REFERENCE:	Nova Bus Manuals
SECTION:	11: Fuel and Exhaust
RS Nº:	MQR 7621-2572
EFFECTIVE IN PROD.:	NA

APPLICATION DEADLINE: 2024JL11
CLAIM REFERENCE NUMBER: WB-5386

SUBJECT:	Loose fuel tank hardware.
JUSTIFICATION:	Loose fuel tank due to improperly torqued hardware and missing hardware.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Remove and install the new hardware.	Nova Bus	Nova Bus	0.4 h
2	–	–	–	–

MATERIAL REQUIRED PER VEHICLE

QTY	PART Nº	REV.	DESCRIPTION
LEVEL 1			
2	N43774	C	Screw M8X25 FL SSA2 C70 D6921
3	N39684	B	Screw M12 Hexagon HD
10	N26738	X	Washer Flat M12 SS DIN 125A
4	N55936	A	Nut FL M12 SS A4CL80
4	N0073149	–	Screw HEX FL M8X35 ZF
4	N103872	–	Nut HEX Lock HFR M8 ZF
4	N103799	–	Plate
1	N39499	B	Bolt M12X45 SS A4 DIN931
LEVEL 2			
–	–	–	–
SHOP SUPPLY			
5 ml	N97665	A	Threadlocker Loctite 243 (bottle of 50 ml)

Materials will be available within 109 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	2023MR13	Initial release	Nandan B S

APPROVED BY: Jean-Nicolas Fournier Digitally signed by Jean-Nicolas Fournier
Date: 2023.03.13 10:34:50 -04'00'

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
New York City Transit New York - NYCT	LD08	8759	8963	L82J5M9778156	L82J8N9778508	205

Tools Required

- Vertical Jack
- Torque wrench

WARNING

To prevent accidents, maintenance personnel should take special safety precautions, such as ensuring that there is no open flame in the vicinity before dismantling the fuel tank.

CAUTION

For more information on the raising and lowering of the vehicle, refer to section 18: hoisting and towing ofthe Nova LFS maintenance manual. Respect your current internal safety procedures. Use the proper hoisting equipment for your safety.

PROCEDURE

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. Locate the fuel tank.
1.5. Raise the vehicle with the help of vertical jack (see figure 1).

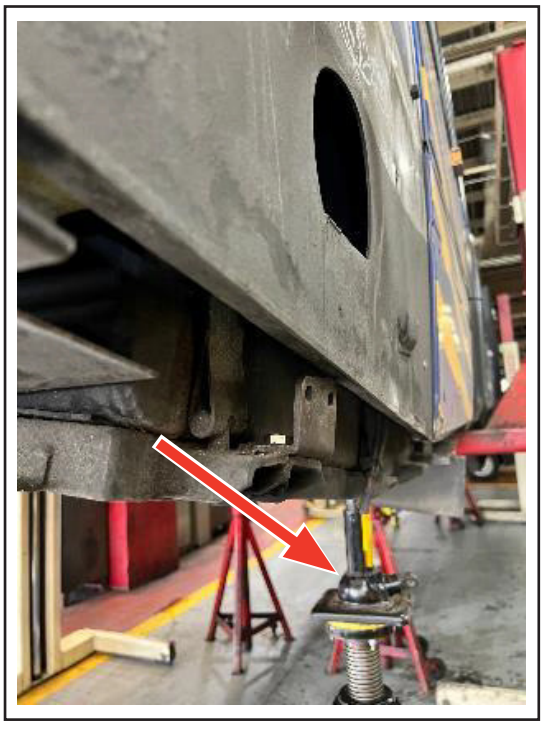

Figure 1 - Mounting Vertical Jack

1.6. Place a suitable support system under the tank and cradle assembly to support it once it has been unfastened (see figure 2).

