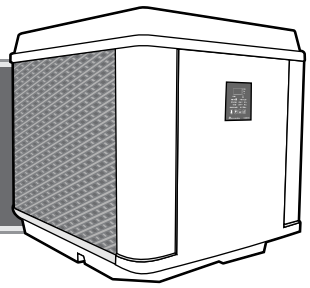




WHITE KNIGHT HEAT PUMP QUICK START GUIDE



START-UP



VERIFY DEDICATED 20 AMP GFCI CIRCUIT IS USED FOR POWER SOURCE CONNECTION.

Before proceeding with this section make certain all plumbing connections are airtight and leak free. Flow rates should not exceed 50 GPM maximum. Use of an external bypass is necessary at flow rates 50 GPM and above. Minimum flow rate is 15 GPM.

- Turn filter pump time clock to the ON position and set filter pump hours. For initial heating, the pool heater and filter pump may need to run continuously until your desired temperature is reached. After initial heating is achieved, the heater will run only to maintain your desired temperature.
- Turn power supply to heater ON.
- The control panel will light up and display either OFF or the actual pool water temperature.
- Select POL or SPA and set your desired water temperature by scrolling either up or down.
- If your programmed water temperature is above the actual water temperature, the fan and compressor will start once the time delay is satisfied.

NOTE: ON INITIAL STARTUP AND EACH TIME THE COMPRESSOR TURNS OFF IT IS PROTECTED BY A 5 MINUTE ANTI-CYCLING DELAY.

PLEASE WAIT UP TO 5 MINUTES AFTER TURNING UNIT ON WITH TOUCHPAD FOR EQUIPMENT TO START

INITIAL HEATING

INITIAL HEATING MAY REQUIRE YOU TO RUN YOUR HEATER AND FILTER PUMP CONTINUOUSLY UP TO 72 HOURS, OR MORE, DEPENDING ON THE FOLLOWING FACTORS:

- Temperature difference between actual water temperature and desired water temperature.
- Size of pool.
- Ambient air temperature, the cooler the air temperature the longer the heating time.
- Heat loss (evaporative, convective, radiative and conductive).
- A pool cover / solar blanket may reduce initial heating time by up to 50 percent.
- Once water is up to temperature it will be maintained inexpensively and efficiently.

NOTE: IT IS NORMAL FOR WATER TO DRIP FROM THE DRAINHOLES AT THE BASE OF THE HEATER. THE UNIT PRODUCES CONDENSATION WHEN IT OPERATES.

WINTERIZING

It is essential that all water within the unit be properly drained when winterizing your pool equipment.

- Turn thermostat settings to OFF. Turn filter pump to OFF.
- Turn power to unit OFF (i.e. pull disconnect or turn circuit breaker OFF).
- Disconnect water inlet and outlet unions at the back of the unit. Be careful not to lose rubber o-rings.
- Flush the heater piping out with fresh water to remove any residual chemicals.
- Use low-pressure air or vacuum to remove water that has accumulated inside the piping of the heater.

TROUBLESHOOTING CHECKLIST

- Check to see that the electrical power is on. Reset breakers, or replace fuses if necessary.
- Check to be sure the electric control panel is set properly. The desired temperature must be set above the actual pool or spa temperature for the heater to run.
- Check to make sure the evaporator coil has enough clearance and that there are no restrictions to its airflow.
- Certain ambient air conditions may cause the heater to go into defrost mode, displayed on the control panel as “DEF” .

NOTE: IT IS NORMAL FOR WATER TO DRIP FROM THE DRAINHOLES AT THE BASE OF THE HEATER. THE UNIT PRODUCES CONDENSATION WHEN IT OPERATES.

ANALYZER CODES

FAILURE LOCK-OUT: This feature is for the protection of the heater. If the same failure occurs three (3) times within an hour, the control will not allow the unit to restart. and shall display the appropriate code (i.e. “LP3”, “HP3”).The reset to normal conditions can be accomplished by pressing any button on the control touch pad one time.

“FLO” (Little or No Water Flow)

- The pump is not running.
- The filter is dirty or clogged.
- Shortage of water to pump - air leak.
- Undersized pump.
- Valves not in correct position.
- Filter in backwash mode.
- Water pressure switch needs adjustment, or is defective.

“HPS” (Compressor High Pressure)

- Low water flow to heater.
- Defective high-pressure switch.

“LPS” (Compressor Low Pressure)

- Evaporator coil dirty.
- Fan motor not running.
- Low refrigerant pressure.
- Defective low-pressure switch.
- Low ambient air temperature.

“ESO”

- Evaporator temperature sensor connection opened. Check for cut or loose sensor wiring or defective sensor.

“tSO”

- Water temperature sensor connection opened. Check for cut or loose sensor wiring or defective sensor.

“ESS”

- Evaporator temperature sensor connection shorted. Check for a short in sensor wiring or defective sensor.

“tSS”

- Water temperature sensor connection shorted. Check for a short in sensor wiring or defective sensor.

“DEF”

- Heat pump in defrost cycle.

CALLING FOR SERVICE



877-246-9943

- Please eliminate any water flow problems before calling for service.
- If you are unable to contact the installing agent, please contact OXYGEN POOLS, LLC. A factory representative will assist you or your serviceman over the phone.

SERVICE PERFORMED WITHIN THE WARRANTY PERIOD MUST BE APPROVED BY WHITE KNIGHT PRIOR TO SERVICE BEING PERFORMED AND ONLY BY A WHITE KNIGHT AUTHORIZED TECHNICIAN. SEE WARRANTY FOR DETAILS.

Please have the following ready before calling:

MODEL #:

SERIAL #:

DATE OF INSTALLATION:

NAME OF OWNER:

ADDRESS:

CONTACT # :

NATURE OF PROBLEM: