Replacement Requirement for 22 kW High-Voltage Charger - OBC (240/24)

Change Overview:

Revision	Date	Modification
0	08/15/2025	▪ Original publication
1	08/22/2025	▪ Update to Cause section
2	09/10/2025	▪ Update to Concern, Cause, and Action section ▪ Addition of reference letter
3	04/02/2026	▪ Update to Required parts and materials

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

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

Equipment: 22 kW high-voltage charger **(M No. KB4)**

Concerns: **New service part for 22 kW on-board high-voltage charger (22kW OBC) replacement.**

Cause: **22kW OBC service part for 2020–2024 Taycan is no longer available. If replacement is necessary, please install an 11 kW replacement OBC and notify the customer as instructed below.**

Information

Before replacing the 22 kW OBC, check whether the vehicle is assigned to open workshop or recall campaigns and, if available, carry them out before replacement.

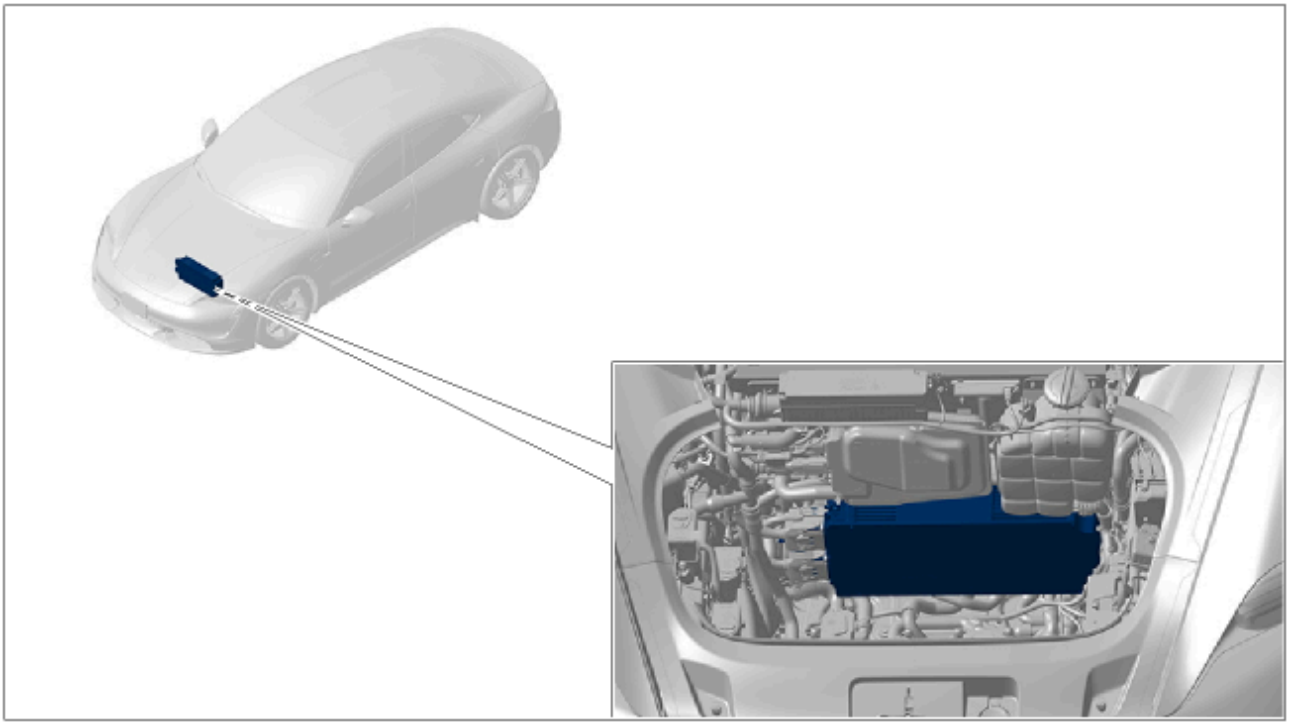
Action: If there is a need for replacement, proceed as follows:

1 Please provide customer with a copy of the letter located on the bulletin PPN page: https://ppn.porsche.com/portal/docs/DOC-571613

2 Replace the 22 kW OBC with 11 kW OBC.

- Read out “Plug & Charge” customer setting
- Remove previous 22 kW high-voltage charger (OBC)
- Replace 22 kW charging socket with 11 kW charging socket
- Install new 11 kW high-voltage charger (OBC)
- Complete coding / re-programming of the new 11 kW high-voltage charger (OBC)
- Restore “Plug & Charge” customer setting

Installation Position:



Installation position of 22 kW high-voltage charger (OBC)

Required parts and materials

Parts Info:

