Thor Motor Coach
Recall Repair Instructions

Recall #	**20V-711** **2020-554**		
Description/Title:	**BIM/BIR Replacement** **Expanded Scope**		
Affected Product Line(s):	**Certain Model Year 2020/2021 Chateau, Daybreak, Four Winds, Freedom Elite, and Quantum motorhomes built on a Chevy chassis**		
Service Campaign # :	**RC000206**	Released Date:	**12/29/2020**
Repair Code:	**TMCRC80497V**	Document Date:	**12/29/2020**
Time Allowed:	**0.75**	Document Revision:	**A**

Issue:

It has been discovered that on certain model year 2020/2021 Chateau, Daybreak, Four Winds, Freedom Elite, and Quantum Motorhomes built on a Chevy chassis, expansion and contraction of the plastic body of the BIM (battery Isolation Manager)/BIR (Battery Isolation Relay) from heat in the engine compartment causes it to be susceptible to moisture inside the body, which in turn produces arcing of the internal components. This internal arcing can cause heating, or the possibility of a fire.

Parts Required:

TMC Recall Part **#0492597**
(All recall parts are sent via Ground Shipping.)

Shop Supplies Needed:
(3) ¼" self-tapping screw
(4) #8 self-tapping pan head screws
(1) ¼" star washer

Tools Required:

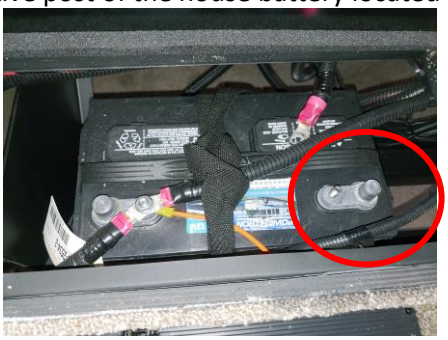
½" socket for torque wrench (for battery cables)
3/8" screw gun bit (for ¼" self-tapping screws)
5/16" socket (to remove overflow bottle)
Electrical Tape
Heat gun
Screw Gun
Square head screw gun bit (for #8 self-tapping screws)
Torque Wrench
Wire cutters
Wire Crimpers

YouTube Video Instructions Found Here: https://youtu.be/P5JIXUf7H6g

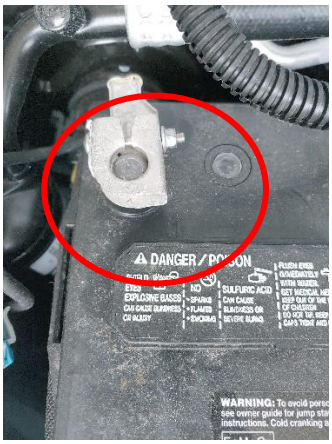
Disclaimer- Video is for installation of recall repair on a Ford Chassis. Steps will vary for Chevy Chassis.

Instructions:

1. Disconnect battery cable on the negative post of the house battery located in the step well.

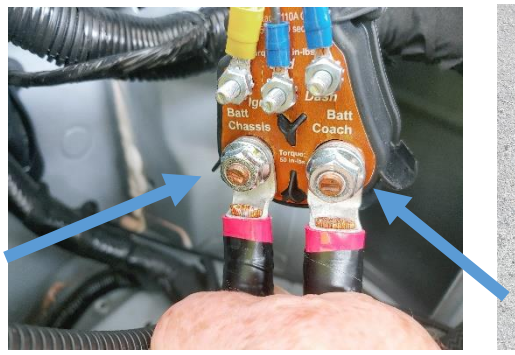


2. Disconnect battery cable from negative post of the chassis battery located under the hood.

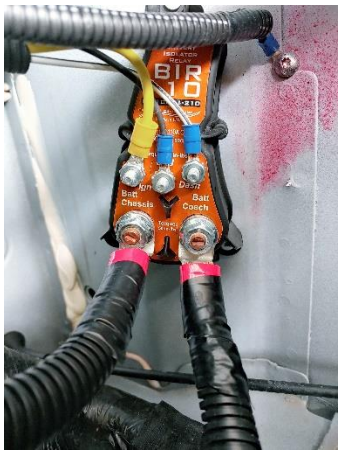


3. Locate BIM/BIR mounted on passenger's side inside fender.

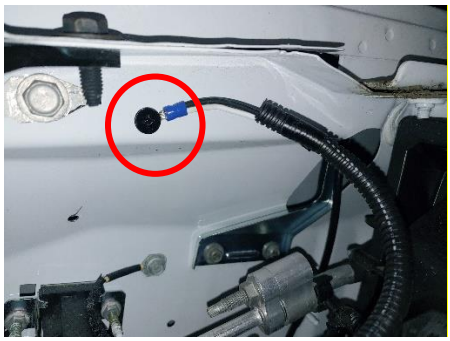
4. Remove the chassis battery cable and the house battery cable from the BIM/BIR and remove BIM/BIR.
   Note: The BIM/BIR needs to be returned to Thor Motor Coach for payment of the recall repairs.



