Hale Products, Inc. Service Bulletins

Bulletin#: SB109   **Revision#:** A   **Date:** 10-22-2009

Product Type Covered: Hale Pump ☐   **FoamLogix** X   ☐

Keywords: FoamLogix low flow LF calibration

Product Covered: FoamLogix 2.1A-LF with display head P/N 111530-15

Problem Statement: Special "LF" (low-flow) versions of the FoamLogix 2.1A require special calibration procedures and identification.

Written by: Alan Smith   **Approved by:** Paul Wentz

Customer Service Designee: Russ Walker

Body of the Bulletin

Customer requests have led to a special low-flow version of the FoamLogix 2.1A (2.1-LF). The FoamLogix display's software has been changed to increase low-flow accuracy for low flow product applications (p/n 111530-15, software versions 1.5 and 1.6). This software change has created the need for the installer to choose one of two separate calibration windows and routines – one for "low flow" or one for "standard flow." When software versions 1.5 or 1.6 are calibrated for either of these two calibration windows, please note that performance will not meet the published NFPA certification for our standard FoamLogix 2.1A version 1.4 display software.

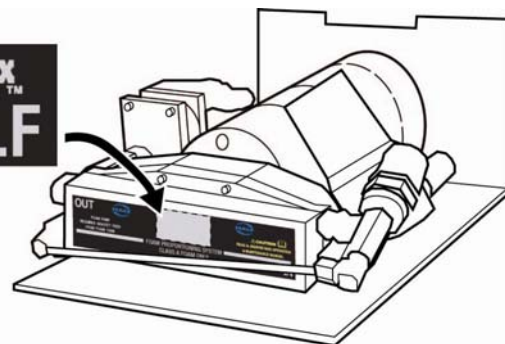This bulletin has instructions to calibrate for accuracy within the "low flow" window.

A. Check system for proper labels. Systems shipped between June 2008 and October 2009 may not have the proper labels. Affix the new labels to the FoamLogix display head and the FoamLogix pump as shown below.
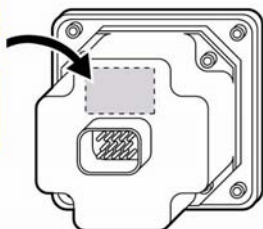

FoamLogix display head label

FoamLogix pump label

Perform calibration steps (for low flow range).

1. If not already attached, connect a hose to the barbed fitting located on the 3-way bypass valve on the foam pump/motor assembly.

2. Place the hose into a clean calibrated measuring container to confine the discharged foam. The original 5 gallon foam container works well.
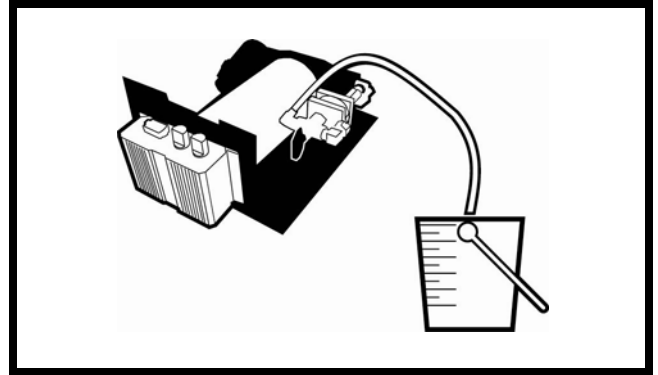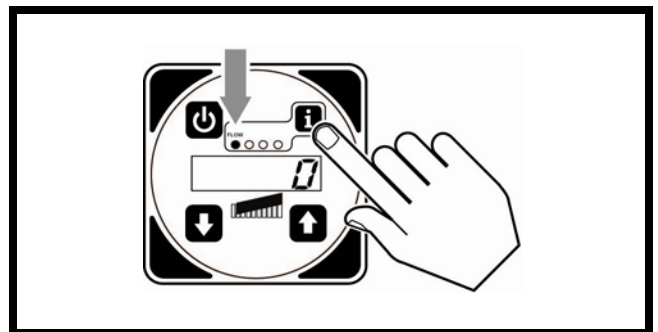

