



PowerStep
MADE IN USA

**SMART
SERIES**



APPLICATION

Chevy Tahoe / GMC Yukon/ Cadillac Escalade *
Chevy Suburban / GMC Yukon XL / Escalade ESV
Escalade EXT

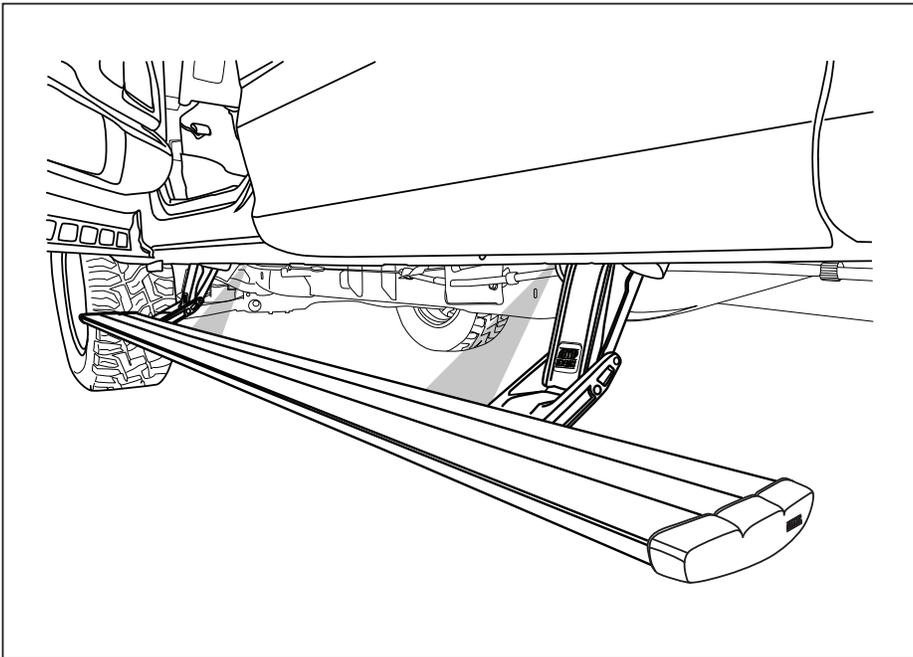
MODEL YR

2015 - 2020
2015 - 2020
2015 - 2020

PART #

86127-01A
86127-01A
86127-01A

* Modification required to running board assembly. See Item 1 on page 2.



INSTALLATION TIME

2-3 Hours

Professional installation recommended

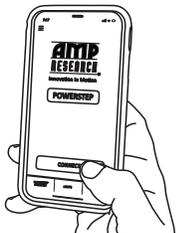
SKILL LEVEL



4= Experienced

TOOLS REQUIRED

- Safety goggles
- Measuring tape
- Flat blade screwdriver
- Phillips head screwdriver
- 9/32" drill bit
- 13 mm socket
- 10 mm socket
- 7 mm socket
- Ratchet wrench and extension
- 13mm end wrench
- Wire stripper / cutter
- Pliers
- 3/16" hex key wrench (allen wrench)
- 5mm hex key wrench (allen wrench)
- Electrical tape
- Weather proof caulking (silicone sealer)
- Heat Gun



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



SCAN ME

WARRANTY

5-Year Limited Warranty

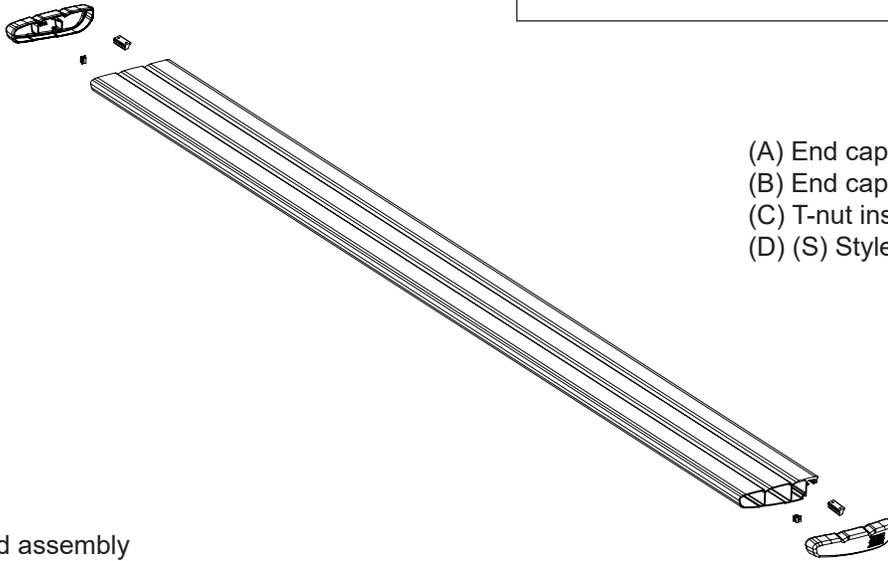
AMP RESEARCH TECH SUPPORT 1-888-983-2204 (Press 2) Monday - Friday, 7:00 AM - 5:00 PM PST

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.

PARTS LIST AND
HARDWARE
IDENTIFICATION

Note: Some Applications require modification.

