

Lafferty Equipment Manufacturing, Inc. Installation & Operation Instructions

Model #920105 • Pump Fed Foamer Complete

REQUIREMENTS

Solution:

Temperature up to 160°F
Pressure 30 - 125 PSI
Flow up to 3 GPM

Compressed Air up to 4 CFM

Hose:

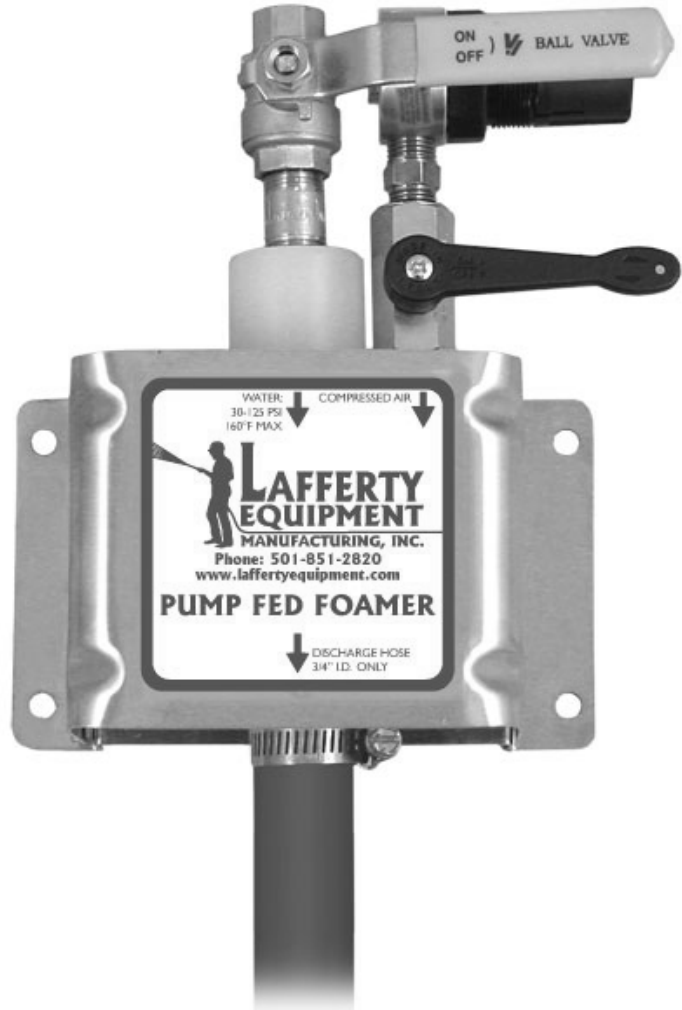
ID: 3/4"
Length: 50'

Nozzle 50250

OPTIONS

Accessories

- Hose Rack, Large #224150
- Hose Rack, Small #224145
- Check Valve, PP, 1/2" FM (EPDM). #491409
- Check Valve, PP, 1/2" FM (Viton). #491411



**READ ALL
INSTRUCTIONS BEFORE
USING EQUIPMENT!**

www.LaffertyEquipment.com
501-851-2820



Principles of Operation

This is a pump fed foamer designed for use with RTU chemical solution supplied by a central chemical feed system. The solution is mixed with compressed air to create quality clinging foam that can be applied to any surface for superior cleaning results.



Safety & Operational Precautions

- Manufacturer assumes no liability for the use or misuse of this unit.
- Wear protective clothing, gloves and eye wear when working with chemicals.
- Always direct the discharge away from people and electrical devices.
- For solution pressures over 100 PSI, remove the discharge ball valve.
- Follow the chemical manufacturers safe handling instructions.

TO INSTALL (Refer to diagram, next page)

It is recommended to install a check valve in the foamer solution inlet to prevent air from going back into solution line. (see Options)

1. Mount the unit to a suitable surface.
2. Connect the discharge hose as shown in the diagram and close the ball valve.
3. Connect pre-mixed solution supply, 35 PSI MINIMUM. To prevent blocking the small jets in the foamer body flush any new plumbing of debris before connecting.
4. Connect compressed air supply. If piping is older and has known contaminants, install a filter.

