

Various Fault Patterns for Porsche Communication Management (PCM) with Software Version 36xx / 37xx / 38xx: Performing Software Update (65/23)

Model Line: **911 (992)**

Model Year: **2024**

Concerns: **Control unit for central computer (PCM)**

Cause: **The PCM cannot be switched on, fails intermittently during vehicle operation or starts up again independently. Possible features:**

- PCM screen remains black
- Navigation display on the instrument cluster fails
- There is no sound output, and the hands-free device is faulty
- The PCM can only be started again after some time or starts up again on its own

On vehicles with a BOSE® Surround Sound System (M-No. 9VL) or a Burmester® 3D High-End Surround Sound System (M-No. 9VJ), the sound settings in the Main Menu >> Media >> Bose/Burmester may also be lost after bus rest:

- No longer ticked on the "Treble and Bass" settings
- No longer ticked on the "Balance and Fader" settings
- Setting bars to "0"

Real Time Traffic display does not show traffic jams in the text on the route monitor.

The map is not centered in the map view on the instrument cluster.

Action: In the event of a complaint, re-program the central computer (PCM) with the latest PIWIS Tester software release.



Information

The minimum programming requirement is the PIWIS Tester software release **42.900.020**.

Required tools

- Tools:
- **P90999 - P90999 - PIWIS Tester 4**
 - Battery charger with a current rating of **at least 90 A**, e.g., **VAS 5908 - battery charger 90 A**
 - **USB storage medium Type A+C 32 GB (for PCM update)**, Part-No. V04014999WW000, already available at the Porsche Center

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 in accordance with the instructions provided in a Technical Information published for this purpose.

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 for the PiUS software tool in the PPN portal under ***PiUS (Porsche integrated Update Service) goes live***.

Overview:

Part No.	Designation – Region	Vehicle allocation
9Y2909000AA	USB storage medium for PCM update – North America – Mexico	I-No. ER3 / ER4

Re-programming control unit for central computer (PCM)



Information

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

- Switch off 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 V** charging voltage and operated in **charging mode**.
- Vehicles with a PVTs contract must be activated for Service mode.
- **The PIWIS Tester must not be charged using the cigarette lighter!**



Information

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



Information

If control units are found to have faults that are **not** caused by control unit programming, these must first be **found** and **corrected**.

- Work Procedure: 1 Unless otherwise already done, prepare a USB storage medium with the software required for the PCM central computer depending on the country variant in accordance with the above overview.
 ⇒ *Technical Information 'Overview of PCM update'*
- 2 The basic procedure for control unit programming is described in the Workshop Manual ⇒ *Workshop Manual '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).
- 4 Re-program the central computer (PCM).

For specific information on control unit programming during this campaign, see the table below.

Required PIWIS Tester software release:	42.900.020 (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:	X3G5A

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 as soon as programming and coding is complete.
Required software (part number and software version):	• North America/Mexico (M-No. ER3/ER4): 9Y2909000AA / 3884
Programming time (up to):	25 minutes
Procedure in the event of error messages appearing during the programming sequence:	⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester – Section on "Troubleshooting"</i>
Procedure in the event of a termination in the control unit programming:	Repeat control unit programming by restarting programming. Additional instructions for aborted programming ⇒ <i>Technical Information '9X00IN Additional information if programming is aborted'</i>
Integration test procedure:	• The integration test shows a green result regardless of this update

- 5 Read out all **fault memories** and process and delete existing faults if necessary.
- 6 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 overview 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.

- 7 End the diagnostic application. Switch off the ignition. Disconnect the Tester from the vehicle.
- 8 Set the battery charger back to a charge voltage of 14.4 volts.

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 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 interrupted	<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.
91522520	Programming central computer	

PCSS encryption:

Location (FES5)	91520	Central computer
Damage type (SA4)	1614	Function not as per specification

Important Notice: Technical Bulletins issued by Porsche Cars North America, Inc. are intended only for use by professional automotive technicians who have attended Porsche service training courses. They are written to inform those technicians of conditions that may occur on some Porsche vehicles, or to provide information that could assist in the proper servicing of a vehicle. Porsche special tools may be necessary in order to perform certain operations identified in these bulletins. Use of tools and procedures other than those Porsche recommends in these bulletins may be detrimental to the safe operation of your vehicle, and may endanger the people working on it. Properly trained Porsche technicians have the equipment, tools, safety instructions, and know-how to do the job properly and safely. Part numbers listed in these bulletins are for reference only. The work procedures updated electronically in the Porsche PIWIS diagnostic and testing device take precedence and, in the event of a discrepancy, the work procedures in the PIWIS Tester are the ones that must be followed.

© 2024 Porsche Cars North America, Inc.