



ROTARY MUCK SPREADERS

OPERATING & SAFETY INSTRUCTIONS

FOR SPARE PARTS GO TO
WWW.MARSHALL-TRAILERS.CO.UK

FOR MODELS:
MS45, MS60, MS75, MS90, MS105



CHARLES J. MARSHALL (ABERDEEN) LTD
CHAPEL WORKS, BUCKSBURN, ABERDEEN, AB21 9TL.

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EC DECLARATION OF CONFORMITY

WE: CHARLES J. MARSHALL (ABERDEEN) LTD

CHAPEL WORKS, BUCKSBURN, ABERDEEN, SCOTLAND, AB21 9TL.

DECLARE THAT THE PRODUCT:

MAKE: CHARLES J. MARSHALL (ABERDEEN) LTD

TYPE: MARSHALL ROTARY MUCKSPREADER

MODEL: _____

SERIAL NO: _____

CONFORMS TO THE ESSENTIAL HEALTH & SAFETY REQUIREMENTS OF 98/37/EC MACHINERY DIRECTIVE AS AMENDED BY 2006/42/EC DIRECTIVE.

PLACE OF ISSUE – CHAPEL WORKS, BUCKSBURN,
ABERDEEN, SCOTLAND, AB21 9TL.

NAME & TITLE OF AUTHORISED PERSON:

A handwritten signature in black ink, appearing to read "C. Marshall", is written over a faint, large "Marshall" watermark.

CHARLES R. MARSHALL
MANAGING DIRECTOR

DATE: _____

WE ENCLOSE OUR INSTRUCTIONS FOR THE SAFE OPERATION OF THIS MACHINE, THE WORKING OF WHICH IS FULLY UNDERSTOOD BY THE UNDERSIGNED.

CUSTOMER'S SIGNATURE: _____ DATE: _____

SAFETY INSTRUCTIONS

Important Safety advice!

1. STOP
2. THINK
3. CALL 01224 722777

Safety First: Please read and fully understand the contents of this instruction manual, if you are in any doubt whatsoever of the safe operation of this machine, please contact Charles J. Marshall (Aberdeen) Ltd on Tel. 01224 722777.

1. Guards - Ensure all guards are securely fastened in place.
2. Maintenance - Ensure the machine and tractor is completely stopped prior to carrying out any maintenance.
3. PTO Shaft - Safety is important, if you are in any doubt of how to fit the PTO shaft, please contact our service department.
4. Always apply the parking brake when the Muck Spreader is to be left unhitched from the tractor.

OPERATING INSTRUCTIONS

YOUR MARSHALL MUCKSPREADER HAS BEEN DESIGNED TO GIVE YOU LONG AND RELIABLE SERVICE. THIS CAN BE ENSURED BY FOLLOWING THE INSTRUCTIONS BELOW.

OPERATING

Operating the Muck Spreader – Open the hydraulically operated lid to allow for better access. It is advisable that you do not cover the starters at either end of the main rotor shaft with solid type muck as this will significantly increase the time the spreader will take to get started. Once you have loaded the spreader close the hydraulic lid, if the spreader is over filled this will not matter, simply place the hydraulic lever in the float position and when the spreader starts it will continue closing. Start the PTO shaft at low engine revs and increase the speed until you are satisfied with the spread rate and pattern. As the spreader continues and the flail chains get to work it will be necessary to either increase the forward speed or decrease the rotor speed to keep the same spread rate and pattern. When the load is discharged always reduce the engine revs to idling prior to shutting off the PTO shaft.

1. Always disengage PTO shaft when turning.
2. Never spread with the muck spreader lid in the open position.
3. Always couple the spreader brakes and lights up every time you use the spreader this reduces the chance of corrosion and the brake mechanism seizing due to lack of use.

BEFORE USING CHECK THE FOLLOWING:

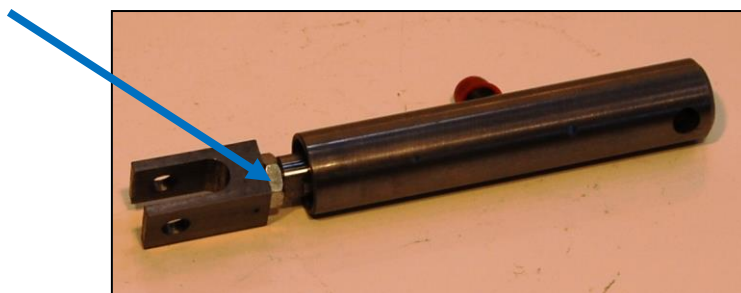
1. Ensure there is tension in the drive line and that side play does not exceed 20mm.
2. Ensure that all bolts that are not accessible when the guard is in place, particularly those securing the small drive shaft bearings, are tight.
3. Ensure that the locknuts on the chain tension adjusters are not loose.
4. Lubricate all bearings as necessary – those in the PTO shaft (one grease point in each knuckle), two on the main rotor shaft bearings and four on the input shaft bearings.
5. Ensure all nuts and bolts are secure.
6. Check the hydraulic hoses for wear or damage and ensure the couplings are clean.
7. Check the flails and flail heads for damage.
8. Drain any accumulation of water as necessary as frozen water can cause damage to the drive line.

MAINTENANCE INSTRUCTIONS

1. Hubs / Bearings must be greased regularly; we recommend they are checked after the first fourteen days work, then six monthly thereafter.
2. Tyre pressure should be checked regularly (See page 6).
3. Wheel nuts should be checked when the machine is new, then after operating for one hour, then one day and weekly thereafter. The same procedure applies if nuts have been removed and replaced.
4. Check the tow hitch for wear and replace accordingly.
5. Lights should be kept clean and if not in use for some length of time, coating with some form of oil spray is recommended.

