

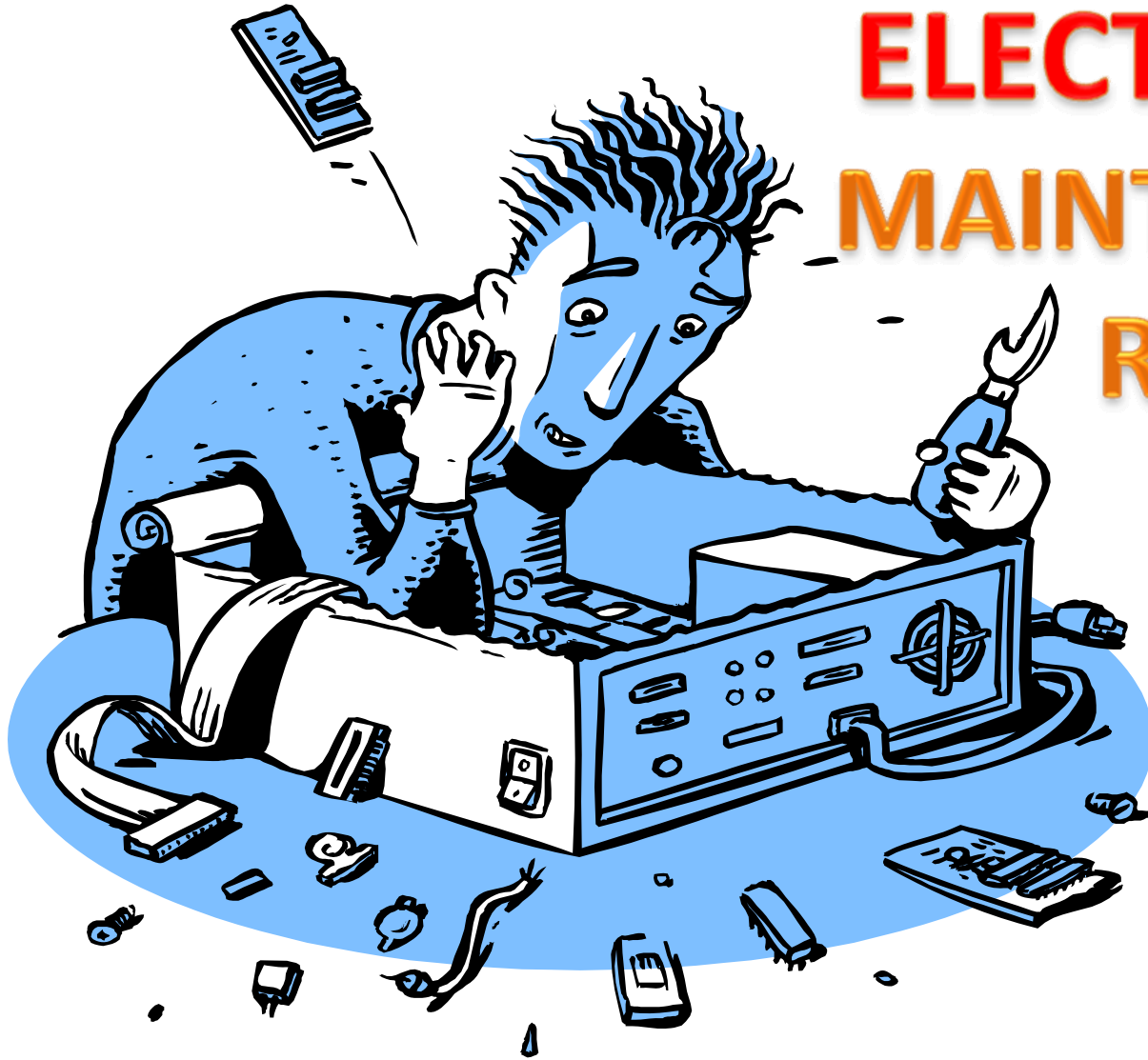


Everything You
Have Always
Wanted to Know
About Kilns



OLYMPIC KILNS

ELECTRIC KILNS MAINTENANCE & REPAIR



KILN FIREBRICK



STAINLESS STEEL SKINS



COMMERCIAL ELECTRIC KILNS



Identifying Olympic Kilns

Standard Line for Pottery & Ceramics



Standard Line Pottery/Ceramics

129E – 11.25" wide x 9" deep

E - equipped with electronic controller

2327HE – 23 3/8" wide x 27" deep;

H fires to high temperatures, cone 10

2350° F

E – equipped with an electronic controller



Identifying Olympic Kilns Glass Kiln Models

Standard Line Glass Kilns

189GFETLC – 17 ½" wide x 9" deep; GF – glass fusing (has a lid element),
E – Equipped with an electronic controller, TLC – top or clamshell loading



Commercial Glass Kilns

Glass – GF12E – GF-glass fusing kiln with elements in the lid of kiln with 12 cubic feet of usable firing space within the chamber
E-equipped with an electronic controller



Identifying Olympic Kilns Commercial Gas & Electric Kilns

Commercial Line - Olympic commercial kilns are abbreviated by their design and cubic foot firing space within the model.

Gas – DD12 – DD-downdraft kiln with 12 cubic feet of usable firing space within the chamber

Electric – FL20E – FL-front-loading electric with 20 cubic feet of usable firing space within the chamber; E-equipped with an electronic controller



Abbreviations

- E – An electronic controller equips the kiln
- S – Solid stainless jacket
- H – 3” brick and the kiln fires to cone 10-2350° F

- DM – dual media for firing glass and ceramics, 3” brick and the kiln fires to cone 10-2350° F - has lid element for glass fusing GF – glass fusing kiln with lid element

- GF – glass fusing kilns, equipped with lid element
- GFTLC – glass fusing kiln that has duplicate openings either top or clamshell loading capabilities

- P – Kiln equipped with pyrometer
- FL – Front – loading
- G – Updraft gas kilns (Raku and Torchbearer)
- DD - Downdraft gas kilns
- T – An Auto-Cone sitter and timer equip the kiln

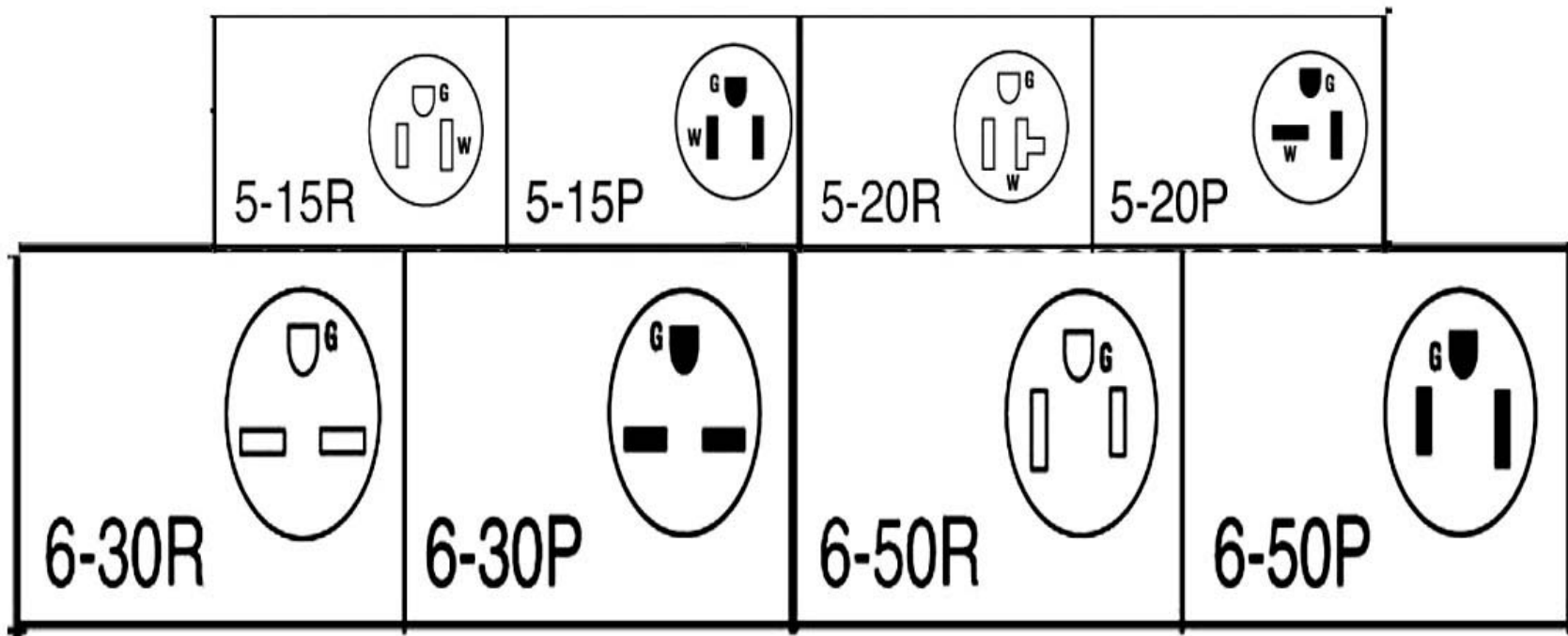
ABC's of Electricity

- **Amp – unit of electrical flow produced by volts acting through the resistance ohm (element)**
- **Volts – unit of electrical pressure**
- **Watts – unit of power**
$$\text{Amps} \times \text{Volts} = \text{Watts}$$

