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Rough Country PSR610330 Installation Instructions

Power Running Boards for Jeep Wrangler Unlimited (2007–2017)

Part number: PSR610330

trailfortress.com/rough-country-power-running-boards-psr610330

Scan for fitment, price and install help

JEEP JK E-Boards 2012-18

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 (2D):
Step Boards x2
Front Motor Left x1
Rear Motor Left x1
Rear Motor Right x1
Front Motor Right x1
Left Mounting Plate x1
Right Mounting Plate x1
Posi-lock connector x2
Power Board Switch x1
Controller Assembly x1
Fuse x2
Wiring Harness x1

Wired Magnetic Sensors
Module x2
Magnet x2

TOOLS NEEDED:
5mm Allen
13mm Wrench
18mm Wrench
Wire Cutter/Stripper
Weatherproof Tape

HARDWARE INCLUDED (2D):
12mm Spring Washer x2
12mm Flat Washer x2
8mm Spring Washer x18
8mm Flat Washer x18
M6x25mm Socket Cap Bolt x8
M8x20mm Hex Head Bolt x12
M8x35mm Hex Head Bolt x4
M12x35mm Hex Head Bolt x2
M12 Tension Block x2
M8 Tension Block x2
M8x25mm Stud Bolt x2
M8 Hex Nut x2
Wire Ties x25

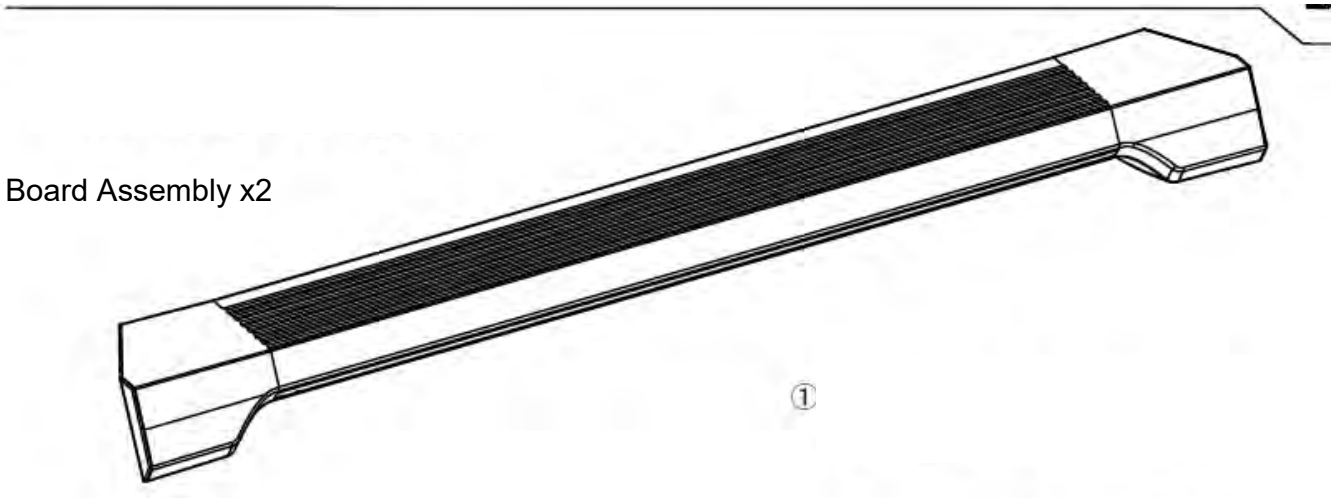
KIT CONTENTS (4D):
Step Boards x2
Front Motor Left x1
Rear Motor Left x1
Rear Motor Right x1
Front Motor Right x1
Mounting Plate x2
Posi-lock connector x4
Power Board Switch x1
Controller Assembly x1
Fuse x2
Wiring Harness x1

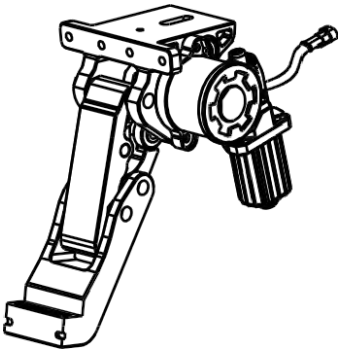
Wired Magnetic Sensors
Module x2
Magnet x4

HARDWARE INCLUDED (4D):
12mm Spring Washer x2
12mm Flat Washer x2
8mm Flat Washer x2
8mm Spring Washer x16
8mm Flat Washer x14
M6x25mm Socket Cap Bolt x8
M8x20mm Hex Head Bolt x10
M8x25mm Hex Head Bolt x2
M8x35mm Hex Head Bolt x4
M12x35mm Hex Head Bolt x2
M12 Tension Block x2
Wire Ties x25

