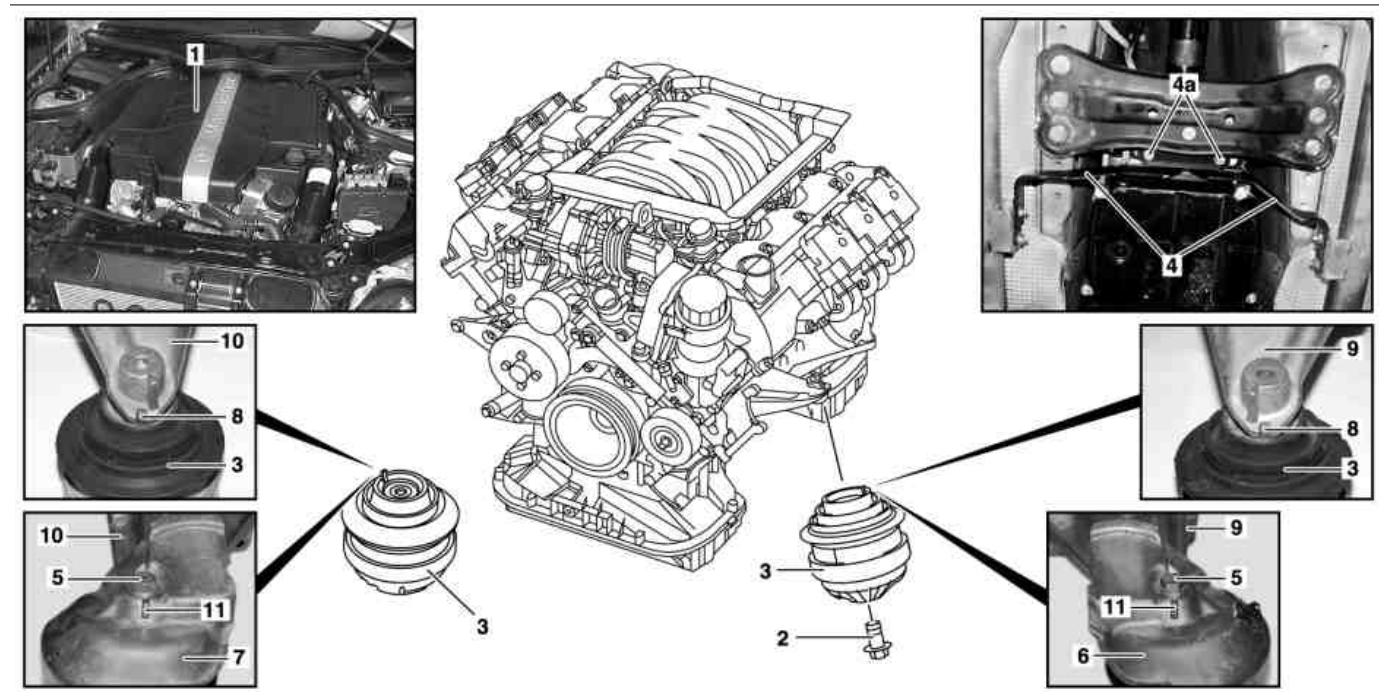


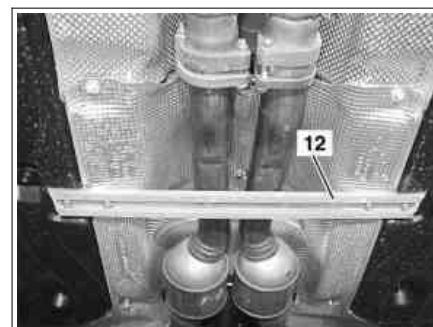
ENGINE 112.912 in MODEL 209.361, 203.261, 209.461, 203.061 with TRANSMISSION 722.6, 716.6  
ENGINE 112.946 in MODEL 203.264 /064 with TRANSMISSION 722.6  
ENGINE 112.961 in MODEL 203.265 /065 with TRANSMISSION 722.6  
ENGINE 113.968 in MODEL 209.475 /375 with TRANSMISSION 722.633  
ENGINE 112.913 in MODEL 211.261 /061 with TRANSMISSIONS 722.6, 716.6  
ENGINE 112.949 in MODEL 211.265 /065 with TRANSMISSION 722.618  
ENGINE 113.967 in MODEL 211.270 /070 with TRANSMISSION 722.633  
ENGINE 113.987 in MODEL 209.376 /476 with TRANSMISSION 722.636  
ENGINE 112.955 in MODEL 209.365 /465 with TRANSMISSION 722.618  
ENGINE 113.990 in MODEL 211.276 /076 with TRANSMISSION 722.643



