

# INSTALLATION GUIDE

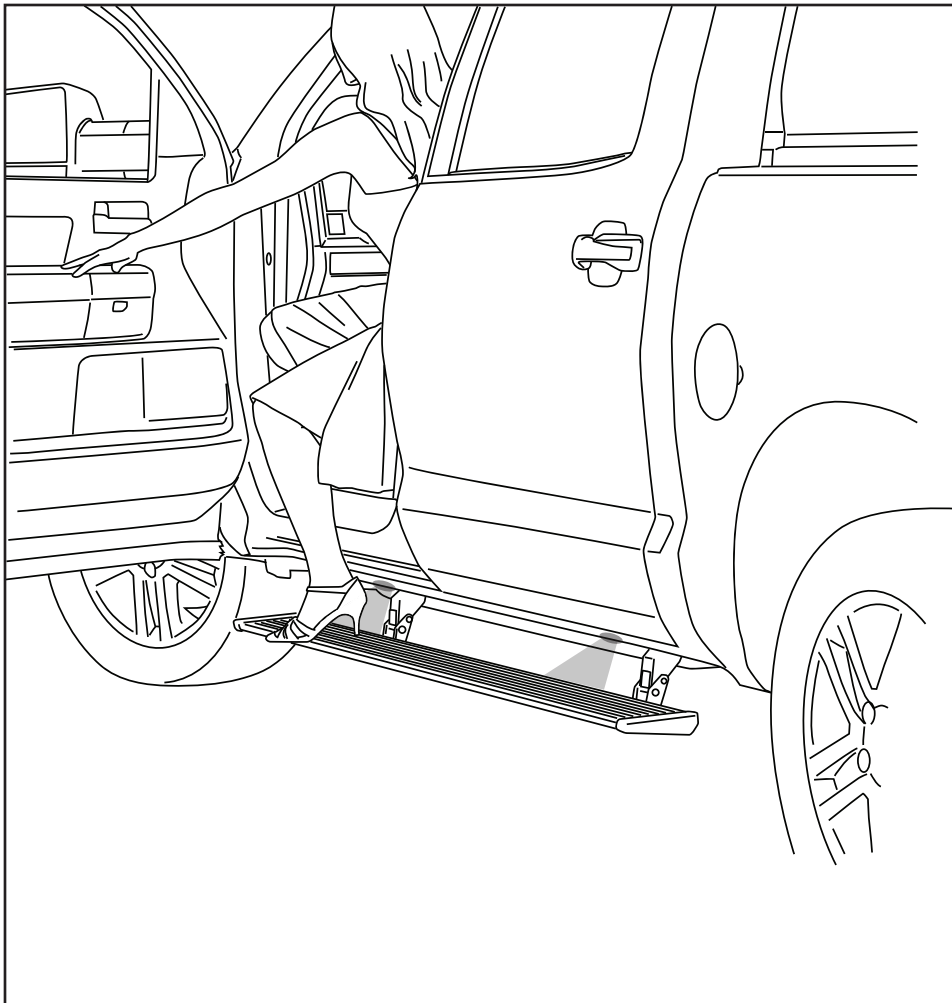
# PowerStep™ Xtreme

MADE IN USA

APPLICATION  
Toyota Tundra CrewMax

MODEL YR  
2007 - 2017

PART #  
78137-01A



## INSTALLATION TIME

**3-5 Hours**

Professional installation recommended

## SKILL LEVEL

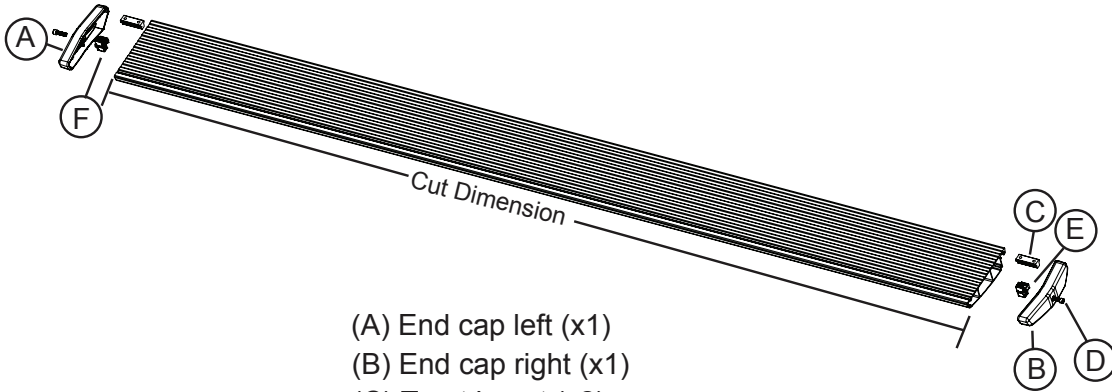


4= Experienced

## TOOLS REQUIRED

- Measuring tape
- 13 mm socket
- 10 mm socket
- Ratchet wrench and extension
- 13mm end wrench
- Wire stripper / cutter
- 3/16" hex key wrench (allen wrench)
- 5mm hex key wrench (allen wrench)
- 4mm hex key wrench ( allen wrench )
- Electrical tape

