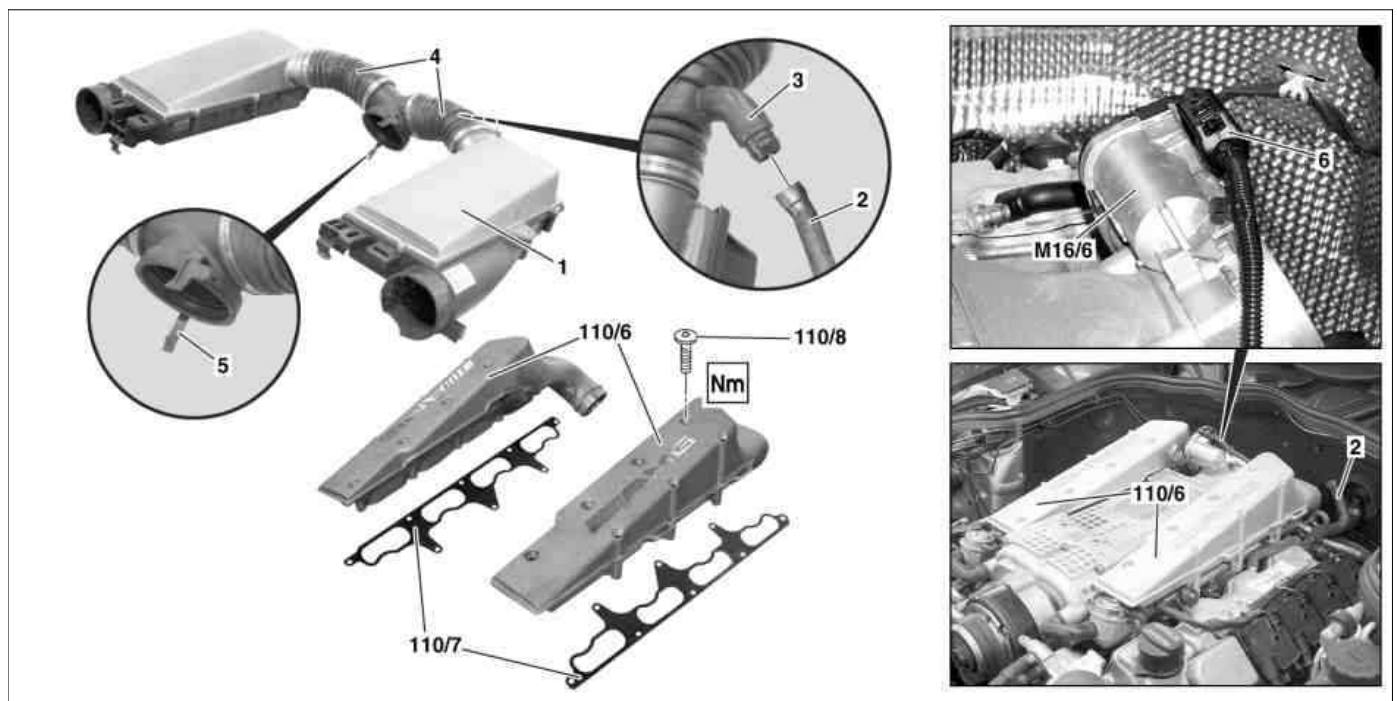


Engine 112.960 in model 170.466
 Engine 112.961 in model 203.065/265
 Engine 113.990 in model 211.076/276
 Engine 113.991 in model 215.374, 220.074/174
 Engine 113.992 in model 230.474
 Engine 113.995 in model 230.472

