

# INSTALLATION GUIDE

# AMP RESEARCH Power Step

MADE IN USA

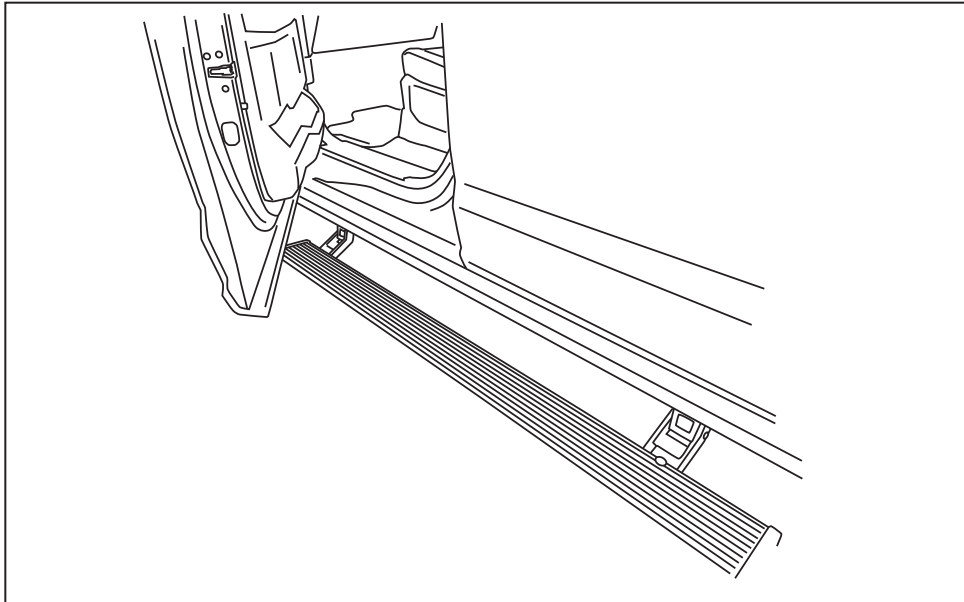
APPLICATION

AMP Part #

Ford Super Duty - Crew Cab 2008-2010, 2013-2015

77134-01A

**Note: The application works only on the Crew Cab model Vehicles.**



## INSTALLATION TIME

**3-5 Hours**

Professional installation recommended

## SKILL LEVEL



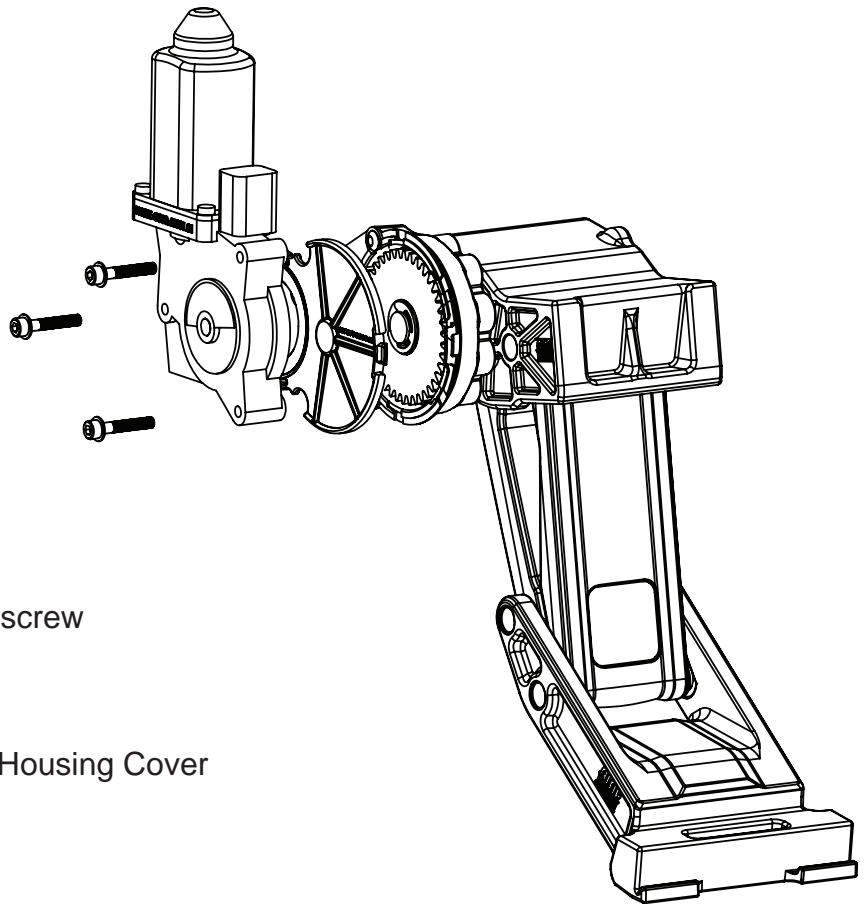
4= Experienced

## TOOLS REQUIRED

- Safety goggles
- Measuring tape
- 10 mm socket
- 13 mm socket
- 1/2" socket
- Ratchet wrench and extension
- 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

**INSTALLATION GUIDE**

Attaching motor to Linkage assembly.