5. Remove the screws holding the BIM/BIR to the inside fender.

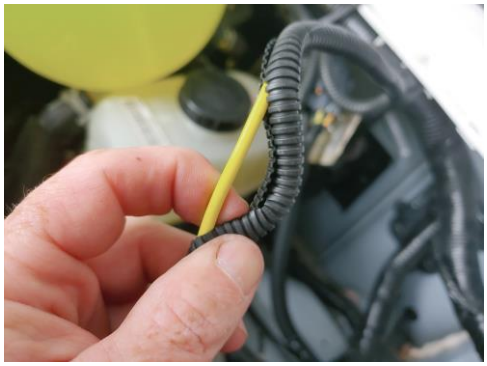


6. Remove ground wire



7. Open the loom for the dash switch, locate the white and white with black tracer. Cut both wires.

8. Open the loom for the ignition power, locate the yellow wire and cut.



9. Find a good clearance where BIM/BIR was installed to mount the Trombetta solenoid. Make sure it is far away enough from the solenoid installed on fender below where the BIM/BIR was installed to avoid sparking.

10. Start a ¼" self-tapping hex head screw at the installation mark on the fender wall. Slide Trombetta solenoid bracket into place on the self-tapping hex head screw and secure.

11. Install a ¼" self-tapping hex head on the other side of the bracket of the Trombetta solenoid.

12. Install ground wire, black wire with ring terminal, above Trombetta solenoid on the inside of the fender by using a ¼" self-tapping hex head using a 3/8" bit.

NOTE: Must use a star washer between the ring terminal and fender.

13. Mount the Isolater Relay Delay (IRD) beside the Trombetta solenoid and along the seam of the fender with 1-2 - #8 self-tapping pan head screws.

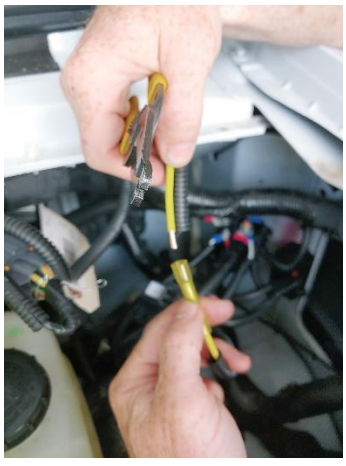
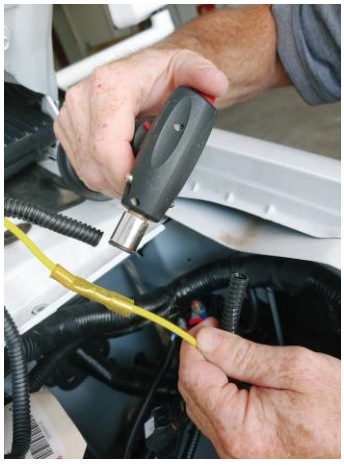
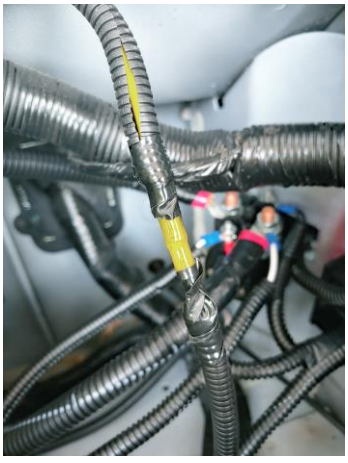
14. Verify which cable is coming from the chassis battery by tracing is back to the chassis battery. Remove the washer and nut from the Trombetta solenoid and secure the chassis battery cable to the large terminal post of the Trombetta solenoid closest to the firewall with the washer and nut.

Note: If either battery cable ring terminal is bent – straighten before securing.