Modification notes

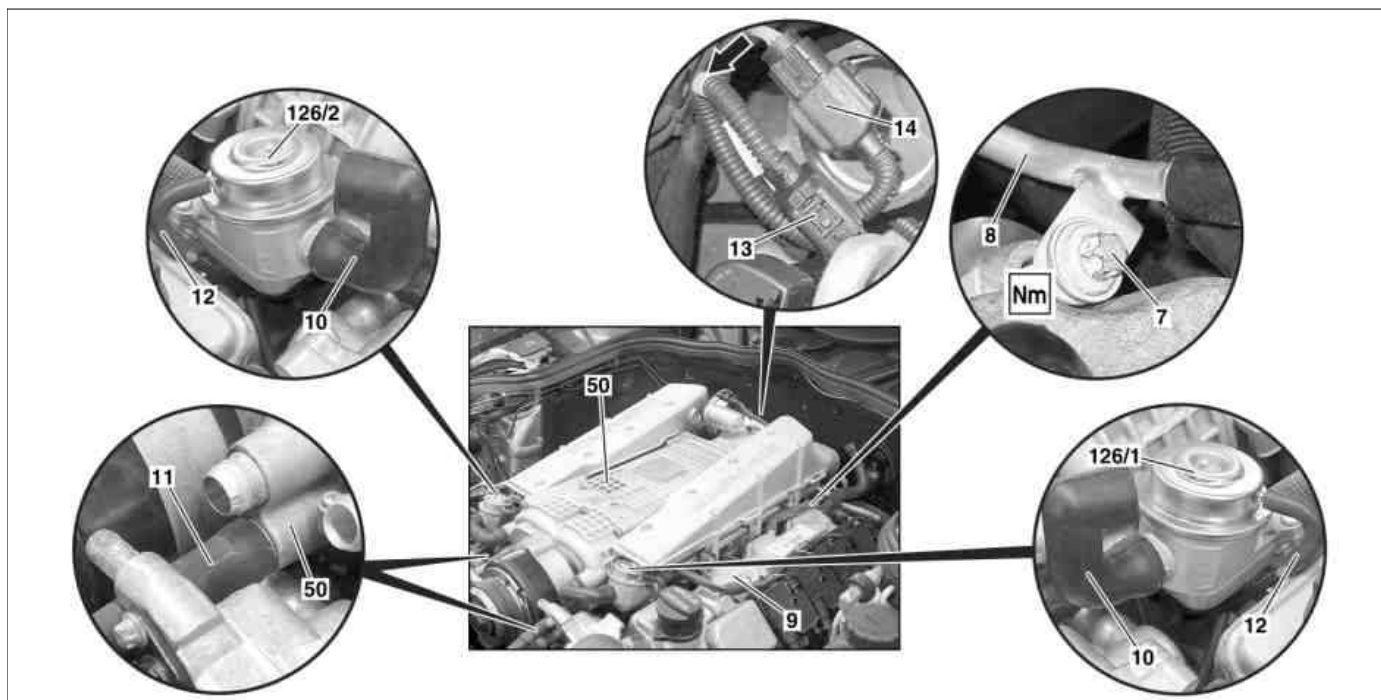
16.05.2006	Disconnect/connect battery ground line removed		
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P09.50-2085-09

Shown on engine 113.990

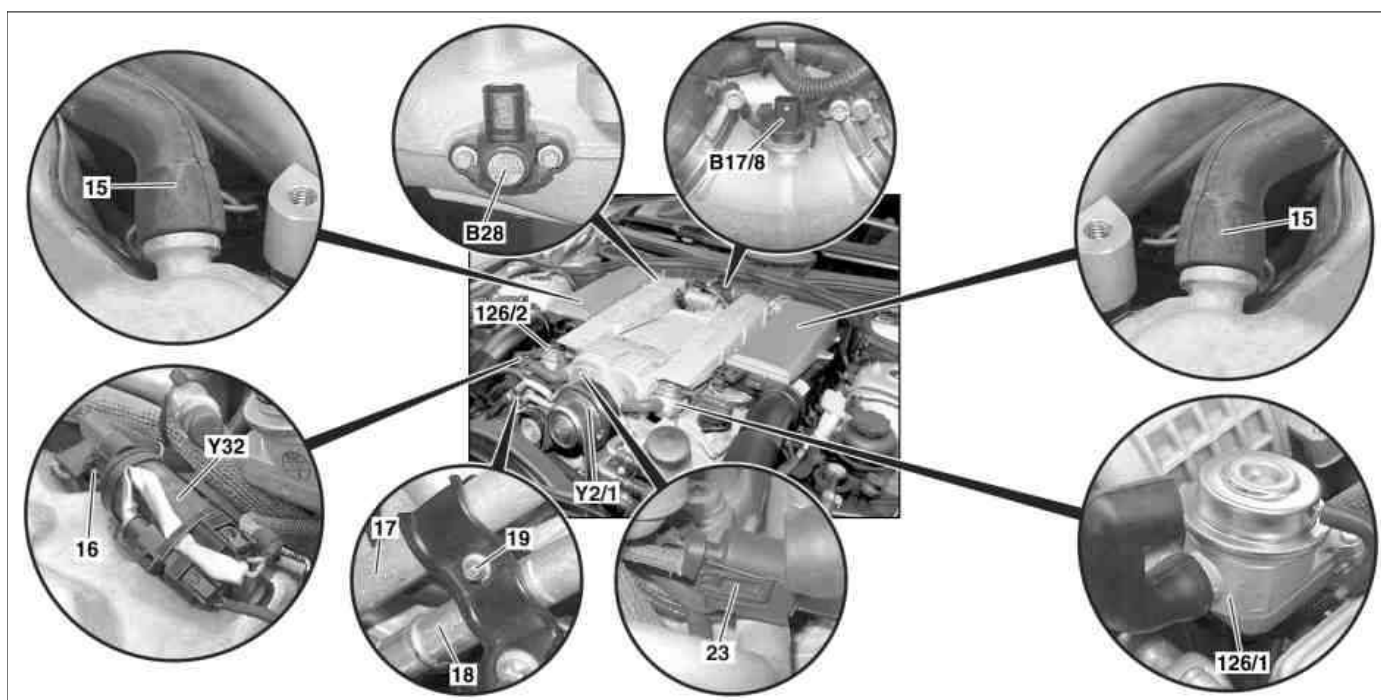
1	Air cleaner housing	5	Catches	110/7	Seal
2	Crankcase ventilation hose	6	Connector	110/8	Screw
3	Fitting	110/6	Top charge-air distributor	M16/6	Throttle valve actuator
4	Intake lines				



