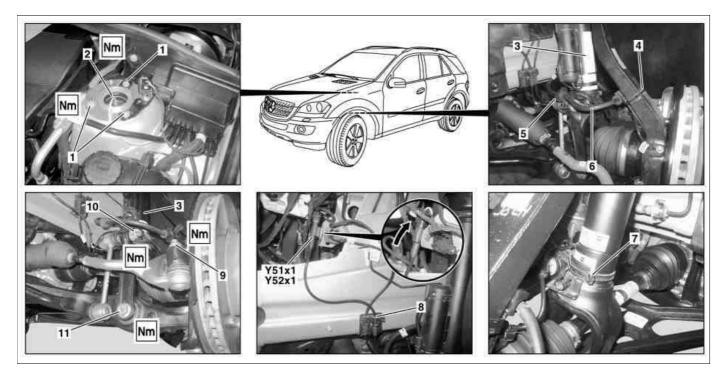
Model 164



P32.25-2134-09

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

| 1 | Nuts |
|---|--------------------------|
| 2 | Pressure line connection |
| 3 | Front suspension strut |

4 Cable tie

12

Nut

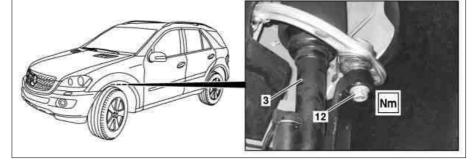
- 5 Brake hose bracket
- Brake hose Cable tie
- Adaptive damping system (ADS) line
- 9 Nut 10 Nut

6

7

8

11NutY51x1Electrical connection for left front-
axle damping valve unitY52x1Electrical connection for right
front-axle damping valve unit



P32.25-2143-04

| ⚠ 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 the vehicle manufacturer. | AS00.00-Z-0010-01A |
|------------|--|---|--------------------|
| | Notes on self-locking nuts and bolts | | AH00.00-N-0001-01A |
| XX | Remove/install | | |
| 1 | Switch off ignition and remove transmitter key from EIS 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 the transmitter key from the 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 nuts from strut mounting stay and unfasten one nut | Only on model 164.195 | |
| 4 | Raise strut mounting stay and place onto bracket | Only on model 164.195 | |
| | | i Gain access to compressed-air connectior (2). | |
| 5 | Jack up vehicle until the wheels are clear of the ground | Model 164 with code 489 (AIRMATIC) | |
| 6 | Deflate AIRmatic system using diagnostic | Model 164 with code 489 (AIRMATIC) | |
| ⊯ AD | system Can only be done with Star | | AD00.00-P-2000-04A |
| 7 | Unscrew nuts (1) on front end | Mm Nut for shock absorber on front end | *BA32.25-P-1001-01G |
| 8 | Unscrew pressure line connection (2) | Model 164 with code 489 (AIRMATIC) | |
| | | i Plug the pressure line for the duration of the repair operations. | |
| | | Mm Air suspension pressure line to front air suspension | *BA32.22-P-1005-03B |
| | | Leakage detection spray for USA Leak detection spray | *BR00.45-Z-1004-03A *BR00.45-Z-1002-03A |
| | | Socket wrench bit | *211589000900 |
| | | S Knife | *000589122800 |
| | | If pressure line or its connection fittings are damaged: | |
| | | ↓ Repair AIRmatic pressure line connection | AR32.22-P-2001-02GZ |
| 9 F AP | Detach front wheel and tire assembly | | AP40.10-P-4050Z |
| 10 | Remove front section of fender liner in fender | Model 164 with code 489 (AIRMATIC) | |
| 11 | Remove cable ties (4) | | AR88.10-P-1310GZ |
| 12 | Detach brake hose (6) from brake hose | | |
| i | bracket (5) Notes on installing brake hoses | | AH42.10-P-9406-01GZ |
| 13 | Remove cable ties (7) | i Installation: Pay attention to installation | |
| | | position. i Installation: Use new cable tie (7). | |
| | | S Pliers | *164589013700 |
| 14 | Unclip ADS line (8) from rpm sensor bracket | Model 164 with code 489 (AIRMATIC) | |
| 15 | Detach electrical connection for left front-axle damping valve unit (Y51x1) or electrical connection for right front axle damping valve unit (Y52x1) | Model 164 with code 489 (AIRMATIC) | |
| | | i Turn retaining clip to remove (arrow). | |
| 16 | Undo nut (9) and remove tie rod from steering knuckle | Nm Self-locking nut, tie rod to steering knuckle | *BA46.40-P-1002-01K |
| | | S Thrust piece | *140589006300 |
| | | S Puller | *140589093300 |
| 17 | Undo nut (10) of link rod and remove link rod from front shock absorber | Mm Nut, torsion bar linkage to front suspension strut | *BA32.20-P-1003-02L |
| 18 | Unscrew nut (12) and remove steering knuckle from upper transverse control arm | Mm Self-locking nut, upper ball joint out of upper transverse control arm to steering | *BA33.20-P-1001-01J |
| | | knuckle | *140589006300 |
| 19 | Push front axle shaft out of front axle shaft | Y Puller Model 164 | *140589093300 |
| | flange, remove front axle shaft | except code 489 (AIRMATIC) 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. To avoid tensioning elastomer bearing. | |

