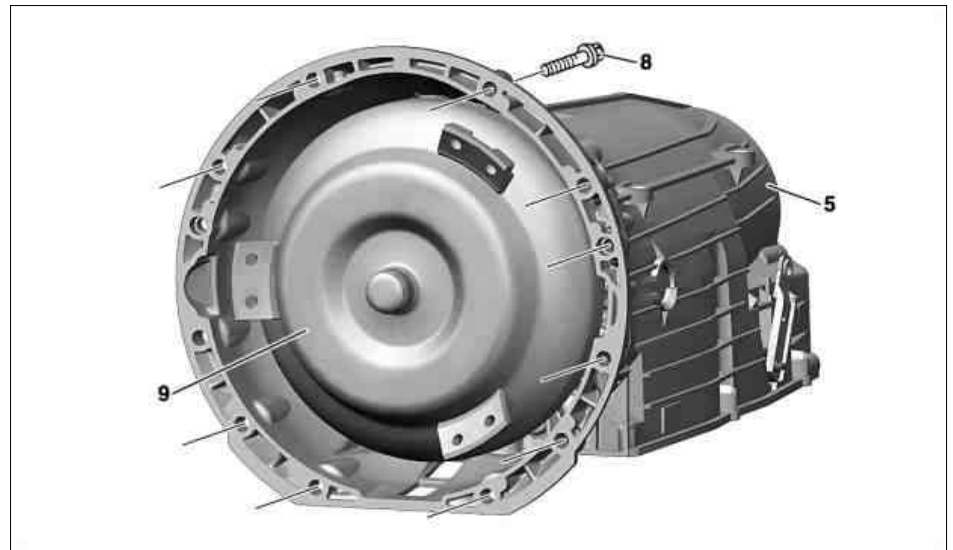
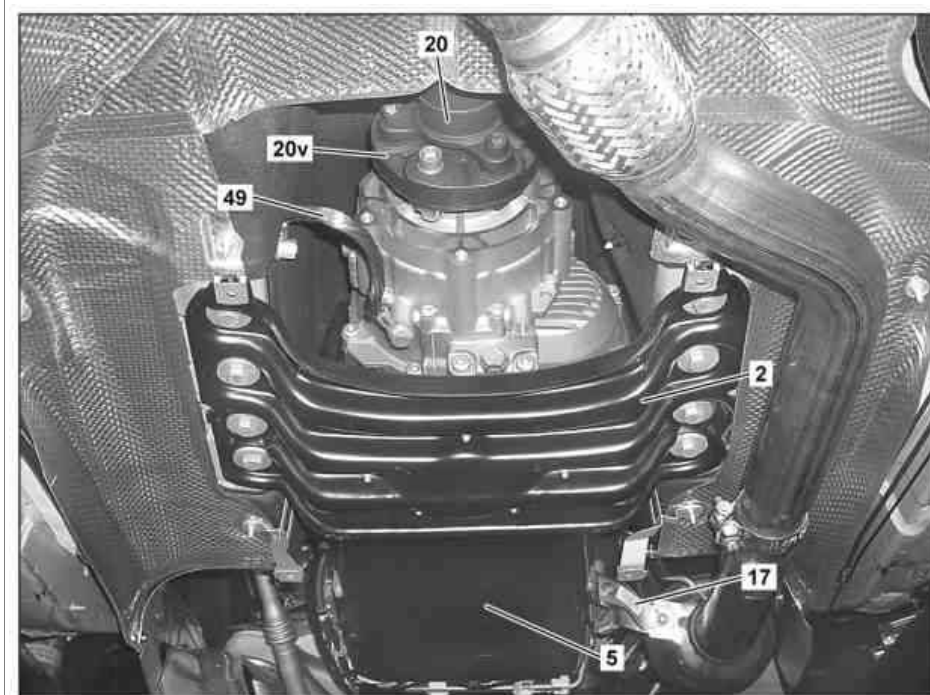