P22.10-2071-09

#### Shown on engine 112

- |                       |                |                         |
|-----------------------|----------------|-------------------------|
| 1 Air cleaner housing | 4a Bolts       | 8 Anti-twist locks      |
| 2 Bolt                | 5 Bolts        | 9 Left engine support   |
| 3 Engine mount        | 6 Left shield  | 10 Right engine support |
| 4 Bracket             | 7 Right shield | 11 Anti-twist locks     |
| 12 Cross strut        |                |                         |



















P22.10-2091-01

#### Modification notes

16.5.06	"Disconnect/connect battery ground line" removed		
---------	--	--	--

	<b>Remove/install</b>		
<b>Danger!</b>	<b>Risk of death</b> caused by vehicle slipping or toppling off the lifting platform.	Align vehicle between columns of vehicle lift and position four support plates at vehicle lift support points specified by vehicle manufacturer.	AS00.00-Z-0010-01A
	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A

1.1	Remove air filter housing (1).	Engine 112.912 /946 /961 in model 203 Engine 112.912 /955 in model 209 Engine 112.913 /949, 113.990 in model 211 Engine 113.987 in model 209.376 /476 as of 24.4.04	AR09.10-P-1150SVK AR09.10-P-1150AC
1.2	Unclip cover on front side of engine	Model 209, 211 with engine 113 except AMG	
2	Detach lower engine compartment paneling	Model 203, 209 Model 211	AR61.20-P-1105P AR61.20-P-1105T
3	Remove bolt (2)	 Model 209  Model 211  Model 203	*BA22.10-P-1001-01L *BA22.10-P-1002-03A *BA22.10-P-1001-01R
4.1	Remove complete exhaust system	Engine 112 in model 203 Engine 112 in model 209 Engine 113.987 in model 209.376 up to 23.4.04, 209.476 Engine 113.968 in model 209.375 /475 Engine 113.987 in model 209.376 as of 24.4.04	AR49.10-P-7000PV AR49.10-P-7000AC
4.2	Remove front exhaust system from right and left exhaust manifold	Model 211  <b>Installation:</b> Replace bolts and check rivet nuts in the exhaust manifold, replace if required: ↓ Replace rivet nuts in exhaust manifold.  	AR49.10-P-7000TB AR49.10-P-5531-01DA *BA14.10-P-1002-01B *103589013900
5	Remove bolts (4a)	Model 211 	*BA49.10-P-1011-01A
6	Detach bracket (4) for exhaust system from transmission	Model 211	
7	Remove cross strut (12)	Model 211	
8	Mount bracket on supercharger	Engine 112.961, 113.990  For engine lifting device.	
9	Mount engine lifting device	Model 203, 209 Model 211  Model 211	AR33.10-P-0100-01P AR33.10-P-0100-01T *240589006100
10	Raise engine	 When lifting engine ensure that components are neither pinched or overstretched to avoid causing damage.	
11	Remove bolts (5)	 Model 209  Model 211  Model 203	*BA22.10-P-1004-01L *BA22.10-P-1001-03A *BA22.10-P-1004-01R
12	Remove engine mounts (3)	 Remove engine mount (3) from left engine carrier (9) and right engine carrier (10). Remove engine mount (3) with left head shield (6) and right heat shield (7).  <b>Installation:</b> Anti-twist locks (8) on engine mounts (3) must latch into retaining grooves in the left engine support (9) and right engine support (10). Anti-twist locks (11) on the right engine support (10) and the left engine support (9) must sit in the cutouts on the left shield (6) and the right shield (7).  Pay attention to environmental protection regulations for disposal of engine mounts (3). Dispose engine mounts (3) into mixed scrap.	
13	Install in the reverse order		
14	Connect STAR DIAGNOSIS and delete fault memory		

