

# INSTALLATION GUIDE



**PowerStep** SMART  
MADE IN USA SERIES

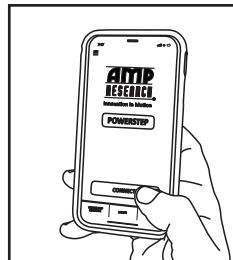
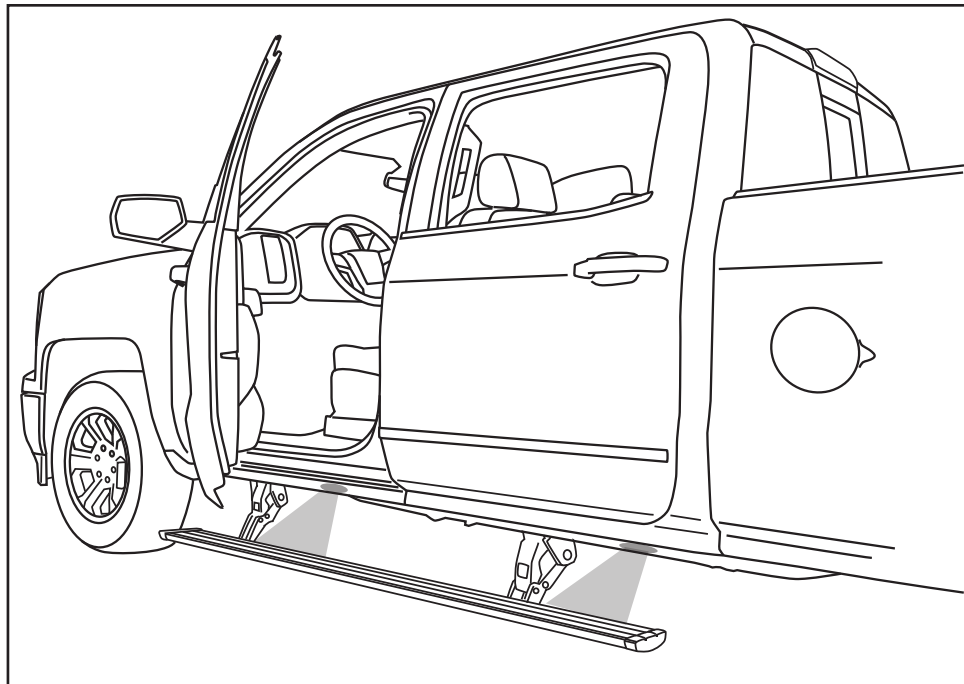


**APPLICATION**

Chevrolet Silverado1500 / GMC Sierra 1500 - Double Cab \*  
 Chevrolet Silverado1500 / GMC Sierra 1500- Crew Cab  
 Chevrolet Silverado HD / GMC Sierra HD - Double Cab \* (excludes diesel engine)  
 Chevrolet Silverado HD / GMC Sierra HD- Crew Cab (excludes diesel engine)

AMP Part #  
 2014-18 86154-01A  
 2014-18 86154-01A  
 2015-19 86154-01A  
 2015-19 86154-01A

\* Modification required to running board assembly. See Item 1 on page 3.



**SMART SERIES APP: Download App to your phone and unlock the latest features including override, light controls, and diagnostics.**



SCAN ME

**INSTALLATION TIME**

**2-3 Hours**

Professional installation recommended

**SKILL LEVEL**



4= Experienced

**TOOLS REQUIRED**

- Safety goggles
- Measuring tape
- Flat blade screwdriver
- Power Drill
- 9/32" drill bit
- 13 mm socket
- Ratchet wrench and extension
- 13mm end wrench
- Wire crimpers
- Wire stripper / cutter
- 3/16" hex key wrench (allen wrench)
- 4mm hex key wrench ( allen wrench )
- Electrical tape
- Weather proof caulking (silicone sealer)
- Silicone spray

**WARRANTY**

**5-Year Limited Warranty**

**AMP RESEARCH TECH SUPPORT 1-888-983-2204 (Press 2) Monday - Friday, 7:00 AM - 5:00 PM PST**

Invented, engineered and manufactured exclusively by AMP Research in the USA. May be covered by one OR MORE of the following patents: 6,641,158; 6,830,257; 6,834,875; 6,938,909; 7,055,839; 7,380,807; 7,413,204; 7,398,985; 7,584,975; 7,566,064; 7,487,986; 8,157,277; 8,408,571; 9,302,626; 9,561,751; 10,053,017; CA2463717 ©2012 AMP Research. All rights reserved. Printed in USA.

