



## **SERVICE CAMPAIGN**

### **CONVENTIONAL TRANSMISSION JUMPER HARNESS REPLACEMENT**

CAMPAIGN NO: M0370

DATE: 11-2-2022

REFERENCE NO: QA-220909-N1

**SUBJECT VEHICLES:** Certain 17MY-20MY Conventional trucks equipped with a J08 engine.

**Note:** *Refer to the appropriate Vehicle Identification Number in the warranty system to determine vehicle eligibility.*

## **OVERVIEW:**

Certain 2017 ~ 2020 model year Hino Conventional vehicles were manufactured with a modified jumper harness between the Transmission Control Module (TCM) and vehicle chassis. The modified jumper harness may allow for potential water intrusion of the modified jumper harness. Water intrusion may cause illumination of the check transmission light on the dashboard. If the illuminated check transmission light is ignored, the transmission may go into fail-safe (or “limp” mode as it is also called) to protect the transmission from internal damage that could be caused by the fault. While in fail-safe (or limp mode) the transmission will be locked in either 3rd. or 4th. gear. This procedure will provide instruction for replacement of the transmission jumper harness.

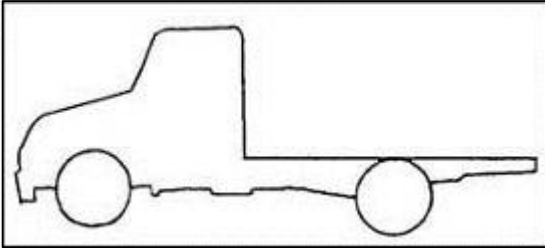
## **BEFORE YOU BEGIN:**

- Read and understand all instructions and procedures before you begin the work.
- Read and follow all **NOTICES** and **WARNINGS** set forth in this publication. These alerts help to avoid damage to components, serious personal injury, or both.
- Park the vehicle on a flat, level and solid surface.
- Apply the parking brake firmly and confirm parking brake activation.
- Turn off the engine and remove the key from the ignition switch.
- Always wear safety glasses or goggles to protect your eyes.
- Place wheel chocks in front of and behind all the wheels to prevent the vehicle from moving.



## VEHICLE PREPARATION:

1. Park the vehicle on a level and solid surface. Confirm the engine is stopped, the starter switch is in the off (LOCK) position, and the key is removed.



