# AFCO Installation & Operation Instructions

### Model #AF 920118 ●Rinse / Pump Fed Foam Hose Drop Station

### **REQUIREMENTS**

# Ready-to-Use Chemical Solution (Minimum 35 PSI at the Unit)

Temperature	up to 160°F
Pressure	35 - 125 PSI
Flow	7.2 GPM @ 40 PSI
Supply Line	1/2"

### Compressed Air up to 3 CFM

### Hose

Foam	3/4" x 50"
Rinse	3/4" x 50'

#### Nozzle

Foam	50250
Rinse	4 Hole Rinse Nozzle

### **OPTIONS**

Large Stainless Steel Hose Rack	# 224150
Recommended Foam Solution Check Valv	es &

# Strainer Check Valve, PP, 1/2" (EPDM) # 491409

Check Valve, PP, 1/2" (Viton) # 491411 SS "Y" Strainer # 150350

#### Alternate Air Check Valve - EPDM Standard

Check Valve, Air, SS, 1/4" MM (Viton / Hast) # 491306





READ ALL
INSTRUCTIONS BEFORE
USING EQUIPMENT!



# **Overview**

The Rinse/Pump Fed Foam Hose Drop Station is a medium volume foam applicator for projecting ready-to-use foaming chemicals and for rinsing. This unit receives ready-to-use chemical solution from a central chemical feed system and creates rich, clinging foam by injecting compressed air into the solution to greatly increase volume and coverage ability. The foam is then projected through the discharge hose and fan nozzle on to any surface up close or at distances up to 12 feet. Rinse through a separate hose with a unique and powerful 4-hole nozzle.



## **Safety & Operational Precautions**

- 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 eve-wear when working with chemicals.
- Always direct the discharge away from people and electrical devices.
- For pressures over 100 PSI, remove the discharge valve or lower pressure
- Follow the chemical manufacturer's safe handling instructions.
- Turn off solution supply and air when unit is not in use for extended periods.

#### **TO INSTALL** (REFER TO DIAGRAM, NEXT PAGE.)

It is recommended to install a check valve in the foamer solution inlet to prevent air from going back into solution line. (see Options)

- 1. Mount the unit to a suitable surface.
- 2. Connect the discharge hoses as shown in the diagram and close the ball valves.
- 3. Connect pre-mixed solution supplies and install a solution check valve in the foamer inlet to prevent compressed air from going back up the solution line.
- 4. To prevent blocking the small jets, flush any new plumbing of debris before connecting. (And/or install a strainer)
- 5. Connect compressed air supply. If piping is older and has known contaminants, install a filter.

#### TO OPERATE

<u>Always</u> make sure the discharge ball valve is closed or pointed in a safe direction before turning inlet valve on. Discharge valve can be shut off at any time during operation but should not be left off for long periods of time with the inlet valve on.

