Rear Aux Light Harness

FOR GM LD/HD Equipped with AEV Bumper

INSTALLATIONGUIDE

NEW PRODUCT

Please visit www.aev-conversions.com to view the most current installation guide for this product.

This is a new product, and we want to make sure that you receive the latest and most accurate information based on customer feedback, product revisions, and/or model year updates. We value customer feedback, so we encourage you to contact our Technical Support department if you have any suggestions on how to make the installation of this product easier or if you have any questions regarding the installation of this product. AEV's Technical Support can be reached by email at tech@aev-conversions.com or by giving us a call at (248)-926-0256.

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Last Updated: 2/11/25

PLEASE READ BEFORE YOU START

To guarantee a quality installation, we recommend reading these instructions thoroughly before beginning any work. These instructions assume a certain amount of mechanical ability and are not written nor intended for someone not familiar with auto repair.

INCLUDED PARTS	QTY
Main Harness	1
Bumper Harness	1

REQUIRED TOOLS
Common Hand Tools
Plastic Trim Tools
1/8” Drill Bit
1 1/8” Hole Saw
Step Bit

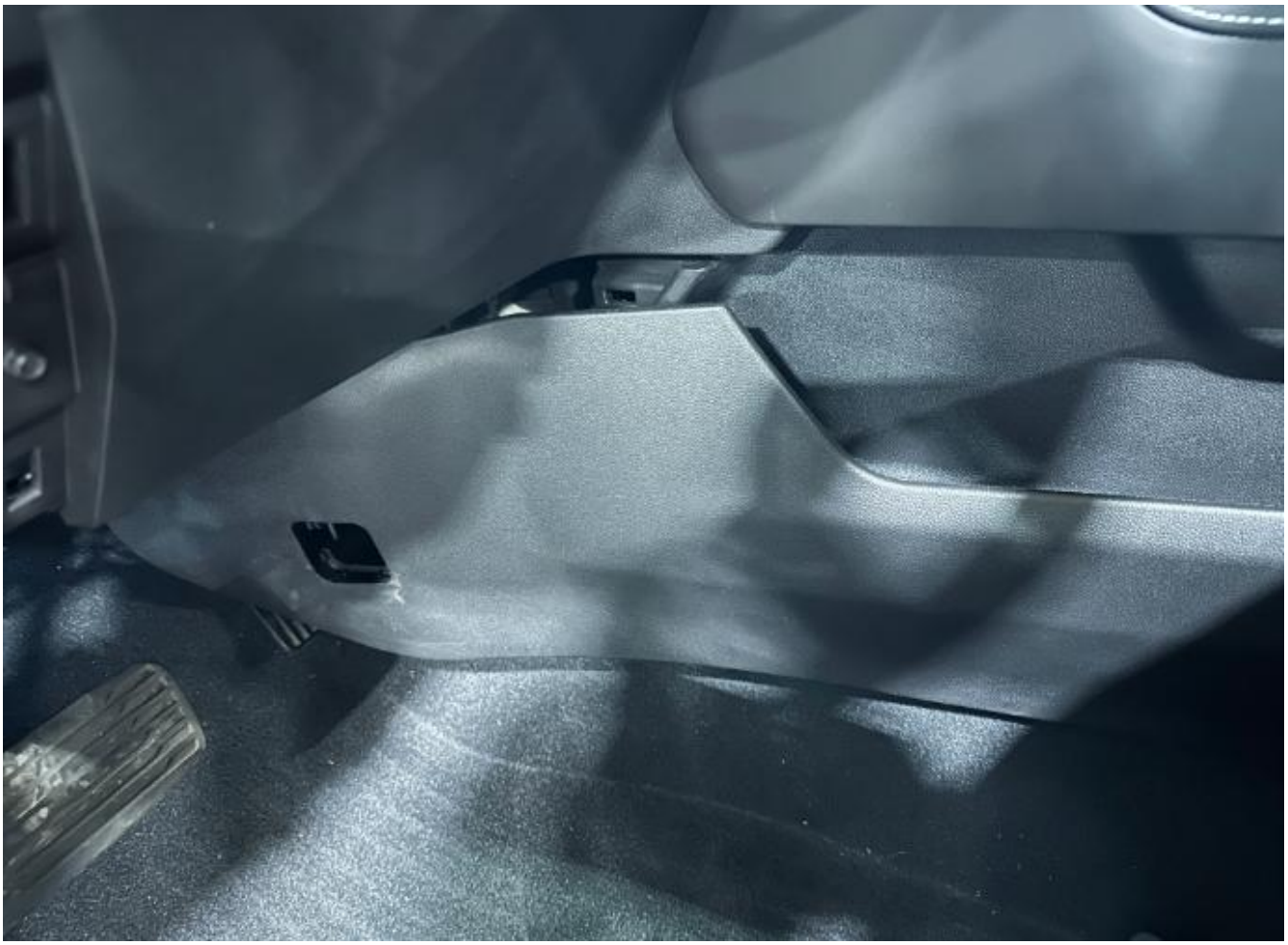
I. VEHICLE PREPARATION

1. Begin by removing the interior plastics detailed in the images below

Remove Driver side plastic on the outside of the dashboard. Use a plastic pry bar to un-snap the plastic.

Remove driver side footwell plastic. This can be done by grabbing the lower edge and pulling it by hand.

Remove the Switch cluster which is held in by the two circled bolts. (ON GMC VEHICLES ONLY. DO NOT REMOVE ON CHEVY)



Remove the driver’s side center console footwell plastic. To do so, you must remove the access panel and bolt first. Then pull off the panel.

Remove passenger door sill plastic and seat rail plastic to allow for the carpet to be pulled back in a later step. These will also be easily removed by pulling on the edge of the plastics.

Remove Passenger center console footwell plastic. This is done in the same way as the driver's side, but it is important to note that there is no access panel and additional fastener.

