Lafferty Equipment Manufacturing, LLC
Installation & Operation Instructions

Model # 941621 · Timed FPS Transfer System

REQUIREMENTS

Chemical concentrate or ready to use solution	
Compressed Air	up to 4 CFM
Electric	120V

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 Standard

Viton Upgrade: Flojet Air Pump & Check Valves	# 710756
Kalrez Upgrade: Flojet Air Pump & Check Valves	# 710755

WEIGHT & DIMENSIONS

Single Package

Shipping Weight	27 lbs.
Shipping Dimensions	20" x 18" x 12"



Lafferty EQUIPMENT MANUFACTURING LLC

CFS TECHNOLOGIES

www.laffertyequipment.com
501-851-2820

WARNING! READ ALL INSTRUCTIONS BEFORE USING EQUIPMENT!

OVERVIEW

The Timed FPS Transfer System is a chemical transfer system for filling any size container with chemical concentrate or ready-to-use solution. Compressed air powers a FloJet air pump which draws chemical from a bulk container and dispenses it into any other container. This unit features on/off rocker switch activation with an adjustable timer to help prevent over usage.

SAFETY & OPERATIONAL PRECAUTIONS

- **See Additional Safety Precautions included with the Electrical Control Box Installation Information**
- **Always consider electrical shock hazard when working with and handling electrical equipment. If uncertain, consult an Electrician. Electrical wiring should only be done by a qualified Electrician, per Local and State Electrical Codes**.
- 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

TIMER ADJUSTMENT

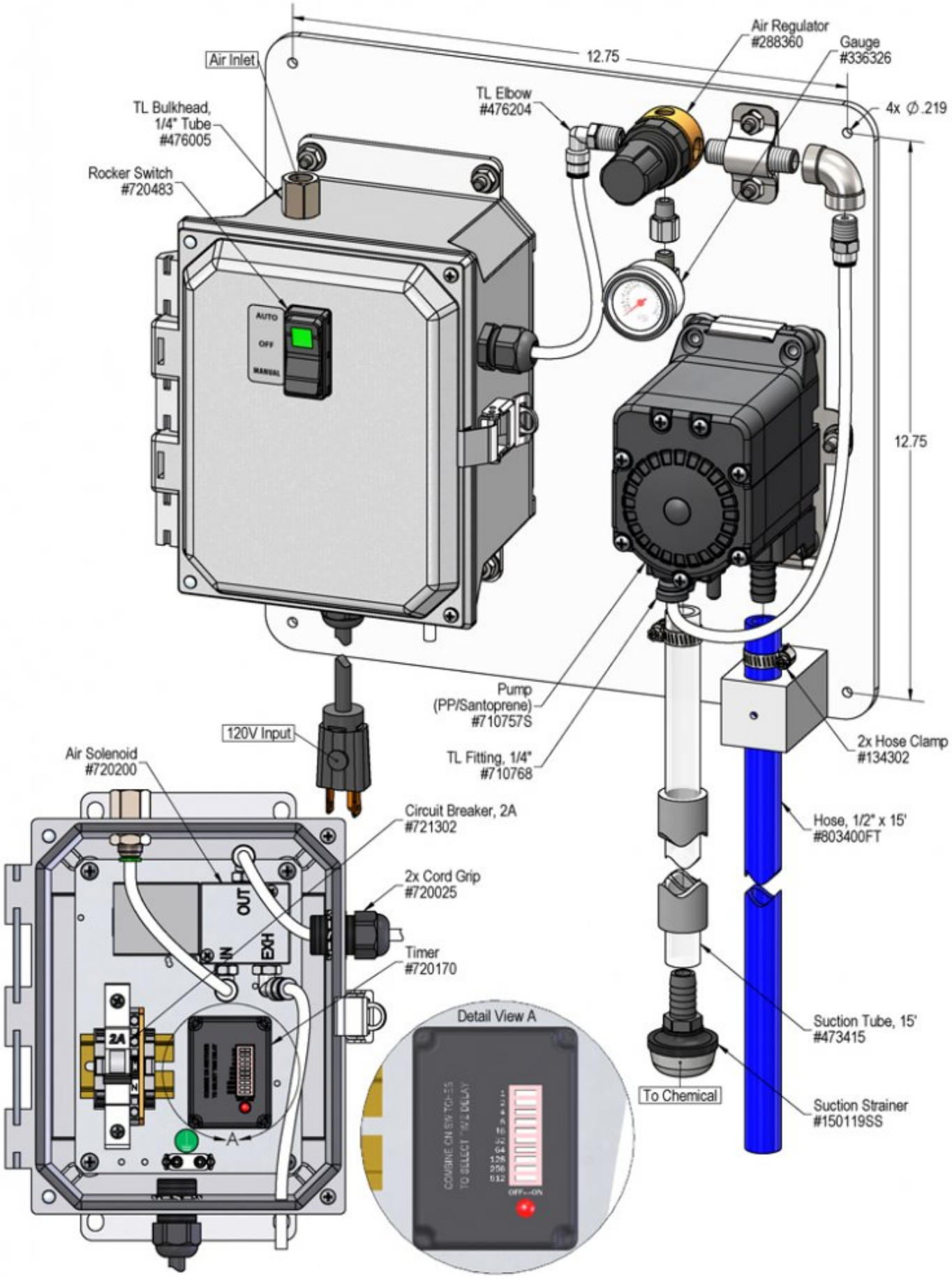
1. CAUTION! UNPLUG THE POWER CORD! Then open control box and adjust the timer. The dip switches control how long the air pump will run each time the unit is activated. Determine how long you want the pump to run and activate the corresponding combination of dip switches. (Up to 17 minutes)
2. Close control box and plug in the power cord. Turn on the power switch. Depress the "Auto" side of the rocker switch, on the front of the control box, to activate the system.

