

## SUBJECT

E-axle Degas Hose Extension

**Bulletin No.:** TFTSB002

**Issue Date:** 10/29/2024

## APPLICABLE MODELS/VINS

**Model:** Tre FCEV

**VINs:** R2393001 thru S2393266

## OVERVIEW

A coolant fitting may come loose due to excess tension on a coolant line. Extension of the hose returns the tension to an appropriate level.

## PARTS REQUIRED

Qty.	Part No.	Description
1	SN00000411	Kit, 90 Degree Fitting Connection to E-axle

## COMMENTS

N/A

## MATERIALS REQUIRED

Qty.	Part No.	Description
As required	Commercially available	Valvoline® Heavy Duty Heat Transfer Fluid

## COMMENTS

N/A

## LABOR INFORMATION

**Labor Operation:** E-axle Degas Hose Extension

**Labor Code:** TFTSB002

**Labor Time:** 2.0 hours

## COMMENTS

N/A

## DISPOSITION INFORMATION

N/A

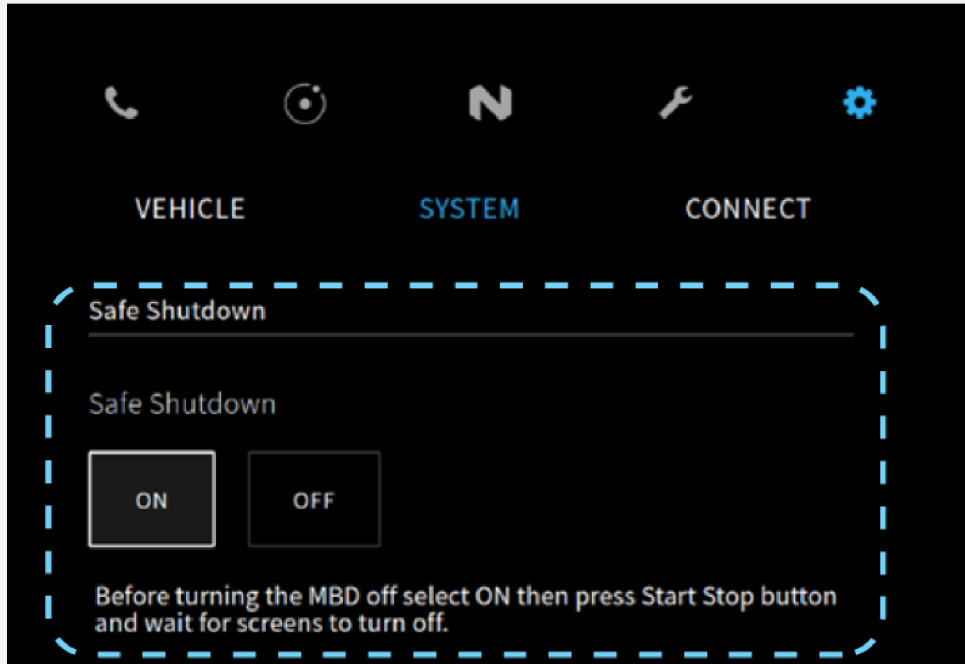
## PROCEDURE

### Preliminary Steps

1. Place the vehicle into Accessory or Permanent Accessory.
2. On the infotainment screen, find the "Safe Shutdown" section under Settings > SYSTEM.

**Note:** The Safe Shutdown section appears at the top of the SYSTEM page and will only appear when the vehicle is in Accessory or Permanent Accessory.

3. Tap ON to select safe shutdown as shown in **Figure 1**.



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**Figure 1, Safe Shutdown (1 of 3)**

## PROCEDURE

### Preliminary Steps Cont.

4. Press the START/STOP button to shut down the vehicle.
5. While the vehicle's system is shutting down, the infotainment screen shows a notification that shutdown is in progress as shown in **Figure 2**.



ICN-7KZ05-0000000002-001-01

**Figure 2, Safe Shutdown (2 of 3)**

6. When the safe shutdown is complete, the infotainment screen will briefly show a confirmation that the MBD can be turned off as shown in **Figure 3**.