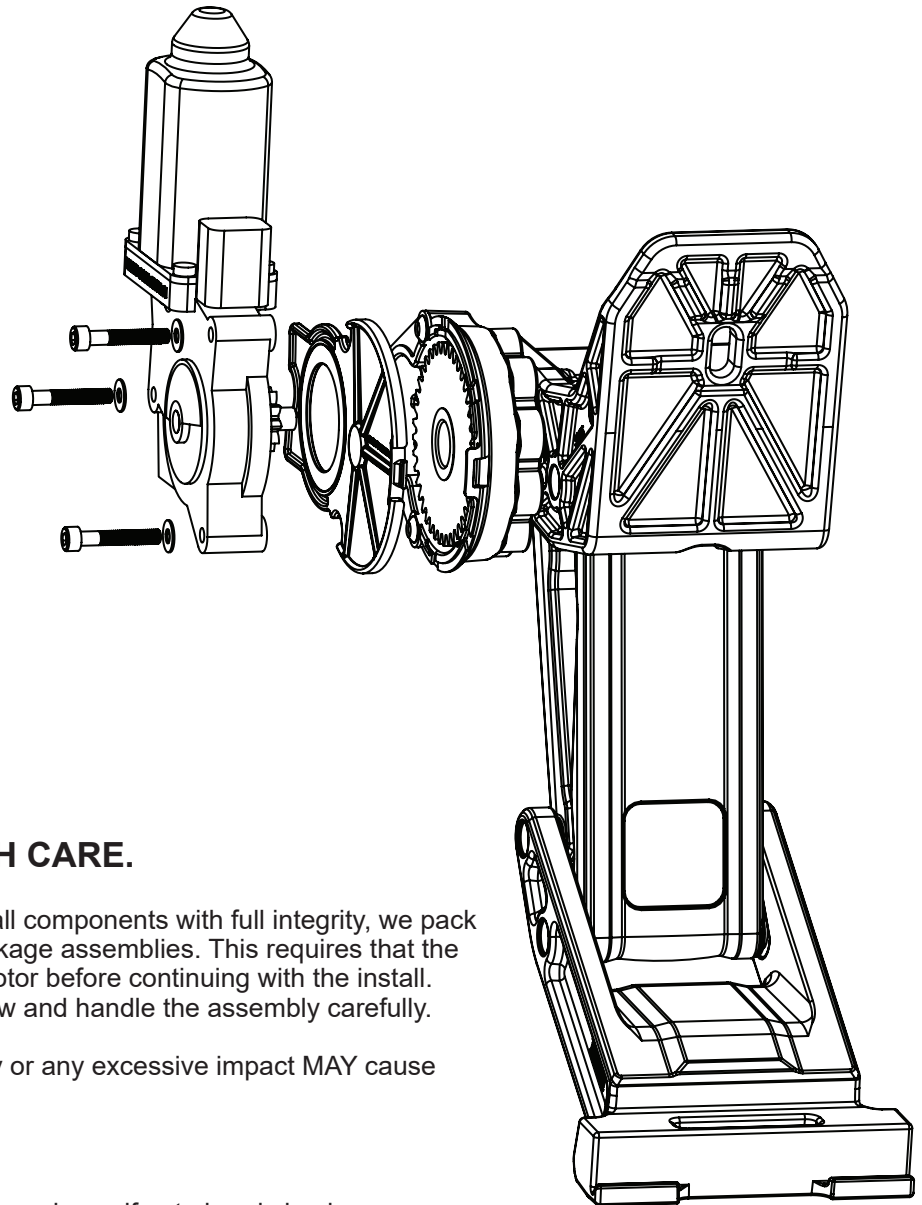
## INSTALLATION GUIDE

### Attaching motor to Linkage assembly

The motors must be attached to the Linkage assemblies before continuing the installation process.

#### EXPLODED VIEW

- Motor
- Gear Cover
- Socket cap screw
- Washer



#### 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.

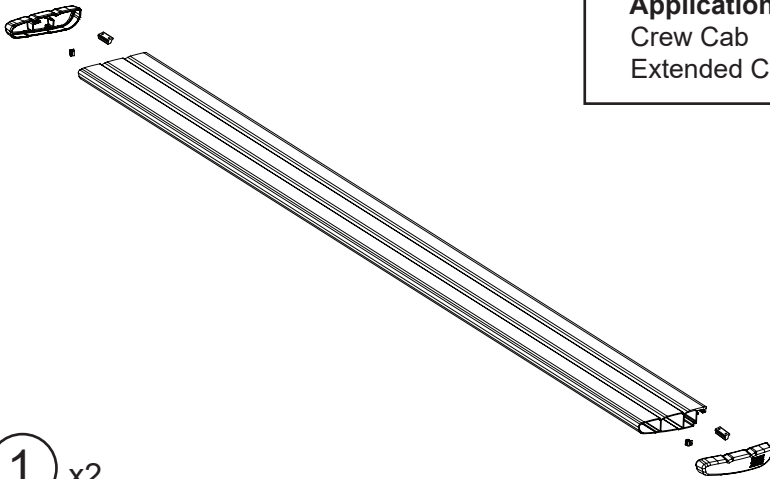
CAUTION: Dropping the assembly or any excessive impact MAY cause damage to the motor.

