

**CROPLANDS**

**OPERATORS MANUAL**  
**CROPLANDS AGRIPAK**  
**LINKAGE SPRAYERS**

MODELS | 300 Litre | 600 Litre | 800 Litre | 1000 Litre

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**STOP**  
**BEFORE COMMENCING**  
operation, **ENSURE** you read  
& understand this manual, its  
contents, and any additional  
information supplied.



LP-OMLINK-B | 2024 FSC Update



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# INTRODUCTION

## GENERAL MANAGER'S WELCOME



**Sean Mulvaney**  
**General Manager**

Dear Customer

Congratulations on the purchase of your new sprayer and thank you for supporting another true blue Australasian manufacturer. For over 50 years Croplands have been delivering spraying solutions and ongoing support for a variety of applications whilst investing in long term partnerships with our suppliers, distributors, end users and local communities. These partnerships are absolutely key in our commitment to support our products into the future.

At Croplands, we are committed to sourcing the very best technology from around the globe and adapting these products to our specific requirements. When these products don't yet exist, we innovate through continuous investment in our own research and development.

Croplands is a wholly owned subsidiary of Nufarm Ltd, the largest supplier of crop protection products in Australasia. This brings a unique understanding and collaborative approach to new market developments, challenges and opportunities.

Please take the time to thoroughly read this manual before you operate your sprayer. This will provide direction to ensure safe usage and help optimise the performance of your investment. Your feedback is welcome and valued.

We trust you will be happy with your sprayer and the level of support - our goal is to be your preferred spraying solutions partner from this point onwards.

Yours Sincerely

**Sean Mulvaney**  
**General Manager**

Croplands has taken steps to ensure this operator's manual is as current and as accurate as possible. Due to the ever-changing markets of cropping and farming, Croplands is constantly striving to be at the forefront of innovation and technology. While the information in this manual is considered accurate at the time of writing, Croplands reserves the right to change this information without notice. Croplands will not accept liability for any inaccuracy in this publication, or changes forthwith.



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# SECTION 1

## IMPORTANT INFORMATION

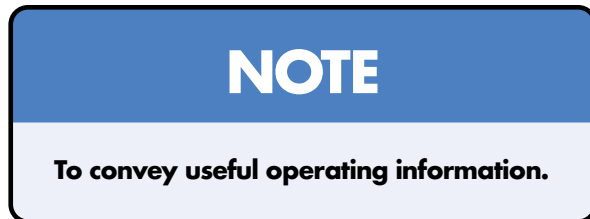
### ABOUT THIS MANUAL

This manual provides assembly, setting up, operating and maintenance instructions for the spray booms of the Croplands Optima boom range. All types of the Croplands Optima range of spray booms are in the Identification and/or in the Specification Chapter. Some model types also have different options available. Some features explained in this manual may not be applicable to your boom.

Please pass on this manual with the sprayer at the time of resale for usage by the new owner.

This manual, LP-OMLINK-B, was first published in July 2016 and updated in February 2021. FSC update, July 2024.

**Check online** as there may be more recent revisions of this manual. [www.croplands.com.au](http://www.croplands.com.au)



### TERMINOLOGY

These terms/symbols used throughout this manual:

<b>NOTE</b>	This Note sign is in place to convey useful information and will help you to identify the best possible way to operate the machine.
<b>CAUTION</b>	This Caution sign shows the potential for incident. An incident may include damage to the machine itself, or possible injury to the operator.
<b>WARNING</b>	This warning sign shows the potential for risk or injury and highlights the need for steps to be taken to protect ones safety.
<b>DANGER</b>	This Danger sign will be used in areas where the highest risk is present. Always read the information on these signs and ensure you are taking steps to prevent risk or injury.



### BEFORE OPERATING YOUR SPRAYER

Before attempting to use your sprayer, make sure you read all Operator Manuals for this sprayer including but not limited to:

This Operator's Manual, **and all other supplied manuals** for items such as Pumps, PTO etc.

And properly understand:

- All Safety Issues.
- Assembly & Installation instructions.
- Calibration of the sprayer.
- Sprayer Operation.
- Sprayer Maintenance.

### INTENDED USE

Croplands sprayers are designed to be used for multipurpose spraying of herbicides, pesticides and fertilisers. The sprayer must not be used for any other purpose.

# SECTION 1

## IMPORTANT INFORMATION

### WARRANTY POLICY

Each sprayer will be delivered with a Specifications, Safety, Warranty & Delivery Booklet which includes:

- the sprayer's specification sheet including the sprayer's unique serial number,
- a safety induction checklist,
- a delivery checklist and customer induction,
- the Croplands Warranty policy and warranty registration form.

Always contact your Croplands Dealer first and foremost for warranty matters.

### NOTE

For full conditions of warranty and warranty policy, please see the Specification, Safety, Warranty & Delivery booklet provided with this sprayer.

# SPRAYER SPECIFICATIONS WARRANTY & PRE-DELIVERY LINKAGE

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GP-WARL-A

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# SECTION 2

## SAFETY

### SAFETY FIRST

Please refer to the Croplands 20 page Safety Manual, part number "GP-SAFE-A" which will be supplied with this product. If for any reason the Safety manual is not available, please see your dealer, Croplands Customer service or the Croplands Web Site to obtain a copy.

This product should not be operated before first reading and understanding the full safety manual.

Be especially vigilant of the PTO shaft and chemical spillage.

	<p><b>⚠ DANGER</b></p> <ul style="list-style-type: none"><li>• DO NOT EXCEED PTO OPERATING SPEED OF 540 RPM.</li><li>• ENSURE ALL SAFETY GUARDS ARE IN PLACE.</li><li>• GREASE SLIDING SHAFTS OF PTO DAILY.</li><li>• EXCESSIVE VIBRATION MAY OCCUR IF USING PTO SPEEDS LESS THAN 350 RPM WHEN FILLING.</li></ul> <p><b>ENTANGLEMENT IN PTO SHAFT CAN SERIOUSLY INJURE OR KILL</b></p> <p>Croplands Equipment Pty Ltd 00-123</p>
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GP-SAFE-A | Update 3

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# SECTION 2

## SAFETY

### SAFETY SIGNS AND DECALS

All signs and decals for sprayer safety and operation must be maintained in good order and replaced if damaged or missing. Most Croplands labels have a part number printed on the decal to aid identification and replacement.

Some examples are shown below.

**WARNING**

**SAFETY INSTRUCTIONS**

1. Read your operator's manual thoroughly before operating the sprayer.
2. Inspect hoses, connections and nozzles daily.
3. Clean filters regularly.
4. Always follow correct maintenance schedules outlined in operator's manuals.
5. Always read chemical manufacturers labels before use.
6. Always observe all warnings on chemical products.
7. Regularly check all nuts and bolts are tight.
8. Always wear appropriate gloves and wash sprayer down before doing any repair or maintenance work.
9. Do not ride on sprayer when moving.
10. Keep clear of moving parts when sprayer is operating.
11. Always keep guards in place when sprayer is operating.
12. Be sure tank lid is closed before operating basket mixing facility.
13. Stand well clear of sprayer when operating.
14. Do not disconnect hoses, nozzles or filters while sprayer is operating.

**FAILURE TO FOLLOW THE ABOVE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.**

Part No: XD - 123

**WARNING**

**OPERATION INSTRUCTIONS**

FOR SAFETY PROCEDURES READ THE OPERATORS MANUAL.

STOP THE ENGINE AND REMOVE THE IGNITION KEY BEFORE (AND AFTER) WORKING ON THE MACHINE.

DO NOT START THE MACHINE WITHOUT ENSURING ALL PEOPLE ARE WELL CLEAR OF WORKING PARTS. SOUND THE HORN BEFORE START UP

FAILURE TO OPERATE CORRECTLY MAY RESULT IN SERIOUS INJURY OR DEATH!

Part No: XD - 125V

**WARNING**

DO NOT FILL THE TANK IN EXCESS OF THE CARRYING CAPACITY OF THE VEHICLE WITH WHICH THE TANK WILL BE USED, AS SPECIFIED BY THE VEHICLE MANUFACTURER.

1 Litre of water = 1 Kg      50 Litres of water = 50 Kg

DO NOT EXCEED THE VEHICLE MANUFACTURERS SPECIFIED SAFE LOAD CARRYING AND TOWING CAPACITIES.

READ THE OPERATORS INSTRUCTION MANUAL AND CHECK UNLADEN WEIGHT BEFORE ATTACHING OR USING THIS PRODUCT.

Part No: XD - 126V

**CAUTION**

**WATER ONLY**

DO NOT ADD CHEMICAL      XD-127V

Part No: XD - 127V

**DANGER**

**KEEP CLEAR OF POWERLINES WHILE OPERATING SPRAYER.**

Never use the folding/unfolding functions near areas with overhead power lines.

Part No: XD - 181

**WARNING**

**BEWARE OF MOVING PARTS.**

Failure to operate correctly may result in serious injury or death!

**CROPLANDS**

Part No: XD-182

**CAUTION**

WATER FOR OPERATOR WASHING ONLY

DO NOT DRINK

Part No: XD - 124V

# SECTION 3

## SPRAYER SPECIFICATION



### PRODUCT IDENTIFICATION

Whenever possible, use the serial number of the AgriPak linkage sprayer when requesting service or parts information.

Where a serial plate is not provided or is no longer on the unit, use the part number from the bar code affixed to this manual or the Warranty & Pre-delivery booklet.



### PUMP MODEL & SERIAL NUMBER

The Pump model & pump serial number is located on the pump itself. The plate shows the name of the manufacturer, type and model of the pump, serial number, maximum working pressure and oil requirements.

For further information on parts for your pump, refer to the parts section on the Croplands website. Use the pump model as the reference.



## NOTE

For further information on Croplands Agripak sprayers, see [www.croplands.com.au](http://www.croplands.com.au)



# SECTION 3

## SPRAYER SPECIFICATION

### LA300 AGRIPAK

<b>Width</b>	1200mm	<b>Height</b>	1420mm
<b>Length</b>	900mm	<b>Weight (bare unit)</b>	150 Kg

1. AR Triple-diaphragm positive displacement pump fitted
2. Standard Pump capacity 80 litres/min
3. 10 litre Hand Wash tank
4. 40 litre Fresh Water Flushing Tank
5. Fully hot-dipped galvanised frame
6. Easy access & fully protected suction filter
7. ARUCM full-bypass 5 tap control unit fitted with master on/off lever
8. Isometric pressure gauge for accuracy in setting pressure
9. Protected pump, rear mounted for excellent PTO angle
10. Quality PTO shaft supplied
11. Safety labels
12. Translucent tank material for easy volume reference
13. Easy-adjust boom height slides
14. Options for controllers, booms, hosereels, spray guns, foam markers & GPS systems  
– refer Croplands Buyers Guide online
15. Main tank drain for complete clean out
16. Venturi tank agitation



LA300 AGRIPAK LINKAGE with optional MBX06 boom

# SECTION 3

## SPRAYER SPECIFICATION

### LA600 AGRIPAK

<b>Width</b>	1400mm	<b>Height</b>	1600mm
<b>Length</b>	1100mm	<b>Weight (bare unit)</b>	200 Kg

1. AR Triple-diaphragm positive displacement pump fitted
2. Standard Pump capacity 80 litres/min
3. Optional 140 L/min
4. 15 litre Hand Wash tank
5. 80 litre Fresh Water Flushing Tank
6. Fully hot-dipped galvanised frame
7. Easy access & fully protected suction filter
8. ARUCM full-bypass 5 tap control unit fitted with master on/off lever
9. Isometric pressure gauge for accuracy in setting pressure
10. Protected pump, rear mounted for excellent PTO angle
11. Quality PTO shaft supplied
12. Safety labels
13. Translucent tank material for easy volume reference
14. Easy-adjust boom height slides
15. Options for for fold up steps, slide out rear packing legs, controllers, booms, hose reels, spray guns, foam markers & GPS systems – refer Croplands Buyers Guide on-line
16. Main tank drain for complete clean out
17. Venturi tank agitation



