

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

Topic number	LI32.22-P-048597
Version	10
Design group	32.22 Air suspension
Date	06-04-2013
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	Remedy updated

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	Designation
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 of temperature change. 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.

2. 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 defective component and additionally check the AIRmatic system for moisture (see step 4).
- 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 defective 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 AIRmatic system for moisture (see step 4).

4. Check for moisture in the 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 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.

Attachments	
File	Designation
3.jpg	Figure 3: Latest air spring bellows with black ring and current part number

Symptoms
Chassis/suspension / Suspension/Dampening / Suspension System Function / Vehicle level too low
Chassis/suspension / Suspension/Dampening / Suspension System Function / Level does not react
Chassis/suspension / Suspension/Dampening / Suspension System Function / Indicator lamp is on
Chassis/suspension / Suspension characteristic / Lopsided/crooked
Chassis/suspension / Suspension/Dampening / AIRMATIC / AIRMATIC leaks / Air leakage
Chassis/suspension / Suspension/Dampening / AIRMATIC / AIRMATIC display / Air Suspension- Stop, Vehicle Too Low
Chassis/suspension / Suspension/Dampening / AIRMATIC / AIRMATIC display / Air Suspension - Service Required
Chassis/suspension / Suspension/Dampening / AIRMATIC / AIRMATIC function / Vehicle is lopsided
Chassis/suspension / Suspension/Dampening / AIRMATIC / AIRMATIC function / Vehicle is too low
Chassis/suspension / Suspension/Dampening / AIRMATIC / AIRMATIC function / Vehicle lowers while driving

Parts							
Part number	ES1	ES2	Designation	Quantity	Note	EPC	Other make part
A 212 320 39 25			Left rear air spring, except AMG	1	As required for station wagon, model series 212 and 218	X	
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	X	
A 212 320 04 04			Compressor unit	1	As required	X	

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

Work units				
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 BELLOWS (1) OF 2ND VEH. AXLE		32F0B 04	As required
32-8680	REPLACE RIGHT AIR SPRING BELLOWS (1) OF 2ND VEH. AXLE		32U0B 04	As required
32-9531	REMOVE/INSTALL COMPRESSOR OF AIR SUSPENSION, REPLACE IF NECESSARY		32511 04	As required
32-8537	REMOVE/INSTALL VALVE UNIT OF AIR SUSPENSION		32511 04	As required