Model #AF 976734 •Vision Satellite Entryway Foam Sanitizer

REQUIREMENTS

Chemical Concentrate

Water

Temperature	up to 160°F
Pressure	35 - 125 PSI
Flow	1.34 GPM @ 40 PSI
Supply Line	1/2"

Compressed Air	up to 3 CFM

Hose	3/4" x 25'

Nozzle	Entryway Spreader

OPTIONS

Stainless Steel Jug Racks
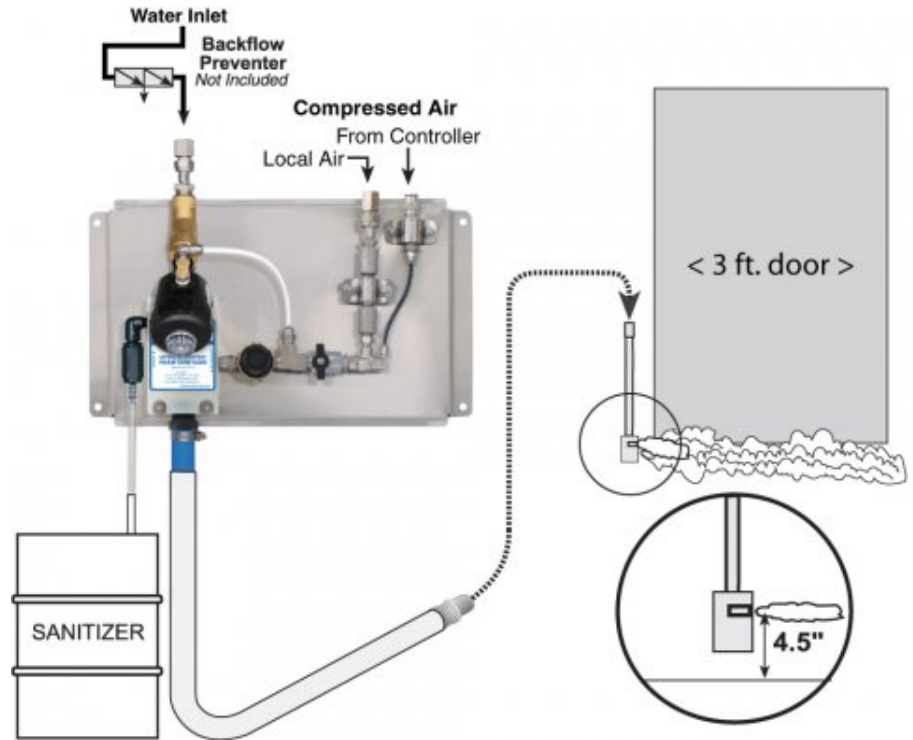
1 Gallon Round/Square	# 224200
1 Gallon Round/Square Locking	# 224200-L
2 ½ Gallon (8 ½" x 10 ½")	# 224210
5 Gallon (12" x 12")	# 224215
5 Gallon Round Locking	# 224216

Dual Pick-up Assembly

Entryway Dual Chemical Pick-up Assembly	# 976012

Alternate Check Valve - Viton Standard

Check Valve, Chemical, PP, 1/4" (EPDM)	# 491401

http://www.afcocare.com

**READ ALL
INSTRUCTIONS BEFORE
USING EQUIPMENT!**

ⓘ Overview

The Vision Satellite Entryway Foam Sanitizer is an automated foam applicator for projecting sanitizing chemicals on to floors of 3' wide employee walk doors to prevent cross contamination. When activated, this venturi injection system uses city water pressure (35 - 125 PSI) to draw and blend chemical concentrate into the water stream to create an accurately diluted solution. Rich, clinging foam is created by injecting compressed air into the solution to greatly increase volume and coverage ability. Foam is then projected through the discharge hose and Spreader™ nozzle. Vision Satellite units are activated by compressed air from the Vision Controller and operated by compressed air local to the satellite - No electrical connection is required at the entryway location. The Vision Controller features highly flexible programmable settings with multiple options to precisely manage the foam sanitizing of up to six zones of multiple doorways with independent settings for each zone.

⚠ Safety & Operational Precautions

- **When connecting to a potable water supply follow all local codes for backflow prevention.**
- For proper performance do NOT modify, substitute nozzle, hose diameter or length.
- 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.
- NEVER mix chemicals without <u>first</u> consulting chemical manufacturer.

