

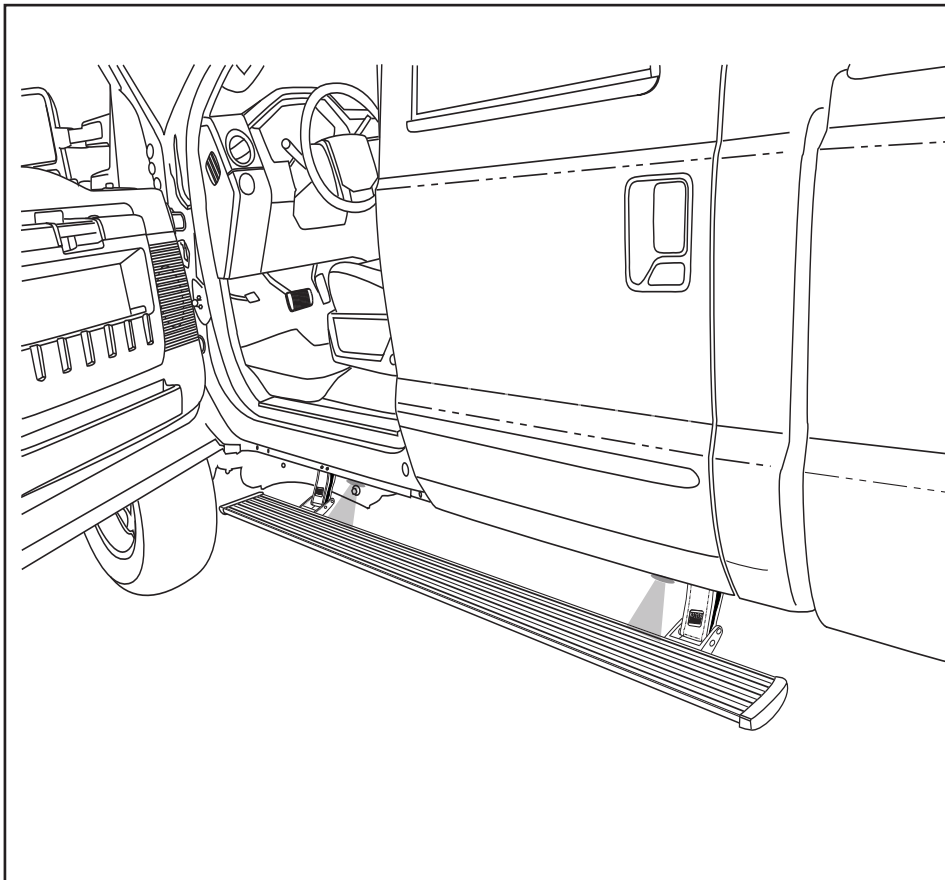
# PowerStep™

MADE IN USA

# Xtreme

APPLICATION	LENGTH	MODEL YR	PART #
Ford F-250 / F-350 / F-450 Regular Cab *	(48")	2008-2016	78234-01A
Ford F-250 / F-350 / F-450 Super Cab *	(60")	2008-2016	78234-01A
Ford F-250 / F-350 / F-450 Crew Cab	(79")	2008-2016	78234-01A

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



### INSTALLATION TIME

**2-3 Hours**

Professional installation recommended

### SKILL LEVEL



4= Experienced

### TOOLS REQUIRED

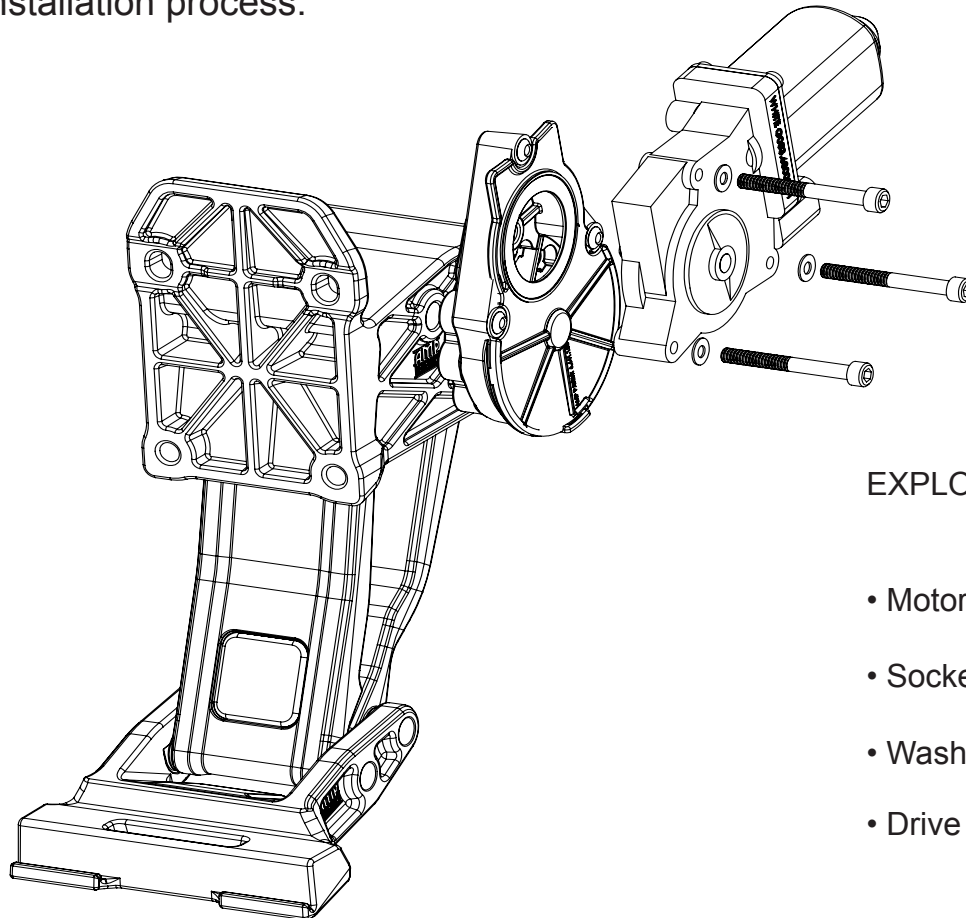
- Safety goggles
- Measuring tape
- Flat blade screwdriver
- Phillips head screwdriver
- 13mm socket
- 8mm socket
- Ratchet wrench and extension
- Wire crimpers
- Wire stripper / cutter
- 3/16" hex key (allen wrench)
- 4mm hex key (allen wrench)
- Electrical tape
- Silicone caulking (sealer)
- 25/64" Drill Bit
- 9/32" Drill Bit

Invented, engineered and manufactured exclusively by AMP Research in the USA. May be covered by one of the following patents: 6,641,158; 6,830,257; 6,834,875; 6,938,909; 7,055,839; 7,380,807; 7,398,985; 7,584,975 ©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
- 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.

