



# Operator's Safety and Service Manual

---

## Cordless Sprayer

Model: **H100AC**



ALL CHEMICALS

SMK Industries, Inc.  
12839 Carpenter Trail  
Carlisle, IA 50047  
Phone: 515-202-0052

# INTRODUCTION

(This page left blank intentionally)

You have purchased a quality SMK product, proudly made in the USA. If you use and maintain your SMK product for what it is intended, you will enjoy many years of safe, reliable service.

The SMK "H100AC" portable sprayer utilizes a magnetically coupled gear pump and 2 DeWalt® NiCad or Lithium Ion 18V batteries.

SMK reserves the right to make changes to this manual without notice

## Table of Contents

<b>Safety Information</b> .....	2
Introduction.....	2
Safety Precautions.....	3-4
<b>Warranty</b> .....	5
Proof of purchase.....	6
Specifications.....	6
<b>Operation</b> .....	7
Contents of carton.....	7
Assembly.....	8-9
Operating the sprayer.....	10
Clean up.....	11
Chemical compatibility.....	11
<b>Troubleshooting</b> .....	12
<b>Maintenance</b> .....	13
<b>Service</b> .....	13
<b>Replacement parts</b> .....	13

## Maintenance

No Routine Maintenance is required.

Thoroughly clean of the entire unit by flushing the internal components (see clean up on page 11) and the exterior surfaces.

## Service



### CAUTION




Service on this unit both within and after the warranty period should be performed only by an authorized service center. To find the service center nearest you Call 1-515-202-0052

## Replacement Parts

For a list of replaceable parts, please call 515-202-0052 for assistance.

## Safety Information

### Introduction

 This Safety Alert Symbol is used to call attention to items or operations which may be dangerous to those operating or working with this equipment. The symbol can be found throughout this manual. Please read these warning and cautions carefully before attempting to operate the unit. Make sure every individual who operates or works with this equipment is familiar with all safety precautions.



### WARNING



**GENERAL WARNING:** Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment and/ or severe bodily injury or death.



### CAUTION



**GENERAL CAUTION:** Indicates information important to the proper operation of the equipment. Failure to observe may result in damage to the equipment.

**REFERENCES:** For details on safety rules and regulations in the United States, contact your local Occupational Safety and Health Administration (OSHA) office. Equipment operated in other countries must be operated and serviced in accordance and compliance with any and all safety requirements of that country. The publication of these safety precautions is done for your information. SMK does not by the publication of these precautions imply or in any way represent that these are the sum of all dangers present near SMK equipment. If you are operating SMK equipment, it is your responsibility to insure that such operation is in full accordance with all applicable safety requirements and codes. All requirements of the United States Federal Occupational Safety and Health Administration Act must be met when operated in areas that are under the jurisdiction of the United States Department.

## Safety Precautions



### WARNING



- ⚠ Before attempting to operate the unit, read and understand all safety precautions and warnings.
- ⚠ Do not use the unit when tired, ill, or under the influence of alcohol, drugs or medication.
- ⚠ Inspect unit before each use for loose, broken, cracked, split, or damaged parts. Do Not operate the unit with loose or damaged component parts.
- ⚠ Always wear safety glasses or goggles that are marked with ANSI Z87
- ⚠ Use only in daylight or good artificial light.
- ⚠ Never use unit without the proper factory authorized accessories attached. When using the unit, ensure that the sprayer discharge hose is securely attached.
- ⚠ Do not modify the unit

## Troubleshooting

### SPRAYER WILL NOT START

- ✓ If batteries are not properly seated and fully charged
- ✓ If On/Off switch is in the off position
- ✓ If Speed Control is turned off (counterclockwise)

### SPRAYER WILL NOT PRIME

- ✓ If pickup tube or discharge hose is restricted
- ✓ If Spray tip or Filter on end of Wand is plugged
- ✓ If you are out of product
- ✓ For properly charged battery(s)
- ✓ For vacuum leak in suction tube

### SPRAYER OUTPUT VOLUME REDUCED

- ✓ If pickup tube or discharge hose for restrictions
- ✓ Sprayer wand and wand tip for restrictions
- ✓ Material is too high in viscosity
- ✓ Material is too cold

