

**Document title** Remove/install complete rear axle

**Document number** ar3510p0010ew

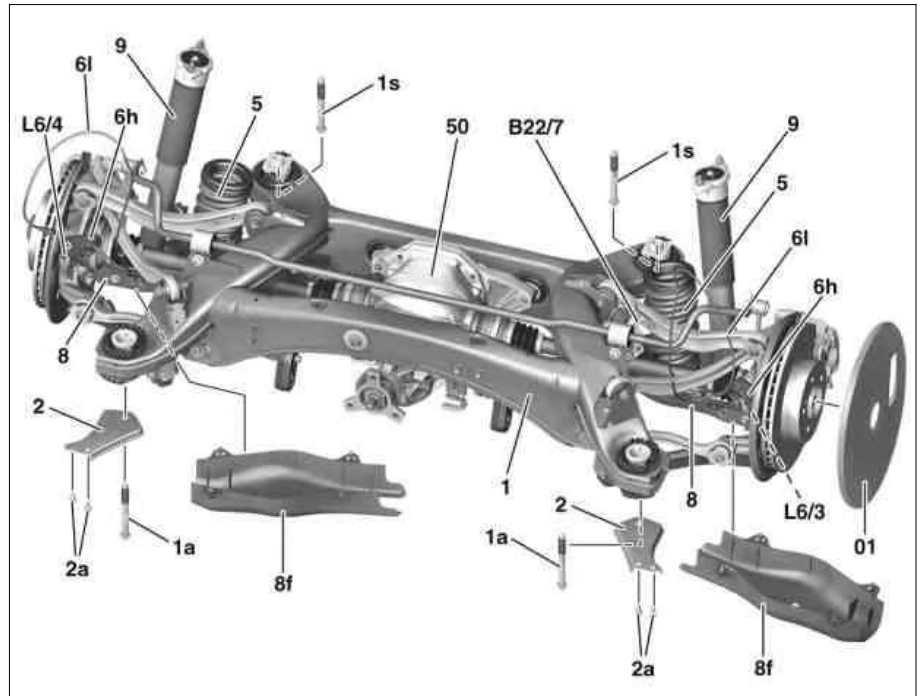
Model 212, 218

## Modification notes

23.05.2017 Wheel alignment check added.




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
01	Guard plate
1a	Screw
1s	Screw
2	Stop plate
2a	Bolts
5	Steel spring
6h	Bracket
6l	Electrical line
8	Spring control arm
8f	Cover
9	Shock absorber
50	Rear axle gear
B22/7	Left rear level sensor
L6/3	Left rear axle rpm sensor
L6/4	Right rear axle rpm sensor



P35.10-2327-06

	<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
⚠ Caution	<b>Risk of poisoning</b> from swallowing brake fluid. <b>Risk of injury</b> from skin and eye contact with brake fluid	Only pour brake fluid into suitable and appropriately marked containers. Wear protective clothing and eye protection when handling brake fluid.	AS42.50-Z-0001-01A
	Notes on AIRmatic	Model 212 with code 488 (Steel/air suspension) Model 212 with code 489 (AIRMATIC) Model 218 with code 488 (Steel/air suspension) Model 218 with code 489 (AIRMATIC)	AH32.22-P-1000-02EW
	Notes on repair work on suspension components		AH00.00-P-0100-01A
🔧 🔧	<b>Remove/install</b>		
1	Shift transmission into neutral position and release the parking brake		
2	Empty air springs using diagnostic system	Model 212.0/1, 218 with code 488 (Steel/air suspension) Model 212.0/1, 218 with code 498 (Japanese version) Model 212.2	AD00.00-P-2000-04A
👉 AD		<b>🔧 Installation:</b> The air spring must be filled as per the specifications. Otherwise, the air spring may suffer initial damage and it may malfunction at a later stage.	
3	Switch off ignition and store transmitter key outside of transmission range (min. 2 m)		

