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MASTER  
MANUFACTURING

DUAL NO BOOM & CENTER DF NOZZLE



Part Number SSBK-3TDNB

Rev 3 Aug. 2014

Note: Do not return product to the distributor/dealer for warranty work. Call Master Manufacturing at (800) 864-1649 for any warranty work or replacement parts.

## **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 too 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. **You will need a 3/4” Spade Drill bit in order to drill out a hole for the return hose.**



## **ASSEMBLY**

The “No Boom” 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 “No Boom” to a Master Manufacturing 2.8 GPM or greater spot sprayer, lawn trailer, 3-point sprayer or ATV kit.

### **Manifold Replacement for Pump with NPT Fittings**

- 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 (PN34-140118) and connect to QA Fitting with threaded end.
- 5.) Thread manifold onto pump using thread sealant.
- 6.) Reattach sprayer pump to tank using the screws removed from step 1.
- 7.) Apply a thread sealant too the gauge thread and thread gauge into manifold, tighten securely.

### **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 34-140065) 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.) Boom height can be 24” – 48” 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 No Boom**

- Your new boom has the capability of using any of the three nozzles independently or simultaneously. Each nozzle can be individually controlled by its corresponding “valve nozzle”. To allow a nozzle to spray, turn its corresponding “valve nozzle” to the on position. All three nozzles are then controlled by one central “boom valve” located on the manifold. The “boom valve” will turn the flow of chemical on or off to whatever selection of individual nozzles you choose to turn on.
- 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 nozzle 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								

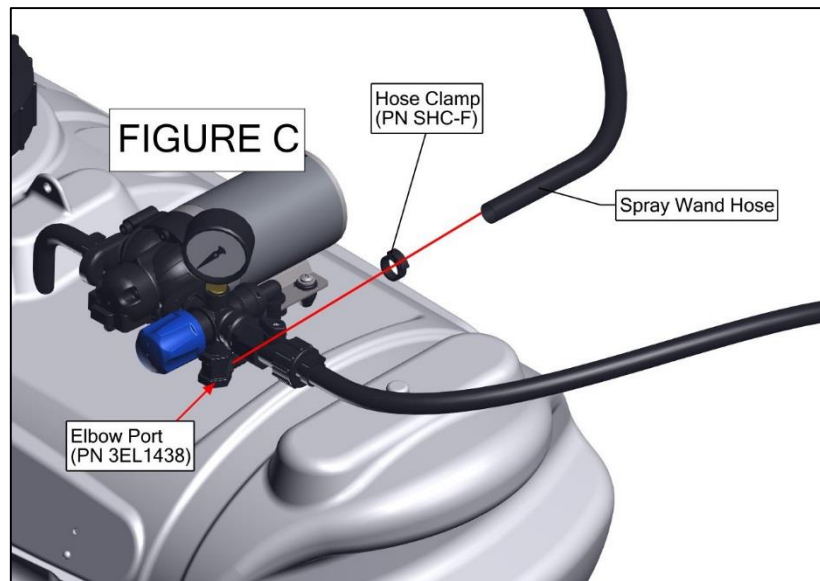
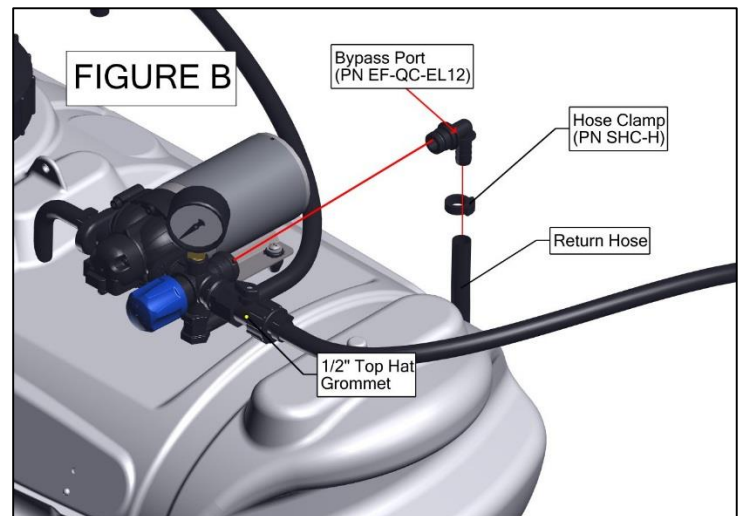
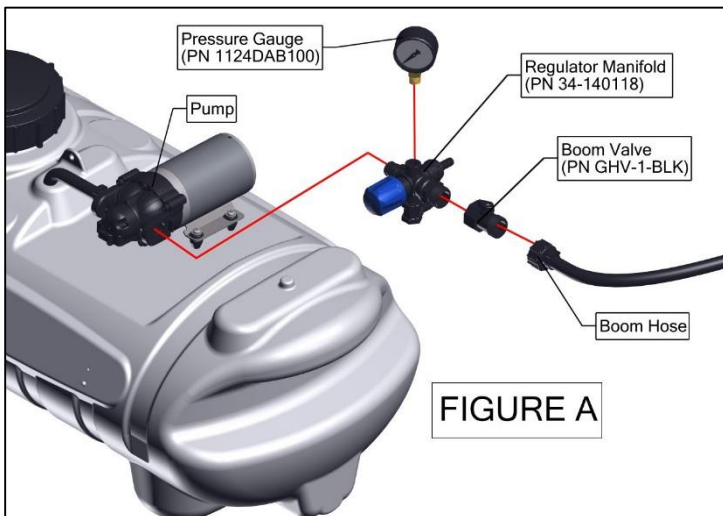
### **WARRANTY PARTS SERVICE**

