

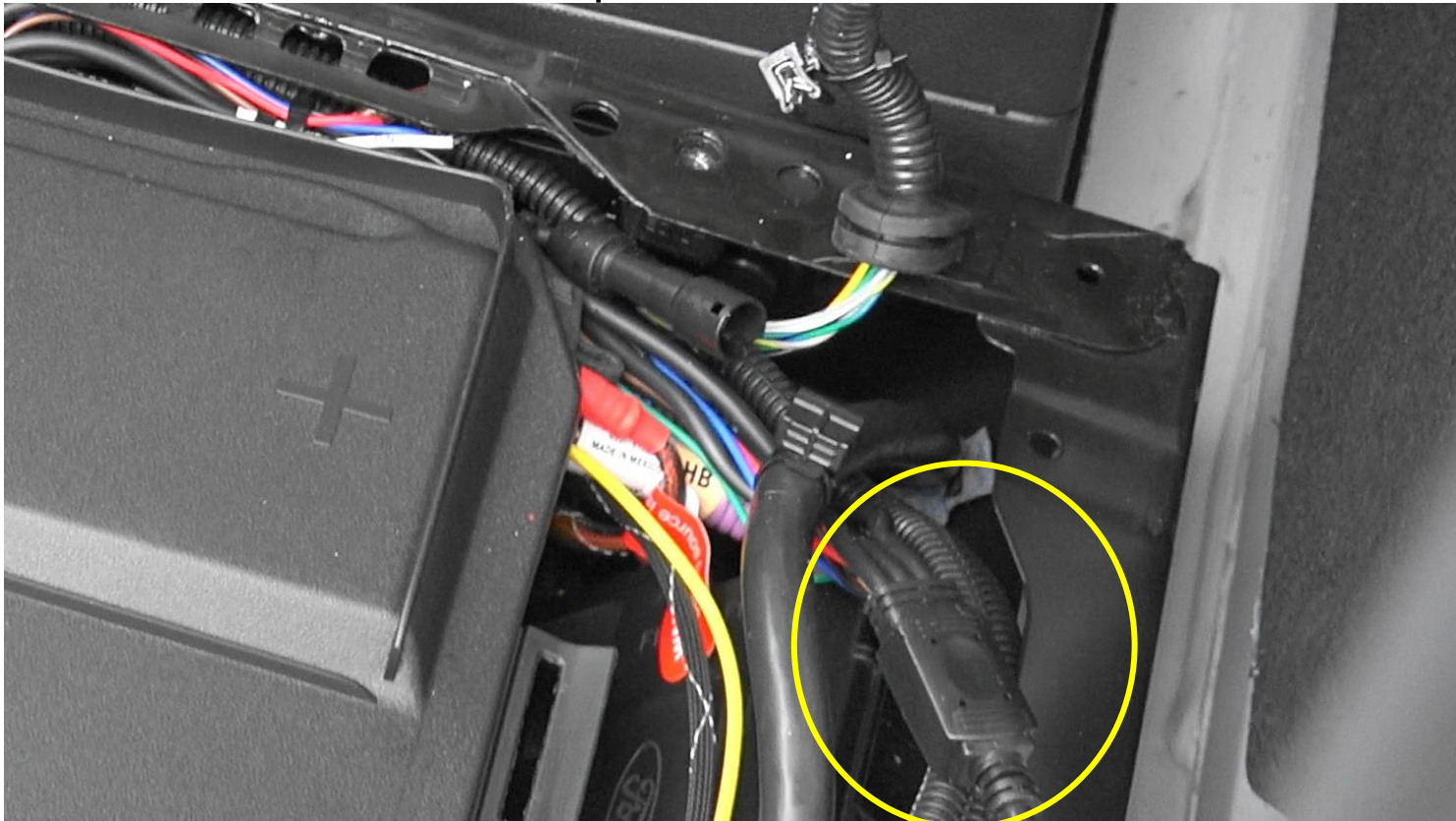
**Installation Guide**

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Model/Part No.:	For VOM74MM Rev A thru C Observation Monitors		

**2018 Frito-Lay Transit Relay Harness Installation Instructions**

**Details: Pages 2-7 are related to Charlotte Built Transits and Pages 8-13 are related to Bristol Built Transits.**

**To find what location the Transit was built, move the seat forward and at the rear of the Battery Compartment will be the VOM74MM Wiring Harness, which is the Charlotte Built Transit. Shown below is the Harness is place:**



