

REFERENCE:	Nova Bus Manuals
SECTION:	14: Heating and ventilation
RS N°:	MQR 7621-336
EFFECTIVE IN PROD.:	—

APPLICATION DEADLINE: 2016JL01
CLAIM REFERENCE NUMBER: WB-3210

SUBJECT:	Auxiliary heater pump
JUSTIFICATION:	New auxiliary heater pump piping configuration.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Install the new auxiliary heater pump piping.	Nova Bus	Nova Bus	4 hours
2	—	—	—	—

MATERIAL

QTY	PART N°	REV.	DESCRIPTION	REPLACES PART N°
LEVEL 1				
1	N77707	—	PIPE ASSY SUCTION ROTRON PUMP	—
1	N20400	—	DRAIN COCK M-NPT-6/M-NPT-2	—
1	2389154	—	GASKET WATER PUMP	—
2	N55583	—	WASHER NORD-LOCK M10 SS A4	—
2	0426370	—	SCREW SOCKET HD M/S 3/8-16X1 Z	—
2	N44888	—	NUT LOCKNYL M8 FL YP C8	—
1	N44882-03	—	SCREW M8X30 FL YP C8.8 D6921	—
1	N31320-10	—	SUPPORT CLAMP LOOP TYPE 1.375" DIA	—
1	N77713	—	ADAPTER NPTM-12/JIC-M-20	—
1	N95819-09	—	HOSE ASSY FC363 FLARE 37° JIC	—
1	N77710	—	BRACKET SUPPORT PIPE HTR ISL10	—
2	N44885-03	—	SCREW M8X30 FL SSA2 C70 D6921	—
2	N43233	—	NUT HEX M8 FLANGED WITH INSERT	—
3	N56339	—	TIE TEFZEL CABLE TIES	—
1	N56836	—	SPACER DUAL SWIVEL SADDLE	—
1	N38350	—	ANCHOR HEAVY DUTY MOUNTS 8mm	—
1	N32102	—	BOLT FLANGE M8X25	—
1	N29781	—	WASHER FLAT M6 SS D440R	—
1	N34500-01	—	BRACKET 90 DEG	—
1	N80925	—	SCREW 1/4-14x1 S/DRIL HEXFL SS	—
LEVEL 2				
—	—	—	—	—

Materials will be available within 42 days. To order, please contact Prevost Parts by phone at 1-800-771-6682, by fax at 1-888-668-2555 or by email at prevostparts.commandes@volvo.com. Specify document number, quantity of parts required and shipping address.

APPROVED BY: Daniel Theriault

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Date: 2015.05.21 20:29:00 -04'00'

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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	2014SE09	Initial release	Bertrand Plouffe
R1	2015AL06	Special tool added and installation information clarified.	Bertrand Plouffe

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
New York City Transit - New York	L608	8000	8014	L82U6B4000047	L82U0B4000061	15
New York City Transit - New York	L620	8015	8074	L82U2B4000062	L82U7B4000123	60
New York City Transit - New York	L621	8075	8089	L82U9B4000124	L82U9B4000138	15
New York City Transit - New York	L643	5895	5895	S92U1B4000143	S92U1B4000143	1
New York City Transit - New York	L670	5770	5894	S92U4C4500024	S92U3B4000242	125
New York City Transit - New York	L681	5896	5283	S92U2C4500023	S92U9C4500195	122
New York City Transit - New York	L692	5284	5363	S92U3C4500158	S92U3D4500274	80

**WARNING**

Follow your internal safety procedures.

PROCEDURE

- 1.1. 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. Respect your internal safety procedures. Use appropriate hoisting equipment for your protection.

- 1.2. Open the rear engine access door.
- 1.3. Locate the auxiliary heater pump. See Figure 1.

