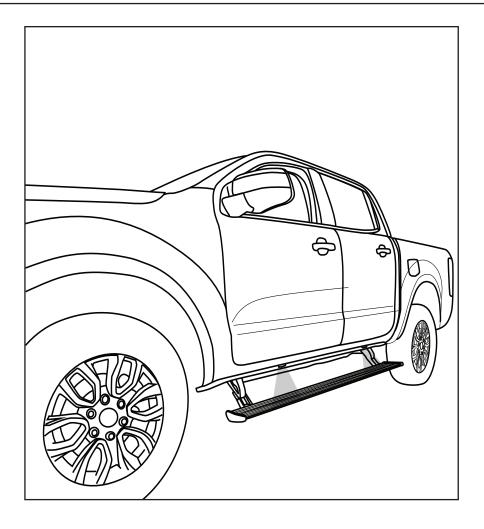
#### INSTALLATION GUIDE

# AMP POWERStep

APPLICATION LENGTH MODEL YR PART #

Ford Ranger - Super Crew 72" 2019 76136-01A

Ford Ranger - Super Cab 65" 2019 76136-01A



### INSTALLATION TIME 3-5 Hours

Professional installation recommended

#### SKILL LEVEL









4= Experienced

#### **TOOLS REQUIRED**

- Safety goggles
- Measuring tape
- ☐ 10 mm socket
- □ 10 mm ratchet wrench
- □ 13 mm ratchet wrench
- ☐ 15 mm ratchet wrench
- ☐ Ratchet wrench and extension
- Pliers
- Wire crimpers
- ☐ Wire stripper / cutter
- □ 3/16" H ex key wrench (allen wrench)
- □ Electrical tape
- ☐ Weather proof caulking (silicone sealer)
- □ 1/8" Drill bit
- □ 9/32" Drill bit
- □ Drill
- □ Heat Gun

#### WARRANTY

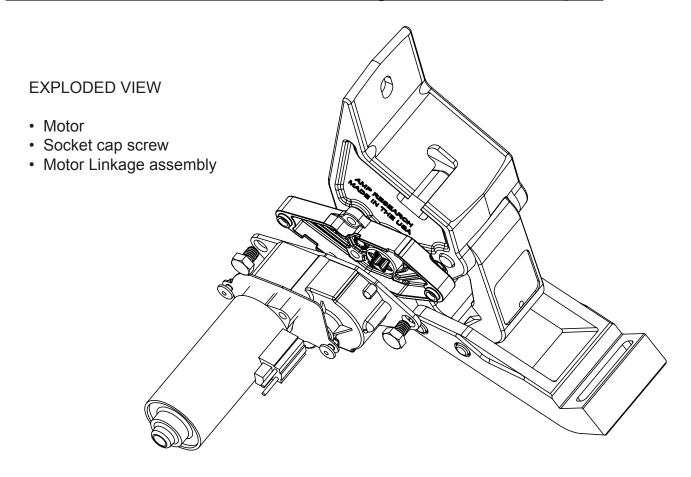
**5-Year Limited Warranty** 

#### AMP RESEARCH TECH SUPPORT 1-888-983-2204 (Press 2) Monday - Friday, 7:00 AM - 5:00 PM PST

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.

## INSTALLATION GUIDE Attaching motor to Linkage assembly

#### The motors must be attached to the Linkage assemblies on step 5



#### **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.**

#### **COMPONENT/PARTS IDENTIFICATION**

Note: Some Applications require modification.

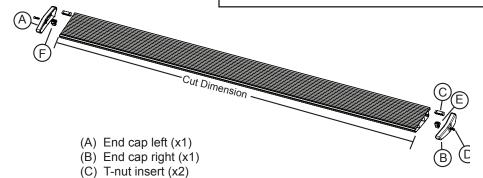
Application

Cut Length

Crew Cab

72" (No Modification Required) 65" (Trim 7")

