

WLK9 - Porsche Communication Management (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 Line: 911 Carrera (992)

Model Year: 2021

Country/Market: USA (C02)

Concerns: Porsche Communication Management (PCM)

Information: Optimized software is available for the Porsche Communication Management (PCM) system.

Action Required: Update PCM software using an SD card and the PIWIS Tester procedure.

Affected Vehicles: Only for vehicles assigned to the campaign (see also PIWIS Vehicle Information). This campaign affects 3,263 vehicles.

Required tools

- Tools:**
- Battery charger with a current rating of **at least 90 A** and, if required, **also with a current and voltage-controlled charge map** for lithium starter batteries, e.g. **VAS 5908 battery charger 90A**
 - **9900 - PIWIS Tester 3** with PIWIS Tester software version **39.900.015** (or higher) installed
 - **SD memory cards for PCM update**

**Information**

From now on, you can even create SD cards **yourself**.

To do this, **download** the software using the SD card tool **PiUS** (Porsche integrated Update Service) and **install** it on a blank SD card.

Pay particular attention to the following:

- The part number **9Y0919360H** displayed in PiUS must be used for this PCM software update.
- For using the software tool, **one** blank or re-writable SD card is required for **each** 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 (SD card) mentioned here must **only** be used on the **vehicles assigned to the campaign**. Damage to the control unit cannot be ruled out if the SD cards are used on other vehicles.

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

**Information**

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

The SD memory card for the PCM update 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.

Overview of PiUS software version – PCM update	
Part No.	Designation – Region
9Y0919360H	Software for PCM update – USA

Preparatory work**NOTICE**

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

- **Increased power consumption during diagnosis can cause a drop in voltage, which can result in one or more fault entries and abortion of the diagnostic process.**

⇒ **Before starting control unit diagnosis, connect a suitable battery charger with a current rating of at least 90 A to the vehicle.**

NOTICE

Control unit programming will be aborted if the WLAN connection is unstable.

- An unstable WiFi connection can interrupt communication between the PIWIS Tester and the vehicle communication module (VCI). As a result, control unit diagnosis may be aborted.
- ⇒ During control unit diagnosis, always connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable.

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 in the area in front of the storage compartment under the armrest (emergency start tray) in order to guarantee a permanent radio link between the vehicle and driver's key.



Information

The procedure described here is based on the PIWIS Tester 3 software version **39.900.015**.

The PIWIS Tester instructions take precedence and in the event of a discrepancy, these are the instructions that must be followed.

A discrepancy may arise with later software versions for example.

Work Procedure: 1 Connect a suitable battery charger, e.g. **Battery charger 90A**, to the jump-start terminals in the luggage compartment and switch it on.

2 Place the driver's key with the back facing down in the area in front of the storage compartment under the armrest (emergency start tray) in order to guarantee a permanent radio link between the vehicle and driver's key ⇒ *Emergency start tray*.



Emergency start tray

3 **9900 - PIWIS Tester 3** must be connected to the vehicle communication module (VCI) via the **USB cable**. Then connect the communication module to the vehicle and switch on the PIWIS Tester.

4 Switch on ignition.

5 On the PIWIS Tester start screen, call up the **'Diagnostics'** application.

The vehicle type is then read out, the diagnostic application is started and the control unit selection screen is populated.

6 Read out the fault memory of the PCM and delete it if necessary.

Performing PCM software update

WARNING

Electrically moved rear spoiler

- Danger of limbs being trapped or severed
 - Risk of damage to components
- ⇒ Do not reach into the danger area.
- ⇒ Keep third parties away from the danger area.
- ⇒ Do not move components or tools into the danger area.

NOTICE

Using the SD cards on vehicles that are not assigned to this campaign

- Risk of damage to control unit
- ⇒ Use the specified SD cards only for the vehicles assigned to the campaign.



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**.

Work Procedure: 1 Insert **SD card** for the **PCM update** into the **SD card slot**.

Part No.	Designation
9Y0919360H	SD memory card for PCM update

- 2 Start the PCM software update using the PIWIS Tester.
 - 2.1 Select the **PCM** control unit in the control unit selection screen (**'Overview'** menu) and press **•F12"** ('Next') to confirm your selection.
 - 2.2 Once the PCM control unit has been found and is displayed in the 'Overview', select the **'Maintenance/repairs'** menu.

Installing PCM software update
 - 2.3 Select the **'Install software update'** function and press **•F12"** ('Next') to perform the software update ⇒ *Installing PCM software update*.
 - 2.4 Confirm the information that is displayed by pressing **•F12"** ('Next').

- 2.5 After meeting the preconditions, confirm by ticking the 'Status' column. Then, press •F12" ('Next') to continue.

Entering PCM programming code

- 2.6 Enter the programming code **S7L4R** in the relevant column ⇒ *Entering PCM programming code* and press •F12" ('Next') to confirm ⇒ *Entering PCM programming code*.

