

P35.10-2169-09





















Shown on model 219 with AIRmatic





















- | | | | | | |
|----|----------------------|------|--------------------------------------|-------|-------------------------------------|
| 01 | Guard plate | 17a | Filler neck | L6/3 | Left rear rpm sensor |
| 1 | Electrical feed line | 50 | Rear axle center assembly | L6/4 | right rear rpm sensor |
| 6i | Air suspensions | 51 | Brake hose | S10/4 | Right rear brake pad contact sensor |
| 6j | Shock absorber | 106 | Propeller shaft | | |
| 17 | Filler hose | 106a | Propeller shaft intermediate bearing | | |

Modification notes

19.6.08	Value changed: Union nut, brake line to brake hose	*BA42.10-P-1001-04I
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☒ ☒	Remove/install		
	Risk of injury caused by body parts being jammed or crushed. Risk of injury to skin and eyes caused by brake fluid spraying out at high pressure when working on the SBC brake system	Deactivate SBC brake system using STAR DIAGNOSIS.	AS42.46-Z-0001-01A
ⓧ	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A
ⓧ Installation	Caution, important note: The threads in the frame floor assembly must be recut and blown out, as any adhesive residue in a thread will prevent the bolt's necessary preload force from being achieved, despite having reached the specified torque and specified angle of rotation. If this is not observed, then the faulty bolt preload force will cause bending forces to act on the bolt, which could ultimately lead to bolt fracture.		
ⓧ	While working on the rear axle, care must be taken to ensure that the surface of aluminum components do not get any scratches, cracks and notches. Otherwise the service life of the parts will be affected		
i	Only tighten nuts and bolts of chassis components when vehicle is in a ready-to-drive condition.		

1	Deactivate SBC brake system using STAR DIAGNOSIS.  AD Connect STAR DIAGNOSIS and read out fault memory	Vehicles with Sensotronic Brake Control (SBC)  The following steps should be run through in STAR DIAGNOSIS: Select the menu item "SBC-Sensotronic Brake Control"/"Initial startup after repair"/"Deactivate 'SBC' system". Then process all the individual steps from top to bottom.	AD00.00-P-2000-04A
2	Empty air springs (6i) completely using STAR DIAGNOSIS Notes on AIRmatic  AD Connect STAR DIAGNOSIS and read out fault memory	Vehicles with AIRmatic (semi-active air suspension), code 489  Installation: Observe the filling process of the air springs (6i) otherwise they will be destroyed.    Electronic inclinometer gotis://F_40.2_02.0	AR32.22-P-1500-04TX AH32.22-P-1000-02T AD00.00-P-2000-04A AR32.22-P-1500-03TX *BA32.25-P-1006-04K *BA32.25-P-1007-04K *211589000900
3	Secure vehicle on the lifting platform		AR00.60-P-0100TX
4.1	Remove exhaust system at flange connection	Model 219.354 /356 /357 /372 Model 219.375 /376/ 377	AR49.10-P-7280TX AR49.10-P-7280TY
4.2	Remove rear muffler	Type 219.322	AR49.10-P-4951TQ
5	Remove rear section components on underfloor paneling		AR61.30-P-1001TX
6	Detach propeller shaft (106) from rear axle differential (50)	 The flexible coupling remains on the propeller shaft (106).  Installation: Attach propeller shaft to rear axle differential (50). 	AR41.10-P-0050-04TX *BA41.10-P-1002-01E
7	Remove fitting sleeves of flexible coupling from rear axle center assembly (50) on the flange Drift for loosening fitting sleeves in flexible coupling.  WF		AR41.10-P-0050-09TX WF58.50-P-4110-01A
8	Remove bolts from propeller shaft intermediate bearing (106a) and remove rear part of propeller shaft (106)  BB Long-life grease (NLGI grade 2)	 Installation: Assemble propeller shaft (106) in correct order. Only tighten the bolts of the propeller shaft center support bearing (106a) after fastening the flexible coupling on the rear axle differential (50). 	AR41.10-P-0050-05TX *BA41.40-P-1001-01B BB00.40-P-0266-02A
9	Unhook brake cables from automatic slack adjuster of parking brake		AR42.20-P-0525TX
10	Remove rear wheels  AP Remove/install wheels, rotate if necessary		AP40.10-P-4050TX
11.1	Remove left and right rear brake calipers	For repair work on fuel tank or rear axle.	AR42.10-P-0080TX AS42.50-Z-0001-01A
11.2	Risk of poisoning caused by swallowing brake fluid. Risk of injury caused by brake fluid coming into contact with skin and eyes. Detach left and right rear brake hose (51) from the brake lines	Only pour brake fluid into suitable and appropriately marked containers. Wear protective clothing and eye protection when handling brake fluid. For bodywork or replacement of rear axle assembly.  Installation: The brake hoses (51) must not be twisted after tightening otherwise they may tear.  Seal off line connections immediately with plugs. The brake fluid expansion reservoir must not be allowed to run completely empty.  When loosening or tightening the brake line on the brake hose (51), take care not to twist its bracket. Counterhold open wrench on two flats of brake hose (51) using an open-end wrench.  	AR42.10-P-0013TX *BA42.10-P-1001-04I *000589750300

