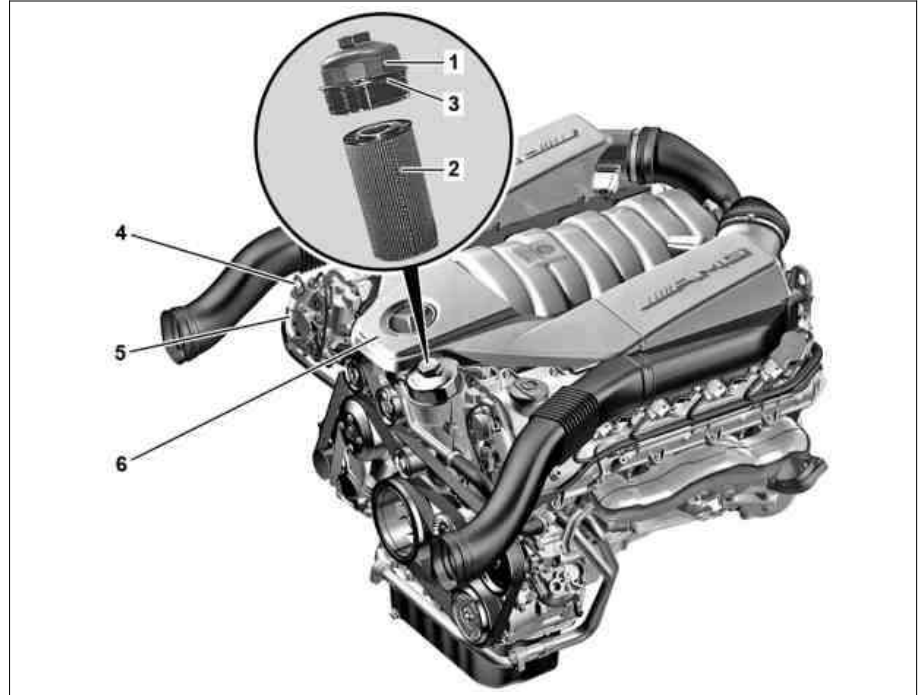


Engine 156 in model 164

### Modification notes

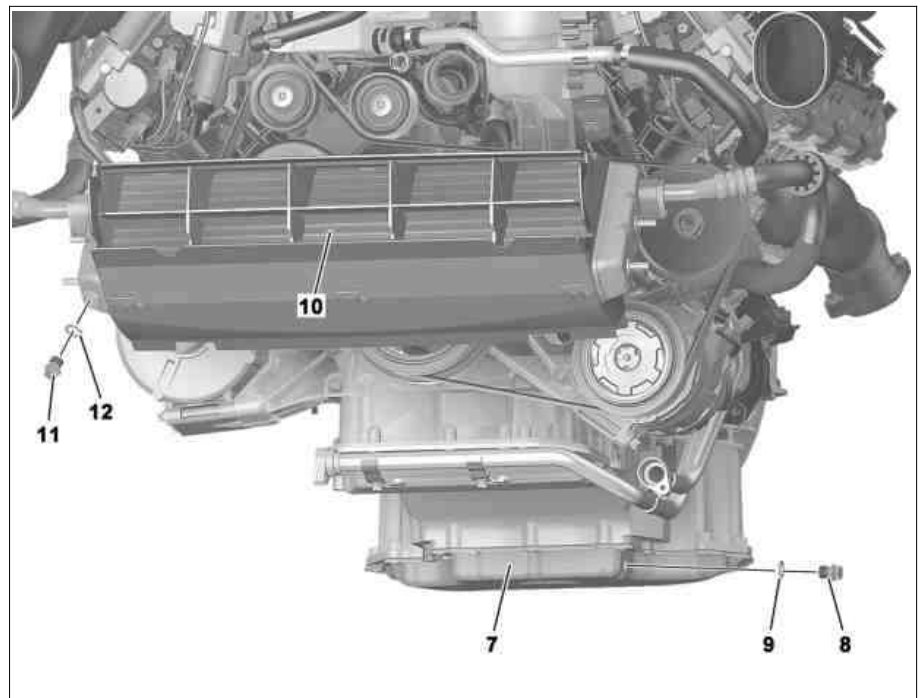
22.02.2016	Add engine oil.	Only approved engine oils as per SAE 0W-40 or 5W-40 may be used.	
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- 1 Oil filter screw-on cover
- 2 Oil filter element
- 3 Sealing ring
- 4 Oil dipstick
- 5 Oil measuring pipe
- 6 Front engine trim panel


























