

# INSTALLATION GUIDE

# AMP RESEARCH Power Step™

MADE IN USA

APPLICATION

MODEL YR

PART #

Chevrolet Colorado / GMC Canyon - Crew Cab 72"

2023

76253-01A

## INSTALLATION TIME

**3-5 Hours**

Professional installation recommended

## SKILL LEVEL



4= Experienced

## TOOLS REQUIRED

- Safety goggles
- Measuring tape
- 9/16 Wrench
- 17/32" Drill bit
- 10 mm socket
- 10 mm ratchet wrench
- 13 mm ratchet wrench
- Ratchet wrench and extension
- Pliers
- Wire crimpers
- Wire stripper / cutter
- 3/16" hex key wrench (allen wrench)
- 5mm allen wrench
- Electrical tape
- Weather proof caulking (silicone sealer)
- 1/8", 9/32" & 21/64" Drill bit
- Drill
- Heat Gun

## WARRANTY

**5-Year Limited Warranty**

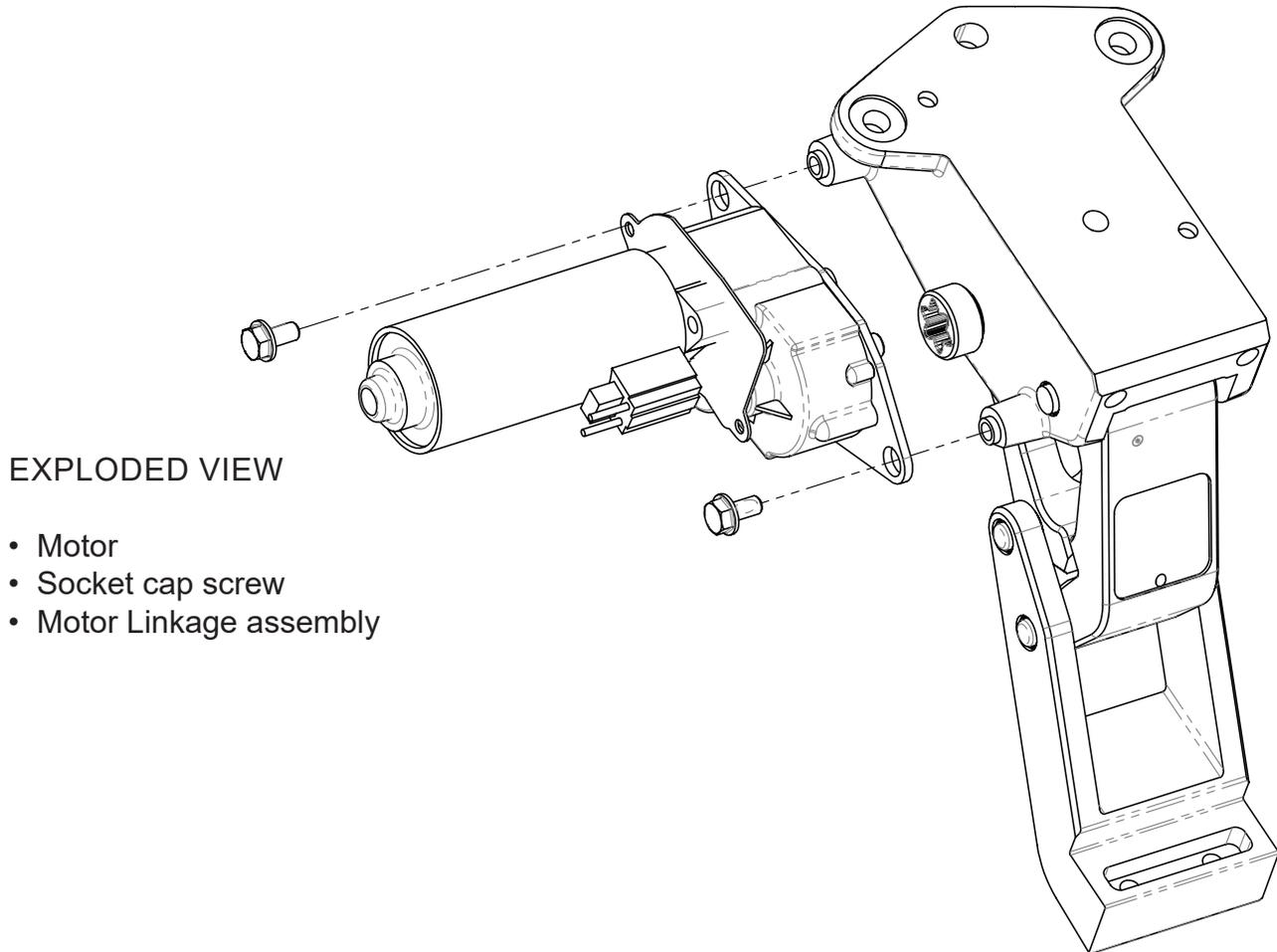
AMP RESEARCH TECH SUPPORT 1-888-983-2204 (Press 2) Monday - Friday, 7:00 AM - 5:00 PM PST

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 after step 28**



#### EXPLODED VIEW

- Motor
- Socket cap screw
- Motor Linkage assembly

### **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.

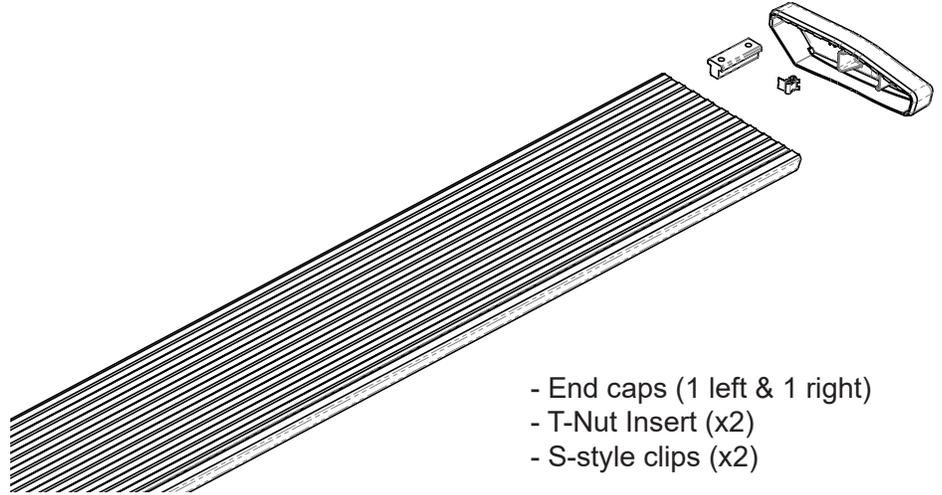
#### Instructions:

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.**

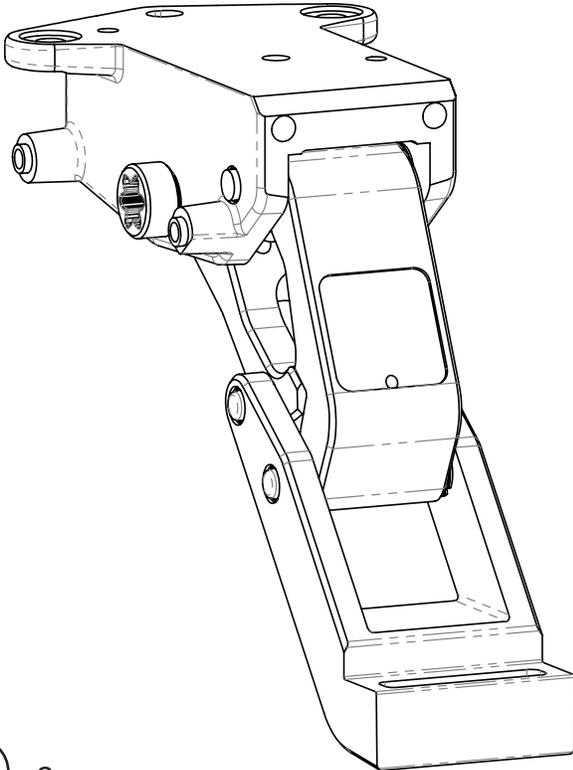
PARTS LIST AND HARDWARE IDENTIFICATION

① x2

Running Board assembly

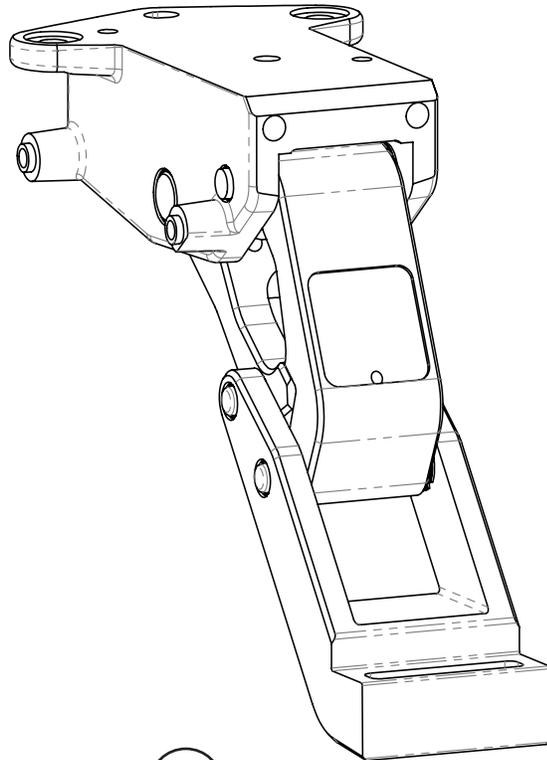


- End caps (1 left & 1 right)
- T-Nut Insert (x2)
- S-style clips (x2)



