00 00 252 BMW engine oil service without supplementary service

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WARNING

Hot fluids.

Risk of scalding!

Conduct all work in the vehicle wearing appropriate personal protective equipment only.

WARNING

Hot surfaces.

Risk of burning!

Perform all work only on components that have cooled down.

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RISK OF DAMAGE

Engine damage caused by excessively filling the engine with engine oil.

Filling an excessive quantity of engine oil may cause engine damage.

- Observe the exact engine oil filling capacity.
- Drain the engine oil.

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RISK OF DAMAGE

Contaminant or foreign body.

Contamination can result in malfunctions, operating failure or leaks.

- Adhere to the utmost cleanliness.
- Protect components from contamination e.g. by covering.
- Close off line connections with seal plugs.

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TECHNICAL INFORMATION

Make sure the vehicle is at operating temperature for engine oil service (engine oil temperature > 70 °C).

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TECHNICAL INFORMATION

Collect and dispose of emerging fluids. Observe country-specific waste disposal regulations.

13 - Install acoustic cover

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RISK OF DAMAGE

Damage to the acoustic cover.

Jerky movements during disassembly and excessive application of force during installation may result in breakage of the acoustic cover.

- Disassemble or mount the acoustic cover carefully.
- Disassemble or mount snap-lock couplings of the ball pivots one after the other.
- Disassemble or mount acoustic cover only at temperatures >20 °C.
- Use only distilled water as an auxiliary material during installation, no lubricants.



• Check the acoustic cover for correct fit of the rubber mounts (1).

• Clip in the acoustic cover (1) into the holders in the indicated areas.

10



Overview of Tightening Torques

Oil filter cover to oil filter module			Used in step 4
O-ring lightly oiled.		Tightening torque	25 Nm
Oil drain plug			Used in step 8
M12x16	Replace sealing ring.	Tightening torque	25 Nm

Overview Technical Data

Engine oil B57D30O0/B57D30S0	Used in step
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- Feed in cross connection (2).
- Attach the Bowden cable .
- Tighten the screws (1).
- Front cross connection

Screw	Tightening torque	19 Nm

96 - Install the rear section of the front wheel arch cover on the left and right

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NOTICE

Description is for left component only. Procedure on the right side is identical.

Install the rear section of the front wheel arch cover

To provide a better overview: Schematic diagram with partially hidden components.



- Feed in rear section of the wheel arch cover (1).
- Tighten screws (arrows).

Wheel arch cover

Thermoplastic hexagon screw	Tightening torque	2,6 Nm
Plastic nut	Tightening torque	2,6 Nm

97 - Partially install the wheel arch trim (side sill) on the front left and right

NOTICE Perform the operations on the left and right side.



- Partially installing front wheel arch trim (side sill)
- In G05 only:
- Check the clips (2) for damage and renew if necessary.
 Check the sealing ring for damage and renew where required.
 The sealing ring must not be damaged or missing.
- Position the wheel arch trim (1) and engage at the clips (2).

• In G07 only:

RISK OF DAMAGE

Contaminant or foreign body.

Contamination can result in malfunctions, operating failure or leaks.

- Adhere to the utmost cleanliness.
- Protect components from contamination e.g. by covering.
- Close off line connections with seal plugs.



ि RISK OF DAMAGE

Damage to the surface.

The use of metal-cutting tools (e.g. emery cloth) to clean the surfaces can damage them and lead to leaks or engine damage.

• Do not use any metal-cutting tools.

• Clean sealing surface.

• Check the installation position of the roller cam followers (1) (risk of damage!).



