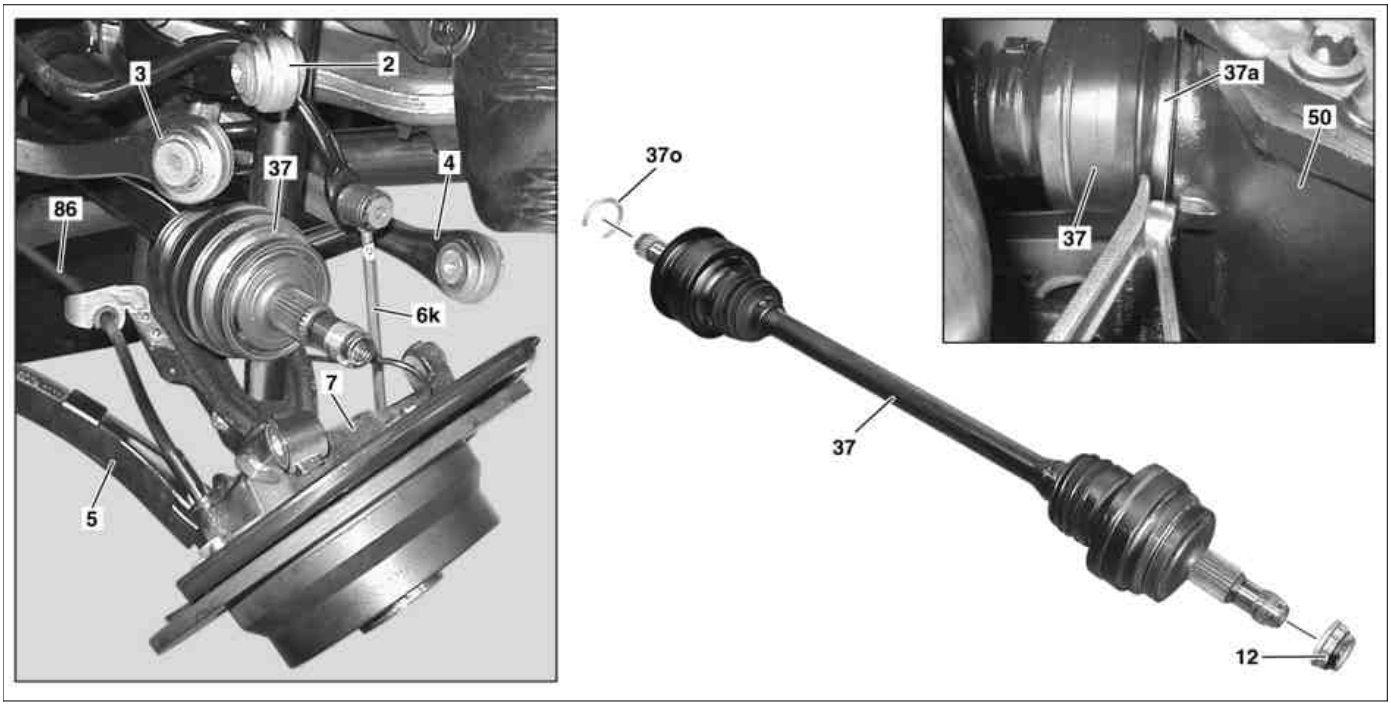
AR35.30-P-0620T	Remove/install rear axle shaft	10.11.11