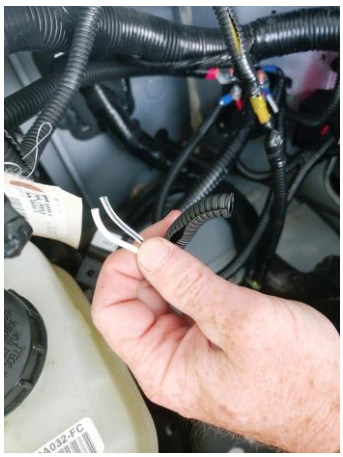
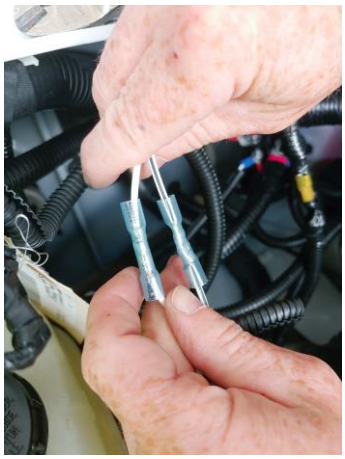
15. Secure the house battery cable to the other large terminal post (towards the front) of the Trombetta solenoid – this house battery is to be secured together with the white wire of the emergency start switch. Put the battery cable on the post first, then place the white wire on top and secure with washer and nut.

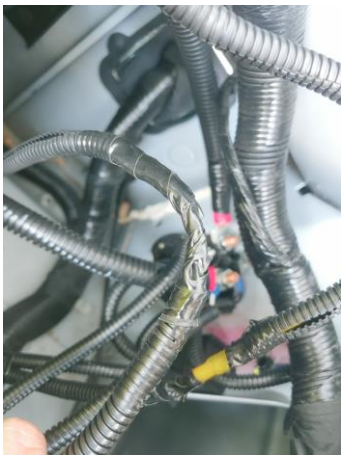
16. Tighten nuts on both battery cables using a torque wrench to 45 inch lbs.

17. Locate and cut yellow ignition power wire, strip back, and connect to yellow wire w/ yellow butt connector from the fuse holder. Crimp and heat shrink using a torch or electric heat gun. Using electrical tape, tape both ends of the yellow wires.

18. Locate cut white wire and white with black tracer from the emergency start switch and strip back both wires. Connect white wires with white butt connector and white with black wires white with black butt connector. Crimp both wires and heat shrink. Use electrical tape to tape both ends of the wires.



19. Zip tie fuse holders and wires together as shown below to keep secure.

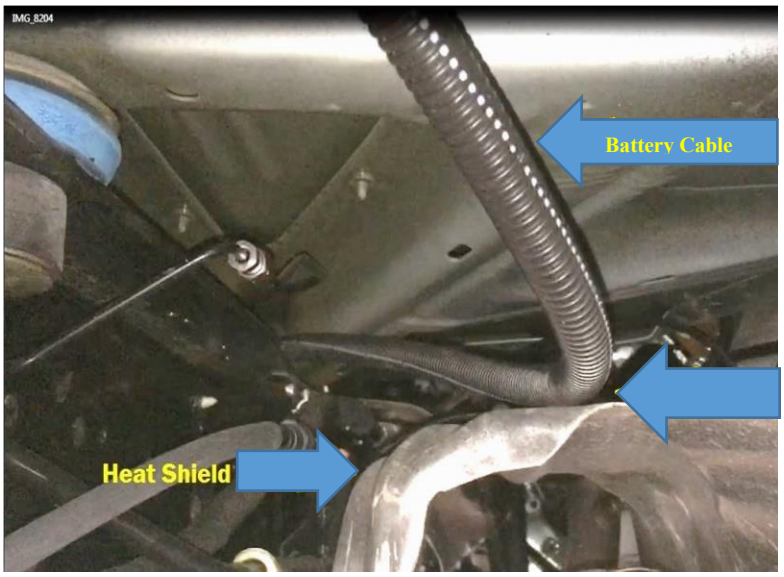
20. Reconnect house battery cable in the step well.

21. Reconnect chassis battery cable under the hood.

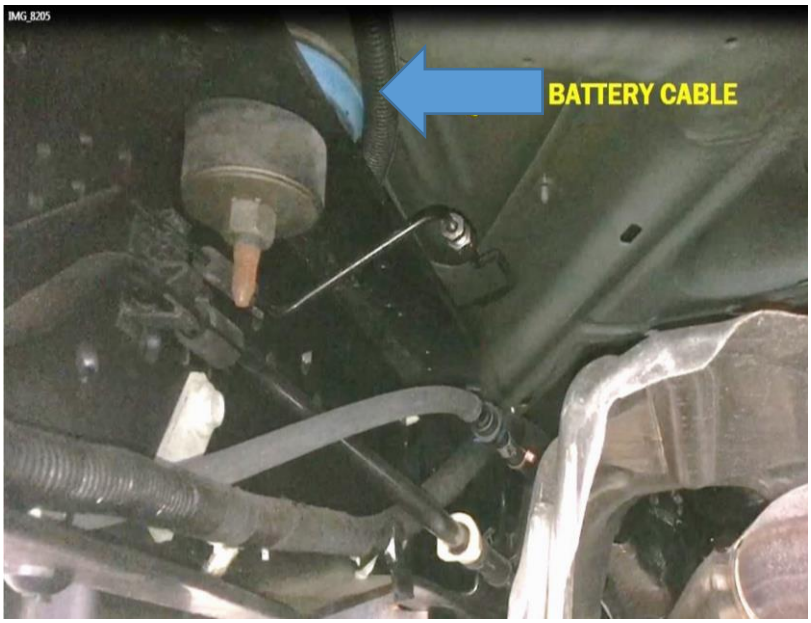
22. Test the emergency start switch by pushing the switch and listen for an audible clicking noise. This indicates the connection is proper. If you do not hear the clicking noise, check fuse holder and wire connections (white & white with black wires).