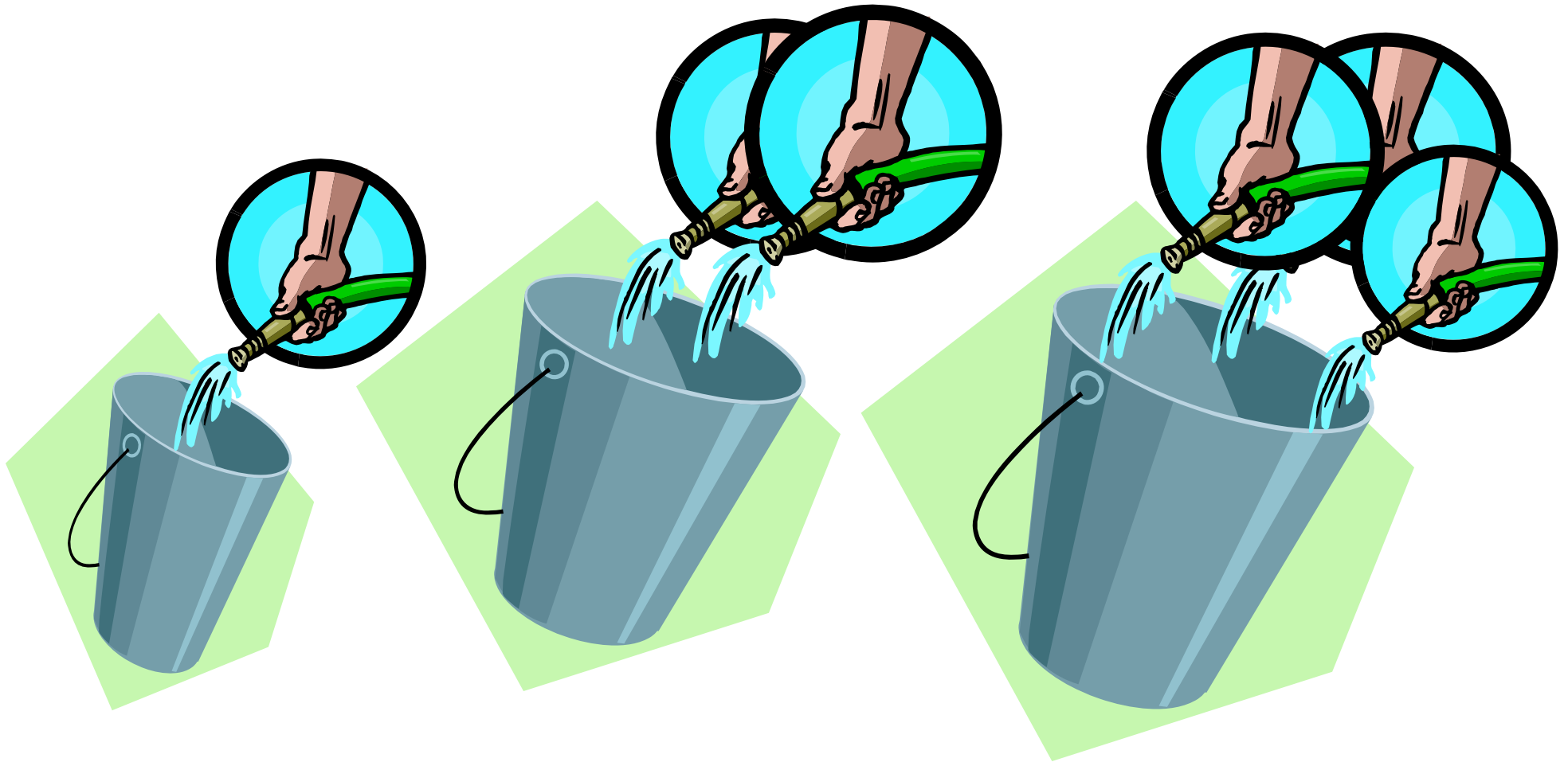
Breaker Size – Plug & Receptacle

Electrical code requires that the breaker size be 125% greater than the amperage required by the kiln

R = Receptacle, P = Plug



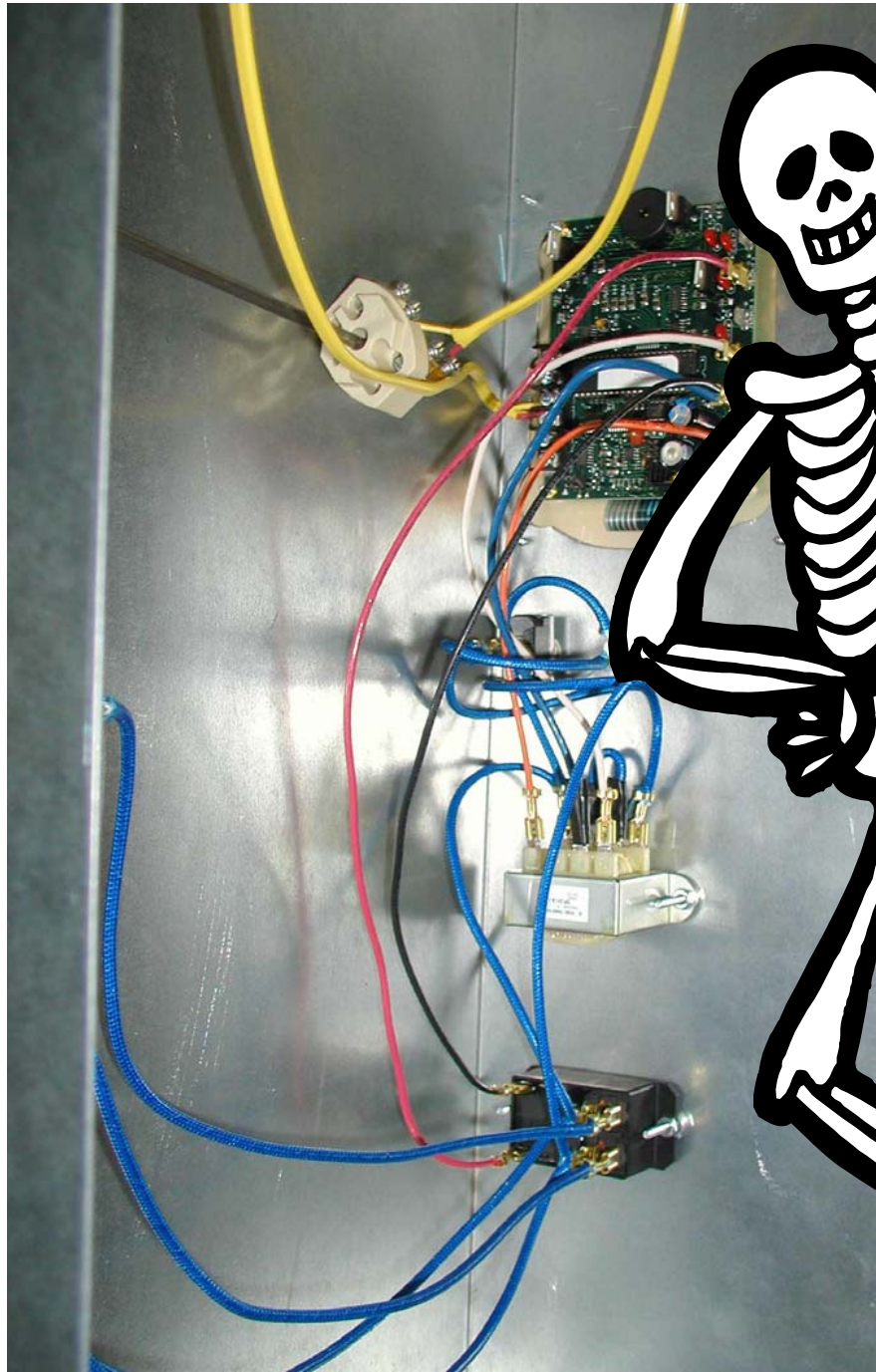
Single & Three Phase Wiring



120 VOLT

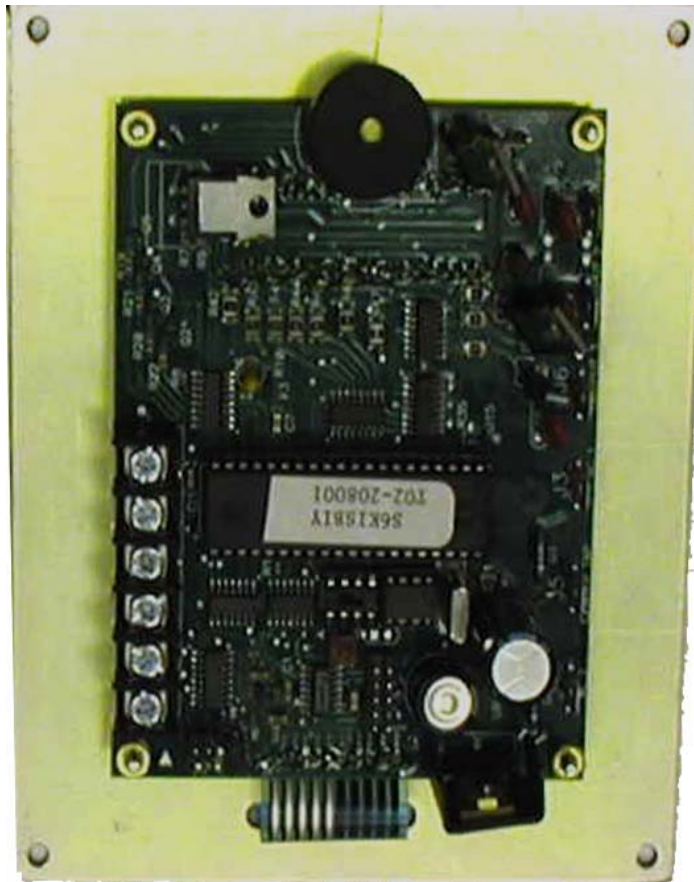
240-208 VOLT - 1 PHASE

240-208 VOLT - 3 PHASE



And the arm
bone is
connected to
the shoulder
bone... the
knee bone is
connected to
the foot bone...

