

# INSTALLATION GUIDE

# **AMP** **RESEARCH** Power Step MADE IN USA

## APPLICATION

Toyota Tacoma Double Cab

Toyota Tacoma Access Cab\*

## MODEL YR

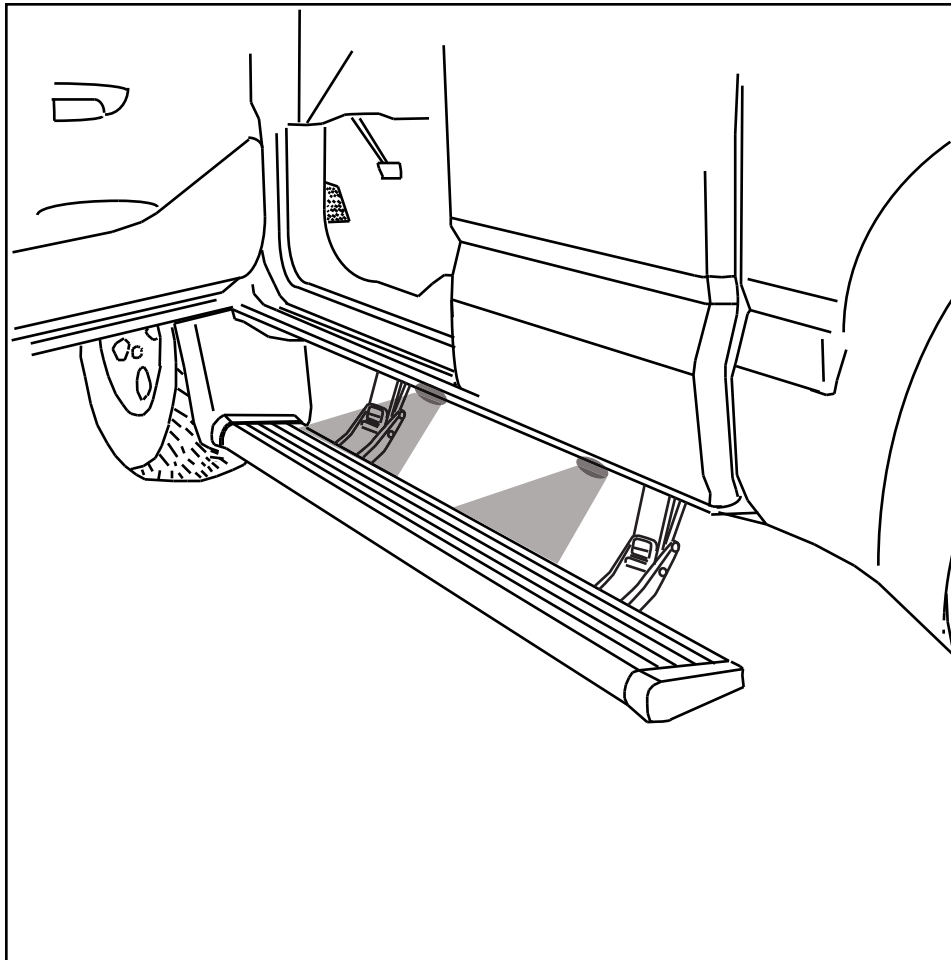
2005 - up

2005 - up

## PART #

75142-01A

75142-01A



## INSTALLATION TIME

**3-5 Hours**

Professional installation recommended

## SKILL LEVEL



3= Experienced

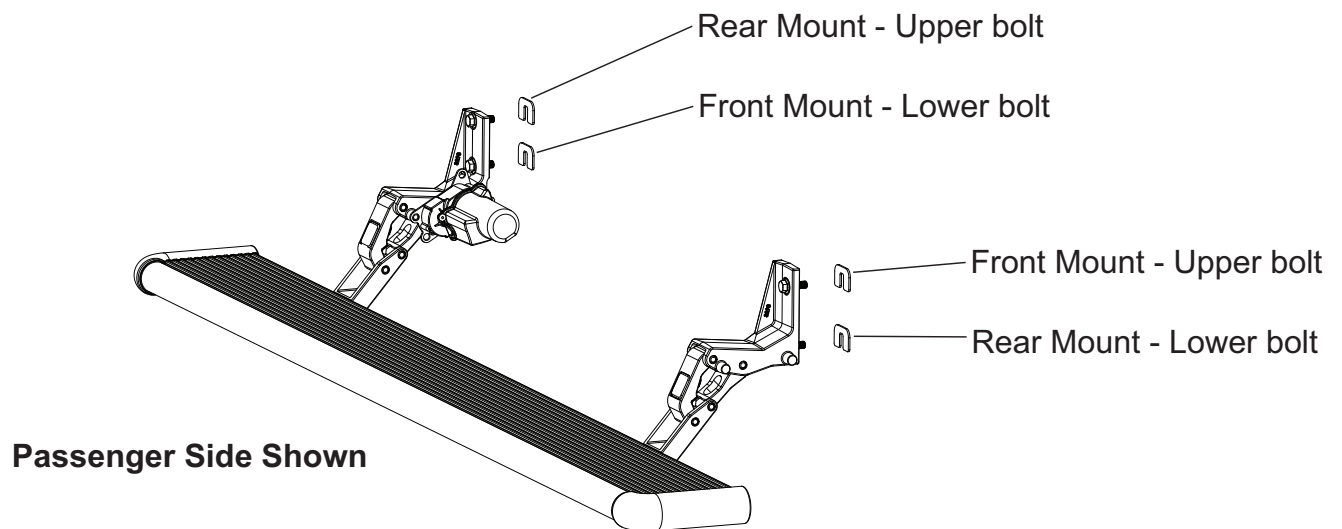
## TOOLS REQUIRED

- 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

Purpose: Due to vehicle-build variations the Power Step may not correctly align with vehicle cladding. Using supplied shims, please follow the instructions below to correct the alignment.