② x2

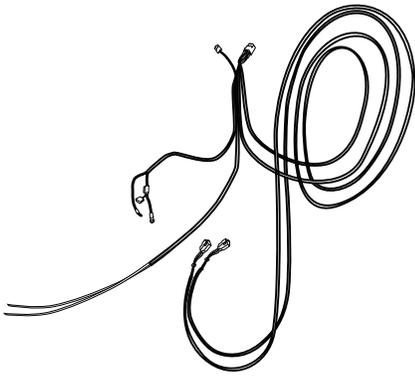
Motor Linkage Assembly



③ x2

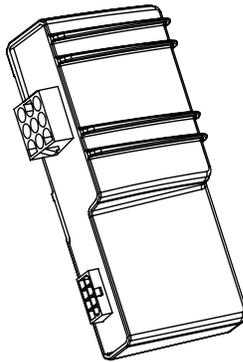
Idler Linkage Assembly

PARTS LIST AND HARDWARE IDENTIFICATION



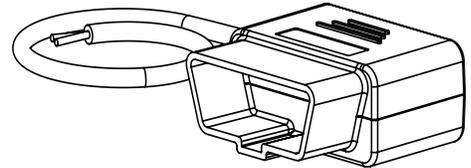
4

Wire Harness



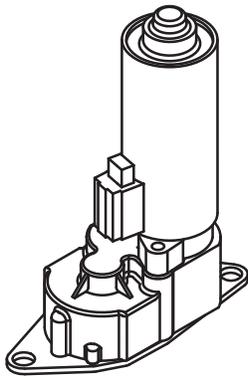
5

Controller STA



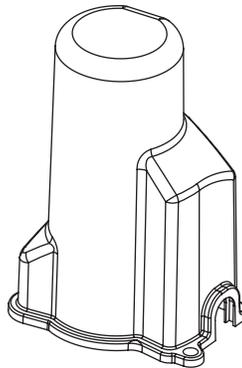
6

ODB II Plug



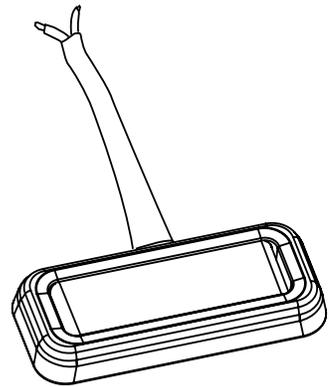
7 x2

Motor



8 x2

Motor Cover



9 x4

LED Lamp



10 x8

Socket Cap Screw



11 x2

Posi-Lock Connector



12 x 4

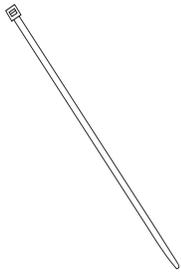
Hex Flange Bolt



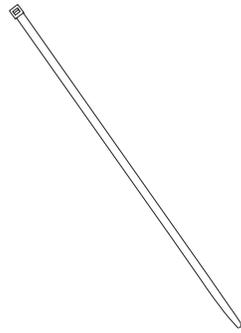
13 x6

Cinch Fastener

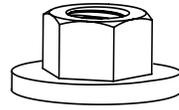
PARTS LIST AND HARDWARE IDENTIFICATION



14 x20  
Cable Tie 7"



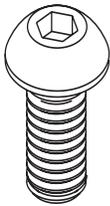
15 x2  
Cable Tie 11"



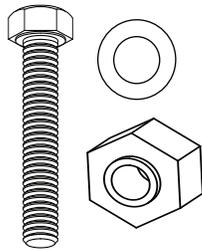
16 x4  
Nut w Conical  
washer



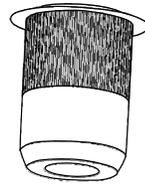
17 x8  
Hex Flange Bolt



18 x8  
Button Head Bolt



19  
Rivet Nut Tool Kit



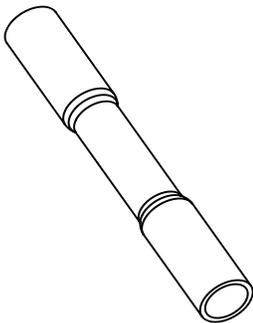
20 x4  
Rivet Nut



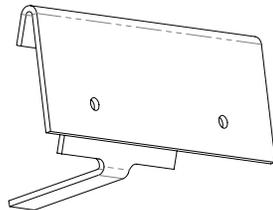
21 x8  
Washer Black



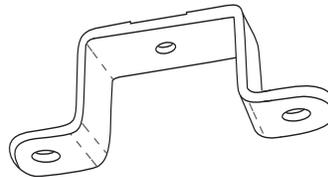
22 x5  
Grommet



23 x8  
Butt Connector



24  
Colorado Drill Template



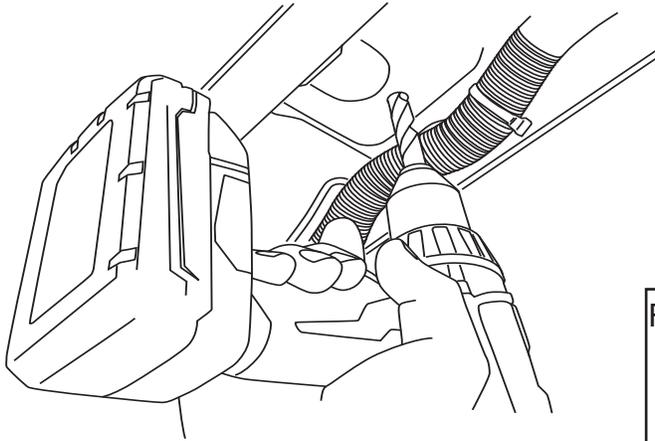
25 x2  
Bracket



26 x2  
Posi Tap

## Installing Linkages

### Front Linkage (Motor Linkage)

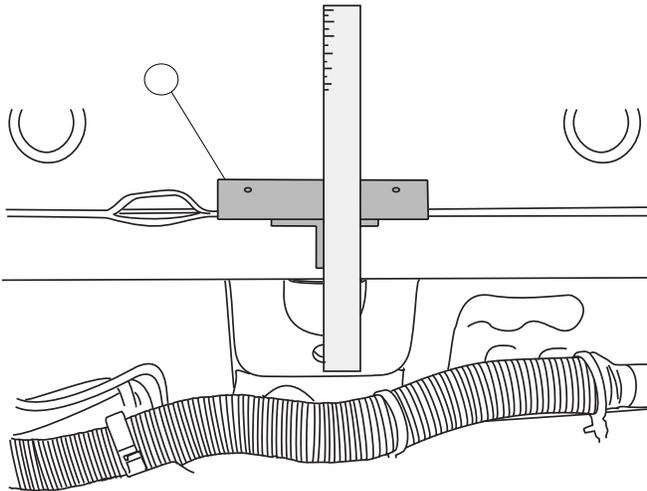


Enlarge the hole on the front body support member. Hole is located approx. 29" from front fender edge. Use a 17/32" Drill bit. Install a rivet nut (20) using the supplied rivet nut tool (19).

Rivet Nut tool kit

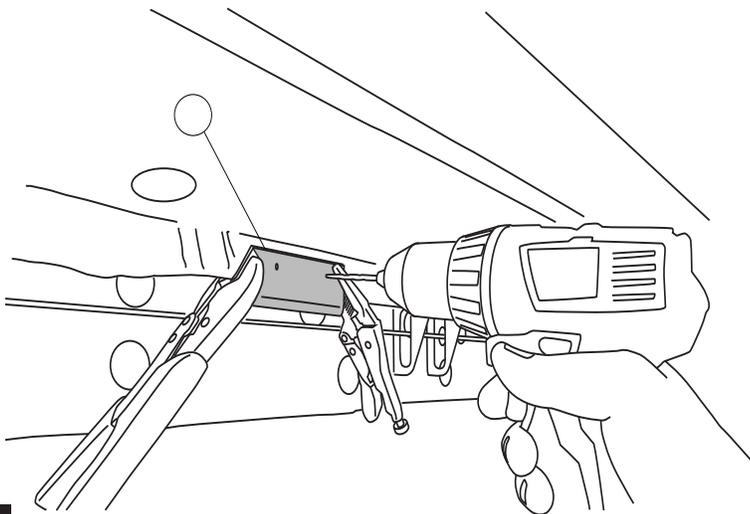


1



Place tail of drill template (24) on the inner rocker surface and slide it until the template rests on the outside of the pinchweld. Use a straight edge as shown to line up the center of the template with the center of the mounting hole in the body crossmember.

