



MAG 45 SPREADER USER MANUAL

45 LITRE MAGNESIUM SPREADER



0800 4 VOGAL (0800 486 425)

E: sales@rataequipment.com **W:** www.rataequipment.com

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
- 13 Parts Diagram

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

With its compact size, the Mag 45 is designed primarily for the application of causmag, although the dual port triangular discharge apertures allow it to also successfully spread grass seed and other various types of fertiliser.

The low spinner height makes it perfect for spreading causmag and lime flour as the product is closer to the pasture hence a more concentrated application and less dust or lost product.

The wide wheel base and strong frame design of the Spreadmax Fertiliser ensure safety and stability when towed behind four wheeled ATV's.

Capacity and Dimensions

MODEL	HOPPER CAPACITY (LITRES)	HOPPER CAPACITY (KG)	OVERALL WIDTH
Mag 45	45	1x 25kg Causmag Bag	660mm
MAX ROAD SPEED WITH SPINNER UNENGAGED	GEARBOX OIL CAPACITY (LITRES)	GEARBOX OIL TYPE	WHEEL SIZE
30km	0.5	EP 80W/90	16X6.50-8

INSTALLATION

Pre-start Checks

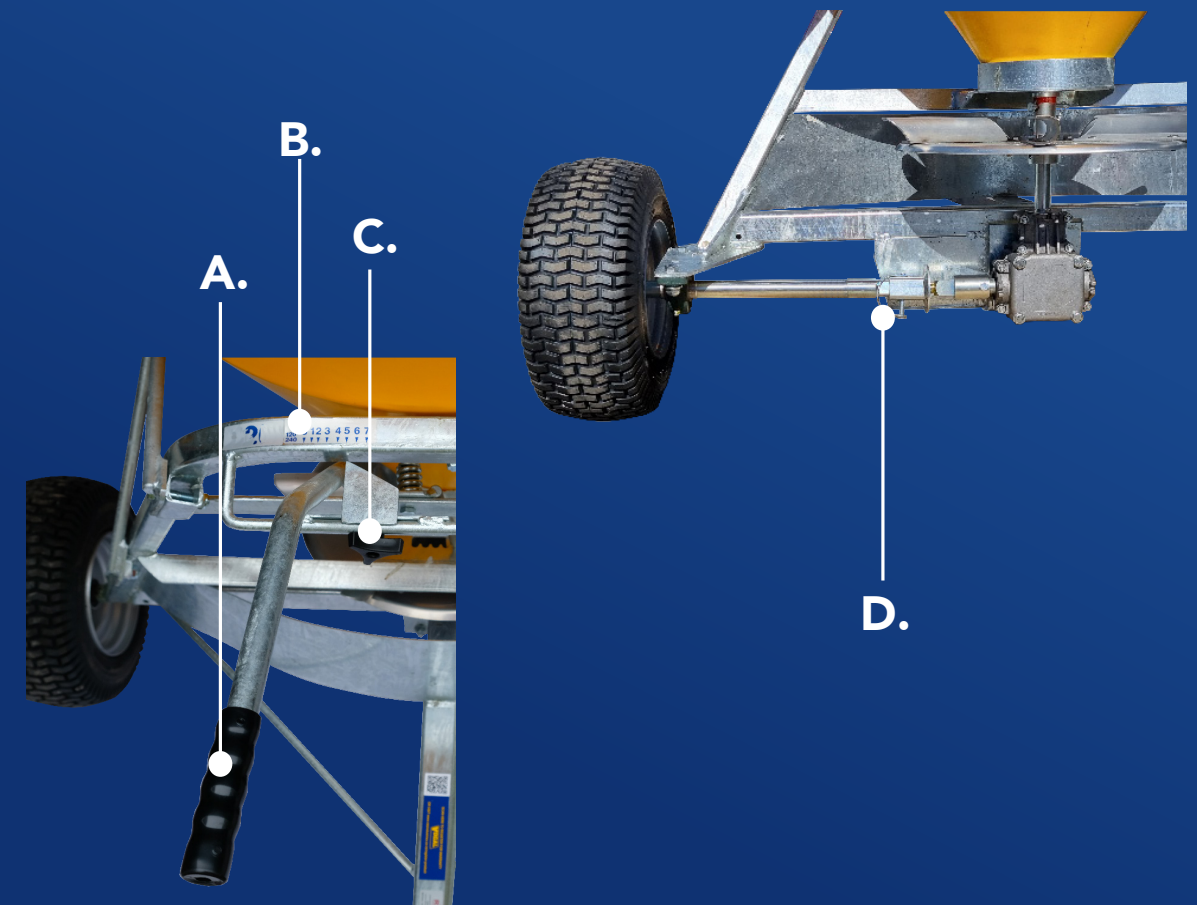
1. Ensure that the towball on the vehicle is compatible with the spreader. The spreader is designed to accept a 1-7/8" diameter towball.
2. Check the operation of all controls.
3. Check the tyre pressure (10psi minimum - 25psi maximum, dependant on load size).
4. Check the condition of the tyres. Look for signs of wear, cuts and impact damage.
5. Check the free operation of the shutter lever.
6. Check the condition of the hopper and lid.
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. Before filling the hopper, set the flow from the hopper to the desired position by moving the lever (A) to the setting required (B) and locking it into place with the tri knob (C).
2. Place the shutter lever (A) in the zero position and fill the hopper with the material to be spread.
3. Drive to the area requiring the fertiliser, engage the D pin (D) to the **IN** position and re-lock the D pin to engage the drive. Obtain desired spreading speed and open shutter lever (A) until lever hits the stop (C).
4. 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.

