

93-24-01 - Reduced Range Concern with Yellow Electrical System Release date: 3/26/2024 Error Message with P0BBD

## 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

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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.

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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 > <u>8CHVHDM1041</u>
- 3. Perform GFF > Test plan > Select self test > 0019 Establish bus sleep mode
- 4. Perform GFF > Special Functions > software configuration > via diagnostic address > <u>008C</u>
- 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.

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