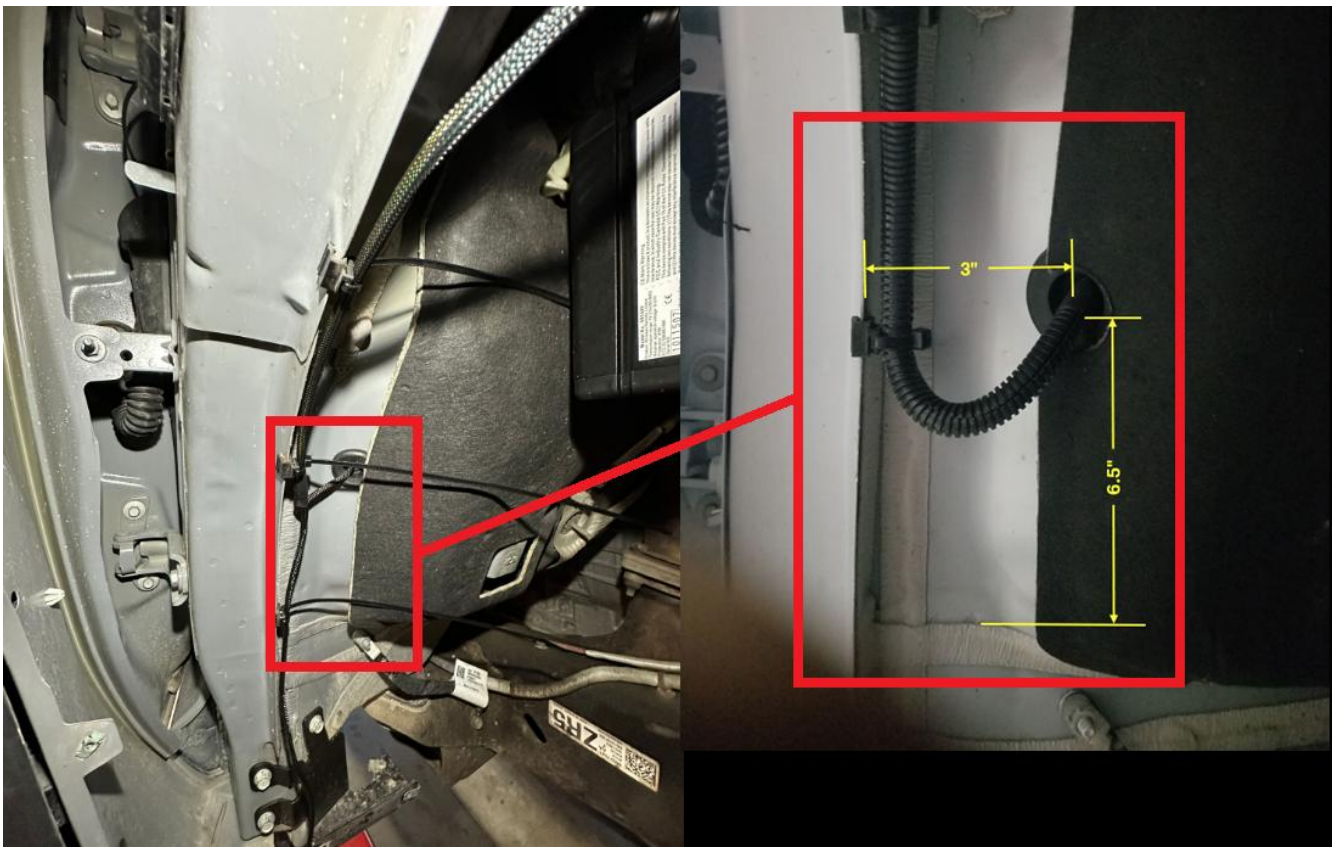
Although not pictured, AEV also recommends removing the front right and rear left wheel well liners. This will greatly increase the ease of assembly of the harness.

AEV also recommends removing the spare tire for easier installation.

Hole for Grommet

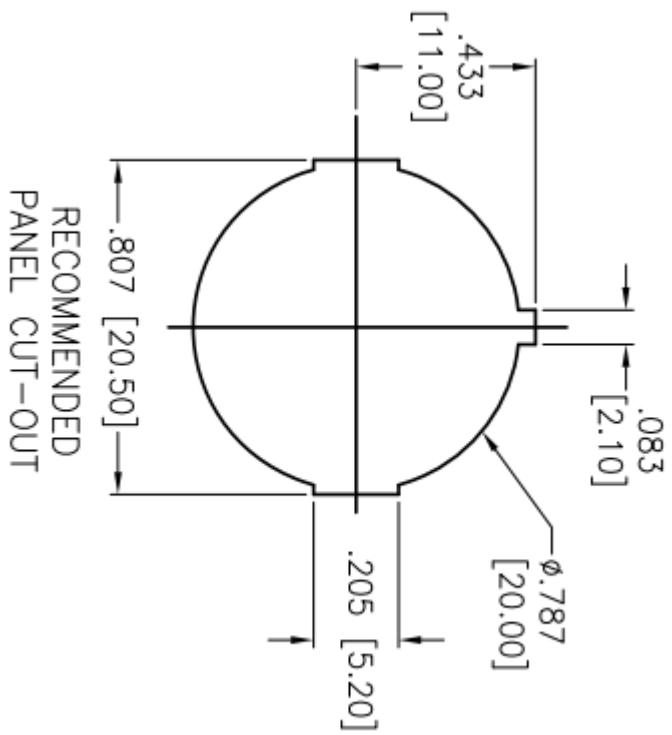
For the harness to be routed, a hole must be drilled in the front right wheel well through the firewall. Follow the steps below to properly locate and drill this hole.

1. Center punch hole using dimensions in image below.
2. Drill ⅛” pilot hole.
3. Drill hole to size using 1 ⅛” hole saw.
4. Deburr edges and rust treat.



Hole for Switch

The next steps are for drilling the hole for the switch that will be installed in the interior of the vehicle. This switch is to be installed near the light controls of your vehicle. Follow the steps below for the hole location of the switch dependent on the vehicle manufacturer.