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 (800) 864-1649. 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.

## **Pump Assembly**

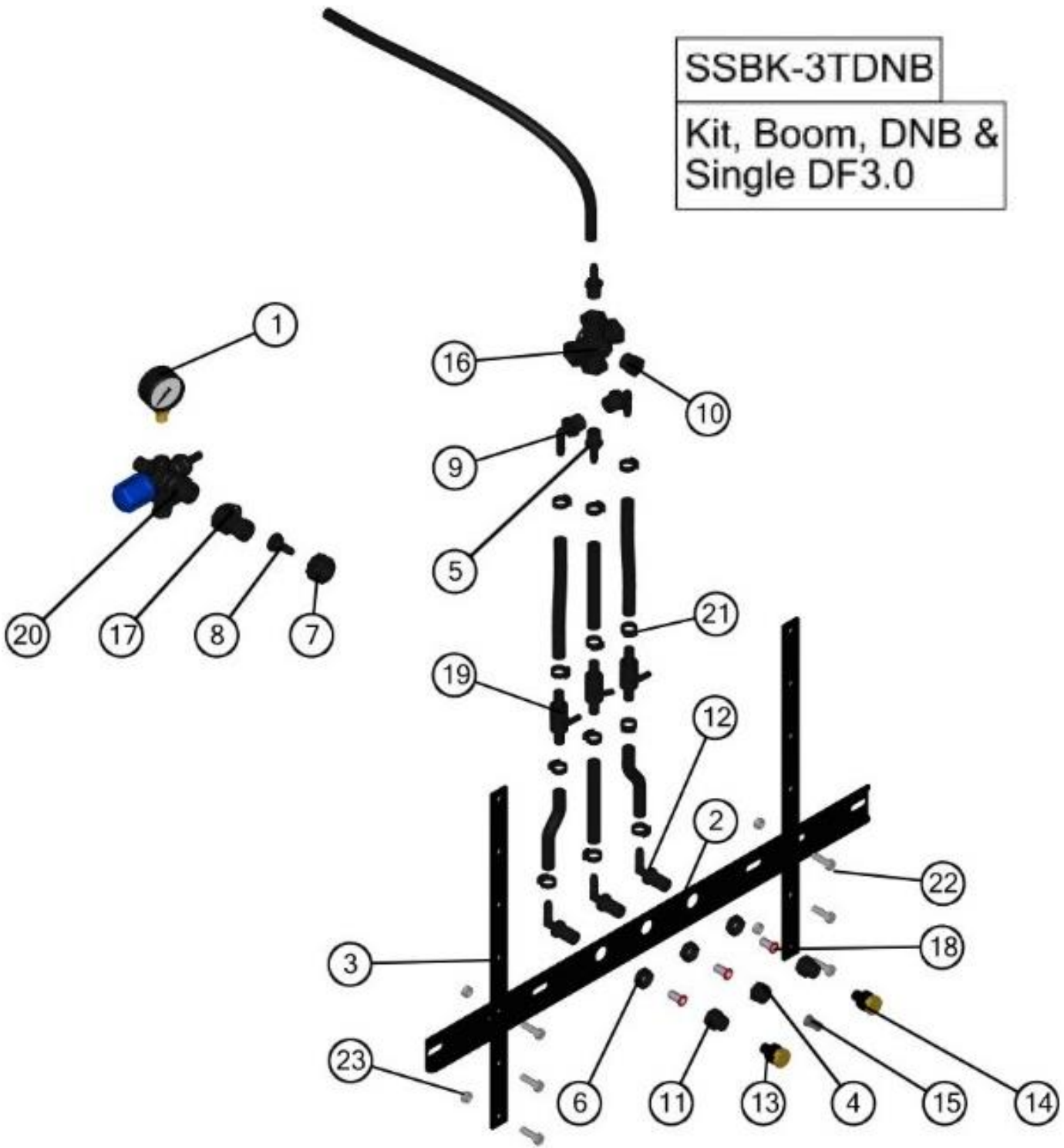
Your pump comes attached to the tank with the Inlet hose already attached. You will need to attach the Regulator Manifold to the pump following the steps below and the diagrams included.

