



Pat. No. 6,683,535

## Introduction



Before proceeding with the installation or operation of the product, make sure to read all instructions thoroughly, as well as complying with all Federal, State and Local Codes, Regulations and Practices. The product must be installed by qualified personnel familiar with all applicable local electrical and mechanical codes. Refer to the National Electrical Code (NFPA 70). Failure to properly install and test this product can result in personal injury or equipment malfunction.

## Safety Guidelines

1. DISCONNECT ALL ELECTRICAL SERVICE BEFORE WORKING ON OR HANDLING THE PRODUCT.
2. DO NOT USE WITH FLAMMABLE OR EXPLOSIVE FLUIDS SUCH AS GASOLINE, FUEL OIL, KEROSENE, ETC. DO NOT USE IN EXPLOSIVE ATMOSPHERES.
3. THIS PRODUCT MUST BE MOUNTED INDOORS.

## Description of Operation

The WaterPro™ Well Stop is a water detection sensor with a built-in power relay that will switch the power off to a well pump to prevent flooding.

Installation is simple, “Bare Lead” models connect in series with a pressure switch or “Piggyback” models plug directly into wall outlets followed by pump power cord plug.

A green “Power” LED indicates power is available for the well pump. When water is detected, the red “Well Pump Stop” LED illuminates and the internal power relay activates to disconnect power going to the well pump to stop the pump and prevent flooding.

The WaterPro™ Well Stop uses an isolated patented circuit that can detect water with no shock hazard at the probes.

## Tools, Supplies and Requirements for Installation - Not Included

1. Phillips screw driver.
2. Access to pressure switch with supplied 120 VAC or 230 VAC power (depending on model).
3. 1/2” Romex Connector (Qty 1).

Note: For easy installation, Alderon Industries will package and prepare bare lead models (Part Numbers 8069 and 8070) with two (2) ring terminals that must be mounted flat under any other incoming wires connected to the pressure switch terminals and include a 2-Wire Wago connector for quick connections.

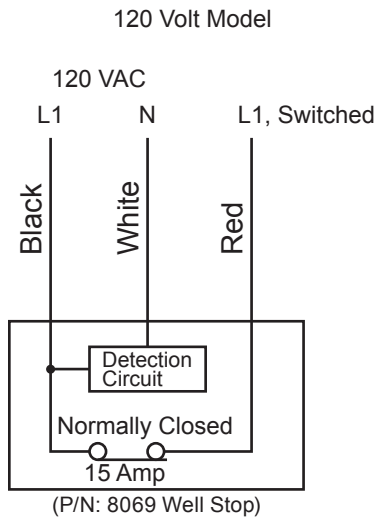
## Installation of the WaterPro™ Well Stop - Bare Leads Directly Controlling Pump

1. For bare lead models (Part Numbers 8069 and 8070) wiring to a pressure switch directly controlling a pump, go to Step 2. For wiring bare lead models into a pilot circuit, go to Page 6. For piggyback plug models (Part Numbers 8071 and 8072) go to Page 6.

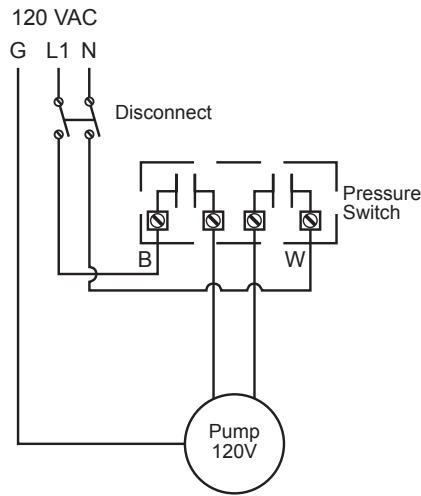
## Installation of the WaterPro™ Well Stop - Bare Leads Directly Controlling Pump, Continued

2A. For 120 VAC model (Part Number 8069), review Figures 1, 2 and 3. This shows the electrical schematics for the WaterPro™ Well Stop Sensor (Fig. 1), the original pump and power wiring to the Pressure Switch (Fig. 2) and the wiring diagram showing the WaterPro™ Well Stop Sensor wired into the Pressure Switch (Fig. 3).

