

AU480 Job Aid Booklet



For Training Purposes Only

These job aids are shortened versions of procedures found in the reference below. Information in the job aid is correct as of the date published. Verify you have the correct information.

References:

- AU480 Chemistry Analyzer Users Guide Volume 1 PN BM480V1AB (August 2010)
- AU480 Chemistry Analyzer Users Guide Volume 2 PN BM480V2AB (August 2010)
- AU480 Chemistry Analyzer Quick Response Guide PN B0480QRG (November 2009)

AU480[®] Chemistry Analyzer

WARNINGS AND PRECAUTIONS

Read all product manuals and consult with Beckman Coulter-trained personnel before attempting to operate the instrument.

Beckman Coulter, Inc. urges its customers and employees to comply with all national health and safety standards such as the use of barrier protection. This may include, but is not limited to, protective eyewear, gloves, suitable laboratory attire when operating or maintaining this or any other automated laboratory equipment.

INTENTION FOR USE

This document is not intended to replace the information in your Users Guide or Quick Response Guide. Information in the Users Guide and Quick Response Guide supersedes information in any other manual.

REVISION STATUS

Rev. A (December 2013)
Based on AU480 software version 1.71

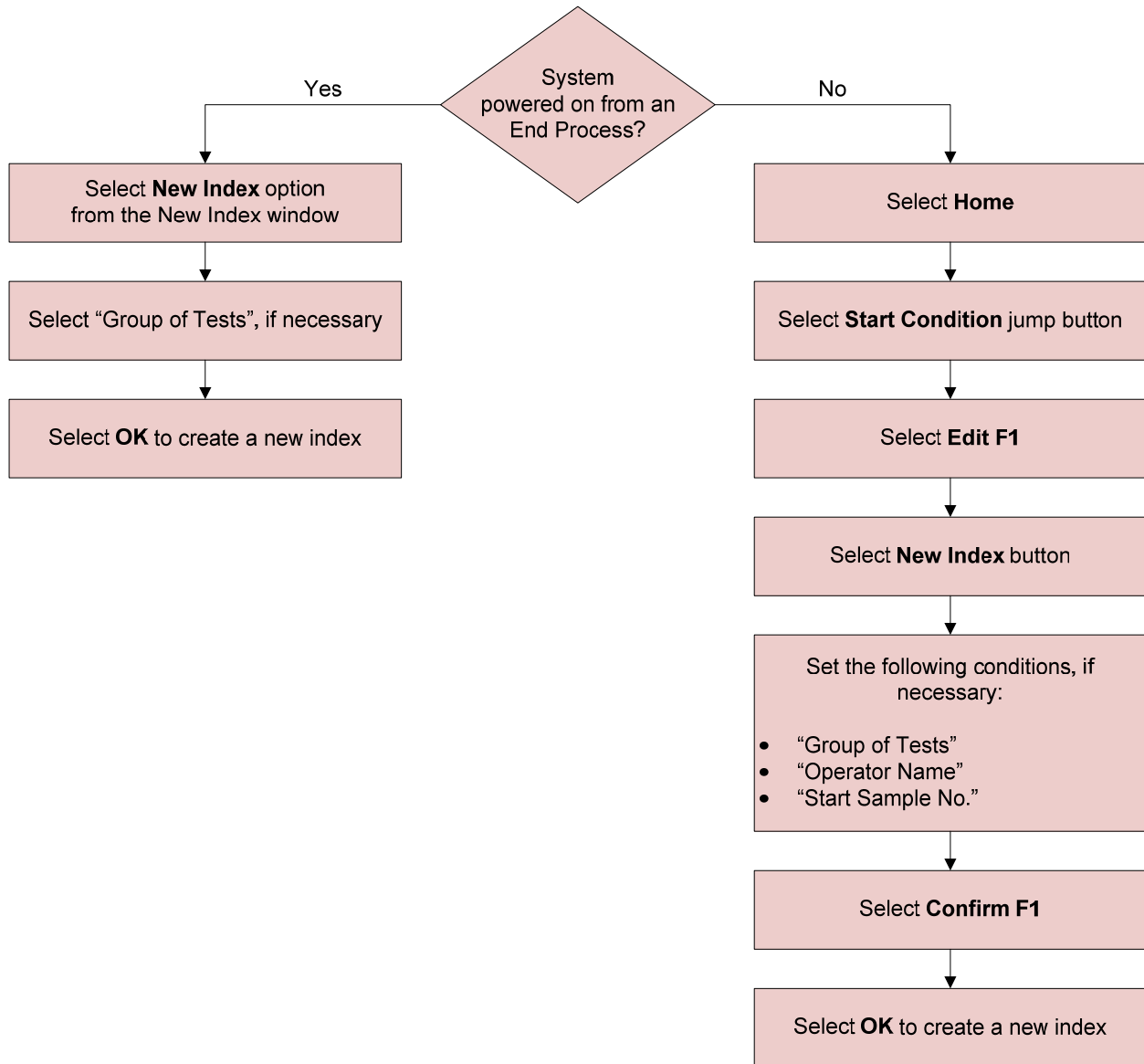
TRADEMARKS

AU480[®] Chemistry Analyzer

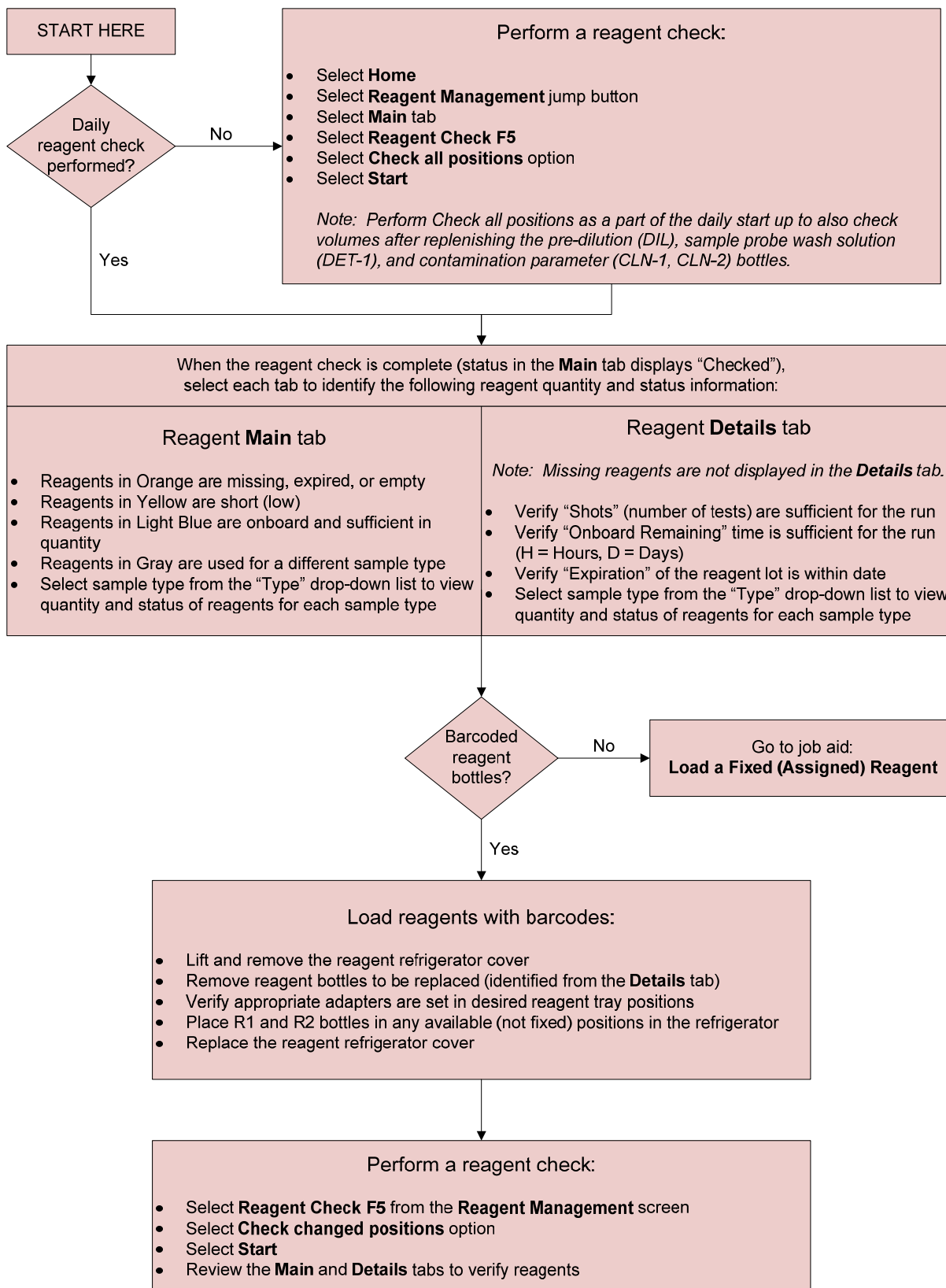
Table of Contents

Set the Start Condition	5
Check and Load Reagents.....	6
Load a Fixed (Assigned) Reagent.....	7
Perform Analyzer Calibration	8
Perform Quality Controls for All Tests	9
Perform Quality Control for Selected Tests	10
Manual Programming for Samples on Racks	11
Manual Programming for STAT Samples.....	12
Perform Add On and Rerun Tests on Racks.....	13
Perform Add On and Rerun Tests on STAT Table	14
Recall Patient Results	15
Print RB/CAL/QC Reports	16
Transfer Data to Host.....	17
Calibration Verification	19
Review and Print QC.....	21
Delete QC Data and Enter Comments	22
Set Calibrator Lot Concentrations	23
Configure New QC Lot Parameters.....	24
Daily Analyzer Maintenance.....	25
Load ISE Reagents (ISE Option only)	27
Perform ISE Clean (ISE Option only)	28
Perform ISE Calibration (ISE Option only)	29
Define a User Menu	30
Save or Load System Parameters	31
Save Data to External Media.....	32
Perform an End Process	33
Perform and Recover from an Emergency Stop.....	34

