

TO: Mercedes-Benz Dealer Principals, General Managers, Sales Managers, Service Managers, Parts Managers	FROM: Gregory Gunther, Department Manager, Vehicle Compliance and Analysis, Engineering Services
RE: Service Campaign Launch Notification Check Convertible Roof Frame, Calibrate if Necessary MY22-23 SL (232 platform)	DATE: April 6, 2023

IMPORTANT SERVICE CAMPAIGN LAUNCH

Please note that all customer inquiries should be directed to the Customer Assistance Center at 1-800-FOR-MERCEDES (1-800-367-6372).

Sincerely,

Gregory Gunther

Department Manager, Vehicle Compliance & Analysis



Service Campaign Launch Notification		April 6, 2023
Campaign No. :	Campaign Desc. :	Check Convertible Roof Frame, Calibrate if Necessary
2023030004	22P7793001	
<p>This is to notify you of the Service Campaign Launch to check the convertible roof frame outlet flap on 153 Model Year (“MY”) 2022-2023 SL (232 platform) vehicles. The vehicles will be visible and flagged in VMI as “OPEN” on April 6, 2023.</p>		
Background		
Issue	Mercedes-Benz AG (“MBAG”), the manufacturer of Mercedes-Benz, has determined that on certain MY 2022-2023 SL (232 platform) vehicles, the software of the rear control unit may not meet current production specifications. Therefore, the possibility exists that the soft top may not close from the “soft top open” position.	
What We’re Doing	MBUSA will conduct a service campaign. An authorized Mercedes-Benz dealer will check and calibrate the roof frame outlet flap, if necessary.	
Parts	The remedy is available and can be performed as necessary.	
Vehicles Affected		
Vehicle Model Year(s)	2022-2023	
Vehicle Model	SL	
Vehicle Populations		
Total Campaign Population	153	
Next Steps/Notes		
AOMS/SOMS	AOMs – This campaign may generate questions from your dealers.	
<p>While we regret any inconvenience this may cause, MBUSA is determined to maintain a high level of vehicle quality and customer satisfaction. Please refer all customer inquiries to the Customer Assistance Center at 1-800-FOR-MERCEDES.</p>		



Service Campaign Bulletin



Mercedes-Benz

Campaign No. 2023030004, April 2023

TO: ALL MERCEDES-BENZ CENTERS

SUBJECT: **Model SL (232 platform)**
Model Year 2022-2023

Check Convertible Roof Frame, Calibrate if Necessary

Mercedes-Benz AG (“MBAG”), the manufacturer of Mercedes-Benz, has determined that on certain MY 2022-2023 SL (232 platform) vehicles, the software of the rear control unit may not meet current production specifications. Therefore, the possibility exists that the soft top may not close from the “soft top open” position. An authorized Mercedes-Benz dealer will check and calibrate the roof frame outlet flap, if necessary.

Prior to performing this Campaign:

- **VMI must 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 153 vehicles are affected.

Order No. P-SC-2023030004

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.

Service Campaign Bulletin

Service Campaign Bulletin

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Calibrate convertible roof frame outlet flap (GAK) at soft top

- i** • Always use the **latest** XENTRY Diagnosis software release with all available add-ons.
 - Make sure to follow the operation steps exactly as described in XENTRY Diagnosis.
 - Use a charger to ensure sufficient power supply to the vehicle's **on-board electrical system battery** (greater than 12.5 V).
 - If XENTRY Diagnosis is already connected to the vehicle, start with **Work Procedure step 2**.
- i** If two or more software updates or SCN codings are performed during a single workshop visit, the operation items **02-4762** and **02-5058** may only be invoiced **only on one of the workshop orders**.

