

Document title Remove/install left cylinder head cover

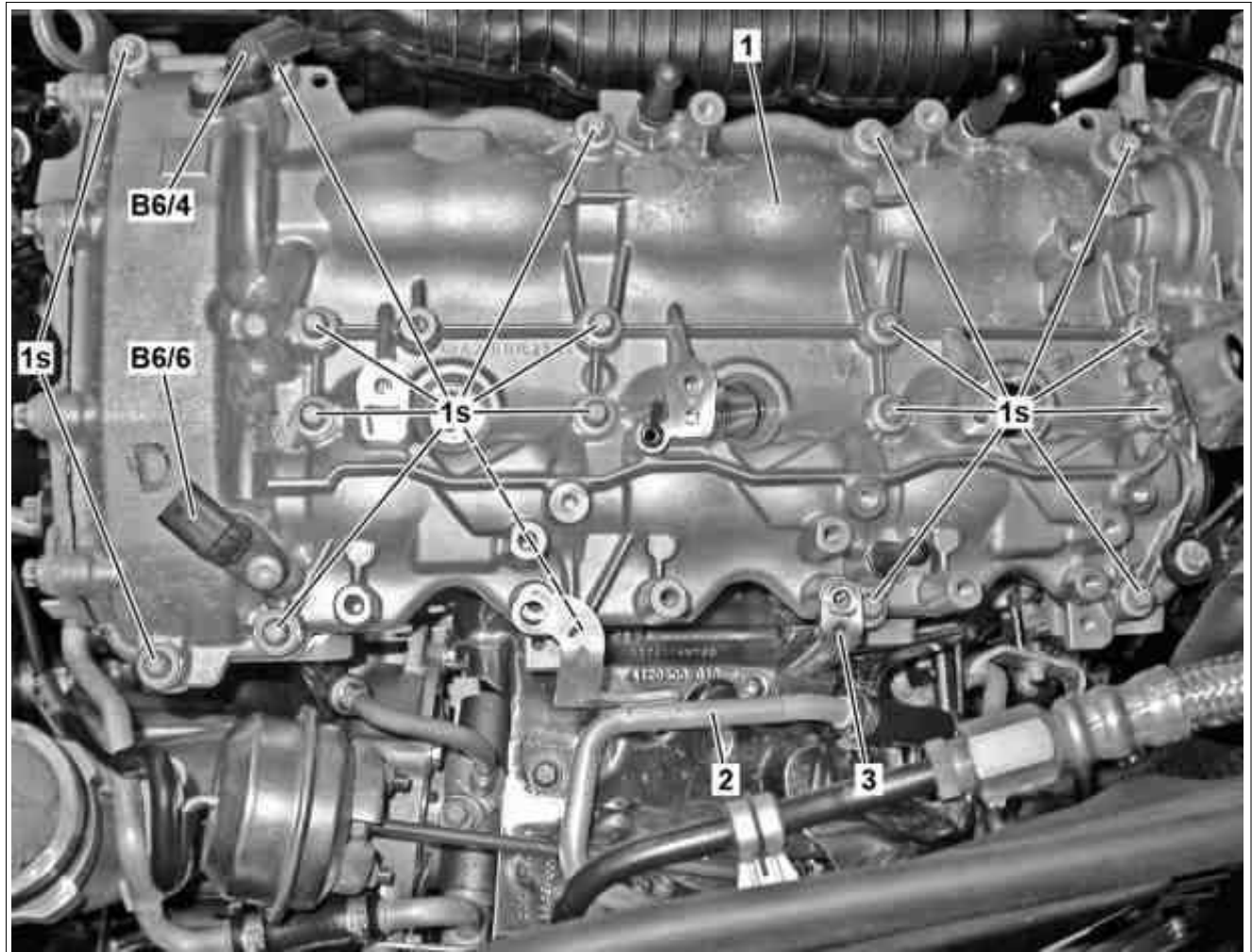
Document number ar0120p5013els

Engine 276.8 in model 207, 212, 218

Modification notes
















05.08.2019	Note document AH00.00-P-0500-01MNE added.	Operation step 20.	
05.08.2019	Note document AH05.20-P-1000-09SZ added.	Operation step 22.	

- 1 Left cylinder head cover
 1s Bolts
 2 Coolant feed line
 3 Heat shield
 B6/4 Left intake camshaft Hall sensor
 B6/6 Left exhaust camshaft Hall sensor



P01.20-2339-06

Warning	Risk of injury caused by fingers being jammed or pinched when removing, installing or aligning hoods, doors, trunk lid/rear-end door or sliding roof.	No parts of the body or limbs should be within the operating area when the components are moving.	AS00.00-Z-0011-01A
	Notes on threaded connections with aluminum screws/bolts		AH00.00-P-0006-01RM
	General information on work on gasoline direct injection system		AH07.00-P-2000-01A
	Remove/install		
1	Open engine hood and position upright.	Engine 276.8 in model 207, 212, 218 Model 207, 212 with engine 276.8	AR88.40-P-1000EW
2	Disconnect ground line from battery. Notes on battery		AR54.10-P-0003EW AH54.10-P-0001-01A
3	Remove upper engine cover.		
4	Remove ME-SFI [ME] control unit.		AR07.08-P-7008ELS
5	Remove air filter housing.		AR09.10-P-1150ELS
6	Remove noise damper of left and right fuel injectors.		
7	Drain off coolant. Notes on coolant	Model 212, 218 with engine 276.8 Model 207 with engine 276.8	AR20.00-P-1142EL AH20.00-N-2080-01A AR20.00-P-1142A
8	Remove coolant hose of heating at bulkhead and cylinder head.		
9	Remove center section of bulkhead.	Engine 276.8 in model 207, 212, 218 Engine 276.8 in model 212	AR61.25-P-6600EW
10	Remove guide tube at cylinder head cover.	Installation: Replace screw/bolt. Screw/bolt, guide tube to cylinder head/cylinder head cover/front cover	*BA01.45-P-1005-01E
11	Remove engine-side engine wiring harness and set aside.		AR01.00-P-2410-02ELS
12	Remove the vacuum pump.	Model 207 with engine 276.8 Model 212, 218 with engine 276.8	AR43.05-P-1320FH AR43.05-P-1320EL

