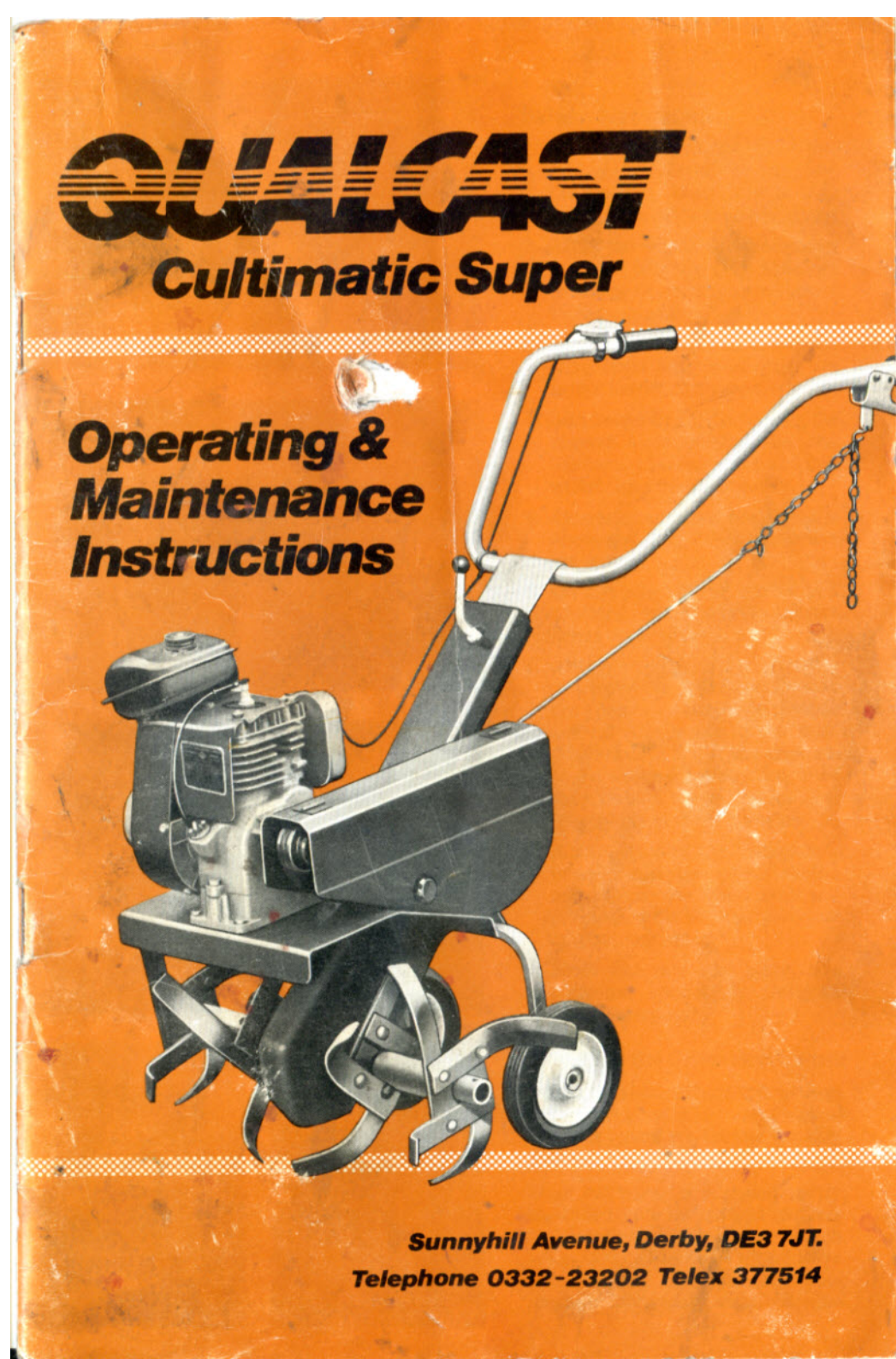


Qualcast Cultimatic Super **Cultivator Tiller Rotavator**

Manual – Operating & Maintenance
Instructions- Spare Parts List

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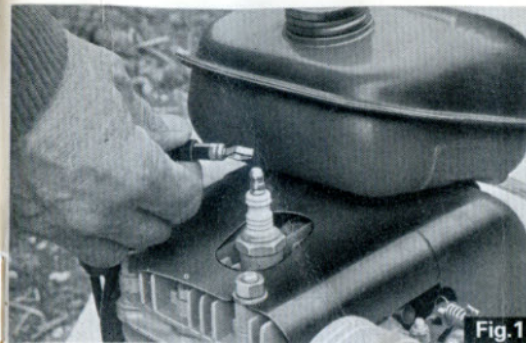


Fig. 1



Fig. 2



Fig. 3



Fig. 4 A



Fig. 4 B

Safety Instructions

1. Know your controls. Read this manual carefully before operating the machine. Learn how to stop the engine quickly in an emergency.
2. **STOP** the engine and disconnect the spark plug wire (Fig. 1) before checking or making adjustments to the cultivator.
3. Always visually inspect to see that nuts, bolts and other parts are secure before commencing work.
4. Add petrol **BEFORE** starting the engine. Avoid spilling fuel and under no circumstances add fuel whilst the engine is running.
5. Always ensure that the clutch is disengaged (Fig. 2) before starting the engine.
6. Do not operate the engine in a confined space where exhaust fumes can collect.
7. Always stop the engine whenever you leave the cultivator. To stop the engine just move the throttle control lever across to the 'stop' position (Fig. 3). If the engine is to be stopped for any length of time, turn off the petrol (A Fig. 4) by pushing in the tap button.
8. Always be sure the cultivator is in a safe operating condition. Use only replacement parts made and guaranteed by the manufacturer of your cultivator.
9. Store fuel in a cool place, in a container specifically designed for the purpose.

Preparing the Cultivator for use

NOTE: Right & left hand instructions refer to the machine when viewed from the operator's normal working position.

Your cultivator is supplied partly assembled in a carton and requires the handle, throttle lever, clutch cable, skid, wheels and rotors to be fitted before use. Examine your machine thoroughly, and if damaged

or faulty, inform your supplier at once.

Assembly Instructions

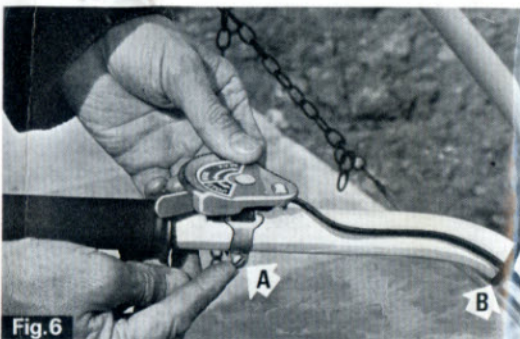
a Handle

Insert the rectangular tongue of the handle into slot (A Fig. 5A). Firmly clamp into position with the threaded clamp screw (Fig. 5B) contained in the hardware packet. Normally the handle is fitted in the fully forward (shortened) position but if a longer handle is required one of the two extra holes (C Fig. 5A) in the handle tongue can be used.



b Throttle

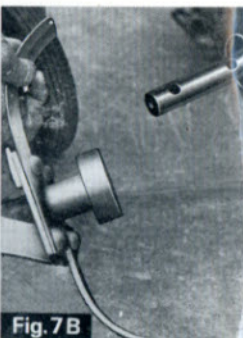
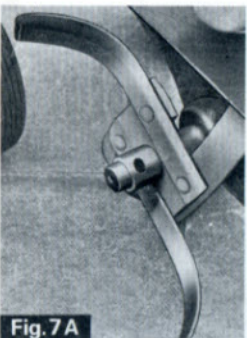
Carefully unwind the coiled throttle cable and bolt the throttle lever to the right handlebar, using the plated screws and nuts supplied, (A Fig. 6). Secure the cable to the handles with the cable clip as shown (B Fig. 6).



