

INSTALLATION GUIDE

AMP **RESEARCH** Power Step MADE IN USA

APPLICATION

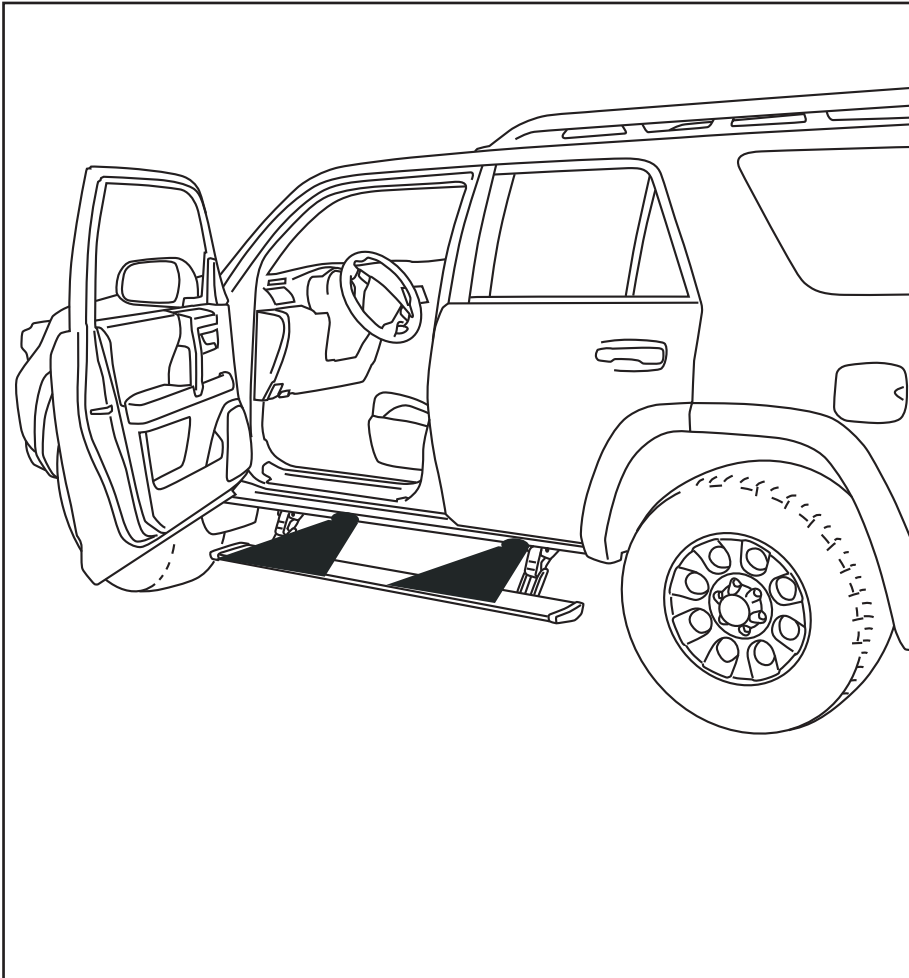
Toyota 4Runner
(Excludes Limited)

