



**BLACK HORSE
OFF ROAD®**

TEL : 1-866-XANATOS

INSTALLATION INSTRUCTIONS

ELITE RETRACTABLE POWER BOARD

2015+ CHEVY COLORADO CREW CAB

2015+ GMC CANYON CREW CAB

Patent No. US 11945405

PART#PWBR14

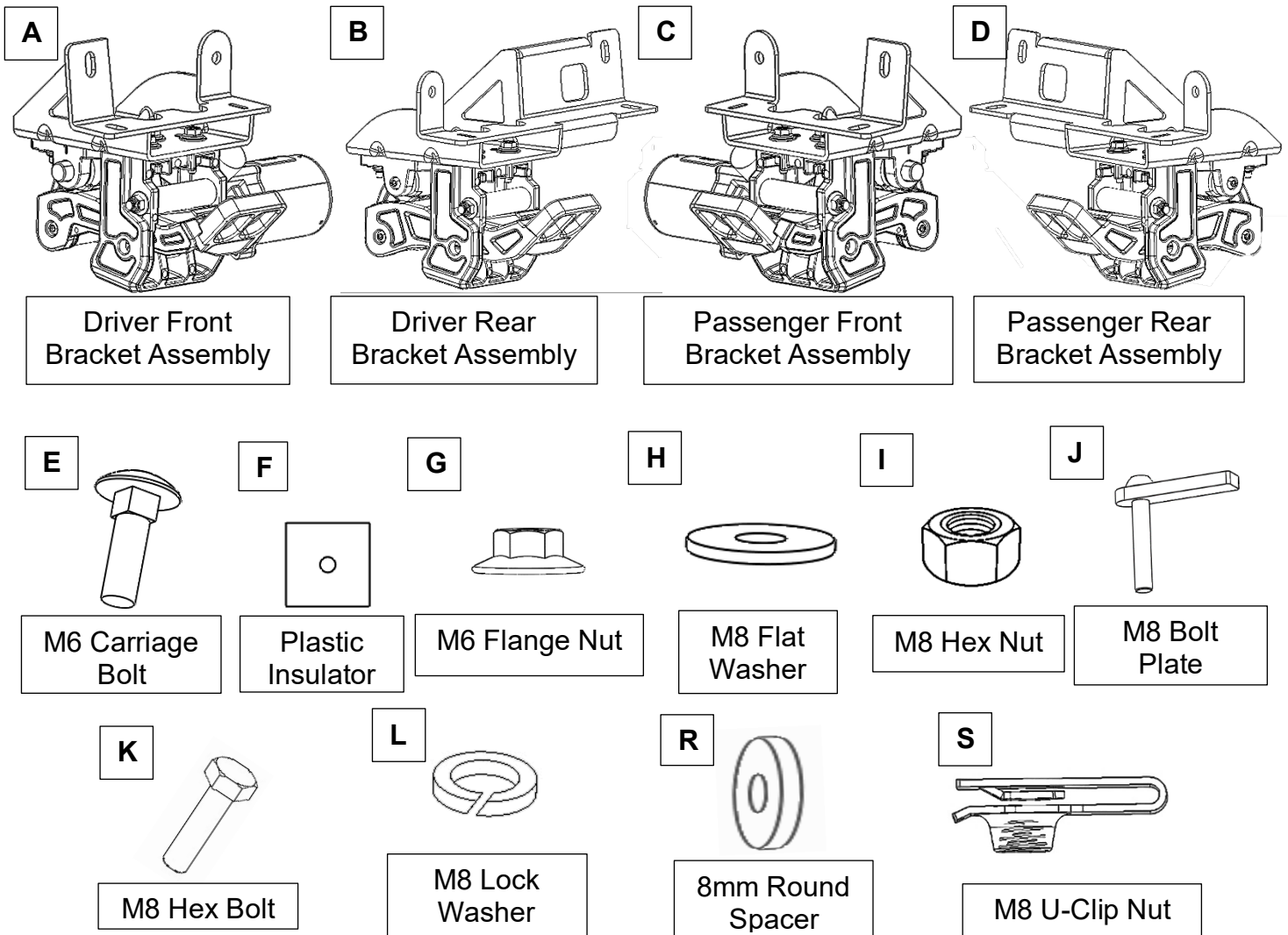
INSTALLATION INSTRUCTIONS

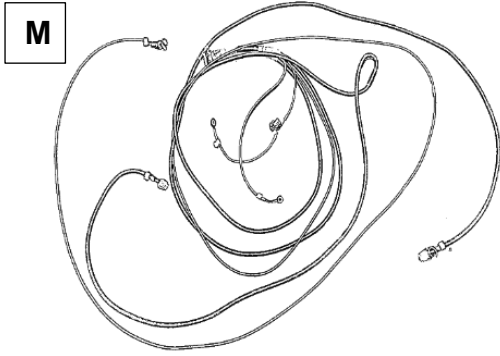
Mechanical PARTS LIST:

Qty	Item Description	Qty	Item Description
2	Running Boards (75in)	4	8mm Hex Nuts
1	Driver/Left Front Bracket Assembly	4	8mm Bolt Plate
1	Passenger/Right Front Bracket Assembly	8	8-1.25mm x 25mm Hex Bolts
1	Driver/Left Rear Bracket Assembly	8	6-1.0mm x 20mm Carriage Bolts
1	Passenger/Right Rear Bracket Assembly	8	6mm Flange Nuts
1	Electronic Materials Package	27	Zip Ties
2	8mm Round Spacer	4	Plastic Retainers
8	8mm U-Clip Nuts	2	Adhesive Foam
12	8mm Lock Washers	3	Rubber Sleeves
12	8mm x 24mm x 2mm Flat Washers		

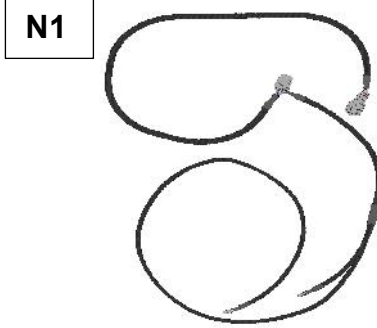
Electronic Materials Package PARTS LIST:

Qty	Item Description	Qty	Item Description
1	Main Harness	1	ECU
2	Wire Taps	4	LED lights
1	LED Y-Harness (Short 280mm)	1	LED Y-Harness (Long 1200mm)

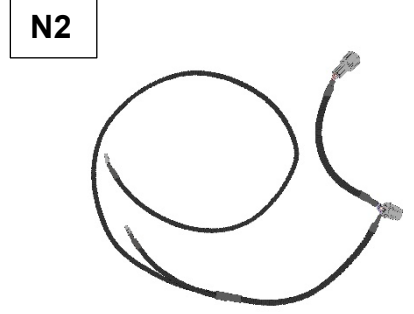




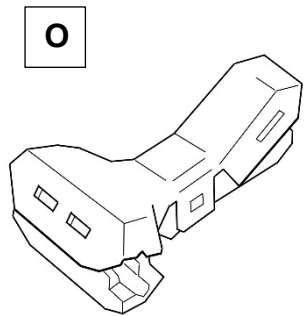
Main Harness



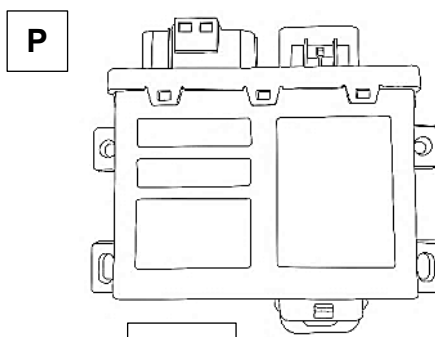
LED Y-Harness (Long)



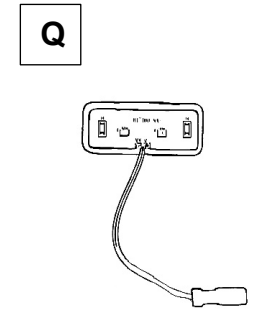
LED Y-Harness (Short)