P18.00-2360-06

- 7 Oil pan
- 8 Drain screw
- 9 Sealing ring
- 10 Oil cooler
- 11 Drain screw
- 12 Sealing ring




P18.00-2381-06

 Caution	<b>Risk of injury</b> to skin and eyes due to handling of engine oil. <b>Risk of poisoning</b> caused by swallowing engine oil	Wear protective gloves, protective clothing and safety glasses. Do not fill engine oil into beverage containers.	<b>AS18.00-Z-0001-01A</b>
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 Warning	<b>Risk of accident</b> from vehicle starting off by itself when engine running. <b>Risk of injury</b> (bruises and burns) resulting from working on the engine while it is being started or when it is running.	Secure vehicle to prevent it from starting off by itself. Wear closed and snug-fitting work clothes. Do not touch hot or rotating parts.	AS00.00-Z-0005-01A
 Danger	<b>Risk of death</b> caused by vehicle slipping or toppling off of the lifting platform.	Align vehicle between vehicle lift columns and position the four support plates at the vehicle lift support points specified by the vehicle manufacturer.	AS00.00-Z-0010-01A
	Notes on engine oil and filter changes		AH18.00-P-0104-01A
	<b>Remove</b>		
1	Allow engine to warm up	 Coolant temperature at least 80 °C.	
2	Remove front engine cover (6)		
3	Remove oil filter threaded cap (1)	 Unscrew oil filter threaded cap (1), depending on version, using  socket, and lift only far enough out of oil filter housing so that the engine oil can drain out of the oil filter and the oil filter housing.  Socket wrench bit	*642589000900
4 	Detach lower engine compartment paneling		AR61.20-P-1105GZ
5	Unscrew drain screw (8) at oil pan (7) and drain engine oil		
6	Unscrew drain screw (11) at oil cooler (10) and drain engine oil		
	<b>Install</b>		
7	Replace sealing rings (9, 12) from drain screws (8, 11)		
8	Screw in drain screw (8) at oil pan (7)	 Oil drain screw to oil pan	*BA01.45-P-1001-01R
9	Screw in drain screw (11) at oil cooler (10)	 Drain plug to oil cooler	*BA18.30-P-1017-01B
10 	Install lower engine compartment paneling.		AR61.20-P-1105GZ
11	Remove oil filter threaded cap (1)		
12	Replace oil filter element (2)		
13	Replace sealing ring (3)		
14	Install oil filter threaded cap (1)	 Unscrew the oil filter threaded cap (1) (depending on the version) using  socket.  Threaded cap to oil filter housing  Socket wrench bit	*BA18.20-P-1001-01V *642589000900
15	Pour in engine oil	 Only use approved engine oils as per SAE 0W-40 or 5W-40. Engine damage can occur otherwise.  Engine oil	*BF18.00-P-1001-01V
	<b>Check</b>		
16	Run engine until it is at operating temperature, and check for leaktightness	 Coolant temperature at least 80 °C.  In the event of leakage: ↓ Determine and rectify cause, subject to separate repair order.	
17	Turn off engine		
18	Pull oil dipstick (4) out of oil measuring pipe (5) and wipe with a lint-free cloth		
19	Check engine oil level using oil dipstick (4); correct if necessary	 Insert oil dipstick (4) into the oil measuring pipe (5) until the end stop and hold in for a duration of at least 3 seconds.	AP18.00-P-1811MP
	<b>Install</b>		
20	Install front engine cover (6)		

 Oil pan


Number	Designation	Engine 156
BA01.45-P-1001-01R	Oil drain screw to oil pan	Nm 30

 Oil filter

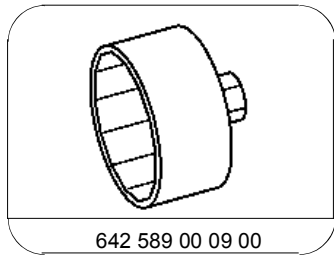
Number	Designation		Engine 156
BA18.20-P-1001-01V	Threaded cap to oil filter housing	Nm	25

 Oil cooling system

Number	Designation		Engine 156
BA18.30-P-1017-01B	Drain plug to oil cooler	Nm	15

 Engine lubrication system

Number	Designation		Engine 156 in model 164
BF18.00-P-1001-01V	Engine oil	Filling capacity (oil and filter change)	Liter 9,7
		Sheet	BB00.40-P-0229-05 A
		Sheet	-
		Sheet	-



Socket wrench bit