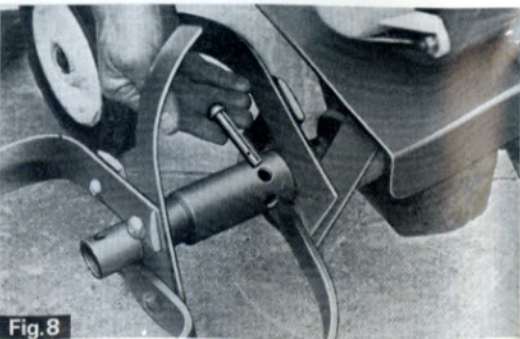
c Rotors

To assist you the rotors are marked RH (right hand) and left hand (LH). These apply as viewed from behind the machine. To fit the rotors proceed as follows:

i. The inner rotors should be placed on the main drive shaft, (Fig. 7A and B) ensuring that the finer **CUTTING EDGE** of each tine faces forward to ensure maximum operating efficiency.

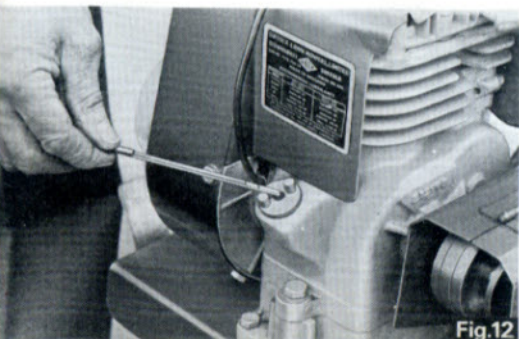
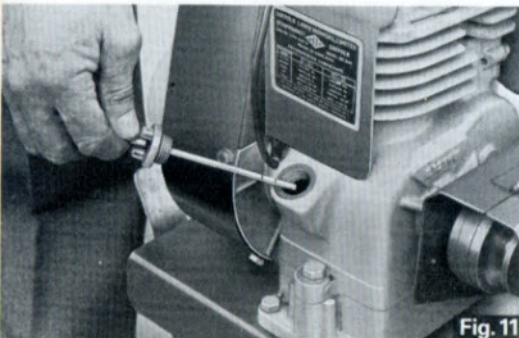
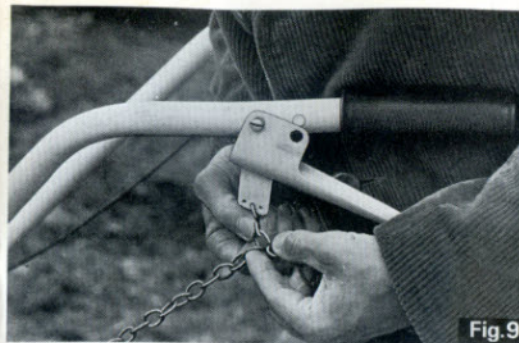


ii. The outer rotors must then be fitted with the cutting edge of the tines also facing forward. Ensure that the locking pin holes on the rotors line up with the holes in both the inner rotors and the drive shaft. The locking pins (Fig. 8) can then be inserted and spring clips located.



d Clutch Chain/Cable

The clutch chain/cable must be hooked to the clutch lever situated



on the left hand handlebar (Fig. 9). Select a link which allows slack in the cable to be taken up with the clutch lever raised to the half way position. Before attempting to start the engine however, ensure that when the clutch lever is fully released the engine turns freely without a tendency to drive the rotors. Check this by slowly withdrawing the engine starter cord. Remedy-lengthen the chain by one link (Fig. 9).

Oil (Chaincase and Sump)

NOTE: As supplied there is *no oil* in either the engine sump or the chaincase. It is therefore important to undertake this operation before attempting to start the engine. *It is also important to put oil in the chaincase before filling the sump because, as you will see, the machine has to be inclined sideways when filling the chaincase, which is not recommended whilst there is oil present in the sump.*

a Chaincase Oil

The transmission operates in a bath of oil in a sealed chaincase to ensure that the chains are properly lubricated at all times. To fill, pull out filler plug and pour in $\frac{1}{2}$ pint of SAE 30 (Fig. 10) oil or any of the recommended grades of engine oil shown on the engine nameplate. It will be necessary to lean the machine over on to its left side to do so. Replace plug when finished.

b Engine Sump Oil

Remove the filler plug together with the dipstick (Fig. 11) and put half a pint of the recommended oil into the sump. See engine nameplate for recommended grades of oil. Replace the filler plug firmly. Then check the oil level on the dipstick (Fig. 12) and likewise every time thereafter before use.

Add more oil as necessary to

bring the level up to the full mark on the dipstick.

Readings should always be taken when the engine is approximately in an upright position. Replace the dipstick firmly after use.

Petrol

Your cultivator is powered by a 4-stroke engine which operates on pure petrol. Therefore **DO NOT MIX OIL WITH PETROL**. Unscrew the filler cap and remove anti-rust paper (Fig. 13). Fill the petrol tank with **CLEAN** pure petrol, preferably low grade, three star (95 octane value). It is advisable to use a fine gauze filter for this purpose (Fig. 14). The tank holds approximately 1½ pints which is enough for about two hours work.

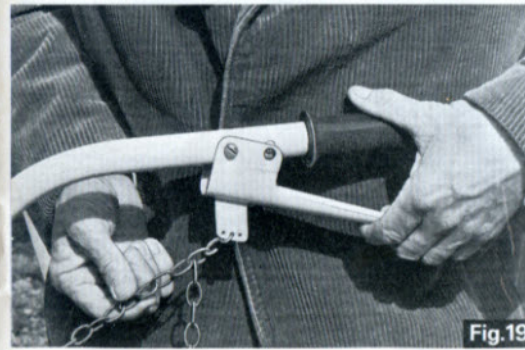
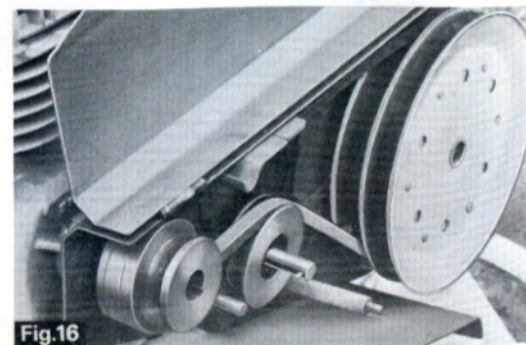
Always replace the cap securely on the petrol tank. **WARNING:** It is dangerous to fill the petrol tank while the engine is running.

