

## INSTALLATION GUIDE

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

**APPLICATION**

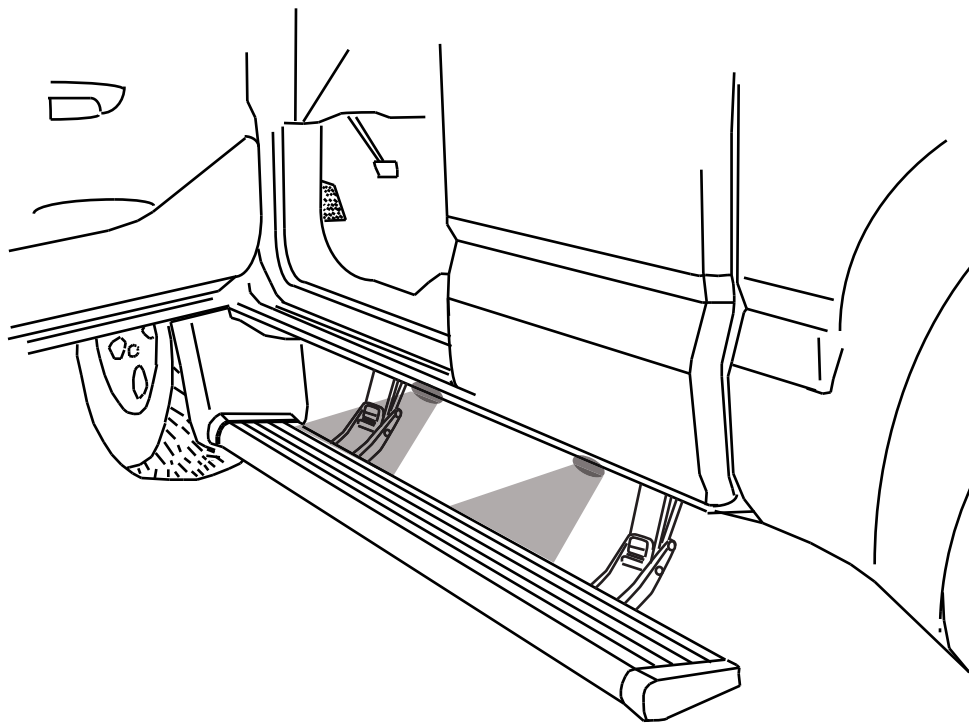
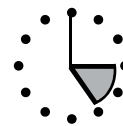
Toyota Tacoma

**MODEL YR**

2005 - up

**PART #**

75142-01A

**INSTALLATION TIME****3 - 5 hrs****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

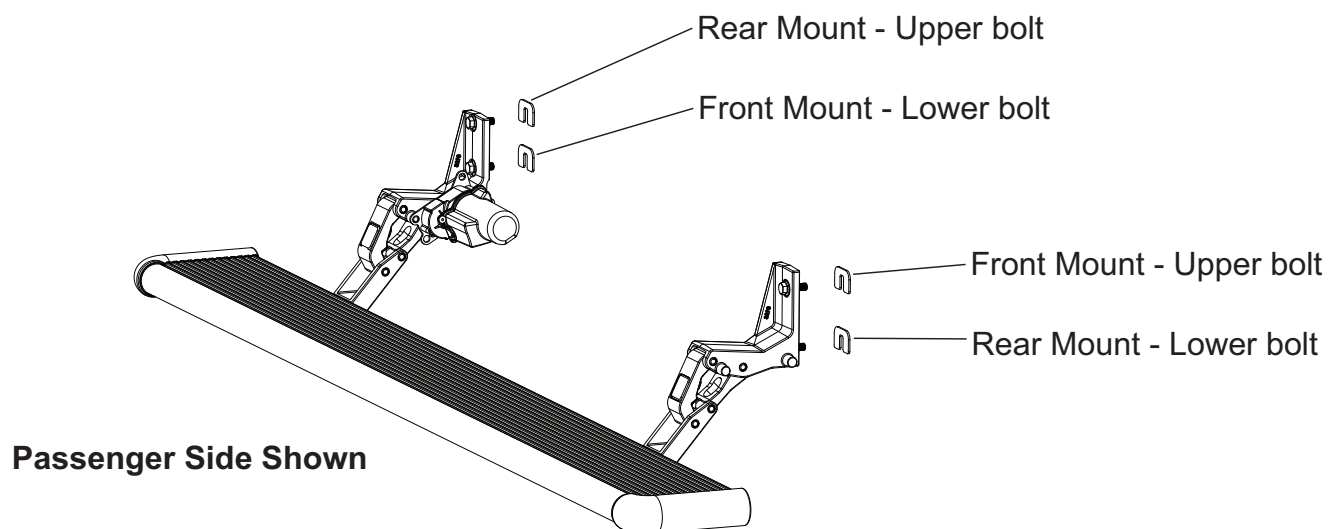
**AMP RESEARCH TECH SUPPORT 1-888-983-2204 (Press 2) Monday - Friday, 6:00 AM - 5:00 PM PST**

