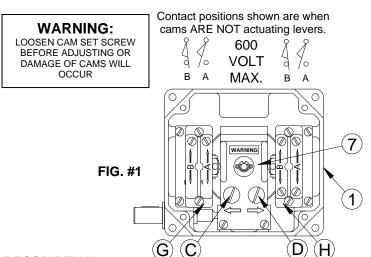




INSTRUCTION SHEET 2006 SERIES 2 CIRCUIT RLS UNIT



DESCRIPTION

This rotary limit switch is designed to control the limits of travel of rotating reversing equipment.

The limit switch input shaft is connected to a worm gear. Adjustable self lubricating nylon roller-cams are concentrically mounted to the worm gear. These adjustable cams actuate the precision limit switches by utilizing a lever assembly.

INSTALLATION

This limit switch may be mounted in any convenient position. When installed, this limit switch will provide long life with a minimum amount of service maintenance.

The following recommendations will prove helpful:

- 1. Install the limit switch so that the shaft load will not exceed (5) five pounds.
- 2. A flexible coupling is recommended for all installations other than gear drive application.
- 3. Coupling should be employed in a manner that results in a minimum of thrust loading on the shaft. If switches are mounted with the shaft up or down, some additional thrust loading resulting from the weight of the shaft plus a very light coupling is permissible.
- 4. Whenever possible, a separate support bearing for the drive sprocket should be used.
- 5. Permissible speed of the input shaft is 2000 R.P.M.

LUBRICATION

This limit switch was lubricated at the factory and should not require lubrication for the life of the switch.

ADJUSTMENT

Refer to figure #1. The electrical switch units "G", "H", are shown with the contact positions assumed when the cams ARE NOT actuating the switch units.

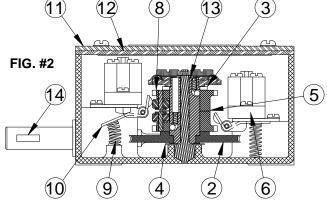
When the cam rotates and actuates the switch, the "B" (closed) contact opens and the "A" (open) contact closes. Each precision switch has (1) one independent adjustable cam.

TO ADJUST SWITCH "G"

TO ADJUST SWITCH "H" 1. Loosen Blue Set Screw

- 1. Loosen Red Set Screw
- 2. Turn "D" to Trip "H"
- 2. Turn "C" to Trip "G" 3. Tighten Red Set Screw
- 3. Tighten Blue Set Screw

| Nominal Input Shaft | Turns of Input Shaft | | | | |
|------------------------|----------------------|---------|-------------|----------|--|
| to Cam Ratio | Maximum | Minimum | Over Travel | To Reset | |
| 5:1 | 4 | 1/8 | 1/8 | 1/16 | |
| 10:1 | 8-1/2 | 1/4 | 1/4 | 1/8 | |
| 20:1 | 17 | 1/2 | 1/2 | 1/4 | |
| 30:1 | 26 | 1 | 3/4 | 3/8 | |
| 40:1 | 35 | 1 | 1 | 1/2 | |
| 60:1 | 53 | 2 | 2 | 3/4 | |
| 80:1 | 72 | 2-1/2 | 2-1/2 | 1 | |
| 120:1 | 108 | 3 | 3 | 1-1/2 | |



RENEWAL PARTS

When ordering renewal parts give this form No. PF-046, Item No., Description, Part No., Quantity, and the Complete Unit Number stamped on the label. Reference FIG. #1 and FIG. #2

| ITEM | DESCRIPTION | PART NUMBER | QTY |
|------|-----------------------------|----------------|-----|
| 1 | Case & Shaft Assembly | | 1 |
| | 5:1 Ratio | PSD-0091300-DN | |
| | 10:1 Ratio | PSD-0091400-DN | |
| | 20:1 Ratio | PSD-0091500-DN | |
| | 30:1 Ratio | PSD-0091600-DN | |
| | 40:1 Ratio | PSD-0091700-DN | |
| | 60:1 Ratio | PSD-0091800-DN | |
| | 80:1 Ratio | PSD-0091900-DN | |
| | 120:1 Ratio | PSD-0092000-DN | |
| 2 | Cam Block & Worm Gear Assy. | | 1 |
| | 5:1 Ratio | PSD-0090500-DN | |
| | 10:1 Ratio | PSD-0090600-DN | |
| | 20:1 Ratio | PSD-0090700-DN | |
| | 30:1 Ratio | PSD-0090800-DN | |
| | 40:1 Ratio | PSD-0090900-DN | |
| | 60:1 Ratio | PSD-0091000-DN | |
| | 80:1 Ratio | PSD-0091100-DN | |
| | 120:1 Ratio | PSD-0091200-DN | |
| 3 | Shim Cam Block (.080 Thick) | PS-0003300-A | 1 |
| 4 | Shim Cam Block (.020 Thick) | PS-0000800-A | 1 |
| 5 | Shim Cam Block (.016 Thick) | PS-0003200-A | 2 |
| 6 | Limit Switch Standard SPDT | 1950-1-B-A-DO | 2 |
| | Optional DPDT | 1950-4-B-A-DO | |
| | Optional SMSB | 1950-1408 | |
| 7 | Adjusting Bracket Assembly | PSD-0024600-B | 1 |
| 8 | Gear and Roller Assembly | PSD-0090400-A | 2 |
| 9 | Spring Compression | PM-0018000-A | 2 |
| 10 | Lever Assembly | PSD-0024400-A | 2 |
| 11 | Cover | PC-0069100-A | 1 |
| 12 | Cover Gasket | PS-0000900-A | 1 |
| 13 | Spacer Center Post | M-0073000-A | 1 |
| 14 | Woodruff Key (#404) | 04-564019-DN | 1 |