

WOLSELEY

MERRY TILLER TITAN

AS A

ROTARY CULTIVATOR

Merry Tiller Titan with 5 h.p.
Briggs and Stratton Engine.
1970 onwards.

OPERATING &
MAINTENANCE
SPARE PARTS LIST

INSTRUCTIONS

IMPORTANT

Before using the Merry Tiller please read
SECTION 1 and 2 of this booklet and the engine
booklet.
Maintenance Instructions are given in
SECTION 3.

MANUFACTURED BY

WOLSELEY ENGINEERING LTD

ELECTRIC AVENUE · WITTON · BIRMINGHAM · B6 7JA

Telephone. 021-327 4821 (7 lines)

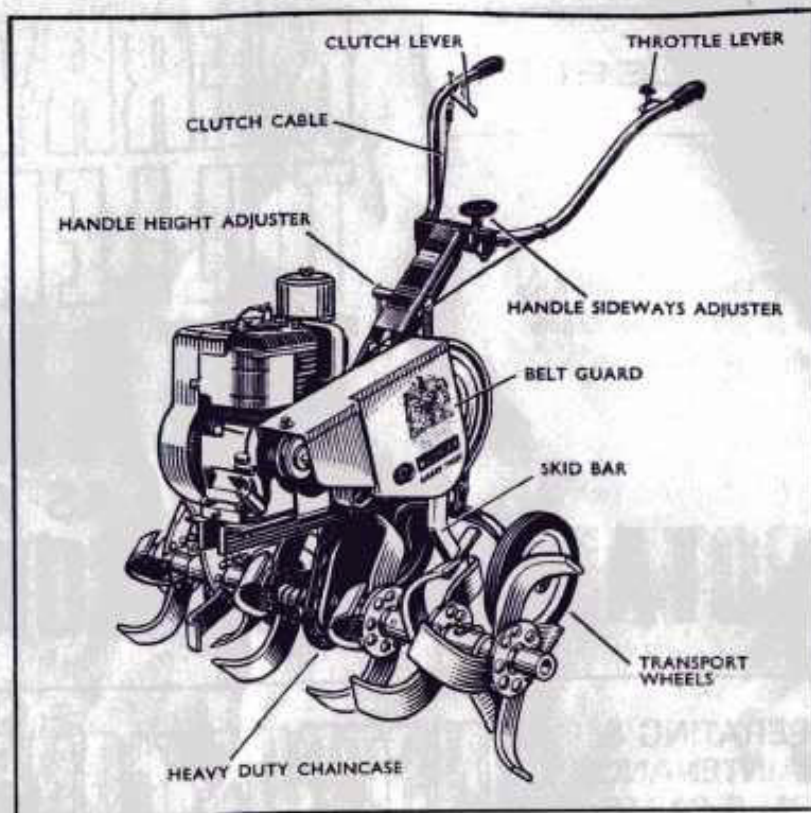
Telegrams & Cables: Sheering, Birmingham

Wolseley Merry Tiller Titan

Cultivator Tiller Rotavator

Manual – Operating &
Maintenance Instructions-
Spare Parts List

This is a free download from
www.allotment-garden.org



INDEX

		PAGE
SECTION 1	Before Use	3
SECTION 2	Use	3, 4, 5 & 6
SECTION 3	Regular Maintenance	6, 7 & 8
SECTION 4	General Specification	9
SECTION 5	Spare Parts	10-17

The Terms RIGHT or LEFT used in this booklet and with all Merry Tiller equipment are determined from the position of the operator standing at the rear of the machine facing forward. All rotors and wheels are marked with Red Paint for Left Hand and Green Paint for Right Hand.

SECTION 1 BEFORE USE

Preparing the Engine Unit

With each Merry Tiller Titan there is an instruction book for the engine unit. Please refer to this before starting. Remember that there is no oil in the engine sump nor in the Merry Tiller chaincase when the machine is new.

The engine unit is a four stroke petrol engine and NO OIL should be put in the petrol tank.

The Briggs & Stratton engine is fitted with a manual choke.

For throttle adjustment see page 7.

Preparing the Machine for Use

The Transmission Chaincase should receive 2 pints of SAE 30 or SAE 20W-30 detergent oil as recommended for the engine unit.

To Fill

Remove the oil filler plug. Tilt the machine on to its left side and pour in the oil. Replace the filler plug.

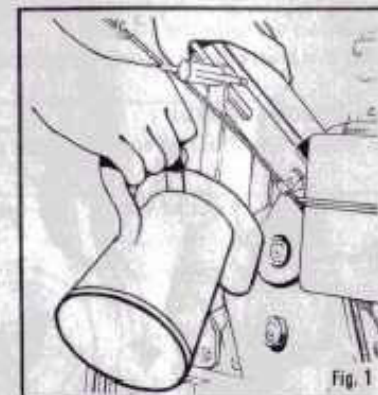


Fig. 1

SECTION 2 USE

IMPORTANT

To Start the Engine

Ensure clutch is in released position before attempting to start the engine.

1. Pull out choke 'A' on carburettor. (See Fig. 2)
2. Push throttle lever forward into fast running position marked 'F'. (See Fig. 3)
3. Pull the starter cord evenly and without jerking. Allow the cord to return steadily avoiding 'springing back' which can damage the starter mechanism.