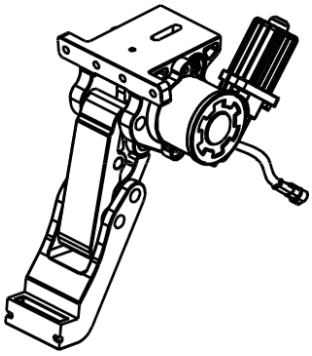
Product Packing List

Board Assembly x2

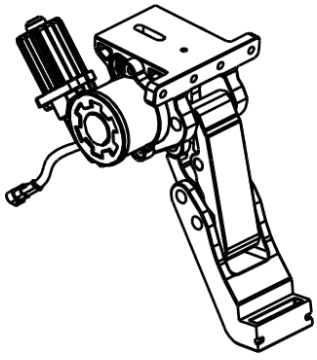




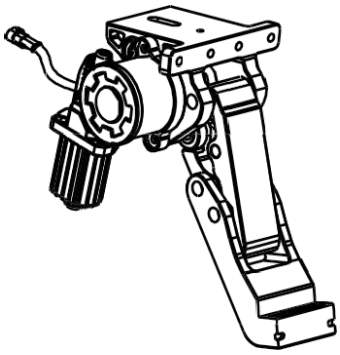
Front Left Motor x1
Driver Side



Rear Left Motor x1
Driver Side

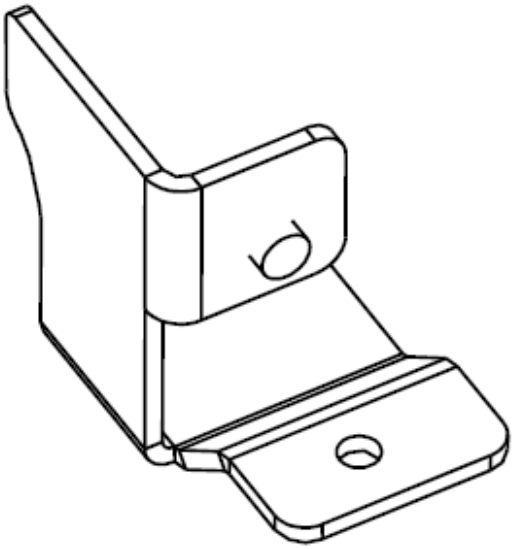


Rear Right Motor x1
Passenger Side

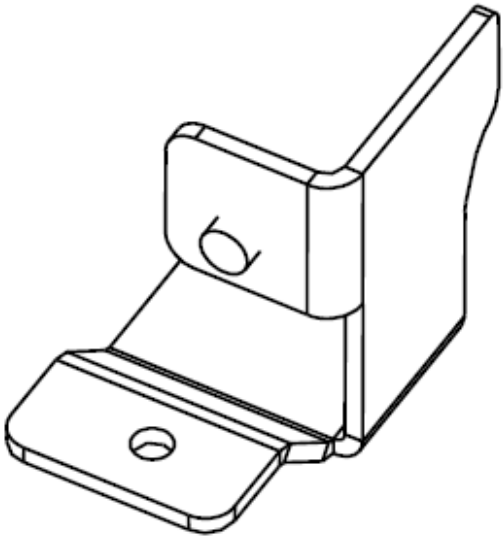


Front Right Motor x1
Passenger Side

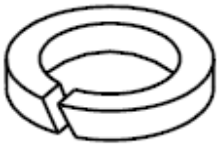
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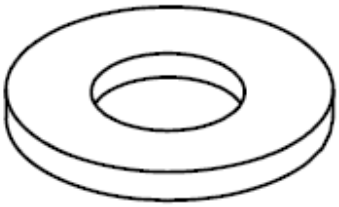
Motor Protective Plate Left x1



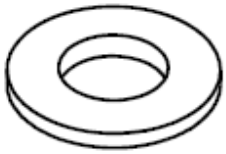
Motor Protective Plate Right x1



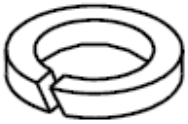
12mm Spring Washer x1



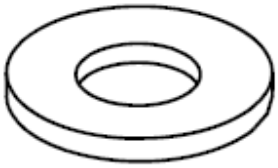
12mm Flat Washer x1



8mm Flat Washer x2
4D Only



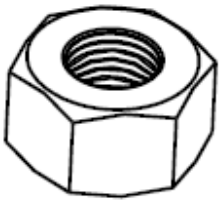
8mm Spring Washer
2D x18
4D x16



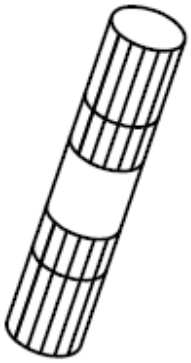
8mm Flat Washer
2D x18
4D x14



M8x25 Stud Bolt x2
2D Only



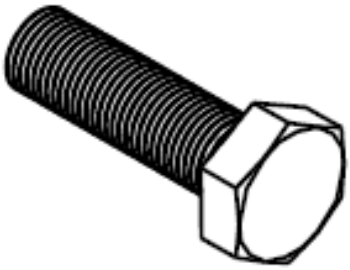
M8 Hex Nut x2
2D Only



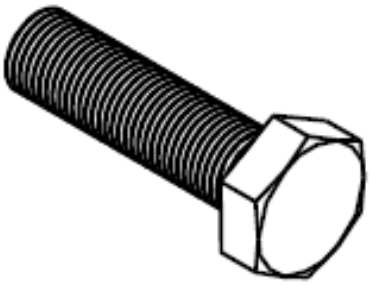
Posi-Lock Connector
2D x2
4D x4

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Product Packing List



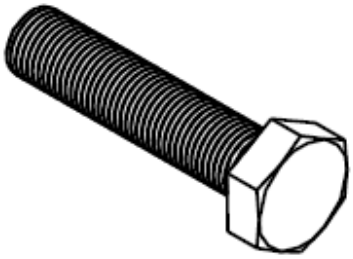
M8x20mm Hex Head Bolt
2D x12
4D x10



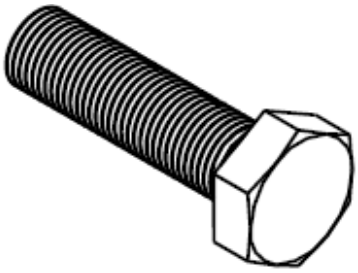
M8x25mm Hex Head Bolt
x2
4D Only



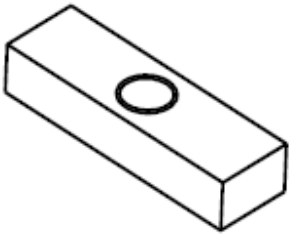
M6x25mm Socket Cap
Screw x8



M8x35mm Hex Head Bolt x4



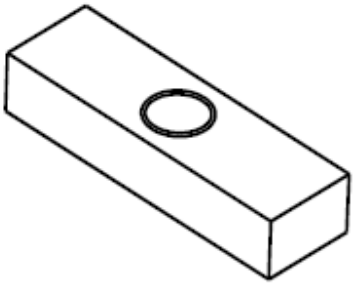
M12x35mm Hex Head Bolt x2



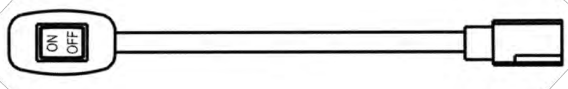
M8 Tension Block x2
2D Only



Wire Tie x25



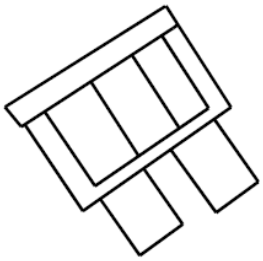
M12 Tension Block x2

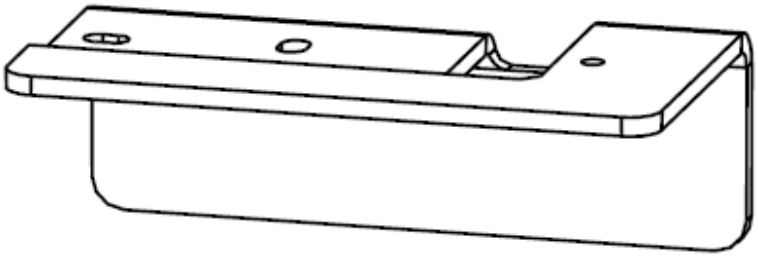


Power Board Switch x1

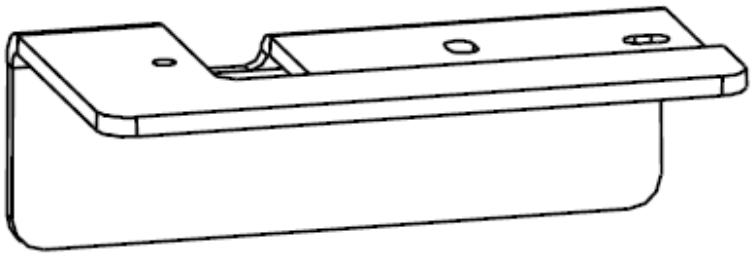
Fuse x2

(4)