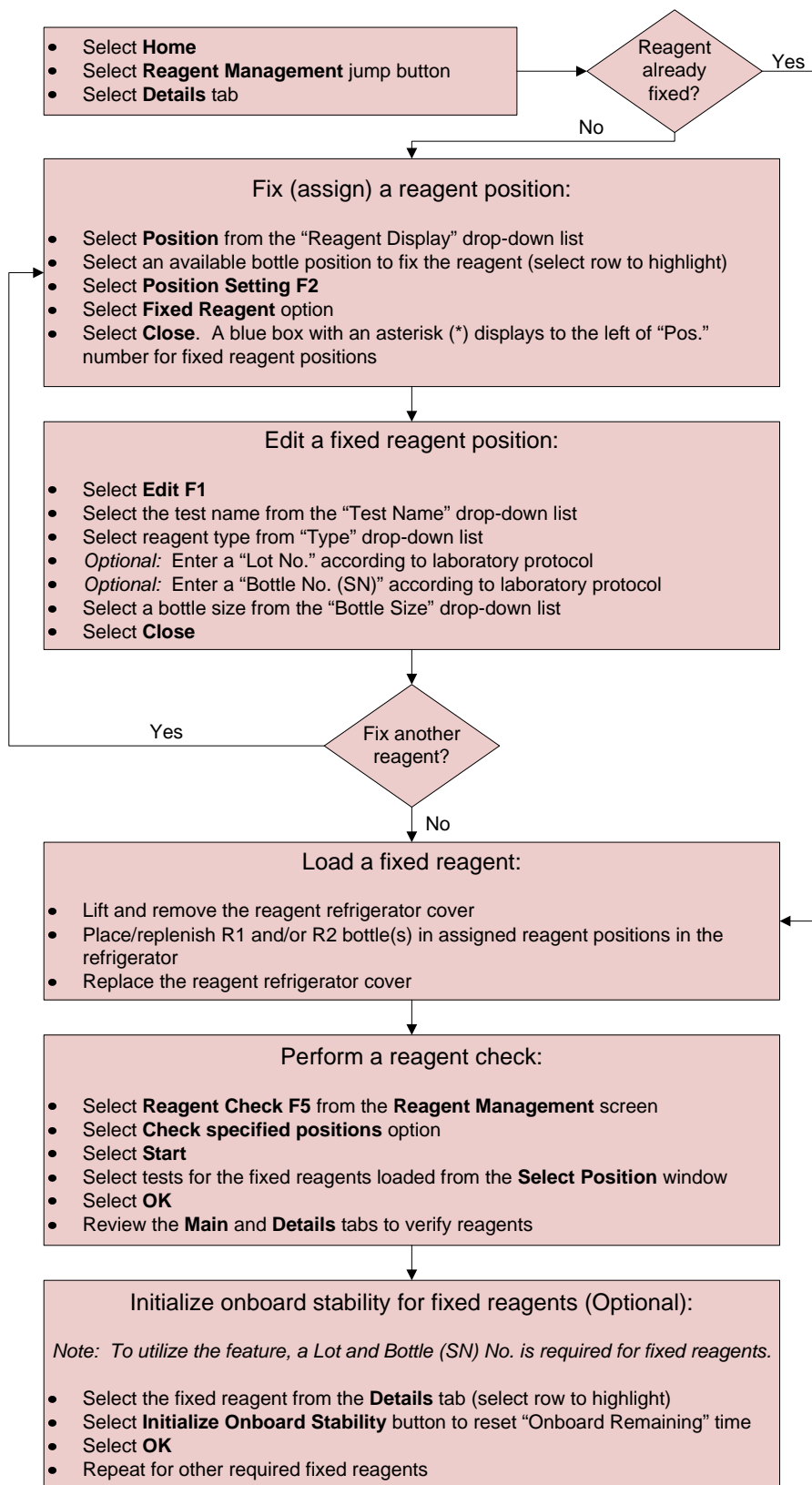
Set the Start Condition



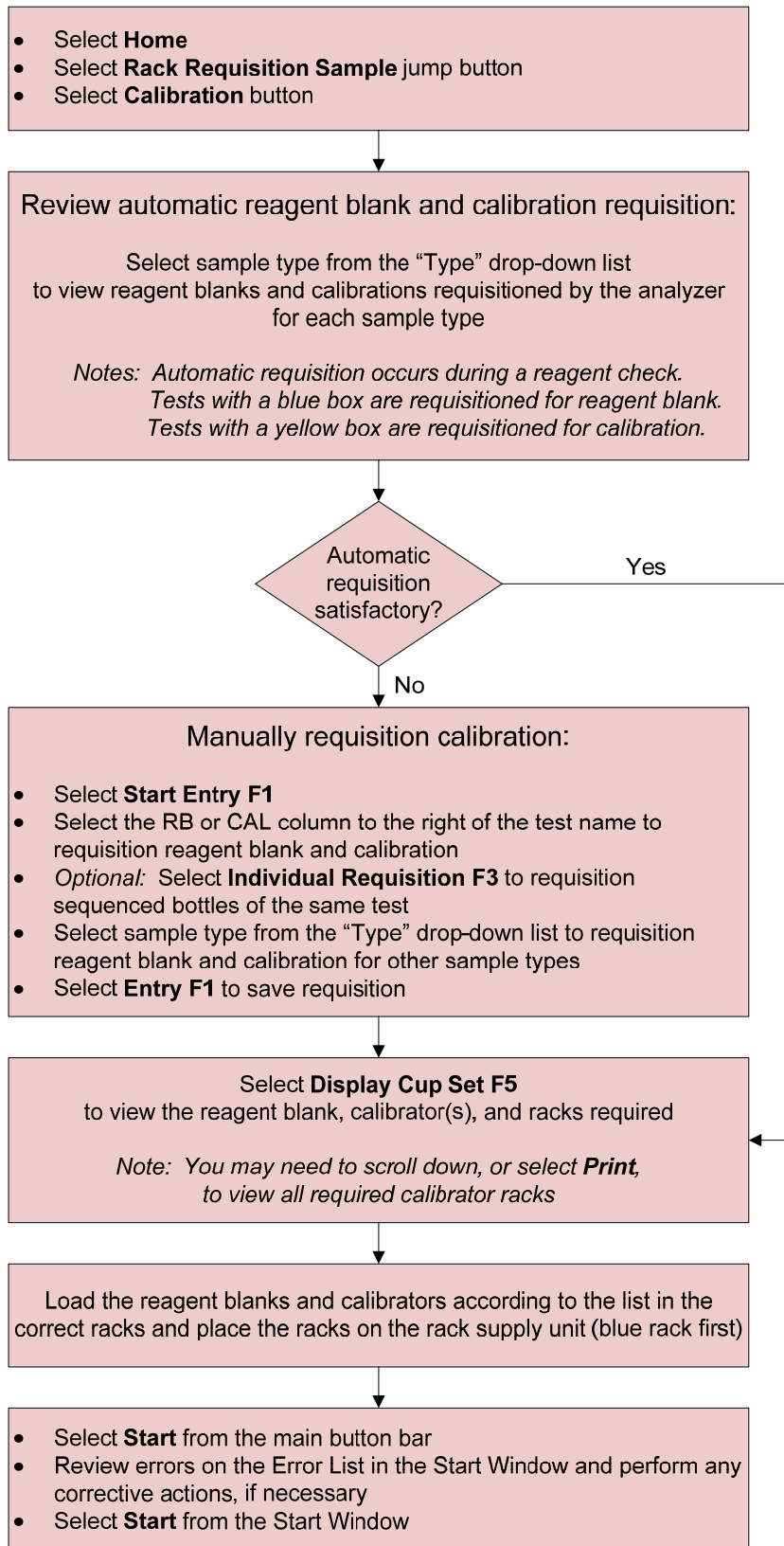
Check and Load Reagents



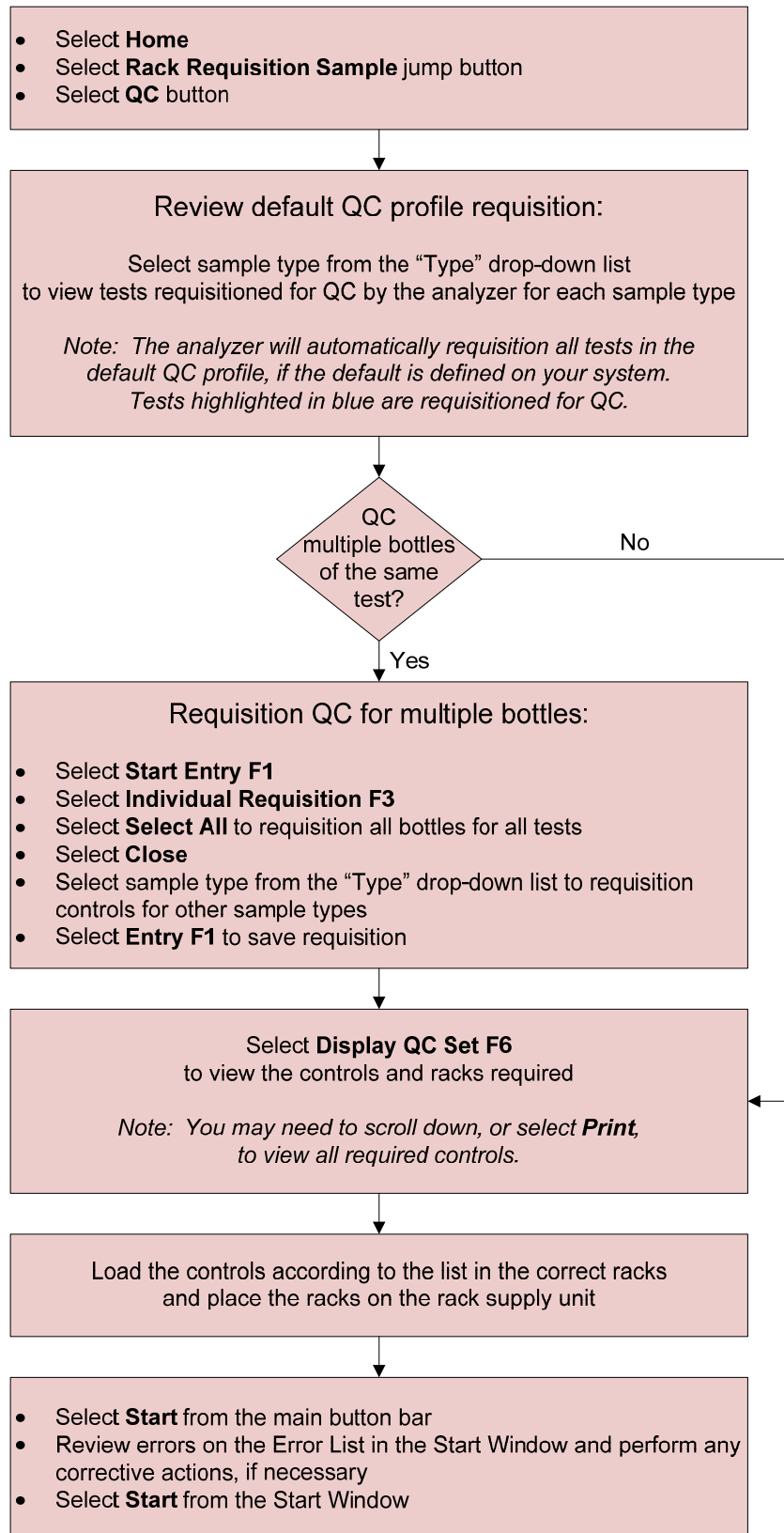
Load a Fixed (Assigned) Reagent



Perform Analyzer Calibration



Perform Quality Controls for All Tests



Perform Quality Control for Selected Tests

- Select **Home**
- Select **Rack Requisition Sample** jump button
- Select **QC** button

Manually requisition QC:

- Select **Start Entry F1**
- Select test(s) to requisition (blue highlight) or deselect test(s) to remove (no blue highlight)
- *Optional:* Select **Individual Requisition F3** to requisition QC for a specific bottle
- Select sample type from the "Type" drop-down list to requisition controls for other sample types
- Select **Entry F1** to save requisition

