Lafferty Equipment Manufacturing, LLC
Installation & Operation Instructions

Model # 925937 · 37.4 Gallon Internal Tank Foamer

REQUIREMENTS

Ready-to-Use Chemical Solution

Compressed Air	up to 5 CFM
Hose	3/4" ID x 40'
Nozzle	50250

OPTIONS

Stainless Steel Hose Racks	
Large Stainless Steel Hose Rack	# 224150
Proportioning / Filling Options	
1-Way Ball Valve Mixing Station (4 GPM)	# 985100
1-Way Push Lever Mixing Station (4 GPM)	# 981100
High Volume Mixing Station (9.9 GPM)	# 985835
Alternate Check Valves & Seals (EPDM Standard)	
Check Valve, Air, SS, 1/4" MM (Viton / Hast)	# 491306
O-Ring, Viton, Tank Lid, 5, 16 & 37 Gallon, ASME	# 708513

WEIGHT & DIMENSIONS

Single Package	
Shipping Weight	201 lbs.
Shipping Dimensions	48" x 40" x 54"

Ships on a pallet



Lafferty EQUIPMENT MANUFACTURING LLC

CFS TECHNOLOGIES

www.laffertyequipment.com
501-851-2820

WARNING! READ ALL INSTRUCTIONS BEFORE USING EQUIPMENT!

OVERVIEW

The Internal 37.4 Gallon Tank Foamer is a foam applicator with an all stainless steel cart assembly for applying ready-to-use foaming chemicals. Connect compressed air to pressurize the 316L stainless steel ASME rated tank and to inject air into the solution to greatly increase volume and coverage ability. Rich, clinging foam is projected on to any surface up close or at distances up to 12 feet. Each fill provides 34 minutes of foaming time.

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.
- Carefully follow chemical manufacturer's safe handling instructions and recommended precautions/practices especially when using flammable chemicals.
- MAXIMUM PRESSURE for air regulator IS 73 PSI. Pop-off valve is set for 75 PSI.

Do Not Use any chemicals that are not compatible with 316L stainless steel, each other or that could off gas. Including hydrochloric (muriatic) acid, hydrofluoric acid, aluminum brighteners, or paint strippers.

TO INSTALL (REFER TO DIAGRAM ON NEXT PAGE)

- This unit has been preset and tested. Use as is before making any adjustments.
- The top air regulator controls the tank pressure and is preset at 60 PSI. This is the optimal pressure. **MAXIMUM PRESSURE IS 73 PSI!** Pop-off valve is set for 75 psi.
- The bottom air regulator controls the foam consistency wet or dry and is preset at approximately 30 PSI. Foam consistency can be changed by adjusting this air regulator. Clockwise for dryer foam, counter-clockwise for wetter. Wet foam will clean MUCH better than dry foam.

