Service Action Instruction

Title			
ISCUS*flex* Instruction: Service Action #67 (updated)			
Part Number: 8060067	Service Action No: 67		
Approved: Date/Sign			
Service	Development	Production	Marketing

1. How to update the ISCUS*flex* software to rev L ver. 2.1.0.494

1.1.1. Summary

Due to reagent batch dependencies and a following slightly more noisy measurement a more forgiving approach was decided, especially for low concentration analyses. The forgiving approach approves more calibration blanks and low concentration samples but if outside previous approval level with a notice in the service log.

A change in Lactate calibration approval was introduced to cope with a larger Lactate sample volume (0.4 µL).

1.1.2. *Introduction*

To handle the ISCUS*flex* analyzer software update, configuration and maintenance has to be made. In order to achieve that, proper tools has to be available.

With the release of the ISCUS*flex* software Rev L (version 2.0.0.339) it became possible to manage this using a single USB key.

One condition that has to be met is that the so called boot up application is of version 2.0. All ISCUS*flex* with software prior to version 2.0.0.339 have the version 1.1 of the boot up application and need to be updated first.

1.1.3. Before you start

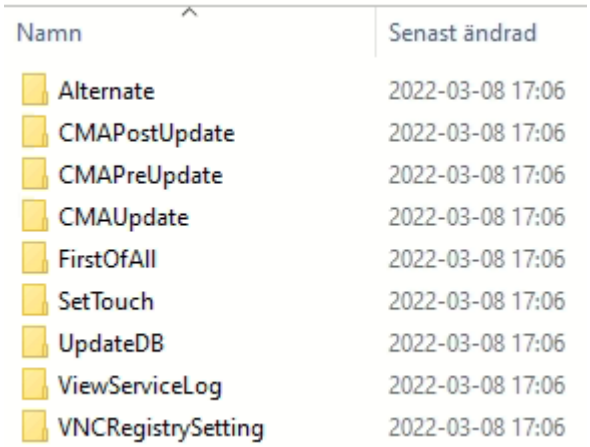
Use only SD cards supplied by M Dialysis AB (max 2GB and mounting fast in an ISCUS*flex*).

Most USB sticks work fine in ISCUS*flex*, but test it in an ISCUS*flex* before using it as a Service Tool.

1.1.4. Create an ISCUS*flex Service Tool*

- Unzip the (ISCUS Tools and L .494, 8050022Q.zip) files to an empty USB memory (or SD card).

A quick look on the USB stick (or SD card) should reveal the following folders:



1.1.5. Update an ISCUS*flex with software prior to version 2.0.0.339*

Update the ISCUS*flex* to boot up 2.0 using your SD-card. Reboot the analyzer.

A dialog, asking you to put in a USB memory, is displayed. Insert your USB Service Tools.

Update the software – Check that the label says version 2.1.0.494, press Update and follow the onscreen messages.

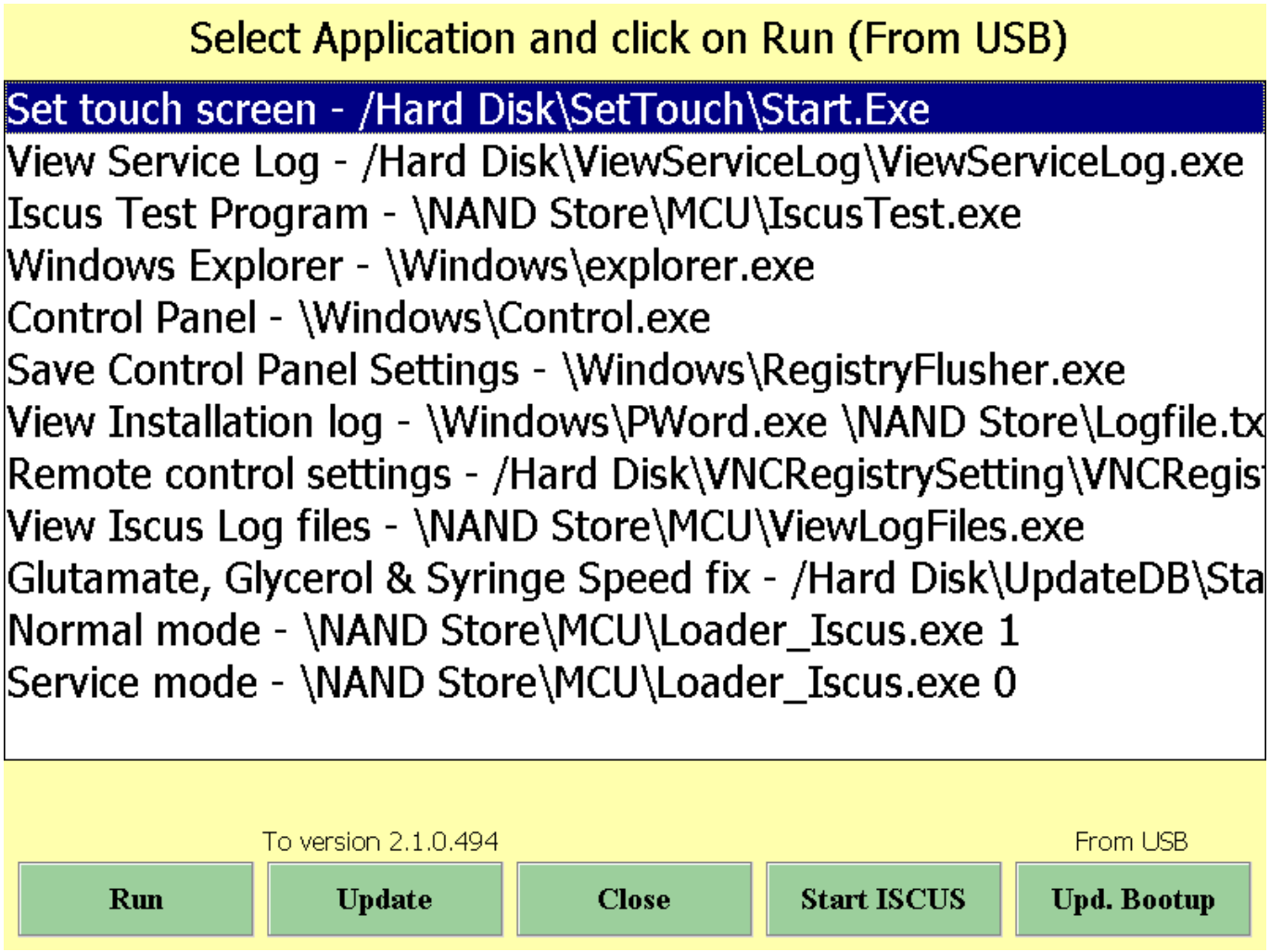
1.1.6. Update an ISCUS^{flex} with software version 2.0.0.339 or later.

