

INSTALLATION GUIDE

AMP RESEARCH Power Step

MADE IN USA

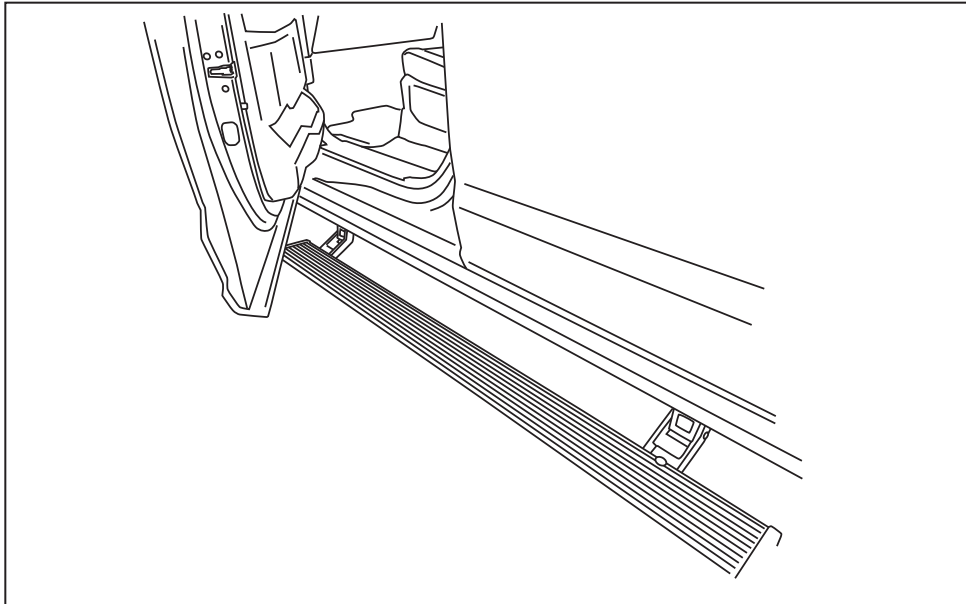
APPLICATION

Ford F150 - SuperCrew 2009-2014

AMP Part

77141-01A

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



INSTALLATION TIME

3-5 Hours

Professional installation recommended

SKILL LEVEL



4= Experienced

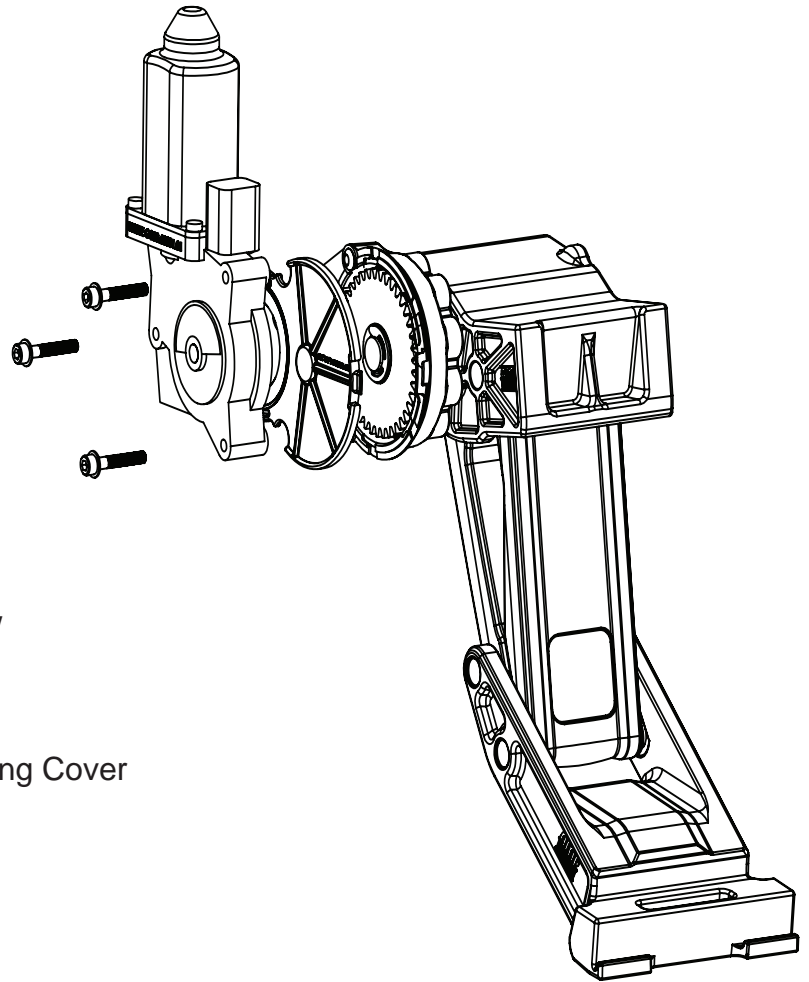
TOOLS REQUIRED

- 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.