LA600 AGRIPAK Linkage with optional MBX06 boom

# SECTION 3

## SPRAYER SPECIFICATION

### LA800 AGRIPAK

<b>Width</b>	1400mm	<b>Height</b>	1700mm
<b>Length</b>	1100mm	<b>Weight (bare unit)</b>	205 Kg

1. AR Triple-diaphragm positive displacement pump fitted
2. Standard Pump capacity 80 litres/min
3. Optional 140 L/min
4. 15 litre Hand Wash tank
5. 80 litre Fresh Water Flushing Tank
6. Fully hot-dipped galvanised frame
7. Easy access & fully protected suction filter
8. ARUCM full-bypass or 5 tap control unit fitted with master on/off lever
9. Isometric pressure gauge for accuracy in setting pressure
10. Protected pump, rear mounted for excellent PTO angle
11. Quality PTO shaft supplied
12. Safety labels
13. Translucent tank material for easy volume reference
14. Easy-adjust boom height slides
15. Options for for fold up steps, slide out parking legs, controllers, booms, hoses, spray guns, foam markers & GPS systems – refer Croplands Buyers Guide on-line
16. Main tank drain for complete clean out
17. Venturi tank agitation



LA800 AGRIPAK Linkage with optional MAX08 boom

# SECTION 3

## SPRAYER SPECIFICATION

### LA1000 AGRIPAK

<b>Width</b>	1420mm	<b>Height</b>	1800mm
<b>Length</b>	1000mm	<b>Weight (bare unit)</b>	450 Kg

1. AR Triple-diaphragm positive displacement pump fitted
2. Standard Pump capacity 80 litres/min
3. Optional 140 L/min pump
4. 15 litre Hand Wash tank
5. 100 litre fresh Water Flushing tank
6. Fully hot-dipped galvanised frame
7. Easy access & fully protected suction filter
8. ARUCM full-bypass or 5 tap control unit fitted with master on/off lever
9. Isometric pressure gauge for accuracy in setting pressure
10. Protected pump, rear mounted for excellent PTO angle
11. Quality PTO shaft supplied
12. Safety labels
13. Translucent tank material for easy volume reference plus clear sight tube
14. Easy-adjust boom height slides
15. Options for controllers, booms, hose reels, spray guns, foam markers & GPS systems – refer Croplands Buyers Guide on-line
16. Fold-up step as standard
17. Over-top support for added strength
18. Slide-out rear park legs and forklift points
19. Venturi tank agitation
20. Main tank has a designated location for the Easyflow chemical handling system



LAC1000 AGRIPAK Linkage with optional MAX12 boom with self-leveller

# SECTION 3

## SPRAYER SPECIFICATION

### AGRIPAK PRO 1300 & 1600

<b>1300</b>	<b>Width</b>	2000mm	<b>Height</b>	2050mm
	<b>Length</b>	950mm	<b>Weight (bare unit)</b>	400kg
<b>1600</b>	<b>Width</b>	2020mm	<b>Height</b>	2150mm
	<b>Length</b>	1050mm	<b>Weight (bare unit)</b>	450kg

1. Calibrated and UV-stabilised poly tank with sight tube and litres marked
2. Integrated handwash tank
3. 170L flushing tank for in-field clean out
4. 30L chemical mixer/induction unit standard
5. Easy-access drain system for quick draining and clean out
6. Protected large suction filter with shut-off valve for easy cleaning
7. Large filling lid with strainer
8. Nozzles are protected on all booms to avoid damage
9. Stainless-steel boom tubing with non-drip nozzle bodies
10. Integrated 1,000mm hydraulic lift device
11. 160 L/min AR triple-diaphragm pump mounted beneath the tank for excellent suction and safety
12. Dual venturi and bypass agitation
13. Stabiliser legs fitted to the frame to keep unit safe from tipping when parked
14. Forklift points on bottom frame rails to assist with loading/unloading from a vehicle
15. Folding access step for safety
16. Clothing and glove locker

**SEE SEPARATE MANUAL FOR AGRIPAK PRO RANGE**



# SECTION 3

## SPRAYER SPECIFICATION

### GENERAL INFORMATION

#### Tanks

Croplands AgriPak tanks are constructed from a UV stabilised, medium density polythene for low distortion qualities and impact resistance. Tanks come with capacities of 300, 600, 800 and 1000 litres. A screw down main lid is installed on all models and comes standard with a basket strainer.

Agitation is provided by a constant bypass system back to tank. A venturi agitator is standard on all models.

#### Pumps

Croplands uses positive displacement oil-backed diaphragm pumps. The AR80LFP pump is standard for all models. Other models can be used if required. The maximum operating pressure is shown below at a PTO output of 540 rpm.

**Do not exceed the maximum PTO output of 540rpm.**

Pump models	Max L/min	Max Press
AR45LFP	43.3	20 bar
AR80LFP	76.4	20 bar
AR140LFP	132.9	15 bar
AR30	35	40 bar
AR503	54.1	40 bar

#### Drive

A 540 rpm PTO shaft with safety shields & safety chains is provided with every AgriPak.

#### Controls

Standard Croplands linkage sprayers come with a manual bypass control with a screw type pressure regulator valve (PRV) that has been pressure tested before leaving the factory. A glycerine filled pressure gauge is fitted, with 2 – 6 control outlets depending on sprayer model. If an electric or automatic rate controlled is fitted, refer to the separate manufacturer's manual provided.

#### Filtration

Refer to the table below for filtration point information. Other combinations are available to order.

Tank lid strainer	18 mesh
Suction filter	50 mesh
Boom nozzle strainers (if fitted)	50 mesh
Optional in-line pressure filter(s)	100 mesh

### BOOM OPTIONS

#### Manual folding, cross-fold booms

##### MBX series

3, 4 & 6 metre cross-fold galvanised boom, stainless steel boom tubes, with Easyfit fork fittings, AirMix™ nozzles & non-drip nozzle bodies.

##### MAX series

8, 10 & 12 cross-fold metre galvanised boom, stainless steel boom tubes, with Easyfit fork fittings, AirMix™ nozzles & nondrip nozzle bodies. 8, 10 & 12 metre have flip-over outer wings. Options include leveller and lift device.

#### Hydraulic crossover fold booms

##### GEX Series

Galvanised 6, 8 and 10 metre cross-fold with hydraulic cylinders operating the inner arm fold. Outer wings on the 8 & 10 metre are manually folded.

##### Hydralink series

(Only suitable for use on the 1000 litre model) 12 & 15 metre hydraulic "X-fold" galvanised boom, stainless steel boom tubes, AirMix™ nozzles & nondrip nozzle bodies. Integral self-leveller with manual lock fitted. Breakaway on outer arms as standard.

#### Under-tree and vine booms

MSC/MSCL-2 covered boom for vines or trees, left, right, double sided & centre section covers available.

#### Vertiboom

High pressure boom, with left/right upright boom tubes and high pressure nozzles for use in small horticultural vertical row crops such as berries.

## NOTE













**For more information on booms and the model fitted to your sprayer, please see the Croplands Spray Boom Operator and Parts Manual.**

# SECTION 3

## SPRAYER SPECIFICATION

BOOM SUITABILITY	AGRIPAK 300	AGRIPAK 600	AGRIPAK 800	AGRIPAK 1000
MBX Series	✓	✓	✓	✗
MAX series	MAX08 only	✓	✓	✓
GEX series	✗	✓	✓	✓
Hydralink series	✗	✗	✗	✓
MSCL covered boom	✓	✓	✓	✗
Vertiboom (high pressure horticultural use only)	✓	✓	✗	✗

### OPTIONAL EQUIPMENT – SEPARATE MANUALS PROVIDED

	<p><b>MBX series booms</b> 3, 4 and 6 metres available – for more information, refer your boom manual or <a href="http://www.croplands.com.au">www.croplands.com.au</a></p>		<p><b>GEX series booms</b> 6, 8 &amp; 10 metres available – for more information, refer your boom manual or <a href="http://www.croplands.com.au">www.croplands.com.au</a></p>		<p><b>Hose reels &amp; guns for hand spraying</b> For more information, refer your hose reel manual or <a href="http://www.croplands.com.au">www.croplands.com.au</a></p>
	<p><b>MAX series booms</b> 8, 10 &amp; 12 metres available – for more information, refer your boom manual or <a href="http://www.croplands.com.au">www.croplands.com.au</a></p>		<p><b>MHL series booms</b> 12 &amp; 15 metre as available (1000 litre AgriPak only) – for more information, refer your boom manual or <a href="http://www.croplands.com.au">www.croplands.com.au</a></p>		<p><b>Chemical Mixing and induction hopper</b> For more information, refer your mixer manual or <a href="http://www.croplands.com.au">www.croplands.com.au</a> 30 litre A5033301 version shown here.</p>
	<p><b>MAX level</b></p>		<p><b>XP Boom kit</b> For use where a boom is impractical – for more information, refer your boom manual or <a href="http://www.croplands.com.au">www.croplands.com.au</a></p>		<p><b>Foam marker or GPS unit</b> For more information refer the manufacturers manual or visit <a href="http://www.croplands.com.au">www.croplands.com.au</a></p>
	<p><b>Hydraulic boom height adjuster or lift device</b> For remote lifting of the spray boom using tractor hydraulic remotes. Shown is lift for LP-800 &amp; MAX booms – for more information visit <a href="http://www.croplands.com.au">www.croplands.com.au</a></p>		<p><b>Vertiboom</b> For use in vertical row crops where high pressure is needed (AgriPak must have a suitable pump fitted) – for more information, refer your boom manual or <a href="http://www.croplands.com.au">www.croplands.com.au</a></p>		<p><b>Optional step for 600, 800 litre versions, standard on 1000 Lt model</b></p>

# SECTION 4

## OPERATION HOOK UP AND PTO INFORMATION

### CONNECTING TO THE TRACTOR

Croplands AgriPak sprayers have models to suit Categories I, II and III tractor linkage connections. 300, 600 & 800 litre models have Cat II for the lower linkage arms, and Cat I for the top link with sleeve if your tractor has Cat II.

The 1000 litre AgriPak sprayer has a clevis-type Cat II & III hitch for the lower arms and Cat II for the top link.



### PROCEDURE

Lower the tractor linkage arms and attach the sprayers lower hitch pins, using the suitable category for your setup.

### WARNING

**Always ensure the tractor PTO is disengaged before attempting to hook up the PTO shaft!**

Lift the tractor linkage up to the level you wish to spray at. Now you can adjust the length of the top linkage arm to level the sprayer. Clean off and grease the PTO splines on the sprayer and tractor stub shafts. Put the PTO shaft onto both splines making sure the spring loaded locking pins click into place and is completely secure on the splines.

Attach the PTO shaft safety chains ( attached on the PTO guards) to the tractor & the pump PTO guard.

### CAUTION

**Ensure that the system does not suck in any air. Ensure all suction lines (from the spray tank) and all couplings are absolutely water tight. Even the smallest leakage may result in pressure variations or even complete pump failure. Sucked-in air may result in "nozzle's dripping".**

Raise and lower the sprayer to check that the tubes of the PTO overlap by at least 1/3 of their length, and not less than 150mm, in all operating positions.

### START UP

After the pre-delivery checklist has been done and your AgriPak linkage is hooked up correctly to your tractor, it is advised that a water test be done to check for leaks and to familiarise yourself with your new sprayer. These checks have been conducted in the factory; however there is a chance that transit could have loosened some fittings.

Running the machine with fresh water is a good safe way to calibrate and learn about your sprayer, and set your sprayer up properly to maximise results in the field.

### NOTE

**Check all of the individual parts before operation. Check the pump oil level before operating the sprayer. You can use SAE30 or SAE 20/40 multi grade engine oil to top up the oil if needed.**





# SECTION 4

## OPERATION HOOK UP AND PTO INFORMATION

Fill the tank partially with water to allow testing of the sprayer before you start your test or spraying job.

