



SERVICE BULLETIN

**L-SERIES RADIATOR HOSE CLAMP-COOLANT
LEAK**

**GROUP: 0-GENERAL
SERVICE BULLETIN NO: SB-22-031
DATE: 12-21-2022
REF: HMM-221220-F1**

SUBJECT VEHICLES: Certain 2022-2023 Model Year L-Series Trucks Equipped with a Cummins B6.7 Engine.

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

OVERVIEW:

The subject vehicles may exhibit coolant leaking from either the inlet or outlet radiator hose connections of the radiator or auxiliary transmission cooler. This leak may be due to reduced clamp retention at these 4 locations. If a coolant leak is identified coming from any of the 4 locations, this procedure provides installation instructions and directions to install the new style hose clamp at all 4 locations.

BEFORE YOU BEGIN:

- Read and understand all instructions before you begin the work.
- 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.
- Make certain that the engine and cooling system has cooled down to an ambient temperature prior to opening the cooling system or removing the degas bottle cap.

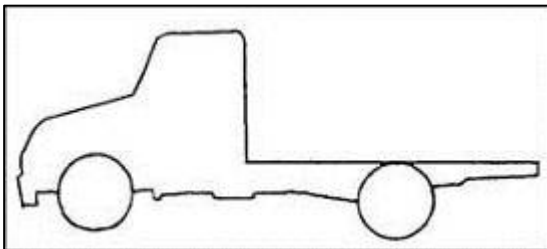


PARTS:

Part Number	Part Description	Quantity
32960	Gates Power Grip Hose Clamp	4
N/A	Fleetguard ES Compleat OAT EG 50/50 - Red	As Needed
N/A	Shell Rotella ELC Nitrite Free 50/50 - Red	As Needed

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.

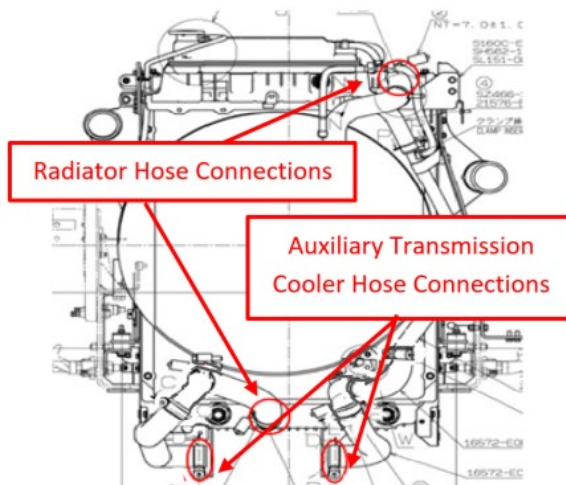


REPAIR PROCEDURE:

1. Is there coolant leaking from any one of the four radiator hose locations?

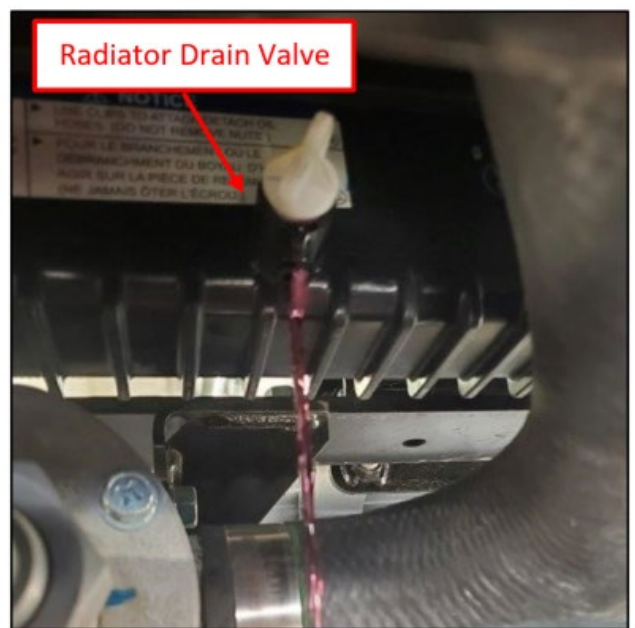
YES – Proceed to **STEP 2**.

