RAM 2015-18 1500, 2019-2021 2500/3500 Crew Cab Retractable Steps W/ Light

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.

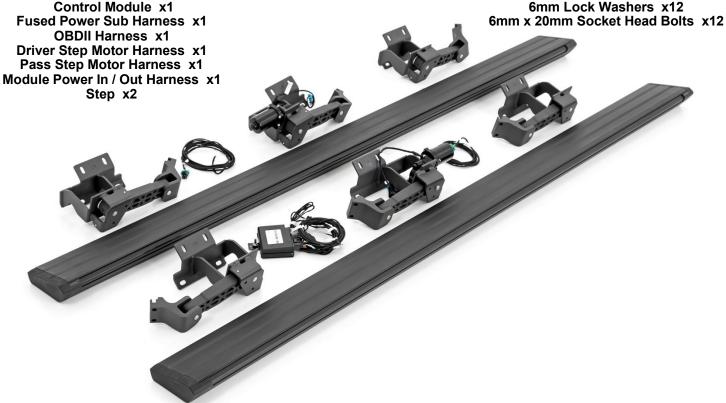
KIT CONTENTS:

Idler Arm Bracket RF, RR x1 Idler Arm Bracket LF, LR x1 Step Motor Bracket RM x1 Step Motor Bracket LM x1 Control Module x1 Fused Power Sub Harness x1 **OBDII Harness x1 Driver Step Motor Harness x1** Pass Step Motor Harness x1

TOOLS NEEDED: 10mm Wrench or Socket 13mm Wrench or Socket 1/2" Drill Bit

Drill Motor

HARDWARE INCLUDED: Flag Nuts x12 8mm x 30mm Hex Head Bolts x18 8mm Flat Washers x18 8mm Flange Lock Nuts x6 6mm Lock Washers x12



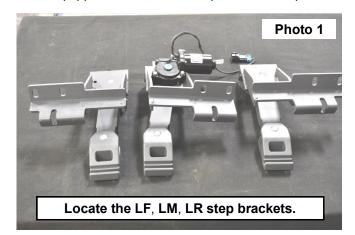
Torque Specs:

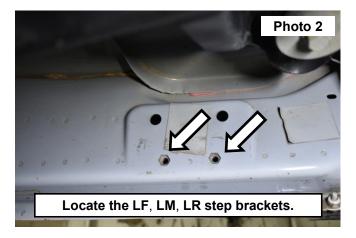
Size	Grade 5	Grade 8	Size	Class 8.8	Class 10.9
5/16"	15 ft/lbs	20ft/lbs	6MM	5ft/lbs	9ft/lbs
3/8"	30 ft/lbs	35ft/lbs	8MM	18ft/lbs	23ft/lbs
7/16"	45 ft/lbs	60ft/lbs	10MM	32ft/lbs	45ft/lbs
1/2"	65 ft/lbs	90ft/lbs	12MM	55ft/lbs	75ft/lbs
9/16"	95 ft/lbs	130ft/lbs	14MM	85ft/lbs	120ft/lbs
5/8"	135ft/lbs	175ft/lbs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



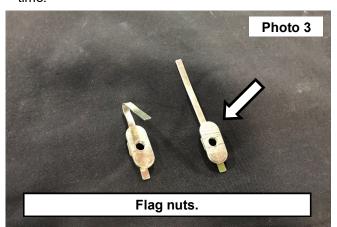
INSTALLATION INSTRUCTONS

- 1. Locate the Left side step brackets from front to back as labeled **LF**, **LM**, **LR**. Shown with idler arm and motor. **See Photo 1**. Left will be the Driver Side of the vehicle.
- 2. Inspect the mounting points on the inside of body. Some vehicles will have a nut sert in the step mount location. If not equipped with the nutserts proceed to step 3 and install the supplied flag nuts in the body. **See Photo 2**.





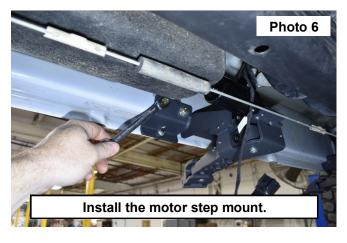
- Install the flag nuts into the body mount if the factory nutsert is not present. The top of the flag nut can be bent over for easy installation. See Photo 3.
- 4. Install the **LF** mount as shown and secure using (if needed (2) 8mm Flag nuts), (2) 8mm x 30mm bolts and (2) of the supplied 8mm flat washers into the installed nut in the body. Secure the lower step mount to the pinch weld using (1) 8mm x 30mm hex head bolt, (1) 8mm Flat washers and (1) 8mm Flange nut. **See Photo 4.** Do not tighten at this time



