

Technical Service Bulletin

| | |
|------------------------|---|
| Topic | 93 Service info: Electrics - high-voltage battery - Q4 e-tron: necessary work steps when replacing high-voltage modules |
| Market area | United States 444 Volkswagen of America, Inc. (6444) |
| Brand | Audi |
| Transaction No. | 2077497/1 |
| Level | EH |
| Status | Released for publishing |
| Release date | Apr 9, 2025 |

New customer code

| Object of complaint | Complaint type | Position |
|--|--|----------|
| information, navigation, communication, entertainment -> malfunction display symbols -> fault display for electric motor | functionality -> activates | |
| entire vehicle -> driving performance, consumption -> range | dimensional accuracy -> too low | |
| vehicle service -> vehicle diagnosis -> Guided Fault Finding (GFF) | control modules, services -> with fault stored in the DTC memory | |
| vehicle service -> inspection, maintenance -> performing a service | service: process -> with complaint confirmation | |
| vehicle service -> inspection, maintenance -> field activity | service: process -> with complaint confirmation | |

Vehicle data

Q4 e-tron

Sales types


| Type | MY | Brand | Designation | Engine code | Gearbox code | Final drive code |
|------|------|-------|-------------|-------------|--------------|------------------|
| F4* | 2022 | A | | * | * | * |
| F4* | 2023 | A | | * | * | * |
| F4* | 2024 | A | | * | * | * |

Control units

| Diagnostic address | Software part number | Software version | Hardware part number | Hardware version |
|----------------------------------|----------------------|------------------|----------------------|------------------|
| 008C - Hybrid battery management | * | 10* | * | * |

Documents

| |
|----------------------|
| Document name |
| master.xml |

 Connection offline

Technical Service Bulletin

Transaction No.: **2077497/1**

93 Service info: Electrics - high-voltage battery - Q4 e-tron: necessary work steps when replacing high-voltage modules

Release date: Apr 9, 2025

Condition

Workshop findings:

A high-voltage module must be replaced on the high-voltage battery as part of repair/maintenance, etc.

Technical Background

If a high-voltage module is replaced, certain steps must be performed to update the build status documentation and, depending on the manufacturer of the high-voltage module, to reconfigure the hybrid management control unit (diagnostic address: 008C).

1. Updating build status documentation (high-voltage module manufacturers LG Chem, CATL and SK)
2. Reconfiguring the hybrid management control unit (only for high-voltage modules from manufacturer LG Chem)

1. Updating build status documentation (high-voltage module manufacturers LG Chem, CATL and SK):

NOTICE

This step applies to high-voltage modules from manufacturers LG Chem, CATL and SK.

Please note that build status documentation must be carried out for the high-voltage modules which are both removed and installed. The build status is documented using ODIS and the scanner -VAS 6161/1a-.

NOTICE

Please note that the scanner -VAS 6161/1a- must first be configured before being used.

Select the following path in ODIS:

- Systems with diagnostic capability
- 008C - Hybrid battery management - J840
- 008C - Hybrid Battery Energy Management - Technical Product Information
- 008C - CarPort BM build status documentation

2. Reconfiguring the hybrid management control unit (only for high-voltage module manufacturer LG Chem):

NOTICE

This step is only necessary for high-voltage modules from manufacturer LG Chem.

- The high-voltage module manufacturer can be found on the type plate of the high-voltage module (see Figure 1, highlighted in green).