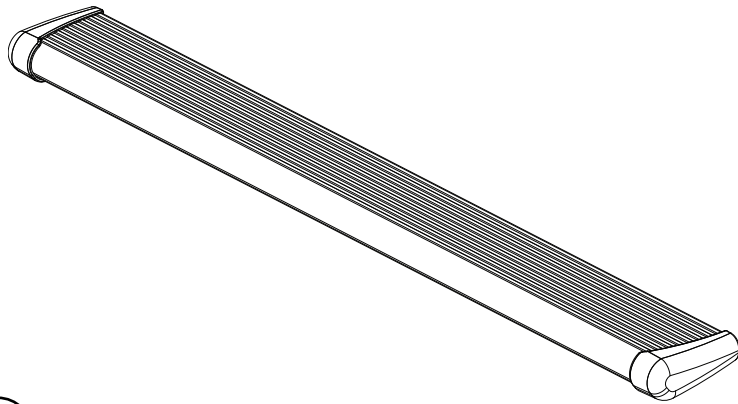
Designed and manufactured by AMP Research®. Patent Number 6,830,257; 6,641,158; 6,834,875; 6,938,909; 6,942,233; 7,007,961; 7,055,839; 7,163,221; 7,367,574; 7,380,807; 7,398,985; 7,413,204; 7,487,986. Other US and Worldwide patents pending. Made in USA © 2010 AMP Research  
5-year limited warranty. Professional installation is recommended.

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.

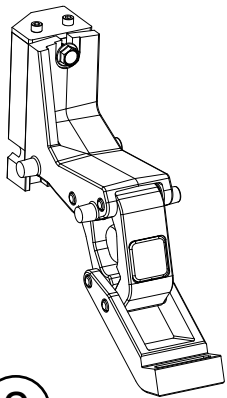




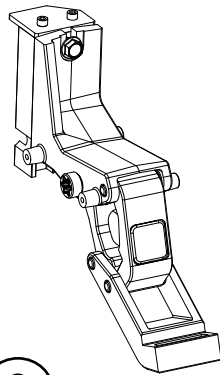
COMPONENT/PARTS  
IDENTIFICATION

① x2  
20-03318-70  
Running Board Assembly

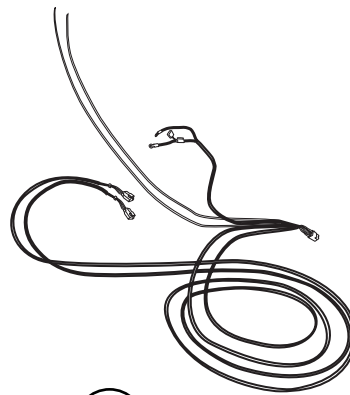
Step Assembly Includes:  
19-03199-11 End Cap left (x1)  
19-03199-12 End Cap right (x1)  
19-02663-90 T-Nut Insert (x2)  
19-03236-90 Socket Cap Screw (x2)  
19-03237-90 Nut Plate (x2)



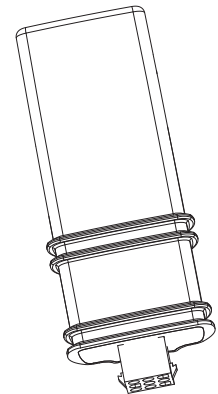
② x2  
10-03685-10  
Idler Linkage Assembly



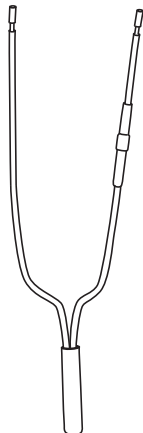
③ x2  
10-03686-10  
Motor Linkage Assembly



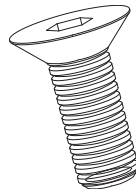
④  
19-03692-90L  
Wire Harness



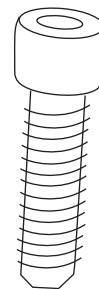
⑤  
19-03297-93  
Controller



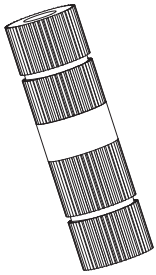
⑥ x2  
19-02727-90  
Single Diode



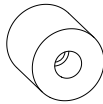
⑧ x4  
19-03352-90  
Flat Head Cap Screw



⑨ x8  
19-02802-90  
Socket Cap Screw

PARTS LIST AND  
HARDWARE  
IDENTIFICATION


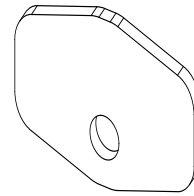
**10** x2  
19-03354-90  
Posi-Tap™ (Red/Grey)