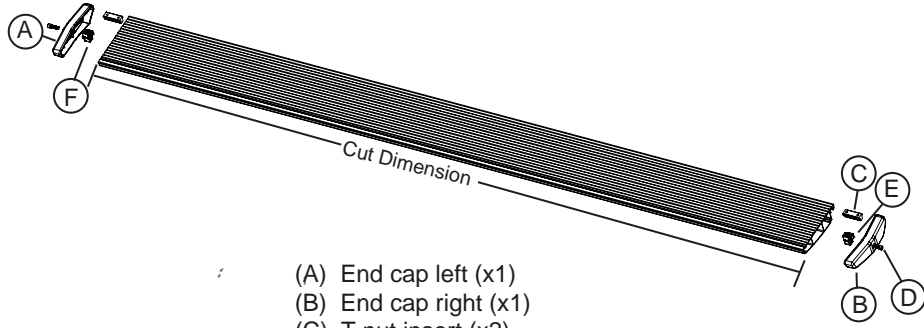
To ensure our customers receive all components with full integrity, we pack the motors separate from their linkage assemblies. This requires that the installer position and fasten the motor before continuing with the install. Please follow the instructions below and handle the assembly carefully.

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

Instructions:

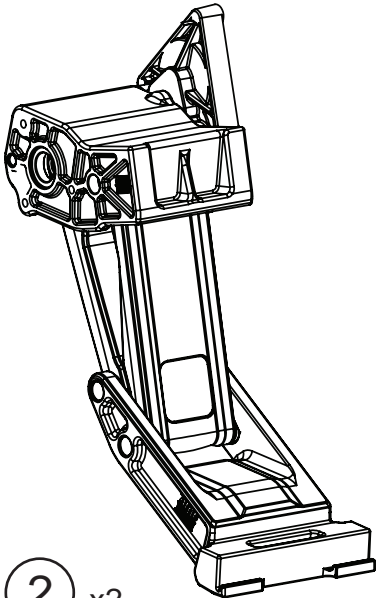
1. Position the gear cover in place as shown if not already in place.
2. Seat motor into position on the three mounting bosses. This may require an adjustment of the gear by moving the swing arms.
3. After seating into place, fasten the motor with the three motor mount screws with 4mm Hex Head. Tighten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

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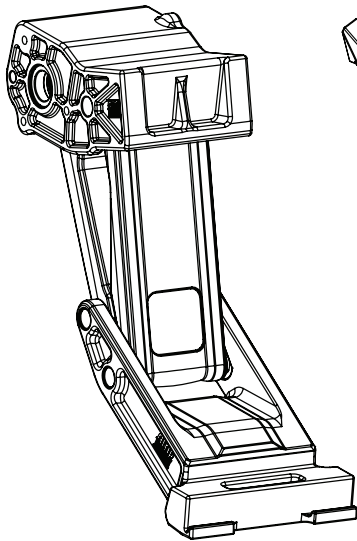


- (A) End cap left (x1)
- (B) End cap right (x1)
- (C) T-nut insert (x2)
- (D) Socket cap screw (x2)
- (E) End cap wedge right (x1)
- (F) End cap wedge left (x1)

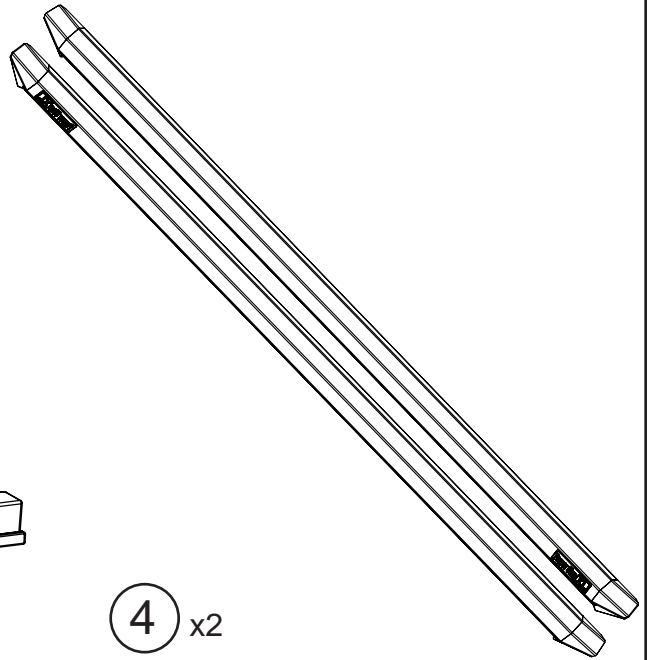
1 x2
Running board assembly



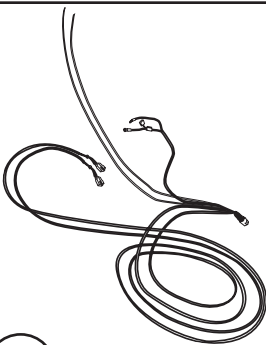
2 x2
Motor Linkage assembly



3 x2
Idler Linkage assembly



4 x2
Rail Assembly



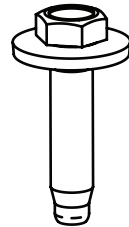
5
Wire harness



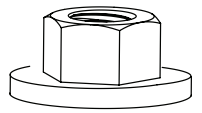
6
A06 Controller



7 x2
Posi-Lock™

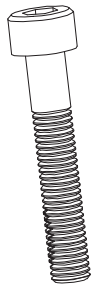


8 x18
M8 Hex Bolt w
Conical washer



9 x10
M8 Nut w Conical
washer

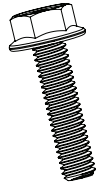
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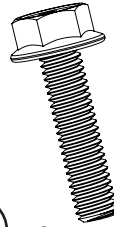
10 x6
M5 Hex Bolt



