Control Unit for High-Voltage Battery (BMC) Loss of Capacity / Range Implausible: Reset Cell Modules (SY 248/24)

Change overview

Revision	Date	Change
0	02/05/2026	▪ First publication
1	03/04/2026	▪ Test step “Plausibility check of battery capacity” added. ▪ Update to Symptom

Model Line: **Macan (XAB)**

Model Year: **As of 2024**

Concerns: **Cell modules**

Symptom: **The customer complains that the displayed battery level does not match the displayed range and/or detects a significantly reduced DC charging power and cannot trace it back to the respective charging park.**

Remedial Action: If there is a customer complaint, perform a plausibility check of battery capacity and, if necessary, reset the cell modules using the Porsche Tester.

Required tools

Tools
Information:

- **P90999 - P90999 - Porsche 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. **battery charger 90 A**. For further information about the battery chargers to be used, see the corresponding Workshop Manual. ⇒*Workshop Manual '270689 Charging the vehicle electrical system battery'*

Resetting the cell modules using the Porsche Tester

Information

After resetting the cell modules, the high-voltage battery adapts to the "start of life capacity" after the next learning phase.

Work procedure:

1 Create vehicle analysis log (VAL).

1.1 Connect and switch on the battery charger.
⇒*Workshop Manual '270689 Charging battery/vehicle electrical system'*

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

1.3 Connect **P90999 - P90999 - Porsche Tester 4**, establish readiness for operation and start the diagnostic application.

1.4 Mark the created Vehicle Analysis Log (VAL) with the attribute **"Pre-VAL"** and return it using the Porsche Tester after the action is completed.

2 Carry out a plausibility check of the battery capacity according to the instructions of the Porsche Tester.

2.1 Open high-voltage battery control unit **(J1120)**.

2.2 Open **"Maintenance repairs"** menu.

2.3 Select the menu item **"Plausibility check of battery capacity"** and carry it out.

- If **no** abnormalities were found during the plausibility check of the battery capacity, **the action ends**.
- If the plausibility check of the battery capacity results in a deviation, continue with Step 3.

3 Deactivate the high-voltage system.
⇒ *Workshop Manual '931083 Deactivate and activate high-voltage system'*

4 Reset the cell modules using the Porsche Tester.

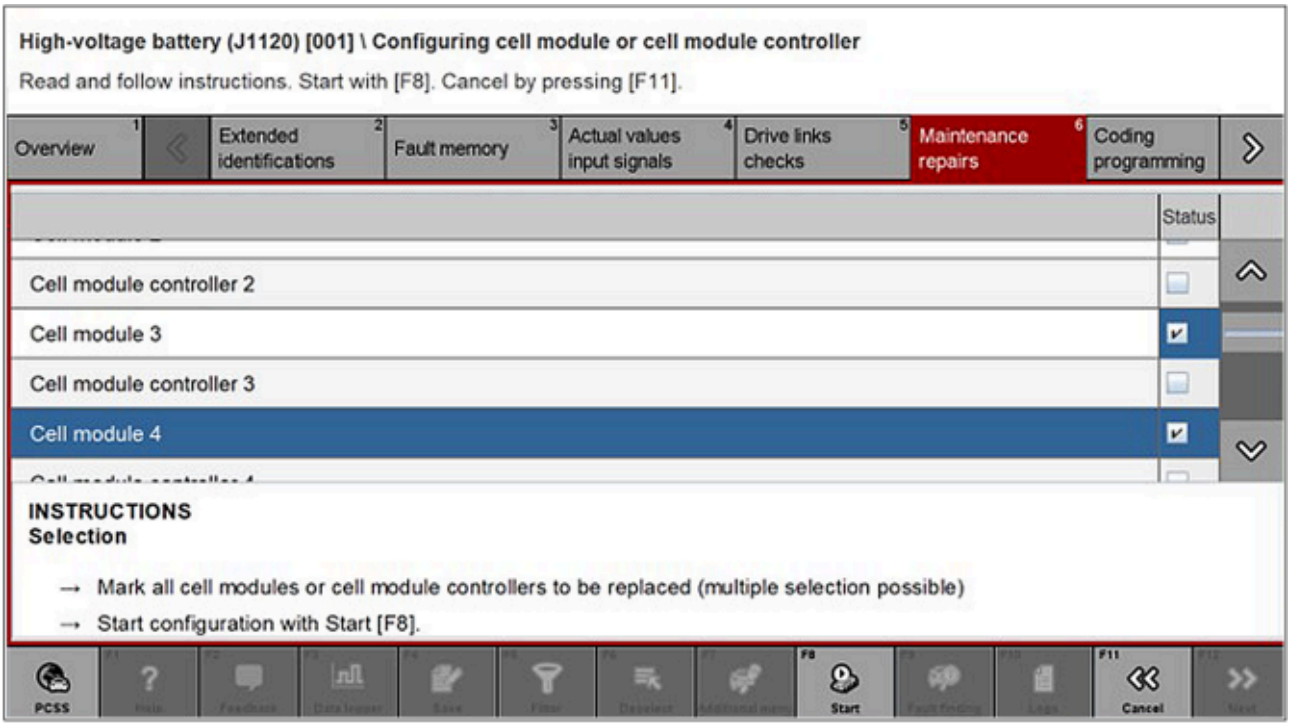
4.1 Select the **"High-voltage battery (J1120)"** control unit in the **"Overview"** control unit selection and confirm your selection by pressing F12 ("Next").

4.2 Select the **"Maintenance repairs"** menu. Then select the **"Configuring cell module and/or cell module controller"** function and confirm by pressing F12 ("Next").

4.3 Follow instructions and information displayed on the Porsche Tester.

4.4 Select **all** 12 cell modules and reset the cell modules by pressing F8 ("Start").

Information
All **12 cell modules** must always be selected.



Selection of cell modules in the Porsche Tester

5 Activate the high-voltage system.
⇒ *Workshop Manual '931083 Deactivate and activate high-voltage system'*

Information

After the high-voltage system has been activated and before the fault memory is deleted, maintain a bus idle of approx. 6 minutes.
Otherwise there is the possibility that the fault memory cannot be deleted.

6 Read out and delete all control unit fault memories.

7 Establish bus idle for at least **1 hour** on the vehicle.

For this purpose:

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

8 Fully charge high-voltage battery after bus idle.

9 Re-establish bus idle for at least **1 hour** on the vehicle.

For this purpose:

- Remove high-voltage charger from the vehicle
- Lock the vehicle
- Place driver's key outside the frequency range of the vehicle

10 Create vehicle analysis log (VAL).

10.1 Connect and switch on the battery charger.
⇒ *Workshop Manual '270689 Charging battery/vehicle electrical system'*

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

10.3 Connect **P90999 - P90999 - Porsche Tester 4**, establish readiness for operation and start the diagnostic application.

10.4 Mark the created Vehicle Analysis Log (VAL) with the attribute **"Post-VAL"** and return it using the Porsche Tester after the action is completed.

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

12 Switch off and disconnect the battery charger.
⇒ *Workshop Manual '270689 Charging the vehicle electrical system battery'*

Labor position and PCSS encryption

Labor position:

APOS	Labor operation	I No.
93252541	Program the high-voltage battery control unit (performing plausibility check of battery capacity)	
93252540	Programming the high-voltage battery control unit (perform cell module reset)	

PCSS encryption:

Location (FES5)	93010	Cell module
Damage type (SA4)	4076	Energy balance too low