4	Secure vehicle on vehicle lift		AR00.60-P-0100EWS
5	Remove rear road wheels		AP40.10-P-4050EW
6	Release left and right underfloor paneling in area of threaded axle connection		AR61.30-P-1001EL
7	Remove left and right rear diagonal strut	Model 212.2, 218.9  Bolt, rear diagonal strut bracket mount to body	*BA61.10-P-1006-01H
8	Remove exhaust system as from connecting point on center muffler	Model 212, 218  Model 212, 218 with engine 157, 276, 278 Model 212 with engine 156, 272, 273 Model 212, 218 with engine 642, 651 Model 212 with engine 274	AR49.10-P-7100EL AR49.10-P-7100EW AR49.10-P-7100EWI AR49.10-P-7100MR
9	Slacken off threaded connections of propeller shaft center support bearing on frame floor assembly by 3 or 4 turns		AR41.10-P-0050EW
10	Detach propeller shaft from rear axle differential (50)	 Flex disk remains on propeller shaft.	AR41.10-P-0050EW
11	Remove center brake cable		AR42.20-P-0523EW
12	Detach right rear brake wear sensor of electrical connection for right rear brake wear sensor from brake caliper		
13	Detach electrical connection for right rear brake wear sensor from brake caliper	 Screw/bolt, brake wear sensor to brake caliper	*BA42.10-P-1003-12J
14	Detach electrical connection from rear left level sensor (B22/7) and unclip from bracket	Model 212.0/1 with code 488 (Steel/air suspension) Model 212.0/1 with code 489 (AIRMATIC) Model 212.0/1 with code 615 (Bi-xenon headlamps with active light function) Model 212.0/1 with code 621 (Intelligent Light System (left-hand traffic)) Model 212.0/1 with code 622 (Intelligent Light System) Model 212.0/1 with code 631 (Static LED headlamps, left-hand traffic) Model 212.0/1 with code 632 (Headlamps, LED, static, right-side traffic) Model 212.0/1 with code 640 (SAE dynamic LED headlamps, right-hand traffic) Model 212.0/1 with code 641 (Dynamic LED headlamps, left-hand traffic) Model 212.0/1 with code 642 (Dynamic LED headlamps, right-hand traffic) Model 212.2 Model 218	
15	Detach electrical connection from rear right level sensor and unclip from bracket	Model 212.0/1, 218 with code 488 (Steel/air suspension) Model 212.0/1, 218 with code 489 (AIRMATIC) Model 212.2	
16	Detach electrical connection of left rear-axle damping valve unit from damper (9) and unclip relevant electrical line (6l) from left bracket (6h) on wheel carrier	Model 212.0/1, 218 with code 488 (Steel/air suspension) Model 212.0/1, 218 with code 489 (AIRMATIC) Model 212.2	
17	Detach electrical connection of right rear-axle damping valve unit from damper (9) and unclip relevant electrical line (6r) from right bracket (6h) on wheel carrier	Model 212.0/1, 218 with code 488 (Steel/air suspension) Model 212.0/1, 218 with code 489 (AIRMATIC) Model 212.2	
18	Remove left rear axle rpm sensor (L6/3) and right rear axle rpm sensor (L6/4) from wheel carriers		AR42.40-P-0820EW
19	Remove covers (8f) from spring control (8) arms		
20.1	Remove steel springs (5)	On vehicles with steel springs (5).	

