STELLANTIS
PARTS & SERVICES

Technical Service Bulletin (TSB)

Camshaft Sensor DTC

REFERENCE:	**TSB:** 08-099-25 **GROUP:** 08 - Electrical 09 - Engine	**Date:**	April 4, 2025	**REVISION:**	—
VEHICLES AFFECTED:	**2022 - 2023 (JL) Jeep Wrangler** **2022 - 2023 (JT) Jeep Gladiator** **This bulletin applies to vehicles equipped with 3.0L V6 Turbo Diesel Engine W/ESS (Sales Code EXJ).**			**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 the following Diagnostic Trouble Code (DTC):** • P0341 - Camshaft Position Sensor - Performance Bank 1 - Sensor 1.				
CAUSE:	**Electromagnetic Interference on camshaft sensor due to mis-routed wiring**				

REPAIR SUMMARY:

This bulletin involves repairing the cam sensor harness and re-routing the generator wiring.

CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
08-15-79-97	Sensor, Camshaft - Repair Harness (0 - Introduction)	6 - Electrical and Body Systems	1.0 Hrs.
Failure Code	ZZ	Service Action	

SPARE PARTS:

Qty	Part No.	Description	Notes
1	68726700AA	Twisted pair overlay for camshaft sensor	
2	68144210AA	Generator cable tie straps	
1	NPN	Electrical Tape	

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 the customer describes any of the symptoms listed above in the customer symptom section, perform the Repair Procedure.

SPECIAL TOOLS:

Description	Ref. No.	Notes
wiTech or equivalent	-	-
Multimeter	-	-

REPAIR PROCEDURE:

1. Disconnect negative battery cable. Refer to the detailed service procedures listed in DealerCONNECT> Service Library> Service Info under: 08 - Electrical / 8F - Engine Systems / Battery System / Standard Procedure.
2. Disconnect battery positive cable from generator Fig. 1.
3. Remove stud clip, two C-Clips and fir tree clip from harness (four clips) Fig. 1.

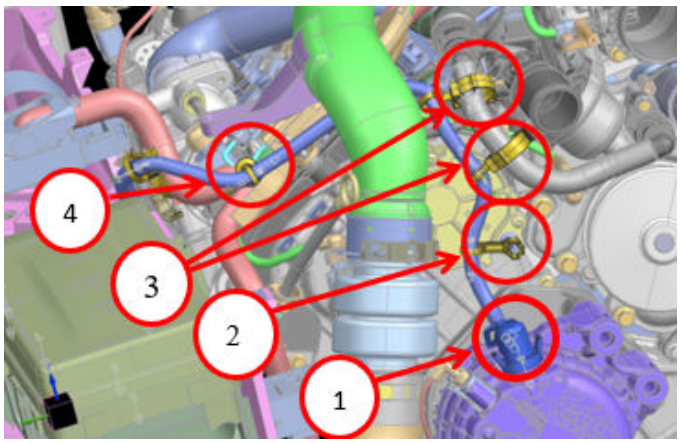

Fig. 1
generator Field Harness

1 - Generator B+ Connector
2 - Stud Clip
3 - C - Clips
4 - Fir Tree Clip

4. Re-route generator positive harness around the Charge Air Cooler (CAC) inlet hose and secure with two tie straps to brake booster vacuum hose Fig. 2.

   NOTE: Ensure harness is not in contact with sharp edges.

