WLA0 - Re-programming DME control unit (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**

Vehicle type: **Panamera 4 E-Hybrid (971)**
Panamera 4 E-Hybrid Executive (971)
Panamera 4 E-Hybrid Sport Turismo (971)

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

Subject: **DME control unit**

Information: **When converting the engine power specification from kilowatts to horsepower for the affected vehicles, the conversion factor for the European unit (hp) was used instead of the unit that is normally used in the affected markets, SAE net horsepower (SAE hp).**

As a result, the engine power specification is on average approx. 1.4% higher than the actual engine power.

Remedial Action: Re-program the DME control unit using the PIWIS Tester with test software version 39.200.010 or a higher software version installed.

Information

With the updated data record for the DME control unit, the maximum engine power is increased by a slight adjustment to the boost pressure to the factory specification.
This adaptation does **not affect** the fuel consumption values, emissions or durability of the engine.

Information

When the **DME control unit** is programmed, the **PDK control unit** is **also** re-programmed automatically. It takes **approx. 15 minutes** in total to program the control units.

Before starting programming and after the control units have been programmed successfully, the procedure for sending **backup documentation** of the software versions installed on the control units to the Porsche After Sales systems will be started **automatically**.

Affected Vehicles: Only vehicles assigned to the campaign (see also PCSS Vehicle Information). This campaign affects 39,396 vehicles in North America.

Required tools

Tools:

- **9900 - PIWIS Tester 3** with PIWIS Tester software version **39.200.010** (or higher) installed
- Battery charger with a current rating of **at least 90 A**, e.g. **90 Amp Charger e.g. VAS 5908**

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 with a current rating of at least 90 A to the vehicle.**

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.**

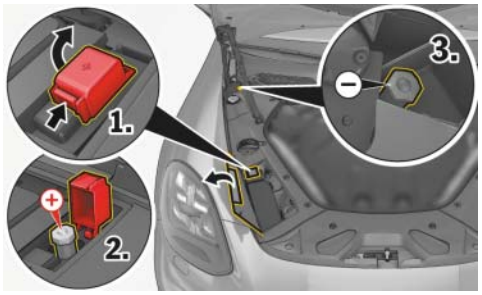
NOTICE

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 Connect a battery charger with a current rating of at least 90 A, e.g. **90 Amp Charger e.g. VAS 5908**, 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 in 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.

Driver's key in storage compartment

3 Connect the PIWIS Tester 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 the ignition.

5 On the PIWIS Tester start screen, call up the **'Diagnostics'** menu. The vehicle type is then read out, the diagnostic application is started and the control unit selection screen is populated.

Re-programming DME control unit

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 or coding.**

Information

The procedure described here is based on the PIWIS Tester 3 test software version **39.200.010**.

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.

It is imperative that the PIWIS Tester remains online during control unit programming so that backup documentation of the software versions installed on the control units **before and after programming** is sent to the Porsche After Sales systems.

Work Procedure: 1 **Re-program DME control unit**.

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:	**39.200.010** (or higher)
Type of control unit programming:	Control unit programming using the **'Automatic programming'** function for the DME control unit: **'DME'** control unit – **'Coding / programming'** menu – **'Automatic programming'** function.
Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. During the programming sequence, the **DME control unit** is **re-programmed** first, then the **PDK control unit** is re-programmed. Both control units are then **re-codedautomatically**. **Do not interrupt programming and coding.** Once the control units have been programmed and coded, you will be prompted to switch the ignition off and then back on again after a certain waiting time. Backup documentation of the new software versions is then performed.
The programming sequence takes (approx.):	**15 minutes**

Software version programmed during this campaign:	DME software version: **0003** DME software part number: **972907551R** Following control unit programming, the software part number and version of the programmed data record can be read out of the DME 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. • Read out and erase fault memories ⇒*Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"*'. • Repeat control unit programming by restarting programming.
Procedure in the event of **other 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"*'.

Concluding work

Work Procedure:

Information

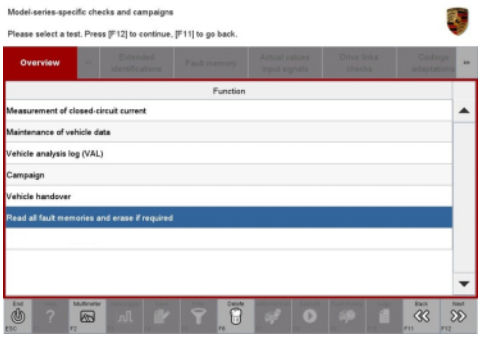
Brief breaks in communication between the control units during programming and coding can result in fault memory entries in all control units in the vehicle system, which might **not be deleted automatically**.
In addition to the automatic deletion of the fault memories during programming, the fault memories of all control units must therefore be **read out and deleted again** as described below **after each programming and coding process**.

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.



Erasing fault memories

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.

1.6 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

2 Switch off the ignition.

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: **Not relevant** for this **vehicle type**.

Scope 2: **Re-program DME control unit**

- Panamera 4 E-Hybrid (971)
- Panamera 4 E-Hybrid Executive (971)
- Panamera 4 E-Hybrid Sport Turismo (971)

Working time:

Re-programming DME control unit — Labor time: **61 TU**

Includes:
- Connecting and disconnecting battery charger
- Connecting and disconnecting PIWIS Tester
- Re-programming PDK control unit
- Performing backup documentation before and after programming
- Reading out and erasing fault memory

⇒ **Damage Code WLA0 66 000 1**