

OWNER'S MANUAL



MAGMASTER 65 SPREADER



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PARTS & SUPPORT

For parts and service support, contact your authorised Yelo store or visit our website for store locations. If you need further assistance, we are only a phone call or email away. Parts list included.



SAFETY PRECAUTIONS

MAGMASTER 65

AN IMPORTANT MESSAGE FOR OWNERS & OPERATORS OF YELO ATTACHMENTS/ACCESSORIES

Be warned of the dangers of loading your ATV or other vehicle in excess of its carrying capacity. It is important to understand that any loads or attachments whether fastened to or placed on a vehicle or ATV will alter the stability or handling characteristics of that vehicle or ATV. Spreader hoppers or other equipment must be filled only to a level where the gross weight is within the load limit of the ATV or other vehicle.

Safety is a primary concern in the design, manufacture, sale, and use of spreaders and other equipment. As manufacturers of spreaders and other equipment we want to confirm to you, our customers, our concern for safety. We take this opportunity to remind you about the simple, basic and common sense rules of safety when using spreaders and other equipment. Failure to follow these rules can result in severe injury or death to operators and bystanders.

It is essential that everyone involved in the assembly, operation, transport, maintenance and storage of this equipment be aware, concerned, prudent and properly trained in safety.

This also applies to equipment that is loaned or rented to someone who has not read the owner's manual and is not familiar with the operation of application equipment.

- NEVER EXCEED THE LOAD LIMIT CAPACITY OF THE ATV OR OTHER VEHICLE.
- ALL ATV AND TRAILED EQUIPMENT TYRES SHOULD BE INFLATED TO MANUFACTURERS RECOMMENDED OPERATING PRESSURES.
- PLEASE NOTE THAT FILLING THE SPREADER HOPPER OR OTHER EQUIPMENT COMPLETELY AND OR THE ATTACHMENT OF ADDITIONAL EQUIPMENT TO THE ATV MAY EXCEED THE ATV'S MAXIMUM LOAD CAPACITY AND IT IS NOT RECOMMENDED TO EXCEED MANUFACTURERS GUIDELINES
- CARGO SHOULD BE PROPERLY DISTRIBUTED AND SECURELY ATTACHED.
- REDUCE SPEED WHEN CARRYING CARGO OR PULLING A TRAILER OR TRAILED APPLICATION EQUIPMENT AND ALLOW GREATER DISTANCE FOR BRAKING.
- NEVER ALLOW ANYONE TO RIDE ON YOUR SPREADER OR OTHER EQUIPMENT.
- ALWAYS FOLLOW THE INSTRUCTIONS IN THE OWNER'S VEHICLE MANUAL FOR CARRYING CARGO OR PULLING A TRAILER.
- PROPER MAINTENANCE IN LINE WITH MANUFACTURER'S RECOMMENDED MAINTENANCE PROCEDURES IS ESSENTIAL.
- BEFORE APPLYING CHEMICALS, READ THE LABEL OF THE CHEMICAL MANUFACTURER OR SUPPLIER FOR PERSONAL PROTECTIVE EQUIPMENT AND OPERATE AS RECOMMENDED.
- THE SAFETY OF ALL CHEMICALS USED IN AGRICULTURE IS UNDER THE JURISDICTION OF A GOVERNMENT AGENCY, IE N.Z. MINISTRY FOR THE ENVIRONMENT; USA ENVIRONMENTAL PROTECTION AGENCY. FURTHER LOCAL GOVERNMENT OR STATE LAWS MAY APPLY.

SAFETY PRECAUTIONS

Before attempting to install or operate the equipment, read and understand the manual thoroughly. **Failure to comply with this instruction constitutes improper use and will invalidate the warranty.**

Throughout this manual there are highlighted text boxes containing warnings, cautions and notes.

Warnings are mandatory instructions to prevent serious injury or permanent damage.

Cautions are advisory instructions to ensure reliable operation of the equipment.

Notes are for convenient operation.