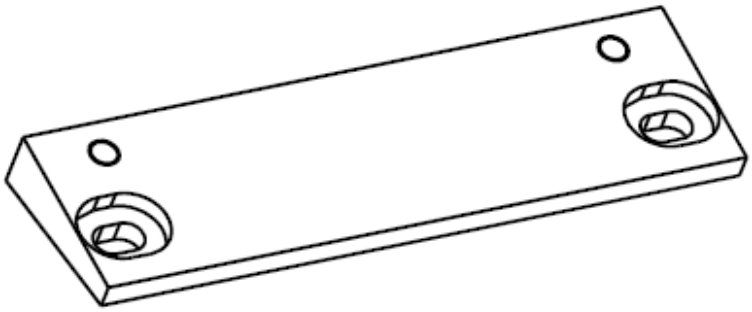




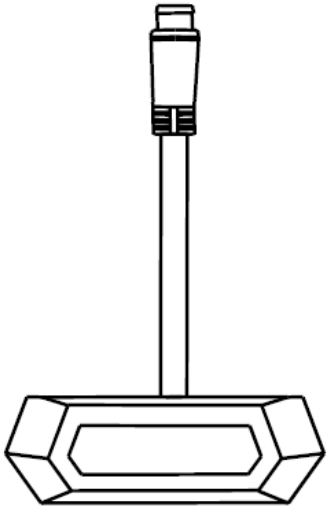
Left Mounting Plate x1
2D Only



Right Mounting Plate x1
2D Only



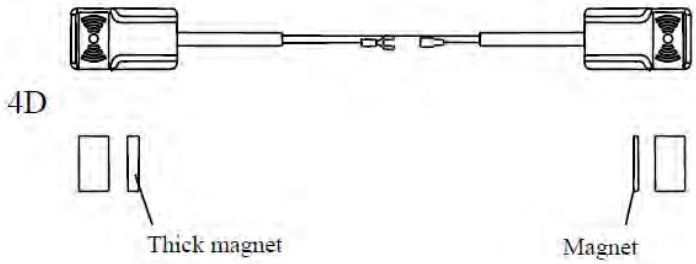
Mounting Plate x2
4D Only



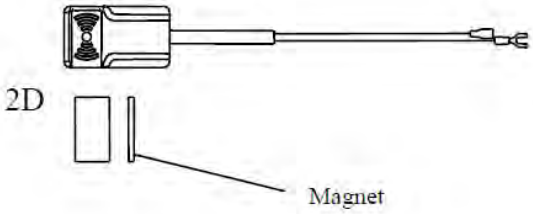
LED Lights x4

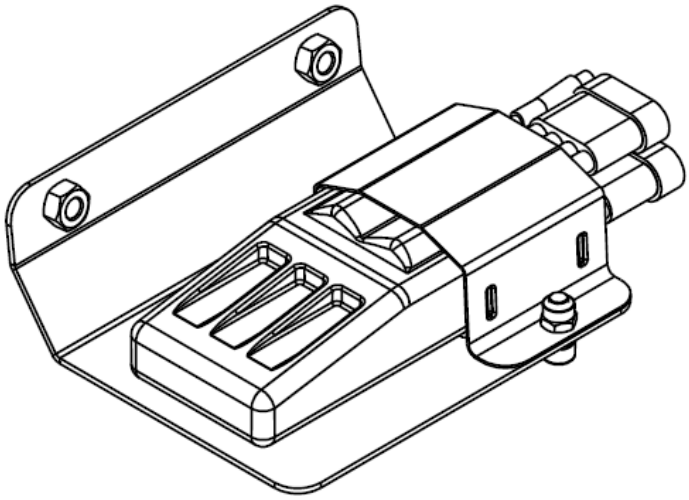
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Product Packing List

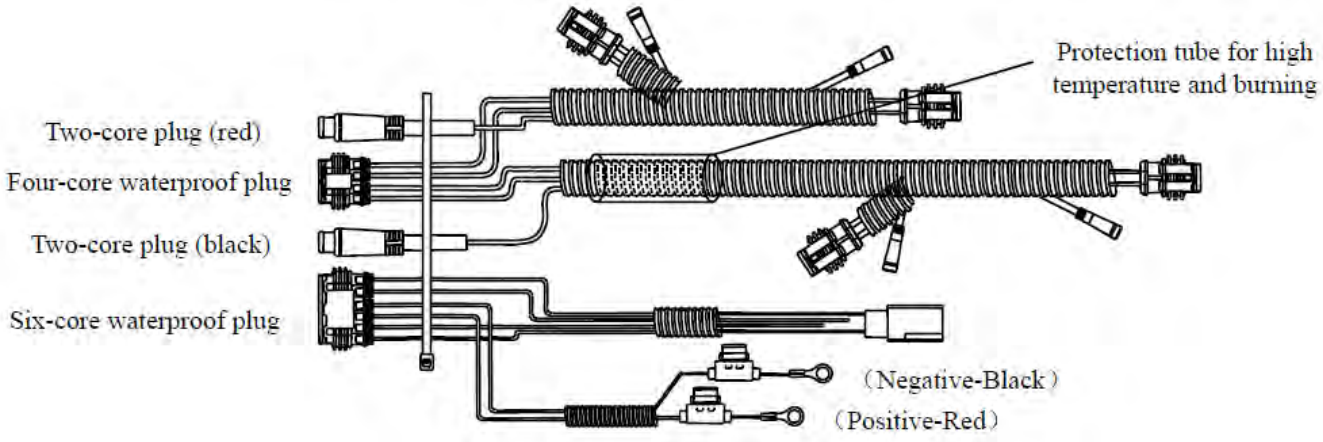


Body Mounted Module x2
Door Mounted Magnet
4D x2 Thick / x2 Normal
2D x2 Normal





Controller Assembly x1



Wiring Harness x1

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Installation of the Driver Side Motors and Controller Assembly

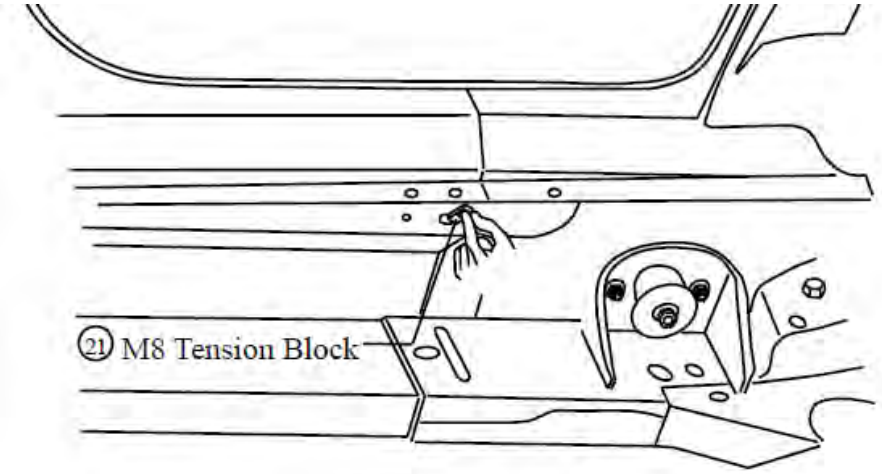


Photo 1

1. **Two Door Model:** Install M8 tension block in the slot. **See Photo 1.**
2. **Two Door Model:** Screw in the supplied M8x25mm stud bolt through the M8 tension block. **See Photo 2.**

