

# LAFFERTY EQUIPMENT MFG., INC. OPERATION INSTRUCTIONS

## PORTABLE LC FOAMER W/ 5 GALLON CART COMPLETE

### Requirements

35 – 100 PSI Water — Up to 3 GPM  
Compressed Air — Up to 5 SCFM  
3/4" I.D. Discharge Hose

Water Temperature

Ambient to 140° F



*Pail not included.*

### OPTIONS

- # 180153 – 00250 Nozzle  
(For increased foam throw)
- # 288473 – Water Regulator  
Assembly with Gauge  
(For fluctuating water pressure)

Model # 915805, Portable LC Foamer W/ 5 Gallon Cart Complete  
(with 25' Hose Assembly)

Ask about our Portable 20, 40, and 45 Gallon LC Foamers.

# PORTABLE LC FOAMER W/ 5 GALLON CART COMPLETE OPERATION INSTRUCTIONS

## IMPORTANT: FOAMER SUPPLIED WITHOUT A BACKFLOW PREVENTER

TO PREVENT POSSIBLE CHEMICAL BACKUP INTO THE WATER SYSTEM, COMPLY WITH LOCAL PLUMBING CODES AND INSTALL APPROPRIATE BACKFLOW PREVENTER BEFORE OPERATING.

CAUTION: ALWAYS OBSERVE GOOD SAFETY HABITS. WEAR PROTECTIVE CLOTHING, GLOVES, AND EYE WEAR. DIRECT DISCHARGE AWAY FROM YOURSELF AND OTHERS.

### TO OPERATE (See Parts Diagram, Facing Page)

1. Foamer supplied without a backflow preventer. To prevent possible chemical backup into the water system, comply with local plumbing codes and install appropriate backflow preventer. Then, connect your 35 – 100 PSI water line and your air line to the foamer.
2. Use **only** the 50250 nozzle supplied with the foamer or the optional 00250 nozzle. If your water pressure exceeds 100 PSI, remove the discharge ball valve.
3. *Stapled to these instructions, with a matching color-coded chart, are metering tips which control your chemical to water dilutions.* You will need to know the water pressure and the number of ounces of chemical needed per gallon of water to determine the correct tip color. (See chemical label for manufacturer's recommendation.)
  - A. Locate your water pressure in the chart. The number below it is your water flow rate in **gallons per minute**.
  - B. Multiply the **gallons per minute** by the number of **ounces of chemical needed per gallon** of water.
  - C. Match answer to the *nearest* number in the metering tip selection chart. [The tip selection chart is based on water-thin chemical. Thicker chemicals will require a larger metering tip. *If selected metering tip does not produce desired foam consistency, increase tip size until desired foam consistency and cleaning results are achieved.*]
  - D. Install selected metering tip into solution check valve. Next, push the chemical tube over the solution check valve and immerse the chemical strainer into your chemical concentrate.

4. While firmly holding foam wand, **point the discharge away from yourself and others**. Then, open the discharge ball valve. Open the water ball valve and the air ball valve. Observe foam quality. **If foam is too wet:**
5. Foam consistency can be changed by adjusting the air regulator.

### AIR REGULATION PROCEDURES

Air pressure is very important for proper operation; air pressure must be LOWER than water pressure. Pull out adjustment knob on **air regulator**, and turn it **slowly clockwise** to increase air pressure until desired foam consistency is achieved. Make only slight adjustments, then wait to see the results. If the flow of foam surges and/or hose “bucks,” you must decrease the air pressure by *slightly* turning the regulator **counterclockwise** until the foam stabilizes. “Fine tune” your adjustments by making *slight* turns **clockwise and/or counterclockwise** until foam is desired consistency. Once adjustments are made, push lock **air regulator**. If foam consistency is too wet or hose is still “bucking,” try installing a larger **metering tip** and/or see Troubleshooting Guide (pg. 4).

6. Apply foam from the bottom and work up to prevent streaking.
7. When foaming is complete, close the discharge ball valve. Return to foamer and close the water ball valve. Then slowly re-open the discharge ball valve. Expect a **strong** blast of foamy solution. After hose is cleared out, close the air ball valve and discharge ball valve. Store hose on hose rack.
8. Rinse the work surface before the foam dries.

