PORSCHE®

Technical Information	Service

Spare Parts Requirements for High-Voltage Components - Check and Update Software as Necessary (44/20)

Change overview

Version	Date	Change
0	April 8, 2020	First publication
1	July 28, 2020	• SW versions updated • PIWIS Tester release updated • Information about WLG2 added

Vehicle Type: **Taycan (Y1A)**

Model Year: **As of 2020**

Subject: **Spare parts requirements for**

- High-voltage battery
- Battery isolator (HV battery E-box)
- Control unit for battery monitoring (HV battery control unit)

Information: **If one of the components specified above needs to be replaced, the software version in the high-voltage battery control unit must be checked after installation in the vehicle and a software update should be performed if necessary.**

Remedial Action: Check the software version in the "high-voltage battery" control unit and update it if necessary.

ⓘ Information

If the vehicle is affected by workshop campaign WLG2 and this has not yet been carried out, this campaign must also be carried out during the workshop visit.
Otherwise, the functionality of the vehicle cannot be guaranteed because of the different software versions in the vehicle.

ⓘ Information

The total time required for control unit programming is **approx. 6 minutes**.

Software: **Overview of software version:**

Control unit	SW (old)	SW (new)
High-voltage battery	E842 or E860	E870

ℹ️ **Information**

If the software version stored in the **high-voltage battery** control unit is **E842**, the control unit must be re-programmed.

If a different software version is stored in the high-voltage battery control unit, this technical information does not apply.

Parts Info: **Overview of affected components:**

Part No.	Designation
9J1915100xx	High-voltage battery (93kWh)
9J1915099xx	High-voltage battery (79kWh)
9J1915251x	Battery isolator (HV battery E-box) — complete
9J1915234x	Control unit for battery monitoring (HV battery control unit)

Tools: ℹ️ **Information**

The Taycan (Y1A) is equipped as standard with a **lithium starter battery**.

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 ⇒ *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 90 A battery charger**
- **9900 - PIWIS Tester 3** with PIWIS test software **version 39.600.015** (or higher) installed.

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 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.

NOTICE

Programming interrupted

- Malfunctions in control unit

- Risk of damage to control unit

⇒ Route the line between the vehicle communication module (VCI) and diagnostic socket on the vehicle without tension and make sure that the connector is inserted fully into the diagnostic socket.

⇒ Check that the rechargeable battery for the PIWIS Tester is charged sufficiently. Connect the PIWIS Tester to the power supply unit if necessary.

Information

The procedure described here is based on the PIWIS Tester 3 software version **39.200.031**.

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: 1   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"'*.

2   Connect a suitable battery charger, e.g. **battery charger 90A**, to the jump-start terminals and switch it on.

3   Position the **driver's key** with the back facing forward upright between the holding struts in the rear cupholder (**emergency start tray**) to guarantee a permanent radio link between the vehicle and remote control ⇒ *Emergency start tray* **-arrow-**.

4   **9900 - PIWIS Tester 3** must be connected to the vehicle communication module (VCI) via the **USB cable**. Then connect the communication module to the vehicle and switch on the PIWIS Tester.

5   Establish operational readiness (switch on ignition).

Emergency start tray

6   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.

7   Select the **high-voltage battery** control unit.

7.1   Select the **Extended identification** menu.

7.2   Check the software version.

- Software version **E870** ⇒ Check whether the vehicle is affected by campaign WLG2. If it is and if the campaign has not yet been carried out, carry out the campaign. End of remedial action.

- Software version **E842 or E860** ⇒ Re-program control unit, see ⇒ *Technical Information '9X00IN Re-programming control unit'*.

