Vehicle drops at rear axle, vehicles with electronic rear axle level control or AIRmatic

Topic number	LI32.22-P-048597
Version	12
Design group	32.22 Air suspension
Date	07-19-2017
Validity	Model 212.0## with air suspension (SA code 489) up to VIN 212.0## ## 596462 Model 212.2## (wagon) up to VIN 212.2## ## 596462 Model 218 with air suspension (SA code 489) up to VIN 218 ### ## 041409
Reason for change	AMG variants added. Pressure reservoir test added to remedy.

Complaint:

The vehicle drops at the rear axle after standing for a long time.

Cause:

Damaged sealing rings in the air suspension element on the rear axle can lead to a microscopic leak and thus to a gradual loss of air

Attachments		
File	Description	
2.JPG	Figure 2	
1.JPG	Figure 1	

Remedy:

1. Check:

 Park the vehicle outdoors and after approx. 2 hours, when the vehicle has cooled down, measure the vehicle level at the rear axle on both sides from the wheel center to the fender.

Note: The vehicle level can drop by 1 mm for each 1 °C change in temperature. For this reason, wait 2 hours before measuring the vehicle level in order to rule out the influence of temperature.

 Leave the vehicle standing overnight and measure the vehicle level at both wheels. While the vehicle is parked, the central locking and the ignition of the vehicle must not be operated.

Drop in vehicle level overnight less than 15 mm:

- The air suspension elements are OK. It is not necessary to replace the air suspension elements on the rear axle.
- Check pressure line connections at valve unit and rear axle air suspension element for leaks using a leak detector spray. If leakage is found (bubbles forming), replace the leaking component and additionally check the AIR-matic system for moisture (see step 4).
- Check the end of the intake line using leak detector spray. If bubbles form, the compressor must be replaced.
- If there is no leakage, the drop can be attributed to the cooling of the air in the system.

3. Drop in vehicle level overnight greater than 15 mm:

- Check pressure line connections at valve unit and rear axle air spring for leaks using a leak detector spray.
 If leakage is found (bubbles forming), replace the leaking component. If there is no leakage at the pressure connections, the relevant air suspension element on the rear axle must be replaced. If the air suspension element installed on the other side is not the latest version (black ring absent, Figure 3), this must be replaced at the same time.
- Check the end of the intake line using leak detector spray. If bubbles form, the compressor must be replaced.
- Check AIRmatic system for moisture (see step 4).

4. Check for moisture in system:

- Unscrew AIRmatic pressure line between compressor and valve unit.
- If water emerges (Figure 1), or if there are visible water droplets at the connection of the pressure line of the
 compressor or valve unit (Figure 2), the compressor, the valve unit and the air filter of the intake hose must be
 replaced. If no water is visible, actuate compressor with XENTRY. If water runs out of the connection on the
 compressor, the compressor, the valve unit and the air filter of the intake hose must be replaced.
- Then unscrew air lines from valve block to air springs on the side of the air suspension strut and blow out with compressed air.
- If the compressed air reservoir is present, disconnect the compressed air line from the reservoir and unscrew
 the pressure reservoir. If there is water in the reservoir, replace the reservoir and blow out the compressed air line from the compressor side using compressed air.

If the components are replaced due to water in the system, this is to be encoded in the warranty and goodwill case as consequential damage for the air spring bellows.

INFO: If components of the system have been replaced and the customer returns with the same complaint a short time later, it must be assumed that the customer has exceeded the fording depth of the vehicle.

Attachments	
File	Description
	Figure 3: Latest air spring bellows with black ring and cur- rent part number

Control unit/fault code		
Control unit	Fault code	Fault text
N51/3 - AIRMATIC (SPC_204)	C156B00	The time for filling the compressed air reservoir was exceeded
N51/3 - AIRMATIC (SPC_204)	C156C00	System 'Compressed air distribution' is leaky

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 212 320 39 25			Left rear air spring, except AMG	1	As required for station wagon, model series 212 and 218	Х
A 212 320 40 25			Right rear air spring, except AMG	1	As required for station wagon, model series 212 and 218	X
A 212 320 37 25			Left rear air spring, except AMG	1	As required for sedan, model series 212	X
A 212 320 38 25			Right rear air spring, except AMG	1	As required for sedan, model series 212	Х

XENTRY TIPS

A 212 320 04 04	Compressor unit	1	As required	
A 212 320 01 58	Valve unit	1	SA 489 Air suspension, model series 212	Х
A 212 320 02 58	Valve unit	1	SA code 488 Electric level adjust- ment, model series 212	X
A 212 320 01 69	Air filter	1	As required	Х
A 212 320 06 58	Valve unit	1	SA code 489 Air suspension, model series 218	Х
A 000 327 01 69	Connector	1	Repair version	Х
A 000 327 00 69	Connector	1	Connector of pressure line, valve unit or air suspension element	Х
A 220 327 10 45	Pressure line	1	Repair version	Х

Operation numbers/damage codes					
Op. no.	Operation text	Time	Damage code	Note	
32-8675	REPLACE AIR SPRING BELLOWS (ALL (2)) OF 2ND VEH. AXLE		32511 04	As required	
32-8679	REPLACE LEFT AIR SPRING BELLOW (1) OF 2ND VEH. AXLE		32F0B 04	As required	
32-8680	REPLACE RIGHT AIR SPRING BEL- LOW (1) OF 2ND VEH. AXLE		32U0B 04	As required	
32-9531	REMOVE/INSTALL COMPRESSOR OF AIR SUSPENSION, REPLACE IF NE- CESSARY		32511 04	As required	
32-8537	REMOVE/INSTALL VALVE UNIT OF AIR SUSPENSION		32511 04	As required	





