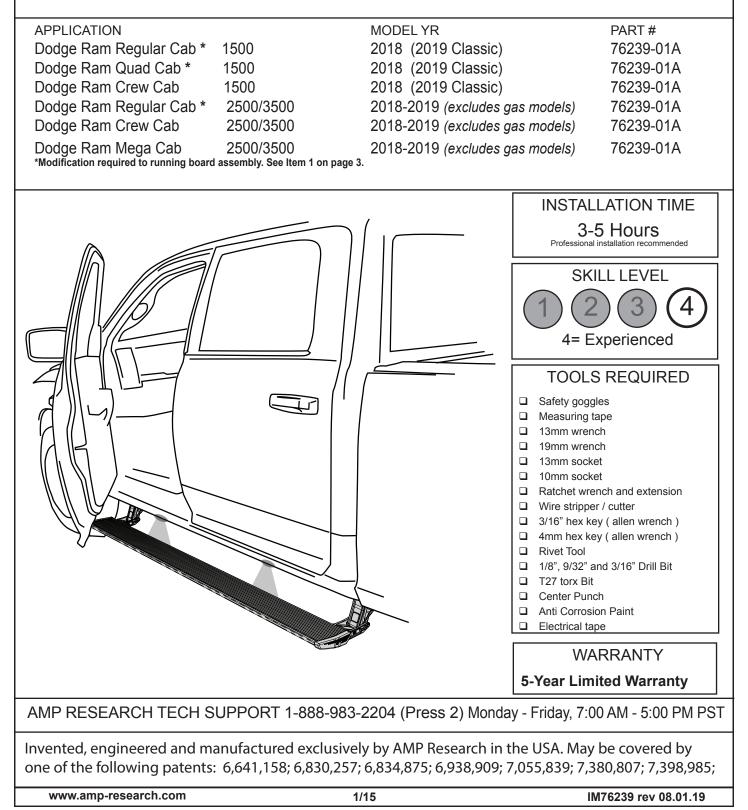


# RESEARCH POWErStep

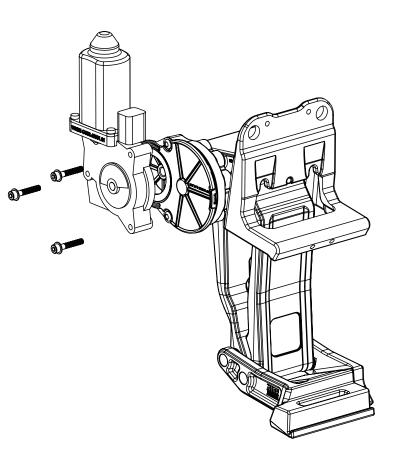


INSTALLATION GUIDE Motor to linkage assembly

### NOTE: The motors will be attached on step 20 (page 8).

EXPLODED VIEW

- Motor
- Socket cap screw
- Washer
- Drive Gear Housing Cover



#### CAUTION: HANDLE WITH CARE.

To ensure our customers receive all components with full integrity, we pack the motors separate from their linkage assemblies. This requires that the installer position and fasten the motor before continuing with the install. Please follow the instructions below and handle the assembly carefully.

