



USER MANUAL

MODEL:

SLX-VA, SLX-VA-2

VENTURI AIRLESS FOAMER - SINGLE STATION

English (Original Instructions)

Updated: 06/02/23



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General Precautions

- For proper performance **do not** substitute nozzle or alter the diameter or length of the included hose.
- **Never** point the spray wand at another individual or electrical devices. Always direct the discharge away.
- For pressures over 100 PSI, remove the discharge valve or lower pressure.
- **Never** leave water supply inlet ball valve on when unit is not in use.
- **Never** mix chemicals without consulting the chemical manufacturer first.
- Manufacturer assumes no liability for the use or misuse of this unit or chemical compatibility.
- Specifications and parts are subject to change without notice.



Safety Warning



- All personnel servicing this unit must be familiar with the information contained in this manual. Follow all installation and maintenance instructions.
- Follow safety instructions of chemical manufacturer (SDS).
- Wear proper PPE when working with chemicals (gloves, safety glasses, face shield, etc.)
- Always follow plant and OSHA guidelines.
- Avoid contact of chemicals with skin and eyes. If contact occurs, see SDS sheet for further first aid measures.
- Follow all local codes for backflow prevention when connecting to a potable water supply.
- **WARNING: Severe damage to your facility, or contamination of your water supply, can occur without proper backflow prevention.**

PROTECT THE ENVIRONMENT

Please dispose of packaging materials, old machine components, and hazardous fluids in an environmentally safe way according to local waste disposal regulations.



Always remember to recycle.



Overview

The SLX wall mounted water driven airless foamer is a low to medium volume decentralized spray system that works with city water pressure to dilute and spray foam at a range of flow rates without compressed air. The unit features a split body design for easy servicing and maintenance.

The included instructions apply to both polypropylene and stainless steel venturi airless foamers regardless of insert size. Model specific specifications will be identified as necessary.

Requirements

- Water Pressure: 35 - 125 PSI

NOTE: A back flow preventer must be installed in the water supply to this unit, per local codes.

- Max Temperature: 140°F
- Chemical compatibility: Chemical products used with this equipment must be formulated for this type of application and compatible with unit materials (see specifications).

NOTE: For more information on chemical compatibility consult the chemical manufacturer.


Specifications

- Materials of Construction:
 - Body: Polypropylene or Stainless Steel (dependent on model)
 - Enclosure: 304SS
 - Wetted Parts: PVC, Polypropylene, AFLAS, and Stainless Steel
- Weight:
 - Foamer with enclosure: 5.2 - 7.5 lbs.
 - Hose Assembly: 8 lbs.
 - Spray wand: 1.2 lbs.
- Dimensions: 7" x 10³/₈" x 6"

NOTE: Weights will vary depending on model configuration and construction materials (i.e. stainless vs. polypropylene)

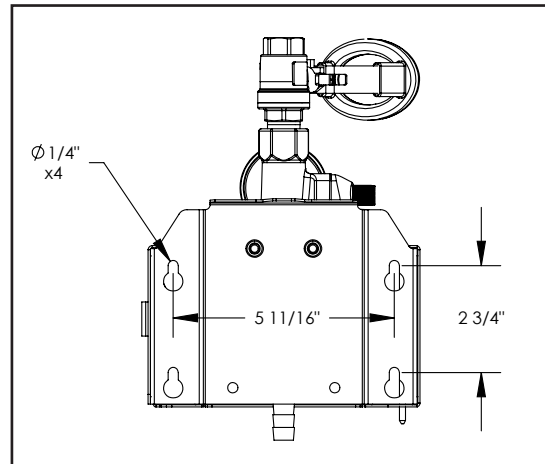
Insert #	Water Flow Rate (GPM)	Hose Size (OD x L)
V14	1.4	1/2" x 50'
V25	2.5	1/2" x 50'

Flow rates and coverage time may vary depending on supply pressure, metering tip size, and chemical viscosity. Always test prior to normal operation to ensure facility requirements are met for cleaning procedures.