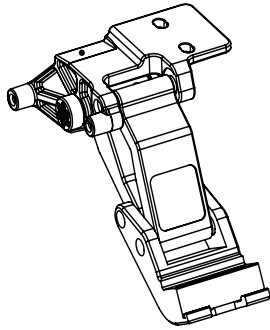
Invented, engineered and manufactured exclusively by AMP Research in the USA. May be covered by one of the following patents: 6,641,158; 6,830,257; 6,834,875; 6,938,909; 7,055,839; 7,380,807; 7,398,985; 7,584,975 ©2012 AMP Research. All rights reserved. Printed in USA.



- (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)

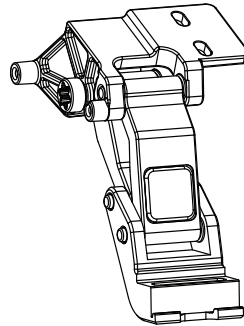
1 x2

Running board assembly



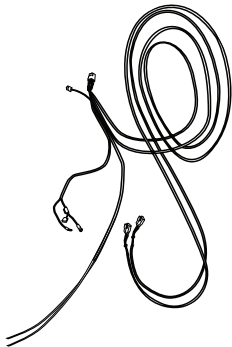
2 x2

Motor linkage assembly (Rear)



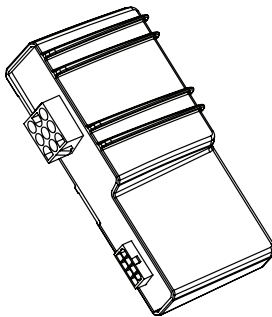
3 x2

Motor linkage assembly (Front)



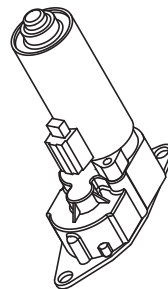
4

Wire harness



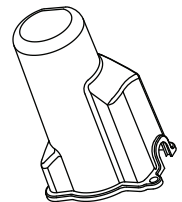
5

Controller XTA



6 x4

Motor



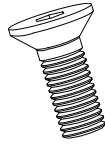
7 x4

Motor Cover

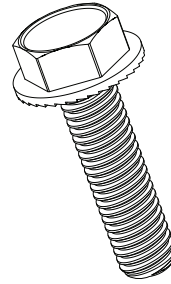
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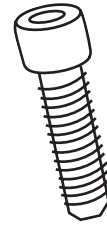
⑧ x12  
Cinch Fastener



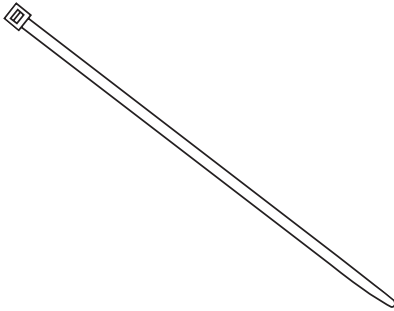
⑨ x8  
Socket Cap Screw



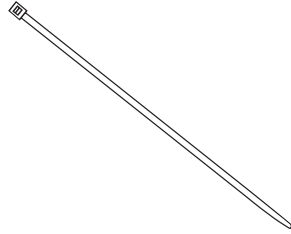
⑩ x8  
Hex Flange Bolt



⑪ x8  
Socket Cap Screw



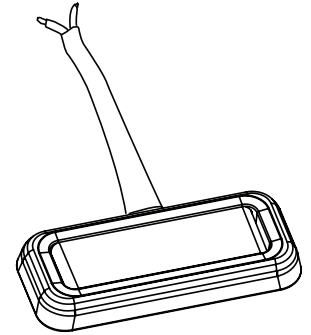
⑫ x2  
Cable tie (11")



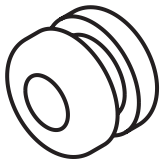
⑬ x20  
Cable tie (7")