BRAKE ADJUSTMENT: Always adjust brakes with the spreader on a completely level surface.

This can be done by loosening the nut behind the clevis, then rotating the piston, adjustment will appear from the ram. Remember to tighten the locknut when completed.



IF THE MUCKSPREADER IS NOT TO BE USED FOR A CONSIDERABLE PERIOD OF TIME THE FOLLOWING TASKS SHOULD BE CARRIED OUT TO MAINTAIN IT IN GOOD CONDITION:

1. Remove the drain cover and clean the muck spreader thoroughly with cold water at a moderate pressure. Do not replace the drain cover until the muck spreader is ready for use again.
2. Ensure the lid is in the up position before uncoupling the hose.
3. Touch-up any scraped or damaged paintwork.
4. All grease nipples should be greased and the machine run for 15 minutes to work in the lubricant.

HISTORICAL CHANGES

1. 1976 – Lid ram changed to pulling lid ram.
2. 1996 – Brakes fitted.
3. 1998 – MS/85 used 60mm bearings on input shaft up to 1998.
4. 1999 – Chain tensioning brackets on all models used a bolt on front until 1999.
5. 2001 – Larger lid fitted.
6. 2001 – Lights fitted to MS60, MS70, MS85, MS105/T & MS155/T
7. 2002 – All MS45, MS70, MS85 used splined PTO shafts up to 2002.

Part Number	Size	Maximum Weight	Speed	Max Tyre Pressure
Please note this chart is for reference only each tyre brand can have different ratings.				
083-01-26-12	26 x 1200 x 12	800kg	25km/h	20psi
083-01-100-12	10.0/80x12 10ply	1000kg	30km/h	45psi
083-01-100-15	10.0 x 15.3	1500kg	30km/h	52psi
083-01-115-15	11.5 x 15	2000kg	30km/h	52psi
083-01-125-15	12.5 x 15	2500kg	30km/h	60psi
N-A	15/70 x 18	3200kg	40km/h	75psi
083-01-15-22.5	15 x 22.5 (385/65R 22.5)	4500kg	80km/h	90psi
083-01-400R-60	400R-60x22.5	4500kg	80km/h	90psi
083-01-1555-17	15-55 x 17	2120kg	40km/h	52psi
083-01-1670-20	16/70 x 20	3000kg	40km/h	49psi
083-01-165-70	16.5 x 70 x 18	3200kg	40km/h	54psi
N-A	18 x 22.5	5800kg	80km/h	90psi
N-A	BN2 340/457-1300 x 18	2600kg	40km/h	60psi
N-A	BN3 1300 x 530 x 533	4500kg	40km/h	53psi
N-A	BN4 22/70-20	4500kg	40km/h	33psi
083-01-340-65	XP27 Radial 340/65R 18	2650kg	90km/h	72psi
083-01-400-60	400-60 x 22.5	4000kg	40km/h	51psi
083-01-550-45	550-45 x 22.5	4375kg	40km/h	41psi
083-01-560-45	560-45 x 22.5	4575kg	45km/h	58psi
083-01-560-60	560-60 x 22.5	5595kg	50km/h	58psi
083-01-500-60	500-60 x 22.5	5450kg	40km/h	41psi
083-01-550-60	550-60 x 22.5	5300kg	40km/h	44psi
083-01-445-45	445-45 X 19.5	4500kg	100km/h	100psi
083-01-335-50	355-50 X 22.5	4500kg	80km/h	100psi
083-01-184-30	18.4 x 30 14 pr	3550kg	40km/h	39psi
083-01-184-34	18.4 x 34 14 pr	3650kg	40km/h	36psi
083-01-231-26	23.1 x 26	3950kg	40km/h	36psi
083-01-281-26	28.1 x 26	6100kg	40km/h	33psi
083-01-305-32	30.5 x 32	7100kg	40km/h	39psi
083-01-750-60	750 x 60 x 30.5	8500kg	40km/h	60psi

MARSHALL PRE-DELIVERY INSPECTION CHECK

Dealer Name:	
Customer's Name:	Contact No:
Address:	Post Code:
Model:	Serial Number:

<u>Check</u>	<u>Completed</u>
Check Tyre Pressure (See chart on page 6)	<input type="checkbox"/>
Tighten Wheel Nuts (18mm Stud Diameter = 270Nm / 22mm Stud Diameter = 475Nm)	<input type="checkbox"/>
Grease Hubs	<input type="checkbox"/>
Check External Wheel Bearing (Ensure No Side Movement on Wheels)	<input type="checkbox"/>
Check Drive Chain Tension	<input type="checkbox"/>
Check All Securing Bolts	<input type="checkbox"/>
Check Lights (If applicable)	<input type="checkbox"/>
Check For Damaged Paint and Touch Up If Necessary	<input type="checkbox"/>
Check Brake Rams (Extend and return freely)	<input type="checkbox"/>
Check Lid Rams (Extend and return freely)	<input type="checkbox"/>
Rams and Hydraulic Hoses Checked for Leaks	<input type="checkbox"/>
Ensure Relevant Paperwork Is Completed and Handed to the Operator	<input type="checkbox"/>

Signed: _____ Date: _____
 General Overall Condition Satisfactory

To be returned when completed:
 Email – admin@marshall-trailers.co.uk
 Post – Charles J Marshall (Aberdeen) Ltd
 Chapel Works, Bucksburn, Aberdeen, AB21 9TL.