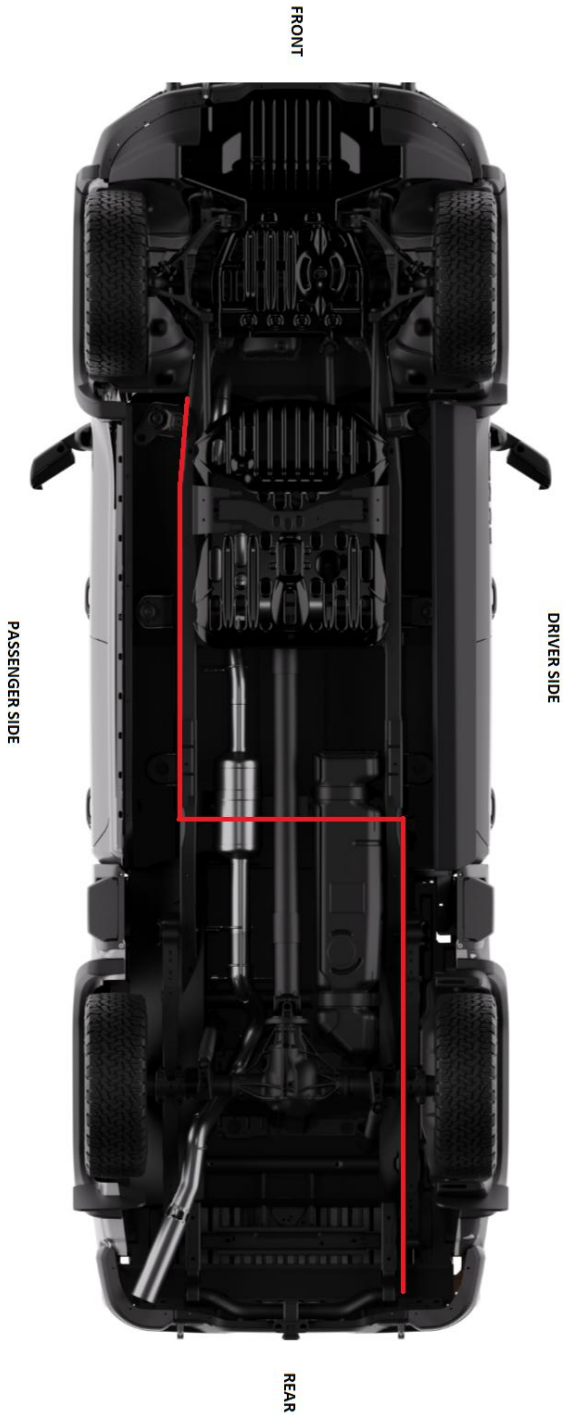
Note: Picture is tilted 90* for proper hole orientation in the vehicle.

1. Center punch using the measurements in the images below based on Chevy or GMC.
2. Drill a pilot hole to ⅛”, then finish hole to ¾” using a step bit.
3. Use a file to match the features around the hole in the image above.
    i. File a little at a time and repeatably test the fitment of the switch
        1. This will ensure that the switch has a tight fit and excessive material is not removed

