



INSTRUCTION TO SERVICE

ITS61009		May 01, 2024
SECTION:	260-BATTERY COMPARTMENT	
SUBJECT:	CORRECT ORIENTATION AND TERMINATION OF NEG CONTACTOR IN RR HV FUSE BOX	
ISSUE:	WRONG CONTACTOR TERMINATION CAUSING OVERHEATING AND FAILURE OF CONTACTORS AND BUS BAR INSULATION	
SUMMARY:	BOM UPDATED WITH CORRECT ORIENTATION OF +A1 AND - A2 CONTACTOR TERMINALS. REQUIRES CORRECTION IN THE FIELD	

ITS61009

Ref. NHTSA Recall No.	Ref. Transport Canada Recall No.
Not Applicable	Not Applicable

THIS ITS DOCUMENT SHOULD BE RETAINED AND REFERRED TO FOR FUTURE MAINTENANCE UNTIL THE NEW FLYER PARTS AND/OR SERVICE MANUAL IS UPDATED TO REFLECT WORK DONE AS A RESULT OF THIS DOCUMENT. ENSURE THAT THIS DOCUMENT IS AVAILABLE FOR PARTS AND MAINTENANCE STAFF GOING FORWARD.



Contents:

1. SAFETY PROCDEURE.....3

2. REWORK PROCDEURE.....4

SAFETY PROCEDURE:

1. Turn the MRS to the off position and wait 5 minutes before proceeding to the next step.
2. Turn the main battery disconnect and HV interlock switch to the “OFF” position.
3. Perform the Lock Out Tag Out procedure.
4. Perform the applicable de-energizing procedure before moving to the next step in this ITS

- **NOTE:** Refer to the *Lockout/Tagout Procedure and De-Energizing Procedures in section 9 of the New Flyer Service Manual.*
- **NOTE:** Use commercially available lock out equipment and tags being sure to follow any local laws or workplace procedures.

