

MASTER

25 GALLON

MANUFACTURING **SPRAYER**



SSP-L1-025N-MM Revision 1 | June 2018

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INTRODUCTION

Your Master Manufacturing Sprayer has been manufactured to provide years of dependable and efficient use. Proper operation and maintenance will ensure long satisfactory service. The purpose of this manual is to assist you in the assembly, operation and maintenance of your sprayer or accessories. Please read through this manual completely to fully understand how to operate and maintain your equipment. Keep your manual in a safe, convenient place for future reference. Always mention the model and part number in any correspondence.

AWARNING Do not allow anyone to operate or maintain this equipment who has not fully read and comprehended this manual. Failure to follow the recommended procedures may result in personal injury or death or equipment damage.

Information in this manual is designed to help owners and operators to obtain the best results and safe operation from their investment. The life of any machine depends largely on the care it is given and we suggest that the manual should be read and understood and referred to frequently. If for any reason you do not understand the instructions and safety requirements, please contact your authorized dealer. The intent of this manual is to provide guidelines to cover general use and to assist in avoiding accidents and injuries.

There may be times when circumstances occur that are not covered in the manual. At those times it is best to use common sense and contact your authorized dealer or our factory.

The requirements of safety cannot be emphasized enough in this publication. We urge you to make safety your top priority when using and maintaining the equipment. We strongly advise that anyone allowed to operate this equipment be thoroughly trained and tested, to prove they understand the fundamentals of safe operation.

WARRANTY PARTS SERVICE

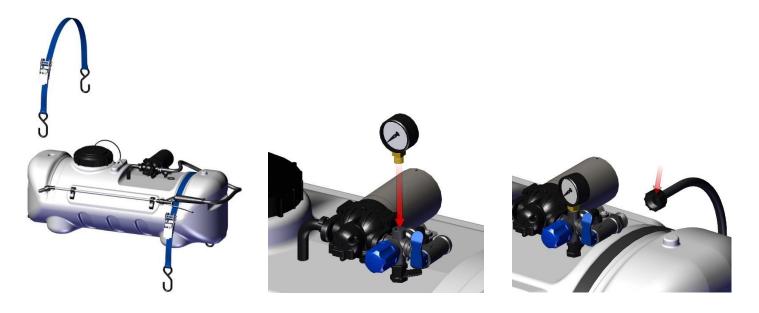
Products sold shall be warranted from defects in workmanship and material when used within the service and scope for which they were designed for a period of one year from date of purchase.

Warranty covers replacement parts ONLY. Please have your original sales receipt or other proof of purchase date when requesting any warranty parts. To ensure the correct parts are acquired always provide the model number of your sprayer/attachment and the part number and description obtained from the illustrated parts breakdown in this manual.

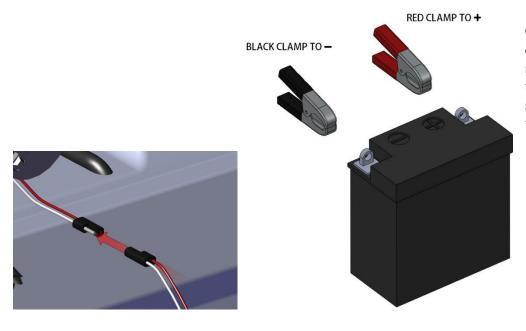
Warranty is void if the use of chemicals that are corrosive or harmful to the internals of the pump are used. It is the user's responsibility to make sure the chemical used is compatible with Viton, Santoprene and Polypropylene. If the chemical is not found to be compatible the warranty is void. Approved liquids include non-flammable liquids, pesticides, water for plants and dust control, ice control chemicals, and water-based non-flammable sealants or stains for outdoor wood surfaces. Please contact Customer Service at 320-340-6464 if you have questions regarding the liquids you would like to use.

ASSEMBLY

Your sprayer has been mostly assembled at the factory. Simply secure the Tank to the sprayer vehicle, attach the Boom Lines to your Boom, install the Pressure Gauge, and connect the Boom Hose to the outlet on the Valve.



WIRING HARNESS



Operating power is obtained directly from a 12 VDC source. Be sure to connect the red to the positive (+) source and attach the black to the negative (-) source.

IMPORTANT

Before spraying chemicals, fill the tank half full of plain water to allow familiarization with the sprayer and to prevent waste of expensive chemicals.

