

REFERENCE:	Nova Bus Manuals
SECTION:	14: Heating & Ventilation
RS N°:	MQR 7621-1829
EFFECTIVE IN PROD.:	N/A

APPLICATION DEADLINE: N/A

SUBJECT:	Auxiliary Heater
JUSTIFICATION:	The fuel filter is now obsolete. The fuel filter and its support will have to be replaced at its next maintenance.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Remove the obsolete fuel filter system. Install a new fuel filter system at a new location.	Client	Client	45 min
2	–	–	–	–

MATERIAL

QTY	PART N°	REV.	DESCRIPTION	REPLACES PART N°
LEVEL 1				
2	0444032		REDUCER (501316)	–
2	0657592		CONNECTOR ASM(83V-106-LF1)	–
4	N23126	BR	BOLT 3/8-16X1" MACH HEX SS	–
1	N24140	A	BALL VALVE (642194)	–
2	N34002	A	GASKET RING (870923)	–
2	N44884-01	C	SCREW M6X20 FL SSA2 C70 D6921	–
2	N44890	B	NUT LOCKNYL M6 FL SSA2 C70	–
4	N55583	A	WASHER NORD-LOCK M10 SS A4	–
1	N81377	A	CABLE TIE-EC22 HORIZ 50LBS 8"L	–
1	N98778		FILTER-HEAD FUEL	–
1	N98779		FILTER FUEL	–
1	N98827	A	SUPPORT FUEL FILTER AUX HTR	–
LEVEL 2				
–	–	–	–	–

Materials will be available within 38 days once your order has been placed. 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.

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	2020NO20	Initial release	Annie St-Jacques

APPROVED BY:

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CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Arrow Coach Line - Arkansas	L494	—	—	L82U793000397	L82U793000397	1
BC Transit - BCT - British Columbia	L463	9319	9333	L82U093000273	L82U093000287	15
BC Transit - BCT - British Columbia	L481	9334	9353	L82U794000004	L82U094000023	20
BC Transit - BCT - British Columbia	L484	9370	9403	L82U494000090	L82U494000123	34
BC Transit - BCT - British Columbia	L486	9354	9369	L82U294000024	L82U494000039	16
BC Transit - BCT - British Columbia	L487	9404	9433	L82U094000149	L82U794000178	30
Belleville Transit - Ontario	L542	—	—	L82UXA3000088	L82U8A3000090	3
Brampton - Ontario	L501	0917	0926	L82U893000506	L82U893000523	10
Brantford - Ontario	L547	10101	10105	L82X6A3000082	L82X3A3000086	5
CMBC (TransLink) - British Columbia	L412	9401	9401	L82X993000136	L82X993000136	1
CMBC (TransLink) - British Columbia	L454	9402	9470	L82X793000359	L82XX93000453	69
CMBC (TransLink) - British Columbia	L455	9471	9491	L82X093000459	L82X993000489	21
CMBC (TransLink) - British Columbia	L482	9492	9517	L82X894000040	L82X094000064	25
CMBC (TransLink) - British Columbia	L483	9518	9542	L82X294000065	L82X594000089	25
CMBC (TransLink) - British Columbia	L532	9543	9551	L82U093000497	L82U693000505	9
CMBC (TransLink) - British Columbia	L533	9552	9573	L82U193000511	L82U093000537	22
CMBC (TransLink) - British Columbia	L534	9574	9590	L82U694000124	L82U894000139	16
CMBC (West Vancouver) - British Columbia	L539	901	909	L82U494000140	L82U994000148	9
Demo - Articulated Bus	L433	—	—	S92UX93000029	S92UX93000029	1
Demo - Engineering Platform 2010 (Altoona)	L373	373-1	373-1	L82UX83000151	L82UX83000151	1
Demo - Proto Platform 2010	L271	—	—	L82U283000001	L82U283000002	2
Grand River Transit - GRT - Ontario	L464	20901	20913	L82U193000296	L82U493000308	13
Grand River Transit - GRT - Ontario	L560	21001	21009	L82U2A3000246	L82U1A3000254	9
Greater Toronto Airports Authority - GTAA - Ontario	L432	432-1	432-1	L82U793000061	L82U793000061	1
Greater Toronto Airports Authority - GTAA - Ontario	L477	L477-1	L477-1	L82U194000001	L82U194000001	1
Lethbridge - Alberta	L489	165	169	L82U493000454	L82U193000458	5
Marketing Sales Demo - MSD 1 ISB Hybrid	L548	—	—	L82X5A3000087	L82X5A3000087	1
Moncton (Codiac) - New Brunswick	L358	358-1	358-1	L82U093000001	L82U093000001	1
Moncton (Codiac) - New Brunswick	L361	361-1	361-1	L82U293000002	L82U293000002	1
Niagara Falls - Ontario	L499	2986	2989	L82U093000564	L82U693000567	4
Peterborough - Ontario	L490	—	—	L82UX93000345	L82U593000348	4
Regina - Saskatchewan	L356	356-1	356-1	L82U883000150	L82U883000150	1
Regina - Saskatchewan	L360	—	—	L82U283000290	L82U283000290	1
Regina - Saskatchewan	L476	625	628	L82U893000313	L82U393000316	4
Regina - Saskatchewan	L561	631	644	L82U8B4000003	L82UXB4000018	14
Saskatoon - Saskatchewan	L359	—	—	S92U583000289	S92U583000289	1
Saskatoon - Saskatchewan	L551	1005	1007	S92UXA3000178	S92U8A3000180	3
St. John - New Brunswick	L272	—	—	S92U483000011	S92U483000011	1
St. John - New Brunswick	L273	—	—	S92U383000050	S92U383000050	1
St. John's - Newfoundland	L503	1066	1066	L82U4A3000071	L82U4A3000071	1
Stratford - Ontario	L493	—	—	L82U2A3000019	L82U2A3000019	1
Strathcona County Transit - Alberta	L523	2010	2010	L82U693000603	L82U693000603	1
Strathcona County Transit - Alberta	L524	3005	3010	L82X593000604	L82X493000609	6