## Exhaust manifold

Number	Designation	Engine 112 except 112.951 / 976	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/ 986/992/993/ 995	Engine 113.987/ 988/990/ 991
BA14.10-P-1002-01B	Flange connection, exhaust manifold/front exhaust pipes	Nm	20	20

#### Engine mounts, engine supports

Number	Designation	Engine 112.912 in model 209	Engine 112.955 in model 209
BA22.10-P-1001-01L	Bolt, front engine mount to front axle carrier	Nm	35
BA22.10-P-1004-01L	Bolt connecting front engine mount to engine support	Nm	55

#### Engine mounts, engine supports

Number	Designation	Engine 113.968 in model 209	Engine 113.987 in model 209
BA22.10-P-1001-01L	Bolt, front engine mount to front axle carrier	Nm	35
BA22.10-P-1004-01L	Bolt connecting front engine mount to engine support	Nm	55

#### Engine mount, engine support (engine side)

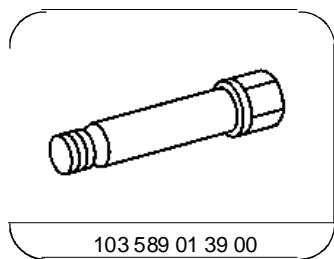
Number	Designation	Model 211 except 4 MATIC
BA22.10-P-1001-03A	Front engine support on engine mount	Nm
BA22.10-P-1002-03A	Front engine mount on front axle carrier	Nm

#### Engine mounts, engine supports

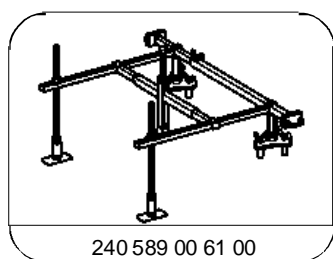
Number	Designation		Engine 112.912/ 946 in model 203	Engine 112.961 in model 203
BA22.10-P-1001-01R	Bolt, front engine mount to front axle carrier	Nm	35	35
BA22.10-P-1004-01R	Bolt, engine mount to engine support	Nm	55	-

#### Exhaust system

Number	Designation		Engine 112, 113 in model 211
BA49.10-P-1011-01A	Bolt, three way catalytic converter bracket to transmission housing	Nm	20

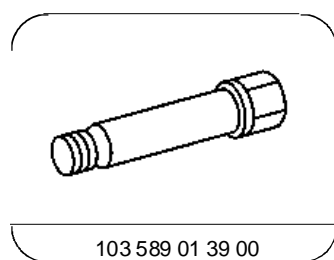


Caulking bolt




Engine lifting fixture

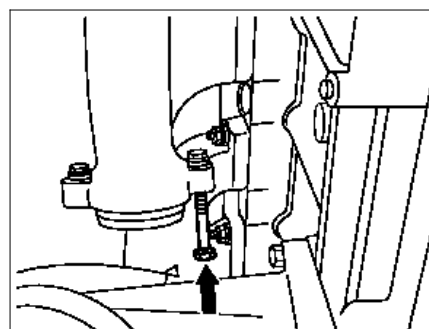
AR49.10-P-5531-01DA	Replace the rivet nuts in the exhaust manifold.		
---------------------	---	--	--



Cocking bolt

- 1 Hammer rivet nuts with a suitable bolt (arrow) out of exhaust manifold bores.

 Only screw bolt into rivet nut by hand.