 **More Information**
Please contact Clean Logix at:
(616)-438-9200 or **sales@clean-logix.com**

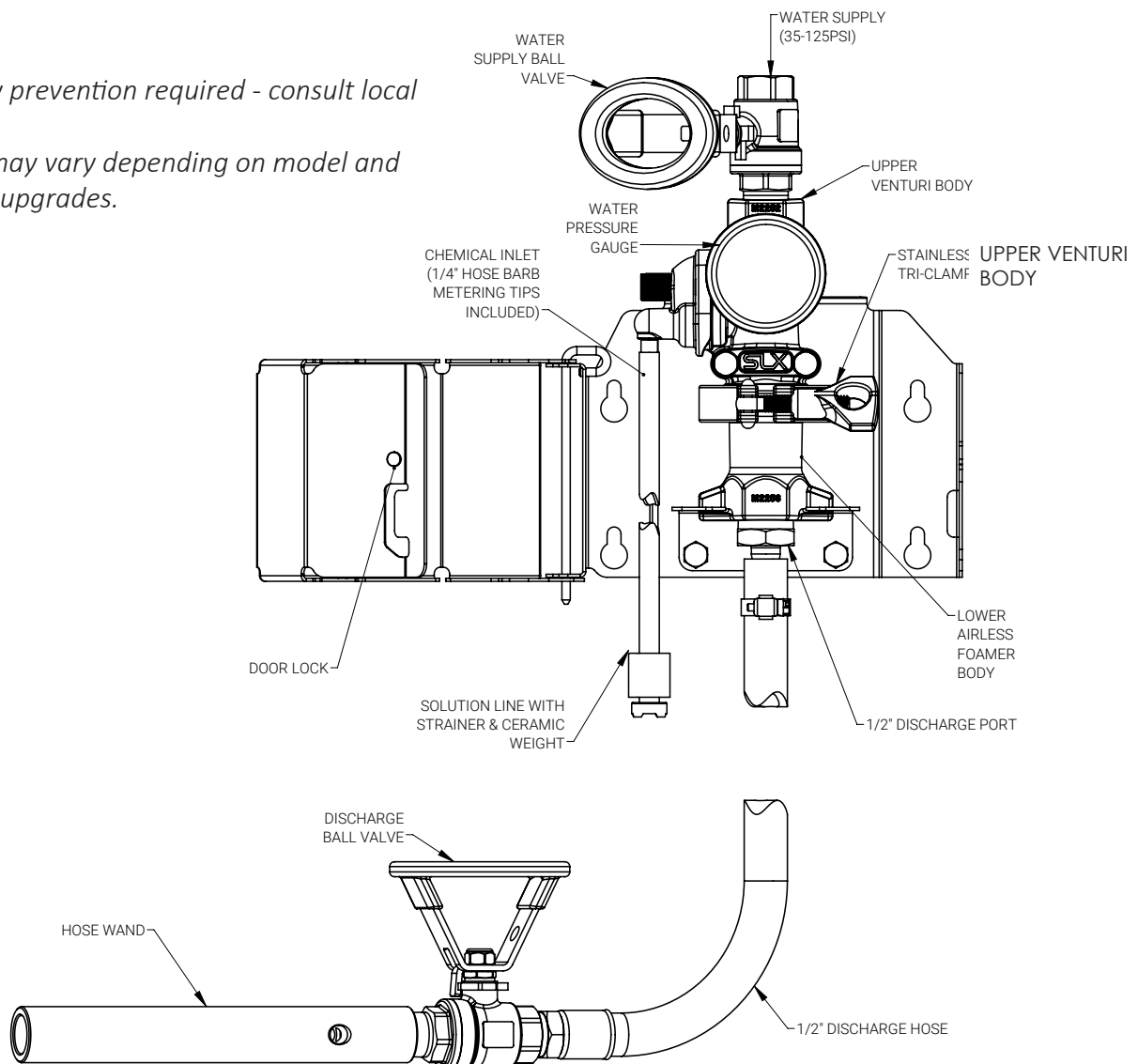
Installation

1. Mount the enclosure to the wall.
2. Flush water supply line to ensure it is flowing properly and free of debris.
3. Connect water to water supply inlet (1/2" NPT)
4. Connect discharge hose and spray wand to the bottom hose barb and secure with hose clamp.



Notes:

- Backflow prevention required - consult local codes.
- System may vary depending on model and optional upgrades.



Dilution

Metering Tips

1. Place chemical container below unit.
2. Using the included metering tips, identify which tip is appropriate for your dilution ratio.

NOTE: Review dilution recommendations for the chemistry being used. GPM's calculated at 40 PSI water pressure. For different pressure estimates use following formula:

$$\text{Dilution Ratio} = \frac{(\text{GPM} \times 128)}{\text{Oz/Gal}}$$

3. Thread metering tip into hose barb on chemical inlet to install. [Fig 5.1]
4. Connect suction line to hose barb.
5. Connect suction line in chemical container (suction line with ceramic weight and strainer included for this purpose).

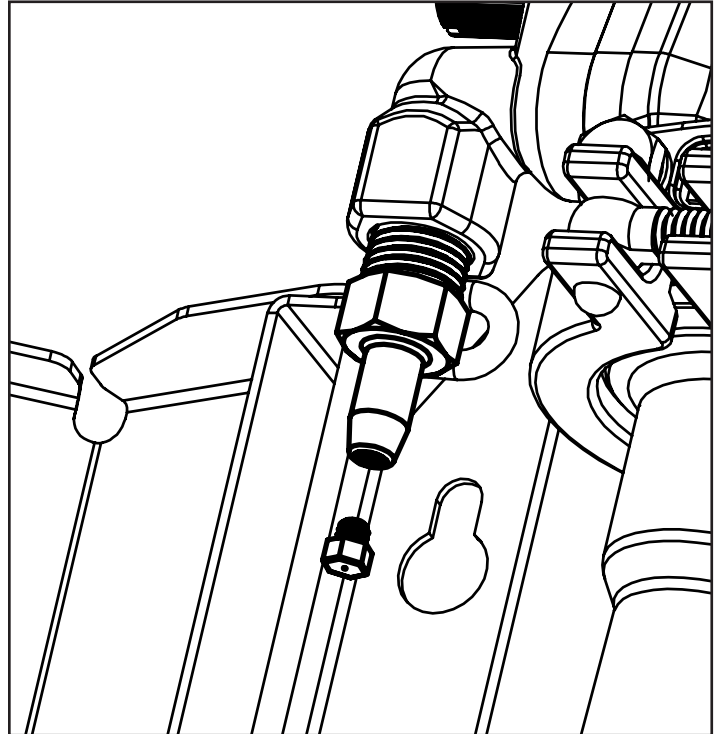


Fig. 5.1: Metering tip and hose barb

Metering Tip Calculator
Mobile App:



NOTE: Dilution ratios may vary depending. Always test chemical dilution prior to normal operation.



Dilution (cont.)