The Suction filter is either fitted with a shut off valve (yellow or red removable twist plug), or with a 3 way ball valve to shut off the flow in the suction line before the filter. This allows you to clean the filter mesh while there is fluid in the spray tank. Always ensure this valve is correctly set prior to start up so that liquid from the main tank can flow through the pump and control unit.



Twist plug to shut off liquid flow.

To start the sprayer, ensure the PTO is set in 540 RPM mode.



### WARNING

**Double check this step as some tractors have a 1000 RPM setting – this will destroy the pump if engaged!**



Make sure the pressure relief valve on the control unit is backed off anti-clockwise prior to engaging the PTO.

Increase the tractor PTO speed up to no more than 540rpm.

### NOTE

**You may not need to run the pump at 540RPM to achieve the desired spray output. In most cases a PTO speed of 400RPM or thereabouts is sufficient.**

The pump will draw liquid from the tank and bypass this until such time as you open the manual taps and flick the main lever on the manual control unit to the open position. Refer to the section below AR UCM controller operation.

Once the boom taps and master on/off lever on the manual control unit are in the open position, the nozzles should spray. Using the rotary pressure relief valve knob, you can now adjust the pressure to the recommended spraying pressure by rotating the PRV knob. Anti-clockwise rotation will reduce the pressure; clockwise rotation will increase the pressure. Using the pressure gauge on the control unit, you can determine the spraying pressure. For most boom-spraying jobs, a pressure between 1 and 5 bar (30 to 70 psi) is the norm. The AirMix™ low-drift nozzles can be safely

operated within a 1-6 bar pressure range, but note that the Spray Quality will be influenced by your spraying pressure.


For more information on Spray Quality, you can access the Croplands Buyers Guide on line and check the chart for AirMix™ nozzles – this information is in the nozzle section.

Most chemical labels advise the application rate and spray quality for the product being used. You may wish to discuss this with your local agronomist if you are unsure.

If you have electric controls or an Auto-Rate spray controller fitted to your AgriPak linkage sprayer, please refer to the Croplands manual relevant to the model you have purchased to learn how to use this prior to start up. Croplands Technical support can also be contacted should you need assistance (see back page for contact details).

### Flushing tank – standard on all models

A 3-way ball valve is provided on the suction line to allow the operator to select suction from either the main spray tank, or the fresh-water flushing tank.



### CAUTION

**Never use the fresh water flushing or handwash tank for chemical use. These tanks are designed specifically for holding fresh water for either flushing the sprayer, or in the case of the hand-wash tank, for the operator to use for cleaning hands or the suction filter in the field.**

# SECTION 4

## OPERATION HOOK UP AND PTO INFORMATION



To flush the sprayer in the field after spraying, shut off the boom using the liquid controls, stop the PTO and leave the boom in the unfolded operating position. Using the ball valve, select the fresh water flush tank. Climb back into the tractor cab, start the PTO and open the manual or electric control to allow fresh water to flow through the spraying circuit and the nozzles. If you have remaining spray left in the main tank, flush only for one to two minutes to flush the pump and boom lines.

If you have finished your spraying job and the main tank is empty, you can flush the system for 5 minutes, or until the flushing tank is empty, to ensure the system is thoroughly flushed with fresh water. It is recommended to do this in the

field so that any chemical residue is deposited in the area you have been spraying to avoid continual deposits back at the spray shed site.

A thorough tank clean once back at the shed is recommended if you have finished your spray job. Always drain the main tank when finished. To avoid algae build up in the fresh water tanks, it is recommended these also be drained and refilled just prior to the next spraying job.



### NOTE

**Always clean the filters when your spraying job is completed.**

This will ensure your AgriPak sprayer is ready to go prior to its next use. To clean the filters:

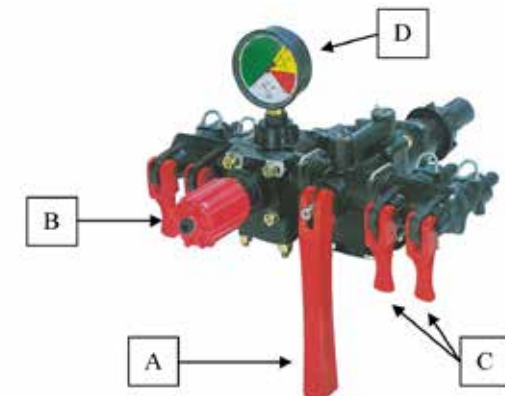
- Ensure the shut-off tap is in the "off" position, or the shut off plug is removed from the filter housing
- Remove the filter element from the housing by undoing the main filter housing nut

- Clean the filter element with fresh water (note, if the suction filter does become blocked during spraying, this can be cleaned in the field by using the handwash tank)
- If a pressure filter is fitted (normally if the sprayer has electric controls fitted), also remove the filter cartridge and clean with fresh water
- Inspect the nozzle filters, at least one from each boom section, and if required, clean these in fresh water. The nozzle filters are up inside the nozzle body and can be accessed by removing the nozzle cap. If care has been taken to have clean water used for spraying, and the suction filter is kept clean, the nozzle filters should not block.

After an extended time of non-use, it is recommended you check the filters before your next spray job. Often spiders or wasps can get into the filter housing.

### ARUCM Controller operation

A four or five outlet control unit is used (five outlet where 3 boom sections & a hose reel is fitted) and is standard on all AgriPak linkage models. The main on/off lever "A" will be used in most instances, and when liquid supply to the



# SECTION 4

## OPERATION HOOK UP AND PTO INFORMATION

boom or nozzles is closed, all liquid will be bypassed to the tank. System pressure is regulated by turning the red (or on some valves black) knob "B" and by observing the reading on the pressure gauge (D"). Turning the knob clockwise increases the pressure and turning anticlockwise decreases pressure. The pressure can only be accurately set with the boom lines open and the master lever open. Fluid is directed to the boom lines or other spraying devices by the outlet valves "C" which may be operated individually. The outlet valves are marked with a "0" or a "1" to indicate if they are on or off. If you wish to stop spraying but leave the tractor PTO running, either the master on/off lever or the individual taps can be used. For a parts breakdown see the controller manual provided.

### Spray guns and hose reels (if fitted)

A variety of spray guns and hose reels are available for use with Croplands AgriPak linkage sprayers. A hose reel may be mounted to the side or rear of the sprayer frame with the inlet end of the hose connected to one outlet of the control unit. When fitted, the standard reel contains 20 metres of 10mm hose at a pressure rating of 20 Bar. The heavy duty steel reel holds 30 metres of hose.

The heavy duty hose reel can hold up to 50 metres of 10mm spray hose. For any unit has a 40-bar pump and a hose reel fitted, the spray hose will have the corresponding higherrated pressure hose fitted.

The spray lance gun fitted on the standard Croplands hose reel is an RL10, rated up to 20 Bar pressure. On the heavy duty reel, the standard spray gun is a Turbo400 model rated to 50-bar pressure.

Other options include:

- TeeJet® range of spray guns
- Spot Gun 300

Talk to your dealer if you want a different spray gun for a specific purpose. To operate the RL10 spray lance or Turbo400 spray gun, start the sprayer and have pressure available in the system. Ensure the tap corresponding to the spray line going to the gun is in the on position. Squeeze the main trigger adjacent to the handle and aim the gun at the plant to be sprayed. For the RL10, you can adjust the spray pattern by rotating the nozzle on the end of the lance. On the Turbo400 gun, adjust the spray pattern with your thumb by pushing the orange sidelever up or down. For a fine "fog" spray, the widest angle should be selected using the side-lever, then the orange end-cone should be adjusted to slide out as far as possible on the gun barrel. This is ideal for very fine spraying such as fungicide application in nursery plants etc.



## WARNING

### Safety information about Spray guns and lances:

1. **NEVER aim the spray gun at anyone**
2. **ALWAYS shut the system off when you are not using the spray gun**
3. **ALWAYS ensure your spray application is not drifting beyond the target**
4. **NEVER operate the gun beyond the pressure capability of the system**

**Secure the gun on the spray unit and roll up the hose when the job is finished.**

## NOTE

**For more information on hose reels and spray guns fitted to your sprayer, please see the Croplands Reels & Spray Guns Operator and Parts Manual.**

### Spray Booms

A variety of booms may be used with Croplands AgriPak linkage sprayers depending upon the model and field application – see table on page 15 for this information. All have non-drip nozzle bodies with AirMix™ flat fan nozzles. Booms are part of the standard equipment on some models, in some cases they may be installed by the dealer or owner. On all types of boom, the setting of the correct operating height is most important to achieve a uniform spraying pattern. This needs to be at a height above the target which will achieve 50% overlap of the spray from adjacent nozzles.

## NOTE

**Section 6 & 7 will only be relevant if your AgriPak Linkage sprayer is fitted with a Croplands boom.**

# SECTION 5

## SPRAYING INFORMATION

This section also provides information relevant to Calibrations in section 7

### When to spray

Spraying results are best when the wind speed and the temperature are low but the relative humidity is reasonably high. An ideal time is at sun up or nearing the end of the day when these conditions are more likely to occur.

For more information, contact Croplands about our SprayWise® program, or purchase a copy of the SprayWise Application Guide from Croplands. Also, the use of the WINDMATE™ Wind meter would be of excellent value to anyone doing regular spraying.

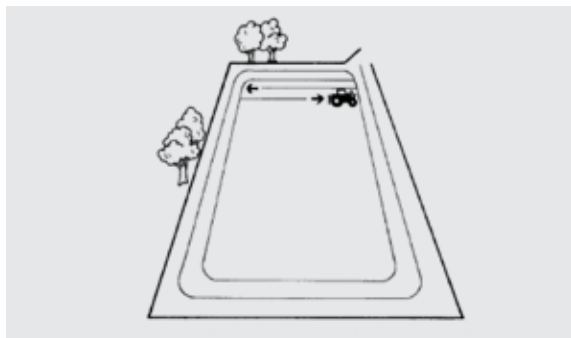
### Field patterns

For the best coverage, spray two swath widths around the outer perimeter of the field as shown in the diagram. This establishes a good headland and will give you adequate room to turn around. Turn the booms off when you come back on to the headland to prevent over spraying and wastage. Using a guidance system such as GPS or foam markers can prevent overlaps and ensure you get better coverage.

### Ground Speed

Modern tractors should have sufficient speed accuracy for sprayers of this size. To check the speed, fill the tank and open the boom to simulate usual spraying conditions. See section 7 to learn how calculate ground speed if your tractor does not have a reliable speedometer.

For spraying with an AgriPak linkage sprayer, the speed will you can safely & accurately spray at will depend on the conditions, terrain, and product being applied. In general, speeds of 5 to 15 km/hr are most often within the range for linkage spraying.



### Spray Quality

Spray quality is becoming extremely important for the correct application of chemicals. Refer to your advisor, local DPI or check the Croplands Buyers Guide for more information. Many chemical labels now specify the spray quality required for the product being used. Loosely, spray quality falls into a droplet range of:

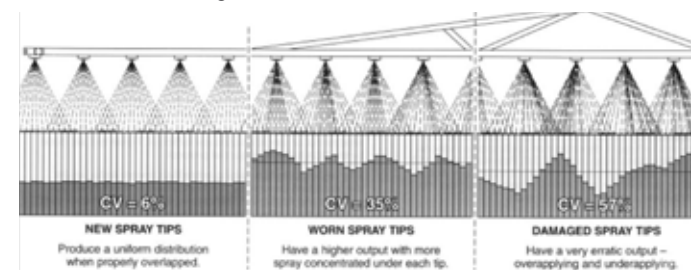
- Ultra Coarse
- Extremely Coarse
- Very Coarse
- Coarse
- Medium
- Fine
- Very fine

### Nozzle spacing and height

Nozzles overlap should be 50% at the point of contact with the spraying surface. Croplands booms operate with a nozzle spacing of 500mm (50cm) with nozzles slightly offset to avoid interference. Nozzles are supplied with 110° angled patterns. The recognized height to achieve the required 50% overlap is 400mm-500mm for 110° nozzles (measured from the target to be sprayed).