Transmission 722.96 in model 204, 207.3, 212, 218  
 Transmission 722.97 in model 212, 218

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	7a	Threaded unions
5	Transmission	17	Front exhaust pipe holder
7	Driven plate spider	20	Propeller shaft





20v	Front flex disk
49	Ground cable

	<b>Risk of death</b> 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	<b>Risk of injury.</b> 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	<b>Risk of injury.</b> 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	<b>Risk of injury</b> 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	<b>Risk of injury</b> 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
	<b>Remove/install</b>		
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 Model 207.3, 212, 218 with transmission 722.96 Model 212, 218 with transmission 722.97	AR54.10-P-0003CW AH54.10-P-0001-01A AR54.10-P-0003EW
4	Secure vehicle on vehicle lift	Model 204, 207.3 with transmission 722.96 Model 212, 218 with transmission 722.96 Model 212, 218 with transmission 722.97	AR00.60-P-0100CW AR00.60-P-0100EWS
5	Remove catalytic converters	Model 212, 218 with engine 642 with transmission 722.96 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 722.96 Model 204 with engine 272 with transmission 722.96 Model 204, 207.3 with engine 276 with transmission 722.96 Model 212 with engine 272 with transmission 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 Model 212, 218 with engine 278 with transmission 722.96 Model 204 with engine 274 with transmission 722.96  <b>Installation:</b> Only install lower engine compartment paneling after leak test.	AR49.10-P-7100EWI AR49.10-P-7100CWI AR49.10-P-7100CW AR49.10-P-7100EW AR49.10-P-7100EL AR49.10-P-7100MR
6	Remove the diesel particulate filter	Model 204, 212 with engine 651 with transmission 722.96 Model 204 with engine 642 with transmission 722.96 as of model year 2009 Model 212, 218 with engine 642 with transmission 722.96	AR14.40-P-1000OMD AR14.40-P-1000CWI AR14.40-P-1000OGE

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

		Model 212, 218 with transmission 722.96 Model 212, 218 with transmission 722.97  The front flexible coupling (20v) remains on the propeller shaft (20).	AR41.10-P-0050EW
11	Remove heat shield	Model 204, 207.3 with transmission 722.96 Model 212, 218 with transmission 722.96 Model 212, 218 with transmission 722.97  Bolt, heat shield to transmission housing	AR27.40-P-0700-01CW AR27.40-P-0700-01EW *BA27.40-P-1014-01A
12	Release and disconnect electrical connection from electric controller unit		
13	Detach ground line (49) from transmission (5)	 Screw/bolt, ground strap to transmission	*BA15.10-P-1002-05C
14	Support transmission (5) and secure it to prevent it from falling down 000 588 11 62 00 Major assembly mount  WS  WS 000 588 10 62 00 Support plate		WS01.00-P-0092B 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  <b>Installation:</b> Replace retaining clamp.	
16.2	Release and disconnect electric line from intelligent servo module for DIRECT SELECT (A80)	Model 212, 218 with transmission 722.96 Model 212, 218 with transmission 722.97	
17	Release and disconnect electric line from oil pump	Transmission 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)	
18	Unclip electric line from transmission (5) and set outside the working area	Transmission 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 722.96 in model 204, 207.3, 212, 218 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, 218.39/99 Transmission 722.97 in model 212, 218	AR41.10-P-0070CWX AR41.10-P-0070EWX
20	Unscrew drain screw from oil pan and drain transmission oil	When replacing the transmission (5) or the torque converter (9).  <b>Installation:</b> Replace seal. If transmission oil is burnt or contains excessive wear debris.  ↓ Flush transmission (5), torque converter (9), oil lines and oil cooler.   Drain screw to oil pan	AR27.55-P-0100B *BA27.10-P-1001-03D
21	Remove bracket of electrical wiring harness from transmission (5)	Transmission 722.96 in model 204, 212 with engine 272	
22	Remove oil lines from transmission (5), transfer case and oil pan and place to one side		AR27.55-P-0600CWX
23	Detach torque converter (9) from star-shaped drive plate (7) and pry off uniformly	 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.  Bolt, torque converter to driver spider  Socket wrench bit  Long wedge	AR27.20-P-0100-01A  *BA27.20-P-1002-01C *001589650900 *115589035900
24	Remove starter from transmission (5)	Transmission 722.96 in model 207 with engine 276.8 Model 204 with engine 272 with transmission 722.96	AR15.30-P-7100ELA AR15.30-P-7100CV

