STELLANTIS
PARTS & SERVICES

Technical Service Bulletin (TSB)
High Voltage Wiring Repair

REFERENCE:	**TSB:** 08-082-25 REV. A **GROUP:** 08 - Electrical	**Date:**	April 12, 2025	**REVISION:**	08-082-25
VEHICLES AFFECTED:	**2021 - 2024 (JL) Jeep Wrangler** **This bulletin applies to vehicles equipped with the 2.0L I4 DOHC DI Turbo PHEV Engine (Sales Code ECX) **and China Country Code (Sales Code 8BL)**.**			**MARKET APPLICABILITY:** ☐ NA ☐ MEA ☐ SA ☐ IAP ☐ EE ☒ CH	
CUSTOMER SYMPTOM:	**Customers must experience a Malfunction Indicator Lamp (MIL) illumination and the vehicle must exhibit/set one or more of the following Diagnostic Trouble Codes (DTCs):** • B273C-00 - Digital Crash Input. • U0287-00 - Lost Communication With Transmission Fluid Pump Module 1. **Customers may also experience one or more of the following:** • Vehicle shakes during a cold start. • Noise is heard from the underbody near the P2 motor.				
CAUSE:	**Water intrusion**				

This bulletin supersedes Technical Service Bulletin (TSB) 08-082-25, date of issue March 21, 2025, which should be removed from your files. All revisions are highlighted with **asterisks and include a new sales code.**

REPAIR SUMMARY:

This bulletin involves repairing the High Voltage (HV) cable harness to the Power Inverter Module (PIM).

CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
08-90-16-CH	P2 Motor Harness Disassembly and Assembly (0 - Introduction)	6 - Electrical and Body Systems	6.7 Hrs.
08-90-16-CR	Repair Plug Connected To The P2 Motor, Remove Tie Band + Clean (0 - Introduction)	6 - Electrical and Body Systems	7.5 Hrs.
08-90-16-CN	Repair Plug Connected To The PIM Motor, Remove Tie Band + Clean (0 - Introduction)	6 - Electrical and Body Systems	7.5 Hrs.
Failure Codes	ZZ	Service Action	

SPARE PARTS:

Qty	Part No.	Description	Notes
(AR)	NPN	Electrical Tape	-
(AR)	NPN	Darbond 2598 Sealing Compound	-
2	111-01190	HellermannTyton	Zip Ties
(AR)	EC0132	Enient Specialist Contact Cleaner	

DIAGNOSIS:

If the customer describes the symptom/condition above, perform the repair procedure.

SPECIAL TOOLS/EQUIPMENT:

Description	Ref. No.	Notes
HellermannTyton EVO7	NPN	Tension Tool
wiTECH or Equivalent	-	-
Wire Brush	NPN	-

REPAIR PROCEDURE:

NOTE: Prior to performing the repair, refer to all applicable published Star Online documents before performing this Repair Procedure.

NOTE: Perform the Repair Procedure unless damage is found. If damage is found, replace the HV cable harness.

1. Remove the PIM to Transmission HV cable harness Fig. 1. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: Service Info> 12 - Electrified Powertrain System / High Voltage Battery / Cables / Removal and Installation.

Fig. 1
HV Cable Harness

2. Inspect the PIM to P2 HV cable harness for rub through or damage near the transmission driveshaft CV joint shield.

3. Is the HV cable harness damaged or rubbed through near the transmission driveshaft CV joint shield?
4. ● YES>>> Replace the PIM to Transmission HV cable harness. Proceed to Step 17.
   ● NO>>> Proceed to Step 5.
5. Using a suitable protective cover and tape, protect both ends of the HV cable harness connectors to prevent dust and contaminants from entry Fig. 2.
6. Remove the plastic zip tie on the HV cable harness connector rubber sleeve Fig. 2.

Fig. 2
HV Cable Harness Connectors

1 - HV Cable Harness Connecter Zip Ties

7. Fold the rubber sleeve backward to its maximum position to expose the metal mesh shielding Fig. 3.

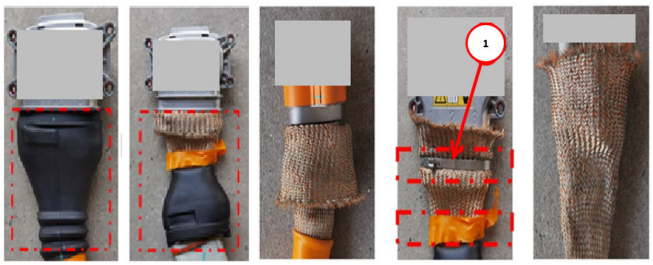

Fig. 3
HV Cable Harness Exposed Metal Mesh Shielding

1 - Metal Clamp

8. Remove the tape from the shielding layer and remove the metal clamp, then stretch the mesh shielding layer up forward Fig. 3.
9. Using compressed air, thoroughly clean the shielding layer and the HV wires from contaminants, oxides, and moisture.

NOTE: The shielding layer and surface must be clean of any debris and contaminants before proceeding to Step 10.

