





Thank you for purchasing your Hydromatic® control panel. To help ensure years of trouble-free operation, please read the following manual carefully.

Before Operation:

Read the following in

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Read the following in

Check List:

- 1. Check junction box for moisture.
- 2. Check wiring of pump black, white, red power wires.
- Check wiring of heat sensor and seal failure wires if supplied.
- 4. Energize control panel. (Turn on power to panel.)
- 5. Check overload relay and verify reset mode (if overload is supplied).
- 6. WARNING! Live voltage can kill! Check voltage to the panel and to the control circuit using a voltmeter.
- 7. Check float operation and response to control panel to the float operation. For sequence of operation, refer to design specification.
- 8. Check full load current with amp probe and compare it with the nameplate rating. (Clamp amp probe around black pump wire.)
- 9. With pump running, check discharge to verify the pump is running. Check for flow.
- 10. Check operation of start relay, per procedure in Item #3 on page 4.
- 11. Make sure H-O-A switch is left in the Auto position after start-up is completed.
- 12.Make sure all conduits from wet well to panel are sealed below panel. Septic gases will damage components in panel.

Pump Start-up:

Refer to pump "Installation and Service Manual".

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WARNING: Before handling these Hydromatic pumps and controls, always disconnect the power first. Do not smoke or use sparkable electrical devices or flames in a septic (gaseous) or possible septic sump.

1. Pump does not run in Hand position.

- a. Check pump circuit breaker and control fuse for tripping or blown condition.
- b. Check incoming power voltage and control circuit voltage.
- c. Check overload relay to see if it is tripped. Reset relay if tripped.
- d. With the power off, check motor heat sensor continuity.
- e. Check wiring of pump to control panel. It should agree with the schematic.
- f. Check contactor coil resistance. It should be 50 to 200 ohms.

2. Pump does not run in Auto position.

- a. Check items (a.) through(d.) per Item #1.
- b. Floats may be miswired to control panel. Check float type (N.O. or N.C.) and hook up by referring to the schematic. If the start and stop floats are hooked in reverse, pump will short cycle and will not pump the level down.
- c. Is the water level in the system high enough to activate floats?

- d1. With the power off, remove Off float and On float wires and replace with two jumpers made from insulated wire.
- d2.Turn power on (with H-O-A switch in Auto position). If pump runs, the problem is in one of the floats.
- d3.If the problem is in a float, turn power off, remove jumper and reconnect the upper float. Turn power on and see if pump will run in Auto. This will help identify which float is the problem. Turn power off before removing any jumper or reconnecting any float.

3. Pump runs, but run light does not energize.

- a. Remove light bulb and check with ohmmeter.
- b. Check wiring for run light in panel.

4. Pump runs but does not pump down the wet well.

a. Impeller may be dragging in volute due to solids. High amper voltage to pull in without chatter. If the problem is a recurring one, measure voltage with recorder on a 24 hour basis.

- b. Contactor may have dust around magnet of coil structure. Dry or clean as required.
- c. Make sure the floats are located away from any turbulence.
- d. Dry out the junction box (if furnished); moisture in the junction box may tend to cause relays to energize intermittently.

tripping 6. Nuisance of overload on motor starters or circuit breakers.

- a. Check all reset buttons and tripped breakers.
- b. Check pump amp draw with amp probe and compare to nameplate amps on pump.
- c. The impeller may be locked up due to excessive debris or solids.
- d. Possible motor failure (fault on windings).

e. Pump may be miswired to terminale666 Tw Traroundce (st)1(r)1(u)1(c)Trspan ActualTex18y4op197 0c8ssive debris)Tj0rt cyc419 021.77