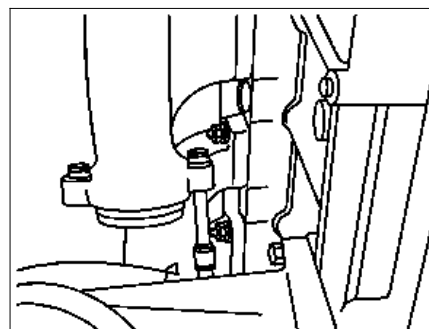


P49.10-0209-01

- 2 Insert new rivet bushes into exhaust manifold bore.

- 3  Screw cocking bolt into rivet nut and tighten.

- 4  Unscrew cocking bolt.



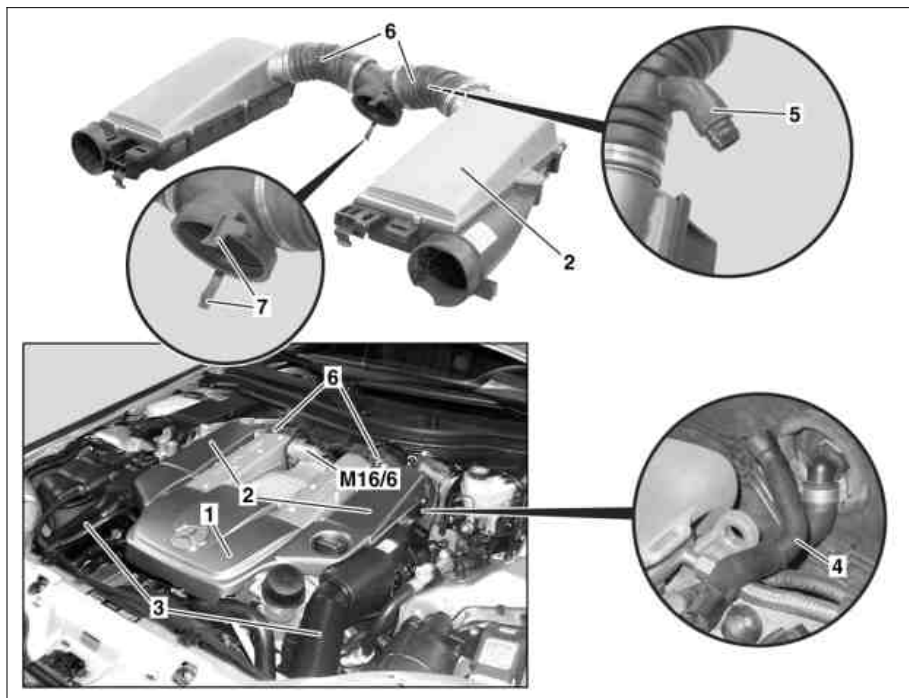
P49.10-0210-01

ENGINE 112.960 in MODEL 170  
 ENGINES 112.912 /946 /961 in MODEL 203  
 ENGINES 112.912 /955 in MODEL 209  
 ENGINES 112.913 /949, 113.990 in MODEL 211  
 ENGINES 113.992 /995 in MODEL 230  
 ENGINE 113.991 in MODEL 215  
 ENGINE 113.991 in MODEL 220

Shown on engine 113.990

- 1 Engine cover
- 2 Air filter housing
- 3 Engine suction fan ducts
- 4 Crankcase ventilation hose
- 5 Connection
- 6 Intake lines
- 7 Catches

