Troubleshooting Guide

If the heater is not operating during the initial start-up, check to see if it has been installed properly, per the owner’s manual. Make sure the breaker has been sized properly. The following are conditions to check before calling Aqua Pro Systems for a service:

Unit is running:
• Check the power light. Check to see if the breaker is set.
• Make sure the filter system is on.
• Make sure the thermostat is higher than the pool water temperature.
• Make sure the filter is clean and is allowing enough water to flow.
• Make sure the outside ambient temperature is higher than 50ºF.
• Make sure the 5-minute time delay has passed.

Unit is running but not heating:
• Check the air coming out of the top of the unit. It should be approximately 8F - 15F lower than the surrounding ambient air temperature. If not, call the factory for service.

Unit runs continuously:
• Lower the desired water temperature below the pool water temperature. If the unit is still running, call the factory for service.
• If the unit shuts off when the thermostat is lowered, it may be running continuously because it cannot reach the desired temperature. A pool blanket may be required to keep the water at this temperature. Also, the filter pump may need to run longer for the heater to reach the desired temperature.

Weather Conditions

As might be expected, weather conditions play a big part in the operation of the heater. Low outside ambient temperature, high winds, low relative humidity, and a large amount of shading on the pool will all have an effect on how much time it takes to heat the pool and how much time it might need to maintain the desired temperature. Once the outside ambient temperature drops below 50ºF, the heater may not operate.

Warranty

For 5 years from the date of purchase, Wayne Water Systems, d/b/a AquaPro Systems (“AquaPro”) will repair or replace, at its option, for the original owner any part or parts of its Heat Pump (“Product”), excluding the heat exchanger and compressor, found upon examination by AquaPro to be defective in materials or workmanship. For 10 years from the date of purchase, AquaPro will repair or replace, at its option, the Copeland Scroll compressor, found upon examination by AquaPro to be defective in materials or workmanship. Warranty is limited to parts only in years 6 through 10 and is on a pro-rated basis.

For 15 years from the date of purchase, AquaPro will repair or replace, at its option, the original owner, the Titanium Heat Exchanger, found upon examination by AquaPro to be defective in parts only in years 6 through 15. Please call AquaPro at 1-877-AQUASYS (1-877-278-2797) for instructions. Be prepared to provide the model number and serial number when exercising this warranty.

All warranty claims on Products or parts submitted for repair or replacement must be paid by purchaser. All non-warranty service charges are the responsibility of the homeowner. Failure to provide for non-warranty service charges will void this warranty.

This Limited Warranty does not cover Products which have been damaged as a result of accident, abuse, misuse, neglect, improper installation, improper maintenance, or failure to operate in accordance with AquaPro’s written instructions. All maintenance and service must be performed by a service agent approved by AquaPro to be defective in materials or workmanship. Warranty is limited to parts only in years 6 through 10 and is on a pro-rated basis.

There is no other express warranty. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM THE DATE OF PURCHASE. THIS IS THE EXCLUSIVE REMEDY AND ANY LIABILITY FOR COSTS OF REPAIR, LABOR, OR REPLACEMENT ITEMS OR DAMAGES OF ANY KIND WHETHER BASED ON NEGLIGENCE, STRICT LIABILITY, OR ANY OTHER THEORY OF LIABILITY, WHETHER TO PROPERTY OR PERSONS, IS LIMITED TO THE LESSER OF THE ACTUAL COST OF REPAIR OR THE COST OF THE PART. THERE IS NO OTHER EXPRESS WARRANTY.

Important Safety Instructions

Read and Follow All Instructions.

Safety Guidelines

This manual contains information that is very important to know and understand. This information is provided for SAFETY and to PREVENT EQUIPMENT PROBLEMS. To help recognize this information, observe the following symbols.

