

REFERENCE:	Nova Bus Manuals
SECTION:	12: Interior furnishing
RS N°:	MQR 7621-1275
EFFECTIVE IN PROD.:	N/A

APPLICATION DEADLINE: 2019AL15
CLAIM REFERENCE NUMBER: WB-4178

SUBJECT:	Seat Rail (60' bus)
JUSTIFICATION:	Seats might get detached from damaged seat rails.

LEVEL	DESCRIPTION	DIRECT CHARGES		TIME
		LABOUR	MATERIAL	
1	Check for damaged, loose seat rail or seat. Torque hardware to specification (if necessary).	Nova Bus	Nova Bus	2 hr 55 min
2	Replace damaged seat rail and torque to specification. Replace hardware (if damaged).	Nova Bus	Nova Bus	2 hr 20 min

MATERIAL

QTY	PART N°	REV.	DESCRIPTION	REPLACES PART N°
LEVEL 1				
—	—	—	—	—
LEVEL 2				
1	N59746	—	RAIL WALL MID RH NO REAR DOOR	—
1	N59741	—	RAIL WALL MID LH	—
1	N71177-2	—	RAIL WALL REAR RH & LH	—
1	N71177-1	—	RAIL WALL REAR RH & LH	—
1	N69417	—	RAIL WALL REAR LH	—
30	N44620-01	—	BOLT SPECIAL W/SAFETY MARK	—
30	N37109	—	NUT FL SERRATED 3/8-24 ZC	—
53	N11034	—	RIVET NUT	—
53	N11344	—	SCREW	—
53	N24210	—	RECTANGULAR WASHER	—

Materials will be available within 45 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.

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	2018FE09	Initial release	Kumaraswamy K S

APPROVED BY:

CLIENT	ORDER	ROAD NUMBER		VIN (2NVY/4RKY...)		QTY
		FROM	TO	FROM	TO	
SEPTA - Pennsylvania	L741	7355	7355	S92L4E4500504	S92L4E4500504	1
SEPTA - Pennsylvania	L742	7371	7414	S92L6E4500729	S92L7E4500772	44
SEPTA - Pennsylvania	L743	7356	7370	S92L1E4500489	S92L2E4500503	15
SEPTA - Pennsylvania	L745	7415	7415	S92L0F4500873	S92L0F4500873	1
SEPTA - Pennsylvania	L746	7416	7454	S92L7F4500952	S92L8F4501012	39
SEPTA - Pennsylvania	L749	7302	7354	S92Y7D4500409	S92L2E4500470	53
SEPTA - Pennsylvania	L861	7300	7484	S92L5G9775188	S92L8G9775220	32

PROCEDURE



WARNING

Follow your internal safety procedures.



NOTE

See the manufacturer's manual, supplied by Nova Bus, for additional details and information.

- 1.1. Park the vehicle on an even surface with transmission in neutral (N).
- 1.2. Set the master control switch in the OFF position (see Figure 1)..

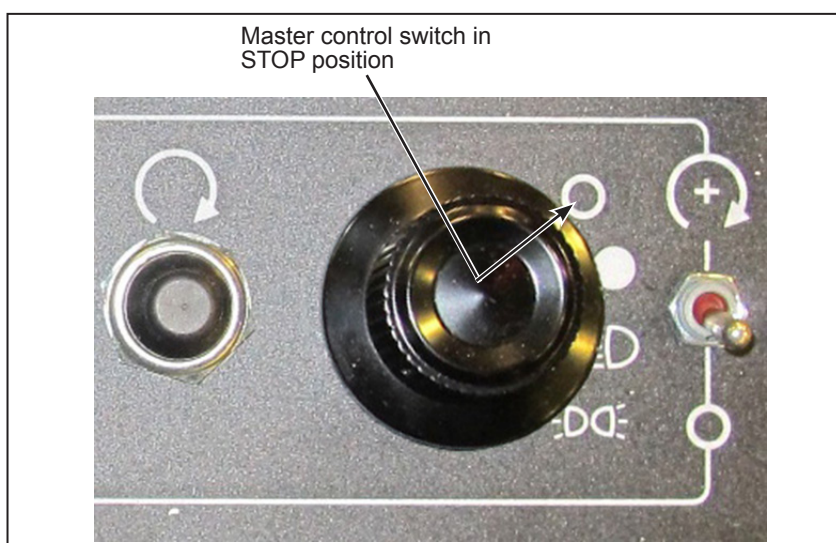


Figure 1 - Master Control Switch in STOP Position



WARNING

Before starting any work on the vehicle, make sure the vehicle is completely and securely stationary. Disconnect the starting circuit on the control box at the rear of the vehicle and place the battery disconnect switches in the OFF position.

- 1.3. Set the battery disconnect switch in the battery compartment to the OFF position (see Figure 2).

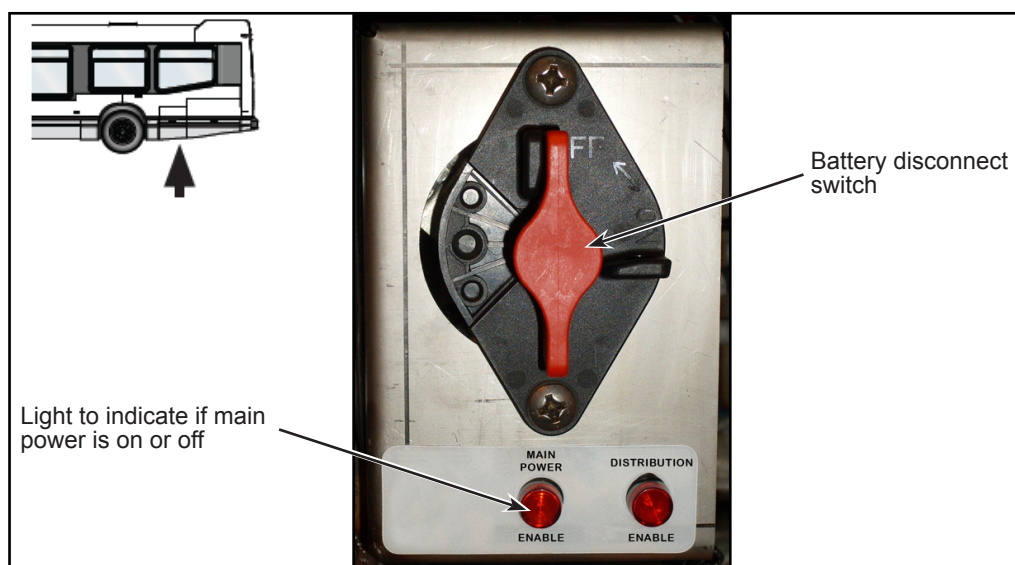


Figure 2 - Typical Battery Disconnect Switch Location

LEVEL 1

- 1.4. Inspect seat rails at the seats bracket area for cracks (see Figure 3).

