Lafferty Equipment Manufacturing, LLC
Installation & Operation Instructions

Model # 932600-V · 1-Way APV-PD Concrete Sprayer

REQUIREMENTS

Ready-to-Use Chemical Solution

Compressed Air	up to 4 CFM @ 90 PSI
Minimum Air Supply Line	3/8"
Hose	1/2" ID x 50'
Nozzle	2520

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

WEIGHT & DIMENSIONS

Single Package

Shipping Weight	25 lbs.
Shipping Dimensions	27" x 19" x 9"



Lafferty® EQUIPMENT MANUFACTURING LLC

CFS TECHNOLOGIES

www.laffertyequipment.com
501-851-2820

WARNING! READ ALL INSTRUCTIONS BEFORE USING EQUIPMENT!

OVERVIEW

The 1-Way APV-PD Concrete Sprayer is a chemical spray applicator for projecting highly corrosive chemicals such as those used to remove concrete and for aluminum brightening. This acid-resistant system uses a cost-effective Flojet air-operated, double-diaphragm pump to draw ready-to-use acid solution from a static tank and project it through the hose, wand and fan nozzle on to a variety of surfaces.

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 Viton diaphragms.

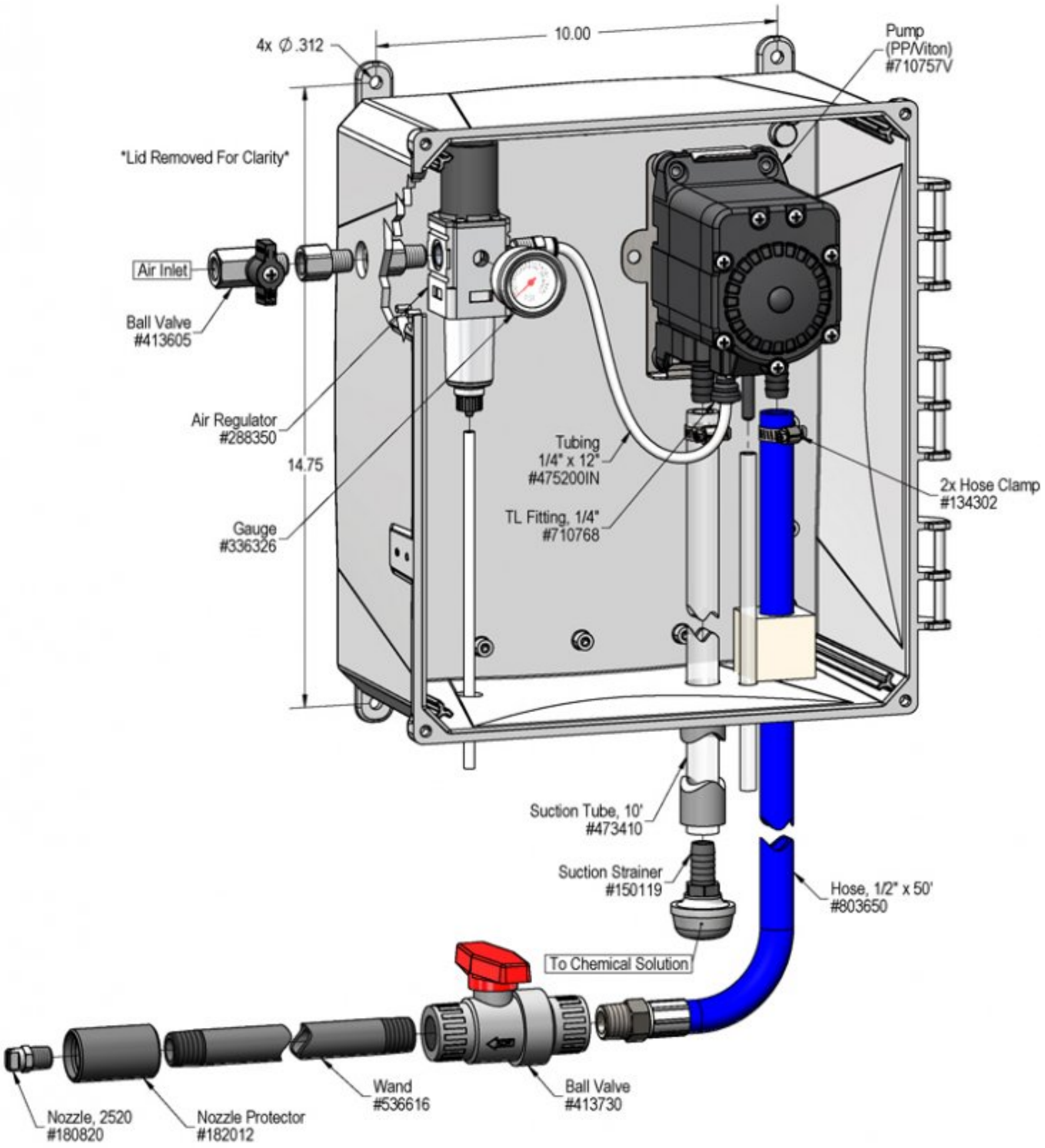
TO INSTALL (REFER TO DIAGRAM ON NEXT PAGE)

