



TECHNICAL SERVICES INFORMATION BULLETIN

TSIB 21-10 Rev C		December 20, 2021
TO:	All Operators	
TITLE:	MCI Main Distribution Panel Protection	
APPLICABILITY:	MCI coaches with Main Distribution Panel, MCI P/N: 07-08-7940: J4500 - All coaches beginning with MY 2017 to 2021. J3500 - All coaches beginning with MY 2018 to 2021. D45CRT - All MY 2021 coaches. D45CRT-LE - All coaches beginning with MY 2018 to 2021. D4520 – All MY 2020 coaches. D4X0X – All coaches beginning with MY 2017 to 2020.	

WARNING

Read this entire procedure before beginning work.

Use Safe Shop Practices at All Times.

To avoid personal injury:

- a. Proper Personal Protective Equipment (PPE) must be worn. Safety glasses and protective gloves are required for working with DEF Fluid.**
- b. Turn the main battery disconnect switch to the OFF position.**
- c. Ensure that both the front and the rear wheels are chocked.**
- d. Position the ENGINE RUN and ENGINE START switches on the engine compartment remote control box to the OFF position.**
- e. Allow enough time for components to cool down prior to working in the engine compartment.**

1.0 Description

This TSIB is being issued in relation to NHTSA Recall 21V-748 and Transport Canada recall 2021-578.

Due to the current global parts shortage, the components required to conduct the related recall repair instructions are not currently available. This is specific to repair instructions ITS60272 (J4500), ITS-60335 (J3500), ITS 60283 (D Coach), and ITS60298 (D45CRT and D4520 coach).

In the interim period, prior to these repair instructions being incorporated on the buses identified above, MCI recommends conducting an immediate inspection of the MDP, MCI P/N: 07-08-7940, and regular interval inspections every 6000 miles for signs of thermal stress or corrosion following this inspection procedure.

Once the recall repair instructions have been incorporated, the inspections described below will no longer be required.

2.0 Material Requirements

ITEM	PART NO	QTY	U/M	DESCRIPTION
1	19-11-258	10	EA	TYRAP -7.31" LONG

3.0 Special Tools

CRC SP-400 - Corrosion Inhibitor (Vendor: CRC, VPN: 03282)
 Calibrated Torque Wrench

4.0 MDP cover disassembly

4.1 J4500/J3500/D45CRT-Le/D4520 coach models:

Locate the Main Battery Disconnect Switch and ensure it is in the off position.



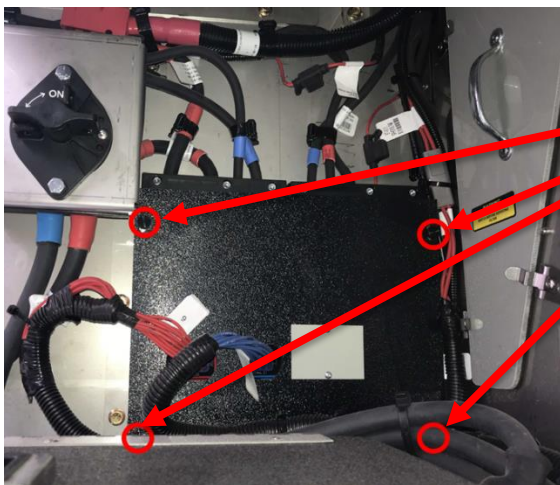
Turn off
MDS.

Disconnect GND, 12V, and 24V battery cables from the coach batteries. Ensure the battery cables do not come in contact with each other or the coach.



Disconnect all battery cables.

Locate the MDP compartment mounted on the rear wall in the battery compartment. Remove and save the 4 thumb screws to release the MDP cover.



Remove and save 4 thumb screws.

Remove 5 tyrapts located at the bottom of the plastic MDP cover to remove the cover.



Remove 5 tyrapts & remove cover.

Remove tyrap that secure BT-P162 to the Main Disconnect Switch cables.



Remove BT-P162 tyrap on battery cables.

Disconnect connectors BT-P161 and BT-P162 from MDP.



Disconnect BT-P161 and BT-P162.

