



**THE**

**SUFFOLK  
SUPER  
17" PUNCH**

***Motor Roller Lawn Mower***  
(Fitted with Microset Adjustment)

**FOUR STROKE ENGINE**

**OPERATING & MAINTENANCE  
MANUAL**

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# The Suffolk Super Punch Motor Lawnmower

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## INSTRUCTIONS

for Operation and Maintenance

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### I. GENERAL ADVICE.

### II. OPERATING INSTRUCTIONS.

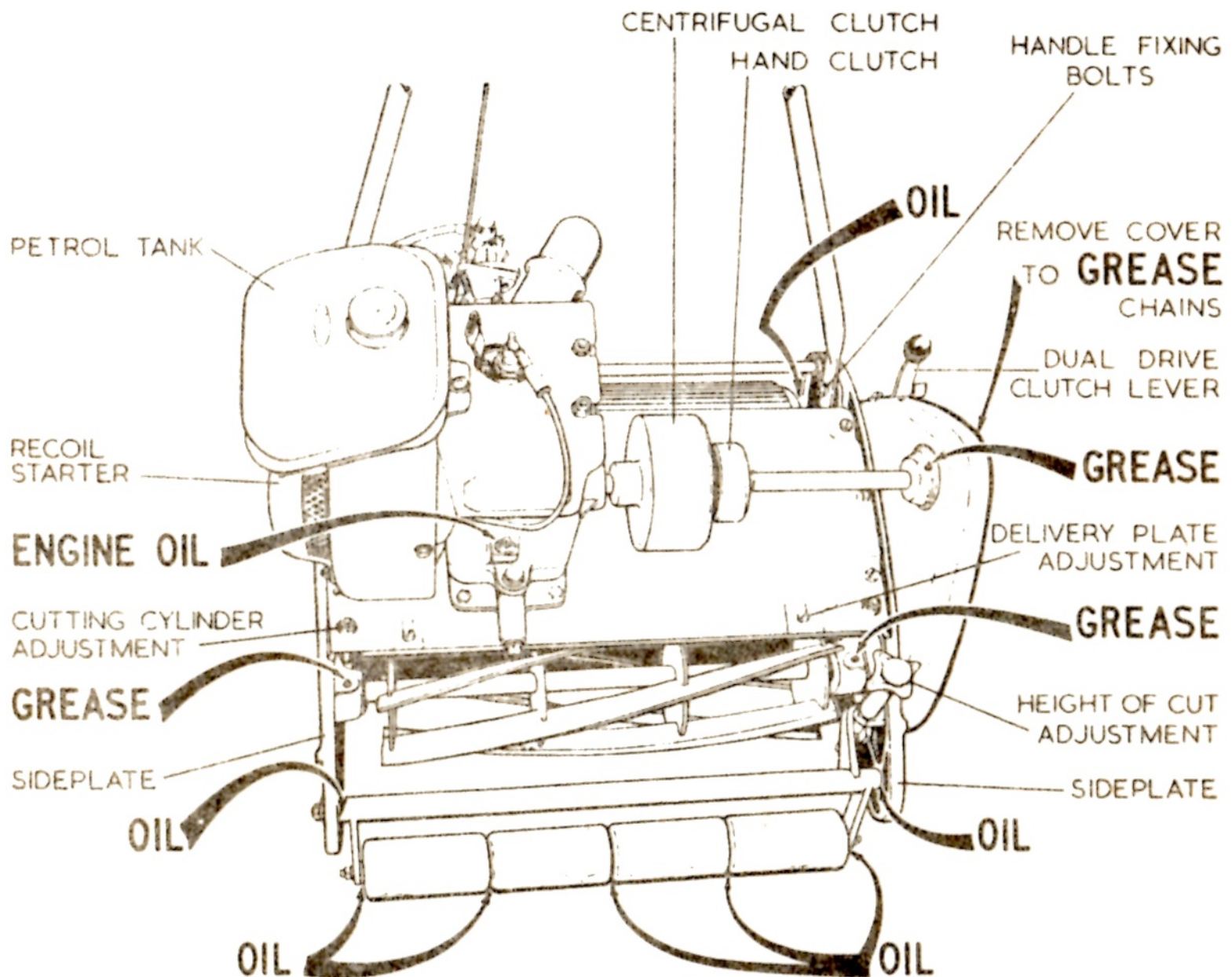
1. Preparation for use.
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(b) Rear Roller Differential Gear.