MODEL YR

2010 - 2015

PART

75155-01A



INSTALLATION TIME

3-5 Hours

Professional installation recommended

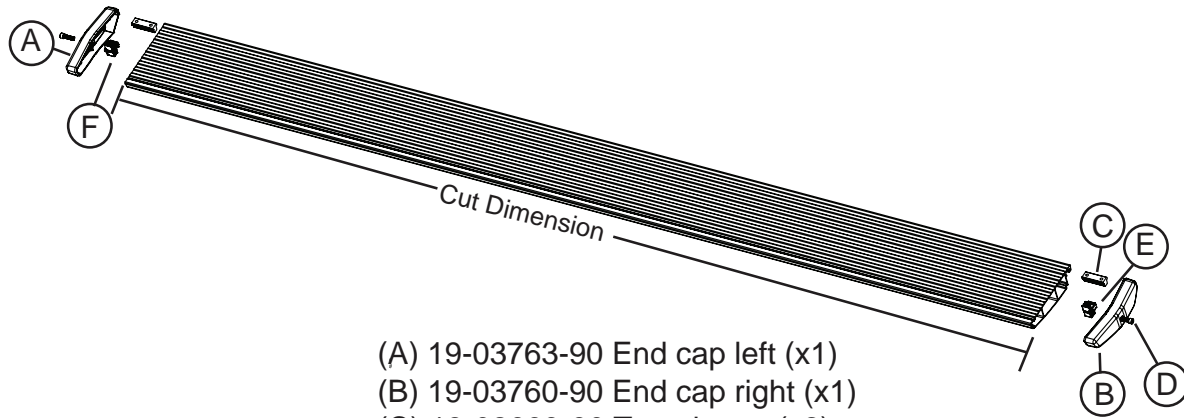
SKILL LEVEL



3= Experienced

TOOLS REQUIRED

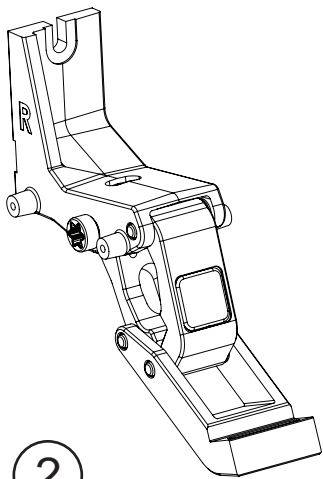
- Safety goggles
- Measuring tape
- 19 mm socket
- 10 mm socket
- 12 mm socket
- Ratchet wrench and extension
- Pliers
- Wire crimpers
- Wire stripper / cutter
- 3/16" hex key wrench (allen wrench)
- 4mm hex key wrench (allen wrench)
- Electrical tape
- Weather proof caulking (silicone sealer)
- 9/32 drill bit
- Drill



1 x2

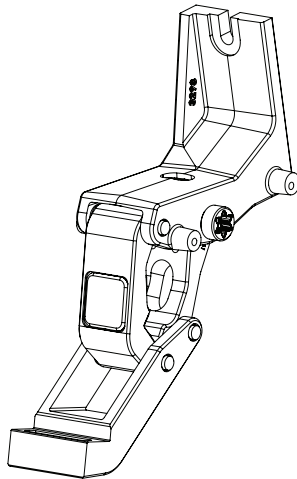
Running board assembly

- (A) 19-03763-90 End cap left (x1)
- (B) 19-03760-90 End cap right (x1)
- (C) 18-02663-90 T-nut insert (x2)
- (D) 19-02802-90 Socket cap screw (x2)
- (E) 19-03761-90 End cap wedge right (x1)
- (F) 19-03764-90 End cap wedge left (x1)



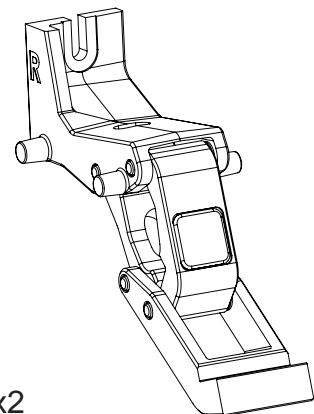
2

10-03992-10
Driver Motor
Linkage Assembly



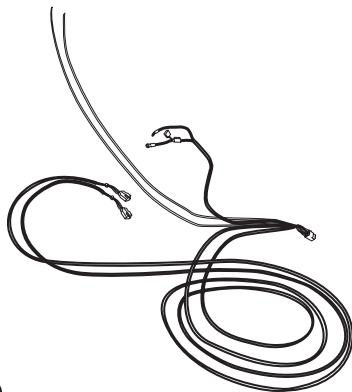
3

10-03992-11
Passenger Motor
Linkage Assembly



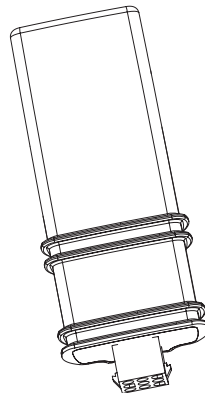
4 x2

10-03993-10
Idler Linkage
Assembly



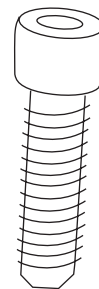
5

19-04015-90L
Wire Harness



6

19-03297-A06
Controller

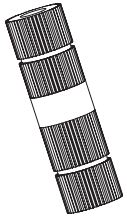


7 x8

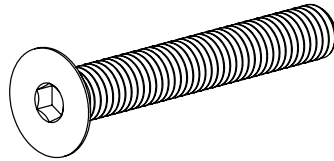
19-02802-90
Socket Cap Screw

AMP RESEARCH POWERSTEP™ – 4 RUNNER

PARTS LIST AND
HARDWARE
IDENTIFICATION



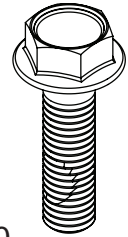
8 x4
19-03354-90
Posi-Tap™ (Red/Grey)



9 x8
19-04014-90
Flat Head Cap
Screw



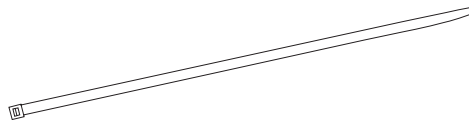
10 x6
19-02721-90
Cinch Fastener



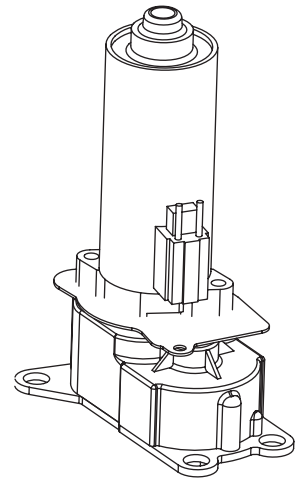
11 x8
19-03341-90
Flange Head Bolt



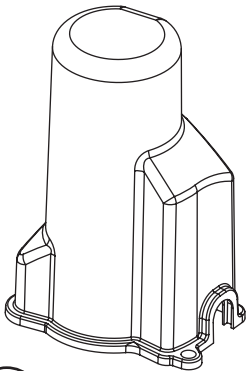
12 x25
19-02805-90
Cable Tie 7"



