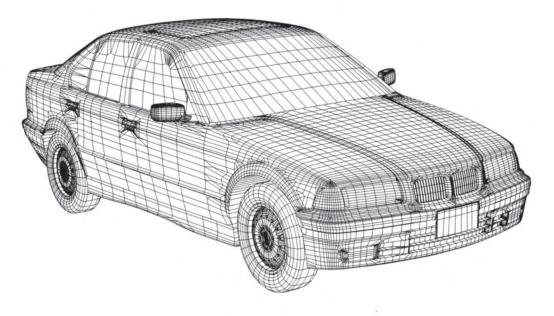


# BMW Tool Catalog



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# Ordering Information

The tools in this catalog comply, where possible, with the numbering system of BMW USA and Mercedes Benz NA and are organized by Repair Groups as found in the Factory Service and Repair Manuals and Workshop Information Systems.

Baum Tools attempts to carry the complete line of OEM issued tools. If you cannot find a particular tool or a tool for a specific application, please call and inquire. We continually update our product line as new tools become available.

Our engineering and development departments are constantly on the alert for new and improved tool designs. We give all suggestions and recommendations careful consideration. We also have contact with a variety of International sources and maintain a flexible stock in order to satisfy your needs.

#### STATEMENT OF POLICY

Orders may be placed by Phone, Fax, E-mail or mail. Every effort is made to process each order at the time it is received. Backordered items are retained on backorder until shipment is possible.

Please specify if backorders are NOT to be carried forward.

**Shipping**: All shipments are F.O.B. our warehouse Sarasota Florida USA, via U.P.S. Ground, 3 Day Select, 2 Day Air, Next Day Air, Express International or Expedited International where available. Guaranteed AM delivery and Saturday delivery is also available upon request.

**Payment**: We accept Visa, MasterCard, American Express, Discover and COD orders. All orders are shipped COD unless other form of payment is made.

**Prices**: Prices are subject to change without notice. Please confirm pricing at the time the order is placed. If ordering by E-mail, Mail or Fax please include a phone number so we may confirm availability and pricing. Returns: All errors in shipping must be reported within 48 hours of receipt. All returns are subject to a 20% restocking charge, when no error on our part exists. No return may be made without an authorization number. All returns must contain a copy of the original invoice. Refunds are made on the first of the following month. Special order Items are non returnable.

**Warranty**: New, currently manufactured and cataloged tools carry a warranty against defects in materials and workmanship for a period of 12 months from the date of delivery. This warranty does not apply to any tool or part of tool which has been altered in any way without the express permission of Baum Tools, the use of power tools in conjunction with any Baum Tool not specifically specified for use with power tools and tools used for jobs other than that specified.

Obsolete and Used Tools carry no warranty and are sold on an AS IS basis regardless of manufacturer.

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Fool Number	Application	Models	11
B115000	CASE DRILLING FIXTURE - 6 CYLINDER Use to install Timesert inserts when the cylinder bolt holes strip in the light alloy type engine case. Use with Timesert kit #TS1015 and inserts #TS10155. Covers all 6 cylinder models from 1998 to 2005.	M52TU, M54, M56	NEW
B1160K	DOUBLE VANOS ASSEMBLY & TIMING KIT This kit contains the tools necessary to assemble and properly time the double VANOS camshaft adjustment unit found in 1998 and later 6 cylinder engines.	M52TU, M54, M56	NEW-
116150	VALVE TIMING ADJUSTMENT PLATE Adjusting plate for setting valve timing on engine with double VANOS.	M52TU, M54, M56	
116180	SECONDARY CHAIN ASSEMBLY FIXTURE Use for preassembling secondary chain sprockets with chain on camshafts.	M52TU, M54, M56	
117340	CAMSGAFT LEAD ANGLE GAUGE For setting camshaft lead angle (control diagram) when installing VANOS adjustment unit on 3.2Liter	S50B32	M3
126410	VANOS CONTROL ADAPTER Cable and adapter for VANOS control for external signaling of VANOS control when installing and function-checking the 4/2 way valve in conjunction with #113450	M50, M52, S50B32, S54, S62	
113292	CHAIN TENSIONER LOCK PIN Locks chain tensioner during timing.	M50, M52	0
113450	VANOS COMPRESSED AIR FITTING Fitting allows for functional testing of VANOS adjusting unit. Use with #126410.	M50, M52, M52TU, M54, M56, N62	
117350	VANOS AIR ADAPTER Use to supply compressed air to VANOS unit during assembly.	S50B32	M3
B1088K	CAMSHAFT LOCKING FIXTURE KIT This camshaft kit allows disassembly and assembly of 4, 6, 8 and 12 cylinder BMW engines produced from 1991 to the present. Includes #113240, #B112440, #113190, #112300, #114230 & #B1088K-6.	M40, M42, M50, M52, M52TU, M54, M56, M60, M62, M70, M73	NEVEL DE LA COMPANIE



Tool Number	Application	Models	11
113240	CAMSHAFT LOCATING FIXTURE - 6 Cylinder Aligns and holds camshaft in place when assembling timing chain. Use with #112300 to locate top dead center. Use with #119110 for M44 models with rough idle.	M42, M44, M50, M52, M52TU, M54, M56, S50US, S52US	
119110	CAMSHAFT GAUGE ADD-ON Additional camshaft gauge half for #113240 to locks intake side at 6 degrees during timing adjustment. Use with #113240 for M44 models with rough idle.	M44	
B112440	CAMSHAFT ALIGNMENT FIXTURE - V8 Locks V8 camshafts and crankshaft at proper position during assembly.	M60, M62	
119460	CAMSHAFT ALIGNMENT JIGS Aligns intake and exhaust cams in the proper timing position for assembly. Use with #119190. Specifically designed for New Generation V8 and V12 engines. 3 piece kit.	N62, N73	NEW
114280	CAMSHAFT LOCKING FIXTURE This camshaft kit aids in assembly of 6 cylinder BMW N52 engines produced from 2004 to the present. See #114290.	N52	NEW
B117250	CAMSHAFT LOCATING JIG Use this jig set to position the camshaft in the TDC position when disassembly and assembly of the intake and exhaust sides.	N40, N45, N57	NEW
119290	CAMSHAFT LOCATING JIG Use this jig set to position the camshaft in the TDC position when disassembly and assembly of the intake and exhaust sides.	N42, N46	NEW
117260	CAMSHAFT SENSOR GEAR DISCONNECT GAUGE Use when disassembling the camshaft or realigning the camshaft.	N40, N45	NEW
114290	CAMSHAFT SENSOR GEAR DISCONNECT GAUGE Use when disassembling the camshaft or realigning the camshaft.	N52	NEW
113190	TDC LOCATING JIG - 12 Cylinder Use to align camshaft during removal and installation or changing chain.	M70, M73	47



Tool Number	Application	Models	11
116450	CAMSHAFT LOCKING FIXTURE Locks camshaft sensor wheel in position during timing and assembly of V8 VANOS equipped engines.	M62VANOS	NEW A
113310	SECONDARY CHAIN TENSIONER LOCKING CLIPS Use to secure the cam chain tensioner.	M62	22
112430	CAMSHAFT LOCATING GAUGE Use to check camshaft position after loading.	M60	
113430	CAMSHAFT TURNING TOOL Use to rotate camshafts into postion for installation or removal.	M60, M62	
112300	TOP DEAD CENTER PIN Aligns flywheel at top dead center. Use with #113240 and #112440 for cam alignemnt. Use with # 112090, # 135330, and # 1235340 to set diesel timing.	All Engines 1994- 2007	
115120	TOP DEAD CENTER LOCATING PIN Locks flywheel at Top Dead Center on new generation 4 and 6 cylinder engines. Use with #119460 for V8.	N45, N46, N52	NEW
119190	TOP DEAD CENTER LOCATING PIN Locks flywheel at Top Dead Center on new generation 4 and 8 cylinder engines. Use with #119460 for V8.	N40, N42, N62	NEW
119480	VALVETRONIC TORSION LEVER Use to pretension and releaving the valvetronic torsion springs.	N62	NEW
115180	TOP DEAD CENTER LOCATING PIN - X5 (V8) Aligns flywheel at top dead center. Use with #B112440 for cam alignment.	M62, X5	
114230	RIGID CHAIN TENSIONOR Use to tension primary chain. Short format for late mdel V8 also for M3.	M60, M62, M62VAN, S50B30	



119340 RIGID CHAIN TENSIONOR Use to tension primary chain.  RIGID CHAIN TENSIONOR Use to tension primary chain. Short format for late model new generation engines. Use with #114280 for cam alignment on N52.  CHAIN TENSIONER STRETCH TRESTLE - V8 (M60) Use with #114230.  CHAIN TENSIONER STRETCH TRESTLE - V8 (M62) Use with # 114230.  BALANCE SHAFT LOCK PLATE - NEW STYLE Aligns the balance shaft in the TDC position during assembly and disa	M60 M62 N46	NEW NEW
Use to tension primary chain. Short format for late model new generation engines. Use with #114280 for cam alignment on N52.  112400 CHAIN TENSIONER STRETCH TRESTLE - V8 (M60) Use with #114230.  117380 CHAIN TENSIONER STRETCH TRESTLE - V8 (M62) Use with # 114230.  BALANCE SHAFT LOCK PLATE - NEW STYLE	M60  M62  N46	
117380 CHAIN TENSIONER STRETCH TRESTLE - V8 (M62) Use with # 114230.  115140 BALANCE SHAFT LOCK PLATE - NEW STYLE	M62	NEW
Use with # 114230.  115140 BALANCE SHAFT LOCK PLATE - NEW STYLE	N46	NEW
		NEW
119330  BALANCE SHAFT LOCK PLATE - OLD STYLE Aligns the balance shaft in the TDC position during assembly and disa Replaced by #115140.	N40, N42, N45, N46 ssembly.	NEW
115490 VANOS TURNING WRENCH Use to adjust VANOS position.	M50, M52	DAM TOOLS
113490 VANOS LOCATING TOOL - M3 Use to line up VANOS unit on M3 S50 engine. See VANOS turning too #115490 for M50 and M52.	S50	Y
115080 CAMSHAFT LOCKING FIXTURE Locks camshaft in position when adjusting timing on M3 3.0L and 3.2L	S50B30, S50B32 . engines.	
116170 VANOS CAP FLAT NOSE PLIERS Pliers for removing and installing plastic closure caps on double VANO	M52TU, M54, M56	-(0)



ool Number	Application	Models	11
W910A	SLIDE HAMMER TIP - 12X1mm  Use on slide hammer #602-0033A to remove rocker shafts on 4 and 6 cylinder models.	All to 1983	
113090	CAMSHAFT ADJUSTING ASSEMBLY Use with #112300 and #135340 to set diesel timing.	M21	
116060	MAGNETIC SOCKET - 10mm X 400mm 1/4" DR. Use to R&R valve cover nuts and intake suction tube mount.	M70, M73	
112250	HEAD BOLT SOCKET TORX - E12 Special 'lock ball' TORX socket for cylinder head screws on late BMW 4-valve models.	M42, M43, M44, M50, M52, M60, M62	
ST1054TX- T50	HEADBOLT SOCKET - TORX T50 Special 130mm long T50 TORX headbolt socket for N52 engine. BMW #114420. Also see ST054TX-T60 for M10 bolts.	N52	NEW CONTRACTOR
ST1054TX- T60	HEADBOLT SOCKET - TORX T60 Special 130mm long T60 TORX headbolt socket for M10 bolts on N52 engine. BMW #115190. Also see ST054TX-T50 for M9 bolts.	N52	NEW
113260	CAMSHAFT LOADING FIXTURE Use to remove/install camshaft without damaging rocker assemblies.	M42, M50, M52, M52TU, M54, M56, S50US, S52US	
113250	CYLINDER HEAD TAPPET SUCKERS Use to lift tappets out of cylinder head.	M40, M41, M42, M43, M44, M50, M51, M52, M52TU, M54, M56, M60, M62, S62	000000000000000000000000000000000000000
119450	CRANKSHAFT COUNTERHOLDER Holds cranckshaft while loosening the center retainer bolt. Use with 27mm socket.	N62, N73	NEW P
118190	VIBRATION DAMPER HOLDER Use to hold vibration damper when removing retaining bolts.	M52TU, M54, M56	0



