



**SPREADMAX
EX120
USER MANUAL**

**120 LITRE
FERTILISER & MAG SPREADER**



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ACQUISITION

CONTENTS:

- 3 Acquisition
- 4 Warranty
- 5 General
- 6 Installation
- 7 Operation
- 8 Calibration
- 9 Calibration Settings
- 10 Safety Instructions
- 11 Maintenance
- 12 Replacement Parts

Warranty Registration:

Scan this QR code to fill out the Warranty Registration Form:
Or type this URL into your browser: hubs.la/Q012gg540



Delivery

Upon delivery of the machine, carefully check for transit damage and report any defects to both the transport company & Rata immediately. Immediately reporting transport damage is essential in getting remediation from the freight provider.

Take the time to go over your new machine and ensure that all nuts & bolts are appropriately tightened before using. Damage caused by fixtures or fasteners loosened in transit is **not** covered by warranty.

Please then visit our website and complete the warranty registration form above. The commencement of warranty is based on the purchase date of your machine, provided the product register form is received at Rata Equipment within 14 days of the purchase date. Warranty claims will only be processed upon receipt of proof of purchase and submission of the warranty registration form within 14 days of purchase.

Welcome

Rata Equipment would like to take this opportunity to welcome you as the new owner of a Rata machine. We want your investment to be the most efficient and reliable piece of equipment it can be. This manual has been produced to assist in the correct operation, maintenance and care of your machine.

The safe operation and maintenance of your machine is very important to prevent any personal injury and/or damage. Read and fully understand the following instructions before using your machine or carrying out any maintenance.

Machine Identification

The machine serial number is engraved into an information plate. Please record the machine serial number in the warranty registration form on the Rata website.

Ensure you have the machine serial number to hand when contacting us about your machine for any reason, or ordering parts.



WARRANTY

Rata Equipment warrants new products sold by it, to be free from defects in material and workmanship for a period of 12 months after the date of purchase to the initial user. This warranty is for the replacement or repair of any part found to be defective during the warranty period. This warranty only applies to new Vogal products.

Should the product fail as a result of a fault in material or sub-standard workmanship by the manufacturer within the warranty period then Rata Equipment will agree to repair this product subject to the conditions of this warranty.

This warranty excludes any transport costs or damage and excludes all normal maintenance costs.

Rata Equipment will not pay for mileage, freight, courier costs, oil, grease or any other expendable materials.

As the use of the Vogal product is outside our control, Rata Equipment accepts no liability for lost earnings or down time directly or indirectly caused by the machine's performance.

Replacement parts provided under the terms of this warranty are covered for the remainder of the warranty period applicable to the product in which they were installed as if such parts were original components of that product.

No warranty work is to be started without first getting approval and following the correct warranty procedures as set out by Rata Equipment. Rata Equipment will not under any circumstances pay for or repair any damage caused by misuse or neglect of any machine.

All warranty issues and claims are totally at the discretion of Rata Equipment. Warranty Exclusions: loose bolts and screws including worn holes for the same, belts, tyres, blades, tines, PTO shafts, disc bearings and hydraulic hoses, these parts are generally not covered by this warranty.

Delivery

The machine is delivered fully assembled, however, before use carefully check the entire machine for transit damage and report any problems immediately.

GENERAL

Designed to spread causmag, urea, grass seed and various other types of fertiliser, the EX120 is the smallest quad bike spreader in the Vogal range that incorporates the easy-lock drive engagement system.

This means the drive engagement is controlled from the front of the spreader along with the shutter aperture control, via two levers. No more getting off the bike to engage the spinner disc!

Also included in the design is a double bearing on the drive wheel - reducing load on the gearbox, a wide track width, stainless steel shutter, super strong drawbar, U.V. resistant plastic hopper and lid and adjustable spinner fins; combine to create a superior design.

Capacity and Dimensions

MODEL	HOPPER CAPACITY (LITRES)	HOPPER CAPACITY (KG)	OVERALL WIDTH
Spreadmax EX120	120	200	1500mm
MAX ROAD SPEED WITH SPINNER UNENGAGED	GEARBOX OIL CAPACITY (LITRES)	GEARBOX OIL TYPE	WHEEL SIZE
30kph	0.5	EP 90	16X6.50-8