! WARNING

- Obese persons and persons with a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a pool or tub.
- Persons using medication should consult their pharmacist before using a pool or tub since some medication may induce hyperthermia. Other medication may affect heart rate, blood pressure, and circulation.
- Pool owners should be aware that hyperthermia can occur even in hot water may induce hyperthermia.
- Hyperthermia occurs when the internal body temperature reaches a level of several degrees above the normal body temperature of 98.6F. The symptoms of hyperthermia include dizziness, fainting, drooling, lethargy, and an increase in the internal temperature of the body. The effects of hyperthermia include: unconsciousness, inability to perceive heat, and death or serious injury.

! CAUTION

- Excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy. Pregnant or possibly pregnant women should limit pool or tub water temperatures to 98ºF (38ºC).
- Avoid drugs, or medication should not be used before or during pool or tub use since their use may lead to unconsciousness with the possibility of drowning.

! NOTICE

- Pregnant women and or unconsciousness resulting in a legal issue.
- Because the tolerance of water temperature regulations and devices vary as much as ±5ºF (±3ºC), you should measure the water temperature at several locations using an accurate thermometer before entering a pool or tub.

SAFETY TIPS

Installation Procedures

Unit Inspection

Inspect your unit very carefully before installing. Make sure there has been no damage to the evaporator fins or there are no punctures or oil-soaked areas on the box. This would indicate damage to the refrigeration system and should be rejected immediately.

The Unit Must be Installed in the Upright Position at All Times and Must Not Be Dropped or Tailgated. Damage to the Refrigeration System is Not the Responsibility of the Manufacturer.

Unit Location

Once the unit has been inspected and cleared of any transportation damage, it is now time to locate the pool heater. It is very important to understand the location of the unit for the best performance of operation.

A minimum of 18” of clearance between the evaporator coils and snads, fences, walls, etc. must be maintained for adequate air intake.

A minimum of 5’ of vertical clearance is required in the top of the unit and any roof overhang or other obstructions must be removed to prevent the re-circulation of cold air back into the evaporator coils. This is to maintain the energy efficiencies in the unit.

REMINDER: Keep your dated proof of purchase for warranty purposes! Attach this manual to file it for safekeeping.

© 2004 AquaPro Systems
For parts, product & service information visit www.aquaprosystems.com

PRO1100

Please read and save these instruction. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/ or property damage! Retain instructions for future reference.

ATTACH YOUR RECEIPT HERE

www.aquaprosystems.com

4
A minimum of 24” of clearance between the front of the unit (access panel area) and any obstruction must be maintained to allow maintenance on the unit when necessary. The unit should be located on a solid level surface, a minimum of 36” x 36” for proper drainage. Make sure any sprinkler heads are not directly spraying water on the unit. While heat pumps are made for an outdoor environment, they are not designed to have sprinkler water constantly spraying them. **NOTE:** This type of constant watering directly on the unit can void your warranty.

Condensation drain holes are provided in all units for adequate removal of condensation and rainwater. **UNITS WILL HAVE CONDENSATION. THIS SHOULD NOT BE MISTAKEN FOR A LEAK IN THE UNIT.**

**Basic Heat Pump Operation**

**Electrical Connections**

All wiring and electrical connections must be performed by a qualified electrician. Installations must be in accordance with local and national codes.

**CAUTION**

Overheating, short-circuiting and fire damage will result from inadequate wiring.

All units are equipped with an electrical wiring schematic inside the electrical panel. If this is missing, please contact the factory at 1-877-278-2797 to obtain one.

All units are to be wired for 230 VAC, 1 phase. This unit requires a dedicated 50-amp breaker or time delay fuse.

**Checkbox Valve:**

The check valve that does not include a shut-off feature may be installed for convenience during servicing. A check valve or Hartford Loop is recommended between the unit and a chlorinator. Failure to do so may void the warranty.

**Figure 1** shows the recommended installation layout.

**Manual Temperature Controls**

**Description**

The manual Temperature Control is designed to regulate pool and spa water temperature.

There are two indicator lights on the control panel to display the current status of the unit.

The thermostat knob may be adjusted to maintain the desired water temperature.