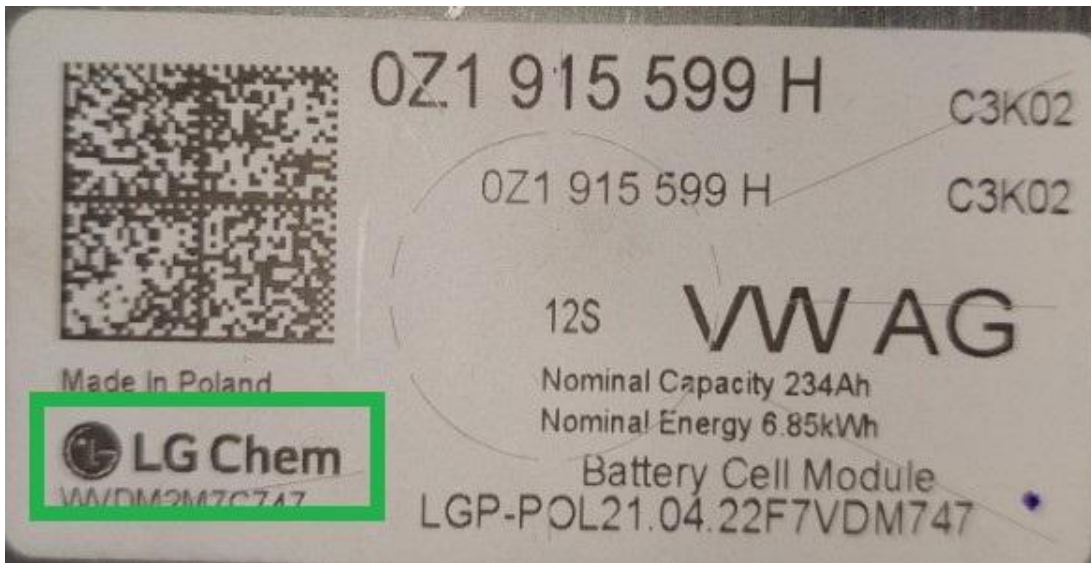


Figure 1. Type plate on the high-voltage module from manufacturer LG Chem.

! NOTICE

The reconfiguration is necessary so that the replaced high-voltage module is not shown as defective when the "AX2 - High-voltage battery 1 - Check cell equalization" test program is run again after a high-voltage module has been replaced. This means that repeat repairs can be avoided.

Step 1: Updating/configuring software (via measure code)

- Connect the battery charger and switch it on.
- Place the vehicle key (remote control) in the center console on the reader coil.
- Switch on the ignition.
- Move driving mode selector to position P.
- Connect ODIS (with online capability) to the diagnostic connector on the vehicle and connect to workshop server.
- In "**Diagnosis**" mode, select the "**Start diagnosis**" function and identify the vehicle.
- Once the control units have been identified, "**Guided Fault Finding**" will start automatically.
- Follow the instructions on the ODIS screen.
- Select the "**Update software**" function in "**Special functions**" mode.
- The software is updated via "**2. Update software via measure code**".
- Enter measure code **8CA013** and confirm.
- Follow the instructions on the ODIS screen for the rest of the program.

Step 2: Activating bus sleep mode

Perform the following work steps in the specified order so that the vehicle is put into bus sleep mode:

- Switch the ignition off.
- Unplug the diagnostic interface from the vehicle diagnostic connection.
- Disconnect battery charger.
- Close the bonnet, boot lid and all doors. Then lock the vehicle from the outside with the vehicle key (remote control). Place the vehicle key (remote control) at least 20 meters away from the vehicle.
- Wait at least 15 minutes for the vehicle to enter bus sleep mode.
- Unlock the vehicle again using the vehicle key (remote control).
- Connect the battery charger and switch it on.
- Plug the diagnostic interface into the vehicle diagnostic connection.
- Switch on the ignition.
- Place the vehicle key (remote control) in the center console on the reader coil.
- Move driving mode selector to position **P**.

Step 3: Updating/configuring software (via measure code)

- Connect to ODIS (with online capability) to diagnostic connector on the vehicle and connect to workshop server.
- In "**Diagnosis**" mode, select the "**Start diagnosis**" function and identify the vehicle.
- Once the control units have been identified, "**Guided Fault Finding**" will start automatically.
- Follow the instructions on the ODIS screen.
- Select the "**Update software**" function in "**Special functions**" mode.
- The software is updated via "**2. Update software via measure code**".
- Enter measure code **8CB013** and confirm.
- Follow the instructions on the ODIS screen for the rest of the program.



NOTICE

Do not yet exit the application after successfully updating/configuring the software.

Step 4: Adapting VKMS and exiting diagnosis



NOTICE

Switch the infotainment system to "offline mode" before performing the test program.

- Turn the ignition off and on.
- Activate vehicle's drive system.
- Switch on the ignition.
- Add the "**VKMS adaptation**" test program to the test plan.
- Select the following points under "**Select own test**":

- “Systems with diagnostic capability”
 - “0025 - Immobilizer”
 - “0025 – VKMS functions”
 - “VKMS adaptation” and attach to the test plan.
- Start the **"VKMS adaptation"** test program.
 - Continue to follow the instructions on the ODIS tester.
 - End the diagnostic session after the test program has been completed. The event memory entries will then be automatically deleted.

Production Solution

Not applicable.

Service

Please review the information in the *Technical Background*.

Warranty

This TSB is informational only and not applicable to any Audi Warranty.

Additional Information

All part and service references provided in this TSB (**2077497**) are subject to change and/or removal. Always check with your Parts Department and/or ETKA for the latest information and parts bulletins. Please check the Repair Manual for fasteners, bolts, nuts, and screws that require replacement during the repair.

©2025 Audi of America, Inc. All rights reserved. The information contained in this document is based on the latest information available at the time of printing and is subject to the copyright and other intellectual property rights of Audi of America, Inc., its affiliated companies, and its licensors. All rights are reserved to make changes at any time without notice. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, nor may these materials be modified or reposted to other sites, without the prior expressed written permission of the publisher.