ELECTRONIC CONTROL BOARD



Error codes - 3-Key Controller

- **ERR1**

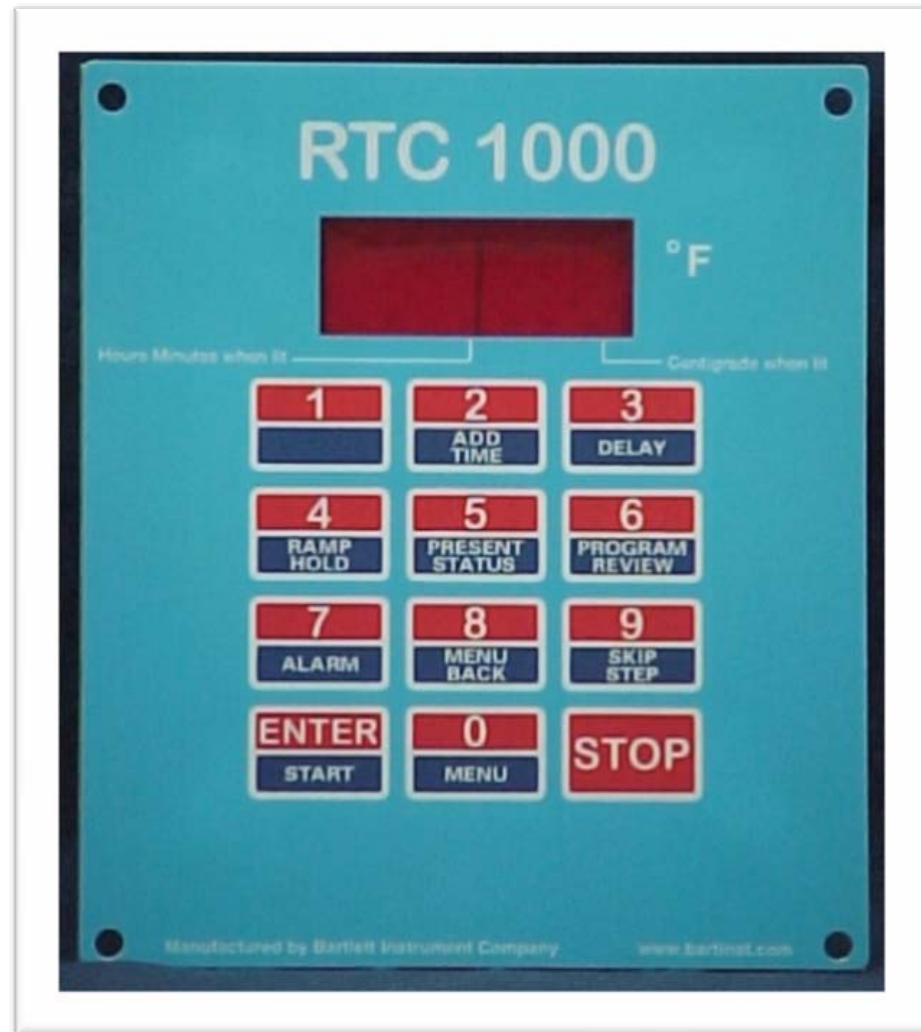
- **ERRP**



- **FAIL or a Negative Temperature is Displayed**

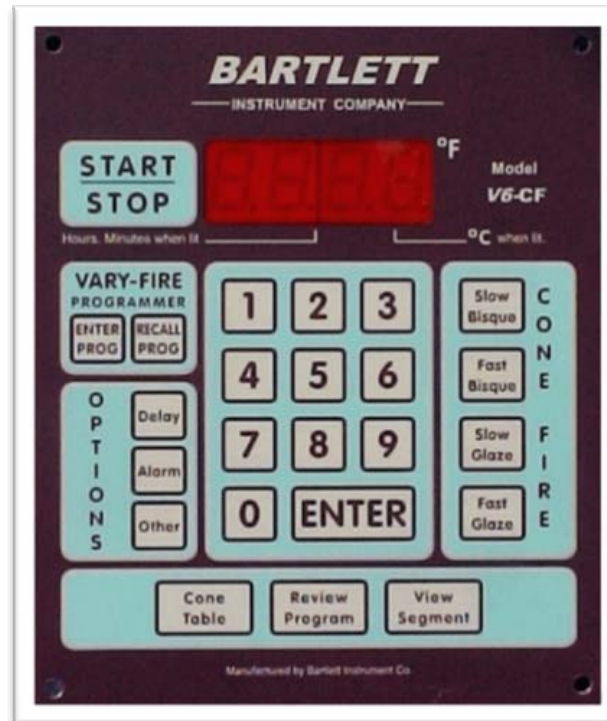
Error codes – RTC-1000 Controller

- **ERR1**
- **ERRP**
- **ERR6 or FAIL**
- **ERR8**
- **ERRD**
- **ERR-**
- **ERRE or ERRT**
- **ERRA**



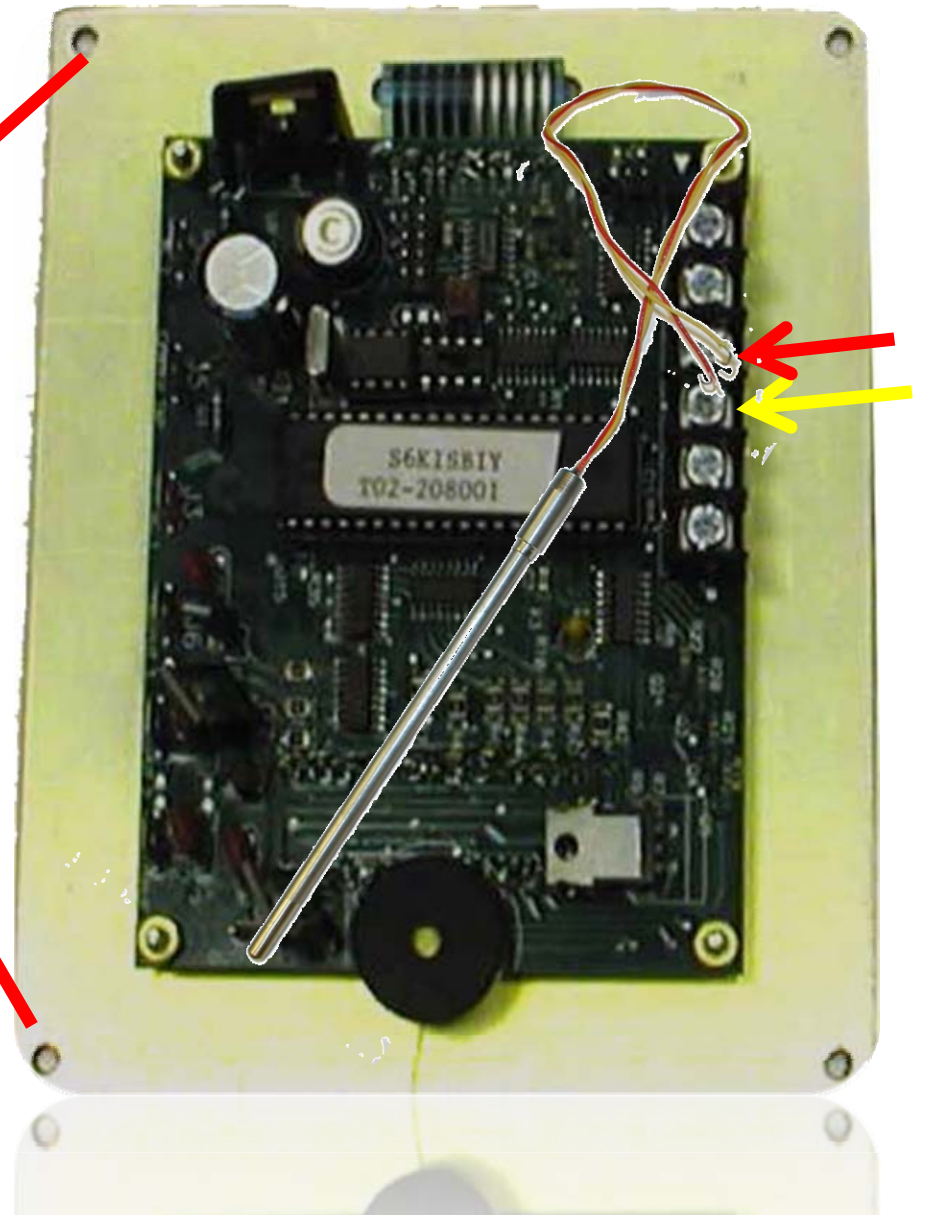
Error codes – V6-CF Controller

- E-0
- E-1
- E-2
- E-3
- E-4
- E-5
- E-6
- E-7
- E-8
- E-9



- ERRP
- E- -
- E- E
- E- bd
- E- d
- E- A
- E- r
- E- U
- E- H
- PF
- StUc
- FAIL