**Indicator Lights**

There are two indicator lights on the front panel that display unit status. The GREEN light indicates that power to the unit is on. The RED light indicates that the unit is in heating mode.

The RED light may become illuminated prior to heater start up. The RED light will become lit when the thermostat knob is at or above the water temperature.

**Application Guidelines**

**Maintenance**

All heat pumps are designed for outdoor use. However, some maintenance is required to maintain the full life of the heater and is necessary to maintain your warranty. Annual maintenance should be scheduled to make sure blowing sand or falling debris is removed from the inside of the heater. Also, rinsing the coil down, monthly, with low water pressure will help keep the base of the unit clear of debris is a must. Do not use a high pressure washer. This can cause damage to your evaporator coils and will void your warranty. It is recommended that a licensed air conditioning specialist perform the annual planned maintenance on your heater. Call Aqua Pro Systems to have this scheduled.

**Pool Blankets**

A pool blanket has been proven to greatly reduce the heat loss in the pool and will save as much as 50% - 60% in your heating bills. During the start of the swimming season and the end of the season, if a pool blanket is not used, the heater may not be able to maintain your desired temperature without the use of the blanket.

**Seasonal Shutdowns**

At the end of your swimming season you may have freezing weather conditions. The unions (provided) must be disconnected to drain any water in the pipes. You must also drain the heat exchanger by removing the drain plug on the side of the unit. This plug can be removed by pushing in on the collar while pulling on the plug. Failure to do so may cause the heat exchanger to expand and crack. This will void your warranty.

If you live in an area that does not have freezing weather conditions but are subject to extended periods of non-use, allow the filtration system to continue to run water through the heater. Or you can drain the unit of all water.

**Guidelines**

Draining is necessary to prevent damage to the condenser shell and coil due to the expansion of freezing water.

The minimum water circulation capacity flowing through the pool heater is 25 gallons per minute and the maximum capacity is 80 gallons per minute.

Do not install a water shutoff valve in the piping from the outlet of the pool heater to the pool or tub. However, a check valve that does not include a shut-off feature may be installed for convenience during servicing.

A check valve or Hartford Loop is recommended between the unit and a chlorinator. Failure to do so may void the warranty.

**Figure 1** shows the recommended installation layout.

**Figure 2** shows how to connect all of the remote systems to the Electronic Temperature Controller.

**Connection to AquaLink, Compool, Hayward, Aqua Switch, and Intermatic Remote Systems:**

- Bring two wires from the remote system to terminals 1 & 2 on Terminal Block (TB1).
- The Temperature Control knob must be turned clockwise (highest temperature setting) for the remote system to operate the Pool Heater.

**Application Guidelines**

**Maintenance**

All heat pumps are designed for outdoor use. However, some maintenance is required to maintain the full life of the heater and is necessary to maintain your warranty. Annual maintenance should be scheduled to make sure blowing sand or falling debris is removed from the inside of the heater. Also, rinsing the coil down, monthly, with low water pressure will help keep the base of the unit clear of debris is a must. Do not use a high pressure washer. This can cause damage to your evaporator coils and will void your warranty. It is recommended that a licensed air conditioning specialist perform the annual planned maintenance on your heater. Call Aqua Pro Systems to have this scheduled.

**Pool Blankets**

A pool blanket has been proven to greatly reduce the heat loss in the pool and will save as much as 50% - 60% in your heating bills. During the start of the swimming season and the end of the season, if a pool blanket is not used, the heater may not be able to maintain your desired temperature without the use of the blanket.

**Seasonal Shutdowns**

At the end of your swimming season you may have freezing weather conditions. The unions (provided) must be disconnected to drain any water in the pipes. You must also drain the heat exchanger by removing the drain plug on the side of the unit. This plug can be removed by pushing in on the collar while pulling on the plug. Failure to do so may cause the heat exchanger to expand and crack. This will void your warranty.

If you live in an area that does not have freezing weather conditions but are subject to extended periods of non-use, allow the filtration system to continue to run water through the heater. Or you can drain the unit of all water.