#### 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.**

**Note: Some Applications require modification.**

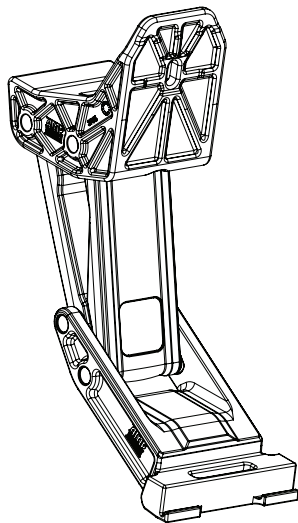
Application	Cut Length
Crew Cab	79" (No Modification Required)
Extended Cab	72" (Trim 7")



1 x2

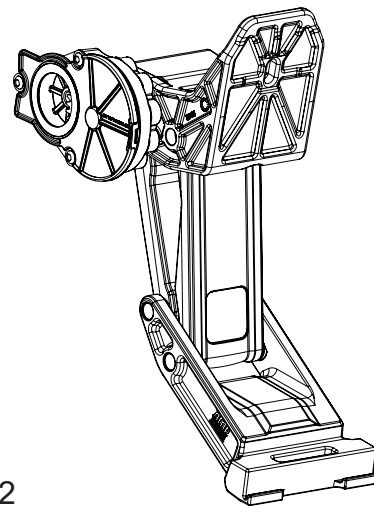
Running board assembly

- (A) End cap left (x1)
- (B) End cap right (x1)
- (C) T-nut insert (x2)
- (D) (S) Style clips (x2)



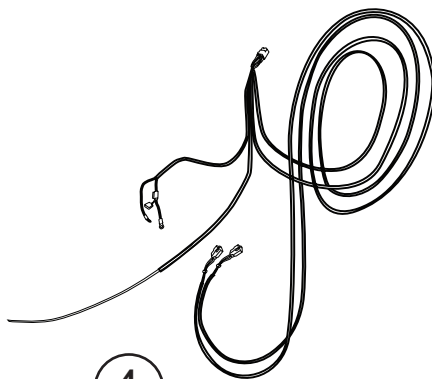
2 x2

Idler Linkage assembly



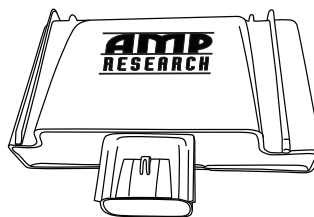
3 x2

Motor Linkage assembly



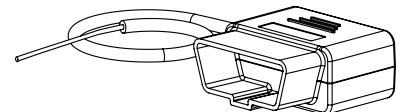
4

Wire harness



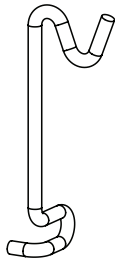
5

Controller STA

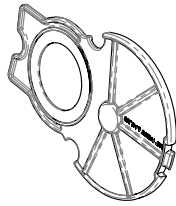


6

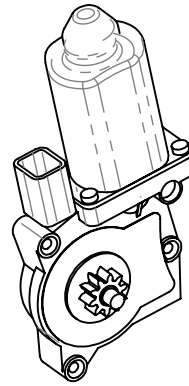
ODB II Plug (smart series)



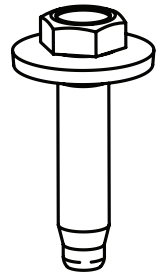
7  
Brake Cable Bracket



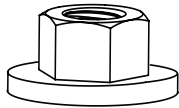
8 x2  
Gear Cover



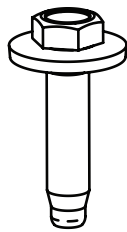
9 x2  
Motor



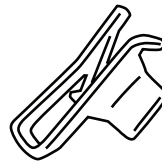
10 x4  
Hex Bolt w  
Conical washer



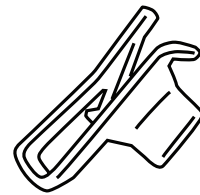
11 x4  
Nut w Conical  
washer



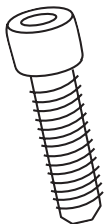
12 x5  
Hex Bolt w  
Conical washer



13 x4  
U-nut



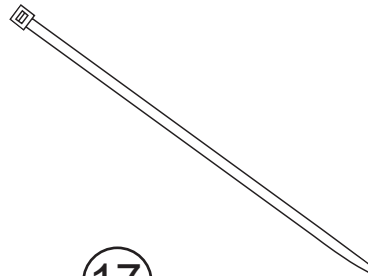
14  
U Nut



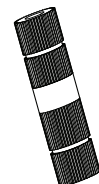
15 x8  
Socket Cap Screw



16 x20  
Cable tie (7")



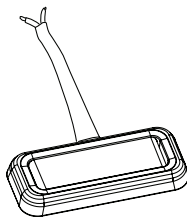
17 x2  
Cable tie (11")



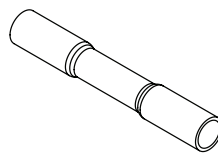
18  
Posi-Lock™



19  
Grommet



20 x4  
LED Lamp



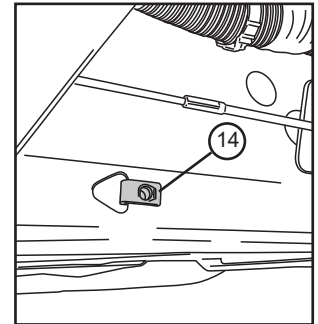
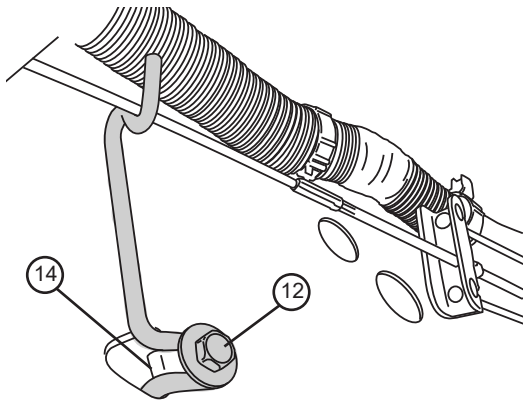
21 x8  
Butt Connector



