

### RAM 2019-20 1500 Crew Cab Retractable Steps

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 question 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:**

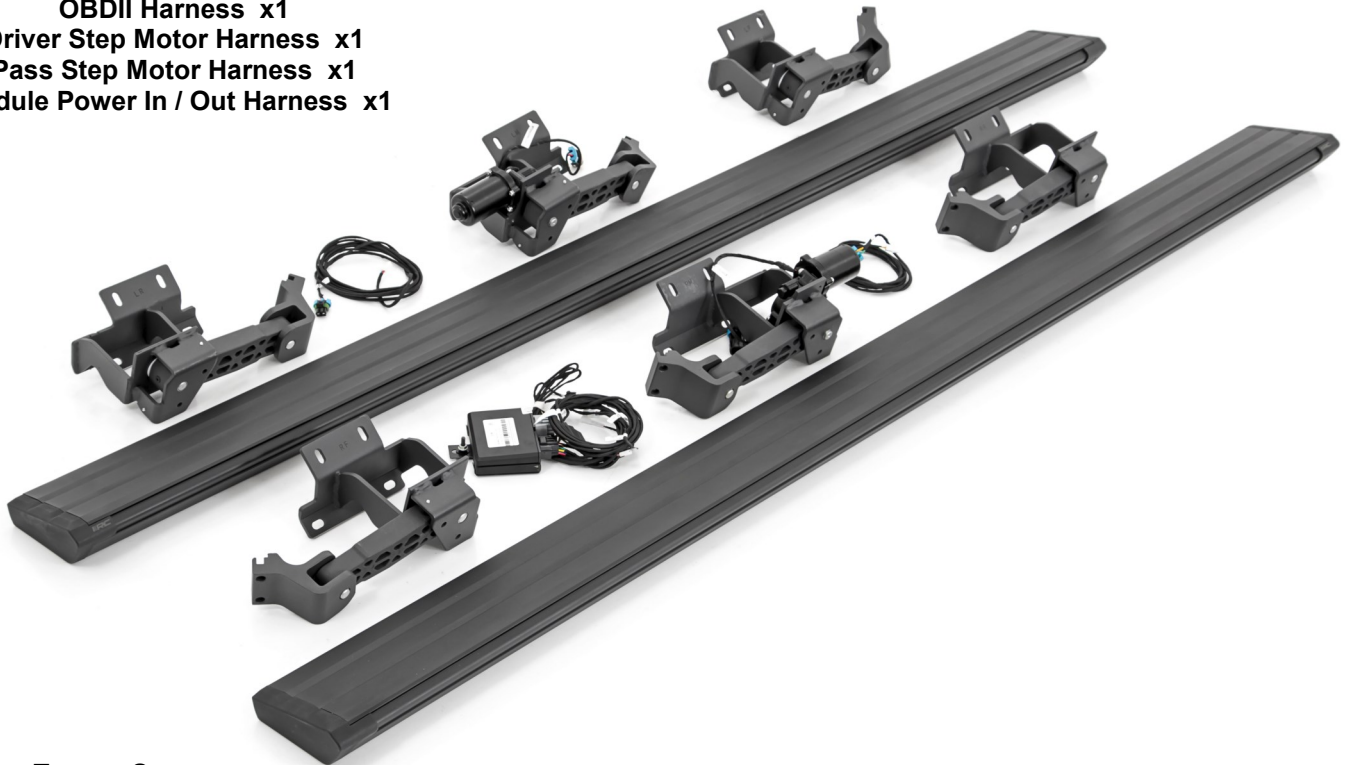
- LF, LM, LR x1
- RF, RM, RR x1
- Idler Arm Bracket Right x2
- Idler Arm Bracket Left x2
- Step Motor Right x1
- Step Motor Left x1
- Control Module x1
- Fused Power Sub Harness x1
- OBDII Harness x1
- Driver Step Motor Harness x1
- Pass Step Motor Harness x1
- Module Power In / Out Harness x1

**TOOLS NEEDED:**

- 5mm Allen Wrench
- 12mm Wrench or Socket
- 13mm Wrench or Socket
- Sealant

**HARDWARE INCLUDED:**

- 6mm Lock Washers x12
- 6mm x 20mm Socket Head Bolts x12
- 8mm Flat Washers x36
- 8mm Carriage Head Bolts x18
- 8mm Flange Lock Nuts x36



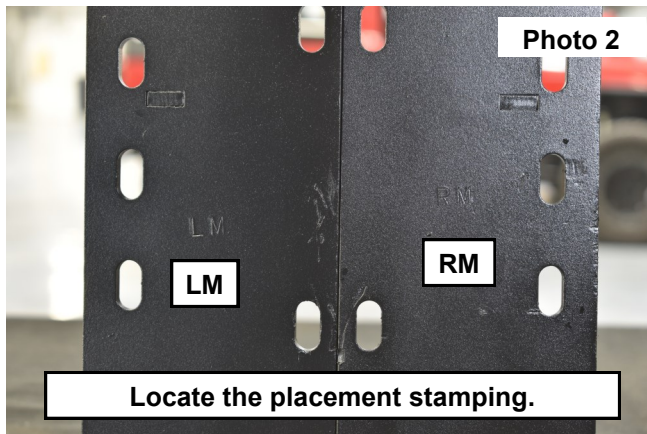
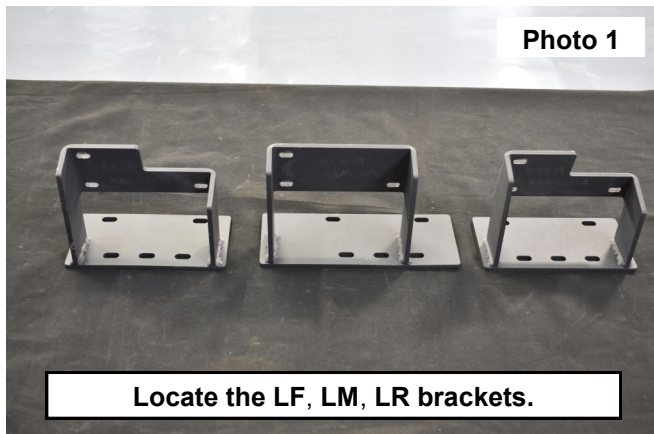
**Torque Specs:**

