

**MODEL**

2001 3 Series, M3, 5 Series, 7 Series , Z3 roadster and coupe; M roadster and coupe; Z8

SITUATION

Model	Production Start*	Comments
7 Series	3/00	no substantial changes compared to last year's models.
Z3 2.5 roadster	10/00	
Z3 3.0 roadster, coupe		
M roadster, M coupe	3/01	
325i sedan, coupe	9/00	Replace the 323i and 323Ci. Utilize the new M54B25 engine (see below).
325Ci convertible	9/00	
325i sport wagon	9/00	
325xi sedan, 325xi sport wagon	9/00	all-wheel drive option
330i sedan, coupe	6/00	Replace the 328i and 328is (E46). Utilize the new M54B30 engine (see below).
330xi	8/00	all-wheel drive option
330Ci convertible	6/00	
M3 coupe	2/01	new model
M3 convertible	4/01	new model
525i sedan, 525i sport wagon	9/00	new models
530i sedan, 530i sport wagon	9/00	replace 528i and 528i sport wagon
540i	9/00	
M5	9/00	
X5	4/00	Refer to Service Information Bulletin 00 53 00, and Service Maintenance checklist SD92-161.
Z8	10/00	

* availability approx. 1 month later

The new M54 engine is a further development of the M52 engine used through the 2000 model year. The following tables show the major differences compared with the M52 engine:

The M54B30 engine (Z3 roadster 3.0 and Z3 coupe, 330i, and 530i) compared to the previous M52B28 engine:

Engine	M54B30	M52B28
displacement cu. in. (cu.cm)	181.8 (2,979)	170.4 (2,793)
bore (mm)	3.31 (84.0)	3.31 (84.0)
stroke (mm)	3.53 (89.6)	3.31 (84.0)
compression ratio :1	10.2	10.2
max. output (hp)	225	193
at engine speed (rpm)	5,900	5,500
max. torque lb-ft (Nm)	214 (290)	206 (280)
at engine speed (rpm)	3,500	3,500
engine management system	Siemens MS43.0	Siemens MS42
emissions compliancy	ULEV*	LEV

* 330Xi is LEV.

The M54B25 engine (Z3 roadster 2.5, 325i, and 525i) compared to the previous M52B25 engine:

Engine	M54B25	M52B25
displacement cu. in. (cu.cm)	152.2 (2,494)	152.2 (2,494)
bore (mm)	3.31 (84.0)	3.31 (84.0)
stroke (mm)	2.95 (75.0)	2.95 (75.0)
compression ratio :1	10.5	10.5
max. output (hp)	184	170
at engine speed (rpm)	6,000	5,500
max. torque lb-ft (Nm)	175 (237)	181 (245)
at engine speed (rpm)	3,500	3,500
engine management system	Siemens MS43.0	Siemens MS42
emissions compliancy	LEV	LEV

The S54B32 engine (M3, M3 convertible, M roadster, M coupe) is the newest development of BMW Motorsport. It is a naturally aspirated, in-line 6-cylinder.

Model	M3, M3 convertible	M roadster, M coupe
displacement cu. in. (cu.cm)	198 (3,246)	198 (3,246)
bore (mm)	87	87
stroke (mm)	91	91
compression ratio :1	11.5	11.5
max. output (hp)	333	315
at engine speed (rpm)	7900	7400
max. torque lb-ft (Nm)	262 (355)	251 (340)
at engine speed (rpm)	4900	4900
engine management system	MS S54	MS S54
emissions compliancy	LEV	LEV
transmission	Getrag 6-speed S6S420G	ZF 5-speed S5D390Z

The 2001 X5 became available as of approx. 4/00. The X5 is not covered in this bulletin, nor does it use the same Service Maintenance checklist as BMW passenger cars. Refer to Service Information Bulletin 00 53 00, and Service Maintenance checklist SD92-158 for the X5.

Quality Certification I (QCI):

A new QCI checklist (item SD92-164) has been developed for all 2001 model year BMW automobiles.

A new QCI operation for 2001 7 Series and the Z8 is to install the new Motorola CPT7000 Digital StarTac portable cellular telephone. This phone is standard equipment on all 7 Series vehicles and the Z8 this year. All in-vehicle components are already installed, except for the handset body kit. During QCI, the technician must connect the telephone selected by the customer during vehicle ordering, and perform the 19-step In-Vehicle Operations Check to ensure correct functions. Please refer to SIB 84 04 00 for further information. Labor allowance times for the 7 Series and the Z8 have been adjusted to accommodate this additional work.

This telephone is also standard equipment on the 2000 model year Z8. Please refer to SIB 84 10 00 for further information.

As of mid-January 2001, the Motorola CPT8000 "TimePort" portable cellular telephone was introduced as standard equipment for 2001 7 Series, replacing the CPT7000 "StarTac" phone. Please refer to SIB 84 13 00 for further information.

The Vehicle/Key Memory Programmer will be ready shortly to facilitate setting the customer's individual preferences during QCI. Please refer to SIB 09 03 00.