**If the Harness is not visible, then this is a Bristol Built Transit.**

**Charlotte Built:**

**Tools Required:**

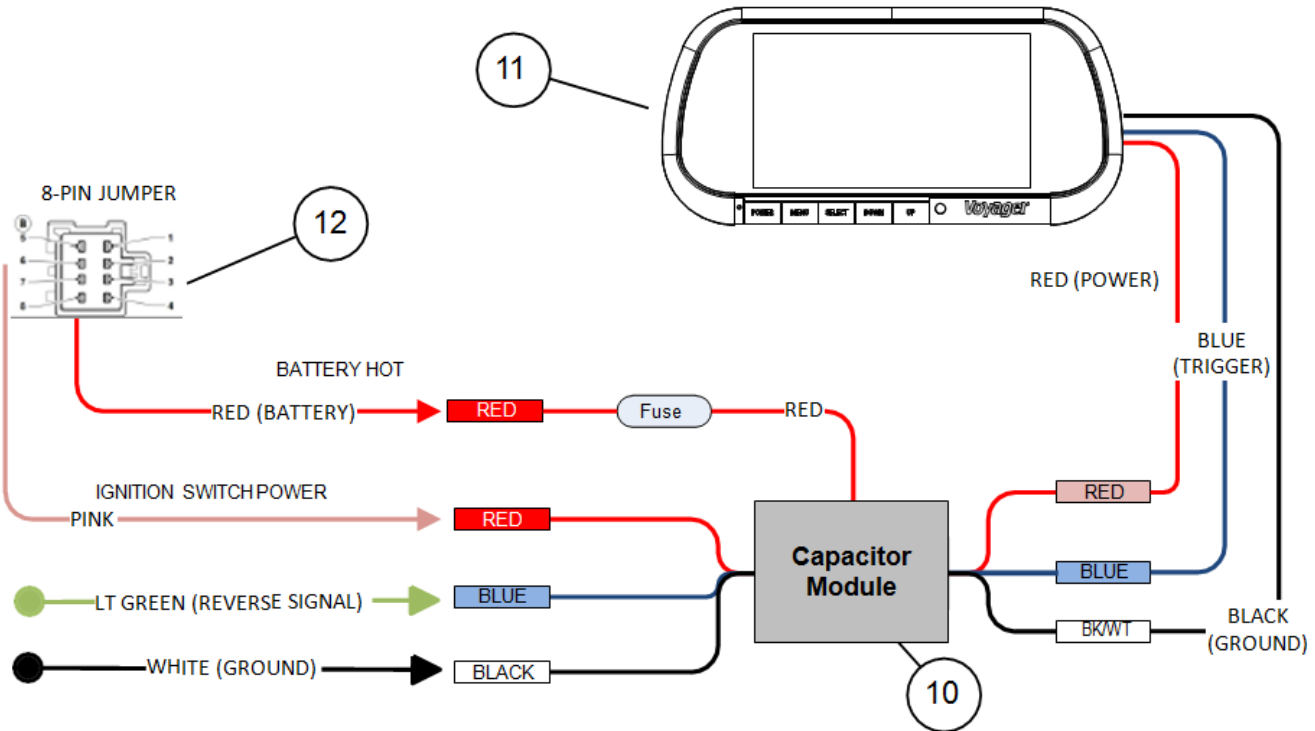
In addition to standard shop tools this job also requires:

- Torx T40 bit.
- Quality torque wrenches
- Wire strippers
- Terminal crimping tool, Sta-Kon or equivalent.
- Wire ties

**Parts Required:**

BOM ID	Description
10	RELAY CAPACITOR MODULE
11	MONITOR 7" REAR VIEW MIRROR
12	PIGTAIL WIRE KIT FD

**Wiring Diagram:**



*Overview of module wiring*

**Pre-installation check:**

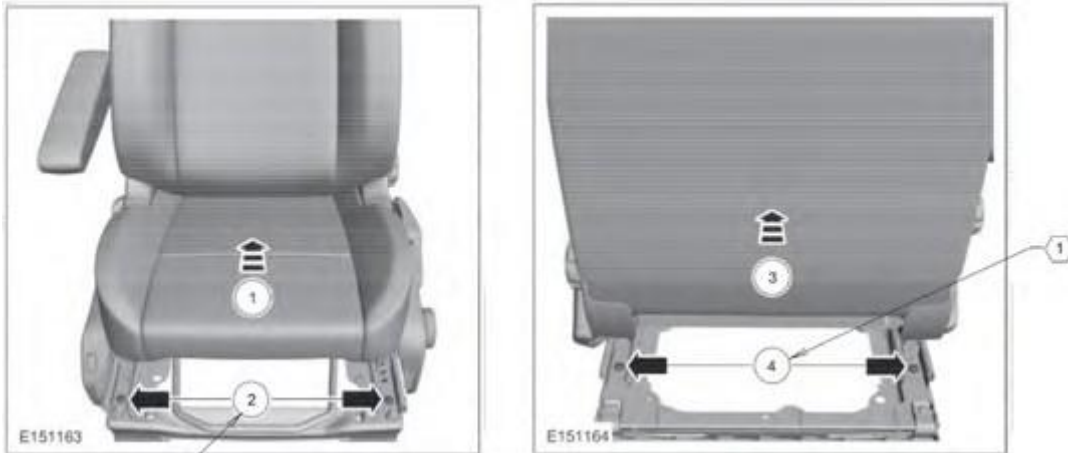
1. Start vehicle. Monitor should turn ON and show rear camera image. POWER LED should illuminate BLUE.
  - a. If monitor does not show image and POWER LED does not illuminate, check harness for +12V, monitor harness fuse and vehicle circuit fuse.
2. Perform factory reset. Press **MENU** button; Press **DOWN** to highlight **RESET** and then press **SELECT** button.
  1. Put vehicle into REVERSE – monitor should display **CAM1** in top Right corner.
  2. Put vehicle back into PARK. **CAM1** text should disappear after 3 seconds.
  3. Shut vehicle OFF and proceed with harness installation.