- Do not overload your spreader. The maximum permissible payload is 40 Kg.
- Never use dirty product or product with stones or lumps.
- Ensure that your towing vehicle is adequate for the task. The maximum tare weight is 97 Kg.
- Never allow anyone to ride on the spreader.
- **Keep the spreader in good condition.** Cleanliness and maintenance are essential for safe and trouble free operation.
- **Never leave product in the hopper or store the spreader without cleaning it.**

YELO MAGMASTER 65

OWNER'S MANUAL

(Pt.No.2400-6600)

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WARNING

Magnesium Oxide will set hard if exposed to air, it is of utmost importance that the spreader be cleaned of all product even if stored for a short time. Load the spreader only with the amount required to be spread and clean all traces of product from the machine after use.

Failure to do so will void warranty.

INTRODUCTION

Congratulations. You have just purchased an advanced spreader from Yelo. Yelo is committed to providing you, the farmer, with quality applying systems.

DESCRIPTION

The Yelo **MagMaster** is a ground-driven spreader designed specifically for the application of powdered Magnesium Oxide. The uniquely designed translucent non-corrosive polyethylene hopper is specially profiled for good product flow, ease of filling and ensuring almost all product is emptied. The distinctive polyethylene shroud guides powder away from the frame, shaft and gearbox assembly. A high-quality stainless steel agitator and shutter ensure even flow of product to the spinner. A unique spinner design ensures optimal spread of fine powders such as Magnesium Oxide. The heavy-duty galvanised frame is fitted with turf tyres as standard equipment. The drive train uses high quality steel and a double sealed self-aligning bearing and heavy-duty gearbox for maximum durability. While seated, the operator has access to the control handle which controls the opening and closing of the shutter. The supplied pin is placed through the axle shaft which engages the gearbox and this rotates the spinner.

Specifications

(Specifications subject to change without notice)

Dry Weight	57 Kg
Dimensions	W1330mm, H1220mm, L1400mm
Capacity	65 litre (40Kg Magnesium Oxide)
Drive	Ground driven (single wheel)
Wheels	18x750x8 4-Ply turf tread (tubeless)
Tyre pressure	12PSI (82Kpa)
Clutch	Removable pin
Control	Adjustable stop pin sets max output, control handle opens shutter
Agitator	Mechanical arm, stainless steel
Spinner	Stainless steel
Hopper	Electro-Galv Steel
Hopper cover	Non-corrosive polyethylene, designed for good product flow, ease of filling and ensuring almost all product is emptied.
	Polyethylene plastic (65L)
Frame	Galvanised steel
Gearbox	Heavy duty with double sealed bearings
Gearbox oil	300ml SAE30
Axle Bearings	Sealed ball races
Axle grease	General Purpose
Application Rate	Up to 13g/m ² (nominal, Magnesium Oxide @ 10 kph)
Spread width	3m (nominal, Magnesium Oxide @ 10 Kph)
Towing speed	10 Kph (Maximum recommended)

NZ

Order Information

Yelo MagMaster 65

P/N 3002

WARRANTY

1 WARRANTY AND LIABILITY

Use of the equipment

- 1.1 You must satisfy yourself as to the suitability of the equipment for your intended use(s) of the equipment.

Your relationship with the retailer

- 1.2 Where you consider you have a warranty claim (or any other claim) in relation to the equipment, you must contact the retailer who sold you the equipment, not RGL directly. The retailer is responsible for liaising with RGL in respect of your claim.

Warranty

- 1.3 RGL warrants to the original purchaser that the equipment is sold free from defects in materials and workmanship for a period of 12 months from date of first retail sale (6 months from date of first retail sale if the equipment is sold in the U.K.) subject to the terms set out below.
- 1.4 RGL will at its option repair or replace the defective equipment (or part of the equipment) or notify the retailer of the equipment to refund the purchase price for such defective equipment to you in the event of a breach of this warranty, subject to the terms set out below.

Liability

- 1.5 Except for the warranty set out in clause 1.2 above, all warranties and representations (including those expressed or implied by law) in respect of the equipment or advice relating to the equipment provided to you by RGL are excluded to the extent permitted by law.

- 1.6 Notwithstanding anything else in this manual, RGL's maximum liability to you (in the event that such liability exists) in respect of any breach of warranty, any matter set out in this manual, or for defective equipment or advice relating to the equipment provided is limited at RGL's option to:

- (a) repairing or replacing the equipment (or part of the equipment); or
- (b) notifying the retailer of the equipment to refund the price for the equipment paid by you.

