ISED ROUTINE MAINTENANCE

Analyzer Alarms, Errors and Routine Maintenance

ALCOR SCIENTIFIC

INTRODUCTION

Proper maintenance of the instrument is required to ensure it operates at optimal performance.

No additional routine maintenance is required other than what is described here.

REPLACING THE PRINTER PAPER

A green LED light on the printer will flash to indicate that the instrument is out of paper.

To replace the printer paper:

1. Pull the lever until the lid is released from the locked position

2. Open the paper cup lid and remove the remaining paper

3. Insert the thermal paper roll into the printer with the paper unwinding from the bottom of the roll

4. Reel off a few inches from a new roll of paper. Hold approximately two (2) inches of paper out of the printer as you place the new roll into the reservoir

5. Close the lid by applying equal amounts of pressure on each side ensuring that the lid is in the locked position
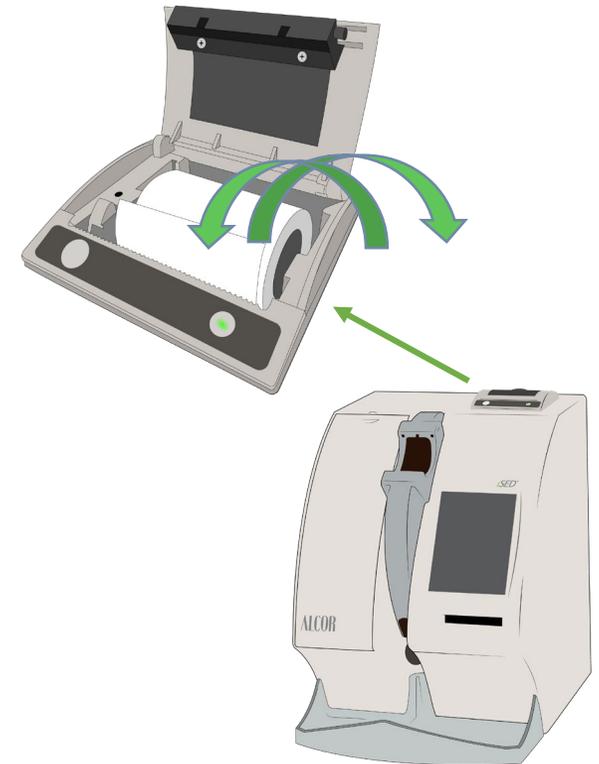
LOW/NO CREDIT ALARMS

The analyzer is designed to alert the user when test credits are below 200 tests and when tests are depleted.

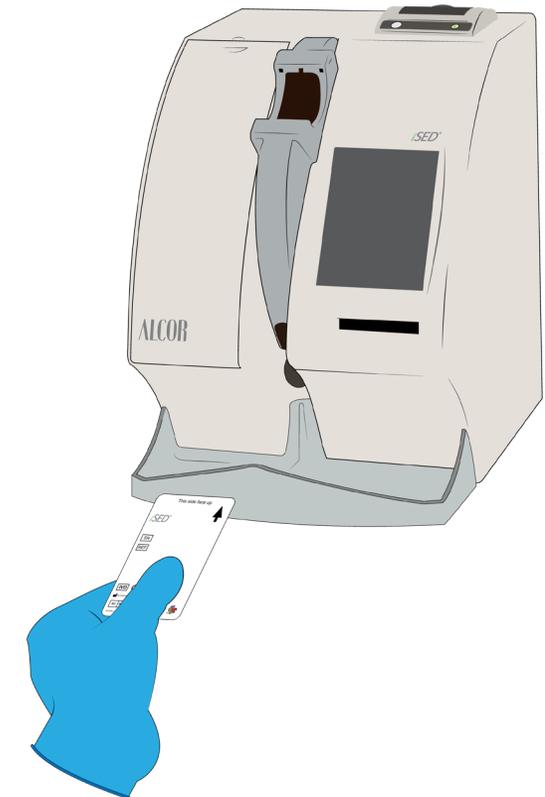In those instances, there will be an audible alarm and visual alert displayed on the touch screen.

ADDING TEST CREDITS

Test credits are required to operate the analyzer. Test credits are downloaded to the analyzer via a pre-loaded test card.