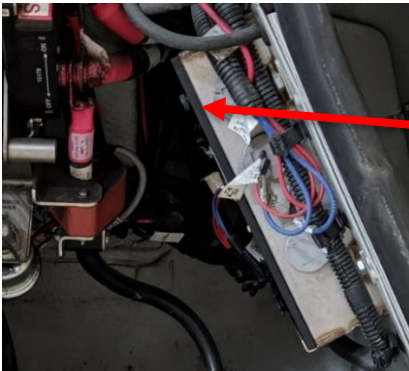
4.2 D4X0X coach models:

Locate the Main Battery Disconnect Switch and ensure it is in the off position.



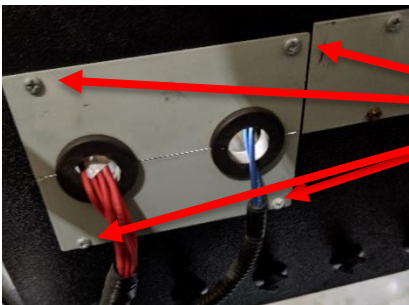
Turn off MDS.

Remove and save the two thumbscrews from the MDP cover.



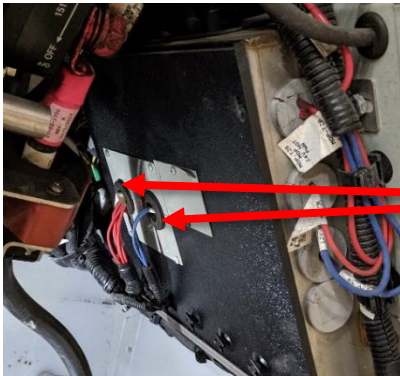
Remove the thumb screws

Remove and save 4 screws holding the MDP cut-out part to the MDP cover.



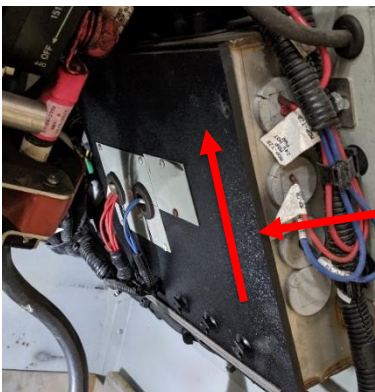
Remove and save the screws

Disconnect the two connectors, BT-P162 and BT-P161, from the main distribution panel.



Disconnect the wires

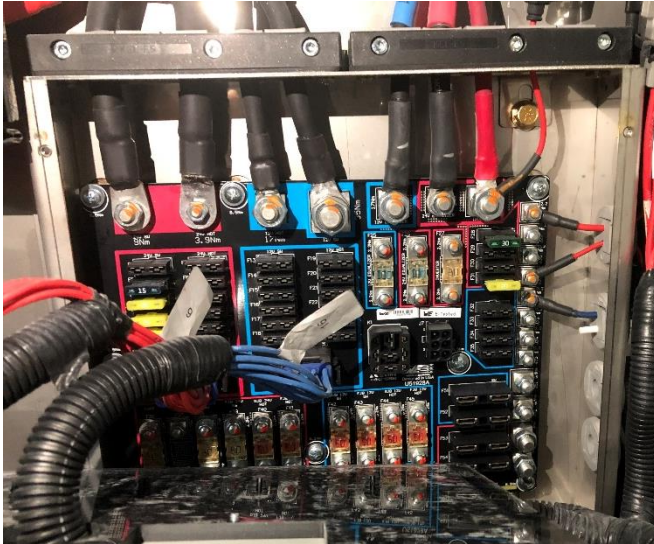
Slide out and save the battery compartment cover out of the bracket.



Slide the cover out

5.0 MDP Inspection

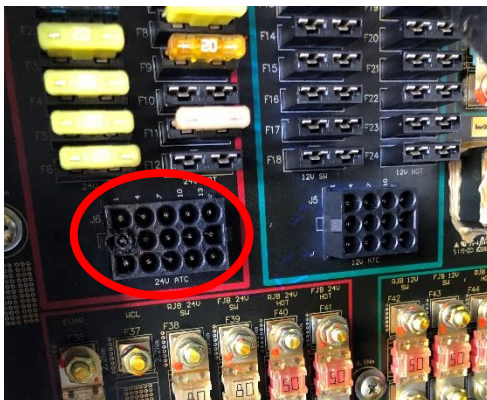
Inspect the front of the MDP for corrosion at all connectors and verify the retaining nuts for all the power cables are properly torqued. If corrosion is found, replace the MDP.