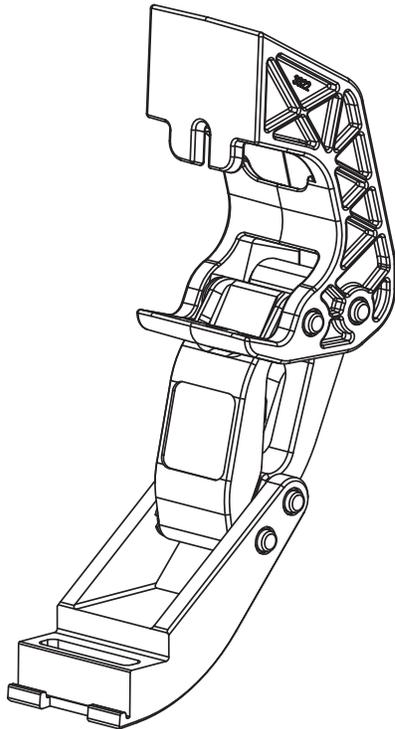
Application	Cut Length
Suburban, Yukon XL, Avalanche, Escalade EXT/ESV	79" (No Modification Required)
Tahoe, Yukon, Escalade	72" (Trim 7")



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

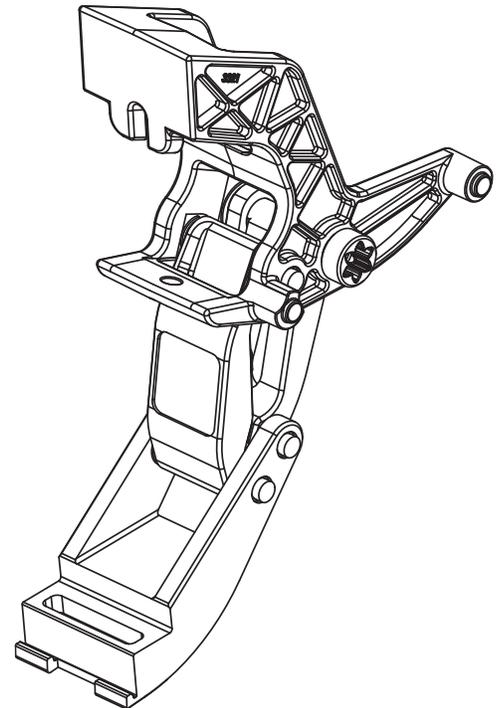
1 x2

Running board assembly



2 x2

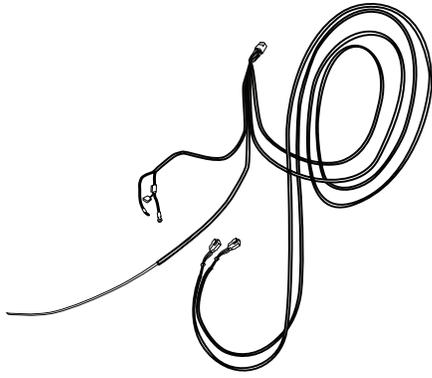
Idler linkage assembly



3 x2

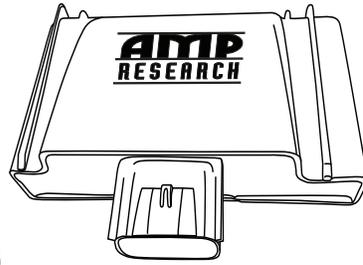
Motor linkage assembly

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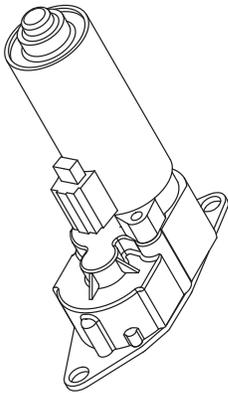
4