P09.50-2086-09

Shown on engine 113.990

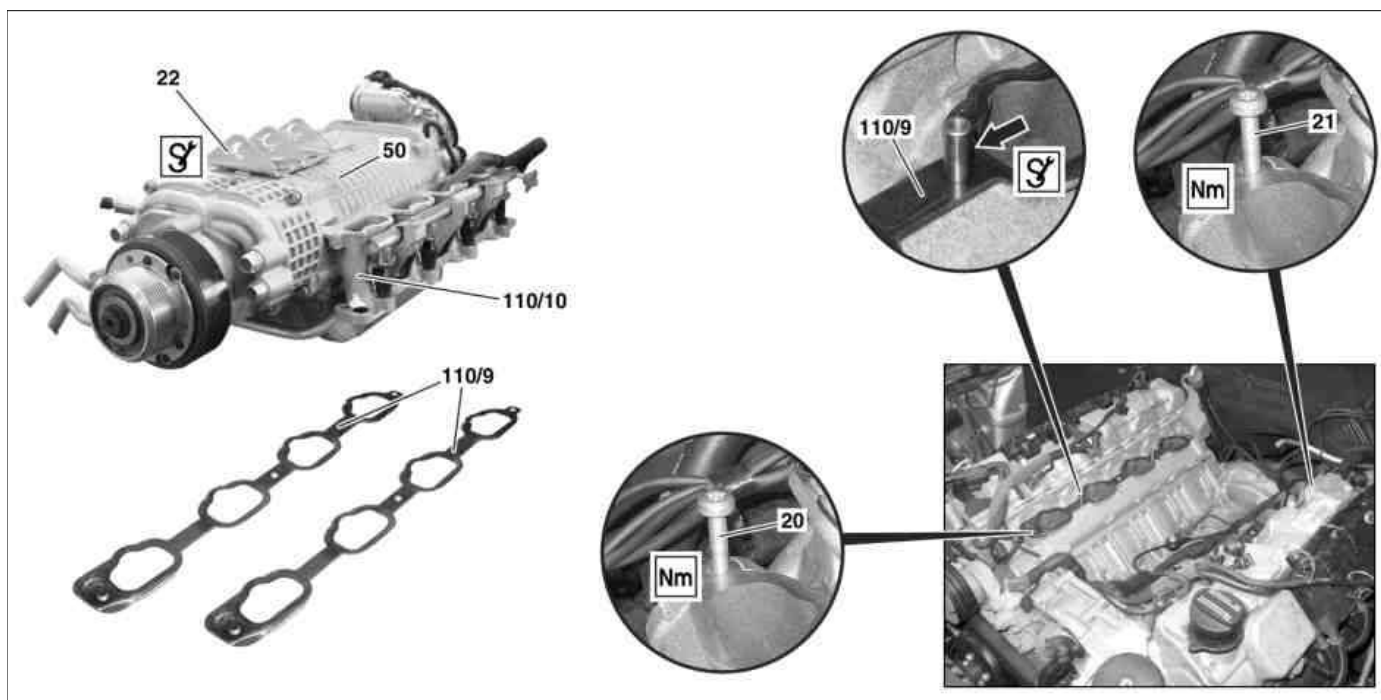
7	Screw	11	Hose	50	Compressor
8	Purge line	12	Vacuum line	126/1	Left air shutoff valve
9	Cylinder head cover	13	Electrical connector	126/2	Right air shutoff valve
10	Hose	14	Electrical connector		