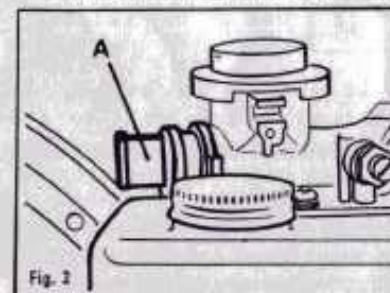


Fig. 2

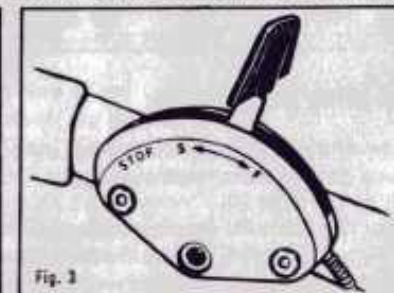


Fig. 3

Running

Once the engine starts, push choke 'A' in by hand. Engine speed can be reduced by pulling the throttle lever back towards 'S' and increased by pushing the lever towards 'F'. For general use set the throttle in the mid-position (as illustrated page 3).

To Stop the Engine

Move throttle lever into the 'Stop' position.

Remember

To release the clutch before attempting to start the engine.

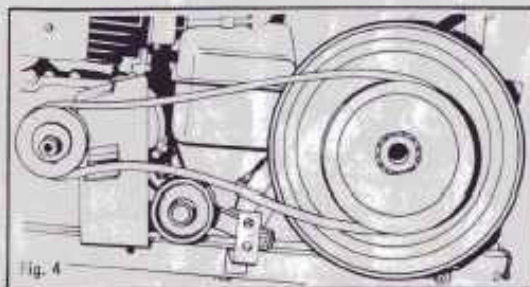
To use the correct length belt (see below).

To pull the starter cord evenly and allow it to return without springing back, as this can damage the starter.

To lift the clutch lever slowly when commencing work.

Two Speed Control

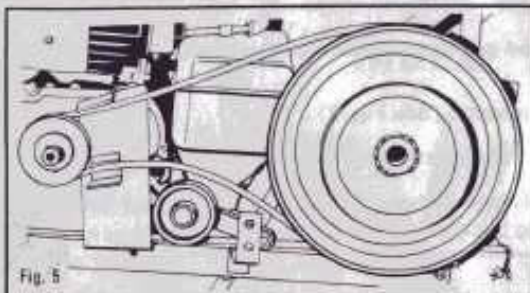
The Merry Tiller Titan is supplied with two belts, A41 and A48.



For Cultivation

Use the A41 Vee Belt driving from the 3" engine pulley to the 6" Drive Pulley.

For Rotor Speeds see page 9.



For Other Applications

The A48 Belt should be used for SLOW Speed applications such as:—
Ploughing, Sickle Mowing

Use 2" engine pulley driving to 10" Drive pulley

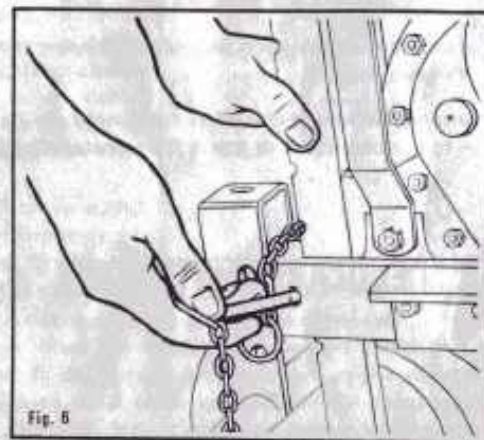
Operating Suggestions

When at the area to be cultivated, remove the transport wheels or turn them upside down on the hitch casting.

Select the rotors for your particular job and attach them to the rotor shaft with the pins and spring clips provided. Always insert the pins so that the head leads forward at the top, this will ensure the spring remains closed.

In rough conditions the wheels can be used to steady the machine in use but these wheels should never be used as a depth control. The position of the operator in relation to the machine is important and when using the Titan at its set depth the operator's arms should be almost straight.

Set the depth required on the rear skid for comfortable control. Further adjustment for correct positioning can be obtained by adjusting the handles for height when the machine is at its set depth. The control of the Titan as a cultivator is achieved by pushing the rear skid into the ground and then raising the clutch lever to start the rotors turning. Press down on the handles until the required depth is obtained and then use only sufficient pressure to maintain the machine at the depth. To dig more deeply apply more pressure to the handles thus causing the skid to penetrate more deeply and thus the rotors will dig deeper.



Further Operating Suggestions

To control the depth of tilling, the Merry Tiller must be operated with both the proper throttle speed and correct up and down pressure on the handles. Raising up means going forward, as by so doing the skid bar is allowed to come out of the soil.

Pushing down means slowing the machine as the skid is pushed further into the soil. At the same time the machine will dig deeper.

When you are first learning to use the Titan, it is not unlikely that it will tend to buck or move from side to side. This will soon be overcome with use.

To acquire the knack of letting the machine do the work without effort on the part of the operator, we offer the following suggestions:—

1. Concentrate on keeping your arms relaxed.
2. When working across a slope turn the front of the machine slightly uphill to stop any tendency for the machine to run downhill.

