Models
- Fits Dodge Cummins Turbo Diesel & Neon
- Ford Power Stroke engines (6.9L, 7.3L, 6.0L & 6.4L)
- Fits Some Jaguar Models

#OFAUD1000**VW, AUDI, MERCEDES
& BMW OIL FILLER**

- Fits 1996 & Later BMW 6 cyl. & 8 cyl.
- Fits Dodge Sprinter
- Fits Mercedes 112 & 113 Engines
- Fits VW/Audi Engines: 1.8 T, 1.9L TDI, 2.0 T, 2.8L (30v), 3.0L (30v), 3.2L, 3.6L & 4.2L (40v)
- No More Mess, Attaches Directly to the Valve Cover & Seals just like the Factory Cap

#OFTOY1038**TOYOTA/LEXUS
OIL FUNNEL
(THREADED)**

- Made of Durable ABS Plastic
- No More Mess
- Threads & Seals Onto the Valve Cover
- Toyota Oil Funnel used on all Toyota, Lexus & Scion motors w/ a threaded oil cap (exc. Prius)
- Fits Pontiac Vibe

#OFGMRD08**GM/FORD OIL
FUNNEL**

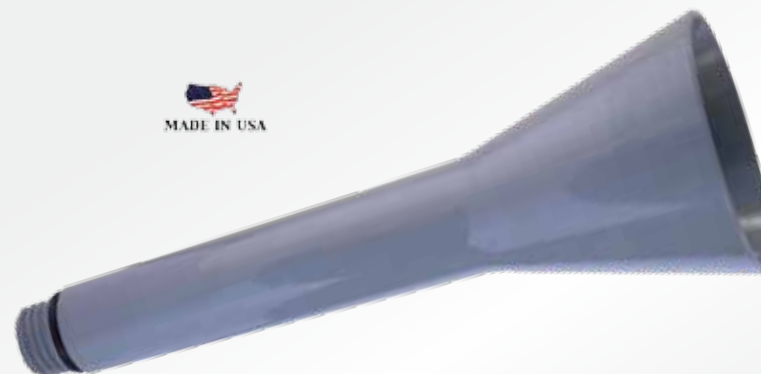
- Fits the New 2011 Ford 6.7L Turbo-Diesel
- Made of Strong Polycarbonate
- No More Mess; Attaches Directly to the Engine Oil Filler Neck
- Fits Cadillac CTS; Saturn SL1; Mercury Mountaineer
- Fits Chevy Cobalt, Silverado, Tahoe, Trailblazer & Vans;
- Fits Ford Explorer, F150, Mustang & Taurus;
- Fits GMC Envoy & Sierra
- Fits Pontiac G6 Grand Prix
- Also Fits Some Jaguar Models

#OFSU1042**SUBARU OIL
FUNNEL**

- Fits All Subaru Models w/ Threaded Oil Cap (exc. Tribeca)
- Prevents Any Unwanted Mess
- Regular Funnels Do Not Fit Properly
- Made of Durable ABS Plastic

#OFTOY1001**TOYOTA/LEXUS
OIL FILLER**

- Fits 1999 & newer Toyota & Lexus Models w/ 3.0L & 3.3L V6 Engines w/ 1/4-Turn Style Caps
- No More Mess, Attaches Directly to the Valve Cover & Seals just like the Factory Cap

**HARLEY-DAVIDSON
OIL FUNNEL****#OFHD35**

- Made of Durable ABS Plastic
- No More Mess
- Threads & Seals Just like the Factory Cap
- Fits All 2007–2011 Harley-Davidson Dyna & Touring Models



#OFHD1419
SHOWN HERE IN USE

**HARLEY-DAVIDSON
OIL FUNNEL****#OFHD419**

- Made of Durable ABS Plastic
- No More Mess
- Seals Just like the Factory Cap
- Fits All 1999–2006 Harley-Davidson Touring Models
- Fits Push-Style Caps

#F 2500

5 PC. OIL FILTER SOCKET SET

- Oil Filter Wrenches are 93mm (36 flutes), 74mm (14 flats) & 76mm (30 flutes)
- Oil Filter Sockets are 24mm & 36mm Hex (6 flats)
- Carrying Case Included
- Set Covers Most 1988–2010 Ford Models
- 5 Year Warranty
- All Tools are 3/8" Drive
- Includes: #M 0219, #F 9336, #F 7630, #2136 & #2124



ENGINE OIL DIPSTICK FOR AUDI

#AU40178

Engine oil dipstick applicable to: 2009 & newer Audi A4, A5 & A6 with engines 2.0L TFSI, 3.2L FSI & 4.2L FSI. Also fits 2010 S4 w/ 3.0L supercharged engine. Chart to read dipstick included.



#T 40057

VW/AUDI OIL FILTER HOUSING DRAIN

Used for draining the oil filter housing. Applicable to: 2005.5–2008 VW/Audi models w/ the 2.0L Turbo engine, (BPY, BPG & BWT) VW 2.5L in-line 5 cylinder engine 2005.5–2011



#T 40057 SHOWN HERE IN USE

#6300 X-16

16MM 12-POINT TAMPER-PROOF SOCKET

16mm 12-point tamper-proof socket for R & R of manual transmission drain plug & Porsche Cayenne & Touareg brake caliper bolts.



#H 2760

OIL DRAIN & FILLER PLUG WRENCH

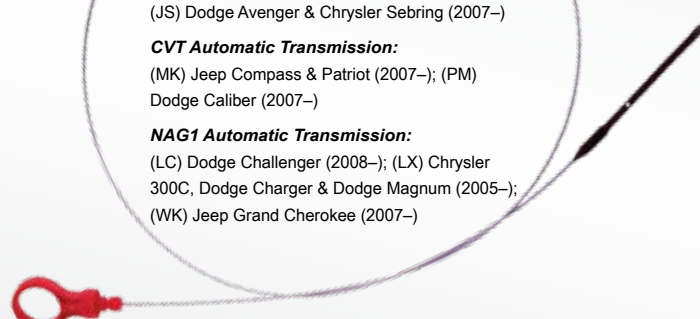
Oil Drain & Filler Plug Wrench. 14mm Allen, 17mm box wrench & is used for the R & R of the differential oil filler plug on many BMW & Mercedes-Benz models.



CHRYSLER TRANSMISSION DIPSTICK

#CRY933

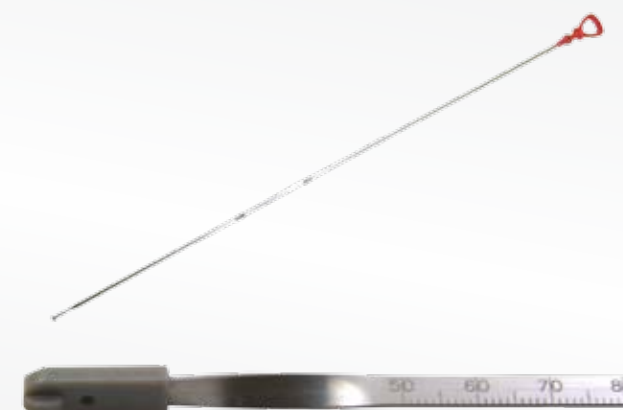
42RLE Automatic Transmission:
(KJ) Jeep Liberty (2006–2007); (KK) Jeep Liberty (2008–); (KA) Dodge Nitro (2007–)
62TE Automatic Transmission:
(JS) Dodge Avenger & Chrysler Sebring (2007–)
CVT Automatic Transmission:
(MK) Jeep Compass & Patriot (2007–); (PM) Dodge Caliber (2007–)
NAG1 Automatic Transmission:
(LC) Dodge Challenger (2008–); (LX) Chrysler 300C, Dodge Charger & Dodge Magnum (2005–); (WK) Jeep Grand Cherokee (2007–)



Used on all vehicles equipped w/ a NAG1, 42RLE, CVT Transmission & the 62TE Transaxle. **Note:** This tool supersedes the original #9336 A & will work on all previous applications.

ENGINE OIL DIPSTICK

#M 0724



For checking engine oil level. Applicable to: newer Mercedes-Benz models w/ engines 112, 113, 137 & 271.

#JA 9015

OIL FILTER WRENCH

#JA 9015 SHOWN HERE ON FILTER HOUSING

• Applicable to 2010–2011 Jaguar & Land Rover w/ 5.0L (V8)



#SU 070

DRAIN PLUG SOCKET

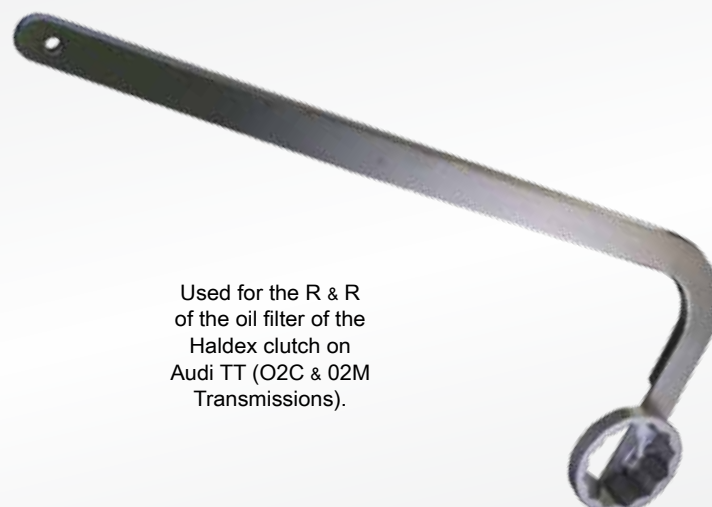
For R & R of transaxle drain plug. Applicable to: 2003 & newer Subaru Outback w/ manual transmission.



#T 10066

HALDEX FILTER WRENCH

Used for the R & R of the oil filter of the Haldex clutch on Audi TT (O2C & O2M Transmissions).



722.6 TRANSMISSION DIPSTICK

#M 7226

For checking ATF level. Applicable to: Mercedes-Benz models 1997 & later w/ 722.6 transmission.



SPRINTER TRANSMISSION DIPSTICK

#SPR 886



Dodge Sprinter & Chrysler Crossfire Transmission Dipstick. Instructions for checking oil level are included.

#100-30 A

30MM DEEP SOCKET

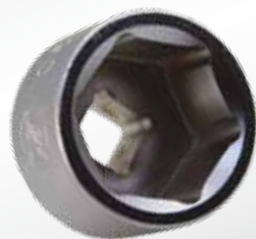


30mm Deep thin-walled socket used for R & R of transmission drive shaft flange nut & the pinion shaft flange nut of differential on older BMW & Mercedes. Fits E 90 325 Rear Wheel Drive axle nuts as well as Toyota models w/ 30mm, 12 pt. axle nuts.

#2124

24MM HEX SOCKET

- 24mm w/ 6 Flats
- Applicable to BMW Models 2004–2008 w/ V8 (N62) & Saturn 1.8L Ecotec
- Steel Construction



#2132

32MM OIL FILTER SOCKET

- 32mm w/ 6 Flats
- Steel Construction
- Fits GM Ecotec Engine
- Fits 2011 2.0L VW T.D.I.



#H 2592

MULTI-TOOTH ADAPTER



Used for the R & R of the freewheel pulley on the alternator. May be used in conjunction w/ the **#S 3054 X-10** socket. Applicable to: Bosch alternators.

Comparable to VW# 3400.

#TOY 185

WHEEL BEARING NUT SOCKET



For R & R of wheel bearing nut located on inboard side of wheel hub. Applicable to: Newer Toyota trucks & SUV's (2WD only).



#TOY 105

HEAD BOLT SOCKET



Head bolt socket for Toyota Paseo, Tercel & other Toyotas that use a #8 bi-hexagon socket.

#3900

5 LOBE TAMPER-PROOF BIT SET



5 Lobe bits & 1/4" drive. Contains: T-10, T-15, T-20, T-25, T-27, T-30, T-40, T-45 & T-50. Carrying Case Included.



#2127

27MM OIL FILTER SOCKET

- 27mm w/ 6 Flats
- Steel Construction
- Fits 2002–2007 Mercedes C230



#2136

36MM OIL FILTER SOCKET

- 36mm w/ 6 Flats
- Fits BMW, Ford, VW & Newer Volvo 3.2L
- Steel Construction



#BMW 432

VANOS SOLENOID SOCKET



32mm socket used for removing & installing the BMW Vanos Solenoid valves.

Comparable to BMW #116420.



#BMW 432 SHOWN HERE IN USE

MADE IN USA

#M 3857

PIN WRENCH SOCKET FOR MERCEDES M-CLASS

3/4" drive Pin Wrench Socket. Used to secure the retaining ring during replacement of ball joints. Applicable to: Mercedes 163 M-Class front & rear axles.



14MM ALLEN SOCKET

#6500-14



14mm Allen for VW Passat 1996–2001, Audi A4; Front & Rear Axle Bolts (AWD)



17MM ALLEN SOCKET

#6500-17



17mm Allen for 1998–2005 VW Passat, 1999–2004 Audi A6, 2002–2005 Audi A4; Front & Rear Axle Bolts (AWD).



18MM 12-POINT SOCKET

#6500 X-18



18mm, 12-Point Socket w/ a 1/2" Drive. Applicable to: 2006–2009 VW Golf & Jetta w/ Independent Rear Suspension (I.R.S.). This tool is used for the R & R of the rear axle bolt.

Comparable to VW #T10162.



30MM 12-POINT SOCKET

#6500 X-30



30mm 12-Point Socket for Mid 1999–2005 VW Golf, Jetta, Cabrio & Beetle Front Axle Nuts.



32MM 12-POINT SOCKET

#6500 X-32



32mm 12-Point Socket w/ a 3/4" Drive for VW Touareg; Front & Rear Axle Nuts.



36MM 12-POINT SOCKET

#6500 X-36



36mm 12-Point 3/4" Drive. For R & R of axle nuts. Applicable to: BMW E38, E39, E46, E53, X5 (front & rear), the new 5 Series E60 & E90 All Wheel Drive 36mm Front & Rear.

TOYOTA AXLE NUT SOCKET

#6500 X-39



39mm 12 point 1/2" drive socket. For R & R of the axle nuts. Applicable to: 2008–2011 Toyota Landcruiser, Sequoia & Tundra. Also fits 2008–2011 Lexus LX 570.

36MM 6-POINT DEEP SOCKET

#S 56-36



36mm 6-Point Deep Socket, 3/4" drive. For R & R of transmission output flange nut on BMW. Applicable to: BMW models: 2001 & newer E46 & E39 w/ 6 cylinder engines using standard transmission S5D 260Z/310Z/320Z (exc. M3 or M5).