MODEL 211.004 /041 /042 /052 /061 /080 /083 /084 /089 /090 /283 /290
Rear axle differential 187FE
MODEL 211.006,
211.054 /056 up to 31.5.06,
211.065 /082 /087 /092
Rear axle differential 198
MODEL 211.007 /008,
211.054 /056 as of 1.6.06,
211.057
Rear axle differential 200FE
MODEL 211.016 /023 /026 /028,
211.070 /076 /270 up to 31.8.03
Rear axle differential 210E
MODEL 211.020 /022 /029 /072 /272 /276 /077 /277
Rear axle differential 215FE
MODEL 211.241 /242 /252 /261 /280 /284 /289 with CODE (489) AIRmatic (semi-active air suspension)
Rear axle differential 187FE
MODEL 211.206,
211.254 /256 up to 31.5.06,
211.265 /282 /287 /292 with CODE (489) AIRmatic (semi-active air suspension)
Rear axle differential 198
MODEL 211.208,
211.254 /256 as of 1.6.06,
211.257 with CODE (489) AIRmatic (semi-active air suspension)
Rear axle differential 200FE
MODEL 211.216 /223 /226 with CODE (489) AIRmatic (semi-active air suspension)
Rear axle differential 210E
MODEL 211.220 /222 with CODE (489) AIRmatic (semi-active air suspension)
Rear axle differential 215FE
MODEL 211.070 /076 /270 as of 1.9.03
Rear axle differential 215FE
MODEL 211.004 with CODE (450) Taxi version
Rear axle differential 198



P35.30-2061-09

Shown on model 211 with steel suspension

2 Camber strut
3 Torque strut
4 Tie rod
5 Thrust arm
6k Stabilizer bar link rod
7 Wheel carrier
12 Twelve-point collar nut
37 Rear axle shaft
37a Protective ring
37o Retaining ring
50 Differential
86 Rear brake cable

Modification notes

17.6.11	Value changed: filling capacity	Model 211 except 211.077/277	*BF35.31-P-1003-01L

	Remove/install		
Danger!	**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
	While working on the rear axle care must be taken to ensure that the surface of all aluminum components do not get any scratches, cracks and notches. Otherwise the service life of the parts will be affected		
	Notes on AIRmatic		AH32.22-P-1000-02T
	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A
1	Deactivate SBC brake system using STAR DIAGNOSIS.	Vehicles with Sensotronic Brake Control (SBC) The following steps should be run through in STAR DIAGNOSIS: Select menu item "SBC Sensotronic Brake Control"/"Deactivate 'SBC' system". Then process all the individual steps from top to bottom.	
AD	Connect STAR DIAGNOSIS and read out fault memory	STAR DIAGNOSIS diagnosis system	AD00.00-P-2000-04A
2	Deflate rear air spring completely using STAR DIAGNOSIS	Vehicles with AIRmatic (semi-active air suspension), code 489	AR32.22-P-1500-04T
AD	Connect STAR DIAGNOSIS and read out fault memory	STAR DIAGNOSIS diagnosis system	AD00.00-P-2000-04A
			*211589000900
		Installation: The filling procedure for the air springs must be observed, otherwise the air springs will be irreparably damaged.	AR32.22-P-1500-03T
		Nm	*BA32.25-P-1008-04B
		Nm	*BA32.25-P-1009-04B
		Electronic inclinometer gotis://F_40.2_02.0	
3	Secure vehicle on vehicle lift		AR00.60-P-0100T
4	Unscrew twelve-point collar nut (12) from rear axle shaft (37)	**Installation:** Replace twelve-point collar nut, tighten and secure.	AR35.30-P-0115-01A
		Nm	*BA35.30-P-1001-01F
5	Remove rear wheel		
AP	Remove/install wheels, rotate if necessary		AP40.10-P-4050Z
6.1	Remove rear brake pads	Except model 211.076 /276 /077 /277 Secure the rear brake caliper to the vehicle to relieve the load on the brake hose in order to prevent the brake hose from being damaged during repair work.	AR42.10-P-1700R
6.2	Detach brake caliper at rear axle	Model 211.076 /276 /077 /277 Secure the rear brake caliper to the vehicle to relieve the load on the brake hose in order to prevent the brake hose from being damaged during repair work.	AR42.10-P-0080RA
7	Detach rear brake cable (86) at cable slack adjuster on parking brake		AR42.20-P-0525T
8	Detach stabilizer bar link rod (6k) from wheel carrier (7)	Nm	*BA32.20-P-1001-04G
9	Raise wheel carrier (7) using transmission jack and transmission platform until rear axle shaft (37) is roughly horizontal	**Installation:** Tighten the bolted connections of the torque strut (3), camber strut (2) and thrust arm (5) as well as the tie rod (4).	
		Nm	*BA35.20-P-1002-03C
		Nm	*BA35.20-P-1002-02C
		Nm	*BA35.20-P-1002-05C
		Nm	*BA35.20-P-1001-04C
		Transmission plate for passenger cars and commercial vehicles gotis://A_25/35/49_02.0 Transmission jack 2.0-7.0 t gotis://H_00.10_01.0	

