Need for Replacement of High-Voltage Battery on Vehicles up to Model Year 2024: Observe Specified Procedure (02/25)

Model Line: **Taycan (Y1A / Y1B / Y1C)**

Model Year: **As of 2020 up to 2024**

Concerns: **Replacing the high-voltage battery**

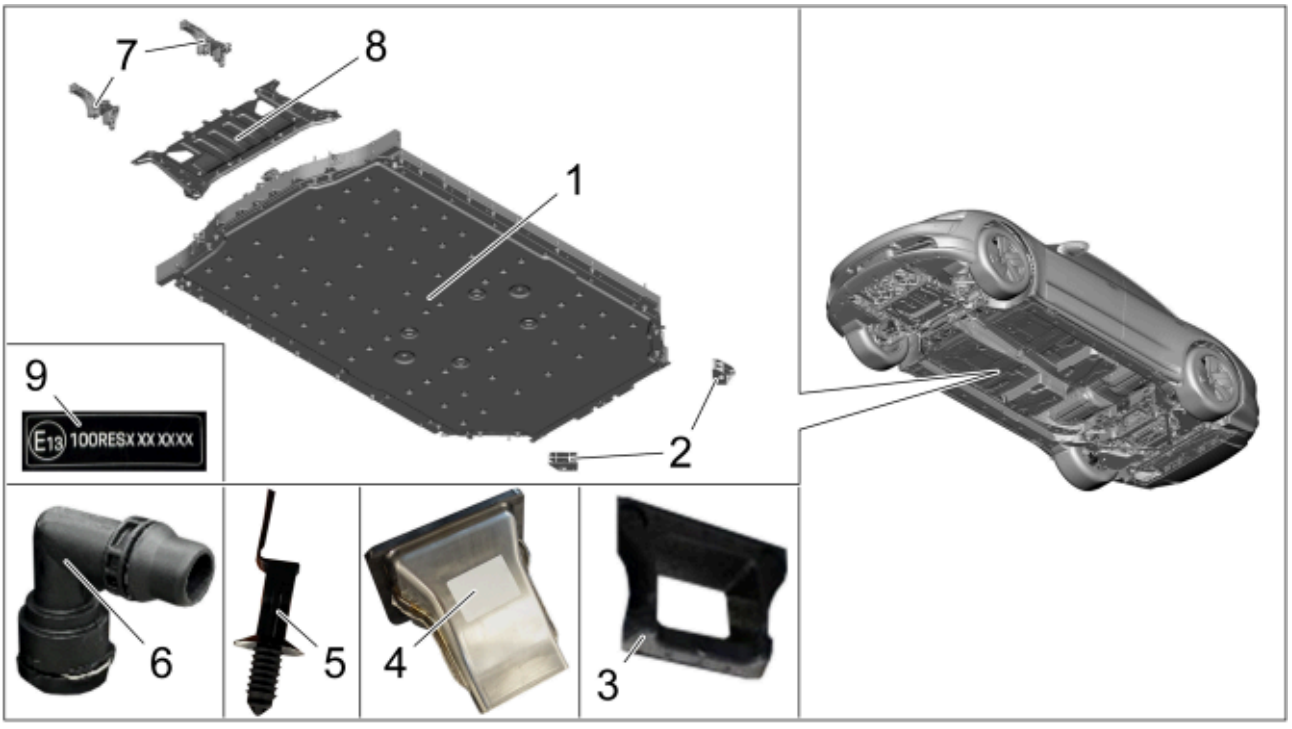
Cause: **The previous high-voltage battery for the Porsche Taycan from model years 2020 - 2024 is no longer available.**

Action: If the previous high-voltage battery needs to be replaced, replace it with a high-voltage battery from model year 2025 onwards.

Information

To ensure installation and functioning of the high-voltage battery from model year 2025 in a Porsche Taycan from model years 2020 to 2024, components of the previous high-voltage battery must be upgraded to the new high-voltage battery, vehicle parts replaced and the new high-voltage battery programmed.

