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# USER MANUAL

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MODEL:

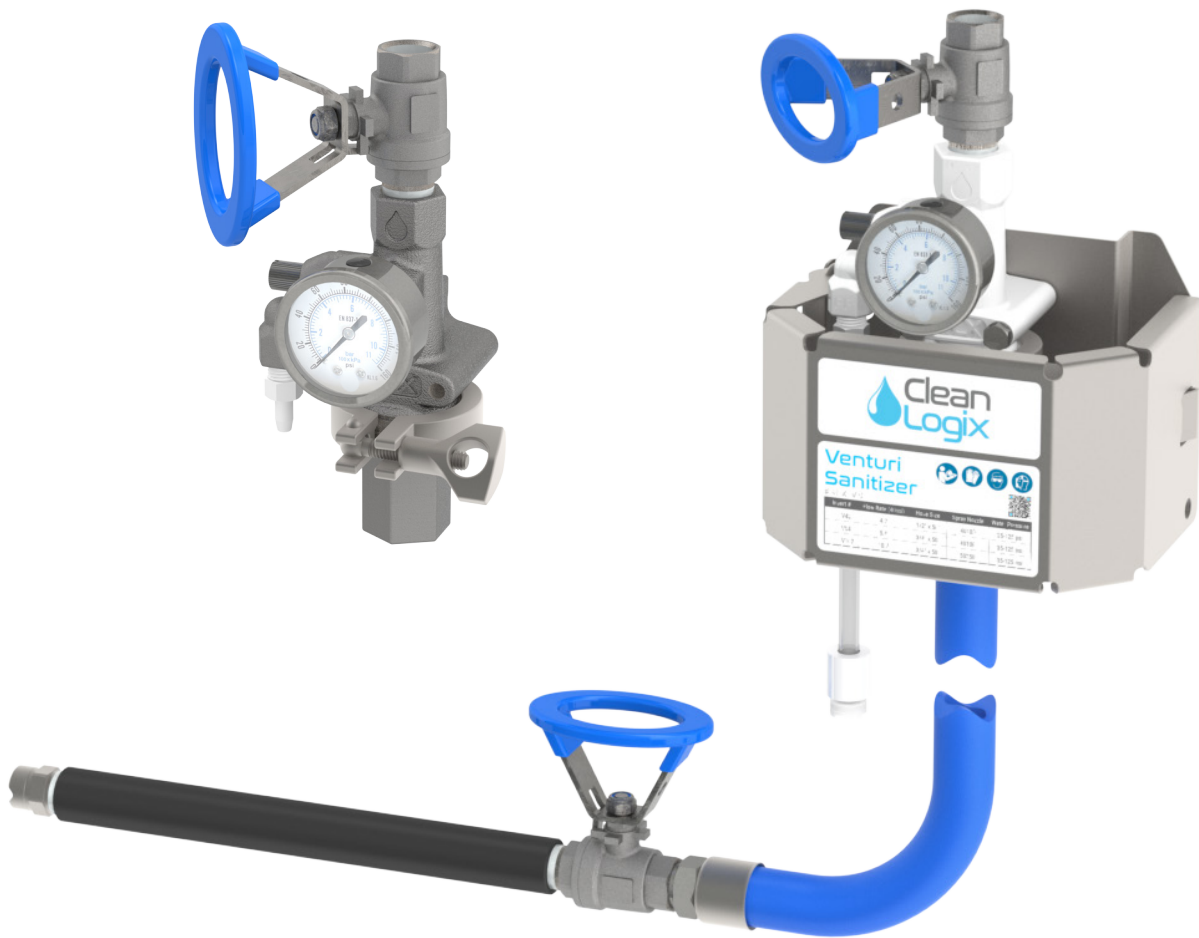
**SLX-VS**

**VENTURI SANITIZER - SINGLE STATION**

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*English (Original Instructions)*

*Updated: 02/23/22*





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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 sanitizer is a low to medium volume decentralized spray system that works with city water pressure to dilute and spray chemistry and detergents at a range of flow rates. The unit features a split body design for easy servicing and maintenance.