22 x2  
(S) Style Clip (Only used  
when trimming board length)

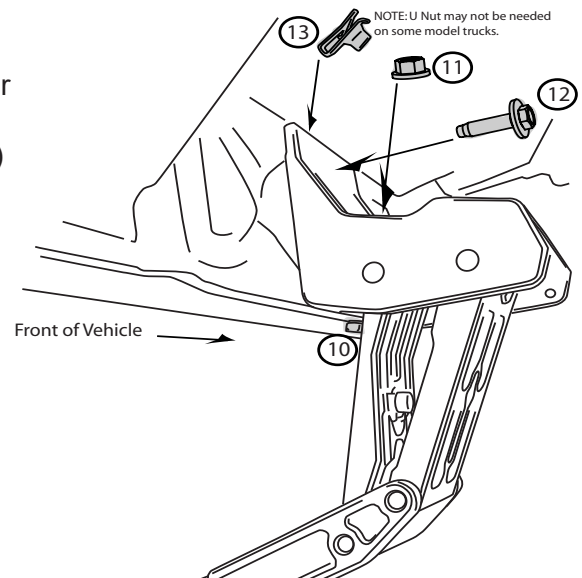
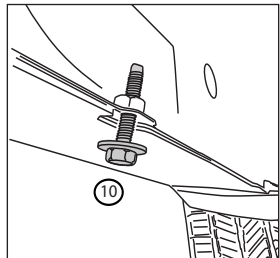
**1500 Models Only!**

Install U Nut (14) into position just forward of brake cable T junction. Use supplied bolt (12) to hold Brake cable rod into position.



**1**

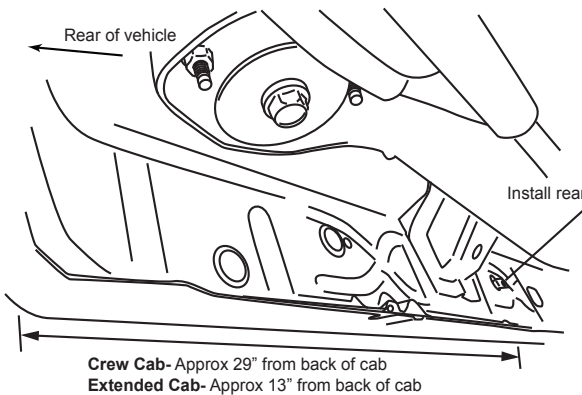
**Front Idler Linkage:** Thread supplied bolt (10) in about half way into the first sheetmetal tab / hole from front. Set linkage over bolt and Tighten lower bolt (10) to 16ft-lbs(22N·m). Finger tighten nut (12) onto bolt (10). Install bolt (12) and torque to 16 ft-lb (22N·m). Next torque lower nut (11) to 16 ft-lb (22N·m) using wrench to hold lower bolt in place.



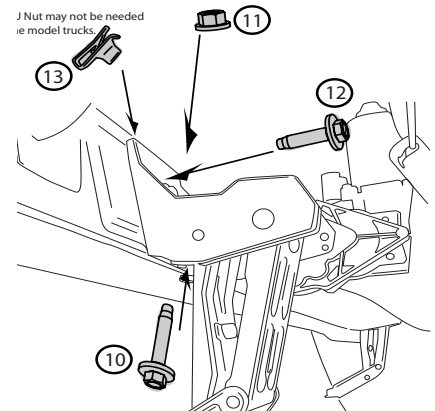
**2**

Note: Threaded nut may not be present on some vehicles. Bolt will assemble the same as step 3.

**Rear Drive Linkage:** Install driver side Motor Linkage in fourth sheetmetal tab / hole from front. Linkage will then clear parking brake cable.



Note: U-nut may be needed if threaded insert is not present on vehicle

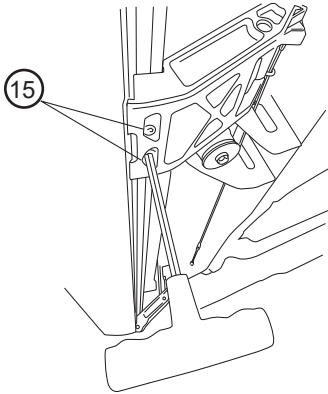


**3**

Set linkage into second to last sheetmetal tab / hole from rear. Use supplied bolt (10) and nut(11) to hold in position. Install bolt (12) into upper mounting hole and snug both bolts. Torque upper bolt (12) to 16ft-lbs(22N·m) first and then torque lower bolt (10) and nut (11) to 16 ft-lb (22N·m). Repeat linkage installation on Passenger side.

