

Glass Sunroof does not Open: Observe Specified Procedure (125/22)

Change overview:

Release	Date	Change
0	09/09/2022	First publication
1	11/13/2023	Model years 2023 and 2024 added

Model Line: **Macan (95B)**

Model Year: **As of 2014 up to 2024**

Equipment: **Large roof system (M No. 3FU)**

Concerns: **Glass sunroof**

Information: Customers complain that the glass sunroof cannot be opened and the fault code “**C13214** – Sunroof/panoramic roof motor – no communication” is stored in the fault memory of the rear-end electronics control unit.

This is caused by corrosion of the control board of the glass sunroof motor, which is not completely sealed against water leaking in.

Cause: The control board of the glass sunroof motor may be corroded if water penetrates up to it. Water can penetrate as far as the glass sunroof motor because the guide rails for the roof assembly frame (glass sunroof/panoramic roof) are not sufficiently sealed against water leaking in.

- Measures:
- Replace defective motor for glass sunroof.
 - Install additional butyl locks in the guide rail under the front glass panel.
 - Check front butyl locks for leaks and replace them if necessary.
 - Check rear butyl locks for leaks and replace them if necessary.
 - Remove roof assembly (panoramic roof) and attach additional butyl locks to the upper bars of the guide rails for the roof assembly frame at a center position between both glass panels. Install roof assembly (panoramic roof).
 - Check seals on the glass sunroof for gaps. Remove any gaps by correcting the install of the seals and the installation positions of the glass panels. Replace roof assembly seals if necessary.

Required parts, materials and tools

Parts Info:

Required parts:

Part No.	Designation - Location	Quantity
95B959591B	⇒ Engine - Panoramic sunroof	1 piece
8K9898057B	⇒ 1 set of mounting parts for sunroof motor - Panoramic sunroof motor	1 piece
95B898011	⇒ 1 set of mounting parts for glass sunroof panel - Panoramic rear sliding-roof panel	1 piece
95B877297	Only if necessary: ⇒ Rear lid seal - Panoramic sunroof seal	1 piece
95B877913A	Only if necessary: ⇒ Front and rear lid seal - Panoramic sunroof seal	1 piece
95B877459B	Only if necessary: ⇒ Seal on glass roof body - Panoramic sunroof seal	1 piece
95B877439	Only if necessary: ⇒ Inner seal - Panoramic sunroof seal	1 piece



Required tools and materials

- 1 – Standard workshop paper towels
- 2 – Cleaning solution
- 3 – Steel bar
- 4 – Spacer wedge
- 5 – Butyl cord
- 6 – Primer applicator

Materials: **Required materials** (usually already available at the Porsche Center):

Part No.	Designation	Quantity
D00940104	⇒ Cleaning solution or alternative (e.g. isopropanol)	250 ml / 8.45 fl oz container (approx. 25 ml/ 0.85 fl oz required per vehicle)
95556402600	⇒ Butyl cord (ø 6 mm)	1 piece

- Tool:
- **9555/1 - 9555/1 - Spacer wedge** or equivalent
 - Primer applicator

Preparatory work

Work Procedure: 1 Replace defective glass sunroof motor.
For instructions, see:
⇒ *Workshop Manual '601419 Removing and installing glass sunroof motor'*