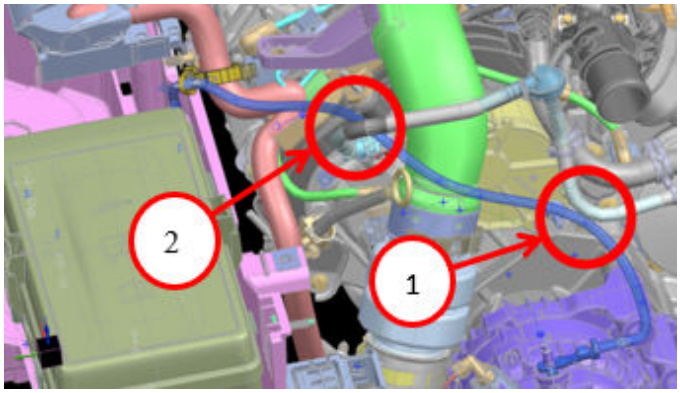

Fig. 2
Re-Routed Harness

1 - Re-routed Harness
2 - Brake Booster Vacuum Hose

5. Reconnect battery positive cable to generator in new orientation (facing vehicle left) Fig. 3.

   NOTE: Ensure there is no excess slack and at least 25mm (1 in.) clearance to radiator fan shroud to any point of the generator positive cable harness.

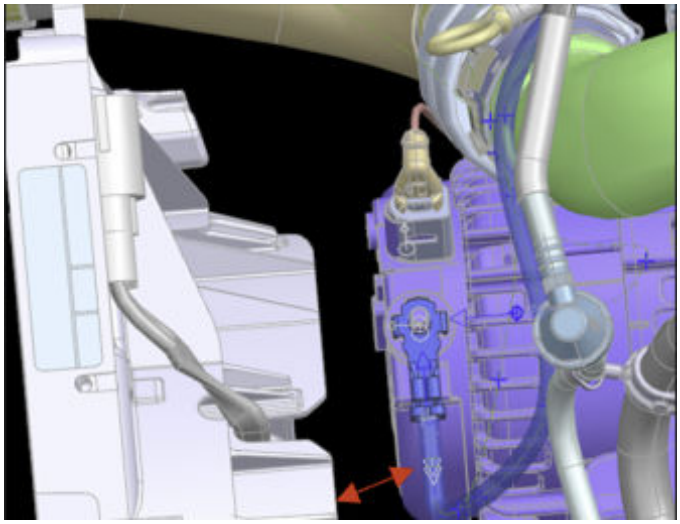

Fig. 3
Harness Wiring Orientation

6. Disconnect the Powertrain Control Module (PCM) C2 connector at the PCM.
7. Remove the tie strap on the C2 harness trough Fig. 4.
8. Remove the clip Raymond on C2 harness Fig. 4.
9. Remove the tape on C2 harness Fig. 4.
10. Extract the terminals from the Camshaft Sensor 3W connector Fig. 4.