The included instructions apply to both polypropylene and stainless steel venturi sanitizers 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: 160°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:
  - Sanitizer with enclosure: 5.2 - 7.5 lbs.
  - Hose Assembly: 8 - 13 lbs.
  - Spray wand: 1.3 - 1.75 lbs.
- Dimensions: 7" x 10<sup>3</sup>/<sub>8</sub>" x 5<sup>1</sup>/<sub>2</sub>"

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

Insert #	Spray Flow Rate (GPM)	Water Flow Rate (GPM)	Hose Size (OD x L)	Spray Nozzle
V42	21 - 42	4.2	1/2" x 50'	40100
V54	27 - 54	5.4	3/4" x 50'	40100
V107	53.5 - 107	10.7	3/4" x 50'	50250

*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](mailto:sales@clean-logix.com)

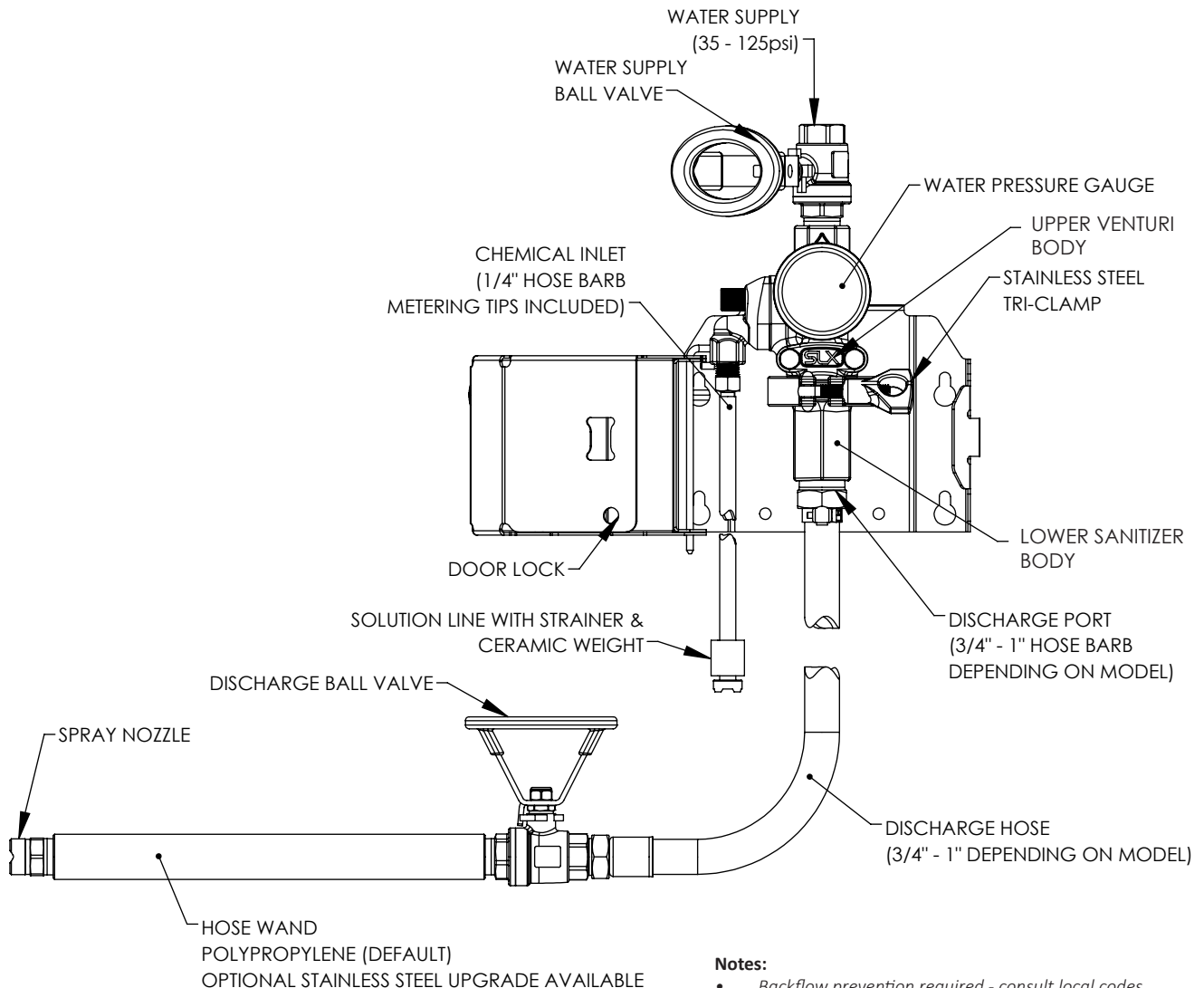
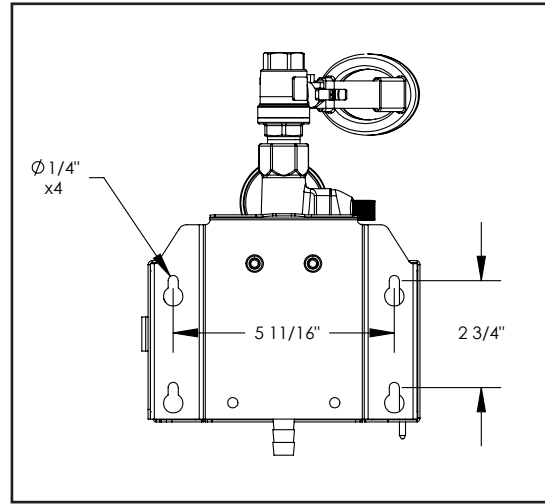
# USER MANUAL: SLX-VS

READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT



## 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).

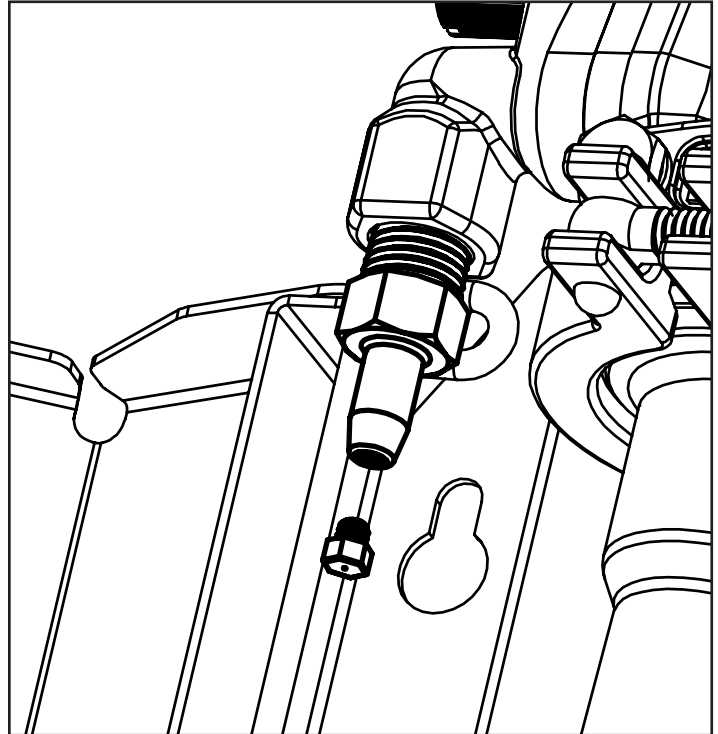


Fig. 5.1: Metering tip and hose barb

### Metering Tip Dilution Ratios

Color	Oz/Gal	V42	V54	V107
Copper	0.56	994:1	1246:1	2411:1
Pumpkin	0.73	763:1	956:1	1850:1
Burgundy	0.90	619:1	775:1	1500:1
Lime	1.28	435:1	545:1	1055:1
Orange	1.70	328:1	410:1	794:1
Turquoise	2.15	259:1	324:1	628:1
Pink	2.93	190:1	238:1	461:1
Corn Yellow	3.84	145:1	182:1	352:1
Dark Green	4.88	114:1	143:1	277:1
Orange	5.77	96:1	121:1	234:1
Gray	6.01	93:1	116:1	225:1
Light Green	7.01	79:1	100:1	193:1