The following estimates are for guideline purposes only. Results may differ. Always test chemistry for proper dilution ratio prior to normal operation. Contact your distributor or chemical manufacturer for support or dilution recommendations.

Tip	Color	Oz/ Min	V14	V25
○	Copper	0.44	407:1	727:1
○	Pumpkin	0.54	332:1	593:1
○	Burgundy	0.67	267:1	478:1
○	Lime	0.85	211:1	376:1
○	Orange	1.70	105:1	188:1
○	Turquoise	2.15	83:1	149:1
⬡	Pink	2.93	61:1	109:1
⬡	Corn Yellow	3.84	47:1	83:1
⬡	Dark Green	4.88	37:1	66:1
⬡	Orange	5.77	31:1	55:1
⬡	Gray	6.01	30:1	53:1
⬡	Light Green	7.01	26:1	46:1
⬡	Med. Green	8.06	22:1	40:1
⬡	Clear Pink	9.43	19:1	34:1
⬡	Yellow Green	11.5	16:1	28:1
⬡	Maroon	11.93	15:1	27:1
⬡	Pale Pink	13.87	13:1	23:1
⬡	Light Blue	15.14	12:1	21:1
⬡	Dark Purple	17.88	10:1	18:1
⬡	Navy Blue	25.36	7:1	13:1
⬡	Clear Aqua	28.6	6:1	11:1
⬡	Black	50	4:1	6:1

Insert Size Flow Rates

PSI	GPM	
	V14	V25
35	1.35	1.25
40	1.40	1.34
45	1.45	1.42
50	1.50	1.50
55	1.60	1.57
60	1.65	1.64
65	1.70	1.71
70	1.70	1.77
75	1.75	1.83
80	1.80	1.90
85	1.85	1.95
90	1.90	2.01
95	1.95	2.07
100	2.00	2.12
105	2.05	2.17
110	2.05	2.22
115	2.10	2.27
120	2.15	2.32

Operation

Initial Use

When operating the airless foamer for the first time some alterations may need to be made to produce the desired foam quality and ensure the unit is drawing chemistry as intended.

1. Ensure unit is properly connected and the water valve is closed [Fig. 7.1]
2. Take hold of the spray wand.
3. Open ball valve on spray wand [Fig. 7.2]
4. Fully open water valve.
 - The spray wand will slowly begin discharging water.
 - Chemical will be drawn up the suction line and introduced to the fluid path.
 - Air will be drawn into the wand to create foam - this may take a few seconds to produce the desired foam quality

NOTE: Do not block air inlet on wand. If blocked, the unit will not produce foam.

5. Ensure water pressure is above 35 PSI
6. Check foam quality and dilution amount per facility standards.
7. Metering tip size may need to be changed if foam quality or dilution ratio is still not adequate.

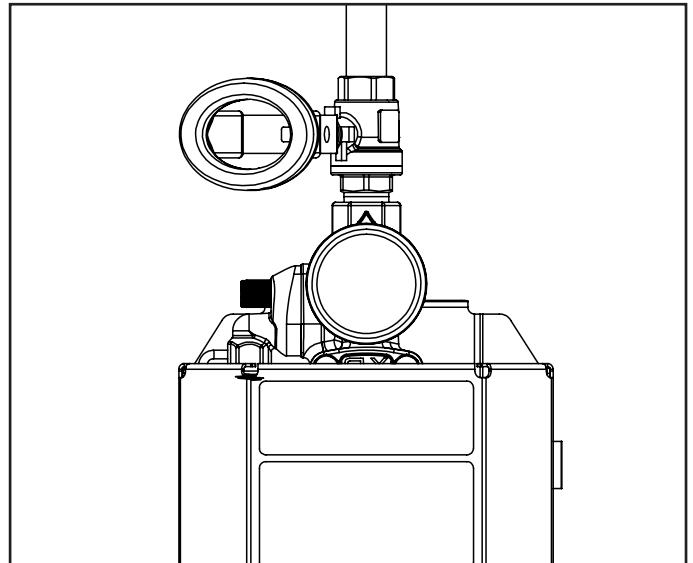


Fig. 7.1: Water supply ball valves closed.

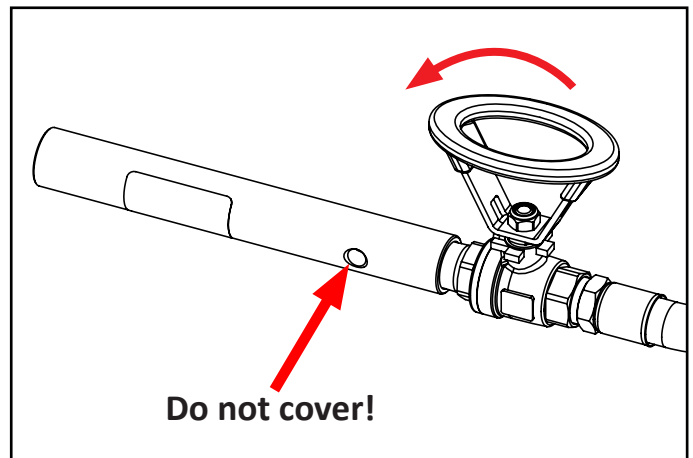


Fig. 7.2: Airless foam wand with open valve.

Operation (cont.)

Normal Use

1. Ensure unit is properly connected and the water valves is closed [Fig.7.1]
2. Take hold of the spray wand.
3. Open ball valve on spray wand
4. Fully open water valve.
 - The spray wand will slowly begin discharging water.
5. Apply foam from top to bottom.
6. Turn spray wand ball valve off to temporarily stop spraying.