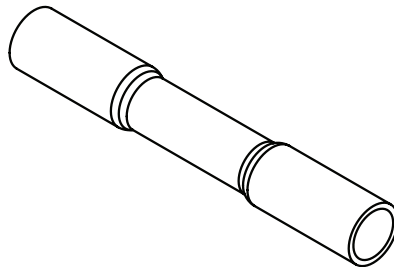
⑭ x2  
Posi-Lock™



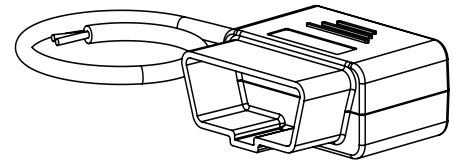
⑮ x4  
LED Lamp



⑯ x4  
Grommet



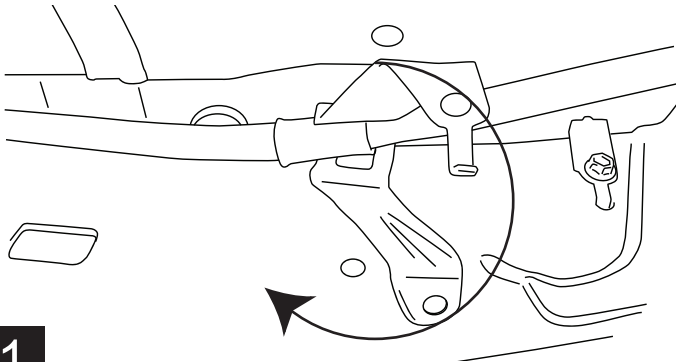
⑰ x8  
Butt Connector



⑱  
OBD II Plug

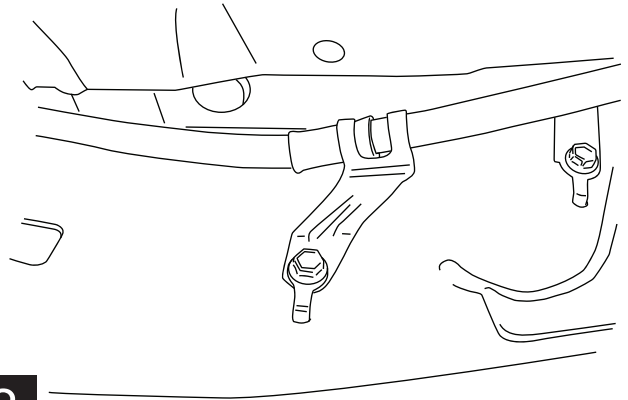
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Remove parking brake cable support from frame. Separate bracket and remove bracket from brake cable. Flip bracket 180 degrees to cable.



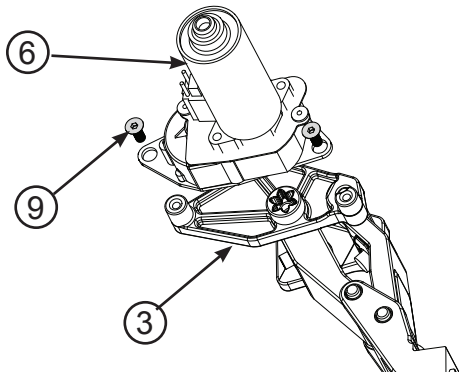
**1**

Secure parking brake cable support to frame so that the bolt is now below the cable.



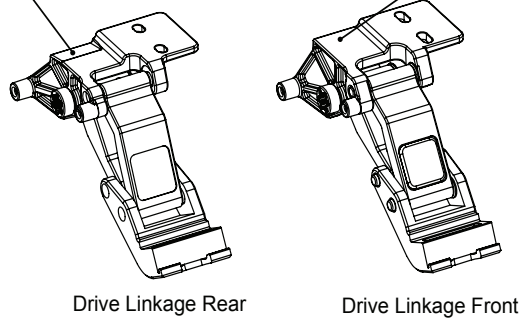
**2**

Slide motor assembly onto drive shaft and mounting bosses of linkage assembly. Use socket head cap screws (9) and tighten to 8 ft-lbs / 11Nm.



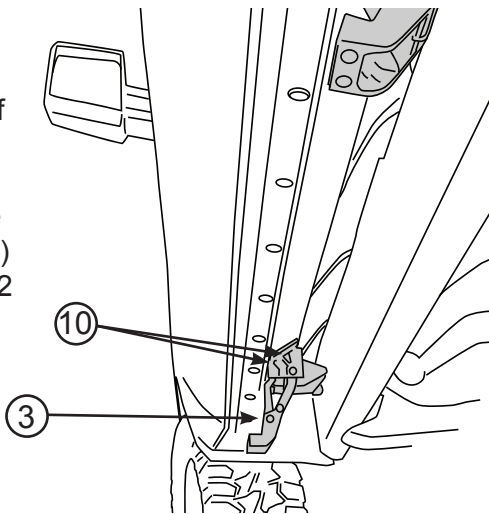
**3**

NOTE: When installing linkages take note of differences in upper mounts.