Transportation

To move the cultivator to the area to be worked, you should use the transport wheels attached to the rear skids. The cultivator should arrive with the skids in the 'forward' transport position (Fig. 15A). If however this is not so, the skids should be moved into the 'forward' position, (Fig. 15B) by slackening the clamp (A Fig. 15B) removing the locking pin and moving the skids forward towards the rotors until the alternative locking pin hole is lined up. The pin should then be replaced.

Rotor Speed

The speeds, standard and overdrive, are provided on your Cultimatic to cover the variety of work and ground conditions that may be encountered. The machine has been despatched from the factory with the standard speed drive engaged. Figure 16 shows it set for overdrive. Standard speed is ideal for digging, hoeing, ridging and weeding in confined areas. However, for open stretches of cultivated land it will be helpful to change up to overdrive.



To change from one speed to the other it is necessary to unscrew the cover securing knob (Fig. 17) and open belt case. Then ease the drive belt off the jockey pulley (A Fig. 18A). Sufficient slack is then provided to allow the belt to be moved from the inner (overdrive) set of pulleys to the outer (standard) set or vice versa (Fig. 18B). After the drive belt has been repositioned, re-engage the jockey pulley and **CLOSE THE BELT CASE**, ensuring that the knob is tightened fully. After this adjustment, it may be necessary to re-adjust the length of the clutch cable. This is accomplished by simply selecting an alternative link in the chain connection to the clutch lever, so that slack on the chain is taken up when the clutch lever is raised to about half way (Fig. 19). **Note: DO NOT ATTEMPT TO MAKE THIS ADJUSTMENT WITH THE ENGINE RUNNING.**

Handle Adjustment

The handle length may be adjusted into one of three positions to suit individual preference. This is achieved by releasing the clamp screw and selecting the appropriate adjustment. Replace the clamp screw afterwards and tighten up firmly.

NOTE: IT IS FIRST NECESSARY TO RELEASE THE CLUTCH CHAIN CABLE. ONCE THE HANDLE ADJUSTMENT HAS BEEN COMPLETED THE CLUTCH CHAIN /CABLE CAN BE ADJUSTED AS EXPLAINED EARLIER

Operating the Cultivator

Starting the Engine

NOTE: Before attempting to start the engine ensure that the clutch is dis-engaged. To do this raise the clutch lever slowly until the spring loaded lock pin (A Fig. 20A) disengages, thus allowing the clutch to be lowered into the disengaged position (B Fig. 20B).

Never race the engine, especially for the first five hours running from new.

Turn the petrol tap on by pulling out the tap button and position the throttle lever half way between maximum and minimum marks.

Partly close the choke lever to a position of about 45 degrees to the vertical (Fig. 21A).

Press the 'tickler' on top of the carburettor (Fig. 21B) until petrol just begins to flow through the small hole (A Fig. 21B).

Pull the recoil starter grip (Fig. 22) out until resistance is felt, allow the rope to rewind and then give a long smooth pull to start. It is not necessary to pull the cord out to full extension to start the engine. Furthermore always return the starter grip under control to its normal position of rest to avoid damage to the starter. As soon as the engine starts up, open the choke immediately.

NOTE: To stop engine, move throttle lever forward into the 'Stop' position.

Digging

NOTE: Allow the engine to warm up for a few minutes before commencing work with the cultivator.

The throttle lever should be opened to approximately two thirds (Fig. 23) position before the clutch lever is engaged.

Once the clutch lever is engaged the rotors will commence to rotate and a downward pressure on the handles will set the rear skids (Fig. 24) into the ground and prevent forward movement. The tines fitted to the rotors will then dig downwards until the required depth is reached. By easing off the pressure on the handles, the cultivator will move forward to new ground, at which point the procedure should be repeated.

Continued on page 14.

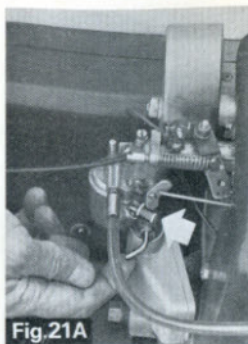


Fig. 21A



Fig. 21B

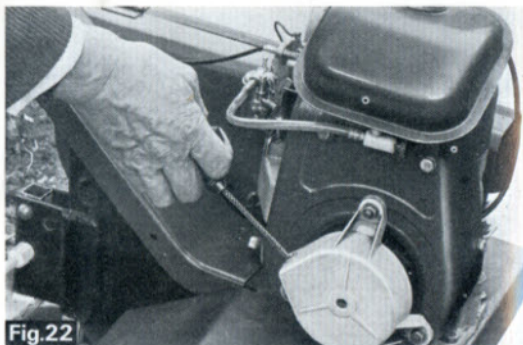


Fig. 22

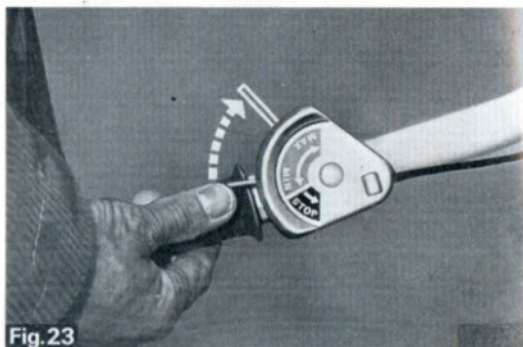


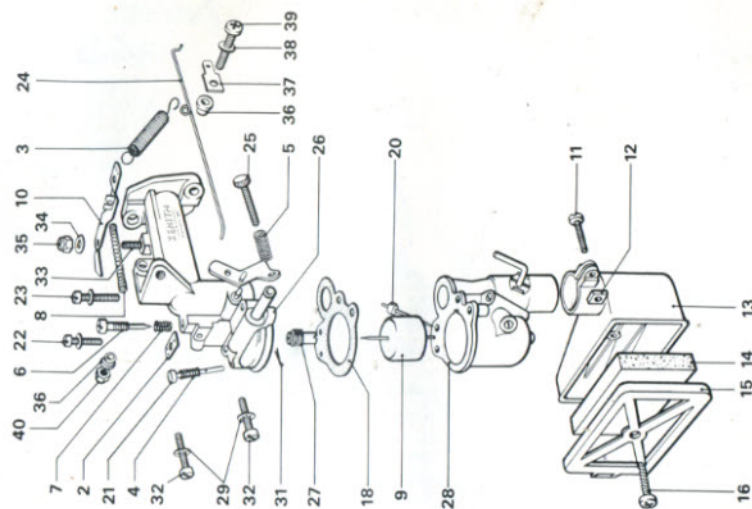
Fig. 23



Fig. 24

CARBURETTOR

Ref. No.	Part No.	Description	Quantity
1	L8589	Manifold Gasket (not illustrated)	1
2	B18639	Spring Anchor Plate	1
3	L8334	Governor Spring	1
4	015454	Spring for Tickler	1
5	08539	Spring for Throttle Stop Screw	1
6	015457	Air Regulating Screw	1
7	015458	Spring for Air Regulating Screw	1
8	L6531	Throttle Return Spring	1
9	020507	Float & Needle Assembly	1
10	L14743	Throttle Lever	1
11	L11337	Screw for Air Filter	1
12	L11221	Nut for Air Filter	1
13	L14744	Air Filter Body	1
14	L14736	Filter Element (Foam)	1
15	L14739	Air Filter Cover	1
16	L12892	Screw for Cover	1
18	020583	Gasket (Bowl to Barrel)	1
20	020582	Slow Running Tube	1
21	020572	Tickler	1
22	020584	Screw & Spring Washer Short	1
23	B19225	Screw & Spring Washer Long	1
24	L14738	Throttle Link	1
25	B16493	Throttle Stop Screw	1
26	B25344	Carburettor Barrel Assembly	1
27	B17767	Needle Seating	1
28	B25467	Carburettor Bowl	1
29	L18026	Shakeproof Washer	2
31	05890	Split Pin for Tickler	1
32	L9087	Screw for Carb. Fixing	2
33	L14779	Stud for Throttle Lever	1
34	L18303	Washer for Throttle Lever	1
36	B24712	Insulating Bush	2
37	B24713	Cut Out Connection Tab	1
38	020102	Washer	1
39	B25352	Screw	1
40	B25995	Nut	1