**Procedure:**

1. Turn off ignition and all lights.

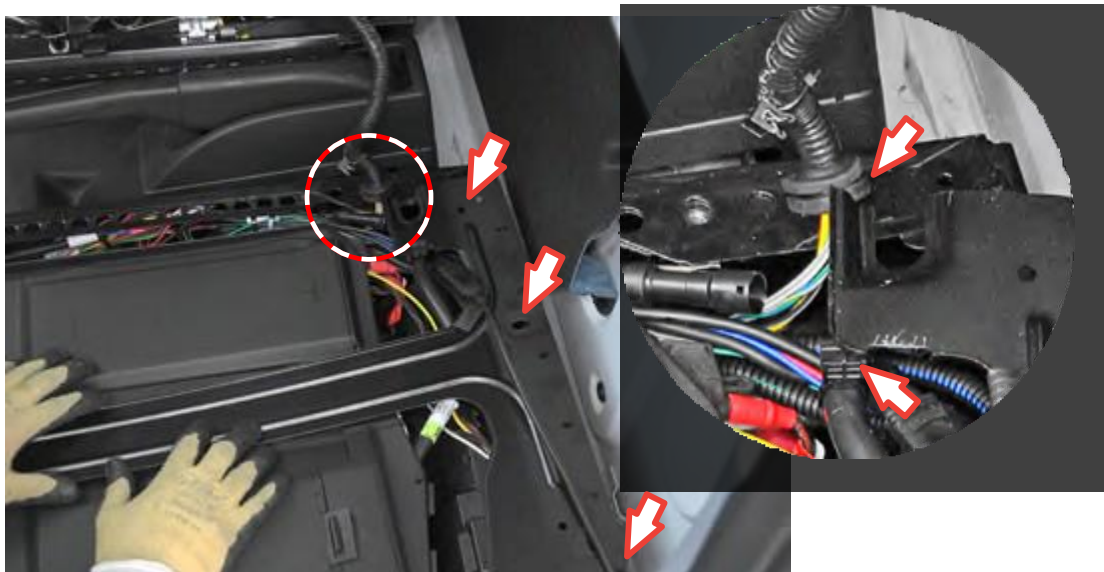
*NOTE: For information on vehicle batteries, see the Ford Transit Operator's Manual.*

2. Move the seat rearward and remove the front seat (2) T40 Torx bolts. Move the seat forward and remove the rear (2) T40 Torx bolts.



*Seat fastener removal*

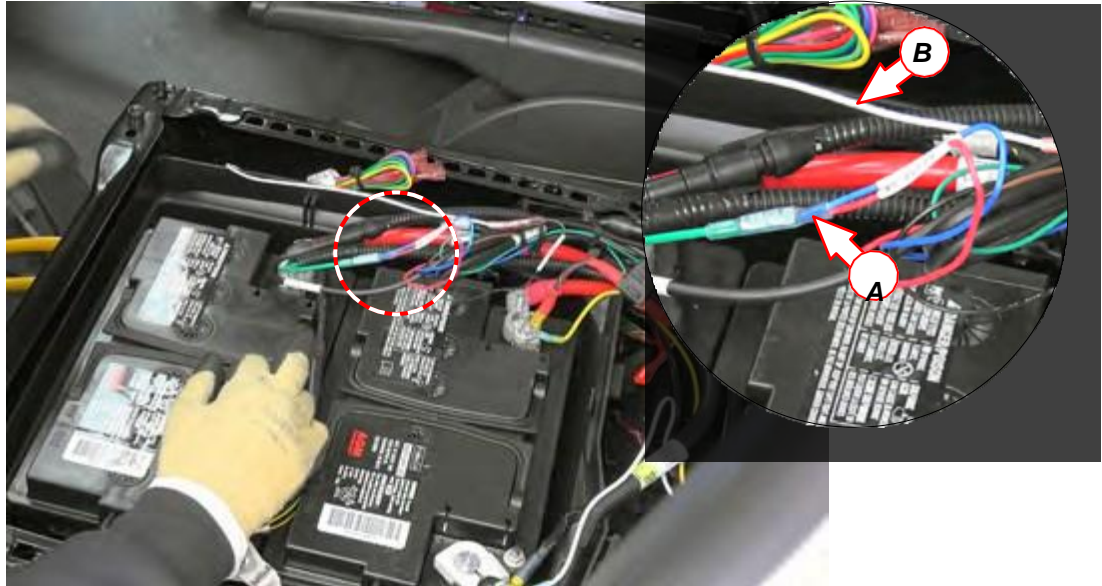
3. Rotate seat away from pedestal track taking care NOT to disconnect seatbelt harness. Lay on passenger seat.
4. Remove (3) bolts from battery cover retainer bracket. Disconnect seatbelt harness grommet and harness clip.
5. Cut wire harness tie and remove retainer bracket.



