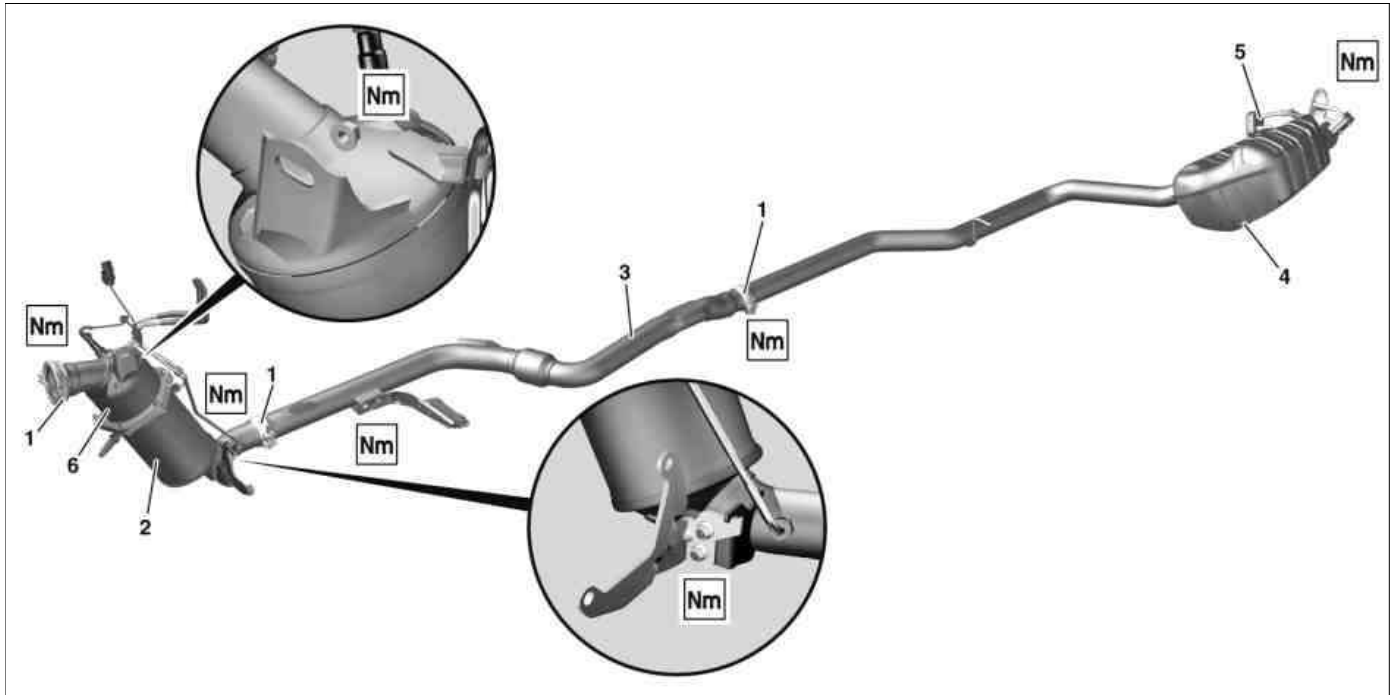


ENGINES 642, 646, 651 in MODEL 204

ENGINES 642, 651 in MODEL 207

ENGINES 651 in MODEL 172



P49.10-2778-09

Exhaust system for engine 646

1 Pipe clamp

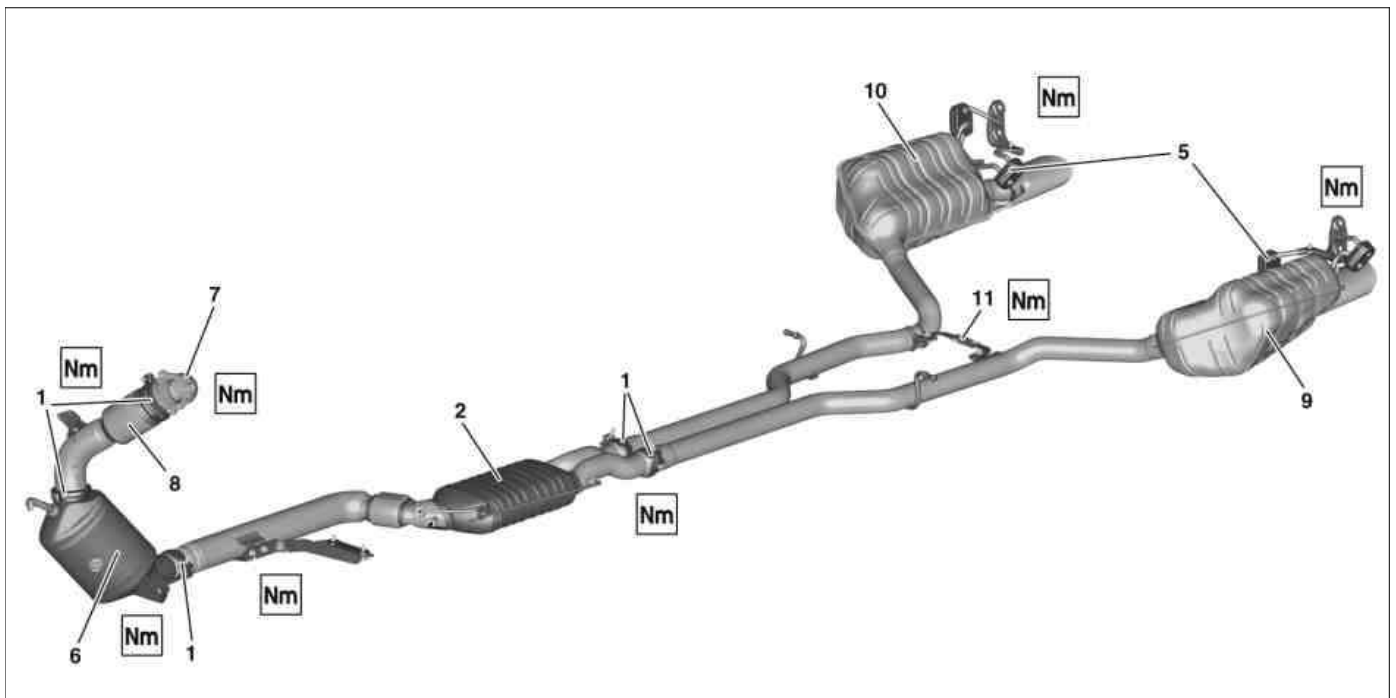
2 Diesel particulate filter

3 Connecting pipe

4 Rear muffler

5 Exhaust rubber mount

6 Catalytic converter



P49.10-2783-09

Exhaust system for engine 642 up to model year 2009

1 Pipe clamp

2 Diesel particulate filter

5 Exhaust rubber mount

6 Catalytic converter

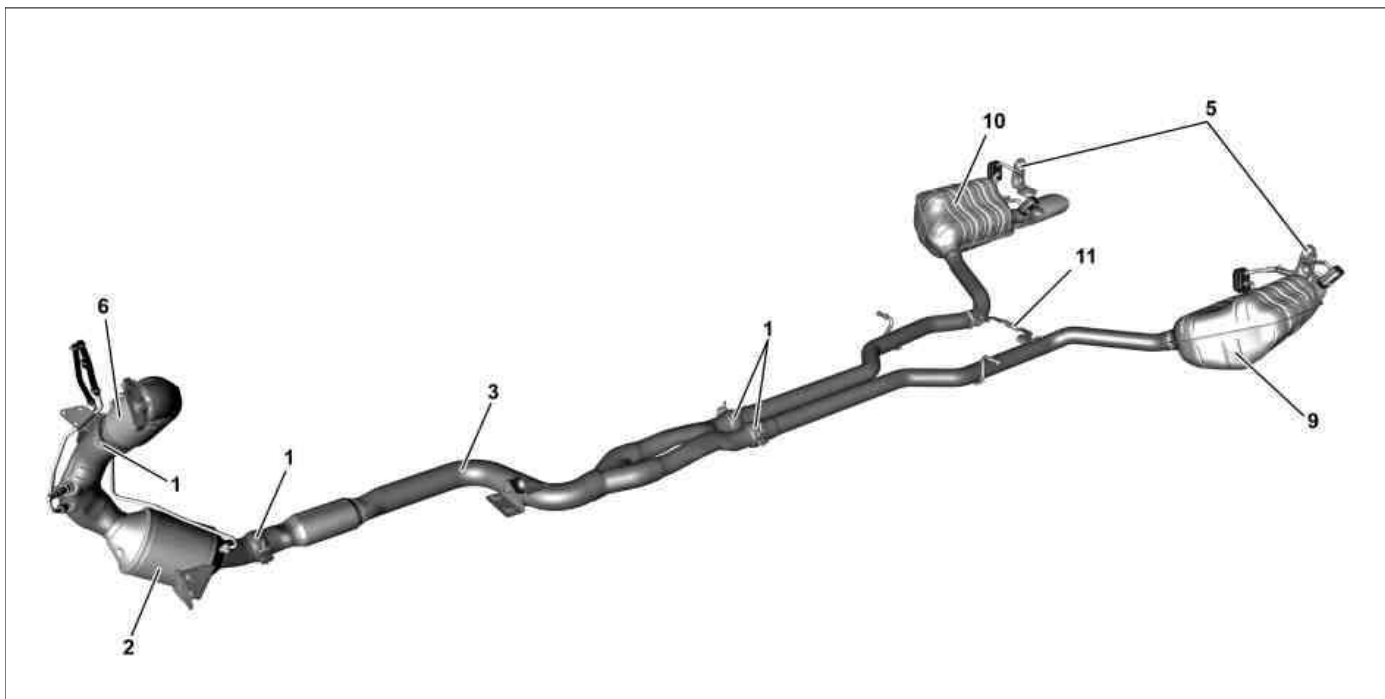
7 Exhaust pipe

8 Catalytic converter pipe

9 Left rear muffler

