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CRESS SQUARE KILN ELEMENT REPLACEMENT INSTRUCTIONS

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 240 Volts. 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. (775) 884-4397.

INSTRUCTIONS FOR THE FOLLOWING MODELS: A15H, A22H, C14, C11H, C15, C17, C20H, C20L, C26H, C8H, C8L.

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 control box.
4. Pull the control 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. Pull the two element lead wires from the back of each switch. (Terminal H1 & H2)
7. Set the control box out of the way. Unbolt element lead wire from the end of the old element.
8. With a pair of wire cutters, cut the old element on the inside of the kiln where the element enters the firing chamber. See diagram
9. From the outside of the kiln, pull the element lead out of the kiln. You should have a piece of lead wire with some small insulators (fish back beads) still on the lead wire. Repeat this with all the elements you are changing.
10. Remove the element pins that hold the elements in the groove of the brick. Some older models can also have two twisted wires in the corners of the kiln. Completely remove the twisted wires with a pair of pliers. (Do not replace this part!). Gently remove the old element from the kiln.
11. Most elements have porcelain rods that run down the center of the element. We recommend replacing the rods.
12. With a pair of pliers, crimp closed the last coiled loop at one end of the element. Hook the element lead (has a loop at the end) to a strong nail or hook on the wall so you can stretch the element out straight. Count out the correct number of rods needed for the element. Pull element straight and begin inserting the rods. You may have to stretch the element further to accommodate all the rods. After installing the last rod, crimp the last coil to close so that the rods will not shoot out!
13. Cut the loop off the element lead. The easiest way to install the new element is to make a new hole from the outside of the kiln through the firebrick to the inside of the kiln. Do this with a piece of coat hanger or a small diameter metal rod. Push the coat hanger through the hole on the outside of the kiln and on through the firebrick to the inside. You will have to angle the coat hanger up or down so the new hole comes out in the correct groove of the firebrick. When you have the coat hanger is the correct place in the groove, touch the element lead to the tip of the coat hanger. Applying pressure tip to tip, push the element lead following the coat hanger through to the outside of the kiln.
14. Install element in the grooves of the firebrick and break the rods as you round the corners. Make sure the element fits tight and back in the corners of the kiln. When you reach the end of the element do the same as you did with the other end in paragraph 13 above
15. Grooves in the brick are of two types; Straight and dropped. Use “U” pins on the straight groove and straight pins on the drop groove. Install pins about every 6 inches being careful not to have any two pins touch each other.
16. Install the small insulators (fish-back) over the lead wires. Cut the element lead wire with a pair of wire cutter about 1 ½” from the large insulator on the outside of the kiln. Form a loop on the element lead with a pair of needle nose pliers. (Snug against the porcelain insulator)
17. Connect the wiring with the bolt, nut, and washers. Tighten securely. (The tighter the better!!).
18. Reposition the control box and secure with sheet metal screws.
19. Vacuum the kiln on the inside to remove any small brick chips. Check adjustment of the kiln sitter if supplied on your kiln. Test fire the kiln empty to cone 05 to allow a protective coating to form on the new elements. (Not necessary on the C15, C20L, C8L, or C14 using low fire chromel elements)
20. Now that you have read all the instructions, get your tools ready and start with number 2 above.