NOTE: Refer to the last page of this procedure for power stud torque specifications of the MDP.

If no corrosion is found, inspect for heat damage on the BT-P162 connector. If heat damage is observed, perform section 6.0. Otherwise, skip to Section 7.0.

Bad



Perform Section 6.0

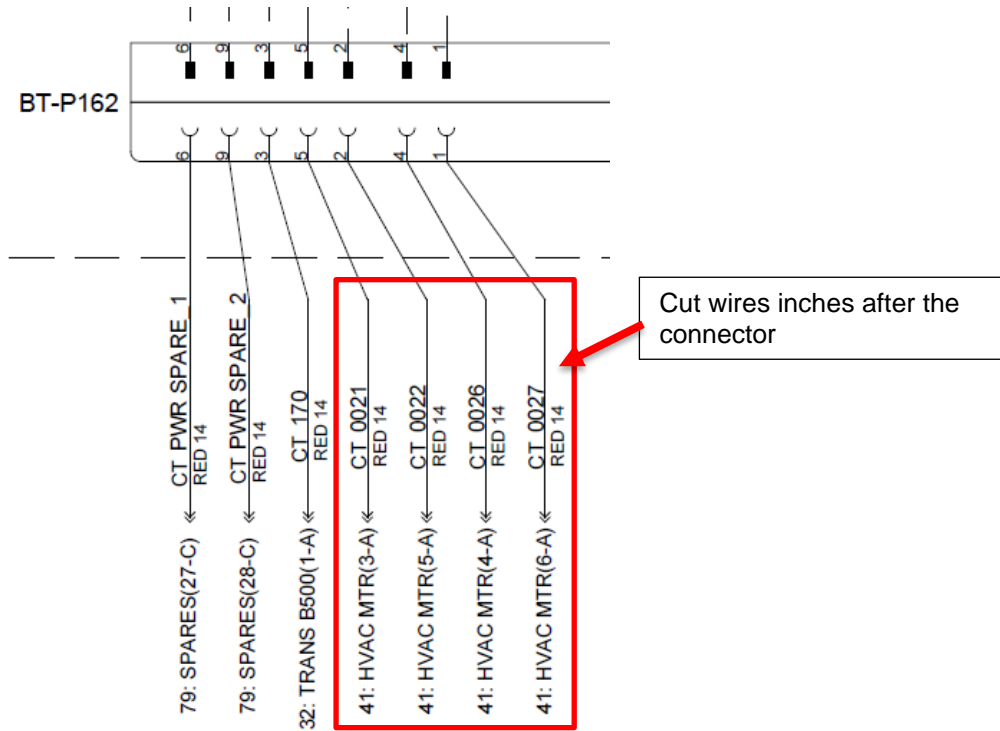
Good



Skip to Section 7.0

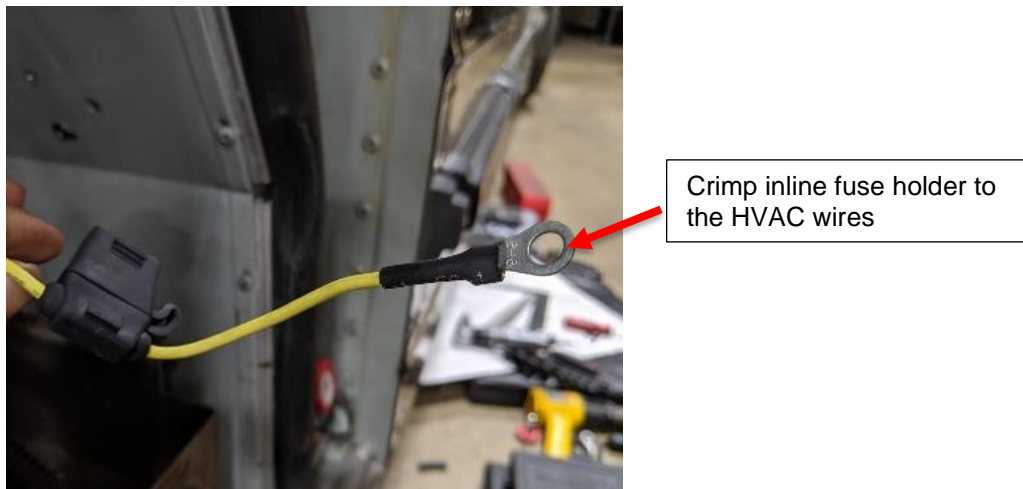
6.0 HVAC Wire Relocation

Cut HVAC wires CT0021, CT0022, CT0026, and CT0027 4-5 inches from the 24V BT-P162 connector.

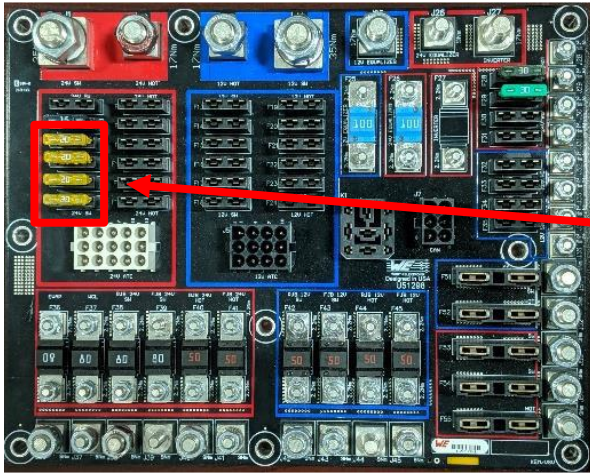


NOTE: Heatshrink and tie back the wire attached to the pins to avoid corrosion.

Crimp HHG in-line fuse holders, MCI P/N: T19-1168 or similar, to the HVAC wires and a 1/2" ring terminal at the end, MCI P/N: 19-11-1171 or similar.



