

Lafferty Equipment Manufacturing, LLC Installation & Operation Instructions

Model # 935200 · Teat Foamer

REQUIREMENTS

Ready-to-Use Chemical Solution

Compressed Air up to 1.5 CFM

Hose 1/2" ID x 25'

Nozzle Teat Foam Gun

OPTIONS

Stainless Steel Hose Racks

Small Stainless Steel Hose Rack # 224145

Stainless Steel Jug Racks

2 ½ Gal. (8 ½" x 10 ½") # 224210

5 Gallon (12" x 12") Round/Square # 224215

Extended Hose (Order in 25' Increments)

Hose, Twin Line, Blue (Added to Standard Length) # 800100FT

Alternate Seal Materials - Santoprene Standard

Viton Upgrade: Flojet Air Pump & Check Valves # 710756

Kalrez Upgrade: Flojet Air Pump & Check Valves # 710755



Lafferty
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CFS TECHNOLOGIES

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**WARNING! READ ALL
INSTRUCTIONS BEFORE
USING EQUIPMENT!**

OVERVIEW

The Teat Foamer is a foam applicator for foaming teat dips in dairy facilities. This pump-driven system uses compressed air to power an AODD pump to draw and pressurize ready-to-use teat dip. The solution flows through the discharge hose to the foamer body where rich, clinging foam is created by injecting compressed air into the solution. A low volume of clinging foam is then applied using the heavy-duty machined polypropylene teat foam cup.

SAFETY & OPERATIONAL PRECAUTIONS

- For proper performance do NOT modify, substitute nozzle, hose diameter or length
- 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.
- Follow the chemical manufacturer's safe handling instructions.
- DO NOT use d-Limonene or other chemicals that are not compatible with the Santoprene diaphragms.
- Viton upgrade is available.

TO INSTALL (REFER TO DIAGRAM ON NEXT PAGE)

1. Mount the unit above solution supply level to prevent siphoning.
2. Place the strainer in the chemical solution(s).
3. Attach the discharge hose.
4. Attach a compressed airline to the air inlet ball valve. DO NOT TURN ON.
5. Air Filter/Dryer recommend.

TO OPERATE

- **The unit has been tested and is ready to operate, the air pressure preset at 60 PSI. This is the optimum pump pressure. Test "as is" before making any adjustments.**
 - To adjust foam consistency, turn the foam consistency needle valve VERY slightly counterclockwise a maximum of 1/8th turn for dryer foam and clockwise for wetter foam.
1. Open the inlet air ball valve.
 2. With the trigger gun in hand direct the discharge in a safe direction and pull the trigger to fill the cup.
 3. If the flow of foam surges, the needle valve is open too much, reduce the air flow by turning the needle valve clockwise until the foam flow stabilizes.
 4. A medium-wet foam will give the best results! Very dry foam will not clean as well.
 5. Dip each teat in the cup and pull the trigger to refill cup as needed.

METERING TIP SELECTION

METERING TIP COLOR	OZ/MIN	DILUTION RATIO @ 40 PSI
Brown	0.56	154.4:1
Clear	0.88	97.9:1
Bright Purple	1.38	62.1:1
White	2.15	39.5:1
Pink	2.93	28.7:1
Corn Yellow	3.84	21.7:1
Dark Green	4.88	16.8:1
Orange	5.77	14.1:1
Gray	6.01	13.5:1
Light Green	7.01	11.4:1
Med. Green	8.06	9.8:1
Clear Pink	9.43	8.2:1
Yellow Green	11.50	6.6:1
Burgundy	11.93	6.3:1
Pale Pink	13.87	5.3:1
Light Blue	15.14	4.7:1
Dark Purple	17.88	3.9:1
Navy Blue	25.36	2.4:1
Clear Aqua	28.60	2.0:1
Black	50.00	-
No Tip		1:1

The dilution ratios above are approximate values. Due to chemical viscosity, actual dilution ratios may vary.

