Blower Speed Switch – Relay Installation

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Property: New Jersey Transit

Issue: Defroster switch failing.

Reason/ Cause: Excessive current to defroster switch is causing the defroster switch to fail prematurely.

Solution: Installation of a relay pack to mitigate excessive current to the defroster switch.

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Number of affected buses: As Required

Estimate repair hours/bus: 1.0 hr.

Necessary parts:

Relay Pack Assembly - NABI PN: 190-1689-511 (Quantity 1)

10-16 x ½" Self Tapping Screw – McMaster Carr PN: 94060A242 (Quantity 2)

Wire Ties – McMaster Carr PN: 80005K51 (As Required)

Defroster Switch – NABI PN: 190-1685-002 (As Required)

Necessary Tools:

Phillips Screwdriver
Wire Cutters
Cordless Drill
Drill Bit Extension
5/32" Drill Bit
Long Length Screwdriver Bit

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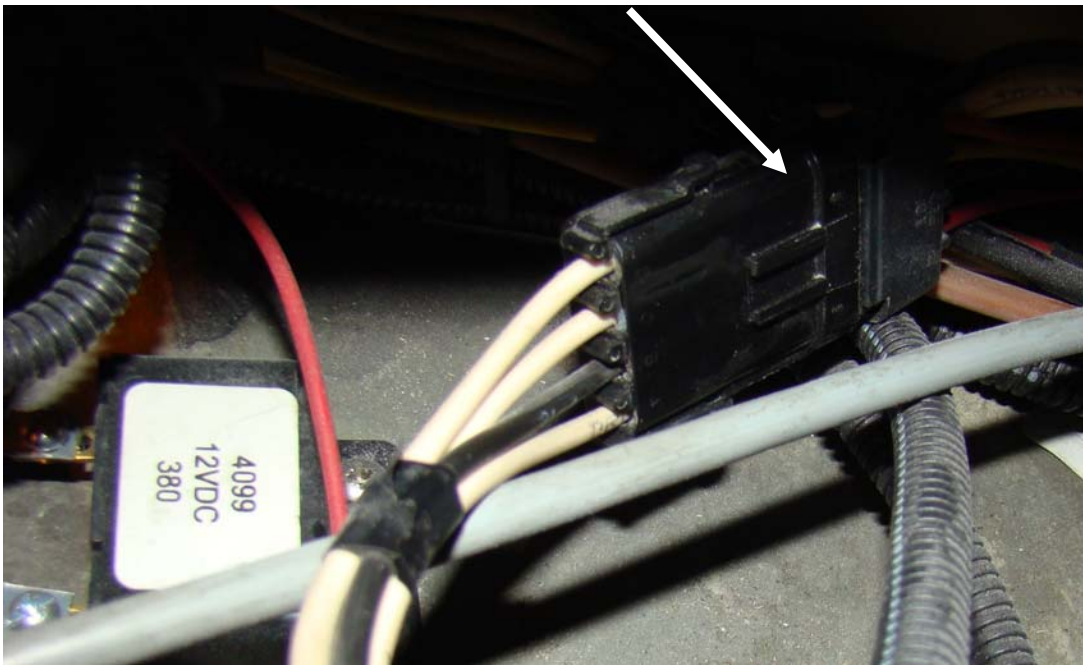
North American Bus Industries, Inc.

