Adjusting Well Pump Pressure Switches

⚠ CAUTION Hazardous voltage, Disconnect power before working on the motor or the pressure switch.

The starting and stopping of the pump is controlled by the pressure switch.

Figure 1: Pressure Switch Location

The pressure switch is typically pre-set correctly for the application. If the cut-off or cut-on pressure needs to be changed, follow the procedure below.

These instructions cover one-post and two-post switches.

One-Post Pressure Switches

These allow adjustment of the cut-on and cut-off pressure at the same time. This will keep a 20 PSI differential between the start (cut-on) and stop (cut-off) pressures.

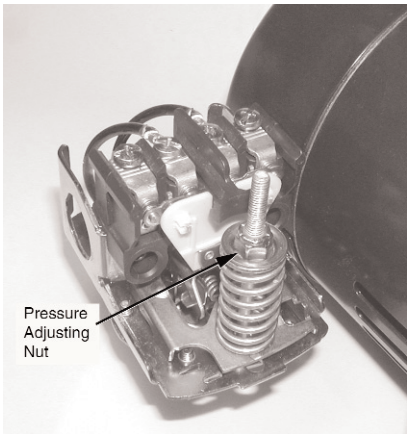

Figure 2: Single Post Pressure Switch

To increase the cut-off and cut-on pressure, turn the nut clockwise ↷. The rate of increase is 2 1/2 PSI for every complete turn of the nut.

(i.e. 4 complete clockwise turns will raise the pressure setting 10 PSI.)

Two-Post Pressure Switches

Pressure switches with two posts allow adjustment of the cut-on and cut-off pressure at the same time. The second post allows adjustment of the cut-off pressure independently.

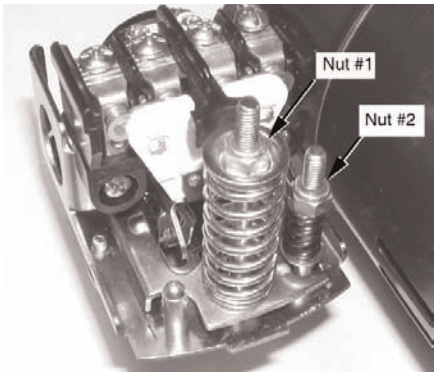

Figure 3: Two Post Pressure Switch

To increase the cut-off and cut-on pressure, turn nut #1 clockwise ↷. The rate of increase is 2 1/2 PSI for every complete turn of the nut. Do not adjust nut #2

The above adjustments maintain a 20 PSI differential between cut-on and cut-off pressures, which is best for pressure tank performance. Very few applications will need to adjust nut #2.

To raise **only** the cut-off pressure , turn nut #2 clockwise.

To lower any pressure, turn the nut counter-clockwise ↶.

NOTICE: The switch should never be adjusted to cut-on below 20 PSI, or cut-off above 60 PSI.

System Pressure

The pressures in a well pump system must keep a set relationship.

- Dead-head pressure: This is the pressure the pump produces when not moving water, as with a closed outlet valve.

  ⚠ CAUTION Risk of explosion. Do not run the pump with a closed discharge longer than needed to read the pressure.
- Cut-Off Pressure: This is the high pressure that turns off the pump. This should always be at least 5 PSI less than the dead-head pressure.
- Cut-On Pressure: This is the low pressure that starts the pump. This is typically 20 PSI less than the cut-off pressure.
- Tank Precharge Pressure: This is set 2 PSI less than the cut-on pressure (see chart).

Switch Cut-On Pressure	Tank Air Precharge*
20	18
30	28
40	38

*With NO water pressure