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

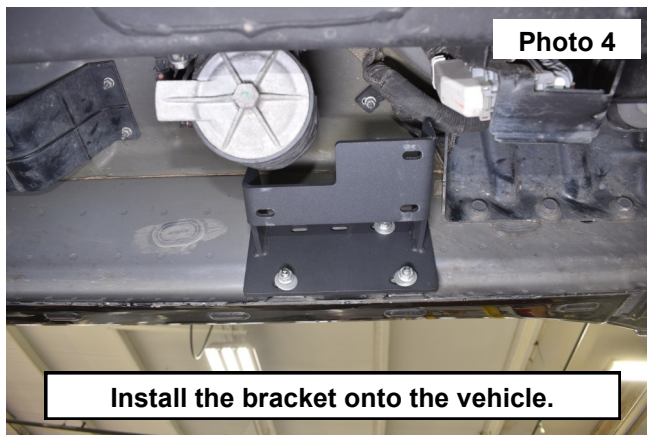
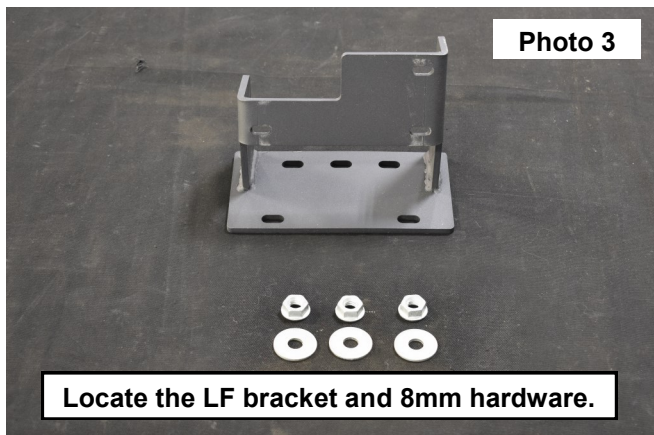


## INSTALLATION INSTRUCTIONS

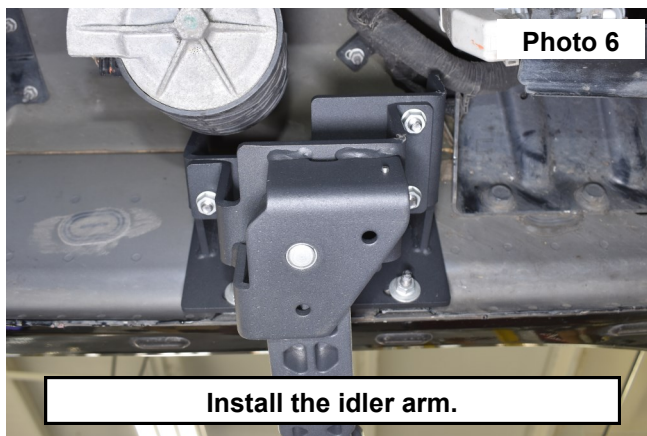
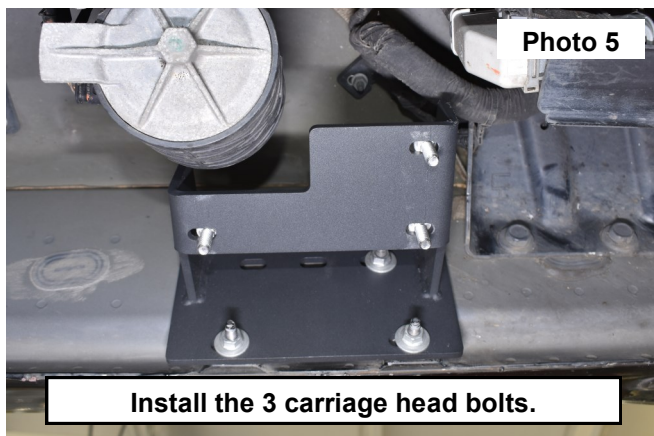
1. Locate the Left side step brackets from front to back as labeled LF, LM, LR. See Photo 1. Left will be the Driver Side of the vehicle.
2. Located on the back side of the bracket the placement stamping can be found. See Photo 2.