NO – This TSB (Technical Service Bulletin) does NOT apply to this vehicle, disregard this bulletin and continue with your normal diagnostics



2. Allow the engine and cooling system to cool down to ambient temperature. Remove the engine coolant degas bottle cap from the degas bottle. Open the radiator drain valve and drain the coolant into a suitable clean container. Once the cooling system is drained, close the radiator drain valve.

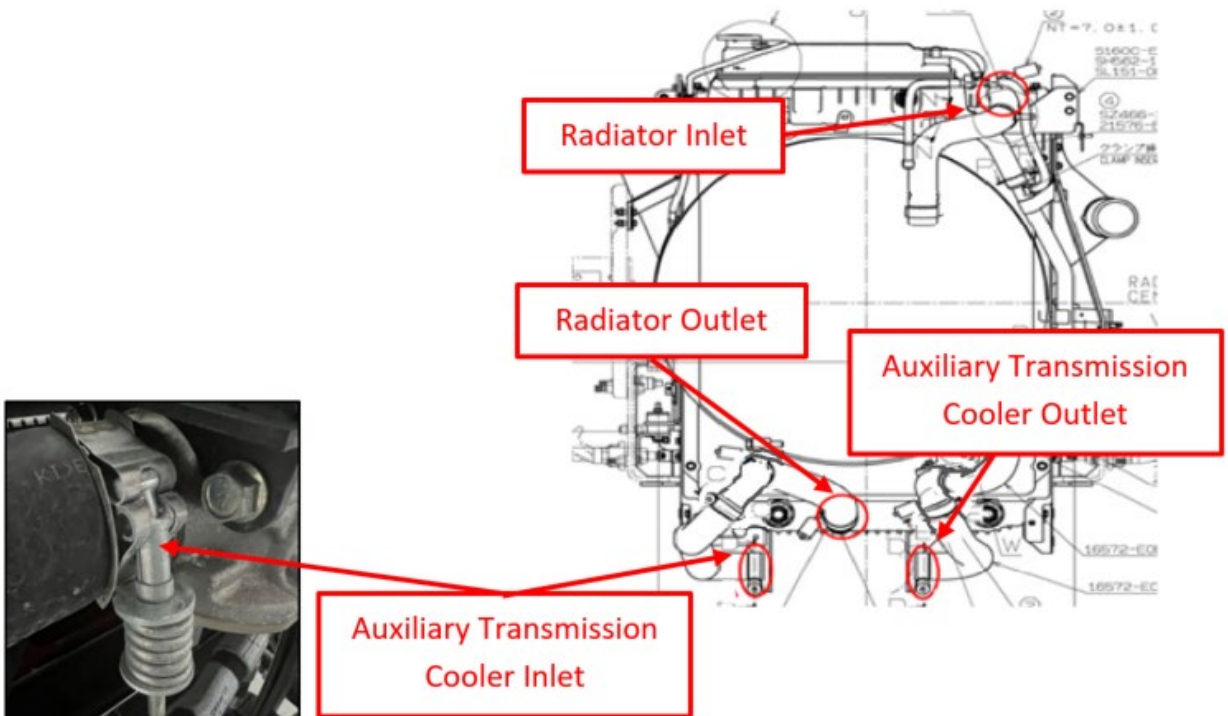
WARNING: Do not loosen or remove the degas bottle cap or attempt to drain the cooling system until the coolant and engine have cooled to ambient temperature. Loosening or removing the degas bottle cap or draining the cooling system prior to the cooling system cooling down could cause severe personal injury due to scalding.