*Battery cover retainer bracket fasteners and harnesses*

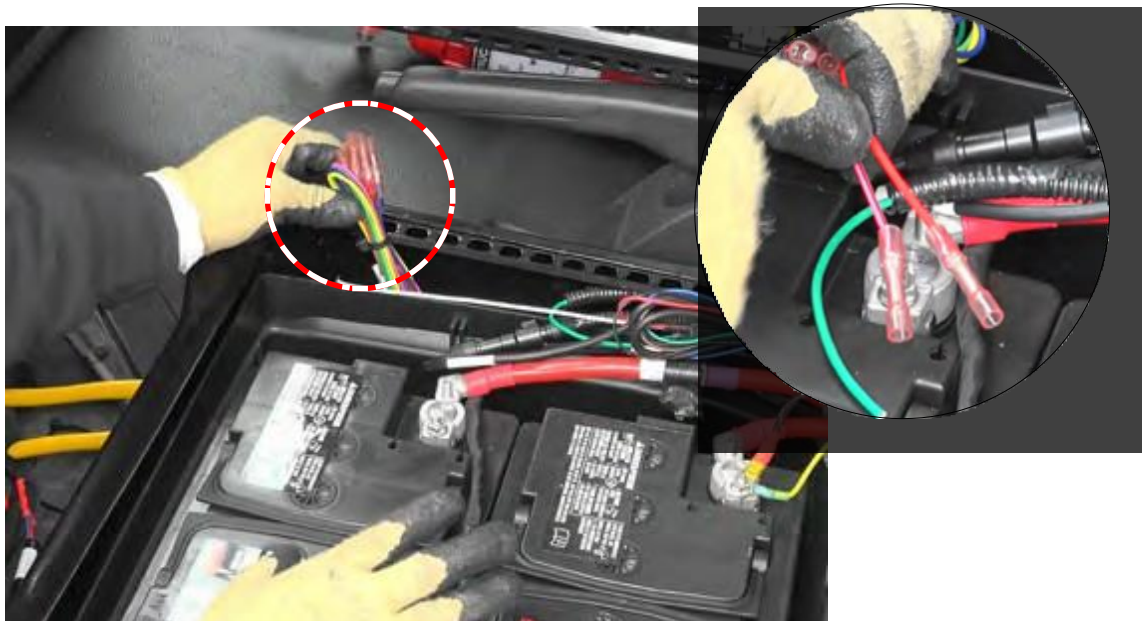


6. Remove battery post cover from battery cover. Push battery cover toward back and remove.
7. Locate the monitor wire harness bundle at the RH rear side of the battery box.
8. Cut the connector joining Green to Red and Blue wires. Cut the White ground wire.



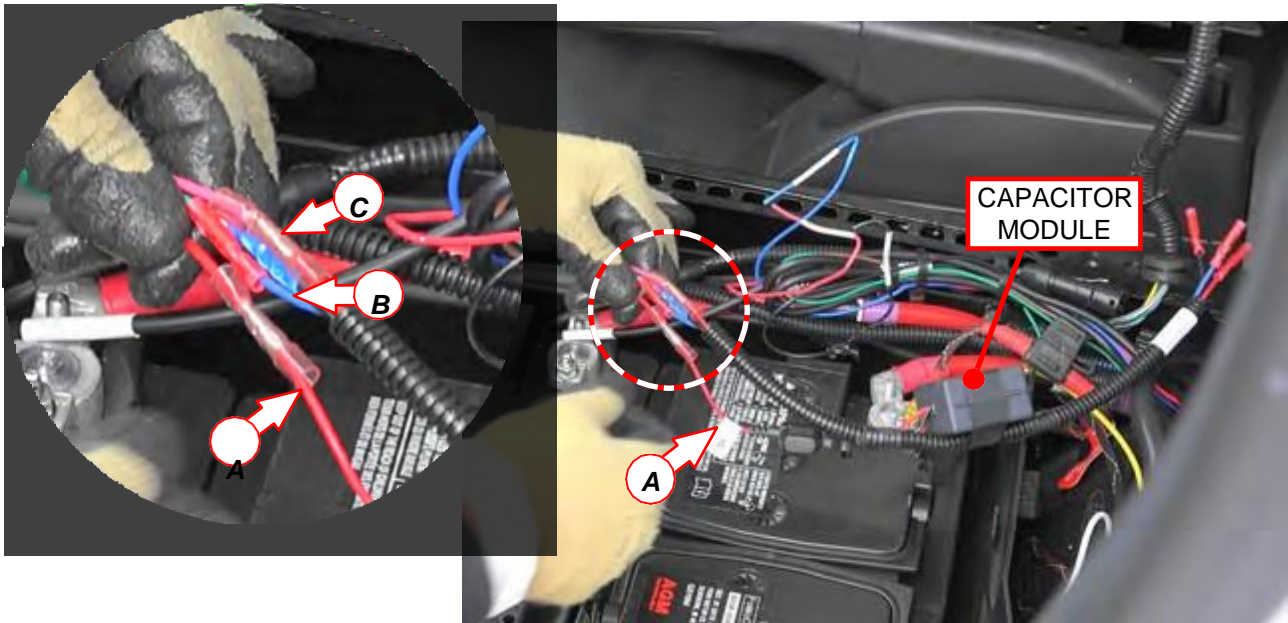
*Light Green to Red and Blue wire (A) and White ground (B) wires*

9. Release the 8-pin chassis jumper harness in the front outboard channel of the pedestal and separate the Red (battery hot) and Pink (ignition hot) wires.
10. Cut off the Red (battery hot) and Pink (ignition switch) wire connectors from the jumper harness and strip the wires.