P09.50-2102-09

Shown on engine 113.990

15	Crankcase ventilation hose	19	Screw	B17/8	Charge air temperature sensor
16	Vacuum line	23	Electrical connector	B28	Pressure sensor (charge air)
17	Coolant return line	126/1	Left air shutoff valve	Y2/1	Supercharger magnetic clutch
18	Coolant feed line	126/2	Right air shutoff valve	Y32	Air pump switchover valve



P09.50-2088-09

Shown on engine 113.990

20	Screw	22	Bracket	110/9	Seal
21	Screw	50	Compressor	110/10	Bottom charge-air distributor

	Remove/install		
Danger	Risk of death 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
Danger	Risk of explosion caused by fuel igniting, risk of poisoning caused by inhaling and swallowing fuel as well as risk of injury to eyes and skin caused by contact with fuel.	No fires, sparks, open flames or smoking. Pour fuels into suitable and appropriately marked containers only. Wear protective clothing when handling fuel.	AS47.00-Z-0001-01A
1	Activate Service mode in Tele-Aid emergency call system Information on Tele Aid emergency call system	Typ 215, 220 mit Code 347 (Notrufsystem TELE AID (D2B)) mit Code 855 (TELE AID)	AR82.95-P-0005-03AM AH82.95-P-0001-01GA
2	Detach ground line(s) from battery/batteries	Model 170 MODEL 215, 220 Do not connect no-load current retention unit.	AR54.10-P-0003A AR54.10-P-0003I
3	Remove air filter housing (1).	Installation: Do not break off catches (5) when positioning on the throttle valve actuator (M16/6). The catches (5) may be suctioned by the compressor (50) and cause engine damage.	AR09.10-P-1150SVK
4	Remove top charge-air distributor (110/6)		AR09.41-P-1320SVK
5	Remove the throttle valve actuator (M16/6)	The plug (6) on the throttle valve actuator (M16/6) must not be removed because it is bonded. Disconnect the electrical connector(13) to remove it.	AR07.61-P-1401SVK
6	Remove fuel distributor	Installation: Install new O-rings of the injection valves.	AR07.03-P-1451AA
7	Remove screw (7) of the purge line (8) from the cylinder head cover (9)	Detach purge line (8) on the engine side and place to one side. Engine 112, 113Screw/bolt, cylinder head cover	*BA01.20-P-1001-01E