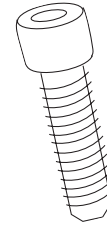
11 x6
M5 Washer



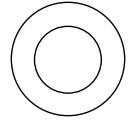
12 x4
M6 Flange Bolt



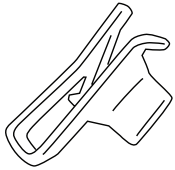
13 x6
5/16 Flange Bolt



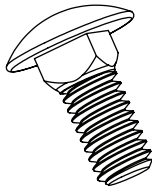
14 x8
Socket Cap Screw



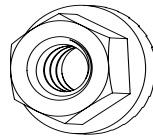
15 x10
M8 Washer



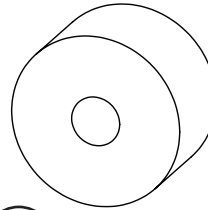
16 x10
M8 U-Nut



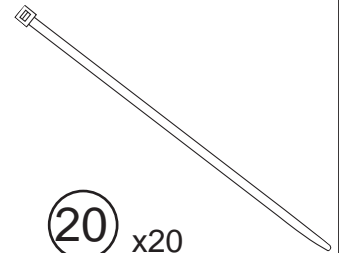
17 x10
5/16-18
Carriage Bolt



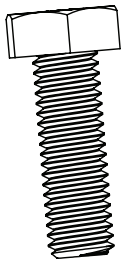
18 x16
5/16-18
Flange nut



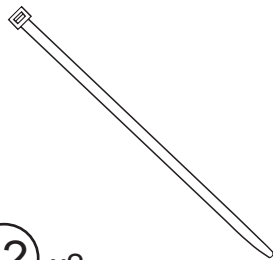
19 x4
Upper Mount
Spacer



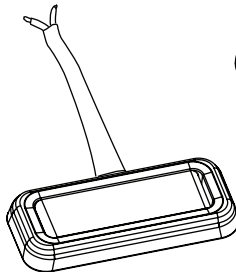
20 x20
Cable tie (7")



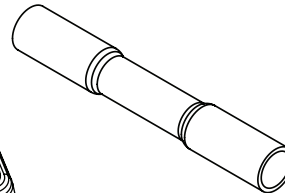
21 x10
M8 Hex Bolt



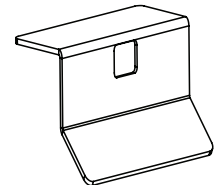
22 x2
Cable tie (11")