10 Right rear muffler

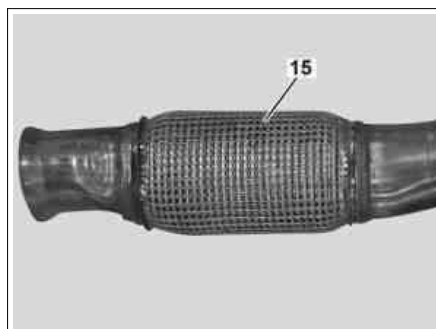
11 Rear cross strut



P49.10-2869-09

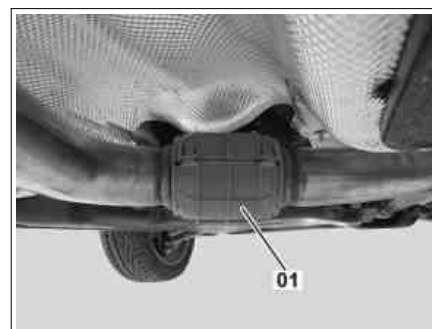
Exhaust system, engine 642 as of model year 2009

- 1 Pipe clamp
- 2 Diesel particulate filter
- 3 Connecting pipe
- 5 Exhaust rubber mount
- 6 Catalytic converter
- 9 Left rear muffler
- 10 Right rear muffler
- 11 Rear cross strut








15 Decoupling element




























P49.10-2914-01




01  Assembly tool

P49.10-2913-01

 	Remove/install		
	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
	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
	Risk of injury caused by scraping 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 self-locking nuts and bolts		AH00.00-N-0001-01A
1.1	Remove both lower engine compartment paneling	Model 204.9  Installation: Only install both lower engine compartment panelings after engine test run and leak test.	AR61.20-P-1105CY
1.2	Remove lower bottom sections of soundproofing	Model 172 Model 204.0/2 Model 207  Installation: Only install lower bottom sections of soundproofing after engine test run and leak test.	AR94.30-P-5300W AR94.30-P-5300EW
2	Mount assembly tool (01) on decoupling element (15)	Engine 642, 651	