### Spray pattern and uniformity

Your nozzle spray pattern, overlap and uniformity need to be monitored and can be tested in the following manner. Keep a spare new nozzle to with which you can compare the other nozzles on your unit. Place the new nozzle at a central point on the boom and fill the tank with fresh, clean water and switch the boom on. Examine the spray patterns against a dark background and replace any that show signs of damage or sufficient wear as shown below.



**Most spray applications will fall into the Medium to Very Coarse range, depending on the application. Talk to a qualified Agronomist or Advisor if uncertain.**

# SECTION 5

## SPRAYING INFORMATION

### BOOM SPRAYER CALIBRATION

Each Croplands boom is fitted standard with nondrip nozzle bodies so that when the liquid flow is switched off, the bodies will not drip. Supplied on all Croplands' booms are AirMix air-induction ultra-low drift nozzles - now an industry standard to reduce the likelihood of spray drift.

The liquid flow to the boom can be stopped & started as required (such as when turning at headlands or where the operator does not want to spray) by using the spray control unit provided on the sprayer.

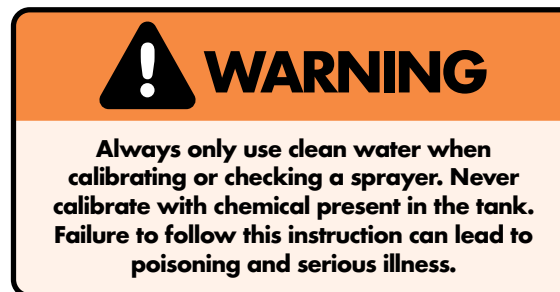
To ensure the right application of herbicide or crop protection product is applied to the target crop, the user should calibrate the AgriPak linkage sprayer to ensure the correct application rate is used for the chemical being used.

The information for the product to be applied (spray target rate and spray quality) is usually supplied by the chemical manufacturer on their product label. Alternatively, a trained agronomist should be consulted.



Part of the calibration process is to determine the flow required to meet the required target spray rate, and this information can be used to determine what speed of travel will best suit your application and what nozzle and spraying pressure to use.

Failure to calibrate a sprayer before operating may result in ineffective or crop damage.



### Calibration

To accurately apply crop protection or herbicides through a spray boom, the following procedure should be undertaken.

1. Measure your speed of travel.
2. Check the nozzle spacing, and
3. Select an appropriate nozzle for the product being applied, and check nozzle output in Litres per minute (L/min), along with spraying pressure.

### 1. Speed of travel

Check your tractor speed. If you have an accurate speedometer, this will suffice. If not, measure the distance you have travelled in one minute in metres, and divide this by 16.7:

$$\begin{array}{r} \text{e.g.} \quad 120 \text{ metres travelled in one minute} \\ \quad \quad \quad \div 16.7 \\ \hline \quad \quad \quad = 7.18 \text{ km/hour} \end{array}$$

If this is impractical, measure the distance travelled in 30 seconds, double it, and then divide by 16.7

Repeat at least twice, from a running start, to ensure accuracy.

### 1. Nozzle spacing

Standard nozzle spacing on a Croplands boom is 50cm. This is also an industry standard for the use of 110 degree nozzle tips as fitted standard to Croplands booms.



# SECTION 5

## SPRAYING INFORMATION

### 1. Select Nozzle Type & Size

Select the Nozzle Type & Size according to:

- Chemical recommendations
- Application rate required
- Pressure setting
- Swath width
- Chosen speed of travel  
(Use actual speed of travel, refer to step 2).

The right nozzle, application rate, spray quality and nozzle pressure will best be advised by your agronomist or consulting with the manufacturer of the product you are applying. The Croplands calibration guide covers these options in more detail.

Included on page 23 is a basic nozzle chart to show nozzle sizes, outputs and application rates at varying speeds.

### 2. Select Nozzle Type & Size according to:

- Chemical recommendations
- Application rate required
- Pressure setting
- Swath width
- Chosen speed of travel  
(Use actual speed of travel, refer to step 2).

### 3. Fit the selected nozzles to the boom as per the nozzle manufacturers specifications.

### 4. Check the nozzle accuracy as outlined above in spraying information.

### 5. Add the correct amount of chemical to the tank as per the directions on the chemical label.

### 1. Adjust the boom height to suit your nozzles as explained in the Nozzle section in spraying information above.

### 2. Don't forget to record your data for future reference.

## SPRAYWISE

It's highly recommended that all operators of this sprayer and spray program managers should be fully conversant with the information supplied in the **Nufarm SprayWise Broadacre Application Handbook** (refer photo) before undertaking spray operations.



The book includes chapters discussing;

- Droplet Size
- Nozzle Types
- Dilute Spraying
- Concentrate Spraying
- Coverage & Assessment
- Selecting Nozzles
- Drift
- Weather
- Adjuvants
- Formulations & Mixing Order
- Cleaning
- Calibration
- Record Keeping
- And more

This book is available from Croplands dealers, under the part number: SPRAYWISEBK at a very reasonable price.

# SECTION 5

## SPRAYING INFORMATION

BROADCAST AND TURF APPLICATIONS									
L/HA 50CM NOZZLE SPACING									
Nozzle type	Pressure bar	Flow rate l/min	5 kph	6 kph	7 kph	8 kph	10 kph	12 kph	16 kph
110-015	1.0	0.346	81.6	68.0	48.3	51.0	40.8	34.0	25.5
	1.5	0.424	101	84.0	72.0	63.0	50.4	42.0	31.5
	2.0	0.490	115	96.0	82.3	72.0	57.6	48.0	36.0
	3.0	0.600	142	118	101	88.5	70.8	59.0	44.3
	4.0	0.693	163	136	117	102	81.6	68.0	51.0
	5.0	0.775	182	152	130	114	91.2	76.0	57.0
	6.0	0.849	199	166	142	125	99.6	83.0	62.3
110-02 STANDARD	1.0	0.462	110	92.0	78.9	69.0	55.2	46.0	34.5
	1.5	0.566	134	112	96.0	84.0	67.2	56.0	42.0
	2.0	0.653	156	130	111	97.5	78.0	65.0	48.8
	3.0	0.800	190	158	135	119	94.8	79.0	59.3
	4.0	0.924	218	182	156	137	109	91.0	68.3
	5.0	1.033	245	204	175	153	122	102	76.5
	6.0	1.131	269	224	192	168	134	112	84.0
110-025	1.0	0.577	137	114	97.7	85.5	68.4	57.0	42.8
	1.5	0.707	168	140	120	105	84.0	70.0	52.5
	2.0	0.816	194	162	139	122	97.2	81.0	60.8
	3.0	1.000	238	198	170	149	119	99.0	74.3
	4.0	1.154	274	228	195	171	137	114	85.5
	5.0	1.291	310	258	221	194	155	129	97.0
	6.0	1.414	339	283	242	212	170	141	106
110-03	1.0	0.693	163	136	117	102	81.6	68.0	51.0
	1.5	0.849	199	166	142	125	100	83.0	62.3
	2.0	0.980	230	192	165	144	115	96.0	72.0
	3.0	1.200	283	236	202	177	142	118	88.5
	4.0	1.386	326	272	233	204	163	136	102
	5.0	1.549	365	304	261	228	182	152	114
	6.0	1.697	401	334	286	251	200	167	125
110-04	1.0	0.924	218	182	156	137	109	91.0	68.3
	1.5	1.113	269	224	192	168	134	112	84.0
	2.0	1.306	310	258	221	194	155	129	96.8
	3.0	1.600	379	316	271	237	190	158	119
	4.0	1.848	437	364	312	273	218	182	137
	5.0	2.066	490	408	350	306	245	204	153
	6.0	2.263	535	446	382	335	268	223	167

# SECTION 6

## DAILY START UP AND USEFUL FORMULA

### Daily start up procedure

A careful, common sense approach to water quality, mixing of chemicals and care of filters, hoses and tank will ensure trouble free spraying.

To ensure trouble free operation, follow the procedure below at the start of each day:

1. Ensure that no solids enter the system to block or damage pump or nozzles.
2. Check that suction line filter is clean and not damaged. It should be checked & cleaned regularly (see Page 21 for more information). Be careful not to damage or deform the mesh or O-Ring while cleaning and refitting the suction line filter. If a filter screen is damaged, replace with a new screen.
3. Put enough clean water into the spray tank to operate the pump and hand gun or boom (if fitted). The tank can be fully filled once your start up check is completed.



1. Activate the pump (see Page 19 for tips on start up).
2. If fitted, adjust the pressure relief valve to obtain the required pressure. Excess liquid will bypass back to the tank. Once the pressure is set, it is normal for minor fluctuations to show on the pressure gauge when switching the hand gun or boom on & off if you have these options fitted.

For more information on your pressure control unit, refer to Page 18 or the separate manual supplied for electric controls (if fitted).



1. Check that all hoses, hose clamps and connections do not leak. Repair or replace damaged components.
2. Read and follow the instructions on the chemical manufacturers label before mixing and adding chemicals to the spray tank. For safety information refer to section 3 in this manual.

1. Add chemical to the tank and proceed with your spraying application.



**Do not add chemicals to the spray tank until the initial start-up or daily start-up procedure has been carried out. This avoids having a tank full of chemical mix and then finding a sprayer problem.**

### Operating Pointers

While spraying continually observe that:

1. Adequate operating pressure is being maintained.
2. Your hand gun coverage is correct and constant for effective cover and that your nozzle is operating correctly (if you have a hose reel & gun fitted).
3. Periodically check and clean filters – between tanks is ideal
4. Your boom height is maintained at the correct height above your target (if you have a boom fitted).
5. Avoid going too slow because over application will occur. Conversely, avoid going to fast because under application will occur. Refer to your calibration information.



# SECTION 6

## DAILY START UP AND USEFUL FORMULA



### Useful Formula

#### 1. Calculating the Tank Spray Area

Use this formula to calculate the area each tank full of spray will cover.

$$\text{Area Covered (ha)} = \frac{\text{Tank Volume (litres)}}{\text{Spray Application Rate (L/ha)}}$$

eg.  $\frac{300 \text{ (litres)}}{100 \text{ (L/ha)}} = 3 \text{ hectares}$

#### 1. Calculating the Total Liquid Volume Required

Use this formula to calculate the amount of spray liquid required to spray a given area.

$$\text{Total Liquid Volume Required (litres)} = \text{Area (ha)} \times \text{Spray Application Rate (L/ha)}$$

eg.  $2 \text{ (Ha)} \times 100 \text{ (L/ha)} = 200 \text{ litres required}$

### NOTE

To find more information on how to calibrate a boom for varying application rates:

- Refer to the Croplands website at [www.croplands.com.au](http://www.croplands.com.au) or
- Contact the Croplands Customer Service or
- Technical Support: Phone 1300 650 724.

# SECTION 7

## LUBRICATION AND MAINTENANCE

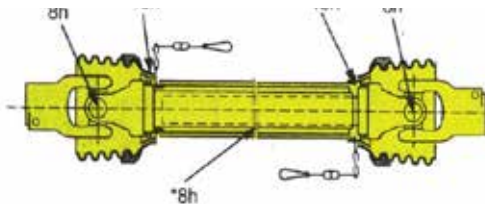
### Daily Sprayer maintenance



## WARNING

**Make sure the tractor is switched off, the machine is lowered to the ground and the PTO drive shaft is disconnected.**

In the first few days of sprayer usage, thoroughly check the machine before starting each day of spraying. Check all nuts and bolts and check plumbing for leaks. Grease the PTO shaft at the time intervals shown on the diagram below. The diagram is only a guide, greasing may need to be more frequent if spraying under extreme conditions.



\* Pull shaft apart – apply grease to inside of outer telescopic profile.

### Pump

Check the oil level on the pump sight gauge and top up with SAE 20/40 multi grade engine oil if needed.