## AMP RESEARCH POWERSTEP™ – CHEVROLET / GMC

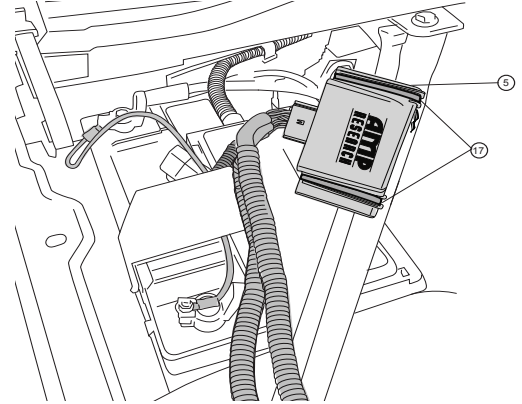
Slide mounting T-nut into position, aligning the end of the board with the rear edge of the back door. Mount board and tighten fasteners to 10 ft-lbs. Insure linkages are squared to body prior to torquing fasteners.



4

Using the two 11" cable ties, mount controller to support arm next to battery. Plug in harness (Ensure that locking tabs engage)

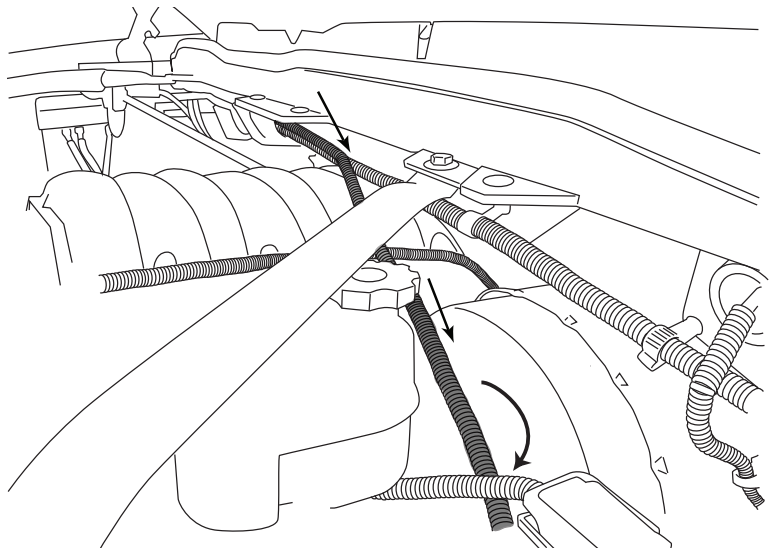
**CAUTION:**  
Do not ground wrench when engaged with nut.



5

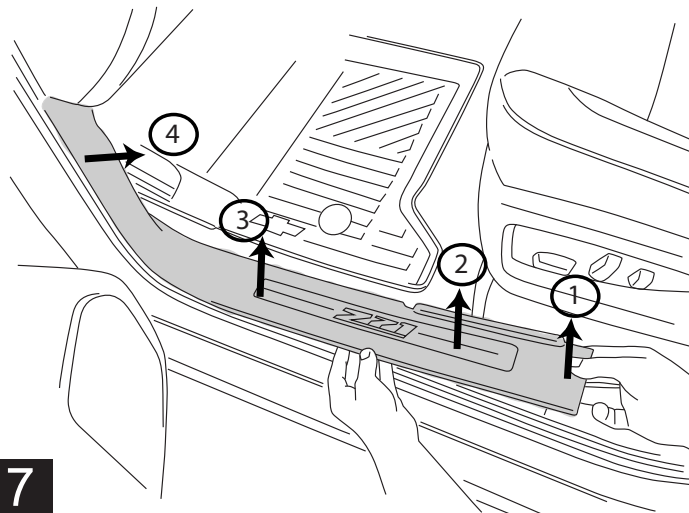
Remove power fuse. Attach power lead (RED wire) to positive pole on the battery. Attach ground lead to negative battery pole.

Route long end of wire harness above engine and down through drivers side wheel well. Zip tie harness to cowlings clips on fire wall. Route short end down passengers side.



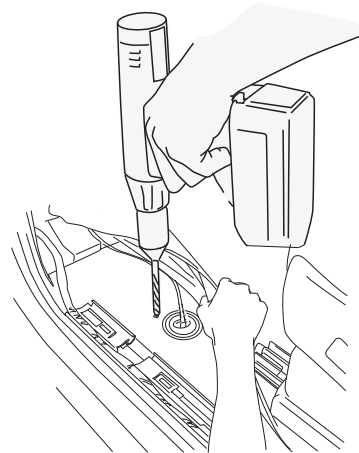
6

Pull up front door sill plate covers as shown.



7

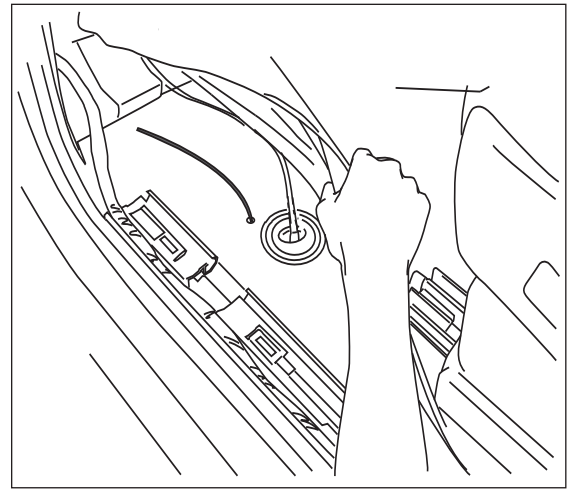
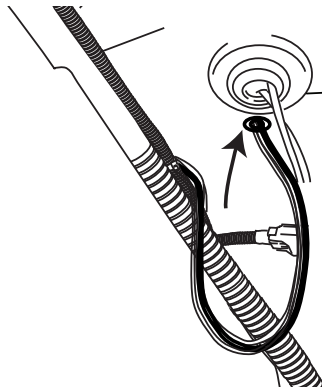
Pull up the carpet and drill 9/32" hole in metal and insert supplied rubber grommet (19).



