## PCH023, PCH024 & PCH048 ELECTROGALVANIZED SHEET STEEL HEATER(S) INSTALLATION INSTRUCTIONS

- 1. Remove old heater and copper plate in normal fashion.
- 2. Inspect and clean outside of chamber.
- 3. Install new heater(s), omitting copper plate, making sure that contact between heater and chamber is evenly distributed.

#### **CAUTION**

To assure no burnouts due to hot spots, be certain that:

Chamber surface is dry and smooth.

Contact of heater to chamber is completely even and uniform.

- 4. Replace back up plate.
- 5. Sequentially tighten tie down bands. The same amount of torque should be applied to all three bands (40 in. lbs. maximum).
- 6. Perform final inspection. Verify that the curvature of the heater(s) matches the chamber and no gaps exist.

#### Note:

- A. Heating element contains a mica material with an adhesive that may cause a non-toxic smoke when initially energized. Heater installation should be performed in a well ventilated area. Also, allow 10 to 15 minutes "burn in" time before returning unit to customer. After "burn in" time, retighten the tie down bands. This will ensure better surface contact between heater and chamber.
- B. Excessive tightening of screws may cause heater to fail.
- C. We recommend that the overtemperature switch which mounts on flip up tab on heater be changed whenever the heaters are changed.

# Service Tips Do's and Don'ts of Heater Replacement

### RPI ELECTROGALVANIZED SHEET STEEL (ESS) HEATERS

- Determine the cause of the sterilizer heater element failure.
- After removing the heater element
  - **DO** inspect the chamber for distortions and holes in the surface. During inspection, look for: 1) high or low spots on the chamber surface which could cause hot spots to develop thus causing the element to prematurely fail; and, 2) holes which would allow water leaks. If any distortions or holes are found,
- it is recommended to replace the chamber.
- When installing the new heater element
  - **DON'T** forget to remove the copper plate if one exists. **DO** install the overtemp switch (RPI Part #PCT042) on the new RPI heater
  - element's flip out tab (<u>on the center heater only</u>) when replacing the original mica element.
  - **DO** make sure that the backup plate is not touching the electrical terminals on your new heater before tightening down bands.
  - **DO** make sure all wires are away from the heater and not pinched before tightening down bands.
  - **DO** make sure that contact between the heater and chamber is evenly distributed.
  - **DO** expect some "smoking" during the "burn-in" procedure after installing a new heater element.
  - **DO** tighten bands (about 40 lb in. maximum torque) when the machine is "cool" and then again after the first few cycles when the machine is "warm".
- Before leaving the site -
  - **DO** stress to the operator the importance of not letting the chamber run dry the operator must remember to turn the machine "off" after each use and especially at the end of the day. If the chamber runs dry, the surface could become warped and/or holes could develop on the surface.
  - **DO** stress to the operator the importance of using distilled water, not tap water.