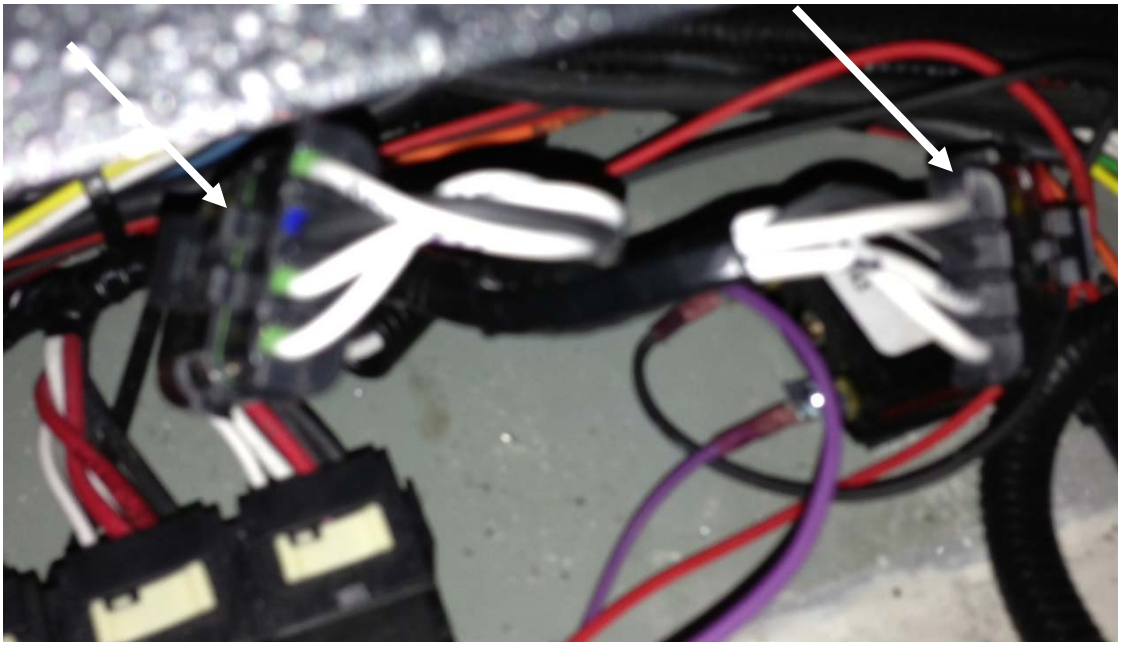
SAFETY PRECAUTIONS MUST BE FOLLOWED ACCORDING TO ACCEPTED INDUSTRY STANDARDS AND LOCAL/PROPERTY REQUIREMENTS.

1. Park the bus and apply the parking brake.
2. Shut off the batteries using the battery disconnect switch.
3. Locate and remove the front dash panel (see below). Use a manual screwdriver do not use a power tool to remove these screws.

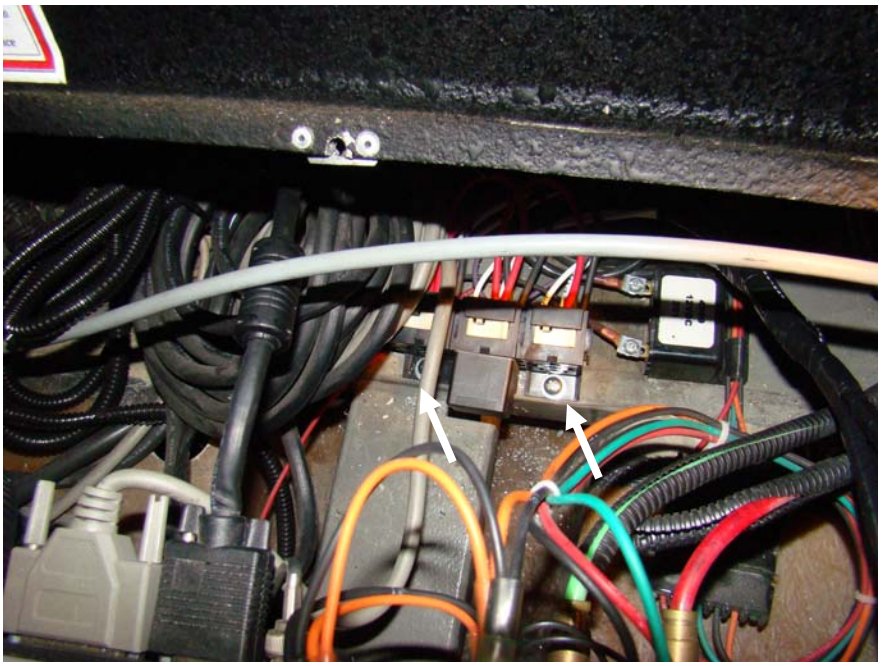
4. Behind the front dash panel, locate the 4 cavity weather pack connector located to the curbside of the vehicle and disconnect (see below).



