

WOLSELEY

MERRY TILLER REVERSIBLE PLOUGH ATTACHMENT

Operating Instructions and Spare Parts List

MODEL

Single Furrow Reversible Plough
Type 2.
For use with the Merry Tiller Titan.

IMPORTANT

Please read Sections 1, 11 and 111 in this booklet
before attempting to use the plough.

MANUFACTURED BY

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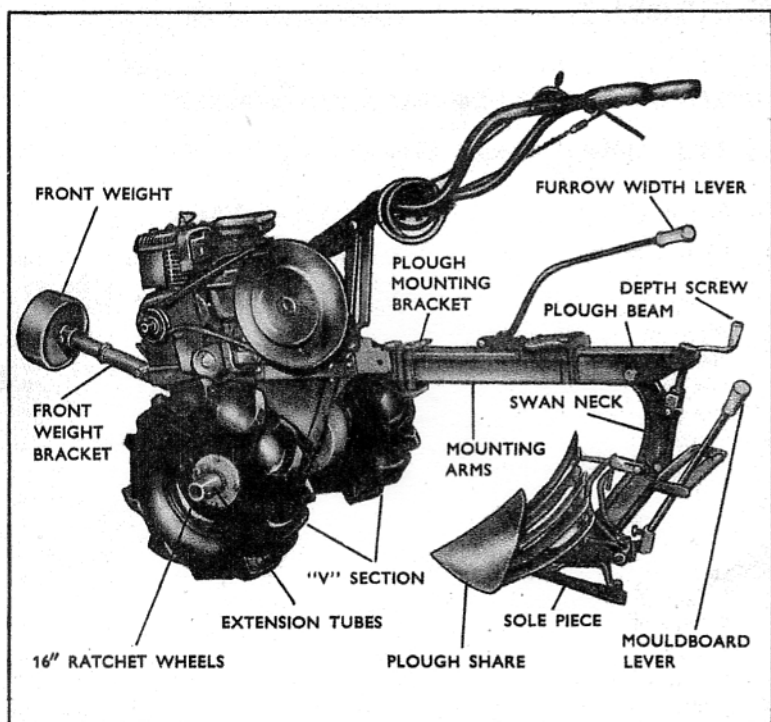


Illustration shows machine less belt guard

Plough assembly as supplied MT.3678 comprises:-

MT.3421 Plough c/w mounting bracket

MT.3639/40 16" wheels with ratchets

MT.3385 Extension tubes

MT.3336 Front weight bracket and weight

As an alternative to the 16" wheels with ratchets there are 19" Spade Lug Wheels available MT.3837.

MT.3386 Wheel weight

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The terms left or right hand referred to in this booklet are determined from the position of the operator at the rear of the machine facing forward.

SECTION I

BEFORE USE

ASSEMBLY OF THE PLOUGH ATTACHMENT TO THE MERRY TILLER TITAN

A. For plough supplied with 16" Ratchet Wheels

1. Place over each rotor shaft one of the extension tubes so that the single hole at one end of the tube corresponds with the hole in the rotor shaft. Do not insert the pin and clip at this stage.
2. Place over each tube one of the wheel weights with the boss of the weight towards the chaincase. Insert the pin through the boss, tube and rotor shaft and close the clip so that the head of the pin leads forward at the top.
3. Place one wheel on each tube so that the ratchet control knob is on the outside and the "V" section of the tread points forward at the top of the wheel. Locate the pin through the wheel boss at hole number 3 on the tube as counted from the machine.
4. Attach the plough mounting bracket on the rear hitch casting of the Merry Tiller with the flat surface of the bracket uppermost. Insert the large pin and hairpin clip.
5. Attach the plough mounting arms to the bracket so that the arm with the width control lever bracket is on the left. Insert the pin and hairpin clip.
6. Attach the plough unit to the mounting arms with the pins and hairpin clips and locate the width control lever in the centre notch of the width quadrant.
7. Attach the front weight bracket to the underside of the engine mounts with the bolts and nuts provided.
8. Insert the front weight extension tube to leave about half of the tube extended forward and insert the pin and clip.
9. Place the front weight over the tube with the boss of the weight towards the engine and locate in position with the bolt and nut provided so that the complete unit is roughly balanced over the wheels.

