



**FS100™ PORTABLE SPRAYER SYSTEM  
INSTALLATION, OPERATING,  
& MAINTENANCE INSTRUCTIONS  
FSG-MNL-00219**





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## 1. GENERAL SAFETY

Decontamination/pressurized washing is an inherently risky activity. Knowledge and training may manage that risk. This document is not a training manual and does not provide all detailed operation. This guide serves as a quick reference for operation. AHJ (Authority Having Jurisdiction) shall provide training and guidelines for system operation.

### SAFETY HEADINGS

DANGERS, WARNINGS, CAUTIONS, and NOTICES consist of two parts: a heading (that identifies possible result if disregarded) and a statement of the hazard (that provides the minimum precautions).

**ATTENTION ▲ DANGER**

INDICATES A HAZARDOUS SITUATION, WHICH IF NOT AVOIDED WILL RESULT IN SERIOUS INJURY OR DEATH.

**ATTENTION ▲ WARNING**

INDICATES A HAZARDOUS SITUATION, WHICH IF NOT AVOIDED COULD RESULT IN SERIOUS INJURY OR DEATH.

**ATTENTION ▲ CAUTION**

INDICATES A POTENTIALLY HAZARDOUS SITUATION, WHICH IF NOT AVOIDED MAY RESULT IN MINOR OR MODERATE INJURY.

**IMPORTANT ▲ NOTICE**

ADDRESSES PRACTICES NOT RELATED TO PERSONAL INJURY.

### GENERAL DANGERS, WARNINGS AND NOTICES

**ATTENTION ▲ DANGER**

- **Fire and Explosion hazard**

- Flammable fumes such as solvents and paint fumes, can ignite or explode if in the same work area as the approved chemicals for the Akron FS100™ Portable Sprayer System, causing serious injuries or death.
- Do not operate or store the system in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep a fire extinguisher nearby.

**ATTENTION ▲ WARNING**

- **General warnings**

- Read and fully understand the Akron FS100™ Portable Sprayer System Manual prior to using the sprayer.
- Read and fully understand Akron-approved product labels prior to using any liquid product with the Akron FS100™ Portable Sprayer System.
- Use this product in accordance with these instructions and in the manner intended. Take into account the working conditions and the work being performed. Use of the product for operations different from those intended could result in a hazardous situation.





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- The Akron FS100™ Portable Sprayer System should never be used in a hazardous environment.
- The Akron FS100™ Portable Sprayer System should never be used in an area containing volatile chemicals or in any area containing volatile or explosive levels of gas, vapor, or particulates.
- Akron FS100™ Portable Sprayer System should never be used by untrained personnel.

**ATTENTION ⚠ WARNING**

- **Personal Protection Equipment**

- Refer to the chemical SDS, NIOSHA, ANSI Z87.1-1989, and OSHA standards for guidance on Personal Protective Equipment (PPE) for the specific chemical/disinfectant you are using.
- Always wear appropriate personal protection when spraying including goggles, gloves and additional PPE required by the chemical manufacturer.
- The following minimum requirements must be met by all protective devices. Protectors shall:
  - Provide adequate protection against the particular hazards for which they are designed.
  - Be of safe design and construction for the work to be performed.
  - Be reasonably comfortable when worn under the designated conditions.
  - Fit snugly and not unduly interfere with the movements of the wearer.
  - Be durable.

**ATTENTION ⚠ WARNING**

- **General Chemical Safety**

Each chemical, such as disinfectants, have a unique set of hazards and needs to be handled properly to ensure worker safety.

- The Akron FS100™ Portable Sprayer System can only be used with products that have been approved by Akron. Never spray any liquid product that is not an Akron-approved product. The Akron FS100™ Portable Sprayer System's warranty is voided if the System is used with products that are not approved by Akron.
- Always read and follow chemical manufacturer's instructions before use with this sprayer as some chemicals may be hazardous when used with this sprayer.
- Flammability of some agents may be increased when sprayed. Follow all agent manufacturers guidance.
- The effectiveness of each chemical can be dependent on the time that the surface is visibly wet. It is dependent on the specific brand of chemical, so refer to the EPA list in order to find the correct application details. Please note that chemicals with the same active ingredient may have different required application times and concentrations.
- This sprayer is designed for use with only the active ingredients listed in the Chemical Compatibility List in this manual. Never mix different chemicals together.
- Avoid inhaling, ingesting, or coming into direct contact with any chemicals.
- Know applicable licensing and regulatory requirements for the chemical you plan to use.
- Know the length of time required by each liquid product application before allowing people and pets to return to the sprayed area.





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- Know emergency and first aid procedures before handling liquid chemicals, detailed in the chemical SDS.
- Exercise extra caution around children and pets. Some chemicals are especially toxic to them. Keep sprayer and spray materials away from them at all times.
- Do not mix or pour chemicals in an enclosed, unventilated area.
- Do not use flammable or explosive agents in this sprayer.
- Store and dispose of chemicals in a correctly labeled container and in a secure location and method.
- Monitor the health of operators frequently exposed to chemicals, as recommended by the chemical label or local/federal regulations.

**ATTENTION ⚠ WARNING**

● **Electric shock hazard**

- All electrical systems have the potential to cause sparks during service. Equipment must be used only by trained, qualified personnel who understand the requirements of this manual.
- Never spray toward electrical outlets.
- Stop operation immediately if static sparking occurs or you feel shock. Do not use equipment until you identify and correct the problem.
- Use an extension cord meeting or exceeding the specifications provided in the extension cord section.
- To reduce the risk of electric shock, do not put the sprayer into water or other liquid. Do not place or store the sprayer where it can fall or be pulled into a tub or sink.

**ATTENTION ⚠ WARNING**

● **Pressurized equipment hazard**

Fluid from equipment that leaks or ruptures from a component can splash in the eyes or on skin, causing serious injury. In order help prevent a leak or rupture:

- Check hoses, tubes, and couplings daily and before extended use. Replace worn or damaged parts immediately.
- Never service system if there is pressure in sprayer.
- Maximum operational pressure of the system is 150 psi.

