

IMPORTANT

- The 1000 was manufactured in 3 locations. The version made by Well has several unique parts.
- Always perform initial inspections including visual, current and airflow (Figure A) tests before servicing a heater.
- o Check the AC cord, wires and plugs, for cut, pinched or exposed wires, secure connection and proper location.
- NEVER touch the glass portion of a heating element. Always visually inspect the elements and perform a resistance test.
- o The heating elements are wired in 3 parallel circuits and are suggested to be replaced in pairs for this reason. (Figure B)
- This heater utilizes wire caps instead of wiring blocks. Always use new wire caps and make sure all wires and caps are secure and that no portion of the wires are exposed.

SPECIFICATIONS

O Current: 12.5 – 14 amps in "HIGH" mode

Airflow: 640+ FPMPower: 1500 Watts

O Heating Elements (Bulbs): 14Ω +/-5% (13.3Ω – 14.7Ω)

o **Heat Rise:** 140° (over ambient temperature)

NO POWER

- Check (in order)
 - 1. Heat sensor (high limit switch)
 - 2. Inspect the wiring and cables and their connections including the AC cord, its ground and the power switch.
- o If the heater turns on then, immediately off, inspect/calibrate/replace the thermostat.

<u>LIMITED HEAT / NO HEAT / FAN NO HEAT</u>

- Remove the leads to the high limit switch and perform a continuity test. If any resistance, replace.
- o Visually inspect the heating elements and their connections. Turn on the heater and look for non-working elements.
- o Test the resistance of the heating elements. They should measure $14\Omega + /-5\%$ (13.3 $\Omega 14.7\Omega$).
- o Replace the bulb if the glass or the ceramic ends are cracked or broken, overly discolored, if the quartz element appears to be damaged or if the wire insulation is excessively whitened (more than 1/4") near the bulb. (FIGURE F)
- o Test the unit with a new thermostat.

OVERHEATING / HEAT NO FAN

- o Check the fan to make sure the fan is spinning freely and the bearings/motor are not making any excessive noise.
- o Visually inspect the fan for built up dust and dirt. Clean it with a soft-bristled brush and vacuum.
- Test/replace the fan sensor.
- Test/replace the high limit switch.
- O Check the heating elements, their wiring and/or connections. Shorted wires could cause a element to get power even when the heater is off.

LOUD FAN

- Visually inspect the fan to make sure it is properly mounted and the fan blades are free of dust build-up. Clean the fan with a soft bristled brush and vacuum if needed.
- o If the fan continues to make noise, the motor or bearings may be bad and the fan assembly will need to be replaced.

^{**}DISCLAIMER: WIRE COLORS, CONNECTORS, PARTS AND THEIR LOCATIONS ARE SUBJECT TO CHANGE**

(FIGURE A) AIRFLOW TESTING



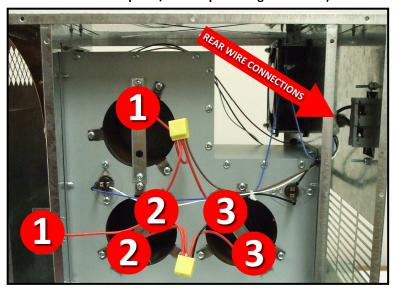
(FIGURE C) LARGE WIRING BLOCK

(Wire colors may vary. Colors for reference purposes only.)

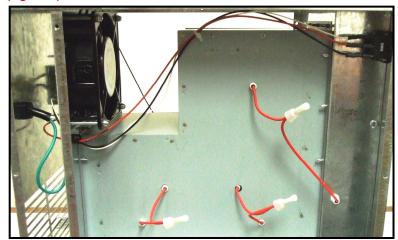
LOCATION	COMPONENT / WIRE COLOR
REAR WIRE	AC NEUTRAL
	POWER SWITCH
CAP	RIGHT SIDE TOP 3 BULBS
	FAN SWITCH
REAR WIRE	AC LINE
CAP	FAN
CAP	POWER SWITCH
REAR WIRE	POWER SWITCH
CAP	TOP THERMOSTAT
REAR WIRE	HIGH LIMIT
CAP	BOTTOM THERMOSTAT
	FRONT BULB
RIGHT SIDE	BOTTOM LEFT BULB
WIRE CAP	BOTTOM RIGHT BULB
	HIGH LIMIT
RIGHT SIDE	FAN SWITCH TO FAN
LEFT SIDE	TOP BULB
WIRE CAP	FRONT BULB
LEFT SIDE	BOTTOM LEFT BULB
WIRE CAP	MIDDLE LEFT BULB
LEFT SIDE	BOTTOM RIGHT BULB
WIRE CAP	MIDDLE RIGHT BULB

(FIGURE B) BULB PAIRING AND WIRING CAP LOCATION.
(All rear wire caps are between the two rear steel panels. You may

need to remove the top and/or back panel to get to them.)



(Figure D) LEFT VIEW OF BULB PAIRING AND POWER SWITCH



(Figure F) Below is an example of a heating element that may have failed. Notice the whitening of the wires where they enter the ceramic end caps. It is recommended that bulbs with this extent (approximately 1/4") of whitening (and the corresponding paired bulb) should be replaced even if they test okay as their life expectancy could be diminished.

