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SERVICE BULLETIN

SB-21-011 CONVENTIONAL LANE DEPARTURE WARNING (LDW) CAMERA HARNESS REPAIR

GROUP: 0-GENERAL
BULLETIN NO: SB-21-011
DATE: 12-13-2021
REF: HMM-211206-B1

Subject: 2020-2021MY Conventional trucks equipped with the LDW system.

Note: This technical service bulletin is provided as technical information and is not authorization for a warrantable repair.

OVERVIEW:
Subject vehicles equipped with a LDW (Lane Departure Warning) system may exhibit a condition of the engine remaining on after the ignition key is turned to the lock position and removed. In the event that a subject vehicle exhibits this condition, inspect the LDW wiring harness and wires for a pinched wire condition by removing the LDW camera mounting bracket at the roof panel. If the pinch condition is identified, follow the steps in this TSB (Technical Service Bulletin) to repair the condition.

BEFORE YOU BEGIN:

- Read and understand all instructions and procedures before you begin the work.
- Read and follow all **WARNINGS** and **NOTICES** set forth in this publication, the Owner's Manual, and Workshop Manual. These alerts help to avoid damage to components, serious personal injury, or both.
- Park the vehicle on a flat, level and solid surface.
- Place the gear shift lever in "Neutral" or "Park".
- 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.

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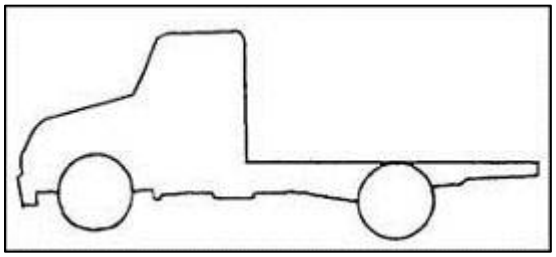
MATERIALS:

MATERIAL DESCRIPTION
20 Gauge / 0.5mm Wire
20 Gauge Uninsulated Crimp Connectors
Heat Shrink Tubing
Electrical Tape

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



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

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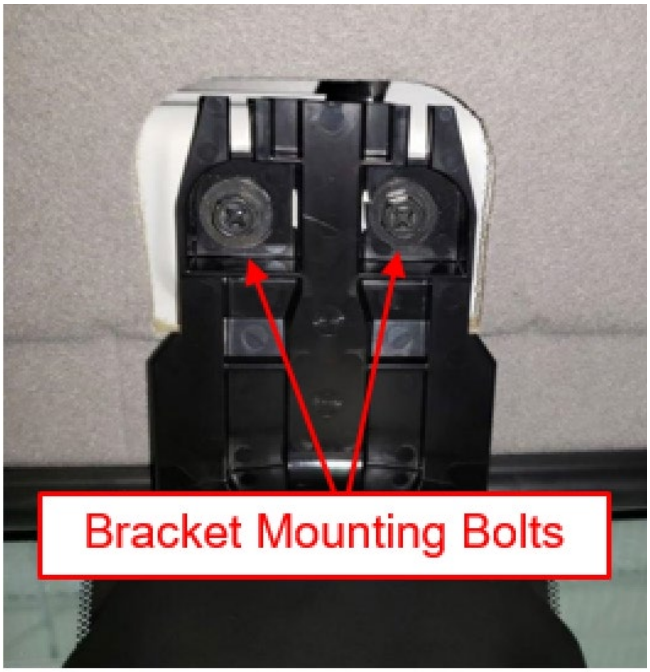
REPAIR PROCEDURE:

1. Pull down on the rear portion of the LDW camera bracket trim where it meets the headliner. Once the clips release from the roof, slide the trim rearward to remove.

2. Remove the two bracket mounting bolts securing the LDW camera bracket to the roof. Remove the bracket by lifting the forward end out of the camera.