8	Detach hoses (10) for the air injection from the compressor (50)	i The hoses (10) remain on the left air shutoff valve (126/1) and right air shutoff valve (126/2).	
9	Detach hoses (11) for the air injection from the compressor (50)		
10	Detach vacuum lines (12) from the left air shutoff valve (126/1) and right air shutoff valve (126/2)		
11	Detach crankcase ventilation hoses (15) from the left cylinder head cover (9) and from the right cylinder head cover		
12	Detach vacuum line (16) from the air pump switchover valve (Y32)		
13	Disconnect electrical connector from charge air temperature sensor (B17/8)		
14	Disconnect electrical connector from the pressure sensor (B28)		
15	Disconnect electrical connector (14) from the air recirculation flap actuator	i The electrical connector (14) of the air recirculation flap actuator and the electrical connector (13) of the throttle valve actuator (M16/6) are identical and can be swapped. The wiring harness of the throttle valve actuator (M16/6) is marked with blue insulation tape. If this is not the case, mark before disconnecting the electrical connectors (13, 14). i Installation: Coat pins of the electrical connectors (13, 14) with contact fluid. Contact fluid	*BR00.45-Z-1001-14A
16	Disconnect electrical connector (23) from the mechanical supercharger magnetic clutch (Y2/1)	! Carefully disconnect electrical connector, So that the plug housing of the mechanical supercharger magnetic clutch (Y2/1) is not damaged.	
17	Remove poly-V belt for supercharger	Engine 113.990/991/992/995	AR13.21-P-1202RVK
18	Remove poly-V belt	Engine 112.960/961	AR13.22-P-1202SVK
19	Remove lower engine compartment paneling	Model 170 MODEL 203 Model 211 MODEL 215, 220 Model 230	AR61.20-P-1105A AR61.20-P-1105P AR61.20-P-1105T AR61.20-P-1105M AR61.20-P-1105R
20	Drain coolant at radiator	Model 170 MODEL 203 Model 211, 215, 220, 230	AR20.00-P-1142SV AR20.00-P-1142PV AR20.00-P-1142RVK
21	Disconnect coolant hoses of the coolant return line (17) and coolant feed line (18)	i Seal coolant hoses of the coolant-return line (17) and coolant-feed line (18). S Clamp	*000589403700
22	Remove screw (19) from the bracket of the coolant-return line (17) and coolant-feed line (18)		
23.1	Remove right air shutoff valve (126/2)	Engine 112 Nm Bolt, bottom part of charge air distributor to cylinder head	*BA09.41-P-1002-01C
23.2	Remove left air shutoff valve (126/1) and right air shutoff valve (126/2)	ENGINE 113 Nm Bolt, bottom part of charge air distributor to cylinder head	*BA09.41-P-1002-01C
24	Remove screws (20) and screw (21)	i Installation: Pay attention to different lengths of screws. The screw (21) has a length of 35 mm. The screws (20) have a length of 30 mm. Nm Bolt, bottom part of charge air distributor to cylinder head	*BA09.41-P-1002-01C
25	Screw bracket (22) onto the compressor (50)	S Bracket	*112589006200
26	Hook engine hoist into the lifting eye of the bracket (22)	S Bracket	*112589006200
27	Pry out compressor (50) with charge air cooler and bottom charge air distributor (110/10)	i Check seals (110/9); replace if necessary. i Installation: For precise positioning of the compressor (50) with charge air cooler and bottom charge-air distributor (110/10) and for centering the seals (110/9), use centering pin (arrow). S Set of dowel bolts	*112589026200

28	Remove compressor (50) from charge air cooler	 Bolt, supercharger to charge air cooler	*BA09.50-P-1001-01B
29	Install in the reverse order		
30	Check cooling system for leaktightness		AR20.00-P-1010RVK
31	Read out fault memory and clear if necessary		AD00.00-P-2000-04A
32	Perform basic programming	Model 170 MODEL 215, 220	AR00.19-P-0200B AR00.19-P-0200M

 Crankcase ventilation, cylinder head cover

Number	Designation			Engine 112	Engine 113
BA01.20-P-1001-01E	Screw/bolt, cylinder head cover	Stage 1	Nm	9	9
		Stage 2	Δ°	–	–

 Charge air pipe/charge air cooling

Number	Designation		ENGINE 112.960/961 AMG	Engine 113.990/991
BA09.41-P-1002-01C	Bolt, bottom part of charge air distributor to cylinder head	Nm	23	20

 Charge air pipe/charge air cooling

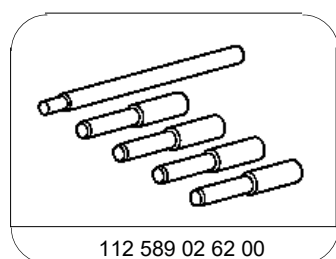
Number	Designation		Engine 113.992/993/995
BA09.41-P-1002-01C	Bolt, bottom part of charge air distributor to cylinder head	Nm	20

 Compressor

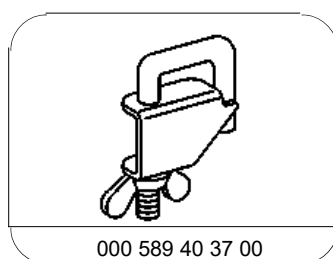
Number	Designation		ENGINE 112.960/961 AMG	Engine 113.990
BA09.50-P-1001-01B	Bolt, supercharger to charge air cooler	Nm	20	20

 Compressor

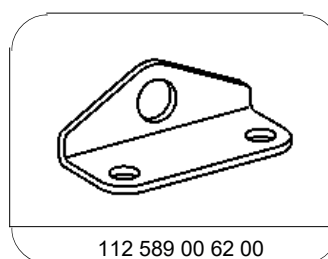
Number	Designation		Engine 113.991	Engine 113.992/995
BA09.50-P-1001-01B	Bolt, supercharger to charge air cooler	Nm	20	20



Set of dowel bolts



Clamp



Bracket

Repair materials

Number	Designation	Order number
BR00.45-Z-1001-14A	Contact fluid	A 008 989 55 71