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MASTER
MANUFACTURING

25 GALLON
ATV SPRAYER



SAP-G1-025D-MM
Revision 2 Feb. 2017

Note: Do not return product to the distributor/dealer for warranty work. Call Master Manufacturing at 320-340-6464 for any warranty work or replacement parts.

INTRODUCTION

Your Master Manufacturing ATV 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 too 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.

ASSEMBLY

The ATV frame kit is designed to fit many applications. It has been specifically designed to attach easily to other Master Manufacturing products. The following instructions are intended for the ATV frame kit to be attached to a Master Manufacturing 15 or 25 gallon spot sprayer. Please refer to the figures in this manual for reference to the following assembly instructions.



Figure 1 Locate the two Tank Bottom Mounts (PN 31-100288).

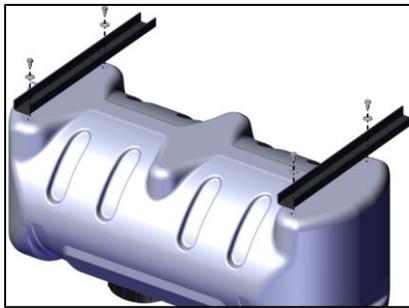
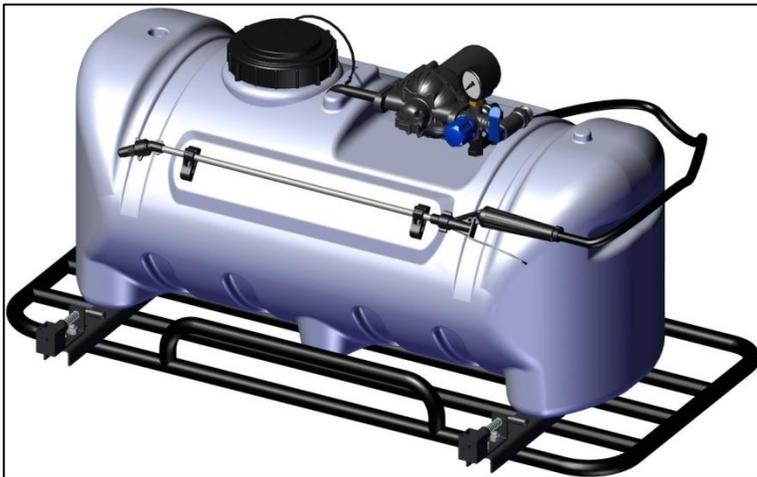


Figure 2 Position the two Brackets under the Tank as shown, noting location of tank drain. Attach the Brackets to the Tank with four 5/16-18 x 1/2" bolts (PN 33-100114) and 5/16 washers (PN 33-100115).



Figure 3 Attach Spring Brackets (PN 34-140092) to Bottom Mounts (PN 31-100288) with four 3/8-16 x 3/4" bolts (PN 33-100135) and 3/8-16 Serrated Nuts (PN 33-100131).



Figures 4 & 5 Position Tank with Bottom Brackets onto ATV rack. Ensure Spring Brackets hang over the back end of the ATV rack and will provide enough room to fasten a boom. Fasten the Tank securely to the ATV rack with (2) Ratchet Straps (PN 33-100164).

Warning: Tank must be securely fastened to ATV to ensure proper handling. Failure to fasten tank to ATV may lead to injury.



Figure 6 Attach the two Upright Spray Boom Brackets (PN 31-100160) to your ATV Spring Brackets.



Figure 7 Attach the Spray Boom (PN 34-140118) to the Upright Spray Boom Brackets using two 5/16-18 x 1" bolts (PN 33-100116) and 5/16-18 nuts (PN 33-100113).



Figure 8 Attach the Boom to the Boom Valve. Make sure the W406V rubber washer is in the end of the Boom Cap (PN 34-140052) before attaching.



Figure 9 Screw Boom Cap (PN 34-140052) onto Boom Valve as shown.



Figure 10 Attach the new wiring harness with inline switch to the sprayer pump by pushing the two terminal connectors together.

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.

Operation and calibration

Raise or lower the nozzles so that you will have a good coverage pattern. Generally the proper height will be approximately 36” from the ground for the No-Boom nozzles and 12-14” for the center deflector nozzle. It is highly recommended that the center deflector nozzle be run independently of the two No-boom nozzles due to the different height requirements for spraying and the gallon per acre difference between the two kinds of nozzles.

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.

