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Rough Country PSR91510 Installation Instructions

Power Running Boards for Ford Expedition 4WD/RWD (2018-2025)

Part number: PSR91510

trailfortress.com/rough-country-power-running-boards-psr91510

Scan for fitment, price and install help

PRB091510

2018-23 FORD Expedition

Thank you for choosing Rough Country for all your vehicle needs.

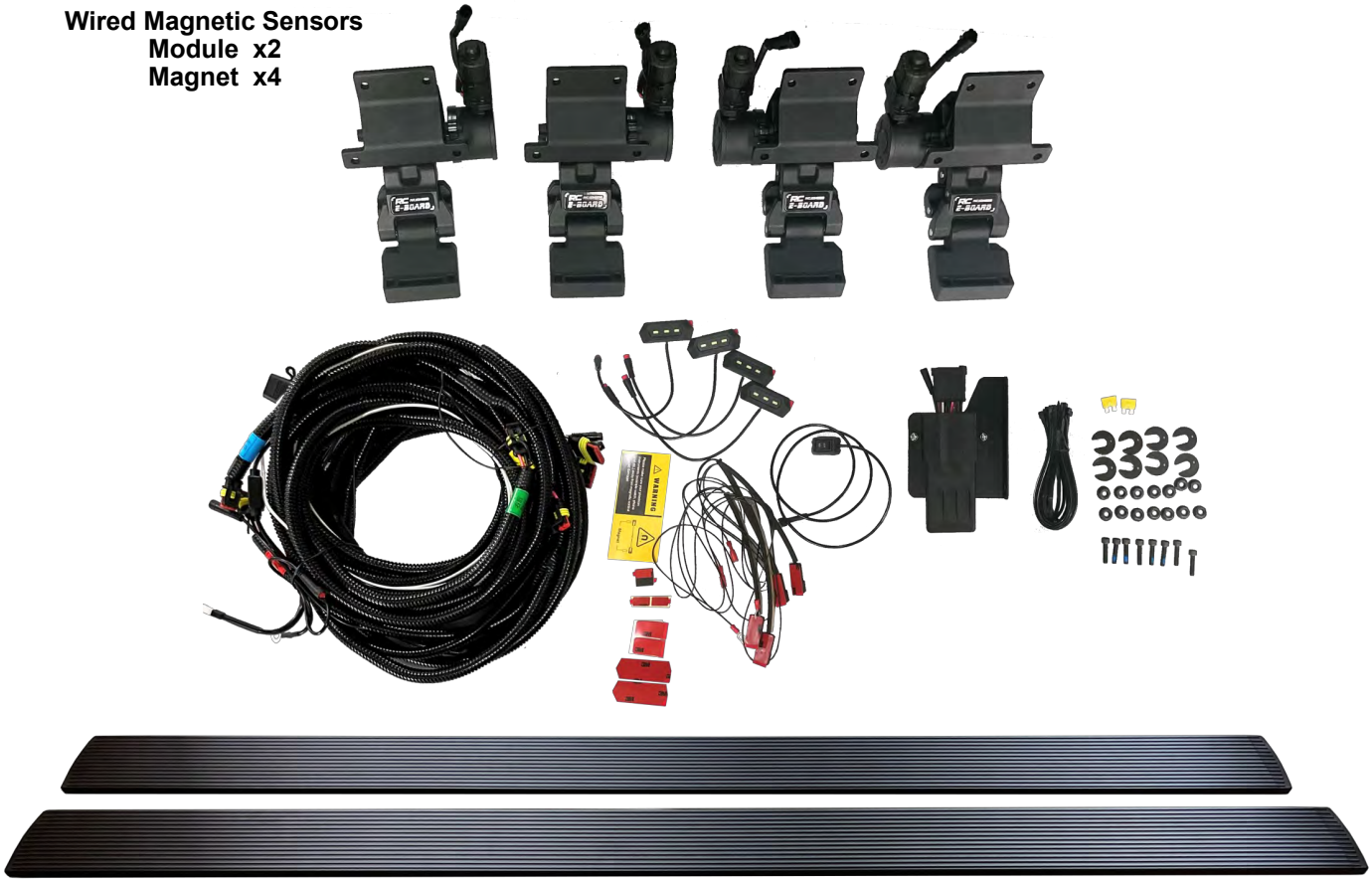
Please read instructions before beginning installation. Check the kit hardware against the kit contents shown below. Be sure you have all needed parts and know where they go.
If questions exist, please call us @1-800-222-7023. We will be happy to answer any questions concerning this product.
Check all fasteners for proper torque. Check to ensure for adequate clearance between all components.
Periodically check all hardware for tightness.

KIT CONTENTS:
Front Motor Left x1
Rear Motor Left x1
Rear Motor Right x1
Front Motor Right x1
Power Board Switch x1
Controller Assembly x1
Control Input Wiring Harness x1
Step Boards x2
LED Lights x4

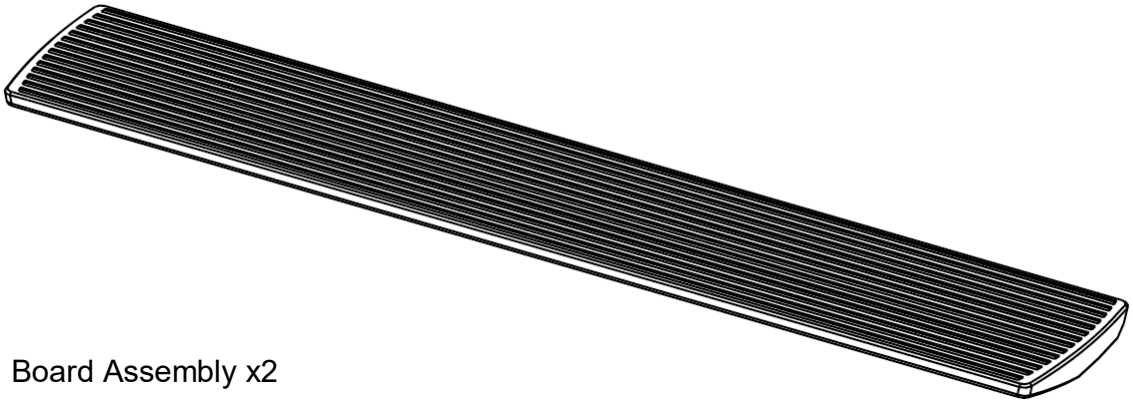
Wired Magnetic Sensors
Module x2
Magnet x4

TOOLS NEEDED:
5mm Allen
8mm Socket
10mm Socket
Rivet Tool
Ratchet
Torque Wrench
Drill Motor
1/2" Drill
Weather Proof Tape