SUBARU DRAIN PLUG SOCKET

#SU 070

For R & R of transaxle drain plug. Applicable to: 2003 & newer Subaru vehicles w/ manual transmission.



SPARK PLUG SOCKET

#SP1412



14mm, 12-Point Spark Plug Socket w/ 3/8" drive. Applicable to 2007 & later BMW 135, 335, 535 & X6 w/ 3.0L twin-turbo motors. Also works on 2007 & newer Turbocharged Mini Coopers. Comparable to BMW #121220. **NOTE:** Spark Plug Socket is slender in design to fit application.

#SP1412 SHOWN HERE ON BMW SPARK PLUG



46MM, 6-POINT SOCKET

#S 55-46



46mm 6-Point thin-wall socket, 3/4" drive. For R & R of front wheel bearing retainer nut on E24, E28, E32 & E34 chassis.

VW/AUDI AXLE NUT SOCKET SET

#6500

#6500-14: 14mm Allen for VW Passat 1996–2001, Audi A4; Front & Rear Axle Bolts (AWD); #6500-17: 17mm Allen for 1998–2005 VW Passat, 1999–2004 Audi A6, 2002–2005 Audi A4; Front & Rear Axle Bolts (AWD); #6500 X-30: 30mm 12-Point Socket for Mid 1999–2005 VW Golf, Jetta, Cabrio & Beetle; Front Axle Nut; #6500 X-32: 32mm 12-Point Socket w/ a 3/4" Drive, VW Touareg; Front & Rear Axle Nuts





#3000

40-PIECE SOCKET SET W/ 1/4" DRIVE

Contains: T-6 through T-45 6-Point Tamperproof® Torx; T-10 through T-50 6-Point Standard Torx; 4mm, 5mm, 6mm & 8mm 12-Point; 2.5, 3, 4, 5, 6 & 8 Allen Drivers; 5/32"-5/16" Straight Blade Drivers; #1, #2 & #3 Phillips Drivers.



12MM 12-POINT SOCKET BIT

#6300 X-12

Applicable to: R & R of axle shaft bolts on newer VW Jetta (gas) & rear toe adjustment on 1999 & later Audi A6 & for bell housing bolts w/ tight clearance on various VW models.



14MM 12-POINT SOCKET BIT

#6300 X-14

Applicable to: R & R of Audi TT differential bracket & for bell housing bolts w/ tight clearance on various VW models.



3000-4 K

4-PIECE ALLEN SOCKET SET



This 4 piece allen socket set includes: 4mm, 5mm, 6mm & 8mm 1/4" drive sockets. Rail Included.

*3000-6 K

6-PIECE ALLEN SOCKET SET



This 6-piece allen socket set includes: 2.5mm, 3mm, 4mm, 5mm, 6mm & 8mm 1/4" drive sockets. Rail Included.

16MM 12-POINT TAMPER-PROOF SOCKET

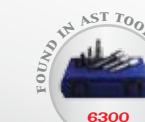
#6300 X-16

16mm 12-point tamperproof® socket for R & R of manual transmission drain plug & Porsche Cayenne & VW Touareg brake caliper bolts.
Comparable to VW #3357.



8MM 12-POINT LONG SOCKET

#6300 XL-8



#3004X

4-PIECE, 12-POINT, DRIVE SET



This 4-piece, 12-point, 1/4" drive socket set includes: 4mm, 5mm, 6mm & 8mm sockets. 1-Piece steel construction.

*3462

*10 POLYDRIVE HEAD BOLT SOCKET



This #10 Polydrive Head Bolt Socket has a 1/2 inch drive, is 155mm long & is applicable to most 1998 & later VW/Audi engines.
Comparable to VW #3452 & #T 10070

10MM 12-POINT LONG SOCKET

#6300 XL-10



10mm 12-point Long Socket for R & R of axle shaft bolts on VW Passat & Golf (new body style).

14MM 12-POINT LONG SOCKET

#6300 XL-14



14mm 12-point Long Socket for R & R of late model Eurovan axle shafts & ball joints. Fits VW Touareg inner CV bolts.

#H 2579-9

HEAD BOLT SOCKET



#9 polydrive head bolt socket, 1/2 inch drive. Applicable to: most 1998 & later VW & Audi engines using aftermarket headbolts that are smaller than the #3462 application.

#H 992 SLG-T55

HEAD BOLT SOCKET FOR MERCEDES



T-55 Torx head bolt socket for Mercedes. Applicable to: Mercedes models w/ motors M112 & M113.

SPREADER

#3424



Used for the R & R of the front shock absorber tube from the wheel bearing housing. Applicable to: VW & Audi TT.



T-100 3/4" DRIVE SOCKET

#H 1012 T-100

Used to remove the plug, for accessing the parking pawl detent on the 722.9 Mercedes transmission.



S 3054 X-10

10MM 12-POINT SOCKET



10mm 12-point, 140mm long socket used for R & R cylinder head bolts. Applicable to: OM 601, OM 602 & OM 603; 2003-2007 Pontiac Vibe, 2003-2007 Toyota Matrix w/ 1.8 L I-4. Also used on VW & Audi head bolts that are 10mm, 12-point.

*S 3054 X-12

12MM 12-POINT SOCKET



140mm long. Applicable to: Toyota; For R & R of cylinder head bolts on 2003 Toyota 4Runner w/ V6 engine, all 2ZZ engines (4-cyl, 4-valves w/ VVT) including 2000-2001 Toyota Celica & 2001-2006 Highlanders w/ 2AZ-FE engines. VW/Audi; Older VW/Audi models w/ 12mm 12 point head bolts. Fits Mercedes OM 615, 616, 617, M 102, M 103.

12MM ALLEN SOCKET

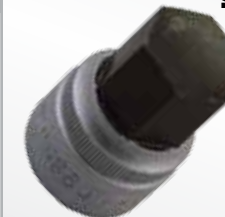
#H 985-12



12mm Allen Socket, 1/2" Drive

19MM ALLEN SOCKET

#H 985-19



19mm, 1/2" Drive Allen Socket

#M 0E24

E24 FEMALE TORX SOCKET

Female torx socket. Applicable to: Front axle nut on Mercedes 4Matic models, new C-Class (204), New E-Class (212), & new S-Class (221).

#H010PT

10-POINT SOCKET

10-Point Socket. Applicable to: **Honda** rear lower control arms.

**VW/AUDI AXLE NUT SOCKET SET**

#6500

#6500-14: 14mm Allen for VW Passat 1996–2001, Audi A4; Front & Rear Axle Bolts (AWD); **#6500-17:** 17mm Allen for 1998–2005 VW Passat, 1999–2004 Audi A6, 2002–2005 Audi A4; Front & Rear Axle Bolts (AWD); **#6500 X-30:** 30mm 12-Point Socket for Mid 1999–2005 VW Golf, Jetta, Cabrio & Beetle; Front Axle Nut; **#6500 X-32:** 32mm 12-Point Socket w/ a 3/4" Drive, VW Touareg; Front & Rear Axle Nuts

#S 54 X-14

14MM 12-POINT SOCKET

14mm 12-Point Socket, 1/2" Drive. Ideal for rear brake caliper bolts on **2006 & newer Passat & Jetta.**



#T 40028
SOCKET
SHOWN
HERE IN
USE

#T 40028 CAMSHAFT ADJUSTING SOCKET

Camshaft Adjusting Socket used to adjust variable valve timing on the exhaust side camshaft to basic position. Applicable to: Audi 3.0L V6 5V. **Used in conjunction w/ #T 40011, #T 40026 & #T 40030.** For complete 3.0L V6 5v set, see **#T 4306.**

**18MM 12-POINT SOCKET**

#6500 X-18



18mm, 12-Point Socket w/ a 1/2" Drive. Applicable to: 2006–2009 VW Golf & Jetta w/ Independent Rear Suspension (I.R.S.). This tool is used for the R & R of the rear axle bolt. **Comparable to VW #T10162.**

30MM DEEP SOCKET

#100-30 A



30mm Deep thin-walled socket. Fits Toyota models w/ 30mm, 12 pt. axle nuts. Used for R & R of transmission drive shaft flange nut & pinion shaft flange nut of differential on older BMW & Mercedes. Fits E 90 325 Rear Wheel Drive axle nuts.

#BMW 060

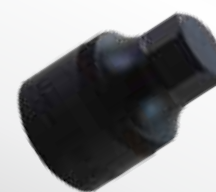
BMW TORX FLYWHEEL SOCKET TOOL

For removal & replacement of flywheel bolts. Applicable to: E34 & E39 V8 4.0L & 4.4L w/ standard transmission. **Comparable to BMW #114180.**

#T 40028

CAMSHAFT ADJUSTING SOCKET**14MM ALLEN SOCKET**

#6500-14



14mm Allen for VW Passat 1996–2001, Audi A4; Front & Rear Axle Bolts (AWD). Overall length 37mm.



#6500
SERIES
SOCKET
SHOWN
HERE IN
USE

#BMW 377

7MM ALLEN SOCKET

7mm, 3/8" Drive allen socket. Applicable to BMW E36, E46, E39 & E31 models, Mercedes S-Class (221) & C-Class (204). For R & R of rear caliper bolts.

#H 2223 LG T-30

TORX SOCKET INSERT

This T-30 torx is for the R & R of the airbag from the steering wheel & is applicable to many BMW, Mercedes-Benz, Saab & VW models.

17MM ALLEN SOCKET

#6500-17



17mm Allen for 1998 & Later VW Passat, 1999–2004 Audi A6, 2002–2005 Audi A4; Front & Rear Axle Bolts (AWD). Overall length 38mm.

**30MM 12-POINT SOCKET**

#6500 X-30



30mm 12-Point Socket for Mid 1999 & Later VW Golf, Jetta, Cabrio & Beetle Front Axle Nuts.



#H 2925

E12 TORX SOCKET

Used for outside Torx headbolts on BMW M42 & M50 engines.

#H 4556

SOCKET

Used for the R & R of the delivery valve on Mercedes-Benz Diesel injection pumps. Applicable to: 601, 602, 603, 605, 606, 615, 616 & 617 diesel engines.

32MM 12-POINT SOCKET

#6500 X-32



32mm 12-Point Socket w/ a 3/4" Drive for VW Touareg; Front & Rear Axle Nuts.

**36MM 12-POINT SOCKET**

#6500 X-36



36mm 12-Point 3/4" Drive. For R & R of axle nuts. Applicable to: BMW E38, E39, E46, E53, X5 (front & rear), the new 5 Series E60 & E90 All Wheel Drive 36mm Front & Rear.

#VW 5220

CAMSHAFT ADJUSTER SOCKET

#10 Polydrive socket for camshaft adjuster bolt on VW/Audi 2.0L Turbo (BPY) engines.

Comparable to VW #T40080

#S 1054 TX T-50

T-50 TORX SOCKET

Used for the R & R of the fly wheel bolts. Applicable to: BMW E34 3.0L V8 engines.

TOYOTA AXLE NUT SOCKET

#6500 X-39



39mm 12 point 1/2" drive socket. For R & R of the axle nuts. Applicable to: 2008–2011 Toyota Landcruiser, Sequoia & Tundra. Also fits 2008–2011 Lexus LX 570.

WHEEL BEARING NUT SOCKET

#TOY 185



For R & R of wheel bearing nut located on inboard side of wheel hub. Applicable to: Newer Toyota trucks & SUV's (2WD only).



#FZ 128

TANK ADAPTER



- Applicable to: 1984–2011 Subaru 4-Cyl. Models
- Used for Pressurizing the Cooling System



#FZ 138

TANK ADAPTER



- Applicable to: 2001–2011 Subaru 6-Cyl. Models
- Used for Pressurizing the Cooling System



#SU 250

SUBARU 2.5L CAM ALIGN. BAR



Camshaft alignment tool for Subaru. Constructed from lightweight aluminum. Applicable to: **2.5L DOHC non-turbo engines.**
Comparable to Subaru tool #499207300.

Note: Only 1 #SU 250 is required to do the job

#SU 250
SHOWN HERE
IN USE



#SU 070

DRAIN PLUG SOCKET



For R & R of transaxle drain plug. Applicable to: **2003 & newer Subaru Outback w/ manual transmission.**

#SU 6514

SUBARU OIL FILTER WRENCH

67mm w/ 14 flats. Used on new Subaru Factory oil filters w/ the part number of #15208AA12A.



#SU 8015

OIL FILTER WRENCH

80mm, 15 Flats. Applicable to: **Subaru models w/ the H6** using factory oil filter #15208AA031, Hyundai models w/ 4 cyl. & Nissan models using filter #15208H8903 & #1520855Y00 (found in older Sentra & Trucks)



#SU 8015
SHOWN HERE ON
FILTER

#SU 3625

SUBARU CAM SPROCKET HOLDER



Used to hold the Camshaft sprockets on **2005 & newer Subaru models** w/ the 2.5L Turbo & the 3.6L 6 cyl. engines.

Comparable to the Subaru #499977500.

IMPORTANT NOTE: Some 2.5L turbo Subaru motors require both the #SU 3625 & #SU 200T. Look closely at cam gears & pulleys.

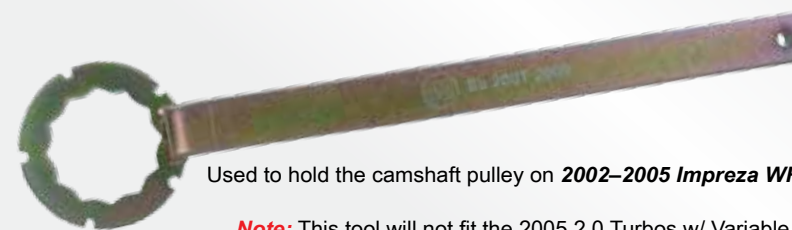


SUBARU OIL FUNNEL

#OFSU1042



- Applicable to: **All Subaru Models w/ Threaded Oil Cap (exc. Tribeca)**
- Prevents Any Unwanted Mess
- Regular Funnels Do Not Fit Properly



Used to hold the camshaft pulley on **2002–2005 Impreza WRX** w/ 2.0 Turbo.

Note: This tool will not fit the 2005 2.0 Turbos w/ Variable Cam Timing.
IMPORTANT NOTE: Some 2.5L turbo Subaru motors require both the #SU 3625 & #SU 200T. Look closely at cam gears & pulleys.