TO PREPARE TO OPERATE

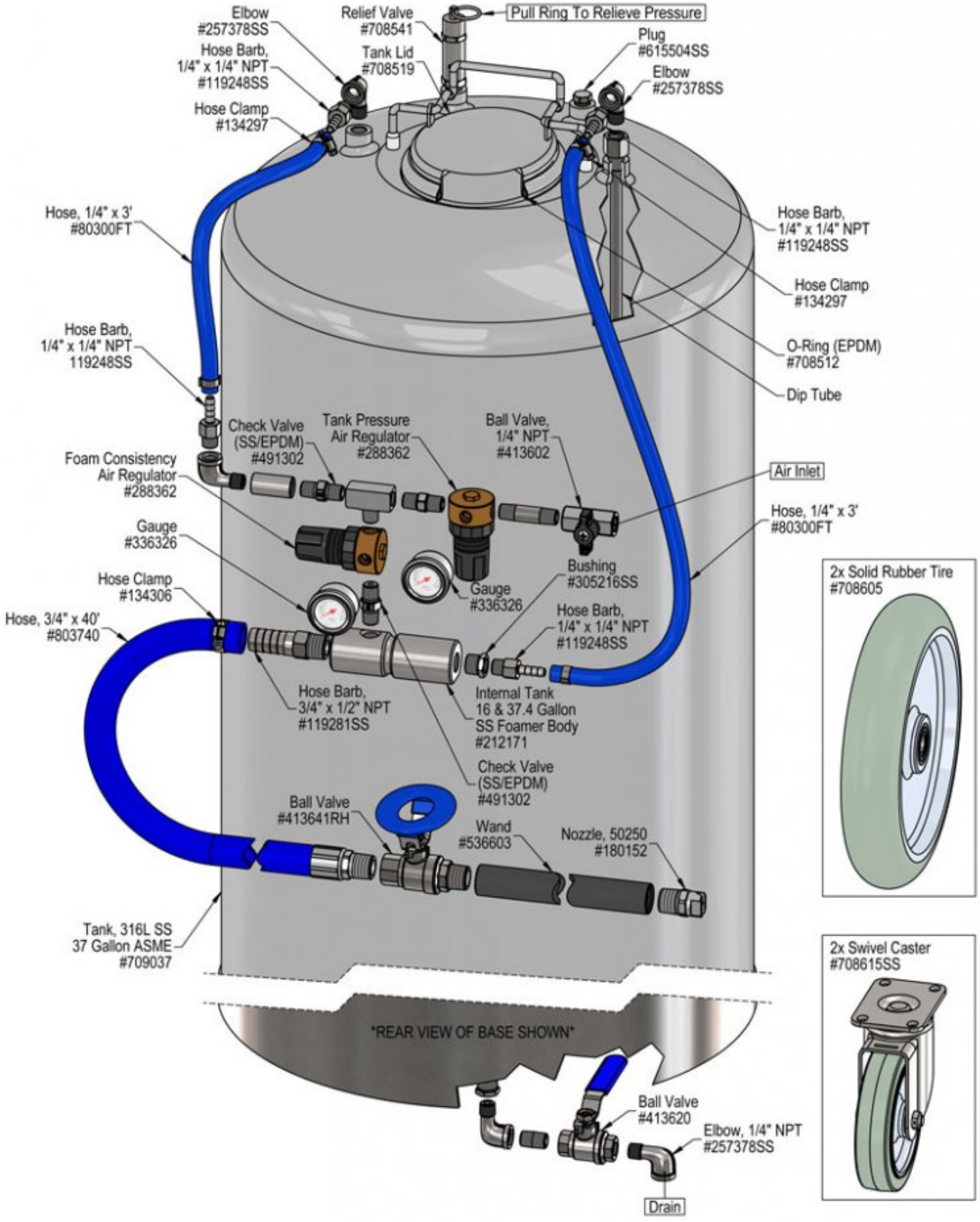
1. Pull wire handle up to unlock the tank lid. Then remove the lid from the tank, making sure the "O" ring remains attached to the lid. Fill tank with chemical solution.
2. Replace the tank lid, making sure the "O" ring seats properly. Lock wire handle in place.
3. Make sure the discharge ball valve on the foam hose assembly is closed.
4. Make sure the air ball valve is closed. Connect a compressed air line (3/8" I.D. minimum) to the foamer.

TO OPERATE

1. Open the air ball valve. Allow time for pressure to build up, approximately 20-30 seconds.
2. While firmly holding the foam wand, *point the discharge away from yourself and others*. Then, open the discharge ball valve. Expect a **strong blast** of foamy solution. Observe foam quality. Air pressure is very important for proper operation.
3. If foam is ***too wet*** or ***too dry***:
   Pull out adjustment knob on foam consistency air regulator, and turn it slowly clockwise for a drier foam or counterclockwise for a wetter foam. 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 foam consistency air 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 regulators.
4. To prevent streaking, apply foam from the bottom and work up.
5. When foaming is completed, close the discharge ball valve. Return to the foamer and close the air ball valve. Store hose on hose rack.
6. Rinse before the foam dries.