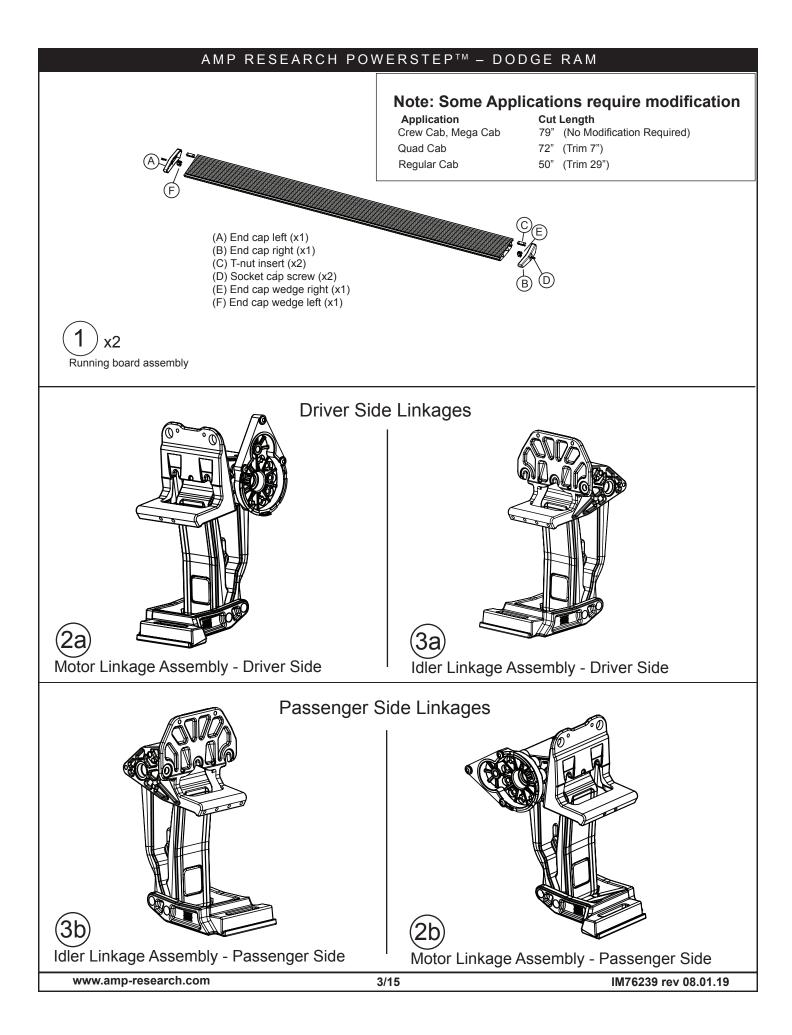
CAUTION: Dropping the assembly or any excessive impact MAY cause damage to the motor.

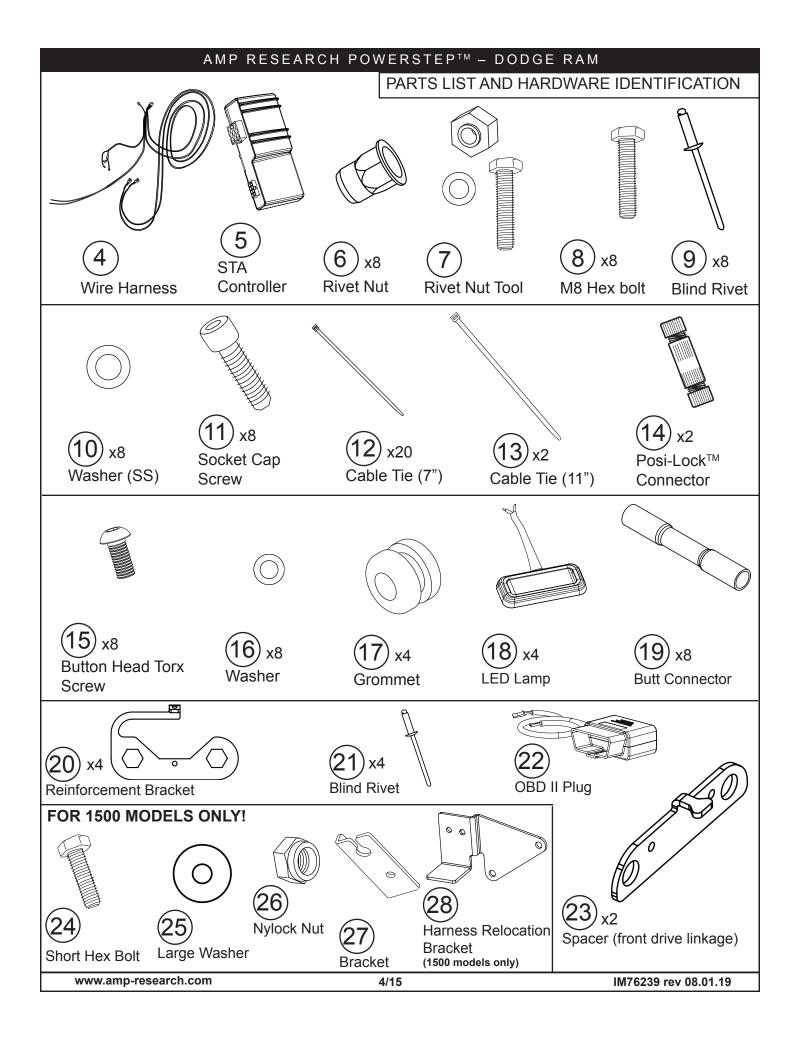
Instructions:

1. Position the gear cover in place as shown if not already in place.

2. Seat motor into position on the three mounting bosses. This may require an adjustment of the gear by moving the swing arms.

