## **OLD HEATING ELEMENT REMOVAL**

- **1. Unplug the cord** assembly from the receptacle.
- Remove the product container from the water vessel assembly.
- **3. Empty the water** from the water vessel assembly.
- 4. On older units, remove the four screws securing the water vessel assembly to the shroud top. On newer units turn the unit over and remove the three screws and lockwashers securing the water vessel assembly to the bottom of the shroud assembly.
- **5. Remove the strain relief** from the cord assembly entry into the shroud using either a Heyco tool or a pair of pliers.
- **6. Pull the thermostat knob** from the thermostat shaft.
- **7. Lift the water vessel up** and tilt it so the thermostat shaft clears the shroud.
- **8. Remove the wire nut** from the cord assembly wire (USA) or blue wire (EURO & AUST) and separate the white heating element wire from the cord assembly.
- **9. Disconnect the cord assembly** black wire (USA), or brown wire (EURO & AUST), and the thermal cutout at the thermal cutout. Set the shroud assembly aside.

NOTE: 230V SERIES prior to 99J refer to Wiring Diagram A. 230V SERIES 99J refer to Wiring Diagram B.

- 10. With the water vessel upside down, remove the screw connecting the other heating element wire (with terminal) to the thermostat.
- 11. If your unit has a bolted-on heating element, loosen the nuts on the heating element assembly until it can be slipped from the water vessel. If the heating element is is secured with bands, remove the two nuts securing the tabs of the heating element to the water vessel, and cut the bands of the heating element. Remove the heating element from the water vessel assembly.



SERVER

Replacement Heating Element Installation

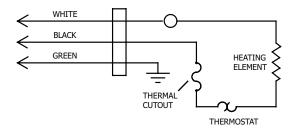


For Models FS-7, FS-7GW, FS-11, FS-11GW

# NEW HEATING ELEMENT INSTALLATION

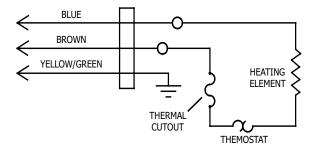
- **12. Position the thermostat bulb bracket** so the rear edge of the bracket is approximately 3/4" to 7/8" (Model FS-11 units) or 1/4" (Model FS-7 units) away from the thermostat box bracket on the left side of the thermostat box bracket. Refer to **Figure ONE.** Mark the location of the bulb bracket on the water vessel assembly.
- 13. Loosely install the new heating element on the water vessel assembly with the heating element gap between the thermostat box bracket and the location for the thermostat bulb bracket. The embossed (raised) area of the heating element must be to the left side of the gap when the thermostat is in front of you and the water vessel is upside down. Locate the heating element approxiately 11/16" below the bottom of the water vessel assembly.

#### WIRING DIAGRAM



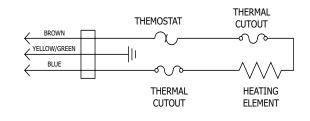
120V AC, 60Hz

### WIRING DIAGRAM A-SERIES PRIOR TO 99J



230V AC, 50Hz & 240V AC, 50HZ

### WIRING DIAGRAM B-SERIES 99J



230V AC, 50Hz & 240V AC, 50HZ

## NEW HEATING ELEMENT INSTALLATION (CONTINUED)

## PAGE TWO

- 14. Install the thermostat bulb bracket behind the heating element in the location established in step 12. Align the left side of the heating element gap with the edge of the thermostat bulb bracket on the water vessel. See Figure TWO. Tighten the screws to 15 inch pounds, secure the heating element to the water vessel.
- **15.** Carefully insert the thermostat bulb in the bulb bracket. Use large bends to avoid kinking of the thermostat bulb capillary tube when routing the thermostat bulb to the bracket. Carefully crimp the corners of the bulb bracket to secure the bulb.
- 16. Connect the heating element wire having the ring terminal to the thermostat using the screw removed in step 10. If a 230V element has two push-on terminals refer to Wiring Diagram B.
- **17. Attach the heating element wire** without terminal to the cord assembly white wire (USA) or blue wire (EURO & AUST) using the wire nut removed in step 8. Twist the wires together by hand before installing the wire nut.

- **18. Install the water vessel assembly in the shroud assembly,** tilting the water vessel assembly to allow the thermostat shaft to enter its opening. Turn the unit upside down.
- **19.** Secure the water vessel assembly at the top of the shroud assembly with four screws (older units) or with three screws in the bottom of the shroud assembly (newer units). Tighten the screws firmly.
- **20.** Carefully pull the cord assembly out to its original position. Install the strain relief bushing on the cord assembly in its original location. Use a Heyco tool or pliers to install the bushing in the shroud assembly.
- **21. Push the thermostat knob** onto the shaft.
- 22. Return the unit to service.