ol Number	Application	Models	11
118200	VIBRATION DAMPER PULLER HEAD Use to grip and remove vibration damper in conjenction with #118210.	M52TU, M54, M56	
118210	VIBRATION DAMPER PULLER Removes vibration damper in conjunction with #118200 and #118190.	M52TU, M54, M56	
112410	SPACER SHIM Use with counterholder #112150 for removing crank bolt.	M41, M44, M52	
112150	CRANKSHAFT COUNTER HOLDER Locks vibration damper when removing crank bolt with engine in the car. Use with shim #112410 for removing bolt on M41, M44 and M52 engines.	M20, M40, M41, M43, M44, M50, M51, M52	0
113460	ANGLE POSITION GAUGE Graduated disk for mounting on counterholder #112450 (M60, M62) or on #112420 (M73) for torquing central bolt.	M60, M62, M73	30 30
112450	CRANKSHAFT COUNTER HOLDER Holds vibration damper when removing/installing retaining bolt.	M60, M62	
112240	CRANKSHAFT COUNTER HOLDER Holds vibration damper when removing/installing retaining bolt.	M30, S38, E34, E32	
112420	CRANK COUNTERHOLDER - M73 Use to releasing/tightening central bolt on vibration damper.	M73	
112230	CRANKSHAFT COUNTER HOLDER - M70 Holds vibration damper when removing/installing retaining bolt.	M70	
119260	FLYWHEEL LOCK KIT Locks flywheel when transmission is removed.	M54, N40, N42, N52, N62, N73, W17	NEW



ool Number	Application	Models	
112170	FLYWHEEL LOCK Locks flywheel in place with transmission removed when removing/installing nuts and bolts.	M20, M21, M40, M41, M42, M43, M44, M47, M50, S50, M51, M52	
112070	FLYWHEEL LOCK Use to lock flywheel in place.	M60, M62, M70, M73, S62	
112120	FLYWHEEL LOCK Locks flywheel with transmission 3HP20, 3HP22, 4HP22 in place when removing or installing crank bolts.	M30	
112160	FLYWHEEL LOCK 6 CYLINDER Locks flywheel in place with transmission removed when removing/installing nuts and bolts.	M10, S14, M30, S38	
112140	FLYWHEEL LOCK 4 CYLINDER Locks flywheel in place with transmission removed when removing/installing nuts and bolts.	M10	The state of the s
112100	FLYWHEEL LOCK Locks flywheel with transmission 3HP12, 3HP22 in place when removing or installing crank bolts.	M10	ev " "
W1088	PILOT BEARING PULLER - 10mm - 25mm Universal pilot bearing and bushing puller. Particularly narrow format and sharp lip allows access to even the hardest to get at bushings and bearings without damage.		· Marine
113150	M SPORT VALVE TAPPET LOADING LEVER - EURO Depresses valve tappets for easy removal of valve adjusting shims. Engines without catalytic convertor. Euro versions.	M88, S38, M6 Euro	2
113170	M SPORT VALVE TAPPET LOADING LEVER - USA Depresses valve tappets for easy removal of valve adjusting shims.	S14, S38, M3, M5, M6, USA	<b>&gt;</b>
114400	VALVE SHIM REMOVER Removes and install valve adjustment shims on M3 from 2000.	S54	NEW



ol Number	Application	Models	11
113070	VALVE ADJUSTING HOOK Spring design allows for easy adjustment of rocker eccentric in any position.	M10, M20, M30	
B9042	RADIATOR FAN WRENCH SET  This 11 piece wrench set contains #115050 and thin 32mm wrench for removing fan clutch. Also contains all wrenches necessary to work on Mercedes fan clutches.	M10, M20, M21, M30, M50, M51, M52, M52TU, M54, M56, M70, M73, S14, S38, S50, S54	NEW C
115050	FAN PULLEY HOLDER Use to remove water pump on models with temperature dependent viscosity drive fans. Use with tool # T9A-32. Also see kit #B9042.	M10, M20, M21, M30, M40, M41, M43, M44, M50, M51, M52, M52TU, M54, M56, M60, M62, M70, M73, N62, S14, S38, S50,	
T9A-32	SPECIAL THIN WRENCH - 32mm Use to loosening and tightening of the fan coupling nut. Use with holding tool #115030. (BMW #115040). Also see T9A-SET.	All	
115010	WATER PUMP LINKAGE CLAMP Use to hold linkage when removing water pump. Use with tool #T9A-32 and #115050	M20	
H2567-1	OIL DRAIN WRENCH - 17mm HEX X 19mm BOX Use to remove gearbox drain and filler plugs with 17mm allen and oil pan drain plugs with 19mm box wrench.	All	9
B1407	OIL FILTER SOCKET SET 3 socket set 27mm, 32mm and 36mm for oil filter housings on Mercedes, VW/Audi and BMW and MINI automobiles.	M52, M60 and M70	NEW O O
103-0209	OIL FILTER WRENCH - 14 POINT 74mm 3/8" DRIVE Socket type filter remover for spin on oil filters and filter housings. Reinforced construction and side lock bolts to remove the most stubborn filters.	All spin on filter.	
B6700	"JAWS" OIL FILTER REMOVER Special "vise-grip" action makes this the best oil filter remover yet.	All	
119240	OIL FILTER WRENCH - 86mm X 16 POINT Use to loosen and tighten oil filter cap.	N40, N42, N45, N46	NEW



Tool Number	Application	Models	11
114180	ENGINE MOUNT BOLT TORX SOCKET - T60  TORX bolt socket for mounting bolts on ZMS engine mounting with dual mass flywheels. See #113380 for models to 12/93 production.	M60, M62, S62	
113380	ENGINE MOUNT BOLT TORX SOCKET - T50 TORX bolt socket for mounting bolts on ZMS engine mounting thru 12/93 production and NEW generation V12. See #114180 for dual mass flywheel.	M60, M70, N73	
ST7380	TORQUE ANGLE GAUGE Angle gauge with magnetic base allows accurate torquing of 'stretch' type bolts used on head, flywheel and case bearings where a torque value and torsion angle are specified.	All	
ST55-36	VIBRATION DAMPER NUT SOCKET - 36mm 3/4" DRIVE Use this thin walled socket to remove pulley end nut with #112120 or #112160. (BMW #112180)	M30	
113100	ENGINE TURNING BAR DOUBLE ROW CHAIN Use to turn engine when adjusting valves and timing.	M10, M30	The same of the sa
113110	ENGINE TURNING BAR SINGLE ROW CHAIN Use to turn engine when adjusting valves and timing. Kit includes ends for 4 and 6 cylinder models.	M10, M30	
KO4012M-17	HEX HEAD SOCKET - 17mm ½" DRIVE Use to remove oil and transmission drain plugs.	All	HAZE 5
71B	COMPRESSION GAUGE 300psi GASOLINE Features flexible hose, side release valve and 10mm and 14mm screw in adapters for spark plug holes.	All	
1106	CYLINDER LEAKDOWN PRESSURE TESTER Check cylinder leakage rate to detect worn or broken rings, gaskets, cylinders and valves. Kit includes: Heavy duty gauges, hose, 10mm and 14mm spark plug port adapters.	All	
111220	SEAL INSTALLER Use to install seal in timing case cover.	S50, M60, M62, M70	



Tool Number	Application	Models	11
111230	SEAL INSTALLER Use to install seal in rear crankshaft cover. Use with drift handle #005500.	M60, M62, M70, M73	
111260	REAR CRANKSHAFT SEAL DRIFT Installs flywheel end crankshaft seal. Use with seal protector # 112213.	M10, S14, M20, M21, M30, S38, M40, M41, M42, M43, M44, M47, M50, M51, M52	
111270	FRONT CRANKSHAFT SEAL KIT Installs front timing gear seals without removing radiator. Kit includes thrust ring and 2 special driver nuts for 4 and 6 cylinder models. See #241050 for M20 engines.	M10, M30, M42	
112210	SEAL GUIDE SLEEVES - SET OF 3 Allows seals to easily slide over front crankshaft, intermediate shaft and rear crankshaft.	M10, S14, M20, M21, M30, S38, M40, M41, M42, M43, M44, M47, M50, S50, M51, M52	118
112211	FRONT CRANKSHAFT SLEEVE Guides front crank seal over shaft lip.	M10, S14, M20, M21, M30, S38, M40, M41, M42, M43, M44, M47, M50, S50, M51, M52	
112212	INTERMEDIATE/CAM SHAFT SLEEVE Guides intermediate/cam shaft seal over shaft lip.	M10, S14, M20, M21, M30, S38, M40, M41, M42, M43, M44, M47, M50, S50, M51, M52	
112213	REAR CRANKSHAFT SLEEVE Guides rear crank seal over shaft lip. Use with #111260. See #112390 for M60, M62, M70 and M73 engines.	M10, S14, M20, M21, M30, S38, M40, M41, M42, M43, M44, M47, M50, S50, M51, M52	
112390	REAR CRANKSHAFT SEAL GUIDE SLEEVE Allows seals to easily slide over rear (flywheel end) of crankshaft.	M60, M62, M70, M73	
10-222A	ENGINE SUPPORT BRIDGE Holds engine in place when front axle or transmission is removed.	All	
H794U-3	PISTON RING COMPRESSOR 70mm - 110mm RANGE Use to compress piston rings when installing pistons into engine case.	All	



ool Number	Application	Models	11
111290	VENT PIPE HOLDER Use to hold oil pipe spring in place while installing cylinder head.	M20	7
W7080	VALVE STEM SEAL INSTALLER Installs 7mm and 8mm valve stem seals. Incorporates both BMW #111130 and #111200.	All	
104-0037	VALVE STEM SEAL PLIERS 4-VALVE Particularly useful to remove valve stem seals on 6mm, 7mm and 8mm valves. Same as BMW # 111250	All including 4 valve types.	2 000
ST11063	VALVE STEM SEAL PLIERS Use to remove valve stem seals.	All	
111061B	ROCKER ARM LOADER - 6 CYLINDER Use to compress rocker assembly when renewing cylinder head. Includes locating tabs for M	M20, M30	THE REAL PROPERTY.
TS1015	TIMESERT KIT-10X1.5mm  Timesert kit for rethreading case when cylinder head bolts strip out. Use with alignment jig #117-0223 and inserts #TS10155.	M52TU, M54, M56	***
TS10155	TIMESERT INSERTS 10X1.5X24.5mm  Bulk Timesert inserts for case repair on BMW 6 cylinder engines from 1998 to 2005.	M52TU, M54, M56	
124	CONNECTING ROD CHISEL Use to peen mounting nuts of connecting rods.	All	STANTONE SIGNAFT

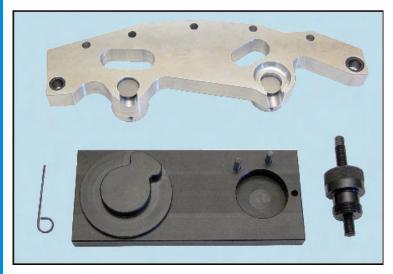




# BMW VANOS TOOLS



#### **DOUBLE VANOS ASSEMBLY AND TIMING KIT**



#### **#B1160K**

#### **Kit Includes:**

Alignment Jig #116150 Sprocket Assembly Jig #116180 Rigid Chain Tensioner #114220 Chain Tensioner Lock Pin #113292 Storage Case (optional)

This kit contains the tools necessary to assemble and properly time the double VANOS camshaft adjustment unit found in 1998 and later 6 cylinder engines.