**ATTENTION ⚠ WARNING**

● **Equipment misuse hazard**

Each chemical, such as disinfectants, have a unique set of hazards and needs to be handled properly to ensure worker safety.

Misuse of the equipment or chemicals can cause death or serious injury.

*Before spraying*

- Check equipment daily. Repair or replace worn or damaged parts immediately with genuine replacement parts from Akron Brass.
- Do not attempt to modify this sprayer. Use only with manufacturer's original parts. Alterations or modifications void your Akron FS100™ Portable Sprayer System warranty, agency approvals, and create safety hazards.





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- Use fluids and solvents that are compatible with equipment wetted parts. Refer to the Chemical Compatibility List in this manual. Read fluid and solvent manufacturer's warnings. For complete information about your material, request SDS from distributor or retailer.
- Do not pour hot or boiling liquids into the tank. These can weaken or damage the hose or tank.
- When disinfecting, first clean the area with soap and water first before applying disinfectant, especially in heavily soiled areas.
- Do not turn on power to sprayer until ready to spray in order to avoid unintentional spray release.

*During spraying*

- Do not use while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating this product may result in serious injury.
- Route hoses and power cords away from traffic areas, sharp edges, moving parts and hot surfaces.
- Do not leave the work area while equipment is energized.
- Do not allow bystanders or children in the area while operating this product. Exposure to chemicals can be hazardous.
- Do not spray when wind speed exceeds 5 MPH in order to minimize spray drift.
- Do not discharge directly against skin.
- Post warning notices to restrict access for the period recommended on chemical label.
- Do not eat, drink, smoke, rub your eyes, or touch your bare skin when handling chemicals and spraying.
- Do not spray where sparks or flame are present.
- Never point spray wand at people, animals, or electrically charged equipment.
- Exercise extra caution when spraying near area accessible to children and pets.

*After spraying*

- Do not leave a pressure in the sprayer system. Discharge residual pressure after pump has been turned off.
- Do not store or leave solution in tank after use for extended periods. Consult with agent supplier for guidance on specific agent use.
- Store the sprayer in a secure, well-ventilated indoor space with the fluid tank empty.
- Decontaminate yourself after use of sprayer and have sprayer cleaned. Wash all exposed areas of the body with soap and water and remove and launder clothing.

**ATTENTION ⚠ WARNING**

● **Pinch Point Hazards**

- Be careful while operating the wand as the trigger may pinch the operator's hand.
- Be careful while removing and stowing the case on the cart.

**ATTENTION ⚠ CAUTION**

- The Akron FS100™ Portable Sprayer System shipping weight is above 75 lbs. and approximately 130 lbs. with battery. Move and lift the shipping container using the appropriate method.
- Maintain this product. Thoroughly inspect both the inside and outside of the sprayer and examine the components before each use. Check for cracked and deteriorated hoses, leaks,





clogged nozzles, and missing or damaged parts. If damaged, have the product repaired before use. Many accidents are caused by poorly maintained products.

- It is a violation of Federal Law to use a chemical in a manner that is not in accordance with its label.

**IMPORTANT ▲ NOTICE**

- **Plastic parts and cleaning solvent hazard**  
 Some agents may affect surfaces being cleaned. Check with agent manufacturer and test on a small area before spraying.
  - Ensure the surface being sprayed is compatible with the approved chemical solvent being used.
  - See technical data in this and all other equipment instruction manuals. Read fluid and solvent manufacturer’s SDSs and recommendations prior to use.

**SAFETY LABELS**

Familiarize yourself with these labels and their locations on the Akron FS100™ Portable Sprayer System.



*Figure 1 101-00353-000*



*Figure 2 101-00355-000*




**⚠ WARNING**

Avoid serious injury or death from fire, explosion, or electrical shock.

- This device must be connected to a Ground Fault Circuit Interrupt (GFCI) protected AC outlet.
- When using an extension cord, connect the AC charger plug before connecting to the GFCI protected AC outlet.
- Make connection in an open atmosphere, free of explosive fumes.
- Make connection in a secure manner that will avoid contact with water.
- Before cleaning or servicing, disconnect power supply.

*Figure 3 101-00356-000*



**⚠ WARNING**

**120 VOLTS  
INPUT**

*Figure 4 101-00357-000*

**FS100 SPRAYER SHOULD ONLY BE OPERATED BY TRAINED PERSONNEL USING PROPER PPE AND APPROVED AGENTS UNDER THE GUIDANCE OF THE AHJ**

**ATTENTION ⚠ WARNING**

**WARNING:**

- FOLLOW ALL AGENT MANUFACTURER'S INSTRUCTIONS
- NEVER AIM SPRAYER WAND AT PEOPLE OR ANIMALS
- NEVER AIM SPRAYER AT ELECTRICALLY CHARGED EQUIPMENT
- ONLY CONNECT TO GFCI OUTLET
- PROVIDE ADEQUATE PPE VENTILATION
- TURN OFF SPRAYER BEFORE CHANGING NOZZLES

Current Chemical: \_\_\_\_\_



**OPERATION INSTRUCTIONS:**

- TURN OFF SPRAYER POWER SWITCH WHEN NOT SPRAYING
- WHEN STARTING FROM A DRY TANK, PRIME PUMP PER MANUAL FIRST
- SPRAY TO WET SURFACES FOLLOWING AGENT MANUFACTURERS INSTRUCTIONS
- BATTERY PROVIDES UP TO 8 HOUR OPERATION BEFORE CHARGING
- ONLY USE SPECIFIED BATTERY
- PROTECT FROM FREEZING AND STORE IN VENTILATED SPACE

Date Added: \_\_\_\_\_



**FILLING INSTRUCTION:**

- NEVER POUR HOT OR BOILING WATER INTO SPRAYER TANK
- WHEN MIXING AGENT CONCENTRATES IN THE TANK, ALWAYS ADD WATER FIRST
- NEVER USE AGENT CONTAINING ACTIVE INGREDIENTS NOT ON THE COMPATIBILITY LIST
- ALWAYS FOLLOW AGENT SUPPLIERS INSTRUCTIONS FOR APPLICATION AND USE
- ALWAYS USE PROPER PPE WHEN MIXING OR FILLING AGENTS

