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MASTER  
MANUFACTURING

## 7' BOOM KIT



Part Number SSBK-7 | Rev 1 Oct. 2008

## INTRODUCTION

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. This product has been manufactured to provide years of dependable service, proper operation and maintenance will ensure its dependability. Keep your manual in a safe, convenient place for future reference. Always mention the model and part number in any correspondence.

## ASSEMBLY

The seven foot boom 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 attachment of the seven foot boom to a Master Manufacturing spot sprayer, lawn trailer, 3-point sprayer or ATV kit.

### **Manifold Replacement**

- 1.) Remove the existing pump from the tank by removing the four screws.
- 2.) Remove the spray wand hose from the barb fitting on the outlet side of the sprayer pump.
- 3.) Remove the hose barb fitting from the outlet side of the pump.
- 4.) Obtain the new manifold (PN34-140068) and apply a thread sealant to the threads of the 3/8" male NPT fitting located on the manifold. Thread the manifold into the outlet side of the pump and tighten securely. Do not over-tighten manifold as pump head may crack.
- 5.) Re-attach sprayer pump to tank using the screws removed from step 1.
- 6.) Push the spray wand hose onto the 3/8" barbed elbow on the manifold. Secure hose with new hose clamp (PN SHC-F) provided.
- 7.) Apply a thread sealant to the gauge thread and thread gauge into manifold, tighten securely.
- 8.) If attaching manifold to a Master Manufacturing Spot sprayer, locate black grommet plug in top of tank and remove it. Insert 12" tank return hose from manifold through hole into tank. On all other tanks, an 11/16" hole will need to be drilled into top of tank within reach of the 12" hose. A wood spade bit works the best (not supplied).

### **Spray Boom Attachment**

- 1.) Attach the two upright spray boom brackets (PN 31-100160) to your lawn trailer, ATV angle brackets or other application using the four 5/16-18 x 1 bolts (PN 33-100116) and 5/16 nuts (PN 33-100113).
- 2.) Attach the spray boom (PN 34-140052) to the upright spray boom brackets using two 5/16-18 x 1 bolts (PN 33-100116) and 5/16 nuts (PN 33-100113).
- 3.) Thread on the boom hose to the manifold valve installed previously and tighten securely.
- 4.) Optimum boom height is 14 to 15 inches above area to be sprayed. Use the location holes in the upright spray boom brackets as adjustments to obtain the optimum spray height.

## **Wiring Harness**

- 1.) Attach the new wiring harness with inline switch to the sprayer pump by pushing the two terminal connectors together.

## **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.

### **Operation and calibration**

The nozzles on the boom will spray an 80” wide swath. The 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.

When selecting pressure from the tip chart, it is a good idea to try for the 20 or 30 PSI range as this allows 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, and hoses.

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.