2. Apply the parking brake. Chock all of the wheels.

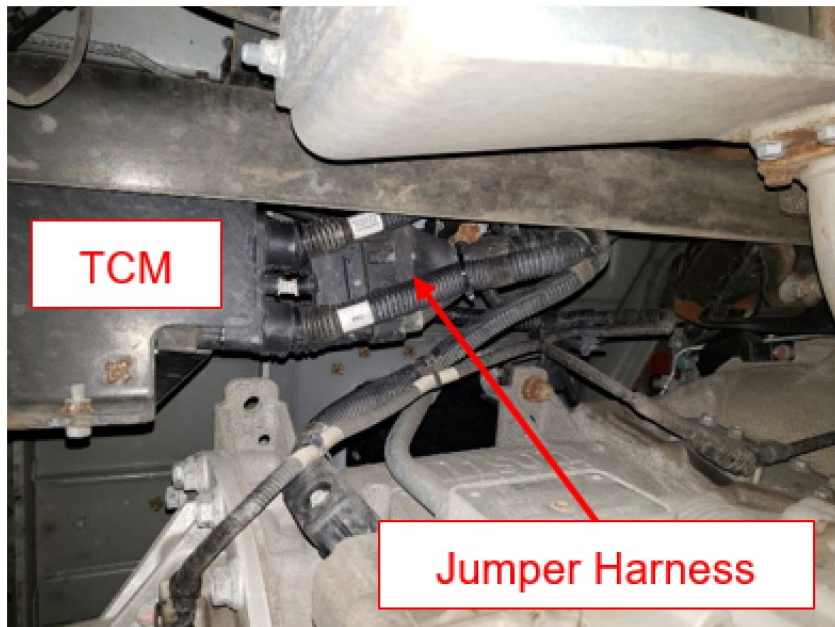


## Parts:

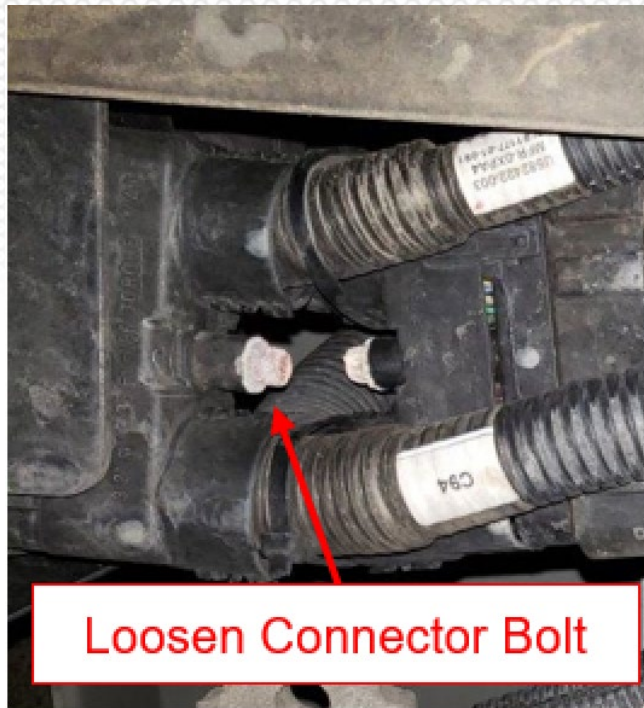
PART NUMBER	PART DESCRIPTION	QUANTITY
US82125-001	JUMPER HARNESS	1
S827111310	HARNESS CLIP	1
HN001234305	RUBBER CAP	2

## Repair Procedure:

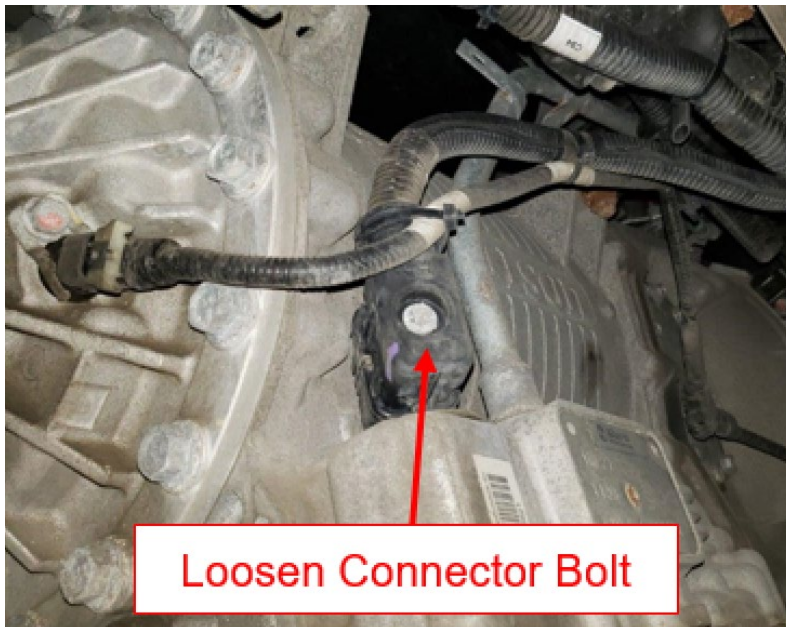
1. Working on the right-hand side of the transmission from under the vehicle, locate the jumper harness that connects between the transmission control module (TCM) and the chassis harness. Cut any zip ties securing this jumper harness to the vehicle.



2. Loosen the bolt securing the jumper harness connector to the TCM. Disconnect this connector.



3. Loosen the bolt securing the jumper harness to the valve body connection on the right rear corner of the transmission. Disconnect this connector.



4. Loosen the bolt securing the jumper harness to the original chassis harness TCM connection. Disconnect this connector.



