HC5000T Sewage Pump Switch

with Programmable Cycle Length and Built-in Alarms

HydroCheck
Engineered for reliability

Overview:

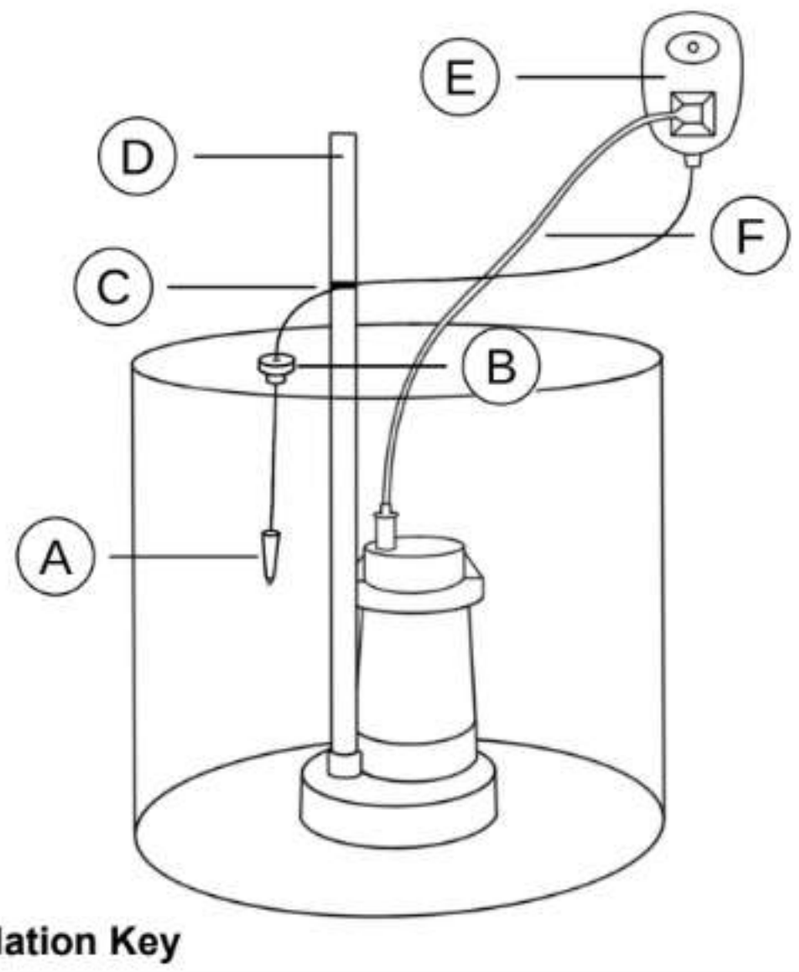
The HydroCheck **HC5000T Electronic Sewage Pump Switch with Programmable Cycle Length and Built-in Alarms** is compatible with all sewage/ejector pumps and is designed to replace traditional float switches. Use the Smart Button to easily program a precise cycle length for your sewage pump that will begin when liquid reaches the sensor tip. See **Troubleshooting** section for Smart Button, LED and Alarm specifications. Not rated for outdoor use.

READ PRIOR TO INSTALLATION:

1. The **"piggyback plug"** attached to the mechanical float switch ***cannot be used with the HC5000T.*** It must be disconnected and remain disconnected.
2. If your sewage pump has **internal float switch wiring**, i.e. does not have a "piggyback plug", then you ***must*** secure the float in an **upward position** as if the pit were full. This assures that the internal switch is always closed and that the pump is always enabled.

Step-by-Step Installation

Step 1	For an ideal installation, drill a 9/16" hole through the sewage pit cover. Insert the **sensor** (A) through the provided **rubber grommet** (B).
Step 2	Lower the **sensor** (A) into the pit so that the tip of the sensor is approximately 1" below the inlet pipe to the pit. **NOTE:** Make sure the sensor is hanging freely and is not in contact with anything else in the pit, such as the pump's power cord, the wall of the pit, etc.
Step 3	Using the provided **tie wrap** (C), secure the sensor cable to a portion of the **discharge pipe** (D) that is located outside of the pit so that the sensor does not drop lower in the pit.
Step 4	Securely plug the drilled hole with the **rubber grommet** (B). **NOTE:** Only applicable if a hole was drilled in Step 1.
Step 5	Plug the **control module** (E) into a 3-prong 120 VAC outlet.
Step 6	Plug the **pump's power cord** (F) into the front of the **control module** (E).
Step 7	Adjust the run time by following the **Run Time Adjustment** steps in the table below. **NOTE:** This product defaults to a 10 second run time and can be reprogrammed at anytime. Achieving the optimal pump cycle length may take several attempts.
Step 8	TEST YOUR INSTALLATION BEFORE LEAVING IT FOR UNATTENDED USE. **NOTE:** This product **will not work if tested in a cup of water.** See *How the Sensor Works: Why won't my pump turn on?* below.



Installation Key

A. Sensor	D. Discharge Pipe
B. Rubber Grommet	E. Control Module
C. Tie Wrap	F. Pump Power Cord

*Inlet pipe and 120 VAC outlet are not pictured.

Product Specifications

Product Dimensions	2.8 x 2.5 x 3.5 in
Weight	14.4 oz
Output Rating	120 VAC, 15 Amp, 1 HP
Alarm Rating	80 dB
Power	120 VAC, 60 Hz
Sensor Cable Length	12 ft

Run Time Adjustment

Step 1	Silence or eliminate all active alarms: There should be no audible alarms active (See **"Smart Button Features"** on how to disable alarm).
Step 2	Press and hold the **Smart Button** for approximately 5 seconds, or until the output turns on and the LED starts to flash green. The output turning on marks the start of the desired run time. **NOTE:** If the pump is in the middle of a cycle, first cancel the cycle by pressing and releasing the Smart Button.
Step 3	Release the **Smart Button** when the desired run time is reached. The output will turn off and the switch is now reprogrammed with the new run time. **NOTE:** Loss of power does not affect the programmed run time.

How the Sensor Works: Why won't my pump turn on?

The sensor detects the presence of water by using a continuity circuit. The continuity circuit works by allowing a small current to flow from the sensor, through the water, to the ground when the tip of the sensor is in water. When no water is present, the circuit is broken and no current flows. Normally, the pump provides the ground reference needed for the continuity circuit to work, but occasionally it won't. If the pump won't turn on, this may indicate a weak ground reference. When this happens, it is necessary to provide a ground reference for the sensor to work.

Adding a Ground Wire:

Step 1	Strip 1 inch of insulation off each end of a 14 AWG length of wire.
Step 2	Secure one end of the wire to a copper water pipe or metal electrical conduit.
Step 3	Place the other end of the wire into the pit so that it is *below* the sensor. **NOTE:** No danger of electrocution.