

## HIGH QUALITY SERIES ACTUATOR

### I. HOW TO RESET LIMIT SWITCHES

**CAUTION: IF YOU WANT TO TEST THIS ACTUATOR ON A BENCH. MAKE SURE TO HOLD THE INNER TUBE WITH YOUR HAND OR WITH A SCREW DRIVER THROUGH THE ROD END WHEN THE INNER TUBE IS MOVING IN AND OUT. Otherwise, the inner tube may turn freely and destroy the factory preset mechanical lower and upper limits**

#### A. RESET LOWER LIMIT

The factory preset mechanical lower limit on this unit is 8 to 10 mm from the retracting end of the actuator.

**MAKE SURE THE ACTUATOR IS PROTECTED AT ITS LOWER MECHANICAL LIMITS WHEN YOU ATTACH IT TO THE ANTENNA MOUNT. Otherwise, please reset lower limit as following procedures:**

- (1) If the actuator has been installed on the antenna mount, detach it first.
- (2) Use your positioner to retract the actuator UNTIL MOTOR STOPS by itself. Important not to hold the inner tube now. Allow it to retract freely.
- (3) Hand turn the inner tube to extend it until it reaches your desired mechanical lower limit. We recommend 4 to 5 turns out (8 to 10 mm).

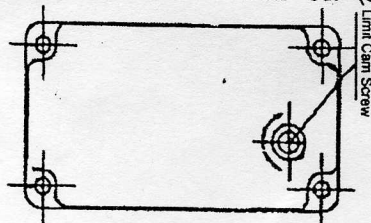


Fig. 1

#### B. RESET UPPER LIMIT

The upper limit can be adjusted without opening the motor back cover.

1. If the actuator can reach the farthest satellite:

- (1) Extend the actuator a little more (We recommend 6-8 mm). This is where you want to set the upper limit.
- (2) Use a proper cross screw driver to loosen the limit cam screw, but do not take it out! (See Fig. 1)

- (3) Use a flat screw driver (or just use a coin) to turn very slowly the upper limit cam counter clockwise (i.e. moving towards the upper limit switch) until you hear (you can also feel it) a "CLICK" sound from the limit switch.

Now the mechanical upper limit is set.

2. If the antenna can not reach the farthest satellite:

- (1) Loosen the limit cam screw with a cross screw driver.
- (2) Use a flat screw driver (or just use a coin) to turn the upper limit cam clockwise (i.e. moving away from the limit switch) in small increments to extend the actuator slowly. **YOU MUST NOT ALLOW THE ACTUATOR TO EXTEND ALL THE WAY OUT! OTHERWISE, THE ACTUATOR MAY BEND AND/OR THE DRIVING GEAR MAY BE DESTROYED. BOTH ACCIDENTS WILL VOID THE WARRANTY.**
- (3) Adjust the upper limit cam carefully to see if the actuator can now reach the farthest satellite. If it can, follow procedures in 1 to set the upper limit. If it cannot, you may need a longer actuator.

You can also open the motor back cover and adjust the upper limit the same way.

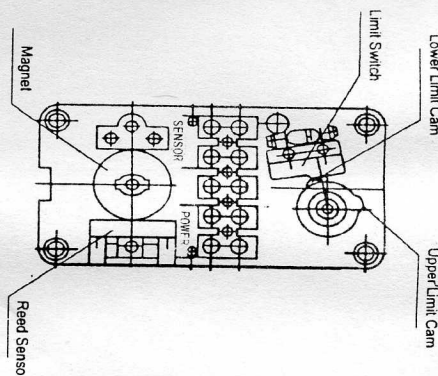


Fig 2.

### II. How to Replace Reed Sensor

1. Open the motor back cover.
2. Loosen the magnet cover screw and remove the magnet cover.
3. Remove the magnet.
4. Loosen the terminal strap screws that fix the wires of reed sensor.
5. Replace the reed sensor together with the wires connect to it with a new one. (REED SENSOR WITH SOLDERED WIRES ARE AVAILABLE UPON REQUEST. PLEASE PURCHASE THROUGH YOUR DISTRIBUTOR.)

### III. VERY IMPORTANT OTHER FEATHERS

1. RUBBER WEATHER ACCORDION, MOTOR BOOT, REED SENSOR REPLACEMENT AND OTHER PARTS: Can be easily purchased through your distributor.

1. Available stroke length : 6, 8, 10 & 12 INCH.

#### WARNING:

You **MUST** use spacers or flat washers to **CREATE CORRECT ALIGNMENT AND ENOUGH CLEARANCE**:

- (A) Between the rod end and the antenna mount.
- (B) Between the bracket and the antenna mount.

**DAMAGE RESULTING FROM FAILURE TO FOLLOW THE ABOVE INSTRUCTIONS WILL NOT BE COVERED BY WARRANTY.**

