INSTALLATION INSTRUCTIONS

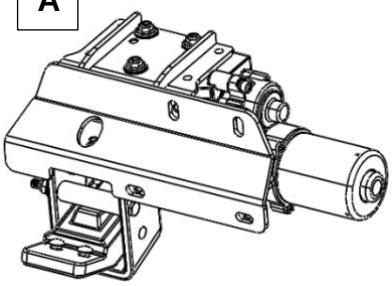
Mechanical PARTS LIST:

Qty	Item Description	Qty	Item Description
2	Running Boards (85in)	12	M8 Nylon Lock Nuts
1	Driver/Left Front Bracket Assembly	12	Flat Washers 8mm x 24mm x 2mm
1	Passenger/Right Front Bracket Assembly	8	M6 Carriage Bolts
1	Driver/Left Rear Bracket Assembly	12	Plastic Insulator
1	Passenger/Right Rear Bracket Assembly	8	M6 Flange Nuts
1	Electronic Materials Package	10	Zip Ties
1	Rubber Sleeve		

Electronic Materials Package PARTS LIST:

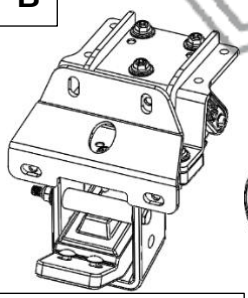
Qty	Item Description	Qty	Item Description
1	Main Harness	1	ECU
2	LED Y-Harness	4	LED lights
2	Wire Taps		

A



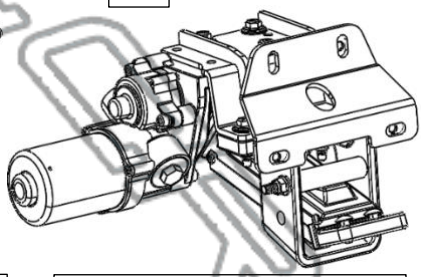
Driver Front Bracket Assembly

B



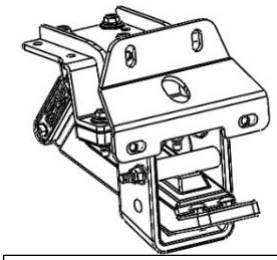
Driver Rear Bracket Assembly

C



Passenger Front Bracket Assembly

D

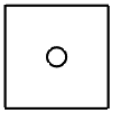


Passenger Rear Bracket Assembly

E

M6 Carriage Bolt

F



Plastic Insulator

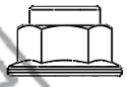
G

M6 Flange Nut

H

Flat Washer

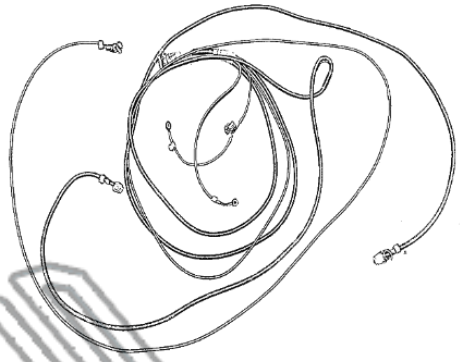
I



M8 Nylon Lock Nut

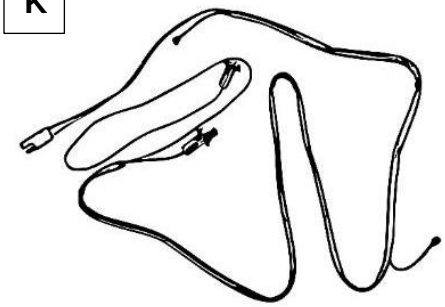
*__NOTE:__ Driver and Passenger Rear Bracket Assemblies are the same.

J



Main Harness

K



LED Y-Harness

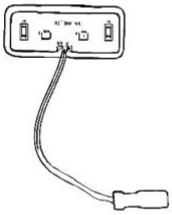
L

Wire Taps

M

ECU

N



LED Lights

TOOLS REQUIRED

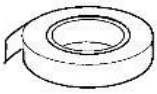
Rachet

8mm
10mm
13mm

Socket

Extensions

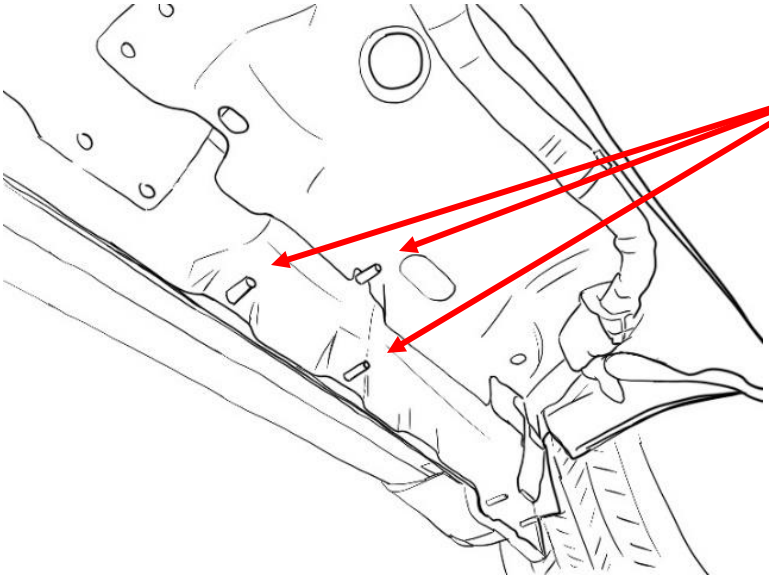
Wrench

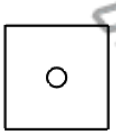


Electrical Tape

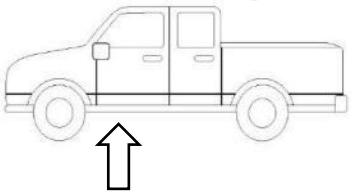
1

Locate Driver Side front mounting points on the rocker panel under the front door. Apply a plastic insulator (F) to each stud before mounting the front bracket.