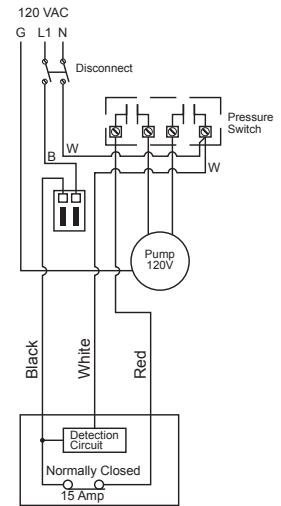
(Fig. 1)



(Fig. 2)

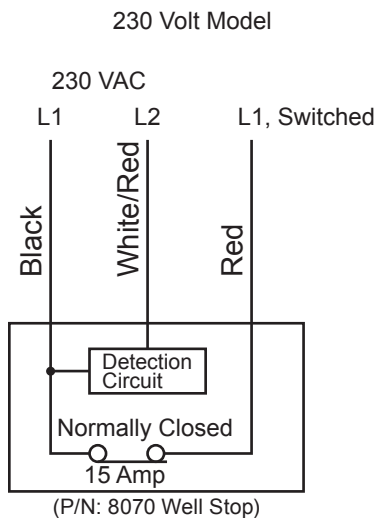


(Fig. 3)

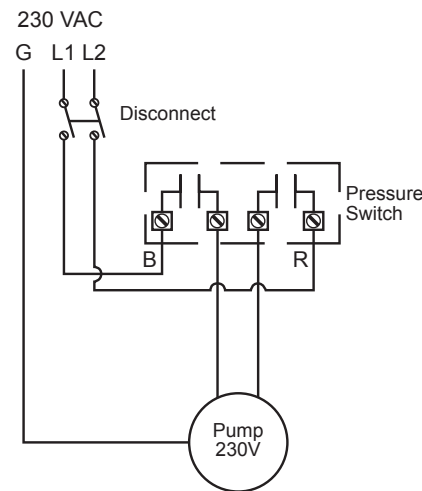


2B. For 230 VAC model (Part Number 8070), review Figures 4, 5 and 6. This shows the electrical schematics for the WaterPro™ Well Stop Sensor (Fig. 4), the original pump and power wiring to the Pressure Switch (Fig. 5) and the wiring diagram showing the WaterPro™ Well Stop Sensor wired into the Pressure Switch (Fig. 6).

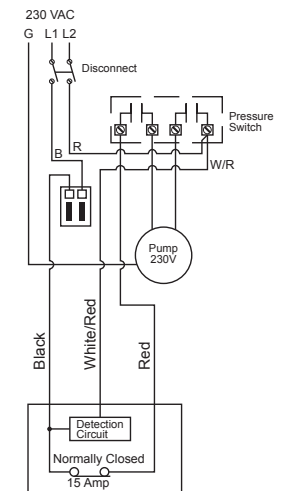
(Fig. 4)



(Fig. 5)



(Fig. 6)



3. The instructions provided are based on the original power and pump connecting to the pressure switch as shown in Figures 2 and 5. If the pump and power are not wired to the pressure switch as shown, change and make the electrical connections to the pump and power as shown in Figure 2 for a 120 Volt system and Figure 5 for a 230 Volt system so the instructions proceeding can be followed correctly.

**Warning!** Turn off all power before any rewiring of the pressure switch.

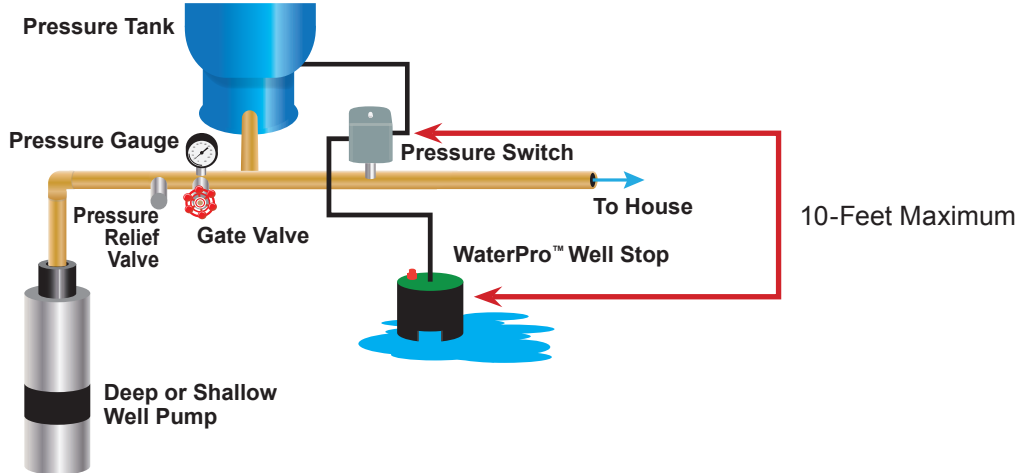
**Note:** The wire colors shown in the photograph examples are for a 230 Volt system and for the 120 Volt system, the red wires may be white. L2 is for 230 Volt system and N (Neutral) is for 120 Volt system.