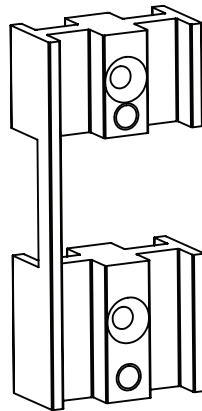
13 x2
19-03339-90
Cable Tie 11"



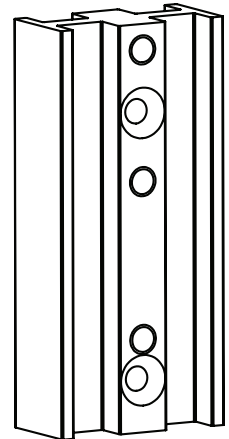
14 x2
20-03289-91
Motor



15 x2
19-03238-90
Motor Cover



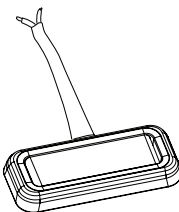
16
15-03990-90
Frame Mount Extrusion (Driver Rear)



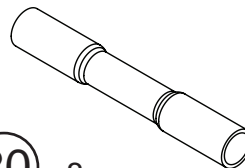
17 x3
15-03991-90
Frame Mount Extrusion



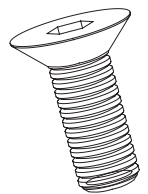
18 x4
19-02640-90
Grommet



19 x4
19-03302-90
LED Lamp



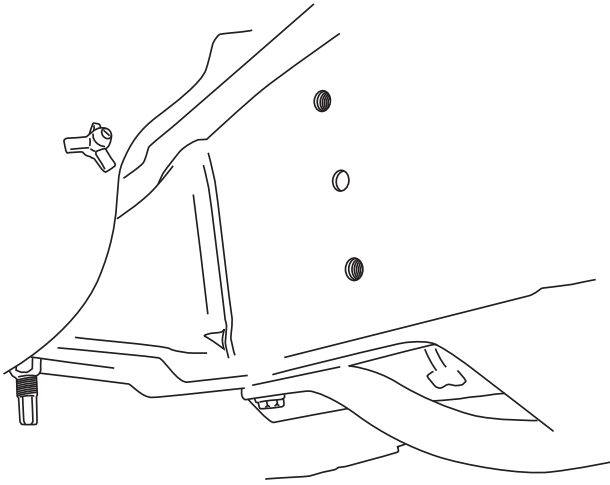
20 x8
19-03911-90
Butt Connector



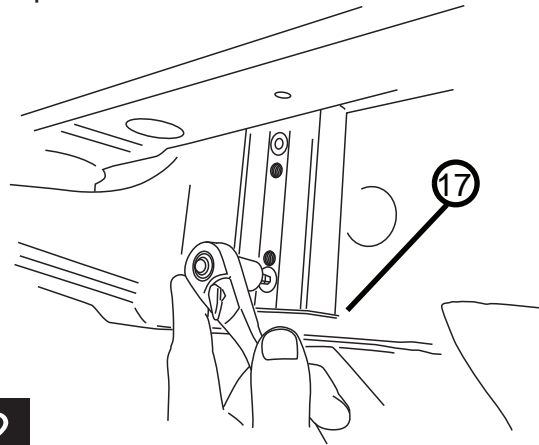
21 x4
19-03352-90
Flat Head Cap Screw

AMP RESEARCH POWERSTEP™ – 4 RUNNER

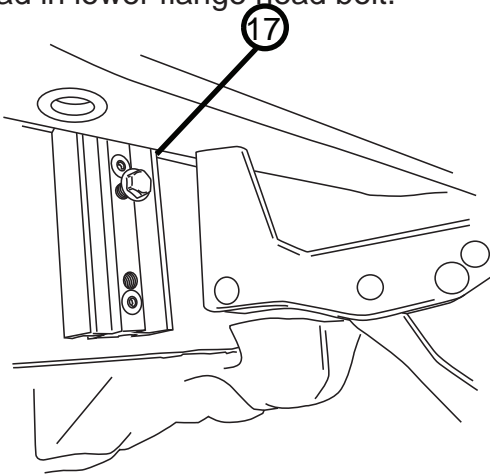
Locate forward most set of threaded holes on the frame. Located just behind front body mount.



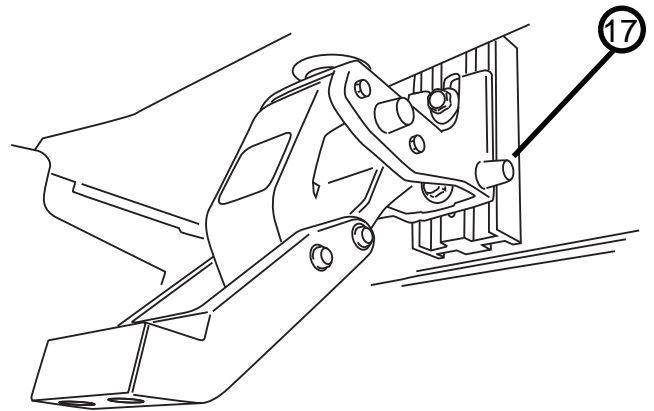
Using provided flat head cap screws attach frame mount extrusion to front set of threaded holes. Torque screws to 16 ft-lbs.