TO OPERATE

1. Hold the hose in the container to be filled. Press the "Auto" side of the rocker switch. The green light will come on.
2. When timer times out, the system will stop.
3. To run the system again, press the rocker switch to "Off" and then to "Auto".
4. To operate the system manually, press and hold the rocker switch to "Manual". Release the rocker switch when finished.
5. To stop at any time, move the switch to the "Off" position.

SWITCH SETTINGS (On front of Control Box)

- **Automatic control (AUTO)** – Top of switch is depressed. Green light glows. The unit will function according to the timer settings.
- **OFF** – Switch is in middle position; Green light is off.
- **Momentary control (MANUAL)** – Press bottom of switch. Unit is active only while switch is pressed. Green light is off. When released, the switch returns to the OFF position.


Air Inlet
12.75
Air Regulator
#288360
Gauge
#336326
TL Elbow
#476204
4x ∅.219
TL Bulkhead,
1/4" Tube
#476005
Rocker Switch
#720483
AUTO
OFF
MANUAL
12.75
Pump
(PP/Santoprene)
#710757S
120V Input
2x Hose Clamp
#134302
Air Solenoid
#720200
TL Fitting, 1/4"
#710768
Circuit Breaker, 2A
#721302
Hose, 1/2" x 15'
#803400FT
2x Cord Grip
#720025
OUT
IN
EXH
Timer
#720170
Detail View A
Suction Tube, 15'
#473415
To Chemical
Suction Strainer
#150119SS

Troubleshooting Guide

Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Air pump will not run or pump solution.	1,2,3	6,7,10,11
B) Will not draw chemical.	1,2,3	7,8,9
C) Pump runs too fast with no output.	2	8,9,10,11
D) Unit doesn't come on when switch is turned on.	4,5	
E) Unit comes on and runs continuously.	4	
F) Unit comes on but no solution through solenoid.	4	

Possible Cause / Solution

Startup

1. **Inlet ball valve partially closed or air pressure too low.**
   - Completely open air inlet ball valve.
   - The air regulator has been pre-set at 60 psi. Do not go over 100 PSI!
2. **Chemical tube not immersed in container or container empty**
   - Immerse tube or replenish.
3. **Hose kinked**
   - Straighten the hose.
4. **Timer failed/Controller not set properly or malfunctioned**
   - Replace timer. See Controller manual.
5. **May have electrical problems**
   - Have a qualified electrician check electrical connections.
   - Ensure circuit breaker (5 amp) has not been tripped at control box.

Maintenance

6. **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.
7. **Air regulator clogged or failed**
   - Clean or replace.
8. **Chemical strainer clogged up**
   - Clean or replace.
9. **Vacuum leak in suction line.**
   - Tighten the connection(s).
10. **Chemical tube stretched out where tube attaches or pin hole/cut in tube sucking air.**
    - Cut off end of tube or replace tube.
11. **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.
12. **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.