

W-Series Water Baths and W-Series OEM Models Only

## SERVICE SCHEDULE

- A) Decontamination User Determined
- B) Calibration Check (Temperature) Every 4 months
- C) System Service (Factory Electrical and Repairs) Every 2 Years

### **BEFORE BEGINNING SERVICE**

Disconnect water bath from power source. Check for signs of damage including pulled cord or physical damage to enclosure. Check for puncture to bath tank or front interface membrane. If any signs of physical damage are found send back for factory service and replacement parts.

### DECONTAMINATION

From time to time algae and other microorganism will grow in the bath. Microorganisms appear as brown or green film or stains on bath tank that usually cover more area on the lower section of bath tank and taper as they reach the water line. Microorganism spread via items placed into the water bath and airborne spores that land and randomly take root.

To decontaminate the system:

- Fill the water bath with water and raise the Temperature to 80°C and hold for one hour. (A lid is required to prevent water from evaporating. If there is no lid available aluminum foil can be used as a cover.) Use a bristled brush to remove dead bacteria; scrub the bath and then discard bath water.
- 2) Killing bacteria spores heat treatment will kill only active microorganisms. To kill endospores used standard household bleach (with 5% sodium hypochlorite) diluted 1:10 in water. Clean with paper towel in bath for at least <u>5 minutes</u> to ensure destruction of spores. Rinse bath out afterwards
- 3) Cleaning the Keypad/Outer enclosure Use store bought rubbing alcohol to disinfect keypad and outer enclosure.

#### Calibration Check:

This document gives guidance on checking the system calibration and making adjustments in water bath. By applying the instructions laboratories can produce calibration results that can be configured to a local laboratory or to National Institute Standards and Technology (NIST) standard.

The approaches taken are not mandatory and are for the guidance of calibration. When analyzing the calibration of the system, it is important to identify a standard which you want to calibrate the system. Store bought "home use thermometers" or "infrared thermometers" are usually far less accurate than lab grade thermometers. It is best practice to use a NIST secondary standard or "lab grade" thermometer that has been calibrated to a NIST standard. However any standard can be used if the operator has a local standard they wish to use.

To check the calibration of the system:

- 1) Fill water bath and place thermometer into the bath. Cover the bath with foil to prevent external temperature fluctuation.
- 2) After temperature has reached desired point read the temperature on the water bath and thermometer. If temperature accuracy is within desired tolerance skip step 3&4.
- 3) Turn off water bath and turn back on while pressing "set" on the front panel of the water bath. Adjust calibration by increasing or decreasing the temperature calibration value to match the thermometer read.
- 4) Turn off the water bath to restart.

# System Service

Water bath systems will experience wear and tear over prolonged usage. Factory reconditioning service is recommended every 2 years.

System service includes:

- 1) Inspection of the bath tank and enclosure conditions.
- 2) Electrical system inspection.
- 3) Replace electrical part or recondition bath tank or enclosure if required.
- 4) Factory recalibration (Users may opt out of factory recalibration if they have the systems precalibrated)

If parts need to be replaced, the Service Technician will notify users of costs during the replacement procedure.