SUBARU CAMSHAFT PULLEY HOLDER

#SU 200T

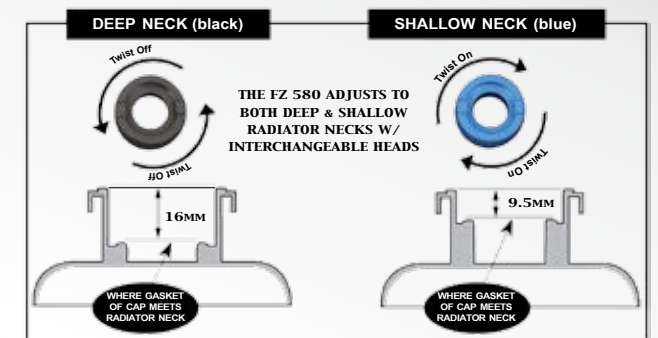


#SU 200T
SHOWN HERE
IN USE

COOLING SYSTEM ADAPTER SET FOR DEEP & SHALLOW RADIATOR NECKS



• #FZ 580 Provides Coverage on All Subaru Models



Using the threaded rings & one base, all small-neck tab style radiators & expansion tanks can be pressurized w/ this new product. Simply thread on the taller or shorter ring to accommodate a shallow or deep neck. The broad range of applications include: Acura, Chrysler, Dodge, Eagle, Ford models (Explorer, Festiva, Tempo, Villager, Windstar, Sport-Trac), Geo, Honda, Hyundai, Infiniti, Izuzu, Lexus, Mazda, Mitsubishi, Nissan, **Subaru**, Suzuki & Toyota.

#100-30 A 30MM DEEP SOCKET



30mm, 1/2" drive, thin-walled, 12 point socket used for R & R of transmission drive shaft flange nut & pinion shaft flange nut of differential on older BMW & Mercedes models. Also used on **Toyota** models w/ 30mm, 12 Pt. axle nuts.

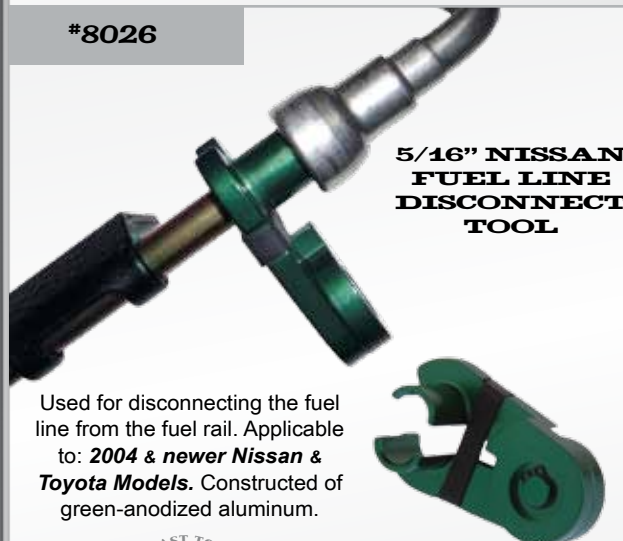
#6500 X-39

TOYOTA AXLE NUT SOCKET



39mm 12 point 1/2" drive socket. For R & R of the axle nuts. Applicable to: **2008-2011 Toyota Landcruiser, Sequoia & Tundra**. Also fits 2008-2011 Lexus LX 570.

#8026



5/16" NISSAN FUEL LINE DISCONNECT TOOL

Used for disconnecting the fuel line from the fuel rail. Applicable to: **2004 & newer Nissan & Toyota Models**. Constructed of green-anodized aluminum.



#FZ 29

CAP ADAPTER

- Works w/ Many Different Asian & Domestic vehicles
- Fits Toyota w/ Small/ Deep Necks



#FZ 128

TANK ADAPTER

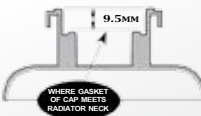
- Works w/ Many Different Asian & Domestic vehicles
- Fits Toyota w/ Small/ Deep Necks
- Fits Camry w/ V6



#FZ 138

TANK ADAPTER

- Works w/ Many Different Asian & Domestic vehicles
- Fits Toyota w/ Small/Shallow Necks
- Fits 4-Cyl. Camry, Fits Yaris & FJ Cruiser



#FZ 148

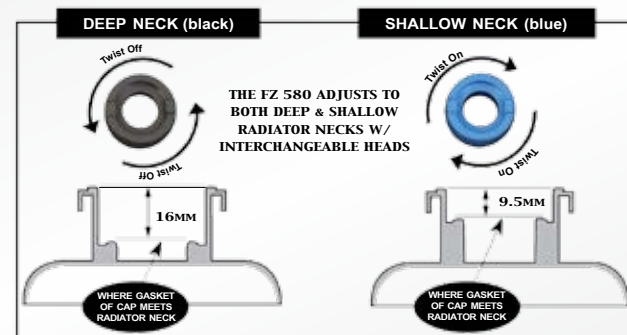
TANK ADAPTER

For pressurizing cooling system. Applicable to: **Toyota Celica GT-S 2000, MR2 Spyder 2000, Prius 2001-2010, 2006-2009 RAV 4, 2007 Lexus LS 460 & 2008 Highlander Hybrid**.



#FZ 580

COOLING SYSTEM ADAPTER SET FOR DEEP & SHALLOW RADIATOR NECKS



Using the threaded rings & one base, all small-neck tab style radiators & expansion tanks can be pressurized w/ this new product. Simply thread on the taller or shorter ring to accommodate a shallow or deep neck. The broad range of applications include: Acura, Chrysler, Dodge, Eagle, Ford models (Explorer, Festiva, Tempo, Villager, Windstar, Sport-Trac), Geo, Honda, Hyundai, Infiniti, Izuzu, **Lexus**, Mazda, Mitsubishi, Nissan, Subaru, Suzuki & **Toyota**.

#ATF 1018 TOY

TOYOTA/LEXUS DRIVE LINE FILLER SET



#ATF 1018 TOY SHOWN HERE IN USE ON A 4RUNNER

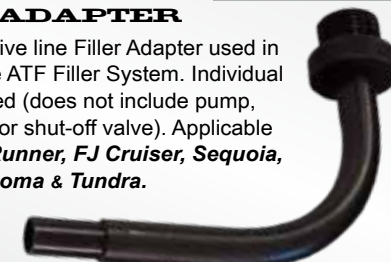
- 5L & 10L Containers Also Available
- Includes Quick Attachment Adapter #ATFTOY118
- Pump Dispenses Efficiently
- Filler Can Handle 90 Weight Oil
- On / Off Ball Valve w/ Safety Catch
- Applicable to: 2005-2010 4Runner, FJ Cruiser, Sequoia, Tacoma & Tundra
- Container Made of UHDP (ULTRA HIGH DENSITY POLYETHYLENE)



TOYOTA/LEXUS DRIVE LINE FILLER ADAPTER

#ATFTOY118

Toyota/Lexus Drive line Filler Adapter used in conjunction w/ the ATF Filler System. Individual adapter included (does not include pump, container, hose, or shut-off valve). Applicable to: **2005-2010 4Runner, FJ Cruiser, Sequoia, Tacoma & Tundra**.



#OFTOY1004

TOYOTA & LEXUS OIL FILLER



- Fits 1999 & Newer Toyota & Lexus Models w/ 3.0L & 3.3L V6 Engines w/ 1/4-Turn Style Caps
- No More Mess, Attaches Directly to the Valve Cover & Seals just like the Factory Cap



#S 440-27

27MM CROWFOOT SOCKET

Used for R & R of 4 Wheel Drive Switch on transfer case or transmission. Applicable to: **1996-2002 Toyota Tacoma & 4Runner**.



HEAD BOLT SOCKET

#TOY 105

Applicable to **Toyota Paseo, Tercel, Yaris, Prius & other Toyotas** that use a #8 bi-hexagon socket. 1/2" drive, 100mm long.



#OFTOY1038

TOYOTA OIL FUNNEL



Toyota Oil Funnel used on all **Toyota, Lexus & Scion motors** w/ a threaded oil cap (exc. Prius).

VALVE SPRING DEPRESSOR

#TOY 160

Valve Spring Depressor used for **Toyota** Engines w/ cylinder head off the vehicle.



WHEEL BEARING NUT SOCKET

#TOY 185

For R & R of wheel bearing nut located on inboard side of wheel hub. Applicable to: **Newer Toyota trucks & SUV's (2WD only)**.



#TOY 300

TOYOTA OIL FILTER WRENCH SET

Factory# Cross Reference

Factory Filter#	AST Tool#
#04152-38010	#TOY 640
#04152-YZZA1	#TOY 640
#04152-YZZA2	#TOY 640
#04152-YZZA3	#TOY 640
#04152-YZZA4	#TOY 640
#04152-YZZA5	#TOY 640
#04152-YZZA6	#TOY 640
#90915-YZZD1	#TOY 730
#90915-YZZD3	#TOY 730
#90915-YZZF1	#TOY 640
#90915-YZZF2	#TOY 640
#90915-YZZG1	#M 0219



This set includes our tool numbers **#TOY 640**, **#TOY 730** & **#M 0219**. w/ the **#TOY 300** you have every gas engine **Toyota** model covered between 1983 & 2011. Cast Aluminum Construction. Hard Plastic Carrying Case Included.

#TOY 640
SHOWN HERE ON
FILTER HOUSING

#TOY 730
SHOWN HERE ON
FILTER

#TOY 1914



TOYOTA
SERPENTINE BELT
WRENCH

Toyota serpentine belt wrench equipped w/ 14mm & 19mm, 12 point secured attachments. Applicable to: **1998–2005 Corolla**, **2004 Matrix**, **2008 Highlander V6 (Non Hybrid)**, **2002 RAV4 & 4.7L/5.7L V8 used in Tundra & Sequoia through 2008.**

#M 0219

74MM OIL FILTER WRENCH

- 74mm w/ 14 Flats
- **Applicable:** **Toyota 4Runner, T100, 1998–2004 Tacoma (V6) & 1998–2007 Sienna**
- Aluminum Construction



#TOY 640

64MM TOYOTA OIL FILTER WRENCH

- 64mm w/ 14 Flats
- **Applicable:** **2007–2011 Toyota 5.7L V8 & 3.5L V6 & 2005–2007 Avalon (V6)**
- **Fits Filter Housing#15620-31050**
- **Fits 2010–2011 4.6 L V8**



#TOY 730

73MM TOYOTA OIL FILTER WRENCH

- 73mm w/ 14 Flats
- Metal Construction
- **Applicable to Toyota 4.7L V8**
- **Fits 1992–2006 Lexus ES 300 & 330**



#TOY 200

A/C CLAMP REMOVER



A/C Clamp Remover for removing special air condition line clamps. Applicable to: **1998 & newer Toyota models** w/ the new style A/C clamps. **Comparable to Toyota Tool #09870-00015 & #09870-00025.**



#TOY 200
SHOWN HERE ON
AC CLAMP

INDIVIDUAL
STUD REMOVERS /
INSTALLERS

#200-9/16 & #200-5/8
are 27mm Hex, No
Square Drive

6mm	7mm	8mm	10mm	12mm	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"
#200-6	#200-7	#200-8	#200-10	#200-12	#200-1/4	#200-5/16	#200-3/8	#200-7/16	#200-1/2	#200-9/16	#200-5/8

#201-7

5 PC.
METRIC STUD
PULLER SET

Includes the New 7mm stud remover, ideal for BMW manifold studs. Includes 6mm, 7mm, 8mm, 10mm & 12mm stud remover / installers.



#203

7 PC. STANDARD
SIZE STUD
PULLER SET

Includes 1/4", 5/16", 3/8", 7/16", 1/2", 9/16" & 5/8" stud remover & installer tools.



#202

5 PC. STANDARD
SIZE STUD
PULLER SET

Includes 1/4", 5/16", 3/8", 7/16", & 1/2" stud remover & installer tools.



19MM FUEL LINE
WRENCH

#H 4550-2



Applicable: 16 & 20 Foot **Mercedes Diesel Trucks**; Lines at Delivery Pump on Cummins Turbo Diesel 5.2L.

SPRINTER
TRANSMISSION DIPSTICK

#SPR 886



Dodge Sprinter & Chrysler Crossfire Transmission Dipstick. Use in conjunction w/ factory repair literature to get correct fluid level measurements. **Equivalent to the factory Chrysler #8863B.**

SPRINTER
TANK
ADAPTER

#FZ 55



- **Fits: 2007–2009 Dodge Sprinter Van**
- Female 46 x 2.5mm Buttress Threads



TANK
ADAPTER

#FZ 22



- **Applicable to: Volvo trucks w/ 48 x 3mm threads on filler neck**
- **Also Fits 2007–2008 Kenworth**



TANK
ADAPTER

#FZ 25



- **Fits Volvo Trucks** w/ 47 x 3mm threads on the filler neck, Volvo, Mini Cooper, Jeep, Land Rover, Renault & Saab



TANK
ADAPTER

#FZ 35 A



- **Applicable to Freightliner & International Trucks**



#FZ 36

CAP ADAPTER

- **Applicable to Freightliner & International Trucks**



#FZ 1002

EUROPEAN
COOLING
SYSTEM
ADAPTER SET

This set contains the following adapters: **#BMW 345**, **#FZ 22**, **#FZ 25**, **#BMW 350**, **#FZ 41** & **#M 0349**.

#EU 2090

Applicable: **2010 & Newer Volvo** front caliper slide bolts



#FZ 22

TANK ADAPTER

- **Applicable to: Volvo Truck Models w/ 48 x 3mm Male Threads on the Filler Neck of the Expansion Tank**
- Used for Pressurizing the Cooling System



#FZ 25

TANK ADAPTER

- **Fits Volvo Cars & Trucks w/ 47 x 3mm Threads on the Filler Neck; Volvo XC90**
- Used for Pressurizing the Cooling System

4-PIECE FLEX NUT
DRIVER SET

#3700

Includes 5mm, 6mm, 7mm & 8mm Flexible Nut Drivers. Use the **#3700** to tighten & loosen the hard-to-reach hose clamps on various makes & models. 5-year warranty. Blue handle constructed of tough composite plastic.



#2136

36MM OIL
FILTER
SOCKET

- 36mm w/ 6 Flats
- **Applicable to: 2005 Volvo 40 & 50 Series (new body) & New 3.2L**
- Steel Construction



#FZ 47

TANK
ADAPTER

- **Applicable to: 2004–2005 Volvo S40 & V50 (new body style), 2008–2011 All Models (exc. XC 90)**
- Used for Pressurizing the Cooling System



#ATF 108V

VOLVO DRIVE
LINE FILLER
ADAPTER

Volvo Drive Line Filler Adapter. Applicable to: **some 2007 & newer Volvo** using 5/16 x 24 threaded plug.



