**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.