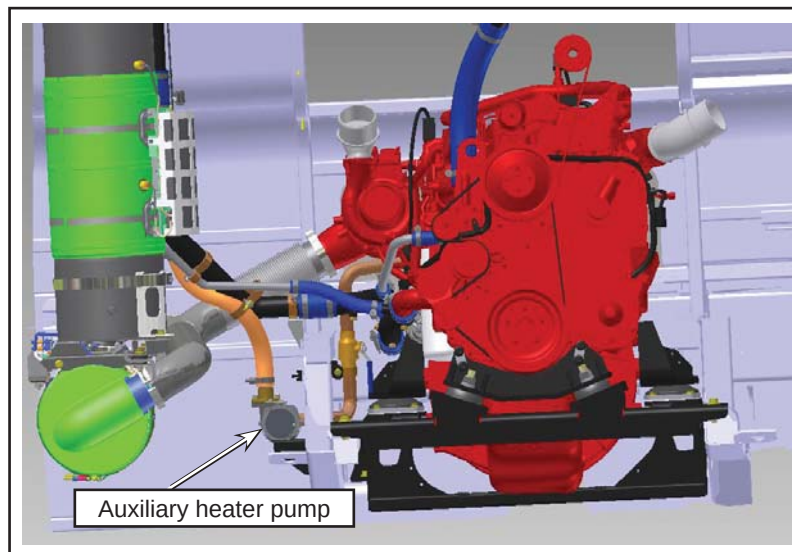


Figure 1 - Auxiliary Heater Pump Location

- 1.4. Drain the fluid from the engine and the auxiliary heater pump in accordance with section 14: **HEATING AND VENTILATION** of the Nova Bus maintenance manual.
- 1.5. Lift the rear seat and open the engine/transmission access door.
- 1.6. Disconnect the batteries in accordance with section 16: **ELECTRICAL SYSTEM** of the Nova Bus maintenance manual.
- 1.7. Remove the positive battery cable from the firewall connector. Retain the hardware. See Figure 2.

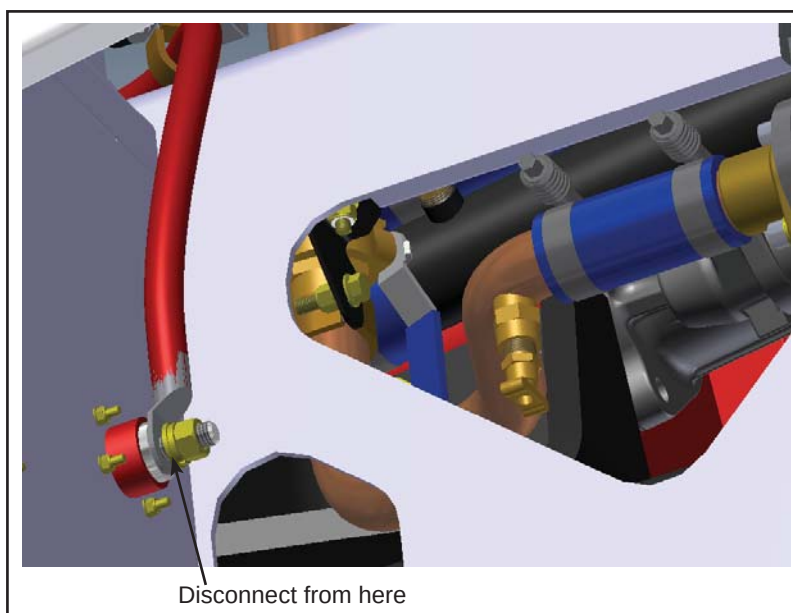


Figure 2 - Positive Battery Cable to be Disconnected

- 1.8. Remove the parts from the auxiliary heater pump flange to the fitting of the 45° elbow. The 45° elbow must stay connected to the engine block. Discard the hardware. See Figure 3.



NOTE

To remove the fitting close to the 45° elbow, use the special tool specifically designed for this purpose. To order the tool, contact your Nova Bus service representative. See Figure 4.