A dialog asking you to put in a USB memory is displayed, put in your USB Service Tools.

Update the software – Check that the label says version 2.1.0.494, press Update and follow the onscreen messages.

Finally follow the instruction in paragraph *3. Specific instructions for version 2.1.0.485 and later* on the last page of this document unless you have already followed those steps during an upgrade to 2.1.0.485.

1.1.7. Service Tools menu



1.1.8. Set Touch screen

Starts automatically if a selection is not made, used for calibrating the touch screen.

1.1.9. View Service Log

Shows the service log entries (not calibrations)

1.1.10. ISCUS Test program

Only for advanced trouble shooting

1.1.11. Windows Explorer

For advanced service engineers handling the inner file structure of the ISCUS^{flex} software. **Caution, incorrect handling may lead to malfunction.**

1.1.12. Control Panel

For configuration issues like language, network settings etc. **Caution, incorrect handling may lead to malfunction.**

1.1.13. Save Control Panel Settings

Issue this after any changes in the Control Panel to permanently store the changes.

1.1.14. View Installation log

Show installation history

1.1.15. Remote control settings

For various settings not found in the Control Panel

1.1.16. View ISCUS log files

For viewing internal log files; AirGapLog.txt, ActvityLog.txt, TemperatureLog.txt, CellTemperatureLog.txt, ProdLog.txt, All-ProdLog.txt and QCData.txt.

1.1.17. Glutamate, Glycerol and Aspirate Speed Fixes. Service/PM interval

Starts program for installing the Glutamate Fix, the Glycerol Fix and/or the Aspirate Speed Fix. Set service (PM) interval. Also used for setting the Pyruvate low calibration Linearity limit and Urea Initial blank level.

1.1.18. Normal mode

Start software in normal mode

1.1.19. Service mode

Start software in Service mode

2. For CLIA users

2.1. With a barcode scanner

By issuing the service code:

CLIA NOMINAL CL CALC
It is possible to scan only the CLIA limits and get the proper Nominal Control levels.

2.2. Without a barcode scanner

By issuing the service codes:

CLIA NOMINAL CL MANUAL CALC
It is possible to enter the CLIA limits and lot number manually, followed by pressing the Recalc. button to automatically get the correct Nominal Control Levels.

3. Specific instructions for version 2.1.0.485 and later

After installation the Pyruvate detection limit for low calibration interval is automatically set to 10 (instead of 2). This requires the latest CalVer kit (lot number higher than T27112) for calibration verification.

The sample volumes have to be set with the service code SAMPLEVOL OPTION. This will set sample volumes to

Lactate normal calibration interval to 0.4 µL (for better performance and stability)
Glycerol normal calibration interval to 0.4 µL (for better performance at high concentrations)
Glutamate normal calibration interval to 1.3 µL (for better performance at high concentrations)

Restart the system and change any reagents/calibrator after altering the sample volumes.

Sample volumes can at any time be checked using the service code SAMPLEVOL. It is possible to reset all sample volumes to previous default using the service code SAMPLEVOL ORIGINAL.

The detection limits can at any point be checked using the service code ANALYTEDL. It is possible to reset the pyruvate detection level with the service code ANALYTEDL PYR LOW 2.01 (you can’t set it to exactly 2 it will then jump back to 10).