WJ15 - Re-Programming Control Unit for High-Voltage Charger (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 2017 up to 2018**
Vehicle Type:	**Panamera 4 E-Hybrid (971)** **Panamera Turbo S E-Hybrid (971)**
Equipment:	High-voltage charger 3.6 kW (I-no. KB1)
Subject:	**Control unit for high-voltage charger**
Information:	**Due to a software error, there is a possibility that the control unit for the high-voltage charger will not switch to energy-saving mode after the vehicle is stopped in the event of specific user behavior.** This can result in an increased closed-circuit current load and can thus deplete the vehicle electrical system battery.
Remedial Action:	Re-program control unit for high-voltage charger using the PIWIS Tester with software version **37.100.010** or a higher software version installed.

ℹ Information

During the campaign, the control unit for the high-voltage charger is re-programmed and then re-coded **automatically**.
It takes **about 10 minutes** to **program and code** the control unit.

Affected Vehicles:	Only the vehicles assigned to the campaign (see also PIWIS Vehicle information). This campaign affects 24 vehicles in North America.

Required tools

Tools:	• **9900 - PIWIS Tester 3** with PIWIS Tester software version **37.100.010** (or higher) installed • **Battery Charger/Power Supply** - Suitable for AGM Type batteries, recommended current rating of 90A fixed voltage 13.5V to 14.5V.

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 starting control unit programming, connect a suitable battery charger or power supply, suitable for AGM type batteries, recommended current rating of 90A fixed voltage 13.5V to 14.5V.**

> **NOTICE**
>
> **Control unit programming will be aborted if the Internet connection is unstable.**
>
> - **An unstable Internet connection can interrupt communication between PIWIS Tester and the vehicle communication module (VCI). As a result, control unit programming may be aborted.**
> - ⇒ **During control unit programming, always connect 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 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   Carry out general preliminary work for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'.*

Re-program control unit for high-voltage charger

ℹ️ Information

The procedure described here is based on the PIWIS Tester 3 software version **37.100.010**.

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   **Re-program control unit for high-voltage charger**.

The basic procedure for control unit programming is described in the Workshop Manual ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'.*

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

Required PIWIS Tester software version:	**37.100.010** (or higher)
Type of control unit programming:	Control unit programming using the **"Campaign" function in the Additional menu** on the PIWIS Tester by entering a programming code.
Programming code:	**C6S5J**
Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. The **control unit for the high-voltage charger** is **re-programmed** and then **re-codedautomatically** during the programming sequence. **Do not interrupt programming and coding.**
Programming time (approx):	**10 minutes**
Software version programmed during this campaign:	For Porsche Part No. 5QE 915 682 **R** — **6009**
	For Porsche Part No. 5QE 915 682 **AM** — **6013**
	Following control unit programming, the Porsche part number and software version can be read out of the "High-voltage charger" control unit in the 'Extended identification' menu using the PIWIS Tester.
Procedure in the event of abnormal termination of control unit programming:	• Switch ignition off and then on again. • Repeat control unit programming by entering the programming code again.
Procedure in the event of error messages appearing during the programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Fault finding"'.*

Reading out and erasing fault memory

ℹ Information

Brief breaks in communication between the control units during programming and coding can result in fault memory entries in all control units in the vehicle system, which might **not be deleted automatically**.

In addition to the automatic deletion of the fault memories during programming, the fault memories of all control units must therefore be **read out and deleted again** as described below **after each programming and coding process**.

Work Procedure: 1   Press •F7" in the control unit selection screen ('Overview' menu) to call up the Additional menu.

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.

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

ℹ Information

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

Erasing fault memories

be **found** and **corrected**. This work **cannot** be invoiced under the workshop campaign number.

4   Press •F8" to delete fault memory entries.

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.

ℹ 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.
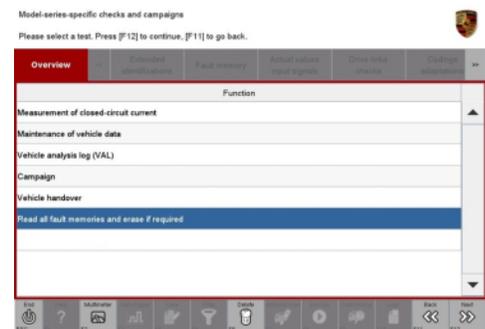
- Plug the PIWIS Tester diagnostic connector into the diagnostic socket again and restore communication with the vehicle.

- Read out the fault memory again and delete any fault memory entries that are stored.

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

Control unit selection

Concluding work

Work Procedure: 1 Carry out general concluding work for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*.

2 Enter the campaign in the Warranty and Maintenance booklet.

Warranty processing

ℹ️ Information

The specified working time was determined specifically for carrying out this campaign and includes all necessary preliminary and subsequent work.
The working time may differ from the working times published in the Labor Operation List in PIWIS.

Scope:

Working time:	
Re-programming control unit for high-voltage charger	Labor time: **47 TU**
Includes: Connecting and disconnecting battery charger	
Connecting and disconnecting PIWIS Tester	
Reading out and erasing fault memories	
⇒ **Damage Code WJ15 066 000 1**	