
Technical Information

Service

72/13_{ENU} WD47

4

WD47 - Re-programming Porsche Stability Management (PSM) Control Unit (Workshop Campaign)

Note: **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 INADEQUATE 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 AND ALSO DOCUMENT THE ACTUAL VOLTAGE ON THE REPAIR ORDER. 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: **2014**

Vehicle Type: **Panamera/Panamera 4/Panamera S E-Hybrid
Panamera S/Panamera 4S/Panamera GTS/Panamera Turbo**

Concerns: **Porsche Stability Management (PSM) control unit**

Information: This is to inform you of a voluntary Workshop Campaign on the above-mentioned vehicles. **After one hundred actuations, the electric parking brake performs a calibration run at a vehicle speed of 9 mph (15 km/h).**

Due to a software error in the PSM control unit, the engine torque is reduced briefly to protect the electric parking brake. The customer may notice this as a loss of power.

To prevent this loss of comfort, the control unit must be re-programmed with an updated data record.

Action Required: Re-program PSM control unit using an updated data record.



Information

The **total time** required for programming and coding is approx. **5 minutes**.

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 3,017 vehicles in North America.

Tools:

- **9818 - PIWIS Tester II** with PIWIS Tester software version **12.900** (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 Procedure: See Attachment "A".

Claim Submission: See Attachment "B".

Attachment "A"

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 or power supply, suitable for AGM type batteries, recommended current rating of 70A fixed voltage 13.5V to 14.5V to the jump-start terminals in the engine compartment.

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

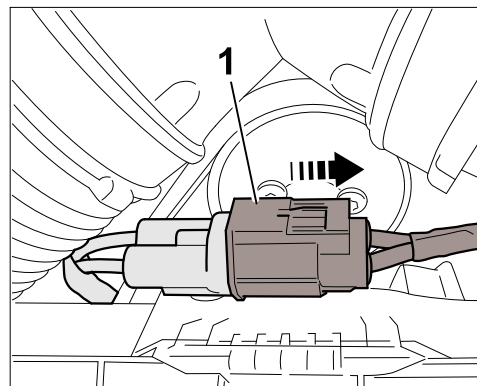
- If the vehicle key is not recognized in vehicles with Porsche Entry & Drive, programming cannot be started or will be interrupted.
- ⇒ Switch on the ignition using the original vehicle key. To do this, replace the original vehicle key in the ignition lock with the plastic key fob if it was previously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

Work Procedure: **NOTE:** VEHICLE VOLTAGE MUST REMAIN BETWEEN 13.5 AND 14.5 VOLTS DURING THE ENTIRE WORK PROCEDURE.

- 1 Connect a battery charger or power supply, suitable for AGM type batteries, recommended current rating of 70A fixed voltage 13.5V to 14.5V to the jump-start terminals in the engine compartment and switch it on.

2 **Only for Panamera S E-Hybrid:**

Disconnect electric plug connection for the fan blower ⇒ *Disconnecting connector -1-* (⇒ *Disconnecting connector -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 connector

- 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 **12.900** (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.

Re-programming PSM control unit



Information

The procedure described here is based on the PIWIS Tester II software version **12.900**.

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.



Information

The rear spoiler may extend automatically during programming.

Do not work in this area during programming.

Work Procedure:

NOTE: VEHICLE VOLTAGE MUST REMAIN BETWEEN 13.5 AND 14.5 VOLTS DURING THE ENTIRE 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 **•>>** 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 press **•>>** to confirm your selection ⇒ *Additional menu - Campaign*.

You are then prompted to enter a programming code.



Additional menu - Campaign

- 6 To enter the programming code, click in the relevant text box so that the cursor starts to flash ⇒ *Programming code input field.*



Programming code input field

- 7 Enter the programming code **S5B4V**.
Press •Enter“ to confirm the programming code you entered. The text box turns blue.
Press •>>“ to start the guided programming sequence.



Information

If programming does not start, the programming code must be entered again and programming must be restarted.



Information

If an error message is displayed (e.g. “Campaign does not exist”, “No suitable programming rules found” or “Vehicle data could not be read”, etc.), please read and follow the appropriate instructions provided under ⇒ *Technical Information 'WD4700 Troubleshooting'* at the end of this Technical Information.



Information

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

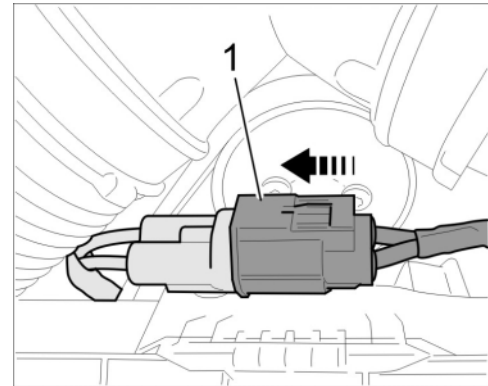
Do not interrupt programming.

