PORSCHE

Technical Information

Complaint - Over the Air (OTA) software update failed: Observe specified procedure (192/20)

Change overview:

Version	Date	Change
0	06/29/2021	• First publication
1	03/10/2022	• Content Update
2	07/21/2022	• "Invoicing" section adjusted

Model Series: **Taycan (Y1A)**

Model Year: **As of 2020**

Concerns: **All OTA (Over the Air) enabled control units**

Information: The Over the Air (OTA) software update failed and an error message appears in the central display of the Porsche Communication Management (PCM).

ⓘ Information

Please also pass the information about the procedure 'Perform software update in Update Center' on to your sales staff in order to inform the customer about this if necessary.

Action required: Perform the relevant remedial action as described in the error message:

Error message	Remedial action
'The online software update could not be performed. The vehicle condition is unchanged.'	Perform software update again in the Update Center ⇒ *Technical Information 'Performing software update in the Update Centre'.*
'The online software update could not be performed. This may cause function restrictions.'	Perform software update using the PIWIS Tester ⇒ *Technical Information 'Performing software update in the PIWIS Tester'.*

**Performing a software update in the Update Center**

ℹ️ Information

The following prerequisites must be met for a software update:

- Porsche ID active

- Online software update service activated in MyPorsche

- Privacy mode deactivated in the vehicle (flight mode)

- Privacy mode service-specifically deactivated (flight mode)

- High-voltage battery is not being charged

- Vehicle plug removed from vehicle charge port

- All electrical loads (e.g. parking pre-climatization) switched off

Work Procedure: 1   Close vehicle doors.

2   Establish readiness for operation.

3   Activate the parking brake.

4   Move selector lever to position 'P'.

5   Press and hold the power button (approx. 1 second) to end readiness for operation.

6   Select the menu item 'Online software update available' ⇒ *Menu item 'Online software update available'* **-1-** in the Update Center.
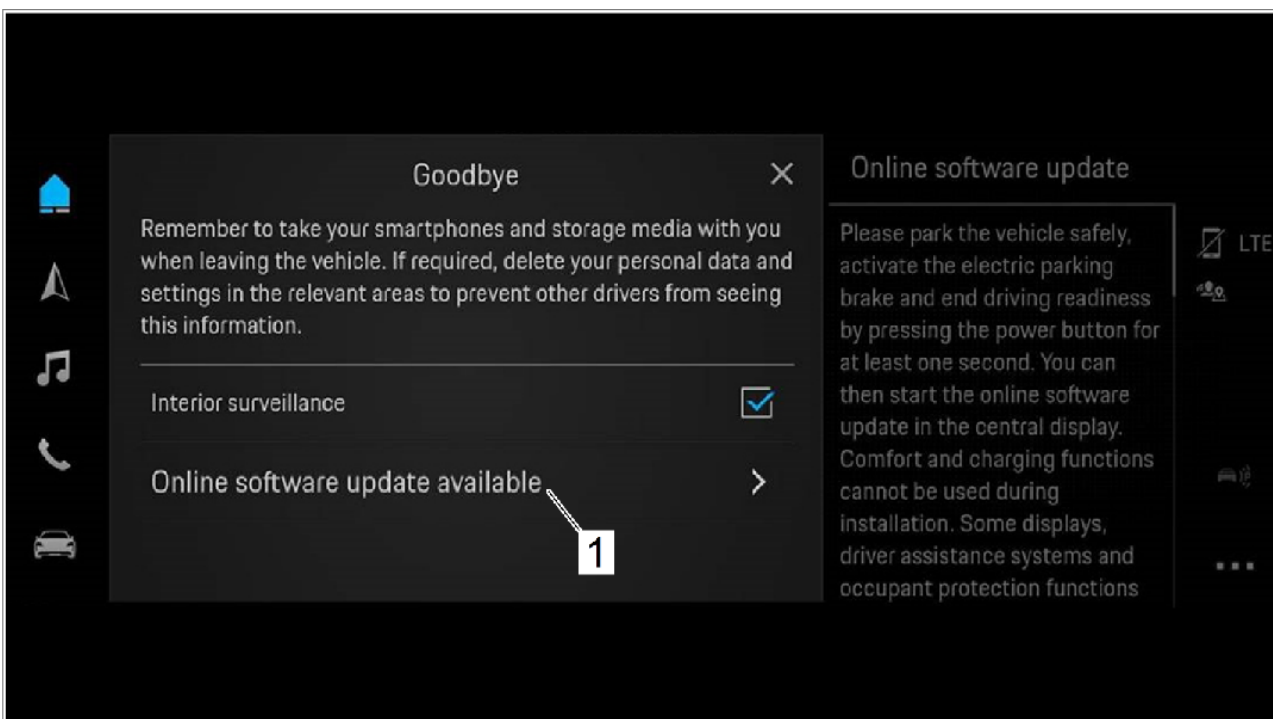
Menu item 'Online software update available'