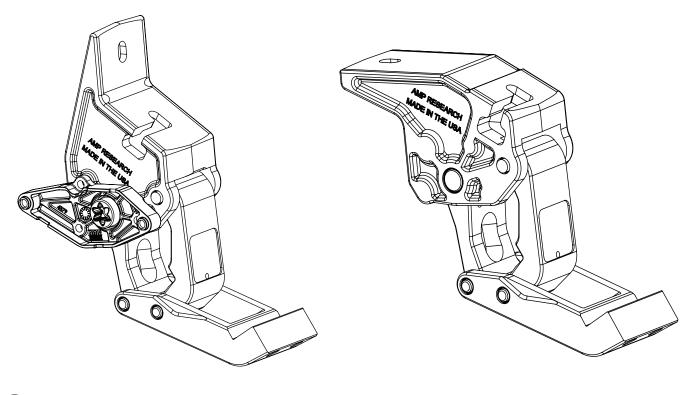
Extended Cab 65" (Trim 7"



(D) Socket cap screw (x2)(E) End cap wedge right (x1)(F) End cap wedge left (x1)

 $(1)_{x2}$ 

#### Running board assembly

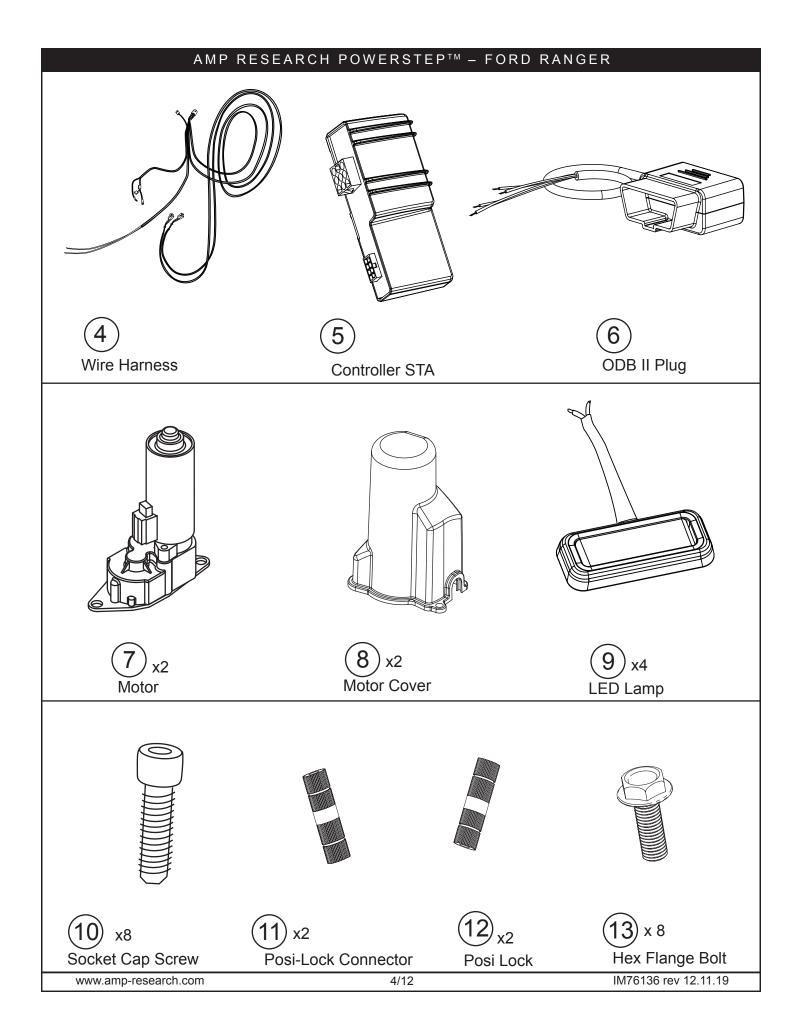


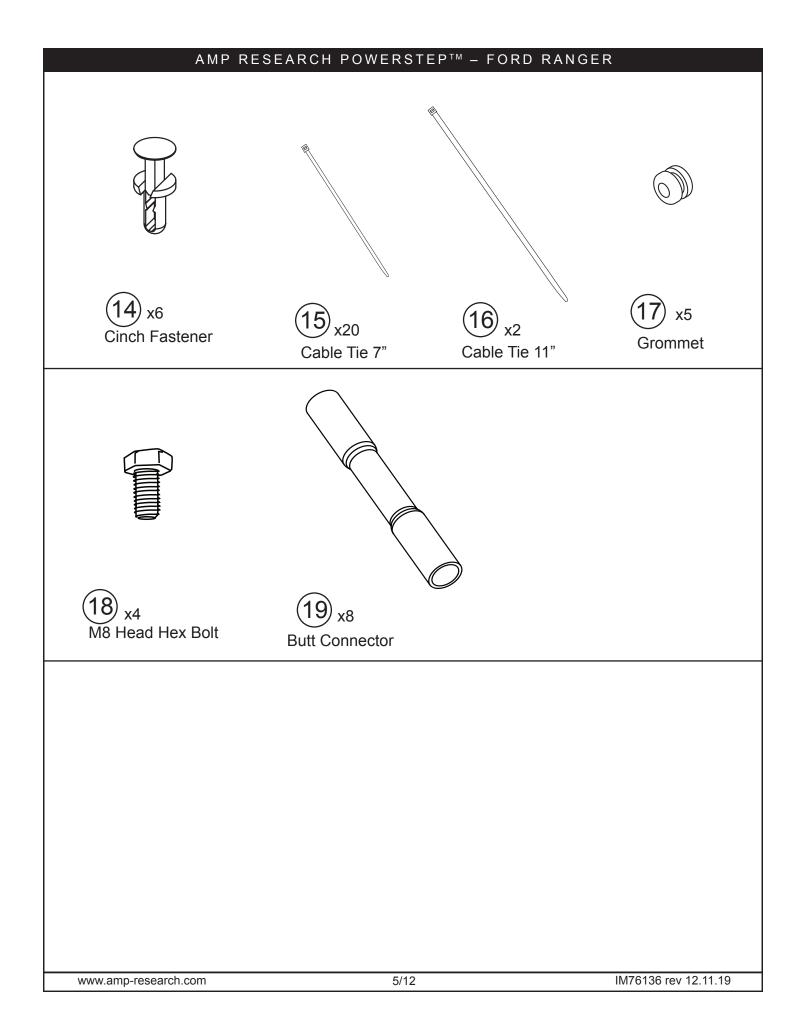
(2) x2

Motor Linkage Assembly (Rear)

 $(3)_{x2}$ 

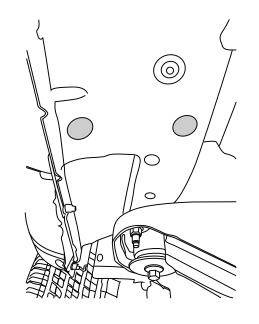
Idler Linkage Assembly (Front)

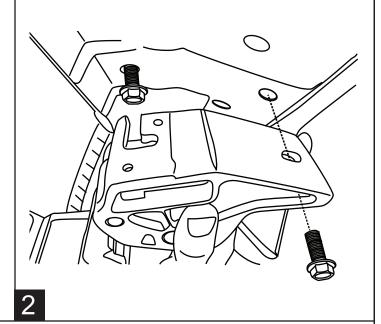




Locate **Front Idler linkage** location. If plastic plugs are present remove plastic plugs to expose threads.