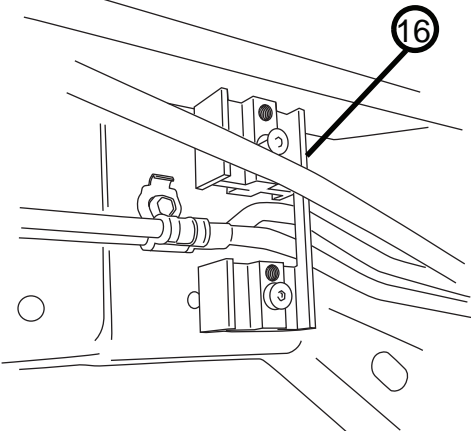
Pre thread upper M10 flange head bolt onto frame mount. Slide linkage into position and thread in lower flange head bolt.



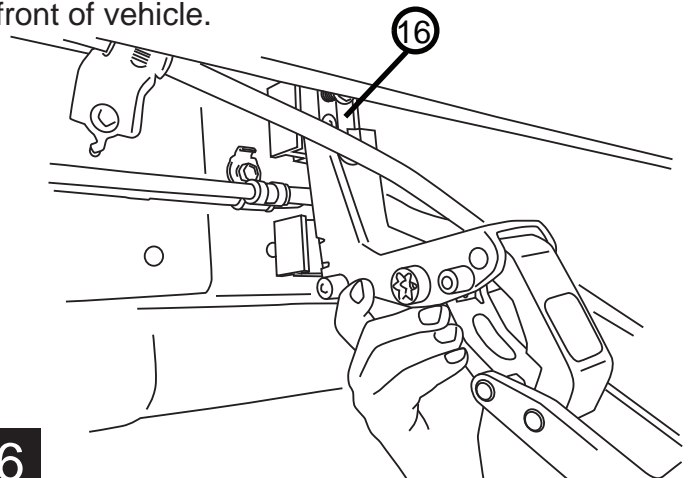
Snug bolts to allow for adjustment at a later step.



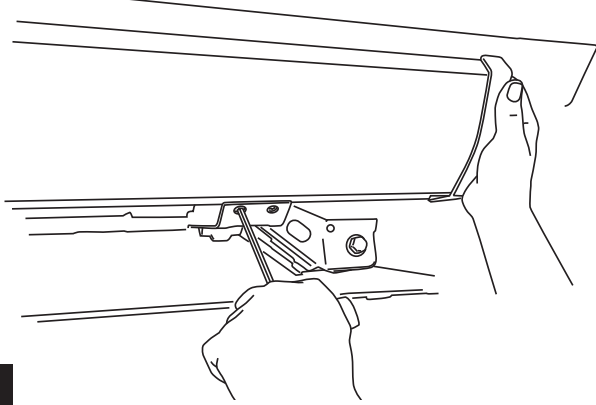
Locate Rear most set of threaded holes on the frame just forward of rear suspension. Vehicle shown has Vehicle Stability Control lines. Tighten screws to 16 ft-lbs.



Pre thread upper M10 flange head bolt onto frame mount. Slide linkage into position and thread in lower flange head bolt. Motor faces front of vehicle.

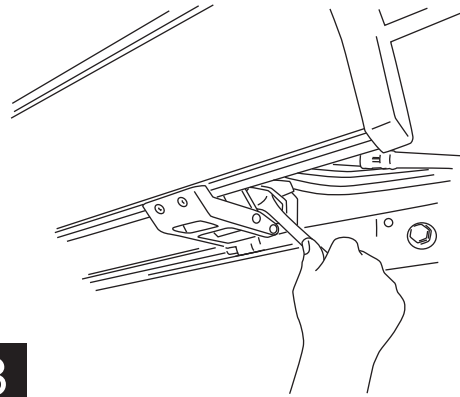


Slide mounting T-nut into position. Slide the board back so that the front of the board is aligned with the front edge of the front door. Torque to 10 ft-lbs.



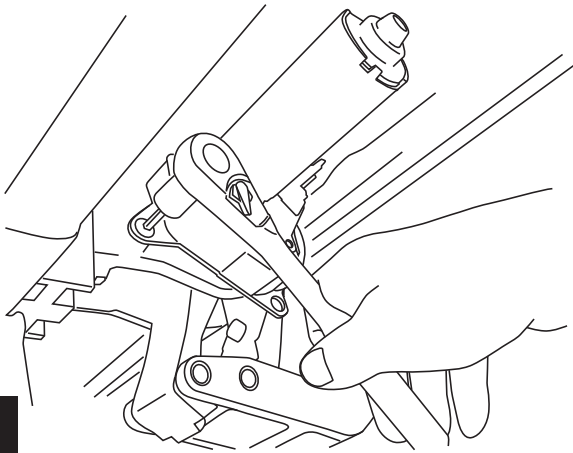
7

Once running board is attached to lower mount tighten linkages at front and rear. Tighten front linkage and check for bind in the system. Steps should deploy under own weight.