- 1.7 Notwithstanding anything else in this manual, in no event will RGL be liable, whether in contract, tort (including negligence) or otherwise:

- (a) where you have altered or modified the equipment, misused or misapplied the equipment, or the equipment has been subjected to any unusual, excessive or non-recommended use, service or handling (including as set out in this manual);
- (b) where the equipment is not transported, stored, handled or used in accordance with any directions given by RGL (or the retailer) to you (including as set out in this manual);
- (c) where the equipment:
 - (i) has been subject to neglect, accident or hireage, or the damage arises from fair wear and tear, battery damage or chemical attack;
 - (ii) has been built to a customer's specifications; or

(iii) has been dismantled, repaired or serviced other than by an authorised service agent of RGL;

(d) for loss or damage caused by any factors beyond RGL's control; or

(e) for any loss of profit or revenue, or for any special, indirect, incidental or consequential damage, loss or injury of any kind suffered by you.

1.8 Where RGL elects to repair or replace the equipment it will use reasonable endeavours to do so as soon as practicable but will not be liable for any delay in doing so.

1.9 You agree that the transactions entered into between you and the retailer (and RGL) are for the purposes of trade and that, having regard to all relevant circumstances of the transactions, it is fair and reasonable that the provisions of the Consumer Guarantees Act 1993 (NZ) do not apply to those transactions to the fullest extent permitted by law.

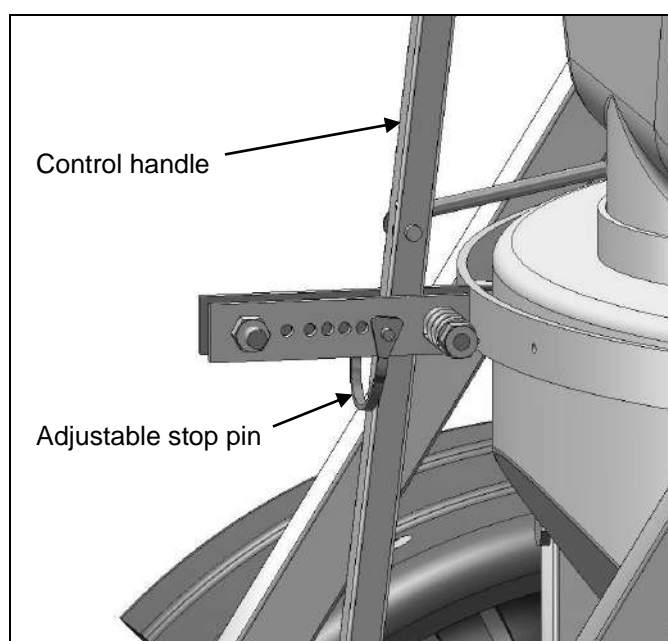
OPERATION

The product to be spread is placed in the hopper. When the spreader is towed forward, the right hand wheel drives through the pin clutch and gearbox to turn the spinner in a clockwise direction. When the control handle is pulled forward, the shutter at the bottom of the hopper rotates to an open position. The size of the opening is set by the adjustable stop pin, which locates into one of five pre-set positions.

An extension of the spinner boss is connected to a stainless steel agitator arm inside the bottom of the hopper. This agitator ensures that product flows continuously out of the hopper to the spinning disk.

After calibration, fill the hopper to the required level and commence spreading. Do not overfill your hopper; the maximum permissible payload is 40Kg. To prevent damage to product, disconnect the axle drive pin to the gearbox until spreading is to be commenced.

To prevent the shutter from opening during travel to the paddock, move the adjustable stop pin to the rear-most hole. This will lock the control handle in place and keep the shutter closed. See following diagram.



Adjustable stop pin shown in rear-most hole.

ASSEMBLY

1. Slide the drawbar into the frame and secure using 1 x M12x65 bolt and Nyloc nut.
2. Slide the Control handle down between the 2 indicator brackets and fit in place with 1x M10x50 bolt and Nyloc nut, fit 10mm washer between the arm and the bracket welded to the main frame.
3. Find the shutter arm. Attach this arm to the control handle and shutter as shown to the right.

