**Purpose:**

This describes the steps for quality control and the schedule for preventive maintenance for the ARK Microwave Plasma Defroster.

**Procedure:**

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| **Quality Control and Maintenance** | |
| **Every Use** | * Check the “snap” action of the bag holder when placed onto arbor shaft. * If it fails to “snap”, check the plastic rectangular spring on the collar for cracks, splits, or breaks. Part must be replaced. * Check the copper contact spring for burns or arcing. Part must be replaced. * Failure to fully seat the bag holder will result in early shutdown. * Wipe up spillage immediately. * Check surface of the door and defroster front when the door is closed. Surface must always be clean. |
| **Daily:** | * Inspect and clean the Microwave Defroster. * Check that temperature probe moves easily and returns to the outward position. * Check Audible Alarm:   + Press the START button   + Red and Green LEDs will light   + Display will read “Station 1 Vacant/Station 2 Vacant”   + Open door to activate the audible alarm.   + Close door to stop the test. |
| **Weekly** | * Using a non-abrasive material, such as a cloth or sponge, and a mild disinfectant solution suitable for stainless steel, such as soap or TB Quat disinfectant: * Wash bag holder clamps. * Clean all air intakes: back, left hand side, under the side cover. * Clean microwave interior. * **Do NOT allow fluid to run around the temperature probe.** * **Do NOT us abrasive materials.** * Visually inspect door seals, hinge, and latch for damage. * Check the interlock operation:   + Display reads “Load Station Press Start”.   + Open Door, interior light comes on, display reads “Door Open”   + Close door, press START, display reads “Station 1 Vacant/Station 2 Vacant”. |

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| **Quality Control and Maintenance (continued)** | |
| **Monthly:** | * Inspect Arbors for Graphite build-up * Place paper towel under the arbor-spigot assembly. * Spray WD-40 for 2-3 seconds at the top of the arbor assembly. * Rotate the drive manually. * Repeat WD-40 spray. * A dark substance may be flushed out with the WD-40. This is normal. |
| **Calibration Check**  ***Monthly*** | * Microwave Defroster is self-calibrating. Instrument stops when first plasma reaches 20oC. * Manual calibrations checks will be performed **monthly**:   + Verify plasma temperature against a known temperature using Temp Check.   + Include all thawing stations available in operational microwave thawers   + Temperature should be 18 to 25oC. (Variance: -2oC/+5oC) |
| **Additional Maintenance** | * Scientific Instruments (SI) will perform:   + Inspection of bag holder springs for arcing/replacement   + Check fan intakes   + Perform microwave leakage test |

***Note: If any abnormal condition is noticed at any time, have the unit checked by a qualified service person.***

**References**

ARK Plasma Defroster Operating Manual and Educational Package

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