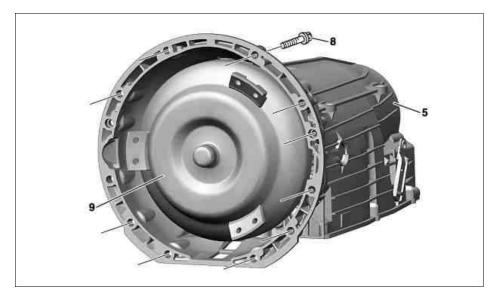
Transmission 7
Transmission 7

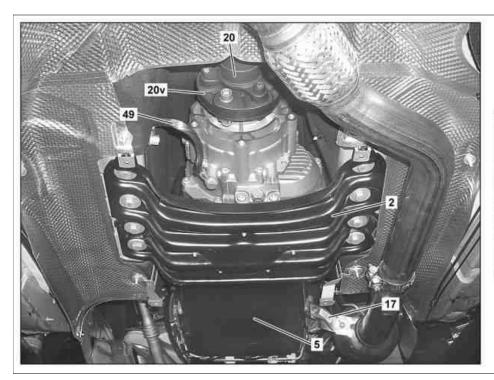
722.96 in model 204, 207.3, 212, 218

722.97 in model 212, 218

- 5 Transmission
- 8 Screws (10 ea.)
- 9 Torque converter



P27.40-2038-05





P27.10-2286-09

Shown on model 204 with engine 651

- 2 Rear engine cross member
- 5 Transmission
- 7 Driven plate spider

- 7a Threaded unions
- 17 Front exhaust pipe holder
- 20 Propeller shaft

- 20v Front flex disk
- 49 Ground cable

	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
⚠ Warning	Risk of injury . Moving parts can pinch, crush or, in extreme cases even sever extremities.	No parts of the body or limbs should be within the operating area of mechanical components when moving components.	AS00.00-Z-0009-01A
⚠ Warning	Risk of injury . Skin or eye injuries may result when handling hot or glowing objects.	Wear protective gloves, protective clothing and safety glasses, if necessary.	AS00.00-Z-0002-01A
⚠ Caution	Risk of injury to skin and eyes due to handling of transmission oil. Health risk caused by swallowing transmission oil	Wear protective gloves, protective clothing and safety glasses. Do not pour transmission oil into beverage bottles.	AS00.40-Z-0001-01A
⚠ Caution	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 threaded connections fastened using a tightening angle-based tightening process		AH00.00-P-0020-01A
	Information on preventing damage to electronic components due to electrostatic discharge		AH54.00-P-0001-01A
	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A
	Notes on automatic transmission		AH27.19-P-0001-01NKB
XX	Remove/install		
1	Shift transmission(5) to neutral position		
2	Release parking brake and secure vehicle to prevent it rolling away		
3	Disconnect ground line from battery Notes on battery	Model 204 with transmission 722.96	AR54.10-P-0003CW AH54.10-P-0001-01A
		Model 207.3, 212, 218 with transmission 722.96 Model 212, 218 with transmission 722.97	AR54.10-P-0003EW
4	Secure vehicle on vehicle lift	Model 204, 207.3 with transmission 722.96	AR00.60-P-0100CW
		Model 212, 218 with transmission 722.96 Model 212, 218 with transmission 722.97	AR00.60-P-0100EWS
5	Remove catalytic converters	Model 212, 218 with engine 642 with transmission 722.96	AR49.10-P-7100EWI
		Model 212, 218 with engine 651 with transmission 722.96	
		Model 204 with engine 642 with transmission 722.96 Model 204 with engine 651 with transmission	AR49.10-P-7100CWI
		722.96 Model 204 with engine 272 with transmission 722.96 Model 204, 207, 3 with engine 276 with	AR49.10-P-7100CW
		Model 204, 207.3 with engine 276 with transmission 722.96 Model 212 with engine 272 with transmission	AR49.10-P-7100EW
		722.96 Model 212 with engine 273 with transmission 722.96	
		Model 212, 218 with engine 157 with transmission 722.97 Model 212, 218 with engine 276 with transmission 722.96	AR49.10-P-7100EL
		Model 212, 218 with engine 278 with transmission 722.96 Model 204 with engine 274 with transmission	AR49.10-P-7100MR
		722.96 i Installation: Only install lower engine compartment paneling after leak test.	CI (40. 10-F-7 100IVIN
6	Remove the diesel particulate filter	Model 204, 212 with engine 651 with transmission 722.96	AR14.40-P-1000OMD
		Model 204 with engine 642 with transmission 722.96 as of model year 2009	AR14.40-P-1000CWI
		Model 212, 218 with engine 642 with transmission 722.96	AR14.40-P-1000OGE

