## SB-10051671-2018 PORSCHE'

## \$69/fe **Technical Information WC65**

## WC65 - Re-programming PDK 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 INADEOUATE 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. 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.

Model Year: As of 2010 up to 2014

Vehicle Type: Panamera 4/Panamera 4S/Panamera GTS

Equipment: Porsche Doppelkupplung (PDK), I-no. 250

All-wheel drive, I-no. 339

Concerns: Porsche Doppelkupplung (PDK) control unit

Information: This is to inform you of a voluntary Workshop Campaign on the above-mentioned vehicles. There is a

possibility that too much drive torque will be transmitted to the front axle by Porsche Traction

Management (PTM) under certain driving conditions on the affected vehicles.

This can result in increased wear on the ring gear and pinion shaft toothing as well as noises from the

front-axle final drive over the service life of the vehicle.

Action

Re-program PDK control unit.

Required:



Information

In addition to the PDK control unit, the DME control unit is also re-programmed and coded automatically. It takes approx. 12 minutes in total to program both control units.

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 6,153 vehicles in North America.

# Se**rvice** WC65 ENU **12**

## **Technical Information**



#### Information

Exceptions during vehicle assignment:

- Panamera 4: Only model year 2011 (B) vehicles are affected by the campaign.
- Panamera 4S: Only model year 2010 (A) vehicles with I-no. 750 are assigned to the campaign.

Tools: 9818 - PIWIS Tester II with PIWIS Tester software version 11.500 (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 See Attachment "A".

Procedure:

Claim See Attachment "B".

Submission:

### Preliminary work

## **NOTICE**

VEHICLE VOLTAGE MUST REMAIN BETWEEN 13.5 AND 14.5 VOLTS DURING THE ENTIRE WORK PROCEDURE.

# 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 commencing work, connect a 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), to the jump-start terminals in the engine compartment.
- ⇒ Disconnect electric plug connection for the fan blower to prevent the blower from coming on during control unit programming.

## 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

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

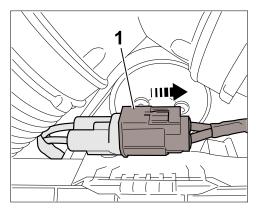
- If the vehicle key is not recognized in vehicles with Porsche Entry & Drive, programming cannot be started or will be interrupted.
- ⇒ Switch on the ignition using the original vehicle key. To do this, replace the original vehicle key in the ignition lock with the plastic key fob if it was previously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

Note: VEHICLE VOLTAGE MUST REMAIN BETWEEN 13.5 AND 14.5 VOLTS DURING THE ENTIRE WORK PROCEDURE.

#### Attachment "A": Work Procedure

Disconnect electric plug connection for the fan blower ⇒ Disconnecting electric plug connection

 -1- (⇒ Disconnecting electric plug connection
 -arrow-) to prevent the blower from coming on during control unit programming.
 Having the fan on and the associated increased current draw can cause a drop in voltage, which can result in abnormal termination of control unit programming.



Disconnecting electric plug connection

- 2 Connect a 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), to the jump-start terminals in the engine compartment.
- 3 Switch on the ignition using the **original driver's key**. On vehicles with "Porsche Entry & Drive", do this by replacing the control panel in the ignition lock with the original driver's key if necessary.
- 4 **9818 PIWIS Tester II** with software version **11.500** (or higher) installed must be connected to the vehicle communication module (VCI) via the **USB cable**. Then, connect the communication module to the vehicle and switch on the PIWIS Tester.

### Carrying out control unit programming

Note: VEHICLE VOLTAGE MUST REMAIN BETWEEN 13.5 AND 14.5 VOLTS DURING THE ENTIRE WORK PROCEDURE.

Procedure:



#### Information

The procedure described here is based on the PIWIS Tester II software version 11.500.

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.

