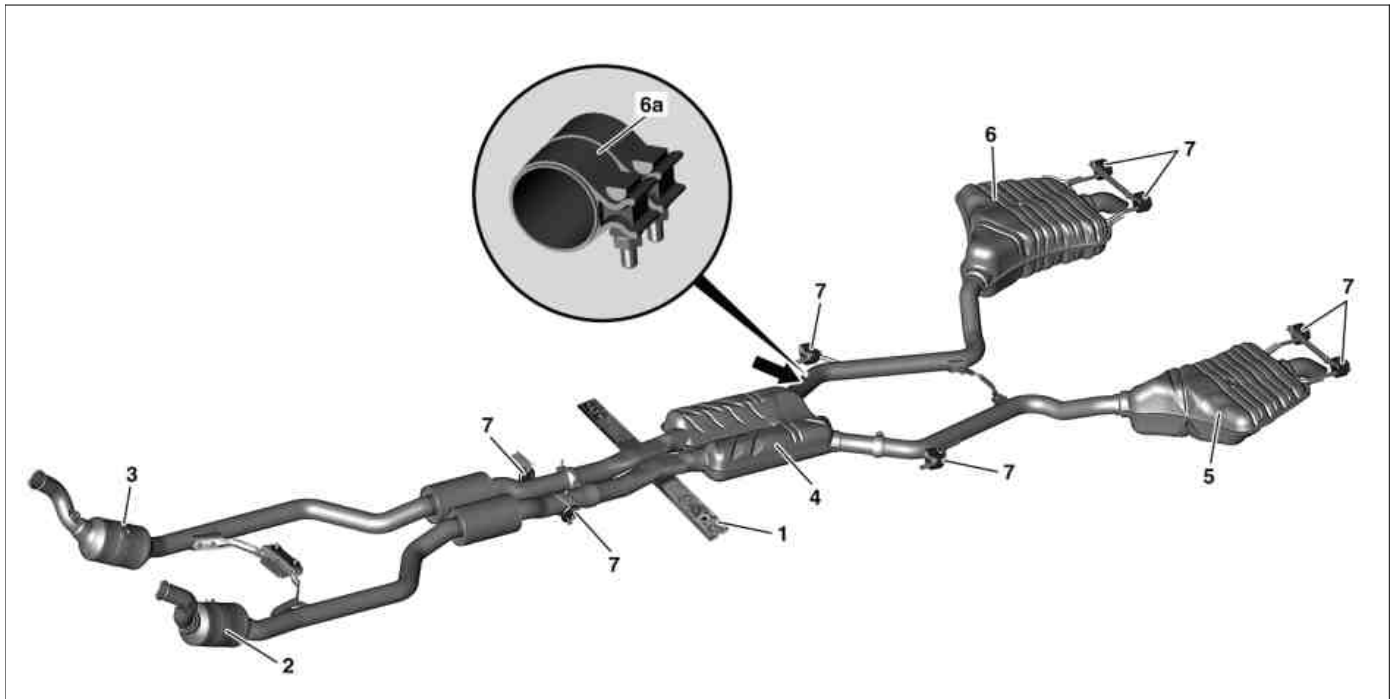


ENGINES 156, 157, 273, 275, 278 in MODEL 216

ENGINES 156, 157, 272, 273, 275, 276, 278 in MODEL 221



P49.10-2614-09

Shown on engine 273

- | | | | | | |
|---|--------------------------|---|---------------------------|-------|--|
| 1 | Crossmember | 3 | Right catalytic converter | 6a | Clamp |
| 2 | Left catalytic converter | 4 | Center muffler | 7 | Exhaust rubber mount |
| | | 5 | Left muffler | Arrow | Separation point for chain pipe cutter (engine 272, 273) |
| | | 6 | Right muffler | | |

⚠	Remove/install		
⚠ Danger!	Risk of death caused by vehicle slipping or toppling off of 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
⚠ Danger!	Risk of injury 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
⚠ Danger!	Risk of injury from grazing or cutting body parts on sharp vehicle parts	Always wear protective gloves when working on or near sharp and non-deburred vehicle parts. Deburr repair panels.	AS00.00-Z-0017-01A
ⓘ	Notes on avoiding damage through contamination and foreign objects		AH00.00-P-5000-01A
ⓘ	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A
1	Disconnect electrical connector for corresponding O2 sensors and expose feed lines	If necessary	AR07.52-P-5303SX
2	Remove bottom engine compartment paneling	If necessary: Vehicles without top protection Vehicles with top protection, code Z07 i Installation: Only install lower engine compartment paneling after engine test run and leak test.	AR61.20-P-1105SX AR61.20-P-1105SXS
3	Remove rear skid plate	Vehicles with top protection, code Z07, if necessary	AR61.40-P-1010SXS
4	Remove crossmember (1)	If necessary Nm	*BA62.30-P-1001-01F
5	Detach corresponding part of exhaust system at separation points and remove	i Engine 272, 273: Cut off right rear muffler (6) when replacing at separation point (arrow) identified by center punch marks with chain pipe cutter at right angles. i Model 221 with engine 278: detach vacuum line for exhaust flaps in rear muffler at vacuum unit. i Apply liquid lubricant to exhaust rubber mounts (7).	