**EXPLODED VIEW**

80-03129-90	Motor
19-03179-90	Socket cap screw
19-03133-90	Washer
19-03138-90	Drive Gear Housing Cover

**CAUTION: HANDLE WITH CARE.**

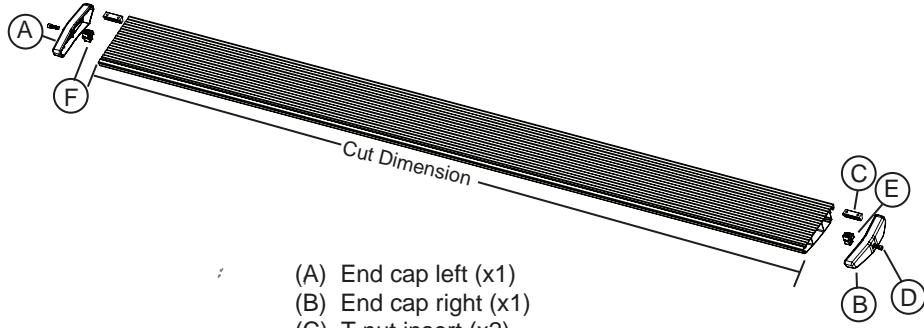
To ensure our customers receive all components with full integrity, we pack the motors separate from their linkage assemblies. This requires that the installer position and fasten the motor before continuing with the install. Please follow the instructions below and handle the assembly carefully.

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

## Instructions:

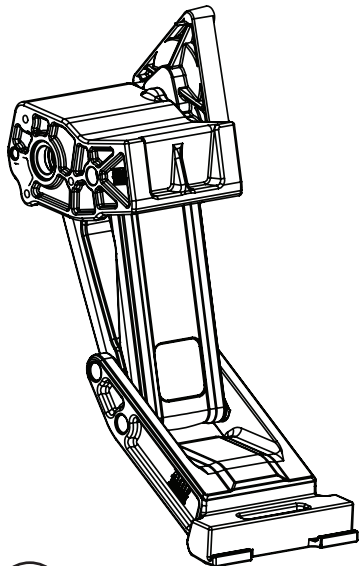
1. Position the gear cover in place as shown if not already in place.
2. Seat motor into position on the three mounting bosses. This may require an adjustment of the gear by moving the swing arms.
3. After seating into place, fasten the motor with the three motor mount screws with 4mm Hex Head. Tighten screws to 36 in-lbs (4N-m). **Do not over torque.**

AMP RESEARCH POWERSTEP™ – FORD F150

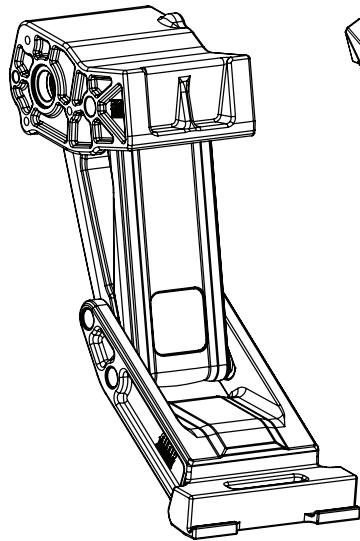


- (A) End cap left (x1)
- (B) End cap right (x1)
- (C) T-nut insert (x2)
- (D) Socket cap screw (x2)
- (E) End cap wedge right (x1)
- (F) End cap wedge left (x1)

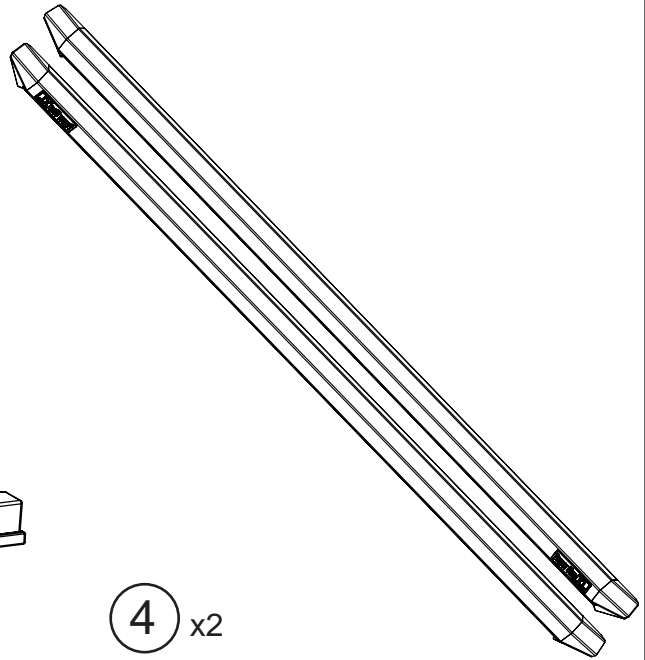
**1** x2  
Running board assembly



**2** x2  
Motor Linkage assembly



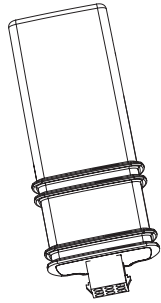
**3** x2  
Idler Linkage assembly



**4** x2  
Rail Assembly



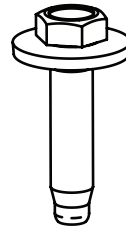
**5**  
Wire harness



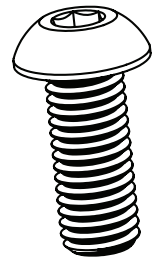
**6**  
A06 Controller



**7** x2  
Posi-Lock™

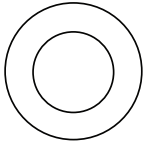


**8** x18  
M8 Hex Bolt w  
Conical washer

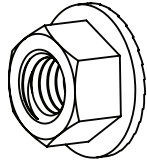


**9** x10  
M10 Button Head  
bolt

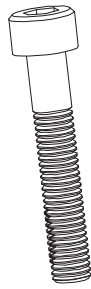
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10 x10  
M10 washer