BMW 6 Cylinder Engines: M52TU (1998-2000)

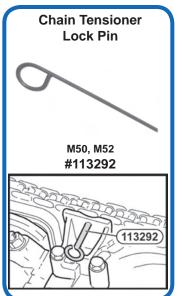
M54 (2001-2004) M56 (2003-present). WE WILL BEAT ANY
COMPETITORS
ADVERTISED PRICE

All parts are available separately.













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## BMW Vibration Damper Tools



#### VIBRATION DAMPER HOLDER



#### VIBRATION DAMPER BRACE



#118200

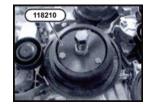
Use with vibration damper brace #118200 to release and tighten the center retainer bolt.

Use with #118190 to hold vibration damper when removing retaining bolt. Use with #118210 to remove vibration damper hub

6 Cylinder Engines: M52TU, M54, M56.

#### **VIBRATION DAMPER HUB PULLER**





Use with #118200 to remove stuck vibration damper hub.

Engines: M52TU, M54, M56.

#### **RIGID CHAIN TENSIONER**



Use to maintaine timing chain tension during disassembly and assembly of camshafts.

Engines: M60, M62.

## CRANKSHAFT COUNTER HOLDER 4 & 6 CYLINDER



Locks crankshaft vibration damper to allow removal of crankshaft bolt with the engine in or out of the car. Use with shim #112410 for M41, M42 and M52 engines.

Engines: M20, M40, M41, M43, M44, M50, M51 & M52.

## CRANKSHAFT COUNTER HOLDER V8



Use to hold the vibration damper when removing and installing the retainer bolt.

Engines: M60, M62.





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## BMW Camshaft Tools



## CAMSHAFT LOCKING FIXTURE 4 & 6 CYLINDERS



#### #113240

Aligns and holds the camshaft in position when assembling cylinder head and replacing timing chain. Use with TDC Pin #112300 and rigid tensioner #114220. Also use gauge add-on #119110 for 4-cylinder M44 engines with rough idle.

**Engines:** M42, M44, M50, M52, M52TU, M54, M56, S50US, S52US.

#### CAMSHAFT LOCKING FIXTURE ADD-ON FOR M44



Additional camshat locking fixture piece for intake side to increase timing by 6 degrees for rough running of M44 4-cylinder engines.

Engine: M44.

## CAMSHAFT LOCKING FIXTURE V8



#### #B112440

Aligns and holds the camshaft in position when assembling cylinder head and replacing timing chain. Use with TDC Pin #112300 and rigid chain tensioner #114230.

Engines: M60, M62.

#### **TOP DEAD CENTER PIN**



Use to lock the flywheel at Top Dead Center when removing or replacing the camshafts or VANOS assemblies. Use #115180 for X5 (E53) vehicles with modified oil sump.

**Engines:** M42, M43, M44, M50, M52, M52TU, M54, M56, M60, M62, M70, M73, S50B30, S50B32, S54, S62.

## Camshaft Adjusting Socket V8 VANOS





116440

Use to adjust VANOS to far left stop during assembly and when adjusting valve timing.

Engine: M62VANOS (1999-2002)

## Cam Sensor Wheel Locking Fixture V8 VANOS







#### 116450

Locks camshaft sensor wheel in position during assembly. Includes left and right bank locking fixtures.

Engine: M62VANOS (1999-2002)





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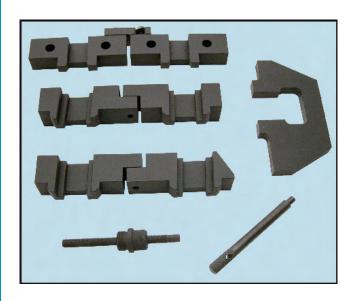


# BMW Camshaft Kits



## CAMSHAFT LOCKING FIXTURE KIT BMW 4, 6, 8 & 12 CYLINDER ENGINES

#B1088K



#### Kit includes:

6 Cyl. Camshaft Fixture	#113240
V8 Camshaft Fixture	#B112440
4 & 12 Cyl. Camshaft Fixture	#113190
TDC Locating Pin	#112300
Rigid Chain Tensioner	#114230
Shim Pins	#B1088K-6

WE WILL BEAT ANY
COMPETITORS
ADVERTISED PRICE

This camshaft kit allows disassembly and assembly of 4, 6, 8 and 12 cylinder BMW engines produced from 1991 to the present.

Includes camshaft locater/lock fixtures, the rigid chain tensioner for V8 engines, the chain tensioner lock pins and the TDC locator pin for the flywheel.

Engines: M40, M42, M50, M52, M52TU, M54, M56, M60, M62, M70, M73

#### VANOS COMPRESSED AIR CONNECTION



#113450

Use to pressurize the single and double VANOS unit when checking or removing and replacing.

Engines: M50, M52, M52TU, M54, M56, N62

#### **VANOS TURNING WRENCH**



Use to adjust VANOS position on single VANOS engines when removing or installing.

Engines: M50, M52, S50US, S52US.





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bmw\_ccv\_092005

## **Electrical - Engine**

Tool Number	Application	Models	12
iScan-BMW	BMW DATA SCANNER Use to read engine control systems to reset fault codes, access live data for road tests, activate components and program/code controllers. Also scans for diagnosing multiple Chassis, Body, Information and Climate systems. 1988-2005	All models from 1990 onward.	
B127040	SECONDARY VOLTAGE MEASUREMENT CLIP SET Use to measure secondary voltage on DIS (multiple coil) COP type systems.	M42, M43, M44, M50, M52, M60, M62	
OBD2-QS	OBD-II / EOBD FAULT CODE READER  Quick scan reads and resets OBD-II and EOBD fault codes. Comes with instruction manual with over 2000 fault code definitions.	All models 1994- 2006	NEW
113450	VANOS COMPRESSED AIR FITTING Fitting allows for functional testing of VANOS adjusting unit. Use with #126410.	M50, M52, M52TU, M54, M56, N62	
126410	VANOS CONTROL ADAPTER Cable and adapter for VANOS control for external signaling of VANOS control when installing and function-checking the 4/2 way valve in conjunction with #113450	M50, M52, S50B32, S54, S62	
TS4412	TIMESERT SPARKPLUG REPAIR KIT 14X1.25mm Solid insert kit from "Timesert" allows quick and easy repair of sparkplug bores.	All	
H880AMGT-3	SPARKPLUG SOCKET MAGNETIC - 17.5mm  Special magnetic socket with thin wall for deep and narrow plug ports on M-power engines. (BMW #121160)	S14, S38, M1, M3, M5, M6	HAZET ERMANY BO AMSTS
H880MGT	SPARK PLUG SOCKET MAGNETIC - 20.8mm 13/16" Thin wall socket for plugs in tight places.		
H2505-2	SPARK PLUG SOCKET - 20.8mm Adjustable in length from 122mm to 152mm and 182mm this spark plug socket allows access to many of the deepest plug ports.		
ST7600	TORQUE LIMITER 15-35Nm Adjustable torque limiter allows use with 16mm and 17.5 mm spark plug socket.	M40, M42, M43, M44, M50, M52, M60, M62, M70, M73, S14, S38, S50	

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## **Electrical - Engine**

ol Number	Application	Models	12
67	SPARK PLUG SOCKET SPINNER - 3/8" DR. Large plastic grip makes it easy to remove plugs from the most difficult locations.	All	
67A/1	WOBBLE EXTENSION - 3/8" 11/16" LONG 'Wobbly' extension to remove difficult to access spark plugs.	All	
103-0037	SPARK PLUG WIRE PLIERS Use to remove ignition plug connectors without separating crimp.	All	1
ST51-32	THIN WALL DEEP SOCKET - 32mm	All	AHLV/ILLE
122100	GLOW PLUG SOCKET - 12mm Use to remove pencil type diesel glow plugs.	M21, M41, M5121	
A0201	BREAK-OUT BOX - 60-PIN W/CASE  Basic 60 pin break out box to test the contacts, continuity, inputs and outputs of a variety of electronic control units. Adapters are available for Bosch, Siemens and TEVES 25, 35, 38, 42, 55 and 60 pin connectors as well as many others.	All	
A0202	BREAK-OUT BOX - 120-PIN W/CASE  Basic 120 pin break out box to test the contacts, continuity, inputs and outputs of a variety of electronic control units. Adapters are available for Bosch, Siemens and TEVES 25, 35, 38, 55, 68 and 88 pin connectors as well as many others.	All	
A020201	25-PIN BREAK OUT BOX CABLE LE1, LU1, LE2, LU2, Mono-Jetronic A2.2, Mono-Jetronic A2.3, KE1, KE2, KE3.1, KE3.5, D-Jet, LH2.0-2.2	All	and and a second and
A020202	35 PIN BREAK OUT BOX CABLE ML1.1, ML1.2, ML1.3, ML2, ML3.1, ML3.2, ML3.3, ML4.1, MP3.1, MK1.1, MK1.2, MK1.3, MA1.2, MA1.7, K-Jet, KE3.2, KE3.3, LH1, LH2.3, LH2.4, LH3.1, ABS2/2B, ABS, EGS	All	
A020204	<b>55-PIN BOSCH BREAK OUT BOX CABLE</b> M1.1, M1.2, M1.3, M1.5, M1.8, M2.1, M2.10, M2.3, M2.4, M2.5, M2.7, M2.8, M2.9, MP3.2, KE5.1, KE5.2, Simtech 56.1, Fenix 4, MMAP, ABS 3 & 5 and newer EGS	All	(All manning)

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#### **Electrical - Engine**

Tool Number	Application	Models	12
A020206-2	<b>88 PIN BREAK OUT BOX CABLE</b> M1.7, M3.1, M3.3, M3.3.1, M3.7, M5.2, EGS	All	
A020209-1	55-PIN TEVES BOB ADAPTER ABS Teves MKIV found in 3 Series 1992-1999	E36	
KK43-2	BEARING & RACE PULLER Bearing, Gear and Battery terminal puller. 70mm with small profile. (Kukko KK43-2)	All	
124010	DME ADJUSTING WRENCH Pin for setting PCB switch on DME controller.	M30	A STATE OF THE PARTY OF THE PAR



## Quick Scan #OBD2-QS \$49<sup>95</sup>



#### Quick Scan includes:

- Quick Scan Code Reader
- OBD-II J1962 Extension Cable
- Fault Code Manual and Users Guide



The Quick Scan OBD-II / EOBD Fault Code Reader is designed to be quick, easy to use and compact.