7	Remove front bracket for exhaust pipe (17) between engine and transmission (5)	Model 204 with engine 272 with transmission 722.96 Model 204, 212 with engine 651 with transmission 722.96 Model 204, 212, 218 with engine 642 with transmission 722.96	
		Mm Model 204 with engine 272 with transmission 722.96 Model 204 with engine 642 with transmission 722.96 Model 204 with engine 651 with transmission 722.96Bolt, exhaust pipe bracket to transmission	*BA49.10-P-1008-01AC
		Model 204 with engine 272 with transmission 722.96 Model 204 with engine 642 with transmission 722.96 Model 204 with engine 651 with transmission 722.96Bolt, exhaust pipe bracket to exhaust pipe	*BA49.10-P-1009-01AC
		Mm Model 212 with engine 651 with transmission 722.96 Model 212, 218 with engine 642 with transmission 722.96Bolt, exhaust system bracket to transmission	*BA49.10-P-1023-01AE
		Mm Model 212 with engine 651 with transmission 722.96 Model 212, 218 with engine 642 with transmission 722.96Bolt/nut, exhaust system bracket to exhaust system	*BA49.10-P-1024-01AE
8.1	Remove bracket for exhaust pipe from transmission (5)	Model 204, 207.3 with engine 276 with transmission 722.96	
	transmission (3)	Mm Model 204 with engine 276 with transmission 722.96Bolt, exhaust system bracket to transmission	*BA49.10-P-1035-01AC
		Mm Model 204 with engine 276 with transmission 722.96Bolt, exhaust system bracket to exhaust flange	*BA49.10-P-1036-01AC
		Mm Model 207.3 with engine 276 with transmission 722.96Bolt, exhaust system bracket to transmission	*BA49.10-P-1023-01AE
		Mm Model 207.3 with engine 276 with transmission 722.96Bolt/nut, exhaust system bracket to exhaust system	*BA49.10-P-1024-01AE
8.2	Remove rear bracket for exhaust pipe from transmission (5)	Model 204, 212 with engine 651 with transmission 722.96 Model 204, 212, 218 with engine 642 with transmission 722.96	
		Model 204 with engine 642 with transmission 722.96 Model 204 with engine 651 with transmission 722.96Bolt, exhaust system bracket to transmission	*BA49.10-P-1035-01AC
		Mm Model 204 with engine 642 with transmission 722.96 Model 204 with engine 651 with transmission 722.96Bolt, exhaust system bracket to exhaust flange	*BA49.10-P-1036-01AC
		Mm Model 212 with engine 651 with transmission 722.96 Model 212, 218 with engine 642 with transmission 722.96Bolt, exhaust system bracket to transmission	*BA49.10-P-1023-01AE
		Mm Model 212 with engine 651 with transmission 722.96 Model 212, 218 with engine 642 with transmission 722.96Bolt/nut, exhaust system bracket to exhaust system	*BA49.10-P-1024-01AE
9	Mark position of front flexible coupling (20v) relative to transmission (5)	Installation: Restore factory installation position. Otherwise, drive train vibrations will occur.	
10	Detach front flex disk (20v) from transmission (5)	Model 204, 207.3 with transmission 722.96	AR41.10-P-0050CW