		<p> When working on exhaust system, the decoupling element (15) can get damaged through bending or twisting of the exhaust pipe. The exhaust system can begin to leak at the decoupling element (15) as a result.</p> <p> Engine 642</p> <p> Engine 651</p>	<p>*642589016300</p> <p>*651589066300</p>
3.1	Remove catalytic converter diesel particulate filter unit	<p>Model 204 with engine 646</p> <p>Model 172, 204 (except model 204.9) with engine 651, except 4MATIC</p> <p>Model 207 with engine 651</p>	<p>AR49.10-P-5501CWI</p> <p>AR49.10-P-5501CD</p>
3.2	Remove catalytic converter	<p>Model 204 with engine 642 up to model year 2009</p> <p>Model 204 with engine 642 as of model year 2009</p> <p>Model 204.9 with engine 651</p> <p>Model 207 with engine 642</p>	<p>AR49.10-P-5500CO</p> <p>AR49.10-P-5500CW</p> <p>AR49.10-P-5500OMD</p> <p>AR49.10-P-5500OGE</p>
4	Remove diesel particulate filter (2) and pressure lines for pressure differential sensor	<p>Model 204. with engine 646 with code (474)</p> <p>Particulate filter</p> <p>Model 204 with engine 642 as of model year 2009</p> <p>Model 207 with engine 642</p>	<p>AR14.40-P-1000T</p> <p>AR14.40-P-1000CWI</p> <p>AR14.40-P-1000OGE</p>
5	Remove corresponding diagonal strut(s) at rear	<p>Model 172, 207.4, if necessary</p> <p>Model 207.4</p> <p></p> <p></p> <p></p> <p>Model 172</p> <p></p> <p></p> <p></p> <p></p>	<p>*BA61.10-P-1007-01H</p> <p>*BA61.10-P-1008-01H</p> <p>*BA61.10-P-1009-01H</p> <p>*BA61.10-P-1005-01A</p> <p>*BA61.10-P-1006-01A</p> <p>*BA61.10-P-1007-01A</p> <p>*BA61.10-P-1008-01A</p>
6	Detach corresponding components of exhaust system at separating points and remove	<p> Installation: Align components for exhaust system tension-free before tightening the bolted connections.</p> <p> Installation: Apply lubricating paste to exhaust rubber bearings (5).</p> <p>Antifriction paste, rubber parts 2.5 kg, DB supply specification 6867.00</p> <p>Screw/bolt, transmission to engine:</p> <p> Transmission 711.67</p> <p>Engine 651 in model 172:</p> <p> Transmission 716.6</p> <p> Transmission 722.6, 722.9</p> <p>Model 172</p> <p> Screw/bolt, clamp to diesel particulate filter/turbocharger</p> <p> Screw/bolt, diesel particulate filter to cylinder head</p> <p> Screw/bolt, diesel particulate filter bracket to transmission</p> <p> Screw/bolt, clamp to exhaust line in the center/diesel particulate filter</p> <p> Screw/bolt, clamp to exhaust line at the rear/exhaust line in the center</p> <p> Screw/bolt, exhaust rubber mount holder to vehicle underbody/rear axle carrier</p> <p> Screw/bolt, exhaust tip clamp to muffler</p> <p>Engine 642, 646, 651 in model 204:</p> <p> Screw/bolt connecting catalytic converter to turbocharger</p> <p> Screw/bolt, diesel particulate filter clamp to turbocharger</p> <p> Screw/bolt, exhaust pipe bracket to transmission</p> <p> Screw/bolt, exhaust pipe bracket to exhaust pipe</p> <p> Screw/bolt, exhaust system to main floor panel</p>	<p>*BR00.45-Z-1002-06A</p> <p>*BA26.10-P-1001-01F</p> <p>*BA26.10-P-1001-01C</p> <p>*BA27.40-P-1008-01A</p> <p>*BA49.10-P-1006-01AI</p> <p>*BA49.10-P-1007-01AI</p> <p>*BA49.10-P-1009-01AI</p> <p>*BA49.10-P-1010-01AI</p> <p>*BA49.10-P-1011-01AI</p> <p>*BA49.10-P-1012-01AI</p> <p>*BA49.10-P-1013-01AI</p> <p>*BA49.10-P-1002-01AC</p> <p>*BA49.10-P-1004-01AC</p> <p>*BA49.10-P-1008-01AC</p> <p>*BA49.10-P-1009-01AC</p> <p>*BA49.10-P-1010-01AC</p>

