WC01 - Re-programming Front-end Electronics Control Unit (Workshop Campaign)

Vehicle Type: **Panamera/Panamera 4/Panamera S Hybrid**
Panamera S/Panamera 4 S/Panamera Turbo/Panamera Turbo S

Model Year: **As of 2010 up to 2012**

Concerns: **Front-end electronics control unit**
Rear-end electronics control unit (only for model year 2012 vehicles)

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

New data records for the front-end electronics and rear-end electronics control units are available for the affected vehicles.

- **Front-end electronics control unit:**

If the vehicle key is not inserted completely into the ignition lock and the ignition lock is then turned to the position “Ignition on”, the ignition lock will be locked after removing the key and the vehicle key can no longer be inserted into the ignition lock.

To prevent this from happening, the front-end electronics control unit must be re-programmed with an updated data record.

- **Rear-end electronics control unit** (only for model year 2012 vehicles):

Due to a software error, there is a possibility that the rear-end electronics control unit will not switch to energy-saving mode after the vehicle is stopped in the event of specific user behavior.
This can result in an increased closed-circuit current load and can thus cause the battery to become discharged.

To prevent this from happening, the rear-end electronics control unit must be re-programmed with an updated data record.

Action Required: Re-program front-end electronics control unit.
The rear-end electronics control unit is also re-programmed on model year 2012 vehicles.

Information
The **total time** required for programming and coding is approx. **6-10 minutes**, depending on the scope.

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.

Tools: PIWIS Tester II 9818 with software version **10.400** (or higher) installed.
Battery charger **(current rating of at least 40 A)**.

Administrative Procedure: See Attachment “A”.

Preliminary 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 commencing work, connect a suitable battery charger with a current rating of at least 40 A 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.**

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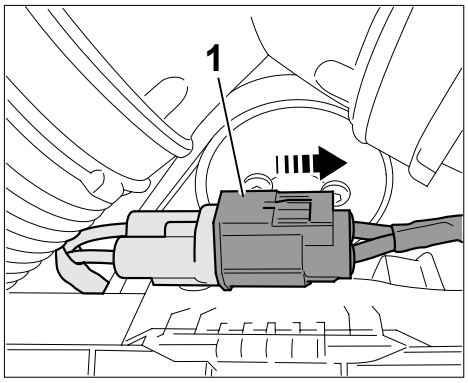
Work Procedure:

1 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 with a current rating of **at least 40 A** to the jump-start terminals in the engine compartment.

3 Switch on ignition using the **original vehicle key**. For vehicles with "Porsche Entry & Drive", do this by replacing the control panel in the ignition lock with the original vehicle key if necessary.

4 Move the windshield wiper lever to position 0 (= windshield wipers off) to prevent the windshield wipers from coming on during programming.

5 PIWIS Tester II 9818 with software version **10.400** (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

Information

The procedure described here is based on the PIWIS Tester II software version **10.400**.

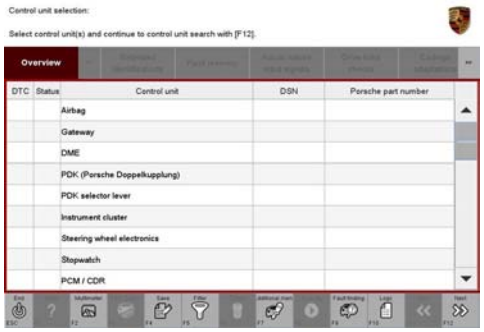
The PIWIS Tester instructions take precedence and in the event of a discrepancy, these are the instructions that must be followed.
A discrepancy may arise with later software versions for example.

Work Procedure:

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 In the control unit selection screen (⇒ **'Overview'** menu), press [F7] to call up the ⇒ '**Additional menu'** (⇒ *Control unit selection*).



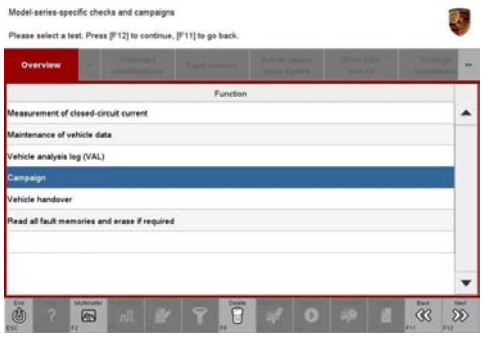
Control unit selection

3 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.