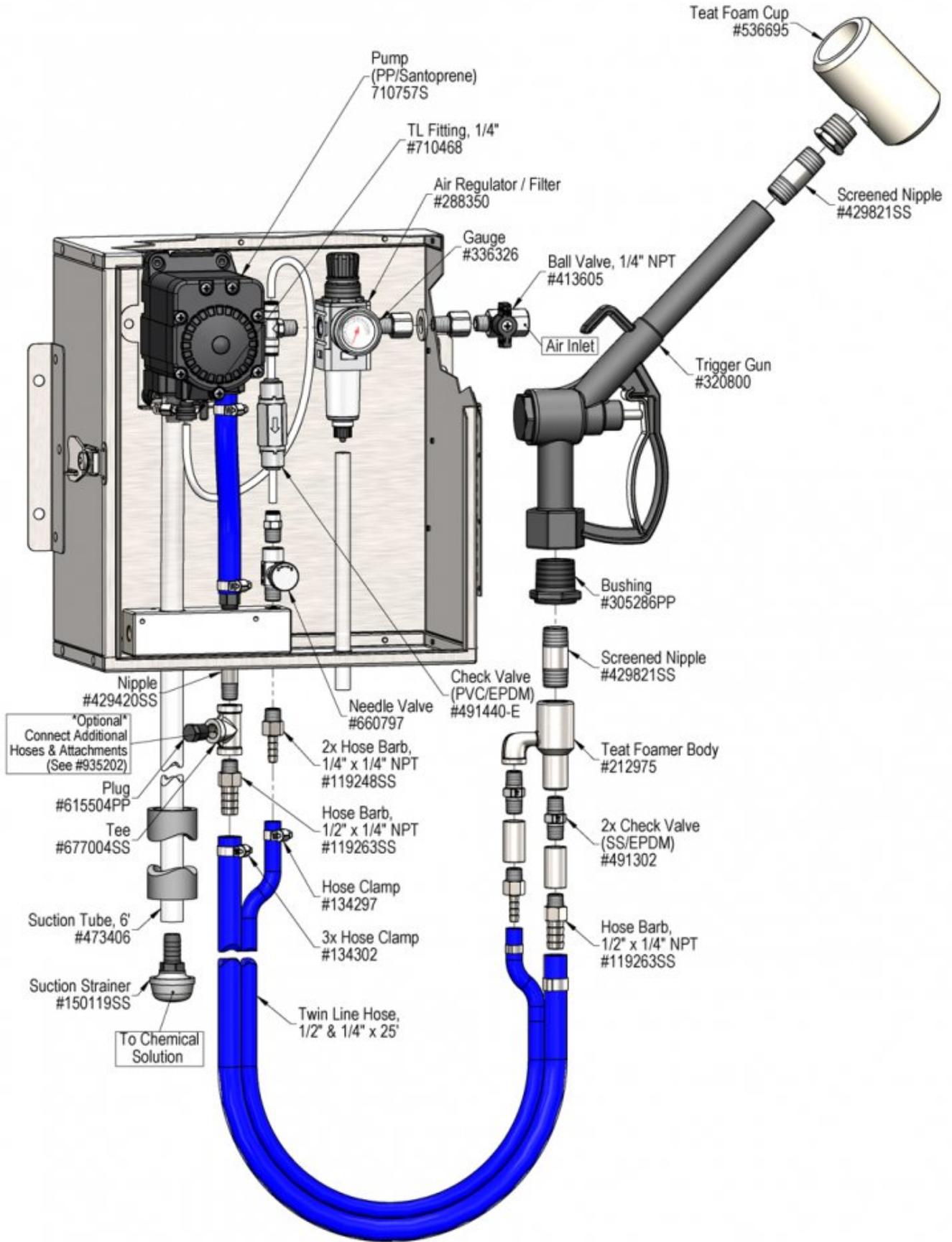
FORMULA

GPM × 128 ÷ Desired Dilution Ratio = oz/min

- See Unit Flow Rates chart for GPM
- Use 20 for 20:1 dilution ratio, 30 for 30:1, etc.
- Match calculated ounces per minute (oz/min) to nearest oz/min in Metering Tip Selection chart.

UNIT FLOW RATES

Pressure	Flow Rate
PSI	GPM
60	.68



Troubleshooting Guide

Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Air pump will not run/will not pump.	1, 2, 3, 4, 7	9, 12, 13, 14, 15
B) Pump runs too fast with no output.	1, 4	9, 10, 11, 12, 13, 14, 15
C) Unit will not draw chemical, poor foam quality.	1, 3, 4, 8	9, 10, 11, 12, 13, 15

Possible Cause / Solution	
Startup	Maintenance
<ol style="list-style-type: none"> 1. Air pressure too high or too low (60 PSI factory set) <ul style="list-style-type: none"> ◦ Open air ball valve fully. ◦ Adjust the air regulator clockwise to increase pressure or counterclockwise to decrease ◦ Do not exceed 90 PSI. Higher pressure will cause permanent damage to the air pump. 2. IF discharge hose is long. <ul style="list-style-type: none"> ◦ Give it plenty of time to fill the hose and reach the end. 3. Discharge hose kinked 4. Suction tube not immersed / Chemical depleted <ul style="list-style-type: none"> ◦ Fully immerse tube ◦ Replenish chemical 5. Dilution too weak <ul style="list-style-type: none"> ◦ Adjust dilution to be stronger. 6. Improper chemical <ul style="list-style-type: none"> ◦ Ensure product is recommended for foaming and/or the application. 7. Ice particles from condensation in air line — Air pump can periodically "freeze up" (stall) due to ice particles in the pump's exhaust (depending on air humidity & other factors) <ul style="list-style-type: none"> ◦ WAIT several seconds to allow the ice particles to melt and blow out, at which time the pump will automatically resume pumping. 	<ol style="list-style-type: none"> 8. Foam output too wet <ul style="list-style-type: none"> ◦ Turn foam consistency knob very slightly counterclockwise. 9. Suction tube(s) blocked or stretched out where tube slides over hose barb or pin hole/cut in tube (sucking air in) <ul style="list-style-type: none"> ◦ Clean strainers. (Replace if missing.) ◦ Cut off end of tube or replace tube. 10. Vacuum leak in solution pick-up connections (sucking air in) <ul style="list-style-type: none"> ◦ Check and tighten suction connections. 11. Chemical check valve stuck or clogged <ul style="list-style-type: none"> ◦ Clean or replace. 12. Foamer body, screened nipples or gun media (not shown) clogged up with dried chemical <ul style="list-style-type: none"> ◦ Clean/flush out with hot water, soak in a de-scaling acid or replace nipple or media. 13. Air regulator / Air filter clogged or failed <ul style="list-style-type: none"> ◦ Clean or replace 14. Problem with air pump <ul style="list-style-type: none"> ◦ Refer to air pump instruction manual. ◦ https://www.xylem.com/en-us/brands/Flojet/flojet-products/g57-air-operated-double-diaphragm-pump ◦ Replace pump. 15. Use of an oiler in the airline will cause poor performance or cause pump to stall and cause damage.

PREVENTIVE MAINTENANCE: When the unit will be out of service for extended periods, place chemical tube(s) in water and flush the chemical out of the unit to help prevent chemical from drying out and causing build-up. Periodically check and clean chemical strainer and replace if missing.