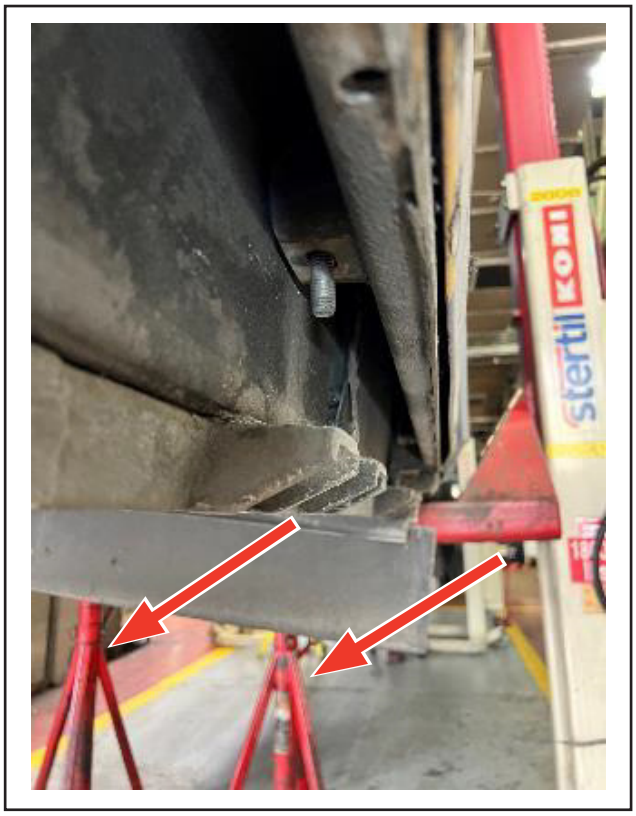

Figure 2 - View of Support system under the Tank and Cradle Assembly

1.7. Bolt the fuel tank cradle in place and adjust the torque according to the values.

NOTE

Please follow the steps in exact order.

1.8. Remove the both screw M8X25 N43774 located on rear curbside corner of fuel tank cradle.

1.9. Use thread locker loctite 243 N97665 on Screw M8x25 N43774 (follow supplier instruction: see appendix section) (see figure 3).