Quantity

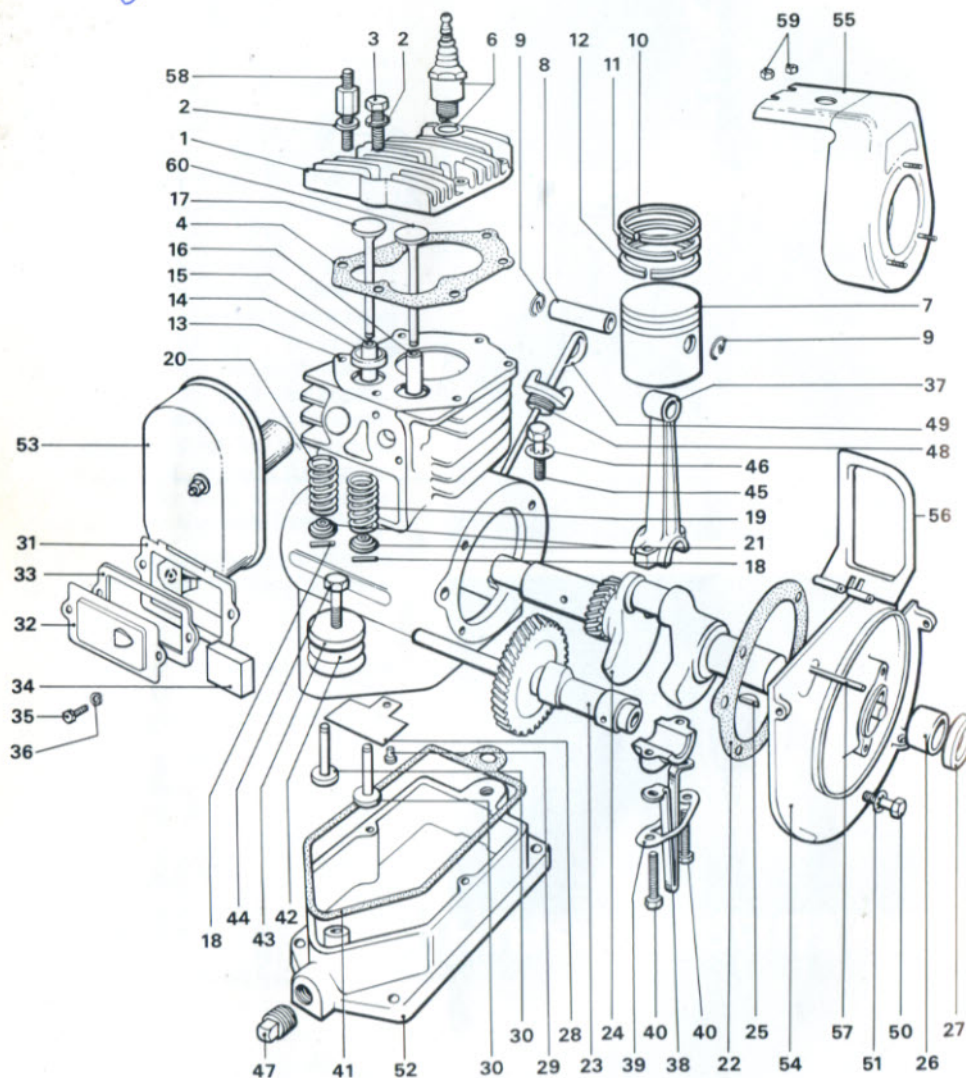
Description

Part No.

Ref. No.

L 35380

Figure 8-20
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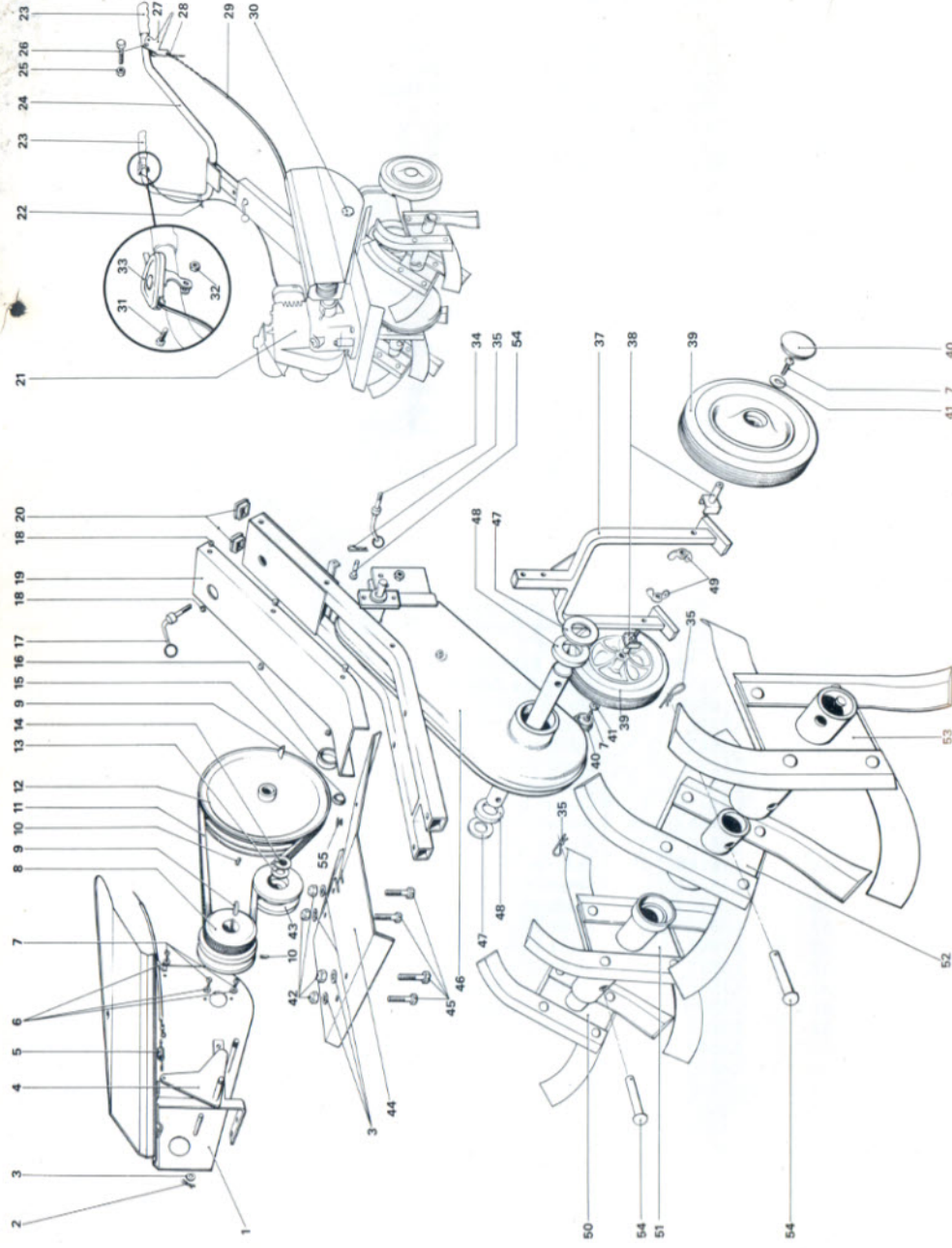