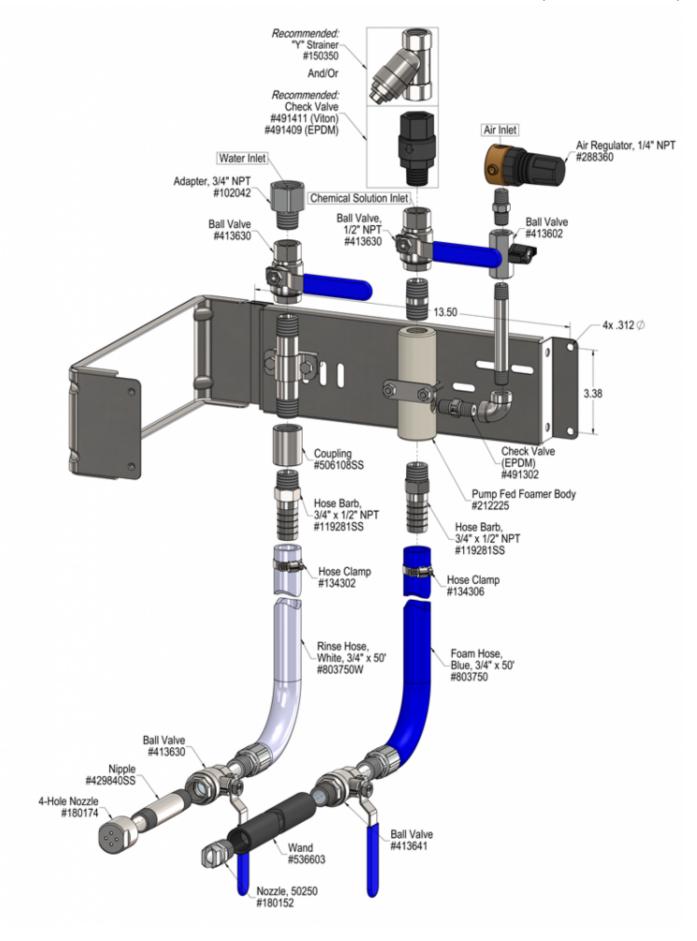
#### **TO FOAM**

- 1. With wand in hand open the inlet ball valve, and the air ball valve.
  - 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 the 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.
  - Medium wet foam will give the best cleaning results! Dry foam will NOT clean as well!
  - You may also have to try different chemical ratios and air settings until foam consistency and cleaning results are acceptable. Once this is set and desired foam
    consistency is achieved push lock the knob. you are ready to start application.
- 2. When foaming is completed, close the discharge ball valve, return to the unit and close the solution and air ball valves. Briefly re-open the discharge ball valve to relieve pressure in the hose. Rinse before the foam dries.

#### **TO RINSE**

- 1. With spray wand in hand and the discharge ball valve closed open the inlet ball valve.
- 2. Open the discharge ball valve to begin application.
- 3. When complete, close the discharge ball valve then close the inlet ball valve.
- 4. Briefly re-open the discharge ball valve to relieve pressure in hose.

Flow Rate Chart			
Pressure	Flow GPM		
PSI	Foam	Rinse	
40	1.70	7.20	
50	1.90	8.05	
60	2.08	8.82	
70	2.25	9.52	
80	2.40	10.18	
90	2.55	10.80	
100	2.69	11.38	
110	2.82	11.94	
120	2.94	12.47	



# **Troubleshooting Guide**

#### AF 920118 • Rinse / Pump Fed Foam Hose Drop Station

**Possible Cause / Solution** 

Problem	Startup	Maintenance			
A) Foam surges and/or hose "bucks". B) Foam too wet. C) Foam does not clean properly or too dry. D) Chemical solution backing up into air line.	1, 2, 3, 4, 5, 6, 7, 8 2, 3, 4, 5, 6 1, 4, 9 11	10, 12, 13 10, 12, 13 10			
Possible Cause / Solution					
Startup		Maintenance			
Air pressure too high     Adjust the air regulator slowly counterclockwise until output stabilizes.	<ul><li>10. Air regulator failed al</li><li>Clean or replace.</li></ul>	<ul><li>10. Air regulator failed allowing too much air or not enough air</li><li>Clean or replace.</li></ul>			
<ul><li>2. Use of an oiler in the airline will cause poor foam quality</li><li>Use only clean, dry air.</li></ul>	<ul><li>11. Air check valve failed</li><li>Replace.</li></ul>				
<ul><li>3. Inlet ball valve or discharge ball valve not completely open</li><li>Completely open the inlet and discharge ball valves.</li></ul>		for obstructions. DO NOT DRILL OUT. Install optional			
<ul> <li>4. Improper chemical or solution too weak</li> <li>Ensure product is recommended for foaming and/or the application. Increase chemical concentration.</li> </ul>	13. Chemical build-up ma	solution "Y" strainer (see OPTIONS, page 1).  13. Chemical build-up may have formed in the body causing restriction  • Carefully remove fittings and soak entire body in descaling acid.			
5. Discharge hose too long, wrong size, kinked or spliced/					

sectioned together (SEE REQUIREMENTS)

6. Nozzle size is wrong (SEE REQUIREMENTS)

8. Air backing up into solution line

· Reapplication may be necessary.

7. Solution pressure or volume too low/inlet piping too small
• Increase solution pressure or volume (SEE REQUIREMENTS).

• Install optional solution check valve (see OPTIONS, page 1).

9. Soil has hardened on surface; always rinse foam before it dries

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hose.

• Straighten the hose - Replace hose with correct size or one piece continuous

PREVENTIVE MAINTENANCE: When the unit will be out of service for extended periods run water through the system to flush the chemical and help prevent chemical build-up.