11 x10  
Flange Nut



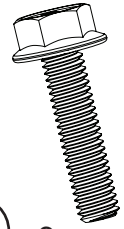
12 x6  
M5 Hex Bolt



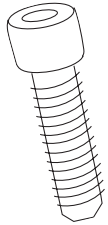
13 x6  
M5 Washer



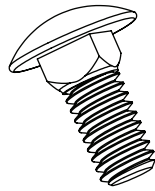
14 x4  
M6 Flange Bolt



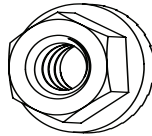
15 x6  
5/16 Flange Bolt



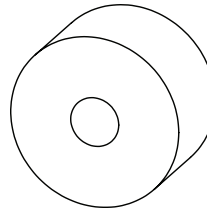
16 x8  
Socket Cap Screw



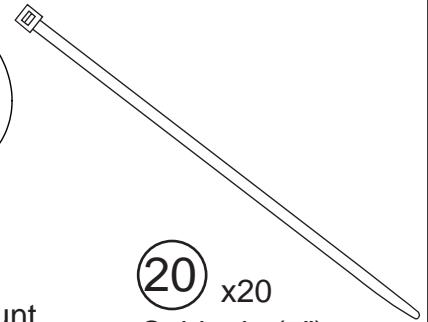
17 x10  
5/16-18  
Carriage Bolt



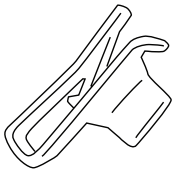
18 x16  
5/16-18  
Flange nut



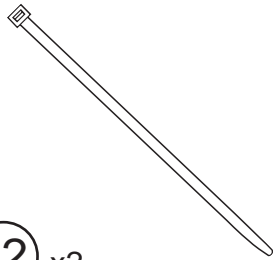
19 x4  
Upper Mount  
Spacer



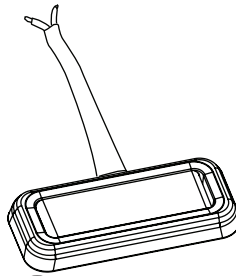
20 x20  
Cable tie (7")



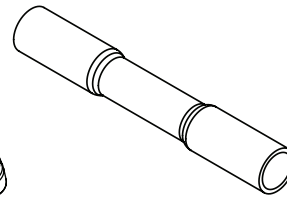
21 x10  
M8 U-nut



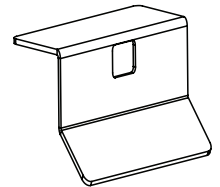
22 x2  
Cable tie (11")



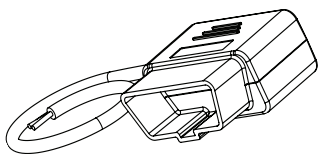
23 x4  
LED Lamp



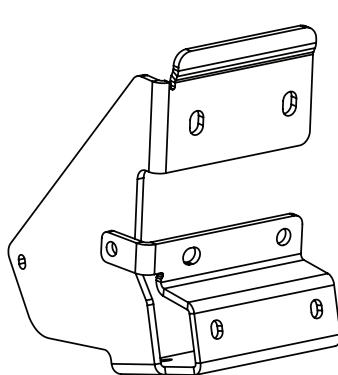
24 x8  
Butt Connector



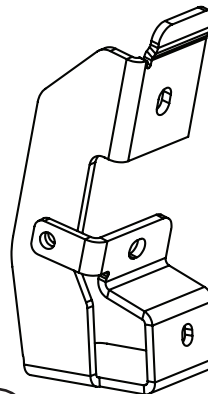
25 x4  
LED Light Bracket



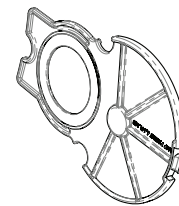
26  
OBD II Plug



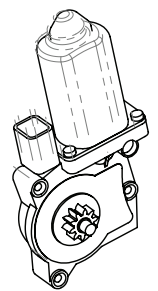
27 x4  
Linkage Mounting  
Bracket



28 x2  
Rail Mounting  
Bracket



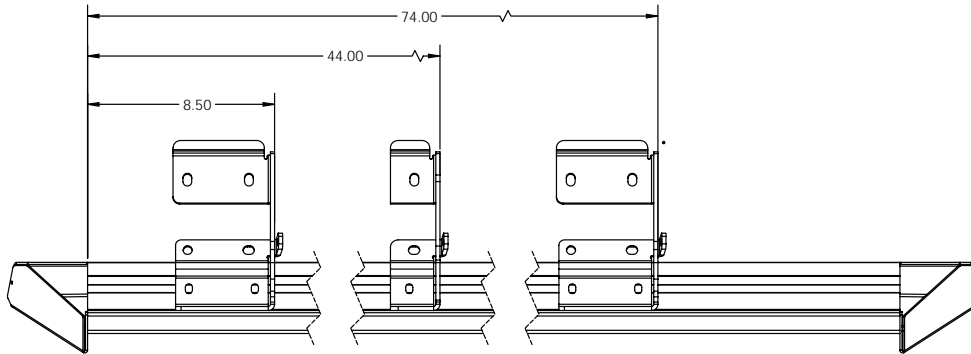
29 x2  
Gear Cover



30 x2  
Motor

## AMP RESEARCH POWERSTEP™ – FORD F150

Insert and position Carriage bolts (17) into slot on rail (4). Insert from either end of rail. Using Flange Nuts (18) provided assemble Brackets 2x (27) & 1x (28) onto the rail (4). Next install Flange Bolt (15) and Flange Nut (18) onto bracket tab. Driver side shown. Dimensions shown are for reference. **Do not tighten this will allow for rail adjustment when mounted onto vehicle.**