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

		Engine 651 in model 204, 212, 218 with transmission 722.96	AR03.30-P-8001CD
30	Check rear engine mount for wear and damage	If rear engine mount is worn or damaged. ↓ 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 Model 212, 218 with transmission 722.96 Model 212, 218 with transmission 722.97	AR28.10-P-1004CWX AR28.10-P-1004EW
32	Install in the reverse order		
	<b>Check</b>		
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.	AR27.00-P-0270SYZ
34	Perform transmission adaptation using diagnostic system	After replacement or repair of transmission(5).	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).	AD00.00-P-2000-04A
			
 Warning	<b>Risk of accident</b> from vehicle starting off by itself when engine running. <b>Risk of injury</b> (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, check transfer case and transmission (5) for leak tightness and proper operation		
37	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 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	AR61.20-P-1105EW AR61.20-P-1105CY AR94.30-P-5300EW

#### Test values for torque converter

Number	Designation	Transmission 722.9
BE27.20-P-1001-01E	Installed height of torque converter to transmission housing flange 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

**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	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		Nm 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	∠°	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 271, 272, 273, 276, 278 in model 207	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

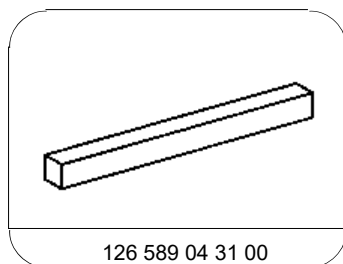
Number	Designation		Engine 642, 651 in model 218
BA49.10-P-1024-01AE	Bolt/nut, exhaust system bracket to exhaust system	Nm	20

**Nm** Exhaust system

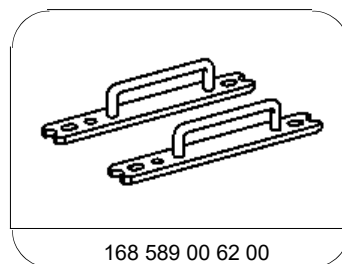
Number	Designation		Engine 276 in model 204	Engine 642, 646, 651 in model 204
BA49.10-P-1035-01AC	Bolt, exhaust system bracket to transmission	Nm	25	–

**Nm** Exhaust system

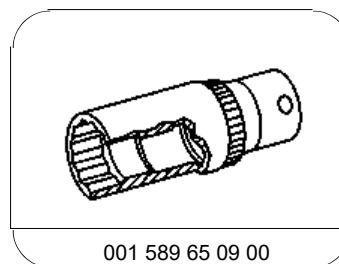
Number	Designation		Engine 276 in model 204	Engine 642, 646, 651 in model 204
BA49.10-P-1036-01AC	Bolt, exhaust system bracket to exhaust flange	Nm	35	–



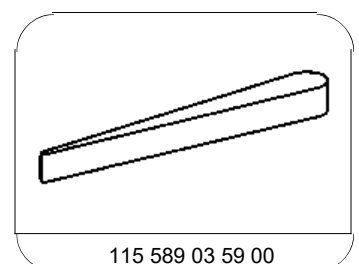
Parallel rest



Handles



Socket wrench bit



Long wedge



**Repair materials**

<b>Number</b>	<b>Designation</b>	<b>Order number</b>
BR00.45-Z-1009-06A	Multi-purpose paste	A 000 989 80 51
BR00.45-Z-1028-04A	Assembly cleaner	A 000 986 56 01