PORSCHE®

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

Model Line: **Cayenne (9YA/9YB)**

Model Year: **As of 2018 up to 2021**

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

Information: The customer complains about the message **'Fault during map update'** and/or a **black/incomplete display of the navigation map on 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 then aborts.
- The Online Map Update can be downloaded and the installation is performed, but the map data is then corrupt.
- Road data is missing in some map regions.

In the event of these complaints, the navigation map view on the PCM screen is then black/incomplete and displays the message 'Fault during map update'. It is not possible to perform a map update again via OTA or SD card.

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

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

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

Information: The customer complains about the message **'Fault during map update'** and/or a **black/incomplete display of the navigation map on 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 then aborts.
- The Online Map Update can be downloaded and the installation is performed, but the map data is then corrupt.
- Road data is missing in some map regions.

In the event of these complaints, the navigation map view on the PCM screen is then black/incomplete and displays the message 'Fault during map update'. It is not possible to perform a map update again via OTA or SD card.

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

AfterSales

Model Line: **911 (992)**

Concerns: **Porsche Communication Management (PCM 5.2)**

Information: The customer complains about the message **'Fault during map update'** and/or a **black/incomplete display of the navigation map on 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 then aborts.
- The Online Map Update can be downloaded and the installation is performed, but the map data is then corrupt.
- Road data is missing in some map regions.

In the event of these complaints, the navigation map view on the PCM screen is then black/incomplete and displays the message 'Fault during map update'. It is not possible to perform a map update again via OTA or SD card.

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

Required tools - 911 (992)

Tools:

i Information

The 911 (992) is equipped with either a **lithium starter battery** (I-no. J2A) **or** an **AGM starter battery** (I-no. J0V, J4K) as standard.
This depends on the following:

- Country version

- Model type

- Vehicle equipment

Lithium starter batteries must only be charged using a **suitable battery charger** that has a current and voltage-controlled charge map.

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

- 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 90A**
- **9900 - PIWIS Tester 3** with PIWIS Tester software version **40.650.030** (or higher) installed

Required tools - Cayenne (9YA/9YB)

Tools:

ℹ Information

The Cayenne is equipped as standard with a **lithium starter battery**, which must only be charged using suitable battery chargers.

For further information about the battery chargers to be used, see the relevant Workshop Manual. ⇒ *Workshop Manual '2706IN General information on the 12-volt lithium-ion battery'* and ⇒ *Workshop Manual '270689 Charging vehicle electrical system battery'*

- Battery charger with a current rating of **at least 90 A** and a **current and voltage-controlled charge map** for lithium starter batteries, e.g. **VAS 5908 Battery charger 90A**
- **9900 - PIWIS Tester 3** with PIWIS Tester software version **40.650.030** (or higher) installed

Required tools - Macan (95B)

Tools:
- **9900 - PIWIS Tester 3** with PIWIS Tester software version **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 Battery charger, 90 A**

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

Preparatory work - 911 (992)

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 cancel 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 diagnosis may be aborted.**

⇒ **During control unit diagnosis, 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, e.g. **Battery charger 90A**, to the jump-start terminals in the boot and switch it on.

2   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 ⇒ *Emergency start tray.*

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.

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.

Preparatory work - Macan (95B)

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 cancel 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 diagnosis may be aborted.**

⇒ **During control unit diagnosis, always connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable.**

1. Connect a battery charger with a current rating of **at least 90 A**, e.g. **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", replace the control unit in the ignition lock with the original driver's key, if necessary.

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.

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.

Preparatory work - Cayenne (9YA/9YB)

NOTICE

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

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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 diagnosis may be aborted.**

⇒ **During control unit diagnosis, 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.

    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.

Emergency start tray

Deleting navigation database and performing SD map update - 911 (992), Cayenne (9YA/9YB), Macan (95B)

ℹ Information

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

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:

ℹ Information

When the routine is performed, the navigation database is deleted in the central computer of the PCM. Before performing the measure, it is important therefore to ensure that a current country-specific navigation map update is available for the vehicle, which can be used to restore the navigation database.

    1   Select the **'Central computer (PCM)'** control unit and confirm with •F12" to continue.

    2   Select the **'Drive links/checks'** menu and confirm with •F12" to continue.

3   Select **'Drive links'** and confirm with •F12" to continue.

4   Select **'Format navigation database'** and confirm with •F12" to continue.

5   Read instructions and confirm with •F12" to continue.

6   Start the routine with •F8" .
Once the navigation database has been formatted, continue with ⇒ Step 7.

7   Establish bus idle.

7.1   Switch off 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.

i **Information**

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

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

A **PCM restart is indicated** by the **Porsche Crest appearing on the PCM display** when the PCM starts up after switching on the ignition.

In rare cases, despite a bus idle of more than 45 minutes, the Porsche Crest is not displayed when the PCM is started. If this is the case, remove the PCM fuse and wait 1 minute before re-inserting it. Then check again whether the Porsche Crest is displayed when the PCM is started.

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 an SD card. ⇒ *Workshop Manual '915225 Programming navigation update on central computer'*.

Concluding work - 911(992), Cayenne (9YA/9YB)

Work Procedure: 1   Switch off ignition.

2   Disconnect **9900 - PIWIS Tester 3** from the vehicle.

3   Remove the driver's key from the emergency start tray.

4   Switch off and disconnect the battery charger.

Concluding work - Macan (95B)

Work Procedure: 1   Switch off ignition.

2   Disconnect **9900 - PIWIS Tester 3** from the vehicle.

3   Disconnect the battery charger.

4   On vehicles with "Porsche Entry & Drive", replace the original driver's key in the ignition lock with the control unit again.

Invoicing - 911 (992), Macan (95B)

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

APOS	Labor operation	I No.
99412501	Programming Navigation Services	

PCSS coding:

Location (FES5)	9941E	Online Map Update
Damage type (SA4)	1614	Function not as specified

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

⇒ *Workshop Manual '915225 Programming navigation update on central computer'*

Invoicing - Cayenne (9YA/9YB)

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

APOS	Labor operation	I No.
99412501	Programming Navigation Services	

PCSS coding:

Location (FES5)	9941E	Online Map Update
Damage type (SA4)	1614	Function not as specified

References: ⇒ *Workshop Manual '2706IN General information on the 12-volt lithium-ion battery'*

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

⇒ *Workshop Manual '915225 Programming navigation update on central computer'*