**4**

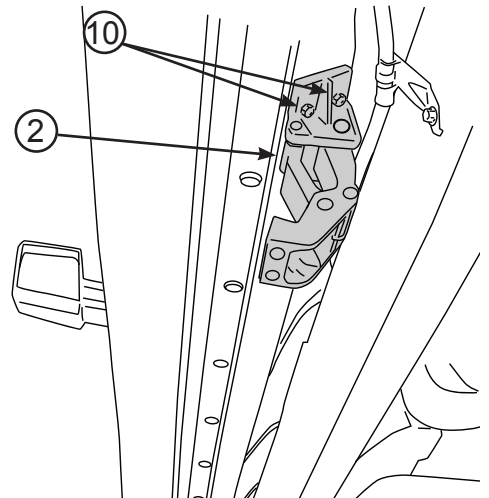
Install front motor linkage on driver side in second set of factory running board holes from front. Use flange bolts (10) and torque to 22 ft-lbs / 30Nm.



**5**

Repeat linkage installation on passenger side.

Install rear drive linkage in last set of factory running board holes from rear. Use flange bolts (10) and torque to 22 ft-lbs / 30Nm.

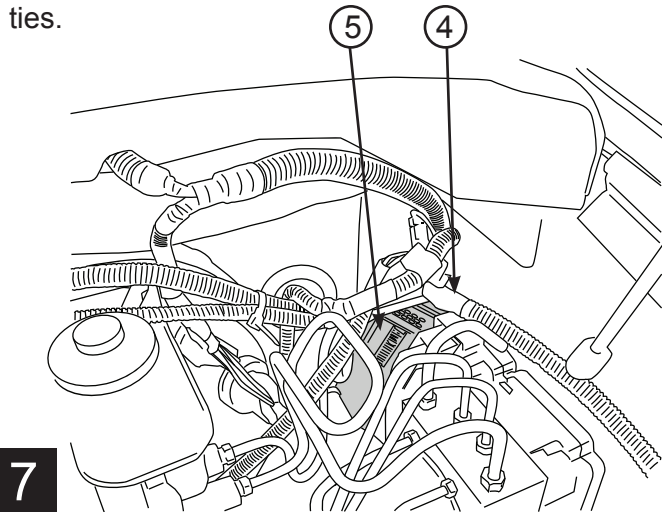


**6**

Repeat linkage installation on passenger side.

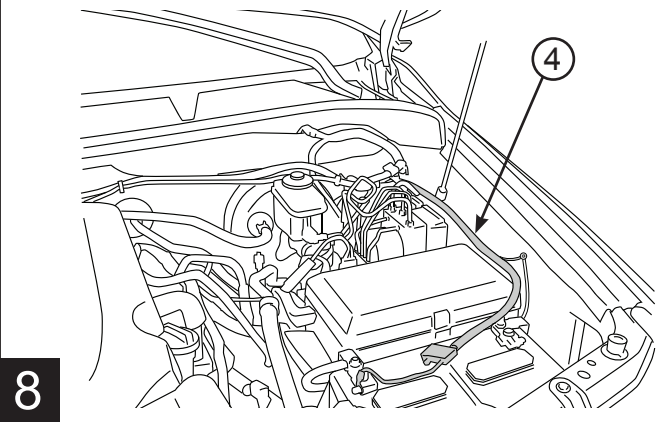
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Install controller under hood on driver side fender apron. Secure to factory wiring loom with 11" cable ties.



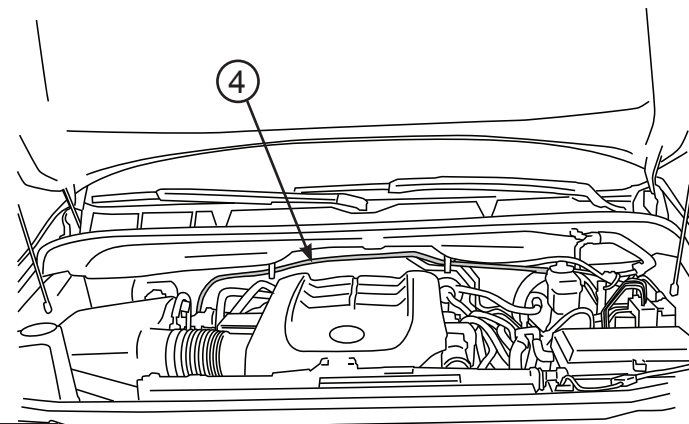
7

Remove power fuse. Connect wire harness to controller and secure locking clip. Connect red power lead to positive battery terminal and black ground lead to grounding lug on fender apron.