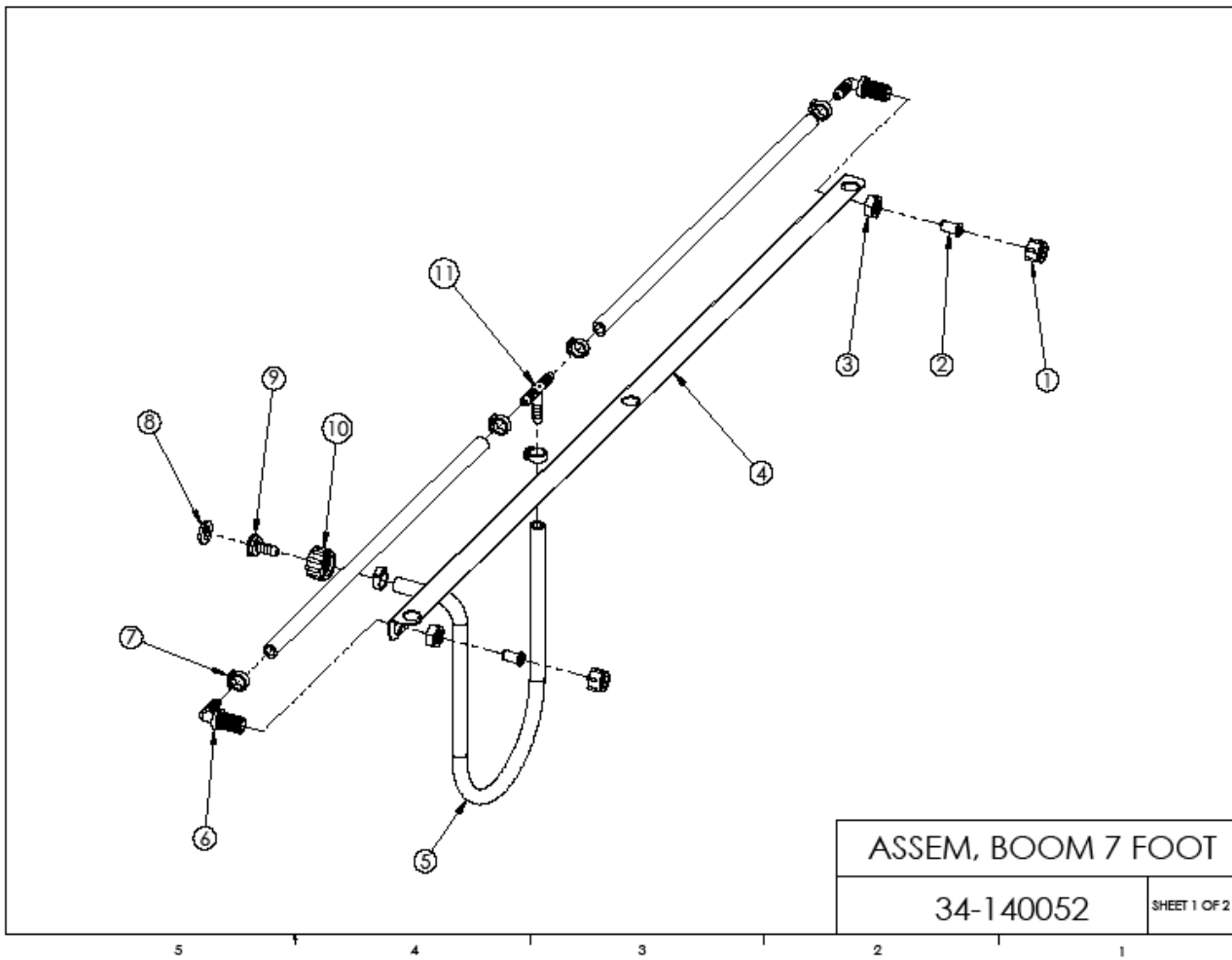
## **WARRANTY PARTS SERVICE**

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.

Contact your distributor/ dealer for replacements parts or warranty work. Please have your original sales receipt or other proof of purchase date when requesting any warranty work.