Part No.	Designation – Location	Number
PAB915684S	⇒ High-voltage battery charger – NAR (M-no. ES6)	1 piece
Additionally required parts for vehicles with the following equipment:		
▪ Rear wheel drive **(M-No. 1X2)**		
9J1915543	⇒ Holder for charger - High-voltage battery charger	1 piece
N 10714801	⇒ Oval socket head bolt M6 x 18 – Charger holder to high-voltage battery charger	6 pieces
N 10737001	⇒ Hexagon nut, self-locking, M6 – Holder for high-voltage heater and high-voltage charger	7 pieces

N 91096801	⇒ Internal hexagon round-head countersunk screw M6 – Holder for high-voltage heater	1 piece

Additionally required parts for vehicles with the following equipment:

- All-wheel drive **(M-No. 1X1)**

9J1915543 Y	⇒ Holder for charger - High-voltage battery charger	1 piece
N 10714801	⇒ Oval socket head bolt M6 x 18 – Charger holder to high-voltage battery charger	4 pieces
N 10737001	⇒ Hexagon nut, self-locking, M6 – Holder for high-voltage heater and high-voltage charger	6 pieces
N 91096801	⇒ Internal hexagon round-head countersunk screw M6 – Holder for high-voltage heater	1 piece

Additionally required parts for vehicles with the following equipment:

- Charging socket Combo 1 (NAR) **(M-no. ES6)**

9J1971093Q	⇒ High-voltage line set for charging socket - Right-hand side of vehicle – NAR (M-no. ES6) - Left-hand drive (M No. L0L)	1 piece

and

9J1971106Q	⇒ High-voltage line set for charging socket - Left-hand side of vehicle – NAR (M-no. ES6) - Left-hand drive (M No. L0L)	1 piece
9J1821247A	⇒ Charge Port —Left-hand side of vehicle -Charge port door (M-no 2W0)	
9J1821248A	⇒ Charge Port —Right-hand side of vehicle -Charge port door (M-no 2W0)	

Additionally required parts if a charging socket must be replaced.

PAF008485	⇒ Hexagon flange bolt M6 x 12 – Door hinge	2 pieces per vehicle side
PAF912032	⇒ M8 x 22 countersunk screw with internal serration – Door arrester to body	1 piece per vehicle side

Material: **Required materials** (usually already available at the Porsche Center)

Part No.	Designation – Location	Quantity
00004330516	⇒ Coolant (20 l / 5.28 gal container) – Cooling system	As required

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, 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 6883 - Insulated tool set**
- **VAS 6558A - High-voltage test adapter**
- **VAS 6558A/27 - Set of Kelvin clamps and test probes**
- **VAS 6410 - Contact surface cleaning set**
- **VAS 6558/9-6A - High-voltage test adapter**
- **T40262 - Locking cap**
- **Pole terminal puller**
- **3093 - Hose clamp**
- **VAS 6675A - Funnel**
- **VAS 531 011 - Cooling system service equipment**
- **VAS 6096/2 - Vacuum pump**
- **VAS 6890 - Spring band clamp pliers**
- Hose clamp, e.g. **3093 - hose clamp**

Preparatory work

Information

Only US vehicles with “Plug & Charge”

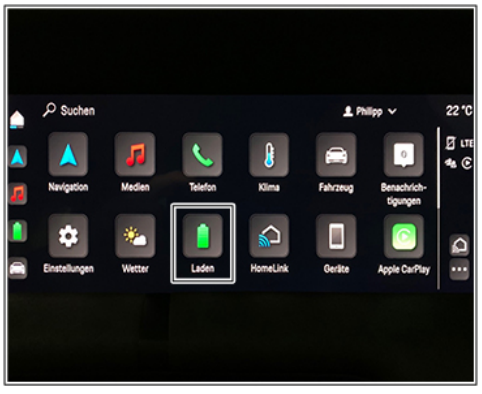
Further information on the Porsche Charging Service can be found in the Porsche Connect Store.

If the high-voltage charger (OBC) is replaced, the “Plug & Charge” customer setting must be read out and documented in the display and control panel before removing the high-voltage charger (OBC). After installing and teaching the new high-voltage charger, (OBC), the customer-specific setting of “Plug & Charge” must be restored.

Work Procedure: 3 **Only for US vehicles with “Plug & Charge”:**

Read out and note customer-specific setting of the “Plug & Charge” setting in the display and control panel.