## LUBRICATION and INSTRUCTION DIAGRAM



### INSTRUCTIONS FOR ORDERING SPARE PARTS

It is essential to quote the following.

- (a) The Model Name of the machine.
- (b) The chassis serial number stamped on the R.H. side plate. (*See mower assembly illustration*).
- (c) The engine serial number. (*See engine assembly illustration*).
- (d) The PART NO. of the part, NOT the illustration No.



## **I. GENERAL ADVICE**

The Suffolk Super Punch Motor Lawnmower is sent out from the factory in perfect condition, and when received should be carefully examined to see that it has not been damaged in transit.

If damaged in any way, your dealer should be advised at once.

Flush out petrol tank with a small quantity of petrol before filling for the first time.

Do not start the engine in your shed or garage unless the doors are open. Exhaust gases are poisonous.

Before starting, always check that there is petrol in the tank and sufficient oil in the sump. Top up if necessary. Oil and grease working parts regularly. A grease gun is provided in the tool kit.

Before mowing, make sure your lawn is quite free from stones and other obstructions, i.e. pieces of bones, wood, etc., which might cause damage to the cutting cylinder.

If any obstacle should get caught, **NEVER ATTEMPT TO CLEAR OBSTACLE OR REVOLVE CYLINDER BY HAND WHILE ENGINE IS RUNNING.**

Never drive the machine over gravel paths without keeping the revolving cutting cylinder well clear of the ground.

The petrol tank should not be filled while the engine is running. Petrol spilling on a hot engine can be dangerous.

**DO NOT MIX OIL WITH PETROL.** The S.I.F engine is a 4 stroke type and is designed with separate oil lubrication. It is wise to filter your petrol through a fine wire gauze when filling the tank.

Do not race the engine. A speed of 3 miles per hour is recommended. At this speed the machine can mow a tennis court in less than 15 minutes.

After use, always wipe blades with oily rag.

If your mower is going to be stored for any length of time, drain the engine completely of fuel to prevent gum deposit forming on essential parts. Remove sparking plug, pour a teaspoonful of engine oil into the cylinder, and turn the engine round slowly by hand to spread the oil. Replace the sparking plug.



## II. OPERATING INSTRUCTIONS

### I. PREPARATION FOR USE.

(a) Fill the petrol tank with commercial petrol. The tank will hold 2 pints which is sufficient for 2 hours running under average working conditions.

**DO NOT MIX ANY OIL WITH THE PETROL.**

(b) Unscrew the filler plug from the front of the engine and fill with  $\frac{1}{2}$  pint of any of the following recommended oils or equivalents. After filling replace plug.

Do NOT use a new engine without first filling sump with oil.

#### RECOMMENDED LUBRICATING OILS.

Climate	Shell	B.P.	Castrol	Mobil
Temperate	X-100 30	Energol SAE. 30	Castrol XL	Mobiloil A
Tropical	X-100 40	Energol SAE. 40	Castrol XXL	Mobiloil AF

(c) Lubricate all grease points of the machine with the grease gun provided. Oil all other points with light machine oil.

*See Page 2*

The differential mechanism inside the Rear Roller should be oiled through the small hole provided about halfway along the roller. DO NOT oil through the space between the two sections of the Roller.

For the rear roller bearings, introduce a few drops of oil ween the adjusting collars (102) and the sideplates.

For the bushes for front roller carrier (140), introduce a few drops of oil between the ends of the carrier and the sideplates.

The Front Roller Spindle (16) should be oiled along its length.

*See Mower Assembly Illustration*

(d) Set the handles of the machine in the position most comfortable for your height, by slackening the bolts (10) at the base of the handle. Re-tighten bolts when desired position is obtained.

*See Mower Assembly Illustration*



(e) Set the position of the wooden rollers at the front of the machine to give the desired height of cut by means of the single hand wheel (141) on the L.H. side. Clockwise rotation lowers the roller and this increases the height of cut. It is advisable to set for high cutting at first and lower the machine to the height required.

*See Mower Assembly Illustration*

## II.

### 2. TO START ENGINE WHEN COLD.

(a) Make sure that the **HAND CLUTCH** is out of engagement.