Renew gaskets. **Parts:** Seals

Overview of Special Tools

2 298 505 Wedge



2 318 635 Adapter



2 361 506 (00 6 103) Spindle



		Re
15 million		In c
		SI-
	GRSW-2361506	1

2 413 317 Cable strap



Common	Us	ed in step	31	34	35	36	40	45	50	51
Usage	The "Cable ties" part Length: 320 mm colo RedABVS270 Length	s set cons ur: RedAE n: 665 mm	sists 3V25 colo	of 3 0 Le ur: F	item ngth led	s as : 500	follov mm	ws:A colou	BV2 Jr:	32
Included in the tool or work										
Storage location										
Replaced by										
In connection with										
SI-Number	01 47 15 (332)									

Common		Used in step	9	10
Usage	Set (delivery of 2 pieces)			
Included in the tool or work				
Storage location	C34			
Replaced by				
In connection with				
SI-Number	01 03 12 (792)			

Common		Used in step	21
Usage	Set consisting of 2 pieces. Replaces SWZ 00 6 031		
Included in the tool or work	0 496 422		
Storage location			
Replaced by			
In connection with			
SI-Number	01 17 10 (659)		

Common		Used in step	21	64
Usage	Spindle (central spindle) for Traverse 00 6 100			
Included in the tool or work	0 496 852			
Storage location				
Replaced by				
In connection with				
SI-Number	01 17 10 (659)			



• Loosen screws (1).

• Remove the underbody panelling (2).

6 - Remove exhaust system



WARNING

Hot exhaust system.

Risk of burning!

• Any work must exclusively be carried out with an exhaust system that has cooled down.



WARNING

Hot surfaces.

Risk of burning!

• Perform all work only on components that have cooled down.



CAUTION

Component with heavy weight.

Danger of injury!

- Note component's centre of gravity.
- Support component using a jack.
- Secure component against falling off the jack.



• Loosen exhaust temperature sensor (1).

Position the mounting element with the fixture (60) on tabletop A for the front axle support at coordinates 7/2 and 7/7.



Caution!

Removal weight approx. 150 kg to 300 kg. Check the payload of the vehicle and unload as needed. Load front footwell with sandbags if necessary, approx. 100 kg. Note safety instructions of <u>table lift</u>.

Position the mounting elements with the fixtures (60) on the front left and right at the front axle support.

Position the mounting elements with the fixtures (40) on the rear left and right at the front axle support.





Position the mounting elements with the mountings (80) at the automatic transmission.



Position the mounting elements with the fixtures (40) at the transmission cross member.

Position the mounting elements with the fixtures (70) at the transmission cross member.



7 – Remove heat shields



- Loosen nuts (1).
- Lower and remove the exhaust system (2) with the assistance of a second person.

- ► Remove heat shield at rear.
- Loosen screws (1).
- Remove the rear heat shield (2).



8 - If installed: Removing the rear axle cover



- Loosen screw (1).
- Loosen screws (2).
- Remove the cover (3).



• Engage the wheel arch trim (1) to the latch mechanisms (2) in the area of the bumper panel.

14 - Install front ornamental grille

Prerequisite

Engine compartment lid is open.



• Check all latch mechanisms (2) for damage.

If latch mechanisms (2) are damaged, renew front ornamental grille (1).

- If necessary, connect connector.
- Position front ornamental grille (1) and clip into all latch mechanisms towards rear.

Additional Information

Overview of Tightening Torques

Automatic air flap control		Used in step 8
Screw	Tightening torque	4 Nm
Top bumper panel to air flap control		Used in step 11
Screw	Tightening torque	3 Nm
Front bumper panel on side wall		Used in step 11
Hexagon screw	Tightening torque	3 Nm
Underbody panelling		Used in step 11
Hexagon screw	Tightening torque	3 Nm
Wheel arch cover		Used in step 12
Thermoplastic hexagon screw	Tightening torque	2,6 Nm
Plastic nut	Tightening torque	2,6 Nm

Overview of Special Tools



• Measure the height of the panorama glass roof lid (1) to the roof (2) with the special tool <u>0 495 259 (51 0 010)</u>.

6 - Installing seal for glass slide/tilt sunroof, inner



- Connect seal (1), starting at mark (2).
- Check seal (1) is correctly seated on panorama glass roof frame.