Wire Taps

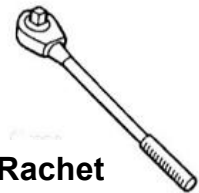


ECU



LED Lights

TOOLS REQUIRED



Ratchet



8mm
10mm
13mm

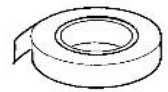
Socket



Extensions

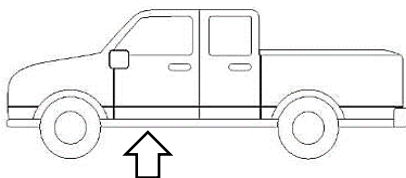


Wrenches

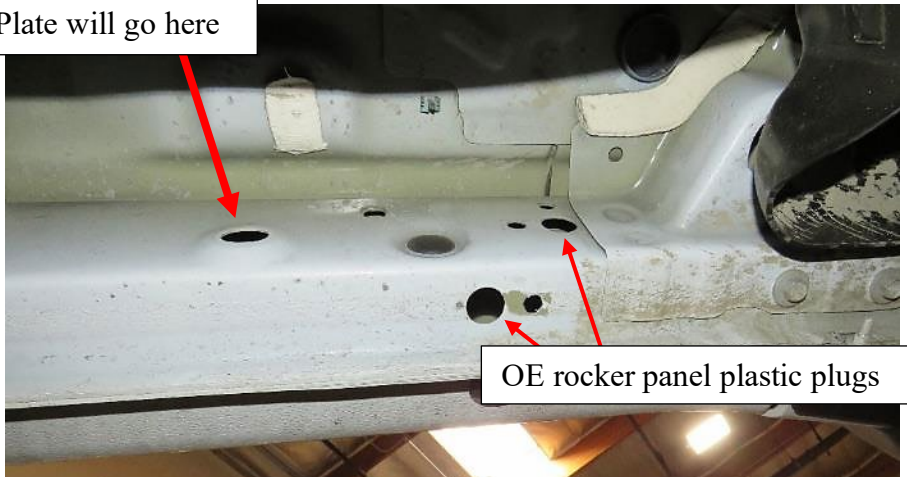


Electrical Tape

1 Locate Driver Side front mounting points on the rocker panel under the front door. Remove any OE plastic plugs on the mounting areas. Insert the bolt plate (J) into the upper left hole with the bolt threads facing the frame. Use the plastic retainer (F) to keep the bolt plate in place for mounting.



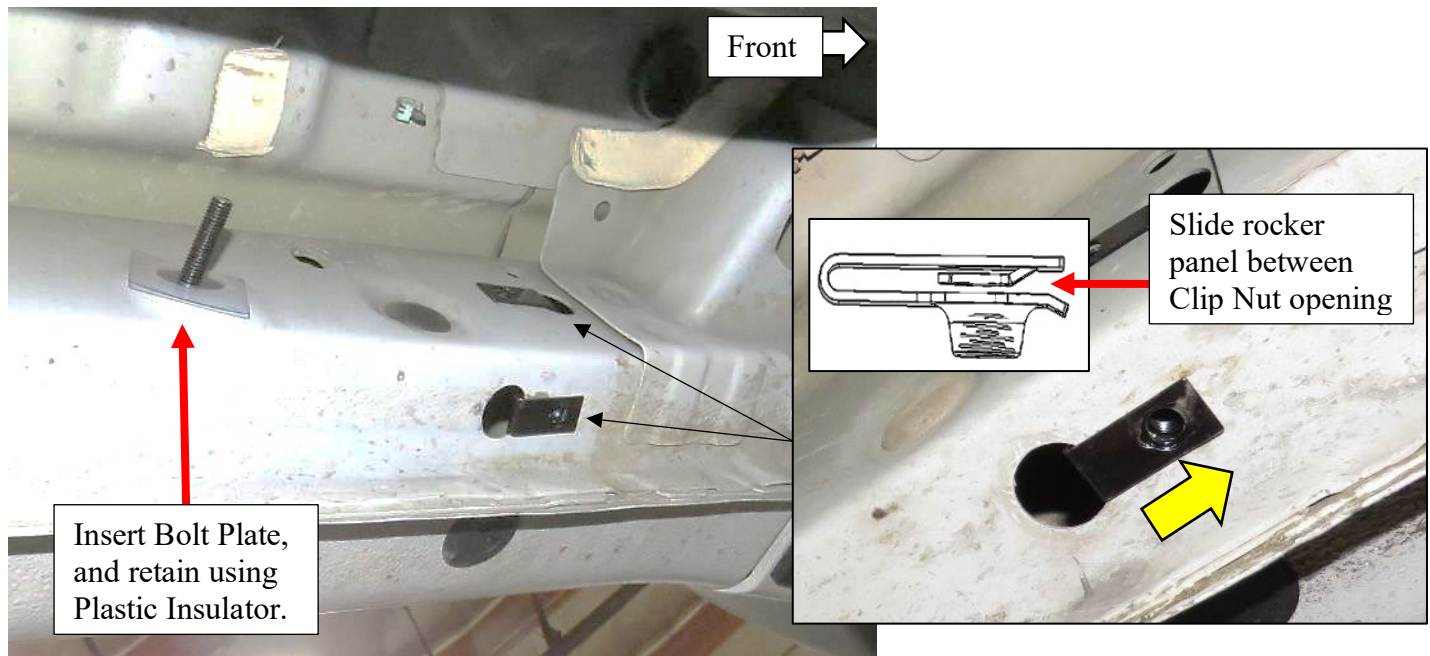
Bolt Plate will go here



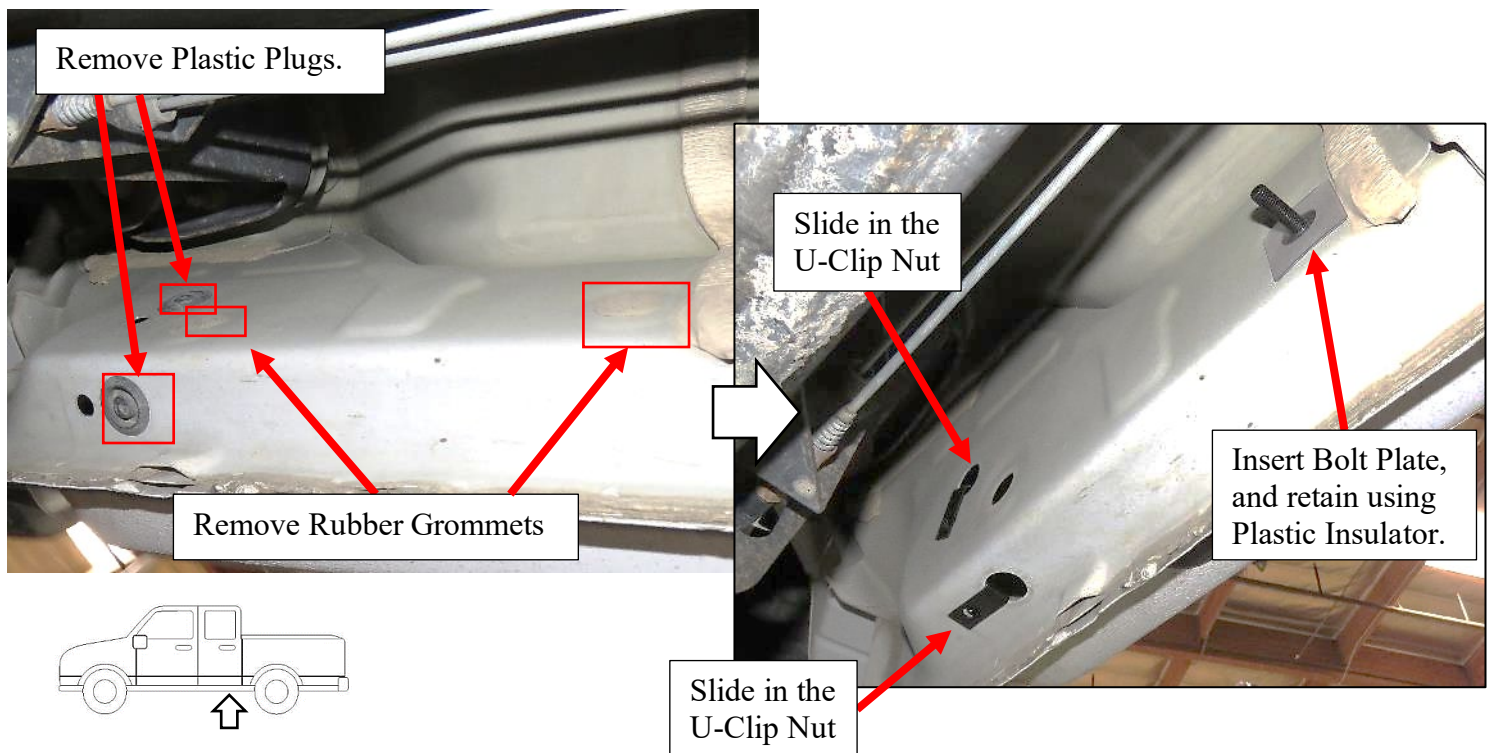
OE rocker panel plastic plugs

*Note: Pry-tool is recommended for removing plastic insert caps.

Insert the U-Clip Nuts (S) into the holes where indicated (in the picture below). The flat side of the U-Clip Nut should be facing outwards and align with the smaller hole next to the bigger one. Then insert the Bolt Plate (J) and keep it in place using a Plastic Insulator (F).