7   Press the 'Install now' ⟹ *'Install now' button* **-1-** button.
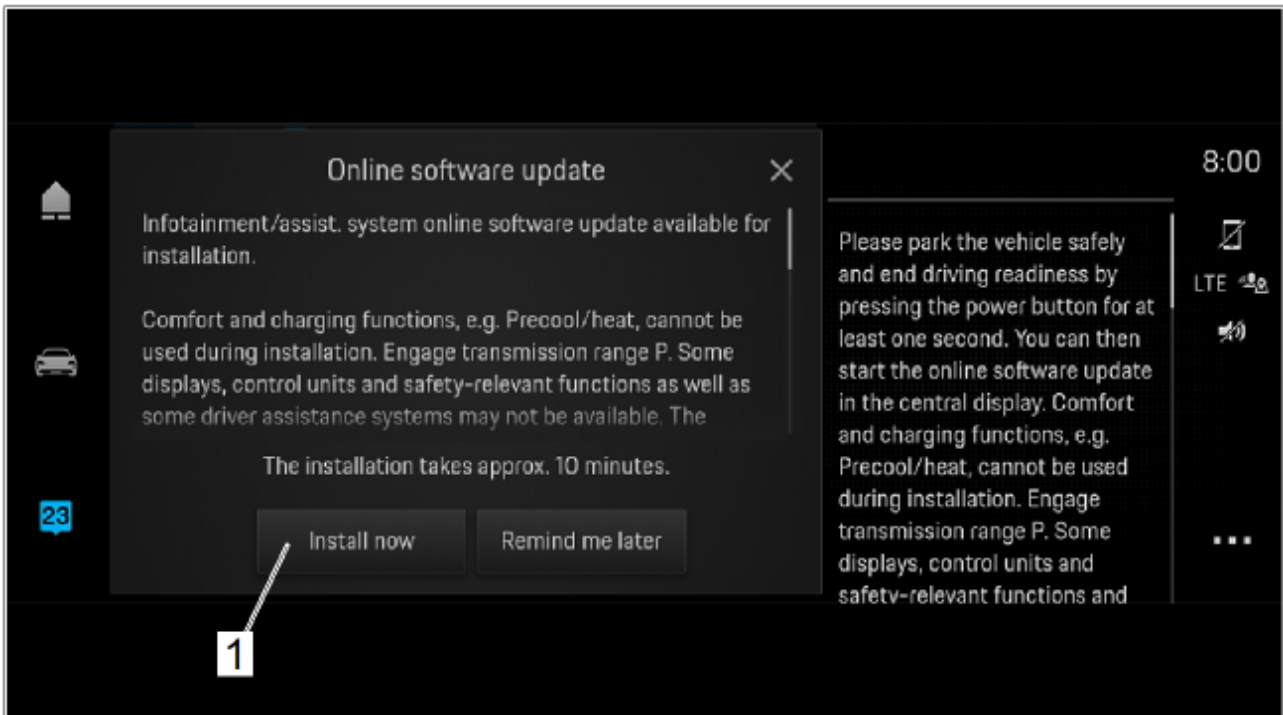
'Install now' button

8   Get out and lock the vehicle.

9   Keep the driver's key outside of the transmitter range.

Performing software update using the PIWIS Tester

ℹ️ Information

- The error message 'Update failed – vehicle functions restricted' also appears in the instrument cluster.

- The error message 'Update failed' appears in the Notification Center.

- The entry ' B199AF0 Online Remote Update – software version inconsistent (A02000)' is stored in the fault memory of the Over the Air (OTA) control unit.

