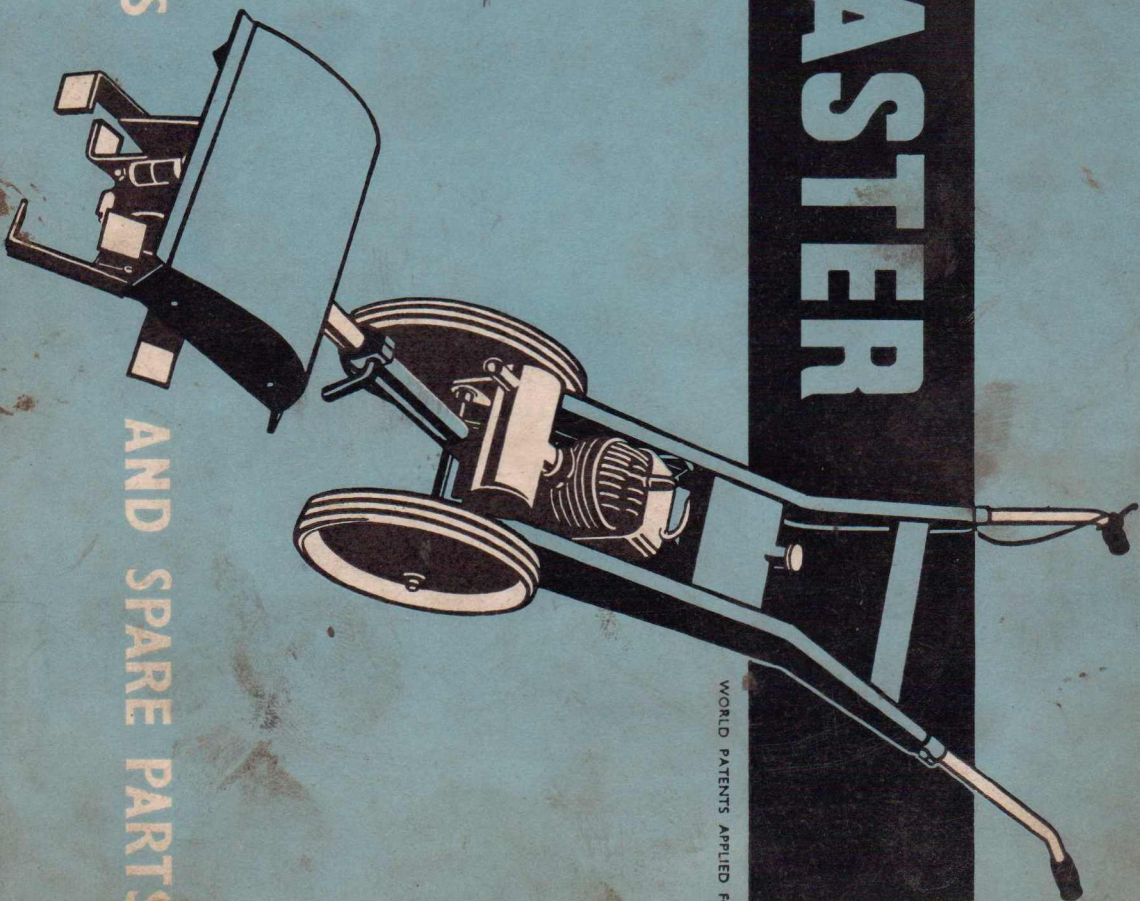


*Landmaster*

# GARDENMASTER

MODEL 80 SERIES 2



OPERATING INSTRUCTIONS

AND SPARE PARTS

WORLD PATENTS APPLIED FOR

# THE *Landmaster* GARDENMASTER 80

THE Gardenmaster 80 is a proved and efficient aid to gardening in all its aspects—for private owner, for municipalities, and for professional grower.

It will mechanically dig, hoe, cut rough grass, mow lawns, and trim hedges, and it will do much more work in far less time.

The Gardenmaster 80 is extremely light to handle and easy to control; an outstanding feature of the machine is the simple arrangement for changing implements—no spanners are required.

The unique design of the tool head enables it to be turned through 90° for use as a special spin weeder, and with this attachment close cultivating and hoeing between plants and shrubs becomes a pleasure. When working on narrow borders, the projecting tool head allows the Gardenmaster to be worked from the lawn or from the path.

Best results for rotary digging are obtained by first working the machine to the required depth at the beginning

of each row and then, slowly and without effort, swinging the tool head from side to side as the machine moves forward.

The Gardenmaster will operate in a forward or backward direction. Working backwards avoids walking over newly cultivated ground but this method should only be practised on soil previously dug. To work backwards the direction of the rotor blades is reversed by simply turning the tool head on which the rotor blades are fixed. With this setting, trench digging to a good spade depth can be achieved.

For shallow inter-row weeding, hoe blades are recommended. Set the engine at approximately half-throttle, work the blades to the required depth, and then proceed at walking pace.

On hard ground where standard hoe blades will not penetrate, the pick tines will effectively break up the soil.

For the handyman the flexible drive (as supplied for the hedge trimmer), when fitted with a  $\frac{1}{4}$ " chuck, can be used for small tools such as drills up to  $\frac{1}{4}$ " diameter.