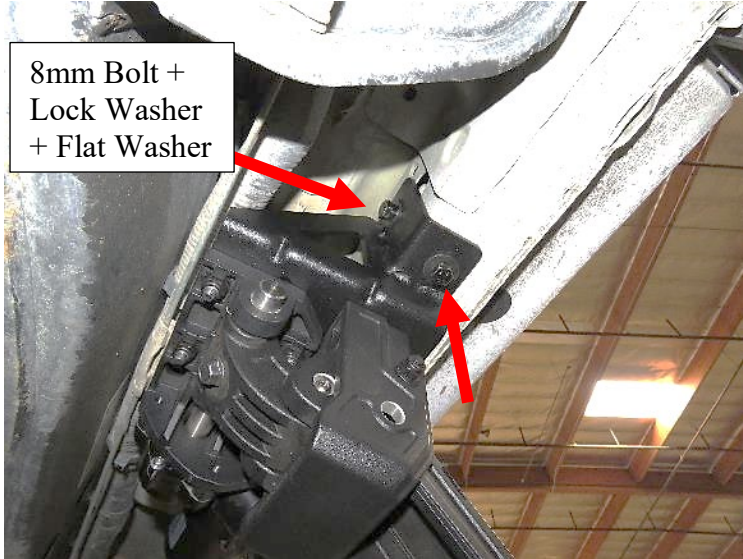
After Inserting the U-Clip Nuts (S) and Bolt Plate (J) into the front mounting points, do the same for the rear mounting points. At the rear of the truck cab, locate the rear mounting points and remove the appropriate plastic plugs as show below. Then install the U-Clip Nuts (S) and Bolt Plate (J).



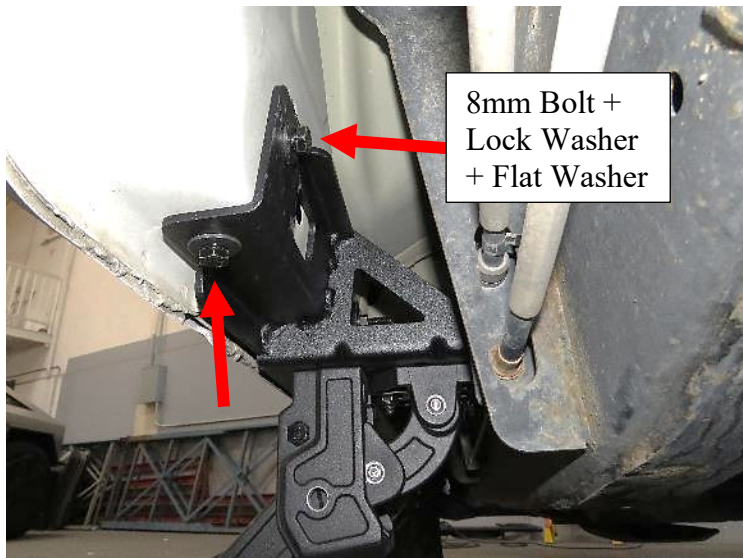
2

Locate and Line up front mounting bracket slots to the U-Clip Nuts and the retained Bolt Plate and place the Driver Side/Left Front Bracket Assembly (A) onto rocker panel. Then fasten 8mm Bolts + Lock Washers + Flat Washers together into the U-Clip Nuts and 8mm Hex nut + Lock Washer + Flat Washer to the bolt plate.

Do not tighten all the way yet but make sure everything is at least hand tight or snug.

**3**

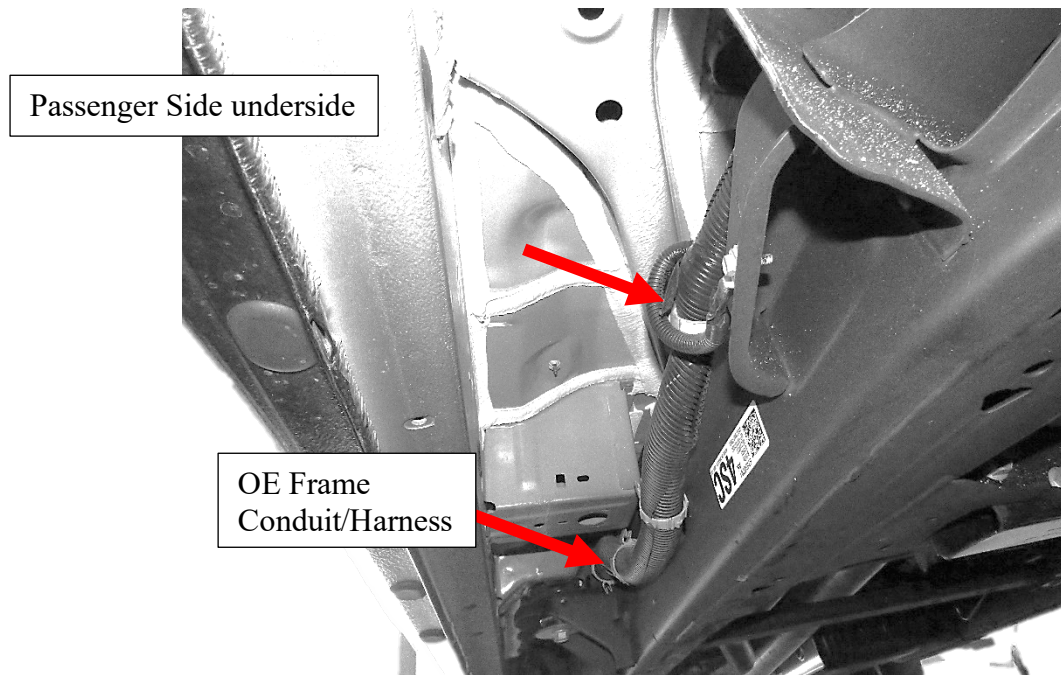
Locate rear mounting points. Next, line up rear mounting bracket slots to the studs and place Driver Side/Left Rear Bracket Assembly (B) onto rocker panel.



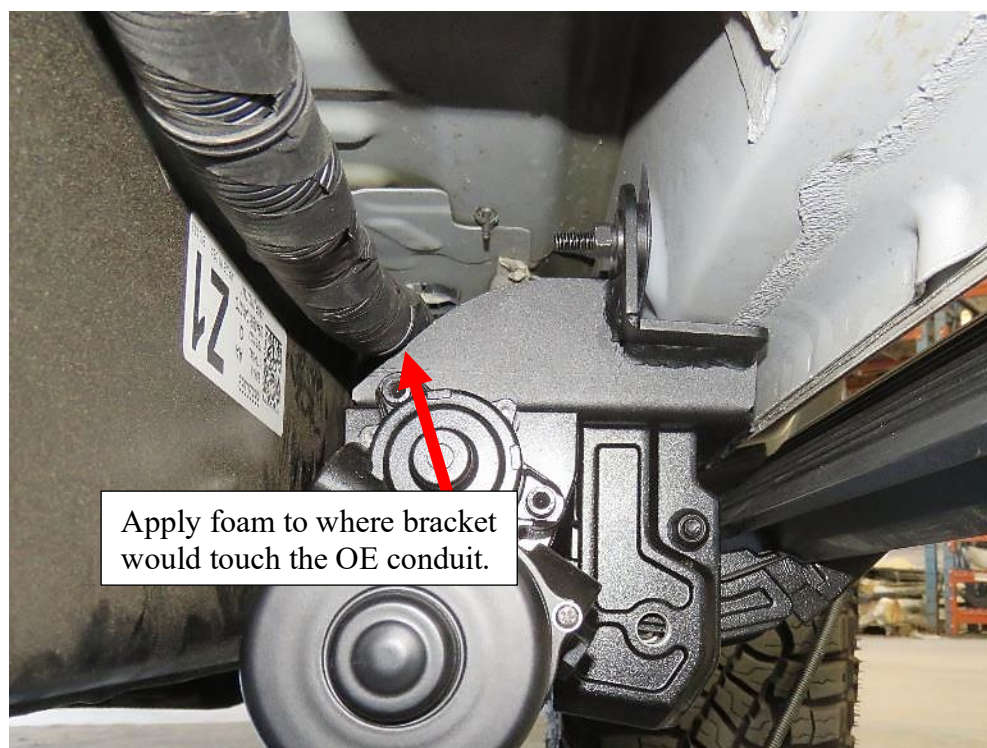
Then fasten 8mm Bolts + Lock Washers + Flat Washers together into the U-Clip Nuts and 8mm Hex nut + Lock Washer + Flat Washer to the bolt plate. Do not tighten all the way yet but make everything at least hand tight or snug. Adjustments will be needed later.

Repeat steps 1 – 3 for the Passenger Side.

On some vehicles, the Driver or Passenger Side has large wire conduits or brake cables running the length of the vehicle frame. Apply the supplied foam strips to the bracket assemblies as shown below or use attach the supplied rubber sleeves to the brake cables using RTV silicone to prevent scratching.

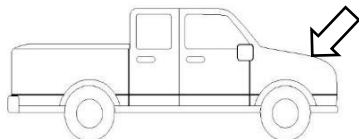


Trim the foam to the appropriate size and apply it to the top of the brackets which will touch the OE frame conduit.