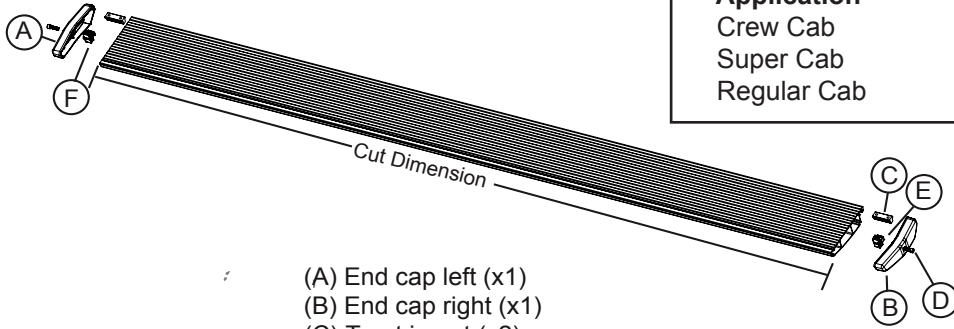
CAUTION: Dropping the assembly or any excessive impact MAY cause damage to the motor.

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.**

**Note: Some Applications require modification.**

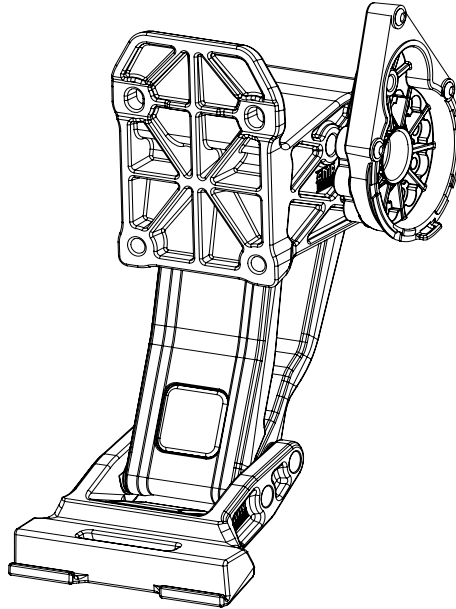
Application	Cut Length
Crew Cab	79" (No Modification Required)
Super Cab	60" (Trim 19")
Regular Cab	48" (Trim 31")



- (A) End cap left (x1)
- (B) End cap right (x1)
- (C) T-nut insert (x2)
- (D) Socket cap screw (x2)
- (E) End cap wedge right (x1)
- (F) End cap wedge left (x1)

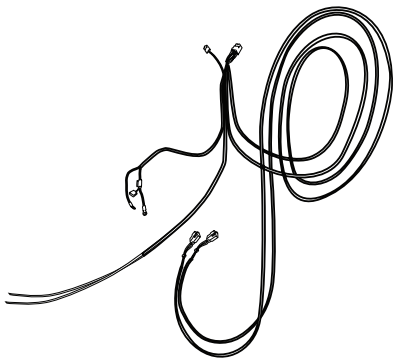
1 x2

Running board assembly



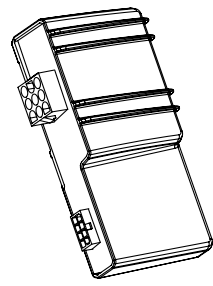
2 x4

Motor linkage assembly



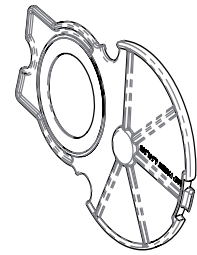
3

Wire harness



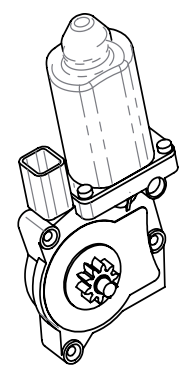
4

Controller



5 x4

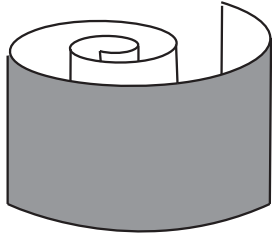
Gear Cover



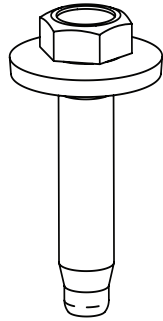
6 x4

Motor

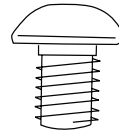
PARTS LIST AND  
HARDWARE  
IDENTIFICATION



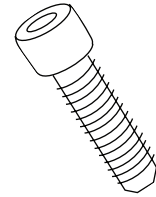
7  
Tape



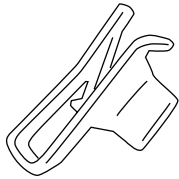
8 x8  
Conical Bolt



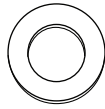
9 x8  
Button head - M10



10 x8  
Socket cap screw



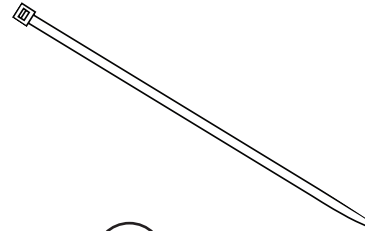
11 x8  
U-nut



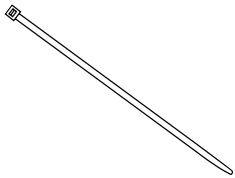
12 x8  
M10 Washer (stainless)