- 1.) Move the Outlet Port Clip on the pump into the Open position.
- 2.) Obtain the Regulator Manifold(PN 34-140118) and slide into the Outlet Port of the pump so that the Blue Knob is facing the front of the pump as seen in FIGURE A
- 3.) Obtain the Boom Valve(PN GHV-1-BLK) and thread onto the Garden Hose Fitting on the Regulator Manifold(PN EF-QC-E34)
- 4.) Obtain the Boom Hose and thread onto the Boom Valve you just attached to the Regulator Manifold
- 5.) Obtain the Pressure Gauge (1124DAB100) and thread into the Top Port on the Regulator manifold.
- 6.) Attach Return Line Hose to Bypass Port (PN EF-QC-EL12) and push other end through the 1/2" Top Hat Grommet in Tank. FIGURE B
- 7.) Attach Hose Clamp to Hose. Make sure that the clamp is on the Bypass Port
- 8.) Attach Spray Wand Hose to Elbow Port on bottom of the Regulator Manifold(PN 3EL1438) FIGURE C
- 9.) Attach Hose Clamp to Hose. Make sure that the clamp is on the Elbow Port



# SSBK-3TDNB

## Kit, Boom, DNB & Single DF3.0

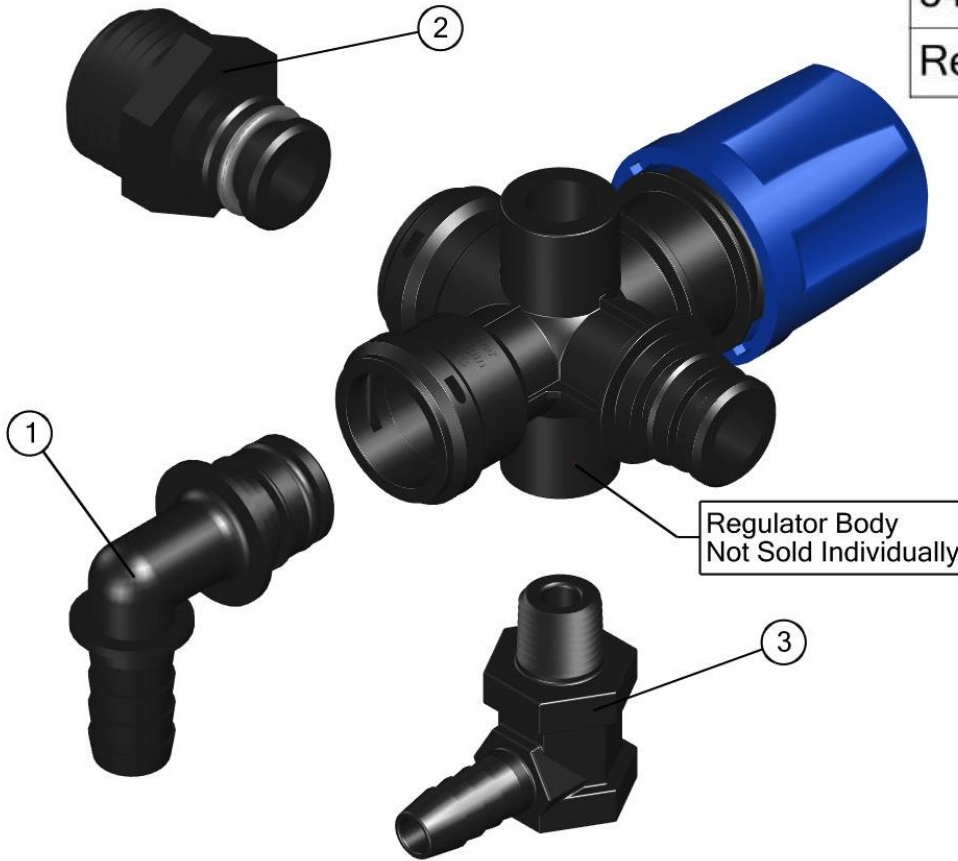


BOM ID	Name	Description	Qty
1	1124DAB100	Gauge, 2"ABS 1/4"LM 100PSI	1