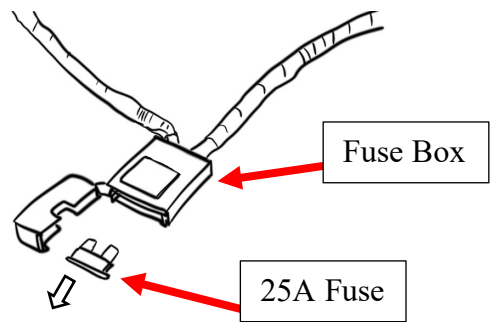


5

Start from the engine compartment by opening the front hood of the vehicle. Locate the Battery and its terminals (positive/negative). Remove the 25A fuse from the fuse box that comes with the main harness (M).

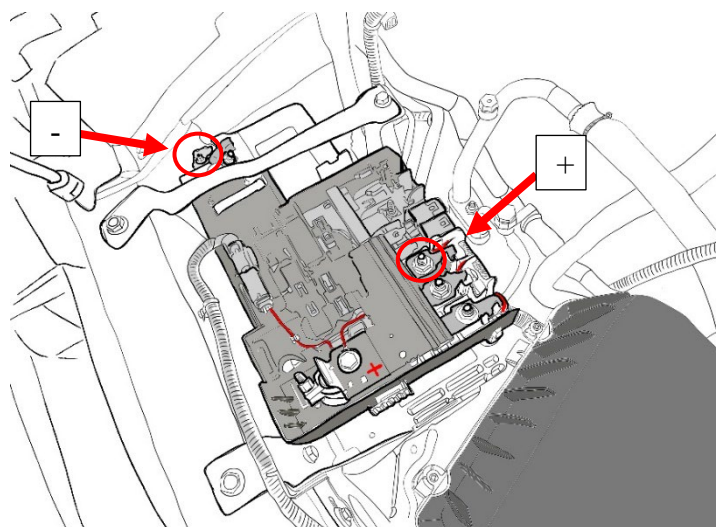


***WARNING:** Keeping the fuse connected to the fuse box may result in electrical sparks and risk of shorting when working with the battery.



6

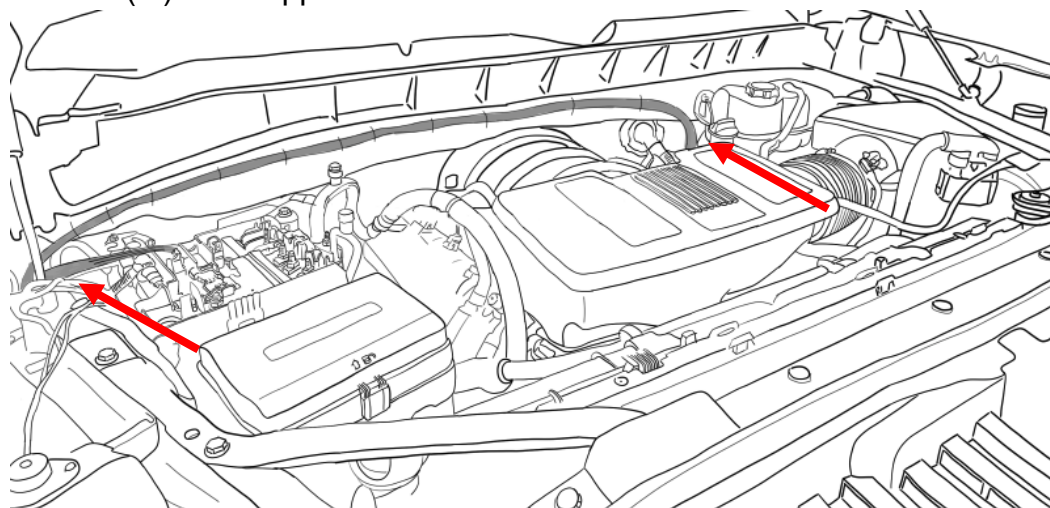
Connect the positive power lead on the main harness (M) to the positive battery terminal. Connect the negative lead to the negative battery terminal. *Make sure both power leads are fully secured.* Connect the ECU (P) to the main harness. Connect the Long LED Y-Harness (N1) to the branch of the main harness that is opposite to whatever side the battery is on. For example, if the battery is on the Driver-Side, then connect the Long Y-Harness to The_Passenger-Side branch.



If the vehicle is either a **23+ Colorado**, route the CAN Signal wires to the Passenger-Side instead of the Driver-Side, and go to **Step 8B** after **Step 7**.

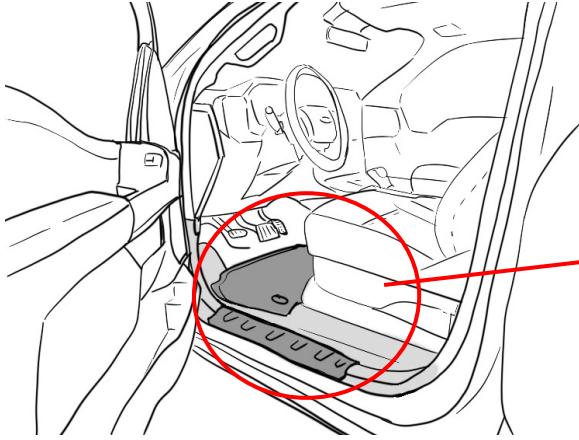
7

Route the main harness (M) around the battery, up along the rear of the engine compartment, and down the wheel well opposite the battery. *For example, on a 2023 Colorado, the longer Driver-Side branch of the main harness would route along the rear firewall and down the Driver-Side.* Route the shorter leg of the harness down the same side as the vehicle battery. **Be sure to avoid contact with any moving or hot engine components.** Attach and secure the main harness (M) with supplied cable ties.



8A

Inside the cabin, remove the driver-side front kick panel and bottom door sill plate. Peel back the carpet to access the hole where there is a grommet or plastic plug. Drilling may be needed.



On the underside of the driver side, locate and create a hole in the floor grommet. The grommet will be close to the front linkage arm. Poke a hole through the grommet and thread the two signal wires through and up into the vehicle cabin.

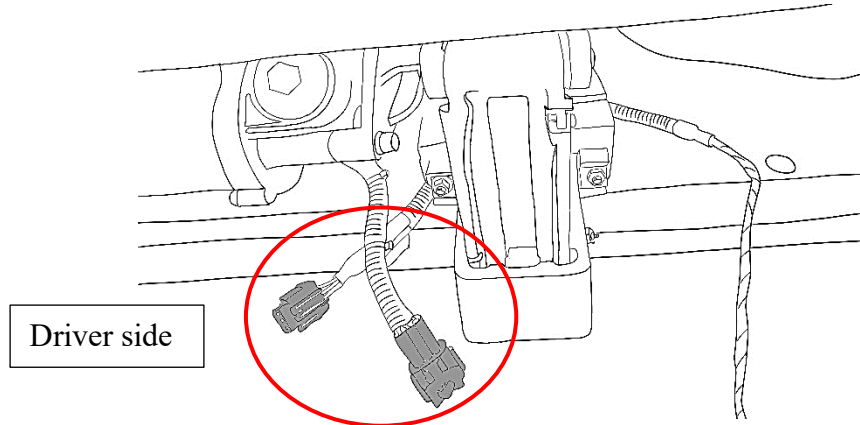
8B

If the vehicle is a Silverado 1500 from 2022 onwards or a Silverado 2500/3500 from 2024 onwards, route the signal branch of the main harness (M) through the Passenger side instead of the Driver Side. Poke a hole using a drill or punch through the plastic cap on the underside to feed the wires into the cabin.



9

Attach the main harness (M) to the LED Y-Harness (N). Then attach the LED Y-Harness (N) to the motor on the Driver Side. Repeat for Passenger Side. The shorter LED Y-Harness should connect to the motor that is on the same side as the ECU.