3.1 Select the **Charging** menu in the display and control panel. ⇒ *Display and control panel "Charging"*



Display and control panel "Charging"

3.2 Select the “additional options” button ... at the bottom right of the display and control panel.⇒ *Display and control panel "Overview"*

Display and control panel "Overview"

3.3 Note the status of the **Plug & Charge** setting in the options menu.⇒ *Display and control panel for "Plug & Charge"*

3.4 Read out and note any charging profiles or timers set by the customer.

Display and control panel for "Plug & Charge"

4 Read the warning notices.
⇒ *Workshop Manual '2X00IN General warning notes for working on the high-voltage system'*

5 Isolate the high-voltage system from the power supply.
⇒ *Workshop Manual '2X00IN Isolating high-voltage system from power supply/Starting high-voltage system'*

6 Complete the documentation.
⇒ *Workshop Manual '2X00IN Test log: Verifying absence of electric charge'*

7 Remove the luggage compartment tray.
⇒ *Workshop Manual '501919 Removing and installing luggage compartment tray'*

8 Drain coolant.
⇒ *Workshop Manual '193817 Draining and filling coolant'*

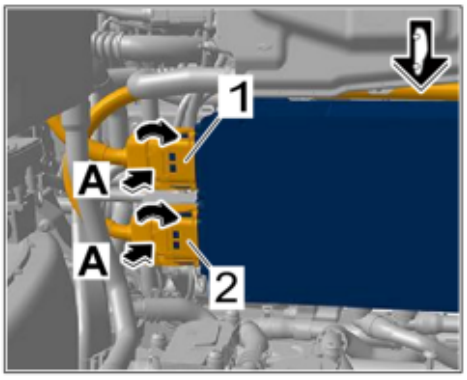
9 Unscrew reservoir at the partition, remove it and set it down by moving it forward into the luggage compartment.
⇒ *Workshop Manual '194019 Removing and reinstalling reservoir'*

10 Loosen the electric passenger compartment heater from the partition and pull it forward.
⇒ *Workshop Manual '828019 Removing and installing electric passenger compartment heater'*

11 Loosen the fuse box at the front end from the partition and pull it forward.
⇒ *Workshop Manual '978409 Loosening and securing front end fuse box'*

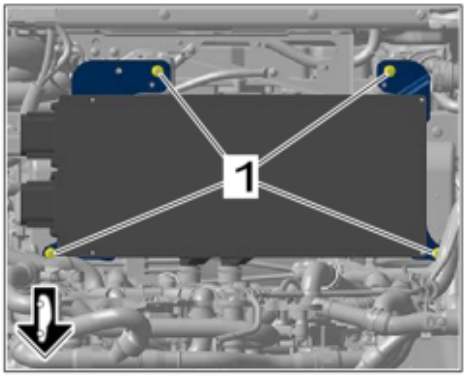
Removing 22-kW high-voltage charger (OBC)

Work Procedure: 1 Release high-voltage lines ⇒ *Disconnecting high-voltage lines* **-1-** and ⇒ *Disconnecting high-voltage lines* **-2-** ⇒ *Disconnecting high-voltage lines* **-Arrows A-** and disconnect them from the high-voltage charger.



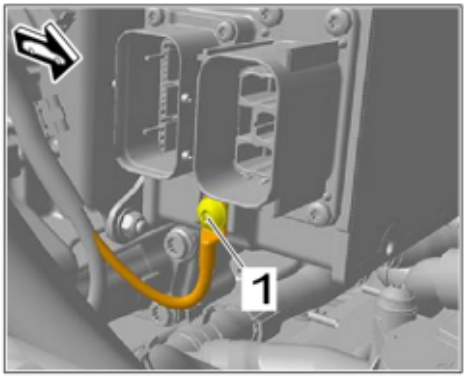
Disconnecting high-voltage lines

2 Unscrew nuts for high-voltage charger holders ⇒ *Fastening nuts on holder* **-1-**.



Fastening nuts on holder

3 Unscrew screw for equipotential bonding line ⇒ *Equipotential bonding line* **-1-**.

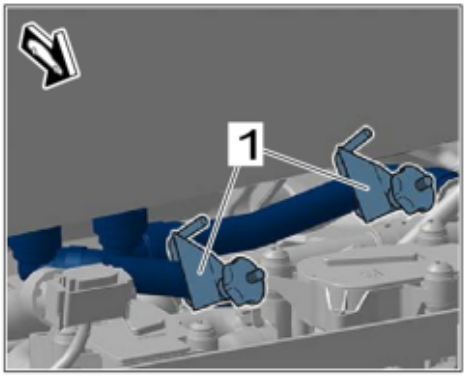


Equipotential bonding line

4 Lift up the high-voltage charger and clamp the two coolant lines with a hose clamp ⇒ *Coolant lines* **-1-** respectively.

Information

Before installing or removing the coolant lines, place absorbent material (paper, cloths) underneath to absorb any emerging coolant. Coolant must never get onto electric contacts.