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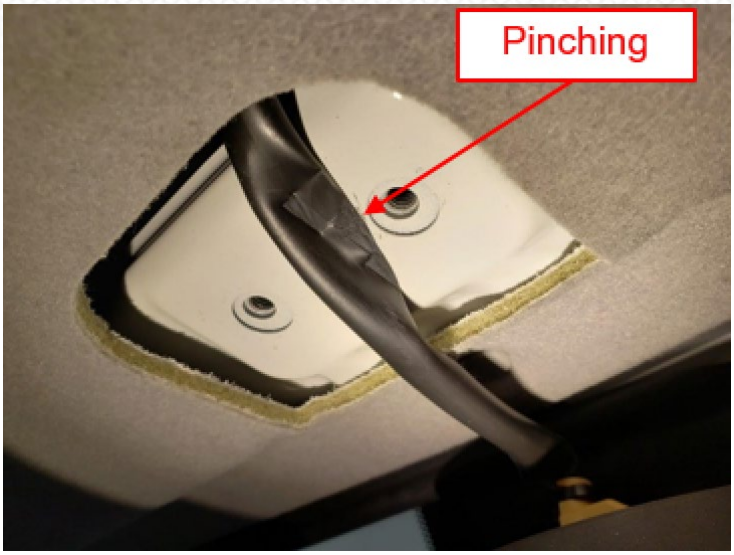
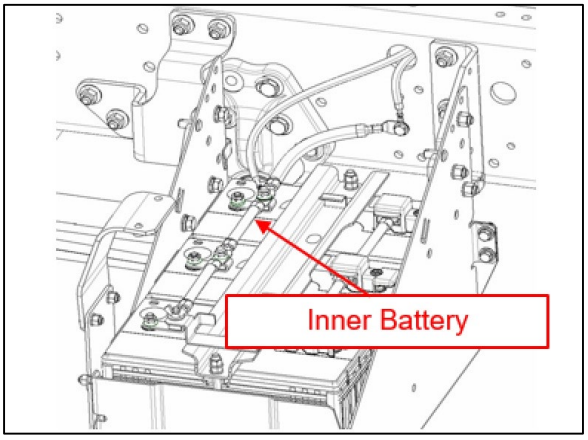
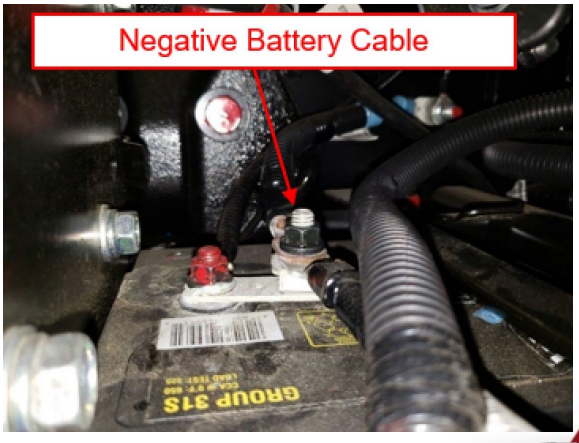
3. Thoroughly inspect the wire harness that connects to the LDW camera for pinching condition around the camera bracket. If a pinching condition is found, proceed to step **5** in the repair procedure. If no pinching of the LDW harness is found, a pinched LDW harness is not the likely cause of the condition. Continue with normal diagnosis using the troubleshooting manual to determine the root cause.



4. On the inner most battery, remove and retain the nut securing the negative battery cable to the battery, then disconnect the negative battery cable.