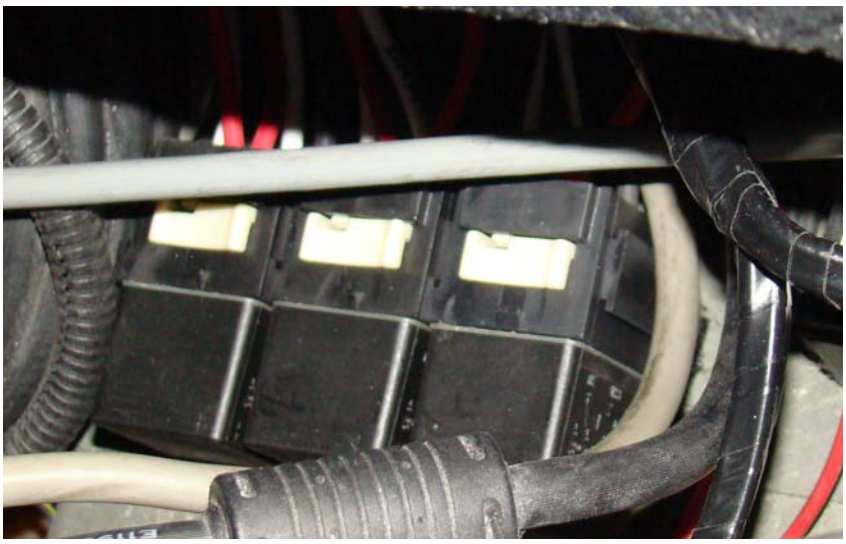
5. Install the relay pack assembly to the previously disconnected connectors (see below).



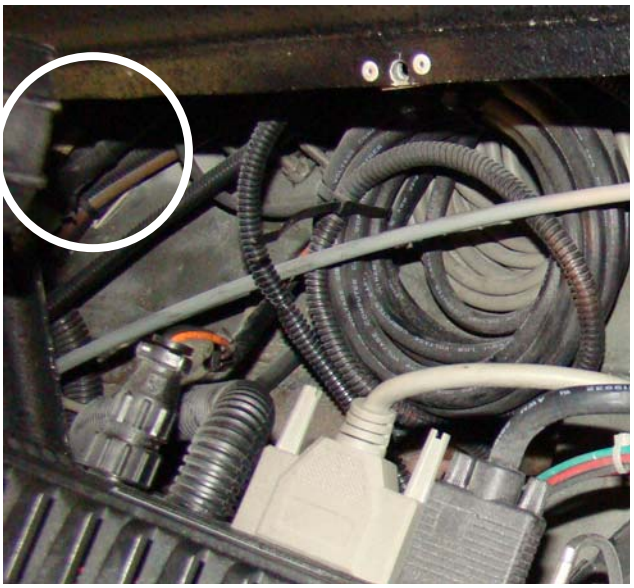
6. Remove the relays from the ends of the relay pack assembly. Drill two 5/32 holes and install two self tapping screws to the previously drilled holes (see below).