Metering Tip Calculator  
Mobile App:



Color	Oz/Gal	V42	V54	V107
Med. Green	8.06	69:1	87:1	168:1
Clear Pink	9.43	59:1	74:1	143:1
Yellow Green	11.50	48:1	61:1	117:1
Maroon	11.93	47:1	58:1	113:1
Pale Pink	13.87	40:1	50:1	97:1
Light Blue	15.14	37:1	46:1	89:1
Dark Purple	17.88	31:1	39:1	76:1
Navy Blue	25.36	22:1	28:1	53:1
Clear Aqua	28.60	19:1	24:1	47:1
Black	50.00	11:1	14:1	27:1

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

## Operation

### Initial Use

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

1. Ensure unit is properly connected and the water valve is closed [Fig. 6.1]
2. Take hold of the spray wand.
3. Open ball valve on spray wand [Fig. 6.2]
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.
5. Ensure water pressure is above 35 PSI
6. Check spray quality and dilution amount per facility standards.
7. Metering tip size may need to be changed if spray quality or dilution ratio is still not adequate.

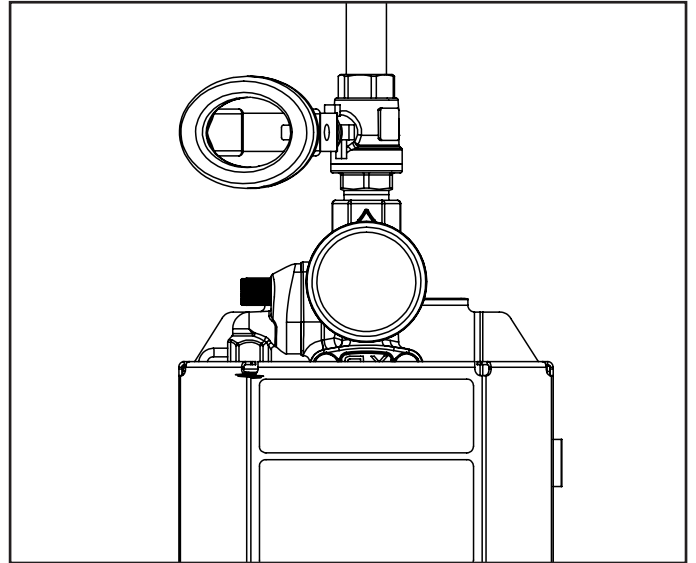


Fig. 6.1: Water supply ball valves closed.

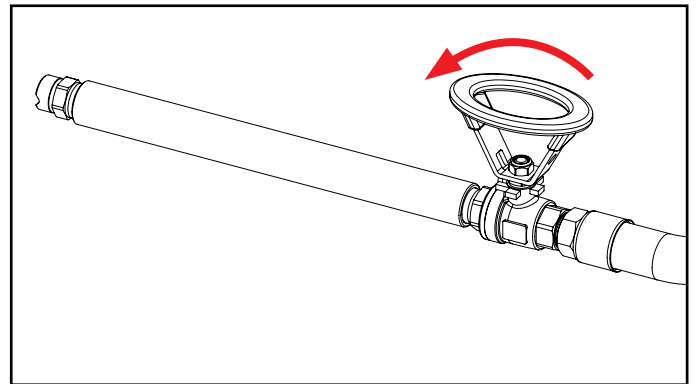


Fig. 6.2: Spray wand with open valve.

## 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 sanitizer 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.

