

OTA Map Update Failed / Navigation Map View in the PCM Screen Black/Incomplete (169/21)

Change Overview:

Version	Date	Change
0	11/24/2021	<ul style="list-style-type: none"> • First publication
1	05/01/2024	<ul style="list-style-type: none"> • Update of MY • Update of damage type

Model Year: **As of 2019**

Model Line: **Macan (95B)**

Concerns: **Porsche Communication Management (PCM 5.0)**

Cause: The customer complains about the message '**Fault during map update**' and/or a **black/incomplete display of the navigation map in the PCM screen** after or during the online map update. The following complaints can occur:

- The online map update can be downloaded, but the installation is then cancelled.
- The online map update can be downloaded, and the installation is carried out, but the map data are then corrupt.
- Road data is missing in some map regions.

In these cases of complaints, the navigation map section is then black/incomplete in the PCM screen or displays the 'Fault during map update' message. A new map update via OTA or SD card is not possible.

Action: Delete navigation database with the PIWIS Tester and installed PIWIS Tester test software release **40.650.030** (or higher) and then perform an SD card update.

Required tools

- Tools:
- **P90999 - PIWIS Tester 4** with PIWIS Tester test software release **40.650.030** (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 90 A battery charger**

For further information about the battery chargers to be used, see the corresponding Workshop Manual.
 ⇒ *Workshop Manual '270689 Charging vehicle electrical system battery'*

Preparatory work

NOTICE

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

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

NOTICE

Control unit 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, control unit coding may be aborted.
- ⇒ During control unit diagnosis, always connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable.

- 1 Connect and activate battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 battery charger 90A**, to the jump-start terminals in the engine compartment and switch it on.
- 2 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.
- 3 **P90999 - Connect PIWIS Tester 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.
- 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.

Delete navigation database and perform SD card update



Information

The procedure described here is based on the PIWIS Tester 3 software release **40.650.030**.

The PIWIS Tester instructions take precedence and in the event of a discrepancy, these are the instructions that must be followed.

Deviations may occur with later software releases, for example.

Work
Procedure:



Information

When the routine is carried out, the navigation database in the PCM central computer is deleted. Before carrying out the action, it must therefore be ensured that there is a current country-specific navigation map update for the vehicle, which can be used to restore the navigation database.

- 1 Select the '**Central computer (PCM)**' control unit and confirm by pressing •F12" .
- 2 Select menu '**Control element checks**' and confirm by pressing •F12" .
- 3 Select **Drive links** and press •F12" Next to confirm.
- 4 Select '**Formatting navigation database**' and confirm by pressing •F12" .
- 5 Read the instructions and confirm by pressing •F12" .
- 6 Start the routine with •F8" .
After formatting the navigation database, continue with ⇒ Point 7.
- 7 Establish bus idle.
 - 7.1 Switch off the ignition.
 - 7.2 Disconnect the PIWIS Tester diagnostic connector from the diagnostic socket.
 - 7.3 Lock the vehicle using the driver's key and remove the **driver's key from the proximity of the vehicle** (approx. 10 meter/ 32.8 ft).
 - 7.4 **Wait approx. 45 minutes** before unlocking the vehicle again.



Information

Depending on the vehicle type and equipment, the **bus idle** can take up to 45 minutes and is **required to restart the PCM**. This is essential so that the navigation data can then be installed correctly.

If the **bus idle is not observed** or the PCM does not restart, the **map data is not installed correctly**. In this case, the procedure must be carried out again.

A **restart of the PCM is identified by the fact** that the **Porsche Crest is displayed on the PCM display** when the PCM is started after switching on the ignition.

In rare cases, the Porsche Crest is not displayed when the PCM is started up for longer than 45 minutes in spite of a bus idle. If this is the case, remove the PCM fuse and plug it back in after waiting 1 minute. Then check again whether the Porsche Crest is displayed when the PCM is started up.

- 7.5 Switch on the ignition.

- 7.6 Plug the PIWIS Tester diagnostic connector into the diagnostic socket again and restore communication with the vehicle.
- 8 Install the navigation data using the SD card. ⇒ *Workshop Manual '915225 Program navigation update on central computer PCM'*.

Concluding work

- Work procedure: 1 Switch off the ignition.
- 2 Disconnect **P90999 - PIWIS Tester 4** from the vehicle.
- 3 Disconnect the battery charger.
- 4 For vehicles with Porsche "Entry & Drive", replace the original driver's key in the ignition lock with the control panel again.

Labor position and PCSS encryption

Labor position:

APOS	Labor operation	I No.
99412501	Programming Navigation Services	

PCSS encryption:

Location (FES5)	9941E	Online map update
Damage type (SA4)	1611	without function

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