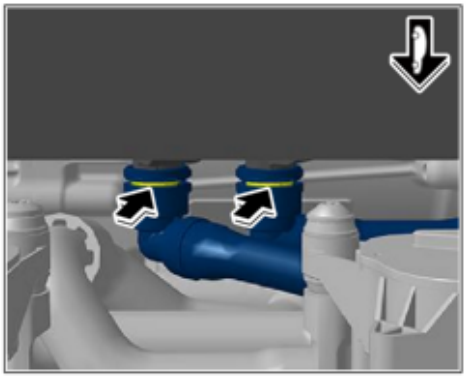


Coolant lines

5 Set the high-voltage charger down by moving it forward, release the connections for the coolant lines by pressing them ⇒ *Coolant lines* **-Arrows-** and disconnect them from the high-voltage charger.

5.1 Close off the high-voltage charger immdiately using suitable stoppers and set it down with the coolant ports facing upwards.

6 Guide the previous high-voltage charger out of the vehicle.



Coolant lines

Replacing 22 kW charging socket with 11 kW charging socket

Work Procedure: 1 Replace previous 22-kW charging sockets with 11-kW charging sockets.
⇒ *Workshop Manual '279619 Removing and installing left charging socket'*
and / or
⇒ *Workshop Manual '279619 Removing and installing right charging socket'*

2 This further depends on the respective vehicle equipment:

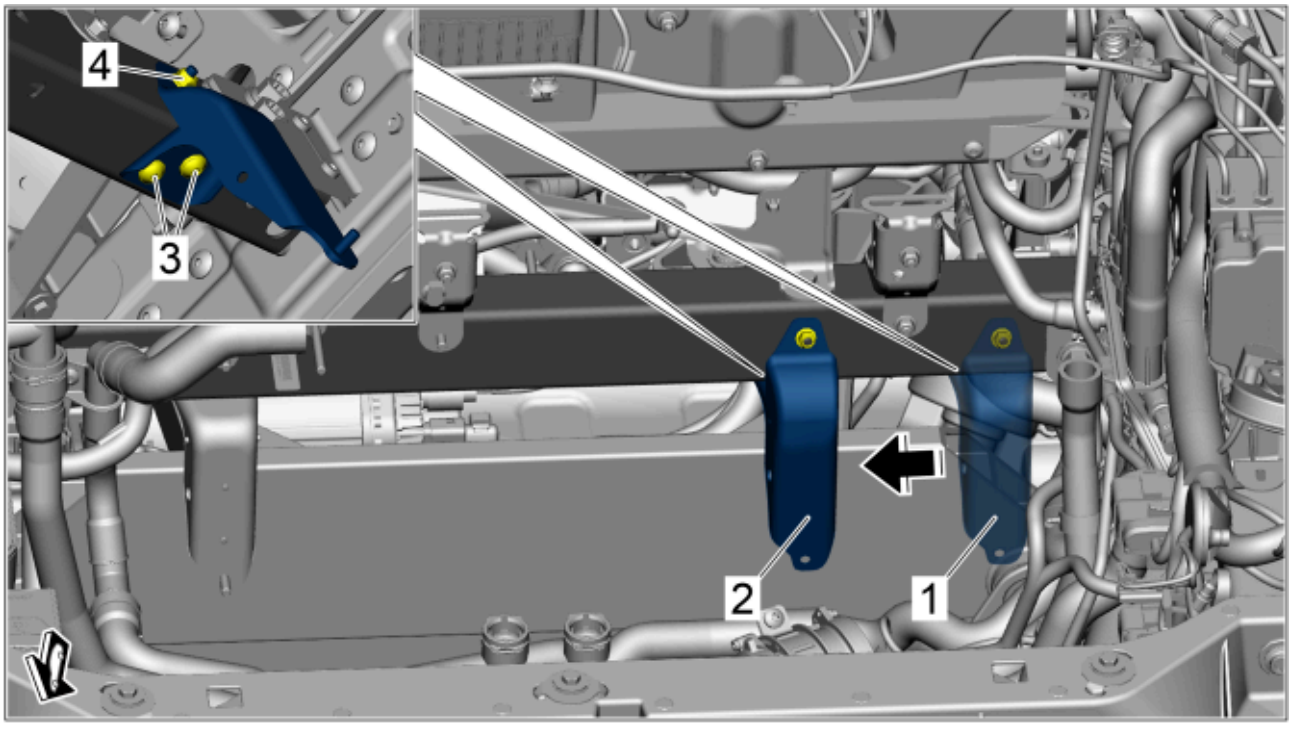
- Vehicles with rear drive **(M-No. 1X2)** ⇒ *Technical Information '279619 Install 11 kW high-voltage charger (2WD - M-no. 1X2)'*

or

- Vehicles with all-wheel drive **(M-No. 1x1)** ⇒ *Technical Information '279619 Install 11 kW high-voltage charger (4WD - M-No. 1X1)'*

Install 11 kW high-voltage charger (2WD - M-No. 1X2)

Work Procedure: 1 Convert bracket holder at the bottom of the vehicle from the previous left position ⇒*Convert bracket holder at bottom (2WD)* **-1-** to the new, right position⇒*Convert bracket holder at bottom (2WD)* **-2-**⇒ *Convert bracket holder at bottom (2WD)* **-Arrow-**.