Sealing glass sunroof

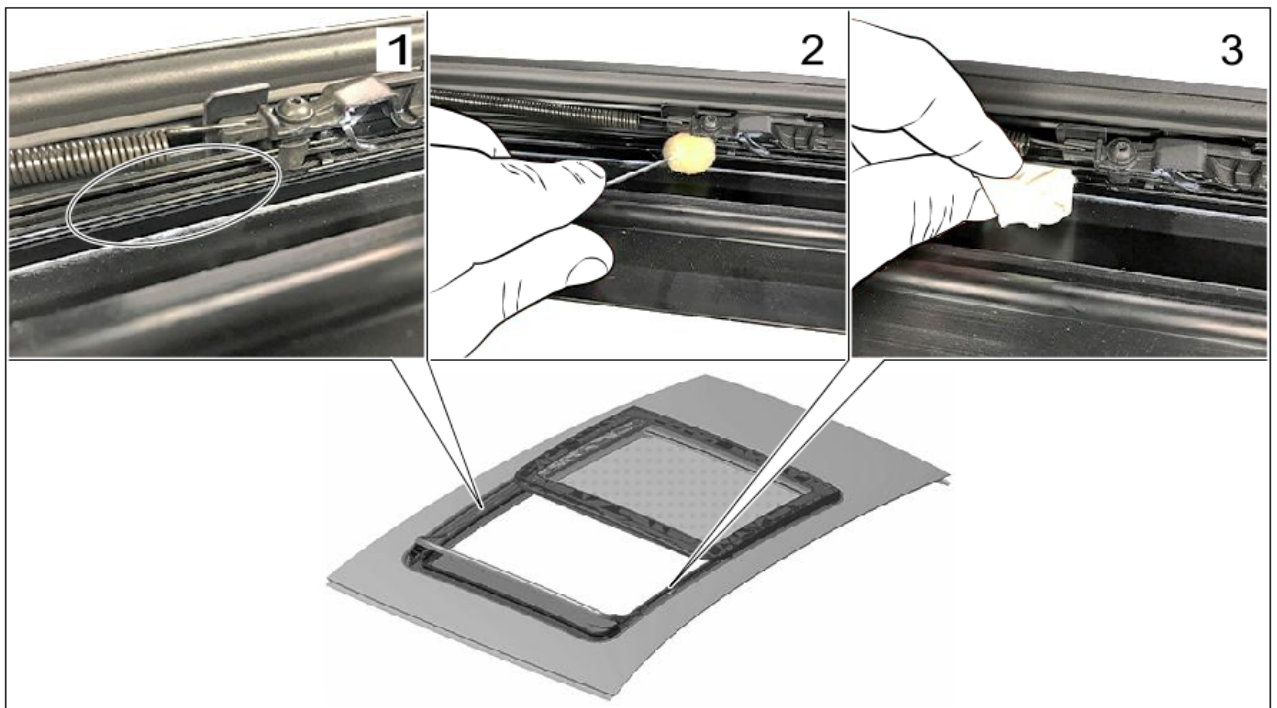


Information

The subsequent work is described for one side as an example. The subsequent work on the other side is almost identical.

Work Procedure: 2 Install additional butyl lock in the guide rail under the front glass panel ⇒ *Cleaning areas*.

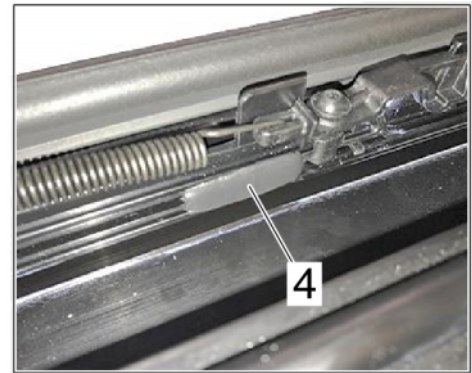
- 2.1 Open the glass sunroof.
- 2.2 Clean ducts on the guide rails.



Cleaning areas

- 2.2.1 Pre-clean the marked area ⇒ *Cleaning areas -1-* of dust, stains, drops of fluid and other visible dirt.
- 2.2.2 Clean the ducts on the guide rails using cleaning solution and primer applicator or standard workshop paper towels ⇒ *Cleaning areas -2-*.

- 2.2.3 Dry the ducts on the guide rails using workshop-available paper towels ⇒ *Cleaning areas -3-*.
- 2.3 Install butyl lock ⇒ *Butyl lock -4-*.
 - 2.3.1 Cut two pieces of 20 mm of butyl cord.
 - 2.3.2 Press the first 20 mm of butyl cord into the guide rail channel completely using a plastic wedge.



Butyl lock



Information

Make sure that the butyl cord is attached, pressed on and affixed without gaps at the designated position. Defects between the butyl cord and the component or between the layers from several butyl cords can cause consequential faults. The repair may have to be repeated.

