Model HC8000
Electronic Sump Pump Switch
Patents Pending

HydroCheck ®
Controlling Water.
Preventing Damage.

Installation Instructions

Overview

The installation of the HC8000 Sump Pump Switch is simple and straightforward, but there are **THREE VERY IMPORTANT** things to remember for HC8000 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 HC8000**. It must be disconnected and remain disconnected. Just let it lay on the floor after the HC8000 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 the internal switch is always closed and the pump enabled.
3. *The HC8000 turns the pump off when it detects the loss of suction by the pump. In order to do this reliably, the sensor should be set at a level to insure that **the pump runs for at least 5 seconds before it starts to suck air!***
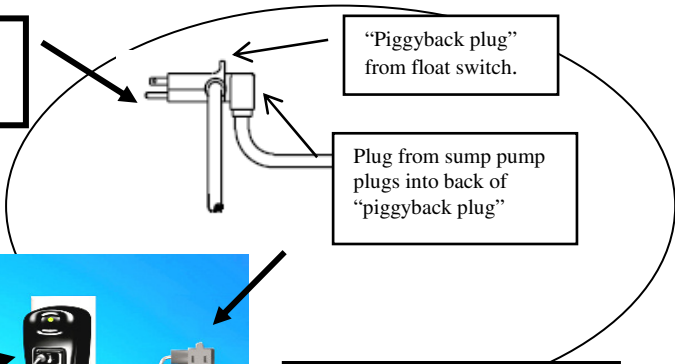
Step-by-Step Installation:

Step 1
Unplug sump pump from back of "piggyback plug"

"Piggyback plug" from float switch.

Plug from sump pump plugs into back of "piggyback plug"

Step 6
Important! Test your installation before leaving it for unattended operation. Make sure the pump turns on when the water level reaches the sensor, and that the pump turns off once it starts to suck air. Note that because of the way the sensor works, placing it in a cup of water will not trigger the pump to come on, See **How the Sensor Works** below

Step 5
Plug the sump motor into control module. Note that the HC8000's output is rated for a maximum of 120 VAC, ¾ HP/13.8 Amps (standard for most sump pumps).

Step 2
Unplug the "piggyback plug" from the 120VAC outlet and set aside. The HC8000 replaces the float switch, so the "piggyback plug" won't be needed any more.

Step 4
Plug the HC8000's control module into the 120VAC outlet. It will beep twice to tell you it's ready to go and the LED will illuminate RED. RED indicates the output is off. GREEN, or flashing GREEN, indicates the output is on**. Note that this product is not rated for outdoor use.**

Step 3
Lower the sensor into the sump pit. **The sensor should be positioned so that the pump will run for at least 5 seconds before sucking air**. Secure the sensor to the discharge pipe with the supplied tie-wrap. (Figure 1)

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.*

Figure 1

HC8000 Sump Pump Switch Troubleshooting Chart

The Model HC8000 Sump 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 and **wait for unit to beep**.
5. Unplug control module from 120 VAC outlet. Wait 10 seconds.
6. Plug control module back into outlet and **wait for unit to beep**.
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	1. Pump not plugged in 2. Float piggy-back plug not disconnected 3. Float switch not secured in "on" position (internally wired float switch)
3 Beeps	High Level Alarm	1. Pump can't keep up with water coming in 2. Discharge plumbing blocked 3. Debris on sensor
Steady Slow Beep*	Motor current above normal	1. High motor current. Replace pump and/or perform Master Reset as described below.
Steady Fast Beep*	Motor current too high	1. Very high motor current. Replace pump and/or perform Master Reset as described below.
Steady Red LED	Pump off, no water detected	1. Normal operation
Steady Green LED	Pump on, water detected by sensor	1. Normal operation
Slow Flashing Green LED	Pump on, water below sensor	1. Normal operation
Pump doesn't turn on	Sensor in water but pump doesn't start. LED is steady Red and switch isn't beeping	1. Sensor isn't getting 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 before it starts to suck air	1. Problem with pump's discharge path. Try to reduce resistance by decreasing number of bends, shortening discharge distance, etc.

*Master Reset Procedure:
1. Unplug the pump from the HC8000
2. Unplug the HC8000 from the 120 VAC outlet
3. Wait 5 seconds then plug the HC8000 back into the 120 VAC outlet
4. **Wait for the HC8000 to beep twice and the light on the front of unit to turn on**, then plug the pump back in.

Model HC8000 Sump Pump Switch Limited Lifetime Warranty

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CALL 1-877-225-2124
If you have installation questions or other product
questions, contact us toll-free at 1-877-225-2124

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