Select **Display QC Set F6** to view the controls and racks required

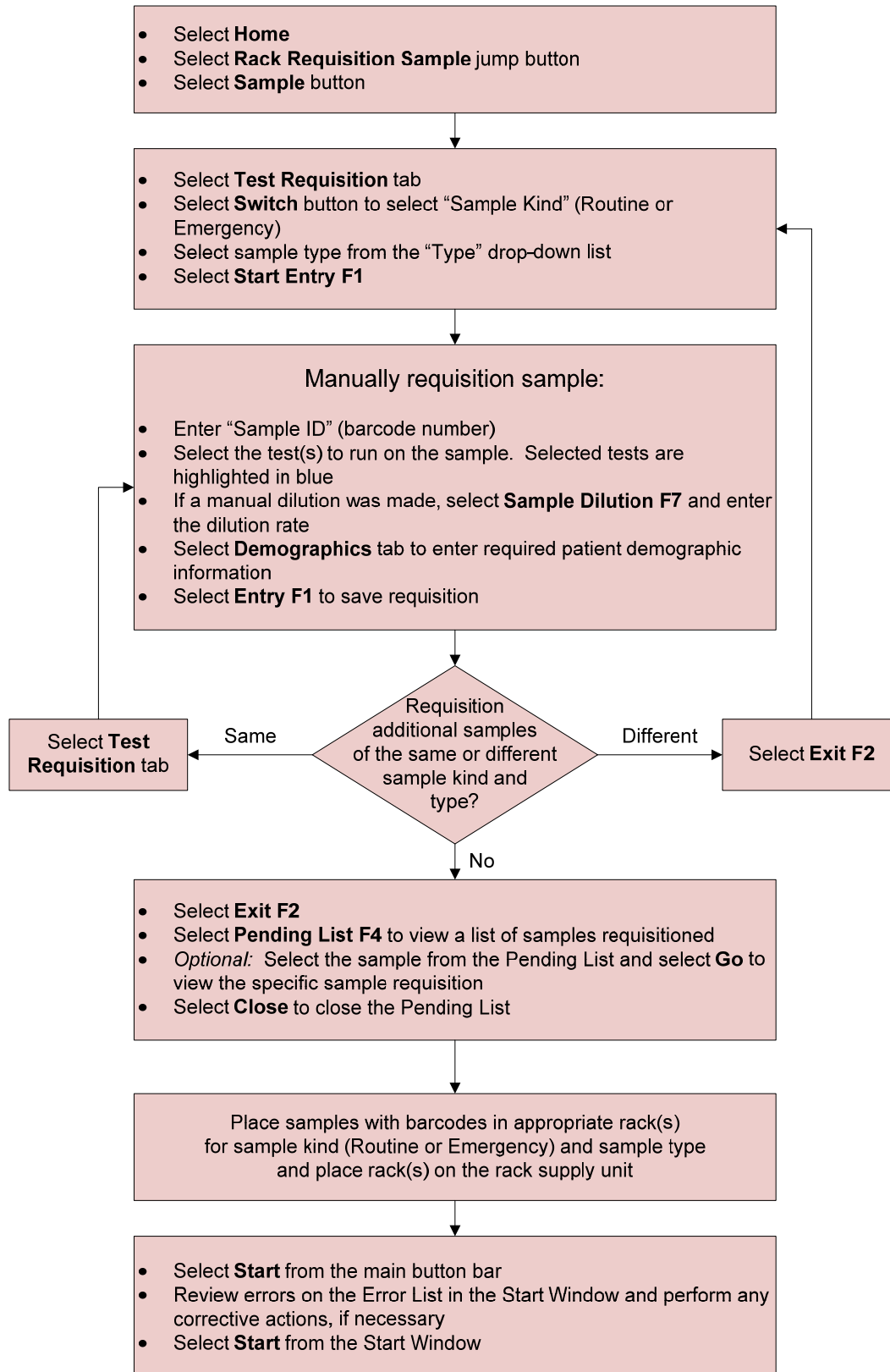
*Note: You may need to scroll down, or select **Print**, to view all required controls. The analyzer will request QC for all levels for the selected test(s) for each sample type. If you do not need to run QC for a specific level, leave the position empty on the rack.*

Load the controls according to the list in the correct racks
and place the racks on the rack supply unit

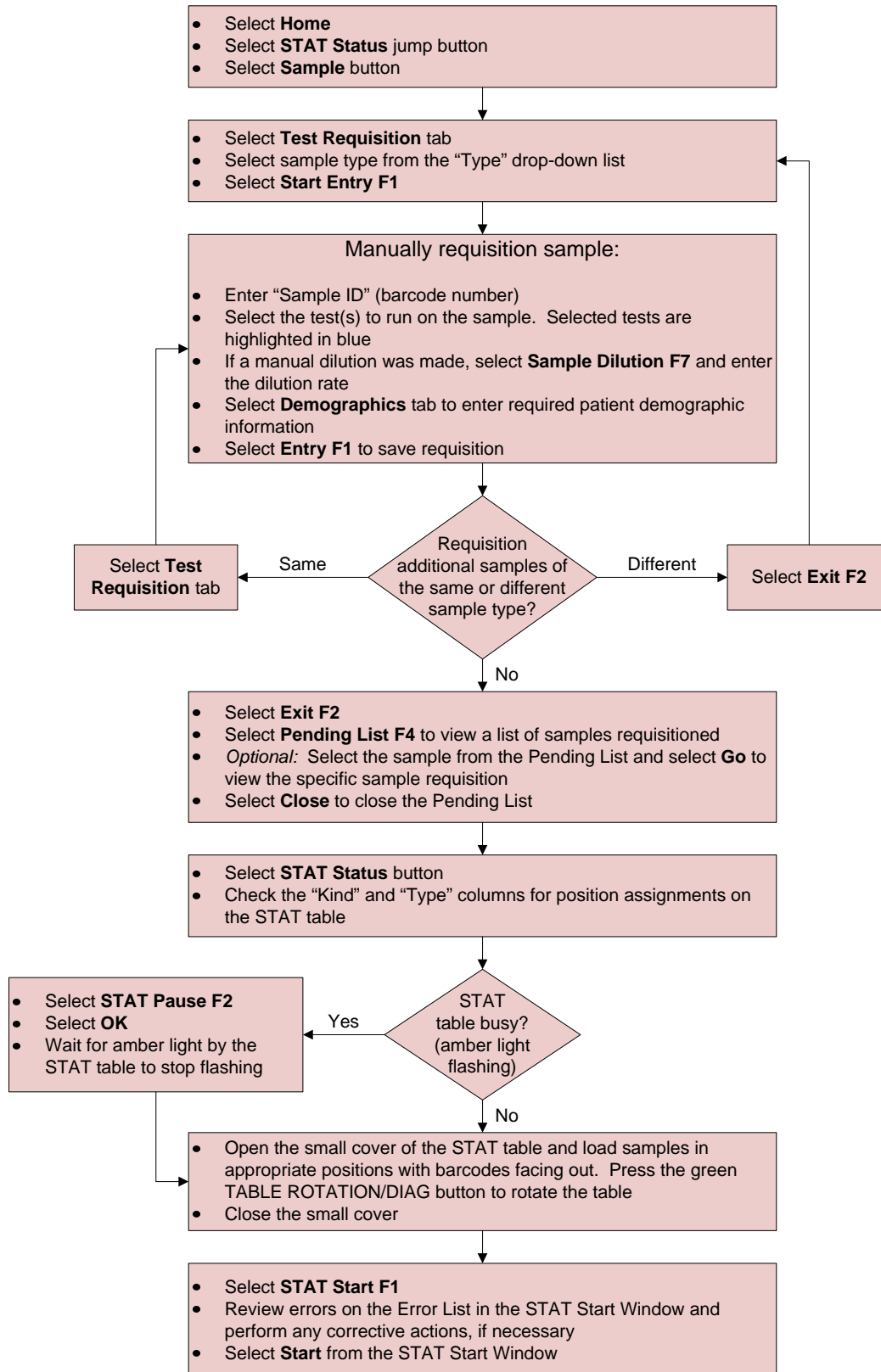
*Note: The analyzer will generate a "QC INCOMPLETE" alarm
if it does not see all levels of QC displayed on the list;
no action is required if you did not need to process all levels.*

- Select **Start** from the main button bar
- Review errors on the Error List in the Start Window and perform any corrective actions, if necessary
- Select **Start** from the Start Window

Manual Programming for Samples on Racks



Manual Programming for STAT Samples



Perform Add On and Rerun Tests on Racks

*Note: This procedure applies only for samples that require an add on or rerun test to be processed **using the same sample ID, rack type, and index as the original sample.***

The information listed below is required to order an add on or rerun. This information can be found on the **Sample Status** screen or on the printed report.

- Sample Number (e.g. S. No. 0003)
- Sample Kind (Routine or Emergency)
- Sample Type

- Select **Home**
- Select **Rack Requisition Sample** jump button
- Select **Sample** button
- Select **Test Requisition** tab

Requisition an add on or rerun test:

- Select **Add On F5**
- Verify the correct "Sample Kind" rack (Routine or Emergency) in which the sample was initially processed is displayed. Select the **Switch** button if you need to change the sample kind
- Select sample type from the "Type" drop-down list
- Enter the sample number in both of the "Sample No." fields
Note: Enter a range of sample numbers if an add on or rerun is required on multiple samples for the same tests.
- Select the **Select Tests to be Repeated** option
- Select the test(s) to add on or rerun
- Select **OK**

- Select **Pending List F4** to view a list of samples requisitioned
- *Optional:* Select the sample from the Pending List and select **Go** to view the specific sample requisition. Tests with an asterisk (*) are pending processing
- Select **Close** to close the Pending List

Place samples with barcodes in appropriate rack(s) for sample kind (Routine or Emergency) and sample type and place rack(s) on the rack supply unit

- Select **Start** from the main button bar
- Review errors on the Error List in the Start Window and perform any corrective actions, if necessary
- Select **Start** from the Start Window

The analyzer may generate a "MEASURE COMPLETED FOR THE READ SAMPLE ID" alarm when the sample barcode is read. Verify the sample is in process from the **Sample Status** screen

Perform Add On and Rerun Tests on STAT Table

*Note: This procedure applies only for STAT samples that require an add on or rerun test to be processed on the STAT table **using the same sample ID and index as the original sample.***

The information listed below is required to order an add on or rerun. This information can be found on the **Sample Status** screen or on the printed report.

- Sample Number (e.g. S. No. P0003)
- Sample Type

- Select **Home**
- Select **STAT Status** jump button
- Select **Sample** button
- Select **Test Requisition** tab

Requisition an add on or rerun test:

- Select **Add On F5**
- Select sample type from the "Type" drop-down list
- Enter the sample number in both of the "Sample No." fields
Note: Enter a range of sample numbers if an add on or rerun is required on multiple samples for the same tests.
- Select the **Select Tests to be Repeated** option
- Select the test(s) to add on or rerun
- Select **OK**

- Select **Pending List F4** to view a list of samples requisitioned
- *Optional:* Select the sample from the Pending List and select **Go** to view the specific sample requisition. Tests with an asterisk (*) are pending processing
- Select **Close** to close the Pending List

- Select **STAT Status** button
- Check the "Kind" and "Type" columns for position assignments on the STAT table

- Select **STAT Pause F2**
- Select **OK**
- Wait for amber light by the STAT table to stop flashing

STAT table busy?
(amber light flashing)