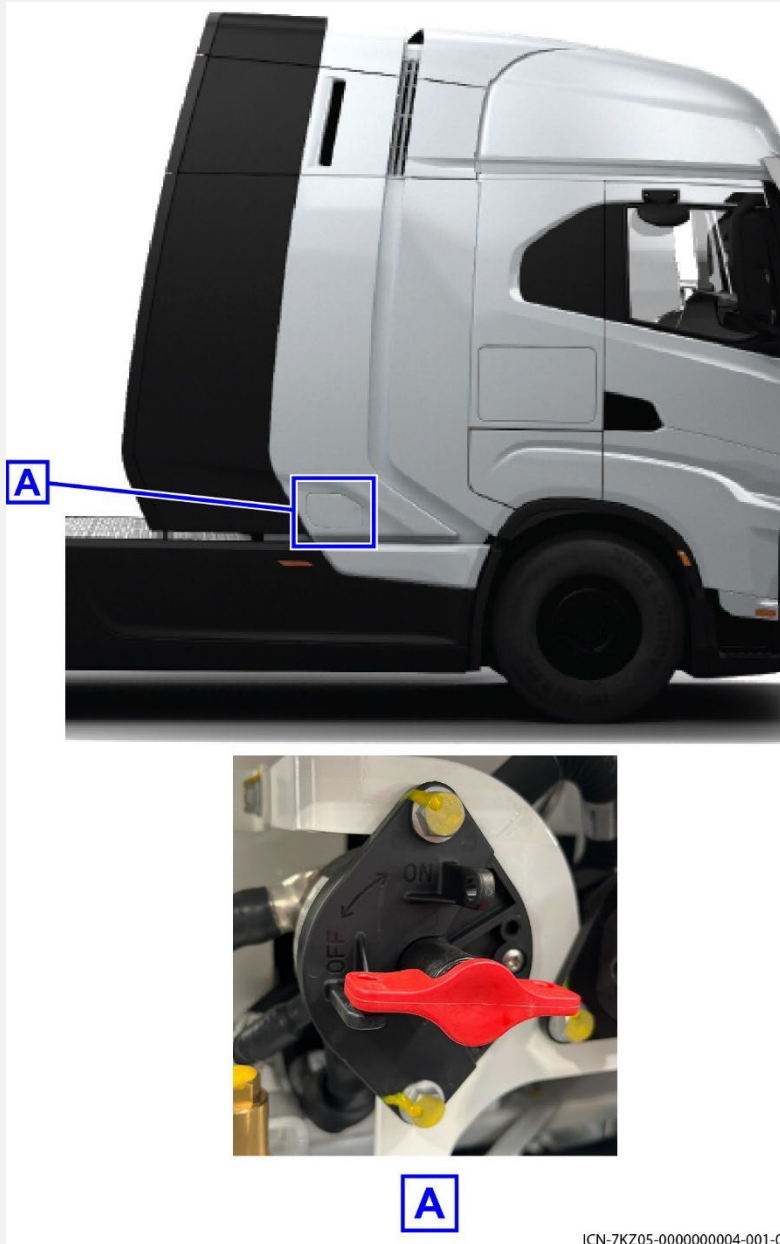
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**Figure 3, Safe Shutdown (3 of 3)**

## PROCEDURE

### Preliminary Steps Cont.

7. Turn the manual battery disconnect (MBD) to the OFF position to disconnect the vehicle's electrical system as shown in **Figure 4**.



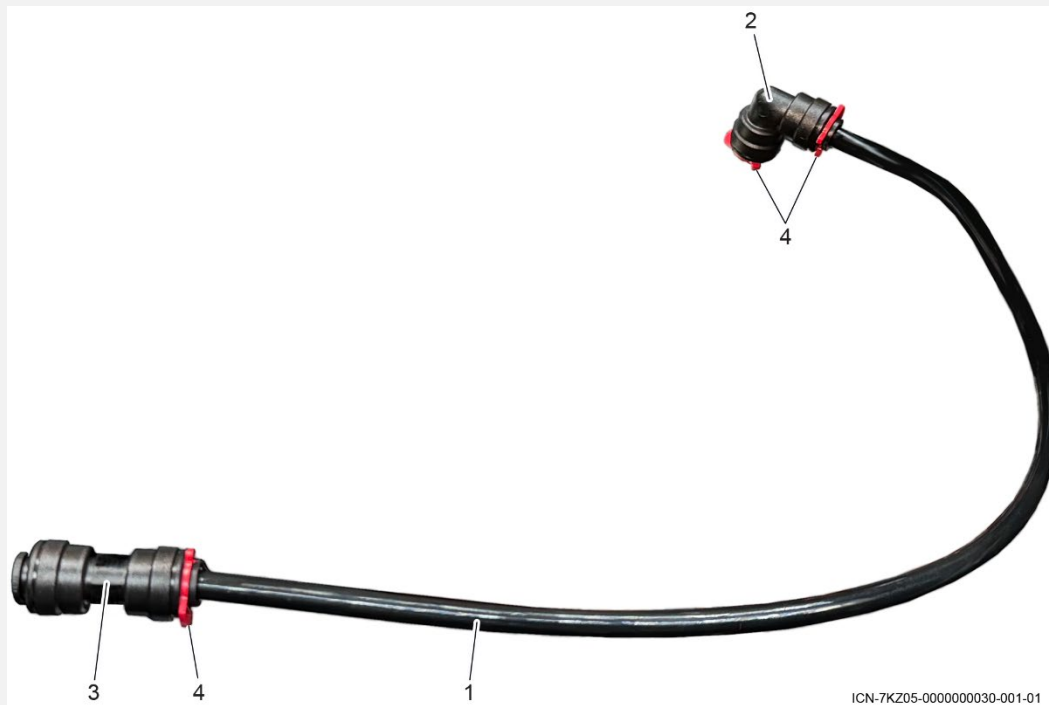
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**Figure 4, MBD Off**

## PROCEDURE

**Degas Hose Extension Assembly**

1. Insert the degas hose (1) into one end of the 90-degree fitting (2) until fully seated.  
**Note:** Fully seated is approximately **0.6 in. (15 mm)** of hose into fitting.
2. Insert the other end of the degas hose (1) into one end of the inline fitting (3) until fully seated.  
**Note:** Fully seated is approximately **0.6 in. (15 mm)** of hose into fitting.
3. Install one locking clip (4) to connect the degas hose (1) to the 90-degree fitting (2).
4. Install one locking clip (4) on the other side of the 90-degree fitting (2).
5. Install one locking clip (4) to connect the degas hose (1) to the inline fitting (3).

