NOVA BUS

SERVICE BULLETIN BS3240E

REFERENCE:	Nova Bus Manuals
SECTION:	09: Engine and cooling
RS Nº:	MQR 7621-805
EFFECTIVE IN PROD.:	L791 (2014MR)

APPLICATION DEADLINE: 2016DE01
CLAIM REFERENCE NUMBER: WB-3240

SUBJECT:	Surge tank filling
JUSTIFICATION:	Coolant filling of the radiator surge tank might be erratic and create air pockets

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Install supply tube N80110-02 on the surge tank.	Nova Bus	Nova Bus	1h15
2	–	–	–	–

MATERIAL

QTY	PART Nº	REV.	DESCRIPTION	REPLACES PART N°
LEVEL 1				
1	N80110-02	–	Supply tube	–
*Note 1	N80823	B	Drilling jig 3/4 in. (19 mm)	–
*Note 1	N79848	A	Drilling jig 1/4 in. (6.5 mm)	–
LEVEL 2				
–	–	–	–	–

Materials will be available within 50 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.

***Note 1; 1 of each drilling jigs will be supplied for the first kits ordered and again per 5 kit ordered thereafter.**

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	2051OC09	Initial release	Luc Carignan

APPROVED BY: Daniel Theriault

Digitally signed by Daniel Theriault
DN: cn=Daniel Theriault, o=Nova Bus, ou, email=daniel.theriault@volvo.com, c=CA
Date: 2015.10.09 11:11:51 -04'00'

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Belleville Transit - Ontario	L598	—	—	L82U5A3000581	L82U7A3000582	2
Calgary Transit - Alberta	L601	8101	8114	L82U5A4000099	L82U4A4000112	14
Calgary Transit - Alberta	L607	8115	8130	L82UXA3000477	L82U6A3000492	16
Calgary Transit - Alberta	L615	8131	8158	L82U1B4000019	L82U4B4000046	28
CT Transit - Connecticut	L554	1041	1065	S92U1A4000139	S92U0A4000164	25
CT Transit - Connecticut	L571	1101	1110	S92YXB4000144	S92Y4B4000169	10
Duke University - North Carolina	L651	—	—	S92Y1B4000145	S92Y3B4000146	2
Grand River Transit - GRT - Ontario	L599	21116	21118	L82X9B3000465	L82X2B3000467	3
Grand River Transit - GRT - Ontario	L631	21119	21121	L82X4B3000468	L82X2B3000470	3
Guelph - Ontario	L579	221	224	L82UXA3000401	L82U5A3000404	4
Halifax - Nova Scotia	L558	717	731	S92UXA3000293	S92U6A3000307	15
Halifax - Nova Scotia	L613	732	741	S92UXB3000019	S92UXB3000028	10
Marketing Sales Demo - MSD 5	L619	—	—	L82X7C3000367	L82X7C3000367	1
Strathcona County Transit - Alberta	L580	2011	2023	L82U1A3000464	L82U8A3000476	13
Thunder Bay - Ontario	L614	—	—	L82UXB3000061	L82U3B3000063	3
York Regional Transit - Ontario	L562	1080	1082	S92U2A3000420	S92U6A3000422	3
York Regional Transit - Ontario	L572	1083	1094	S92U3A3000569	S92U2A3000580	12

WARNING

Follow your internal safety procedures.

