

# **VERSATILE BOOM**

**OPERATORS HANDBOOK** 







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# **INTRODUCTION**

# Thank you for your purchase of a Rapid Spray Versatile 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 boom is designed to fit many applications. It has been specifically designed to attach easily to other Rapid Spray products.

#### VERSATILE BOOM ASSEMBLY

- 1. Remove contents from the box.
- 2. Grab (2x) 'J' brackets (ASBVL040BK) from the components.
- 3. Position Versatile Boom with the nozzles pointing to the ground.
- 4. Insert 'J' brackets into the guide mounts located on the Versatile Boom and secure into place by using (2x) M8 x 50mm bolts, (4x) M8 washer and (2x) M8 nyloc nut.

# SCAN QR FOR INSTALLATION VIDEO



#### LIGHT WEIGHT HITCH MOUNT ASSEMBLY: (ATKUBM50MMLW)

- 1. Remove contents from the box.
- 2. Fit main Hitch Boom Mount (ASTKUBM50MML) to the Haymen Reece tow-bar on the utility vehicle / side-by-side.
- 3. Lock Hitch Boom Mount into place by using heavy duty hitch pin (CHPHD583).
- 4. Align Hitch Boom cross arm (ASTKUBM50MML) into main Hitch Boom Mount.
- 5. Secure into place by using (1x) M8x75mm boly, (2x) M8 washer and (1x) M8 nyloc nut.

#### MOUNTING VERSATILE BOOM TO THE HITCH MOUNT & SPRAY UNIT

- 1. Align 'J' brackets on the Versatile Boom with the cross arm of the Hitch Mount. NOTE: OPTIMUM MOUNTING HEIGHT– 500MM~ ABOVE SPRAY TARGET
- 2. Secure into place by using (2x) M8 x 75mm bolt, (4x) M8 washer and (2X) M8 nut.
- 3. Connect the boom supply line to the spraying unit then fasten fly nut until secure.

#### **INITIAL BOOM SET UP**

- 1. Flush the spraying unit system of any chemicals that may be present in the lines.
- 2. Fill spraying unit with water and isolate boom supply line at the ball valve.
- 3. Adjust teejet nozzles to desired spray angle.
- 4. Operate the spray unit at default system pressure with the regulator (if applicable) set to '0'.
- 5. Open the ball vale supply line to the Versatile Boom and inspect spray pattern and coverage.
- Configure boom settings to find desired boom performance.
   REMINDER: DO NOT EXCEED A SYSTEM PRESSURE OF 10 BAR WHILE USING THE VERSATILE BOOM

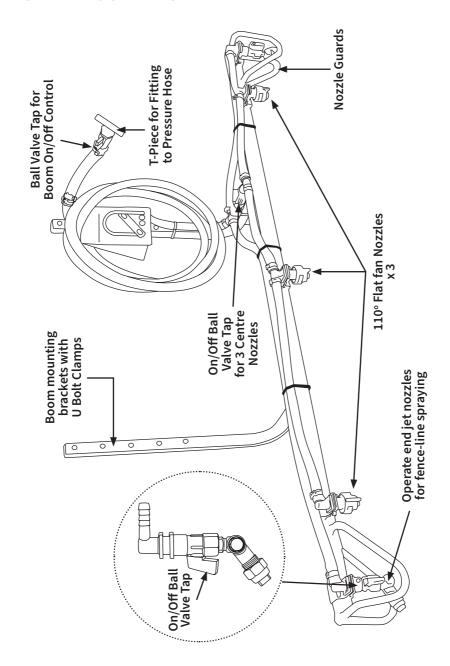
### **ASSEMBLY CONT.**

#### TEN TIPS FOR REDUCING SPRAY DRIFT

- 1. Constantly monitor weather conditions.
- 2. All products within the tank are mixed carefully.
- 3. Understand the product's mode of action (how it reacts to living organism) and coverage requirements.
- 4. Check the best method for spray control (nozzles with larger spray quality).
- 5. Beware of weather conditions i.e. check inversion risk levels and wind speed.
- 6. Use weather forecasts to inform your spray decisions.
- 7. Ensure any adjacent areas such as cropping, buildings, livestock or other humans will not be at risk of spray drift.
- 8. Optimum times for spraying is when sun is 20 degrees above the horizon and with wind speeds of up to 4-5km/hr has been consistent for 20-30 minutes.
- 9. Set boom heights to achieve double overlap of spray patterns.
- 10. Avoid spraying at high speeds.



# **VERSATILE BOOM DIAGRAM**



#### **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. NOTE: Test this with water only before adding chemical.
- 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 330mm to 457mm from the ground.