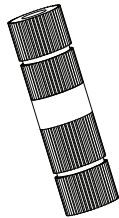
13  
Nylock nut



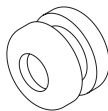
14 x2  
Cable tie (11")



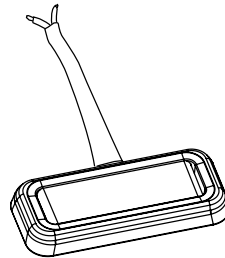
15 x20  
Cable tie (7")



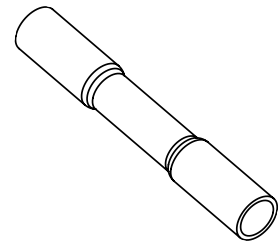
16 x2  
Posi-Lock®



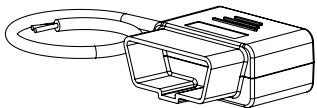
17 x4  
Grommet



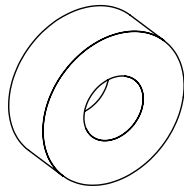
18 x4  
LED Lamp



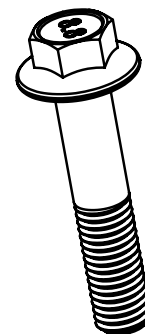
19 x8  
Butt connector



20  
OBD II Plug

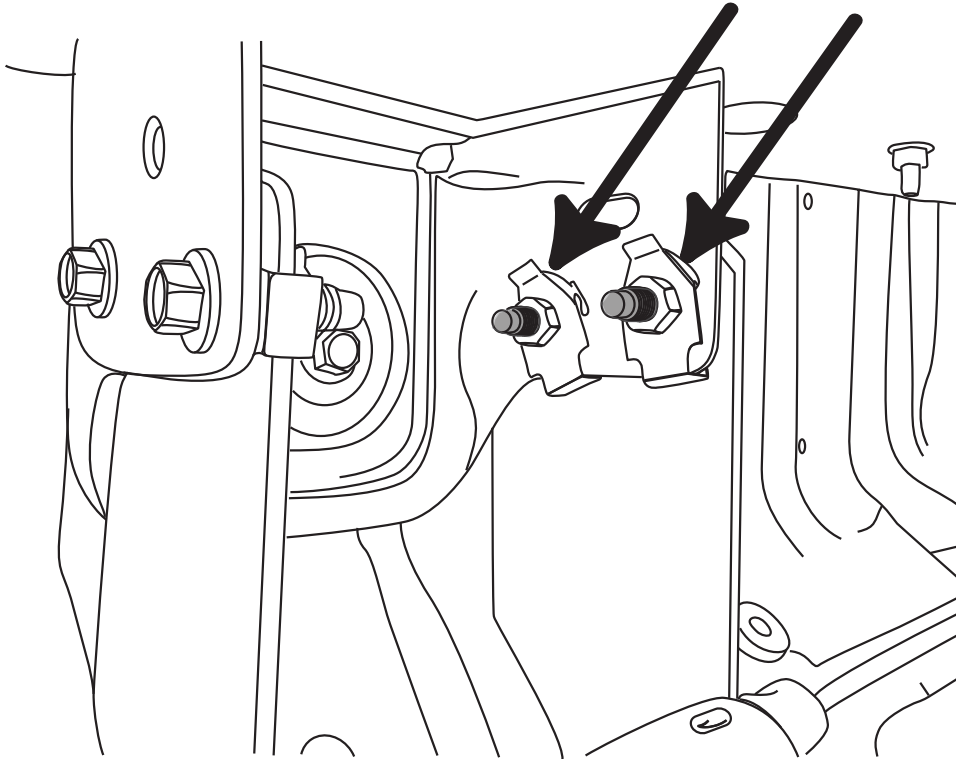


21 x2  
Spacer