1 On the PIWIS Tester start screen, call up the ⇒ 'Diagnostics' menu and select vehicle type ⇒ 'Panamera'.

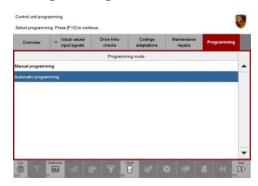
The diagnostic application is then started and the control unit selection screen is populated.

2 Select the control unit ⇒ 'Transmission control' in the control unit selection screen (⇒ "Overview" menu) and press •>>" to confirm your selection ⇒ Control unit selection - Transmission control.



Control unit selection - Transmission control

- When the question "Create Vehicle Analysis Log (VAL)?" appears, either press •F12" to create a VAL or press •F11" if you do not want to create a VAL.
- 4 Press •>>" to acknowledge the message informing you that campaigns for the vehicle are stored in the PIWIS information system.
- 5 Once the **PDK** control unit has been found, select the **⇒ 'Programming'** menu.
- 6 Select the ⇒ 'Automatic programming' function and press •>> " to confirm your selection and start the guided programming sequence ⇒ DME Automatic programming.



DME - Automatic programming



#### Information

When the  ${\bf PDK}$  control unit is programmed automatically, the  ${\bf DME}$  control unit is  ${\bf also}$  re-programmed automatically.

Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. Then press •>>" to continue.

First the **DME** control unit and then the **PDK** control unit is **programmed** using a new data record. Total programming time is **approx**. **12 minutes**.

The control units are then re-coded automatically.

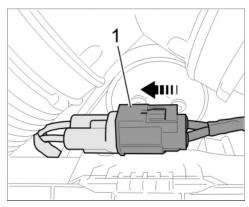
### Do not interrupt programming and coding.

Once the control units have been re-coded, you will be prompted to switch the ignition off and then back on again after approx. 10 seconds.

During the waiting time, connect the electric plug connection ⇒ Plugging in electric plug connection
 -1- for the fan blower in the engine compartment ⇒ Plugging in electric plug connection -arrow.

Once programming is completed successfully (message "Programming was completed successfully"), carry out the work described below.

 If programming is interrupted (e.g. due to a voltage drop or if communication is aborted, etc.) or if programming could not be carried out successfully (error message "Programming unsuccessful"), programming must be repeated.



Plugging in electric plug connection

- If coding is not carried out successfully during the guided programming sequence, the DME and PDK control units must be re-coded again separately once the guided programming sequence is complete. To do this, select the control units "DME" and "Transmission control" in the control unit selection screen (⇒ "Overview" menu) and press •>> " to confirm your selection. Once the control units have been found, select the "Codings/adaptations" menu and re-code the control units using the "Automatic coding" function.
- 8 Once the control units have been programmed and coded successfully, press •>>" to continue.
- 9 Select the ⇒ 'Overview' menu and press •<<" to return to the control unit selection screen ⇒ Control unit selection.



Control unit selection

## Performing throttle valve adaptation

Note: VEHICLE VOLTAGE MUST REMAIN BETWEEN 13.5 AND 14.5 VOLTS DURING THE ENTIRE WORK

PROCEDURE.

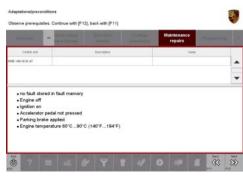
Procedure:

- Select the 'DME' control unit in the control unit selection screen ('Overview' menu) and press
   >> " to confirm your selection.
- Once the DME control unit has been found and is displayed in the overview, select the ⇒ 'Main-tenance/repairs' menu.
- Select menu item ⇒ 'Adaptations' and press
   >> " to confirm your selection ⇒ DME Adaptations.



DME - Adaptations

4 Comply with the displayed preconditions and press •>> " to confirm ⇒ Adaptation preconditions.



Adaptation preconditions

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



Throttle valve adaptation

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6 Follow the instructions on the PIWIS Tester while throttle valve adaptation is being performed.
Once throttle valve adaptation is complete, a tick appears in the "Value" field on the PIWIS Tester display.