3. After seating into place, fasten the motor with the three motor mount screws with 4mm Hex Head. Tighten screws to 36 in-lbs (4N-m). **Do not over torque.** 

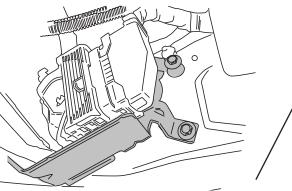




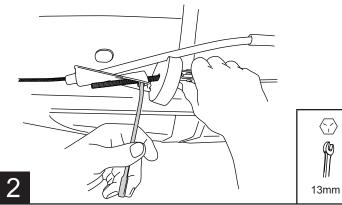
#### AMP RESEARCH POWERSTEP<sup>™</sup> - DODGE RAM

NOTE: 1500 RAM Only! Powerstep installations require additional steps and come with the required additional hardware. Please read and carefully follow the instructions in Step 1 for your vehicle model. Follow Steps 1-5 to relocate brake cable and wire harness plug and then proceed with the Power Step installation. For Ram 2500/3500 Skip to step 6.

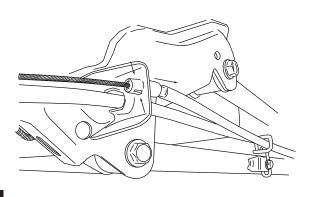
On Drivers side of vehicle towards front of body remove harness bracket with 10mm socket or wrench. Remove plug from bracket. And replace with supplied bracket using two of the three factory screws.



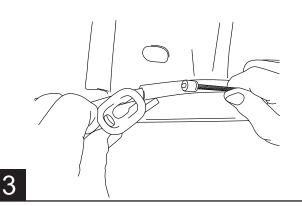
While holding brake cable adjustment nut with wrench (located on driverside along frame, towards the rear), loosen brake cable to allow for slack. Mark position of nut before loosening.



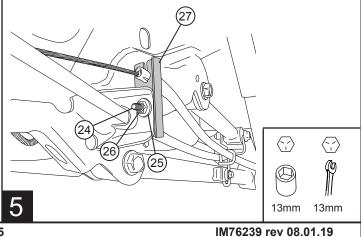
Remove brake cable guide from frame by depressing locking tabs and sliding guide out through hole. Unthread brake cable from frame mount.



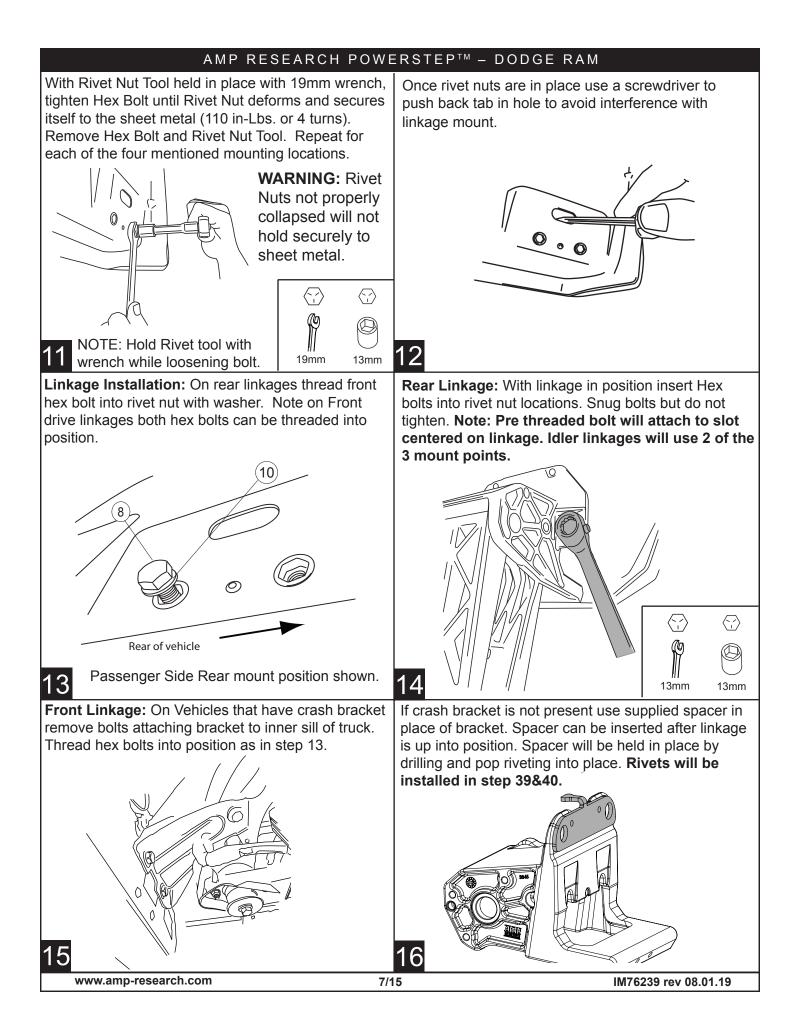
After gaining enough slack, detach brake cable as shown below. This detachment point is located just to the rear of the adjustment nut.