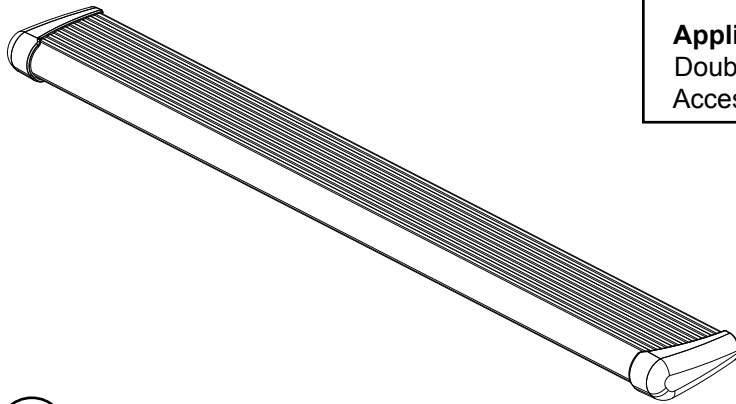
Misalignment:	Shim Correction:
The gap between board and vehicle cladding is too large toward rear of running board.	Shim rear mount at lower bolt. (diagram below)
The gap between board and vehicle cladding is too small toward rear of running board.	Shim rear mount at upper bolt. (diagram below)
The gap between board and vehicle cladding is too large toward front end of running board.	Shim front mount at lower bolt. (diagram below)
The gap between board and vehicle cladding is too small toward front end of running board.	Shim front mount at upper bolt. (diagram below)

**Shim Placement:** Place shim(s) **ONLY WHERE NEEDED** as indicated above in “Misalignment/ Shim Correction” chart.



**Note: Some Applications require modification.**

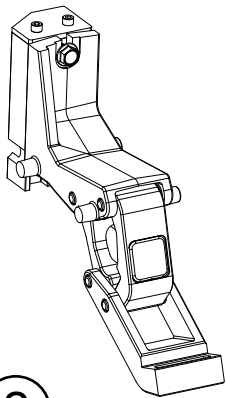
Application	Cut Length
Double Cab	70" (No Modification Required)
Access Cab	60" (Trim 10")



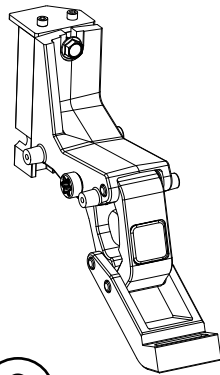
**1** x2  
20-03318-70  
Running Board Assembly

**COMPONENT/PARTS IDENTIFICATION**

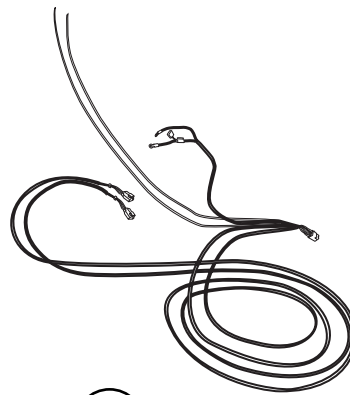
Step Assembly Includes:  
 19-03199-11 End Cap left (x1)  
 19-03199-12 End Cap right (x1)  
 19-02663-90 T-Nut Insert (x2)  
 19-03236-90 Socket Cap Screw (x2)  
 19-03237-90 Nut Plate (x2)



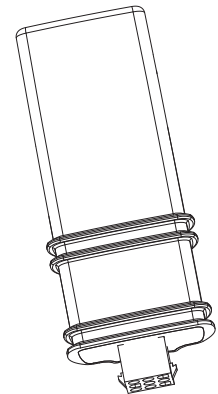
**2** x2  
10-03685-10  
Idler Linkage Assembly



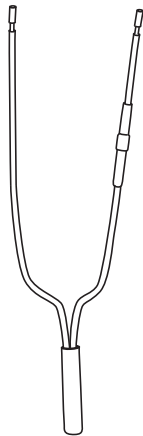
**3** x2  
10-03686-10  
Motor Linkage Assembly



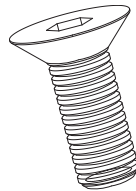
**4**  
19-03692-90L  
Wire Harness



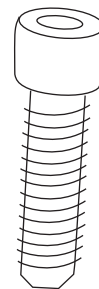
**5**  
19-03297-A06  
Controller



**6** x2  
19-02727-90  
Single Diode

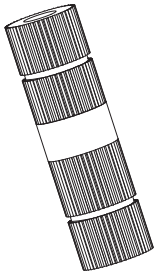


**8** x4  
19-03352-90  
Flat Head Cap Screw

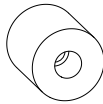


**9** x8  
19-02802-90  
Socket Cap Screw

PARTS LIST AND  
HARDWARE  
IDENTIFICATION



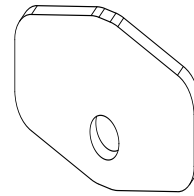
**10** x2  
19-03354-90  
Posi-Tap™ (Red/Grey)