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

- 7 Press F8" ("Stop") to end throttle valve adaptation.
- 8 Press •<<" to return to the start page of the ⇒ 'Maintenance/repairs' menu.
- 9 Select the ⇒ 'Overview' menu and press •<<" to return to the control unit selection screen.

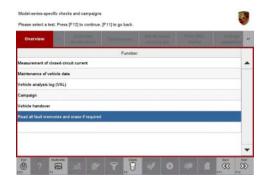
### Reading out and erasing fault memories

Note: VEHICLE VOLTAGE MUST REMAIN BETWEEN 13.5 AND 14.5 VOLTS DURING THE ENTIRE WORK PROCEDURE.

Procedure:

- 1 In the control unit selection screen (⇒ 'Overview' menu), press •F7" to call up the Additional menu.
- 2 Select the function "Read all fault memories and erase if required" and press •>>" to confirm ⇒ Erasing fault memories.

The fault memories of the control units are read out.



Erasing fault memories

- 3 Once you have read out the fault memories, erase the fault memory entries by pressing •F8".
- 4 Press F12" ("Yes") in response to the question as to whether you really want to erase 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 (e.g. fault memories of the DME control unit, Adaptive Cruise Control (ACC) control unit, etc.) cannot be erased, switch off the ignition, disconnect the PIWIS Tester diagnostic connector from the diagnostic socket and lock the vehicle using the vehicle key. Wait for approx. 1 minute and then read out the fault memories of these control units again and erase the fault memories separately.

If control units are found to have 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.

5 Once you have erased the fault memories, select the ⇒ 'Overview' menu and press •<<" to return to the control unit selection screen ⇒ Control unit selection.



Control unit selection

### Subsequent work



#### **Exhaust gases**

- Risk of Carbon Monoxide (CO) Poisoning
- ⇒ Before starting the engine, position an exhaust extraction system behind the vehicle's exhaust pipes and switch it on.

Note: VEHICLE VOLTAGE MUST REMAIN BETWEEN 13.5 AND 14.5 VOLTS DURING THE ENTIRE WORK PROCEDURE.

Procedure: 1 Perform engine torque loss adaptation.

To obtain the engine temperature required for engine torque loss adaptation (176° F/80° C), leave the engine running in selector lever position "P" until the required temperature is reached.

Conditions/procedure for engine torque loss adaptation:

- Engine temperature is at least 176° F/80° C (the engine temperature can be read out in the "Actual values" menu using the PIWIS Tester).
- Position steering wheel straight ahead.

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- PDK selector lever in position P.
- Leave engine running at idle speed for 3 minutes with air conditioning switched off.
- Then leave engine running at idle speed for 3 minutes with air conditioning switched on (normal load).
- 2 Switch off ignition.
- 3 Disconnect the PIWIS Tester from the vehicle.
- 4 Switch off and disconnect the battery charger.
- On vehicles with Porsche Entry & Drive, replace the original driver's key in the ignition lock with the control panel again.
- 6 Enter the workshop campaign in the Warranty and Maintenance booklet.

#### Note:



#### Information

The specified working time was determined specifically for carrying out this campaign and includes all required preliminary and subsequent work.

The working time may differ from the working times published in the Labor Operation List in PIWIS.

### Attachment "B": Claim Submission - Workshop Campaign WC65

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.

### Working time:

Re-programming PDK and DME control unit

Includes: Disconnecting and connecting electric plug connection for

fan blower

Connecting and disconnecting battery charger Connecting and disconnecting PIWIS Tester

Performing throttle valve adaptation
Performing engine torque loss adaptation

Labor time: 57 TU

Reading out and er	rasing fault memories
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⇒ Damage code WC65 066 000 1

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Dealership	Service Manager	 Shop Foreman	 Service Technician		
Distribution			0		
Routing	Asst. Manager	 Warranty Admin.	 Service Technician	 	 

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