**Purpose:**

To assure that the liquid reagents use for testing on the TANGO are loaded properly, reagent shelf life is recorded and monitored in an appropriate and accurate manner, and that, when necessary, reagent information is correctly edited.

**Limitations:**

* Do not load reagents while loading plates or samples as only one loading window can be displayed at the same time.
* Insert new cell mixers in newly opened red cell reagents.
* Storage of liquid reagents is at 2-8 oC until reagent expiration or at the designated shelf life on the instrument.
* Do not use expired reagents or reagents that have exceeded their on board shelf life.
* Reagents having different ages (expiration date or time after opening) must not be combined and then used.
* Dispose of expired or damaged reagents in a designated biohazard waste container.
* If the Tango is turned off the liquid reagent information is deleted. Upon restarting, the liquid reagents must be removed from the analyzer and then reloaded.
* Samples and reagents derived from human or animal blood are potentially biohazardous and/or infectious. Use appropriate PPE when handling such materials.

**Procedure:**

**Loading Liquid Reagents**

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| **Step** | **Action** | **Related Documents** |
| 1 | Upon opening a new TANGO reagent bottle:   * Record **OPENED** date, time, and tech ID on the reagent box, bottle, and log (if applicable)   Shelf life of reagent is set at 168 hrs (7 days) onboard or until labeled expiration, whichever date is shorter.   * The 168 hr clock stops when reagents are removed from the Tango and placed in the refrigerator. * The 20 digit barcodes automatically keep track of expiration time and cannot be edited onboard   NOTE: Working Bromelin solution has a 24 hr shelf life which cannot be extended | TANGO User Manual  Reagent Receipt Form  Tango Daily QC Reagent Dating Form |
| 2 | Remove the caps/droppers from the vials. |  |
| **Step** | **Action** | **Related Documents** |
| **Loading Reagents (continued)** | | |
| 3 | **Prepare Reagent Red Cells**   * Mix cells to re-suspend. This may be done by inversion prior to opening the vial or by using a clean pipette to mix the contents. * Insert a plastic cell mixer into each vial of cells. Press down firmly to ensure that the cell mixer is seated in the vial. * After re-suspension and insertion of the cell mixer, place the vials into racks for the cooled reagent area. Ensure the barcode on the vial is visible through the opening in the side of the rack. * If the vials sit prior to being placed on the TANGO, they must be re-suspended again with a clean pipette. * The cells can be stored on the TANGO for seven (7) days or 168 hours |  |
| 4 | **Prepare MLB2, Anti-Human Globulin and Working Bromelin Solution**   * No special preparation is required for MLB2 and Anti-IgG. * Remove any foam or bubbles and place in the racks so that the barcode on the vial is visible through the opening in the side of the rack. * Place the MLB2 and Anti-human Globulin in one rack and the working Bromelin solution in another.   + Using one rack for these two reagents will allow tracking of on-board shelf life.   + The working Bromelin solution must be replaced every 24 hours. | Tango Bromelin Preparation |
| 5 | **Load Reagents**   * Open the reagent loading station door. This opens the ‘Reagent Loading’ window.   + Briefly open the reagent station door when loading cooled reagents to control the temperature in the cooled section. * The 5 tracks of the reagent station are depicted on the screen in the ‘Reagent Loading’ window. * The system indicates the position for the next rack to be inserted by a flashing red LED light. This position will always be the first empty position from the left. * Hold the rack by the handle and place it on the track indicated by the flashing LED. * Push the rack all the way in to the instrument until the tappet is seated in the back of the reagent area. * Touch the ‘Volume Check’ button to perform a volume check once all reagents have been loaded. |  |
| 6 | The rack will be displayed on the screen and the information on the barcode is read and displayed in the text boxes.   * Lot No. – 9 digit reagent lot number * Expiry date – expiration date * Volume in % - Shows the volume in %. This will automatically be 100% unless volume check is selected. After volume check is completed, this field will be updated. |  |
| **Step** | **Action** | **Related Documents** |
| **Loading Reagents (continued)** | | |
| 7 | If the barcode cannot be read properly or there is no barcode, the information can be manually entered or a hand held scanner can be used.   * Touch the ‘Manual Input’ button. * Enter the information manually or use a hand held scanner. * If the rack was removed to enter information, re-insert the rack. * If the rack was not removed, touch the ‘Accept Input’ button to save the information. |  |
| 8 | Once all reagents are loaded, close the reagent loading door. |  |
| 9 | Observe and confirm the volume check on all reagents which have not previously had a volume check. |  |
| 10 | The Tango will count down the shelf life of the reagents from the time they are loaded onto the instrument in one hour increments. |  |

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| **Edit On-board Shelf Life for non 20 digit barcodes** | | |
| 1 | Upon reloading an opened liquid reagent onto the instrument,   * Note the hours remaining based on the opened/expired times on reagent box: * Shelf life of liquid reagent equals 168 hrs onboard or until labeled expiration, whichever date is shorter. * Working Bromelin solution has a 24 hr shelf life |  |
| 2 | Open the reagent loading door to open the ‘Reagent Loading’ window or touch the reagent chamber icon from the Main Menu.  Note: Before editing the time, the reagent must be removed and placed back on the analyzer |  |
| 3 | Touch the reagent rack that corresponds to the reagent requiring editing.   * The reagent test boxes will be displayed * To edit the shelf life of the reagent, touch the ‘Shelf Life’ button. * The shelf life will be displayed in hours. The TANGO will count down in one (1) hour increments. * A text box will open allowing the edit of the shelf life. Enter the appropriate time remaining.   ***NOTE:*** *The shelf life that is entered must be a number less than what is currently displayed.* |  |
| 4 | Close the ‘Reagent Loading’ window by closing the reagent door or touching ‘OK’. |  |

**Referenced Documents:**

TANGO User Guide, Version 3.3