WARNING

Spray wand ball valve should only be turned off momentarily when under pressure. There may be kick-back/recoil when re-opening.

7. When complete, turn off water supply line.
8. Open spray wand ball valve and let pressure exhaust completely.
9. Rinse hose.
10. Store hose depressurized, with the ball valve open, and coiled properly coiled to prevent kinks or damage.

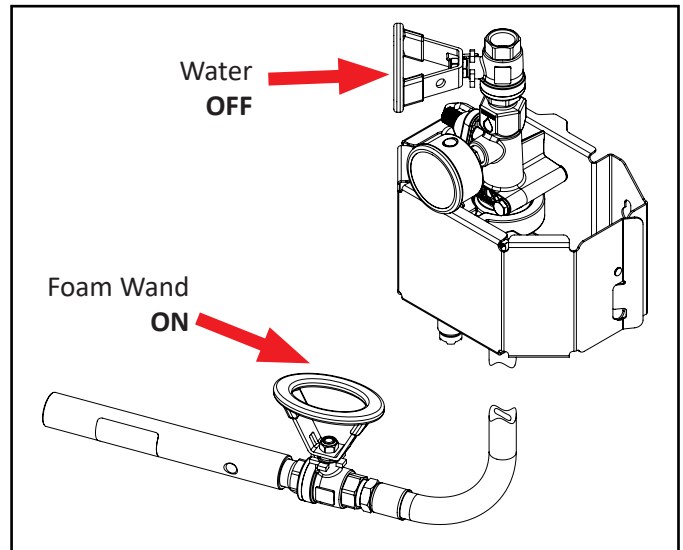


Fig. 7.1: Ball valve positions for start up

General Use

Removing Venturi Insert

1. Ensure water supply line is off and system is depressurized.

WARNING

Depressurize system prior to servicing! Always wear appropriate personal protective equipment (PPE) when handling chemical per SDS recommendations.

2. Open the enclosure door.
3. Loosen the tri-clamp fitting to disconnect the upper venturi body and lower airless foamer body.

NOTE: Supply line and discharge hose can remain connected during this process. Ensure there is adequate hose/tubing length for maneuverability.

4. Pull the lower airless foamer body down, away from the upper venturi section.
 - **For Polypropylene Models:** Twist the lower airless foamer body and align the winglets to release it from the support bracket. [Fig 8.2]

WARNING

An o-ring is positioned between the upper and lower bodies. Ensure it is not lost during servicing.

5. With the bottom half removed the venturi insert can be accessed; pull straight down to remove.
 - Force may be required due to o-rings and/or chemical build-up.
 - A screwdriver can be used to pry the insert out if necessary [Fig. 8.3]
6. The insert can be cleaned using warm water or descaling acid compatible with PVC.