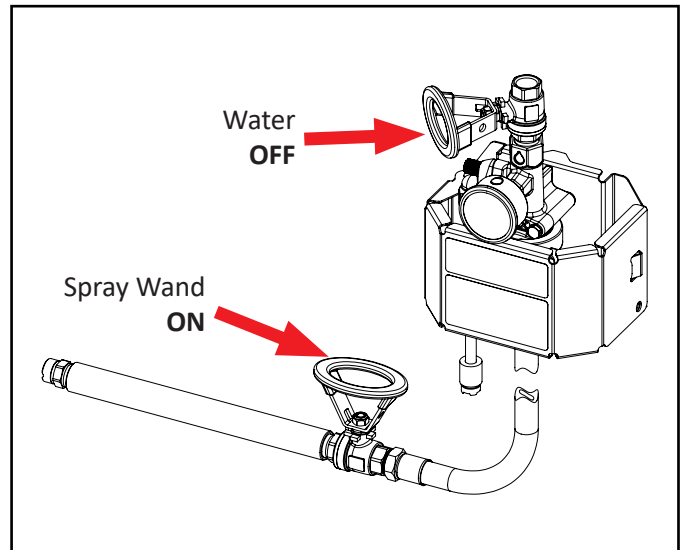


Fig. 7.1: Ball valve positions for start up

## 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 sanitizer 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 sanitizer body down, away from the upper venturi section.
  - **For Polypropylene Models:** Twist the lower sanitizer 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.