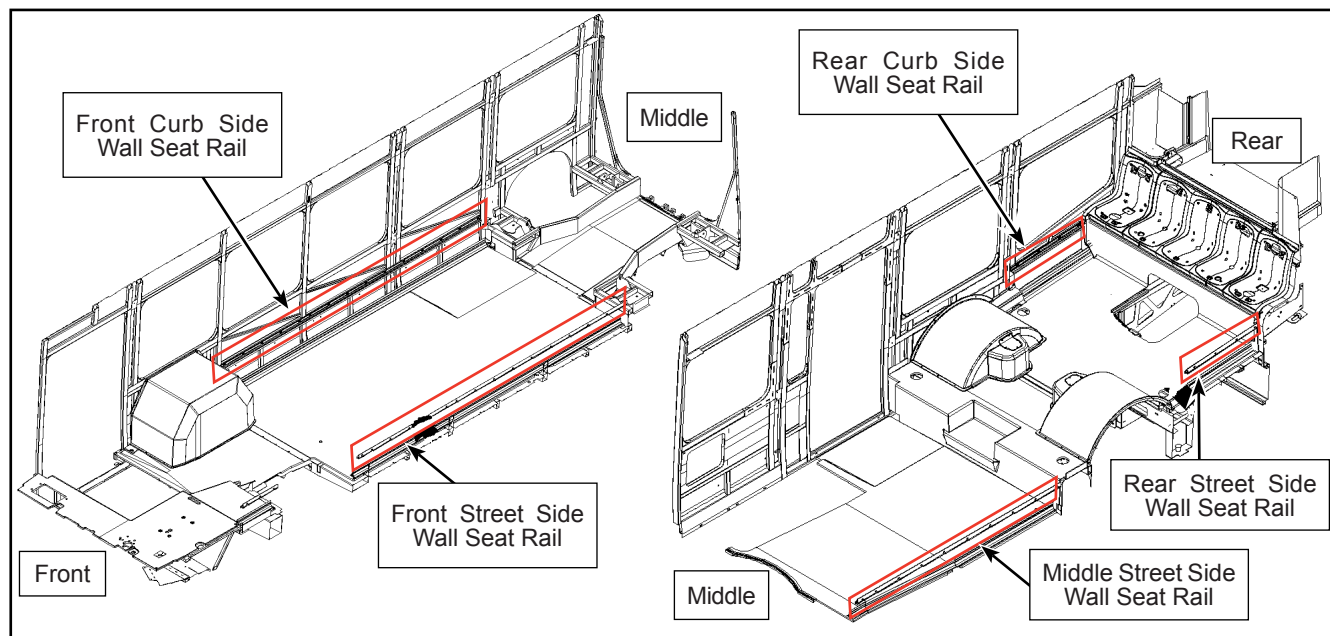


Figure 3 - Typical Location of Seat rails

- 1.5. If cracks are present go to LEVEL 2 (step 2.1 onwards). Else, follow the subsequent procedure.
- 1.6. Apply full body weight onto all passenger seats and shake in order to check for looseness at seat rail. If seat is not loose go to step 1.14. Else, follow subsequent procedure.
 - 1.6.1. Remove and inspect each nut attached to upper and lower seat bracket (see Figure 4). If hardware are rusted or stretched or having damaged threads proceed to LEVEL 2 (step 2.17 onwards), else continue with following steps.

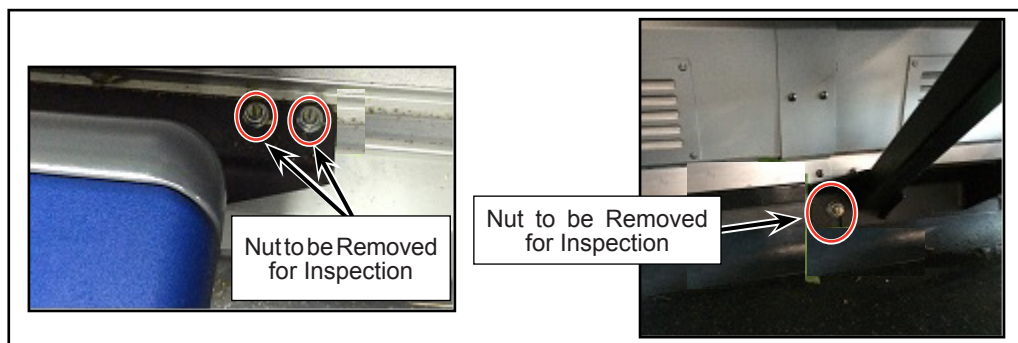


Figure 4 - Removal of Nuts for Inspection

- 1.6.2. Apply loctite and torque hardware to 16 lb-ft (21 N•m).
 - 1.6.3. Apply torque seal on all the torqued hardware.
- 1.7. Locate seat rail hardware on along the wall (see Figure 3 and Figure 5).