Convert bracket holder at bottom (2WD)

1 – Previous holder position for 22-kW high-voltage charger
2 – New holder position for 11-kW high-voltage charger
3 – Fastening screws for lower bracket holder (shown at new holder position)
4 – Fastening nut for lower bracket holder (shown at new holder position)

1.1 Remove lower bracket holder at position ⇒*Convert bracket holder at bottom (2WD)* **-1-**, by unscrewing screws ⇒*Convert bracket holder at bottom (2WD)* **-3-** and nuts ⇒*Convert bracket holder at bottom (2WD)* **-4-**.

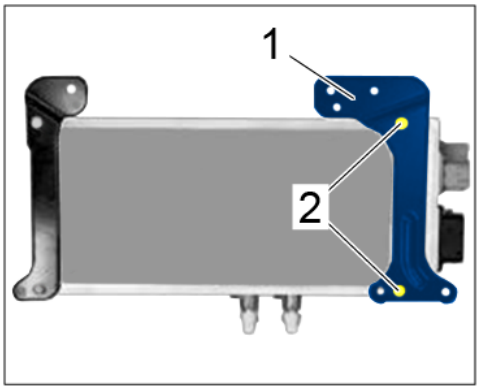
1.2 Move lower bracket holder from the left position ⇒*Convert bracket holder at bottom (2WD)* **-1-** to the right position ⇒*Convert bracket holder at bottom (2WD)* **-2-**.

1.3 Install and tighten **new** screws ⇒*Convert bracket holder at bottom (2WD)* **-3-** and **new** nuts ⇒ *Convert bracket holder at bottom (2WD)* **-2-** on ⇒*Convert bracket holder at bottom (2WD)* **-4-** the newly positioned lower bracket holder.

Tightening torque 8 Nm (5.9 ftlb.)

2 Convert **previous** plug-side holder ⇒*Convert high-voltage charger holder* **-1-** from **previous** 22-kW high-voltage charger to **new** 11-kW high-voltage charger.

2.1 Thread-off screws ⇒*Convert high-voltage charger holder* **-2-**.

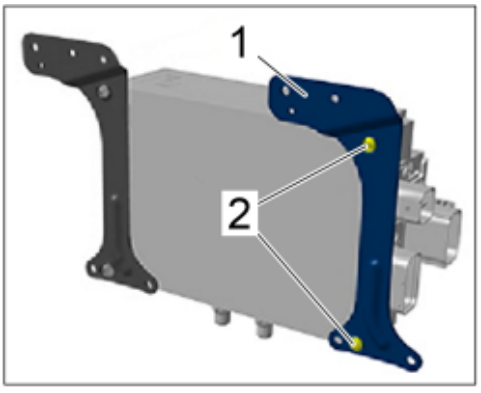


Convert high-voltage charger holder

2.2 Remove holder ⇒*Convert high-voltage charger holder* **-1-** and position on **new** 11-kW high-voltage charger ⇒*Install high-voltage charger holder*.

2.3 Screw-in and tighten **new** screws ⇒*Install high-voltage charger holder* **-2-**.

Tightening torque 8 Nm (5.9 ftlb.)



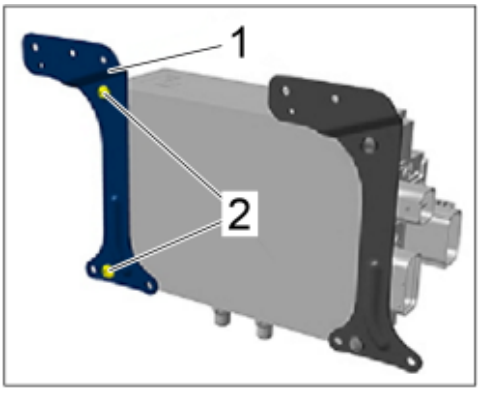
Install high-voltage charger holder

3 Fasten **new** high-voltage charger holder ⇒*New high-voltage charger holder* **-1-** to the **new** 11-kW high-voltage charger.

3.1 Position **new** high-voltage charger holder ⇒*New high-voltage charger holder* **-1-** on **new** 11-kW high-voltage charger ⇒*New high-voltage charger holder* **-1-**.

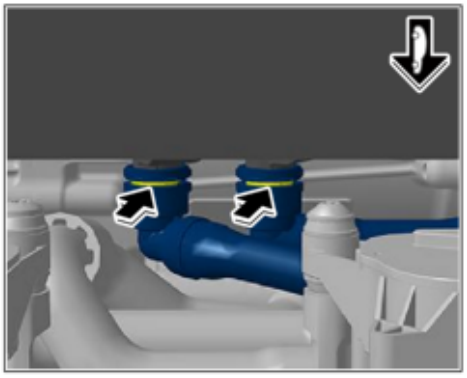
3.2 Screw-in and tighten **new** screws ⇒*New high-voltage charger holder* **-2-**.