Required tools

Tool: • **9900 - PIWIS Tester 3** with current PIWIS Tester software version.
         • **Battery charger** with a rated current of **at least 90 A**, e.g. **VAS 5908 battery charger 90A**.

Preparatory work

> **NOTICE**
>
> **Fault entry in the fault memory and control unit programming aborted due to low voltage.**
>
> - Increased current draw during diagnosis 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 control unit programming, connect a suitable battery charger with a current rating of at least 90 A to the vehicle.

> **NOTICE**
>
> **Control unit programming will be aborted if the WLAN 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 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 recognized**
>
> - If the driver's key is not recognized in the vehicle, programming cannot be started or will be interrupted.
> - ⇒ Place the driver's key with the back facing down into the front left storage compartment in the center console to guarantee a continuous radio link between the vehicle and the driver's key.

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"'*.
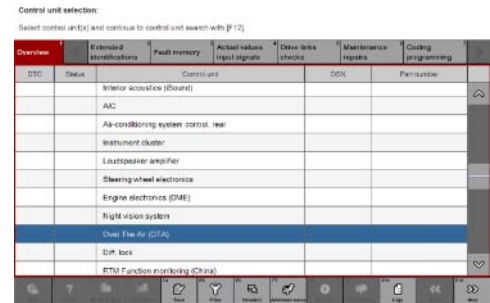

Emergency start tray

Resetting error messages

Work procedure: 1 Start diagnostics.

2 Select the **'Over-the-Air (OTA)'** control unit.
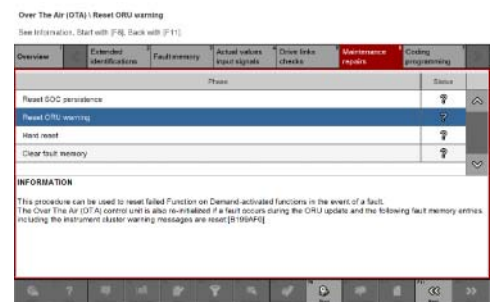
3 Select **'Maintenance/repairs'** menu.

Control unit selection

4 Select the menu item **'Reset ORU warning'** and press •F12" to continue.

Resetting ORU warning

5 Select the menu item **'Reset ORU warning'** and press •F8" to continue.

6 Follow the instructions on the Tester.

7 Establish bus idle.

    7.1 End readiness for operation.

    7.2 Disconnect the PIWIS Tester from the vehicle.

    7.3 Switch off and disconnect the battery charger.

Resetting ORU warning

    7.4 Get out and lock the vehicle.

    7.5 Keep the driver's key outside of the transmitter range.

    7.6 Wait for at least two minutes.

8 Check fault status.

    8.1 Establish readiness for operation.

    8.2 Check whether the error messages are reset in the instrument cluster and central display. If not, repeat the procedure.

    8.3 End readiness for operation.

Re-programming control unit

<div style="border:1px solid">NOTICE</div>

Using an older version of the PIWIS Tester software

• **Measure is ineffective**

⇒ **Always use the current version of the PIWIS Tester software for control unit programming and coding.**

Work
Procedure:

Information

It is imperative that the PIWIS Tester remains online during control unit programming so that backup documentation of the software versions installed on the control units **before and after programming** is sent to the Porsche After Sales systems.

1   **Re-programme the affected control unit.**

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 – section on "Programming"'.*

2   Carry out control unit programming using the **'Automatic programming' function** of the control unit affected.

3   The integration test is started automatically after the backup documentation process. Alternatively, the integration test can also be started manually by pressing •F3" .⇒ *Backup documentation*
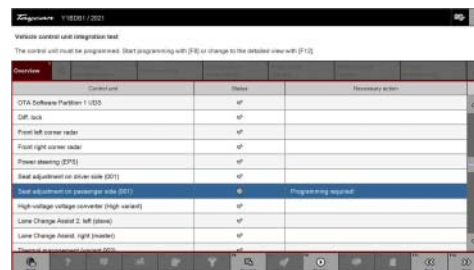
Backup documentation

Information

For further information on the integration test, see: ⇒ *Technical Information '9X00IN Information on the software system of various control units in the vehicle (112/21)'*

