

LAFFERTY EQUIPMENT MFG., INC. INSTALLATION / OPERATION INSTRUCTIONS

HVHC FOAMER

Requirements

30 – 100 PSI Water — Up to 6 GPM

25 – 100 PSI Air — Up to 14 SCFM

1" I. D. Discharge Hose

Water Temperature

Ambient to 140° F



The Lafferty HVHC (High Volume High Concentrate) Foamer is designed for those *tough cleaning jobs* which require a **high concentration of chemical.**

OPTIONS

- *Air Gauge*
- *Water Gauge*
- *Water Regulator - for fluctuating water pressure*
- *Backflow Preventer*
- *Stainless Steel Hose Rack*

Model # 916110, HVHC Foamer
(with nozzle only)

Model # 916115, HVHC Foamer Complete
(with 50' hose, ball valve, wand, and nozzle)

**Need to throw foam 40' or more? Ask about our
Super HV Foamer**

HVHC FOAMER INSTALLATION / OPERATION INSTRUCTIONS

IMPORTANT: FOAMER SUPPLIED WITHOUT A BACKFLOW PREVENTER

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

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

TO INSTALL (See Parts Diagram, Facing Page)

1. Mount the HVHC Foamer to a suitable surface.
2. **Foamer is supplied without a backflow preventer. To prevent possible chemical back up into the water system, comply with local plumbing codes and install appropriate backflow preventer.** Then, connect your 30 – 100 PSI water and air lines to the foamer.
3. Connect the foam hose to the hose barb and secure with the clamp. **[Foam hose must be 1" I. D.]**
4. Connect the foam wand assembly to the hose. **[Use only the 3/4" nozzle supplied with foamer. If your pressure exceeds 100 PSI remove the discharge ball valve.]**
5. Push the chemical tube over the toe nipple. Then, immerse the chemical strainer into your chemical concentrate.

Air Adjustment Guidelines

For desired foam consistency, you may need to adjust the air pressure with the air regulator and the volume with the needle valve. To make adjustments, turn the regulator knob 1/4 of a revolution at a time. Then, turn the needle valve slightly. Wait to see the results before continuing.

[Chemical concentration is directly affected by air pressure and volume. Generally speaking, lower air pressure/volume yields the strongest possible chemical concentration.]

TO OPERATE

1. Make sure the needle valve is turned completely **clockwise**. Then, turn the needle valve 2 - 3 *complete* turns **counterclockwise**. Next, pull out the adjustment knob on the air regulator.
2. While firmly holding the 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 and observe foam quality. If foam is too wet:

- A. Turn air regulator knob **clockwise** to increase pressure until foam is desired consistency. If flow of foam surges and/or becomes too dry, turn the needle valve slightly **clockwise** to decrease volume until foam is desired consistency. Wait to see the results before continuing. It may be necessary to "fine tune" your adjustments by turning the regulator and needle valve **clockwise** and/or **counterclockwise** until foam is desired consistency.
 - B. When desired foam consistency is achieved, push lock the air regulator.
3. Apply foam from the bottom and work up to prevent streaking.
 4. When foaming is completed, close the discharge ball valve. Return to foamer and close the water ball valve. Then slowly re-open the discharge valve. Expect a strong blast of foamy solution. After hose is cleared out, close the air ball valve and store the hose.
 5. Rinse the work surface before foam dries.

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

WATER PRESSURE	40 PSI	50 PSI	60 PSI	70 PSI	80 PSI	90 PSI	100 PSI
HVHC FOAMER	3.64	4.06	4.31	4.53	4.91	5.20	5.38
WATER FLOW RATE	GPM	GPM	GPM	GPM	GPM	GPM	GPM

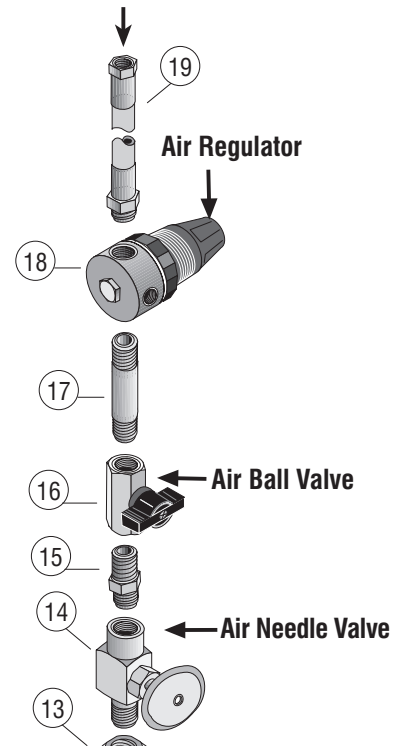
PREVENTIVE MAINTENANCE: When the foamer will be out of service for extended periods, the risk of residual chemical build-up is increased. To prevent build-up, remove chemical tube from chemical concentrate and place it in warm water. Completely open the water supply valve for 30 seconds to flush. Check and/or clean chemical strainer; replace if missing.