M16/6 Throttle valve actuator



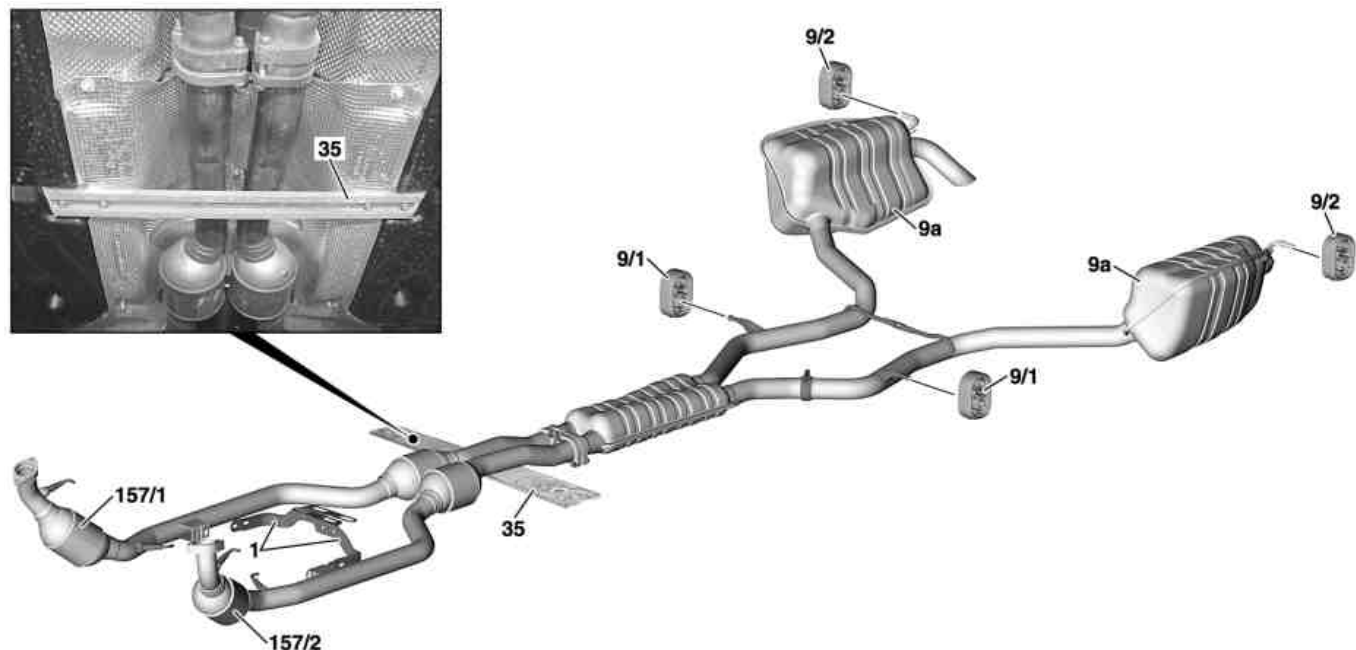
P09.10-2101-06

		Remove/install	
1	Remove engine trim panel (1)	Detach engine cover (1) on both sides of the air filter housing (2) and at the bracket towards the top.	
2	Remove engine intake air ducts (3)		
3	Remove air filter housing (2).	When removing the air filter housing (2) make sure that the intake lines (6) are not twisted. If the air filter housing (2) is removed incorrectly, the steel ring in the intake line (6) can become deformed and work itself loose when the engine is running. Carefully lift air filter housing (2) and remove crankcase bleed hose (4) from fitting (5) on intake line (6). <b>Installation:</b> Ensure that the catches (7) do not break off when fitting onto the throttle valve actuator (M16/6.). The catches (7) can be sucked in by the engine and cause engine damage. <b>Installation:</b> Moisten sealing ring, throttle valve actuator (M16/6) and retaining rubbers with liquid lubricant. Lubricant	*BR00.45-Z-1002-06A
4	Install in the reverse order		

#### Repair materials

Number	Designation	Order number
BR00.45-Z-1002-06A	Lubricating paste, rubber parts 2.5 kg, DB supply specification 6867.00	A 000 989 01 60

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 113.990 in MODEL 211.076 /276  
 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 156.983 in MODEL 211.077 /277



