**Purpose:**

To assure that the TANGO is maintained properly according to the TANGO User Guide and manufacturer’s recommendations.

**Required Materials:**

* Tango Maintenance Form
* Lint free wipes
* DI Water
* Microcide SQ Solution
* Disinfectant

**Safety Precautions:**

Microcide SQ Solution

* Liquid is corrosive. Causes irreversible eye damage. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin or on clothing. Wear protective clothing and rubber gloves. Wear goggles, face shield or safety glasses. Wash hands thoroughly with soap and water after handling and before eating or drinking. Remove contaminated clothing and wash before use.
* Store in a cool dry place in tightly closed container. Always replace lid after use. Wash empty container thoroughly and dispose of in trash. Do not mix this product with other chemicals. Do not reuse container.

**Procedure:**

|  |  |  |
| --- | --- | --- |
| **Step** | **Action** | **Related Documents** |
| 1 | Obtain the Tango Maintenance form, record a check mark as each task is completed and enter initials in the last box. | TANGO Maintenance form |
| 2 | Bleach and empty waste | Tango Liquid Waste Disposal |
| 3 | From the Main Menu, select the ‘Maintenance’ button then select the ‘Remove Front Cover’ button and remove the front cover  |  |
| 4 | Clean the Optical Filter* Pull the carrier out of the TANGO. It is located on the right side of the instrument.
* Carefully clean the filter using a lint free wipe. Do not scratch the filter as this could adversely impact the interpretation of the reaction images.
* Insert the carrier back in to the TANGO with the grooves facing up, until it clicks into place.
 |  |
| **Step** | **Action** | **Related Documents** |
| 5 | Clean the pipettor wash stations* Clean the exterior of the wash stations with DI water.
* The interior of the wash stations are cleaned daily using the ‘Auto Rinsing’ function.
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| 6 | Clean washer manifold* Remove cover of the strip wash station
* Unscrew the 2 pins holding the washer manifold in
* Pull forward and up to remove the manifold
* Gently brush the washer “fingers” with a soft toothbrush, being careful to not scratch the black coating
* Reinstall the washer manifold and replace the strip wash station cover
* Replace front cover
 | Tango Removing the instrument covers |
| 7 | Prepare Microcide SQ Solution.* Fill an appropriate container or flask with 400mL of Microcide SQ Solution. (100mL Microcide + 300mL DI water).
 | Tango Preparing Decontamination Solution  |
| 8 | Perform Decontamination * Unscrew the tubing from the Wash Solution and System Liquid containers.
* Place the tubing in the container with the Microcide Solution.
* The ends of the tubing must be completely submerged in the Microcide SQ Solution.
* Access the Decontamination’ function by selecting the Maintenance button.
* Set parameters and run:
	+ Pipettor Cycles: 2
	+ Washer Cycles: 3
	+ Suspension Cycles: 1
* Once the rinse cycles are complete, let the Microcide SQ Solution sit in the instrument for 15 minutes.
 |  |
| 9 | During this time:* Remove the tubing from the Microcide Solution and rinse with DI water.
* Dry the tubing and place in container used in step 10
 |  |
| 10 | After the Microcide SQ Solution has sat in the TANGO lines for 15 minutes, fill an appropriate container with 2L of DI water.* Place the tubing from the System Liquid and Wash Solution containers in the DI water.
* Rinse the system by means of the ‘Decontamination’ function with the following parameters.
* Pipettor Cycles: 6
* Washer Cycles: 5
* Suspension Cycles: 3
* Once the rinse is completed, reconnect the tubing back to the System Liquid and Wash Solution containers.
* Remove the cover of the suspension cup and rinse thoroughly with DI water.
* Dry cover and replace
 |  |
| **Step** | **Action** | **Related Documents** |
| 11 | Clean and Decontaminate Containers*NOTE: These steps may be done, as time allows, during the 15 minutes the Microcide SQ Solution is sitting in the instrument.* |  |
| 12 | Decontaminate the System Liquid and Wash Solution containers.* Unscrew the cap from both.
* Empty the contents of each container.
* Divide the remaining Microcide SQ Solution equally between the two containers.
* Screw the cap back on each container and shake thoroughly.
* Empty each container, reserving the Microcide SQ for step 13, and rinse thoroughly with DI water.

Refill containers with appropriate liquid and replace caps. Ensure there are no bubbles in the containers prior to priming. |  |
| 13 | Decontaminate the Waste Container.* Disconnect sensor cable.
* Unscrew nozzle from the container and place it in container or on absorbent paper to collect the fluid from the waste line.
* Unscrew cap and empty container according to institutional regulations.
* Add Microcide SQ Solution reserved from step 12 to the container.
* Screw cap on the container and shake thoroughly.
* Allow the solution to stand in the container for 30 minutes.
* After 30 minutes, unscrew cap and empty Microcide SQ Solution from the Waste container.
* Replace nozzle and cap on the container.
* Connect Sensor Cable.
* Place Waste container back on shelf.
 |  |
| 14 | Perform system rinse to prime liquids into instrument:* Enter the following cycles by selecting the ‘Maintenance’ button, then the ‘Rinsing’ button. Select ‘Start’ to begin rinse
	+ Pipettor Cycles: 2
	+ Washer Cycles: 3
	+ Suspension Cycles: 1
 |  |
| 15 | Check Probes, Syringes and Tubing * Check tubing for bubbles. The tubing may be viewed through the acrylic glass window on the rear wall of the analyzer.
* Use a flashlight if necessary.
* Small bubbles are normally present in the tubing.
* Large bubbles that move through the tubing are indicative of an air leak in the system or an empty fluid container.
* Check syringes for leaks or bubbles as the piston moves up and down.
* Check for dripping or splattering from the probes.

If any of the above conditions exist, check fluid levels of the containers. If there is adequate fluid and the issue persists after priming, contact Technical Service. |  |
| 16 | Perform ABO/Rh and antibody screen QC after completion of weekly maintenance  | Tango ABO/Rh antibody screen QC |

**Referenced Documents:**

* Microcide Cleaning Concentrate Product Information Sheet
* TANGO User Guide, Version 3.3