# WaterPro™ Well Stop - Installation Instructions

## Installation of the WaterPro™ Well Stop - Bare Leads Directly Controlling Pump, Continued

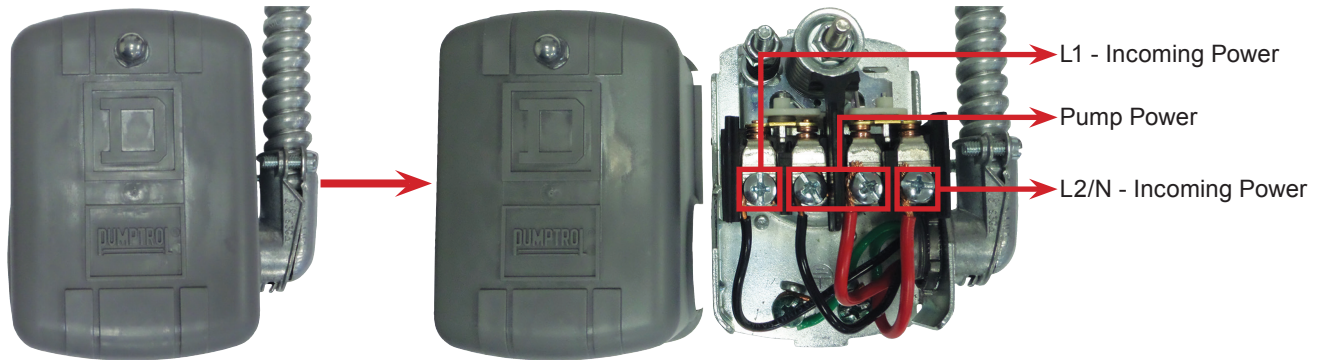
4. Determine the location for the WaterPro™ Well Stop sensor, which must be within 10-Feet of the Pressure Switch (Fig. 7). Make sure the pressure switch main disconnect incoming power is turned off. Position the WaterPro™ Well Stop sensor in the desired location.

(Fig. 7)



5. Caution! - When installing wires, route all wires away from sharp objects and internal components. After ensuring all power is disconnected, remove the pressure switch cap (Fig. 8).

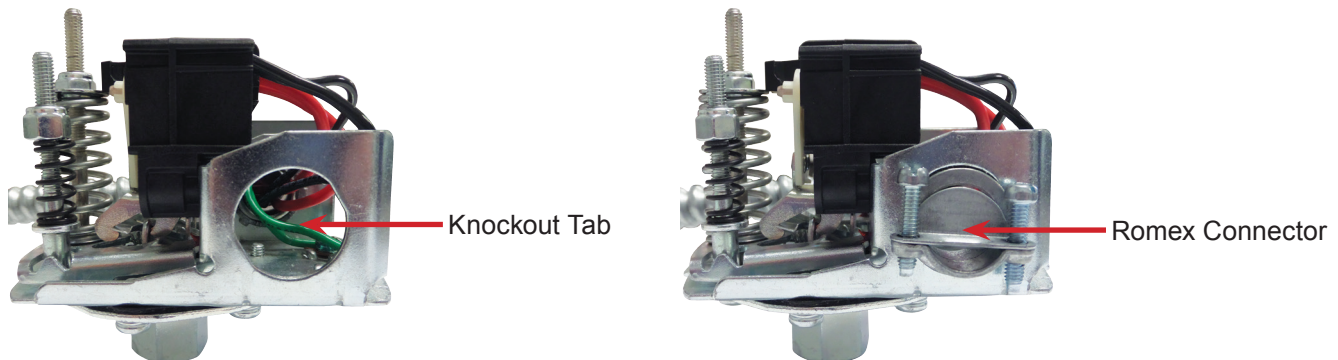
(Fig. 8)



6. Remove the pressure switch “knockout” tab (Fig. 9) and insert the 1/2” Romex connector (Fig. 10) into the opposite side of the pressure switch in which the main disconnect incoming power and motor/pump cable are inserted through conduit.