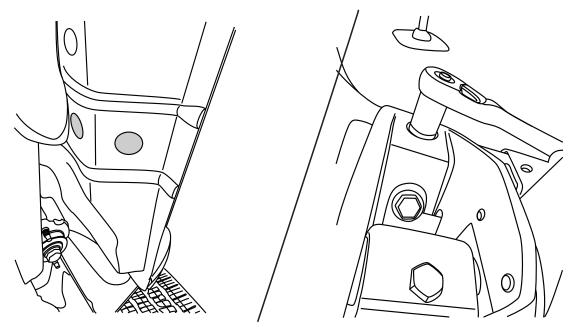
Pre thread supplied M10 flange bolt and hook linkage over bolt as shown. Once linkage is in position thread in rear linkage mounting bolt. Snug up bolts but do not torque.





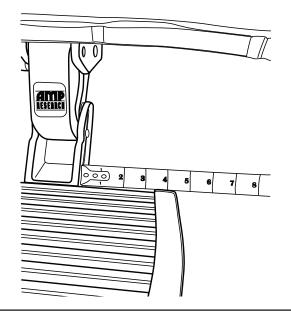
Locate **Rear Drive linkage** location. If plastic plugs are present remove plastic plugs to expose threads.

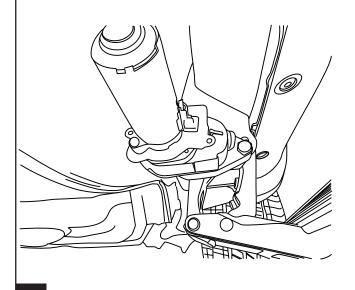
Pre thread supplied M10 flange bolt and hook linkage over bolt as shown. Once linkage is in position thread in rear linkage mounting bolt. Snug up bolts but do not torque.