B. For plough being used with 19" Spade Lug Wheels

The procedure is as above for all parts except:—

2. Place over each tube one of the wheel weights with the boss of the weight nearest the machine. Insert the pin through the weight boss at the second hole from the chaincase. Insert the pin and clip through the extension tube and rotor shaft.
3. Place one wheel on each of the tubes so that the longer side of the "V" section of the wheel is to the outside and the "V" section pointing forward at the top of the wheel. Locate on the fifth hole from the machine and insert the pin and clip.

PREPARATION OF THE MERRY TILLER TITAN

Please refer to the instruction booklets provided with your Merry Tiller with particular reference to the lubrication and fuel requirements.

For plough operation the longer of the two belts supplied should be used driving from the 2" engine pulley to the 10" drive pulley on the chaincase.

The plough should never be used with the shorter belt driving.

REVERSE DRIVE FOR THE MERRY TILLER TITAN

The reverse drive for the Titan will considerably ease the use of the plough attachment with particular emphasis on the turning of the unit and for driving backwards should an obstruction be met whilst ploughing. The instruction booklet on the reverse drive gives details of its operation.

SECTION II PLOUGH CONTROLS

All positions quoted assume that the furrow is turning to the right, and the opposite settings apply when turning to the left.

PLOUGH BEAM

The swan neck of the plough is located into the main beam by a bolt and nut. Where it is attached to the beam there are two positions in which it can be fitted.

Bottom hole fixing — this is the best position for general plough work in most soil conditions and should be used with the plough mounting bracket in the position as described above.

Top hole fixing — this gives a greater angle to the swan neck and with the plough mounting bracket turned upside down on the hitch casting and the mouldboard fixed in the central position, then the unit can be used for furrowing or ridging. This position will give 2" greater depth to the plough.

All the following controls assume that the plough is in the bottom hole fixing position.

WIDTH CONTROL LEVER

The width quadrant is located at the front of the main beam and has a total of nine notches, four either side of the centre. In the centre position and with 16" wheels on the third hole on the tube then the furrow width will be 8".

In the centre position and with Spade Lug Wheels on the fifth hole on the extension tube then the furrow width will be 10".

Moving the lever one notch left or right will alter the width of the

furrow by 2" and in 2" stages on the other notches.

In the last two notches the width is too great for effective turning of the furrow and these positions should only be used for ploughing round obstructions or close to hedges by using the wheel nearest to the share as the furrow wheel.

MOULDBOARD LEVER

This lever is located at the rear of the plough and is used to move the mouldboard to the required direction for ploughing. On the lever bracket there are two notches at either end which can be used according to requirements as the angle of the mouldboard is affected by using one or other of these notches. The amount of effect on the furrow by using these notches is only slight.

MOULDBOARD ANGLE ADJUSTER

This is located just forward of the mouldboard lever bracket and by loosening the holding bolt and sliding the adjuster forward or backward then the angle of the mouldboard will be altered. For general ploughing it is best to move the adjuster to its most forward position to give the best shattering effect to the plough furrow. The rear position should be used on light soils where a less shattering effect is required.

DEPTH CONTROL SCREW

The depth screw is located on top of the main beam and by turning the depth screw lever the angle of the swan neck in relation to the main beam is altered thus allowing greater penetration of the share point and thereby increasing the depth of the plough.

With 16" wheels and the plough set for general work — then with the screw set flush with the lever boss the depth will be 4". Two turns of the screw lever will increase the depth by 1".

With 19" spade lug wheels and plough set for general work — then with the screw set flush with the lever the depth will be slightly less than 4" but again two turns on the screw lever will increase the depth by 1".