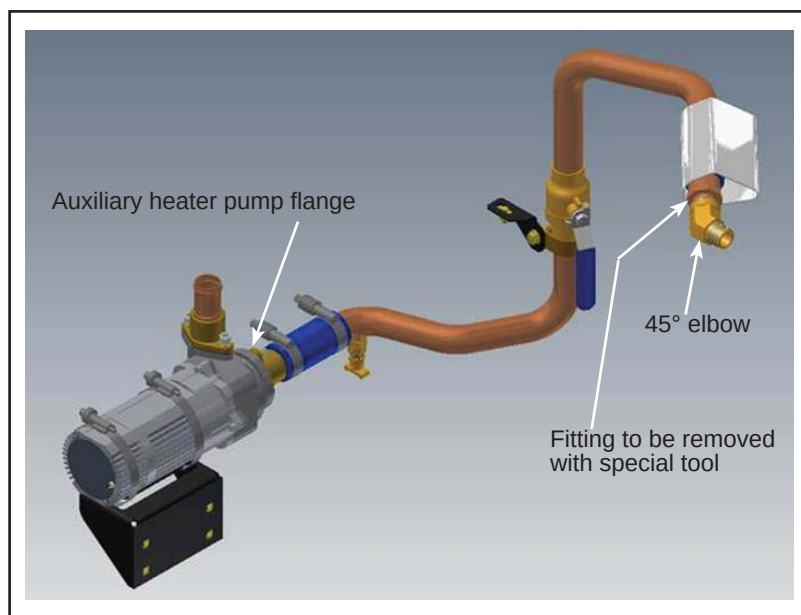


Figure 3 - Parts to be Removed



Figure 4 - Special Tool to Remove the Fitting

- 1.9. Position the 45° elbow at a 25° angle, using a protractor. See Figure 5.

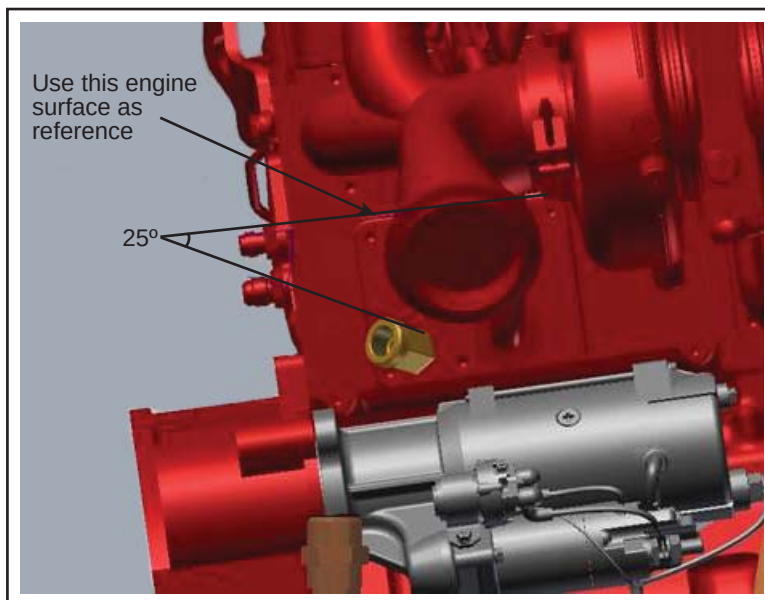


Figure 5 - Correct Position of the 45° Elbow

- 1.10. Drill two holes of 0.354 in. (9 mm) in diameter into the longitudinal beam to hold the N77710 bracket support in place. See Figure 6.