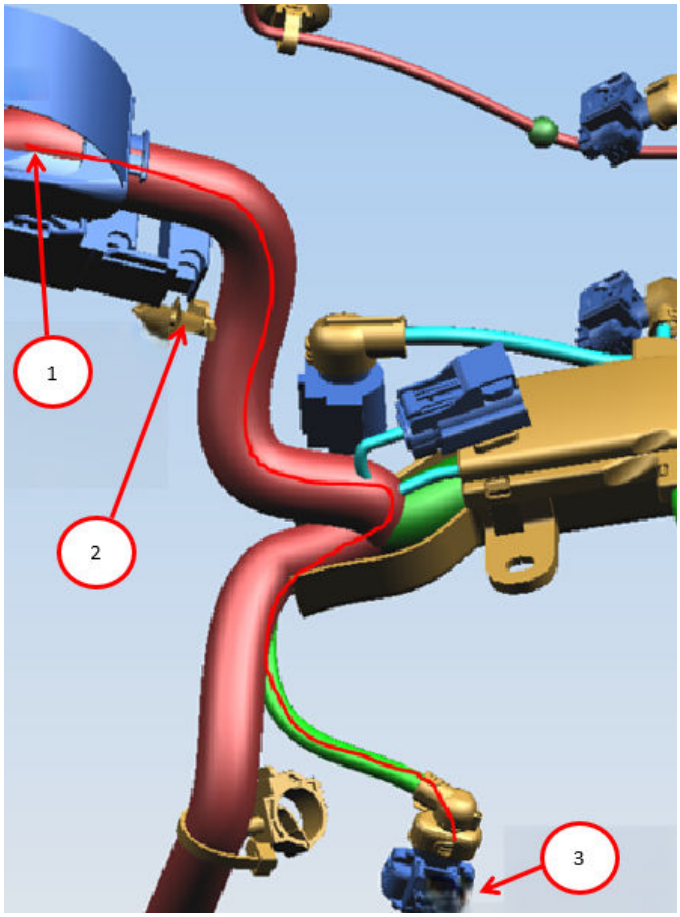

Fig. 4
Cam Sensor Wiring harness

1 - PCM C2 Connector
2 - Clip Raymond
3 - Camshaft Sensor Harness connector

11. Locate pins 37, 52 and 51 of the PCM C2 connector Fig. 5.

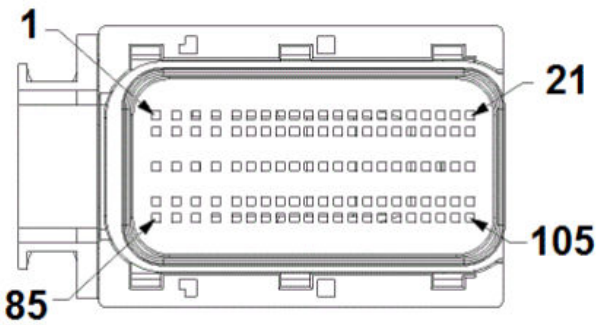

Fig. 5
PCM C2 Connector

12. Trace and cut wires 37, 52 and 51 at different positions to avoid solder points in the same area.

13. Strip the wires and solder to the with twisted pair jumper kit using the solder sleeves included in the kit (refer to the kit instructions).
14. Insert kit harness terminals inside the original Camshaft Sensor 3W connector.
15. Tape the harness back up.
16. Fix clip on PCM C2 branch and use a tie strap on the trough to hold the harness within the trough.
17. Reconnect the PCM C2 connector at the PCM.
18. Reconnect the negative battery cable. Refer to the detailed service procedures listed in DealerCONNECT> Service Library> Service Info under: 08 - Electrical / 8F - Engine Systems / Battery System / Standard Procedure.
19. Perform an eletrical pin-to-pin test with multimeter to confirm the eletrical continuity Fig. 6.

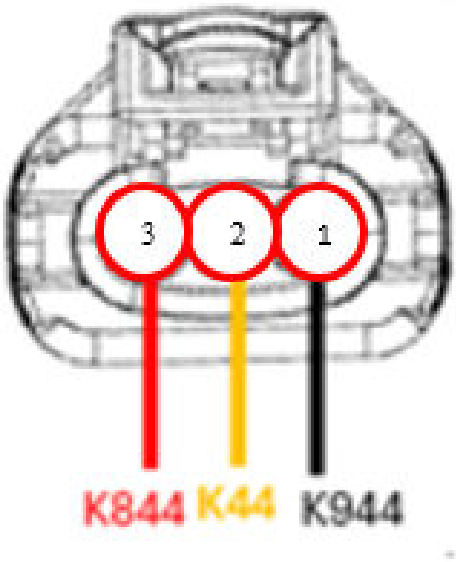

Fig. 6
Camshaft Sensor Harness End

1 - Pin 1
2 - Pin 2
3 - Pin 3

- With ECU connector inserted and KEY-OFF – measure with an ohmmeter set to Ohms.
  - Pin 2 to Pin 1 (SIGNAL Out to SIGNAL/SUPPLY negative) = OL.
  - Pin 2 to Pin 3 (SIGNAL Out to SUPPLY) = OL.
- With ECU connector inserted and KEY-ON – measure with a voltmeter, at least 100 mV resolution.
  - Pin 2 to Ground (SIGNAL Out) = Around 4.6 V.
  - Pin 3 to Ground (SUPPLY) = 5 V.
  - Pin 1 to Ground (SIGNAL and SUPPLY negative) = 12 V.

20. Turn the key off and reconnect the cam sensor haness connector.
21. Clear all DTCs that may have been set in any module.

POLICY:

Reimbursable within the provisions of the warranty.