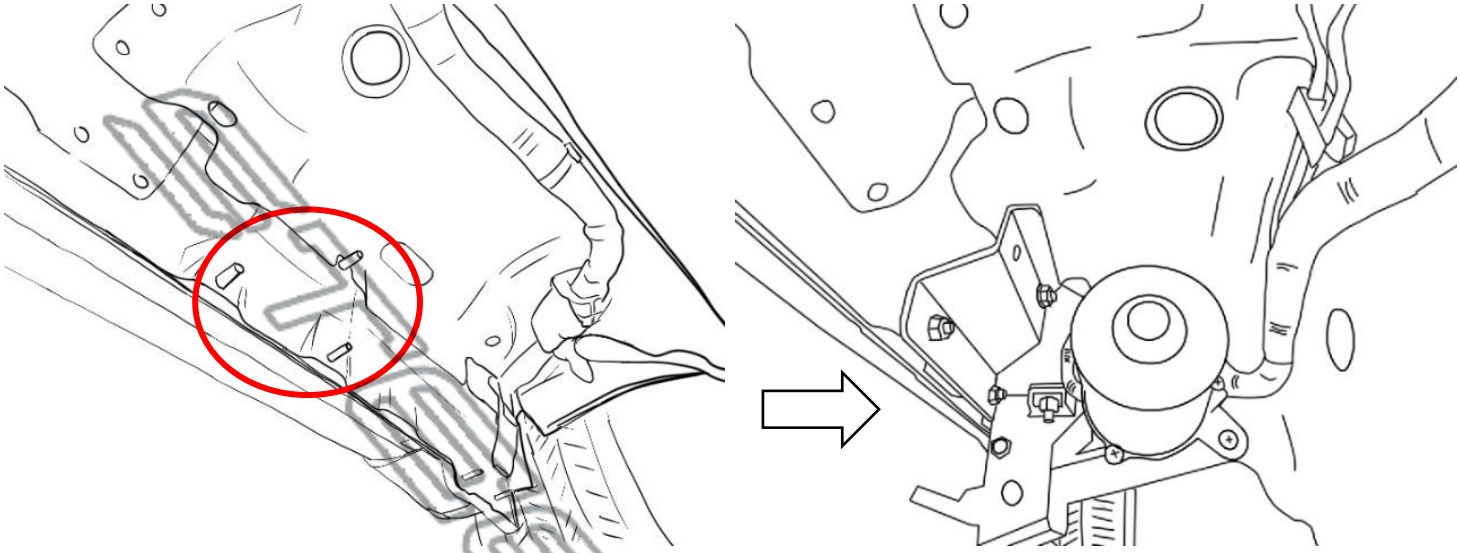


Plastic Insulator



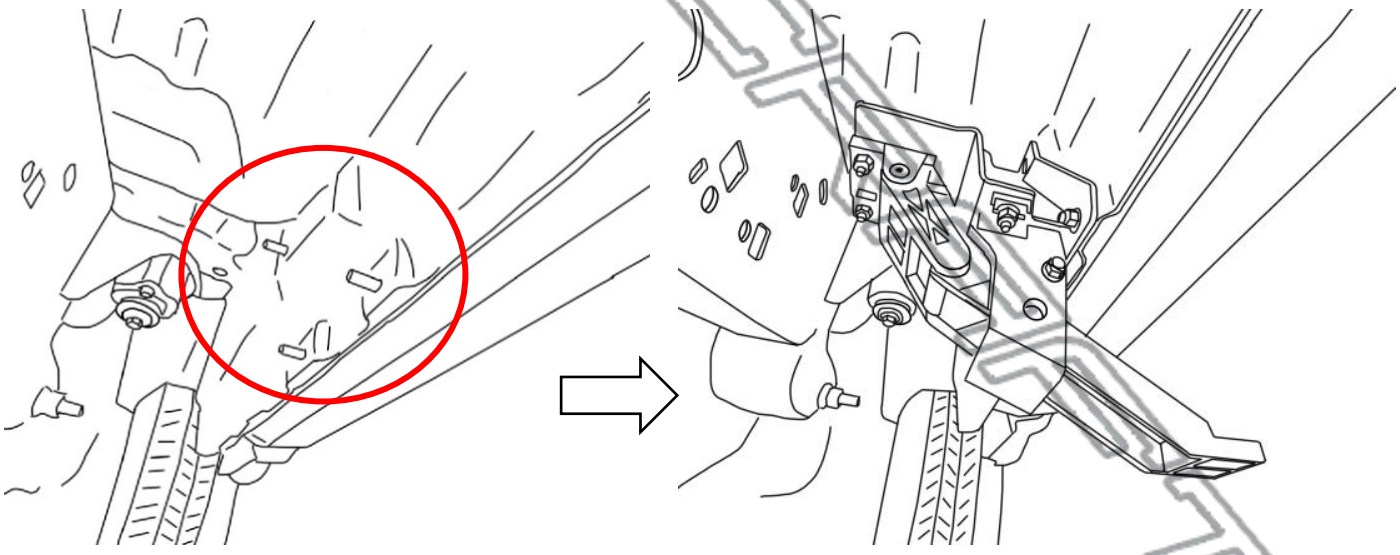
2

Next, line up front mounting bracket slots to the studs and place Driver Side/Left Front Bracket Assembly (A) onto rocker panel. Then fasten Nylon Lock Nuts (I) and washers (H). Do not tighten all the way yet.