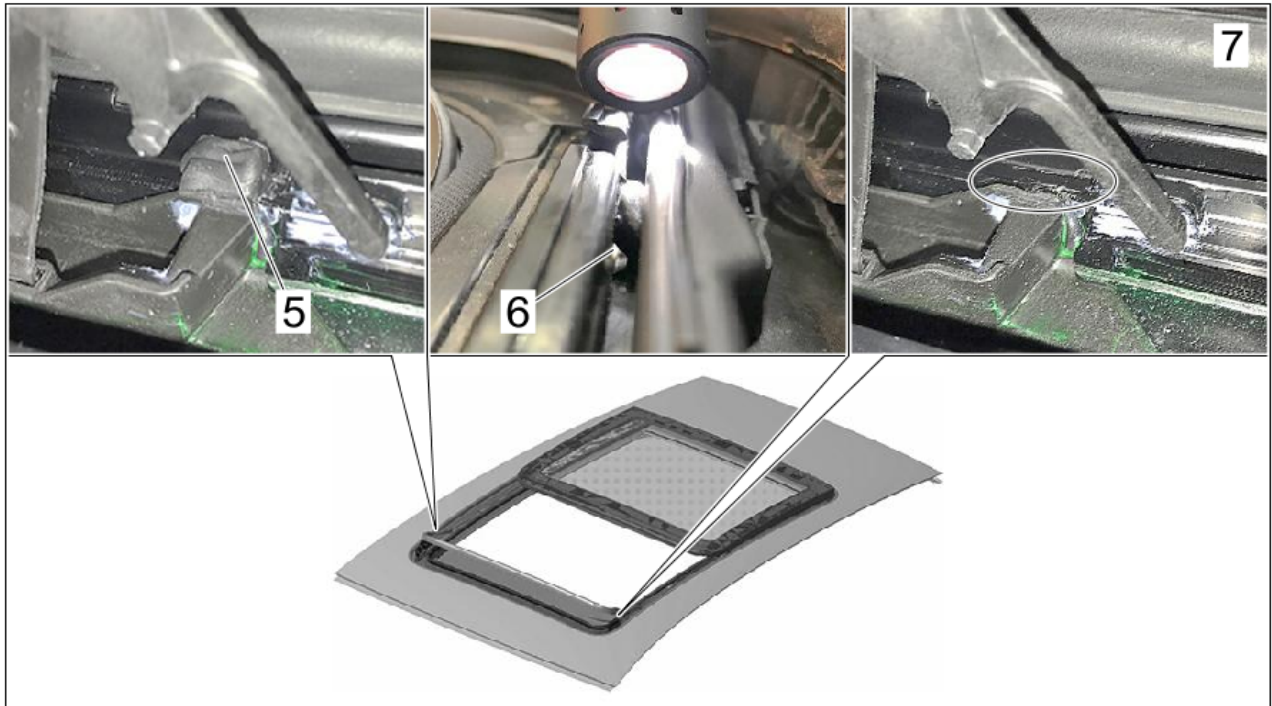
- 2.3.3 Affix a second piece of 20 mm butyl cord over the top.



Information

Make sure that the butyl cord is attached, pressed on and affixed without gaps at the designated position. Defects between the butyl cord and the component or between the layers from several butyl cords can cause consequential faults. The repair may have to be repeated.

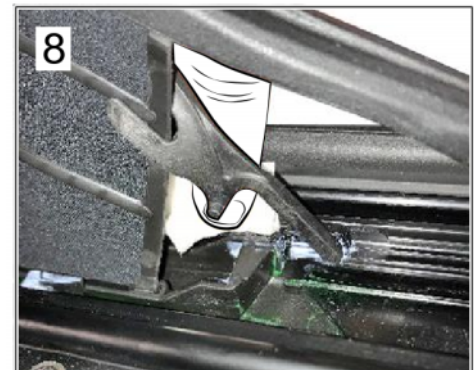
- 3 Check front butyl lock ⇒ *Front butyl locks -5-* for leaks as described below and replace it if necessary.



Front butyl locks

- 3.1 To check for leaks, illuminate the front butyl lock ⇒ *Front butyl locks -5-* from the front using a commercially available electric torch.
 If there are **no** imperfections in the front butyl lock, ⇒ *Front butyl locks -5-* continue with Step 4.
 In the event of visible defects, remove the ⇒ *Front butyl locks -6-* front butyl lock ⇒ *Front butyl locks -5-* completely ⇒ *Front butyl locks -7-* and replace it as described below.