11		1 The front flexible coupling (20v) remains on the propeller shaft (20).	
	Remove heat shield	Model 204, 207.3 with transmission 722.96	AR27.40-P-0700-01CW
	Tomove near smela	Model 212, 218 with transmission 722.96 Model 212, 218 with transmission 722.97	AR27.40-P-0700-01EW
		Nm Bolt, heat shield to transmission housing	*BA27.40-P-1014-01A
12	Release and disconnect electrical connection from electric controller unit		
13	Detach ground line (49) from transmission (5)	Nm Screw/bolt, ground strap to transmission	*BA15.10-P-1002-05C
14	Support transmission (5) and secure it to prevent it from falling down	colomizati, gradita attap to transmission	
¥ WS	000 588 11 62 00 Major assembly mount		WS01.00-P-0092B
₩S	000 588 10 62 00 Support plate		WS26.00-P-3309B
15	Remove rear engine cross member (2) Notes on bolted connections with self tapping screws		AR22.10-P-1180CW AH00.00-P-0007-01SF
16.1	Remove shift rod from transmission selector lever (5)	Model 204, 207.3 with transmission 722.96	
		i Installation: Replace retaining clamp.	
16.2	Release and disconnect electric line from	Model 212, 218 with transmission 722.96	
	intelligent servo module for DIRECT SELECT (A80)	Model 212, 218 with transmission 722.97	
17	Release and disconnect electric line from oil	Transmission 722.96 in model 204, 207.3, 212,	
	pump	with code B03 (ECO start/stop function) Transmission 722.97 in model 212, 218 with code B03 (ECO start/stop function)	
18	Unclip electric line from transmission (5) and se outside the working area	tTransmission 722.96 in model 204, 207.3, 212, 218 with code B03 (ECO start/stop function)	
		Transmission 722.97 in model 212, 218 with code B03 (ECO start/stop function)	
19	Release front axle differential propeller shaft (20) from front axle differential and fix into place		
	on transmission (5)	Transmission 722.97 in model 212, 218 Transmission 722.96 in model 204, 207.3 Transmission 722.96 in model 212.08/09/28/29,	AR41.10-P-0070CWX AR41.10-P-0070EWX
00		218.39/99 Transmission 722.97 in model 212, 218	
20	Unscrew drain screw from oil pan and drain transmission oil	When replacing the transmission (5) or the torque converter (9).	
		I Installation: Replace seal. If transmission oil is burnt or contains excessive wear debris.	
		Flush transmission (5), torque converter (9), oil lines and oil cooler.	
		Nm Drain screw to oil pan	AR27.55-P-0100B *BA27.10-P-1001-03D
04	Domovo hypotest of algorithm of the com-		DM21.10-F-1001-03D
21 	Remove bracket of electrical wiring harness from transmission (5) Remove oil lines from transmission (5), transfer	Transmission 722.96 in model 204, 212 with engine 272	AR27.55-P-0600CWX
23	case and oil pan and place to one side Detach torque converter (9) from star-shaped		AR27.20-P-0100-01A
۷.	drive plate (7) and pry off uniformly	(3)	71121.20-F-0100-01A
		Do not use an impact wrench/driver or a compressed-air tool.	
		Otherwise the star-shaped drive plate (7) threaded unions (7a) can be damaged.	
		Nm Bolt, torque converter to driver spider	*BA27.20-P-1002-01C
		Socket wrench bit	*001589650900
	l l		*115589035900
		ダ I ong wedge	113303033300
24	Remove starter from transmission (5)	Transmission 722.96 in model 207 with engine 276.8	AR15.30-P-7100ELA