TO FOAM

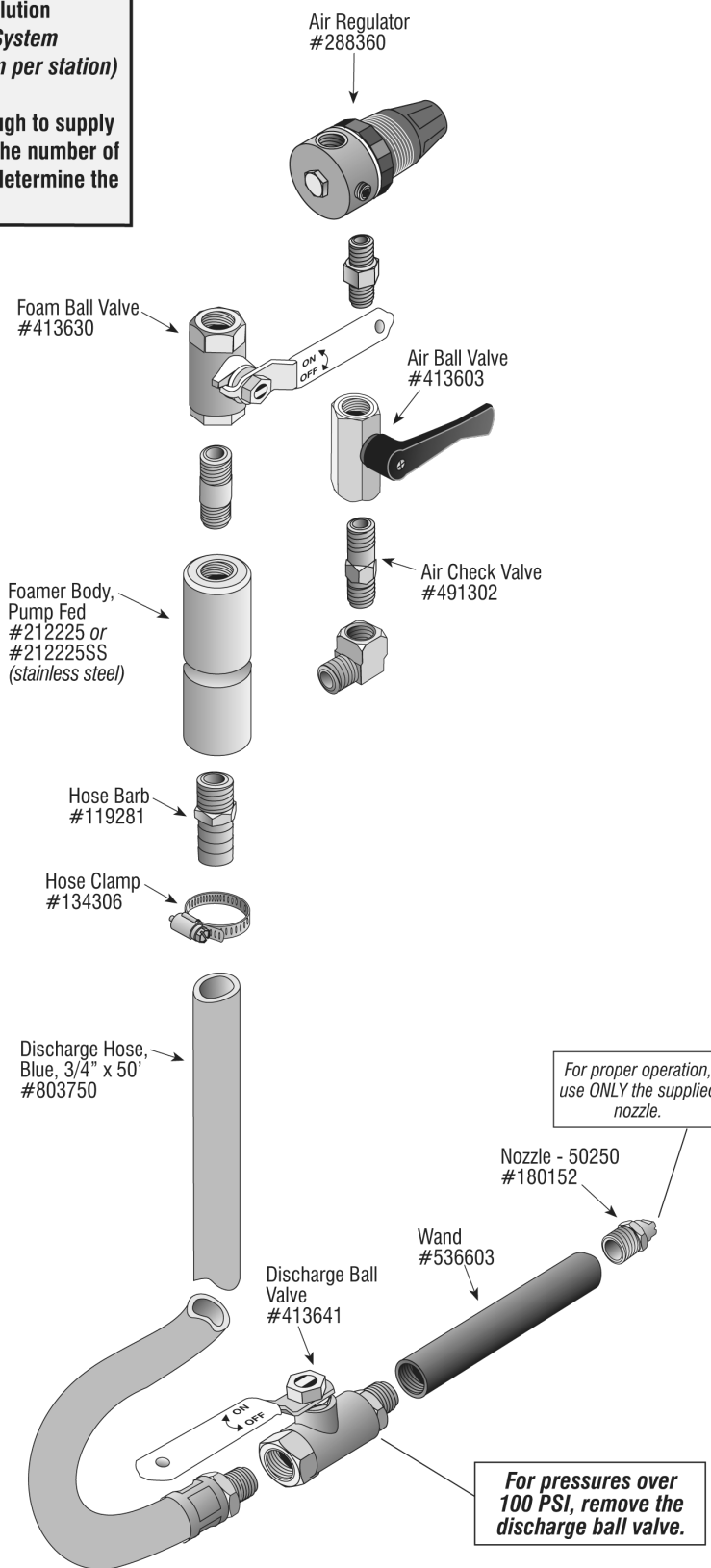
Always make sure the discharge ball valve is closed or pointed in a safe direction before turning water and air on. Ball valve can be shut off at any time during operation but should not be left unattended for long periods of time. Expect a strong blast when re-opening ball valve.

