APB5 - Replacing the Cell Block Module on High-Voltage Battery (Recall Campaign)

Vehicle Type: **Taycan (Y1A / Y1B / Y1C)**

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

Concerns: **Cell block module**

Cause: **There is a possibility that, under certain circumstances, a defect in the battery cells installed in the high-voltage battery can occur on the affected vehicles.**

In this case, a short circuit within the battery modules during the vehicle's service life cannot be ruled out, which could lead to thermal events and later to a fire in the vehicle.

Action: Replace cell block module.

Information

To find out the campaign scope for **Replacing the cell block module** assigned to each vehicle, see PCSS Vehicle Information.

Depending on the cell module that was affected, the vehicle was precisely assigned to a scope.

Scope 1-33 is only valid for vehicles with a **high-voltage battery with 33 modules**

Scope 34-59 is only valid for vehicles with a **high-voltage battery with 28 modules**

Scope	33-module HVB	TU
1	1	2814
2	2	2850
3	3	2803
4	4	2805
5	5	2854
6	6	2879
7	7	2835
8	8	2835
9	9	2836
10	10	2806
11	11	2805
12	12	2803
13	13	2859
14	14	2881
15	15	2846
16	16	2839
17	17	2807
18	18	1536
19	19	1540
20	20	1602
21	21	2807
22	22	2839
23	23	2839
24	24	2872
25	25	2839
26	26	2839
27	27	2885
28	28	2809
29	29	2805
30	30	2805
31	31	2805
32	32	2827
33	33	2664

Scope	28-module HVB	TU
34	1	2233
35	2	2269
36	3	2222
37	4	2224
38	5	2273
39	6	2298
40	7	2254
41	8	2254
42	9	2255
43	10	2225
44	11	2224
45	12	2222
46	13	2278
47	14	2300
48	15	2265
49	16	2258
50	17	2447
	18	
51	19	2222
52	20	2283
53	21	2226
54	22	2258
55	23	2258
56	24	2483
	25	
57	26	2172
58	27	2217
59	28	2142

Allocation of scopes to cell block module

Information

NOTES about Warranty Processing for Multiple Campaigns:

Please see the Warranty processing section at the end of the TI for more detailed notes. Vehicles assigned to APB5 are also assigned to WRJ5 Workshop Campaign. The Scopes table on the next page denotes the affected battery module that is being replaced. APB5 should be closed with 0 parts and 0TU labor. Only customer satisfaction (towing, mobility) should be included in the APB5 Warranty claim. WRJ5 covers the parts (installed by EVBS) and labor for your PC removing and reinstalling the battery (as well as the shipping prep, leak test, etc.) and the Sublet from EVBS for the work performed.

Information

Processing of multiple campaigns

If the vehicle is assigned to one or more of the campaigns listed below, the campaigns **must be carried out together** if possible because of the overlapping steps involved.
Before carrying out this campaign, it is thus important to check whether the vehicle in question also comes under one or more of the campaigns specified below:

- **APB2** Recall campaign – Checking high-voltage battery and replacing if necessary (depth of repair 1 or 3)
- **WPL8** Workshop campaign - Replacing electric passenger compartment heater (depth of repair 2)

Processing APB2 recall campaign

If, in addition to this campaign, the **APB2 campaign** has not yet been carried out on a vehicle, the **leak test of the high-voltage battery must first be carried out as part of the APB2 campaign**.

- If the **test result is positive** (high-voltage battery is leak-tight), this campaign can be carried out.
- If the **test result is negative** (high-voltage battery is leaking), implementation of this campaign is no longer necessary due to the necessary replacement of the high-voltage battery and can be concluded. After carrying out campaign APB5, campaign APB2 is to be closed by performing a recall update (warranty claim with 0 material units and 0 time units).

For warranty processing for both campaigns, proceed as follows in this case:

- A warranty claim must be submitted for **campaign APB5** in which **0 TU** is entered as the specified **labor time** and **no material items** are specified.
- Mark **campaign APB5** as **Recall Update** with the reason **“Other + free text ⇒Replace HVB”** in PQIS. The **“Warranty relevance”** flag must be activated in order to be able to set a warranty claim and close the campaign.