With the plough beam in the top hole position, bracket turned upside down and the mouldboard central — then the depth with the screw and lever flush with each other will be 6" and two turns will increase the depth by 1".

WHEEL SETTINGS

16" Ratchet Wheels

The control of the ratchets is made on the knob on the centre plate. This knob has an arrow stamped into it and corresponding letters are

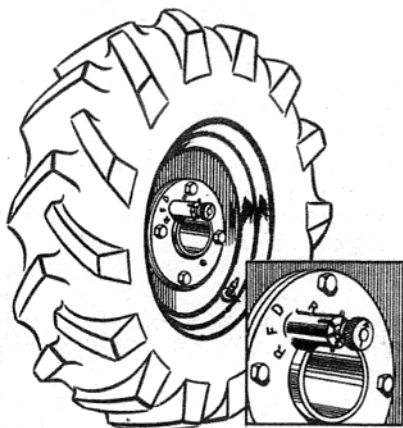
stamped into the surrounding plate.

By lifting the knob and turning towards the letter "R", in the same direction as the wheel normally turns then the wheel will drive forwards and ratchet on over-run.

By lifting the knob and turning towards the opposite letter "R" then the wheel will drive backwards and ratchet on over-run.

By lifting the knob and turning to the letter "D" then the wheel will be in drive forwards or backwards.

By lifting the knob and turning to the letter "F" then the wheel will be free in either direction.



Note

Using the 16" Ratchet Wheels, easy turning can be achieved by arranging the wheel ratchets so that one is in the locked position and the other is in the normal position for driving forward and ratcheting on over-run. This will enable the machine to be driven forward on both wheels and reversed on one wheel. For turning, you will be able to over-run the wheel fixed for ratcheting in both a forward and reverse direction.

If the ratchets are set in this way for ease of turning it should be remembered that the ratchets must be altered at the ends of the rows for best traction on the return furrow.

For general plough work the wheel should be attached at hole 3 on the tube.

It is possible to alter the furrow width without altering the width control lever, by moving the wheel one hole in or out which will decrease or increase the width by 2".

19" Spade Lug Wheels

It should be noted that these wheels do not have ratchets and for the best operating effect the reverse drive for the Titan is a benefit. There is a slot in the pin boss of the wheel which will give a slight differential action for turning.

For general ploughing the wheel should be attached to the fifth hole on the tube and again by moving the wheel in or out the width of the furrow can be altered by 2" without altering the width control lever.

SECTION III SUGGESTED PLOUGH OPERATION

These suggestions apply to general ploughing work and should be interpreted according to your own conditions.

1. The plough is designed to turn the furrow one way alternately by moving the mouldboard lever. This eliminates the necessity for complicated ploughing plans, although it is necessary to leave sufficient headland around the area to be ploughed to allow space for turning the complete machine.
2. It is advisable to plough in straight lines as this will aid working down the ground afterwards.
3. Do not operate the plough with too high an engine speed on the Merry Tiller Titan. Half throttle will give adequate power and a good ploughing speed.
4. Do not plough waterlogged or snow laden ground. This will possibly cause poor soil moisture movement and slow warming of the soil in the springtime.
5. Plough at a different depth each season to prevent the possibility of mineral "pans" forming in the sub soil.
6. Plough in opposite directions each season to overcome the problem of "ridging" when an area is ploughed in the same direction each season.
7. Where grassland is to be ploughed it is advisable to cut the grass down to ground level prior to ploughing or go over the ground with rotors prior to ploughing.

SECTION IV SPECIFICATION AND MAINTENANCE

PLOUGH SPECIFICATION

Weight of plough and hitch 40 lb.

Weight of plough, weights and Merry Tiller Titan, 16" wheels, 247 lb.

Weight of plough, weights and Merry Tiller Titan, 19" spade lug wheels, 252 lb.

Plough construction — beam and main stem, cast iron, one piece soil plate for durability, spring steel share, alloy mouldboard fingers.

16" Ratchet Wheels

Self cleaning "V" tread, pneumatic tyres on steel rim.

