WG44 - Re-programming PDK 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. Please refer to Equipment Information EQ1401 for a list of suitable battery chargers/power supplies which should be used to maintain vehicle voltage.
Model Year:	**2017**
Vehicle Type:	**718 Cayman (982)/718 Boxster (982)**
Equipment:	PDK transmission (**I-no. 250**)
Subject:	**PDK control unit**
Information:	During diagnostic monitoring of the hydraulic control valves of the PDK transmission, a fault memory entry is stored in the PDK control unit if an implausible shift rod movement is detected. The PDK control unit therefore initiates a flushing measure in order to flush particles of dirt determined as the cause of the fault out of the hydraulic control valves.
	As soon as the fault memory entry was activated in two consecutive driving cycles, there was a possibility with the previous diagnostic configuration that the message "Engine control fault – visit workshop – Driving permitted" would be displayed in the instrument cluster although the flushing measure had already been carried out successfully and a fault was no longer present.
	To prevent this from happening, the diagnostic function for monitoring the hydraulic control valves will be adapted accordingly.

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.**

Remedial Action:	Re-program PDK control unit using the PIWIS Tester with software version **33.700.030** (PIWIS Tester 3) or **17.700.030** (PIWIS Tester II) or a higher version installed.

> **ℹ Information**
>
> When the **PDK control unit** is programmed, the **DME control unit** is also re-programmed automatically. It takes **approx. 12 minutes** in total to **program** the control units.

Affected
Vehicles: Only the vehicles assigned to the campaign (see also PIWIS Vehicle information). This campaign affects 875 vehicles in North America.

Required Tools

Tools:
- **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.
- **9900 - PIWIS Tester III** with PIWIS Tester software version **33.700.030** (or higher) installed

or

- **9818 - PIWIS Tester II** with PIWIS Tester software version **17.700.030** (or higher) installed.

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 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 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 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.**

AfterSales

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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

ℹ Information

When the **PDK control unit** is programmed, the **DME control unit** is also re-programmed automatically.

Work Procedure: 1   **Re-program PDK 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"'*.

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

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.**

Required PIWIS Tester software version:	• PIWIS Tester III: **33.700.030** (or higher)
	• PIWIS Tester II: **17.700.030** (or higher)
Type of control unit programming:	Control unit programming using the **'Automatic programming'** function for the transmission control unit.
	Transmission control ⇒ **'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 initially **re-programmed** and then **re-codedautomatically**.
	The **PDK control unit** is then **re-programmed** and **re-codedautomatically**.
	Do not interrupt programming and coding.

Programming time (approx):	**12 minutes**
Procedure in the event of **abnormal termination** of control unit programming:	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"'.*

Reading out and erasing fault memory

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.

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.

4 Press •F8" to delete fault memory entries.

5 Press •>>" ("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 the fault memories of individual control units cannot be erased, 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.
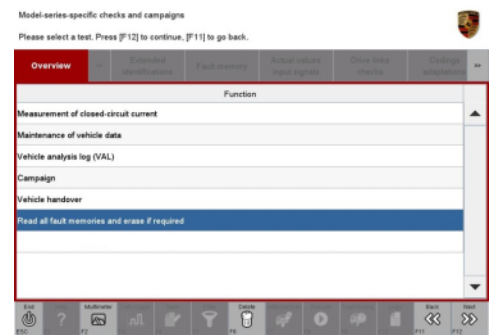
- Read out the fault memory again and delete any fault memory entries that are stored.

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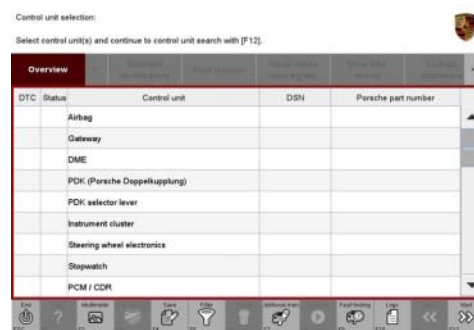

Control unit selection

Perform throttle valve adaptation

Work Procedure: 1 Select the **'DME'** control unit in the control unit selection screen ('Overview' menu) and press •F12" ('Next') to confirm your selection.

2 Once the DME control unit has been found and is displayed in the overview, select the ⇒ **'Maintenance/repairs'** menu.

3 Select menu item ⇒ **'Adaptations'** and confirm your selection by pressing •F12" ('Next') ⇒ *DME - Adaptations*.
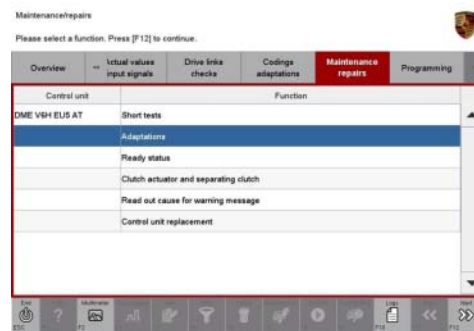
DME - Adaptations

4 Comply with the displayed preconditions and press •F12" ('Next') to confirm ⇒ *Adaptation preconditions*.
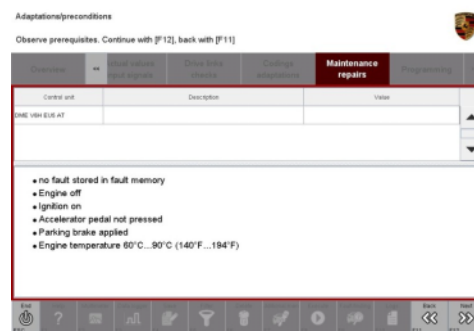
Adaptation preconditions

5 Select the ⇒ **'Throttle valve adaptation'** function so that the corresponding text line turns blue and press •F8" ('Start') to start throttle valve adaptation ⇒ *Throttle valve adaptation*.

6 Follow the instructions on thePIWIS Tester while throttle valve adaptation is being performed.

Throttle valve adaptation

Throttle valve adaptation successful

Once throttle valve adaptation is complete, a tick will appear in the "Value" field on the PIWIS Tester display.

If throttle valve adaptation is **not** completed successfully, the adaptation must be **repeated**.

7 Press •F8" ('Stop') to end throttle valve adaptation.

8 Press •F11" ('Back') to return to the start page of the ⇒ **'Maintenance/repairs'** menu.

9 Select the ⇒ **'Overview'** menu to return to the control unit selection screen ⇒ *Control unit selection*.

Control unit selection

Concluding work

Work Procedure: 1 Switch off the ignition.

2 Disconnect the PIWIS Tester from the vehicle.

3 Switch off and disconnect the battery charger.

4 On vehicles with Porsche Entry & Drive, replace the original vehicle key in the ignition lock with the control panel again.

5 Enter the workshop campaign in the Warranty and Maintenance booklet.

Warranty Processing

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.

Scope:

Working time:	
Re-programming PDK control unit	Labor time: **57 TU**
Includes: Re-programming DME control unit	
Connecting and disconnecting battery charger	
Connecting and disconnecting PIWIS Tester	
Reading out and erasing fault memories	
Performing adaptations	
⟹ **Damage Code WG44 066 000 1**	

Dealership	Service Manager	_____	Shop Foreman	_____	Service Technician	_____	_____	_____	_____
Distribution Routing	Asst. Manager	_____	Warranty Admin.	_____	Service Technician	_____	_____	_____	_____