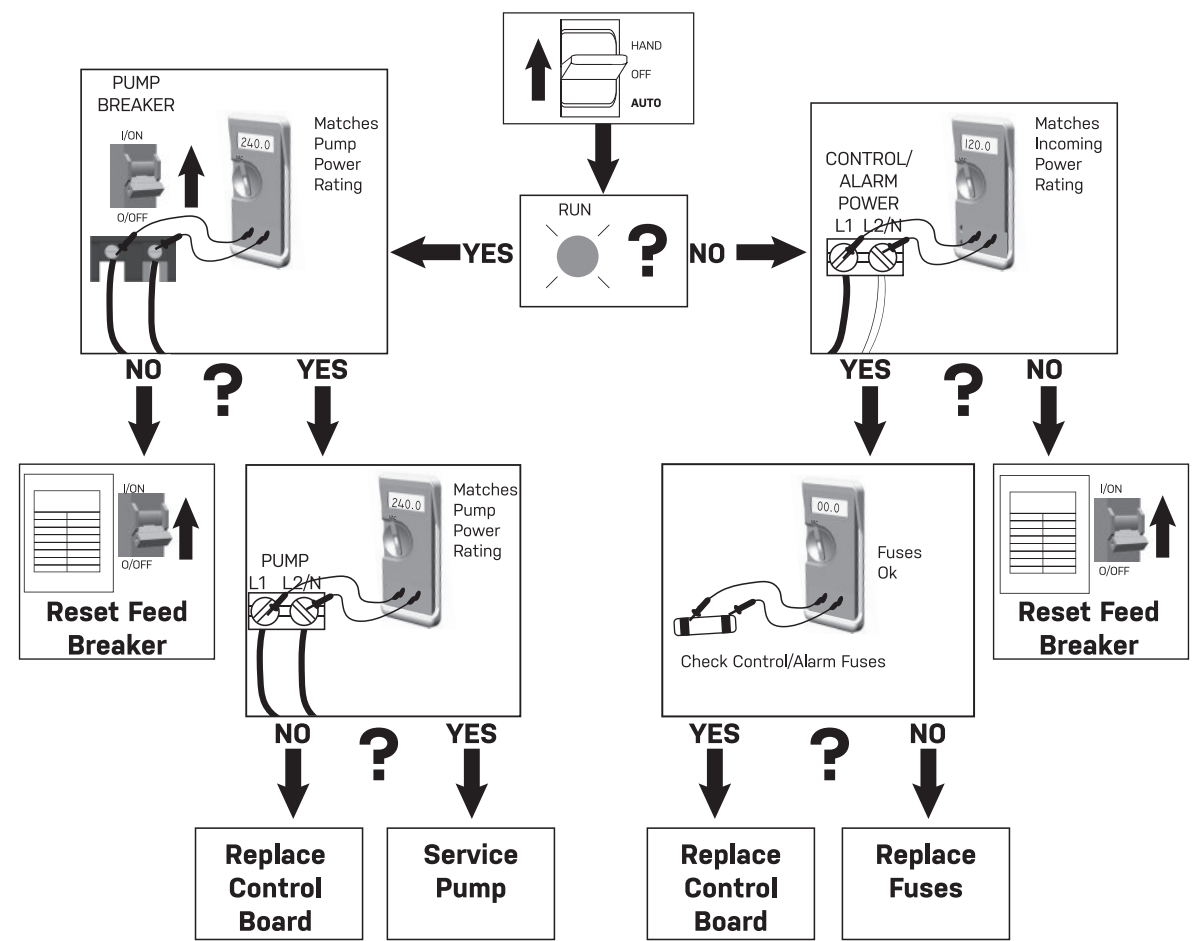
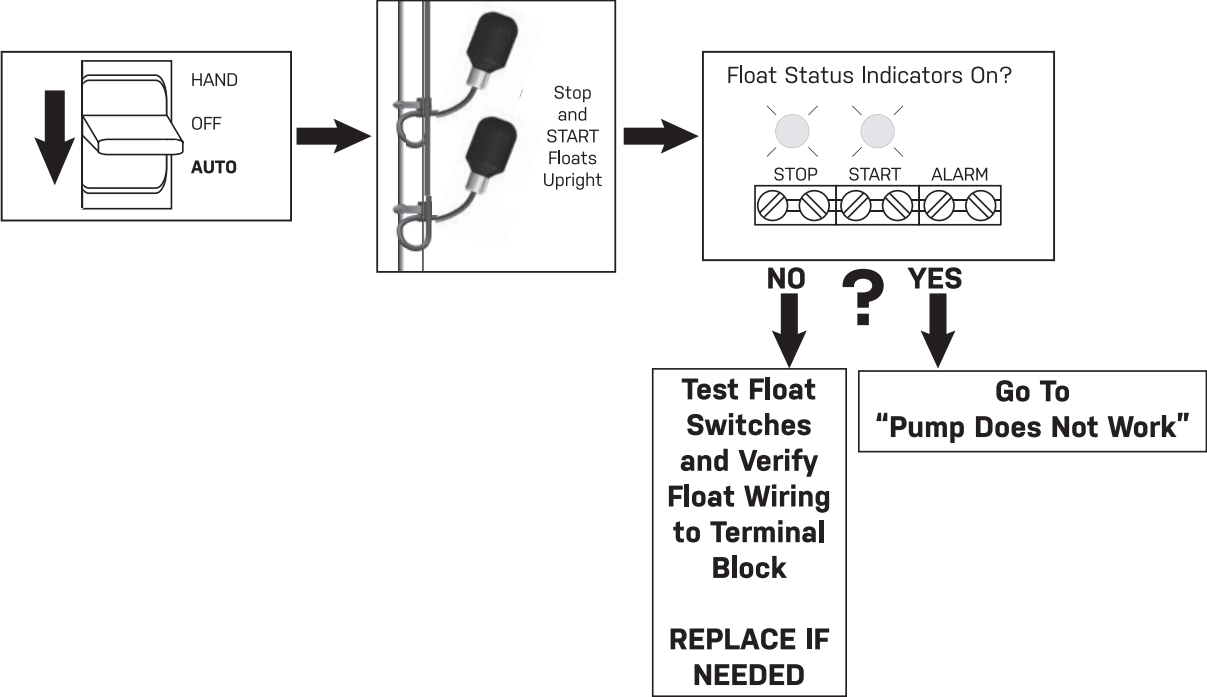