All you do is plug it in and turn on the ignition key.

Reads OBD-II Fault Codes (1996 and newer) and displays them in the order stored.

Just leave the Quick Scan attached and the codes will automatically be erased after being read 5 times in succession.

Remove the Quick Scan from the OBD-II socket before the codes are read 5 times and the codes will remain in storage.

\*\*INCLUDES OVER\*\*
2000 FAULT CODE\*\*

A handy user manual with over 2000 OBD-II codes is included.

**Now reads EOBD Vehicles** 

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## **Fuel Injection**

Tool Number	Application	Models	13
1318-M	FUEL INJECTION PRESSURE TEST - MASTER KIT Checks charging (supply), running and leakage pressures of all types of injection systems. Includes: Gauge (160psi/1100kpa), 3-way switch, all hoses, all fittings and storage case.	All Models	\$11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1318-R	FUEL INJECTION PRESSURE GAUGE - ECONOMY KIT Checks charging (supply), running and leakage pressures of all types of injection systems. Includes: Gauge (160psi/1100kpa) 3 way switch, hoses and fittings, and storage case.	All	
1318- ADAPTERS	FUEL INJECTION PRESSURE TESTER ADAPTERS  Various adapters for use with the #1318 pressure tester. Sizes range from 6mm to 14mm male, female and butt end. Hoses and gauges also available. Please request size or application when ordering.	All Models	
1076	PRESSURE GAUGE - 60psi/4bar Fuel pump and vacuum pressure gauge for testing carburetion and injection systems. See # 1318 for differential pressure testing in mechanical and electronic injection systems.	MOST	
M99	LAMBDA CONTROL TESTER  Open/closed loop tester allows analysis of O2 Lambda feedback loop. Use to set CO level, check oxygen sensor and ECU for proper rich/lean response. Auto senses titania or zirconia O2 sensors.	All O2 Sensor Equipped	
0986615360	BOSCH CIS INJECTOR TESTER Checks and cleans gas fuel injectors. 160psi/11bar range. Other gauges are available for special applications.		
T3398	ELECTRONIC INJECTOR FIRING KIT  Allows easy trouble shooting of faulty injectors on car with pressure gauge 1318 or on bench using injector tester M24G.		
102-0463	TEST HARNESS - IDLE SPEED CONTROL VALVE Tests electronic idle speed control with standard multimeter. (VOM-DMM) (BMW #900311)	M10, M20, M30	
VAG1527B	LED CONTINUITY TESTER  Special low current continuity test light with 3-48 volt range for diagnostic trouble shooting of late model computer controlled systems without causing damage to electronics.	All	
134010	THROTTLE POSITION SWITCH BRIDGE  Use to bridge throttle position switch when calibrating idle speed control system w/o AEGS (in conjunction with #134030).	M10, M20, M30	

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## **Fuel Injection**

ool Number	Application	Models	13
134020	THROTTLE POSITION SWITCH BRIDGE Use to bridge throttle position switch when calibrating idle speed control system with AEGS from 1986 model (in conjunction with #134030).	M10, M20, M30	
B1630	RESISTANCE SUBSTITUTION BOX Resistance substitution box allows testing and calibration of dash gauges, injection system sensors, cruise control, and anti theft systems.		
5045	OXYGEN SENSOR SOCKET - 22mm  Use to R&R oxygen sensor on all lambda equipped models, except M43, M44, M52, M62. See crowfoot #117030. (BMW #117020)	M10, M20, M30, M40, M42, M43, M44, M50, M52, M60, M62, M70, M73	
4491B	OXYGEN SENSOR SOCKET - 22mm Special box end crowfoot for the R&R of oxygen sensors in restricted areas.		
119150	SPECIAL WRENCH ADAPTER Special swivel adapter for the O2 sensor crowfoot to get at difficult to access O2 sensors, such as that found on the S54 M3 vehicles.	M52, M54, N42, N62, S54	
H4550	INJECTION LINE FLARE WRENCH - 17mm Remove and install injection fittings, lines and pipes. (BMW #135020)	M21, M41, M47, M51	
H4555-1	DIESEL INJECTOR NOZZLE SOCKET - 27mm  Special interior relief and cutout side to accommodate the small leakage return tubes on top of injection nozzle. (BMW #135320)	M21, M41, M47, M51	HAZET 4555-1
ST12-5.5	CARBURETOR WRENCH - 5.5mm  Extra thin electric type wrench for accelerator pump linkage adjustment on Solex and Zenith carburetors. 2 required.	All Solex & Zenith carbureted .	C C C C C C C C C C C C C C C C C C C
691STE	CARBURETOR SYNCHRONIZER (STE) Plug type base with exchangeable tips for different types of carburetors. Use with #130050 or #130060.	All carbureted .	
691A	'UNI-SYN' CARBURETOR SYNCHRONIZER Round base for use on most standard throat carburetors. Use to synchronize multiple carburetors for maximum performance. Use with #130050 or #130060.	All carbureted .	

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## **Fuel Injection**

Tool Number	Application	Models	13
131060	CO ADJUSTING FLATHEAD SCREWDRIVER Idle mixture control adjustment screwdriver. Extra short format for reaching tight location of adjuster.	M20, M30	
131100	CO HEX HEAD SCREWDRIVER - 5mm  Adjusts idle mixture control in place. Short body with step for engaging diaphragm. Knurled handle for easy grip and quick adjustment.	M10, M20, M30	
ST4748	CO/IDLE ALLEN SCREWDRIVER - 3mm Short 3mm allen driver to adjust CO/idle mixture screw on injection control.	All CIS injected.	CO December Com
ST10507	CO ADJUSMENT HEX SCREWDRIVER - 3mm X 380mm long Use to adjusts CO and idle mixture control screw on fuel injection distributor. BMW #131020	M10, M20	
ST10518	CARBURETOR IDLE SCREWDRIVER - 1.0x5.5x410mm  Extra long narrow screwdriver allows easy access to recessed idle adjustment/enrichment screws.	All carbureted.	
H4518	CO PLUG EXTRACTOR Removes mixture and idle lock plugs for adjustment purposes.	All CIS models.	
ST11085	CARBURETOR JET REAMERS 0.33 - 2.00mm  Tapered reamers to allow precision reaming of carburetor main jets. Set includes 13 reamers and pin vice.	All carbureted .	
ST12975	FUEL LINE CLAMP - 30mm Use to block off fuel line when working on fuel system or removing engine.	All	Translation of the state of the
ST165	DOUBLE FLARING KIT Ideal for making fuel, brake and other hydraulic line fittings. Double flaring kit includes: basic press, 4.75, 5, 6, 8, 9 and 10mm clamping blocks and flaring cones.	All	NEW
W250	EXHAUST PROBE - UNIVERSAL ADAPTER Use to tap into exhaust pipe to sample gases before they reach the catalytic converter. High grade silicone tubing and quick connects allow use with any exhaust sampling system.	All	

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## **Fuel Injection**

Tool Number	Application	Models	<u> </u>
691J	GRADUATE CYLINDER - 1.8ML.  Use for fuel pump, injection pump, and injector output volume measurements.  NALGENE material, non-breakable, resists gasoline and solvents for long life.	Accelerator pump.	Q
6911	GRADUATE CYLINDER - 15ML.  Use for fuel pump, injection pump, and injector output volume measurements.  NALGENE material, non-breakable, resists gasoline and solvents for long life.	All injected.	
691G	GRADUATE CYLINDER - 25ML.  Use for fuel pump, injection pump, and injector output volume measurements.  NALGENE material, non-breakable, resists gasoline and solvents for long life.	All injected .	
691F	GRADUATE CYLINDER - 50ML.  Use for fuel pump, injection pump, and injector output volume measurements.  NALGENE material, non-breakable, resists gasoline and solvents for long life.	All injected .	
691E	GRADUATE CYLINDER - 250ML.  Use for fuel pump, injection pump, and injector output volume measurements.  NALGENE material, non-breakable, resists gasoline and solvents for long life.	All injected .	
691H	GRADUATE CYLINDER - 1000ML.  Use for fuel pump, injection pump, and injector output volume measurements.  NALGENE material, non-breakable, resists gasoline and solvents for long life.	All .	

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# **OXY-WISE**



#### The Intelegent Oxygen Sensor Tester



#### **Tests**

- Closed Loop Oxygen Sensor Function
- Open Loop Response
- Mixture Adjustment
- · Oxygen Sensor Heater Supply Voltage
- ECU Supply Voltage
- Open or Grounded Circuits

**Works** on All Vehicles With Any Type of Oxygen Sensor

**Automatic** Detection of Zirconia and Titania Sensor Types.

**Simulates** Rich to Lean & Lean to Rich Conditions to Check ECU Response.

**Identifies** Each Wire in Multiple Wire Lambda Sensors.

Easy Hook-Up to Any O2 Sensor.

**Internally Power Supply** Allows "Bench Testing" of Suspect O2 Sensors.

No Special Adapters Needed.









# **OXY-WISE**



#### The Intelegent Oxygen Sensor Tester

The Oxy-Wise Lambda (O2) Sensor Tester #M99 provides a quick and accurate diagnosis of the vehicles Oxygen sensor and allows simulation of the sensor to test the conditions of the wiring harness and the operation of the ECU.

Designed to make diagnosis simple, Oxy-Wise incorporates intelligent sensor wire recognition making it a snap to identify the O2 signal wire, heater wire, bias voltage and ground.

Oxy-Wise automatically identifies the difference between Zirconia and Titania Oxygen sensors and automatically switches operation for proper testing.

Powered by an internal battery, Oxy-Wise is independent of the cars 12 volt power supply making it possible to easily test all Oxygen sensors out of the car and on the bench for the first time!

An indicator is also incorporated to let you know if the battery is low to insuring accurate testing.

The Oxy-Wise Lambda (O2) Sensor Tester #M99 represents a powerful and intelligent approach to testing Lambda control circuits at a very affordable price.

#### Specifications:

Power Supply: One 9V Battery

Connectors: One "Bed-o-Nails" Signal Clip

One Ground Clip

Display: Output Crossover Of Lambda Sensor Displayed As A Light Path.

Controls: Two Controls For On/off

Two Controls To Simulate Rich And Lean Conditions.