NB: Keep area around the handle and indicator bracket clean and lubricated after every use.



CALIBRATION

Magnesium Oxide powder is applied at a rate determined by the number of cows to be treated. When spreading this product, calculate the weight of powder to be applied and apply this amount with the adjustment stop pin in position 1-5. Use the table below to work out which setting is most appropriate.

Magmaster 65L Nominal application rates (grams/m²) for Magnesium Oxide spread at 10Kph

	Adjustment Stop Pin	Application Rate (g/m ²)
Low	1	1.6
	2	2.7
	3	3.8
	4	8.2
High	5	12.6

NOTE

Because of variations in product characteristics, speedometer calibration and driving speed, the information in the calibration guide should be regarded as a starting point only.

OPERATING THE SPREADER

When the spreader has been correctly calibrated, the hopper may be filled to the required level and spreading commenced.

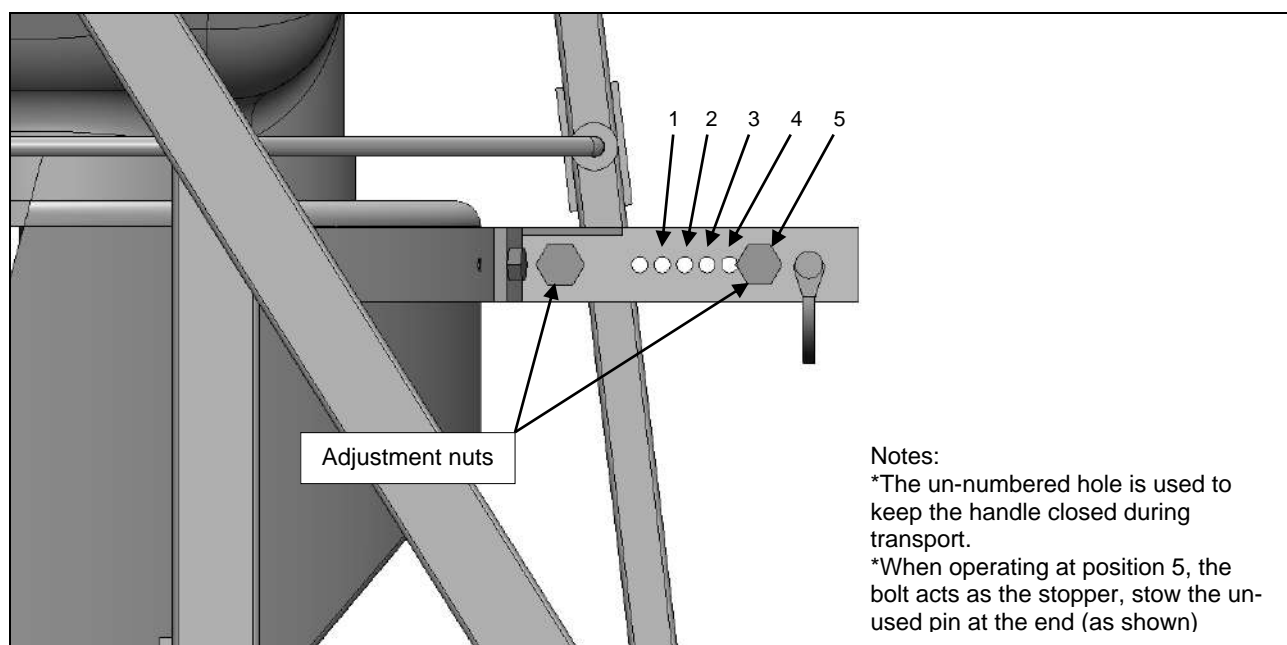
To reduce agitator damage to product and to ensure that product is not forced past the agitator shaft when towing the spreader to the area to be treated, the drive to the gearbox should be disconnected by removing the pin from the drive axle.

WARNING

To prevent damage to the spreader do not tow the spreader at speeds in excess of 15 Kph during spreading or transit.

To prevent inadvertent operation of the shutter while the spreader is in transit it is recommended that the adjustable stop pin be moved to the rear-most hole.