Wire harness



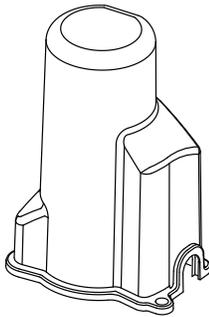
5

Controller SSA



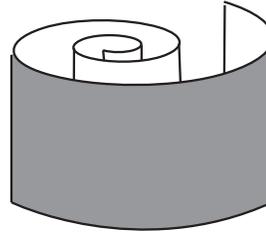
6 x2

Motor



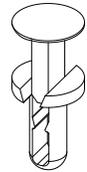
7 x2

Motor Cover



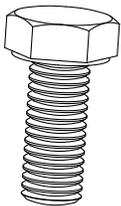
8

Rubber



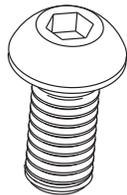
9 x6

Cinch Fastener



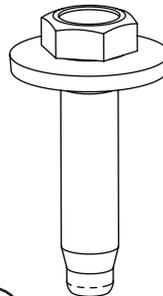
10 x4

Hex Bolt



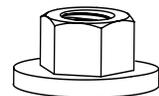
11 x4

Button Head Bolt



12 x8

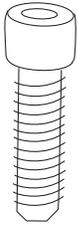
Conical Washer Bolt



13 x8

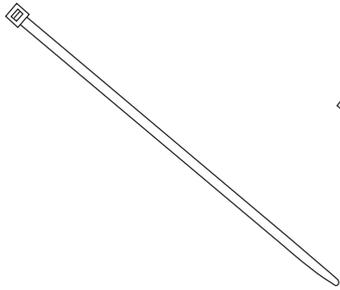
Nut with Conical Washer

PARTS LIST AND
HARDWARE
IDENTIFICATION



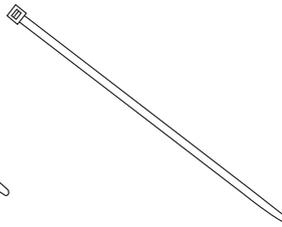
14 x8

Socket Cap Screw



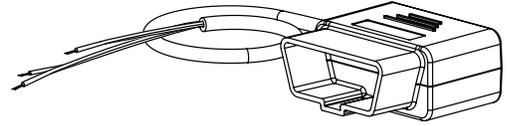
15 x2

Cable tie (11")



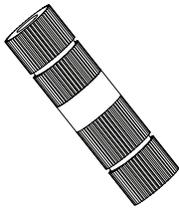
16 x20

Cable tie (7")



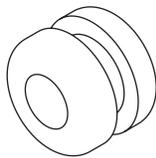
17

ODB II Plug FD21 (smart series)



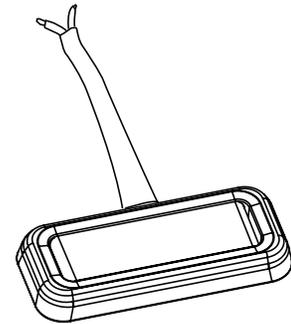
18

Posi-Lock™



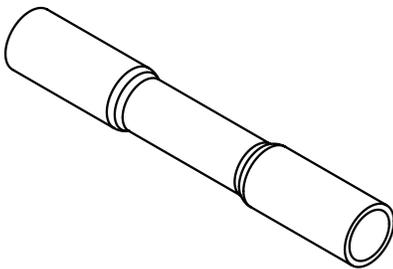
19

Grommet



20 x4

LED Lamp



21 x8

Butt Connector

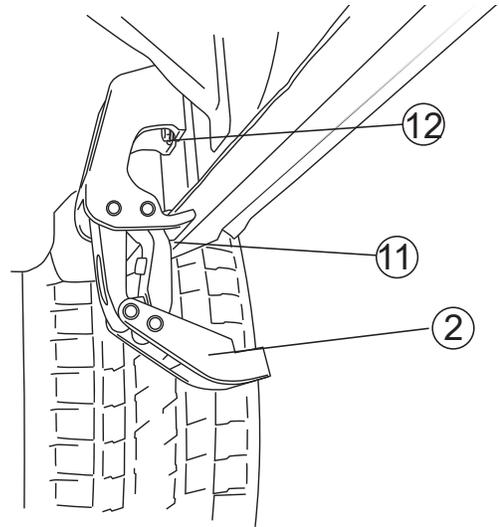


22 x2

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

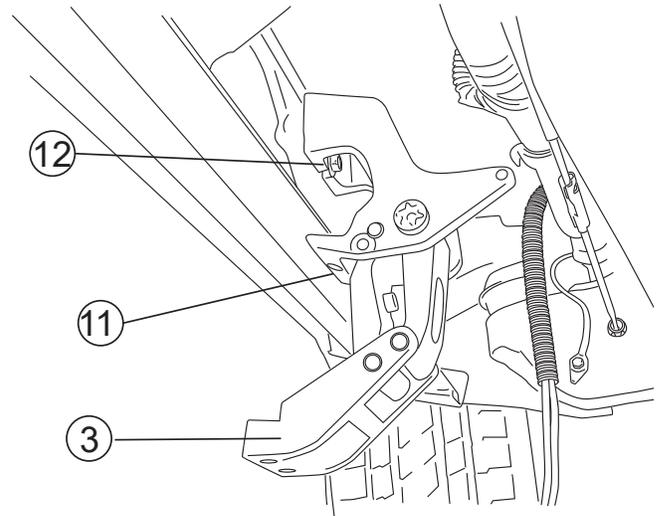
Bolt idler linkage assembly to rearmost mounting tab on **Suburban** and second to last mounting tab on **Tahoe**. First thread M8x16 Button Head Screw (11) thru pinch weld, finger tighten. Next, thread supplied M8x35 Conical Washer Bolt (12) into upper mount position and finger tighten. Next tighten Button Head Screw (11) to 16 ft-lbs (22Nm), then tighten the Conical Washer Bolt (12) to 16ft-lbs (22Nm).

NOTE: Conical Washer Nut (13) are provided for vehicles that may have a stud present on the upper mounting position.