PROCEDURE

1.1. Open the radiator access door. See Figure 1.

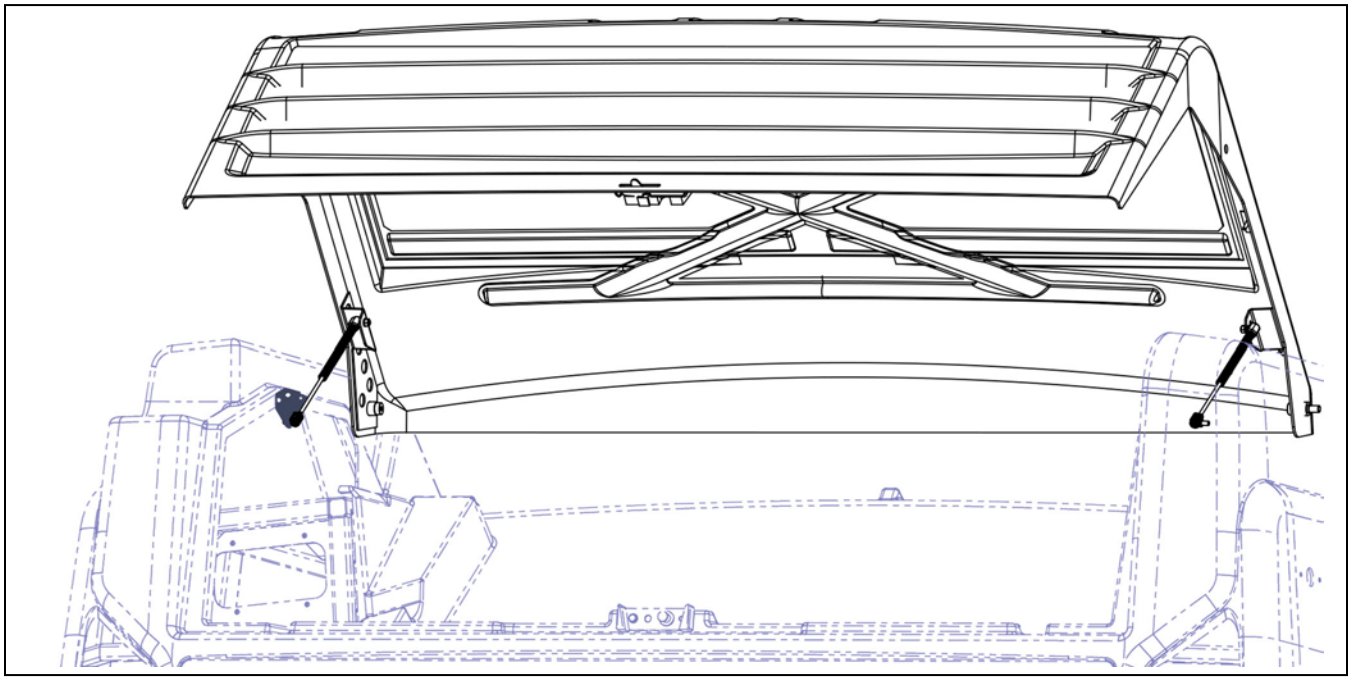


Figure 1 - Radiator Access Door

WARNING

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

1.2. Open the rear engine door.

1.3. Close the control valve to isolate the engine cooling circuit from the heating circuit. See section **09: ENGINE COOLING** of the Nova Bus maintenance manual.

1.4. Connect a coolant filling hose equipped with a pressure regulator to the quick connect fitting and set the regulator to 10 psi. See Figure 2.