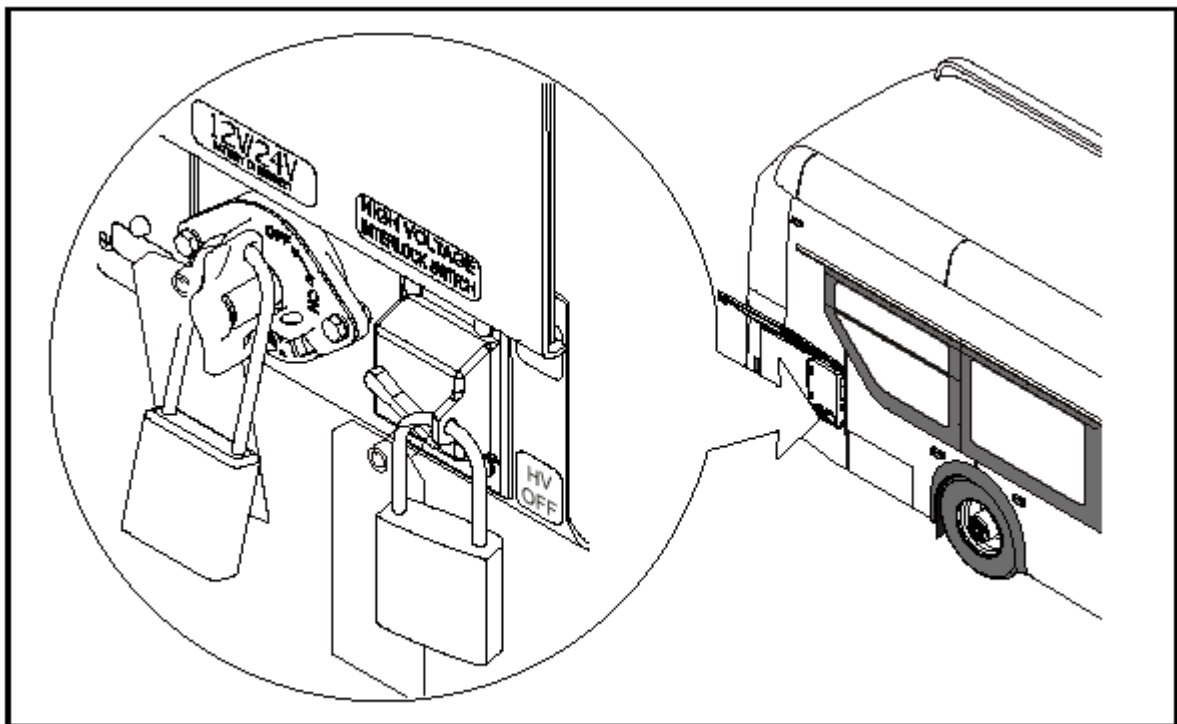


Figure 1: Lockout tagout location reference.

REWORK PROCEDURE:

5. Open the engine door to get access to rear HV fuse box
6. Unscrew the 4 screws holding the front cover and remove the front cover
7. Locate the Negative Contactor at the bottom right of the rear inverter rack as marked in fig. 2 below.