Replacing Thermocouple



Inside the ELECTRICAL BOX



ON/OFF TOGGLE SWITCH

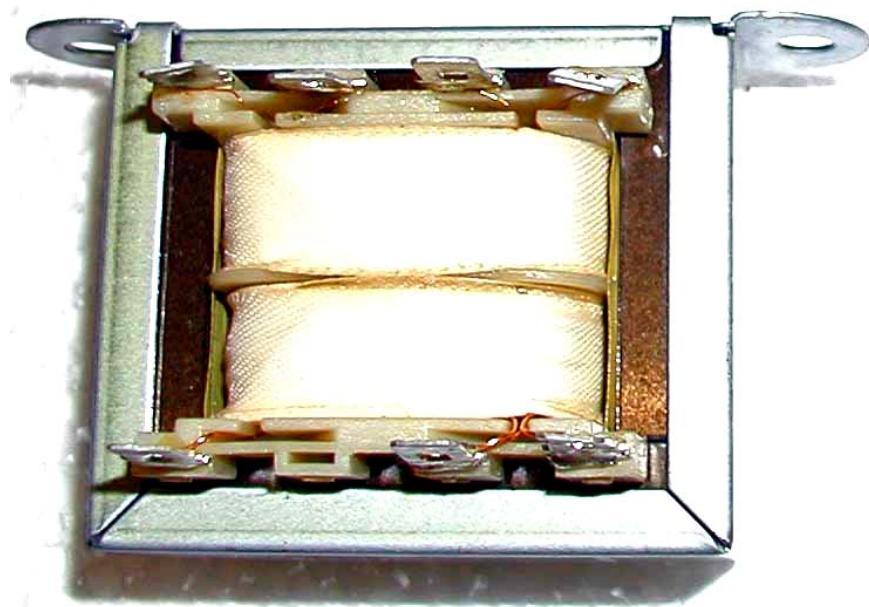


**CONTROLLER/MANUAL
TOGGLE SWITCH**

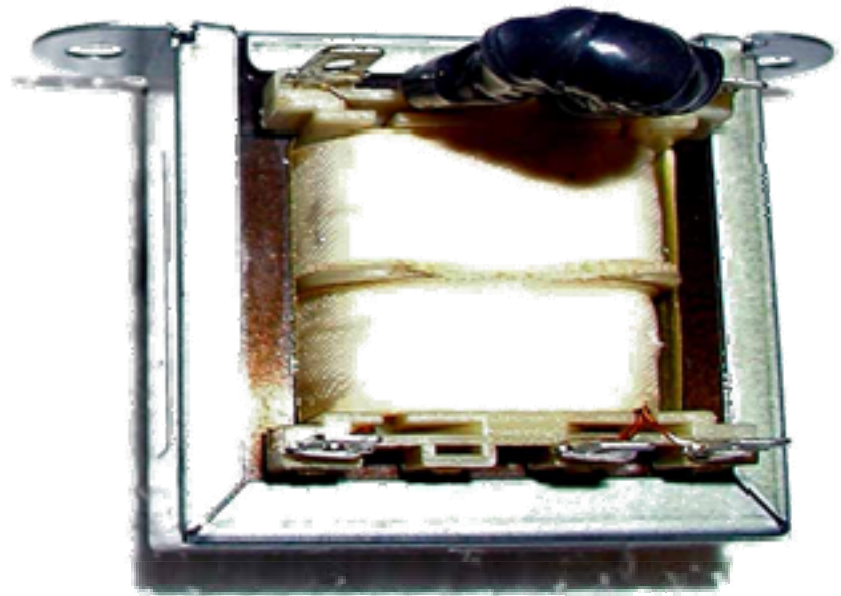


TRANSFORMER

12 VOLT for 120 or 240/208 VOLT

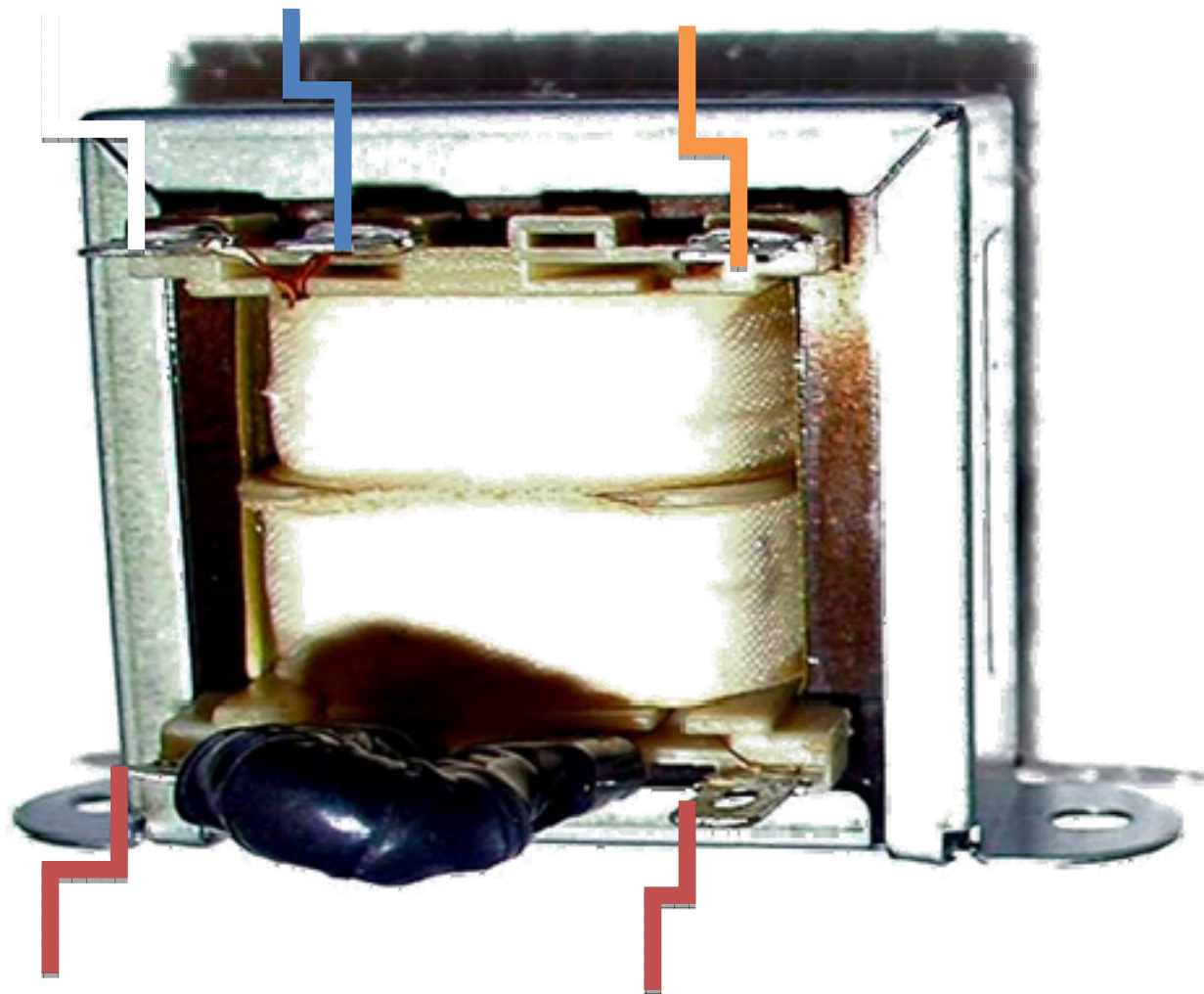


120 VOLT

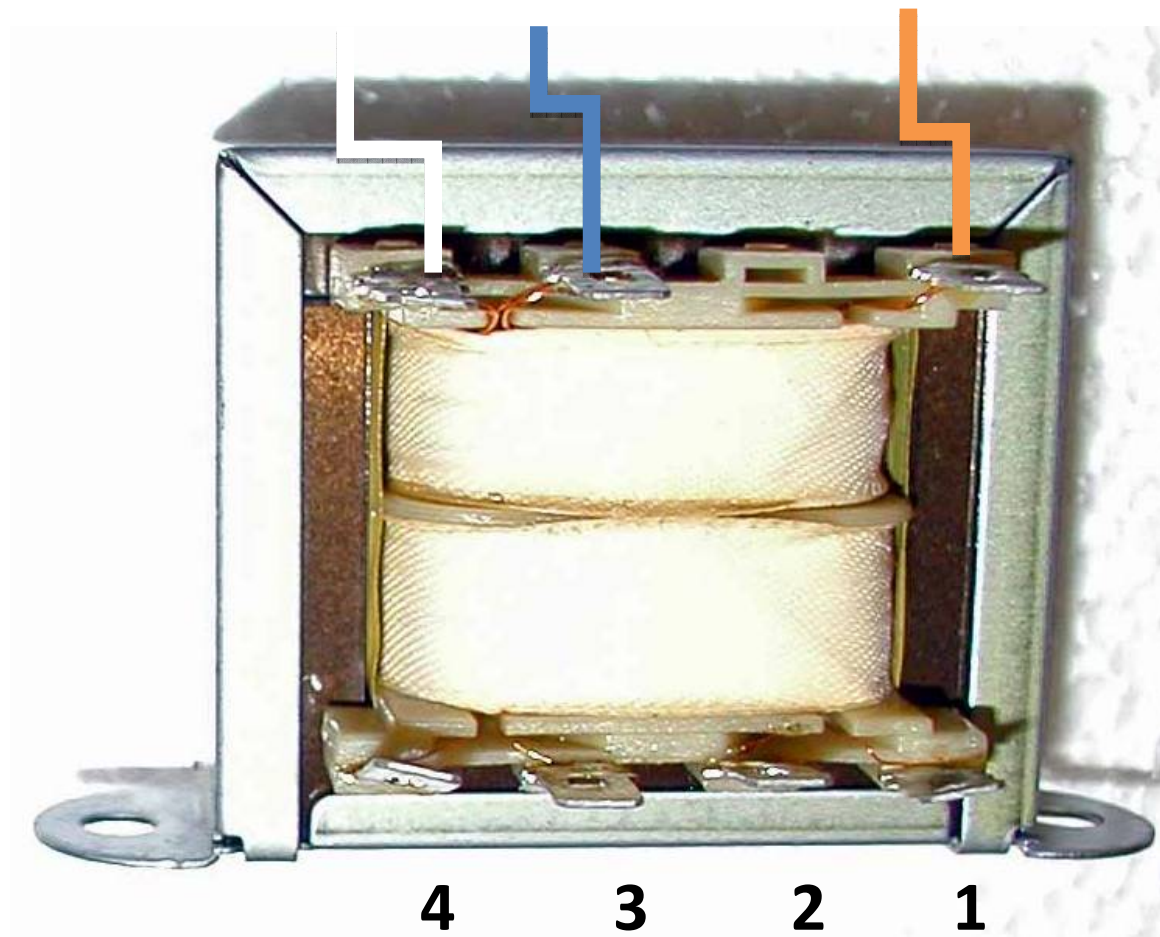


240/208 VOLT

240/208 TRANSFORMER 12 VOLT



120 VOLT TRANSFORMER



240, 120, 12 Volt Relay

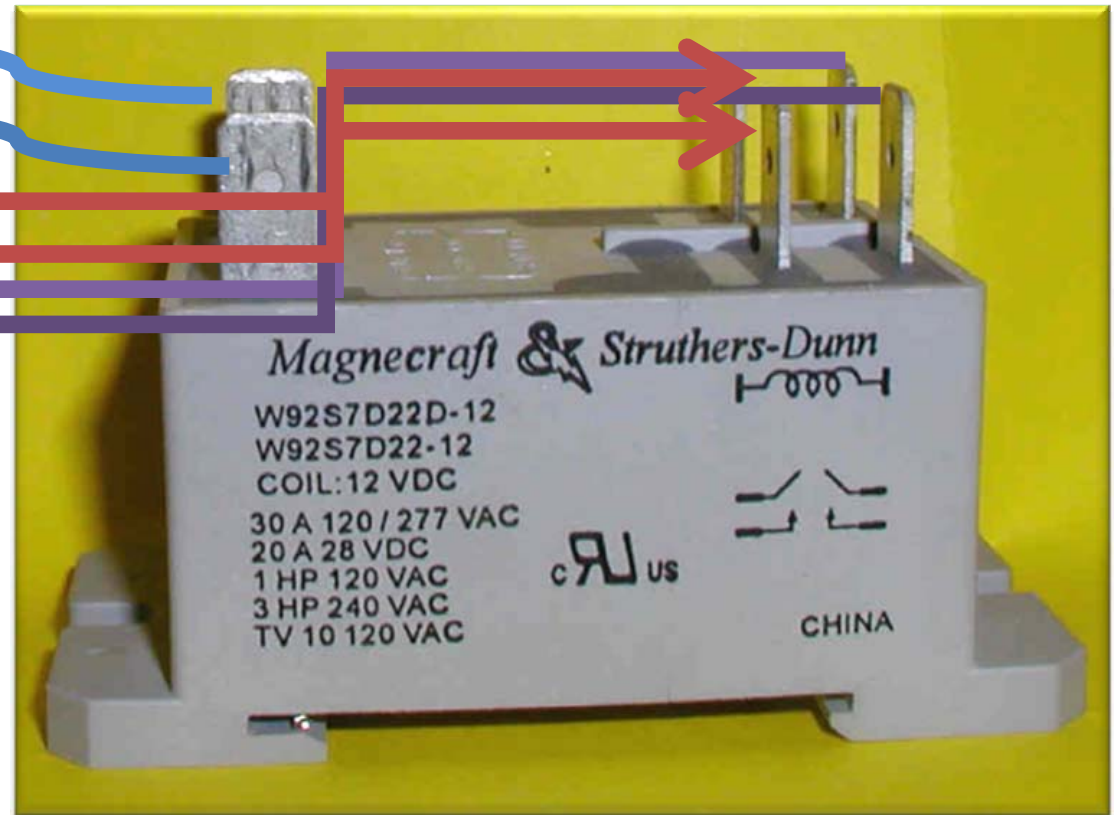


240, 120, 12 Volt Relay

COIL
CONNECTION

