

# AFCO Installation & Operation Instructions

## Model #AF 975350 • Portable 16 Gallon Small Area Cleaning System (SACS)

### REQUIREMENTS

#### Foaming & Sanitizing Chemical Concentrates

#### Water to fill 16 Gallon Tank

Water Usage Rates:

Foam	0.5 GPM
Rinse	1.5 GPM
Sanitize	0.5 GPM

**Hose** 3/8" x 25'

#### Nozzles:

Foam	#10 Bullet Foam Nozzle
Rinse	2510
Sanitize	2510

### OPTIONS

#### Alternate Check Valve - EPDM Standard

Check Valve, Chemical, PP/Viton, 1/4" # 491315

### WEIGHT & DIMENSIONS

**Shipping Weight: 148 lbs.**

**Shipping Dimensions: 48" x 40" x 54"**

**Ships On A Pallet**



<http://www.afcocare.com>

**READ ALL  
INSTRUCTIONS BEFORE  
USING EQUIPMENT!**

## Overview

The Small Area Cleaning System (SACS) is a self-contained low volume Foam/Rinse/Sanitize cleaning system for multiple chemical applications. This convenient system uses a re-chargeable battery and 12V pump to draw fresh water from the 16 gallon tank and create the pressure to run the system. It uses precision metering tips to accurately dilute two chemical concentrates from the attached jug rack and projects one chemical as wet foam, a second as a fan spray, and rinses. Perfect for precision cleaning in small areas where water pressure is unavailable.

**AFCO • 5000 Letterkenny Rd • Chambersburg, PA. 17201 • 1-800-345-1329**



# Safety & Operational Precautions

- Always turn unit off at the switch on the outside of the cabinet after each use and relieve pressure in the hose by pulling the trigger on the trigger gun.
- 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 first consulting chemical manufacturer.
- Always consider electrical shock hazard when working with and handling electrical equipment. If uncertain, consult an Electrician. Electrical wiring should only be done by a qualified Electrician per Local and State Electrical Codes.

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

### BATTERY CHECK

1. With the discharge pointed in a safe direction, turn on pump and operate rinse stream. Check pressure gauge - if below 40 PSI - charge battery.
2. Turn off pump before charging battery.

### BATTERY CHARGING

1. Ensure the unit and floor are DRY before plugging in charger
2. Open cabinet door and access the charging plug. Plug into 110 Volt power supply only.
3. Charge for a minimum 3 hours. Check charger light for full charge.
4. Unplug charger and fold cord into cabinet. Close cabinet door. Unit battery is charged for use.

### TO PREPARE FOR USE

1. Remove lid from the water tank and fill with WATER ONLY to the desired level. Replace lid.
2. With the center ball valve (rinse) turned on flip the switch to the on position. Using the rinse/sanitize wand point the nozzle in a safe location like a drain and pull the trigger. Allow several seconds for the pump to prime. Notice the pressure on the gauge, if the pressure is **below 40 PSI charge the battery.**
3. Once the water and pressure rinse begins, release the trigger, turn the switch off. Close the rinse valve and pull the trigger to release the pressure in the hose.
4. Place the chemical concentrates in the jug rack, place the clear tubing with strainers in the jugs and screw bottle lids on securely.
5. Do not connect the clear tubes to the check valves until metering tips are installed.

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 water thin 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

### TO FOAM

1. Quick connect the airless foam wand to the trigger gun.
2. Flip the switch to the on position.
3. Open the foam ball valve and pull the trigger to begin foam application. Allow several seconds for the chemical to be drawn and reach the foam nozzle.
4. Foamer can be adjusted to project a wide angle pattern for close-up, quick coverage or a zero degree stream for increased distance. Grip the end of the nozzle and turn it 1/4 turn in either direction to adjust.
5. Make final metering tip adjustments based on cleaning and foaming results.
6. When finished release the trigger. Close the foam ball valve.

### TO RINSE

1. Quick disconnect the foam nozzle from the gun and replace it with the nozzle.
2. Open the foam ball valve and pull the trigger to begin rinsing. Allow several seconds for the chemical to be purged from the hose.
3. When finished release the trigger. Close the rinse ball valve.

### TO SANITIZE

1. Open the sanitize ball valve and pull the trigger to begin application. Allow several seconds for the chemical to be drawn and reach the nozzle.
2. Make final metering tip adjustments based on results.
3. When finished release the trigger. Close the sanitize ball valve.
4. When finished ALWAYS turn the switch to the off position and pull the trigger to release pressure in hose.
5. Recharge battery after each extended use or as needed.

### Metering Tip Selection Chart

Metering Tip Color	Oz. per Min.	Example: Dilution Ratio @ 70 PSI		
		Foam	Rinse	Sanitize
Brown	.56	126:1	—	126:1
Clear	.88	80:1	—	80:1
Bright Purple	1.38	51:1	—	51:1
White	2.15	33:1	—	33:1
Pink	2.93	24:1	—	24:1
Corn Yellow	3.84	18:1	—	18:1
Dark Green	4.88	14:1	—	14:1
Orange	5.77	12:1	—	12:1
Gray	6.01	12:1	—	12:1
Light Green	7.01	10:1	—	10:1
Med. Green	8.06	9:1	—	9:1
Clear Pink	9.43	—	—	—
Yellow Green	11.50	—	—	—
Burgundy	11.93	—	—	—
Pale Pink	13.87	—	—	—
Light Blue	15.14	—	—	—
Dark Purple	17.88	—	—	—
Navy Blue	25.36	—	—	—
Clear Aqua	28.60	—	—	—
Black	50.00	—	—	—
No Tip Ratio Up To:		8.0:1	—	8.0:1

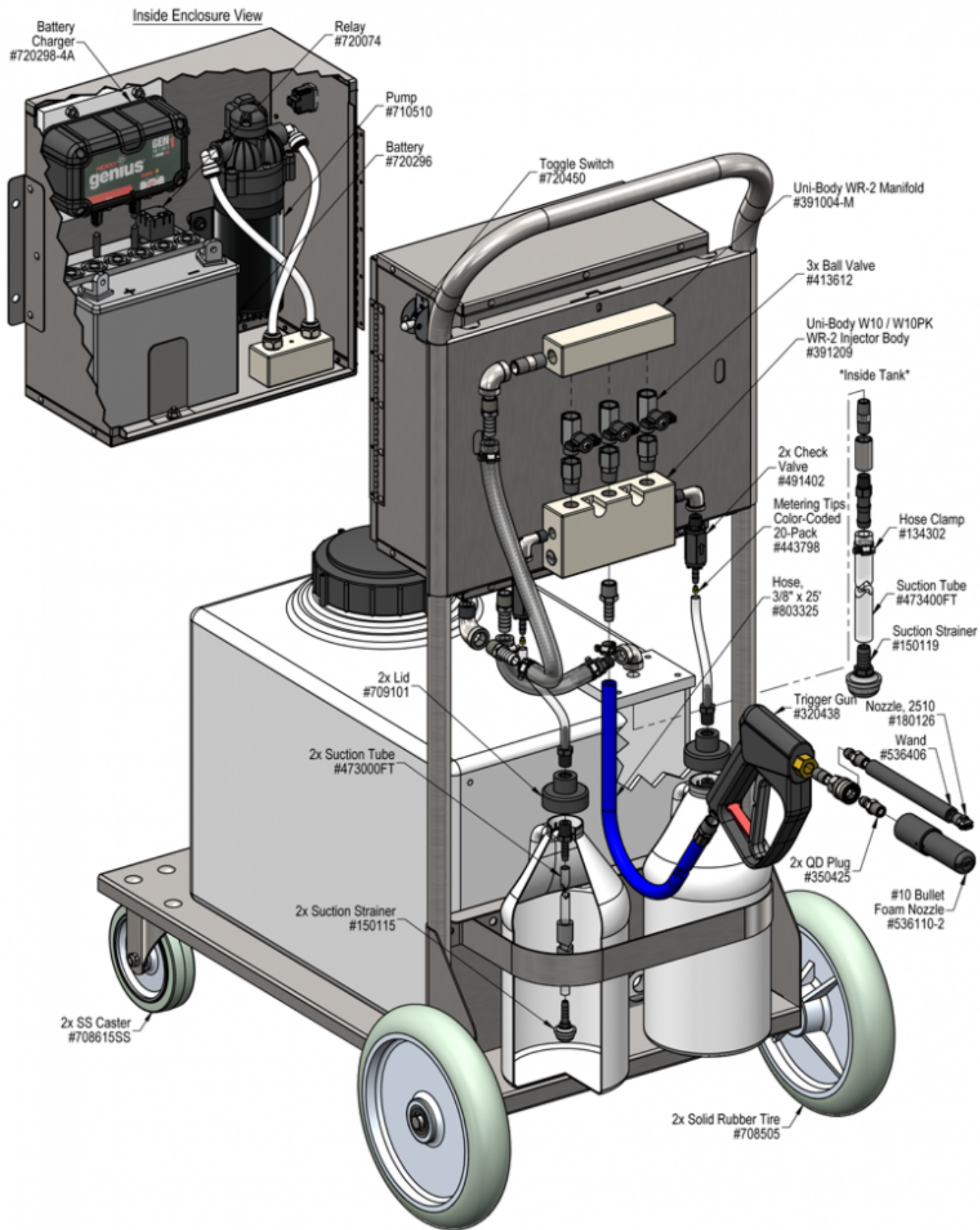
The dilution ratios above are approximate values. Due to chemical viscosity, actual dilution ratios may vary.