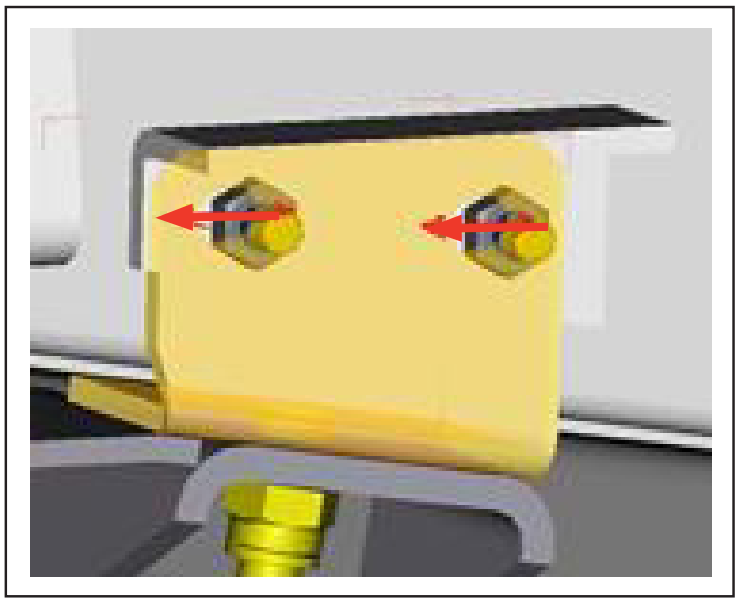

Figure 3 - Apply Thread Locker Loctite 243 to Screw M8x25

1.10. Pre torque 2x N43774 screw M8X25 to 5 Nm (adjust if need to have enough support and no gap to structure).

1.11. Raise vehicle to gain access to the fuel tank cradle mounting bolts.

1.12. Support fuel tank and loosen hardware of mounting points #1, 4, 5 and 6 (see figure 4).

1.13. Remove and discard hardware of points #2 and 3.

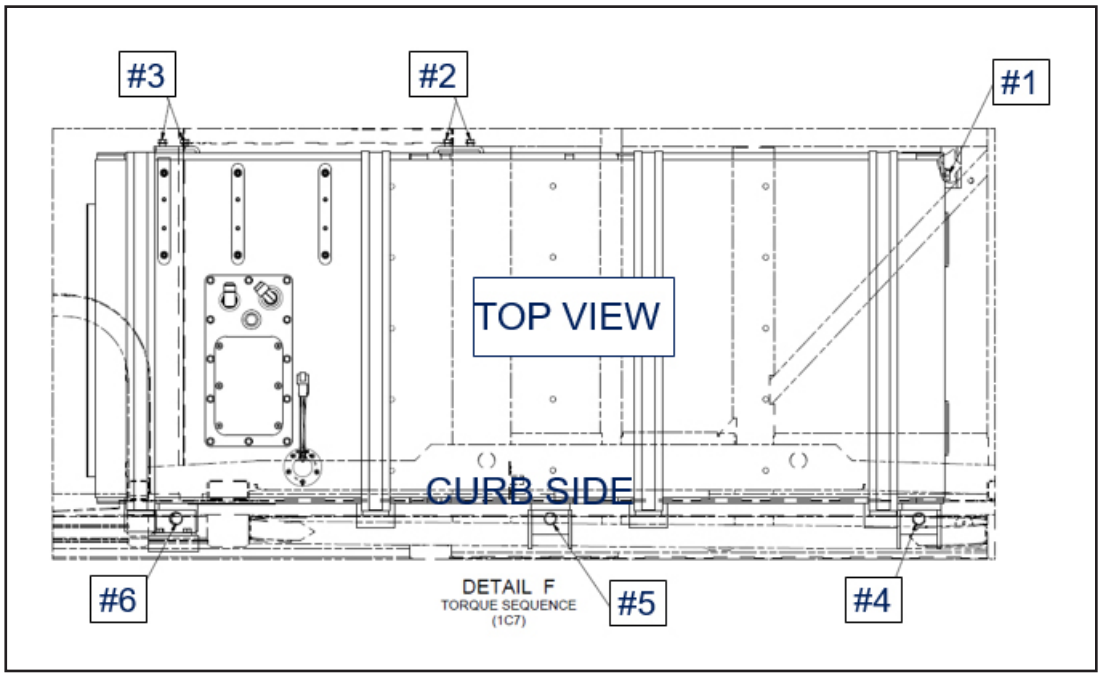

Figure 4 - Removal of Mounting Hardware

1.14. Remove any undercoating where the M8 bolts sit.

1.15. After removing old hardware, Install new hardware provided at joints #2 and 3.

NOTE

Make sure that the cradle holes and the structure hole are not misaligned prior to inserting the bolts to avoid damaging the threads (ref figure below).

1.16. For position 4,5 and 6 washer added between the structure and fuel tank cradle to fill the gap during installation (see figure 5).

