

2012 BMW 550i GT (F07) V8-4.4L Turbo (N63)

Vehicle > Engine, Cooling and Exhaust > Engine > Engine Lubrication > Oil Filter > Service and Repair > Removal and Replacement

ENGINE OIL SERVICE

11 00 ... Service - Engine Oil (N63)

Special tools required:



WARNING:

Risk of scalding.

Carry out work on the vehicle only when wearing oil- and heat-resistant protective gloves incl. forearm protection, face guard and protective apron.



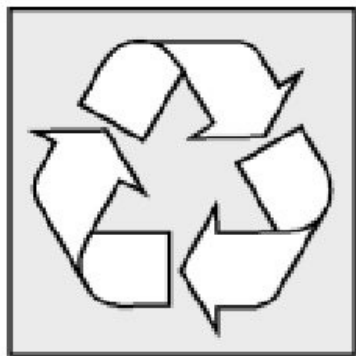
IMPORTANT:

Carry out the engine oil service only when the engine is at operating temperature.

Observe the exact engine oil filling capacity.

Overfilling the engine with engine oil will result in engine damage.

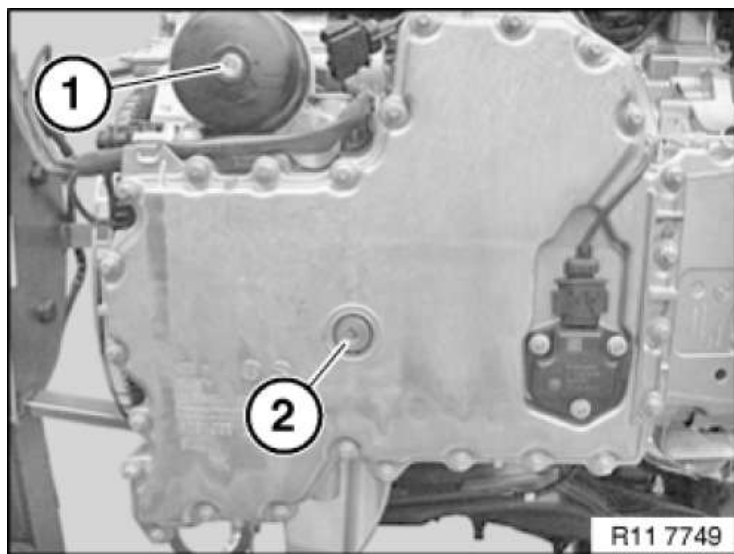
Checking and drip-off times (at least 10 minutes) must be observed.



Recycling:

Catch and dispose of drained engine oil in a suitable collecting vessel.

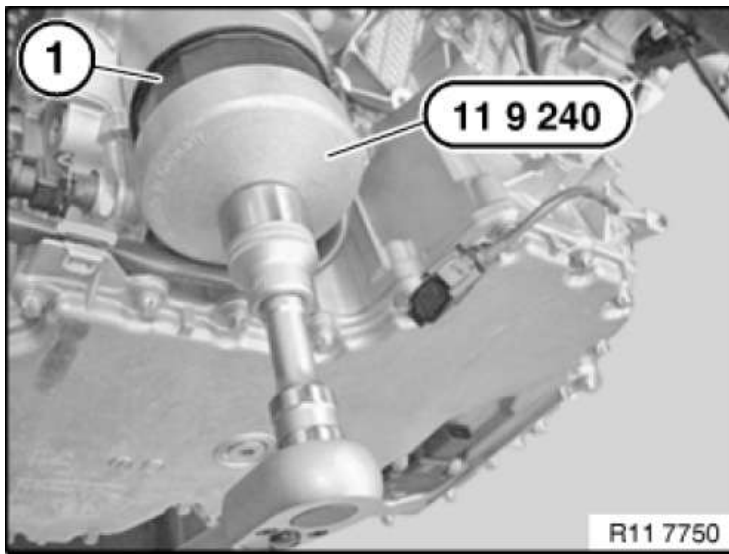
Observe country-specific waste disposal regulations.



Release screw plug (1) on oil filter cap.

Remove screw plug (2) from oil sump and drain engine oil.