8

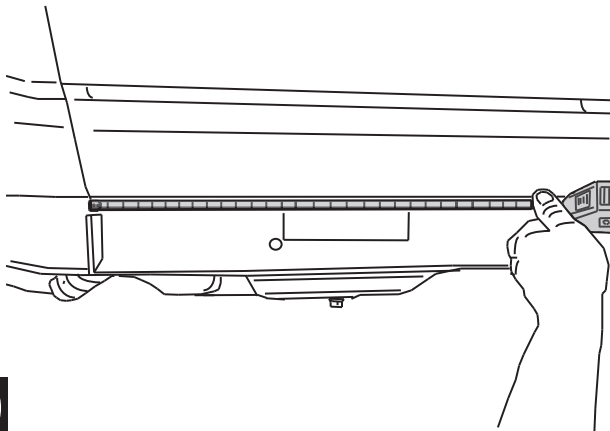
Route wire harness along the frame and back towards rear linkages. Secure with zip ties. Push both wires through rubber grommets.

NOTE: Seal holes with silicone glue and cover with tape so carpet does not stick to glue.

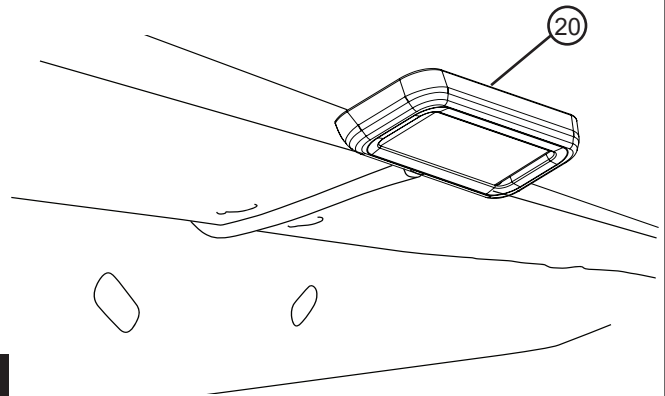


9

On each side of the vehicle measure from the front edge of door line on the pinch weld to the specified lengths below. Measure at 23" for front LED Light and 63" for rear LED Light.



Affix lamp to rocker panel surface. Make sure the lamp is affixed to a clean, flat surface. There is a step down midway across the surface. Affix lamp just outside of step down.

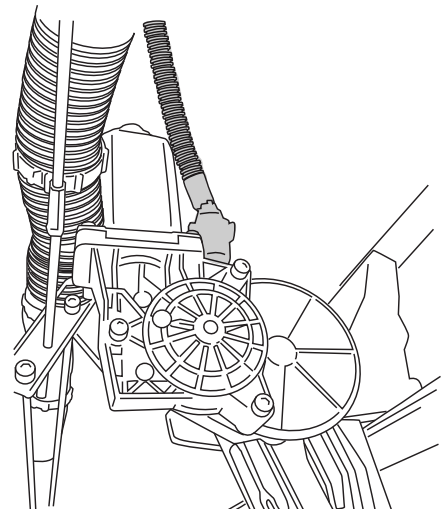
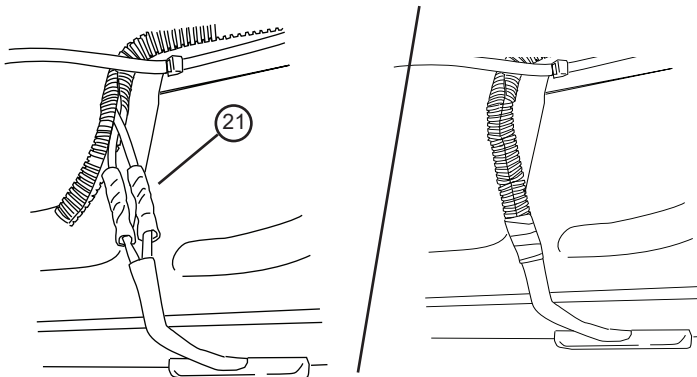


10

11

Using supplied butt connectors, connect the lamp wires. Red to Red, Black to Black. Once Crimped use heat gun to shrink tube. Close and wrap conduit with electrical tape. Secure all loose wires with cable ties. Pull lamp wires upward to avoid any wire snagging.

Connect harness to motor. Secure harness with tie wraps.



