

NUMBER: 08-043-18

GROUP: 08 - Electrical

DATE: March 20, 2018

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SUBJECT:

Transmission Control Module (TCM) Harness Damaged from Heat Shield

OVERVIEW:

This bulletin involves rerouting the TCM harness away from a heat shield, possibly repairing it if damaged and adding a protective wire harness cover.

MODELS:

2015 - 2017 (WK)

Jeep Grand Cherokee

- NOTE: This bulletin applies to vehicles within the following markets/countries: NAFTA and EMEA.
- NOTE: This bulletin applies to vehicles built on or after May 01, 2014 (MDH 0501XX) on or before July 24, 2017 (MDH 0724XX) equipped with a 3.0L V6 Turbo Diesel Engine (Sales Codes EXF or EXN) and a 8-SPD Auto 845RE Trans or a 8-SPD Auto 8HP75 Trans (Sales Codes DFL or DFV).

SYMPTOM/CONDITION:

Customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find the following Diagnostic Trouble Code (DTC) has been set:

• C2200-49 - Anti-Lock Brake Module Internal - Internal Electronic Failure (MY17 WK Only).

The customer may also experience one or more of the following:

- The transmission will not shift out of Park.
- A no crank or no start condition.
- The Instrument Panel Cluster (IPC) or PRNDL lights flashing on and off.

DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, 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 the symptom/condition listed above, perform the Repair Procedure.

PARTS REQUIRED:

Qty.	Part No.	Description
1	68405966AA	Repair Kit

NOTE: The repair kit contains wires and heat shrink for wiring harness repairs.

REPAIR PROCEDURE:

- Raise and support the vehicle. Refer to the detailed service procedures available in DealerCONNECT> TechCONNECT under: Service Info> 04 - Vehicle Quick Reference> Hoisting> Standard Procedure.
- Remove the transmission skid plate. Refer to the detailed service procedures available in DealerCONNECT> TechCONNECT under: Service Info>13 - Frame and Bumpers/Under Body Protection/Plate, Skid, Transmission/Removal.
- 3. Support the transmission with a suitable jack.
- 4. Remove the two transmission crossmember mount nuts.
- 5. Remove the six transmission crossmember bolts.
- 6. Remove the transmission crossmember.
- 7. Remove the TCM connector from the rear of the transmission assembly (Fig. 1).



Fig. 1 TCM Wiring Harness - Disconnected

8. Disconnect the green Diesel Particulate Filter (DPF) Exhaust Gas Temperature (EGT) sensor connector (Fig. 2) .

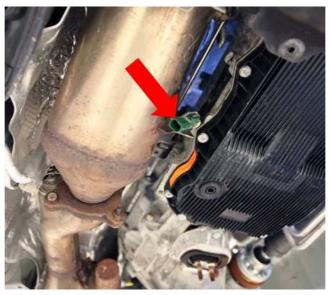


Fig. 2 Green EGT Connector

- 9. Disconnect the TCM wiring harness from two fasteners.
- 10. Reposition the TCM wiring harness up and over the transmission assembly to the left side of the vehicle in order to allow adequate room to perform the repair (Fig. 3).



Fig. 3 TCM Wiring Harness On Left Side Of Transmission

- 11. Is the TCM wiring harness damaged from contact with the heat shield (Fig. 4) ?
 - YES>>> Repair the wiring harness. Refer to the detailed service procedures available in DealerCONNECT> TechCONNECT under: Service Info>29 Non-DTC Diagnostics/Circuit Testing Procedures/Standard Procedure. Then proceed to Step 12.
 - NO>>> Proceed to Step 12.

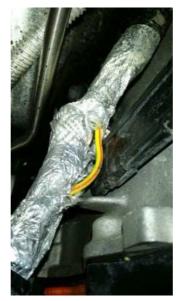


Fig. 4 TCM Wiring Harness Damage

12. Remove and discard fastener #20098 (If Equipped) (Fig. 5).

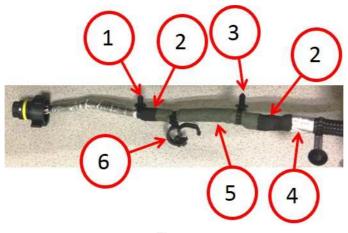


Fig. 5 TCM Wiring Harness Final Assembly

- 1 Do Not Cover This Fastener With Reflective Tape
- 2 Ends To Wrap With Reflective Tape
- 3 #20098 Fastener To Cut Off And Discard (If Equipped)
- 4 End Of Loom
- 5 Twist Tube
- 6 C-Clip To Remove And Save
- 13. Cut the C-clip zip tie that holds the C-clip to the wiring harness (Fig. 5) . Save the C-clip to re-use.
- 14. Starting from where the wire loom ends, slide the Twist Tube over the original reflective tape on the wiring harness (Fig. 5).

15. Install the C-clip from Step 13, 80 mm (3.1 in.) from the fastener closest to the wiring harness connector with a new zip tie on the wiring harness (Fig. 6). Make sure the C-clip is positioned 90° from the other two fasteners (Fig. 5).



Fig. 6 Spacing For Fasteners

16. NOTE: If the wiring harness did not have a fastener with zip tie cut and discarded in Step 12 a new fastener with zip tie must still be installed to help secure the twist tube

to the wiring harness.

Install new fastener #20098 on wiring harness 50 mm (1.9 in.) (Fig. 6) from the fastener closest to the wiring harness connector to the replaced fastener cut and discarded in Step 12. Make sure the fastener is 180° from the offset clip (Fig. 5).

17. Using reflective tape, wrap tape to cover the twist tube at each end (Fig. 7) . **DO NOT** cover any fasteners with tape.



Fig. 7 Correct And Final assembly

- 18. Reposition the TCM wiring harness up and over the transmission assembly and to the right side of the vehicle.
- 19. NOTE: Ensure all heat shields are routed away from the TCM wiring harness. Connect the wiring harness on three fasteners. On some vehicles the third fastener can't be connected.
- 20. Install the TCM connector on the rear of the transmission assembly.
- 21. Install the transmission crossmember.
- 22. Install the six transmission crossmember bolts.
- 23. Install the two transmission crossmember mount nuts.
- 24. Remove the transmission jack.
- 25. Install the transmission skid plate. Refer to the detailed service procedures available in DealerCONNECT> TechCONNECT under: Service Info>13 Frame and Bumpers/Under Body Protection/Plate, Skid, Transmission/Installation.
- 26. Lower the vehicle.
- 27. Using wiTECH clear any DTCs that may have been set.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
08-91-CF-90	Transmission wiring Harness, Inspect and Verify Routing (2 - Skilled)	6 - Electrical and Body Systems	1.2 Hrs.

RELATED LOPS:

Labor Operation No:	Description	Skill Category	Amount
08-91-CF-50	Transmission wiring Harness, Repair One to Two Wire Circuits (2 - Skilled)	6 - Electrical and Body Systems	0.1 Hrs.
08-91-CF-51	Transmission wiring Harness, Repair Three to Four Wire Circuits (2 - Skilled)	6 - Electrical and Body Systems	0.2 Hrs.

FAILURE CODE:

	ZZ	Service Action
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