Remove 20A fuses from the MDP and install them in the in-line fuse holders.



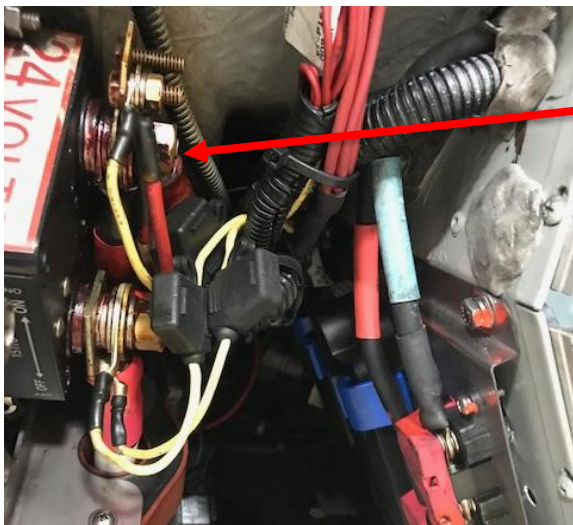
Remove 20A fuses and install in in-line fuse holders

Connect the modified HVAC wires to either 24V SW stud on the MDS as shown below for various coach models. Torque the nut to 300 In-lbs.



Connect the modified HVAC wires to 24V SW stud on MDS

J4500/J3500/D45CRT-
Le/D4520 coach models



Connect the modified HVAC wires to 24V SW stud on MDS

D4X0X coach models

7.0 MDP Protection

After completing the inspection, cover all open connectors and fuse slots with masking tape.



Cover open connectors and fuse slots.

Using short sprays, apply the corrosion inhibitor, MCI P/N: 23-02-0119, on all power and fuse studs. Wipe off any excessive corrosion inhibitor from the fuse windows using a dry rag.