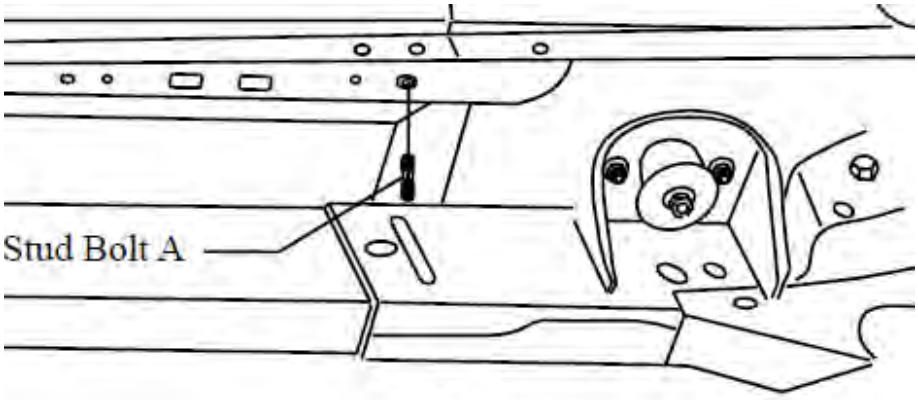


Photo 2

3. **Two Door Model:** Install the left mounting plate by attaching a supplied 8mm flat washer, spring washer, and an M8 hex nut to the stud bolt with a 13mm wrench. Use 13mm wrench to install a supplied 8mm flat washer, 8mm spring washer, and M8x35mm hex head bolt through the slotted hole of the left mounting plate. Do not tighten fully. **See Photo 3.**

NOTE: Mounting plates are for the rear motors.

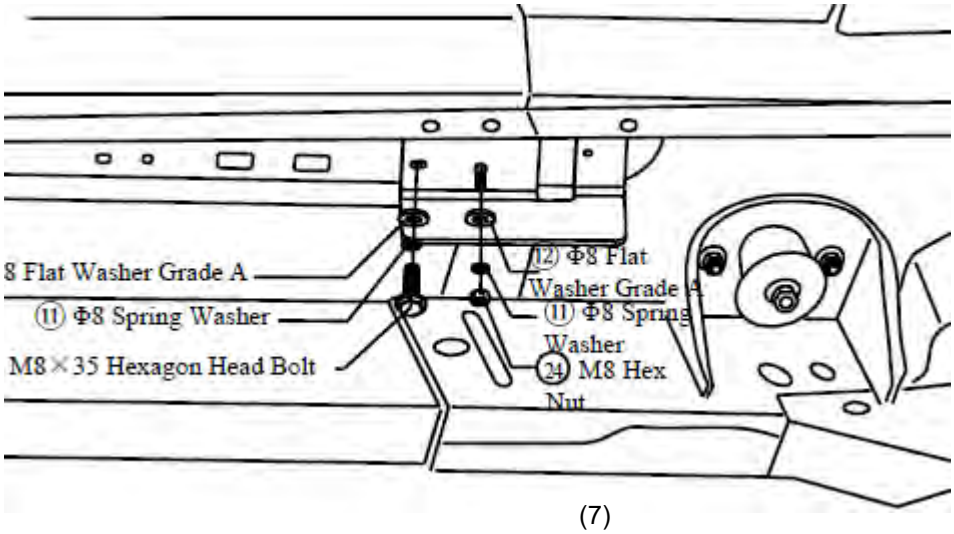


Photo 3

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Driver Side Motor Installation

4. **Four Door Model:** Install mounting plate with supplied 8mm flat washer, 8mm spring washer, and M8x25mm hex head bolt with a 13mm wrench. Do not fully tighten. **See Photo 4.**
5. Insert a supplied M8 hex head bolt (2D uses 20mm length and 4D uses 25mm length) , 8mm spring washer, and 8mm flat washer into the slot of the driver side rear motor. **See Photo 5.**

Photo 4

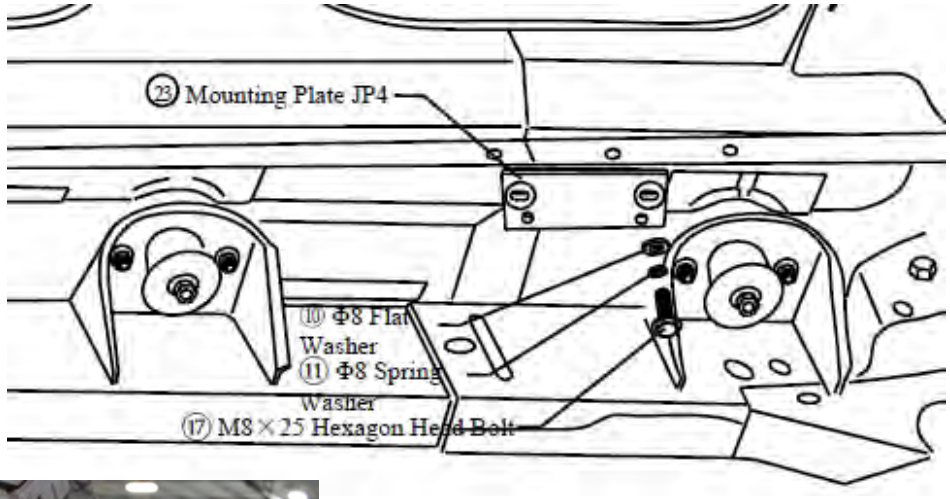




Photo 5

6. Thread the bolt from Step 5 into the threaded hole of the mounting plate. **See Photo 6.**
7. Align threaded hole of the motor mount with hole in the pinch weld. Install an M8x20mm hex head bolt, spring washer, and flat washer. Loosely tighten with a 13mm wrench. **See Photo 7.**

