

Technical Service Bulletin (TSB)
Incorrectly Routed Wheel Speed Sensor Wiring

REFERENCE:	TSB: 05-003-25 GROUP: 05 - Brakes	Date:	July 11, 2025	REVISION:	–
VEHICLES AFFECTED:	2025 (DP) RAM 4500/5500 Cab Chassis This bulletin applies to vehicles built on or after February 05, 2025 (MDH 0205XX) and on or before March 31, 2025 (MDH 0331XX) equipped with a 6.4L V8 HEMI Upgrade HD Engine (Sales Code ESL).			MARKET APPLICABILITY: <input checked="" type="checkbox"/> NA <input type="checkbox"/> MEA <input type="checkbox"/> SA <input type="checkbox"/> IAP <input type="checkbox"/> EE <input type="checkbox"/> CH NOTE: This bulletin applies to North America markets.	
CUSTOMER SYMPTOM:	Customers must experience a Malfunction Indicator Lamp (MIL) illumination and the vehicle must exhibit/set the following Diagnostic Trouble Code (DTC): <ul style="list-style-type: none"> • C0031-1D - Left Front Wheel Speed Sensor - Circuit Current Out Of Range. Customers may comment on one or more of the following: <ul style="list-style-type: none"> • Brake warning indicator illuminated on the Instrument Panel Cluster (IPC). • Electronic Stability Control (ESC) indicator is illuminated. 				
CAUSE:	Wiring not routing correctly				

This Technical Service Bulletin (TSB) has also been released as a Rapid Service Update (RSU) 25-129, date of issue July 11, 2025. All applicable RSU VINs have been loaded. To verify this RSU service action is applicable to the vehicle, use VIP or perform a VIN search in DealerCONNECT/Service Library. All repairs are reimbursable within the provisions of warranty.

REPAIR SUMMARY:

This bulletin involves inspecting the wheel speed sensor wiring routing and correcting the routing as needed.

CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
08-14-18-9J	Sensor, Wheel Speed - Inspect (1 - Semi-Skilled)	5 - Brakes	0.4 Hrs.
08-14-18-9K	Sensor, Wheel Speed - Inspect and Repair (1 - Semi-Skilled)	5 - Brakes	0.6 Hrs.
Failure Codes	ZY	Service Action	

DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in DealerCONNECT/ Service Library, verify all related systems are functioning as designed. If DTCs or symptom conditions, other than the ones listed above are present, record the issues on the repair order and repair as necessary before proceeding further with this bulletin.

If a customer's VIN is listed in VIP or your RSU VIN list, perform the repair. If any vehicle not on the VIN list exhibits any of the symptom listed above in the customer symptom section, perform the Repair Procedure.

SPECIAL TOOLS/EQUIPMENT:

Description	Ref. No.	Notes
wiTECH or Equivalent	-	-

REPAIR PROCEDURE:

1. Remove the left front wheelhouse splash shield to gain access to the wheel speed wiring harness inspection area [Fig. 1](#). Refer to the detailed service procedures available in DealerCONNECT/Service Library under: Service Info> 23 - Body / Exterior / Shield, Splash, Front Wheelhouse / Removal.