TO SHUT DOWN OR REFILL TANK

1. Turn off the air supply by closing the air ball valve.
2. Pull up the ring on the pop-off pressure relief valve and/or open the discharge ball valve to relieve pressure completely.
3. Refill the tank, when necessary, with chemical solution from optional Mixing Station, using the procedure in "TO PREPARE TO OPERATE" steps 1 - 4.


Elbow
#257378SS
Relief Valve
#708541
Pull Ring To Relieve Pressure
Plug
#615504SS
Hose Barb,
1/4" x 1/4" NPT
#119248SS
Tank Lid
#708519
Elbow
#257378SS
Hose Clamp
#134297
Hose, 1/4" x 3'
#80300FT
Hose Barb,
1/4" x 1/4" NPT
#119248SS
Hose Clamp
#134297
Hose Barb,
1/4" x 1/4" NPT
119248SS
O-Ring (EPDM)
#708512
Dip Tube
Check Valve
(SS/EPDM)
#491302
Tank Pressure
Air Regulator
#288362
Ball Valve,
1/4" NPT
#413602
Foam Consistency
Air Regulator
#288362
Air Inlet
Hose, 1/4" x 3'
#80300FT
Gauge
#336326
Bushing
#305216SS
Hose Clamp
#134306
Gauge
#336326
Hose, 3/4" x 40'
#803740
Hose Barb,
1/4" x 1/4" NPT
#119248SS
Hose Barb,
3/4" x 1/2" NPT
#119281SS
Internal Tank
16 & 37.4 Gallon
SS Foamer Body
#212171
Check Valve
(SS/EPDM)
#491302
Ball Valve
#413641RH
Wand
#536603
Nozzle, 50250
#180152
Tank, 316L SS
37 Gallon ASME
#709037
REAR VIEW OF BASE SHOWN
Ball Valve
#413620
Elbow, 1/4" NPT
#257378SS
Drain
2x Solid Rubber Tire
#708605
2x Swivel Caster
#708615SS

Troubleshooting Guide

Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Foam surges and/or hose "bucks".	1,2,3,4,5,6	8,10,11,12,14
B) Foam output too wet.	1,2,3,4,5,6	8,10,11,12,13
C) Foam output too dry.	1	8
D) Foam does not clean properly.	2,4	13
E) Pop-Off valve keeps relieving.	7	8,10,12
F) Tank won't hold pressure.	7	8,10,12

Possible Cause / Solution

Startup

1. **Foam consistency air regulator adjustment too low or too high.**
   - Open inlet air ball valve fully. Adjust foam consistency air regulator slightly clockwise for dryer foam and counterclockwise for wetter foam.
2. **Weak chemical solution**
   - Increase chemical concentration.
3. **Discharge ball valve not completely open**
   - Completely open discharge ball valve.
4. **Improper chemical**
   - Ensure chemical is recommended for foaming and the application.
5. **Foam hose wrong size or kinked**
   - See requirements. Straighten the hose.
6. **Nozzle size too small**
   - Use only supplied nozzle.
7. **Tank air pressure regulator set too high**
   - Adjust the top air regulator slowly counterclockwise.
   - Optimal pressure is 60 PSI

Maintenance

8. **Air regulator clogged or failed**
   - Clean or replace air regulator.
9. **Air check valve clogged or failed**
   - Clean or replace the air check valve(s).
10. **Pop-Off Valve clogged or failed**
    - Clean or replace
11. **Tank is empty (no solution)**
    - Follow refill tank procedure.
12. **Tank o-ring not seated, missing or worn**
    - Realign, clean or replace.
13. **Soil has hardened on surface**
    - Reapplication may be necessary. Always rinse foam before it dries.
14. **Use of an oiler on the airline will cause poor foam quality**
    - Use only clean, dry air.

PREVENTIVE MAINTENANCE: Perform preventive maintenance when the unit will be out of service for extended periods. When using corrosive chemicals, empty tank of any remaining chemical solution, then partially fill tank with clear water, recharge the tank with air, open discharge ball valve, and flush the entire system before storing.