"uL" Error Code Troubleshooting Guide

FLINN SCIENTIFIC

Explanation

Calibration and zero-points are set during manufacturing. It is likely that the zero-point has shifted or the calibration factor has been lost. This should not be a reoccurring problem, however it is a good idea to calibrate the balance once a week especially for balances that are used often or have milligram specificity. This guide applies to balances OB2090, OB2093, OB2094, OB2095, OB2096, OB2097, AP8581.

Before Getting Started

If the "uL" problem occurred straight out of the box there is a 90% success rate of correcting the problem using the following procedure.

If the unit did work initially and the "uL" error showed up after several uses the problem is likely an electronic or mechanical problem and unit may need to be returned for service if the following procedure does not work.

Set Up

Please insure pan is positioned properly, transportation cardboard properly removed from under the pan and balance is placed on solid surface. Also please insure that the environment is stable—free from excessive air flow, draft, vibration, direct sunlight, extreme temperatures, etc.

Turn on the balance and gently press down on the pan. If the "uL" disappears and is replaced by "oL," it is likely this error can be corrected.

Note: Small weights (5 g, 10 g, 20 g) or objects are needed for preloading scale. The calibration weights provided with this balance are too heavy—smaller weights are needed. Coins such as nickels and quarters may work, however you may need as many as 20 coins to bring some balances back into range.

Procedure

- 1. Turn the unit on. Note: For milligram models please allow 2 to 3 hours warm-up.
- 2. It is likely an R followed by a sequence of numbers will appear and quickly disappear followed by the message "uL."
- 3. Set small weights or coins on the balance pan one at a time until the display gives any type of numerical reading. Remove weights if necessary to obtain a reading close to zero. *Example:* If the balance has 50 g of weight on it and the display is reading "10.00 g" remove a 10 gram weight to obtain a zero reading.
- 4. Push and release the zero button allowing the balance to zero.
- 5. After zero stabilizes, you will see two triangles on the bottom left hand corner of the display.
- 6. Push and release the CAL button and proceed with calibration (refer to the balance manual page 12).
- 7. After calibration is complete, remove the calibration weight only—*leave the weights that were added prior to the calibration weight on the pan.*
- 8. Shut the balance off.
- 9. Remove all the weights.
- 10. Turn the balance back on. If it reads zero, immediately do a standard calibration using the calibration procedure in the manual.
- 11. If the balance continues to show "uL" repeat steps 3 through 8. *Note:* It should require less weight each time to achieve a reading as you step the zero-point back to the proper zero setting. *Example:* If the balance required 50 grams of weight to obtain a numerical reading the first time, it is likely that 30–40 grams of weight will yield a reading the second time the procedure is carried out.
- 12. Continue step 11 until a reading is obtained without any weights on the pan. Once this occurs, calibrate the balance as described in the manual.
- 13. It is recommended that the unit be calibrated regularly. If the scale is used daily, calibrate the unit at least once a week.

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