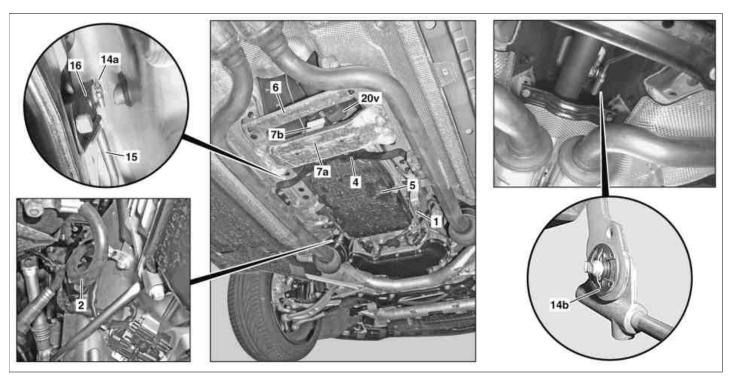
TRANSMISSION 722.9 (except 722.96) in MODEL 207
TRANSMISSION 722.9 (except 722.96/997) in MODEL 204

Modification notes

5.3.14	"Remove corrosion from crankshaft" added.	Step 28	
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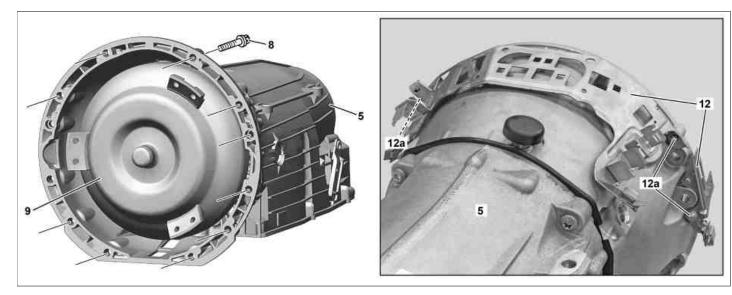


P27.10-2266-09

- 1 Heat shield
- 2 Ground cable
- 4 Exhaust system bracket
- 5 Transmission

- 7a Rear engine cross member
- 7b Rear engine mount
- 14a Retaining clamp
- 14b Fuse

- 15 Shift rod
- 16 Range selector lever
- 20v Front flex disk



P27.10-2485-08

5 Transmission8 Screw

9 Torque converter or start-up clutch

12a Screw

12 Bracket

⚠ Danger !	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
(1)	Information on preventing damage to electronic components due to electrostatic discharge		AH54.00-P-0001-01A
i	Notes on automatic transmission		AH27.19-P-0001-01NKB
XX	Remove/install		
1	Move selector lever into position "N"		
2	Release parking brake		
3	Detach ground line from battery	MODEL 204 with TRANSMISSION 722.9 (except 722.96/997)	AR54.10-P-0003CW
(1)	Notes on battery		AH54.10-P-0001-01A
	,	MODEL 207 with TRANSMISSION 722.9 (except 722.96)	AR54.10-P-0003EW
4	Secure vehicle on vehicle lift		AR00.60-P-0100CW
5.1	Remove engine compartment paneling	With gasoline engines	
		MODEL 204.9 with TRANSMISSION 722.9 (except 722.96/997)	AR61.20-P-1105CY
		MODEL 204.0/2/3, 207	AR61.20-P-1105EW
5.2	Remove bottom sections of soundproofing	On diesel engines	
		MODEL 204.0/2/3, 207	AR94.30-P-5300EW
5.3	Remove both lower engine compartment paneling	MODEL 204.9	
			AR61.20-P-1105CY
6	Remove air duct housing	TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 272.982 TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 272.982	AR09.20-P-0080CV
7	Disconnect electrical connectors of heated oxygen sensor and unclip from bracket	TRANSMISSION 722.9 (except 722.96) in MODEL 207 TRANSMISSION 722.9 (except 722.96/997) in MODEL 204.0/2/3 Except TRANSMISSION 722.9 (except 722.96) in MODEL 204.9 with ENGINE 274	7.1.105.20 T 00000 V