To prevent the shutter from vibrating closed when the spreader is operated over rough ground, the control handle friction may be increased by tightening the two adjustment nuts at either end of the index plate.



WARNING

Due to the nature of Magnesium Oxide it is **not** recommended that the spreader be filled with product if the spreader is to be towed a large distance to the paddock, as the product will pack down and could potentially damage the agitator.

MAINTENANCE

WARNING

Magnesium Oxide will set hard if exposed to air, it is of utmost importance that the spreader be cleaned of all product even if stored for a short time. Load the spreader only with the amount required to be spread and clean **all** traces of product from the machine after use.

Failure to do so will void warranty.

The following maintenance actions are mandatory for reliable use of the spreader.

Before Use

Check the tyre pressures and charge with air as required. The correct pressure is 12PSI (82Kpa).

Disengage the gearbox drive pin then turn the spinner by hand to ensure it is free to turn without interference.

Check fasteners around the gearbox, shaft, mudguards and hopper for tightness.

Check the hopper to ensure that no debris is inside.

If the spreader has not been used for some time, grease the bearings (pay particular attention to the pin clutch bearing).

Check the gearbox for leaks. If leaks are detected it will be necessary to drain and replenish the gearbox with 300ml of SAE 30 oil.

CAUTION

To replenish the gearbox of oil, the spreader may be inverted to place the filler plug uppermost. However, in doing so extreme care must be taken to prevent damage to the spinner and deflectors.

After Each Use or Daily When In Use

Remove all traces of product from the spreader by brushing or washing. Pay particular attention to areas where product has accumulated and built up. Remove by scraping if necessary taking care not to damage the surface finish of the spreader or its components.

NOTE

Cleanliness of the Magmaster is of the utmost importance, all moving part must be kept clean and clear of any build up of material, failure to do so could cause irreparable damage to the machine

If washing, do not direct high-pressure water onto the gearbox, axle or wheel bearing seals.

After washing, grease the bearings (three places) and apply water-displacing fluid such as WD 40 or LPS3 to all metal parts.

Check for damaged or worn components and replace as required.