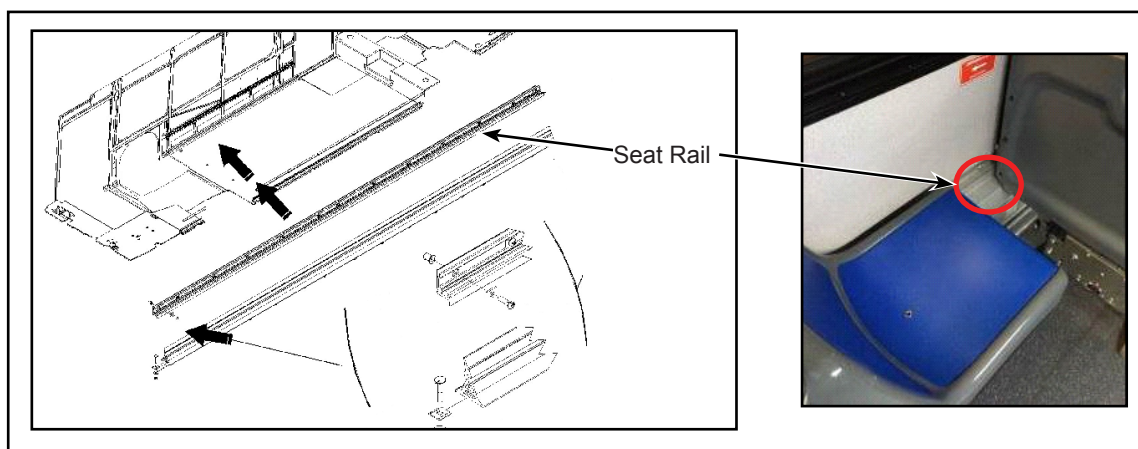


Figure 5 - Typical Location of Seat Rail

**NOTE**

It may be necessary to utilize the extra long bit socket to access hardware under seat.

- 1.8. Remove and inspect each bolt on seat rail one at a time (see Figure 6). If hardware are rusted, stretched or having damaged threads proceed to LEVEL 2 (step 2.20 onwards), else continue with following steps.

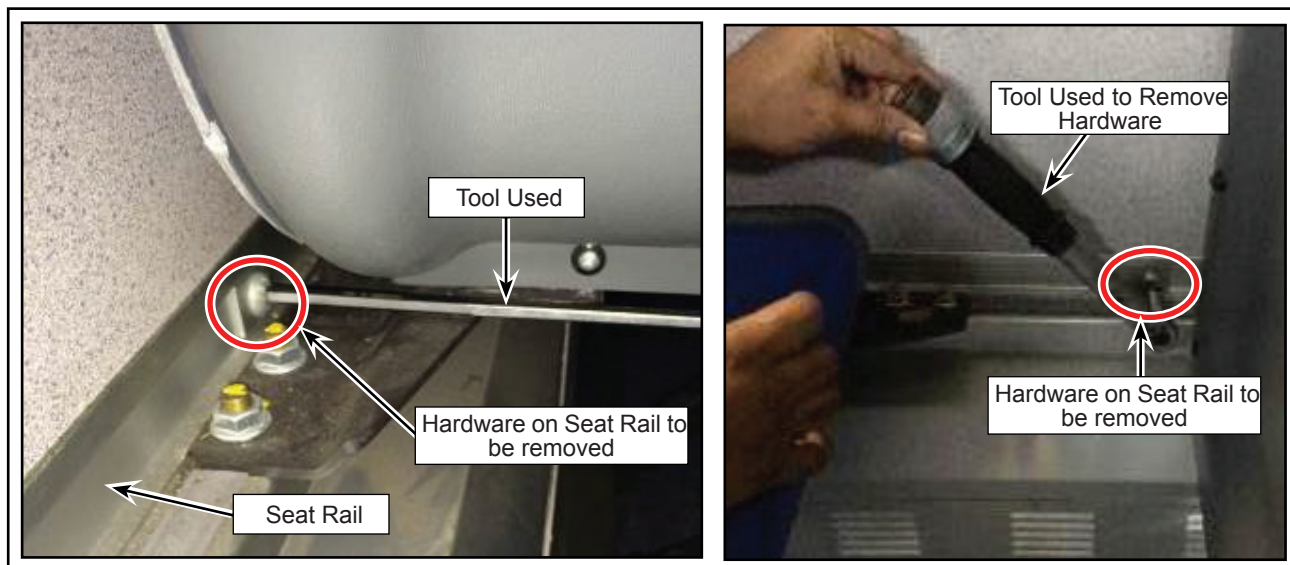


Figure 6 - Removal of Hardware on Seat Rail for Inspection

- 1.9. Apply loctite to hardware and torque hardware to 16 lb-ft (21 N•m).
1.10. Apply torque seal on the hardware torqued.

**NOTE**

Two of the bolts on the sideways facing seat require a torque adapter or crows foot to access.

- 1.11. Using a 14mm socket and torque wrench, remove and inspect the bolts on the rear wheelwell seats (see Figure 7). If bolts are rusted, stretched or having damaged threads proceed to level 2 (step 2.23 onwards), else continue with consecutive steps.

