

Recall Campaign Bulletin



Mercedes-Benz

Campaign No. 2022050015, May 2022

Revision F 02/13/2023

TO: ALL MERCEDES-BENZ CENTERS

SUBJECT: **Model GL-Class, ML-Class, and R-Class (X164, W164 and 251 platform)
Model Year 2006-2012**

Inspect Brake Booster – without Pedal Rework

Mercedes-Benz AG (“MBAG”), the manufacturer of Mercedes-Benz vehicles, has determined that on certain Model Year (“MY”) 2006-2012 ML, GL (W164/X164 platform) and R-Class (251 platform) vehicles, the function of the brake booster might be affected due to advanced corrosion in the joint area of its housing. After extended time in the field and in conjunction with prolonged water exposure, this corrosion might lead to a vacuum leak at the brake booster. If this were to occur, the brake force support might be reduced, leading to an increase in the brake pedal forces required to decelerate the vehicle, and/or increased stopping distances. Additionally, in rare cases of very severe corrosion, it might be possible for a particularly strong or hard brake application to cause mechanical damage in the brake booster, whereby the connection between brake pedal and brake system would fail. In such a very rare case, it would not be possible to decelerate the vehicle via the brake pedal. The risk of a crash or injury would be increased. The function of the parking brake is not affected by this issue. Before the issue occurs, the driver might notice a change in the brake pedal feel and/or hissing/airflow noises when applying the brake pedal. MBUSA will conduct a voluntary recall. An authorized Mercedes-Benz dealer will remove the rubber sleeve from the brake booster housing, check the brake booster on the affected vehicles and, depending on the result of this inspection, replace as necessary. **Affected customers were mailed a recall owner notification letter and instructed to stop driving their vehicles until the inspection process is completed.**

Prior to performing this 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 Campaign bulletin and follow the repair procedure exactly as described.

Approximately 278,173 vehicles are affected.

Order No. P-RC-2022050015

This bulletin has been created and maintained in accordance with MBUSA-SLP S423QH001, Document and Data Control, and MBUSA-SLP S424HH001, Control of Quality Record

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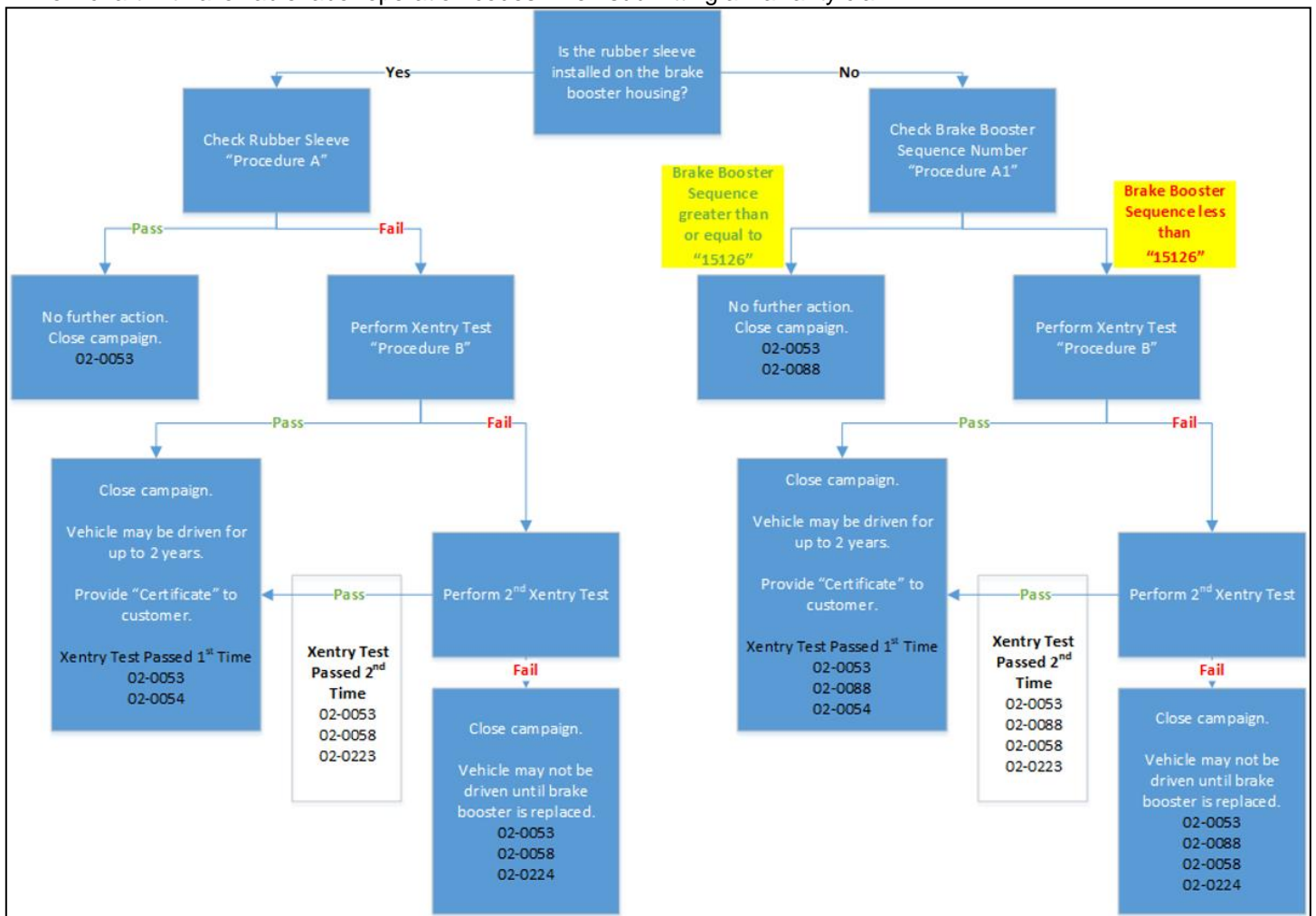
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Inspect Brake Booster