Install board to linkages. Measure approx. 4.5" from back of linkage to the tip of the board as shown. Tighten socket cap screws (10) with 3/16" Allen wrench. Torque to 10ft-lbs. Hand cycle the board to ensure no bind is present. Once verified Torque linkage mounting bolts (13) from steps 1-4 to 30ft-lbs.

Install motor onto linkages using supplied Hex head bolts (18). Torque to 36in-lbs. (See page 2 for motor install)

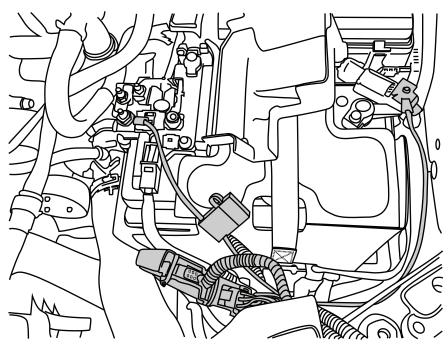




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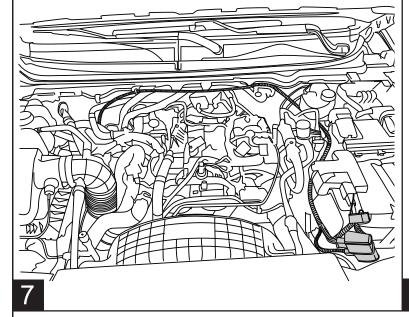


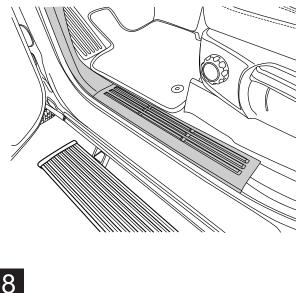
Remove Fuse from powerstep wire harness. Mount controller using supplied zip ties to harness in front of battery as shown. Connect positive leads from harness. Red to positive battery terminal and black to negative battery terminal.



Route the two wire harness legs down over to each wheel well. Long leg will run across to passenger side, short leg will run down to driver side. Ensure loom is free from steering and exhaust components.

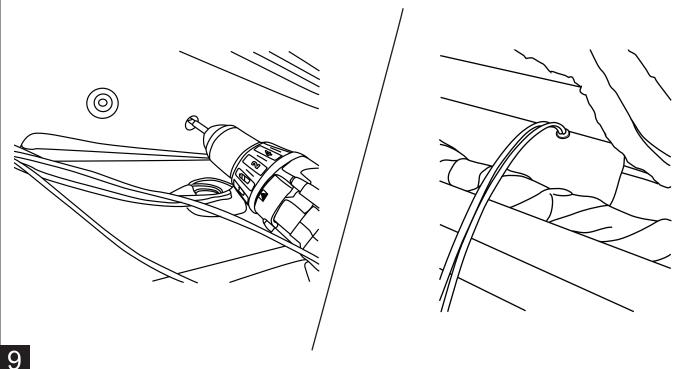
Remove floor mat and sill plate cover to expose floor below.



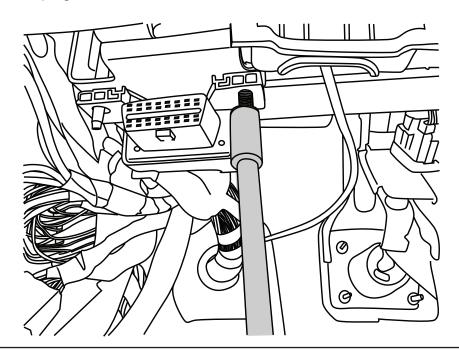


Locate hole forward of rubber plug. Approx location is in footwell area of cab. Use a 9/32" drill bit and drill thru floor. While drilling lift carpet to ensure drill bit does not damage carpet inside cab.

Insert provided grommet (17) and trigger wires thru hole. Route wires towards kick panel area.