POWER IN

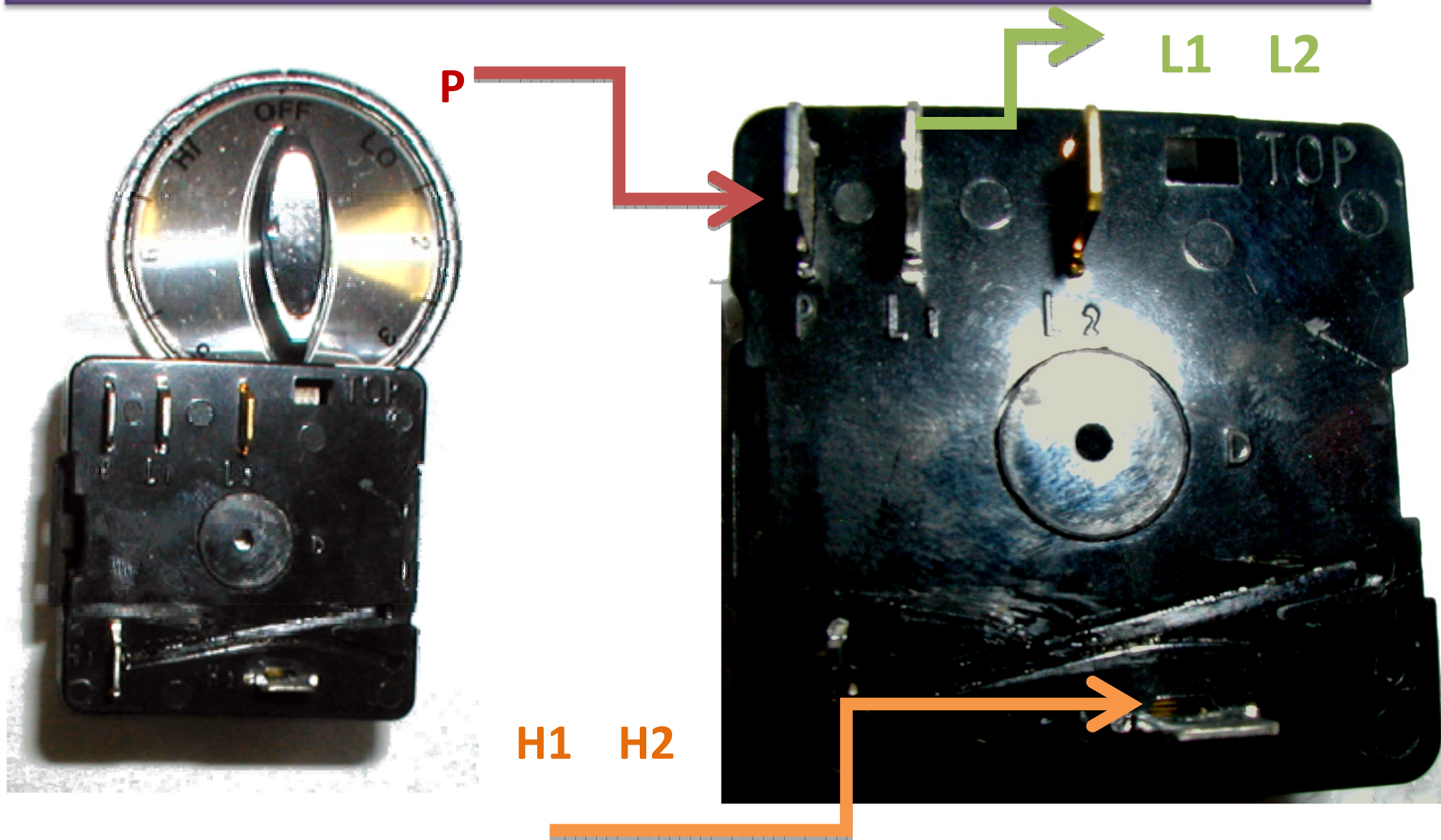
POWER OUT



120 VOLT RTC-1000 ELECTRICAL BOX



240 Volt Infinite Switch



3-KEY CONTROLLER



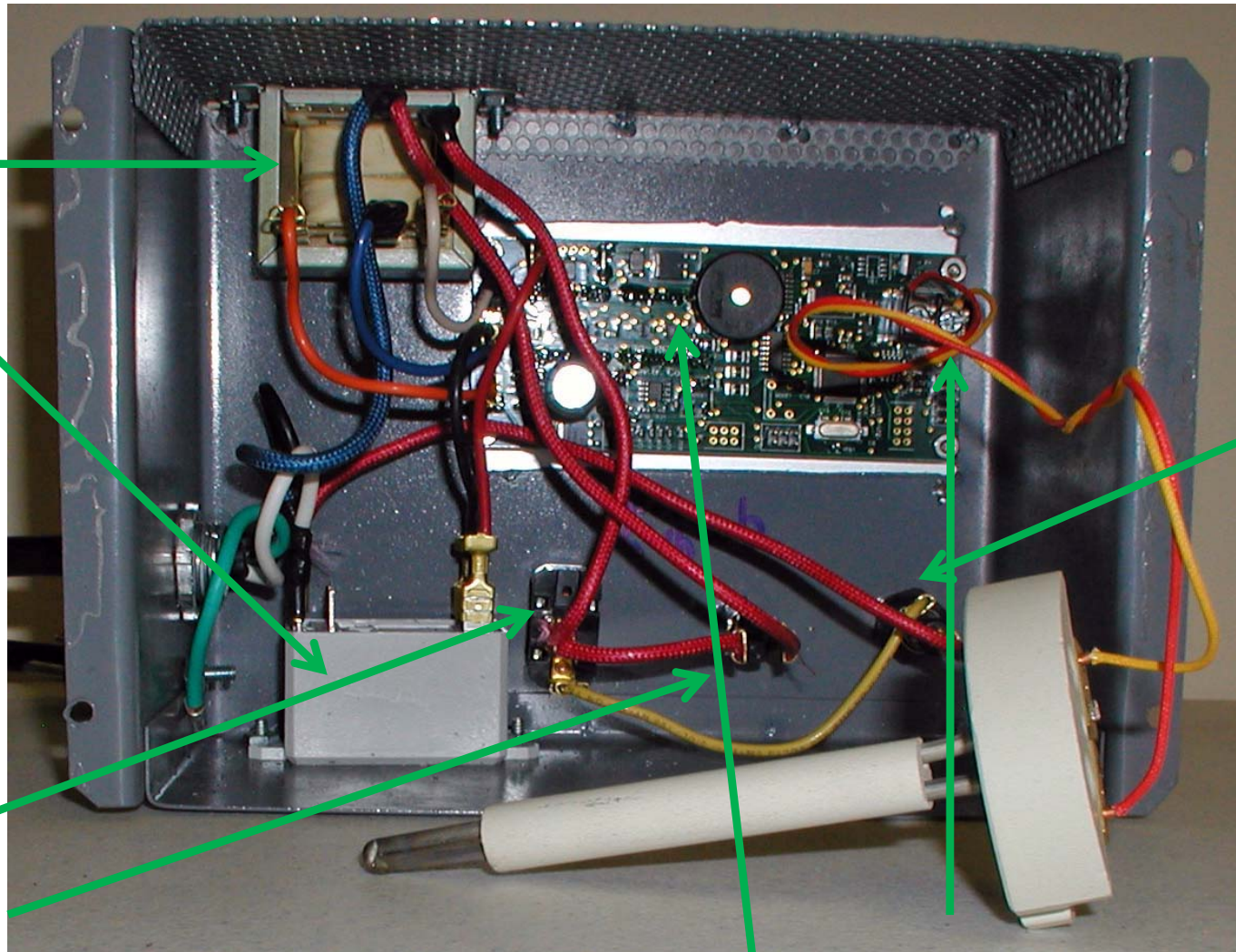
INSIDE 3-KEY ELECTRONIC CONTROLLER ELECTRIC BOX

- 120 VOLT TRANSFORMER

- 12 VOLT RELAY

- ON/OFF TOGGLE SWITCH

- PILOT LIGHT



FUSE

THERMOCOUPLE
CONTROL BOARD

120 VOLT RTC-1000 ELECTRICAL BOX



**INSIDE 120 VOLT
RTC-1000 ELECTRICAL
BOX**

Blue wires – attaches lid element to relay –
this is the relay you need to replace