3

Locate rear mounting points. Apply a plastic insulator (F) to each stud before mounting the Driver Side Rear Bracket Assembly (B). Next, line up rear mounting bracket slots to the studs and place Driver Side/Left Rear Bracket Assembly (B) onto rocker panel.



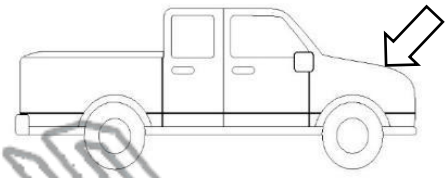
Then fasten Nylon Lock Nuts (I) and washers (H). Do not tighten all the way yet. For vehicles with e-brake cables on the Driver Side, take the rubber sleeve in the kit and slide over the brake line, near backside of the bracket assembly, to protect the line from wear. Attach sleeve to line using RTV silicone sealant.

4

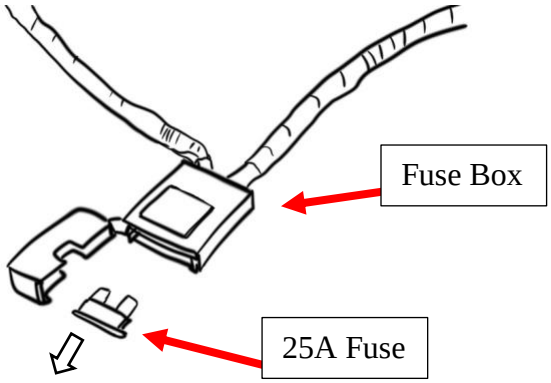
Repeat steps 1 – 3 for the Passenger Side.

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 (J).



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

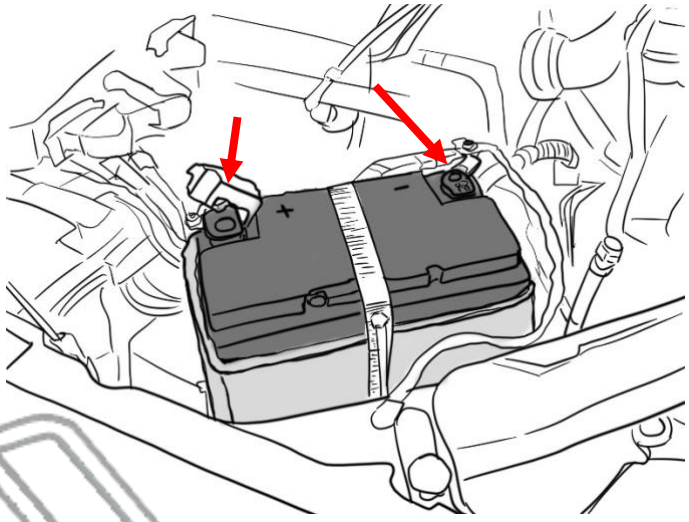


6

Connect the positive power lead on the main harness (J) to the positive battery terminal. Connect the negative lead to the negative battery terminal.

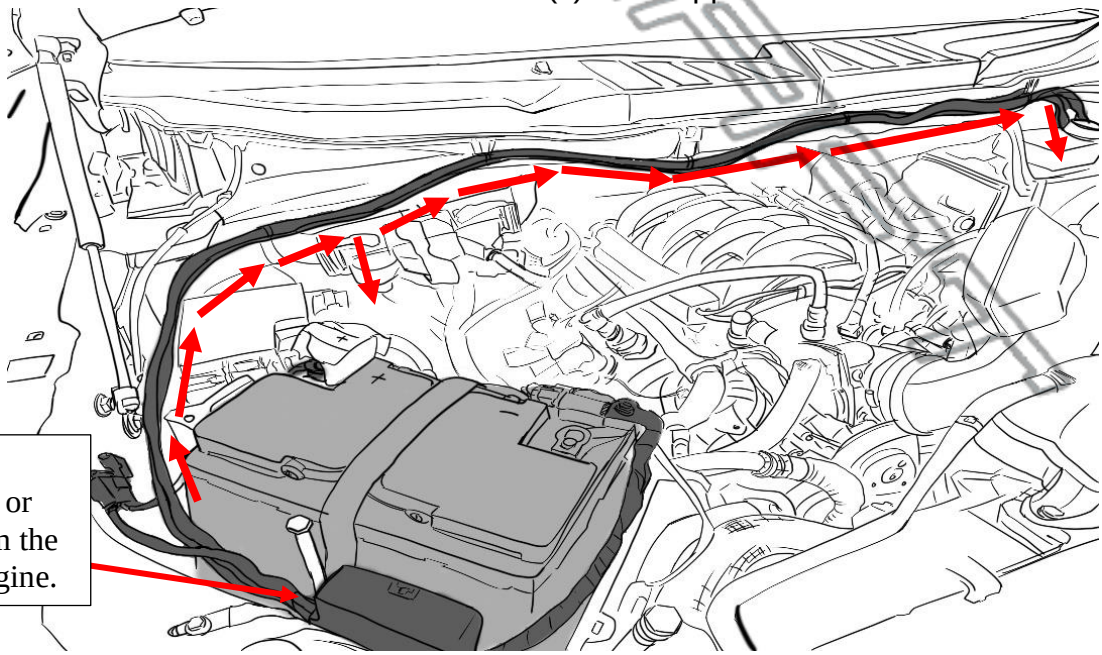
Make sure both power leads are fully secured.