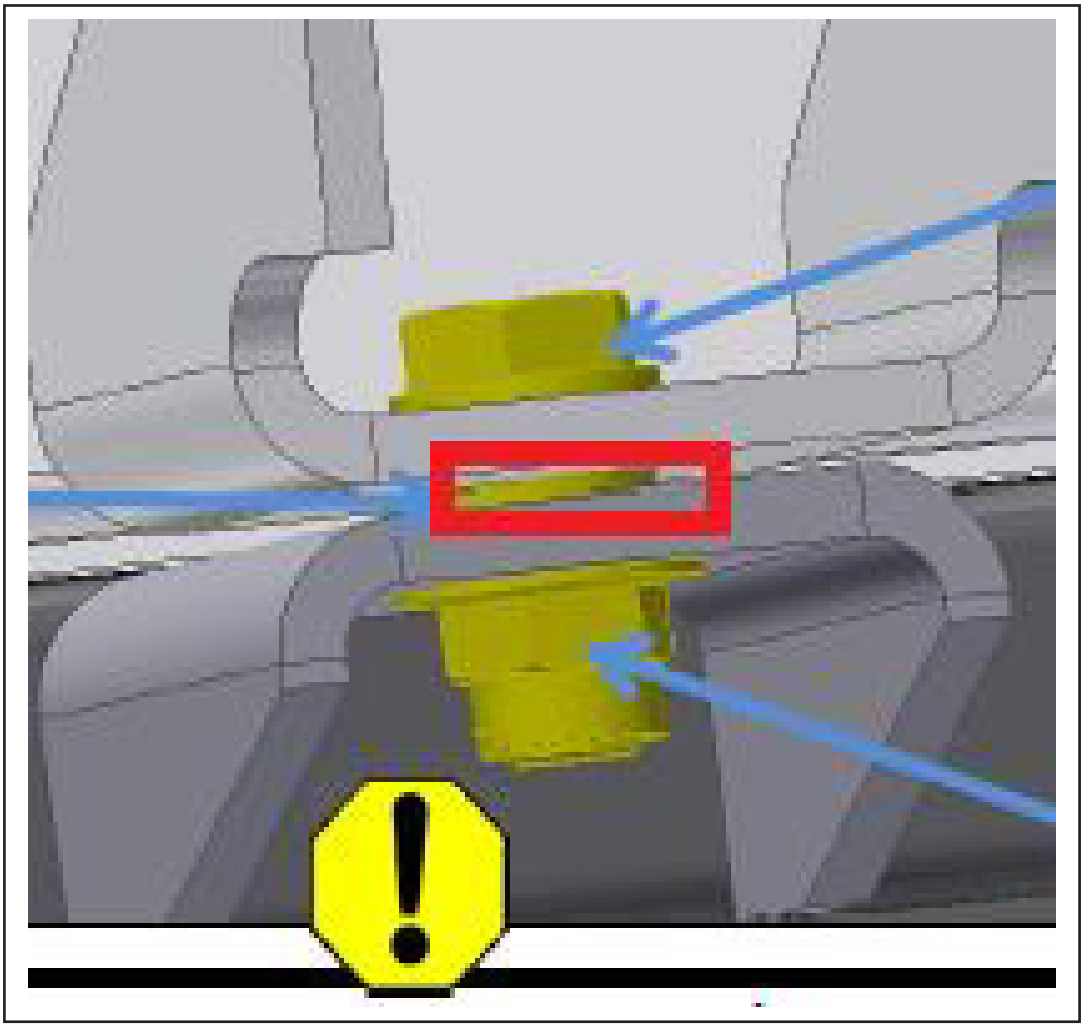

Figure 5 - Installation of Washer

1.17. Install the other hardware following the figure below.

1.18. Pre-torque respecting the sequence below 1,2,3,4,5,6 = 5 ± 2 Nm (adjust if needed to have enough support) (see figure 6).

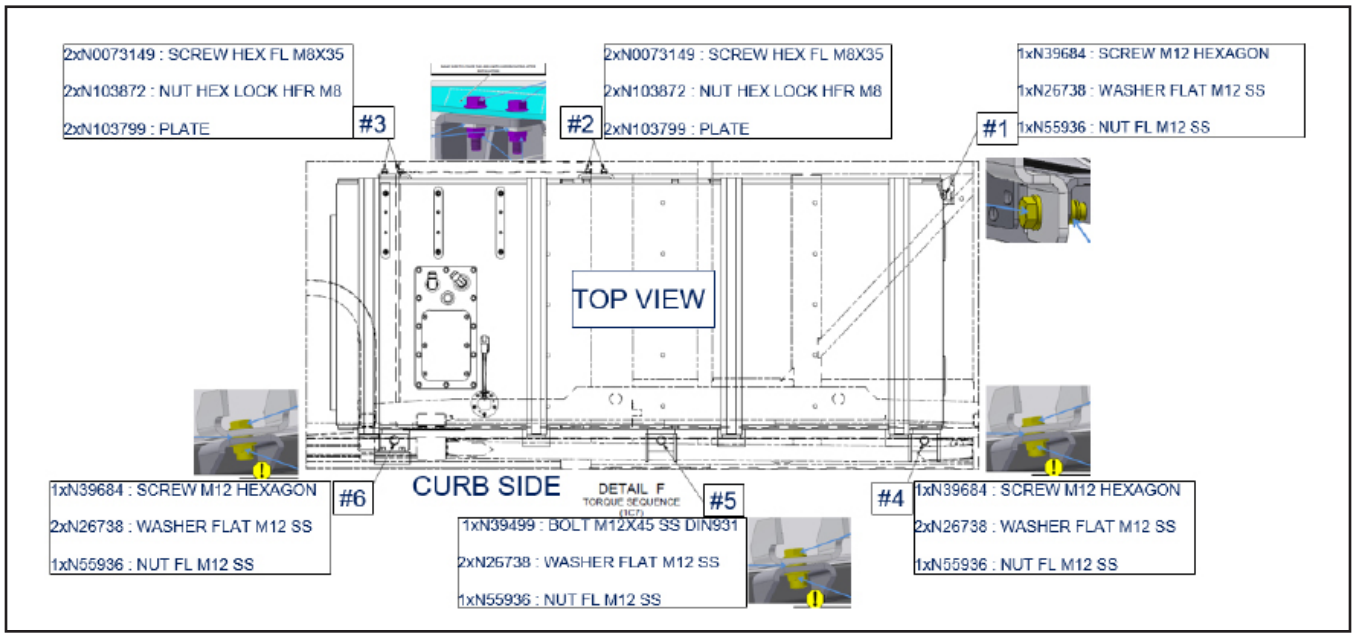

Figure 6 - Installation of Hardware

1.19. Make sure the cradle is firmly pressed against the structure at position #1 #2 and #3 and there is no visible gap between the cradle and the structure prior to torquing the bolts.