Component Overview:



Component overview

1 – High-voltage battery
2 – Mounting bracket **(change)**
3 – Acoustic seal
4 – Air duct (only for vehicles with country of delivery China)
5 – Cable tie with holder (only for vehicles with electrically active roll stabilization / M-no. 1P7), **2 piece(s) (replacement)**
6 – Coolant nozzle, **2 piece(s)**
7 – Anti-roll bar support on left and right, with rubber bearing **(replacement)**
8 – Front axle support rear section **(replacement)**
9 – Information sign / E-number label

Required parts

Parts Info:

Part No.	Designation – Location of use	Quantity
9J1...	⇒ High-voltage battery (complete) – The currently valid high-voltage battery is to be determined independently from the PET2 catalogue	1 piece

9J1...	⇒ Information plate – The respective currently valid information sign (E-number label) for the high-voltage battery is to be determined independently from the PET2 catalogue	1 piece
9J1122293K	⇒ Coolant support – High-voltage battery	1 piece
9J1122293J	⇒ Coolant support – High-voltage battery	1 piece
9J1413357B	⇒ Anti-roll bar support – left	1 piece
9J1413358B	⇒ Anti-roll bar support – right	1 piece
N 10831701	⇒ Internal serration screw – Anti-roll bar support	2 piece(s)
N 10664503	⇒ Hexagon-head bolt – Anti-roll bar support	4 piece(s)
N 10435506	⇒ Hexagon collar nut, self-locking – Anti-roll bar support	3 piece
N 10782201	⇒ Hexagon-head bolt – Anti-roll bar support right	1 piece
N 91244301	⇒ Hexagon-head bolt with hex socket head (Duo) – Anti-roll bar support lower	2 piece(s)
N 91006202	⇒ Hexagon-head bolt (combination) – Anti-roll bar support clamp	4 piece(s)
PAD407129A	⇒ Reinforcement plate – Front axle support (rear section)	1 piece
971411313K	Vehicles without PDCC (M-No. 1P0): ⇒ Rubber mounting – Anti-roll bar support	4 piece(s)
or		
971411313J	Vehicles with PDCC (M-No. 1P7): ⇒ Rubber mounting – Anti-roll bar support	4 piece(s)

Additional required parts for vehicles with electrically active roll stabilization (EAWS) / (M-no. 1P7):

PAF009558	⇒ Tie-wrap with retainer – High-voltage line on high-voltage battery support frame	2 piece(s)

Required tools

Tools:

- **P90999 - PIWIS Tester 4**
- 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 90 A**. For further information about the battery chargers to be used, see the corresponding Workshop Manual. ⇒ *Workshop Manual '270689 Charge battery and vehicle electrical system'*
- Torque wrench, 0.4-2 Nm (0.3-1.5 ftlb.), e.g., **VAS 6253A - torque wrench, 0.4-2 Nm (0.3-1.5 ftlb.)**
- Torque wrench, 2-10 Nm (1.5-7.5 ftlb.), e.g. **V.A.G 1783 - torque wrench, 2-10 Nm (1.5-7.5 ftlb.)**
- Torque wrench, 6-50 Nm (4.5-37 ftlb.), e.g. **V.A.G 1331A - torque wrench, 6-50 Nm (4.5-37 ftlb.)**
- Torque wrench, 40-200 Nm (30-148 ftlb.) e.g., **V.A.G 1332A - torque wrench, 40-200 Nm (30-148 ftlb.)**
- **VAS 6266A - Wheel fitting trolley**
- **VAS 6931A - Transmission and gearbox jack**
- **VAS 6883A - Insulated tool set**
- **VAS 6832 - Master Gear unit elevating platform**
- **VAS 6832/9 - Assembly tool**
- **P90012 - Guide pins**
- **VAS 6558A/45 - High-voltage measurement adapter**
- **VAS 6558/9-6A - High-voltage test adapter**
- **VAS 6410 - Contact surface cleaning set**
- **T40262 - Locking cap**
- **VAS 531 011 - Cooling system service equipment**
- **3093 - Hose clamp**
- **VAS 6675A - Funnel**
- **VAS 6884 - High-voltage cordon**

Replace high-voltage battery

Information

By way of example, some work steps are described for one side of the vehicle. The procedure on the other side is almost identical.