Indent Panel: Five Indicators To Show;

1) Heater Supply

2) Ecu Supply Voltage

3) Open Circuit

4) Ground

5) Internal Battery Low Indicator

Dimensions: 150mm X 75mm X 37.5mm

6" X 3" X 1.5"







## **Fuel Delivery**

Tool Number	Application	Models	16
161020	FUEL LEVEL SENDING UNIT SOCKET  Use to remove and install the fuel level sending unit found on most late models.  1 Piece. For later models with side ridsges use #203-0107.	E31, E34, E36, E38, E39, E46, E52, E53, E60, E61, E63, E64, E65, E66, E67, E83, E85, E87, R50, R52, E53	NEW
203-0107	FUEL TANK SENDER SPIDER WRENCH Use to remove and install the locking ring of the fuel tank delivery sensor unit. Also see #161020.	E31, E34, E36, E38, E39, E46, E52, E53, E60, E61, E63, E64, E65, E66, E67, E83, E85, E87, R50, R52, R53	NEW
161040	SPECIAL CARBON FILTER WRENCH Use to release the carbon filter/fuel tank pipe and fuel supply lines at the injection rail (except E38 and E39).	All M52 engines from 1996	
161050	COMBI TOOL For releasing tubing connectors on carbon canister as well as fuel lines on engine.	E36, E38, E39	
161000	FUEL HOSE REMOVAL TOOL - 6mm	All	1835
161010	FUEL HOSE REMOVAL TOOL - 8mm	M10, S14, M40, M42, M43	100
B161001	FUEL LINE HOSE CLAMP TOOL Removes tamper proof fuel line clamps.	All	NEW



## **Cooling System**

Tool Number	Application	Models	1/
W245	RADIATOR RESERVOIR ADAPTER Use with a Pressure tester such as Stant, Blue Point, or Napa to check for leakage of radiator core/reservoir.	All 1983 - 1986	
W246	RADIATOR CAP ADAPTER Use with a Pressure tester such as Stant, Blue Point, or Napa to check for leakage and opening pressure of micro type caps.	All 1983 - 1986	
W345	RADIATOR RESERVOIR ADAPTER Use with a Pressure tester such as Stant, Blue Point, or Napa to check for leakage of radiator core/reservoir.	BMW 1987 - 1989	
W346	RADIATOR CAP ADAPTER Use with a Pressure tester such as Stant, Blue Point, or Napa to check for leakage and opening pressure of micro type caps.	BMW 1987 - 1989	
W445	RADIATOR RESERVOIR ADAPTER Use with a Pressure tester such as Stant, Blue Point, or Napa to check for leakage of radiator core/reservoir.	BMW 1990 - 1999	
170030	OIL COOLER LINE PLIERS Releases the hydraulic cooling lines that connect to the transmission.	E46, E53, E65, E66, E85, R50, R53	NEW
B10623-2	OIL COOLER LINE RELEASE TOOL Releases the hydraulic cooling lines that connect to the transmission. Also for quick release fuel lines.	E46, E53, E65, E66, E85, E90, E91, R50, R53	NEW
ST12506	FLEXIBLE HOSE CLAMP HEX NUT DRIVERS Use to remove hose clamps with worm-drive threads. Sizes 5, 6, 7, 8 and 10mm available. Please specify size when ordering. See # H798-5 for late model "Corbin" clamps.	All	Property one

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BMW Tools Clutch

Tool Number	Application	Models	21
212170	SELF ADJUSTING CLUTCH FIXTURE Use to install and set all self adjusting clutches (SAC). Most models from 9/97 on.	E34, E36, E38, E39, E46, E52, E53, E85, Z3	NEW
212180	SELF ADJUSTING CLUTCH CENTERING TOOL Use to reset and center the centering ring on self adjusting clutch. Use with #212170.	E34, E36, E38, E39, E46, E52, E53, E85	NEW
212140	CLUTCH PILOT SHAFT - SAC Aids in alignment of clutch disk during installation. Self Adjusting Clutch type from 9/97. Use with #212160.	E38, E39, E46, R50, R53	NEW
212080	CLUTCH WEAR GAUGE Use to check clutch plate thickness to determine if replacement is necessary.	M40, M41, M42, M43, M44, M50, M51, M52, M60, M62, M70, M73, S50	
212100	CLUTCH PILOT SHAFT - EARLY Aids in alignment of clutch disk during installation. 5 speed 1969-95. (C-28).	240/5, 260/5, 265/5, 265/5sport, 280/5sport	
212120	CLUTCH PILOT SHAFT - 6 SPEED Aids in alignment of clutch disk during installation. 6 Speed (C-25)	E31, E34, E38	
212130	CLUTCH PILOT SHAFT - 5 SPEED Aids in alignment of clutch disk during installation. 5-Speed (GM10)	S5D 200G, S5D 250G, S5D 260Z, S5D 310Z	
ST13-6	COMBINATION WRENCH - 6mm Removes vent plug on hydraulic clutch.		

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#### **Manual Transmission**

ool Number	Application	Models	<b>Z</b> 3
KK70-2	BALL BEARING PULLER SET  Complete set of ball bearing extractors for 6000-6013, 6200-621, 6300-6311 and 6403-6408 type bearings. Replaces #23200, 232010, 232020, 232050 and 232060 Replacement arms available.	All	
KK17-1	REINFORCED BEARING SEPARATOR - 75mm Reinforced separator is ideal for the removal of pinion bearings, gears and races.	All	
KK15-3	BEARING SEPARATOR - 150mm  Bearing separator is ideal for the removal of pinion bearings, gears and races. For smaller bearings use #KK17-1. (BMW #231490) Mfg. by Kukko of Germany.	All	
H2567-1	OIL DRAIN WRENCH - 17mm HEX X 19mm BOX Use to remove gearbox drain and filler plugs with 17mm allen and oil pan drain plugs with 19mm box wrench.	All	9
ST51-30	THIN WALL DEEP SOCKET - 30mm Removes drive shaft output flange nut.	All	AHLVIII.LE S
ST6547	LOCKRING PLIERS Removes and installs transmission output shaft clips.	All	
ST6543	INTERNAL SNAP RING PLIERS STRAIGHT Removes internal snap rings from housings. Available sizes: 140, 180, 225mm.	All	
ST6544	INTERNAL SNAP RING PLIERS 90 BEND Removes internal snap rings from housings. Available sizes: 130, 170, 215, 300mm.	All	<u>(0)</u>
ST6545	EXTERNAL SNAP RING PLIERS - STRAIGHT Removes external snap rings from housings. Available sizes: 140, 180, 210, 315mm.	All	
ST6546	EXTERNAL SNAP RING PLIERS 90 BEND Removes internal snap rings from housings. Available sizes: 125, 170, 200, 290mm.	All	

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#### **Manual Transmission**

Tool Number	Application	Models	23
ST13-15	COMBINATION WRENCH - 15mm Removes axle flange and drive shaft nuts.		
ST21-21X24	DOUBLE BOX WRENCH - 21X24mm  Thin wrench for universal joint 12-point nut.	All	0
T9A-46	THIN OPEN END WRENCH - 46mm  Holds drive shaft and/or differential lock nut when removing drive shaft.Also see #T9A-SET	E30	
231240	SELECTOR SHAFT BUSHING DRIFT Use to install selector shaft seal in rear of transmission housing.	4HP22, 4HP24, A4S270R, A4S310R, A5S300J, A5S310Z, A5S440Z, A5S560Z, BW65, S5D200G,	



#### T9A-SET VERY THIN WRENCH SET

Set of 7 very thin wrenchs for use in a variety of situations, such as, Driveshaft removal, Oil Cooler lines, Camber adjustment, ...etc.

Set includes sizes

24mm

**27mm** 

32mm

36mm

42mm

46mm

Other sizes available on request.

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#### **Automatic Transmission**

Tool Number	Application	Models	24
iScan-BMW	BMW DATA SCANNER Use to access EGS/AEGS/GS to read and reset fault codes, access live data for road tests, activate components and program/code controllers. Transmission Specific: Check codes, solenoid and switch engagement and read fluid temperature during service.	All models 1988 to present.	1
1090	TRANSMISSION PRESSURE GAUGE SET  Dual gauges allow testing of automatic transmission shift pressures. Includes: Two gauges 160psi and 300psi, hook and sufficient hose to bring gauges into car for road tests.	All	
241170	GROOVE NUT SOCKET - 4 PIN To R&R slotted nut on the output flange.	A5S310Z (5HP18 & 5HP19)	NEW
244110	GROOVE NUT SOCKET - 6 PIN Special socket for install/remove slotted nut on the output shaft flange.	A5S440Z, A5S560Z (5HP24 & 5HP30)	NEW
245150	VALVE BODY ALIGNEMENT PINS Use to center the valve body of the transmission during assembly. E34, E36, E39, Z3	A4S310R (THMR-1)	
245250	SHIFT SHAFT SEAL INSTALLER Use to install the shift shaft seal on the 5HP18, 5HP24 & 5HP30 transmissions.	A5S310Z, A5S440Z, A5S560Z	
245260	SHIFT SHAFT SEAL PULLER Use to remove the shift shaft seal from the 5HP30 transmission.	A5\$560Z	
245270	SHIFT SHAFT SEAL INSTALLER Use to install the shift shaft seal on the A5S440Z transmission.	E38, E39	
231240	SELECTOR SHAFT BUSHING DRIFT Use to install selector shaft seal in rear of transmission housing.	4HP22, 4HP24, A4S270R, A4S310R, A5S310Z, A5S440Z, A5S560Z, ZF S5-16	
B10623-2	OIL COOLER LINE RELEASE TOOL Releases the hydraulic cooling lines that connect to the transmission. Also for quick release fuel lines.	E46, E53, E65, E66, E85, E90, E91, R50, R53	NEW

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#### **Automatic Transmission**

Tool Number	Application	Models	24
245490	SHIFT SHAFT SEAL GUIDE SLEEVES Use these sleeves to protect the 5HP18, 5HP24 & 5HP30 transmission shift shaft seal during installation.	A5S310Z, A5S440Z, A5S560Z	
KO4012M-17	HEX HEAD SOCKET - 17mm ½" DRIVE Use to remove oil and transmission drain plugs.	All	HAZZ Z
H2567-1	OIL DRAIN WRENCH - 17mm HEX X 19mm BOX Use to remove gearbox drain and filler plugs with 17mm allen and oil pan drain plugs with 19mm box wrench.	All	
ST51-30	THIN WALL DEEP SOCKET - 30mm Removes drive shaft output flange nut.	All	AHLVILLE Service Service St.
ST47TX/4	SWIVEL TORX SOCKET SET - 3/8" DRIVE Special TORX sockets to remove transmission mounts, steering columns, and various other TORX bolts. Includes: E8, E10, E12, and E14 sizes.	All	
ST49TX-T40	TORX SOCKET - T40 3/8" DRIVE Use to remove and install TORX retaining bolts in GA6HP26Z transmission.	E65, E66	
245210	GEARSHIFT CABLE HOLDER Use to hold gearshift cable when removing or installing.	4HP22, 4HP24, A4S270R, A4S310R, A5S310Z	
245220	GEARSHIFT CABLE HOLDER Use to hold gearshift cable when removing or installing.	A5S300J, A5S310Z	
245240	GEARSHIFT CABLE HOLDER Use to hold gearshift cable when removing or installing.	A5S310Z, A5S560Z	

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# Gear Shift

Tool Number	Application	Models	
251120	GEAR LEVER BEARING PIN WRENCH Removes the groove nut that retains the gear lever bearing in place.	E31, E36, E60, E61, E83, E85, E87	
251110	SHIFT LEVER PIN WRENCH Removes groove nut from gear shift lever to allow rebushing of gear shift shaft.	E31, E36, E46	
251100	SHIFT LEVER PIN WRENCH Removes groove nut from gear shift lever to allow rebushing of gear shift shaft.	S38, E23, E24, E28, E30, E32, E34	
P208B	PIN SPANNER - 58/62mm Use to adjust gear lever pin in shift assembly.	E3, E9, E12, E28	