3. For best results operate at reduced throttle settings when the ground is very hard or rough.
4. Do not hurry the job—proceed at a slow walk—thus giving the machine time to do its work.
5. It is advisable to re-adjust the height of the rear skid to maintain the correct height of the handles after the Tiller has dug down to its correct depth.
6. The rear wheels may be used to steady the machine if required.
7. It is better to release the clutch lever and go over the ground again if the machine starts to run away, rather than straining to hold it back (which should not be necessary).
8. Cultivate only when it is suitable to do so. Frozen or waterlogged ground, if cultivated, can cause poor soil moisture movement.
9. Cultivate at a different depth each season to prevent the possibility of "panning" in the sub soil.
10. Do not cultivate on the low speed as this will not only be slow but may cause damage to the chaincase or rotors if an obstruction is met.

SECTION 3 REGULAR MAINTENANCE

Engine

Refer to the engine manual. In very dusty conditions it may be necessary to change the oil more often than suggested.

Remember that the engine unit depends upon a flow of air over the cylinder head and barrel for efficient cooling. Do not allow dirt or trash to build up in the cooling fins or behind the metal cowls.

Fitting Throttle Control and Adjustment

If the existing throttle cable has broken at the engine end, it can be used again.

If a new cable and control is required, fit as follows:—

Release bolts and nuts at the control on handlebar, remove the air filter and release the cable clamp and cable at the engine and withdraw.

Place in position the new control lever, insert the bolts and attach nuts and tighten.

Throttle Control Adjustment

IMPORTANT

Do not attempt to adjust throttle control with the engine running.

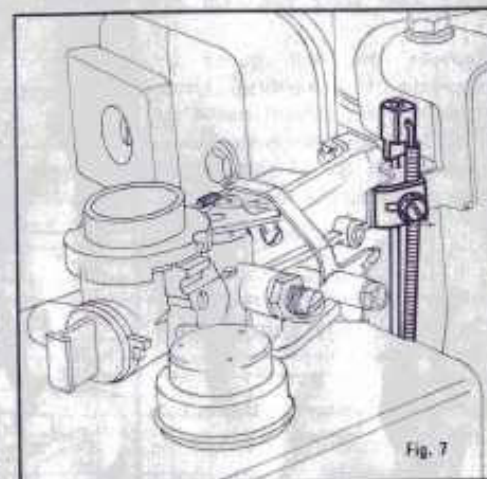
With the throttle lever pushed fully forward i.e. past 'Fast' running position, bend the inner core of the throttle cable at right angles $1\frac{1}{2}$ " from the outer cable end. Next bend cable at right angles again as shown below.



Feed cable between petrol tank bracket and the rear of the blower housing. Fit clamp in place over the outer cable and lightly tighten clamp screw. Insert inner cable through the nut on the end of the vertical throttle link rod. (See Fig. 7.)

Adjust the outer cable in the clamp until approximately $\frac{1}{4}$ " protrudes above the top of the clamp.

Pull the throttle control lever into the 'STOP' position and, if setting is correct, the cut-out mechanism on the carburettor will operate. If the cut-out does not operate, draw the outer cable down through the clamp until the cut-out operates. If the cut-out operates before the throttle lever is in the 'STOP' position push outer cable up through the clamp to adjust. When the correct setting and operation is obtained tighten clamp screw.



Refit the air filter.

Transmission Case

On the right hand side of the case just above the engine mount is an oil level plug. This should be removed from time to time to make sure that the oil level in the chaincase is maintained and if necessary a small amount of oil added to maintain the quantity of 2 pints in the case.

It is most important that the level of oil in this case should not be allowed to drop.

Clutch Adjustment

The clutch should engage when the lever is raised about two-thirds. When disengaged the belt should be completely slack and not binding. Always use the correct belt. The Merry Tiller has a special belt with a low length tolerance variation and non-rubberised case. A rubber cased belt may cause creeping forward of the machine.

IMPORTANT: DO NOT ATTEMPT TO ADJUST THE CLUTCH WITH THE ENGINE RUNNING.

Initial Adjustment

The clutch cable provided has a standard length with adjusting links at the lever end. Connect the control spring to link 5 as illustrated before adjusting the clutch.

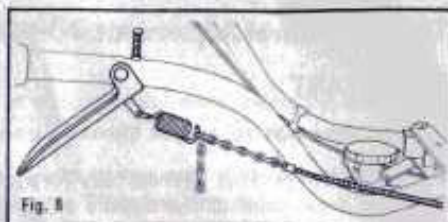


Fig. 8

Remove the belt guard by releasing the holding knob. Undo the adjustment nut A so that the clutch wire is slack. Loosen nut B. This locks the idler arm in relation to the spindle.

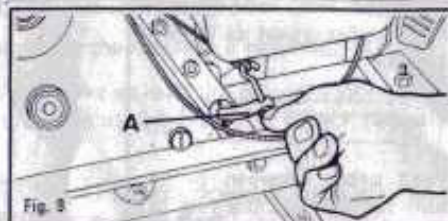


Fig. 9

Adjust the idler arm in relation to the spindle to take up some of the belt slack. Re-tighten nut B. Sufficiently screw up the nut A until correct setting is obtained.

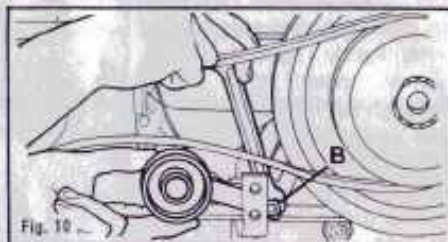


Fig. 10

Belt Slippage

Always use the correct belt, this can only be obtained from your dealer. As above, do not use a rubber covered belt. Belts will tend to slip as the pulleys wear and also if oil leaks onto the belt.