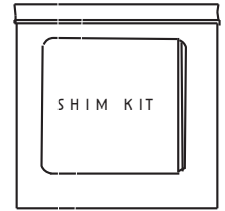
**11**  
19-03706-90



**12** x6  
19-02721-90  
Cinch Fastener



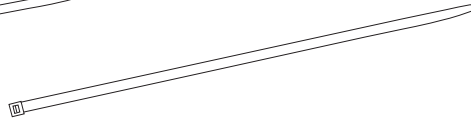
**13** x4  
19-03702-90



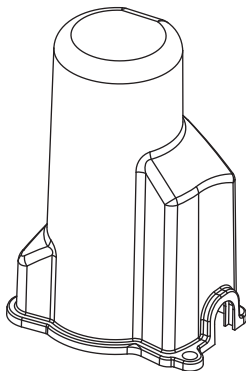
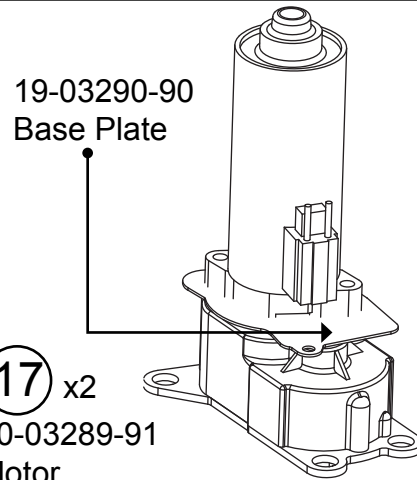
**14** Includes x4  
19-03142-90  
Shim Kit



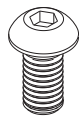
**15** x25  
19-02805-90  
Cable Tie 7"



**16** x2  
19-03339-90  
Cable Tie 11"



**18** x2  
19-03238-90  
Motor Cover



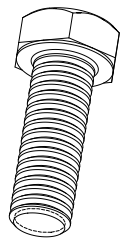
**19**  
16-02634-90  
Button Head Bolt



**20**  
16-03014-90  
M8 Washer



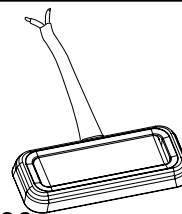
**21** x4  
19-03705-90  
Spring Washer



**22** x4  
19-03704-90  
M12 Bolt



**23** x4  
19-02640-90  
Grommet

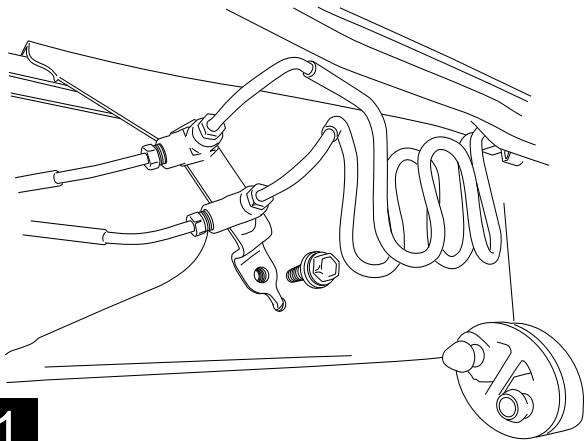


**24** x4  
19-03302-90  
LED Lamp



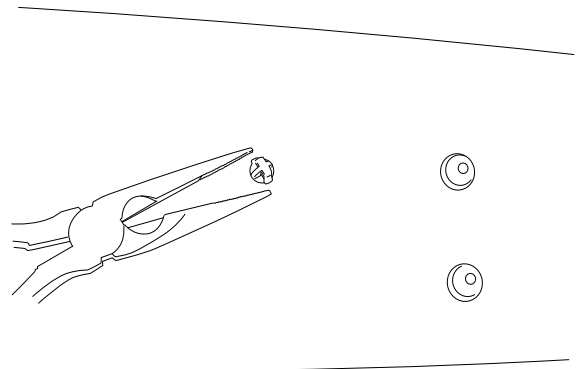
**25** x8  
19-02989-90  
Butt Connector

Remove brake line retainer bolt from driver side front inside frame rail to provide access inside frame.



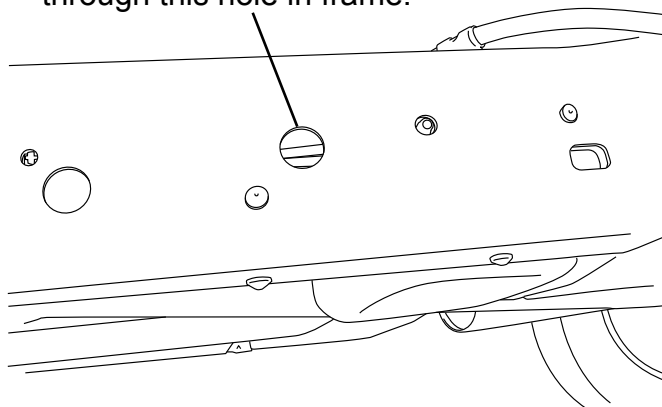
1

Disconnect brake lines from frame by squeezing outside of plastic fastener. CAUTION: Do not break plastic fastener. Disconnect first and third fastener from front.