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Sudbury - Ontario	L465	791	795	L82U593000317	L82U793000321	5
Sudbury - Ontario	L552	801	808	L82U3A3000238	L82U0A3000245	8
Thunder Bay - Ontario	L488	—	—	L82U193000332	L82U593000334	3
Timmins - Ontario	L475	—	—	L82U493000311	L82U693000312	2
Timmins - Ontario	L550	—	—	L82U8A3000171	L82UXA3000172	2
University of Alabama - Alabama	L479	479-1	479-1	L82U394000002	L82U394000002	1
University of Alabama - Alabama	L480	480-1	480-1	L82U594000003	L82U594000003	1
University of Alabama - Alabama	L573	—	—	L82U9A4000137	L82U0A4000138	2
University of Colorado - Colorado	L427	—	—	S92U693000027	S92U693000027	1
University of Colorado - Colorado	L428	—	—	S92U893000028	S92U893000028	1
Whitehorse - Yukon	L563	38	41	L82U3A3000255	L82U9A3000258	4
Woodstock - Ontario	L460	—	—	L82U693000309	L82U693000309	1
Woodstock - Ontario	L492	—	—	L82U4A3000040	L82U6A3000041	2

**WARNING**

FOLLOW YOUR INTERNAL SAFETY PROCEDURES.

**NOTE**

Your vehicle configuration may differ.

PROCEDURE

- 1.1. Park the vehicle on a leveled surface and set the transmission shift selector to **NEUTRAL (N)**.
- 1.2. Apply the parking brake.
- 1.3. On the lateral console, set the master control switch to the **ENG STOP** position (**O**).
- 1.4. In the battery compartment, set the battery disconnect switch to the **DISABLE** position (**OFF**).

NEW FUEL FILTER MOUNTING BRACKET INSTALLATION

**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.

- 1.5. Lift the vehicle. Locate the new location of the new fuel filter (Figure 1).