Oil Seals

On the chaincase input shaft (top) the oil seal can be easily replaced having removed the pulley and key. Prise out the oil seal with a screwdriver and before fitting the new seal make sure the keyway is clean and smooth. Tap the new seal in position and refit the pulley. Always tighten the grub screw.

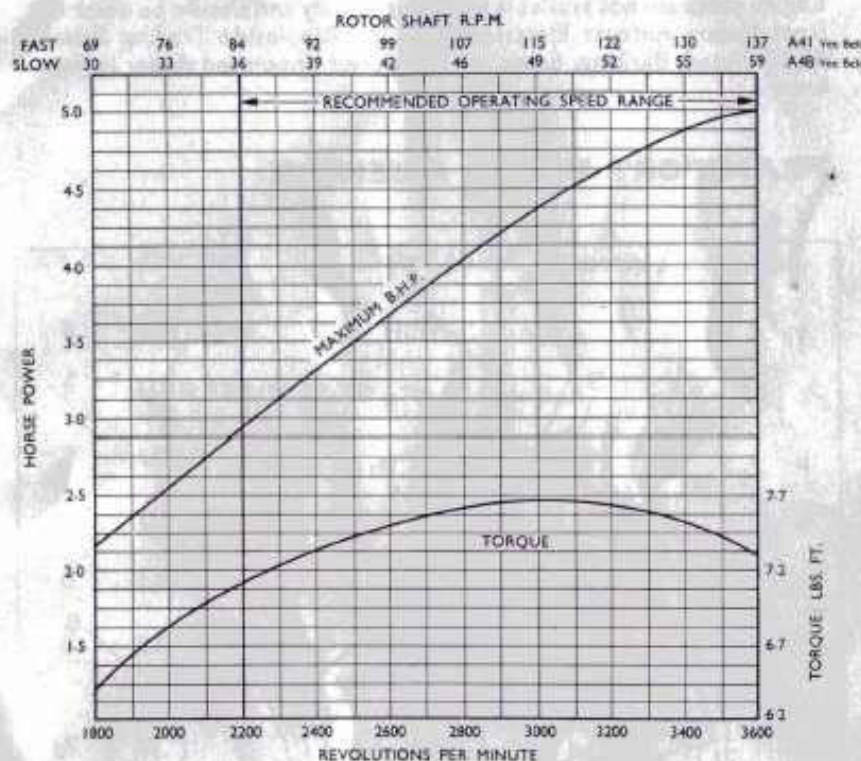
General Hints

1. When storing the Merry Tiller for long periods make sure that the engine unit is stored as per the instructions.
2. Make sure all nuts and bolts are tight before and after use.
3. Do not carry out adjustments with the engine running.
4. The life of the machine will be improved if it is kept clean.
5. It is advisable to have your Merry Tiller checked and overhauled periodically by the authorised distributor in your area, whose name and address, if not known, can be obtained from the factory.

SECTION 4

GENERAL SPECIFICATION

RELATION OF ROTOR SPEEDS TO GIVEN ENGINE SPEEDS



All machines are fitted with recoil starters, three stage reduction chaincases with oil bath lubrication. Final drive is by heavy duty rotor shaft. Constructed with heavy gauge angle steel mounts, cast steel hitch assembly and heavy gauge steel tube handles.

Merry Tiller Titan with Briggs and Stratton Engine
 Engine power is 5 h.p. at 3,600 r.p.m. (American rating)
 Engine capacity is 206 c.c. or approx 12.57 cu. ins.
 Tank capacity is 5 pints of petrol (not Petrol/Oil Mixture)

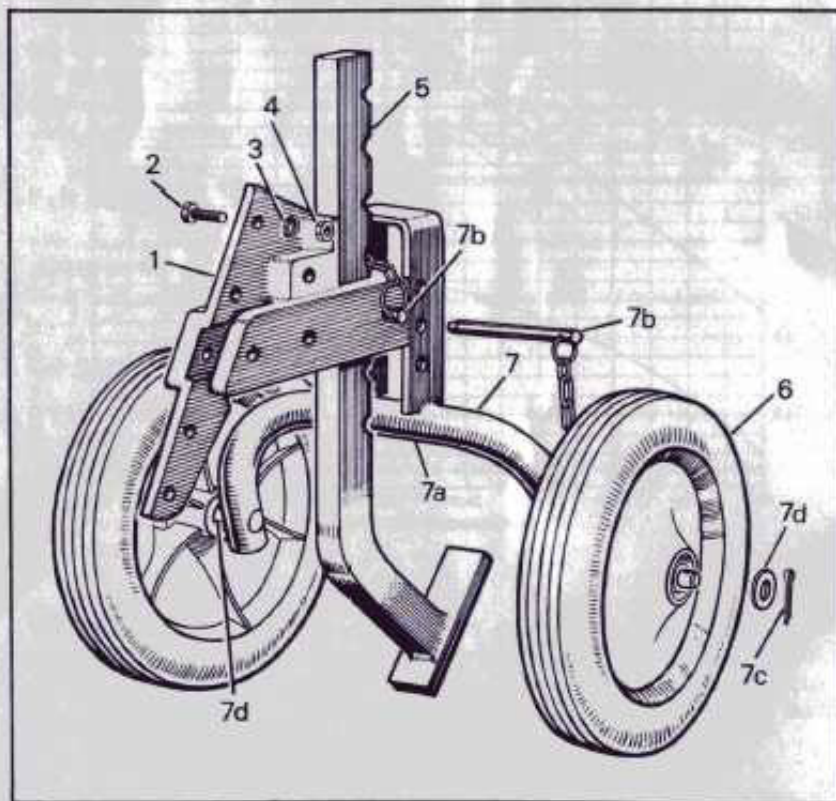
SECTION 5 SPARE PARTS

When ordering spare parts make sure that you quote the Model Part Number and Description as this will help your distributor to supply the correct part quickly.