**Figure 5, Degas Hose Extension Assembly**

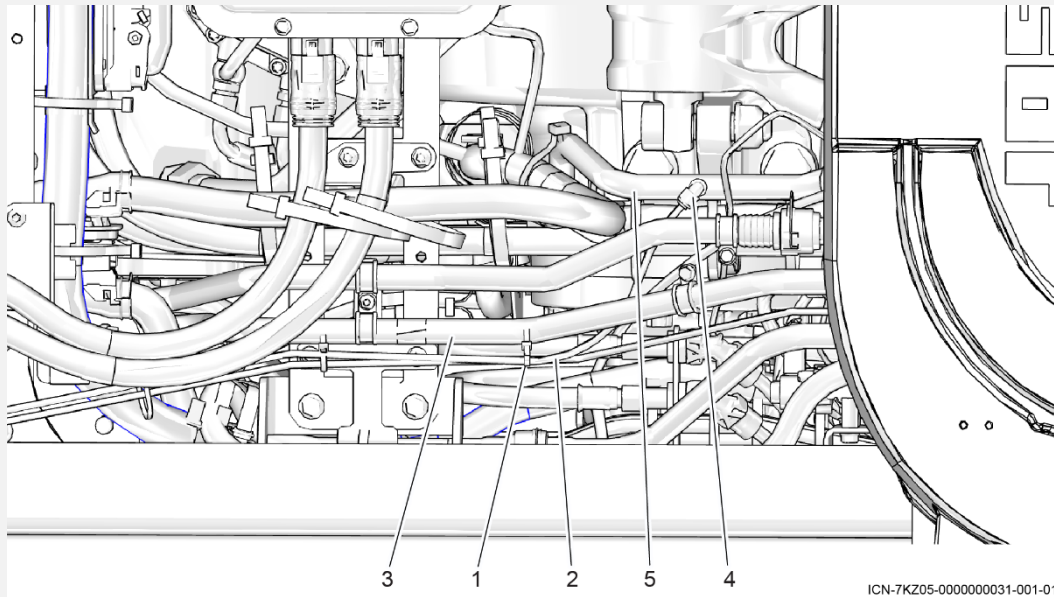
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## PROCEDURE

### Degas Hose Extension Install

1. Cut and remove the cable tie (1) from the degas hose (2) and inverter thermal hose (3).
2. Place a suitable container under the e-axle line (5) to collect any coolant.
3. Remove the old 90-degree fitting (4) from the port on the e-axle line (5).

**Note:** Once removed, coolant will begin to flow. Quickly install the new 90-degree fitting from the degas hose extension. Refer to Step 4.