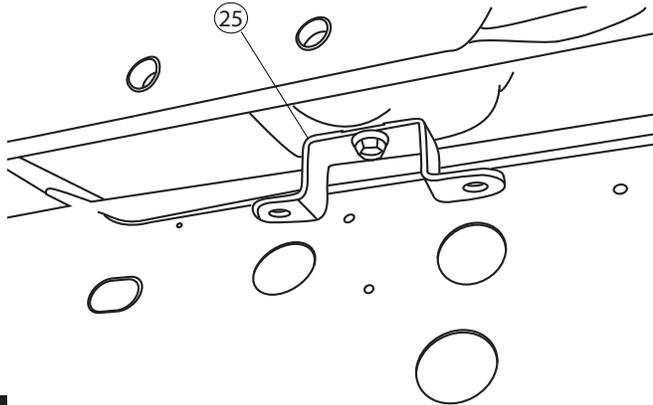
2



With drill template secured with vise grips, drill 1/8" Pilot holes. Remove template and drill holes to 21/64".

**Only clamp Template on the sides as shown, clamping only the outer thickness of the template and the pinchweld. Do not clamp the template in the center as this will damage the template and improperly locate the holes.**

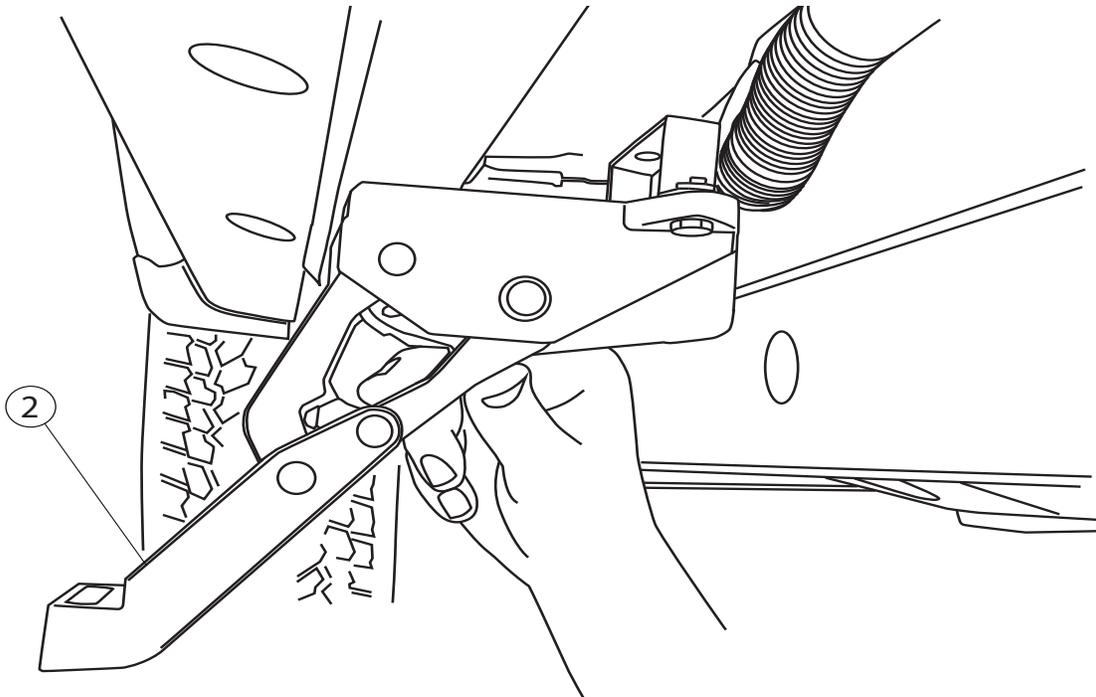
3



Snug the front linkage bracket (25) to the rivenut first. Note: bracket to be oriented closest to the frame.

4

Install front linkage (2) to the pinch weld using supplied M8 button head bolts (18) and M8 washers (21), snug bolts. Next, using the supplied Hex flange bolts (17) and Serrated nuts (16) tighten linkage upper mount to steel bracket assembled in step 4. Snug bolts to allow for adjustments at a later step.

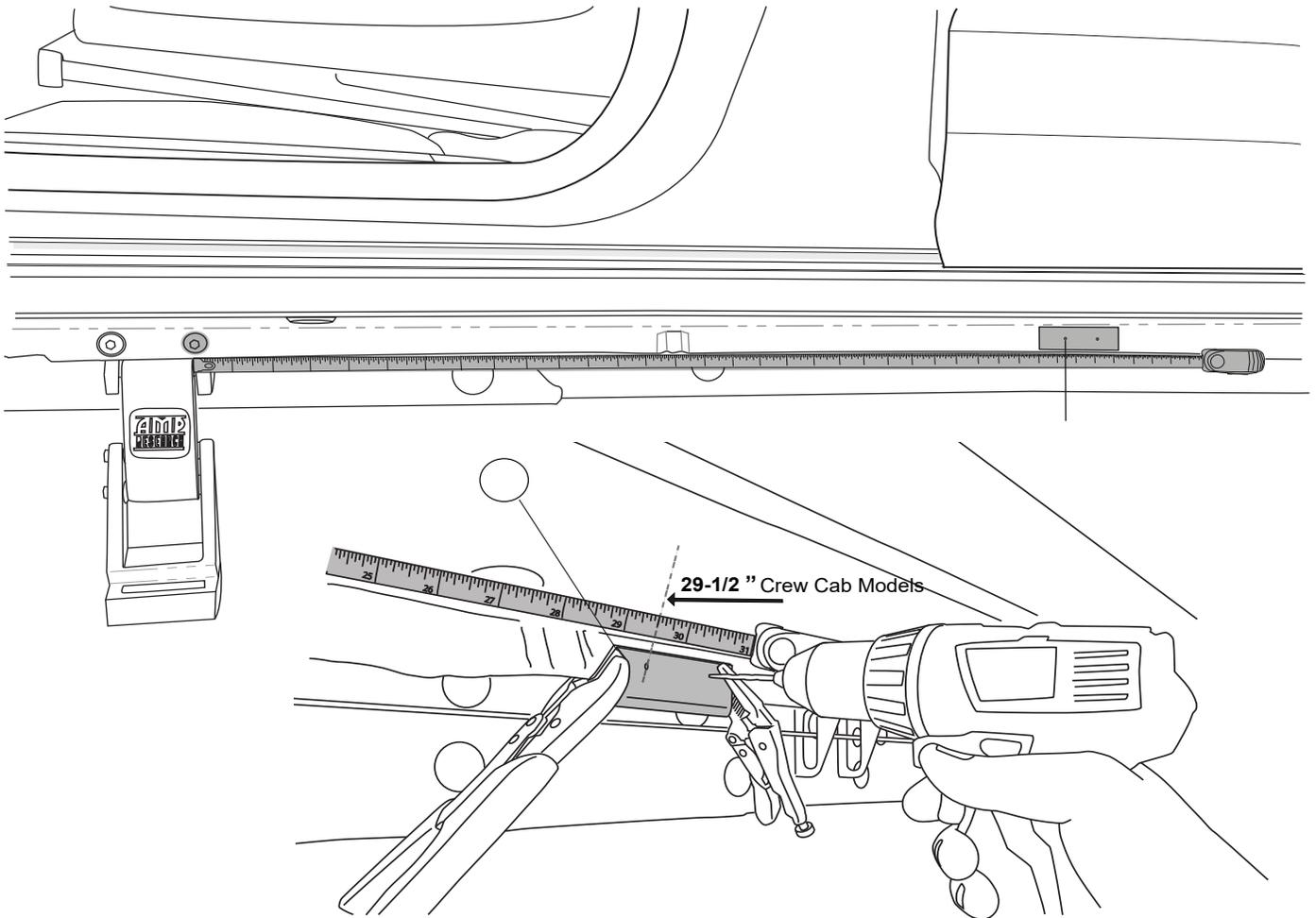


5

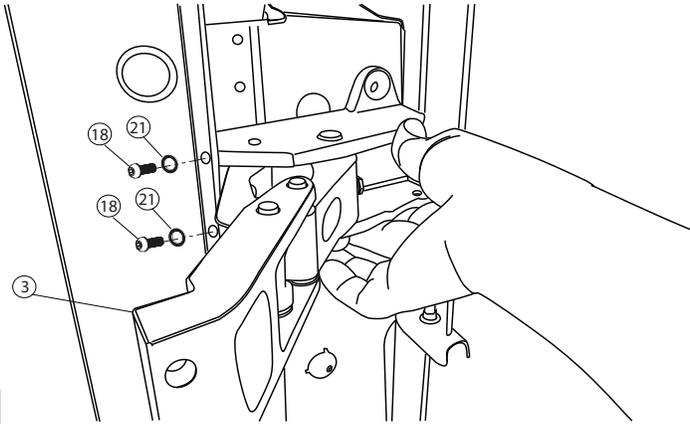
**Repeat Steps 1-5 on the passenger side of the vehicle.**

## Rear Linkage (Idler Linkage)

**Crew Cab Models:** On the driver side measure **29.5"** back from the center of the rear linkage mounting hole to the forward hole of the drill template.