*Figure 5 101-00359-000*





## 2. SYSTEM SPECIFICATIONS

MECHANICAL			
<b>Dimensions</b>	44"H x 27"W x 23"D – with cart 26.5"H x 23"W x 14"D – without cart		
<b>Weight – Empty</b>	Unit Weight with user supplied battery: 130 lb Unit Weight (without cart) with battery: 100 lb		
<b>Weight – Full</b>	Unit Weight with user supplied battery and fluid: 170 lb Unit Weight (without cart) with battery and fluid: 140 lb		
<b>Shipping Weight</b>	101 lb		
<b>Standard Hose Length</b>	50 ft		
<b>Flow Rate</b>	0.2 gpm	0.26 gpm	0.28 gpm
<b>Pressure</b>	150 psi	120 psi	75 psi

ELECTRICAL	
<b>Voltage – Charger</b>	Input: 110-120VAC Output: 12VDC
<b>Current – Charger</b>	Output: 10A
<b>Voltage – Battery</b>	12VDC
<b>Battery Type (not included)</b>	Optima YELLOWTOP Dual Purpose Model D34 AGM battery, or equivalent
<b>Run Time</b>	8 hours (battery fully charged)
<b>Charging Time</b>	7 hours



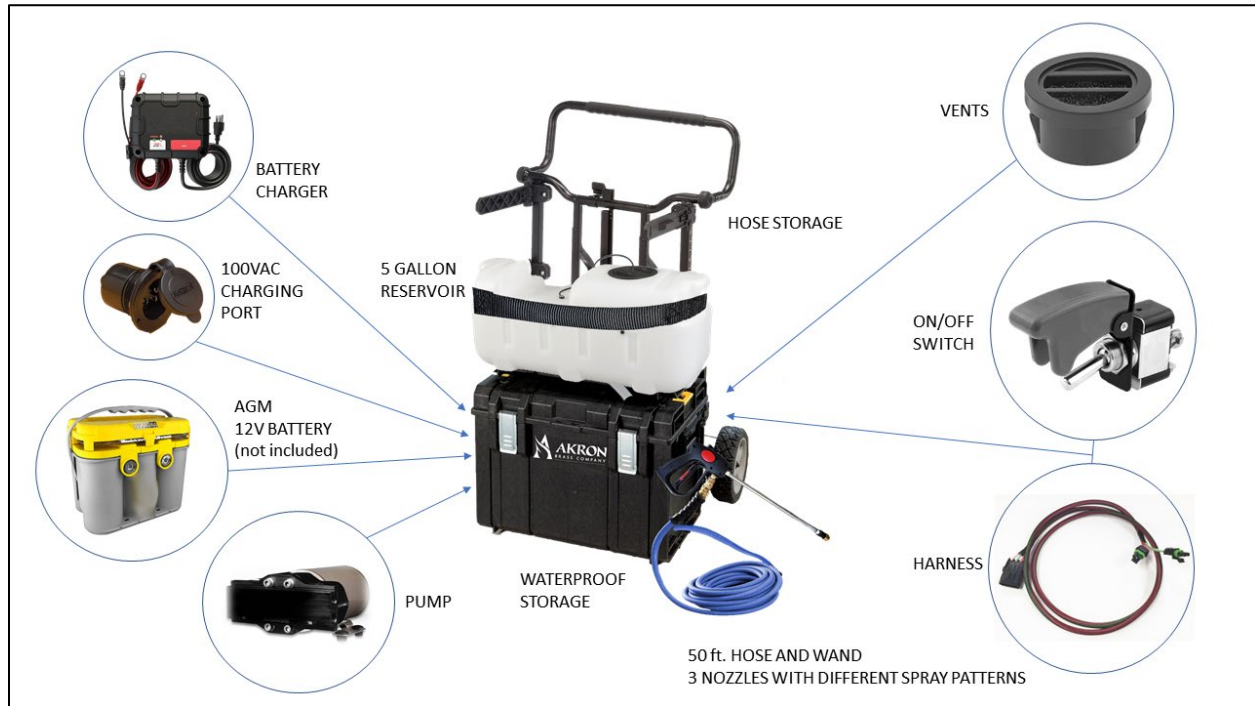


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### 3. SYSTEM COMPONENTS

**IMPORTANT NOTICE**

**Call Akron Technical Service for Help With Parts 800-228-1161**



*Figure 6 System Component Illustration. Not all parts illustrated are available from Akron for spare parts.*

SPARE COMPONENTS	
WAND ASSEMBLY	038-00112-000
PUMP ASSEMBLY	501-00069-000
PUMP ENCLOSURE/STORAGE	570-00021-000
IDEX & Warning Decal	101-00353-000
INLET LABEL	101-00354-000
OUTLET LABEL	101-00355-000
POWER LABEL	101-00356-000
120 VAC power conn decal	101-00357-000
LABEL, TANK WARNING	101-00359-000





## EXTENSION CORD

This system does not include an extension cord. To use the installed battery maintainer/charger, a 3-prong receptacle is installed.

When using an extension cord, ensure it is in good condition. Inspect cords periodically and replace if damaged. Always use a sufficiently rated extension cord. If an alternate extension cord is used, be aware that an undersized extension cord will cause a drop in-line voltage, which could result in loss of power, damage to the product and/or overheating.

### Extension Cord Requirements

**Gauge:** 12/3 (grounded)

**Max length:** 100 feet

**Power Outlet (recommended):** GFCI (ground fault circuit interrupter)

#### ATTENTION ⚠ WARNING

When system's battery charger and extension cord are connected, the electrical parts are electrically live even when the switch is off. To reduce the risk of burns, fire, electric shock or injury:

- Keep the cord away from heated surfaces
- Do not use a damaged or broken power cord
- Do not crimp or kink the cord or strain it around sharp edges
- If the unit or electrical components come in touch with water, unplug immediately. Do not reach into water to retrieve

### Power Connection

The charger/maintainer must be plugged into a 3-prong grounded outlet rated for no less than 15A.