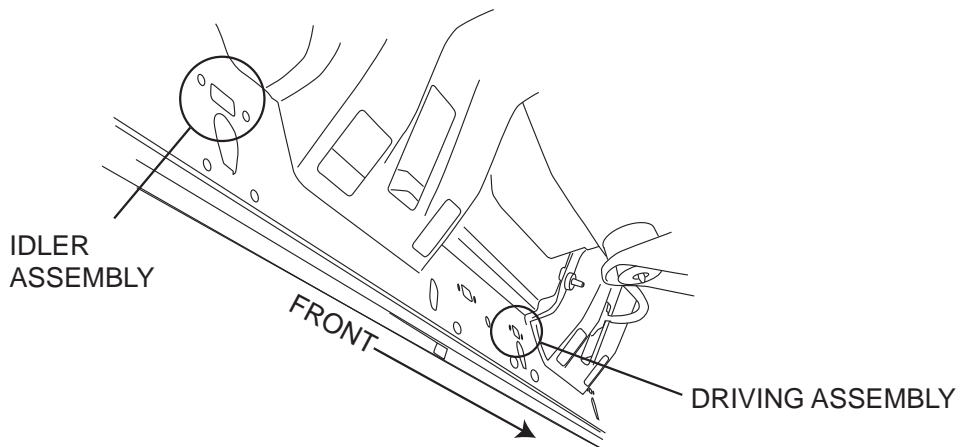


1

**Note: Badge on rail sits towards the rear of the vehicle!**

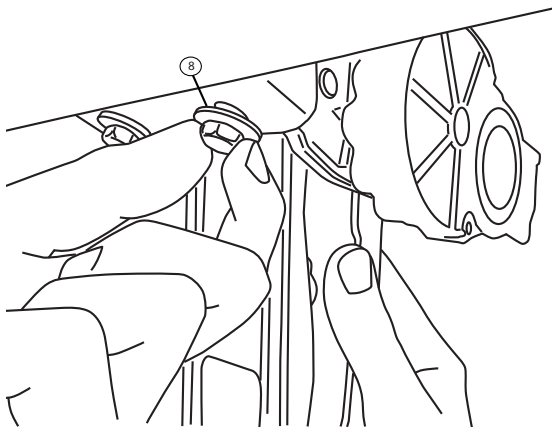
Set rail up into position. Starting with the rear bracket work towards the two front brackets. Insert U nuts (21) into position. Use provided button head bolts (9) with washers (10) and Flange Nut (11) on lower set of mount holes and captive washer bolt (8) on upper set of holes of brackets. Snug to body

### Driver Side



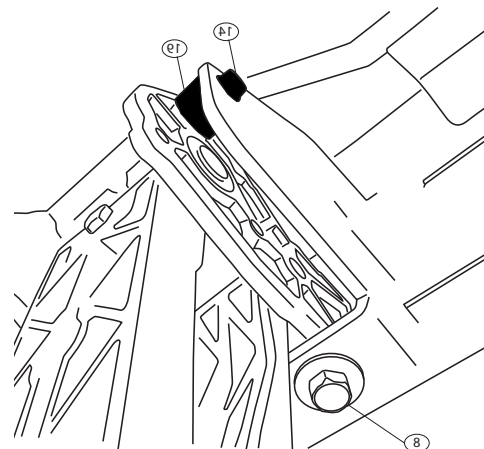
2

Thread supplied bolts 2x (8) into Front Drive Linkage. Repeat step for Rear Idler Linkage. Do not tighten.



3

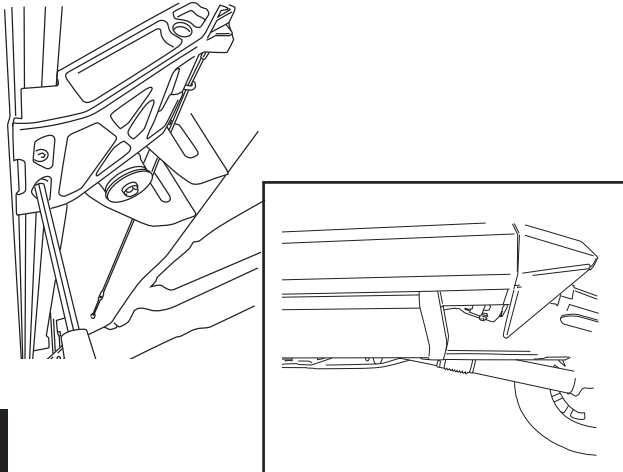
Install provided spacer (17) and M6 bolt (12) into upper mount as shown on both the Drive and Idler linkages. Do not tighten.



