WRS1 - Checking High-Voltage Battery and Replacing Cell Block Module if necessary (Workshop Campaign)

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

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

Concerns: **High-voltage battery**

Cause: **The required, optimized software for the high-voltage battery control unit as part of ARB6 / ARB7 / WRS0 is currently not available to update all affected vehicles immediately. Therefore, a check of the battery status using an interim action is necessary until this on-board diagnostics software is available.**
As part of the interim action, a vehicle analysis log (VAL) is created at the workshop visit for offline vehicles without activated online functions and corresponding data transmission in order to analyze cell modules based on the VAL data analysis. Valid (complete) workshop and OTA VALs are taken into account for the evaluation.

Action: Check cell modules via vehicle analysis log (PCSS).

- **Population 1** – customer vehicles with an existing, valid VAL – create 1x VAL (scope 1)
- **Population 2** – customer vehicles without an existing, valid VAL – create 3x VAL (scope 2)
- **Population 3** – new vehicles without an existing, valid VAL – create 3x VAL (scope 3)

Information

An **evaluation of the state of** the **module cell block** of the Affected Vehicles is carried out by the **PAG internal analysis of the VALs**.

On the basis of the transmitted VALs, PAG evaluates the state of the module cell block for the respective vehicle by **using an analysis algorithm**.

The **analysis result** and the necessary further steps for each vehicle are displayed in the PCSS approx. 30-45 minutes after the VAL has been uploaded.
Please also note the following information:

- Customer is contacted by the relevant Porsche Center or by the importer using the **ARB6 customer letter**.
- Customer arranges an appointment with the Porsche Center for carrying out campaign ARB6.
- In the event of a **negative test result**, the assignment to the affected scope of the **recall campaign ARB5 and the accompanying campaigns "Replacing module cell block"** takes place once a day and is also displayed in the PCSS.
- In the event of a **positive test result** (no conspicuous modules), the **interim action is completed** and the warranty invoicing is made via the campaign number WRS1 under scopes 1-3. The ARB6 campaign remains open after performing the WRS1 until the final **on-board diagnostics is available (Q1 / 2025).** The vehicle can then be handed over to the customer.

- This **test** (WRS1) is **valid for 60 days.**
- If the software is not available, the **high-voltage battery must be rechecked every 60 days at the latest**. A renewed workshop campaign similar to WRS1 will be published in good time for processing.
- As soon as the software is available, the **final action (Q1/2025)** must be carried out in accordance with the ARB6 recall campaign.
- When **the software or the on-board diagnostics is available**, the **WRS1 campaign is deactivated or closed.**

Affected Vehicles: Only vehicles assigned to the campaign (see also PCSS Vehicle Information).

Required tools

Tools:
- Battery charger with a current rating of **at least 90 A**, e.g., **VAS 5908 battery charger 90 A**
- **P90999 - P90999 - PIWIS Tester 4**

Checking high-voltage battery – population 1 (customer vehicles with an existing, valid VAL)

Work Procedure:

<table>
<tr><th colspan="2">Review high-voltage battery flow chart</th></tr>
<tr><td colspan="2">Creating Vehicle Analysis Log (VAL) in workshop
Upload VAL via the data return function
↓</td></tr>
<tr><td colspan="2">VAL is analyzed within 30-45 minutes.
Reply to PAG about analysis result via PCSS display in the “Campaigns” area by pressing the “battery with magnifying glass” icon symbol (see table on PCSS menu prompt).
↓</td></tr>
<tr><td>OK
↓</td><td>Not OK
↓</td></tr>
<tr><td rowspan="2">End of action
Invoicing for Scope 1
If the final action "Re-programming ARB6 BMCe software" is not available, the high-voltage battery must be rechecked by means of a VAL test after 60 days at the latest.</td><td>Invoicing for VAL check via WRS1 scope 1.
Replacing module via ARB5 recall/ and accompanying campaigns “Replacing cell block module”
Please submit the warranty claim for the campaign in WWS via the assigned scope.</td></tr>
<tr><td>After replacing module:
If the final action "Re-programming ARB6 BMCe software" is not available, the high-voltage battery must be rechecked by means of a VAL test after 60 days at the latest.</td></tr>
</table>

1 Open the front cover and connect a suitable battery charger, e.g., 90 A battery charger, to the jump-start terminals and switch it on.

2 Open the door and position the driver's key with the back facing forward upright between the holding strips in the rear drinks holder (emergency start tray) to ensure a permanent radio link between the vehicle and remote control.