7 - Initialising the glass slide/tilt sunroof panel



• Press and hold the switch in the "Vent Position" direction.

The glass slide/tilt sunroof moves to vent position.

• In the event of a delayed start or sudden stop of the glass slide/tilt sunroof, continue operating the switch in the "Vent Position" direction.

0 496 569 (00 9 325) Wedge



Common	Used in step 5 7
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

Links

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
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61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17

Wheel bolts			Used in step 9
M 14 / AF 17	Screw in wheel bolts and evenly tighten crosswise by hand in order to centre the wheel rim.	Tightening torque	140 Nm
	Tighten wheel bolts to the prescribed tightening torque with a calibrated torque wrench in a crosswise sequence.	Check	140 Nm
	Check all the wheel bolts in the same order or retighten to the prescribed tightening torque again.		
Wheel arch cover, bottor	n front		Used in step 10
Hexagon screw		Tightening torque	3 Nm
Underbody panelling			Used in step 11
Hexagon screw		Tightening torque	3 Nm
Front stiffening plate on	front axle support		Used in step 11
M8	Renew screws.	Tightening torque	19 Nm

Overview of Special Tools

2 344 011 Tool



Common	Used in step 8	Э
Usage	Tool (wheel hub grinder) for cleaning the connection of the wheel rim (wheel contact face) to the wheel hub.	f
Included in the tool or work		
Storage location		
Replaced by		
In connection with		
SI-Number	08 08 12 (872)	

Replacement tools: 0 495 221 (36 1 323) Wheel stud



Common		Used in step	3
Usage	(Code 30) Code 39 available separately under 36 13 1 181 259	, (see EPC)	
Included in the tool or work	0 492 518		
Storage location			
Replaced by			
In connection with			
SI-Number			



• Install the support (3) for the bumper panel and tighten the nuts (2).

Rear bumper support to body

Nut	Tightening torque	108 Nm

• Tighten nuts (1).

Rear silencer to bumper support

M8	Tightening	19 Nm
	torque	

- Install the adapter (3) and mount the expanding rivets (2).
- Tighten the screws (1).

Bumper trim, rear

Hexagon screw	Tightening torque	3,0 Nm
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10 – Install rear bumper panel



• Install the bumper panel (3).

Guide in bumper panel (3) while connecting and locking all the connectors.

• Insert bumper panel (3) in guides (2) and engage it into retaining lugs (1).



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NOTICE

Perform the operations on the left and right side.

- Engage the bumper panel in the area of the side panel into the latch mechanisms.
- Tighten down screw (1).

Bumper trim, rear

Hexagon	Tightening	3,0 Nm
screw	torque	

5124 Overview of tightening torques

Striker to rear lid		
Screw	Tightening torque	19Nm
Tailgate/tailgate lock		
M8x20 screw	Tightening torque	19Nm

Enclosure 3 to SI 34 03 96 (150), edition 02/2019

Use:

All vehicles with Dynamic Stability Control (DSC) *without* a pre-charge pump must be filled with new brake fluid *DOT 4 with low viscosity*.

All other vehicles can be filled with the new brake fluid DOT 4 with low viscosity; it is possible to mix DOT 4 and DOT 4 with low viscosity.

Identification of container:

Brake fluid **DOT 4 with low viscosity**, container size 0.25 - 5.0 litre: **Cap colour black**

Trade name	BMW part number	Container size
BMW brake fluid DOT 4 with low viscosity	83 13 0 443 023	0,25-litre can
BMW brake fluid DOT 4 with low viscosity	83 13 0 443 024	0,50-litre can
BMW brake fluid DOT 4 with low viscosity	83 13 0 443 026	1,0-litre can
BMW brake fluid DOT 4 with low viscosity	83 13 0 443 027	5,0-litre canister
BMW brake fluid DOT 4 with low viscosity	83 13 0 443 028	30.0-litre barrel
BMW brake fluid DOT 4 with low viscosity	83 13 0 443 029	60.0-litre barrel