TO INSTALL (REFER TO DIAGRAM, NEXT PAGE.)

Note: An independent 3/8" compressed air supply line should be installed, starting from a central Lafferty Vision Controller and extending to each location where a Vision Satellite will be installed.

1. Mount the Satellite to a suitable surface above chemical supply to prevent siphoning.
2. See Page 1 for proper installation layout.
3. You can use either the supplied section of hose to connect the foamer to 3/4" pipe or use 3/4" ID pipe only. <u>Minimum length of the total hose/pipe is 25'.</u> Use as few elbows as possible
4. Connect and mount the spreader nozzle slot at around 4-5" off the floor.
5. Connect <u>local</u> compressed air supply to the unit.
6. Close air ball valve.
7. Connect air supply line from the central Lafferty Vision Controller to the unit.
8. Connect water supply.

Set the chemical dilution ratio by threading one of the color coded metering tips into each chemical check valve. See chemical labels for dilution ratio recommendation or consult your chemical supplier.

- For the strongest dilution ratio do NOT install a colored metering tip.
- The dilution ratios in the metering tip chart are based on <u>water thin</u> chemicals with a viscosity of 1CPS.
- **Thicker chemicals will require a larger tip than the ratios shown in the chart.**
- Application results will ultimately determine final tip color.
- Select the tip color that is closest to your desired chemical strength and thread it into the tip holder. DO NOT OVER TIGHTEN.
- Push the chemical tube over the check valve barb and place the strainer in the chemical concentrate.

TO OPERATE

Testing & Adjustment

The Vision Satellite Entryway Foam Sanitizer is equipped with an air ball valve. While testing and adjusting the unit, or in case of an emergency, the unit can be shut off by closing the air ball valve completely. The unit will not operate when the air ball valve is closed, regardless of Vision Controller settings. **Do not use the air ball valve to control air flow**. This ball valve must be fully open for the unit to operate correctly.

Recommended Testing Procedure — You can temporarily, directly connect a separate compressed air supply to the unit. In this case you would need to connect the air supply to both the local air inlet port and the air inlet from the Vision Controller port.

1. Final metering tip/chemical dilution and air adjustments will now have to be made.
2. Open the air ball valve completely to activate the unit.
3. Wait a few seconds and observe foam consistency.
   - Use the least amount of air needed to achieve good foam quality to prevent solution pressure fluctuations from affecting performance. Air pressure must be kept lower than solution pressure.
   - To adjust foam consistency pull out on the air regulator knob, turn slightly clockwise for dryer foam and counterclockwise for wetter foam. Wait a few seconds to see each adjustment
   - You may also have to try different dilution and air settings until foam consistency is acceptable. Once this is set and desired foam consistency is achieved push lock the knob. You are ready to start.

Testing Procedure when unit is connected to a Vision Controller:

1. Follow page 4 of the separate Vision Controller instructions to select the Zone for this Satellite unit, then set the Zone to Manual Operation for several minutes. Turn off air to any additional satellite units that are connected to the same Zone. Follow steps 2 and 3 under Recommended Testing Procedure, above.
2. When testing is complete, close the air ball valve at the unit. Follow the Controller instruction manual to re-set the Controller for standard operation.
3. Re-open the air ball valve at all units to allow activation by the Vision Controller.