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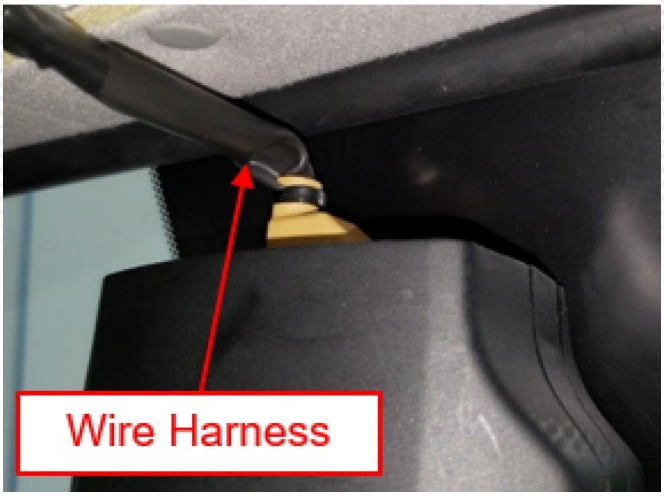
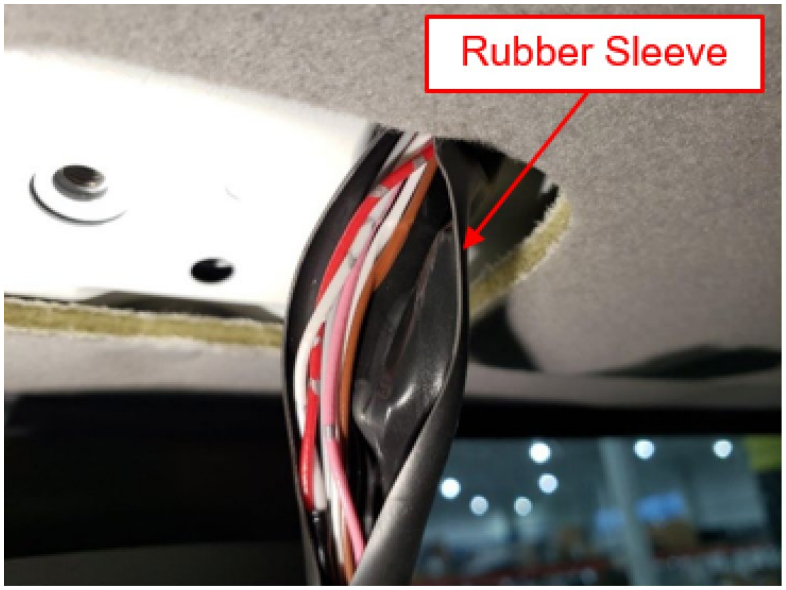
5. Disconnect the wire harness connector from the LDW camera by pushing forward on the locking tab.



NOTICE: Care should be taken to make to ensure that while cutting open the rubber sleeve, you do not cut or damage the insulation on the wires within the LDW camera harness.

6. Cut open the rubber sleeve around the wiring to expose the pinched area of the LDW camera wire harness.



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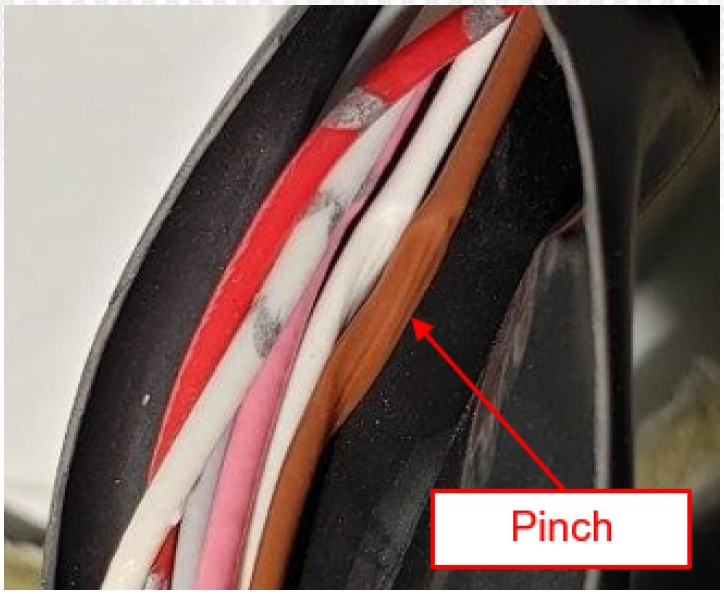
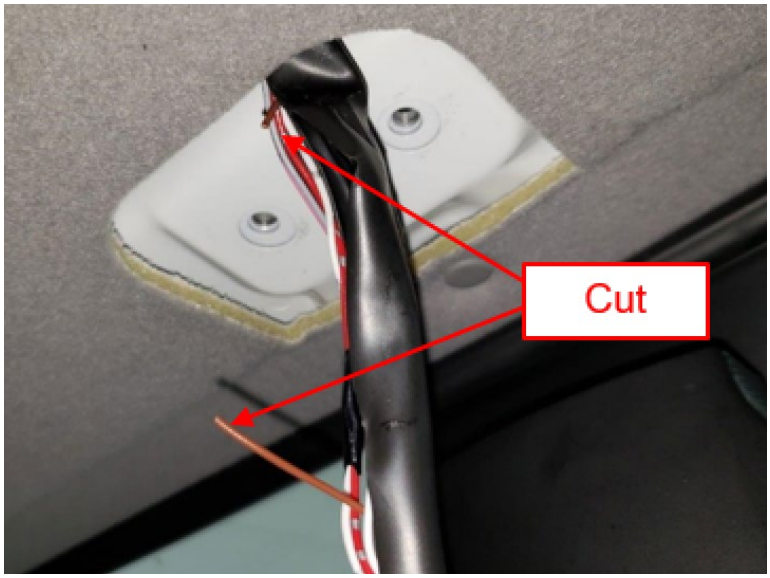
7. Inspect the wires for signs of damage. It may be possible that the pinch only affected the rubber sleeve. If only the sleeve was affected, proceed to step **12.** If wires have been pinched, proceed to step **9.**