		TRANSMISSION 722.9 (except 722.96) in MODEL 207 TRANSMISSION 722.9 (except 722.96/997) in	AR07.52-P-5303FH
		MODEL 204.0/2/3 TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 278	AR07.52-P-5303ELB
		TRANSMISSION 722.9 (except 722.96) in MODEL 204 with ENGINE 156	AR07.52-P-5303CMG
		TRANSMISSION 722.9 (except 722.96) in MODEL 204 (except 204.05/06/25/95) with	AR07.52-P-5303CV
		ENGINE 272 TRANSMISSION 722.9 (except 722.96/995) in MODEL 207 with ENGINE 272	
		TRANSMISSION 722.9 (except 722.96/995) in MODEL 207 with ENGINE 273	
8.1	Detach bracket of diesel particulate filter between diesel particulate filter and transmission (5)	TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 642 TRANSMISSION 722.9 (except 722.96) in	
	uanomico (c)	MODEL 207 with ENGINE 651 TRANSMISSION 722.9 (except 722.96/997) in	
		MODEL 204 with ENGINE 642 TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 651	
		Nm Bolt, automatic transmission to engine	*BA27.40-P-1008-01A *BA49.10-P-1002-01AC
			BA45.10-F-1002-01AC
		TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 642 TRANSMISSION 722.9 (except 722.96/997) in	
		MODEL 204 with ENGINE 651	*BA49.10-P-1009-01AE
		TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 642	
0.0	Domaija pataliitis paguartar braskat at	TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 651	
8.2	Remove catalytic converter bracket at transmission (5)	TRANSMISSION 722.9 (except 722.96/995) in MODEL 207 TRANSMISSION 722.9 (except 722.96/997) in MODEL 204	
		MODEL 204 (except 204.9) with ENGINE 274 with TRANSMISSION 722.9 (except 722.96)	AR49.10-P-7100MR
		TRANSMISSION 722.9 (except 722.96/995) in MODEL 207 with ENGINE 271	AR49.10-P-7100CW
		TRANSMISSION 722.9 (except 722.96/995) in MODEL 207 with ENGINE 272 TRANSMISSION 722.9 (except 722.96/995) in	
		MODEL 207 with ENGINE 273 TRANSMISSION 722.9 (except 722.96/995) in	
		MODEL 207 with ENGINE 276 TRANSMISSION 722.9 (except 722.96/995) in MODEL 207 with ENGINE 278	
		TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 156	
		TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 272 TRANSMISSION 722.9 (except 722.96/997) in	
8.3	Remove catalytic converters	MODEL 204 with ENGINE 276 TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 278	
		MODEL 207 WILL ENGINE 270	AR49.10-P-7100CW
9	Remove heat shield (1) and disconnect electrical connector from electric controller unit		AR27.40-P-0700-01CW
10	Disconnect electrical connector from electric oil	Bolt, heat shield to transmission housing	*BA27.40-P-1014-01A
	pump and unclip electrical line from transmission (5)	ii iistaliou	
11	Release and disconnect electrical connector from intelligent servo module	TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 276.8 TRANSMISSION 722.994/995 in MODEL 207 with ENGINE 274 TRANSMISSION 722.995 in MODEL 204.9	
		with ENGINE 274 TRANSMISSION 722.994/995 in MODEL 207 with ENGINE 274	AR27.19-P-0550ECM