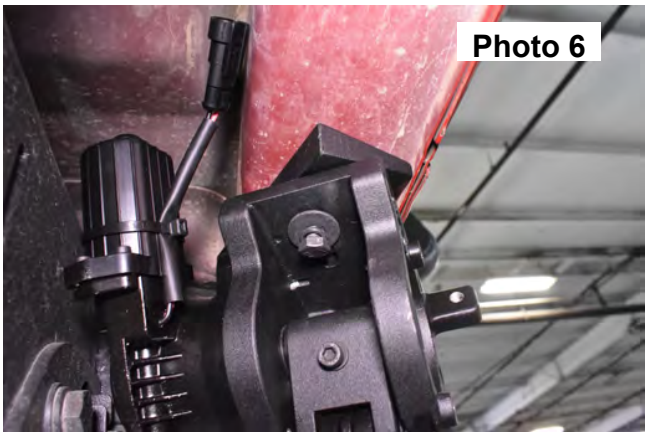


Photo 6

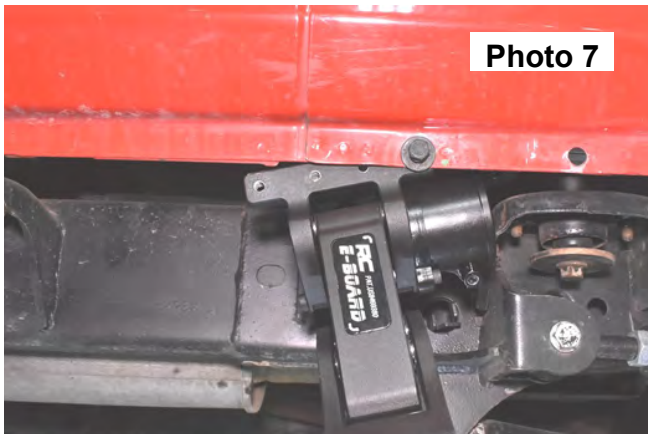
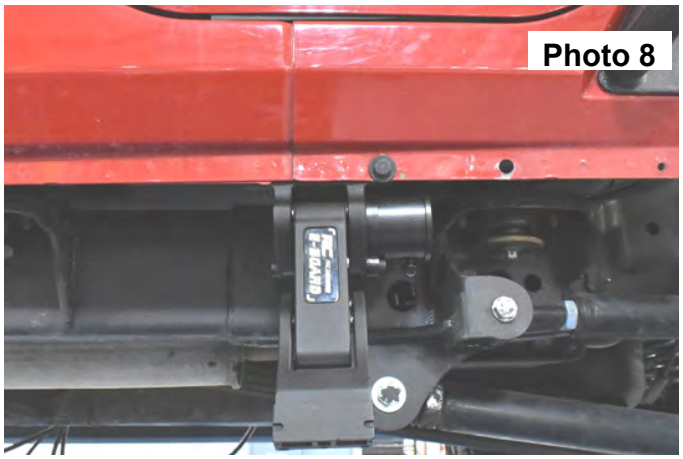


Photo 7

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8. Adjust step motor to desired location and tighten the two bolts to spec with a 13mm wrench. **See Photo 8.**
9. For the driver side front motor, thread the M8x35mm bolt, spring washer, and flat washer into the threaded hole in the underside of the vehicle. Align the motor mount with the two holes in the pinch weld. Loosely install two (2) sets of M8x20mm hex head bolts, spring washers, and flat washers with a 13mm wrench. Adjust fitment as desired. Tighten to spec when finished. **See Photo 9.**


Photo 8

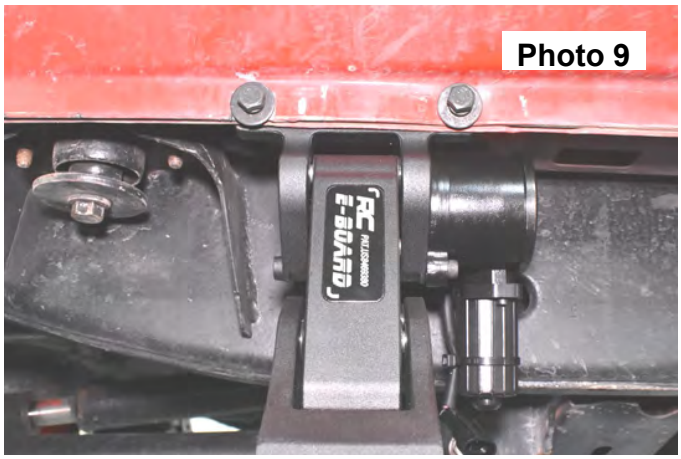
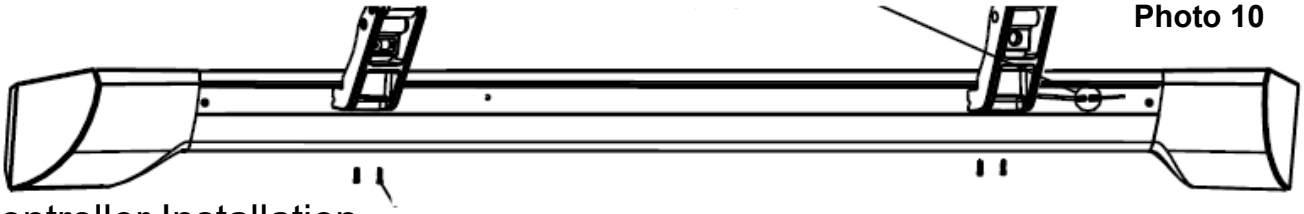


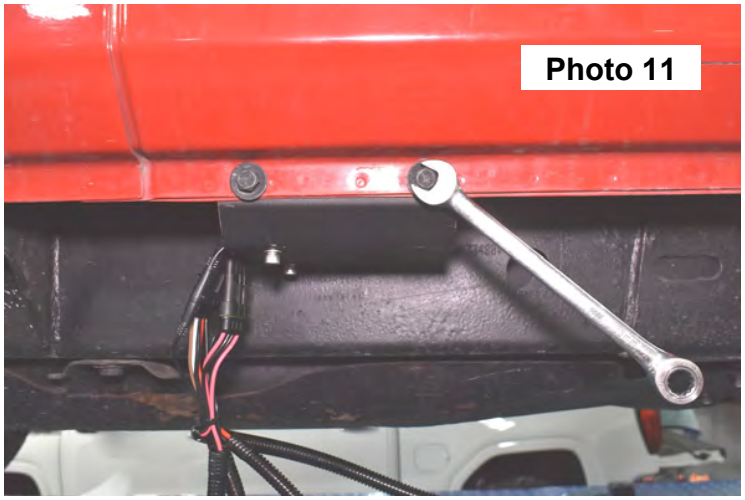
Photo 9

10. Install the board assembly with four (4) M6x25mm socket cap screws (two for each motor). Tighten with a 5mm Allen wrench. **See Photo 10.**
11. Repeat steps 1-10 for passenger side of vehicle.