Work Procedure

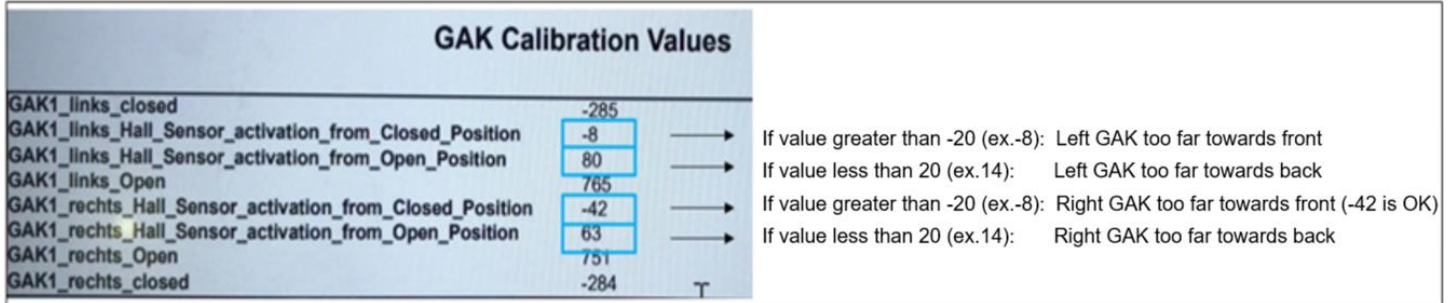
i **GAK is the German abbreviation for Header Bow**

1. Connect XENTRY Diagnosis.
2. Update rear control unit (SG-FOND) software.
 - i** To do this, select menu item "Quick test view – N22/6 rear control unit (SG-FOND) - Adaptations – Control unit update – Updating of control unit software".
 - i** Then follow the user guidance in XENTRY Diagnosis.
 - i** If no new software is found, the latest version is already installed. In this case, continue to follow the work instructions.

i XENTRY Diagnosis will fully guide you through the following operations.
(The figures below are examples only and serve to provide a better understanding of the operations to be carried out).

Check/test procedure

1. Identify the work procedure (left GAK and/or right GAK) with XENTRY Diagnosis.
 - a. Read out calibration data (ACTUAL values) with XENTRY Diagnosis.
 - i** To do this, select menu item "Quick test view – N22/6 control unit – Rear control unit - Control unit log => Read out ACTUAL values.
 - b. **Save** calibration data **as a PDF**, open and identify defective convertible roof frame outlet flap (GAK) (figure 1) and determine the required rework scope (figure 2)



Left GAK	Closed Position	Not OK for 0 up to -19	OK < -19
	Open Position	Not OK for 0 up to +19	OK > +19
Right GAK	Closed Position	Not OK for 0 up to -19	OK < -19
	Open Position	Not OK for 0 up to +19	OK > +19

Figure 1: Interpretation of GAK calibration value from control unit log

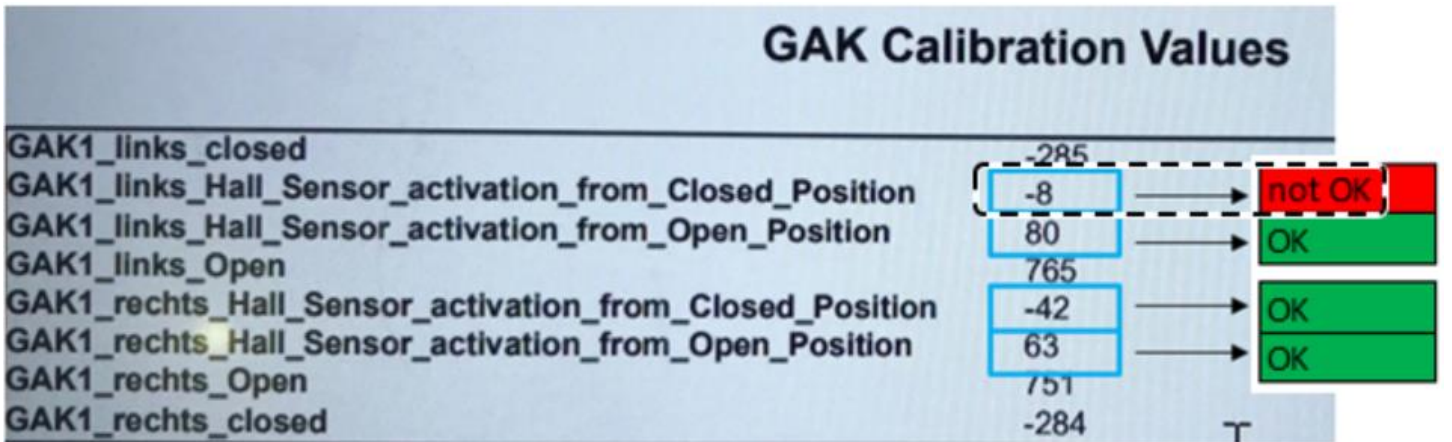


Figure 2: Determination of rework scope

- i** Example: **-8 not OK**. Here the **left GAK** must be moved to the rear.