#### **OPERATIONS & CALIBRATION**

The nozzles on the boom will spray an 110" wide swath. The nozzle height is approximately 400mm (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, 50cm nozzle spacing

			FLOW	SPEED (KM/H)						
Nozzle Part	BAR	PSI	L/MIN	6	8	10	12	14	16	18
	1.5	22	1.13	226	170	136	113	97	85	75
1011004	3	44	1.60	320	240	12	160	137	120	107
LD11004 Red Nozzle	4	58	1.85	370	277	222	185	158	139	123
	5	73	2.07	413	310	248	207	177	155	138
	7	102	2.44	489	367	293	244	209	183	163

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

#### **CLEANING & STORAGE**

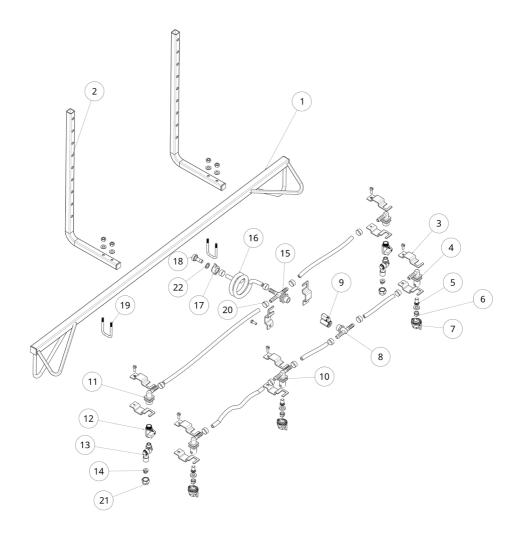
Most spray materials are highly corrosive. The most important aspect of long dependable service from the sprayer is a thorough cleaning immediately following each use. In addition, the residue of one type of chemical could cause an undesirable effect when a different chemical is used for a different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



# PARTS BREAKDOWN CONT.

#	CODE	DESCRIPTION	QTY
1	ASBVL040	Versatile boom frame	1
2	ASBVL040BK-J	Versatile boom J bracket	2
3	ATPNV25	Vari spacing clamps to suit 1 inch pipe	6
4	ATPNDQE10	Nozzle holder elbow (1 way) w/ 10mm barb	2
5	CNRB424211	Ball check nozzle filter 100 mesh	5
6	CNSLD110020	Low drift 100° nozzle .02 yellow	3
7	CNQG40290003	Quick couple nozzle cap & washer (red)	3
8	CFNT10M10B10B	Poly tee 10mm barb 2 sides 3/8 thread	1
9	CFVBB010F010F	10mm 3/8 mini ball valve F/F	1
10	ATPNDQT10	Nozzle holder tee (2 way) w/ 10mm barb	1
11	CAP413211010	Nozzle holder ¼ BSPF thread   Elbow	2
12	CFVBB006M006F	6mm ¼ mini ball valve M/F	2
13	ATPNST08C	Single swivel nozzle holder	2
14	CNSOC040	Teejet OC-04 brass offset end nozzle	2
15	ATPNDTX10AC	Nozzle holder threaded cross	1
16	CUY58010MM	10mm spray hose /meter	4
17	CFBF12F	½ inch fly nut	1
18	CFBS12N10T	10mm straight hose tail	1
19	CHUR08M050X06	U – Bolt No1 with 2mm plate & 2 x nuts	2
20	CFCC16	Green cobra C16/8	16
21	CNQ2566057	Cap to suit ATPNST08C	2
22	CYWFN18X12.5X5	18.5 x 12.5 x 2mm nylon washer	1

#### 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 Versatile Boom 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	Serial No	
Purchased From(Dealer Name & Town)		
Purchaser's Name		
Purchaser's Address		
Purchaser's Phone Number		
Email Address:		
Disclaimer: If you don't want us to ke following circle:	ep you informed of new prod	ducts, please tick the
To help us help you further, please o	omplete the following:	
Purchaser's Age	Principal Usage	
O Up to 25	O Commercial farm	O Town council
25 - 40	O Hobby farm	O Hire company
O 41 - 55	O Industrial	O Home
Over 55	Other	•
What influenced you to purchase a F		
Received Catalogue	O Better features than co	ompetitor product
Newspaper advertisement	Quality & reliability	
Magazine advertisement	O Price	
O Dealer recommendation	Past experience with F	Rapid Spray products
Friends recommendation	Other	
What other Rapid Spray products do	•	
Hand / Backpack Sprayers	UTV / Field sprayers	
Cartage / Spray tanks	Pumps, motors and co	ontrollers
Diesel refuelling units / tanks	Chapin / Jacto spraye	
Fire fighting	Other	

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**Rapid Spray Liquid Management Systems** 