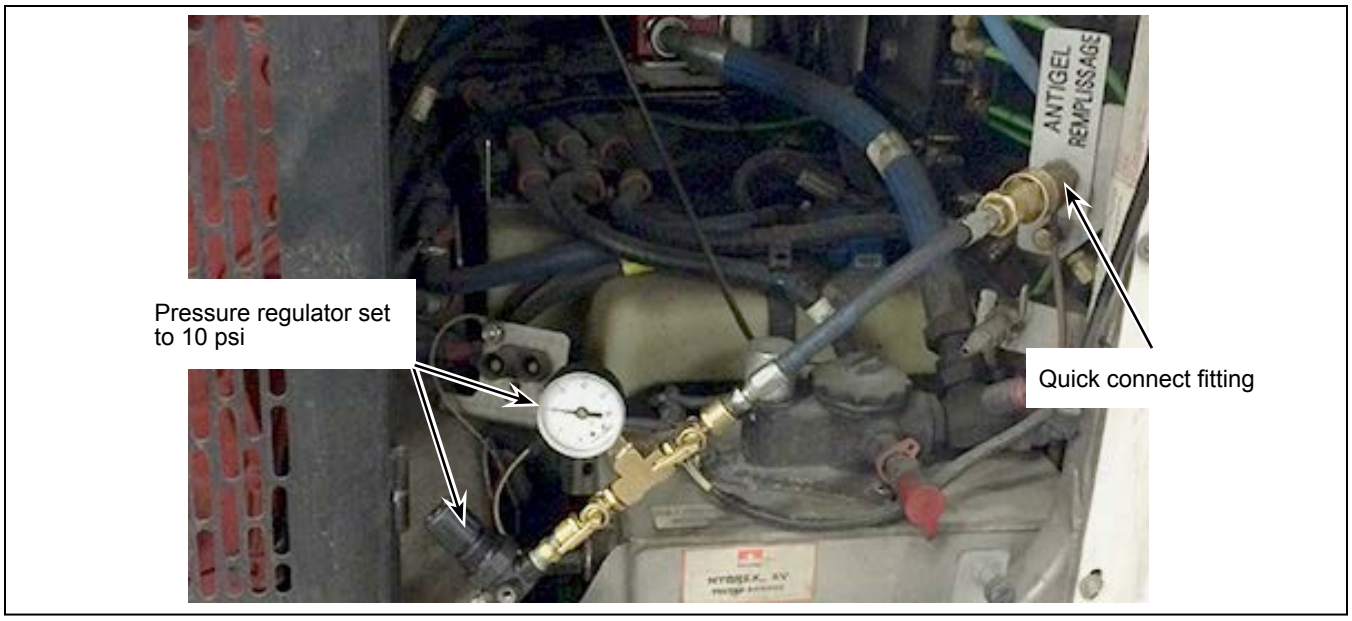


Figure 2 - Coolant Filling Hose Equipped with a Pressure Regulator

1.5. Validate visually if there are coolant leaks on the radiator.

1.5.1. If there is a leak on the radiator, replace the radiator according to the replacement procedure in information letter **LI1846.**

1.6. Disconnect the coolant filling hose equipped with a pressure regulator from the quick connect fitting.

1.7. Release pressure using the air discharge valve knob located on the coolant quick connect fitting bracket in the rear right portion of the engine compartment. See Figure 3.