3. Turn the bypass valve handle so that the ARROW points in the direction of the barbed fitting (foam flows out the bypass).
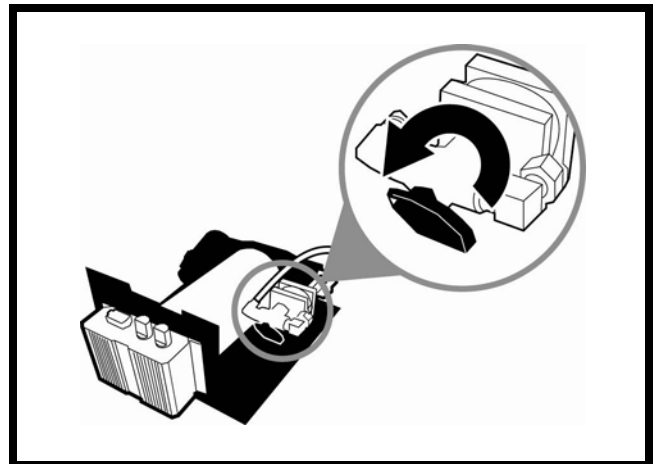
4. Make certain the FoamLogix display is showing the water flow rate screen ("**FLOW**" LED is ON). If not, press the "**i**" button until the water flow rate screen is shown.

   [Do not enter calibration at this time]

5. Put the FoamLogix display into simulated water flow by pressing the UP ARROW and DOWN ARROW buttons simultaneously.
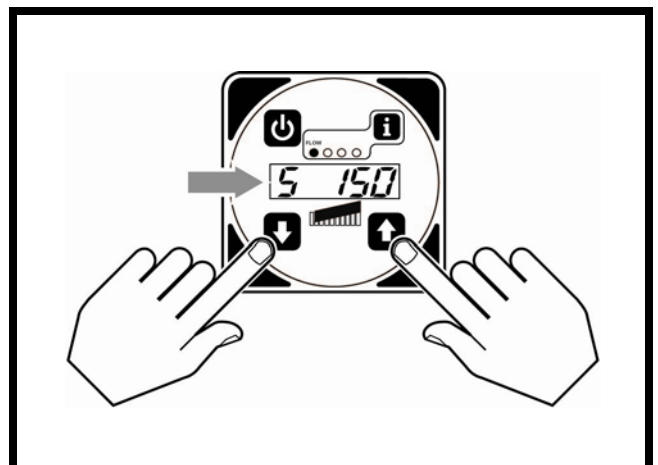
   <u>English units</u>
   The FoamLogix display should show "**S 150**", or less (<u>S</u>imulated flow, <u>150</u> gpm).
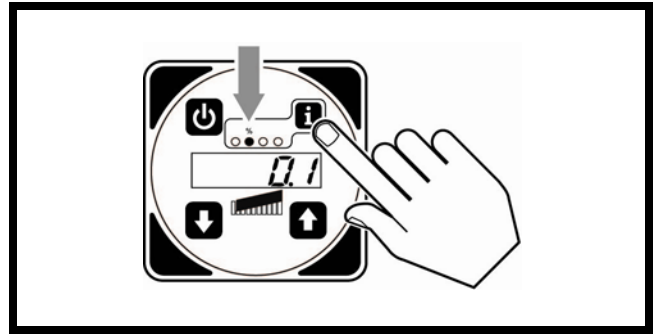
   <u>Metric units</u>
   The FoamLogix display should show "**S 567**", or less (<u>S</u>imulated flow, <u>567</u> lpm).

   If not, use the UP/DOWN arrow buttons to adjust the value.

6. Press the "**i**" button once on the FoamLogix display to show the foam rate percentage screen ("**%**" LED is ON). Use the UP ARROW/DOWN ARROW buttons to set the foam flow percentage to 0.1%.
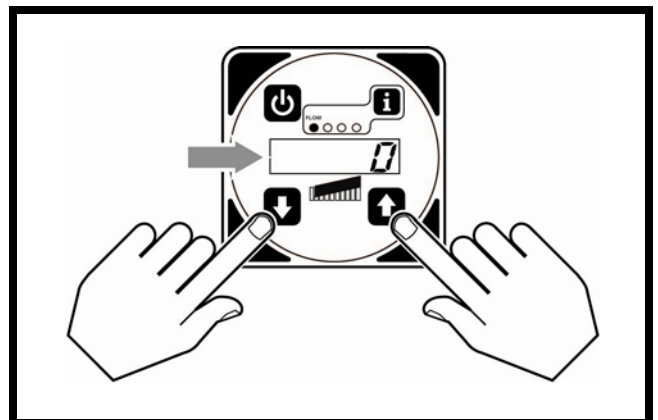

