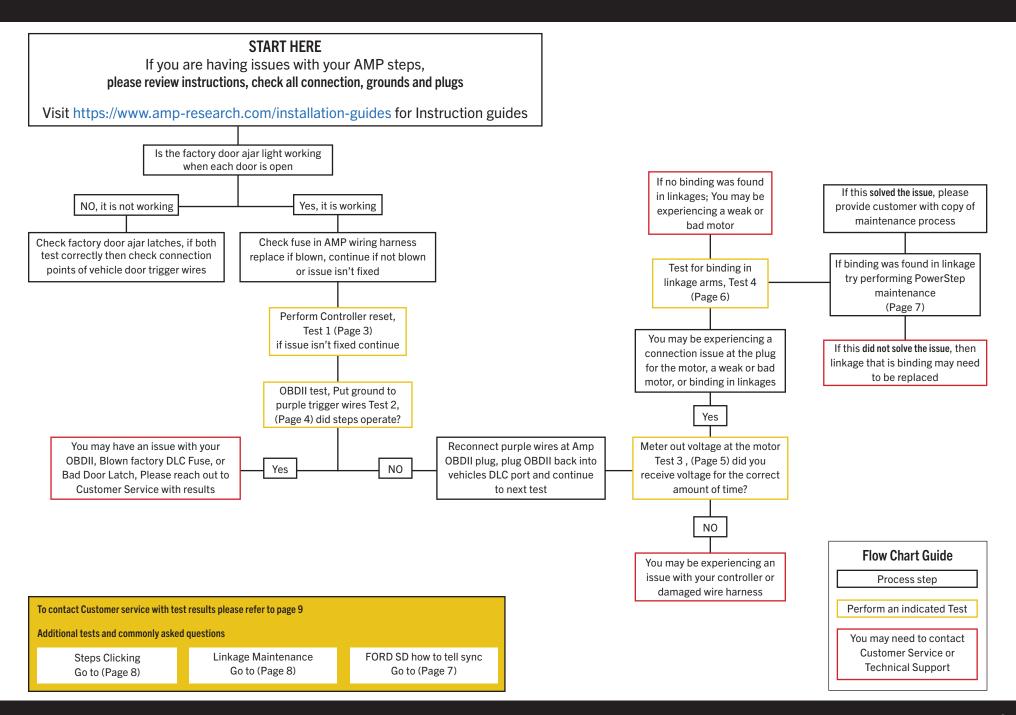


POWERSTEP INSTALLATION TROUBLESHOOTING GUIDE



TECHNICAL ISSUES FLOW CHART





TEST 1 | RESET THE CONTROLLER



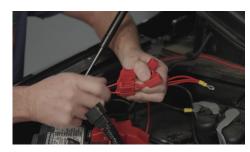
If your PowerSteps are not working/functioning after you've completed the install the first test to solving the issue is to try resetting the controller before proceeding to other possible issues.

1. Locate the AMP Research Controller under the hood (see Fig. 1). The controller will have a red wire going from the red + terminal of the battery directly to the controller.



(Figure 1)

2. Locate the fuse holder on the red wire going to the controller. (See Fig. 2).



(Figure 2)

3. Remove the 30/40-amp fuse to the system (see Fig. 3). Verify both locking clips are fully locked into the controller.



(Figure 3)

- **4.** Push each one of the wires individually deep into the controller.
 - Let the system sit for 5 minutes.
 - Reinstall the fuse into the controller and retest.

TEST 2 | OBDII



If your steps are no longer deploying or retracting and the LED lights for the steps no longer light up, you may be experiencing an issue with your controller or OBDII module plug if the kit is a plug and play. Follow the steps below to help identify where the issue may be coming from.

IDENTIFY CONTROLLER VS. OBDII FAILURE

- Complete controller reset procedure before performing this test.
- Locate OBDII module (see Fig. 4) plug under dash which is plugged in to the vehicles diagnostic port.



(Figure 4)

- Follow black pigtail off side of plug till it splits in to 2 purple wires.
 - (Note: One is purple, and one is purple/black stripe)
- Disconnect purple and purple/black stripe wires from splice point under dash.
- Put OBDII plug to the side. It will not be used.
- Locate a solid chassis ground location in the vehicle.
 - (Note: Chassis ground locations can be found on any non-painted bare metal location in the vehicle. If one cannot be found, then a jumper wire from the "-"or black terminal of the battery can also be used).
- Ground both purple wires to chassis ground location. This can be performed with both wires at the same time or each wire individually. These are our trigger wires, one driver and one passenger.
- When chassis ground is applied to wires it will deploy the step and when ground is removed it will retract the step.
- If you are experiencing no deployment and lights for steps are not illuminating, you may have a controller failure.
- If steps start to deploy and retract when ground is applied and removed, then you may have in OBDII failure.