2

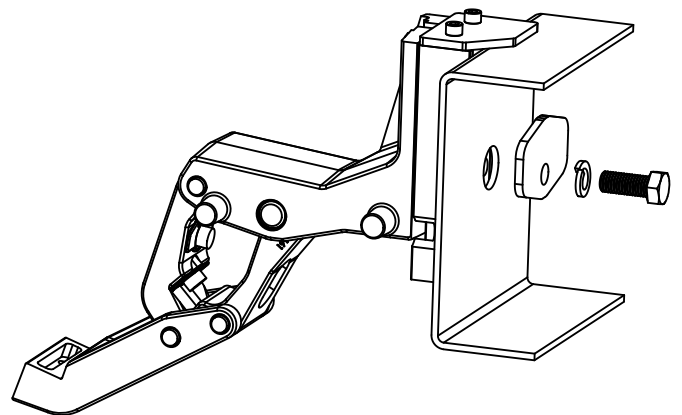
Install driver side rear motor linkage through this hole in frame.



3

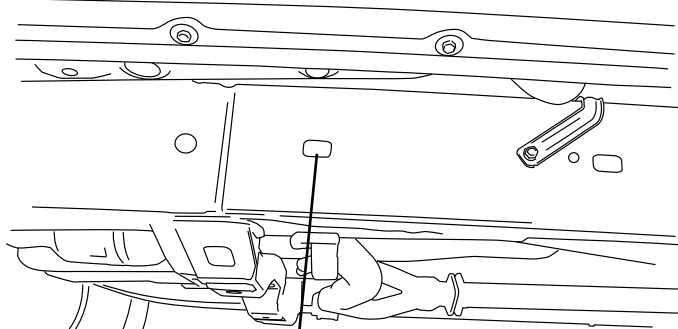
Through-bolt linkage to frame as shown in next step.

Secure Linkage Assembly to frame. FINGER TIGHTEN ONLY.



4

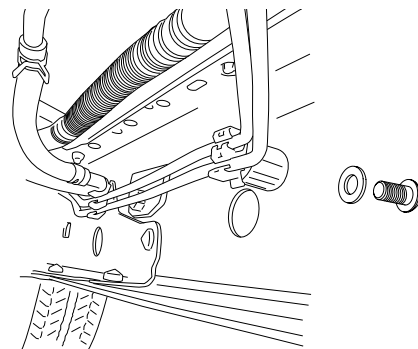
Install Driver Side Front Idler Linkage. Insert top plate between frame and body and slide into forward position. See step 6 for passenger side installation.



5

Through-bolt linkage to frame using this hole.

Install brake line stand-off inside driver rear frame rail as shown.

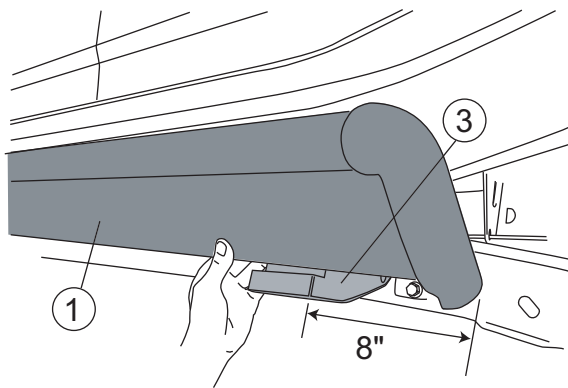


Replace all brake line fasteners.

**Install linkages on passenger side MOTOR LINKAGE IN FRONT.**

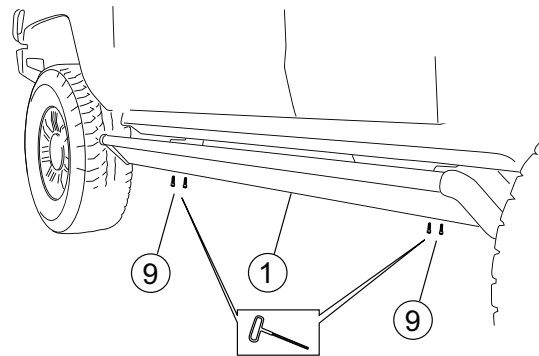
6

Center running board to doors and mount onto linkages by sliding T-nuts into position.



7

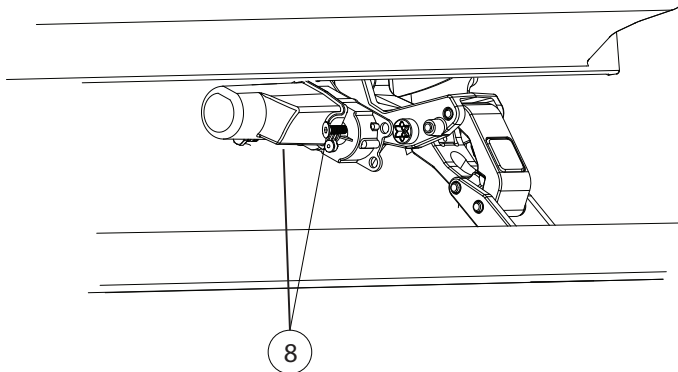
Torque 3/16" Allen bolts to 10ft-lbs. (13.5Nm)