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#### **Front Axle**

ool Number	Application	Models	31
B313000	UPPER SUB-FRAME TENSION STRUT BUSHING KIT Hydraulically driven, this kit quickly removes and installs the metalastic bushing in the traction strut with the strut still in the car. Includes hydraulic ram, pads and tubes. Hydraulic pump not included.	E32, E34, E38, E39, E60, E61, E63, E64, E83, E87	NEW O
B312140	TRACTION STRUT PULLER Removes traction strut from the tie rod lever.	E31, E32, E34	
B311050	LOWER CONTROL ARM BUSHING KIT - E32, E34 Kit includes: Fitted Pad, Tube and C-clamp press.	E32, E34	
312260	WISHBONE RUBBER MOUNT REMOVER & INSTALLER TOOL Removes and installer for wishbone bushings.	E38, E39, E46/5, E53	
1117J	MACPHERSON STRUT SPRING COMPRESSOR Compresses all types of MacPherson style coil springs front and rear. Includes three sets of jaws (2) for 110, 120 and 130mm springs found in most BMW's.	E31, E32, E34, E36, E39, Z3, Z3 coupe	
1117V	MACPHERSON STRUT VICE ADAPTER This vice adapter holds the MacPherson strut when off the vehicle.	All	NEW
AS311440	BALLJOINT KIT Use this kit to remove and install the outer balljoint on the front wishbone.	E30, E36, Z3	
B311440K	OUTER AND CENTER BALLJOINT KIT Includes press adapter cups & pads to remove and install outer and center ballJoint.	E30, E36, Z3	NEW O P
B311440	OUTER BALL JOINT KIT Includes C-clamp type press and adapter cups & pads to remove and install outer ball Joint.	E30, E36	9
B311450	INNER BALL JOINT KIT Includes C-clamp type press and adapter cups & pads to remove and install the center ball joint.	E30, E36	

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#### **Front Axle**

Tool Number	Application	Models	31
B312130	THRUST ARM BUSHING TOOL Removes and installs the Thrust arm bushing without removing the arm from the car. Kit includes pad and tube for E23, E24, E28 & E32, pad for E30, E36 & E46 and C-clamp press #B7249.	E23, E24, E28, E30, E33, E36, E46, E85	
B312130A	THRUST ARM BUSHING ADAPTERS Pads and tube only. (Use with c-clamp #B7249)	E23, E24, E28, E30, E32, E36	
B7249	C-CLAMP PRESS C-Clamp press for use with a variety of components to perform press jobs on the car.	All	
B1858	THRUST ARM MOUNT KIT Removes installs the thrust arm bushing mount from the thrust arm on 3 series vehicles. Contains both B312150 and B312151.	E30, E36, E46	NEW I
B312150	THRUST ARM MOUNT PULLER Removes the thrust arm bushing mount from the thrust arm on 3 series vehicles.	E30, E36, E46	İ
B312151	THRUST ARM MOUNT INSTALLER Installs mount onto 3 series thrust arm.	E30, E36, E46	耳
KK129-0	UNIVERSAL BALL JOINT PULLER 2-STAGE Scissor type puller allows access to difficult to reach and obstructed ball joints. 2-stage action allows removal of spindles up to 50mm in length. Particularly usefull for control arms from steering knuckle. Mfg. by Kukko of Germany.	E38, E39, E52, E53, E83, R50, R52, R53	
KK129-1	UNIVERSAL BALL JOINT PULLER Scissor type puller allows access to difficult to reach and obstructed ball joints. Removes most tie rod ball joints without tearing the rubber boot. Particularly usefull for removing steering tie rod from wheel carrier. Mfg. by Kukko of Germany.	All, E83	
313150	SHOCK ABSORBER PIN WRENCH Removes threaded ring from shock absorber.	E21, E30, E28, E34, E3, E9, E23, E24, E32	
312200	SPECIAL SOCKET Use to expand wheel carrier (front-axle) when removing strut spring.	E38, E39, E46, E52, E65, E66, E83, E85	

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### Front Axle

Tool Number	Application	Models	31
313170	SHOCK ABSORBER WRENCH For loosening and tightening shock absorber-mount threaded connection.	E21, E30, E28, E34, E32, E36	A manufacture of the same of t
ST1051-22	SHOCK ABSORBER SOCKET - 22mm Use to release shock absorber retainer nut. (Front axle with EDC).	E38, E39, E46, E52, E60, E61, E63, E64, E65, E66, E83, E85, R50, R52, R53	
311170	OUTPUT SHAFT PRYBAR - AWD Use to remove the output shaft from the front transaxle assembly on 4WD vehicles. (325ix, 330ix)	E46/16	-
315110	OUTPUT SHAFT PRYBAR - AWD Use to remove the output shaft from the front transaxle assembly on 4WD vehicles.	525ix, X3, X5	NEW
312110	FRONT WHEEL BEARING HUB INSTALLER Loads the axle shaft and hub into the front wheel bearing.	E28, E36, Z3, E46, E85	
312120	FRONT WHEEL BEARING HUB INSTALLER Loads the axle shaft and hub into the front wheel bearing.	E30	
ST55-46	SOCKET - 46mm 3/4" DRIVE Thin walled socket for R&R of front wheel bearing retainer nut. (BMW #312080)	E28, E34, E23, E24, E32, E36, E38	
ST55-36	SOCKET - 36mm 1/2" DR. Thin walled socket for R&R of front wheel bearing retainer nut.	E30	

SEE MORE FRONT AXLE TOOLS ON PAGES 43 & 44.

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## **Steering**

Tool Number	Application	Models	<b>32</b>
KK129-0	UNIVERSAL BALL JOINT PULLER 2-STAGE Scissor type puller allows access to difficult to reach and obstructed ball joints. 2-stage action allows removal of spindles up to 50mm in length. Particularly usefull for control arms from steering knuckle. Mfg. by Kukko of Germany.	All	
KK129-1	UNIVERSAL BALL JOINT PULLER Removes most tie rod ball joints without tearing the rubber boot. Removes wheel control ball joint from E30, E34 (525ix), E36, E46, Z1,Z3. Removing track rod from wheel carrier E34(525ix). Mfg. by Kukko of Germany.	E30, E34, E36, Z1, Z3, E46, E85, R50, R52, R53	
KK128-2	TIE ROD BALL JOINT PULLER - 23-32mm  Puller for separating tie rod and steering knuckle ball joints without tearing ball joint boots. Mfg. by Kukko of Germany.	E38, E39, R50, R52, R53	3
322040	BALL JOINT PULLER Removes steering track rod ball joints from the steering gear (drop) arm and the steering idler arm.	E24, E28, E34	
323080	TOE-IN SETTING TOOL For setting toe-in on rear axle-rear axle with KDS.	E36, Z3	NEW
323030	TOE-IN ADJUSTER Setting tool for adjusting toe-in at rear axle on models with KDS. E36 from 3/98.	E36, E46, E85	NEW
323140	CAMBER ADJUSTER Use this fixture to adjust the front camber on late model 3 series with KDS.	E38, E39, E46, E53, E65, E66, E67, E85, E87	NEW T
323190	CAMBER ADJUSTING TOOL Use to adjust front camber.	E60, E61, E63, E64	NEW
323160	CAMBER ADJUSTING WRENCH INSERT - 38mm Use to set the camber on the front axle. Drive 9x14mm for torque wrench #ST730/5. Mfg. Stahlwille of Germany	E53, E60, E61, E63, E64, E65, E66, E67, E83	NEW
323110	STEERING COLUMN IGNITION LOCK RELEASE PIN Use to release lock detent when removing steering wheel lock cylinder.	E31, E32, E34, E36, E38, E39, Z3, E46, E60, E61, E63, E64, E83, E85, R50, R52, R53	NEW

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# **Steering**

Tool Number	Application	Models	32
323040	STEERING ANGLE SENSOR INSTALLER Slip bushing for installing the steering angle sensor on the steering column.	E46, E85	NEW
ST1445	TAMPER PROOF TORX BIT - T30  Special bit with borehole for releasing and tightening Airbag sensor on wheel house and rollbar sensor on the E36 convertible.	All	1445-T30
323170	AIRBAG LEVER Use to pry airbag from steering wheel mount.	E65, E66, E67	NEW
ST40TX-E8	TORX SOCKET - E8 FEMALE 1/4" DRIVE Tightens shear bolt on steering column. (BMW #323120)	E12, E21, E23, E24, E28, E30, E31, E32, E34, E36, E38, E39	SIVANIA SIVANIA
321030	HYDRAULIC LINE LEVER Use to remove hydraulic lines from the steering gear assembly on models with plastic FCD caps.	E60, E61, E63, E64, E65, E66, E67, E83, E85, E87	
321300	HYDRAULIC LINE TOOL Use to disconnect hydraulic lines on vehicles equipped with N73 V12 engines. Metal FDC clutches.	E65, E67, E83	NEW
323100	STEERING COLUMN SET NUT CROWFOOT Crowfoot for setting nut on steering spindle with adjustable steering column. Use with 002050. Not for E38 or E39 models.	E12, E21, E23, E24, E28, E30, E31, E32, E34, E36	
ST24-17X19	POWER STEERING PUMP WRENCH - 17X19mm Special reinforced line wrench for power steering pressure lines.	E12, E21, E23, E24, E28, E30, E31, E32, E34, E36, E38, E39	
T9A-32	SPECIAL THIN WRENCH - 32mm Use to remove RIGHT tie rod mount.	E21, E30, E36, E65, E66	
T9A-27	SPECIAL THIN WRENCH - 27mm Use to remove LEFT tie rod mount.	E21, E30	5

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BMW Tools Steering

Tool Number	Application	Models	3
ST10625	HOSE CLAMP PLIERS Pincer type pliers removes and fastens ear crimp type clamps.	All	
ST10625/2	HOSE CLIP PLIER - EARLESS Use to close hose clips that do not have ears, such as found on shaft sleevs of Vwaudi, BMW, Mercedes and Toyota.	All	NEW

### Front & Rear Differential Mount Bushing Kits

Use to remove and install the front differential mount bushings and rear transverse bushing on the rear subframe of 3 series (E46) and Z4 (E85).