- 2.7 Press •F8" ('Start') to start.

- 2.8 After checking the software data, press •F8" ('Start') to start programming.

After starting the update, the PCM is restarted in the Update menu and then switches to the Developer menu.

The loading progress of the individual software modules is indicated by a progress bar in the Developer menu.

The time required for the update depends on the respective vehicle equipment and can be up to 40 minutes.

The PCM is restarted several times during the update.

- 2.9 Once the update is complete, an overview is displayed showing processes that have been completed successfully marked with a tick in the Status box. Press •F12" ('Next') to confirm.

- **Software version programmed during this campaign: 2841**

Following control unit programming, the software version can be read out of the PCM control unit in the 'Extended identifications' menu using the PIWIS Tester.

- 3 Remove inserted SD card from the SD card slot.

Concluding work



WARNING

Electrically moved rear spoiler

- **Danger of limbs being trapped or severed**
- **Risk of damage to components**
- ⇒ **Do not reach into the danger area.**
- ⇒ **Keep third parties away from the danger area.**
- ⇒ **Do not move components or tools into the danger area.**

NOTICE

Using the SD cards on vehicles that are not assigned to this campaign

- **Risk of damage to control unit**
- ⇒ **Use the specified SD cards only for the vehicles assigned to the campaign.**

Work Procedure: 1 Read out and erase the fault memories of all control units.

1.1 Press •F7“ in the control unit selection screen ('Overview' menu) to call up the Additional menu.

1.2 Select the function "Read all fault memories and erase if required" and press •F12“ ('Next') to confirm your selection ⇒ *Erasing fault memories*.

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.

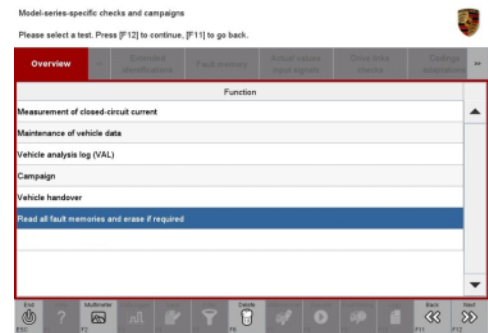
The faults stored in the fault memories of the various control units are deleted.



Information

If fault memory entries for individual control units cannot be deleted, 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.
- Start the engine, leave it running for a short time and then stop it again.
- Switch off the ignition and wait approx. 10 seconds before switching it back on again.
- Plug the PIWIS Tester diagnostic connector into the diagnostic socket again and restore communication with the vehicle.
- Read out the fault memory again and delete any fault memory entries that are stored.



Erasing fault memories

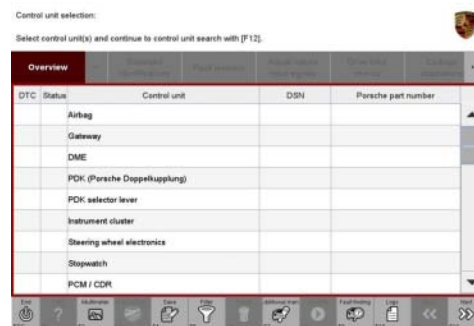
1.6 Once you have erased the fault memories, select the **'Overview'** menu to return to the control unit selection screen ⇒ *Control unit selection*.

2 Switch off ignition.



Information

Connect the PIWIS Tester to a network as soon as you can and log into the PPN in order to transfer the backup documentation created during this campaign to the PAG systems.



Control unit selection

3 Disconnect the PIWIS Tester from the vehicle.

4 Switch off and disconnect the battery charger.

5 Enter the campaign in the Warranty and Maintenance booklet.

Warranty processing

Scope 1: Currently not applicable.

Scope 2:

Working time:	
Performing PCM software update	Labor time: 52 TU
Includes:	
⇒ Damage Code WLK9 66 000 1	

Scope 3:

Vehicles that have not yet been delivered, on which the **campaign was not carried out during the sales check**.

Working time:	
Performing PCM software update	Labor time: 62 TU
Includes:	
Connecting and disconnecting battery charger	
Connecting and disconnecting PIWIS Tester	
Reading out and erasing fault memories	
⇒ Damage Code WLK9 066 000 1	

Scope 4: **Vehicles that have already been delivered.**

Working time:

Performing PCM software update

Labor time: **78 TU**

Includes: Connecting and disconnecting battery charger
Connecting and disconnecting PIWIS Tester
Reading out and erasing fault memories

⇒ Damage Code WLK9 066 000 1

Overview of new features of the PCM update

Overview:

Function	Description
Porsche Communication Management (PCM)	<ul style="list-style-type: none"> Easier programming of the garage door opener Easier destination input via keyword search Optimized display and use of the voice assistant and voice recognition (online/offline) Improved activation of WiFi hotspot Correction of automatic daylight saving time changeover

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