- i** Return information for rubber sleeve and quick test has been removed.
- i** Existing problems that would hinder the inspection procedure or any subsequent repairs must first be rectified and are the responsibility of the customer. Any associated costs are not claimable and should not be included with the campaign claim.
- i** Any primary loss which is a direct result of performing the XENTRY test should be submitted on the same claim as the campaign reimbursement.
- i** Before starting work, there must be **no** fault message present in the instrument cluster for the brake system. If a fault message is present before starting work, it must be rectified and is the responsibility of the customer. Any associated costs are not claimable and should not be included with the campaign claim.

1. Flow chart with allowable labor operation codes when submitting a warranty claim.



Check/test procedure A–visual inspection only

1. Open the hood and check the water drains (**marking, figure 1**) for correct installation and ability to drain.
 - i** Only for model 251
 - i** Clean and correctly install water drains if necessary.

**Figure 1**

2. Remove the rubber sleeve wrapped around the brake booster (**A, figure 2**) with a suitable tool (hook and side cutting pliers). If the rubber sleeve is not present, please proceed to check/test procedure **A1**.

i The rubber sleeve should be separated above the barcode label on the brake booster as seen in (**A, figure 2** and **B, figure 4.1**).

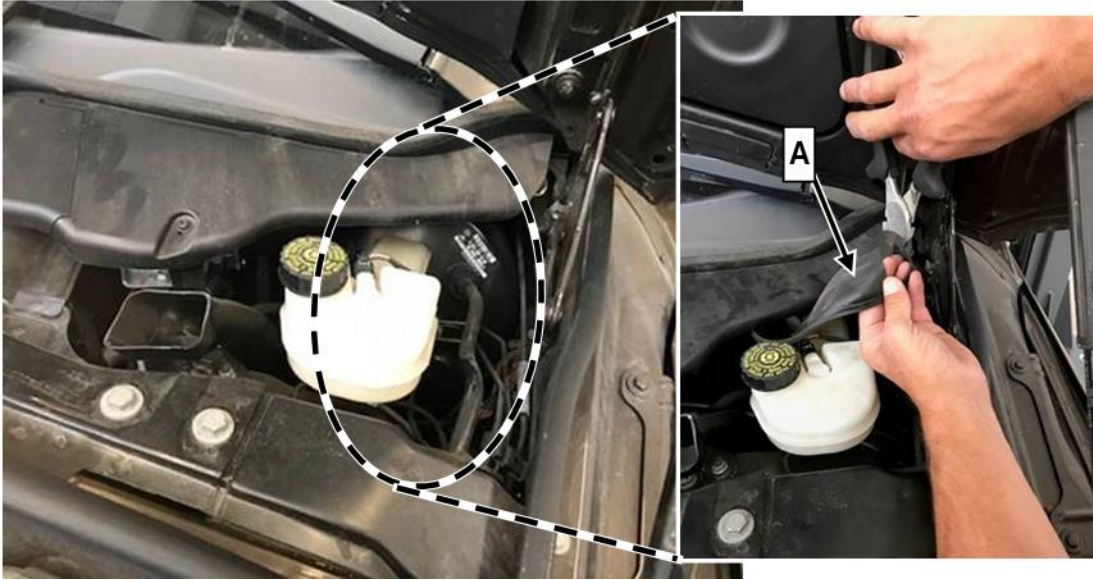


Figure 2

3. Take a photo of the rubber sleeve with the VIN label of the B-pillar (**A, figures 3 and 4**) and store to a local HDD/computer storage location with the vehicle service file and attach it to the warranty claim in EVA.

i These pictures serve as documentation of the current condition of the brake booster.



Figure 3

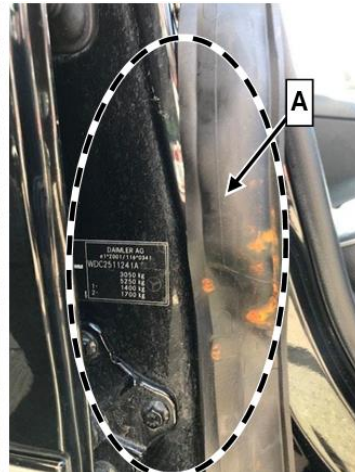


Figure 4

4. Check corrosion of the brake booster using the removed rubber sleeve.

i Use figures 5, 6 and 7 to assess corrosion.

i **Brake booster OK:**

Multiple point-shaped corrosion marks (**figure 5**) are permissible.

A maximum of **one point-shaped corrosion mark** with a diameter **greater than 15 mm** (**figures 6 and 7**) is permitted.



Figure 5 OK

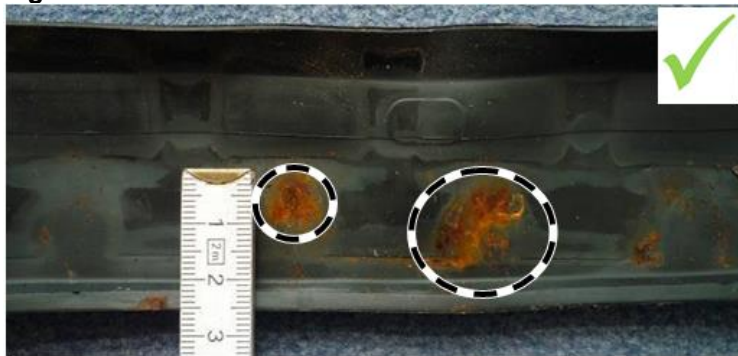


Figure 6 OK

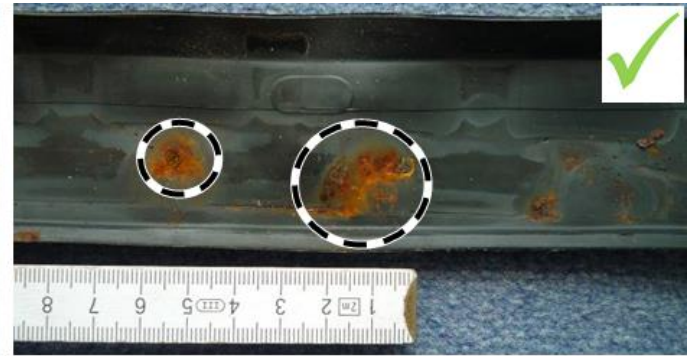


Figure 7 OK

i **Brake booster not OK:**

Widespread corrosion marks spanning the rubber sleeve are not permissible.