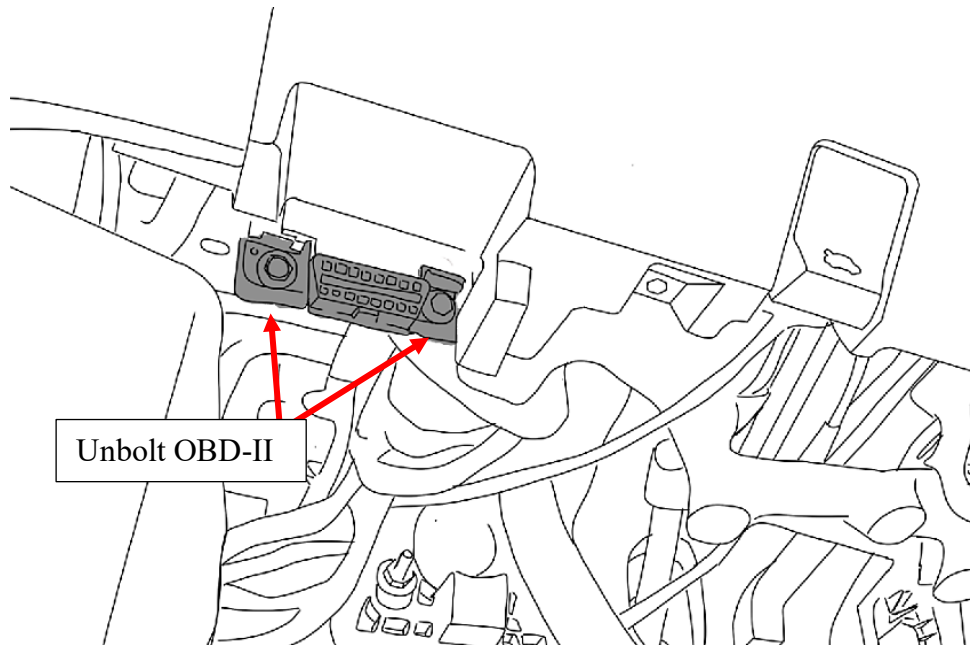


10 Determine which technology system the vehicle is normally equipped with using the abridged guide below:

2015-2022 Colorado = pre-refresh technology system
2023+ Colorado = post-refresh technology system

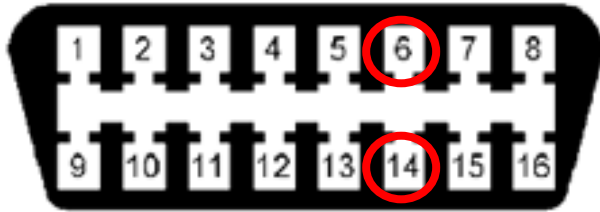
If the vehicle is equipped with a pre-refresh tech system, follow Step 10 Part A. If the vehicle is equipped with a post-refresh tech system follow Step 10 Part B instead (page 11).

PART A: Confirm the technology system of the vehicle. Locate the OBD-II Port under the steering wheel, near the front hood release lever. Unbolt the two bolts using a socket for easier access to the rear side of the plug.



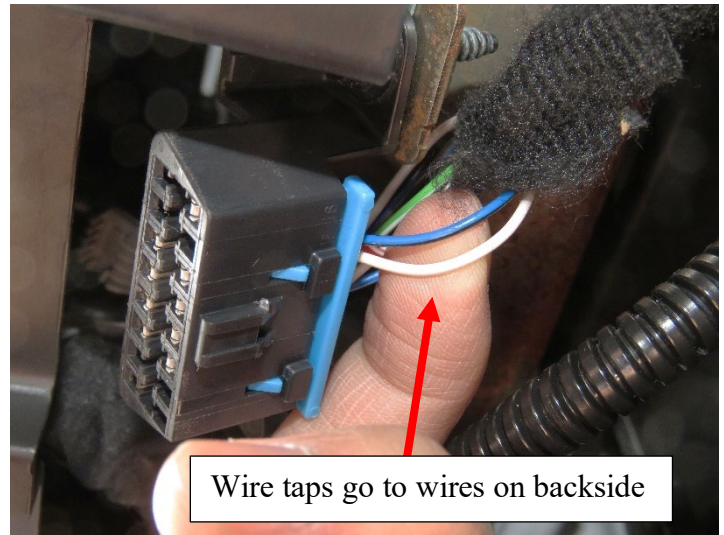
Connect the High and Low wires from the main harness (M) using the supplied wire taps (O). Identify wires from back of the OBD-II Connector.

OBD-II Connector Pin Layout



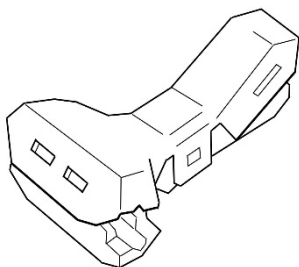
Find and use wire taps on corresponding wires for Pin 6 and 14 on backside of OBD.

Pin 6 = CAN-H
 Pin 14 = CAN-L

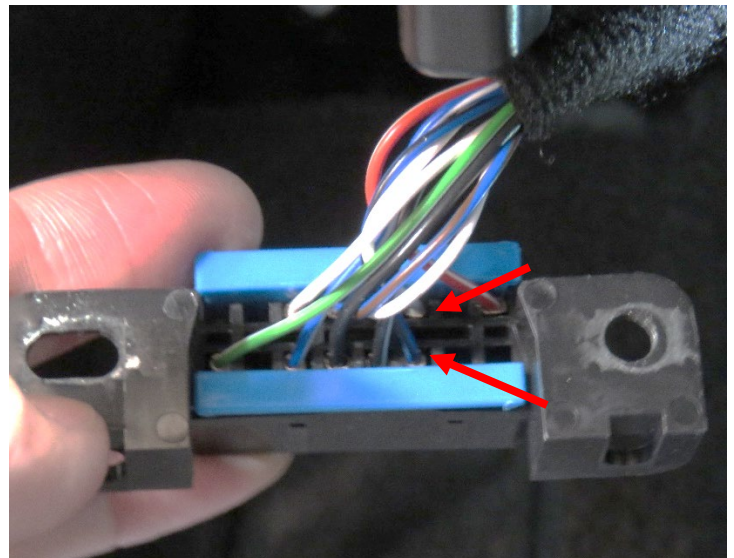


*NOTE: On some vehicles, wires may have different colors than depicted here.

Factory CAN Wire	Main Harness wire color
3rd from right (lower), Pin 14	Yellow (Low)
3rd from right (upper), Pin 6	White (High)

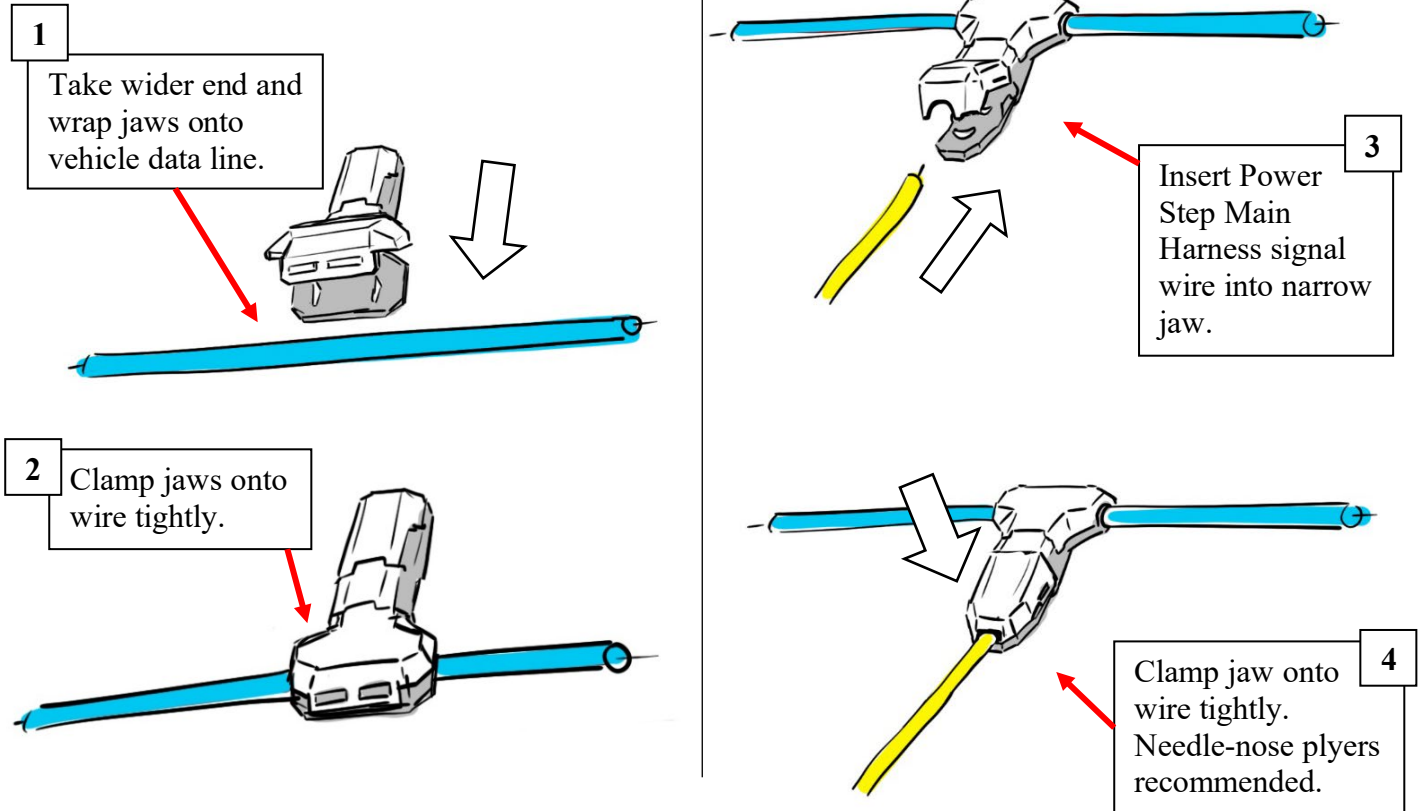


NOTE: Wire taps supplied with kit. Please see next page for guide.