Re-program the high-voltage battery control unit

Work Procedure: 1   **Specific information on control unit programming in the context of this Technical Information:**

Required PIWIS Tester software version:	**39.600.015** (or higher)
Type of control unit programming:	Control unit programming using the **"Campaign" function in the Additional menu** on the PIWIS Tester by entering a programming code.
Programming code:	**F4C2J**
Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. During programming, the high-voltage battery control unit is **re-programmed** and then **re-coded** automatically. **Do not interrupt programming.**
Programming time (approx):	**6 minutes**
Software version programmed during this campaign:	**E870** Following control unit programming, the software version can be read out of the high-voltage battery control unit in the ⇒ 'Extended identifications' menu using the PIWIS Tester.
Procedure in the event of error messages appearing during the programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming - section on "Fault finding"'.*
Procedure in the event of abnormal termination of control unit programming:	Repeat control unit programming by restarting programming.

2 Check whether the vehicle is affected by workshop campaign WLG2. If it is and if the campaign has not yet been carried out, carry out the campaign.

Concluding work

Work Procedure: 1 Read out and erase the fault memories of all control units.

1.1 Press •F7" in the control unit selection screen ('Overview' menu) to call up the Additional menu.

1.2 Select the function "Read all fault memories and erase if required" and press •F12" ('Next') to confirm your selection .

The fault memories of the control units are read out.

1.3 Once you have read out the fault memories, check the fault memory entries.

Erasing fault memories

ⓘ Information

If control units are found to have faults that are **not** caused by control unit programming, these must first be **found and corrected**. This work must be invoiced using a separate warranty claim.

1.4 Press •F8" to delete fault memory entries.

1.5 Press •F12" ('Yes') in response to the question as to whether you really want to delete all fault memory entries.

The faults stored in the fault memories of the various control units are deleted.

ⓘ Information

If fault memory entries for individual control units cannot be deleted, proceed as follows:

• End operational readiness (switch off ignition).

• Disconnect the PIWIS Tester diagnostic connector from the diagnostic socket.

• Lock the vehicle using the driver's key.

• Establish bus idle on the vehicle.

• Establish operational readiness (switch on ignition).

• End operational readiness and restore it after a waiting time of approx. 10 seconds.

• Plug the PIWIS Tester diagnostic connector into the diagnostic socket again and restore communication with the vehicle.

• Read out the fault memory again and delete any fault memory entries that are stored.
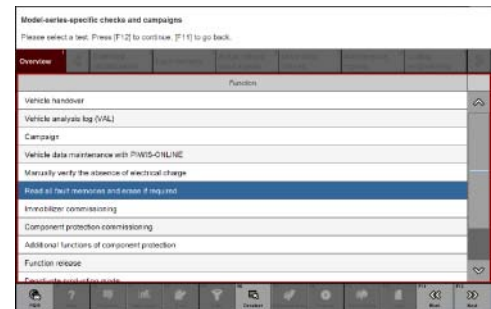
1.6 Once you have erased the fault memories, select the **'Overview'** menu to return to the control unit selection screen ⇒ *Control unit selection*.

2 End operational readiness (switch off ignition).

3 Disconnect the PIWIS Tester from the vehicle.

4 Switch off and disconnect the battery charger.
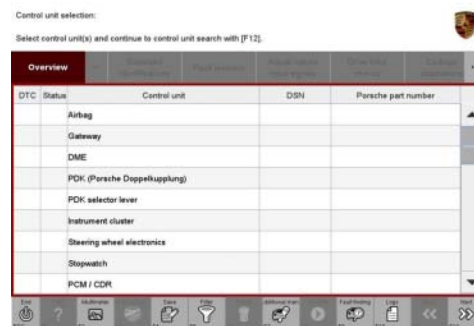
Control unit selection

Invoicing

Invoicing: For documentation and warranty invoicing, enter the PQIS coding specified below in the warranty claim:

APOS	Labor operation	I No.
27940150	Checking high-voltage battery control unit	
27942555	Programming high-voltage battery control unit	

PQIS coding:

Location (FES5)	27080	High-voltage battery
Damage type (SA4)	9735	Repair in accordance with PAG instructions

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