

LAFFERTY EQUIPMENT MANUFACTURING, INC. Installation & Operation Instructions

Pump Fed Foamers Complete

Model # 920105 • Pump Fed Foamer Complete

Model # 920115 • SS Pump Fed Foamer Complete

REQUIREMENTS

Solution:

Temp. range..... Ambient to 160° F

Pressure range..... 30 to 125 PSI

Flow range 1.85 to 3.5 GPM

Compressed Air..... 1.5 to 5 CFM

Nozzle size 50250

Hose:

I.D. 3/4" ONLY

Length 50'

OPTIONS

- 00250 Foam Nozzle # 180153
(For increased foam throw)
- Strainer, "Y", SS, 1/2" #150350
- Solution Check Valve, PP, 1/2" FM..... #491411

All Stainless Steel Accessories

- Hose Rack, Large # 224150
- Hose Rack, Small # 224145



www.LaffertyEquipment.com
501-851-2820



Safety & Operational Precautions

SAFETY PRECAUTIONS

- **Manufacturer Assumes No Liability For The Use Or Misuse Of This Unit.**

Personal Safety:

- Wear protective clothing, gloves and eyewear when working with chemicals.
- Always direct the discharge away from people and electrical devices.
- Turn off inlet ball valves when unit is not in use.

- For pressures over 100 PSI, remove the discharge ball valve.
- Follow the chemical manufacturer's safe handling instructions.
- Regular equipment maintenance should include checking all hoses, tubes, clamps, strainers and connections.

OPERATIONAL PRECAUTIONS

- Do not substitute nozzle or hose sizes. (See "Requirements".) The unit **will not** work properly with smaller nozzles or hose sizes. Do not splice/section hose together.

Principles of Operation: This is a pump fed foamer designed for use with central cleaning/sanitizing systems. The ready to use (RTU) chemical solution is pumped to multiple units.

TO INSTALL *(Refer to Diagram, Next Page.)*

Read all Safety and Operational Precautions on page 1.

1. Mount the unit to a suitable surface.
2. Flush any new plumbing to remove debris before connecting station.
3. Install **optional** solution "Y" strainer. Install **optional** solution check valve.
4. Connect chemical solution supply. **DO NOT TURN ON**
5. Connect the hose as shown in the diagram.
6. Connect compressed air supply.

Flow Rate Chart	
Solution Pressure	Flow Rate Pump Fed Foamer
<i>PSI</i>	<i>GPM</i>
40	1.85
50	2.24
60	2.50
70	2.76
80	3.00
90	3.25
100	3.50

TO FOAM

1. **Hold the foam wand firmly** and direct the discharge in a safe direction. Open the discharge ball valve, the foam ball valve, and the air ball valve.
2. **WAIT SEVERAL SECONDS for foam output to stabilize.** *Air pressure adjustment is the most important element of proper operation. Air pressure must be kept lower than solution pressure. Use the least amount of air pressure necessary to achieve good foam quality. Keeping air pressure to a minimum will prevent solution pressure fluctuations from affecting foamer performance. Medium wet foam will give the best cleaning results! Real dry foam will NOT clean as good!*

To adjust foam quality, pull out adjustment knob on air regulator and turn it **very, very slightly clockwise for dryer foam and counterclockwise for wetter foam.** Wait several seconds to see the results of EACH adjustment. **Once properly adjusted the air should not have to be adjusted again.**

If the flow of foam surges, the air pressure is too high. Slightly turn the air regulator counterclockwise. When foam is the desired consistency, push-lock the air regulator. *(Surging can also indicate a weak chemical concentration)*