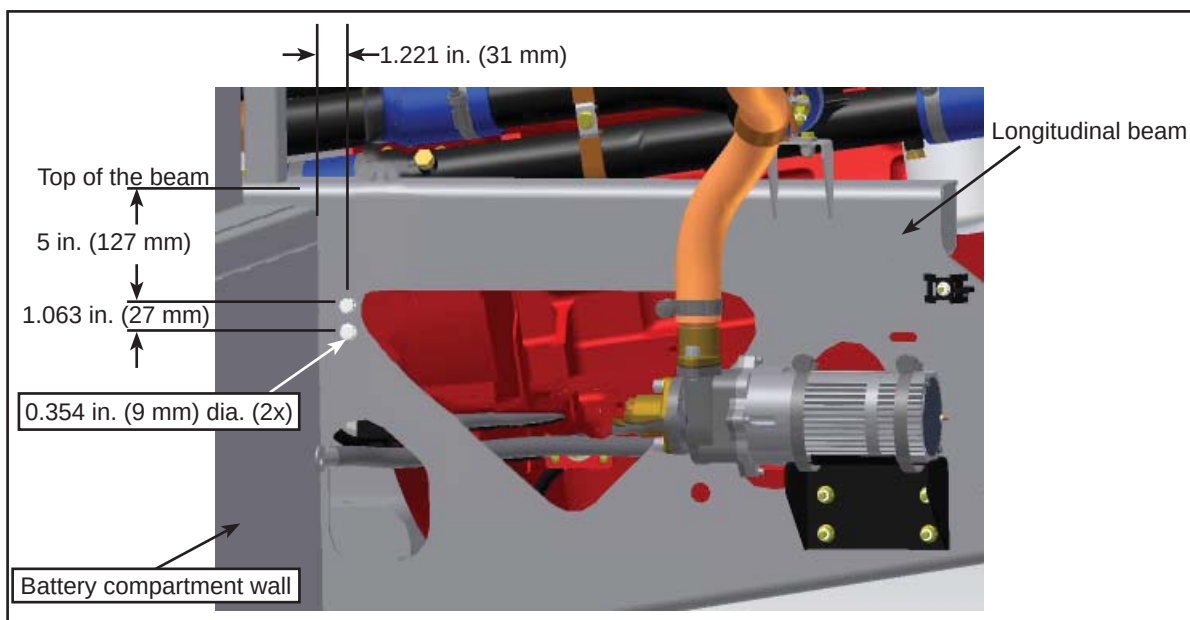


Figure 6 - N77710 Bracket Hole Drilling Locations

- 1.11. Use an angle drill to drill a hole $11/64$ in. (4.37 mm) in diameter x 0.197 in. (5 mm) in depth into the firewall to hold the N34500-01 bracket in place. See Figure 7. Shorten (cut) the drill bit if necessary.