#H 2223 LG T-30

TORX SOCKET INSERT

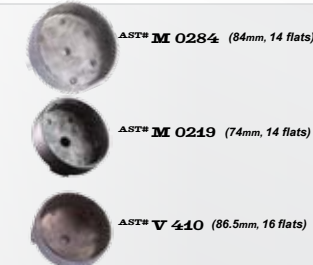


T-30 torx. Used for R & R of the airbag from the steering wheel. Applicable to: many BMW, Mercedes-Benz, Saab, VW & **Volvo** models.

7-PIECE OIL FILTER
WRENCH SET

#2101

Contains oil filter wrench sockets for many domestic & foreign applications. Covers all Mercedes-Benz applications. The 27mm, 32mm & 36mm hex sizes covers VW/Audi, BMW, newer Mercedes 4-cyl. engines, Saturn & GM 2.2 L Ecotec engines. Covers Ford Escape Hybrid & Ford OEM #FL 910 & #FL 793. The four cup-style wrenches covers many VW, BMW, Toyota, & Mazda 3. Also covers Dodge Sprinter & Jeep 3.0L CRD engines & **1999–2010 Volvo models**.



AST# 2132 (32mm, 6 flats)

AST# M 0219 (74mm, 14 flats)

AST# 2136 (36mm, 6 flats)

AST# V 410 (86.5mm, 16 flats)

AST# 2175 (74.5mm, 14 flats)

AST# V 410 (86.5mm, 16 flats)

INCLUDED IN THE 2401

#TA 18

ADAPTER

For brake master cylinder or clutch master cylinder reservoirs. Used in conjunction w/ pressure bleeder (pressure bleeder attachment thread size of 1/4" NPT).



#V 450

VOLVO BRAKE
PISTON ADAPTER

3/8" Drive. For turning in the rear brake caliper piston. Applicable to: **2005 New body Volvo 40 & 50 Series**.



#V 410

86.5MM OIL FILTER WRENCH

- 86.5mm w/ 16 Flats
- **Applicable to: 1999–2006 Volvo Models (exc. newer 40 & 50 Series & 3.2L In-line 6 Cyl. see #2136)**



#V 722

VOLVO ECU RELEASE KEY

Used to remove the ECU from the body mount. Applicable to: **2001–2011 V70 XC, XC70, C70 & 2000–2011 V70, 2000–2011 V70 XC, 2000–2011 S80, XC90, V70, S60, C70 Convertible & S70**.

CAMSHAFT & CRANKSHAFT
ALIGNMENT TOOL

#V 500

This tool is used for the alignment of the camshafts & crankshafts on **Volvo in-line 4, 5 & 6 cyl. twin cam motors through 2006**. May also be used to align the camshafts w/ the cam cover.

Engines:

B6254GS, B6294T, B5234T4, B6294S2, B5244S6, B5204T2, B5234FS, B4184S2, B5254FS M 4.4, B4204T2, B5244S4, B5254T, B5234T9, B4204T3(US)(CDN), B6304S3, B5204T4, B5244S5, B5204T3, B5204FS, B5252FS, B5254FS M 4.3, B4194T, B6294S, B5244T4, B6254FS, B4184S, B5234T6, B5234T2, B6304FS2, GB5252S, B4204S2, B4204T, B5244S2, B5204T5, B5244T7, B4184S9, B4204T4, B6284T, B5234T5, B6304FS, B4204T3, B5244SG2, B6244FS, B4184SJ, B4204T2 CVT, B6304GS, B5254T4, B4184S3, B5234T3, B5244T2, B5244T3, B5244T5, B5254T2, B4204S, B5244S7, B5204FT, B5234FT, B5234T8, B5234T7, B5244S, B4184S10, B4194T2, B5254T3, B5254S DENSO, B4164S, B5254FS LH 3.2, B5244SG, B5244T, B4204T5, B5202FS, B4164S2 & D4192T2



AST VW/AUDI TOOLS

- ⇒ CUSTOM DIPSTICKS
- ⇒ OIL CHANGE TOOLS
- ⇒ ENGINE TOOLS
- ⇒ SPECIAL BITS & BIT SETS

***3000**
40-PIECE SOCKET SET
WITH 1/4" DRIVE
see pg. 76



***6800TDI**
VW TDI
TIMING BELT TOOL
SET
see pg. 83



***2101**
7-PIECE OIL FILTER
WRENCH/SOCKET
SET
see pg. 79



***VW 601**
AIRBAG REMOVAL
TOOL
see pg. 77



***T 40070**
CAM LOCK
CLAMP
see pg. 86



***AU40178**
AUDI ENGINE
OIL DIPSTICK
see pg. 81



***T 10252**
CAMSHAFT LOCKING
TOOL
see pg. 83



***T 4306**
AUDI 3.0L TIMING
TOOL SET
see pg. 87





#3000

40-PIECE SOCKET SET W/ 1/4" DRIVE

Contains: T-6 through T-45 6-Point Tamperproof® Torx; T-10 through T-50 6-Point Standard Torx; 4mm, 5mm, 6mm & 8mm 12-Point; 2.5, 3, 4, 5, 6 & 8 Allen Drivers; 5/32"-5/16" Straight Blade Drivers; #1, #2 & #3 Phillips Drivers.



T-20 T-HANDLE DRIVER

#3200 T-20



This tool is used to access the door handle fasteners on some Mercedes-Benz models. Applicable to: **newer VW Golf, Jetta, Beetle & Passat & 2001-2004 C-Class w/ 203 chassis**

RADIO REMOVAL TOOL

#2040



Radio removal tool for **VW, Audi, Ford & Saab** radios w/ DIN chassis.

T-30 TORX SCREWDRIVER

#3200 T-30



This tool is used to access the door handle fasteners on some Mercedes-Benz models. Applicable to: 2000-2004 Mercedes S-Class w/ 220 chassis. Also used for R & R of adjustments of headlamps on **1999-2004 Audi A6**.

T-45 TORX BIT

#3200 T-45



Used for the R & R of door hinge fasteners.

#3000-4 K

4-PIECE ALLEN SOCKET SET



This 4-piece allen socket set includes: 4mm, 5mm, 6mm & 8mm 1/4" drive sockets.

#3000-6 K

6-PIECE ALLEN SOCKET SET



This 6-piece allen socket set includes: 2.5mm, 3mm, 4mm, 5mm, 6mm & 8mm 1/4" drive sockets.

T-6 TORX BIT

#3200 T-6



Used for the R & R of door handle fasteners on **VW Touareg** as well as Porsche Cayenne.

4MM 12-POINT SCREWDRIVER BIT

#3200 X-4



1/4 inch hex drive bit. Used for the R & R of 4mm door handle screws. Applicable to: **VW Golf, Jetta, Passat & New Beetle**.

#3900

5 LOBE TAMPER- PROOF BIT SET



5 Lobe Bits & 1/4" Drive. Contains: T-10, T-15, T-20, T-25, T-27, T-30, T-40, T-45 & T-50. Includes Case.



#3200

EUROPEAN DOOR/HINGE HANDLE SET

Compact solution to accessing the special fasteners found on the door hinges & handles of **VW/Audi**, Mercedes-Benz & Porsche. Includes: four door hinge bits (less than an inch long), & a slender ratcheting wrench. Also included are the extra long drivers necessary to access the door handles of Mercedes-Benz & **VW**.



RADIO REMOVAL KEYS

#3316



Used for removing the factory-installed radio. Applicable to: **1998-2005 VW Passat, 1999-2005 Jetta & Golf w/ vertically aligned key slots.**

RADIO REMOVAL TOOL

#3344 A



Used for radio removal on **Audi A4, A6, A8 & VW new Beetle through 2005 w/ horizontally aligned key slots.** Two pair of **#3344 A's** are required for most newer VW/Audi models. **Comparable to VW# T 10057.**

#3101

8-PIECE RADIO REMOVAL SET



Set includes the **#2040, #BMW 050, #3344 A** (includes two pair), **#M 2070, #3316, #BMW 025** & the **#BMW 010**. Applications include: Ford & VW models w/ a DIN chassis, BMW models w/ anti-theft radio, **Audi A4, A6, A8 & VW new Beetle**, 1992 & later Mercedes 129, 140, 163, 202 & 210 models, **VW New body Passat, Jetta & Golf**, center console removal on newer BMW Z3, X5 & 5 Series (E39), Multi-Informational Display (MID) removal on BMW X5 & 5 Series (E39).

#7200

CAMSHAFT PULLEY HOLDER



#7200 SHOWN
HERE IN USE

Comes w/ 3 sets of interchangeable pins. Pins may be threaded in two different locations, based on application access. Overall length 18". 12" Spread between pins at tip of arms, when pivot arm is at 90°. Holding pins are Made in USA.

TORX SOCKET INSERT

#H 2223 LG T-30



T-30 torx. Used for R & R of the airbag from the steering wheel. Applicable to: many **VW/Audi**, Mercedes-Benz, Saab & BMW models.

10MM 12-POINT SOCKET

#H 8808-10



10mm, 12-Point Allen Socket, 3/8" Drive. Used during R & R of the door hinges on **VW & Audi models**. The socket's overall height is 43mm. Applicable to: **new VW Beetle, new body VW Jetta & late model VW Golf w/ 10mm, 12-point door hinge bolts.**



#3810

6-PIECE FILE SET

Set includes six files & a protective case. Files are 7 3/8" in length.

AIRBAG REMOVAL TOOL

#VW 601



Used to remove the driver's side airbag from the steering wheel on **1999-2004 VW Passat, Jetta, Golf & Beetle** where torx head screws are no longer used.

#FZ 1002

EUROPEAN
COOLING
SYSTEM
ADAPTER SET

This set contains the following adapters: ***BMW 345**, ***FZ 22**, ***FZ 25**, ***BMW 350**, ***FZ 41** & ***M 0349**.

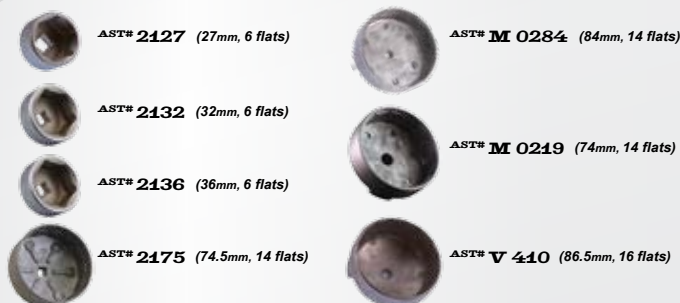
#3101

8-PIECE
RADIO
REMOVAL
SET

Set includes the ***2040**, ***BMW 050**, ***3344 A** (includes two pair), ***M 2070**, ***3316**, ***BMW 025** & the ***BMW 010**. Applications include: Ford & VW models w/ a DIN chassis, BMW models w/ anti-theft radio, **Audi A4, A6, A8 & new VW Beetles**, 1992 & later Mercedes 129, 140, 163, 202 & 210 models, **VW new body Passat, Jetta & Golf**, center console removal on newer BMW Z3, X5 & 5 Series (E39), Multi-Informational Display (MID) removal on BMW X5 & 5 Series (E39).

7-PIECE OIL FILTER
WRENCH SET

#2101



INCLUDED IN THE #2101

Contains oil filter wrench sockets for many domestic & foreign applications. Covers all Mercedes-Benz applications. The 27mm, 32mm & 36mm hex sizes cover VW/Audi, BMW, newer Mercedes 4-cyl. engines, Saturn & GM 2.2 L Ecotec engines. Covers Ford Escape Hybrid & Ford OEM #FL 910 & #FL 793. The four cup-style wrenches cover many VW, BMW, Toyota & Mazda 3. Also covers Dodge Sprinter & Jeep 3.0L CRD engines & 1999–2010 Volvo models.

#FZ 22

TANK ADAPTER

- Applicable to: **1978–1993 VW/Audi** w/ Male Threads on Filler Neck of Expansion Tank & Audi A8/S8

MORE
108
INFO

#FZ 41

TANK ADAPTER

- Fits All 1999–2011 Audi Models (exc. A8 & S8—see #FZ 22)
- Fits All 1999–2011 VW Models
- Also Fits w/ Porsche Cayenne

MORE
108
INFO

#2040

RADIO REMOVAL
TOOL

Radio removal tool for **VW, Audi**, Ford & Saab radios w/ DIN chassis.



#3316

RADIO REMOVAL KEYS



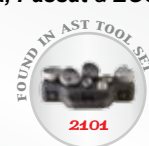
Used for removing the factory-installed radio. Applicable to: **1998–2005 VW Passat**, **1999–2005 Jetta & Golf** w/ vertically aligned key slots.

36MM OIL
FILTER SOCKET

#2136



- 36mm w/ 6 Flats, 3/8" Drive
- Applicable to: **VW/Audi VR-6 Engines & 2006–2008 Golf, Jetta, Passat & EOS w/ 2.0L Turbo**
- Steel Construction

MORE
108
INFO

#2175

74.5MM OIL FILTER
WRENCH

- 74.5mm w/ 14 Flats
- Applicable to: **1.8L 5v Turbo**
- Aluminum Construction

#3344 A

RADIO REMOVAL
TOOL

Used for radio removal on **Audi A4, A6, A8 & VW New Beetle through 2005** w/ horizontally aligned key slots. Two pair of ***3344 A**'s are required for most newer VW/Audi models.

Comparable to VW# **T 10057**.

#S 1553 N

WIRE TERMINAL
EXTRACTOR

This tool is used to remove flat terminals w/ one release tang from the connector plug.

TENSIONER
RELEASE TOOL

#3299 A



Serpentine Belt Release Tool. Applicable to: **2002–2005 Audi A4 w/ 3.0L V6 engines & 2002–2004 Audi A6 w/ 3.0L V6 engines**.

#S 1556 N

WIRE TERMINAL
EXTRACTOR

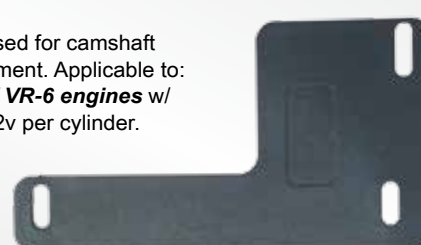
This tool is used to remove flat terminals w/ two release tangs from the connector plug. (1mm wide, 2.5mm apart)

#S 1591 N

WIRE TERMINAL
EXTRACTOR

This tool is used to remove flat terminals w/ two release tangs from the connector plug. (1.65mm wide, 2.8mm apart)

Used for camshaft alignment. Applicable to: **VW VR-6 engines w/ 2v per cylinder**.