GMC

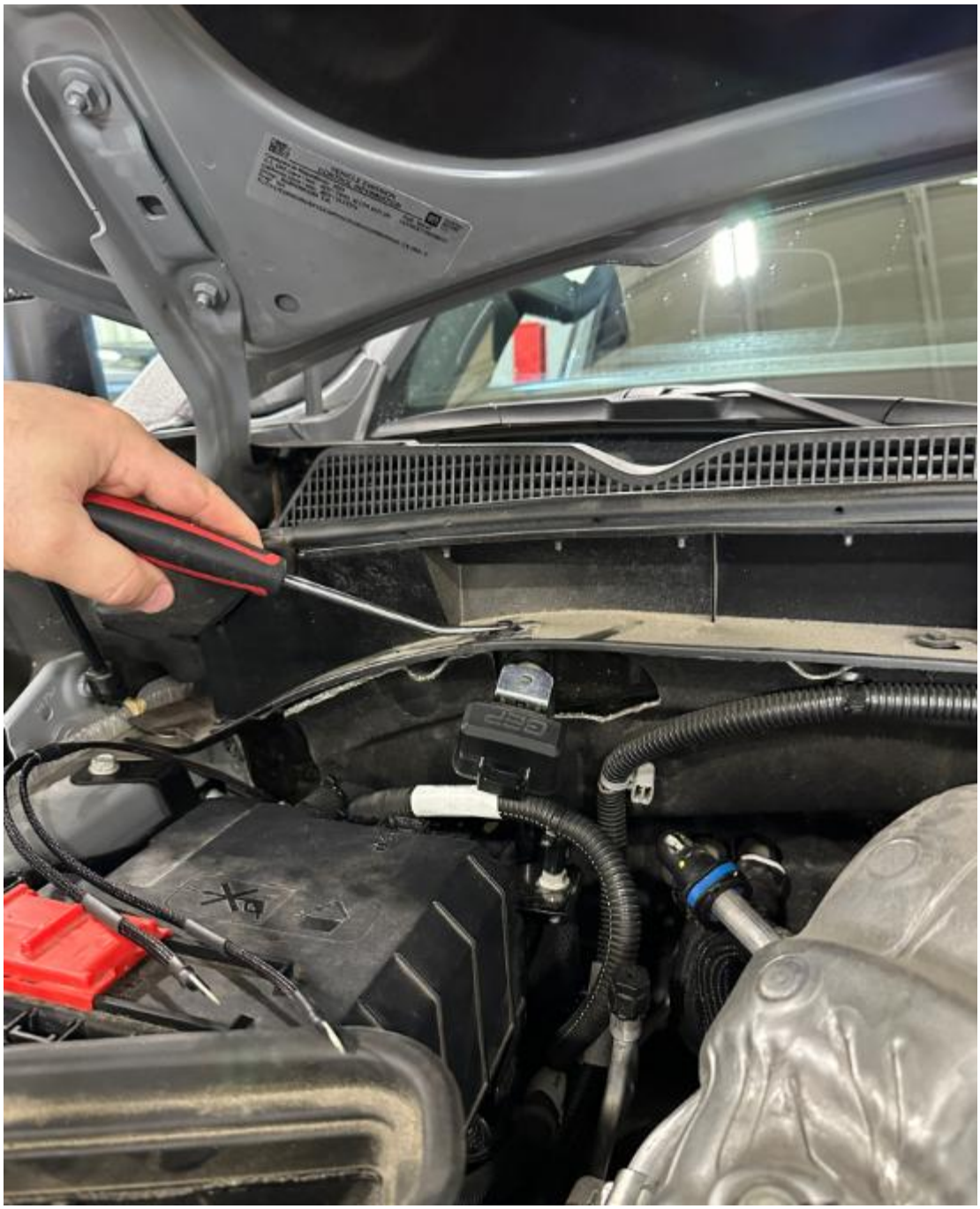
CHEVY

II. INSTALLATION



Overall Harness Routing

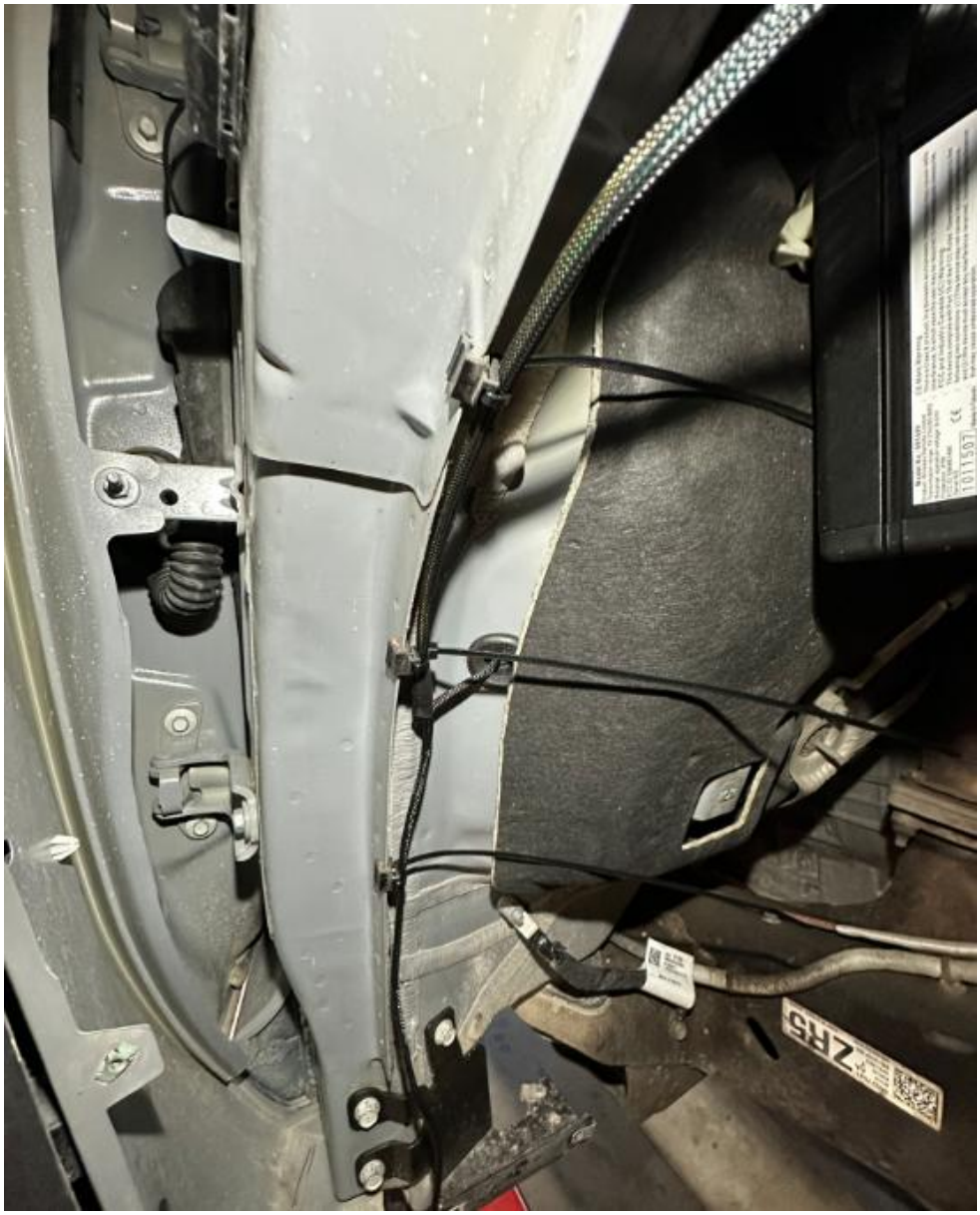
Begin the harness installation by routing the harness behind the battery/fuse box. Leaving the positive and ground wires in the engine bay along the top of the fuse box. Most of the harness should be hanging in the passenger wheel well.