Emergency start tray

3 Establish readiness for operation (switch on ignition).

Information

An **active** Internet connection with the PIWIS Tester must be ensured. To log in using the PIWIS Tester, the technician is **required.**

The PIWIS Tester must not be charged using the cigarette lighter!

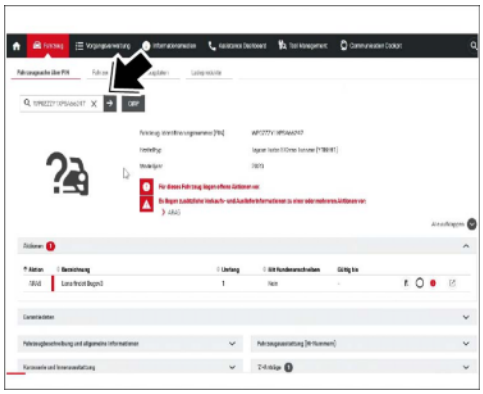
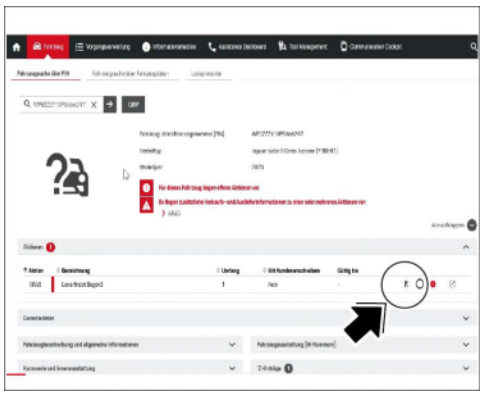
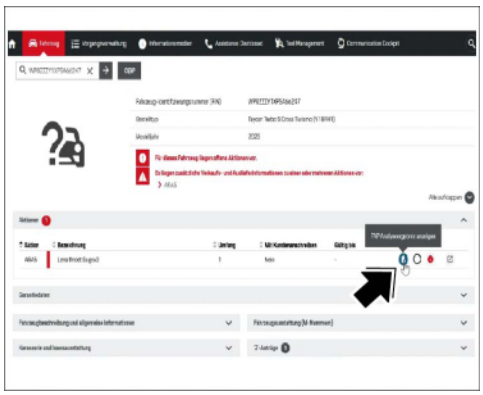
4 Connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable. Then connect the communication module to the vehicle and switch on the PIWIS Tester.

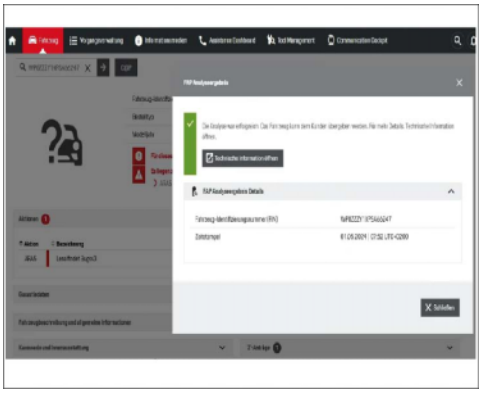
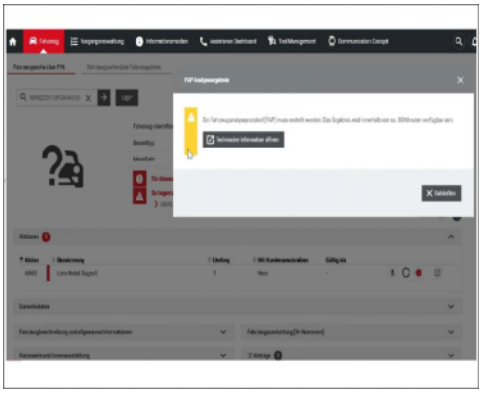
5 **Create a Vehicle Analysis Log (VAL)**.

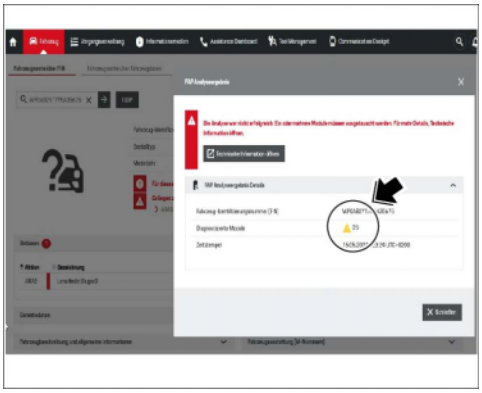
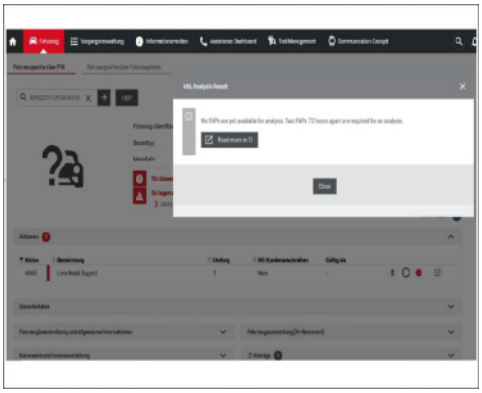
Mark the Vehicle Analysis Log you have just created with the attribute "**Extra VAL**" and return it using the PIWIS Tester after completion.