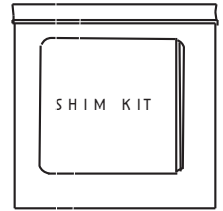
**11**  
19-03706-90



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



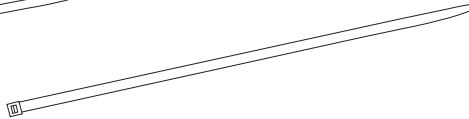
**13** x4  
19-03702-90



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

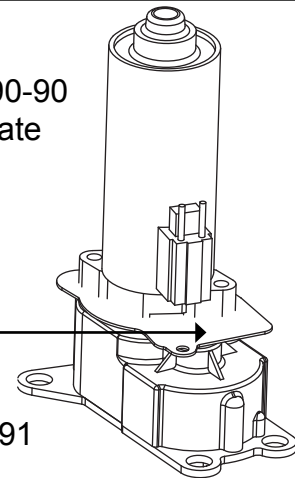


**15** x25  
19-02805-90  
Cable Tie 7"

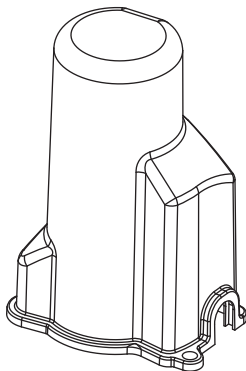


**16** x2  
19-03339-90  
Cable Tie 11"

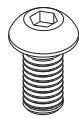
19-03290-90  
Base Plate



**17** x2  
20-03289-91  
Motor



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



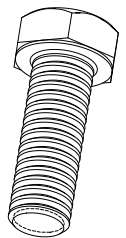
**19**  
16-02634-90  
Button Head Bolt



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



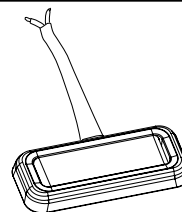
**21** x4  
19-03705-90  
Spring Washer



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



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

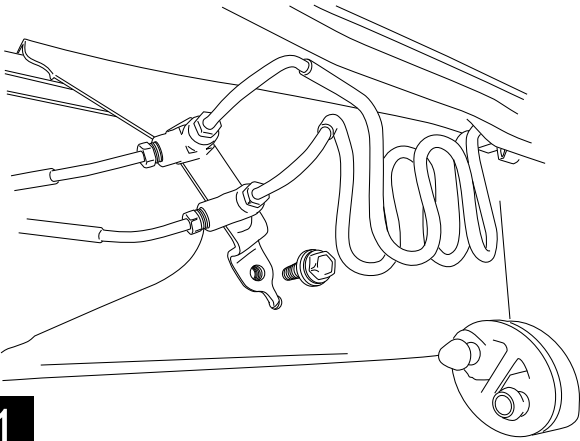


**24** x4  
19-03302-90  
LED Lamp



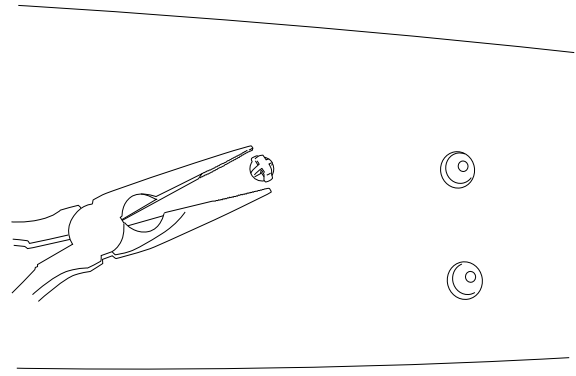
**25** x8  
19-02989-90  
Butt Connector

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



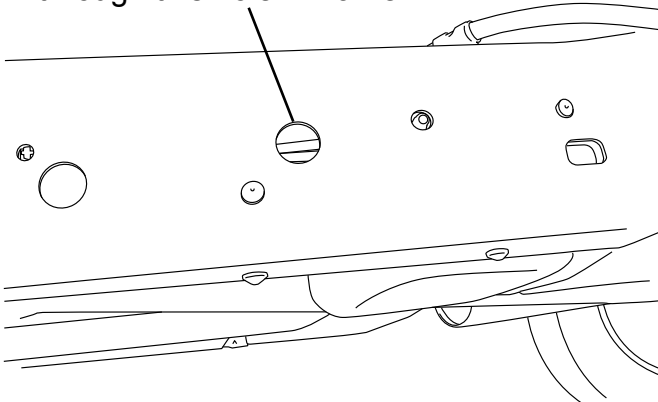
1

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

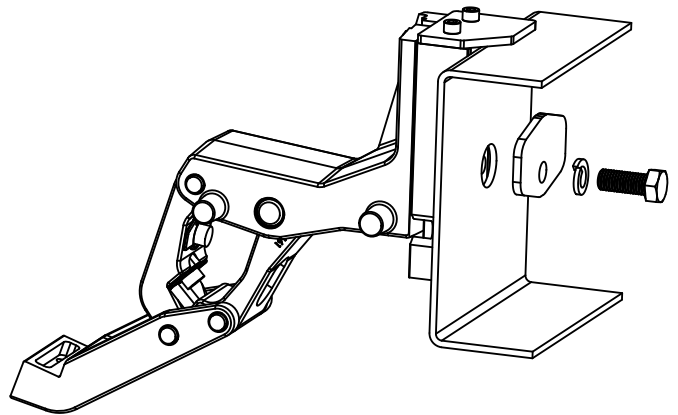
Install driver side rear motor linkage through this hole in frame.



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

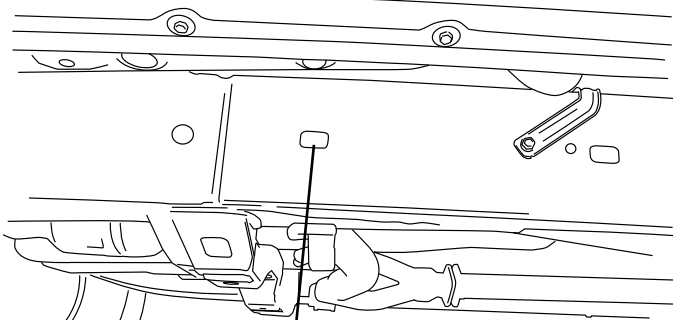
3

Secure Linkage Assembly to frame. FINGER TIGHTEN ONLY.



