

REFERENCE:	Nova Bus Manuals
SECTION:	09: Engine Cooling
RS N°:	MQR 7621-2692
EFFECTIVE IN PROD.:	LF53 (2024FE)
TC RECALL N°:	2024-193
NHTSA RECALL N°:	24V231

APPLICATION DEADLINES: N/A CLAIM
REFERENCE NUMBER: SR5577

SUBJECT:	Engine Coolant Hose
JUSTIFICATION:	Vehicles may have been built with an engine coolant return hoses that are incompatible with the coolant system temperatures. In the event that the engine coolant return hose fails and the coolant level reaches a critical low threshold, the engine may shutdown. An unexpected engine shutdown could increase the risk of a crash.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Replace the engine coolant hoses N95062-47 and N95062-48 with the new coolant hoses N95060-254 and N95060- 249.	Nova Bus	Nova Bus	3.5h
2	–	–	–	–

MATERIAL REQUIRED PER VEHICLE

QTY	PART N°	REV.	DESCRIPTION
LEVEL 1			
1	N95060-249	–	Coolant hose 5/16 "ID X 125"
1	N95060-254	–	Coolant hose 5/16 "ID X 32"
4	2494772	–	Hose clamp
13	N93464-15	–	Split Block
4	N56339	–	Cable tie (tefzel)
LEVEL 2			
–	–	–	–

Materials will be available within 106 days once your order has been placed.

To order, please contact novabus.parts@volvo.com

Or by phone for CANADA 1-800-771-6682, for USA 1-877-999-8808

Specify document number, quantity of parts required and shipping address.

DISPOSAL OF PARTS

REMOVED PARTS ARE:	DISCARDED *	RETAINED	* Dispose of the unused parts and the defective parts in accordance with local environmental standards in effect.
	Yes	–	

REVISION HISTORY

REV.	DATE	CHANGE DESCRIPTION	WRITTEN BY
NR	2024JL03	Initial release	Luc Carignan

APPROVED BY:

Jose David
Montoya

NQF705003 VERSION 5

Signature numérique de Jose David
Montoya
Date : 2024.07.03 07:52:26 -04'00'

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CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Chicago Transit Authority - CTA - Illinois	LD76	8350	8449			100
Chicago Transit Authority - CTA - Illinois	LE87	8450	8549			100
Chicago Transit Authority - CTA - Illinois	LF11	8550	8551			2
Chicago Transit Authority - CTA - Illinois	LF11	8553	8585			33
Chicago Transit Authority - CTA - Illinois	LF11	8587	8590			4
Chicago Transit Authority - CTA - Illinois	LF11	8592	8601			10
Chicago Transit Authority - CTA - Illinois	LF11	8603	8603			1
Chicago Transit Authority - CTA - Illinois	LF11	8606	8607			2
Chicago Transit Authority - CTA - Illinois	LF11	8609	8610			2
Chicago Transit Authority - CTA - Illinois	LF11	8612	8612			1
Chicago Transit Authority - CTA - Illinois	LF11	8614	8616			3
Chicago Transit Authority - CTA - Illinois	LF11	8618	8620			3
Chicago Transit Authority - CTA - Illinois	LF11	8622	8623			2
Chicago Transit Authority - CTA - Illinois	LF11	8625	8649			25
Chicago Transit Authority - CTA - Illinois	LF52	8651	8654			4
Chicago Transit Authority - CTA - Illinois	LF52	8656	8663			8
Chicago Transit Authority - CTA - Illinois	LF52	8665	8668			4
Chicago Transit Authority - CTA - Illinois	LF52	8670	8671			2
Chicago Transit Authority - CTA - Illinois	LF52	8682	8685			4
Chicago Transit Authority - CTA - Illinois	LF52	8687	8687			1
Chicago Transit Authority - CTA - Illinois	LF52	8689	8691			3
Chicago Transit Authority - CTA - Illinois	LF52	8693	8694			2
New York City Transit - NYCT - New York	LD06	8755	8758			4
New York City Transit - NYCT - New York	LD08	8759	8963			205
New York City Transit - NYCT - New York	LE84	8964	8970			7
New York City Transit - NYCT - New York	LE84	8972	8973			2
New York City Transit - NYCT - New York	LE84	8975	8975			1
New York City Transit - NYCT - New York	LE84	8977	8979			3
New York City Transit - NYCT - New York	LE84	8983	8983			1
New York City Transit - NYCT - New York	LE84	8985	8985			1
New York City Transit - NYCT - New York	LE84	8987	9014			27
New York City Transit - NYCT - New York	LE84	9016	9017			2
New York City Transit - NYCT - New York	LE84	9019	9020			2
New York City Transit - NYCT - New York	LE84	9022	9022			1
New York City Transit - NYCT - New York	LE84	9024	9025			2
New York City Transit - NYCT - New York	LE84	9027	9031			5
New York City Transit - NYCT - New York	LE84	9033	9046			14
New York City Transit - NYCT - New York	LE84	9048	9049			2
New York City Transit - NYCT - New York	LE84	9051	9053			3
New York City Transit - NYCT - New York	LE84	9056	9056			1
New York City Transit - NYCT - New York	LE84	9059	9064			6
New York City Transit - NYCT - New York	LE84	9067	9068			2
New York City Transit - NYCT - New York	LE84	9070	9070			1