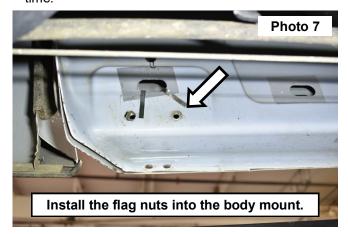


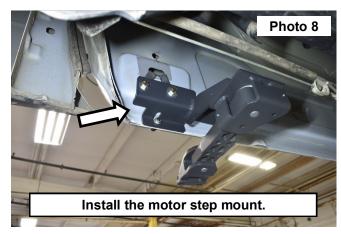
- 5. Install the flag nuts into the body mount if the factory nutsert is not present. See Photo 5.
- 6. Install the **LM** mount as shown and secure using (if needed (2) 8mm Flag nuts), (2) 8mm x 30mm bolts and (2) of the supplied 8mm flat washers into the installed nut in the body. Secure the lower step mount to the pinch weld using (1) 8mm x 30mm hex head bolt, (1) 8mm Flat washers and (1) 8mm Flange nut. **See Photo 6.** Do not tighten at this time.



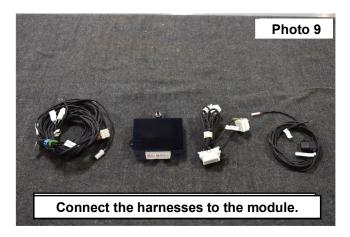


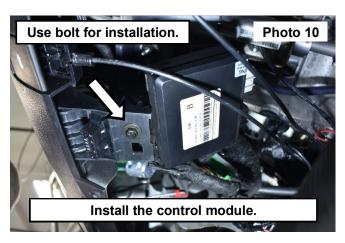
- 7. Install the flag nuts into the body mount if the factory nutsert is not present. See Photo 7.
- 8. Install the LR mount as shown and secure using (if needed (2) 8mm Flag nuts), (2) 8mm x 30mm bolts and (2) of the supplied 8mm flat washers into the installed nut in the body. Secure the lower step mount to the pinch weld using (1) 8mm x 30mm hex head bolt, (1) 8mm Flat washers and (1) 8mm Flange nut. See Photo 8. Do not tighten at this time.





- 9. **NOTE:** Disconnect the battery of the vehicle at this time.
- 10. Connect the Grey and Black Plug wiring harnesses to the module. See Photo 9.
- 11. 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 under side of the dash by the hood pull with the module tilted up. Use the supplied bolt to install. **See Photo 10.**





- 12. Remove the driver side scuff plate and fold the carpet back exposing the floor of the vehicle. See Photo 11.
- 13. Remove the plug in the bottom of the floor using a pry tool. See Photo 12.

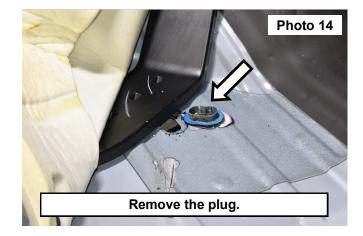




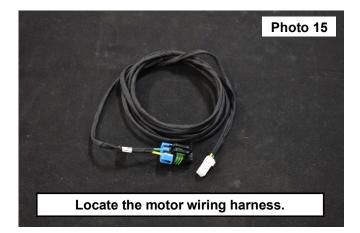


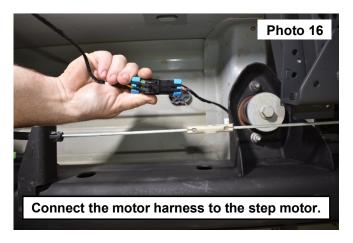
- 14. Remove the passengers side scuff plate and fold the carpet back exposing the floor of the vehicle. See Photo 13.
- 15. Remove the plug in the bottom of the floor using a pry tool. See Photo 14.





- 16. Locate the motor wiring harness and the step light wires. See Photo 15.
- 17. Connect the motor harness to the step motor on the Driver and Passengers side of the vehicle. See Photo 16.





18. Place the motor harness into the plug holes in the driver and passenger side floor. See Photos 17 and 18.







- 19. Drill a 1/2" hole in the center of the plastic plug for the driver and passenger side floor. See Photo 19.
- 20. Install the harnesses through the plugs. See Photo 20.





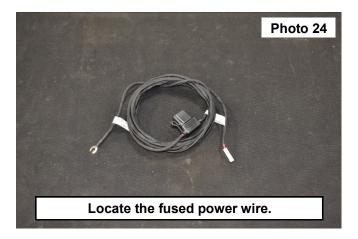
- 21. Place the plugs into the OE hole in the floor. (Passengers side shown) Then run the wiring over to the driver side. **See Photo 21.**
- 22. Connect the driver and passenger side motor harnesses to the module plug under the dash. See Photo 22.