CULTIMATIC SUPER - ENGINE 98G 14 3H

Ref.No.	Part No.	Description	Quantity
1	L8223	Cylinder Head	1
2	L18022	Washer for Cylinder Head Screws	10
3	L18170	Setscrew for Cylinder Head	6
4	L8224	Gasket for Cylinder Head	1
6	L8400	Spark Plug	1
7	L8218	Piston	1
8	L8222	Gudgeon Pin	1
9	L3518	Circlip	2
10	L8219	Compression Ring	1
11	L8220	Scraper Ring	1
12	L8221	Oil Ring	1
13	L12265	Cylinder Block	1
14	L3534	Valve Seat Insert - Exhaust	1
15	L3532	Exhaust Valve Guide	1
16	L3533	Inlet Valve Guide	1
17	L8225	Exhaust Valve	1
18	L3531	Cotter Pin for Valve Spring	2
19	L3529	Inlet Valve Spring	1
20	L3528	Exhaust Valve Spring	1
21	L3968	Valve Spring Retainer	2
22	L3859	Paper Gasket for Backplate	1
23	L3510	Camshaft	1
24	L8210	Crankshaft	1
25	L3597	Key for Crankshaft	1
26	L3536	Main Bearing	2
27	L3813	Oil Seal	2
28	L3561	Breather Baffle	1
29	L3814	Drive Screw for Breather Baffle	1
30	L8217	Tappet	2
31	L12267	Breather Body	1
32	L12268	Beather Cover	1
33	L12273	Gasket	1
34	L12272	Filter Element	1
35	L9087	Screw for Breather	2
36	L18090	Spring Washer	2
37	L8211	Connecting Rod	1
38	L3522	Oil Splasher	1
39	L3523	Locking Strip	1
40	L18344	Screw for Big End Bearing Cap	2
41	L3547	Gasket for Sump	1
42	L3749	Asbestos Washer	1
43	L3566	Washer for Sump Bolt	1
44	L18169	Bolt for Sump	1
45	L18168	Setscrew for Sump	1
46	L3821	Shakeproof Washer	1
47	L3822	Drain Plug	1
48	L7506	Filler Plug	1
49	L6895	Dipstick	1
50	L18167	Screw for Magneto Backplate	4
51	L18090	Spring Washer	4
52	L8226	Sump	1
53	L8685	Silencer Assembly	1
54	L8169	Magneto Backplate	1
55	L9249	Flywheel Magneto Coil	1
56	L8202	Governor Blade	1
57	L8336	Governor Spindle	1
58	L8590	Cylinder Head Studs	2
59	L18016	Nut for Head Studs	2
60	L3526	Inlet Valve	1
	L9298	Petrol Tank Assembly	1
	L16019	Petrol Tap	1
	L5309	Petrol Tube	1
	L18029	Screw	3
	L18030	Washer	3
	L6961	Nut	3

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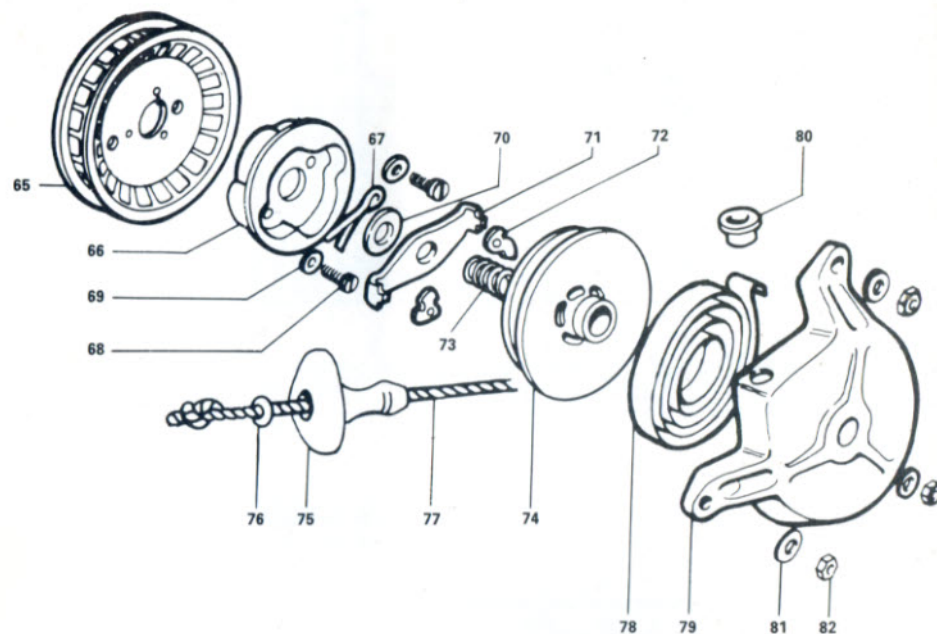
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CULTIMATIC SUPER