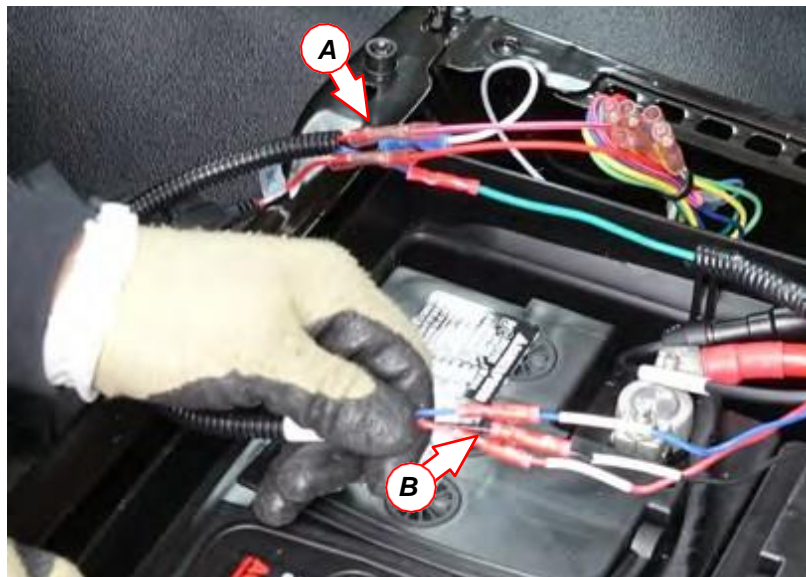
*Red and Pink wires on the chassis jumper harness*

11. Crimp the Red (battery hot) wire to the Red power feed connector on the module.
12. Crimp the Pink jumper wire to the Red connector on the module. Crimp the Green wire to the Blue module wire. Connect the White ground wire to the Black module ground.



*Red battery hot (A), Blue trigger (B) and Red ignition switch (C) wires on module*

13. Strip and crimp the Blue wire to the Blue module wire, the Red wire to the Red module wire, and the Black (Ground) wire to Black module wire.

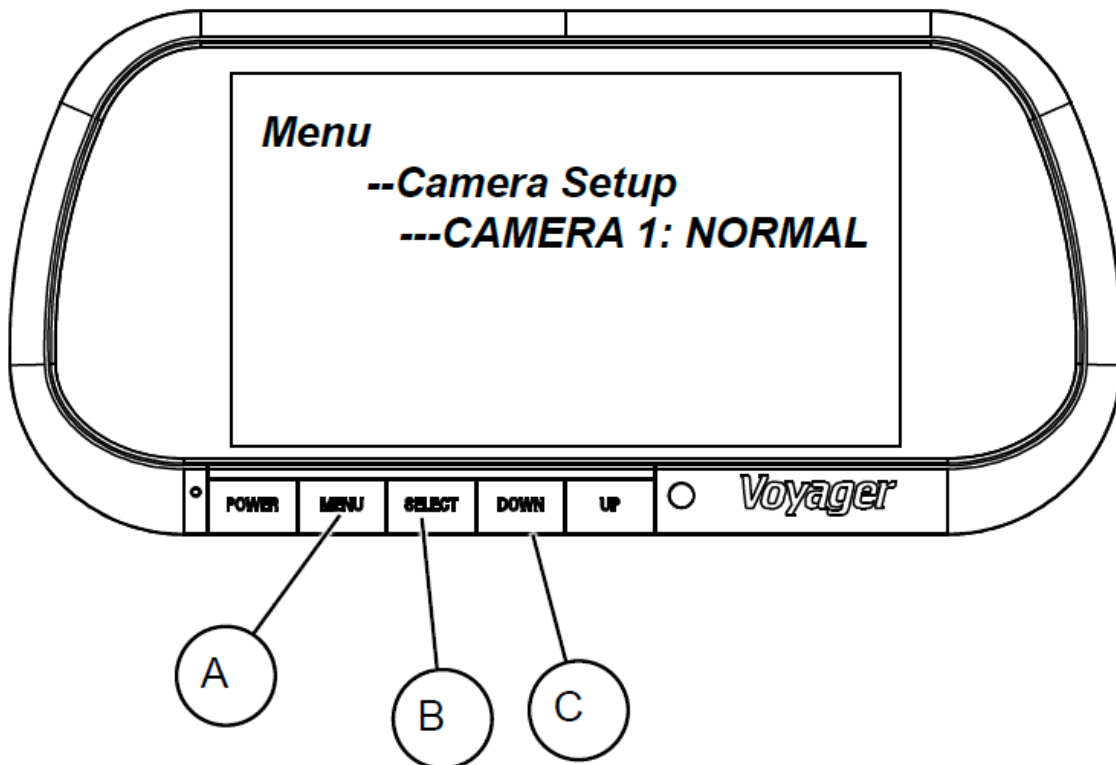


*Wiring connections from chassis to module (A) and module to monitor (B)*

14. Secure harness and module in the seat pedestal channel.
15. Install battery cover and battery terminal cover.
16. Install battery retainer bracket.
17. Secure grommet in battery cover retainer bracket and wire tie seatbelt harness.
18. Install seat on pedestal.
19. Secure seat with (4) Torx bolts.
20. Torque to 16–18 FT•LBS.

### Monitor Camera Setup

1. Press the Menu button on the backup monitor. Press Select (B), scroll down (C) and choose Camera Setup. Select Camera 1, then press Select to choose Normal setup.
2. Press Down button (C) to Exit and Press the Select (B).



3. Turn ignition ON and re-check monitor settings to confirm Camera 1 setting is in Normal mode and rearview image is correctly oriented.

