



## IMPORTANT

- Always perform initial inspections including visual, current and airflow (Figure A) tests before servicing a heater.
- Check the A/C cord, wires and plugs, for cut, pinched or exposed wires, secure connection and proper location. (Figure B)
- NEVER touch the glass portion of a heating element. Always visually inspect the elements and perform a resistance test.

## SPECIFICATIONS

- **Current:** 12.5 amps (up to 14 amps when first heating up) in "HIGH" mode.
- **Airflow:** 720+ FPM (Feet Per Minute)
- **Power:** 1350 Watts
- **Heating Elements (Bulbs):**  $25\Omega \pm 5\%$  ( $23.75\Omega - 26.25\Omega$ )
- **Heat Rise:**  $140^\circ$  (over ambient temperature)

## NO POWER

- Inspect wiring and cables.
- Check the ribbon cable. Make sure the plug is not reversed on the rear circuit board.
- Check the power cord, its connections and ground.
- Check (in order)
  1. Rear circuit board
  2. Heating elements
  3. High limit switch
  4. Front control board

## LIMITED HEAT / NO HEAT / FAN NO HEAT

- Visually inspect the heating elements and their connections. Turn on the heater and look for non-working elements.
- Perform a resistance test. Heating elements should measure  $25\Omega \pm 5\%$  ( $23.75\Omega - 26.25\Omega$ ).
- Replace a heating element if the glass or the ceramic ends are cracked, broken, overly discolored or if the quartz element appears to be damaged. (FIGURE C)
- Remove the leads to the high limit switch and perform a continuity test. If any resistance, replace.
- Test the unit with a new rear circuit board.

## OVERHEATING / HEAT NO FAN

- Check the fan to make sure the fan is spinning freely, properly aligned and not binding.
- Visually inspect the fan for built up dust and dirt. Clean it with a soft-bristled brush and vacuum.
- Inspect the fan bearing and oil it if needed. (Bearing is opposite the motor).
- Replace the high limit switch and operate heater to test.

## LOUD FAN

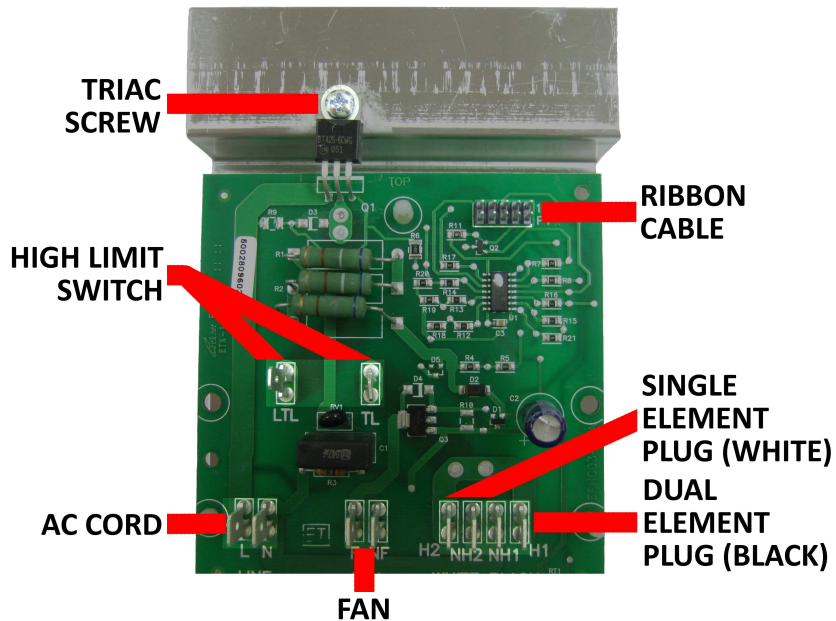
- Visually inspect the fan to make sure the cage and motor are properly mounted, aligned and spinning freely.
- Inspect the fan bearing and oil it if needed. (Bearing is opposite the motor).
- Inspect the fan bushing. Make sure it fits tightly in the blower fan and on the motor shaft.
- If the fan continues to make noise, the motor may need replaced.

**\*\*DISCLAIMER: WIRE COLORS, CONNECTORS, PARTS AND THEIR LOCATIONS ARE SUBJECT TO CHANGE.\*\***

**(FIGURE A) AIRFLOW TESTING**



**(FIGURE B) REAR CIRCUIT BOARD**



**(FIGURE C) EXAMPLE HEATING ELEMENT**



The heating element above is in passable condition. Notice the discoloration and gathering of the coil at the base. Heating elements should be replaced if they appear to be in poorer condition than the example below. Elements should ALWAYS be replaced if they are cracked, broken, chipped, have loose end caps or are extremely discolored from oxidization.