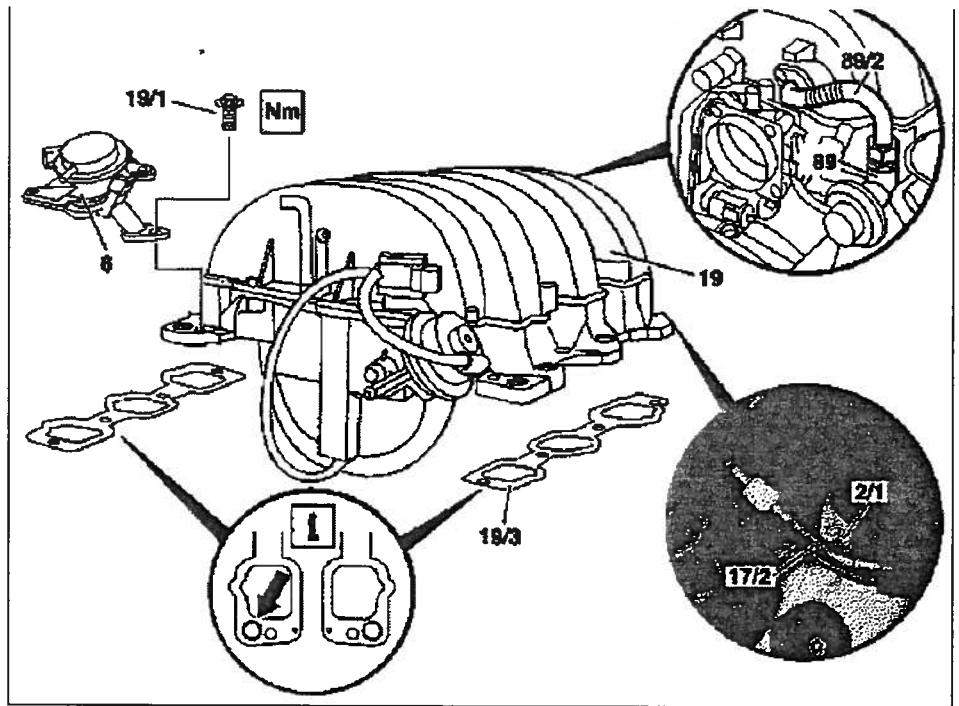


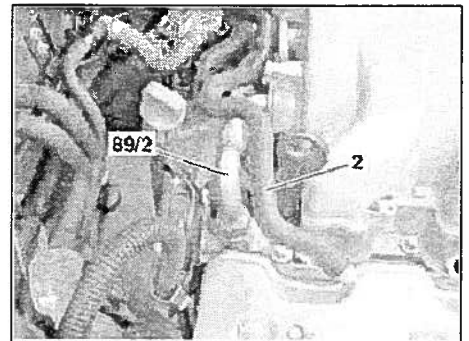
ENGINE 112.910 in MODELS 202.026 /086
ENGINE 112.920 in MODELS 202.029 /089
ENGINE 112.921 in MODELS 210.063 /081 /263 /281
ENGINE 112.922 in MODEL 220.063
ENGINE 112.923 in MODEL 129.059
ENGINE 112.940 in MODELS 208.365 /465
ENGINE 112.941 in MODELS 210.065 /082 /265 /282
ENGINE 112.942 in MODEL 163.154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

- 2/1 Screw of cylinder head cover
 - 6 Combination valve
 - 17/2 Feed line
 - 19 Intake manifold
 - 19/1 Bolt
 - 19/3 Seal
 - 89 Exhaust gas recirculation valve
 - 89/2 Cable
- Arrow: Hole for combination valve

















