

### HOW YOUR HEAT PUMP WORKS IN BRIEF

Once installed the Performance Plus Swimming Pool Heater will not function unless the isolation switch is turned on, water is flowing through the heat exchanger and the water is not already up to the desired temperature. This is controlled by a Flow Switch and an Electronic Temperature Sensor which is built into the unit or plumbed remotely by the installer.

### SEASON START UP (with Pool Management / Timeclock Bypass)

1. Simply turn your Performance Plus swimming pool heat pump on at the isolation switch
2. Set your time clock for the desired filtration cycle
3. Turn on the Auto Heat switch
4. Your Pool Management / Timeclock Bypass system will now allow you to maintain your pool heating without further alterations to the system. For more detailed instructions or technical information please see your Pool Management / Timeclock Bypass booklet.

### SEASON START UP (with no Pool Management / Timeclock Bypass)

NON Pool management / Timeclock bypass

1. Turn off your chlorination system completely
2. Set your filter to run 24 hours/day
3. Turn on the chlorination system manually for the required duration per day only
4. Once the pool has reached its desired temperature you can now reduce the filtration system; 12 hours at the beginning of the season is not an unreasonable length while ambient temperatures are still low, this can be reduced further as the swimming season progresses, but will increase again towards the end of the season (this will take a few days of alteration to achieve the desired result).

CAUTION: Where a water treatment system that does not actively monitor chemical levels is used without the addition of a Pool Management / Timeclock Bypass system, turn the water treatment system off during the initial heat up period as overriding the time clock may cause over treatment of the pool water.

### TEMPERATURE CONTROL

(for models with Hot Water Heat Pumps Controller)

Read/Modify function of the set point

1. Press set and hold for 3 seconds
2. Press arrow up or down to set
3. Press set to confirm the value



### END OF SEASON SHUT DOWN

Simply turn the heat pump off at the isolation switch

(For Dual Purpose Heat Pumps turn off the appropriate labelled switch)

CAUTION: Regions where standing water can freeze; If you do not filter your swimming pool through the winter months, drain the water from the Performance Plus Swimming Pool Heater at the end of the season to avoid the risk of damage.

TROUBLESHOOTING	PROBABLE CAUSE	POSSIBLE SOLUTION
<b>No red light</b>	No power supply.	Check fuse / circuit breaker
<b>Red light is on, but the display is not functioning</b>	No water flow through heat pump.	Check filter pump is running, check flow switch inside heat pump
<b>The pool never reaches the desired temperature</b>	Controller is set too low	Adjust the controller set point
	Not enough running time The desired temperature is higher than what the heat pump was sized to achieve	Extend filtration hours Keep the cover on for longer periods of time
<b>The pool is warm but the heat pump fails to turn off</b>	The probe is not properly placed or seated properly	Seat the probe as shown in the swimming pool manual
	Controller set point is above an achievable temperature	Adjust the controller set point down to 28°C
<b>The water is cold</b>	There is no power	Check fuse/circuit breaker or isolating switch
	The set point is set too low	Set controller to 28°C
	The heat pump has stopped on safety	Check water flow through heat pump flow switch
<b>There is ice on the fins at the back of the heat pump</b>	The ambient temperature is very low	This is a natural function in cold weather. The active defrost function should melt the ice within minutes of the de-ice controls automatic activation
	If the weather is warm the heat pump may be low on refrigerant	Contact Hot Water Heat Pumps Ltd or your nearest service agent
<b>There is water around the heat pump</b>	Condensation	This is a natural function of the heat pump in humid conditions. Condensation forms on the coil and drains into the inbuilt drain tray. A tray could be placed below the unit to catch the water to be piped away
	Possible water leak from connections to the heat exchanger in the top of the unit	Check under the lid of the unit for any sign of water in the top part of the heat pump. Prolonged exposure to pool water will cause damage to the heat pump if neglected. Contact your nearest service agent

If you are in doubt as to an issue of the performance of your heat pump, please contact Hot Water Heat Pumps Limited or your nearest service agent.