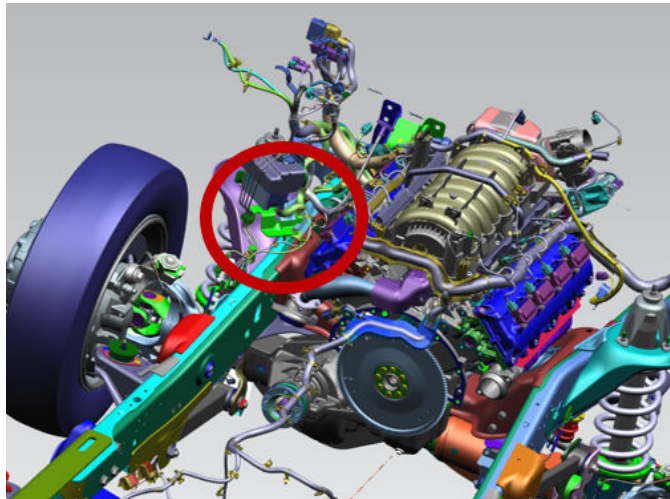


Fig. 1
Inspection Area

2. Turn the steering wheel full lock to the left [Fig. 2](#).



Fig. 2
Left Front Wheel Fully Turned

3. Inspect the wheel speed sensor wiring and wiring clips for proper routing [Fig. 3](#).

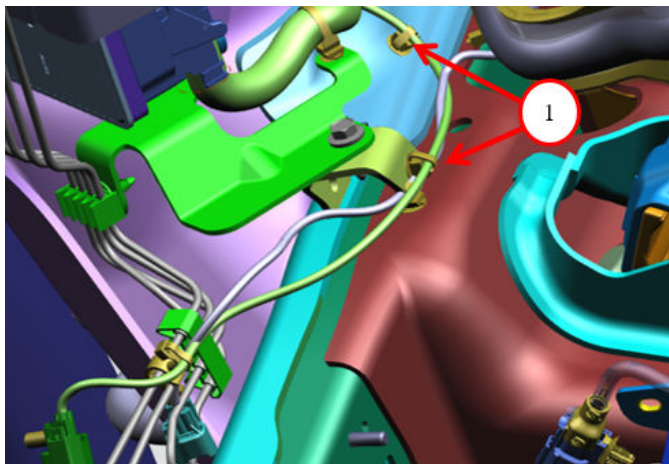


Fig. 3
Wheel Speed Sensor Wiring Routing

1 - Incorrectly Routed Wheel Speed Sensor Wiring And Clips

4. Is the wheel speed sensor wiring routed correctly [Fig. 3](#)?
 - YES>>> Use Inspection LOP (08-14-18-9J) to close the active RSU and proceed to [Step 15](#).
 - NO>>> Proceed to [Step 5](#).

5. Disconnect the Anti-Lock Brake System (ABS) wire harness connector [Fig. 4](#).

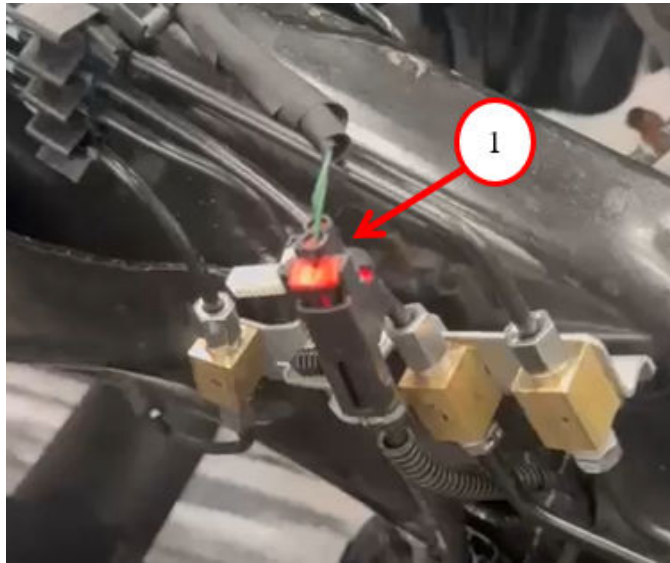


Fig. 4
ABS Wire Harness Connector

1 - ABS Wire Harness Connector

6. Remove the wheel speed sensor wiring clips and inspect the wires for damage between the wire insulation and the harness connector [Fig. 5](#).



Fig. 5
Area To Inspect For Damaged Wiring

7. Is the wheel speed sensor wire damaged between the wire insulation and the harness connector?
- YES>>> Proceed to [Step 8](#).
 - NO>>> Proceed to [Step 9](#).
8. Cut the circuit and replace the damaged section of wiring between the wire insulation and the harness connector.
9. Remove the terminal from the harness connector and solder to the rear section with heat shrink.
10. Install the terminal back to the harness connector.

11. Install the wiring clip 55mm. (2.0 in.) from the back of the harness connector [Fig. 6](#).

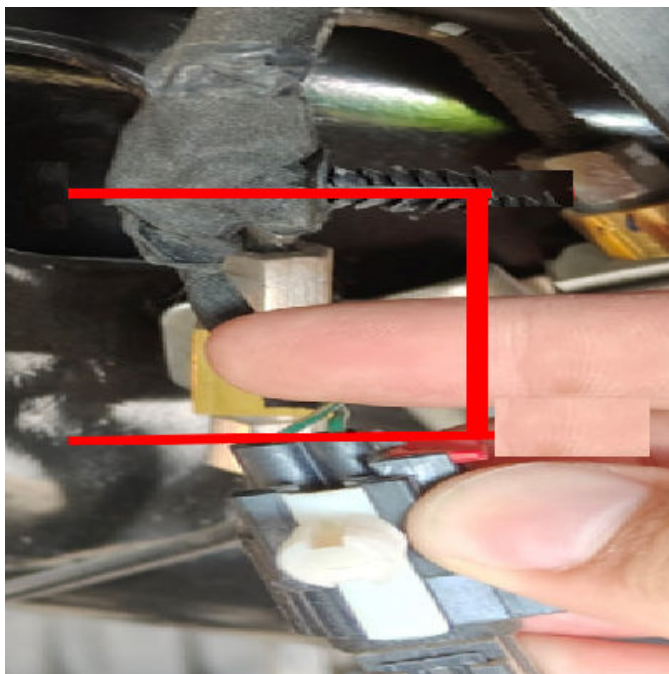


Fig. 6
Install Clip

12. Install the harness connector with the new wiring clip to the existing hole FIG. Confirm that the clip is located in the correct hole [Fig. 7](#) and [Fig. 9](#).

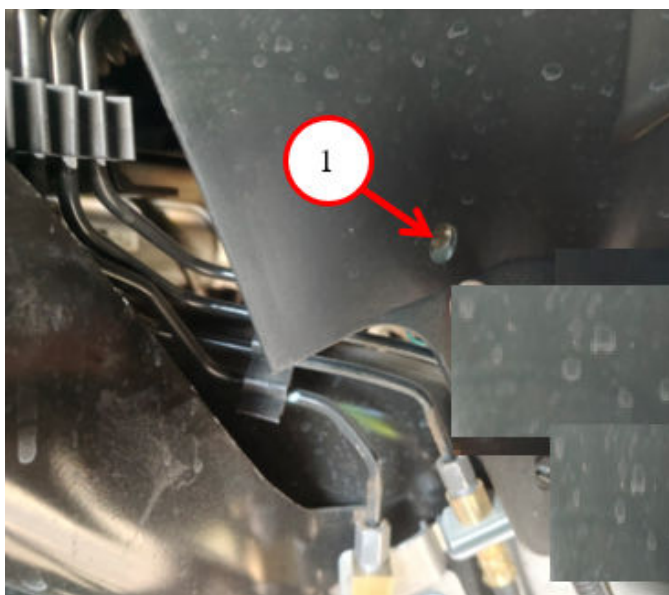


Fig. 7
Existing Wiring Clip Hole

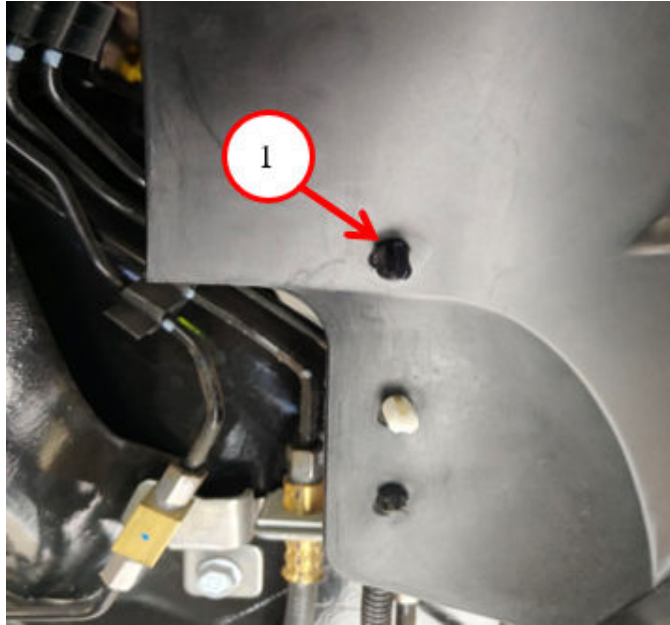


Fig. 8

Back Of Existing Wiring Clip Hole To Confirm Proper Installed Location

13. Connect the ABS wire harness connector [Fig. 4](#).
14. Install the left front wheelhouse splash shield. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: Service Info> 23 - Body / Exterior / Shield, Splash, Front Wheelhouse / Installation.
15. Clear DTCs.

POLICY:

Reimbursable within the provisions of the warranty.

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