P09.20-0283-06

- 2 Crankshaft ventilation hose
- 89/2 Cable



P09.20-2137-01

☒ ☒	Remove/Install		
⚠ 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 fire, sparks, open flames or smoking. Pour fuels only into suitable and appropriately marked containers. Wear protective clothing when handling fuel.	AS47.00-Z-0001-01A
1.1	Remove key from electronic ignition switch	<p>i Only for vehicles with electronic ignition switch.</p> <p>i Vehicles with Keyless Go, Code 889: Switch off engine, remove Keyless Go cards out of vehicle and store outside of the transmitter range.</p>	
2.1	Remove cover on front side of engine	i Only models 129, 211, 215, 220, 230	
3.1	Remove engine trim panel with integrated air filter	i The air filter is integrated in the engine cover. Remove engine cover or air filter by pulling vertically up and away from 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

	intake pipe	<p>Engine 113.940</p> <p>Engines 112.922 /944 /972 /973 /975</p> <p>Engines 113.941/ 948/ 960/ 961/ 963/ 966</p> <p>Engines 112.912/ 913/ 916/ 917/ 946/ 947/ 949/ 954/ 953/ 955</p> <p>Engines 113.968/ 967/ 969/ 987/ 988/ 989</p> <p>Engines 112.923/ 943</p> <p>Engines 113.943 /944 /980 /984</p> <p>Engine 113.942/ 965/ 981</p>	<p>AR07.07-P-1454AA</p> <p>AR07.07-P-1454SV</p> <p>AR07.07-P-1454AG</p> <p>AR07.07-P-1454MV</p>
5	Disconnect the lead line (17/2) at the fuel distributor	<p> Release fuel pressure via service valve and collect fuel.</p> <p> Disconnect fuel feed line at fuel rail</p> <p> Pressure hose</p>	<p>*BA07.52-P-1001-01A</p> <p>*119589046300</p>
6	Removing fuel rail with injection valves	<p>Engines 112.910/ 920/ 921/ 923/ 940/ 941/ 942/ 943/ 970</p> <p>Engines 113.940/ 942/ 943/ 944/ 961/ 965/ 980/ 981/ 984</p> <p>Engines 112.912 /913 /916 /917 /922 / 944 /946 /947 /949 /953 /954 /955 /972 / 973 /975</p> <p>Engines 113.941 /948 /960 /963 /966 / 967 /968 /969 /987 /988 /989</p>	<p>AR07.03-P-1451A</p> <p>AR07.03-P-1451AA</p>
7.1	Unscrew bolt of cylinder head cover (2/1)	<p>Model 230.475 only</p> <p> Screw of cylinder head cover</p>	<p>*BA01.20-P-1001-01E</p>
7.2	Remove crankshaft ventilation hose (2) and line (89/2) and place aside	<p> Only Model 171.473.</p> <p> Remove cylinder head cover bolt (2/1) to loosen the bracket of the exhaust gas recirculation valve.</p> <p> Screw of cylinder head cover</p>	<p>*BA01.20-P-1001-01E</p>
8.1	Disconnect vacuum lines from intake pipe (19)	<p> Observe intake manifold connection diagram, see: ↓</p> <p>Engine 112 except 112.913 /917 /949 /954</p> <p>Engines 112.913 /917 /949 /954</p> <p>Engine 112 with USA version, code 494, except engines 112.913 /916 /917 /949/ 953 /954 /975</p> <p>Engines 112.913 /916 /917 /949 /953/ 954 /975 with USA version, code 494</p> <p>Engine 113 except 113.967/ 969</p> <p>Engine 113.967/ 969</p> <p>Engine 113 with USA version, code 494, except engines 113.948 /963 /966 /984 / 967 /969 /988 /989</p> <p>Engines 113.948 /963 /966 /984 /967 / 969 /988 /989 with USA version, code 494a</p>	<p>AR09.20-P-1310-01A</p> <p>AR09.20-P-1310-01T</p> <p>AR09.20-P-1310-01AA</p> <p>AR09.20-P-1310-01AU</p> <p>AR09.20-P-1310-01TA</p> <p>AR09.20-P-1310-01AC</p>
9	Disconnect electrical connectors		
10	Unscrew acorn nut from pipe (89/2) to exhaust gas recirculation valve (89)	<p> Counterhold connection fitting when unscrewing.</p> <p> Union nut of exhaust gas recirculation pipe to exhaust gas recirculation valve</p>	<p>*BA14.20-P-1002-01B</p>
11.1	Unscrew screw (19/1)	<p>Except engine 113.987 as of 24.04.04,</p> <p>Engines 113.988/ 989</p> <p> Bolt of intake manifold to cylinder head</p>	<p>*BA09.20-P-1001-01D</p>
11.2	Remove bolts from right combination valve (6) and left combination valve (6)	<p>Only for engine 113.987 as of 24.04.04</p> <p>Engines 113.988/ 989</p> <p> Bolt of intake manifold to cylinder head</p>	<p>*BA09.20-P-1001-01D</p>
12.1	Remove combination valve (6)	<p>Except engine 113.987 as of 24.04.04</p> <p>Engines 113.988/ 989</p> <p> Installation: Install new gasket</p>	
12.2	Loosen right combination valve (6) and left combination valve (6) and place aside	<p>Only for engine 113.987 as of 24.04.04</p> <p>Engines 113.988/ 989</p> <p> Installation: Install new gasket</p>	