Connect the ECU (M) to the main harness.



7

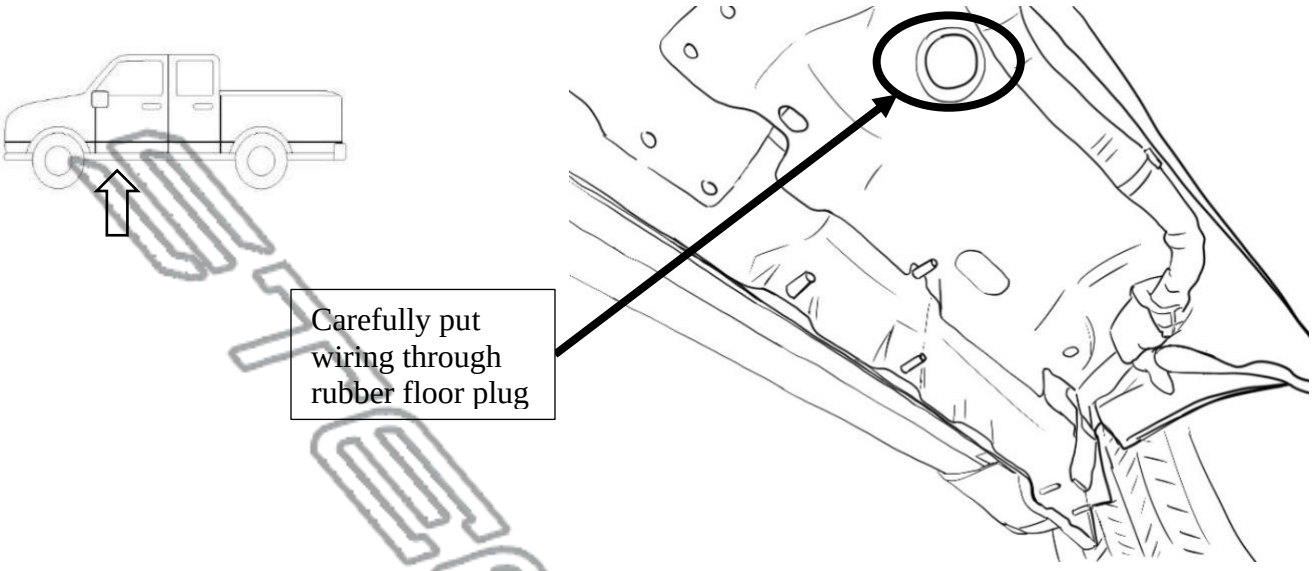
Route the main harness (J) around the battery, up along the rear of the engine compartment, and down the Driver-side wheel well. Route the shorter leg of the harness down the Passenger-side wheel well. **Be sure to avoid contact with any moving or hot engine components.** Attach and secure the main harness (J) with supplied cable ties.



ECU (M) should be secured near battery or any space away from the direct heat of the engine.

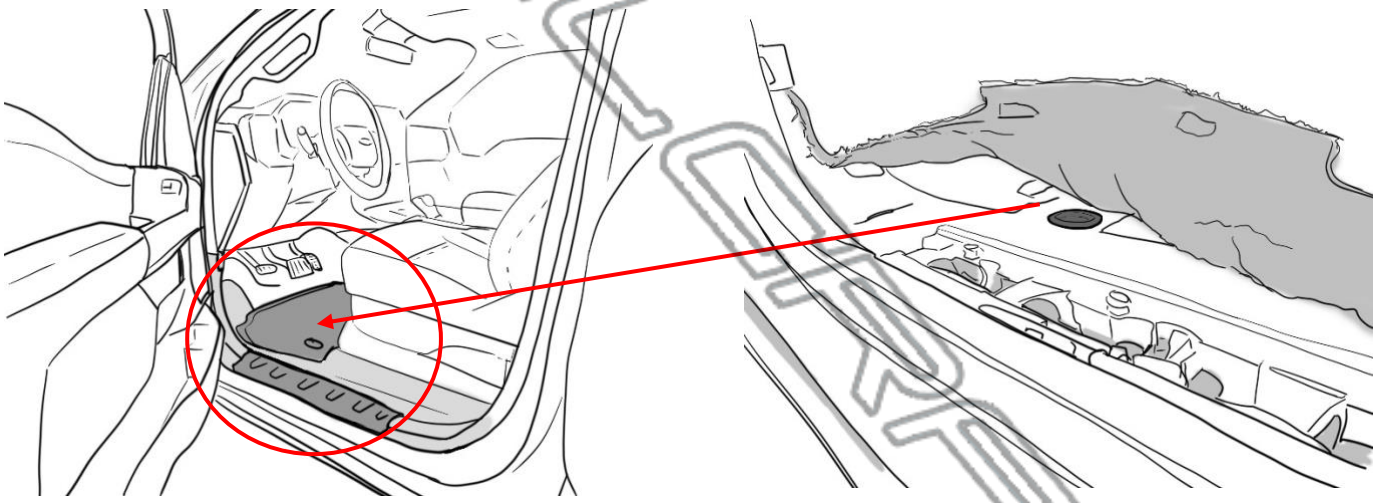
8

On the underside of the driver side, locate and remove the floor grommet in the floor panel behind the front wheel well. 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.