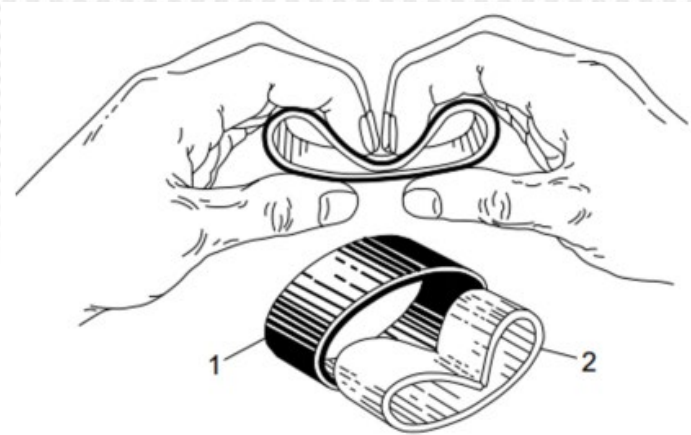
3. Loosen the 4 constant torque coolant hose clamps and disconnect the following radiator hoses at each connection point:

- radiator inlet
- radiator outlet
- auxiliary transmission cooler inlet
- auxiliary transmission cooler outlet

Remove and discard the (4) constant torque clamps.



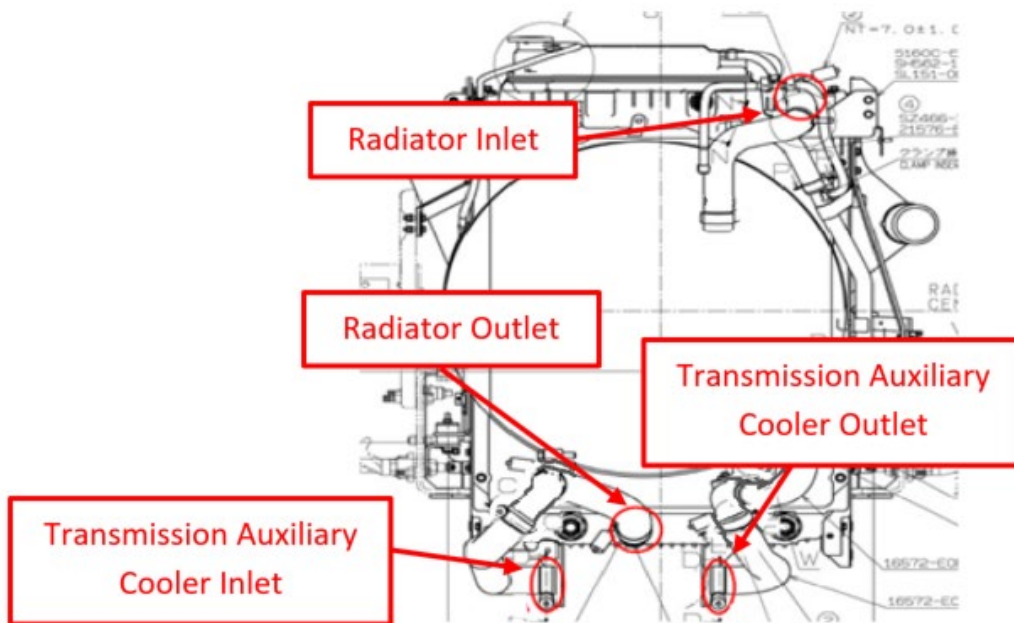
4. Using the new Gates PowerGrip hose clamps, remove the cardboard brace by squeezing the clamp and cardboard brace as illustrated in the picture below. Remove the cardboard brace and discard.