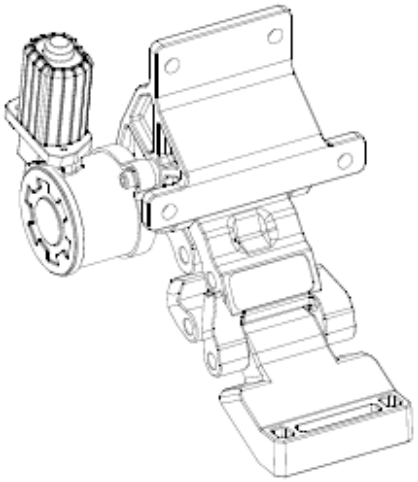
HARDWARE INCLUDED:
M8 x30 Hex Flange Bolt x14
M6 x20 Hex Flange Bolt x8
M6 x25 Socket Cap Screw x8
Shim x8
Wire Ties x25



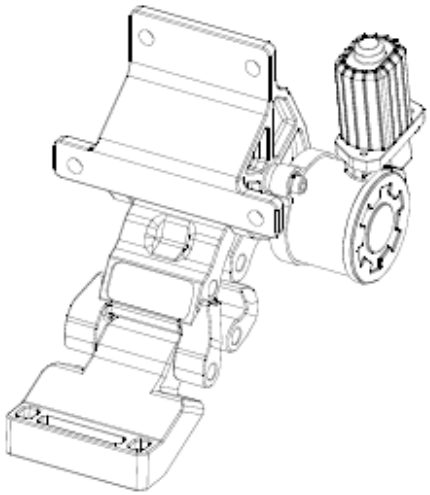
Product Packing List



Board Assembly x2



Front Left Motor x1
Rear Left Motor x1
Driver Side



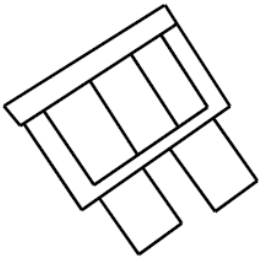
Front Right Motor x1
Rear Right Motor x1
Passenger Side



