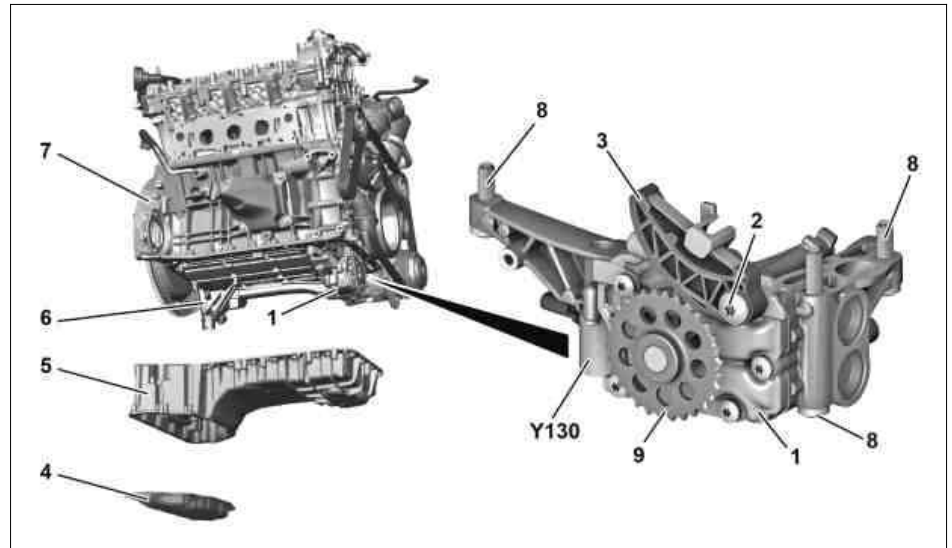


Engine 157, 276, 278 in model 212, 218

Modification notes


28.03.2014	Screw/bolt, oil suction pipe with oil deflector to crankcase	ENGINE 276	BA18.10-P-1005-01R
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
- 1 Oil pump
- 3 Chain tensioning rail
- 4 Oil pan bottom section
- 5 Oil pan
- 6 Oil baffle with intake manifold
- 7 Cylinder crankcase
- 8 Screw
- 9 Oil pump gear
- Y130 Engine oil pump valve




P18.10-2194-05

☒ ☒	Remove/install		
1	Remove oil pan bottom section (4) and oil pan (5) Notes on sealant path for oil pan	Engine 276.8 in model 212, 218 Engine 276 in model 212.095/195 Engine 276.9 in model 212 (except 212.095/195), 218 Engine 157, 278 in model 212, 218 i Installation: Observe notes on sealant path on the oil pan (5). Nm Screw/bolt, oil pan to crankcase/ timing case cover/rear end cover Nm Bolt, oil pan to crankcase Nm Bolt, oil pan bottom section to oil pan Sealant, Loctite 5970, 50 ml Loctite 7200 Loctite 7063 cleaning spray (150 ml)	AR01.45-P-7500ELS AH01.45-P-0001-01MMA AR01.45-P-7500EHV AR01.45-P-7500EL AR01.45-P-7500ELB *BA01.45-P-1001-01E *BA01.45-P-1002-01E *BA01.45-P-1003-01E *BR00.45-Z-1013-01A *BR00.45-Z-1038-04A *BR00.45-Z-1046-04A
2	Detach oil baffle with intake manifold (6) from oil pump (1) and cylinder crankcase (7)	Nm Bolt, oil suction pipe with oil deflector to crankcase	*BA18.10-P-1005-01R
3	Remove screw/bolts (8) and unfasten oil pump (1) from cylinder crankcase	Nm Bolt, oil pump to cylinder crankcase	*BA18.10-P-1001-01R
4	Disconnect electrical connection on engine oil pump valve (Y130)		
5	Push back chain tensioning rail (3), take oil pump chain of the oil pump gear (9) and remove oil pump (1)	i Installation: Fill oil pump (1) with engine oil before installation so that oil is delivered at the initial startup.	
☐	Check		
6	Check oil pump gear (9) for easy movement and damage	i Install new oil pump (1) if necessary.	
7	Check clamping device for the oil pump (1)	i If necessary replace clamping device for oil pump (1).	AR18.10-P-2000EL


8	Install in the reverse order			
 Warning	Risk of accident from vehicle starting off by itself when engine running. Risk of injury (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	
9	Carry out an engine test run, checking the engine for proper operation and leaktightness			

 Oil pan


Number	Designation			Engine 157	Engine 276
BA01.45-P-1001-01E	Screw/bolt, oil pan to crankcase/ timing case cover/rear end cover	M6	Nm	9	9

 Oil pan


Number	Designation			Engine 278
BA01.45-P-1001-01E	Screw/bolt, oil pan to crankcase/ timing case cover/rear end cover	M6	Nm	9

 Oil pan


Number	Designation			Engine 157	Engine 276
BA01.45-P-1002-01E	Bolt, oil pan to crankcase	M8	Nm	20	20

 Oil pan


Number	Designation			Engine 278
BA01.45-P-1002-01E	Bolt, oil pan to crankcase	M8	Nm	20

 Oil pan


Number	Designation			Engine 157	Engine 276
BA01.45-P-1003-01E	Bolt, oil pan bottom section to oil pan		Nm	14	14

 Oil pan

Number	Designation			Engine 278
BA01.45-P-1003-01E	Bolt, oil pan bottom section to oil pan		Nm	14

 Oil pump

Number	Designation			Engine 157	Engine 276
BA18.10-P-1001-01R	Bolt, oil pump to cylinder crankcase	Stage 1	Nm	5	5
		Stage 2	Nm	20	20

 Oil pump

Number	Designation			Engine 278
BA18.10-P-1001-01R	Bolt, oil pump to cylinder crankcase	Stage 1	Nm	5
		Stage 2	Nm	20

Nm Oil pump

Number	Designation		Engine 157	Engine 276
BA18.10-P-1005-01R	Bolt, oil suction pipe with oil deflector to crankcase	Nm	9	14

Nm Oil pump

Number	Designation		Engine 278
BA18.10-P-1005-01R	Bolt, oil suction pipe with oil deflector to crankcase	Nm	9

Repair materials

Number	Designation	Order number
BR00.45-Z-1013-01A	Sealant, Loctite 5970, 50 ml	A 003 989 98 20 10
BR00.45-Z-1038-04A	Loctite 7200	Henkel AG & Co. KGaA http://www.loctite.de
BR00.45-Z-1046-04A	Loctite 7063 cleaning spray (150 ml)	A 001 986 71 71 10