### Bristol Built:

#### Pre-installation check:

2. Start vehicle. Monitor should turn ON and show rear camera image. POWER LED should illuminate BLUE.
  - b. If monitor does not show image and POWER LED does not illuminate, check harness for +12V, monitor harness fuse and vehicle circuit fuse.
3. Perform factory reset. Press **MENU** button; Press **DOWN** to highlight **RESET** and then press **SELECT** button.
4. Put vehicle into REVERSE – monitor should display **CAM1** in top Right corner.
5. Put vehicle back into PARK. **CAM1** text should disappear after 3 seconds.
6. Shut vehicle OFF and proceed with harness installation.

#### Installation:

The Monitor Harness location for the Bristol Built Transits is inside the Headliner, roughly above Driver's seat. By pulling on the rear of the Headliner behind the Driver's seat, it is possible to reach in and locate the Harness. If the Harness is able to be located, please pull the Harness towards the rear of the Headliner and pull out the Harness, as shown below:



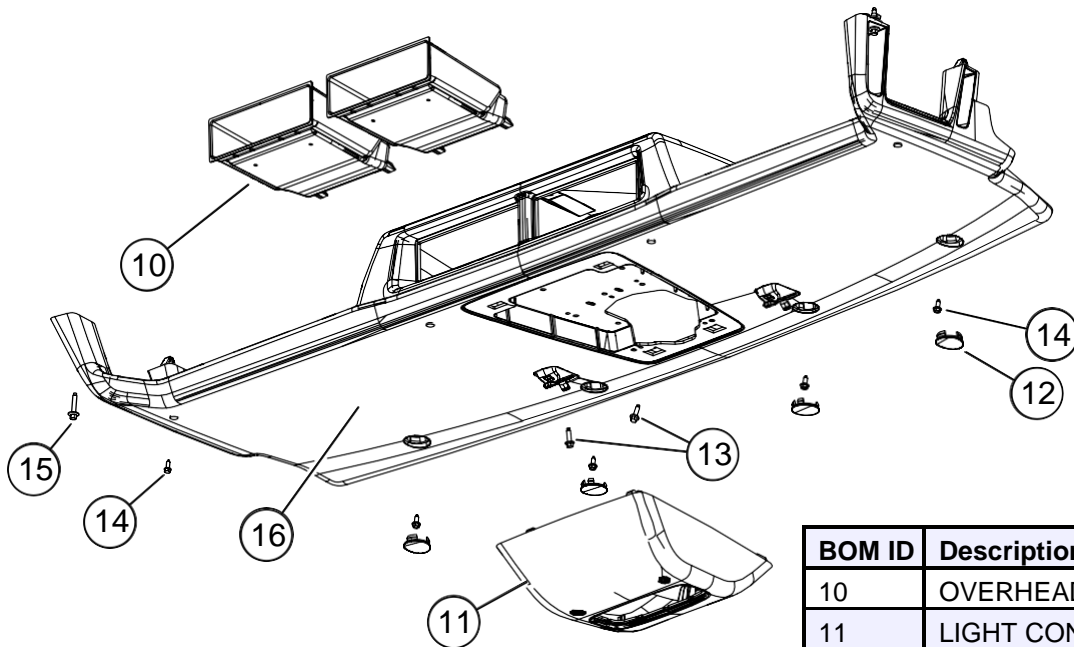


However, the Harness may have made its way closer to the Shelving Assembly and cannot be reached. This will require that the Shelving be removed. Please follow instructions below to remove Shelving:

1. Remove storage pockets from the overhead shelves.
2. Remove the overhead light console and disconnect harness connectors.
3. Remove (2) M5 screws from inside.
4. Remove sun visor screw covers and Torx screws from each side.
5. Remove (4) M4 screws from windshield side of overhead shelf.
6. Remove (2) M5 and (2) M4 screws from LH and RH shelf mount.



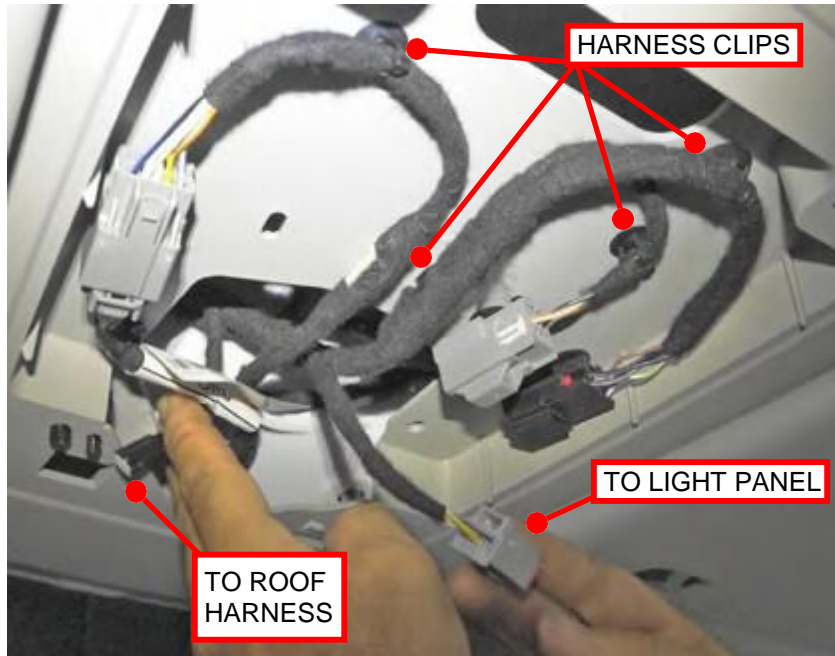
*Sun visor screw*



BOM ID	Description	Qty
10	OVERHEAD STORAGE	2
11	LIGHT CONSOLE	1
12	SCREW COVERS	4
13	M5 CONSOLE SCREW	2
14	M4 SCREW	6
15	M5 SCREW	2
16	OVERHEAD SHELF	1