OPERATION

Using the boom nozzles

- Four things must be considered before spraying with the boom.
 - 1. How much chemical must be mixed in the tank?
 - 2. Rate of spray (gallons per acre to be sprayed.)
 - 3. What pressure (P.S.I) will be used.
 - 4. Speed traveled (M.P.H.) while spraying.
 - 5. Boom height and spray pattern
- Refer to the chemical label to determine the chemical mixture.
- See the tip chart to determine the pressure, speed and rate of spray to be used for your application.
- Check the spray pattern with water only. Usually you can see the coverage better on a solid concrete surface, such as a driveway.
- Raise or lower the nozzles so that you will have a good coverage pattern. If you can see dry spots on the concrete surface you will need to raise the nozzles. Too much solution in the pattern areas means you need to lower the nozzles. Generally, the proper height will be from 13 inches to 18 inches from the ground.

The nozzles on the boom will spray an 85" wide swath. The ideal nozzle height is approximately 15" above the object being sprayed.

Once you know how much you are going to spray, then determine (from the tip chart) the spraying pressure (PSI) and the spraying speed (MPH). The pressure can be set by running the sprayer with the boom nozzles "ON" and then by adjusting the bypass valve lever until the gauge reads the desired pressure. Notice that the pressure will go up when the garden hose valve is slowly closed.

Conditions of weather and terrain must be considered when setting the sprayer. Do not spray on windy days. Protective clothing must be worn in some cases. Be sure to read the chemical label carefully. Before spraying chemicals, fill the tank half full of plain water to allow familiarization with the sprayer and to prevent waste of expensive chemicals. After all calibrations have been completed, add water and chemicals to the tank. Always follow chemical manufacturer's instructions for mixing.

Gauge Pressure	Flow in GPM	Gallons per Acre				
PSI		20" Spacing				
		3 MPH	4 MPH	5 MPH	6 MPH	7 MPH
40	.034	2.2	1.6	1.3	1.1	1.0
60	.040	2.6	2.0	1.6	1.3	1.1
75	.044	2.9	2.2	1.8	1.5	1.3
90	.047	3.1	2.4	2.0	1.6	1.4
120	.055	3.6	2.7	2.2	1.8	1.6

^{*}GPM is per nozzle

CLEANING & STORAGE

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Spray materials can be highly toxic. Make sure to read and follow all warning labels.

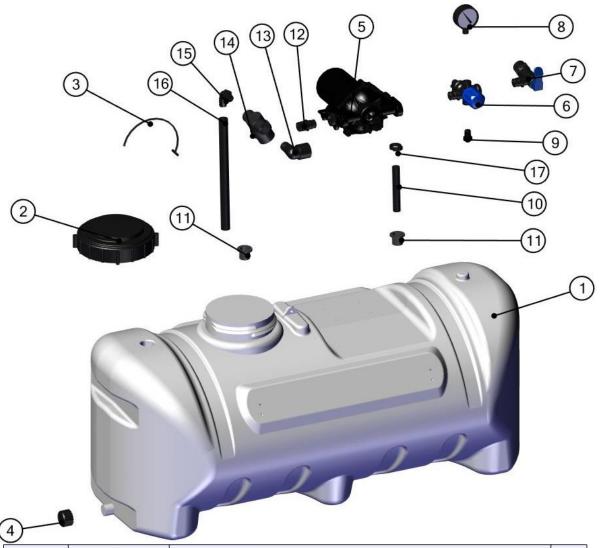
Most spray materials are highly corrosive. The most important aspect of long, dependable service from the sprayer is a thorough cleaning immediately following each use. In addition, the residue of one type of chemical could cause an undesirable effect when a different chemical is used for a different purpose.

The most effective cleaning method is to pump several rinses of clean water through the tank, pump, hoses, boom, spray gun, etc. A neutralizing agent such as a solution of Nutra-Sol, a detergent or household ammonia, as recommended by the chemical manufacturer, can assist in removal of a persistent chemical. When the system is thoroughly cleaned, drain the tank, suction line, pump, hoses, etc.