**Figure 6, Old Degas Hose Fitting Removal**

ICN-7KZ05-0000000031-001-01

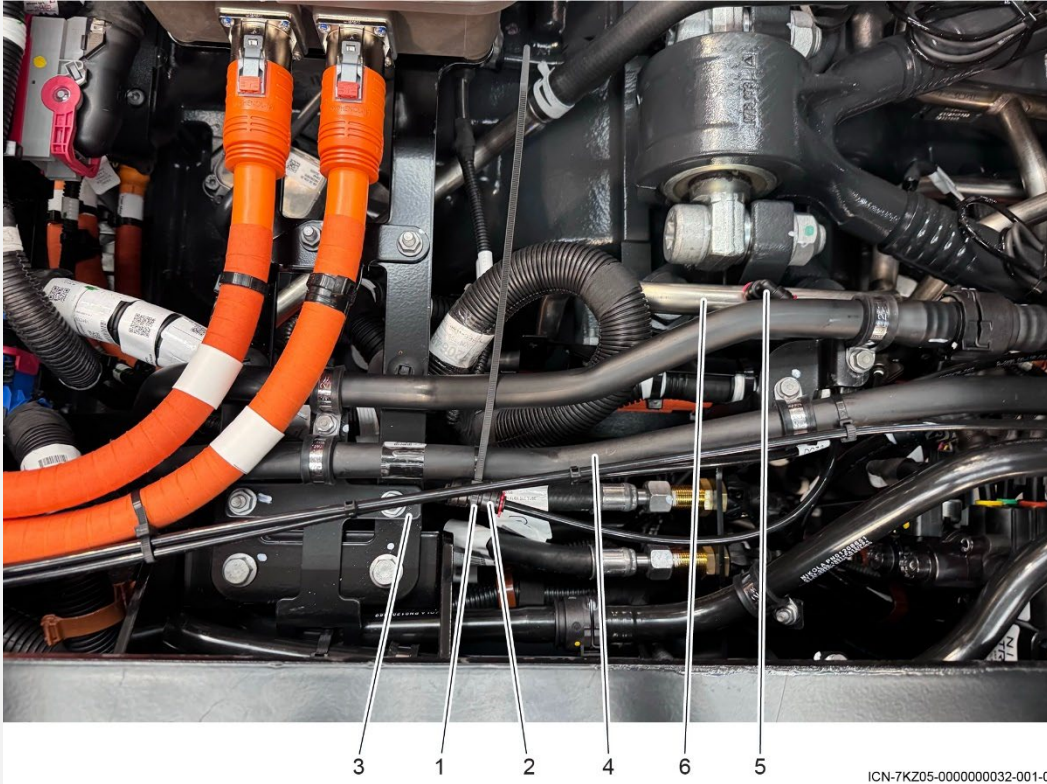
## PROCEDURE

### Degas Hose Extension Install Cont.

4. Install the open end of the 90-degree fitting (5) onto the port on the e-axis line (6) until fully seated.

**Note:** With the locking clip already installed onto the 90-degree fitting, more force will be necessary to correctly install.

5. Install one loop of the double tie strap (1) tightly around the inline fitting (2).
6. With the open end of the inline fitting (2) aligned with the rear center PDU bracket (3) (as shown in **Figure 7**), install the other loop of the double tie strap (1) around the inverter thermal hose (4).



**Figure 7, Degas Hose Extension Install (1 of 2)**

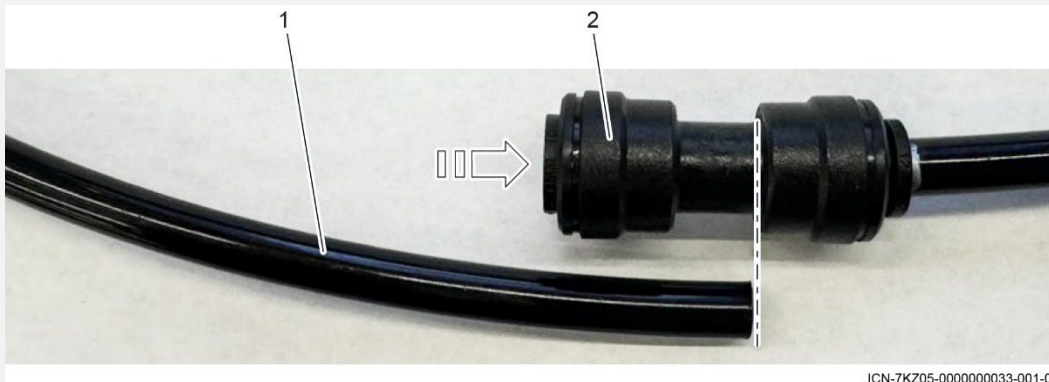
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## PROCEDURE

**Degas Hose Extension Install Cont.**

7. Prepare the vehicle side degas hose (1) as follows:
  - a. Place the degas hose (1) next to the degas hose extension inline fitting (2).
  - b. Cut the degas hose (1) so that it will be fully seated into the inline fitting (2) as shown in **Figure 8**.
8. Install the degas hose (1) into the inline fitting (2) until fully seated.

**Note:** Fully seated is approximately **0.6 in. (15 mm)** of hose into fitting.



ICN-7KZ05-0000000033-001-01

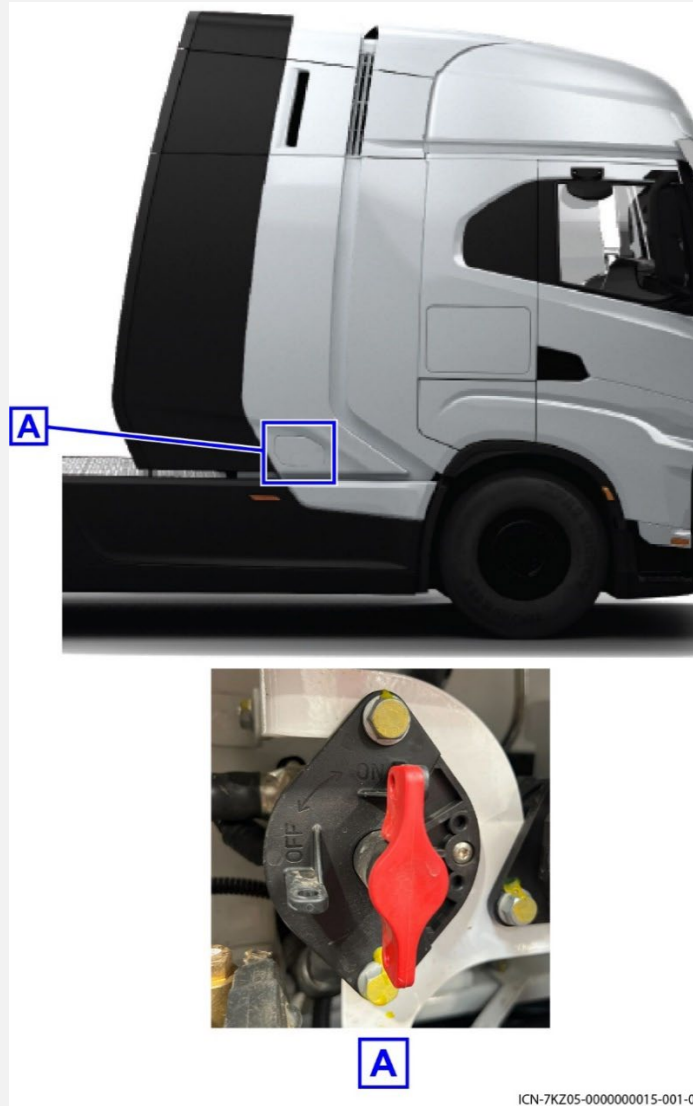
**Figure 8, Degas Hose Extension Install (2 of 2)**