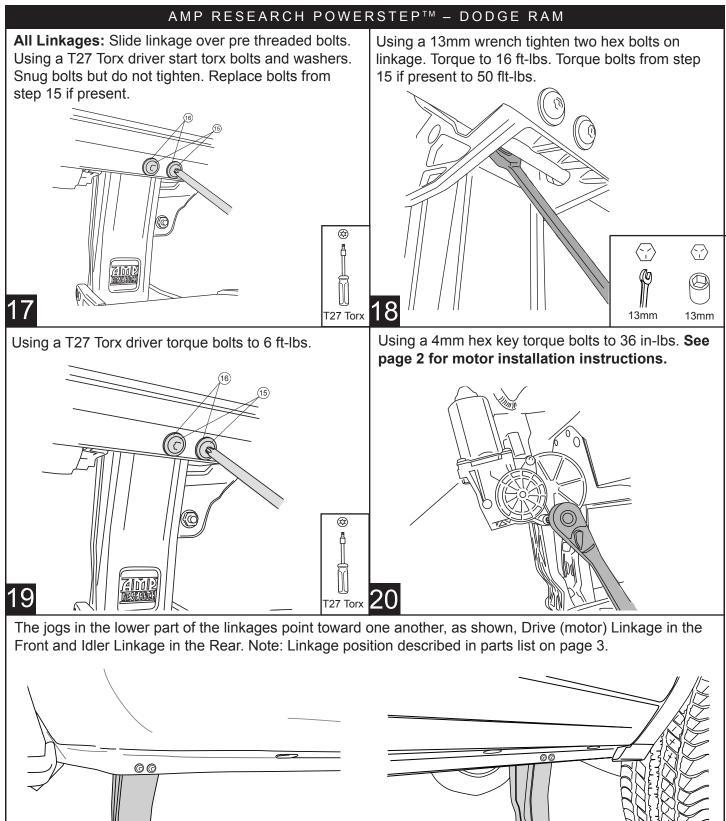


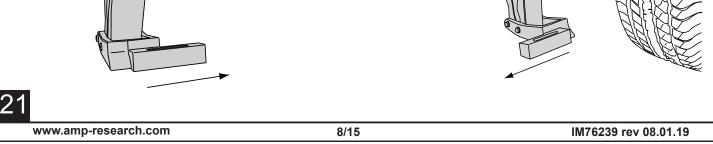
Attach brake cable guide to supplied Brake Cable Bracket (27) and mount bracket with supplied hardware. Reattach brake cable and readjust brake cable adjustment nut to original position.



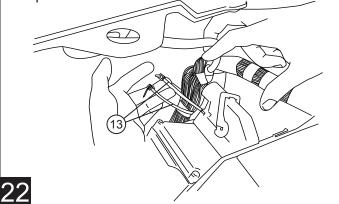
#### AMP RESEARCH POWERSTEP™ - DODGE RAM HARDWARE MOUNTING **OVERVIEW** (passenger side shown) Locate forward most and rearward most mounting provisions on inner sill of truck. Remove tape from sill drain hole at both mounting points. Note: Some vehicles may have Front welded fasteners installed already. Idler Assembly Backing plates and rivet nuts are not needed on these locations. Factory Rivet **NOTE:** Driving Linkage Assemblies nuts will need to be removed to install (with motor) mount in the front; Idler backing plates Assemblies mount in the rear. Driving Assembly 6 Set Reinforcement Plate in place and locate with Once hole is drilled insert a piece of string or wire rivet nuts. Drill hole using an 1/8" drill bit. After through hole in Reinforcement Plate. Set plate into drilling apply paint to prevent rusting position. (20)6 8 Set rivet nuts into place for alignment. Insert pop Assemble Hex Bolt (lubricated with soapy water), rivet through hole in plate and secure in place. Once Washer, Rivet Tool, and Rivet Nut together as pop rivet is installed remove string or wire from shown and place into hex cutouts in sill. An extra Reinforcement Plate. NOTE: Verify plate is pulled Hex Bolt and M8 Washer is supplied to install rivet flush to the body before securing pop rivet. nuts. 9 $\left( \right)$ www.amp-research.com IM76239 rev 08.01.19 6/15