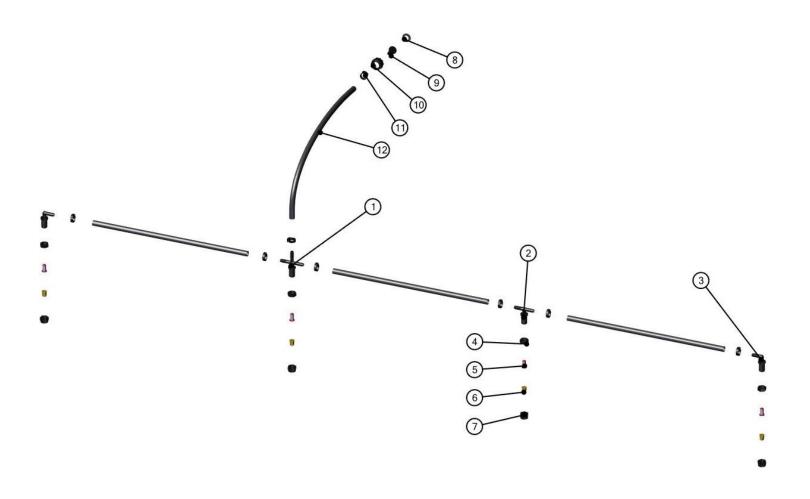
The following steps should be followed for the maintenance and storage of your sprayer.

- 1. Wash and flush out sprayer after completion of each phase of your program. Flush out sprayer when changing chemicals if there is a possibility of the chemicals being incompatible. Use of a detergent is advisable if the chemical manufacturer does not make specific cleaning recommendations. Flush system completely, including nozzles. Never use metal objects to open clogged nozzles.
- 2. Clean sprayer thoroughly before storing at the end of the spraying season. Permanent type antifreeze added to the final rinse will leave a rust inhibiting film in parts of the sprayer.

PARTS DIAGRAMS



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BOM ID	Description	Description	Qty
1	33-103230	TANK, 25 GAL, SPRAYER	1
2	33-103221	LID, TANK, 5" W .25" HOLE	1
3	33-103222	LANYARD, LID SHORT BLACK	1
4	33-103218	OUTLET CAP, 3/4" BLACK	1
5	EF3000-QA	PUMP, 12V, 3GPM, EVERFLO, QUICK ATTACH PORTS	1
6	34-140158	REGULATOR, ASSY, SPRAYER, MINUS OUTLET	1
7	34-140161	VALVE, ON/OFF, MALE QA X FEMALE QA PORTS	1
8	2141GXB100	GAUGE, 2.5" SS, LM, 100PSI, SINGLE SCALE	1
9	3F14	HEX PLUG, 1/4" MPT, POLY	1
10	33-103622-5	HOSE, RUBBER, EPDM, 1/2" ID X 5" LONG, 13/16" OD	1
11	33-100098	GROMMET, TOP HAT, BLACK, 3/4" HB, 1/2" HOSE	2
12	EF-QC-M12	FITTING, ADAPTOR, QA X 1/2" MNPT, BLACK	1
13	3SE12	STR, ELB, 1/2" MPT X 1/2" FPT	1
14	17919-F	STRAINER, 1/2" FNPT, EPDM	1
15	3EL12	ELBOW: 1/2" MPT X 1/2" HB POLY	1
16	33-103622	HOSE, RUBBER, EPDM, 1/2" ID X 13/16" OD	1
17	SHC-H	SNAPPER HOSE CLIP, BLK	1



BOM ID	Description	Description	Qty
1	3T38C-C	TEE: 3/8" HB X 3/8" HB X 3/8" HB	1
2	3NTT38-C	TEE: NXTHD 11/16" MPS X 3/8" HB	1
3	3NTL38-C	ELBOW: NXTHD 11/16" MPS X 3/8" HB	2
4	3B12	NOZZLE NUT: 11/16" POLY	4
5	NS-50	NOZZLE STRAINER, 50M RED	4
6	TX-2	NOZZLE, FAN, 80 DEG, #8 (GREY)	4
7	38027	NOZZLE NUT, 11/16" FPS, POLY	4
8	W406V	WASHER: 1" OD X 3/4" ID	1
9	3C38	FLAT SEAT HOSE BARB: 3/8" HB	1
10	3B34	SWIVEL NUT: KNURLED 3/4" FGHT	1
11	SHC-F	SNAPPER HOSE CLIP	8
12	33-103153	GATES 3/8" RUBBER HOSE (ASK FOR LENGTH)	1