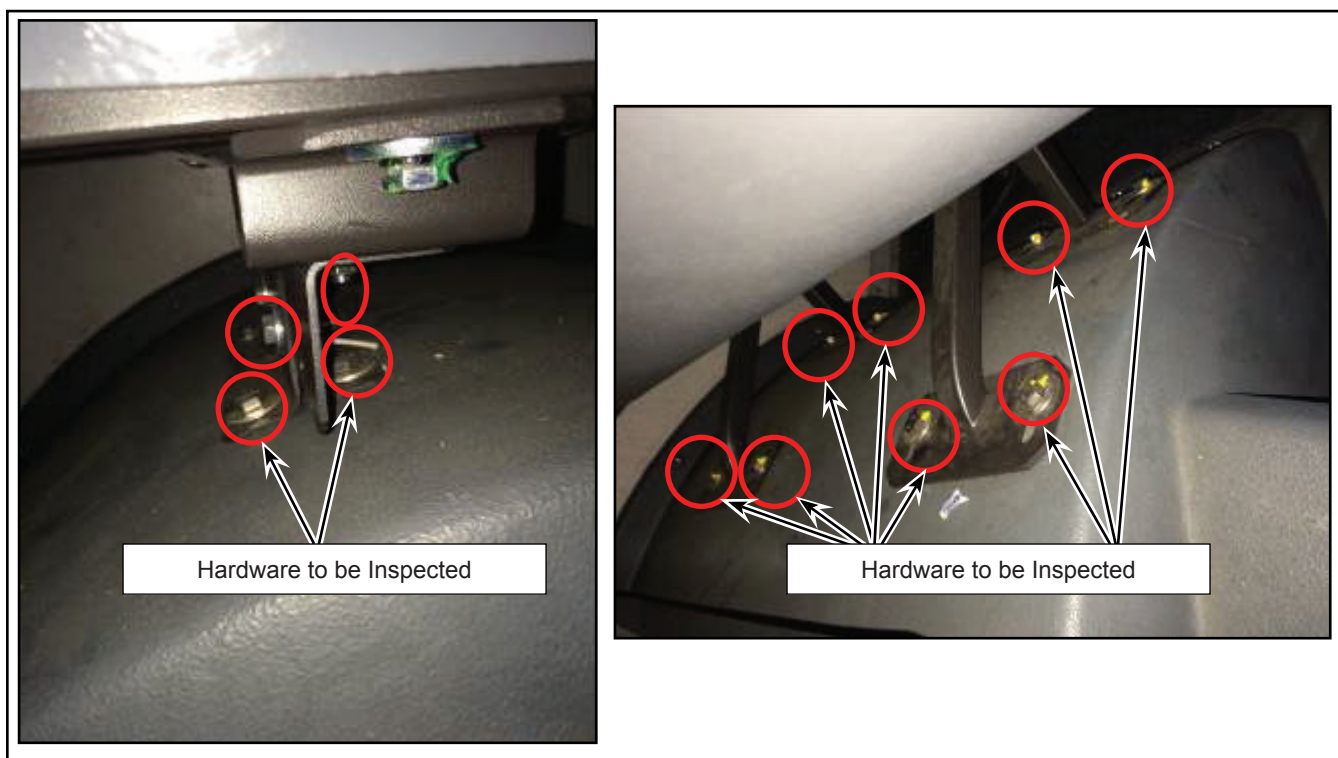


Figure 7 - Typical View of Rear Wheelwell Seats

- 1.12. Apply loctite and torque hardware to 21 lb-ft (28 N•m).
1.13. Apply torque seal on all the torqued hardware.
1.14. Set the battery disconnect switch in the battery compartment to ON position.
1.15. Place the Master control switch in ON position.
1.16. The vehicle may be returned to service.❖

LEVEL 2**REPLACEMENT OF DAMAGED SEAT RAIL**

2.1. Perform the following steps to remove the seats.

2.1.1. Line up masking tape to top and bottom bracket (see Figure 8).

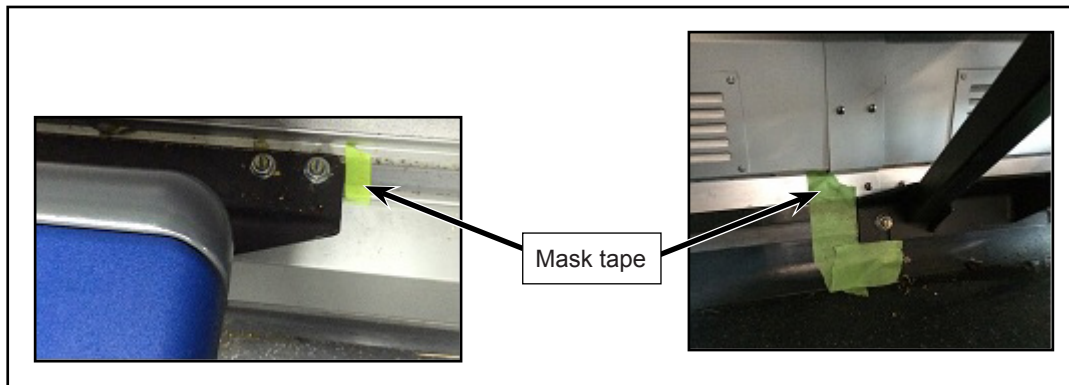


Figure 8 - Typical View of Applying Masking Tape to Brackets

2.1.2. Remove screws on both sides top of stanchion bracket using phillips head screwdrivers (see Figure 9).



Figure 9 - Removal of Screws on the Stanchion

2.1.3. Remove the stanchion bracket and carefully pull wiring slack out of the stanchion (see Figure 10).



Figure 10 - Typical View of Wiring Slack

2.1.4. Pull the stanchion out from the insert housing (see Figure 11).

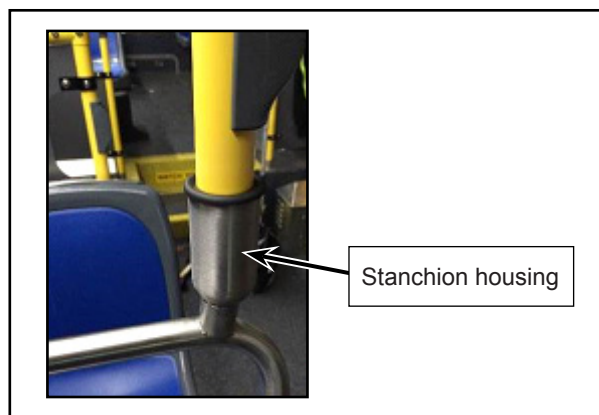


Figure 11 - Typical View of Stanchion Housing



WARNING

Be careful not to damage the wiring.