The Porsche part number of the data record programmed during the campaign depends on the vehicle type:

Vehicle type	Porsche part number of new PSM data record
– Panamera S E-Hybrid	970.618.113. 66
– All other Panamera vehicles	970.618.113. 56

Once the control unit has been programmed, you will be prompted to switch the ignition off and then back on again after a waiting time of approx. 10 seconds.

- 8 During the waiting time, connect the electric plug connection ⇒ *Connecting electric plug connection -1-* for the fan blower in the engine compartment ⇒ *Connecting electric plug connection -arrow-* if necessary.



Connecting electric plug connection



Information

When programming has been completed successfully, the message "The action was completed successfully" will be displayed.

Once programming is completed successfully, carry out the work described under ⇒ *Technical Information 'WD4700 Subsequent work'*.

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"), the **ignition must be switched off** and the **fuse for the PSM control unit** must be removed and then re-inserted as described in Steps 1.1 to 1.5 under ⇒ *Technical Information 'WD4700 Subsequent work'*.

After switching on the ignition, programming must be **repeated** by entering the programming code **S5B4V** again (Additional menu > Campaign >> Enter campaign number).

Subsequent work

Work
Procedure:

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



Information

The **fuse** for the PSM control unit **must always be removed** after

- the PSM control unit has been programmed successfully

or

- if programming is interrupted

1 **Remove the fuse for the PSM control unit from its slot and then re-insert it.**

1.1 Switch off ignition.

1.2 Remove the cover of the fuse box on the left of the dashboard. Carefully lever off the cover with a screwdriver and remove it.

- 1.3 Carefully remove the fuse (10 amp) for the PSM control unit (second row from the bottom, slot 41) using the plastic clip.
 - 1.4 Re-insert the fuse for the PSM control unit in its slot.
 - 1.5 Fit the cover for the fuse box on the left of the dashboard.
- 2 Read out and erase all fault memories.

**Information**

If the fault memories of individual control units cannot be erased, start the engine briefly and then switch the ignition off and then on again. Then 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 driver's key in the ignition lock with the control panel again.
- 6 Retract the extended rear spoiler manually using the button in the centre console.
- 7 Enter the workshop campaign in the Warranty and Maintenance booklet.

Attachment "B"**Claim Submission** - Workshop Campaign WD47

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.

Scope:

Working time:

Re-programming PSM control unit

Labor time: **38 TU**

Includes:

- Connecting and disconnecting battery charger
- Connecting and disconnecting PIWIS Tester
- Disconnecting and connecting electric plug connection for fan blower (if necessary)
- Removing and inserting fuse for PSM control unit
- Reading out and erasing fault memories
- Retracting rear spoiler manually

⇒ Damage code WD47 066 000 1

TroubleshootingWork
Procedure:

Error message after entering programming number	Possible causes	Remedial action
Specified campaign does not exist.	<ul style="list-style-type: none"> • PIWIS Tester software is not up-to-date. 	<ul style="list-style-type: none"> • Update PIWIS Tester software to the software version specified in the Technical Information (or a higher software version). Then enter the programming number again and start programming.
	<ul style="list-style-type: none"> • Wrong vehicle type selected. 	<ul style="list-style-type: none"> • Close the diagnostic application. Select the correct vehicle type and restart the diagnostic application. Then enter the programming number again and start programming.
	<ul style="list-style-type: none"> • A programming number does not have to be entered in order to carry out the campaign. 	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> Campaign must not be carried out on the vehicle or campaign was already carried out. 	<ul style="list-style-type: none"> Check vehicle assignment to the campaign in PIWIS > Vehicle information.
	<ul style="list-style-type: none"> Replacement control unit with up-to-date software version was installed. 	<ul style="list-style-type: none"> Check Porsche part number of the PSM control unit in the ⇒ "Extended identification" menu. Porsche part number of PSM control unit with new data records:
	<ul style="list-style-type: none"> Software version of the installed control unit is already up-to-date. 	
	<ul style="list-style-type: none"> Software version of the control unit is a version that is not intended for carrying out the campaign. 	
No suitable programming rules found. Cause: Current vehicle equipment is not shown in the programming rules. Please check vehicle order and change it if necessary.	<ul style="list-style-type: none"> Campaign must not be carried out on the vehicle. 	<ul style="list-style-type: none"> Check vehicle assignment to the campaign in PIWIS > Vehicle information.
	<ul style="list-style-type: none"> Vehicle order is wrong. 	<ul style="list-style-type: none"> Check vehicle order and correct it if necessary (PIWIS Tester > Additional menu >> Maintenance of vehicle data).
Vehicle data could not be read.	<ul style="list-style-type: none"> Ignition not switched on. 	<ul style="list-style-type: none"> Switch on ignition and close and restart the diagnostic application. Then enter the programming number again and start programming.

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