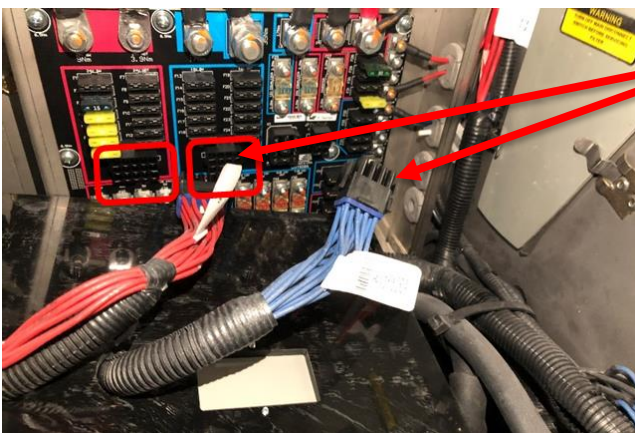


Spray anticorrosive on MDP studs.

8.0 MDP Cover Assembly

8.1 J4500/J3500/D45CRT-Le/D4520 coach models:

Route through the MDP cover holes and secure connectors BT-P161 and BT-P162 to the MDP board.



Connect BT-P161 and BT-P162.

Secure the MDP cover using the 4 thumb screws, MCI P/N: 07-08-9231.



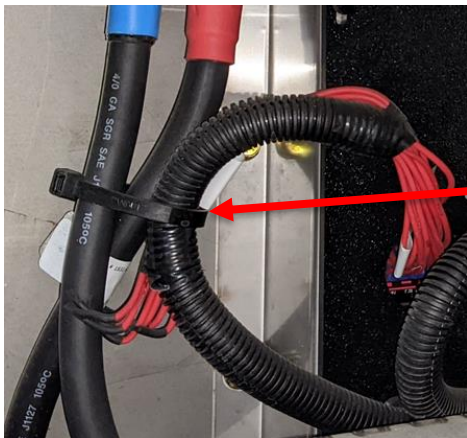
Install 4 thumb screws.

Secure the BT-P161/BT-P162 harnesses to the MDP cover using 5 tyrap, MCI P/N: 19-11-258, and existing mounts.



Secure harness using 5 tyrap.

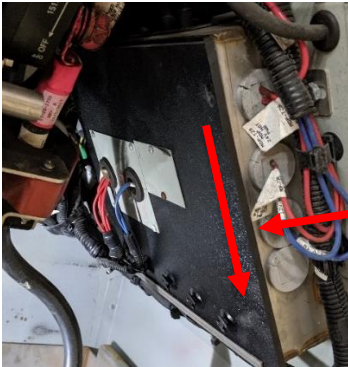
Loosely secure the BT-P162 branch to the MDS battery cables, allowing a smooth curve on the harness. Ensure there is no side strain at the connector.



Loosely secure BT-162 to MDS Cables.

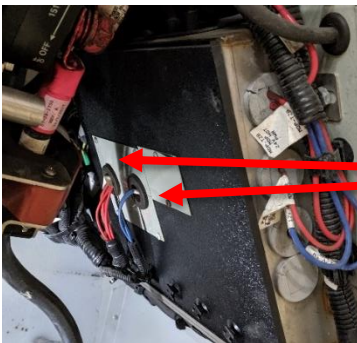
8.2 D4X0X coach models:

Slide in and discard the battery compartment cover out of the bracket.



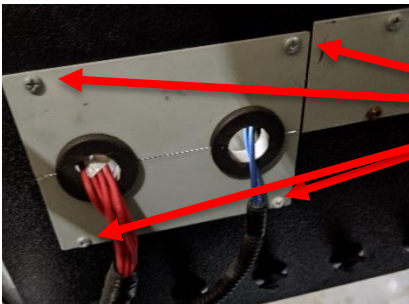
Slide the cover in

Connect the two connectors, BT-P162 and BT-P161, to the main distribution panel.



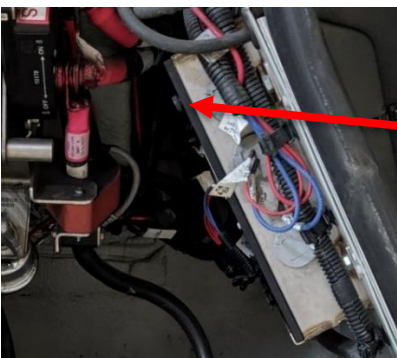
Connect the wires

Re-install the MDP cut-out part to the MDP cover using existing screws.



