

### Theory of Operation:

The Interlock Pressure Switch# 550311 is designed to activate the attached 120v pigtail only in the presence of pressure. This switch is commonly used in swimming pool chemical injection applications to allow chemical controllers or chemical injection pumps to activate only when there is water pressure at the point of chemical injection. The switch is designed to deactivate power when there is no pressure in the return line. **THIS INTERLOCK PRESSURE SWITCH MUST BE CALIBRATED CORRECTLY. THIS INTERLOCK PRESSURE SWITCH DOES NOT REPLACE OWNER RESPONSIBILITY; PROPER OPERATION MUST ALWAYS BE VALIDATED. NEVER BACKWASH POOL FILTERS WHILE THE POOL IS IN USE.**

### Interlock Pressure Switch Ratings:

- 120 Volt
- 10 Amp
- 1 – 6 PSI Pressure Input

### #550311 Kit Included Parts:

- Normally Open Interlock Pressure Switch
- 20 feet of ¼" OD HDPE Tubing
- ¼" Tube x ¼" NPT Pressure Switch Fitting

### Tools Needed for Installation:

- Electric Drill
- 7/16" Drill Bit
- ¼" NPT Pipe Tap
- Teflon Tape
- Pliers
- Mounting Screws or Anchors
- Screwdriver
- Drill Bit for Mounting Screws or Anchors



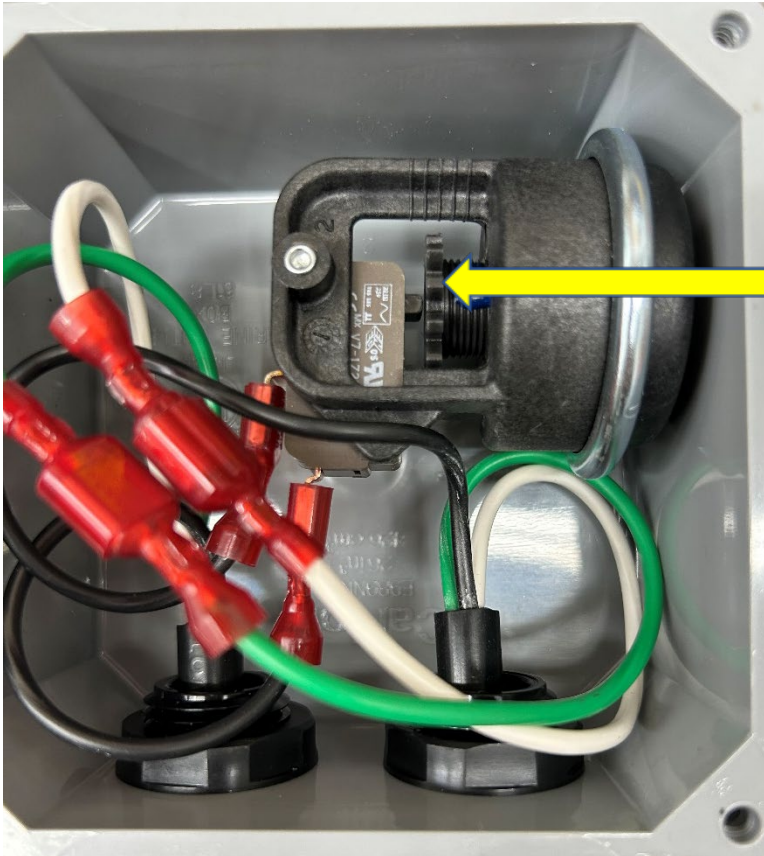
### Installation Instructions:

**WARNING = DO NOT EXCEED VOLTAGE, CURRENT, OR PRESSURE RATINGS.**

- 1.) Position and mount the Interlock Pressure Switch (using anchors and screws) on a vertical surface such that cords are facing down. Make sure the 120v load cable is able to reach the load pigtail on the pressure switch.
- 2.) With the pressure isolated (pump off, valves shut, etc.) drill a 7/16" hole and tap the hole with a ¼" NPT pipe tap just before the chemical injection points **in the return line**. Screw the tap approximately halfway into the hole in the pipe.
- 3.) Wrap threads of the pressure switch fitting with Teflon tape and thread fitting until tight in threaded hole in the pipe.
- 4.) Install the ¼" OD pressure tubing between the pressure switch inlet fitting and the fitting in the return line.
- 5.) Turn pool circulation system back on and inspect for leaks in the pressure switch pressure line.
- 6.) Plug load to be switched into the Interlock Pressure Switch pigtail.
- 7.) Test Interlock Pressure Switch several times by doing the following:
  - a. Turn circulation pump off. Interlock Pressure Switch should turn off the load.
  - b. If the system is a pressure filtration system, put filter in backwash mode. The Interlock Pressure Switch should turn off the load.
- 8.) If the Interlock Pressure Switch does not turn off the load during the above testing, following the calibration instructions on page 2.

## **Calibration Instructions:**

- 1.) Unplug the Interlock Pressure Switch from the GFCI power outlet.
- 2.) Remove the cover plate by removing the 4 screws.
- 3.) The factory setting of the pressure switch is 3 psi.
- 4.) To increase the actuation pressure of the switch, rotate the knurled knob clockwise(DOWN). Each complete turn of the knob equals a .75 psi increase in the pressure switch actuation setting.
- 5.) To decrease the actuation pressure of the switch, rotate the knurled knob counter-clockwise (UP). Each complete turn of the knob equals a .75 psi decrease in the pressure switch actuation setting.
- 6.) Replace cover and 4 screws to seal enclosure.
- 7.) Plug Interlock Pressure Switch back into the GFCI power outlet.
- 8.) Perform Step-7 of the Installation Instructions to validate the Interlock Pressure Switch is operating correctly.



**Knurled knob location:**

DOWN = Increases pressure setting  
UP = Decreases pressure setting