Lafferty Equipment Manufacturing, LLC
Installation & Operation Instructions

Model # 935170 · Portable 20 Gallon PD Precision Foamer

REQUIREMENTS

Ready-to-Use Chemical Solution	
Solution Temperature	120°F MAX
Electric	110V - Min.15 AMP Circuit

OPTIONS

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
Alternate Air Check Valve - EPDM Standard	
Check Valve, Air, SS, 1/4" MM (Viton / Hast)	# 491306

WEIGHT & DIMENSIONS

Single Package	
Shipping Weight	156 lbs.
Shipping Dimensions	40" x 48" x 61"
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 Portable 20 Gallon PD Precision Foamer is a low volume foam applicator that is ideal for jobs where precision application and tight control of overspray are required such as for cleaning restaurant hoods and vents. This unit features an all stainless steel cart assembly and on-board 110V air-compressor. An air-operated, double-diaphragm FloJet Pump draws ready-to-use chemical from a the 20 gallon tank and injects compressed air to create rich, clinging foam which greatly increases volume and coverage ability. The foam is then projected through the discharge hose, trigger gun and fan nozzle.

SAFETY & OPERATIONAL PRECAUTIONS

- **Plug into a 15 amp circuit or larger. Do NOT use a light gauge extension cord!**
- For proper performance do NOT modify, substitute nozzle, hose diameter or length
- Manufacturer assumes no liability for the use or misuse of this unit.
- ALWAYS 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 and Kalrez upgrades are available.

TO INSTALL (REFER TO DIAGRAM ON NEXT PAGE)

Fill the air compressor with the included air compressor oil before operating.

The unit has been tested and air pressure preset at the optimum setting of 60 PSI. Once the compressor has been filled with oil, test "as is" before adjusting air pressure. Do not exceed 80 PSI.

You will need ready to use (RTU) chemical solution.

1. Add the desired amount of RTU solution to the tank and place the solution strainer in it.
2. Ensure the air compressor switch is in the off position.
3. Plug the air compressor into a receptacle. MINIMUM 15 AMP circuit.
4. DO NOT USE AN EXTENSION CORD THAT IS NOT HEAVY DUTY.