*Overview of headliner removal*

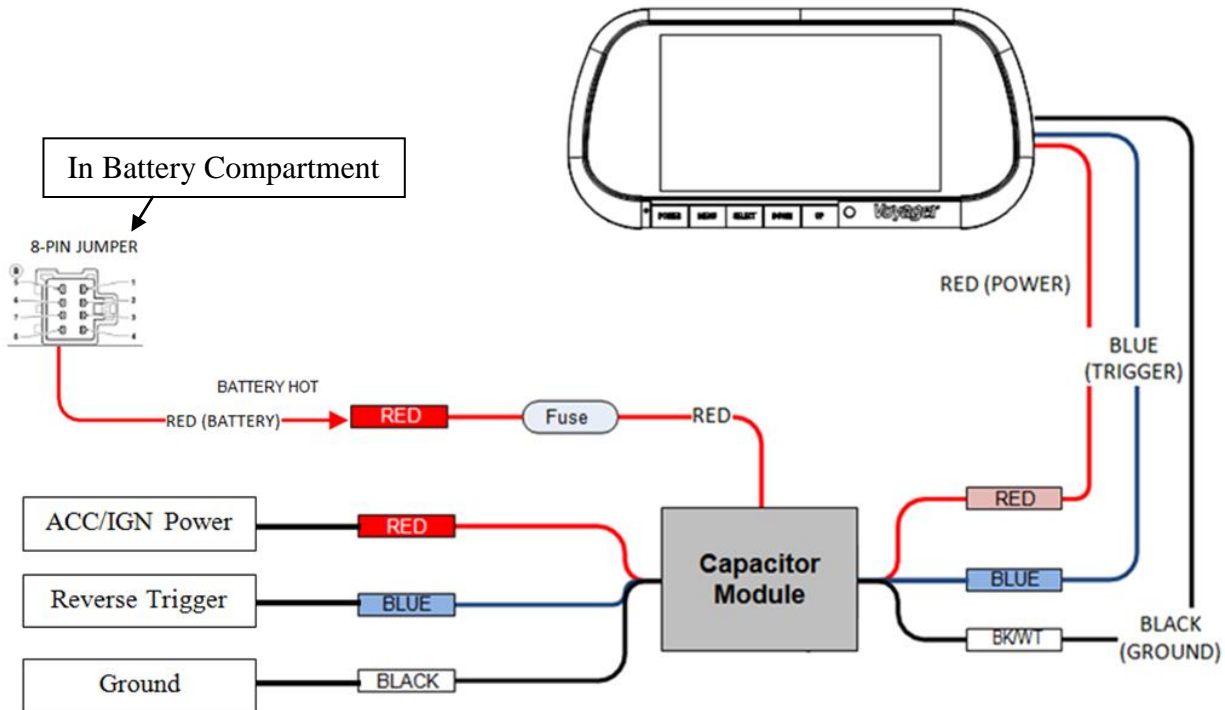
- Disconnect roof harness and detach harness retaining clips from overhead shelf.



*Opening above courtesy light*

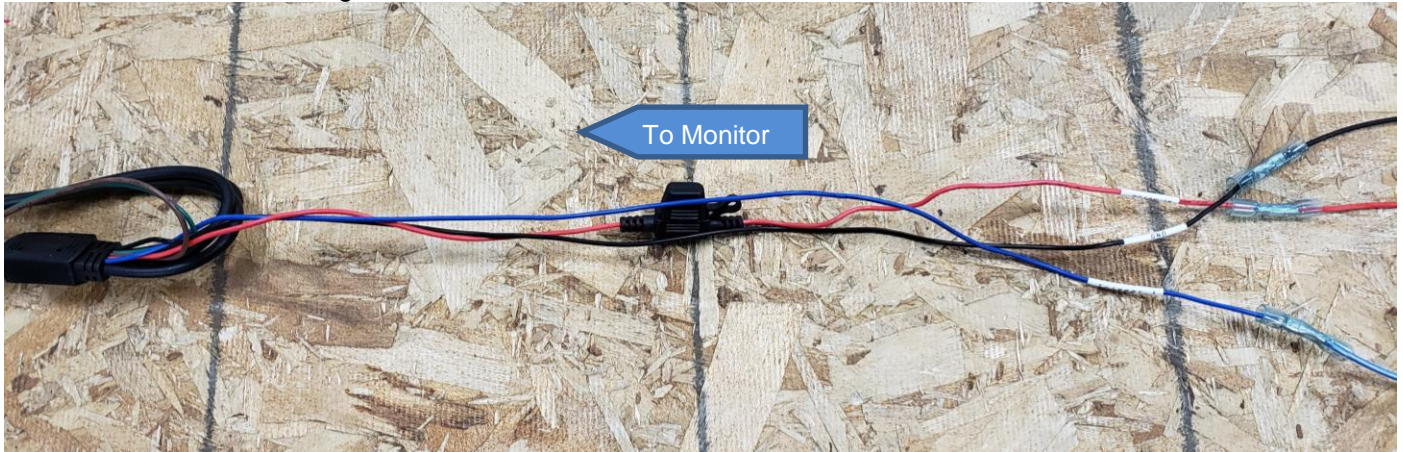
- Carefully feed harness through opening and remove overhead shelf.