2. Move soft top into convertible position and Header Bow (GAK) into intermediate position (figure 3).

i For this purpose, move to position via the soft top switch (1).



Figure 3 Move to position via soft top switch (1)

3. Open soft top locks via XENTRY Diagnosis (figure 4).

Version: N22/6 - Rear control unit (SG-FOND) | 12.0V | Ignition ON

Selection:

- Control unit reset
- Soft top
- M27/13 (Touchscreen actuator motor)
- Individual roof motor control
- M47/1 (Front soft top lock electric motor)**
- Header bow
- Lower header bow
- Convertible roof motors

Caution!
An incorrect operation can lead to failure of the system.

Requirements

- Ignition ON
- Bring the actual values into the specified value ranges by fully opening the soft top.

Status of associated actual values

Name	Actual value	Specified value
S84/3 (Soft top 'open' limit switch)	ACTUATED	ACTUATED
S84/38 (Soft top lock locked limit switch)	ACTUATED	
Status of component 'M47/1 (Front soft top lock electric motor)'	NOT ACTUATED	

Notes

- Open soft top lock.
- Lock soft top lock.

Figure 4

i **Important note: Risk of damage!**

The electric motor is actuated without monitoring. Once the position is reached, the button must be released. **Risk of damage!**

i 2 people are required for the performance of this operation!

Person 1: Visual height adjustment (soft top (A) and GAK rear edge (B))

Person 2: Gradual raising of soft top via Xentry

4. Raise soft top (A) to same height as GAK rear edge (B) (figure 5).

i For this purpose, gradually raise soft top (A) via Xentry (figure 6).

To determine the **lowest** clearance, soft top (A) and GAK rear edge (B) must be at the **same height**.



Figure 5 Raising the soft top

Name	Actual value	Specified value
Hall sensor GAK1 intermediate position left	ACTUATED	ACTUATED
Hall sensor GAK1 intermediate position right	ACTUATED	ACTUATED
Hall sensor GAK2 open left	NOT ACTUATED	ACTUATED
Hall sensor GAK2 open right	NOT ACTUATED	ACTUATED
Hall sensor Front latch closed	ACTUATED	NOT ACTUATED
Status of soft top control	NOT ACTUATED	
Hall sensor Motor CT left	-1320	
Hall sensor Motor CT right	1320	

Figure 6 Raising the soft top header bow via XENTRY

i The following **distance measurements must** always be carried out with a raised soft top **coming from the convertible position** (most critical distance in the movement)
Risk of damage to soft top!

i Only perform the operation step if the values of the convertible roof frame outlet flap (GAK) are **not OK!**

5. Readjustment of **not OK** GAK (figure 7)

i Perform distance measurement at narrowest location in movement between GAK and soft top.

i A distance of **at least 15 mm must** always be ensured at both convertible roof frame outlet flaps to the soft top!