If the part you require for your machine is not quoted in this list, perhaps due to changes which have occurred in design, then your distributor has a complete Master Spare Parts list and can advise you.

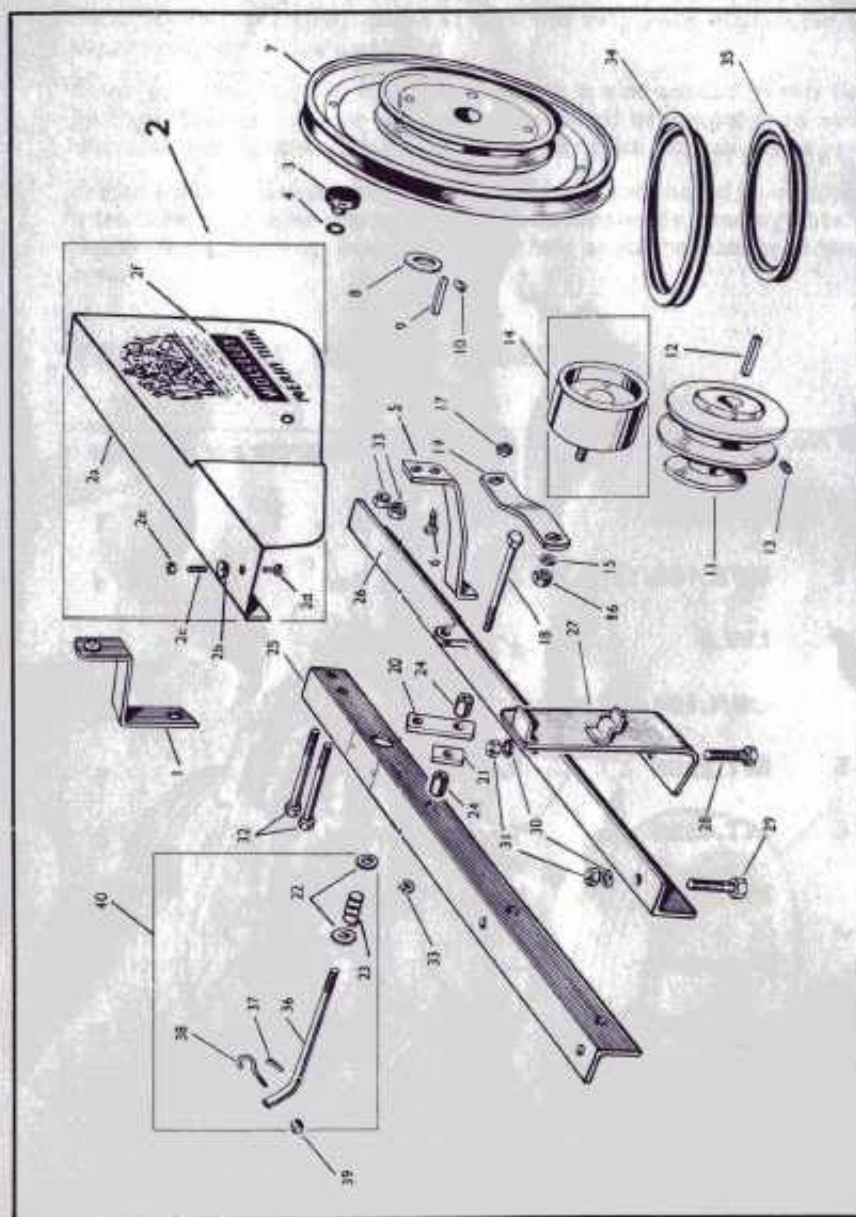
Engine parts are not available from this factory and should be obtained from Messrs Autocar Electrical Co. Ltd., Rippleside Trading Estate, Ripple Road, Barking, Essex, or from their appointed dealer in your area.