10	Detach torque strut (3) from wheel carrier (7)	**Installation:** Bolt on torque strut loosely	
11	Detach camber strut (2) from wheel carrier (7)	**Installation:** Bolt on camber strut loosely.	
12	Detach tie rod (4) from wheel carrier (7).	**Installation:** Bolt on tie rod loosely.	
13	Detach thrust arm (5) from wheel carrier (7)	**Installation:** Bolt on thrust arm loosely.	
14	Lower transmission jack	**Installation:** Lift wheel carrier (7) with transmission jack and transmission platform until the rear axle shaft (37) is approximately horizontal. Transmission jack 2.0-7.0 t gotis://H_00.10_01.0 Transmission plate for passenger cars and commercial vehicles gotis://A_25/35/49_02.0	
15	Fold down wheel carrier (7) and pull rear axle shaft (37) out of rear axle shaft flange	Suspend rear axle shaft with a hook on vehicle to prevent damage to the rubber boot on the rear axle shaft. If rear axle shaft is jammed: ↓ Press rear axle shaft out of the rear axle shaft flange 	 AR35.30-P-0115-03B *210589034300 *210589014000
16	Lever rear axle shaft (37) out of rear axle differential (50)	Do not fasten an assembly lever to the protection ring (37a). Support the assembly lever, e.g. using an open wrench, on the rear axle differential (50).	
17	Lower differential (50)	Vehicles with AIRmatic (semi-active air suspension) code 489 and balancing mass at the rear axle (37) Do not remove exhaust system. Do not detach propeller shaft. Only detach additional volume reservoir on the affected side.	AR35.31-P-0520T
18	Take out rear axle shaft (37)	**Installation:** Install new retaining ring (37o) on inner splined profile.	
	Checking		
19	Check constant velocity joints and rubber boots for leaks and damage	Replace completely if the constant velocity joint on the rear axle shaft (37) is defective. If damaged or leaking: ↓ Replace constant velocity joint or rubber boot on rear axle shaft.	 AR35.30-P-0661P
20	Check condition of radial sealing ring in side of rear axle differential (50)	If damaged or leaking: ↓ Replace new radial sealing ring on side of rear axle differential.	 AR35.31-P-0545T
21	Install in the reverse order		
22 BT	Check oil level in rear axle center assembly (50) and correct if necessary Oil filler/drain screw on rear axle differential modified	Mixing of old universal hypoid gear oil and the new FE hypoid gear oil should be avoided due to the better fuel economy. Loctite 7063 cleaning spray (150 ml) Sealant, Omnifit 100H (50 g)	AR35.31-P-0520-03I *BA35.31-P-1002-02A *BF35.31-P-1004-01L *BF35.31-P-1001-01L *BF35.31-P-1002-01L *BF35.31-P-1003-01L *BF35.31-P-1006-01L *BR00.45-Z-1046-04A *BR00.45-Z-1061-01A BT35.31-P-0015-01A
23.1 AD	Activate SBC brake system using STAR DIAGNOSIS 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 "Initial startup after repair"/"Remove/ install brake pads" menu item. Then process all the individual steps from top to bottom. STAR DIAGNOSIS diagnosis system	 AD00.00-P-2000-04A

⚠ **Danger!** 23.2	**Risk of accident** when commissioning the vehicle due to a lack of braking effect when the service brake is operated for the first time after repair work Press the brake pedal several times until the brake pads contact the brake disks	Before starting engine, actuate brake pedal several times until the pressure is built up and maintained in the brake system. Vehicles with Adaptive Brake (ABR) ⓘ Firm resistance should be noticeable at the brake pedal.	AS42.50-Z-0002-01A
24	Perform wheel alignment check		AR40.20-P-0200T

Nm Rear axle stabilizer bar

Number	Designation		Model 211
BA32.20-P-1001-04G	Nut, link rod to wheel carrier	Nm	50