### EXAMPLE OF METERING TIP SELECTION Portable LC Foamer at 50 PSI

- 50 PSI = 1.46 GPM
- 2 ounces of chemical per gallon of water
- $1.46 \times 2 = 2.92$
- $2.92 \approx 2.7$  for thin chemical (pink tip)  
(thicker chemicals will require a larger tip)

**CAUTION: SHUT DOWN AFTER EACH USE! NEVER LEAVE FOAMER UNATTENDED WITHOUT CLOSING THE INCOMING WATER AND AIR BALL VALVES AND RELIEVING PRESSURE IN THE HOSE.**

WATER PRESSURE	40 PSI	50 PSI	60 PSI	70 PSI	80 PSI	90 PSI	100 PSI
PORTABLE LC FOAMER WATER FLOW RATE	1.34 GPM	1.46 GPM	1.54 GPM	1.59 GPM	1.76 GPM	1.80 GPM	1.91 GPM

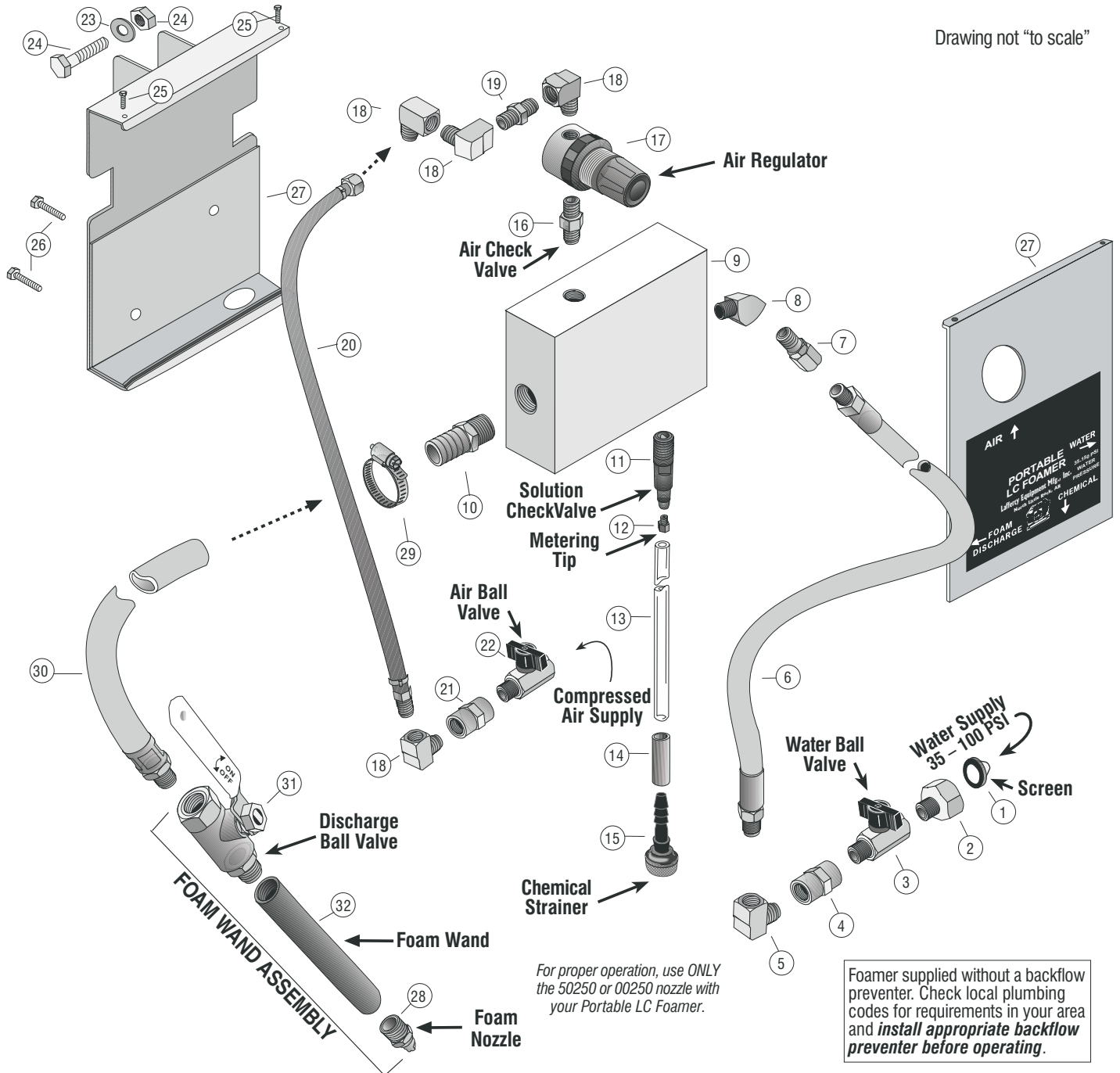
The number under each color in the chart below represents the **average ounces of water-thin chemical which will pass through the tip per minute.**

