Lafferty Equipment Manufacturing, LLC
Installation & Operation Instructions

Model # 941603 · 3-Way FPS Transfer System

REQUIREMENTS

Chemical Concentrate or Ready-to-Use Solution	
Compressed Air	up to 4 CFM per pump

OPTIONS

Stainless Steel Hose Racks

Small Stainless Steel Hose Rack	# 224145

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

Alternate Seal Materials (Santoprene/EPDM Standard)

UPGRADE: Viton Pump & Viton Trigger Gun	# 941600-VT
UPGRADE: Kalrez Pump & Viton Trigger Gun	# 941600-KT
UPGRADE: Kalrez, ATEX Pump & EPDM Hoses	# 941600-ATEX

Alternate Discharge (Trigger Gun Standard)

UPGRADE: Stainless Steel Ball Valve & Wand	# 941600-X

WEIGHT & DIMENSIONS

Single Package

Shipping Weight	33 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 3-Way FPS Transfer System is a chemical transfer system for filling any sized container with chemical concentrate or ready-to-use solution. This unit uses compressed air to power FloJet air pumps which draw 3 chemicals from bulk containers and dispense them into any other containers through 15 foot discharge hoses and trigger guns.

SAFETY & OPERATIONAL PRECAUTIONS

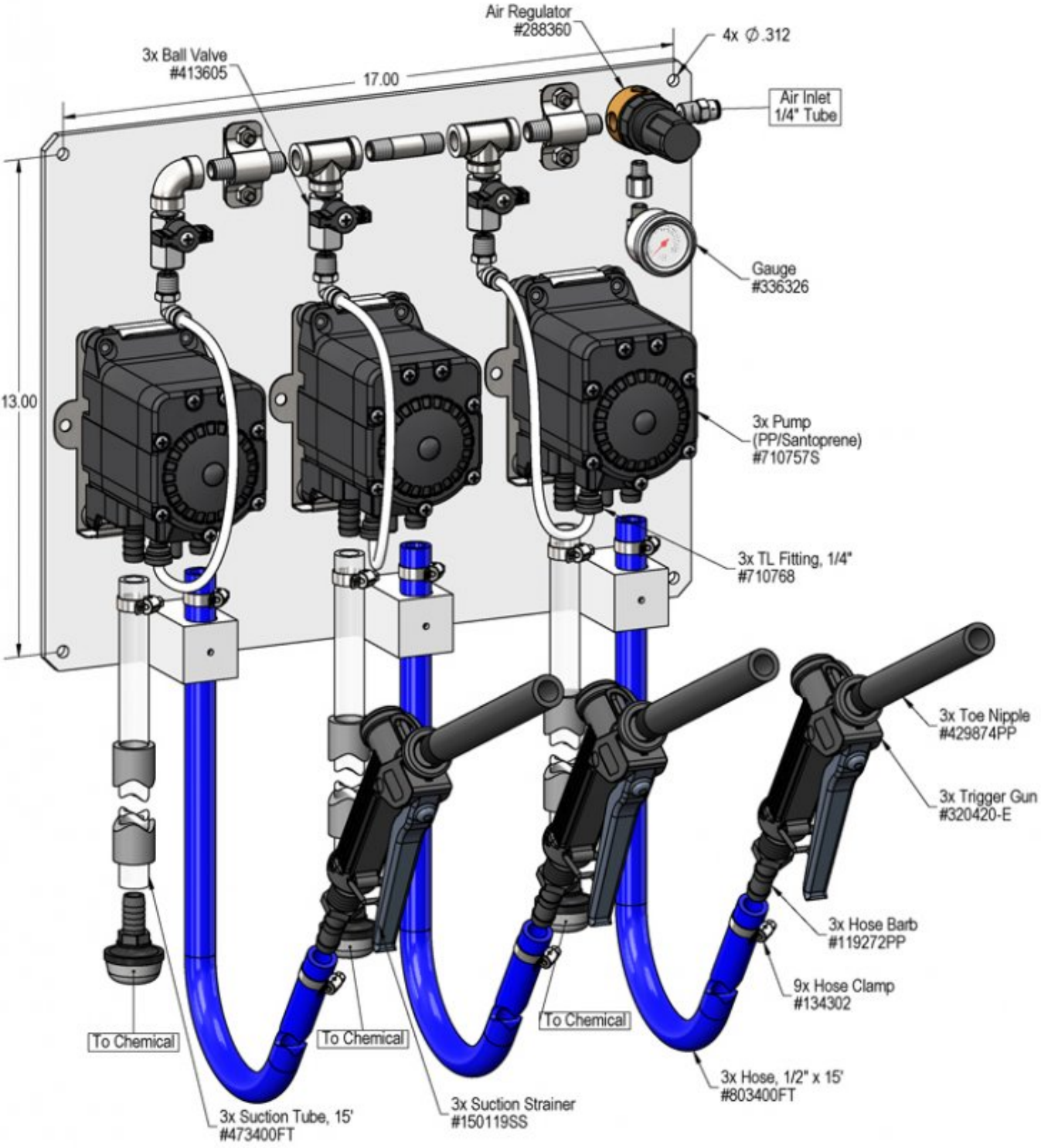
- For proper performance do NOT modify or substitute hose diameter.
- Manufacturer assumes no liability for the use or misuse of this unit.
- Wear protective clothing, gloves and eye-wear when working with chemicals.
- Always direct the discharge away from people and electrical devices.
- Follow the chemical manufacturer's safe handling instructions.
- DO NOT use d-Limonene or other chemicals that are not compatible with the Santoprene diaphragms.
- Viton or Kalrez upgrades are 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

1. Hold the trigger gun, open the inlet air ball valve, place the nozzle in the container to be filled. Pull the trigger and begin.
2. When container is filled to the desired level, release the trigger. Close the inlet ball valve and pull the trigger to relieve pressure in the hose.


Air Regulator
#288360
4x Ø.312
3x Ball Valve
#413605
17.00
Air Inlet
1/4" Tube
Gauge
#336326
13.00
3x Pump
(PP/Santoprene)
#710757S
3x TL Fitting, 1/4"
#710768
3x Toe Nipple
#429874PP
3x Trigger Gun
#320420-E
3x Hose Barb
#119272PP
9x Hose Clamp
#134302
To Chemical
To Chemical
To Chemical
3x Hose, 1/2" x 15'
#803400FT
3x Suction Strainer
#150119SS
3x Suction Tube, 15'
#473400FT

Troubleshooting Guide

Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Air pump will not run or pump chemical solution.	1,3,4	5,6,9,10
B) Will not draw chemical.	1,2,3	6,7,8
C) Pump runs too fast with no output.	2	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. **Hose kinked**
   - 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/brands/Flojet/flojet-products/g57-air-operated-double-diaphragm-pump
   - 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.