8. Cut the damaged sections of wire out of the LDW camera wire harness. Make sure that enough wire is left to allow for splicing.



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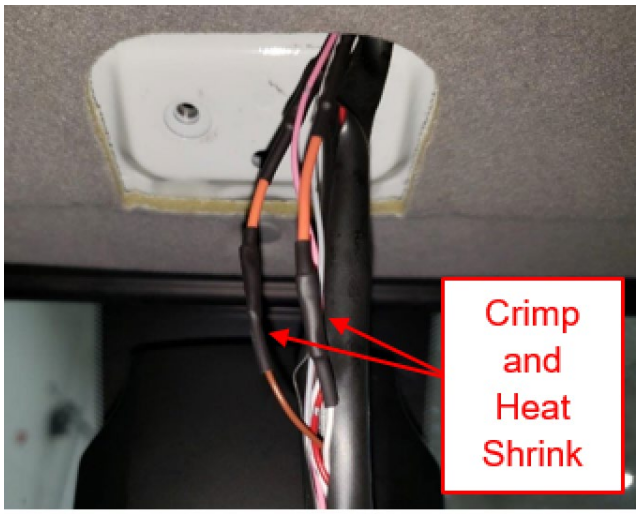
NOTICE: Do not use pre-insulated crimp connectors as the larger diameter of these connectors may prevent the harness from fitting properly in the camera bracket during re-assembly.

9. Cut pieces of 20 gauge or 0.5mm wire the same length as the sections of wire cut out in step **8.** Prepare two crimp connectors and two pieces of heat shrink tubing for each wire. Strip the wire ends on the repair wire and on the camera wire harness.

10. Install the repair wire and crimp the connectors. Use a heat gun to shrink the heat shrink tubing. Repeat as needed for any additional wires that were found to be damaged.



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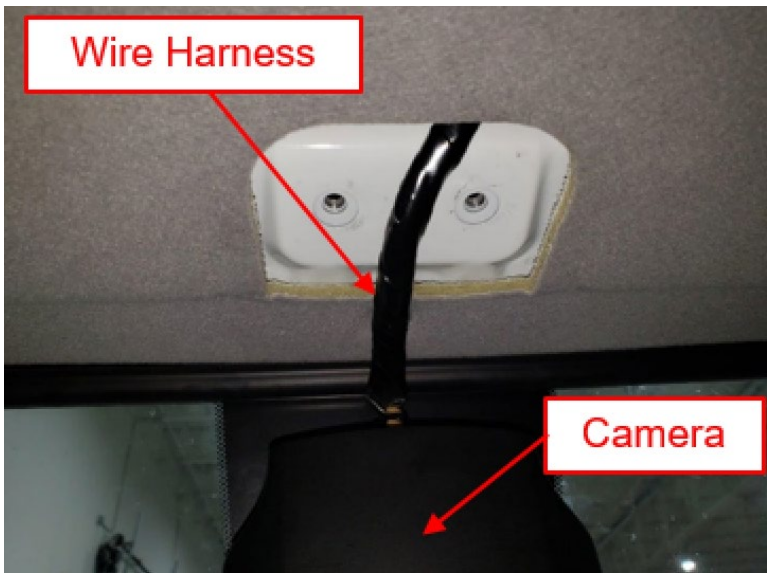
11. Fit the LDW camera wires back inside the rubber sleeve and wrap the wire harness tightly with electrical tape.