### Filters

It is important to clean filters daily as they can have a

major impact on your sprayer's performance. Wash them out with a soft brush and constantly check for holes or tears. Clean the suction filter every time the tank is filled and at the end of the days spraying. Make sure O rings are in good condition and grease them with O ring grease in necessary. Clean out nozzle filters if installed. See page 18 for picture of filter screen.



### Spray lines

Never leave chemicals in the tank or the pump. Rinse the tank out completely with fresh water and operate machine to clear all spray lines. Remove boom lines caps if you have a boom fitted and flush boom lines.



## CAUTION

**Do not leave water in the machine, particularly in cooler climes as this can freeze and ruin the pump.**

### Annual sprayer maintenance

#### General sprayer care

When spraying season has finished, clean the machine completely.

Check all electrical fuses as these can easily blow if corroded in the off season.

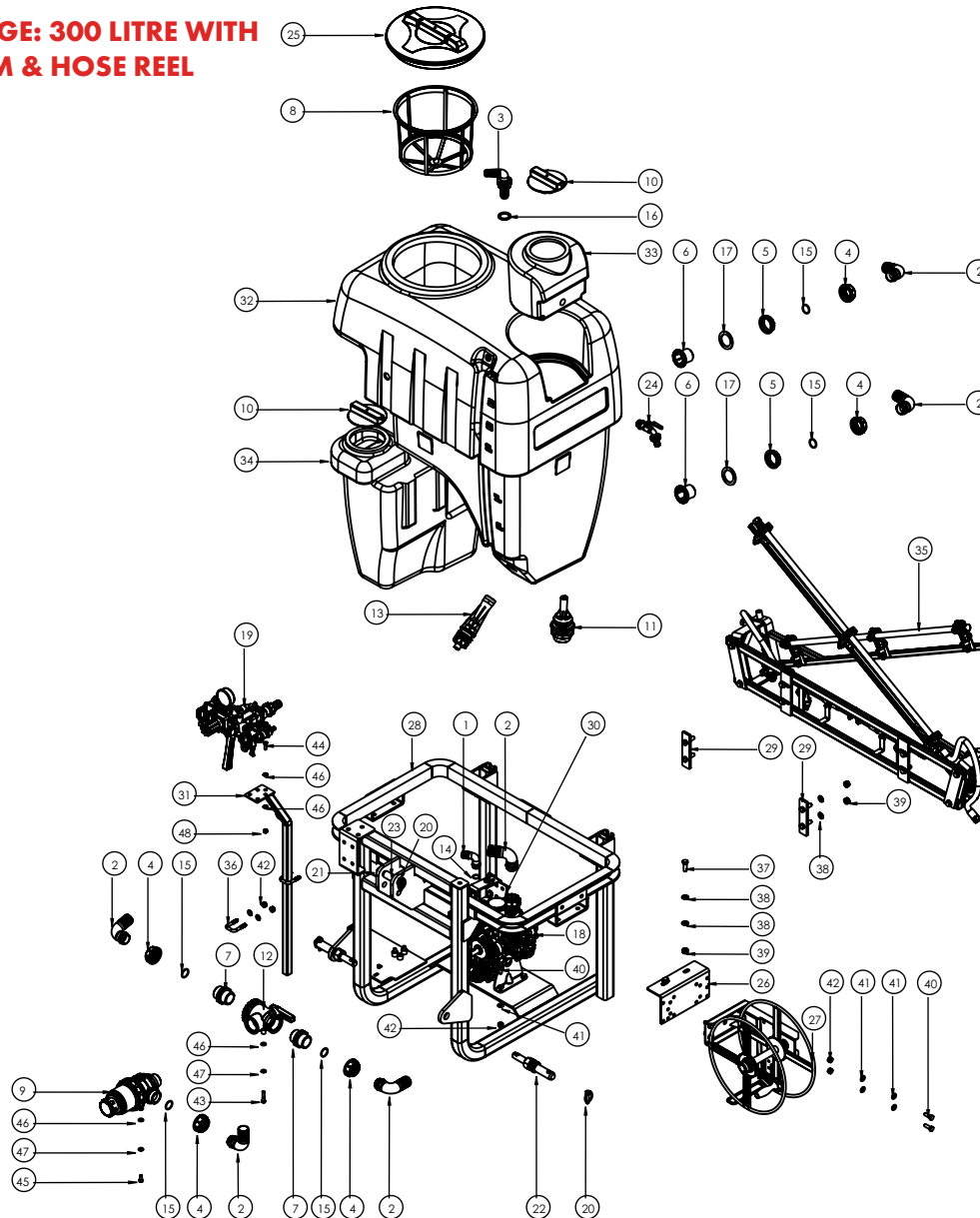
#### Pump

Flush and drain the pump completely before storage. Check the valves and diaphragms for wear and damage before the start of the new season. Set the air pressure in the chamber to around 10 – 20% of the usual operating pressure. Drain the oil before the commencement of the next season and replace completely with new oil (SAE 20/40 multi grade engine oil).

# SECTION 8

## ASSEMBLY DRAWINGS, PARTS & SCHEMATICS

**LA300 LINKAGE: 300 LITRE WITH MBX04 BOOM & HOSE REEL**



ITEM NO.	PART NUMBER	DESCRIPTION	Default/ QTY.
1	A116425	ELBOW 0.25 FOR FLY	1
2	A116640	ELBOW 1 1/2"	6
3	A118426	PIPE 1 X 1 SINGLE PIECE 90 DEG	1
4	A200060	FLY NUT 1 1/2"	5
5	A205060	BACK NUT 1 1/2"	2
6	A220060	TANK OUTLET 1 1/2"	2
7	A250060	NIPPLE 1 1/2"	2
8	A300120	FILTER BASKET MEDIUM 254MM DEEP	1
9	A314463	FILTER 1 1/2" 50M SH/THR SOV	1
10	A3522000	BREATHER FOR 355MM & 455MM LID	2
11	A452107	VALVE 2" ANTI POLLUTION DRAIN	1
12	A454236	BALL VALVE POLY 1 1/2" 3 WAY	1
13	A5022042	AGITATOR STRAIGHT #2 CERAMIC JET	1
14	AG10041	O RING 1"	1
15	AG10061	O RING 1 1/2"	6
16	AG40004	FLAT SEAL 1" EPDM	1
17	AG40006	FLAT SEAL 1 1/2" EPDM	2
18	AR80LFP-C	PUMP AR80 POLY BP C+PC	1
19	ARUCM-5	UCM 5 WAY CONTROLLER	1
20	B0006	BARE LINC PIN 7/16" DIA	3
21	B0075	TOP LINK PIN CAT 1 (MF35)	1
22	B0205	CAT 1-2 IMPLEMENT PIN 1" NUT	2
23	B0353	BUSH CONVERSION CAT 1 TO CAT 2	1
24	BALL348IB	BALL BIBCOCK 3/4"	1
25	G8155000	LID/RING KIT 355MM	1
26	HP-229	MANIFOLD BRACKET HP-223C2	1
27	L-R01.60	HOSEREEL SP250 20MM X 10MM RL10	1
28	LP030	FRAME 300LT AGRIPAK FARMATE	1
29	LP030-7-2	BOOM MOUNT 300LT	2
30	LP060-1	FLUSH TANK BRACKET	1
31	LP-121	CONTROLLER BRACKET LINKAGE	1
32	P300L	300LT LINKAGE CHEMICAL TANK	1
33	P300-10L	10LT HAND WASH TANK TO SUIT 300LT	1
34	P300-45L	45LT FLUSH TANK TO SUIT 300LT LINKAGE	1
35	MBX04	BOOM 4M CROSS FOLD COMPLETE	1
36	XBMBB32	U BOLT 32MM	2
37	M12X35	M12 X 35 SET SCREW HT ZP	2
38	M12FWASHER	M12 FLAT WASHER ZP	8
39	M12NNUT	M12 NYLOC NUT HT ZP	6
40	M10X30	M10 X 30 SET SCREW HT ZP	10
41	M10FWASHER	M10 FLAT WASHER ZP	24
42	M10NNUT	M10 NYLOC NUT HT ZP	14
43	MBX40BOLT	M8 X 40 HEX HEAD BOLT HT ZP	3
44	M8X25	M8 X 25 SET SCREW HT ZP	2
45	M8X20	M8 X 20 SET SCREW HT ZP	3
46	M8FWASHER	M8 FLAT WASHER ZP	10
47	M8SWASHER	M8 SPRING WASHER ZP	6
48	M8NNUT	M8 NYLOC NUT HT ZP	2

### NOTE

Drawings are for illustration purpose only - refer to sprayer for actual plumbing. Parts listed are indicative of the sprayer type.

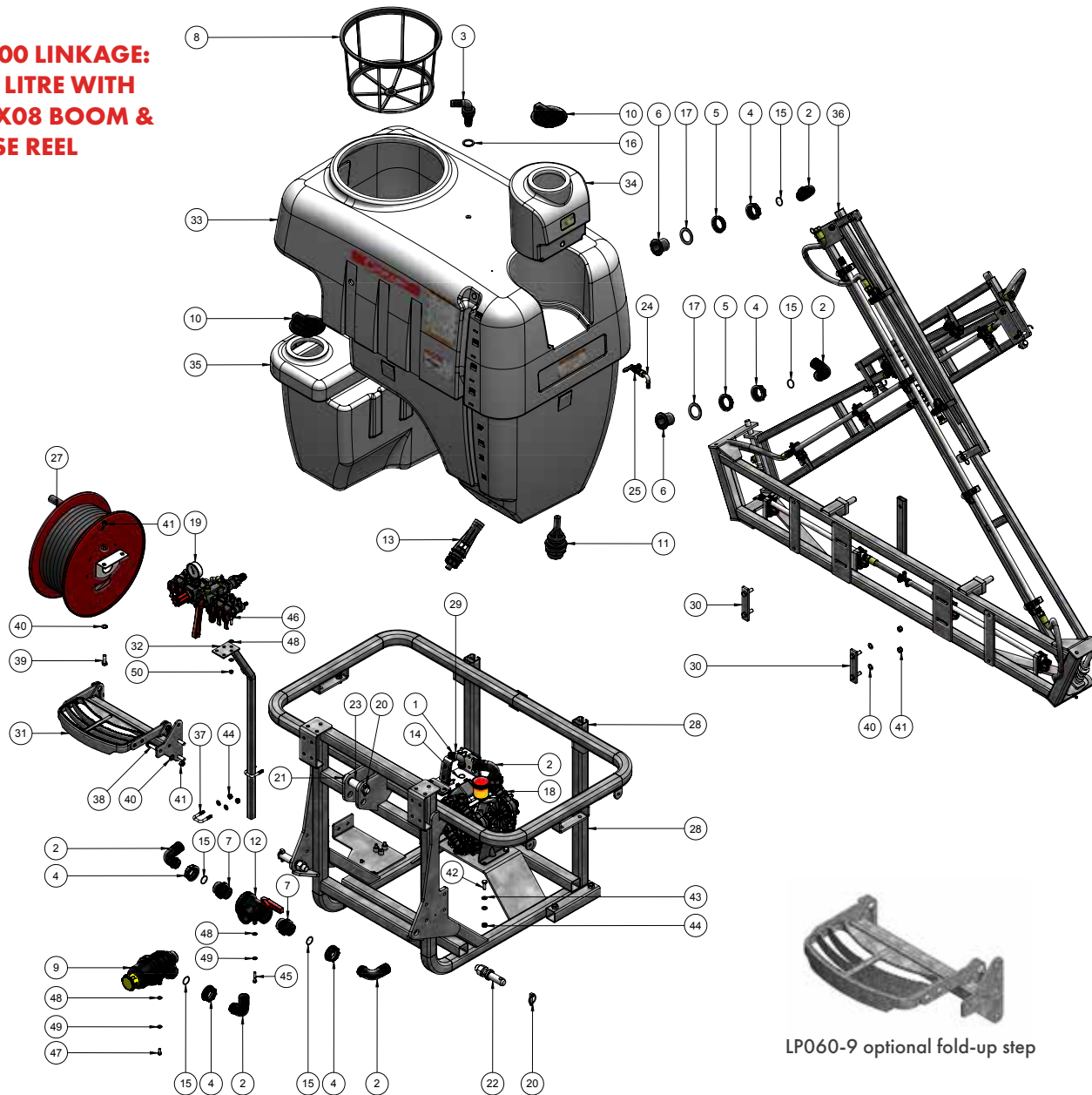
Items in *italics* or without a part number are non stocked items and may need to be specially ordered.

