

# **Early Bronco AMP PowerStep Running Boards**

These AMP PowerSteps will not work with the factory auxiliary side fuel tank. For optimal fuel range, we highly recommend adding our M1A1 23-gallon Fuel Tank if you have not done so already.

#### **PREPARATION**

Ensure the Bronco is parked on a level surface. Set the emergency brake and chock the wheels to prevent the vehicle from rolling. Disconnect the battery.

If your Bronco has a side fuel tank, the tank and brackets must all be removed prior to installation of your new AMP PowerSteps. Ensure the fuel tank is empty prior to removal.

Layout all components received with your new PowerSteps and verify you have received all components listed on the enclosed Inventory Sheet to ensure you have everything needed to complete the install.

#### **AMP Step Motor to Motor Linkage Assembly**

Prior to installation, you must attach a provided Motor to each Motor Linkage assembly. Use a T20 Torx bit to install.

#### 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.

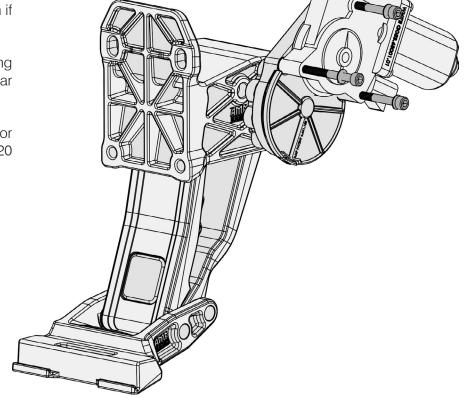
Position the gear cover in place as shown if not already in place.

Seat motor in position on the three mounting bosses. This may require adjusting the gear by moving the swing arms.

After seating into place, fasten the motor with the three motor mount screws with T20 Torx Head.

Tighten screws to 36 in-lbs.

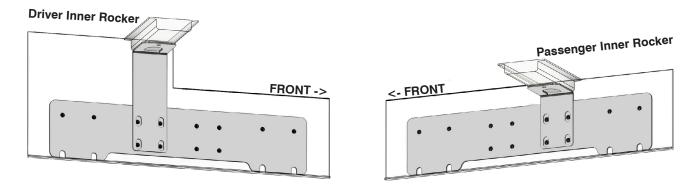
Do not over torque.



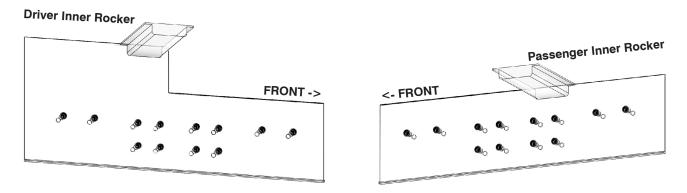


#### **AMP PowerStep Support Bracket Installation**

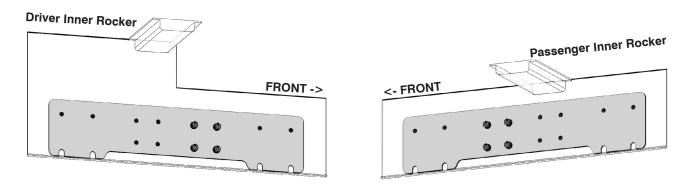
Align Main Bracket and L-Shape Support Brace as shown. **Ensure Support Braces align to center of floor crossrail and holes shown in the graphic below. The bottom of the main bracket should align as close to the bottom lip of inner rocker as possible.** Clamp Main Bracket in place. Use a center punch to mark inner rocker at center of each of the 12 holes in the mounting bracket.



Remove Main Brackets and Support Braces. Drilll 1/8" pilot holes where each hole center was marked in Step 1. Use a step bit to increase hole size to 1/2", then use provided 17/32" Drill Bit for final hole size. Install provided M8 Rivnut in each hole. It's critical these holes line up with the holes in Main Bracket.