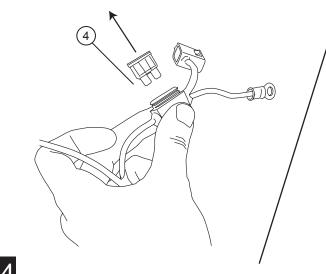




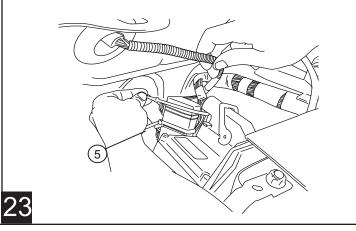
Prepare large tie-wraps for mounting Power Step Controller. Loosely loop tie-wraps around large bundle of wires behind battery in engine compartment.



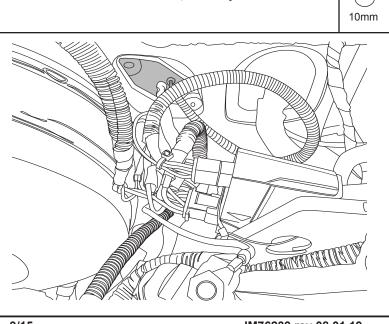
Remove fuse from Power Step Wire Harness.



Insert controller into tie-wrap loops and cinch down securely. The tie-wraps should cinch down into channels on controller surface.



Connect power leads from Controller, Red to positive battery terminal and Black to the vehicle body ground as shown.



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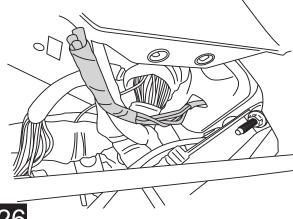
Locate large rubber wire boot on driver side firewall as shown below. Slice small opening as shown below to run trigger wires through.

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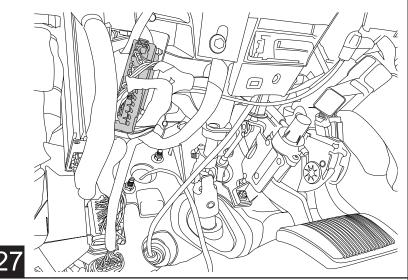
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Tape leading end of wires together and push through rubber boot to cabin side of the firewall. Silicon lubricant may be used for ease of passage. The trigger wires will come out just above and to the left of the brake pedal.

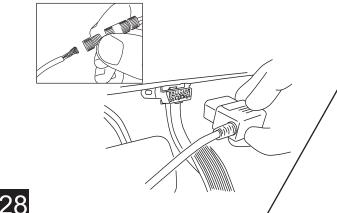


Locate Green Connector Block under dash to the left of the steering column. The 2 pin plug off the OBD harness will plug into one of the open ports on this green plug.

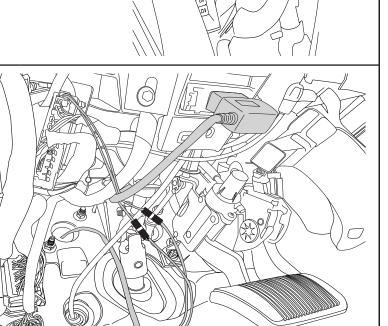


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Plug 2 pin plug into the Green Connector Block. Use supplied Posi-Lock connectors to attach the Plug and Play module to the Harness. Attach Matching colors on the harness to the wires on the module. Plug in module to the OBD II port on the vehicle.