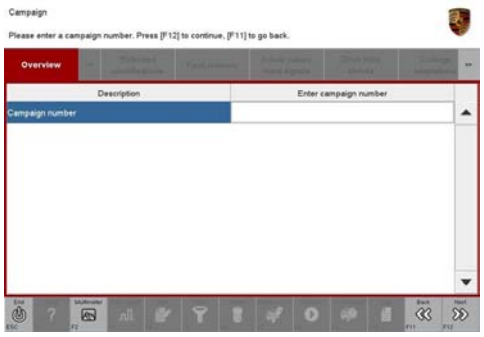
5 Select the ⇒ **'Campaign'** function and confirm your selection by pressing [>>] (⇒ *Additional menu – Campaign*).

You are then prompted to enter a campaign number.



Additional menu – Campaign

6 To enter the campaign number, click in the relevant text box so that the cursor starts to flash ⇒ *Campaign number input field*.



Campaign number input field

7 Enter campaign number **WC01** and confirm your entry by pressing [Enter].

The text box turns blue.

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Press [>>] to start the guided programming sequence.

Information

Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. **Do not interrupt programming and coding.**

Programming and coding is performed in several steps:

- The **gateway control unit is first re-coded** in **preparation for programming**.
- Then, the **front-end electronics** control unit and for **model year 2012** vehicles, the **rear-end electronics** control unit is also re-**programmed** and then **automatically** re-**coded**.
- The **gateway control unit is coded** again once programming is complete.

The **display in the instrument cluster is switched off** while the front-end electronics control unit is being programmed and will remain off during the entire programming procedure.
The message "Ignition key not removed" appears in the multi-function display.

The ignition is still active in the background.
Never switch the ignition off and then on again because if you do, programming will be interrupted and will then have to be restarted.

The display in the instrument cluster will be switched on again automatically as soon as programming is complete.

Overview of part numbers of data records to be programmed

Model year	Control unit	Porsche part number of new data record
2010 (A)	Front-end electronics	**7PP907064EF**
2011 (B)	Front-end electronics	**7PP907064FB**
2012 (C)	Front-end electronics	**7PP907064FF**
	Rear-end electronics	**7PP907279AM**

The **Porsche part number** of the front-end electronics control unit and the rear-end electronics control unit if necessary, which can be read out in the ⇒ “Extended identification” menu using the PIWIS Tester, **will not change following control unit programming**.

The **software version** specified in the ⇒ “Extended identification” menu is decisive for checking whether the control unit software is up-to-date.

Overview of current software versions

Model year	Control unit	Software version of current data record
2010 (A)	Front-end electronics	**1570**
2011 (B)	Front-end electronics	**0950**
2012 (C)	Front-end electronics	**2080**
	Rear-end electronics	**2070**

Information
If programming does not start, the campaign number must be entered again and programming must be restarted.

Information
If an **error message** is displayed after starting programming (e.g. “Campaign does not exist”, “No suitable programming rules found” or “Vehicle data could not be read”, etc.), refer to the appropriate instructions provided in ⇒ *Technical Information 'WC0100 WC01 Workshop campaign – Re-programming front-end electronics control unit - section on "Troubleshooting"'*.

Information
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”), follow the **instructions provided under** ⇒ *Technical Information 'WC0100 Procedure after programming is aborted'* **to repeat** the programming procedure.

It is **not** possible to program the control units manually.

Once programming is completed successfully (message “Campaign was carried out successfully”), carry out the **Subsequent work** described below.

Subsequent work

Work Procedure: 1 Plug in electric plug connection for the fan blower.

2 Read out and erase all fault memories.

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Information

If the fault memories of individual control units cannot be erased, switch the ignition off and then on again and erase the fault memories of these control units 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.

3 Disconnect the PIWIS Tester from the vehicle.

4 Switch off and disconnect the battery charger.

5 On vehicles with Porsche Entry & Drive, 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.

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

Attachment "A"

Administrative Procedure - Workshop Campaign WC01
Warranty claims should be submitted via WWS/PQIS.
Note: Open campaigns can be checked by using the PIWIS Vehicle Information link.
Labor, parts, and sublet will be automatically inserted when Technician is selected in WWS/PQIS.