## Clean up



### CAUTION



As with any type of sprayer, this unit will not function satisfactorily if the unit is not clean. If the product being sprayed is intended to cure or set up after application, the Sprayer must be cleaned and flushed after EACH use by using the appropriate fluids as recommended by the chemical/ compound manufacturer. Pump the cleaning agent through the sprayer until all traces of the previously sprayed material has been removed from the unit. **Failure to clean the unit after using these types of materials will result in failure of the unit and loss of warranty coverage.**

**DO NOT USE THE PUMP TO PURGE THE SPRAY HOSE.** Running the Pump dry over 1 minute will destroy the gears and void the warranty. Disconnect the Hose on each end and drain manually using gravity.

## Chemical Compatibility

The magnetically coupled gear pump has no seals or gaskets in the fluid path and therefore will not leak. The only material coming in contact with the fluid being sprayed is 316 Stainless Steel, Ceramic and PEEK (Polyetheretherketone) Gears.

The only solvents which will attack PEEK are concentrated nitric acid and sulphuric acids.



### CAUTION



**IT IS YOUR RESPONSIBILITY TO ENSURE THAT THE MATERIAL YOU ARE SPRAYING IS COMPATIBLE WITH THE PUMPS COMPONENTS.**



### CAUTION



- ⚠ If the product being sprayed is intended to cure or set up after application, the Sprayer must be cleaned and flushed using the appropriate fluids as recommended by the chemical/compound manufacturer. Failure to clean the unit after using these types of materials will result in failure of the unit and loss of warranty coverage.
- ⚠ Attempting to spray liquids below the manufactures recommended temperatures may affect the sprayers ability to adequately perform. Low temperatures may affect your materials viscosity.
- ⚠ Do not submerge or expose to excessive moisture
- ⚠ Do not spray liquids with high solids (Over 35%) or abrasive additives as this will destroy the pumps gears and will void the warranty. This Sprayer is intended for and was tested with Chemicals used for curing and sealing applications. If you are unsure of the suitability of the product you want to spray contact SMK at 515-202-0052 for assistance.

# Warranty



## CAUTION



- DO NOT ATTEMPT TO SERVICE THE UNIT BY REMOVING THE COVER. REMOVAL OF THE UNIT COVER WILL VOID THE WARRANTY. CALL THE SERVICE CENTER.**

SMK Industries warrants this product to be free from material or workmanship defects for a period of 60 days from the date of manufacture. Alternatively, 60 days from purchase, not to exceed one year from date of manufacture.

Warranty does not apply when:

- Unit is not used within the guidelines of this manual.
- Product or Parts are used or installed outside the SMK authorized service center.
- Incompatible fluids are used.
- Misuse or Abuse.
- Improper or inadequate cleaning of unit after use.

In the event you need to utilize this warranty, the product or part must be returned for examination, postage prepaid, direct to the SMK Industries service center as instructed by calling 515-202-0052. Proof of purchase date and an explanation of the claim must accompany the merchandise. If inspection discloses a defect, SMK will either repair or replace the product with like equipment at SMK's expense. If no defect is found during the inspection, or if the defect resulted from causes not within the scope of SMK's limited warranty, then the user must assume all costs incurred returning and/or storing the product.

All products and parts will be tested using SMK testing criteria. Units found to be damaged, altered or otherwise mistreated will not be covered under this warranty. Units found not to be defective are subject to charges to be paid by the returnee.

# Operating the Sprayer

Keeping all safety and operating measures in mind.

You are now ready to begin spraying.

4. Prime the Sprayer
  - a. Squeeze the Spray Gun Handle
  - b. Turn the Power Switch On (depress white square)
  - c. The Pump is self priming and should begin spraying in a few seconds.
  - d. **IMPORTANT** - When Power Switch Light starts flickering (pump is cycling on and off), turn the Speed Control down (counterclockwise) until the light is steady on (pump is not cycling on and off).
  - e. After liquid is flowing and all air is purged from the lines, release the Handle and the Sprayer will turn off.
  - f. If the pump does not prime within 20 seconds, turn off the power and check to see that all fittings are tight and the Intake Filter is not clogged.
  - g. Running the Pump dry over 1 minute will destroy the gears and void the warranty.