Yes

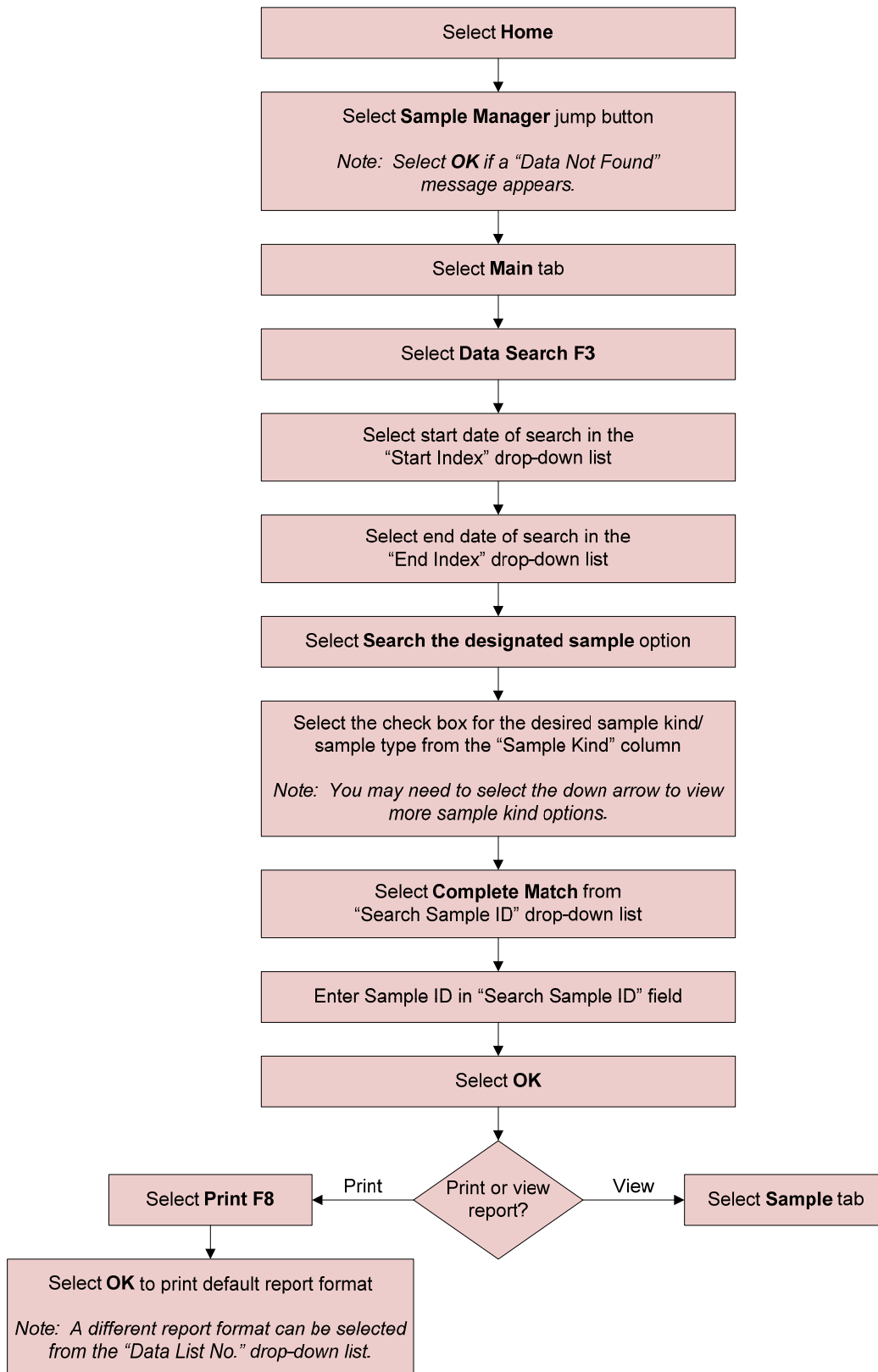
No

- Open the small cover of the STAT table and load samples in appropriate positions with barcodes facing out. Press the green **TABLE ROTATION/DIAG** button to rotate the table
- Close the small cover

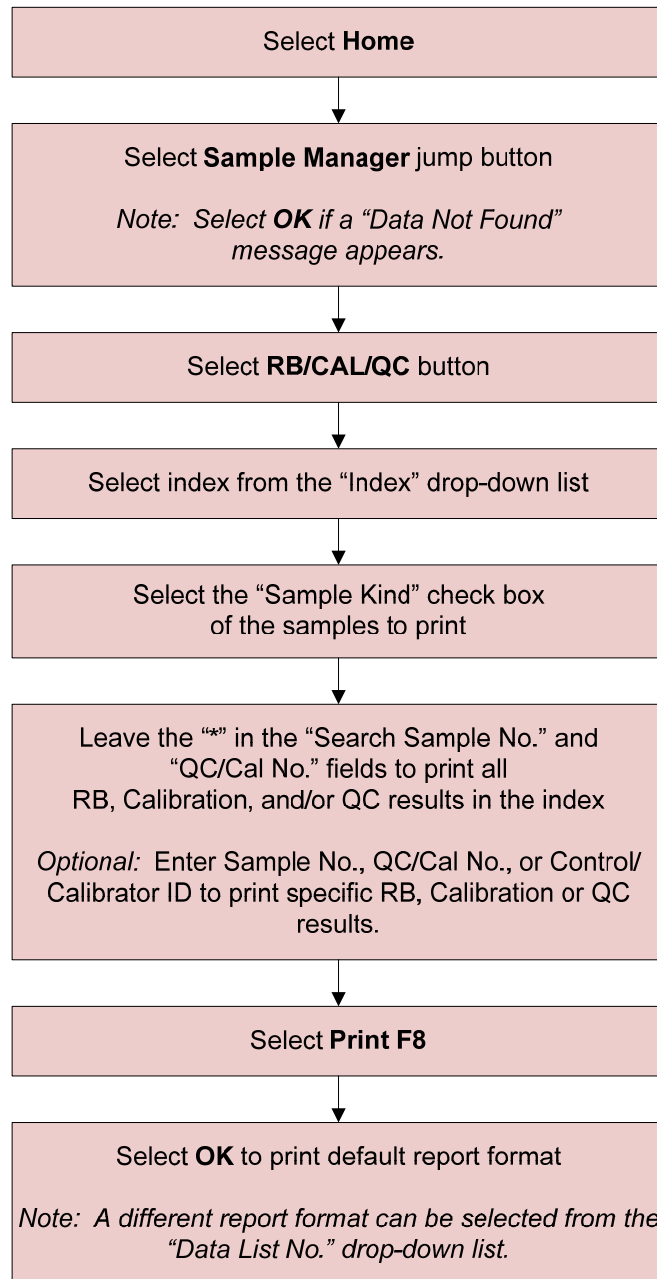
- Select **STAT Start F1**
- Review errors on the Error List in the STAT Start Window and perform any corrective actions, if necessary
- Select **Start** from the STAT Start Window

The analyzer may generate a "MEASURE COMPLETED FOR THE READ SAMPLE ID" alarm when the sample barcode is read. Verify the sample is in process from the **Sample Status** screen

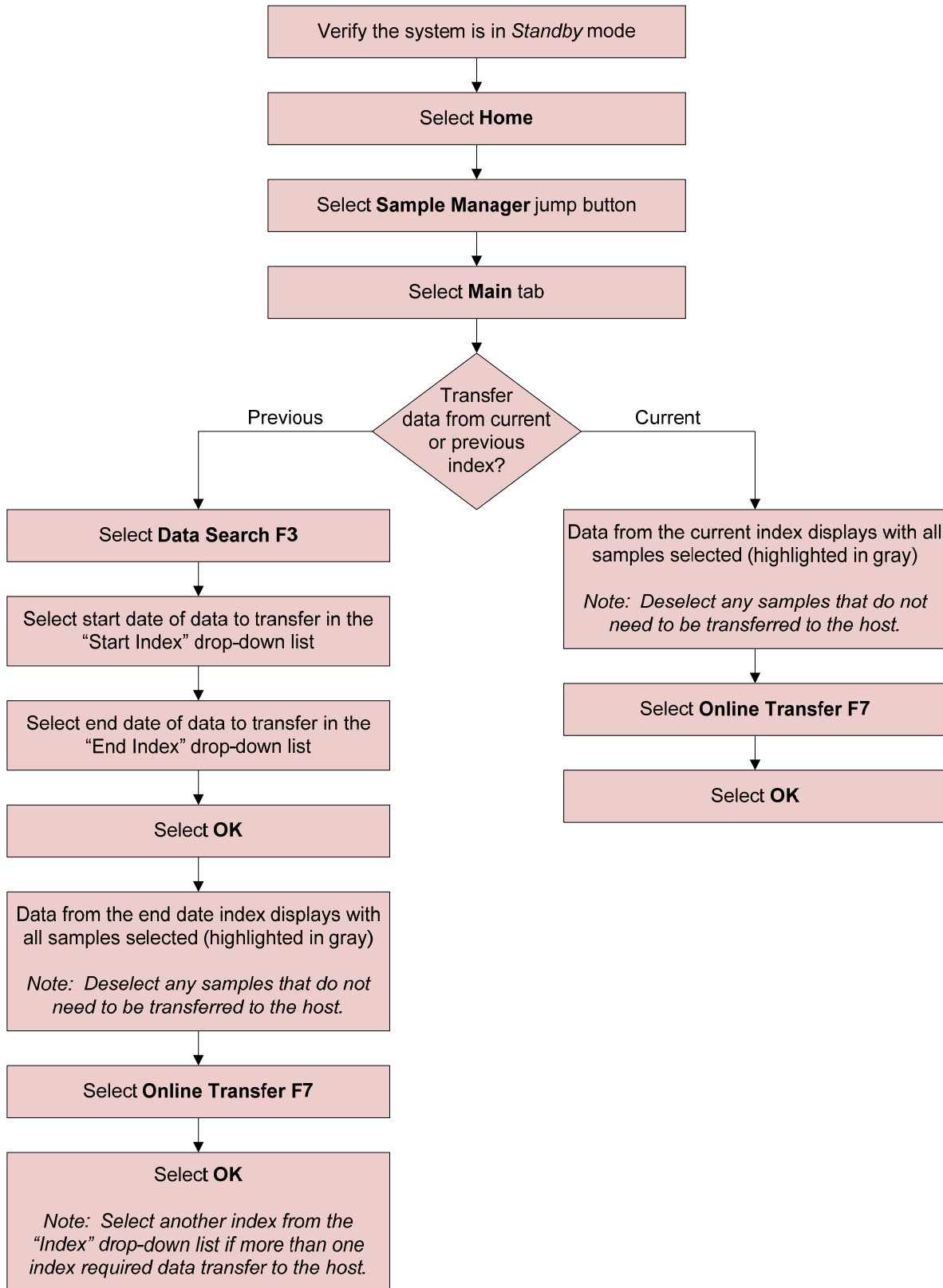
Recall Patient Results



Print RB/CAL/QC Reports



Transfer Data to Host



This page intentionally left blank.

Calibration Verification

Note: This procedure applies only for racks in barcode mode. You will need to use barcodes labels that increment by one digit.

- Select **Menu List**
- Select **Calibration** menu
- Select **Calibration Verification** sub-menu
- Select **Material Parameter** button

- Select test from the "Test Name" drop-down list
- Select sample type from the "Type" drop-down list
- Select **Edit F1**

For each level of the calibration verification material:

- Enter the level name in the "Material Name" column
- Enter the sample ID (barcode number) in the "Material ID" column. Up to three sample IDs can be assigned to each level for three replicates
- Select the "Evaluate" check box to include the material level for the calibration verification
- Enter the "Expected Value" (from calibration verification material package insert)
- Enter the "Tolerance Value" (determined by laboratory)
- Select **Confirm F1**

Enter parameters for another test?