With the 12 rivnuts installed per side, mount the main brackets to the inner rocker panels using provided bolts & washers. For now, only mount using the four hole locations indicated below. (Do not tighten fully)





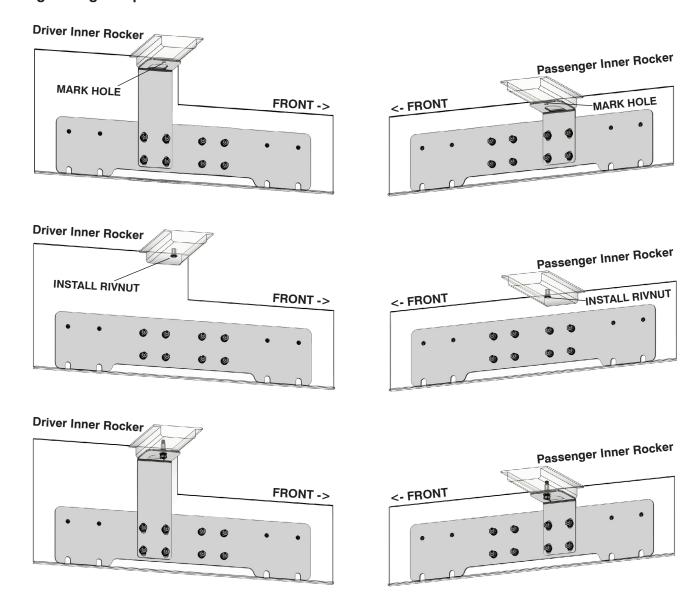
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With Main Brackets installed, bolt Support Braces to the Inner Rocker Panels as shown. **Do not tighten.** 

Mark the underside of the floor crossrail where the upper mounting hole on each Support Brace aligns. Remove the Support Braces and install a provided rivnut in each crossrail. **NOTE: Step bit will not work on floor crossrail due to limited depth before hitting the underside of the floor pan.** 

With rivnuts installed, mount the Support Braces using provided bolts & washers and tighten all bolts securely. To ensure the bolts remain secure, add a bit of provided Blue Threadlocker to the threads before final tightening. Torque to 20 ft lb.

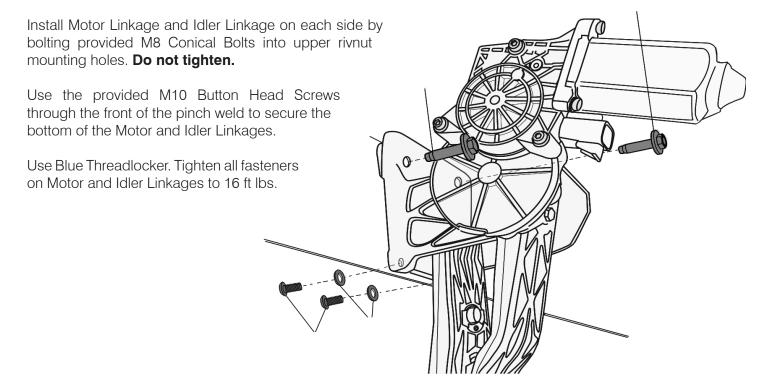


At the bottom of the Main Bracket on each side are two slotted holes. Use a center punch to mark the center of the rounded section of these slotted holes. Drill a 1/8" pilot hole at each of the marked locations. Look at the outside of the pinch weld (at the bottom of the rocker panel) to ensure the pilot hole is centered on the pinch weld. If not, mark and drill a new pilot hole in the preferred location on the pinch weld. Once you have a pilot hole you are content with, use a step bit to increase the hole size to 13/32".



#### AMP PowerStep Motor & Idler Linkage Mounting

We chose to install the Motor Linkage toward the front of the Bronco and the Idler Linkage toward the rear to provide better protection for the motor. Which linkage is installed in front or back position is at your discretion. The wiring harness will reach for either option.

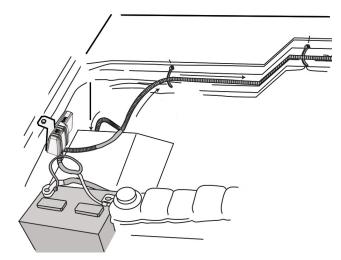


## Wiring the AMP PowerSteps

Please note: The provided wiring harness was originally designed for a larger vehicle, and therefore has sections that are longer than what is required for installation in the Early Bronco. Modifying the wiring harness is not endorsed by WILD HORSES and should only be attempted by a professional. Improper modification may cause unwarranted damage to the AMP Steps or fire. - WILD HORSES disclaims all responsibility for damages incurred as a result of modification of the Wiring Harness.

Locate the two ring terminals on the provided Wiring Harness. Ensure the ring terminal ends of the Wiring Harness can easily reach the positive and negative battery posts. **Do not connect yet.** You will do this at the end when reconnecting the battery cables.

Lead the Wiring Harness from the battery along the passenger side fender apron just above the wheel well. If desired, use two provided Zip Tie Mounts and Zip Ties to secure the wiring harness to the fender apron - will require drilling two small holes in the fender apron, see provided Zip Tie Mount Instructions.