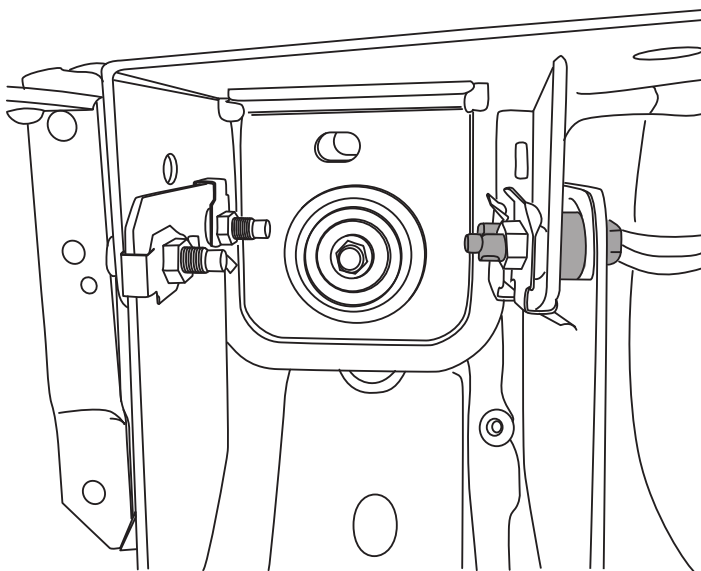
22 x2  
Flange Head Bolt

**Short bed models with crash bracket:** Remove two forward bolts holding crash bracket in place. .



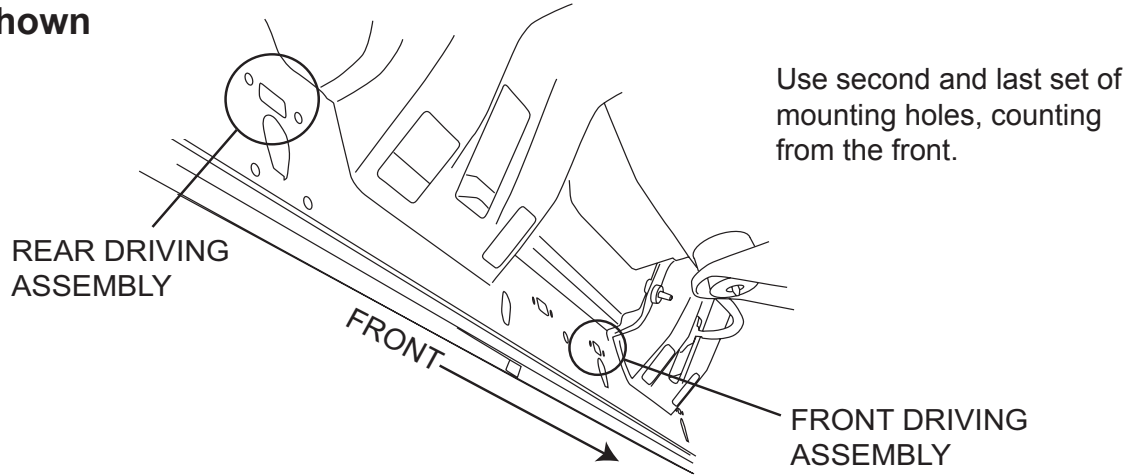
1

Use provided Flange head bolts (#22) and Spacers (#21) to move forward part of crash bracket. Note: Spacers are needed to clear motor housing.

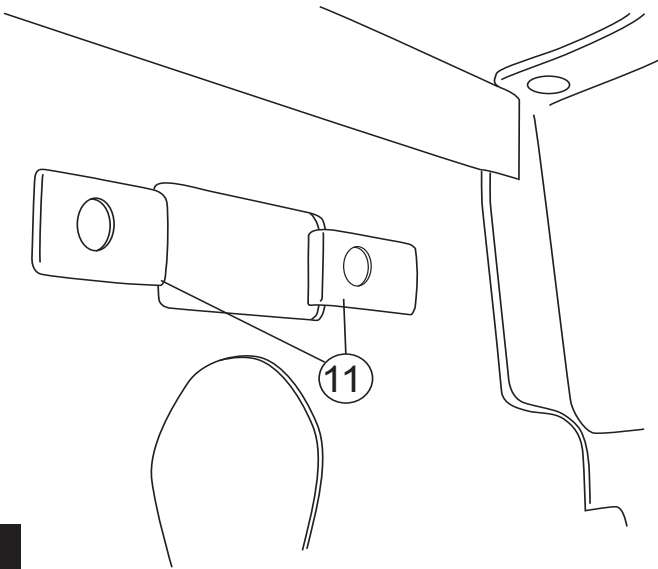


2

Driver Side Shown

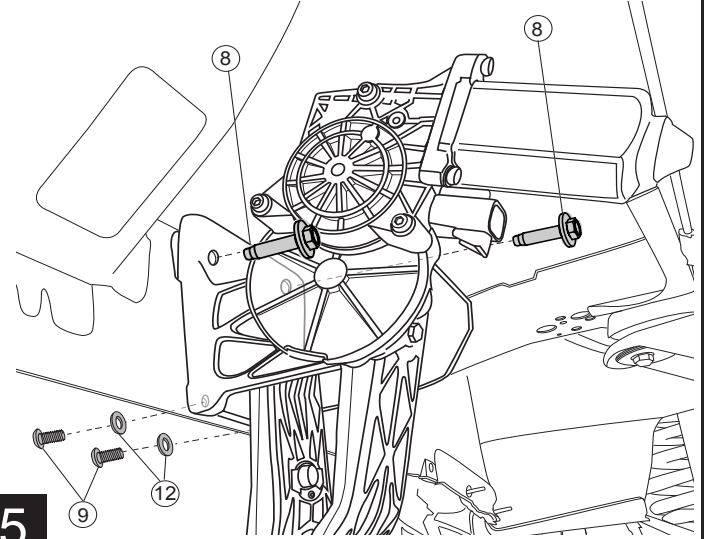


3



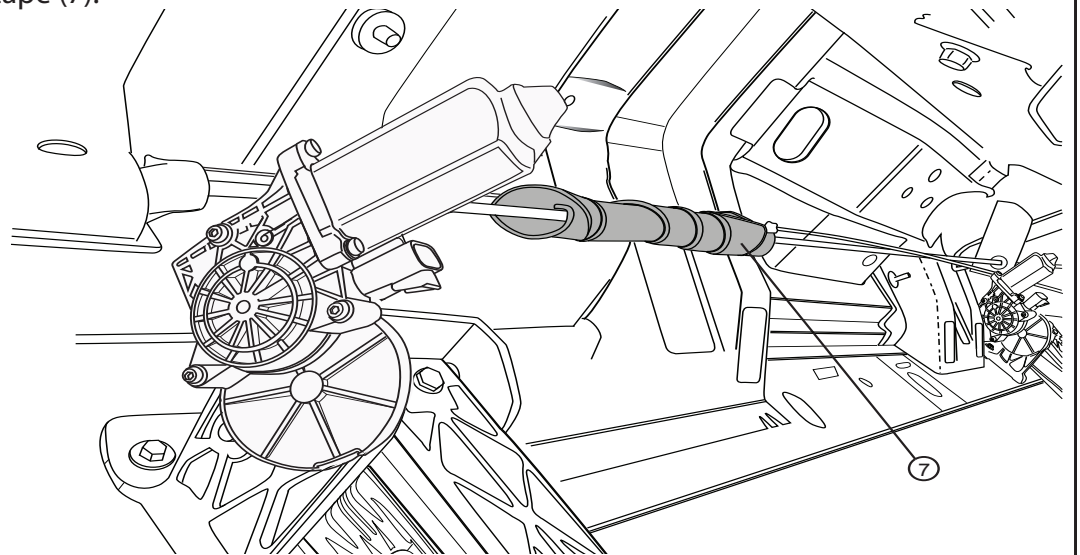
4

Torque fasteners to 16 ft-lbs. (22 N m).