2.1.5. Temporarily tape the stanchion onto the top rail (see Figure 12).



Figure 12 - Typical View of Securing the Stanchion

2.1.6. Remove and retain nuts attached to upper and lower seat brackets with a 9/16" (14mm) socket (see Figure 13).

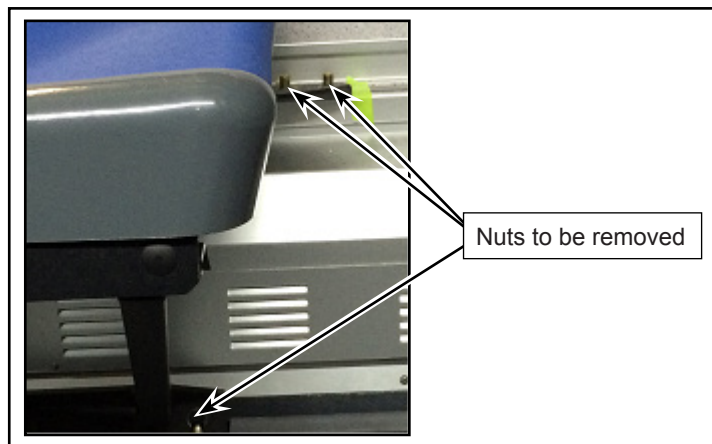


Figure 13 - Typical View of Seat Bracket Disassembly

- 2.2. Locate the hardware used to fix the seat rail on the wall (see Figure 14).

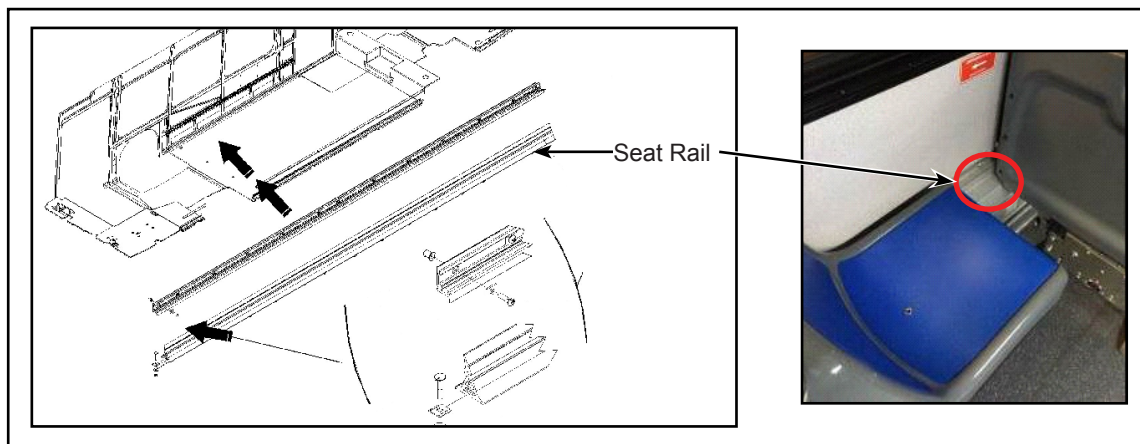


Figure 14 - Location of Seat Rail

- 2.3. Remove and discard the seat rail hardware.
- 2.4. Remove and retain the heater box cover and filter fitted to seat rail (see Figure 15).

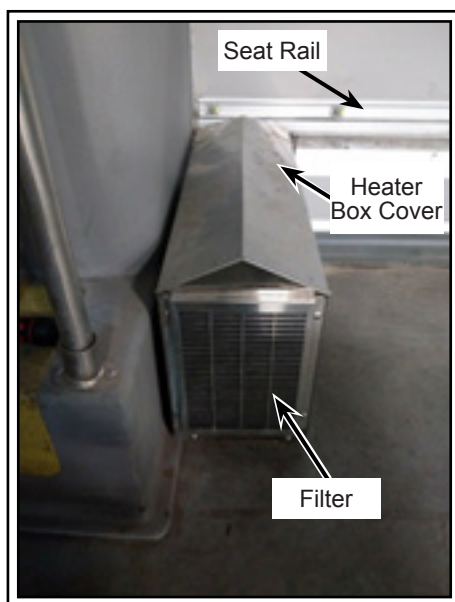


Figure 15 - Removal of Heater Box Cover and Filter

- 2.5. Replace the cracked seat rail with the new seat rail provided (see Figure 16).