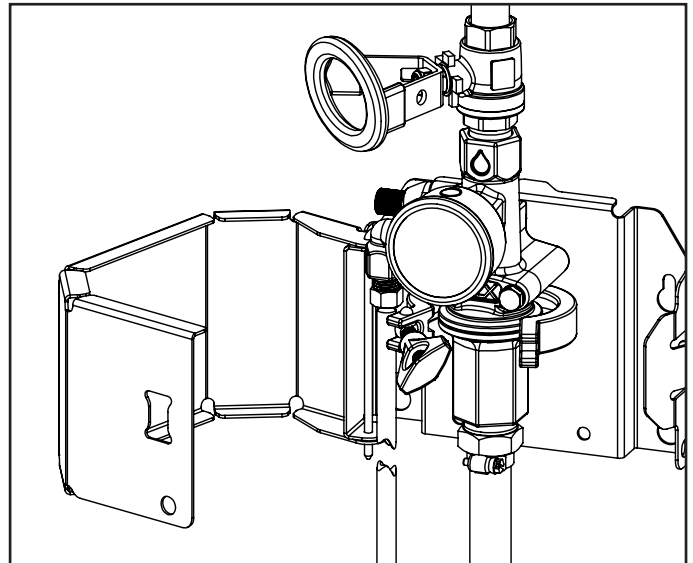


Fig. 8.1: Tri-clamp open

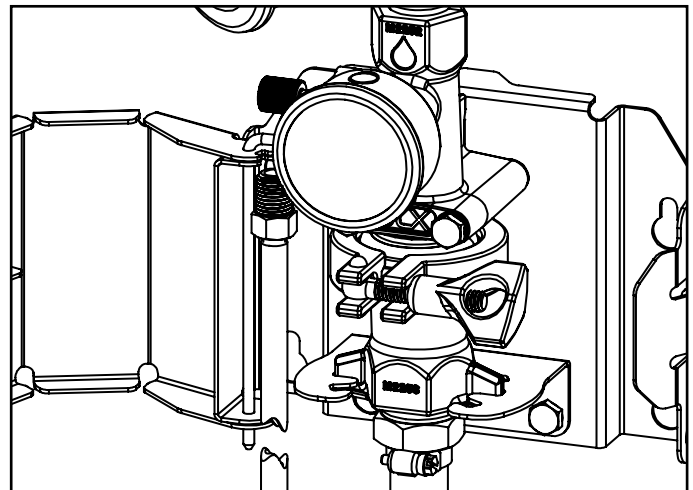


Fig. 8.2: Polypropylene lower support bracket

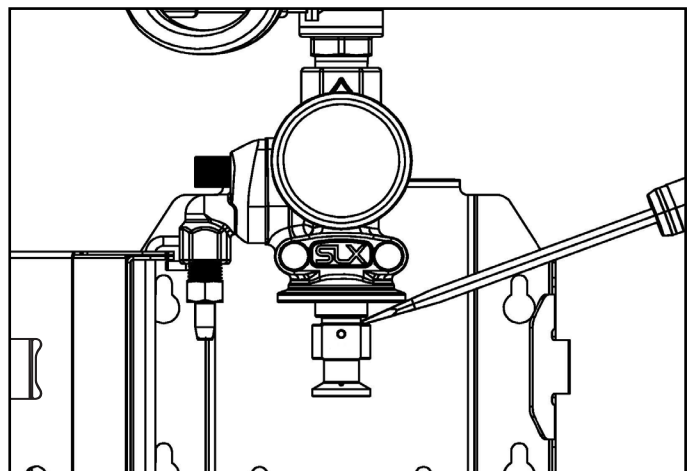


Fig. 8.3: Venturi insert removal using screwdriver

General Use (cont.)

Removing Venturi Insert (cont.)

7. Replace insert with clean or new version by sliding it back into the upper venturi body, o-ring section first.
8. Reconnect the lower airless foamer body to the upper venturi section.

WARNING

Ensure o-ring is positioned between the upper and lower bodies and is seated properly. Failure to do so may result in leaks or improper performance.

9. Place the tri-clamp around the lip where the two halves meet, tighten in place until secure.
10. Ensure all connection points are secure.
11. Close enclosure door and lock if necessary.
12. Follow initial setup procedures to test insert and spray quality before resuming normal operation.

Removing Check Valve

1. Ensure supply line is off and system is depressurized.
2. Open the enclosure door
3. Loosen the thumb screw on the elbow by hand or using a flathead screwdriver. [Fig 10.2]
4. Pull the elbow away from the airless foamer body.
5. The check valve will be seated either inside of the elbow or the main body. Grab it and pull to remove. [Fig 10.3]
6. Clean or replace if damaged.
7. To reinsert, orient the check valve with the arrow pointing towards the airless foamer body and press into place.
8. Reattach the elbow and tighten the thumb screw until secure.

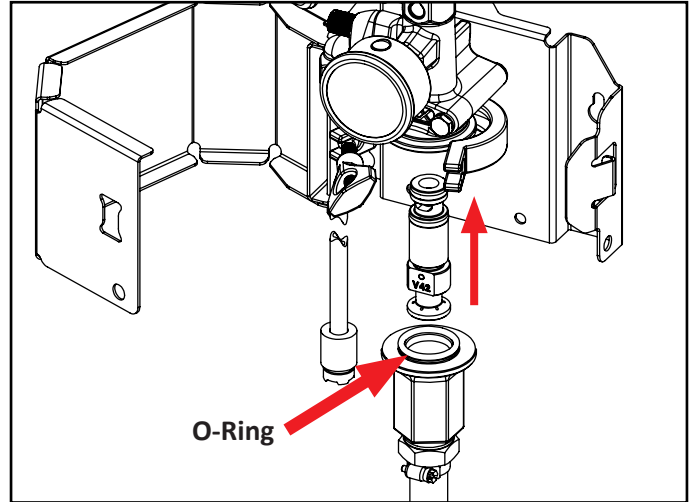


Fig. 10.1: Replacing venturi insert

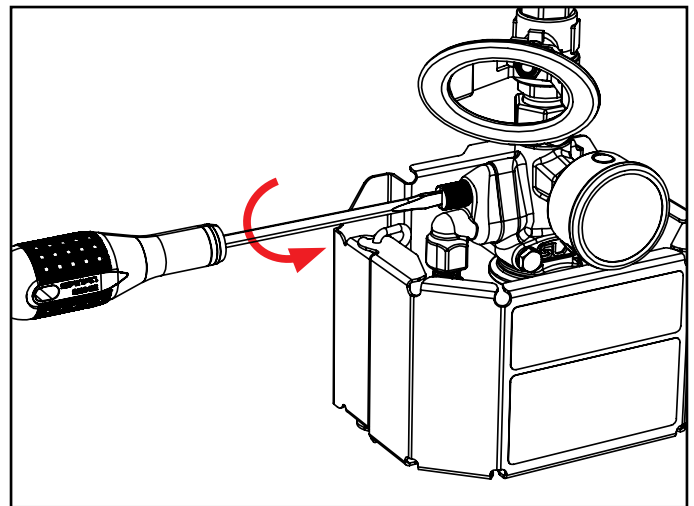


Fig. 10.2: Loosening thumb screw on elbow (chemical inlet)

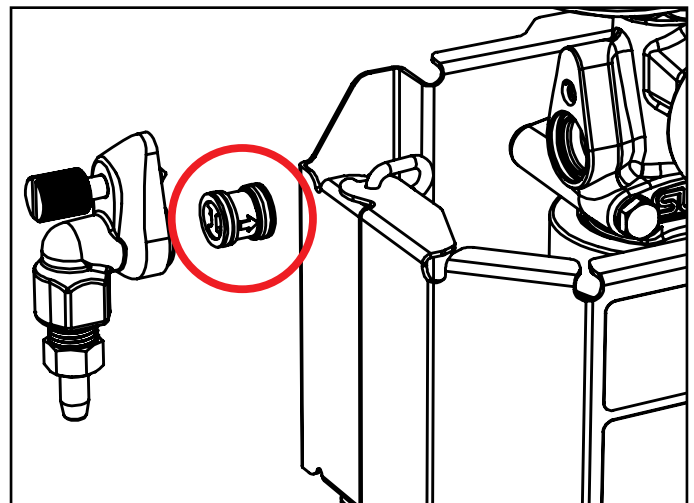


Fig. 10.3: SLX Check Valve (correct orientation)

Maintenance

The following maintenance procedures are recommended for normal use. Units which see a high amount of use should be inspected more frequently.