Troubleshooting

Pump Does Not Work



Pump Does Not Work in “AUTO”



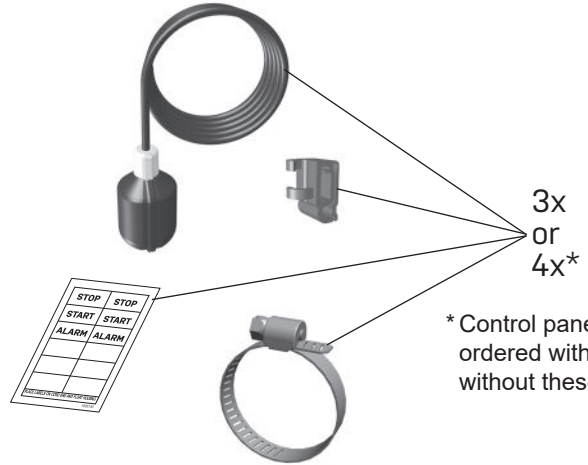
Single Phase Simplex

Installation Instructions and Operation/Troubleshooting Manual

U.S. Patent 10,251,284



Parts Included



* Control panel may be ordered with or without these items.

WARNING!
ELECTRICAL SHOCK HAZARD
Disconnect all power sources before servicing. Failure to do so could result in serious injury or death.

This control panel must be installed and serviced by a licensed electrician in accordance with the National Electric Code NFPA-70, state and local electrical codes. UL Type 4X enclosures are for indoor or outdoor use.

Warranty void if panel is modified.

| | |
|---|--|
| <p>For information regarding operation, available options, or servicing questions, please call an CSI Controls customer service technician:</p> <p>1-800-746-6287</p> | <p>CSI Controls offers a five-year limited warranty. For complete terms and conditions, please visit www.csicontrols.com.</p> |
| | <p>Products returned must be cleaned, sanitized, or decontaminated as necessary prior to shipment to ensure that employees will not be exposed to health hazards in handling said material. All applicable laws and regulations shall apply.</p> |

Manufactured by: CSI CONTROLS

Technical Support: +1-800-746-6287

techsupport@sjeinc.com
www.csicontrols.com

Installing the Float Switches

The SPF Series® Single Phase Simplex control panel operates with three float switches. They activate pump STOP, pump START, and high-level ALARM functions.