			T
12	Detach ground line (2) to transmission (5)	i ENGINE 156	
		The bracket for the oxygen sensor electrical connector is secured to the transmission (5) by	
		means of the screw/bolt of the ground line (2).	
		Nm Bolt, automatic transmission to engine	*BA27.40-P-1008-01A
		Nm Bolt, ground strap to transmission	*BA15.10-P-1002-05C
13	Remove exhaust system bracket (4)	TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 274	AR49.10-P-7100ECM
		TRANSMISSION 722.90 in MODEL 204 with ENGINE 272	AR49.10-P-7100CW
		TRANSMISSION 722.90 in MODEL 207 with ENGINE 272	
		ENGINE 642, 651	AR49.10-P-7100CWI
14.1	Remove pipe clamp securing diesel particulate filter to pipe	TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 642 TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 642	
			AR49.10-P-7100CWI
14.2	Remove diesel particulate filter	TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 651 TRANSMISSION 722.9 (except 722.96/997) in MODEL 204.0/2/3 with ENGINE 651	
			AR49.10-P-5501CD
14.3	Detach left and right catalytic converter from front exhaust pipes	TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 276.8	AB40 10 B 71000W
14.4	Detach exhaust system from exhaust	MODEL 204 with ENGINE 156 with	AR49.10-P-7100CW
14.4	manifolds	TRANSMISSION 722.90	
		without CODE P98 (Black Series) MODEL 204 with ENGINE 156 with	
		TRANSMISSION 722.93	
		without CODE P98 (Black Series)	
		MODEL 204, 207 with ENGINE 272.982 with TRANSMISSION 722.90	
		without CODE P98 (Black Series)	
		,	AR49.10-P-7100CW
14.5	Detach exhaust system from catalytic converter	TRANSMISSION 722.9 (except 722.96) in MODEL 204 (except 204.9) with ENGINE 274 TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 274	
		TRANSMISSION 722.9 (except 722.96) in MODEL 204 (except 204.9) with ENGINE 274 MODEL 207 with ENGINE 274 with	AR49.10-P-7100MR
		TRANSMISSION 722.9 (except 722.96)	AR49.10-P-7100ECM
		Protect the decoupling element using the	
		assembly tool. The decoupling element will otherwise be damaged.	
		i Installation: Replace clamp if necessary.	
15	Remove left exhaust line	Engine 272.982	
		_	AR14.20-P-1020-01CDE
		Nm MODEL 204, 207	*BA27.40-P-1008-01A
		Nm MODEL 204	*BA49.10-P-1031-01AC
		Nm MODEL 204	*BA49.10-P-1032-01AC
		Nm MODEL 207	*BA49.10-P-1040-01AE
		Nm MODEL 207	*BA49.10-P-1041-01AE
16	Support and lash down transmission (5)	Transmission jack gotis://H_00.10_01.0	
17	Remove rear engine crossmember (7a) with	Transmission platform gotis://A 25/35/49 02.0 TRANSMISSION 722.9 (except 722.96) in	AR22.10-P-1180CW
	rear engine mount (7b)	MODEL 207 TRANSMISSION 722.9 (except 722.96/997) in	
		MODEL 204 with ENGINE 272 TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 274	
		TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 276	
		TRANSMISSION 722.9 (except 722.96/997) in	
		MODEL 204 with ENGINE 642 TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 651	