Tyre pressure should be 20 lb. p.s.i. for general ploughing.

Tyre pressure can be reduced to give additional traction but the pressure should never be below 12 lb. p.s.i.

19" Spade Lug Wheels

All steel construction.

Overall diameter 19".

Effective working diameter appr. 17".

Weight 15 lb. each.

Wheel weights and Front weight

Cast iron construction.

Weight 26 lb. each.

GENERAL MAINTENANCE

After use the plough should be cleaned and bolts and nuts checked for tightness.

A little oil should be put on the depth control screw lever and screw but never put oil on the mouldboard pivot.

If the plough is to be stored make sure that grease or anti rust fluid is put on the share and on the fingers as a rusty share or corroded fingers will give a poor finish to the ploughing. Replace any broken or worn parts with particular reference to the share.

Make sure that the tyre pressures of the wheels are correct and apply a small amount of oil to the ratchet control knob when the wheels are to be stored and before and after use.

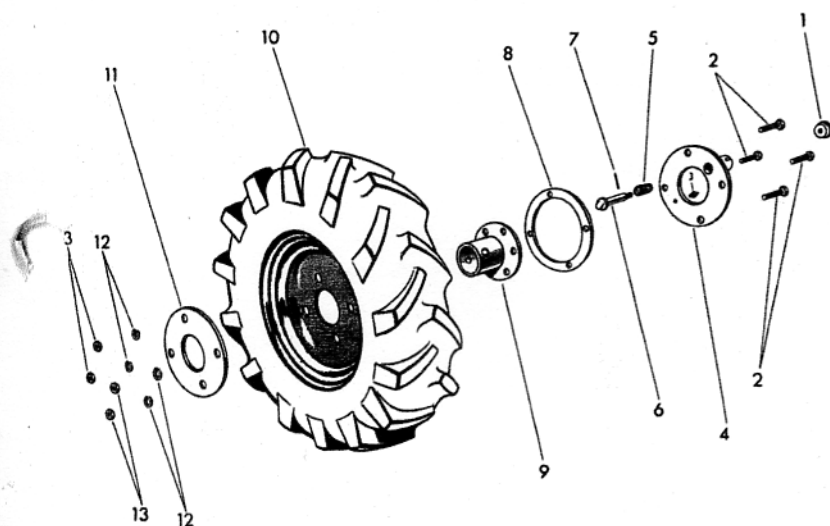
SECTION V

SPARE PARTS

When ordering spare parts from your dealer please endeavour to quote the correct part number and description as this will enable your dealer to supply you with the correct part quickly and from his stock.

