



# Mounting and Wiring Instructions for the Gemini Limit Switch LS-1 to B410 and A420 Series Actuators

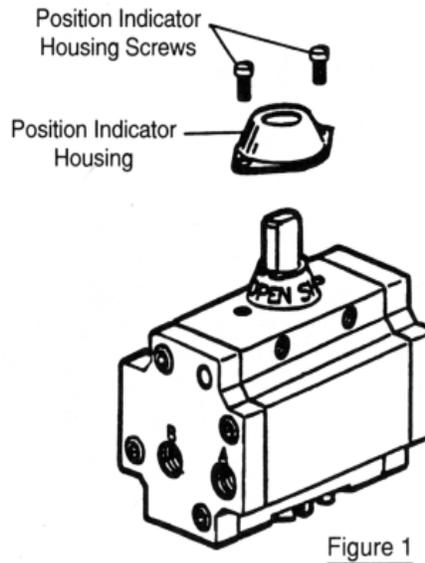
2 Otter Court, Raymond, New Hampshire 03077 • Tel. (603) 895-4761 • FAX (603) 895-6785 • www.geminivalve.com

These instructions detail the procedure for mounting the Gemini Model LS-1 Limit Switch on Gemini A400 Series Pneumatic Actuators. See backside of this sheet for electrical wiring information necessary to complete the installation. Before proceeding to the detailed instructions, check to insure that you have the appropriate LSM (Limit Switch Mounting) kit.

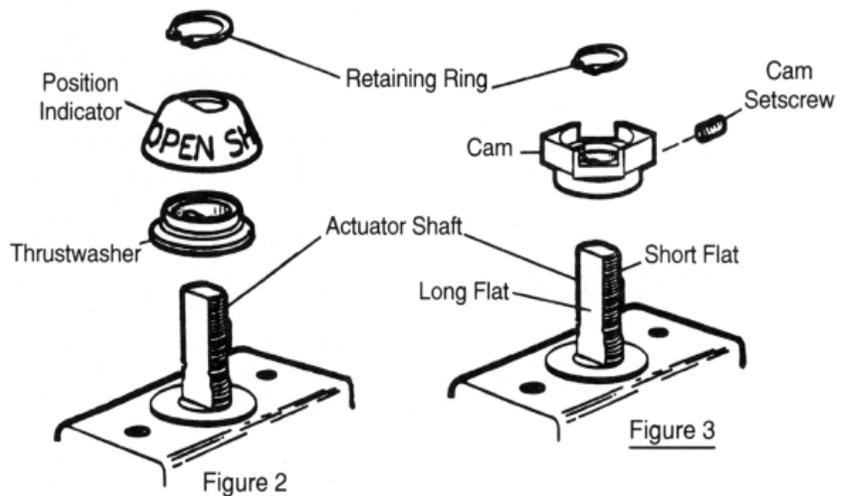
## Mounting Instructions

### Fitting of the Operating Cam and Limit Switch Mounting Bracket

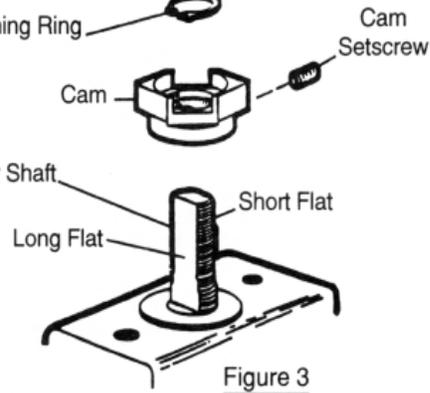
1. Remove the two position indicator housing screws, which secure the position indicator housing, from the top of the actuator to which the switch is to be mounted. Remove the position indicator housing. Figure 1.



2. Remove the retaining ring from the actuator shaft. Remove the position indicator and thrustwasher. A spare retaining ring has been provided in the mounting kit for use if the original becomes damaged during removal of the position indicator.) Figure 2.