- 3.1.1 Thoroughly clean the butyl lock area ⇒ *Front butyl locks -7-* using cleaning solution and primer applicator or standard workshop paper towel and dry it with a standard workshop paper towel ⇒ *Front butyl lock area -8-*.

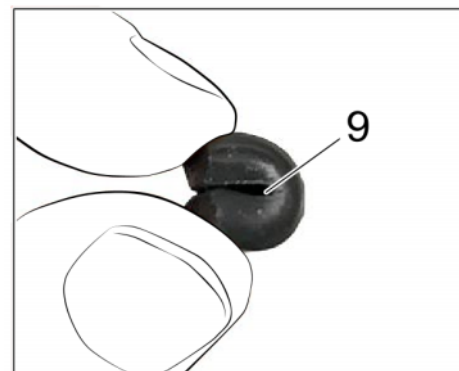


Front butyl lock area

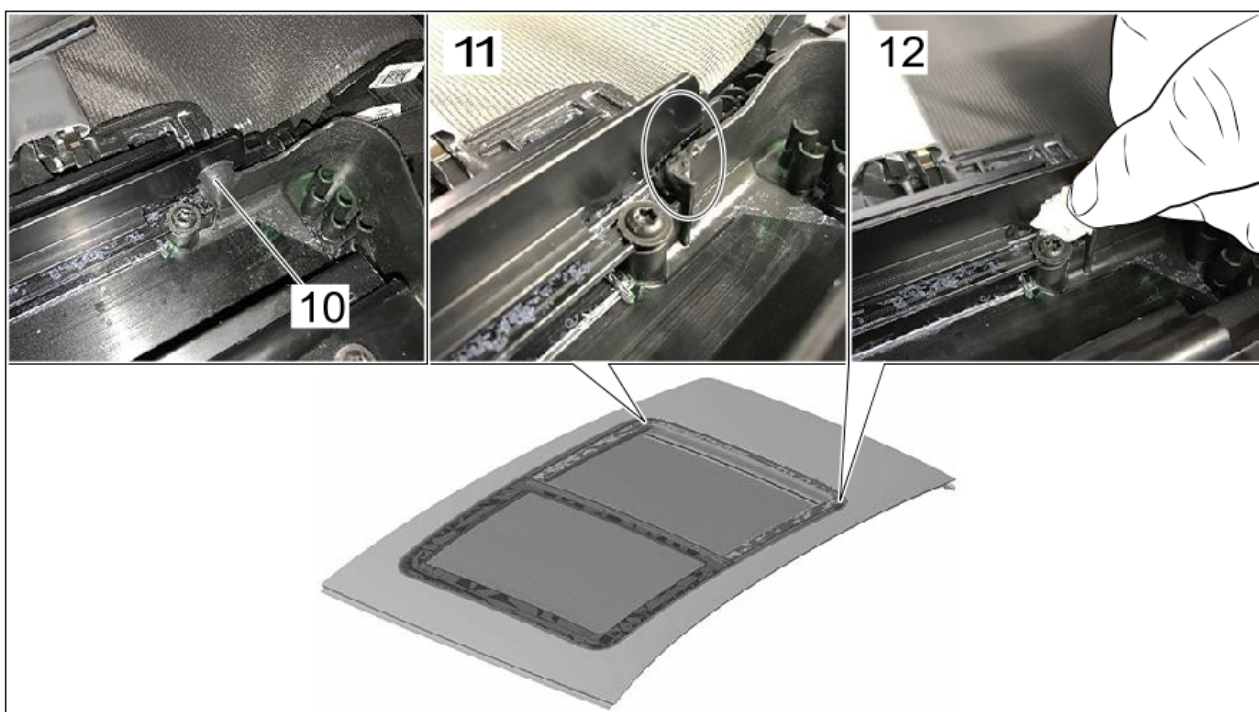
3.1.2 Cut 20-mm butyl cord to size, bend it 180° in the middle ⇒ *Bending butyl cord-9-* and press it as a front butyl lock ⇒ *Front butyl locks-5-* into the guide rail channel to close it fully.