For further parts information refer to: [www.croplands.com.au](http://www.croplands.com.au)

# SECTION 8

## ASSEMBLY DRAWINGS, PARTS & SCHEMATICS

**LA600 LINKAGE:  
600 LITRE WITH  
MAX08 BOOM &  
HOSE REEL**



ITEM NO.	PART NUMBER	DESCRIPTION	Default/QTY.
1	A116425	ELBOW 0.25 FOR FLY	1
2	A116640	ELBOW 1 1/2"	6
3	A118426	PIPE 1 X 1 SINGLE PIECE 90DEG	1
4	A200060	FLY NUT 1 1/2"	5
5	A205060	BACK NUT 1 1/2"	2
6	A220060	TANK OUTLET 1 1/2"	2
7	A250060	NIPPLE 1 1/2"	2
8	A300130	FILTER BASKET LARGE 254MM DEEP	1
9	A314463	FILTER 1 1/2" 50MM SH/THR SOV	1
10	A3522000	BREATHER FOR 355MM & 455MM LID	2
11	A452107	VALVE 2" ANTI POLLUTION DRAIN	1
12	A454236	BALL VALVE POLY 1 1/2" 3 WAY	1
13	A5022042	AGITATOR STRAIGHT#2 CERAMIC J	1
14	AG10041	O RING 1"	1
15	AG10061	O RING 1 1/2"	6
16	AG40004	FLAT SEAL 1" EPDM	1
17	AG40006	FLAT SEAL 1 1/2" EPDM	2
18	AR80LFP-C	PUMP AR80 POLY BP C+PC	1
19	ARUCM-5	UCM 5WAY LESS FILTER#31830	1
20	B0006	BARE LINC PIN 7/16" DIA	3
21	B0076	TOP LINK PIN 3" X 7/16" ST040	1
22	B0102	IMPLEMENT PIN CAT2	2
23	B0519	BUSH CAT2-3	1
24	B163.604.13	ELBOW 1/2" C/W HEX NUT 1/2"	1
25	B165.1501.5	BALL VALVE 1/2" X 1/2" RH	1
26	G8161000	LID/RING KIT 455MM	1
27	L-R2412	HOSE REEL SIDE MOUNT 30M TO UN	1
28	LP060	FRAME 600LT AG RPAK FARMATE	1
29	LP060-1	FLUSH TANK BRACKET	1
30	LP060-7-2	BOOM MOUNT 600LT	2
31	LP060-9	LINKAGE STEP ASSEMBLY KIT	option
32	LP-121	CONTROLLER BRACKET LINKAGE	1
33	P600L	600LT LINKAGE CHEMICAL TANK	1
34	P600-15L	TANK HAND WASH TO SUIT 600/800LT	1
35	P600-90L	90LT FLUSH TANK TO SUIT 600/ 800LT	1
36	MAX08-1	MAX 8M BOOM COMPLETE	1
37	XBMBB32	U BOLT 32MM	2
38	M12X40	M12 X 40 HEX HEAD SET SCREW HT ZP	3
39	M12X35	M12 X 35 SET SCREW HT ZP	2
40	M12PWASHER	M12 FLAT WASHER ZP	14
41	M12NNUT	M12 NYLOC NUT HT ZP	9

### NOTE

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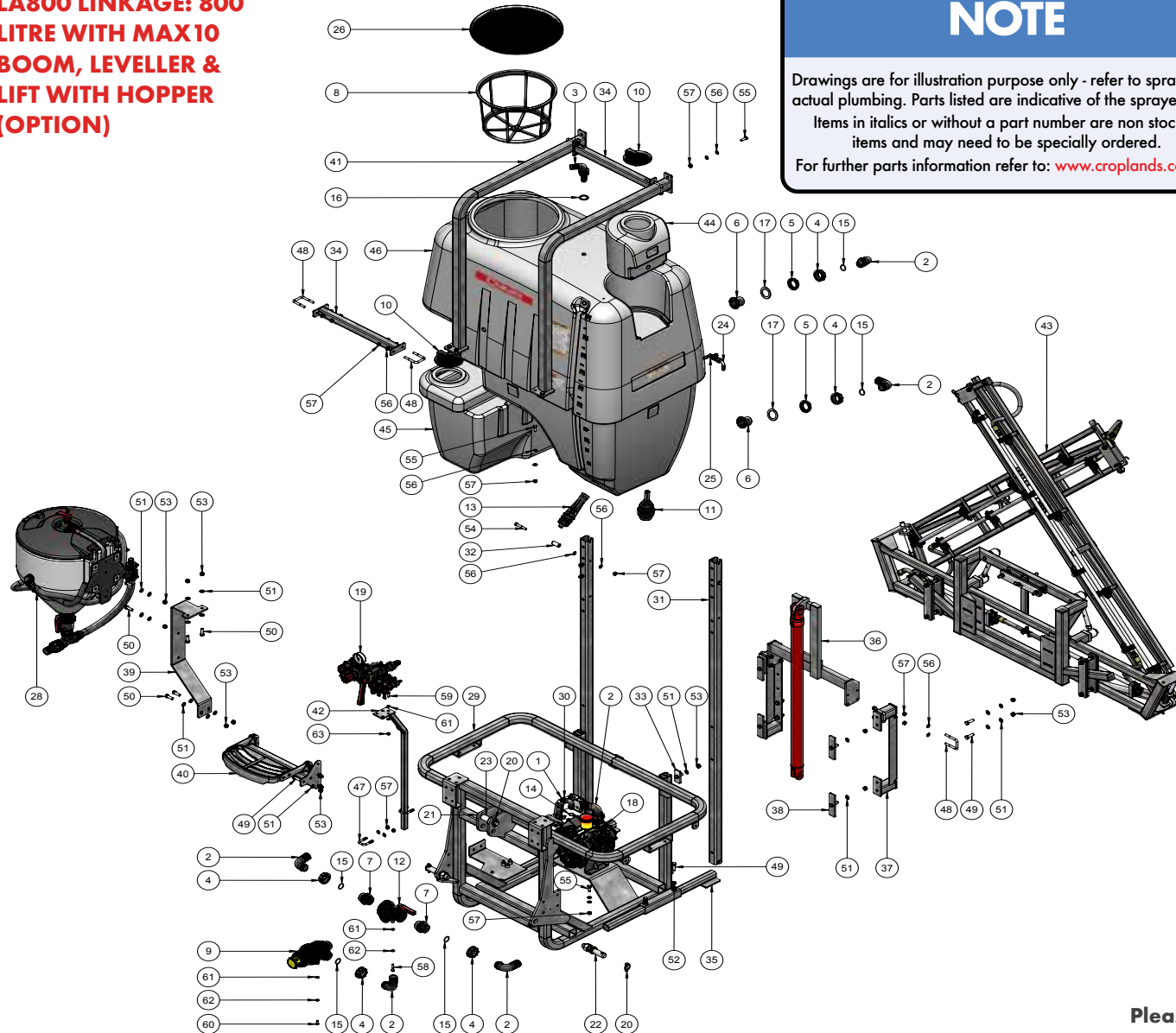


LP060-9 optional fold-up step

# SECTION 8

## ASSEMBLY DRAWINGS, PARTS & SCHEMATICS

**LA800 LINKAGE: 800  
LITRE WITH MAX10  
BOOM, LEVELLER &  
LIFT WITH HOPPER  
(OPTION)**



### NOTE

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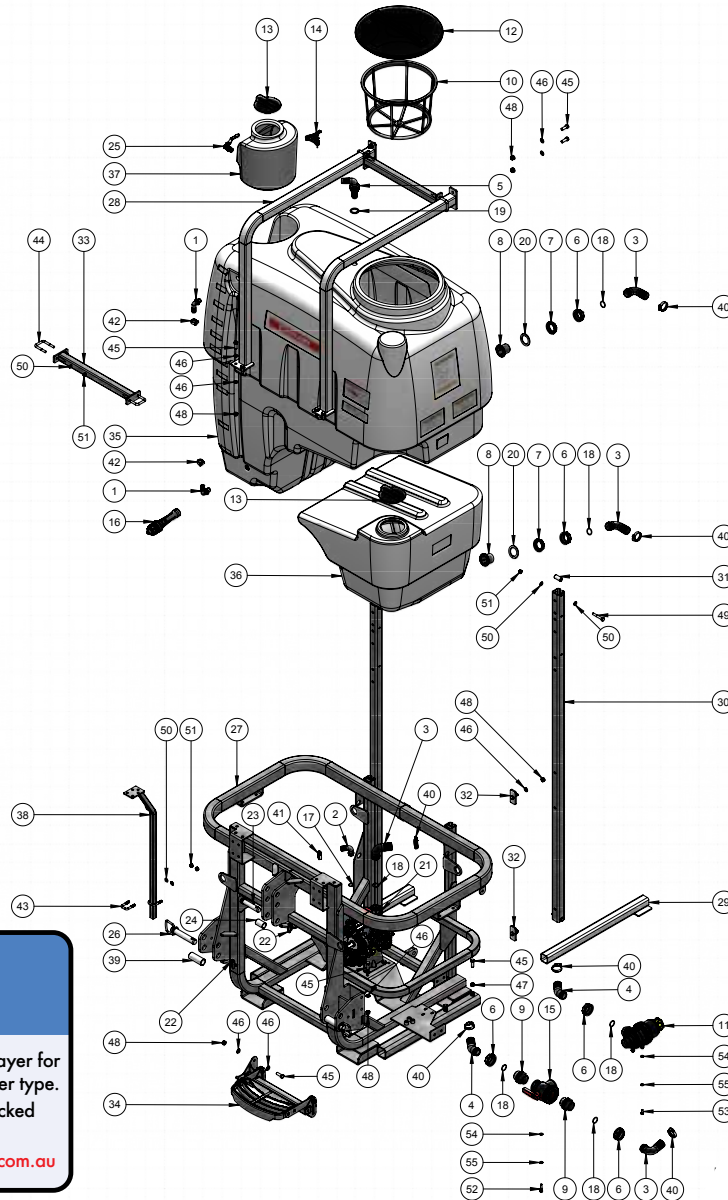
ITEM NO.	PART NUMBER	DESCRIPTION	Default/ QTY.
1	A116425	ELBOW 0.25 FOR FLY	1
2	A116640	ELBOW 1 1/2"	6
3	A118426	PIPE 1 X 1 SINGLE PIECE 90DEG	1
4	A200060	FLY NUT 1 1/2"	5
5	A205060	BACK NUT 1 1/2"	2
6	A220060	TANK O ULET 1 1/2"	2
7	A250060	NIPPLE 1 1/2"	2
8	A300130	FILTER BASKET LARGE 254MM DEEP	1
9	A314463	FILTER 1 1/2" 50MM SH/ THR SOV	1
10	A3522000	BREATHER FOR 355MM & 455MM LID	2
11	A452107	VALVE 2" ANTI POLLUTION DRAIN	1
12	A454236	BALL VALVE POLY 1 1/2" 3 WAY	1
13	A5022042	AGITATOR STRAIGHT#2 CERAMIC J	1
14	AG 10041	O RING 1"	1
15	AG 10061	O RING 1 1/2"	6
16	AG 40004	FLAT SEAL 1" EPDM	1
17	AG 40006	FLAT SEAL 1 1/2" EPDM	2
18	AR80LFP-C	PUMP AR80 POLY BP C+PC	1
19	ARUCM-5	UCM 5WAY LESS FILTER#31830	1
20	B0006	BARE LINC H PIN 7/16" DIA	3
21	B0076	TOP LINK PIN 3" X 7/16" S1040	1
22	B0102	IM PLEMENT PIN CAT 2	2
23	B0519	BUSH CAT 2-3	1
24	B163.604.13	ELBOW 1/2" C/W HEX NUT 1/2"	1
25	B165.1501.5	BALL VALVE 1/2" X 1/2" RH	1
26	G8161000	LID/ RING KIT 455MM	1
27	HP-029	HYDRAULIC CYLINDER 2.0 X 36	1
28	KB-1003A	CHEMICAL MIXING UNIT 60LT PROD	1
29	LP060	FRAME 600LT AGRIPAK FARMATE	1
30	LP060-1	FLUSH TANK BRACKET	1
31	LP060-2	LIFT SLIDE TUBE	2
32	LP060-2-1	SPACER SLIDE TUBE	4
33	LP060-2-2	ATTACHMENT PLATE	4
34	LP060-4	LIFT CROSS BRACE	2
35	LP060-5	FOOT EXTENSION	2
36	LP060-6	LIFT SLIDE FRAME	1
37	LP060-7	LIFT BOOM MOUNT	2
38	LP060-7-1	LIFT SLIDE	4
39	LP060-8	CHEM-E-FLUSH BRKT 600/800 LINKAGE	1
40	LP060-9	LINKAGE STEP ASSEMBLY KIT	1
41	LP080-3	LIFT SUPPORT BRACKET 800LT	2
42	LP-121	CONTROLLER BRACKET LINKAGE	1
43	MAX10L	MAX 10M LEVEL BOOM COMPLETE	1
44	P600-15L	TANK HAND WASH TO SUIT 600/800LT	1
45	P600-90L	90LT FLUSH TANK TO SUIT 600/800LT	1
46	P800L	800LT LINKAGE CHEMICAL TANK	1
47	XBM BB32	U BOLT 32MM	2
48	XBM BB50	U-BOLT 50MM X 10	8
49	M12X40	M12 X 40 HEX HEAD SET SCREW HT ZP	11
50	M12X35	M12 X 35 SET SCREW HT ZP	6
51	M12PWASHER	M12 FLAT WASHER ZP	35
52	M12HNUT	M12 HEX NUT HT ZP	4
53	M12NNUT	M12 NYLOC NUT HT ZP	22
54	M10X65BOLT	M10 X 65 BOLT HT ZP	4
55	M10X30	M10 X 30 SET SCREW HT ZP	14
56	M10PWASHER	M10 FLAT WASHER ZP	56
57	M10NNUT	M10 NYLOC NUT HT ZP	38
58	M8X40BOLT	M8 X 40 HEX HEAD BOLT HT ZP	3
59	M8X25	M8 X 25 SET SCREW HT ZP	2
60	M8X20	M8 X 20 SET SCREW HT ZP	3
61	M8PWASHER	M8 FLAT WASHER ZP	10
62	M8SWASHER	M8 SPRING WASHER ZP	6
63	M8NNUT	M8 NYLOC NUT HT ZP	2