1.20. Apply torque to Screw M8X25 2x N43774 to 27± 2 Nm (see figure 7).

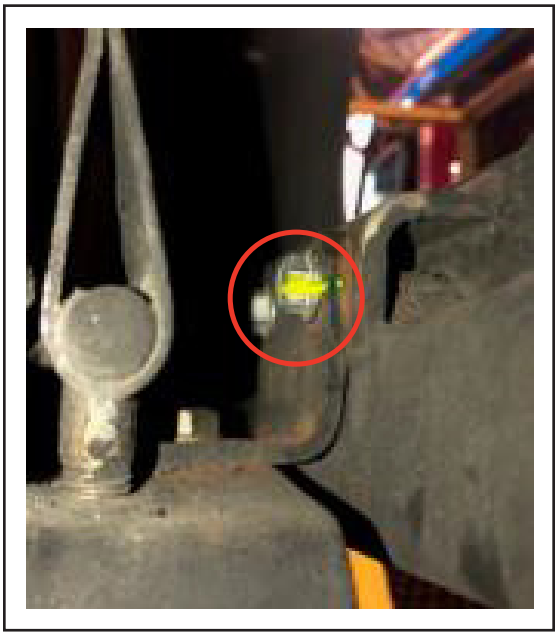

Figure 7 - Apply Torque to Screw M8X25

Follow torque sequence

- Torque : 1 = 93 ± 7Nm
- Torque : 2,3 = 50 ± 5Nm (to the bolt head while holding the nut with wrench in cradle)
- Torque : 4,5,6 = 93 ± 7Nm

NOTE

No more gape at the end of the procedure.

1.21. If there is a space between these two parts, use enough N26738 washers to fill the gap.

Figure 8 - Verify Space Between Two Parts

APPENDIX

Apply threadlocker loctite 243 application minimum 2-3 drops on the screw to be sure of engagement (see figure 9).

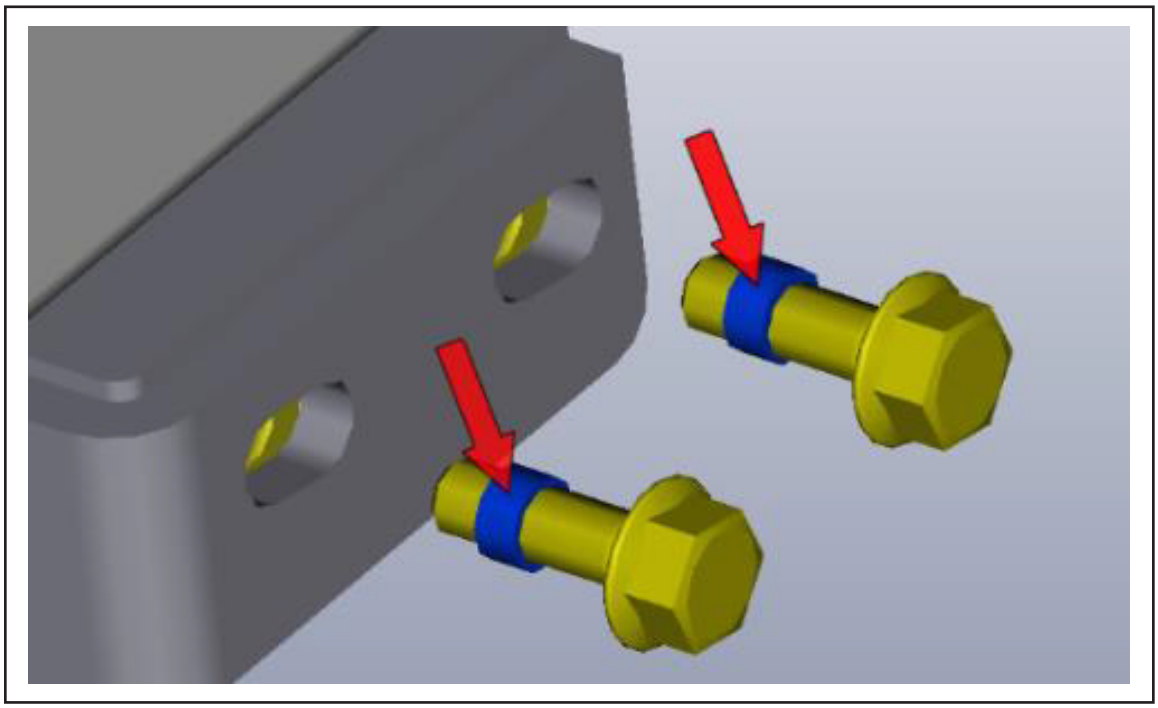

Figure 9 - Apply Threadlocker Loctite 243 Application

1.22. Vehicle ready for service.❖