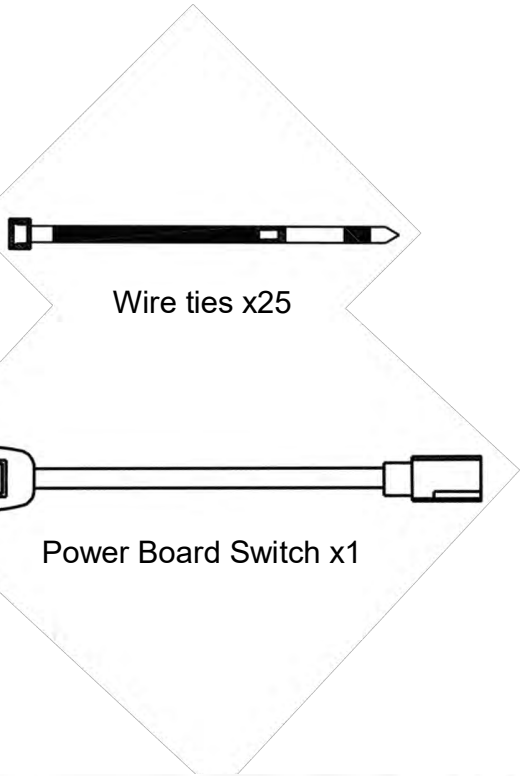
M8 Hex Flange Nut x14



M6 x25 Socket Cap Screw x8

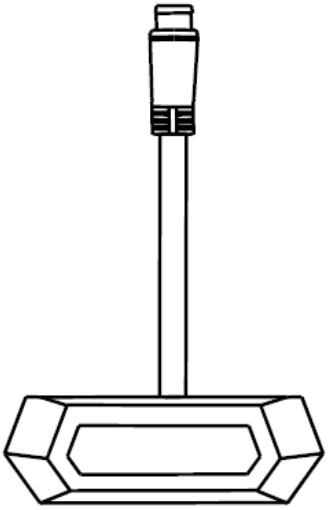


Fuse x2

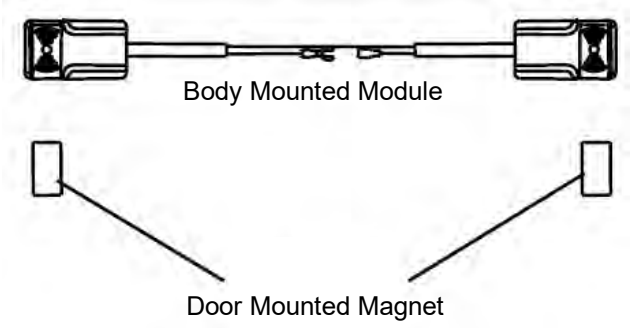


Wire ties x25

Power Board Switch x1



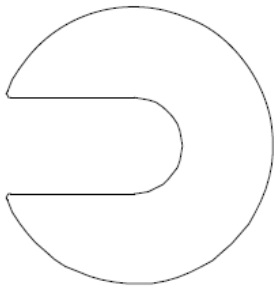
LED Lights x4



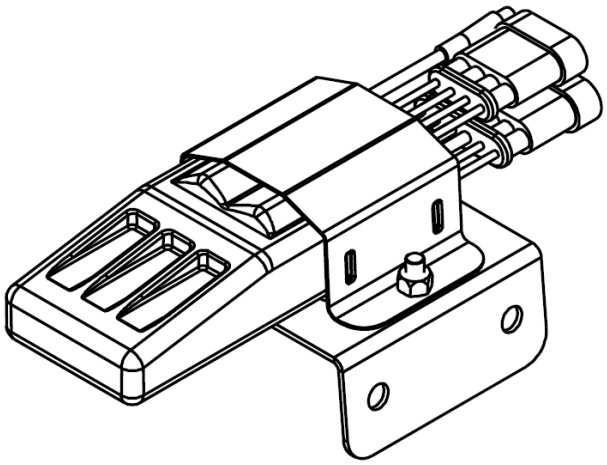
Body Mounted Module

Door Mounted Magnet

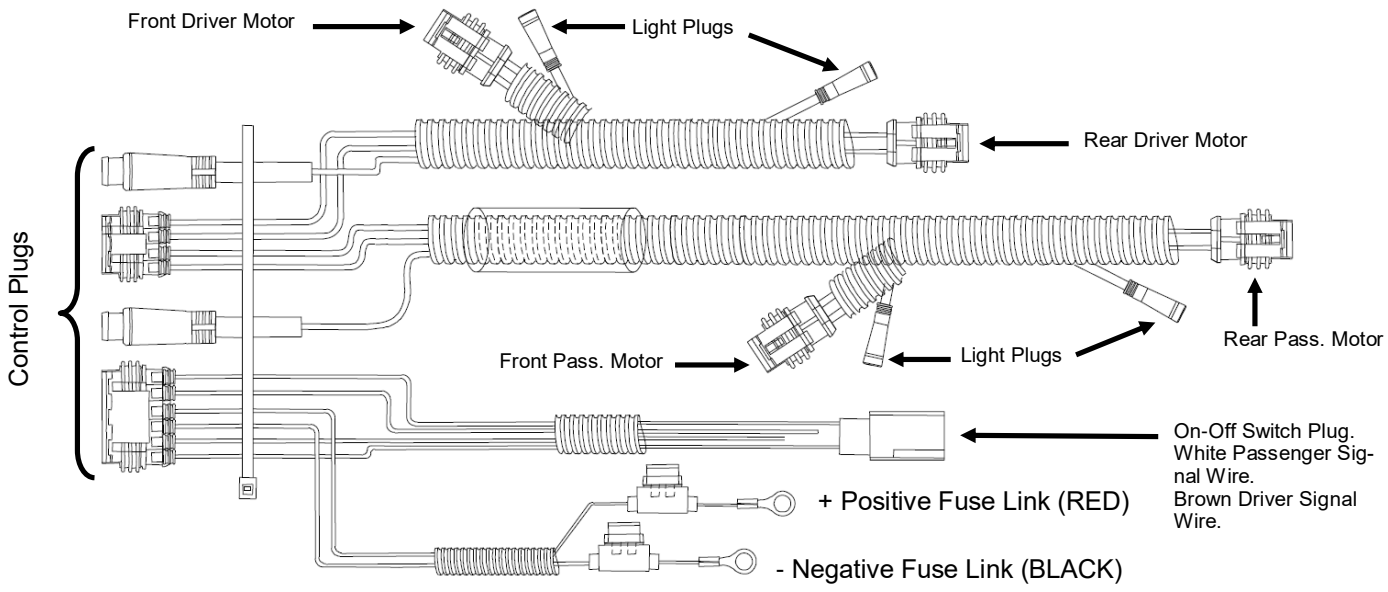
Body Mounted Module x2
Door Mounted Magnet x4