7. Reinstall the previously removed relays back to the relay pack assembly (see below).



8. Route long wire through the street side cavity (see below).

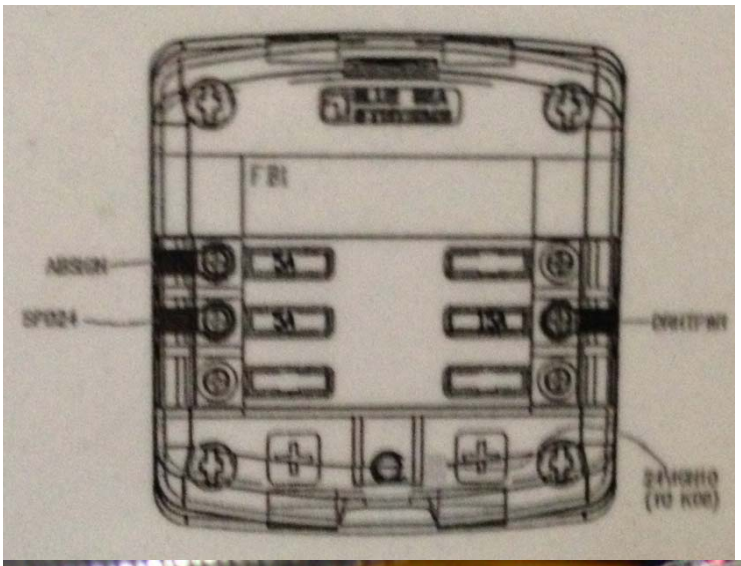


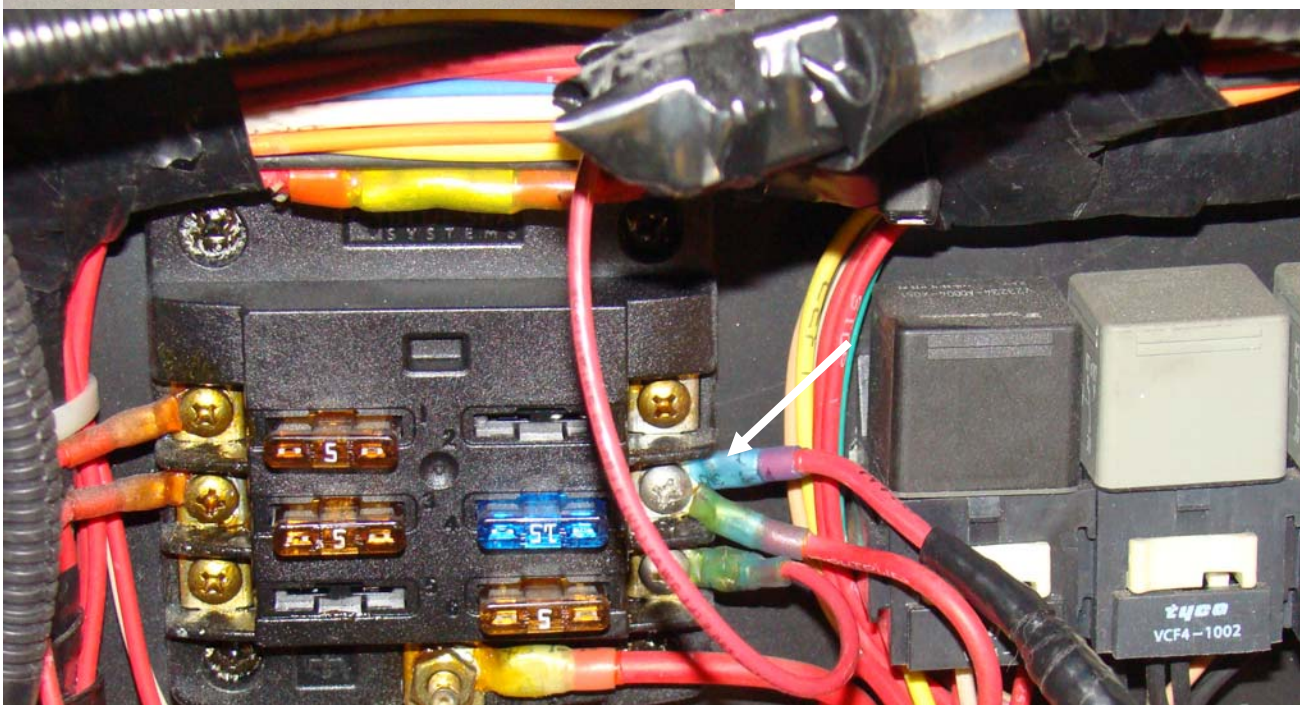
9. Open main electrical compartment exterior access door below the operators window (see below).