When selecting pressure from the tip chart, it is a good idea to try for approximately 30 PSI as this allows for an excellent nozzle pattern. At 10 PSI the pattern begins to break up and at 40 PSI you may notice some drift. 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.

CLEANING & STORAGE

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 anti-freeze added to the final rinse will leave a rust inhibiting film in parts of the sprayer.

Gallons Per Acre

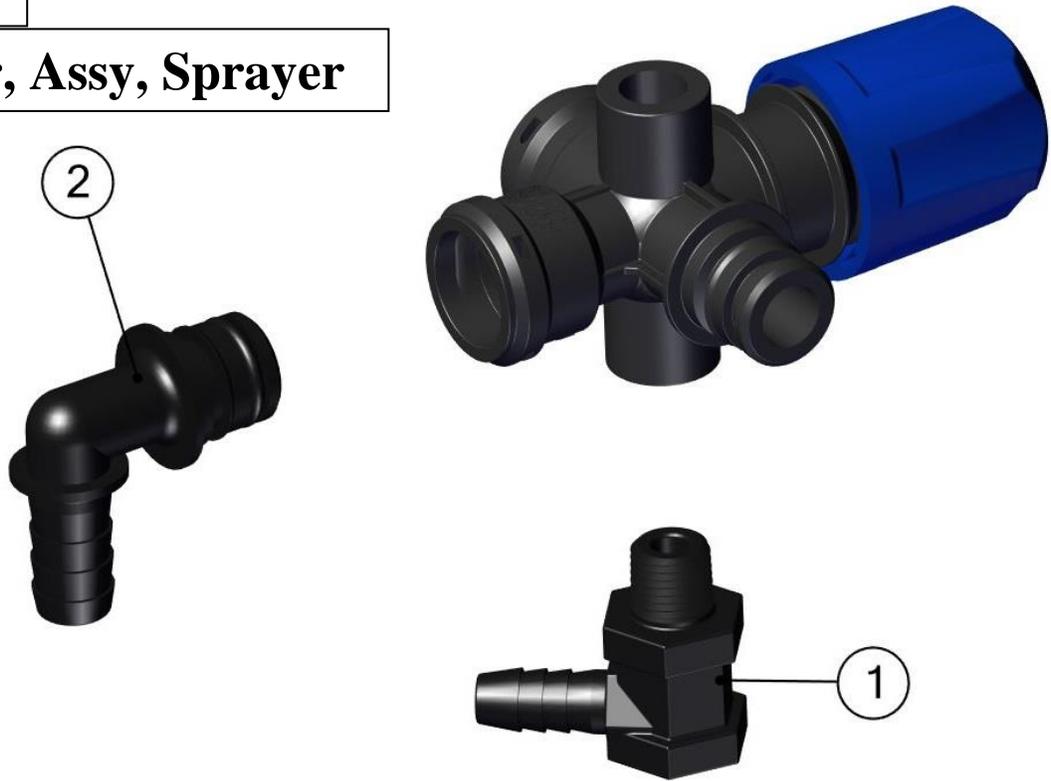
| Nozzle part # | PSI | Flow GPM | 2 mph | 3 mph | 4 mph | 5 mph | 6 mph | 7 mph |
|--|-----|----------|-------|-------|-------|-------|-------|-------|
| BN2BP088LSX | 20 | .75 | 11.6 | 7.8 | 5.8 | 4.6 | 3.9 | 3.3 |
| (2 GPM) | 30 | .85 | 13.1 | 8.8 | 6.6 | 5.3 | 4.4 | 3.8 |
| | 40 | 1.0 | 15.5 | 10.3 | 7.8 | 6.2 | 5.2 | 4.4 |
| | | | | | | | | |
| BN2BP088RSX | 20 | 2.0 | 11.6 | 7.8 | 5.8 | 4.6 | 3.9 | 3.3 |
| (2 GPM) | 30 | 2.3 | 13.1 | 8.8 | 6.6 | 5.3 | 4.4 | 3.8 |
| | 40 | 2.9 | 15.5 | 10.3 | 7.8 | 6.2 | 5.2 | 4.4 |
| | | | | | | | | |
| DF3.0 | 20 | .42 | 33.6 | 20.8 | 15.6 | 12.5 | 10.4 | 8.9 |
| | 30 | .52 | 38.6 | 25.7 | 19.3 | 15.4 | 12.9 | 11.0 |
| | 40 | .60 | 44.6 | 29.7 | 22.3 | 17.8 | 14.9 | 12.7 |
| DF3.0 GPA calculated at 40" band width | | | | | | | | |

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. Contact Master Manufacturing for warranty parts at 320-340-6464. Do not return product to your distributor/dealer. 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.