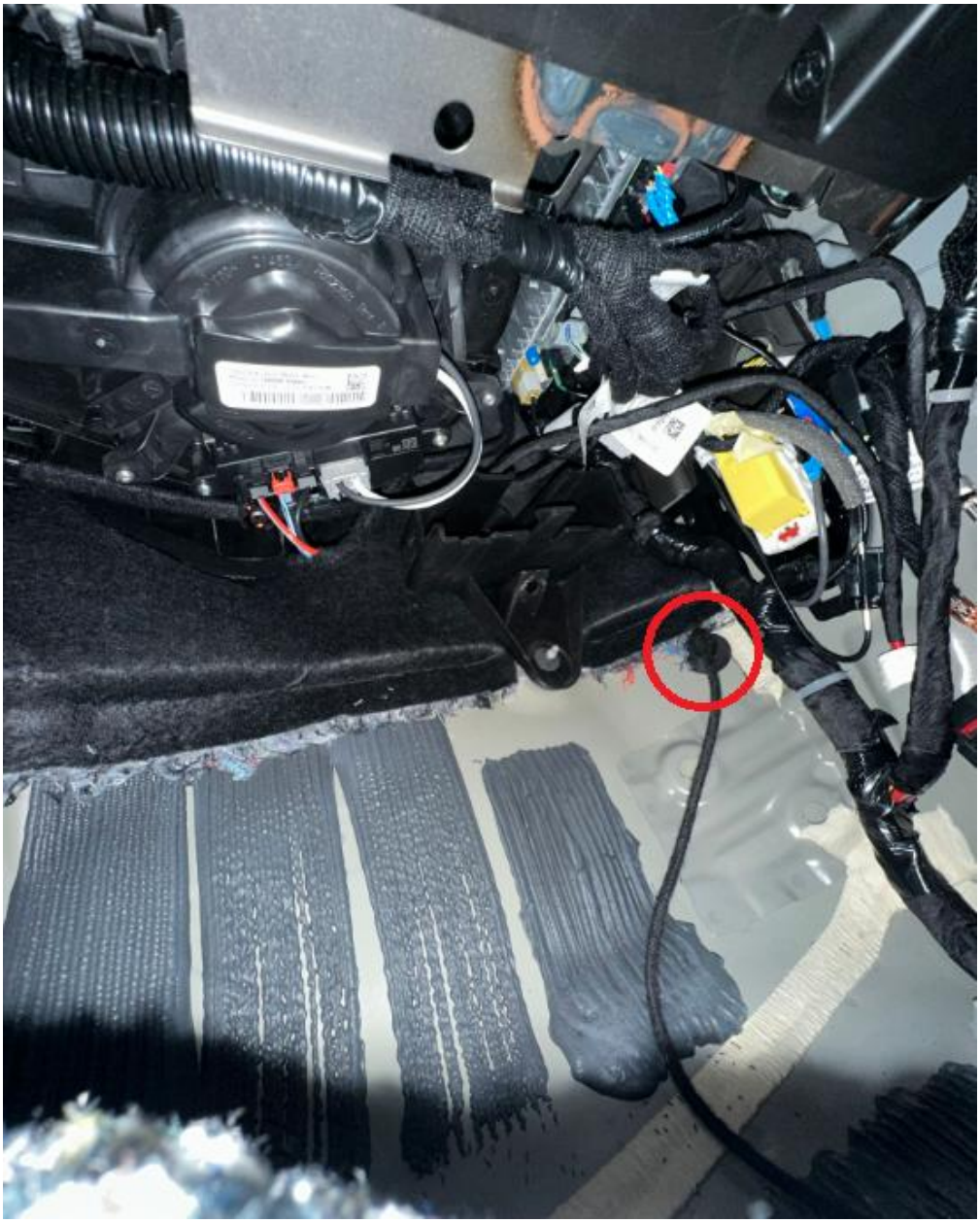
Remove the plastic panel clip and place the fuse box bracket between the plastic and sheet metal. Re-install the plastic panel clip back through the hole, securing the fuse box.

Image showing installation of fuse box between plastic and sheet metal.

Feed the three 90* wire ends through the hole that was previously drilled through the firewall. Feed the harness all the way to the rubber grommet and insert the gromet.



Secure the remainder of the harness to the seem of the steel using three edge clip zip-ties. See the location in the image above.



Making your way inside the vehicle, you will see the harness is now in the passenger footwell. You may need to pull back the carpet for better visibility.

Looking up into the passenger footwell, the harness will be routed along the harness highlighted in yellow in the image above.

Use two zip ties to secure the harness as shown above. The harness should be routed towards the driver's side of the vehicle. Ensure to remove any slack before securing the harness to ensure that there is enough to route to the driver side of the vehicle.

Staying in the passenger footwell, looking towards the driver side of the vehicle, there is a small support bracket. Route the harness behind this bracket.

Feed the harness across the vehicle through the open space to the driver footwell. The harness is highlighted yellow for better depiction and is to be routed behind the metal support structure in the driver side footwell.

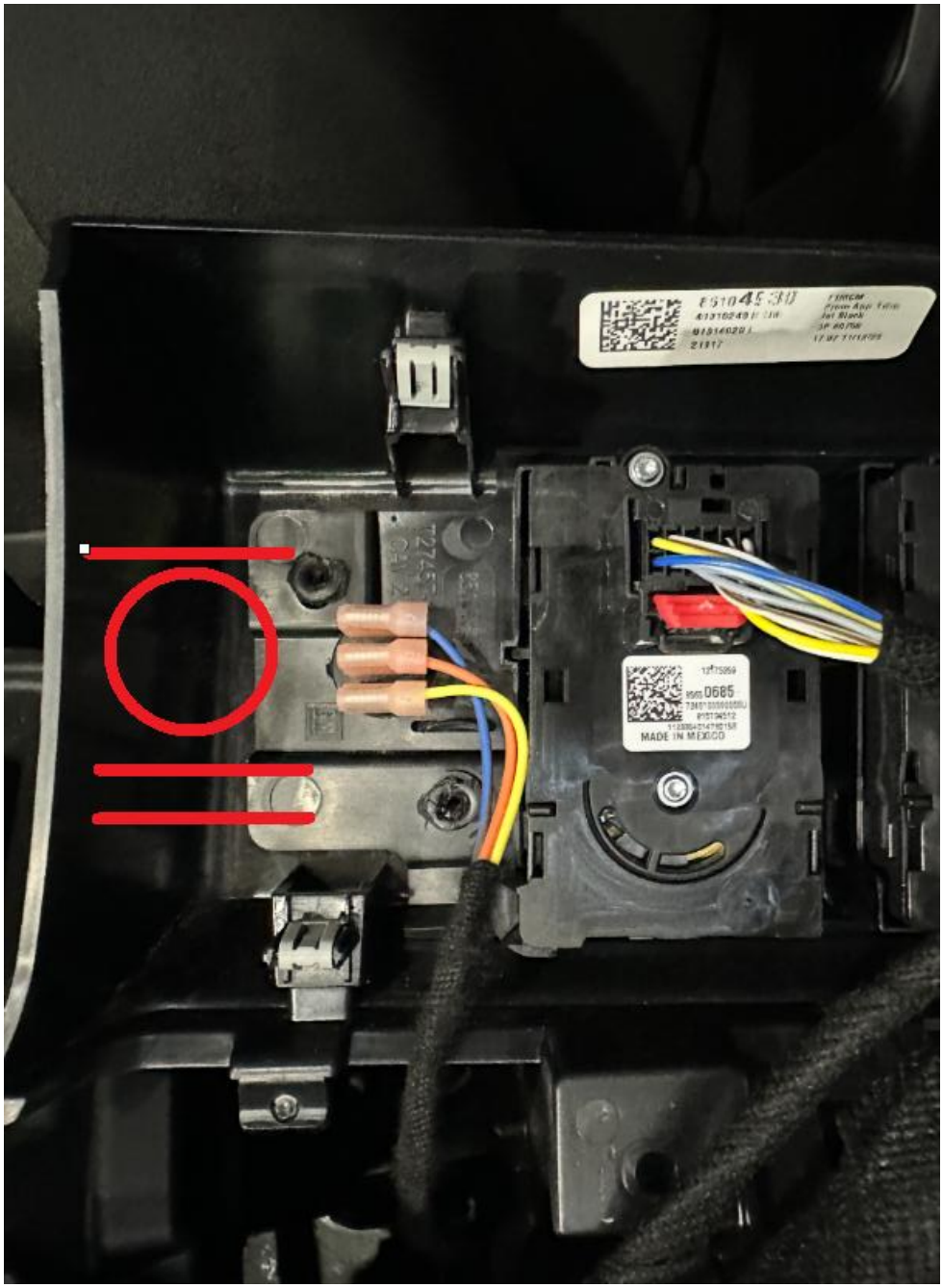
Going back to the passenger side of the vehicle, secure the harness once more with a zip tie in the location above.