		<p>i Installation: Engine 272, 273: Secure right rear muffler (6) using hose clamp (6a).</p> <p>i Installation: Align parts of exhaust system tension-free before tightening bolted connections.</p> <p>Nm</p> <p>Nm</p> <p>Nm</p> <p>Nm Except engines 157, 276, 278,</p> <p>Nm Except engine 276, 278</p> <p>Nm</p> <p>Nm Except engine 276, 278</p> <p>Nm Except engine 276, 278</p> <p>Nm</p> <p>Nm Except engines 156, 157, 276,278</p> <p>Nm</p> <p>Nm Except engines 156, 157, 276,278</p> <p>Nm Except engines 156, 157, 276, 278</p> <p>Nm Except engines 156, 157, 276, 278</p> <p>Lubricant paste</p>	<p>*BA49.10-P-1001-01Z</p> <p>*BA49.10-P-1002-01Z</p> <p>*BA49.10-P-1003-01Z</p> <p>*BA49.10-P-1004-01Z</p> <p>*BA49.10-P-1005-01Z</p> <p>*BA49.10-P-1006-01Z</p> <p>*BA49.10-P-1007-01Z</p> <p>*BA49.10-P-1008-01Z</p> <p>*BA49.10-P-1009-01Z</p> <p>*BA49.10-P-1010-01Z</p> <p>*BA49.10-P-1011-01Z</p> <p>*BA49.10-P-1012-01Z</p> <p>*BA49.10-P-1013-01Z</p> <p>*BA49.10-P-1014-01Z</p> <p>*BR00.45-Z-1002-06A</p>
	Clean		
6	Remove combustion and corrosion residue at separation points		
	Checking		
7	Check exhaust rubber mount (7)	i Check for wear and damage, and replace if necessary.	
8	Install in the reverse order		
	Checking		
9	Inspect installation position and unobstructed movement of all parts of exhaust system		
	Danger!		
10	<p>Risk of accident caused by vehicle starting off by itself when engine is running. Risk of injury caused by contusions and burns during starting procedure or when working near the engine as it is running</p> <p>Test run engine and check exhaust system for leaks</p>	<p>Secure vehicle to prevent it from moving by itself.</p> <p>Wear closed and snug-fitting work clothes.</p> <p>Do not touch hot or rotating parts.</p>	AS00.00-Z-0005-01A

Nm Crossmember and front reinforcement

Number	Designation		Model 216	Model 221
BA62.30-P-1001-01F	Bolt, cross member to transmission tunnel	Nm	25	25

Nm Exhaust system

Number	Designation		Engine 272 in model 221	Engine 273 in model 221	Engine 275 in model 221
BA49.10-P-1001-01Z	Bolt, catalytic converter to exhaust manifold	Nm	25	25	-
BA49.10-P-1002-01Z	Nut, Torca clamp for center muffler to catalytic converter	Nm	55	55	-
BA49.10-P-1003-01Z	Bolt, rear muffler hose clamp to catalytic converter	Nm	35	35	-
BA49.10-P-1004-01Z	Bolt, hose clamp of rear muffler to center muffler	Nm	35	35	-

BA49.10-P-1005-01Z	Nut, muffler brace to rear muffler	Nm	25	25	25
BA49.10-P-1006-01Z	Bolt, rubber mount bracket to frame floor	Nm	20	20	20
BA49.10-P-1007-01Z	Nut connecting catalytic converter bracket to catalytic converter	Nm	11	11	11
BA49.10-P-1008-01Z	Bolt, catalytic converter bracket to transmission	Nm	20	20	20
BA49.10-P-1009-01Z	Bolt, exhaust rubber mount to rear axle carrier	Nm	20	20	20
BA49.10-P-1010-01Z	Bolt connecting catalytic converter clamp to exhaust gas turbocharger	Nm	-	-	25
BA49.10-P-1011-01Z	Bolt, catalytic converter bracket to top bracket/ transmission housing	Nm	-	-	20
BA49.10-P-1012-01Z	Nut connecting Torca clamp of right catalytic converter to left catalytic converter	Nm	-	-	55
BA49.10-P-1013-01Z	Bolt connecting center muffler hose clamp to catalytic converter	Nm	-	-	35
BA49.10-P-1014-01Z	Bolt, tail piece of exhaust pipe to rear muffler	Nm	-	-	8