To download test credits:

1. Insert your test card into the test card reader with the arrow facing forward and the chip facing up

2. Test credits will automatically be added to the analyzer, and the new total of available tests will display

3. Remove the empty test card and discard; **the test card cannot be reused**
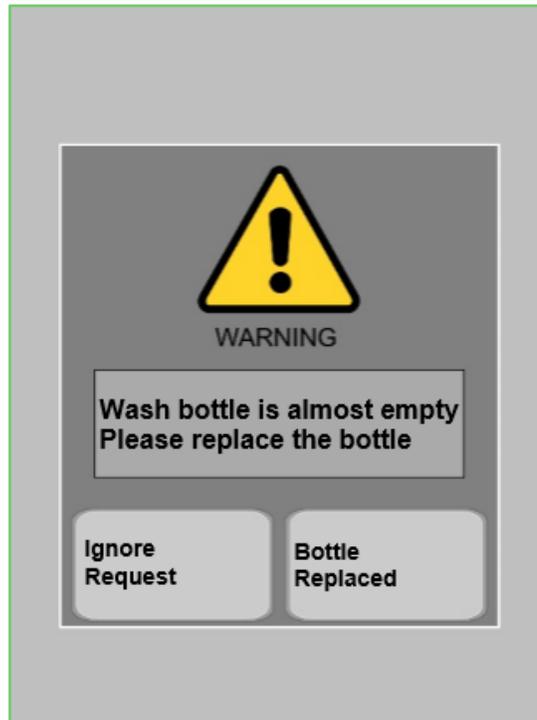
Once downloaded the total available test credits will be displayed on the screen.

WASH BOTTLE ALARMS

The analyzer is designed to alert the user when the wash bottle is nearly empty and when the bottle is depleted. In those instances, there will be an audible alarm and visual alert displayed on the touch screen.

WARNING

Wash bottle is almost empty
Please replace the bottle

Ignore Request | Bottle Replaced

STOP

ERROR

Wash bottle is empty
Please replace the bottle

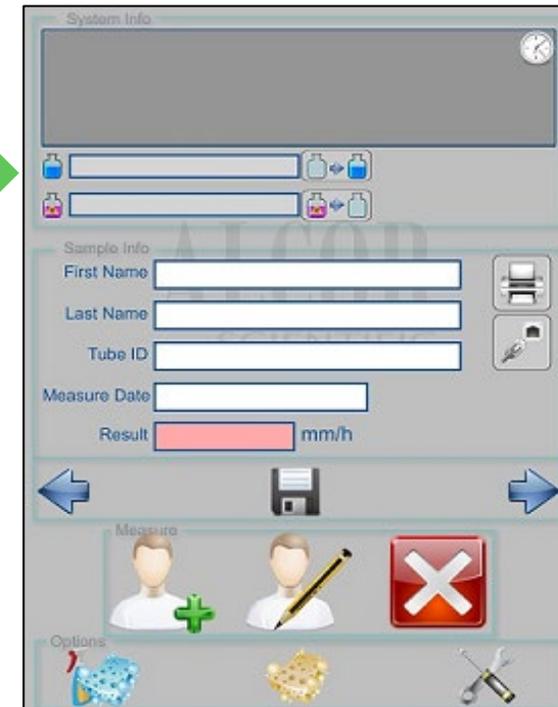Abort Request | Bottle Replaced

REPLACING THE WASH BOTTLE

WARNING: Universal precautions should be followed. Always wear gloves to prevent exposure to pathogens. Dispose of bio-hazardous waste properly.

To replace the wash bottle:

- Open the reagent compartment and disconnect the tubing connections from the bottle cap

- Remove the bottle from the compartment and replace with a new bottle. **Do not discard the special waste and wash bottle caps!**

- Recap, replace and reconnect the bottle that you have replaced

- Select the icon to reset the wash counter

It is recommended to visually check the wash bottle often.

Home Screen

WASTE BOTTLE ALARMS

The analyzer is designed to alert the user when the waste bottle is nearly full and when the bottle is full. In those instances, there will be an audible alarm and visual alert displayed on the touch screen.

REPLACING THE WASTE BOTTLE

⚠️ WARNING: Universal precautions should be followed. Always wear gloves to prevent exposure to pathogens. Dispose of bio-hazardous waste properly.

To replace the waste bottle:

- Open the reagent compartment and disconnect the tubing connections from the bottle cap

- Remove the bottle from the compartment and replace with a ne~~w~~ bottle. **Do not discard the special waste and wash bottle caps!**

- Recap, replace and reconnect the bottle that you have replace~~d~~

- Select the 🧪🧪 icon to reset the waste counter

It is recommended to visually check the waste bottle often.

Home Screen

DEEP WASH MESSAGE

The recommended frequency for deep washing is monthly or every 1,000 samples, whichever occurs first.