INSTALLATION

Pre-start Checks

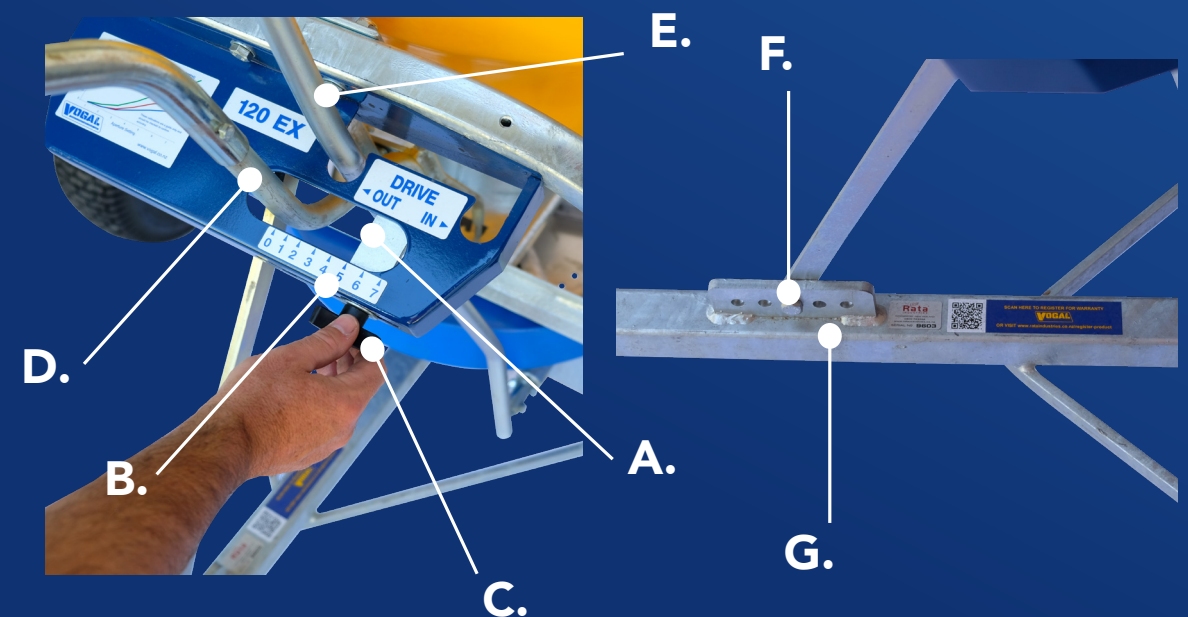
1. Ensure that the towball on the vehicle is compatible with the spreader. The spreader is designed to accept a 1-7/8" diameter towball.
2. Check the operation of all controls. (A)
3. Ensure the ride height is correctly set for the ATV towing the spreader. (B)
3. Check the tyre pressure (C) 10psi minimum to 25psi maximum dependant on load size.
4. Check the condition of the tyres. Look for signs of wear, cuts and impact damage. (C)
5. Check the free operation for the shutter lever. (A)
6. Check the condition of the hopper and lid. (D)
7. Check that all grease points have been greased.
8. Check the gearbox for oil leaks, if an oil leak is evident do not use the spreader and carry out repairs immediately.
9. Check that the agitator is movable, free from debris and well greased.



OPERATION

Operating

1. Once securely connected, the spreader is operated fully from the ATV.
2. Before filling the hopper, set the flow from the hopper by moving the pointer (A) to the setting required (B) and locking it in place with the tri knob (C).
3. Place the shutter lever (D) in the zero position and fill the hopper with the material to be spread.
4. Drive to the area requiring the fertiliser, move the drive handle (E) to the **IN** position gently moving forward at the same time, move the lever (D) to the open position - until lever hits stop (C).
5. To ensure the correct spread pattern and angle of spread, the spreader must be horizontal to the ground. To achieve this, the vertical link on the tow bar is adjustable. To adjust the vertical link, remove the retaining bolt (F), move the tow bar (G) up or down to achieve the correct angle, insert the retaining bolt and secure.
6. It is important to remember that a constant speed ensures a constant spread width. When turning, turn clockwise in order to maintain a constant spinner speed.



CALIBRATION

To calibrate your spreader, view this blog and accompanying explainer video on our website:

rataequipment.com/how-to-calibrate-a-spreader

If you are unable to access the internet, carefully read and perform the following instructions:

1. Place a measured amount of fertiliser in the hopper, e.g. 10kg (A).
2. Choose an aperture setting to suit the rate required for the type of fertiliser used, e.g. Setting 6 (B).
3. Obtain the desired travel speed (12 to 15 km/hr) and open the aperture to preset setting 6, e.g. 200 metres (C).
Note maintain a constant speed and coverage width, e.g. 8 metres (D).