7. Press the ON/OFF button on the FoamLogix display. The system will begin flowing foam. Press the ON/OFF button after 10 seconds to stop the foam flow.
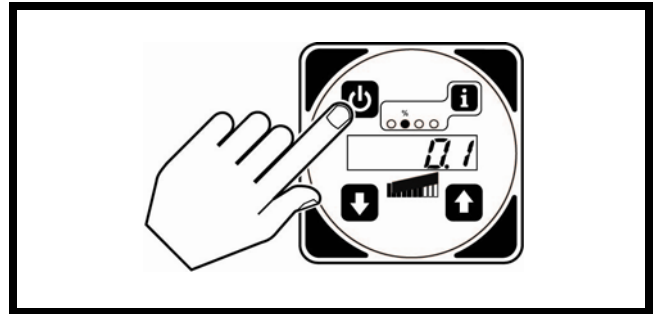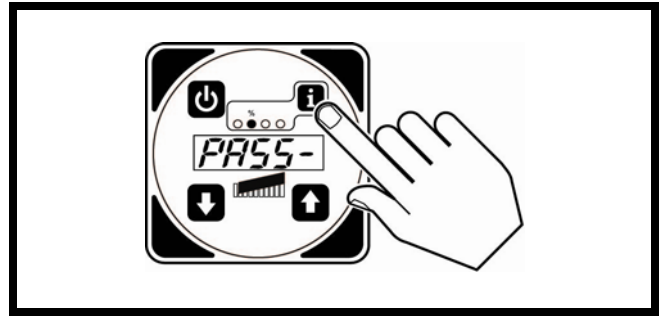

8. Press the "**i**" button on the FoamLogix display 3 times. Make certain the FoamLogix display is showing the water flow rate screen ("**FLOW**" LED is ON).
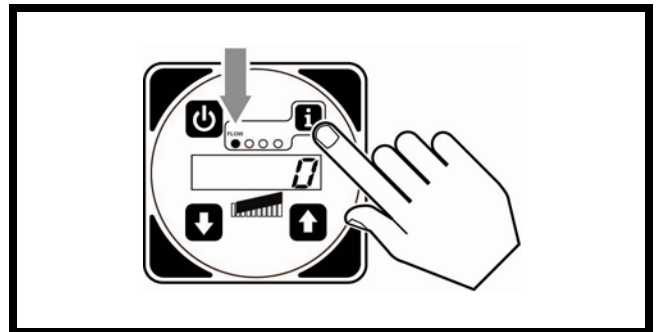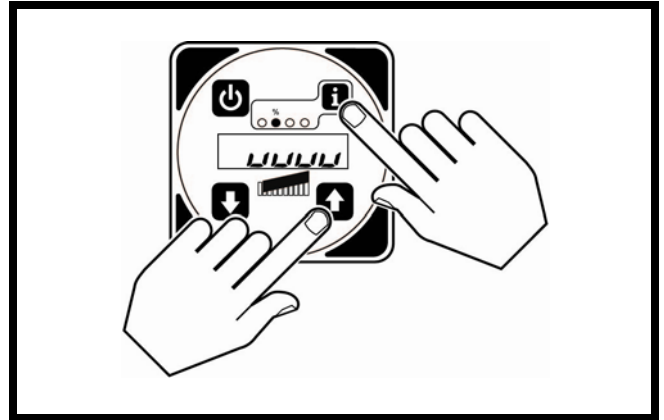