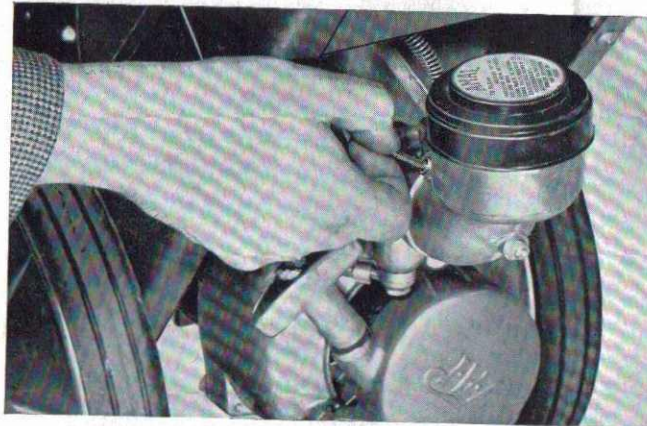
## O P E R A T I N G

Attention to the following points will ensure years of trouble-free service:

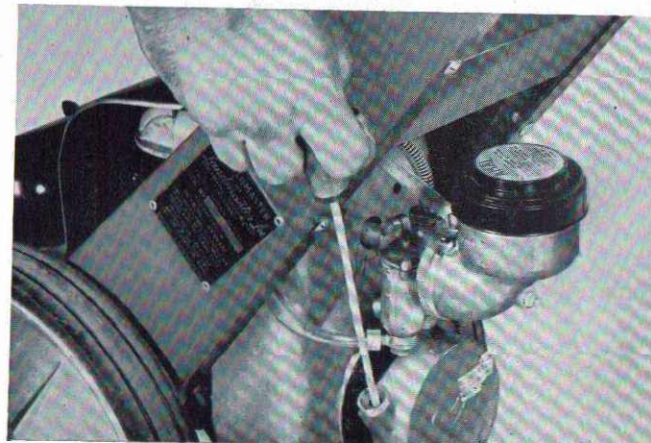
- Always use the correct fuel mixture. Never run the engine without its air filter. Use only a sparking plug of the type recommended by the engine makers.
- Clean the air filter as recommended and see that it is fitted correctly.
- When finishing work for the day, see that the petrol tap is turned off and fuel drained from the carburettor by running the engine until it stops.
- Keep the engine speed low (usually a third to half throttle), and never race or overload.
- The rotor speed should never be so high that it throws soil and stones over the machine.
- To avoid damage to the blade when cutting grass, remove stones, etc., before use.
- Consult your Gardenmaster distributor or agent for maintenance, overhauls, and spares requirements.

### FUEL MIXTURE

The correct fuel mixture ('petroil') is 24 parts commercial petrol (cheaper grade) to 1 part lubricating oil (S.A.E.30). This should be well mixed in a clean can before putting in the fuel tank. If a quantity of fuel mixture has been left in the tank for several hours, rock the machine to agitate and remix.



A



B

## I N S T R U

### AMAL OIL BATH

Before using engine and pour in the Filtering oil to cover the Retaining Gauze. Set in the Top Cover with any surplus and finally taking care to support Cover is snapped home.

**MAINTENANCE.** After hours (more frequently conditions) clean the Absorbent Pad, Gauze petrol, allow to drain, re-lubricate as above, as necessary.

### ENGINE STARTING

To start the engine pulling the operating pin the filter elbow. Set the quarters to fully open, a starter handle (illustration) slowly and kept in a light grip.

As the engine warms up gradually. When the engine necessary to close the choke

# I N S T R U C T I O N S

## AMAL OIL BATH AIR FILTER—TYPE 384

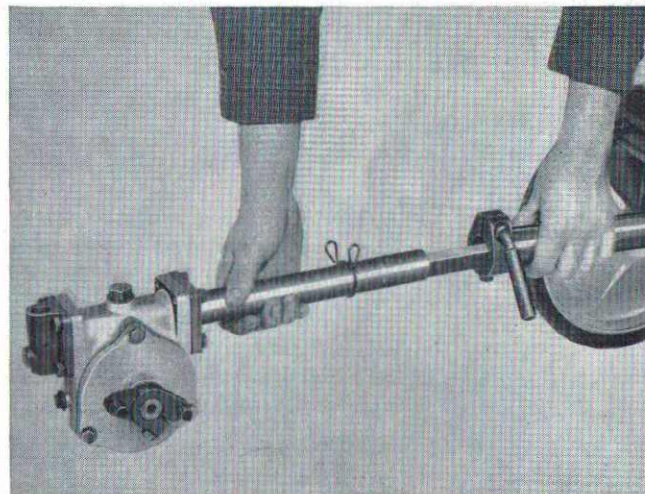
Before using engine remove the Filter Top Cover and pour in the Filter Bowl just sufficient lubricating oil to cover the Absorbent Pad and the Retaining Gauze. Saturate the Metal Wool Pack in the Top Cover with lubricating oil, drain off any surplus and finally replace the Top Cover, taking care to support the filter body when the Cover is snapped home.

**MAINTENANCE.** After each 8 to 10 working hours (more frequently when working under dusty conditions) clean the Filter by washing the Absorbent Pad, Gauze and Metal Wool Pad in petrol, allow to drain, clean the Filter Bowl and re-lubricate as above. Renew the Absorbent Pad as necessary.

## ENGINE STARTING

To start the engine when cold, close the choke by pulling the operating pin (illustration A) on the side of the filter elbow. Set the throttle approximately three-quarters to fully open, and pull smartly on the recoil starter handle (illustration B). The handle must be returned slowly and kept in a light grip until fully returned.

As the engine warms up after starting, open the choke gradually. When the engine is hot, it is not usually necessary to close the choke when restarting.