8

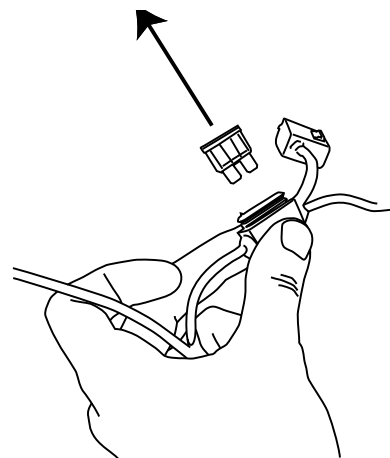
Torque linkage to frame through bolts from step 4 to 40 ft-lbs(54Nm)

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



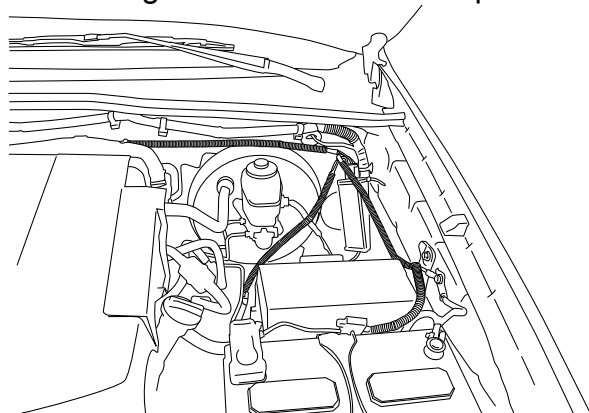
9

Remove fuse.



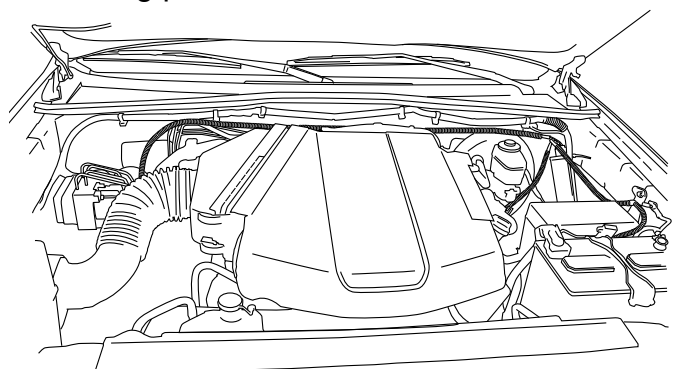
10

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

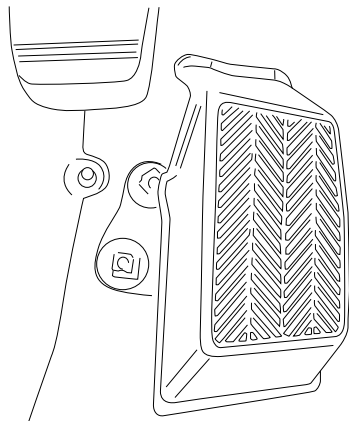
Run wire harness as shown outside the frame rails on both sides. Avoid hot, sharp or moving parts! Secure with 7" wire ties.



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

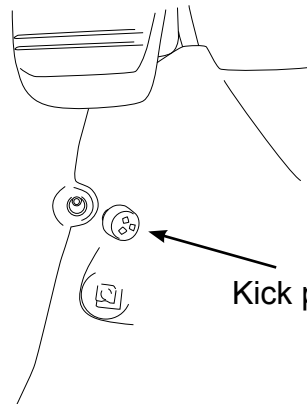
12

Pry left foot rest loose at driver side kick panel.



13

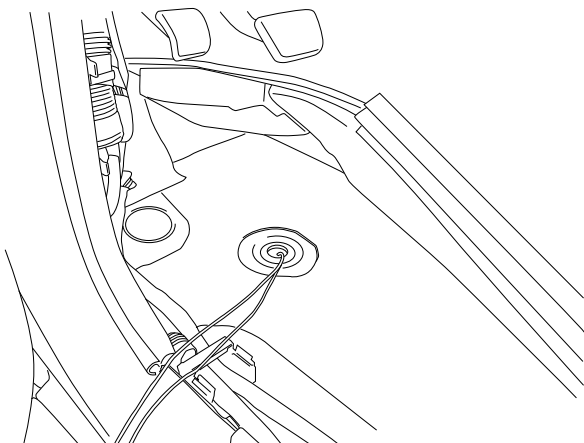
Pry up front door sill plates and remove kick panel fasteners and panels on driver and passenger side.



Kick panel fastener

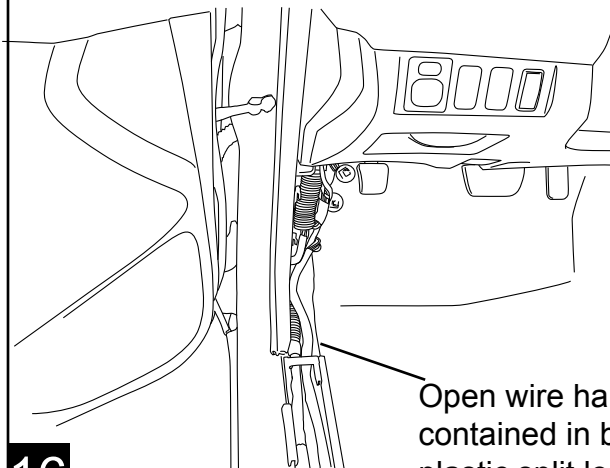
14

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



15

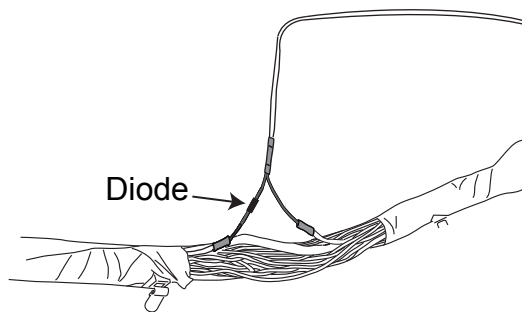
Locate door ajar signal wires on driver side. Front Green/Yellow, rear Pink/Black.