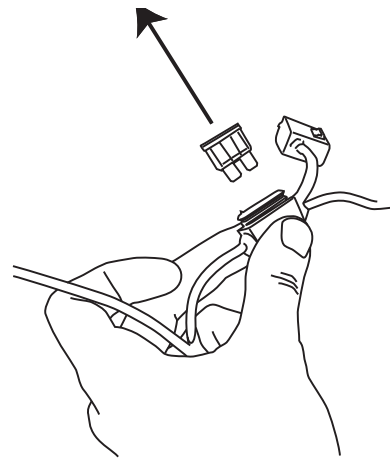
8

Attach motor onto Motor Linkage Assembly using two M6x16 flat head screws on both drive and passenger sides



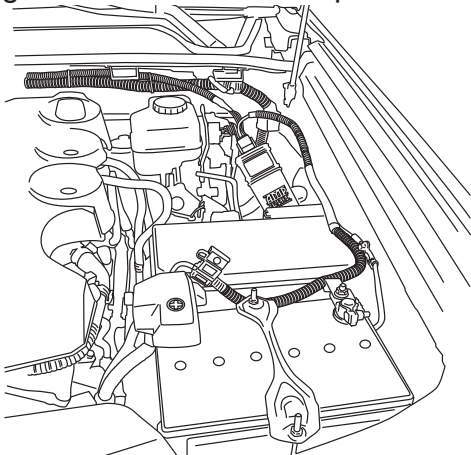
9

Remove fuse.



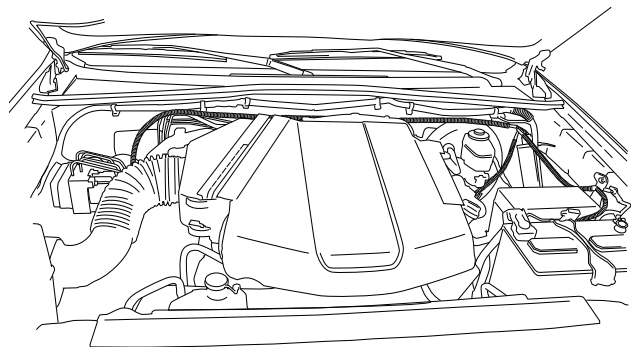
10

Secure controller to factory wire loom using supplied 11" wire ties. Connect Red fused wire to stud on battery positive terminal. Connect Black wire to ground on inner fender panel.



11

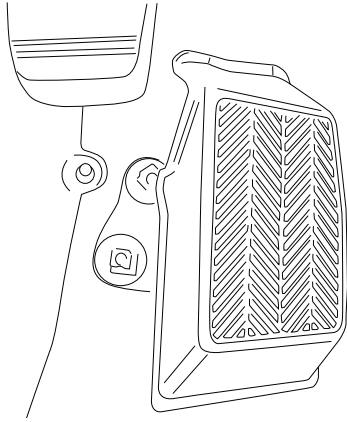
Run wire harness as shown outside the frame rails on both sides. Avoid hot, sharp or moving parts! Secure with 7" wire ties.



Note: Run loom with Green/Yellow and Pink/Black Trigger wires down drivers side of vehicle.

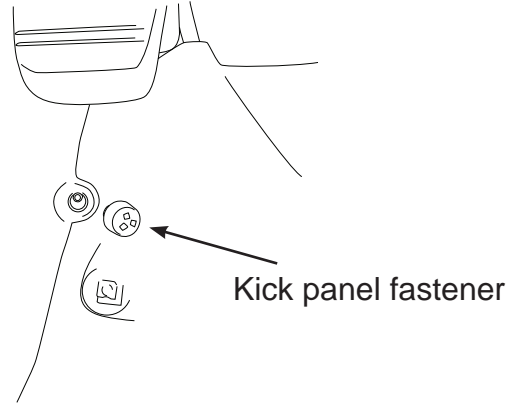
12

Pry left foot rest loose at driver side kick panel.



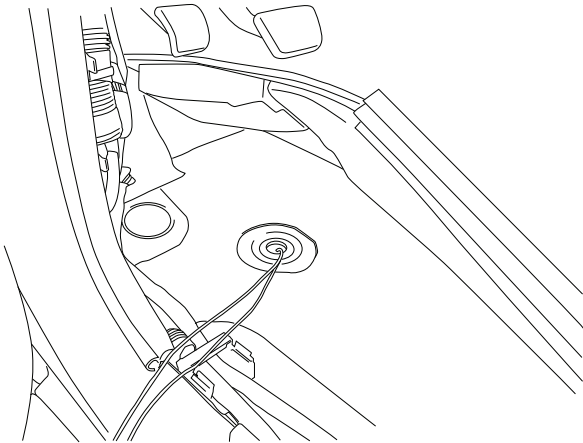
13

Pry up front door sill plates and remove kick panel fasteners and panels on driver and passenger side.



