

REFERENCE:	Nova Bus Manuals
SECTION:	16: Electrical system
RS N°:	MQR 7621-2619
EFFECTIVE IN PROD.:	NA

APPLICATION DEADLINE: 2025MR07
CLAIM REFERENCE NUMBER: WB-5543

SUBJECT:	Battery tray structure cracks.
JUSTIFICATION:	Battery tray structure cracks due to thin sheet metal.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Install brace to tray bottom, apply torque to hinge bolts and inspect support arm.	Nova Bus	Nova Bus	1.5 h
2	Replace battery tray, apply torque to hinge bolts and inspect support arm.	Nova Bus	Nova Bus	1.5 h

MATERIAL REQUIRED PER VEHICLE

QTY	PART N°	REV.	DESCRIPTION
LEVEL 1			
1	N108101		TUBE ASSEMBLY
6	N8951500		SERRATED NUT
6	N44892	B	NUT LOCKNYL M10 FL SSA2 C70
LEVEL 2			
1	N97990	B	BATTERY TRAY 4 BATT ASSEMBLY
SHOP SUPPLIES			
-	-	-	-

Materials will be available within 37 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.
	*		
	-	-	

REVISION HISTORY

REV.	DATE	CHANGE DESCRIPTION	WRITTEN BY
NR	2024JA16	Initial release	Rajendra N M

APPROVED BY:

NQF772001 VERSION 3

Irina

Negoescu

Signature
numérique de
Irina Negoescu
Date : 2024.02.05
13:31:09 -05'00'

PAGE 1 OF 8

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
Maryland Transit Administration - MTA - Maryland	LB82	20001	20001	L82J8K9	[REDACTED]	1
Maryland Transit Administration - MTA - Maryland	LB83	20031	20031	S92J9K9	[REDACTED]	1
Maryland Transit Administration - MTA - Maryland	LC27	20002	20030	L82JXL9	[REDACTED]	29
Maryland Transit Administration - MTA - Maryland	LC28	20032	20070	S92J5L9	[REDACTED]	39
Maryland Transit Administration - MTA - Maryland	LD82	21001	21003	L82J2M9	[REDACTED]	3
Maryland Transit Administration - MTA - Maryland	LD82	21004	21013	L82J5M9	[REDACTED]	10
Maryland Transit Administration - MTA - Maryland	LD82	21014	21014	L82J6M9	[REDACTED]	1
Maryland Transit Administration - MTA - Maryland	LD82	21015	21015	L82J7M9	[REDACTED]	1
Maryland Transit Administration - MTA - Maryland	LD82	21016	21020	L82J9M9	[REDACTED]	5
Maryland Transit Administration - MTA - Maryland	LD82	21021	21021	L82J2M9	[REDACTED]	1
Maryland Transit Administration - MTA - Maryland	LD82	21022	21023	L82J4M9	[REDACTED]	2
Maryland Transit Administration - MTA - Maryland	LD82	21024	21024	L82J2M9	[REDACTED]	1
Maryland Transit Administration - MTA - Maryland	LD82	21025	21029	L82J4M9	[REDACTED]	5
Maryland Transit Administration - MTA - Maryland	LD82	21030	21030	L82J8M9	[REDACTED]	1
Maryland Transit Administration - MTA - Maryland	LD82	21031	21034	L82JXM9	[REDACTED]	4
Maryland Transit Administration - MTA - Maryland	LD82	21035	21036	L82J2M9	[REDACTED]	2
Maryland Transit Administration - MTA - Maryland	LD82	21037	21037	L82J0M9	[REDACTED]	1
Maryland Transit Administration - MTA - Maryland	LD82	21038	21038	L82J7M9	[REDACTED]	1
Maryland Transit Administration - MTA - Maryland	LD82	21039	21042	L82J9M9	[REDACTED]	4
Maryland Transit Administration - MTA - Maryland	LD82	21043	21044	L82J6M9	[REDACTED]	2
Maryland Transit Administration - MTA - Maryland	LD82	21045	21045	L82JXM9	[REDACTED]	1
Maryland Transit Administration - MTA - Maryland	LD82	21046	21046	L82J2M9	[REDACTED]	1
Maryland Transit Administration - MTA - Maryland	LD82	21047	21050	L82J9M9	[REDACTED]	4
Maryland Transit Administration - MTA - Maryland	LD82	21051	21070	L82J6M9	[REDACTED]	20

**WARNING**

FOLLOW YOUR INTERNAL SAFETY PROCEDURES.