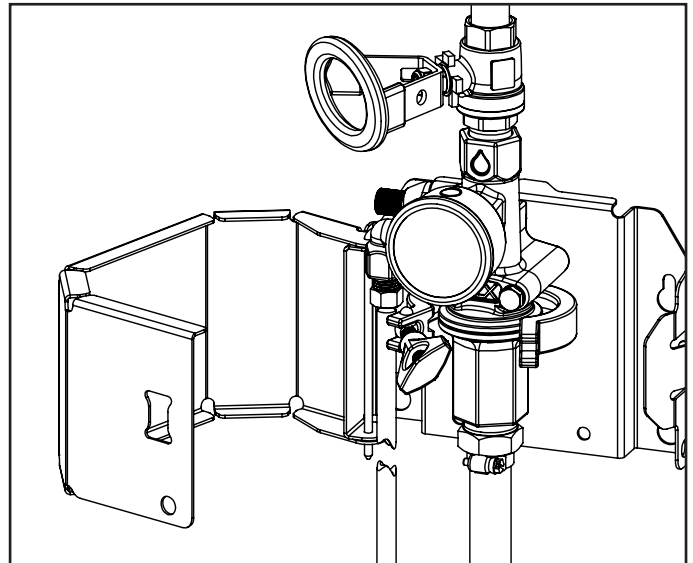


Fig. 8.1: Tri-clamp open

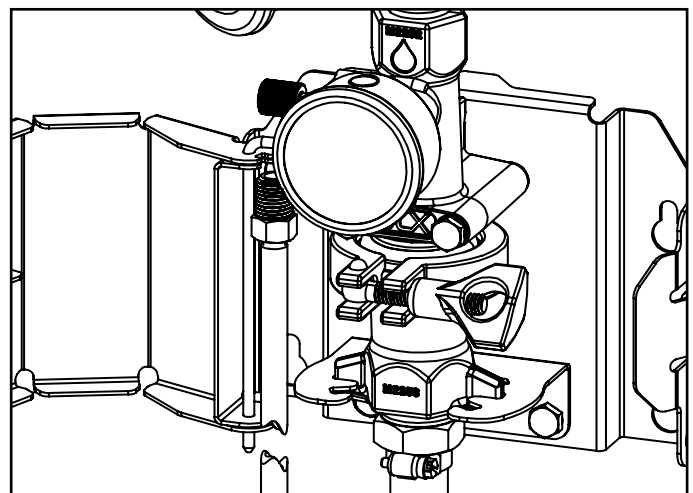


Fig. 8.2: Polypropylene lower support bracket

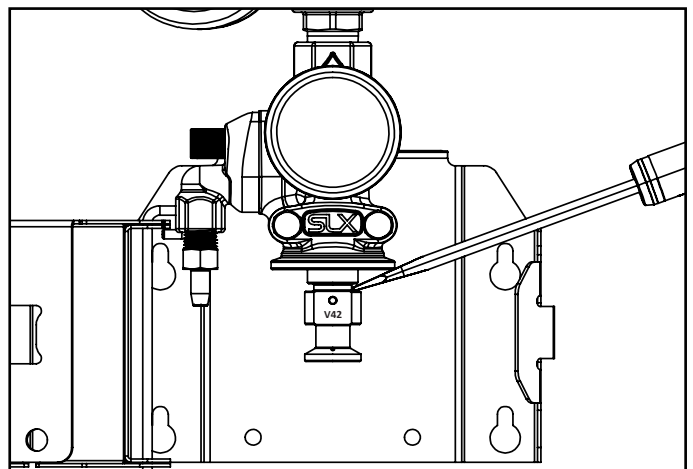


Fig. 8.3: Venturi insert removal using screwdriver



## 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 sanitizer 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 9.2]
4. Pull the elbow away from the sanitizer body.
5. The check valve will be seated either inside of the elbow or the main body. Grab it and pull to remove. [Fig 9.3]
6. Clean or replace if damaged.
7. To reinsert, orient the check valve with the arrow pointing towards the sanitizer body and press into place.
8. Reattach the elbow and tighten the thumb screw until secure.

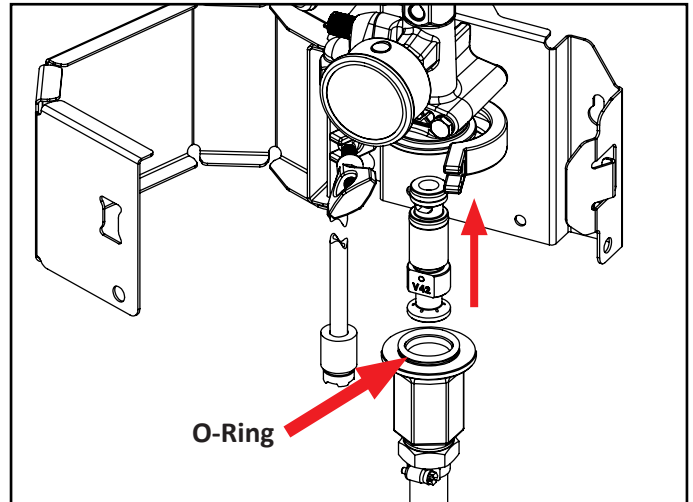


Fig. 9.1: Replacing venturi insert

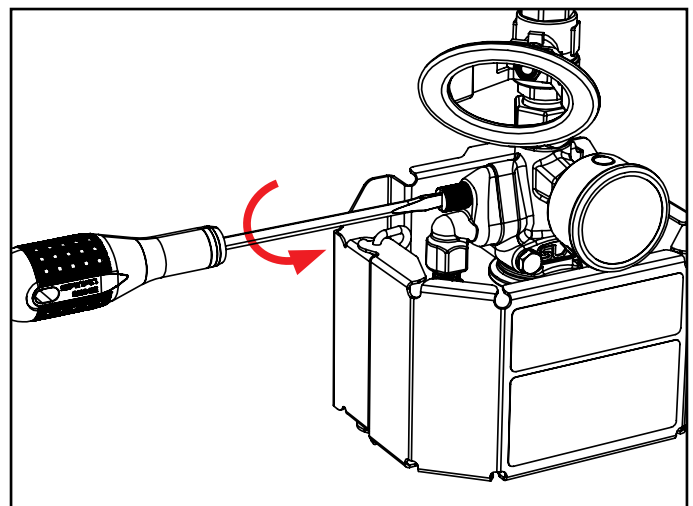


Fig. 9.2: Loosening thumb screw on elbow (chemical inlet)