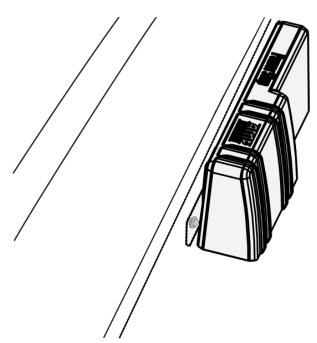
#### **AMP PowerStep Controller STA Mounting**

Identify where you would like to mount the AMP Step Controller STA inside the engine bay. You will need a spot on the passenger side around the back of the wheel housing and firewall cowl. Use provided Zip Ties to mount the AMP Step Controller STA to the Controller Mounting Bracket. The Mounting Bracket should be pressed against the backside of the Controller.

Connect the two corresponding plugs on the Wiring Harness to the Controller STA - pay close attention to the plug layout to prevent plugging in backward which can result in damage to the plug or the Controller.

After these plugs, the Wiring Harness splits off into two sections to lead back to the Step Motors. Lead the shorter of these two sections down between the passenger wheel well and firewall. This section will control the passenger side steps. Lay the longer section across the firewall cowl leading toward the driver side of the Bronco.

Use the 1/4" x 1" Bolts, 1/4" Hex nuts and Flat Washers that came with the Mounting Bracket to secure the Controller to the Bronco. You will need to drill two holes to match the holes in the Mounting Bracket where you have opted to mount the Controller.



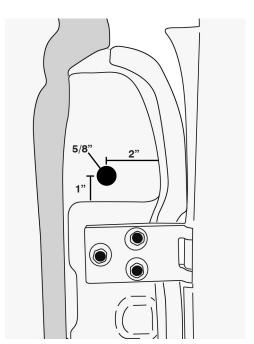
Use six (6) to seven (7) of the provided Zip Tie Mounts and Zip Ties to secure the Wiring Harness along the top front of the firewall cowl of the Bronco.

## **Door Trigger Switch Installation**

NOTE: Installation of the provided Door Trigger Switches requires drilling holes in the driver and passenger A-pillar of your Bronco. The following steps should be repeated for both the Driver and Passenger Side.

Open the door and locate the flat upper section at the top of the A-pillar. Measure up 1" from where this flat section begins just above the upper door hinge. At this position, measure 2" in from the outer edge of the A-pillar and mark the intersection of these measurements with a center punch.

Start with a small drill bit to drill a pilot hole where the center punch mark was made. Gradually increase the hole size until this hole is 5/8" in diameter.





#### **Door Trigger Switch Installation (continued)**

Directly behind the newly drilled 5/8" hole, follow this same method to drill a 3/8" hole in the fender side of the A-pillar. This hole will be used to lead the Door Trigger Switch wiring to the switch.

Locate the **Purple Trigger Wire** on the Wiring Harness.

Use 4-feet of provided Split Braid Wiring Sleeve to shield trigger wire. Secure the sleeve to the Wiring Harness near the location where it splits from the Wiring Harness using a provided Small Zip Tie.

**NOTE: The sleeve will be longer than the trigger wire.** This is to support the additional wire coming off back of Door Trigger Switch.

Lead the trigger wire through the factory hole located at the bottom of the kick panel on the Bronco.

Use a wire hanger or similar tool to attach the end of the Split Braid Sleeve and lead it up the firewall between the fender and fender apron, through the 3/8" hole in the fender side of the A-pillar and finally through the 5/8" hole in the door side of the A-pillar.

Pull the sleeved trigger wire through until you can access the trigger wire from the door side of the A-pillar.

Use provided Butt Connector to splice the Door Trigger Switch wire to the trigger wire. Check that the connection is secure, then work all the wire up to the Door Trigger Switch into the sleeve and cut off any excess sleeve. Use a provided Small Zip Tie to secure the sleeve to the trigger switch wire.

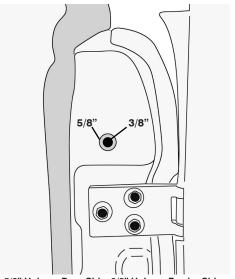
Carefully pull the sleeved trigger wire back through the A-pillar until the Door Trigger Switch can install fully into the 5/8" hole in the A-pillar. (This is a two-person job).

With the switch in place, pull back the rubber cover on the switch's mounting tab. Ensure the hole in the tab is centered directly above the main body of the switch. Use a center punch to mark the center of the hole where it aligns with the A-pillar.

