

# MiSeq FGx Maintenance Guidance

## Resuming Instrument Operation after Idle Time

When the MiSeq FGx Instrument is idle for more than 2 weeks, follow these recommendations before setting up a sequencing run:

- Power Cycle the Instrument
  - If the instrument was not shut down, power cycle the instrument by going to the start menu in the bottom left corner of the screen and selecting shut down. Once the instrument has shut down, flip the switch on the back of the instrument to the off position. Pause for about 1 minute and then flip the switch to the on position to restart the instrument.
  - If the instrument was shut down, flip the switch on the back of the instrument to the on position to start the instrument.
- Inspect the Instrument
  - Inspect the instrument sippers, PR2 bottle, flow cell compartment, and wash tray for visible residue. If any residue is present on the external sippers, PR2 bottle, or flow cell compartment, then carefully wipe these components with nuclease-free water. If there is any residue present in the wash tray, then use a test tube brush to scrub the inside of the wash tray with nuclease-free water. Rinse thoroughly.
  - Open the chiller and remove the wash tray. Wipe up any water on the bottom of the chiller components with a paper towel.
- Wash the Instrument
  - Prepare fresh 10% and 0.5% Tween 20 in Nuclease-free water. Reference page 57 in the [MiSeq FGx Instrument Reference Guide](#) for instructions on how to make dilutions.
  - Perform a Maintenance Wash as follows:
    - Use 0.5% Tween 20 for the first and second wash
    - Use Nuclease-free water for the third wash
  - If there still appears to be residue after the maintenance wash, then perform a super wash which consists of:
    - 3 x Post Run Washes with fresh 0.5% Tween in all positions and 0.01% bleach only in position 17
    - 1 x Post Run Wash with 0.5% Tween (no bleach) in all positions
    - 1 x Maintenance Wash with 0.5% Tween 20 for the first and second wash, and nuclease-free water for the third wash
    - 1 x Post Run Wash with nuclease-free water only (no tween/no bleach)
- Run a Systems Check
  - Run a Full Systems Check (except for Tip/Tilt Test and Full Optics Test) by following [This Video](#) or the instructions starting on page 23 in the [MiSeq FGx Instrument Reference Guide](#). If it passes, proceed with your run. If any test fails, please send the results, serial #, and any additional important details about the problem (e.g. note which wash protocols were followed prior to running the systems check) to [techsupport@verogen.com](mailto:techsupport@verogen.com).