		Model 212 with engine 272 with transmission 722.96 Model 212 with engine 273 with transmission	AR15.30-P-7100EW
		722.96 Model 204 with engine 274 with transmission	AR15.30-P-7100MR
		722.96 Model 204, 207 with engine 276 (except 276.8) with transmission 722.96	AR15.30-P-7100FH
		Model 212, 218 with engine 276 with transmission 722.96	AR15.30-P-7100EL
		Model 212, 218 with engine 157 with transmission 722.97	AR15.30-P-7100ELB
		Model 212, 218 with engine 278 with transmission 722.96	
		Model 204 with engine 642 with transmission 722.96	AR15.30-P-7100CWX
		Model 212, 218 with engine 642 with transmission 722.96	AR15.30-P-7100SXI
		Model 204 with engine 651 with transmission 722.96	AR15.30-P-7100CD
		Model 212, 218 with engine 651 with transmission 722.96	
		i Place starter with attached lines to one side and secure against falling down.	
25	Remove bolt (8)	i Installation: Fasten bracket of electrical feed lines onto transmission (5).	
		Bolt, automatic transmission to engine	*BA27.40-P-1008-01A
26 ₩ S	Remove transmission (5) downwards 000 588 11 62 00 Major assembly mount		WS01.00-P-0092B
₩S	000 588 10 62 00 Support plate		WS26.00-P-3309B
		(3)	
		Secure torque converter(9) against falling down Otherwise, the torque converter (9) will drop out and be damaged.	
		i Installation: Align torque converter bores (9) to threaded unions (7a) in star-shaped drive	
27	Remove torque converter (9)	plate (7). If necessary.	
		Installed height of torque converter	AR27.20-P-0500-01W *BE27.20-P-1001-01E
		Multi-purpose paste	*BR00.45-Z-1009-06A
		Y Handles	*168589006200
		Parallel rest	*126589043100
28	Remove corrosion from crankshaft		AR03.20-P-1000-01A
		Assembly cleaner	*BR00.45-Z-1028-04A
		Multi-purpose paste	*BR00.45-Z-1009-06A
	Check		
29	Check threaded unions (7a) in drive plate spic (7)	ler If threaded unions (7a) are damaged or loose	
		√ Install a new star-shaped drive plate (7).	
		Engine 272 in model 212 with transmission 722.96	AR03.30-P-8001EW
		Engine 273 in model 212 with transmission 722.96	AB02 20 B 0004CV
		Engine 272 in model 204 with transmission 722.96	AR03.30-P-8001CV
		Engine 274 in model 204 with transmission 722.96	AR03.30-P-8001MR
		Engine 276 in model 204, 207 with transmission 722.96	
		Engine 157 in model 212, 218 with transmission 722.97 Engine 276 in model 212, 218 with transmission	
		722.96 Engine 278 in model 212, 218 with transmission	
		722.96 Engine 642 in model 204 with transmission	AR03.30-P-8001CO
		722.96 Engine 642 in model 212, 218 with transmission	AR03.30-P-8001SXI
© Daimler &C 3/31/04 1/07/40	ar27.10-p-0500cwx. Remove/install transmission with torque con	722.96	Page 5 of 9
		VOLUM .	

		Engine 651 in model 204, 212, 218 with transmission 722.96	AR03.30-P-8001CD
30	Check rear engine mount for wear and damage	↓	
		Replace rear engine mount.	AR22.10-P-1180CW
31	Prefill transfer case with transmission oil	Transmission 722.96 in model 204, 207.3, 212, 218 Transmission 722.97 in model 212, 218 When replacing transmission (5).	
		Model 204 with engine 642 with transmission 722.96 Model 204 with engine 651 with transmission 722.96 Model 204, 207.38 with engine 276 with transmission 722.96 Model 204.9 with engine 274 with transmission 722.96	AR28.10-P-1004CWX
		Model 212, 218 with transmission 722.96 Model 212, 218 with transmission 722.97	AR28.10-P-1004EW
32	Install in the reverse order		
1	Check		
33	Add transmission oil to transmission (5), check and correct transmission oil level	When replacing the transmission (5) or if transmission oil is drained off.	
34	Perform transmission adaptation using diagnostic system	After replacement or repair of transmission(5).	AR27.00-P-0270SYZ
F AD	diagnostic system		AD00.00-P-2000-04A
35	Reset data on service life of torque converter lockup clutch using diagnostic system	After replacement of torque converter(9).	
AD AD			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. Perform engine test run, check transfer case and transmission (5) for leak tightness and	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
37	proper operation	Transmission 722 06 in model 204, 207, 2, 242	
31	Install lower engine compartment paneling	Transmission 722.96 in model 204, 207.3, 212, 218 Transmission 722.97 in model 212, 218 Transmission 722.96 in model 204.0, 212 with engine 272 Transmission 722.96 in model 204.0/3, 207.3, 212, 218 with engine 276 Transmission 722.96 in model 212 with engine 273	
		Transmission 722.96 in model 212, 218 with engine 278 Transmission 722.97 in model 212, 218 with engine 157	
		Transmission 722.96 in model 204.9 with engine 272 Transmission 722.96 in model 204.9 with engine 274 Transmission 722.96 in model 204.9 with engine 276 Transmission 722.96 in model 204.9 with engine 642	AR61.20-P-1105CY
		Transmission 722.96 in model 204.9 with engine 651 Transmission 722.96 in model 204.0/2, 212, 218 with engine 642 Transmission 722.96 in model 204.0/2, 212, 218 with engine 651	AR94.30-P-5300EW