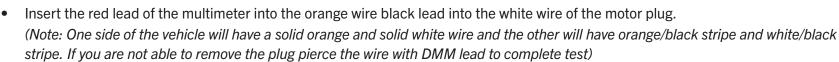
TEST 3 | MOTOR



If you believe you are experiencing an issue with a motor that has failed, follow the steps below. (Note: You will need a digital multimeter to perform this test).

TESTING POWER TO MOTOR

- Locate the plug at the motor.
- Remove plug from the motor.
- Using a digital multimeter set meter to volts DC (symbol to right).



- With multimeter visible open the door on the side of the vehicle the motor we are testing is located.
- The meter should display battery voltage for 5 seconds and return to zero.
 (Note: To check for battery voltage touch red and black lead of meter directly to red and black posts of battery under the same volts DC setting on meter)
- Close door and meter should display -battery voltage for 5 seconds and return to zero.
 (Note: It doesn't matter if you display "- "or "+" voltage during door open or door close operation just that we are getting voltage for 5 seconds before returning to zero)
- If you receive voltage for less than 5 seconds or only in one direction, we may have an issue with the controller.
- If test shows accurate voltage readings, then we may be experiencing binding in the linkage or a motor issue.
- If you want to confirm you are having an issue with your motor, simply switch the motors from side to side and see if the issue follows the motor.
 - (Note: This step will only work if one side has failed, and the other side is working).
- If both sides have failed, you can unplug the motor and manually put 12v power+ and ground- to each of the pins on the motor to check if it will move. One contact gets positive+ and the other gets a ground- and the motor moves one way, then you switch the configuration, and the motor will spin the other.

TEST 4 | TESTING FOR LINKAGE BINDING



If you believe you are experiencing an issue with binding or seized linkages follow the steps below to test.

1. CLEAN POWERSTEPS (Follow cleaning procedure below)

- Prepare for cleaning
 - Manually set the running boards in the deployed position by opening the door, and then place your foot on the step. Maintain firm
 pressure with your foot on the step as you close the door. Your steps will remain in the deployed position.
- How to maintain your steps:
 - Use a pressure washer to clean all 4 hinge points, front and rear linkages, which are all 4 hinge points for your PowerSteps.
 - ▲ Avoid spraying the motors directly.
 - After washing, <u>apply silicone spray (dry Film lubricant) only to all 4 linkage arms and all pivot pins</u> (additional pivot pins are located up high on the linkage arm). Then cycle the door to work the lubrication in to the hinge points.
 - **▲** DO NOT apply silicone, wax, or protectants like Armor All® to the running board.
 - ▲ DO NOT lubricate with any greases, oils, WD-40, or penetrants.
- Cleaning should be done on a regular basis or if mud, grime, or salt becomes stuck in the running board mechanism.

2. TEST FOR BINDING

- Remove motor to the PowerStep.
- The step will rest in the down position after the motor has been removed so use caution.
- Move the step from the board's center to its fully retracted position while being cautious of any linkage arm resistance.
- Release the board while maintaining your legs at a safe distance from the retracted position.
- The board should return to the fully deployed position quickly.
- If any resistance is felt in the linkages when putting the boards in the fully retracted position or if the board falls to the fully deployed position slowly then proceed to the next step.
- Remove board from linkage arms.
- Individually put each linkage up and down and feel for resistance or binding.
- If you feel resistance or experience binding, then that linkage may need to be replaced.
- If you're only experiencing resistance or binding on one side, remove the working board and test the other side to confirm.
- Using a stopwatch, time both sides to verify that the linkages are dropping at a similar rate of speed consistently.

POWERSTEP NOT SYNCING*



Identifying the Sync3 or Sync4 Radios.

(*Applies to Kits # 76236-01A, 76242-01A, 77236-01A, 77242-01A, 78236-01A, 78242-01A, 86236-01A, 86242-01A).

1. FORD Super Duty Sync 3 or Sync 4

- Go to home screen on radio.
- Tap "Settings" in lower right-hand corner.
- Tap on "General" that is displayed in the settings menu.
- Scroll down to "About Sync."
- Sync Version will be displayed at the top of the "About Sync" information page.

STEP IS CLICKING WHEN DEPLOYED OR RETRACTING



If your Powersteps are clicking when in motion (deployed or retracting) there may a simple motor adjustment that needs to happen.