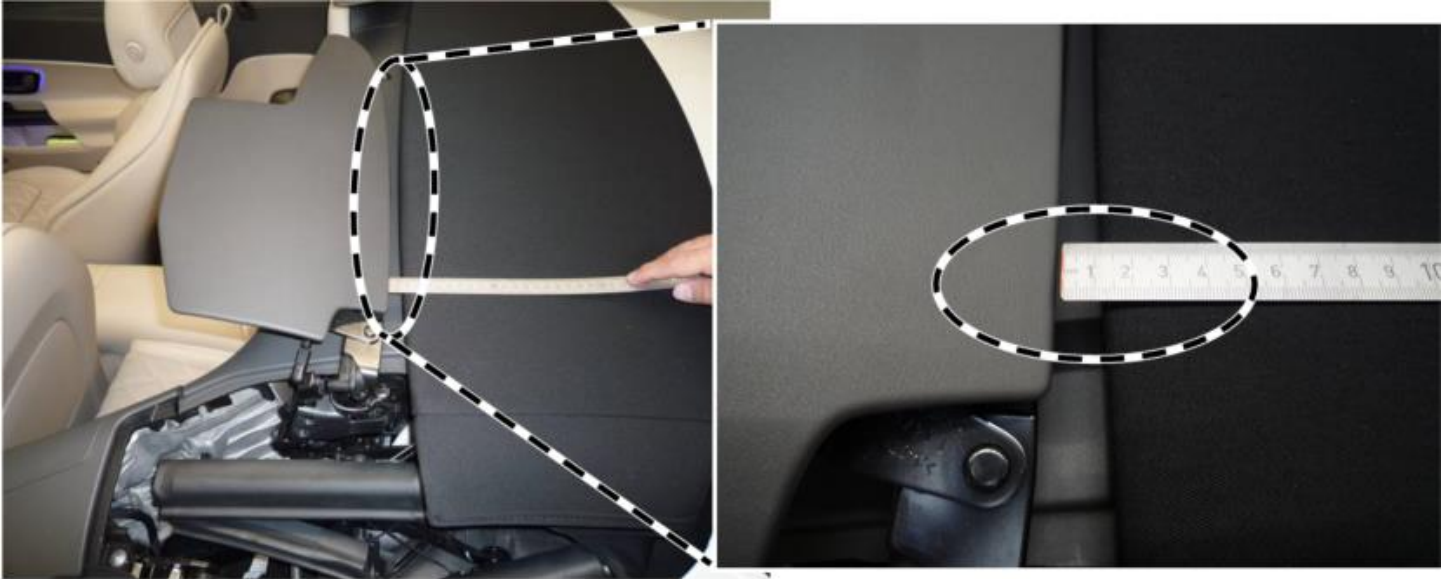


Figure 7 not OK

6. Gradually move back convertible roof frame outlet flap (GAK) via XENTRY to a distance of **17 mm** (figure 8).

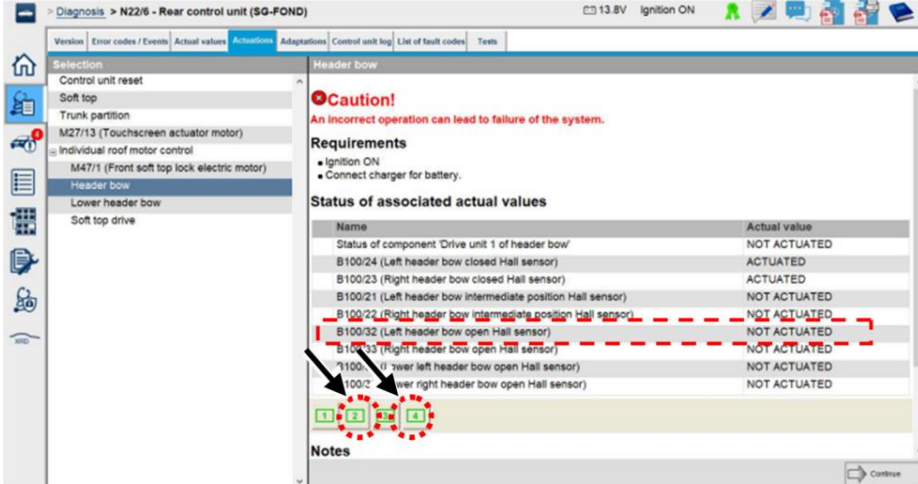


Figure 8

- i** Check whether sensors for GAK 1 intermediate position are at "Actuated".

Note: Per actuation, the mechanical system is moved backwards by approx. 1-2 mm



7. Carry out position adjustment of GAK via XENTRY (figure 9).

i Both convertible roof frame outlet flaps (GAK) must align (figure 9).

i A distance of **at least 15 mm must** always be ensured at both convertible roof frame outlet flaps to the soft top!



Figure 9

i 2 people are required for the performance of this operation!!