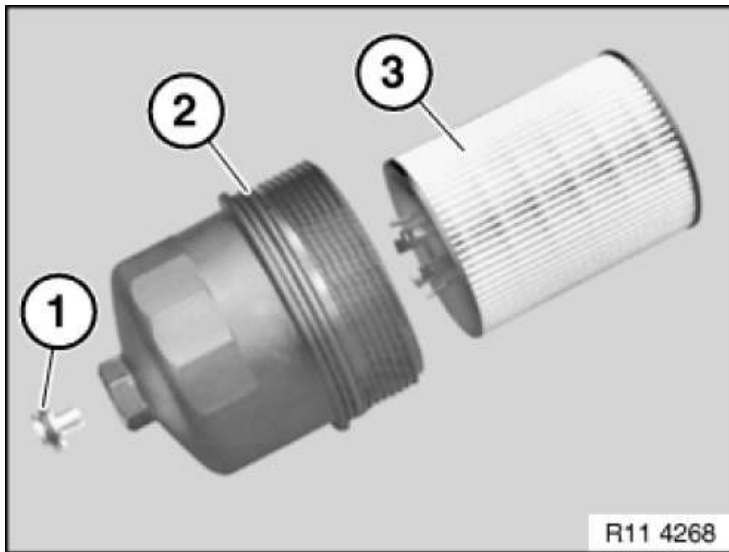
Graphic E71.



Release oil filter cover (1) with special tool 11 9 240.

Tightening torque 11 42 1AZ.

Graphic E71



Installation note:

Renew sealing ring (2) and wet with oil.

Check sealing ring (1) and renew, if installed.

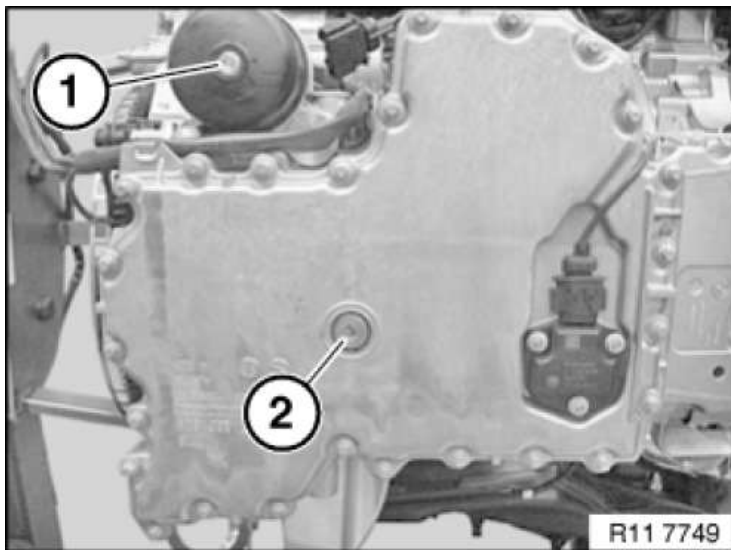
Renew oil filter element (3) and slide into the oil filter cover.

Oil filter element (3) must snap audibly into place.

Insert oil filter element (3) into oil filter cover.

Installation note:

Oil filter element (3) must snap audibly into place.



NOTE: Presentation: without underbody protection and reinforcement plate.

Graphic E71.

Installation note:

Replace sealing rings.

Insert screw plug (2) for oil sump and tighten down.

Tightening torque 11 13 1AZ.

Insert screw plug (1) for oil filter cap and tighten down.

Tightening torque 11 42 2AZ.

NOTE:

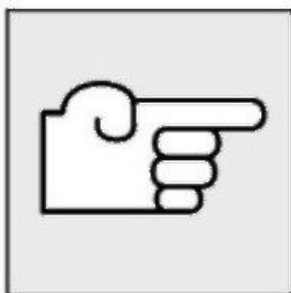
Pour in engine oil.

Start engine and run at idle until oil pressure indicator light goes out.

Switch off engine

Check oil filter cap and screw plugs (1 and 2) for oil filter cap and oil sump for leaks.

Assemble engine.



Checking engine oil level:

- Park vehicle on a horizontal surface
- Allow engine to run at operating temperature for three minutes with increased engine speed (approx. 1100 rpm)
- Read off engine oil level in instrument panel or on Control Display
- Top up engine oil if necessary

11 13 Oil Pan

	Type	Thread	Tightening specification	Measure
1AZ Oil drain plug	N63	M18 x 1.5	Replace sealing ring	40 Nm
2AZ Oil sump top section to crankcase	N63	M8		25
3AZ Oil sump bottom section to oil sump top section	N63	M8	Replace microencapsulated screws	27 Nm
4AZ Oil deflector to oil sump top section	N63	M6		10 Nm
5AZ Screw plug, oil channel, to oil sump top section	N63	M24x1.5	Replace sealing ring	50 Nm
6AZ Oil condition sensor to oil sump bottom section	N63	M6	Replace O-ring	8.5 Nm