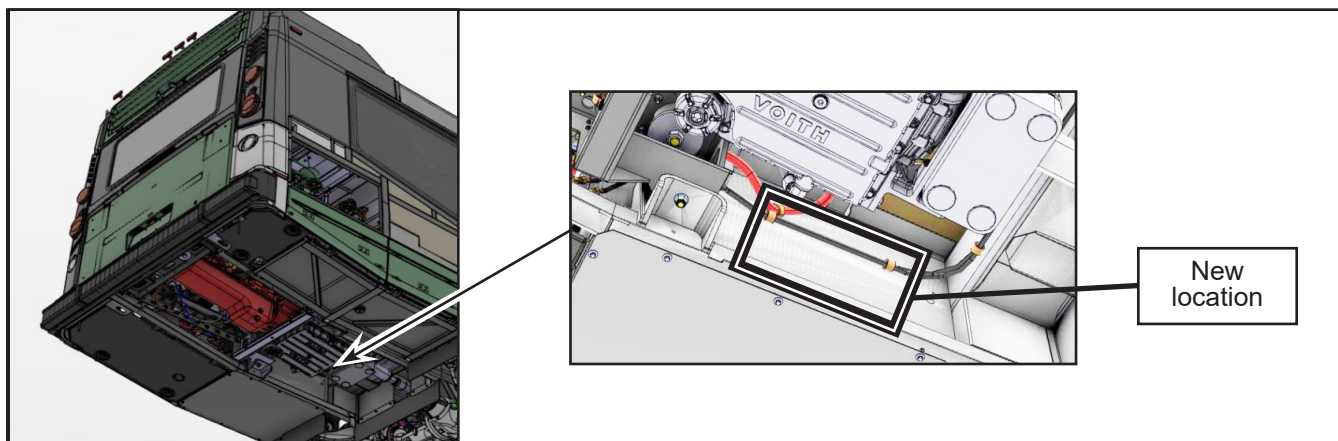


Figure 1 - New Location of the Auxiliary Heater Fuel Filter

**NOTE**

The position of the new support bracket for the fuel filter depends on the configuration of your vehicle.

Position in the area shown in Figure 2 and validate for any interference with components installed in the **BATTERY COMPARTMENT** on the other side of the structure.

- 1.6. Position the new fuel filter support N98827 on the structure, centered between the 2 p-clamps. Level and mark the mounting holes position (Figure 2).
- 1.7. Validate before drilling that no component could be damaged in the **BATTERY COMPARTMENT**, on the other side of the structure. Drill through the structure 2 holes of 0.28 in. (7 mm). Start with a smaller drill bit size.

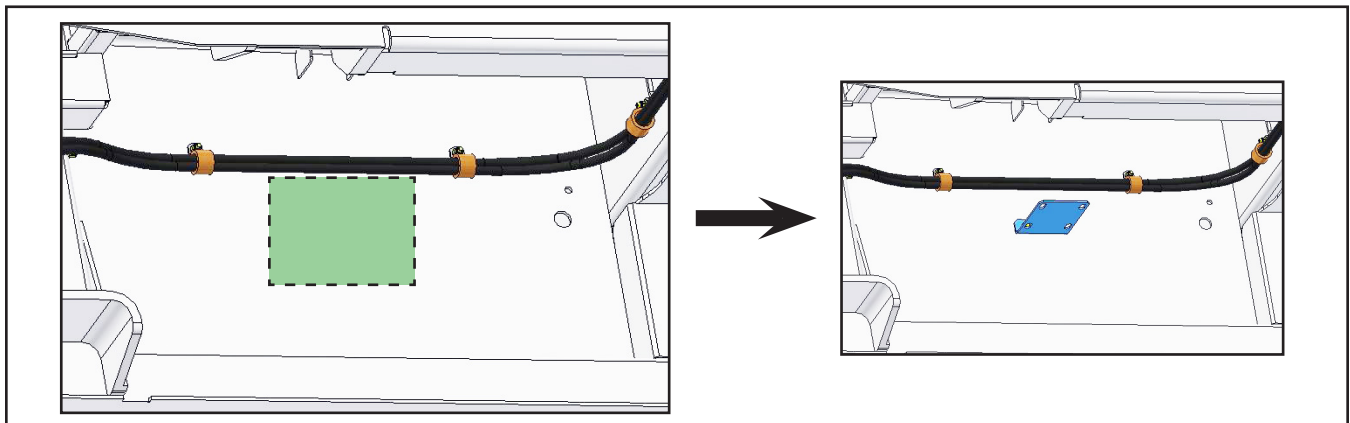


Figure 2 - New Fuel Filter Assembly Support Bracket Position (Some Components Removed for Clarity)

- 1.8. Install the support bracket with 4 screws N44884-01 and 4 nuts N44890. Torque at the torque value shown in Figure 3.