WARNING

Depressurize system prior to servicing! Always wear appropriate personal protective equipment (PPE) when handling chemical per SDS recommendations.

Daily:

- Check condition of hose (damage or leaks)
 - Replace as necessary.
- Ensure water line is not receiving backflow of chemistry.
 - Ensure check valve is operating properly, replace as necessary.
- Verify ball valves are operating properly.
 - Replace as necessary.

Weekly:

- Ensure metering tip is free of clogs
 - Remove from chemical inlet and clean with water.
- Ensure tri-clamp is secure and bodies are sealed
 - Verify o-ring is seated properly and is not damaged. Replace as necessary.
 - Check that tri-clamp is seated properly and tighten till secure.

Monthly

- Verify check valve is operating properly
 - Remove and ensure spring is functioning properly. Replace as necessary.
- Check venturi insert for clogs and debris.
 - Remove and inspect - if clogged or scale has built up clean with water or de-scaling acid compatible with PVC.
- Check o-rings on inserts and check valves.
 - Remove and replace as necessary.
 - O-rings can be purchased individually or pre-installed as complete check valve or insert assemblies.

Annually

- Replace discharge hose (and wand if necessary)
- Replace insert, check valves, regulators, and gauges



More Information

Please contact Clean Logix at:

(616)-438-9200 or **sales@clean-logix.com**



Troubleshooting

Foamer will not draw chemical

	Cause	Solution
Start-up	Improper water pressure	Increase water pressure or water volume.
	Inlet or discharge ball valve is not completely open	Completely open the ball valves.
	Chemical ball valve not open (2-way only)	Open chemical ball valve
	Not enough chemistry is being diluted	Install larger metering tip to use more chemistry
	Chemical supply is empty or suction line is not fully submerged	Immerse tube or replenish.
	Discharge hose too long or wrong size or kinked	Straighten the hose or replace hose with correct size and length (see system specifications based on insert size)
	Wand size is incorrect	Replace wand with correct size (see system specifications based on insert size)
Extended Use	Venturi insert is clogged	Open airless foamer body and check for debris or obstructions. Clean as necessary with water or air.
	Chemical strainer or metering tip partially blocked	Clean or replace chemical strainer and/or metering tip.
	Chemical tube stretched out or pin hole/cut in chemical tube sucking air.	Cut off end of tube or replace tube.
	Vacuum leak in chemical pick-up connections	Tighten the connection.
	Improper water pressure	Increase water pressure or water volume.
	Chemical check valve stuck or failed	Clean or replace.
	Hard water scale or chemical build-up may have formed in the airless foamer body causing poor or no chemical pick-up	Open airless foamer body and check for build-up. Remove and clean with water or descaling acid (insert is PVC). Replace as necessary.
	Airless Foam Wand screen clogged	Remove fittings and soak wand in descaling acid.
More than one chemical ball valve is open (2-way only)	Close one of the ball valves and ensure the other is fully open.	

For Technical Support:





Troubleshooting

Foamer is using too little chemistry (too diluted, not strong enough)

	Cause	Solution
Start-up	Water pressure or water volume too low/inlet piping too small causing poor chemical pick up	Increase water pressure or water volume.
	Inlet or discharge ball valve is not completely open	Completely open the ball valves.
	Chemical ball valve not open (2-way only)	Open chemical ball valve
	Not enough chemistry is being diluted	Install larger metering tip to use more chemistry
	Improper chemical	Ensure product is recommended for foaming and the application.
	Chemical supply is empty or suction line is not fully submerged	Immerse tube or replenish.
	Discharge hose too long or wrong size or kinked	Straighten the hose or replace hose with correct size and length.
	Wand size is incorrect	Replace wand with correct size.
Extended Use	Chemical strainer or metering tip partially blocked	Clean or replace chemical strainer and/or metering tip.
	Chemical tube stretched out or pin hole/cut in chemical tube sucking air.	Cut off end of tube or replace tube.
	Vacuum leak in chemical pick-up connections	Tighten the connection.
	Chemical check valve stuck or failed	Clean or replace.
	Hard water scale or chemical build-up may have formed in the airless foamer body causing poor or no chemical pick-up	Open airless foamer body and check for build-up. Remove and clean with water or descaling acid (insert is PVC). Replace as necessary.
	More than one chemical ball valve is open (2-way only)	Close one of the ball valves and ensure the other is fully open.

For Technical Support:





Troubleshooting

Airless foamer is using too much chemistry (too strong, not diluted enough)

Cause	Solution
No metering tip installed or metering tip too large	Install smaller metering tip and test.
More than one chemical ball valve is open (2-way only)	Close one of the ball valves and ensure the other is fully open.

Water is backing up into chemical container

Cause	Solution
Chemical check valve stuck or failed	Clean or replace.