4

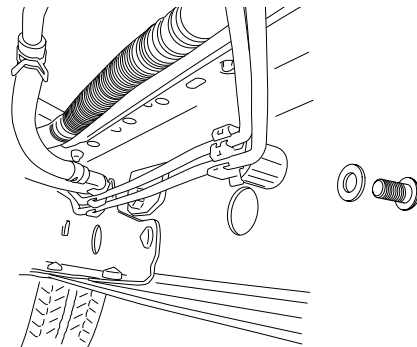
Install Driver Side Front Idler Linkage. Insert top plate between frame and body and slide into forward position. See step 6 for passenger side installation.



Through-bolt linkage to frame using this hole.

5

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

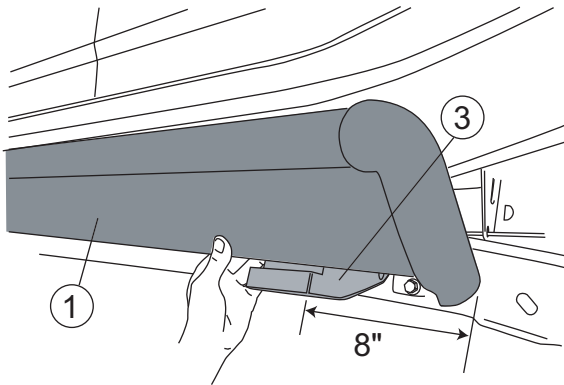


Replace all brake line fasteners.

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

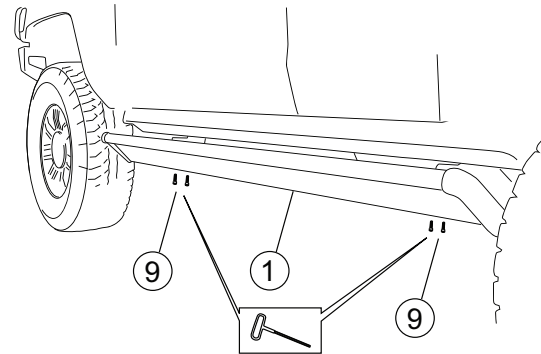
6

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



7

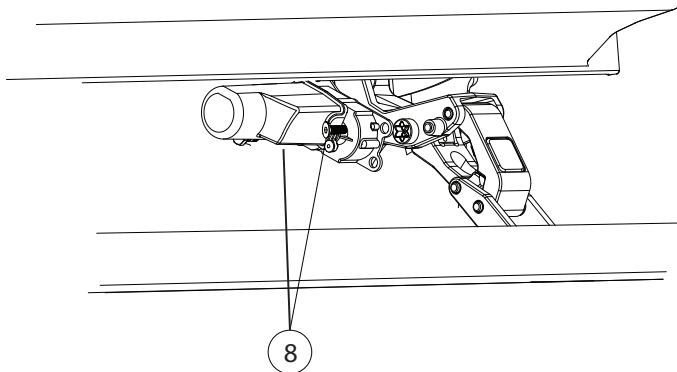
Torque 3/16" Allen bolts to 10ft-lbs. (13.5Nm)



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

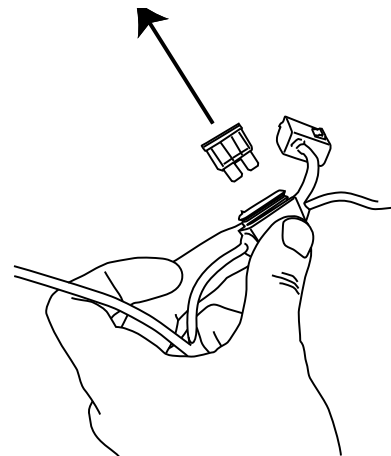
8

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



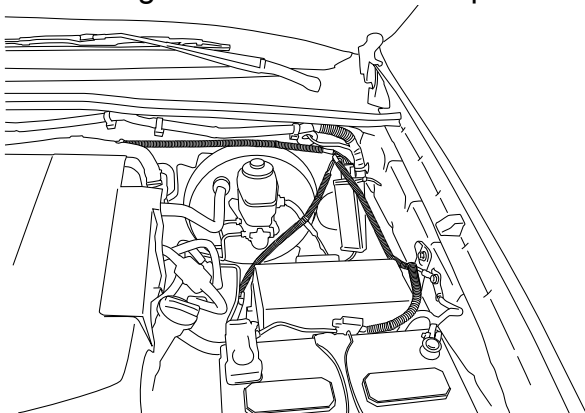
9

Remove fuse.



