

# **2M BOOM KIT**

**OPERATORS HANDBOOK** 







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## INTRODUCTION

# Thank you for your purchase of a Rapid Spray 2m Spray Boom.

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.

**DISCLAIMER:** In line with our policy of continuous improvement, the weights, dimensions and design may change slightly from what is shown in this operators handbook.

\*WARNING: Always obey vehicle and UTV/ATV manufacturer instructions regarding loading and operation. Please check weight restrictions. Serious death or injury can occur from improper usage. Rapid Spray accepts no liability for the unsafe operation of this unit.

## **ASSEMBLY**

The seven foot boom kit is designed to fit many applications. It has been specifically designed to attach easily to other Rapid Spray products. The following instructions are intended for the attachment of the seven foot boom to a Rapid Spray lawn trailer, 3-point sprayer or ATV kit.

### **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 (litres per acres to be sprayed).
  - **3.** What pressure (bar / psi) will be used?
  - **4.** Speed traveled (kmh) while spraying.
- Refer to the chemical label to determine the chemical mixture.
- See the tip chart to determine the pressure to be used. The chart will also show the speed used when spraying.
- Open the valve lever to the boom nozzles.
- Check the spray pattern. Usually you can see the coverage better on 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.

#### **OPERATIONS & CALIBRATION**

The nozzles on the boom will spray an 80" wide swath. The nozzle height is approximately 40cm (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 garden hose 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 chemical to the tank. Always follow chemical manufacturer's instructions for mixing.

# **LITRE PER HECTARE**

Litres per hectare, 40" spacing.

		FLOW	SPEED (km / h)						
Nozzle Part	PSI	L/min	6.4	8.0	9.7	11.3	12.9	14.5	16.1
DE 0.0	15	0.91	83.3	66.4	55.2	47.7	42.1	37.4	33.7
	20	1.06	97.3	77.6	64.5	55.2	48.6	43.0	39.3
DF 2.0 Red Nozzle	30	1.32	121.6	97.3	81.4	69.2	60.8	54.3	48.6
Red Nozzle	40	1.51	139.4	111.3	92.6	79.5	69.2	61.7	55.2
	60	1.85	170.2	136.6	113.2	97.3	85.1	75.8	68.3
	15	1.17	107.6	86.1	72.0	61.7	54.3	47.7	43.0
DESE	20	1.32	121.6	97.3	81.4	69.2	60.8	54.3	48.6
DF 2.5 Brown Nozzle	30	1.63	149.7	119.7	99.2	85.1	74.8	66.4	59.9
DIOWITNOZZIE	40	1.89	174.0	139.4	116.0	99.2	87.1	77.6	69.2
	60	2.31	211.4	169.3	141.2	120.7	105.7	94.5	85.1
DF 3.0 Gray Nozzle	15	1.40	128.1	102.9	86.1	73.0	64.5	57.1	51.4
	20	1.59	145.9	116.9	97.3	83.3	73.	64.5	58.0
	30	1.97	180.5	144.1	120.7	102.9	90.7	80.4	72.0
	40	2.27	208.6	166.5	139.4	118.8	103.8	92.6	83.3
	60	2.76	253.5	203.0	169.3	145.0	127.2	112.2	101.0

Note: All Litre per hectare calculations above are per nozzle.

## **CLEANING & STORAGE**

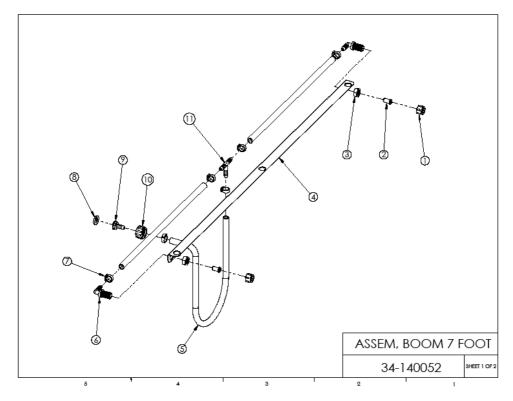
Most spray materials are highly corrosive. The most important aspect of long dependable service from the sprayer is a thorough cleaning immediately following each use. In addition, the residue of one type of chemical could cause an undesirable effect when a different chemical is used for a different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

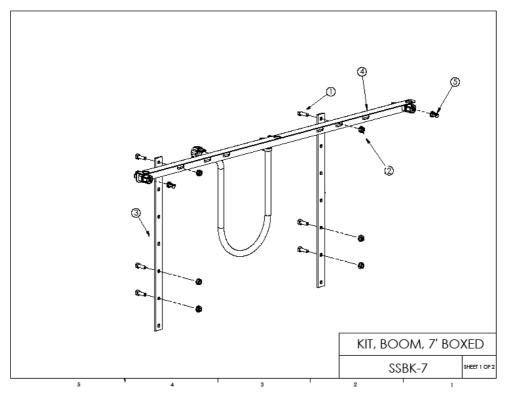
The following steps should be followed for the maintenance and storage of your sprayer.

- 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.