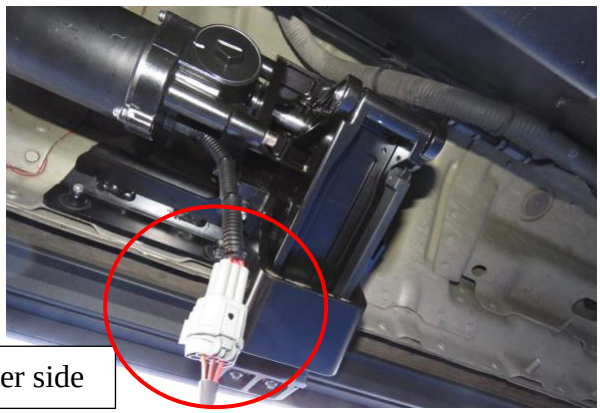
9

Inside the vehicle cabin, remove the driver-side front kick panel and bottom door sill plate. Peel back the carpet to access the hole where the grommet was removed. Feed the wires through.

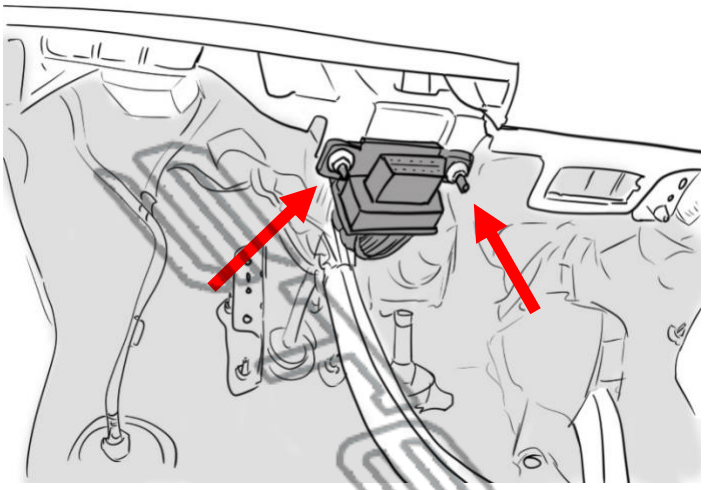


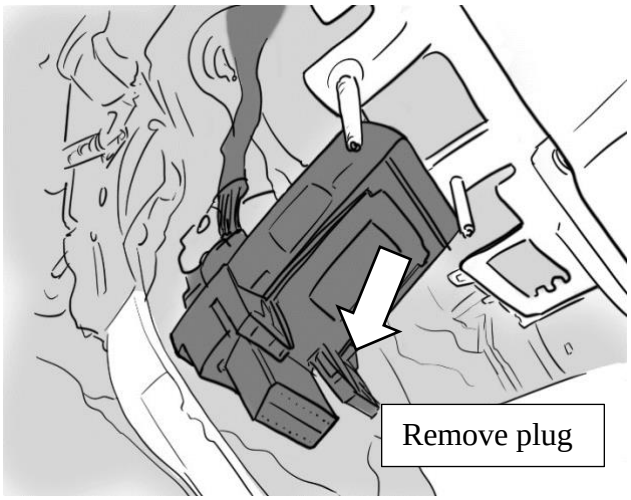
10

Attach the main harness (J) to one LED Y-Harness (K). Then attach the LED Y-Harness to the motor (do this for driver side first). Repeat for passenger side.



11 Locate the OBD-II Port under the steering wheel, near the front hood release lever. Unbolt the two flanged nuts using a socket for easier access to the rear side of the plug.