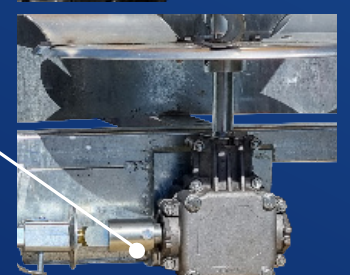
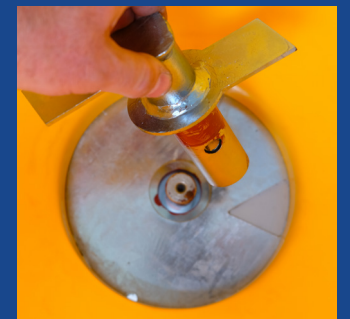
Warning: Obey all road rules and regulations while using the implement on the road.

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.
2. Check the wheel bearings for play and pack grease every six months.
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. Grease the drive wheel bearing at the grease point 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.



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.



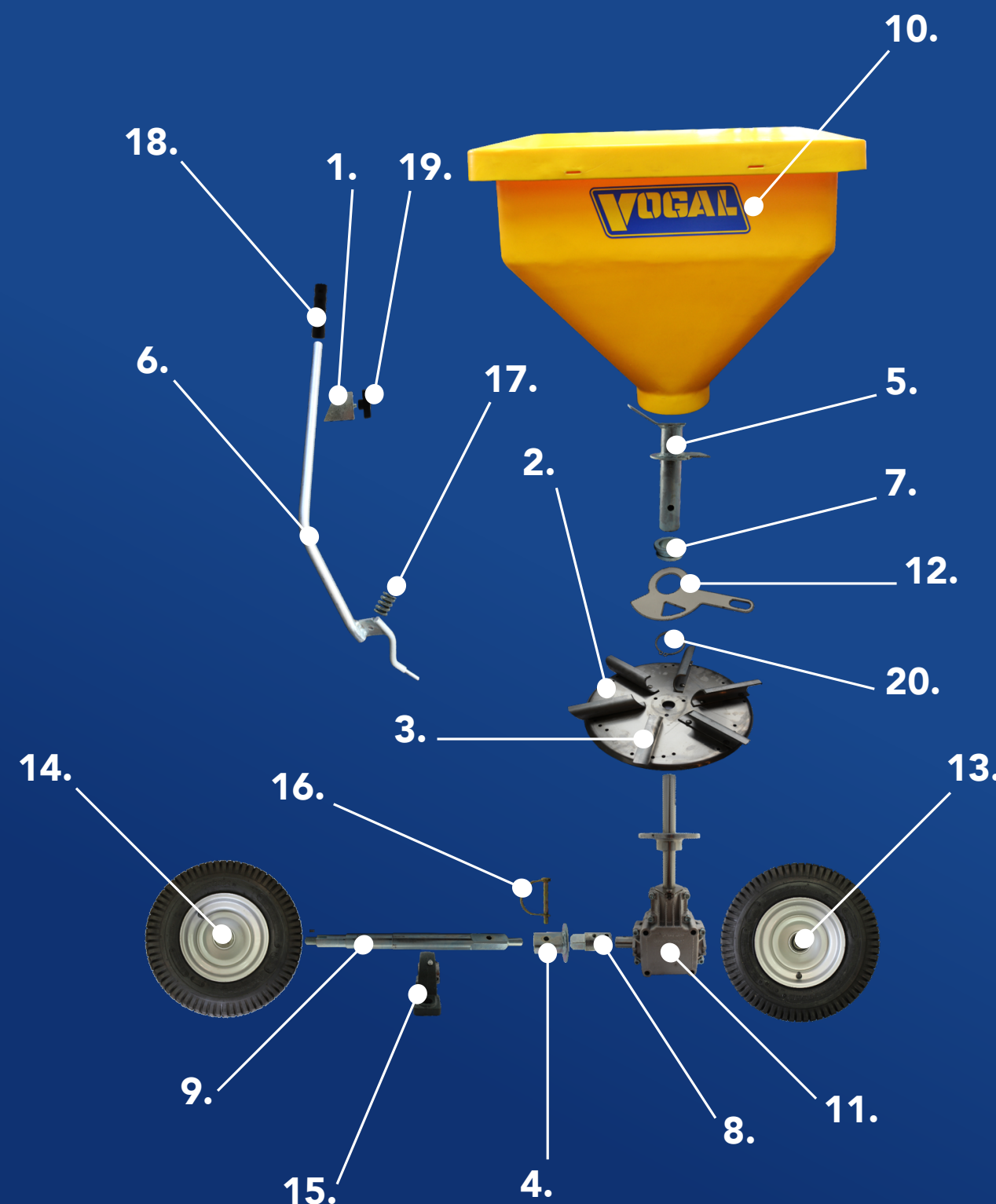
PARTS DIAGRAM

Mag 45 Parts List

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	1
	4258	M8x16 Bolt S/S	3
	4272	M8x50 Bolt Zinc	1
	4280	M8 Washer Spring S/S	3
	4282	M8 Washer HD Zinc	1
	4284	M8 Washer (16x1.2) S/S	3
	4353	M10 Nut Nyloc Zinc	5
	4355	M10x25 Bolt Galv	3
	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)	3
	4398	M10 Washer (24x3) HD Galv	3
	4399	M10 Washer (24x3) HD Zinc	1
	4453	M12 Nut Nyloc Zinc	2
	4468	M12x40 Bolt Zinc	2
	4499	M12 Washer (28x3) HD Zinc	2
	4655	M16 Nut Nyloc Zinc	2
	4690	M16 Washer (35x3) HD Black	2
	5049	Grease Nipple M10x1.0 Straight	1
	4152	M6 Nut Nyloc Zinc	2
	4150	M6 Nut S/S	12