HVHC FOAMER COMPLETE - MODEL # 916115

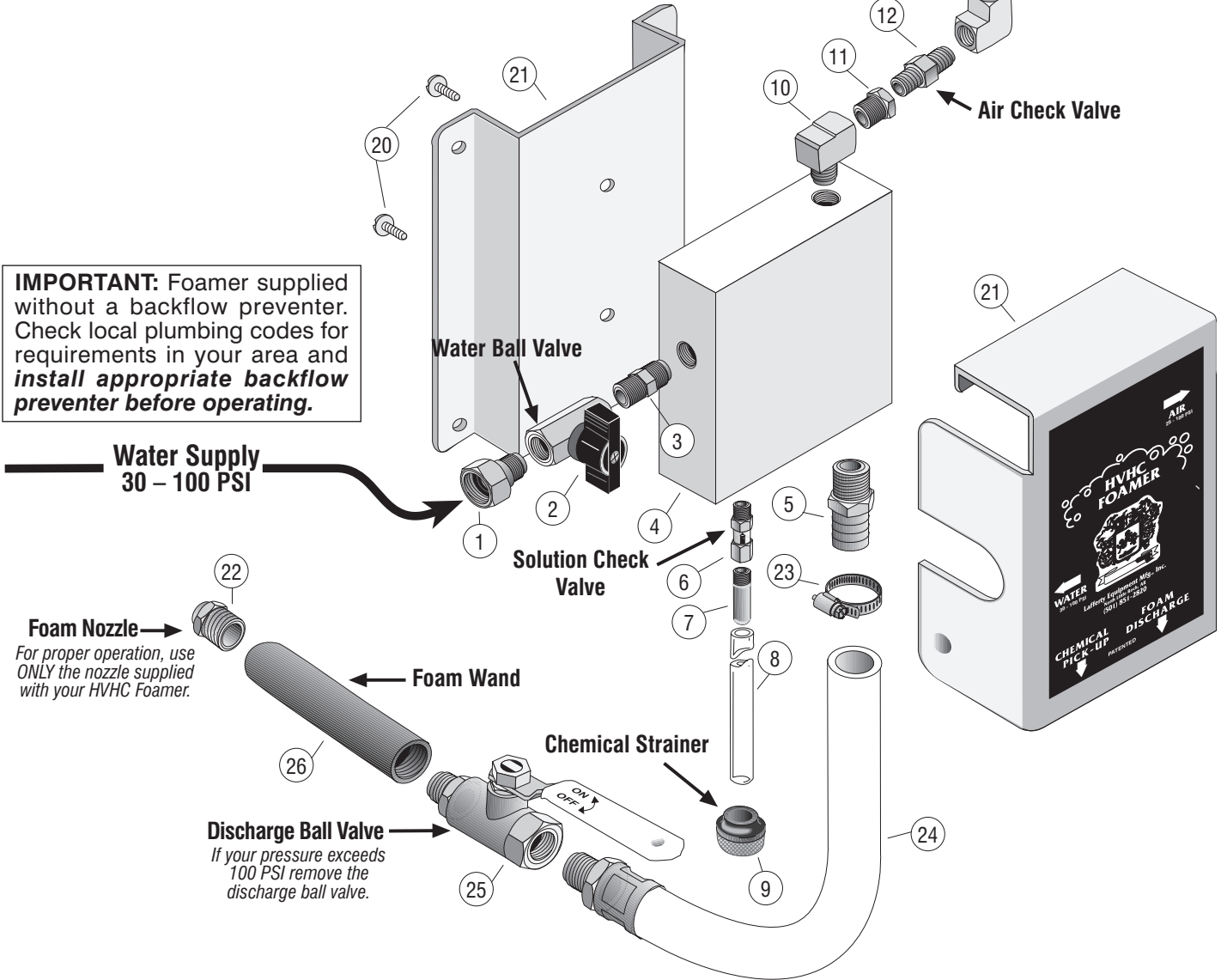
Compressed Air Supply
25 - 100 PSI

QTY.	CALL #	DESCRIPTION	PART #
1	1	ADAPTER, FGH X 3/8" MPT	102023
1	2	BALL VALVE, 3/8" FFB	413608
1	3	NIPPLE, HEX, 3/8"	429689
1	4	FOAMER BODY, HV/HVHC	212113
1	5	HOSE BARB, 1" x 3/4" MPT	119293
1	6	CHECK VALVE, SS, 1/4" FM	491328
1	7	NIPPLE, TOE, 1/4" x 1 1/2"	492742
1	8	TUBE, CHEMICAL 7/16" x 6'	474749
1	9	STRAINER, MONEL 3/8"	150119
1	10	ELBOW, ST., 3/8"	257380
1	11	BUSHING, 3/8" x 1/4"	305216
1	12	CHECK VALVE, AIR, SS 1/4"	491306
1	13	ELBOW, 90°, 1/4"	257358
1	14	NEEDLE VALVE, 1/4"	660797
1	15	NIPPLE, HEX, 1/4"	429686
1	16	BALL VALVE, 1/4" FMB	413605
1	17	NIPPLE, SS, 1/4" x 2"	429702
1	18	REGULATOR, AIR, 1/4"	288360
1	19	HOSE, AIR, 1/4" x 24"	195182
2	20	SCREW, HCSS #10 x 1"	396464
1	21	BASE & COVER, HVHC	222555
1	22	NOZZLE, 3/4" - HV	180154
1	23	HOSE CLAMP, 1"	134311
1	24	HOSE, 1" x 50', 3/4" MPT	801251
1	25	BALL VALVE, NPB, 3/4" FM(A)	413648
1	26	WAND, FOAM, HV, 14"	536605

These 4 items are not included with the HVHC Foamer, #916110



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



Foam Nozzle
For proper operation, use ONLY the nozzle supplied with your HVHC Foamer.

Discharge Ball Valve
If your pressure exceeds 100 PSI remove the discharge ball valve.

TROUBLESHOOTING GUIDE

for

HVHC FOAMER

PROBLEMS	POSSIBLE CAUSE / SOLUTION																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
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

- Air pressure/volume too high for available water pressure** – Slightly adjust needle valve clockwise and/or adjust the air regulator slowly counterclockwise.
- Use of an oiler on the airline will cause poor foam quality** – Use only clean, dry air.
- Inadequate air supply** – Open air inlet valve fully/adjust needle valve counterclockwise and/or air regulator clockwise.
