

The Front Display and Control Panel Flickers or Fails Intermittently (221/24)

Model Line: **Cayenne (9YA / 9YB)**

Model Year: **As of 2024 up to 2025**

Concerns: **Front display and operator control panel**

Cause: **The customer complains that the front display and control panel is flickering, fails occasionally or content is displayed in a distorted / divided manner.**



Example illustrations of complaints regarding the front display and control panel

Action: In the event of a customer complaint, re-program the control unit for the PCM central computer (central display and passenger display) using the PIWIS Tester.



Information

The minimum requirement for programming is the PIWIS Tester software release: **43.500.030** (or higher)

**Information**

Replacing the display and control panel or the central computer (PCM) is not expedient for this complaint and does not provide any remedy.

Required tools

Tools:

- **P90999 - PIWIS Tester 4**
- Battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 - 90 A battery charger**. For further information about the battery chargers to be used, see the corresponding Workshop Manual. ⇒ *Workshop Manual '270689 Charge battery and vehicle electrical system'*
- **USB storage medium Type A+C 32 GB (for PCM update)**

Overview of PCM update**Information**

The central computer (PCM) software update is performed using a USB storage medium. The software release that is specific to each region must be **downloaded** using the software tool **PiUS** (Porsche integrated Update Service) and must be **installed** on a blank USB storage medium.

Pay particular **attention** to the following:

- For this PCM software update, a USB storage medium must be used.
- To use the software tool, **one** blank or re-writable USB storage medium is required for **each** individual software.
- The software available in PiUS must **only** be used with the corresponding Technical Information with instructions included.

The software listed here may **only** be used for the action **described here**. Damage to the central computer cannot be ruled out if the software is used on other vehicles.

You will find further information on installation and use of the PiUS software tool in the PPN portal under ***PiUS (Porsche integrated Update Service) goes live***.

Overview:

| Part No. | Designation – Location of use – Campaign code |
|-----------------|--|
| 976909000H | USB storage medium for PCM update – Central display – E3C1D |
| 976909000J | USB storage medium for PCM update – Passenger display – E3B1F |

Re-programming the control unit for the PCM central computer (central display and passenger display)



Information

Before starting programming, particular attention **must** be paid to the following:

- Switch the charger off and on once; the battery charger display **must** be off before starting it again, because the battery charger automatically switches to trickle charge after 5 hours (default setting in the charger).
- The charger must be set to **14.6 volt** charging voltage and operated in **charging mode**.
- Vehicles with a PVTs (Porsche Vehicle Tracking System) contract must have Workshop mode activated.
- **The PIWIS Tester must not be charged using the cigarette lighter.**

- Work Procedure: 1 Unless this has already been done, prepare a **separate** USB storage medium with the required software for the central display and, if present, passenger display as per the above overview.
 ⇒ *Technical Information '270689 Overview of PCM update'*
- 2 Observe control unit programming preconditions in the Workshop Manual.
 ⇒ *Workshop Manual '270689 Basic instructions and procedure for control unit programming using the PIWIS Tester'*
- 3 Select the Guest account from the central display (PCM) and activate **Privacy mode** (available in some countries).



Information

If Privacy mode is not active, programming may be aborted, resulting in a defect in the central computer (PCM).

- 4 Re-program the control unit for the PCM central computer (central display and passenger display).
 First re-program the central display and then, if installed, the passenger display.

Specific information on control unit programming during this action:

| | |
|---|--|
| Required PIWIS Tester software release: | 43.500.030 (or higher) |
| Type of control unit programming: | PCM central computer update using PIWIS Tester start code to start the guided programming sequence. The PCM application software is loaded via the USB storage medium. In the control unit selection (' Overview ' menu) select the PCM central computer control unit and select the ' Service / repairs ' menu. |

