

WKH7 - 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: **As of 2017 up to 2019**

Vehicle Type: **Panamera (971)/Panamera 4 (971)**
Panamera 4 Executive (971)
Panamera 4 Sport Turismo (971)

Subject: **DME control unit**

Information: **Updated software is available for the DME control unit.**

This software optimizes control of the oxygen sensor downstream of catalytic converter.

Remedial Action: Re-program the DME control unit using the PIWIS Tester with test software version **39.600.020** (or higher) installed.



Information

When the DME control unit is programmed, the PDK control unit is also re-programmed **automatically**. Then, **both** control units are **coded automatically**.

The total time required for **programming and coding** both control units is **approx. 15 minutes**.



Information

During control unit programming, the old adaptation values of the PDK transmission are deleted. As a result, there is a possibility that after programming the PDK control unit, the gearshift behavior of the PDK transmission will initially be different to what the customer was used to before the measure was carried out.

Please inform the customer about this if necessary and also point out the following:

- The transmission adapts to the customer's driving style after approx. 100 to 150 km (60 to 100 mls), depending on the driving style (sporty or moderate)
- The adaptation can be performed continuously or in stages
- Hard gear changes or jerking of the transmission can sometimes occur during the adaptation phase

Affected Vehicles: Only for vehicles assigned to the campaign (see also PIWIS Vehicle Information). There are 6,396 vehicles affected by this campaign.

Required tools

Tools:

- **9900 - PIWIS Tester 3** with PIWIS Tester software version **39.600.020** (or higher) installed
- Battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 Battery charger 90A**

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 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 programming may be aborted.
- ⇒ During control unit programming, 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 into the front left storage compartment in the center console to guarantee a continuous radio link between the vehicle and the driver's key.

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.

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'*.



Information

The procedure described here is based on the PIWIS Tester 3 software version **39.600.020**.

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.

Re-programming DME control unit



WARNING

Electrically moved side windows and 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.
- ⇒ Retract roll-up sun blinds on the rear side windows before starting programming or coding.

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 table below.



Information

Start control unit programming using the "Automatic programming" function of the DME control unit. The **DME control unit** and **also** the **PDK control unit** will be re-programmed and coded automatically one after the other during the programming sequence. The total time required for **programming and coding** both control units is **approx. 15 minutes**.

Required PIWIS Tester software version:	39.600.020 (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-coded automatically . 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:	<ul style="list-style-type: none"> • DME control unit Software version: 0005 (or higher) Software Part No.: 971907559B (or higher) • PDK control unit for software version: 0651 (or higher) software Part No.: ODS927309J (or higher)
Procedure in the event of abnormal termination of control unit programming:	<ul style="list-style-type: none"> • Switch ignition off and then on again. • Read out and erase fault memories ⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"</i>. • Repeat control unit programming by restarting programming.
Procedure in the event of other error messages appearing during the programming sequence:	⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Fault finding"</i> .

Concluding work

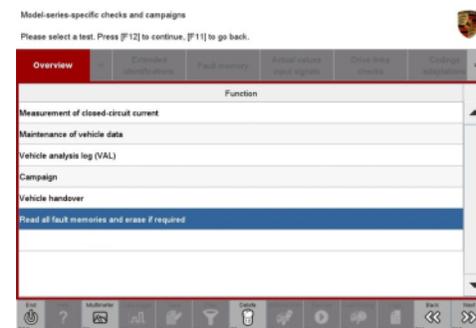
Work Procedure: 1 Read out and erase the fault memories of all control units.

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.



Erasing fault memories



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*.
- 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.



Control unit selection

Warranty processing



Information

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

Scope 1: Re-program DME control unit

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
- Reading out and erasing fault memories

⇒ **Damage Code WKH7 066 000 1**

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