Bolt and Wedge Adjustment

- Remove motor from side that is being affected.
- Allow step to rest in the fully deployed or down position.
- Unscrew ¼ in.-20x7/8 in. socket head or gold colored hex cap screw located at the top of the linkage arm in the rear.
- Loosen 3-4 turns and strike the head of the bolt with a hammer lightly to push wedge loose from the linkage arm.
 (Note: threaded hole on wedge is not in the center of the wedge).
- Apply light pressure to the running board and reinstall the wedge and bolt.
- Torque bolt to 12ft lbs.
- Re-install the motor and retest.





Tech Process: Installer



Installation Guides

Scan Code to retrieve instructions for your specific make/model vehicle.



Support Center

Scan Code for up-to-date vehicle testing procedures and FAQs.

- Visit https://realtruck.com/contact-brands/contact-ampresearch to provide all the necessary information for tech assistance and issue resolution. Items needed: copy of customer's proof of purchase with date of purchase, customer or shop name, and part number purchased. In addition, include the make, model, VIN number, fuel type and description of issue along with picture of the issue if applicable. Please provide the name of the AMP technician you spoke with.
- If the Tech team is unable to resolve the issue through provided information on the Contact Us form, they will reach out to you within 2 business days: excluding weekends and holidays.
- If additional support is needed, AMP Research Tech Support may be reached at 888-983-2204. Please use the Contact Us form before calling and note the request number for the tech to reference. Installation issue tips available for self-help at https://www.amp-research.com, scroll to bottom of pages to view FAQs. Tech is to review the issue and diagnose the problem. We will only replace parts that AMP Research Tech Support have deemed necessary to fix the issue. Labor is not included under the manufacturer's limited warranty.
 - If the product can be fixed in the field, replacement parts will be shipped within 2-3 business days. If the item is out of stock, you will be provided with an ETA.
 - If the Technical Support team cannot resolve the issue, the Customer Service and/or Technical Support Representative will be capable of issuing an RMA for any product deemed to be defective or incorrect under the AMP Research brand terms and conditions.

CONTACT INFO	PHONE: 1-888-983-2204	EMAIL: support@amp-research.com	HOURS: Mon-Fri, 7am to 5pm PST
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Submit Test Results and Warranty Claim

- To submit go to: https://www.amp-research.com/warranty-support, click on How To Submit Claim
- You will need the following information to submit a warranty claim:
 - What was the results of the testing you did
 - Name, Address, Phone Number, and Email Address
 - Vehicle Year, Make, and Model
 - AMP Research Product & Part Number

- Description of the warranty issue
- Copy of original receipt
- Images of product



Claim and Warranty Scan Code to submit

test results and warranty claim.

Warranty

We offer a limited 5 year warranty on AMP Research PowerStep products. AMP warranties are limited to the original purchaser of the AMP Research branded product(s). This warrants the product to be free from material and workmanship defects and is not transferable from the original purchaser. The full Warranty documentation can be downloaded at https://www.amp-research.com/warranty-support.

For information regarding the Warranty eligibility of any specific part number, please refer to that product page listing on our website or contact Customer Service.

- AMP Research has an industry-leading, 5-year limited warranty on all PowerSteps.
- The installer should contact the AMP Research Technical Support team with any issues surrounding AMP Research products.
- If the Technical Support team cannot resolve the issue, the Customer Service and/or Technical Support Representative will be capable of issuing an RMA for any product deemed to be defective or incorrect under the AMP Research brand terms & conditions.
- Timeline expectation(s) to issue RMA to a Wholesaler or Jobber level should not extend beyond 1 2 business days.
- Any returns received back from a business entity separate than that established on the RMA may prolong the credit process, or forfeit their opportunity for credit altogether. Please contact AMP Research Customer Service if details surrounding the product's WD needs to be updated.
- The Customer Service and/or Technical Support Representatives for AMP Research are the lone entities authorized to establish RMA(s) for product to be returned, with credit or replacement to be established. This excludes component or piece parts.
- All returns to AMP Research must include Return Merchandise Authorization (RMA) number. Any items returned without RMA from an AMP Research representative will be refused upon receipt, and sent back to its origin at the customer's expense.
- RMA numbers are not to be reused, and will expire within 45-days after the initial issue date. Please reach out to AMP Research Customer Service if the return date surpasses 45 days to prevent part from being refused upon arrival.
- AMP Research will not be responsible for the return shipping charges, unless previously authorized by an AMP Research Customer Service Representative.

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