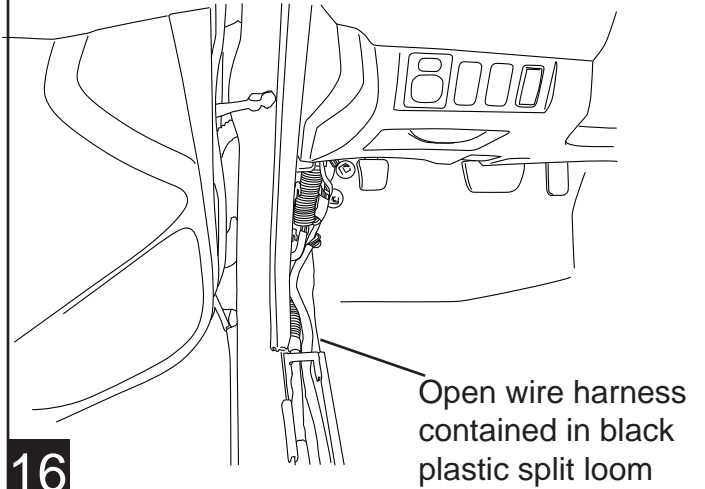
14

Pull up carpet and locate rubber grommet. Slice the grommet and pass trigger wires from under the vehicle and into the cab.



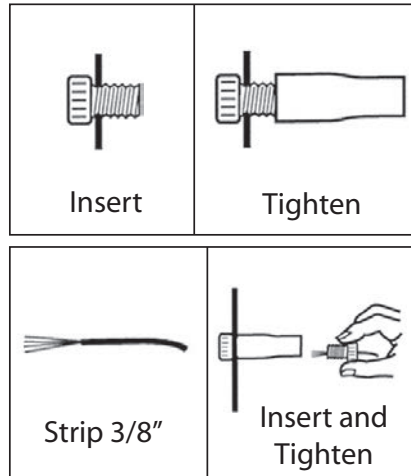
15

Locate door ajar signal wires on driver side. Front Green/Yellow, rear Pink/Black.



16

Posi-Tap Instructions



17

Drivers Side Front: Connect Red Trigger Wire to Red factory Door Ajar signal wire (12 volt negative with door open) using supplied Posi-Tap.

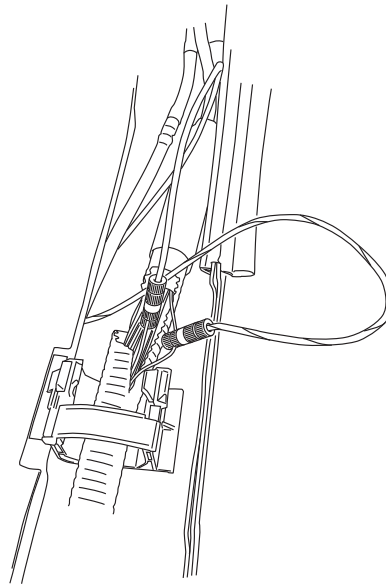
Drivers Side Rear: Connect Purple Trigger Wire to Purple factory Door Ajar signal wire using supplied Posi-Tap



18

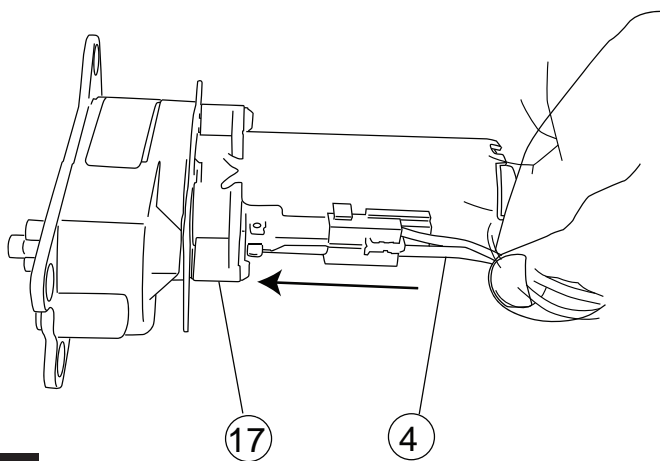
Passenger Side Front: Connect Black Trigger Wire to Black factory Door Ajar signal wire (12 volt negative with door open) using supplied Posi-Tap.

Passenger Side Rear: Connect Red Trigger Wire to Red factory Door Ajar signal wire using supplied Posi-Tap



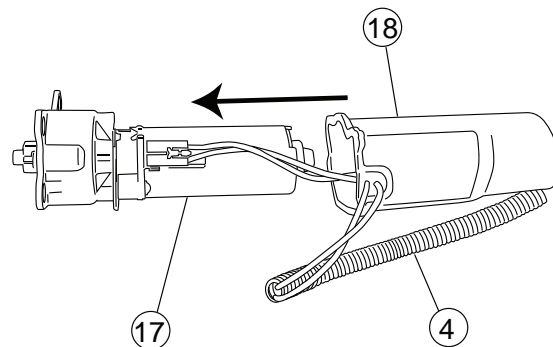
19

Connect Wire Harness to Motor.