Tightening torque 8 Nm (5.9 ftlb.)



New high-voltage charger holder

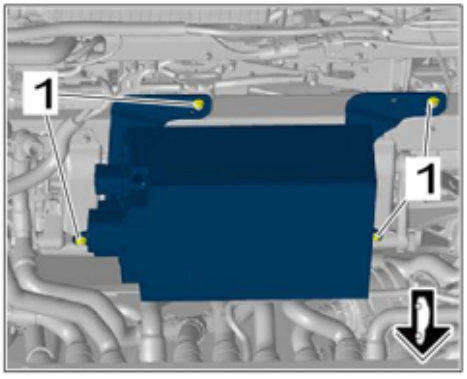
4 Position and lock coolant lines on new high-voltage charger, then remove previously installed hose clamps.
⇒ *Lock coolant lines*



Lock coolant lines

5 Position high-voltage charger at mounting points and attach and tighten new nuts for high-voltage charger holders ⇒ *Fastening nuts* **-1-**.

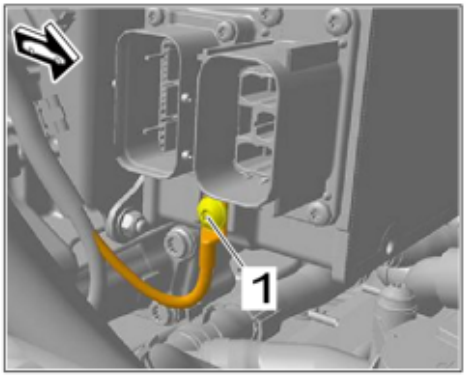
Tightening torque 8 Nm (5.9 ftlb.)



Fastening nuts

6 Screw-in screw ⇒ *Ground line* **-1-** for equipotential bonding line and tighten.

Tightening torque 8 Nm (5.9 ftlb.)



Ground line

7 Position fuse box for front end at the partition and tighten to specification.
⇒ *Workshop Manual '978409 Loosening and securing front end fuse box'*

8 Position electric passenger compartment heater at the partition and tighten to specification.
⇒ *Workshop Manual '828019 Removing and installing electric passenger compartment heater'*

9 Position coolant expansion tank at the partition andtighten to specification.
⇒ *Workshop Manual '194019 Removing and reinstalling reservoir'*

10 Then continue with:
⇒ *Technical Information '194019 Follow-up actions'*

Install 11 kW high-voltage charger (AWD - M-No. 1X1)

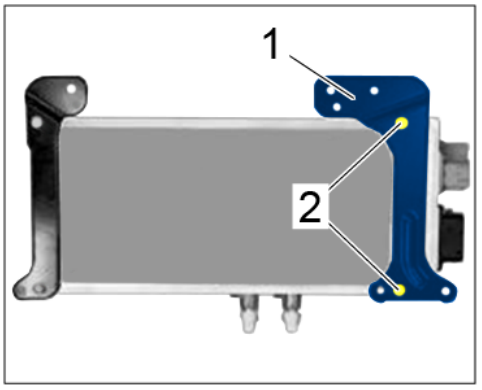
Information

All-wheel drive vehicles (M-No. 1x1) on which a 22 kW high-voltage charger has been retrofitted in the past have an additional console holder installed at the bottom.
The studs for mounting the 11 kW high-voltage charger were removed as part of the conversion for this bracket. This holder remains in the vehicle.

Work procedure:

1 Convert **previous** plug-side holder ⇒*Convert high-voltage charger holder* **-1-** from **previous** 22 kW high-voltage charger to **new** 11 kW high-voltage charger.

1.1 Thread-off screws ⇒*Convert high-voltage charger holder* **-2-**.

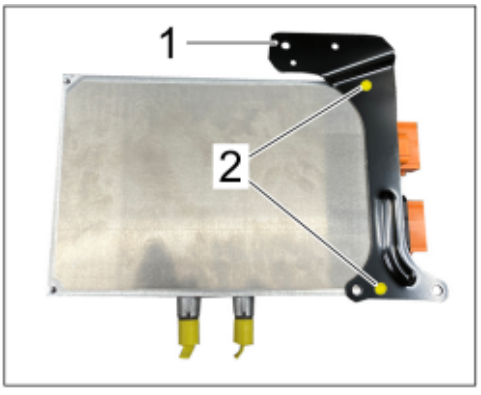


Convert high-voltage charger holder

1.2 Remove holder ⇒*Convert high-voltage charger holder* **-1-** and position on **new** 11 kW high-voltage charger. ⇒*Install high-voltage charger holder*

1.3 Screw-in and tighten **new** screws ⇒*Install high-voltage charger holder* **-2-**.

Tightening torque 8 Nm (5.9 ftlb.)