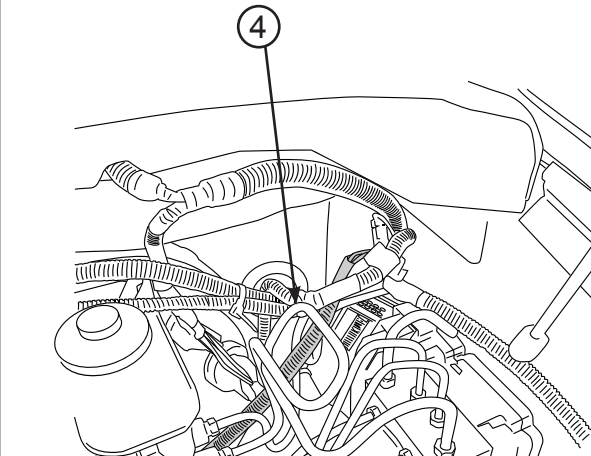
8

Route longest leg of wire harness across fire wall to passenger side and under vehicle outside of frame rail.



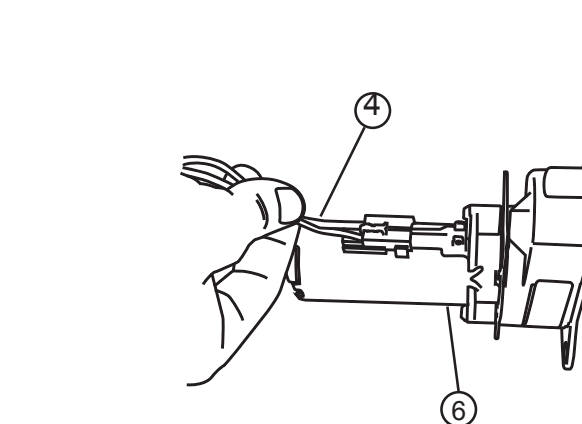
9

Route shorter leg of wire harness down driver side fender well and under vehicle outside of frame rail.



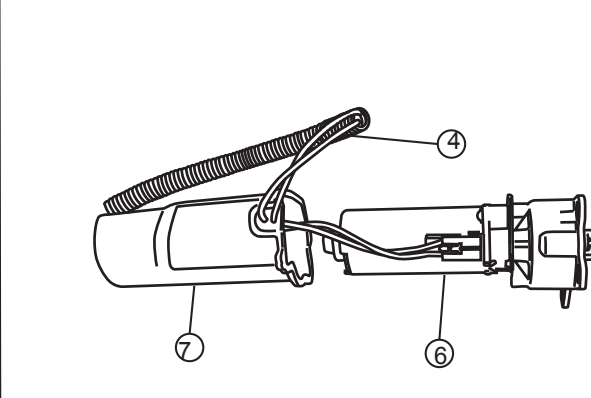
10

Insert plug from wire harness onto motors.



11

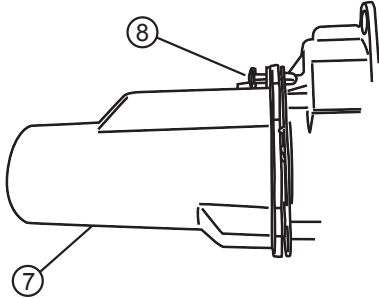
Slide rubber grommet on wire harness into slot of motor cover. Install motor cover onto motor.



12

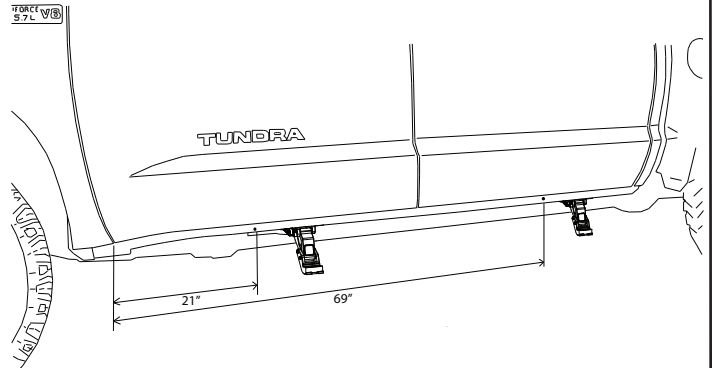
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Partially separate the plastic rivet from the pin by bending the pin back and forth. Slide motor cover over motor and insert plastic push pin rivets in mounting holes of motor cover. Drive pin flush with rivet head. Use pliers to ease installation.