## PROCEDURE

### Final Steps

1. Turn the MBD to the ON position to reconnect the vehicle's electrical system as shown in **Figure 12**.



**Figure 9, MBD On**

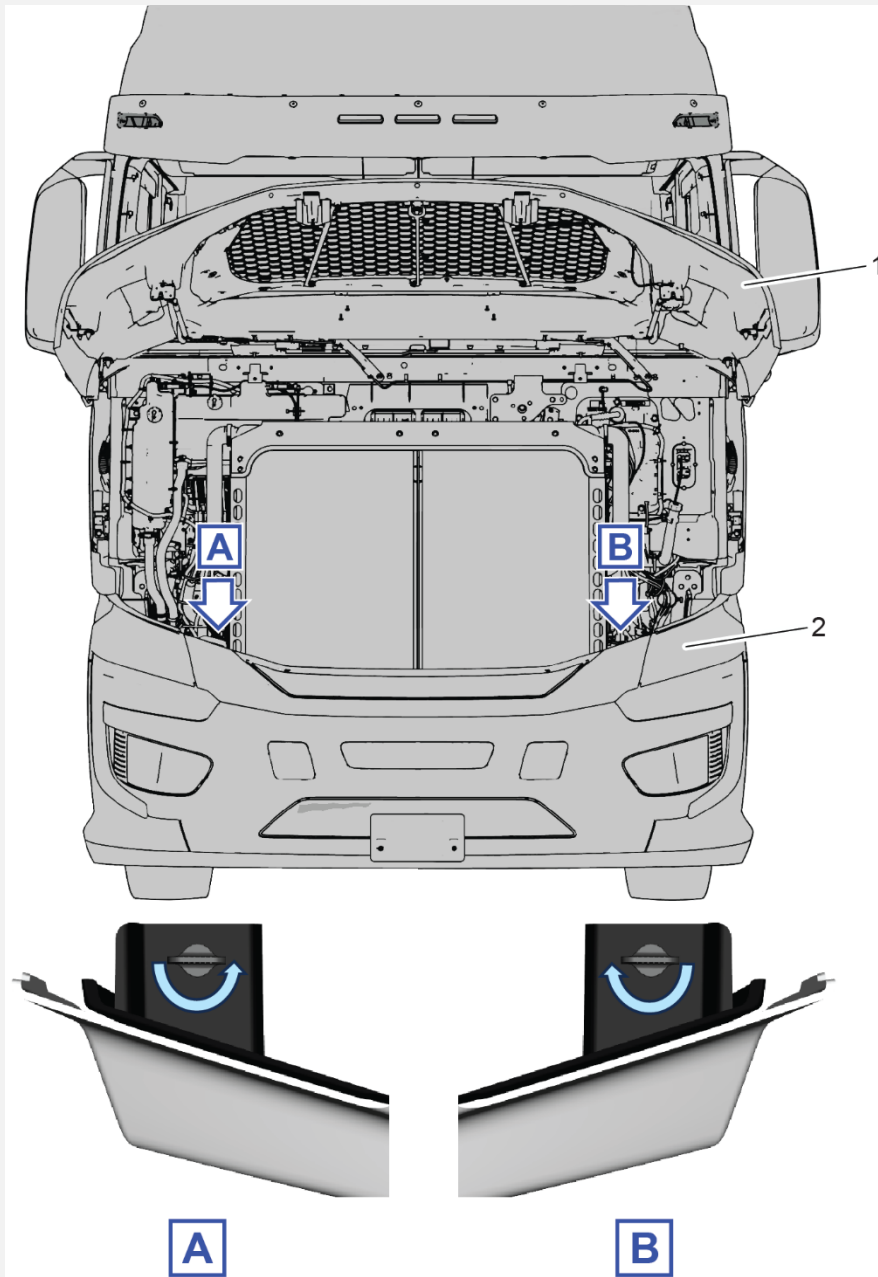
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## PROCEDURE

### Final Steps Cont.

**NOTICE:** Risk of damage. Before tilting the radiator and cab, the upper center front bumper trim must be removed. Failure to follow these instructions may cause vehicle damage.

2. Lift the front grille (1) shown in **Figure 10**.
3. Locate and twist the two bumper trim (2) clips to the unlock position.
4. Remove the bumper trim (2) from the vehicle and place in a safe place.