Please contact Technical support for further details

# SECTION 8

## ASSEMBLY DRAWINGS, PARTS & SCHEMATICS

### LA1000 TANK AND FRAME ONLY



### NOTE

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Items in italics or without a part number are non stocked items and may need to be specially ordered.

For further parts information refer to: [www.croplands.com.au](http://www.croplands.com.au)

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	A1132220	ELBOW 1/2"BSP TO 20MM HOSE	2
2	A116425	ELBOW 0.25 FOR FLY	1
3	A116640	ELBOW 1 1/2"	4
4	A117640	ELBOW 1 1/2" X 1 1/2" 45 DEG	2
5	A118426	PIPE 1 X 1 SINGLE PIECE 90DEG	1
6	A200060	FLY NUT 1 1/2"	5
7	A205060	BACK NUT 1 1/2"	2
8	A220060	TANK OUTLET 1 1/2"	2
9	A250060	NIPPLE 1 1/2"	2
10	A300130	FILTER BASKET LARGE 254MM DEEP	1
11	A314463	FILTER 1 1/2" 50MM SH/THR SOV	1
12	A3510060	LID/RING KIT 455MM	1
13	A3522000	BREATHER FOR 355MM & 455MM LID	2
14	A452107	VALVE 2" ANTI POLLUTION DRAIN	1
15	A454236	BALL VALVE POLY 1 1/2" 3 WAY	1
16	A5022042	AGITATOR STRAIGHT #2 CERAMIC J	1
17	AG10041	O RING 1"	1
18	AG10061	O RING 1 1/2"	6
19	AG40004	FLAT SEAL 1" EPDM	1
20	AG40006	FLAT SEAL 1 1/2" EPDM	2
21	AR80LFP-C	PUMP AR80 POLY BP C+PC	1
22	B0006	BARE LINCH PIN 7/16" DIA	3
23	B0076	TOP LINK PIN 3" X 7/16" S1040	1
24	B0519	BUSH CAT2-3	1
25	B165.1501.5	BALL VALVE 1/2" X 1/2" RH	1
26	B2662	DRAWBAR PIN 4 3/4" X 1 1/8" CAT2 S1040	2
27	LP101C	LINKAGE FRAME 1000LT	1
28	LP101C-3	LIFT SUPPORT BRACKET 600LT	2
29	LP101C-5	FOOT EXTENSION	2
30	LP060-2	LIFT SLIDE TUBE	2
31	LP060-2-1	SPACER SLIDE TUBE	4
32	LP060-2-2	ATTACHMENT PLATE	4
33	LP060-4	LIFT CROSS BRACE	2
34	LP060-9	LINKAGE STEP ASSEMBLY KIT	1
35	P1000LB	TANK 1000LT LINKAGE	1
36	P1000-130L	TANK FLUSH TO SUIT 1000LT	1
37	P800-15L	TANK HAND WASH TO SUIT 600/800LT	1
38	LP-121	CONTROLLER BRACKET LINKAGE	1
39	LP-152A	REDUCER BUSH CAT II III 90MM	2
40	TR112HC	HOSE CLAMP 40MM 1 1/2" WORM DRIVE	6
41	TR1HC	HOSE CLAMP 25MM 1" WORM DRIVE	1
42	TR34HC	HOSE CLAMP 20MM 3/4" WORM DRIVE	2
43	XBMB32	U BOLT 32MM	2
44	XBMB50	U-BOLT 50MM X 10	4
45	M12X35	M 12 X 35 SET SCREW HT ZP	19
46	M12FWASHER	M 12 FLAT WASHER ZP	34
47	M12HNUT	M 12 HEX NUT HT ZP	4
48	M12NNUT	M 12 NYLOC NUT HT ZP	19
49	M10X70BOLT	M 10 X 70 BOLT HT ZP	4
50	M10FWASHER	M 10 FLAT WASHER ZP	20
51	M10NNUT	M 10 NYLOC NUT HT ZP	14
52	M8X40BOLT	M 8 X 40 HEX HEAD BOLT HT ZP	3
53	M8X20	M 8 X 20 SET SCREW HT ZP	3
54	M8FWASHER	M 8 FLAT WASHER ZP	6
55	M8SWASHER	M 8 SPRING WASHER ZP	6

# SECTION 8

## ASSEMBLY DRAWINGS, PARTS & SCHEMATICS

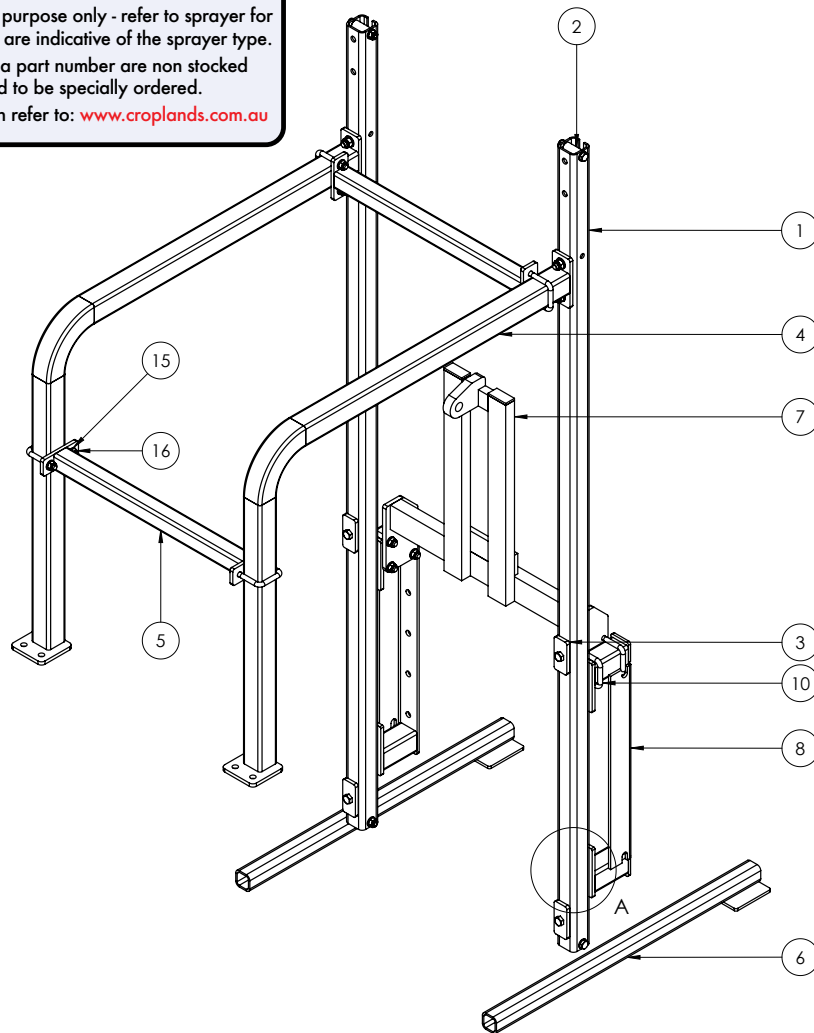
LIFT DEVICE FOR 600, 800 AND 1,000 LITRE AGRIPAK MODELS

### NOTE

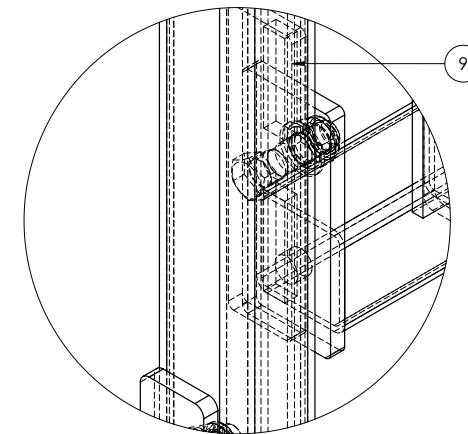
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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	LP060-2	LIFT SLIDE TUBE	2
2	LP060-2-1	SPACER SLIDE TUBE	4
3	LP060-2-2	ATTACHMENT PLATE	4
4	LP060-3	LIFT SUPPORT BRACKET 600LT	2
5	LP060-4	LIFT CROSS BRACE	2
6	LP060-5	FOOT EXTENSION	2
7	LP060-6	LIFT SLIDE FRAME	1
8	LP060-7	LIFT BOOM MOUNT	2
9	LP060-7-1	LIFT SLIDE	4
10	XBMBB50	U-BOLT 50MM X 10	8
11	M12X35	M12 X 35 SET SCREW HT ZP	4
12	M12FWASHER	M12 FLAT WASHER ZP	17
13	M12NNUT	M12 NYLOC NUT HT ZP	12
14	M10X65BOLT	M10 X 65 BOLT HT ZP	4
15	M10FWASHER	M10 FLAT WASHER ZP	24
16	M10NNUT	M10 NYLOC NUT HT ZP	20