#3268

VR-6
CAMSHAFT
RULER

#3242

LOCKING
PIN

This tool is used to lock the crankshaft in T.D.C. position on **VW & Audi 2.7L & 2.8L V6 engines, & 4.2L V8 w/ timing belt**.

#3366

**BRACKET FOR
CHAIN ADJUSTER**

Used when removing & installing the timing chain adjuster. Applicable to: **VW/Audi 4, 6 & 8 cyl. engines w/ 5v per cylinder.**

#3359

**TDI
LOCK PIN**

This injector pump locking pin is used for **1999–2006 VW TDI** engines.

Used in conjunction w/ **#3428, #T 10100** or **#T 10050** depending on model year of TDI.



#3243

**CAMSHAFT ALIGNMENT
TOOL**

Used to hold camshafts at T.D.C. position. Applicable to: **VW/Audi 2.8L V6 engines w/ two valves per cylinder.**

#3391

**CAMSHAFT
ALIGNMENT
TOOL**

This tool is used to hold both camshafts in T.D.C. position. Applicable to: **VW/Audi V6, 2.8 & 2.7L engines w/ 5v per cylinder.** For the 3.0 V6 used in Audi models see **#T 40030** or **#T 4306**.

#3369

SUPPORT GUIDES

Guides for holding front lock carrier in service position. Applicable to: **Audi A4 & A6; VW Passat 1998 until end of 9/2000.**

#6632

**VW/AUDI COIL
PACK PULLER**

Used for removing & installing coils w/ power stage. Applicable to: **2008 Audi Q7 3.6L, 2007 Audi TT 3.2L V6, VW 2.8L VR6 (4v) engines & VW Touareg w/ 3.2L V6.**

Comparable to VW #T10095A.



#6700

**VW/AUDI 1.8T
TENSIONER
HOLDER SET**

Set contains the **#6700-1** Tensioner Bolt & Washer, the **#6700-2** Tensioner Locking Plate, the **#6700-3** Tensioner Lock Pin & the **#6700-4** Holding Rod. Used for holding the timing belt tensioner & the accessory belt tensioner. Applicable to: **VW & Audi models w/ a 1.8 Turbo Motor.**

#3428

**TDI CAM
LOCK BAR**

Used for locking the camshaft on 1999–2003 VW TDI without removing the valve cover. Replaces the old style **#3418**. Used in conjunction w/ the **#3359**. Comparable to VW #T 10098 A.

#6639

**VW/AUDI COIL
PACK PULLER**

**#6639 SHOWN
HERE IN USE**

Used for removing ignition coils w/ final output stage. Applicable to: **2.0T, 1.8T, 3.0, 3.2 & 4.2L engines.** Compact size, only 2" in length. Comparable to VW# **T 40039**.



#8032

**32MM FAN CLUTCH
WRENCH**

32mm x 380mm long wrench used for the R & R of any 32mm fan clutch nuts. Applicable to: **VW, Audi & BMW models w/ 32mm fan clutch nuts.**

#H 1849-6

**SPARK PLUG
CONNECTOR REMOVER**

This tool is used for spark plug boot removal. Applicable to: **VW VR6 engine & older 2.0L motors.** Comparable to VW# **T10029**.

**SPANNER
WRENCH**

#H 2587



Used for adjusting the tension of the timing belt. Applicable to: **4 cyl. VW Golf & Jetta through 1998, 4 cyl. VW Passat, Corrado, 1.9L TDI VW models through 1997.** Comparable to VW #V 159

**TIMING BELT
SPANNER
WRENCH**

#H 2587-1



Used for the adjustment of the timing belt. Applicable to: **2004–2005 VW Golf, Jetta Pumpe Duse & 2002–2005 Audi 3.0 V6.** Comparable to VW #3387.

**TIMING BELT
SPANNER
WRENCH**

#H 2587-2



Used for adjusting the timing belt tension. Applicable to: **1999 & later VW Golf, Jetta, Passat & 1999–2003 VW Beetle w/ 2.0L gas engine, 1.9L T.D.I. diesel engine & 2006–2008 VW/Audi 2.0T (BPY).** Comparable to VW #T 10020

**SOCKET**

#H 2579-9



#9 polydrive head bolt socket, 1/2 inch drive. Applicable to: most **1998 & later VW & Audi engines** using aftermarket headbolts that are smaller than the **#3462** application.

**MULTITOOTH
ADAPTER**

#H 2592

Used for the R & R of the freewheel pulley on the alternator. This tool may be used in conjunction w/ **#S 3054 X-10** Socket.

Comparable to VW #3400.

NOTE: For torx head fasteners, see **#S 1054 TX T-50**.



#M 0219

**74MM OIL
FILTER
WRENCH**

74mm Oil Filter Wrench w/ 14 Flats

Applicable:

2005–2011 VW 2.5L Motors, 2009–2011 VW/Audi All Models w/ 2.0L Turbo; 1999–2008 Beetle (1.9L TDI), Golf (1.9L TDI) & Jetta (1.9L TDI).

See **#2132** for 2011 2.0L T.D.I.

**12MM 12-POINT
SOCKET**

#S 54 X-12

12mm 12-Point Socket, 1/2" Drive, 65mm Length. Fits Porsche 911, 914, 928, 944 & **VW type 2 flywheel bolts.**



#AU 40178

**AUDI
ENGINE OIL
DIPSTICK**

Applicable to: **2009–2010 Audi A4, A5 & A6 w/ Engines 2.0L TFSI, 3.2L FSI & 4.2L FSI. Fits 2010 S4 3.0L Supercharged.** Chart to read dipstick included.



#MVW2050F FUEL LINE PLIERS

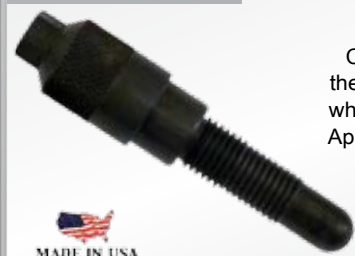
Fuel line pliers for VW fuel lines w/ plastic snap-together connectors. Applicable to: **1999 & later VW w/ plastic release-style lines.**

#T 10115**TENSIONER LOCKING PINS**

Used to hold the timing belt tensioner in place while removing & installing the timing belt. Applicable to: **2004 & newer Golf, Jetta & New Beetle with 1.9L TDI Pumpe Duse, Engine #BEW; & 2.0L Turbo (BPY).**

#T 40011**3-PIECE LOCKING PIN SET**

Used to lock the timing belt tensioner while relieving pressure from the belt. Applicable to: **VW/Audi 3.0L V6 (5v), some 1.8L 4 cyl. 5v turbo & 4.2L V8 5v w/ timing belt.**

#T 40026**CRANK LOCK PIN**

Crank lock pin used to lock the crankshaft at TDC position when replacing the timing belt. Applicable to: **Audi 3.0L V6 5V.**
Used in conjunction w/ #T 40011, #T 40028 & #T 40030.

#T 40028**CAMSHAFT ADJUSTING SOCKET**

Camshaft Adjusting Socket used to adjust variable valve timing on the exhaust side camshaft to basic position. Applicable to: **Audi 3.0L V6 5v.**
Used in conjunction w/ #T 40011, #T 40026 & #T 40030.

#S 3054 X-10**10MM 12-POINT SOCKET**

10mm, 12-Point Socket, 140mm long. Used for R & R of cylinder head bolts. **Used on VW & Audi head bolts,** 10mm, 12-point. **Most VW & Audi applications 1998 & newer require the #3462 Head Bolt Socket.**

#T 10050**CRANKSHAFT STOP**

Used to lock the crankshaft in place during timing belt replacement on **2004–2005 VW TDI Pumpe Duse.** Used in conjunction w/ **#3359, #H 2587-1 & #T 10115.**

#T 10050
SHOWN HERE
IN USE

#T 10100**CRANKSHAFT STOP (OVAL PULLEY DIESEL)**

Used to lock the crankshaft in place during timing belt replacement. Applicable to: **4-Cyl. 1.9L & 2.0L, 2v & 4v diesel engines** equipped w/ oval crankshaft pulley.

#T 10100
SHOWN HERE
IN USE

#T 40001**PULLER**

Puller used to remove cam sprockets. Applicable to: **VW 4 cyl. TDI, VW/Audi V6 (5v) & Audi V8 (40v).**
NOTE: Inquire about separate arms for 2.0L turbo.

#T 40005**CAMSHAFT ALIGNMENT TOOL FOR AUDI 40V V8**

Used to hold both camshafts in TDC position while replacing the timing belt. Applicable to: **VW/Audi w/ 40v V8 (5v per cyl) w/ timing belt.**
Used in conjunction w/ #3242.

#T 40030**CAMSHAFT ALIGNMENT FIXTURE**

Camshaft alignment fixture used to hold & align the camshafts. Applicable to: **Audi 3.0L V6 5v, 2002–2005 Audi A4 & 2002–2004 Audi A6.**
Used in conjunction w/ #T 40011, #T 40026 & #T 40028. For complete set, see **#T 4306.**

#T 40057**VW/AUDI OIL FILTER HOUSING DRAIN**

Used for draining the oil filter housing on **2006–2008 VW/Audi** models w/ the 2.0L Turbo (engine codes; BPG, BPY, BWT) & the **2005 1/2–2011 2.5L inline 5 cyl. VW engine.**

#T 40057
SHOWN HERE
IN USE

#6800TDI**VW TDI TIMING BELT TOOL SET**

#T 10050
SHOWN HERE
IN USE

Used for setting & adjusting the cam/crank/pump timing on 1999–2008 VW TDI engines. Includes: **#3359** TDI Lock Pin, **#3428** TDI Cam Lock Bar, **#H 2587-1 & #H 2587-2** Timing Belt Tensioner Spanner Wrenches, **#T 10115** Tensioner Lock Pins, **#T 10050** Crankshaft Stop & **#T 10100** Oval Pulley Crankshaft Stop.

#T 10100
SHOWN HERE
IN USE

32MM OIL FILTER SOCKET

(32mm, 6 flats) 3/8" Drive.
Applicable to: 2011 T.D.I. 2.0L

#2132**CAMSHAFT ADJUSTER SOCKET**

#10 Polydrive socket for camshaft adjuster bolt on **VW/Audi 2.0L Turbo (BPY)** engines.
Comparable to factory tool #T40080

#VW 5220**#OFAUD1000**

PATENT PENDING
MADE IN USA

VW, AUDI, MERCEDES & BMW OIL FILLER

- Fits BMW 6 & 8 cylinders 1996–Newer
- Fits Dodge Sprinter
- Fits Mercedes 112 & 113 Engines
- **Fits VW/Audi Engines: 1.8T, 1.9L TDI, 2.0T, 2.8L (30v), 3.0L (30v), 3.2L, 3.6L & 4.2L (40v)**
- No More Mess, Attaches Directly to the Valve Cover & Seals just like the Factory Cap

CAMSHAFT LOCKING TOOL**#T 10252**

Camshaft Alignment Tool for **2006–2008 VW/Audi 2.0L Turbo Engines (BPY).** Used in conjunction with: **#VW 5220, #T 10115 & #H 2587-2.**

#T 10252
SHOWN HERE
IN USE



#6300

VW/AUDI/PORSCHE SOCKET & BIT SET

- #6300 XL-14** For R & R of Late Model Eurovan Axle Shafts & Ball Joints
- #6300 XL-8** For R & R of Axle Shaft Bolts on Beetle, Jetta TDI & Older VW/Audi Models
- #6300 XL-10** For R & R of Axle Shaft Bolts on 1999–2005 Passat & Golf
- #6300 X-16** For R & R of Manual Transmission Drain Plug & Touareg & Porsche Cayenne Brake Caliper Bolts
- #6300 X-12** For R & R of Axle Shaft Bolts on 1999–2005 Jetta (gas) & Rear Toe Adjustment on 1999 & Later Audi A6
- #6300 X-14** For R & R of Audi TT Differential Bracket & for Bell Housing Bolts w/ Tight Clearance on Various VW Models
- #3424** Spreader for Assisting R & R of Strut Housing on VW & Audi TT



#S 55-46

46MM HEX SOCKET

46mm, 6-Point Thin-Wall Socket, 3/4" Drive. For R & R of front wheel bearing retainer nut on E24, E28, E32 & E34 chassis. Also applicable to **VW type 2 rear axle shaft nuts**.



#S 3054 X-12

12MM 12-POINT SOCKET

12mm, 12-Point Socket, 140mm Long. Applicable to: Older **VW/Audi models** w/ 12mm 12-point head bolts; Used for R & R of cylinder head bolts on 2003 Toyota 4Runner w/ V6 engine, all 2ZZ engines (4-cyl., 4v w/ VVT) including 2000–2001 Toyota Celica & 2001–2006 Highlander w/ 2AZ-FE engines.



#3104

ALIGNMENT PLATE

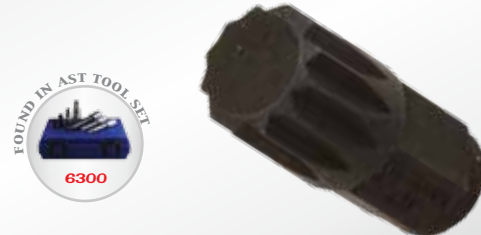


Used when adjusting the transmission shift linkage. Applicable to: **1985 & newer VW Golf & Jetta w/ 5 speed manual gearbox**.

#6300 X-12

12MM 12-POINT SOCKET BIT

12mm, 12-Point Socket Bit. Applicable to: the R & R of axle shaft bolts on **newer VW Jetta** (gas) & rear toe adjustment on **1999 & later Audi A6**.



#6300 X-14

14MM 12-POINT SOCKET BIT

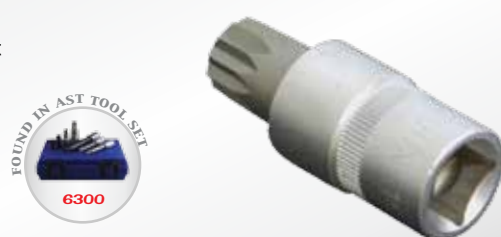
14mm 12-Point Socket Bit. Used for R & R of Audi TT differential bracket & for bell housing bolts w/ tight clearance on various **VW models**.