4

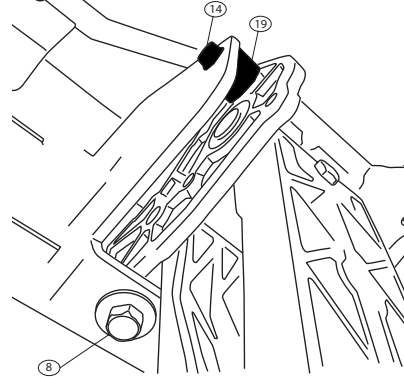
AMP RESEARCH POWERSTEP™ – FORD F150

Slide mounting T-nut into position, Center board in rail pocket. Tighten fasteners to 10 ft-lbs.



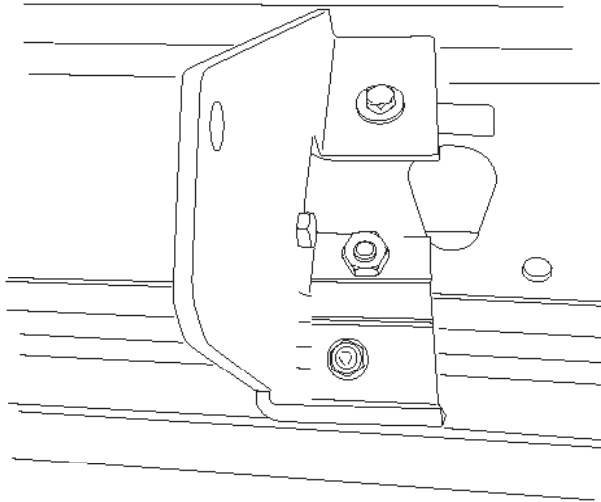
5

Using a 13mm socket Torque linkage bolts 4x (8) from step 3 to 16 ft-lbs. Next use a 10mm socket, torque linkage spacer bolt 2x (12) from step 6 to 8 ft-lbs. Once linkages are tight cycle board to verify steps deploy under own weight.



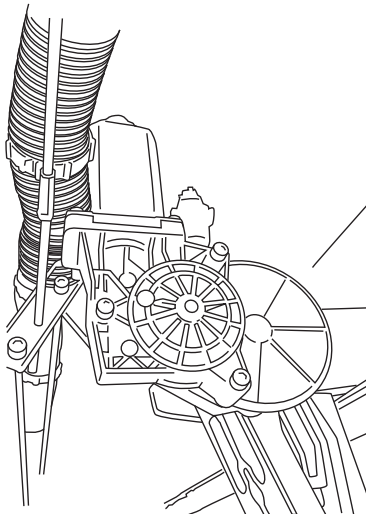
6

Start from rear of vehicle tighten brackets to the body of the vehicle. First Torque Button Head Bolts(10) to 16ft-lbs and then tighten Captive washer bolts(8) to 16 ft-lbs.



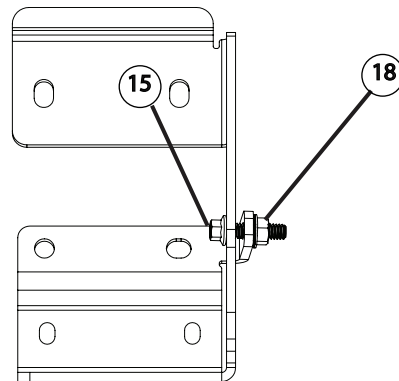
7

Attach motor to harness. Using a 4mm hex Torque to 36 in-Lbs.



8

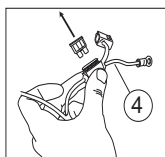
Torque bolts on mounting brackets as shown to 16ft-lbs.



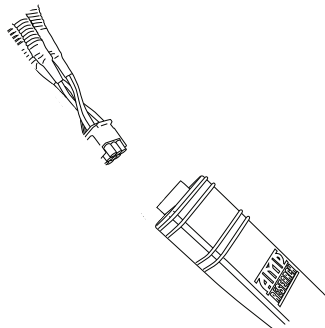
9

## AMP RESEARCH POWERSTEP™ – FORD F150

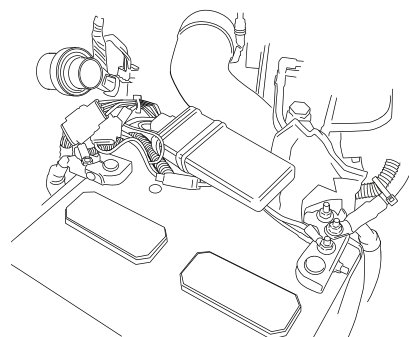
Attach wire harness to controller (make sure connector locking tabs fully engage). Mount controller with the two 11" tie wraps to factory conduit, just forward of battery.



Remove fuse from wire harness

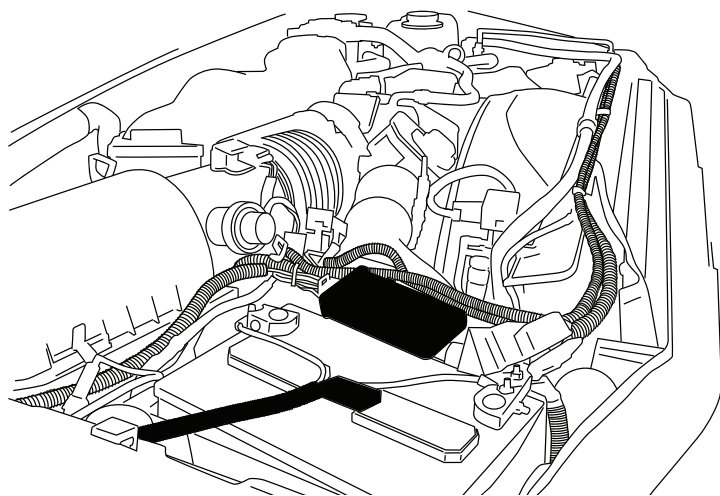


Secure controller to vehicle wire loom beside battery (on passenger side) and connect both Power Step wire harness connectors to connectors on controller. Secure locking tabs on connectors.