In the drivers side footwell, begin securing the harness by using an edge clip zip tie in the position shown above.

Next, secure the harness to the AC vent as shown above.

Using the fir tree zip-tie, Insert it into the open hole on the ac vent as shown.

Using another fir tree zip tie, secure the harness to the metal bracket as shown.



The switch connection may now be made. The blue wire corresponds to the single line on the switch, the orange the center, and the yellow to the double lines. (Lines in reference are on the switch itself)

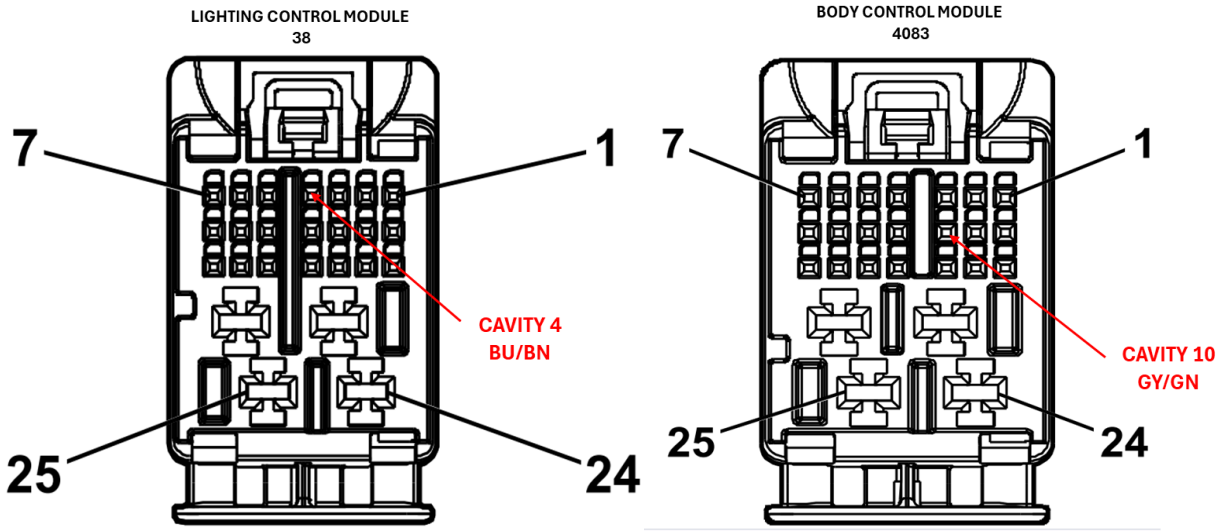
Under Dash Harness Tie In

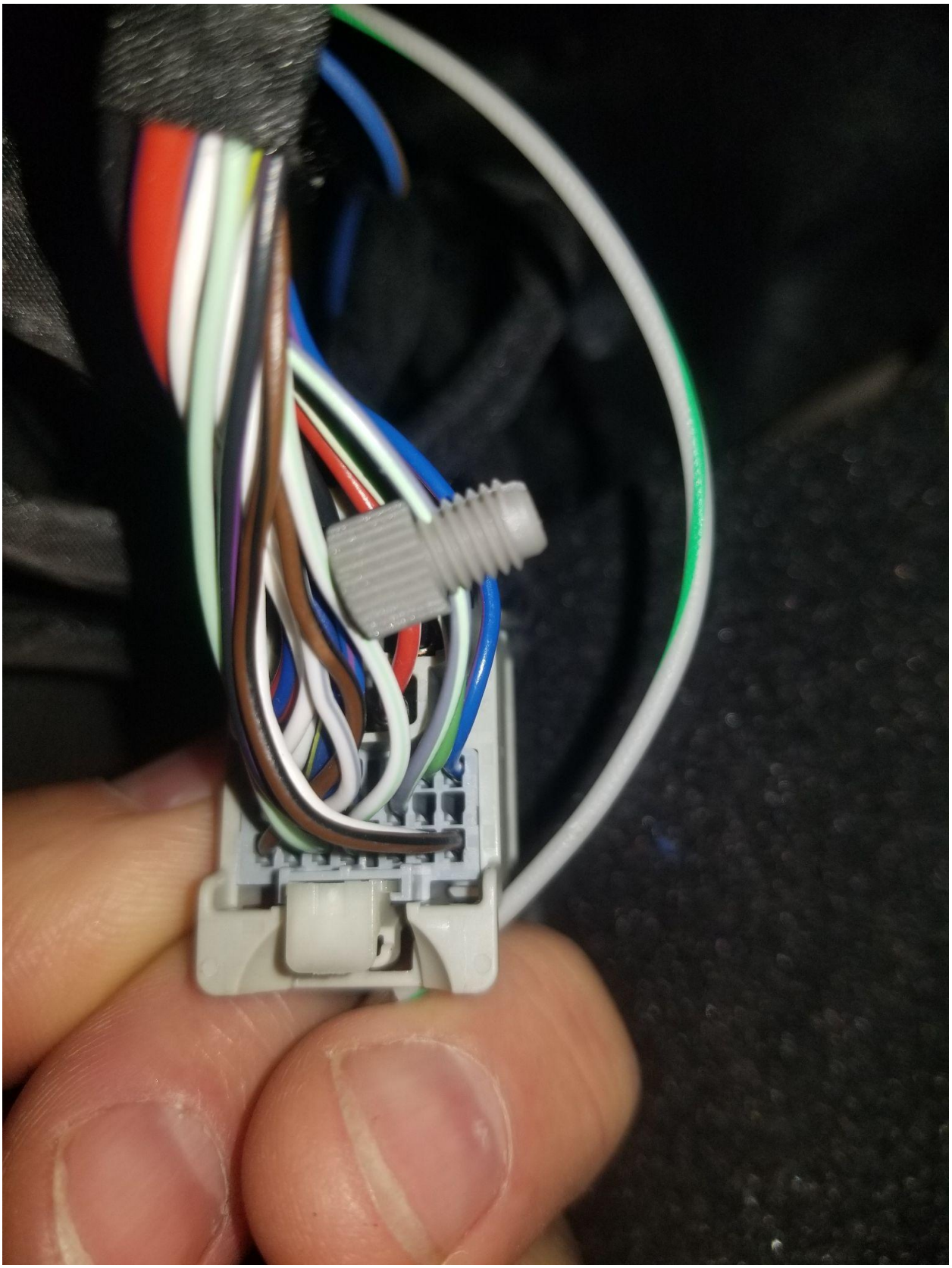
1. Locate the gray connectors for the Lighting Control Module and the Body Control Module the dash on the left (driver) side.