Metering Tip Selection Chart

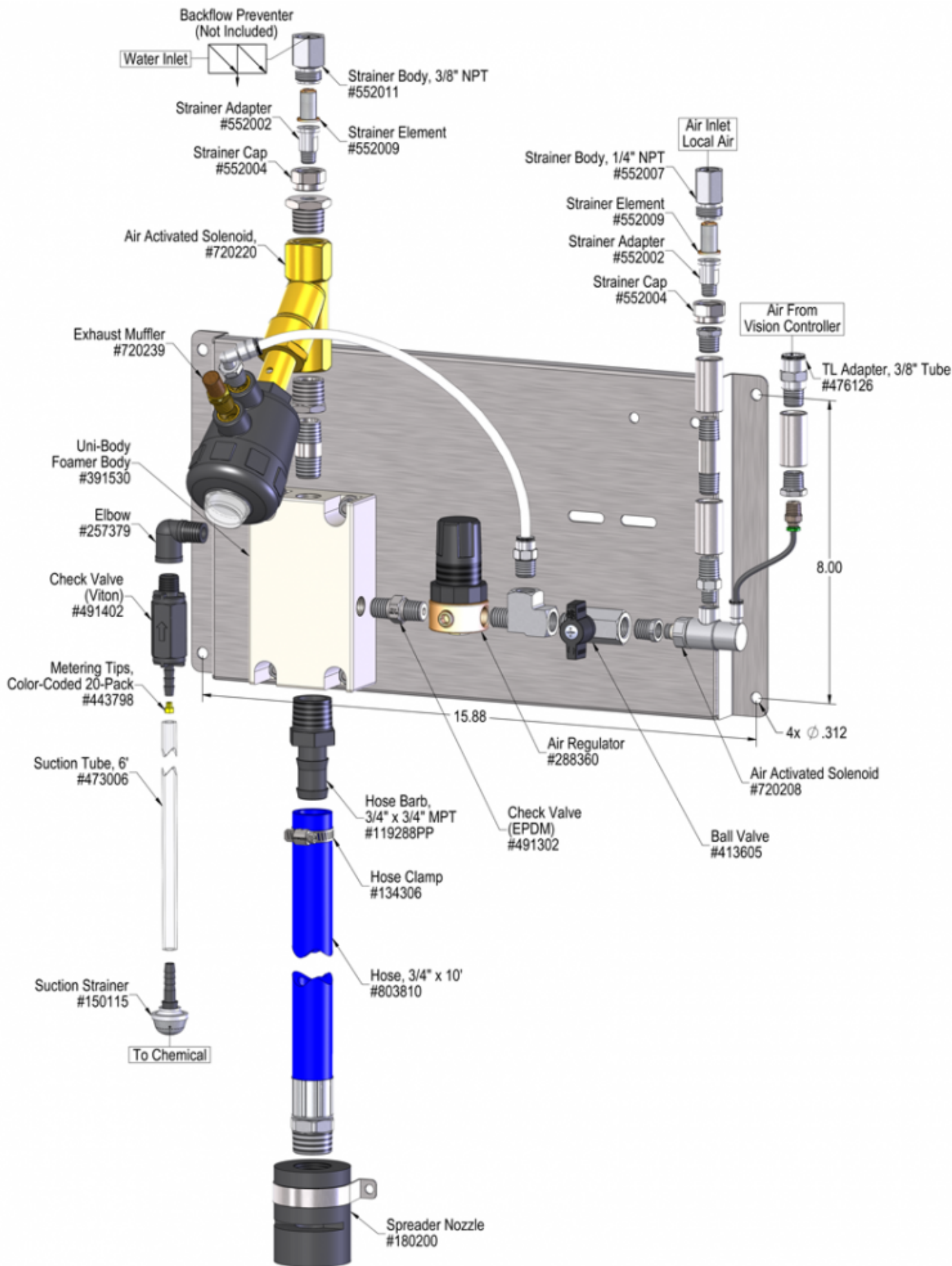| Metering Tip Color	Oz. per Min.	Example: Dilution Ratio @ 40 PSI
Brown	.56	306:1
Clear	.88	195:1
Bright Purple	1.38	124:1
White	2.15	80:1
Pink	2.93	59:1
Corn Yellow	3.84	45:1
Dark Green	4.88	35:1
Orange	5.77	30:1
Gray	6.01	29:1
Light Green	7.01	24:1
Med. Green	8.06	21:1
Clear Pink	9.43	18:1
Yellow Green	11.50	15:1
Burgundy	11.93	14:1
Pale Pink	13.87	12:1
Light Blue	15.14	11:1
Dark Purple	17.88	10:1
Navy Blue	25.36	7:1
Clear Aqua	28.60	—
Black	50.00	—
No Tip Ratio	up to 6.0:1	

The dilution ratios above are approximate values. Due to chemical viscosity, actual dilution ratios may vary.