13	Remove ignition coils.	Engine 276.8 in model 212, 218 Model 207 with engine 276.8	AR15.12-P-2003EL AR15.12-P-2003FH
14	Remove front cover at left cylinder head.		AR01.30-P-5711ELS
15	Remove heat shield (3) from left cylinder head cover (1) and exhaust gas turbocharger.	 Bolt/nut for shield attachment	*BA09.40-P-1011-01W
16	Remove coolant feed line (2) from exhaust gas turbocharger and left cylinder head cover (1).	Engine 276.8 in model 207, 212, 218 except code 920 (Direct petrol injection with stratified charging)  Installation: Replace seal.  Bolt, coolant feed/return line to turbocharger  Bolt for coolant line attachment	*BA09.40-P-1008-01W *BA09.40-P-1010-01W
17	Remove left intake camshaft Hall sensor (B6/4).	 Bolt, camshaft Hall sensor to cylinder head cover	*BA15.10-P-1006-03E
18	Remove left rail.	Model 207 with engine 276.8 Model 212, 218 with engine 276.8	AR07.03-P-1010FH AR07.03-P-1010EL
19	Release bolts (1s) of left cylinder head cover (1) in reverse order to tightening procedure and remove.	Bolt tightening procedure for cylinder head cover  Installation: Replace screw/bolts (1s) with new ones.  Screw/bolt, cylinder head cover to cylinder head	AR01.20-P-5014-03MMA *BA01.20-P-1004-01L
20	Carefully pry off left cylinder head cover (1) from cylinder head. Notes on application of flange sealants to seal major assemblies Notes on sealant path for cylinder head cover	 Do not hammer in a tool to pry off between the left cylinder head cover (1) and cylinder head. The sealing surfaces can be damaged otherwise.  Installation: Apply sealant as per the notes on sealant path to the left cylinder head cover (1). Sealant, Loctite 5970, 50 ml  Application gun	AH00.00-P-0500-01MNE AH01.30-P-1000-08MM *BR00.45-Z-1013-01A *112589002500
21	Transfer left exhaust camshaft Hall sensor (B6/6) and all brackets at left cylinder head cover (1).	Only when replacing the left cylinder head cover (1)  Bolt, camshaft Hall sensor to cylinder head cover	*BA15.10-P-1006-03E
	Check		
22	Check camshaft mounts in left cylinder head cover (1) and camshafts for galling and score marks. General information on checking camshafts and bearing points of camshafts	If camshaft mounts or camshafts are damaged ↓ Replace left cylinder head cover (1) or camshafts. Engine 276.8 in model 207 Engine 276.8 in model 212, 218	AH05.20-P-1000-09SZ AR05.20-P-6992FH AR05.20-P-6992EL
	Clean		
23	Clean sealing surfaces at cylinder head and left cylinder head cover (1).	 Do not use any sharp-edged tools or abrasive paper. The sealing surfaces can be 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
24	Install in the reverse order.		
25	Check engine cooling system for leak tightness.	Model 207 with engine 276.8 Model 212, 218 with engine 276.8	AR20.00-P-1010ELA AR20.00-P-1010EL
26	Check engine oil level and correct if necessary.		AP18.00-P-0101CWZ
 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
27	Perform engine test run and check engine in terms of leak tightness while engine is running.		

Nm Crankcase ventilation, cylinder head cover

Number	Designation			Engine 276
BA01.20-P-1004-01L	Screw/bolt, cylinder head cover to cylinder head	Stage 1	Nm	12
		Stage 2	4°	90

Nm Oil pan

Number	Designation			Engine 276
BA01.45-P-1005-01E	Screw/bolt, guide tube to cylinder head/cylinder head cover/front cover		Nm	5

Nm Turbocharger

Number	Designation			Engine 276.8
BA09.40-P-1008-01W	Bolt, coolant feed/return line to turbocharger		Nm	9

Nm Turbocharger

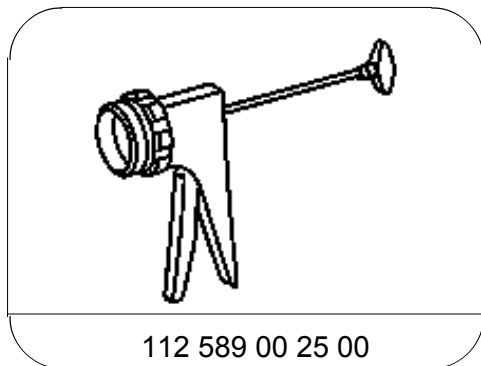
Number	Designation			Engine 276.8
BA09.40-P-1010-01W	Bolt for coolant line attachment	M6	Nm	9

Nm Turbocharger

Number	Designation			Engine 276.8
BA09.40-P-1011-01W	Bolt/nut for shield attachment	M6	Nm	9

Nm Position sensor

Number	Designation			Engine 276
BA15.10-P-1006-03E	Bolt, camshaft Hall sensor to cylinder head cover		Nm	9



112 589 00 25 00

Application gun

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 (400 ml) cleaning spray	A 001 986 71 71 09