**Loosen Connector Bolt**

5. Cut any remaining zip ties securing the old jumper harness to the vehicle. Remove and discard the old jumper harness.



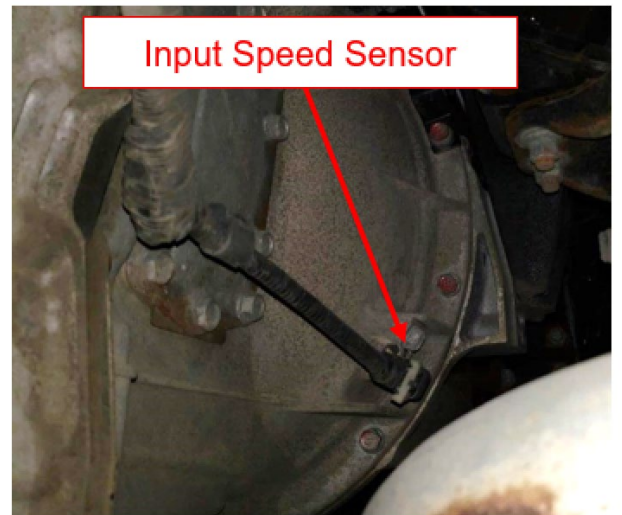
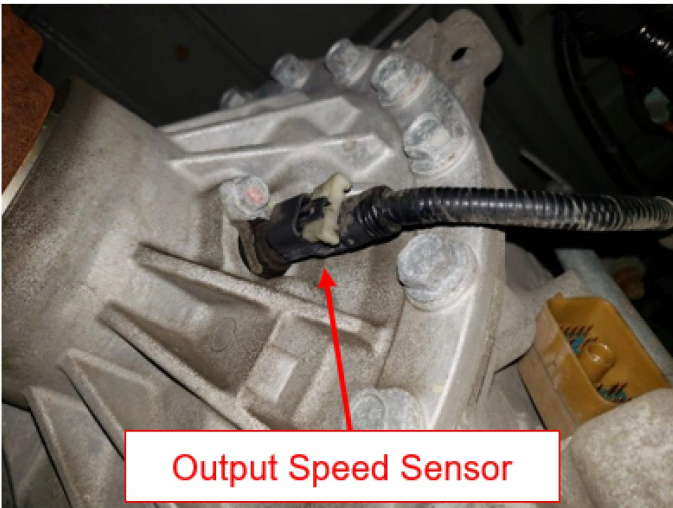
**Old  
Jumper  
Harness**

6. Carefully inspect the TCM connection on the chassis harness where the old jumper harness was attached for signs of water intrusion or corrosion. Dry the connection if water is present. If corrosion is present, chassis harness replacement will be necessary.

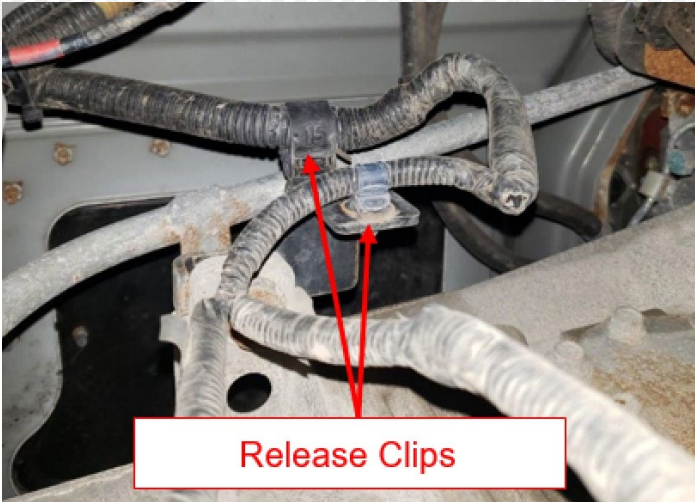


Inspect

7. Disconnect the transmission input and output shaft speed sensors by first sliding the white locking clip away from the sensor and then releasing the connector.



8. Release the harness clips securing the speed sensor wire branch of the chassis harness to the transmission and chassis. Position this wire branch out of the way over the rear of the transmission until later in this procedure. The speed sensor connections will be incorporated into the new jumper harness.



9. Remove the wire harness bracket above the exhaust brake control solenoid from the frame rail by removing the single nut from the outside of the frame rail.

