

# Position Indicator Switch Adjustment

## 1 Explosion-proof NEMA 7 housings:

Unscrew the housing cover from the base and valve body assembly by using a strap wrench on the aluminum housing cover. The 2 switches and mounting block are now exposed.

## Waterproof NEMA 4 and standard NEMA 1 housings:

Unscrew the housing screw at the center of the housing bottom and remove the housing. The 2 switches and mounting block are now exposed.

**WARNING:** Do not allow the weight of the housing cover to pull on the switch leads. This can permanently damage the switches.

**Note:** It is recommended that the following steps be performed with an ohmmeter connected directly to the lead wires of the position switches and the coil and cylinder cap removed so that the piston can be manually moved.

## 2 With the valve in the closed position, loosen the Closed Switch Adjustment Set Screw and gently slide the Closed Position Switch either up or down in the mounting block until the switch closes.

## 3 Move the piston up from the closed position and verify that the switch opens before the piston reaches the full open position.

## 4 Adjust the position of the switch as required until the conditions of steps 3 and 4 are met.

**Note:** The position of the switches will vary from valve to valve as the exact position of the reed switch within the switch tube is subject to variation.

**Note:** The switches can also be rotated in the mounting block. This can affect their sensitivity and in some cases aid in setting of the switches. Again, this is because there is variation in the position of the reed switch within the tube.

## 5 Tighten the Closed Switch Adjustment Set Screw.

## 6 With the valve in the open position, loosen the Open Switch Adjustment Set Screw and gently slide the Open Position Switch either up or down in the mounting block until the switch closes.

## 7 Move the piston down from the open position and verify that the switch opens before the piston reaches the fully closed position.

## 8 Adjust the position of the switch as required until the conditions of steps 6 and 7 are met.

## 9 Tighten the Open Switch Adjustment Set Screw.

## 10 Repeat the test of the switches with the valve assembled, the valves position controlled by energizing the coil, and with full system pressure. Repeat the above steps as required.

**Note:** There are 2 set screws in the center of the plastic mounting block that hold the block to the magnet tube.

Generally it is not necessary to loosen these set screws and adjust the position of the block relative to the magnet tube. If necessary to achieve switch positioning this can be done.

## 11 Replace the housing cover.

See page [105](#) for a drawing of the position indicator switch assembly.