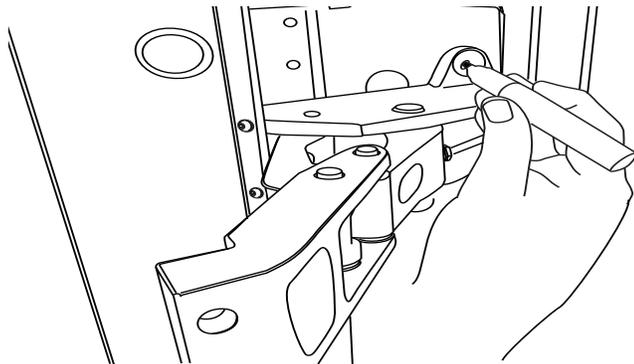


With drill template secured with vise grips, drill 1/8" Pilot holes. Remove template and drill holes to 21/64".



Install rear linkage (3) to the pinch weld using the supplied M8 button head bolts (18) and M8 washers (21).

7

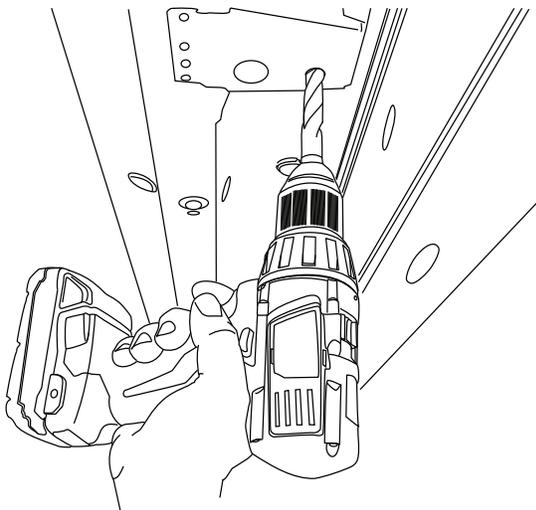


The **rearward tab** on the linkage upper mount will land on the body crossmember, mark the center of the hole and remove the linkage.

**NOTE: Other tab will not be used for rear linkage mounting.**

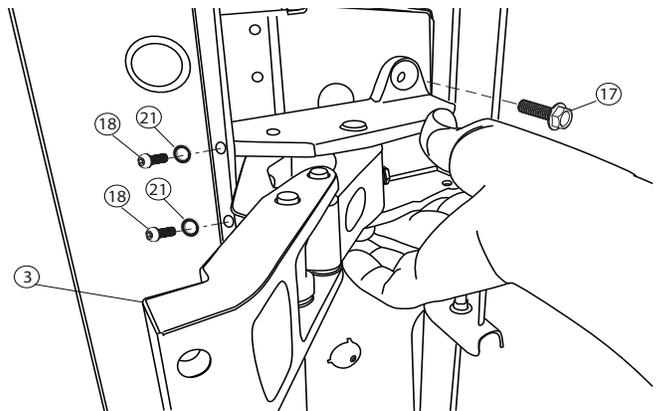
8

Center punch and pre drill using an 1/8" drill bit. Next drill hole to 17/32". Then install a rivet nut (20) into the hole using supplied rivet nut tool.



9

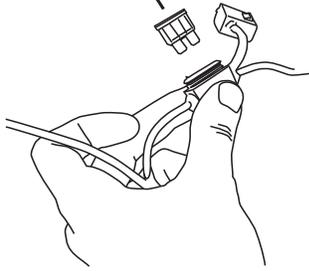
Reinstall the rear linkage. First, tighten the pinch weld bolts (18) then tighten the bolt to the rivnut as seen below.



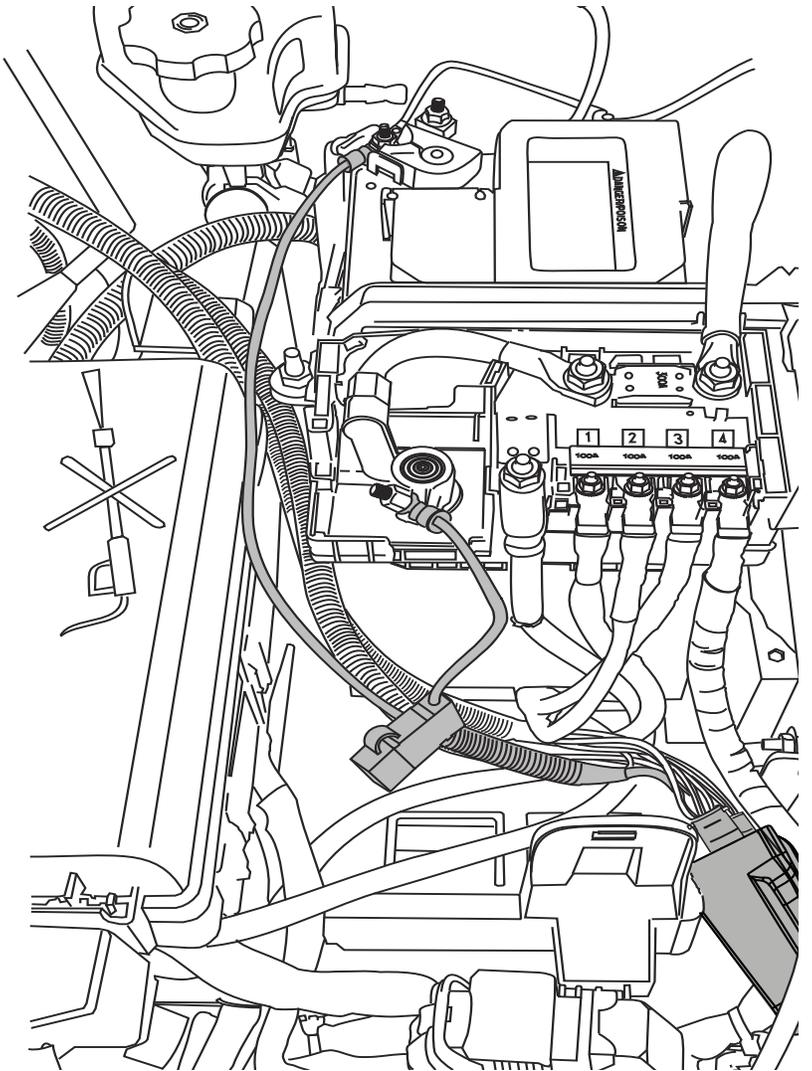
10

**Repeat Steps 6 - 10 on the passenger side of the vehicle.**

Remove fuse. ↗

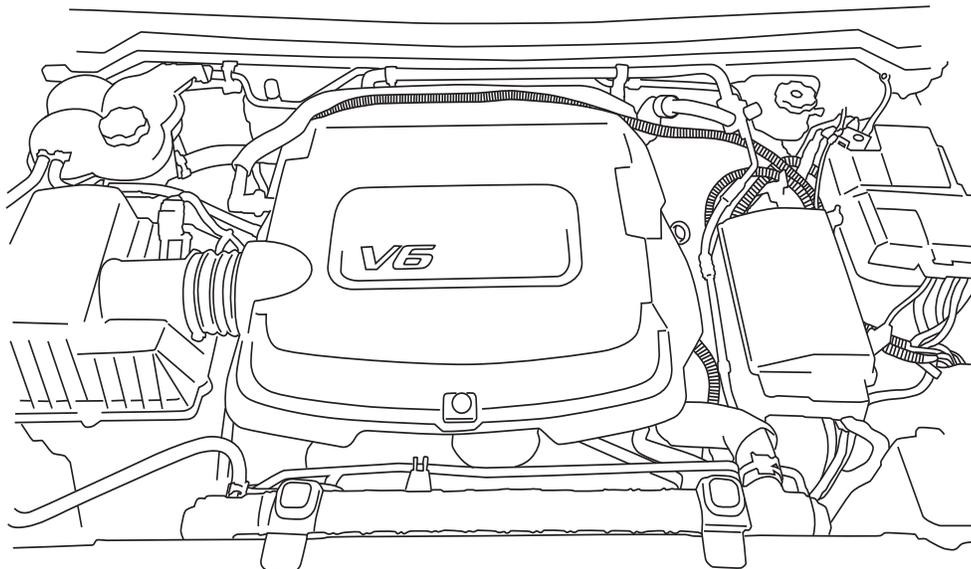


Remove Fuse from harness. Plug harness to controller and ensure that locking tabs are engaged. Attach controller horizontally to driver side wire loom. Secure with 11" cable ties. Attach ground lead to the negative battery terminal. Open the power distribution block cover and connect the Power wire to the positive power battery cable terminal.