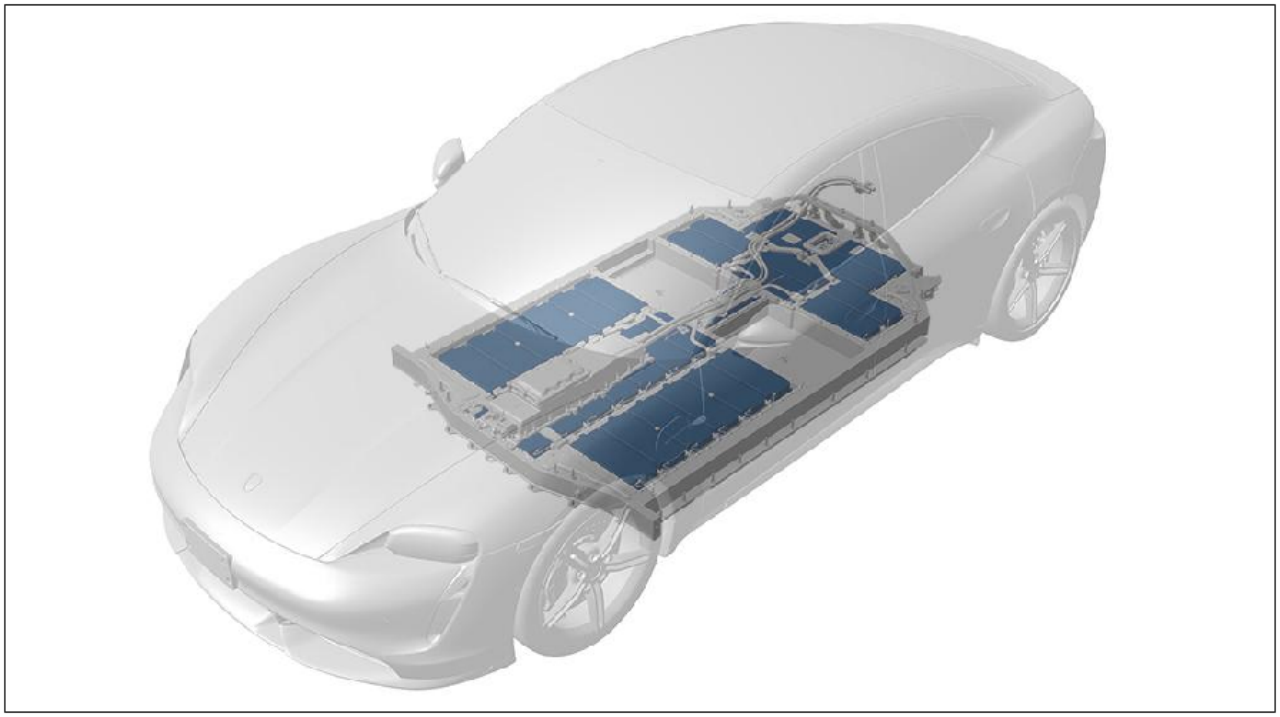
Processing campaign APB5

Please be reminded that Spiers/EVBS is doing the module replacement. Your Porsche Center will still be billed for and reimbursed via Warranty claim for all of the necessary parts used, but the new parts will come already installed in the battery by EVBS.

Your Porsche Center should invoice the individual items incurred for customer mobility, vehicle reception, vehicle transport and acceptance of the vehicle after return transport in accordance with the warranty specifications using campaign APB5. APB5 should be closed with 0 parts and 0 labor by marking "Campaign not feasible" and selecting the "warranty relevant" flag. The only things on the APB5 Warranty claim should be the items mentioned here.

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

Installation Position:



Installation position: Cell block module

Required tools

Tools:

- **T40262 - T40262 - Locking cap**
- **VAS 6558A - High-voltage test adapter**
- **VAS 6558/9-6A - High-voltage test adapter**
- **VAS 6883 - Insulated tool set**.
- **V.A.G 1274B - Cooling system testing unit**
- **VAS 5581 - Diagnostic Box**
- **VAS 6911/3B - Test plug set**
- **9925 - 9925 - Leak-tightness test set**
- **9925/1 - 9925/1 - Adapter cable**
- **T90028 - T90028 - Cover**
- **T40349 - T40349 - Seal plug**
- **T90012 - T90012 - Cover**
- **V.A.G 1628 - Hand-cartridge gun**
- **VAS 221 005 - Cartridge opener**
- **V.A.G 1397B - Pressure sensor**
- **VAS 691 005/14 - Hose connector**
- **T40449 - T40449 - Sealing adapter**
- **VAS 6410 - Contact surface cleaning set**