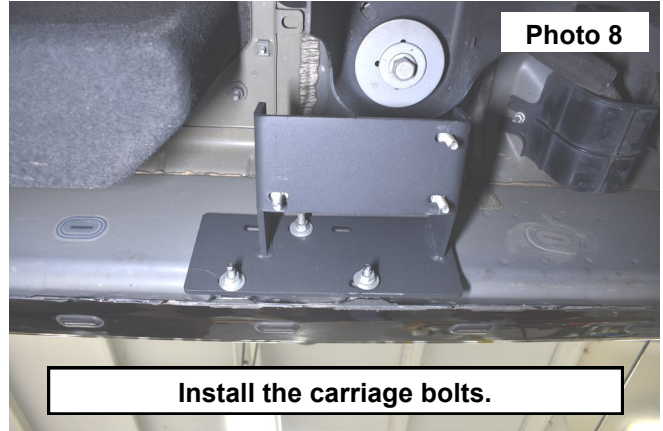
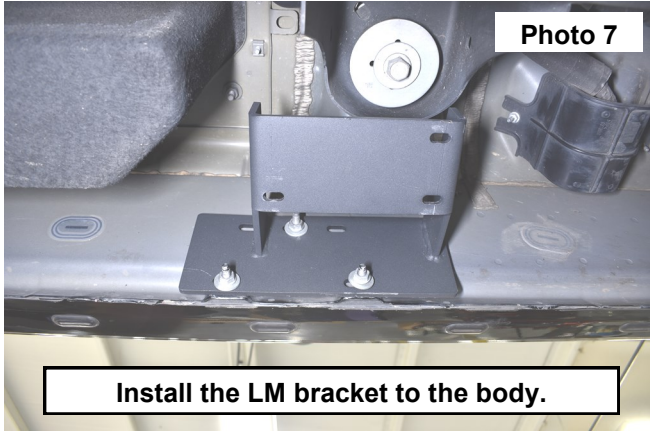
3. Locate the LF bracket to install onto the front drivers side of the vehicle shown with the supplied 8mm flange lock nuts and 8mm flat washers. See Photo 3.
4. Install the LF bracket onto the body of the vehicle using (3) the supplied 8mm flange lock nuts and (3) of the 8mm flat washers onto the studs. See Photo 4.



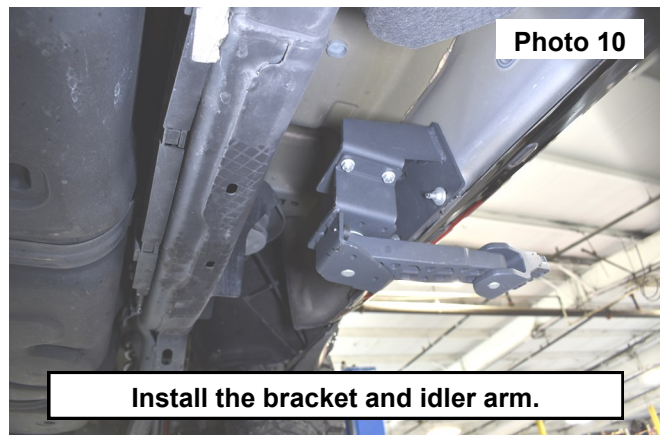
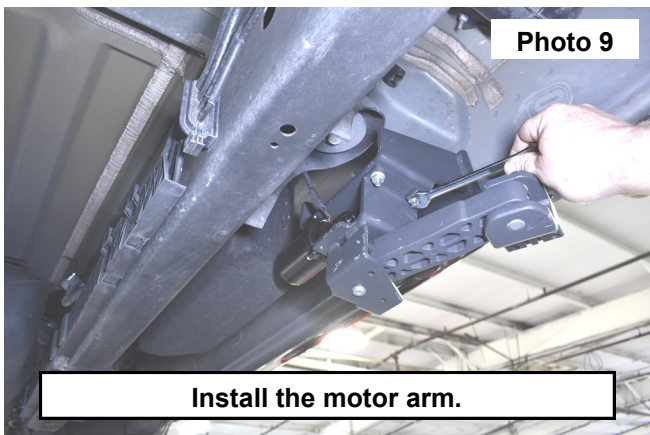
5. Install (3) of the supplied 8mm carriage head bolts into the LF bracket. See Photo 5.
6. Install the front idler arm onto the LF bracket and secure using (3) of the supplied 8mm flange nuts. Snug all hardware mounting the idler arm and bracket to the vehicle using a 13mm wrench. See Photo 6.
7. **NOTE:** All idler arm and motor arms close to the front of the vehicle.



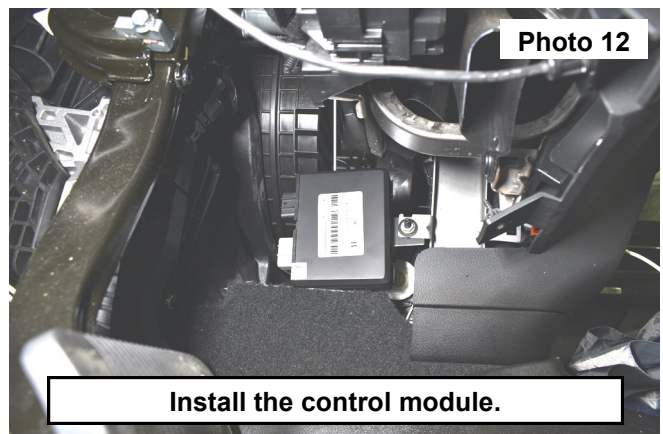
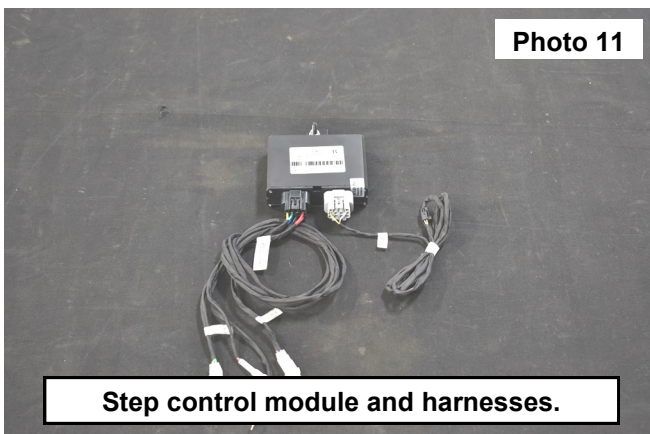
8. Install the LM bracket onto the vehicle using (3) the supplied 8mm flange lock nuts and (3) of the 8mm flat washers onto the studs. **See Photo 7.**
9. Install (3) of the supplied 8mm carriage head bolts into the LM bracket. **See Photo 8.**