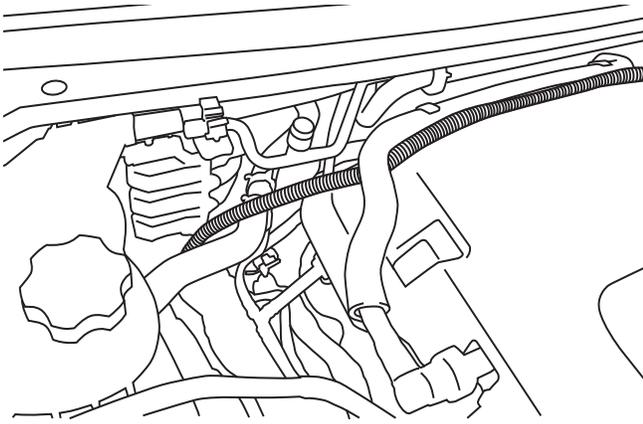


11

Route the two wire harness leads towards the firewall, the longer leg will run across to passenger side of vehicle. Secure harness with supplied tie wraps. Attach to hose at the back of the engine cover.



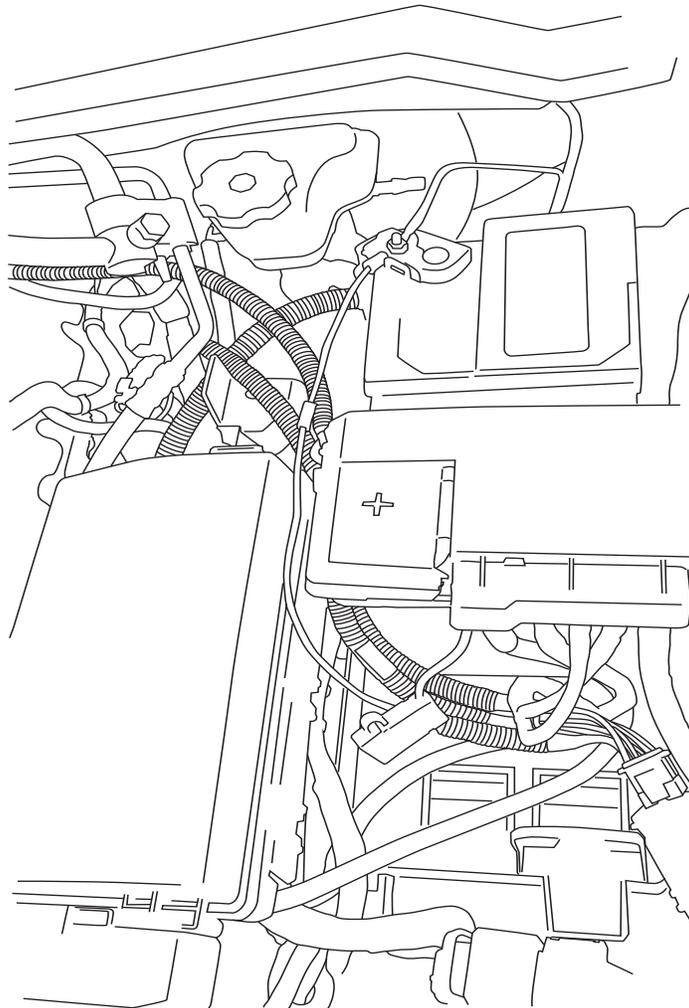
12



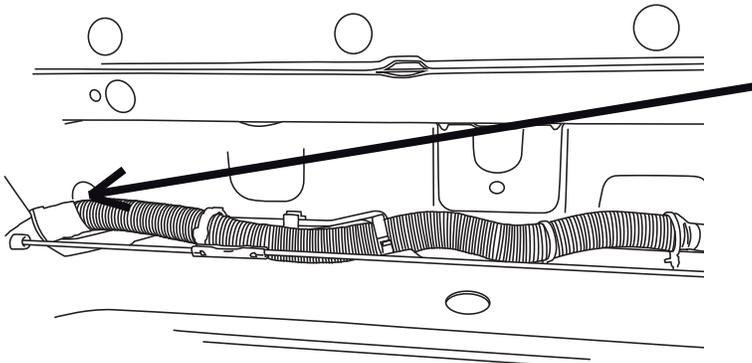
Route the passenger harness-leg down to the outside of the frame on the passenger side behind the inner fender liner, over the body mount bracket and to the motor on the front linkage. Secure with zip ties.

13

Route the driver's side leg of the harness down away from the exhaust, steering, and silver AC lines behind the inner fender liner to the outside of the frame.

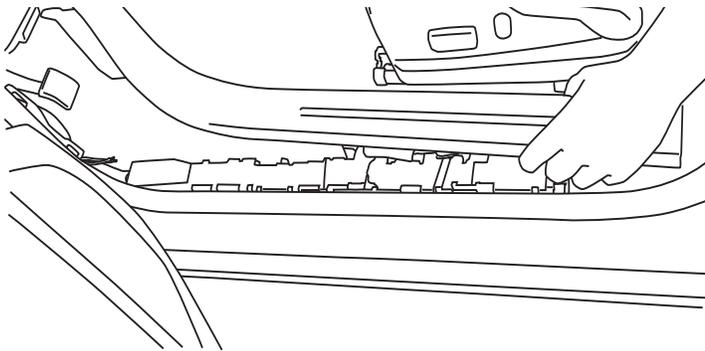


14



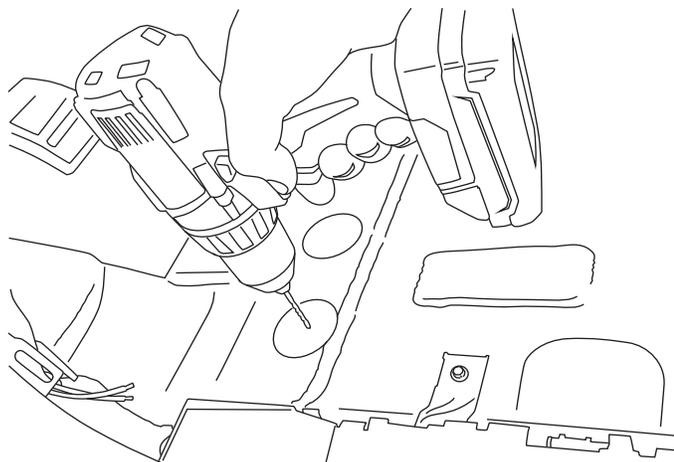
Route harness along the body mount bracket and zip tie to the factory harness. The purple wires will go through plastic plug in the floor in step 16.

15



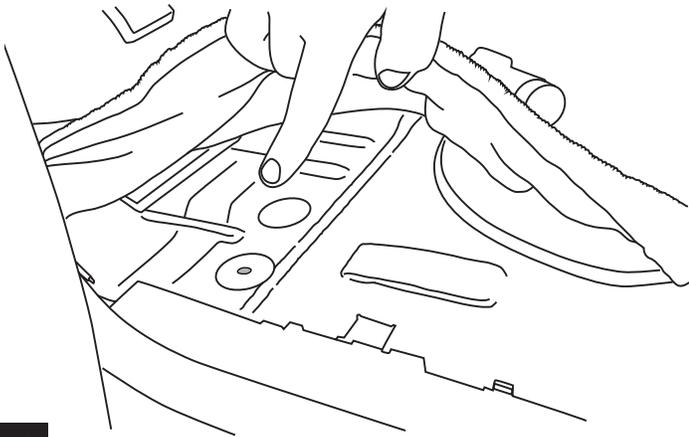
Remove the drivers side door sill trim-panel, by pulling up and back.

16



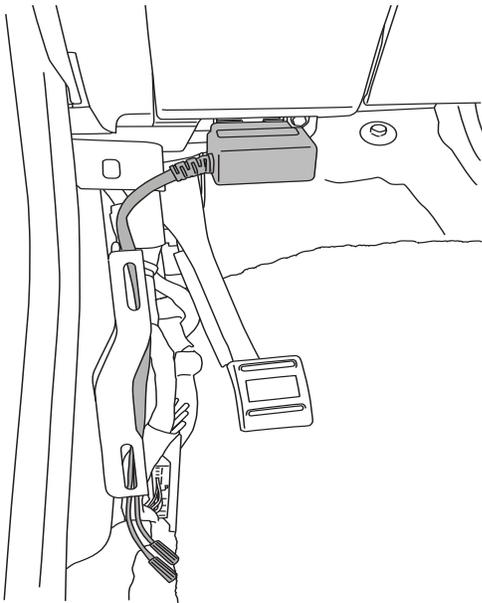
Lift the carpet to expose the plastic in-floor plug. Drill a 9/32" hole in the middle and insert the supplied rubber grommet (22).