## THE UNIVERSAL CULTIVATING TOOL HEAD

To assemble the tool head to the machine, first feed the square drive shaft into the frame extension tube and rotate until the engine crankshaft is fully engaged. Feed the tool head tube into the frame extension tube after ensuring that the locking lever is loose. Rotate the head until the square drive shaft is engaged with the tool head and push home. Position the tool head in a vertical or horizontal position according to the type of cultivating tools selected for the work in hand and lock the clamp by a clockwise turn of the lever. (See illustration above.)

### FITTING THE CULTIVATING TOOLS

The method of fitting the cultivating blades and the pick tines is identical. (Each cultivating blade assembly has an arrow stamped on the tool plate indicating the forward direction. The blade assemblies are also stamped 'R' or 'L', indicating right and left-hand respectively.) First feed the right-hand blade assembly on to the tool clamp bolt. Feed the bolt through the hollow spindle on the tool head and locate the blade assembly on the pegs on the driving block. Then fit the left-hand blade assembly on to the exposed opposite end of the tool clamp bolt and locate the pegs. Ensure that the head of the tool clamp bolt is seated between the cultivating blades, and finally lock up tight with the hand nut. (Illustration D.)

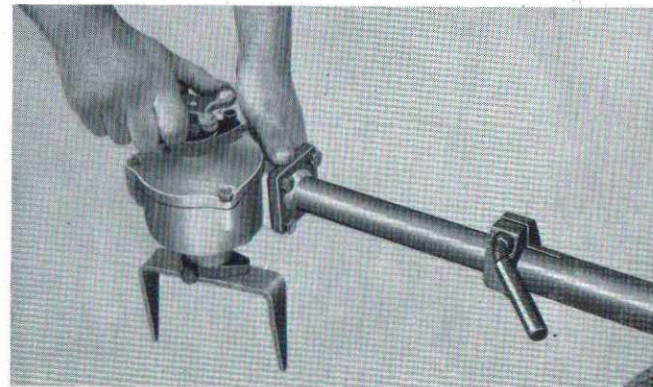
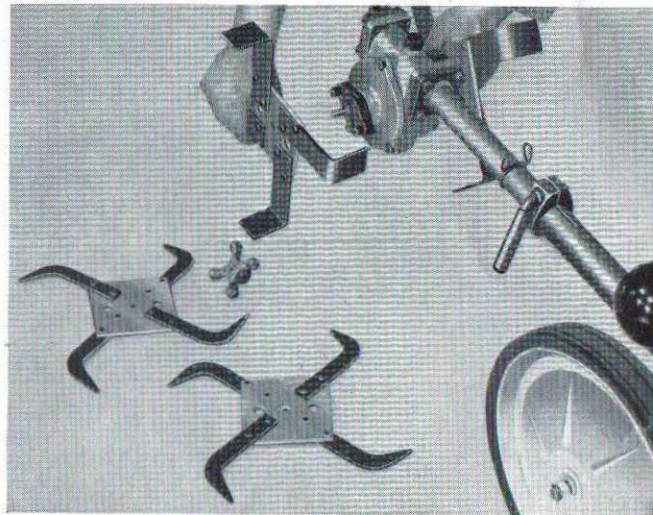
### HANDLEBAR ADJUSTMENT

To adjust the height of the handlebars, loosen the wing nut on each frame member and raise or lower the handlebar tubes to the position required. Relock the wing nuts.

### SPIN WEEDER

Before fitting the spin weeder turn the tool head through 90° to position the tool spindle vertically, with the smooth face of the tool head casting downwards. Pass the clamp bolt through the spin weeder and then upwards through the hollow tool spindle, engage the pins on the driving block, fit and tighten the hand nut. (Illustration E.)

D



E

### LUBRICATION

Periodically, remove the casting of the tool head, through the top filler plug front plug. Refit both plugs

### MAINTENANCE

(1) Clean the machine of any soil or grass from the motor, and air filter. Remove behind the driving blocks.

(2) After use see that the fuel drained from the carburetor until it stops.

(3) At intervals of about in the gear box by removing with Castrol (S.T.90) oil as

(4) Drain gear box and re

(5) Apply a few drops occasionally or remove the

(6) Periodically check all tighten if necessary.

(7) Attend to the engine, described in the J.A.P. engine

(8) Clean the air filter as d

## LUBRICATION

Periodically, remove the overflow plug on the front casting of the tool head, fill with Castrol (S.T.90) oil through the top filler plug until oil overflows through the front plug. Refit both plugs.

## MAINTENANCE

(1) Clean the machine after use, taking care to remove any soil or grass from the cylinder fins, silencer, carburettor, and air filter. Remove tools and clear any trash from behind the driving blocks.

(2) After use see that the petrol tap is turned 'OFF' and fuel drained from the carburettor by running the engine until it stops.

(3) At intervals of about four weeks, check the oil level in the gear box by removing filler and level plugs. Top up with Castrol (S.T.90) oil as previously described.

(4) Drain gear box and refill at the end of a season's use.

(5) Apply a few drops of oil to the wheel bearings occasionally or remove the wheels and grease the axle.

(6) Periodically check all nuts, bolts, and screws, and tighten if necessary.

(7) Attend to the engine, carburettor, and magneto as described in the J.A.P. engine booklet.

(8) Clean the air filter as described on page 3.

*Full information for the J.A.P. engine is contained in a separate booklet. This deals with the whole engine unit, its magneto, and carburettor, and tells you how to use it and keep it ready for service. Please study both instruction books and keep them for reference.*

## IMPORTANT NOTES

A spare Woodruff key (Part No. A.1375, diagram No. 3) is supplied with each Gardenmaster.

A similar Woodruff key is fitted to either side of the tool head and is located under each driving block (Part No. 31, diagram No. 3).

This key acts as a safety device and will shear if sudden undue strain is put on the transmission by hitting a solid obstruction such as a rock or a concrete path.