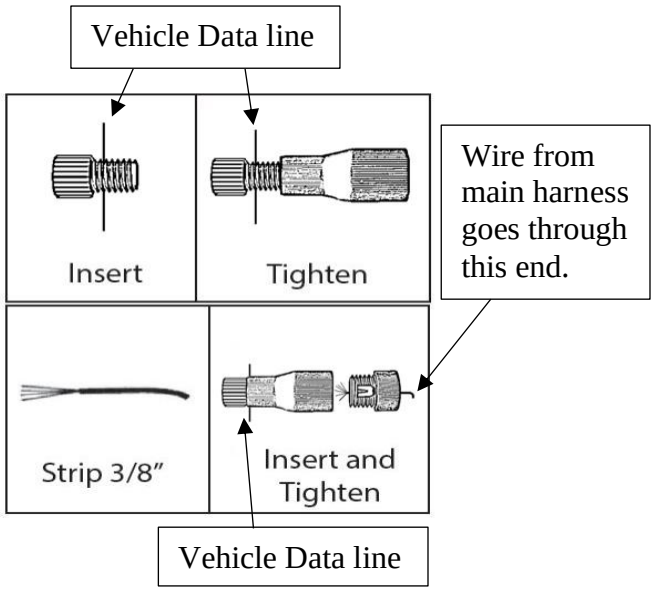


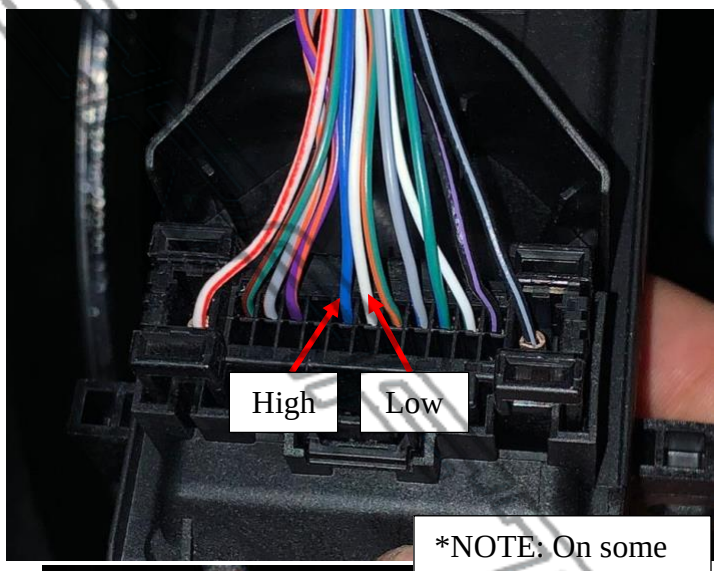


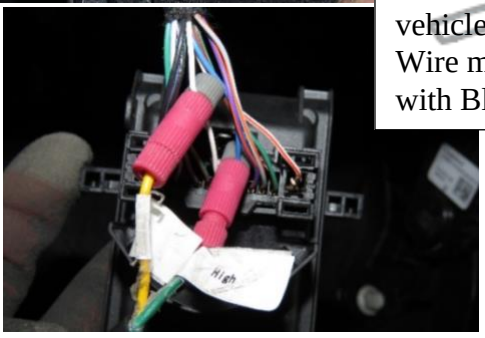
12 Identify wire configurations from back of the OBD-II Connector and continue with the appropriate steps depending on type of connector.

If wires are connected in a **single row** (*Smart Data Link Module*), **follow Step 12A**. If wires are connected to **both rows** (*Standard OBD-II Connector*), **follow Step 12B instead**.

PART A: Confirm wires are connected to only single row behind OBD-II Connector (Smart Data Link Module). Connect the High and Low wires from the main harness (J) using the supplied wire taps (L). 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.





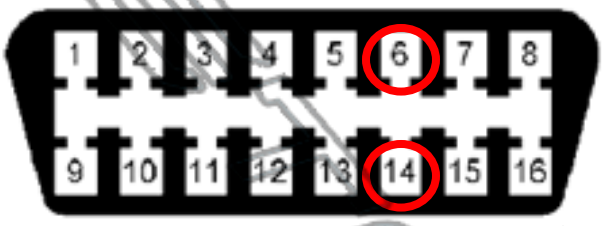


*NOTE: On some vehicles, the Blue Wire may be White with Blue Stripe.

Factory CAN Wire	Main Harness wire color
6th from right, White (CAN-L)	Yellow (Low)
7th from right, Blue (CAN-H)	White (High)

PART B: Confirm wires are connected in two rows (Standard OBD-II Connector). Identify the appropriate wires on back of the plug which correspond to the indicated positions on the front of the plug. Connect the Yellow (Low) and White (High) wires from the main harness (J) using the supplied wire taps (L). 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.

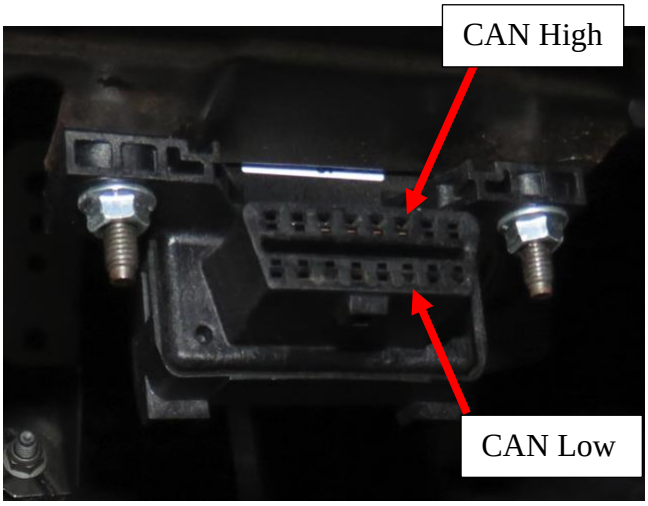
OBD-II Connector Pin Layout



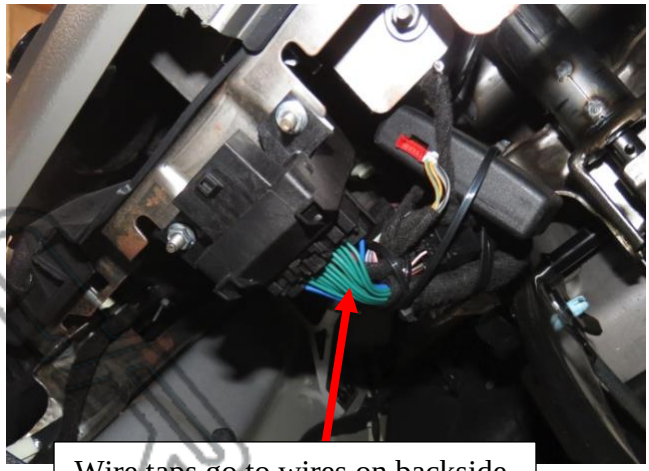
Right Side

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



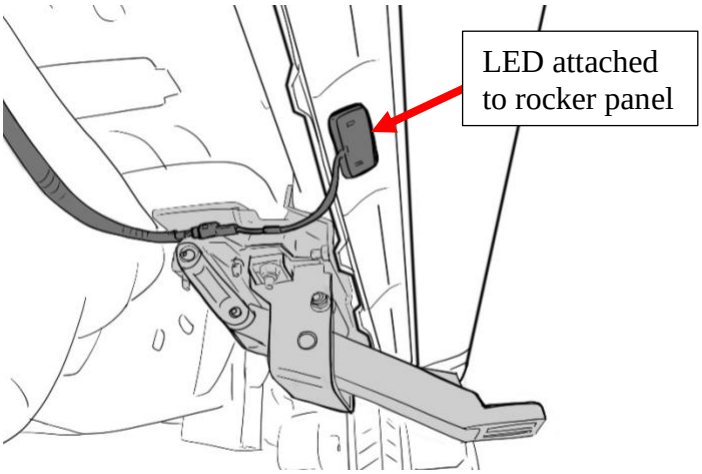
Factory CAN Wire	Main Harness wire color
3rd from right (lower), Pin 14	Yellow (Low)
3rd from right (upper), Pin 6	White (High)