Bushing: #33 17 6 751 808

Front Bushings #B333360

**Rear Bushing - #B3333370** 

Complete kit #B333390

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Γool Number	Application	Models	33
924-0231	SUSPENSION SPRING COMPRESSOR Compresses coil springs in the car on several different models, as well as many Mercedes Benz chassis types when removing and installin coil springs or shock absorbers. Includes plates for small and large spring types.	E31	NEW
AS4502	REAR WHEEL BEARING KIT Use this kit to remove and install rear axle hubs and bearings. Use with hub puller #B234.	E30, E31, E23, E32, E36, E38, E46, Z3	
B333351	REAR AXLE BUSHING KIT Removes and installs upper control arm bushing, lower control arm bushing and front trailing arm bushing on both E36 and E46 chassis (3 series 1990-2005). Also fits trailing arm bushing on 5 and 7 series See #AS4464 for 3 series trailing arm bushing only.	E23, E24, E28, E30, E32, E34, E36, E39, E46	NE 0000
AS4464	TRAILING ARM BUSHING KIT - 3 SERIES  This kit is desigened to remove and install the rear trailing arm bushing only.  See #B333351 kit for upper and lower control arm and well as trailing arm bushings.	E36, E46	
B333040	REAR A-ARM BUSHING KIT Includes basic screw press #B7249, pad (49mm id x 59mm od) and support tube. Also see #B333351 and B333050 foir other bushings on the A-arm.	E23, E28, E30, E32, E34, E36, E39	
B333040/1	REAR A-ARM BUSHING ADAPTERS Pad (49mm id x 59mm od) and support tube only.	E23, E28, E30, E32, E34, E36, E39	
B333050	REAR A-ARM BUSHING KIT Use to replace rear A-arm (sub-frame) bushing 33 32 9 061 946 found in 5, 6 and 7 series 1982-95. See also #B333351 for E36 and E46 chassis.	E23, E24, E28, E32, E34	NEW
B334191	REAR AXLE CARRIER BALLJOINT KIT This kit allows the replacement of the rear axle carrier balljoint with the carrier in place on the car. See also #B333351.	E38, E39, E52, E53, E60, E61, E63, E64, E65, E66, E67	
334030	REAR WHEEL BEARING KIT Removes and installs rear wheel bearings and installs rear axle drive flange. (See #333260 for E31, E34 & E38 and #334040 for E30 & E36)	E23, E24, E28, E32, E34, E36	
B333100	REAR AXLE CARRIER MOUNT BUSHING KIT Includes all parts necessary to remove and install carrier mount bushings.	E23, E24, E28, E30, E32, E34, E36	

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### **Rear Axle**

Tool Number	Application	Models	33
B334140	REAR AXLE CARRIER MOUNT KIT  This kit contains the tools necessary to remove and install the rear axle carrier mount bushings on late 3series and Z4 models.	E46, E85	NEW S S S
B333360	FRONT DIFFERENTIAL MOUNT BUSHING KIT Use to remove and install the front differential mount bushings in the rear subframe on 3 series (E46) and Z4.	E46, E85	NEW O
B333370	REAR DIFFERENTIAL MOUNT BUSHING KIT Use to remove and install the rear transverse differential mount bushing in the rear sub-frame on 3 series (E46) and Z4.	E46, E85	NEW O O O
332110	OUTPUT SHAFT PULLER Use to remove and install output shaft in drive flange. Use with #334200 for E30, E36.	E30, E31, E36, E38, E39	
KK17-K	KUKKO BEARING & GEAR PULLER KIT Special reinforced bearing separator and drive cross member for removing bearing inner race from the drive flange on rear wheel bearing. From Kukko of Germany.	E12, E21, E23, E24, E28, E30, E31, E32, E34, E36, E38, E39, E46, Z3	CUKIO CONTROL
W280	DIFFERENTIAL PLUG WRENCH 10mm  Special short 10mm hex head wrench for accessing differential oil filler plugs on late model BMW.	E30, E32, E34, E36, E38, E39, E46	

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# **BMW Undercar Tools Front End**



### TRaction Strut Thrust Arm **Bushing Kit**



#B312130

Removes and installs the Thrust arm bushing without removing the arm from the car. Kit includes pad and tube for E23, E24, E28 & E32, pad for E30, E36, E46 & E85 and C-clamp press #B7249.

### **Outer and Center BallJoint** Kit E30 & E36



#B311440

Use this kit to remove and install the outer and center balljoint on the front wishbone in a press. ON CAR TOOL for outer ballioint also available #AS311440.

E30 & E36 - #31 12 6 758 510 Outer and Center ballioints avalable from Mahle



### **Thrust Arm Bushing Mount** Remover and Installer E30, E36, E46 & E85



Fits both large and small mount types. **Bushings** 

E30 - #31 12 9 058 931 E36, Z3 - #31 12 9 059 288

E46 - #31 12 6 754 547

E85 - #31 12 6 757 623

### **Lower Control Arm Bushing Kit** E32, E34 & E53



### #B1809

Use to remove and install the control arm bushings on steel control arms (not for use on aluminum arms).

**Bushing** 

E32, E34 & E53 - #31 12 1 124 622

BMW part numbers may have changed since time of publication.





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# BMW Undercar Tools Front End



# on-CAR 100L Upper Sub-Frame Traction Strut Bushing Kit



#B313000

5 Series (E34, E39) 7 Series (E32, E38, E65, E66) 8 Series (E31) X5 (E53)



Hydraulically driven, this kit quickly removes and installs the metalastic bushing in the traction strut with the strut still in the car. Includes hydraulic ram, pads and tubes. Hydraulic pump not included. 10 Ton recommended.

### **Bushings**

**E32**, **E31** - #31 12 1 136 607

**E34 -** #31 12 1 139 456

**E38, E39 -** #31 12 0 006 482

**E53 -** #31 12 1 096 372

E65, E66 - #31 12 0 303 754



### Spring Compressor



### #1117J

Compresses all types of MacPherson style coil springs front and rear. Includes three sets of jaws (2) for 110, 140 and 190mm springs found in most BMW's and many other vehicles..

E31, E32, E34, E36, E38, E39, E52, E60, E61, E63, E64, E65, E66, E67, R50, R52, R53

### **Strut Vise Adapter**



Allows strut to be mounted in a vice for easy access during shock and strut assembly/disassembly.

**All Models** 



800-848-6657









# BMW Undercar Tools Rear End



### Rear Axle Carrier Mount Bushing Kit E23, E24, E28, E30, E32, E34



### #B333100

This kits allows removal and replacement of the Carrier Mount Bushings with the axle on the car.

#### **Bushings**

**E23**, **E24**, **E28** - #33 31 1 130 488 **E32**, **E34** - #33 31 1 129 760 **E30**, **E36** - #33 31 1 129 144

Rear Axle Carrier Ball Joint Kit E38, E39, E52, E53, E60, E61, E63, E64,

E65, E66



This kit allows easy replacement of the rear axle carrier ball joint with the carrier in place on the car.

**Balljoint** - #33 32 1 095 631 E38, E39, E52, E53, E60, E61, E63, E64, E65, E66

### Rear Wheel Bearing Remover & Installer Kit E30/E36/E46, M3/Z3, E23/E32/E38, E31



### #AS4502

Use this kit to remove and install rear axle hubs and bearings. Use with hub remover #AS4503.

#### **Bearings**

**E23**, **E32**, **E38**, **E31** - #33 41 1 134 549 E30, E36, E46, M3, Z3 (Drum) - #33 41 1 124 358 **E30**, **E36**, **E46**, **M3**, **Z3** (Disk) - #33 41 1 130 617

# Rear Axle Hub R&R Kit 5 Series (E34)



**#B334201** 

Screw type puller for removing hub and screw press installer for pulling in the rear axle hub on 5 series E34 chassis.



800-848-6657









# BMW Undercar Tools Rear End



# Rear Axle Bushing Kit E36, E46 & E85



Removes and installs upper control arm bushing (1), lower control arm bushing (2) and front trailing arm bushing (3) on both E36 and E46 chassis (3 series 1990-2005). Also fits upper and control arm bushing on E85 (Z4).

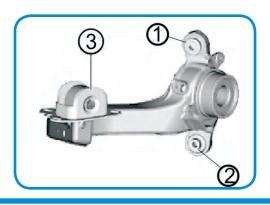
Does not fit Z4 trailing arm bushing.

#B333351

### **Bushings:**

**E36, E46 & E85** - #33 32 1 140 345 (Ball Joint) **E36, E46 & E85** - #33 32 1 136 311 (Lower Arm)

**E36 & E46** - #33 32 1 097 009 (Front Training Arm)



# Front & Rear Differential Mount Bushing Kits



### Front Bushings #B333360 Rear Bushing - #B3333370 Complete kit #B333390

Use to remove and install the front differential mount bushings and rear transverse bushing on the rear subframe of 3 series (E46) and Z4 (E85).



Bushings: #33 17 1 093 175

MasterCard



Bushing: #33 17 6 751 808

### Heavy Duty Hydraulic Hub Remover



### **B234**

Hydraulically driven hub puller with adapters for for 4 or 5 hole type wheel hubs. Fits most makes and models.

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ISA







BMW Tools Brakes

Tool Number	Application	Models	34
iScan-BMW	BMW DATA SCANNER Use to access ABS/ASC/DSC and other traction control systems to read and reset fault codes, access live data for road tests, activate components. Also for DME, EGS., SRS, A/C, IC and body systems	All models from 1990 onward.	The same
ST165	DOUBLE FLARING KIT Ideal for making fuel, brake and other hydraulic line fittings. Double flaring kit includes: basic press, 4.75, 5, 6, 8, 9 and 10mm clamping blocks and flaring cones.	All	NEW
KK126-00	PISTON CALIPER PRESS Use to press calipers back into assembly for easy installation of pads. (BMW #341050)	All Models	
KK126-03	BRAKE PISTON TURNING PLIER Use to rotate piston caliper during installation. (BMW #341060)	E21, E12, E28, E23, E24	No. of the second
344000	SPECIAL ALLEN WRENCH Allen key for removing/installing handbrake shoe mounting spring and pulse transmitters on ABS equipped models.	All Models	3
341040	BRAKE CALIPER MOUNT SWIVEL SOCKET - 7mm  Allen socket 3/8" drive with universal joint for replacing brake pads, calipers and mounts, front and rear.	E24, E28, E31, E32, E34, E36	A SERVICE AND A
ST2054/7	HEX HEAD SOCKET - 7mm ½" DRIVE Special socket for brake pad removal on front disc brakes.	E28, E34, E24, E32	
343170	OPEN END WRENCHES Open end box wrenches, 11mm and 12mm, for removing and installing hydraulic tubbing unions. Use with torque wrench.	E12, E21, E23, E24, E28, E30, E31, E32, E34, E36, E38, E39	
346320	BRAKE CALIPER RELEASE LEVER Use to retract front brake caliper.	E38, E52, E60, E61, E63, E64, E65, E66, E67	NEW
ST1069	BRAKE BLEEDING WRENCH Special wrench with attached hose for quick brake bleeding. Available in sizes 7, 8, 9, 10 and 11mm. Please specify size when ordering.	All	

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Tool Number	Application	Models	34
ST108-175X4	DRIFT - 4mm X 175mm  Long drift for safety bolts on disc brakes and brake linings in brake saddles.	AII	
ST12373	BRAKE CALIPER BRUSH Wire brush for cleaning of fixed brake calipers and shoes.	All	\$ COLUMN
ST24-10X12	FLARE NUT WRENCH - 10 X 12mm For brake lines.	All	3
A0202	BREAK-OUT BOX - 120-PIN W/CASE Basic 120 pin break out box to test the contacts, continuity, inputs and outputs of a variety of electronic control units. Adapters are available for Bosch, Siemens and TEVES 25, 35, 38, 55, 68 and 88 pin connectors as well as many others.	All	
A0201	BREAK-OUT BOX - 60-PIN W/CASE Basic 60 pin break out box to test the contacts, continuity, inputs and outputs of a variety of electronic control units. Adapters are available for Bosch, Siemens and TEVES 25, 35, 38, 42, 55 and 60 pin connectors as well as many others.	All	
A020202	35 PIN BREAK OUT BOX CABLE Use with Break out Box #A0201 (60 pin) or #A0202 (120 pin) to diagnose ABS2/2B, ABS, EGS systems.	All	
A020204	55-PIN BOSCH BREAK OUT BOX CABLE Use with Break out Box #A0201 (60 pin) or #A0202 (120 pin) to diagnose ABS 3 & 5 and newer EGS systems.	AII	
A020206-2	88 PIN BREAK OUT BOX CABLE Use with Break out Box #A0201 (60 pin) or #A0202 (120 pin) to diagnose ABS/DSC system.	E46	
A020209-1	55-PIN TEVES BOB ADAPTER ABS Teves MKIV found in 3 Series 1992-1999	E36	