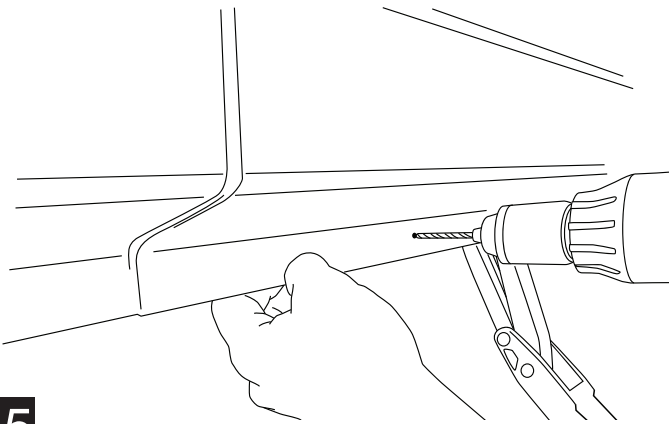
13

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 21" for front LED Light and 69" for rear LED Light.



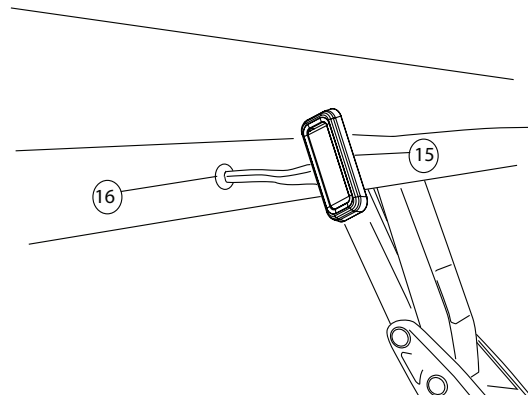
14

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



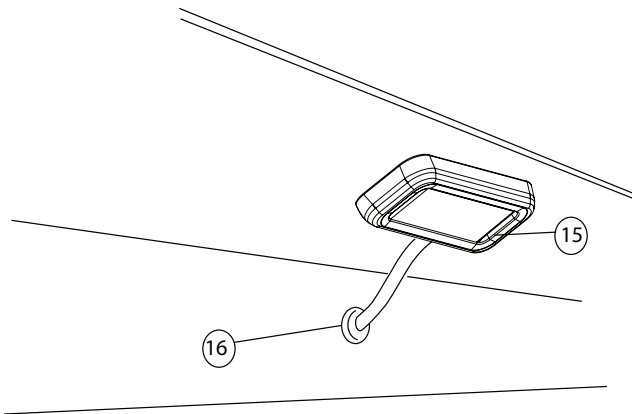
15

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



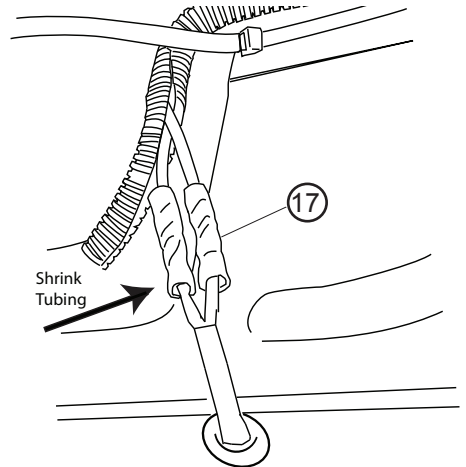
16

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



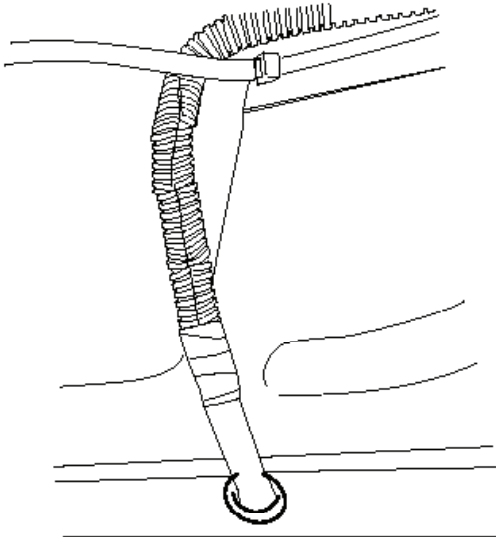
17

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

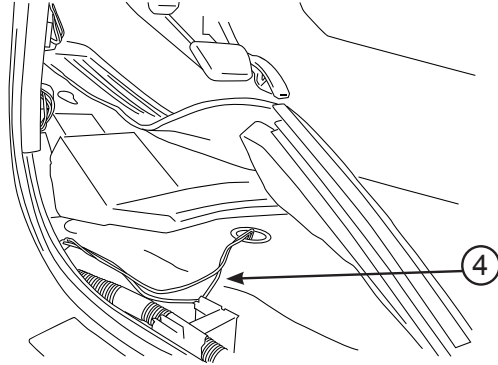


18

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.



