

SERVICE BULLETIN

22-23 MY L-SERIES COOLANT DEGAS BOTTLE SUPERSESSION

GROUP: 0-GENERAL

SB NO: 24-002 DATE: 2/29/2024

REF: HMM-240219-F1

SUBJECT VEHICLES:

2022 and 2023 model year Hino L-Series Conventional vehicles equipped with a Cummins B6.7 engine that were assembled at the Mineral Wells, West Virginia USA assembly plant.

Note:

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

OVERVIEW:

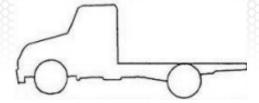
For 2022 model year and 2023 model year L-Series Conventional trucks built before March 25, 2022, the coolant degas bottle service part, (Hino P/N S16F0E0470), has been discontinued and superseded with (Hino P/N S16F0E0480). If the coolant degas bottle is damaged and requires replacement, this Technical Service Bulletin (TSB) contains an inspection procedure to confirm which coolant degas bottle is equipped on the vehicle and then a repair procedure which contains directions for installing the updated coolant degas bottle.

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.
- 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.
- 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 flat, level and solid surface.



2. Confirm the engine is stopped, the ignition switch is in the off (LOCK) position, and the key is removed.



3. Apply the parking brake.





4. Chock all of the wheels.



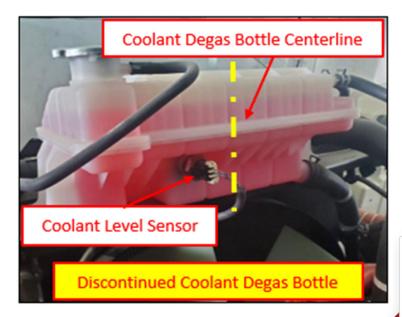


PARTS:

PART NUMBER	PART DESCRIPTION	QUANTITY
S16F0E0480	Coolant Degas Bottle	1
16571E1C50	Coolant Hose	1
00745EA001A	Coolant Degas Bottle Attention Label (Optional Coolant)	As Needed
S478371230	Wiring Harness Retainer	1
S827111730	Zip Tie	1
SZ46637001	Coolant Hose Clamp	1
21576E0030	Coolant Hose Clamp	1
N/A	Fleetguard ES Compleat OAT EG 50/50 - Red	As Needed
N/A	Shell Rotella ELC Nitrite Free 50/50 - Red	As Needed

INSPECTION PROCEDURE:

- **1.** Locate the coolant level sensor mounted in the coolant degas bottle. Is the coolant level sensor located to the left of the coolant degas bottle centerline?
- **NO** This is the revised coolant degas bottle. Disregard this TSB, it does not apply to this vehicle.
- **YES** This is the discontinued coolant degas bottle, as shown in the photograph to the right. Proceed to the REPAIR PROCEDURE



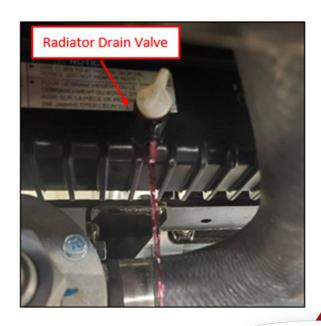


REPAIR PROCEDURE:

1. Allow the engine and cooling system to cool down to ambient temperature. Remove the engine coolant fill cap from the coolant degas bottle. Open the radiator drain valve and drain the coolant into a suitable container until the coolant degas bottle is empty. Close the radiator drain valve when the coolant degas bottle is empty.

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



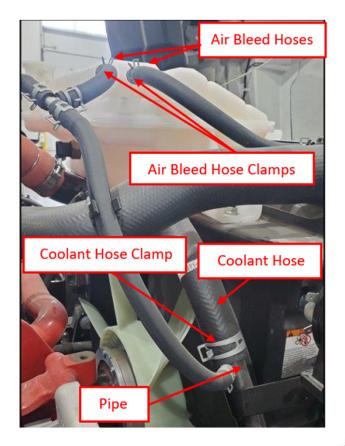




2. Disconnect the overflow hose at the coolant degas bottle and then the coolant level sensor connector. Remove and discard the 2 wiring harness retainers, and single zip tie.



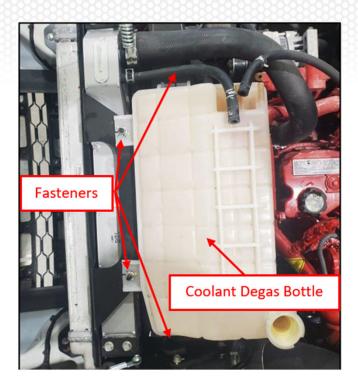
3. Release the 2 air bleed hose clamps and disconnect both air bleed hoses from the coolant degas bottle. Release the coolant hose clamp and disconnect the coolant hose from the pipe.





4. Remove the 4 fasteners securing the coolant degas bottle, retain the fasteners. Remove the coolant degas bottle, coolant hose and coolant hose clamp from the vehicle and discard.

NOTICE: When removing the degas bottle, there is still a coolant hose and clamp attached to the coolant degas bottle on the right underside. These will be discarded.



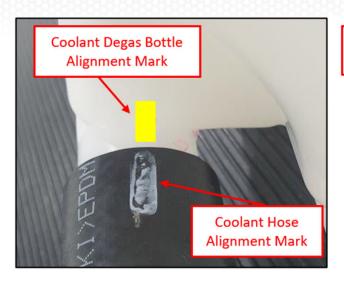
5. Inspect the coolant degas bottle that was just removed. If the old degas bottle contains a coolant attention label, ensure a new attention label is affixed to the new coolant degas bottle before installing the coolant degas bottle to the vehicle.