THERMOCOUPLE

PILOT LIGHT FOR LID/BODY SWITCH

LID/BODY TOGGLE SWITCH

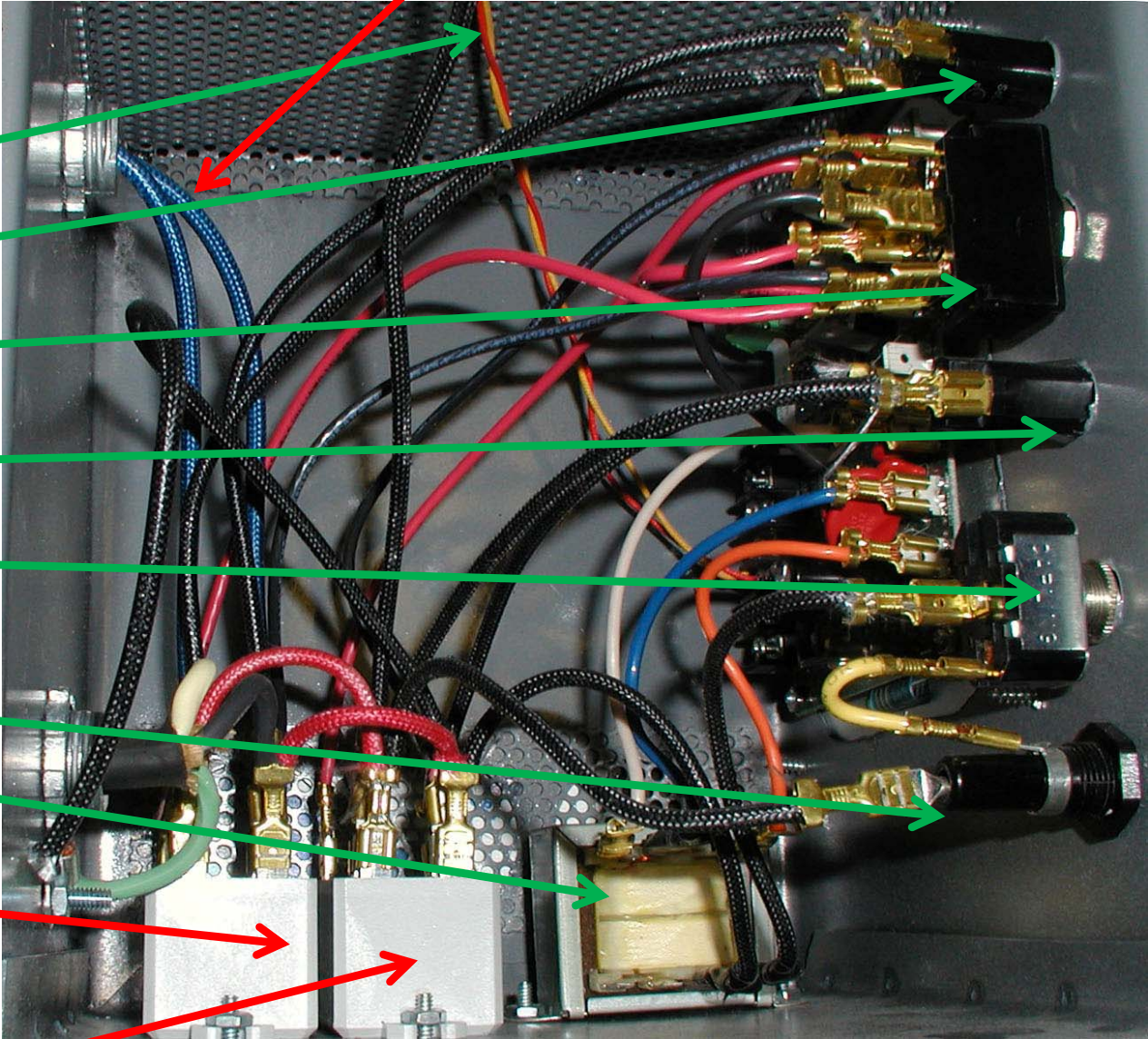
PILOT LIGHT FOR KILN

ON/OFF TOGGLE SWITCH

FUSE

120 VOLT TRANSFORMER

12 VOLT RELAYS



240-208 Volt RTC-1000 ELECTRICAL BOX



V6-CF & RTC-1000 WALL UNIT

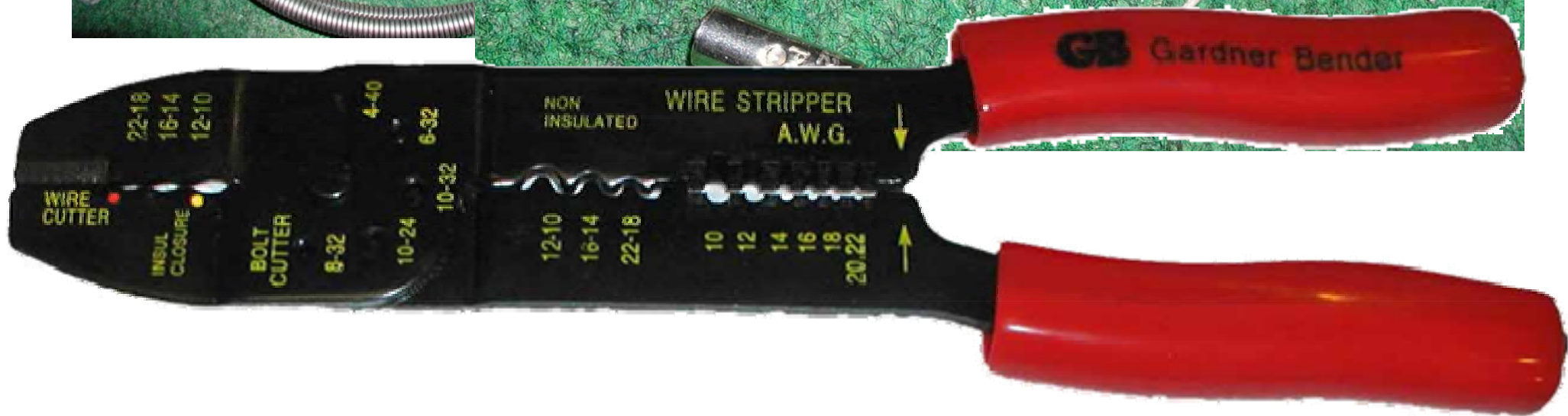


New Option for Kiln Sitter Equipped Kilns Electro Sitter!



- Electro Sitter replaces all kiln sitter and kiln sitter timers. It's easy and best of all, parts are available!
- The Electro Sitter box is complete with thermocouple attached. The box will fit where the kiln sitter/timer were screwed into the kiln. Simply remove the screws from the kiln sitter on front of the kiln, then detached wires connecting to kiln sitter. Wires will be attached to the back of the Electro Sitter exactly as they were attached to the kiln sitter back plate.