Nm Camber strut

Number	Designation					Model 211
BA35.20-P-1002-02C	Self-locking nut, camber strut to wheel carrier.	Aluminum	M12	Stage 1	Nm	50
				Stage 2	∡°	90
		Steel	M14	Stage 1	Nm	80
				Stage 2	∡°	90

Nm Torque strut

Number	Designation					Model 211
BA35.20-P-1002-03C	Self-locking nut, torque strut to wheel carrier	Aluminum	M12	Stage 1	Nm	50
				Stage 2	∡°	90
		Steel	M14	Stage 1	Nm	80
				Stage 2	∡°	90

Nm Torque strut

Number	Designation					Model 211
BA35.20-P-1002-05C	Self-locking nut, thrust arm to wheel carrier	Aluminum	M12	Stage 1	Nm	50
				Stage 2	∡°	90
		Steel	M14	Stage 1	Nm	80
				Stage 2	∡°	90

Nm Rear axle shaft

Number	Designation				Model 211
BA35.30-P-1001-01F	Collar nut, rear axle shaft to rear axle shaft flange	self-locking		Nm	350
		not self-locking	Stage 1	Nm	170
			Stage 2	∡°	45

Nm Differential housing

Number	Designation		Model 211
BA35.31-P-1002-02A	Oil filler screw, differential	Nm	50

Nm Suspension struts

Number	Designation		Model 211 AIRmatic
BA32.25-P-1008-04B	Nut, rear air spring at spring control arm	Nm	150
BA32.25-P-1009-04B	Air suspension pressure line at rear axle distributor	Nm	2

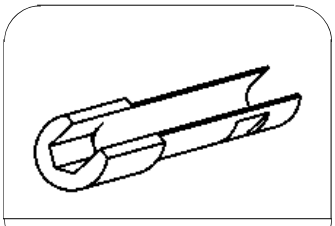
Nm Tie rod

Number	Designation			Model 211
BA35.20-P-1001-04C	Self-locking nut, tie rod at wheel carrier	Stage 1	Nm	40
		Stage 2	∡°	90

Differential

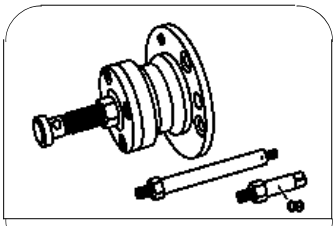
Number	Designation			Model 211 except 211.077/277	Model 211.077/277, model 230.470/472/474/479
BF35.31-P-1001-01L	Filling capacity	210 mm dia.rear axle differential in rear axle differential 210E	Liters	1,6	-

		Specifications for Operating Fluids	Sheet	BB00.40-P-0235-07A	-
BF35.31-P-1002-01L	Filling capacity	Rear axle differential dia. 198 mm	Liters	1.1	-
		Specifications for Operating Fluids	Sheet	BB00.40-P-0235-07A	-
BF35.31-P-1003-01L	Filling capacity	Differential Ø 187 mm	Liters	0.95	-
		Specifications for Operating Fluids	Sheet	BB00.40-P-0235-07A	-
BF35.31-P-1004-01L	Filling capacity	Differential Ø 215 mm	Liters	1.2	1.2
		Specifications for Operating Fluids	Sheet	BB00.40-P-0235-07A	BB00.40-P-0235-61A
BF35.31-P-1006-01L	Filling capacity	200 mm dia. rear axle differential in rear axle differential 200FE	Liters	1,1	-
		Specifications for Operating Fluids	Sheet	BB00.40-P-0235-07A	-



211 589 00 09 00

Wrench socket



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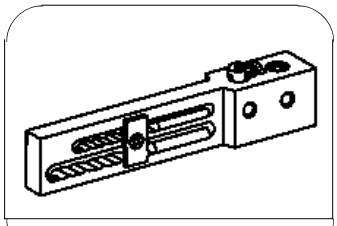
Extraction and insertion tool



210 589 01 40 00

Bracket

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	Loctite 7063 cleaning spray (150 ml)	A 001 986 71 71 10