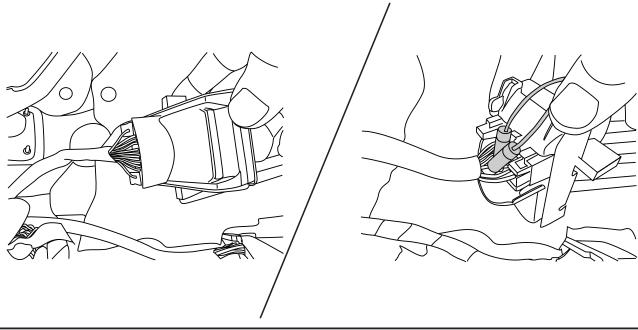
Locate OBD port and remove bolt and nut holding it in place with 8mm socket to gain better access to back side of plug.



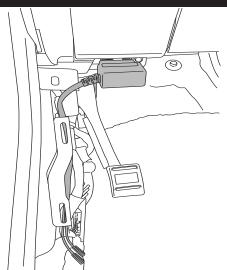
10

Locate the following wires and connect with supplied posi taps to the following wire colors listed below.

Factory Can Wire	OBD Module wire Color
Grey with Orange Stripe	White Wire
Purple with Orange Stripe	Blue Wire

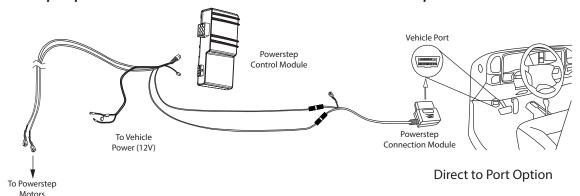


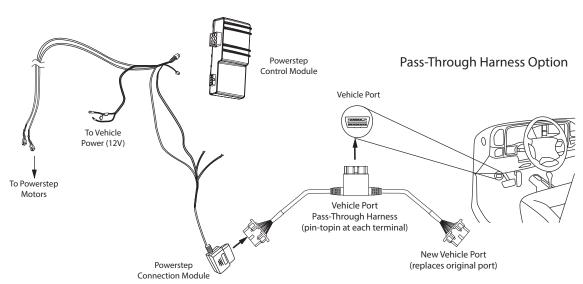
Use supplied posi lock connectors to attach the 2 purple wires of the obd harness to the main harness. Attach matching colors on the harness to the wires on the module. Lastly reinstall Factory OBD port removed in step 11. Plug in module to OBD port on the vehicle. Reinstall sill plate removed from step 8.



13

**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 below for a brief description.* 





14

www.amp-research.com 10/12 IM76136 rev 12.11.19

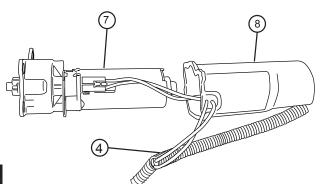
# AMP RESEARCH POWERSTEP™ - FORD RANGER Insert grommet into drilled holes. Insert lamp wires through the grommets. (Silicon lube will help wires slip through grommets). 15 Affix lamp to rocker panel surface. Make sure lamp is affixed to a flat, clean surface. 16 Using supplied butt connectors, connect the lamp wires. Red to Red, Black to Black. Once Crimped use heat gun to shrink tube. 17 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. 8

11/12

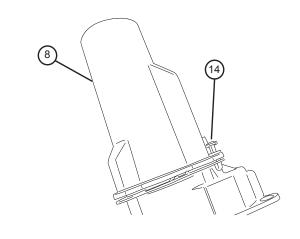
www.amp-research.com

IM76136 rev 12.11.19

Insert plug from wire harness (4) onto motor (7). Slide rubber grommet on wire harness into slot of motor cover (8). Insert motor cover onto motor. Use electrical tape to cover any exposed wire from the motor.



Insert plastic push pin rivets (14) in mounting holes of motor cover (8). Use pliers to ease installation.

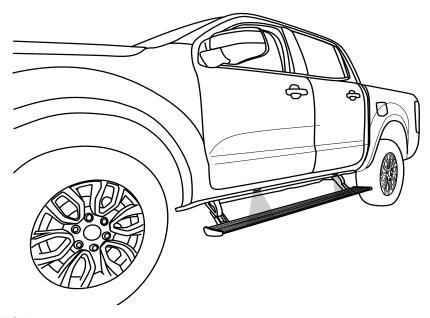


20

#### Reinstall fuse.



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 reillumintated 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 1-888-983-2204

#### **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.