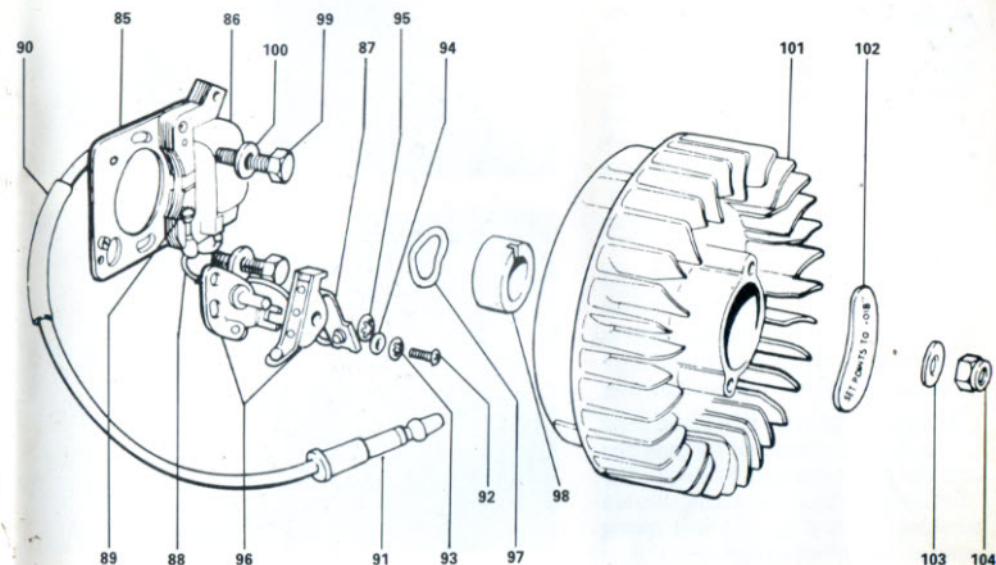
Ref.No.	Part No.	Description	Quantity	Ref. No.	Part No.	Description	Quantity
1	L17177	Pulley Guard Assembly	1	29	L17239	Clutch Cable Assembly	1
2	L17253	Split Pin for Clutch Control	1	30	L17260	Handwheel Assembly	1
3	L11101	Washer for Engine & Clutch Control	5	31	L10890	Screw for Throttle Control	1
4	L17189	Jockey Pulley Bracket Assembly	1	32	L10892	Nut for Throttle Control	1
5	L17245	Spring for Clutch Cable	1	33	L17561	Throttle Control Lever Assembly	1
6	L11127	Washer for Pulley Guard Assembly	3	34	L17232	Locking Lever Assembly for Skid	1
7	L11304	Screw for Pulley Guard & Wheels	5	35	L17247	Spring Clip for Slashers & Skid	3
8	L17223	Engine Pulley	1	36	L17248	Drive Pin for Skid	1
9	L3845	Woodruff Key	2	37	L17205	Rear Skid Assembly	1
10	L11354	Grub Screw for Engine Pulley & 2 speed Pulley	2	38	L17235	Spindle Assembly for Wheels	2
11	L17249	Vee Belt	1	39	L12115	8" Transport Wheel & Tyre	2
12	L17224	2-Speed Pulley Assembly	1	40	L17325	Hub Cap	2
13	L18114	Washer for Jockey Pulley	1	41	L11130	Washer for Wheel	2
14	L8585	Circlip for Jockey Pulley	1	42	L11201	Nut for Engine	4
15	L9572	Closing Plug	1	43	L17262	Jockey Pulley Assembly	1
16	L17176	Cap for Bearing Boss	1	44	L17193	Rotor Guard	1
17	L17228	Locking Lever Assembly for Handle	1	45	L18410	Bolt for Engine	4
18	L17252	Rivet - Plastic Snap-in	1	46	L17141	Main Body Assembly	1
19	L17194	Cover Plate	6	47	L18409	Washer for Oil Seal	2
20	L17251	Plug Insert	2	48	L17255	Felt Washer	2
21	L12024	Engine 98 cc.	1	49	L11227	Wing Nut	2
22	L11580	Control Cable Strap	1	50	L17222	Slasher Blade Assembly - Outer R.H.	1
23	L17204	Handle Grip	2	51	L17218	Slasher Blade Assembly - Inner R.H.	1
24	L17195	Handle Sub Assembly	1	52	L17210	Slasher Blade Assembly - Inner L.H.	1
25	L11225	Nut for Clutch Lever	1	53	L17219	Slasher Blade Assembly - Outer L.H.	1
26	L11352	Bolt for Clutch Lever	1	54	L17246	Drive Pin for Slashers	2
27	L17199	Lever Grip Assembly	1	55	L17922	Blind Grommet	1
28	L17244	Link	1				

RECOIL STARTER



Ref.No.	Part No.	Description	Quantity
65	L9255	Rotary Screen	1
66	L9332	Driving Hub	1
67	L3847	Split Pin	1
68	L18176	Screw	2
69	L18174	Shakeproof Washer	2
70	L18177	Washer	1
71	L9329	Activator	1
72	L9330	Pawl	2
73	L9331	Compression Spring	1
74	L9328	Pulley	1
75	L11932	Handle for Starter Rope	1
76	L9035	Ferrule for Rope	1
77	L5517	Rope	1
78	L5516	Recoil Spring	1
79	L10889	Cover Assembly	1
80	L9333	Eyelet for Cover	1
81	L18030	Plain Washer for Cover	3
82	L18175	Nut for Cover	3

MAGNETO ASSEMBLY



Ref.No.	Part No.	Description	Quantity
85	L8108	Stator Plate Assembly	1
86	L8123	Coil & Condenser Assembly	1
87	L8126	Retaining Clip for Coil	1
88	L8149	Lead Clamp Screw	1
89	L8160	Star Washer	1
90	L8124	H.T. Lead	1
91	L11606	Suppressor	1
92	L8131	Screw for Adjuster Plate	1
93	L5042	Shakeproof Washer	1
94	L18172	Washer for Adjuster Plate Screw	1
95	L8137	Retaining Clip (Breaker Arm)	1
96	L8524	Contact Breaker Set	1
97	L5052	Wave Washer	1
98	L8146	Cam Sleeve	1
99	L18167	Screw for Stator Plate	2
100	L9725	Washer for Stator Plate Screw	2
101	L9300	Flywheel	1
102	L9304	Inspection Cover	1
103	L8390	Crankshaft Washer	1
104	L8043	Crankshaft Nut	1

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Simply continue this cycle until the whole area is dug. On some occasions it may be necessary to slightly lift the handles to start the forward movement.

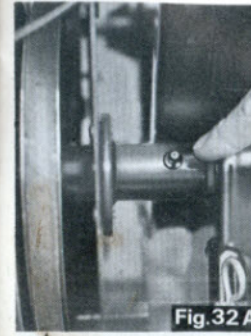
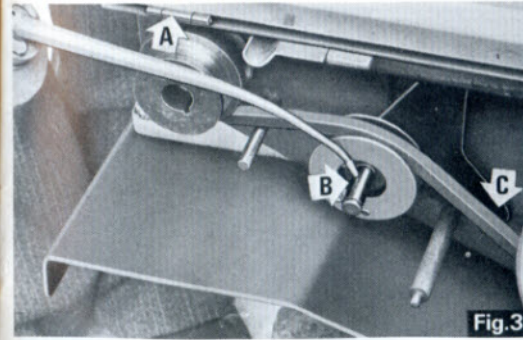
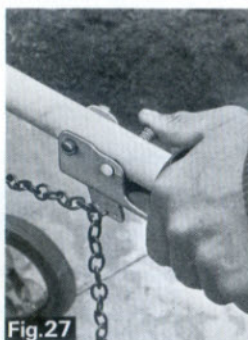
It is recommended that whilst learning how to work the cultivator, the clutch is held in the engaged position manually. In other words, do not press the spring loaded locking pin into position as shown in (Fig. 25). It will only be necessary now to release the clutch lever (Fig. 26) and the tines will stop rotating instantly.

However, with practice you will soon acquire increasing confidence and expertise in handling the machine, when the clutch can be permanently engaged with the clutch locking pin.

To release the clutch locking lever it is simply necessary to pull the clutch lever gradually up to the handle grip and the spring loaded locking catch (Fig. 27) will spring out as described earlier.

