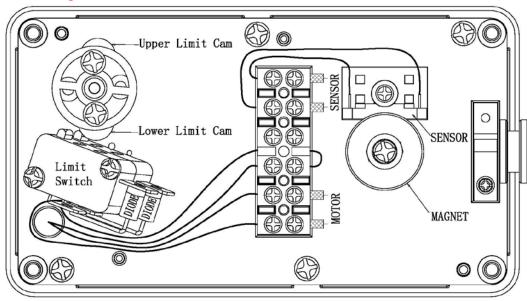


HD ACTUATOR LIMIT SWITCH INSTRUCTIONS

<u>CAUTION</u>: Adjustment of limit switches on a linear actuator requires basic knowledge of geared electric motor functions. End users lacking this knowledge are strongly advised to seek professional help when adjusting limit switches. Failure adjusting limit switches properly can result in permanent damage to the linear actuator that is not covered under Windy Nation's warranty.

NOTE: The limit-switches are factory-set for maximum stroke-length and protection of the motor unit against over-extending. Do not run the actuator without being fully assembled.

For bench testing, hold the inner tube securely when moving in and out to prevent twisting that may destroy the limit settings.



Inside Bottom Cover of Actuator Housing

RESET LOWER LIMIT

The factory preset mechanical lower limit is 1/4" to 1/2" from the retracting end of the actuator

- 1. If the actuator has been installed, detach it first.
- 2. Retract the actuator until the motor stops by itself.
- 3. Use a screwdriver through the rod end or hand-turn the actuator to retract it until it cannot be turned anymore. The lower limit is now set on zero inches (0").
- 4. Hand-turn the inner tube to extend to your desired mechanical lower limit. At least 2 to 4 turns out are recommended (1/4" to 3/4")

MAKE SURE THE ACTUATOR IS PROTECTED AT ITS LOWER MECHANICAL LIMITS, WHEN MOUNTED

RESET UPPER LIMIT

- 1. If the actuator reaches the farthest extension point:
 - a. Extend the actuator 2 additional turns (approx. 1/4"); this is where you want to set the upper limit.

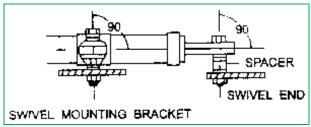


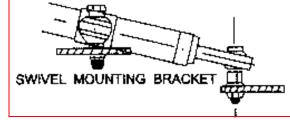
clean | power to the people

- b. Very slowly rotate the upper limit cam counter clockwise (i.e. moving towards the upper limit switch) until you hear a "CLICK" Sound from the limit switch (may also be felt).
- c. Now the mechanical upper limit is set.
- 2. If the actuator cannot reach the farthest extension point:
 - a. Open the back cover of the actuator locating two plastic cams stacked one on the other (see image above). The upper one is for the upper limit adjustment.
 - b. Loosen the limit cam screw, but do not remove.
 - c. Turn the upper cam clockwise (i.e. Moving away from the upper limit switch) in small increments to extend the actuator slowly. Do not allow the actuator to extend all the way out. This may cause the actuator to bend and/or the driving gear may be destroyed. Both accidents will void the warranty.
 - d. Adjust the upper cam carefully to see if the actuator can now reach the farthest extension point. If it can, follow procedures in step 1 to set the upper limit. If it does not you may need a longer actuator.

IMPORTANT

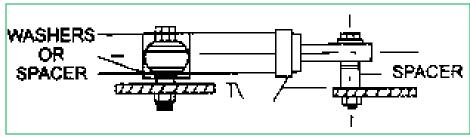
- 1. Use the enclosed two (2) spacers or as many flat washers as necessary (not included) to create the correct alignment and clearance as follows:
 - a. Between the rod end and the antenna mount.
 - b. Between the bracket and the antenna mount.





Correct Alignment

Incorrect Alignment



Correct Clearance

2. Do NOT connect the 24-36V DC motor wires of the positioner to the reed sensor switch. This destroys the reed-sensor and disables the positioner for calculating the antenna-position.

DAMAGE RESULTING FROM FAILURE TO FOLLOW THE ABOVE INSTRUCTIONS WILL VOID WARRANTY.