This action will clean the aspiration pathway from the needle to the reading cell.
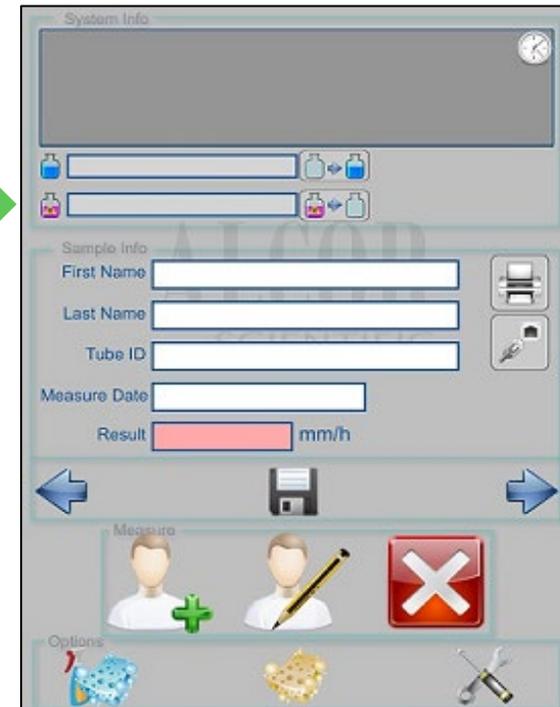
PERFORMING A DEEP WASH CYCLE

☣ WARNING: Universal precautions should be followed. Always wear gloves to prevent exposure to pathogens. Dispose of bio-hazardous waste properly.

Materials needed:

- Empty and unused 13x75mm EDTA tubes with pierceable caps

- 6-7% hypochlorite (bleach)

- iWASH

To fill bleach tubes:

- Remove cap from empty tube

- Fill the tube with bleach

- Recap the tube
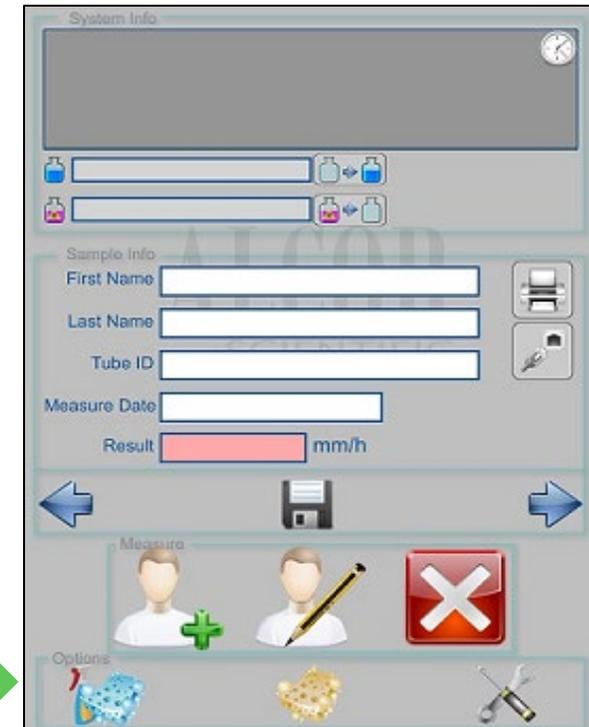
To run a deep wash cycle:

- Select the [icon] icon to activate a deep wash

- A prompt to insert the bleach tube will be displayed on the touchscreen

- Insert the bleach tube

- The analyzer will automatically perform two (2) wash cycles, one (1) deep wash cycle and two (2) wash cycles in that order

SYSTEM STATUS MESSAGES

Each of the following messages display on the touch screen as the system is processing specimens.

LINES 1 & 2	STATUS
"Available Credit"	'Quantity' Tests Available Low – Purchase More Tests (Alarm) 0 – No Tests Available
LINES 3 & 4	**STATUS**
"iSED is"	
Positioning Sampler	Sample wheel being positioned for loading a new tube, aspiration or tube extraction
Waiting Cuvette	Waiting for sample (repeating beeps)
Memo Sample	Sample barcode successfully read, or barcode acquisition time window elapsed
Mixing	Sample wheel rotating to mix all samples
Withdrawing	Sample wheel positioned and probe is withdrawing the sample
Measuring	Sample is positioned in read cell and analysis is underway
Extracting	Testing is complete and tube is being extracted from analyzer
Idle	All scheduled testing complete

SYSTEM WARNING MESSAGES

This table shows examples of the warning messages you may see displayed on the touch screen, while operating the analyzer, and some possible solutions. Should you experience other warning messages, refer to the Troubleshooting Chart.