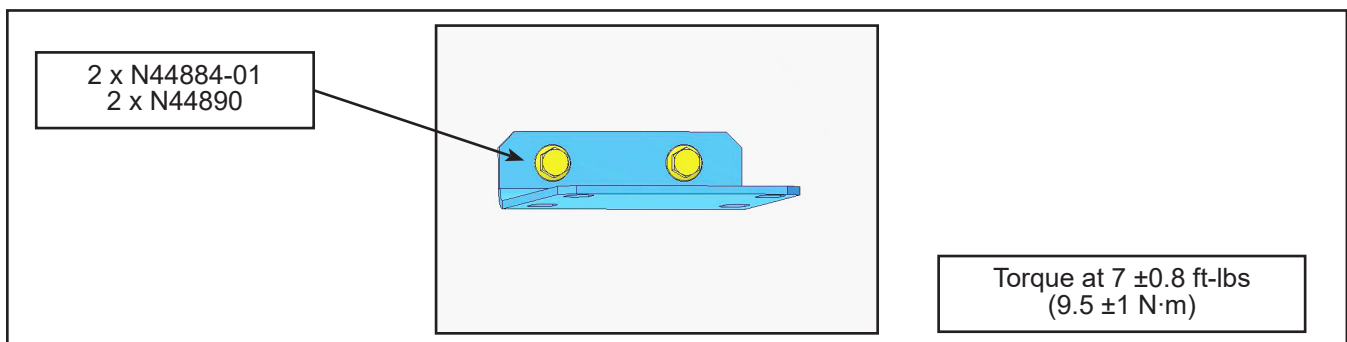


Figure 3 - Mount Support on Structure with Screws and Nuts

NEW FUEL FILTER ASSEMBLY

1.9. Assemble the new fuel filter system as show in Figure 4. Apply thread sealant where shown and validate fuel filter head orientation.

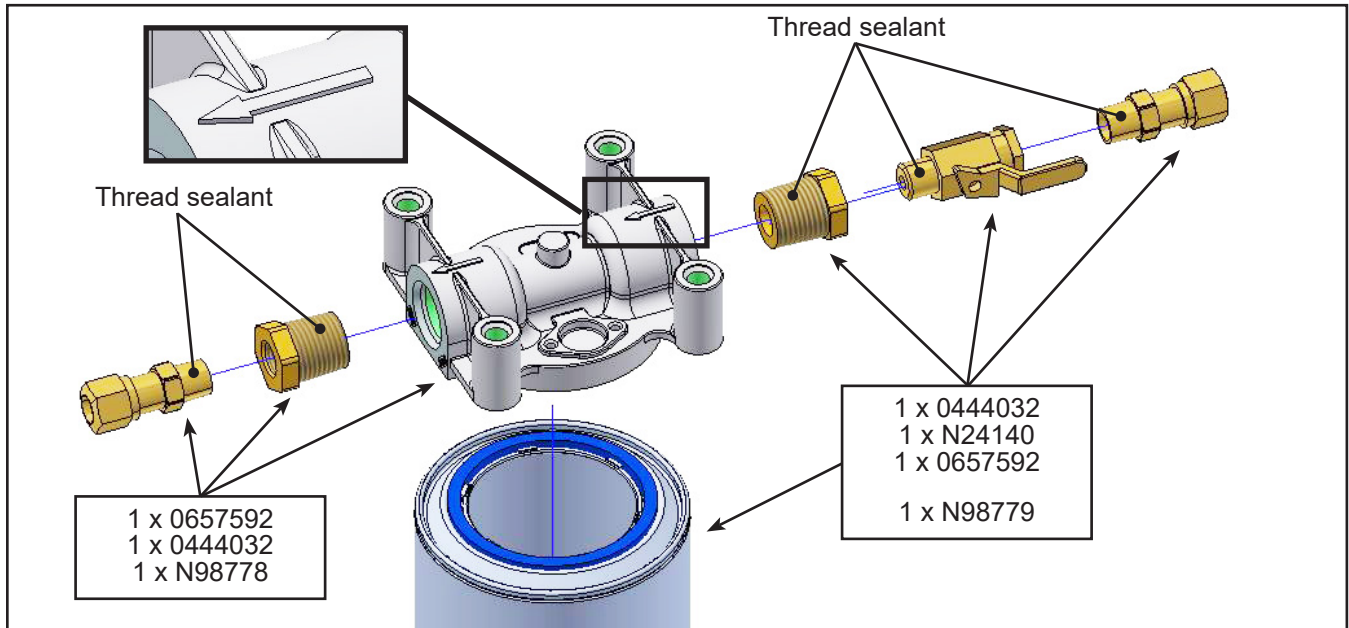


Figure 4 - Assemble the Fuel Filter Assembly

1.10. Mount the new fuel filter assembly on the support bracket with 4 screws and 4 washers. Validate orientation and torque at the torque value shown in Figure 5.

