

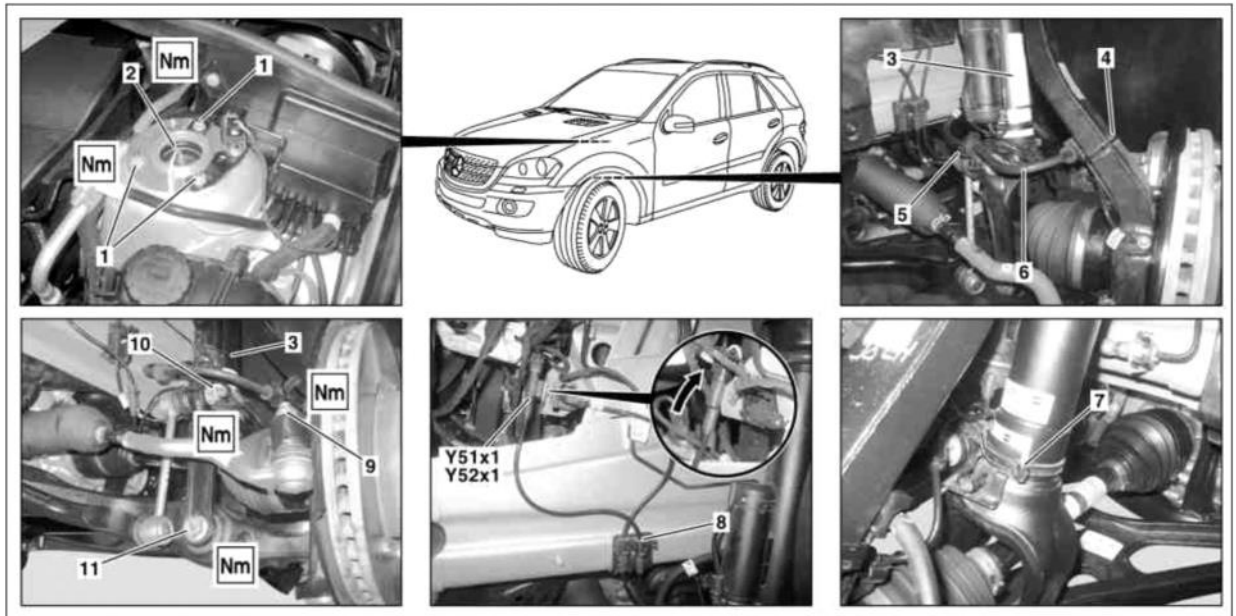
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MODEL 164

Modification notes

27.7.12	Repair method modified	Wheel alignment check omitted	
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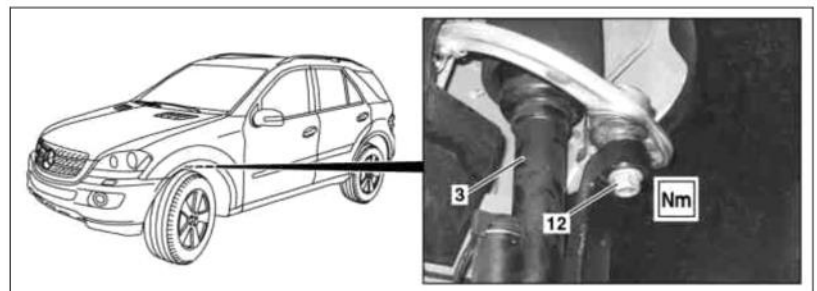


P32.25-2134-09

Overview of AIRmatic suspension, shown on model 164.1 with AIRmatic (air suspension with level adjustment and adaptive damping system ADS), code 489

1	Nuts	6	Brake hose	11	Nut
2	Pressure line connection	7	Cable tie	Y51x1	Left front axle damping valve unit connector
3	Front suspension strut	8	ADS line	Y52x1	Right front axle damping valve unit connector
4	Cable tie	9	Nut		
5	Brake hose bracket	10	Nut		