ELEMENT REPLACEMENT



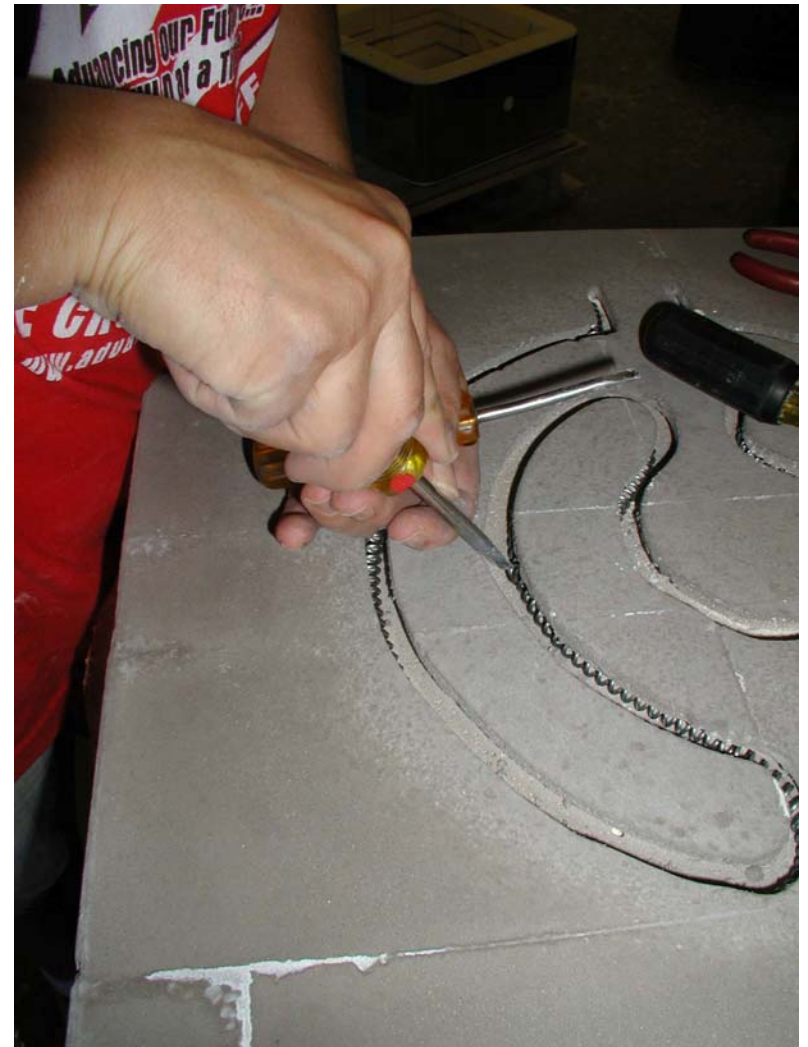
Lid Element – Replacement or Sagging



Lid Element – Replacement or Sagging

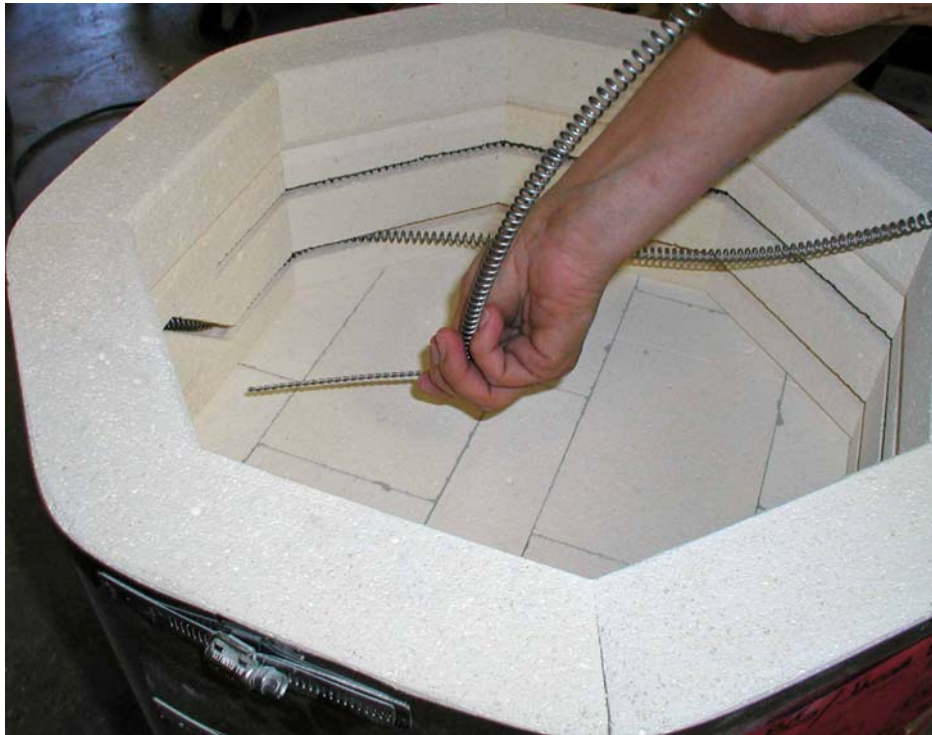


Lid Element – Replacement or Sagging



REPLACING WALL ELEMENTS

**INSERT PIGTAIL THROUGH
TERMINAL BRICK**



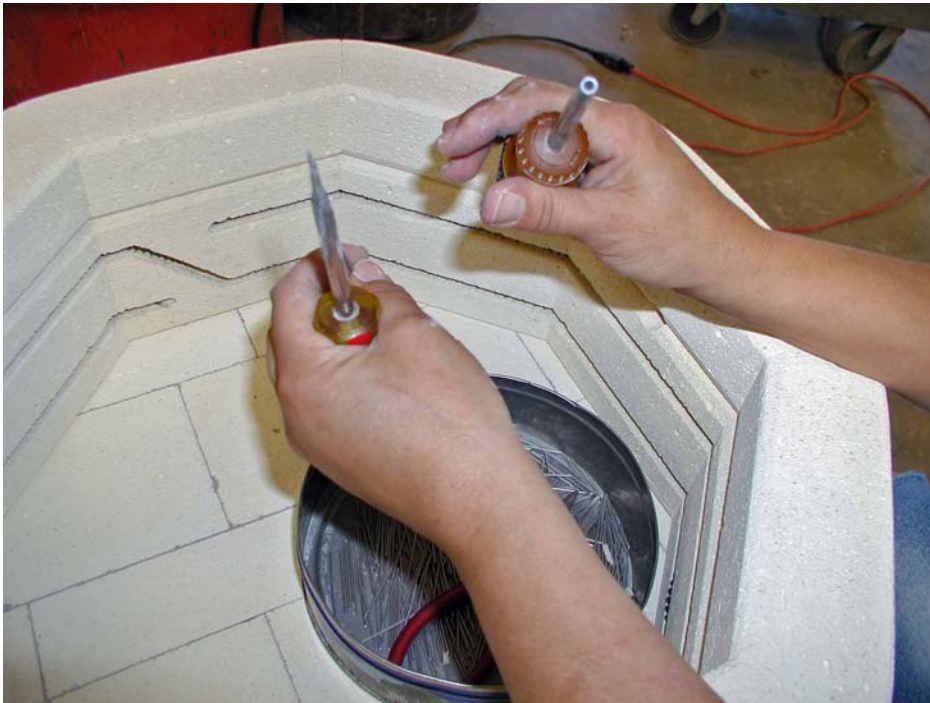
**INSERT ELEMENT IN GROOVE –
GROOVE HOLDS THE ELEMENT**



REPLACING WALL ELEMENTS

**TWO SCREWDRIVERS or NEEDLE NOSE
PLIERS for ELEMENT PIN PLACEMENT**

**PLACE PIN in SCREWDRIVER with
HOLE or NEEDLE NOSE PLIERS**



REPLACING WALL ELEMENTS

ELEMENT PIGTAIL – ½ GOES THROUGH HI TEMP CONNECTOR

WIRE GOES THROUGH ½ of HI TEMP CONNECTOR & THEN BOTH ELEMENT & WIRE CRIMPED WITH CRIMPING TOOL



MORTAR & KILN PATCH



MORTAR & KILN PATCH

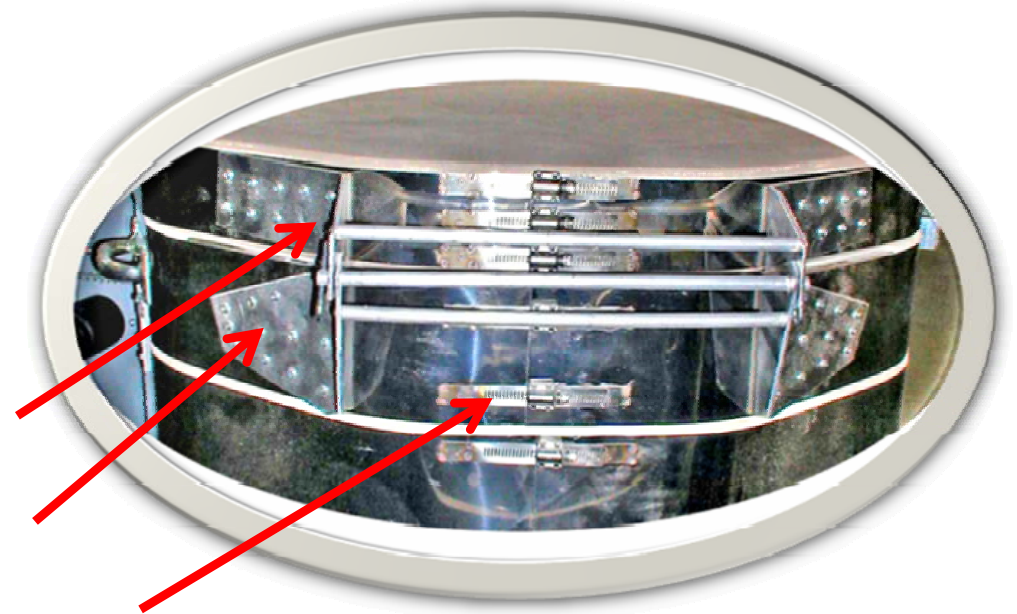
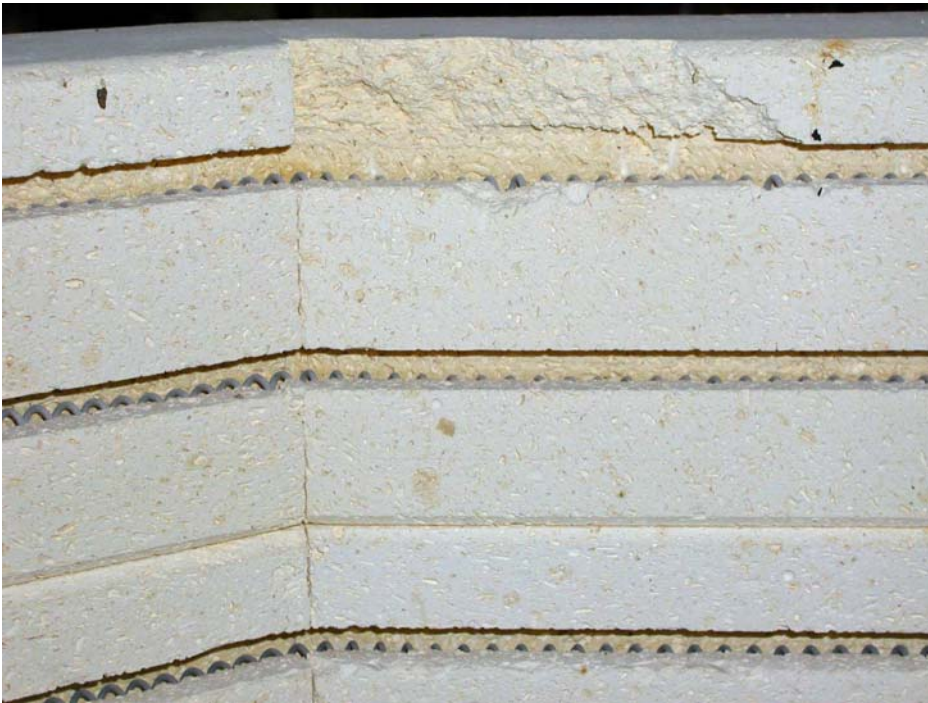