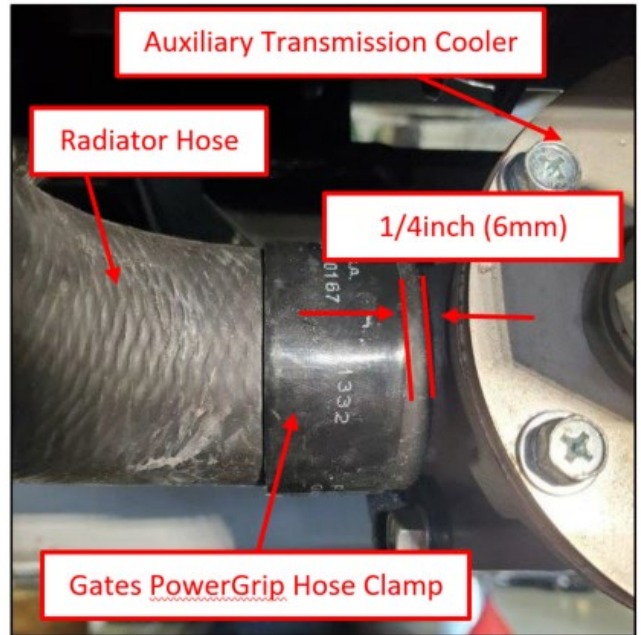
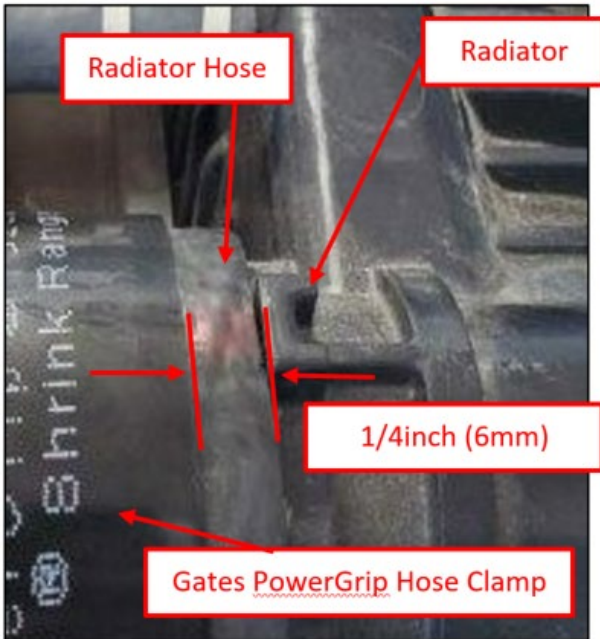
1. Clamp
2. Cardboard Brace

5. Position 1 PowerGrip hose clamp over each of the 4 radiator hoses. Reinstall the 4 radiator hoses to their corresponding connection point.

- radiator inlet
- radiator outlet
- auxiliary transmission cooler inlet
- auxiliary transmission cooler outlet