Open wire harness contained in black plastic split loom

16

Install Single Diode Harness as shown on Pink/Black wire (12 volt negative with door open) and connect to Power Step Pink/Black trigger wire. Make sure to install the diode toward the front of the vehicle.

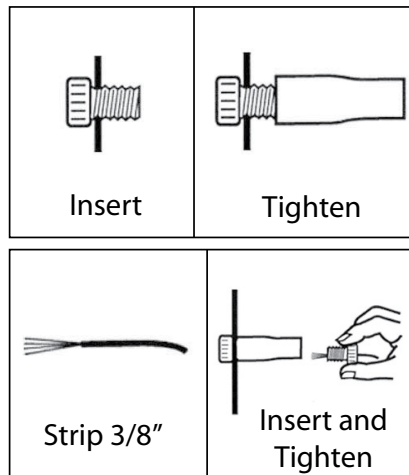


Diode

Front of vehicle

17

Posi-Tap Instructions



Insert

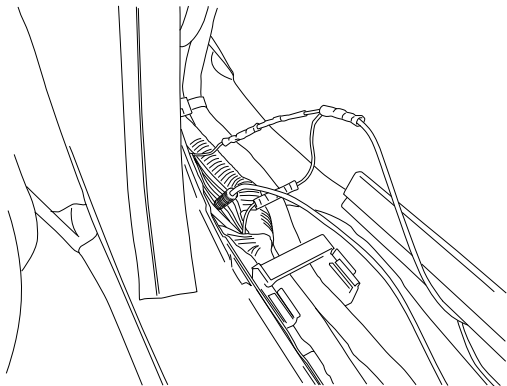
Tighten

Strip 3/8"

Insert and Tighten

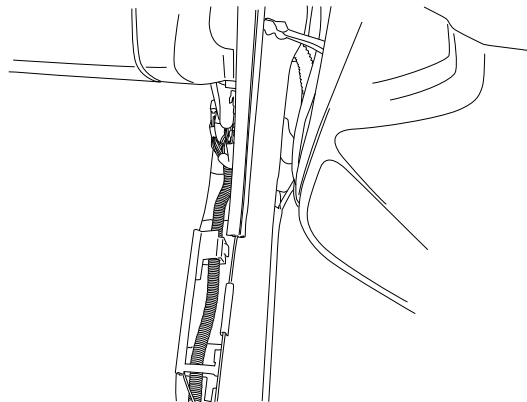
18

Connect Green/Yellow Power Step trigger wire to Green/Yellow factory Door Ajar signal wire (12 volt negative with door open) using supplied Posi-Tap.



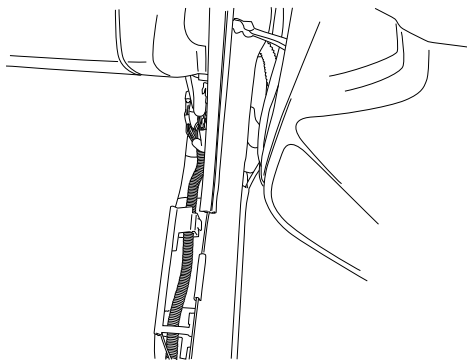
19

In passenger-side front door sill, locate Door Ajar signal wires inside Black plastic split loom. Front Red/Black rear Pink/Black



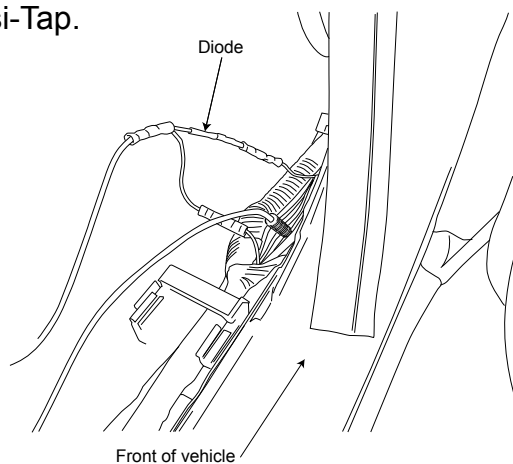
20

Install Single Diode harness as shown in step 16 on Pink/Black wire (12 volt negative with door open) and connect to Power Step Pink/Black trigger wire. Make sure to install the diode toward the front of the vehicle.



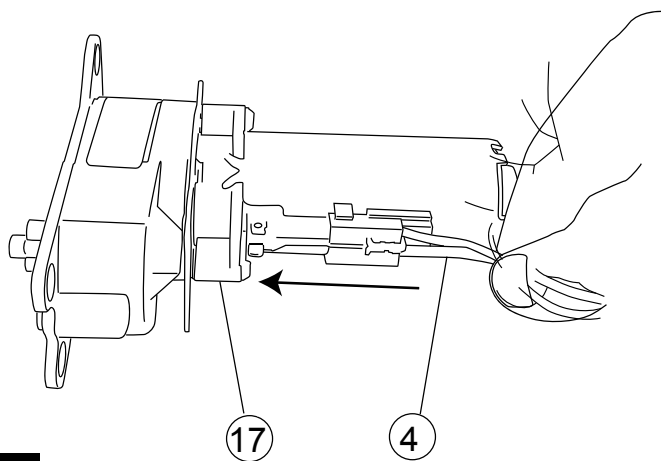
21

Connect Red/Black Power Step trigger wire to Red/Black factory Door Ajar signal wire (12 volt negative with door open) using supplied Posi-Tap.