4. Check the effective spread coverage width, e.g. 8 metres (D).

5. Measure the amount of fertiliser left in the hopper, e.g. 4kg (E).

6. Then perform the following calculations:-
Measured amount of fertiliser initially loaded in the hopper (A) 10kg
Deduct any remaining fertiliser (E) 4kg
Balance used 6kg

Multiply width of spread (D) 8 metres
By the metres travelled (C) x 200 metres
= 1,600sq. metres

Divide 10,000 by the answer (1,600) $10,000 / 1,600 = 6.30$

Multiply the sum (6.30) by the test quantity used (B) $6\text{kg (B)} \times 6.30$
= 37.80kg

The figure achieved is the sowing rate per hectare at the constant speed selected for the test.

Due to the variations of seed and fertiliser types, it is recommended the test be carried out for each product being used.

CALIBRATION SETTINGS

Calibrated at a speed of 15kph (kg/ha)

SETTING	1	2	3	4	5	6	7
Urea	-	-	11.00	27.50	44.83	63.30	82.50
Super	-	-	19.30	44.00	77.00	112.80	140.30
DAP	-	-	19.30	35.80	57.80	79.80	104.50

Calibrated at a speed of 20ph (kg/ha)

SETTING	1	2	3	4	5	6	7
Urea	-	-	7.50	20.00	32.50	50.00	62.50
Super	-	-	20.00	42.00	62.50	82.50	102.50
DAP	-	-	10.00	25.00	40.00	60.00	75.00

Note: these calibrations are a guide only and should be checked to confirm accuracy.

SAFETY INSTRUCTIONS

1. Rata Industries Group Ltd takes no responsibility for damage/s to people or property caused by the inappropriate or abnormal use of any of its products.
2. Carefully read and take note of the following warnings before attempting to operate the equipment.

Warning: Ensure the spreader tow hitch is in good repair and fit for towing.

Warning: Check that all moving parts are in good repair and that all the fasteners are correctly tightened.

Warning: Never allow any person to ride on the spreader.

Warning: Never tow the spreader with the spinner drive engaged at a speed greater than 20kph. **Note** Maximum towing speed with the drive **disengaged** is 30kph.

Warning: Do not exceed the maximum weight/capacity specified by the manufacturer of the towing vehicle.

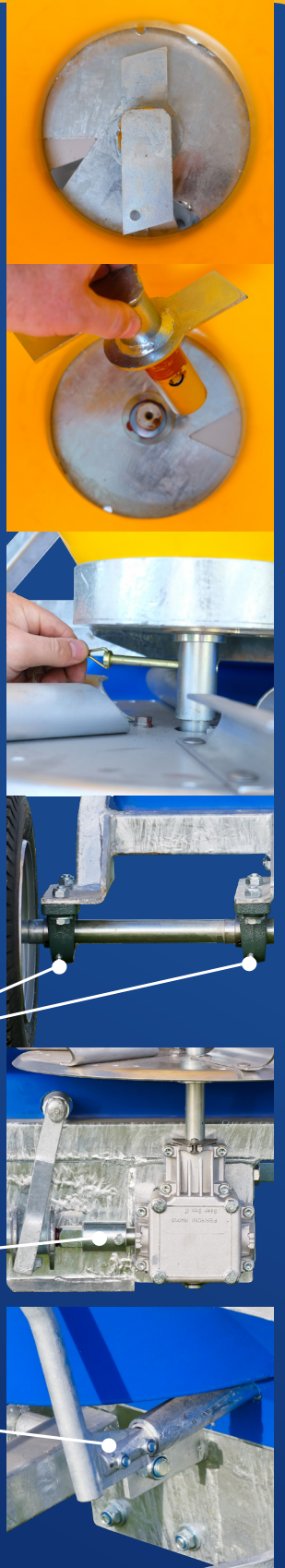
Warning: Obey all road rules and regulations while transporting the implement on the road.

Warning: Foreign objects can cause extensive damage to the machine and result in injury to the operator. Make sure that the contents of the hopper are clean and free of debris and foreign objects before use.

Warning: Before using the spreader the operator should ensure that this manual is read and fully understood.