| | | Mm Self-locking nut, shock absorber to wishbone | *BA32.25-P-1002-01G |
|--------|--|--|---------------------|
| 21 | Press transverse control arm downwards and remove front suspension strut (3) | i 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 | Charge AIRmatic system using diagnostic system | Model 164 with code 489 (AIRMATIC) | |
| i⊷ A D | | () 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 suspension bellows | Model 164 with code 489 (AIRMATIC) | |
| 25 | Check AIRmatic for leaks | Model 164 with code 489 (AIRMATIC) | |
| | | | AR32.22-P-8100GZ |

Nm Front axle torsion bar

| Number | Designation | | Model 164.1/8 |
|--------------------|--|-----------|---------------|
| BA32.20-P-1003-02L | Nut, torsion bar linkage to front suspension strutStage 1 Nm | | 100 |
| | Stage 2 | Loosen ∡° | 180 |
| | Stage 3 | Nm | 120 |
| | Stage 4 | ۲° | 45 |

Nm Air suspension

| Number | Designation | | Model 164.1/8 with code 489 (AIRMATIC) |
|--------------------|--|----|--|
| BA32.22-P-1005-03B | Air suspension pressure line to front air suspension | Nm | 5 |

Nm Front axle shock absorber

| Number | Designation | | 1 | Model 164.1/8 |
|--------------------|-------------------------------------|---------|----|---------------|
| BA32.25-P-1001-01G | Nut for shock absorber on front end | Stage 1 | Nm | 30 |
| | | Stage 2 | ۲° | -180 |
| | | Stage 3 | Nm | 27 |

Nm Front axle shock absorber

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

Nm Wheel control, hub

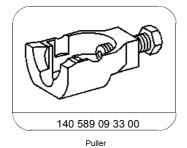
| Number | Designation | | | Model 164.1/8 |
|--------------------|--|---------|----|---------------|
| BA33.20-P-1001-01J | Self-locking nut, upper ball joint out of upper transverse control arm to steering knuckle | Stage 1 | Nm | 20 |
| | | Stage 2 | ڴ | 90 |

Nm Tie rod

| Number | Designation | | | Model 164.1/8 |
|--------------------|---|---------|----|---------------|
| BA46.40-P-1002-01K | Self-locking nut, tie rod to steering knuckle | Stage 1 | Nm | 45 |
| | | Stage 2 | ۲° | 90 |

Nm 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 |



140 589 00 63 00

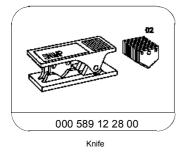
211 589 00 09 00



Thrust piece

Socket wrench bit

Pliers



Repair materials

| Number | Designation | Order number |
|--------------------|---------------------------------|---|
| BR00.45-Z-1002-03A | Leak detection spray | Christof Fischer GmbH www.kaeltefischer.de |
| BR00.45-Z-1004-03A | Leakage detection spray for USA | LIQUI MOLY |
| | | www.liqui-moly.com |