Work Procedure:

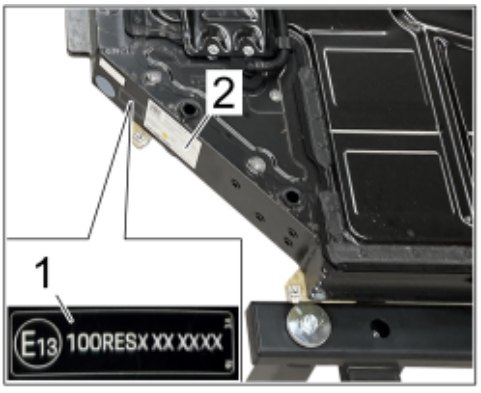
1 Remove the high-voltage battery.
⇒ *Workshop Manual '270819 Remove and install high-voltage battery'*

2 Photograph the type plate of the previously installed and new high-voltage battery and note down the serial numbers.

Information
After the action, photo documentation must be attached to the process in PCSS.

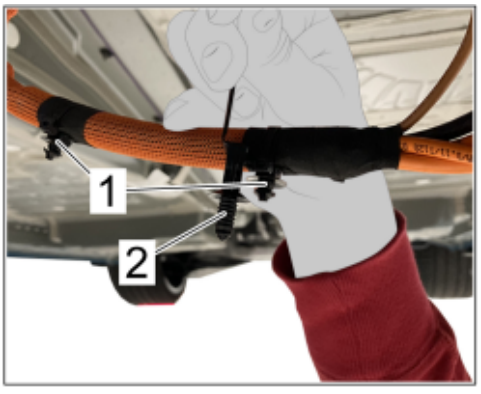
Serial number (example)

3 Affix E-number label ⇒*Affix E-number label* **-1-** next to type plate ⇒*Affix E-number label* **-2-** to **new** high-voltage battery.



Affix E-number label

4 **Only for vehicles with electrically active roll stabilization (EAWS) / (M-no. 1P7):**
Replace cable holder ⇒*Replace cable holder* **-1-** on EAWS control unit high-voltage line with cable holder with a longer bridge ⇒*Replace cable holder* **-2-**.

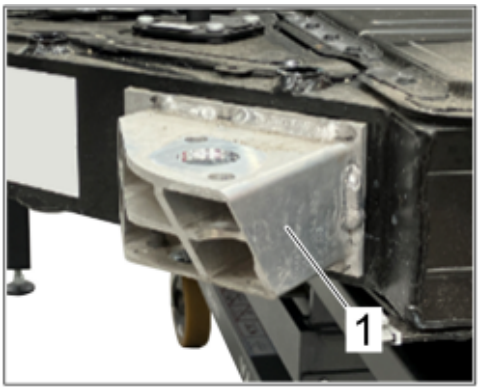


Replace cable holder

5 Change both mounting brackets ⇒ *Change mounting bracket* **-1-** of the removed high-voltage battery to the new high-voltage battery, while screwing in screws to the system by hand.

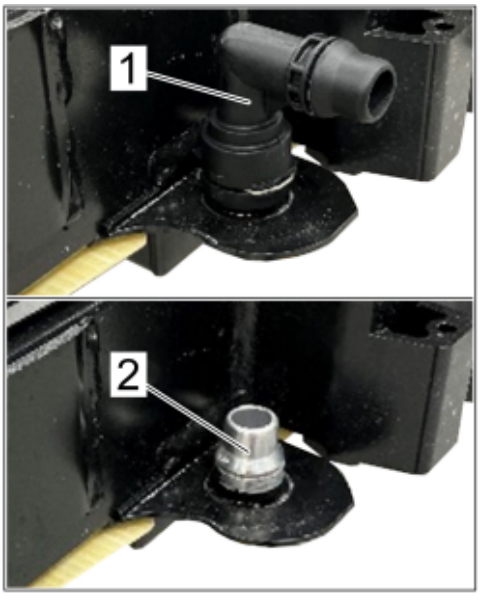
For work procedure, see:
⇒ *Workshop Manual '270819 Remove and install add-on parts for high-voltage battery '*

Information
The screws of the mounting brackets are only tightened to the high-voltage battery when installed.