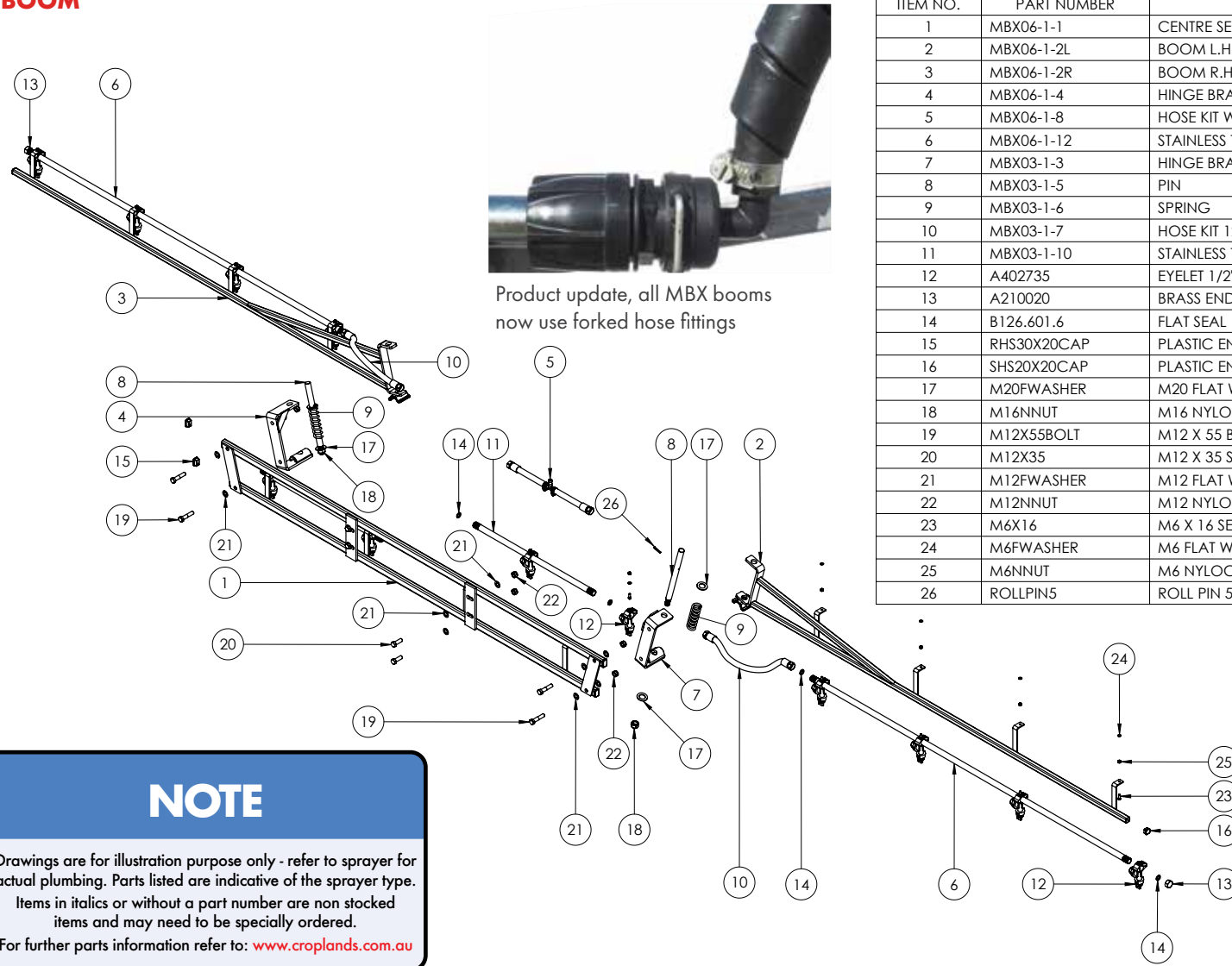


DETAIL A  
SCALE 1 : 2

# SECTION 8

## ASSEMBLY DRAWINGS, PARTS & SCHEMATICS

### MBX06 BOOM



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MBX06-1-1	CENTRE SECTION 6M CROSS FOLD	1
2	MBX06-1-2L	BOOM L.H. 6M CROSS FOLD	1
3	MBX06-1-2R	BOOM R.H. 3M CROSS FOLD	1
4	MBX06-1-4	HINGE BRACKET R.H.	1
5	MBX06-1-8	HOSE KIT WITH 1/2" TEE	1
6	MBX06-1-12	STAINLESS TUBE 1/2NB 1600MM 4 HOLES	2
7	MBX03-1-3	HINGE BRACKET L.H.	1
8	MBX03-1-5	PIN	2
9	MBX03-1-6	SPRING	2
10	MBX03-1-7	HOSE KIT 12MM	2
11	MBX03-1-10	STAINLESS TUBE 1/2NB X 600MM 2 HOLES	2
12	A402735	EYELET 1/2" NON DRIP FARMATE	12
13	A210020	BRASS END CAP	2
14	B126.601.6	FLAT SEAL 1/2" EPDM	8
15	RHS30X20CAP	PLASTIC END CAP 30 X 20 RHS	4
16	SHS20X20CAP	PLASTIC END CAP 20 X 20 SHS	2
17	M20FWASHER	M20 FLAT WASHER ZP	4
18	M16NNUT	M16 NYLOC NUT HT ZP	2
19	M12X55BOLT	M12 X 55 BOLT HT ZP	4
20	M12X35	M12 X 35 SET SCREW HT ZP	4
21	M12FWASHER	M12 FLAT WASHER ZP	16
22	M12NNUT	M12 NYLOC NUT HT ZP	8
23	M6X16	M6 X 16 SET SCREW HT ZP	12
24	M6FWASHER	M6 FLAT WASHER ZP	12
25	M6NNUT	M6 NYLOC NUT HT ZP	12
26	ROLLPIN5	ROLL PIN 5MM DIA ZP	2

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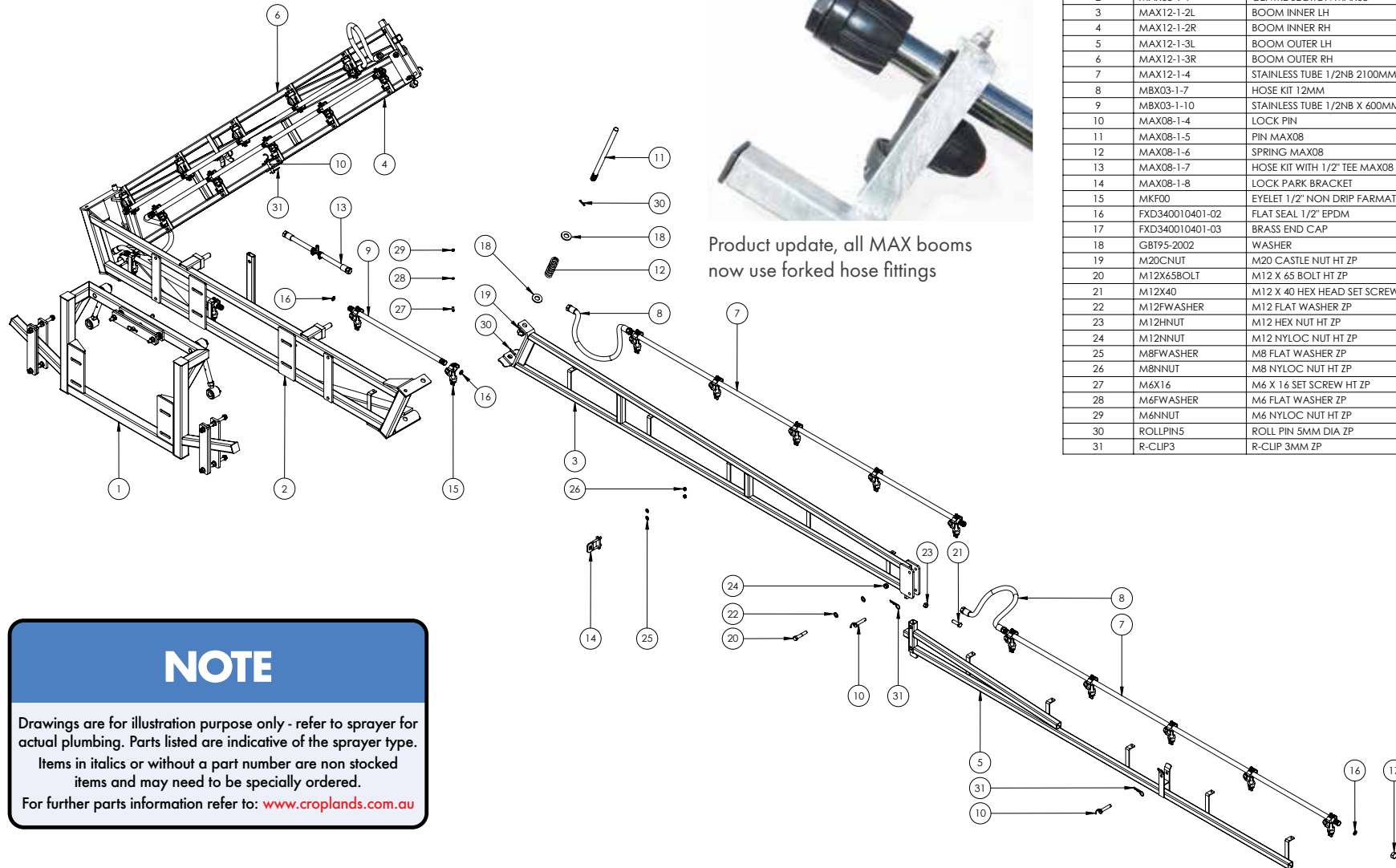
Please contact Technical support for further details



# SECTION 8

## ASSEMBLY DRAWINGS, PARTS & SCHEMATICS

### MAX12 METRE BOOM WITH SELF LEVELLER



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MAX-LEVEL	MAX BOOM LEVELLER	1
2	MAX08-1-1	CENTRE SECTION MAX08	1
3	MAX12-1-2L	BOOM INNER LH	1
4	MAX12-1-2R	BOOM INNER RH	1
5	MAX12-1-3L	BOOM OUTER LH	1
6	MAX12-1-3R	BOOM OUTER RH	1
7	MAX12-1-4	STAINLESS TUBE 1/2NB 2100MM 5 HOLES	4
8	MBX03-1-7	HOSE KIT 12MM	4
9	MBX03-1-10	STAINLESS TUBE 1/2NB X 600MM 2 HOLES	2
10	MAX08-1-4	LOCK PIN	5
11	MAX08-1-5	PIN MAX08	2
12	MAX08-1-6	SPRING MAX08	2
13	MAX08-1-7	HOSE KIT WITH 1/2" TEE MAX08	1
14	MAX08-1-8	LOCK PARK BRACKET	1
15	MKFOO	EYELET 1/2" NON DRIP FARMATE	24
16	FXD340010401-02	FLAT SEAL 1/2" EPDM	12
17	FXD340010401-03	BRASS END CAP	2
18	G8T95-2002	WASHER	4
19	M20CNUT	M20 CASTLE NUT HT ZP	2
20	M12X65BOLT	M12 X 65 BOLT HT ZP	2
21	M12X40	M12 X 40 HEX HEAD SET SCREW HT ZP	2
22	M12FWASHER	M12 FLAT WASHER ZP	4
23	M12HNUT	M12 HEX NUT HT ZP	2
24	M12NNUT	M12 NYLOC NUT HT ZP	2
25	M8FWASHER	M8 FLAT WASHER ZP	2
26	M8NNUT	M8 NYLOC NUT HT ZP	2
27	M6X16	M6 X 16 SET SCREW HT ZP	24
28	M6FWASHER	M6 FLAT WASHER ZP	24
29	M6NNUT	M6 NYLOC NUT HT ZP	24
30	ROLLPIN5	ROLL PIN 5MM DIA ZP	4
31	R-CLIP3	R-CLIP 3MM ZP	5

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on the Croplands website