A new Service Maintenance Checklist (item SD92-157) has been developed for the 2001 models. It contains only a few changes compared to last year's checklist. The Checklist SD92-157 has been updated to include all new models mentioned above. It also incorporates space to record values called for in specific checking operations. These include disc brake pad thickness, tire pressures, parking brake lining thickness, and the freeze point temperatures of the engine coolant and of the windshield washer fluid. The Service Maintenance Checklist has been expanded to incorporate the above new models. It can be differentiated from previous versions by the print date 1/01 (former version print date was 9/00).

UPDATE! Service Maintenance Checklist SD92-157 has been revised to include a separate line for the new Castrol TWS Motorsport 10W-60 Synthetic, and the Castrol Formula RS 10W-60 Synthetic engine oils for the M3, M3 convertible and the M roadster/M coupe. Refer to the "General Notes" section on more information on these oils. The revised checklist can be differentiated from previous versions by the print date 6/01 (formerly 1/01).

Please refer to SIB 11 06 01 for information on changing the engine oil on early production 2001 M3 and M roadster/M coupe vehicles.

A new section has been added to the Service Maintenance Checklist. Prior to performing any maintenance work, please note and record the number of lamps still showing in the Service Interval Indicator (SII) in the "header" area on the front of the checklist (when the ignition is switched on, place an "X" in the box representing the lamp(s) still illuminated). This pertains to all models except E46 3 Series and Z8. For E46 3 Series and the Z8, please record the actual mileage until the next service, read from the SII.

Copies of the QCI, and Service Maintenance checklists applicable for 2001 models are included as attachments.

These models require additional maintenance as follows:

M roadster, M coupe:

UPDATE! 1200 Mile Service: Change engine oil and filter while engine is at operating temperature. The only approved oils for the S54 engine are Castrol TWS 10W-60 Synthetic, and Castrol Formula RS 10W-60 Synthetic engine oil. Please refer to additional information below.

Inspection 2: Check clutch disc for wear.

M3, M roadster, M coupe:

UPDATE! 1200 Mile Service, and Inspection 2: replace differential oil. Use SAF-XJ, part number 83 22 1 470 080.

Inspection 1: Adjust valves. Engine temperature must be less than 95°F/35°C.

M3:

UPDATE! 1200 Mile Service, and Inspection 2: replace transmission fluid. Use MTF-LT-1, part number 83 22 9 408 942.

General Notes:

Service and Warranty Information booklet:

Model	Booklet
3 Series (E46), incl. M3 and M3 convertible	SD92-162
Z3, M roadster/ M coupe, 5, 7 Series	SD92-160
Z8	SD92-167

BMW High Performance Synthetic Engine Oil (5W-30):

UPDATE! All models covered by this Bulletin (except M3/M3 convertible and M roadster/M coupe- see below) are factory-filled with this oil. It is strongly recommended for service use as well. Please refer to SI 11 08 98 for more information. The 5W-30 synthetic engine oil can be ordered under part number 07 51 0 017 866 (1 quart; delivered per case of 12 quarts).

Vehicles filled with the High Performance Synthetic Oil also have a label applied to the front of the engine compartment (exact locations differ slightly by model). The label can be ordered under part number 01 00 0 002 569.



Castrol TWS Motorsport 10W-60 Synthetic, and Castrol Formula RS 10W-60* Synthetic Oils:

UPDATE! These are the only approved oils for the S54B32 engine in the M3 (coupe and convertible) and the M roadster/M coupe. The TWS Motorsport 10W-60 Synthetic has the same formulation as the Formula RS 10W-60. Since only the name was changed, it can be ordered under BMW part number 07 51 0 009 420.

UPDATE! * Castrol Formula RS 10W-60 Synthetic is the same oil which is approved for 2000 M5 through 2/2000 production- please refer to SIB 00 01 99

UPDATE! Vehicles filled with either of these oils also have a label applied to the front of the engine compartment (exact locations differ slightly by model) which references the 10W-60 oil. The label can be ordered under part number 01 00 0 141 034. It has orange letters on a black background to differentiate it from other engine oil labels used previously.



Extended (approx. 15,000 mi) Service Interval:

All models (including all with the new S54 6-cylinder Motorsport engine) feature the extended oil change service interval. However, engine oil should be changed at least once a year. This revision is retroactive to earlier model years. The annual oil change is included in the BMW Maintenance Plan.

Main Diagnostic Socket:

A new diagnosis socket will be introduced on the model year 2001 3 Series (330i E46). It is located in the driver's footwell, combined with the OBD socket. The new OBD/diagnosis socket replaces the 21-pin diagnostic connector which was located in the engine compartment.