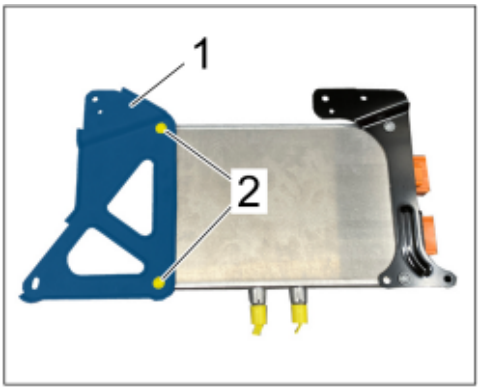
Install high-voltage charger holder

2 Fasten **new** high-voltage charger holder ⇒*New high-voltage charger holder* **-1-** to the **new** 11 kW high-voltage charger.

2.1 Position **new** high-voltage charger holder ⇒*New high-voltage charger holder* **-1-** on **new** 11 kW high-voltage charger.

2.2 Screw-in and tighten **new** screws ⇒*New high-voltage charger holder* **-2-**.

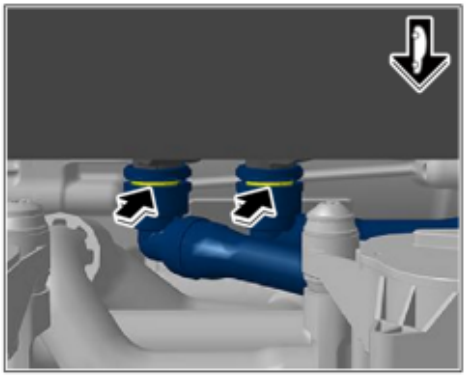
Tightening torque 8 Nm (5.9 ftlb.)



New high-voltage charger holder

3 Position and lock coolant lines on new high-voltage charger, then remove previously installed hose clamps. ⇒*Lock coolant lines*

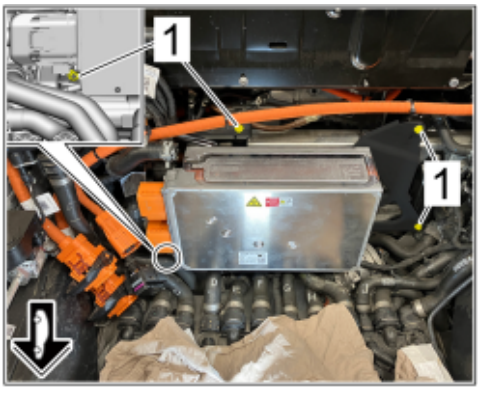
4 Position high-voltage charger at mounting points and attach and tighten new nuts for high-voltage charger holders ⇒*Install high-voltage charger* **-1-**.



Lock coolant lines

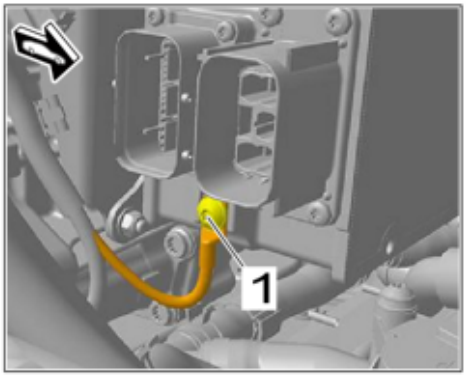
Tightening torque 8 Nm (5.9 ftlb.)

5 Thread-in screw ⇒*Ground line* **-1-** for equipotential bonding line and tighten.



Install high-voltage charger

Tightening torque 8 Nm (5.9 ftlb.)



Ground line

6 Position fuse box for front end at the partition and tighten to specification.
⇒ *Workshop Manual '978409 Loosening and securing front end fuse box'*

7 Position electric passenger compartment heater at the partition and tighten to specification.
⇒ *Workshop Manual '828019 Removing and installing electric passenger compartment heater'*

8 Position coolant expansion tank at the partition and tighten to specification.
⇒ *Workshop Manual '194019 Removing and reinstalling reservoir'*

Follow-up actions

NOTICE

Voltage drop

- **Destruction of control unit**
- **Damage to control unit**
- **Error entries in control unit**
- **Control unit coding aborted**
- **Malfunctions in the control unit, even during programming**

⇒ **Switch off the ignition and remove ignition key before disconnecting the control unit.**

⇒ **Make sure that the power supply is not interrupted during programming.**

⇒ **Connect a battery charger with a current rating of at least 90 A to the vehicle battery.**