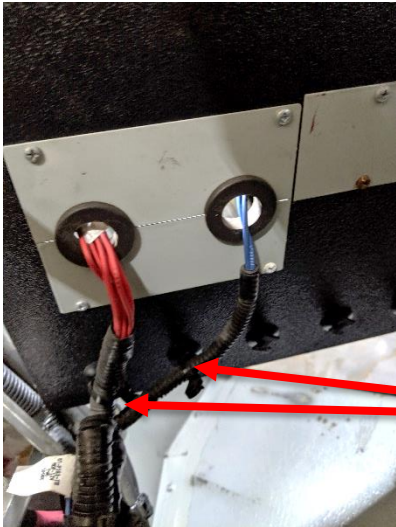
Re-install MDP cut-out part

Secure the MDP cover using the existing two thumbscrews.



Re-install the MDP cover

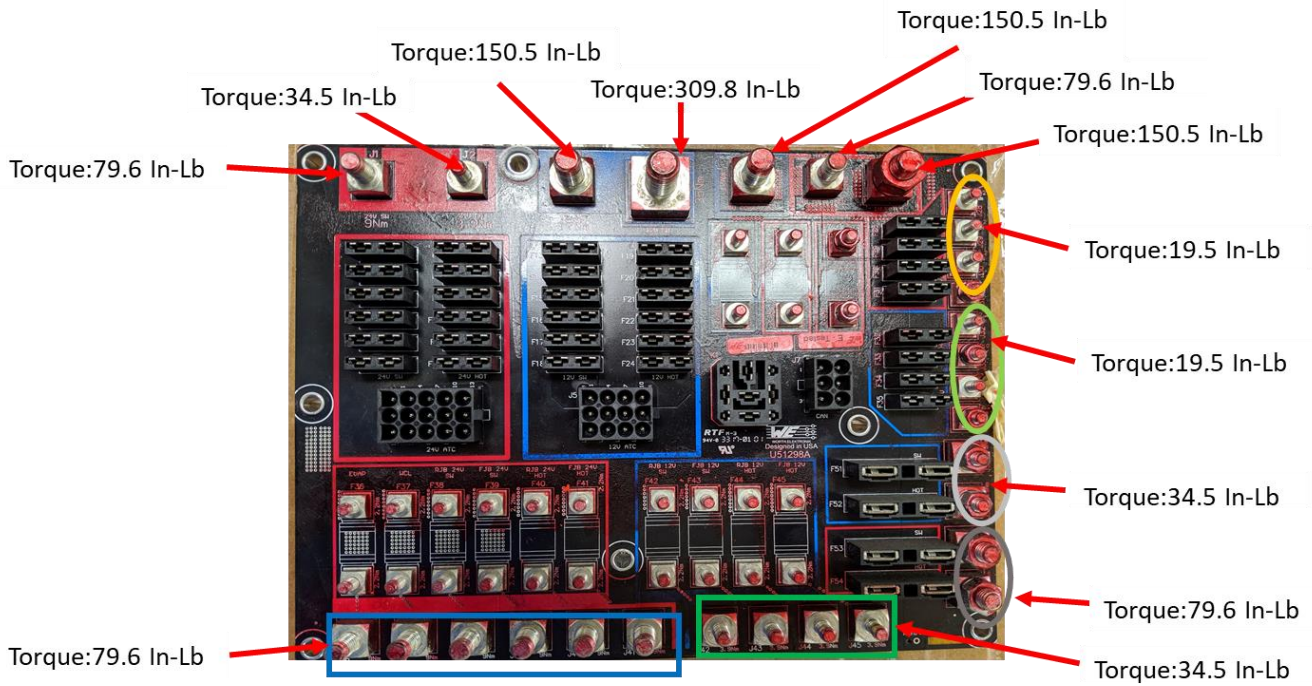
Secure the BT-P162 and BT-P161 connectors to the MDP cover using 2 tyraps, MCI P/N: 19-11-258. Ensure the tyraps do not create tension at the pins or connectors.



Secure BT-P162/ BT-P161 to MDP cover.

9.0 Appendix

Torque values for Main Distribution Panel studs:



End of the procedure

If you have questions or need further assistance, please contact the MCI Technical Call Center @ 1-800-241-2947.