10. Install the mid motor mount onto the LM bracket and secure using (3) of the supplied 8mm flange nuts. Snug all hardware mounting the idler arm and bracket to the vehicle using a 13mm wrench. **See Photo 9.**
11. Install the LR mount onto the studs at the rear of the cab. Secure the mount using (3) of the supplied 8mm flange lock nuts and (3) of the 8mm flat washers. Then install the rear idler arm onto the LM bracket, secure by using (3) of the 8mm carriage head bolts (3) 8mm flange lock nuts and (3) of the 8mm flat washers. Snug the hardware using a 13mm wrench. **See Photo 10.**

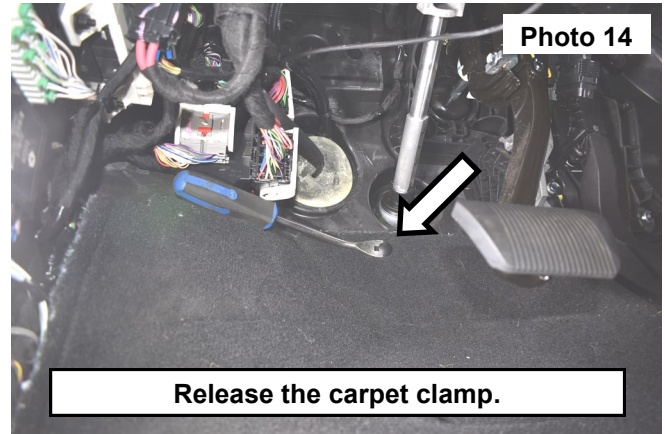
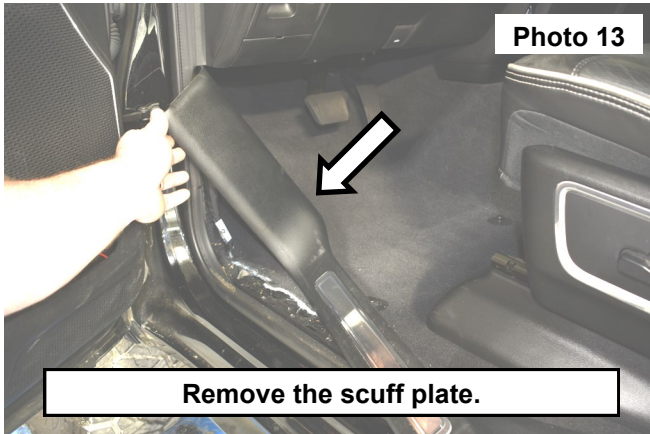


12. Locate the right side step brackets front to back as labeled **RF, RM, RR** and install onto the right side of the vehicle using steps 2-11. The right side is the passenger side.
13. Locate the step control module and harnesses. **See Photo 11.**
14. Looking under dash on driver side find a area to mount the module without it being into the way of brake and gas pedal and out of harms way. The module shown has been installed onto the center front side of the dash. Use a 10mm wrench to tighten bolt. **See Photo 12.**



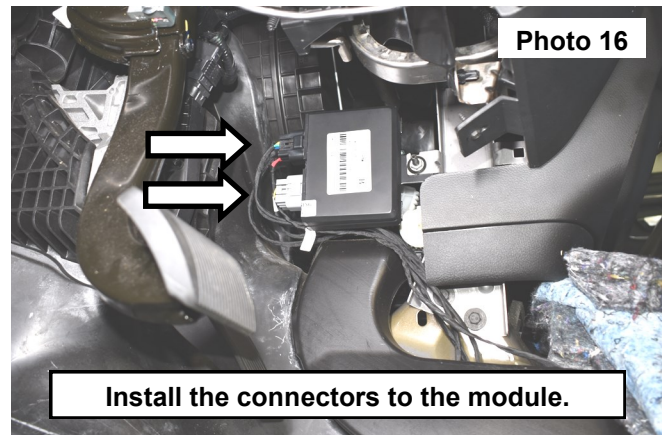
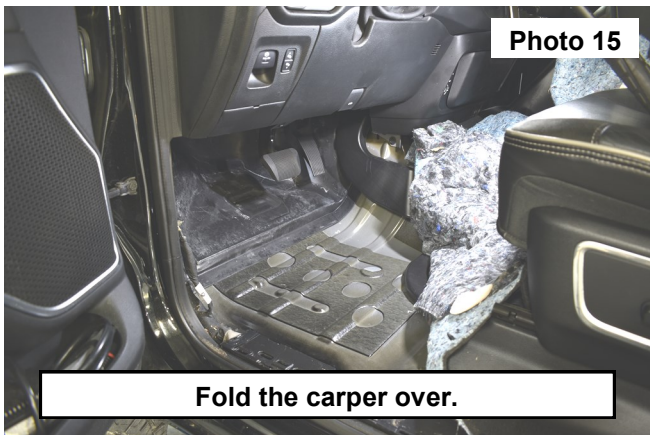
15. Remove the scuff plate and kick panel. Take care not to damage these panels. **See Photo 13.**