MORTAR



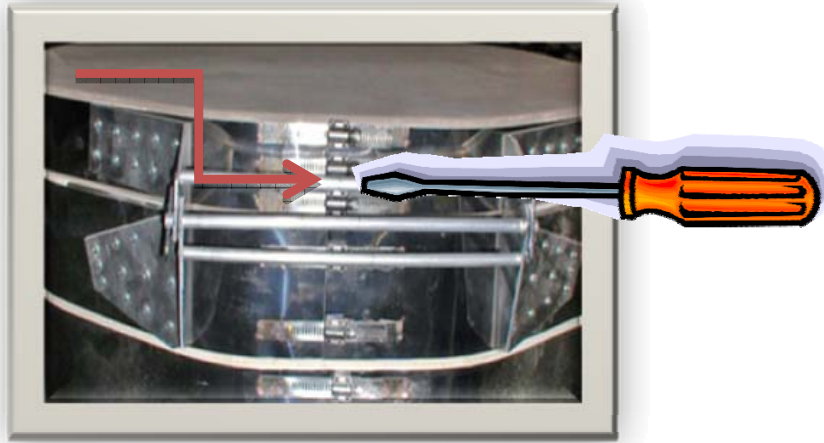
KILN PATCH



BRICK REPLACEMENT

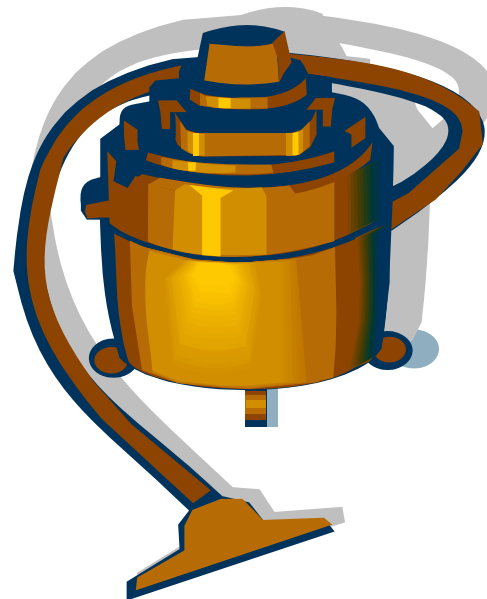


GENERAL MAINTENANCE BANDS, VACUUMING



TIGHTEN STAINLESS STEEL
BANDS ON A REGULAR BASIS TO
KEEP KILN ALIGNMENT
USE A FLATHEAD SCREWDRIVER
TO TIGHTEN HOSE CLAMPS
WHEN THE KILN IS WARM

VACUUM KILN TO REMOVE DUST
PARTICLES & DEBRIS TO PROTECT
FUTURE FIRINGS



KILN WASH APPLY SPARINGLY

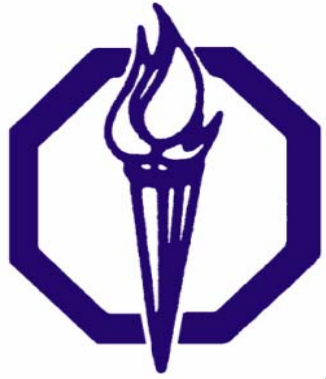
KILN WASH USED ONLY ON CERAMIC SHELVES TO PROTECT THE LIFE OF THE SHELF

MIX WATER WITH WASH TO A FORM A CONSISTENCY SIMILAR TO THIN PANCAKE BATTER, BRUSH 1/16" ON SHELVES & KILN FLOOR, DRY

KILN WASH WILL BEGIN TO FLAKE OFF WHEN IT IS TIME TO RE-WASH

DO NOT APPLY TO KILN WALLS, ELEMENTS OR LID.





OLYMPIC KILNS



*Building the Finest Kilns for
Your Creative Spirit!*

www.greatkilns.com