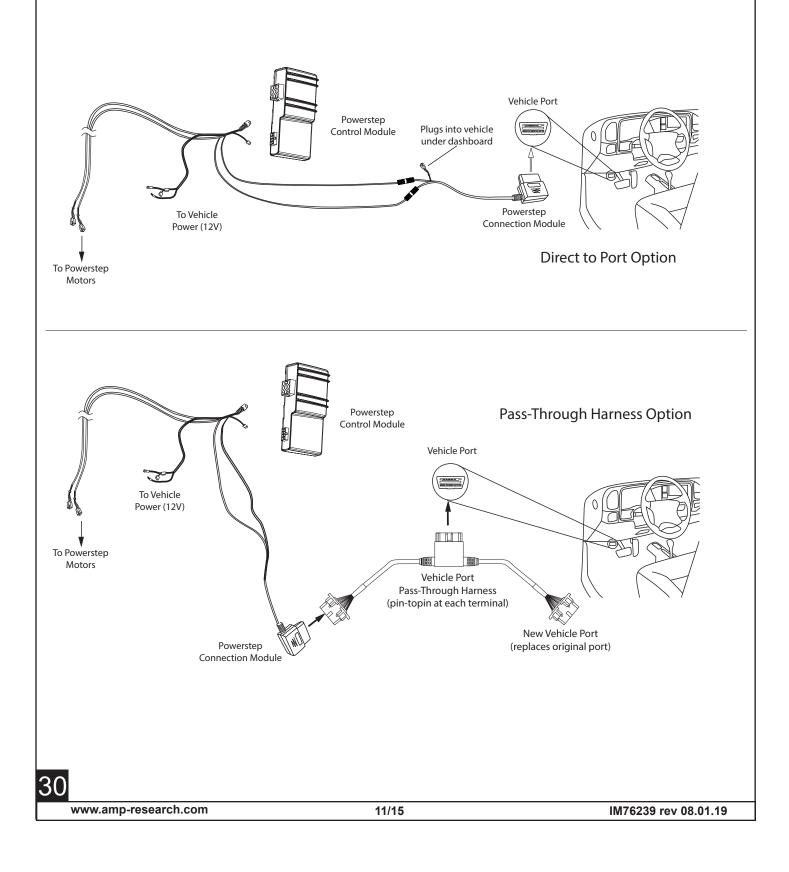


Secure harness with supplied tie wraps. Make sure wires are away from E-brake mechanism and brake pedal assembly.



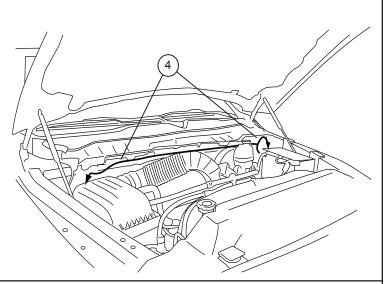
**OBD II install:** Use Supplied Posi-Lock connectors to attach the Plug and Play Module to the Harness. Attach matching colors on the harness to the wires on the module. Plug in module to OBD II port on the vehicle. Secure harness with supplied tie wraps.

*Note: If the OBD II pass thru harness (76404-01A) was purchased see install sheet supplied in packaging. The pass through harness allows for an open port for other accessories. See below for a brief description.* 

