



## **Limit Switch Adjustment**

Follow directions below to adjust the limit switch settings to your Venture actuator. Your components and installation may vary slightly depending upon your original configuration, but concepts shown here should still apply. This procedure is meant to be performed on a fully-assembled actuator that is almost fully retracted.

**\*\*Units are typically shipped from the factory with the retract switch activated and tube fully retracted, but power supplies vary, so it is always a good idea to reset the retract limit switch using the power supply that will be utilized in operation.\*\***

**Insure the inner tube does not rotate during this procedure when actuator is operated under power.**

**\*\*Warning\*\* Great care should be taken when adjusting the limit switches. If your actuator is supplied without a clutch it is possible to damage the gears if the actuator is over extended or retracted under power.**

### **Setting the stroke of your actuator**

1. If gearbox is not yet attached to actuator tube, do so now. Actuator tube should be almost fully retracted.
2. Extend actuator under power a short distance until Leadscrew Nut has come completely off of "retract" limit switch button.
3. Retract actuator under power until "retract" limit switch shuts off actuator.
  - a. If actuator "bottoms out" before limit switch shuts power off, immediately shut off power and manually extend (unscrew) Inner Tube a couple turns. Re-extend actuator under power, then re-retract under power until limit switch shuts it down (without bottoming it out).
4. After actuator shuts off, screw Inner Tube in manually until it bottoms out, then turn it back out 1 or 2 turns.
5. Now extend actuator under power, shutting it off manually when it reaches your desired stroke or extension point. *\*\*units are typically set in the factory at less than full stroke... It may be necessary to loosen the screw which holds the adjusting rod in position in order to reach the desired extension.\*\**
6. Slide the adjusting rod to where it just activates (you should hear a click) the "extend" limit switch as shown in the photo below. Tighten screw onto the rod.
7. Retract actuator approximately 1 inch [25mm], then extend under power until "extend" limit switch turns the actuator off. Check the extension (stroke) of your actuator and adjust the Stroke Adjust Rod in or out if necessary until your proper setting is achieved.
  - a. Fully extended measurement minus fully retracted measurement is your full-stroke. Adjust rod away from "extend" limit switch to increase stroke, towards it to decrease stroke. *Beware that it takes very little movement of the Stroke Adjusting Rod to make a large change to the stroke. Trial-and-error will be involved. A good hint is to rotate Stroke Adjust Rod to a new point before re-tightening screw, or screw will tend to find previous indentation. It is best to just lightly tighten screw onto rod until final setting is achieved.*
  - b. Numbers stamped onto gearplate may or may not coincide with a rough stroke measurement of your actuator, depending on your configuration. These numbers are for Venture internal use only.

