# **Recall Campaign Bulletin**



Campaign No. 2020070005, August 2020

Revision A 8-21-2020

#### TO: ALL MERCEDES-BENZ CENTERS

## SUBJECT: Model G-Class vehicles (463 platform) Model Year 2019-2020 Differential Locking System

Mercedes-Benz AG ("MBAG"), the manufacturer of Mercedes-Benz vehicles, has determined that on certain Model Year ("MY") 2019-2020 G-Class vehicles (463 platform), the control unit of the differential locking module might not meet current production specifications. The electrical contact of a specific resistor might be impaired due to sulfur fumes originating from the axle oil. If the resistor is impaired, the electrical currents calculated with this resistor would have a higher value than what actually exists. As a result, the communication between the control unit and the locking actuator will shut down and the differential locking status might no longer be reliably determined. According to the specified system strategy for locked differentials, both ESP and ABS systems would be deactivated. This could increase the risk of a crash under certain operating conditions. The customer will be made aware of the issue by an ABS and ESP message in the instrument cluster. An authorized Mercedes-Benz dealer will check the differential locking modules on the affected vehicles and replace them, if necessary.

Prior to performing this Recall Campaign:

- VMI must always be checked before performing campaigns to verify that the campaign is required on a specific vehicle. Always check for any other open campaigns, and perform accordingly.
- Please review the entire Recall Campaign bulletin and follow the repair procedure exactly as described.

Please note that Recall Campaigns **do not expire** and may also be performed on a vehicle with a vehicle status indicator.

Approximately 6300 vehicles are involved.

Order No. P-RC-2020070005 This bulletin has been created and maintained in accordance with MBUSA-SLP S423QH001, Document and Data Control, and MBUSA-SLP S424HH001, Control of Quality Records. Recall Campaign Bulletin

**Recall Campaign Bulletin** 

### Check/test procedure

- 1. Remove lower center engine compartment lining (AR61.20-P-1105XG).
- Check part number at top at actuator of differential lock of *front axle*.
  No actuator with the item number *A 463 906 33 01 may* be installed.

Perform check using a mirror as shown in (Figure 1).

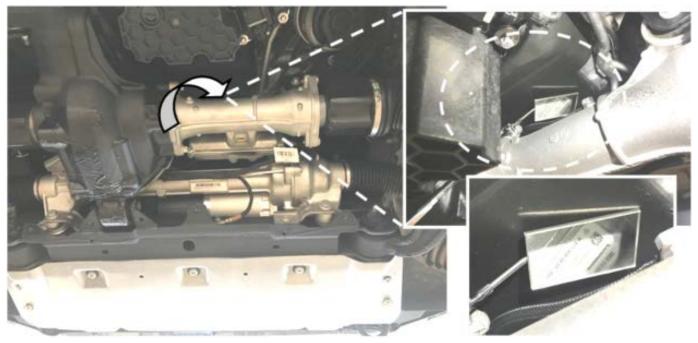


Figure 1

3. Check part number at top at actuator of differential lock of *rear axle* using a mirror (Figure 2).

**i** No actuator with the part number **A 463 906 34 01** may be installed.

 $\boxed{\mathbf{i}}$  If part number of actuator at rear axle cannot be read off due to undercoat / paint coat or parts sticker is no longer legible, the actuator will be replaced.





- a. Part number illegible or corresponds to A 463 906 33 01 and/or A 463 906 34 01: Perform work procedure.
- b. Part number does NOT correspond to A 463 906 33 01 and does NOT correspond to A 463 906 34 01: End measure.

i The results of this check must be documented in writing on the work order.

#### Work procedure

- 1. Replace actuator of differential lock at front axle and/or rear axle.
  - **I** <u>The</u> parking brake on the rear axle must be opened after the vehicle has been lifted.

**I** To do this, press the start button twice without actuating the brake pedal (ignition on) – actuate the brake pedal – move selector lever to "N" position (read on display) – open parking brake – switch off ignition.

**i** Attention: Now that the vehicle is in permanent "N," there is a risk of the vehicle rolling away.

**i** Only actuators with incorrect or illegible part number will be replaced.

- **i** For basic data for actuator of front axle, see **AR33.40-P-0001XGA**.
- **i** For basic data for actuator of rear axle, see **AR35.40-P-0001XGA**.

The actuator bolts N 000 000 001 433 and N000 000 003 3967 are not one time use and it can be reused for this specific campaign.

- **i** New actuator must *not be painted*.(Figure 3)
- **i** Observe installation instructions for rear axle actuator.



Figure 3

**i Important:** The new rear axle actuator from the replacement parts department is delivered in "lock engaged" <u>condition</u>. (Visible by the position of the bolt on the actuator)(figure 6)

**i**<u>To</u> install the new actuator, the **lock in the rear axle** must be **engaged manually**.

**i** With the actuator removed, the slider in the axle tube for actuating the lock must be moved in the direction of the axle centerpiece (figure 5), e.g. with a Torx wrench. One of the rear wheels must be turned at the same time.

Li The bolt of the actuator is always installed in the large opening.(figure 4 and 5)



Figure 4 (lock NOT engaged: slider to wheel)



Figure 1 (lock engaged: slider to axle centerpiece)



Figure 6 (installation position of rear axle actuator with new part)

i The differential lock opens automatically during the first ignition sequence.

2. Check differential locks of front and rear axle for proper operation.

**i** For this purpose, start the engine – engage low range "N" position – actuate transfer case differential lock switch/rear axle differential lock switch/front axle differential lock switch – drive in gentle figure 8 lines at walking pace in an open area until the **red feedback of all three locks** appears **on operating switch (figure 7)** – deactivate locks and low range.



Figure 7

#### **Primary Parts Information**

Qty.	Part Name	Part Number
As required	Parts kit for front axle differential lock actuator	A 463 906 46 02
As required	Hexagon head bolt	N 910 105 010 016
As required	Parts kit for rear axle differential lock actuator	A 463 906 55 02

Small parts such as screws/bolts, lock nuts, sealing rings, cable ties, fluids, sealant etc. are not listed in the parts list. The required small parts are taken into account in the budgeting.

#### Warranty Information

#### With Check Only

**Operation:** Check actuator of front and rear differential lock

Damage Code	Operation Number	Labor Time (hrs.)
33 950 03 8	02-1466	0.4

#### With check and replace front differential lock

**Operation:** Check actuator of front and rear differential lock Replace actuator of front differential lock (after check)

Damage Code	Operation Number	Labor Time (hrs.)
33 950 03 7	02-1466	0.4
	02-1467	0.8

#### With check and replace rear differential lock

**Operation:** Check actuator of front and rear differential lock Replace actuator of rear differential lock (after check)

Damage Code	Operation Number	Labor Time (hrs.)
33 950 03 7	02-1466	0.4
	02-1468	0.4

#### With check and replace both front and rear differential lock

**Operation:** Check actuator of front and rear differential lock Replace actuator of front and rear differential lock (after check)

Damage Code	Operation Number	Labor Time (hrs.)
33 950 03 7	02-1466	0.4
	02-1469	0.9

# **i** Note

Operation Number labor times are subject to change.