### METERING TIP SELECTION IN OUNCES PER MINUTE (AVERAGE)

COLOR	Brown	Clear	Bright Purple	White	Pink	Corn Yellow	Dark Green	Orange	Gray	Light Green	Medium Green	Clear Pink	Yellow Green	Burgundy	Pale Pink	Light Blue	Dark Purple	Navy Blue	Clear Aqua	Black
Thin Chemical	0.84	1.16	1.4	2.0	2.7	3.4	4.0	5.3	6.1	7.0	8.5	9.2	11.2	12.5	12.9	14.2	17.6	21.4	30.2	40.4

# PORTABLE LC FOAMER W/ 5 GALLON CART COMPLETE – Model # 915805

Drawing not "to scale"



For proper operation, use ONLY the 50250 or 00250 nozzle with your Portable LC Foamer.

Foamer supplied without a backflow preventer. Check local plumbing codes for requirements in your area and **install appropriate backflow preventer before operating.**

CALL #	QTY.	PART #	DESCRIPTION	CALL #	QTY.	PART #	DESCRIPTION
1	1	102050	ADAPTER WASHER, GH W/SCREEN	18	4	257378	ELBOW, ST., NPB, 1/4"
2	1	102023	ADAPTER, NPB, FGH x 3/8" MPT	19	1	429686	NIPPLE, HEX, NPB, 1/4"
3	1	413612	BALL VALVE, 3/8" FMB	20	1	805026B	HOSE, AIR, 1/4" x 26", 1/4" MPT & SWIVEL FE
4	1	506672	COUPLING, NPB, 3/8" (MODIFIED)	21	1	506669	COUPLING, NPB, 1/4" (MODIFIED)
5	1	257380	ELBOW, ST., NPB, 3/8"	22	1	413605	BALL VALVE, 1/4" FMB
6	1	805520B	HOSE, 1/2" x 20 1/2", 3/8" MPT (BOTH ENDS)	23	1	398961	WASHER, SS, 5/16"
7	1	243347	SWIVEL, NPB, 3/8" x 3/8"	24	1	393215	BOLT, SS, 5/16" -18 x 1 1/2" W/ NUT
8	1	257606	ELBOW, ST., 45°, NPB, 3/8"	25	2	396466	SCREW, TYPE F, SS, #6 x 1/2" W/ WASHER
9	1	212106	FOAMER BODY, PP, LC PORTABLE	26	2	396464	SCREW, HCSS, #10 x 1"
10	1	119282	HOSE BARB, NPB, 3/4" x 1/2" MPT (SCREENED)	27	1	222078	BASE & COVER, SS, PORTABLE LC
11	1	491311	CHECK VALVE, SOLUTION, PP/VITON, 1/4"	28	1	180152	NOZZLE, NPB, 1/2" - 50250
12	1	443798	METERING TIPS, SET (20)	29	1	134306	HOSE CLAMP, 3/4"
13	1	473003	TUBE, CHEMICAL, 1/4" x 3'	30	1	803725	HOSE, BLUE, 3/4" x 25', 1/2" MPT (ONE END)
14	1	475100	WEIGHT, CHEMICAL TUBE, 1/4"	31	1	413641	BALL VALVE, NPB, 1/2" FM(A)
15	1	150115	STRAINER, CHEMICAL, HASTELLOY, 1/4"	32	1	536603	WAND, PP, 14" x 1/2" FF
16	1	491302	CHECK VALVE, AIR, NPB, 1/4"	not shown	1	709215	CART ASSEMBLY, SS, 5 GALLON ROUND
17	1	288360	REGULATOR, AIR, 1/4"	not shown	2	708600	TIRE, PLASTIC, 8" (REPLACEMENT)