			*129589009100
12	Remove fender liners from rear fenders	Vehicles with AIRmatic (semi-active air suspension), code 489	AR88.10-P-1400TX
13	Disconnect electrical connectors of brake and chassis components at the rear axle	Vehicles with AIRmatic (semi-active air suspension), code 489	AR32.22-P-1500-01TX
14	Remove left rear rpm sensor (L6/3) and right rear rpm sensor (L6/4) from the wheel carriers	Vehicles without AIRmatic  Unclip electric feed lines of rpm sensor from all retaining clamps and tie up rpm sensor to one side. 	*BA42.30-P-1001-02A
15	Disconnect electrical connector from right rear brake pad contact sensor (S10/4)	Vehicles without AIRmatic	
16	Detach electrical feed line (1) from right rear brake pad contact sensor (S10/4)	Vehicles without AIRmatic  Unclip electrical feed line from retaining clamps and tie up to one side. 	*BA42.10-P-1002-12B
17.1	Pry left and right air spring (6i) off the frame floor using assembly lever	Vehicles with AIRmatic (semi-active air suspension), code 489  In doing so the retaining clips for the air springs (6i) are destroyed.  Installation: Slide on the air springs (6i), until the new clips can be heard engaging into the frame floor. The air springs (6i) must be aligned straight and must not be kinked.	
17.2	Remove left and right rear springs	Vehicles without AIRmatic	AR32.20-P-0230TX
18	Detach left and right shock absorbers (6j) from spring control arms	Vehicles with AIRmatic (semi-active air suspension), code 489 	*BA32.25-P-1002-03I
19	Drain fuel tank.	Vehicles with diesel engine Vehicles with gasoline engine	AR47.10-P-4001TQ AR47.10-P-4001TX
20	Remove filler hose (17) of fuel tank	 Check filler hose (17) and clamps for damage.	
21	Install guard plates (01) to protect brake disk cover panels		AR42.00-P-0100-01TX *220589013100
22	Lower rear axle.	 Do not damage filler hose (17). Kink filler hose (17) downwards when lowering the rear axle.    Installation: Recut and blow out the threads in the frame floor assembly to ensure a perfect threaded connection.  Use new bolts.	AR35.10-P-0020-01TX *BA35.10-P-1001-01J *BA35.10-P-1002-01J
23	Replace retaining clips of air springs (6i)	Vehicles with AIRmatic (semi-active air suspension), code 489	AR32.22-P-1500-02TX
	Checking		
24	Check rear axle for damage, replace damaged parts		
25	Check condition of air springs (6i)	Vehicles with AIRmatic (semi-active air suspension), code 489	AR32.22-P-1500-05TX
26	Install in the reverse order		
27	Check oil level in rear axle center assembly (50) and correct if necessary	 Mixing of old universal hypoid gear oil and the new FE hypoid gear oil should be avoided due to the better fuel economy.     Cleaning spray, Loctite 7063 (150ml) Sealant, Omnifit 100H (50 g)	AR35.31-P-0520-03TX *BA35.31-P-1002-02D *BF35.31-P-1003-01P *BF35.31-P-1004-01P *BF35.31-P-1005-01P *BR00.45-Z-1046-04A *BR00.45-Z-1061-01A
28.1	Bleed brake system with STAR DIAGNOSIS	Vehicles with Sensotronic Brake Control (SBC)	AR42.10-P-0012TX

		<p>i The following steps should be run through in STAR DIAGNOSIS: Select menu item "initial startup after repair"/ "after opening or exchanging one or more brake hoses". Then process all the individual steps from top to bottom.</p> <p>i When performing the bleeding operation always observe the instructions in the document "Bleeding brake system using STAR DIAGNOSIS".</p>	
28.2	Bleed brake system	Vehicles with Adaptive Brake (ABR)	AR42.10-P-0010T
29	Perform a wheel alignment check		AR40.20-P-0200TX

