Cress Mfg. Company
4736 Convair Dr., Carson City NV 89706

Cress Kiln Element Replacement Instructions

Please note: Most Cress kilns have elements that are different from each other in the same kiln. Example: Top, upper middle, middle, lower middle, and bottom. Make sure you are replacing like for like and the voltage of the new elements is the same as the old ones. Elements are tagged at the factory with the model number, position, and voltage if other than n 240 V. If your new elements do not appear to be the same as the old elements (too long or short or a different gage, or thickness) please contact the factory before attempting replacement for advice or additional help. (702) 884-4397.

Element Replacement for all - B, EB, EF, FX, FTX, FE, and FTE models:

1. Please read all instructions before beginning:
2. **Unplug kiln from the outlet or disconnect the power to the kiln!**
3. Remove the sheet metal screws along the sides of the blue panel box.
4. Pull the panel box straight away from the kiln being careful not to damage the porcelain tube assembly if you have a Dawson Kiln Sitter.
5. Label all elements and element lead wires as to their position.
6. Unbolt connecting wires from old or damaged element(s).
7. Straighten unbolted element ends and cut close to porcelain insulator with a pair of wire cutters.
8. Remove porcelain insulator. On older models the porcelain insulator will be held in place on the chimney by a metal nut on the back side. Do not remove this type of insulator. Check to see that the insulator and nut are tight on the chimney. See Diagram.
9. Remove the old element pins at each corner of the brick with a pair of needle nose pliers, Check each brick for additional pins!
10. Gently lift out old element form the groove of the brick. On kilns used for porcelain temperatures the elements will be very brittle and may break. into small pieces when removed. Support the bottom edge of the brick with you hand to avoid damaging the firebrick. Remove all pieces of old element.
11 Install new element by bending the lead 90 degrees to the coiled section. Push one end of the element lead through the brick to the outside of the kiln. Feed the element into the groove so the bends in the element fit the corners of the brick. Not all elements are bent to the shape of the kiln.
Install this type of element by compressing slightly as you work around the kiln. If new element is a little short, remove a couple of feet of the element from the groove and stretch element a few more inches overall. Push the other element lead through to the outside of the kiln.
12. Install porcelain insulator over the element lead. Cut the element leads so they extend 1 1/2" from the porcelain insulator.
13. Form a loop on the element with a pair of needle nose pliers, Loop must be snug against the porcelain insulator.
14. Use your needle nose pliers or an old table knife to gently push the elements down in the groove of the brick.
15. Install new element pins (straight) with a pair of needle nose pliers. Pins are used to hold the element DOWN in the groove. (not against the wall) Pins should be angled down about 45 degrees and catch the element at the bottom edge of the loop. See diagram. Use only the pins supplied with the new elements. Do not use pins of any other material!. On sections that have damaged brick, use pins about 1" apart. Otherwise pins should only go in the corners. It is important that the pins do not touch each other.
16. Bolt element lead wires back on the new elements as the were originally.
17. Make sure connections are extremely tight and that the lead wires are facing up or down. See diagram.
18. Reposition and secure panel box to kiln with sheet metal screws.
19. Vacuum kiln to remove all small brick chips in element grooves.
20. Check adjustment of the kiln sitter if supplied on your kiln.
21. Test-fire kiln to cone 05 empty to allow the protective coating to form on the new elements.
22. Now that you have read all the instructions get your tools ready and start with number 2 above!