

Appendix 13: *i-STAT System – Ceramic Conditioning Cartridge*

Using the i-STAT Ceramic Conditioning Cartridge (CCC)

Error codes can sometimes be corrected by conditioning the pins in the analyzer using the CCC as follows:

1. Run an external e-simulator
 - a. The analyzer should not be configured with the internal electronic simulator enabled, however best practice is to run an external electronic simulator prior to running the CCC. Running the external e-simulator ensures the internal e-simulator cycle will not execute during the pin conditioning process, which could lead to the premature termination of the process.
2. Run the CCC two (2) times
 1. Initiate the CCC cycle as you would initiate an external e-simulator cycle. The instrument will identify the CCC as an external e-simulator and display a Simulator Failure Code (i.e. rRGL) when the cycle is complete. Disregard the code, as this is expected behavior.
3. Update the CCC Usage Log
 1. See Appendix 14 Ceramic Conditioning Usage Log. Updating the log allows the user to keep track of the number of pin conditioning cycles performed with the current ceramic strip in the CCC. If necessary, replace or rotate the ceramic strip so the CCC is ready for future use. Refer to section below for the CCC maintenance instructions
4. Return the analyzer to service.

Maintaining the Ceramic Conditioning Cartridge:

Rotating the strip:

1. Using a small Phillips head screwdriver, loosen and remove the screw and retainer
2. While wearing gloves, remove the ceramic strip. The ceramic strip is brittle and should be handled with care to avoid damaging or contaminating it.
3. Inspect the ceramic strip for damage. Replace if cracked or chipped. **Cracked strips must be replaced before using the ceramic cartridge in an analyzer.**
4. Inspect the aluminum base. Clean if necessary with isopropyl alcohol and a soft, lint-free cloth. Avoid using paper that might leave fibers on the ceramic cartridge which might be carried into the analyzer.
5. Rotate the ceramic strip to the next orientation (either spin around or flip over). The ceramic cartridge may be used to perform 25 repairs (2 runs per repair) before rotating or replacing the strip. The strip may be rotated 3 times before replacing it (i.e. the strip has a total of 4 positions; original position of the strip plus 3 rotations). The 4 orientations are:
 - a. Initial position
 - b. The strip rotated by “spinning it” 180 degrees, same side up
 - c. The strip rotated by turning it over, now back side up
 - d. The strip rotated by “spinning it” again 180 degree, back side still up