Shim x8

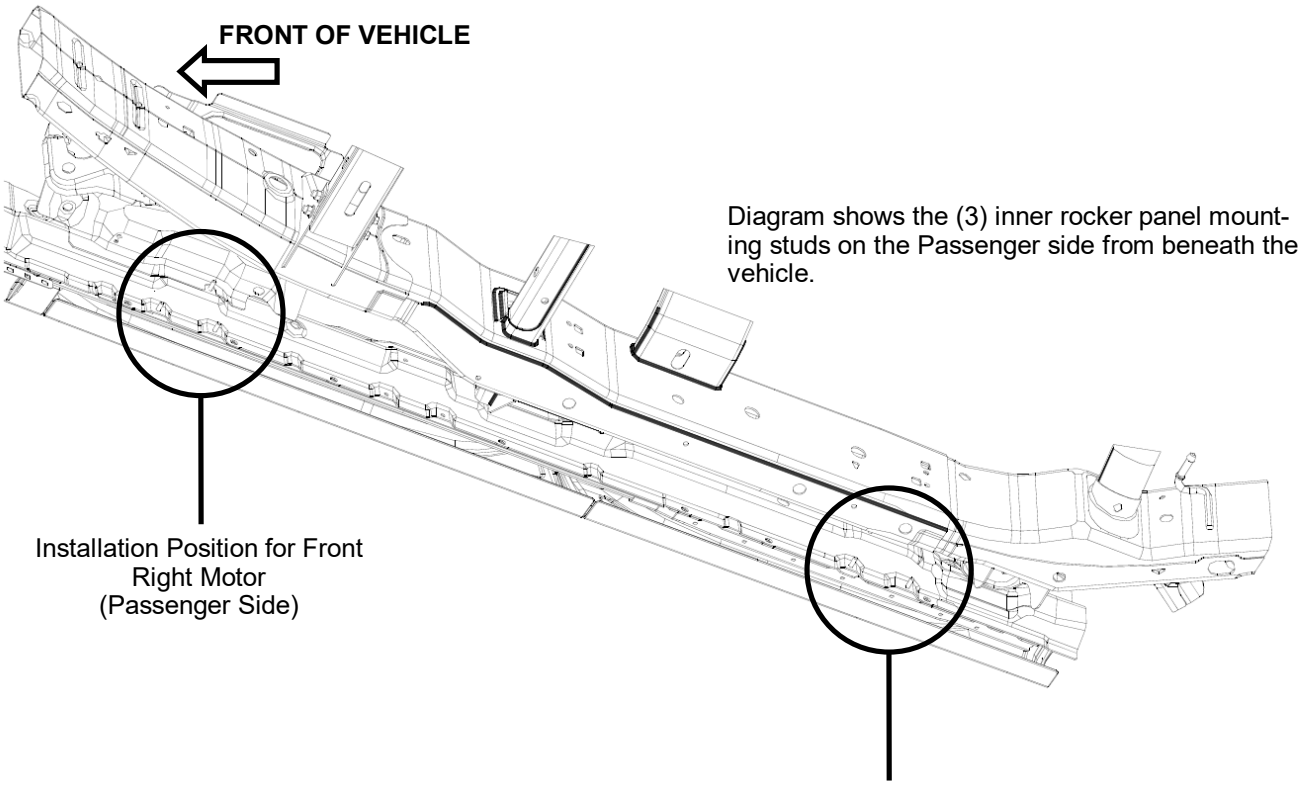


Controller Assembly x1



Wiring Harness x1

Installation Position of the Driver Side Motors and Controller Assembly



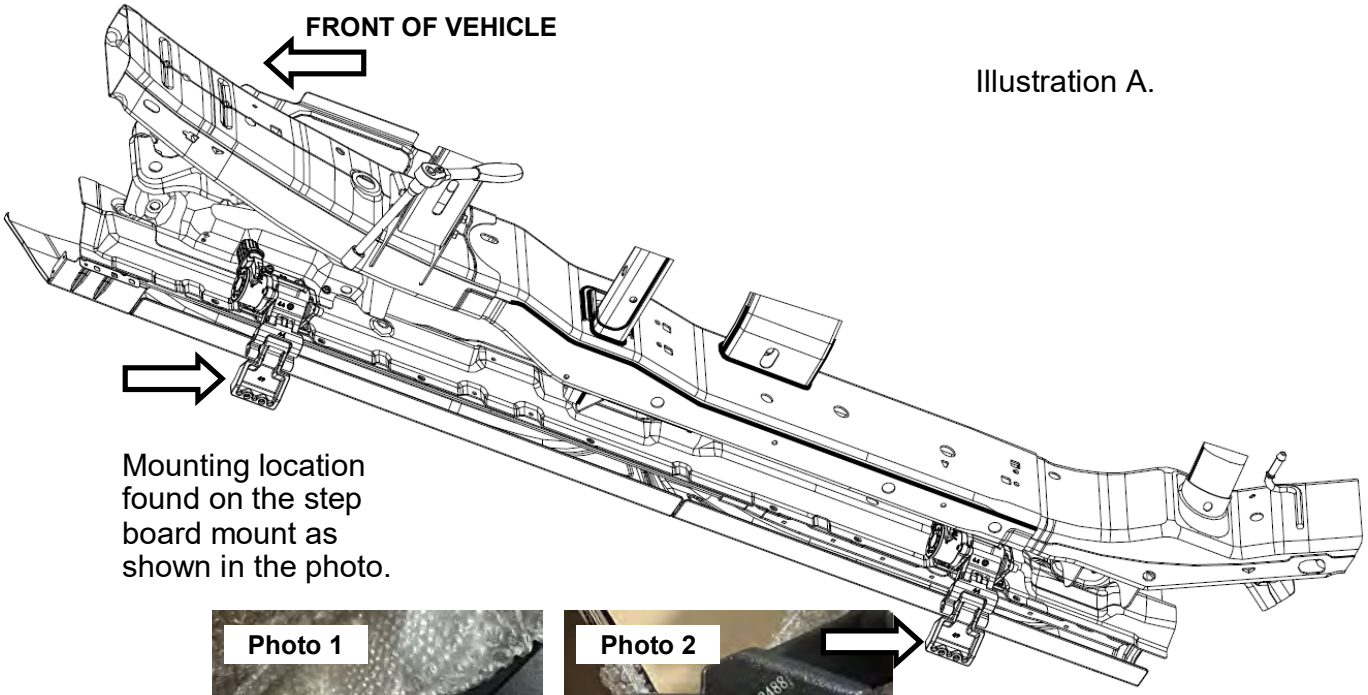


Illustration A.

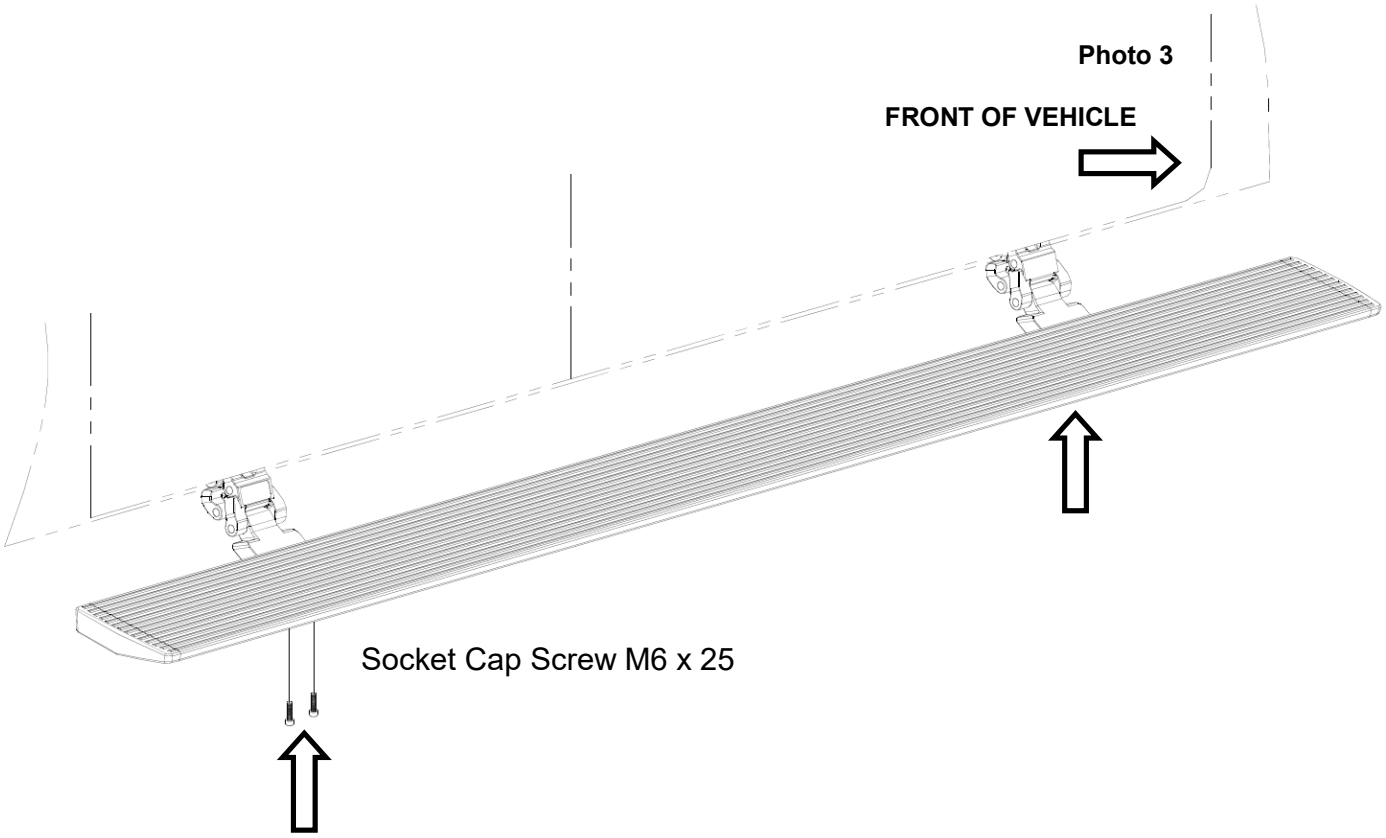
Mounting location found on the step board mount as shown in the photo.





Illustration **A** shows the step motors mounted to the inner rocker panel on the passenger side from beneath the vehicle.