Wire taps go to wires on backside

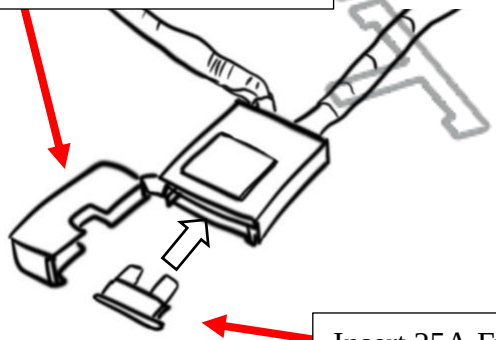
13

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



LED attached to rocker panel

Close lid after replacing Fuse

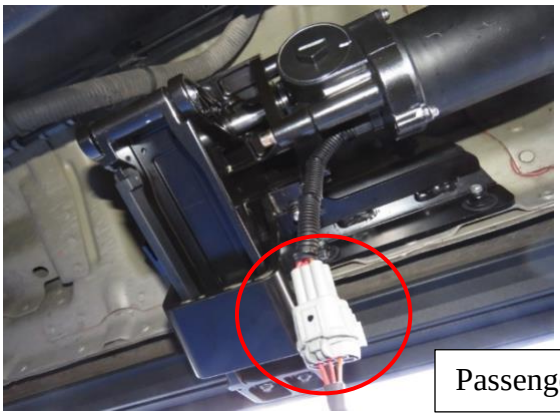


Insert 25A Fuse

14

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 (J) via the LED-Y harnesses (K).

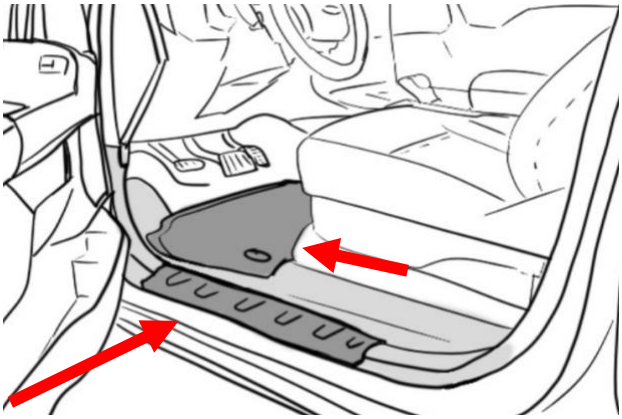
*NOTE: The linkage arms on the front bracket assemblies will not move unless both motors are connected.



15

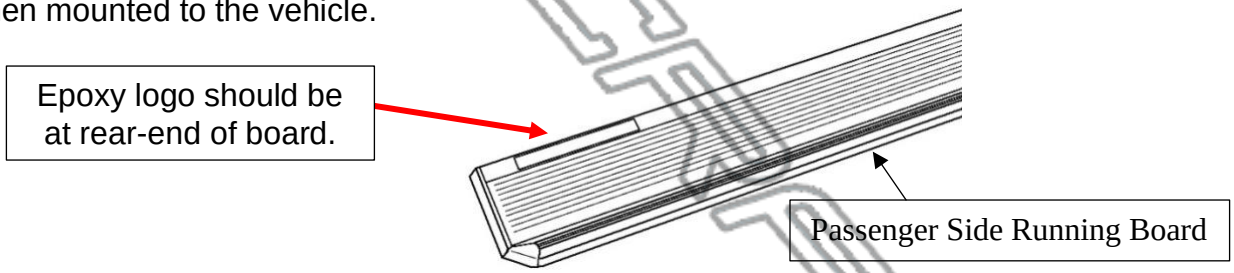
Seal the grommet with RTV Silicone Sealant.

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.



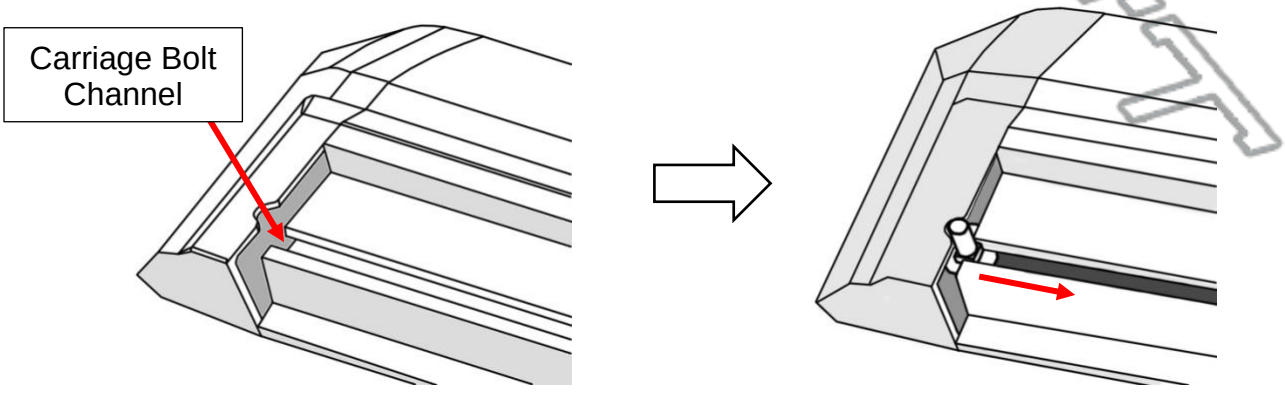
16

Locate the power step boards. Distinguish the Driver Side from the Passenger Side by the location of the epoxy logo on the running board. The logo should line up with the rear of the cab when mounted to the vehicle.