TRANSPORT WHEEL ASSEMBLY



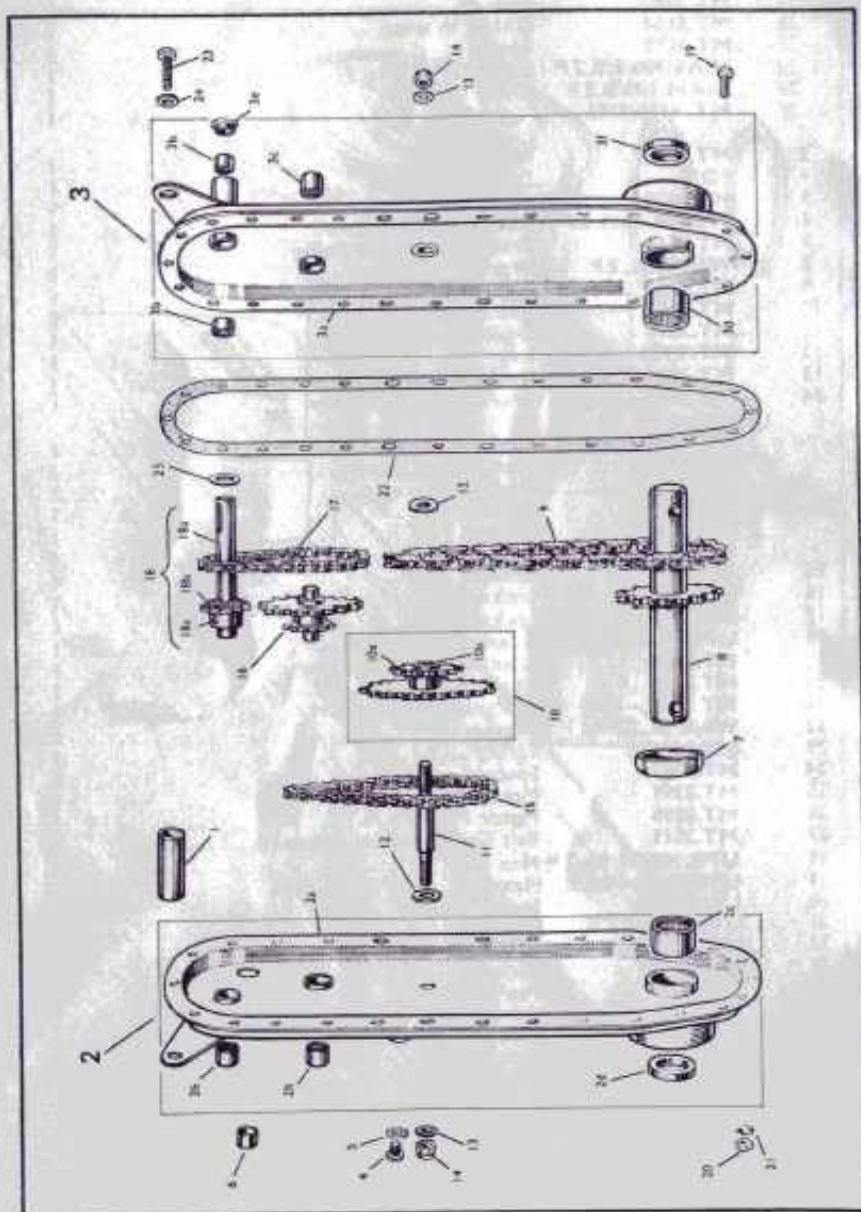
Item No.	Part No.	Part Name	Quantity per Machine
1	MT.3248	Hitch Casting	1
2	UFB.104/16/R.ZP	$\frac{1}{4}$ " x 1" Hex Bolt	4
3	LW.4	$\frac{1}{4}$ " Spring Washer	4
4	UFN.104/S.ZP	$\frac{1}{4}$ " Hex Nut	4
5	MT.2295	Rear Skid	1
6	MT.4328	Transport Wheel	2
7	MT.3605	Wheel Frame Assembly	1
<i>comprising:-</i>			
7a	MT.2290	Transport Wheel Arch.	1
7b	MT.2506	Hitch Pin Assembly	2
7c	MT.1561	Split Pin	2
7d	W.8/S/L.L/ZP	Washer	4