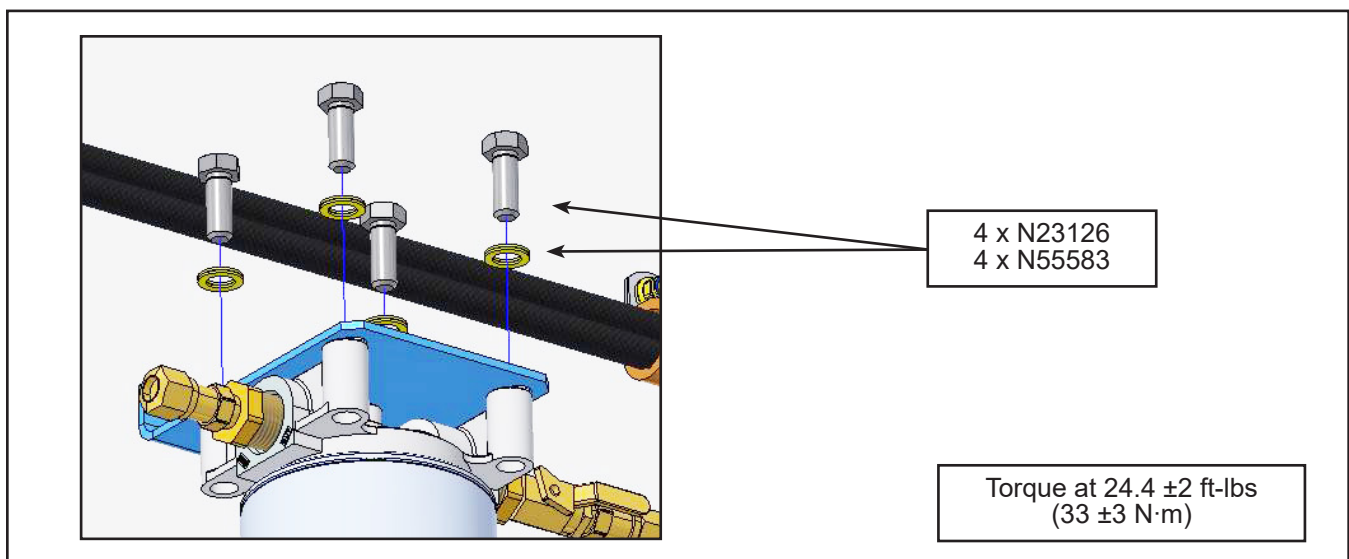


Figure 5 - Mount the Fuel Filter Assembly on the Support Bracket

HOSES CONNECTIONS

- 1.11. Locate the fuel supply line (Figure 6). **Validate on your vehicle which one is the fuel supply line.**
- 1.12. Close the new fuel filter ball valve.