4   After the test has been completed, the update of the control unit affected and any other control units is displayed in the overview.⇒ *Programming required*
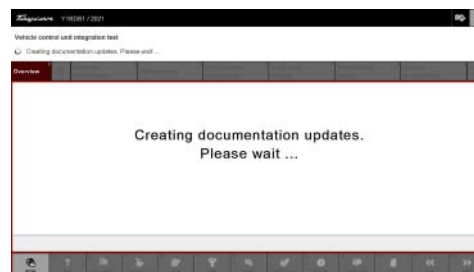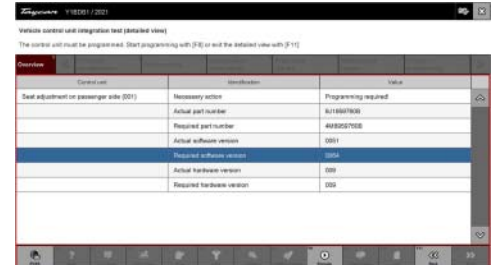
Programming required

5   Click on the control unit affected to view further details and start programming. The step-by-step instructions then start ⇒ *Detailed view of integration test – software version.*

Detailed view of integration test – software version

6   When programming is complete, backup documentation including the integration test is performed again.
All affected control units should now be successfully re-programmed or checked in the control unit overview and their status ⇒ *Vehicle integration test complete.*

Vehicle integration test complete

ℹ️ Information

The vehicle must not be handed back to the customer until all control units have been checked and the system is thus compliant. ⇒ *Conformity of the vehicle system*

7   **In the event of a fault – Performance of the integration test**
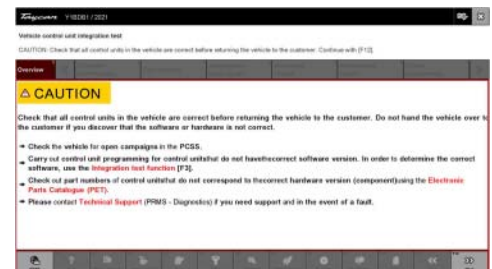
Conformity of the vehicle system

If the integration test fails, this is displayed as a result ⇒ *Vehicle control unit integration test failed.* Then complete the following steps:

7.1   In the Additional menu (F7), execute the "Maintenance of vehicle data with PIWIS ONLINE" function and write the current vehicle data record from the online system into the vehicle.

7.2   Carry out the integration test again.

7.3   In the event of a further fault, contact Technical Support.
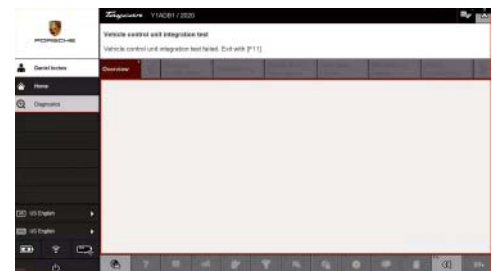
Vehicle control unit integration test failed

ℹ️ Information

If the Over the Air (OTA) control unit cannot be activated or re-programmed following two attempts with the PIWIS Tester, it must be replaced, see ⇒ *Workshop Manual '919855 Replacing Over the Air control unit'*.

8 Read out all **fault memories**, process and correct existing faults if necessary.

9 Exit the diagnostic application. Switch off ignition. Disconnect the Tester from the vehicle.

10 Switch off and disconnect the battery charger.

Parts required if necessary

Parts Info:	Part Nos.	Designation	Number
	…¹⁾	⇒ Control unit	1 pc.

¹⁾ Select the part number of the relevant control unit using the Porsche Spare Parts Catalogue (PET2).

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

Invoicing:

ℹ️ Information

To remedy a customer complaint (OTA update failed), the work for remedying subsequent damage (diagnosis/parts replacement) can be invoiced using a warranty claim.

• **Invoicing using a campaign claim is not possible in this case because no separate campaign claim is opened on the VIN as part of an OTA update.**

Procedure:

Opening a warranty claim by entering the VIN under the respective **CUSTOMER NO.** (FES5) as a component responsible for causing the problem in combination with the corresponding **damage category** (SA4).

Enter the campaign code **"ONxx - Repair in accordance with PAG specifications"** as a reference in the comment field of the warranty claim.

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