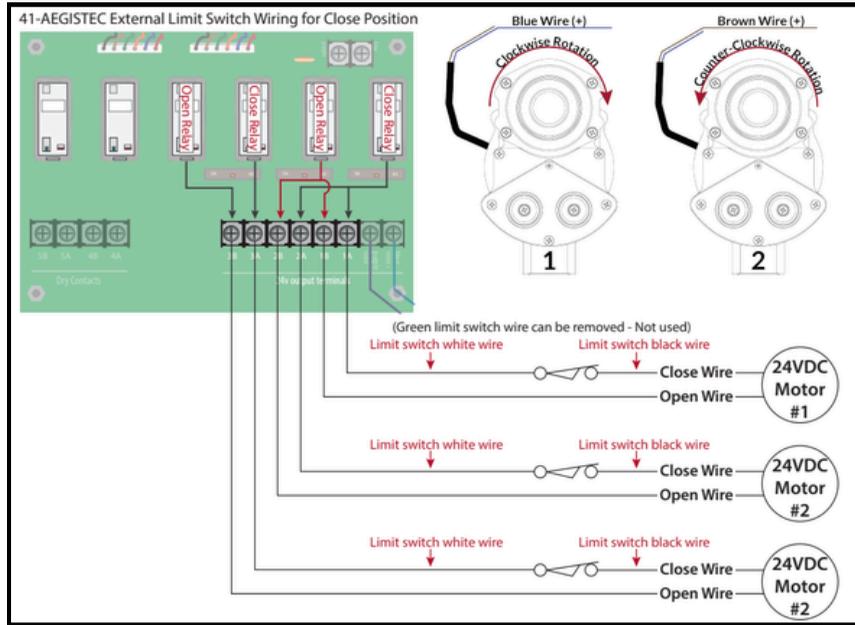
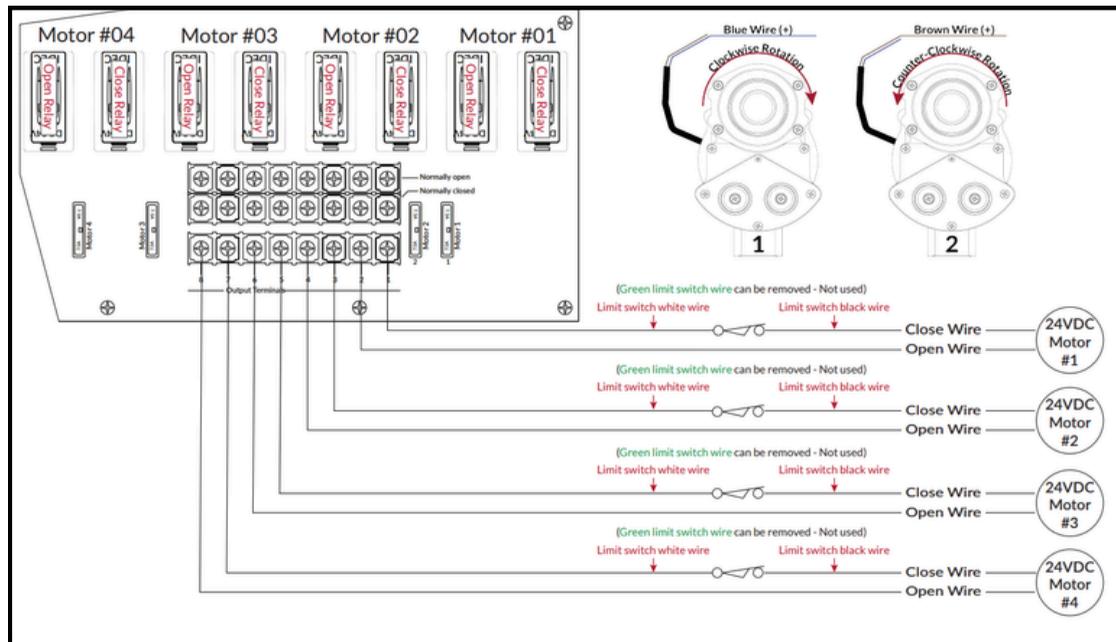


Limit Switch Wiring for 41-AEGISTEC



Example of Limit Switch Wiring for 41-AEGISTECP



ADVANCING
ALTERNATIVES

61-LSARL-LVM-RP

External Limit Switch for Rack
& Pinion Low Voltage Motors

Quick Start Guide

Scan the QR Code to visit our Knowledge Center, which features videos and other resources.



Visit Advancing Alternatives' YouTube Channel to Access Video Tutorials



IMPORTANT

For detailed instructions and technical support, visit advancingalternatives.com/knowledge-center

Safety Information:



SHOCK HAZARD Electric shock can kill. Touching live electrical parts can cause fatal shocks or severe burns.