(3)	Notes on bolted connections with self tapping screws		AH00.00-P-0007-01SF
		TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 156	AR22.10-P-1180CMG
18	Mark propeller shaft	i Attach color marking to identify the propeller shaft position at the flange of the transmission (5), in order to find the original factory installation position when reinstalling.	
19.1	Remove front flexible coupling (20v)	MODEL 204, 207 with TRANSMISSION 722.9 (except 722.96/995/997)	AR41.10-P-0050CW
19.2	Detach front flexible coupling (20v) from transmission output flange	TRANSMISSION 722.994/995 in MODEL 207 with ENGINE 274	AR41.10-P-0050CW
20	Detach shift rod (15) at range selector lever (16) of transmission (5)	TRANSMISSION 722.9 (except 722.904/96/995/997) in MODEL 207 TRANSMISSION 722.9 (except 722.96/995/997) in MODEL 204	
21	Detach torque converter or start-up clutch (9) from driver spider and pry off from driver spider uniformly using long wedge	i Installation: Replace retaining clamp (14a). TRANSMISSION 722.9 (except 722.93/96/997) in MODEL 204 TRANSMISSION 722.9 (except 722.96) in MODEL 207	
		TRANSMISSION 722.93 in MODEL 204 Do not use impact wrenches or compressed air tools. The threaded unions in the driver spider will otherwise be damaged. TRANSMISSION 722.9 (except 722.96/997) in MODEL 204, 207with angled threaded connection Installation: Replace screw/bolts.	AR27.51-P-0400-01W
		TRANSMISSION 722.90, 722.99 (except 722.997) in MODEL 204, 207	*BA27.20-P-1002-01C *BA27.51-P-1001-01A
		TRANSMISSION 722.93 in MODEL 204 Socket wrench bit Long wedge	*001589650900 *115589035900
22	Detach oil lines from transmission (5) and oil pan and place to one side	TRANSMISSION 722.9 (except 722.96/995/997) in MODEL 204 (except 204.077/277/377) TRANSMISSION 722.995 in MODEL 204.9 with ENGINE 274	AR27.55-P-0600CV
		TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 156	AR27.55-P-0600CMG
		TRANSMISSION 722.995 in MODEL 204 (except 204.9) with ENGINE 274 TRANSMISSION 722.995 in MODEL 207 with ENGINE 274.9	AR27.55-P-0600MR
		TRANSMISSION 722.9 (except 722.96/995) in MODEL 207 Before starting work the area around the oil lines must be thoroughly cleaned in the	AR27.55-P-0600EV
		area around the separation points on the transmission (5). Even the smallest dirt particles in the hydraulic components can lead to malfunctions and a total failure of the transmission (5).	
		i TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 276.8 Also detach the oil lines from the refrigerant compressor.	
		i Do not kink or bend the oil lines. i Seal off the connections on the transmission (5) and the oil lines using stop plugs.	**************
		Record plug	*129589009100

23	Detach starter from transmission (5)	TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 156	AR15.30-P-7100CMG
		TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 271	AR15.30-P-7100CW
		TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 272 TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 273 TRANSMISSION 722.9 (except 722.96/997) in	AR15.30-P-7100CV
		MODEL 204 with ENGINE 272	
		TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 274 TRANSMISSION 722.9 (except 722.96/997) in	AR15.30-P-7100MR
		MODEL 204 with ENGINE 274 TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 276	AR15.30-P-7100FH
		TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 276	
		TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 278	AR15.30-P-7100ELB
		TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 642	AR15.30-P-7100CO
		TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 642	AR15.30-P-7100SXI
		TRANSMISSION 722.9 (except 722.96) in MODEL 207 with ENGINE 651 TRANSMISSION 722.9 (except 722.96/997) in MODEL 204 with ENGINE 651	AR15.30-P-7100CD
		Place starter to the side with lines connected and secure to prevent it falling down.	
24	Detach bracket (12) from transmission (5); to	TRANSMISSION 722.9 (except 722.96) in	
	do so, screws/remove bolts (12a)	MODEL 207 with ENGINE 276.8	*D * 0.7 * 40 D * 10.2 * 0.1 *
0.5		Bracket, wiring harness to automatic transmission	*BA27.40-P-1024-01A
25	Support engine at the oil pan	ENGINE 156	
		When the transmission (5) is removed, the engine must be propped up at the oil pan in order to prevent the engine from tipping over.	
26	Remove bolts (8) and remove transmission (5) downwards	Secure the torque converter or start-up clutch (9) to prevent them from falling out. The torque converter or start-up clutch (9) can otherwise be damaged.	
		i Installation: Align the bores of the torque converter or start-up clutch (9) with the threaded unions in the driver spider.	4D407 40 D 4000 044
27	Pomovo tarquo convertor or ctart un alutali (0)	Bolt, automatic transmission to engine	*BA27.40-P-1008-01A
21	Remove torque converter or start-up clutch (9) using grab handles	If necessary TRANSMISSION 722.9 (except 722.93/96/997)	AR27.20-P-0500-01W
		in MODEL 204 TRANSMISSION 722.9 (except 722.96) in MODEL 207	
		TRANSMISSION 722.93 in MODEL 204	AR27.51-P-0400-02AMG
		TRANSMISSION 722.9 (except 722.93)	*BE27.20-P-1001-01E
		TRANSMISSION 722.93 in MODEL 204	*BE27.51-P-1001-02A
		Multi-purpose paste	*BR00.45-Z-1009-06A
		Handles	*168589006200
20	Pamova correction from availabett	Parallel rest	*126589043100
28	Remove corrosion from crankshaft	Assembly cleaner	*BR00.45-Z-1028-04A
		Multi-purpose paste	*BR00.45-Z-1009-06A
4	Check		
29	Check threaded unions in driver spider	If threaded unions are damaged or loose ↓	
		Install a new driver spider. MODEL 207 with ENGINE 642 with TRANSMISSION 722.9 (except 722.96)	AR03.30-P-8001SXI