1

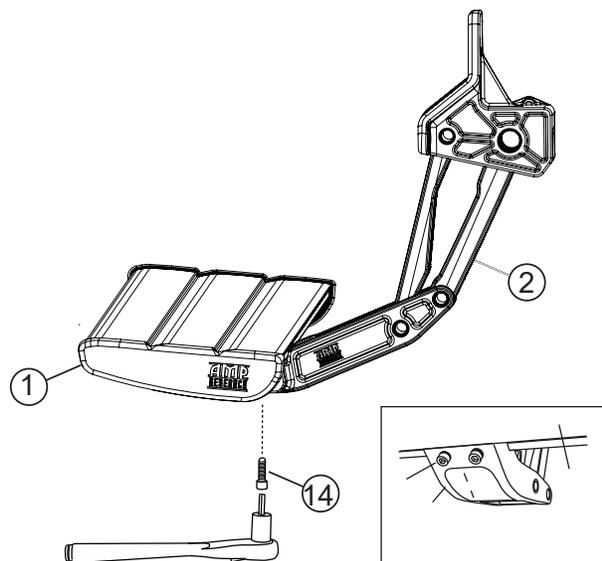
Bolt drive linkage assembly to forward most mounting tab. First thread M8x16 Button Head Screw(11) thru pinch weld, finger tighten. Next thread supplied M8x35 Conical Washer Bolt(12) into upper mount position and finger tighten. Next tighten Button Head Screw(11) to 16ft-lbs (22Nm), Then tighten Conical Washer Bolt(12) to 16ft-lbs (22Nm). **Note: Conical Washer Nuts(13) are provided for vehicles that may have a stud present on the upper mounting position.**



2

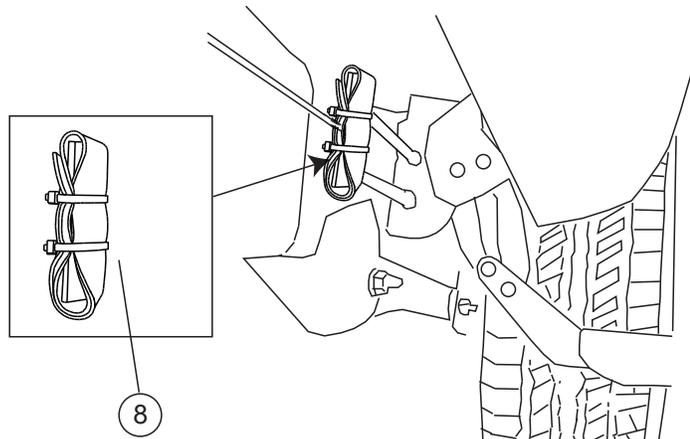
Slide mounting T-nut into position. Mount board and tighten fasteners (14) to 10 ft-lbs. Align the end of the board with the rear edge of the back door.

Tighten button head fasteners and M8 nuts on driving and idler linkages to 16 ft-lbs.



3

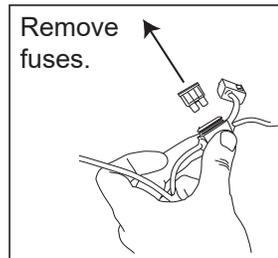
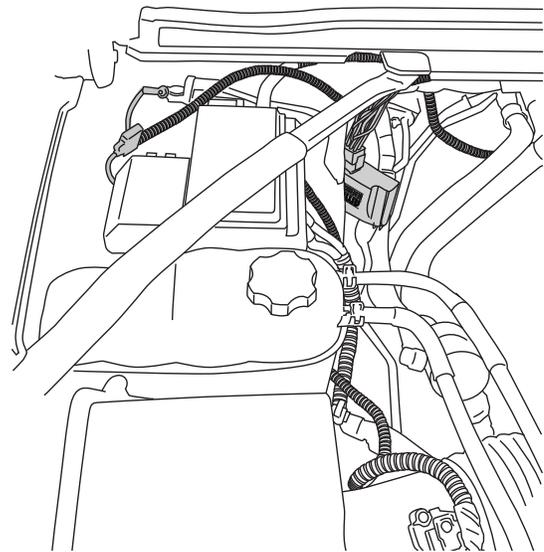
On some vehicles the emergency cable bracket may come in contact with linkage arm. If so, wrap supplied rubber around bracket and secure with two cable ties.



4

Using the two 11" Zip Ties (15), mount Controller (5) to support arm next to battery. Remove power fuses from wire harness. Attach power lead RED wire to positive pole on the battery. Plug in Wire Harness (4). (Ensure that locking tabs engage).

Attach ground lead to negative battery pole.