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
New York City Transit - NYCT - New York	LE84	9074	9074			1
New York City Transit - NYCT - New York	LE84	9078	9078			1
New York City Transit - NYCT - New York	LE84	9080	9081			2
New York City Transit - NYCT - New York	LE84	9083	9086			4
New York City Transit - NYCT - New York	LE84	9093	9093			1
New York City Transit - NYCT - New York	LF51	9105	9105			1
New York City Transit - NYCT - New York	LF51	9109	9112			4
New York City Transit - NYCT - New York	LF51	9114	9114			1
New York City Transit - NYCT - New York	LF51	9117	9118			2
New York City Transit - NYCT - New York	LF51	9125	9127			3
New York City Transit - NYCT - New York	LF51	9129	9129			1
New York City Transit - NYCT - New York	LF51	9131	9134			4
New York City Transit - NYCT - New York	LF51	9136	9136			1
New York City Transit - NYCT - New York	LF51	9138	9138			1
New York City Transit - NYCT - New York	LF51	9140	9141			2
New York City Transit - NYCT - New York	LF51	9148	9148			1
New York City Transit - NYCT - New York	LF51	9150	9152			3
New York City Transit - NYCT - New York	LF51	9156	9156			1
New York City Transit - NYCT - New York	LF51	9165	9165			1
New York City Transit - NYCT - New York	LF51	9166	9169			4
New York City Transit - NYCT - New York	LF51	9174	9175			2
New York City Transit - NYCT - New York	LF51	9179	9179			1
New York City Transit - NYCT - New York	LF51	9182	9182			1
New York City Transit - NYCT - New York	LF51	9198	9200			3

**WARNING**

FOLLOW YOUR INTERNAL SAFETY PROCEDURES.

PROCEDURE

**CAUTION**

It is highly recommended to wait until the engine is cold before starting this procedure.

**WARNING**

Before starting any work on the radiator, make sure the vehicle is stationary. Isolate the engine cooling circuit from the control box located at the rear of the vehicle.

- 1.1. Park the vehicle on an even surface with the transmission on neutral.
- 1.2. Apply the parking brake and set the master control switch to the **stop** position.
- 1.3. Set the battery disconnect switch in the battery compartment to the **off** position.
- 1.4. Open the radiator canopy. See Figure 1.
- 1.5. Remove the street side light panel. Retain the panel and hardware. See Figure 1.

