

# **Technical Information**

Service

144/21 ENU 4770

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"Chassis Fault" Warning/Fault Memory Entry "C059500" in the Brake Booster Control Unit (144/21)

Vehicle Type: Panamera 4 E-Hybrid (971)/Panamera 4S E-Hybrid (971)/Panamera Turbo S E-Hybrid (971)

Model Year: As of 2017 up to 2021

Concerns: Brake booster control unit

Information:

- The yellow warning 'Chassis fault Adapted driving permitted' is displayed in the instrument cluster. The warning message sometimes appears together with a noticeably stiffer and slightly vibrating brake pedal.
- The fault memory entry 'C059500 Brake booster control unit power level implausible (00E900)' is stored in the fault memory of the brake booster control unit. This is caused by a temporary (individual) or permanent internal overcurrent detected in the brake booster control unit.

Action required: In the event of a customer complaint, re-code the brake booster control unit using PIWIS Tester software version **40.550.022** (or higher).

### Required tools

Tools:

- 9900 PIWIS Tester 3 with PIWIS Tester software version 40.550.022 (or higher) installed
- Battery charger with a current rating of at least 90 A and if required also with a current and voltage-controlled charge map for lithium starter batteries, e.g. VAS 5908 Battery charger, 90 A

For further information about the battery chargers to be used, see  $\Rightarrow$  Workshop Manual '270689 Charging vehicle electrical system battery'.

### Preparatory work



Fault entry in the fault memory and/or control unit coding aborted due to undervoltage.

- Increased current draw during diagnosis or control unit coding can cause a drop in voltage, which can result in one or more fault entries and the abnormal termination of the coding process.
- ⇒ Before starting control unit coding, connect a suitable battery charger with a current rating of at least 90 A to the vehicle.

# NOTICE

Coding will be aborted if the WiFi connection is unstable.

- An unstable WiFi connection can interrupt communication between the PIWIS Tester and the vehicle communication module (VCI). As a result, coding may be aborted.
- ⇒ During control unit coding, always connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable.

### **NOTICE**

Control unit coding will be aborted if the driver's key is not recognized

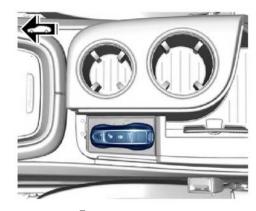
- If the driver's key is not recognized in the vehicle, coding cannot be started or will be interrupted.
- ⇒ Place the driver's key with the back facing down in the area in front of the storage compartment under the armrest (emergency start tray) in order to guarantee a permanent radio link between the vehicle and driver's key.

Work Procedure: 1

Connect a suitable battery charger with a current rating of **at least 90 A**, e.g. **Battery charger 90A**, to the jump-start terminals in the luggage compartment and switch it on. ⇒ *Workshop Manual '270689 Charging vehicle electrical system battery'* 

- 2 Place driver's key in emergency start tray.
- 3 Connect 9900 PIWIS Tester 3 to the vehicle communication module (VCI) via the USB cable. Then connect the communication module to the vehicle and switch on the PIWIS Tester.
- 4 Switch on the ignition.
- On the PIWIS Tester start screen, call up the 'Diagnostics' application.

The vehicle type is then read out, the diagnostic application is started and the control unit selection screen is populated.



Emergency start tray

### Re-coding brake booster control unit

## NOTICE

Use of a PIWIS Tester software version that is older than the prescribed version.

- · Measure is ineffective
- ⇒ Always use the specified version or a higher version of the PIWIS Tester software for control unit coding.

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#### Information

The procedure described here is based on the PIWIS Tester 3 software version **40.550.022**.

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 Re-code brake booster control unit automatically.

Required PIWIS software version:	40.550.022 (or higher)
Type of control unit coding:	Control unit coding using the 'Automatic coding' function for the brake booster control unit:
	'Brake booster' control unit – 'Coding/programming' menu – 'Automatic coding' function.
Coding sequence:	Read and follow the <b>information and instructions on the PIWIS Tester</b> during the guided procedure.
	Do not interrupt coding.
	When coding is complete, the message "Coding has been completed successfully" is displayed and a tick appears in the 'Status' box.
Procedure if control unit coding is <b>not</b> successful:	Repeat control unit coding.

## Concluding work

Work Procedure: 1 Read out the fault memory and check any existing fault memory entries.



#### Information

If control units are found to have faults that are not caused by the fault described here, these must be **found** and **corrected**.

- 2 Delete the fault memory.
- 3 Switch off ignition.
- 4 Disconnect **9900 PIWIS Tester 3** from the vehicle.
- 5 Remove the driver's key from the emergency start tray.
- 6 Disconnect the battery charger.

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## Invoicing

For documentation and warranty invoicing, enter the labor operation and PQIS coding specified below in the warranty claim:

APOS	Labor operation	I No.
47702515	Programming brake booster	

### PQIS coding:

Location (FES5)	47700	Brake booster
Damage type (SA4)	1614	Function not as specified

References: ⇒ Workshop Manual '270689 Charging vehicle electrical system battery'

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