**Purpose:**

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

**Required Materials:**

* + - * Tango Maintenance Form
* DI Water
* New Suspension Cup and Splash Bowl
* Disinfectant
* USB Storage Device
* Microcide

**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** |
| **Preparation** | | |
| 1 | Obtain the Tango Maintenance form, record a check mark as each task is completed and enter initials in the last box. | TANGO infinity: Maintenance form |
| 2 | Empty, clean and refill DI water squirt bottle.   * Label bottle with content, date prepared, expiration date, and tech ID |  |
| 3 | Perform monthly database backup | TANGO infinity: Monthly Database backup & accessing backup results |
| **Washer Manifold Maintenance and rack disinfection** | | |
| 1 | Turn off instrument and computer | TANGO infinity: Start Up, Pause, and Shut Down |
| **Step** | **Action** | **Related Documents** |
| **Washer Manifold Maintenance and rack disinfection (continued)** | | |
| 2 | Lift front cover | TANGO infinity: Opening and Closing the Instrument Cover |
| 3 | Move the SPOLV Pipettor up and over to a position above the sample station |  |
| 4 | Use both hands to firmly grip bracket behind the washer manifold   * Turn screws counterclockwise * Wipe the 16 needles with gauze or soft cloth soaked in DI water, taking care to not scratch off the Teflon coating. Ensure the backs and areas between needles are cleaned. * Line up pins with screw openings and re-screw in place |  |
| 5 | Disinfect Sample racks and reagent racks   * Clean racks by wiping with water or water-based detergent * Disinfect surfaces with bleach, Ethanol 70%, or an alcohol-based disinfectant |  |
| **Replace Suspension Cup and Splash Bowl** | |  |
| 1 | Remove the gray plastic cover above the suspension cup. |  |
| 2 | Remove the suspension cup by pulling straight up from the top. |  |
| 3 | Remove the splash bowl by pulling straight up from the top |  |
| 4 | Insert the new Splash Bowl. The draining nozzle must be inserted in the draining sink on the left side |  |
| 5 | Insert a new suspension cup from the top, ensuring that the new cup is completely seated on the hexagon motor axis. |  |
| 6 | Clean the gray plastic cover with DI water, dry completely and place it over the cup. |  |
| 7 | Close front cover |  |
| 8 | Power instrument on and then computer. | TANGO infinity: Start up, Pause, and Shut Down |
| **Disinfect the containers and liquid system** | | |
| 1 | Bleach and empty the liquid waste container | TANGO infinity: Liquid Waste Disposal |
| 2 | Empty the system liquid container and the washing solution container |  |
| 3 | Prepare approximately 2L of Microcide by mixing 500 mL of Microcide with 1500 mL DI water | TANGO infinity: Preparing Decontamination Solution |
| 4 | Split the Microcide solution between the system liquid container and the washing solution container |  |
| 5 | Screw the cap on each container and carefully rotate to coat all inner surfaces |  |
| 6 | Reconnect the Washing Solution Container and System Liquid Container |  |
| **Step** | **Action** | **Related Documents** |
| **Disinfect the containers and liquid system (continued)** | | |
| 7 | Raise the front of the System Liquid Container by placing a rack under the front edge |  |
| 8 | Touch the ‘Maintenance’ button to open the ‘Maintenance’ menu |  |
| 9 | Touch the ‘Rinsing’ button to open ‘Rinsing’ dialog and enter the following parameters:   * Pipettor Cycles: 1 * Washer Cycles: 2 * Suspension Cycles: 1   Touch ‘OK’ to start the process |  |
| 10 | Allow Microcide to remain in the instrument and containers for 15 minutes |  |
| 11 | Empty the Liquid Waste Container, this can be performed while the disinfecting solution remains in the instrument and containers | TANGO infinity: Liquid Waste Disposal |
| 12 | After the 15 minutes is completed, empty the Microcide solution from the Washing Solution Container and the System Liquid Container into the Liquid Waste Container and allow to remain in the container for 15 minutes |  |
| 13 | While the Microcide is sitting in the Liquid Waste Container, rinse the Washing Solution and System Liquid Containers   * Fill Washing Solution Container and the System Liquid Container with DI water * Screw cap on each and carefully rotate the container to dilute the disinfecting solution * Unscrew caps and empty down drain * Repeat rinse steps to remove any residual disinfecting solution * Leave DI water in each bottle for rinsing the internal Liquid System of the Infinity |  |
| 14 | Using DI water, rinse the probe for the Washing Solution Container and replace containers on the instrument. |  |
| 15 | After the Microcide solution has been in the Liquid Waste Container for 15 minutes, rinse the internal Liquid System of the Infinity with DI water using the following parameters:   * Pipettor Cycles: 2 * Washer Cycles: 4 * Suspension Cycles: 2 |  |
| 16 | Empty DI water from the Washing Solution Container and refill with buffered saline. Empty DI water from the System Liquid Container and refill with fresh DI water. | TANGO infinity: Liquid Container Management |
| 17 | Empty waste container | TANGO infinity: Liquid Waste Disposal |
| 18 | Prime Liquid System using the following parameters:   * Pipettor Cycles: 1 * Washer Cycles: 2 * Suspension Cycles: 1 |  |
| **Step** | **Action** | **Related Documents** |
| **Clear Strip Waste Level Sensor** | | |
| 1 | The TANGO infinity will count processed strips and indicate strip waste level. |  |
| 2 | When the Strip Waste Bin counter is full, the Strip Waste button at the bottom of the screen will flash red and the user will receive a warning message.   * Pull open the Strip Waste Drawer on the right side of the analyzer. * Close the strip waste drawer, ensure the waste bag is pulled through and aimed toward waste bin * Confirm the query ‘Has the Strip Waste Drawer been emptied’ by touching OK * This will reset the strip counter to 0 * The strip waste icon will turn from red to green   Note: Counter will need resetting even though the bin has been replaced by a large waste container under the analyzer. |  |
| 3 | Perform ABO/Rh and antibody screen QC after completion of monthly maintenance | TANGO infinity: ABO/Rh antibody screen QC |

**References**

TANGO Infinity User Manual, Version 1.7.1

Microcide Cleaning Concentrate Product Information Sheet