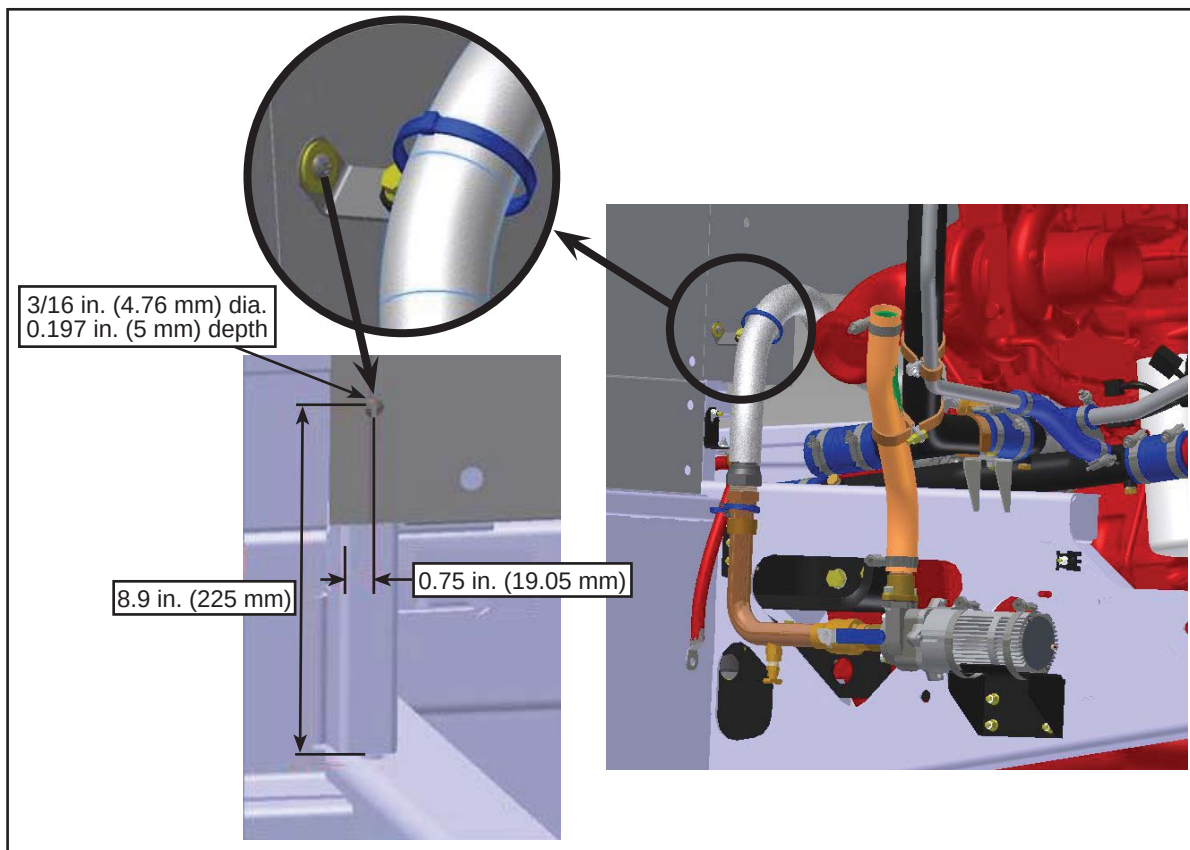


Figure 7 - N34500-01 Bracket Hole Drilling Location

- 1.12. Install N34500-01 bracket at a 45° angle on the firewall with N80925 screw and N29781 washer. Tighten the screw until the bracket is secured. See Figure 8.
- 1.13. Install N77707 pipe assembly onto the auxiliary pump with 2x 0426370 screws, 2x N55583 washers and 2389154 gasket. See Figure 8.
- 1.13.1. Make sure to keep a gap between the N77707 pipe assembly and the electrical cable. See Figure 8.