		MODEL 204 with ENGINE 274 with TRANSMISSION 722.9 (except 722.96/997) MODEL 207 with ENGINE 274 with TRANSMISSION 722.9 (except 722.96)	AR03.30-P-8001MR
		MODEL 204 with ENGINE 276 with TRANSMISSION 722.9 (except 722.96/997) MODEL 207 with ENGINE 276 with	AR03.30-P-8001FH
		TRANSMISSION 722.9 (except 722.96) MODEL 207 with ENGINE 278 with TRANSMISSION 722.9 (except 722.96)	
		MODEL 207 with ENGINE 271 with TRANSMISSION 722.9 (except 722.96)	AR03.30-P-8001CW
		MODEL 204 with ENGINE 272 with TRANSMISSION 722.9 (except 722.96/997)	AR03.30-P-8001CV
		MODEL 207 with ENGINE 272 with TRANSMISSION 722.9 (except 722.96) MODEL 207 with ENGINE 273 with TRANSMISSION 722.9 (except 722.96)	
		MODEL 204 with ENGINE 642 with	AR03.30-P-8001CO
		TRANSMISSION 722.9 (except 722.96/997) MODEL 204 with ENGINE 156 with	AR03.30-P-8001CMG
		TRANSMISSION 722.9 (except 722.96/997) MODEL 204 with ENGINE 651 with	AR03.30-P-8001CD
		TRANSMISSION 722.9 (except 722.96/997) MODEL 207 with ENGINE 651 with	
		TRANSMISSION 722.9 (except 722.96)	
30	Install in the reverse order		
31	Fill transmission (5) with transmission oil	After replacing the transmission (5) or if transmission oil has been drained off.	
			AR27.00-P-0270W
32	Check transmission oil level and correct if necessary		AR27.00-P-0270W
33	Read out fault memory using the diagnostic system and clear if necessary		
⊯ AD	,		AD00.00-P-2000-04A
34	Perform transmission adaptation using diagnostic system	After replacement or repair of transmission (5)	
35	Reset data on service life of torque converter lockup clutch using diagnostic system	After replacing torque converter (9)	
⚠ Danger !	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
36	Perform engine test run and check transmission (5) for function and leaks		

Test values for torque converter

Number	Designation				TRANSMISSION 722.9
BE27.20-P-1001-01E	Installed height of torque converter	Distance, bolt flange to transmission housing flange	Helical screwed connection	mm	9,5
			See picture		AR27.20-P-0500-01 W
			Axial screwed connection	mm	19,5