Further hints for ease of Operation

1. Select the right speed for the job in hand. (See section on Rotor Speed above).
2. Do not try to rush the work. Proceed at a slow walk, to give the cultivator time to break down the soil.
3. Do not try to fight the machine. Keep relaxed and let the machine do the work. Keeping the machine upright should be no problem due to the balance provided by the twin skids. **IF THE CULTIVATOR TYNES TEND TO 'WALK' ACROSS THE TOP OF THE SOIL WITHOUT ANY PENETRATION, DO NOT TRY TO HAUL IT BACK BUT SIMPLY PRESS DOWN (Fig. 28) ON THE HANDLES SO THAT THE SKIDS (I.E. THE BRAKES) DIG INTO THE SOIL, AT WHICH POINT THE ROTOR TYNES WILL AUTOMATICALLY START TO DIG DOWNWARDS.**



4. When working on a slope work across the slope starting at the top and work down. In this way the firmer ground on the 'downward' side of the cultivator will tend to keep the machine level.
5. Cultivate only when conditions are suitable. Cultivating water logged or frozen ground will yield poor results.
6. Try to cultivate at different depths each year to avoid compaction of the sub soil at any one level.

General Maintenance

To ensure the best results, follow this simple routine:

Before use, the following points will require oiling. Engine oil will be suitable for this purpose.

- a) Transport wheel spindles (Fig. 29).
- b) Clutch lever pivot point (Fig. 30).
- c) Transmission cover hinge (A Fig. 31).
- d) Jockey pulley spindle (B Fig. 31).
- e) Jockey pulley lever arm pivot (C Fig. 31).

After first five hours

Change engine sump oil only (see below). It will not be necessary to change the chaincase oil on this occasion. Check general tightness of nuts and bolts.

After 30 hours or a season's use the following will need attention:

- a) Apply grease to intermediate pulley shaft through grease nipple (Fig. 32A) and to end of shaft by removing plastic cap (Fig. 32B). Replace cap firmly.
- b) Change oil in both engine sump and chaincase (see below).
- c) Clean airfilter (see below).
- d) Check nuts and bolts for tightness.

Oil Change (engine sump and chaincase)

After the first five hour oil change mentioned earlier, it is desirable to change the oil in both the sump and the chaincase on the same occasion, thereafter.

a Changing Chaincase Oil

As the chaincase is sealed little oil is likely to escape during normal use. It is, however, advisable to change the oil at least once a year. To do this, it is necessary to tip the cultivator on to its side. Before draining therefore ensure that the petrol tank is empty. Remove the oil filler plug and tilt the cultivator sideways until the chaincase is drained completely. Then add clean oil as described previously (Fig. 33) see page 3.



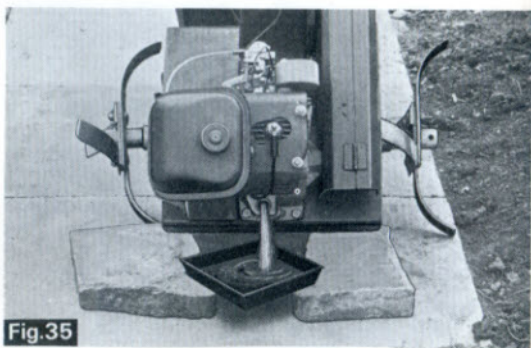
b Changing Engine Sump Oil

To change the engine sump oil, remove the oil filler plug (Fig. 34) at the front of the engine to allow the oil to run out. This is best done immediately after use, whilst the oil is hot and drains freely. Tilt the cultivator forwards as shown, using two blocks or bricks to increase the angle further (Fig. 36) to ensure complete drainage. When empty add clean oil as described previously and replace plug firmly, see page 3.



Cleaning Air Filter

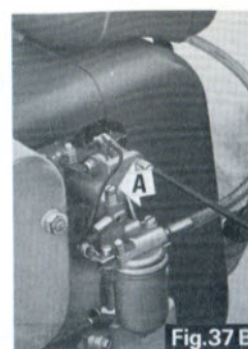
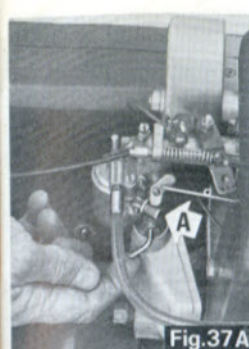
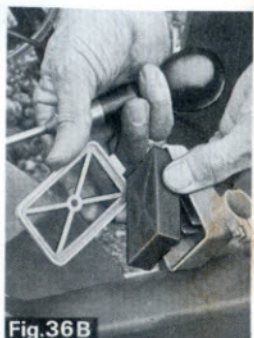
After every thirty hours use (or more frequently if conditions are very dirty) remove the central screw and pull off the air filter (Fig. 36A). Take out the foam element (Fig. 36B) and wash this element in clean petrol. Squeeze it out and allow to dry before replacing carefully. Refit and tighten central screw.



Replace the element after 100 hours of use.

Magneto Points

The points are set at 0.018" to 0.020" at the works during manufacture and will rarely require adjustment between normal servicing periods. In the event of difficulty contact your nearest Service Agent.



Carburettor Adjustment

Carburettor adjustment is somewhat sensitive and should not be attempted unless absolutely necessary. If however adjustment proves necessary then:

- If tick-over is too slow or too fast, this can be corrected by turning the throttle stop screw (A Fig. 37A) clockwise to increase speed, anti-clockwise to reduce speed, ensuring that the throttle control lever is in the tick-over position.
- Tick-over and starting may be improved by turning the air regulating screw slightly one way or the other (A Fig. 38B). The optimum position for this screw is three quarters to one full turn open (i.e. anti-clockwise from the fully closed position).

Ignition Details

The spark plug gap should be between 0.020" and 0.025" (Fig. 39).

NOTE: A T.V. suppressor is fitted in the plug cap attached to the H.T. lead (Fig. 39).

Belt Clutch Adjustment

After a bedding in period, the drive belt may require re-adjustment to ensure the clutch's continued positive drive. This is achieved by shortening the chain link on the clutch lever (Fig. 40) see page 3.

NOTE: DO NOT ATTEMPT TO ADJUST WITH THE ENGINE RUNNING.

Cultimatic Super Attachments

The main advantage of the Qualcast Cultimatic is the reduced time and effort required in digging and preparing the ground for planting. But anyone involved with growing his own crops will know only too well that the hard work is far from finished once the initial preparation has been carried out. Such tasks as seed bed preparation, ridging, fertilizing, weeding and hoeing, have to be carried out throughout each season to ensure successful crops.

To widen the scope of your Cultimatic and to extend its use all the year round, a number of attachments are available, shown below.

Tool Bar

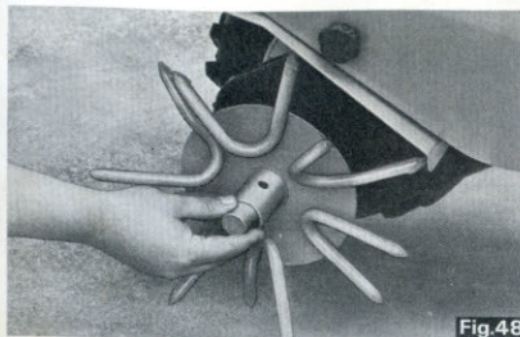
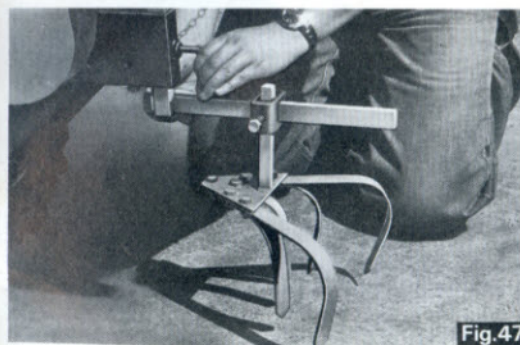
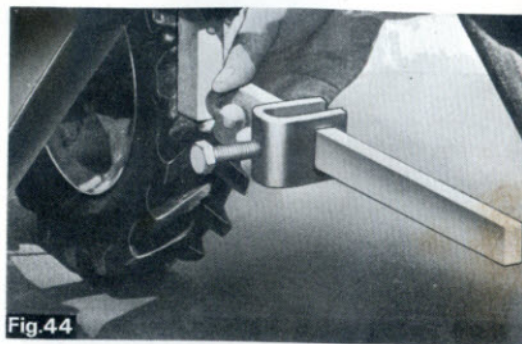
The tool bar (Fig. 41) is designed to accept two of the attachments listed below, the ridger and the five prong hoe.