17



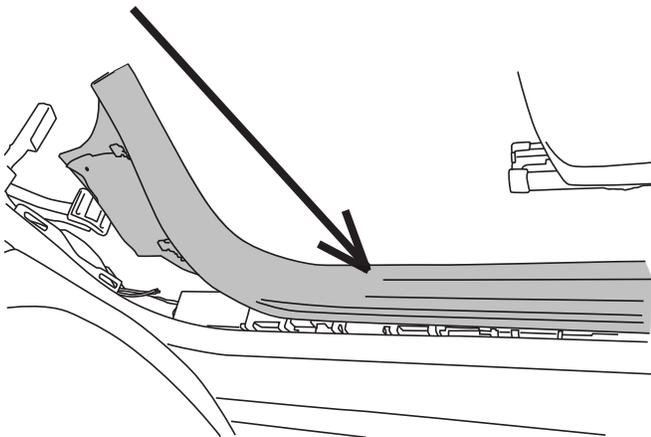
Pull the purple trigger wires through the grommet from below. Use the Posi Locks (11) to make the connection to the plug and play module.

18



Next plug in the Plug and Play module under the dash as shown and route the wires behind the bracket to the left. The wires from below can be tucked under the carpet for the trim to be installed on top. Make sure the wires are clear of the E-brake mechanism.

19

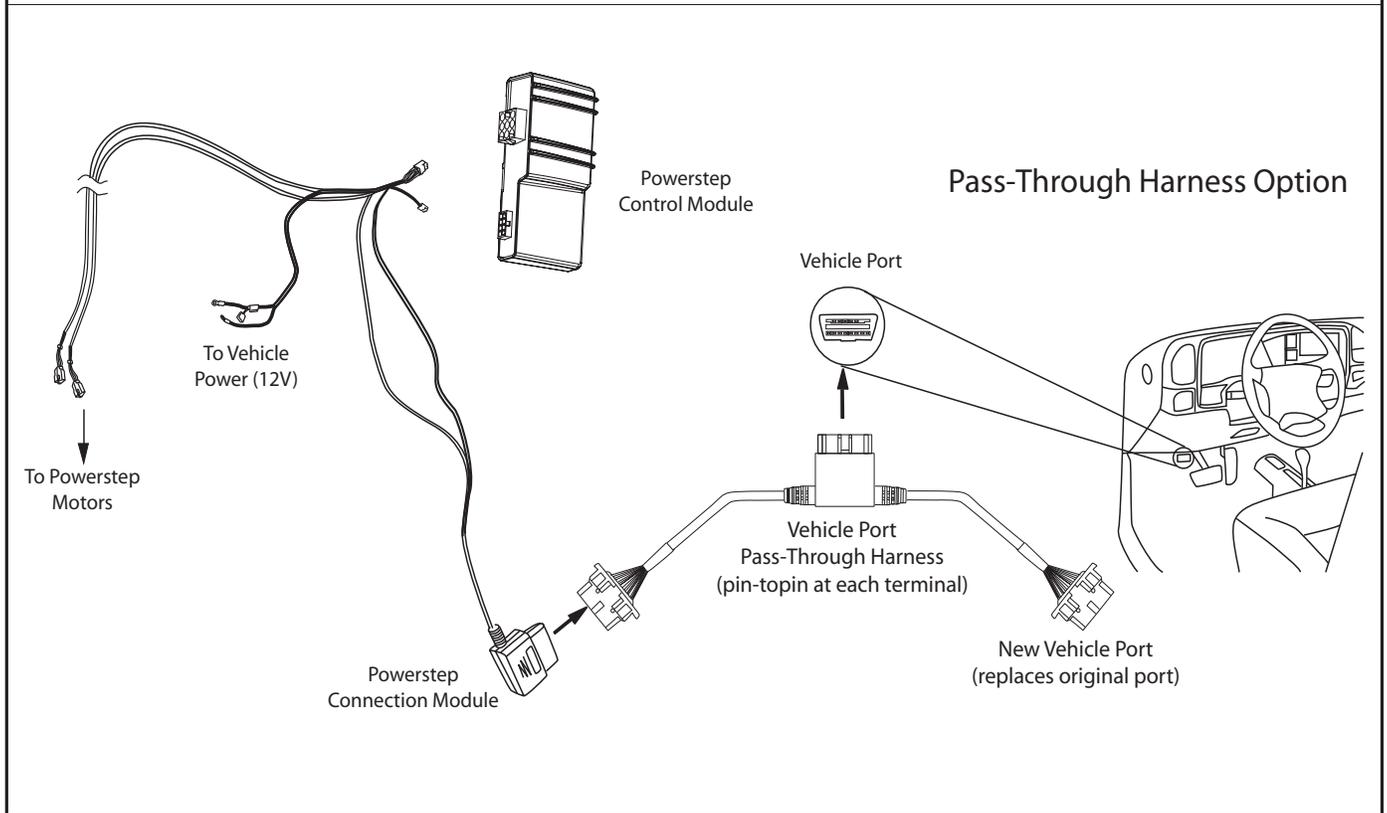
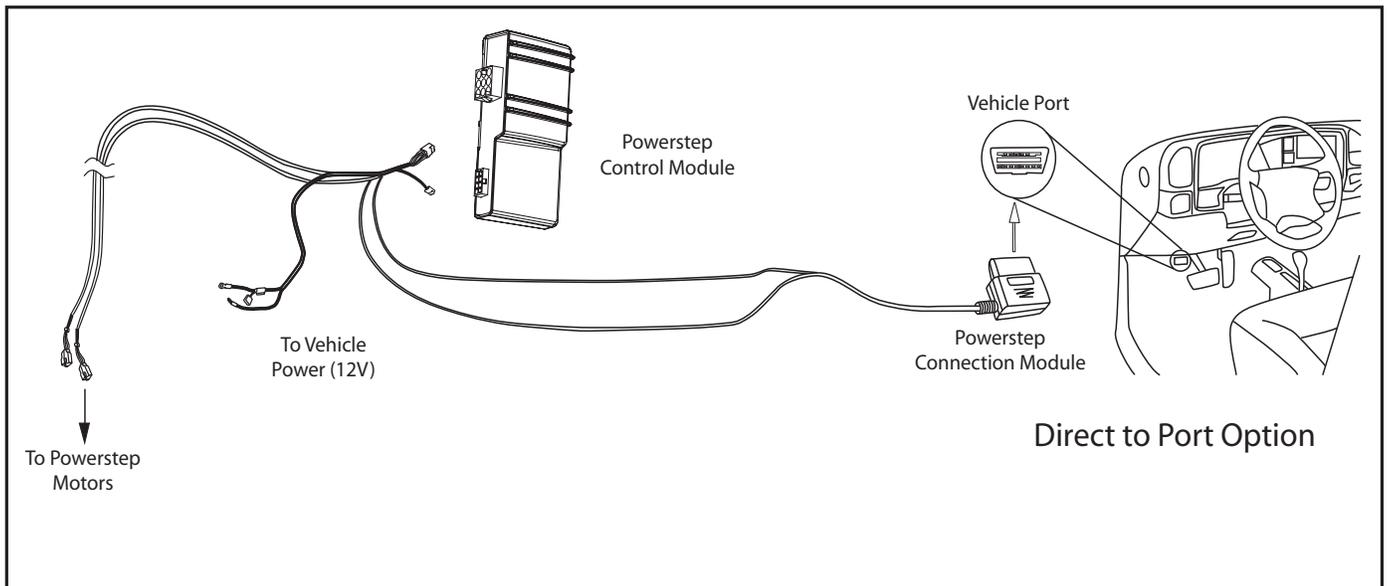


Reinstall the drivers side door sill trim-panel, be careful to not damage or pinch the wires.