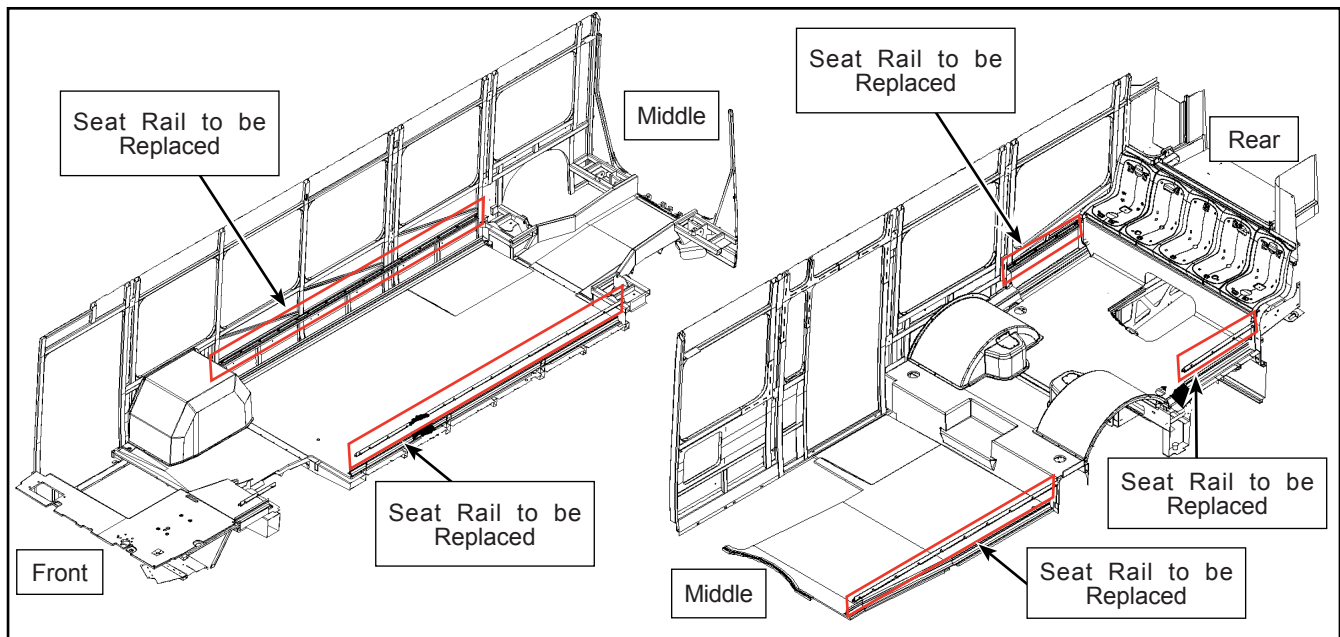


Figure 16 - Installation of New Seat Rail

- 2.6. Apply loctite and insert new hardware to attach the seat rail on wall.
2.7. Initially, tighten the hardware by hand.



NOTE

It may be necessary to utilize the extra long bit socket to access hardware under seat.

- 2.8. Torque the hardware as specified (see Figure 17) and apply torque seal.

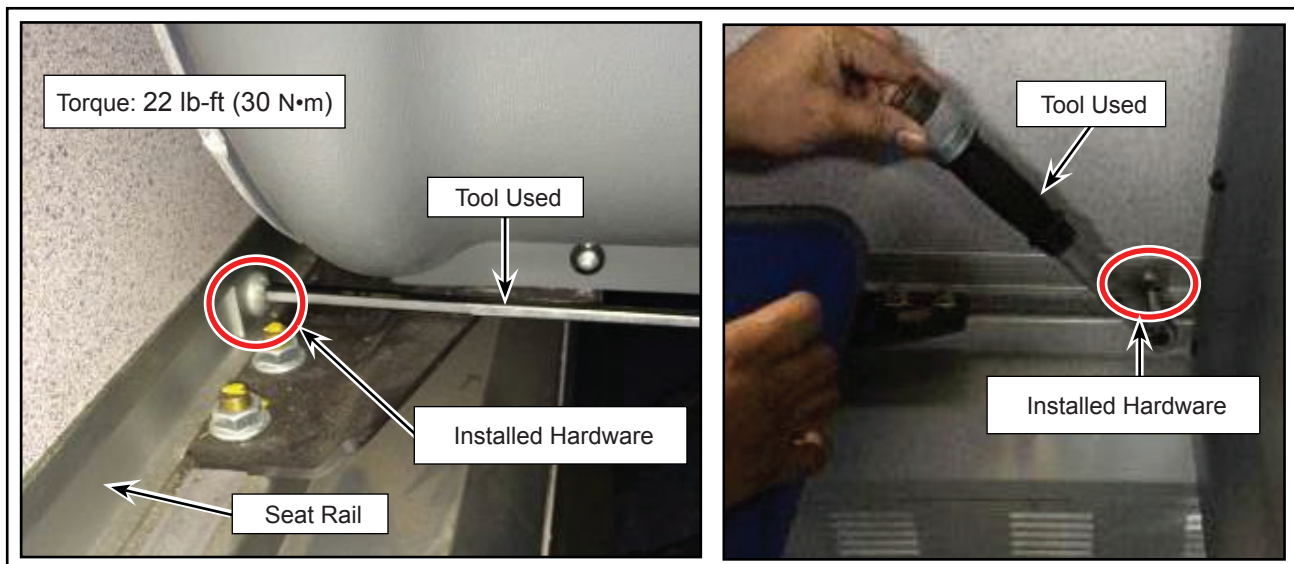


Figure 17 - Installation of Seat Rail Hardware

- 2.9. Install the retained heater box cover and filter.
- 2.10. Install the seats again by the following procedure.
- 2.10.1. Insert the upper and lower seat brackets onto the welded bolts. Confirm that the upper and lower brackets are lined up with the masking tape (see Figure 18).

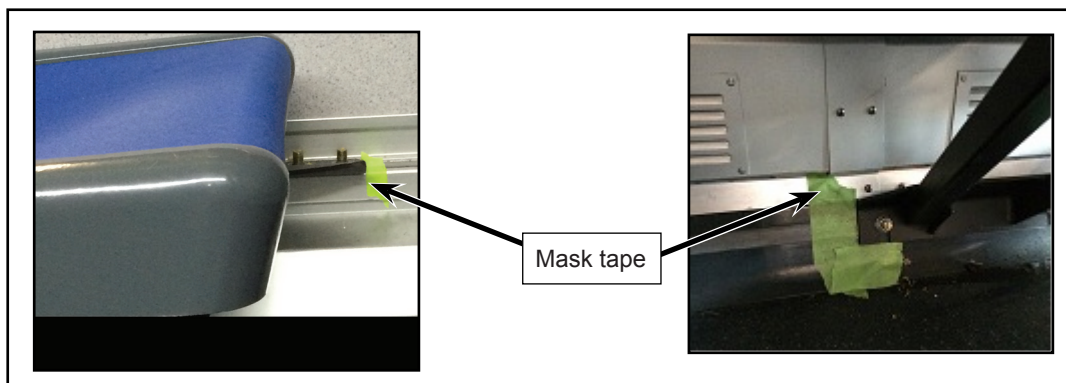


Figure 18 - Typical View of Seat Bracket Reassembling

- 2.10.2. Apply loctite to the bolts.
- 2.10.3. Attach nuts to upper and lower seat bracket with a 9/16" (14mm) socket (see Figure 19).
- 2.10.4. Torque hardware as specified (see Figure 19).
- 2.10.5. Apply Torque seal on hardware.