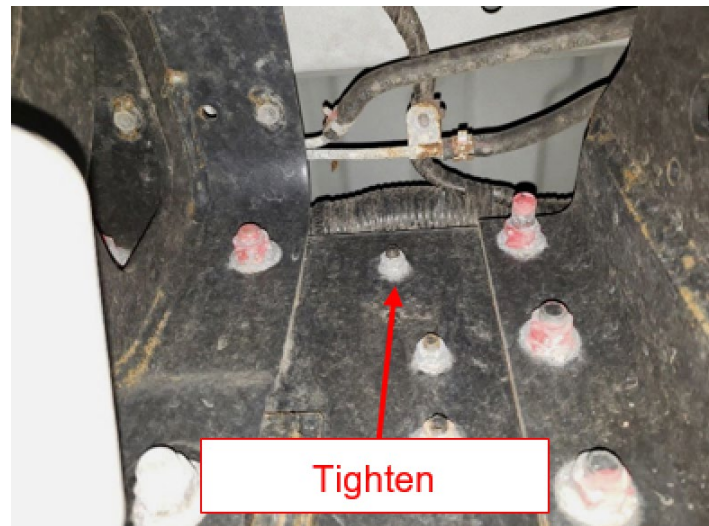


**10.** Mark and drill a 3/8-inch hole 33mm from the end of the wire harness bracket removed in step 9.



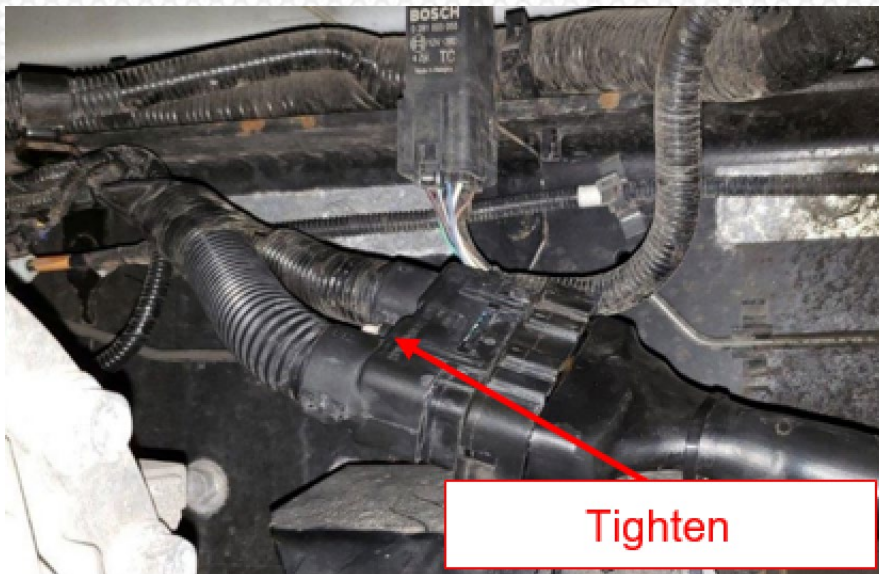
**11.** Reinstall the wire harness bracket. Tighten the nut to specified torque.

**Specified Torque:** 16 lb-ft (22 Nm)

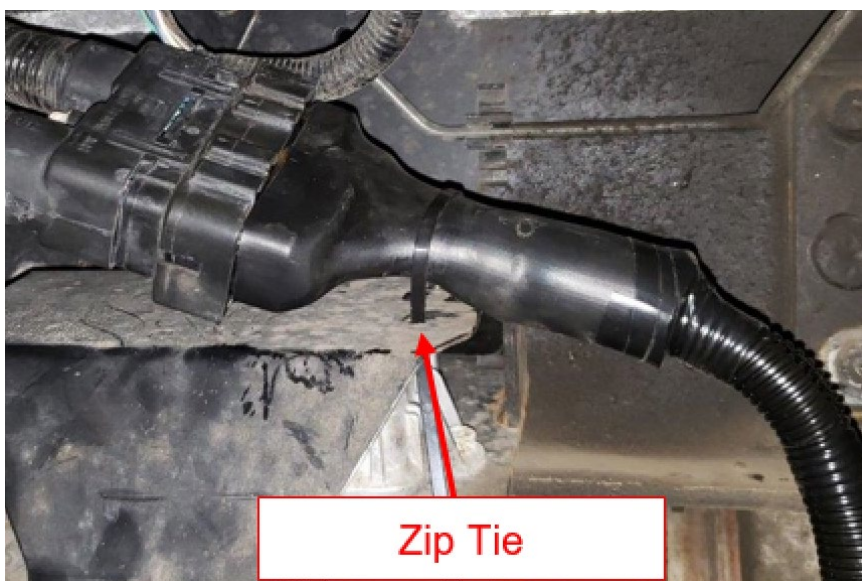


**12.** Attach the new US82125001 jumper harness to the chassis harness TCM connection and position above the TCM mounting bracket. Tighten the connector bolt to the specified torque.