Test values for torque converter

Number	Designation	Transmission 722.9
		(except 722.93)

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	mm	19,5

Nm Ground strap

Number	Designation		.,	Model 204	Model 207
BA15.10-P-1002-05C	Screw/bolt, ground strap to transmission	M8	Nm	27	16
		M10	Nm	-	-

Nm Ground strap

Number	ber Designation			Model 212	Model 218
BA15.10-P-1002-05C	Screw/bolt, ground strap to transmission	M8	Nm	25	-
		M10	Nm	39	39

Nm Automatic transmission oil pan

Number	Designation		Transmission 722.9
BA27.10-P-1001-03D	Drain screw to oil pan	٧m	22

Nm Torque converter

Number	Designation				Transmission 722.9
BA27.20-P-1002-01C	Bolt, torque converter to driver spider	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 Exhaust system

Number	Designation		Engine 156, 271, 272 in model 204	Engine 642, 646, 651 in model 204
BA49.10-P-1008-01AC	Bolt, exhaust pipe bracket to transmission	Nm	20	20

Nm Exhaust system

Number	Designation		Engine 156, 271, 272 in model 204	Engine 642, 646, 651 in model 204
BA49.10-P-1009-01AC	Bolt, exhaust pipe bracket to exhaust pipe	Nm	20	20

Nm Exhaust system

Number	Designation		, ,	Engine 642, 651 in model 212
BA49.10-P-1023-01AE	Bolt, exhaust system bracket to transmission	Nm	20	20

Nm Exhaust system

Number	Designation		Engine 642, 651 in model 218
BA49.10-P-1023-01AE	Bolt, exhaust system bracket to transmission	Nm	20

Nm Exhaust system

Number	Designation		Engine 271, 272, 273, 276, 278 in model 207	Engine 642, 651 in model 212
BA49.10-P-1024-01AE	Bolt/nut, exhaust system bracket to exhaust system	Nm	20	20

Nm Exhaust system

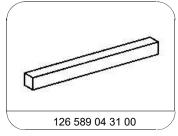
Number	Designation		Engine 642, 651 in model 218
BA49.10-P-1024-01AE	Bolt/nut, exhaust system bracket to exhaust system	٧m	20

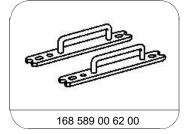
Nm Exhaust system

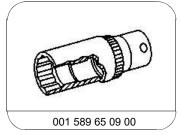
Number	Designation		Engine 276 in model	Engine 642, 646,
			204	651 in model 204
BA49.10-P-1035-01AC	Bolt, exhaust system bracket to transmission	Nm	25	_

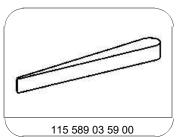
Nm Exhaust system

Number	Designation		Engine 276 in model 204	Engine 642, 646, 651 in model 204
BA49.10-P-1036-01AC	Bolt, exhaust system bracket to exhaust flange	١m	35	_









Parallel rest Handles Socket wrench bit Long wedge

Repair materials

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