



93-24-01 - Reduced Range Concern with Yellow Electrical System Error Message with P0BBD

Release date: 3/26/2024

Condition

| Applicable Vehicles |             |           |             |                |              |        |
|---------------------|-------------|-----------|-------------|----------------|--------------|--------|
| Model(s)            | Year        | Eng. Code | Trans. Code | VIN Range From | VIN Range To | PR No. |
| ID.4                | 2021 - 2023 | All       | All         | All            | All          | LX0    |

| Revision Table  |                |                |                       |
|-----------------|----------------|----------------|-----------------------|
| Instance Number | Published Date | Version Number | Reason For Update     |
| 2073298/1       | 3/26/2024      | 93-24-01       | Original publication. |

Customer Concern:

- Electrical system error message (yellow) with the following DTC stored in the Battery Regulation Control Module - **J840**- (diagnostic address 008C):
  - P0BBD00: Hybrid Battery Pack Voltage Variation Exceeded Limit
- A complaint of reduced or dropping range may also be present.

**NOTICE**

If a vehicle presents a range complaint without the above DTC stored in the Battery Regulation Control Module -**J840**- (diagnostic address 008C), then this bulletin does not apply. For concerns relating to the degradation of the total capacity of the high-voltage battery due to aging, refer to Technical Service Bulletin 2071535. For other concerns related to range diagnosis, refer to Technical Service Bulletin 2071494.

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## Technical Background

In some high-voltage batteries there have been cells that demonstrate an increased self-discharge due to a production fault. An increased self-discharge in individual battery cells can lead to a reduction in overall battery capacity, and therefore a reduction of the range of the vehicle.

In the case of a cell module replacement, certain steps must be carried out in order to reset the data in the Battery Regulation Control Module -**J840**- (diagnostic address 008C).

## Production Solution

Improvements made to battery production process CW48/22.

## Service

### ! NOTICE

This procedure applies to vehicles with a Battery Regulation Control Module -**J840**- (diagnostic address 008C) with software version 1041. If the -**J840**- software is at a lower level than 1041, ensure all applicable campaigns are completed to bring the -**J840**- up to software version 1041.

### ! NOTICE

This procedure includes a reset of the data in the Battery Regulation Control Module -**J840**- (diagnostic address 008C). This will prevent the “check cell equalization” test plan (performed in campaign 93P7) from incorrectly identifying cell modules as defective that have already been replaced.

1. Complete the test plan populated in GFF for DTC P0BBD00.
  - Only replace cell module(s) as directed by this GFF test plan’s results, and in accordance with the instructions outlined in the repair manual.
2. Perform GFF > Special Functions > software configuration > via action code > 8CHVHDM1041
3. Perform GFF > Test plan > Select self test > 0019 – Establish bus sleep mode
4. Perform GFF > Special Functions > software configuration > via diagnostic address > 008C
5. Perform GFF > Test Plan > Select self test > 0025 – VKMS adaptation



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## Warranty

Information only.

## Required Parts and Tools

Not applicable.

## Additional Information

All part and service references provided in this Technical Bulletin are subject to change and/or removal. Always check with your Parts Dept. and Repair Manuals for the latest information.