ENGINE MOUNT ASSEMBLY AND CLUTCH



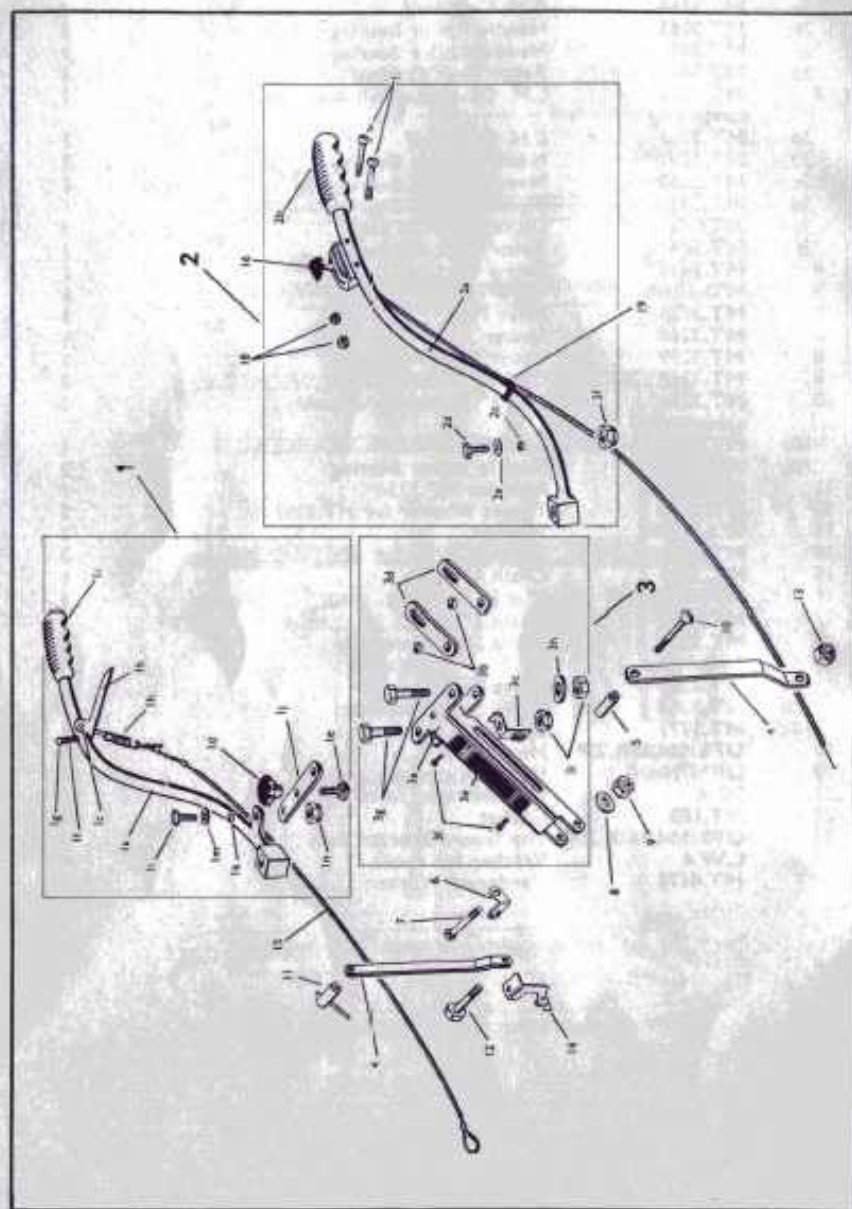
Item No.	Part No.	Part Name	Quantity per Machine
1	MT.3541	Top Support Bracket Assembly	1
2	MT.4256	Guard Assembly	1
	comprising		
2a	MT.3540	Guard	1
2b	MT.3164	Dished Washer	1
2c	MT.3170	Spring	1
2d	2BAS/700/8/S.ZP	Screw	1
2e	2BAN/100/S.ZP	Nut	1
2f	MT.4176/4181	Transfers	1
3	MT.3168	Plastic Knob	1
4	FD/5	Fan Disc Washer	1
5	MT.3620	Lower Support Bracket	1
6	WS/105/10/R.ZP	Guard Bracket Screw	1
7	MT.3514	Transmission Case Pulley	1
8	W10/S/SL.ZP	Washer	1
9	MT.375	Key	1
10	MT.3307	Grub Screw	1
11	MT.3515	Double Engine Pulley	1
12	MT.2925	Key	1
13	MT.3091	Grub Screw	1
14	MT.3598	Idler Bearing Assembly	1
	comprising		
	MT.3592	Idler Wheel	1
	MT.3593	Idler Wheel Spindle	1
	MT.3594	Needle Bearing	2
	MT.3595	Circlip	1
	MT.3596	Oil Seal	1
	MT.3599	End Cover	1
15	W6/S/SL.ZP	Washer	1
16	MT.2857	Locknut	1
17	MT.2931	Locknut	1
18	UFB/105/48/SS.ZP	Guard Bracket Bolt	1
19	MT.3635	Idler Arm	1
20	MT.2962	Chaincase Support L.H.	1
21	MT.2961	Chaincase Support R.H.	1
22	W6/S/SL.ZP	Washer	2
23	MT.3644	Spring	1
24	MT.3367	Spacer	2
25	MT.3391	Motor Mount R.H.	1
26	MT.3295	Motor Mount L.H.	1
27	MT.3511	Belt Guide Bracket Assembly	1
28	UFB/105/28/SS.ZP	Hex Bolt	1
29	UFB/105/24/SS.ZP	Hex Bolt	3
30	LW/5	Spring Washer	4
31	UFN/105/S.ZP	Hex Nut	4
32	UFB/105/44/SS.ZP	Hex Bolt	2
33	MT.2857	Locknut	3
34	MT.3371	Vee Belt A.48	1
35	MT.2992	Vee Belt A.41	1
36	MT.3643	Idler Arm Spindle	1
37	B.764	Cotter Pin	1
38	MT.3637	Hook Bolt	1
39	MT.3645	Grooved Nut	1
40	MT.3744	Clutch Idler Spindle Assembly	1
	Comprising	No's. 22, 23, 36, 37, 38, 39, as above.	