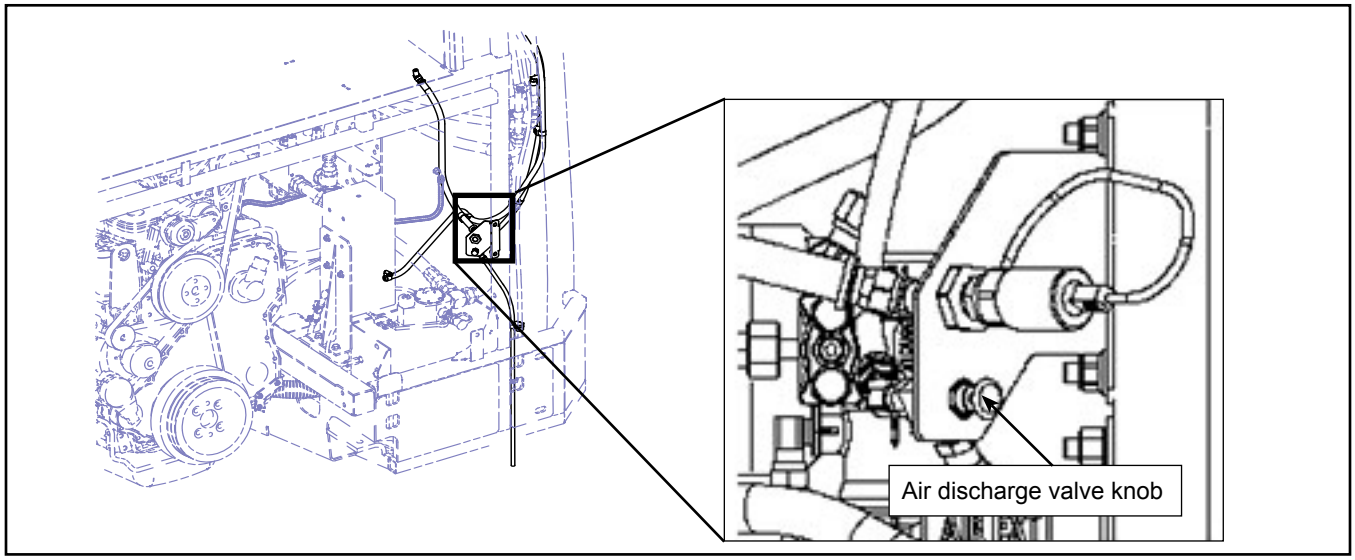


Figure 3 - Location of the Air Discharge Valve Knob in the Engine Compartment

1.8. Open the drain valve of the cooling circuit to remove around 2.6 gallons (10 liters) of coolant. See section **09: ENGINE COOLING** of the Nova Bus maintenance manual for drain valve location and procedure.

1.9. Disconnect the supply hose from the adaptor of the surge tank. Remove and discard the adaptor. See Figure 4.

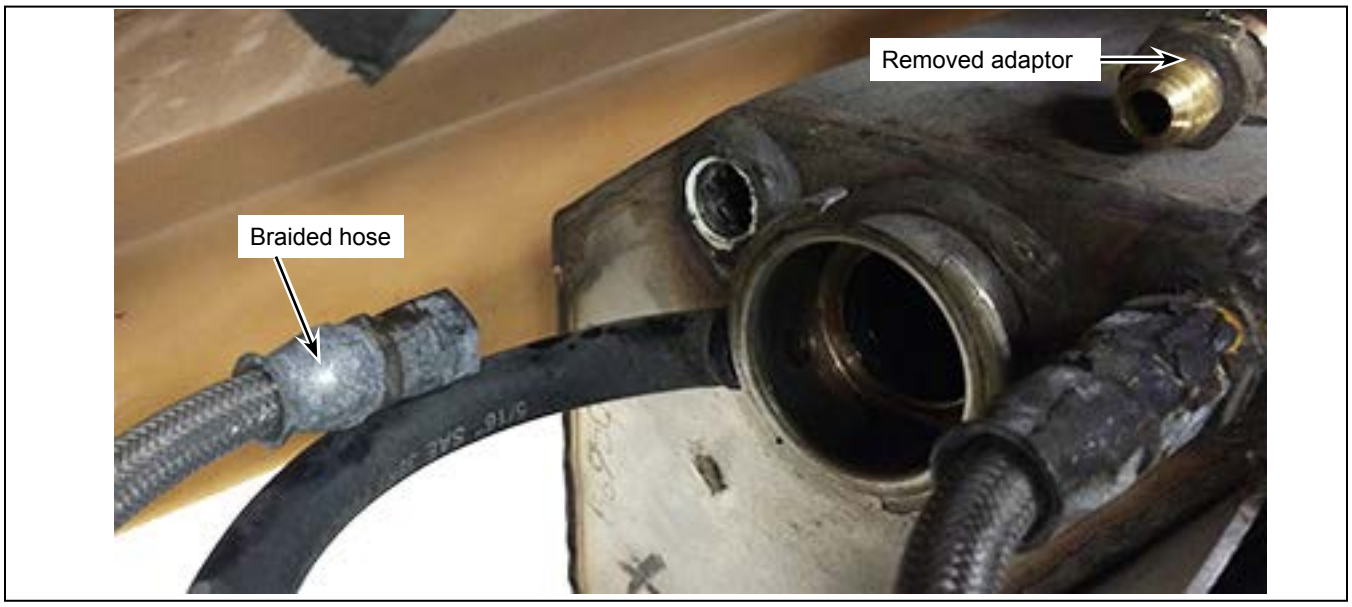


Figure 4 - Braided Hose Disconnected and Adaptor Removed

1.10. Remove the protective caps and identification tag, then apply a thin coat of thread sealant on the threads of the new N80110-02 supply tube fitting. See Figure 5.