Yes

No

Requisition tests for calibration verification material:

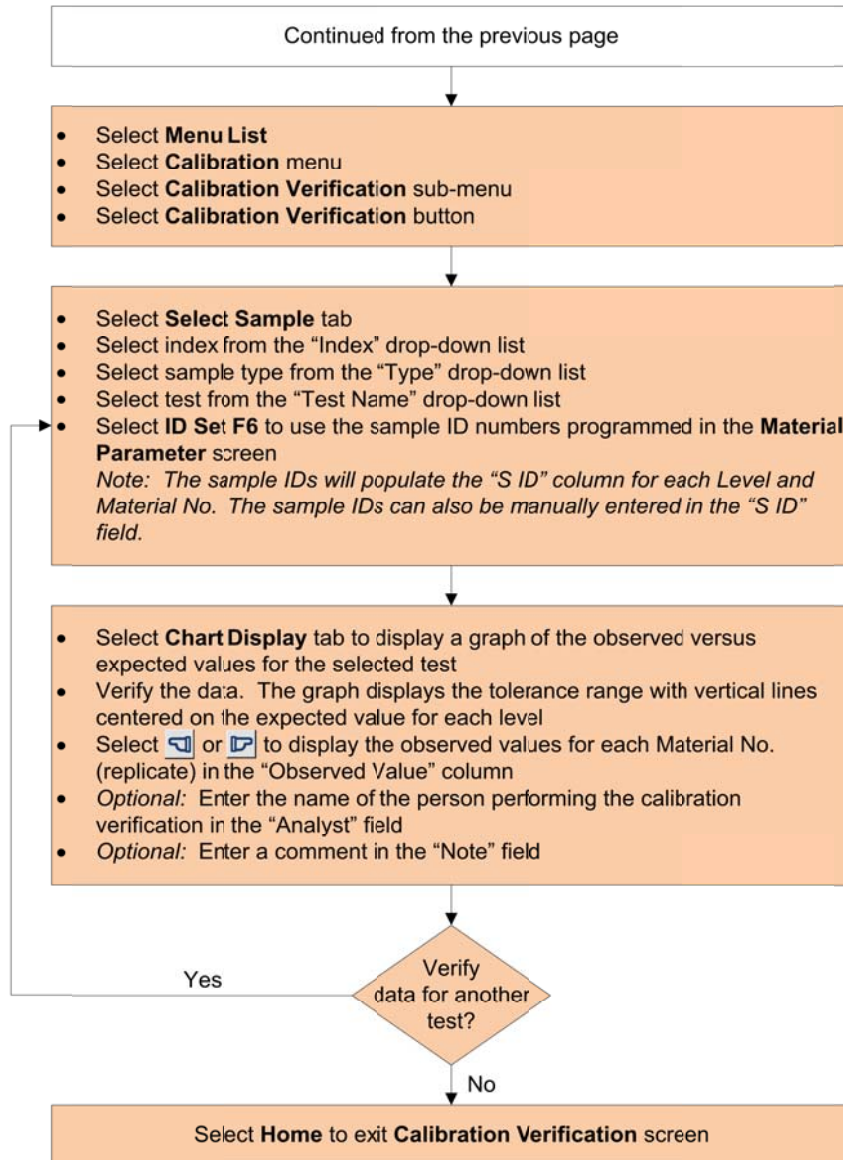
- Select **Home**
- Select **Rack Requisition Sample** jump button
- Select **Sample** button
- Select **Test Requisition** tab
- Select **Switch** button to select "Sample Kind" (Routine or Emergency)
- Select sample type from the "Type" drop-down list
- Select **Start Entry F1**
- Enter "Sample ID" (barcode number)
- Select tests to be evaluated for the calibration verification
- Select **Batch Entry F3**
- Select the **Number of Samples** option and enter the number of samples to be processed
- Select **OK**
- *Note: The sample IDs will automatically increment by one for each sample in the batch.*
- Select **Exit F2**
- Select **Pending List F4** to view a list of samples requisitioned

Process calibration verification material:

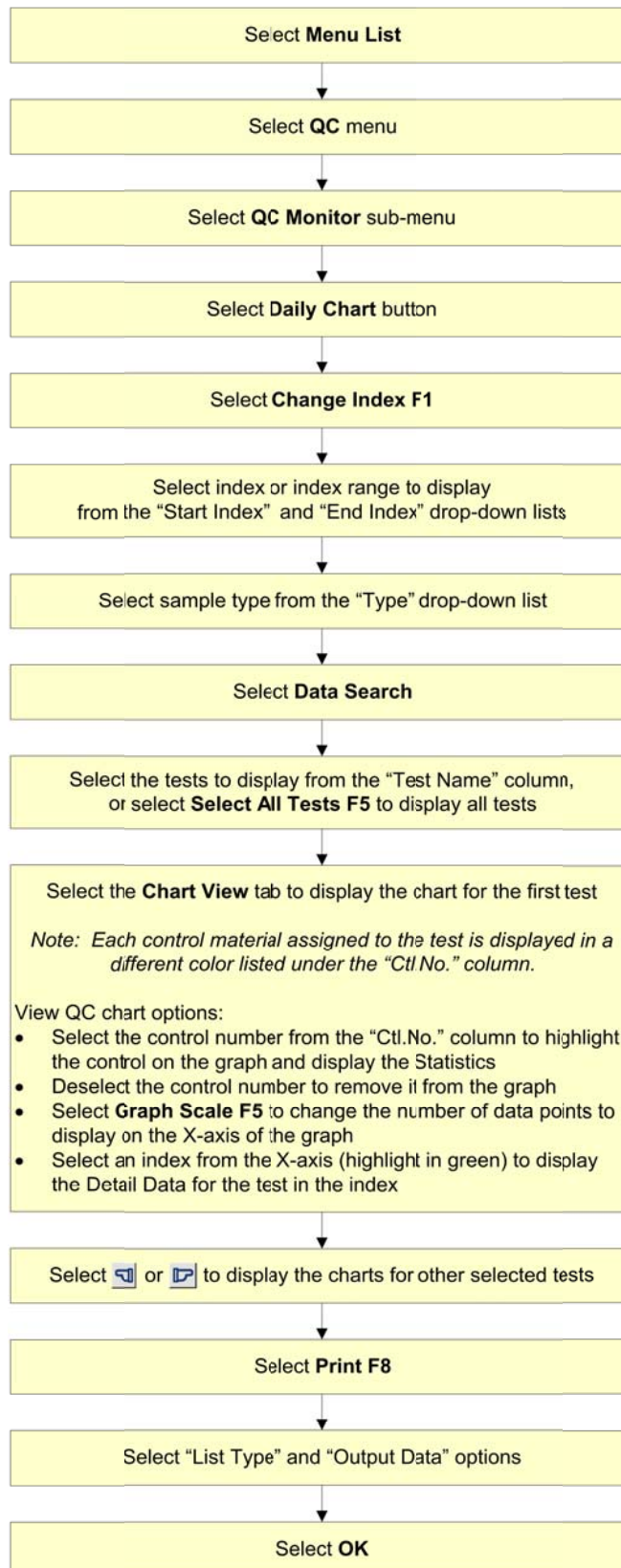
- Place samples with barcodes in appropriate rack(s) for sample kind (Routine or Emergency) and sample type and place rack(s) on the rack supply unit
- Select **Start** from the main button bar
- Review errors on the Error List in the Start Window and perform any corrective actions, if necessary
- Select **Start** from the Start Window

After sample processing completes, continue to the next page to verify calibration