Photo 10

Controller Installation

12. The controller mounting will be located near the center of the vehicle on the passenger side of the vehicle. Install the controller assembly with two (2) supplied M8x20mm hex head bolts, large 8mm flat washer, and 8mm spring washer. Tighten with a 13mm wrench. **See Photo 11.**


Photo 11

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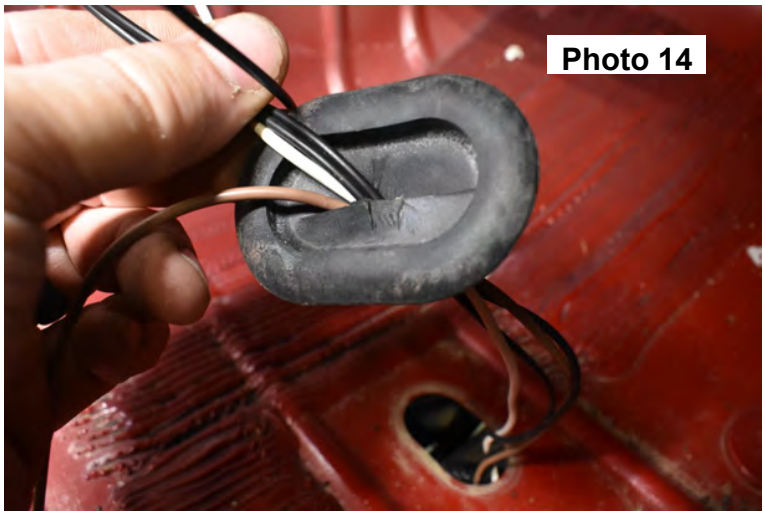
13. Install the supplied M12 tensioning block into the slot by the driver side front motor. **See Photo 12.**
14. With supplied M12x35mm hex head bolt, spring washer and flat washer, install the left protective plate. Tighten with an 18mm wrench. **See Photo 13.**
15. Repeat for passenger side.


Photo 12



Photo 13

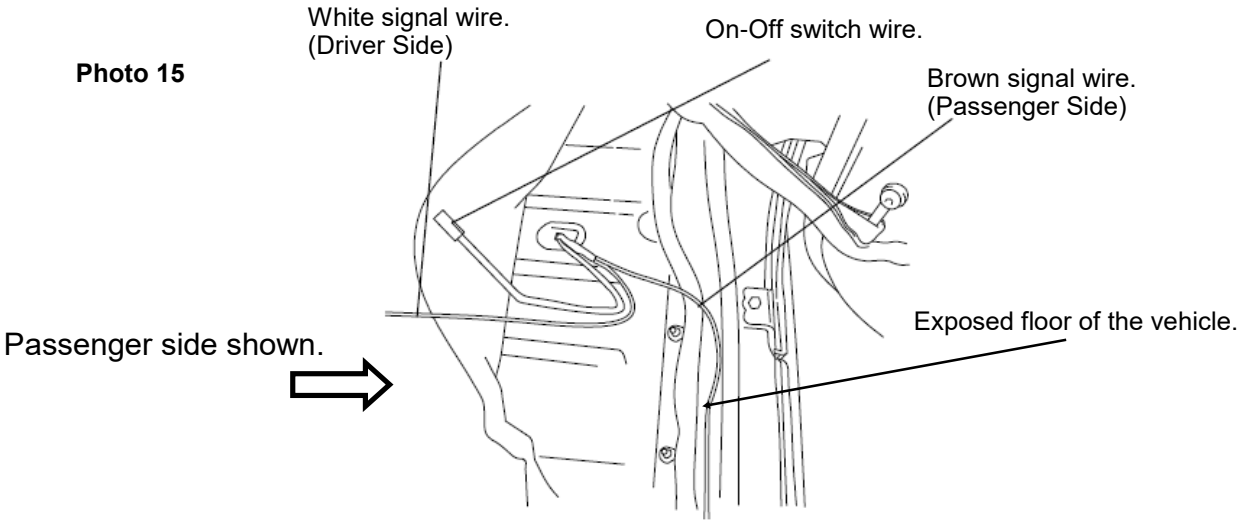
16. Remove the kick panel and the scuff plate on the passenger side of the vehicle.
17. Lift the carpet to expose the rubber grommet on the passenger side. Feed the brown signal wire, white signal wire, and On/Off switch wires through the rubber grommet. **See Photo 14.**


Photo 14

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Wiring Harness Installation

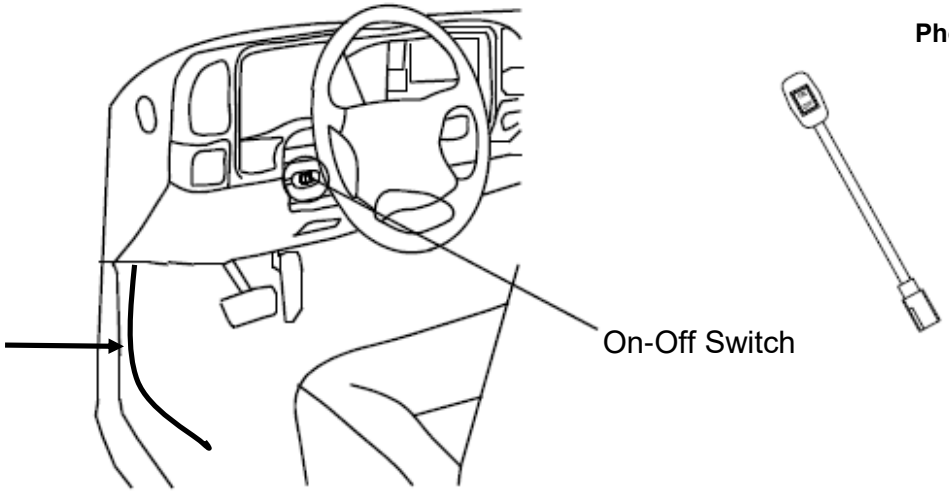
Photo 15



18. Install the supplied wiring harness' Brown, White and On-Off switch wire through the grommet in the drain plug under the floor of the vehicle to the inside of the cab. **See Photo 15.**

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

Photo 16



19. 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 16.**
20. 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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2D Module Installation

