

WPE7 – Re-Programming Central Computer (PCM) (Workshop Campaign)

Important: **CRITICAL WARNING** -This campaign includes steps where control unit(s) in the vehicle will be programmed with the PIWIS Tester. The vehicle voltage must be maintained between 13.5 volts and 14.5 volts during this programming. Failure to maintain this voltage could result in damaged control unit(s). Damage caused by inadequate voltage during programming is not a warrantable defect. The technician must verify the actual vehicle voltage in the PIWIS Tester before starting the campaign and also document the actual voltage on the repair order.

Model Year: **As of 2023**

Vehicle Type: **992 (911 Dakar)**

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

Cause: **Due to a fault in the software of the central computer (PCM) control unit on the affected vehicles, the “Driving mode” tab may only be displayed in German.**

- Actions:
- Re-program the central computer (PCM) control unit using the **latest** PIWIS Tester software release in each case.
 - Minimum requirement: Version **42.000.030**

Affected Vehicles: Only vehicles assigned to the campaign (see also PCSS Vehicle Information).

Required tools

- Tool:
- **9900 - PIWIS Tester 3/4**
 - 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 dealer

Re-programming central computer (PCM) control unit

Work Procedure:



Information

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

- The charger must be switched 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).
- Set charge voltage to **14.6 volts**.

- Operate 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!**
- 1 The basic procedure for the control unit programming is described in the Workshop Manual ⇒ *Workshop Manual 'Basic Instructions and Procedure for Control Unit Programming using the PIWIS Tester'*.
 - 2 Create Vehicle Analysis Log (VAL) using the PIWIS Tester. Mark the vehicle analysis log you have just created with the attribute "**Pre-VAL**" and after carrying out the campaign, return it using the PIWIS Tester.
 - 3 Select 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). Central computers that are replaced as part of the workshop campaign are checked by Porsche AG. If private mode was not set in the central computer before starting programming, the costs will be re-debited.

- 4 Re-program main computer (PCM).

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

Prepare USB stick with the **required** software (depending on country version).

Overview of the software to be used for the central computer (PCM): See ⇒ *Technical Information 'overview of PCM update'*

Required PIWIS Tester software release:	42.000.030 (or higher)
Type of control unit programming:	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 carry out the software update.
Programming code:	X3G5A

Programming sequence:	<p>Read and follow the information and instructions on the PIWIS Tester during the guided programming sequence.</p> <p>Do not interrupt programming and coding.</p> <p>A backup documentation process for the re-programmed software releases starts as soon as programming and coding is complete.</p>
Programming time (up to):	25 minutes
Control unit programmed in this campaign:	<ul style="list-style-type: none"> Control unit for central computer (PCM) 3823 <p>Following control unit programming, the software release can be read out from the relevant control unit in the ⇒ 'Incremented identifications' menu using the PIWIS Tester.</p>
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 "Fault finding"</i>
Procedure in the event of a termination in the control unit programming:	<p>Repeat control unit programming by restarting programming.</p> <p>Additional instructions for aborted programming ⇒ <i>Technical Information '9X00IN Additional information if programming is aborted'</i></p>
Integration test procedure:	<ul style="list-style-type: none"> The integration test shows a green result independently of the necessary campaign The campaign WPE7 must still be carried out

- 5 Read out all **error memories**, process and delete existing errors if necessary.



Information

If control units are found to have faults that are **not** caused by control unit programming, these must first be **found** and **corrected**. This work **cannot** be invoiced under the workshop campaign number.

- 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 Create Vehicle Analysis Log (VAL) using the PIWIS Tester. Mark the vehicle analysis log you have just created with the attribute **"Post-VAL"** and after carrying out the campaign, return it using the PIWIS Tester.
- 8 Exit the diagnostic application. Switch off ignition. Disconnect the Tester from the vehicle.
- 9 Set battery charger back to a charge voltage of 14.4 volts.
- 10 Disassembly tool, e.g. Enter the campaign in the Warranty and Maintenance booklet.

Warranty processing

Scope 1:

Labor time:

Re-programming central computer (PCM) control unit

Labor time: **97 TU**

Includes:

- Connecting and disconnecting battery charger
- Connecting and disconnecting PIWIS Tester
- Reading out and erasing fault memories
- Create Vehicle Analysis Logs (VALs) before and after the campaign

⇒ Damage code **WPE7 066 000 1**

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
9Y2909000L	USB storage medium for PCM update – Europe – RoW	I-No. ER1 / ER2
9Y2909000M	USB storage medium for PCM update – North America – Mexico	I-No. ER3 / ER4
9Y2909000G	USB storage medium for PCM update – Japan – China – Korea – Taiwan	I-No. ER5 / ER6 / ER7 / ER8

Additional instructions if programming is aborted



Information

If individual programming steps or reworking 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 "Fault finding"*

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 required:
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 on 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 in 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

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