#6300 X-16

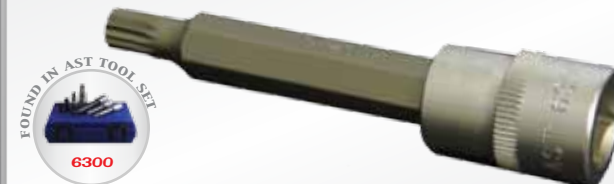
16MM 12-POINT TAMPER-PROOF SOCKET

16mm 12-point tamper-proof socket for R & R of manual transmission drain plug & Porsche Cayenne & **VW Touareg** brake caliper bolts.



#6300 XL-8

8MM 12-POINT LONG SOCKET



8mm 12-point, 3/8" drive, 90mm long socket for R & R of axle shaft bolts on **VW Beetle, Jetta TDI & older VW/Audi models**.

#6300 XL-10

10MM 12-POINT LONG SOCKET



10mm 12-point, 3/8" drive, 90mm long socket for R & R of axle shaft bolts on **VW Passat & Golf** (new body style).

#6300 XL-14

14MM 12-POINT LONG SOCKET



14mm 12-point, 1/2" drive 140mm long socket for R & R of late model **Eurovan** axle shafts & ball joints, **Touareg** inner CV bolts.

#T 10066

HALDEX FILTER WRENCH



Used for the R & R of the oil filter of the Haldex clutch on **Audi TT (02C & 02M Transmissions)**

VW/AUDI DRIVE LINE FILLER SYSTEM

#ATF 1033-5 VW

For VW/Audi applications. Includes pump, 5 liter container, hose, shut-off valve, 2 Angled Attachments, a 10 x 1.0 Attachment, 22 x 1.5 Attachment & 24 x 1.5 Attachment

- **Used only to Fill, Not to Drain—So Clean Fluid Stays Clean**
- **5 Liter Capacity**
- **Additional 3 & 10 Liter Drums also available**
- **Includes DSG & CVT Adapters**
- **Pump Dispenses Efficiently**
- **On/Off Ball Valve w/ Safety Catch**
- **Container Made of UHDP (Ultra High Density Polyethylene)**
- **Hose Length 4 ft. 10 in.**



VW/AUDI "DSG" DRIVE LINE FILLER ADAPTER

#ATF 16 DSG



Used w/ the AST ATF Filler System. The attachment has a 24mm x 1.5 thread. (does not include pump, container, hose, or shut-off valve). **For the complete VW/Audi System Set, see #ATF 1033-5 VW.**

VW/AUDI "CVT" DRIVE LINE FILLER ADAPTER

#ATF 17 CVT

Used w/ the AST ATF Filler System. The attachment has a 22mm x 1.5 thread. (does not include pump, container, hose, or shut-off valve). **For the complete VW/Audi System Set, see #ATF 1033-5 VW.**



SHORT DRIVE LINE FILLER SYSTEM ADAPTER FOR VW/AUDI

#ATF 103



Used w/ the ATF Filler System. Individual adapter included (does not include pump, container, hose, or shut-off valve). **For the complete VW/Audi Set, see #ATF 1033-5 VW.**

LONG DRIVE LINE FILLER SYSTEM ADAPTER FOR VW/AUDI

#ATF 104



Used in conjunction w/ the ATF Filler System. Individual adapter included (does not include pump, container, hose, or shut-off valve). **For the complete VW/Audi Set, see #ATF 1033-5 VW.**

10MM x 1.0 DRIVE LINE FILLER SYSTEM ADAPTER FOR VW/AUDI

#ATF 105



Used w/ the ATF Filler System. Individual adapter included (does not include pump, container, hose, or shut-off valve). **For the complete VW/Audi Set, see #ATF 1033-5 VW.**

#3424

SPREADER

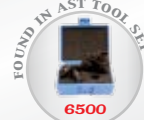
Used for the R & R of the front shock absorber tube from the wheel bearing housing. Applicable to: **VW & Audi TT.**



#6500-17

17MM ALLEN SOCKET

17mm Allen Socket. Applicable to: **1998–2005 VW Passat, 1999–2004 Audi A6, 2002–2005 Audi A4;** front & rear axle bolts (AWD).



#6500 X-30

30MM 12-POINT SOCKET

1/2" Drive. Applicable to: **mid 1999–2005 VW Golf, Jetta, Cabrio & Beetle;** front axle nuts.



#T 40069

VW/AUDI CRANKSHAFT LOCKING PIN



Locking pin to lock crankshaft at T.D.C. Applicable to **VW/Audi** engines: 2.5L I-5 cyl. (BGP, BGQ, BPR, BPS, CBTA & CBUA) 3.2L V6 4v (BKH & CALA)

#S 54 X-14

14mm 12-Point Socket, 1/2" Drive. Ideal for rear brake caliper bolts on **2006 & newer Passat & Jetta.**



#TA 18

ADAPTER



For brake master cyl. or clutch master cyl. reservoirs. Used in conjunction w/ pressure bleeder (pressure bleeder attachment thread size of 1/4" NPT).



#6500-14

14MM ALLEN SOCKET

14mm Allen Socket. Applicable to: **VW Passat 1996–2001, Audi A4;** front & rear axle bolts (AWD).



#6500 X-18

18MM 12-POINT SOCKET, 1/2" DRIVE

18mm, 12-Point Socket w/ a 1/2" Drive. Applicable to: 2006–2009 VW Golf & Jetta w/ Independent Rear Suspension (I.R.S.). This tool is used for the R & R of the rear axle bolt.

Comparable to VW Tool #T10162.



#6500 X-32

32MM 12-POINT SOCKET

32mm 12-Point Socket, 3/4" Drive. Applicable to: **VW Touareg;** Front & Rear Axle Nuts.



#T 40070

CAM LOCK CLAMP



Includes 2 Cam Lock Clamps. Camshaft locking clamp used for setting timing. **May be used in conjunction w/ #T 40069.**

Applicable to: **Audi: 3.2L V6 4v (BKH), 4.2L V8 4v (BAR, BNS, BVJ, BYH & CAUA) & 5.2L V10 4v (BXA & BSM)**
VW: 2.5L I5 (BGP, BGQ, BPR, BPS, CBTA & CBUA)



#T 4306

AUDI 3.0L TIMING TOOL SET

Includes the following tools:

#T 40011

3-Pc. locking pin set used to lock the timing belt tensioner while relieving pressure from the belt

#T 40026

Used to lock the crankshaft at TDC position when replacing the timing belt

#T 40028

Used to adjust variable valve timing on the exhaust side camshaft to basic position

#T 40030

Used to hold & align the camshafts

Applicable to: Audi 3.0L (V6) 5v, used in 2002–2005 Audi A4 & 2002–2004 Audi A6



VW/AUDI AXLE NUT SOCKET SET

#6500-14

14mm Allen for 1996–2001 VW Passat Audi A4; Front & Rear Axle Bolts (AWD)

#6500-17

17mm Allen for 1998–2005 VW Passat, 1999–2004 Audi A6 2002–2005 Audi A4; Front & Rear Axle Bolts (AWD)

#6500 X-30

30mm 12-Point Socket for Mid 1999–2005 VW Golf, Jetta, Cabrio & Beetle; Front Axle Nut

#6500 X-32

32mm 12-Point Socket w/ a 3/4" Drive, VW Touareg; Front & Rear Axle Nuts

NOTE: For 2006–2009 VW Jetta & Golf Rear Axle Bolt, order **#6500 X-18** separately (see pg. 86)




ACURA

Cooling System Tank Adapters & Cooling System Cap Adapters for Acura Models

Model	Year	Tank Adapter	Cap Adapter	
Integra	1990–1993	 #FZ 128	 #FZ 29	
Integra Legend TL	1994–1999 1991–1996 2007	 #FZ 138		

Oil Filter Wrenches for Acura



Model / Engine	Year	Oil Filter Wrench	Specs	
All models		 #5063	63mm oil filter wrench, w/ 14 flats	

AUDI

PLEASE SEE VW / AUDI






BENTLEY

Cooling System Tank Adapters & Cooling System Cap Adapters for Bentley Models

Model	Year	Tank Adapter	Cap Adapter	
Arnage	2000–2003	 #FZ 34		









BMW

Cooling System Tank Adapters & Cooling System Cap Adapters for BMW Models


Model	Year	Tank Adapter	Cap Adapter	
All models 3 Series 7 Series X3 X5	1989–2005 2004–2005 2002–2006 2005–2006 2005–2006	 #BMW 345		
3 Series 5 & 6 Series X5 X6 7 Series	2006–2011 2004–2011 2007–2011 2009–2011 2010–2011	 #BMW 350	 #BMW 352	

Oil Filter Wrenches for BMW Models



Model / Engine	Year	Oil Filter Wrench	Specs	
5 & 7 Series (V8) X5 (V8)	2004–2011 2004–2011	 #2124	24mm oil filter socket w/ 6 flats	
M52 engine M60 engine M62 engine M70 engine M73 engine	1992–2005	 #2136	36mm oil filter socket w/ 6 flats	

M44 engine (1.9L)		 #2175	74.5mm oil filter wrench w/ 14 flats	
BMW Motorcycles w/ oil filter #11 42 7 673 541	2007–2011	 #BM 1276	76mm oil filter wrench w/ 12 Flutes	
BMW Motorcycles w/ oil filter #1142 1460845 & #1142 7721779	2004	 #M 0219	74mm oil filter wrench, w/ 14 flats	 
3-Series 335i (twin turbo) 535i (turbo) X6 (turbo)	2006 2007–2010 2007–2010	 #V 410	86.5mm oil filter wrench w/ 16 flats	

Line Disconnect Tools for BMW Models




Model / Engine	Year	Line Disconnect Tool	Specs	
3 Series (E46 & E90) X5	1999–2009 1999–2005	 #BMW 5346	Power steering & transmission line disconnect tool for BMW	

Headbolt Sockets for BMW Models

Model / Engine	Year	Headbolt Socket	Specs	
BMW N54 (3.0T) motors	2006–2010	#118580 (special order)	1/2" drive, long T60	
M 42 engine M 50 engine		#H 2925	1/2" drive, E12 Torx socket	





BUICK

Cooling System Tank Adapters & Cooling System Cap Adapters for Buick Models

Model	Year	Tank Adapter	Cap Adapter	
Roadmaster Skylark	1994–1996 1992–1998	 #FZ 35 A	 #FZ 36	

CADILLAC

Cooling System Tank Adapters & Cooling System Cap Adapters for Cadillac



Model	Year	Tank Adapter	Cap Adapter	
CTS Escalade Fleetwood Seville	2003 1999 1994–1996 1998–2003	 #FZ 35 A	 #FZ 36	
Catera	1997–2001	 #FZ 32 A		

Line Disconnect Tools for Cadillac				
Model / Engine	Year	Line Disconnect Tool	Specs	
CTS	2003–2004	 #8021	Used for R & R of oil cooler lines	

CHEVROLET					
Cooling System Tank Adapters & Cooling System Cap Adapters for Chevrolet Models					
Model	Year	Tank Adapter	Cap Adapter		
Metro	1989–1994	 #FZ 128	 #FZ 29		
Nova	1985–1988				
Prizm	1989–1992				
Spectrum	1985–1988				
Sprint	1985–1988				
Tracker	1989–1993				
Metro	1998	 #FZ 138			
Prizm	1998				
Tracker	1998				
Aveo	2009	 #FZ 35 A	 #FZ 36		
Beretta	1992–1996				
Camaro	1999				
Caprice	1995–1996				
Cavalier	1995–1999				
Cobalt	2005–2007				
Corsica	1992–1996				
Corvette	1999–2011				
Cruze	2011				
Equinox	2010				
Express	2010–2011				
Impala SS	1994–1996				
Malibu	1997–1999				
Malibu Hybrid	2009				
Metro	1999				
Prizm	1999				
Silverado 1500	1999–2011				
Silverado 2500	1999–2011				
Suburban	2000–2011				
Tahoe	1999–2011				
Tracker	1999				
Trailblazer	2001–2011				
Van (Duramax 6.6L diesel)	2007–2011				

Line Disconnect Tools for Chevrolet				
Model / Engine	Year	Line Disconnect Tool	Specs	
Tahoe	2002–2004	 #8022	Used for R & R of fuel filters	
Suburban	2002–2004			











CHRYSLER				
Cooling System Tank Adapters & Cooling System Cap Adapters for Chrysler				
Model	Year	Tank Adapter	Cap Adapter	
Colt Laser Stealth Talon	1984–1992 1991–1998 1991–1996 1991–1998	 #FZ 128	 #FZ 29	
Colt Summit	1993 1993–1995	 #FZ 138		
Oil Filter Wrenches for Chrysler				
Model / Engine	Year	Oil Filter Wrench	Specs	
Crossfire 3.2L (V6)	2004	 #M 0219	74mm oil filter wrench, w/ 14 flats	 2404  TOY 300
DAEWOO				
Cooling System Tank Adapters & Cooling System Cap Adapters for Daewoo Models				
Model	Year	Tank Adapter	Cap Adapter	
All models	1999–2001	 #FZ 34		
DODGE				
Cooling System Tank Adapters & Cooling System Cap Adapters for Dodge Models				
Model	Year	Tank Adapter	Cap Adapter	
Sprinter Van	2007–2009	 #FZ 55		
Oil Filter Wrenches for Dodge Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
Sprinter (2.7L 5-cyl.)		 #2175	74.5mm oil filter wrench w/ 14 flats	 2404
Sprinter (3.5L 5-cyl.)	2007	 #M 0219	74mm oil filter wrench w/ 14 flats	 2404  TOY 300
Sprinter 3.0L V6 CRD	2007–2010	 #M 0284	84mm oil filter wrench w/ 14 flats, 22mm hex	 2404





Line Disconnect Tools for Dodge Models				
Model / Engine	Year	Line Disconnect Tool	Specs	
Ram Pickup w/ V10 or Cummins Turbo Diesel	1995–2007	 #8016	Used for R & R of Oil & Transmission Cooler Lines	