3.1.3 Check new front butyl lock for leaks. To do this, repeat the work procedure from Step 3.1.

4 Check rear butyl lock ⇒ *Rear butyl locks-10-* for leaks as described below and replace it if necessary.



Bending butyl cord



Rear butyl locks

4.1 Remove rear glass panel.

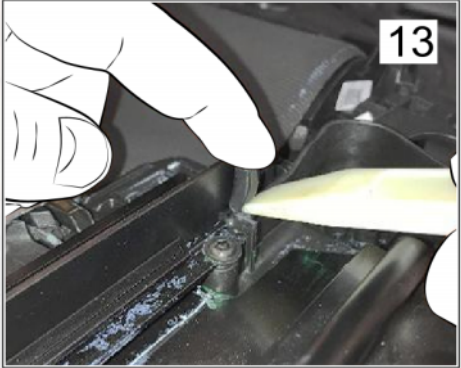

For instructions, see:

⇒ *Workshop Manual '60401913 Removing and installing rear glass panel'*

4.2 To check for leaks, illuminate the rear butyl lock ⇒ *Rear butyl locks-10-* from the rear using a commercially available electric torch.

If there are **no** imperfections in the butyl lock, continue with Step 4.3.

In the event of visible defects, remove the rear butyl lock ⇒ *Rear butyl locks-10-* completely ⇒ *Rear butyl locks-11-* and replace it as described below.

- 4.2.1 Thoroughly clean the butyl lock area ⇒ *Rear butyl locks -11-* using cleaning solution and primer applicator or standard workshop paper towel and dry it with a standard workshop paper towel ⇒ *Rear butyl locks -12-*.
- 4.2.2 Cut 10-mm butyl cord and press it up into the duct in the butyl lock area first using a plastic wedge and close it completely ⇒ *Rear butyl cord -13-*.
- 
- Rear butyl cord*
- 4.2.3 Fold the top end of the butyl cord down and reshape it by pressing on it to the rear ⇒ *Rear butyl lock -14-* of the butyl lock.
- 4.2.4 Check new rear butyl lock for leaks. To do this work procedure, repeat Step 4.2 or higher.
- 4.3 Install rear glass panel.
For instructions, see:
⇒ *Workshop Manual '60401913 Removing and installing rear glass panel'*
- 5 Install additional butyl lock ⇒ *Butyl lock centered on roof assembly frame -17-* on the upper bar of the guide rail for the roof assembly frame at a center position between both glass panels ⇒ *Butyl lock centered on roof assembly frame -15-*.
- 
- Rear butyl lock*



Butyl lock centered on roof assembly frame

- 5.1 Removing roof assembly (panoramic roof).
 Procedure:
 ⇒ *Workshop Manual '600619 Removing and installing roof assembly (panoramic roof)'*
- 5.2 Thoroughly clean the upper bar of the guide rail close to the butyl lock ⇒ *Butyl lock centered on roof assembly frame -15-* to be installed with cleaning solution and dry it with standard workshop paper towel ⇒ *Butyl lock centered on roof assembly frame -16-*.
- 5.3 Cut 60-mm butyl cord and affix it centrally between the two glass panels on the upper bar of the guide rail for the roof assembly frame ⇒ *Butyl lock centered on roof assembly frame -17-*.



Information

Make sure that the butyl cord is attached, pressed on and affixed without gaps at the designated position. Defects between the butyl cord and the component or between the layers from several butyl cords can cause consequential faults. The repair may have to be repeated.

