- Be sure to inspect the outside of the heat pump and remove anything obstructing air entering or leaving the heat pump.
- What is the air temperature? Your heat pump may be in a defrost mode. A Blue Defrost light will be on. This indicates that the air temperature is too cold to support heating. When the temperature warms up, the heat pump will begin to heat your pool or spa. The Defrost light will go off.

Heat Pump Not Running

- Is the Amber Power light on? If not, check and reset the circuit breaker to the heat pump to insure that it is getting power.
- Is the Green Flow light on? If not, is the pump supplying water to the heat pump on? This pump must be running in order for the heat pump to come on. If pump is on, check that all valves are in their proper operating positions. Also check the pool water filter, is it time to clean?
- Please note and remember that the heater will not re-start for 5 minutes after it has been stopped for any reason.
- Your heat pump may be equipped with a Low Ref (refrigerant) light, if on, call Aqua Cal for service at 1-800-786-7751. Your heat pump may be equipped with a High Ref (refrigerant) light, if on, see note under "Heat Pump Going Off and On" below.
- If after checking all of the above, the heater still does not come on, call Aqua Cal for service at 1-800-786-7751.

Water Leaking out of Heat Pump (Is it a leak or natural condensation from normal operation? Here's how to find out).

- Shut your heat pump off leaving the water pump running. In a couple of hours, there should be marked reduction in the water around the bottom of the heat pump.
- If you believe that the heat pump is leaking, you can check the water draining out the base of the unit for the presence of the sanitizer that you are using for your pool. Take your test kit and check a sample of the water for chlorine or bromine. If the sample tests positive call Aqua Cal for service at 1-800-786-7751. If the test is negative, the water is probably condensate, unless you are using an ionizer or ozone generator to sanitize your pool.

Low Ref Light On or Intermittently On

If your heat pump is equipped with a red Low Ref (refrigerant) light and it is "on" or intermittently comes on, call Aqua Cal for service at 1-800-786-7751.

Heat Pump Going Off and On at Five Minute Cycles

- If equipped, is the red High Ref (refrigerant) light on or briefly going on just before the heat pump shuts off? If so, this is usually indicative of low water flow through the unit. Check for improperly positioned valves or a dirty filter. Correct this and the unit should operate. If not, call Aqua Cal for service at 1-800-786-7751.
- Certain types of pool cleaners can also cause the heat pump to cycle on and off. If you have a suction type of cleaner plugged into your pool skimmer and it breaks the surface when going up the walls of the pool, the air it sucks into the filter line can cause the heat pump to shut off. If it does, the heater will not restart for five minutes. Low water levels in the pool or spa can also cause the surface skimmer to suck in air causing the heat pump to cycle. Be sure to maintain proper water levels.

What We Need To Know When You Call Us

If you should ever have to call Aqua Cal for service, please have the model, serial number and installation date of your unit ready when you call.

Model:	
Serial Number:	
Installation Date:	

This will speed up the service process and allow us to respond more quickly. A brief description of what the unit is or is not doing will also help the situation. You can call us at 800-786-7751. Our office hours are 8 a.m. to 5 p.m. EST, Monday through Friday. If calling after hours, our voice mail services will handle your call. Be sure to leave your name and complete address and a phone number for us. Our fax number is 727-821-7471.

This publication is available in Spanish, French, German,
Portuguese and Italian. For more information call 1-800-786-7751 or
visit us at our website www.aquacal.com



Quick "Start, Run & Check" Guide

"Almost" Everything You Need to Know ...

> 2737 24th Street North St. Petersburg, FL 33713 1-800-786-7751 www.aquacal.com

"Almost" Everything You Need to Know ... To Get It Running ... and Keep It Running.

START UP

- Turn the thermostat dial counterclockwise to its lowest setting. (For complete details see Control Panel diagrams in your Owner's Manual).
- Flip the On/Off toggle switch to the On position (if your heat pump is so equipped).
- The pool or spa filter pump must be operating for five minutes.
- The Power light (Amber) and Flow light (Green) should be lit.