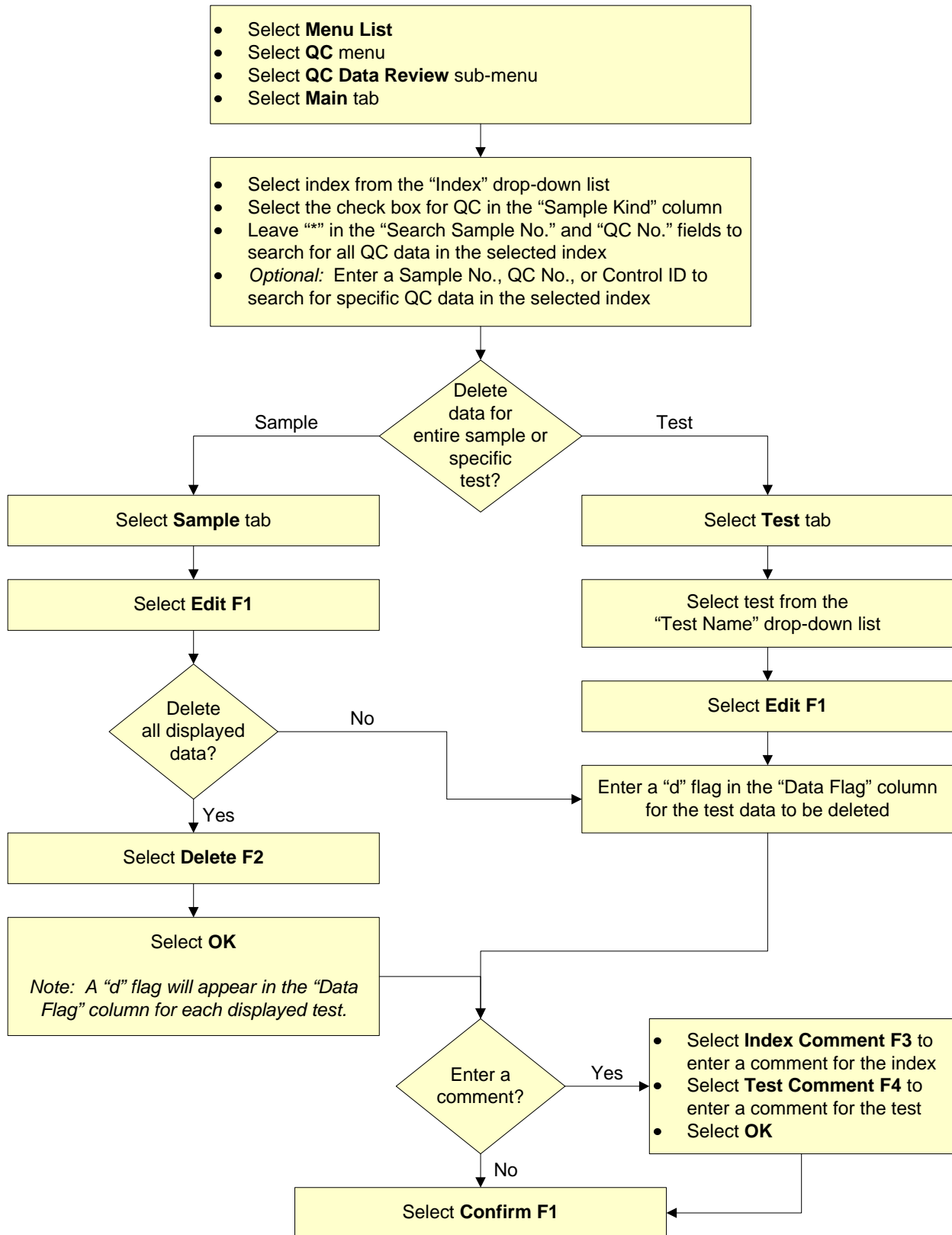
Calibration Verification, continued



Review and Print QC

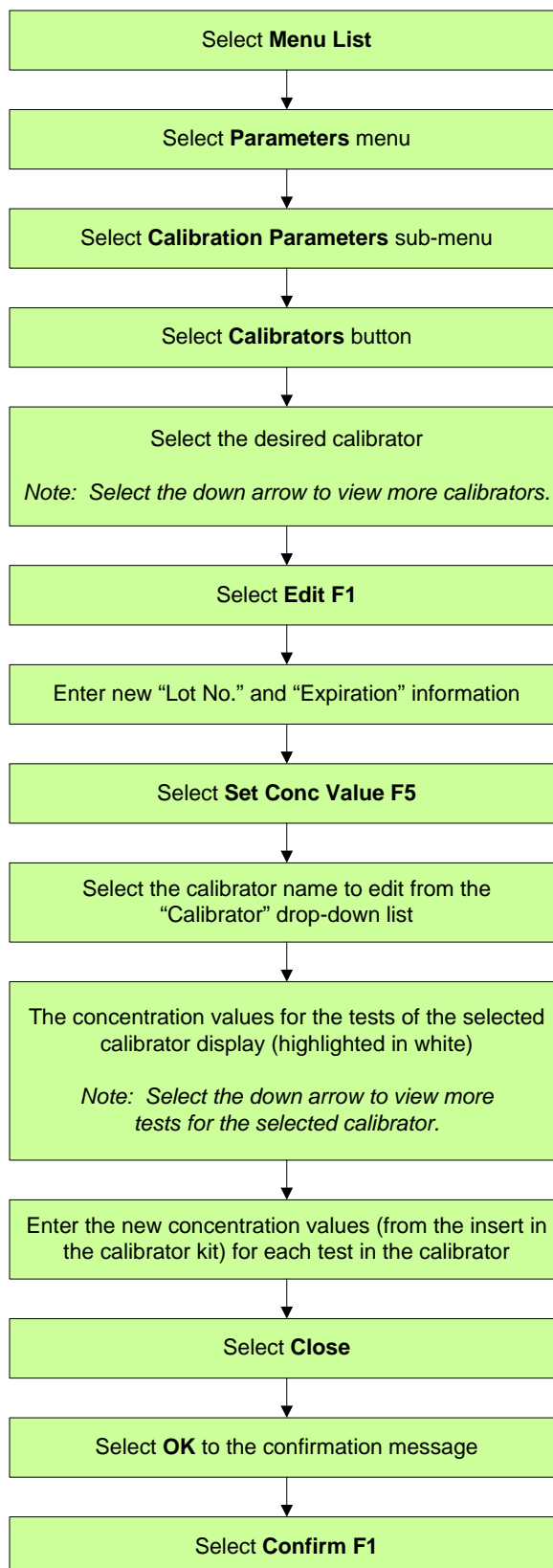


Delete QC Data and Enter Comments

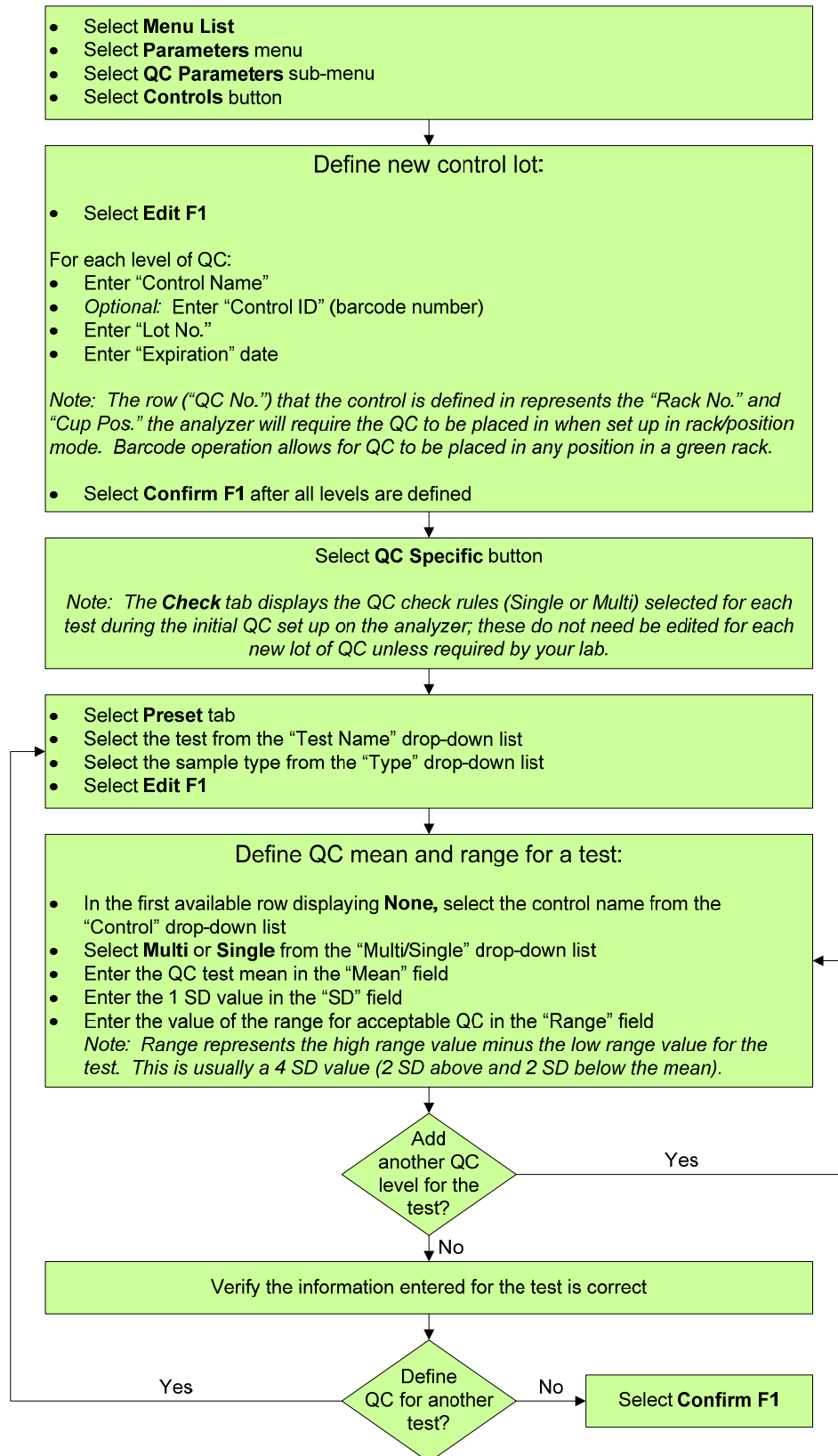


Set Calibrator Lot Concentrations

Note:
This procedure
applies only for
calibrators that are
already defined on
the analyzer.



Configure New QC Lot Parameters



Daily Analyzer Maintenance

Inspect the Syringes for Leaks

- Verify the system is in *Warm Up* or *Standby* mode
- Open the front right door of the analyzer

For each syringe:

- Visually inspect the case head for any cracks or leaks/condensation
 - Use a lint-free cloth to check the top and bottom connections of the syringe case head and the bottom fixing screw for leaks
 - Verify the fixing nut and piston fixing screw are tight
- Close the front right door of the analyzer

Inspect the Wash Solution Roller Pump for Leaks

- Verify the system is in *Warm Up* or *Standby* mode
- Open the front left door of the analyzer

For the wash solution roller pump tubing:

- Visually inspect for cracks; use a clean dry cloth to check for any leaks
- Verify the connectors are tight; turn connector clockwise to tighten

Inspect the Wash Solution and Replenish As Needed

- Verify the system is in *Warm Up* or *Standby* mode

Inspect the wash solution level:

- Verify there is a sufficient quantity of wash solution for typical daily use; the system uses approximately 0.5 L per day for 2,000 tests per day

To replenish the wash solution:

- Pull the wash solution tank forward and unscrew the cap to remove the cap and connector from the tank
 - Replace the tank with a new wash solution tank
 - Insert the level sensor in the tank, tighten the cap and place the wash solution tank in the analyzer
- Close the front left door of the analyzer

Inspect the Printer and Paper

- Verify the printer is on
- Verify that there is enough paper in the printer

Inspect the Stability of the Upper Cover

- Verify that the cover is stable and remains in the upright position when raised

Daily Maintenance procedures continued on the next page

Daily Maintenance, continued

Daily Maintenance procedures continued from the previous page

Inspect, Clean, and Prime the Sample Probe, Reagent Probe, and Mix Bars

- Verify the system is in *Warm Up* or *Standby* mode
- Open the main cover of the analyzer

For the sample and reagent probes:

- Visually inspect that they are not bent or damaged
- Inspect for contaminants or crystallization; wipe outside with 70% isopropyl alcohol, if needed

For each mix bar:

- Inspect for deformities (bent, scratches, or chips in the Teflon coating)
- Inspect for contaminants or crystallization; wipe outside with 70% isopropyl alcohol, if needed

Verify proper operation of the probes and mix bars:

- Select **Home**
- Select **Analyzer Maintenance** jump button
- Place a check mark in the box next to the **Analyzer Maintenance** option
- Select **Prime Washing-line**
- Select **OK** in the Start Window
- Press the green TABLE ROTATION/DIAG button on the analyzer to start the prime cycle
- Verify a thin straight stream of water is dispensed from each probe and that water is present in the wash wells
- Verify proper operation of the mix unit and wash nozzle unit
- When priming is complete (green button lights up), deselect the check box next to the **Analyzer Maintenance** option to exit the *Maintenance* mode

Replace the DI Water in the Pre-dilution Bottle

- Discard the water in the pre-dilution bottle (located between the reagent compartment and reagent probe)
- Rinse the bottle twice with DI water
- Fill the bottle with DI water and replace it on the analyzer

Prepare the Sample Probe Wash Solutions

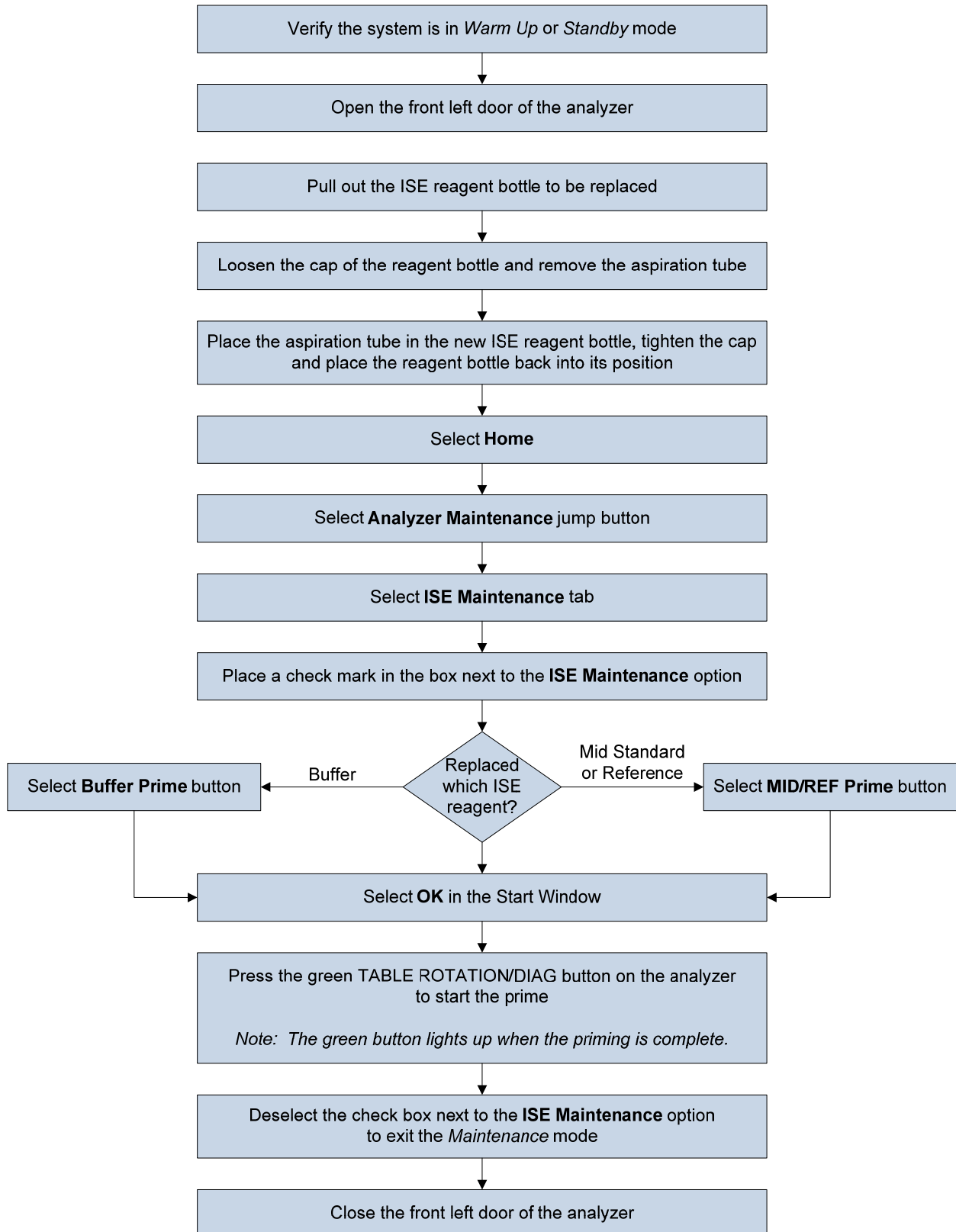
- Verify there is a sufficient amount of 2% wash in the Sample Probe Detergent tube, located in the W1 position of the STAT table