FORD




Cooling System Tank Adapters & Cooling System Cap Adapters for Ford Models				
Model	Year	Tank Adapter	Cap Adapter	
Escort	1991–1999	 #FZ 128	 #FZ 29	
Explorer	1995–1999			
Explorer (Sport Trac)	2004			
Festiva	1988–1993			
Ranger	2003			
Thunderbird	1989–1992			
Thunderbird (V6)	1993–1997			
Tempo	1992–1994			
Topaz	1992–1994			
Villager	1993–1999			
Windstar	1995–1999			
Focus	2012	 #FZ 47		
E-Series Van	1995–2003	 #FZ 32 A	 #FZ 36	
Edge	2009–2011			
Excursion	2000–2003			
Expedition	2003–2007			
Explorer	2002–2005			
Five Hundred	2005			
Focus	2006			
Freestyle	2005			
F-Series	1995–2011			
Sterling	2005			
Taurus	1996–2011			
Thunderbird	2003			
Thunderbird (V8)	1993–1997			
Windstar	2002–2003			
Contour	1995–1997	 #FZ 34		
Focus	2000–2006			
Contour	1998–2001	 #FZ 37		
Escape	2001–2005			

Oil Filter Wrenches for Ford Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
Escape Hybrid	2006–2008	 #M 0219	74mm oil filter wrench w/ 14 flats	 2104
Focus (2.3L)	2004–2007			
Fits OEM filters: FL910 & FL973				
Fusion (2.3L)	2006–2008			
F-Series	All models	 #2124	24mm w/ 6 flats Used for R & R of fuel filter housing	 F 2500
F250 Turbo Diesel	2004	 #2136	36mm oil filter wrench w/ 6 flats Also used for R & R of fuel filter	 2104
F350 Turbo Diesel				
Models w/ Motorcraft filter #FL400S	1981–2009	 #F 7630	76mm oil filter wrench, w/ 30 Flutes	 F 2500
Models w/ Motorcraft filter #FL500S	2009–2010			
Models w/ Motorcraft filter #FL2005	2000–2004			
Models w/ Motorcraft filter #FL820S	1991–2010	 #F 9336	93mm oil filter wrench, w/ 36 Flutes	 F 2500



Line Disconnect Tools for Ford Models				
Model / Engine	Year	Line Disconnect Tool	Specs	
Mustang	1995–1996	 #8010	Used for the removal of 1/4" return lines on the fuel pump	 8440
Aerostar	1990–1997	 #8012	For R & R of fuel filter & fuel lines	 8440
Bronco	1990–1997			
E-Series Van	1991–2006			
Explorer	1990–2006			
F-Series	1991–2000			
Ranger	1992–2006			
Aerostar	1990–1997	 #8013	For R & R of fuel lines	 8440
Bronco	1990–1997			
E-Series Van	1991–2006			
Explorer	1990–2006			
F-Series	1991–2006			
Ranger	1992–2006			
Taurus	Models w/ AXOD & ATX transmissions	 #8014	Used for R & R of oil cooler lines	 8440
Escort				
Explorer (V8)	2003–2004	 #8021	Used for R & R of oil cooler lines	 8440
F-150	2004–2008			
Expedition	2005			




Edge Escape (6F Trans.) Excursion w/ 6.0L Turbo Diesel Explorer (V8) F-350 F-350 w/ 6.0L Turbo Diesel F-250 w/ 6.0L Turbo Diesel	2009–2010 2008 2008 2005	 #8023	Used for R & R of transmission oil cooler lines	
Explorer (Sport Trac) Ranger	2007 2006	 #8024	Used for R & R of transmission oil cooler lines	

FREIGHTLINER




Cooling System Tank Adapters & Cooling System Cap Adapters for Freightliner				
Model	Year	Tank Adapter	Cap Adapter	
Diesel Truck	2004	 #FZ 35 A	 #FZ 36	

GM



Oil Filter Wrenches for GM Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
Models w/ 4 cyl. Ecotec		 #2132	32mm oil filter wrench, w/ 6 flats	




Line Disconnect Tools for GM Models				
Model / Engine	Year	Line Disconnect Tool	Specs	
All models w/ 5/16" fuel line & fuel rail		 #8012	For R & R of fuel filter & fuel lines	
GM w/ 6.6 V8 Turbo Diesel Duramax	2011	 #8027	For R & R of the fuel line from the indirect fuel injector	


GMC

Cooling System Tank Adapters & Cooling System Cap Adapters for GMC Models				
Model	Year	Tank Adapter	Cap Adapter	
Envoy Sierra 1500 Sierra 2500 Yukon	2002 1999–2011 1999–2011 1999	 #FZ 35 A	 #FZ 36	




HARLEY-DAVIDSON



Oil Filter Wrenches for GM Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
All models w/ a spin on oil filter		 #HD 1474	74mm oil filter wrench, w/ 14 flats	

Cooling System Tank Adapters & Cooling System Cap Adapters for Honda Models				
Model	Year	Tank Adapter	Cap Adapter	
Accord Civic Motorcycle	1990–1993 1988–1993 1991–2006	 #FZ 128	 #FZ 29	
Accord Civic Civic Hybrid CRV Element Fit Odyssey Pilot S2000	1994–2009 1994–2005 2004 2009 2008 2009 1999–2009 2003–2008 2008	 #FZ 138		




Oil Filter Wrenches for Honda				
Model / Engine	Year	Oil Filter Wrench	Specs	
All Honda models (exc. S2000)	through 2011	 #5063	63mm oil filter wrench, w/ 14 flats	

HYUNDAI


Cooling System Tank Adapters & Cooling System Cap Adapters for Hyundai Models				
Model	Year	Tank Adapter	Cap Adapter	
All models	1987–1999	 #FZ 128	 #FZ 29	

Oil Filter Wrenches for Hyundai Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
Azerra Santa Fe Sonata	2006–2009	 #HY 8815	88mm oil filter wrench w/ 15 flats, 22mm hex	
4 cyl. models		 #SU 8015	80mm oil filter wrench w/ 15 flats	












INFINITI

Cooling System Tank Adapters & Cooling System Cap Adapters for Infiniti Models				
Model	Year	Tank Adapter	Cap Adapter	
All models	1992–1999	 #FZ 128	 #FZ 29	

















Oil Filter Wrenches for Infiniti Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
Models w/ VQ30DE engines	1995–2007		64mm oil filter wrench w/ 14 flats	
	2004–2007			
		#5063		
INTERNATIONAL				
Cooling System Tank Adapters & Cooling System Cap Adapters for International Models				
Model	Year	Tank Adapter	Cap Adapter	
Models w/ 466 engine	1994–2002			
VT 365 engine	2007			
		#FZ 32 A	#FZ 36	
ISUZU				
Cooling System Tank Adapters & Cooling System Cap Adapters for Isuzu Models				
Model	Year	Tank Adapter	Cap Adapter	
All models	1992–1997			
Rodeo (V6)	2001			
		#FZ 128	#FZ 29	
All models	1998–1999			
		#FZ 138		
JAGUAR				
Cooling System Tank Adapters & Cooling System Cap Adapters for Jaguar Models				
Model	Year	Tank Adapter	Cap Adapter	
S Type	2000–2003			
		#FZ 35 A	#FZ 36	
All models w/ male threads on filler neck	1990–1994			
		#FZ 34		
XJ8	1998–2001			
XK8	1998–2001			
X Type	2002–2003			
		#FZ 37		
Oil Filter Wrenches for Jaguar Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
Jaguar w/ V8 5.0L	2010–2011		90mm oil filter wrench w/ 15 flats	
		#JA 9015		

JEEP				
Cooling System Tank Adapters & Cooling System Cap Adapters for Jeep Models				
Model	Year	Tank Adapter	Cap Adapter	
All Models	1987–1990			
		#FZ 25		
Oil Filter Wrenches for Jeep Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
Cherokee 3.0L V6 CRD	2007–2009		84mm oil filter wrench w/ 14 flats	
		#M 0284		
LAMBORGHINI				
Cooling System Tank Adapters & Cooling System Cap Adapters for Lamborghini Models				
Mercealogo	2007			
		#FZ 22		
LAND ROVER				
Cooling System Tank Adapters & Cooling System Cap Adapters for Land Rover Models				
Model	Year	Tank Adapter	Cap Adapter	
Freelander LR3	2005			
Range Rover Sport	2005–2007 2006			
		#FZ 32 A		
Discovery Series 2 Range Rover	2002 1995–2004			
		#BMW 345		
Freelander	2002			
		#FZ 25		
Discovery Series 1 Range Rover	1998 1988–1994			
		#FZ 34		
LR2	2007–2008			
		#FZ 47		
Oil Filter Wrenches for Land Rover Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
Land Rover models w/ V8 5.0L	2010–2011		90mm oil filter wrench w/ 15 flats	
		#JA 9015		

LEXUS




Cooling System Tank Adapters & Cooling System Cap Adapters for Lexus Models							
Model	Year	Tank Adapter	Cap Adapter				
LS 400	1990–1999	 #FZ 128	 #FZ 29				
LX 450	1996–1999						
LX 470	1996–1999						
ES 300	1994–1999						
ES 300	1992–1993	 #FZ 138					
GS 300	1993–1999						
GS 400	1998–1999						
RX 300	2000						
Oil Filter Wrenches for Lexus Models							
Model / Engine	Year	Oil Filter Wrench	Specs				
ES 350 (V6)	2007 & Newer	 #TOY 640	64mm oil filter wrench w/ 14 flats				
GS 300 (V6)	2006						
GS 350 (V6)	2007 & Newer						
GS 450h (Hybrid)	2007 & Newer						
IS 250 (V6)	2006 & Newer						
IS 350 (V6)	2006 & Newer						
LS 460 (V8)	2007 & Newer						
LS 600h L (V8)	2008						
RX 350 (V6)	2007 & Newer	 #TOY 730	73mm oil filter wrench w/ 14 flats				
ES 250 (V6)	1990–1991						
ES 300 (V6)	1992–2003						
ES 330 (V6)	2004–2006						
GS 300 (I6)	1998–2005						
GS 400 (V8)	1998–2000						
GS 430 (V8)	2001–2004						
GX 470 (V8)	2004 & Newer						
IS 300 (I6)	2001–2005						
LS 400 (V8)	1990–2000						
LS 430 (V8)	2001–2006						
LX 450 (I6)	1996–1997						
LX 470 (V8)	1998–2007						
RX 300 (V6)	1999–2003						
RX 330 (V6)	2004–2006						
RX 400h (V6)	2006 & Newer						
SC 300 (I6)	1992–2000						
SC 400 (V8)	1992–2000						
SC 430 (V8)	2002 & Newer						
LINCOLN							
Cooling System Tank Adapters & Cooling System Cap Adapters for Lincoln Models							
Model	Year	Tank Adapter	Cap Adapter				
Mark VIII	1993–1998	 #FZ 32 A	 #FZ 36				
Navigator	1998–1998						
Towncar	1993–1999						

MAZDA



Cooling System Tank Adapters & Cooling System Cap Adapters for Mazda Models							
Model	Year	Tank Adapter	Cap Adapter				
All Models	1985–1999	 #FZ 128	 #FZ 29				
Protege (automatic)	2000–2001						
6	2004						
Protege (1.5L engine)	1995	 #FZ 138					
Protege (manual)	2000–2001						
5	2007						
3	2004–2006	 #FZ 47					
Tribute	2001–2004	 #FZ 37					
Oil Filter Wrenches for Mazda Models							
Model / Engine	Year	Oil Filter Wrench	Specs				
3 (2.3L)	2004–2006	 #M 0219	74mm oil filter wrench w/ 14 flats	 			
5 (2.3L)	2005–2007						
6 (2.3L)	All Models						
CX-7 (2.3L turbo)	2007						
Mazdaspeed 3	2006–2007						
Mazdaspeed 6	2006–2007						
Mazda 2.0L engines & filter #LF05-14-302A	All Models	 #2176					
MERCEDES–BENZ							
Cooling System Tank Adapters & Cooling System Cap Adapters for Mercedes-Benz Models							
Model	Year	Tank Adapter	Cap Adapter				
AMG C-Class CL-Class CLK-Class CLS-Class E-Class G-Class ML 164 R-Class S-Class SL-Class SLK-Class	1996–2011 All models shown equipped w/ BLACK, threaded cap For 1998–2005 M-Class see #FZ 32 A	 #M 0349					
ML 320	1998–2005				 #FZ 32 A	 #FZ 36	
ML 430	1998–2005						

Oil Filter Wrenches for Mercedes-Benz Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
All models w/ V6 & V8 <i>For diesel see #M 0284 & #2136</i>	1998–2011	 #M 0219	74mm oil filter wrench w/ 14 flats	 
E 320 3.0L V6 CRD GL 320 CDI ML 320 CDI	2007–2012 2007–2012 2007–2012	 #M 0284	84mm oil filter wrench w/ 14 flats	
C 230 (4 cyl.) Kompressor	2002–2007	 #2127	27mm oil filter wrench w/ 6 flats	
OM 604 engine OM 605 engine OM 606 engine		 #2136	36mm oil filter wrench w/ 6 flats	
M 102 & M 103 engines w/ 12 flute OEM oil filter		 #BM 1276	76mm, 12 flutes, 3/8" drive	
Head Bolt Sockets for Mercedes-Benz Models				
Model / Engine	Year	Headbolt Socket	Specs	
M601 engine M602 engine M603 engine		#S 3054 X-10	10mm, 12-point socket	
M112 engine M113 engine M 137 engine		#H 992 SLG-T55	T-55 Torx	
MERCURY				
Cooling System Tank Adapters & Cooling System Cap Adapters for Mercury Models				
Model	Year	Tank Adapter	Cap Adapter	
Cougar Cougar (V6) Tracer	1989–1992 1993–1997 1991–1999	 #FZ 128	 #FZ 29	
Cougar (V8) Crown Victoria Grand Marquis Sable	1993–1997 1993–2003 1993–2003 1996–2003	 #FZ 32 A	 #FZ 36	
Mystique	1998–2001	 #FZ 37		






Mystique	1995–1997	 #FZ 34		
Oil Filter Wrenches for Mercury Marine Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
4 Stroke (marine applications) 200 motor 4 Stroke (marine applications) 225 motor		 #TOY 730	73mm oil filter wrench w/ 14 flats	
MINI COOPER				
Cooling System Tank Adapters & Cooling System Cap Adapters for Mini Cooper Models				
Model	Year	Tank Adapter	Cap Adapter	
Cooper S	through 2007	 #FZ 25		
Oil Filter Wrenches for Mini Cooper Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
Cooper S		 #2136	36mm oil filter socket w/ 6 flats	
MITSUBISHI				
Cooling System Tank Adapters & Cooling System Cap Adapters for Mitsubishi Models				
Model	Year	Tank Adapter	Cap Adapter	
3000 GT Diamante Galant Mirage Montero Outlander	1991–1998 1992–1995 1985–1993 1985–1992 1989–1998 2004	 #FZ 128	 #FZ 29	
Diamante Eclipse (Spyder) Galant Mirage Montero Sport	1996–1998 2002 1994–2003 1993–1999 1997–1999	 #FZ 138		
NISSAN				
Cooling System Tank Adapters & Cooling System Cap Adapters for Nissan Models				
Model	Year	Tank Adapter	Cap Adapter	
All models 350Z Altima Frontier Maxima Murano Quest Sentra X-Terra	1987–2004 2004 2006–2009 2004–2011 2000–2011 2004 2004 2000–2011 2004	 #FZ 128	 #FZ 29	