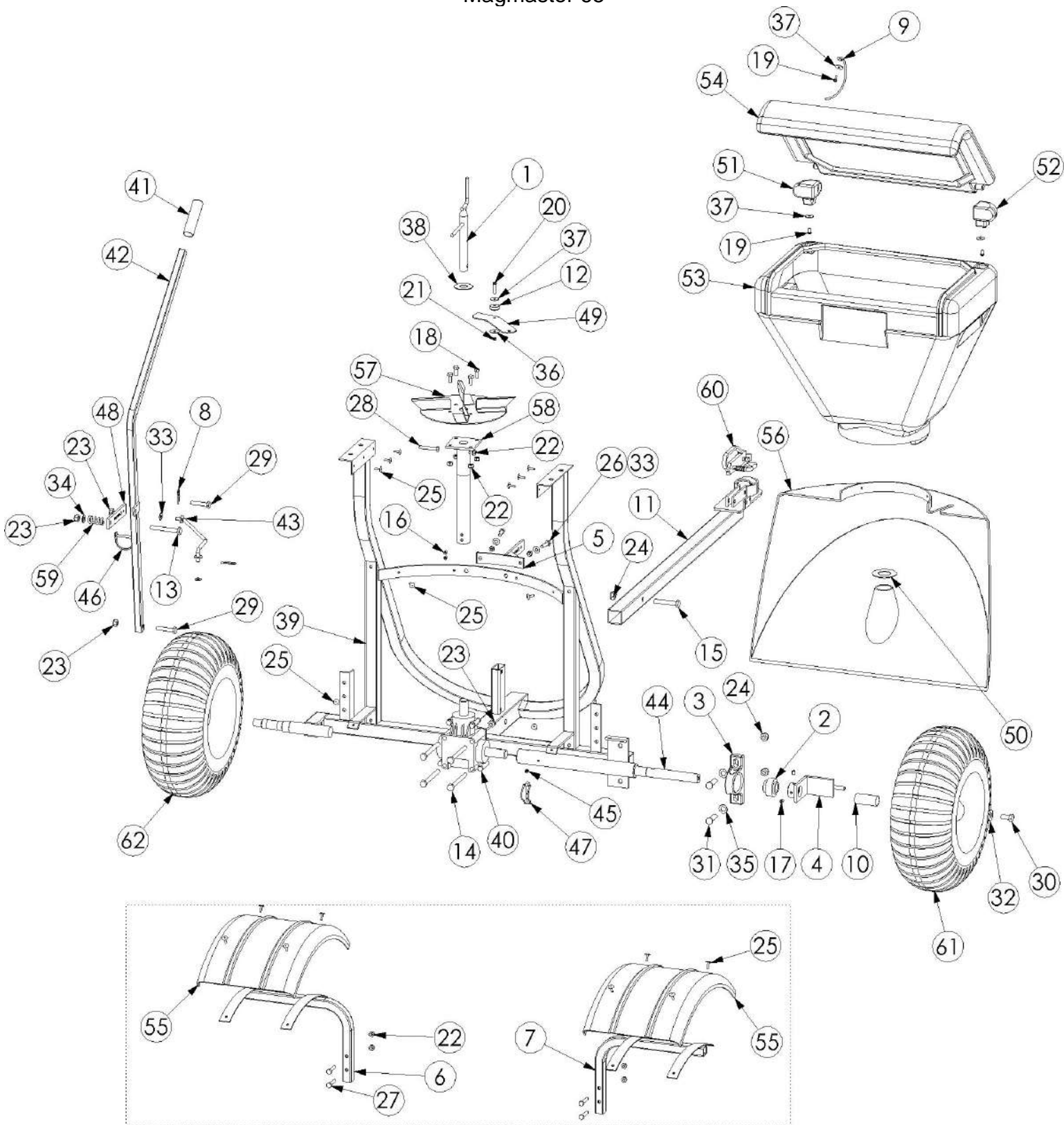
HINTS

When greasing the pin clutch bearing in the axle assembly, leave the pin in place. This will assist the grease to fully enter the scroll in the axle and prevent the axle from being displaced if the bearing housing should be over pressurised with grease.

If the drive axle is removed from the axle housing for any reason care must be taken to ensure that both the axle scroll and bronze bush are clean and free of debris before reassembly.

To remove the agitator from the hopper, remove the bolt, which attaches the agitator shaft to the spinner flange assembly then withdraw the agitator from inside the hopper. When ordering replacement parts always quote the spreader model and the part number of the required part.