2	31-100141	BRACKET, NO BOOM	1
3	31-100160	Bracket, Upright, Spray Booms	2
4	38027	Nozzle Nut, 11/16"FPS, Poly	1
5	3A1238	3/8 BARB TO 3/8 MALE PIPE THEAD	2
6	3B12	Nozzle Nut: 11/16" Poly	3
7	3B34	Swivel Nut: Knurled 3/4"FGHT	1
8	3C38	Flat Seat Hose Barb: 3/8"HB	1
9	3EL1238	Elbow: 1/2"MPT x 3/8"HB Poly	2
10	3F14	1/2 PIPE PLUG	1
11	3NF1614	Coupling: 11/16"FPS x 1/4"FPT	2
12	3NTL38	Elbow: NxTHd-11/16"MPS x 3/8"HB	3

BOM ID	Name	Description	Qty
13	BN2BP088LSX	Nozzle, No Boom, BP, 088 Left	1
14	BN2BP088RSX	Nozzle, No-Boom BP, 088 Right	1
15	DF3.0	Nozzle, Deflect Tip, 3.0	1
16	GCR1214	CROSS, NYLON, 1/2" FNPT X 1/4" FNPT	1
17	GHV-1-BLK	Valve, 3/4" FGHT x 3/4" MGHT	1
18	NS-50	Nozzle Strainer, 50M Red	3
19	PBV-38HB12	Ball Valve, Plastic 3/8"	1
20	34-140118	Regulator, Assy, Sprayer	1
21	SHC-F	SNAPPER HOSE CLIP	12
22	33-100116	Bolt, 5/16-18 x 1"	6
23	33-100113	Nut, 5/16 Serrated Flange	6

34-140118

Regulator, Assy, Sprayer



BOM ID	Name	Description	Qty
1	EF-QC-EL12	Fitting, Elbow, QA x 1/2"HB, Black	1
2	EF-QC-E34	Fitting: 3/4"Garden Hose x QC	1
3	EF-QC-EL1438	Elbow: 1/4"MPT x 3/8"HB Poly	1