ICN-7KZ05-0000000005-001-01

**Figure 10, Bumper Trim Removal**

## PROCEDURE

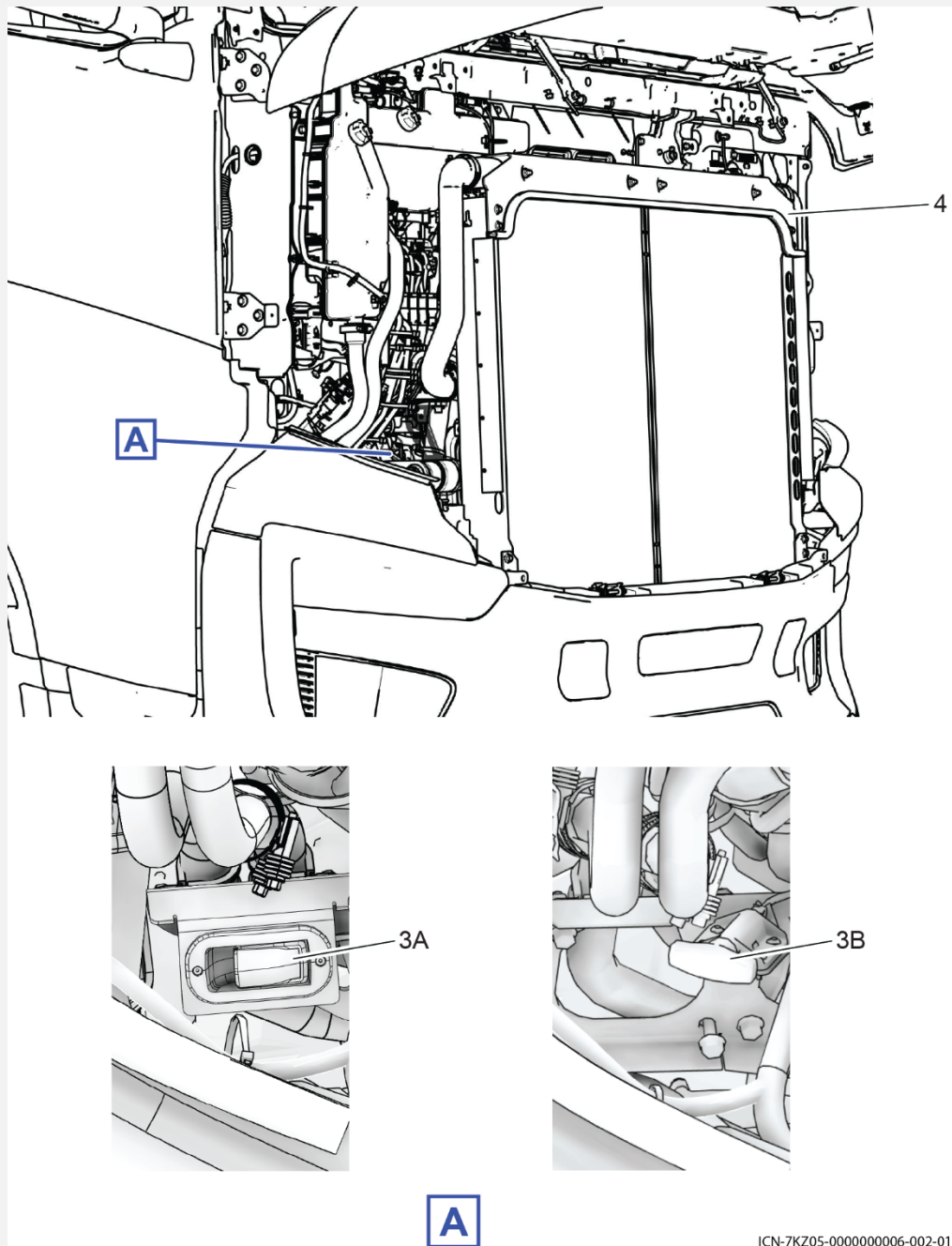
### Final Steps Cont.

**NOTICE:** Risk of damage. Before tilting the cab, the radiator must be tilted until the cab strap is fully engaged. Failure to follow these instructions may cause vehicle damage.