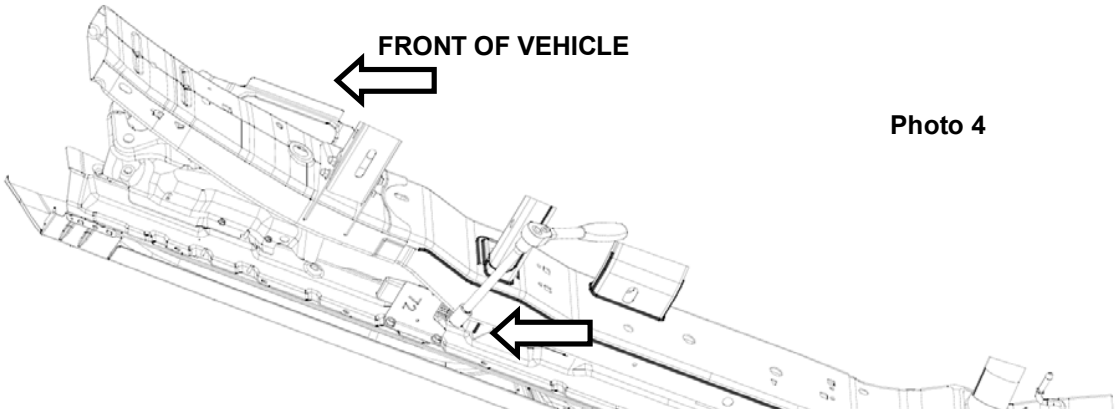
1. Place the passenger side front motor onto the (3) rocker panel studs. Secure using (3) of the supplied 8mm flange nuts. **See Photo 1.**
2. Install the passenger side rear motor using (3) of the supplied 8mm flange nuts. **See Photo 2.**
   NOTE: Do not tighten at this time, snug only using a 13mm socket.



3. Install the step board onto the driver front and rear motor brackets. Secure the board using (2) M6 x 25 Socket Cap Screw bolts into each motor bracket.

NOTE: Center the step to the cab of the vehicle. Do not tighten at this time, snug only using a 5mm Allen. **See Photo 3.**

4. At this time install the Passengers Side step motors and step board following the steps from 1-3.



5. Install the controller assembly bracket onto the passenger side center (2) studs and secure using (2) of the supplied 8mm flange nuts. Tighten using a 13mm socket. **See Photo 4.**

Photo 5

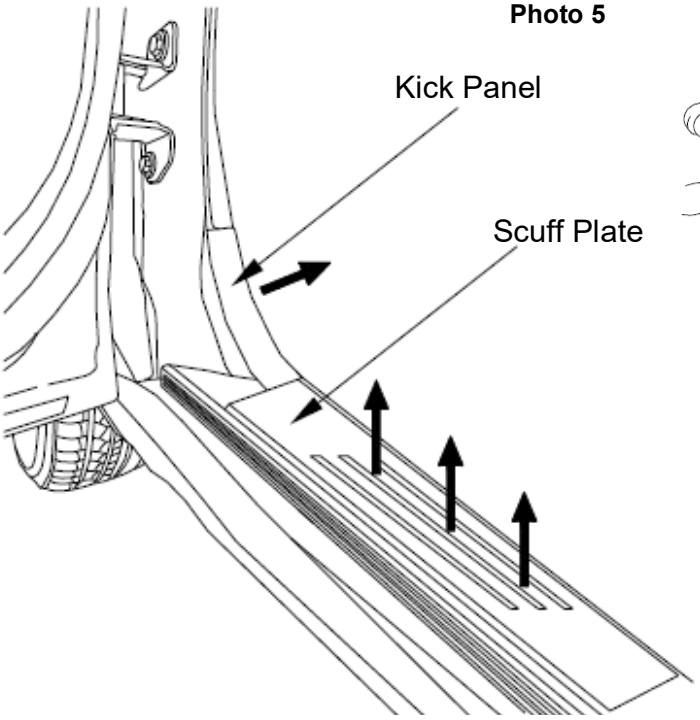
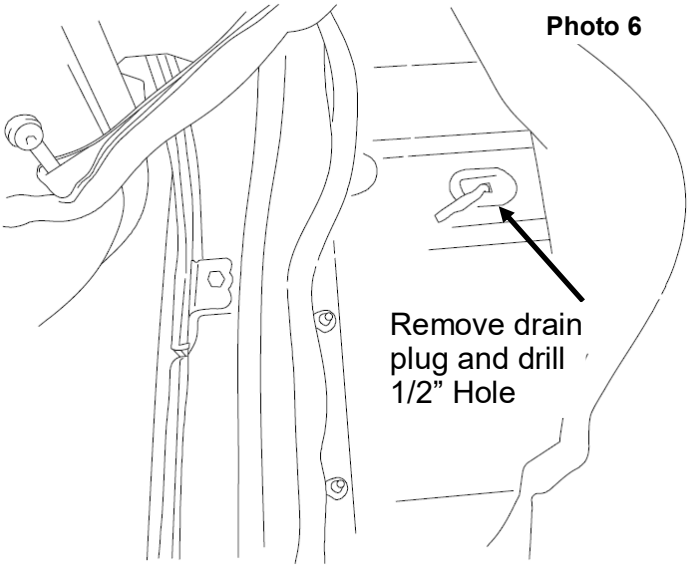


Photo 6

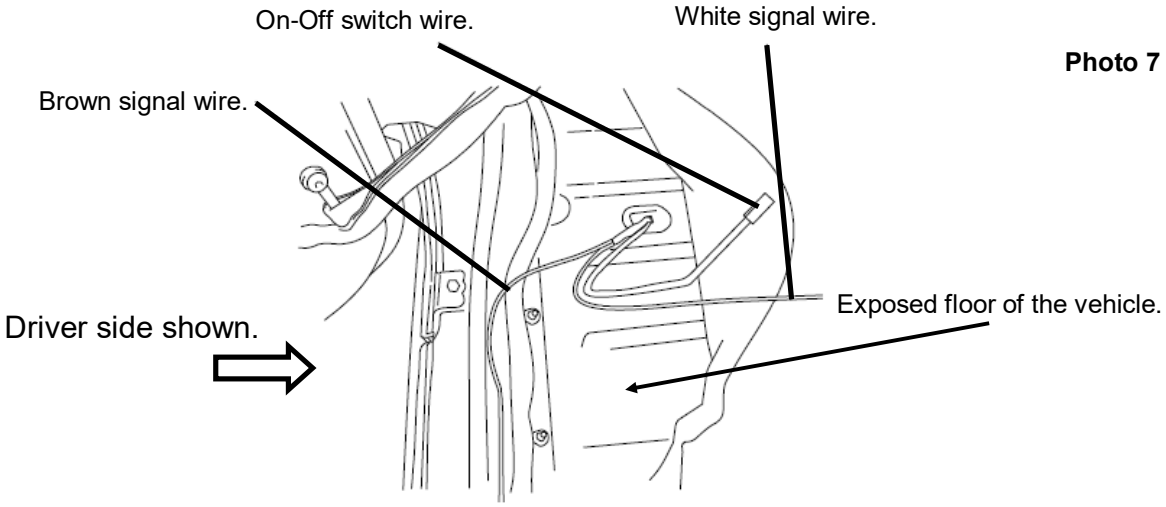


Driver side shown.