Metering Tip Selection Formula

(GPM x 128) / Dilution Ratio = Oz. per Min

Flow Rate Chart

Pressure	Flow Rate
PSI	GPM
40	1.34
50	1.50
60	1.64
70	1.77
80	1.90
90	2.01
100	2.12
110	2.22
120	2.32

Backflow Preventer
(Not Included)

Water Inlet

Strainer Body, 3/8" NPT
#552011

Strainer Adapter
#552002

Strainer Element
#552009

Strainer Cap
#552004

Air Activated Solenoid,
#720220

Exhaust Muffler
#720239

Uni-Body
Foamer Body
#391530

Elbow
#257379

Check Valve
(Viton)
#491402

Metering Tips,
Color-Coded 20-Pack
#443798

Suction Tube, 6'
#473006

Suction Strainer
#150115

To Chemical

Air Inlet
Local Air

Strainer Body, 1/4" NPT
#552007

Strainer Element
#552009

Strainer Adapter
#552002

Strainer Cap
#552004

Air From
Vision Controller

TL Adapter, 3/8" Tube
#476126

8.00

15.88

Air Regulator
#288360

Hose Barb,
3/4" x 3/4" MPT
#119288PP

Hose Clamp
#134306

Check Valve
(EPDM)
#491302

Hose, 3/4" x 10'
#803810

Ball Valve
#413605

Air Activated Solenoid
#720208

4x ⌀ .312

Spreader Nozzle
#180200

Troubleshooting Guide

AF 976734 ● Vision Satellite Entryway Foam Sanitizer

Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Foamer will not draw chemical.	1, 7, 8, 9, 10	13, 14, 15, 16, 17, 19, 20
B) Foam surges.	1, 2, 3, 4, 6, 7, 8, 9, 10	13, 14, 15, 16, 17, 19, 20
C) Foam output too wet.	2, 3, 4, 6, 7, 8, 9, 10	13, 14, 15, 16, 17, 18, 19, 20
D) Foam output too dry.	1, 5	17
E) Doesn't come on when switch is turned on.	11,12	
F) Comes on and runs continuously.	11	
G) Comes on but no water through solenoid.	10	19
H) Air or solution backing up into water line.		21

Possible Cause / Solution

Startup

1. **Air pressure too high**
   - Adjust air regulator slowly counterclockwise until output stabilizes.
2. **Air adjustment too low**
   - Adjust air regulator very slowly clockwise.
3. **Use of an oiler in the airline will cause poor foam quality**
   - Use only clean, dry air.
4. **Not enough chemical - metering tip too small**
   - Install larger metering tip.
5. **No metering tip installed or metering tip too large**
   - Install smaller metering tip.
6. **Improper chemical**
   - Ensure product is recommended for foaming and/or the application.
7. **Chemical tube not immersed in chemical or chemical depleted**
   - Immerse tube or replenish
8. **Foam hose kinked or hose/plumbing too short or wrong size**
   - (See REQUIREMENTS on page 1)
9. **Water pressure too low or water volume too low/inlet piping too small**
   - Increase water pressure or water volume. (See REQUIREMENTS on page 1)
10. **No water to the unit**
    - Ensure that the water supply is not shut off to the unit.
11. **Timer failed/Controller not set properly or malfunctioned**
    - Replace timer. See Controller manual.
12. **May have electrical problems**
    - Ensure circuit breaker (5 Amp) has not been tripped.
    - Have a qualified electrician check electrical connections.

Maintenance

13. **Chemical check valve stuck or failed**
    - Clean or replace.
14. **Chemical strainer or metering tip partially blocked**
    - Clean or replace chemical strainer and/or metering tip.
15. **Chemical tube stretched out where tube slides over check valve or pin hole/cut in chemical tube (sucking air in)**
    - Cut off end of tube or replace tube.
16. **Vacuum leak in chemical pick-up connections**
    - Tighten the connections.
17. **Air regulator failed allowing too much air or not enough air**
    - Clean or replace.
18. **Air check valve or air solenoid clogged or failed**
    - Clean or replace.
19. **Water solenoid clogged or failed**
    - Clean or replace the water solenoid.
20. **Chemical build-up may have formed in the body, causing poor or no chemical pick-up**
    - Follow PREVENTIVE MAINTENANCE instructions below, using hot water or descaling acid. When there is no draw at all, carefully remove fittings and soak entire body in descaling acid.
21. **No backflow preventer installed**
    - Install appropriate backflow preventer into water line.

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.