

Non-Technical SOP

<b>Title</b>	<b>Scale Quality Control</b>	
<b>Prepared by</b>	Stephanie Codina	Date: 3/29/2011
<b>Owner</b>	Stephanie Codina	Date: 3/29/2011

<b>Laboratory Approval</b>		
<b>Print Name and Title</b>	<b>Signature</b>	<b>Date</b>
<i>Refer to the electronic signature page for approval and approval dates.</i>		
<b>Local Issue Date:</b>		<b>Local Effective Date:</b>

<b>12 month (or new) management review and approval: Signature acknowledges SOP version remains in effect with NO revisions.</b>		
<b>Print Name</b>	<b>Signature</b>	<b>Date</b>

Form revised 3/31/09

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**1. PURPOSE**

Properly functioning scales are essential for determining the volume of blood products and ensuring quality control of the Galileo Echo. This procedure outlines the maintenance and quality control steps that will be taken to ensure blood bank scales are accurate.

**2. SCOPE**

This procedure applies to all scales used in the blood bank.

**3. RESPONSIBILITY**

All blood bank staff members must understand how to quality control and calibrate blood bank scales.

**4. DEFINITIONS**

N/A

**5. PROCEDURE**

**Quality Control (Ohaus CS2000 and Scout-Pro)**

Step	Action
1	Quality control is performed on the scale each day of use, after repairs, and following relocation of the scale. At a minimum, scale QC will be performed quarterly.
2	Turn the scale on by pressing the "On/Off Zero" button.
3	Ensure the scale is set to grams. A. If the scale is set to grams, a "g" will be seen in the lower, right-hand corner of the display. B. You can change the unit of measure by pressing and holding the "Unit/Cal" or "Print/Unit" button until the "g" is present.

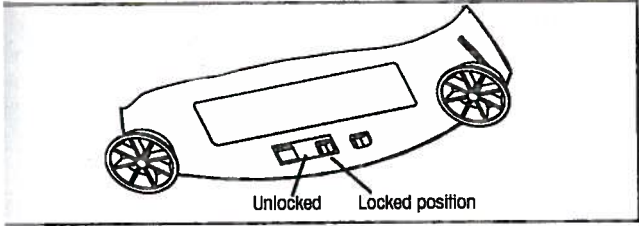
Step	Action
4	Tare the scale to zero by pressing the "On/Off Zero" button. The display should read "0."
5	Place the weight on the scale using the white glove provided. Failure to use the white glove can damage the weights. A. SGAH uses 3 weights for the Ohaus CS2000. a. 20g b. 500g c. 1000g B. WAH uses the 200g weight for the Ohaus CS2000. C. SGAH and WAH use a 100g weight for the Ohaus Scout-Pro.
6	Note the reading of the scale and record on the Blood Bank Scale Calibration and QC Form (Ohaus CS2000) or on an Echo maintenance form (Ohaus Scout-Pro).
7	Repeat with additional weights if applicable.
8	Document the performance acceptability on the form. A. The acceptable range is the weight $\pm$ 1g a. 20g weight acceptable range = 19-21g b. 100g weight acceptable range = 99.05-100.05g c. 200g weight acceptable range = 199-201g d. 500g weight acceptable range = 499-501g e. 1000g weight acceptable range = 999-1001g  B. Perform a calibration if any reading is outside of acceptable range. Do not use the scale until the calibration has been performed.

**Calibration (Ohaus CS2000)**

Step	Action
1	Calibration is performed upon receipt, semi-annually, and after activities that may affect the calibration of the scale such as repair or relocation of the scale.
2	The calibration can be aborted at any time by turning the scale off. The message "CAL E" will display if the calibration steps are not followed or the incorrect weight is used.
3	Press and hold the "Unit Cal" button to start the calibration process. The display will show "CAL."
4	Press the "On/Off Zero" button capture 0. The display will show "-C-" while the scale stores the zero load signal.