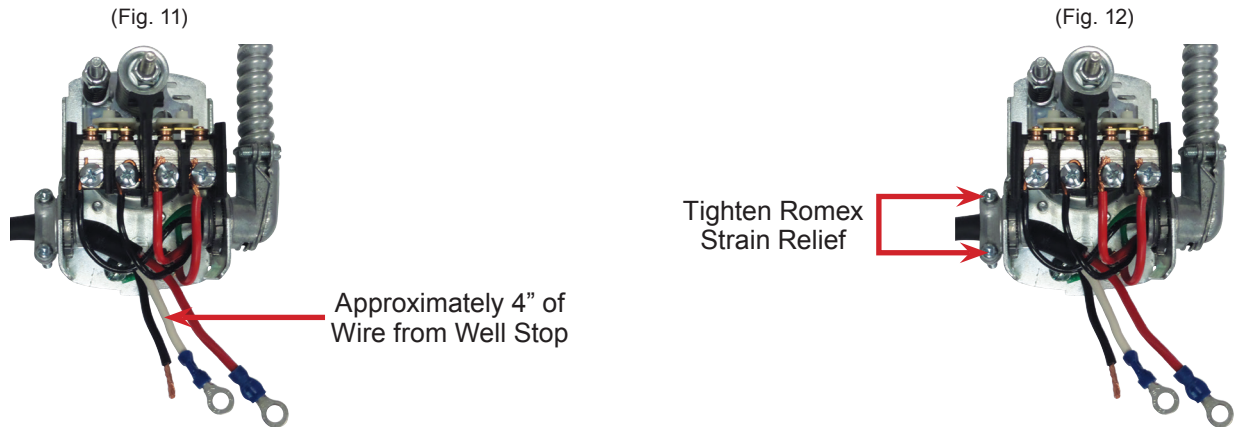
(Fig. 9)

(Fig. 10)