9. Take the FoamLogix display out of simulated water flow by pressing the UP ARROW and DOWN ARROW buttons simultaneously.
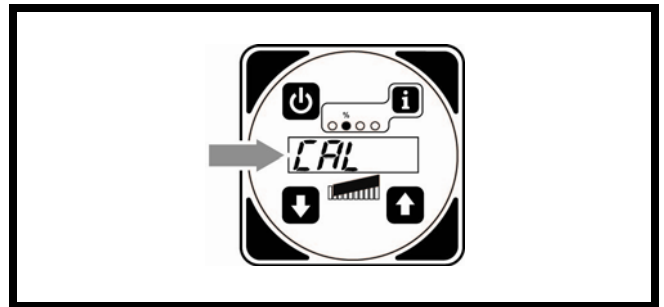
10. Press and hold the "**i**" button on the FoamLogix display until "**PASS**" is shown (approximately 2 seconds).
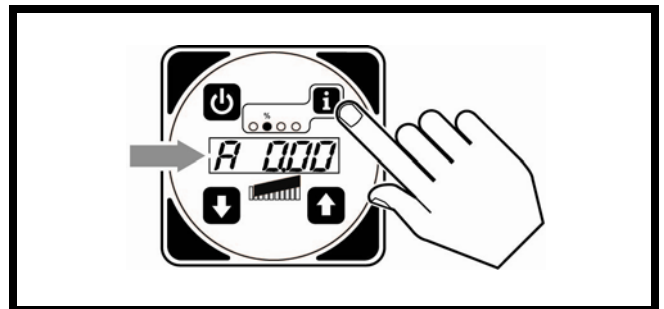
11. Continue holding the "**i**" button and press the UP ARROW button 4 times (↑↑↑↑).
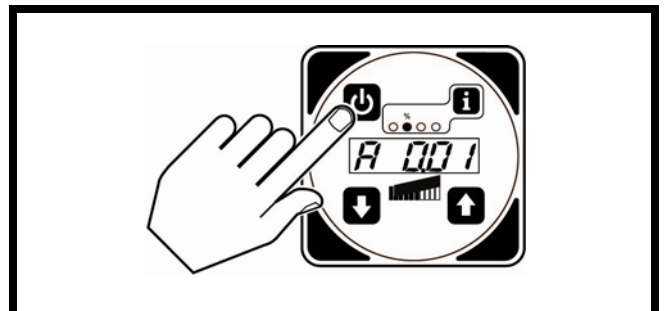A "**u**" is shown on the display with each UP ARROW button press.

12. Release the "**i**" button. The display shows "**CAL**" for about 2 seconds indicating the calibration mode is entered.
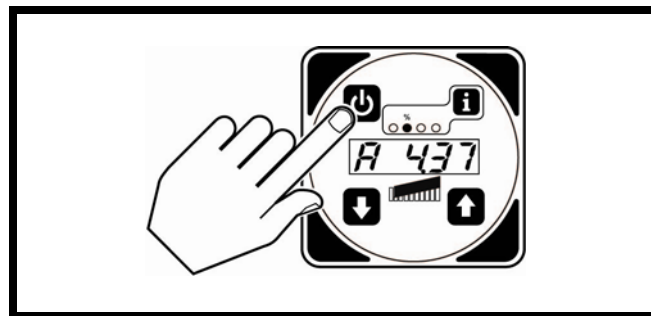
13. Press the "**i**" button 4 times until "**A 0.00**" is shown.

14. Press the red ON/OFF button. The bar graph illuminates 6 bars, the foam motor begins running, and the display value starts increasing.

15. When the calibrated measuring container is filled to the required level, press the red ON/OFF to STOP the foam flow.

16. Use the UP ARROW/DOWN ARROW buttons and set the value to the known amount of foam collected in the calibrated measuring container.
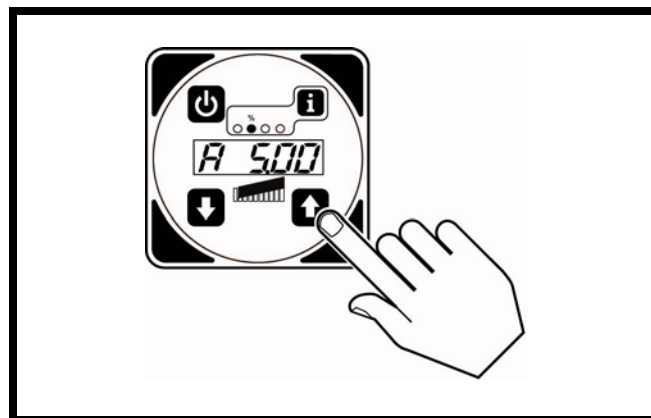
17. If the foam is dispensed into a **clean** container, return the concentrate to the foam tank and place the bypass hose back into the container.

