



Technical Service Bulletin: TSB260091

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Traction Inverter HVIL Failure – Inspection Prior to Replacement

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Warranty Statement

The information in this document has no effect on present warranty coverage or repair practices, nor does it authorize TRP or Campaign actions.

Contents

Product Affected

- BES CM0904 EV104B
- BES CM2450 EV105B
- BES CM2450 EV107B
- BES CM2450 EV110B
- BES CM2450 EV111B

Issue Summary

Symptom:

- The traction inverter exhibits a high voltage interlock loop (HVIL) failure.
 - For BES CM0904 EV104B, Fault Code 97 is active
 - For BES CM2450 EV105B, BES CM2450 EV107B, BES CM2450 EV110B, and BES CM2450 EV111B, one or more of the following fault codes are active: FC 8174, FC 8175

Root Cause:

- The HVIL loop includes a 2A-rated HVIL circuit within the traction inverter.
- If the HVIL loop experiences a short to ground, the traction inverter HVIL circuit will fail first because of the current capacity rating of 2A.
- This failure can be misinterpreted as an internal traction inverter fault when the actual root cause is external to the traction inverter.

Verification

When a traction inverter fails HVIL, inspect the HVIL loop for a short to ground.

Resolution

- If there is a short to ground condition in the HVIL loop, do **not** immediately replace the traction inverter.
- Isolate and inspect sections of the loop to determine the root cause of the HVIL failure.
 - Repair the identified issue and verify the HVIL circuit.
 - If no root cause is identified, follow the direction provided by 1-800-CUMMINS, or use the local technical escalation process.

Document History

Date	Details
2026-6-22	Module Created
2026-6-23	Fixed minor formatting error in TSB content.

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