

## Common Well System Problems That Damage Pressure Switches:

### Pressure Switch Not Turning OFF:

- Verify that your pump is creating enough pressure to signal the pressure switch to turn off. If the pump is not creating enough pressure to signal the switch to turn off, it is possible the pump could need to be replaced. Or you may have to purchase a pressure switch with lower ON/OFF settings example: 30/50psi switch. You will need a functional water pressure gauge to verify the water system pressure.
- If your pump is not creating enough pressure to turn the pressure switch off, it can damage the contacts causing the switch to fail.
- If the pressure is going past the Cut-Off number of the switch, you may have a bad pressure tank, or the water pressure inlet to the switch could be blocked with sediment or debris.
- The pressure switch does not control how much pressure your pump makes, it only turns on and off as the pressure in your system drops or increases signaling the switch to turn ON/OFF.
- Verify the air pressure in your pressure tank is 2psi below the Cut-On number of the pressure switch.

### Bad Pressure Tank:

- If you are using a bladder tank and experiencing rapid cycling (constant cycling on and off) of the pressure switch, it is possible you may need to replace pressure tank. You may also notice the pressure going past the Cut-Off of your pressure switch, this is also another warning sign that you will need to replace the pressure tank
- The easiest way to test if your pressure tank is damaged, is to bleed off a few pounds of air pressure from the bladder. If there is water coming out of the tanks Schrader valve, the tank is bad and will need to be replaced immediately.
- Verify the air pressure in your pressure tank is 2psi below the Cut-On number of the pressure switch

### Rapid Cycling:

- If you are experiencing rapid cycling or the switch is turning ON/OFF while no water is being used. You may have a leak in your well system. Most submersible pumps have check valves installed on the pump itself, if this check valve or any other check valve in the piping fails, it will allow water to travel back into the well, causing the switch to rapid cycle or turn ON/OFF while no water is being used. Consult a certified plumber or well driller.
- On new well installations rapid cycling can occur if the pressure switch is mounted 5ft or greater from the pressure tank. Typically pressure switches are mounted to "Tank Tees" which connect directly to the pressure tank.
- If your pressure tank is undersized this can cause rapid cycling depending on the demand placed on the well system.
- Verify the air pressure in your pressure tank is 2psi below the Cut-On number of the pressure switch

### Improperly Adjusted Switch:

- Your pressure switch is pre-set from the factory, please verify proper operation of the switch several cycles before you decided to adjust the pressure switch. Please see pressure switch instructions
- Verify the air pressure in your pressure tank is 2psi below the Cut-On number of the pressure switch

**Other tips:**

- Verify pressure tank and bladder is in good working order before replacing pressure switch. Damaged or bad pressure tanks will not allow the switch to operate properly
- Verify there are no leaks in the well system before replacing pressure switch. Leaks can cause the switch to rapid cycle and damage the switch.
- Verify your pump is capable of creating the pressure to signal the pressure switch to turn off.
- This pressure switch is pre-set from the factory, please verify proper operation of the switch several cycles before you decided to adjust the pressure switch to accommodate your needs. Please see pressure switch instructions.
- Verify your water pressure gauge is working properly before installing your pressure switch. If you do not have a water pressure gauge, we recommend installing one before installing your pressure switch.
- Model number PPSL3050, lever **MUST** be held in the start position until the pump builds within 10psi or less of the start pressure for proper operation.

Please see instruction manual for complete installation instructions and troubleshooting. Or call 800-346-7611 for Technical Support.