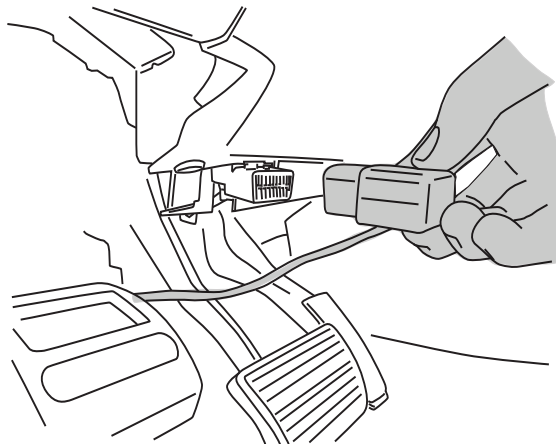
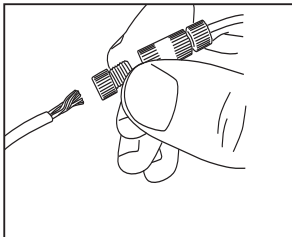
Remove driver front sill plate and kick panel. Pull up carpet. Locate rubber grommet under carpet in forward floorboard. Cut a slit in the rubber grommet and pass the trigger wires up through grommet under carpet on driver and side.



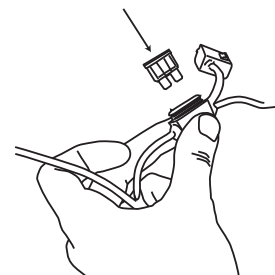
19

**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.

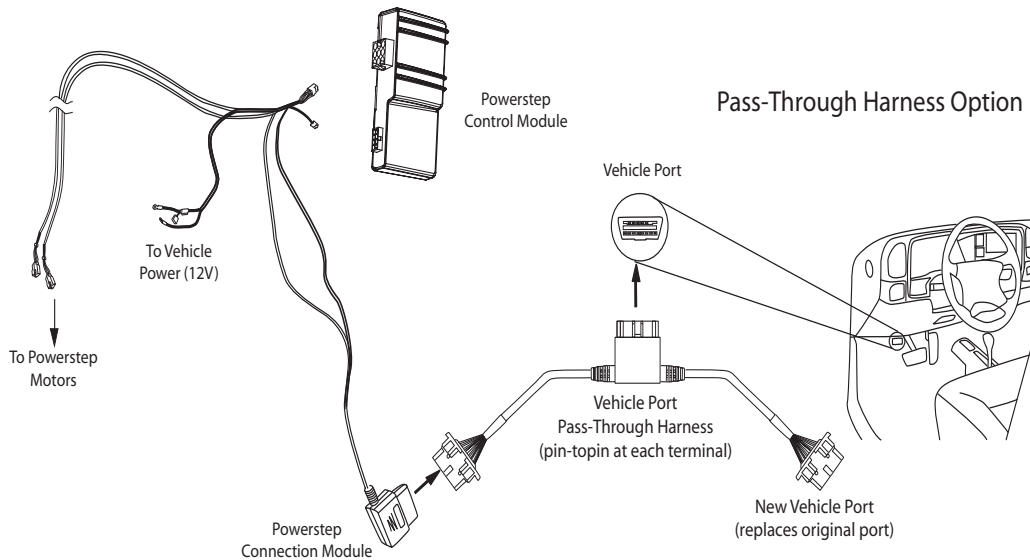
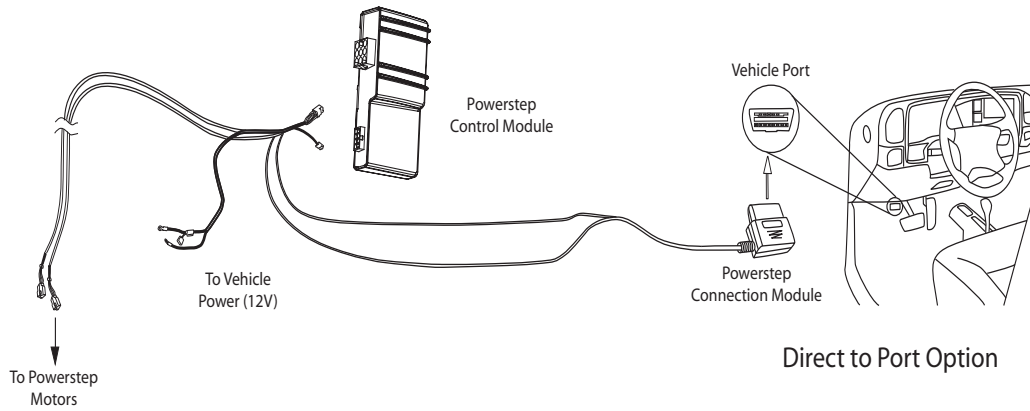


Once OBD II Plug is installed reinstall fuse.



