

### DuraMAC™ Water Pressure Booster System

# **Troubleshooting**

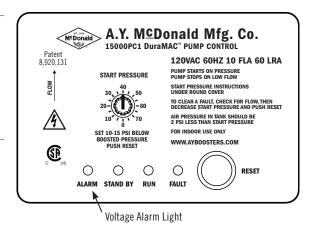
17035R020PC1, 17052R020PC1, 17070R020PC2, 17040C035PC2, 17062C035PC2, 17078C035PC2

#### **Purple Alarm Light-**

If the voltage drops below the recommended low limit, a Purple Alarm light will be flashing. If the voltage then moves back into the normal range, the Purple light will be illuminated (not flashing), indicating that voltage had dropped below the recommended range during the cycle time.

#### **Yellow Alarm Light** -

If the voltage increases above the recommended high limit, a Yellow Alarm light will be flashing. If the voltage then moves back into the normal range, the Yellow light will be illuminated (not flashing), indicating that the voltage had increased above the recommended range during the cycle time.



#### White Alarm Light

If the voltage has been both low and high - a white light will be on. These Alarms can be cleared by pressing the reset button. Note: the Alarm light will never stop the pump from running as it is only an indication that the voltage has been out of the recommended range during cycling of the pump.

The alarm lights can also come on due to storms and lighting. If the pump is working properly, pressing reset will turn off these lights. For the 120 volt control; the low voltage limit is 98 volts, and the high voltage limit is 140 volts. For the 230 volt control; the low voltage limit is 195 volts, and the high voltage limit is 270 volts. When running the motor outside of these voltages, damage to the windings can occur. Consult a certified electrician to correct voltage problems.

#### RED light on (or flashing) and pump will not start:

- 1. Start pressure set to high. Remove round cover on control and adjust start pressure dial 10 15 psi less than maximum boosted pressure as shown on pressure gauge, and push RESET. This unit is factory set at 50 psi. If red light
  - faults still occur, turn down start pressure dial an additional 5-10 PSI. Then adjust air press in tank.
- 2. Water cannot flow through pump to build pressure. Make sure all valves are open and the check valve is in the correct orientation.
- 3. If installed in a suction lift application, prime could be lost. Re-prime and check for leaks on suction side. Push the RESET button, the pump will run for 5 seconds, watch pressure gauge to make sure that the pressure is increasing.
- 4. Make sure all filters are installed after the pump, Change the filter cartridges regularly.
- 5. The water supply has been interrupted. The pump will automatically try a restart 15 minutes after a failure. This will occur automatically 4 times, flashing one time for every failed restart, and then a solid RED light will be on.



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## **Troubleshooting**

#### BLUE light on and pump will not stop: -

- 1. Pump stops on a flow rate less than 1/2 GPM. This is normal if flow is higher.
- 2. Possible leaks in systems such as; running toilets, humidifiers, water softeners, ice makers...
- 3. If the pump has a bypass valve installed, make sure it is closed for normal operation (see diagram page 5 of instruction manual).
- 4. Plastic magnetic piston (inside brass control) could be jammed by excessive thread sealant or debris. Loosen union nut and inspect piston. It should move freely and spring outwards (see diagram page 4 of instruction manual).
- 4. To check for water leakage in the house, close the valve after pump. If pump stops, then water is leaking somewhere after this valve. Fix leaks and open valves again.

#### Pump starts and stops without obvious use: —

- 1. Small leaks in the system can cause this, Reduce Start Pressure by turning dial to a lower pressure. Then adjust air pressure in tank (see #6-7 on page 8 of instruction manual).
- 2. Try alternate Flow Mode page 9 of instruction manual.

#### **GREEN** light on and pump will not start: -

1. Start pressure dial set lower than incoming pressure. Adjust start pressure dial 10-15 psi less than maximum boosted pressure as shown on pressure gauge, and push reset. Then adjust air pressure in tank see #6-7 on page 8 of instruction manual.

#### Pump stops at a pressure higher than 80 psi.

1. This can happen if your incoming pressure is higher than the value in the table on page 3 of instruction manual. A Pressure reducing valve should be installed before the pump.

#### Pump will not start and no lights are on. -

- 1. Make sure pump is plugged into control, and control is plugged into a GFCI circuit. Test wall power receptacle with a light or multi-meter.
- 2. Unplug gray transducer cord, turn start pressure dial to "0" and push reset (Flow Mode). If a light comes on, contact customer service.

#### If Pump Is Noisy: -

- 1. Be sure the pump is mounted on a substantial foundation. Pipe should be rigid and all connections tight.
- 2. Total suction lift or flow is beyond the pump capability and the pump is starved for water.

#### Pump will not stay primed (Suction lift). —

- 1. Check foot valve. Make sure it is clean and sufficiently submerged; but is not in sand or mud.
- 2. Be sure pump is sufficiently primed.
- 3. Check for possible leaks in suction piping.
- 4. Total suction lift may be beyond the pump capability of 10 feet.