- **VAS 6558A/27 - Set of Kelvin clamps and test probes**
- **VAS 531 011 - Cooling system service equipment**
- **VAS 6096/2 - Vacuum pump**
- **3093 - 3093 - Hose clamp**
- **VAS 6675A - Funnel**
- **P90012 - P90012 - Guide pins**
- **VAS 6832 - Master Gear unit elevating platform**
- **VAS 6832/9 - Assembly device**
- **VAS 6884 - High-voltage cordon**
- **VAS 501 009 - Fork lift cross member**
- **T90010 - T90010 - Lifting tool**
- **VAS 501 011 - Chain sling**
- **9900 - PIWIS Tester 3**
- **VAS 6910 - Module balancer**
- **T90023 - T90023 - Gap filler template**
- **VAS 6762/10 - End caps**
- Battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 - battery charger 90 A**

Country-specific tools:

- **VAS 6558/10-1 - High-voltage test adapter**
- **VAS 6558/14A - High-voltage test adapter**
- **VAS 6558/17A - High-voltage test adapter**
- **VAS 6558/10-2 - High-voltage test adapter**
- **VAS 6558/18A - High-voltage test adapter**
- **VAS 6558/13A - VAS 6558/13A - High-voltage test adapter**
- **VAS 6558/22 - High-voltage test adapter**

Please refer to the relevant Workshop Manuals for details of the required tools.

Required parts and materials

Information

The **part numbers** of the **required parts** for the respective vehicle can be seen in the **assigned scope**.

An overview of the required parts is given in the Excel table in the PPN document for the campaign.

		APB5 Replacement Part Overview																														
		33-module High-voltage battery																														
	cell block module no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
	Scope	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
	Spare parts no.																																	
Cell modul	V040I5004BE	1	1	-	-	1	1	-	-	1	1	-	-	1	-	1	1	1	-	-	1	1	1	1	-	1	1	-	-	-	-	-	-	-
Cell modul	V040I5004BF	-	-	1	1	-	-	1	1	-	-	1	1	-	1	-	-	-	1	1	-	-	-	-	1	-	-	1	1	1	1	1	1
Module Connectors	9J1915153AA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-
Module Connectors	9J1915153AB	-	-	-	1	1	-	-	1	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-
Module Connectors	9J1915153AC	-	1	1	-	-	1	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
Module Connectors	9J1915153AD	-	-	1	1	1	1	1	1	1	1	1	1	1	-	1	1	-	-	-	-	-	-	-	-	1	1	-	1	2	2	2	2	1
Module Connectors	9J1915153AE	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Module Connectors	9J1915153AT	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-
Module Connectors	9J1915153AG	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Module Connectors	9J1915153AH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-
Module Connectors	9J1915153AJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Module Connectors	9J1915153AK	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-
Module Connectors	9J1915153BA	1	1	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Module Connectors	9J1915153AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Module Connectors	9J1915153AN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Module Connectors	9J1915153AP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Module Connectors	9J1915153AQ	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Module Connectors	9J1915153AR	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Module Connectors	9J1915153AS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cover plate large	V040I5004BG	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1
Cover plate tee	V040I5004BH	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Battery Housing Repair Kit	9J1938037	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Combination screw	PAF3095254	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186	54	54	54	186	186	186	186	186	186	186	186	186	186	186	186	186
Hexagon nut	PAF908946	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	-	-	-	10	10	10	10	10	10	10	10	10	10	10	10	10
Hexagon socket screw	PAF909771	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	-	-	-	6	6	6	6	6	6	6	6	6	6	6	6	6
Sleeve	9J1904997A	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	-	-	-	10	10	10	10	10	10	10	10	10	10	10	10	10
Thermal paste for cooling unit	9J1915471	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lens screw with internal multi-tooth head	N 90737107	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	0	0	0	10	10	10	10	10	10	10	10	10	10	10	10	10
Sealant	0000433532	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Damping element	9J1915448	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2
Damping element	9J1915448A	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2
Damping element	9J1915448B	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-	-	-	4	4	4	4	4	4	4	4	4	4	4	4	4
Hexagon socket screw	PAF912954	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	-	-	-	10	10	10	10	10	10	10	10	10	10	10	10	10
Warnschild	12E910006Q	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1
Warning Sign	12E910849G	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Warning Sign	9J1910006B	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1
Enter the warning sign	1EA090505	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1
Hexagon socket screw (BMCe)	PAF909770	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	-	-	-	9	9	9	9	9	9	9	9	9	9	9	9	9
Holder HV cable	9J1971504A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1
Cable support	9J1971906	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	3	3	3	3	3	3	3	3	3	3	3	3	3
Gasket BMCe	9J1915423J	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1
Hexagon socket round (module)	PAF912706	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Hexagon socket screw	PAF909165	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-	-	-	2	2	2	2	2	2	2	2	2	2	2	2	2
Connection flange	9J1915510B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pressure valve	9J1915754	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexagon socket screw	N 10700201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lubricating oil	V040I5003T	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Coolant additive	0000433516	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l	0,5l
Hexagon Head Screw (PDCC Only)	N 91006202	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Corrosion inhibitor GPL 205	available in the PC	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Overview of parts