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# **Electronics - General**

Tool Number	Application	Models	61
DBL800	DEUTRONIC POWER SUPPLY/BATTERY CHARGER  Microprocessor controlled charger/power supply to maintain power levels during programming and diagnostics. Microprocessor controlled charging, measuring and monitoring. Built-in interface for computer, programming unit, printer and large display.	All Models.	NEW
ST1550	KABLEX CONNECTOR KIT - BMW Includes: Round contact pin extractor 1.5mm, 2.5mm & 3.5mm, Flat plug contact removers for 1.5mm, 1.9mm & 2.8mm and 2-prong contacts 2.8mm & 5.8mm. Replacement round contact shrouds available. (BMW #611130)	E28, E30, E31, E32, E34, E36, E38, E39, E46, E60, E61, E63, E64, E65, E66, E83, E85, E87, E90	
ST1501/1511	CONTACT EXTRACTOR (ROUND) - 1.5mm  Use to remove the round contacts with locking feathers. Replaceble tips available as #ST1511. Also in kit #ST1550.	All	
ST1502/1512	CONTACT EXTRACTOR (ROUND) - 3.5mm  Use to remove the round contacts with locking feathers. Replaceble tips available as #ST1512. Also in kit #ST1550.	All	
ST1504/1514	CONTACT EXTRACTOR (ROUND) - 2.5mm  Use to remove the round contacts with locking feathers. Replaceble tips available as #ST1514. Also in kit #ST1550.	All	
ST1553	CONTACT EXTRACTOR (FLAT) - 2.8, 5.8mm Use to remove double size flat contacts with single release channel.	All	
ST1554	CONTACT EXTRACTOR (FLAT) - 2.8mm  Use to remove single size flat contacts with single release channel. Also in kit #ST1550.	All	
ST1555	CONTACT EXTRACTOR (FLAT) - 5.8mm  Use to remove single size flat contacts with single release channel. Also in kit #ST1550.	All	
ST1591	CABLE EXTRACTOR (2 PIN DBGM) - 2.8, 5.8mm  Use to remove flat contacts with dual release channels. DBGM Type. Also in kit #ST1550.	All	STE MULEO
ST1589K	CABLE EXTRACTOR - 8mm Use to remove flat plug-in sockets of Load Current Contact connectors.	E65, E66	

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### **Electronics - General**

Tool Number	Application	Models	61
611360	SOCKET RELEASE TOOL Use to release electrical socket holders.	E30, E31, E32, E34, E36, E38, E39	
160	NAV RELEASE TOOLS Use to remove and install navigation units and some radios.	E38, E39, E46, E52, E53, E65, E66, E85	
613300	EWS ANTENNA WRENCH Use to remove the EWS antenna ring from the ignition lock.	E31, E32, E34, E36, E38, E39, E46, E52, E53, E60, E61, E63, E64, E83, E85, R50, R53	NEW
613100	HEADLIGHT SWITCH RELEASE TOOL Use to remove the headlight switch retainer on the Z3 model.	Z3, E46	-
9513	SPARK PLUG CONNECTOR PLIERS Removes spark plug wires without damage on latest model Porsches particularly lower wires on 911C2/4.	All	
611250	RELAY PLIERS Allows easy removal of 'BOSCH' relays in even the tightest locations.	All	-
611300	OUTSIDE MIRROR REMOVAL PLIERS Use to remove the retainer on the outside mirror.	E12, E21, E23, E24, E28, E30, E31, E32, E34, E36, E38, E39	
H2566-2	SPECIAL DASH SCREWDRIVER Headlight and fan switch escutcheon screwdriver removes switch retainer nuts used on BMW dashes till 1983.	E30, M3, Z1 (Series 3 up to 1987)	
ST4750-T10	MID SCREWDRIVER - TORX T10 Use to remove and install MID (Multifuction Information Display) on X5 and later model 5 Series (E39).	E39, E53	Quantum O south
ST4753-2.5	RADIO SCREWDRIVER - 2.5mm HEX Use to remove the radio found in Z3, X5 and late model 5 Series.	E36/7, E39, E53	Transmo )

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### **Electronics - General**

Γool Number	Application	Models	61
600143	ANTI-THEFT RADIO SCREWDRIVER Special 5-sided screwdriver to release anti-theft radio mounts.	All	
600143US	ANTI-THEFT RADIO SCREWDRIVER Special 5-sided screwdriver to release anti-theft radio mounts.(US Mfg.)	All	
616060	WINDSHIELD WIPER PULLER Use to remove the windshield wiper arm.	E24, E28, E30, E31, E32, E34, E36, E38, E39, E46, E52, E53, E60, E61, E63, E64, E65, E66, E67, E83, E85, RR1	
W6220	REMOTE STARTER SWITCH Plugs directly into 15 or 20 pin diagnostic socket to start engine while adjusting valves or timing engine. BMW models from 1983 to 1993.	All from 1983-91	
1315A/1	BOSCH TEST HARNESS - 2 PIN Use to measure current in Idle Air Valve circuit.	M10, M20, M30	
1315A/2	TEST HARNESS - IDLE STABILIZER - 2 WIRE 3 PRONG Flat pin three (3) wire for measuring current (amps) of idle stabilizers.	M20, M30, M50	
1501	TEST HARNESS - 3 PRONG Flat three (3) wire for measuring resistance and voltage. Idle and throttle control switch, throttle control potentiometer, trip computer, idle control air valves (BOSCH type), altitude sensorsetc.	M10, M20, M30, M50	
611440	JETRONIC TEST CABLES Use to test sensors on all Jetronic and Motronic injection systems. Use with standard VOM/DMM.	All	
612050	SERVOTRONIC TEST CABLE Use this cable to test the signal from the Servotronic unit with a standard DMM (Digital Multi Meter).	E32, E34	
V8695	SRS TEST RESISTOR  This tool is equipped with the same connector and is of the same resistance as the air bag module. Use to test for faulty airbags.	All to MRS3	NEW

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### **Instruments**

Tool Number	Application	Models	62
iScan-BMW	BMW DATA SCANNER  Use to read and reset fault codes, access live data for road tests, activate components and program/code controllers and reset service intervals and SRS controllers.	All models 1988 to present.	A DESE
D21	Pscan Service reset tool for all analog resets (to 2000) and digital resets for E46 and Z4 (2001 onward). Includes base unit and BMW reset module. Other modules available uponm request.	All	NEW
W211T	SERVICE INTERVAL RESET TOOL Use to reset service interval reminder lights on the instrument cluster after oil change and transmission inspection. 1983-99 models.	All	18:18:17
V8695	SRS TEST RESISTOR This tool is equipped with the same connector and is of the same resistance as the air bag module. Use to test for faulty airbags.	All to MRS3	NEW

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# **Heating & Air Conditioning**

Tool Number	Application	Models	64
641010	HEATER CONTROL HOOKS Release and installation hooks for heater controls. Eliminates the need to remove the radio.	E46, E53	6 x(50)
641110	GROOVED NUT SOCKET KEY For releasing vane pump pulley.	E30, E34, E23, E32	
641120	BOWDEN CABLE RELEASER	E34, E36, E36/5	
641020	AIR GRILL HOOKS Use to release and remove fresh air grill and to remove various trim pieces.	E36, E38, E39, E46, E52, E53, E60, E61, E63, E64, E65, E66, E67, E83, E85, E87, E90, R50, R52, R53, RR1	NEW
641030	AIR GRILL HOOKS Use to release and remove fresh air grill	E65, E66	NEW





# Deutronic (Battery Charging Systems

# DON'T RISK ANOTHER EXPENSIVE CONTROLLER!!!! Computer Controlled Power Supply

A Regulated Battery Charger/Power supply is absolutely necessary when Flashing/Programming late model vehicles. YOUR TRANSFORMER BASED CHARGER IS NOT SUFFICIENT FOR THIS JOB.



# **DBL-800**

Stable battery voltage is critical during programming. Any fluctuation, spiking or loss of voltage will interrupt programming, which could cause the controller to lock up or be damaged.

#### Two critical items are:

- Precise voltage control under changing load conditions
- Clean DC (AC eliminated)

Since the programming of modules requires the ignition key to be turned on for extended periods, without the engine running. This means that during the flashing/programming event, the vehicle's systems are operating from the vehicle battery alone. So, a regulated battery charger is critical.

The Deutronic DBL800 helps reduce the risk of damaging control units by providing a continuous stable voltage supply under changing load conditions.

Non regulated power supplies, such as transformer based units, can cause

- mains(AC) fluctuations being passed on the battery and on board electronics.
- pulsing current (destruction of onboard electronics)
- low stability of output voltage (abort of flash process).
- superpose alternating current on charging process.
- cell gassing (danger of explosion).

DON'T PROGRAM ANOTHER ECU WITHOUT ONE.



# Deutronic DBL800



- Microprocessor controlled charging, testing and monitoring of batteries.
- Switchable option to an adjustable power supply for *programming/flashing* of vehicle controllers.
- Short circuit and reverse polarity protected.
- Built-in interface for connection to computer, programming units, printers and large displays.
- Fully protected against defective/shorted batteries.
- Deep discharge refresh function for sulphated batteries (special software optional).
- Sparking is avoided by microprocessor controlled time-delay current turn-on. This allows battery terminal clamps to be connected with unit on.
- Various charging software programs included for refreshing batteries with differing fault conditions

Input voltage 115V/10A (103-133AC), 47Hz - 63Hz Standard universal connector at front plane (IEC320) 10A

### **Output (Factory settings)**

Plug-in charge cables with fully isolated clamping jaws switch-off relay. Output voltage monitored by Over Voltage Protection and limited to 16VDC or alternative 32VDC. If the output voltage goes to 16VDC or alternatively 32VDC for a period longer than 5 seconds, the current is automatically switched off. Remote control switching via cable. Electronic current limiting adjustable.

### **Charge Mode (Factory settings)**

The unit starts with a charging voltage of 14,2VDC. If charging current falls below 2,5A then the charging voltage will drop to 13,2VDC.

When additional current is required, the Charger will again increase the charging voltage up to 14,2VDC.

#### Current

45A @ 14.2V 55A @ 13.2V

#### Load regulation

Static. 10-90%: <50mVpp Dynamic. 20-90%: <300mVpp

#### Cooling

Convection cooling, supported by internal controlled and regulated fan. Controlled power reduction at high temperatures in conditions of inadequate ventilation.

#### **Physical Specifications**

Ambient operating temperature -20°C ~+40°C Dimensions - 240 x 295 x 120mm (TxBxH) Weight - 3.9kg / 8.6lb (without cables, without package)

Approved by BMW AG, Porsche, Jaguar and other companies.













# OBD-II / EOBD Fault Code Reader





INCLUDES OVER
2000 FAULT CODE
DEFINITIONS.

FAST NEW EASY ACCURATE





The Quick Scan OBD-II / EOBD Fault Code Reader is designed to be quick, easy to use and compact.

All you do is plug it in and turn on the ignition key.

\$49<sup>95</sup>

Reads OBD-II Fault Codes (1996 and newer) and displays them in the order stored.

Just leave the Quick Scan attached and the codes will automatically be erased after being read 5 times in succession.

Remove the Quick Scan from the OBD-II socket before the codes are read 5 times and the codes will remain in storage.

A handy user manual with over 2000 OBD-II codes is included.

NOW READS

EOBD

VEHICLES

### **Quick Scan includes:**

- Quick Scan Code Reader
- OBD-II J1962 Extension Cable
- Fault Code Manual and Users Guide





800-848-6657