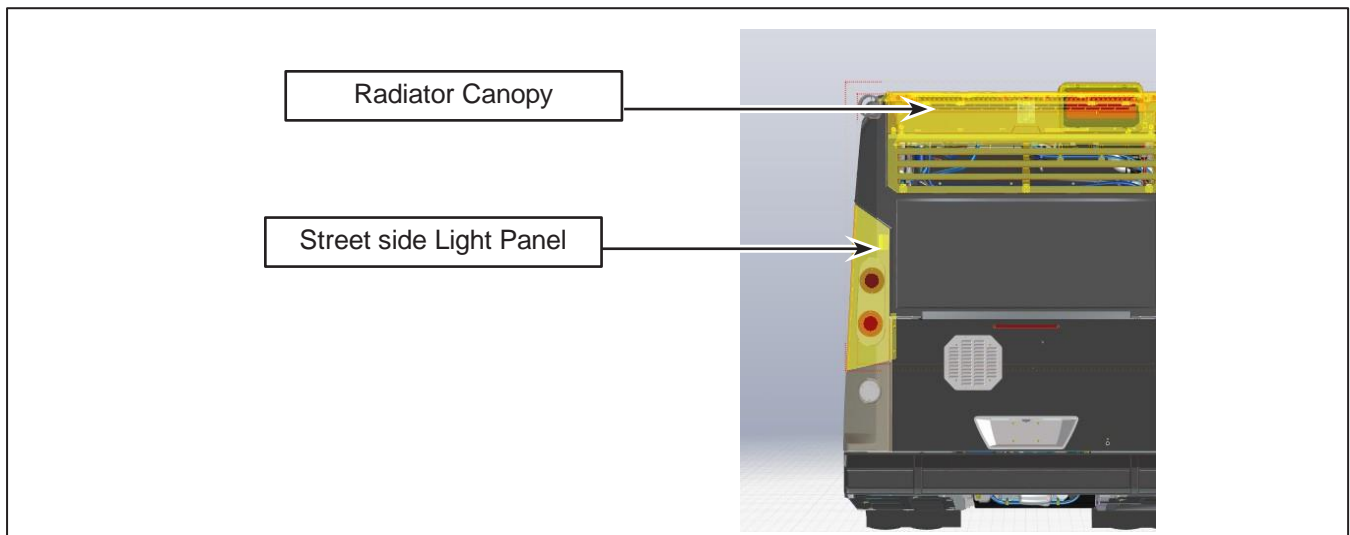


Figure 1 - Radiator Canopy and Street Side Light Panel to Remove

- 1.6. Turn the lock and remove the radiator grid. Retain the grid and hardware. See Figure 2.
- 1.7. If required to access the coolant hose split block remove the cover located between the radiator and the surge tank. A double face foam affix a portion of the cover. Retain the cover and hardware. See Figure 2.

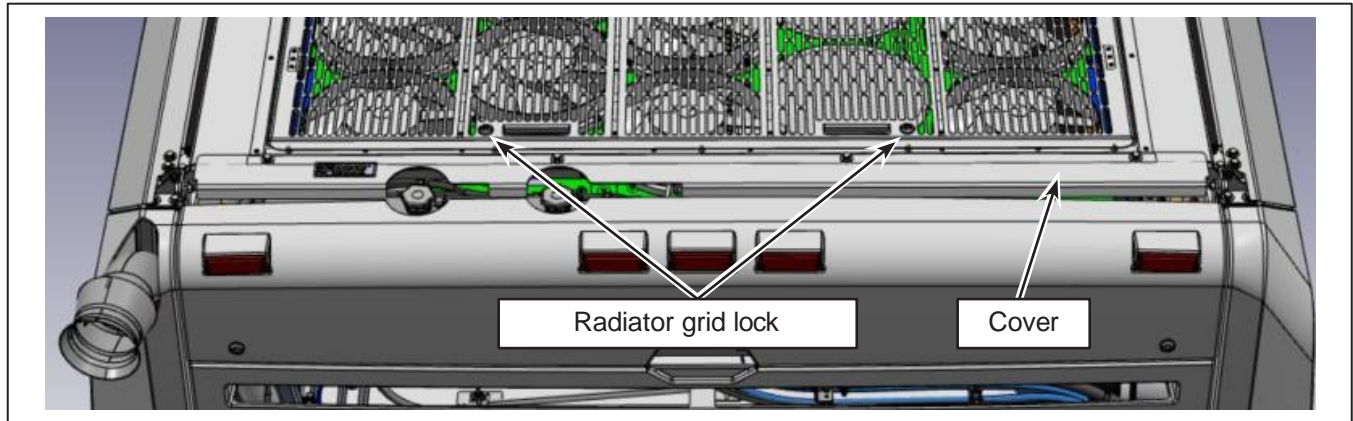


Figure 2 - Radiator Grid and Cover

- 1.8. Remove and retain the surge tank pressure caps. See Figure 3.



CAUTION

Wait until the temperature is below 120°F (50°C) before removing the surge tank pressure caps. Failure to do so can cause personal injury from heated coolant spray.

