



93-23-01TT - Reduced Range Concern and/or Yellow Electrical Error Message With P0BBD

Release date: 3/2/2023

Condition

ATTENTION:

**THIS IS A TECH TIP, NOT A TECHNICAL BULLETIN.
TECH TIPS ARE NOT ASSOCIATED WITH WARRANTY CLAIMING.**

Applicable Vehicles

Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To
ID.4	2021 - 2022	All	All	All	All

Revision Table

Instance Number	Published Date	Version Number	Reason For Update
2069432/1	3/2/2022	93-23-01TT	Original publication.

The following customer concerns may be identified:

- Electrical error message (yellow)
 - Stored DTC in 008C: P0BBD00: Hybrid Battery Pack Voltage Variation Exceeded Limit
- Reduced or dropping range with no relevant DTCs stored

Technical Background

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

The range of the vehicle is a complex calculation that accounts for a wide variety of inputs, all of which need to be considered when evaluating a reduced range complaint.

Service

To ascertain whether there is a battery defect contributing to the customer's concern, the following test plan is available through Guided Fault Finding:

- Perform GFF > Test plan > Select self-test > 008C - Check cell equalization
 - Only replace cell module(s) as directed by this GFF test plan's results, and in accordance with the repair manual.
 - If the complaint is only for reduced range without a warning message with DTC P0BBD, and this GFF test plan determines that the high-voltage battery is OK, then no further technical diagnosis should be carried out in accordance with this tech tip.



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It is important to note that range is a function of multiple factors, all of which should be considered and investigated with the customer when evaluating a complaint of reduced range. Some of these factors include (but are not limited to):

- Personal driving habits (e.g. aggressive driving, use of braking mode)
- Environmental conditions (e.g. extreme temperatures, hilly terrain)
- Electrical consumer use (e.g. heat, air conditioning)
- Vehicle conditions (e.g. tire pressure, sources of drag such as roof racks)
- Recharging habits

Additional Information

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