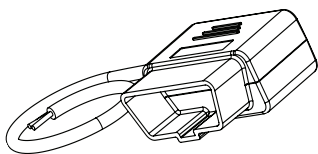
23 x4
LED Lamp



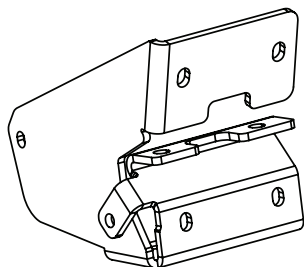
24 x8
Butt Connector



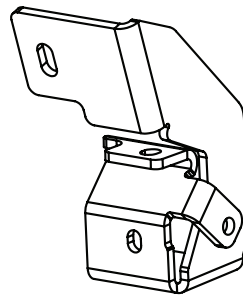
25 x4
LED Light Bracket



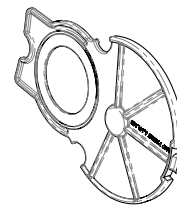
26
OBD II Plug



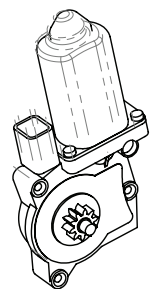
27 x4
Linkage Mounting
Bracket



28 x2
Rail Mounting
Bracket



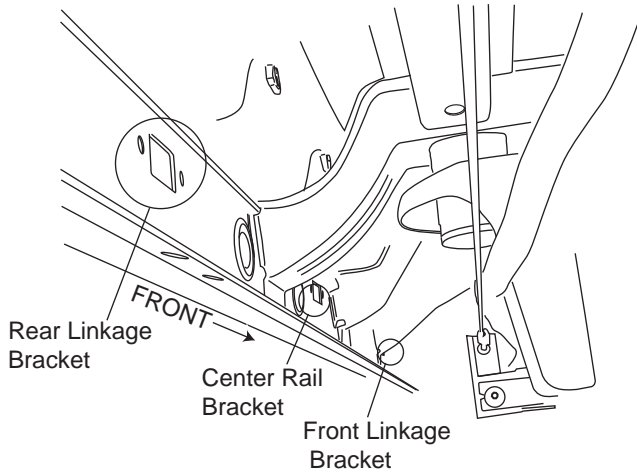
29 x2
Gear Cover



30 x2
Motor

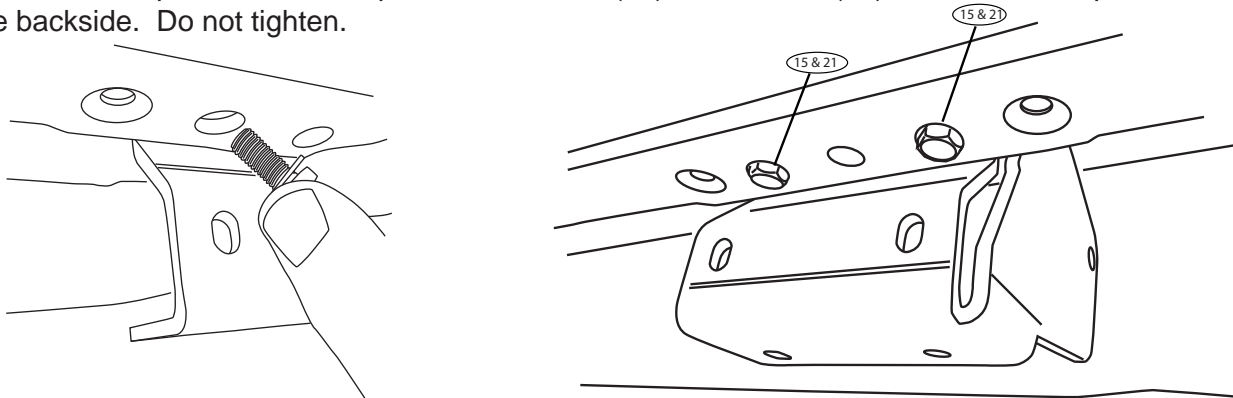
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Locate mounting points. First middle and last set of holes on the inner sill. Install 5 u nuts (16) in upper mount holes.



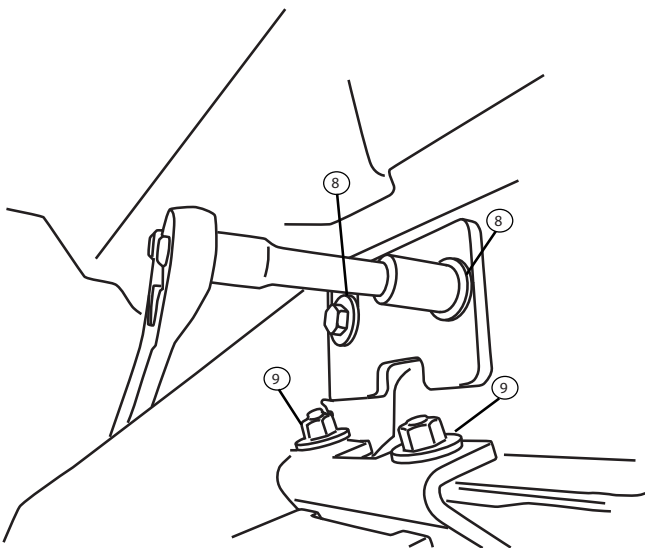
1

Set Brackets into position and use provided M8 Bolts(21) and washer (15) on outside and provided M8 nuts on the backside. Do not tighten.



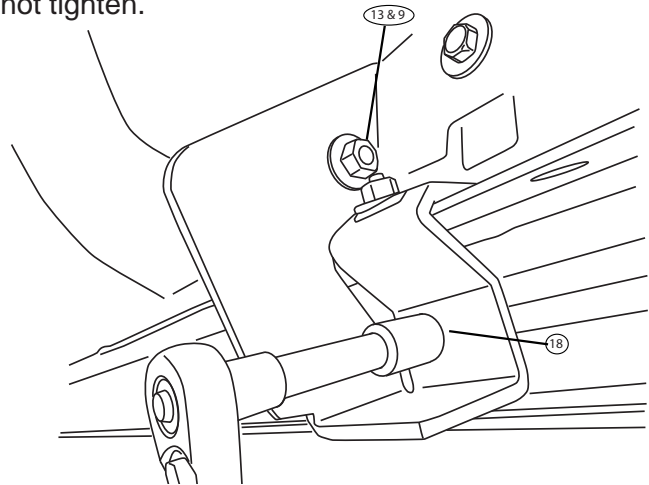
2

Using provided captive washer m8 bolts (8) install upper bracket hardware to brackets. Do not tighten.



3

Set Rail up into position. Start with rear bracket work towards the front brackets. Attach Carriage bolts 5x (17) and Flange Nut 5X (18). Center rail at front and rear door line. Torque Flange Nuts to 16 ft-lbs. Insert Flange bolt (13) and nut (18) into side of bracket. Do not tighten.