⚠️ **IMPORTANT!**
If the container is NOT clean, the foam becomes contaminated and must be discarded.

18. Repeat preceding steps 14 through 16.

19. Press the "**i**" button to view the foam flow calibration factor. Write this number down for future reference.

   **Verify the foam calibration factor is between 270 and 310.**

    Contact customer service at 1-800-533-3569 if the calibration factor does not fall within the required calibration range.
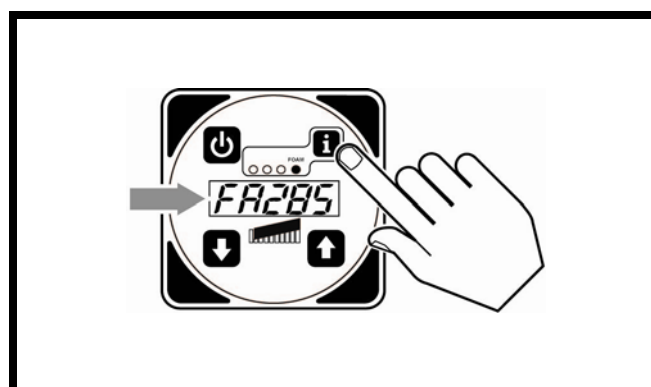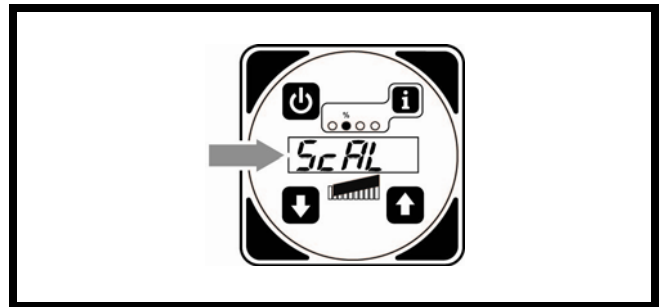
20. Press and hold the "**i**" button on the FoamLogix display until "**PASS**" is shown (approximately 2 seconds).
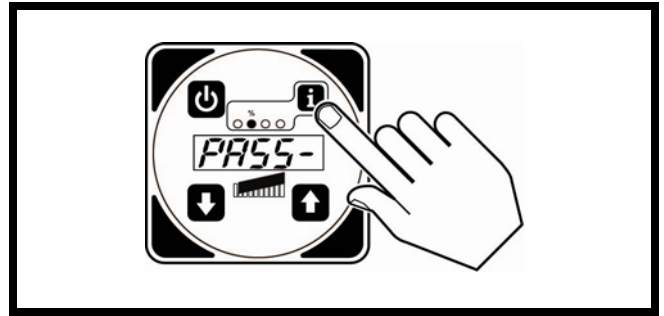
21. Continue holding the "**i**" button and press the UP ARROW button 4 times (↑↑↑).
A "**u**" is shown on the display with each UP ARROW button press.
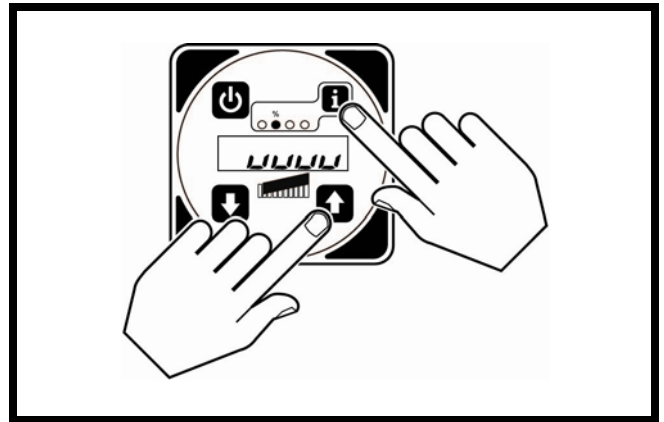
22. Release the "**i**" button. The display shows "**ScAL**" for about 5 seconds. The display re-initializes and the foam calibration is saved.

23. Foam flow calibration is now complete.
Water flow calibration, default foam injection rate, and default simulated water flow can be set using the standard instructions in the manual (029-0021-74-0) supplied with the unit.