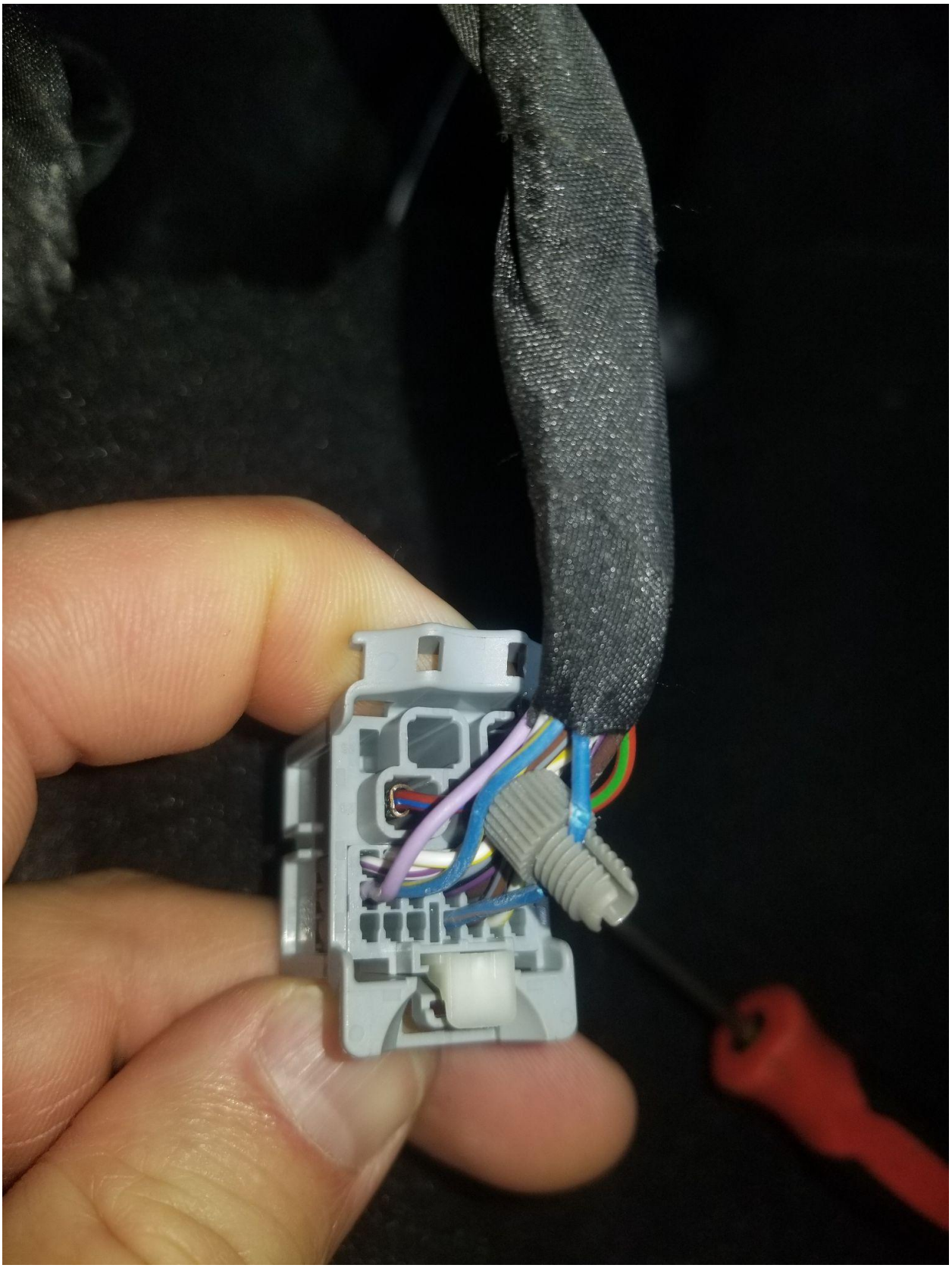
2. Optional Step: Unplug both connectors for easier access.

3. Strip about ¼" of insulation off the gray with green stripe and blue with brown stripe wires on the supplied harness.

4. Install Posi Tap connectors as shown below.







Routing to Rear of Vehicle

To begin routing to the rear of the vehicle, feed the harness over the body frame mount

Once the harness has been fully feed through, secure the harness as shown with a zipe tie.

Highlighted in yellow, begin routing the harness along the frame rail of the vehicle, following the other wiring present.

Just before reaching the 3rd body mount on the passenger side, route the harness across to the driver side. At this point, you will see a frame cross-member to follow.

Route the harness across the cross-member, following the factory wiring.

Pass the wiring over the fuel tank until it is on the other side and is now outside of the driver side frame rail

NOTE: TO HELP CROSS THE FUEL TANK, THE HARNESS CAN BE TAPED TO A STURDY WIRE/COAT HANGER TO HELP UNTIL IT IS SEEN ON THE OTHER SIDE AND CAN BE PULLED THROUGH

Going back to the passenger side of the vehicle, secure the harness to the existing factory harness. Use one zip-tie roughly every foot to ensure that it is not loose.