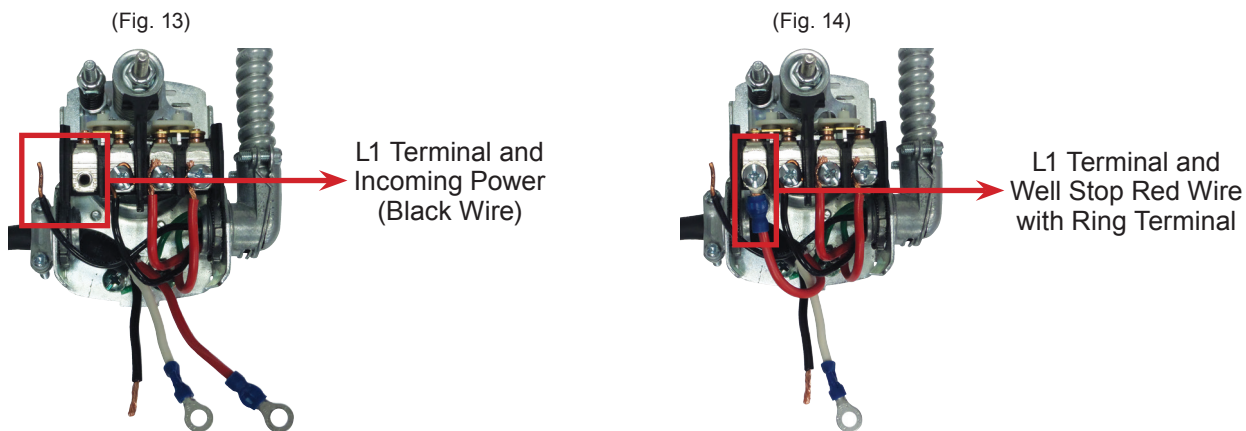


## Installation of the WaterPro™ Well Stop - Bare Leads Directly Controlling Pump, Continued

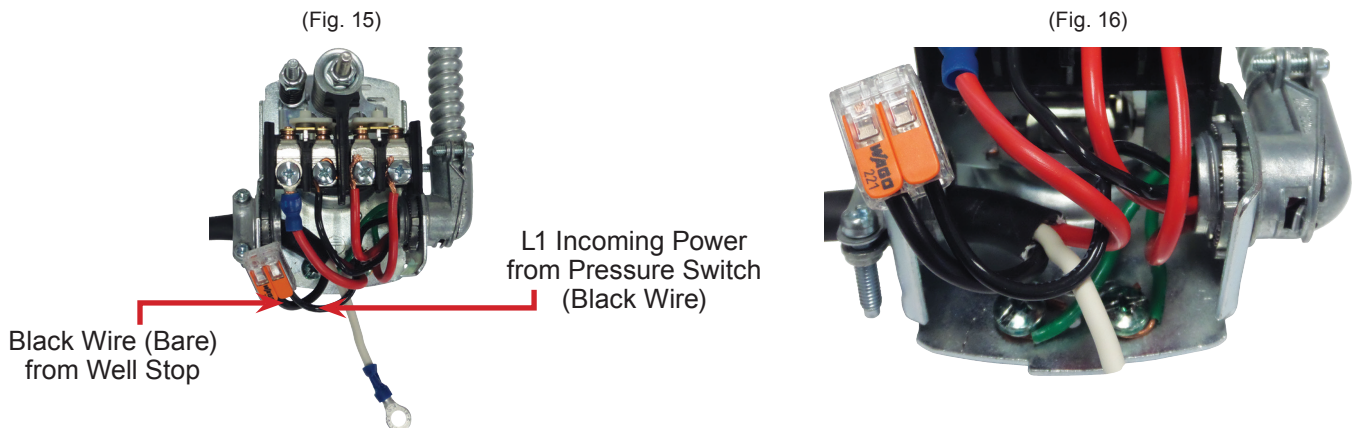
7. Insert WaterPro™ Well Stop cable through the 1/2" Romex connector and feed the wires approximately four-inches (4") into the pressure switch (Fig. 11). Tighten down the Romex strain relief connector to secure the cable in place (Fig. 12).



8. Remove screw from the L1 Terminal on the pressure switch and remove the L1 Incoming Power (black wire) (Fig. 13). Using the provided ring terminal from the WaterPro™ Well Stop, securely fasten the red wire to the L1 Terminal which you just removed the black wire from (Fig. 14).



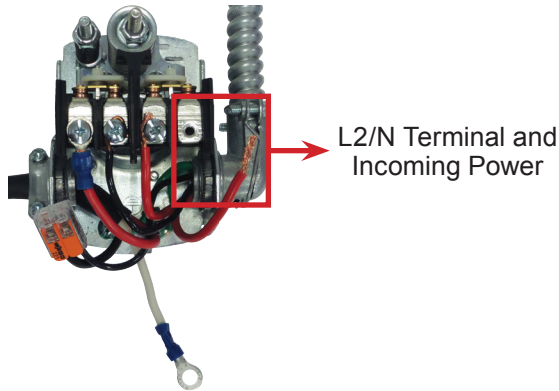
9. Insert the L1 Incoming Power (black wire) and WaterPro™ Well Stop bare black wire into the provided 2-Wire Wago connector (Fig. 15). See zoomed in photograph of 2-Wire Wago connector for wiring reference (Fig. 16).



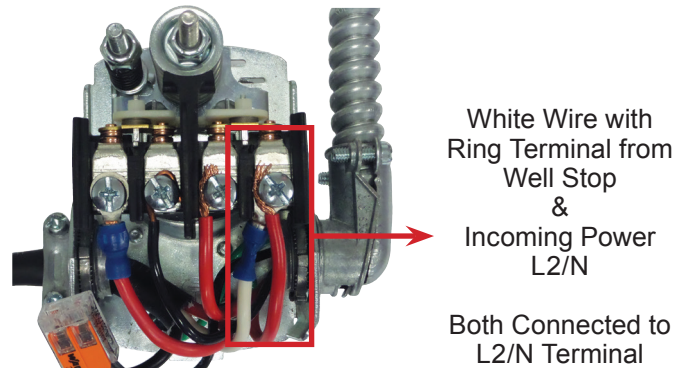
## Installation of the WaterPro™ Well Stop - Bare Leads Directly Controlling Pump, Continued

10. Remove the screw from the L2/N Terminal (Fig. 17) and remove the L2/N Incoming Power (red wire/230 VAC or white wire/120 VAC). Next, using the provided ring terminal from the WaterPro™ Well Stop, place the white wire on the L2/N Terminal and replace the L2/N Incoming Power wire and securely fasten both wires to the same L2/N Terminal (Fig. 18).