		Model 212.0/1 except code 488 (Steel/air suspension) except code 489 (AIRMATIC) Model 218 except code 488 (Steel/air suspension) except code 489 (AIRMATIC)	AR32.20-P-0230EW
20.2	Remove air springs	When working on the body. Model 212.0/1, 218 with code 488 (Steel/air suspension) Model 212.0/1, 218 with code 489 (AIRMATIC) Model 212.2	AR32.22-P-1500EW
20.3	Unclip air springs from the spring control arms (8)	When replacing the fuel tank or working on the rear axle. Model 212.0/1, 218 with code 488 (Steel/air suspension) Model 212.0/1, 218 with code 489 (AIRMATIC) Model 212.2	AR32.22-P-1500EW
21.1	Detach left and right rear brake hose from brake lines	When working on the body.	AR42.10-P-0013EW
21.2	Detach left and right rear brake caliper from brake caliper support or wheel carrier	When replacing the fuel tank or working on the rear axle. Model 212 (except 212.074/075/076/077/092/274/275/276/277/292) Model 212.074/075/076/077/092/274/275/276/277/292 Model 218.374/375/376/392/974/975/976/992 Model 218 (except 218.374/375/376/392/974/975/976/992)	AR42.10-P-0080EW AR42.10-P-0080CMG AR42.10-P-0080EL
22.1	Remove shock absorbers (9) at top from body	When working on the body. Model 212.0/1 except code 488 (Steel/air suspension) except code 489 (AIRMATIC) Model 218 except code 488 (Steel/air suspension) except code 489 (AIRMATIC) Model 212.0/1, 218 with code 488 (Steel/air suspension) Model 212.0/1, 218 with code 489 (AIRMATIC) Model 212.2	AR32.25-P-0110EW AR32.25-P-0110EWA
22.2	Remove shock absorbers (9) from spring links (8)	When replacing the fuel tank or working on the rear axle. Model 212.0/1 except code 488 (Steel/air suspension) except code 489 (AIRMATIC) Model 218 except code 488 (Steel/air suspension) except code 489 (AIRMATIC) Model 212.0/1, 218 with code 488 (Steel/air suspension) Model 212.0/1, 218 with code 489 (AIRMATIC) Model 212.2	AR32.25-P-0110EW AR32.25-P-0110EWA
23	Support rear axle differential (50) and secure with a tensioning strap against falling down 000 588 11 62 00 Major assembly mount 000 588 10 62 00 Support plate		WS01.00-P-0092B WS26.00-P-3309B
24	Mount guard plates (01)	 Guard plate	AR42.00-P-0100-01A *220589013100
25	Remove bolts (1s) Notes on threaded connections fastened using a tightening angle-based tightening process Notes on self-locking nuts and bolts	 <b>Installation:</b> The thread in the frame floor assembly must be recut and then blown out. Otherwise, the faulty bolt preload force will cause bending forces to act on the bolts (1s), which could ultimately lead to bolt fracture.  <b>Installation:</b> Replace screw/bolts (1s) with new ones.  Self-locking bolt of rear elastomer bearing on rear axle carrier to frame floor assembly	AH00.00-P-0020-01A AH00.00-N-0001-01A *BA35.10-P-1002-01N

26	Unscrew bolts (1a, 2a) and remove stop plates (2) Notes on threaded connections fastened using a tightening angle-based tightening process Notes on self-locking nuts and bolts	<p><b>ⓘ Installation:</b> The thread in the frame floor assembly must be recut and then blown out. Otherwise, the faulty bolt preload force will cause bending forces to act on the bolts (1a), which could ultimately lead to bolt fracture.</p> <p><b>ⓘ Installation:</b> Replace bolts (1a, 2a).</p> <p><b>Nm</b> Bolt, stop plate to body</p> <p><b>Nm</b> Self-locking bolt of front elastomer bearing on rear axle carrier to frame floor assembly</p>	AH00.00-P-0020-01A AH00.00-N-0001-01A  *BA35.10-P-1003-01N *BA35.10-P-1001-01N
27	Lower rear axle and remove from working area	<p><b>ⓘ</b> Pay attention to fuel lines and electrical cables when lowering. Otherwise the lines may be damaged.</p>	
28	Install in the reverse order		
29	Perform wheel alignment check		AR40.20-P-0200EW

**Nm** Rear axle carrier

Number	Designation			Model 212	Model 218
BA35.10-P-1001-01N	Self-locking bolt of front elastomer bearing on rear axle carrier to frame floor assembly	Stage 1	Nm	80	80
		Stage 2		lösen	lösen
		Stage 3	Nm	80	80
		Stage 4	∠°	90	90

**Nm** Rear axle carrier

Number	Designation			Model 212	Model 218
BA35.10-P-1002-01N	Self-locking bolt of rear elastomer bearing on rear axle carrier to frame floor assembly	Stage 1	Nm	80	80
		Stage 2		lösen	lösen
		Stage 3	Nm	80	80
		Stage 4	∠°	90	90

**Nm** Rear axle carrier

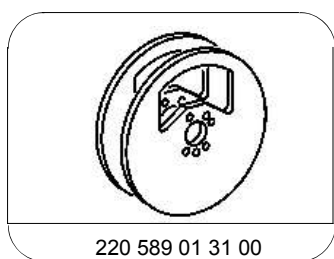
Number	Designation		Model 212	Model 218
BA35.10-P-1003-01N	Bolt, stop plate to body	Nm	30	30

**Nm** Rear axle brake caliper

Number	Designation		Model 212	Model 218
BA42.10-P-1003-12J	Screw/bolt, brake wear sensor to brake caliper	Nm	8	8

**Nm** Frame floor assembly

Number	Designation		Model 212	Model 218
BA61.10-P-1006-01H	Bolt, rear diagonal strut bracket mount to body	Nm	60	60



Guard plate