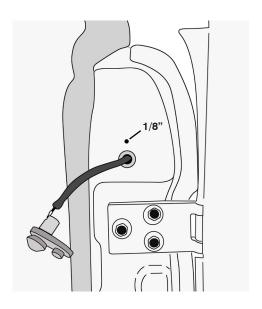
Slide the tab out of the way and carefully drill a 1/8" hole where you just marked with the center punch.

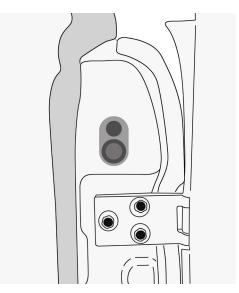
Put the tab back in place and hold a provided 5/16" washer between the tab and the A-pillar. Use a provided Sheet Metal Screw to secure the switch to the A-pillar. Place the rubber cover over the mounting tab of the switch you may opt to use a bit of glue to secure it.

Repeat Door Trigger Switch Installation on the other side of the Bronco.



5/8" Hole on Door Side, 3/8" Hole on Fender Side







#### **Connect Wiring Harness to Motor Linkage**

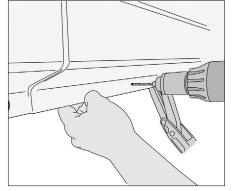
Lead the remaining portion of Wiring Harness back toward the AMP Steps under the rocker panels. Connect the corresponding plug to each Step Motor on the Motor Linkage.

## **Install LED Lights for Steps**

Mark and drill a 5/16" hole through the pinch weld under the rocker panel 1.5" back from the rearmost pinch bolts on each of the Motor Linkage and Idler Linkage. These holes are to be used for the wiring of the LED Lights.

Deburr all holes prior to installing the LED Lights.

Place a provided Wire Grommet on the wire coming from the LED Light. We found putting the grommet on the wire first



makes installation easier. Carefully lead the wire through the newly drilled hole in the pinch weld and secure the grommet in the pinch weld. Have patience installing the grommet to avoid tearing it. Use a small flat screwdriver to help work it into the hole.

Make sure the underside of the rocker panel is clean where the LED Light will be mounted. Alcohol wipes are handy at this point to ensure a good surface for adhesion. Remove the cover from the adhesive strip on the backside of the LED Light and mount the light to the underside of the rocker panel about 3/4" in front of the pinch weld.

Use provided Butt Connectors to connect the LED Lights to the wire leads coming off the Wiring Harness.

## **Secure Wiring Harness to Body**

Use provided Zip Tie Mounts and Zip Ties to ensure the Wiring Harness is well secured to the Bronco's body to ensure no loose wiring is hanging. Use caution to ensure wiring is well protected from sharp edges that could cause wear and eventual cutting of the wires.

When securing the Wiring Harness above the Motor Linkage and Idler Linkage, be careful not to drill the inner rocker panel more than 1/2" above the Main Bracket. Drilling any higher could hit lower door seal or cause visible holes in the inner rocker when opening the driver door.







#### **Connect Power and Test**

Reconnect the battery cables. - Connect the black wire with ring terminal end to the negative post of the battery cable. Connect the red wire with ring terminal end to the positive post of the battery cable. - If the ring terminals on the Wiring Harness are too small, cut off these ring terminals and install the provided larger Ring terminals to the Wiring Harness.

Open each door and verify that the Motor Linkage extends when the door opens and the LED Lights illuminate.

Close each door and verify the LED Lights turn off and the Motor Linkage retracts - there should be a 3-second delay before the Motor Linkage retracts.

#### **Install Step Boards**

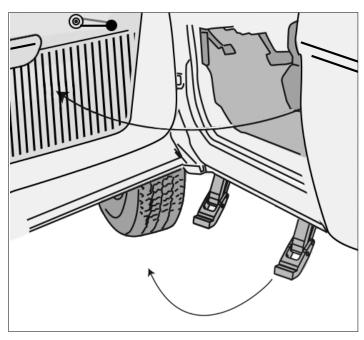
Once you have confirmed everything is working correctly, open the doors to extend the Motor Linkage. With the Motor Linkage on each side extended, disconnect power at the battery. The Motor Linkage should remain extended.

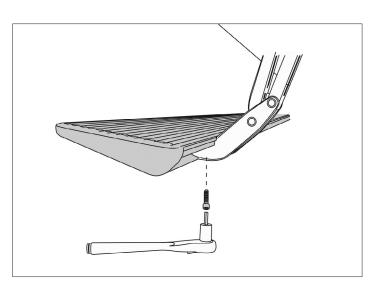
Place a Step Board on the end of the Motor Linkage making sure the silver backing plate is in line with the holes in the bottom of the Motor Linkage arm. You will need to be under the vehicle to see this. Holding the Step Board in place, use the provided Socket Cap Screws to secure the Step Board to the Motor Linkage Arm. Do not fully tighten.

