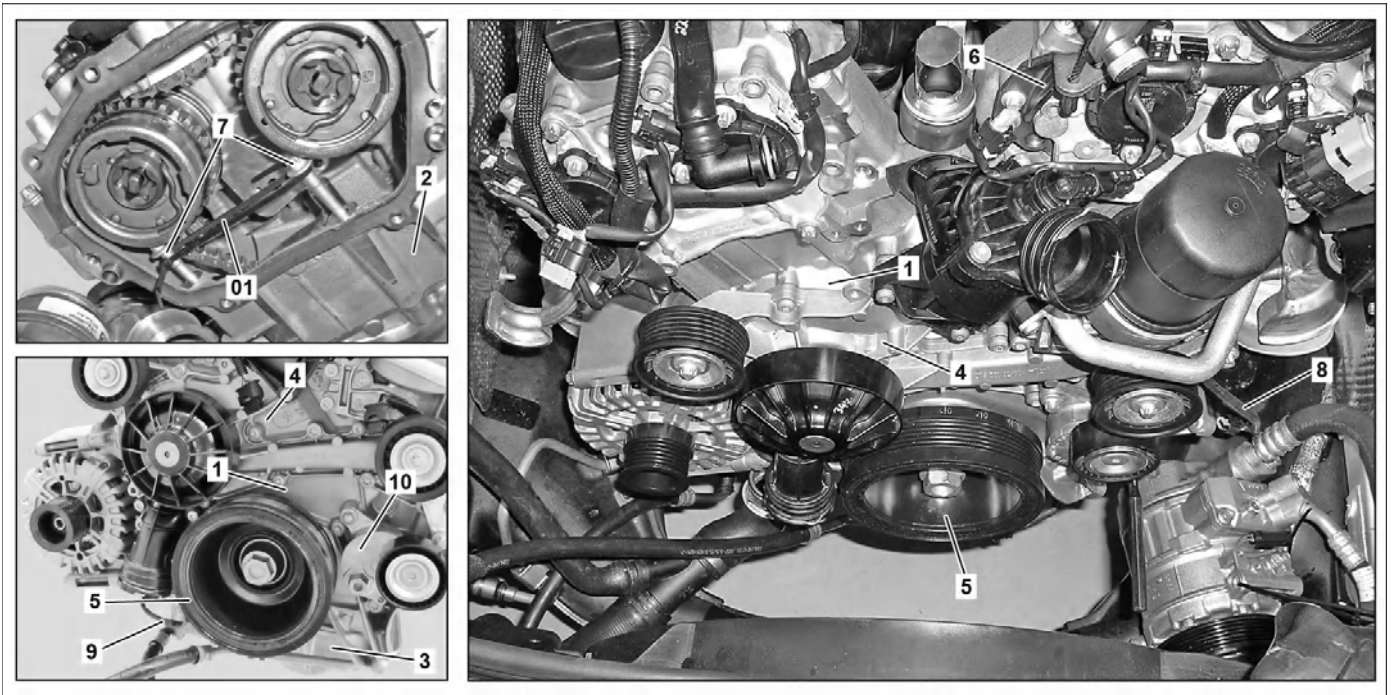


## Engine 276.9 in model 212, 218







P01.40-2276-09

## Shown on ENGINE 276.9 in MODEL 218

01	Cable tie	4	Coolant pump	8	Electrical line
1	Timing case cover	5	Belt pulley/vibration damper	9	Electrical line
2	Cylinder head	6	Engine suspension lug	10	Tensioning device
3	Oil pan	7	Bolts		