To replace a broken key is a simple matter. Take off cultivating tools, unscrew clamping bolt (A.299), and remove the driving block which exposes the key. Remove broken parts of key and replace with new one, reassemble, and the machine is ready for working.

Always keep a spare Woodruff key (Part No. A.1375). Your dealer will have them in stock.

# SPARE PARTS

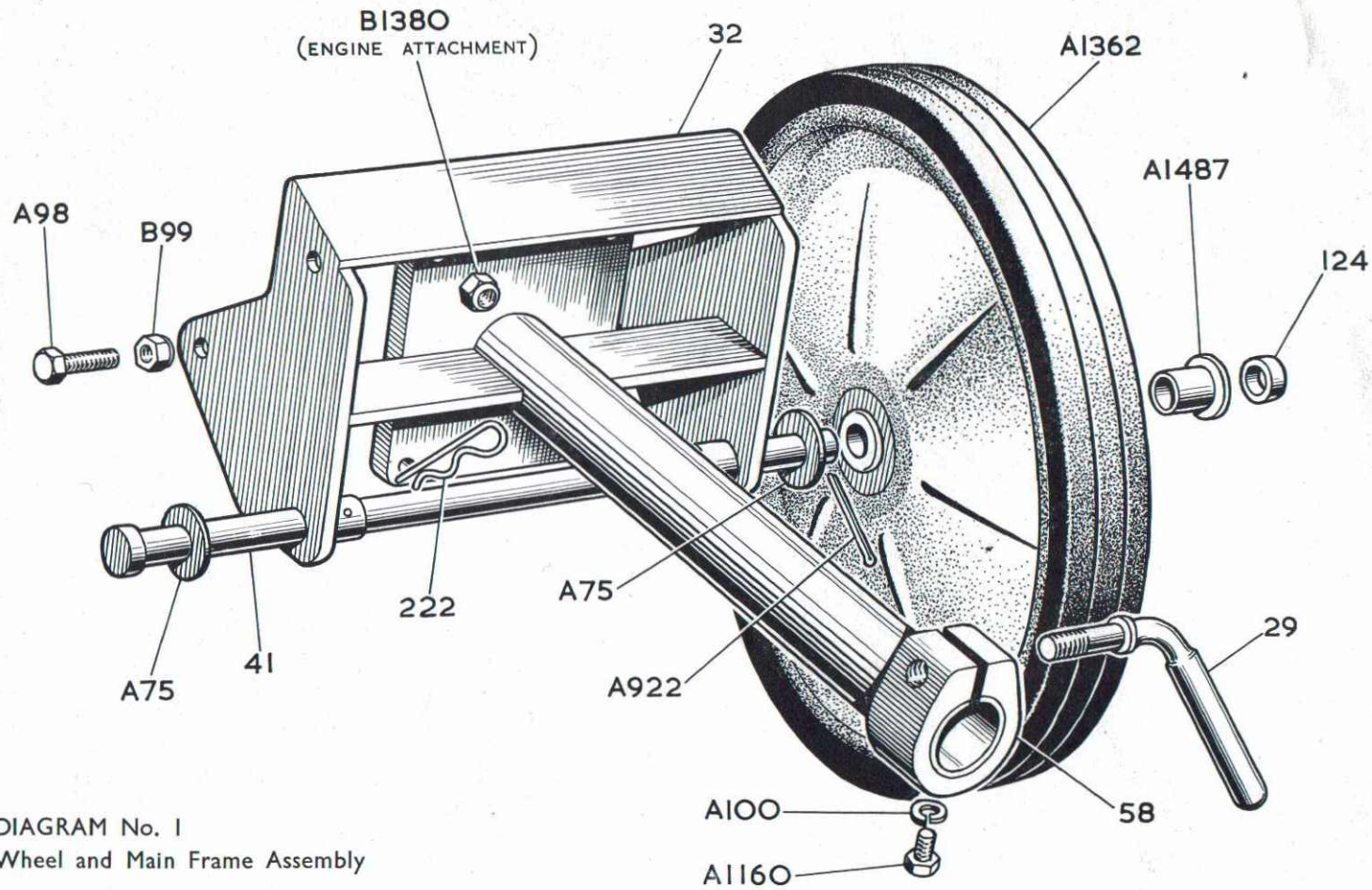
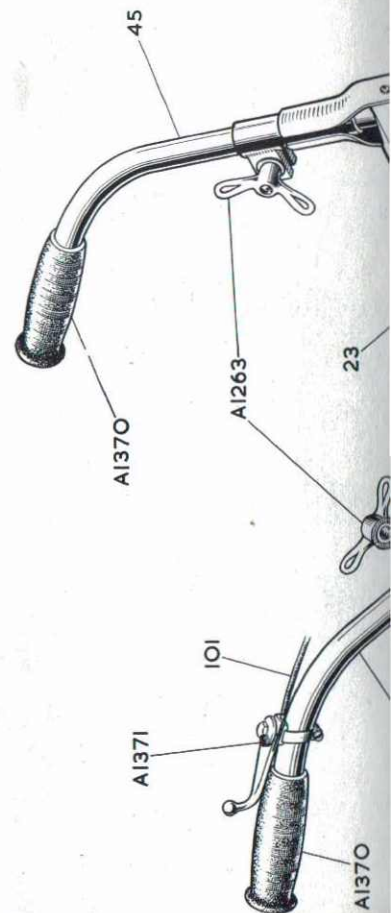