## 4. INITIAL UNIT SETUP

The FS100™ System includes all the necessary components for operation, EXCEPT the battery. Use the following instructions to help procure and install a suitable battery and conduct an initial operating test.

### Battery Requirements

- Type:** Optima YELLOWTOP Dual Purpose Model D34 AGM battery, or equal
- BCI Group:** 34
- Voltage:** 12VDC
- Cold Cranking Amps:** 750 minimum
- Reserve Capacity:** 120 minimum
- Post/Terminal Type:** SAE

### Battery Installation

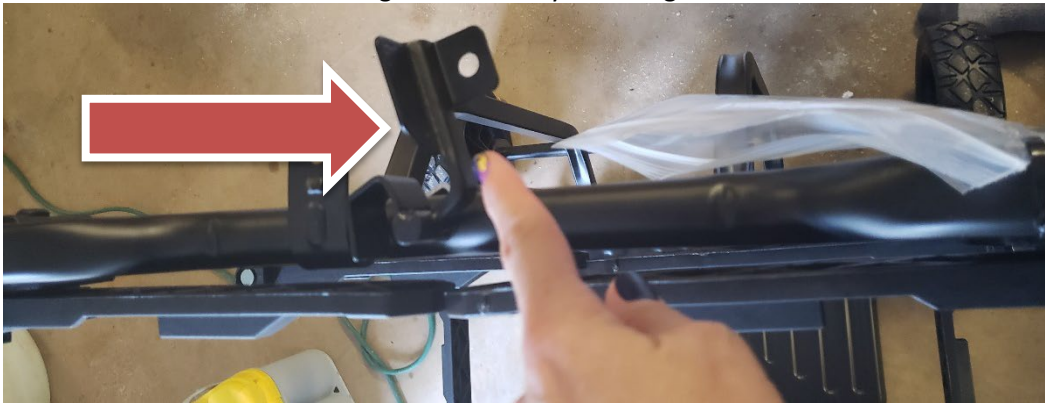
**IMPORTANT ▲ NOTICE**

Wear safety glasses or other PPE, per Authority Having Jurisdiction (AHJ) guidelines.

**ATTENTION ▲ WARNING**

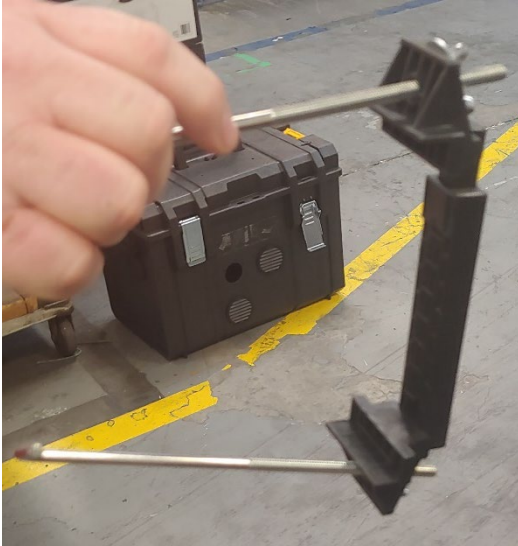
Only use the recommended battery and do not use a lead acid battery.  
Pinch point when removing and stowing the enclosure on cart.

1. Disconnect any external power connections to the unit.
2. Empty (if necessary) the 5-gallon liquid reservoir.
3. Remove the cart from the storage container by releasing the box from the cart

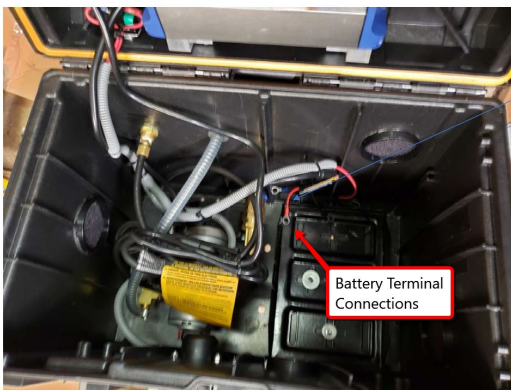


4. Open the container lid.

5. Install the battery inside the compartment, using the 2x J-bolts and battery strap. It is recommended to put the small washers and nuts on first.



6. Connect the harness positive and ground ring terminals to the appropriate post on the battery. For more information on setting up the battery charger/maintainer connections please refer to the manual for the charger provided with the unit.
7. Close the container lid, install box back onto cart, and secure with the lock used to release the box in step 3.



Battery terminal connections



Battery installed with J-bolts

### Initial Operating Test

1. Fill the 5-gallon reservoir with 1/2 gallon of water.
2. Disconnect the wand from the end of the hose, using the quick-connect fitting.
3. Place the end of the hose into the top of the 5-gallon reservoir.
4. Locate the ON/OFF switch on the unit and move the switch to the ON position or UP direction. You should hear the piston pump operating as it begins to circulate water through the system.
5. Once water is circulating through the system and back into the 5-gallon reservoir, turn the switch to the OFF position or DOWN direction. **The pump has been primed.**
6. Remove the hose from the 5-gallon reservoir and reconnect the wand.
7. Turn the system back ON.



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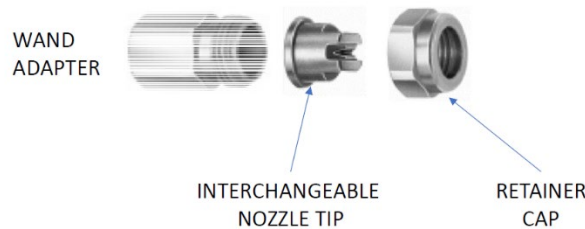
8. Using the wand, depress the handle to spray the liquid. Adjust the nozzle to test different spray patterns.
9. Depress and release the handle several times to make sure the spray pressure is consistent each time and that the liquid stops flowing as expected.
10. Inspect the wand and hose assembly for leaks. Use the Troubleshooting section of this manual to help address any problems.
11. Depress the handle until all the water in the reservoir is used. Turn the system OFF.
12. Remove the cart from the storage container and open the container lid. Inspect for leaks. Use the Troubleshooting section of this manual to help address any problems.
13. Close the container lid and cap the reservoir. **The unit is ready for use.**



System ready for priming operation.