Test values for start up clutch

Number	Designation		TRANSMISSION 722.93
BE27.51-P-1001-02A	Installed height of start up clutch	Distance, bolt flange mm to transmission housing flange	9,5
		See picture	_

Nm Ground strap

Number	Designation			MODEL 204	MODEL 207
BA15.10-P-1002-05C	Bolt, ground strap to transmission	M8	Nm	27	16
		M10	Nm	_	-

Nm Torque converter

Number	Designation				TRANSMISSION 722.9
BA27.20-P-1002-01C	Bolt, torque converter to drive plate	Straight threaded connection	M8	Nm	42
		Angled threaded connection	Stage 1	Nm	4
			Stage 2	Nm	30
			Stage 3	۷°	90

Nm Housing

Number	Designation			TRANSMISSION 722.9
BA27.40-P-1008-01A	Bolt, automatic transmission to engine	M10×40	Nm	38
		M10×45	Nm	38
		M10×90	Nm	38
		M12	Nm	_

Nm Housing

Number	Designation		TRANSMISSION 722.9
BA27.40-P-1014-01A	Bolt, heat shield to transmission housing	Nm	9

Nm Housing

Number	Designation	TRANSMISSION 722.9
BA27.40-P-1024-01A	Bracket, wiring harness to automatic transmission Nm	10

Nm Start up clutch

Number	Designation			TRANSMISSION 722.93
BA27.51-P-1001-01A	Bolt, start up clutch to driver	Stage 1	Nm	4
		Stage 2	Nm	30
		Stage 3	Δ°	90

Nm Exhaust system

Number	Designation		ENGINE 642, 646, 651 in MODEL 204
BA49.10-P-1002-01AC	Bolt connecting catalytic converter to turbocharger	Nm	20

Nm Exhaust system

Number	Designation	ENGINE 642, 651 in MODEL 207
BA49.10-P-1009-01AE	Bolt/nut, bracket of diesel particulate filter to lower diesel particulate Nm filter	20

Nm Exhaust system

Number	Designation	ENGINE 156, 271, 272 in MODEL 204
BA49.10-P-1031-01AC	Bolt, flange for exhaust gas recirculation lines to exhaust gas Nm recirculation positioner	9

Nm Exhaust system

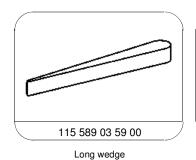
Number	Designation		ENGINE 156, 271, 272 in MODEL 204
BA49.10-P-1032-01AC	Bolt, exhaust gas recirculation line clamp to catalytic converter	Nm	9

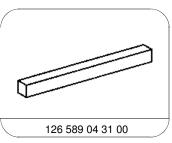
Nm Exhaust system

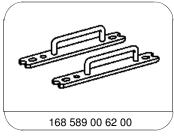
Number	Designation	ENGINE 271, 272, 273, 276, 278 in MODEL 207
BA49.10-P-1040-01AE	Bolt, flange for exhaust gas recirculation lines to exhaust gas Nm recirculation positioner	9

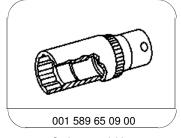
Nm Exhaust system

Number	Designation		ENGINE 271, 272, 273, 276, 278 in MODEL 207
BA49.10-P-1041-01AE	Bolt, clamp for exhaust gas recirculation line to catalytic converter Nn	า	9





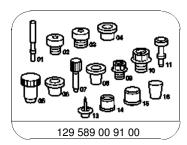




Parallel rest

Handles

Socket wrench bit



Record plug

Repair materials

Number	Designation	Order number
BR00.45-Z-1009-06A	Multi-purpose paste	A 000 989 80 51 10
BR00.45-Z-1028-04A		Adolf Würth GmbH & Co. KG Reinhold-Würth-Str. 12-17 74653 Künzelsau-Gaisbach Germany Tel. +49 7940 15-0 Fax +49 7940 15-1000 www.wuerth.de