

# STEFFES CORPORATION

## HEATING ELEMENT REPLACEMENT PROCEDURE

### Models: 2102 – 2106

Heating Element(s) - various item numbers depending upon input and voltage

**THIS PROCEDURE MUST BE PERFORMED BY A QUALIFIED TECHNICIAN**

**NOTE:** *Steffes Corporation recommends that all four elements be replaced any time element failure has occurred.*

1. Disconnect power to all branch circuits of the heater.
2. Detach the painted front panel by removing the screws located on the bottom edge of the panel.
3. Remove the inner galvanized front panel by taking out the screws on the right side. Be careful not to damage the insulation on the inside of this panel.
4. Remove the bricks starting from the top and working down.

**NOTE:** *Do NOT remove the bottom row of bricks as this may cause damage to bottom micropore panel insulation.*

5. Hinge the right side panel open by a) removing the screw located above the grill slats on the lower right side of the heater; b) loosening the screw located at the top right corner of the electrical compartment; and c) pushing out on the right side panel. Refer to Figure 1.

6. Remove the wires from terminations of the elements. This is done by sliding the quick disconnects from the terminals on the front side of the elements and removing the screws from the terminations on the back side of the elements.

7. Remove elements by pulling them straight out and then forward through the brick storage cavity area.

8. Install the new elements starting from the bottom. To do so, insert the ends through the existing element openings in the right side of the brick cavity until both ends are completely showing in the electrical compartment. Be sure the elements are installed in the correct direction (screw terminal of the elements to the back of the heater).

9. Slide one piece of vinyl tubing over each of the front elements. Connect the element wiring harnesses to the ends of the new elements at both the front and back of the elements. Slide the vinyl tubing over the front connections.

10. Load the bricks into the storage cavity.

**NOTE:** *Bricks in rows 1 through 7 must be loaded with the grooved side up. Install the 8th (top) row of bricks with the grooved side facing down (Figure 2).*

11. Verify that the core charging thermocouple is wired correctly (Figure 3).

12. Install the galvanized front panel and energize the heater.

13. Initiate a charge (off-peak) mode. "C" should be displayed on the heater's control panel. Test each element for proper amperage and voltage readings.

14. Initiate a peak (on-peak) mode. "P" should be displayed on the heater's control panel. Test each element to ensure there is no amperage or voltage readings.

15. Close the right side panel and install the painted front panel.



### WARNING

**HAZARDOUS VOLTAGE:** Risk of electric shock, injury, or death. System may be connected to more than one branch circuit. Disconnect power to all circuits before servicing. Equipment must be installed and serviced by a qualified technician.

Figure 1

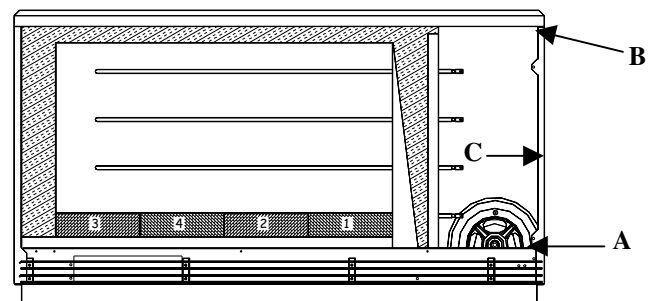
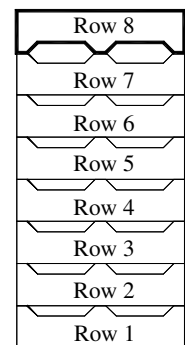


Figure 2



Side View

Figure 3

