Importance of a Professionally-Installed Variable Speed Pump (VSP)

Firstly, if you haven't read our "Benefits of A Variable Speed Pump" guide, we highly recommend doing that first. Once you have a better understanding of how a VSP works, you'll understand how it will help you save money, and other benefits they offer.

In this day and age of money savings options and internet connected devices, you want to make sure you're getting the most savings, and accessibility out of your new VSP. This guide will walk you through the importance of having your VSP installed properly, and most important, professionally installed; the kinds of damage an improperly installed VSP can cause; how much a properly installed VSP can change your pool experience, and most importantly the effect on your wallet.

There are MANY reasons as to why you should have your VSP professionally installed and setup.

1. Most pump manufacturers will not honor the pump warranty, unless it is installed by a qualified professional. If you're spending the money on a new VSP, you should check and make sure you meet all requirements for the manufacturer's warranty.

2. If a VSP is not installed properly, it can cause major damage to your pool's filter system, and the suction and return lines that are buried underground and under your pool deck. Since all new residential VSPs are rated between 1.5hp-3hp, you can easily have too much water flow (GPM) going through your pipes and can cause cavitation, degradation, and bursting of your underground pipes.

3. You could also damage your filter, valves, chlorinator, chlorine generator, heater, heat pump, floor system, booster pumps, which then translates to major damage to your wallet.

4. If your VSP isn't configured correctly, you can have too much water flow going through your valves and filter. This could cause your filter media, tank and/or valves to be prematurely damaged due to high system pressures.

If your VSP is set too low or high, it would affect your equipment the following ways:

- You could drastically reduce the life of your heater or heat pump by having too little water flow through it. When there's not enough water flow going through a heat exchanger/condenser, the hot water sits there and degrades the CuproNickle pipes in the exchanger/condenser. There's also a pressure switch that needs to be triggered for your heater/heat pump to activate. If you're running your VSP with high flow rates, you could erode your heat exchanger/condenser due to excessive water turbulence.

- Your chlorinator (in-line), or chlorine generator can blow apart from excessive water flow. Alternatively, if you don't have enough flow, you won't break down the chlorine tabs in your chlorinator or satisfy the flow switch in your chlorine generator to allow the process of electrolysis to start.

- If you have a floor system and there is excess water flow, you can blow your module and module body apart. You could also cause damage to the rotating heads in the bottom of the pool. If there's inefficient flow, your module will not turn and the pool would be stuck in one zone all the

time. Also, there may not have enough pressure required to pop the heads up out of their housing.

- If you don't have sufficient flow for a booster pump, you could burn out the motor and bearings. You'd also be replacing seals and impellers more often as the water in the wet end will be hot because of improper flow. Your pool would also be less clean as your cleaner won't be moving around the pool because it doesn't have enough pressure to operate. If you have too much pressure, it would cause your cleaner to run around your pool skipping over everything it's supposed to be picking up, and possibly coming out of the pool causing it to drain down while the cleaner is running.

- With a VSP not dialed in properly, you would be spending more money as the system's hydraulics are not designed to handle the flow of the VSP, causing the pump to draw higher amperage than needed.

Avoid the agony of all these potential problems and let us help you take full advantage of the benefits of a Variable Speed Pump.

A qualified professional can also help you set up remote access to the VSP. Many new models of VSPs come with an Internet access option, allowing you to turn on/off the VSP and change the speeds of your pump from anywhere in the world. With an automation upgrade or installation, you can get the most energy-efficient pool system available, and access to any of your pool's devices from anywhere in the world.

Whether you already have a VSP or are considering an upgrade for your pool by installing one, call us today for an appointment on optimizing your VSP so you can be sure you're getting the savings you deserve. We also offer a free energy audit on any single speed pool filter pump, and a new VSP installation estimate.