		<p> Nut, suspension ring to connecting pipe</p> <p> Rear muffler clamp nut to connecting pipe/diesel particulate filter</p> <p> Nut, exhaust rubber mount holder to rear axle</p> <p> Screw/bolt, exhaust rubber mount holder to frame floor assembly/rear axle carrier</p> <p> Screw/bolt, cross connection left rear to right rear</p> <p> Screw/bolt, exhaust pipe to turbocharger</p> <p> Nut, exhaust pipe clamp to catalytic converter pipe or exhaust pipe</p> <p> Nut, catalytic pipe clamp or exhaust pipe to catalytic converter</p> <p> Clamp nut/bolt between catalytic converter/connecting pipe/diesel particulate filter</p> <p> Bolt/nut, catalytic converter hose clamp to diesel particulate filter</p> <p> Bolt/nut, bracket of diesel particulate filter to lower diesel particulate filter</p> <p> Catalytic converter/diesel particle unit nut bolt/nut on crankcase</p> <p> Screw/bolt, bracket to transmission</p> <p> Screw/bolt connecting catalytic converter clamp to exhaust gas turbocharger</p> <p>Engine 642, 651 in model 207:</p> <p> Screw/bolt connecting catalytic converter to turbocharger</p> <p> Screw/bolt, diesel particulate filter clamp to turbocharger</p> <p> Nut attaching diesel particulate filter above</p> <p> Nut, catalytic converter clamp to diesel particulate filter</p> <p> Screw/bolt, upper diesel particulate filter bracket to diesel particulate filter/cylinder crankcase</p> <p> Screw/bolt, diesel particulate filter bracket to oil pan</p> <p> Bolt/nut, bracket of diesel particulate filter to lower diesel particulate filter</p> <p> Screw/bolt, bracket to transmission</p> <p> Screw/bolt, connecting pipe clamp to diesel particulate filter</p> <p> Screw/bolt, exhaust bracket to transmission</p> <p> Screw/bolt, exhaust bracket to exhaust</p> <p> Screw/bolt, exhaust system to main floor panel</p> <p> Nut, suspension ring to connecting pipe</p> <p> Nut, rear muffler clamp to connecting pipe</p> <p> Screw/bolt, cross connection left rear to right rear</p> <p> Screw/bolt, exhaust rubber mount holder to frame floor assembly/rear axle carrier</p>	<p>*BA49.10-P-1011-01AC</p> <p>*BA49.10-P-1013-01AC</p> <p>*BA49.10-P-1014-01AC</p> <p>*BA49.10-P-1015-01AC</p> <p>*BA49.10-P-1016-01AC</p> <p>*BA49.10-P-1019-01AC</p> <p>*BA49.10-P-1020-01AC</p> <p>*BA49.10-P-1021-01AC</p> <p>*BA49.10-P-1022-01AC</p> <p>*BA49.10-P-1023-01AC</p> <p>*BA49.10-P-1027-01AC</p> <p>*BA49.10-P-1029-01AC</p> <p>*BA49.10-P-1033-01AC</p> <p>*BA49.10-P-1034-01AC</p> <p>*BA49.10-P-1002-01AE</p> <p>*BA49.10-P-1003-01AE</p> <p>*BA49.10-P-1004-01AE</p> <p>*BA49.10-P-1005-01AE</p> <p>*BA49.10-P-1006-01AE</p> <p>*BA49.10-P-1008-01AE</p> <p>*BA49.10-P-1009-01AE</p> <p>*BA49.10-P-1011-01AE</p> <p>*BA49.10-P-1020-01AE</p> <p>*BA49.10-P-1023-01AE</p> <p>*BA49.10-P-1024-01AE</p> <p>*BA49.10-P-1025-01AE</p> <p>*BA49.10-P-1026-01AE</p> <p>*BA49.10-P-1031-01AE</p> <p>*BA49.10-P-1035-01AE</p> <p>*BA49.10-P-1036-01AE</p>
	Clean		
7	Remove combustion and corrosion residues at the connection points		
8	Check exhaust rubber mount (5) for damage and wear		
9	Install in the reverse order		
	Checking		
10	Check installation position and unobstructed movement of all components of the exhaust system		
	<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>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>	<p>AS00.00-Z-0005-01A</p>