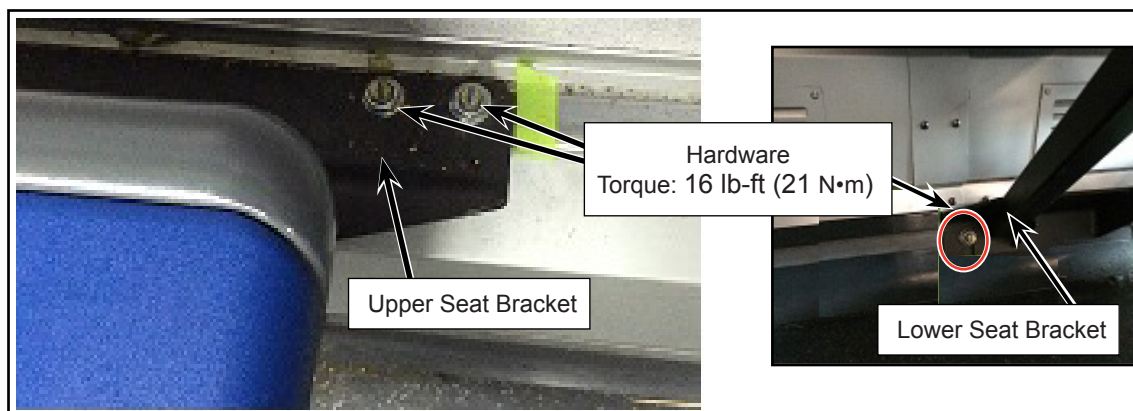


Figure 19 - Typical View of Nuts Installed to Bracket

2.10.6. Insert stanchion onto top insert housing of the seat (see Figure 20).

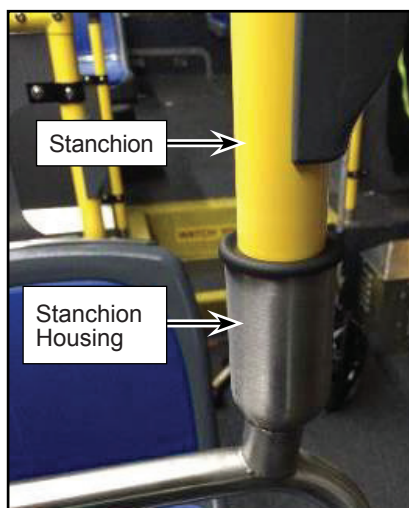


Figure 20 - Typical View of Stanchion Housing

- 2.11. Place next stop request wiring carefully into the stanchion.
- 2.12. Place the stanchion bracket in place and tighten the hardware with two #3 phillips head screwdrivers (one screwdriver in front and one in rear).
- 2.13. Remove masking tape.



NOTE

Two of the bolts on the sideways facing seat require a torque adapter or crows foot to access.

- 2.14. Remove and inspect the bolts on the rear wheelwell seats one at a time (see Figure 21). If bolts are rusted, stretched or having damaged threads, replace the bolts.

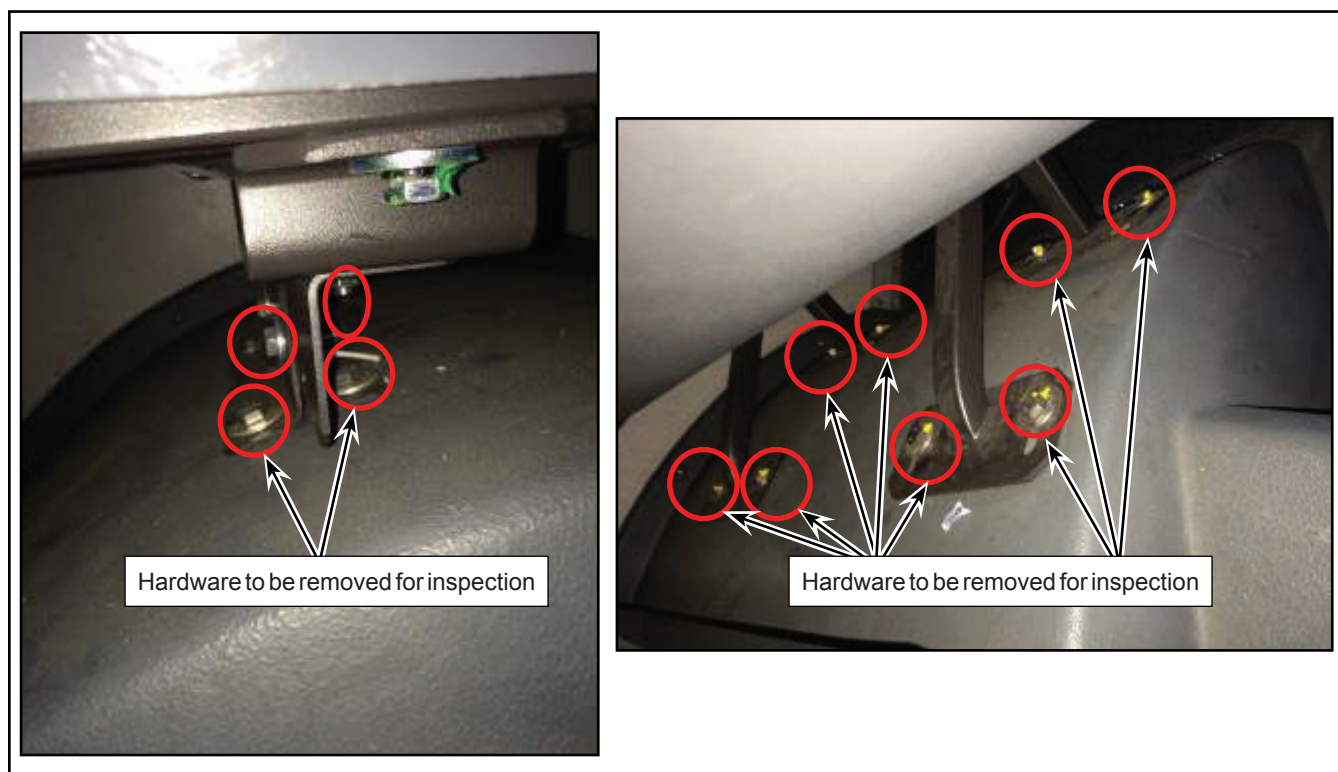


Figure 21 - Typical View of Rear Wheelwell Seats

- 2.15. Apply loctite and torque hardware to 21 lb-ft (28 N•m).
2.16. Apply torque seal on all torqued hardware. Proceed to step 2.26.