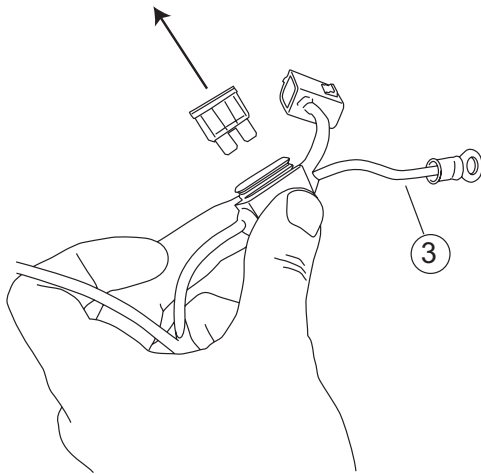
5

Wrap e-brake cable with tape (7).



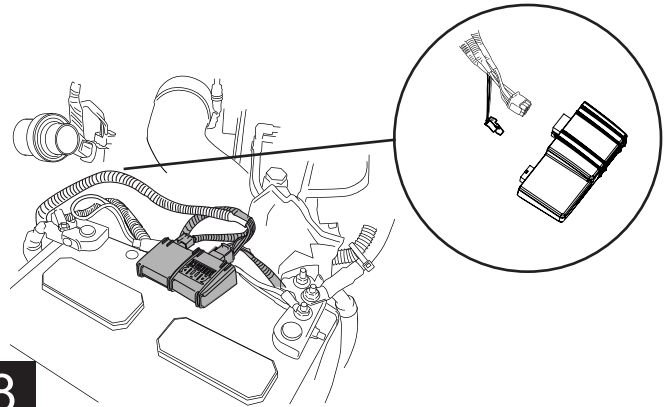
6

Remove fuse from harness.



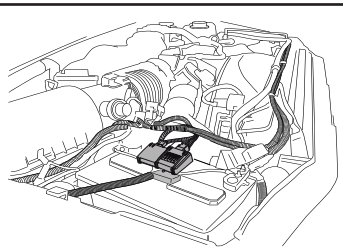
7

Secure controller to vehicle wire loom beside battery (on passenger side) and connect both Power Step wire harness connectors to connectors on controller. Secure locking tabs on connectors.

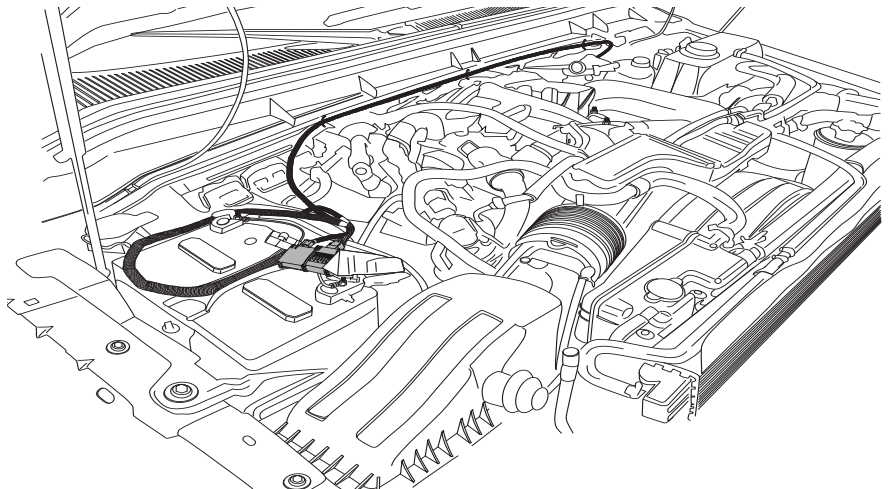


8

Connect power and ground for controller to battery, Red to positive and Black to the negative lead. Route harness legs down over wheel wells toward motor linkages, long leg across front and over to driver side. Secure all loose sections of the harness with cable ties.

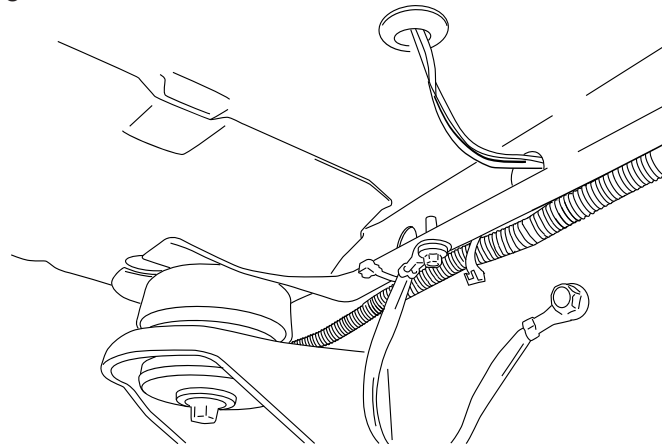


MODELS: 2013 AND OLDER



9

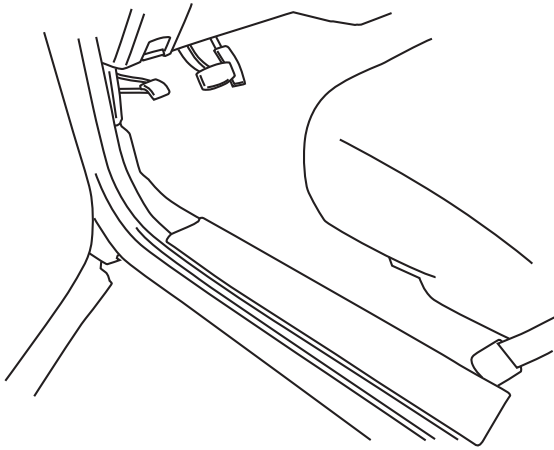
Run wire legs down and along underside of vehicle floor, securing with tie wraps. Run trigger wires (2) on Drivers side through grommet as shown below.