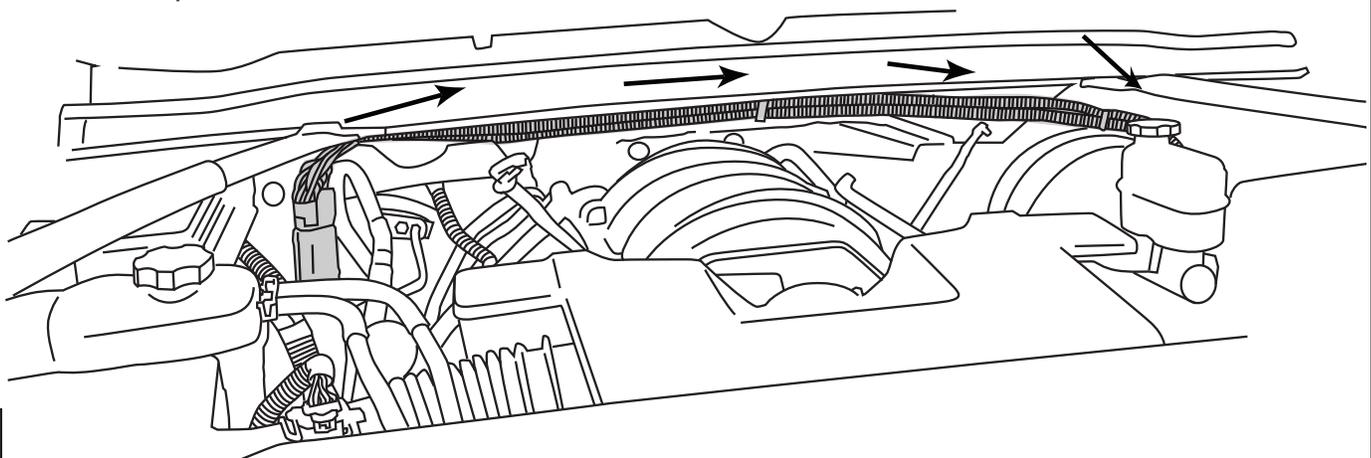


CAUTION: Do not ground wrench when engaged with nut.

5

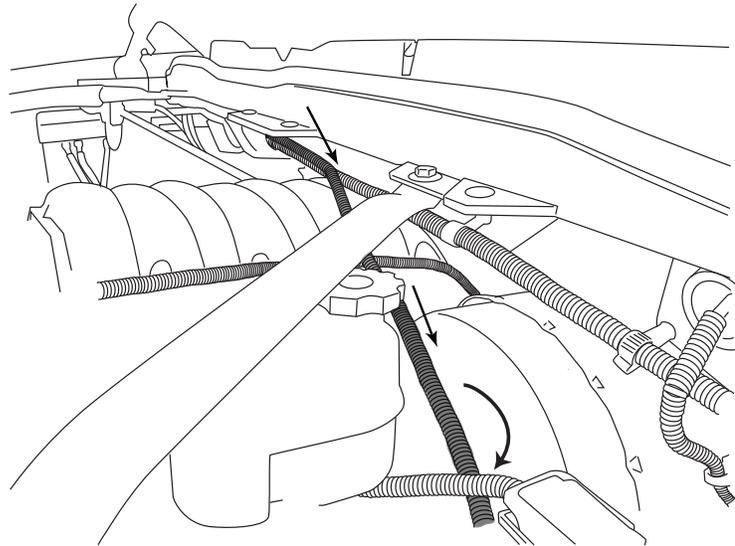
Route long end of wire harness above engine and down through drivers side wheel well. Zip Tie (16) harness to cowling clips on fire wall. Route short end down passengers side.

Secure with zip ties.



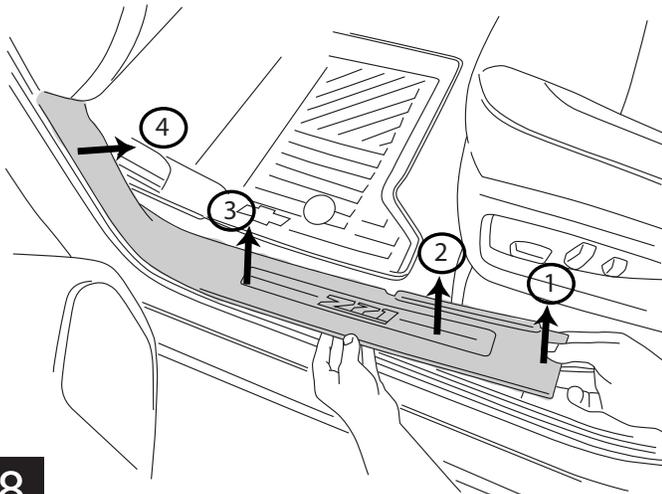
6

Route wire harness along the frame. Secure with Zip Ties (16).



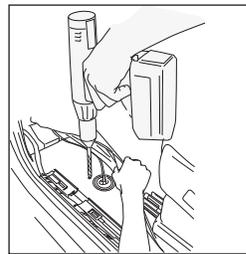
7

Pull up front door sill plate covers as shown.

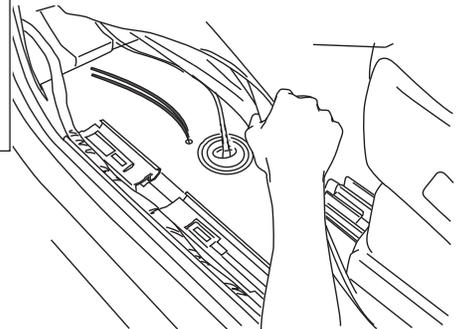


8

Pull up the carpet drill a 9/32" hole and thread yellow wire through the floor panel. Add rubber grommet (19).

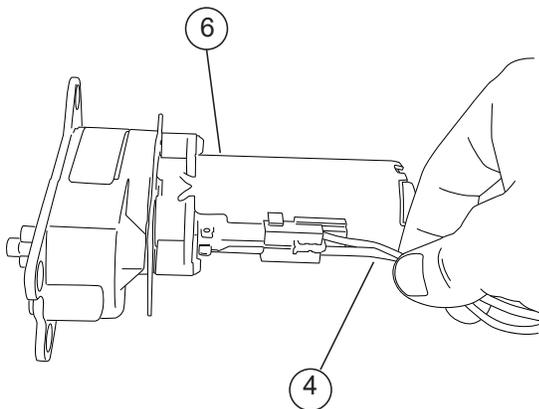


Seal holes with silicon glue.