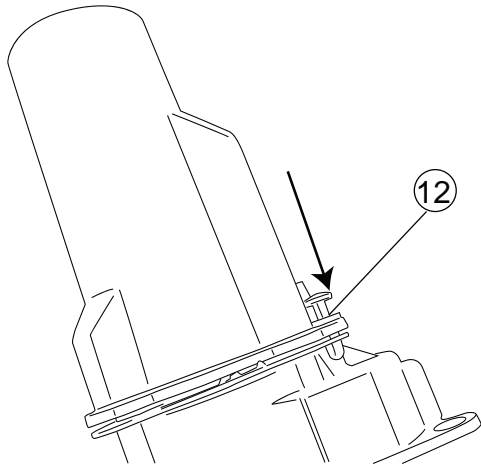
20

Slide rubber grommet on Wire Harness into slot of Motor Cover. Slide Motor Cover over Motor.

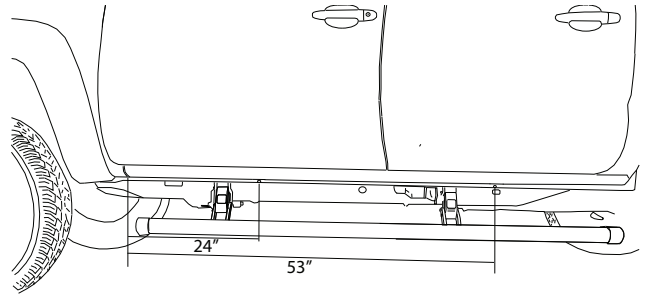


21

Insert plastic push pin rivets in mounting holes of Motor Cover.



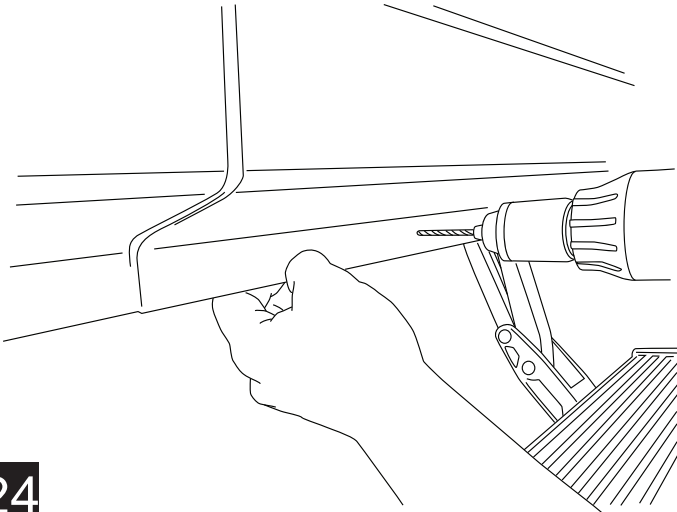
On each side of the vehicle measure from the front edge of door line on the pinch weld to the specified lengths below. Measure at 24" for front LED Light and 53" for rear LED Light.



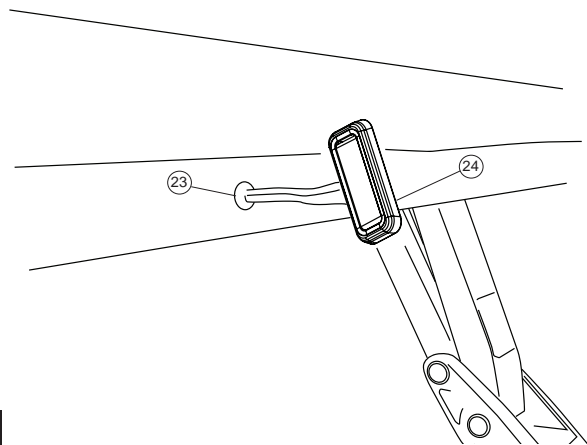
22

23

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



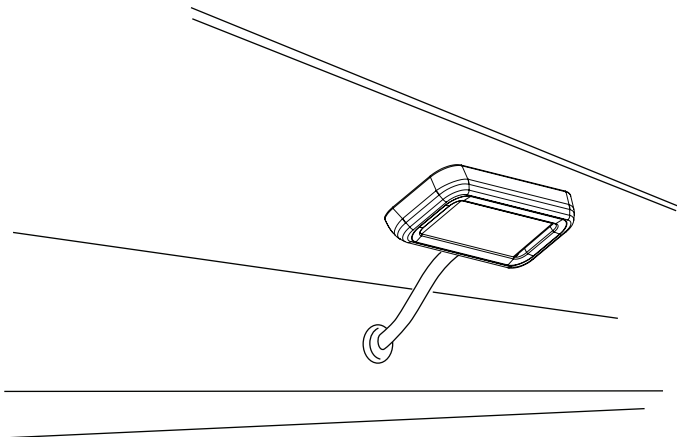
Insert grommet into drilled holes. Insert lamp wires through the grommets. (Silicon lube will help wires slip through grommets.)