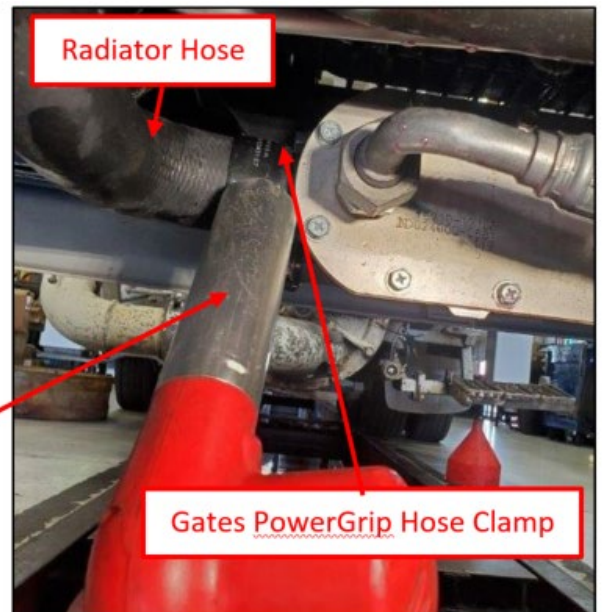
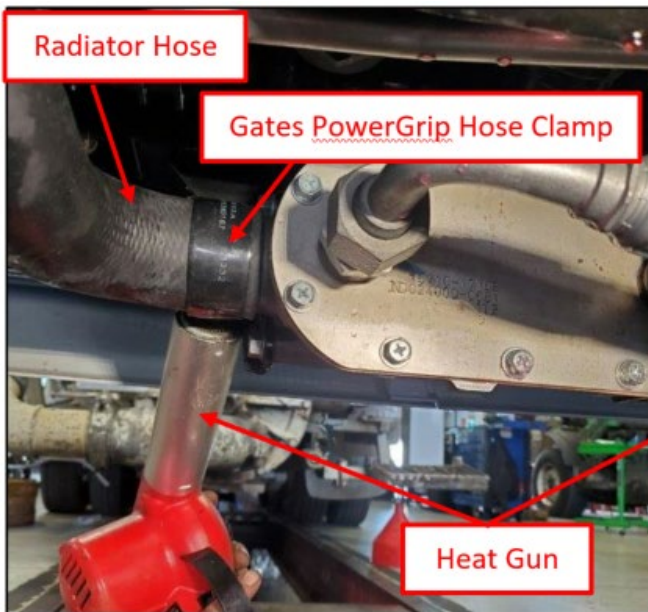
6. Make certain that each of the 4 radiator hose connections are fully seated onto the radiator and auxiliary transmission cooler before proceeding. Position each of the Gates PowerGrip coolant hose clamps 1/4inch (6mm) from the end of radiator hose, see photographs below.



7. The Gates PowerGrip hose clamps will require heat to begin shrinking and tightening them around the radiator hose. While using a heat gun, apply heat to each of the 4 Gates PowerGrip hose clamps. To prevent overheating the hose clamp or radiator hose, continuously move the heat gun evenly heating as much of the Gates Power Grip hose clamp as possible. The clamp should begin to shrink and tighten after 30 to 60 seconds and may take 2 minutes for each clamp location.

NOTICE: Care should be taken to ensure that the Gates PowerGrip hose clamp or radiator hose is not overheated and damaged.

NOTICE: Once the engine reaches operating temperatures, the Gates PowerGrip hose clamps will continue to shrink and tighten at each of the 4 hose connections.



8. Slowly refill the cooling system and install the degas bottle cap securely to the degas bottle. Start the engine and run the engine until the engine and cooling system are at operating temperature.

NOTICE: During vehicle manufacturing, one of two different types of engine coolant could have been used. To ensure the correct replacement engine coolant is added to the cooling system, inspect the degas bottle for an ATTENTION label. If an ATTENTION label is affixed to the coolant degas bottle, then use the Optional Cooling System Fluid Fill to top-off the cooling system. If no label is found, then use the Standard Cooling System Fluid Fill.

- **Standard Cooling System Fluid Fill**
Fleetguard ES Compleat OAT EG 50/50
- **Optional Cooling System Fluid Fill**
Shell Rotella ELC Nitrate Free 50/50

9. Recheck the 4 radiator hose connections where the Gates PowerGrip hose clamps were installed. Make certain there are no signs of engine coolant leaking before continuing to the next step.

10. This bulletin is complete, proceed to the FINAL INSPECTION PROCEDURE.



FINAL INSPECTION PROCEDURE:

1. To complete this technical service bulletin, review the bulletin and confirm the following:
 - Inspect the 4 radiator hose connections that received the Gate PowerGrip hose clamps and make certain there are no coolant leaks.
 - Make certain the correct coolant was used and that the coolant level is full.
 - Engine coolant degas bottle cap is correctly installed.

CLAIM APPLICATION

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

Gates PowerGrip Radiator Hose Clamp Installation:

- a) Labor charge: 1.6 Hours
- b) Warranty code: 13322
- c) Trouble code: 12
- d) Operation code: 13350AOT
- e) Original failed part: 16581-EW100