Once the Shelving is removed or loose, please locate the Monitor Harness to begin wiring in the Field Fix Kit into the Monitor Harness, as shown below:





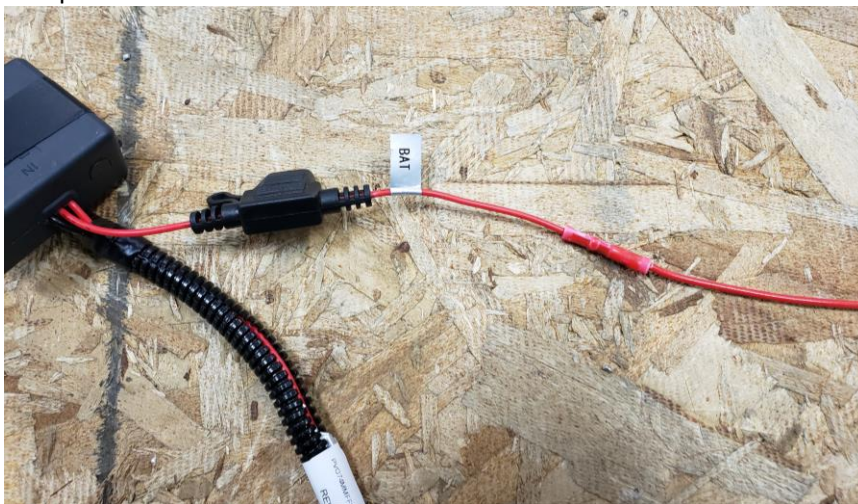
1. Locate the VOM74MM Wiring Harness, shown below:



2. Begin to insert Field Fix by cutting into wires and connecting to attached Butt-connectors, as show below:



3. The Battery Wire then needs to be attached to a Battery/Constant Battery source. This will be achieved by running the wire included in the Kit to the Battery Compartment. Begin by connecting the Wire to the Field Fix Component:

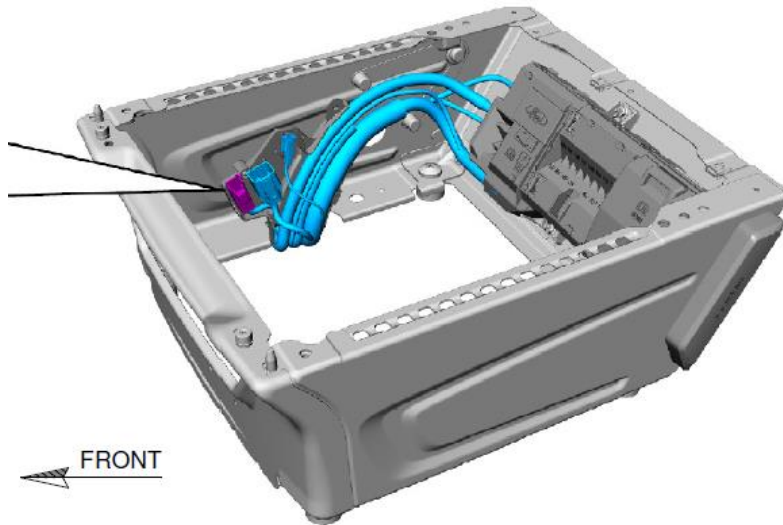




4. The Wire will then be run down the B-pillar. Remove the B-pillar as shown below by pulling it from the Body of the Vehicle (unclipping the B-pillar from the Body):



5. The Wire will then be connected to the Red Wire on the Up-fit Connector located inside the Battery Compartment. To access the wiring, slide the seat back and the Wiring should be visible. Location of Wiring shown below:



6. Using a Hook-type tool, the wiring should be able to be pulled out without removing the seat; tool shown below. If the seat needs to be removed, refer to the Charlotte Built steps above.



**Post-installation check:**

1. Start vehicle. Monitor should turn ON and show rear camera image. POWER LED should illuminate BLUE.
  - a. If monitor does not show image and POWER LED does not illuminate, check harness for +12V, monitor harness fuse and vehicle circuit fuse.
2. Put monitor into STANDBY mode by pressing POWER button. POWER LED should illuminate RED.
3. Put vehicle into REVERSE – monitor should activate and show rear camera. Put vehicle back into PARK. Monitor should go back into STANDBY mode.
4. Press POWER button to turn the monitor ON.
5. Turn vehicle ignition OFF. **Monitor should remain active for approximately 3-5 seconds** and then shut OFF.
  - a. **The delayed shutdown time is critical. If the Monitor shuts down, or the image on the screen goes away immediately after the Monitor is powered OFF, the relay harness should be replaced with another and system re-tested. A short delay of the Monitor staying ON, or the image remaining on the Monitor is what is desired.**
6. Reassemble shelving and tuck Monitor Harness and Field Fix Component back into Headliner.