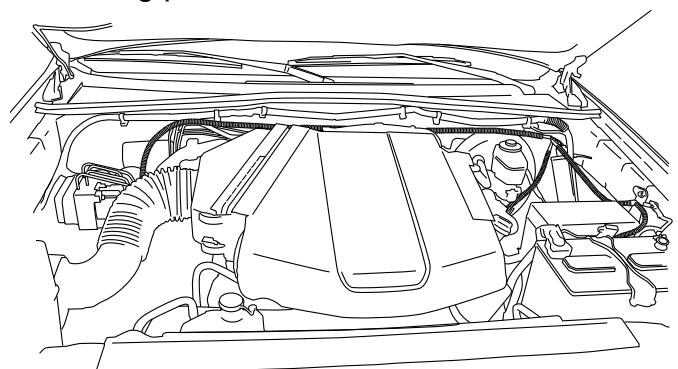
10

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

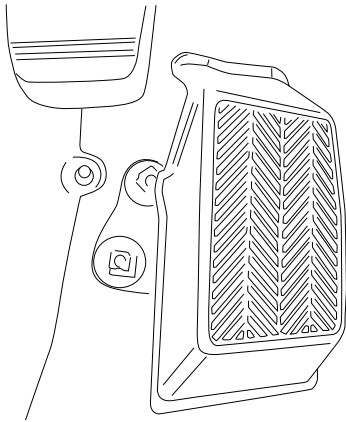
Run wire harness as shown outside the frame rails on both sides. Avoid hot, sharp or moving parts! Secure with 7" wire ties.



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

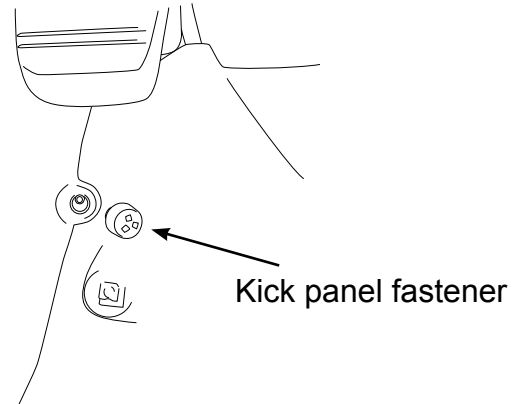
12

Pry left foot rest loose at driver side kick panel.



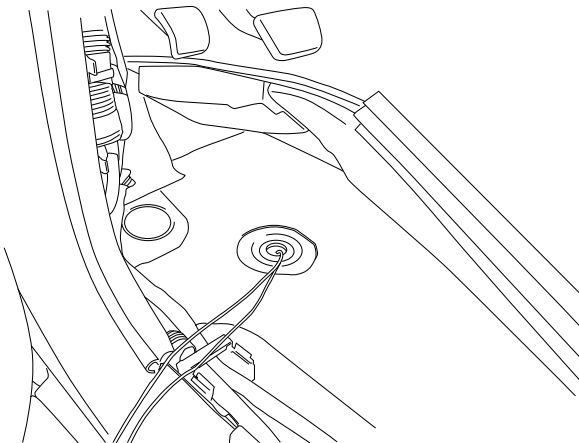
13

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



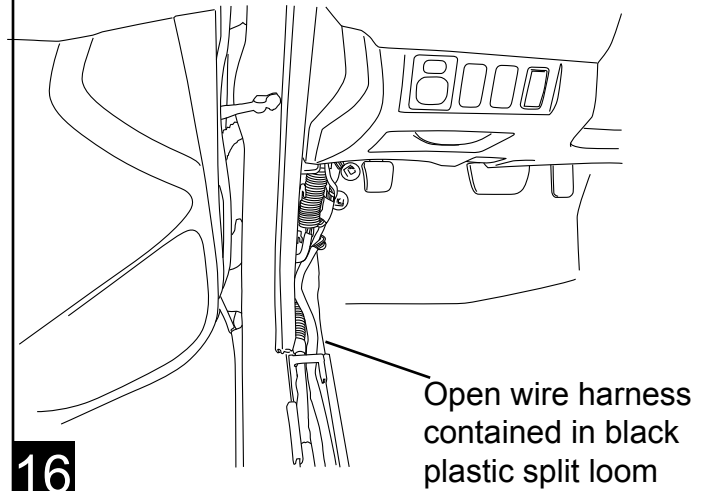
14

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



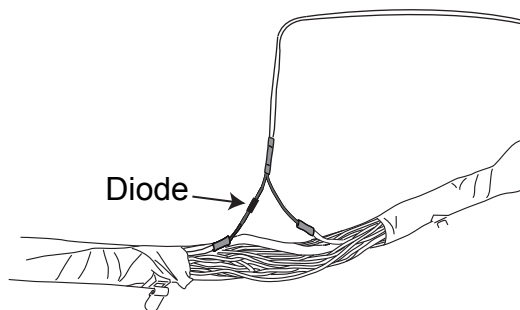
15

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



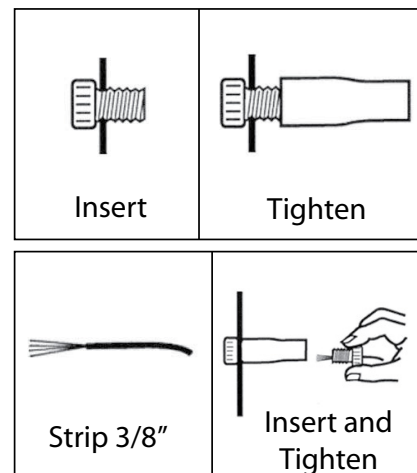
16

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.