Contamination Parameters

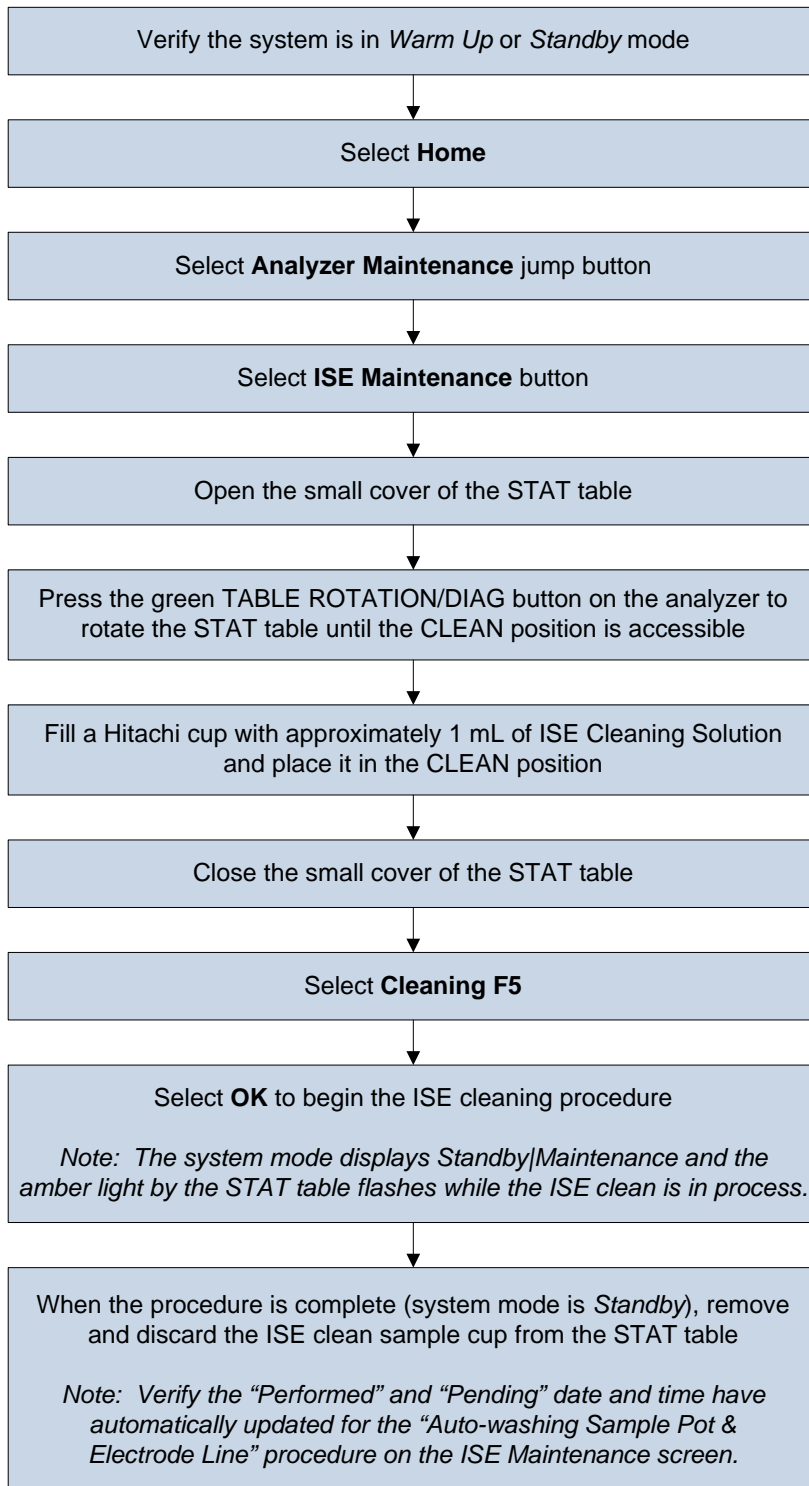
- If you have contamination parameters defined on your system, verify you have sufficient volume of the appropriate cleaning solution in each bottle (60 mL bottles located in the reagent compartment in fixed positions labeled CLN-1 and CLN-2)

Document completion of Daily Maintenance tasks on the paper Analyzer Maintenance Schedule List

Load ISE Reagents (ISE Option only)

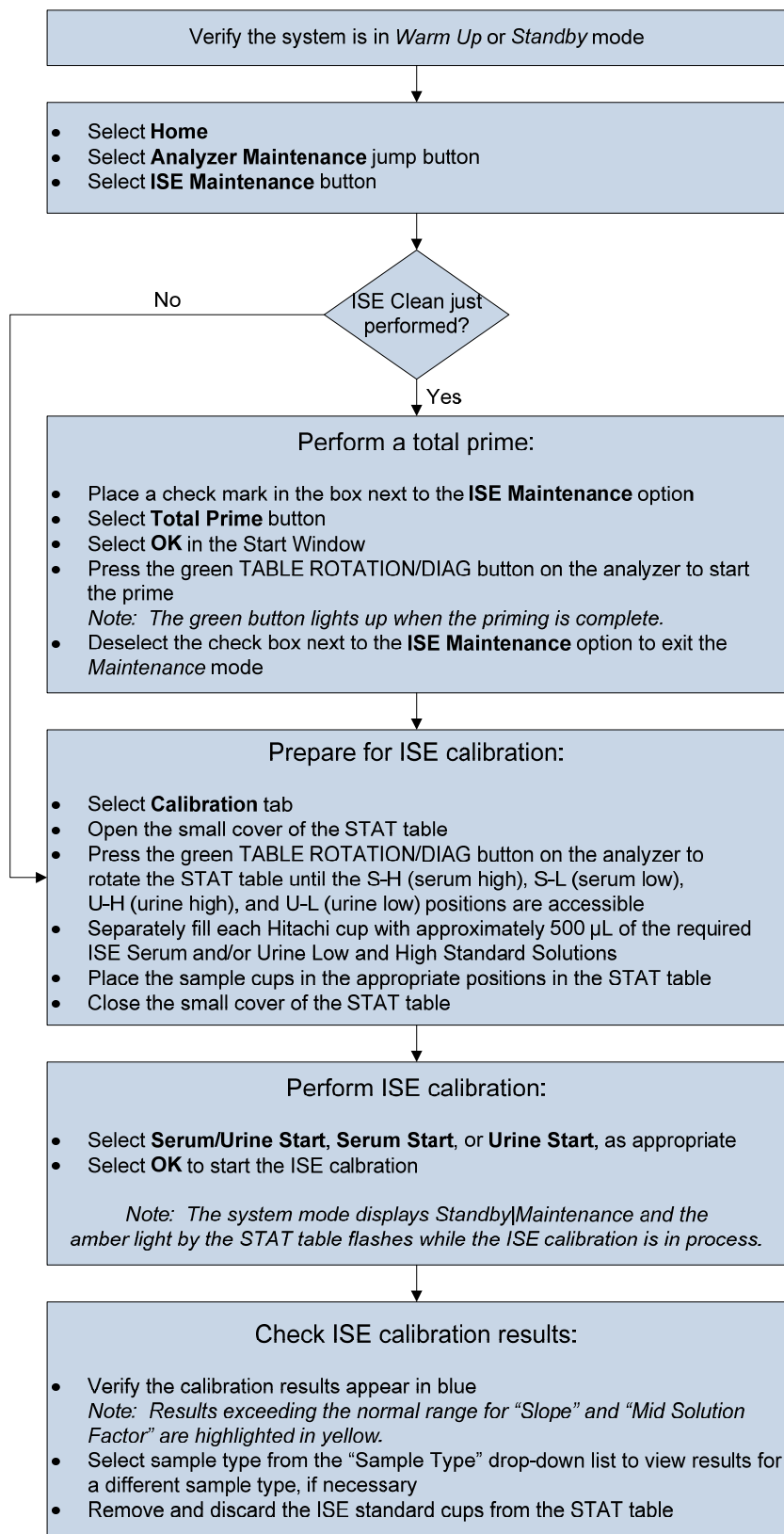


Perform ISE Clean (ISE Option only)

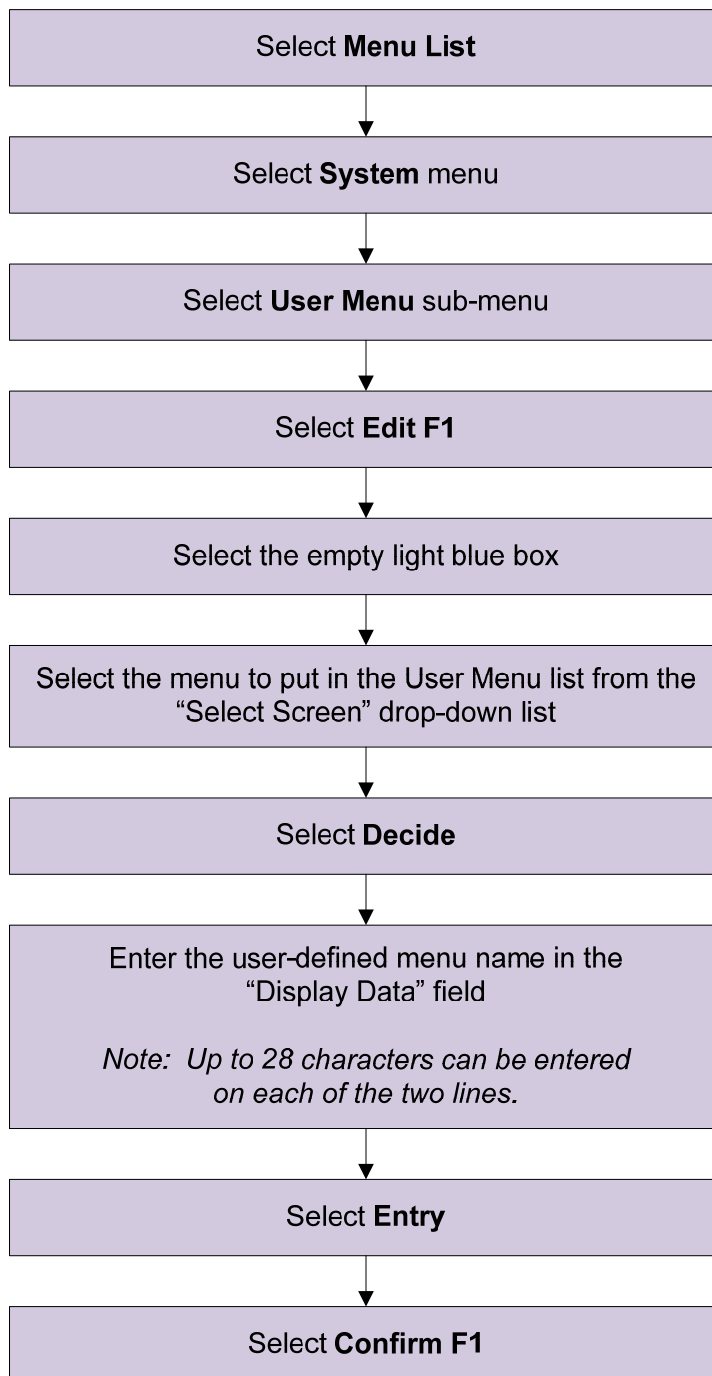


CAUTION:
Pressing the green button during the clean will STOP the procedure.