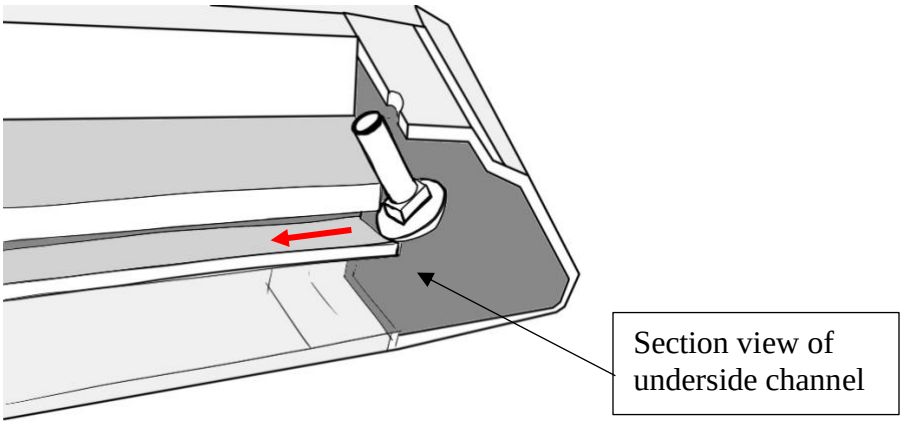


17

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.

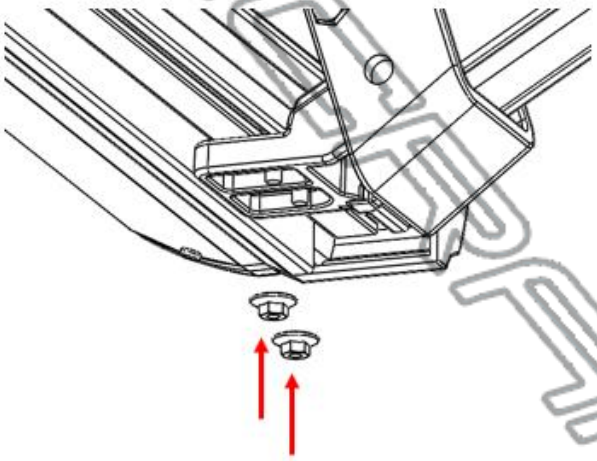


18

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 the board in the 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 (J) 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.

19

Perform system check and troubleshooting. If board is making irregular movements or noise, readjust the boards as follows:

a) With board deployed loosen 6mm flange nuts under board.

b) Leave the flange nuts slightly less than snug.

c) Open and close door several times for board to settle into position.

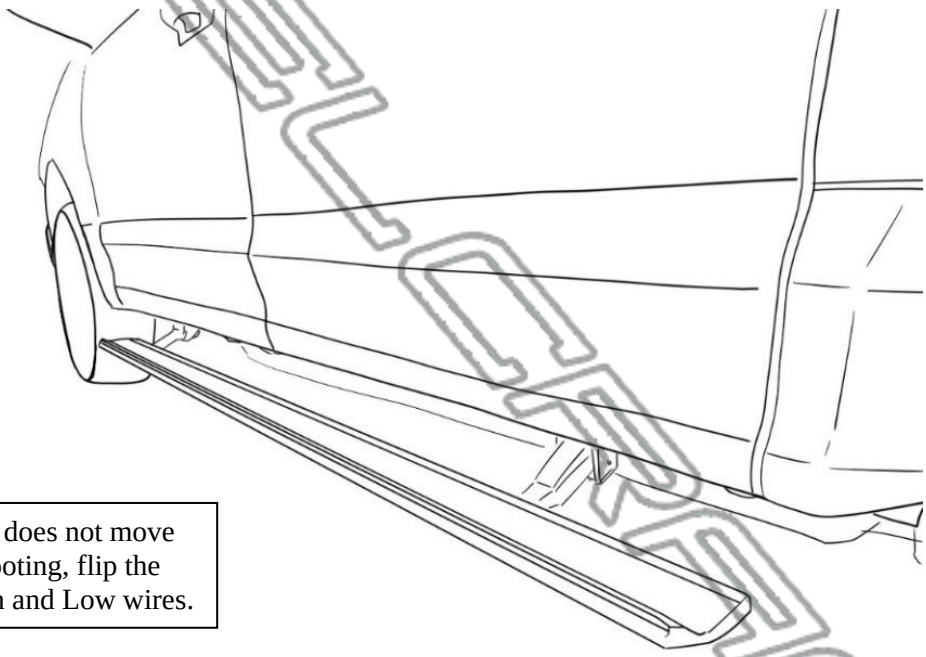
d) With the step in the deployed position, gradually tighten flange nuts while alternating between each. Do not over tighten.

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.

20

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, flip the CAN Signal High and Low wires.