34-140118

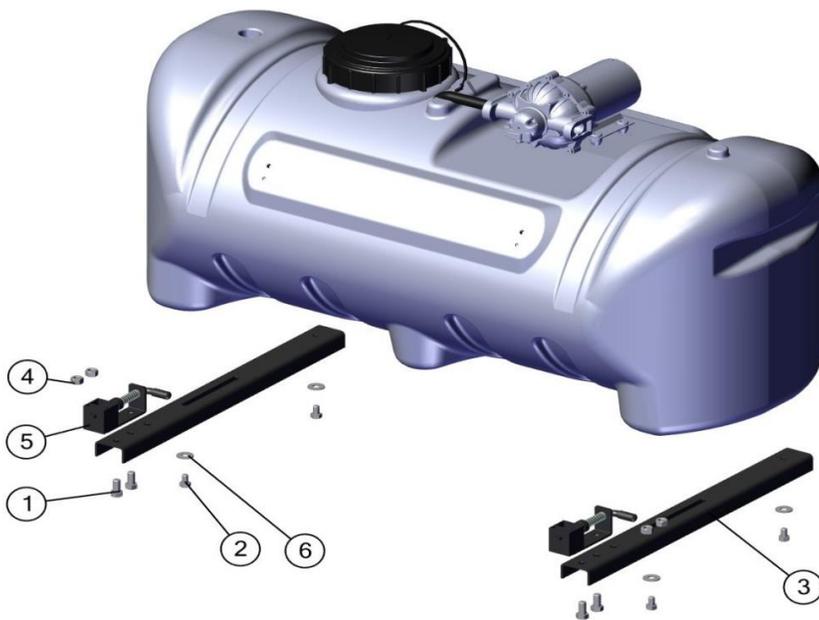
Regulator, Assy, Sprayer



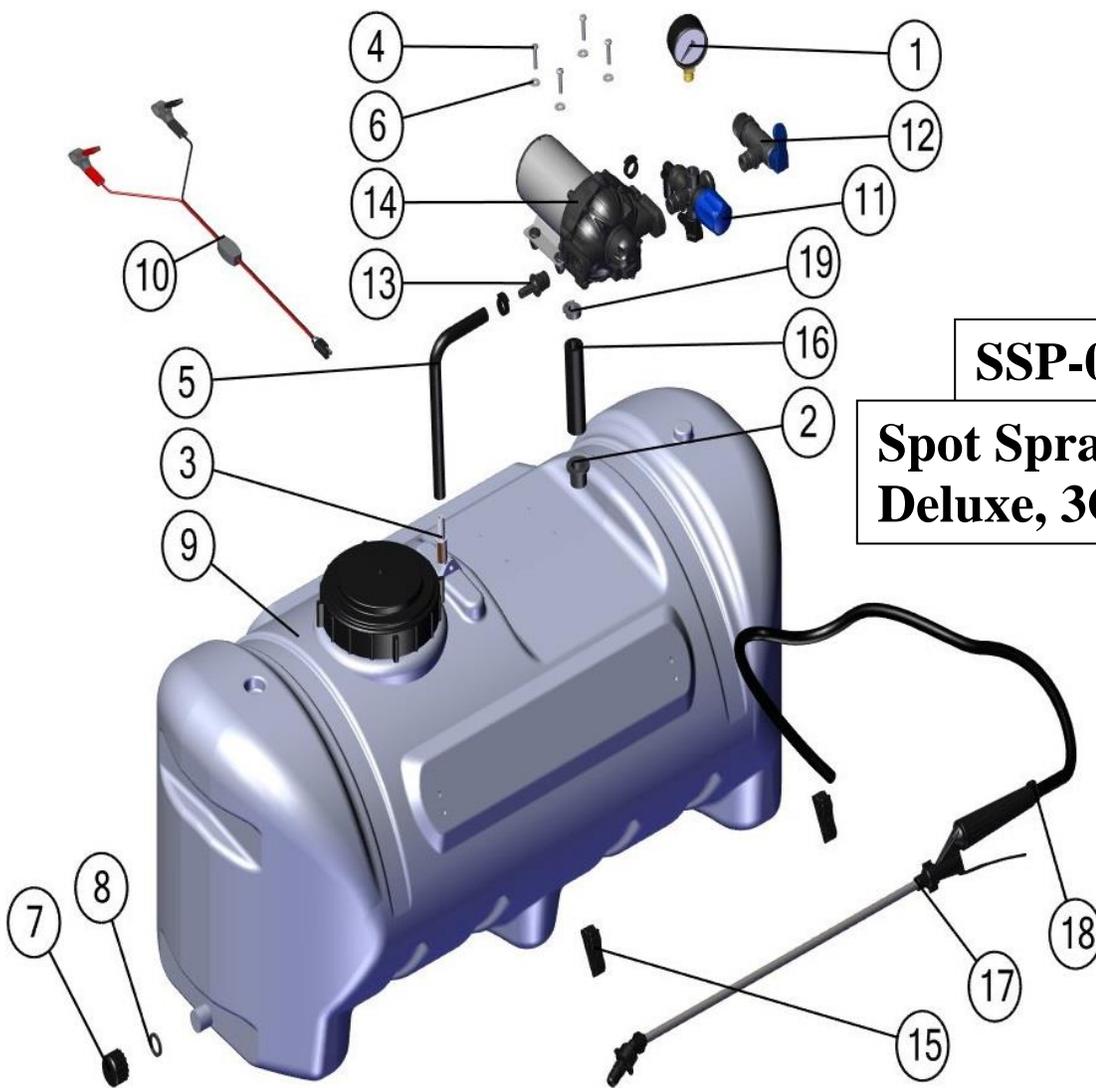
| BOM ID | Name | Description | Qty |
|--------|------------|--------------------------------|-----|
| 1 | 3EL1438 | Elbow: 1/4" MPT x 3/8" HB Poly | 1 |
| 2 | EF-QC-EL12 | Fitting, 1/2" HB 90 Elbow | 1 |

