



ADVANCING
ALTERNATIVES

LSARL-LVM-RP

*Limit Switch Assembly For Rack &
Pinion Low Voltage Motors*

Installation Instructions



Read completely thru these instructions before beginning your installation, to familiarize yourself and compare what you received with the instructions.



Always wear eye and ear protection. Always use gloves and other necessary safety equipment. Metal can be sharp, handle carefully to avoid injury.



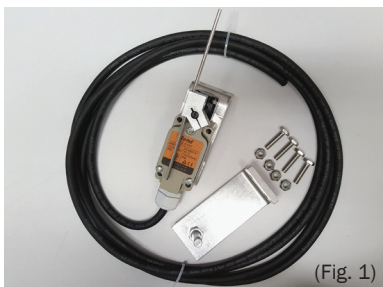
Qualified electricians should provide any electrical installation.

For Technical Support:

1-877-546-2257

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Components Included:

- 1 - Lever Style Limit Switch with 8' of wire.
- 2 - Aluminum Mounting Plate.
- 4 - 1/4"x 1" Stainless Steel Bolts
- 4 - 1/4" Stainless Steel Nuts



1. An external limit switch is needed when using a Low Voltage Motor for your Rack & Pinion. These instructions will guide you through the installation process. Since there are many different Rack & Pinion manufacturers and greenhouses we try to generalize the instructions to fit every style and type of system.

2. First you will want to mount your Low Voltage Motor to a greenhouse bow or a mounting bracket that may have been constructed by your greenhouse installer. Instructions for the Low Voltage Motor are found with the motor package.

3. Second process is to mount the limit switch, this is the gray box with mounted to an "L" bracket. Mount the limit switch in close proximity to the motor so that the 8' limit switch wire will reach the motor. A vice grip or "C" clamp is a nice addition to help with the installation of these parts. Clamp the "L" bracket with the limit switch to the stationary portion and drill two 1/4" holes through the aluminum. After the holes are drilled you will use the 1/4" bolts and nuts to fasten the bracket to your Rack & Pinion vent header or sill. You will want the limit switch as close to the edge of the sill as possible. See illustration 3 for a visual reference.



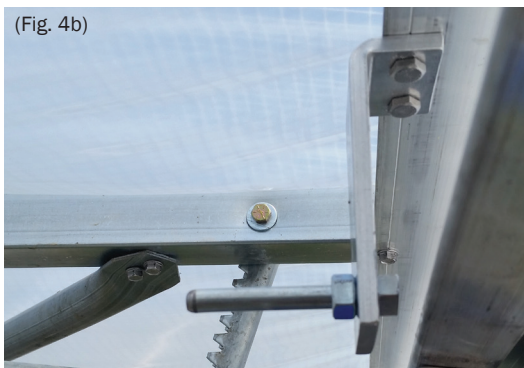
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4. The third step is to mount the trigger pin, this is the 3/8" pin that will hit the limit switch killing the power to the motor. You will mount this part to the moving portion of the Rack & Pinion. As before, clamp it to the bottom sash and drill two 1/4" holes through the sash. Attach the trigger "L" bracket to the bottom sash with the 1/4" bolts and nuts.

(Fig. 4a)



(Fig. 4b)



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5. After mounting all of the hardware you will wire the limit switch in tandem with the Low Voltage Motor. The 8' wire provided with the limit switch should be more than sufficient to reach your motor

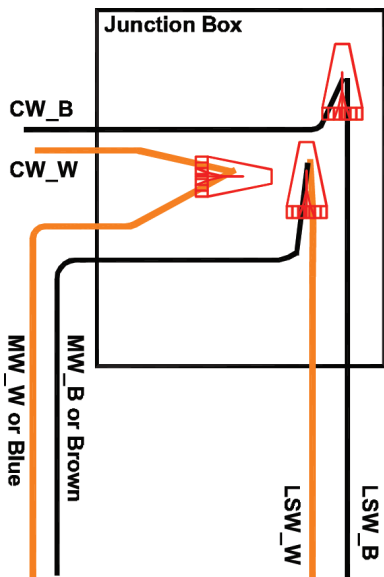
6. The wire connections given below are a starting point, and may need to be changed accordingly. A qualified electrician should assist in this step of the installation. (Fig. 6)

Connect the white lead from the controller straight thru the white or blue lead of the motor.

Connect the black lead from the controller to the back lead coming from the limit switch.

Connect the white lead coming from the limit switch to the black or brown lead going to the motor.

These combinations are for example, depending on the motor and direction you wish to stop your curtain, you may have to reverse the pairings of wires due to LVMs operating directionally via polarity, which is controlled by a transformer.



(Fig. 6)

Wire Codes

CW_B = wire from controller, Black

CW_W = wire from controller, White

MW_B = wire from motor, Black (or Brown)

MW_W = wire from motor, White (or Blue)

LSW_B = wire from Limit Switch, Black

LSW_W = wire from Limit Switch, White

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