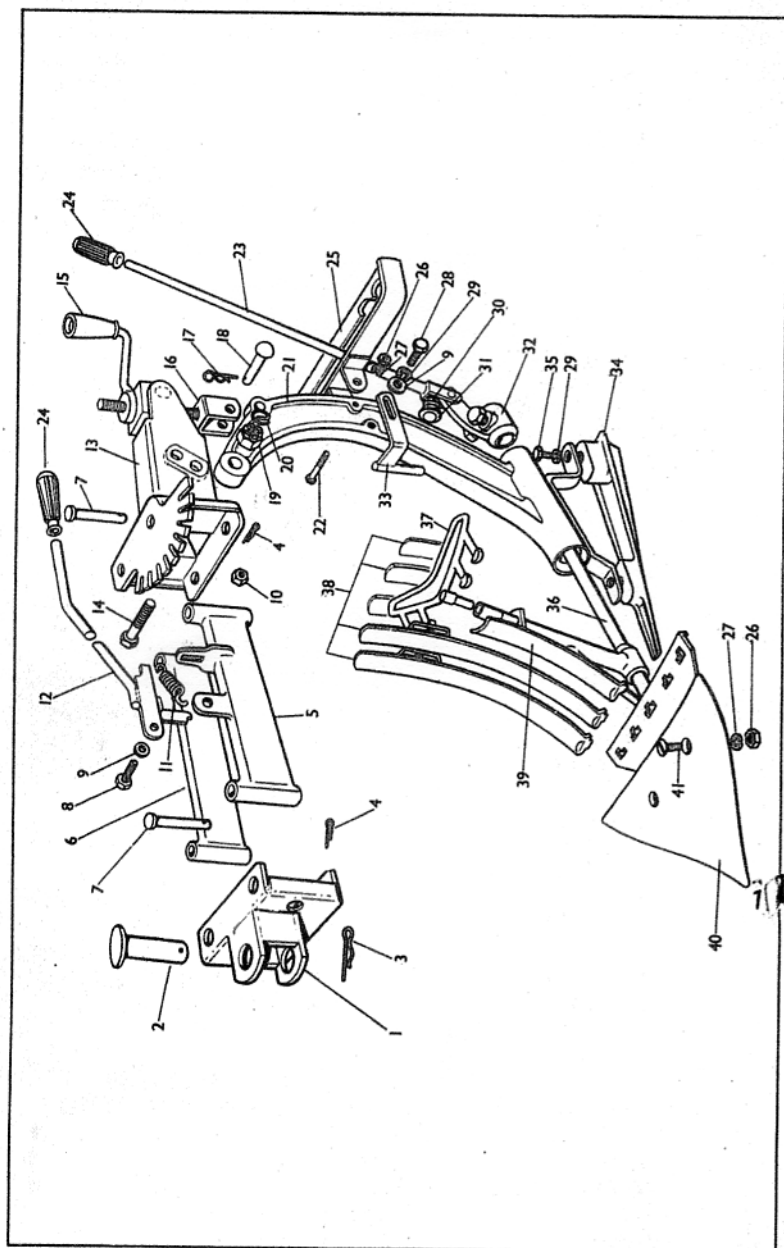
If it is necessary for your dealer to send to us for individual items then a few days delay may arise due to the processing of the order at this factory, and the time taken in transit.

16" RATCHET WHEELS MT 3639/40



Item No.	Part No.	Part Name	Quantity per Wheel
1	MT.3632	Knurled Knob	1
2	UFB.105/18R/ZP	Bolt	4
3	MT.2360	Grease Nipple	1
4	MT.3625	Plunger Tube and Plate	1
5	MT.3633	Spring	1
6	MT.3631	Plunger	1
8	MT.3641	Pin	1
8	MT.3627	Spacer Ring	1
9	MT.3630	Ratchet Ring	1
10 & 10A I.	MT.3396	L.H. Wheel Assembly	
	II. MT.3389	R.H. Wheel Assembly	
		comprising:	
(a)	MT.3382	Wheel Centre	
(b)	MT.3387	Dunlop Cover 4.00×8.1T.39	
(c)	MT.3388	Dunlop Tube 4.00×8.271.2131D	
11	MT.3626	Cover Plate	1
12	LW.5	Washer	4
13	UFN.105/S.ZP	Nut	4