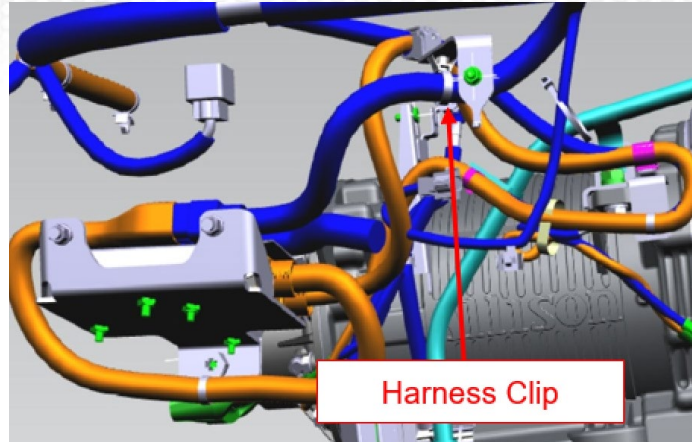
**Specified Torque:** 26 lb-in (3 Nm)



**13.** Run a zip tie through the two holes in TCM cover and secure the jumper harness to the TCM cover.

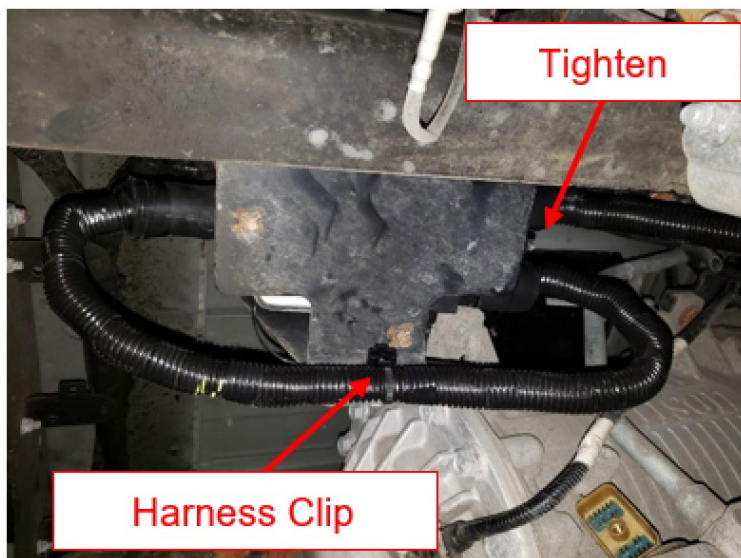


**14.** On the section of chassis harness that runs above the exhaust brake solenoid and connects to the jumper harness above the TCM in step **13**, install the 827112610A harness attachment clip. Attach from the underside to the hole drilled in the bracket in step **10**. Refer to the depiction below on the right, where the frame rail is not shown.

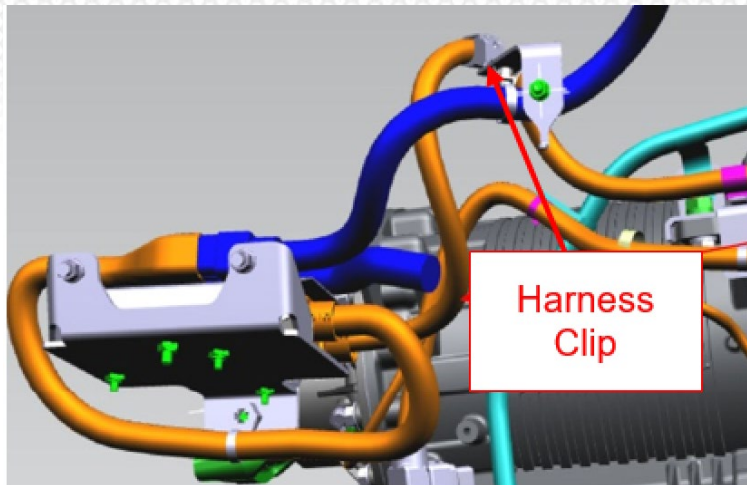


**15.** Route the jumper harness underneath the TCM mounting bracket. Attach the jumper harness clip to the exposed bolt as shown and connect the jumper harness to the TCM. Tighten the connector bolt to the specified torque.