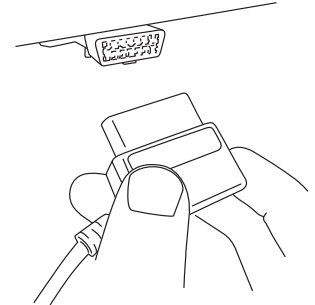
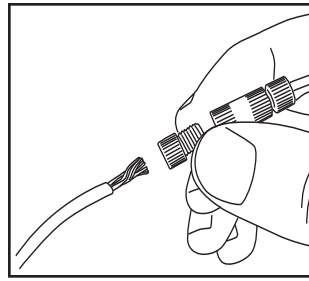
Driver-Side

10

Open driver door and remove sill plate and kick panel.



Wire OBD II connector with Posi-Splice and plug into port.

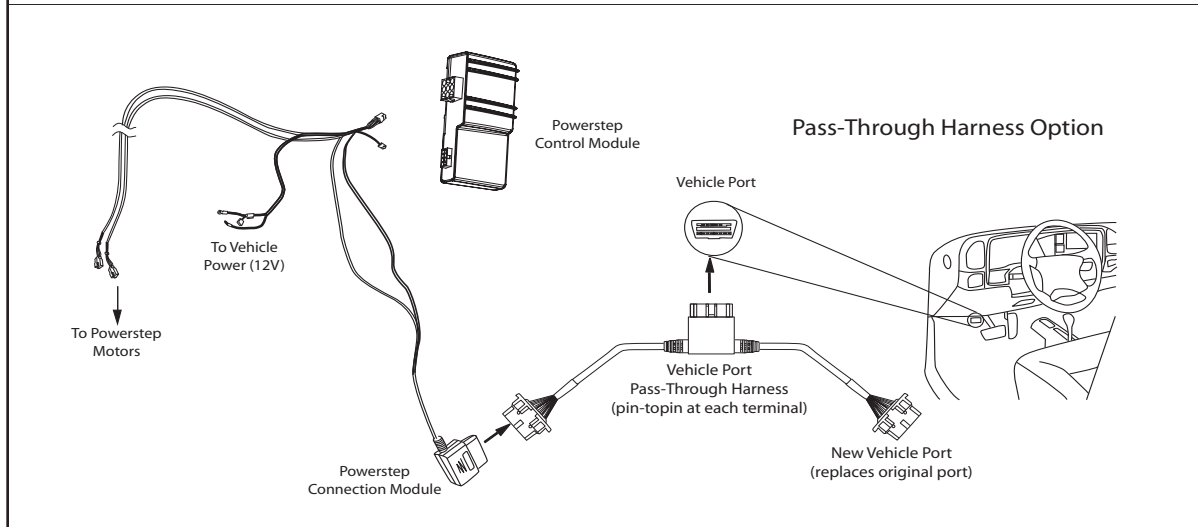
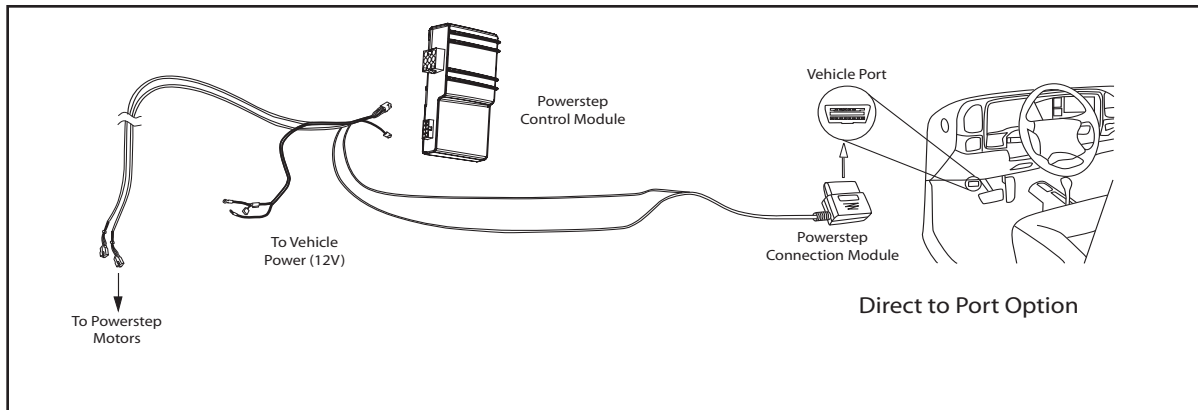


11

12

**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.

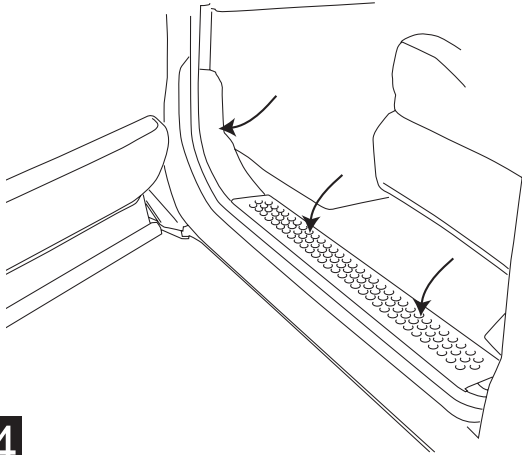
*Note: If the OBD II pass thru harness (76404-01A) was purchased see install sheet supplied in packaging. The pass through harness allows for an open port for other accessories. See below for a brief description.*



13

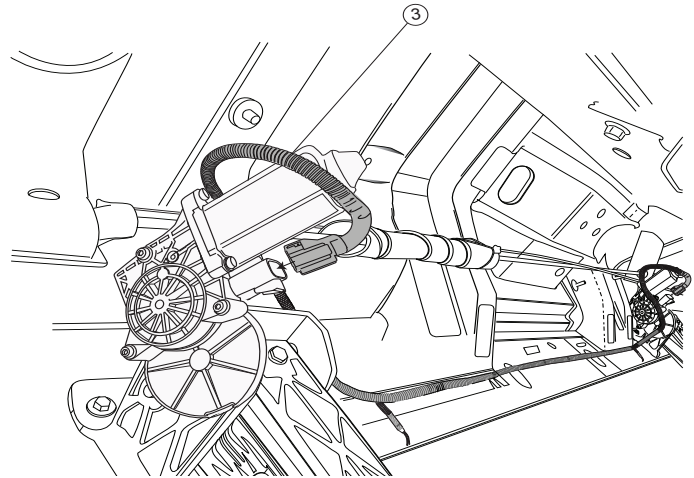


Secure wires and replace kick panel and sill plate. Be careful not to pinch any wires when replacing panels.



