# AFCO Installation & Operation Instructions

### Model #AF 942105 ●Freedom Sprayer

### **REQUIREMENTS**

**Ready-to-Use Chemical Solution** 

Compressed Air 4 CFM

**Nozzle** 2506 & 2510

1/2" x 50'

# 989070

#### **OPTIONS**

40 Gallon Gemini Level Master

Hose

Large Stainless Steel Hose Rack	# 224150	
Proportioning / Filling Options 1-Way Ball Valve Mixing Station (4 GPM)	# 985100	
1-Way Push Lever Mixing Station (4 GPM)	# 981100	
High Volume Mixing Station (9.9 GPM)	# 985835	
<b>Level Masters to Supply Ready-To-Use Chemical</b> 20 Gallon Level Master # 989020		
40 Gallon Level Master	# 989040	
60 Gallon Level Master	# 989046	
20 Gallon Gemini Level Master	# 080060	





READ ALL
INSTRUCTIONS BEFORE
USING EQUIPMENT!



## **Overview**

The Freedom Sprayer is a chemical spray applicator for projecting ready-to-use chemical solution on to a variety of surfaces. This unit features a lockable, stainless steel enclosure and uses a rugged Yamada air-operated, double-diaphragm pump to draw pre-diluted chemical from a user-supplied tank. The solution is then discharged through the hose, wand and fan pattern spray nozzle. Includes 2 nozzles for projecting a low or medium volume spray.



### **Safety & Operational Precautions**

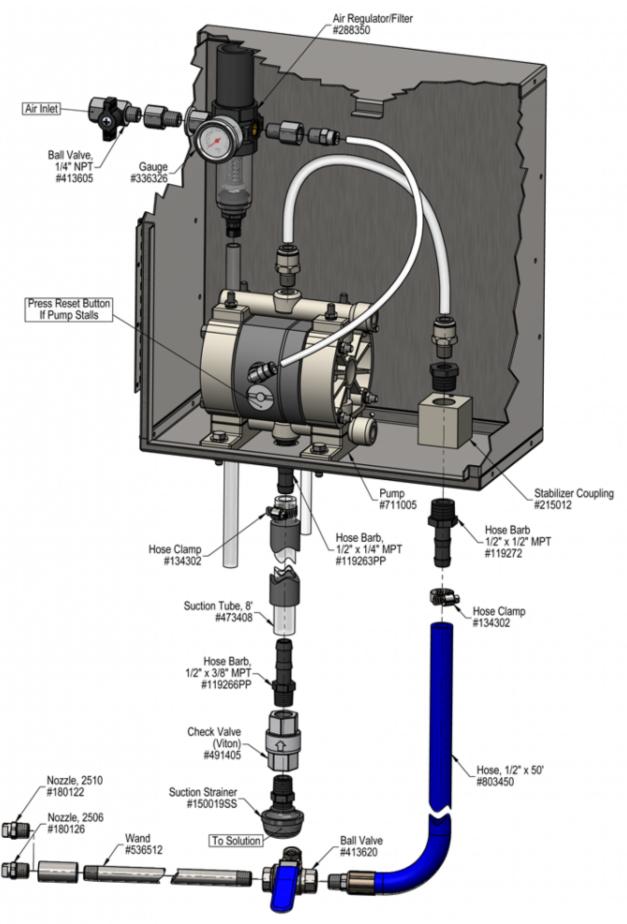
- For proper performance do NOT modify, substitute nozzle, hose diameter or length
- Manufacturer assumes no liability for the use or misuse of this unit.
- Wear protective clothing, gloves and eye-wear when working with chemicals.
- Always direct the discharge away from people and electrical devices.
- Follow the chemical manufacturer's safe handling instructions.
- DO NOT use chemicals that are not compatible with glass filled polypropylene or the Teflon diaphragms.
- Do not use products that contain sodium hypochlorite (bleach) or strong alkaline
- Do NOT run the pump dry. This can cause damage to the pump.
- Always slightly open the inlet ball valve until the pump primes.

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

- 1. To ensure the dry pump will prime, fill the 1/2" clear suction tube with water.
- 2. Securely attach the full suction tube to the pump as shown in the drawing.
- 3. Fill the tank with ready to use solution to the desired level. Replace lid.
- 4. Attach a compressed airline to the inlet ball valve. DO NOT TURN ON

#### **TO OPERATE**

- <u>Always</u> make sure the discharge ball valve is closed or pointed in a safe direction before turning the air on. Ball valve can be shut off at any time during operation but should not be left unattended for long periods of time.
- The unit has been tested and is ready to operate, the air pressure preset at 60 PSI. This is the optimum pump pressure. Test "as is" before making any adjustments.
- 2 nozzles are provided a 2506 (.7 GPM) and a 2510 (1.2 GPM). Select one and install it.
- 1. With the wand in hand direct the discharge in a safe direction and open the discharge ball valve and the air ball valve.
- 2. Wait several seconds for pump to prime. IF after 30 seconds the pump hasn't primed turn off the air, remove the suction tube and fill with water and replace. Once the diaphragms are wet priming is not an issue. Open air ball valve to resume set up.
- 3. When spraying is complete:
  - Close the discharge ball valve.
  - Promptly return to the unit and close the air ball valve.
  - Briefly re-open the discharge ball valve to relieve pressure in the hose.
  - Store the hose on optional hose rack.
- 4. Rinse the work surface before the spray dries.



# **Troubleshooting Guide**

### **AF 942105 ● Freedom Sprayer**

Problem	Possible Cause / Solution		
	Startup	Maintenance	
A) Air pump will not run or pump solution.	1,3	4,5,8,9	
B) Will not draw chemical.	1,2,3	5,6,7,	
C) Pump runs too fast with no output.	2	5,6,7,8	

Possible Cause / Solution		
Startup	Maintenance	
<ol> <li>Air adjustment too low         <ul> <li>Open air ball valve fully. Adjust air regulator slowly clockwise. Optimum air pressure is 60 PSI.</li> </ul> </li> <li>Chemical tube not immersed in container or container empty         <ul> <li>Immerse tube or replenish.</li> </ul> </li> <li>Discharge ball valve closed or hose kinked         <ul> <li>Open ball valve / Straighten the hose.</li> </ul> </li> </ol>	<ul> <li>4. Air regulator clogged or failed Clean or replace.</li> <li>5. Chemical strainer clogged up <ul> <li>Clean or replace.</li> </ul> </li> <li>6. Vacuum leak in suction line. <ul> <li>Tighten the connection(s).</li> </ul> </li> <li>7. Chemical tube stretched out where tube attaches or pin hole/cut in tube sucking air. <ul> <li>Cut off end of tube or replace tube.</li> </ul> </li> <li>8. Problem with air pump <ul> <li>Refer to air pump instruction manual</li> </ul> </li> <li>9. Use of an oiler in the airline will cause pump to stall <ul> <li>Use only clean, dry air.</li> </ul> </li> </ul>	

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.



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