Nm Rear axle rpm sensor

Number	Designation		Model 219
BA42.30-P-1001-02A	Self-locking bolt of rear axle rpm sensor to wheel carrier	Nm	8

Nm Propeller shaft

Number	Designation		Model 219
BA41.10-P-1002-01E	Self-locking nut, flexible coupling to rear propeller shaft or rear axle differential.	M12 Nm	60

Nm Propeller shaft intermediate bearing

Number	Designation		Model 219
BA41.40-P-1001-01B	Bolt, propeller shaft intermediate bearing to frame floor assembly	Self-tapping screw Nm	25

Nm Brake lines, brake hoses

Number	Designation		Model 219 with SBC	Model 219 with ABR
BA42.10-P-1001-04I	Union nut, brake line to brake hose	Nm	18	18

Nm Rear axle brake caliper

Number	Designation	Model 219
BA42.10-P-1002-12B	Bolt, brake pad contact sensor to brake caliper	Nm 8

Nm Rear axle carrier

Number	Designation	Model 219
BA35.10-P-1001-01J	Self-locking bolt, front rear axle carrier rubber mount to frame floor	Stage 1 Nm 90
		Stage 2 \angle° 60
BA35.10-P-1002-01J	Self-locking bolt, rear axle carrier rear rubber mount to frame floor	Stage 1 Nm 90
		Stage 2 \angle° 60

Nm Rear axle shock absorber

Number	Designation	Model 219 AIRmatic
BA32.25-P-1002-03I	Self-locking nut for attaching shock absorber to spring control arm	M10 Nm 55

Nm Rear axle center assembly housing

Number	Designation	Model 219
BA35.31-P-1002-02D	Oil filler screw, rear axle differential	Nm 50

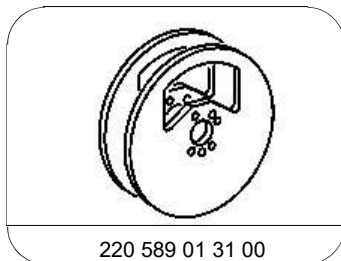
Nm Suspension struts

Number	Designation	Model 219 with AIRmatic
BA32.25-P-1006-04K	Nut, rear air spring at spring control arm	Nm 150

BA32.25-P-1007-04K	Air suspension pressure line at rear axle distributor	Nm	5
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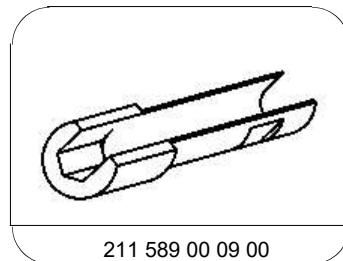
📄 Rear axle differential

Number	Designation	Model 219 except 219.376/377	Model 219.376/377
BF35.31-P-1003-01P	Filling capacity	Rear differential assembly dia. 215 mm	Liters 1.2
	Specifications for Operating Fluids		Sheet BB00.40-P-0235-07 A BB00.40-P-0235-61 A
BF35.31-P-1004-01P	Filling capacity	Rear axle differential dia. 198 mm	Liters 1.1
	Specifications for Operating Fluids		Sheet BB00.40-P-0235-07 A -
BF35.31-P-1005-01P	Filling capacity	Rear axle center assembly dia. 200 mm	Liters 1.1
	Specifications for Operating Fluids		Sheet BB00.40-P-0235-07 A -



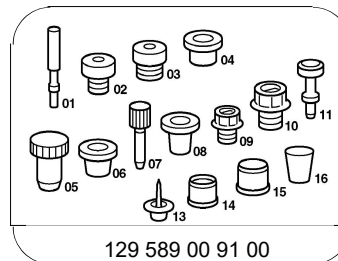
220 589 01 31 00

Guard plate



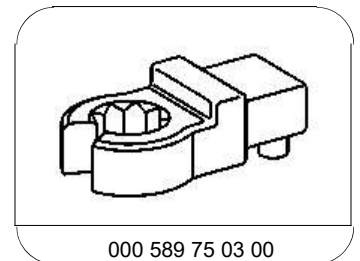
211 589 00 09 00

Wrench socket



129 589 00 91 00

Set of stop plugs



000 589 75 03 00

Box wrench bit

Repair materials

Number	Designation	Order number
BR00.45-Z-1061-01A	Sealant, Omnifit 100H (50 g)	A 002 989 23 71
BR00.45-Z-1046-04A	Cleaning spray, Loctite 7063 (150ml)	A 001 986 71 71 10