6. Remove the kick panel and the scuff plate on the Driver and Passenger side of the vehicle. **See Photo 5.**
7. Lift the carpet to expose and remove the drain plug on the driver side. In the center of the drain plug drill a hole using a 1/2” drill, re-install into the floor of the cab. **See Photo 6.**

Wiring Harness Installation

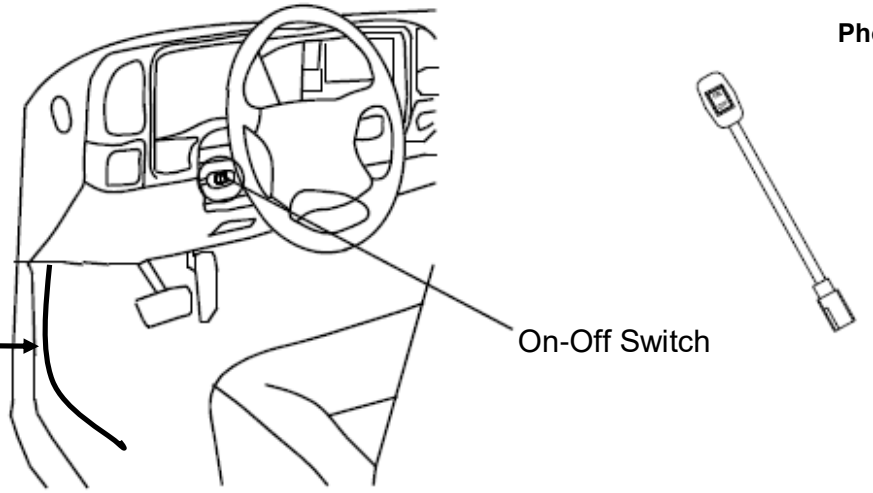
Photo 7



8. Install the supplied wiring harness’s Brown, White and On-Off switch wire through the hole drilled in the drain plug under the floor of the vehicle to the inside of the cab. **See Photo 7.**

NOTE: Apply waterproof tape to the wiring harness and the drain plug once the wiring harness has been fully installed.

Photo 8



NOTE: Secure the On -Off Switch wiring harness from the dash to the drain plug under carpet.

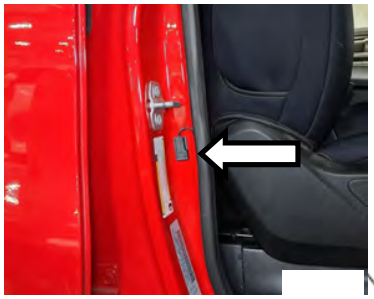
9. Mount the On-Off switch. Clean the area of installation and remove the covering on the double sided tape and apply it to the dash. Switch shown on the upper dash. **See Photo 8.**
10. Connect the On-Off switch to the wiring harness installed in the floor of the cab. Leave switch in the On position, this will keep the motors in the extended position as installed to the vehicle when power is connected. Secure the On-Off switch wiring harness behind the dash to the drain plug under the carpet.

NOTE: Normal function of the On-Off switch once power has been connected to the positive and negative fused links on the battery. (On) the steps will extend for use and entering the vehicle. Steps will retract when both doors per side are closed connecting the magnet to the module. (Off) the steps will retract to the body of the vehicle even when the doors are open and the magnet is away from the module.

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FRONT OF VEHICLE

Photo 9A



Front Passenger Door Module (C)

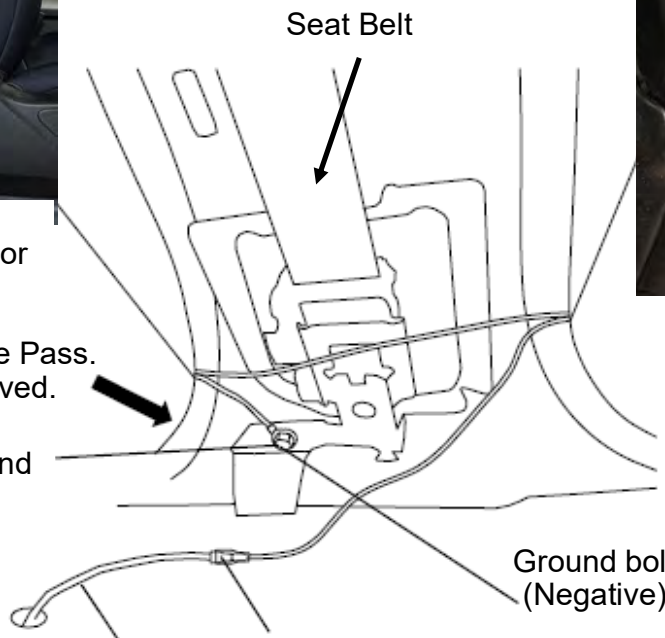
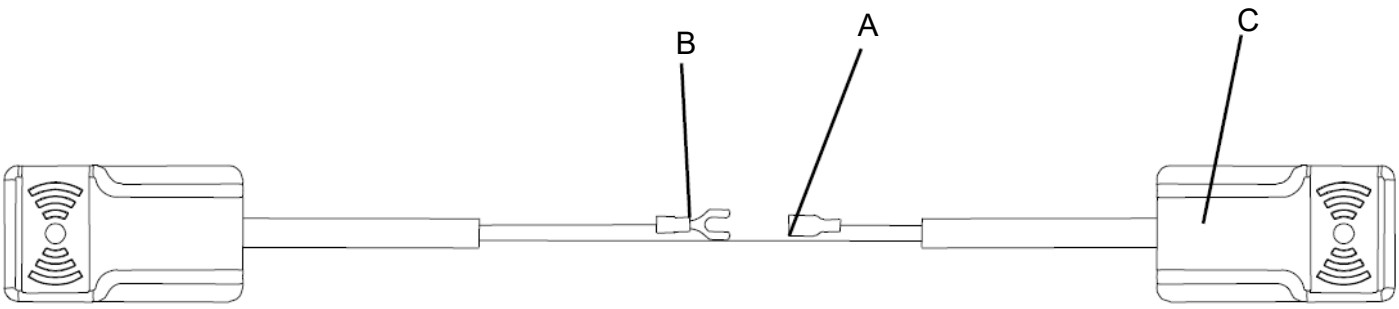


Photo 9B



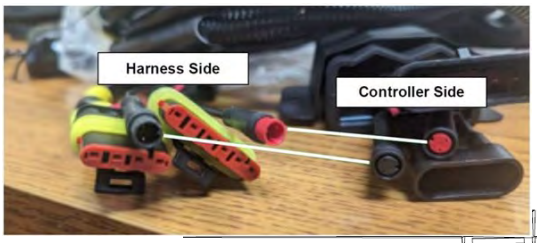
Rear Passenger Door Module (C)



11. Remove the interior trim panel on the passenger side of the vehicle (*If interior trim is equipped with air bag, use caution*). Connect the White signal wire from the wiring harness to terminal (A) on the module. Connect module wire (B) to the vehicle ground. Remove the double sided tape backing and place the front module (C) in a secure location to the inside of the door jamb. **See Photo 9 A.** Remove the cover off of the double sided tape and place the place the rear module (C) in a secure location to the inside of the door jamb. **See Photo 9 B.**
12. Follow step 11 and install the driver side module using the brown wire from the supplied wiring harness. *Photos 9A and 9B are shown from the passenger side of the vehicle*.