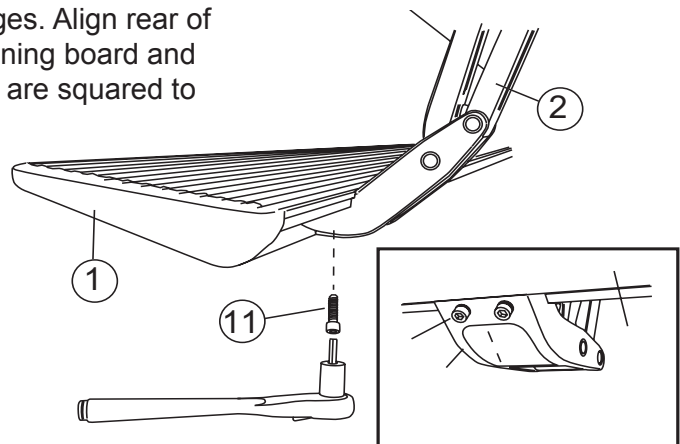
20

# AMP RESEARCH POWERSTEP™ – TOYOTA TUNDRA



21

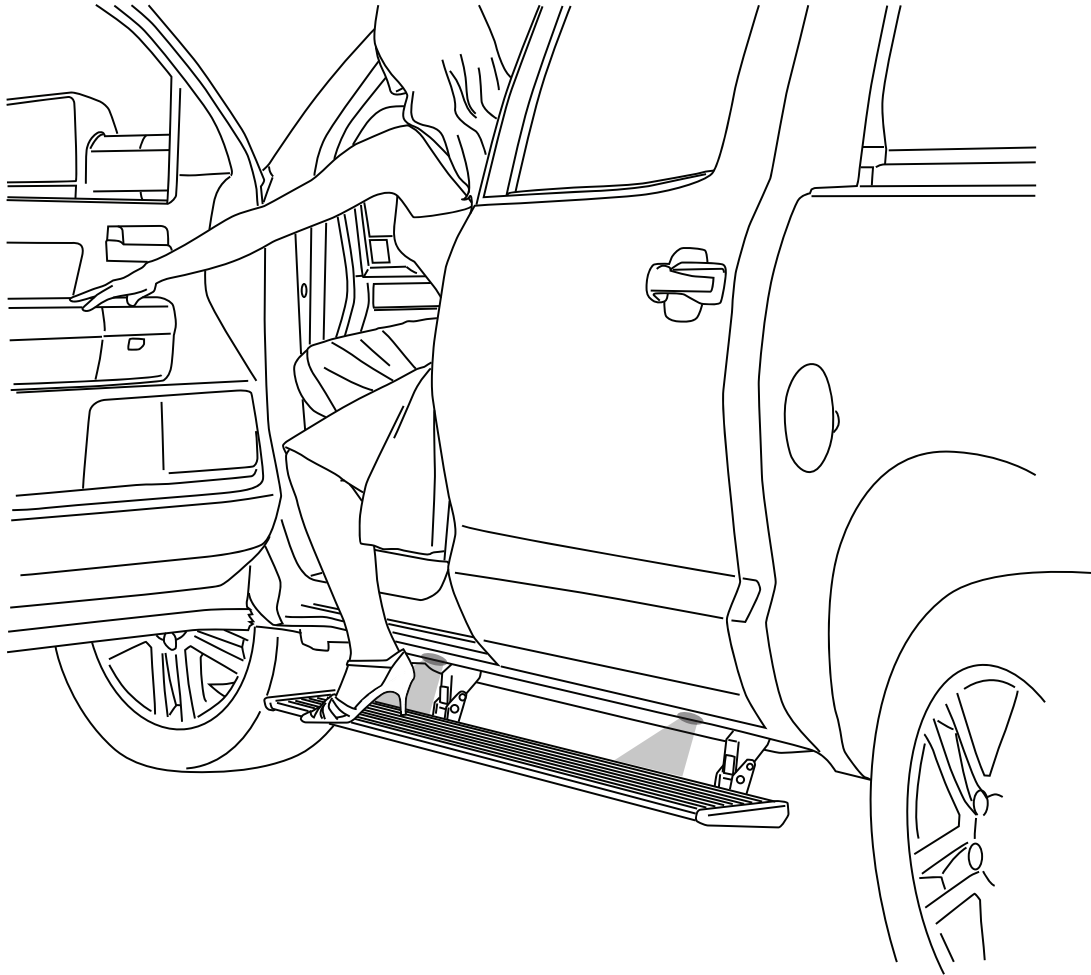
Install running board. Open door to deploy both linkages. Align rear of running board with back edge of rear door. Mount running board and tighten fasteners to 10 ft-lbs / 14Nm. Ensure linkages are squared to body prior to torquing fasteners.



22



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.

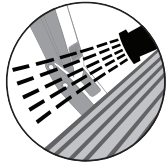
**Automatic stop:**

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.