	Remove/install		
	<b>Risk of death</b> when working on component parts and systems with $U \geq 30$ V alternating voltage (AC) or $U \geq 60$ V direct voltage (DC)	Do not touch damaged or defective live component parts and lines or non-insulated electrical connections and lines.	AS00.00-Z-0035-01A
	General information on vehicles with high-voltage on-board electrical system and/or lithium-ion battery and/or gaseous-fuel drive system as well as personal protective equipment		AH00.00-Z-0300-01A
1	Remove both front covers	Engine 276.9 on right cylinder head Engine 276.9 on left cylinder head	AR01.30-P-5700ELR AR01.30-P-5700ELL
2	Remove belt pulley / vibration damper (5)		AR03.30-P-1600EL
3	Mount engine lifting lug (6)	Bolt, lifting eye to front cylinder head	*BA01.30-P-1005-01W
4	Remove electrical vacuum pump	Engine 276.9 in model 212.095/195	AR43.05-P-0001EHV
5	Remove oil pan (3)	Engine 276.9 in model 212.095/195 Engine 276.9 in model 212 (except 212.095/195), 218	AR01.45-P-7500EHV AR01.45-P-7500EL
6	Detach power electronics control unit with power distributor from timing case cover	Engine 276.9 in model 212.095/195  Do not remove the high-voltage lines to the high-voltage battery and to the electrical machine. Place power electronics control unit to one side and secure against falling down.	AR08.10-P-0011EHV
7	Disconnect electrical connection for engine oil pump valve on oil pump		
8	Remove coolant pump(4)		AR20.10-P-1271EL
9	Remove screw/bolts (7) for the cylinder head (2) at timing case cover (1)	Remove screw/bolts (7) and fix with a cable tie (01). Bolt, cylinder head to timing case cover	*BA01.30-P-1002-01W

10	Remove tensioning device (10) on poly-V belt		AR13.20-P-0001EL
11	Remove alternator	Engine 276.9 in model 212 (except 212.095/195), 218	AR15.40-P-5032EL
12	Disconnect electrical connection for engine oil pump valve on timing case cover (1)		
13	Unclip electrical line (9) for engine oil pump valve on timing case cover (1) and place to the side		
14.1	Remove electrical line (8) at coolant compressor on timing case cover (1)	Engine 276.9 in model 212 (except 212.095/195), 218 except code ME04 (Mild hybrid drive)	
14.2	Remove refrigerant compressor from engine	Engine 276.9 in model 212.095/195  <b>i</b> Do not separate refrigerant lines. <b>i</b> Place A/C compressor to one side and secure against falling down.	AR83.55-P-5300EHV
15	Remove timing case cover (1) screw/bolts	<b>i</b> <b>Installation:</b> Pay attention to different screw/bolt lengths and screw/bolt diameters.	AR01.40-P-8000-01MMA
16	Remove timing case cover (1) Notes on sealant path for timing case cover	Engine 276.9 in model 212, 218  <b>i</b> <b>Installation:</b> Replace both seals in timing case cover (1) and apply sealant on sealing surface of the timing case cover (1):. <b>i</b> <b>Installation:</b> Replace front crankshaft radial shaft sealing ring.	AR03.20-P-3000EL AH01.40-P-1000-01MMA
	<b>Clean</b>		
17	Clean sealing surfaces	 One must not use sharp-edged tooling or abrasive paper. The sealing surfaces can get damaged otherwise. Loctite 7200 Loctite 7063 (400 ml) cleaning spray	AR01.00-P-0050-01A  *BR00.45-Z-1038-04A *BR00.45-Z-1046-04A
18	Install in the reverse order		
19	Check engine oil level and correct if necessary		AP18.00-P-0101CWZ
			AR20.00-P-1010EL
20	Check cooling system for leaktightness		AS00.00-Z-0005-01A
 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.	
21	Carry out an engine test run and check engine for leaktightness		

 Cylinder head

Number	Designation	Engine 276
BA01.30-P-1002-01W	Bolt, cylinder head to timing case cover M7 Nm	14

 Cylinder head

Number	Designation	Engine 276
BA01.30-P-1005-01W	Bolt, lifting eye to front cylinder head Nm	18

Repair materials

Number	Designation	Order number
BR00.45-Z-1038-04A	Loctite 7200	Henkel AG & Co. KGaA <a href="http://www.loctite.de">http://www.loctite.de</a>
BR00.45-Z-1046-04A	Loctite 7063 (400 ml) cleaning spray	A 001 986 71 71 09