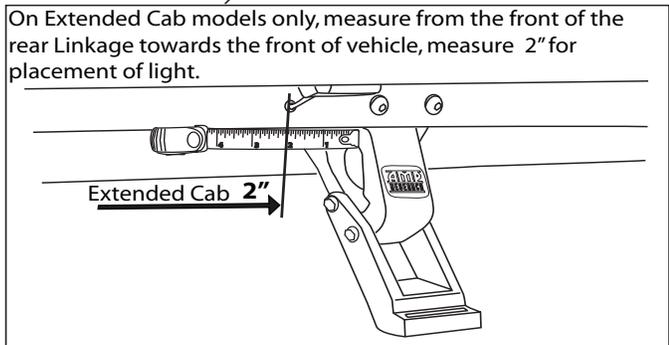
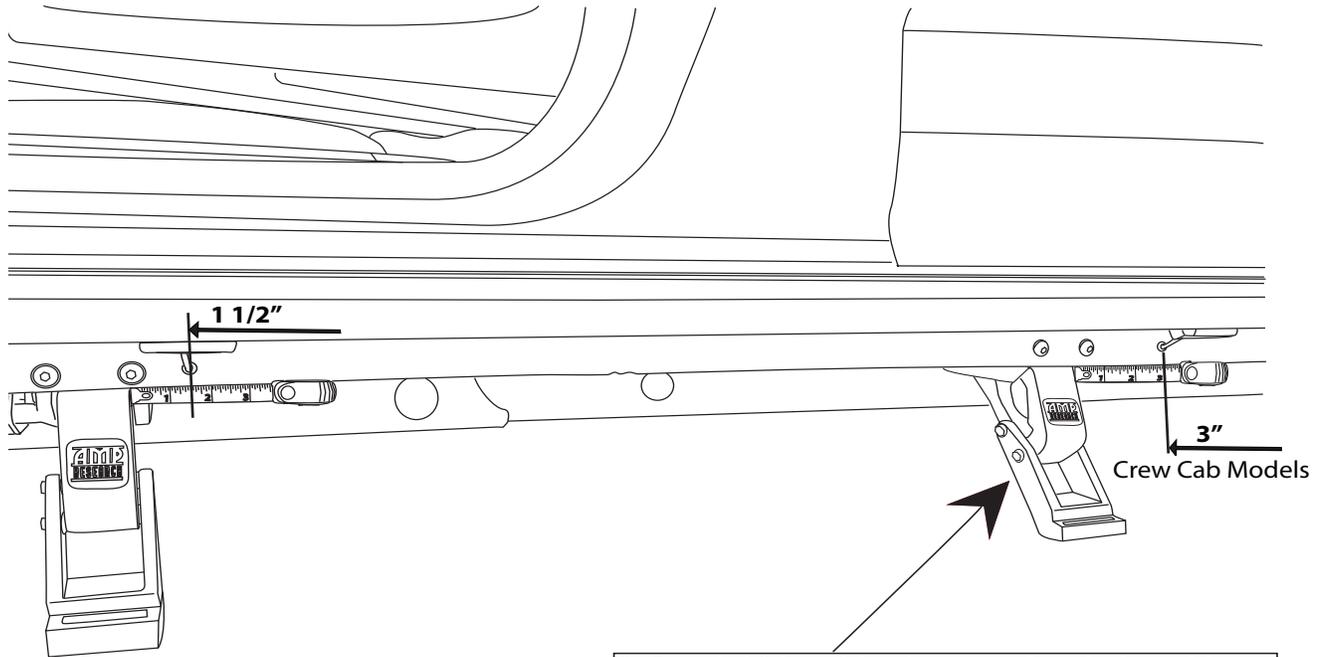
**NOTE: Seal hole with silicone glue and cover with tape so carpet does not stick to glue.**

20

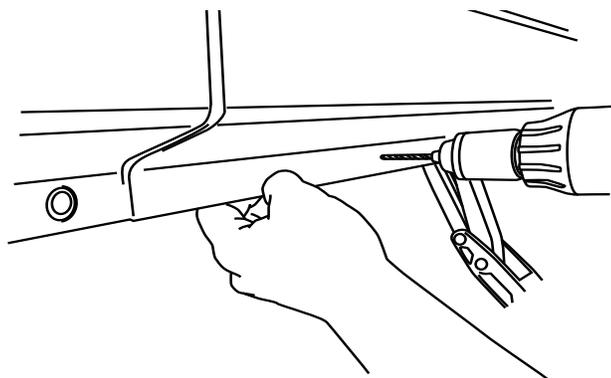
**OBD II install:** Use Supplied Posi Twist connectors to attach the Plug and Play Module to the Harness. Attach matching colors on the harness to the wires on the module. Plug in module to OBD II port on the vehicle. Secure harness with supplied tie wraps. *Note: If the OBD II pass thru harness (76404-01A) 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.*



On each side of the vehicle measure from the rear edge of the front linkage on the pinch weld 1.5" back and mark. Measure 3" from the rear edge of the rear linkage and mark. **Note: for Extended Cab, mount the rear light 2" in front of the forward edge of the rear linkage.**



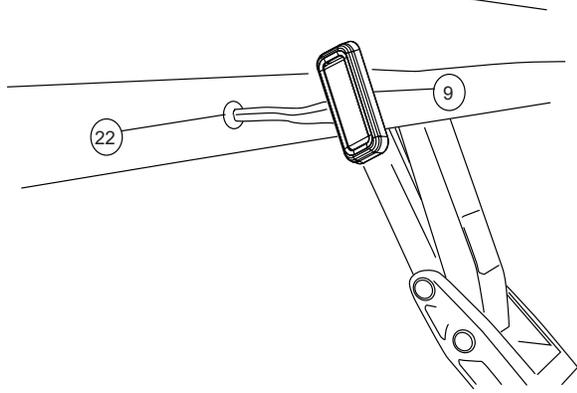
22



Center punch and drill a 1/8" pilot hole then drill a 9/32" hole through the pinch weld at marked locations. Deburr all holes. After drilling apply paint to holes to prevent rusting.

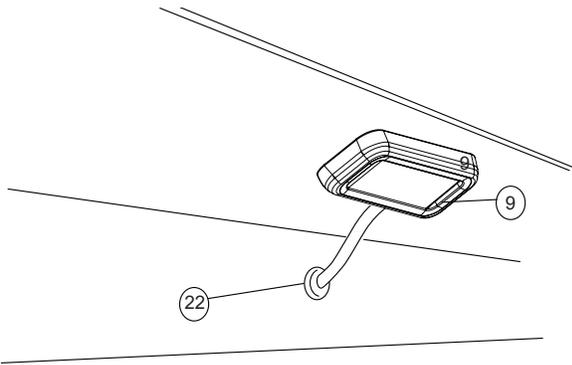


23



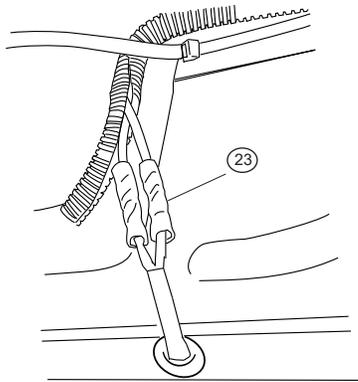
Insert grommet into drilled holes. Insert lamp wires through the grommets. (Silicon lube will help wires slip through grommets).

24



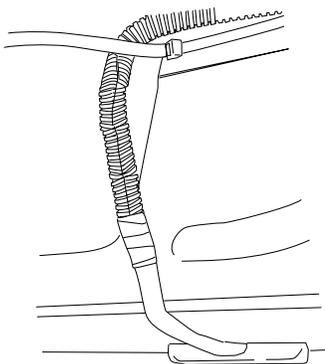
Affix lamp to rocker panel surface. Make sure lamp is affixed to a flat, clean surface.

25



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

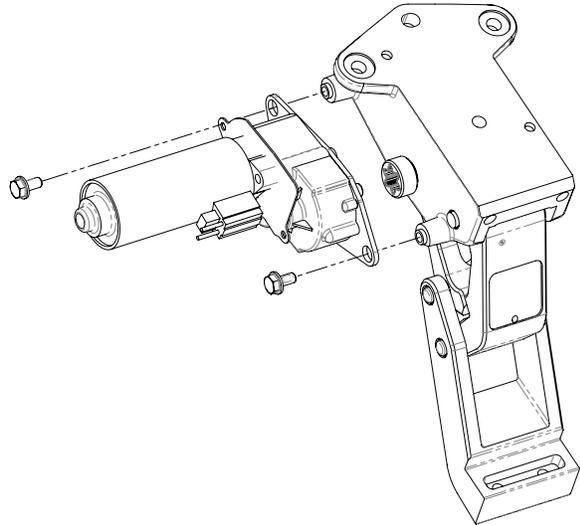
26



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.

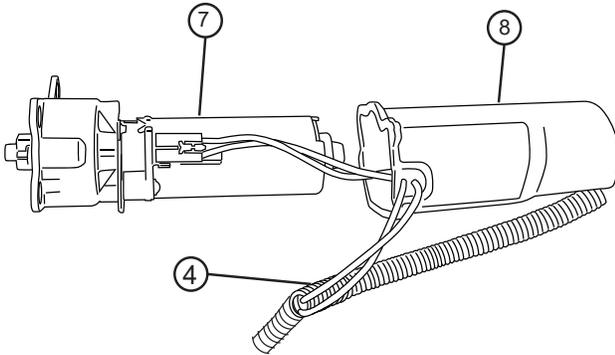
27

Install motors onto the front linkages using 2 bolts per motor, item (12).

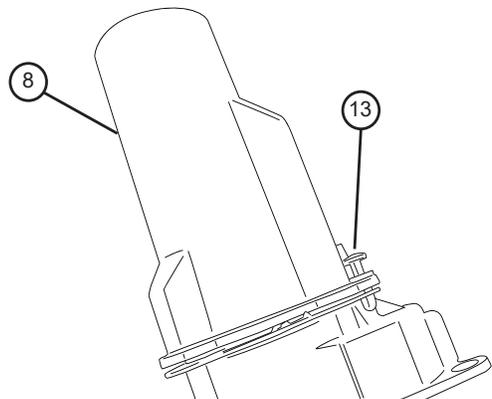


28

Insert plug from wire harness (7) onto motor (4). Slide rubber grommet on wire harness into slot of motor cover (8). Insert motor cover onto motor. Use electrical tape to cover any exposed wire from the motor.