Person 1: Measurement of distance

Person 2: Movement of GAK via Xentry

8. Manually raise soft top via Xentry up to "Cobra position" (figure 10).

i The value must lie between 800 and 900 on the right side and -800 and -900 on the left side. Both values of "Hall Sensor Motor CT left/right" show this value (see figure 11).



Figure 10

Diagnosis > N22/6 - Rear control unit (SG-FOND) 13.7V Ignition ON

Version Error codes / Events Actual values **Actual values** Adaptations Control unit log List of fault codes Tests Author data

Selection

- Soft top
 - M27/13 (Touchscreen actuator motor)
 - Individual roof motor control
 - M47/1 (Front soft top lock electric motor)
 - GAK1_Control
 - GAK2_Control
 - Convertible roof motors

Convertible roof motors

- Bring the actual values into the specified value ranges.

Status of associated actual values

Name	Actual value	Specified value
Hall sensor GAK1 intermediate position left	ACTUATED	ACTUATED
Hall sensor GAK1 intermediate position right	ACTUATED	ACTUATED
Hall sensor GAK2 open left	NOT ACTUATED	ACTUATED
Hall sensor GAK2 open right	NOT ACTUATED	ACTUATED
Hall sensor Front latch closed	ACTUATED	NOT ACTUATED
Status of soft top control	NOT ACTUATED	
Hall sensor Motor CT left	-850	
Hall sensor Motor CT right	820	

Note

- Opening of soft top
- Closing of soft top

Additional note

The actuation is only

Hall sensor Motor CT
Hall sensor Motor CT

Continue

13:43 PM 7/15/2022

Figure 11

9. Start teach-in run of soft top via XENTRY (figure 12).

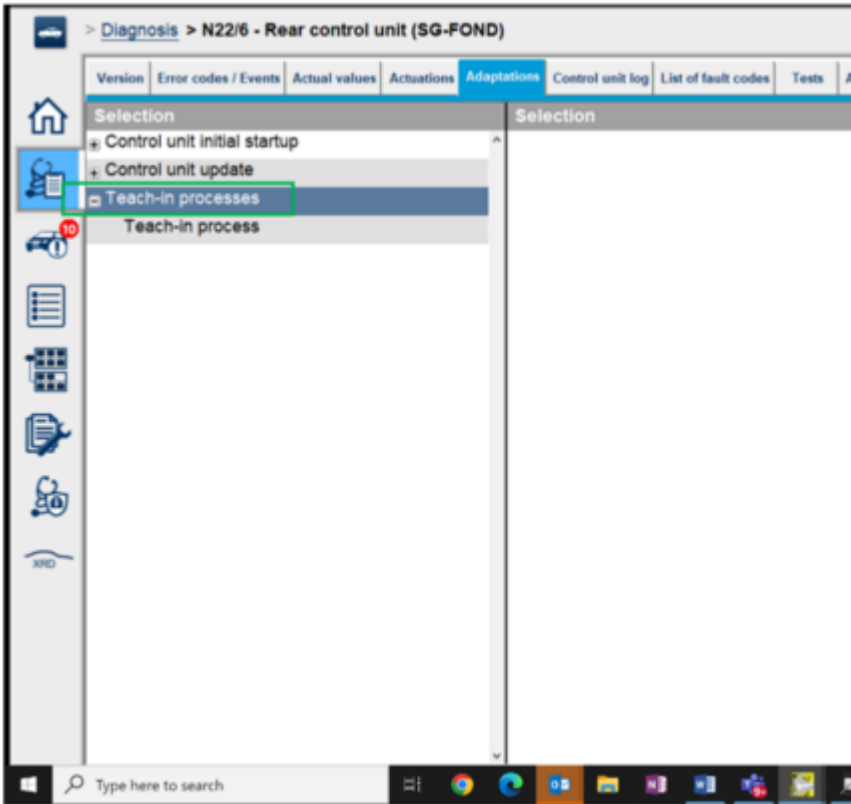


Figure 12

10. Confirmation that part replacement has occurred (figure 13).

i This is required for the "teach-in of header bow" (Start teach-in process).

