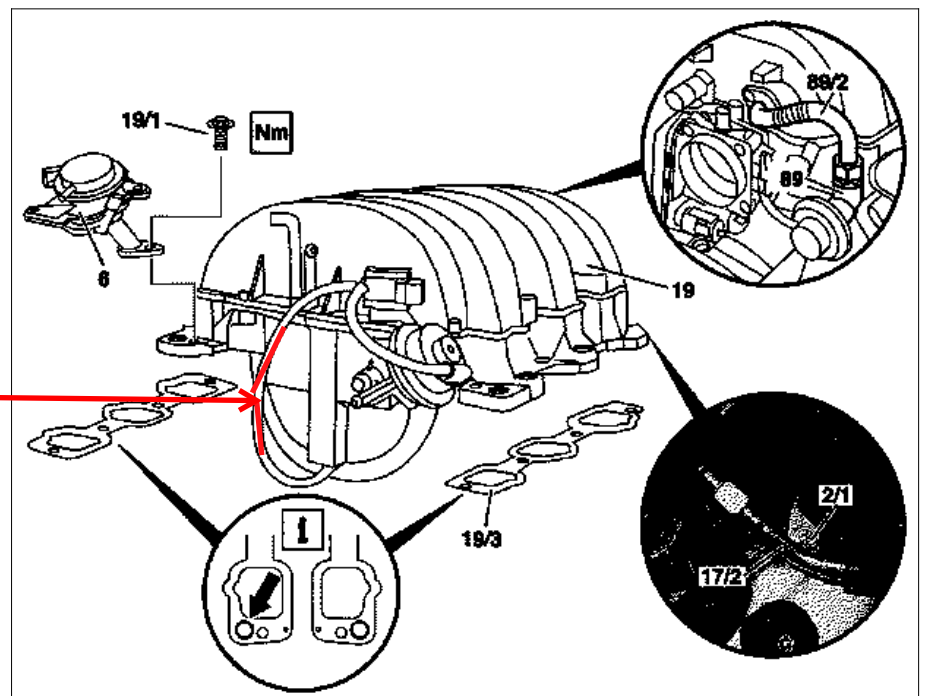


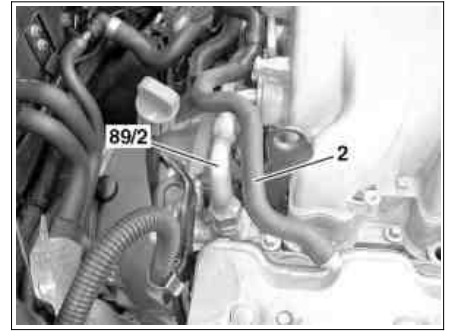
ENGINES 112.910 in MODEL 202.026 /086
 ENGINES 112.920 in MODEL 202.029 /089
 ENGINES 112.921 in MODEL 210.063 /081 /263 /281
 ENGINES 112.922 in MODEL 220.063 /163
 ENGINES 112.923 in MODEL 129.059
 ENGINES 112.940 in MODEL 208.365 /465
 ENGINES 112.941 in MODEL 210.065 /082 /265 /282
 ENGINES 112.942 in MODEL 163.154
 ENGINES 112.943 in MODEL 129.064
 ENGINES 112.944 in MODEL 220.065 /165
 ENGINES 113.940 in MODEL 210.070 /270
 ENGINES 113.941 in MODEL 220.070 /170
 ENGINES 113.960 in MODEL 215.375, 220.075 /175
 ENGINES 113.961 in MODEL 129.068
 ENGINES 113.944 in MODEL 202.033 /093
 ENGINES 113.942 in MODEL 163.172
 ENGINES 113.980 in MODEL 210.074 /274
 ENGINES 113.943 in MODEL 208.370 /470
 ENGINES 113.984 in MODEL 208.374
 ENGINES 113.981 in MODEL 163.174
 ENGINES 112.912 in MODEL 203.061 /261, 209.361 /461
 ENGINES 112.946 in MODEL 203.064 /264
 ENGINES 112.947 in MODEL 170.465
 ENGINES 113.963 in MODEL 230.475
 ENGINES 113.968 in MODEL 209.375 /475
 ENGINES 112.913 in MODEL 211.061 /261
 ENGINES 112.949 in MODEL 211.065 /265
 ENGINES 113.967 in MODEL 211.070 /270
 ENGINES 113.987 in MODEL 209.376 /476
 ENGINES 112.955 in MODEL 209.365 /465
 ENGINES 112.916 in MODEL 203.081 /281
 ENGINES 112.953 in MODEL 203.084 /284
 ENGINES 112.970 in MODEL 163.157
 ENGINES 112.972 in MODEL 220.067 /167
 ENGINES 112.973 in MODEL 230.467
 ENGINES 113.965 in MODEL 163.175
 ENGINES 112.975 in MODEL 220.087 /187
 ENGINES 113.948 in MODEL 220.083 /183
 ENGINES 113.966 in MODEL 220.084 /184
 ENGINES 112.917 in MODELS 211.080 /280
 ENGINES 112.954 in MODEL 211.082 /282
 ENGINES 113.969 in MODEL 211.083 /283
 ENGINES 113.988 in MODEL 203.076 /276
 ENGINES 113.989 in MODEL 171.473