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

Part No.	Designation	Quantity
...	Corrosion preventive GPL 205	Quantity as required
...	Isopropanol cleaning cloths	Quantity as required
	Fabric adhesive tape (fleece)	
	Paintbrush	
	Disposable gloves	

*For warranty processing, the **Part No. APB50000001** designated as “Consumables” can be invoiced as an **additional part** in the warranty claim. Maximum amount $ 5.39.

Replacing cell block module

Information

The recalls for the cell module exchange of the Taycan of the 1st generation give rise to many question marks, but also comments and suggestions.
Therefore, certain processes were analysed and work steps were developed to increase the efficiency of the repair concept as part of the recall campaigns. Please observe these actions when carrying out this campaign.

Details on the Efficiency Manual can be found in the section: ⇒*Technical Information 'Actions to increase the efficiency of HV battery repair'* or as a presentation in the appendix to the PPN documents for the campaign.

Work Procedure: 1 Create Vehicle Analysis Log (VAL) using the PIWIS Tester. Mark the vehicle analysis log you have just created with the attribute “Pre-VAL”.

2 Remove the battery and prepare for shipment to EVBS. NOTE: Please leak test the battery after removal and before shipping to EVBS. These instructions are contained within "Preliminary Work" section, steps 1 to 4 of ⇒*Workshop Manual '2X00IN General warning notices for working on the high-voltage on-board system'*

If the HV Battery fails the leak test per the Workshop Manual, replace the battery and DO NOT send the battery to EVBS. If you require a new HV Battery, please submit a PRMS Parts Support ticket to Bill Trusky for release of the battery. Please mention APB5 in ticket.

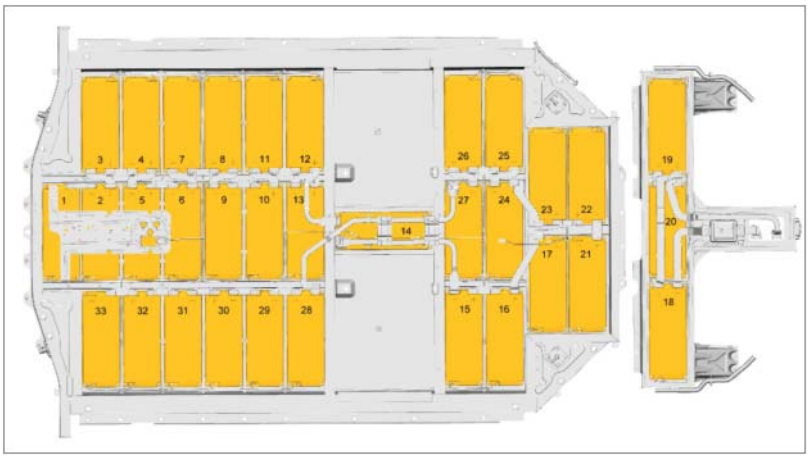
PLEASE NOTE THAT IT IS PERMISSIBLE TO MOVE THE VEHICLE AFTER THE BATTERY HAS BEEN REMOVED. Normally this would not be approved, but because of the repair taking place outside the Porsche Center, the vehicle can be moved off of the lift after the battery is removed. THE BATTERY COVER MUST BE REINSTALLED BEFORE MOVING THE VEHICLE. THE SPEED LIMIT WHILE MOVING THE VEHICLE WITH NO HV BATTERY INSTALLED IS 4 MPH.