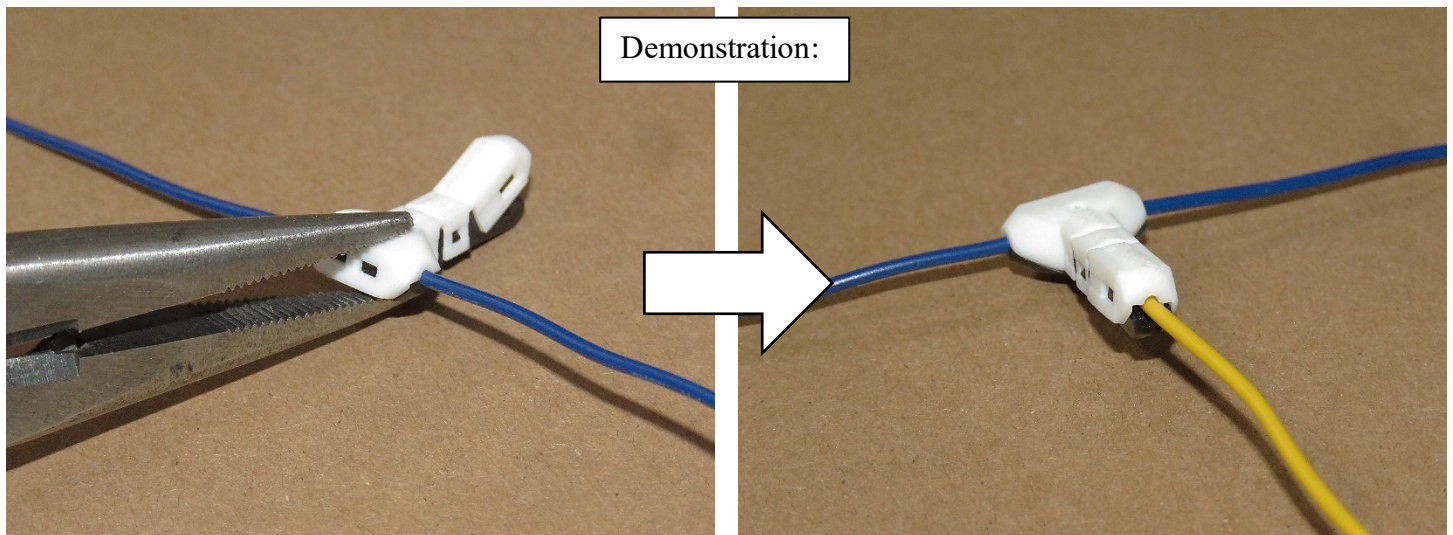


After successfully connecting the wires, return the module back into its place, tighten the previously removed nuts, and check that it is secure on the bracket.

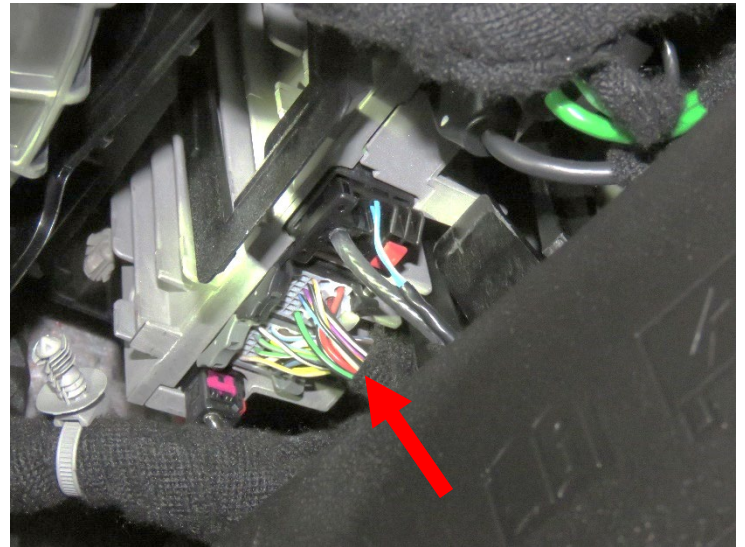
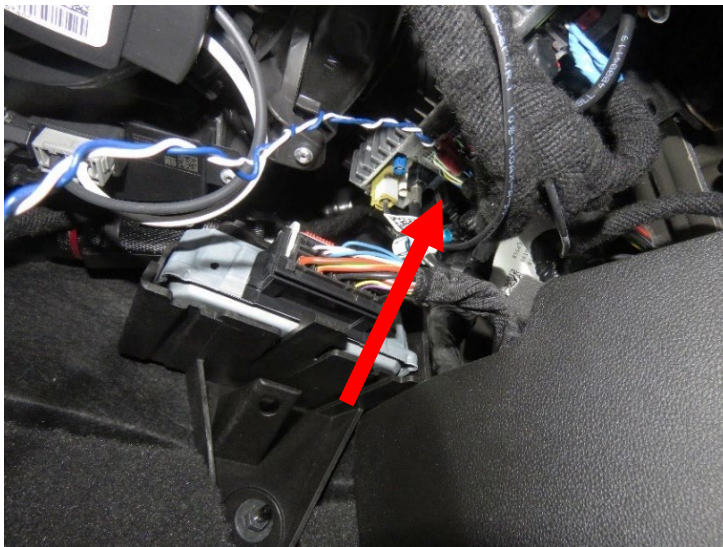
The kit comes supplied with wire taps called "shark taps". Follow the guide below to tap the wire using the "shark tap":



NOTE: Make sure wire is seated properly in the jaws before clamping. The wire being tapped must be centered on the "teeth" to make a proper tap.



PART B: Confirm the technology system of the vehicle. Under the glove compartment on the Passenger Side, locate the radio module. On some models, the underside shield may have to be removed to access the components below the glove compartment.



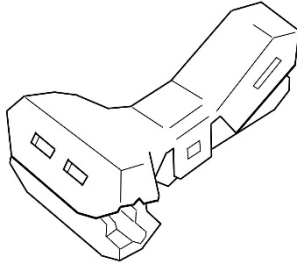
Determine the kind of radio that is installed by looking at the color of the two main connectors that are plugged in.

If your radio has a **BLACK and GREY plug**, proceed to **Part B-2**.

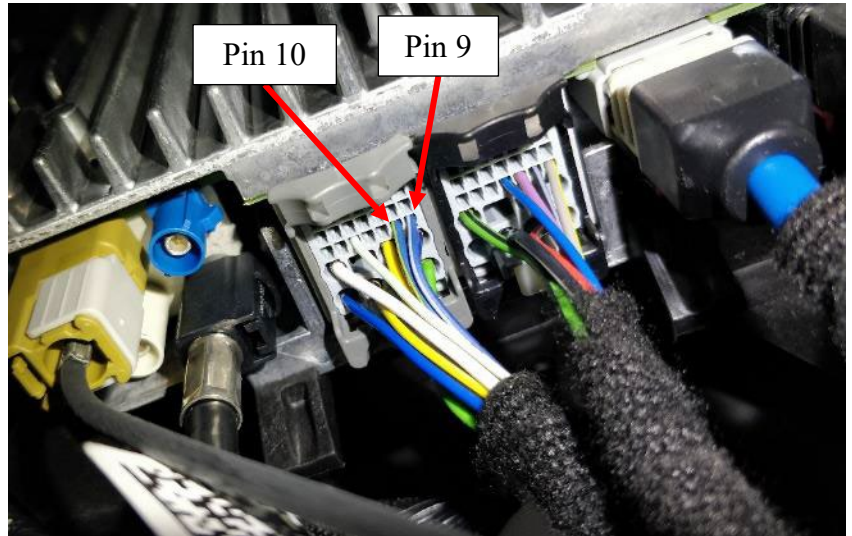
If your radio does not have these plugs, please check the underside of the glove box thoroughly, and please check the year, model, and make of your vehicle.

Part B-2:

Connect the High and Low wires from the main harness (M) using the supplied wire taps (O). After successfully connecting the wires, return the module back into its place, tighten the previously removed nuts, and check that it is secure on the bracket.