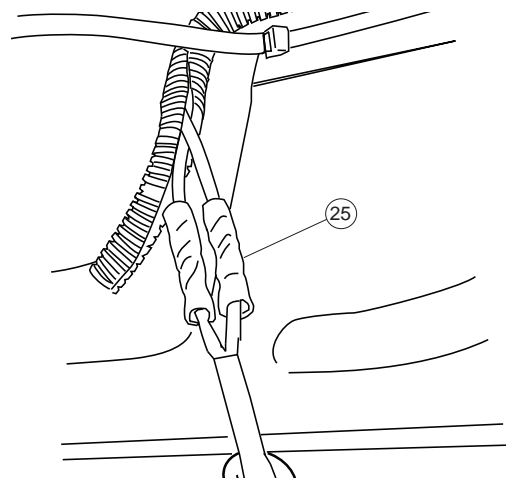
24

25

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



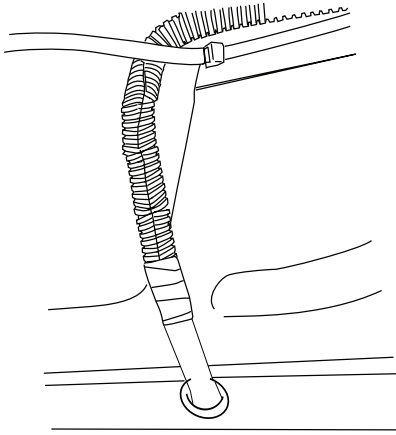
Using supplied butt connectors, connect the lamp wires. Red to Red, Black to Black. Once Crimped use heat gun to shrink tube.



26

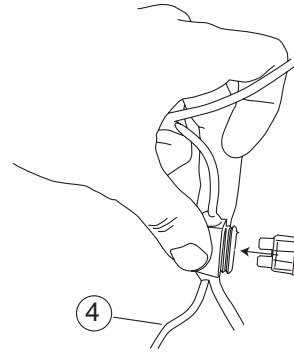
27

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.



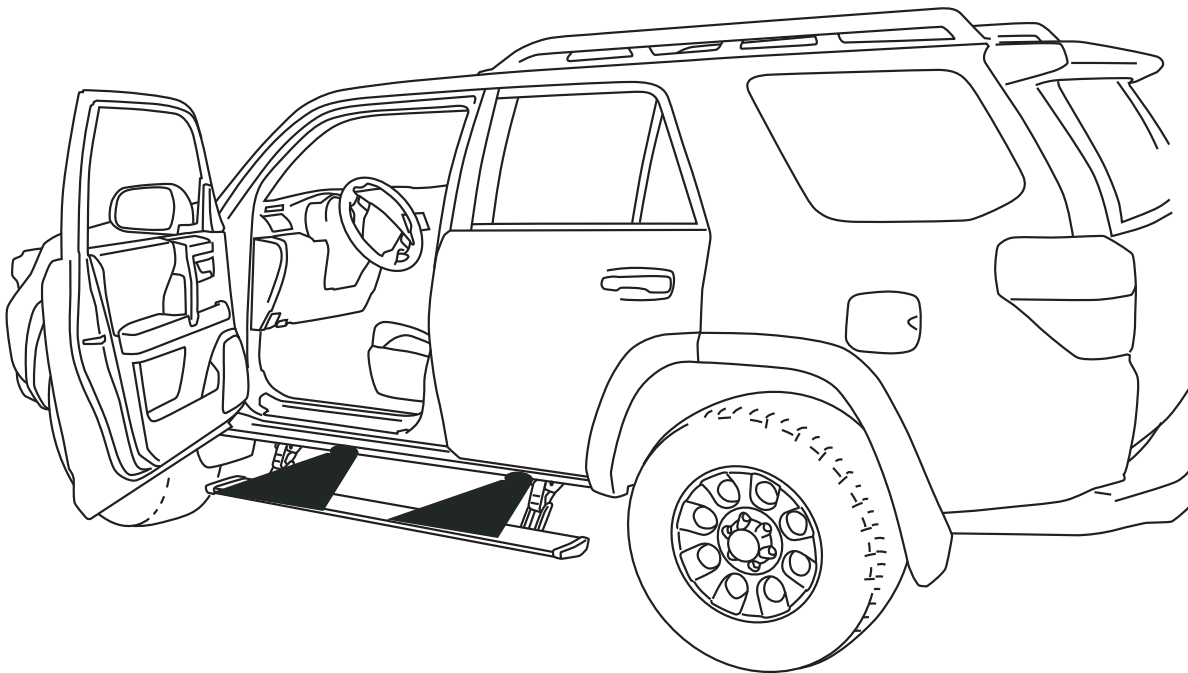
28

Reinstall the fuse.



29

Check that all doors activate the Power Step and the LED Lights work when doors open and close. Reinstall any remaining trim panels.



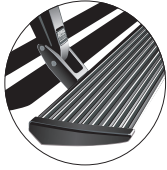
FINAL SYSTEM CHECK

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.

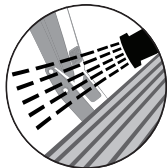
Automatic stop:

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.