Nm Exhaust system

Number	Designation		Engine 273 in model 216	Engine 275 in model 216
BA49.10-P-1001-01Z	Bolt, catalytic converter to exhaust manifold	Nm	25	-
BA49.10-P-1002-01Z	Nut, Torca clamp for center muffler to catalytic converter	Nm	55	-
BA49.10-P-1003-01Z	Bolt, rear muffler hose clamp to catalytic converter	Nm	35	-
BA49.10-P-1004-01Z	Bolt, hose clamp of rear muffler to center muffler	Nm	35	-
BA49.10-P-1005-01Z	Nut, muffler brace to rear muffler	Nm	25	25
BA49.10-P-1006-01Z	Bolt, rubber mount bracket to frame floor	Nm	20	20
BA49.10-P-1007-01Z	Nut connecting catalytic converter bracket to catalytic converter	Nm	11	11
BA49.10-P-1008-01Z	Bolt, catalytic converter bracket to transmission	Nm	20	20
BA49.10-P-1009-01Z	Bolt, exhaust rubber mount to rear axle carrier	Nm	20	20
BA49.10-P-1010-01Z	Bolt connecting catalytic converter clamp to exhaust gas turbocharger	Nm	-	25
BA49.10-P-1011-01Z	Bolt, catalytic converter bracket to top bracket/ transmission housing	Nm	-	20
BA49.10-P-1012-01Z	Nut connecting Torca clamp of right catalytic converter to left catalytic converter	Nm	-	55

BA49.10-P-1013-01Z	Bolt connecting center muffler hose clamp to catalytic converter	Nm	-	35
BA49.10-P-1014-01Z	Bolt, tail piece of exhaust pipe to rear muffler	Nm	8	8

Nm Exhaust system

Number	Designation		Engine 156 in model 216	Engine 156 in model 221
BA49.10-P-1001-01Z	Bolt, catalytic converter to exhaust manifold	Nm	25	25
BA49.10-P-1002-01Z	Nut, Torca clamp for center muffler to catalytic converter	Nm	55	55
BA49.10-P-1003-01Z	Bolt, rear muffler hose clamp to catalytic converter	Nm	35	35
BA49.10-P-1004-01Z	Bolt, hose clamp of rear muffler to center muffler	Nm	35	35
BA49.10-P-1005-01Z	Nut, muffler brace to rear muffler	Nm	25	25
BA49.10-P-1006-01Z	Bolt, rubber mount bracket to frame floor	Nm	20	20
BA49.10-P-1007-01Z	Nut connecting catalytic converter bracket to catalytic converter	Nm	11	11
BA49.10-P-1008-01Z	Bolt, catalytic converter bracket to transmission	Nm	20	20
BA49.10-P-1009-01Z	Bolt, exhaust rubber mount to rear axle carrier	Nm	20	20
BA49.10-P-1011-01Z	Bolt, catalytic converter bracket to top bracket/ transmission housing	Nm	20	20

Nm Exhaust system

Number	Designation		Engine 157 in model 216/221
BA49.10-P-1001-01Z	Bolt, catalytic converter to exhaust manifold	Nm	25
BA49.10-P-1002-01Z	Nut, Torca clamp for center muffler to catalytic converter	Nm	55
BA49.10-P-1003-01Z	Bolt, rear muffler hose clamp to catalytic converter	Nm	35
BA49.10-P-1005-01Z	Nut, muffler brace to rear muffler	Nm	25
BA49.10-P-1006-01Z	Bolt, rubber mount bracket to frame floor	Nm	20
BA49.10-P-1007-01Z	Nut connecting catalytic converter bracket to catalytic converter	Nm	11
BA49.10-P-1008-01Z	Bolt, catalytic converter bracket to transmission	Nm	27
BA49.10-P-1009-01Z	Bolt, exhaust rubber mount to rear axle carrier	Nm	20

BA49.10-P-1011-01Z	Bolt, catalytic converter bracket to top bracket/ transmission housing	Nm	20
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Nm Exhaust system

Number	Designation		Engine 276 in model 221	Engine 278 in model 216	Engine 278 in model 221
BA49.10-P-1001-01Z	Bolt, catalytic converter to exhaust manifold	Nm	25	25	25
BA49.10-P-1002-01Z	Nut, Torca clamp for center muffler to catalytic converter	Nm	-	55	55
BA49.10-P-1003-01Z	Bolt, rear muffler hose clamp to catalytic converter	Nm	35	35	35
BA49.10-P-1006-01Z	Bolt, rubber mount bracket to frame floor	Nm	22	22	22
BA49.10-P-1009-01Z	Bolt, exhaust rubber mount to rear axle carrier	Nm	22	22	22
BA49.10-P-1011-01Z	Bolt, catalytic converter bracket to top bracket/ transmission housing	Nm	20	20	20

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