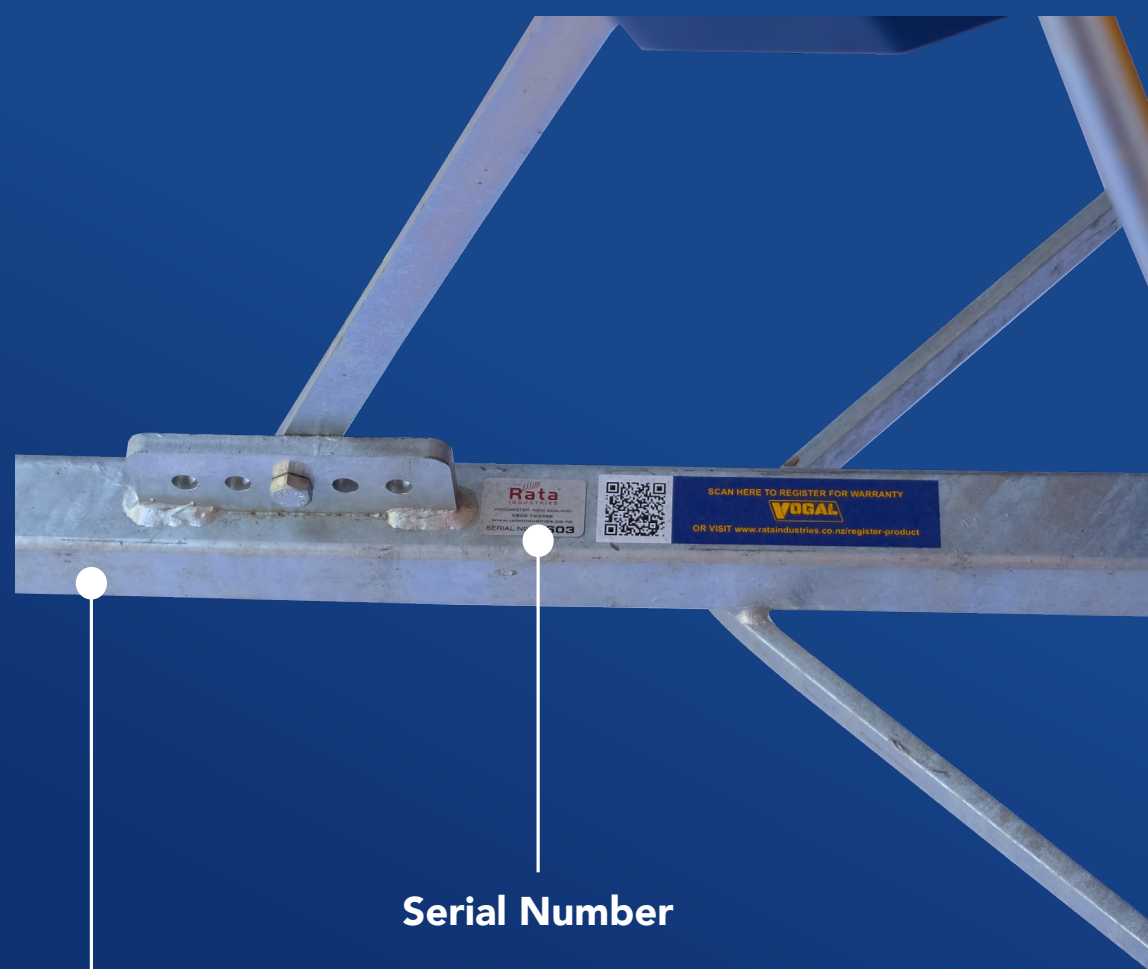
MAINTENANCE

1. Maintenance should be undertaken regularly, good maintenance extends the life of the spreader.
3. Open the aperture and clean around the aperture blades and holes.
4. Periodically remove the agitator by removing the pin located under the hopper.
5. Lift the agitator, clear of the shaft and remove any residue, grease and replace the agitator. Ensure the retaining pin is refitted and held in place by the spring clip.
6. Check the oil level in the gearbox. To check, turn the spreader on its side, remove the filler plug located in the base, check that the oil is level with the rim of the hole, top up if necessary.
7. Change the gearbox oil (EP 90) every six months with normal use or every three months under extreme conditions. The quantity of oil required is 500ml.
8. Check the wheel bearings for play and pack grease every six months. Grease at the grease points indicated.
9. Check the condition of the engagement mechanism and grease daily. Use the following procedure: engage the drive, and then pump grease into the grease point.
10. Check the condition of the drive engagement lever and the plastic liner tube.



REPLACEMENT PARTS

1. To order replacement parts please quote the spreader model, serial number and date of purchase.
2. The serial number is located on the spreader tow bar as shown below.
3. The following pages detail the replacement parts available.