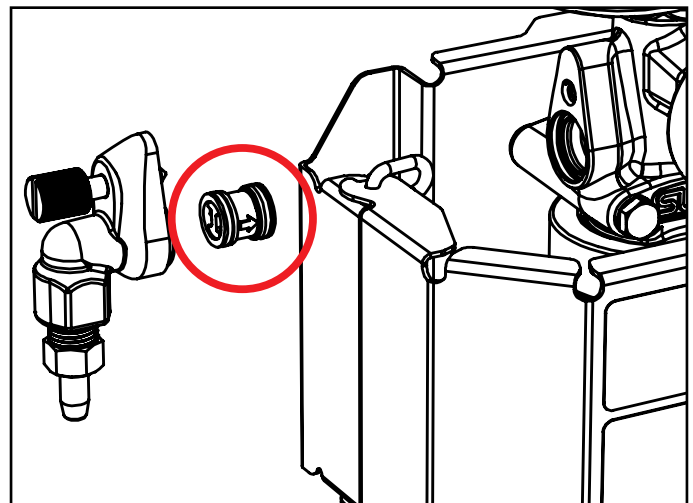


Fig. 9.3: SLX Check Valve (correct orientation)

## 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](mailto:sales@clean-logix.com)



## Troubleshooting

### Sanitizer will not draw chemical

	Cause	Solution
Start-up	Improper water pressure	Check regulator settings. Clean or replace as necessary.
	Inlet or discharge ball valve is not completely open	Completely open the ball valves.
	Chemical ball valve not open <b>(2-way only)</b>	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)
	Nozzle size too small	Replace nozzle with correct size (see system specifications based on insert size)
Extended Use	Venturi insert is clogged	Open sanitizer 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	Check regulator settings. Clean or replace as necessary.
	Chemical check valve stuck or failed	Clean or replace.
	Hard water scale or chemical build-up may have formed in the sanitizer body causing poor or no chemical pick-up	Open sanitizer 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 <b>(2-way only)</b>	Close one of the ball valves and ensure the other is fully open.

For Technical Support:





## Troubleshooting

### Sanitizer 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 <b>(2-way only)</b>	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 sanitizing/spraying 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.
	Nozzle size too small	Replace nozzle 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 sanitizer body causing poor or no chemical pick-up	Open sanitizer 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 <b>(2-way only)</b>	Close one of the ball valves and ensure the other is fully open.

For Technical Support:





## Troubleshooting

### Sanitizer 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 <b>(2-way only)</b>	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