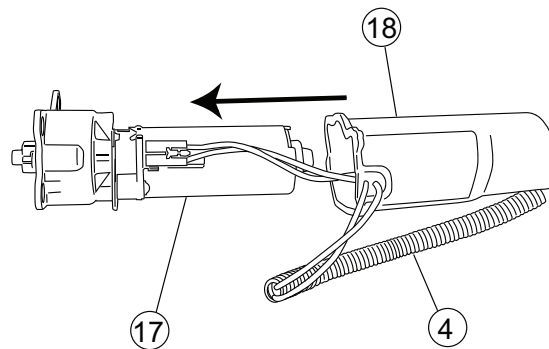
22

Connect Wire Harness to Motor.



23

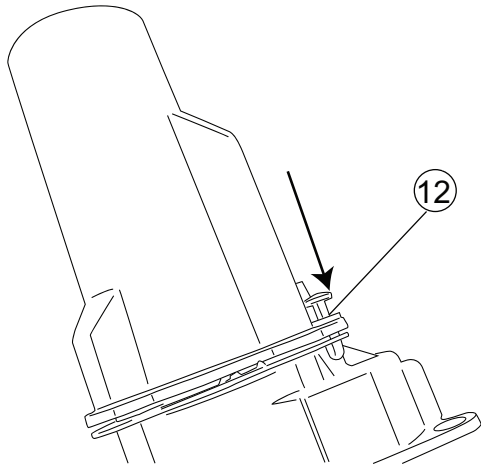
Slide rubber grommet on Wire Harness into slot of Motor Cover. Slide Motor Cover over Motor.



24

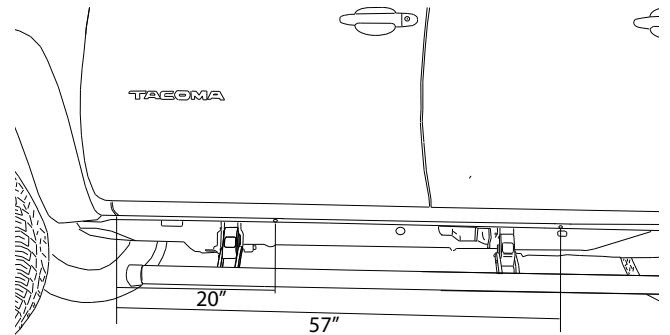


Insert plastic push pin rivets in mounting holes of Motor Cover.



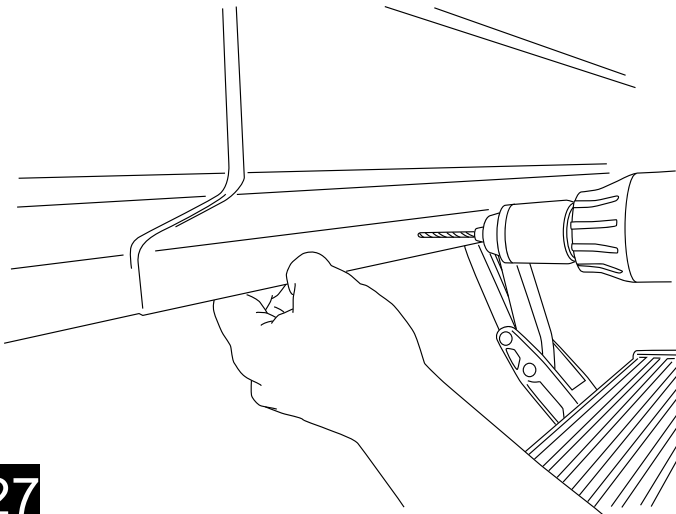
25

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 20" for front LED Light and 57" for rear LED Light.



