



ROTARY MUCK SPREADERS

OPERATING & SAFETY INSTRUCTIONS

For all spare parts please visit:

www.marshall-trailers.co.uk

For all MS45 / MS60 / MS75 / MS90 / MS105 models

Charles J. Marshall (Aberdeen) Ltd
Chapel Works, Bucksburn, Aberdeen AB21 9TL

Telephone: 01224 722777

Email: admin@marshall-trailers.co.uk

Website: www.marshall-trailers.co.uk





EC Declaration of Conformity

Charles J. Marshall (Aberdeen) Ltd of
Chapel Works, Bucksburn, Aberdeen, AB21 9TL United Kingdom

Declares that the product:

Make: Charles J. Marshall (Aberdeen) Ltd

Type: Marshall Rotary Muck Spreader

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, AB21 9TL United Kingdom

**Name & Title of
Authorised Person:**

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 Signature:

Date:



SAFETY INSTRUCTIONS

IMPORTANT SAFETY ADVICE: STOP. THINK. CALL 01224 722777

Safety First: Please read and fully understand the contents of this instruction manual, if you are in any doubt whatsoever about 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. **Parking Brake** - Always apply the parking brake when the Muck Spreader is to be left unhitched from the tractor.

OPERATING INSTRUCTIONS

YOUR MARSHALL MUCK SPREADER HAS BEEN DESIGNED TO GIVE YOU LONG & RELIABLE SERVICE, ENSURED BY FOLLOWING THE INSTRUCTIONS BELOW.

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 only.



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 MUCK SPREADER 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.

FOR SPARE PARTS GO TO:

www.marshall-trailers.co.uk



TYRE PRESSURE CHART

PART NUMBER	SIZE	MAX. HEIGHT	SPEED	MAX. TYRE PRESS.
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 15.3	2650kg	40km/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	4550kg	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 Name:

Address & Post Code:

Model:

Serial Number:

Check

Completed

Check tyre pressure (See chart on page 6)

Tighten wheel nuts

18mm stud diameter = 270Nm & 22mm stud diameter = 475Nm

Grease hubs

Check external wheel pressure (Ensure no side movement on wheels)

Check drive chain tension

Check all securing bolts

Check lights (If applicable)

Check for damaged paint & touch up if necessary

Check brake rams (Extend & return freely)

Check lid rams (Extend & return freely)

Rams & hydraulic hoses checked for leaks

Ensure relevant paperwork is completed & handed to the operator

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.