



i-STAT 1 SYSTEM TECHNICAL BULLETIN

Instructions For Restoring Analyzers That Produce *** For Hematocrit and Quality Check Code 23

Hematocrit star-out (***) results and Quality Check Code 23 may be reduced by restoring an analyzer with the reusable i-STAT Ceramic Conditioning Cartridge. This technical bulletin contains instructions for this restoration process.

QUICK REFERENCE

Using an i-STAT Ceramic Conditioning Cartridge (CCC)

Step	Action
1	Run an external Electronic Simulator
2	Run the CCC two times
3	Update the CCC Usage Log
4	Return the analyzer to service

DETAILED INSTRUCTIONS

Using an i-STAT Ceramic Conditioning Cartridge (CCC)

1. *Run an external Electronic Simulator*

If the analyzer is configured with the Internal Electronic Simulator enabled, run an external Electronic Simulator. Running the external Electronic Simulator ensures the Internal Simulator cycle will not execute during the restoration cycle, which could lead to the premature termination of restoration cycle.

2. *Run the CCC two times*

Initiate the CCC cycle as you would initiate an external Electronic Simulator cycle. The instrument will identify the CCC as an external Electronic 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*

Update the CCC Usage Log to keep track of the number of restoration 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 sections below for the CCC Usage Log and maintenance instructions.

4. *Return the analyzer to service*

MAINTAINING THE CERAMIC CONDITIONING CARTRIDGE

The Ceramic Conditioning Cartridge consists of an aluminum base that supports a ceramic “strip.” The strip is a white strip of Alumina that is held down by a brass retainer and retainer screw. The ceramic cartridge may be used up to 50 times before the strip is worn and needs to be rotated or up to 200 times before the strip must be replaced as described below.

PROCEDURE FOR ROTATING THE STRIP

Note: Rubber gloves should be worn to perform the following procedure.

1. Using a small Phillips head screwdriver, loosen and remove the screw and retainer.
2. Remove the ceramic strip.
Note: 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 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).
Note: The ceramic cartridge may be used to perform 25 repairs 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). In other words, a single strip may be used to repair 100 analyzers – 25 analyzers per orientation of the strip. The 4 orientations are:
 1. Initial position
 2. The strip rotated by “spinning it” 180 degrees, same side up.
 3. The strip rotated by turning it over, now back-side up.
 4. The strip rotated by “spinning it” again 180 degrees, back-side still up.
6. Place the ceramic strip in the base, making sure it sits flat in the recess and does not overhang either edge (i.e., the inner edges adjacent to the strip, not the wider edges back on the body of the cartridge).
7. Replace the retainer plate and retainer screw.
Note: Over-tightening the screw may damage the threads in the base or crack the ceramic strip.
8. Record the strip rotation in the Use Log.

PROCEDURE FOR REPLACING THE STRIP

Follow the same procedure as rotating the strip, except discard the old strip and insert a new strip in its place.

Request replacement parts by contacting your i-STAT support provider and refer to the following i-STAT list numbers:

Description	List Number
Ceramic Cartridge, Packaged (with box, spare strips, etc.)	04J51-01
Ceramic Cartridge Strips, Replacement	06F21-39

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