

WE17 - Re-programming High-voltage Battery Control Unit (Workshop Campaign)

Important: **CRITICAL WARNING** - THIS CAMPAIGN INCLUDES STEPS WHERE SEVERAL CONTROL UNITS IN THE VEHICLE WILL BE PROGRAMMED WITH THE PIWIS TESTER. IT IS CRITICAL THAT THE VEHICLE VOLTAGE BE BETWEEN 13.5 VOLTS AND 14.5 VOLTS DURING THIS PROGRAMMING. OTHERWISE, THE PROGRAMMING COULD FAIL RESULTING IN DAMAGED CONTROL UNITS. CONTROL UNITS DAMAGED BY INADEQUATE VOLTAGE WILL NOT BE COVERED UNDER WARRANTY. THE TECHNICIAN MUST VERIFY THE ACTUAL VEHICLE VOLTAGE IN THE INSTRUMENT CLUSTER OR IN THE PIWIS TESTER BEFORE STARTING THE CAMPAIGN AND ALSO DOCUMENT THE ACTUAL VOLTAGE ON THE REPAIR ORDER. IT IS ALSO ADVISABLE TO MONITOR THE VEHICLE VOLTAGE DURING THE PROGRAMMING VIA THE INSTRUMENT CLUSTER. PLEASE REFER TO EQUIPMENT INFORMATION EQ-1105 FOR A LIST OF SUITABLE BATTERY CHARGERS/POWER SUPPLIES WHICH SHOULD BE USED TO MAINTAIN VEHICLE VOLTAGE.

ADDITIONAL WARNING FOR PLUG-IN HYBRID VEHICLES - A HIGH VOLTAGE CHARGER CONNECTED TO THE VEHICLE IS NOT SUFFICIENT FOR PROGRAMMING PURPOSES. DURING A PROGRAMMING PROCEDURE, THE HIGH VOLTAGE CONTACTS MAY BE DISCONNECTED RESULTING IN A LOW VOLTAGE CONDITION IN THE 12 VOLT SYSTEM DURING PROGRAMMING. THE LOW VOLTAGE BATTERY MUST STILL BE CHARGED WITH AN APPROVED CHARGER.

Model Year: **2014**

Vehicle Type: **Panamera S E-Hybrid**

Country/Market: USA (C02)
Canada (C36)

Concerns: **High-voltage battery control unit**

Information: This is to inform you of a voluntary Workshop Campaign on the above-mentioned vehicles. **The error message "Hybrid system failure - Park vehicle safely" can appear sporadically in the instrument cluster on the affected vehicles because the high-voltage system diagnostic function is too sensitive.**

Action Required: Re-program the high-voltage battery control unit.



Information

The total time required for programming and coding the control unit is **approx. 12 minutes**.

- It takes **about 6 minutes** to **program** the high-voltage battery control unit.
- Once programming is complete, a control unit run-on phase of **at least 6 minutes** with the **ignition switched off** is required so that on-board diagnosis of the high-voltage system can be performed. The vehicle cannot be started until on-board diagnosis is completed successfully.

Affected Vehicles: The VIN(s) can be checked by using PIWIS Vehicle Information link to verify if the campaign affects the vehicle. This campaign is scope specific to the VIN! Failure to verify in PIWIS may result in an improper repair. This campaign affects 615 vehicles in North America.

Tools:

- **9818 - PIWIS Tester II** with PIWIS Tester software version **13.800** (or higher) installed
- **Battery Charger/Power Supply** - Suitable for AGM Type batteries, recommended current rating of 70A fixed voltage 13.5V to 14.5V. Refer to Equipment Information EQ-1105.

Work Procedure: See Attachment "A".

Claim Submission: See Attachment "B".

Attachment "A"

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 battery charger or power supply, suitable for AGM type batteries, recommended current rating of 70A 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 II and the vehicle communication module (VCI). As a result, control unit programming may be aborted.
- ⇒ During control unit programming, always connect PIWIS Tester II to the vehicle communication module (VCI) via the USB cable.