16. Release the carpet clamp from the stud in the floor of the vehicle. **See Photo 14.**

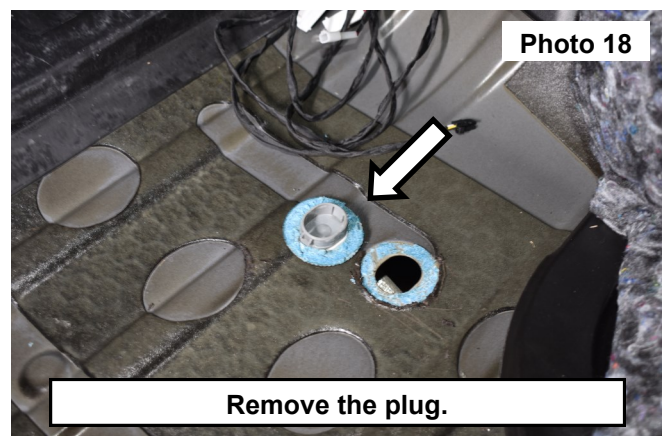
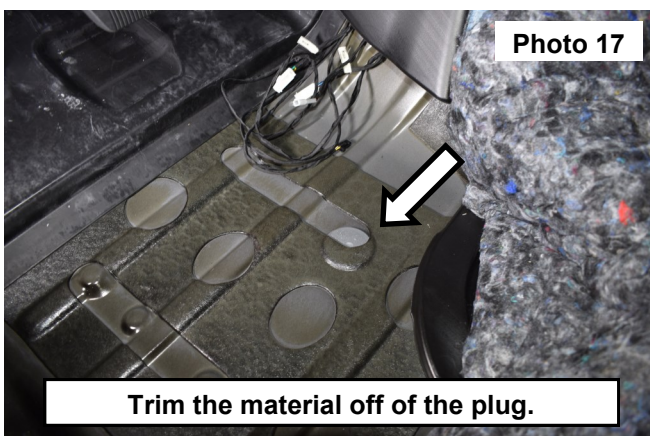


17. Fold the carpet over to expose the floor of the vehicle. **See Photo 15.**

18. Locate the grey connector and the black connector. Plug the connectors into the control module, and run the wiring behind the air vent tube to the floor. **NOTE:** The passengers side step motor wire will be ran across to the passengers side in a later step. **See Photo 16.**

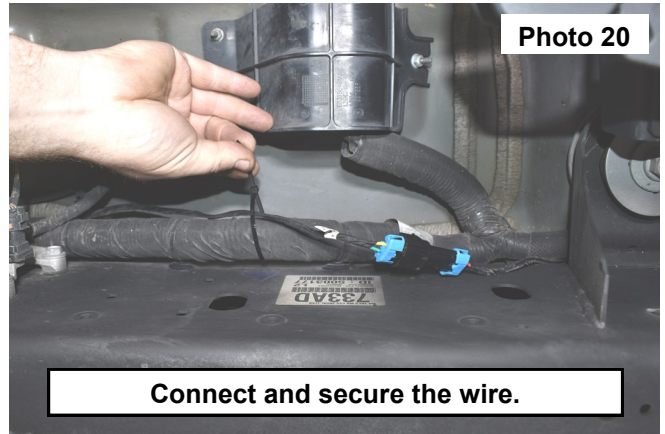
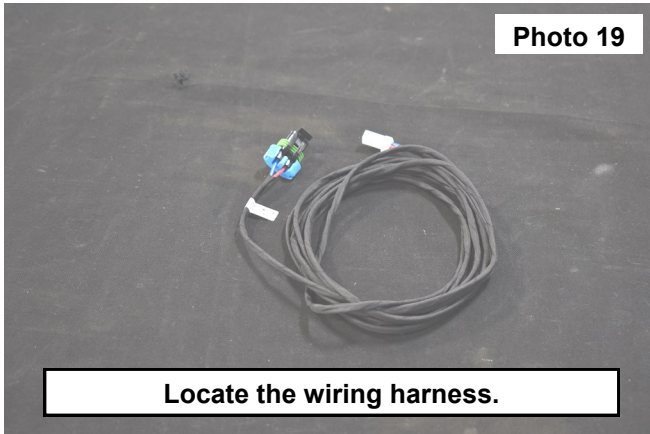


19. Cut the sound canceling material from around plastic plug in floor and remove plug. **See Photos 17 and 18.**



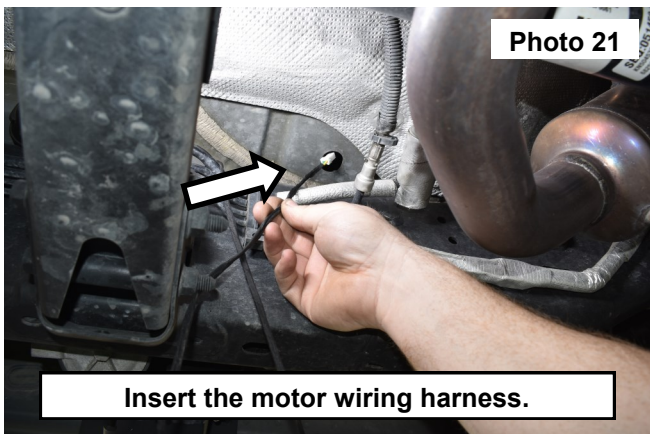
20. Locate the driver side motor wiring harness shown in **Photo 19**.

21. Connect the harness to the motor, using a supplied cable tie to secure the wiring in a safe location. **See Photo 20**.