# TROUBLESHOOTING GUIDE

for

## PORTABLE LC FOAMER W/ 5 GALLON CART COMPLETE

**PREVENTIVE MAINTENANCE:** Remove the chemical tube from your chemical concentrate and place it in warm water. Completely open the water ball valve and discharge ball valve for approximately 30 seconds to flush the unit. Relieve pressure in the discharge hose by shutting off the water ball valve first, then the discharge ball valve. Check and/or clean the chemical strainer; replace if missing (see diagram, pg. 3).

PROBLEMS WITH FOAMER	POSSIBLE CAUSE / SOLUTION																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
A) Foamer will not draw chemical.	•			•		•	•	•	•	•		•	•	•	•					•
B) Foam surges and/or hose “bucks.”	•	•	•	•		•	•	•	•	•	•	•	•	•	•		•			•
C) Foam output too wet.		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•			•
D) Foam output too dry.	•			•													•			
E) Water flowing into chemical container.										•										
F) Foam does not clean properly.												•						•	•	
G) Water/chemical backing up into air line.					•															

## POSSIBLE CAUSE / SOLUTION

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. <b>Air pressure too high for available water pressure</b> – Adjust the air regulator slowly counterclockwise.</li> <li>2. <b>Use of an oiler on the airline will cause poor foam quality</b> – Use only clean, dry air.</li> <li>3. <b>Inadequate air supply</b> – Open air inlet valve fully. Adjust air regulator slowly clockwise. Check air line to be sure adequate pressure is being supplied.</li> <li>4. <b>Air regulator clogged or failed</b> – Clean or replace air regulator.</li> <li>5. <b>Air check valve clogged or failed</b> – Clean or replace the air check valve.</li> <li>6. <b>Water pressure fluctuating or temperature too high</b> – Install a water regulator to stabilize pressure or decrease water temperature.</li> <li>7. <b>Foam hose wrong size or kinked</b> – Must be 3/4" I.D. Straighten the hose.</li> <li>8. <b>Nozzle size too small</b> – Use only the recommended 50250 or 00250 nozzle.</li> <li>9. <b>Water inlet and discharge ball valves not completely open</b> – Completely open the water and discharge ball valves.</li> <li>10. <b>Solution check valve clogged or failed</b> – Clean or replace solution check valve.</li> </ol> | <ol style="list-style-type: none"> <li>11. <b>Water inlet adapter screen clogged</b> – Clean the water inlet adapter screen. [Completely unscrew FGH adapter from water supply for easy cleaning or replacement of screen; see part #1, pg. 3.]</li> <li>12. <b>Improper chemical</b> – Ensure product is recommended for foaming and/or the application.</li> <li>13. <b>Chemical tube not immersed in chemical or chemical depleted</b> – Immerse tube or replenish.</li> <li>14. <b>Chemical strainer or metering tip blocked</b> – Clean or replace chemical strainer and/or metering tip.</li> <li>15. <b>Chemical tube stretched out where tube slides over solution check valve or pin hole/cut in chemical tube</b> – Cut approximately 1/2" off end of tube or replace tube.</li> <li>16. <b>Vacuum leak in chemical pick-up assembly</b> – Tighten the connection(s).</li> <li>17. <b>Chemical to water ratio too high</b> – Install smaller tip.</li> <li>18. <b>Chemical to water ratio too low</b> – Install larger tip.</li> <li>19. <b>Soil has hardened on surface</b> – Reapplication may be necessary. Always rinse foam <b>before</b> it dries.</li> <li>20. <b>Water scale or chemical build-up may have formed in the foamer body causing poor or no chemical pick-up</b> – To descale, carefully remove fittings and soak <i>entire</i> foamer body in descaling acid.</li> </ol> |
|--|---|

**Lafferty Equipment Manufacturing, Inc.**

5614 Oak Grove Road  
 North Little Rock, Arkansas 72118  
 Telephone: (501) 851-2820 — FAX: (501) 851-3719  
 www.laffertyequipment.com

**Made in the USA**

Distributed by: