Lafferty Equipment Manufacturing, LLC
Installation & Operation Instructions

Model # 933505-YPT · 1-Way YPT-PD Concrete Foamer

REQUIREMENTS

Ready-to-Use Chemical Solution

Temperature	up to 160°F
Pressure	60 to 60 PSI
Flow	1.2 GPM @ 60 PSI
Supply Line	1/4"
Compressed Air	up to 6 CFM
Hose	3/4" ID x 50'
Nozzle	40150

OPTIONS

Stainless Steel Hose Racks

Large Stainless Steel Hose Rack	# 224150

To Dilute and Dispense Ready-To-Use Acid Solution

414HC Acid Mixing Station	# 980415

Drum & Tote Stick Lengths & Seal Materials

Drum Stick, 33" (Viton or EPDM)	# 491643 / 491643-E
Drum Stick, 48" (Viton or EPDM)	# 491648 / 491648-E
Drum Stick, 54" (Viton or EPDM)	# 491645 / 491645-E
Tote Stick, 33" (Viton or EPDM)	# 491653 / 491653-E
Tote Stick, 48" (Viton or EPDM)	# 491654 / 491654-E
Tote Stick, 54" (Viton or EPDM)	# 491656 / 491656-E



Lafferty EQUIPMENT MANUFACTURING LLC

CFS TECHNOLOGIES

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WARNING! READ ALL INSTRUCTIONS BEFORE USING EQUIPMENT!

OVERVIEW

The 1-Way YPT-PD Concrete Foamer is a foam applicator for projecting highly corrosive chemicals such as those used to remove concrete and for aluminum brightening. This acid-resistant system uses a rugged 1/4" Yamada air-operated, double-diaphragm pump to draw ready-to-use acid solution from a static tank and inject compressed air to greatly increase volume and coverage ability. Rich, clinging foam is projected through the hose, wand and fan nozzle on to any surface.

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 chemicals that are not compatible with glass filled polypropylene or the Teflon diaphragms.
- Do not use products that contain sodium hypochlorite (bleach) or strong alkaline
- Do NOT run the pump dry. This can cause damage to the pump.
- Always slightly open the inlet ball valve until the pump primes.

UNIT FLOW RATES	
PSI	GPM
60	1.20

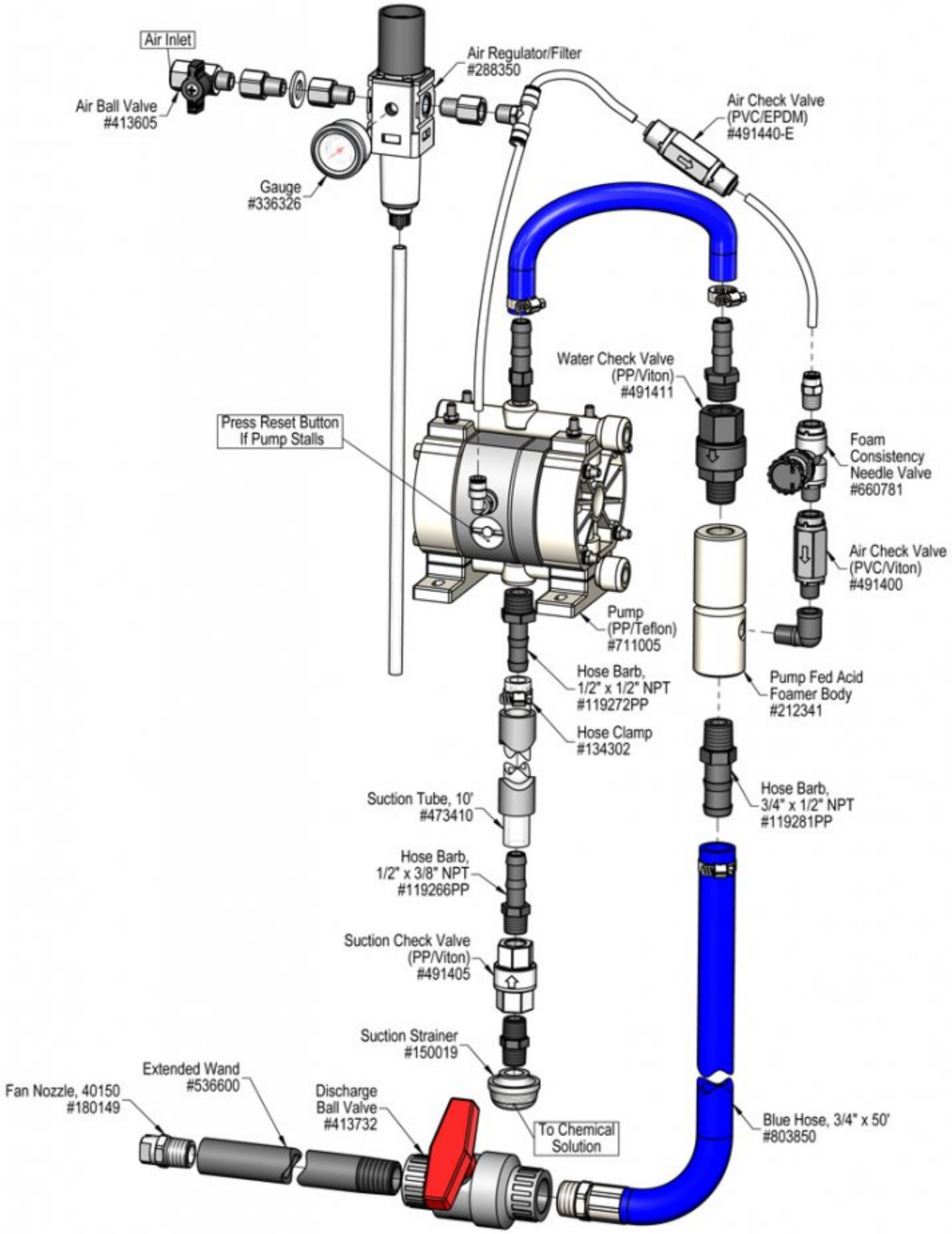
TO INSTALL (REFER TO DIAGRAM ON NEXT PAGE)