Step	Action
5	The display will show "C1000." 1000 is the calibration weight in grams. Place the 1000g weight on the scale platform using the white glove.
6	Press the "On/Off Zero" button. The display will show "-C-" while the scale stores the calibration point signal.
7	Following calibration, the display will return to normal weighing mode. Document the calibration on the QC form. Perform QC prior to use.

**Calibration (Ohaus Scout-Pro)**

Step	Action
1	Calibration is performed upon receipt, semi-annually, and after activities that may affect the calibration of the scale such as repair or relocation of the scale.
2	Unlock the lockswitch. A. The lockswitch is located under the balance. B. The lockswitch is used to lock out the menu mode preventing unauthorized changes.
	
3	Ensure the scale is off.
4	Press the "On/Zero Off" button and hold until the "Menu" appears, then release.
5	The screen will change to "CAL."
6	Press the On/Zero Off" button. A. "-C-" will appear on the screen while the scale balances. B. "200g" will appear on the screen.
7	Place the 200g mass on the scale and press the "On/Zero Off" button.
8	Remove the mass when the screen displays "200.00g." The tare will return to "0.00g."
9	Lock the lockswitch.

Form revised 3/21/00

**6. RELATED DOCUMENTS**

- A. Form: Blood Bank Scale Calibration and QC Form
- B. Form: Washer Residual Volume Test and Washer Dispense Accuracy Test Maintenance Record
- C. Probe Accuracy Test Maintenance Record

**7. REFERENCES**

- 1. Roback, J.D., Combs, M.R., Grossman, B.J., Hillyer, C.D. 2008. Technical Manual of the AABB, 16th ed. AABB Publishing, Bethesda, Maryland.
- 2. Standards for Blood Banks and Transfusion Services, 2011. AABB, 27th ed. AABB Publishing, Bethesda, Maryland.
- 3. Ohaus Compact Scales Model CS2000 Operating Manual. Ohaus Corporation, Pine Brook, NJ. 2002.

**8. REVISION HISTORY**

Version	Date	Reason for Revision	Revised By	Approved By
		Supersedes WAB516.01, SGAH.BB12.000		
000	6.21.2011	Section 5: Add QC and calibration instructions for the Ohaus Scout-Pro scale. Section 6: Add additiional documents	SCodina	NCacciabeve
001	9.12.2012	Section 5: Removed requirement to QC the dietetic scale	SCodina	NCacciabeve

**9. ADDENDA AND APPENDICES**

None



Month and Year: \_\_\_\_\_

### Scale Calibration and Quality Control Form

Date	Tech	20g Weight	500g Weight	1000g Weight	Acceptable?	Reviewed By:
		Acceptable Range 19-21g	Acceptable Range 499-501g	Acceptable Range 999-1001g	Y / N	
1						
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QC Each Day of Use, After Repairs, After Relocation

NIU = Not In Use on This Day

Ohaus Scout Pro Calibration Performed Semi-Annually	
200g Weight	
Acceptable Range 199-201 g	
Acceptable? Y/N	
Serial Number	

Ohaus CS2000 Calibration Performed Semi-Annually	
1000g Weight	
Acceptable Range 999-1001g	
Acceptable? Y/N	

09.12.12

Revised By: \_\_\_\_\_

Date: \_\_\_\_\_



Month and Year: \_\_\_\_\_

### Scale Calibration and Quality Control Form

Date	Tech	200g Weight	Acceptable?	Reviewed By:
		Acceptable Range 199-201g	Y / N	
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QC Each Day of Use, After Repairs, After Relocation

NIU = Not In Use on This Day

09.12.12

Ohaus Scout Pro Calibration Performed Semi-Annually	
200g Weight	
Acceptable Range 199-201 g	
Acceptable? Y/N	
Serial Number	

Ohaus CS2000 Calibration Performed Semi-Annually	
1000g Weight	
Acceptable Range 999-1001g	
Acceptable? Y/N	

Revised By: \_\_\_\_\_

Date: \_\_\_\_\_