**Wand Nozzle Tip Selection**

Three nozzle tips ship with each unit and each nozzle is stamped with a number. The 11001 nozzle is installed on the unit. Use the table below to help select another nozzle, based upon the desired flow conditions. Refer to the Maintenance Instructions for assistance in cleaning, changing, or inspecting the nozzle tips.



SAE NOZZLE PERFORMANCE				METRIC		DROPLET SIZE CLASSIFICATION
NOZZLE MODEL	SPRAY ANGLE DEG	PRESSURE PSIG	FLOW GPM	PRESSURE BAR	FLOW LPM	MIN PER ASABE STD S572.1 & BCPC SPECIFICATIONS
11001 *	110	150	0.2	10.3	0.76	VERY FINE TO EXTREMELY FINE
110015	110	120	0.26	8.3	0.98	FINE TO VERY FINE
8002	80	75	0.28	5.2	1.06	FINE
* INSTALLED AT FACTORY						



## 5. GENERAL OPERATION

Before starting operation, a nozzle should be selected based upon the desired application. The system includes three different styles and they can easily be swapped out by using a wrench. Refer to the Wand Nozzle Tip Selection part of the Initial Unit Setup section.



### 1. COMMISSIONING

**ATTENTION ⚠ WARNING**

REVIEW ALL SAFETY WARNINGS IN THE MANUAL BEFORE OPERATING THE UNIT

**IMPORTANT ⚠ NOTICE**

BEFORE USING THE UNIT, THE USER MANUAL SHOULD BE READ AND THE UNIT NEEDS TO BE PUT INTO SERVICE BY HOOKING UP THE PROPER AGM BATTERY, PRIMING THE UNIT, AND TESTING OPERATION.

**IMPORTANT ⚠ NOTICE**

THE LABEL ON THE TANK HAS A PLACE TO WRITE DOWN THE CHEMICAL CURRENTLY IN USE AND THE DATE ADDED.



### 2. SURFACE PREP

**IMPORTANT ⚠ NOTICE**

**ATTENTION ⚠ CAUTION**

CLEAN HEAVILY SOILED AREAS WITH SOAP AND WATER FIRST BEFORE DISINFECTING, PER RECOMMENDATION OF THE AREA HAVING JURISDICTION (AHJ).



### 3. SAFETY REQUIREMENTS

**ATTENTION ⚠ WARNING**

ONLY USE THIS PRODUCT WITH EPA APPROVED DISINFECTANTS SUITABLE FOR USE WITH THE FS100.\*

REFER TO THE SDS SHEETS AND AUTHORITY HAVING JURISDICTION (AHJ) FOR THE PROPER PPE, CONCENTRATION, AND APPLICATION METHODS.

**\*refer to active ingredient compatibility list in the FS100™ user manual**



#### 4. FILLING UP RESERVOIR

**ATTENTION ⚠ CAUTION**

- BEFORE STARTING, CHECK TO ENSURE THE RESERVOIR IS EMPTY.
- IF THE RESERVOIR IS NOT EMPTY, REMOVE EXCESS LIQUID AND FLUSH THE SYSTEM WITH WATER.
- ONCE THE RESERVOIR IS CLEANED AND EMPTY, USE THE 4-INCH OPENING ON TOP TO FILL IT WITH THE DISINFECTANT RECOMMENDED BY YOUR AHJ IN THE CONCENTRATION COMPLIANT WITH THE EPA LABEL AND THE FS100™ CHEMICAL COMPATIBILITY LIST.

**ATTENTION ⚠ CAUTION**

DO NOT POUR HOT OR BOILING LIQUIDS INTO THE RESERVOIR.  
 WHEN MIXING LIQUIDS IN THE RESERVOIR, ADD WATER FIRST, THEN THE CONCENTRATE, SO THAT THE CONCENTRATE IS NOT SITTING UNDILUTED IN THE RESERVOIR.

**ATTENTION ⚠ CAUTION**

FOLLOW ALL SAFETY AND PPE GUIDELINES LISTED ON THE SDS SHEET AND EPA LABEL SPECIFIC TO THE DISINFECTANT YOU WILL BE HANDLING.



#### 5. PRIMING THE PUMP

- DISCONNECT THE WAND FROM THE END OF THE HOSE, USING THE QUICK-CONNECT FITTING.
- PLACE THE END OF THE HOSE INTO THE TOP OF THE 5-GALLON RESERVOIR.
- LOCATE THE ON/OFF SWITCH ON THE UNIT AND MOVE THE SWITCH TO THE ON POSITION OR UP DIRECTION. YOU SHOULD HEAR THE PISTON PUMP OPERATING AS IT BEGINS TO CIRCULATE FLUID THROUGH THE SYSTEM.
- ONCE FLUID IS CIRCULATING THROUGH THE SYSTEM AND BACK INTO THE 5-GALLON RESERVOIR, TURN THE SWITCH TO THE OFF POSITION OR DOWN DIRECTION. **THE PUMP HAS BEEN PRIMED.**
- REMOVE THE HOSE FROM THE 5-GALLON RESERVOIR AND RECONNECT THE WAND.





#### **6. POWER REQUIREMENTS**

THE SYSTEM EITHER OPERATES FROM THE INSTALLED 12VDC BATTERY OR WHEN PLUGGED INTO A STANDARD GFCI 120VAC OUTLET VIA THE INTEGRATED BATTERY CHARGER.

**ATTENTION ⚠ CAUTION**

UNIT SHOULD BE TURNED OFF WHEN NOT SPRAYING.



#### **7. TURNING THE SYSTEM ON**

SYSTEM IS TURNED ON VIA THE ON/OFF SWITCH.

THE PUMP WILL PRESSURIZE THE FLUID, WHICH CAN BE EXPELLED VIA THE TRIGGER ON THE WAND.



#### **8. APPLYING THE PRODUCT**

ENSURE THE WORK AREA IS WELL VENTILATED IN ACCORDANCE WITH OSHA, NIOSH, OR AHJ STANDARDS.