Feedback on analysis results by PAG takes place via PCSS after approx. 30-45 minutes.

- The data analysis yields a **positive result** (green PCSS display): The vehicle can then be handed over to the customer. Continue to Warranty Processing, Scope 1.
- The data analysis yields a **negative result** (red PCSS display): In rare cases, it may be necessary to replace the cell block module. If this is the case, the VIN in the ARB5 campaign is transferred to one of the accompanying campaigns.
- VAL faulty/insufficient (yellow or grey PCSS display): In very rare cases, additional VALs may be required.

PCSS menu prompt	Illustration
1. Vehicle search via VIN	 *PCSS vehicle search*
2. Confirming “Battery with magnifying glass” icon under campaigns in WRS1	 *Display of campaign in PCSS*
3. VAL analysis result is displayed via pop-up window	 *Pop-up display window*

- **Green indicator**: The test result is **“positive”**. Cell modules are OK.	 *"Green" display result*
- **Yellow indicator**: A Vehicle Analysis Log (VAL) must be created	 *"Yellow" display result*

- **Red indicator**: The test result is **"negative"**. One or more modules must be replaced.	 *"Red" display result*
- **Grey indicator**: There are no valid VALs. Additional VALs must be created according to the following procedure. 1. Creating and uploading a VAL 2. Charge up to 100% SoC via AC charge port. 3. Create and upload a second VAL after 6 hours of downtime. 4. Create and upload a third VAL after 66 hours of downtime. 5. Check analysis result again in PCSS.	 *"Grey" display result*

6 End the diagnostic application.

6.1 End readiness for operation (switch off ignition).

6.2 Disconnect the PIWIS Tester from the vehicle.

7 Switch off and disconnect the battery charger.

8 Enter the campaign in the Warranty and Maintenance logbook.

Checking high-voltage battery – Populations 2 and 3 (new vehicles and customer vehicles without valid VALs)

Work Procedure:

<table>
<tr><td colspan="3">Review high-voltage battery flow chart</td></tr>
<tr><td colspan="3">1. Creating Vehicle Analysis Log (VAL)
↓</td></tr>
<tr><td colspan="3">Charge up to 100% SoC via AC port
↓</td></tr>
<tr><td rowspan="4">Idling time:
↑
72 hours
↓</td><td colspan="2">Idling time:
6 hours
↓</td></tr>
<tr><td colspan="2">2. Creating Vehicle Analysis Log (VAL)
↓</td></tr>
<tr><td colspan="2">Idling time:
66 hours
↓</td></tr>
<tr><td colspan="2">3. Creating Vehicle Analysis Log (VAL)
↓</td></tr>
<tr><td colspan="3">VAL is analyzed within 30-45 minutes.
Reply to PAG about analysis result via PCSS display in the “Campaigns” area by pressing the “battery with magnifying glass” icon symbol.
↓</td></tr>
<tr><td>OK
↓</td><td colspan="2">Not OK
↓</td></tr>
<tr><td>End of action
Invoicing for Scope 2 or 3
If the final action "Re-programming ARB6 BMCe software" is not available, the high-voltage battery must be rechecked by means of a VAL test after 60 days at the latest.</td><td colspan="2">Invoicing for VAL check via WRS1 scope 2 or 3.
Replacing module via ARB5 recall / and accompanying campaigns “Replacing cell block module”
Please submit the warranty claim for the campaign in WWS via the assigned scope.

After replacing module:
If the final action "Re-programming ARB6 BMCe software" is not available, the high-voltage battery must be rechecked by means of a VAL test after 60 days at the latest.</td></tr>
</table>

9 Open the front cover and connect a suitable battery charger, e.g., 90 A battery charger, to the jump-start terminals and switch it on.

10 Open the door and position the driver's key with the back facing forward upright between the holding strips in the rear drinks holder (emergency start tray) to ensure a permanent radio link between the vehicle and remote control.