10. Fold the shielding layer and HV wires and make maximum exposure of the groove Fig. 4.

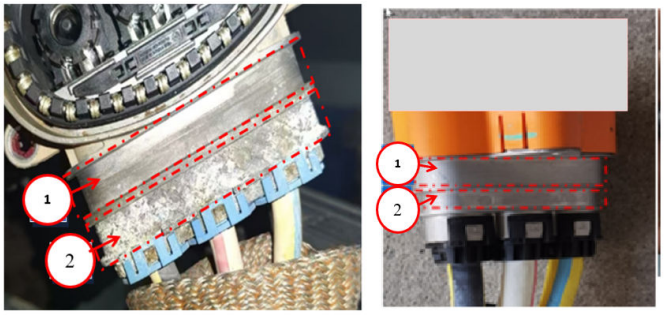

Fig. 4
HV Cable Harness Connector Grooves Exposed

1 - Zone A Groove
2 - Zone B Groove

11. Use the wire brush to thoroughly clean the HV cable harness connector end of oxidation and dust in Zone A and Zone B Fig. 4.

    (Optional) Chemical assist removal:

    a. Evenly spray ENIENT EC0132 (natural rust remover) on the oxidized and rusted parts of the HV cable harness connector. For hard to reach spots like grooves and gaps with severe rust, use a soft brush dipped in the rust remover to ensure full contact with the oxidized and rusted layer.
    b. Wait three to five minutes or more for full chelation and dissolution of the oxidation to occur.
    c. After oxidation dissolution, wipe and clean the surface of the dissolved oxidization and any residual cleaning material. Dry the surface with a soft cloth or towel. **DO NOT** allow this to air dry. An air compressor gun can also be used expedite the drying of the surfaces.

    (Optional) Mechanical grinding:

    a. If the oxidization is too severe and cannot be cleaned, sand polish the groove, **(DO NOT over polish)**.
    b. Use the air compressor gun to blow away the dust and make the area clean.

12. Put back the metal mesh shielding layer around the HV cable harness connector and use the original metal clamp to secure the connector and shielding layer. Wrap with electrical tape Fig. 5.

Fig. 5
Proper HV Cable Harness Connector Mesh And Clamp Positioning

13. Apply Darbond 2598 sealing compound evenly around the tightening area between the HV cable harness connector and the rubber sleeve in Zone A Fig. 4 and Fig. 6.

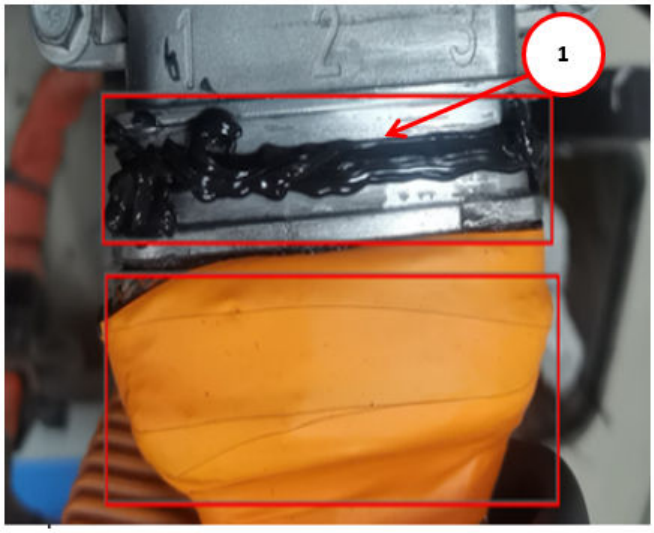

Fig. 6
HV Cable Harness Connector Sealed Using Darbound 2598
1 - Sealed HV Cable Harness Connector

14. Reattach the rubber sleeve and secure it within 15 minutes of applying the sealing compound and tighten the plastic cable tie using the HellermannTyton EVO7 tool to 225 N·m (166 Ft. Lbs.). Repeat the same process for the other end connector of the HV cable harness Fig. 7.

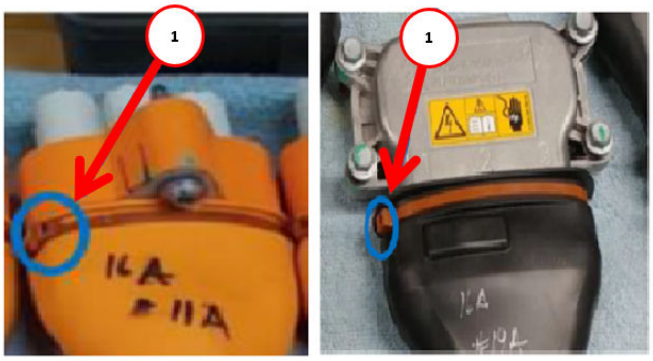

Fig. 7
HV Cable Harness Connector Sleeve With Cable Tie
1 - Plastic Cable Tie Position On Connector

NOTE: Ensure the zip tie head is positioned on the connector side and thoroughly wipe away any excess compound.

15. After applying the sealer compound, it is necessary to wait for at least 24 hours to let the compound cure and achieve a better sealing effect. **DO NOT** touch or move the sealed area during this period. (Curing time need be extended to 48 hours in an environment with high humidity or cold temperatures).
16. Remove the plastic bags and tape used to protect the joints on both end HV cable harness connectors.
17. Install the PIM to Transmission HV cable harness. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: Service Info> 12 - Electrified Powertrain System / High Voltage Battery / Cables / Removal and Installation.

NOTE: Remind the customer to park the vehicle for two days if possible after picking it up and avoid driving on harsh road conditions within two days.

18. Clear DTCs.

POLICY:

Reimbursable within the provisions of the warranty.