**BARNSTEAD E-PURE USE & MAINTENANCE (rev. March 2019)**

**Model D4641**

**Every Day:**

* Make sure unit is plugged into the programmable timer. Power switch on the unit should always be in the “on” position, except when performing maintenance.
* Make sure that the water supply is connected and on.
* Check canisters, valves, and connections for leaks.
* Check to make sure that timer is starting the unit at the scheduled times (posted on wall next to unit; every 4 hours for 20 minutes each cycle).

**Before Use:**

* On the programmable timer at the outlet, press the “ON/OFF” button to start up the unit and observe resistivity reading (should rise to 18.2 meg. Ω-cm, no lower than 10.0). If the unit is automatically cycled ON, wait for cycle to end and then proceed immediately without the 20 minutes warmup.
* Allow to run for 20 minutes.
* Make sure hands, equipment, and area are clean.
* If resistivity is acceptable, remove cover from bell on auxiliary dispenser (if filling bottles for blanks) or the remote dispenser (if filling carboys) and run 500 ml into a grad cylinder. Discard this water.
* Fill bottles taking care to avoid contamination of either the water in the container or the dispenser and bell.
* When finished, tap the bell to remove last drop and replace the cover on the bell. If additional fills are anticipated within a short period of time it’s ok to leave the unit running; otherwise, shut off at the programmable timer by pressing the “ON/OFF” button.
* Be sure to wipe up any spills.

**Once a Week (Or when refilling calibration water carboy—this is usually often enough):**

* Press “ON/OFF” button on programmable timer, observe resistivity reading on unit and record stabilized reading in logbook.
* Check and record amount of time required to draw 1 liter from both the auxiliary and remote dispensers.
* Cap dispenser bells, shut off, and clean up area.

**As Needed:**

* Change the 0.2 µm final filter when flow rate drops below approximately 1 liter/minute. [The operating manual recommends changing the 0.2 µm final filter monthly or if there is bacterial breakthrough. We have used so little water in the past that we have seldom needed to change the filters more than once or twice per year.]
* When the resistivity starts dropping below 18.0 consider changing the cartridges **soon**, following the procedures given in the manual.
* Keep other notes and records, as needed, in the logbook.

**Manual:** [**W:\DWM\SOP\Manuals & Training\LAB\barnstead2015\E-Pure.pdf**](file:///W:\DWM\SOP\Manuals%20&%20Training\LAB\barnstead2015\E-Pure.pdf)

**Reorder Parts**

* Sanitization cartridge, cat. #D50223
* 4-module organic free set cat. #D5023
  1. D0836
  2. D0803
  3. D5027
  4. D5021
* Final filter, cat. #D3750 (for auxiliary dispenser)
* Final filter, cat. #FL703X2 (for remote dispenser)