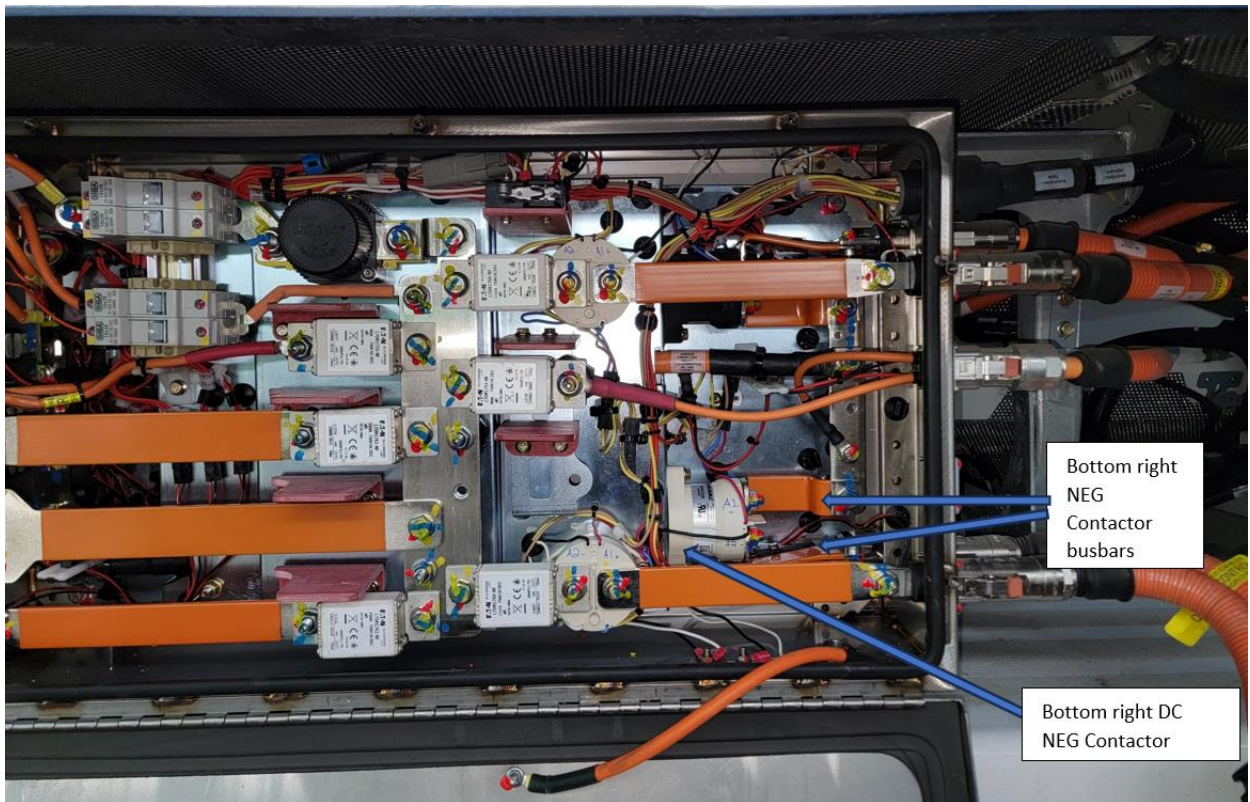


Fig 2: Rear HV Fuse Box

8. Use 13 mm socket to remove the nuts on both the contactor end of the upper bus bar (PN:810776) and on ASSY-BUSBAR NEG CS (PN:822545)
9. Use 13 mm socket to remove the nuts on the contactor end of the lower bus bar (PN:825840) and 10mm socket for the nut on the other end of the bus bar.
10. Remove the M5-0.80 bolts holding the contactor and visually confirm the +A1 and A2- terminal markings on the contactor as shown in Fig 3 below.



Fig 3: +A1 and A2- markings on the contactor terminals

11. Re-install the contactor so that its A1+ terminal is at the top while A2- terminal is below (see fig 4) and refasten the contactor to the Fuse Box chassis using the M5-0.80 bolts with a torque of 3.7 Nm.
12. Fasten the busbar (PN:810776) to the A1 terminal of the contactor at 10Nm and the other end of the same bus bar on the ASSY-BUSBAR NEG CS (PN:822545) at 16 Nm torque.

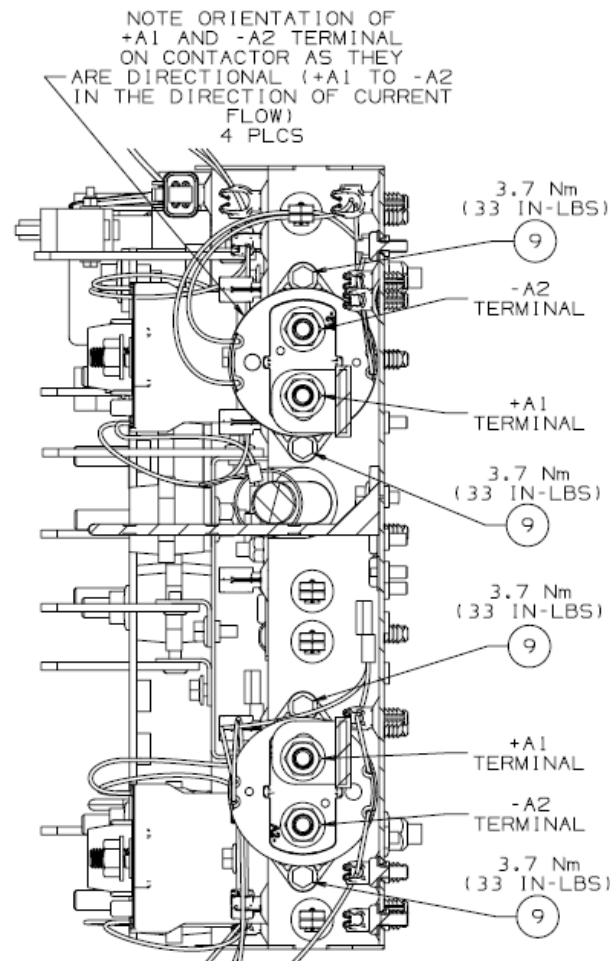


Fig 4: Negative DC Contactor terminal orientation

13. Fasten the second busbar (PN:825840) to the A2- terminal of the contactor with a torque of 10Nm and its other end to Neg Receptacle Powerlock (PN822453)
14. Perform visual check to ensure the fuse box is closed with no debris, tools etc.
15. Reinstall the RR HV fuse box cover.
16. Remove the lockout/tagout from 12/24-volt Battery Disconnect switch and set the switch to the ON position.
17. Set the Master Run switch to DAY-RUN or NIGHT-RUN position.



LABOUR ESTIMATE				
	Operation	Number of Technician(s)	Hours	Labor Time T X HR
1	Re-Orientation and termination of DC Contactor in RR HV Fuse Box	1	1	1