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

- **Always make sure the discharge ball valve or trigger gun is closed and pointed in a safe direction before turning the air on. Discharge can be shut off at any time during operation but should not be left unattended for long periods of time.**
- **The unit has been tested and is ready to operate, the air pressure is preset at 60 PSI. This is the optimum pump pressure. Test "as is" before making any adjustments.**

1. With the wand in hand direct the discharge in a safe direction, open the discharge ball valve (or squeeze trigger gun), and open the air ball valve.
2. When spraying is complete:
    - Close the discharge ball valve or release trigger.
    - Promptly return to the unit and close the air ball valve.
    - Briefly re-open the discharge ball valve or trigger gun to relieve pressure in the hose.
    - Store the hose on optional hose rack.
3. IF applicable, rinse the work surface before the solution dries.


4x Ø .312
10.00
Pump
(PP/Viton)
#710757V
Lid Removed For Clarity
Air Inlet
Ball Valve
#413605
Air Regulator
#288350
14.75
Gauge
#336326
Tubing
1/4" x 12"
#475200IN
TL Fitting, 1/4"
#710768
2x Hose Clamp
#134302
Suction Tube, 10'
#473410
Suction Strainer
#150119
Hose, 1/2" x 50'
#803650
To Chemical Solution
Nozzle, 2520
#180820
Nozzle Protector
#182012
Wand
#536616
Ball Valve
#413730

Troubleshooting Guide

Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Air pump will not run or pump solution. B) Will not draw chemical. C) Pump runs too fast with no output.	1,3,4 1,2,3 2	5,6,9,10 6,7,8 6,7,8,9

Possible Cause / Solution

Startup

1. **Inlet ball valve partially closed or air pressure too low.**
   - Completely open air inlet ball valve.
2. **Chemical tube not immersed in container or container empty**
   - Immerse tube or replenish.
3. **Discharge ball valve closed or hose kinked**
   - Open ball valve / Straighten the hose.
4. **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)**
   - WAIT several seconds to allow the ice particles to melt and blow out, at which time the pump will automatically resume pumping.

Maintenance

5. **Air regulator clogged or failed**
   - Clean or replace.
6. **Chemical strainer clogged up**
   - Clean or replace.
7. **Vacuum leak in suction line.**
   - Tighten the connection(s).
8. **Chemical tube stretched out where tube attaches or pin hole/cut in tube sucking air.**
   - Cut off end of tube or replace tube.
9. **Problem with air pump**
   - Refer to air pump instruction manual.
   - https://www.xylem.com/en-us/products-services/pumps-packaged-pump-systems/pumps/positive-displacement-pumps2/diaphragm-pumps/air-operated-diaphragm-pumps/g57-air-operated-double-diaphragm-pump/documentation/
   - Replace pump.
10. **Use of an oiler in the airline will cause pump to stall**
    - Use only clean, dry air.

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.