Lafferty Equipment Manufacturing, LLC
Installation & Operation Instructions

Model # 919050 · Mini-Central Pump System

REQUIREMENTS

Ready-to-Use Chemical Solution

Compressed Air	up to 16 CFM
Hose	3/4" ID x 15'

OPTIONS

Air Pump Diaphragm Options - Santoprene Standard

Teflon Diaphragm Upgrade For 1/2" Air Pump	# 710919

Level Masters Provide an Automatic Supply of Ready-to-Use Chemical

Level Master (Various Tank Sizes)	# 989304
Gemini Level Master (Various Tank Sizes)	# 989316

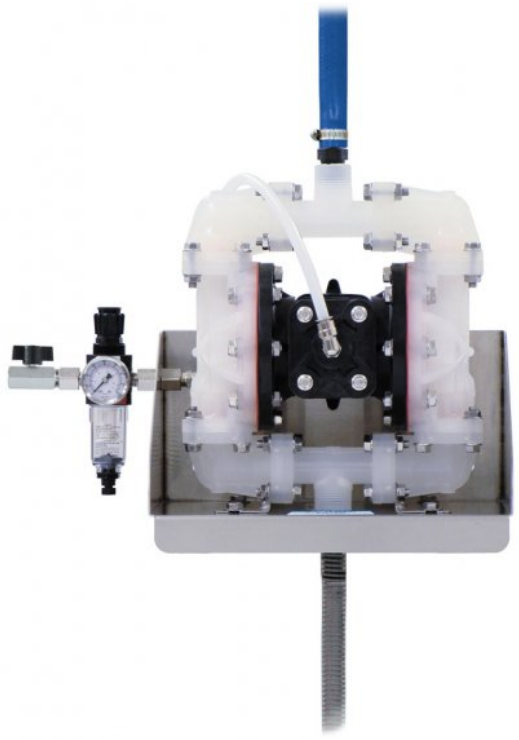
Drum & Tote Stick Lengths & Seal Materials

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	45 lbs.
Shipping Dimensions	25" x 16" x 16"



Lafferty® EQUIPMENT MANUFACTURING LLC

CFS TECHNOLOGIES

www.laffertyequipment.com
501-851-2820

WARNING! READ ALL INSTRUCTIONS BEFORE USING EQUIPMENT!

OVERVIEW

The Mini-Central Pump System is a compressed air driven system that will pump neat or ready to use chemical solutions for a variety of applications. Used to transfer chemicals, fill vessels and feed remote Pump Fed Foamers or Sanitizing Hose Drop Stations. As a transfer system it will pump up to 12 GPM and as a central chemical feed system it will pump up to 9 GPM @ 60 PSI.

SAFETY & OPERATIONAL PRECAUTIONS

- See pump operations instructions for proper maintenance and start up procedures.
- Must use clean dry air!
- The pump's gasketed fasteners have been tightened and tested according to manufacturer's specifications and should be checked after the first use to prevent possible leakage and damage.
- Manufacturer assumes no liability for the use or misuse of this unit.
- Wear protective clothing, gloves and eye-wear when working with chemicals.
- Follow the chemical manufacturer's safe handling instructions.
- DO NOT use chemicals that are not compatible with the Santoprene diaphragms.
- Optional Teflon diaphragms available.

