Circuit Breaker trips

Condition:
Circuit breaker trips during firing.
The breaker or fuse will shut off the power to the kiln immediately or at some time during the firing. Check electrical installation requirements for your kiln.

Start

Does the circuit breaker or fuse shut off immediately?  

Yes  

No

Does the kiln's voltage match the supply voltage?  

Yes  

No

208 volt kilns will trip the breaker or blow the fuse when 240 volts is applied to them. Change the elements to 240 volts or have your electrician install a step down transformer to 208 volts.

Yes  

No

UNPLUG KILN and check interbox plugs and receptacles and any other wiring connections for signs of arcing or burning. You may need to replace the breaker.

Can you see sparks when the breaker or fuse trips?  

Yes  

No

UNPLUG KILN and check interbox plugs and receptacles and any other wiring connections for signs of arcing or burning. You may need to replace the breaker.

A warm breaker is normal but a hot breaker means trouble. Poor electrical connections create heat. Breakers will trip due to overheating or over amperage. Hot breakers indicate a poor wire connection at the breaker (tighten connection and/or replace breaker), or a poor connection on the breaker bar of the breaker box (move breaker to a new location in the box), or there may be the wrong wire gauge size wire from the breaker box to the kiln outlet. Check installation electrical requirements and increase the wire gauge to the proper size.

Yes  

No

Is the circuit breaker very hot to touch when it trips?  

Yes  

No

The problem is in the wiring to the kiln. Call an electrician.

Start

Unplug the kiln. Does the circuit breaker trip without the kiln plugged in?  

Yes  

No

Can you see sparks when the breaker or fuse trips?

Yes  

No

Unplug the kiln. Does the circuit breaker trip without the kiln plugged in?

Yes

Turn off the breaker. Unplug the kiln and inspect the area near the sparks. Look for burning or loose connections and replace them.

A warm breaker is normal but a hot breaker means trouble. Poor electrical connections create heat. Breakers will trip due to overheating or over amperage. Hot breakers indicate a poor wire connection at the breaker (tighten connection and/or replace breaker), or a poor connection on the breaker bar of the breaker box (move breaker to a new location in the box), or there may be the wrong wire gauge size wire from the breaker box to the kiln outlet. Check installation electrical requirements and increase the wire gauge to the proper size.

No