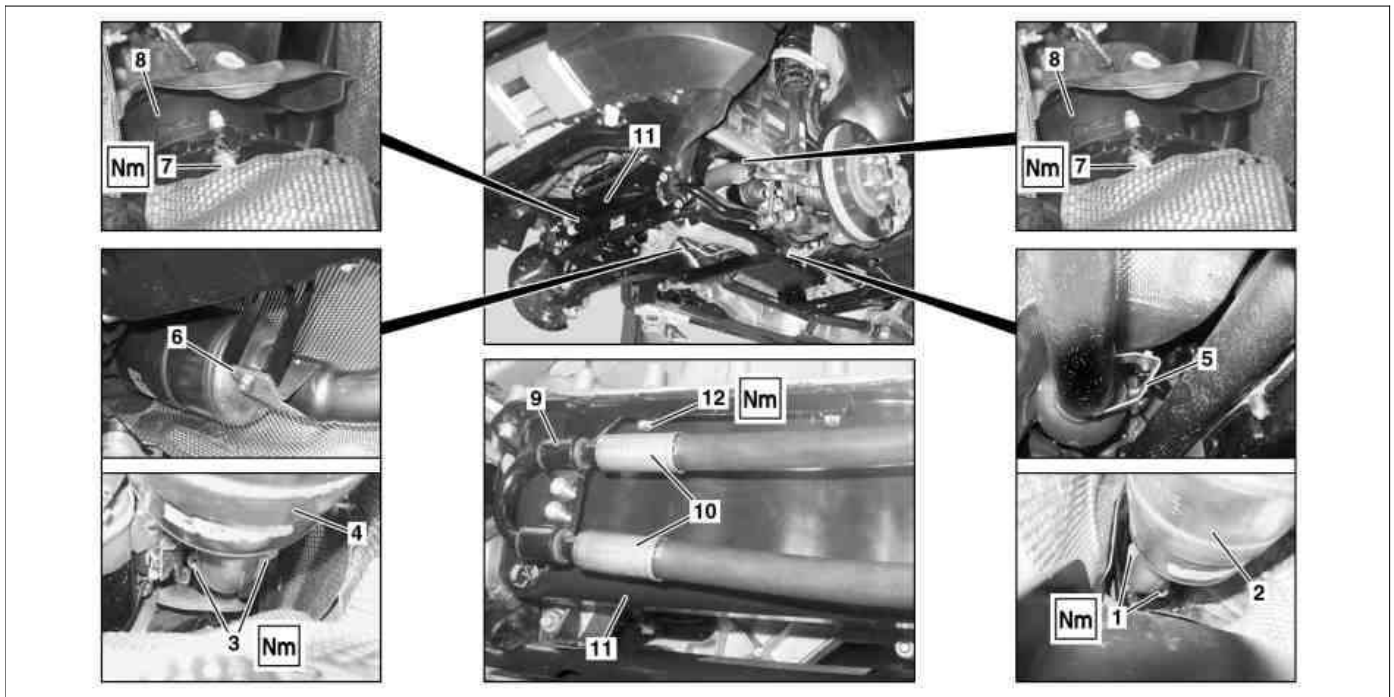


Engine 272, 273 in model 164

Engine 272, 273, 276 in model 251


























P01.45-2200-09

Shown on model 164

1	Bolts	5	Left exhaust bracket	9	Bracket
2	Left catalytic converter	6	Right exhaust bracket	10	High pressure pipe
3	Bolts	7	Screw	11	Oil pan bottom section
4	Right catalytic converter	8	Engine mount	12	Screw

	Risk of death when working on component parts and systems with $U \geq 30$ V alternating voltage (AC) or $U \geq 60$ V direct voltage (DC)	Do not touch damaged or defective live component parts and lines or non-insulated electrical connections and lines.	AS00.00-Z-0035-01A
	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
	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A
	Remove/install		
1	Remove windshield wiper system	Engine 276.8 in model 251	AR82.30-P-6400RT
2.1	Remove air filter housing	Engine 272 (except 272.973), 273 in model 164, 251	AR09.10-P-1150GZA
2.2	Remove left and right air filter housing with right engine air intake duct upstream of air filter	Engine 276.8 in model 251	AR09.10-P-1150GQC
3	Remove power electronics with power distributor	Engine 272.973 in model 164.195	AR08.10-P-0011GZH
4	Put on engine hoist	Model 164 Model 251 Observe the manufacturer's assembly specifications and safety information. Model 251 Bolt, partition wall reinforcement between wheel well liners to fender Engine lifting device	AR33.10-P-0100-01GZ AR33.10-P-0100-01RT *BA62.30-P-1008-01E *240589006100