**CAUTION**

Before removing, dismantling or maintaining any electrical component, the electrician should take the necessary precautions to avoid any risk of personal injury or damage to the equipment. If necessary, mark all wiring prior to disconnecting, to facilitate reconnection.

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 battery compartment and access the battery tray.
- 1.5. Release the anchor bolt of the tray and swing it outward, away from the vehicle.

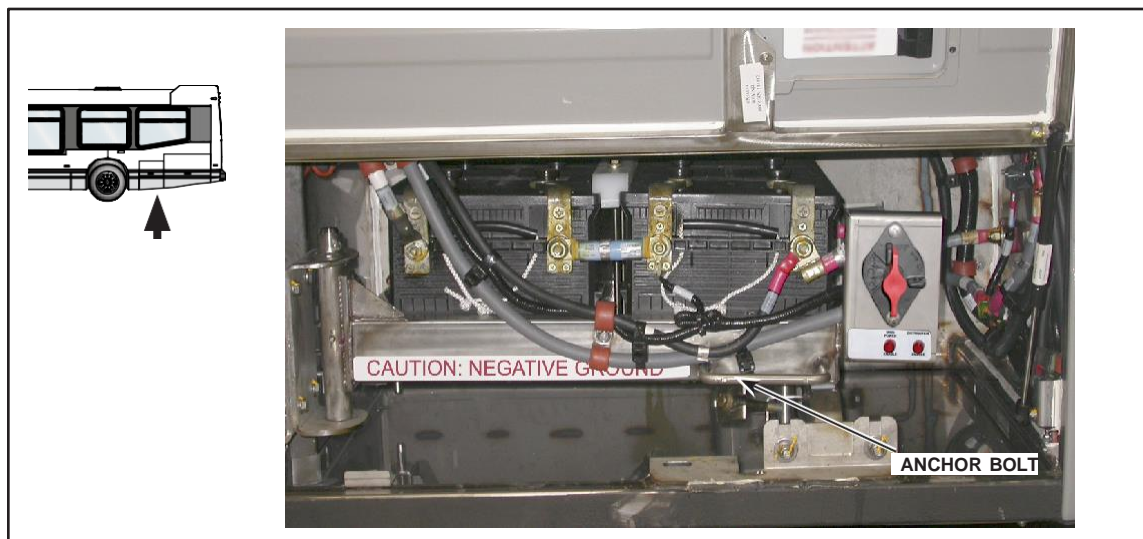


Figure 1 - Battery Compartment

- 1.6. Inspect battery tray bottom. If no crack is found proceed with Level 1. If tray bottom is cracked, proceed with Level 2.

LEVEL 1 : INSTALL BRACE TO TRAY BOTTOM**Step 1: Torque hinge bolts**

- 1.7. Apply blue loctite to the threads of the hinge bolts and torque all four bolts to 33 Nm.
- 1.8. Apply torque seal to the bolt heads.