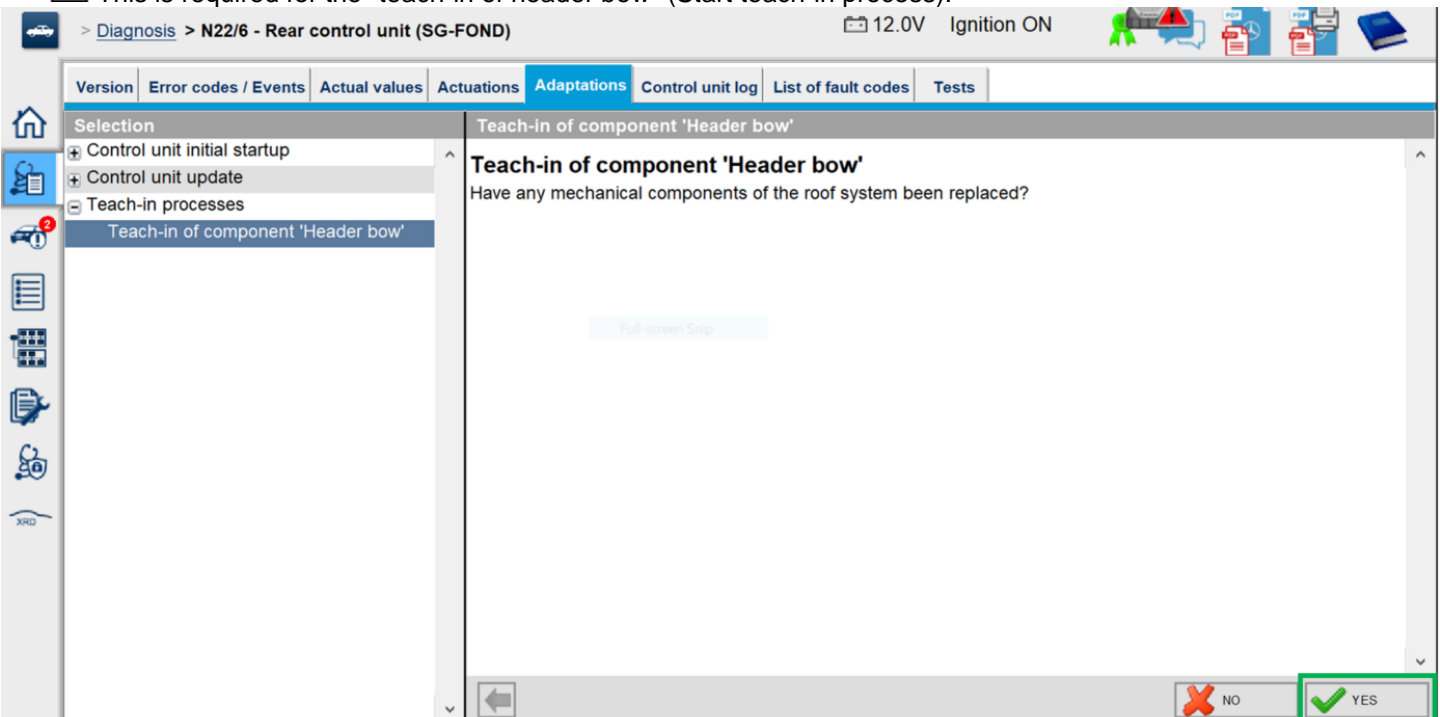


Figure 13

11. If the teach-in process is not successful (figure 14), please create a TIPS case.

i If the teach-in process was successful, continue with operation step 12.