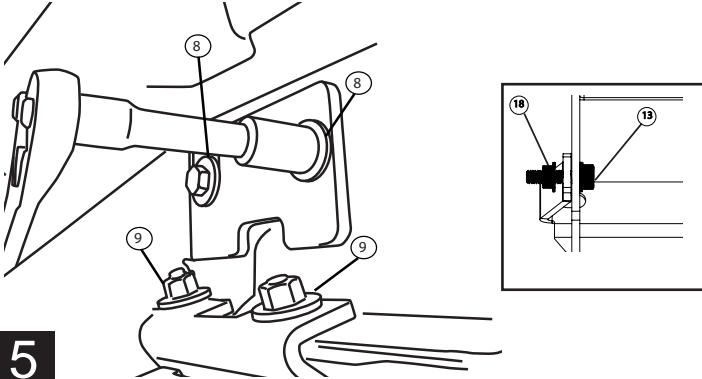


4

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

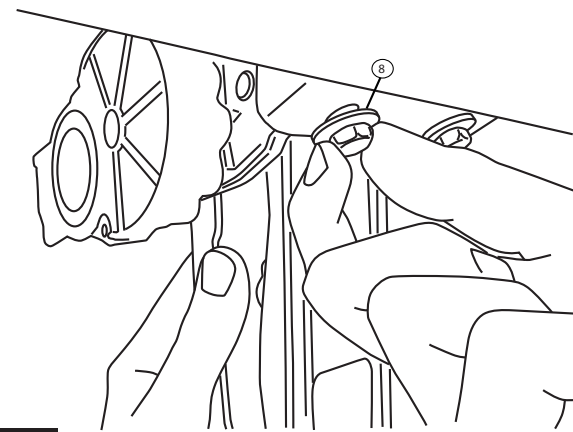
AMP RESEARCH POWERSTEP™ – FORD F150

Starting from the rear of the vehicle work your way forward. Using a 13mm socket and wrench tighten Pinch weld bolts (21) and nut (9) first to 16ft-lbs. Next tighten upper sill bolts (8) to 16ft-lbs. Next torque flange bolt and nut on bracket tab to 16ft-lbs.



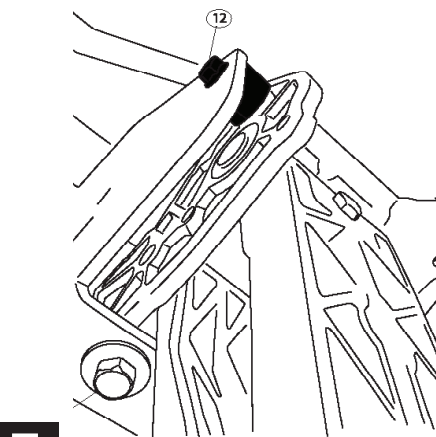
5

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



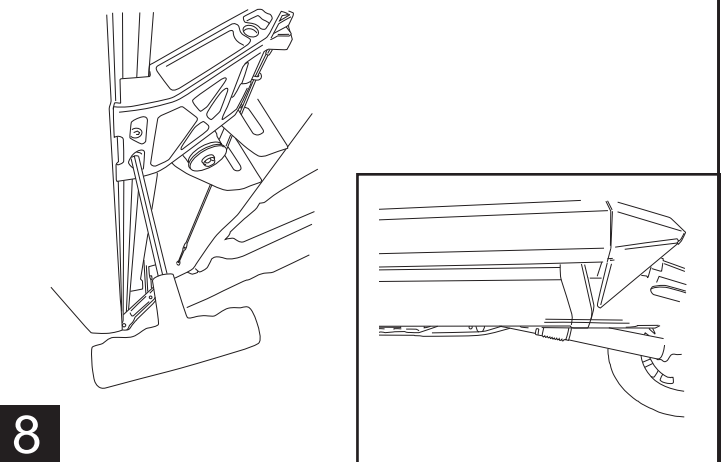
6

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



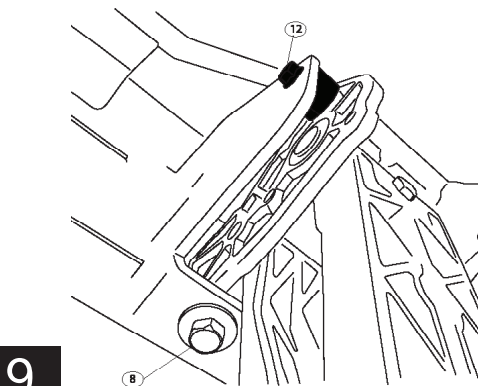
7

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



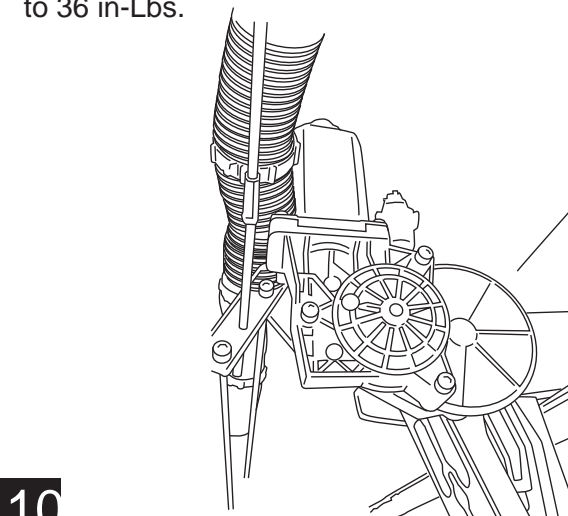
8

Using a 13mm socket Torque linkage bolts 4x (8) from step 5 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.