5   	Drain engine oil, collect if necessary	Model 164, 251 with engine 272 Model 164, 251 with engine 273 Model 251 with engine 276  Installation: Replace sealing ring.	AP18.00-P-0101PIT AP18.00-P-0101RX AP18.00-P-0101W
6	Remove screw/bolt for (1) left CAT (2) and screw/bolts (3) right CAT (4) from exhaust manifold	Engine 272  Engine 272 in model 164 Bolt, flange connection to exhaust pipe/exhaust manifold  Engine 272 in model 251 Bolt, flange connection to exhaust pipe or exhaust manifold	*BA49.10-P-1002-01W *BA49.10-P-1002-01X
7	Remove the screw/bolts for left exhaust bracket (5) and right exhaust bracket (6)	Engine 272  Engine 272 in model 164 Bolt, catalytic converter bracket to catalytic converter  Engine 272 in model 251 Bolt, catalytic converter bracket to catalytic converter	*BA49.10-P-1001-01W *BA49.10-P-1001-01X
8	Remove screw/bolts (7) of engine mounts (8) on front axle carrier	 Model 164 Screw/bolt, front engine mount to front axle carrier  Model 251 Bolt, front engine mount to front axle carrier	*BA22.10-P-1001-03G *BA22.10-P-1001-03F
9	Lift engine	 Pay attention when lifting out engine that no cables and lines are damaged and that engine does not lean against the bulkhead.	
10	Remove bracket (9) for high-pressure lines (10) on oil pan bottom section (11)	Engine 272, 273  Screw/bolt, power steering pressure line to oil pan	*BA01.45-P-1004-01M
11	Detach torsion bar from front axle carrier	Model 251	AR32.20-P-0300RT
12	Remove screw/bolts (12) of oil pan bottom section (11)	 Engine 272, 273 Screw/bolt, oil pan bottom section to oil pan  ENGINE 276 Bolt, oil pan bottom section to oil pan	*BA01.45-P-1003-01M *BA01.45-P-1003-01E
13	Loosen oil pan bottom section (11) from oil pan and remove. Notes on sealant path for oil pan Notes on sealant path for oil pan	Model 164, 251 Engine 272, 273 in model 164 Engine 272, 273 in model 251 Engine 276 in model 251 Engine 276 in model 251  If oil pan bottom section (11) cannot be loosened from the oil pan, heat oil pan bottom section (11) around sealing surfaces using a heat gun. Then slide an  assembly wedge between sealing surface, to separate oil pan bottom section (11) from oil pan.  Installation: Pay attention to sealant path on oil pan bottom section (11). Sealant, Loctite 5970, 50 ml  Mounting wedge  Application gun	AH01.45-P-0001-01VA AH01.45-P-0001-01MMA AR01.45-P-7500-04MM *BR00.45-Z-1013-01A *110589035900 *112589002500
	Clean		
14	Clean sealing surfaces on oil pan bottom section (11) and oil pan	 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
15	Install in the reverse order		
16 	Read out fault memory using the diagnostic system and clear if necessary		AD00.00-P-2000-04A
 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

17	Carry out engine test run, checking the engine for leaktightness and proper operation		
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Nm Oil pan

Number	Designation		Engine 276
BA01.45-P-1003-01E	Bolt, oil pan bottom section to oil pan	Nm	14

Nm Oil pan

Number	Designation		Engine 272	Engine 273
BA01.45-P-1003-01M	Screw/bolt, oil pan bottom section to oil pan	Nm	9	14

Nm Oil pan

Number	Designation		Engine 272	Engine 273
BA01.45-P-1004-01M	Screw/bolt, power steering pressure line to oil pan M6	Nm	10	10

Nm Engine mount, engine support (engine side)

Number	Designation		Model 251
BA22.10-P-1001-03F	Bolt, front engine mount to front axle carrier	Nm	53

Nm Engine mount, engine support (engine side)

Number	Designation		Model 164
BA22.10-P-1001-03G	Screw/bolt, front engine mount to front axle carrier	Nm	53

Nm Exhaust system

Number	Designation		Engine 272, 273 in model 164
BA49.10-P-1001-01W	Bolt, catalytic converter bracket to catalytic converter	Nm	20

Nm Exhaust system

Number	Designation		Engine 272, 273, 276 in model 251
BA49.10-P-1001-01X	Bolt, catalytic converter bracket to catalytic converter	Nm	20

Nm Exhaust system

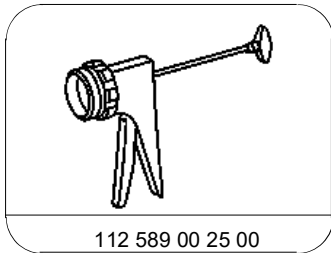
Number	Designation		Engine 272, 273 in model 164
BA49.10-P-1002-01W	Bolt, flange connection to exhaust pipe/exhaust manifold	Nm	20

Nm Exhaust system

Number	Designation		Engine 272, 273, 276 in model 251
BA49.10-P-1002-01X	Bolt, flange connection to exhaust pipe or exhaust manifold	Nm	20

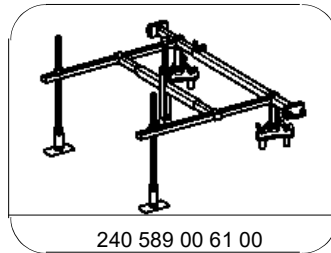
Nm Crossmember and front reinforcement

Number	Designation	Model 251
BA62.30-P-1008-01E	Bolt, partition wall reinforcement between wheel well liners to fender Nm	10



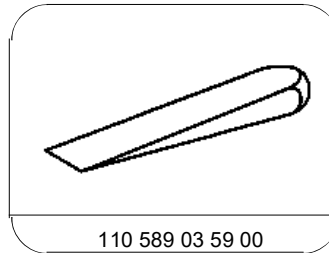
112 589 00 25 00

Application gun



240 589 00 61 00

Engine lifting device



110 589 03 59 00

Mounting wedge

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