The pump is designed for continuous duty when proper operating criteria are met.



## CAUTION



**BEFORE REMOVING THE SPRAY HOSE, TURN THE POWER OFF AND RELIEVE ANY PRESSURE IN THE SPRAY HOSE BY SQUEEZING THE SPRAY HANDLE.**

## Assembly (Cont)

5. Set the Sprayer unit on top of the container by guiding the inlet tube into the hole in top of container.
6. Set the Power Switch to the off position
7. Insert the Batteries into the receptacle, **DO NOT FORCE**. When properly aligned they will slide in easily. When fully inserted they will contact the Sprayer housing and you will hear a click indicating the Safety Switch has been activated. The Sprayer will run with one Battery.
8. Check the sprayer trigger handle to make sure the lever is not locked in the open/ on position.
9. Turn the Speed Control to Hi (fast) by turning completely clockwise. It is located on the top front of the Sprayer, next to the Power Switch.

SMK shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages of any kind by the reason of use or sale of any defective product or part. This limited warranty covers units distributed in the United States of America only.

This limited warranty is in lieu of all other warranties, expressed or implied, and no other person is authorized to give any other warranty or assume obligation or liability on behalf of SMK Industries, Inc.

Products and parts must be flushed free of all fluids prior to returning to SMK for warranty inspection.

## PROOF OF PURCHASE

Please retain your dated sales receipt as proof of purchase to validate the warranty period.

## SPECIFICATIONS

Pump	TOPSFLO® MG213XK/DC24WI
Pump Voltage	24 Volts
Chassis	Powder Coated Steel
Spray Gun	TeeJet® AA30L-1/4
Wand	TeeJet® 6671-24
Wand tips	TeeJet® XR8001-VS, 5500-X14
Approved batteries	Dewalt® 18V
	or Interstate® 18V
Flow Rate	2.7 GPM (free flow)
Battery Life	75 Gallon Minimum (w/cone tip)
Pressure	60 PSI up to 0.8 GPM

## Operation



### WARNING



Carefully read through this entire manual before attempting to use your new product. Pay close attention to the safety alerts symbols, warnings and cautions.

## Contents of Carton

Contents of Carton include:

1. Cordless Sprayer Assembly
2. Spray Gun Assembly w/24 Inch Curved Wand & Tip
3. Spray Hose Assembly with Quick Disconnects
4. Intake Tube for 5 Gallon Bucket
5. Intake Tube for 55 Gallon Drum
6. Tip Kit
7. Tapered Fan Tip XR8001-VS
8. Check Valve with 100 mesh Screen for Wand
9. Nozzle Cap Hex Nut
10. Operator's Safety and Service Manual

Batteries and Bucket not included.

Examine all parts to ensure that everything is accounted for and no damage has occurred during shipment.

## Assembly

To prepare the unit for operation, assemble the sprayer as follows:

1. Spray Tip
  - a. The Wand comes preassembled with an Adjustable Cone Tip.
  - b. An optional 0.1 GPM Tapered Fan tip and Check Valve with Screen is provided in a Shipping Bag.
2. Assemble Spray Hose
  - a. Attach Spray Hose to the Spray Gun and Sprayer Unit. Both ends are the same.
  - b. Slide the spring loaded, knurled collar on the Hose Coupler towards the Hose, push on to the Nipples on Sprayer & Spray Gun and release. Pull on the hose to make sure it is attached.
3. Attach Desired Intake Tube
  - a. 5 Gallon Bucket Intake Tube
    - i. Attach by hand to the Garden Hose Fitting on the Bottom of the Sprayer.
  - b. 55 Gallon Drum Intake Tube
    - i. Assemble by inserting Tube extension into the Plastic Union Fitting until fully seated and tighten the Hex Nut. May require a wrench to insure no leakage.
    - ii. Attach by hand to the Garden Hose Fitting on the Bottom of the Sprayer.
4. Remove the pouring spout lid from the 5 Gallon Bucket, or lid of 55 gallon drum, of material that you intend to spray.