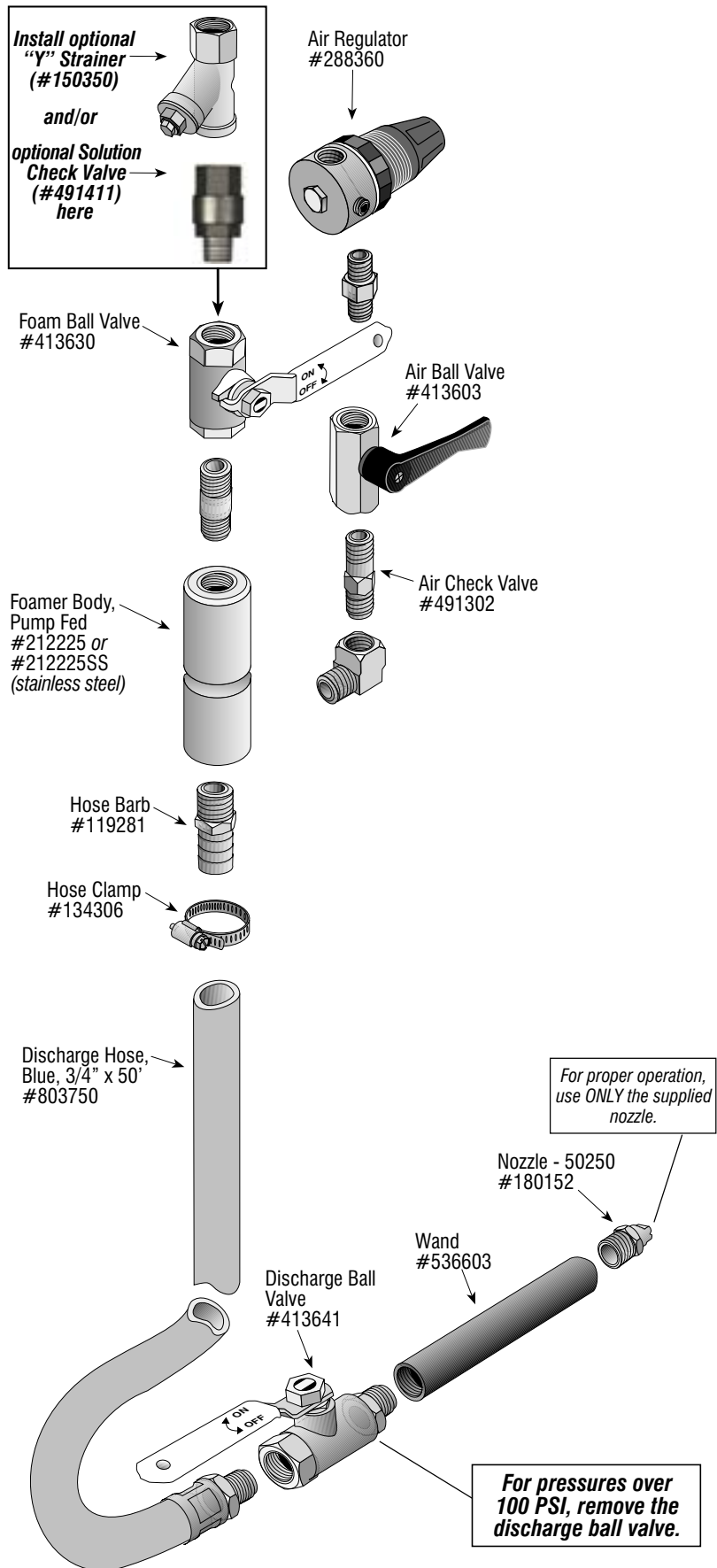
3. When foaming is completed, close the discharge ball valve; return to the unit and close the foam ball valve. Slowly re-open the discharge ball valve and expect a **strong blast** of foamy solution. After the air blows the solution out of the hose, close the air ball valve. Close the discharge ball valve and rinse the work surface before foam dries.

⚠ Turn Off Inlet Ball Valve When Not In Use

**Pre-Mixed Chemical Solution
From Central Pumping System
30 to 125 PSI (30 PSI minimum per station)**

Plumbing should be large enough to supply 30 PSI minimum per station. The number of units in simultaneous use will determine the plumbing size.

Drawing not "To Scale"



Troubleshooting Guide

Pump Fed Foamers Complete

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