ITEM	PART NO.	DESCRIPTION	QTY
	SP100-010	Towbar	1
	2801	Hub Cap	2

ITEM	PART NO.	DESCRIPTION	QTY
	4156	M6x16 Bolt Zinc	2
	4157	M6x16 Coach Bolt S/S	12
	4187	M6 Washer Spring S/S	12
	4192	M6 Washer (12x1) S/S	12
	4254	M8 Nut Nyloc Zinc	3
	4258	M8x16 Bolt S/S	3
	4266	M8x16 Bolt Zinc	2
	4272	M8x50 Bolt Zinc	1
	4280	M8 Washer Spring S/S	3
	4286	M8 Washer (19x1.6)	1
	4284	M8 Washer (16x1.2) S/S	3
	4363	M10x35 Bolt & Nut Galv	2
	4365	M10x35 Bolt Zinc	2
	4375	M10x55 Bolt Zinc	2
	4359	M10x30 Bolt & Nut Galv	3
	4378	M10x65 Bolt Zinc	1
	4379	M10x70 Bolt Zinc	2
	4384	M10x120 Bolt Zinc	4
	4390	M10 Washer Spring Galv	3
	4395	M10 Washer Square Galv (50x50x3)	1
	4396	M10 Washer (21x1) Zinc	2
	4399	M10 Washer (24x3) HD Zinc	5
	4453	M12 Nut Nyloc Zinc	12
	4458	M12x25 Bolt Zinc	4
	4462	M12x30 Bolt Zinc	2
	4465	M12x35 Bolt Zinc	2
	4468	M12x40 Bolt Zinc	4
	4499	M12 Washer (28x3) HD Zinc	2
	4655	M16 Nut Nyloc Zinc	2
	4684	M16x180 Bolt & Nut Galv	1
	4688	M16 Washer Spring Zinc	1
	4690	M16 Washer (35x3) HD Black	2
	5008	Rivet 6-8 73 ASL	11
	5049	Grease Nipple M10x1.0 Straight	1
	4152	M6 Nut Nyloc Zinc	2
	4150	M6 Nut S/S	12
	1226	Coupling WBB 2000 1 7/8	1

REPLACEMENT PARTS

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
1	SP100-035	Pointer	1	
2	SP102-004	Spinner Disc	1	3 x M8x16 SS Bolts
3	SP102-005	Spinner Fin	6	
4	SP100-015	Drive Slider	1	
5	SP100-008	Agitator	1	Recommend also purchasing item SP100-003
6	SP100-112	Shutter Lever	1	
7	SP100-003	Agitator Bush	1	Consider also item 5042S/S
8	SP100-016	Drive Stub	1	Bolt - M8x50 ZP & Nyloc Nut Grease Nipple - p/n 5054A
9	SP100-007	Drive Axle	1	Consider also item SP100-016
10	1800	Hopper & Lid Yellow	1	Hoppers and lids also available separately
11	2120	Gearbox RV010	1	
12	1944	Moving Shutter	1	
13	2186	Non-Drive Wheel 16x650-8	1	Attaches to stub axle on frame
14	2187	Drive Wheel 16x650-8	1	Attached to end of drive axle, will likely also need item SP100-034
15	1868	Gearbox Seal	1	
16	1846	UCP206 30mm Bearing & Housing Set	2	
17	1093	D Pin	1	
18	1094	Spring	1	Grease contact surfaces (both ends) M10x65 bolt and Nyloc Nut with 24x3 Washer
19	1644	Grip Handle 22mm	1	Heat in boiling water for easier install
20	1645	Grip Handle 25mm	1	
21	1651	Tri Knob Female 8mm	1	
22	1572	Wheel/Gearbox Bearing	2	Standard 6205 bearing
23	1876	Wheel Bearing Seal	1	
24	SP100-011	Towbar Adjuster	1	
25	SP100-037	Hopper Side Arm LH	1	
26	SP100-037a	Hopper Side Arm RH	1	
27	5042S/S	Circlip 45mm External S/S	1	
28	SP100-014	Drive Operating Lever	1	
29	SP100-030	Shutter Lever Extension	1	
30	SP100-033	Drive Engage Liner Tube	1	
31	SP100-036	Index Box	1	
32	SP100-038	Front Hopper Bracket	1	
33	SP100-114	Drive Handle	1	
34	SP136-029	Towbar Bush Liner	1	
35	1810	Spinner Shield Blue	1	

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
36	SP100-034	Drive Axle Key	1	
37	SP100-041	Hooper Cross Stay	1	
38	1679	Gearbox Shaft Felt Washer	1	Oil soak before install
39	1901	Gearbox Shaft Gaurd	1	





Vogal Spreadmax EX120 Spreader User Manual 2022

User manuals are current until it is necessary for us to update them & may be current for several years.

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