12 Nut



P32.25-2143-04

	Remove/install		
Danger !	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 vehicle manufacturer.	AS00.00-Z-0010-01A

1	Switch off ignition and remove the transmitter key from the EIS [EZS] control unit	MODEL 164 with CODE 889 (Keyless Go) i Press Keyless Go start and stop button repeatedly until the ignition is switched off. Remove transmitter key from vehicle and store it in a location beyond its transmission range (at least 2 m).	
2	Open engine hood and raise to vertical position		AR88.40-P-1000GZ
3.1	Remove strut tower brace	Only on model 164.8 Nm Nut, for dome strut bolted connection to bracket	AR62.30-P-2500GY *BA62.30-P-1005-02D
3.2	Remove 3 nut threaded connections for strut mounting stay and release one nut threaded connection	Only on model 164.195	
4	Raise strut mounting stay and place onto bracket	Only on model 164.195 i To gain access to pressure line terminal (2).	
5	Raise vehicle until the wheels are clear of the ground	MODEL 164 with CODE 489 (AIRMATIC (air suspension with continuous damper adjustment))	
6	Deflate AIRmatic system using STAR DIAGNOSIS	MODEL 164 with CODE 489 (AIRMATIC (air suspension with continuous damper adjustment))	AD00.00-P-2000-04A
AD			
7	Unscrew nuts (1) on front end	Nm Nut for shock absorber on front end	*BA32.25-P-1001-01G
8	Unscrew pressure line connection (2)	MODEL 164 with CODE 489 (Airmatic (air suspension with level adjustment and adaptive damping system ADS)) i Plug the pressure line for the duration of the repair operations. Nm Air suspension pressure line to front air suspension Leak detection spray for USA Leak detection spray S Socket wrench bit S Knife If pressure line or its connection fittings are damaged: ↓ Repair AIRmatic pressure line connection	*BA32.22-P-1005-03B *BR00.45-Z-1004-03A *BR00.45-Z-1002-03A *21158900900 *000589122800 AR32.22-P-2001-02GZ
9	Remove front wheel		AP40.10-P-4050Z
AP			
10	Remove fender liner front section in front fender	MODEL 164 with CODE 489 (AIRMATIC (air suspension with continuous damper adjustment))	AR88.10-P-1310GZ
11	Cut off cable ties (4)		
12	Detach brake hose (6) from brake hose bracket (5) i Notes on installing brake hoses		AH42.10-P-9406-01GZ
13	Cut off cable ties (7)	i Installation: Pay attention to installation position. i Installation: Use new cable tie (7). S Pliers	
14	Unclip ADS line (8) from rpm sensor bracket	MODEL 164 with CODE 489 (AIRMATIC (air suspension with continuous damper adjustment))	
15	Detach left front axle damping valve unit connector (Y51x1) or right front axle damping valve unit connector (Y52x1)	MODEL 164 with CODE 489 (AIRMATIC (air suspension with continuous damper adjustment)) i Turn clip to remove (arrow).	
16	Undo nut (9) and remove tie rod from steering knuckle	Nm Self-locking nut, tie rod to steering knuckle S Thrust piece S Puller	*BA46.40-P-1002-01K
17	Undo nut (10) of link rod and remove link rod from front shock absorber	Nm Nut, link rod to front shock	*BA32.20-P-1003-02L