More than one corrosion mark with a diameter greater than 15 mm is not permissible.

- Corrosion measurements **Exceeds thresholds-NOK**: Carry out **check/test procedure B - XENTRY/DAS**.
- Corrosion measurements **Does not exceed threshold-OK** (figure 5, 6 or 7): **End measure. (Certificate of Passed Initial Diagnostic Brake Test not required).**

i If the measure is ended, **do not** re-install a new rubber sleeve. Apply marking with **white touch-up paint pen (1, figure 8)** to the brake booster checked.

i **Under no circumstances should you treat the brake booster with anti-corrosion agent.**

i The **findings** from the check/test procedure must be **documented on the Repair Order** and included in the dealer **text in the warranty claim** in EVA.

Check/test procedure A1 - visual inspection only if no rubber sleeve is present

1. Take a photo of the barcode label (B, figure 8) on the brake booster and store to a local HDD/computer storage location with the vehicle service file and attach to the warranty claim in EVA.



Figure 8

1. Check sequence of numbers on the barcode label (C, figure 9).
 - a. If the numeric sequence between numbers 13 and 17 is **less than** "15126": Carry out **scope of testing B - XENTRY/DAS**.
 - b. If the numeric sequence between numbers 13 and 17 is **greater than or equal to** "15126": **End measure**.



Figure 9

Check/test procedure B - XENTRY/DAS This step is only to be used if step A or A1 has failed

- i** Ensure use of **XENTRY Diagnosis version 03/2022** or higher.
- i** The current version of all add-ons must be installed.
- i** Make sure to follow the operation steps exactly as described in XENTRY Diagnosis.

1. Connect XENTRY Diagnosis.

- i** XENTRY **must** be connected via the cable with VCI/SD Connect.

i Note regarding vehicles with KeylessGo: Remove KeylessGo start button and perform test with ignition key.

i Do not perform any unnecessary braking procedures (maximum full-stop braking) before the test. As a rule, the test should be performed nonstop **without interruption**.

In certain conditions, the XENTRY scope of testing can be interrupted while the test is ongoing (e.g. hydraulic system is leaky) (cancellation). In this case, please follow the user guidance in XENTRY/DAS Diagnosis, because notes on the causes will be displayed for you.

IMPORTANT: If XENTRY/DAS Diagnosis requests that the brake pedal be withdrawn into the starting position toward the driver, this **must** be done by means of a powerful foot motion.

Check brake booster with XENTRY/DAS.

i To do this, select the menu item "Main groups – Control units - Chassis – ESP-Electronic Stability Program – Complete list of guided tests – Braking power".

i Then follow the user guidance in XENTRY/DAS Diagnosis.

i Print out the brake force "event log" after the test and store to a local HDD/computer storage location.

- a. XENTRY/DAS test **not** passed: Please **perform this test again**.

- i** **Only perform this test twice.**

- b. XENTRY/DAS test **passed**: **Continue with operation step 2.**

i If the XENTRY/DAS test was **not** passed the first time, you **must** perform a second XENTRY/DAS test. If this second test is now **passed**, continue with the operation step 2 of scope of testing B.

IMPORTANT: Only perform the **second** test if the **first** XENTRY/DAS test was **not** passed.

The **second** test must be invoiced using operation number 02-0245 or 02-0246.

- a. XENTRY/DAS test of the **second test not** passed: **Close campaign with claim**. See Launch NCU FAQ for mobility solution options to offer to the customer until parts are available and the part can be exchanged. Do **not** provide customer Certificate of Passed Initial Diagnostic Brake Test.
- b. XENTRY/DAS test of the **second test passed**: Continue with **operation step 2**.

2. Apply marking with **white touch-up paint pen (1, figure 10)** to the inspected brake booster.
- i** Under no circumstances should you treat the brake booster with anti-corrosion agent/paint.