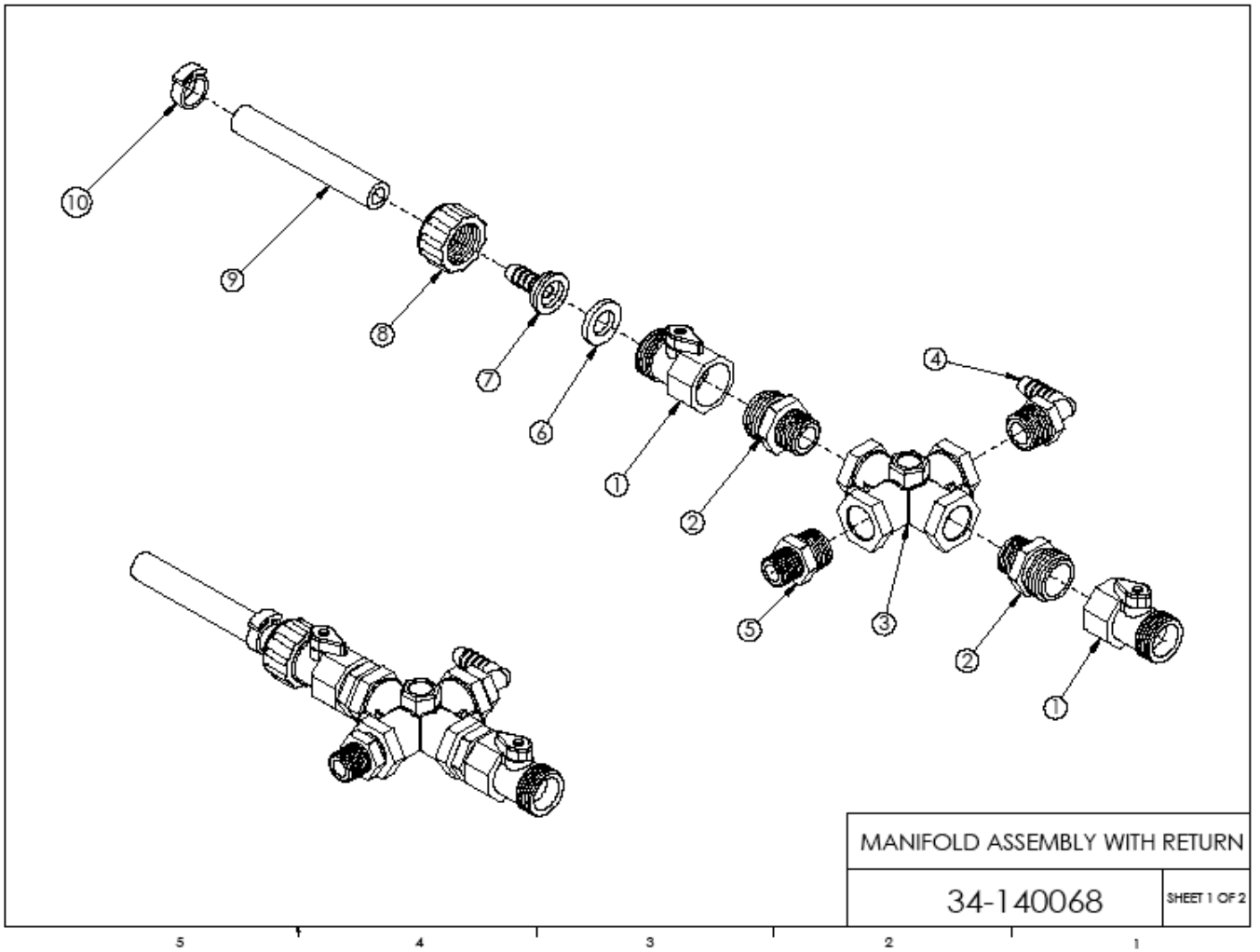
To ensure the correct parts are acquired always provide the model number of your sprayer/attachment and the part number and description obtained from illustrated parts breakdown in this manual.