Change mounting bracket

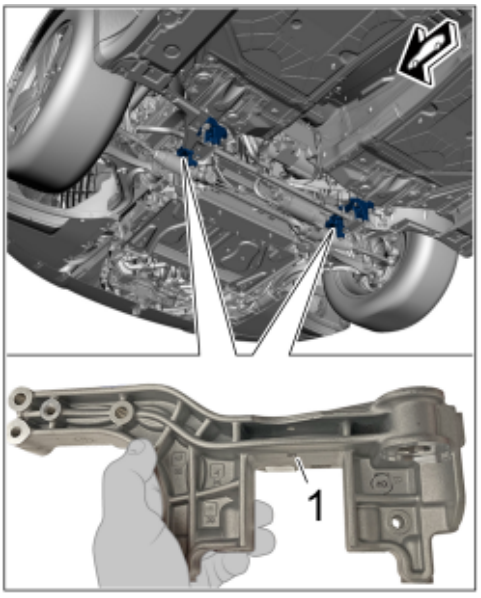
6 Connect coolant nozzles ⇒ *Install coolant nozzles* **-1-** to supports ⇒ *Install coolant nozzles* **-2-** on the left and right of the new high-voltage battery.



Install coolant nozzles

7 Replace anti-roll bar fastenings ⇒ *Replace anti-roll bar fastening* **-1-** with fastenings with model year 2025 component status, replacing rubber bearings.

For work procedure, see:
⇒ *Workshop Manual '407919 Remove and install anti-roll bar mount'*



Replace anti-roll bar fastening

8 Install high-voltage battery, observing the following:

- Tightening sequence of the converted mounting brackets, see ⇒ *Workshop Manual '270819 removing and installing attachment parts on the high-voltage battery '*
- Install **new** front axle support (rear section)
- Do not perform any further activities on the vehicle or PIWIS Tester during the cooling system ventilation routine
- **Do not perform commissioning of the high-voltage system**

Information
For subsequent programming of the high-voltage battery, the high-voltage system on the vehicle must be disconnected from the power supply (deactivated).

⇒ *Workshop Manual '270819 Remove and install high-voltage battery'*

Program high-voltage battery

Information
Before starting the test, the following points must be fulfilled:

- The high-voltage battery has been completely replaced
- Cooling system is filled and ventilation routine performed
- Jack mode is not active
- The high-voltage system on the vehicle is disconnected from the power supply (deactivated)

Work procedure: 1 Establish readiness for operation and start the diagnostic application.

Information
The high-voltage battery programming sequence must **not be interrupted**.

2 Write the serial number of the new high-voltage battery into the high-voltage battery control unit.

2.1 Select **"High-voltage battery"** control unit in the control unit selection **"Overview"** and press F12 ("Next") to confirm selection.

2.2 Select **"Serial number coding for the high-voltage battery"**.

2.3 Follow Tester instructions and notes.

2.4 Enter new serial number of the high-voltage battery according to menu guidance.

Information

The vehicle data is maintained via a guided Tester procedure.
Pay particular attention to the following:

- A connection to the Internet is required for the Tester procedure.
- Depending on the changes made to the vehicle data, automatic coding and backup documentation of the affected control units is performed after saving these changes.
- Read and follow the **information and instructions on the PIWIS Tester** during the guided procedure.
- Do not interrupt the coding process. When coding is complete, the message "Coding has been completed successfully" is displayed and a tick will then appear in the "Status" box.

3 Add control number "ST6 - J1PA HVB REINSTALLATION FOR CS" to vehicle order.

3.1 In the control unit selection (**'Overview'** menu) press F7 to call up the Additional menu.

3.2 Select the **'Vehicle data maintenance with PIWIS ONLINE'** function and press F12 ('Next') to confirm.

3.3 Press F12 ('Next') to skip the displays containing information about vehicle description, colors / materials and X numbers.