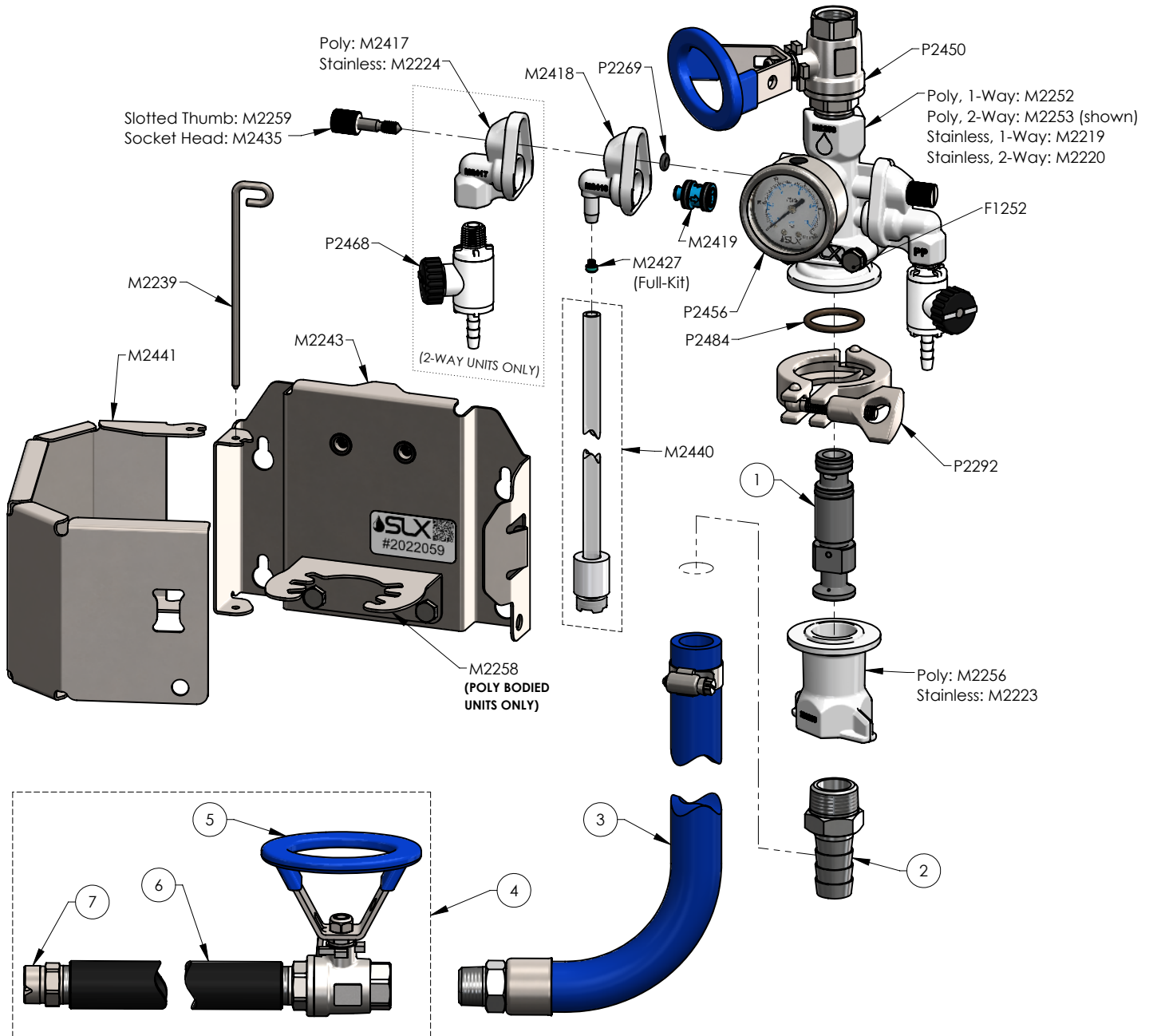
Cause	Solution
Inlet ball valve left on when not in use	Turn off ball valve

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.



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

**Purchase Replacement Parts:**





## Parts Call-Out

NO.	V42	V54	V107	DESCRIPTION
1	M2330	M2331	M2332	INSERT ASSEMBLY, VENTURI, INCLUDES O-RINGS
2	M2424	M2425	M2425	PIPE ADAPTER, HOSE BARB, 316SS
3	M2269	M2273	M2273	HOSE ASSEMBLY, PVC, BLUE, MNPT ONE END, INCLUDES CLAMP
	M2270	M2274	M2274	HOSE ASSEMBLY, PVC, RED, MNPT ONE END, INCLUDES CLAMP
4	M2336	M2336	M2336	SLX WAND ASSEMBLY, POLYPROPYLENE, AXIAL FAN SPRAY NOZZLE
	M2337	M2337	M2337	SLX WAND ASSEMBLY, STAINLESS STEEL, AXIAL FAN SPRAY NOZZLE
5	P2450	P2449	P2449	BALL VALVE, MANUAL
6	M2218	M2218	M2218	SLX WAND 10" BLACK POLYPROPYLENE
	M2263	M2263	M2263	SLX WAND 10" STAINLESS STEEL
7	P2472	P2472	P2470	NOZZLE, AXIAL FAN SPRAY, NPT, 304SS
-	P1339	P2488	P2488	HOSE CLAMP, WORM GEAR, SS
		F1105		BOLT HHC 1/4-20 X 1/2 SS
		F1128		WASHER SPLIT LOCK 1/4 SS
		F1212		NUT NYLOCK 1/4-20 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
		M2243		SLX CLAMSHELL BACKPLATE SIZE 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
		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
		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
		M2441		SLX CLAMSHELL DOOR REPLACEMENT ASSEMBLY - SINGLE
		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
		P2468		VALVE, BALL, MANUAL, .250 BARB WITH 8-32 THREAD X .250 NPT MALE, ROUND KNOB, PP BODY, VITON SEALS
		P2484		O-RING, SLX BODY, VITON, BROWN