*See Section II, Para. 6(b), on Page 7.*

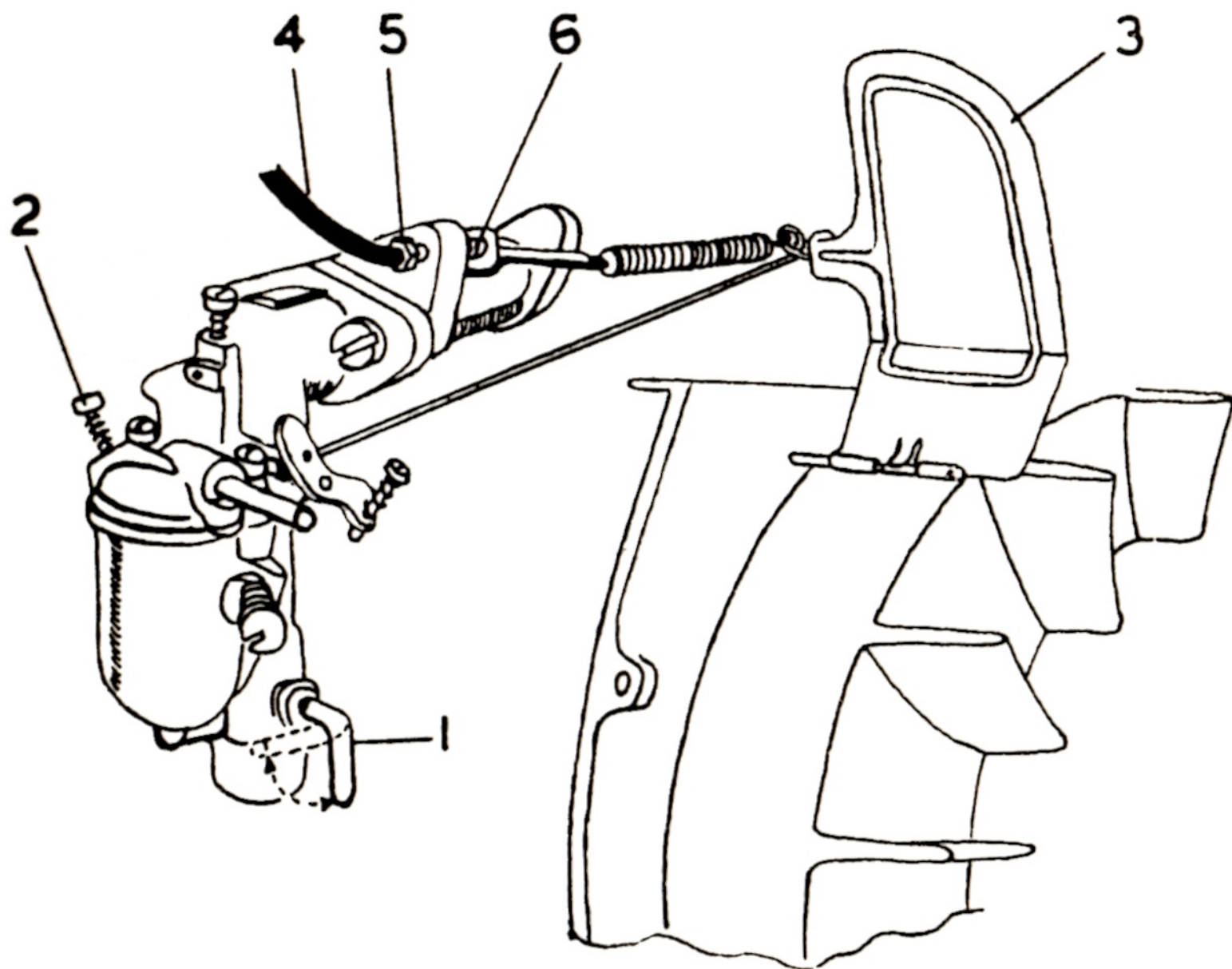
(b) Turn on petrol by means of petrol tap immediately under petrol tank. Tap control button should be pulled out gently.

(c) Close the air strangler by turning the small lever (1) at the side of the carburetter to horizontal position.

(d) Open control lever on handle bar about one third of its full opening.

(e) Press the tickler (2) on top of the carburetter float chamber until the petrol just commences to overflow.

*See Illustration below.*



(f) To start the Engine grip the rubber handle firmly and pull smartly. Do not pull the rope out to its full extent, and do not release your grip on the handle until the rope has recoiled into position.

**The Starter will automatically reset itself for further use.**



(g) After the engine has started, gradually open strangler as engine warms up. When engine is warm and running smoothly, partially close control lever so that engine is idling.

II.