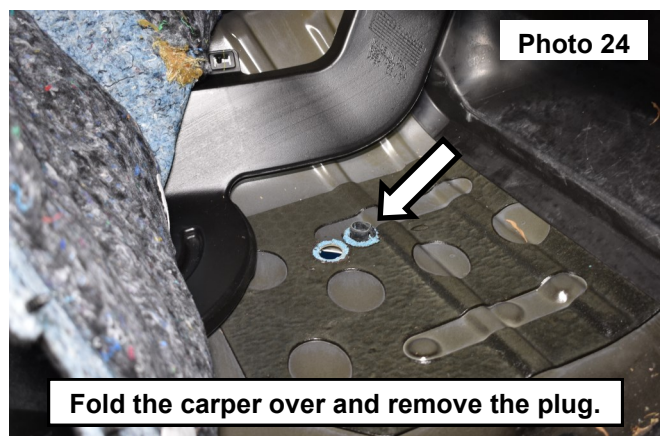
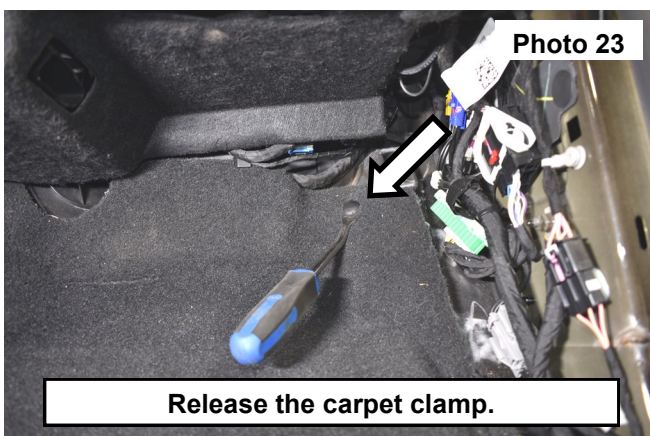
22. Insert the motor wiring harness into the plug hole in the bottom of the cab and connect to the black plugs wiring harness in the module. **See Photo 21**.

23. Locate and remove the scuff plate and kick panel on the right hand side. Take care not to damage these panels. **See Photo 22**.

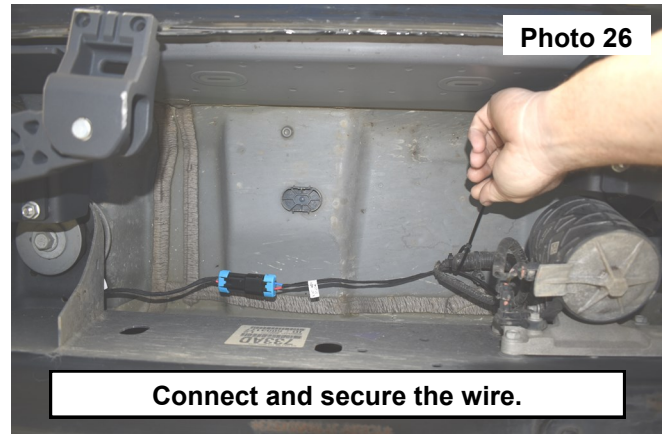
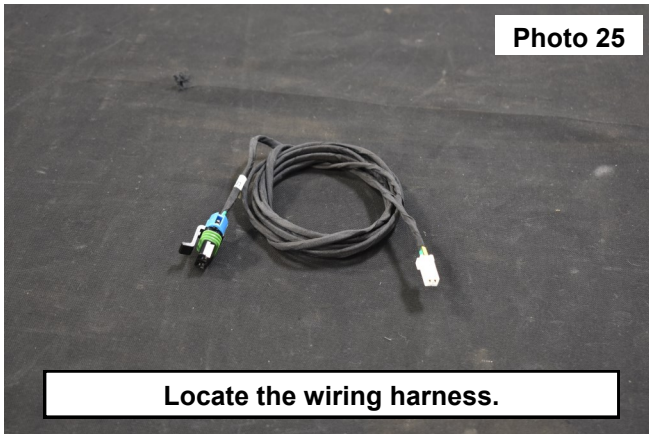


24. Release the carpet clamp from the stud in the floor of the vehicle. **See Photo 23**.

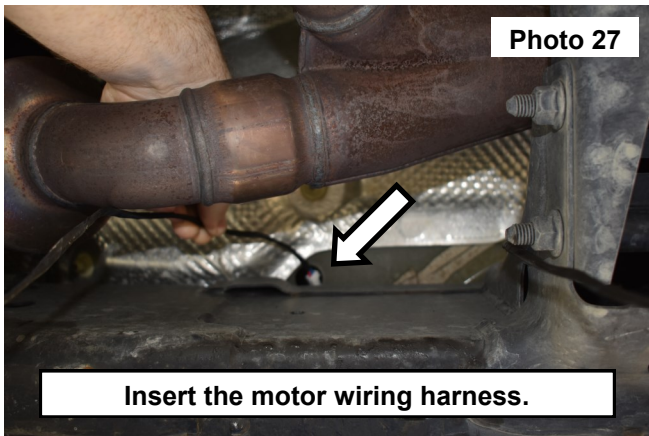
25. Fold the carper over to expose the floor of the vehicle, Cut the sound canceling material from around plastic plug in floor and remove plug. **See Photo 24**.



