Model HC6000 Electronic Hi-Lo Pump Switch

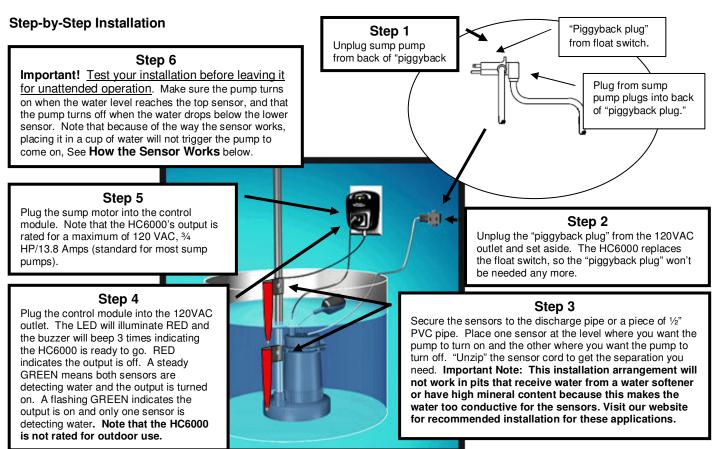


Installation Instructions

Overview

The installation of the **HC6000 Hi-Lo Pump Switch** is simple and straightforward, but there are **TWO VERY IMPORTANT** things to remember for the HC6000 to give you years of trouble free, worry free, service.

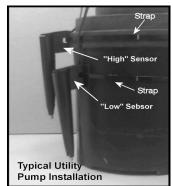
- 1. The "piggyback plug" attached to the mechanical float switch cannot be used with the HC6000. It must be disconnected and remain disconnected. Just let it lay on the floor after the HC6000 is installed.
- 2. If your sump pump has internal float switch wiring, i.e., doesn't have a "piggyback plug," then you **MUST** secure the float up as if the pit were full so that its internal switch is always closed and the pump enabled.



How the Sensor Works:

The sensor detects the presence of water by using a continuity circuit, which, when the tip of the sensor is in water, allows a small voltage to flow from the sensor, through the water, to ground. When no water is present, the circuit is broken and no voltage flows. Normally, the pump provides the ground needed for the continuity circuit, but occasionally it won't.

When this happens, it is necessary to provide a ground for the sensor to work. This can be done with a length of wire (14 AWG) having a couple of inches of insulation stripped off at both ends. Secure one end of the wire around a water pipe or electrical conduit. Place the other end into the pit far enough down so that the end of the wire is below the sensor. **Note that placing the sensor in a cup of water will not trigger the pump to come on because there is no ground reference to complete the continuity circuit.**



HC6000 Hi-Lo Pump Switch Troubleshooting Chart

The Model HC6000 Utility Pump Switch has a number of built in alarms that warn of problems with the pump or discharge plumbing. The available alarms are described in the table below. *To disable the alarms perform the following steps:*

- 1. Unplug pump from control module.
- 2. Lift sensor out of water.
- 3. Unplug control module from 120 VAC outlet. Wait 10 seconds.
- 4. Plug control module back into outlet. Wait 10 seconds.
- 5. Unplug control module from 120 VAC outlet. Wait 10 seconds.
- 6. Plug control module back into outlet. Wait 10 seconds.
- 7. Plug pump back into control module
- 8. Place sensor back into water

Alarm/Indicator/Problem	Description	Possible Causes
2 Beeps	Can't turn pump on	 Pump not plugged in Float piggy-back plug not disconnected Float switch not secured in "on" position (internally wired float switch)
3 Beeps	High Level Alarm	Pump can't keep up with water coming in Discharge plumbing blocked Debris on sensor
Steady Slow Beep*	Motor current above normal	Pump motor beginning to fail. Replace pump and/or perform Master Reset as described below.
Steady Fast Beep*	Motor current too high	Pump motor failure imminent. Replace pump and/or perform Master Reset as described below.
Steady Red LED	Pump off, no water detected by either sensor	Normal Operation
Flashing Red LED	Pump off, water detected by lower sensor	Normal Operation
Steady Green LED	Pump on, water detected by both sensors	Normal Operation
Slow Flashing Green LED	Pump on, water below upper sensor, and above lower sensor	Normal Operation
Pump doesn't turn on	Both sensors in water but the pump doesn't start. LED is steady Red and switch isn't beeping	Sensors aren't getting a good ground from pump. Install ground wire as described in "How Sensor Works" on front of sheet
Pump turns off too soon	Pump starts okay, but shuts off after a couple of seconds	Sensors aren't getting a good ground from pump. Install ground wire as described in "How Sensor Works" on front of sheet

^{*}Master Reset Procedure:

- 1. Unplug the pump from the HC6000
- 2. Unplug the HC6000 from the 120 VAC outlet
- 3. Wait 5 seconds then plug the HC6000 back into the 120 VAC outlet
- 4. Wait for the HC6000 to finish its startup checks (about 5 seconds) then plug the pump back in.

Model HC6000 Hi-Lo Pump Switch Limited Lifetime Warranty

STAK Enterprises Inc. warrants the **Model HC6000 Hi-Lo Pump Switch** to be free from defects in materials and workmanship for its normal, useful life, from the date of purchase. STAK Enterprises Inc. makes no other express warranty for this device. No agent, representative, dealer, or employee of STAK Enterprises Inc. has the authority to increase or alter the obligations or limitations of the warranty. The company's obligation of this warranty shall be limited to the repair or replacement of any part of the HC6000 which is found to be defective in materials or workmanship under normal use and service during the duration of product use by original product owner commencing with the date of purchase. Owner must pay all shipping charges necessary to replace product covered by this warranty. This warranty shall not apply to acts of God, nor shall it apply to products which, in the sole judgment of STAK Enterprises, Inc. have been subject to negligence, abuse, accident, tampering, alteration, misapplication, or improper installation. Units in need of repair should be returned, shipping prepaid, to

Customer Service Department STAK Enterprises, Inc. 2413 West Algonquin Road #309 Algonquin, IL 60102

THE DURATION OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING THAT OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSES, SHALL BE LIMITED TO THE NORMAL, USEFUL LIFE OF THE PRODUCT, COMMENCING WITH THE DATE OF PURCHASE. IN NO CASE SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WHATSOEVER.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.