PORSCHE®

Technical Information	Service	
	268/22 ENU 4890	**4**

Activated Warning Message "Power Steering Reduced" in Conjunction with Fault Memory Entry "B200049" in Power Steering Control Unit (268/22)

Vehicle Type: **Cayenne (9YA / 9YB)**

Model Year: **As of 2019 up to 2022**

Concerns: **Power steering control unit**

Cause: Customers complain about an activated warning message **"Power steering reduced" in the instrument cluster**.
The following fault memory entry is stored in the power steering gear control unit fault memory:

- B200049 – coding (703680)

Action: In the event of a customer complaint, check the power steering gear software status and depending on the result re-program.

Required tools

Tool:
- Battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 battery charger 90A**. For further information about the battery chargers to be used, see the corresponding Workshop Manual.
  ⇒ *Workshop Manual '270689 Charging vehicle electrical system and battery'*
- **9900 - PIWIS Tester 3/4** with PIWIS Tester software version **41.900.040** (or higher) installed

Checking the power steering gear software status

Work Procedure: 1   Connect a battery charger that is suitable for lithium starter batteries with a current rating of at least 90 A (e.g. **battery charger 90 A**) to the jump-lead starting terminals in the engine compartment. For instructions, see:
⇒ *Workshop Manual '2706IN External power connection, jump-lead starting'*

2 **Position** the driver key in the rear area of the left cupholder in the center console between the holding struts (emergency start tray) in order to ensure a permanent radio link between the vehicle and driver key⇒ *Emergency start tray*.

3 Connect **9900 - PIWIS Tester 3/4** 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.

Emergency start tray

5 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.

6 Create Vehicle Analysis Log (VAL) using the PIWIS Tester. Mark the created vehicle analysis log with **"Pre-VAL"** and return it with the PIWIS Tester after programming.

7 Select **Power steering control unit**.

8 Select **'Extended identification'** menu.

9 Read out software status:

Software version:	Action:
0507 or higher	After the action, the power steering software status is current. Continue fault finding by other means.
Less than 0507 and Vehicle model year **2022 (N) – 2023 (P)**	Re-program power steering control unit, vehicles from model year 2022 (N). ⇒ *Technical Information '2706IN Re-programming power steering control unit, vehicles from model year 2022 (N)'*
Less than 0507 and Vehicle model year **2019 (K) – 2021 (M)**	Re-program power steering control unit, vehicles from model years 2019 (K) – 2021 (M). ⇒*Technical Information '2706IN Re-programming power steering control unit, vehicles from model years 2018 (J) – 2021 (M)'*

Re-programming power steering control unit, vehicles from model year 2022 (N)

1 The basic work 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"'*.

Specific information on control unit programming in the context of this Technical Information:

Required PIWIS Tester software version:	**41.900.040** (or higher)
Type of control unit programming:	Control unit programming using **'Automatic programming'** in the power steering control unit. **'Power steering'** control unit – **'Coding/programming'** menu – **'Automatic programming'**.
Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. During programming, the **power steering control unit** is **re-programmed** and then **automatically re-coded**. **Do not interrupt programming and coding.** Once the control units have been programmed and coded, you will be prompted to switch the ignition off and then back on again after a certain waiting time. Backup documentation of the new software versions is then performed.
Programming time (approx.):	Programming takes up to **5 minutes**, depending on equipment.
Power steering data set programmed during this programming:	• **0507** The software version information in the programmed data record is based on the specified PIWIS Tester software version. Please note that this may be different in a later release.
Procedure in the event of error messages appearing during the programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Troubleshooting"'.*
Procedure in the event of a termination in the control unit programming:	Repeat control unit programming by restarting programming.

2 Carry out general reworking for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and work procedure for control unit programming using the PIWIS Tester - "Reworking" section'.*

Re-programming power steering control unit, vehicles from model years 2019 (K) – 2021 (M)

Work Procedure: 1
Workshop

Carry out general preliminary work for control unit programming as described in ⇒ *Manual '9X00IN Basic instructions and procedure for control unit programming - "Preliminary Work" section'*.

2   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"'*.

Specific information on control unit programming in the context of this Technical Information:

Required PIWIS Tester software release:	**41.900.040** (or higher)
Type of control unit programming:	Control unit programming using the **'Campaign'** function in the Additional menu on the PIWIS Tester by entering a programming code.
Programming code:	**B2S2M**
Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. During programming, the **power steering control unit** is **re-programmed** and then **automatically re-coded**. **Do not interrupt programming and coding.** Backup documentation of the new software versions is then performed.
Programming time (approx.):	**5 minutes**
Software version programmed during programming:	• **0507** The software version information in the programmed data record is based on the specified PIWIS Tester software version. Please note that this may be different in a later release.

Procedure in the event of a termination in the control unit programming:	• Switch ignition off and then on again. • Reading out and erasing fault memories. ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Rework"'* • Repeat control unit programming by restarting programming.
Procedure in the event of error messages appearing during the programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Troubleshooting"'.*

3   Carry out general reworking for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and work procedure for control unit programming using the PIWIS Tester - "Reworking" section'.*

Invoicing

For documentation and warranty invoicing, enter the working position and PCSS encryption specified below in the warranty claim:

APOS	Labor operation	I No.
48900100	Check power steering gear	
48902553	Programming power-steering gear	

PCSS encryption:

Location (FES5)	48900	Power steering gear
Damage type (SA4)	1614	function not according to specification