SSFK-ATV-QA-25

**Kit, Frame, ATV
Boom Mounting**



| BOM ID | Name | Description | Qty |
|--------|-----------|------------------------------|-----|
| 1 | 33-100135 | Bolt, 3/8-16 x 3/4" | 4 |
| 2 | 33-100114 | Bolt, 5/16-18 x 1/2" | 4 |
| 3 | 31-100288 | Mnt, ATV, Spot Sprayer | 2 |
| 4 | 33-100131 | Nut, 3/8-16, Serrated Flange | 4 |
| 5 | 34-140093 | Spring Bracket Assm, QA | 2 |
| 6 | 33-100115 | Washer, 5/16", Zinc Plated | 4 |



SSP-01-025D-MM
**Spot Sprayer, 25 Gal,
 Deluxe, 3GPM Everflo**

| BOM ID | Name | Description | Qty |
|--------|---------------------|---|-----|
| 1 | 1124DAB100 | Gauge, 2" ABS 1/4" LM 100PSI | 1 |
| 2 | 33-100098 | Grommet, Top Hat, Black, 3/4" HB, 1/2" Hose | 1 |
| 3 | 33-103121 | Strainer, Inlet, 1/2" HB, SS | 1 |
| 4 | 33-103127 | Screw, Machine, 10-24 x 1" | 4 |
| 5 | 33-103133 | Hose Assembly, 3/8" x 21", W/Fil | 1 |
| 6 | 33-103131 | Washer, #10, Zinc | 4 |
| 7 | 33-103218 | Outlet Cap, 3/4" Black | 1 |
| 8 | 33-103220 | Gasket, 3/4" SuperSeal | 1 |
| 9 | 33-103230 | Tank, 25 Gallon | 1 |
| 10 | 33-103233 | Harness, Wire, SS. | 1 |
| 11 | 34-140118 | Regulator, Assy, Sprayer, NTE | 1 |
| 12 | 34-140141 | Valve, ON/OFF, Male QA X Female QA Ports | 1 |
| 13 | 3A38-QA | Fitting, QA x 1/2"HB, Black, Straight | 1 |
| 14 | EF3-5000-QC | Pump, 12V, 3GPM Everflo, Quick Attach Ports | 1 |
| 15 | GC-100-KIT | Clip, Gun (PAIR) | 1 |
| 16 | 33-103622 | 1/2" Rubber Hose | 1 |
| 17 | SG-4507F-38-RUB15-P | Spray Gun Assembly, 3/8"x15' | 1 |
| 18 | SHC-F | Snapper Hose Clip, BLK | 2 |
| 19 | SHC-H | Snapper Hose Clip, BLK | 2 |