Mag 45 Parts List Cont.

ITEM	PART NO.	DESCRIPTION	QTY	NOTES
	SP122-001	Main Frame	1	
1	SP100-017	Pointer	1	
	SP100-034	Drive Axle Key	1	
2	SP102-004	Spinner Disc	1	
3	SP102-005	Spinner Fin	6	
4	SP121-006	Drive Slider	1	
5	SP122-006	Agitator	1	Recommend also purchasing item SP100-003
6	SP122-012	Shutter Lever	1	
7	SP100-003	Agitator Bush	1	Recommend also purchasing item 5042S/S
8	SP100-016	Drive Stub	1	Bolt - M8x50 ZP & Nyloc Nut Grease Nipple - p/n 5054A
9	SP122-007	Drive Axle	1	
10	1795	Hopper & Lid Yellow	1	Hoppers and lids also available separately
11	2121	Gearbox RV010	1	
12	1927	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
	2801	Hub Cap	2	
15	1846	UCP206 30mm Bearing & Housing Set	1	
16	1093	D Pin	2	
17	1094	Spring	1	Grease contact surfaces (both ends)
18	1644	Grip Handle 22mm	1	Heat in boiling water for easier install
19	1651	Tri Knob Female 8mm	1	
	1679	Felt Washer	1	Oil soak before install
	1226	Coupling WBB 2000 1 7/8	1	
20	5042S/S	Circlip 45mm External S/S	1	





Vogal Mag 45 Spreader User Manual 2022

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

0800 4 VOGAL (0800 486 425)

E: sales@rataequipment.com **W:** www.rataequipment.com