### Metering Tip Selection Formula

$$\frac{(\text{GPM} \times 128)}{\text{Dilution Ratio}} = \text{Oz. per Min}$$

### Flow Rate Chart

Pressure PSI	Water Flow GPM		
	Foam	Rinse	Sanitize
70	0.55	1.50	0.55



# Troubleshooting Guide

## AF 975350 • Portable 16 Gallon Small Area Cleaning System (SACS)

Problem	Possible Cause / Solution	
	Startup	Maintenance
A) Unit will not draw chemical.	1, 2, 3, 4, 5	9, 11, 12, 13, 14, 15, 16
B) Using too much chemical.	7	
C) Foam/spray does not clean/perform.	6, 8	12, 13, 14, 16
D) Water back flowing into chemical		9

Possible Cause / Solution	
Startup	Maintenance
<ol style="list-style-type: none"> <li>1. <b>Water pressure too low</b> <ul style="list-style-type: none"> <li>◦ Battery is low- recharge battery.</li> </ul> </li> <li>2. <b>Inlet ball valve or discharge ball valve not completely open.</b> <ul style="list-style-type: none"> <li>◦ Completely open the valve.</li> </ul> </li> <li>3. <b>More than one unit ball valve is open</b> <ul style="list-style-type: none"> <li>◦ Open only one unit ball valve at a time.</li> </ul> </li> <li>4. <b>Discharge hose too long or kinked</b> <ul style="list-style-type: none"> <li>◦ Straighten or shorten the hose.</li> </ul> </li> <li>5. <b>Chemical tube not immersed in chemical or chemical depleted</b> <ul style="list-style-type: none"> <li>◦ Immerse or replenish chemical</li> </ul> </li> <li>6. <b>Improper chemical</b> <ul style="list-style-type: none"> <li>◦ Ensure product is recommended for foaming and/or the application.</li> </ul> </li> <li>7. <b>Dilution too strong even with smallest metering tip</b> <ul style="list-style-type: none"> <li>◦ Some weak dilutions at lower water pressures are impossible to achieve with a metering tip. Pre-dilute your chemical until desired dilution ratio is achieved.</li> </ul> </li> <li>8. <b>Dilution too weak</b> <ul style="list-style-type: none"> <li>◦ Install larger metering tip.</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>9. <b>Chemical check valve stuck or clogged</b> <ul style="list-style-type: none"> <li>◦ Clean or replace.</li> </ul> </li> <li>10. <b>Battery level low</b> <ul style="list-style-type: none"> <li>◦ Recharge battery.</li> </ul> </li> <li>11. <b>Airless Foam Wand screen blocked</b> <ul style="list-style-type: none"> <li>◦ Dried chemical build-up may be obstructing flow through the screen. Remove fittings and soak the entire wand in de-scaling acid.</li> </ul> </li> <li>12. <b>Metering tip blocked</b> <ul style="list-style-type: none"> <li>◦ Clean or replace metering tip.</li> </ul> </li> <li>13. <b>Chemical tube stretched out where tube slides over check valve or pin hole/cut in chemical tube</b> <ul style="list-style-type: none"> <li>◦ Cut off end of tube or replace tube.</li> </ul> </li> <li>14. <b>Vacuum leak in chemical pick-up connection</b> <ul style="list-style-type: none"> <li>◦ Tighten the connection.</li> </ul> </li> <li>15. <b>Water tank empty</b> <ul style="list-style-type: none"> <li>◦ Refill tank.</li> </ul> </li> <li>16. <b>Chemical build-up or scale may have formed in the body causing poor or no chemical pick-up</b> <ul style="list-style-type: none"> <li>◦ Remove fittings and soak entire body in de-scaling acid. Replace fittings being careful not to cross thread or over tighten.</li> </ul> </li> </ol>

**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.**