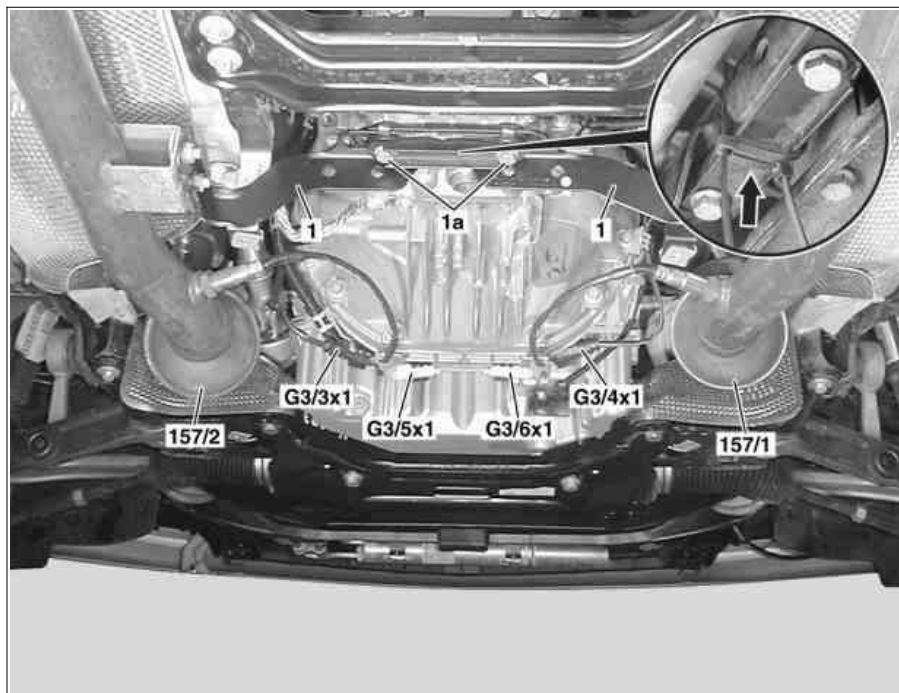
P49.10-2195-09

#### Symbolic representation

1	Catalytic converter bracket	9a	Rear muffler	157/1	Firewall catalytic converter on the right
9/1	Exhaust rubber mount	35	Crossmember	157/2	Firewall catalytic converter on the left
9/2	Exhaust rubber mount				

#### Symbolic representation

1	Catalytic converter bracket
1a	Screw/bolts
157/1	Firewall catalytic converter on the right
157/2	Firewall catalytic converter on the left
G3/3x1	Connector for left O2 sensor upstream of catalytic converter
G3/4x1	Connector for right O2 sensor upstream of catalytic converter
G3/5x1	Connector for left O2 sensor downstream of catalytic converter
G3/6x1	Connector for right O2 sensor downstream of catalytic converter