MERRY TILLER PLOUGH ATTACHMENT MT3420



SPARE PARTS

Item No.	Part No.	Part Name	Quantity per machine
1	MT.3412	Mounting Bracket	1
2	MT.3409	Mounting Pin	1
3	EF.1120	Clip	1
4	MT.3479	Clip	4
5	MT.3658	Mounting Arm (Left Hand) ..	1
6	MT.3659	Mounting Arm (Right Hand) ..	1
7	MT.3478	Hitch Pin	4
8	WB/105/16/S.ZP	$\frac{5}{16}$ " \times 1" Hex. Bolt	1
9	W5/S.ZP	$\frac{5}{16}$ " Plain Washer	3
10	WN/105/S.ZP	$\frac{5}{16}$ " Nut	1
11	MT.3863	Spring	1
12	MT.3864	Handle (Width Adjustment) ..	1
13	MT.3653	Width Adjustment Bracket ..	1
14	WB/108/48/R.ZP	$\frac{1}{2}$ " \times 3" Hex. Bolt	1
15	MT.3654	Depth Screw Handle	1
16	MT.3655	Depth Screw & Bracket	1
17	MT.3865	Clip	1
18	MT.3866	Pin	1
19	WN/308/S.ZP	Castle Nut	1
20	MT.3660	$\frac{1}{2}$ " Wire Clip	1
21	MT.3656	Main Stem	1
22	WB/104/28/R.ZP	$\frac{1}{2}$ " \times $1\frac{3}{4}$ " Hex. Bolt	1
23	MT.3867	Reversing Handle	1
24	MT.3868	Reversing Handle Knob	1
25	MT.3657	Reversing Bracket	1
26	WN/104/S.ZP	$\frac{1}{4}$ " Nut	3
27	LW4/S	$\frac{1}{4}$ " Spring Washer	3
28	WB/105/8/S.ZP	$\frac{5}{16}$ " \times $\frac{1}{2}$ " Hex. Bolt	2
29	LW.5/S	Lockwasher	3
30	MT.3466	Reversing Spring	1
31		Spring Pin	1
32	WB/108/12S.ZP	$\frac{1}{2}$ " \times $\frac{3}{4}$ " Set Screw	2
33	MT.3869	Roller Bracket	1
34	MT.3870	Sole Plate	1
35	WB/105/10/S.ZP	$\frac{5}{16}$ " \times $\frac{5}{8}$ " Hex. Bolt	2
36	MT.3874	Mouldboard Bracket	1
37	MT.3871	Finger Bracket	1
38	MT.3872	Mouldboard Fingers	4
39	MT.3873	Centre Finger	1
40	MT.3455	Share	1
41	WS/504/8/S.ZP	$\frac{1}{4}$ " \times $\frac{1}{2}$ " C'sk. Screw	2

N.B. Cannot be used with Merry Tiller Major or Professional.

As manufacturers Wolseley Engineering Limited hope that you will be satisfied with the performance of your Merry Tiller Titan. In order to make your gardening easier and give you more time for relaxation we would draw your attention to the items below which can give you all year round use for your machine.

MT.2737	Heavy Duty Toolbar
MT.2351	16" Lawnmower
MT.3064	24" Lawnmower
MT.3556	Rotary Grasscutter
MT.3757	36" Sickle Mower
MT.3900	30" Reel Mower
MT.2173	Load Carrier
MT.2390	Canvas Cover
MT.3575	Vee Plex Pulley (Required for all power driven tools)
MT.2618	P.T.O. Attachment (to which can be added the range of Tarpen Flex Equipment)
MT.2466	Bulldozer Blade (Also available for front mounting)
MT.2600	Sawbench
MT.2613	Self Priming Pump
MT.2978	Yard Scraper
MT.3003	Rake Attachment
MT.3988	Reverse Drive Attachment
MT.4031	Rotor Fenders

And the range of digging rotors.

THE WOLSELEY MERRY TILLER GUARANTEE

Wolseley Engineering Limited, guarantee to replace, free of charge, for the original purchaser, any parts of Merry Tiller equipment found to be defective through faulty material or workmanship within 12 months of the date of purchase, subject to the following conditions:—

- 1 All parts submitted for replacement shall be held by the dealer in readiness for return to our works if requested.
- 2 The guarantee does not cover expenses incurred by the owner in removing or replacing faulty parts or any consequential expenses.
- 3 This guarantee does not cover faults caused by wear and tear, misuse or abuse, hiring out, accident or by any alteration or repair which in our opinion has caused the fault.
- 4 The guarantee also excludes the engine and any other proprietary items, which are covered by other manufacturers guarantees.

GUARANTEE CLAIM CARD

If a claim is necessary the above guarantee will be honoured provided that this section is returned with the faulty parts to your dealer. Should a further claim be necessary your dealer will have this record.

Plough

Date of Claim:

Your Name and Address.....

Dealer's Name and Address.....

Date of Sale.....

To be completed and signed by the dealer at time of sale.