There are further instructions at the end of this document.

3 Remove the affected cell block module. For instructions, see ⇒*Workshop Manual '270855 Replacing cell block module'*

Counting the modules of a 28-module high-voltage battery is different from counting the modules of a 33-module high-voltage battery.

28-module high-voltage battery version



33-module high-voltage battery version

4 Install the HV Battery with the new cell module(s) and then store the new Serial Number(s) of the cell module(s) in PCSS. For instructions, see ⇒ *Workshop Manual '270855 Replacing cell block module'*

NOTE: Your PC will only be responsible for entering the new Serial Number(s) of the replaced cell modules and the re-installation of the HV Battery. The steps for entering the new Serial Number(s) are contained in the "Reworking" Section, steps 8 and 9 of WM270855 and the re-installation instructions for the HV Battery are contained in "Reworking" Section, steps 14 through 27 of WM 270855.

5 Create Vehicle Analysis Log (VAL) using the PIWIS Tester. Return the vehicle analysis log you have just created with the attribute **"Post-VAL"** using the PIWIS Tester.

6 Enter the campaign in the Warranty and Maintenance logbook.

Warranty processing

Information

The specified working times were determined specifically for the completion of this campaign and may differ from the working times published in the Labor Operation List in PCSS.

Repair depth: **The Porsche Center is only responsible for removing the battery, performing the leak test before shipment, and then shipping the battery to EVBS. Then, installing the HV Battery when it returns from EVBS. Your Porsche Center will receive information with the battery from EVBS on the new Serial Numbers for the replaced battery modules, which you will need to enter in PCSS in order to properly document the repair.**

Vehicles assigned to APB5 are also assigned to WRJ5 Workshop Campaign. APB5 should be closed with 0 parts and 0TU labor. Only customer satisfaction (towing, mobility) should be included in the APB5 Warranty claim. The WRJ5 Campaign covers the parts (installed by EVBS)

and labor for your PC removing and reinstalling the battery, as well as the shipping prep, leak test, etc. The Sublet amount from EVBS should also be included in the WRJ5 claim.

NOTE: If more than one HV Battery module is replaced by EVBS, that means that they found more than the required modules were potentially faultly. PCNA has authorized EVBS to replace any modules found to be potentially faulty. If more than one module is replaced, it must be invoiced on the WRJ5 Campaign. HV Batteries and Cell modules **cannot be invoiced as subsequent credit appeals**, as it will not trigger a serial number change in PCSS.

If the HV Battery fails the leak test when first removed at your Porsche Center, the battery should not be sent to EVBS. In this case, APB5 should be closed for $0 by selecting "Campaign not Feasible" in PCSS and selecting the "Warranty Relevant" flag. All costs for the battery replacement, including the removal and leak test, must be invoiced under WRJ5, Scope 2.

Porsche Centers can invoice can invoice the individual items incurred for customer mobility, vehicle reception, vehicle transport and acceptance of the vehicle after return transport in accordance with the warranty specifications using **APB5.**

• Vehicle acceptance	50 TU
• Acceptance of the vehicle following return transport	50 TU
• Costs for transporting the vehicle to and from the Porsche Center (APB50000003)	Amount as per invoice*
• Vehicle parking (APB50000004)	Quantity as required (for warranty invoicing only)
• Customer mobility, other brands (APB50000005)	Quantity as required (for warranty invoicing only)

* Please document copy of invoice in PQIS

Scope 1-59: **Replacing cell block module of high-voltage battery**

Labor time:

Replacing cell block module — Labor time: **0 TU**

Includes:
- Creating vehicle analysis log
- Deactivating high-voltage system and starting it up
- Remove and install high-voltage battery
- Performing leak test on battery housing of the high-voltage battery and recording the results
- Draining and filling coolant
- Removing and installing high-voltage battery cover

Required parts:

For required parts, please refer to the section “Required parts and materials”

Required materials (usually already available in the Porsche Center):

APB50000001*	Consumables	1 piece (for warranty invoicing only)

Additional costs:

APB50000002**	Disposal costs	Quantity as required (for warranty invoicing only)
APB50000003***	Vehicle Transport	Quantity as required (for warranty invoicing only)
APB50000004****	Vehicle storage	Quantity as required (for warranty invoicing only)
APB50000005*****	Customer mobility, other brands	Quantity as required (for warranty invoicing only)

*For warranty processing, the **Part No. APB50000001** designated as “Consumables” can be invoiced as an **additional part** in the warranty claim. Maximum amount $ 5.39.

