**Purpose:**

To describe the procedure for the operation and maintenance of the Thermo Scientific Modular Block Dri-Baths (commonly known as Heat Blocks).

**Safety Precautions:** There should be a minimum space allowance of 2 inches between the heat block unit and any walls for proper ventilation.

**Procedure:**

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| --- | --- | --- |
| **Step** | **Action** | **Related Documents** |
| **Procedure A: Daily QC** |  |
| **1** | * QC shall be recorded on each shift and temperature of LED readout and the thermometer in a saline tube in the heat block should be within + 1.0°C.
 | Bench Daily Reagent and Equipment QC Form |
| **2** | * Check that the volume of the saline tube is ½ an inch in height
 |  |
| **3** | * If the temperature does not match the actual block temperature within + 1.0°C, calibrate the readout by pressing and holding the UP and DOWN arrow keys together at the same time until the display begins to flash. Press the appropriate UP or DOWN key to adjust the displayed temperature to match the actual temperature. Document on Daily QC Form
 |  |
| **4** | * Calibration data is automatically entered and stored.
 |  |
| **5** | * Acceptable temperature range is 36-38C. If heat block is found outside of this range, all patient testing since most recent acceptable temperature documentation must be repeated.
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| **Procedure B: Calibration**  |  |
| **1** | * All thermometers are calibrated annually against the NIST traceable thermometer.
 | * Calibrating Thermometers Using NIST
* Thermometer Calibration Form
 |
| **1** | * If the temperature does not match the actual block temperature within + 1.0°C, calibrate the readout by pressing and holding the UP and DOWN arrow keys together at the same time until the display begins to flash. Press the appropriate UP or DOWN key to adjust the displayed temperature to match the actual temperature. Document on Daily QC form.
 |  |
| **2** | * Calibration data is automatically entered and stored.
 |  |
| **Step** | **Action** | **Related Documents** |
| **Procedure C: Operation** |  |
| **1** | * Turn on the heat block by pressing power switch ON. The heat block is ready to use when the LED temperature reading and the thermometer in a saline tube in the heat block agree within + 1.0°C.
 |  |
| **2** | * To check the setpoint of the LED display, press and release either the UP or DOWN arrow key once. The display will flash the existing set point temperature established.
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| **3** | * To change a temperature set point, press the appropriate UP or DOWN key to raise or lower the temperature to a desired value and release. When the displayed temperature stops flashing (showing the actual temperature) the new set point is established.
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| **4** | * Turn power OFF.
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| **Procedure D: Maintenance** |  |
| **1** | * Cleaning only needs to be done periodically or whenever heat block is visibly soiled:
* Turn power switch to OFF and unplug the unit. Allow unit to cool before removing the modular heat blocks from their wells.
* Wash modular heat block sections in warm to hot soapy water with a soft cloth. Holes can be cleaned using a test tube brush. Rinse and wipe dry.
* UNDER NO CIRCUMSTANCES SHOULD THE BASE SECTION (referred to as the cabinet) BE IMMERSED. Wipe the exterior and well with a wet cloth, taking care not to get water in the base.

Allow base to dry completely before reinstalling modular heat blocks and reconnecting power source. |  |

**References:**

Standards for Blood Banks and Transfusion Services, Current Edition, Bethesda, MD: American Association of Blood Banks.

Thermo Scientific Modular Block Dri-Bath Operator’s Instructions