10

11

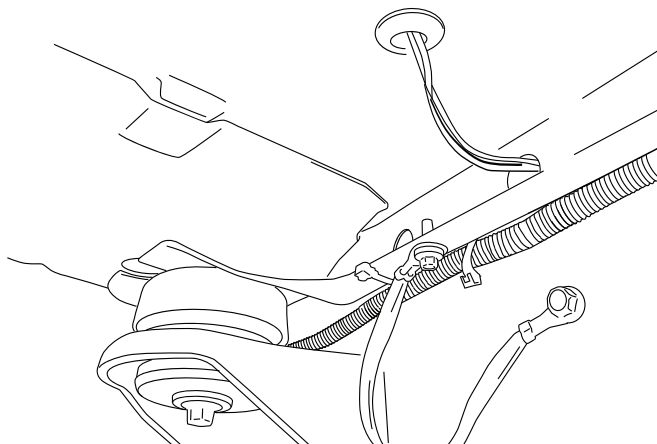


Connect power and ground for controller to battery, Red to positive and Black to the negative lead. Route harness legs down over wheel wells toward motor linkages, long leg across front and over to driver side.

Secure all loose sections of the harness with cable ties.

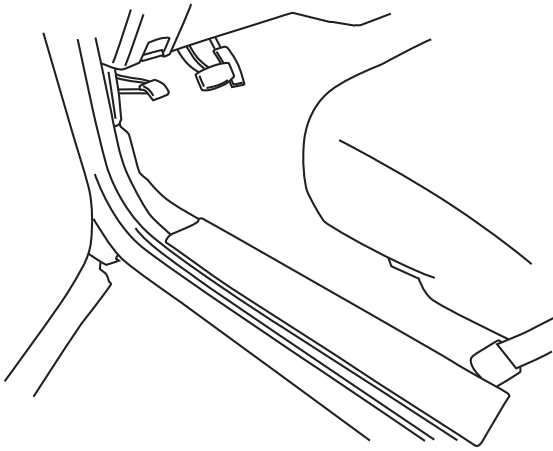
12

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 bellow.



13

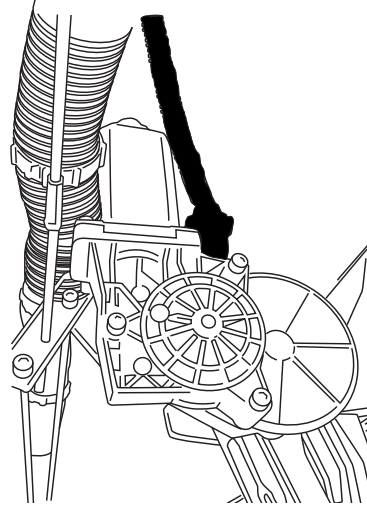




14

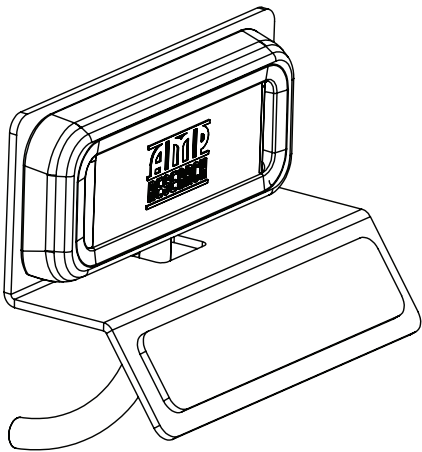
Open driver door and remove sill plate and kick panel.

Connect harness to motor. Secure harness with tie wraps.



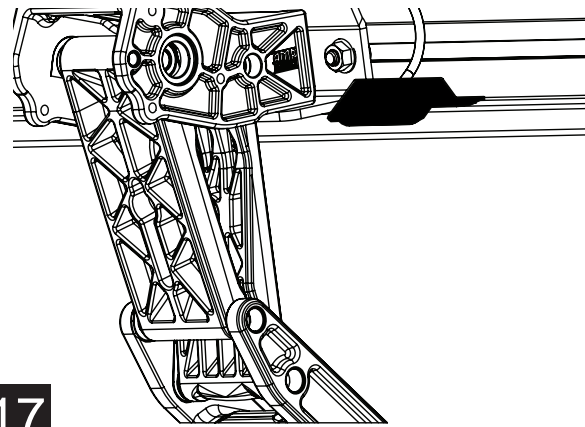
15

Affix LED lamp (20) to LED Bracket (22) as shown..



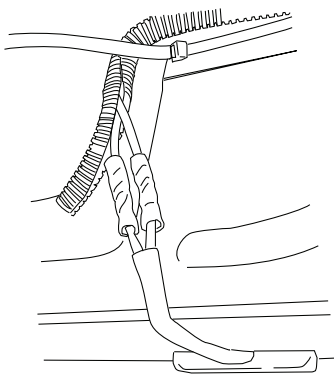
16

Affix LED light bracket assembly to rail. Mount front light rearward of front linkage and mount rear light just forward of rear linkage.