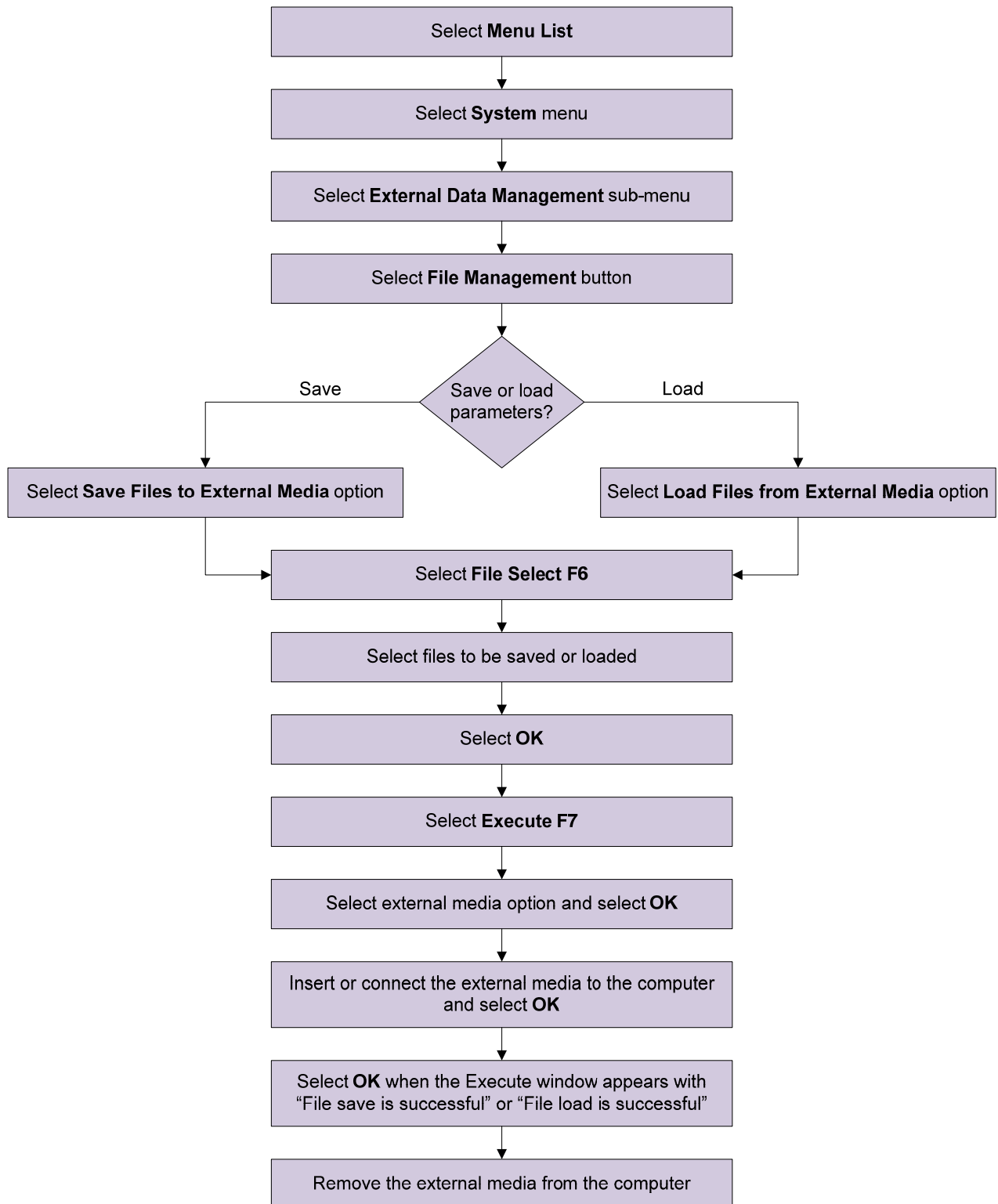
Perform ISE Calibration (ISE Option only)



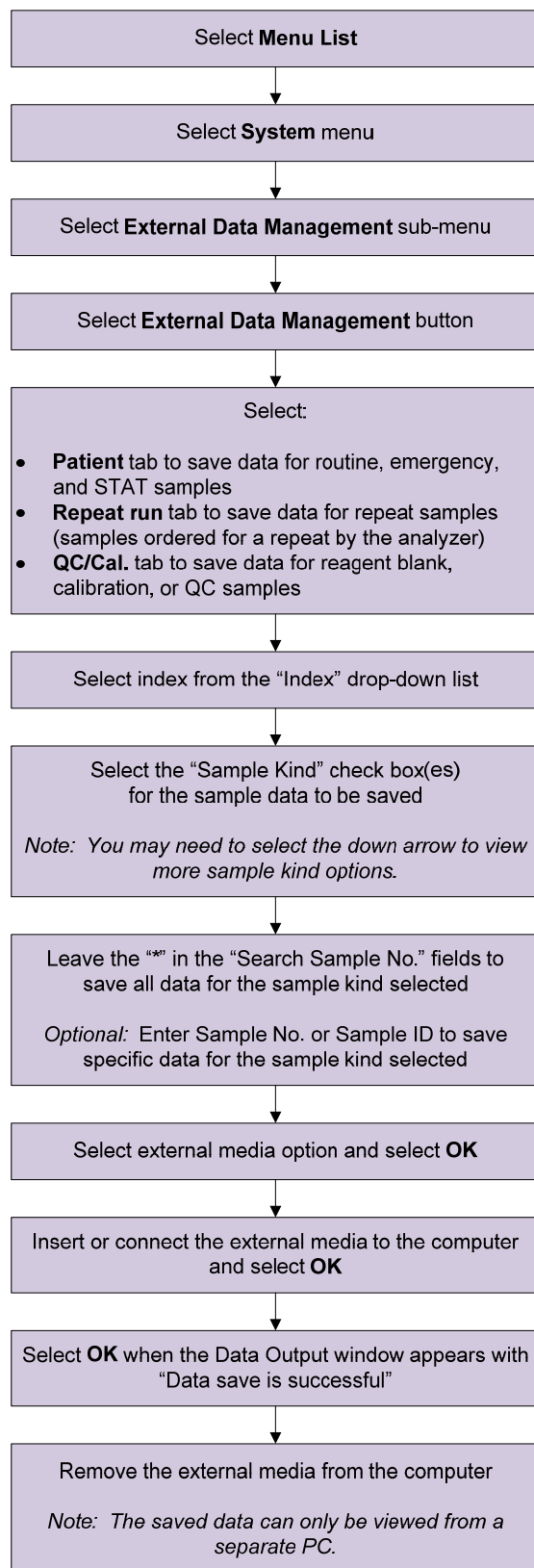
Define a User Menu



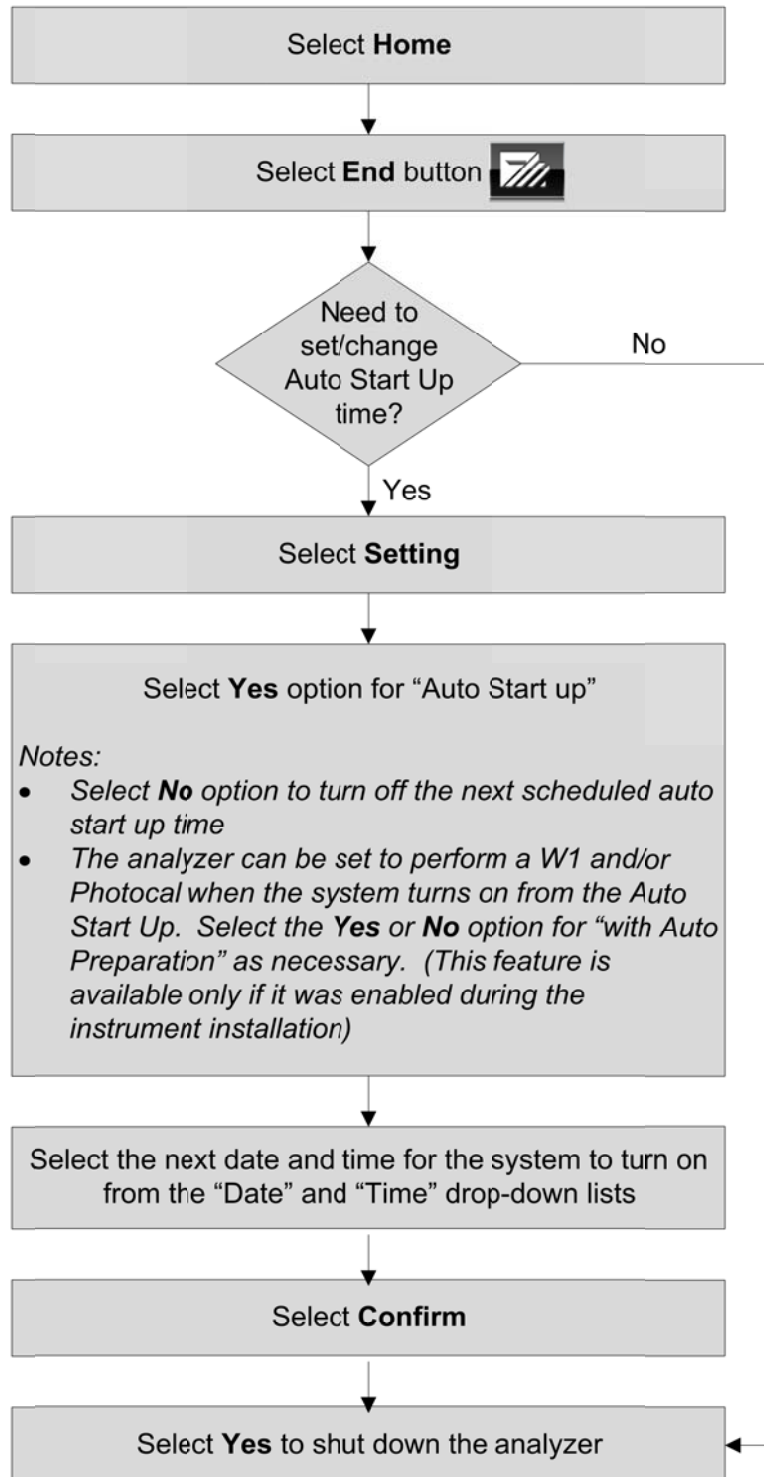
Save or Load System Parameters



Save Data to External Media



Perform an End Process



Perform and Recover from an Emergency Stop