Shown on engine 112

- 2/1 Cylinder head cover bolt
- 6 Combination valve
- 17/2 Feed line
- 19 Intake manifold
- 19/1 Bolt
- 19/3 Gasket
- 89 Exhaust gas recirculation valve
- 89/2 Cable
- Arrow Hole for combination valve



2 Crankcase ventilation hose
89/2 Cable



P09.20-2137-01

☒ ☒	Remove/install		
	Risk of explosion caused by fuel igniting, risk of poisoning caused by inhaling and swallowing fuel and risk of injury to eyes and skin caused by contact with fuel	No fire, sparks, open flames or smoking. Only pour fuels into suitable and appropriately marked containers. Wear protective clothing when handling fuel.	AS47.00-Z-0001-01A
1	Remove key from electronic ignition switch	Only on vehicles with electronic ignition switch i Vehicles with Keyless Go code 889: Switch off engine, remove Keyless Go-Cards out of vehicle and store outside of the sender range.	
2	Remove cover on front side of engine	Model 129, 211, 215, 220, 230 only	
3.1	Remove engine cover with integrated air filter	Except model 171.473, 203.076 /276, 209.376 /476 from 24.4.04 i The air filter is integrated in the engine cover. Remove engine cover or air filter by pulling it vertically up and off the cylinder head covers.	
3.2	Remove air filter housing	Model 171.473 Model 203.076 /276 Model 209.376/ 476 as of 24.4.04	AR09.10-P-1150AC
4	Remove hot film mass air flow sensor with air intake pipe	Engine 112.910 /920 /921 /940 /941 /942 /970 /943 /970 Engine 113.940 Engine 112.922 /944 /972 /973 /975 Engine 113.941 /948 /960 /961 /963 /966 Engine 112.912 /913 /916 /917 /946 /947 /949 /954 /953 /955 Engine 113.968 /967 /969 /987 /988 /989 Engine 112.923/ 943 Engine 113.943 /944 /980 /984 ENGINE 113.942/ 965/ 981	AR07.07-P-1454A AR07.07-P-1454AA AR07.07-P-1454SV AR07.07-P-1454AG AR07.07-P-1454MV
5	Disconnect lead line (17/2) at the fuel distributor	i Release fuel pressure via service valve and collect fuel! Nm S	*BA07.52-P-1001-01A *119589046300
6	Removing fuel rail with injection valves	Engine 112.910 /920 /921 /923 /940 /941 /942 /943 /970 Engine 113.940 /942 /943 /944 /961 /965 /980 /981 /984 Engine 112.912 /913 /916 /917 /922 /944 /946 /947 /949 /953 /954 /955 /972 /973 /975 Engine 113.941 /948 /960 /963 /966 /967 /968 /969 /987 /988 /989	AR07.03-P-1451A AR07.03-P-1451AA
7.1	Remove bolt of cylinder head cover (2/1)	Model 230.475 only Nm	*BA01.20-P-1001-01E
7.2	Remove crankshaft ventilation hose (2) and line (89/2) and place to one side	Model 171.473 only i Remove cylinder head cover (2/1) bolt in order to detach exhaust gas recirculation valve (89) bracket. Nm	*BA01.20-P-1001-01E
8	Disconnect vacuum lines from intake pipe (19)	i Installation: Observe intake manifold connection diagram. ↓ Engine 112 except 112.913 /917 /949 /954 Engine 112.913 /917 /949 /954 Engine 112 with USA version, code 494, except engine 112.913 /916 /917 /949 /953 /954 /975	AR09.20-P-1310-01A AR09.20-P-1310-01T AR09.20-P-1310-01AA

