Mercedes-Benz

star bulletin



DTB Date: December 1, 2005

Order No.: P-B-32.50/34

Supersedes:

Group: 32

SUBJECT: Model 230.474/475/476/479

VEHICLE LEVEL LOWERS AFTER BEING PARKED

If you receive customer reports in the above model vehicles of the vehicle s suspension level lowering after being parked (engine off) and any combination of the following fault codes stored, perform the corresponding action based upon the present condition.

∐ Note

The vehicle s level may lower at any of the following: an individual strut, front or rear axle, right or left vehicle side and/or complete vehicle.

Fault Code	Fault Code Text	
C1525 (001)	Critical vehicle level front left	
C1525 (002)	Critical vehicle level front right	
C1525 (004)	Critical vehicle level rear left	
C1525 (008)	Critical vehicle level rear right	
C1531 (001)	Left front suspension strut moves although locking valve is closed	
C1531 (002)	Right front suspension strut moves although locking valve is closed	
C1531 (004)	Left rear suspension strut moves although locking valve is closed	
C1531 (008)	Right rear suspension strut moves although locking valve is closed	

i Note:

For both conditions listed below, large temperature differences in the ABC suspension system between operating and when stationary for an extended period can also cause the vehicle to lower slightly.

The lowering is caused by temperature dependent volume changes in the ABC oil within the suspension struts.

The vehicle can lower up to 10 mm when the temperature difference is 30°C (ABC operating temperature 20°C / outside ambient temperature -10°C).

Condition 1:

If a vehicle lowers after being stationary (engine off) within approximately one week, this is likely due to internal leakage in the check valve of the front (Y36/1) or rear (Y36/2) axle valve blocks. The internal leakage is the result of deposits or contamination on the valve seat of the check valve. In order remove the deposits, perform the following.

- 1. Flush the ABC suspension system (reference WIS document SM32.50-P-0002A).
- 2. Replace the hydraulic oil filter (reference WIS document SM32.50-P-0002-01A).
- 3. Check and correct the ABC suspension hydraulic fluid level (reference WIS document AP32.50-P-3213I).
- 4. Using STAR Diagnosis perform a Rodeo routine for 0.75 hour by navigating to the following menus: Control Units Chassis ABC-Active Body Control Actuations Cyclically Alternating Actuation of All Suspension Struts in a Circular Motion (Rodeo).

If the complaint still continues to occur after the above procedure, the respective valve block must be replaced (reference WIS documents: AR32.50-P-0001R and AR32.50-P-0002R.



⚠ Caution!

It is imperative that the utmost attention for cleanliness be observed when working on the ABC suspension system in order to ensure that no contamination enters the system. Small particles of debris can contaminate the hydraulic fluid, thus causing internal leakage.

Condition 2:

If a vehicle lowers only after being stationary (engine off) for more than approximately a week, this is a characteristic of the hydraulic design and is not a complaint that requires a repair. The check valves in the front and rear axle valve blocks have a metal valve seat. The inherent design of this sealing method, required for system durability, permits a limited level of leakage which can result in the vehicle slowly lowering. If the vehicle does not lower significantly until after approximately one week has passed, do

perform any repair attempts.

Parts Information				
Qty.	Part Name	Part Number/Exchange		
10	ABC hydraulic fluid, Pentosin (1 liter)	BQ132 0001		
1	ABC oil filter	A003 184 61 01		
1	ABC valve unit (front or rear)	A220 320 03 58		



The following allowable labor operations should be used when submitting a warranty claim for this repair.

In Case of Warranty

Operation: Short test, perform (54-1011)

ABC system (Model 230), flush and test function (32-0000 (A))

Rodeo test perform (32-0000 (B))

Valve body front axle for Act. Body Cont. (ABC), replace (32-7545)

Valve body rear axle for Act. Body Contr. (ABC), replace (32-7546)

Addit. Work on ABC ABC sys. Drain, fill and correct oil level (32-7578)

Damage Code	Operation Number	Time (hrs.)	Model Indicator (s)
32554 B1	54 1011	0.3 hrs.	00
	32 0000 (A)	2.2 hrs.*	R1, R2, R3, R4
	02 3474	2.2 hrs	J3, M1, M2, M4, M5, M8, M9
	02 3476	2.2 hrs	N1, N2, N3, N4, N5, N6
	32 0000 (B)	0.8 hrs*	J3, M1, M2, M4, M5, M8, M9, N1, N2, N3, N4, N5, N6, R1, R2, R3, R4
	32 7545	1.0 hrs	M1, M2, M4, M5, M8, M9, N1, N2, N3, N4, N5, N6,
		1.4 hrs	J3
		1.7 hrs	R1, R2, R3, R4
	32 7546	0.9 hrs	M9, N1, N2, N3, N4, N5, N6
		1.0 hrs	M1, M2, M4, M5, M8
		2.3 hrs	R1, R2, R3, R4
	32 7578	0.6 hrs	J3, M1, M2, M4, M5, M8, M9, N1, N2, N3, N4, N5, N6, R1, R2, R3, R4

^{*} Maximum time allowed with a separate time punch.