"iSED is in Warning"	Solution
Available Positions = 0	Please wait for next available slot
'Unavailable credit Please Add credits'	Download more credits to continue
'iSED Credits are low Please add credits'	Download more credits or skip to continue
'Waste Bottle Full' (message displayed and alarm)	Remove and replace waste bottle
'Wash Bottle Empty' (message displayed and alarm)	Replace iWASH bottle
Ejection Out	Check for blocked ejection port
Paper Error/Out (Flashing green light)	Replace paper
Rotor Finger	Remove any foreign object from area around sample entry port
Wash not Ok 'Wash Nok displayed'	Check to see that iWASH bottle line is connected and there no kinks in the line. Run wash cycle again.

SYSTEM ERROR MESSAGES

The table below shows examples of the error messages you may see displayed on the touch screen while operating the analyzer and some possible solutions. Contact Technical Support if the error cannot be resolved by any solution provided.

"iSED in Error"	Solution
Rotor Home	Restart the unit, eject the sample and re-enter the sample.
Syringe Home	Restart the unit, eject the sample and re-enter the sample.
Syringe Up	Restart the unit, eject the sample and re-enter the sample.
Syringe Probe	Restart the unit, eject the sample and re-enter the sample.
Syringe Not Tube	Restart the unit, eject the sample and re-enter the sample.
Ejection home	Restart the unit, eject the sample and re-enter the sample.
Ejection lock	Restart the unit, eject the sample and re-enter the sample.
Ejection Out	Restart the unit, eject the sample and re-enter the sample.
Ejection Tubes Jam	Remove source of jam. Sensor will reset once tube is removed.
Tail sensor	Restart the unit, eject the sample and re-enter the sample.
Unable to withdraw	Check sample volume and perform wash cycle.

SAMPLING ERROR MESSAGES

In the event of a sampling error, the instrument will try to resolve it automatically up to a maximum of three (3) attempts. If after the third attempt, the instrument is unable to resolve the sampling error, an error message will be printed.

Error Message (printed)	Explanation/Solution
"No Flow Detected"	This error appears when the system is able to withdraw the correct volume from the sample tube but is not able to detect the sample moving in the reading position. Contact Technical Support
"Abnormal Sample"	Human blood, when stopped into the reading cell, must present a drop in light transmission. This error indicates the detection of an anomalous sample. New specimen should be drawn.
"Abnormal Reaction"	Usually a hematological sample, after being positioned into the reading cell, starts to form rouleaux (aggregates) with the increase of the detected signal. If the signal detected decreases instead, the error code is provided, indicating a non-standard condition.
"Insufficient Data Points"	This error appears when the reaction takes too much time to develop, or when the drop of the signal of error 3 takes too much time to end. This is an indication of hyper-viscosity of the sample, or hydraulic malfunctioning. New specimen should be drawn.
"Sample Too Dark"	Indicates a very high HCT of the sample, with a consequential unreliable result. Instead of providing an inaccurate result, the system provides the error message. New specimen should be drawn.
"No HCT Detected"	Indicates a very low HCT of the sample, with a consequential unreliable result. Instead of providing an inaccurate result, the system provides the error message. New specimen should be drawn.
"Sample Too Clear"	Indicates a very low HCT of the sample, with a consequential unreliable result. Instead of providing an inaccurate result, the system provides the error message. New specimen should be drawn.
"Unable to Withdraw"	This error appears when the system is not able to aspirate the correct volume from the sample tube. Contact Technical Support

EXAMPLE PRINTOUT OF ERROR MESSAGE

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Date: 03/25/2013                    Date of analysis
Time: 13:36:24                      Time result printed
iSED Sn. 00001                      Instrument serial number
ID: 812409                          Barcoded sample identification
Error: Abnormal Reaction
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TROUBLESHOOTING CHART

This troubleshooting chart will help diagnose some simple problems and offer a solution.

Situation	Possible Cause(s)	Solution(s)
Instrument will not power ON	Loose power connections or bad fuse	Check all power connections at the rear of instrument, power supply and wall outlet. Reconnect power cord at all locations. Wait 30 seconds. Plug back in. Remove fuse cap immediately above power connection on rear of instrument. Check fuse and replace if necessary.
Sample tube stuck in the wheel	Tube dropped during sample entry	Power OFF the instrument and manually remove the tube(s) from the wheel.
Touch screen not responding	Touch screen is out of calibration	Contact Technical Support for calibration instruction.
Results are running low/high	Lipemic, hemolyzed or clotted specimen Pre-analytical sample handling change or system error	Verify condition of specimen. Run controls. Once complete if results are within range, resume normal operation; if out of range, discontinue testing and contact Technical Support.
Instrument is not scanning patient barcode	Damaged, incompatible or no barcode label Barcode reader misaligned	Validate barcode label Contact Technical Support for instruction.

THANK YOU!

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