P49.10-2294-06

#### Modification notes

16.6.04	"Disconnect/connect battery ground line" removed	
---------	--	--

	<b>Remove/install</b>		
<b>Danger!</b>	<b>Risk of death</b> caused by vehicle slipping or toppling off of the vehicle lift.	Align vehicle between vehicle lift columns and position four support plates at vehicle lift support points specified by vehicle manufacturer.	AS00.00-Z-0010-01A
<b>Danger!</b>	<b>Risk of injury</b> to skin and eyes caused by handling hot or glowing objects.	Wear safety gloves, protective clothing and safety glasses, if necessary.	AS00.00-Z-0002-01A
	Notes on self-locking nuts and screw/bolts		AH00.00-N-0001-01A
1	Remove rear engine compartment paneling		AR61.20-P-1105T
2	Disconnect connector for left O2 sensor upstream of the catalytic converter (G3/3x1) and connector for right O2 sensor upstream of the catalytic converter (G3/4x1) and expose electrical lines		
3	Disconnect connector for left O2 sensor downstream of the catalytic converter (G3/5x1) and connector for right O2 sensor downstream of the catalytic converter (G3/6x1) and expose electrical lines		
4	Fix shim and rubber shim with cable tie (arrow)	Model 211.076/ 077/ 276/ 277.	
5	Loosen screw/bolts (1a)		*BA49.10-P-1011-01A
6	Remove catalytic converter bracket (1) from firewall catalytic converter, right (157/1) and firewall catalytic converter, left (157/2)	Model 211.061 /065 /070 /080 /082 /083 /261 /265 /270 /280 /282 /283. 	*BA49.10-P-1012-01A
7	Support exhaust system with transmission jack and transmission platform	Transmission platform for passenger cars and commercial vehicles <a href="#">gotis://A_25/35/49_02.0</a> Transmission jack <a href="#">gotis://H_00.10_01.0</a>	
8	Remove firewall catalytic converter, right (157/1) and firewall catalytic converter, left (157/2) from the exhaust manifolds	<b>Installation:</b> Check rivet nuts in exhaust manifold, replace if required: ↓  Replace rivet nuts in exhaust manifold Engines 112, 113 Engine 156 Caulking bolt	AR49.10-P-5531-01DA *BA14.10-P-1002-01B *BA14.10-P-1002-01N *103589013900
9	Loosen nuts on the exhaust lateral strut	Model 211.076/ 077/ 276/ 277. 	*BA14.10-P-1002-01N
10	Unhook rear muffler (9a) from exhaust rubber mount (9/1, 9/2)	To simplify removal: Apply liquid lubricant to the retaining bracket and on the holes of the exhaust rubber mounts. <b>Installation:</b> Use liquid lubricant. Lubricant paste	*BR00.45-Z-1002-06A
11	Remove crossmember (35)		*BA62.30-P-1001-01A
12	Lift out exhaust system	Lower transmission jack and tilt exhaust system 45° around the longitudinal axis. For model 211.076 /077 /276 /277 remove tilted to the rear. <b>Installation:</b> Check exhaust rubber mounts (9/1, 9/2), replace if worn. Transmission plate for passenger cars <a href="#">gotis://A_25/35/49_02.0</a> Transmission jack <a href="#">gotis://H_00.10_01.0</a>	
<b>OS</b>	Notes on disposing of catalytic converters		OS49.10-P-1000-01A
13	Install in the reverse order		
	<b>Checking</b>		
14	Check installation position and clearance of exhaust system	The exhaust system must be installed free of stress. Realign exhaust system if necessary.	
<b>Danger!</b>	<b>Risk of accident</b> caused by vehicle starting off by itself when engine is running. <b>Risk of injury</b> caused by contusions and burns during starting procedure or when working near the engine as it is running	Secure vehicle to prevent it from moving by itself. Wear closed and snug-fitting work clothes. Do not touch hot or rotating parts.	AS00.00-Z-0005-01A
15	Test run engine and check exhaust system for leaks		



**Nm** Crossmember and front reinforcement

Number	Designation		Model 211
BA62.30-P-1001-01A	Bolt, crossmember to body	Nm	25

**Nm** Exhaust manifold

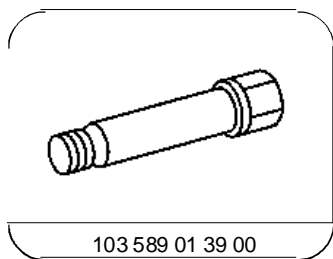
Number	Designation		Engine 113.987/ 988/990/ 991	Engine 112 except 112.951/ 976	Engine 113.940/941/ 942/943/944/ 945/946/948/ 960/961/962/ 963/964/965/ 966/967/968/ 969/971/980/ 981/982/984/ 986/992/993/ 995
BA14.10-P-1002-01B	Flange connection, exhaust manifold/front exhaust pipes	Nm	20	20	20

**Nm** Exhaust manifold

Number	Designation		Engine 156
BA14.10-P-1002-01N	Flange connection for exhaust manifold/front exhaust pipe	Nm	20

**Nm** Exhaust system

Number	Designation		Engine 112, 113 in model 211	Engine 156 in model 211
BA49.10-P-1011-01A	Bolt of Catalytic converter bracket to transmission housing	Nm	20	20
BA49.10-P-1012-01A	Self-locking nut of catalytic converter bracket to three way catalytic converter	Nm	20	20



Caulking bolt

#### Repair materials

Number	Designation	Order number
BR00.45-Z-1002-06A	Antifriction paste, rubber parts 2.5 kg, DB supply specification 6867.00	A 000 989 01 60