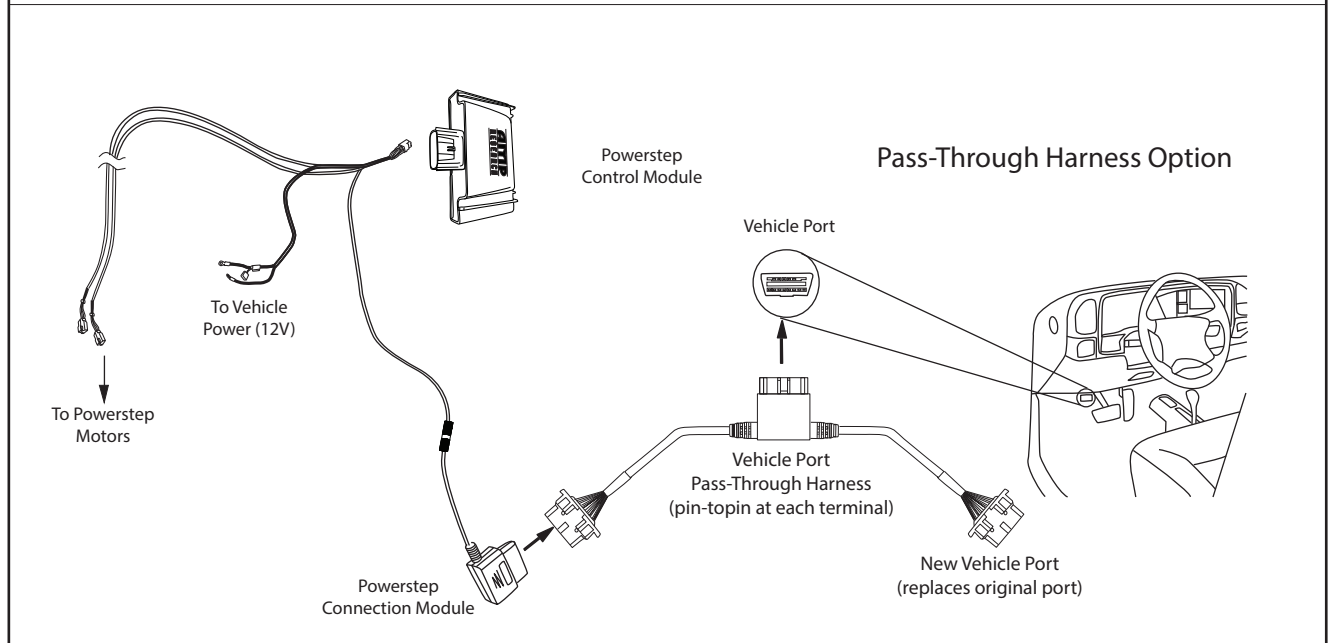
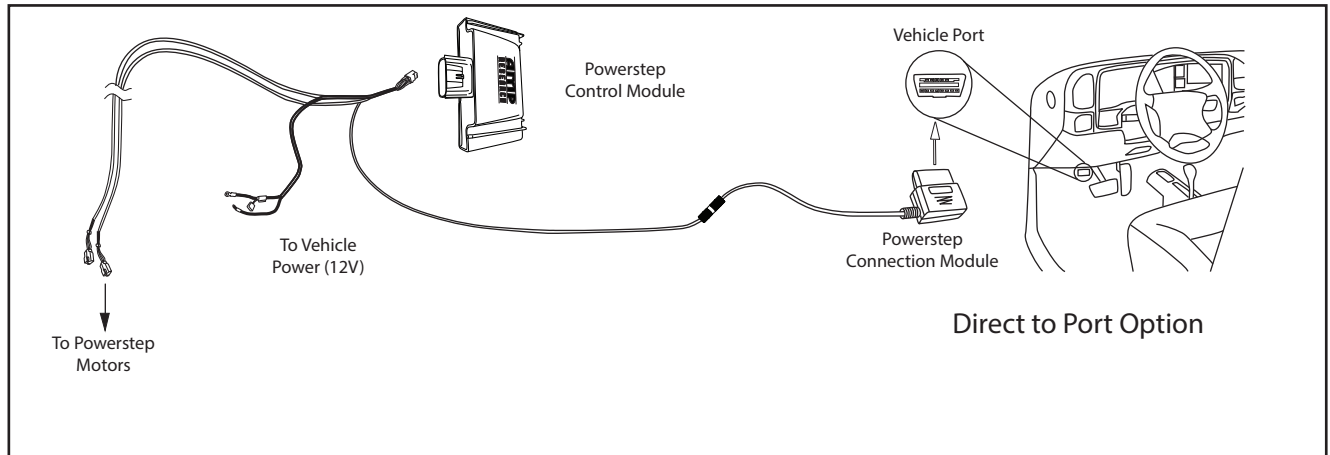
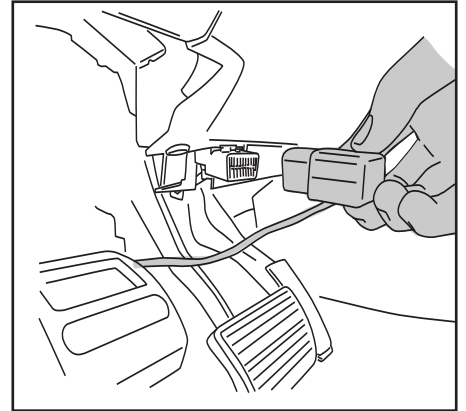
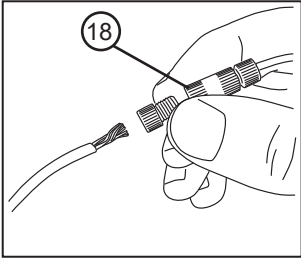
12