Emergency start tray

11 Establish readiness for operation (switch on ignition).

Information

An **active** Internet connection with the PIWIS Tester must be ensured. To log in using the PIWIS Tester, the technician is **required.**

The PIWIS Tester must not be charged using the cigarette lighter!

12 Connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable. Then connect the communication module to the vehicle and switch on the PIWIS Tester.

13 **Create a Vehicle Analysis Log (VAL)**. Mark the Vehicle Analysis Log you have just created with the attribute "**Extra VAL**" and return it using the PIWIS Tester after completion.

14 Charge the high-voltage battery of the vehicle on the driver's side to **100% SoC** via the charging port with alternating current (AC).
To reduce the charging time, it is recommended that charging be carried out at industrial electrical outlets, at E-charging stations, or at the wall box. Only charge the high-voltage battery at domestic electrical outlets, provided no other charging option is available.

15 Start the charging process and **note the time that 100% "Charging goal met at"** is displayed in the center console control panel.
The end time of the charging process is decisive for the creation of the additional Vehicle Analysis Logs.
Please ensure that the following intervals are observed. Failure to do so may result in delays or an invalid evaluation.

16 After a charge state of 100% SoC has been reached, maintain an **idling time of 6 hours** and then **create a second Vehicle Analysis Log (VAL)**.
Mark the Vehicle Analysis Log you have just created with the attribute "**Extra VAL**" and return it using the PIWIS Tester after completion.

17 After the second VAL, maintain a further **idling time of 66 hours** and then **create a third Vehicle Analysis Log (VAL)**.
Mark the Vehicle Analysis Log you have just created with the attribute "**Extra VAL**" and return it using the PIWIS Tester after completion.

PAG feedback on analysis results is provided via a PPN update and provision of a VIN list with scope allocation.

- The data analysis yields a **positive result** (green PCSS display): The vehicle can then be handed over to the customer. Continue to Warranty Processing, Scope 2-3.
- The data analysis yields a **negative result** (red PCSS display): In rare cases, it may be necessary to replace the cell block module. If this is the case, the VIN in the ARB5 campaign is transferred to one of the accompanying campaigns.
- VAL faulty/insufficient (yellow or grey PCSS display): In very rare cases, additional VALs may be required.

18 End the diagnostic application.

18.1 End readiness for operation (switch off ignition).

18.2 Disconnect the PIWIS Tester from the vehicle.

19 Switch off and disconnect the battery charger.

20 Enter the campaign in the Warranty and Maintenance logbook.

Warranty processing

Scope 1:

- Population 1 – Customer vehicles with an existing, valid VAL

Labor time:

Checking high-voltage battery — Labor time: **35 TU**
Includes: Creating 1x Vehicle Analysis Log (VAL)

WRS10000001*	Vehicle Transport	Quantity as required (for warranty invoicing only)

* For warranty processing, the **Part No. WRS10000001** can be invoiced in the warranty claim as an **additional part** with the designation “vehicle transportation” and with the amount as per invoice. Please document a copy of the invoice for this in the warranty claim.

⇒ **Damage number WRS1 066 000 1**

Scope 2:

- Population 2 – customer vehicles, without an existing, valid VAL

Labor time:

Checking high-voltage battery — Labor time: **124 TU**
Includes: 3 x Creating Vehicle Analysis Log (VAL)

Additional costs:

WRS10000001*	Vehicle Transport	Quantity as required (for warranty invoicing only)

WRS10000002**	Power consumption	Quantity as required (for warranty invoicing only)

* For warranty processing, the **Part No. WRS10000001** can be invoiced in the warranty claim as an **additional part** with the designation “vehicle transportation” and with the amount as per invoice. Please document a copy of the invoice for this in the warranty claim.

** For warranty processing, the **part number WRS100000002** with the designation “Energy Consumption” can be invoiced as an **additional part** in the warranty claim. Maximum amount $32.21.

⇒ **Damage number WRS1 066 000 2**

Scope 3:

- Population 3 – new vehicles, without an existing, valid VAL

Labor time:

Checking high-voltage battery — Labor time: **124 TU**
Includes: 3 x Creating Vehicle Analysis Log (VAL)

Additional costs:

WRS10000002*	Power consumption	Quantity as required (for warranty invoicing only)

*For warranty processing, the **part number WRS100000002** with the designation “Energy Consumption” can be invoiced as an **additional part** in the warranty claim. Maximum amount $32.21.

⇒ **Damage number WRS1 066 000 2**