3.4 Add coding value **"ST6 - J1PA HVB REINSTALLATION FOR CS"** to the vehicle data. Moreover, for the relevant coding value, click on the tick in the "Installed" field to select the value.
Make sure that the 'Installed' column is subsequently **ticked** and that the pen symbol is displayed in the 'Changed' column.

3.5 **No** further PR number may be set.
If, for example, PR number "ST3" or "ST5" is set, **delete it**.

3.6 Then press F12 ("Next") to close the PR numbers display.

3.7 Press F8 in the overview that is then displayed to save the changed vehicle data.

3.8 Once you have saved the vehicle data, press F11 ('Back') to return to the control unit selection screen.

4 Program high-voltage battery.

4.1 Select **"High-voltage battery"** control unit in the control unit selection **"Overview"** and press F12 ("Next") to confirm selection.

4.2 Select the “Coding Programming” tab and run the Automatic Programming function.

4.3 Start required programming with F8 .

4.4 Follow the instructions on the PIWIS Tester.

5 Activate the high-voltage system.
⇒ *Workshop Manual '277583 Deactivate and activate high-voltage system'*

6 Delete history memory.

6.1 Perform "Delete history memory" routine.

6.2 Establish bus idle for **at least 5 minutes** on the vehicle.

For this purpose:

- Disconnect the battery charger
- End diagnostic application, end readiness for operation, and disconnect **P90999 - PIWIS Tester 4** from vehicle
- Lock the vehicle
- Place driver's key outside the frequency range of the vehicle

6.3 Connect and switch on the battery charger.
For work procedure, see: ⇒ *Workshop Manual '270689 Charge vehicle electrical system battery'*

6.4 Place the original remote control in the emergency start tray.

6.5 Establish readiness for operation and start the diagnostic application.

6.6 Select the **"BMS"** control unit in the control unit selection **"Overview"** and press F12 ("Next") to confirm selection.

6.7 Read out and delete fault memories.

6.8 If the fault memory entries "Diag_F_CMC**_Performance_*" are still present, perform step ⇒ 8 again.

7 Review the thermal management software status and re-program if necessary.

Information
If the software status in the thermal management control unit (J1024) is lower than "0325", a **campaign** has not yet been carried out with regard to the software status.

7.1 Select the **"Thermal management (J1024)"** control unit in the control unit selection **"Overview"** and press F12 ("Next") to confirm selection.

7.2 Check software for required **Software status "0325"** (or higher).

Assessment		Action
(✓)	The software version is **"0325"** (or higher).	The current software version is **OK**. Continue with Step ⇒ 10.
(✗)	The software version is **not "0325"** (or higher).	The current software version is **not OK**. Review open campaigns of the vehicle. Re-program thermal management control unit (J1024) via **open campaign**. **Then continue with Step** ⇒ 10.

8 Carry out airbag zero-position calibration.

8.1 Select the **"Airbag"** control unit in the control unit selection screen (**"Overview"** menu) and press F12 ("Next") to confirm your selection.

8.2 Select the menu **"Service/repairs"** then select the **"Teach combination sensor (J234)"** function and press F12 ("Next") to confirm your selection.

8.3 Follow the instructions on the PIWIS Tester.

9 Perform component protection commissioning.

9.1 In the control unit selection (**'Overview'** menu) press F7 to call up the Additional menu.

9.2 Select **"Component protection commissioning"**.

9.3 Select **"High-voltage battery control unit"**.

9.4 Follow the instructions on the PIWIS Tester.

9.5 Teach component protection according to menu guidance.

10 Read out and delete all control unit fault memories.

11 End the diagnostic application. End readiness for operation and disconnect **P90999 - PIWIS Tester 4** from vehicle.

12 Switch off and disconnect the battery charger.
For work procedure, see: ⇒*Workshop Manual '270689 Charge vehicle electrical system battery'*

13 Photo documentation must be attached to the process in PCSS.

Labor position and PCSS encryption

Labor position:

APOS	Labor operation	I No.
27084940	Rework high-voltage battery (without PDCC)	
27084941	Rework high-voltage battery (with PDCC)	

PCSS encryption:

Location (FES5)	27080	High-voltage battery
Damage type (SA4)	9735	Repair according to PAG instructions