Scope:

Working time:

Re-programming front-end electronics and rear-end electronics if necessary — Labor time: **30 TU**

Includes:
- Disconnecting and connecting electric plug connection for fan blower
- Connecting and disconnecting battery charger
- Connecting and disconnecting PIWIS Tester
- Reading out and erasing fault memory

Invoicing: ⇒ Damage code WC01 066 000 1

Troubleshooting

Work Procedure:

Error message after entering campaign number	Possible causes	Remedial action
Specified campaign does not exist	• PIWIS Tester software is not up-to-date	• Update PIWIS Tester software to the software version specified in the Technical Information (or a higher software version). Then enter the campaign number again and start programming.
	• Wrong vehicle type selected	• Close the diagnostic application. Select the correct vehicle type and restart the diagnostic application. Then enter the campaign number again and start programming.
	• A campaign number does not have to be entered in order to carry out the campaign.	• Carry out the campaign as described in the Technical Information.
No suitable programming rules found. Cause: **Part number of the control unit** is not in the programming rules.	• Campaign must not be carried out on the vehicle or campaign was already carried out.	• Check vehicle assignment to the campaign in **PIWIS > Vehicle Information**.
	• Replacement control unit with up-to-date software version was installed	• Check software version of the control unit in the ⇒ "Extended identification" menu. Current **software version**: **– Front-end electronics:** **1570** (MY 2010) **0950** (MY 2011) **2080** (MY 2012) **– Rear-end electronics:** **2070** (MY 2012 only)
	• Software version of the installed control unit is already up-to-date	
	• Software version of the control unit is a version that is not intended for carrying out the campaign.	

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No suitable programming rules found. Cause: **Current vehicle equipment** is not shown in the programming rules. Please check vehicle order and change if necessary.	• Campaign must not be carried out on the vehicle.	• Check vehicle assignment to the campaign in **PIWIS > Vehicle Information**.
	• Vehicle order is wrong.	• Check vehicle order and correct it if necessary (PIWIS Tester > Additional menu >> Maintenance of vehicle data).
Vehicle data could not be read	• Ignition not switched on	• Switch on ignition and close and restart the diagnostic application. Then enter the campaign number again and start programming.

Procedure after programming is aborted

Information

If programming is aborted (the message “Programming was not completed successfully” is displayed on the PIWIS Tester screen), **always proceed in accordance with the procedure described below**.

Work Procedure: 1 If the message **“Programming was not completed successfully”** is displayed, **first press F11 to cancel the programming procedure** and then go back to the **start page of the Additional menu**.

2 Actuate the central locking button in the centre console to “wake up” the gateway control unit and re-establish communication between the gateway control unit and the front-end electronics control unit.

3 Select the ⇒ **’Campaign’** function and **restart** control unit programming by **entering the campaign number** again.

- If programming is completed **successfully** following the restart (message “Campaign was carried out successfully”), carry out the work described under ⇒ *Technical Information ’WC0100 Subsequent work’*.

- If programming **is not completed successfully** even after restarting (message “Programming was not completed successfully” is displayed again), Steps 1 to 3 must be repeated until programming is completed successfully. It may be necessary to **restart** programming **up to three times** in individual cases.

- If programming **does not start again** after entering the programming number or **is not completed successfully even after restarting programming at least three times** (message “Programming was not completed successfully”), carry out the following work:

4 Press F11 to cancel programming.

5 Switch off the ignition.

6 Switch off and disconnect the battery charger.

7 Disconnect the negative terminal of the vehicle battery and wait for approx. one minute. Then re-connect the negative terminal of the vehicle battery.

8 Switch on ignition and restore communication between the vehicle and the PIWIS Tester.

9 Actuate the central locking button in the center console to “wake up” the gateway control unit and re-establish communication between the gateway control unit and the front-end electronics control unit.

10 Call up the Additional menu on the PIWIS Tester and restart control unit programming again using the ⇒ **’Campaign’** function by entering the campaign number.

- If programming is completed **successfully** after disconnecting and connecting the vehicle battery (message “Campaign was carried out successfully”), carry out the work required after disconnecting the battery ⇒ *Workshop Manual ’2X00IN Work instructions after disconnecting the battery’* and the work described under ⇒ *Technical Information ’WC0100 Subsequent work’*.

- If programming **is not completed successfully** even after disconnecting and connecting the vehicle battery (message “Programming was not completed successfully”), repeat the entire procedure after programming is aborted.

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	Asst. Manager	_____	Warranty Admin.	_____	Service Technician	_____	_____	_____	_____

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