### 3. TO START ENGINE WHEN HOT.

The same procedure should be adopted except that it should not be necessary to close the strangler or to flood carburetter by pressing tickler.

II.

### 4. TO STOP ENGINE.

To stop engine temporarily or in an emergency press the cut-out switch on to the sparking plug terminal and hold it there until it stops.

If the engine is going to be stopped for any length of time (several hours) turn the fuel off and allow the engine to continue running until it has used up the small amount of fuel left in the carburetter.

II.

### 5. FAILURE TO START.

If after a reasonable number of trials the engine should not start, this may be due to one or more of several causes, such as :

(a) Petrol Tank empty, lack of petrol through tap not being turned on or fuel supply choked, or vent hole in petrol tank filler cap blocked, or failure to flood the carburetter.

(b) Too much petrol through excessive flooding causing wet sparking plug. If so, remove and dry the plug, turn engine over smartly with control lever closed. Replace plug.

(c) Control lever open too wide. One quarter to one third is correct.

(d) Sparking plug dirty or gap between points incorrect. Clean or adjust if necessary. Gap should be .020 in.—.022 in.

(e) No spark. Remove plug and place plug body on top of cylinder with lead attached and turn engine. There should be a spark at the points. If not, clean and adjust gap between points.

If, after all above items have been checked, the engine still will not start, a more detailed examination will be required.

See section on 'Engine'.

II

### 6. MOWER CONTROLS.

#### (a) CENTRIFUGAL CLUTCH.

This clutch is automatic in operation, so that a single control lever gives the operator full command of the machine.



## (b) HAND CLUTCH

An additional hand operated clutch is fitted on the outside of the centrifugal clutch to enable the engine to be disconnected from the mower for starting. To disengage, pull the outer cover of this hand clutch outwards (about  $\frac{1}{2}$ " ) over the spring loaded ball on the transmission shaft. To re-engage, push inwards.

Note :—Re-engage Clutch only when engine is idling.

*See Diagram on Page 2*

## (c) DUAL DRIVE CLUTCH.

The dual drive mechanism consists of a special clutch fixed to the rear roller, which enables the mower either to be self-propelled, or to be pushed by the user with the engine still driving the cutting cylinder.

This clutch is operated by the lever (78) which protrudes from the bottom R.H. corner of the chain case.

To disengage the rear roller, push the lever towards the mower until the catch (87) drops into position behind it.

To drive the rear roller, lift the catch, when the lever will return outwards to the engaged position.

**THIS LEVER MUST BE MOVED ONLY WHEN THE ENGINE IS IDLING.**

*See Mower Assembly Illustration*

## II.

### 7. OPERATION OF MOWER.

Having started the engine, to commence mowing the following procedure should be adhered to.

#### **TO OPERATE MACHINE AS FULLY PROPELLED MOWER.**

(a) Allow engine to warm up before starting mowing.

(b) Engage hand operated clutch. *See II 6 (b).*

(c) Ensure that Dual Drive Clutch is engaged. *See II 6 (c).*

(d) Pull open control lever smoothly. As the lever is opened up the machine will automatically take up the drive and move forward. Should the machine at any time fail to take up the drive when the control lever is fully opened, close the control lever and free the cutting cylinder by turning the clutch shaft. **DO NOT ATTEMPT TO TURN THE CYLINDER BY HAND.**

(e) To stop the mower, close the control lever fully. This will stop the mower but not the engine.

#### **TO OPERATE MACHINE IN CONFINED SPACES, USING DUAL DRIVE.**

(f) Disengage Dual Drive Clutch. *See II 6 (c).*

(g) Engage hand operated clutch. *See II 6 (b).*



(h) Pull open control lever smoothly. As the lever is opened up, the cutting cylinder will automatically commence to rotate but the machine will not move forward under its own power and must be pushed.

(j) To stop cutting cylinder rotating, close control lever fully.

## II.

### 8. CUTTING ADJUSTMENTS.

The only parts other than the handles (see Para. II. 1 (d)) that may require adjusting are the cutting cylinder and the front roller, for height of cut.

#### (a) Cutting Cylinder.

If at any time the mower is found not to be cutting satisfactorily, a slight adjustment may be required to the cutting cylinder.

To bring the cylinder (22) closer to the cutting edge of the bottom blade (43), screw the two adjusting nuts (33), on the platform immediately above the cylinder in a clockwise direction. Care should be taken to ensure that the cutting blades **JUST TOUCH** the cutting edge of the bottom blade equally all along its length. It is unnecessary to set cylinder blades **HARD** on to the bottom blade.