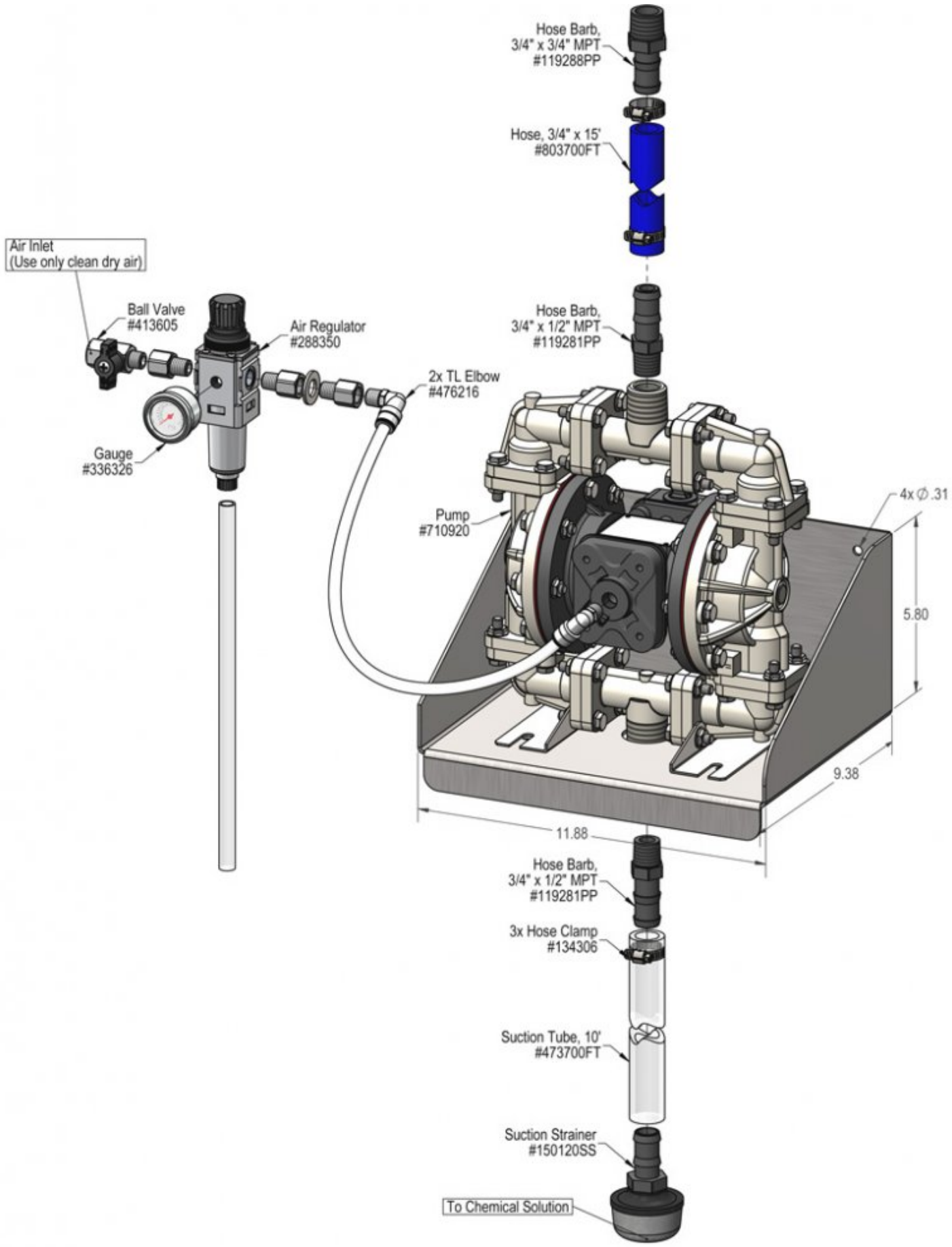
TO INSTALL (REFER TO DIAGRAM ON NEXT PAGE)

1. Mount the unit to a suitable surface.
2. Connect a clean/dry compressed air line to the air inlet ball valve.
3. Connect the suction tube to the hose barb.
4. Place the strainer in a container of neat or ready to use chemical solution.
5. Connect the short flexible discharge hose to the discharge hose barb. Never hard plumb directly to the pump. Always use flexible hose as the first section.
6. Either use this hose or a longer one for transferring chemical or filling containers.
   - When using pump to provide pressurized chemical to Pump Fed Applicators (Foamers, Sprayers, etc.), connect the discharge hose to the distribution manifold or piping to applicators. To avoid detrimental pressure loss, take into consideration the length of the manifold/piping and the expected GPM usage of applicators to determine the size of the manifold and/or piping.
   - When used in conjunction with an Air Level Master to control the activation of chemical proportioners, connect Air Level Master air inlet tubing to the side of the air regulator opposite the gauge (Air Level Master and tubing not included with pump).

TO OPERATE

You are now ready to operate the system, depending on the intended application.

1. Turn the inlet ball valve slightly until the pump primes then open fully to begin pumping.


Hose Barb,
3/4" x 3/4" MPT
#119288PP
Hose, 3/4" x 15'
#803700FT
Air Inlet
(Use only clean dry air)
Ball Valve
#413605
Air Regulator
#288350
2x TL Elbow
#476216
Hose Barb,
3/4" x 1/2" MPT
#119281PP
Gauge
#336326
Pump
#710920
4x ∅ .31
5.80
9.38
11.88
Hose Barb,
3/4" x 1/2" MPT
#119281PP
3x Hose Clamp
#134306
Suction Tube, 10'
#473700FT
Suction Strainer
#150120SS
To Chemical Solution

Troubleshooting Guide

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

Possible Cause / Solution

Startup

1. **Problem with air pump**
   - Refer to air pump instruction manual.
   - Ensure that each pump component is properly aligned. If misaligned, loosen the required bolts and allow the components to settle in the appropriate position. Re-tighten the bolts, but do not over tighten.
   - After the first use check the gasketed bolts for loosening, tighten if needed. Do not over tighten.
   - Never hard plumb the discharge side of the air pump. Use flexible hose.
2. **Air pressure too low**
   - Open air ball valve fully after pump has primed.
   - The air regulator has been pre-set at 80 psi. Do not go over 100 PSI!

Maintenance

3. **Check air muffler for signs of dirty air.**
   - Clean muffler and install air filter before unit.
4. **Air regulator clogged or failed**
   - Clean or replace, and install air filter before unit.
5. **Solution suction tube not immersed in chemical or chemical depleted**
   - Immerse tube or replenish.
6. **Solution strainer blocked**
   - Clean or replace.
7. **Solution suction tube stretched out where tube slides over hose barb or pin hole/cut in tube (sucking air in)**
   - Cut off end of tube or replace tube.
8. **Vacuum leak in solution pick-up connections**
   - Tighten the connection.

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. Inspect and re-torque pump fasteners once per month, or as needed. Refer to pump manual for details.