		positioning of intake manifold and for centering the gasket (19/3). <input type="checkbox"/> Nm Bolt of intake manifold to cylinder head <input checked="" type="checkbox"/> Set of dowel bolts	*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	Engines	Engine
		112.910/911/ 912/913/914/ 915/916/917/ 920/921/922/ 923/940/941/ 942/943/944/ 945/946/947/ 949/951/953/ 954/955/960/ 961/970/972/ 973/975/976	113.940/ 941/942/943/ 944/948/960/ 961/962/963/ 964/965/966/ 967/968/969/ 971/980/981/ 982/984/986/ 992	113.989
BA01.20-P-1001-01E	Screw of cylinder head cover	Nm 8	10	8

Fuel rail

Number	Designation	Engine
		112 except 112.945/ 951/960/ 961
BA07.52-P-1001-01A	Disconnect fuel feed line at fuel rail	Nm 38

Fuel rail

Number	Designation	Engine	Engines	Engine
		113.987	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	113.989
BA07.52-P-1001-01A	Fuel feed line to fuel distributor	Nm 38	38	38

Intake manifold

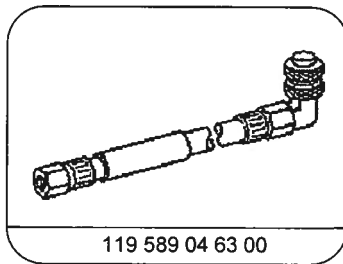
Number	Designation	Engine	Engines	Engines	Engines
		112.910/911/ 912/913/914/ 915/916/917/ 920/921/922/ 923/940/941/ 942/943/944/ 945/946/947/ 949/951/953/ 954/955/960/ 961/970/972/ 973/975/976	113.940/941/ 942/943/944/ 945/946/948/ 960/961/962/ 963/964/965/ 966/967/968/ 969/971/980/ 981/982/984/ 986/987/988/ 990/991/992		
BA09.20-P-1001-01D	Bolt, intake manifold to cylinder head	M8 Nm	20	20	20

Nm Exhaust gas recirculation

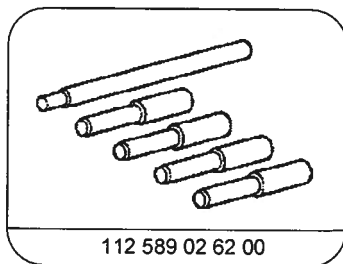
Number	Designation	Engine	Engine	Engines	Engine	
		112.910/912/916/ 920/921/922/923/ 940/941/942/943/ 944/945/946/947/ 953/972/975	112.913/ 917/949/ 954/955/ 970/973	113.940/941/942/ 943/944/948/960/9 61/962/964/965/96 6/967/968/969/971/ 980/981/982/984/9 87/988	113.963	
BA14.20-P-1002-01B	Acorn nut, exhaust gas recirculation pipe to exhaust gas recirculation valve	Nm	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



Pressure hose



Set of dowel bolts