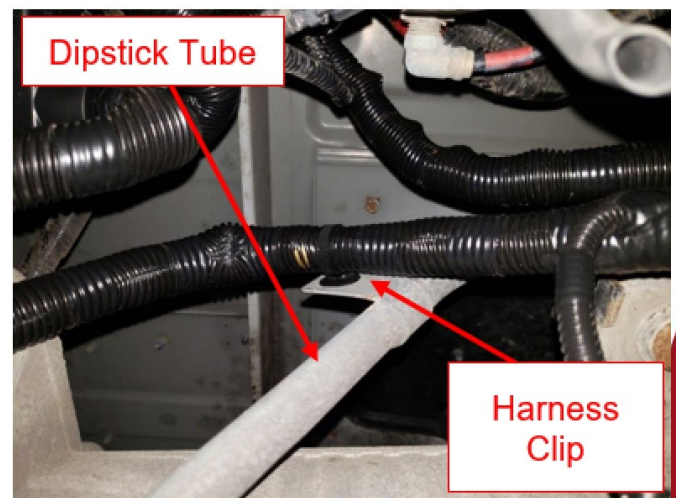
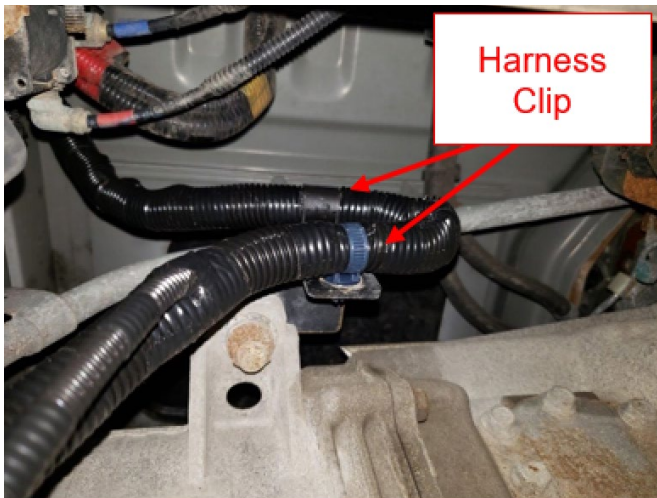
**Specified Torque:** 26 lb-in (3 Nm)



**16.** Route the remaining portion of the jumper harness up and over the frame rail bracket, attaching the clip shown to the right where the original chassis harness was previously installed. Refer to the depiction on the right, where the jumper harness is shown in orange and the frame rail is not shown.



**17.** There are three harness clipping points on the right side of the Allison 3000 Series transmission. Route and connect the jumper harness to all three locations as shown.

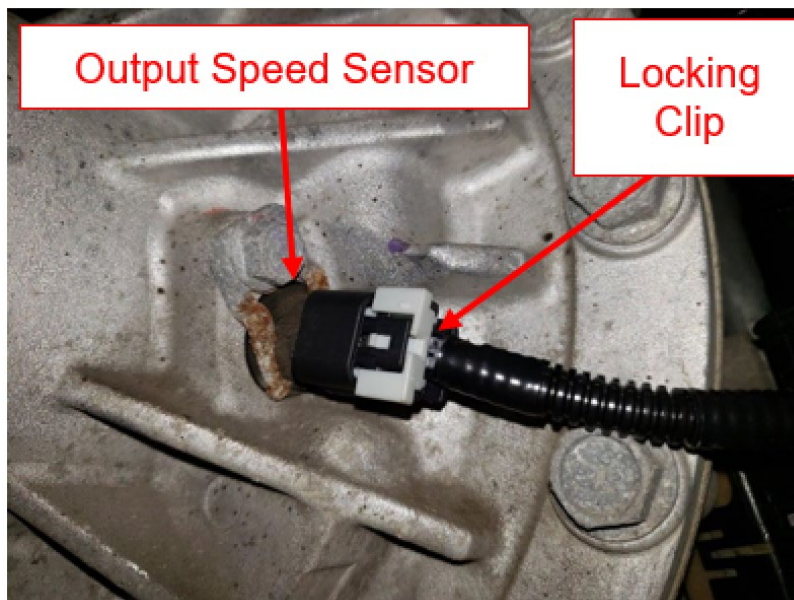


**18.** Connect the valve body connection on the jumper harness to the transmission. Tighten the connector bolt to the specified torque.