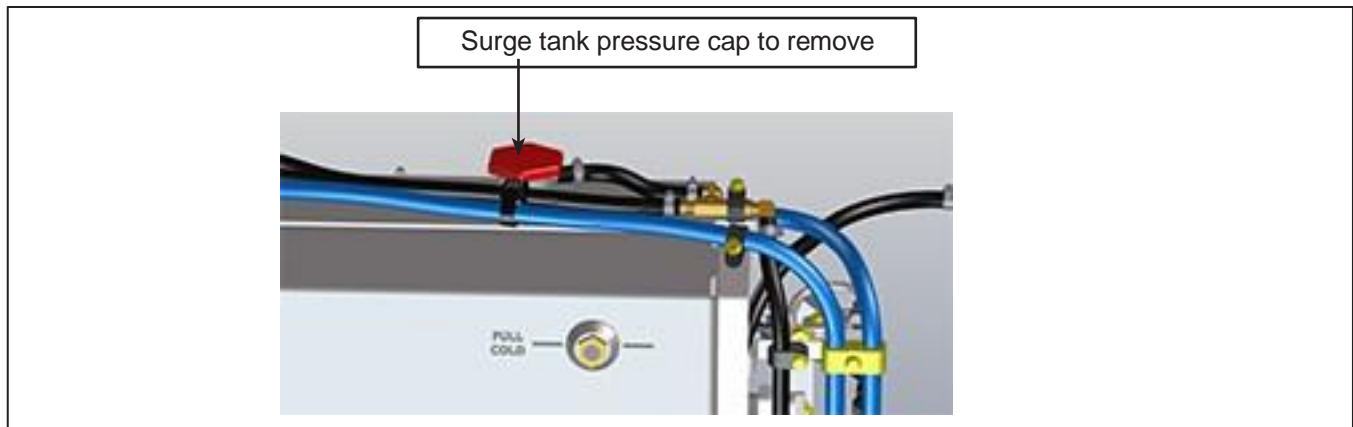


Figure 3 - Surge Tank Pressure Cap

- 1.9. Raise the vehicle.

**CAUTION**

For information on hoisting and towing of the vehicle, see section 18: *hoisting and towing in the Nova Bus maintenance manual*. Use appropriate hoisting equipment for your protection and to prevent damage to the vehicle.

- 1.10. Open the drain valves/plugs and let the coolant fluid drain into an appropriate container (a drain pan with a capacity of about 35 gallons (119 liters) will be adequate for most applications):
- If equipped with an Allison transmission, open the drain valve on the transmission oil cooler. See Figure 4.
 - If equipped with a ZF or Voith transmission, remove the drain plug on the transmission outlet hose. See Figure 4.
- 1.11. Close the drain valves/plugs when the coolant is fully drained.
- 1.12. Lower the vehicle.