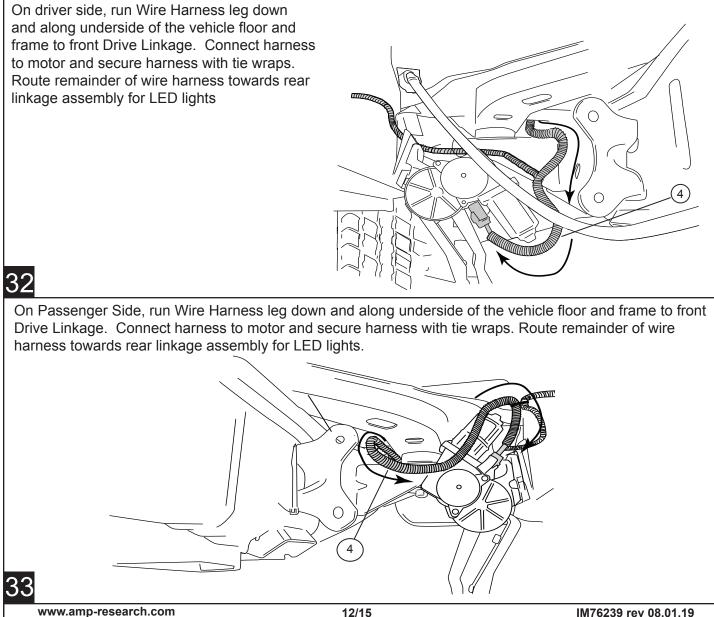


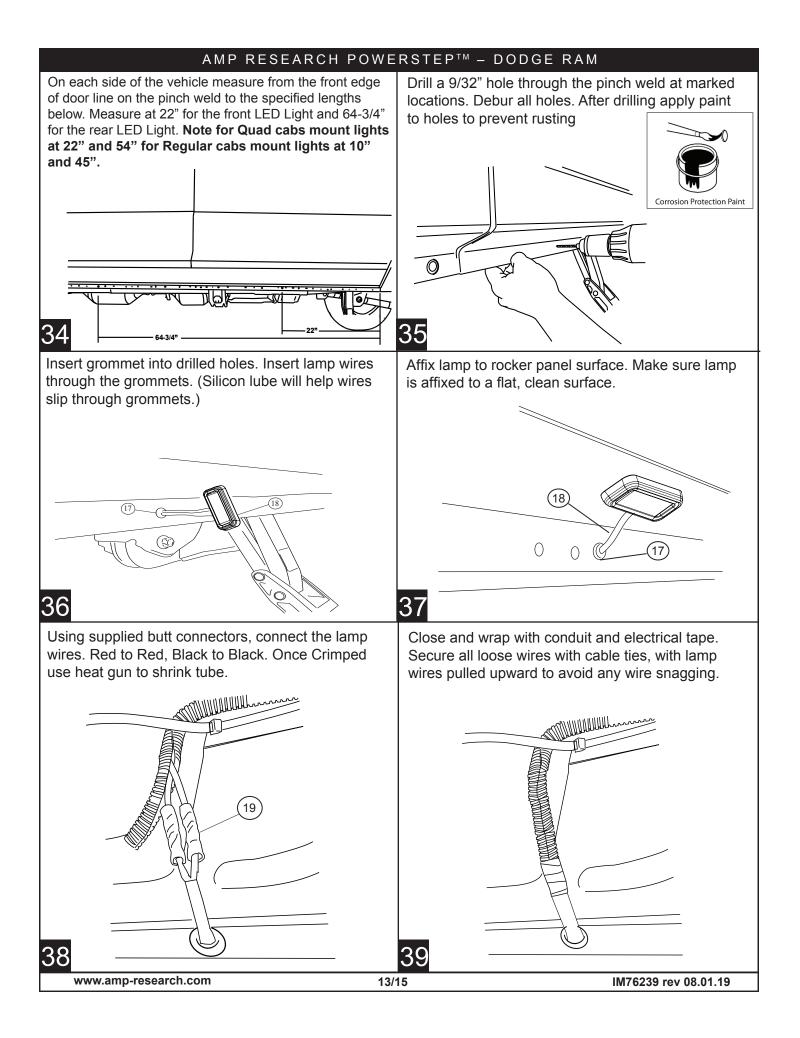
#### AMP RESEARCH POWERSTEP<sup>™</sup> - DODGE RAM

Route the two Wire Harness legs down over the wheel wells toward Motor Linkages, long leg across to the passenger side. Secure harness with tie wraps.

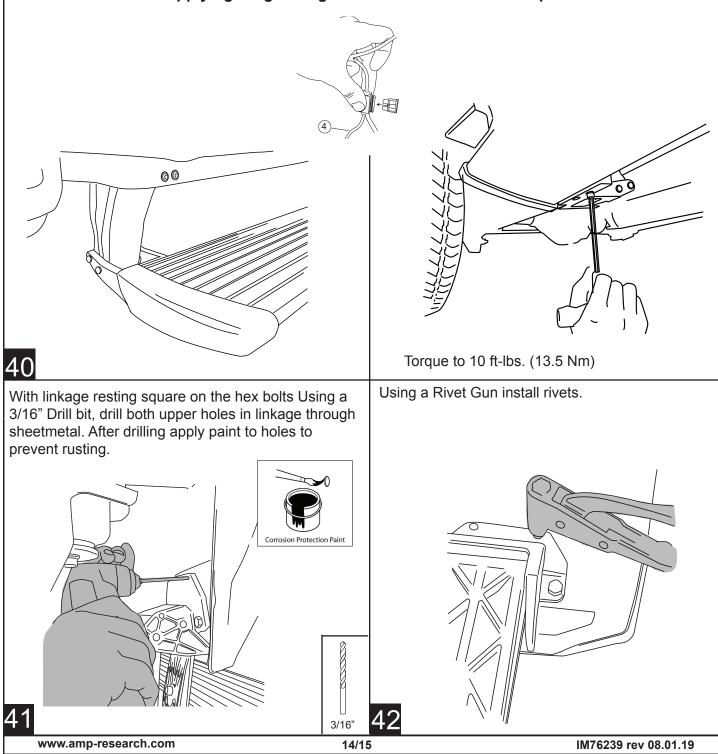


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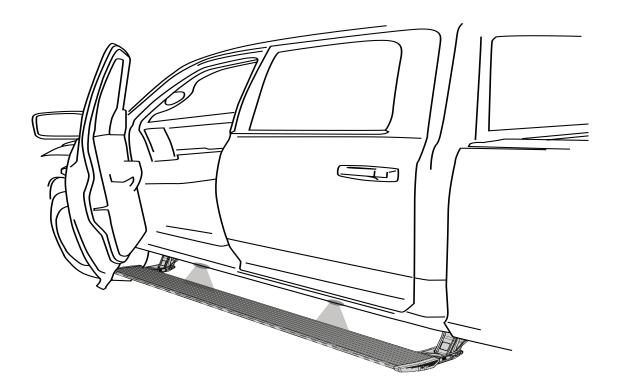