11 13 Oil Pan

	Type	Thread	Tightening specification	Measure
1AZ Oil drain plug	N63	M18 x 1.5	Replace sealing ring	40 Nm
2AZ Oil sump top section to crankcase	N63	M8		25
3AZ Oil sump bottom section to oil sump top section	N63	M8	Replace microencapsulated screws	27 Nm
4AZ Oil deflector to oil sump top section	N63	M6		10 Nm
5AZ Screw plug, oil channel, to oil sump top section	N63	M24x1.5	Replace sealing ring	50 Nm
6AZ Oil condition sensor to oil sump bottom section	N63	M6	Replace O-ring	8.5 Nm

11 13 Oil Pan

	Type	Thread	Tightening specification	Measure
1AZ Oil drain plug	N63	M18 x 1.5	Replace sealing ring	40 Nm
2AZ Oil sump top section to crankcase	N63	M8		25
3AZ Oil sump bottom section to oil sump top section	N63	M8	Replace microencapsulated screws	27 Nm
4AZ Oil deflector to oil sump top section	N63	M6		10 Nm
5AZ Screw plug, oil channel, to oil sump top section	N63	M24x1.5	Replace sealing ring	50 Nm
6AZ Oil condition sensor to oil sump bottom section	N63	M6	Replace O-ring	8.5 Nm

11- 42 Oil Filter and Pipes

	Type	Thread	Tightening specification	Measure
1AZ Oil filter cover to oil sump top section	N63			25 Nm
2AZ Oil drain plug to oil filter cover	N63	M12	Replace sealing ring	10 Nm
3AZ Turbocharger oil line to crankcase	N63	M12x1.5	Replace sealing ring	27 Nm
4AZ Oil line to turbocharger	N63	M10x1	Replace sealing ring	16 Nm
5AZ Oil line to turbocharger (return)	N63	M6x16	Replace seal	10 Nm
6AZ Oil line to crankcase (return)	N63	M6x16	Replace seal	10 Nm
7AZ Holder, oil line to coolant line	N63	M6	Screw, captive	10 Nm
8AZ Oil return cover to crankcase	N63	M6x20	Replace seal	10 Nm
9AZ Oil return line to turbocharger	N63	M6x16		10 Nm
10AZ Oil return line to oil return cover	N63	M6		10 Nm

11- 42 Oil Filter and Pipes

	Type	Thread	Tightening specification	Measure
1AZ Oil filter cover to oil sump top section	N63			25 Nm
2AZ Oil drain plug to oil filter cover	N63	M12	Replace sealing ring	10 Nm
3AZ Turbocharger oil line to crankcase	N63	M12x1.5	Replace sealing ring	27 Nm
4AZ Oil line to turbocharger	N63	M10x1	Replace sealing ring	16 Nm
5AZ Oil line to turbocharger (return)	N63	M6x16	Replace seal	10 Nm
6AZ Oil line to crankcase (return)	N63	M6x16	Replace seal	10 Nm
7AZ Holder, oil line to coolant line	N63	M6	Screw, captive	10 Nm
8AZ Oil return cover to crankcase	N63	M6x20	Replace seal	10 Nm
9AZ Oil return line to turbocharger	N63	M6x16		10 Nm
10AZ Oil return line to oil return cover	N63	M6		10 Nm

11- 42 Oil Filter and Pipes

	Type	Thread	Tightening specification	Measure
1AZ Oil filter cover to oil sump top section	N63			25 Nm
2AZ Oil drain plug to oil filter cover	N63	M12	Replace sealing ring	10 Nm
3AZ Turbocharger oil line to crankcase	N63	M12x1.5	Replace sealing ring	27 Nm
4AZ Oil line to turbocharger	N63	M10x1	Replace sealing ring	16 Nm
5AZ Oil line to turbocharger (return)	N63	M6x16	Replace seal	10 Nm
6AZ Oil line to crankcase (return)	N63	M6x16	Replace seal	10 Nm
7AZ Holder, oil line to coolant line	N63	M6	Screw, captive	10 Nm
8AZ Oil return cover to crankcase	N63	M6x20	Replace seal	10 Nm
9AZ Oil return line to turbocharger	N63	M6x16		10 Nm
10AZ Oil return line to oil return cover	N63	M6		10 Nm