(Fig. 17)



(Fig. 18)



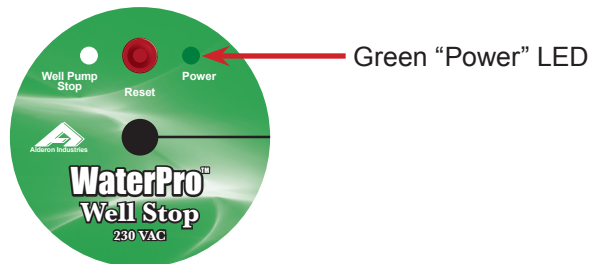
11. Neatly tuck all wires and connectors inside the pressure switch enclosure, then replace the pressure switch cap (Fig. 19).

(Fig. 19)



12. Restore power to the system. The green "Power" LED should illuminate (Fig. 20). After wiring and restoring power, go to Page 7 for testing.

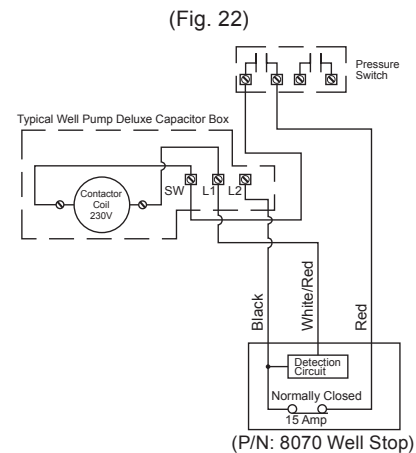
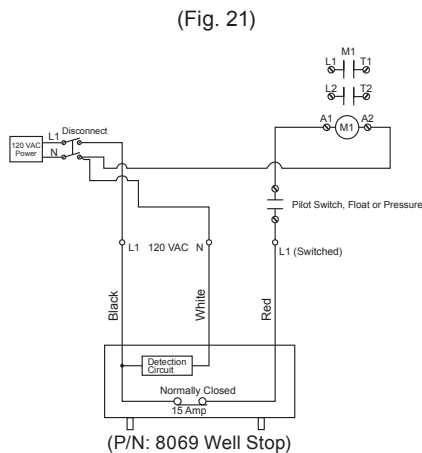
(Fig. 20)





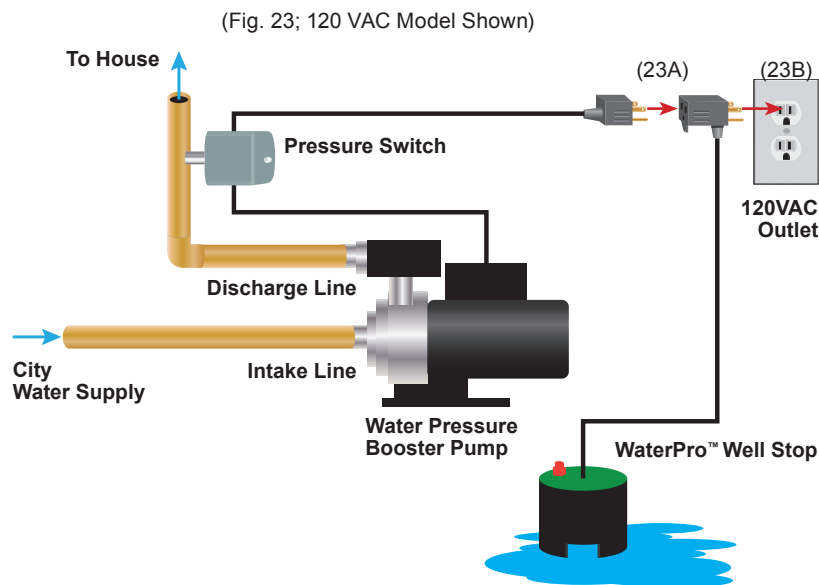
## Installation of the WaterPro™ Well Stop - Bare Leads into Pilot Circuit

