

## **EVENHEAT TROUBLESHOOTING TIPS**

### **Kiln Not Heating**

- Check for "blown" fuse or tripped circuit breaker. Double check that these devices are properly sized.
- Check for voltage at the kiln plug/receptacle.
- Kiln not plugged in. (Don't laugh, it's happened!).
- On automatic, computerized models check the control fuse located on the kiln control panel.
- Make sure Kiln Sitter plunger is pushed in or the kilns' power switch is ON.
- Limit timer on kiln Sitter model may be set to "0".
- Make sure kiln is plugged into the correctly specified receptacle.
- Possible element failure.
- Kiln panel component failure.
- Check for worn or broken wires.

### **Kiln Fires Too Slowly**

- Elements are wearing out. Elements age when fired and increase in resistance. Firings gradually take longer, and longer until the kiln will not reach temperature. Replace all elements. High firings wear the elements out faster than lower firings.
- Make sure all elements are firing. You can check this by carefully lifting the lid while the kiln is on to make sure all elements are glowing. In some kilns, especially automatics, the top, and bottom coils appear to become hot quickly while the center elements appear to be slow in becoming hot and are less bright. Do not touch the elements when doing this!!
- Voltage too low. As the voltage falls so does power. Check voltage while under load for a more valid reading.
- Improper operating voltage. Check rated voltage (printed on the nameplate) against the measured voltage. A kiln designed for 240V will be slower when connected to 208V.
- Voltage may vary in certain areas due to heavy electrical use. This is especially true in the summer with a heavy demand for air conditioning and refrigeration.
- Long runs of wire from the main service can cause a lower voltage, which lowers power.
- High amperage draw of the kiln could cause a voltage drop at the kiln. While rare, this would indicate that the electrical service supply transformer is not capable of supplying the desired power.
- Service wired incorrectly. The kiln may have inadvertently been connected to 120V instead of 208 or 240V. (It's happened)
- Loose connections between fuse box and kiln.
- Aluminum wire has been known to cause some problems. We do not recommend aluminum wiring.

### **Kiln Fires Too Quickly**

- Improper operating voltage. Check rated voltage (printed on the nameplate) against the measured voltage. A kiln designed for 208V will fire faster when connected to 240V. This situation is dangerous and may cause amperages to exceed design limits. Do not allow this condition to exist and cease using the kiln immediately.
- Check element ohms to make sure they meet the factory specifications.
- Improperly programmed automatic controls. Double check your program.

### **Hot or Partially Melted Plug or Wall Receptacle**

- The kiln should be shut down immediately and Power disconnected
- This can be caused by a worn receptacle or plug. Loose connections within the

receptacle or cord set cap can also be the problem.

- Plugging and unplugging the cord set can cause connections to wear and loosen.
- Corrosion on the cord prongs and/or receptacle is another cause.
- Damp conditions, such as damp basements, can be the cause of corrosion. Corrosion interferes with making a good connection between the cord and wall receptacle.
- If any of these problems exist, replace power cord and receptacle immediately with Genuine Factory replacement parts.

### **Brick Cracking and Hairline Cracks**

- Hairline cracks are common in all kilns and should not be a concern. These are normal. Bricks expand and contract when heated and then cooled. The cracks will close as the kiln gets hotter.
- This is most prevalent in the kiln top or bottom. Kilns fired at the higher temperatures will experience more spalling and cracking of the brick
- Kilns cooled down too rapidly will affect the amount of cracking.
- If you are repairing broken brick, repair cement should be used to adhere the broken piece back into place.
- If a brick breaks under an element and is impossible to repair, an element pin can be used under the coil to prevent drooping.

### **Fuse "Blows" or Breaker Trips Immediately when Kiln is Turned On**

- Generally speaking, if a fuse "blows" or circuit breaker trips immediately upon applying power to the kiln, or pressing the start keys, it indicates a short circuit within the kiln itself. It's also possible that the fuses or breakers protecting the circuit are not sized properly.
- Check the wiring for any signs of arcing (visual and smell). If there is any evidence of arcing, call a qualified electrician to fix the problem. This must be fixed before you continue firing.
- Electrical service to the kiln is wired incorrectly. Have a qualified electrician check the electrical service from the main service to the kiln. There have been incidences where the connections from the electrical pole outside to the main service at the house have been loose.
- The circuit is overloaded. Disconnect all other appliances while operating your kiln.

### **Fuse "Blows" or Breaker Trips During Firing**

- Generally speaking, if a fuse "blows" or circuit breaker trips sometime after the beginning of the firing it indicates a problem with the electrical service itself.
- The causes are varied. Heat at the fuses or breakers will cause them to "blow" or trip at lower amperage levels. This heat can be caused by a weak or loose connection at the fuse or breaker or elsewhere in the service (heat travels well in copper). A fuse or breaker is not normally warm or hot. It should be very close to room temperature during normal operation.
- It's possible also that fuses or breakers are bad, weak, junk, etc. Replace only with the proper size. Do not install larger fuses or breakers to solve this problem. Something out of the ordinary made the originals fail. The problem must be corrected not bullied into submission. It doesn't work that way.
- In this type of situation, it is suggested that a qualified electrician be asked to check for circuit problems.