APPLY PRODUCT TO THE SURFACE USING SLOW AND SMOOTH SWEEPS TO WET, BUT NOT SATURATE THE SURFACE.

**IMPORTANT ⚠ NOTICE**

USE THE EPA GUIDANCE IN ORDER TO DETERMINE PROPER CONTACT TIME FOR DISINFECTION.

**ATTENTION ⚠ CAUTION**

THE WAND TRIGGER CAN CREATE A PINCHING HAZARD. USE GLOVES OR GRIP THE TRIGGER NEAR THE BOTTOM WHEN APPLYING THE PRODUCT.

**AGM**



### 9. TURNING OFF SYSTEM

WHEN YOU HAVE FINISHED OPERATING THE SYSTEM, FLIP THE SWITCH TO THE OFF POSITION. THIS DEACTIVATES THE PUMP.

WITH THE WAND POINTED IN A SAFE DIRECTION, RELIEVE PRESSURE IN THE SYSTEM BY PULLING THE WAND TRIGGER.



### 10. STORAGE

AFTER THE SYSTEM IS SAFELY SHUTDOWN, RETURN THE HOSE, WAND, AND EXTENSION CORD BACK TO THE STORAGE AREA.

#### IMPORTANT ▲ NOTICE

IF THE SYSTEM IS GOING INTO LONG TERM STORAGE, ENSURE THE CHEMICAL IS PROPERLY DRAINED FROM THE RESERVOIR ACCORDING TO EPA AND AHJ REGULATIONS. FLUSH THE SYSTEM WITH WATER AND DRAIN.

#### IMPORTANT ▲ NOTICE

IF THE SYSTEM WILL BE STORED IN A BELOW-FREEZING ENVIRONMENT, FLUSH THE SYSTEM WITH AN ANTIFREEZE SOLUTION AND DRAIN.



### 11. DISPOSAL/REMOVAL OF PPE

WHEN THE SYSTEM HAS BEEN STORED, REMOVE AND DISPOSE / CLEAN YOUR PPE ACCORDING TO YOUR AHJ.

## 6. MAINTENANCE INSTRUCTIONS

For the Akron FS100™ Sprayer to remain functional, the equipment should be cleaned on a regular basis. In addition to general exterior cleaning of the unit, there are THREE user-serviceable areas: sprayer nozzle, piston pump intake strainer, and piston pump seals and check valves.

### DRAINING THE UNIT

1. Pump out fluid and store or dispose as per the AHJ.
2. After use turn off unit drain hose through the wand to ensure all fluid is out then disconnect the hose and store on the top arms.
3. Tilt the tank and ensure all agent is out of the tank.

**ATTENTION ⚠ WARNING**

Pinch point when removing and stowing the enclosure on cart.

### REMOVING THE ENCLOSURE FROM THE CART

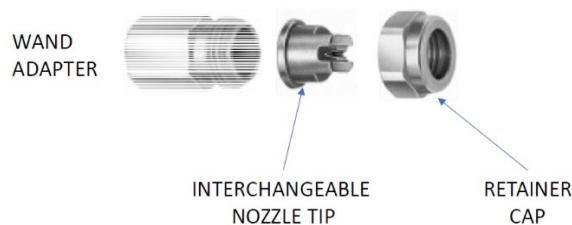
1. Release locking bar of the cart to remove the pump enclosure.
2. Remove the pump enclosure before attempting to open the pump enclosure.

Releasing mechanism to remove box from cart.



### SPRAYER NOZZLE

The most important maintenance task to ensure trouble-free operation of your unit is to rinse the nozzle out with clean water after every use. This routine cleaning will avoid the long-term chemical buildup that eventually causes clogs, poor spray patterns, and shortened life of the nozzle components.



#### To Clean/Inspect Change the Nozzle Assembly

3. With the unit unplugged and powered OFF, unscrew the retainer cap from the wand adapter with a 13/16" wrench, holding the wand adapter with an 11/16" wrench. Clean any debris from or around any of the interior surfaces with warm, soapy water.

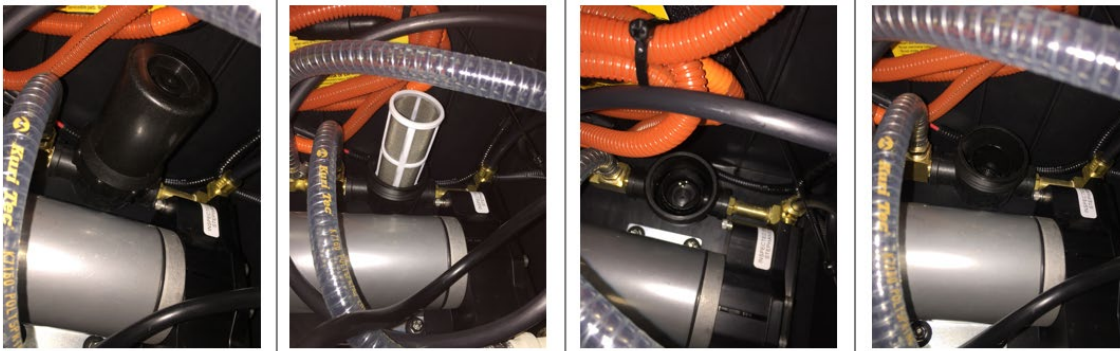
4. Inspect for any damage to the nozzle tip. If spray pattern was noted to be inconsistent or non-typical of a normal symmetrical spray, remove/replace the liquid tip.
5. Thoroughly clean all interior surfaces of the nozzle tip, including the main orifice. Never use a wire brush, file, or sandpaper to clean any surface or orifice.

### PISTON PUMP INTAKE STRAINER

A low-pressure in-line liquid strainer is mounted to the inlet of the piston pump. The strainer protects the pump from debris that might accumulate in the 5-gallon liquid reservoir. The strainer has a composite, non-metallic housing with a stainless-steel mesh strainer element.

#### IMPORTANT ▲ NOTICE

The strainer is a low-pressure device and should NOT be subjected to HIGH pressure flushing water.