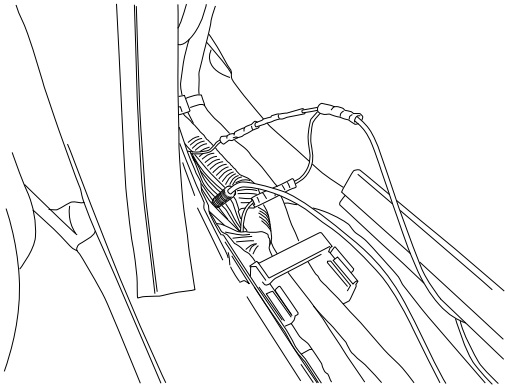
17

### Posi-Tap Instructions



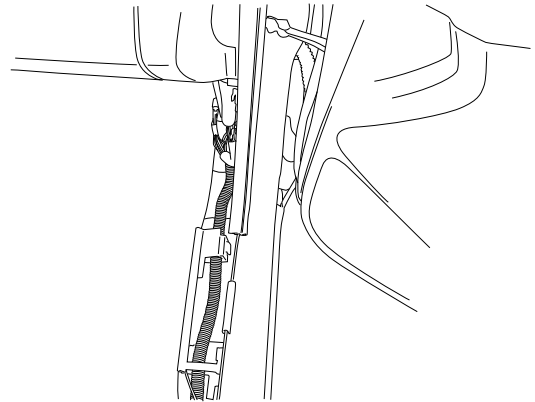
18

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.



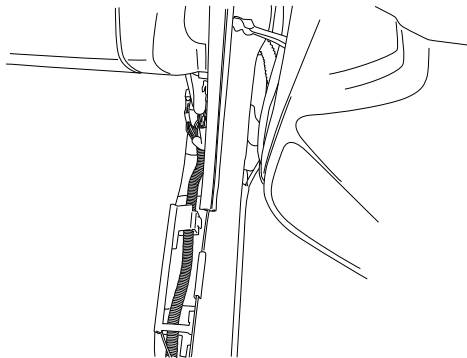
19

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



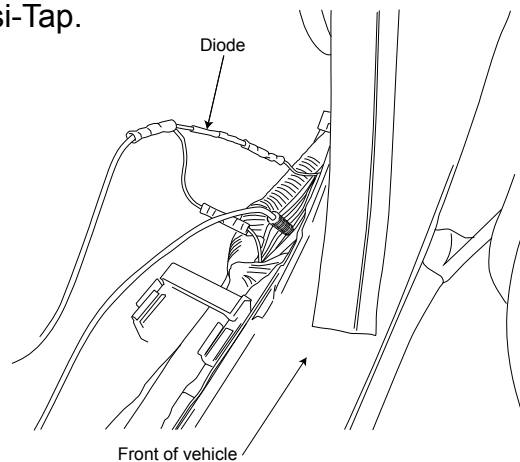
20

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.



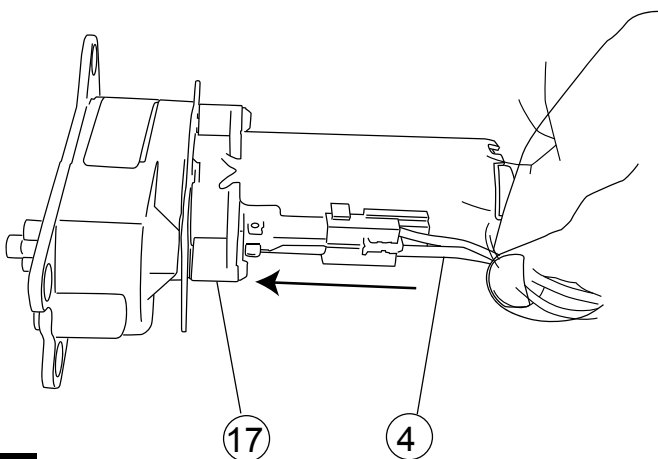
21

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.



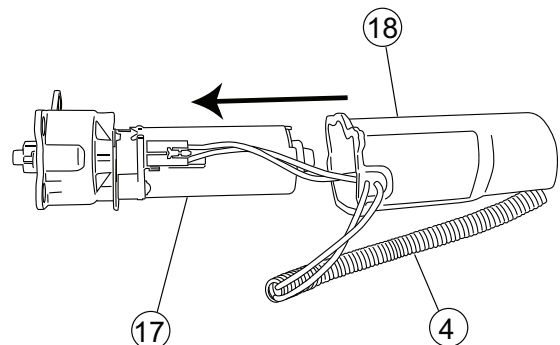
22

Connect Wire Harness to Motor.