1.11. Hand tighten the new N80110-02 supply tube on the surge tank and, with a wrench, make 1/2 of a turn to fully tighten. See Figure 5.

1.12. Hand tighten the supply hose on the supply tube adaptor and, with a wrench, make 1/8 of a turn to fully tighten. See Figure 5.

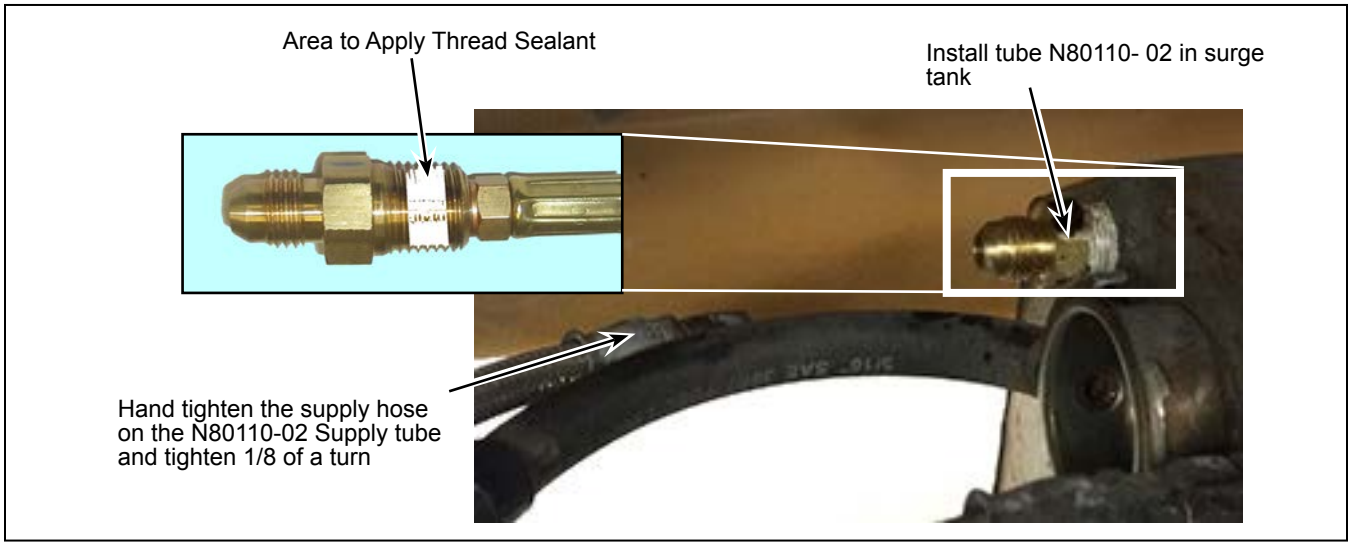


Figure 5 - Supply Tube N80110-02 Installed

1.13. Disconnect the supply hose from the adaptor located on the left collector of the radiator and remove the adaptor. See Figure 6.

1.14. Install a small piece of cloth in the inlet hole of the radiator collector. The piece of cloth should not obstruct the threaded portion of the hole. See Figure 6.