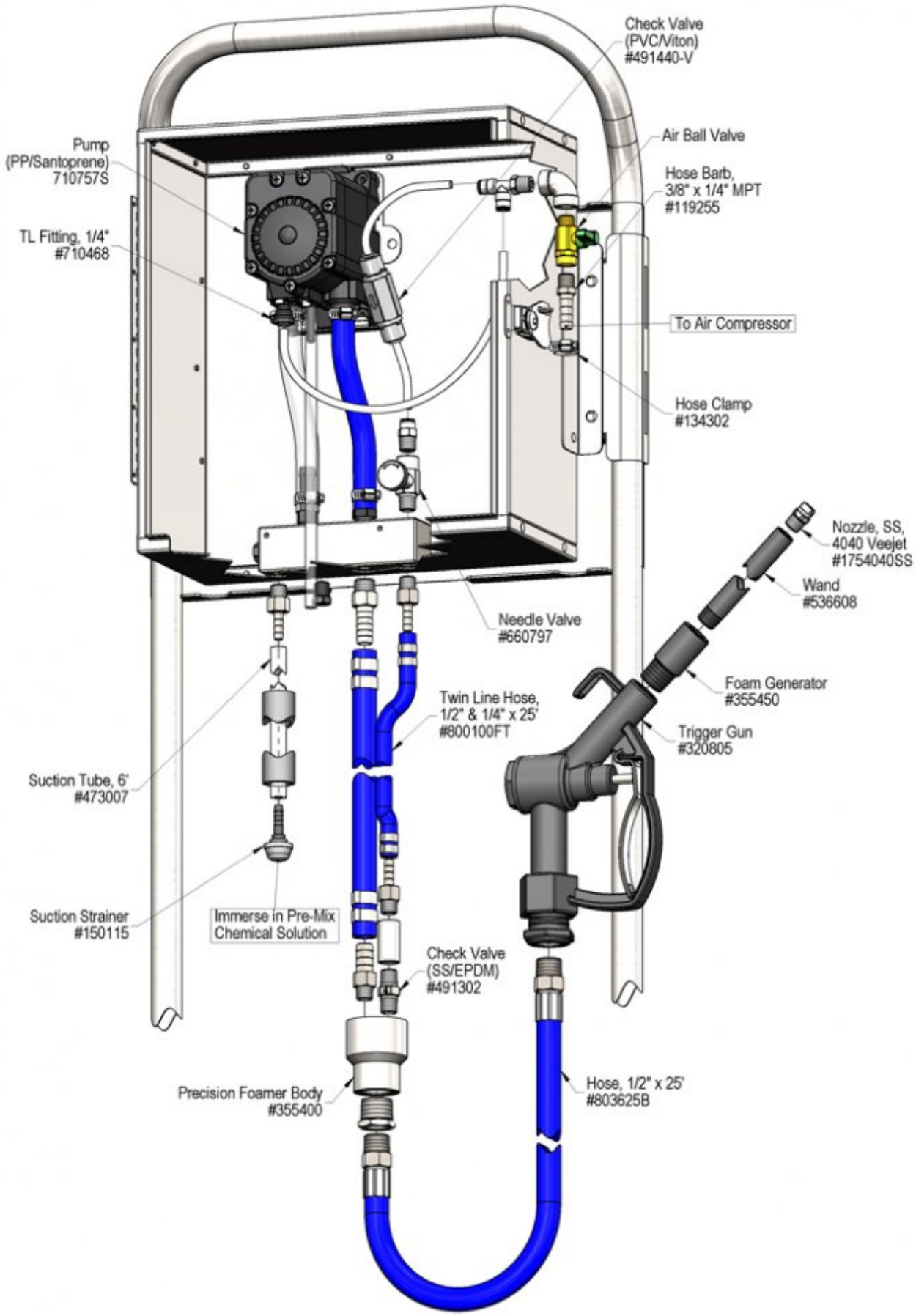
TO OPERATE

Fill the air compressor with the included air compressor oil before operating.

- Plug into a 15 amp circuit or larger. The unit has been tested and, once filled with oil again, is ready to operate, the air pressure preset at 60 PSI. This is the optimum pump pressure. Test "as is" before making any adjustments.

1. Plug in and turn on air compressor and allow it to pressurize the tank. Compressor will cycle on and off as needed.
2. Turn the inlet ball valve on.
3. Direct the discharge in a safe direction and pull the trigger.
4. Allow **several** seconds for the pump to prime and completely fill the hose, hold the trigger till foam begins to appear.
5. To adjust the foam quality, slightly adjust the air needle valve. (Note: Opening the air needle valve more than one full turn will not have any effect. Normally 1/4 turn counter-clockwise is more than enough.) Turn clockwise for wetter foam, counterclockwise for dryer foam. Wet foam will clean and cling to the surface longer!
6. When foaming is completed:
    - Release the trigger.
    - Return to the unit and turn inlet ball valve off.
    - Depress the trigger for several seconds to relieve pressure in the hose.
    - Once you have used the system you will in some cases remove the tube from the chemical and place in water before the application is finished. The system will foam for several seconds before it runs all the chemical out of the hose. Utilizing this technique, you can both maximize your chemical use and flush out the system at the same time, decreasing the time on the job!
    - Compressor can be left full or if it will be out of service a few days drain the tank.

If unit will be out of service for a long period, follow Preventive Maintenance steps at bottom of page 4.


Check Valve
(PVC/Viton)
#491440-V
Air Ball Valve
Pump
(PP/Santoprene)
710757S
Hose Barb,
3/8" x 1/4" MPT
#119255
TL Fitting, 1/4"
#710468
To Air Compressor
Hose Clamp
#134302
Nozzle, SS,
4040 Veejet
#1754040SS
Wand
#536608
Needle Valve
#660797
Foam Generator
#355450
Twin Line Hose,
1/2" & 1/4" x 25'
#800100FT
Trigger Gun
#320805
Suction Tube, 6'
#473007
Suction Strainer
#150115
Immerse in Pre-Mix
Chemical Solution
Check Valve
(SS/EPDM)
#491302
Precision Foamer Body
#355400
Hose, 1/2" x 25'
#803625B

Troubleshooting Guide

Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Air pump will not run/will not pump.	1,2,3,4,7	9,13,14
B) Pump runs too fast with no output.	1,4	9,10,11,12,13,14
C) Unit will not draw chemical.	1,3,4	9,10,11,12,13
D) Cleaning results not acceptable	5,6,8	9,10,11
E) Air compressor will not turn on.		14

Possible Cause / Solution

Startup

1. **Air pressure too high or too low (60 PSI factory set)**
   - Adjust the air regulator on the compressor clockwise to increase pressure or counterclockwise to decrease
   - Do not exceed 90 PSI. Higher pressure will cause permanent damage to the air pump.
2. **Discharge hose is long.**
   - Give it plenty of time to fill the hose and reach the end.
3. **Discharge hose kinked**
4. **Suction tube not immersed / Chemical solution depleted**
   - Fully immerse tube
   - Replenish chemical solution
5. **Dilution too weak**
   - Use a stronger solution.
6. **Improper chemical**
   - 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 air pump's exhaust (depending on air humidity & other factors)**
   - WAIT several seconds to allow the ice particles to melt and blow out, at which time the air pump will automatically resume pumping.
8. **Soil has hardened on surface**
   - Always rinse foam before it dries.

Maintenance

9. **Foam output too dry, not cleaning**
   - Turn foam consistency knob slightly clockwise. Wet foam cleans better.
10. **Suction tube blocked or stretched out where tube slides over hose barb or pin hole/cut in tube (sucking air in)**
    - Clean strainer. (Replace if missing.)
    - Cut off end of tube or replace tube.
11. **Vacuum leak in solution pick-up connections (sucking air in)**
    - Check and tighten suction connections.
12. **Foam generator or foamer body clogged up with dried chemical**
    - Clean/flush out with hot water, soak in a de-scaling acid or replace foam generator.
13. **Problem with air pump**
    - Refer to air pump instruction manual
    - https://www.xylem.com/en-us/brands/Flojet/flojet-products/g57-air-operated-double-diaphragm-pump
    - Replace pump.
14. **Problem with air compressor**
    - Refer to air compressor instruction manual.
    - Press the "reset button" See manual.

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.