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MULTISPREAD HANDBOOK

For Models
BT2 and BT3

The Marshall BT2/3 Multispread will spread all types of granulated fertilizer as well as Lime, Gypsum, Cow and Fowl Manures.

GROUND DRIVE FEED SYSTEM

Feed of fertilizer etc., from the hopper to the spinner is driven by a vee belt which runs on the inside of the wheel hub. The jockey pulley which runs on the top side of the vee belt is used as the feed clutch. When towing the spreader at highway speeds remove the vee belt from the pulleys. NOTE: DO NOT REVERSE THE MACHINE WHILE THE VEE BELT IS ENGAGED.

APPLICATION RATES

Application rates are altered by a combination of feed belt speed, which is controlled by the change sprockets on the left side of the machine and the hopper feed door opening. Spreading rate charts for fertilizers are included in this hand book. When spreading Lime, Gypsum, Cow and Fowl Manures some initial testing and adjustment will be necessary as these materials vary in consistency and the weight per cubic metre depending on moisture content.

SPINNER SPEED

The recommended spinner speed for spreading all types of material is 500 to 700 RPM.

PTO SPINNER DRIVE

Machines are geared to operate on a tractor with 540 RPM PTO (1000 RPM is optional). To operate the spinner at 700 RPM the tractor PTO should be working at approximately 430 RPM.

HYDRAULIC SPINNER DRIVE

Machines require an oil flow from the tractor of at least 5 g.p.m. (22 litres/min) To set the correct spinner speed follow this procedure.

Connect the two hoses to the tractor couplings - the pressure hose is the one marked IN on the flow valve on the spreader. Run the tractor until the oil has reached operating temperature. Then run the tractor engine at full throttle and adjust the flow valve on the spreader so that the spinner is running at 700 RPM - to check the spinner RPM you will need a hand held rev counter. Once the spinner is running at 700 RPM with the tractor at full throttle the tractor engine speed should be lowered to where the spinner RPM drops below 700 RPM - at this point make a note of the tractor engine speed as you can work from this engine speed up to full throttle without altering the spinner RPM.

MAINTENANCE

GREASING BEARINGS

The machine is fitted with sealed self aligning bearings, however due to the abrasive qualities of fertilizer etc., grease must be applied at least once daily in order to force out any particles of dust. Take care not to fracture the bearing seals by forcing in too much grease at a time.

FEED BELT CHAINS

The feed belt roller chains should be kept well lubricated at all times, particularly before the machine is stored for any length of time. For best results use RENOLD CHAIN LUBRICANT.

VEE BELTS

Check for wear and tension.

WHEEL BEARINGS

Check regularly.

WHEEL NUTS

Check tension before using the machine and at regular intervals.

CLEANING AND STORAGE

After using the spreader all fertilizer etc., should be removed from the hopper and spinner areas - then wash down with water (high pressure if available), DO NOT USE OIL OR DEISEL. Store the machine under cover and in a dry place - do not allow direct sunlight on the feed belt.

* * * * * C A U T I O N * * * * *

TURN OFF TRACTOR ENGINE (OR SPREADER ENGINE IF FITTED) WHEN MAKING ANY ADJUSTMENTS TO THE V-BELTS AND SPROCKETS ON THE MACHINE OR WHEN CARRYING OUT NORMAL MAINTENANCE. REPLACE ALL SAFETY GUARDS AFTER MAKING ADJUSTMENTS.

DO NOT STAND OR WORK NEAR THE SPINNERS WHILE ROTATING. DO NOT OPERATE THE SPREADER WHERE IT CAN CAUSE DAMAGE TO PROPERTY OR INJURY TO BYSTANDERS.

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BT2 MULTISPREAD.... 900X16 TYRES.

SUPERPHOSPHATE RATES : Kilograms per Hectare *

Note: These figures are only a guide as fertilizers will vary in consistency and cubic weight.

Sprocket	Door	WIDTH OF PASS (distance from your previous pass)				
		Settings	Opening	14 metre 46 feet	16 metre 52 feet	18 metre 59 feet
17 tooth	20mm		75	65	60	50
	25mm		100	85	75	70
	to	30mm	125	110	100	90
	35mm		150	135	120	110
	48 tooth	40mm	190	165	145	130
	45mm	210	185	165	150	
	50mm	240	210	185	170	
26 tooth	25mm		200	180	160	145
	to	30mm	250	225	200	180
	35mm		310	275	245	220
38 tooth	40mm		370	325	290	260
	45mm		425	370	330	300
	50mm		470	400	360	325
34 tooth	35mm		440	385	340	300
	to	40mm	530	465	410	370
	45mm		640	560	500	450
	50mm		710	625	550	500
	55mm		770	675	600	540
	60mm		850	750	660	600
	65mm		900	800	700	640
	70mm		1000	900	800	700
	75mm		1100	960	850	770
	80mm		1200	1050	940	840
	85mm	1300	1130	1000	900	
	90mm	1360	1200	1060	950	
	95mm	1440	1250	1120	1000	
	100mm	1500	1320	1170	1050	

* to convert to LBS/ACRE deduct 10%

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BT2 MULTISPREAD.... 900X16 TYRES.

UREA (and similar fertilizers) RATES: Kilograms per Hectare

Note: These figures are only a guide as fertilizers will vary in consistency and cubic weight.

Sprocket Settings	Door Opening	WIDTH OF PASS (distance from your previous pass)			
		10 metre 33 feet	12 metre 39 feet	14 metre 46 feet	16 metre 52 feet
17 tooth	15mm	40	35	30	25
to	20mm	70	55	50	45
	25mm	90	75	65	60
48 tooth	30mm	125	100	90	80
	35mm	145	120	100	90
	40mm	170	145	125	110
	45mm	190	160	140	120
	50mm	220	185	160	135
26 tooth					
to	25mm	190	160	140	120
	30mm	240	200	170	150
38 tooth	35mm	300	250	220	190
	40mm	350	300	250	220
	45mm	390	330	280	245
	50mm	430	360	300	270

* to convert to LBS/ACRE deduct 10%

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Models BT2 and BT3

**A GUIDE TO SPREADING RATES FOR LIME,
GYPSUM AND MANURES.**

Due to the great variation of weight per cubic metre as well as moisture content the chart below is intended as a guide only.

Rate adjustments are made by the following...

1. Changing the drive sprocket settings.
2. Adjusting the feed door opening.
3. Varying the width of pass. (the closer the pass the heavier the application.)

Sprocket Settings	Feed Door Opening	Kilograms per Hectare	Width of Pass.
17 to 48 tooth	50mm to 100mm	100 to 1000	4 metres to 8 metres
26 to 38 tooth	100mm to 200mm	1000 to 2000	4 metres to 8 metres
34 to 34 tooth	100mm to 200mm	2000 to 4000	4 metres to 8 metres

CLOVER SEED ATTACHMENT

BT2: 900x16 tyres

Sprocket main counter- shaft	Sprocket main feed- shaft	Seed Attachment Door Opening	KG per Hectare (for lbs/acre deduct 10%)
17 tooth sprocket	48 tooth sprocket	5 mm 10 mm 15 mm 20 mm 25 mm	1.5 3 4.5 6 7.5
26 tooth sprocket	38 tooth sprocket	5 mm 10 mm 15 mm 20 mm 25 mm	2.5 5 7.5 10 12.5
34 tooth	34 tooth	5 mm 10 mm 15 mm 20 mm 25 mm	3.5 7 10.5 14.5 17.5