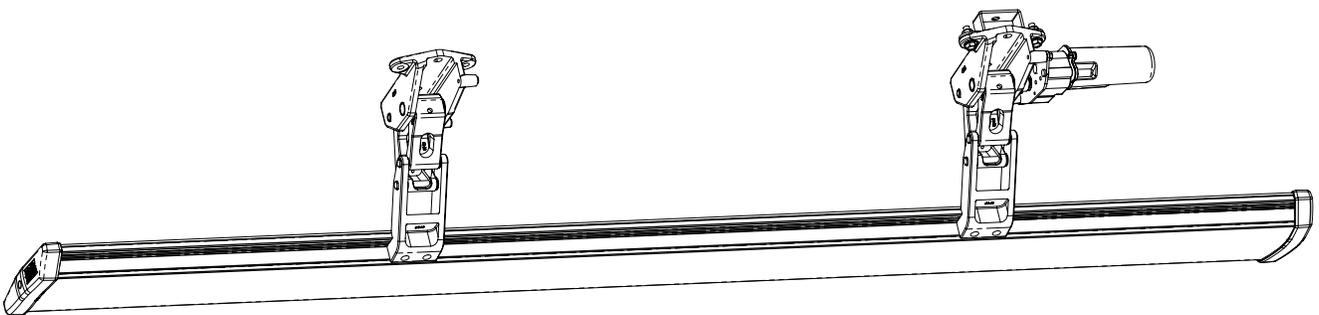
Insert plastic push pin rivets (13) in mounting holes of motor cover (8). Use pliers to ease installation.



29

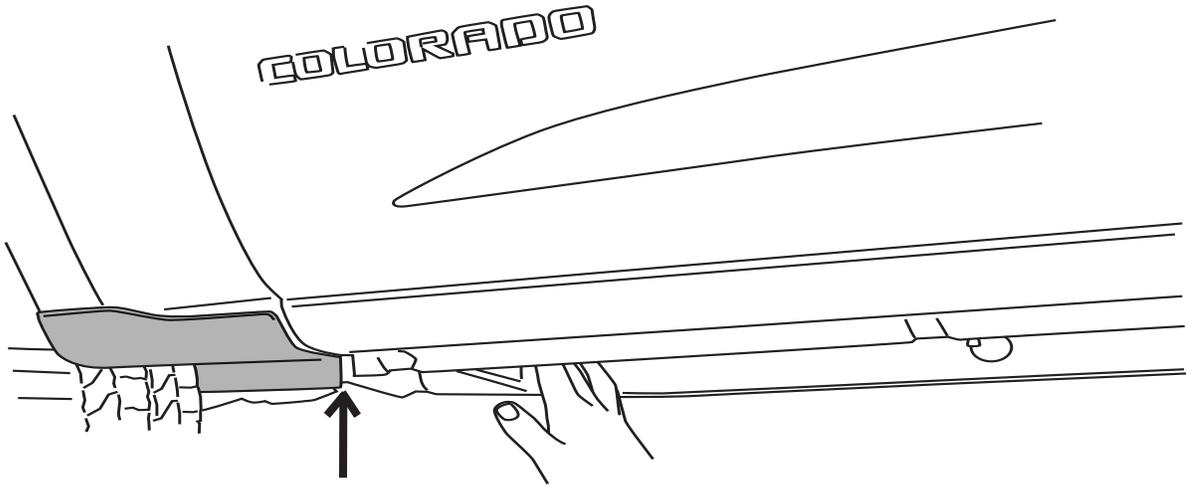
30

Next, mount step extrusion to linkage assemblies. Line up t-nuts in step assembly with slots in lower mounts of linkage assemblies. Tighten 4 socket cap screws (10) with 3/16" allen wrench. Fasten loosely to allow for adjustments.



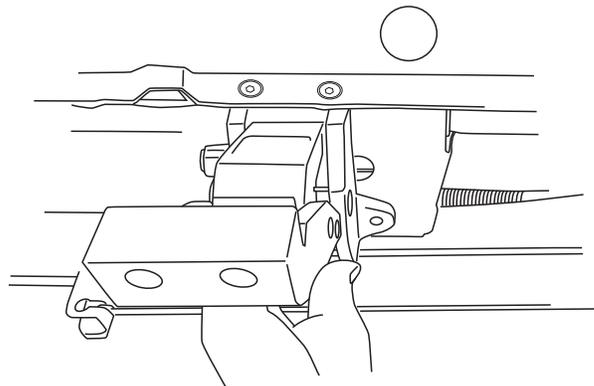
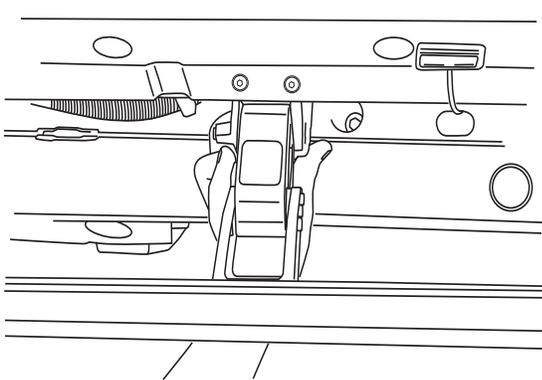
31

Line up the front edge of the board just behind the front fender trim. Repeat on passenger side. Torque the bolts to the step extrusions to 10 ft-lbs(13.5 N m).



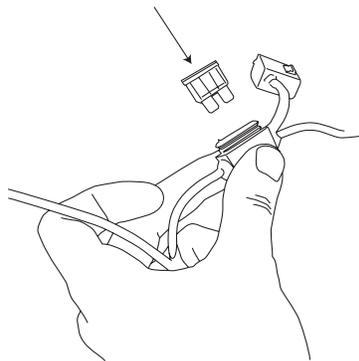
32

Front & Rear Linkages on Driver and Passenger side: Torque fasteners to 16 ft-lbs. (22 N m).



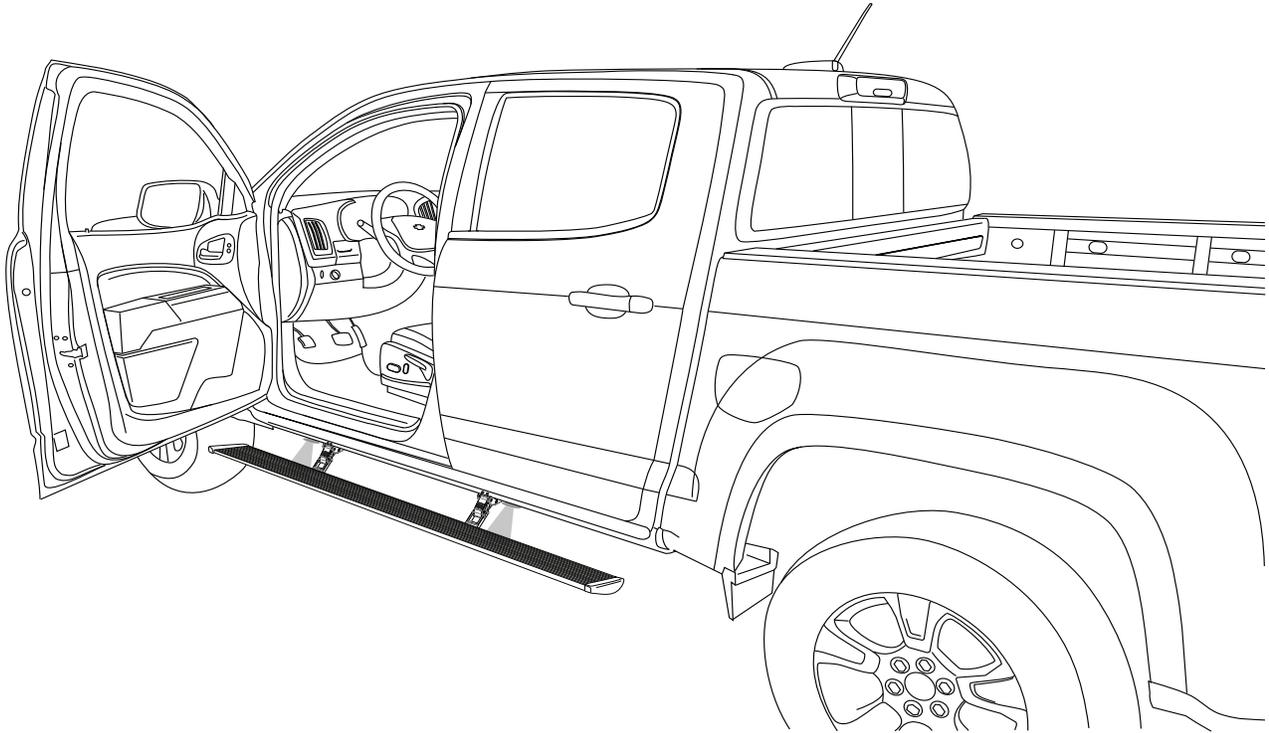
33

Reinstall fuse.



34

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.

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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.

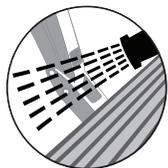
**Automatic stop:**

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.



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

