ING INSTRUCTIONS FOR MODELS #711, #911, #1111 #1317, #1717, #70, #90, #100, #130, #150 & #170

Bisque Firing:

a. Run kiln on LOW for about ½ hour. Longer for very heavy pieces and if pieces are very thin and small, LOW will not be necessary. If you have a poor voltage condition causing an unusual long firing period, low firing may be ignored. If you have a pyrometer, a reading of about 450 degrees F. is about right before turning kiln to MEDIUM heat.

b. After kiln has attained proper temperature on LOW, turn kiln to medium for about one hour. If pieces are very small and thin, medium will not be necessary. If you have a voltage condition causing long firing skip medium. 800 degrees F. is about right at the end of medium firing.

c. Turn kiln to high and fire to maturing of cone or corresponding reading of your pyrometer.

Glaze Firing:

a. If pieces are vitrified, large, thick or box like in shape, always use low to start your glaze firing except when you have bad voltage. Fire on low for about ½ hour, or if you have a pyrometer, fire to about 450 degrees F.

b. After kiln has attained proper temperature on low, turn kiln to medium for about one hour. Medium can be skipped if your pieces are small, or if you have poor voltage. If you have a pyrometer, fire on medium to about 800 degrees F.

c. Turn kiln to high and fire until maturing temperature of cone or corresponding reading on your pyrometer.

d. Models 1317 and 1717 have six heat control. This makes it possible to obtain very close control of temperature differences under the many firing conditions that exist for the average ceramist. For very tall pieces, where the load is not heavy, hot spots at the top of the kiln may be avoided by firing the bottom switch on high and the top switch on medium. Other firing problems may arise that will require other methods but if you bear in mind that the top switch controls the temperature at the top of the kiln you will be able to do many things not possible in most kilns. For normal loads this will not be necessary, just follow above directions with both switches.

Decorating Firing:

Follow above directions in most cases. However, it will be necessary to fire with the door slightly open until the oils in your decorating medium have been burned away. This will usually occur when the kiln has attained 800 degrees F. When the oils have burned off, close the door of your kiln and fire until the maturing point of your cone.

Poor Voltage:

If your kiln takes an unusually long time to fire it is possible that you may have poor voltage. First, check your receptable for poor connections. If receptacle heats up and is very hot to the touch replace with a heavier-duty receptacle. Sometimes running a heavier line such as #12 for the smaller models and #10 for the larger kilns will correct the trouble. In some cases it is possible for your electric company to correct the trouble. Ask them to run a "RECORDED VOLT TEST" with the kilnrunning and also with the kiln not running. Ask for the results of the test and if the average voltage is less than 110 volts an extended firing time may be expected. This test should be run over a 24 hour period to give you an exact picture of your voltage.

Trouble Shooting:

If elements do not heat follow this procedure:

1. Check to see that plug is in receptacle properly.
2. Check fuses. Put in new ones just to be sure.
3. Check elements by testing with a test lamp or some similar method.
4. If fuses are O.K. then the trouble is with the switch. When ordering the switch give model number of the kiln and the make of the switch, as several types of switches have been installed on our kilns.

Replacement of Firebrick:

All linings can be replaced on our kilns. Directions for installing are given for installation when the brick is ordered.

Patching Breaks and Cracks in your Kiln:

All firebrick cracks with use, and if serious cracks develop they may be repaired by high temperature cement being applied to the fire-brick. Apply when kiln is cold. Before applying cement wet part to be repaired with a little water. This will make a better bond. Allow cement to dry before firing kiln about 24 hours.

Replacing Elements:

All elements come stretched to the proper length for replacement. Take your elements out one at a time and replace with a new one. This is so that your wires do not become mixed up. However, if this happens follow the diagram to get back on proper hook-up. Insert elements with thin-nosed pliers. If elements come out of the grooves merely force back into place with the same thin-nosed pliers. Cement may also be used on the edge of the groove to hold elements in place. Make certain that the high temperature cement does not enclose any part of the element. Do not close in the gap of the groove though, as that may cause element failure.

Care of Kiln:

Apply kiln wash to floor of kiln so that if glaze drips it may easily be removed. Apply on a thin coat. Remove glaze drippings immediately. Vacuum clean kiln occasionally to remove particles of foreign matter.

Guarantee:

Send in the lower portion of your guarantee and keep the upper part for your records. This is very important and if it is not done the guarantee may be void. Our elements are unconditionally guaranteed for one year. Do not fire the kiln over 2000 degrees F.