** For warranty processing, the **Part No. APB50000002** can be invoiced in the warranty claim as an **additional part** with the designation “Disposal costs” 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 No. APB50000003** 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 No. APB500000004** can be invoiced in the warranty claim as an **additional part** with the designation “Vehicle storage” 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 No. APB50000005** can be invoiced in the warranty claim as an **additional part** with the designation “Customer mobility” and with the amount as per invoice.
Please document a copy of the invoice for this in the warranty claim.

⇒ **Damage Number APB5 099 000 2**

Invoicing of vehicle transport / customer mobility / complex component

Invoicing: **Costs for transporting the vehicle**
If required, the vehicle can be collected from the customer and transported to the Porsche Center or to a parking space used by the Porsche Center. The costs incurred can be invoiced in the warranty claim for

recall campaign APB5 under the **part number APB50000003** with the designation “Transport flat rate” (type: sublet) as an additional part.

Costs for vehicle storage
If third-party parking spaces are used for storing affected vehicles, the costs incurred can be invoiced as an additional part in the warranty claim for recall campaign APB5 using the **part number APB50000004**.
Up to $ 10.78 per day can be invoiced for storing the vehicle.

Costs for customer mobility
If necessary, customer mobility can be granted at the most until the workshop appointment and for the duration of the implementation of the campaign. The current rules governing the Customer Mobility Programme generally apply here. Depending on the vehicles used to guarantee customer mobility, the costs incurred can be invoiced as follows:

- Utilization of Porsche vehicles via Mobility Account (standard process)

Costs are processed using the standard process in accordance with the currently applicable rules governing the Customer Mobility Programme.

If other Group or other brands are utilized, the costs incurred in the warranty claim for recall campaign APB5 must be invoiced under the **Part No. APB50000005** with the designation “Customer Mobility” as an additional part.
To this end, please document a copy of the invoice for this in the warranty claim.

In order to keep the costs incurred for mobile storage and vehicle accommodation as low as possible, customers who already use mobile storage by substitute vehicle before the campaign is carried out must, if possible, prioritize the campaign processing. If more than 45 days of mobile posture are invoiced as part of the APB5 campaign, the need in the campaign claim must be justified.
Campaign claims with more than 45 days of invoiced mobility are submitted by the system to the responsible importer for review and release.

Actions to increase the efficiency of HV battery repair

Overview:
- Ideal typical process flow
- Omission of defined work steps
- Best business practice examples for increasing efficiency
- Procedure to “release” the parking brake with removed high-voltage battery

The measures shown below are intended to make the repair process for the high-voltage battery more efficient (for affected vehicles from the recall campaign)

Premises:
- Vehicle affected from campaign APB5 / ARA4 / ARA5
- Vehicle arrives at the Porsche C/high-voltage support point under its own power
- No safety-relevant error codes stored in the HV battery control unit
- No warning messages for the high-voltage battery/high-voltage system displayed on the instrument cluster

Process flow: **Ideal typical process flow within the framework of the campaigns**

<table>
<tr>
<td>Porsche C</td>
<td>Vehicle affected by recall campaign APB5 / ARA4 / ARA5
↓
Information to customer (in the course of making an appointment): Submission of the vehicle with high-voltage battery charge state approx. 30%
⇒</td>
<td>To-do:
• Creation of VAL
• Diagnosis of vehicle for safety-relevant fault codes in HVB
• Determine SOC high-voltage battery
• Forward vehicle information (VAL; SOC) to HV support point
• Organize transport to HV support point
↓
Vehicle Transport</td>
<td>• Final inspection of vehicle
• Prepare/perform handover to end customer</td>
</tr>
<tr>
<td>High-voltage supporting point</td>
<td colspan="2">Activities prior to repair
• Ordering spare parts
• Start balancing module
• Omission of classification
Repair by HVE
• Repair as per Workshop Manual
• Omission of defined work steps (see section below)
Activities after repair
• Creation of VAL
• Perform quality control
• Forward vehicle information to PC
• Organize transport to PC
⇒</td>
<td>↑
Vehicle Transport</td>
</tr>
</table>