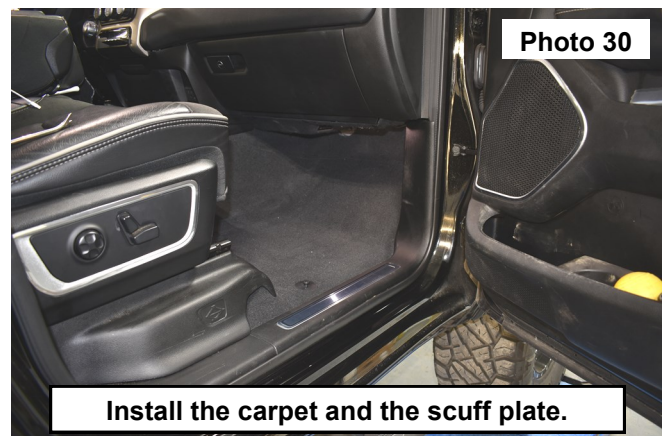
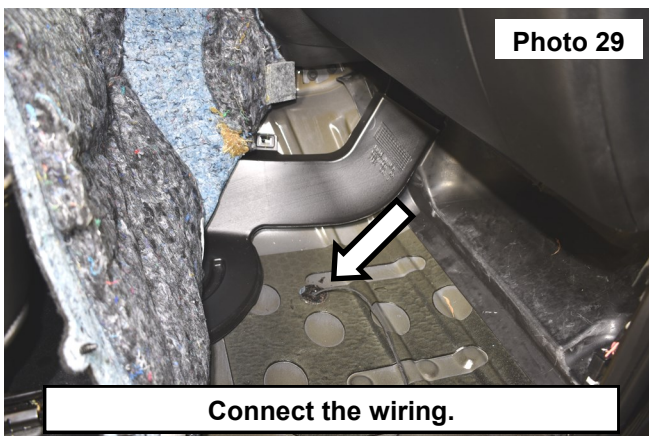
26. Locate the passengers side motor wiring harness shown in **Photo 25**.  
27. Connect the harness to the motor, using a supplied cable tie to secure the wiring in a safe location. **See Photo 26**.



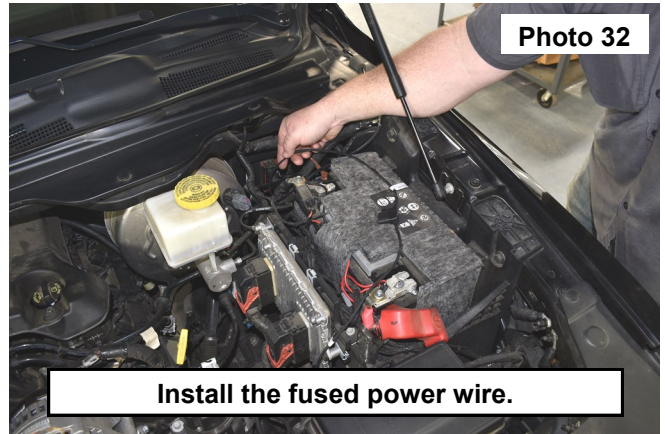
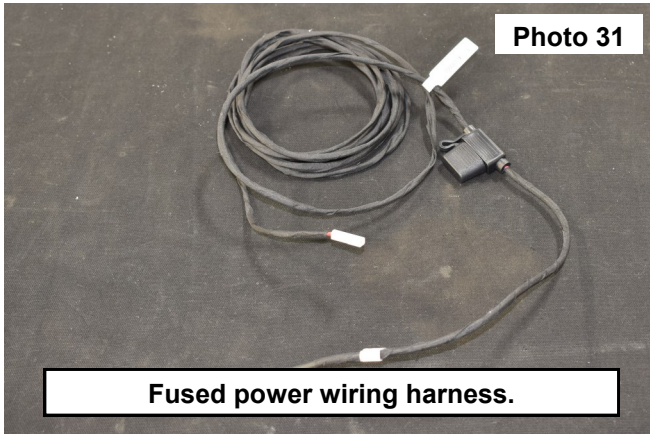
28. Insert the motor wiring harness into the plug hole in the bottom of the cab. **See Photo 27**.  
29. Drill a 1/2 hole into the center of both plastic plugs and run the passengers side motor wire through the plug and install into the floor of the vehicle. **See Photos 28**.



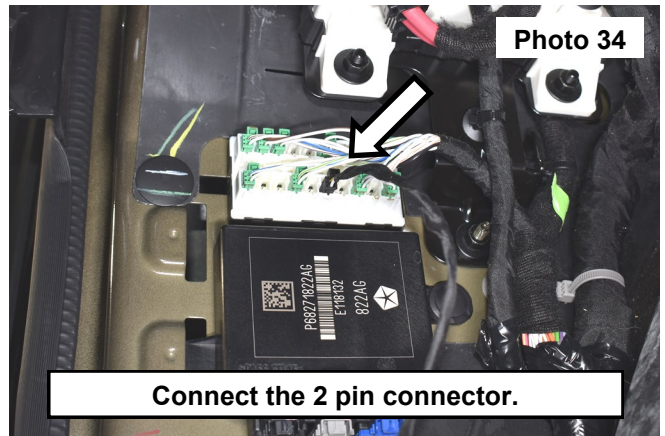
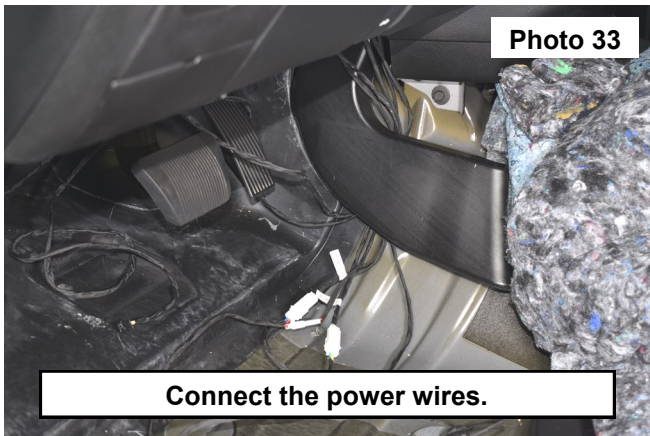
30. Connect the wiring of the passengers side plug to the wire from the black harness connected to the module. Use sealant to weather proof the wire in the plug. **See Photo 29**.  
31. Make sure the wire is ran under the carpet. Then reinstall the carpet with the clamp and the scuff plate back into the vehicle. **See Photos 30**.