- 23. Connect the ground wire to the bolt behind the kick panel. Install using a 10mm wrench. See Photo 23.
- 24. Locate the fused power wire. See Photo 24.

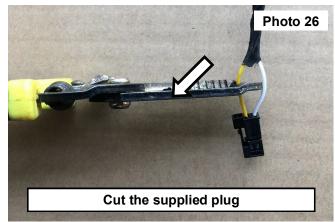






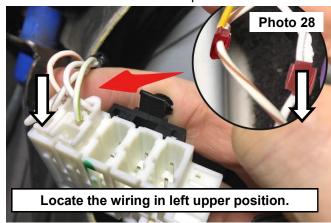
- 25. Remove the positive battery cover. Install the power wire, route the wire from the battery across fire wall over to driver side fender well. Route wire down fender well and along frame to the grommet and inside the cab and connect to the module harness. Do not attach to the battery at this time.
- 26. On the 15-17 1500 & the 19-21 2500 trucks ,install signal wire into the white bus board under the dash near the steering column. See Photo 25. Proceed to next steps to connect to 2018 1500 1500 vehicles.
- 27. It will be necessary to wire into the harness on the 2018 Ram 1500 trucks. Please follow the steps below.
- 28. Remove the plastic end on the signal wire as shown in Photo 26.



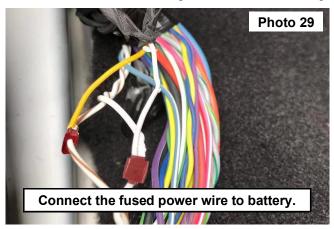


29. Locate the harness and connector as shown in Photo 27 & 28 behind the drivers side kick panel.



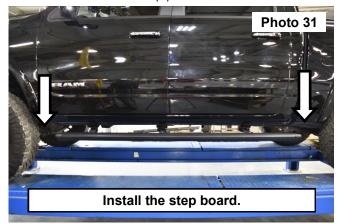


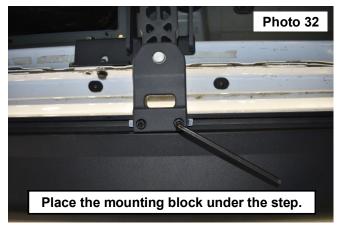
- 30. Using the connectors included in the kit. Connect the Yellow wire from the step harness to the factory white wire with brown stripe. Connect the white wire from the light harness to the factory white wire. **See Photo 29**.
- 31. Close all doors on the vehicle. Connect the fused power wire to the power block of the vehicle using a 13mm socket. **See Photo 30.** Be sure to tighten the nut to ensure good connection.





- 32. Test the motors by opening and closing each door to confirm that each door operates the step motor correctly.
- 33. Open one door on each side. With the motor and idler arms extended outward, install one step board onto the mounts. Center the step on the vehicle when open. **See Photo 31.**
- 34. 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 32.**



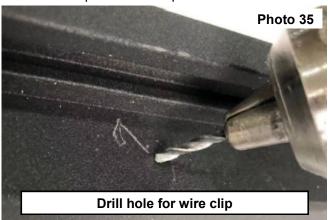


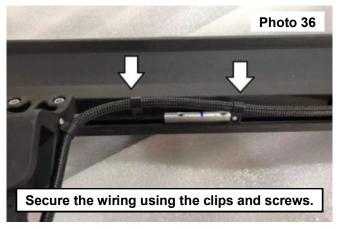
- 35. Check that the step is center on the vehicle and snug the hardware using a 5mm allen wrench. See Photo 33.
- 36. With the step closed, connect the step lighting wire to the vehicle harness. See Photo 34.





37. Drill a hole in the step board as shown using a 7/64 bit and secure the wire to the step with the supplied phillips head screws and plastic loom clips. **See Photo 35 and 36.**





- 38. Repeat steps 1-37 on the opposite side of the vehicle. Use the Passenger side extension wiring to the module to the motor and light wiring, mounting of the step brackets and the step board to the arms.
- 39. Test the step by closing the door. Make sure step does not hit frame and wires are not in harms way.
- 40. Make sure the step is not in any bind when opening or closing, use shims if needed. This would hinder the step from fully extending or closing. Adjust steps as necessary to get full cycle
- 41. 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.
- 42. Repeat steps 28-33 on the opposite side of the vehicle. Tighten brackets on the body using a 13mm socket.
- 43. Check all hardware every 500 miles.
- 44. Double check that all wires are secured with a cable tie and away from exhaust heat.