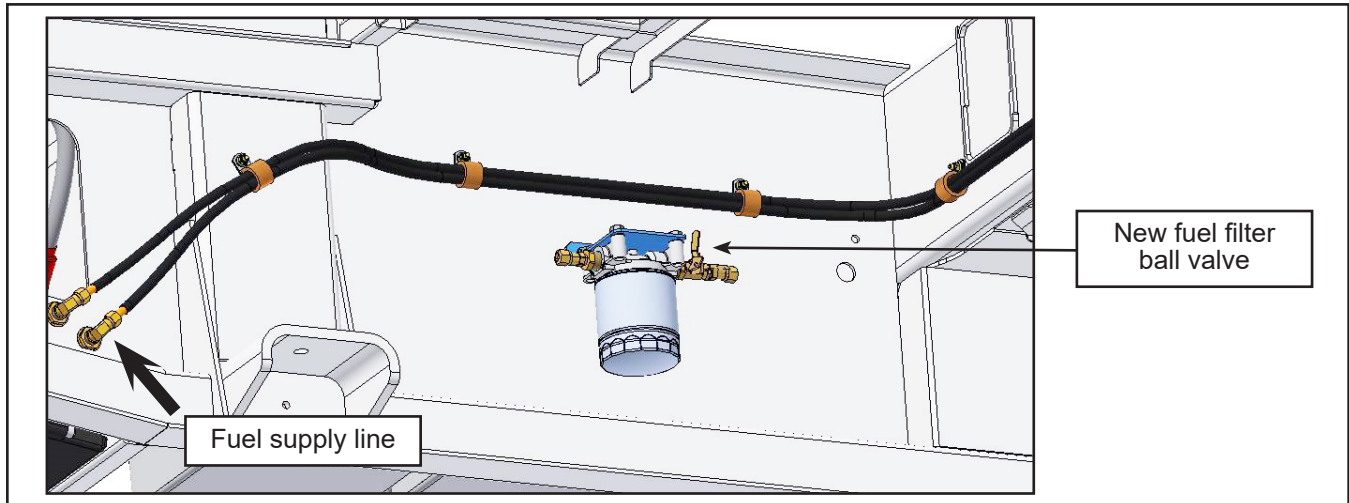


Figure 6 - Locate Fuel Supply Line and Close Ball Valve (Some Components Removed for Clarity)

**CAUTION**

The fuel supply hose is directly connected to the fuel tank. Stop the flow of fuel before cutting the hose and prepare a suitable container to collect fuel.

- 1.13. Cut the loom and the hose of the supply fuel line and connect each section on each side of the fuel filter head as show in Figure 7. **A certain amount of fuel will spill.**
- 1.14. Secure fuel hoses.

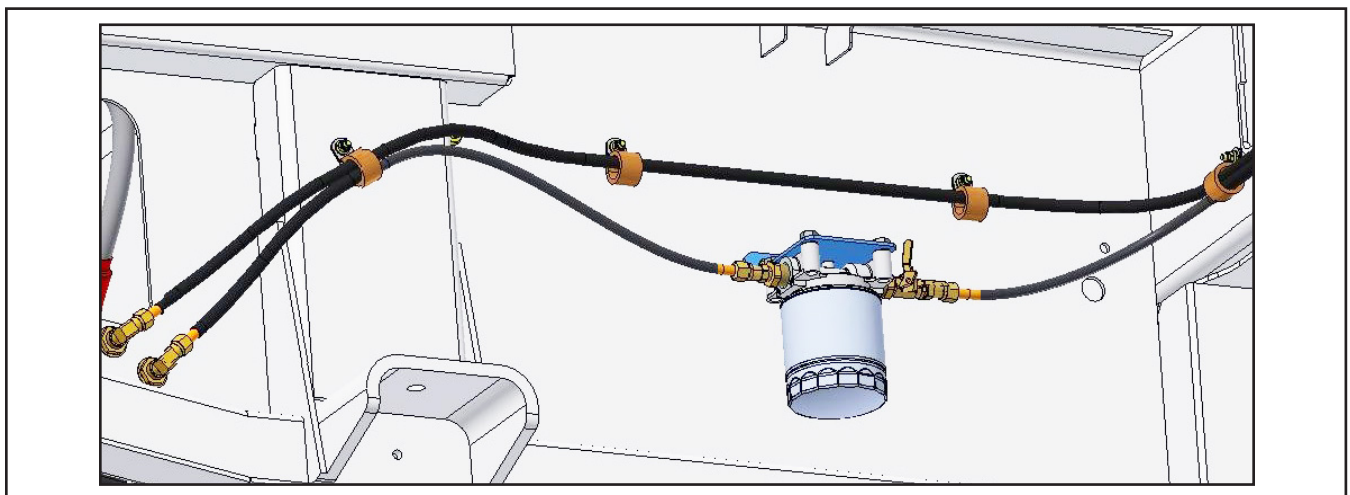


Figure 7 - Connect the Cut Fuel Hose and Loom (Some Components Removed for Clarity)

OLD FUEL FILTER ASSEMBLY REMOVAL

- 1.15. Locate the auxiliary heater and the old fuel filter (Figure 8).