DIAGRAM No. 1  
Wheel and Main Frame Assembly



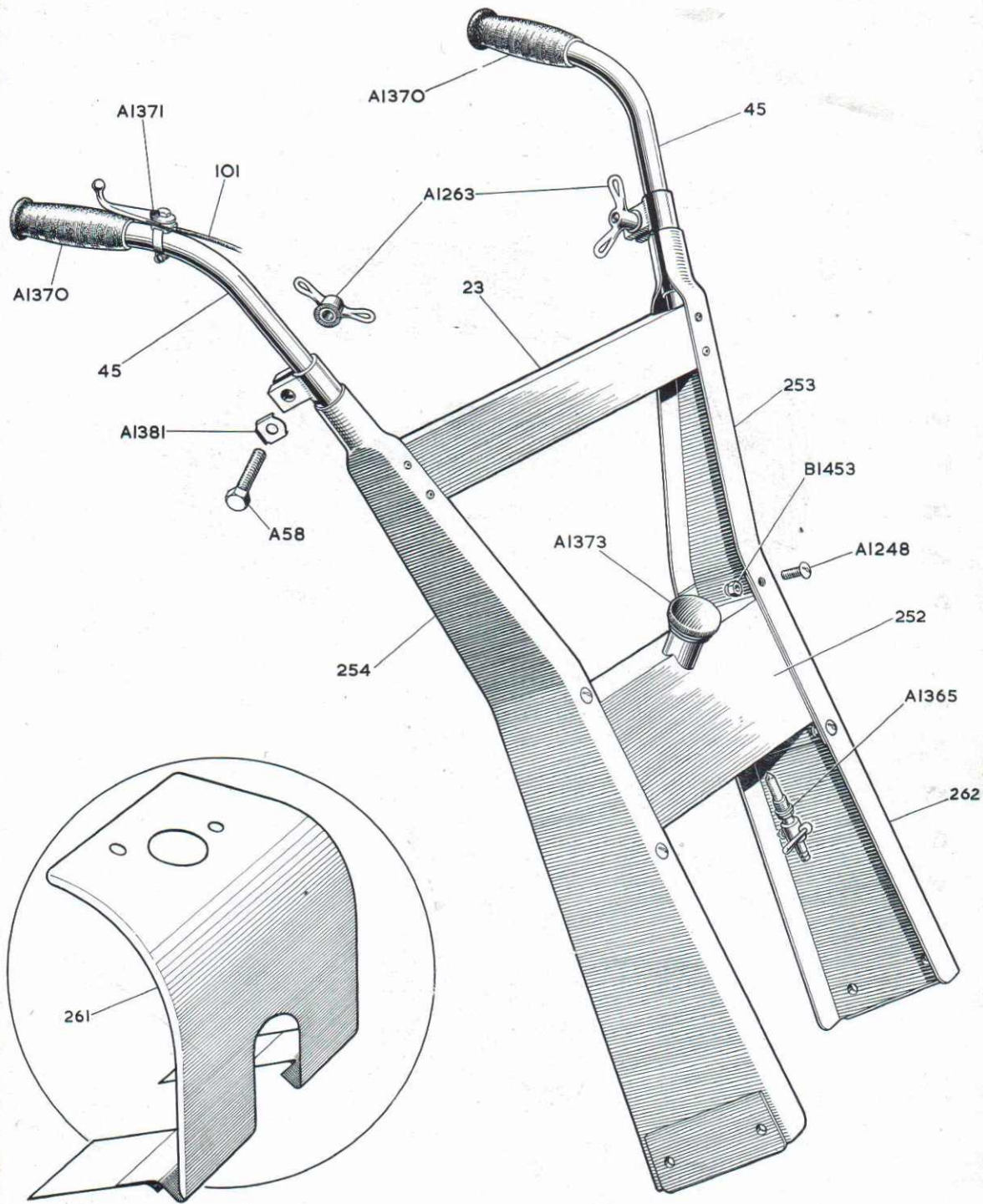


DIAGRAM No. 2  
 Handlebar and Fuel Tank Assembly



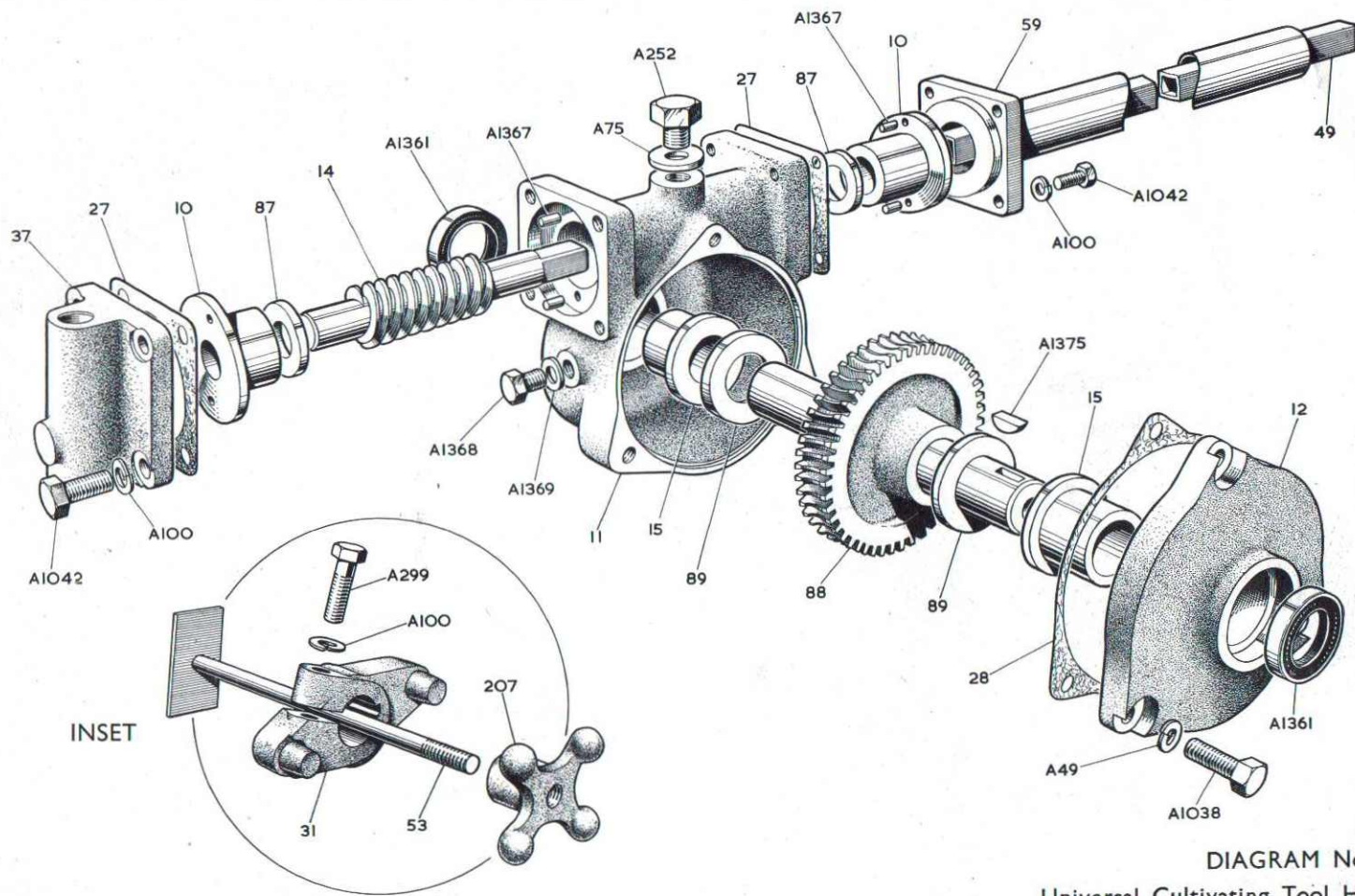


DIAGRAM No. 3  
Universal Cultivating Tool Head

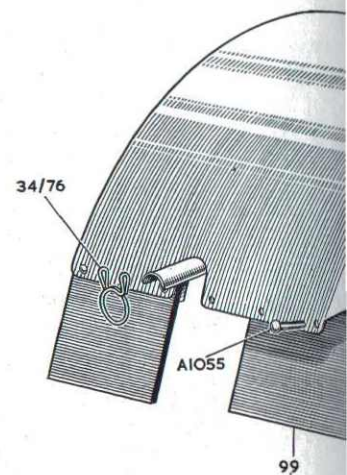


DIAGRAM No. 4  
Rotary Hoe Cover

Assembly of Hoe Blades and Tool Plate R.H. 6 and L.H. 9

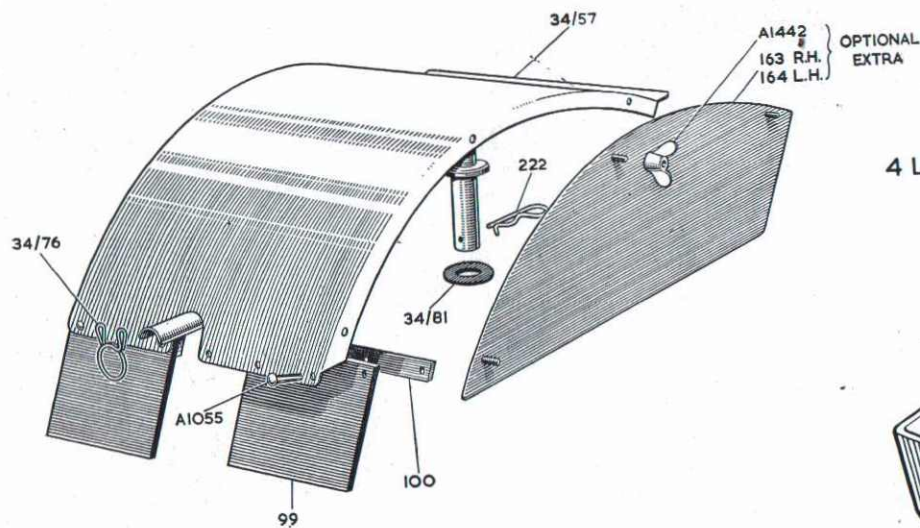


DIAGRAM No. 4  
Rotary Hoe Cover Assembly