Chemistry is backing up into water supply line

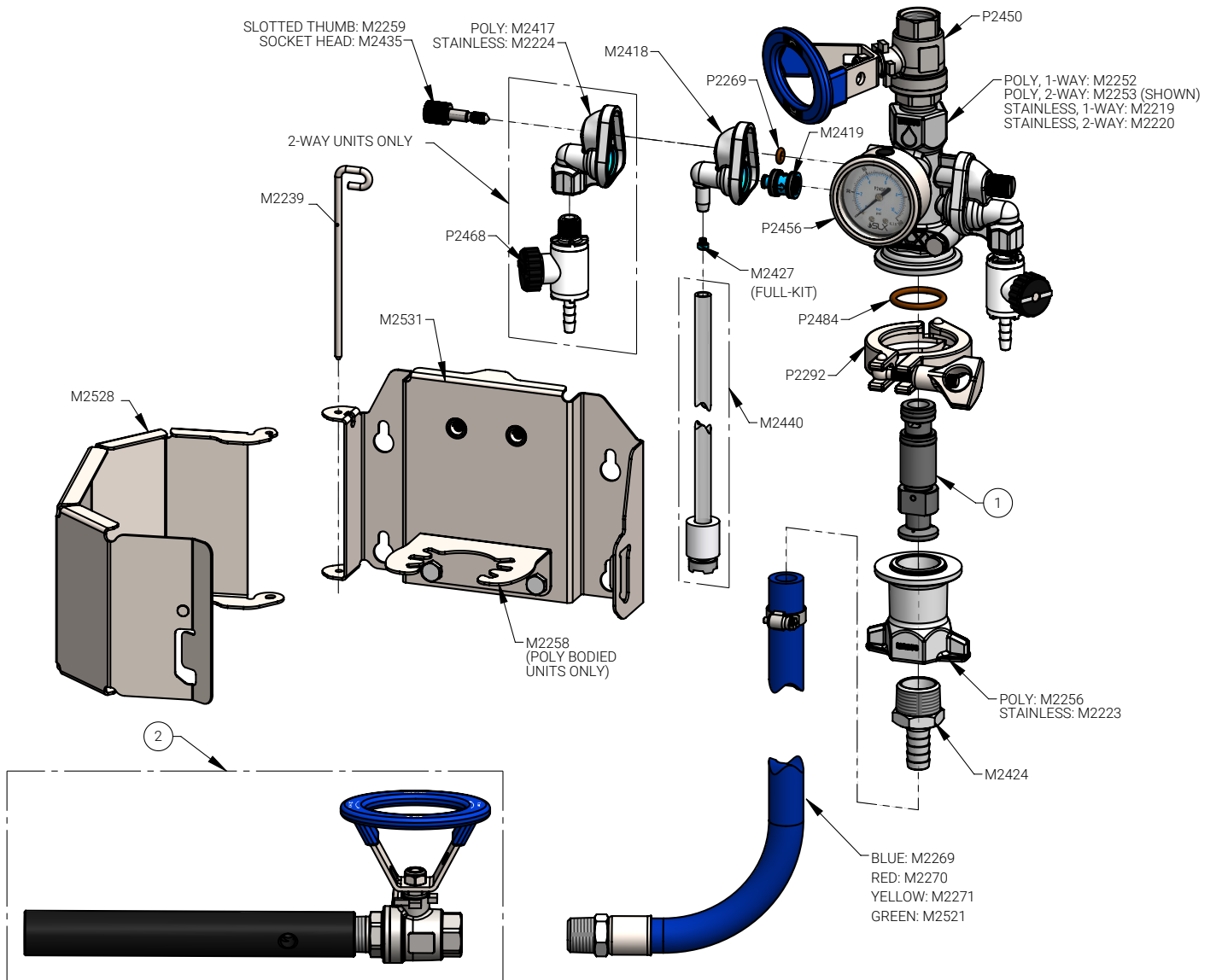
Cause	Solution
Inlet ball valve left on when not in use	Turn off ball valve

For Technical Support:



Parts Call-Out

Parts will vary depending on venturi insert size and body material. Review the parts list and following diagrams for the different system types to identify replacement parts for your specific system.