CHAINCASE ASSEMBLY



Item No.	Part No.	Part Name	Quantity per Machine		
1	MT.3297	Handle Spacer	..	..	1
2	MT.3253	R.H. Chaincase Half Assembly	..	..	1
2a	MT.3264	R.H. Case Half	..	..	1
2b	MT.3263	Needle Roller Bearing	..	..	2
2c	MT.343	Needle Roller Bearing	..	..	1
2d	MT.344	Rotor Shaft Oil Seal	..	..	1
3	MT.3252	L.H. Chaincase Half Assembly	..	..	1
3a	MT.3261	L.H. Case Half	..	..	1
3b	MT.3262	Needle Roller Bearing	..	..	2
3c	MT.3263	Needle Roller Bearing	..	..	1
3d	MT.343	Needle Roller Bearing	..	..	1
3e	MT.342	Drive Shaft Oil Seal	..	..	1
3f	MT.344	Rotor Shaft Oil Seal	..	..	1
4	MT.3438	Screw Oil Level	..	..	1
5	WD.104A	Fibre Washer	..	..	1
6	MT.3735	Filler Plug	..	..	1
7	MT.3260	Spacer	..	..	1
8	MT.3259	Rotor Shaft Assembly	..	..	1
9	MT.3267	Chain 1/2" Pitch	..	..	1
10	MT.3256	1/4" x 1/2" Sprocket Assembly	..	..	1
10a	MT.3280	Sprocket	..	..	1
10b	MT.3281	Needle Roller Bearing	..	..	2
11	MT.3257	Axle for MT.3256	..	..	1
12	MT.3258	Thrust Washer for MT.3257	..	..	2
13	W.6/S/SH	Washer	..	..	2
14	MT.2931	Locknut	..	..	2
15	MT.3266	Chain 1/2" Pitch	..	..	1
16	MT.3255	3/8" x 1/2" Sprocket	..	..	1
17	MT.3265	Chain 3/8" Pitch	..	..	1
18	MT.3254	Drive Shaft Assembly	..	..	1
18a	MT.3283	Drive Shaft	..	..	1
18b	MT.3284	Drive Shaft Sprocket	..	..	1
18c	MT.3779	Spiral Pin	..	..	1
19	UFS/104/8/R.ZP	Hex Screw	..	..	20
20	UFN/104/A	Hex Nut	..	..	21
21	FD.4	Washer	..	..	20
22	MT.105	Gasket	..	..	1
23	UFS/104/10/R.ZP	Top Guard Bracket Bolt	..	..	1
24	L.W.4	Washer for above	..	..	1
25	MT.4175	Hardened Washer	..	..	1

ADJUSTABLE HANDLE ASSEMBLY



Item No.	Part No.	Part Name	Quantity per Machine			
1	MT.3527	R.H. Handle Assembly	..	..	..	1
	comprising					
1a	MT.3531	R.H. Handle Weld Assembly	..	..	..	1
1b	MT.3311	Clutch Lever ..	..	..	..	1
1c	MT.3329	Clutch Lever Rivet ..	..	..	..	1
1d	MT.2309	Clamping Knob ..	..	..	..	1
1e	MT.3529	Locking Bolt ..	..	..	..	1
1f	MT.3058	Clutch Catch Spring ..	..	..	..	1
1g	MT.3330	Clutch Catch Rivet ..	..	..	..	1
1h	MT.152	Clutch Control Spring ..	..	..	..	1
1i	MT.3294	Handle Grip ..	..	..	..	1
1j	MT.3543	Upper Cross Bar ..	..	..	..	1
1k	MT.2634	Spacing Collar Long ..	..	..	..	1
1l	UFS/106/16/SS.ZP	Bolt ..	..	..	..	1
1m	W6/S.S.H/ZP	Washer ..	..	..	..	1
1n	MT.2931	Locknut ..	..	..	..	1
2	MT.3528	Handle Assembly L.H.	..	..	..	1
	comprising					
2a	MT.3533	Handle Weld Assembly L.H.	..	..	..	1
2b	MT.3294	Handle Grip ..	..	..	..	1
2c	MT.2634	Spacing Collar Long ..	..	..	..	1
2d	UFS/106/16/SS.ZP	Bolt ..	..	..	..	1
2e	W6/S.S.H/ZP	Washer ..	..	..	..	1
2f	MT.2931	Locknut ..	..	..	..	1
3	MT.3606	Handle Mounting Bracket Assembly	..	..	..	1
	comprising					
3a	MT.3552	Handle Mounting Bracket ..	..	..	..	1
3b	MT.3554	Spacing Collar Short ..	..	..	..	2
3c	MT.3887	Cable Guide ..	..	..	..	1
3d	MT.3545	Locking Plate ..	..	..	..	2
3e	MT.4173	Nameplate Titan ..	..	..	..	1
3f	WD.139	Nameplate Screws ..	..	..	..	2
3g	UFB/106/40/SS.ZP	Hex Bolt ..	..	..	..	2
3h	W6/S.S.H/ZP	Washer ..	..	..	..	1
3i	MT.2931	Locknut ..	..	..	..	2
4	MT.3544	Stay ..	..	..	..	2
5	MT.3616	Spacer ..	..	..	..	1
6	MT.3765	Cable Guide ..	..	..	..	1
7	UFB/108/56/SB.ZP	Pivot Bolt ..	..	..	..	1
8	W8/S.S.H.ZP	Washer ..	..	..	..	1
9	MT.3332	Locknut ..	..	..	..	1
10	MT.3530	Cup Square Bolt ..	..	..	..	1
11	MT.3061	Clamping Nut Assembly ..	..	..	..	1
12	UFB/106/32/SS.ZP	Bolt ..	..	..	..	1
13	MT.2931	Locknut ..	..	..	..	1
14	MT.4091	Throttle Control Bracket ..	..	..	..	1
15	MT.3982	Clutch Cable Assembly ..	..	..	..	1
16	MT.4148	Throttle Lever and Cable ..	..	..	..	1
17	2BAS/600/28/S.ZP	Rd. Hd. Screw ..	..	..	..	2
18	2BAN/100/S.ZP	Nut ..	..	..	..	2
19	KK.683	Cable Grip Rubber ..	..	..	..	2

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.3678	Plough Attachment
MT.2737	Heavy Duty Toolbar
	Rotary Grasscutter
MT.3757	36" Sickle 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.2978	Yard Scraper
MT.3003	Rake Attachment
MT.4262	Reverse Drive Attachment

This is a free download from:

<http://www.allotment.org.uk>