23

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

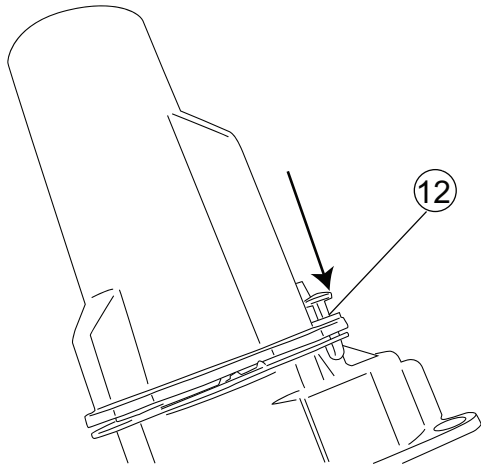


24



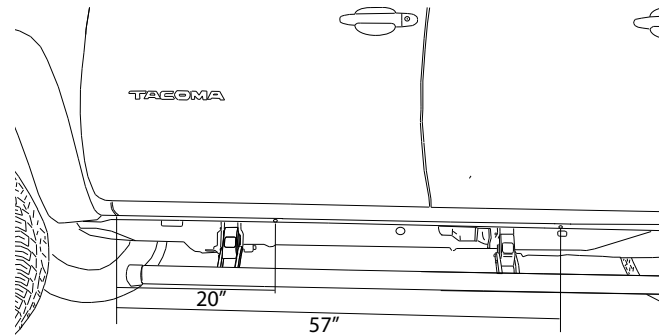
# AMP RESEARCH POWER STEP – TACOMA

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



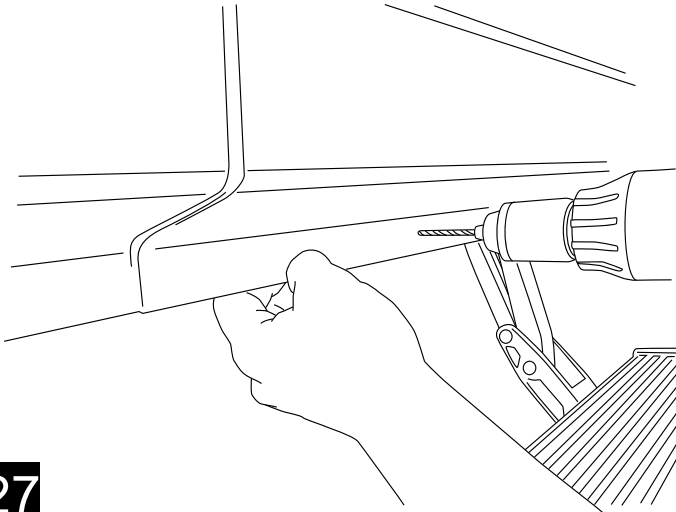
25

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.