- 1 **⚠ WARNING!**

Ensure all power is turned OFF before installing floats in tank. Failure to do so could result in serious or fatal shock.
- 2

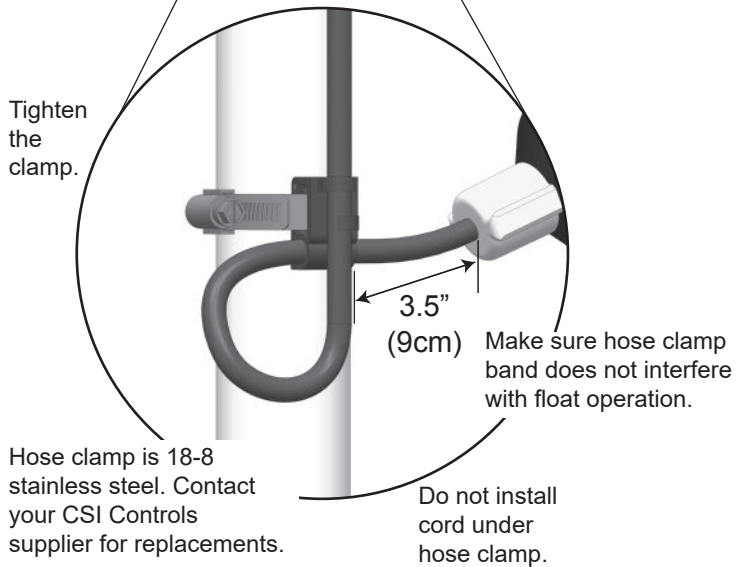
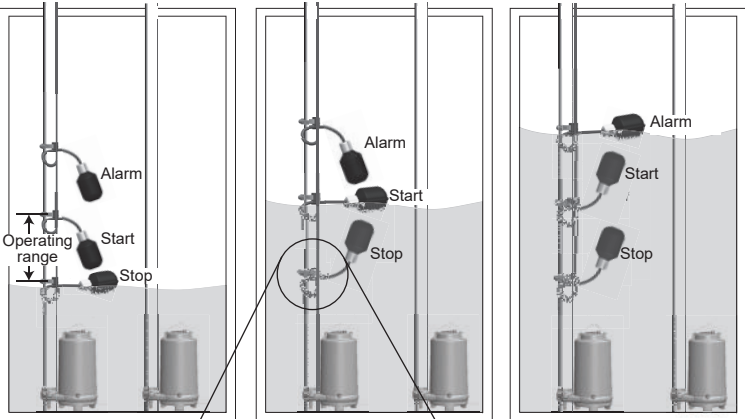
Label each float and cord end with the provided pairs of STOP, START, and ALARM stickers.



- 3 **⚠ CAUTION!**

If the floats are not properly mounted and connected in the correct order, the pump will not function properly.

Floats require free range of motion. They must not touch each other or any equipment in the pump chamber.



Mounting the Control Panel

NOTE

If the distance to the control panel exceeds the length of the float switch cords or the pump power cord, splicing in a liquid-tight junction box will be required. For outdoor or wet installation, we recommend an CSI Controls, UL Type 4X junction box.

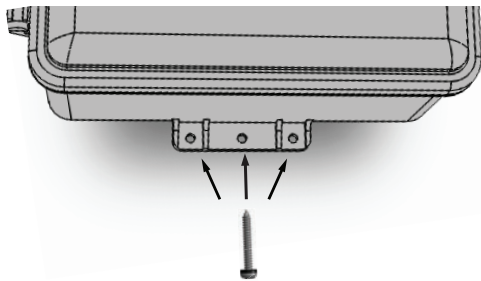
- 1

Drill and install top fastener using appropriate anchor if necessary.



- 2

Drill and install a bottom fastener using appropriate anchor if necessary.



Wiring the Control Panel

- 1

Determine conduit entrance locations on control panel as shown. Check local codes and schematic on the inside cover of the panel for the number of power circuits required.

⚠ CAUTION!

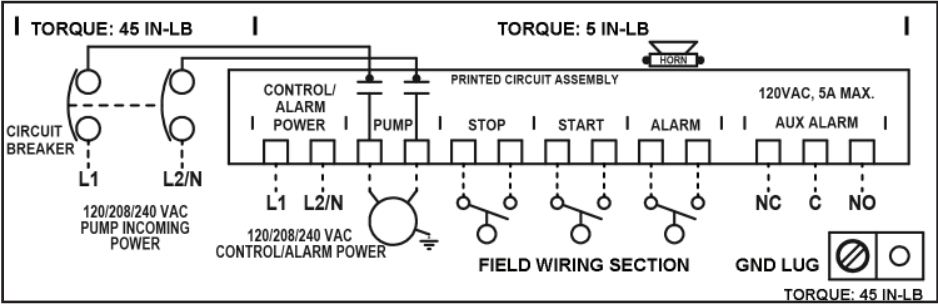
Be sure the pump power voltage and phase are the same as the pump motor being installed. Use of separate pump and control/alarm power sources is recommended.