18	Unscrew nut (12) and remove steering knuckle from upper transverse control arm	Self-locking nut, upper ball joint out of upper transverse control arm to steering knuckle Thrust piece Puller	*BA33.20-P-1001-01J
19	Push front axle shaft out of front axle shaft flange, remove front axle shaft	MODEL 164 without CODE 489 (AIRMATIC (air suspension with continuous damper adjustment)) See <div style="text-align: center;">↓</div> Remove/install front axle shafts Remove/install front axle shafts	AR33.30-P-0620GZ
20	Undo nut (11) from front shock absorber and remove front shock absorber from transverse control arm	Installation: Final tightening, when vehicle on measuring platform or in K0 position. In order to prevent placing rubber bushing under stress. Self-locking nut, shock absorber to wishbone	*BA32.25-P-1002-01G
21	Press transverse control arm downwards and remove front suspension strut (3)	When installing or reinstalling the front suspension strut (3) check the condition of the front suspension strut (3).	
22	Install in the reverse order		
23	Fill AIRmatic system using STAR DIAGNOSIS	MODEL 164 with CODE 489 (AIRMATIC (air suspension with continuous damper adjustment)) The wheels must not be in contact with the ground during the filling. Since the air suspension bellows in the spring element is destroyed when filling in deflected condition.	AD00.00-P-2000-04A
24	Remove transport fastening or split ring below air spring bellows	MODEL 164 with CODE 489 (AIRMATIC (air suspension with continuous damper adjustment))	
25	Check AIRmatic for leaks	MODEL 164 with CODE 489 (Airmatic (air suspension with level adjustment and adaptive damping system ADS))	AR32.22-P-8100GZ

Front axle shock absorber

Number	Designation	Model 164.1/8	
BA32.25-P-1001-01G	Nut for shock absorber on front end	Stage 1	Nm 30
		Stage 2	∠° -180
		Stage 3	Nm 27

Front axle shock absorber

Number	Designation	Model 164.1/8	
BA32.25-P-1002-01G	Self-locking nut, shock absorber to wishbone	Nm	265

Front end with front reinforcement

Number	Designation	MODEL 164.8	
BA62.30-P-1005-02D	Nut, for dome strut bolted connection to bracket	Nm	50

Front axle torsion bar

Number	Designation	Model 164.1/8	
BA32.20-P-1003-02L	Nut, link rod to front shock	Stage 1	Nm 100
		2nd stage loosen	∠° 180
		Stage 3	Nm 120
		Stage 4	∠° 45

Nm Tie rod

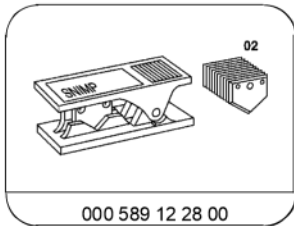
Number	Designation	Stage 1	Nm	MODEL 164.1/8
BA46.40-P-1002-01K	Self-locking nut, tie rod to steering knuckle	Stage 1	Nm	45
		Stage 2	Δ°	90

Nm Air suspension

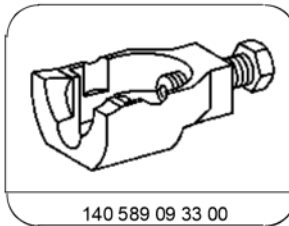
Number	Designation	MODEL 164.1/8 with CODE 489 (Airmatic (air suspension with level adjustment and adaptive damping system ADS))
BA32.22-P-1005-03B	Air suspension pressure line to front air suspension	Nm 5

Nm Wheel control, hub

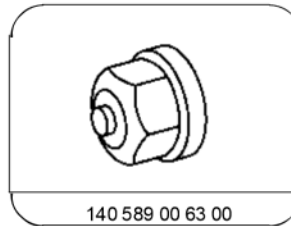
Number	Designation	Stage 1	Nm	MODEL 164.1/8
BA33.20-P-1001-01J	Self-locking nut, upper ball joint out of upper transverse control arm to steering knuckle	Stage 1	Nm	20
		Stage 2	Δ°	90



Knife



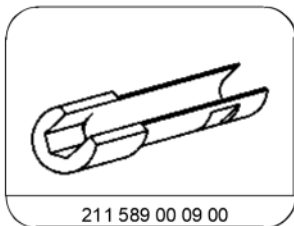
Puller



Thrust piece



Pliers



Socket wrench bit

Repair materials

Number	Designation	Order number
BR00.45-Z-1002-03A	Leak detection spray	Christof Fischer GmbH, Augsburger Strasse 289-293, 70327 Stuttgart Germany Tel. +49 711 30502-0 Fax +49 711 30502-10 www.kaeltfischer.de

BR00.45-Z-1004-03A

Leakage detection spray for USA

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