9

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

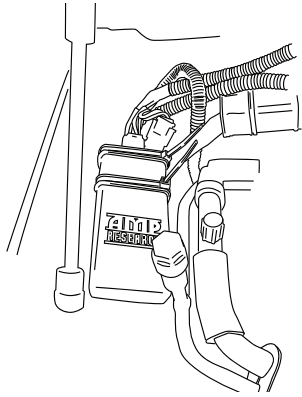
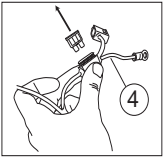


10

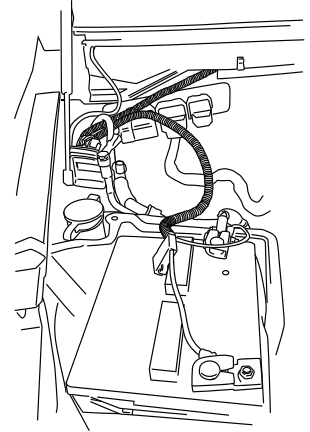
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Attach wire harness to controller (make sure connector locking tabs fully engage). Mount controller with the two 11" tie wraps to factory conduit.

Remove fuse from wire harness



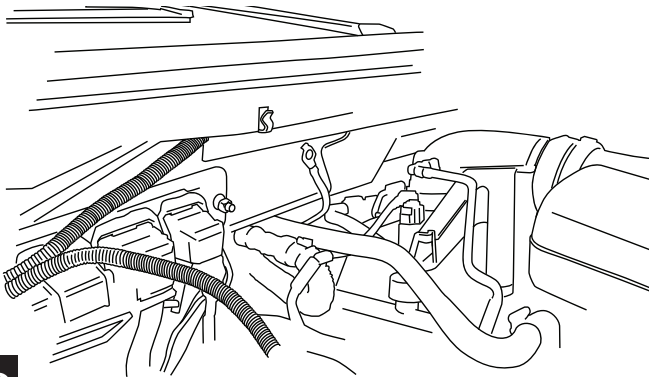
Connect red and black power leads to battery. Red lead goes to positive. Route shorter leg of harness down passenger-side wheel well.



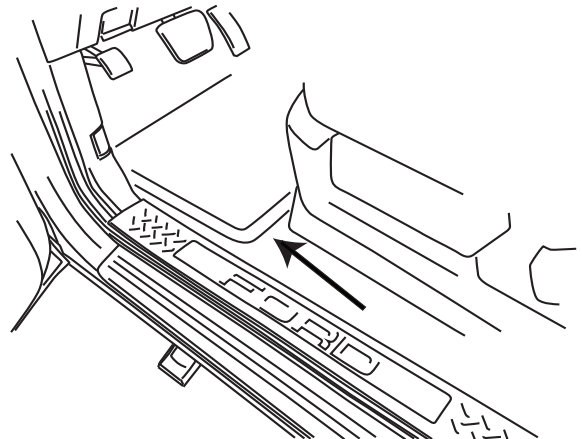
11

12

Route longer leg of harness down along driver-side wheel well and along frame of vehicle. Secure with tie wraps.



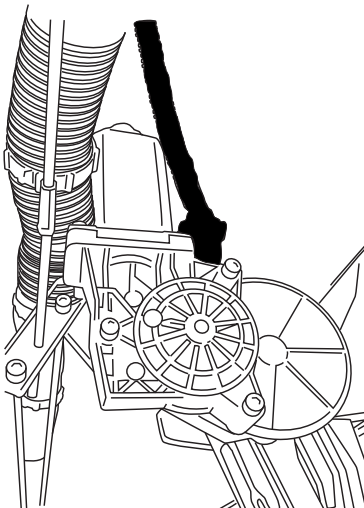
Remove driver side front kick panel and door sill plate. Roll back carpet to access hole for passing trigger wires into cab of vehicle.



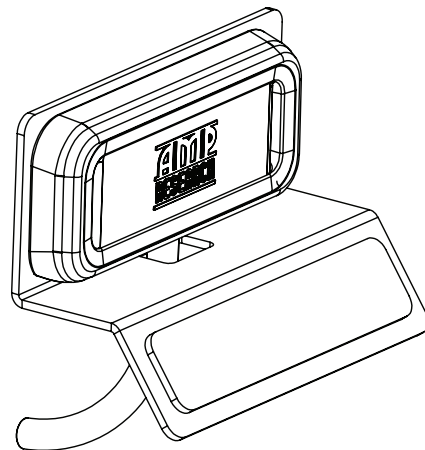
13

14

Connect harness to motor. Secure harness with tie wraps.



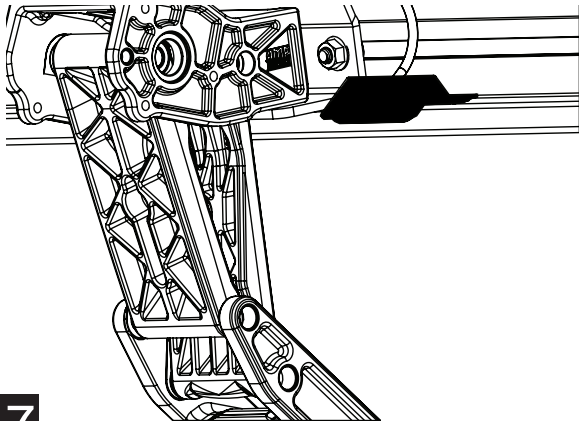
Affix LED lamp (20) to LED Bracket (22) as shown..