### To Clean/Inspect the Strainer

1. Disconnect any external power connections to the unit.
2. Empty (if necessary) the 5-gallon liquid reservoir.
3. Remove the cart from the storage container and open the container lid.
4. Unscrew the plastic strainer cap from the base. Clean any debris from inside the cap.
5. Remove the stainless-steel strainer element and clean any debris from or around any of the interior surfaces. If needed, rinse the strainer element with warm, soapy water. Inspect the strainer for damage and replace as necessary.
6. Reinstall both the strainer element and strainer cap.
7. Replace the container lid.

### PISTON PUMP REPLACEMENT

**If required to replace the piston pump, follow these steps:**

1. Disconnect any external power connections to the unit.
2. Empty (if necessary) the 5-gallon liquid reservoir.
3. Remove the cart from the storage container and open the container lid.
4. Disconnect the power and ground electrical connections between the battery and the piston pump motor.
5. Disconnect the discharge tube and inlet hose from the piston pump.
6. Remove the piston pump assembly.
7. Install the replacement piston pump assembly inside the battery compartment.
8. Reconnect the plumbing and electrical connections.
9. Replace the container lid and refill with liquid to test the unit.



## 7. TROUBLESHOOTING INSTRUCTIONS

Do NOT use a chemical in the unit that is not chemically compatible. If you encounter the issues listed below, use the suggested troubleshooting methods. If you encounter an issue that is not addressed in this manual, contact the Akron Customer Service Center at 800-228-1161.

<b>Excessive liquid dripping or leaking</b>	
<b><i>Potential Cause</i></b>	<b><i>Remedy</i></b>
<i>Damage to sprayer nozzle assembly</i>	Inspect for damage and faulty parts. If present, review spare parts list or the contact Akron customer service center.
<i>Damage to spray nozzle hose</i>	Replace hose.
<i>Plumbing connections are loose</i>	Check connections between the hose and both the nozzle assembly and the pump. Tighten as required.
<i>Piston pump seals are defective</i>	Replace the piston pump seals and check valves using the included maintenance instructions.
<i>Blockage in the sprayer trigger</i>	Pull and release the handle to blow out dirt. If unsuccessful, remove the nozzle and cycle the handle again.

<b>System will not spray, has weak spray, or has shut off suddenly</b>	
<b><i>Potential Cause</i></b>	<b><i>Remedy</i></b>
<i>Battery is depleted</i>	Charge the battery and check the fuses (see the charger manual for more details).
<i>Liquid reservoir is depleted</i>	Refill the liquid reservoir.
<i>Blockage in sprayer nozzle assembly</i>	Inspect the nozzle assembly using the included maintenance instructions.
<i>Damage or kinks in spray nozzle hose</i>	Inspect the hose for damage or blockages and replace if necessary.
<i>Automatic Breaker Failure</i>	Change the breaker.
<i>Loose electrical connection</i>	Inspect the electrical system for damaged wires or loose connections.
<i>Pump intake strainer is clogged</i>	Clean the intake strainer using the included maintenance instructions.
<i>Piston pump seals or check valves are defective</i>	Replace the piston pump seals and check valves using the included maintenance instructions.





## **8. BATTERY CHARGER – GENERAL OPERATION, INSTALLATION, AND MAINTENANCE**

**IMPORTANT ▲ NOTICE**

**FULLY AUTOMATIC AND INSTALLED IN THE PUMP ENCLOSURE.**

**REFER TO BATTERY CHARGER MANUAL INCLUDED WITH THE UNIT.**





## 9. CHEMICAL COMPATIBILITY LIST

The FS100 is a portable sprayer system with a fan nozzle pattern to wet surfaces with cleaning agents. The FS100 is a medium pressure sprayer with interchangeable nozzle tips. Effectiveness of the disinfectant operation is dependent on appropriate use and selection of the cleaning agent by the user of the sprayer system. The FS100 provides a means to apply a cleaning agent, but Akron Brass makes no warranties or representations regarding the effectiveness of the selected cleaning agent for disinfection or decontamination purposes.

### ATTENTION ⚠ WARNING

READ THESE INSTRUCTIONS AND ALL CHEMICAL OR CLEANING AGENT INSTRUCTIONS AND WARNINGS CAREFULLY. Failure to follow all instructions provided with the sprayer, the cleaning agent being used, and the AHJ (Authority Having Jurisdiction), may result in serious personal injury. For safe use of this product you must read and follow all instructions, including but not limited to:

- Do not leave a pressure in the sprayer system. Discharge residual pressure after pump has been turned off.
- Do not store or leave solution in tank after use for extended periods. Consult with cleaning agent supplier for guidance on specific cleaning agent use and storage.
- Always wear appropriate personal protection when spraying including goggles, gloves and additional PPE required by the cleaning agent manufacturer.
- Never service system if there is pressure in sprayer.
- Never point spray wand at people, animals or electrically charged equipment.
- Do not use flammable or explosive cleaning agents or other materials in this sprayer.
- Do not attempt to modify this sprayer. Use only with manufacturer's original parts.
- This sprayer is designed for use with only liquids having the active ingredients listed in the table below. Never mix different chemicals together.
- Always read and follow chemical manufacturer and/or cleaning agent manufacturer's instructions before use with this sprayer, as some chemicals may be hazardous when used with this sprayer.

#### Example Disinfectant Agent

Purerox™ is an example of a broad spectrum disinfectant that is compatible with this sprayer. More information about its effectiveness is available at

<https://icleanforhealth.com/orderp/purerox-covid19-pkg1>

- Know the contents of the chemical or cleaning agent being sprayed. Read all Material Safety Data Sheets (MSDS) and container labels provided with the chemical or cleaning agent and follow the chemical manufacturer's safety instructions.
- Do not operate the sprayer in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Do not allow bystanders or children in the area while operating this product. Exposure to some chemicals can be hazardous.