6. Using the new coolant degas bottle, install the new coolant hose onto the coolant degas bottle. Position the white alignment mark on the coolant hose with the raised alignment mark on the coolant degas bottle. Position the 2 coolant hose clamps as shown in the photograph below.

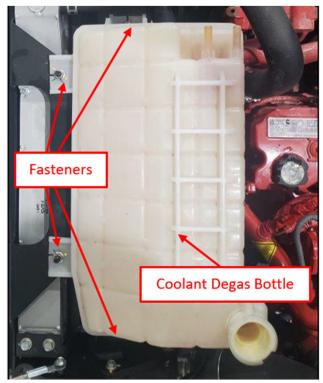
NOTICE: In the photograph below, the raised alignment mark on the coolant degas bottle has been highlighted yellow for your reference.





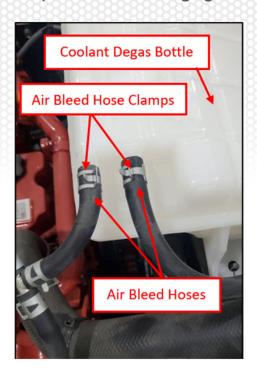
7. Install the new coolant degas bottle using the four fasteners previously removed. Tightened to the specified torque.

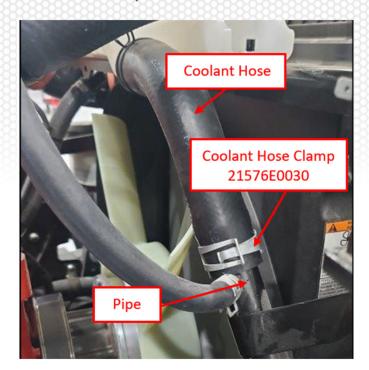
Specified Torque: 16 ft-lb (22 Nm)





8. Connect the 2 air bleed hoses, reposition and engage the 2 air bleed hose clamps. Connect the coolant hose onto the pipe and reposition and engage the coolant hose clamp.

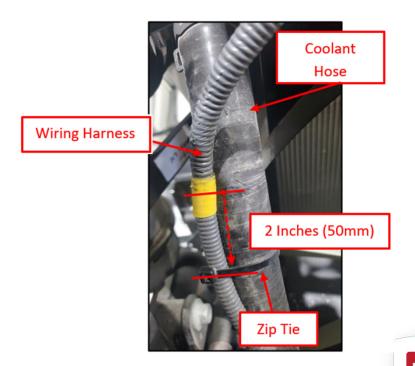




TRUCKS

A Toyota Group Company

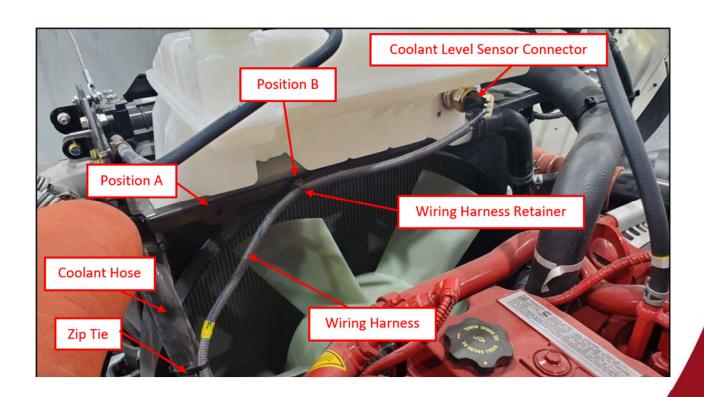
9. Position the zip tie around the wiring harness and coolant hose, approximately 2 inches (50mm) below the original location. Do not fully tighten the zip tie during **Step 9**.



10. Connect the coolant level sensor connector. Clip in the wiring harness retainer onto the radiator support in position B. Wrap the zip tie potion of the wiring harness retainer around the wiring harness but do not tighten it at this time. Remove most of the slack of the wiring harness between the coolant level sensor and wiring harness retainer and then tighten the zip tie portion of the retain at position B. Now tighten the zip tie at the coolant hose. Reconfirm the wiring harness will not contact the fan or that the wiring harness is pulled too tight.

NOTICE: If the wiring harness is pulled too tight between the coolant level sensor and wiring harness retainer, damage may occur to the harness, or related connector terminals.

NOTICE: Be sure the harness does not contact the radiator cooling fan or damage will occur.





11. Slowly refill the cooling system and securely install the degas bottle cap to the degas bottle. Start the engine and run the engine until the engine and cooling system are at operating temperature. Shut the engine off and remove the ignition key.

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



12. Proceed to the FINAL INSPECTION.



FINAL INSPECTION:

To complete this technical service bulletin, review the bulletin and confirm the following:

- Inspect for coolant leaks.
- Make certain the correct coolant was used and that the coolant level is full.
- Make certain that if the old coolant degas bottle had an Attention Label affixed to it, a new Attention Label was affixed to the newly installed coolant degas bottle.
- Wiring harness is correctly routed and not contacting the cooling fan.

CLAIM APPLICATION:

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

Header Tank Installation:

a) Labor charge: 0.5 Hours

b) Warranty code: 13210

c) Trouble code: 12

d) Operation code: 13201BRE

e) Original failed part: S16F0E0470