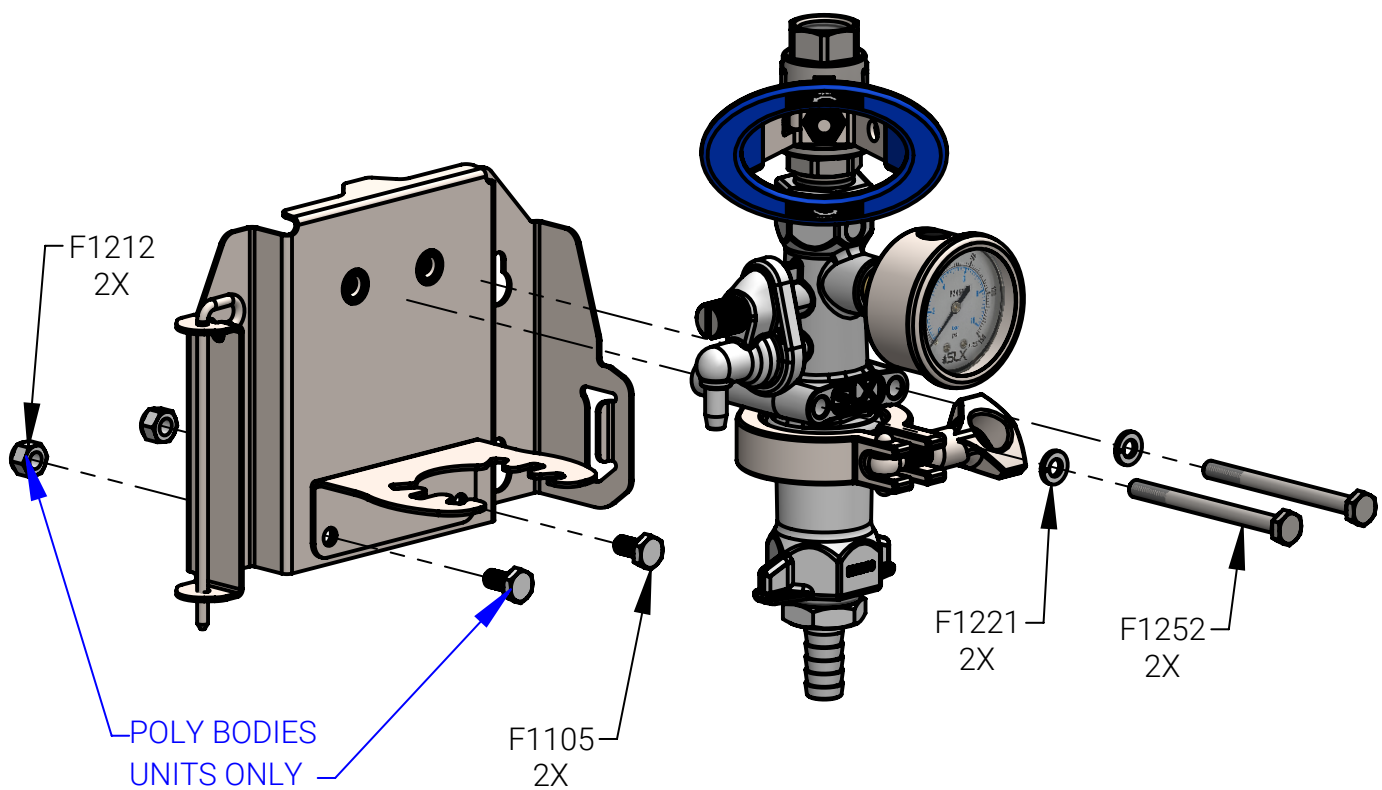
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Purchase Replacement Parts:



Parts Call-Out (cont.)

Parts will vary depending on venturi insert size and body material. Review the parts list and following diagrams for the different system types to identify replacement parts for your specific system.



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Purchase Replacement Parts:





Parts Call-Out

NO.	V14	V25	DESCRIPTION
1	M2325	M2691	INSERT ASSEMBLY, VENTURI, INCLUDES O-RINGS
2	M2516	M2517	SLX AIRLESS FOAM WAND ASSEMBLY
	F1212		NUT NYLOCK 1/4-20 316SS
	F1221		WASHER, SPLIT LOCK, 1/4" X .487", 316SS
	F1252		BOLT HHC 1/4-20 X 3, 316SS
	M2219		SLX UPPER BODY, TYPE-1V, SS
	M2220		SLX UPPER BODY, TYPE-2V, SS
	M2223		SLX LOWER BODY, TYPE-S, SS
	M2224		SLX CHECK ELBOW, 1/4 FNPT, SS
	M2239		SLX HINGE PIN V2.1
	M2252		SLX UPPER BODY, TYPE-1V, PP
	M2253		SLX UPPER BODY, TYPE-2V, PP
	M2256		SLX LOWER BODY, TYPE-S, PP
	M2258		SLX LOWER SUPPORT BRACKET
	M2259		SLX THUMB SCREW
	M2269		HOSE ASSEMBLY, 1/2" X 50', PVC, BLUE, 1/2" MNPT ONE END
	M2270		HOSE ASSEMBLY, 1/2" X 50', PVC, RED, 1/2" MNPT ONE END
	M2271		HOSE ASSEMBLY, 1/2" X 50', PVC, YELLOW, 1/2" MNPT ONE END
	M2417		SLX CHECK ELBOW, 1/4 FNPT, PP, V2
	M2418		SLX CHECK ELBOW, METERING BARB, PP
	M2419		SLX CHECK VALVE, BALL TYPE, AFLAS SEALS, HASTELLOY SPRING, 0.5LB
	M2424		PIPE ADAPTER, HOSE BARB, 3/4" NPT X 1/2" BARB, 316SS, 150 PSI
	M2427		SLX METERING TIP FULL KIT - 22 TIPS AND DRIVER
	M2435		SLX SECURITY SCREW - SOCKET
	M2440		SLX SUCTION LINE ASSEMBLY 1/4" X 6' WITH STRAINER AND WEIGHT
	M2516		SLX AIRLESS FOAM WAND ASSEMBLY, 1/2" BALL VALVE, .116 POLY
	M2521		HOSE ASSEMBLY, 1/2" X 50', PVC, GREEN, 1/2" MNPT ONE END
	M2528		SLX CLAMSHELL DOOR V4.2 SIZE 1
	M2531		SLX CLAMSHELL BACKPLATE V4.2 SIZE 1
	P2269		O-RING 106 3/32 x 3/16 ID x 3/8 OD EPDM
	P2292		SANITARY FLANGE CLAMP, 1.0-1.5, 304
	P2450		VALVE, BALL, MANUAL, 1/2" NPT FEMALE X 1/2" NPT MALE, 316SS BODY, PTFE SEAT, 1000 PSI (gauge not included)
	P2456		GAUGE, PRESSURE, 2", 0-150psi, 1/4" NPT, SS
	P2484		O-RING, SLX BODY, VITON, BROWN