WARNING All electrical connections must be made by a qualified, licensed electrician. All connections must be made in accordance with all state and local codes.

What's Included:



- 1 Lever Style Limit Switch with 8' of wire
- 2 Aluminum Mounting Plates
- 4 ea. Metric Mounting Bolts (6MMx20MM)
- 4 ea. 1" - 1/2" Self-Drilling Tek Screws

Overview:

An external limit switch is needed when using a Low Voltage Motor for your Rack & Pinion system. This externally mounted limit switch is meant to override the directional movement of the motor and acts as an important safety switch to protect your motor from stress and damage. You will first set your motor's internal limit switches to control the motor's stopping locations for your Rack & Pinion system. Then, this external limit switch should be set to slightly precede the motor's stopping location, protecting the motor from over-travel and mechanical stress. Since there are many different Rack & Pinion manufacturers and greenhouse designs, these instructions are generalized to fit various system types.

Installation Instructions

1) Mount the limit switch assembly. Mount the limit switch (gray box with lever) to the stationary portion of your Rack & Pinion system (header or sill) using the provided aluminum L-bracket and mounting bolts. Position the limit switch close to the motor so the 8' wire will reach. Use a vice grip or C-clamp to hold the bracket in place while drilling two 1/4" holes through the aluminum bracket and the greenhouse structure. Secure with the 1/4" bolts and nuts. Mount the limit switch as close to the edge of the sill as possible.

2) Mount the trigger pin assembly. Mount the trigger pin (3/8" pin on aluminum L-bracket) to the moving portion of the Rack & Pinion system (the bottom sash). Clamp it in position and drill two 1/4" holes through the bracket and sash. Attach using the 1/4" bolts and nuts. This pin will hit the limit switch lever to stop the motor. See Image 1 for reference.



Image 1

3) Wire the limit switch. Connect the wires as follows (see Figure 1):

- Black wire from limit switch → connects to one motor wire (Motor Wire A)
- White wire from limit switch → connects to Controller CLOSE wire
- Controller OPEN wire → connects to the other motor wire (Motor Wire B)

Troubleshooting: If the motor is not shutting off when closing, swap the two motor wires:

- Motor Wire A (previously connected to Controller OPEN) → now connects to black limit switch wire
- Motor Wire B (previously connected to black limit switch wire) → now connects to Controller OPEN

After wiring is complete, test the system by running the motor through several open and close cycles. Adjust the lever rod of the limit switch up or down to set the exact stopping position. The lever should be positioned so the motor stops slightly before its internal limit switch is reached, relieving tension and stress on the motor.

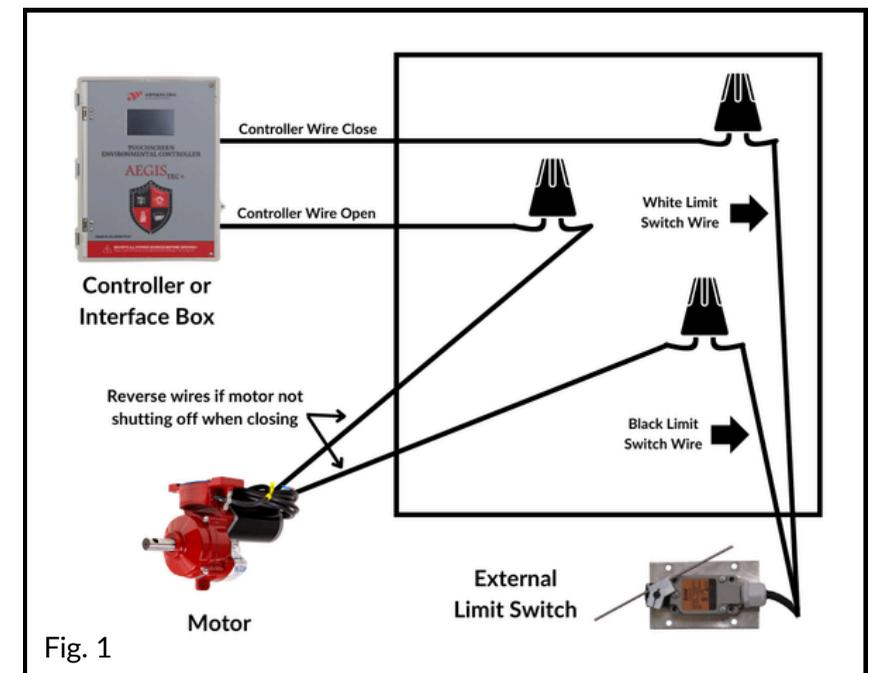


Fig. 1

Always remember to perform routine maintenance checks on all of your equipment, especially at the beginning and end of each season!