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- Do not use while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating this product may result in serious injury.
- Use this product in accordance with these instructions and in the manner intended, take into account the working conditions and the work being performed. Use of the product for operations different from those intended could result in a hazardous situation.
- Electric shock hazard. Never spray toward electrical outlets.
- Do not pour hot or boiling liquids into the tank. These can weaken or damage the hose or tank.
- Spray area must be well ventilated.
- Store the sprayer in a secure, well-ventilated indoor space with the fluid tank empty.
- Do not smoke while using the sprayer, or spray where spark or flame is present.
- Do not discharge directly against skin.
- To reduce the risk of electric shock, do not put the sprayer into water or other liquid. Do not place or store the sprayer where it can fall or be pulled into a tub or sink.

The list below is intended to provide guidance to the user about the active ingredients found in over the counter disinfectants that are suitable for use with the FS100 and its components. This list is intended to provide the user / AHJ guidance for selection of their preferred agent. Any deviation from this list will void the warranty as it may cause damage to the sprayer system and/or create risk to the user.

<b>Active Ingredient</b>
Hydrogen Peroxide
Sodium Hypochlorite Solution (20% strength or less)
Phenolic
Sodium Carbonate
Sodium Bicarbonate
L-Lactic Acid
Peroxyacetic Acid
Silver Dihydrogen Citrate
Citric Acid
Hypochlorous Acid (37% Strength or less)
Ammonium Carbonate

**ATTENTION ⚠ WARNING**

- Refer to the chemical or cleaning agent manufacturer’s Safety Data Sheet (SDS), labels, and AHJ. Also refer to the SDS, NIOSHA, ANSI Z87.1-1989, and OSHA standards for guidance on Personal Protective Equipment (PPE) for the specific chemical/cleaning agent you are using.
- Flammability of some agents may be increased when sprayed. Follow all cleaning agent manufacturers’ guidance.
- Do not ingest chemicals or cleaning agents.







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**ATTENTION ⚠ CAUTION**

- Thoroughly inspect both the inside and outside of the sprayer and examine the components before each use. Check for cracked and deteriorated hoses, leaks, clogged nozzles, and missing or damaged parts. If damaged, have the product repaired before use.
- Some chemicals or cleaning agents may surfaces being cleaned. Check with chemical or cleaning agent manufacturer and test on a small area before spraying.

WHEN QUESTIONS COME UP REGARDING HOW TO SAFELY USE A CHEMICAL OR CLEANING AGENT OR WHETHER SUCH CHEMICAL OR CLEANING AGENT IS SUITABLE FOR YOUR PURPOSE, REFER THOSE QUESTION TO THE SUPPLIER OR MANUFACTURER OF THE CHEMICAL OR CLEANING AGENT.





## 10. WARRANTY STATEMENT

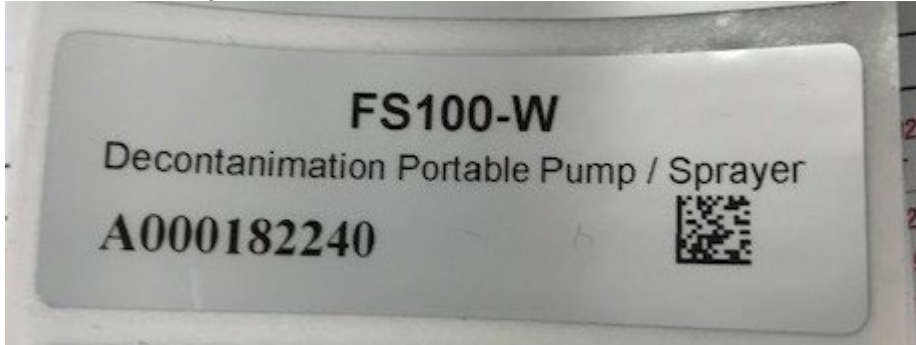
REFER TO WARRANTY STATEMENT ON FS100 PRODUCT PAGE:

[https://www.akronbrass.com/fs100#product\\_tabs\\_specifications](https://www.akronbrass.com/fs100#product_tabs_specifications)

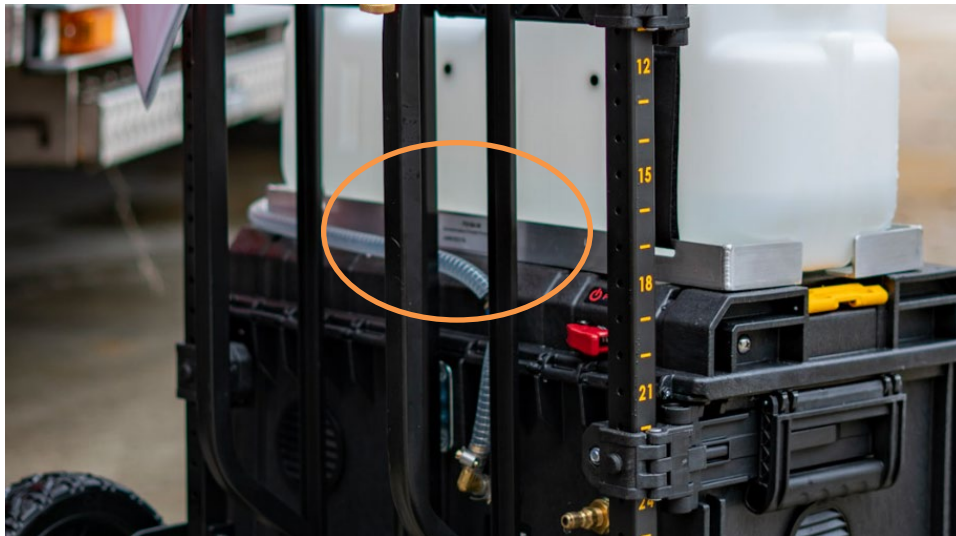
Akron FS100™ Portable Sprayer System carries a one (1) year warranty on parts only.

Please be sure to have your serial number ready when you contact customer/technical service.

**Here is an example of the label:**



**It will be located here:**



### Revision History

Revision	Reason Updated
05/22/2020 - A	New Instruction
6/10/2020- B	Added Pinch Warning, additional instructions for removing/stowing cart and battery installation, phone numbers for customer support and pictures of the serial tag with location. Updated nozzle performance to include droplet size, copyright statement, and product photo