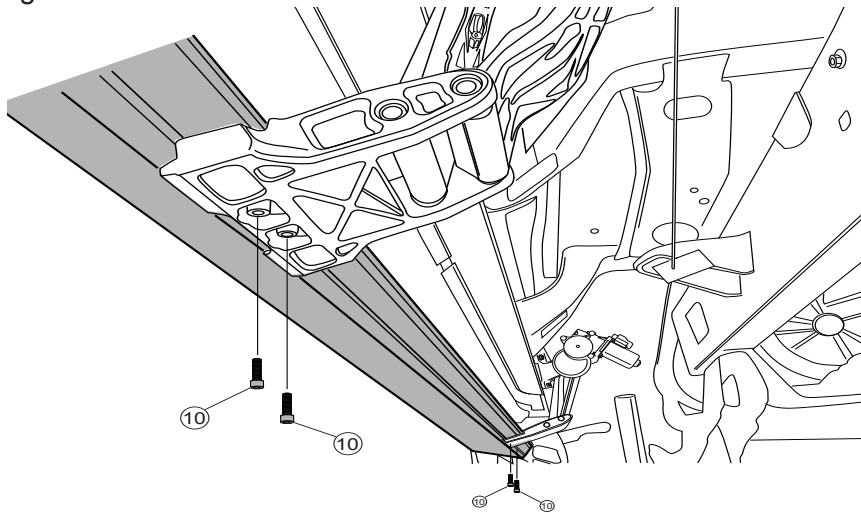
14

Connect front motor, route remaining harness towards rear of vehicle and *connect* remaining plug into rear motor.



15

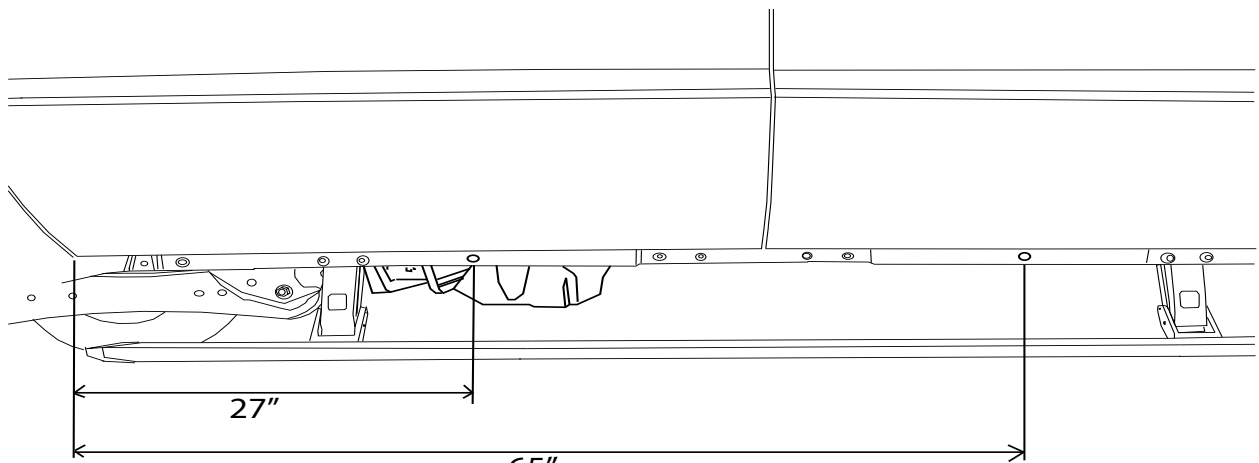
Slide mounting T-nut into position. Mount Board and tighten fasteners to 10ft-lbs. Align the end of the board with the rear edge of the back door.



16

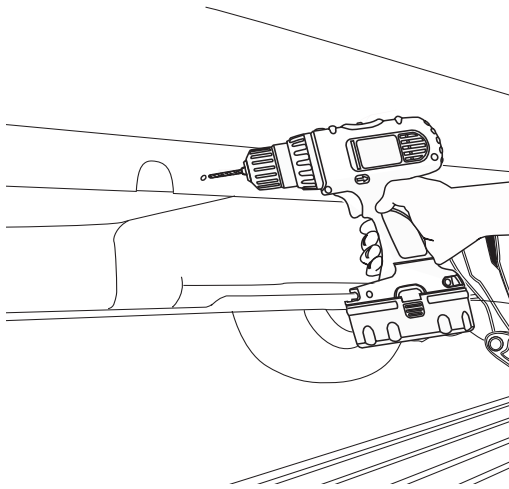
**TORQUE**  
10 ft-lbs. (13.5 Nm)

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 27" for front LED Light and 65" for rear LED Light.



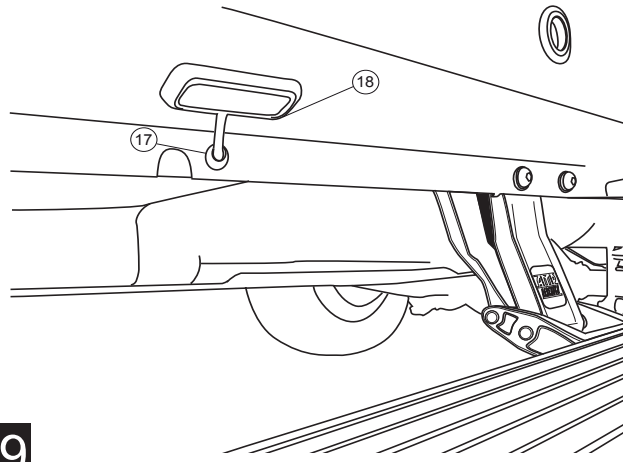
17

Drill a 9/32" hole through the pinch weld at marked locations. Deburr all holes.