#### (b) Front Rollers.

The height of cut is governed by the position of the front wood rollers. Adjustment is by means of the single hand wheel (141) on the L.H. side of the mower.

*See Paragraph II I (e) on Page 5*

Care should be taken as it is possible to lower the machine so that the bottom blade touches the ground.

## III. MAINTENANCE & REPAIRS.

### 1. ENGINE.

A description of the engine together with instructions for maintenance will be found later in this booklet.

## III.

### 2. CUTTING CYLINDER—REMOVAL.

The cylinder unit is held between the mower sides by four hexagon screws.

The removal of the unit for regrinding the cylinder is simple and the following procedure is recommended :

(a) Stand the mower on a low bench and tilt the machine backwards so that it rests on the handles. The front wooden roller will then be uppermost.



(b) Take off the chain case cover (60) by removing the three screws (61).

(c) Remove the intermediate chain (55) and the cylinder driving chain (59).

(d) Remove the hexagon nut (28) on the end of the cylinder spindle so that the chain wheels (56) on this spindle can be removed together with their key (58).

(e) Access will thus be given to the two hexagon screws (40) which fix the cylinder unit to the L.H. side of the mower, i.e. chain case side. Loosen these screws and also the corresponding screws on the R.H. side of the mower.

(f) Loosen the hexagon nuts (14) at the R.H. side of the front and rear tie rods.

(g) Loosen the three slotted screws (4) holding the engine platform to the R.H. side of the mower.

(h) Remove the four hexagon screws (40) which fix the cylinder unit to the mower sides. The unit can then be withdrawn downwards and clear of the mower. It is advisable to lower the R.H. end of the cylinder unit slightly in advance of the L.H. end.

(i) Remove the two pivot pins (29) holding the bearing blocks (25 & 26) to the soleplate (39) and also the cylinder adjusting nuts (33). Take off the delivery plate (36) by removing the three screws (37) which hold it to the soleplate.

*See Mower Assembly Illustration*

To re-assemble, reverse the procedure mentioned.

### III.

#### 3. CHAIN.

Access to the chains is readily obtained by removing the three screws (61) on the outside of the chain case and then withdrawing the cover (60).

The cylinder driving chain (59) is fitted with a hook type chain adjuster (62) complete with Nylon Slipper (63) which can be adjusted to take up any variations in chain wear, by means of a nut (66). The intermediate chain (55) may be adjusted by the following procedure :

1. Ensure cutting cylinder is adjusted correctly.
2. Slacken nut at centre of sprocket (69). Move sprocket to give correct chain tension.
3. Tighten nut.

All chains should be kept well lubricated with grease.

*See Mower Assembly Illustration.*



### III.

#### 4. CENTRIFUGAL CLUTCH.

Access to the clutch is readily obtained by removing the screws which fix engine to the mower platform and withdrawing the engine. If it is suspected that the clutch is not operating satisfactorily, this may be due to one or more of the following causes :

(a) Oil or grease on the linings of the clutch shoes (123) or on the inside of the clutch drum (127). Clean thoroughly with petrol or other degreasing agent.

(b) Clutch shoes unable to turn on pivot pins (125). Clean if necessary and free the obstruction.

(c) Linings of clutch shoes worn. This is not likely to occur except after very prolonged life. Remove shoes by withdrawing split pins (126) which secure the shoes to their pivot pins and fit new linings. Use new rivets.

(d) If after attention to the foregoing points the clutch is found still to be slipping, turn the spring adjusting screws (138) in the clutch shoes in an anti-clockwise direction. This will allow the shoes to exert a greater pressure on the clutch drum.

After adjustment check that the clutch is completely disengaged when engine is idling.

*See Mower Assembly Illustration*

### III.

#### 5(a). DUAL DRIVE CLUTCH.

Access to the dual drive clutch is obtained by removing the chain case cover (60). The clutch teeth can then be lubricated with a few drops of light machine oil.

If it is required to dismantle the clutch, the following procedure is recommended :

(i) Remove pivot screw (91) holding the catch (87) to the chain case.

(ii) Withdraw the clutch lever pivot pin (84) after removing the split pin (86).

(iii) The clutch lever (78) can then be withdrawn from the sliding dog (75).

(iv) Remove circlip (74) from end of roller spindle. The spring (76) and sliding dog (75) can then be removed.