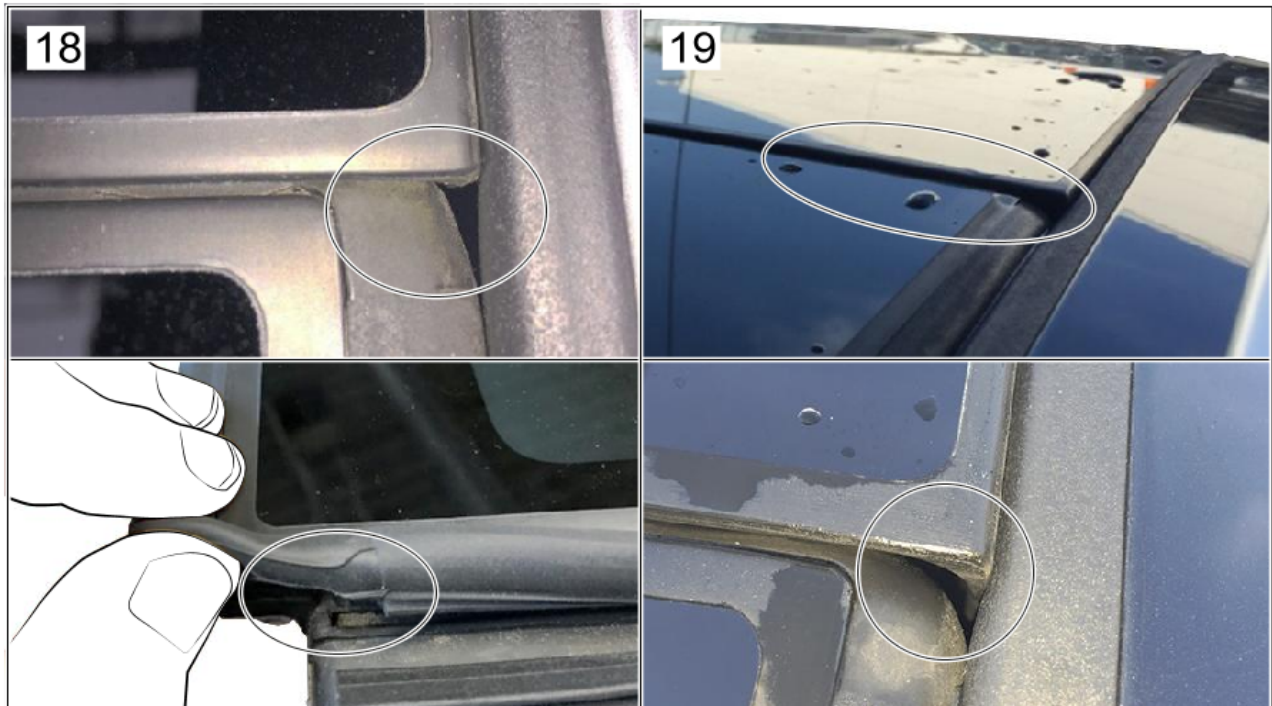
- 5.4 Install roof assembly (panoramic roof).
 Procedure:
 ⇒ *Workshop Manual '600619 Removing and installing roof assembly (panoramic roof)'*

Concluding work

Work Procedure: 6 Check seals on the glass sunroof for gaps.

Examples of gaps between the seals on the glass sunroof:

- Seal on glass panel not installed fully on bar ⇒ *Gaps at seals on panoramic sunroof-18-*
- Glass panel incorrectly installed ⇒ *Gaps at seals on panoramic sunroof-19-*



Gaps at seals on panoramic sunroof

- 6.1 If there are **no** gaps: The work is finished.
If there are **gaps**:
- 6.1.1 Correct the install of the seals if necessary.
 - 6.1.2 Correct installation positions of the glass panels if necessary.
 - 6.1.3 Only if the gaps in the seals cannot be eliminated by means of 6.1.1 and 6.1.2:
Replace seals on roof assembly.
For instructions, see:
⇒ *Workshop Manual '605455 Replacing seals for roof assembly'*

Invoicing

For documentation and invoicing in the event of a warranty, state the work items required depending on the scope of work and the specified PCSS encryption in the warranty claim:

APOS	Labor operation	I No.
60054900	Reworking sunroof	
60061950	Removing and installing roof assembly	
60141900	Removing and installing motors for sunroof	
60401910	Removing and installing sunroof panel	
60545501	Replacing front roof assembly seal	
60545502	Replacing front roof assembly seal	
60545505	Replacing front roof assembly seal	
60545510	Replacing front roof assembly seal	

PCSS encryption:

Location (FES5)	60140	Sunroof motor
Damage type (SA4)	1621	does not open

- References:
- ⇒ *Workshop Manual '601419 Removing and installing glass sunroof motor'*
 - ⇒ *Workshop Manual '60401913 Removing and installing rear glass panel'*
 - ⇒ *Workshop Manual '600619 Removing and installing roof assembly (panoramic roof)'*
 - ⇒ *Workshop Manual '605455 Replacing seals for roof assembly'*

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