NOTE: The magnets will be installed in a later step after the power has been connected.

NOTE: (B) Connect the LED light plugs on the driver side. Take care to plug corresponding colors. Red to red and black to black. These are passenger and driver side specific.



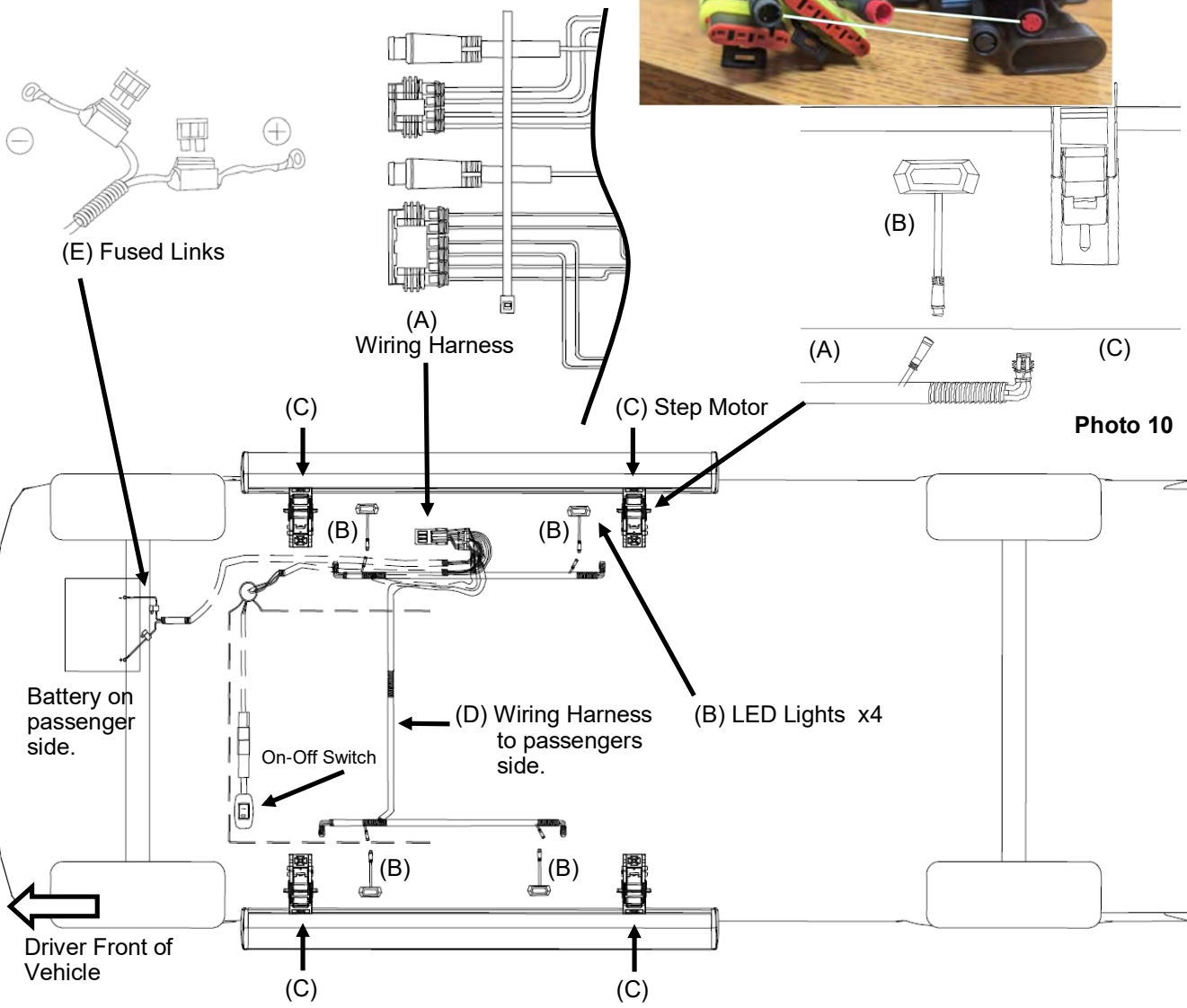


Photo 10

13. (A) Connect the 4 plugs of the wiring harness to the controller assembly mounted to the body of the vehicle on the driver side. **See Photo 10.**
14. (B) Mount the (4) LED Lights. Clean the surface of the pinch weld under the center of each door on the driver and passenger side of the vehicle. Remove the double sided tape backing and apply to the pinch weld.
15. (A) Route the wiring harness along the frame of the driver side.
16. (C) Connect the step motor labeled to the corresponding wiring harness (Driver Side) Front Left Motor and Rear Left Motor.
17. (B) Connect the LED light plugs on the driver side.
18. (D) Route the wiring harness across the frame to the passenger side of the vehicle.
19. (C) Connect the step motor labeled to the corresponding wiring harness (Passengers Side) Front Right Motor and Rear Right Motor.
20. (B) Connect the LED light plugs on the passenger side.
21. (E) Route the fused link harness along the driver side frame up to the battery box, secure the wiring harness with the supplied wire ties away from heat or moving parts. Connect the fused link's to the Positive and Negative side of the battery.

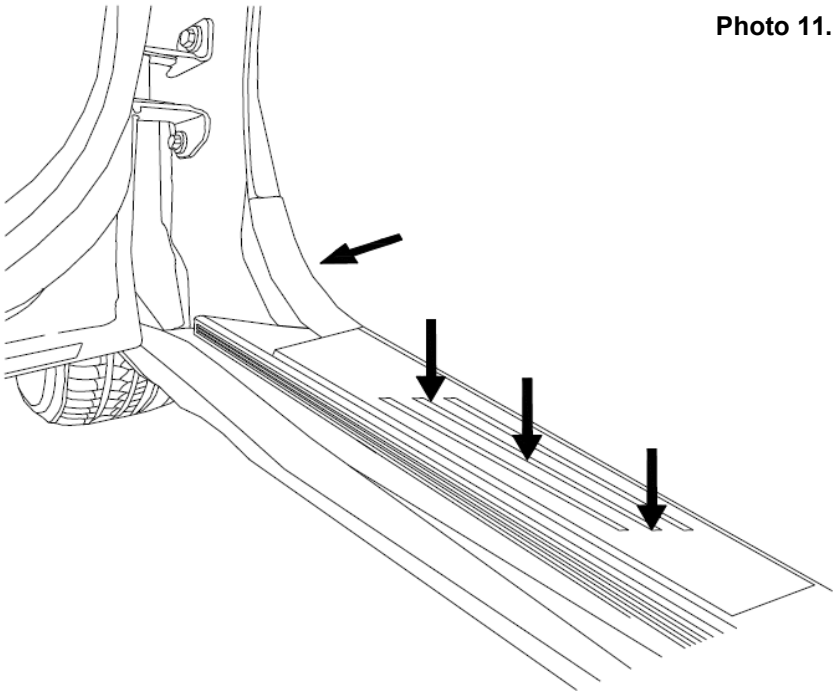


Photo 11.