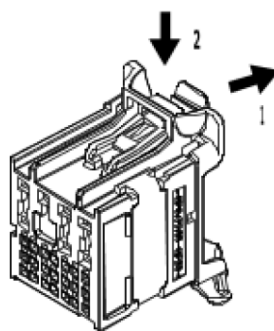
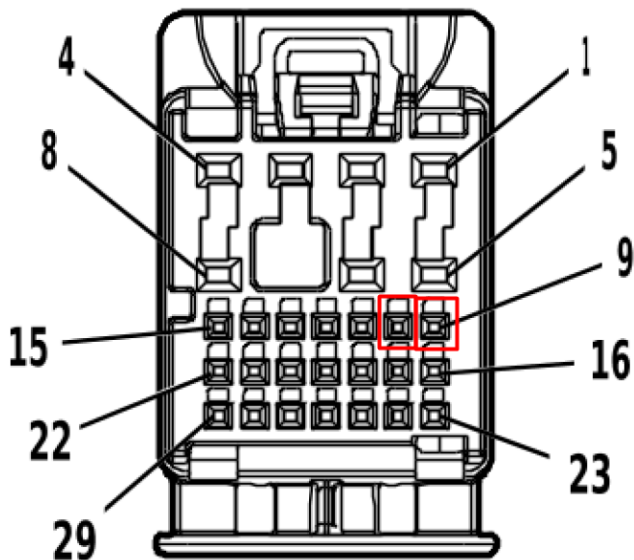
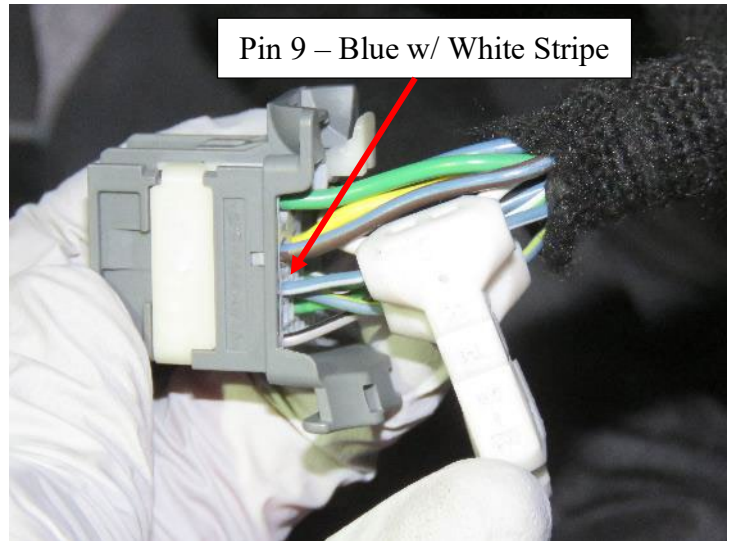


NOTE: Wire taps supplied with kit. Please see page 9 for guide.



Factory CAN Wire	Main Harness wire color
Blue w/ White Stripe (CAN-H)	White (High)
Blue w/ Yellow Stripe (CAN-L)	Yellow (Low)

*NOTE: On some vehicles, the positions of the Black and Grey plugs may be reversed.



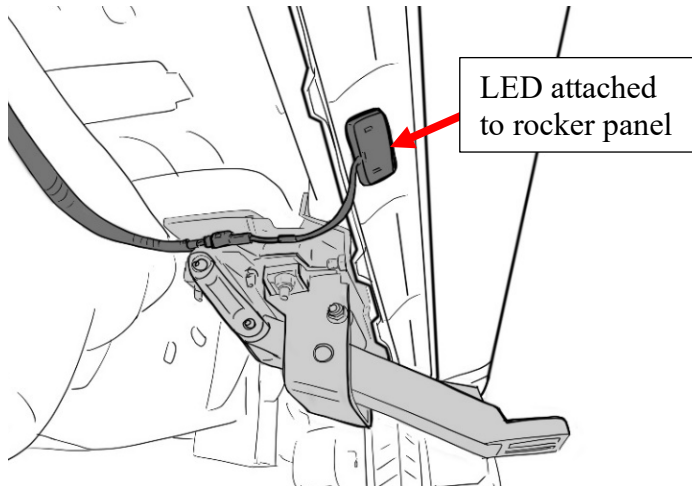
*NOTE: Please be careful of the correct orientation of the plug.

Pin 9 = High
Pin 10 = Low

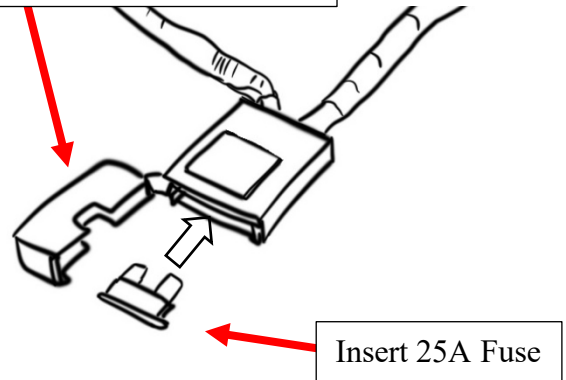
After successfully connecting the wires, return the module back into its place, tighten the previously removed nuts, and check that it is secure on the bracket.

11

Plug in LED lights (Q) into LED Y-Harness (N) and attach them to the bottom of the rocker panel. Use provided 3M double sided adhesive tape on back of LED light (Q). Replace Fuse into Fuse Box.



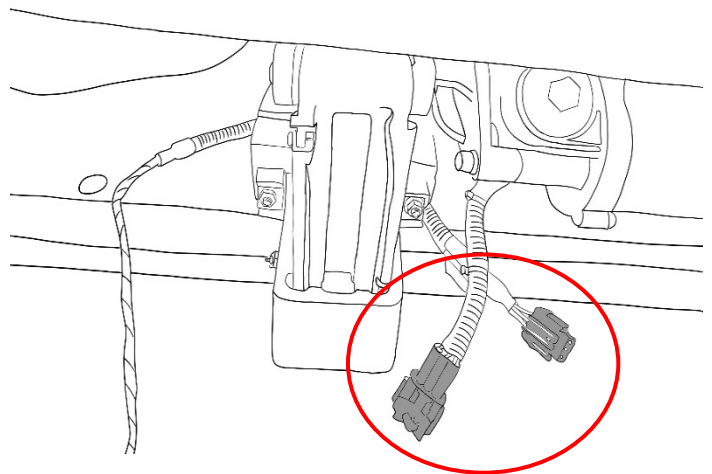
Close lid after replacing Fuse



12

Check to make sure the harnesses on the Driver Side/Left Front Bracket Assembly (A) and Passenger Side Front Bracket Assembly (C) are connected to the main harness (M) via the LED-Y harnesses (N).

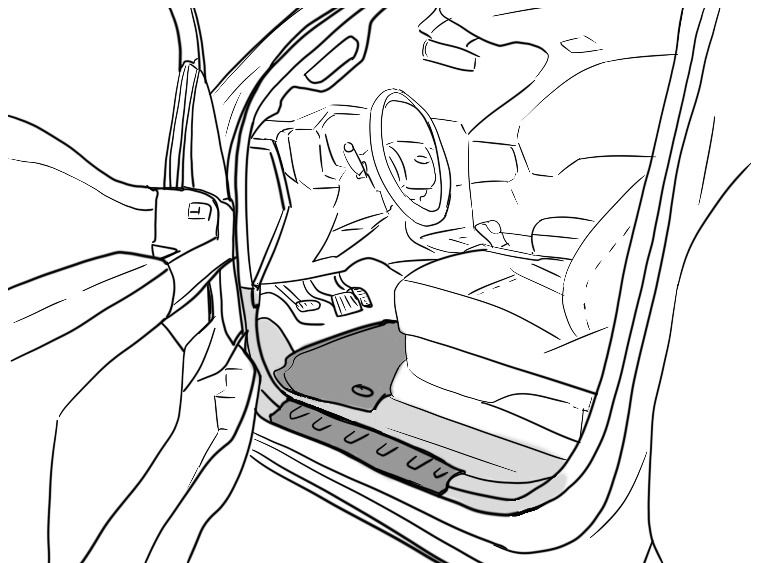
*NOTE: The linkage arms on the front bracket assemblies will not move unless both motors are connected.



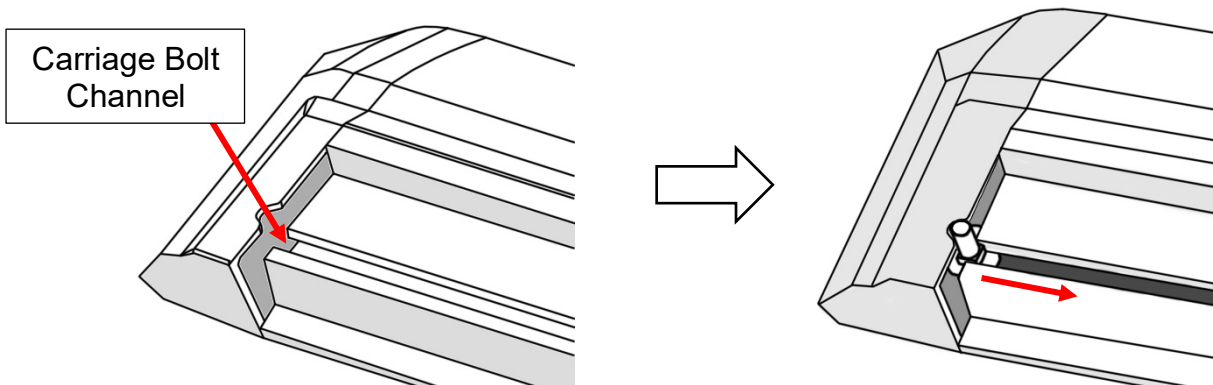
13

Seal the grommet with RTV Silicone Sealant.