10. Locate wire that was routed on step 8 (see below).

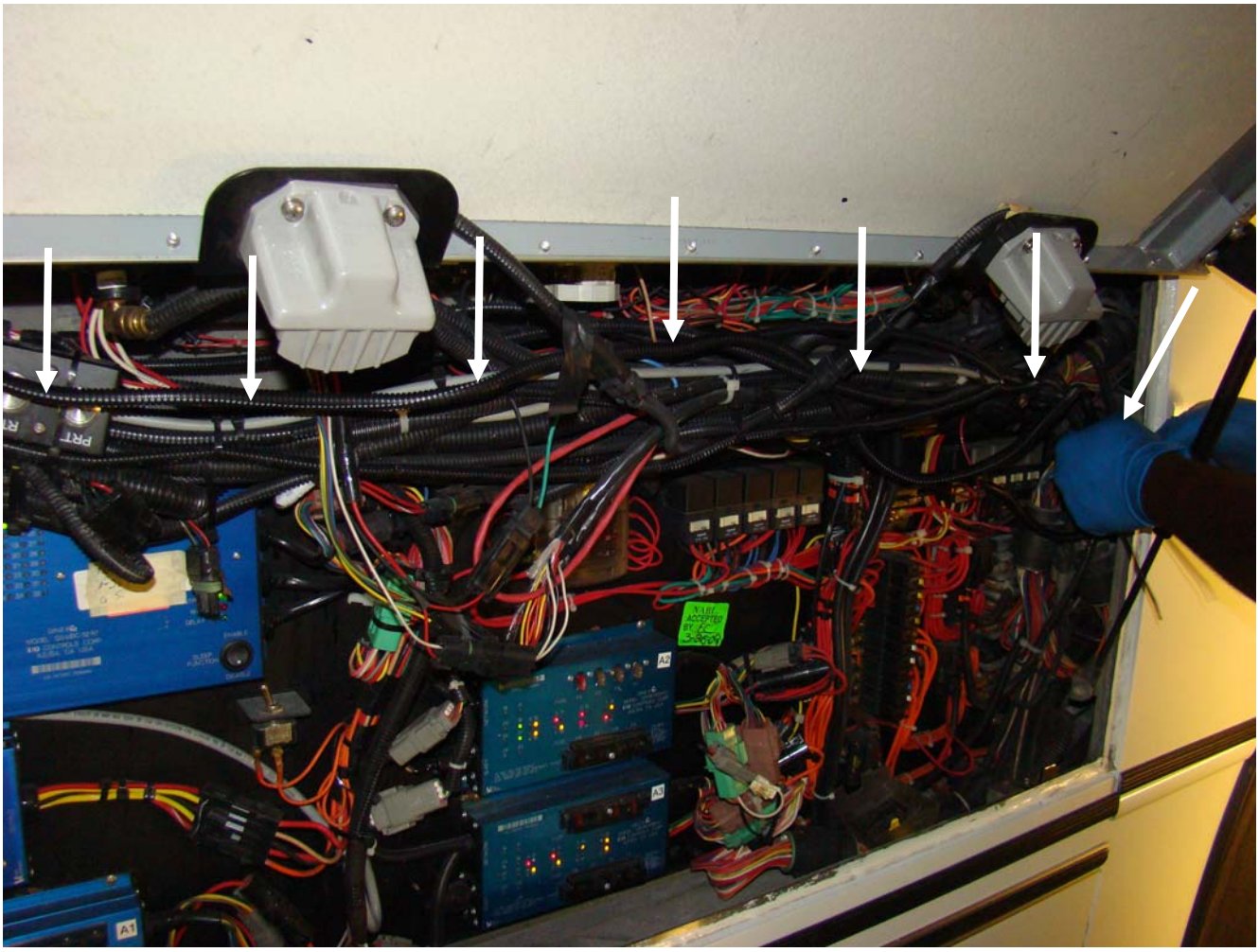
11. Route wire over to fuse block (see below).

12. Install ring terminal to the fuse block (see below). It is installed to the same location as DRHTPWR (See below).





13. Install wire ties to the previously installed wire(s) (see below).



14. Reinstall fuse block cover.

15. Inspect defroster blower motor switch, if damaged it should be replaced (see below).

16. Turn on the batteries using the battery disconnect switch.

17. Turn on the master run switch.

18. Operate the drivers defroster blower motor switch at all speeds and verify that the newly installed relay pack is working at all stages. As each stage is activated the relay will “click”, this indicates the relay pack is working properly.

19. Turn off the master run switch.

20. Reinstall the front dash panel using the hardware removed in step 3. Use a manual screwdriver do not use a power tool to install these screws.