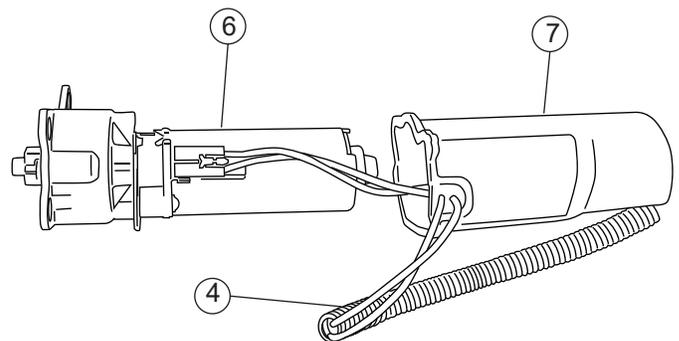


9

Insert plug from wire harness onto motor.



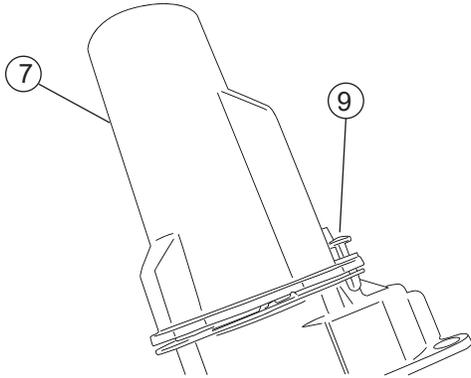
Slide rubber grommet on wire harness into slot of motor cover. Insert motor cover onto motor.



11

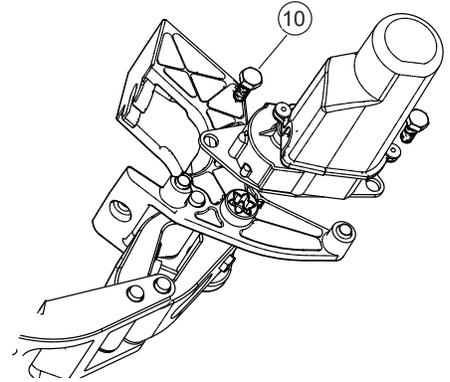
10

Insert plastic push pin rivets in mounting holes of motor cover. Use pliers to ease installation.



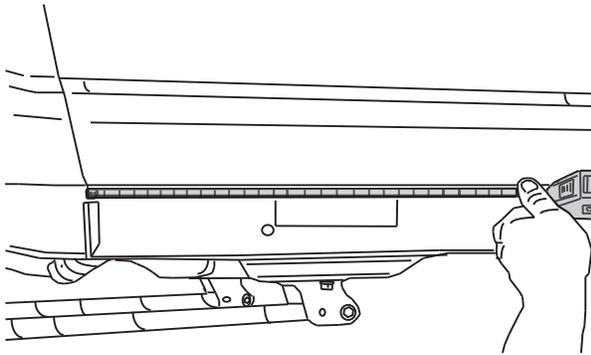
12

Slide motor assembly onto drive shaft and mounting bosses of driving linkage assembly. Use two (10) bolts to bolt motor down. Tighten to 16ft-lbs. Use electrical tape to cover any exposed wire from the motor.



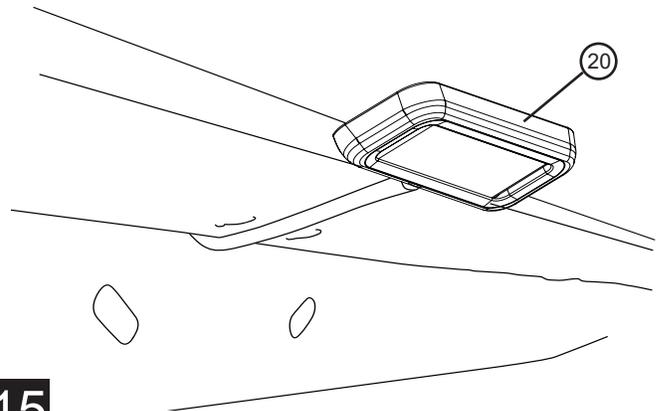
13

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 20" for front LED Light and 58" for rear LED Light.



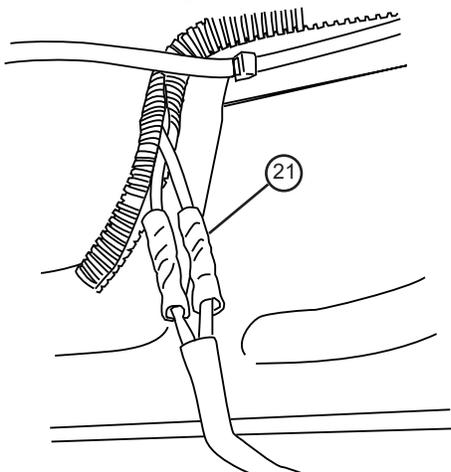
14

Affix lamp (20) 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.