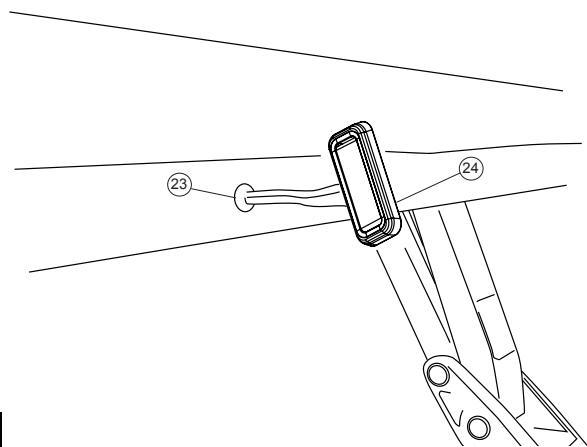
26

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



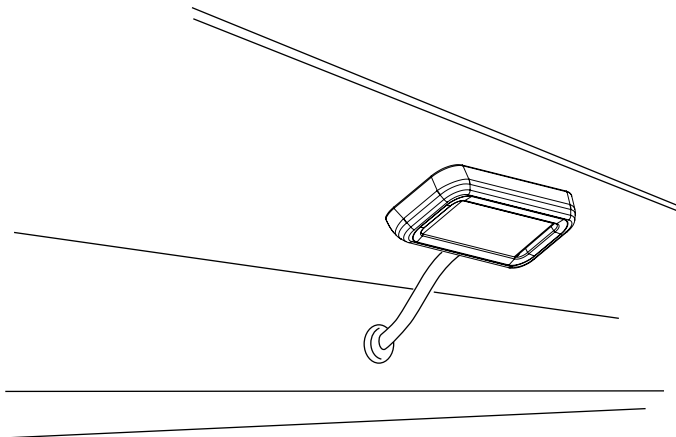
27

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



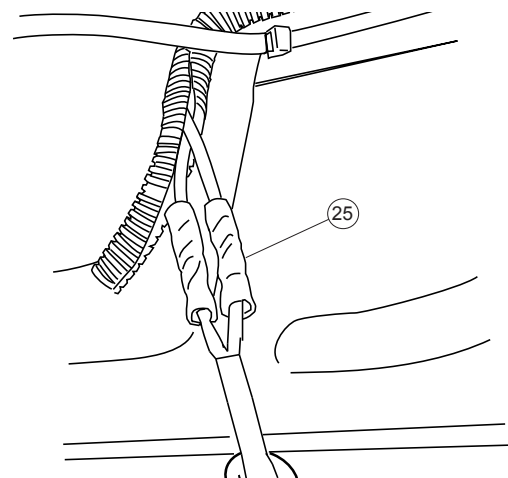
28

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



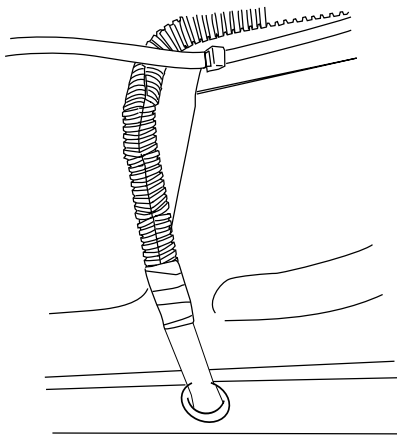
29

Using supplied butt connectors, connect the lamp wires. Red to Red, Black to Black



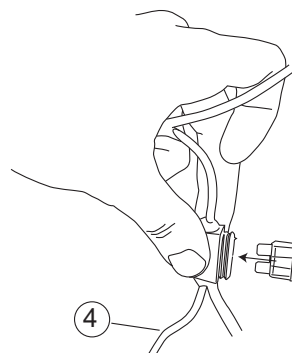
30

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.



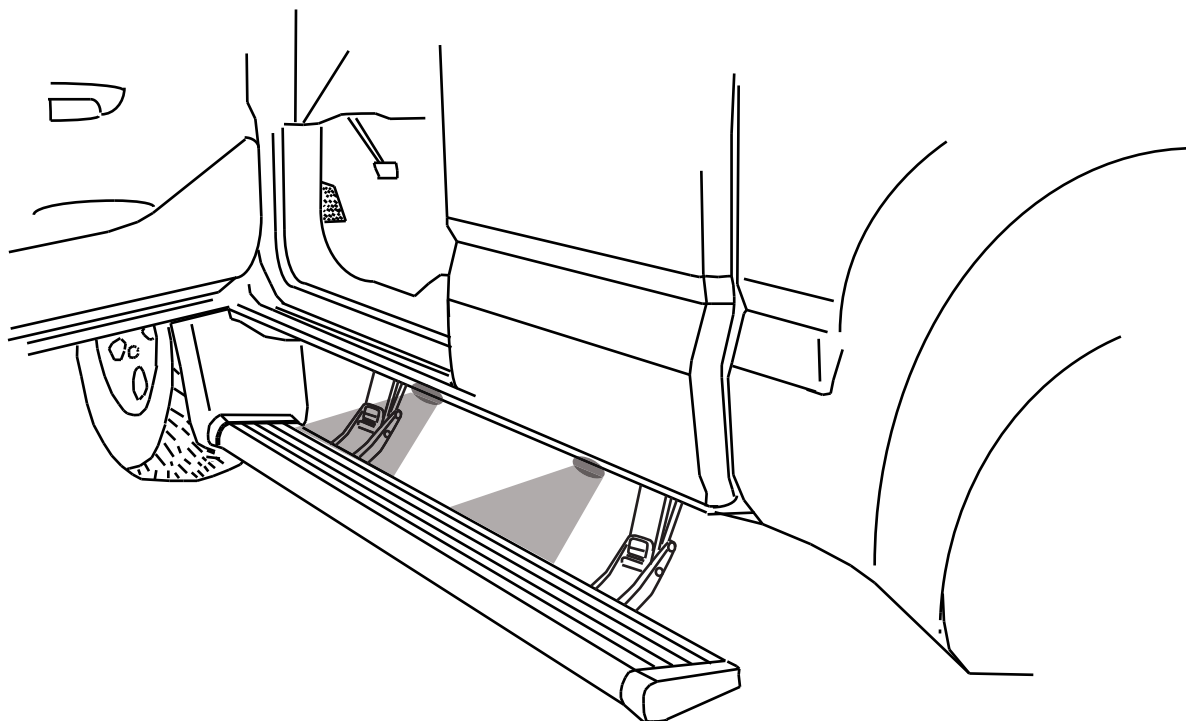
31

Reinstall the fuse.



32

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.