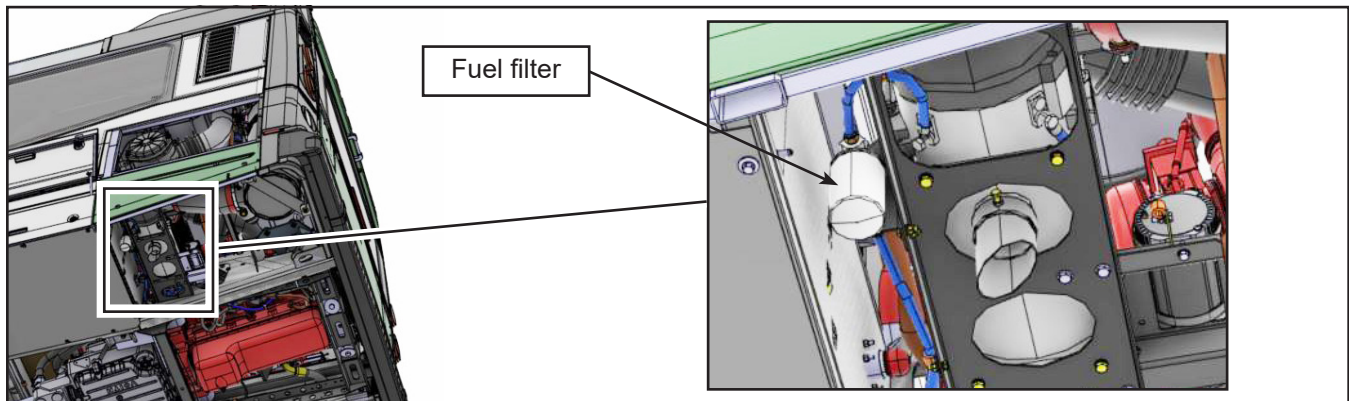


Figure 8 - Old Fuel Filter Location (Some Components Removed for Clarity)

- 1.16. Remove and discard the fuel filter, the fuel filter head, the reducer and the clamp (Figure 9). Keep the passthrough fitting installed on bracket. It is not necessary to remove the old ball valve, it can be left in place. **A certain amount of fuel will spill.**

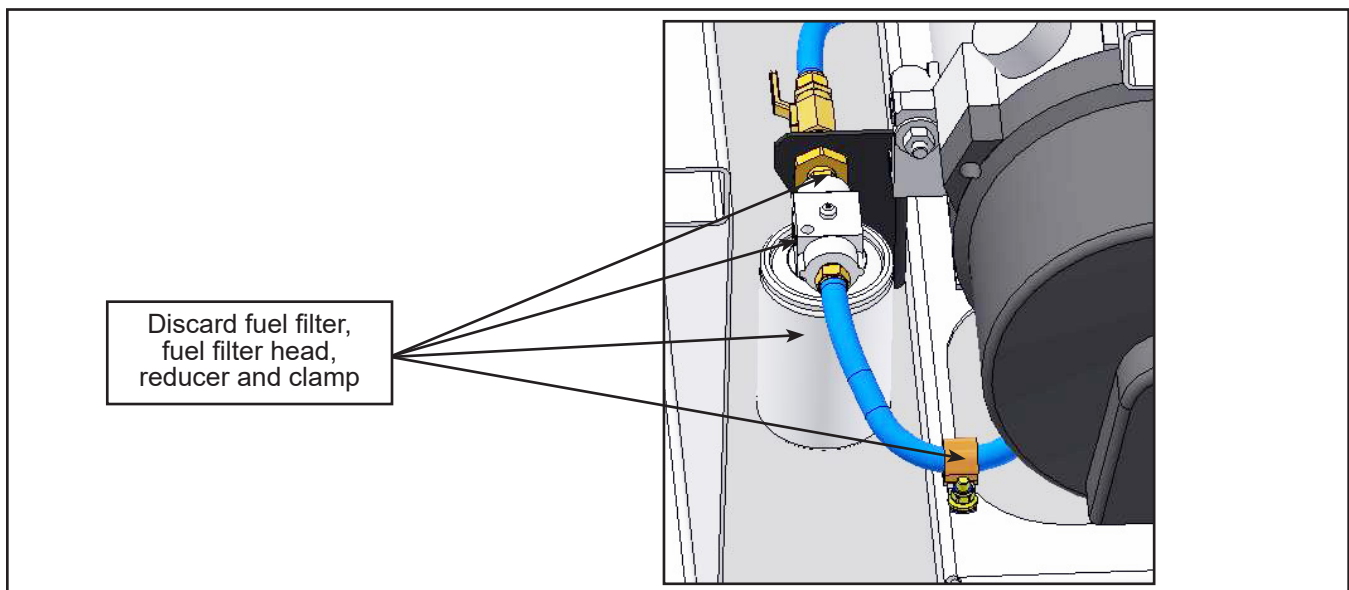


Figure 9 - Remove and Discard Old Fuel Filter Assembly Components

- 1.17. Reconnect the hose to the passthrough fitting with thread sealant. If hose orientation has to be modified and the Banjo fitting untightened, replace the Banjo fitting gasket ring with a new one: N34002 (Figure 10).
- 1.18. Secure fuel hose with edge clip and cable tie N81377 (Figure 10).