Resetting the Service Interval Indicator (SII):

On 2001 3 Series, 5 Series (incl. M5) and X5 vehicles without the diagnostic connector in the engine compartment, the SII reset tool can no longer be used (see note below). Instead, the SII can be reset with the trip odometer reset button in the instrument cluster, following the procedure given below:

- The ignition key must be in the "0" ("off") position.
- Press and hold the trip odometer button in the instrument cluster, and turn the ignition key to the "1" (accessory) position.
- Keep the button pressed for approx. 5 more seconds until any of the following words appear in the display: "Oil Service" or "Inspection", with "Reset" or "Re". For a vehicle equipped with a "high cluster": The fuel amount (in liters) remaining until the next service is displayed (i.e. 3224).
- Press the button again and hold for approx. 5 seconds until the words "Reset" or "Re" flash.
- If there is no "flash", the minimum consumption value has not been met.
- While the display is flashing, press the button briefly to reset the Service Interval. After the display has shown the new interval, the following will appear in the display for approx. 2 seconds: "END SIA".

The system can only be reset again after the vehicle has been driven approx. 50-75 miles (consumes at least 2.5 gal. fuel).

If the display shows "Reset" or "re" when resetting, the minimum driving distance has been fulfilled and the system can be reset again.

It is possible to interrupt and end the reset procedure by changing the position of the ignition key.

Note: An alternate method to reset the SII is to use the OBD adapter harness (available under part number 90 88 6 614 300, sent to all BMW centers as part of the Automatic Tool Shipment Program) together with the SII Reset Tool (available under part number 88 88 6 621 110). Fasten the Reset Tool to the OBD adapter harness, then connect the harness to the OBD/diagnosis socket in the driver's footwell. Reset the SII per usual procedure.

325xi sedan, 325xi sport wagon and 330xi sedan:

The all-wheel drivetrain is available as an option with either the manual transmission or with the optional automatic transmission. The all-wheel drive concept is very similar to that utilized in the X5 SAV, in that the system incorporates two open differentials and a single speed transfer case. The front differential is bolted to the side of the engine's oil pan. The front differential requires SAF-XO lubricant, which is the same synthetic lubricant needed for the rear differential. The transfer case (designation NV124) utilizes spur gears instead of a drive chain in the X5's case (designation NV125). The NV124 transfer case's lubricant is MTF-LT-1, available under part number

83 22 9 408 942 (5 liters). The front and rear differential, as well as the transfer case, all have lifetime fluid ratings.

PARTS INFORMATION

Additional copies of the checklists for 2001 models can be ordered from Product Engineering as listed below:

Item	Description	Qty	Price
SD92-164	Quality Certification I Checklists (2001 models)	1 pack (=25 forms)	\$4.00
 SD92-157	2001 Service Maintenance Checklists: all passenger cars (print date 6/01)	1 pack (=25 forms)	\$4.00

A pre-printed Material Order Form is enclosed.

WARRANTY INFORMATION

2001 Model Year QCI payments will be automatically issued to BMW centers upon reporting a 2001 model year vehicle as retailed, or placing the vehicle in service as a BMW center demonstrator or Service/Loaner vehicle. The payments, processed via a miscellaneous billing, will be based on the display and delivery check flat rates as published, and each BMW center's warranty labor rate. The QCI line item on the repair order should be charged internally to the New Car Sales Department.

Service		
QC I		Display and Delivery Check-Labor Allowance (FRU)
	325i, 325Ci	11
	325iT	11
	325Ci (E46 convertible)	13
	330i, 330Ci	11
	330Ci (E46 convertible)	13
	M3	11
	M3 convertible	13
	Z3 roadster 2.5, 3.0	13
	Z3 3.0 coupe	13
	M roadster	13
	M coupe	13
	525i, 525iT	11
	530i, 530iT	11
	540i	11

	M5	11
	740i/iL*	15
	750iL*	18
	Z8*	14

* includes 1 FRU for connecting and testing CPT7000 or CPT8000 phone as standard equipment.

Reimbursement for handset kit is \$475.00.

BMW Company Cars

Reimbursement for performing the QCI on BMW company cars (of any model year) must still be requested by submitting a claim through DCS using the Spot Delivery codes as listed below:

Defect Code:	11 99 99 77 BV
Labor Operation:	00 00 012
Flat Rate Units:	Refer to KSD for flat rate times.

Note: BMW company cars delivered to BMW field personnel may have already received a full QCI at the Vehicle Preparation Center (VPC) which serves your region. This should be evident upon arrival at your center by the absence of the usual protective seat and door panel covers and battery main-disconnect cable, correct wipers are already installed, the Monroney label is not affixed to the window, etc. As of March 2001, the VPCs will affix a small orange-colored label onto the center console near the transmission selector lever which reads "QC1 already done at VPC!". If this label is found, remove it prior to delivery to the employee. Please verify that the QC1 has already been performed at a VPC on a specific vehicle by contacting your regional Distribution Manager with the chassis#.

IMPORTANT:

As with all work that is reimbursed by BMW, the repair order, time recording and record keeping requirements outlined in the Warranty Policy and Procedures Manual must be strictly observed.

Quality Certification I payments are subject to audit.