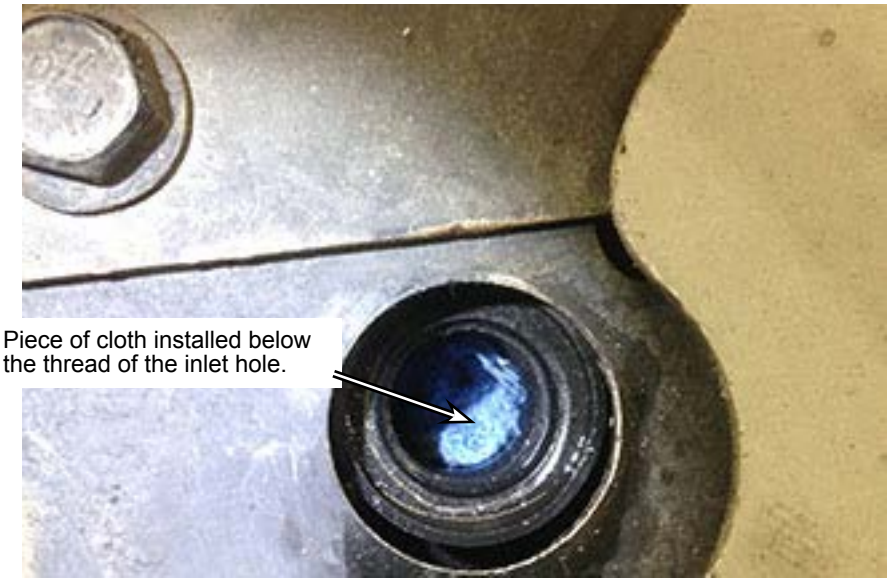


Figure 6 - Piece of Cloth Installed in Inlet Hole.

NOTE

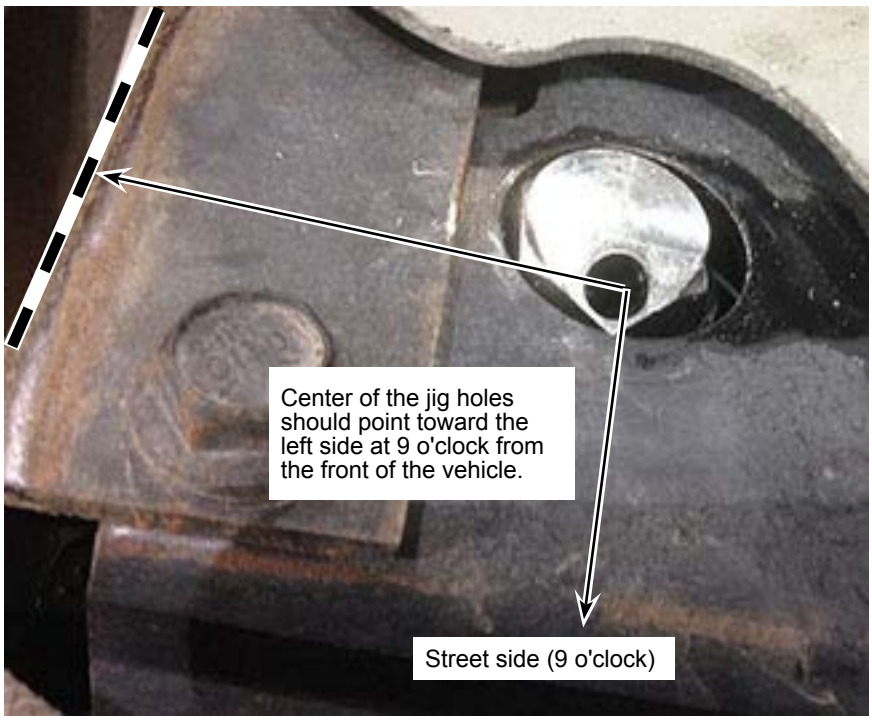
Before performing the next step in the procedure measure the radiator collector inlet hole to determine which drilling jig is required to drill the radiator collector.

1.15. Install and position the drilling jigs. See Figure 7 for jig position

1.16. Drill the radiator collector with a drill bit. See 7 for drill bit length and size.

CAUTION

The length of the drill bit drilling portion should not exceed 2.5 in. (63 mm) to avoid damage to the core of the radiator.



Adjust the drilling portion of the drill pin to 63 mm (2.5 po.)

Jig N80823 use a **7 mm** (**J**) drill pin.

Jig N79848 use a **#26** (**5/32**) drill pin.

Figure 7 - Position of Drilling Jigs N80823 and N79848

1.17. Remove the drilling jig and as much the drilling residue as possible, using a handheld vacuum..

1.18. Remove the small piece of cloth. Hand tighten the retained adaptor on the radiator collector and, with a wrench, make 1/8 of a turn to fully tighten. See Figure 8 for the position of the adaptor.