		Engine 112.913 /916 /917 /949 /953 /954 /975 with USA version, code 494 Engine 113 except 113.967 /969 Engine 113.967 /969 Engine 113 with USA version, code 494, except engine 113.948 /963 /966 /984 /967 /969 /988 /989 Engine 113.948 /963 /966 /984 /967 /969 /988 /989 with USA version, code 494	AR09.20-P-1310-01AU AR09.20-P-1310-01TA AR09.20-P-1310-01AC
9	Disconnect electrical connectors		
10	Unscrew union nut from pipe (89/2) to exhaust gas recirculation valve (89)	Counterhold connection fitting when unscrewing. 	*BA14.20-P-1002-01B
11	Remove screw (19/1)	except engine 113.987 from 24.04.04, Engine 113.988/ 989 	*BA09.20-P-1001-01D
11.2	Remove bolts from right combination valve (6) and left combination valve (6)	Only on engines 113.987 from 24.04.04 Engine 113.988/ 989 	*BA09.20-P-1001-01D
12.1	Remove combination valve (6)	except engine 113.987 from 24.04.04, Engine 113.988/ 989 Installation: Install new gasket	
12.2	Detach right combination valve (6) and left combination valve (6) and place to one side	Only engine 113.987 from 24.04.04 Engine 113.988/ 989 Installation: Replace seals.	
13	Detach intake manifold (19)	Plug intake ducts. Use centering bolt for exact positioning of intake manifold and for centering the gasket (19/3). 	*BA09.20-P-1001-01D *112589026200
14	Replace gasket (19/3)		
15	Install in the reverse order		

Crankcase ventilation, cylinder head cover

Number	Designation			Engine 112	Engine 113
		BA01.20-P-1001-01E	Cylinder head cover bolt	Stage 1	Nm
		Stage 2	∠°	-	-

Fuel distributor

Number	Designation	Engine 112 except 112.945/951/960/961
BA07.52-P-1001-01A	Fuel feed line to fuel distributor	Nm 38

Fuel distributor

Number	Designation	Engine 113.940/941/ 942/943/944/ 945/946/948/ 960/961/962/ 963/964/965/ 966/967/968/ 969/971/980/ 981/982/984/ 986/988	Engine 113.987	Engine 113.989
BA07.52-P-1001-01A	Fuel feed line to fuel distributor	Nm 38	38	38

Nm Intake manifold

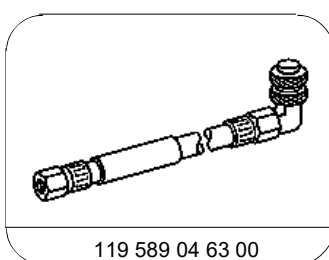
Number	Designation	Engines 112, 113
BA09.20-P-1001-01D	Bolt, intake manifold to cylinder head M8 Nm 20	

Nm Exhaust gas recirculation

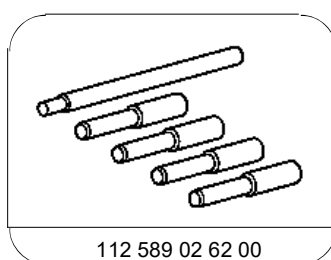
Number	Designation	Engine 112.910/912/916/ 920/921/922/923/ 940/941/942/943/ 944/945/946/947/ 953/972/975	Engine 112.913/ 917/949/ 954/955/ 970/973	Engine 113.940/941/942/ 943/944/948/960/9 61/962/964/965/96 6/967/968/969/971 /980/981/982/984/ 987/988	Engine 113.963
BA14.20-P-1002-01B	Union nut, exhaust gas recirculation pipe to exhaust gas recirculation valve Nm 40	40	40	40	23

Nm Exhaust gas recirculation

Number	Designation	Engine 113.989
BA14.20-P-1002-01B	Acorn nut, exhaust gas recirculation pipe to exhaust gas recirculation valve Nm 40	40



Pressure hose



Set of dowel bolts