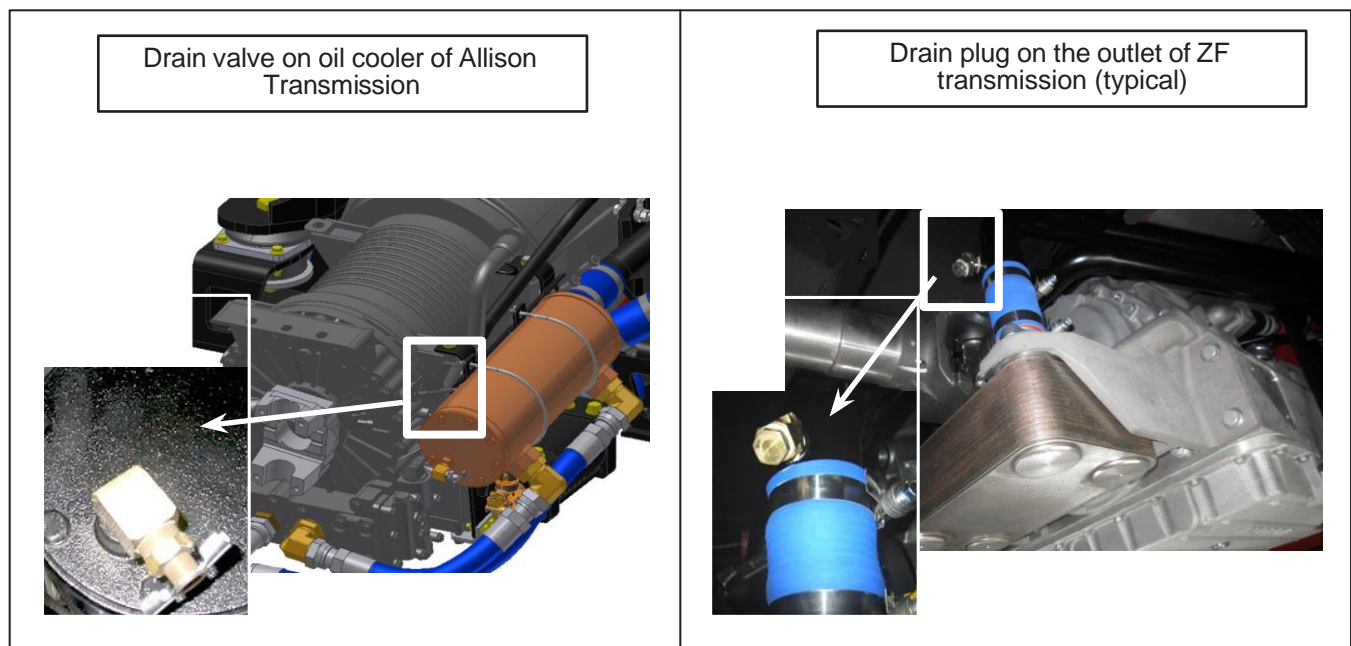


Figure 4 - Coolant Drain Valve / Plug

- 1.13. Install the retained surge tank pressure caps. See Figure 5.
- 1.14. Remove and discard the split block fixing the hoses to remove to the surge tank. Retain the hardware. See Figure 5.
- 1.15. Remove and discard the hose clamp fixing the hoses to remove from the surge tank. See Figure 5.
- 1.16. Remove the hose clamp fixing coolant hose N95062-47 to the radiator. See Figure 5.
- 1.17. Disconnect coolant hose N95062-47 from the radiator. See Figure 5.
- 1.18. Disconnect coolant hose N95062-47 and N95062-48 from the surge tank. See Figure 5.

