AU680 Systematic Approach to Troubleshooting

The following will assist you to logically and systematically approach troubleshooting.

- Identify Indicators
  - Observations
  - Failures: RB, Cal, QC
  - Messages
  - Flags
  - Alarms

- Take Inventory-What could have happened?
  - Reagent loaded?
  - Open new cal, QC?
  - Maintenance?
  - Parts replaced?

- Use your resources
  - Manuals
  - Software
    - RB/Calibration Monitor Screen
    - ISE Calibration screen
  - Hotline
  - Logs
  - User Updates
  - Alarm help
  - Co workers

- Assess Severity
  - 1 or multiple analytes
  - 1 or multiple levels
  - RB, Cal, QC or combination

- Use Systematic Approach
  - What is common to failure?
  - What is unique to failure?

- Devise Plan

- Implement Plan/Test
AU680 Instrument Indicators

Status Messages
The Message Window on the Home Menu displays messages about the system status.

The messages can be:

- **Green**
  - Informational: No action required
- **Yellow/Orange**
  - Caution: Impacted tests may not be measured correctly under current conditions
- **Red**
  - Warning: Fatal Error–Unable to run under current conditions

Alarm Messages
Alarm Messages are recorded in the Alarm List.

- Select one time to silence the audible alarm
- Select again to clear the message from the message line
- Select to view the list of alarms

Alarm Message Troubleshooting
When a message is displayed in the alarm message area:

1. Select Alarm List. Information displayed includes the “Date”, “Level”, “Alarm No.” and “Alarm”.
2. Select the alarm you are investigating, then select Help to display the alarm description and corrective actions.
3. Print the alarm message using the “Print Screen” key on the keyboard.
4. Troubleshoot using the Help information.
5. Call Technical Support if issue persists after troubleshooting.
AU680 Troubleshooting Flowchart

Troubleshooting:
Failed Reagent Blank (RB),
Calibration (Cal), or Quality Control (QC)

Review RB Monitor: Consistent ODs?

Review Cal Monitor: Consistent ODs?

Calibrator unique to the failed chemistry?

Troubleshoot QC material:
- Poured and placed correctly?
- Expired?
- Proper prep?
- Proper storage?
- Contaminated?

Troubleshoot Sample Handling System:
- Sample probe?
- Sample syringes?
- Sample mix bar?

Troubleshoot System Components/Environment:
- Water Source?
- Waste?
- Wash Detergent?
- Wash Nozzle?
- Lamp?
- Lab temperature?
- Power?

Tools to assist in determining failure include:
- Printed reports
- Alarms
- Reagent History
- Calibration History

Troubleshoot Reagent Handling System:
- Reagent probe?
- Reagent syringe?
- Reagent mix bar?

Troubleshoot Reagent: Expired?

Troubleshoot Reagent: Proper prep?

Troubleshoot Reagent: Proper storage?

Troubleshoot Reagent: Contaminated?

Failure for multiple chemistries?

NO

YES

NO