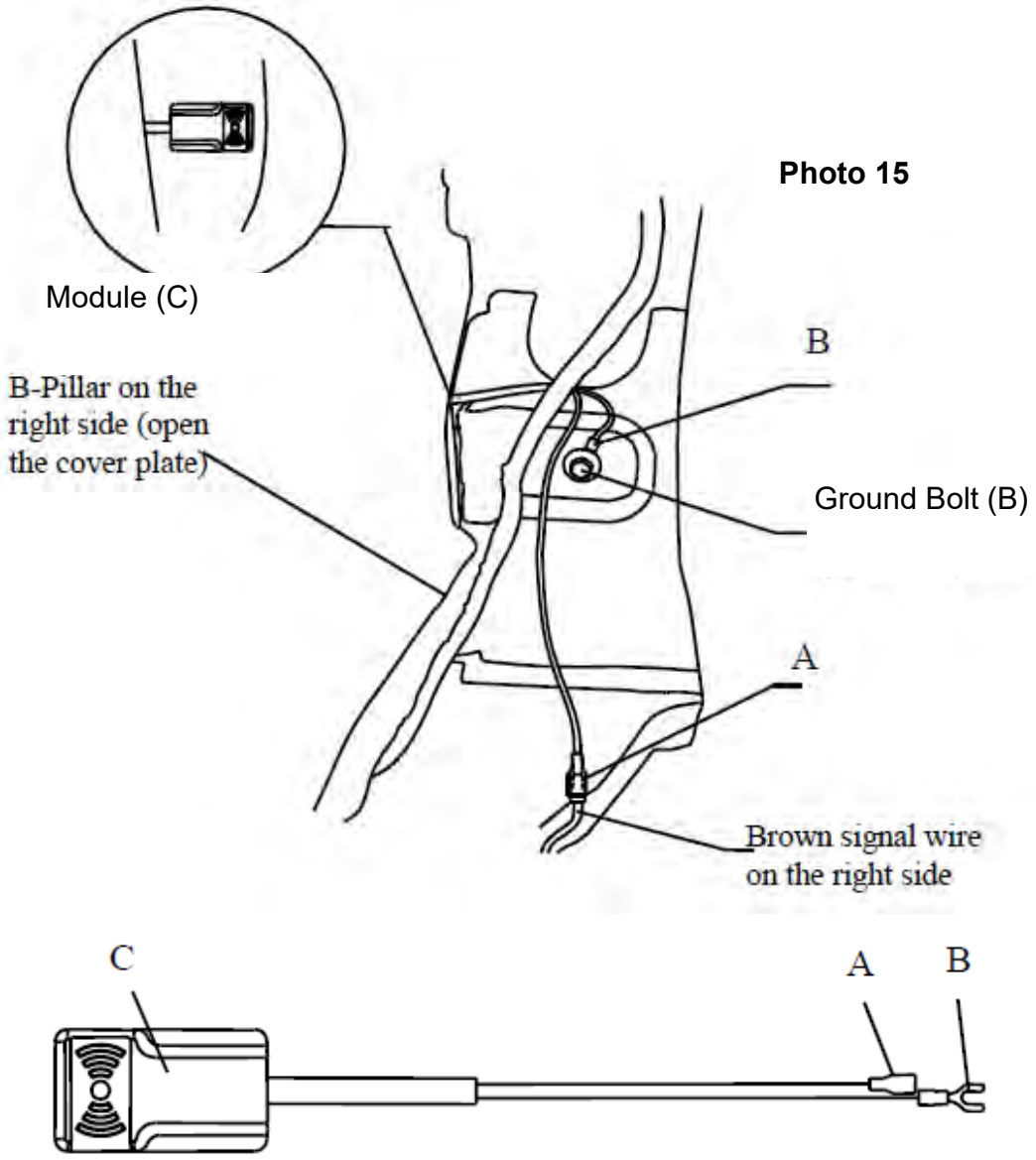


Photo 15

21. Remove the interior trim panel on the passenger side of the vehicle (*If interior trim is equipped with air bag, use caution*). Connect the brown 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 15.** 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.
22. Follow step 21 and install the driver side module using the white wire from the supplied wiring harness.

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

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4D Module Installation

Photo 16A

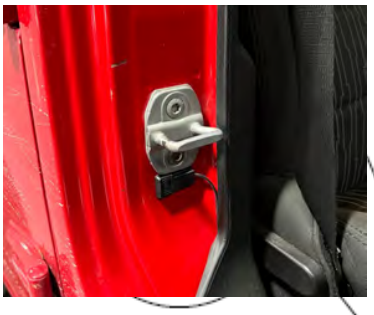
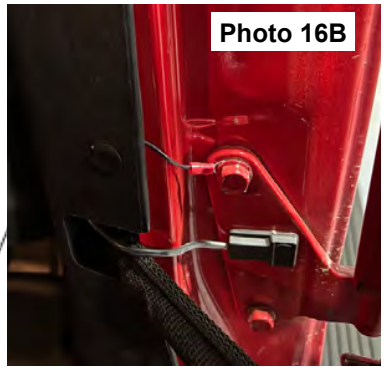
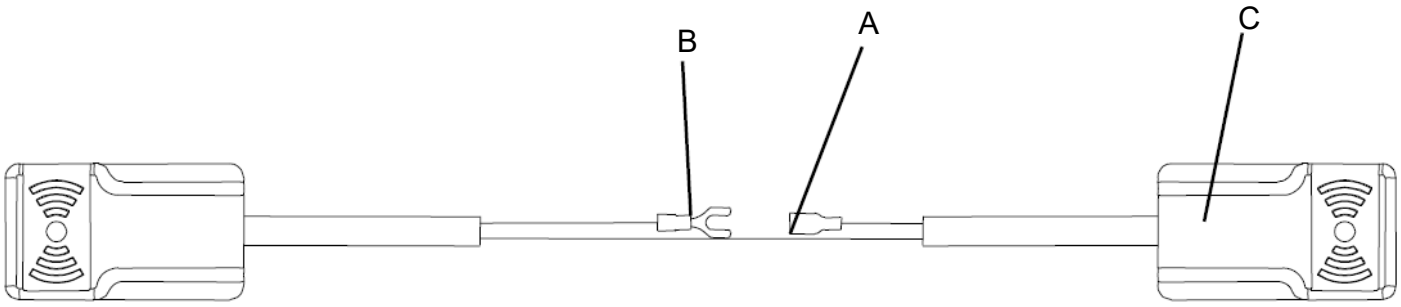