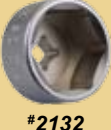





Armada	2005–2011			
Titan	2004			
Oil Filter Wrenches for Nissan Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
Altima	1997–2011		63mm oil filter wrench w/ 14 flats	
Maxima	1994–2011			
Murano	2002–2007			
Pathfinder	1995–2011			
Pick-up	1997–2011			
Sentra	2007			
Xterra	2002–2011			
X-Trail (Canada)	2004–2011			
Older Sentra models & trucks using filter #15208H8903 & #1520855Y00			80mm oil filter wrench w/ 15 flats	
Line Disconnect Tools for Nissan Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
Models w/ a 5/16" Fuel Rail	2004 & Newer		Used for disconnecting the fuel line from the fuel rail	

OLDSMOBILE

Cooling System Tank Adapters & Cooling System Cap Adapters for Oldsmobile Models				
Model	Year	Tank Adapter	Cap Adapter	
Achieva	1992–1998			
Alero	1999			
Aurora	1995–1999			
Cutlass	1997–1998			
Intrigue	1999–2000			

PONTIAC

Cooling System Tank Adapters & Cooling System Cap Adapters for Pontiac Models				
Model	Year	Tank Adapter	Cap Adapter	
Grand Am	1992–1999			
G6	2005–2008			
Sunfire	1995–1999			
Le Mans	1988–1993			
Head Bolt Sockets for Pontiac Models				
Model / Engine	Year	Headbolt Socket	Specs	
Vibe	2003–2007	#S 3054 X-10	10mm, 12-point	


Cooling System Tank Adapters & Cooling System Cap Adapters for Porsche Models				
Model	Year	Tank Adapter	Cap Adapter	
Boxster 911 (water-cooled models w/ threaded necks)				
Oil Filter Wrenches for Porsche Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
924 944			74.5mm oil filter wrench w/ 14 flats	
911 Boxster Cayenne Cayman	1999–2008 1997–2008 2005–2008 2005–2008		74mm oil filter wrench w/ 14 flats	 
SAAB				
Cooling System Tank Adapters & Cooling System Cap Adapters for Saab Models				
Model	Year	Tank Adapter	Cap Adapter	
9 ³	2003–2004			
900 9000	1978–1994 1986–1998			
900	1994–1998			
Oil Filter Wrenches for Saab Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
9 ³	2003		32mm oil filter wrench w/ 6 flats	
Line Disconnect Tools for Saab Models				
Model / Engine	Year	Line Disconnect Tool	Specs	
900	Models w/ 5/16" fuel line & fuel rail		For R & R of fuel filter & fuel lines	
900			For R & R of fuel lines	

SATURN




Cooling System Tank Adapters & Cooling System Cap Adapters for Saturn Models				
Model	Year	Tank Adapter	Cap Adapter	
All Models Ion Vue	1990–1999 2005 2003	 #FZ 35 A	 #FZ 36	
LS	2000	 #FZ 34		
Oil Filter Wrenches for Saturn Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
Astra (1.8L)	2008	 #2124	24mm oil filter socket w/ 6 flats	
Ion (4 cyl. Ecotec)		 #2132	32mm oil filter wrench w/ 6 flats	
SCION				
Cooling System Tank Adapters & Cooling System Cap Adapters for Scion Models				
Model	Year	Tank Adapter	Cap Adapter	
All models	2008	 #FZ 138		
xB	2009	 #FZ 148		
Oil Filter Wrenches for Scion Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
tC xA xB xD	2005–2011 2004–2011 2004–2011 2008–2011	 #TOY 640	64mm oil filter wrench w/ 14 flats	
SMART				
Cooling System Tank Adapters & Cooling System Cap Adapters for Smart Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
All U.S. models	2008	 #5040	66.5mm oil filter wrench w/ 14 flats	
STERLING				
Cooling System Tank Adapters & Cooling System Cap Adapters for Sterling Models				
Model	Year	Tank Adapter	Cap Adapter	
All models	1987–1991	 #FZ 25		



Heavy Truck (Freightliner)	2004	 #FZ 35 A	 #FZ 36	
SUBARU				
Cooling System Tank Adapters & Cooling System Cap Adapters for Subaru Models				
Model	Year	Tank Adapter	Cap Adapter	
All models (4-cyl.)	1984–2011	 #FZ 128	 #FZ 29	
All models (6-cyl.)	2006–2011	 #FZ 138		
Oil Filter Wrenches for Subaru				
Model / Engine	Year	Oil Filter Wrench	Specs	
H6 engines w/ filter #15208AA031		 #SU 8015	80mm oil filter wrench w/ 15 flats	
Subaru Factory oil filters w/ the part number of #15208AA12A.		 #SU 6514	67mm oil filter wrench w/ 14 flats	
SUZUKI				
Cooling System Tank Adapters & Cooling System Cap Adapters for Suzuki Models				
Model	Year	Tank Adapter	Cap Adapter	
All models w/ 16mm filler neck	1983–1995	 #FZ 128		
TOYOTA				
Cooling System Tank Adapters & Cooling System Cap Adapters for Toyota Models				
Model	Year	Tank Adapter	Cap Adapter	
4 Runner Avalon Camry Celica Corolla Cressida Land Cruiser MR2 (Spyder) Pickup Previa Sienna Solara Starlet Supra (non-turbo) T100 Tacoma Tercel	1986–1995 1995–2003 1983–1989 1983–2005 1983–1992 1985–1992 1987–2002 1985–1995 1983–1999 1989–1997 1998–2003 1999–2002 1983–1984 1986–1992 1995–1998 2000–2002 1983–1990	 #FZ 128	 #FZ 29	

4 Runner	2003–2005	 #FZ 138	
Avalon	2011		
Camry (V6, A/T)	1990–2007		
Celica	1990–1998		
Corolla	1993–2011		
Echo	2000–2003		
FJ	2007–2011		
Highlander	2001–2011		
Matrix	2003		
Paseo	1992–1999		
RAV4	1996–2003		
Sequoia	2001–2003		
Sienna	2010		
Supra (turbo)	1990–1992		
Tacoma	2006–2011		
Tercel	1991–1999		
Tundra	2000–2002		
Venza	2011		
Yaris	2011		

Celica (GTS-S)	2000	 #FZ 148	
Highlander (Hybrid)	2008		
MR2 (Spyder)	2000		
Prius	2001–2010		
RAV 4	2006–2011		



Oil Filter Wrenches for Toyota Models

Model / Engine	Year	Oil Filter Wrench	Specs	
4 Runner (I4 & V6)	1985–2002	 #M 0219	74mm oil filter wrench w/ 14 flats	 
Avalon (3.0 L V6)	1995–2004			
Camry (4 cyl. & V6)	1984–2006			
Celica (4 cyl.)	1983–1985			
Corolla (I4 diesel)	1984			
Cressida (6 cyl.)	1981–1992			
Highlander (V6)	2001–2008			
Previa (4 cyl.)	1991–1997			
Sienna (V6)	1998–2007			
Solara (4 & 6 cyl.)	1999–2008			
Supra (In-line 6)	1979–1998			
T100 (I4 & V6)	1993–1998			
Tacoma (I4 & V6)	1995–2010			
Truck / 4Runner (I4)	1977–1984			
Tundra (3.4 L)	2000–2004			
Van 4WD & ATM (I4)	1987–1989			




Avalon (3.5 L V6)	2005–2008	 #TOY 640	64mm oil filter wrench w/ 14 flats	
Camry (2.0 L I4)	1983–2009			
Celica (I4)	1986–2005			
Corolla (I4)	1983–2010			
Echo (1.5 L I4)	2000–2005			
Highlander (3.5 L V6)	2008–2010			
Land Cruiser (5.7 L V8)	2008–2010			
Matrix (I4)	2003–2010			
MR2 & Spyder (I4)	1985–2005			
Paseo (I4)	1992–1997			
Prius (I4)	2001–2008			
RAV4 (I4 & 3.5 L V6)	1996–2010			
Sequoia (5.7 L & 4.6 L)	2009–2011			
Sienna (3.5 L V6)	2007–2010			
Solara (I4)	1999–2001			
Tercel (I4)	1980–1998			
Tundra (5.7 L & 4.6 L)	2007–2011			
Yaris (I4)	2006–2010			

4 Runner (V6 & 4.7 V8)	2003–2010	 #TOY 730	73mm oil filter wrench w/ 14 flats	
FJ Cruiser (4.0 L V6)	2007–2010			
Land Cruiser (I6 & V8)	1975–2008			
Sequoia (4.7 L V8)	2001–2009			
Tacoma (V6)	2005–2010			
Tundra (6 & 4.7 L 8 cyl.)	2000–2010			

Line Disconnect Tools for Toyota Models

Model / Engine	Year	Line Disconnect Tool	Specs	
Newer Toyota models w/ a 5/16" fuel rail		 #8026		

Head Bolt Sockets for Toyota Models

Model / Engine	Year	Headbolt Socket	Specs	
Matrix	2003–2007	#S 3054 X-10	10mm, 12-point	
4Runner (V6) Celica (2AZ-FE engines) Highlander (2AZ-FE engines) All 2ZZ engines (4-cyl., 4-valves w/ VVT)	2003 2000–2001 2001–2006	#S 3054 X-12	12mm, 12-point	
Paseo Tercel Prius Yaris	early 1990's early 1990's through 2011 through 2011	#TOY 105	#8 Bi-Hex	

VOLVO

Cooling System Tank Adapters & Cooling System Cap Adapters				
Model	Year	Tank Adapter	Cap Adapter	
Volvo Trucks VN 430 670		 #FZ 22		 FZ 4002
XC 90 Passenger vehicles (exc. newer 40 & 50 Series)	1978–2007	 #FZ 25		 FZ 4002
Volvo Trucks (w/ 47mm x 3mm threads on secondary filler neck)	1978–2007			
All models (exc. XC 90)	2008–2011	 #FZ 47		
Oil Filter Wrenches for Volvo Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
All Models (exc. 2005 40 & 50 series)	1999–2006	 #V 410	86.5mm oil filter wrench w/ 16 flats	 2104
40 & 50 Series XC 70 (3.2L) XC 90 (3.2L)	2005–2011 2008–2011 2008–2011	 #2136	36mm oil filter wrench w/ 6 flats	 2104
VW / AUDI				
Cooling System Tank Adapters & Cooling System Cap Adapters for VW & Audi Models				
Model	Year	Tank Adapter	Cap Adapter	
All VW/Audi models (exc. Audi 8 Series) See #FZ 22 for A8 & S8	1999–2011	 #FZ 41		 FZ 4002
Models w/ male threads on exp. tank S8 A8	1975–1993	 #FZ 22		 FZ 4002
Oil Filter Wrenches for VW & Audi Models				
Model / Engine	Year	Oil Filter Wrench	Specs	
S6 (5.2L) Q7 (4.2L) VW T.D.I. (2.0L)	2007 2011	 #2132	32mm oil filter wrench w/ 6 flats	 2104
Corrado (VR-6) EOS (2.0L turbo) Eurovan (VR-6) Golf (2.0L turbo) Golf R32 (3.2L VR-6, 4v) Jetta (2.0L turbo) Jetta (2.8L VR6) Passat (2.0L turbo) Passat (2.8L VR6) Touareg (3.6L) Q7 (3.6L)	2006–2008	 #2136	36mm oil filter wrench w/ 6 flats	 2104

Golf (1.8L Turbo, 2.0L) Jetta (1.8L Turbo, 2.0L) Passat (1.8L Turbo, 2.0L)	2006–2008	 #2175	74.5mm oil filter wrench w/ 14 flats	 2104
All VW/Audi w/ 2.0L Turbo Beetle (1.9L TDI) All 2.5L 5 cyl. Engines Golf (1.9L TDI) Jetta (1.9L TDI)	2009–2011 1999–2008 2005.5–2011 1999–2008 1999–2008	 #M 0219	74mm oil filter wrench w/ 14 flats	 2104  TOY 300
Headbolt Sockets for VW & Audi Models				
Model / Engine	Year	Headbolt Socket	Specs	
All models w/ #10 polydrive headbolts	1998–2010	#3462	6-Point, #10 polydrive	
All models w/ 10mm 12-point headbolts	1984–2005	#S 3054 X-10	10mm, 12-point	
All models w/ #9 polydrive aftermarket headbolts	1998–2010	#H 2579-9	6-point, #9 polydrive	
YAMAHA				
Cooling System Tank Adapters & Cooling System Cap Adapters for Yamaha				
Model	Year	Tank Adapter	Cap Adapter	
All Yamaha watercooled motorcycle / ATV w/ deep neck		 #FZ 128	 #FZ 29	
All Yamaha watercooled motorcycle & ATV w/ shallow neck		 #FZ 138		
Oil Filter Wrenches for Yamaha				
Yamaha motorcycle, ATV, snowmobile & marine 4-stroke engines using filter #5GH-13440-00		 #5063	63mm oil filter wrench w/ 14 flats	
Yamaha outboard marine 4-stroke engines, I-4 & V6, 150-250 HP		 #TOY 730	73mm oil filter wrench w/ 14 flats	 TOY 300

30 T-10	28
30 T-15	28
30 T-20	28
30 T-25	28
30 T-27	28
30 T-30	28
30 T-40	28
30 T-45	28
30 T-50	28
100-30 A	14, 41, 60, 68
200-6	29
200-8	29
200-10	29
200-12	29
200-1/4	29
200-5/16	29
200-3/8	29
200-7/16	29
200-1/2	29
200-9/16	29
200-5/8	29
201	29, 47
201-7	15, 28, 47, 71
202	29, 47, 71
203	29, 47, 71
1200	28
1201	28
2040	19, 24, 76, 77, 78
2101	15, 22, 38, 55, 73, 79
2124	14, 22, 54, 60
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DRIVER'S
SIDE
BOTTOM OF
BLOCK

HOLE LOCATION FOR "BMW 420-1