How to Operate the Controls-Pool or Spa Operation

- Turn selected pool or spa thermostat dial clockwise to its highest setting.
- The heat pump will start and begin to heat your pool or sna.
 - **NOTE:** The heat pump has a time delay so if it shuts down for any reason, it will not restart for approximately five minutes.
- Allow your pool or spa filter pump to run continuously until the temperature you want your pool or spa is met. (This may take several days.) This may require removal or resetting the trippers on the time clock to allow it to run continuously.
- To set the thermostat, allow the heat pump to warm the water until it reaches the temperature you desire. Then turn the thermostat knob slowly counterclockwise until the unit shuts off. The heater will maintain your pool or spa at this temperature automatically.

Time Clock Run Times

Once your heat pump has brought your pool up to temperature, it will be necessary to reset your time clock. Be sure to allow enough running time for your pool to allow the heat pump to replace the heat loss. This time will vary depending upon the time of year. Colder months require longer running times, usually eight to twelve hours.

How to Operate the Controls–Manual Switching from Pool to Spa Heating

- Open spa valves and close pool valves as instructed by your installer.
- With the spa filter pump running for at least five minutes, flip the Pool/Spa toggle switch from the Pool setting to the Spa Setting.
- Turn the Spa thermostat clockwise until it stops (104° F).
- The typical spa may take up to several hours to initially heat up depending on the volume of water, water temperature, and the climatic conditions at the time of start up.
- ❖ When the spa reaches the desired temperature (104° F) is maximum), *slowly rotate* the thermostat knob counterclockwise until the heat pump stops. Your spa thermostat is now set to automatically maintain this temperature any time your spa thermostat has been selected and the filter pump is in spa mode.
- When finished using your spa, position the toggle switch to the pool setting and reverse the valves to their original position.

Water Running out the Bottom of Your Heat Pump

This is normal. Depending upon humidity, condensate water is produced as a by-product of transferring heat from the air to your pool. Quantities of up to six to eight gallons per hour are not uncommon if the humidity is high. Low humidity may result in no condensate run off.

NORMAL USAGE

- If you have followed the directions so far, your heat pump should be set to heat your pool or spa automatically.
- Water chemistry... VERY IMPORTANT NOTE!! Your heat pump has been engineered for durability and reliability; however, prolonged exposure to unbalanced water chemistry will result in premature failure and service.
- Keep chlorine in the 1 to 3 PPM range; pH needs to be kept between 7.2 and 7.8; Alkalinity, 60 to 180 but this will vary depending on the pool surface type, so check with your dealer. If bromine is being used, 2.0 to 4.0 PPM. See Owner's Manual for more detailed information.

MAINTENANCE

- Planned maintenance. You should have your heat pump cleaned on an annual basis by a qualified pool heat pump specialist. If your heat pump is located on the beach or a sea wall area where salt spray contamination or sand gets in or on the unit, a more frequent cleaning is necessary. Call Aqua Cal for details at 1-800-786-7751.
- Provide good airflow to the heat pump. Keep the sides and top of the heat pump free of obstructions.
- Control sprinklers. If they spray on or into the unit, divert the spray or move them so they don't reach the heat pump.
- Drainage. As stated before, your heat pump produces a lot of condensate at various times. Keep the drain holes at the base of the heat pump free of grass and weeds.
- If leaves begin to pile up on the inside of the your heat pump, call Aqua Cal (1-800-786-7751) and ask for a Planned Maintenance service call.
- Another VERY IMPORTANT NOTE!! In areas where hard freezing conditions occur, winterize your heat pump. See your Owner's Manual for additional details.
- In areas where light freezing conditions occur lasting only a couple of hours, keep the pump supplying the water to the heat pump running. Flowing water will not freeze under light freezing conditions. You will notice the blue Defrost light on. This is normal.

TROUBLE SHOOTING

Heat Pump Running but Not Heating

- Is the air blowing out of the top of the unit noticeably cooler (8°-12° is typical) than the surrounding air? If not, call Aqua Cal for service at 1-800-786-7751.
- How long are you running your pool or spa recirculation pump? Cooler climatic conditions or heating to a higher temperature may necessitate running the heat pump for a longer time. A pool blanket may be necessary to allow for shorter running times, not to mention a huge savings on your heating energy costs.
- 75% of temperature loss from your pool is from evaporation. A pool blanket is your best investment in your heated pool.