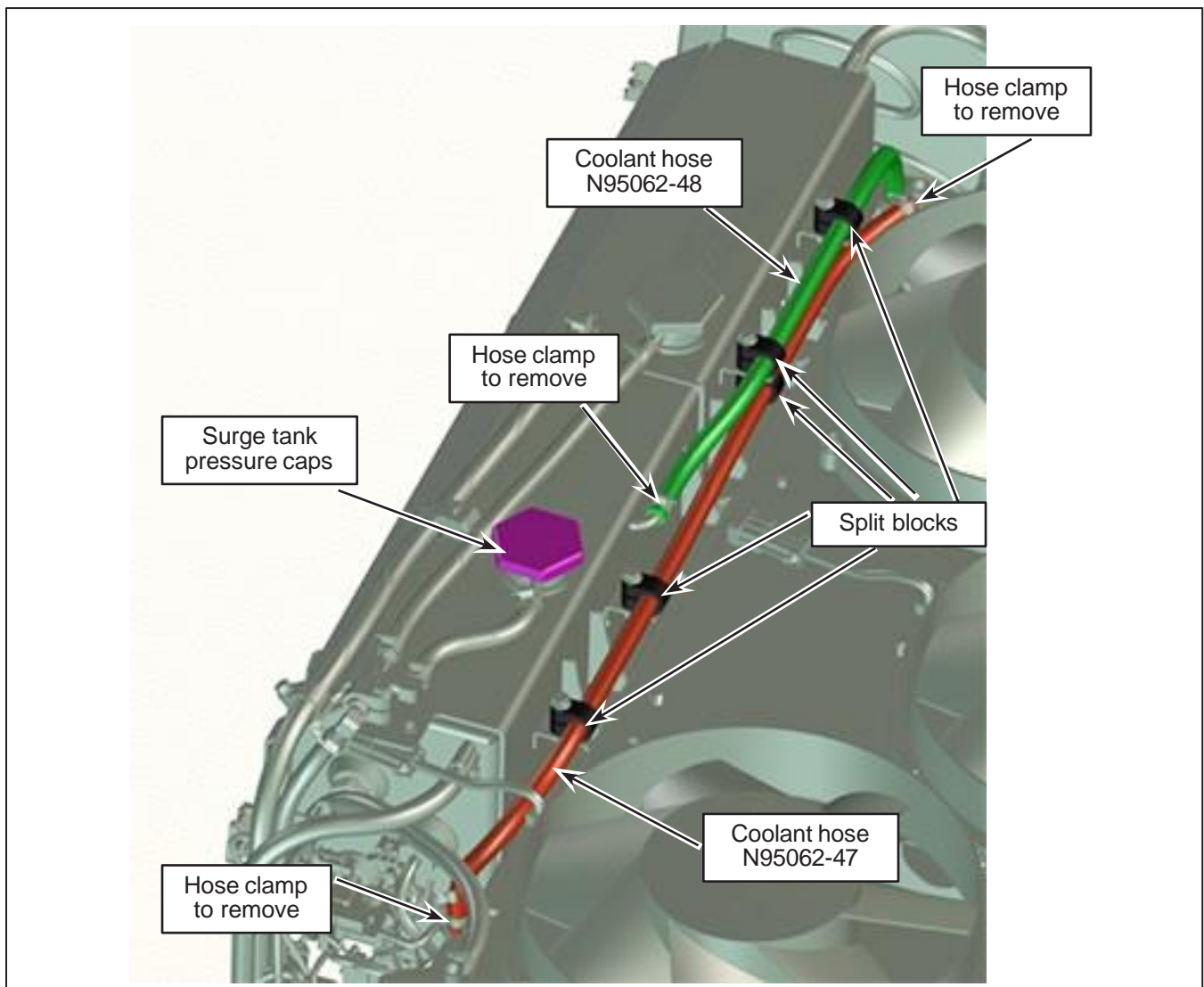


Figure 5 - Coolant Hose and Hardware to Remove

- 1.19. Connect the new coolant hose N95060-254 to the surge tank and radiator using hoses clamp 2494772. See Figure 6 for torque value.
- 1.20. Connect the new coolant hose N95060-249 to the surge tank using the hose clamp 2494772. See Figure 6 for torque value.
- 1.21. Fix the new coolant hoses N95060-249 and N95060-254 to the surge tank using the new split blocks N93464-15 and the retained hardware. Torque split blocks. See Figure 6 for torque value.
- 1.22. Open the rear engine access door.

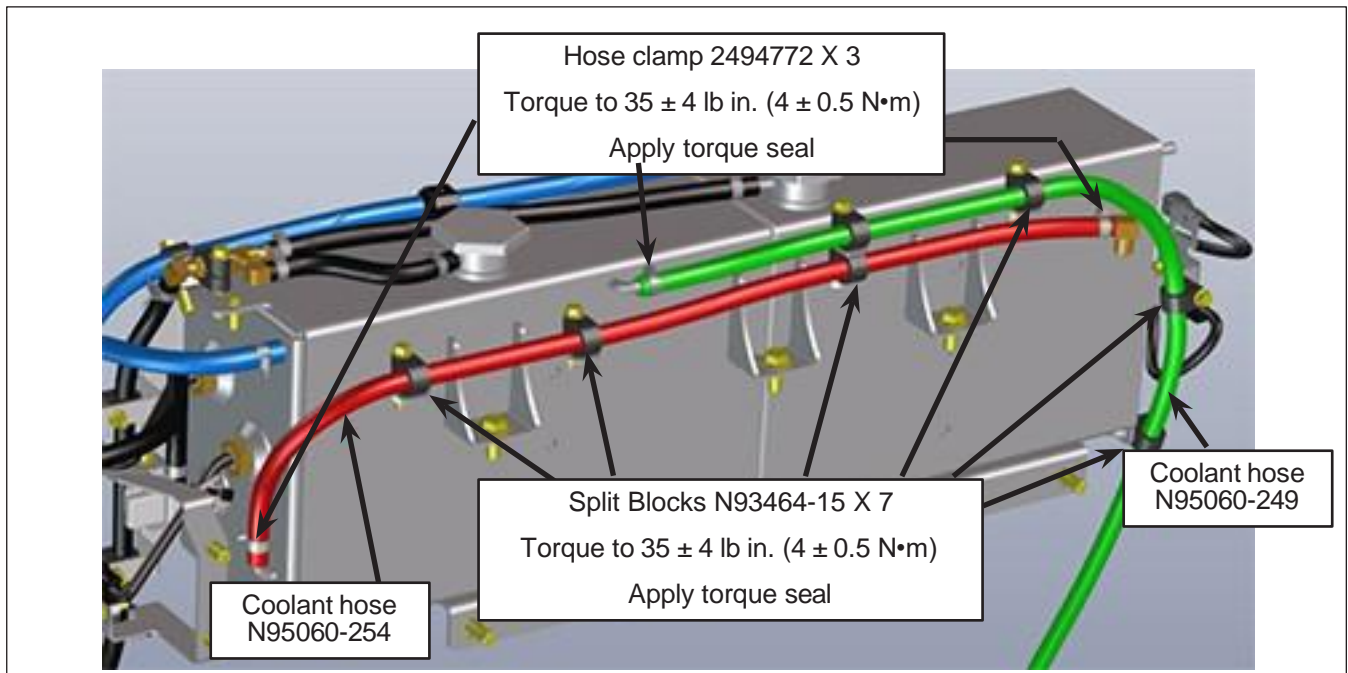


Figure 6 - New Coolant Hoses N95060-249 and N95060-254 Installed on Surge Tank.