Fitting the Tool Bar

To fit the tool bar, it will be necessary to remove the rear skid completely from the chassis first (Fig. 42). Then slacken the clamp bolt on the rear of the tool post on the chassis (Fig. 43). Insert the vertical member of the tool bar and tighten the clamp into one of the several locating notches (Fig. 44) designed to provide a variety of height adjustments to suit the particular attachments being used, and the demands and nature of the work.

Ridger (Plough)

Following the initial digging in late winter or early spring, one of the first tasks to be carried out is ploughing channels in the soil for planting beans, potatoes, and other root crops quickly and easily. It will also ridge up the soil for potatoes when the plants have grown.



Using the tool bar clamp, insert the vertical post of the ridger through the slots of the clamp and tighten the clamps securely (Fig. 45). For this attachment the tool bar is normally mounted in its highest position and can be adjusted to provide varying channel depths.

Where the soil is compacted and requires to be broken up to ease the way for the plough, it is sometimes helpful to use one pair of slasher rotors (Fig. 46) instead of the rubber tyred wheels.

Five Pronged Hoe

Throughout the growing season a continuous loosening of the soil is necessary for aeration and weed prevention to help and protect seedlings and plants. The five-pronged hoe (Fig. 47) attachment will provide you with the mechanical means of carrying out these otherwise onerous and time consuming tasks.

Although it is possible to use a pair of rotors as a means of traction, it is recommended that rubber tyred wheels would be a better solution as this would give the added balance which is needed for inter-row work.

To fit this attachment follow the procedure above for the ridger.

Fine Rotors

This attachment (Fig. 48) which can be purchased either as one pair or two, is used in place of - and are fitted in exactly the same manner - as the slasher rotors. The attachment has been designed to further break down the soil into fine tilth, following the use of slasher rotors, which make it ideal for the preparation of seed beds, planting out, or for lawn making.

Rubber Tyred Wheels

Designed for use with both the hoe and the ridger to give better traction and balance, particularly when working between rows of plants.

To fit, first remove the rotors and fit the wheel adaptor (Fig. 49) (if supplied loose) over the rotor shaft. The wheel can then be slid over the adaptor and located by means of the adaptor pins slotted into the milled recess of the wheel (Fig. 50). The drive pins are then inserted on the inside of the wheel through the adaptor and rotor shaft. Finally snap home the spring clip into place.

Crop Shield (disc coulters)

These are fitted to the end of the rotor shaft (Fig. 51) and are a means of protecting plants from both the rotor action itself and soil which may be disturbed and turned outwards when the Cultimatic is being used between rows. They should be locked to the rotor shaft by means of the pin and spring clip provided.

IMPORTANT: It is essential when ordering spare parts that the following information be given:

- Model and number of machine
- Part number, NOT plate reference number.
- Description of part.

NOTE: Where parts are made right and left hand these are determined as the machine is pushed.



Fig.49



Fig.50

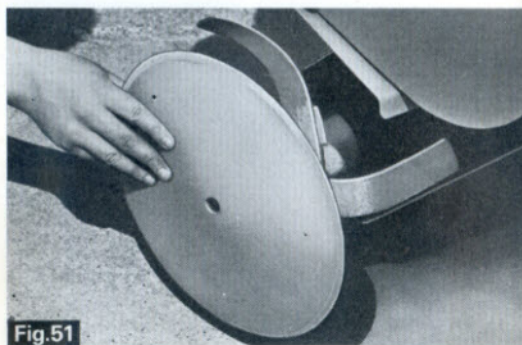


Fig.51

SPARES AND SERVICE

We have Service Branches covering the whole of the United Kingdom and in addition some 400 appointed agents in all principal towns to give "on the spot" service to all our machines.

In the event of spares or service being required, therefore, please contact your nearest branch or write to us for the name and address of your nearest appointed service agent.

SERVICE BRANCHES

DARLINGTON (Co. Durham)
McMullen Road, Darlington
Co. Durham DL1 1XZ
Telephone: 0325-2671, 66939

SCOTLAND
Industrial Estate, Larkhall,
Strathclyde ML9 2PF
Telephone: 0698-882370

SHEFFIELD (South Yorks.)
Rotherham Road
Eckington, Sheffield S31 9FH
Telephone: 024683-2373/4

NORTHERN IRELAND
Rugby Engineering Works,
101 Rugby Avenue,
Belfast BT7 1RF
Telephone: 0232-36488/9

PRESTON (Lancs.)
The Grove, School Lane,
Longton,
Nr. Preston PR4 4SA
Telephone: 0772-612451/2

BIRMINGHAM (West Midlands)
P.O. Box 256,
Atco Works, Tilton Road,
Birmingham B9 4PR
Telephone: 021-773-1441/3

CHEPSTOW (Gwent)
Castleford, Tutshill
Chepstow NP6 7YJ
Telephone: 02912-2732, 2114

NORTH LONDON
Charlton Road, Edmonton,
London, N9 8HR
Telephone: 01-804-5262/3

EXETER (Devon)
14 Marsh Green Road,
Marsh Barton, Exeter EX2 8PG
Telephone: 0392-73882, 54017

REIGATE
61 Albert Road North
Reigate, Surrey RH2 9EP
Telephone: 07372-45731/5



AMENDMENT SLIP FOR CULTIMATIC SUPER MANUAL

Please note the following alterations to this manual :-

Page 2

Paragraph C (1) should read :- The inner and outer rotors should be placed on the main drive shaft, - - - -

Page 4

Transportation

The cultivator should arrive with the skids in the forward transport position (F1G 15A). If however this is not so (F1G 15B) the skids should be moved into the forward position by slackening - - - -

Page 7

Item 36 B24712 Insulating Bush Deleted
Item 37 B24713 Cut-out connection tap Deleted
Item 39 B25352 Screw Deleted
Item 40 B25995 Nut Deleted

Page 9

Item 37 should read, L08214 Con rod assembly not L8211 Con rod.
Item 55 should read, Flywheel magneto cowl not coil
L18029 should be 7 per set not 3 per set.

Page 16

Paragraph B

This section refers to figures 34 & 35 not 34,36

Cleaning air filter This should read :-

After every thirty hours use (or more frequently if conditions are very dirty) remove the air filter from the carburettor (F1G 36A) undo the central screw to remove air filter cover, take out the foam element (F1G 36B) and - - - -

Page 17

Carburettor adjustment B

This section refers to (A F1G 37B) not (A F1G 38B).

Ignition details

This section refers to (F1G 38) not (F1G 39)