- Needle valve and/or air regulator clogged or failed** – Clean or replace needle valve or air regulator.
- Air check valve clogged or failed** – Clean or replace the air check valve.
- Water pressure fluctuating or temperature too high** – Install a water regulator to stabilize pressure or decrease water temperature.
- Foam hose too long or wrong size or kinked; must be 1" I.D.** – For pressure below 65 PSI, 50' is the maximum length **recommended**; for pressures over 65 PSI, 75' is the maximum. Straighten the hose.
- Nozzle size too small** – Must be a part #180154 nozzle.
- Water inlet and discharge ball valves not completely open** – Completely open the water and discharge ball valves.
- Solution check valve clogged, or failed** – Clean or replace solution check valve.
- Trash/rust clogging foamer aspirator** – Disconnect water from unit and visually inspect; remove blockage.
- Improper chemical** – Ensure product is recommended for foaming and/or the application.
- Chemical tube not immersed in chemical or chemical depleted** – Immerse tube or replenish.
- Chemical strainer blocked** – Clean or replace chemical strainer.
- Chemical tube stretched out where tube slides over check valve or pin hole/cut in chemical tube** – Cut approximately 1/2" off end of tube or replace tube.
- Vacuum leak in chemical pick-up assembly** – Tighten the connection(s).
- Soil has hardened on surface** – Reapplication may be necessary. Always rinse foam **before** it dries.
- Water scale or chemical build-up may have formed in the foamer body causing poor pick-up** – To descale, carefully remove body and soak *entire* foamer body in descaling acid.

Lafferty Equipment Manufacturing, Inc.

5614 Oak Grove Road
North Little Rock, AR 72118

Telephone: (501) 851-2820 — FAX: (501) 851-3719

Made in the USA

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