15

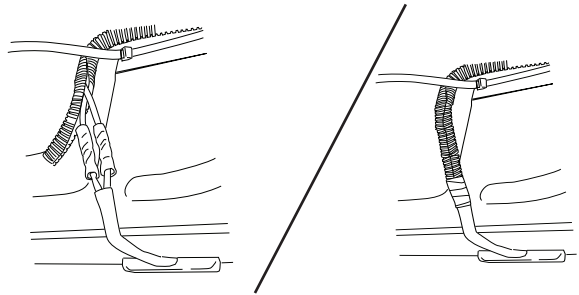
16

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



17

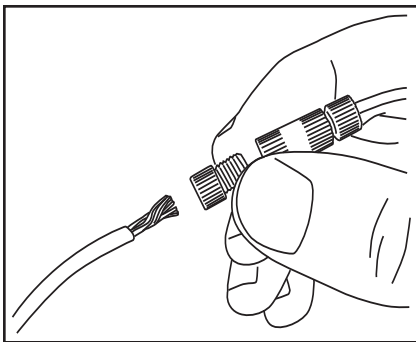
Using supplied butt connectors, connect the lamp wires. Red to Red, Black to Black. Once Crimped use heat gun to shrink tube. Close and wrap conduit with electrical tape. Secure all loose wires with cable ties. Pull lamp wires upward to avoid any wire snagging.



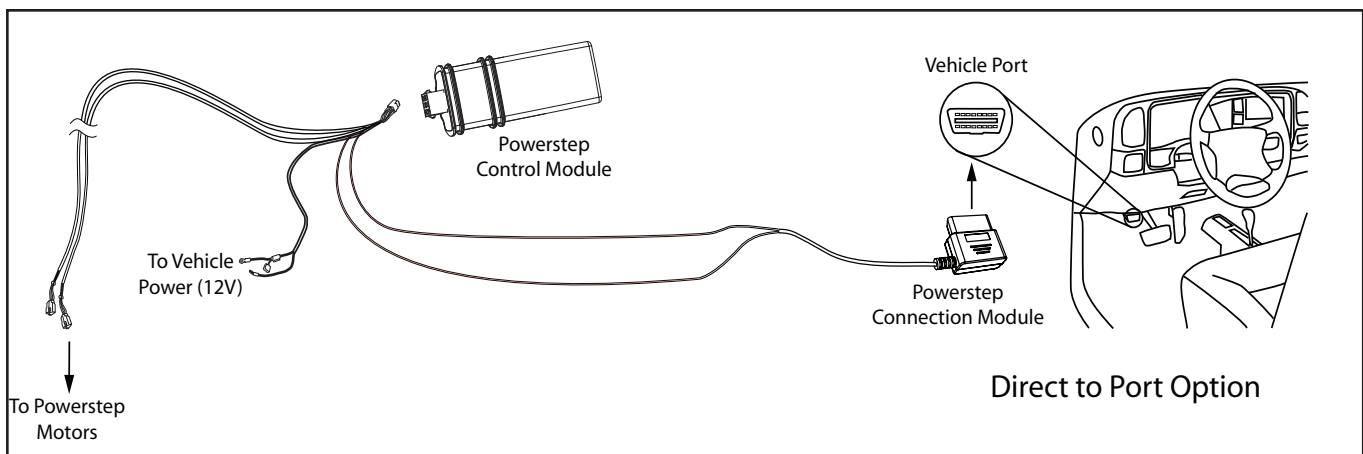
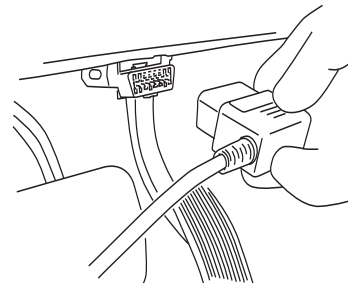
18

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.

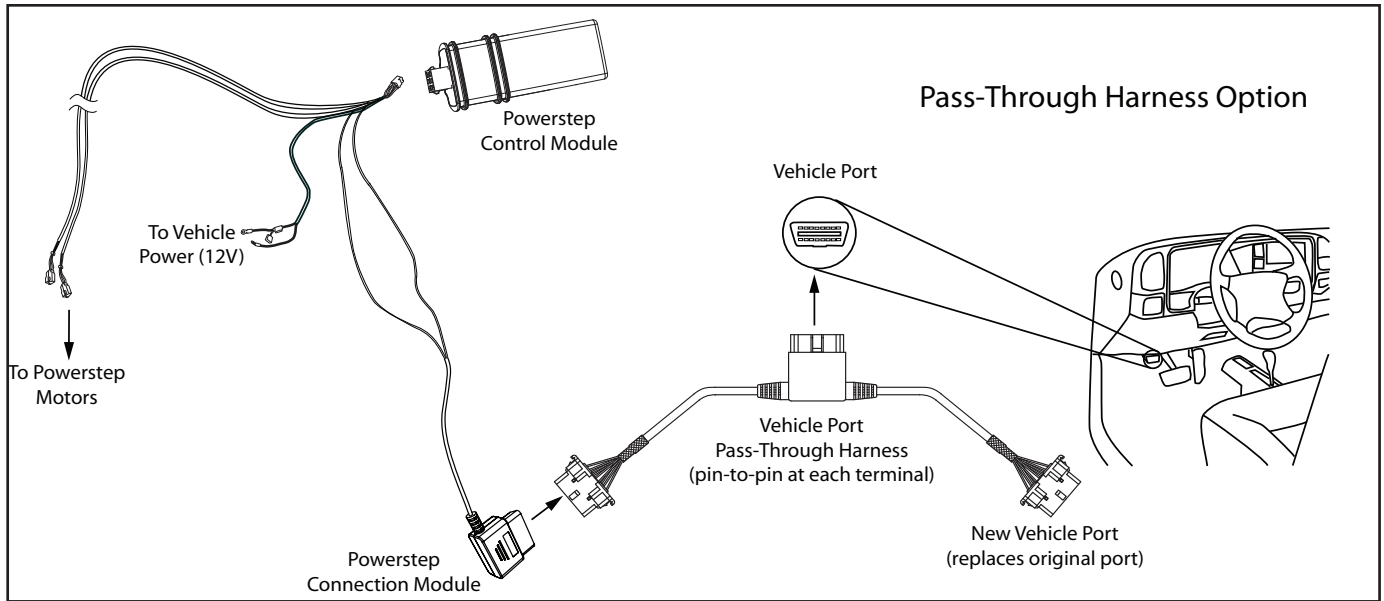
Note: If the OBD II pass thru harness (76404-01A) was purchased see install sheet supplied in packaging. The pass through harness allows for an open port for other accessories. See next page for a brief description.



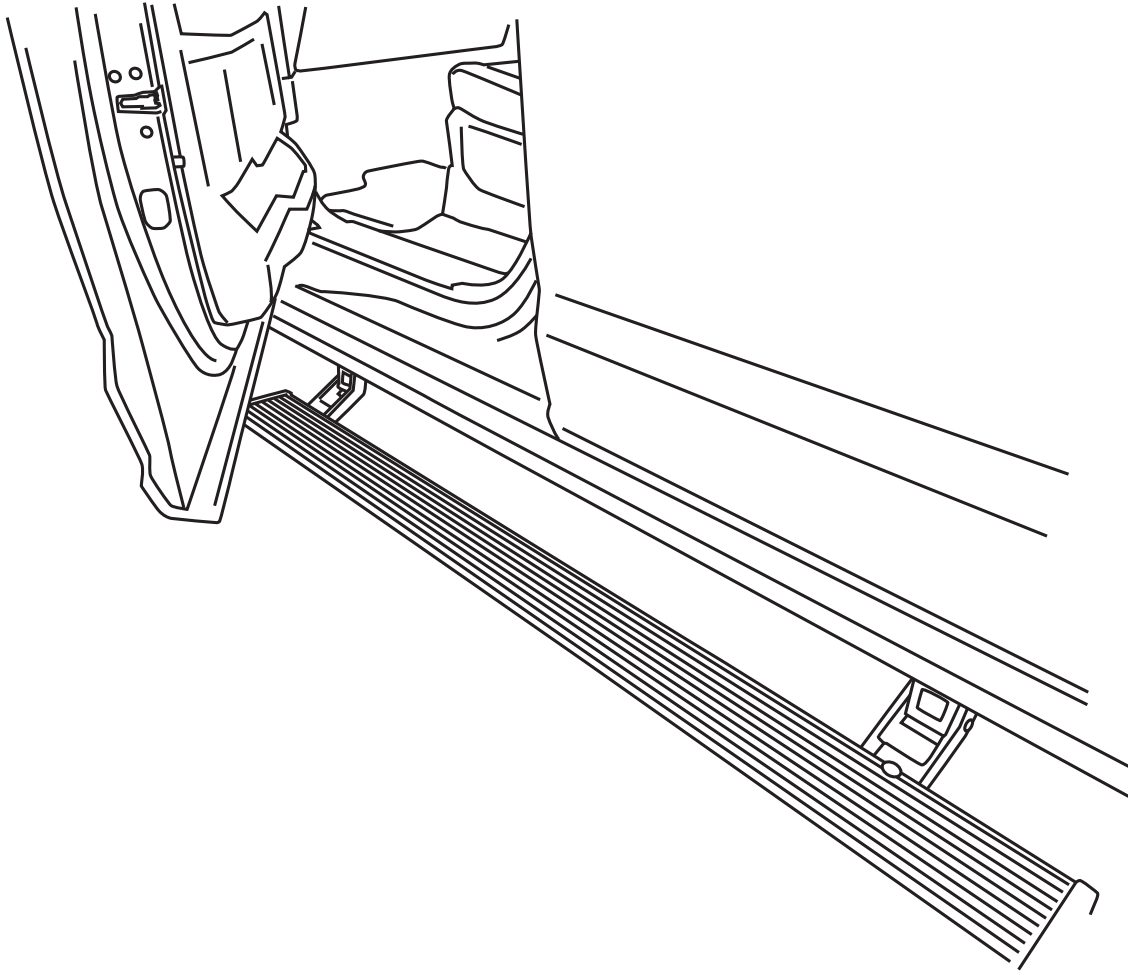
OBD II Connector located below steering column.



19



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.

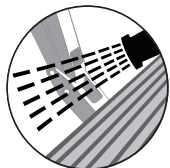
Automatic stop:

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.