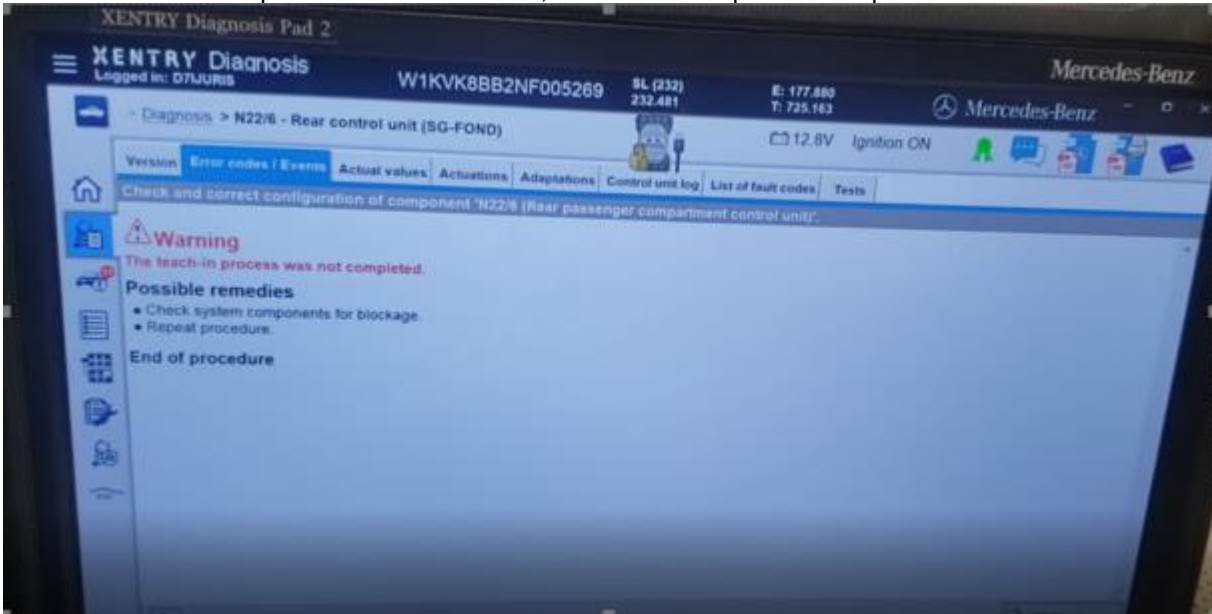


Figure 14

12. Read out calibration data and export as a PDF (figure 15).

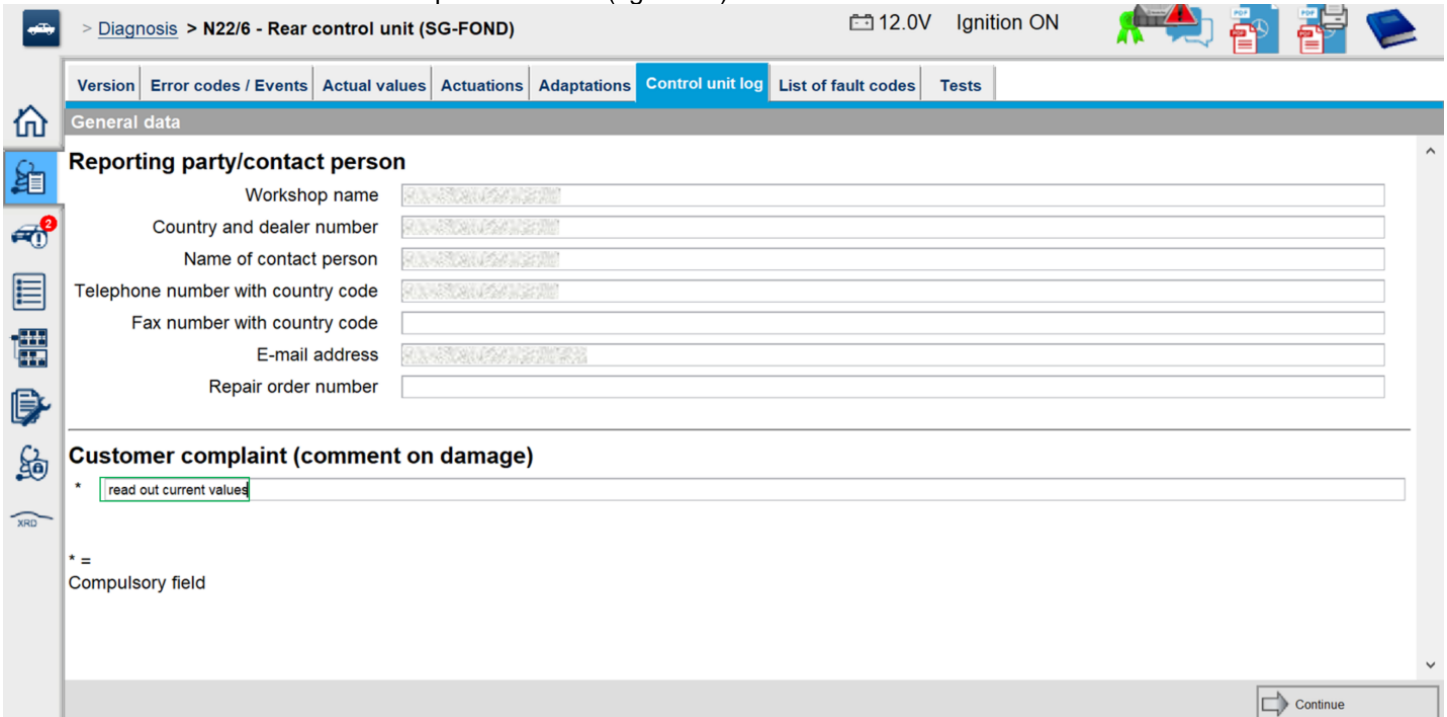


Figure 15

13. Evaluate calibration data.

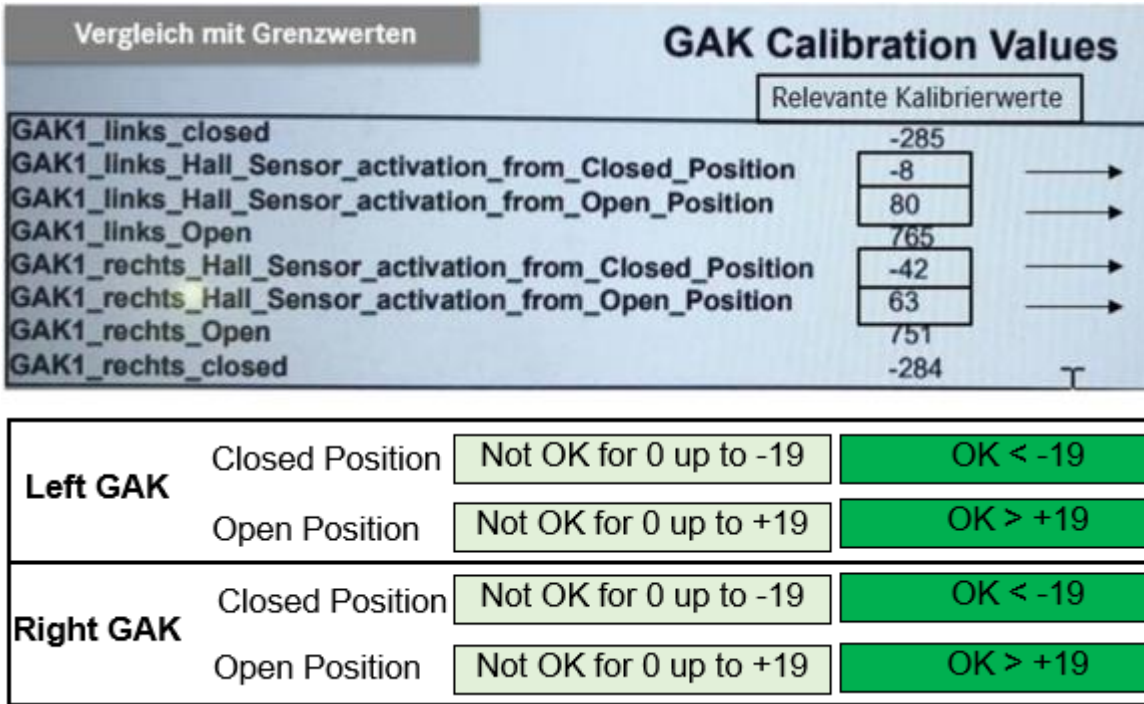


Figure 16

i In the case of not OK data after the calibration, please create a TIPS case.

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

Warranty Information

Damage Code	Operation Number	Description	Labor Time (hrs.)
77 930 01	12-1568	Calibrate convertible roof frame outlet flap at soft top Includes: Connect/disconnect diagnostic system (XENTRY Diagnosis) and starter battery charger	1.0

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