# **PARTS BREAKDOWN**



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 2m (7')
5	3204-1401	1	Centre hose, rubber 3%" x 38"
		2	Nozzle hose, rubber ¾" x 19"
6	NTL38-C	2	Nozzle body, elbow, ¾" HB
7	SHC-F	6	Snapper hose clamp "F"
8	W406V	1	Garden hose washer
9	C38	1	Flat seat ¾" hose barb
10	B34	1	Knurled garden hose swivel nut
11	T38	1	Tee, %" HB



Item#	Part Number	Qty	Description
1	33-100116	6	Screw, cap, 5/16 - 18 x 1"
2	33-100113	6	Nut, 5/16-18, serrated flange
3	31-100160	2	Bracket, upright
4	34-140052	1	Assembly, boom 2m (7')
5	DF3.0	2	Spray Nozzle

## **WARRANTY**

#### WARRANTY POLICIES AND PROCEDURES

The following warranty is the only warranty applicable to RAPID SPRAY products, and to the maximum extent permitted by law, overrides any other conditions or warranties Expressed or implied on RAPID SPRAY products.

Other than legislative obligations to the contrary, RAPID SPRAY will not be liable for and incidental or consequential damages arising from the ownership or use of a product. No person, including any dealer or representative of RAPID SPRAY is authorized to make any representation or warranty on behalf of RAPID SPRAY in addition or inconsistent with these provisions. Purchasers to whom these provisions apply agree to hold RAPID SPRAY not liable for claims by their customers in excess of the obligations of RAPID SPRAY expressly set forth herein

NOTE: All tank and spray systems must have their warranty activated by returning warranty card located at the end of this document or registering online within 21 days of purchase by the end user.

#### THE WARRANTY

All products sold by RAPID SPRAY are guaranteed to be free from defect in materials workmanship or manufacture for a period of 12 months from the initial date of purchase, excepting the following exclusions;

Any parts/products found by RAPID SPRAY to be defective, either in material or workmanship will be replaced or repaired within this period, at no cost to the initial purchaser if following conditions are met:

- The item has been operated in accordance with all instructions and warnings provided
- Item is still owned and operated by the original purchaser proof of purchase is required to obtain warranty



See <a href="https://www.rapidspray.net/resources/warranty-registration">https://www.rapidspray.net/resources/warranty-registration</a> to register your Marshal Q for warranty.



# The following things are expressly excluded from the above warranty.

ABUSE	Failure as a result of neglect, such as improper operation. Lack of maintenance or continued operation after discovery of a defect that leads to further damage
ALTERATIONS	Any unauthorized alteration, modification, attachments or unauthorized repair to equipment.
CLEAN-UP TIME	RAPID SPRAY does not pay for cleaning of products, parts or accessories or work area before or after the warranty repair.
DAMAGE	Damages or machine/component failure caused by carelessness/recklessness or accidental damage, improper operation, excessive speed, inappropriate storage or transportation.
ENVIRONMENTAL CONDITIONS & APPLICATION	Deteriorated or failed components such as o-rings, diaphragms, hoses, seals and connections damaged by corrosive chemicals, dirt and sand, excessive heat, moisture or other environmental impacts. Warranty determination on these type of failures will be made by RAPID SPRAY, only after inspection of the failed component.
INABILITY   UNSUITABILITY	In no event shall RAPID SPRAY be liable to any person for indirect or consequential damages or for injury or commercial loss resulting from any use or inability to use any RAPID SPRAY product.
MAINTENANCE	Component failure due to failure to perform maintenance services such as, oil and grease changes/top-ups, failure to clean tanks, pumps filters, nozzles and spray lines. Failure to tighten or replace loose or missing bolts, nuts, fittings, shields and covers.
NON-GENUINE PARTS	Use of parts other than RAPID SPRAY parts for repair of warranted items will automatically negate any warranty. Warranted components must be replaced with genuine parts.

# **WARRANTY REGISTRATION**

You can register online at <u>www.rapidspray.net/resources/warranty-registration</u> or complete all the details below and post this form back to:

Rapid Spray, PO Box 3119, Singleton NSW 2330

Model	Sorial No.				
	Model Serial No				
Purchased From(Dealer Name & Town)					
Purchaser's Name					
Purchaser's Address					
Purchaser's Phone Number					
Purchaser's Email Address:					
Disclaimer: If you don't want us to keep you informed of new products, please tick the following circle:					
To help us help you further, please co	mplete the following:				
Purchaser's Age	Principal Usage				
O Up to 25	O Commercial farm	O Town council			
O 25 - 40	O Hobby farm	O Hire company			
O 41 - 55	O Industrial	Home			
Over 55	Other	•			
What influenced you to purchase a Rapid Spray product?					
Received Catalogue	O Better features than co	mpetitor product			
Newspaper advertisement	Quality & reliability				
Magazine advertisement	O Price				
O Dealer recommendation	Dealer recommendation Past experience with Rapid Spray products				
Friends recommendation	Other				
What other Rapid Spray products do	you use?				
O Spray tanks	O Boom sprayers				
Cartage tanks	Bertolini pumps & controllers				
O Diesel tanks	Diesel tanks				
Fire fighting	Other				



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**Rapid Spray Liquid Management Systems** 