- 2

Connect the following wires to the proper terminal positions:

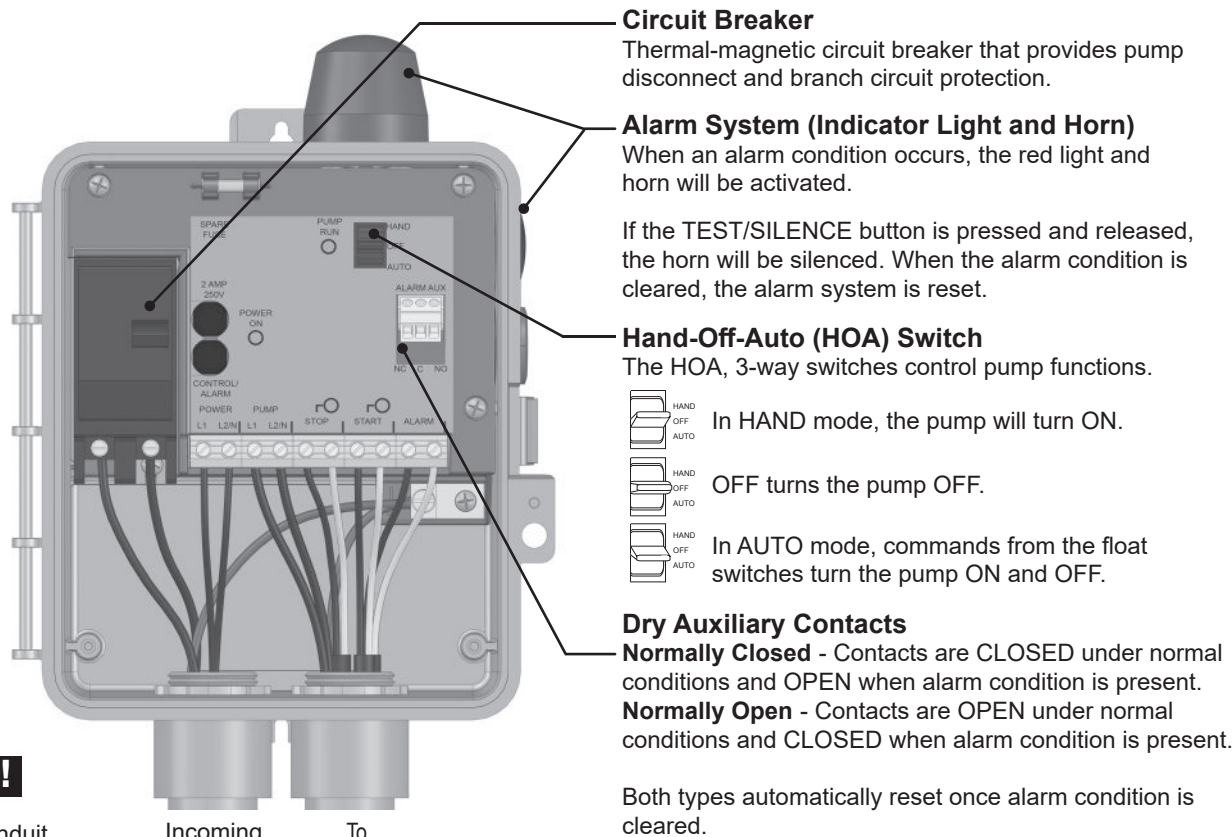
 - incoming power for pump circuit
 - incoming power for control/alarm circuit
 - pump
 - float switches
- 3

Verify correct operation of control panel after installation is complete.



Operations

CSI Controls SPF Series® Single Phase Simplex control panel operates with a three float system. When all floats are in the open or OFF position, the panel is inactive. As the liquid level rises and closes the STOP float, the panel remains inactive until the START float closes. At this point the pump will turn ON (if the Hand-Off-Auto switch is in the AUTO mode and the power is ON). The pump will remain ON until both the STOP and START floats return to their OFF positions. If the liquid level rises beyond both the STOP and START floats to reach the ALARM float, the alarm will be activated.



⚠ CAUTION!

You must use conduit sealant to prevent moisture or gases from entering the panel.

Incoming power to main breaker panel

To pump tank

Type 4X conduit must be used to maintain a Type 4X rating of the control panel.



Technical support, service questions:

+1-800-746-6287