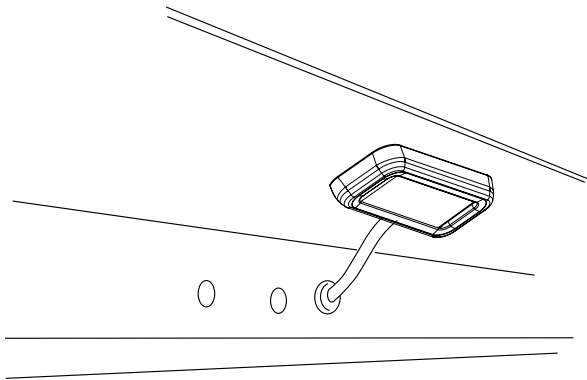
18

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



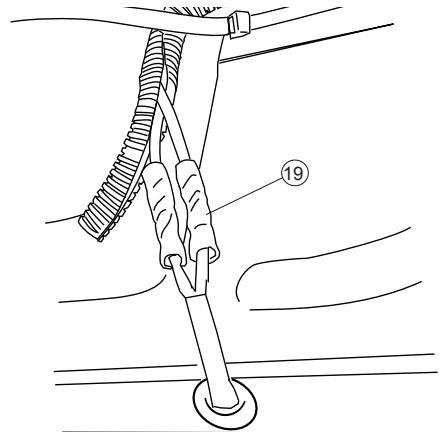
19

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



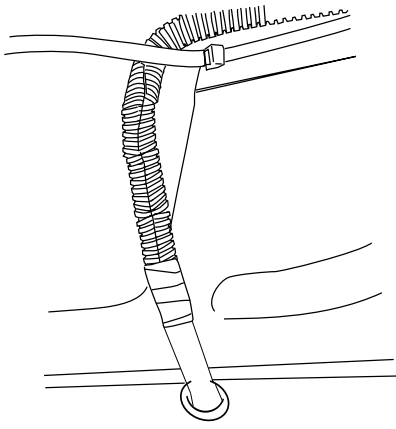
20

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



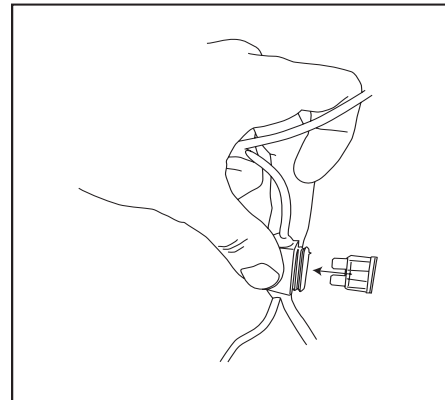
21

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.



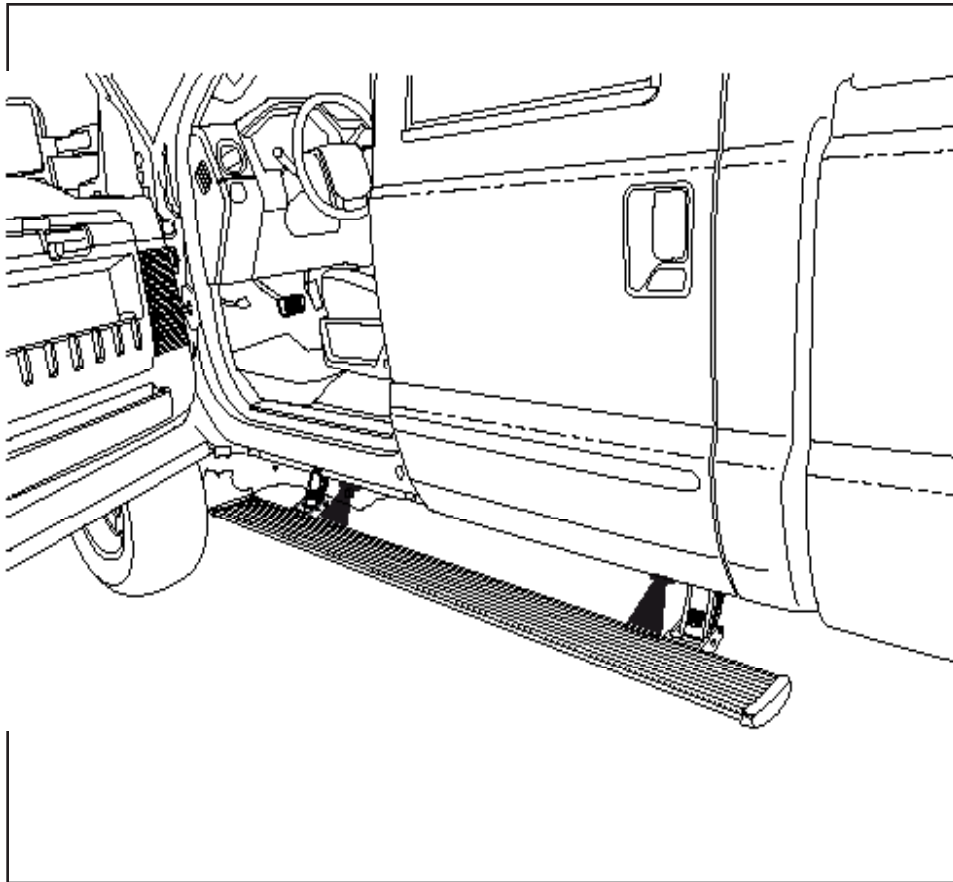
22

Reinstall the fuse.



23

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.

**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.

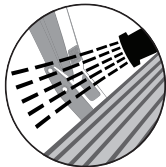
**Automatic stop:**

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.

**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.