

WJ76 - Performing PCM Software Update (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: 2018

Model Line: Panamera (971)

Equipment: ParkAssist with reversing camera (I-no. 7X8)
ParkAssist with Surround View (I-no. 8A4)

Subject: Porsche Communication Management (PCM) 4.1

Information: The reversing camera may not be activated correctly when the ignition is switched on and reverse gear is engaged on the affected vehicles.

Remedial Action:

- Update PCM software using an SD card
- Update reversing camera control unit using an SD card
- Re-code PCM using PIWIS Tester software version **38.700.015** (or higher)

Affected Vehicles: Only the vehicles assigned to the campaign (see also PCSS Vehicle Information). This campaign affects 1 vehicle in North America.

Required tools

NOTICE

Use of a PIWIS Tester software version that is older than the prescribed version

- Measure is ineffective
- ⇒ **Always use the prescribed version or a higher version of the PIWIS Tester software for control unit programming and coding.**

Tool

- Battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 battery charger 90A**
- **9900 - PIWIS Tester 3** with PIWIS Tester software version **39.500.000** (or higher) installed
- **SD memory cards for PCM update**

**Information**

The PCM update is performed using a specific SD memory card for the region.

The SD memory card for the PCM update listed below must be re-used as part of the workshop equipment and remains at the Porsche dealer. The SD memory card must not therefore be left in the vehicle or handed over to the customer.

The following specifications apply here:

'See Information -> The PCM update is performed using a specific SD memory card for the region.'

Number of vehicles on which work is to be performed by the Porsche dealer as part of the campaign	Maximum order quantity of SD memory cards for the PCM update
• 1 to 20 vehicles	2 ea.
• 21 to 50 vehicles	4 ea.
• 51 to 100 vehicles	6 ea.

SD memory card for PCM update for this workshop campaign:

Part No.	Designation – Region	I-no.
971919360AA	SD memory card for PCM update – USA/NAR/Mexico	ER3/ER4

Preparatory work**NOTICE**

Fault entry in the fault memory and control unit programming aborted due to low voltage.

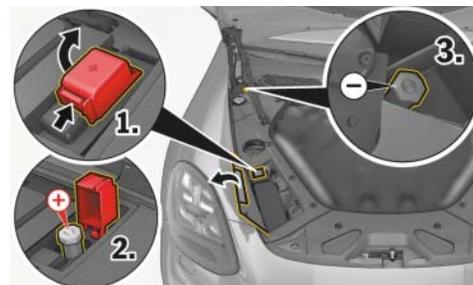
- Increased current draw during diagnosis or control unit programming can cause a drop in voltage, which can result in one or more fault entries and the abnormal termination of the programming process.
- ⇒ Before commencing work, connect a suitable battery charger with a charging current of at least 90 A to the jump-start terminals in the engine compartment.

NOTICE

Control unit programming will be aborted if the driver's key is not recognized

- If the driver's key is not recognized in the vehicle, programming cannot be started or will be interrupted.
- ⇒ Place the driver's key with the back facing down into the front left storage compartment in the center console to guarantee a continuous radio link between the vehicle and the driver's key.

Work Procedure: 1 Connect a battery charger with a current rating of **at least 90 A**, e.g. **Battery charger 90A** to the jump-start terminals in the engine compartment and switch it on ⇒ *Jump-start terminals*.



Jump-start terminals

- 2 Place the driver's key with the back facing down into the front left storage compartment in the center console ⇒ *Driver's key in storage compartment*. This will guarantee an uninterrupted radio link between the vehicle and the driver's key.
- 3 Switch on the ignition.



Driver's key in storage compartment

Performing PCM software update

- Work Procedure: 1 Switch on the PCM if it is not started automatically.
- 2 Remove any inserted SD cards from the SD card slots on the PCM central computer in the glove compartment.
To do this, first press against the SD card to release it. Then, pull the SD card out of the card slot.
 - 3 **Insert SD card** for the **PCM update** into the **left SD card slot** (SD 1) in such a way that the bevelled edge of the SD card is at the front right.
 - 4 Performing PCM update via SD card and PCM using the PIWIS re-coding tester.
For instructions, see ⇒ *Workshop Manual '915225 programming central computer data update'*.
 - Required PIWIS Tester software version: **39.500.000**



Information

If the software update is interrupted or if **error messages** are displayed (e.g. as a result of read errors), the update must be **repeated**.

- 5 Any SD cards that were removed before starting the PCM update must now be re-inserted into the SD card slots.

Concluding work

Work Procedure: 1 Read out and erase all fault memories.

- 1.1 In the control unit selection screen ('Overview' menu), press •F7" to call up the 'Additional menu' (⇒ *Control unit selection*).
- 1.2 Select the function "Read all fault memories and erase if required" and press •F12" ("Next") to confirm your selection ⇒ *Erasing fault memories*.



Control unit selection

The fault memories of the control units are read out.

- 1.3 Once you have read out the fault memories, check the fault memory entries.



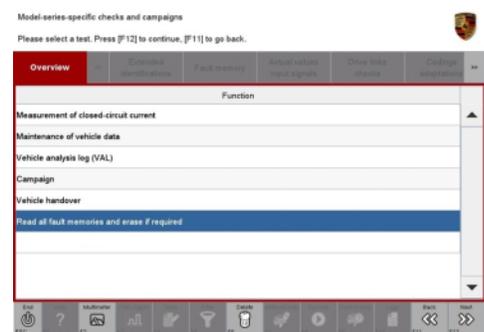
Information

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.

- 1.4 Press •F8" to delete fault memory entries.
- 1.5 Press •F12" ("Yes") in response to the question as to whether you really want to delete all fault memory entries.

The faults stored in the fault memories of the various control units are deleted.



Erasing fault memories



Information

If the fault memories of individual control units cannot be erased, proceed as follows:

- Switch off the ignition.
 - Disconnect the PIWIS Tester diagnostic connector from the diagnostic socket.
 - Lock the vehicle using the driver's key.
 - Wait approx. 1 minute before unlocking the vehicle again.
 - Plug the PIWIS Tester diagnostic connector into the diagnostic socket again and restore communication with the vehicle.
 - Read out the fault memories of these control units again and erase the fault memories separately.
- 2 Disconnect the PIWIS Tester from the vehicle.
 - 3 Perform a function test on the PCM.
 - 4 Switch off the ignition.
 - 5 Switch off and disconnect the battery charger.
 - 6 Enter the campaign in the Warranty and Maintenance booklet.

Warranty processingScope 1: **Perform PCM software update****Working time:**

Performing PCM software update

Labor time: **60 TU**

Includes:

- Connecting and disconnecting battery charger
- Connecting and disconnecting PIWIS Tester
- Performing update confirmation
- Re-coding PCM
- Re-coding reversing camera
- Performing function check
- Reading out and erasing fault memory

Required tools:

971919360AA SD memory card up to 6 ea. *

– PCM update for **NAR/USA/Mexico**

* Only the **actual number of SD memory cards** that are available to the Porsche dealer for carrying out this campaign must be invoiced for each Porsche dealer.

The number of SD cards provided for each Porsche dealer depends on how many vehicles will have to be worked on by each Porsche dealer as part of this campaign (see section ⇒ *Technical Information '915225 Required tools'*).

The SD memory cards must only be **invoiced once** for the first vehicle during **warranty processing**. Only the **working time** must be invoiced in the warranty claim for all other vehicles on which work is carried out as part of this campaign at the Porsche dealer.

⇒ **Damage Code WJ76 066 000 1**

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