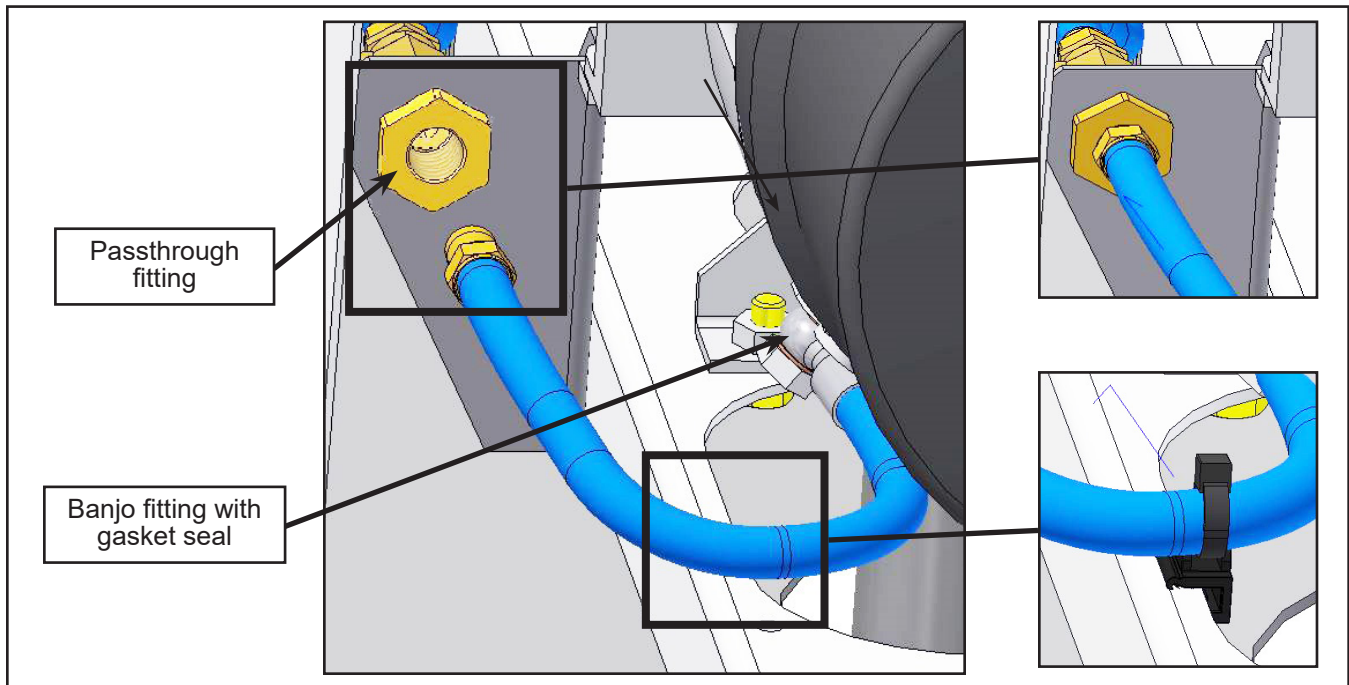


Figure 10 - Reconnect Fuel Hose and Secure with Edge Clip and Cable Tie

- 1.19. Open the ball valve to supply fuel to the fuel filter and auxiliary heater. Make sure that there are no leaks.
- 1.20. Lower the vehicle.

AUXILIARY HEATER SYSTEM TEST

- 1.21. In the battery compartment set the battery disconnect switch to the **ENABLE** position (**ON**).
- 1.22. On the operator lateral console, set the master control switch to the **RUN** position (**●**).
- 1.23. Start the engine.
- 1.24. Use the test function of the auxiliary heating system.
 - a. In the engine compartment, on the control box, activate the auxiliary heater ignition request.
 - b. Operate the system until combustion is constant and that there is no ignition cut-off. At least 5 to 10 minutes. Restart the sequence if necessary.
- 1.25. Stop the engine and check again for leaks.
- 1.26. The vehicle can return in service. ❖