EXPLODED DIAGRAM
Magmaster 65



PARTS LIST
Magmaster 65

Item No.	QTY.	e9 part no	e9 description
1	1	1036-8230	Agitator-Spreader-Magmaster-SS
2	1	1140-1200	Bearing-Ball-Pillow Block-Drive Axle-Spreaders
3	1	1140-4000	Bearing-Housing-Pillow Block-Drive Axle-Spreaders
4	1	1300-4100	Bracket-Drive-130L/MAG/165L-Spreaders-ZP
5	1	1300-4550	Bracket-Handle Position-Index-RH-MM65-ZP
6	1	1300-6800	Bracket-Mudguard-CDIT300/400/MM165-LH-GL
7	1	1300-6801	Bracket-Mudguard-CDIT300/400/MM165-RH-GL
8	2	2050-7300	Clip-R Type-Pin-2.5MM-ZP
9	1	2230-1100	Cord-Arrestor-Hinged Spreader Lid
10	1	2250-1000	Cover-Axle Shaft-55mm Long-Spreader 130L/165L/Magmaster-SS
11	1	2550-1300	Drawbar-Magmaster 65-GL
12	1	2700-0750	Fabricated-Plastic-Round-OD 25x9mm Long-Drilled-UHMWPE
13	1	2840-1080	Fastener-Bolt&Nut-Hex-8.8 Grade-M10x80-ZP
14	4	2840-1110	Fastener-Bolt&Nut-Hex-8.8 Grade-M10x110-ZP
15	1	2840-1265	Fastener-Bolt&Nut-Hex-8.8 Grade-M12x65-ZP
16	2	3010-0810	Fastener-Grub Screw-Socket Head-M8x10-Stainless
17	2	3010-5200	Fastener-Grub Screw-Socket Head-3/8x3/8-Stainless
18	4	3075-0820	Fastener-Set-Screw-Hex-304 Grade-M8x20-Stainless
19	3	3090-0512	Fastener-Machine-Screw-Pan-M5x12-Phillips-Stainless
20	1	3090-0530	Fastener-Machine-Screw-Pan-M5x30-Phillips-Stainless
21	1	3130-0105	Fastener-Nut-Nyloc-M5-Stainless
22	11	3170-0008	Fastener-Nut-Nyloc-M8-ZP
23	7	3170-0010	Fastener-Nut-Nyloc-M10-ZP
24	3	3170-0012	Fastener-Nut-Nyloc-M12-ZP
25	18	3240-0018	Fastener-Rivet-Blind-Truss Head-3/16x18mm-Aluminium
26	2	3290-0830	Fastener-Set Screw-Hex-8.8 Grade-M8x30-ZP
27	4	3290-0840	Fastener-Set Screw-Hex-8.8 Grade-M8x40-ZP
28	1	3290-0850	Fastener-Set Screw-Hex-8.8 Grade-M8x50-ZP
29	2	3290-1050	Fastener-Set Screw-Hex-8.8 Grade-M10x50-ZP
30	1	3290-1225	Fastener-Set Screw-Hex-8.8 Grade-M12x25-ZP
31	2	3290-1240	Fastener-Set Screw-Hex-8.8 Grade-M12x40-ZP
32	1	3310-5012	Fastener-Washer-Flat-Heavy-M12x32x3-Galv
33	4	3310-6008	Fastener-Washer-Flat-M8-ZP
34	1	3310-6010	Fastener-Washer-Flat-M10-ZP
35	2	3310-6012	Fastener-Washer-Flat-M12-ZP
36	1	3310-9104	Fastener-Washer-Flat-3/16"x1"-ZP
37	4	3310-9210	Fastener-Washer-Flat-3/16"x7/8"x1.5-Grade 304-Stainless
38	1	3310-9750	Fastener-Washer-Flat-23.5x2"x1.5-Grade 316-Stainless
39	1	3500-5800	Frame-Spreader-Magmaster-GL
40	1	3800-2000	Gearbox-Ferroni-RV12-2-6-Ratio 1 to 3.25
41	1	3865-3800	Grip-Handle-7/8"-PVC-Black-Plastic
42	1	4050-1300	Handle-Magmaster 65-ZP
43	1	5050-7920	Linkage-Shutter-Magmaster 65-ZP
44	1	5200-6700	Machined-Axle-Gearbox Drive-Magmaster-Black
45	1	5270-0003	Nipple-Grease-Straight-Short-M6-ZP
46	1	6100-4820	Pin-Locking-6x50mm-ZP

47	1	6100-4840	Pin-Locking-8x45mm-Snapon Pipe-ZPG
48	1	6500-4201	Profiled-Index-Plate-MAG/130L/165L Spreader-ZP
49	1	6500-7800	Profiled-Shutter-Magmaster-Spreader-Stainless
50	1	6500-9000	Profiled-Washer-Spinner Shaft-34.9x67x2mm-Stainless 304
51	1	7500-2000	Rota-Hinge-LH-SM70/75
52	1	7500-2010	Rota-Hinge-RH-SM70/75
53	1	7500-2180	Rota-Hopper-Spreader-Magmaster -Yellow-MDPE
54	1	7500-2520	Rota-Lid-Hopper-SM70/75L
55	2	7500-2590	Rota-Mudguard-Blue-MDPE-1/4 Circle
56	1	7500-2700	Rota-Shroud-Spreader Magmaster-Yellow-MDPE
57	1	8200-5000	Spinner-Magmaster 65-SS
58	1	8200-5100	Spinner-Mount-Magmaster 65-ZP
59	1	8250-1800	Spring-Compression-Crinkle Plate-ZP
60	1	8800-3800	Tow-Coupling-Handle-Double Ended-1 78 x 50mm-ZP
61	1	9200-8610	Wheel-Turf-DRILLED-DRIVE-18x750x8-Tubeless
62	1	9200-8600	Wheel-Turf-Bearing-18x750x8-Tubeless