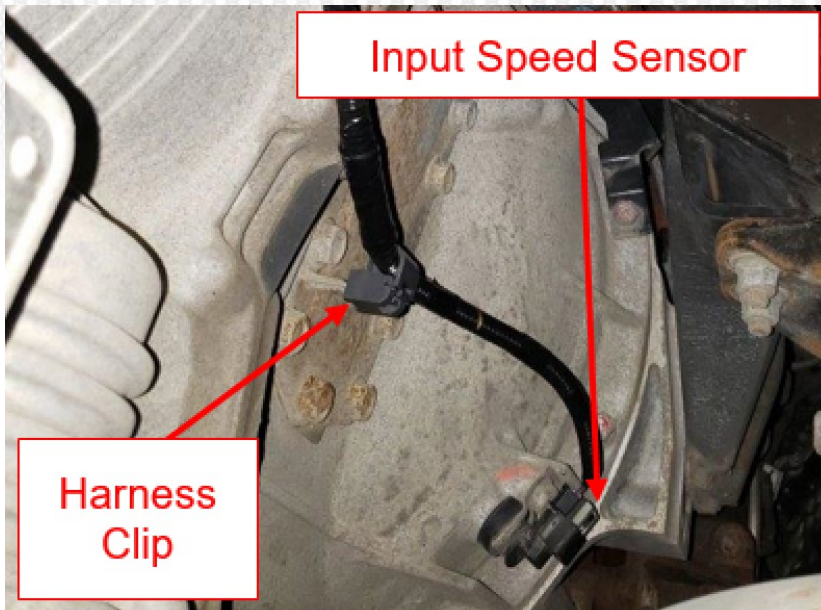
**Specified Torque:** 26 lb-in (3 Nm)



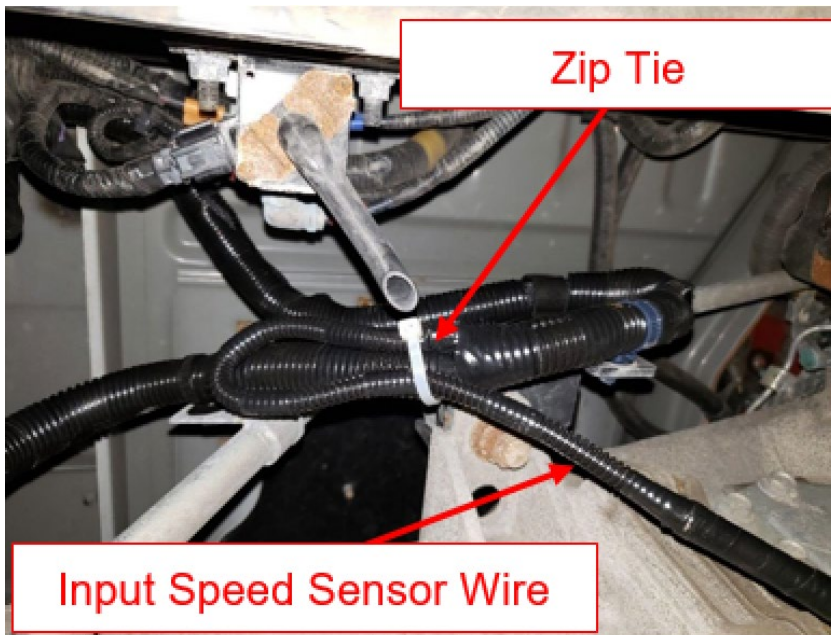
**19.** Connect the output shaft speed sensor connection on the jumper harness to the output shaft speed sensor. Ensure the white locking clip is pushed inwards after completing the connection.



