



FE OPERATING INSTRUCTIONS

BEFORE FIRING

- A. Turn thumbwheel to “▲”.
- B. Turn timer off.
- C. Raise lid and lock in place. Gently test that lid is locked in open position.
- D. Place senior cones behind peepholes: Load kiln.
- E. Lower lid and plug all peepholes except top one (which is never plugged). For china paint, gold, luster's, reds, and decals raise lid to lowest lid prop position for entire firing.

(NOTE: First Firing and Kiln break-in should be done at a cone 05.)

FIRING

- Step 1 Set electronic temperature control to desired temperature. Use cone/temp chart 108°F/hr. scale on page 15-4.
- Step 2 Turn thumbwheel to “1”.
- Step 3 Set speed control to “Normal Speed” for most firings. Letters D & E for hand built items or if you wish a longer firing time. Recommend “E” for porcelain bisque.
- Step 4 Set timer by turning white ring to move pointer to desired number of hours. Push in center to start.
- Step 5 Periodically check senior cones. When senior cone bends and electronic control turns off, manually turn thumbwheel to “▲” position and timer to off. Allow to cool before opening.

NOTE: If pointer on electronic temperature control is turned to a setting below the temperature inside the kiln, the temperature control and the elements will shut off. To turn on the kiln in order to continue firing, the timer must be reset. To reset, turn timer to OFF or to “0” hours, then reselect hours and push in center to start. Slight variations on load and voltage may cause kiln to fire hotter or cooler temperatures in relationship to cones.

*EXAMPLE: If cone bends and temperature control pilot light is still on, turn pointer down on temperature control SLOWLY until light goes off. Check elapsed time on timer and adjust hour setting on timer (white ring setting) for next firing.

If temperature control pilot light goes off at end of firing time and cone is still standing, turn timer to “0” hours and turn temperature control up slightly. The reset timer and push in center to start. All pilot lights should be on.

EXPLANATION OF FEATURES:

1. **ELECTRONIC TEMPERATURE CONTROL:** Control will shut kiln off upon reaching selected temperature. Use large cone/temp chart for setting (outside °F scale). Chart is on page 15-4. Upon reaching temperature pilot light will go off and remain off.
2. **THERMOCOUPLE:** Heat sensing probe that sticks through the inside of the kiln. This needs to be replaced annually if the kiln is used at high temperatures. The kiln will not operate with a broken thermocouple. The thermocouple cap is to prevent the effects of thermocouple oxidation on finished ware (black specks which might drop from the tip of the thermocouple). Place this porcelain cap over the end of the heat sensing thermocouple. **DO NOT CEMENT INTO PLACE.** Using the porcelain cap lowers temperature at tip of thermocouple approximately one cone. On FE models, when using cap, set controller one cone lower.
3. **THUMBWHEEL:** Automatically increases power to the elements. With the firemate speed control set, the thumbwheel will automatically advance from “1” to “2” to “3”, etc. The thumbwheel works in conjunction with the speed control. The thumbwheel may also be used manually. Numbers 0, 1, 2 = low on 20%, off 80%; 4, 5, 6 = medium on 50%, off 50%; 9 & 10 = high on 100%.
4. **FIREMATE SPEED CONTROL:** This switch increases or decreases the rotation of the thumbwheel. For most firings, set on “NORMAL SPEED, A”. Selecting letters C, D, & E will increase the total firing time. Setting the knob on “STOP/MANUAL” will stop the thumbwheel from advancing.
5. **12 HOUR TIMER:** The timer provides two functions. It indicates the hours set and also the number of hours elapsed firing time. The outer white dial ring, when set, remains stationary. The inner black dial of this control has a dot which will advance up in hours through firing. To start the timer the center of the dial is pushed in. At the end of firing, after the electronic temperature control has shut off, the timer will continue to run and will automatically reset itself to the off position.

MANUAL FE OPERATION

Refer to manual FX operation page 7-5.