Figure 10

3. Print out customer certificate titled "Certificate of Passed Initial Diagnostic Brake Test", located at the end of this document, fill out, sign, and hand over to the customer.
4. Disconnect XENTRY Diagnosis.

Warranty Information

i **Note:** The following allowable labor operation should be used when submitting a warranty claim for this repair.

Damage Code	Operation Number	Description	Labor Time (hrs.)	
42 900 05	02-0053	Check/test procedure A Check brake unit Includes: Remove rubber sleeve from brake unit and document test result This operation number can be used even if no rubber sleeve is present on the brake unit	0.2	
	02-0088	Check/test procedure A1 Check barcode on brake unit Only if no rubber sleeve is present on the brake unit End of test: Do not perform any further work.	0.1	
	End Here If Vehicle Passed Visual Inspection			
	02-0054*	Check/test procedure B Check brake unit using XENTRY Diagnosis Findings: OK Includes: Connect/disconnect XENTRY	0.4	
	End Here If Vehicle Failed Visual Inspection & Passed 1st XENTRY Check			
	02-0058*	Check/test procedure B Check brake unit using XENTRY Diagnosis Findings: not OK Includes: Connect/disconnect XENTRY Repeat scope of testing with the result of test item 02-0223 or 02-0224.	0.4	
	02-0223**	Check/test procedure B - 2nd XENTRY/DAS test Extra work for: G 02 0058: Check brake unit with XENTRY Diagnosis – findings OK i The second time the vehicle was tested, it was found to be OK .	0.2	
	End Here If Vehicle Failed Visual Inspection & Failed 1st XENTRY Check but Passed 2nd XENTRY Check			
	02-0224**	Check/test procedure B - 2nd XENTRY/DAS test Extra work for: G 02 0058: Check brake unit with XENTRY Diagnosis – findings not OK i The second time the vehicle was tested, it was found to be not OK	0.2	
* Invoice only operation item 02-0054 or 02-0058. Invoicing both operation items is not permissible.				
** Invoice operation item 02-0223 or 02-0224. Invoicing both operation items is not permissible.				

When using operation item 02-0054 or 02-0223, the Certificate of Passed Initial Diagnostic Brake Test must be handed over to the customer which is located at the end of this document.

i **Note:** Always check ASRA for the current OP-Code times. Labor times are subject to change and updates may not be reflected in this document.



Mercedes-Benz

Certificate of Passed Initial Diagnostic Brake Test

Recall campaign – Inspect Brake Booster

Vehicle identification number: _____

Dear Valued Customer:

Your vehicle's brake booster has been inspected by your authorized Mercedes-Benz service facility for corrosion and functionality under MBUSA Recall Campaign number 2022050015 or 2022050014 bearing NHTSA ID# 22V315. The results of this initial inspection confirm that it is not immediately necessary to replace the brake booster in your vehicle. Therefore, your vehicle is no longer subject to the Stop Drive and may continue to be driven. A mobility solution is no longer necessary.

Important!

The brake booster may be subject to an additional inspection or a replacement brake booster, whichever comes first, within a period of 2 years from the date of the initial inspection.

Mercedes-Benz USA will contact you again by mail to schedule the additional inspection at the appropriate time.

If you sell your vehicle in the meantime, you must provide this document to the buyer.

The additional inspection of the brake booster is very important to your vehicle's safety. Therefore, it will be checked whether this has been carried out no later than 2 years after the first inspection. If this additional inspection was not carried out on your vehicle in time, you should stop operating the vehicle.

If the described additional inspection is not completed, advanced corrosion in the joint area of the housing could potentially impair the function of the brake booster. This might increase the required brake pedal force and possibly extend the stopping distance. In very rare cases, it cannot be completely ruled out that mechanical damage to the brake booster might occur, whereby the connection between brake pedal and brake system would fail. In that condition, the vehicle would no longer be decelerated via the service brake which would increase the risk of a crash or injury.

Date of inspection: _____

Signature of Mercedes-Benz Dealer