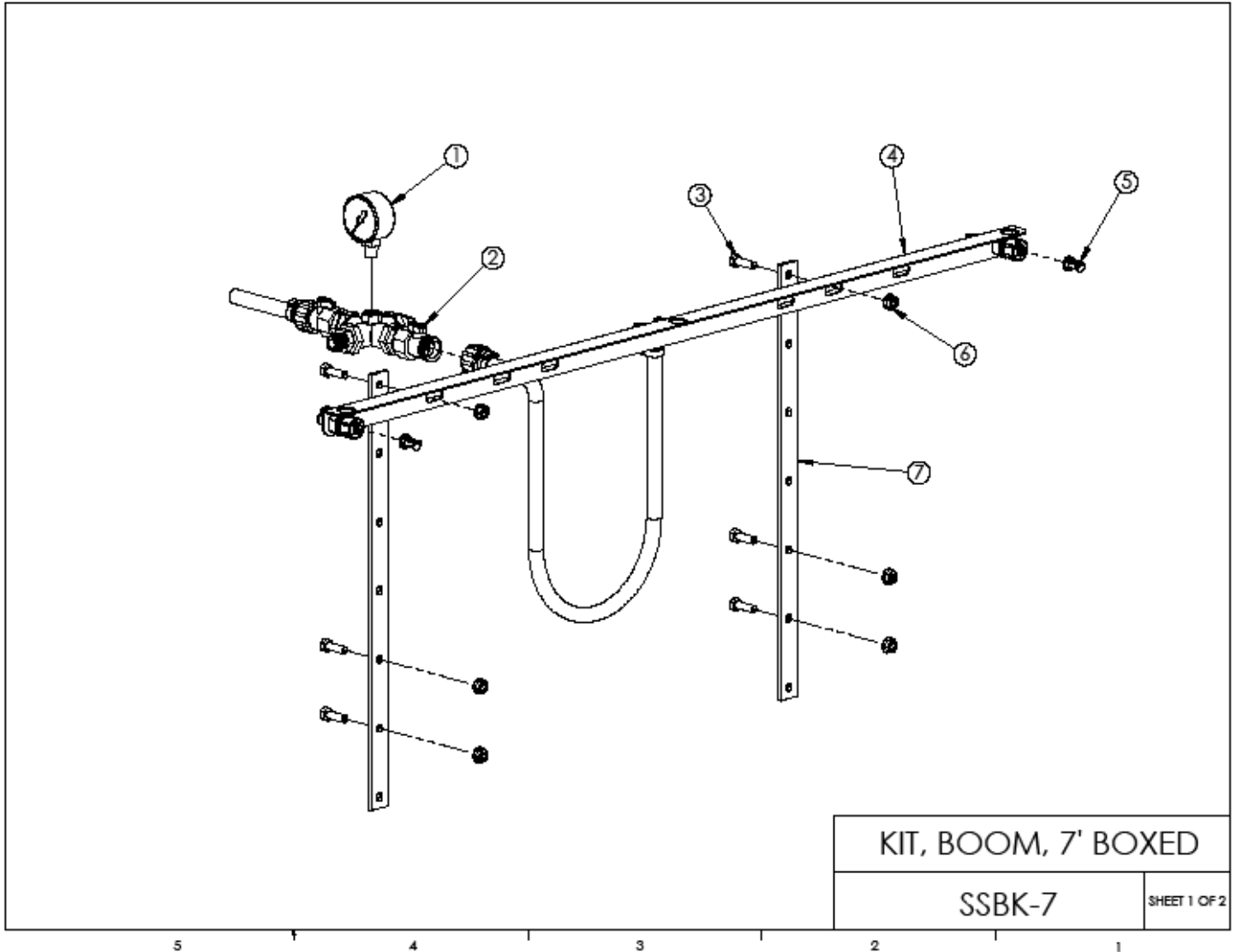
**Parts List Figure 34-140052**

Item #	Part Number	Qty	Description
1	8027	2	Nozzle Nut
2	NS-50	2	Nozzle strainer, 50 mesh
3	B12	2	Nozzle body retaining nut
4	31-100120	1	Boom, 7' (2m)
5	3204-1407	1	Center hose, rubber, 3/8" x 38" long
		2	Nozzle hose, rubber, 3/8" x 19" long
6	NTL38-C	2	Nozzle body, elbow, 3/8" HB
7	SHC-F	6	Snapper hose clamp "F"
8	W406V	1	Garden hose washer
9	C38	1	Flat seat 3/8" hose barb
10	B34	1	Knurled garden hose swivel nut
11	T38	1	Tee, 3/8" HB



**Parts List Figure 34-140068**

Item #	Part Number	Qty	Description
1	GHV-1-BLK	2	Valve, Garden Hose
2	E3412	2	Adaptor, 1/2" MNPT x 3/4" garden hose thread
3	GCR1214	1	Cross, 1/2" FMPT, 1/4" FNPT
4	EL1238	1	Elbow, 1/2" MNPT x 3/8" HB
5	M1238	1	Adaptor, 1/2" MNPT x 3/8" MNPT
6	W406V	1	Garden Hose Washer
7	C38	1	Flat seat 3/8" hose barb
8	B34	1	Swivel Garden Hose Nut
9	3204-1407	12"	Gates 3/8" Rubber Hose
10	SHC-F	1	Hose clamp



**Parts List Figure SSBK-7**

Item #	Part Number	Qty	Description
1	1124DAB100	1	Gauge, 100 psi
2	34-140068	1	Assembly, Manifold
3	33-100116	6	Screw, Cap, 5/16-18 x 1"
4	34-140052	1	Assembly, Boom, 7' (2m)
5	DF3.0	2	Spray Nozzle, 3.0, Gray
6	33-100113	6	Nut, 5/16-18, serrated flange
7	31-100160	2	Bracket, Upright