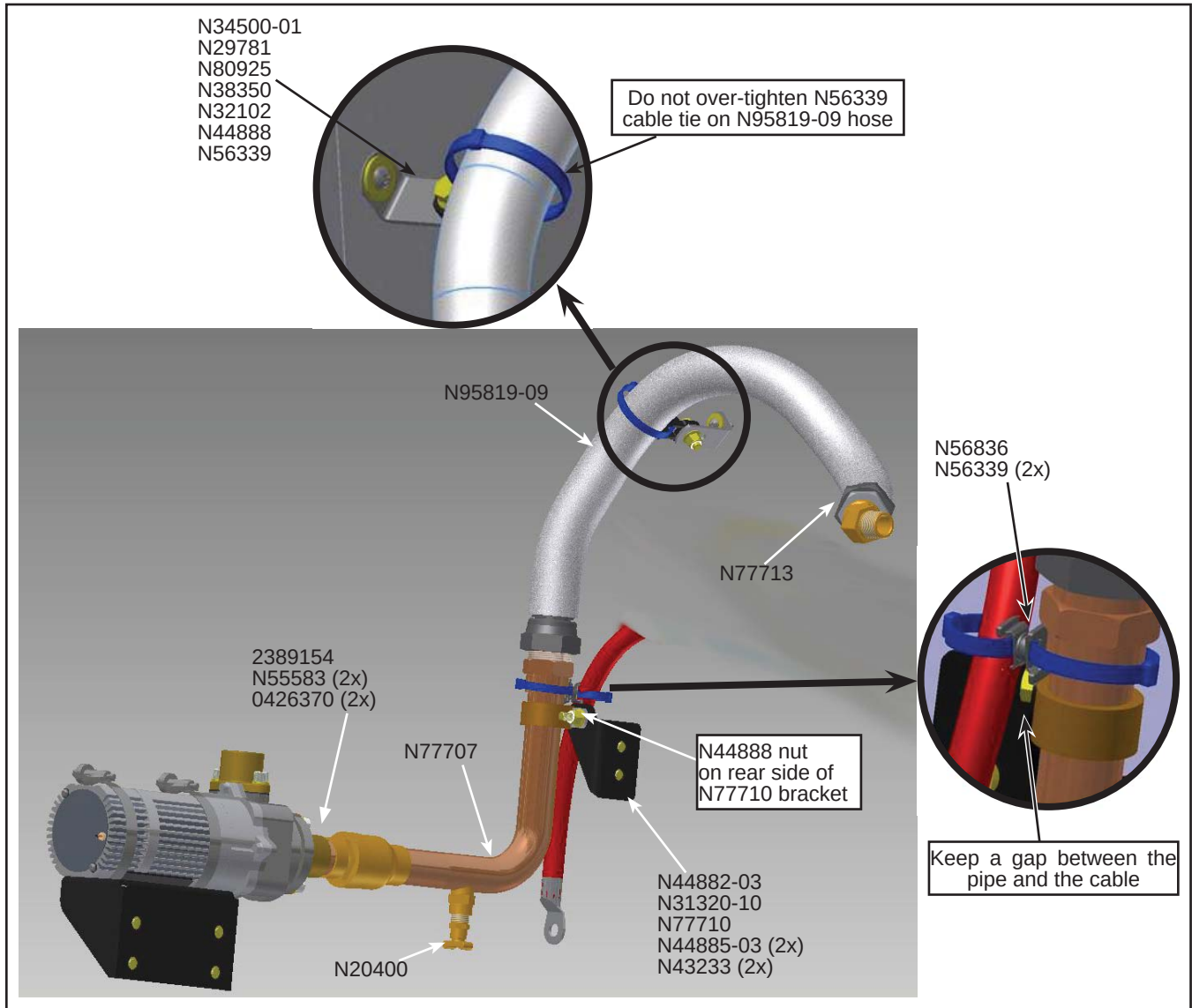


Figure 8 - Location of New Parts

- 1.14. Install N95819-09 hose assembly onto N77707 pipe assembly and to engine 45° elbow. See Figure 8.



NOTE

Make sure that the O-ring is installed in the flared end of the coolant pipe. See Figure 9.

Do not over-tighten the N56339 cable tie when attaching the N95819-09 hose assembly to the N34500-01 bracket. See Figure 8.

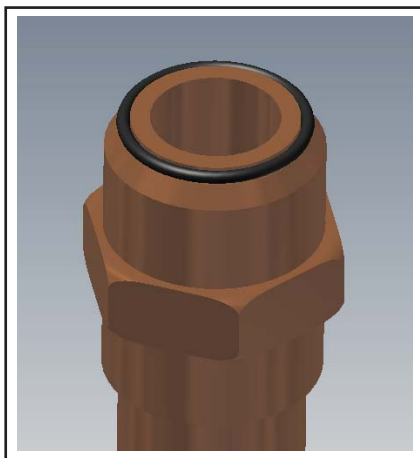


Figure 9 - O-ring in the Flare End of the Coolant Pipe (Part # 501803 if Required)

- 1.15. Install N20400 drain cock onto N77707 pipe assembly. See Figure 8.
- 1.16. Install N77710 bracket support pipe. See Figure 8.
 - 1.16.1. Make sure to place the N44888 nut on the rear side of the N77710 bracket support pipe. See Figure 8.
- 1.17. Torque all the fittings and screws to their specified values. See Figure 10.
- 1.18. Install the positive battery cable on the firewall connector. Use the retained hardware. Torque to the specified value. See Figure 10.