Steps:

Omission of defined work steps, in the process of campaigns APB5 / ARA4 / ARA5

Action	Description	Time span
Omission of high-voltage battery classification	**Prerequisite:** • Vehicle is affected in the context of campaigns APB5 or ARA4. • Vehicle arrives at the Porsche C/high-voltage support point under its own power • There are no safety-relevant fault codes stored in the HV battery control unit • There are no warning messages for the high-voltage battery/high-voltage system displayed on the instrument cluster	30 minutes
Omission of communication test before closing high-voltage battery	**Important:** Visual inspection after repair (before closing high-voltage battery) that all plugs of the wiring harness are plugged in.	30 minutes
Removing and installing high-voltage module(s) without crane	Use of the cross member and bridge without lifting/using the module with the workshop crane. The guide pins are still necessary and must be used.	20 minutes
Setting control devices without crane	**Prerequisite:** Setting of BMCe with two people and utilization of guide pins. **Note:** Electrical connection between high-voltage battery and BMCe must be established before installing them (as before)	10 minutes

The omission of the defined work steps is not transferred to the repair media and only applies to the affected vehicles within the framework of the campaigns. The omission of the scope of work has no effect on the times to be invoiced in the respective scopes.

Increased efficiency:

Best Business Practice Examples

Actions prior to commencement of repair work

- Customer information as part of appointment scheduling: Message to bring the vehicle to the PC with a charge status of approx. 30%
- Start balancing of the new (to be replaced) modules, based on VAL information of the accepting PC
- Omission of classification of high-voltage battery when vehicle arrives at the PC under its own power
- Omission of classification of high-voltage battery if no safety-relevant fault codes are stored in the high-voltage battery control unit
- Omission of classification of high-voltage battery if no warning messages for the high-voltage battery/system are displayed in the instrument cluster

Actions

- Purchase of additional repair table(s)
- Remove vehicle with removed high-voltage battery from the lifting platform during the repair period (see Quick Start Guide below)
- Removing the high-voltage battery from the high-voltage repair work station during the drying time of the adhesive / fine seam seal (inside the workshop area)
- Start of further high-voltage battery repairs during:

⇒ Performance of insulation resistance measurement (HVE activity)

⇒ Performance of dielectric strength test (HVE activity)

⇒ Application of the fine seam seal

⇒ Drying time of the adhesive/fine seam seal

⇒ Application of corrosion protection

⇒ Performance of the seal test

⇒ Creation of the adhesive log

Actions during HV battery repair

- In parallel with the removal of the cover screws, you can start by opening the battery cover
- Utilization of the specified battery screwdriver for loosening/screwing the cover screws
- Adhere to the waiting times and temperature windows for adhesives and sealants according to Workshop Manual. **Important:** Extended waiting times do not lead to improved results
- Waiting times for fine seam sealing: Drying time of 12 hours is sufficient. **Important:** Extended waiting times do not lead to improved results
- HVE (in classification state “normal”) only necessary for activities inside the opened HV battery housing
- All other work can be carried out under the supervision of the HVE, by instructed/trained technicians of the HV support point (see Workshop Manual: ⇒*Workshop Manual '2X00IN Isolate from power supply during service activities on BEV vehicles'*)

Parking brake:

Information

- **No damage on the body due to movement / transport is to be expected** if the high-voltage battery is removed / not installed
- **Wheel alignment is not necessary** if chassis connection points are not loosened
- The **rolling speed of max. 7 km/h** should not be exceeded

Procedure to “release” the parking brake with removed high-voltage battery using the PIWIS tester

1. Establish readiness for operation (switch on ignition)
2. Release the parking brake in the PCM menu
3. Set transmission control unit in N position via selector lever
4. Set transmission control unit in N position via selector lever

5. Using the PIWIS Tester in the motor electronics (DME) control unit
⇒ Coding programming
⇒ Customer-specific settings
⇒ Block parking lock
⇒ Change status from “not active” to “active” and write with [F8]

Note:
This coding on “active” sets a fault in the motor electronics control unit (DME) and a red warning message is triggered in the instrument cluster

After the repair, the following must therefore be carried out:
1. the coding must be reset to “not active”
2. the fault memory must be deleted