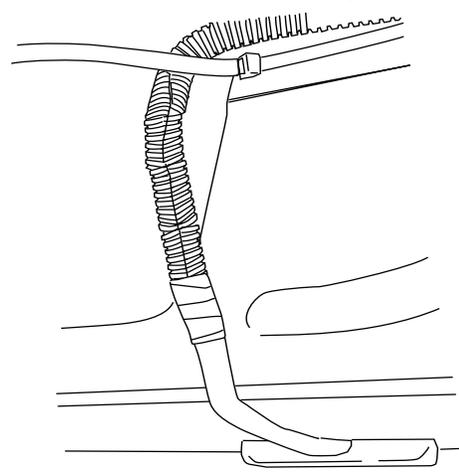
15

Using supplied butt connectors, connect the lamp wires. Red to Red, Black to Black. Once Crimped use heat gun to shrink tube.



16

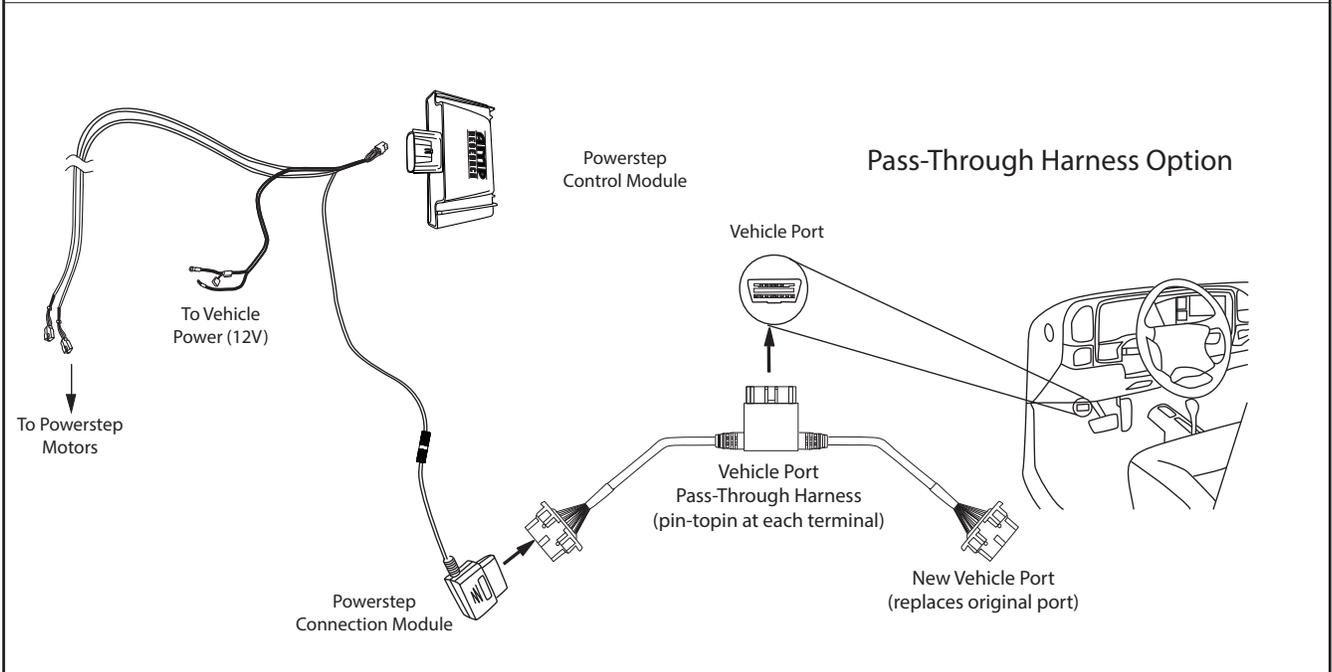
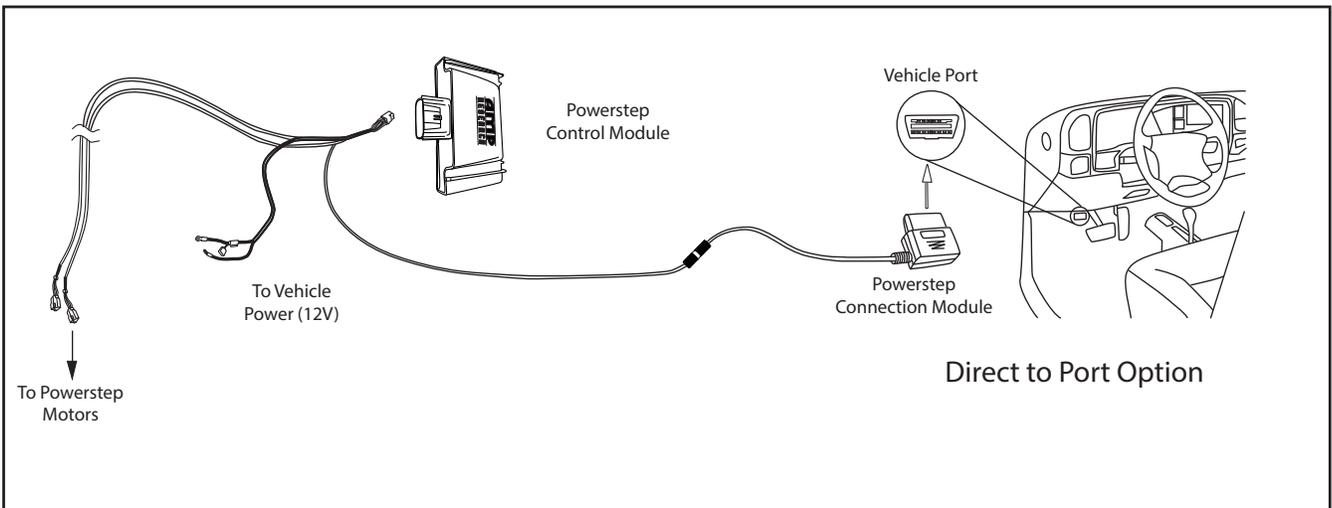
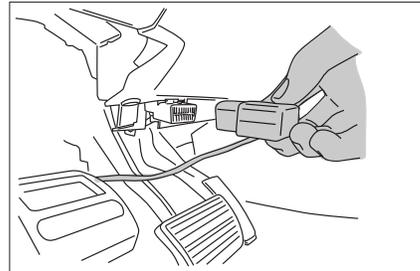
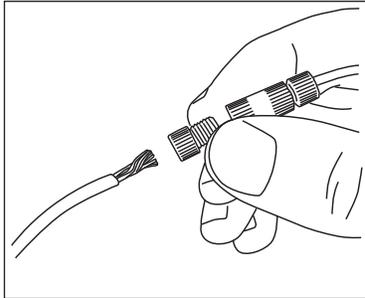
Close and wrap with conduit and electrical tape. Secure all loose wires with cable ties, with lamp wires pulled upward to avoid any wire snagging.