13

**AMP RESEARCH POWERSTEP™ – CHEVROLET / GMC**

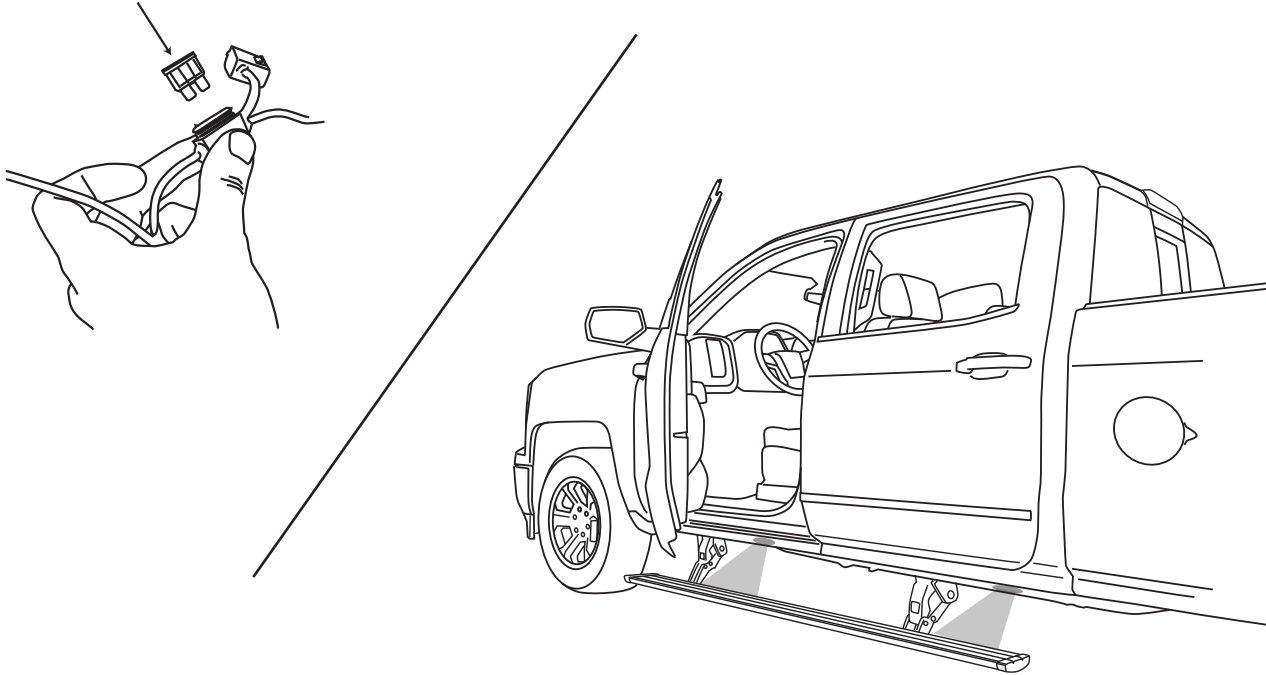
**OBD II install:** Use Supplied Posi-Lock™ (18) connectors to attach the Plug and Play Module to the Harness. Attach matching colors on the harness to the wires on the module. Plug in module to OBD II port on the vehicle. Secure harness with supplied tie wraps.

**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.





Reinstall fuse. 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**

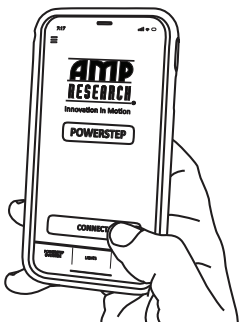
Check that all doors activate the PowerStep and the LED lights work when doors open and close.

**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 there is a 2-second delay before the PowerStep returns to the stowed/retracted position.**

**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 reilluminated by closing and opening any door of vehicle.

14

Download our Smart Series App on your Android phone or iPhone by scanning the QR code below and follow the instructions. Or visit your app store and search “AMP Research Powerstep” to download app.





# PowerStep™

AMERICAN DESIGNED, ENGINEERED AND MANUFACTURED.

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Please visit:

**[www.amp-research.com/productregistration](http://www.amp-research.com/productregistration)**  
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Product Registration Benefits:

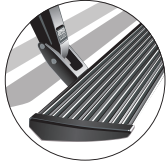
- Ensure we have your purchase receipt and product info in our system which is required for warranty
- Faster and easier access to customer service and tech support in the unlikely event you need warranty or product support
- Registration helps us keep you up to date on product information and offers

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**Please visit: [www.amp-research.com](http://www.amp-research.com)**

Rev 01.05.21

**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.

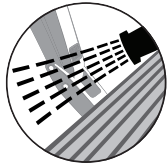
**Automatic stop:**

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. Avoid spraying the motors directly. After washing, apply silicone spray lubricant to the hinge pivot pins. Do not apply silicone, wax or protectants like Armor All® 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.



The material that your product is made from can be recycled. Please also consider recycling the packaging that your product came in.