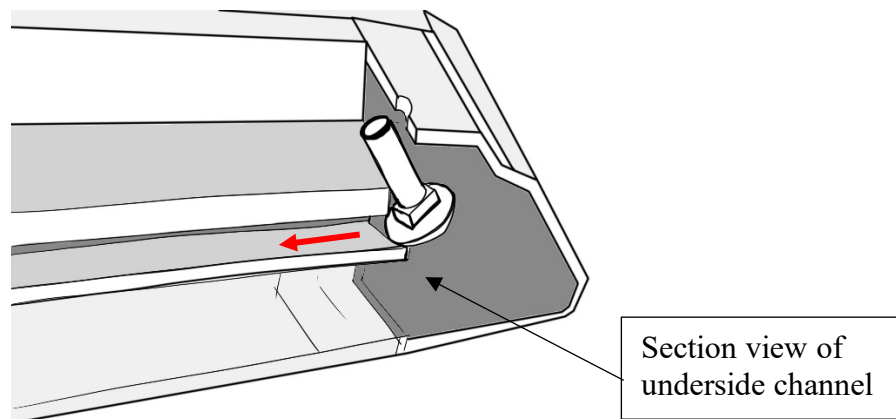
Hide wires and reattach the kick panel with the carpet fully unfurled in its original position. Reattach the door sill panel and check to make sure there are no obstructions or potential snag points around the brake pedal area.



- 14** Prepare the power step boards. Locate the end of the boards and slide the M6 Carriage Bolts (E) into the channel on the underside of the board. Insert a total of 4 carriage bolts (E).



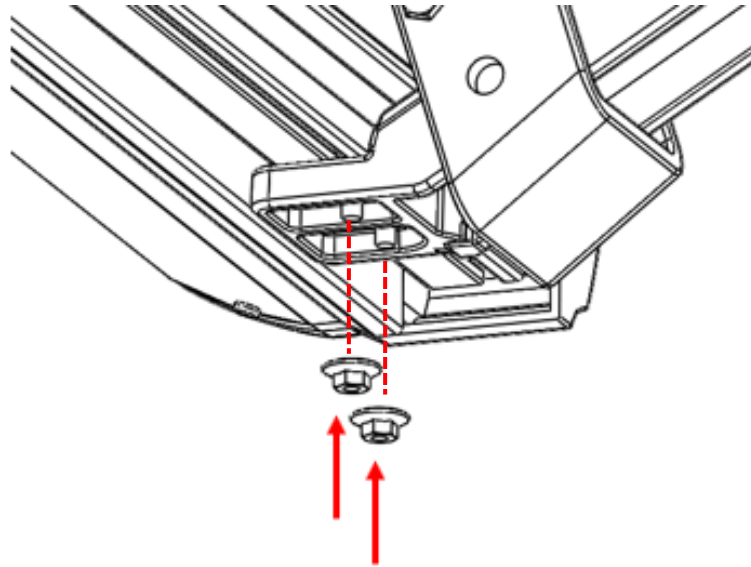
Use the notch in the board's end caps to feed the bolts into the channel.



- 15** Perform a function check by closing the driver side front door and opening it again. The front bracket assembly (A) motor should activate the linkage arm and move it into the down or "deployed" position.

After deploying linkage arms, unplug main harness connector, while front door is open, to hold deployed position for running board installation.

Line up the carriage bolts (E), under the power step boards, with the slots on the linkage arms (A & B). Insert the 4 carriage bolts (E) into the slots on front and rear linkage arms. Adjust board to desired position. Moderately hand tighten the flange nuts (G) onto the carriage bolts.



Once the board is adjusted, plug in main harness (M) connector to return power to the linkage arms. Open and close doors several times to deploy and retract the steps to settle the steps into their natural alignment. After cycling the step, tighten all hardware on the board and brackets.

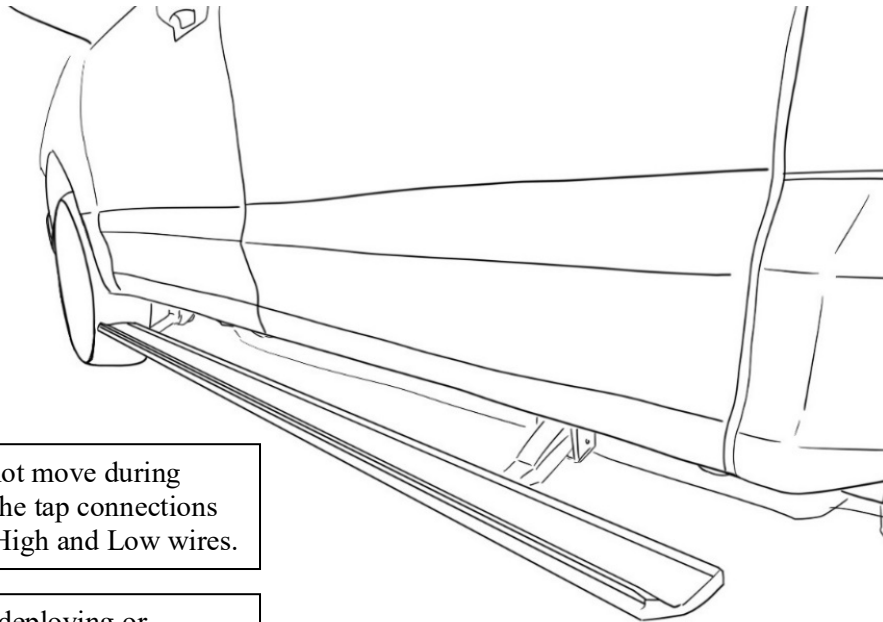
Some further adjustment may be required for desired step position. Repeat for passenger side.

- 16** Perform system check and troubleshooting. If board is making irregular movements or noise, readjust the boards as follows:
- With board deployed loosen 6mm flange nuts under board.
 - Leave the flange nuts slightly less than snug.
 - Open and close door several times for board to settle into position.
 - With the step in the deployed position, gradually tighten flange nuts while alternating between each. Do not over tighten.

If board is making abnormal noise or the motion is binding, repeat steps “a” through “d”.

Note: If the above method does not resolve the issue, the brackets mounting to the vehicle may not be aligned properly with the vehicle. In this case, remove the board and realign brackets before attempting steps “a” to “d” once again.

Reinstall any remaining trim panels if necessary. Check and make sure all hardware is fully tightened. Perform a final system check. Finish.



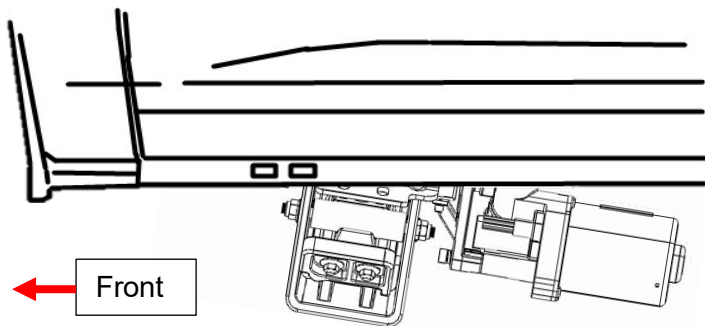
*NOTE: If board does not move during troubleshooting, check the tap connections or flip the CAN Signal High and Low wires.

*NOTE: If board is not deploying or retracting evenly, please check bracket alignment. (see below "Extra" Step)

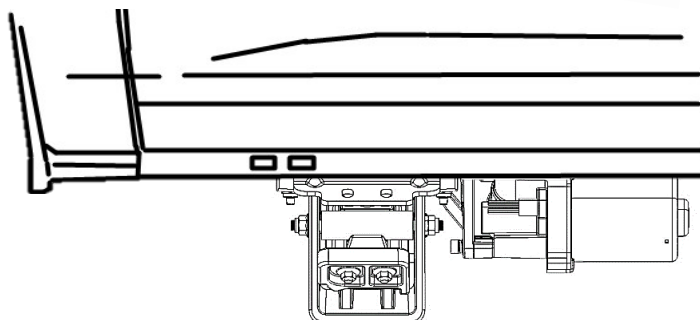
Note: Dielectric Grease may be applied to the ECU connector to protect against corrosion.

EXTRA

Look at the bracket assembly and determine if the bracket is mounted crooked. Adjust the bracket assembly so that the horizontal lines of the linkage arm are parallel to vehicle body. Once the bracket assembly is aligned correctly, fully tighten the mounting hardware.



Bad Alignment
to vehicle body.



Good Alignment
to vehicle body.