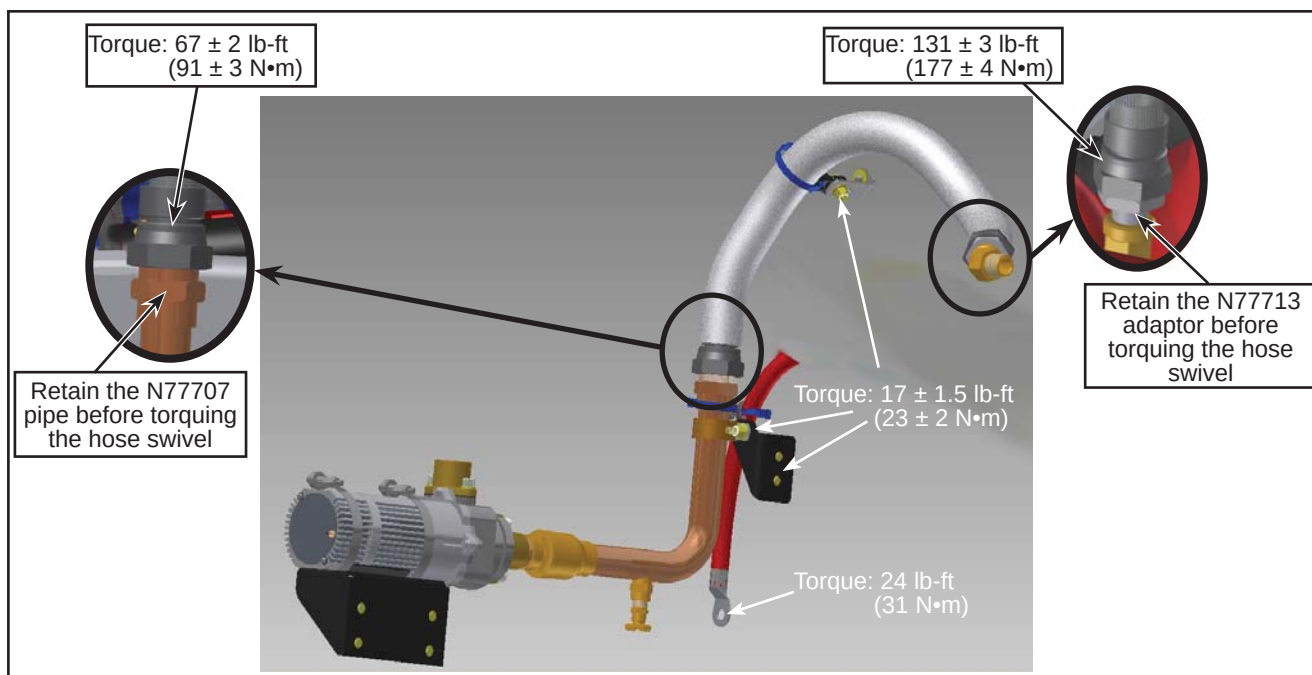


Figure 10 - Specified Torque Values

- 1.19. Fill the cooling system in accordance with sections 14: **HEATING AND VENTILATION** and 09: **ENGINE AND COOLING** of the Nova Bus maintenance manual.
- 1.20. Connect the batteries in accordance with section 16: **ELECTRICAL SYSTEM** of the Nova Bus maintenance manual.
- 1.21. Lower the vehicle.
- 1.22. Start engine and check newly installed pipe for leaks. Ensure coolant is at proper level.
- 1.23. Close the engine/transmission access door under the rear seat and lower the rear seat.
- 1.24. Close the rear engine access door.
- 1.25. The vehicle may be returned to service. ❖