Figure 2 - Location of Battery Tray Hinge Bolts

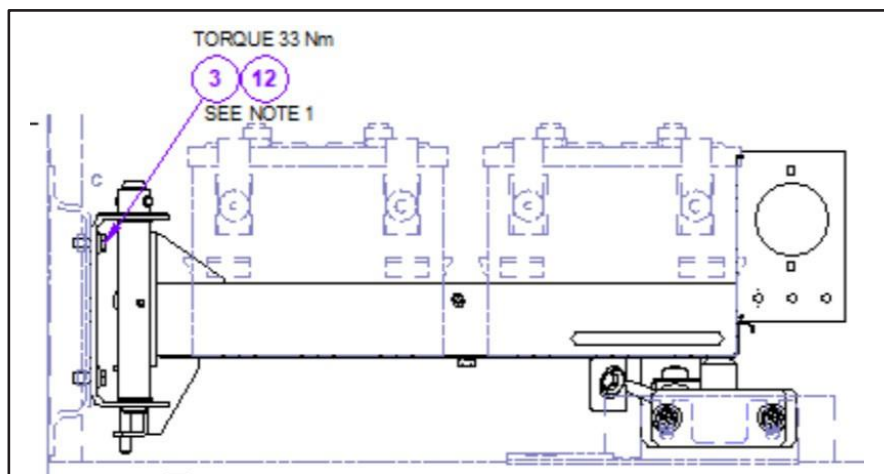


Figure 3 - Line Diagram of Battery Tray Hinge Bolts with Torque

Step 2: Installation of Brace to tray bottom

- 1.9. Disconnect the batteries.
- 1.10. Make sure to secure the cables to avoid any risk of creating a short circuit.
- 1.11. Remove the battery bolts and holddowns.
- 1.12. The batteries can be removed from the tray.
- 1.13. Clean dirt and debris from the tray bottom.
- 1.14. Screw the six bolts without any washers in the weld nuts from the under side of the battery tray and snug tight.



Figure 4 - Installation of Bolts Under the Tray

- 1.15. Slide the brace in place and screw the serrated nuts down.



Figure 5 - Installation of Brace to Tray Bottom

1.16. Hold the bolts under the tray with a wrench and torque the serrated nuts to 40 Nm.

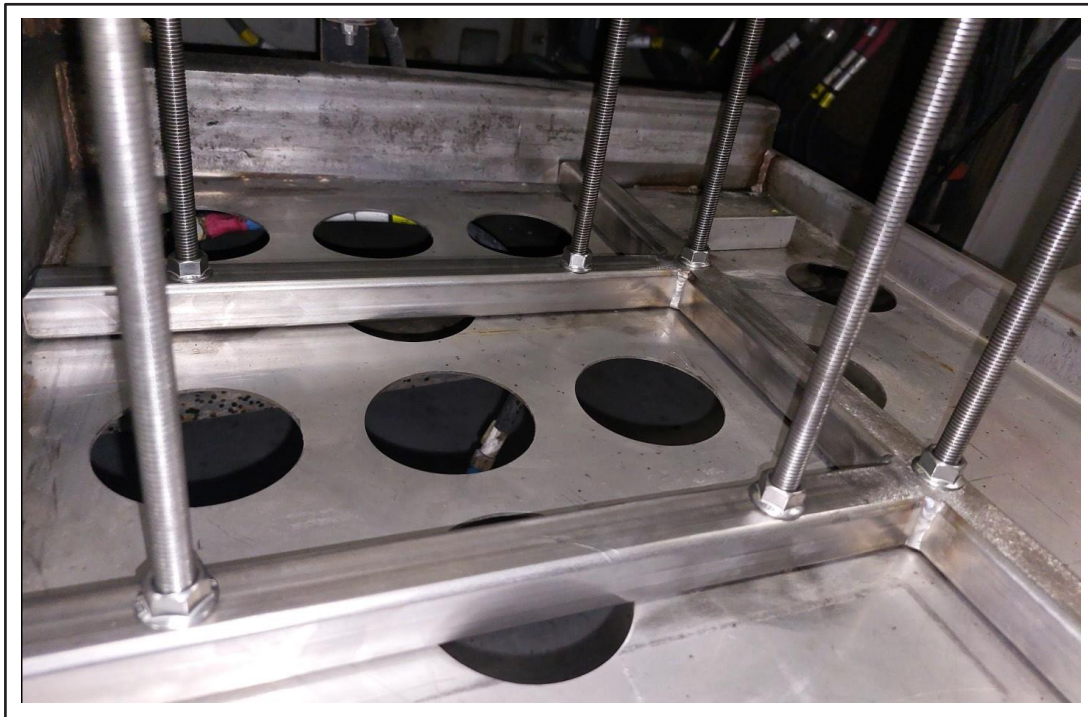


Figure 6 - Installation of Serrated Nuts

1.17. Install the batteries, cables and holddowns.



Figure 7 - Installation of Batteries and Cables

- 1.18. Install the lock nuts without any washer and torque to 7 Nm.



Figure 8 - Installation of Lock Nut

Step 3: Inspection of Support Arm

- 1.19. Ensure the support arm makes contact with the bottom of the battery tray.



Figure 9 - Inspection of Support Arm

- 1.20. Adjust the support arm if necessary, using a torque wrench to tighten the bolts to a torque of 33 Nm.
- 1.21. Apply torque seal to the nuts.



Figure 10 - Applying Torque Seal to The Nuts

- 1.22. Vehicle is ready for service ❖