NOTICE

Note on installation check

- **The installation check can be ignored at this moment in time. The 11kW OBC charger is only used after PR no. change OK.**

Work Procedure: 1 Fill with coolant and bleed the cooling system.
⇒ *Workshop Manual '193817 Draining and filling coolant'*

2 Start the high-voltage system and complete the relevant documentation.
⇒ *Workshop Manual '2X00IN Isolating high-voltage system from power supply/Starting high-voltage system'*

3 Complete the documentation.
⇒ *Workshop Manual '2X00IN Test log: Starting the high-voltage system'*

4 Code / program 11 kW high-voltage charger (OBC).

NOTICE

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

- **An unstable Wi-Fi 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.**

4.1 Connect **P90999 - PIWIS Tester 4** to the vehicle and switch on.

4.2 Switch on ignition **AND** hazard warning lights on the vehicle.

Information
The **PIWIS Tester** instructions take precedence since the description may be different with later Tester releases.

The procedure described here has been structured in general terms. Different text or additional information may appear on the **PIWIS Tester**.

4.3 Select the “Diagnostics” menu item on the PIWIS Tester.

4.4 If **P90999 - PIWIS Tester 4** is connected correctly, a connection to the vehicle will be established: The “Taycan” series is recognized and an overview of the control unit is created.

4.5 Press F12 to go to the control unit search screen.

4.6 F8 for additional menu. Question: “Should a VAL be created?” If “Yes”, press F12 to confirm.

4.7 After the VAL has been created, a message may appear that there are still open service actions for the connected vehicle. You can do this with F12 . This is followed by the back up documentation of the vehicle and the vehicle integration test.

Information
The function is **ONLY** available when the Tester is online.

5 Enter the new vehicle equipment in the vehicle data using “PIWIS Online”

5.1 Select the “Vehicle data maintenance with PIWIS-ONLINE” function in the “Additional menu” menu item.

A message appears informing you that the “Actual” (vehicle) data and “Target” (PIWIS Online) data will be compared.

Press F12 to continue.

5.2 Confirm the message “The vehicle data was compared with PIWIS Online. Significant differences were found” with F12 .

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

5.4 Add the coding value **"S9K"** to the vehicle data on the PR numbers page. 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.

5.5 Look for the “**BATTERY CHARGER**” option in the “Family” column.

Select the option “**KB3**” in the “Value” column in the drop-down menu. Press F12 to continue.

5.6 A table containing the coding value and the columns “new value” and “old value” is displayed in the overview. Press F8 to continue.

5.7 Data is then written / saved. The following messages appear one after the other:

- Transfer vehicle data to PIWIS Online.
- Write and transfer vehicle data to the vehicle.
- Vehicle order was written successfully.
- A check was performed in order to check whether control units have to be coded as a result of the changes that were made.

6 Code the new vehicle equipment.

6.1 Confirm the table containing a list of control units that must be coded by pressing F12 .

6.2 Individual data records will be loaded, depending on the number of control units to be coded.

Wait for “Creating backup documentation. Please wait..." and “Coding was completed successfully.” information. Press F12 to continue.

Repeat the process for other control units if necessary.

6.3 Wait for the “Adaptation of the control units is complete.” and check the coding status of the control units in the displayed table.

Continue by pressing F12 to return to the control unit overview.

7 Re-program high-voltage charger.
⇒ *Workshop Manual '279755 Replacing high-voltage charger'*

8 Check the customer-specific setting of the “Plug & Charge” setting as read out under Preparatory work, Step 1. Restore any other timers and charging profile settings if necessary.

NOTICE

Note on Plug & Charge

- **If the Plug & Charge display for Step 1 does not appear in the PCM, please reset the PCM to the factory settings with step 9. If step 8 is successful, skip step 9 and continue to step 10.**

9 Resetting the PCM to factory settings.

9.1 Select the "Central computer" control unit in the control unit selection screen (Overview menu) and call up the "Maintenance/repairs" area.

9.2 Select the "Reset factory settings" function and follow the instructions on the screen.

10 Read out the fault memory of all systems, work through any existing faults, and erase the fault memory.

Labor position and PCSS encryption

Labor position:

APOS	Labor operation	I No.
27975543	Replace high-voltage charger (OBC) (2WD)	
27975545	Replace high-voltage charger (OBC) (AWD)	
27975541	Replace high-voltage charger (OBC) and charging socket on the right (2WD)	
27975542	Replace high-voltage charger (OBC) and charging socket on the right (AWD)	
27975544	Replace high-voltage charger (OBC) and charging socket on the right and left (2WD)	
27975546	Replace high-voltage charger (OBC) and charging socket on the right and left (AWD)	

PCSS encryption:

Location (FES5)	27970	High-voltage charger
Damage type (SA4)	1611	does not function