5. Locate the radiator release paddle (3A) or T-handle (3B) on the passenger side of the vehicle shown in **Figure 11**.

**Note:** Radiator release type will depend on what is installed on the vehicle.

6. While holding the radiator (4) pull the T-handle (3).

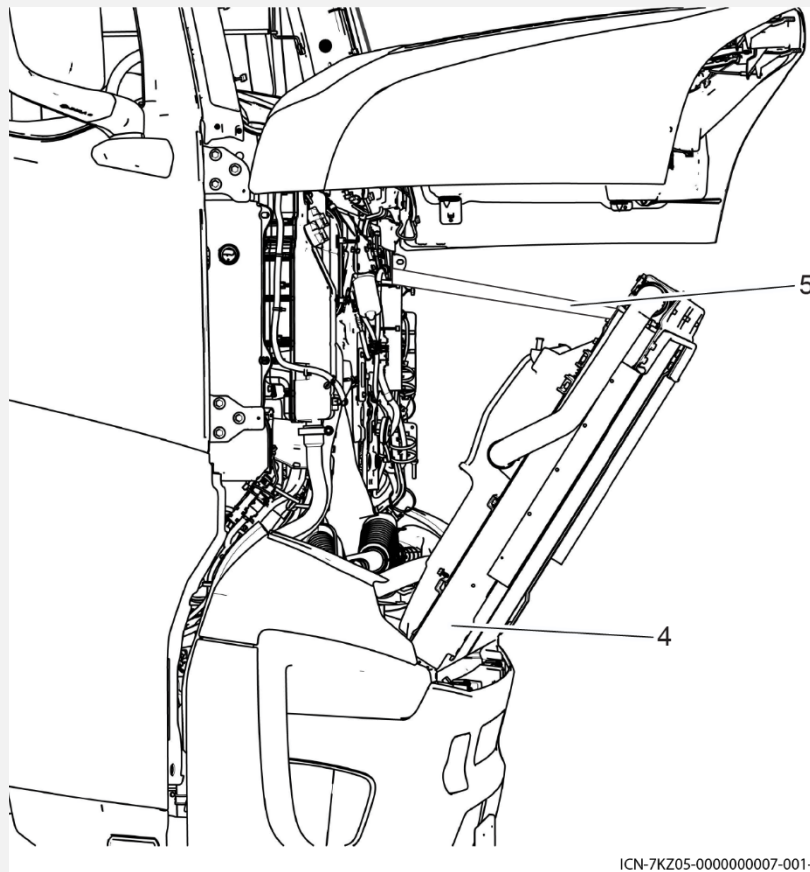


**Figure 11, Radiator Release**

## PROCEDURE

### Final Steps Cont.

7. Tilt the radiator (4) down until the cab strap (5) is fully engaged shown in **Figure 12**.



**Figure 12, Radiator Tilt**

8. Log in to the "Diagnostic" screen on the infotainment center.
9. Under TMM UDS Routines, run the following routines:
  - a. PwrTrnDegasStg1  
**Note:** This routine takes approximately eight minutes to complete.
  - b. PwrTrnDegasStg2  
**Note:** This routine takes approximately eight minutes to complete.

## PROCEDURE

### Final Steps Cont.

10. Tilt the cab forward to access the powertrain coolant expansion tank (1).

**Note:** The powertrain coolant expansion tank is located under the cab in front of the hydrogen storage system backpack on the passenger side of the vehicle as shown in **Figure 13**.

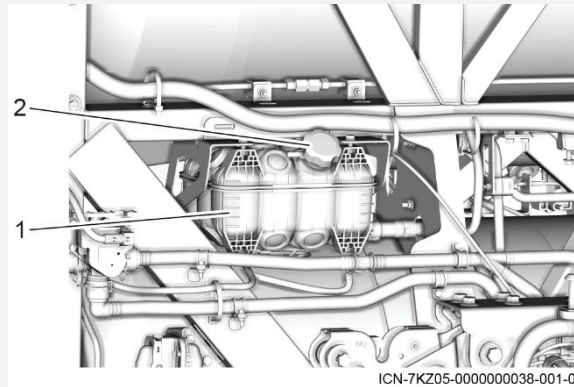
11. Check the coolant level in the powertrain coolant expansion tank (1).

12. If coolant needs to be added, do the following:

- a. Remove the cap (2) from the powertrain coolant expansion tank (1).
- b. Add coolant until the level is at the MAX line.

**Note:** Refer to "MATERIALS REQUIRED" on page 1 for the correct coolant.

- c. Reinstall the cap (2) onto the powertrain coolant expansion tank (1).



ICN-7KZ05-000000038-001-01

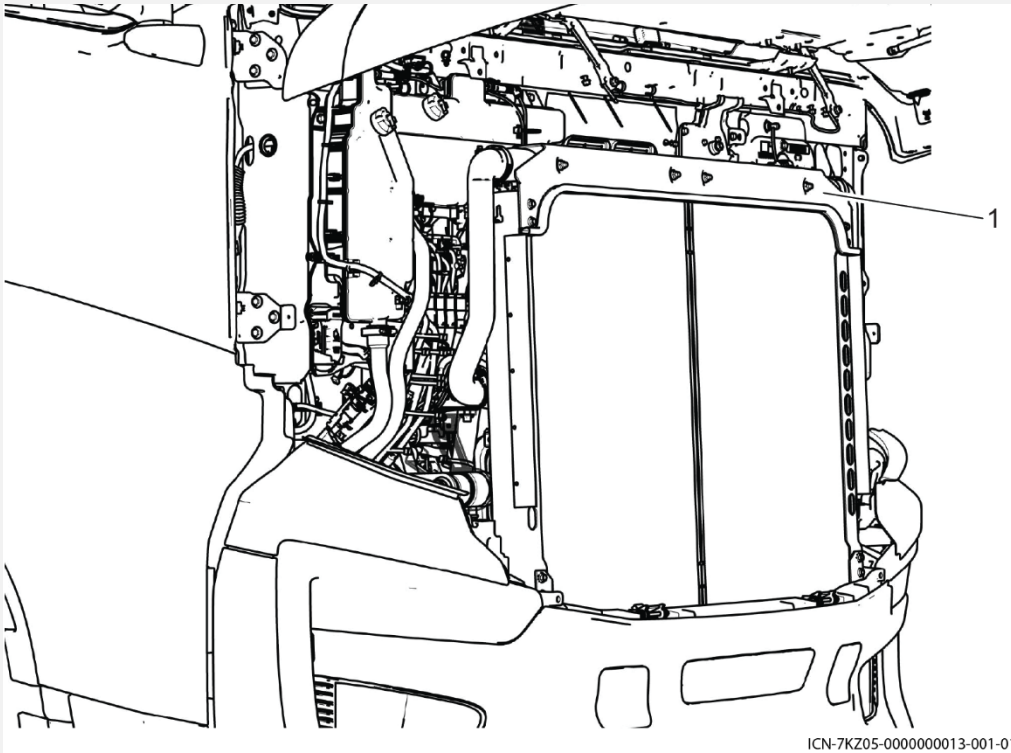
**Figure 13, Powertrain Coolant Expansion Tank Location**