- 1.23. Remove and discard all the split blocks maintaining the old coolant hose N95062-48. Retain the hardware.
- 1.24. If there is cable ties fixing the old coolant hose N95062-48 note their position and remove them.
- 1.25. Disconnect from the engine and discard the coolant hose N95062-48.
- 1.26. Affix the new coolant hose N95060-249 to the same anchor points of the old coolant hose using the new N93464-15 split blocks. Torque the split blocks. See Figure 7 for torque value.
- 1.27. Slide a new hose clamp 2494772 on the N95060-249 coolant hose and connect the hose to the engine. Torque the hose clamp. See Figure 7 for torque value.
- 1.28. If cable ties were used to affix the old coolant hoses, affix the new coolant hoses N95060-249 and N95062-254 in the same position using N56339 cable ties.

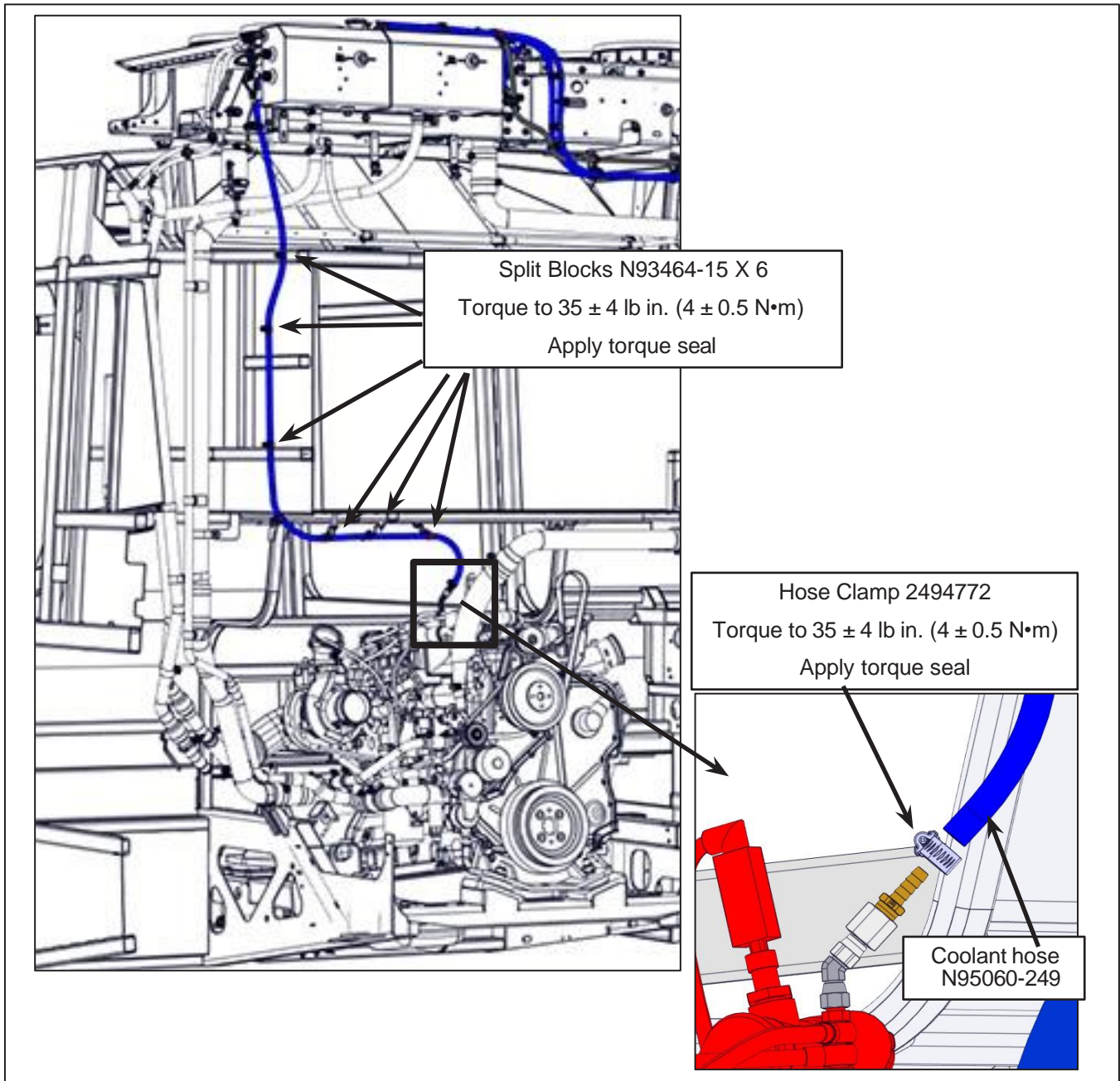


Figure 7 - Coolant Hose N95060-249 Installation in Engine Compartment