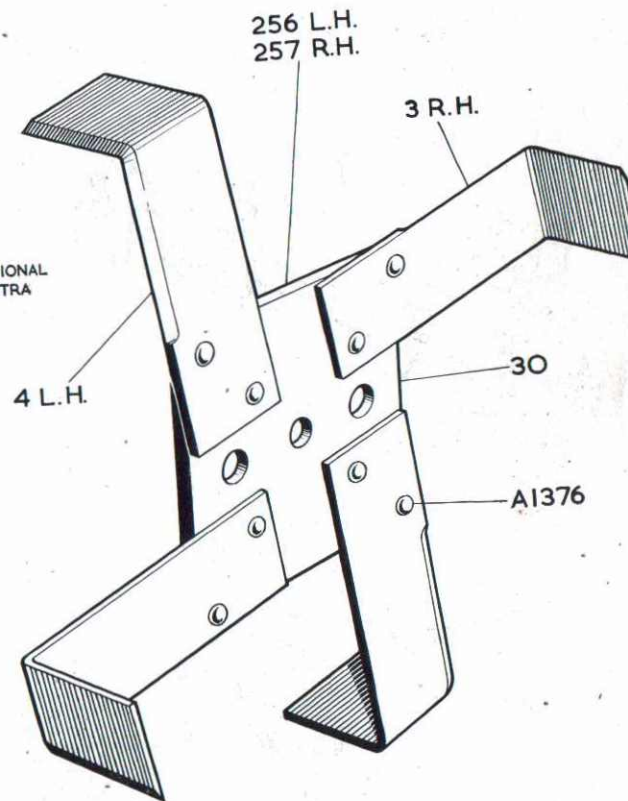


DIAGRAM No. 5  
Hoe Blade Assembly

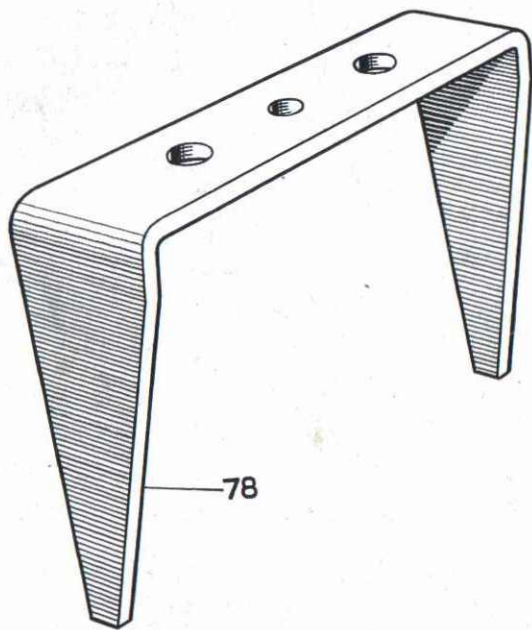


DIAGRAM No. 6  
Spin Weeder

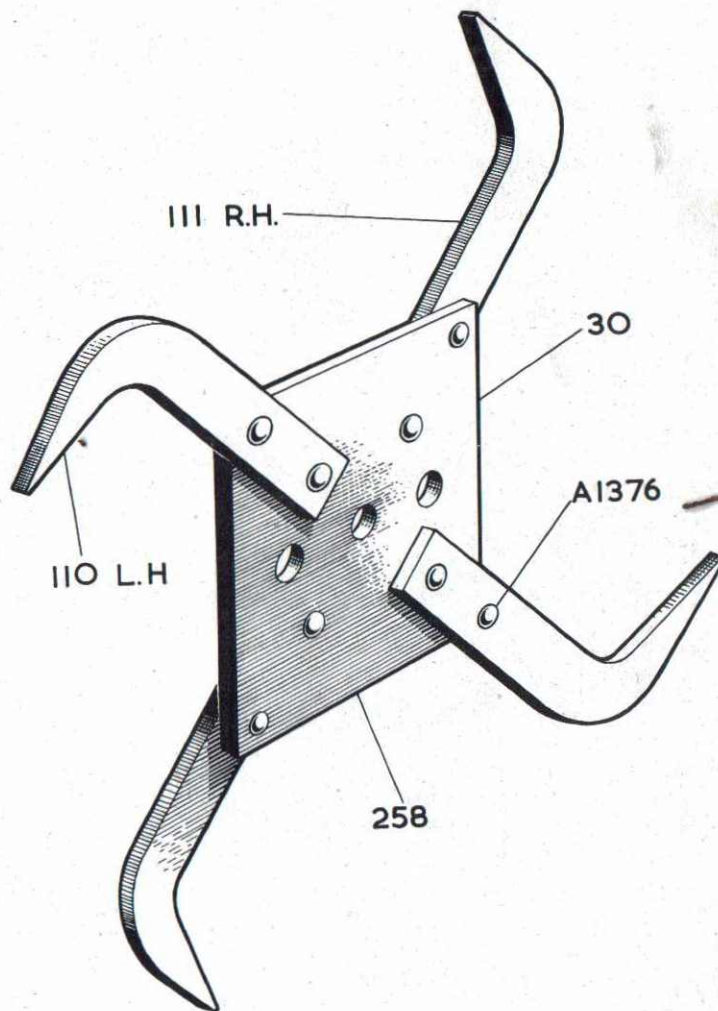


DIAGRAM No. 7  
Pick Tine Assembly 258

DIAGRAM No. 1  
Wheel and Main Frame Ass

- 32 Assembly of Main Frame
- 41 Assembly of Axle
- 58 Clamp
- 29 Locking Lever
- 124 Axle Collar
- A.1362 Wheel
- A. 922 Split Pin,  $\frac{3}{32}$ " by 1"
- A.1487 Nylon Bush  $\frac{1}{2}$ " i.d.
- 222 Spring Pin

DIAGRAM No. 2  
Handlebar and Fuel Tank A

- 253 Assembly of Lefthand
- 254 Assembly of Righthand
- 23 Cross Bar
- 252 Fuel Tank
- 45 Handlebar Tube
- A.1370 Rubber Hand Grip,  $\frac{3}{4}$ "
- A.1371 Throttle Control Lever
- 101 Throttle Control Cable
- A.1373 Fuel Tank Cap (for 17)
- A.1365 Stop Tap (Fuel Tank)
- 261 Engine Stone Guard
- 262 Handlebar Assembly
- 254, 23, 252, A.1370