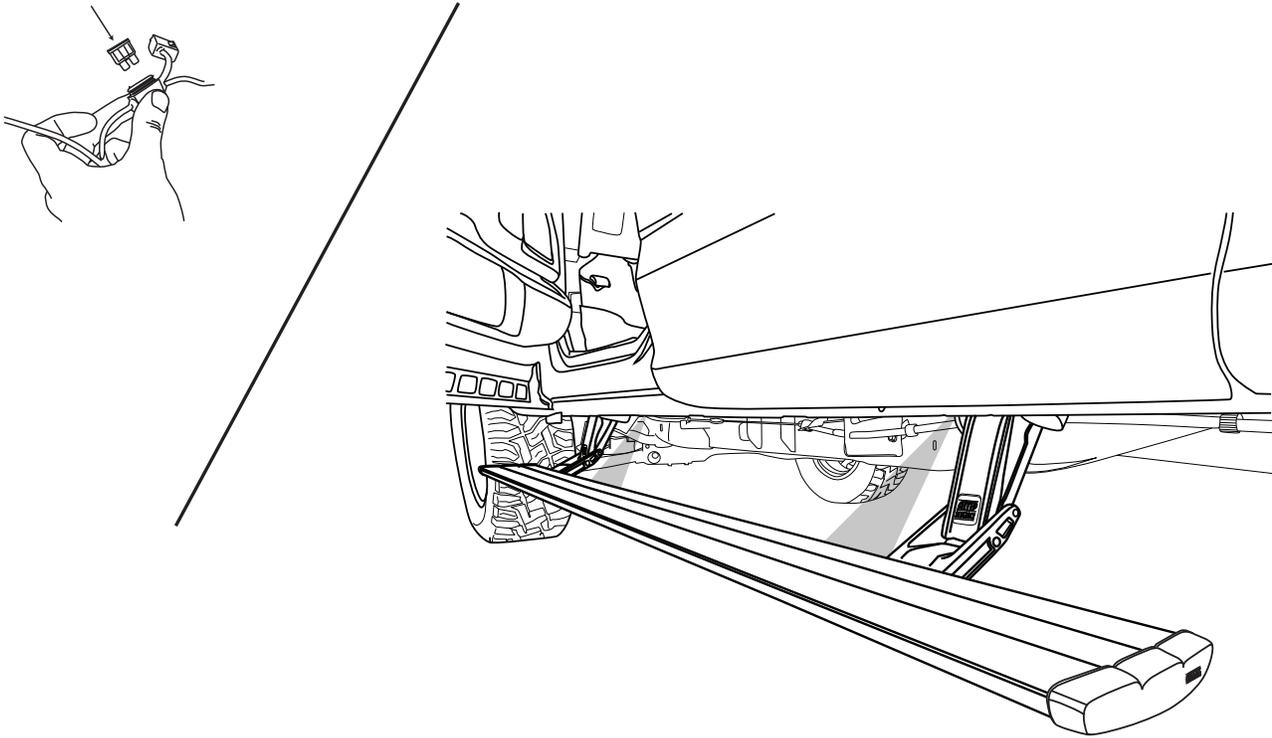
17

OBD II install: Use Supplied Posi-Lock™ (18) connector 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 (17) to OBD II port on the vehicle. Secure harness with supplied tie wraps (16).

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 Fuses. 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

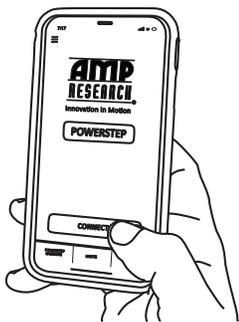
Check that all doors activate the PowerStep and the LED lights work when doors open and close.

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.

19

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.





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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.

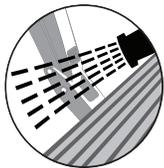
Automatic stop:

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 TECH SUPPORT 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.