REPLACEMENT OF HARDWARE (IF DAMAGED)

- 2.17. Discard the damaged nuts on seat brackets and install new hardware provided (see Figure 22).

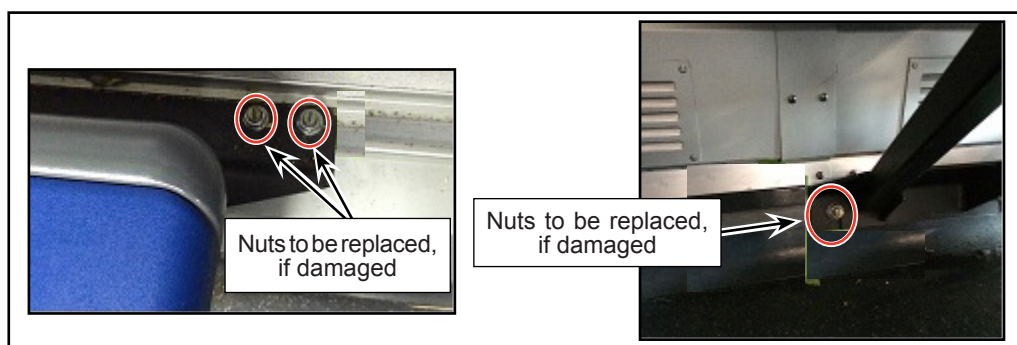


Figure 22 - Typical Location of Nuts

- 2.18. Apply loctite and torque hardware to 16 lb-ft (21 N•m).
2.19. Apply torque seal on all the torqued hardware. Proceed to step 2.26.

- 2.20. Replace the damaged hardware with new hardware provided (see Figure 23).



Figure 23 - Installation of Damaged Hardware to attach Seat Rail on Wall

- 2.21. Apply loctite and torque hardware to 16 lb-ft (21 N•m).
2.22. Apply torque seal on all hardware torqued. Proceed to step 2.26.
2.23. Replace the damaged hardware with new hardware provided (see Figure 24).

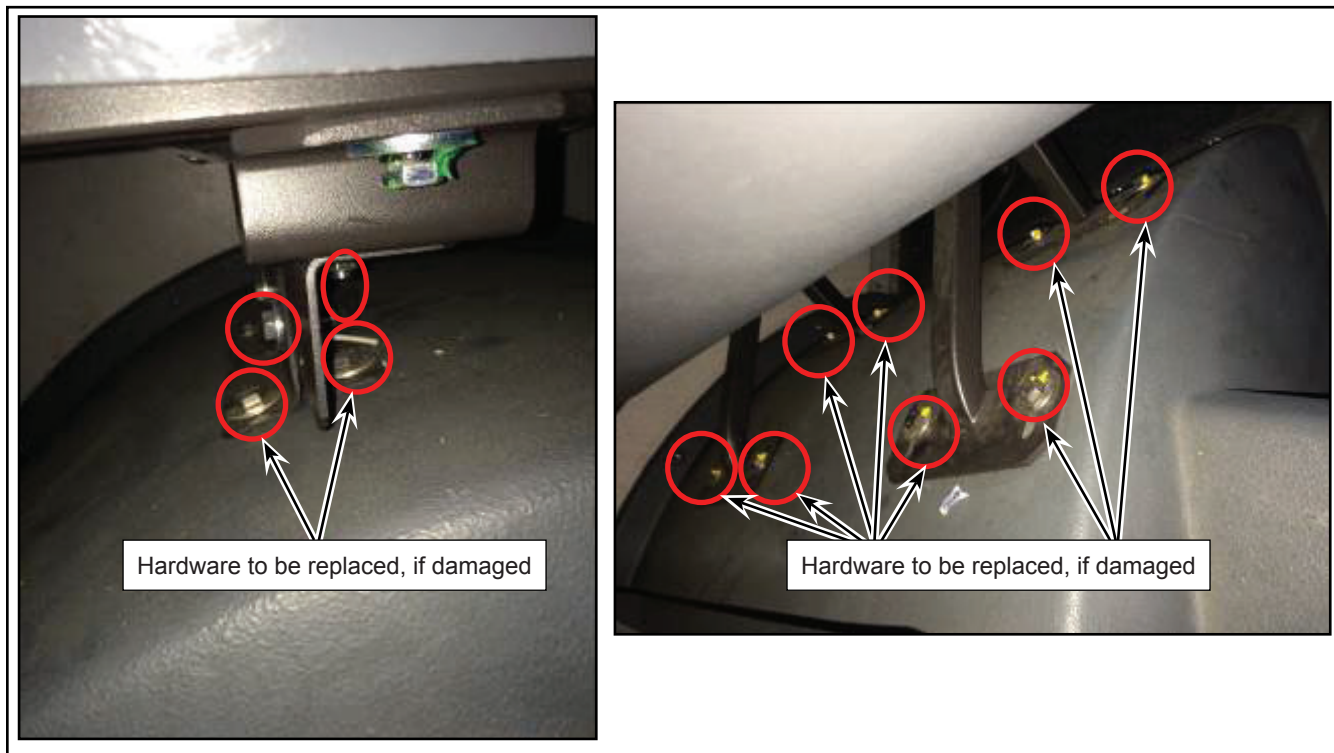


Figure 24 - Installation of Damaged Hardware

- 2.24. Apply loctite and torque hardware to 21 lb-ft (28 N•m).
2.25. Apply torque seal on all the hardware torqued.

- 2.26. Set the battery disconnect switch in the battery compartment to ON position.
- 2.27. Test and Confirm that the next stop request activates when button is pushed (see Figure 25).



Figure 25 - Typical View of Next Stop Request Button

- 2.28. Place the Master control switch in ON position.
- 2.29. The vehicle may be returned to service. ❖