1. Before wiring into a pilot/control circuit, disconnect all power.
2. The WaterPro™ Well Stop can be used in pilot (control) circuits to interrupt a magnetic contactor. Refer to the schematic for 120 Volt WaterPro™ Well Stop (Part Number 8069) (Fig. 21). The black and white wires must be connected to 120 VAC (Black to L1 and White to N). The red wire is the “Switched” L1 line that can “Feed” 120 Volt sensors that switch power to a magnetic coil (Fig. 21).
3. For a 230 Volt WaterPro™ Well Stop (Part Number 8070) that is intended to be wired into the pilot circuit of a deluxe capacitor starter box (includes magnetic contactor coil rated at 230 VAC), refer to the schematic (Fig. 22). The black wire connects to L2, the white/red wire will be connected to L1. The red wire is the “Switched” L2 line that connects to the SW Terminal or the coil of the magnetic contactor. Check the schematic that comes with the starter panel as schematic may vary and verify the magnetic contactor coil is rated for 230 VAC.
4. After wiring into the pilot circuit, restore power and go to Page 7 for testing.



## Installation of the WaterPro™ Well Stop - Piggyback Plug Models

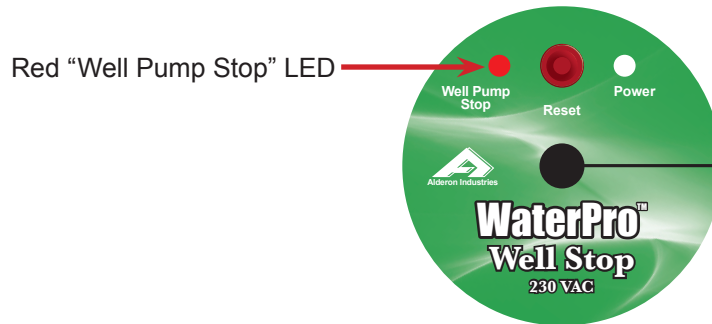
1. For Jet Pumps that have a male power cord pre-wired into the pressure switch, a piggyback plug version of the WaterPro™ Well Stop can be used to interrupt power to the pump when a water leak is detected. Part Number 8071 has a 120 VAC Piggyback Plug and Part Number 8072 has a 230 VAC Piggyback Plug.
2. Plug the pump power cord into the female piggyback plug on the WaterPro™ Well Stop (Fig. 23A), then plug the male end of the piggyback plug into the receptacle (voltage dependent per model) (Fig. 23B).
3. After the pump and piggyback are connected to a receptacle, go to Page 7 for testing.



## Testing the WaterPro™ Well Stop

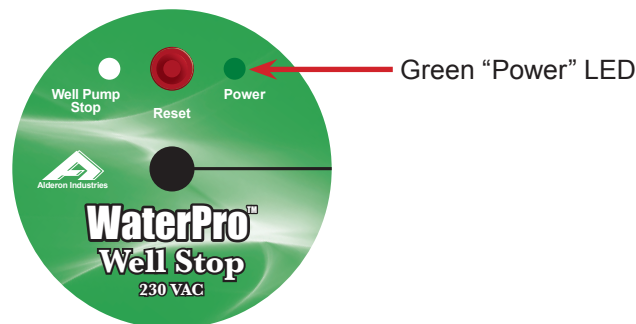
1. After completing the steps for the installation of the WaterPro™ Well Stop, you are ready for testing.
2. Test the system by filling a shallow dish with approximately one-inch (1") of water and placing the bottom of the WaterPro™ Well Stop into the dish, ensuring water completely contacts both probe sensors on the bottom.
3. The Red "Well Pump Stop" LED should illuminate (Fig. 24) and the power to the pump should be interrupted.

(Fig. 24)



4. Ensure to completely dry the probes on the bottom, press the "Reset" switch and the Green "Power" LED should illuminate (Fig. 25) with the power to the pump being restored (reference pressure switch manufacturer's operating instructions for proper operation of the pressure switch and for adjusting pressure switch settings).

(Fig. 25)



## Maintenance

The WaterPro™ Well Stop uses an isolated patented circuit that detects water with no shock hazard at the probes.

1. Test system monthly to ensure switch integrity.
2. Keep both (2) stainless steel probes (bottom of the unit) clean and free of rust, mud, soap or any type of non conductive material.
3. When inspecting monthly, clean probes keeping them free of debris, calcium or iron deposits.

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