1.19. Hand tighten the supply hose on the adaptor and with a wrench, make 1/8 of a turn to fully tighten. See Figure 8.

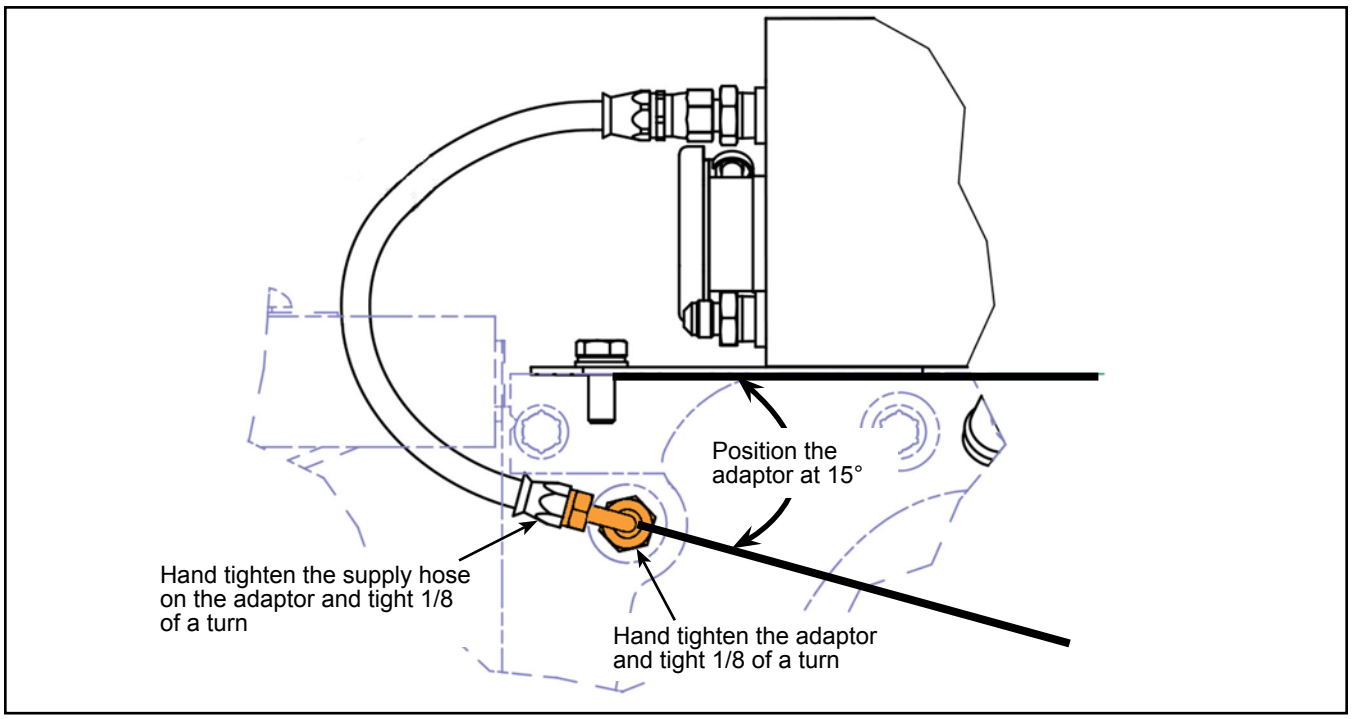


Figure 8 - Position of the Adaptor on the Radiator Collector and Supply Hose Installed

1.20. Connect a coolant hose to the quick connect adaptor and fill the coolant according to the filling procedure section 09 : ENGINE COOLING.

1.21. Start the vehicle in rear mode using the switches located on the engine control box.

1.22. Activate the fast idle and let the engine run for 30 minutes in fast idle mode.

1.23. Stop the engine.

1.24. Open the control valve to join the engine cooling and heating circuits.

1.25. Top the coolant level if needed.

1.26. Close and lock the radiator access and rear engine doors. ❖