On the driver side, take the harness and route it over the mount as shown.

As seen in the image above, after routing over the mount the harness should be present in the rear left wheel well.

From here begin to cross the harness to the inside of the driver side frame rail.

From here you can now go back to where the harness crossed the vehicle at the cross-member and secure to the factory wiring. Ensure that there is as little slack as possible.

Alternate angle showing the securing of the harness along the cross-member

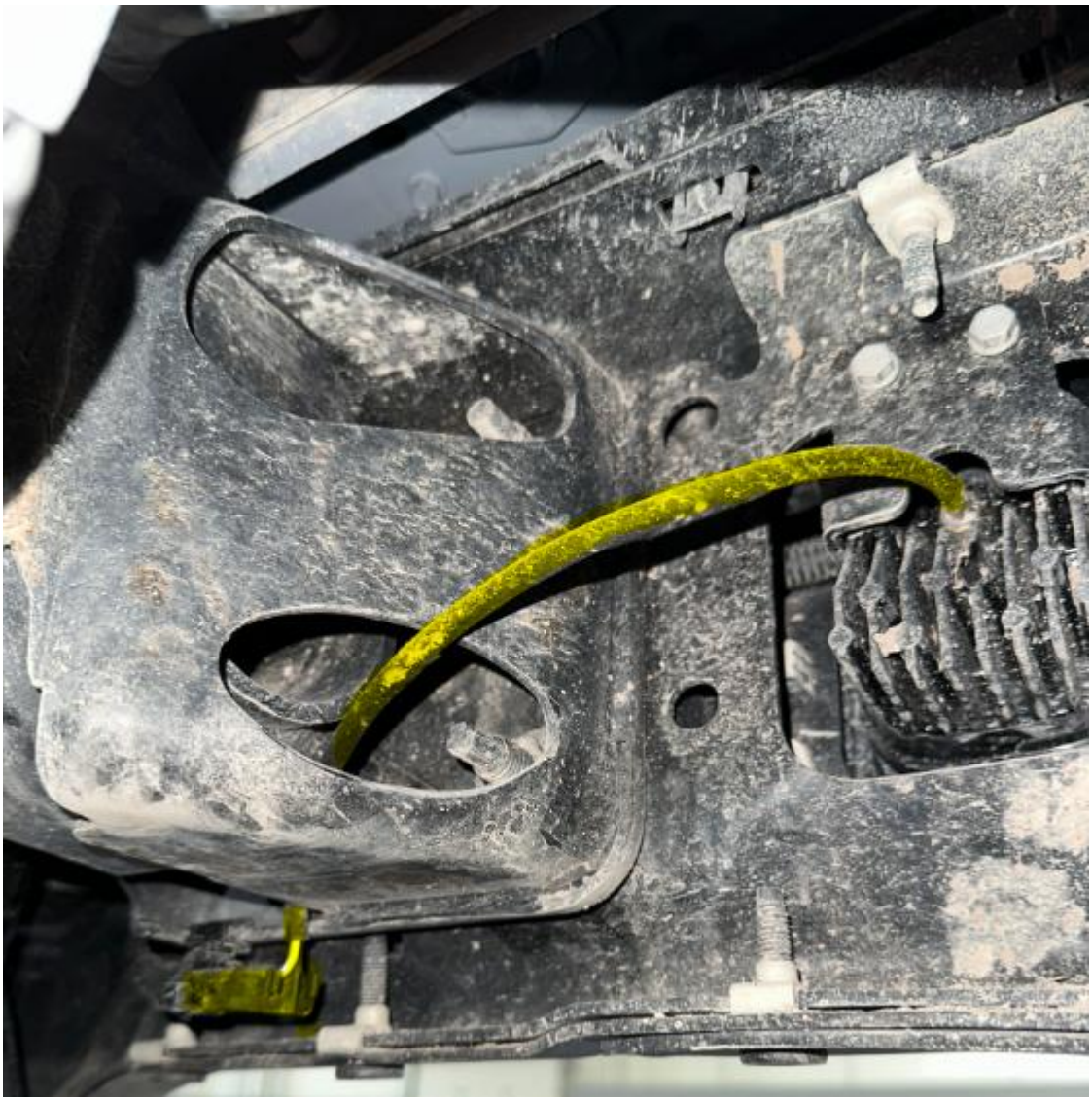
With the harness now on the inside of the driver side frame rail, follow the harness located above the bump stop as seen in the image above.

Follow the red lines in the image above to complete the harness routing to the rear of the vehicle. The right most line near the shock is where the previous image left off.

To complete this step of the wire routing, continue to follow the factory wiring until you have crossed the trailer hitch tubing. At this point you may let the harness end hang as shown.

Image showing where the harness end terminates in reference to the trailer hitch.

Wiring Rear Bumper Harness



With the aux lights installed, refer to the rear bumper aux light bracket installation guide, route the wiring through the bumper mounting plates, wiring is highlighted yellow.

The bumper harness provided can now be installed as shown above.

Zip tie to the bumper harness as seen, ensuring that the plug that connects to the main aux light harness terminates on the driver side of the vehicle. Zip tie this to the bumper harness.

You can now connect the two harnesses together. Do not secure the chassis harness to the bumper harness in case the bumper has to be removed from the vehicle. This keeps it so that it is just one additional step when removing the rear bumper.

To finish the installation, pull the harness slack back towards the front of the vehicle. You may now secure the factory harness located on the inboard side of the driver side frame rail.

Additional image showing secures along the inboard side of the driver side frame rail.

As done on the passenger side, secure the harness to the factory harness routed alongside the driver side frame rail, placing zip-ties roughly every foot. If you have excess harness, secure this above the fuel tank.

NOTE: PRIOR TO INSTALLING ALL OF THE PLASTICS BACK INTO THE INTERIOR, TEST THE FUNCTIONALITY OF THE HARNESS. ONCE EVERYTHING HAS BEEN TESTED AND PROVEN TO FUNCTION, YOU MAY NOW INSTALL THE INTERIOR PLASTICS, WHEEL WELL LINERS, AND SPARE TIRE IF REMOVED.