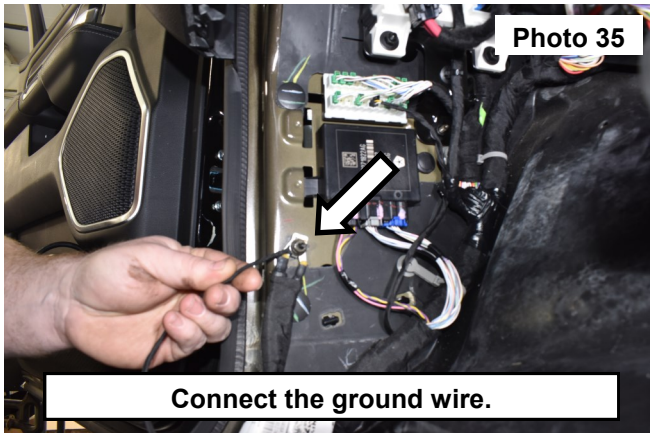
32. Locate the fused power wiring harness. **See Photo 31.**  
33. Install the fused power wire to the battery and secure under the vehicle . Install the wire through the access hole in the bottom of the floor. **NOTE: Do not connect to the battery at this time. See Photo 32.**



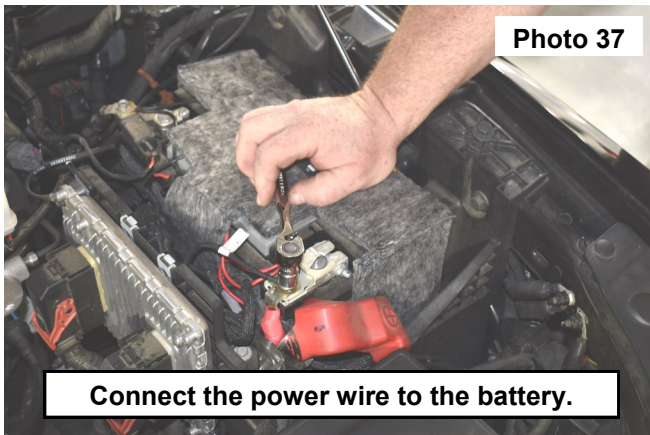
34. Connect the power wire to the black wiring harness from the module. **See Photo 33.**  
35. Connect the 2 pin connector to the white box located beside the floor trim panel that was removed. **See Photo 34.**



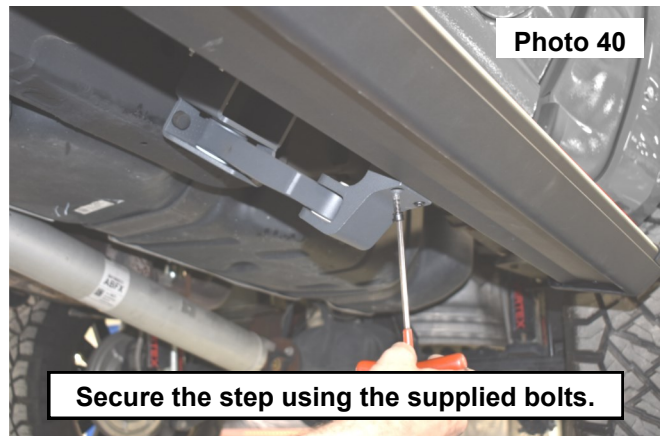
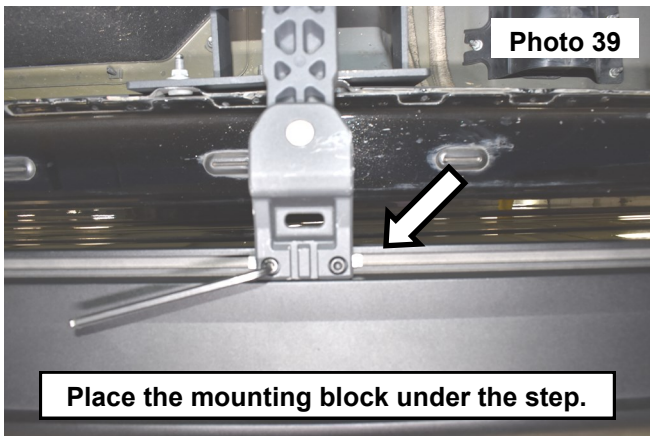
36. Install the ground wire to the stud on driver side using a 10mm wrench. **See Photo 35.**  
37. Install the carpet with the clamp and the scuff plate back into the vehicle. **See Photos 36.**



38. Close all doors on the vehicle. Then connect the fused power wire to the battery using a 12mm wrench. **See Photo 37.**
39. Open each door insuring that the driver and passenger side step motors are activated.
40. Open one door to extend the motor arm open the idler arms to the rubber bump stop.
41. Install and center the step board onto the idler arm mounts. **See Photo 38.**



42. Slide the mounting block under each of the (3) mounts, then secure the step board using (2) of the supplied 6mm socket head bolts and (2) 6mm lock washers in each step mount. **See Photo 39.**
43. Check that the step is center on the vehicle and snug the hardware using a 5mm Allen wrench. **See Photo 40.**



44. Test the step by closing the door. Make sure step does not hit frame and wires are not in harms way.
45. **NOTE:** *Tighten the motor arm first, test the step to the closed position. Then open and adjust the idler arms into position and tighten the front then rear while testing for no bind. Use shims if needed under the hinge and brackets adjust steps as necessary to get full cycle.*
46. Tighten the hinge mount to the step brackets using a 13mm socket. Add shims to get desire look if the step needs to be leveled from the front to the rear of the vehicle.
47. Repeat steps 40-46 on the opposite side of the vehicle. Tighten brackets on the body using a 13mm socket.
48. Check all hardware every 500 miles.
49. Double check that all wires are secured with a cable tie, away from exhaust heat and out of harms way.

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