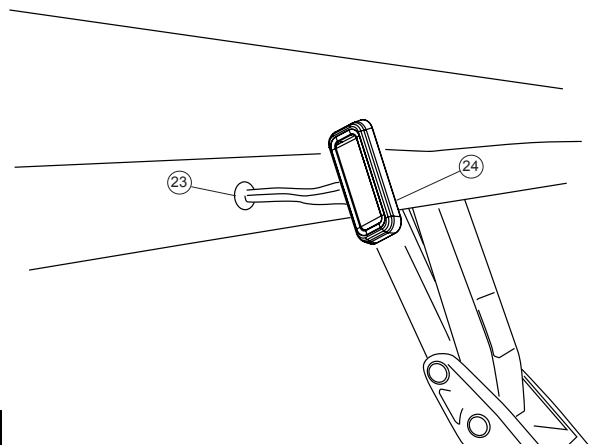
26

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



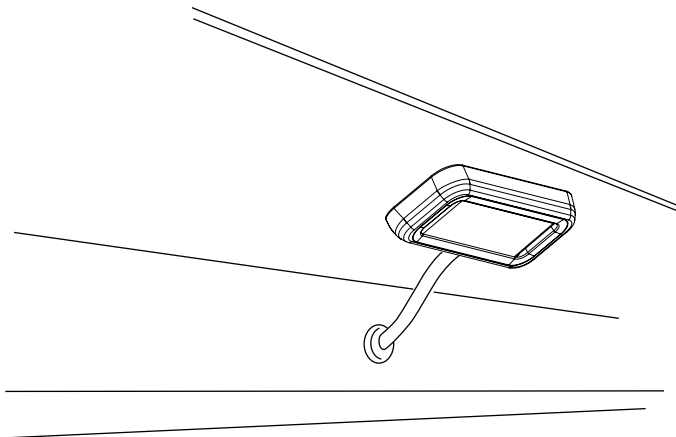
27

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



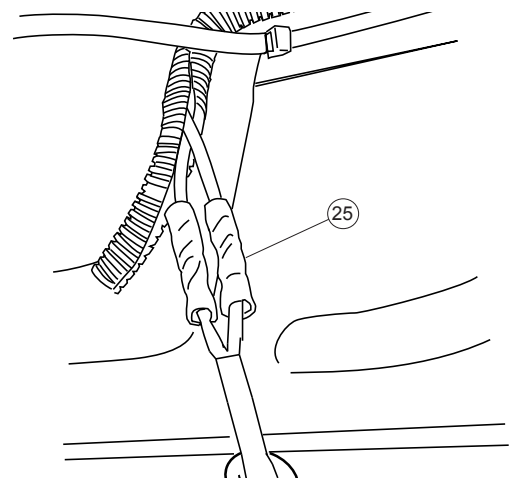
28

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



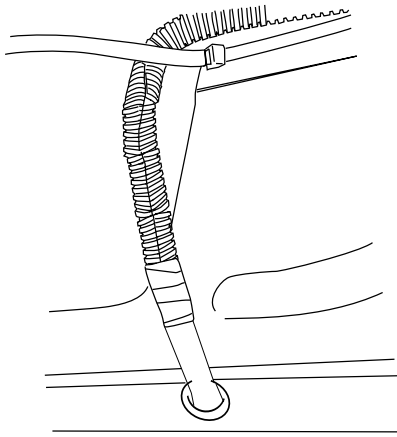
29

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



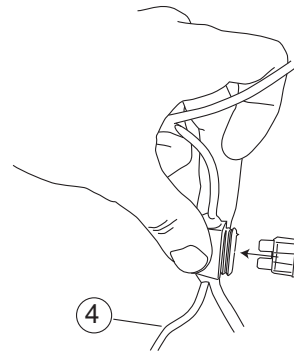
30

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.



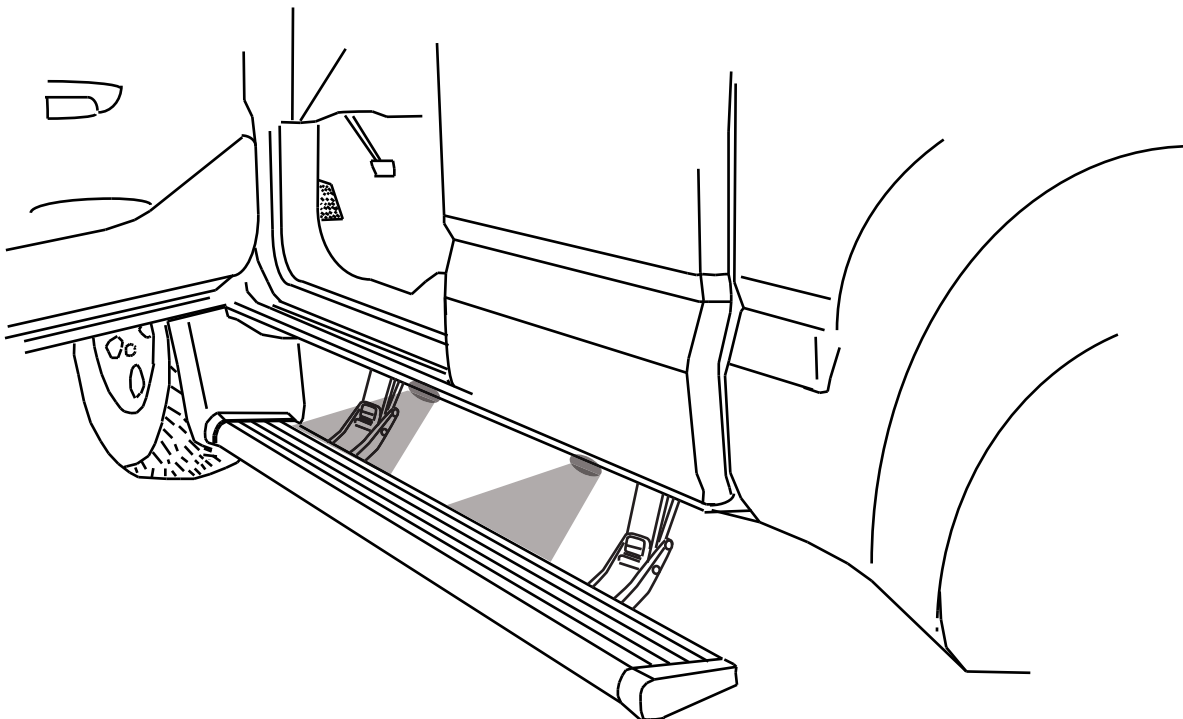
31

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.



**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.

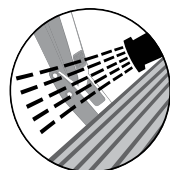
**Automatic stop:**

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.

## 5-YEAR LIMITED WARRANTY

AMP RESEARCH warrants this product to be free from defects in material and workmanship for FIVE (5) YEARS FROM DATE OF PURCHASE, provided there has been normal use and proper maintenance. This warranty applies to the original purchaser only. All remedies under this warranty are limited to the repair replacement of the product itself, or the repair or replacement of any component part thereof, found by the factory to be defective within the time period specified. The decision to repair or replace is wholly within the discretion of the manufacturer.

This warranty specifically excludes labor. If you have a warranty claim, first you must call our factory at the number below for instructions. You must retain proof of purchase and submit a copy with any items returned for warranty work. Upon completion of warranty work, if any, we will return the repaired or replaced item or items to you freight prepaid. Damage to our products caused by accidents, fire, vandalism, negligence, misinstallation, misuse, Acts of God, or by defective parts not manufactured by us, is not covered under this warranty.

ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE CREATED HEREBY ARE LIMITED IN DURATION TO THE SAME DURATION AND SCOPE AS THE EXPRESS WRITTEN WARRANTY. OUR COMPANY SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

**FOR WARRANTY ISSUES WITH THIS PRODUCT PLEASE CALL AMP RESEARCH CUSTOMER SERVICE 1-800-315-9697**

## 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.