Install boards: Slide mounting T-Nut of board into position and attach to linkages. Shift board forward as much as possible for proper clearance. The end of board/end cap will nest into linkage lower mount 1/2" when positioned correctly. With doors open Reinstall fuse. With boards in extended position step on boards to seat linkages. Walk the length of the board taking bouncing steps. DO NOT JUMP ON BOARD! Verify that board end caps do not contact the pinch weld. If Endcaps make contact loosen 4 button head screws at pinch weld. Walk the length of the board and apply weight to the center of the board and while applying weight retighten button head screws at pinch weld.



Check that all doors activate the Power Step and the LED Lights work when doors open and close. Reinstall any remaining trim panels.



#### **FINAL SYSTEM CHECK**

Check that all doors activate the PowerStep and the LED lights work when doors open and close. **NORMAL OPERATION:** When the doors open, PowerStep automatically deploys from under the vehicle. When the doors are closed, PowerStep will automatically return to the stowed/retracted position. *Note that* 

**CORRECT OPERATION OF LIGHTS:** All four lamps will illuminate upon opening any door of vehicle. Lamps will stay on until restowing of both Power Steps or until 5 minutes has expired with the doors open. When the lights timeout after 5 minutes, they can be reillumintated by closing and opening any door of vehicle.

## **апр** Reserrer Power Step

#### Congratulations on your purchase of the genuine AMP Research PowerStep! Here's what you should know...

**POWER-DEPLOYABLE RUNNING BOARDS OPERATION:** AMP Research PowerStep running boards automatically move when the doors are opened to assist entering and exiting the vehicle.



#### Automatic power deploy:

The running boards will extend down and out when the doors are opened.

#### Automatic power stow:

The running boards will return to the stowed position when the doors are closed. There will be a 2-second delay before the running boards move to the stowed position.

#### Automatic stop:

If an object is in the way of the moving running board, the running board will automatically stop. To reset, clear any obstruction, then simply open and close the door to resume normal operation.



#### Manually set in the deployed (OUT) position for access to the roof:

The running boards can be manually set in the deployed position by firmly holding the step down with your foot while at the same time closing the door. To resume normal operation, open and close the door.



**Maintenance:** In adverse conditions, debris such as mud, dirt, and salt may become trapped in the running board mechanism, possibly leading to unwanted noise. If this occurs, manually set the running boards to the deployed position and flush the front and rear hinge arms with a high-pressure car wash wand. <u>Avoid spraying the motors directly.</u> After washing, apply silicone spray lubricant to the hinge pivot pins. Do not apply silicone, wax or protectants like Armor All<sup>®</sup> to the running board stepping surface.

Caution! Keep hands away when the running board is in motion.

#### **5-YEAR LIMITED WARRANTY**

AMP RESEARCH warrants this product to be free from defects in material and workmanship for FIVE (5) YEARS FROM DATE OF PURCHASE, provided there has been normal use and proper maintenance. This warranty applies to the original purchaser only. All remedies under this warranty are limited to the repair replacement of the product itself, or the repair or replacement of any component part thereof, found by the factory to be defective within the time period specified. The decision to repair or replace is wholly within the discretion of the manufacturer.

This warranty specifically excludes labor. If you have a warranty claim, first you must call our factory at the number below for instructions. You must retain proof of purchase and submit a copy with any items returned for warranty work. Upon completion of warranty work, if any, we will return the repaired or replaced item or items to you freight prepaid. Damage to our products caused by accidents, fire, vandalism, negligence, misinstallation, misuse, Acts of God, or by defective parts not manufactured by us, is not covered under this warranty.

ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE CREATED HEREBY ARE LIMITED IN DURATION TO THE SAME DURATION AND SCOPE AS THE EXPRESS WRITTEN WARRANTY. OUR COMPANY SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

FOR WARRANTY ISSUES WITH THIS PRODUCT PLEASE CALL AMP RESEARCH CUSTOMER SERVICE 1-888-983-2204

#### WARNING

Be sure to read and precisely follow the provided instructions when installing this product. Failure to do so could place the vehicle occupants in a potentially dangerous situation. After installing or reinstalling, re-check to insure that the product is properly installed.