



## 60 kW Pool Heater Installation and User Manual

### **WARNING:**

Overheating/over-pressurising the burner or failing to follow installation instructions will VOID THE WARRANTY. Please use a pool professional for your installation and ensure they are given these instructions. Damage can be caused by failure to start the pump before lighting the fire, by pump failure, mismanagement of valves or incorrect installation. It is the owner's responsibility to ensure adequate water flow at all times when the heater is burning. Pool vacuuming or back-washing must not be carried out whilst the heater is lit. The feeds from the skimmer and sump must be open and unrestricted as must the returns to the pool. Pressure must never exceed 0.5 bar. Please check your household insurance for adequate cover against accidental damage.

No return valve may be fitted on the outlet of the heater. This can result in accidental over-pressure and failure of internal welds. A one-way valve is recommended in place of the valve on the return leg (just visible in picture, bottom right). Chlorine levels must be kept to normal ie 1-3 ppm and never in excess of 5ppm whilst burner is connected.

**If the burner is lit with no water flow it will MELT!**

### **Installing**

The burner comes with standard 1 ½ inch female threads. Unit must be plumbed in 1 ½ pipe. Do not reduce to any smaller diameters. The inlet must be at the bottom and outlet at the top. You will need a male socket union for each of these, some pipe, 2 x Tee pieces and 2 valves. You will need lots of PTFE tape on the threads to make a seal (more than usual). The small rubber bung is the drain off and is fitted at the bottom rear of the unit.

The burner must be installed after the sand filter and should be the LAST item in any plumbing system before the returns to pool as the pressure upstream can rise to over one bar when the sand becomes clogged. Normal downstream pressure is about 0.2 bar. The burner is pressure-tested in the factory to 0.5 bar. Install the pressure gauge supplied in the top of the unit and on first use, open the flow valve gradually whilst monitoring pressure. If pressure is high switch off and check your outlets for restrictions or consult your pool installer.

### **Commissioning**

Air purge. On first switch on there will be large volume of air gurgling into the pool as the water flowing in to the burner replaces the air. This is normal but should only last 2-3 minutes.

### **Condensation**

Do not panic as it does look as though there is a leak! There will also be some fine ash from the chimney on the first burn, it is obvious as it is the same curved shape as the inside of the pipe. Do not be alarmed.

Hard water areas: If you are in a hard water area you may find some calcium deposits forming and collecting in the bottom of the burner as the lime comes out of solution from your tap water. Sometimes this can affect the water clarity until it has all been collected in your filter and backwashed away. You may also need to disconnect the heater and flush it out with a hose to remove scale deposits.



### **Corrosion**

Aluminium can be badly affected by high concentrations of Chlorine and on rare occasions corrosion has caused leaks to appear through misuse. As long as the Chlorine concentration is kept to normal swimming levels there is no problem. Approx 3 ppm is ideal. The maximum allowable is 5 ppm so when shock dosing the burner **MUST** be bypassed. Chlorine powder or liquid must never be added directly to the skimmer. This is bad practice under any circumstances and can damage pool plant and pool liners. The life of your pool burner will also be extended if you drain it when not in use during the season and flush with fresh water before winterising. You will need to fill completely with fresh water from a hose before draining down and disconnecting.

The alternate approach is to fill up tight and close the door if leaving unattended for a few hours. However remember that pump failure or power cut may lead to meltdown of the heater.

### **IMPORTANT RULES IN USING THE BURNER**

Ensure water flow before lighting fire!

Allow fire to completely burn out before stopping pump!

Beware of timers on pumps, select **CONSTANT**!

**NO SHOCK DOSING OF CHLORINE** – isolate burner first!

**NEVER** add Chlorine directly to skimmer!

Drain and flush burner when not in use!