Repeat the previous process to connect the Step Board to the Idler Linkage arm. You will likely need to push the Idler Linkage arm forward for it to align with the Step Board before it can be bolted in place.

With the Step Board loosely installed on both the Motor Linkage and Idler Linkage arms, slide the Step Board to the left or right until it is well centered under the rocker panel.

Once centered, tighten all four (4) Socket Cap Screws to secure the Step Board to the Motor Linkage and Idler Linkage arms. **Torque to 10 ft-lb. Do not overtighten.** 







#### **Final System Check**

Reconnect battery power. Check that all doors activate the PowerStep and the LED Lights work when doors open and close. Pay attention to the Step Boards as they deploy and retract to ensure there are no clearance issues with the underside of the body. We have seen times when the lower lip of the rocker panel is out of spec and can prevent the PowerSteps from actuating. In this case, we have used a rubber mallet to gently bring the lip up and out of the way.

## **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 3-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 the vehicle. Lamps will stay on until restowing of both PowerSteps 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 the vehicle.

## **AMP PowerStep Maintenance Info**



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 3-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:

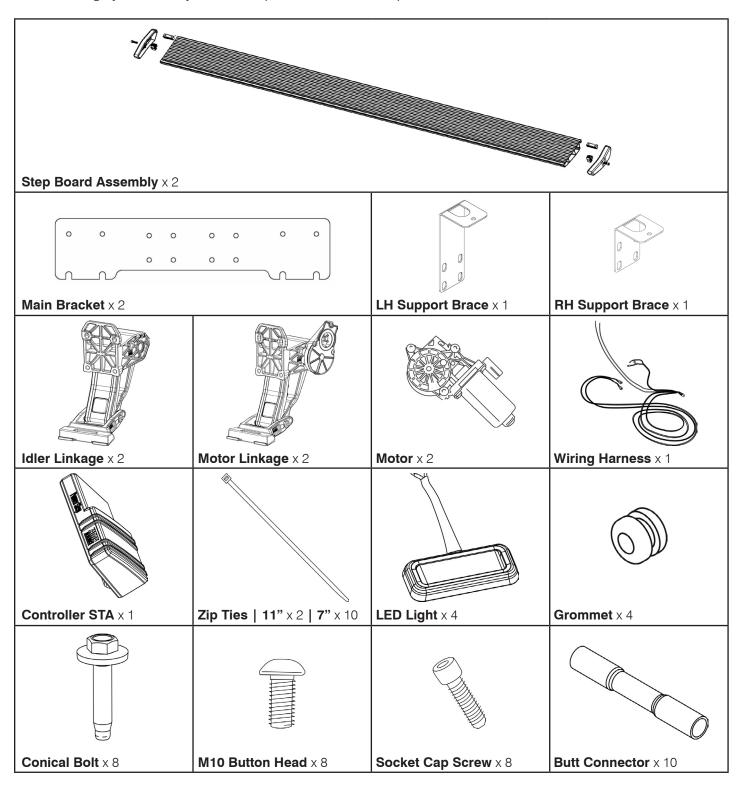
In adverse conditions, debris such as mud, dirt, and salt, may become trapped in the running board mechanism, possibly leading to unwanted noise. If this occurs, manually set the running boards to the deployed position and flush the front and rear hinge arms with a high-pressure car wash wand. **Avoid 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.



#### **Inventory List - Parts Included**

The following components are included with your AMP PowerStep Running Boards for 66-77 Ford Bronco. Please check thoroughly to ensure you have all parts needed to complete this installation.







M8 Rivnut x 26	<b>M8x1.25 Bolt</b> x 18	M8 Washer x 10	M8 Fender Washer x 8
1/4" Split Braid x 8 ft	Controller Bracket x 1	Door Trigger Switch x 2	Self Tapping Screw x 2
M	Canal Control		
<b>17/32 Drill Bit</b> x 1	Blue Threadlocker x 1	Ring Terminal x 2	Zip Tie Push Mount x 20

## **Tools Required**

The following tools will be needed to complete the installation of this product. Please make sure you have all tools needed prior to starting the installation process.

- T20 Torx Screwdriver
- Drill & Drill Bits Set
- Ratchet Wrench
- Metric Allen Wrenches
- Heat Gun

- Vise-Grip Pliers
- Rivnut Tool
- Standard & Metric Sockets
- Wire Strippers/Crimper
- Flush Cutters