11	Test run engine and check exhaust system for leaks		
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Nm Complete manual transmission

Number	Designation	Transmission 711.67
BA26.10-P-1001-01F	Screw/bolt, transmission to engine	Nm 39

Nm Complete manual transmission

Number	Designation	Transmission 716.6
BA26.10-P-1001-01C	Screw/bolt, transmission to engine	Nm 40

Nm Housing

Number	Designation	Transmission 722.6 except 722.660/661/662/ 663/666/673/674	Transmission 722.9
BA27.40-P-1008-01A	Screw/bolt, automatic transmission to engine	M10 × 40 Nm	39
		M10 × 90 Nm	39
		M12 Nm	-
			38
			38
			-

Nm Exhaust system

Number	Designation	Engine 651 in model 172
BA49.10-P-1006-01AI	Screw/bolt, clamp to diesel particulate filter/turbocharger	Nm 35
BA49.10-P-1007-01AI	Screw/bolt, diesel particulate filter to cylinder head	Nm 20
BA49.10-P-1009-01AI	Screw/bolt, diesel particulate filter bracket to transmission	Nm 39
BA49.10-P-1010-01AI	Screw/bolt, clamp to exhaust line in the center/diesel particulate filter	Nm 35
BA49.10-P-1011-01AI	Screw/bolt, clamp to exhaust line at the rear/exhaust line in the center	Nm 35

BA49.10-P-1012-01AI	Screw/bolt, exhaust rubber mount holder to vehicle underbody/rear axle carrier	Nm	20
BA49.10-P-1013-01AI	Screw/bolt, exhaust tip clamp to muffler	Nm	25

Nm Exhaust system

Number	Designation		Engine 642, 646, 651 in model 204
BA49.10-P-1002-01AC	Screw/bolt connecting catalytic converter to turbocharger	Nm	20
BA49.10-P-1004-01AC	Screw/bolt, diesel particulate filter clamp to turbocharger	Nm	18
BA49.10-P-1008-01AC	Screw/bolt, exhaust pipe bracket to transmission	Nm	20
BA49.10-P-1009-01AC	Screw/bolt, exhaust pipe bracket to exhaust pipe	Nm	20
BA49.10-P-1010-01AC	Screw/bolt, exhaust system to main floor panel	M8 Nm	20
		M10 Nm	50
BA49.10-P-1011-01AC	Nut, suspension ring to connecting pipe	Nm	20
BA49.10-P-1013-01AC	Rear muffler clamp nut on connecting pipe/diesel particulate filter	Nm	35
BA49.10-P-1014-01AC	Nut, exhaust rubber mount holder to rear axle	Nm	23
BA49.10-P-1015-01AC	Screw/bolt, exhaust rubber mount holder to frame floor assembly/rear axle carrier	Nm	20
BA49.10-P-1016-01AC	Screw/bolt, cross connection left rear to right rear	Nm	20
BA49.10-P-1019-01AC	Screw/bolt, exhaust pipe to turbocharger	Nm	20
BA49.10-P-1020-01AC	Nut, exhaust pipe clamp to catalytic converter pipe or exhaust pipe	Nm	15
BA49.10-P-1021-01AC	Nut, catalytic pipe clamp or exhaust pipe to catalytic converter	Nm	15
BA49.10-P-1022-01AC	Clamp nut/screw between catalytic converter/ connecting pipe/diesel particulate filter	Nm	35
BA49.10-P-1023-01AC	Bolt/nut, catalytic converter hose clamp to diesel particulate filter	Nm	17
BA49.10-P-1027-01AC	Bolt/nut, bracket of diesel particulate filter to lower diesel particulate filter	Nm	20
BA49.10-P-1029-01AC	Catalytic converter/diesel particle unit nut bolt/nut on crankcase	Nm	20
BA49.10-P-1033-01AC	Screw/bolt, bracket to transmission	Nm	39
BA49.10-P-1034-01AC	Screw/bolt connecting catalytic converter clamp to exhaust gas turbocharger	Nm	18

