PORSCHE

Technical Information

Various PCM Central Computer Fault Corrections: Re-Programming PCM Main Computer (80/22)

Model Line:	**Panamera (971)**
Model Year:	**2021**
Concerns:	**Porsche Communication Management (PCM)**

Information: Optimized software for the PCM central computer is available to correct the following complaints:

- Independent restart of the PCM central computer
- Black screen in the PCM central computer
- Automatic deactivation of PCM central computer
- Usability and system stability of PCM central computer

Action required: Re-programming PCM main computer.

Software: **Overview of the software versions affected**

Control unit	Software version (new status)	Vehicle allocation
Central computer	2872	ER1 / ER2
Central computer	2870	ER3 / ER4 / ER5 / ER6 / ER7 / ER8

Required parts and tools

Parts:

i **Information**

Programming is performed using the specific storage medium.

The storage medium for ECU programming must be reused as part of the workshop equipment and remains at the Porsche dealer. The storage medium must therefore not remain in the vehicle and must not be handed over to the customer.

Part No.	Vehicle allocation	Software
9Y0909400D	M No. **ER3** (NAR) M No. **ER4** (Mex)	2870

ℹ️ **Information**

The storage medium can be even created.

To do this, **PiUS** (Porsche integtrated update service) software should be **downloaded** using the storage media tool unit and **installed** on a blank storage medium.

Pay particular **attention** to the following:

- For the application of the software tool, **each** software requires **an** empty or free writable storage medium.

- The software available in PiUS must **only** be used in accordance with the instructions provided in the Technical Information (TI) published for this purpose.

You will find further information on how to install and use the PiUS software tool in the PPN portal under "**PiUS (Porsche integrated Update Service) goes live**".

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 battery'*
- **9900 - PIWIS Tester 3** with PIWIS Tester software version **41.100.010** (or higher) installed
- **Storage medium** with the right software installed.

Preliminary work

NOTICE

Fault entry in the fault memory or control unit programming aborted, as the case may be, due to under-voltage.

- **Increased current draw during diagnostics 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 starting work, connect a suitable battery charger with a current rating of at least 90 A to the jump-start terminals.**

NOTICE

Control unit programming will be aborted if the Wi-Fi connection is unstable.

- **An unstable Wi-Fi 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 the PIWIS Tester to the vehicle communication module (VCI) via the USB cable.**

NOTICE

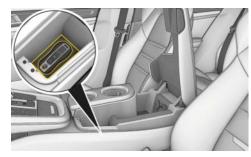**Control unit programming will be aborted if the driver's key is not detected**

- **If the driver's key is not detected in vehicles with Porsche Entry & Drive, programming cannot be started or will be interrupted.**

⇒ **Switch on the ignition using the original driver's key. To do this, replace the control unit in the ignition lock with the original driver's key if necessary.**

Work Procedure: 1   Place the driver's key with the back facing down into the front left storage compartment in the center console (emergency start tray) to guarantee a continuous radio link between the vehicle and the driver's key ⇒ *Emergency start tray*.

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

Emergency start tray

Re-programming PCM main computer

Work Procedure: 1   Re-programming PCM main computer. ⇒ *Workshop Manual '915225 Programming central computer data update'*

        Programming code required for programming: **T8Q9W**

ℹ️ Information

If the software update is interrupted or if **error messages** are displayed (e.g. as a result of read errors), the programming must be **repeated**.

Concluding work

Work Procedure: 1   Carry out general rework for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Rework"'*.

Invoicing

For documentation and invoicing in the event of a warranty, state the work items required depending on the scope of work and the specified PCSS encryption in the warranty claim:

APOS	Labor operation	I No.
91520103	Check central computer	
91522553	Programming central computer	

PCSS encryption:

Location (FES5)	91520	Central computer
Damage type (SA4)	1614	function not as per specification

References: ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming'*

⇒ *Workshop Manual '270689 Charging vehicle electrical system battery'*