Photo 16B



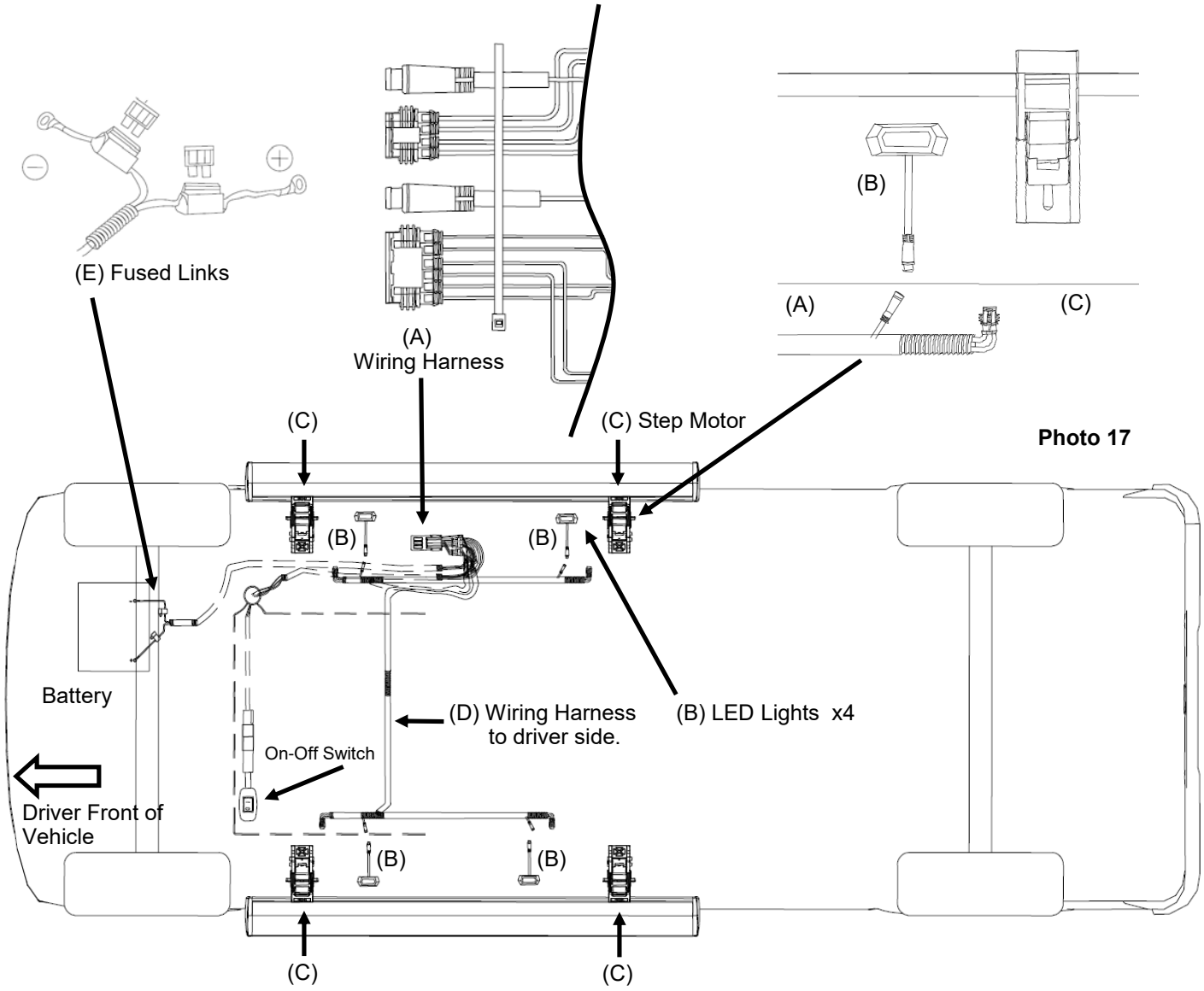
Rear Passenger Door Module (C)



23. Remove the interior trim panel on the passenger side of the vehicle (*If interior trim is equipped with air bag, use caution*). Connect the brown 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 16 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 16B.**
24. Follow step 14 and install the driver side module using the brown wire from the supplied wiring harness. *Photos 16A and 16B 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.

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25. (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 17.**
26. (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.
27. (A) Route the wiring harness along the frame of the driver side.
28. (C) Connect the step motor labeled to the corresponding wiring harness (Driver Side) Front Left Motor and Rear Left Motor.
29. (B) Connect the LED light plugs on the driver side.
30. (D) Route the wiring harness across the frame to the passenger side of the vehicle.
31. (C) Connect the step motor labeled to the corresponding wiring harness (Passengers Side) Front Right Motor and Rear Right Motor.
32. (B) Connect the LED light plugs on the passenger side.
33. (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.

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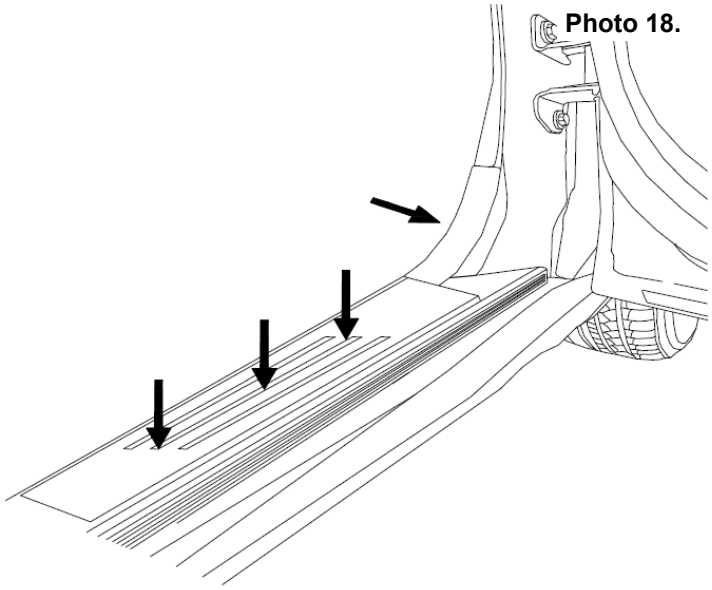


Photo 18.

34. 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 18.**
35. 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.
36. At this time, tighten the rear M8 motor bracket bolt's using a 13mm socket to 45ft/lbs and the front pinch weld mount M6 bolts using a 8mm socket to 23ft/lbs.
37. Tighten the step to the motor bracket using a 5mm Allen to 14ft/lbs.
38. Place the magnet on the vehicle door aligned with the module. (Shown on the passenger side) for aluminum door vehicles this can be done with painter's tape to test and ensure it will work correctly. **See Photos 19 and 20. NOTE:** 2D models only have two magnets. On 4D models, the thicker magnet goes on the rear door.
39. 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.



Photo 19

Magnet Placed on the passenger front door.

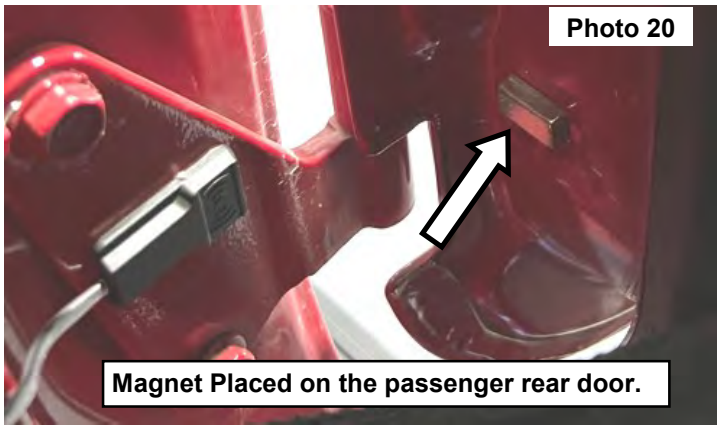


Photo 20

Magnet Placed on the passenger rear door.

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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
- 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

Torque Specs:

Size	Grade 5	Grade 8	Size	Class 8.8	Class 10.9
5/16”	15 ft/lbs	20ft/lbs	6MM	5ft/lbs	9ft/lbs
3/8”	30 ft/lbs	35ft/lbs	8MM	18ft/lbs	23ft/lbs
7/16”	45 ft/lbs	60ft/lbs	10MM	32ft/lbs	45ft/lbs
1/2”	65 ft/lbs	90ft/lbs	12MM	55ft/lbs	75ft/lbs
9/16”	95 ft/lbs	130ft/lbs	14MM	85ft/lbs	120ft/lbs
5/8”	135ft/lbs	175ft/lbs	16MM	130ft/lbs	165ft/lbs
3/4”	185ft/lbs	280ft/lbs	18MM	170ft/lbs	240ft/lbs

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