Nm Exhaust system

Number	Designation	Engines 642, 651 in model 207	
BA49.10-P-1002-01AE	Screw/bolt connecting catalytic converter to turbocharger	Nm	20
BA49.10-P-1003-01AE	Screw/bolt, diesel particulate filter clamp to turbocharger	Nm	18
BA49.10-P-1004-01AE	Nut attaching diesel particulate filter above	Nm	20
BA49.10-P-1005-01AE	Nut, catalytic converter clamp to diesel particulate filter	Nm	15
BA49.10-P-1006-01AE	Screw/bolt, upper diesel particulate filter bracket to diesel particulate filter/cylinder crankcase	Nm	20
BA49.10-P-1008-01AE	Screw/bolt, diesel particulate filter bracket to oil pan	Nm	20
BA49.10-P-1009-01AE	Bolt/nut, bracket of diesel particulate filter to lower diesel particulate filter	Nm	20
BA49.10-P-1011-01AE	Screw/bolt, bracket to transmission	Nm	39
BA49.10-P-1020-01AE	Screw/bolt, connecting pipe clamp to diesel particulate filter	Nm	35
BA49.10-P-1023-01AE	Screw/bolt, exhaust bracket to transmission	Nm	20
BA49.10-P-1024-01AE	Screw/bolt/nut, exhaust bracket to exhaust	Nm	20
BA49.10-P-1025-01AE	Screw/bolt, exhaust system to main floor panel	M8	Nm 20
		M10	Nm 50
BA49.10-P-1026-01AE	Nut, suspension ring to connecting pipe	Nm	20
BA49.10-P-1031-01AE	Nut, rear muffler clamp to connecting pipe	Nm	35
BA49.10-P-1035-01AE	Screw/bolt, cross connection left rear to right rear	Nm	20
BA49.10-P-1036-01AE	Screw/bolt, exhaust rubber mount holder to frame floor assembly/rear axle carrier	Nm	20

Nm Frame floor assembly

Number	Designation	Model 172	
BA61.10-P-1005-01A	Self-locking bolt, rear diagonal strut to frame floor	Nm	60
BA61.10-P-1006-01A	Self-locking bolt, front diagonal strut to frame floor or front axle carrier	Nm	60
BA61.10-P-1007-01A	Collar bolt connecting front reinforcement brace to frame floor	Nm	20

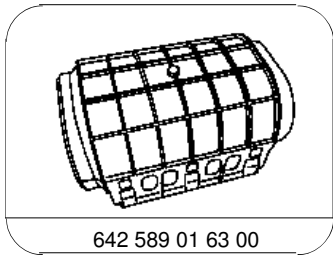
BA61.10-P-1008-01A	Collar bolt, rear reinforcement bridge to frame floor	Nm	20
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Nm Frame floor assembly

Number	Designation		Model 207.4
BA61.10-P-1007-01H	Screw/bolt, rear diagonal strut on spare wheel well	Nm	80
BA61.10-P-1008-01H	Screw/bolt, rear diagonal strut on longitudinal member	Nm	80
BA61.10-P-1009-01H	Screw/bolt, rear diagonal strut to bracket	Nm	17

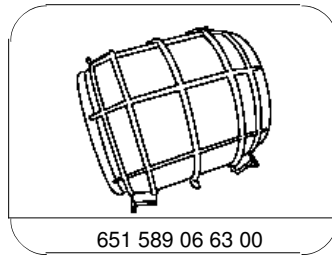
Repair materials

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



642 589 01 63 00

Assembly tool



651 589 06 63 00

Assembly tool