22. Adjust the carpet into place and re-install the B-pillar trim, kick panel and the scuff plate on the driver and passenger side of the vehicle. **See Photo 11.**

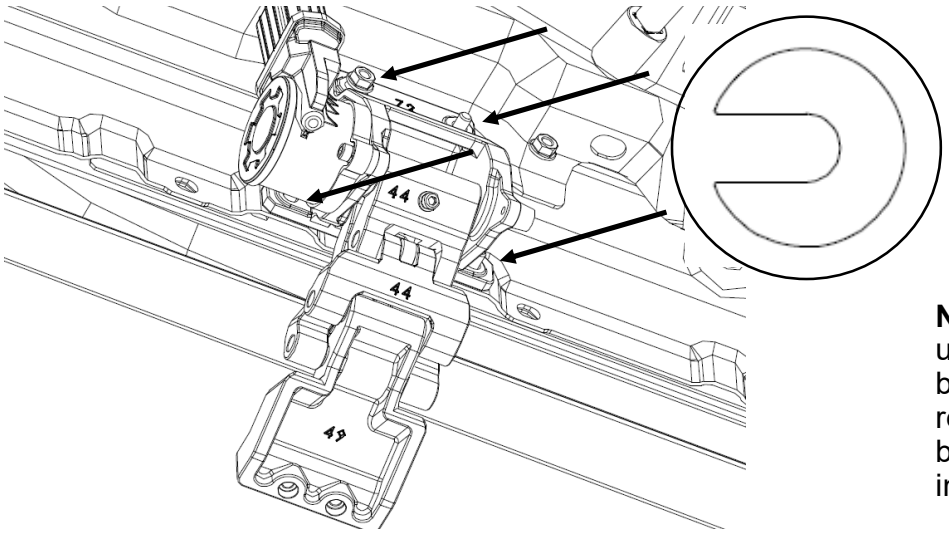
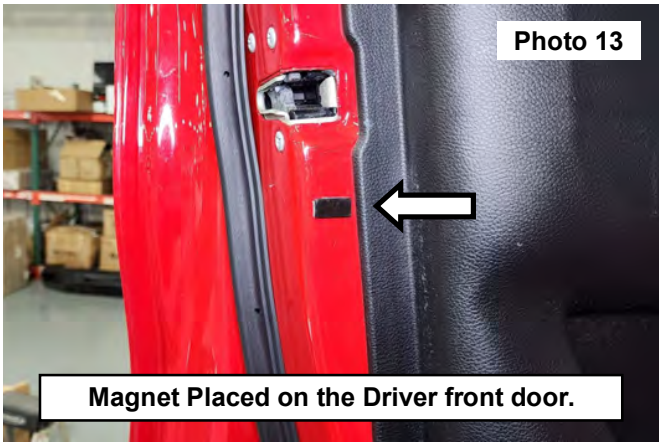
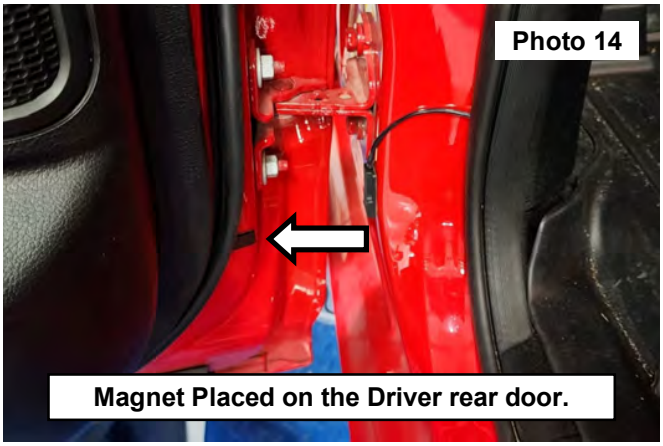


Photo 12.

NOTE: The Shims will be used if the steps are in a bind or the mounting surface requires a small adjustment before tightening the mounting brackets.

23. Using the (On-Off) switch cycle the steps (2-3 Times) leave them in the down position. The switch will be in the (On) position.
24. If the boards need adjusting or are in a bind, the supplied shims can be placed in-between the motor bracket and the body of the vehicle. Steps should work in a smooth motion with no binding. **See Photo 12.**
25. At this time, tighten the rear M8 x30 motor bracket bolt's using a 10mm socket to 45ft/lbs. and the front pinch weld mount M6 x20 bolts using a 8mm socket to 23ft/lbs.
26. Tighten the step to the motor bracket using a 5mm Allen to 14ft/lbs.





27. Place the magnet on the vehicle door aligned with the module. (Shown on the driver side) for aluminum door vehicles this can be done with painter's tape to test and ensure it will work correctly. **See Photos 13 and 14.**
28. Ensure the On-Off switch is in the ON position. Now test the front and rear doors on the right and left side of the vehicle. If each one works correctly, the magnets are in line with the module. Mark the magnets position on each of the 4 doors, remove the covering from the double sided tape and stick the magnet to the door in the marked position.

NOTE: The On-Off switch will remain in the On position for normal use. We recommend the switch be in the Off position in icy or off roading conditions to prevent binding or damage to the step board, motor or motor bracket.

Troubleshooting Guide

Steps not working.

- On/Off Switch in On position
- Check for proper Power and Ground connections to battery
- Check Fuses in the Positive and Negative wires to the battery
- Do not share grounds with other components.
- Check Ground connection on Pass and Driver side at B-Pillar
- Check all plugs and connections to ensure they are seated properly and making a good connection

Steps work with On/Off Switch but not with doors opening and closing.

- Check Module to Magnet alignment on doors
- Use a magnet to position over module

Steps drop when door is closed and retract when door is opened.

- Motors will operate in reverse polarity. Check the fused links on the battery for Positive and Negative connection