1. Mount the unit above chemical solution container to prevent siphoning.
2. To ensure the dry pump will prime fill the 1/2" clear suction tube with water.
3. Securely attach the full suction tube to the pump as shown in the drawing and place the strainer in a static container of ready-to-use chemical solution.
4. Attach a compressed air line to the inlet ball valve. DO NOT TURN ON

TO OPERATE

- **Always make sure the discharge ball valve is closed or pointed in a safe direction before turning the 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.**
- **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.**
- The foam consistency knob is pre-set at approximately 1/2 turn. To adjust foam consistency, turn the foam consistency needle valve counterclockwise a maximum of 1 turn for drier foam and clockwise for wetter foam. Wait several seconds after each adjustment to see the results.

1. With the foam wand in hand direct the discharge in a safe direction and open the discharge ball valve.
2. To prime the pump, slightly open the air inlet ball valve to make the pump cycle very slow where it will prime. Once the solution reaches the pump open the air valve all the way.
3. Do NOT run the pump dry. This can cause damage to the pump.
4. Always slightly open the inlet ball valve until the pump primes.
5. IF after several seconds the pump hasn't primed turn off the air, remove the suction tube and fill with water and replace. Once the diaphragms are wet priming is not an issue. Open air ball valve to resume set up.
6. If the flow of foam surges, the needle valve is open too much or the chemical concentration is too weak, reduce the air flow by turning the needle valve slowly clockwise until the foam flow stabilizes. Or add more chemical concentrate.
7. A medium-wet foam will give the best cleaning results! Very dry foam will NOT clean as well!
8. When foaming is complete:
    - Close the discharge ball valve.
    - Promptly return to the unit and close the air ball valve.
    - Briefly re-open the discharge ball valve to relieve pressure in the hose.
9. Rinse the work surface before the foam dries.


Air Inlet
Air Ball Valve
#413605
Air Regulator/Filter
#288350
Air Check Valve
(PVC/EPDM)
#491440-E
Gauge
#336326
Water Check Valve
(PP/Viton)
#491411
Press Reset Button
If Pump Stalls
Foam
Consistency
Needle Valve
#660781
Air Check Valve
(PVC/Viton)
#491400
Pump
(PP/Teflon)
#711005
Hose Barb,
1/2" x 1/2" NPT
#119272PP
Pump Fed Acid
Foamer Body
#212341
Hose Clamp
#134302
Hose Barb,
3/4" x 1/2" NPT
#119281PP
Suction Tube, 10'
#473410
Hose Barb,
1/2" x 3/8" NPT
#119266PP
Suction Check Valve
(PP/Viton)
#491405
Suction Strainer
#150019
Extended Wand
#536600
Fan Nozzle, 40150
#180149
Discharge
Ball Valve
#413732
To Chemical
Solution
Blue Hose, 3/4" x 50'
#803850

Troubleshooting Guide

Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Air pump will not pump or runs with no output.	1, 2, 3, 4	8, 9, 10, 11, 12, 13
B) Foam surges and/or hose "bucks".	1, 2, 3, 4, 5, 6	8, 11, 12
C) Foam output too wet.	1, 2, 3, 4, 5, 6	8, 11, 12
D) Foam output too dry.	2	
E) Cleaning results not acceptable.	2, 5, 6, 7	
F) Chemical solution getting into airline		10

Possible Cause / Solution

Startup

1. **Inlet ball valve partially closed or air pressure too low.**
   - Completely open air inlet ball valve. Optimum air pressure is 60 PSI.
2. **Foam consistency needle valve open too much**
   - Adjust the needle valve slowly clockwise until foam stabilizes.
3. **Discharge ball valve not completely open or Discharge hose kinked• Completely open the discharge ball valve / straighten hose**
4. **Solution tube not completely immersed in chemical or container empty**
   - Immerse tube or replenish chemical.
   - If pump has run dry, manually prime the pump: Remove the clear suction tube and fill the tube with water or chemical solution and reconnect.
5. **Dilution too weak**
   - Add more chemical to solution container.
6. **Improper chemical**
   - Ensure product is recommended for foaming and/or the application
7. **Soil has hardened on surface**
   - Always rinse foam before it dries.

Maintenance

8. **Solution strainer blocked**
   - Clean or replace
9. **Air regulator failed**
   - Clean or replace
10. **Air or water check valve(s) failed**
    - Clean or replace
11. **Discharge hose too long or wrong size or kinked**
    - Straighten the hose
    - See "Requirements" for correct hose diameter and length
12. **Nozzle size too small or missing**
    - See "Requirements"
13. **Problem with air pump**
    - Refer to air pump instruction manual
    - Repair or replace

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.