| | |
|--|---|
| | Select the ' Install software update ' function and press (F12) ('Next') to perform the software update. |
| Programming code: | Front display and control panel (central display): <ul style="list-style-type: none"> ▪ E3C1D Front display and control panel (passenger display - if present): <ul style="list-style-type: none"> ▪ E3B1F |
| Programming sequence: | Read and follow the information and instructions on the PIWIS Tester during the guided programming sequence. Do not interrupt the programming and coding process. A backup documentation process for the re-programmed software releases starts after programming and coding. |
| Required software (part number and software version): | <ul style="list-style-type: none"> ▪ Central display: 976909000H / 0110 ▪ Passenger display: 976909000J / 0610 |
| Programming duration: | Programming takes up to 25 minutes , depending on equipment. |
| Procedure if error messages appear during the programming sequence: | ⇒ <i>Workshop Manual '270689 Basic instructions and procedure for control unit programming using the PIWIS Tester'</i> |
| Procedure in the event of a termination in the control unit programming: | Repeat the control unit programming by re-entering the programming code. Additional instructions if programming is aborted: ⇒ <i>Technical Information '270689 Additional instructions if programming is aborted'</i> |
| Integration test procedure: | The integration test shows a green result regardless of this update. |

- 5 Remove USB storage medium.
- 6 Read out and delete all control unit fault memories.
- 7 Press **(F3)** to start the integration test in the control unit selection.
All affected control units should now be successfully re-programmed or checked in the control unit and the overview of the control units and their status.



Information

If a deviation in the integration test is still indicated despite programming being carried out, this must be repeated. If the deviation persists, contact Technical Support.

- 8 Exit the diagnostic application, switch off the ignition and disconnect **P90999 - PIWIS Tester 4** from the vehicle.
- 9 Switch off and disconnect the battery charger.
For procedure, see: ⇒ *Workshop Manual '270689 Charging vehicle electrical system battery'*

Additional instructions if programming is aborted



Information

If individual programming steps or rework could not be carried out correctly, see Workshop Manual for the basic procedure for control unit programming using the PIWIS Tester. ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - Section on "Troubleshooting"*

In the event of a fault, logging must **always** be created during programming using **[Ctrl]** and **[L]** using the PIWIS Tester.

Notes:

| Control unit: | Situation: | Action: |
|--------------------------------------|---|--|
| Cancelling individual control units: | One or more control units cannot be programmed or can no longer be accessed | <ul style="list-style-type: none"> ▪ Check whether the control unit can be accessed using the PIWIS Tester or if bus idle does not have to be carried out ▪ Control unit still not accessible → Remove fuse for control unit → Ignition on → Ignition off → Re-insert fuse ▪ Control unit still not accessible → Disconnect battery overnight ▪ Check whether the control unit is accessible |
| Central computer (PCM) | The central computer freezes while loading | <ul style="list-style-type: none"> ▪ Starting programming again ▪ Performing PCM factory reset using the guided PIWIS Tester procedure |

| | | |
|------------------------|---|---|
| Central computer (PCM) | The central computer control unit cannot be accessed | <ul style="list-style-type: none"> ▪ Pulling out fuse for central computer control unit → Ignition on → Ignition off → Re-insert fuse |
| Central computer (PCM) | Programming of the central computer (PCM) aborts when Fault 33 is detected | <ul style="list-style-type: none"> ▪ Fault 33 is displayed on the central computer display during programming ▪ Start the update in the Developer menu on the central computer (PCM). The update may only be started from the Developer menu in this case because the PCM is already in the Developer menu ▪ If the update still cannot be performed → replace central computer (PCM) |
| Central computer (PCM) | No start of programming | <ul style="list-style-type: none"> ▪ Programming is started via the additional menu and not in the central computer (PCM) control unit under Service / repairs as described in the TI |
| Central computer (PCM) | Programming is not started or programming is aborted | <ul style="list-style-type: none"> ▪ For other topics that are not listed in the TI, a PRMS ticket must be created before replacing the PCM system |

Labor position and PCSS encryption

Labor position:

| APOS | Labor operation | I No. |
|----------|--|-------|
| 91522540 | Re-programming the control unit for the PCM central computer (central display) | |
| 91522541 | Re-programming the control unit for the PCM central computer (central display and passenger display) | |

PCSS encryption:

| | | |
|-------------------|-------|---------------------------------|
| Location (FES5) | 91100 | Front display and control panel |
| Damage type (SA4) | 1613 | does not function in some cases |

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