

INSTALLATION MANUAL

3025165

Level of Difficulty

Moderate

This is the second of two manuals required to complete this installation. The first manual is included with your mounting brackets.

Parts List

- | | |
|---|---|
| 1 | Driver / left ActionTrac™ powered running board |
| 1 | Passenger / right ActionTrac™ powered running board |

Attachment hardware is supplied with the mounting brackets. Hardware quantities will vary depending on the vehicle application.

Tools Required

Ratchet	Drill
Socket set	Drill bit set
Zip ties	Level

Torque Specifications

	Metric	SAE
	M6 bolt	3 ft.-lbs.
	M8 bolt	7 ft.-lbs.
	M10 bolt	16 ft.-lbs.
	M12 bolt	28 ft.-lbs.
	1/4" bolt	3 ft.-lbs.
	5/16" bolt	7 ft.-lbs.
	3/8" bolt	16 ft.-lbs.
	7/16" bolt	20 ft.-lbs.
	1/2" bolt	28 ft.-lbs.

Use above torque setting unless otherwise noted

Weight Capacity

650 lbs.

Weight capacity is static and limited to bracket weight ratings

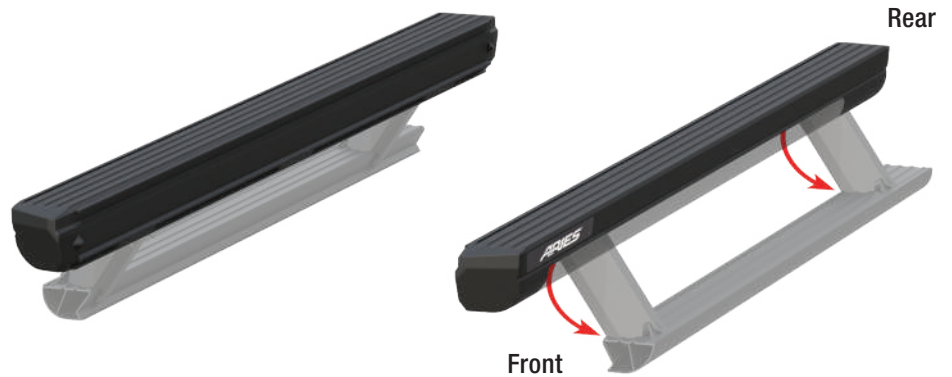
⚠ WARNING

Improper electrical installation may result in personal injury. Unless you are familiar with the installation and handling of electrical systems, have this step performed by someone who has that familiarity.

⚠ CAUTION

If the step fails to actuate completely (open or closed), do not attempt to force the step open or close. Applying force in this condition will damage the product and void your warranty. Refer to the troubleshooting guide on the last page of the instruction manual to resolve potential issues.

Product Photo



Notes and Maintenance

Before you begin installation, read all instructions thoroughly.

Proper tools will improve the quality of installation and reduce the time required.

No maintenance required on waterproof harness or water-resistant motors.

If mud or dirt is built up on the steps, simply spray them off and let them air dry.

Mild automotive detergent may be used to clean the product. Do not use dish detergent, abrasive cleaners, abrasive pads, wire brushes or other similar products that may damage the finish.

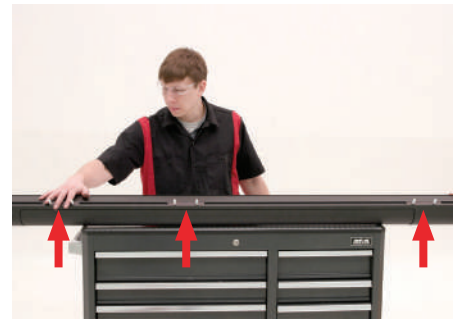
Periodic inspection of all wires and connections should be performed to ensure there is no visible damage or loose connections.

Refer to the table to the left when securing hardware during the installation process to help prevent damage to the product or vehicle.

Step 1

With the driver-side brackets installed, take the driver-side running board and insert T-rails into the slot as shown. Position each T-rail as close to the mounting bracket location as possible.

Note: The number of mounting brackets may vary based on application. Use one T-rail per bracket.



Step 2

With help, carefully place the running board onto the mounting brackets.

Align the T-rails with the mounting brackets on the vehicle. Slide the top mounting track on the board over the top flange on each bracket. Adjust the T-rails in the lower track of the board so the studs drop into the slots on the bottom of each mounting bracket.



Step 3

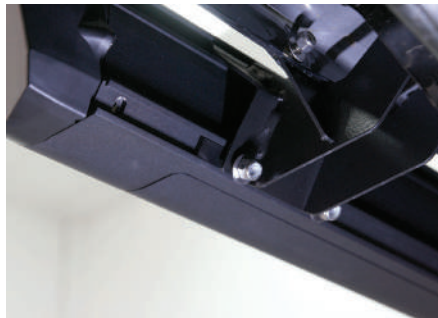
Secure the running board to the front mounting bracket using one 5/16" OR M8 flat washer and one 5/16" nylock nut on each T-rail stud.

Note: 5/16" and M8 washers are interchangeable sizes. Depending on the hardware supplied with your brackets you may use either size.

Repeat for the middle mounting bracket.

Before securing the rear mounting bracket, place an LED light bracket over one of the T-rail studs, as shown in the third image. Secure each T-rail stud with one 5/16" flat washer and one 5/16" nylock nut.

Snug the hardware, but do not fully tighten.



Step 4

At this time, adjust the running board to the desired location.

With the running board in position, it is recommended to tighten all brackets to the boards first, followed by the vehicle connections.

Tighten all hardware to the recommended torque specifications listed in the table on the first page.

Repeat steps 1 through 4 on the passenger side.