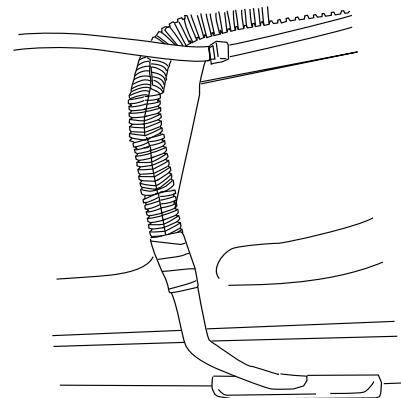


17

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.



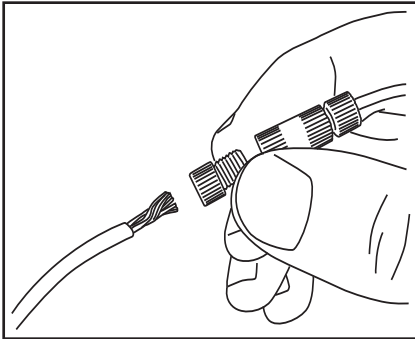
18



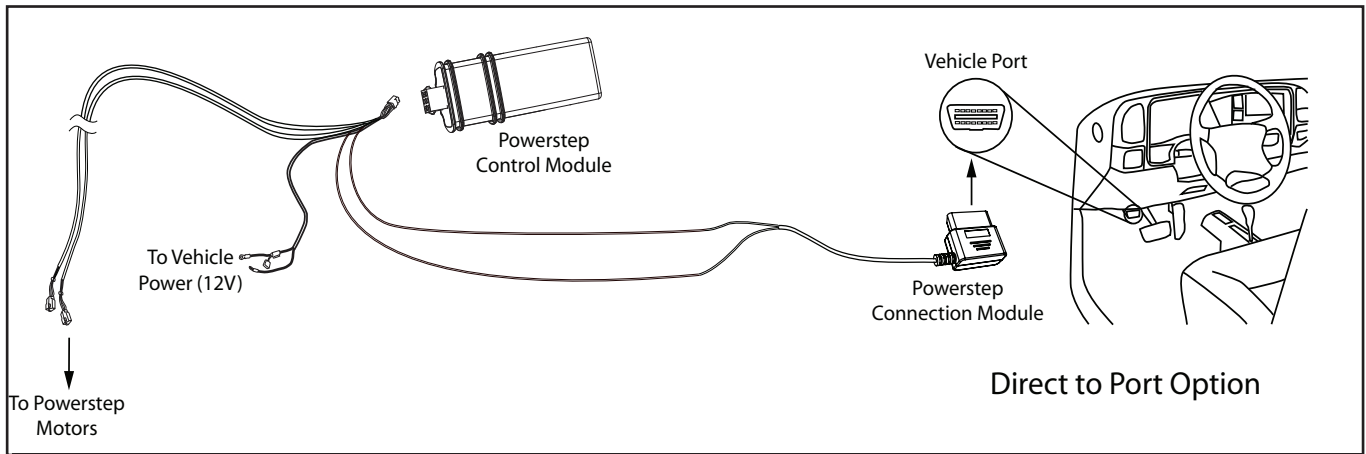
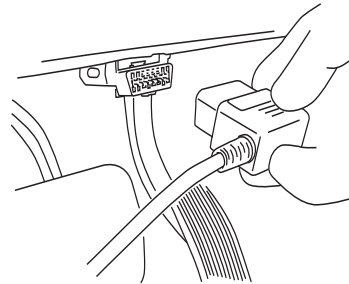


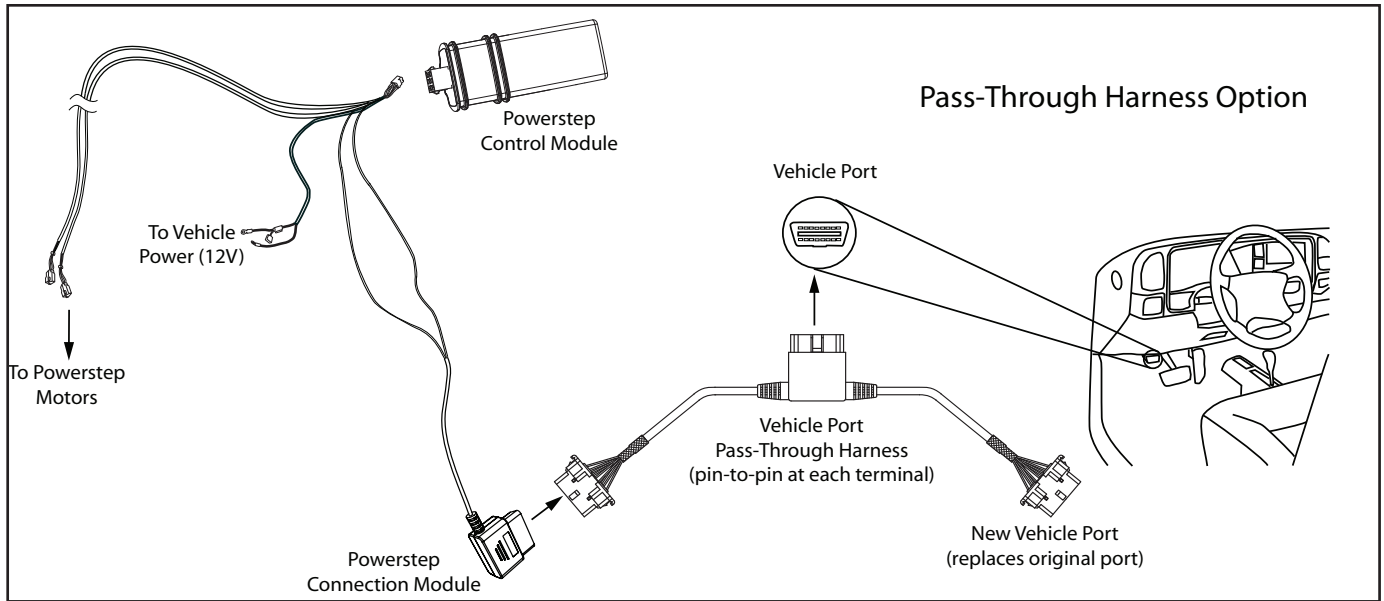
**OBD II install:** Use Supplied Posi Twist connectors to attach the Plug and Play Module to the Harness. Attach matching colors on the harness to the wires on the module. Plug in module to OBD II port on the vehicle. Secure harness with supplied tie wraps.

**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 next page for a brief description.

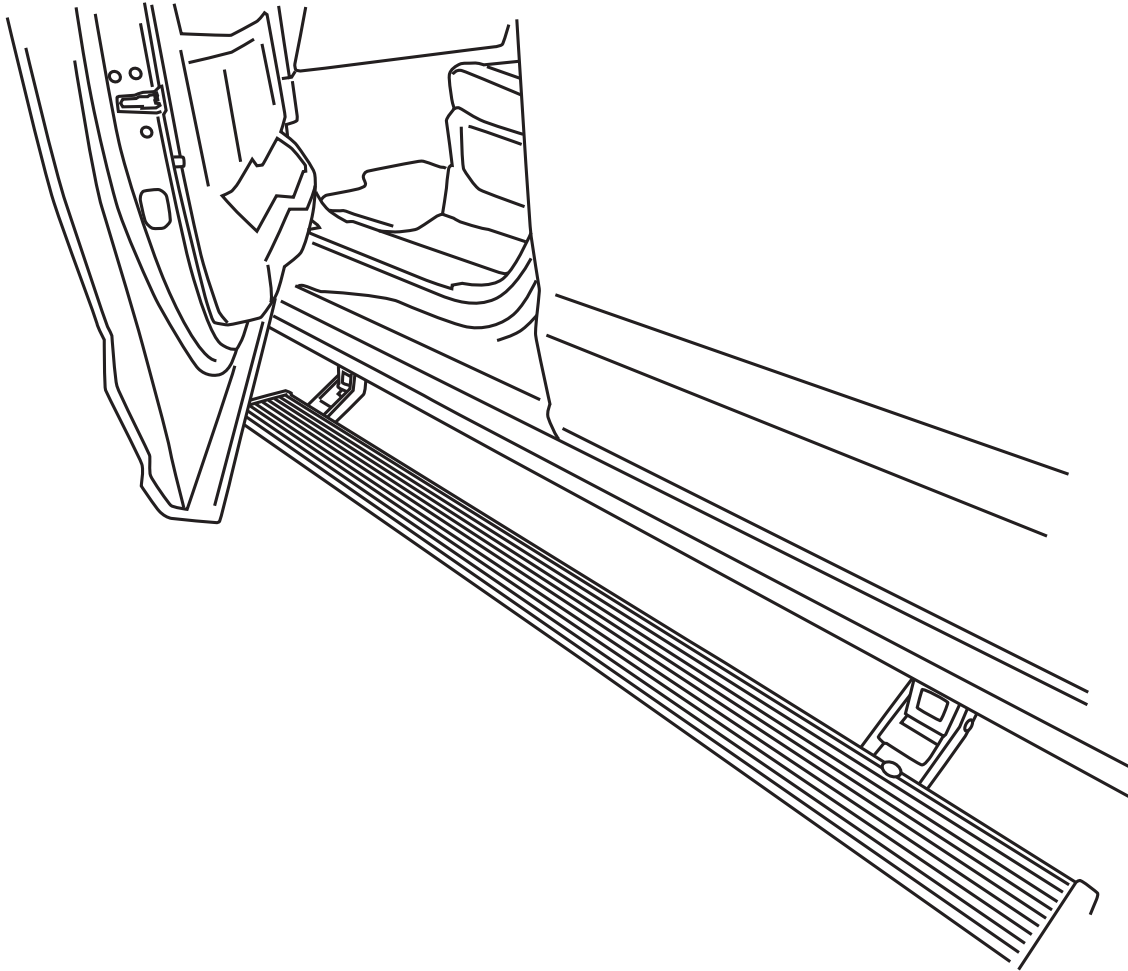


OBD II Connector located below steering column.





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.



# PowerStep™

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

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



**Automatic power deploy:**

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

**Automatic power stow:**

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

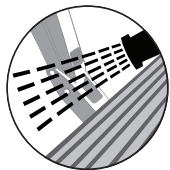
**Automatic stop:**

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



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

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



**Maintenance:** In adverse conditions, debris such as mud, dirt, and salt may become trapped in the running board mechanism, possibly leading to unwanted noise. If this occurs, manually set the running boards to the deployed position and flush the front and rear hinge arms with a high-pressure car wash wand.

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.