23. Start the engine, after 15-20 seconds, you should hear an audible clicking noise. This indicates the connection is proper. If you do not hear the clicking noise, check fuse holder and yellow wire connections.

If nearby, verify the 2 gauge cable that runs from the Trombetta is supported away from the engine exhaust manifold and the rest of the exhaust, covering the area under the hood to the rear of the cab. If the 2 gauge cable is not secured away from the exhaust manifold or the rest of the exhaust, secure as indicated in the following image.

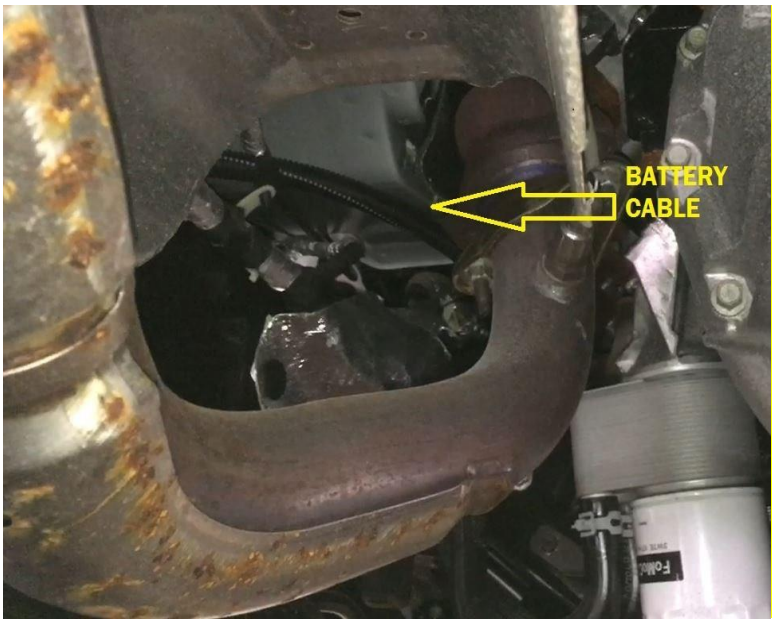


NOT PROPERLY SECURED!



PROPERLY SECURED!

Secure battery cables tight to the chassis frame. Keep battery cable away from exhaust and manifold.



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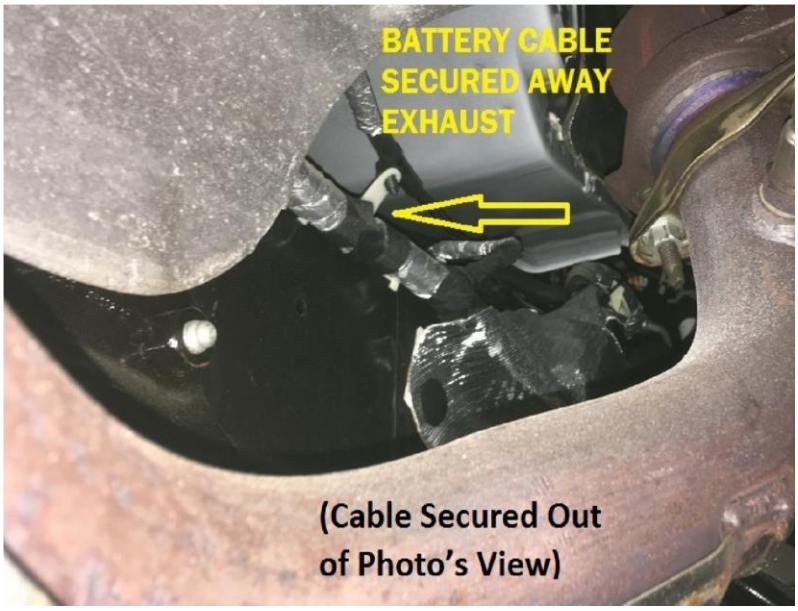

PROPERLY SECURED!