3. Place the cam in position on the actuator shaft. The flat side of the cam hole must align with the long flat on the actuator shaft. Reinstall the retaining ring atop the cam or install the spare retaining ring from the kit. Tighten the cam setscrew. (Hex wrench is included in the LSM mounting kit.) Figure 3.



4. Place the limit switch bracket atop actuator so that the long side faces the side of the actuator on which the limit switch is desired. Secure the bracket with the socket head screws. All factory mounted units are assembled so that the long side is opposite the actuator nameplate side unless otherwise specified. Figure 4

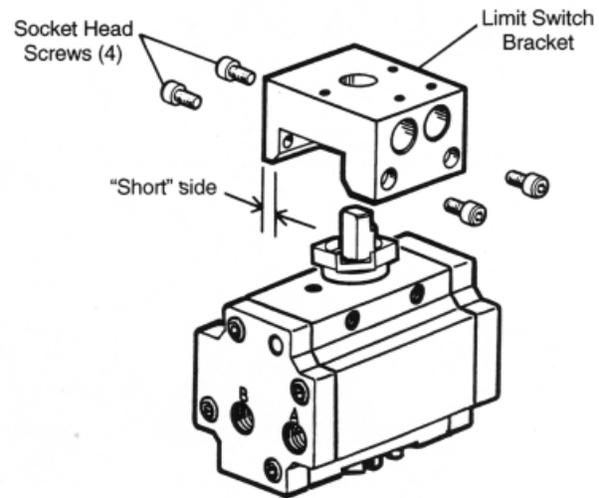


Figure 4

### Attachment of Limit Switch

1. Fit the bushings, which extend from the Limit Switch housing, into the matching holes in the long side of the mounting bracket. Push switch housing against bracket and verify that switch body touches bracket. Secure switch body to bracket with two #10-24 setscrews using a medium strength (nonpermanent) thread locker (not included in mounting kit). Note: Hex wrench supplied with LSM Mounting Kit. Figure 5.

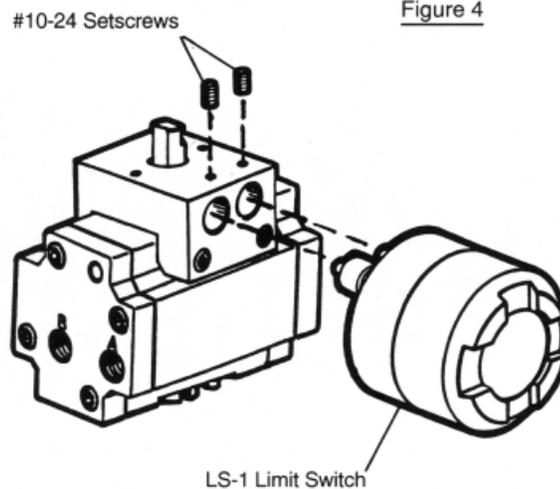


Figure 5

The LS-1 Limit Switch installation should now be operable upon

### Wiring Instructions

1. Route the wire to be terminated through the conduit hub and up through the access space to the terminal block.
2. Strip insulation back 1/4", insert the stripped ends directly into the proper terminal clamps and tighten screws.
3. Internal interconnections between terminal-block and switches are diagrammed inside the Limit Switch Cover.

### Wiring Specifications

#### Switch Ratings

AC	250 volts; 10 amps
DC	250 volts; 0.25 amps
	125 volts; 0.50 amps
Lamp Load	125 volts; 5 amps

#### Wire Size

#12 AWG Max. #24 AWG Min.  
Field Installed Conductors Must Have a Temperature Rating of 60C or 75C

**Insulation Stripping Length: 1/4"**

**Note:** If the Switch is installed in a hazardous location i.e. where flammable vapors or dust are present in the atmosphere, replace the cover and tighten securely before connecting the electrical supply circuit.

If necessary, a screwdriver shank or similar tool may be engaged in the cover wrenching lugs to assist removal and replacement.