13. Tilt the cab back to its original position.

## PROCEDURE

### Final Steps Cont.

14. Push the radiator (1) back until it locks into place shown in **Figure 14**.



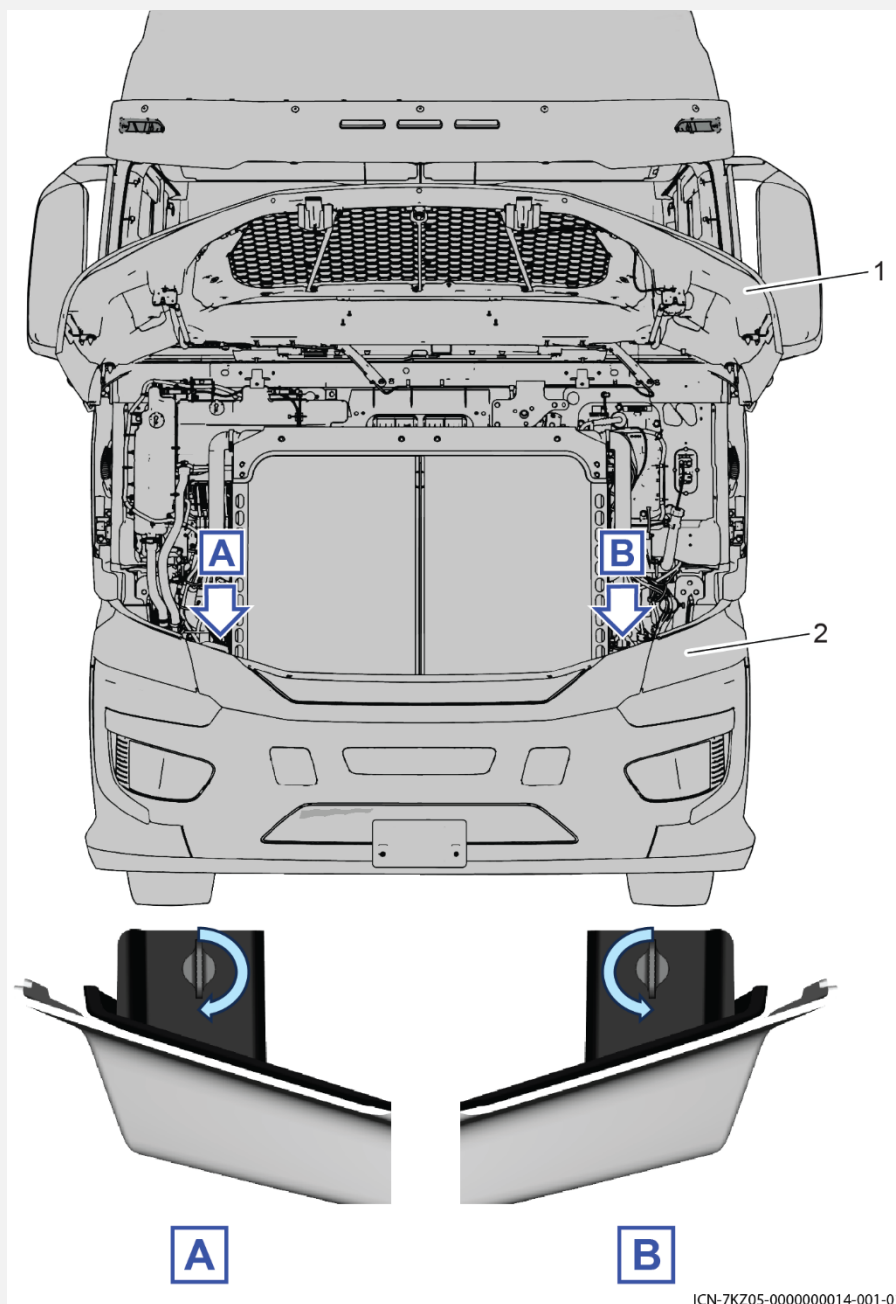
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**Figure 14, Radiator Tilt and Lock**

## PROCEDURE

### Final Steps Cont.

15. Reinstall the bumper trim (2) onto the vehicle shown in **Figure 15**.
16. Locate and twist the two bumper trim (2) clips to the lock position.
17. Lower the front grille (1) on the vehicle.



**Figure 15, Bumper Trim Install**

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