NOTICE

Programming interrupted

- Malfunctions in control unit
 - Risk of damage to control unit
- ⇒ Route the line between the PIWIS Tester and the vehicle communication module (VCI) without tension to prevent the line from slipping out of the USB connection on the PIWIS Tester.
- ⇒ Lock connecting lines on the vehicle communication module (VCI) using the bayonet lock.

- ⇒ Route the line between the vehicle communication module (VCI) and diagnostic socket on the vehicle without tension and make sure that the connector is inserted fully into the diagnostic socket.
- ⇒ Check that the rechargeable battery for the PIWIS Tester is charged sufficiently. Connect the PIWIS Tester to the mains power supply if necessary.

NOTICE

Control unit programming will be aborted if the vehicle key is not recognized

- If the vehicle key is not recognized in vehicles with Porsche Entry & Drive, programming cannot be started or will be interrupted.
- ⇒ Switch on the ignition using the original vehicle key. To do this, replace the original vehicle key in the ignition lock with the plastic key fob if it was previously removed at the start of this procedure.

Work Procedure: **NOTE:** VEHICLE VOLTAGE MUST REMAIN BETWEEN 13.5 AND 14.5 VOLTS DURING THE ENTIRE 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 - section on "Preliminary work"*.

Carrying out control unit programming

Work Procedure: 1 Re-program the high-voltage battery control unit.

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

Specific information on control unit programming during this campaign:

Required PIWIS Tester software version:	13.800 (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:	FOK7U

Programming sequence:	<p>Read and follow the information and instructions on the PIWIS Tester during the guided programming sequence.</p> <p>During the programming sequence, the high-voltage battery control unit is re-programmed and then re-coded automatically.</p> <p>Do not interrupt programming and coding.</p>
Programming time (approx.):	<p>12 minutes</p> <p>Once the control unit has been programmed and coded, you will be prompted to switch the ignition off and then back on again after a waiting time of 6 minutes.</p> <p>The 6-minute waiting time with the ignition switched off is necessary so that on-board diagnosis of the high-voltage system can be performed and completed as required after control unit programming.</p> <p>The vehicle cannot be started until on-board diagnosis is completed successfully.</p>
Software version programmed during this campaign:	<p>0710</p> <p>Following control unit programming, the software version can be read out of the high-voltage battery control unit in the ⇒ 'Extended identification' menu using the PIWIS Tester.</p>
Procedure in the event of error messages appearing during the programming sequence:	<p>⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Troubleshooting"</i>.</p>
Procedure in the event of abnormal termination of control unit programming:	<p>Repeat control unit programming by restarting programming.</p>

Subsequent work

Work Procedure: **NOTE:** VEHICLE VOLTAGE MUST REMAIN BETWEEN 13.5 AND 14.5 VOLTS DURING THE ENTIRE WORK PROCEDURE.

- 1 Carry out general subsequent work for control unit programming as described in the Workshop Manual ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"*.



Information

If the engine will not start and the prompt "Park vehicle safely" appears in the instrument cluster, on-board diagnosis of the hybrid system may not have been completed fully. If this happens, switch off the ignition, disconnect the PIWIS Tester from the diagnostic socket on the vehicle and lock the vehicle. **Wait for at least 6 minutes.** Then unlock the vehicle and try to start the engine again.



Information

If the **passive** (greyed) fault memory entry "**D00000 - Function restriction due to fault in PSM**" is entered in the 'Electric power steering' control unit, please ignore this. The fault memory entry is stored as a result of a communication problem between the control units caused by the PIWIS Tester connected to the vehicle.

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

- 2 Enter the workshop campaign in the Warranty and Maintenance booklet.

Attachment "B"

Claim Submission - Workshop Campaign WE17

Warranty claims should be submitted via WWS/PQIS.

Open campaigns may be checked by using either the PIWIS Vehicle Information system or through PQIS Job Creation.

Labor, parts, and sublet will be automatically inserted when Technician is selected in WWS/PQIS. If necessary, the required part numbers will need to be manually entered into warranty system by the dealer administrator.

Scope:



Information

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

Working time:

Re-programming high-voltage battery control unit

Labor time: **60 TU**

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

Calibrating electric machine

⇒ Damage code WE17 066 000 1

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