DIAGRAM No. 3  
Universal Cultivating Tool

- 37 Rotary Hoe Cover Fix
- 27 Gear Box Gasket
- 10 Worm Bearing (front)
- 87 Worm Washer
- 14 Worm
- A.1367 Dowel Pin  $\frac{3}{16}$ " by  $\frac{3}{8}$ "
- 11 Gear Box
- 59 Assembly of Gear Box

WHEN

ALL SPARE PARTS

# S P A R E P A R T S

## DIAGRAM No. 1

### Wheel and Main Frame Assembly

- 32 Assembly of Main Frame
- 41 Assembly of Axle
- 58 Clamp
- 29 Locking Lever
- 124 Axle Collar
- A.1362 Wheel
- A. 922 Split Pin,  $\frac{3}{32}$ " by 1"
- A.1487 Nylon Bush  $\frac{1}{2}$ " i.d.
- 222 Spring Pin

## DIAGRAM No. 2

### Handlebar and Fuel Tank Assembly

- 253 Assembly of Lefthand Handlebar
- 254 Assembly of Righthand Handlebar
- 23 Cross Bar
- 252 Fuel Tank
- 45 Handlebar Tube
- A.1370 Rubber Hand Grip,  $\frac{1}{4}$ " i.d.
- A.1371 Throttle Control Lever
- 101 Throttle Control Cable
- A.1373 Fuel Tank Cap (for 17)
- A.1365 Stop Tap (Fuel Tank)
- 261 Engine Stone Guard
- 262 Handlebar Assembly Comprising 253, 254, 23, 252, A.1373, A.1365.

## DIAGRAM No. 3

### Universal Cultivating Tool Head

- 37 Rotary Hoe Cover Fixing Bracket
- 27 Gear Box Gasket
- 10 Worm Bearing (front and rear)
- 87 Worm Washer
- 14 Worm
- A.1367 Dowel Pin  $\frac{3}{16}$ " by  $\frac{3}{8}$ "
- 11 Gear Box
- 59 Assembly of Gear Box Mounting Tube

- 49 Drive Shaft
- 15 Bush
- 89 Worm Wheel Washer
- 88 Assembly of Worm Shaft
- 28 Cover Gasket
- 12 Gear Box Cover
- A.1375 Woodruff Key No. 60
- A.1361 Oilseal 13P/13708725

### Inset

- 53 Tool Clamp Spindle
- 207 Tool Clamp Nut
- 31 Driving Block

## DIAGRAM No. 4

### Rotary Hoe Cover Assembly

- 34/76 Rotary Hoe Cover Spring Clip
- 34/57 Rotary Hoe Cover Assembly
- 222 Spring Pin
- 34/81 Rubber Washer
- 100 Clamping Plate
- 99 Rear Flap
- A.1055 Bifurcated Rivet
- 163 Side Wall, Righthand
- 164 Side Wall, Lefthand

## DIAGRAM No. 5

### Hoe Blade Assembly

- 30 Tool Plate
- 3 Hoe Blade, Righthand
- 4 Hoe Blade, Lefthand
- A.1376  $\frac{1}{4}$ " by  $\frac{1}{2}$ " Snaphead Rivet
- 256 Assembly of Hoe Blades and Tool Plate, Lefthand
- 257 Assembly of Hoe Blades and Tool Plate, Righthand

## DIAGRAM No. 6

### Spin Weeder

- 78 Spin Weeder

## DIAGRAM No. 7

### Pick Tine Assembly

- 30 Tool Plate
- 111 Pick Tine, Righthand
- 110 Pick Tine, Lefthand
- A.1376  $\frac{1}{4}$ " by  $\frac{1}{2}$ " Snaphead Rivet
- 258 Assembly of Pick Tines and Tool Plate

### Bolts

- A.58  $\frac{3}{8}$ " B.S.F. by  $1\frac{1}{4}$ " Bolt
- A.98  $\frac{5}{16}$ " B.S.F. by  $\frac{1}{2}$ " Bolt
- A. 299  $\frac{5}{16}$ " B.S.F. by  $1\frac{1}{4}$ " Bolt

### Set Screws

- A.1160  $\frac{5}{16}$ " B.S.F. by  $\frac{1}{2}$ " Set Screw
- A.1042  $\frac{1}{16}$ " B.S.W. by  $\frac{3}{4}$ " Set Screw
- A.1368  $\frac{1}{16}$ " B.S.W. by  $\frac{3}{8}$ " Set Screw
- A. 252  $\frac{1}{2}$ " B.S.F. by  $\frac{1}{2}$ " Set Screw
- A.1038  $\frac{1}{4}$ " B.S.W. by  $\frac{1}{2}$ " Set Screw
- A.1248 2 B.A. by  $\frac{1}{2}$ " Set Screw

### Nuts

- B.1380  $\frac{5}{16}$ " B.S.C. Nyloc T Nut
- B.99  $\frac{1}{16}$ " B.S.F. Nyloc T Nut
- A.1263  $\frac{3}{8}$ " B.S.F. Wing Nut
- A.1442 2 B.A. Wing Nut
- B.1453 2 B.A. Nyloc P Nut

### Washers

- A. 100  $\frac{5}{16}$ " Single Coil Spring Washer
- A. 75  $\frac{1}{2}$ " Plain Washer
- A. 49  $\frac{1}{4}$ " Single Coil Spring Washer
- A.1369  $\frac{1}{16}$ " Fibre Washer
- A.1381  $\frac{3}{8}$ " Special Tab Washer

WHEN ORDERING SPARES, SERIAL NUMBER OF MACHINE MUST BE QUOTED

**ALL SPARE PARTS SHOULD BE OBTAINED FROM YOUR LOCAL DEALER**