12. Connect the LDW camera wire harness to the LDW camera.



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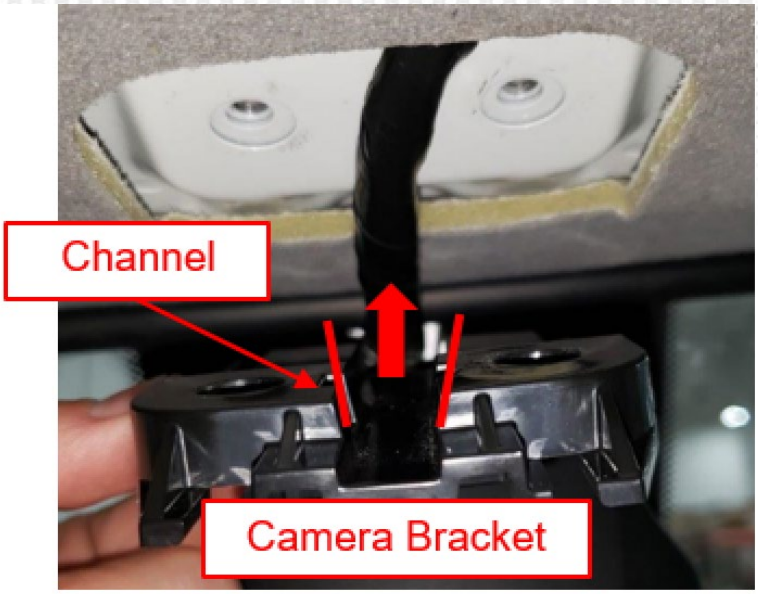
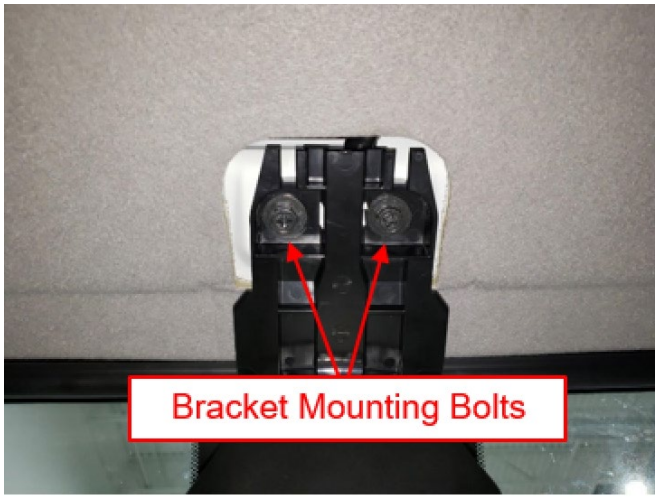
13. Fit the LDW camera bracket back in place, using extra care to ensure that the wire harness fits within the channel on the bracket and will not be pinched when the bracket mounting bolts are installed.



NOTICE: Use caution to ensure that the LDW camera harness is not being pinched when tightening the bracket mounting bolts.

14. Install and tighten the LDW camera bracket mounting bolts to the specified torque.

Specified Torque: 31 lb-in (3.5 Nm)



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15. Install the LDW camera bracket trim by first sliding the forward edge into place and then pushing the rear portion upwards until the clips lock into the camera bracket.

16. Connect the negative battery cable if previously disconnected. Tighten the nut to the specified torque.

Specified Torque: 97 lb-in (8lb-ft / 11 Nm)

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FINAL INSPECTION:

To complete this TSB review and confirm the following:

- The LDW camera wire harness has been repaired and reconnected to the LDW camera.
- The LDW camera bracket has been installed without pinching the LDW camera harness.
- The battery has been reconnected.
- Conduct and operational test to confirm the engine shuts off when the ignition key is placed in the lock position and the key is removed.

CLAIM APPLICATION:

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

LDW Camera Harness Repair:

a) Labor charge: 0.5 Hours (One Wire Repaired)
b) Additional Labor: 0.1 Hours (Each Additional Wire Repaired)
c) Warranty code: 84520
d) Trouble code: 40
e) Operation code: 84550AOT
f) Original failed part: 9999999999