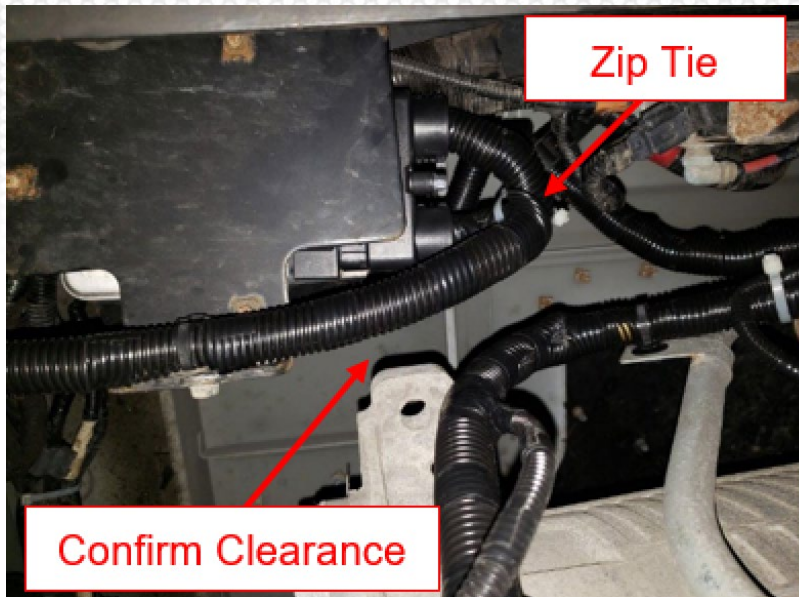
**20.** Connect the input shaft speed sensor connection on the jumper harness to the input shaft speed sensor. Ensure the white locking clip is pushed inwards after completing the connection. Attach the harness clip to the tab on the side of the transmission.



**21.** Zip tie any excess length on the input shaft speed sensor wire to the jumper harness as shown.



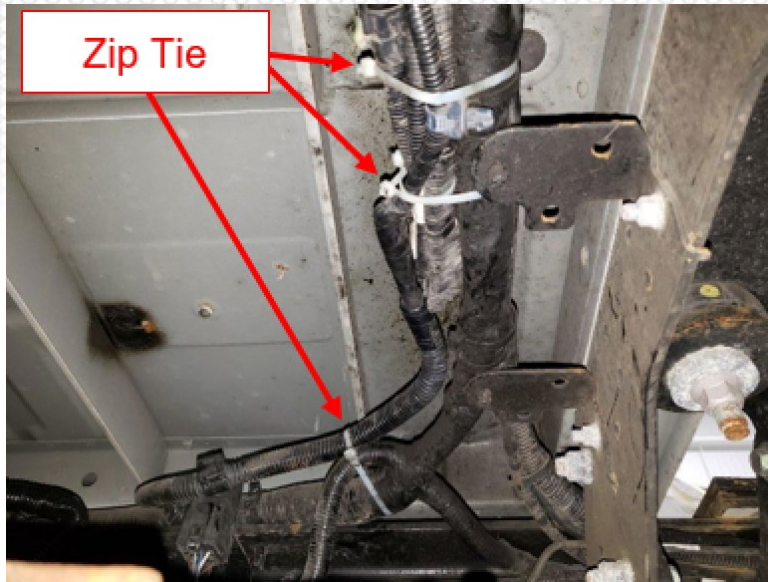
**22.** Zip tie the branches of the jumper harness together as they exit the connection at the TCM to ensure at least one inch of clearance between these harness branches and the transmission.



**23.** Install the HN001234305 rubber caps on the unused speed sensor connections of the chassis wire harness that were positioned aside in step 8.



**24.** Bundle the unused chassis wire harness speed sensor section and zip tie to the main section of the chassis wire harness on the underside of the cab.



**25.** Carefully inspect the installation of the jumper harness to ensure at least one inch of clearance between components that will move independently from each other to allow for movement of the transmission in the chassis. Add zip ties as needed.

## **FINAL INSPECTION:**

1. To complete this service campaign review and confirm the following:
  - The new jumper harness has been connected to all components.
  - The connector bolts have been tightened to the specified torque.
  - There is at least one inch of clearance between the harness and moving parts.
  - The speed sensor connections on the old chassis harness have been secured.

## **CLAIM APPLICATION**

*Reimbursable in accordance within the terms and policies of the Hino limited warranties.*

## **Transmission Jumper Harness Installation:**

- a) Recall No: M0370
- b) Labor charge: 1.2 Hours
- c) Warranty code: 26520
- d) Trouble code: 98
- e) Operation code: 26550AOT
- f) Original failed part: 9999999999