1. Final chemical dilution and air adjustments will now have to be made.
2. With wand in hand open the inlet ball valve, and the air ball valve.
 - Wait a few seconds and observe foam consistency.
 - Use the least amount of air needed to achieve good foam quality to prevent solution pressure fluctuations from affecting performance. Air pressure must be kept lower than solution pressure.
 - If foam consistency is too dry or too wet pull out on the air regulator knob, turn slightly clockwise for dryer foam and counterclockwise for wetter foam. Wait a few seconds to see each adjustment.
 - Medium wet foam will give the best cleaning results! Dry foam will NOT clean as well!
 - You may also have to try different chemical rations and air settings until foam consistency and cleaning results are acceptable. Once this is set and desired foam consistency is achieved push lock the knob, you are ready to start application.
3. When foaming is completed, close the discharge ball valve, return to the unit and close the water and air ball valves. Briefly re-open the discharge ball valve to relieve pressure in the hose. Rinse before the foam dries.

Water Flow Rate Chart	
Water Pressure	Water Flow Rate
PSI	GPM
40	2.00
50	2.24
60	2.45
70	2.65
80	2.83
90	3.00
100	3.16

**Pre-Mixed Chemical Solution
From Central Pumping System
35 to 125 PSI (35 PSI minimum per station)**

Plumbing should be large enough to supply 35 PSI minimum per station. The number of units in simultaneous use will determine the plumbing size.



Troubleshooting Guide

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Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Foam surges and/or hose "bucks".	1, 2, 3, 4, 5, 6, 7, 8	10, 12, 13
B) Foam too wet.	2, 3, 4, 5, 6	10, 12, 13
C) Foam does not clean properly or too dry.	1, 4, 9	10
D) Chemical solution backing up into air line.	11	

Possible Cause / Solution	
Startup	Maintenance
<p>1. Air pressure too high</p> <ul style="list-style-type: none"> Adjust the air regulator slowly counterclockwise until output stabilizes. <p>2. Use of an oiler in the airline will cause poor foam quality</p> <ul style="list-style-type: none"> Use only clean, dry air. <p>3. Inlet ball valve or discharge ball valve not completely open</p> <p>Completely open the inlet and discharge ball valves.</p> <p>4. Improper chemical or solution too weak</p> <ul style="list-style-type: none"> Ensure product is recommended for foaming and/or the application. Increase chemical concentration. <p>5. Discharge hose too long, wrong size, kinked or spliced/sectioned together (SEE REQUIREMENTS)</p> <ul style="list-style-type: none"> Straighten the hose - Replace hose with correct size or one piece continuous hose. <p>6. Nozzle size is wrong (SEE REQUIREMENTS)</p> <p>7. Solution pressure or volume too low/inlet piping too small</p> <ul style="list-style-type: none"> Increase solution pressure or volume (SEE REQUIREMENTS). <p>8. Air backing up into solution line</p> <ul style="list-style-type: none"> Install optional solution check valve (see OPTIONS, page 1). <p>9. Soil has hardened on surface; always rinse foam before it dries</p> <ul style="list-style-type: none"> Reapplication may be necessary. 	<p>10. Air regulator failed allowing too much air or not enough air</p> <ul style="list-style-type: none"> Clean or replace. <p>11. Air check valve failed</p> <ul style="list-style-type: none"> Replace. <p>12. Inlet orifice clogged</p> <ul style="list-style-type: none"> Check/clean inlet orifice for obstructions. DO NOT DRILL OUT. Install optional solution "Y" strainer (see OPTIONS, page 1). <p>13. Chemical build-up may have formed in the body causing restriction</p> <ul style="list-style-type: none"> Carefully remove fittings and soak entire body in descaling acid.