Step 5

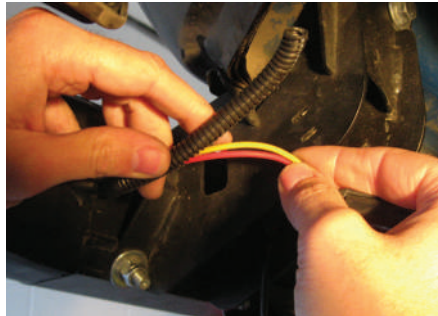
On the driver side, plug the rear actuator (red / black) into the running board and pull the extra wire back into the vehicle.

Plug the LED light wire (brown / tan) into the LED light and secure it to the mounting bracket tab with the supplied jam nut.

Once all the wiring is installed, cover the wires with split loom for extra protection.

Repeat for the passenger side of the vehicle. See below for wiring call outs.

Attach the two wiring harnesses and re-install the fuse removed during initial wiring process.



Wiring Color Code

	LED light	Actuator
DS	Brown / Dark brown	Black / Red
PS	Pink / Brown	Black / Red

Step 6

Attach the two wiring harnesses and re-install the fuse removed during initial wiring process.



Step 7

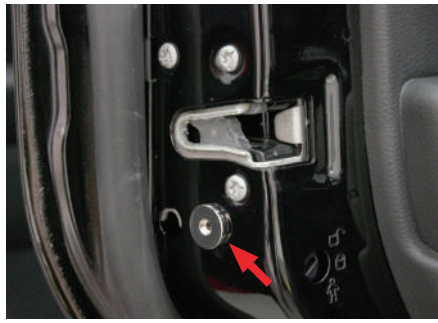
With power connected to the installed wire harness, temporarily position the supplied magnets on the doors to align with the sensors when the doors are closed. Repeat this for the other three doors.

Note: On vehicles with aluminum body panels, non-marking tape may be used to temporarily secure the magnets.

With the magnets in position and the system power switched on, test the boards by opening each door independently to ensure proper step function.

Once all magnet locations are confirmed and the system is operating correctly, mark the magnet positions and permanently install using the 3/4" x 3/4" double-sided tape.

Note: If there are any issues with the step function refer to the 'Troubleshooting' section on the last page of this installation manual.



Step 8

With the steps functioning properly, re-install all trim panels, carpet and other removed items.


Congratulations on the installation of your new ARIES ActionTrac™ powered running boards.

With the running boards installed, periodic inspections should be performed to ensure all mounting hardware remains tight.

To protect your investment, see the 'Notes and Maintenance' section on the first page of this instruction manual.



TROUBLESHOOTING

Condition	Possible Cause	Possible Solutions	Additional Information
Boards do not open when the door is opened	Power switch is off	Confirm that the main power switch is in the on position and has power.	--
	Poor battery connection	Confirm the positive and negative connection on the battery are secure.	--
	Fuse is blown or removed	Confirm that the fuse is plugged in and not blown.	--
	Control module not connected	Confirm that the control module is plugged in.	--
	Board not connected	Confirm that the board connections are plugged in and secure.	--
	Door sensors not connected	Confirm that the door sensors are plugged in.	--
	Bad motor	Replace the board.	To check the motor function, apply 12 volts directly to the motor leads. If the board does not open, swap the leads and try again. If the board opens, the motor is good and swapping the leads back will cycle the board closed.
	Faulty control module	Replace the control module.	In rare cases, the programming of the control module may be faulty. Replace if the control module is receiving power but the boards are not functioning properly.
Boards open with the front/rear door, but not the other	Door sensor disconnected	Confirm that the door sensor is plugged in.	--
	Bad door sensor	Replace the sensor.	To check for a bad sensor, disconnect the sensor and check for continuity with a multi-meter. The sensor is normally a closed switch and should have continuity without the magnet present and should not have continuity when the magnet is placed near the sensor.
Board is open and will not close	Magnet misalignment	Adjust the magnet position.	Disconnect both sensors and the board should close. Connect only one door sensor and test. If the board closes, the alignment for that door is good. Connect the second sensor and repeat.
	Bad door sensor	Replace the sensor.	To check for a bad sensor, disconnect the sensor and check for continuity with a multi-meter. The sensor is normally a closed switch and should have continuity without the magnet present and should not have continuity when the magnet is placed near the sensor.
Boards squeak when opening/closing	Metal on metal contact	Apply graphite lubricant to all pivot points. 	If excessive squeaking still occurs, check for worn out bushings or obvious areas of metal on metal contact.
LED light does not turn on when the step is open	LED not connected	Confirm that the LED connection is plugged in and secure.	--
	Faulty LED	Inspect the LED and wiring harness for damage.	To test LED functionality, apply 12 volts directly to the LED. If the LED will not turn on when directly connected, it will need to be replaced.
Boards function opposite to how they should (door open board closed, door closed board open)	Incorrect sensors	Replace the sensors.	To check for an incorrect sensor, disconnect the sensor and check for continuity with a multi-meter. The sensor is normally a closed switch and should have continuity without the magnet present and should not have continuity when the magnet is placed near the sensor.
	Motor harness polarity reversed	Replace the board.	If sensors are confirmed to be correct (normally closed) and board still operates in reverse, the motor electrical harness may be reversed.
After quick succession of cycling the boards multiple times, the boards no longer open.	A programed safety limit has been reached.	Using the main switch, power off the boards for 5-10 seconds and turn back on. The boards should cycle when turned back on.	The LED will flash 8 times when this issue occurs.
Boards do not open when both front and rear doors are opened simultaneously	Software limitation	Close the doors and open them individually.	A software limitation will prevent the boards from opening if both the front and rear door are opened simultaneously. Closing the doors and opening them one at a time will reset the board.