- 1.29. Connect the coolant fill hose to the quick-connect coupling, located at the rear left of the engine compartment and place a suitably sized container where the surge tank drain line ends under the vehicle to collect the coolant being rejected during filling. See Figure 8.
- 1.30. Start filling the system with the retained coolant, open the valve or press the button, and maintained to evacuate the air from the surge tank. It is very important that the valve remains open throughout the filling procedure to avoid a buildup of pressure inside the tank. Fill until overflow. Close the valve. See Figure 8.

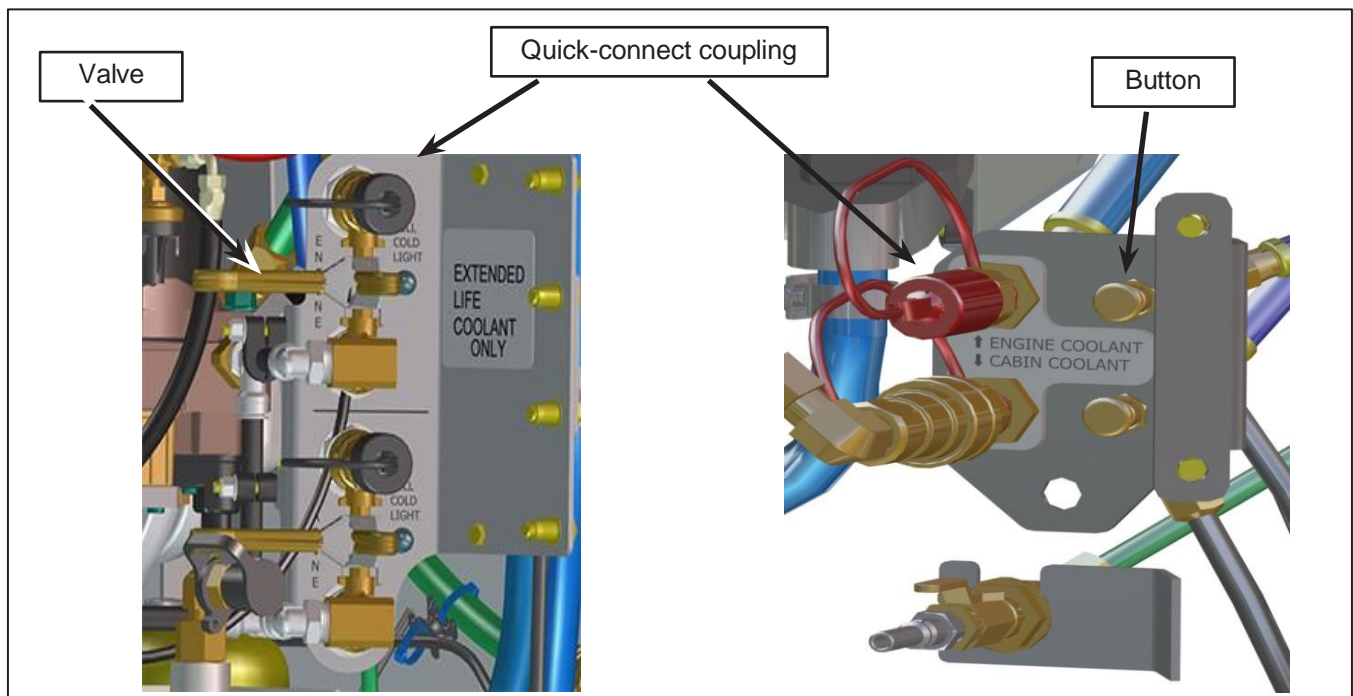


Figure 8 - Coolant Quick Connect Filling Fitting and Valve

- 1.31. Set the battery disconnect switch in the battery compartment to the on position.
- 1.32. Close the radiator canopy.
- 1.33. Install the retained street side light panel.
- 1.34. Close the radiator grid.
- 1.35. Close the rear engine access door.
- 1.36. The vehicle can return in service.