(v) Loosen screw (96) at the end of the spindle and remove the square key (95) by tapping with a brass drift.

(vi) Remove circlip (74a), sprocket (51) and washer (73).

To re-assemble, reverse the above procedure.

*See Mower Assembly Illustration.*



### III.

#### (5b). REAR ROLLER DIFFERENTIAL GEAR.

Both sections of the rear roller are driven by the engine, but a car type differential gear mechanism is contained within the roller so that the mower can be negotiated easily on corners.

If it is suspected that the differential gear is not operating satisfactorily, the following procedure should be adopted :

(a) Remove the dual drive clutch. *See Para. III. 5a, Page 10.*

(b) Remove the R.H. side of the mower by taking out the platform screws (4), the soleplate screws (40) and removing the tie rod nuts (14). The roller spindle can then be withdrawn from the L.H. side.

(c) Loosen screws (103) and remove the adjusting collars (102). The roller sections can then be removed, giving access to the differential gear unit.

(d) Any wear on the face of the bevel pinions (117) or on the friction discs (112) can be taken up by adjustment to the nuts (115) on the end of the carrier spindle (110), but do not over-tighten. It must always be possible to turn these pinions by hand after adjustment.

*See Mower Assembly Illustration.*



# The Suffolk Four Stroke Engine

Type 75 G.14

Model No. 13A

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## DESCRIPTION & INSTRUCTIONS

### for Operation and Maintenance

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#### I. DESCRIPTION.

#### II. OPERATION INSTRUCTIONS.

1. Preparation for use.
2. To start engine when cold.
3. To start engine when hot.
4. To stop engine.
5. Speed Regulation.
6. Failure to start.
7. Lubrication.
8. Ignition.

#### III. MAINTENANCE & REPAIRS.

1. Magneto Description.
2. Magneto Service Instructions.
3. Carburetter Description.
4. Carburetter adjustments and maintenance.
5. Control Cable adjustments.
6. Engine dismantling.



## I. DESCRIPTION.

<b>Engine.</b>	Petrol, four stroke, single cylinder, air cooled.
<b>Cylinder Dimensions.</b>	Bore, 50.8 millimetres. Stroke, 38.1 millimetres. Cubic Capacity, 75 c.c.
<b>Max. H.P.</b>	1.0 at 3,000 revolutions per minute.
<b>Valves.</b>	Mushroom. Side valve.
<b>Valve Clearances.</b>	Exhaust .015 inches. Inlet .007 inches. Inlet valve opens 2 degrees after Top Dead Centre. With above valve clearances the correct opening and closing of the valves will follow.
<b>Camshaft.</b>	One piece helical gear driven.
<b>Piston.</b>	Material, low expansion aluminium alloy. 1 Compression Ring, 1 Scraper Ring, 1 Oil Control Ring. Gudgeon Pin fixing by 2 circlips.
<b>Connecting Rod.</b>	Material, aluminium alloy. Big end bearing, plain and direct on crankshaft.
<b>Crankshaft.</b>	Material, Steel Forging.
<b>Main Bearings.</b>	Steel backed white metal lined.
<b>Ignition.</b>	<b>MAGNETO, FLYWHEEL TYPE.</b> TIMING, 22—24 degrees before top dead centre. DRIVE direct main shaft. SPARKING PLUG, size 14 mm. 3/8 in. reach CHAMPION J8, or equivalent. Three-eighths inch reach.
<b>Carburetter.</b>	Zenith 13TCA-2.
<b>Lubrication System.</b>	Special 'Oil-mist' method.
<b>Fuel Tank Capacity.</b>	2 pints.
<b>Fuel Consumption.</b>	.8 pints per H.P. hour.
<b>Rotation.</b>	Clockwise looking at recoil starter.
<b>Method of fixing.</b>	By four bolts 5/16 in. dia. in base at 6 3/8 in. by 3 1/8 in. centres.



## II. OPERATION INSTRUCTIONS.

### 1. PREPARATION FOR USE.

*See Para. II 1, Page 4*

### 2. TO START ENGINE WHEN COLD.

*See Para. II 2, Page 5*

### 3. TO START ENGINE WHEN HOT.

*See Para. II 3, Page 6*

### 4. TO STOP ENGINE.

*See Para. II 4, Page 6*

### 5. SPEED REGULATION.

The speed of the engine is controlled by the lever at the end of the cable attached to the carburetter.

An automatic governor (3) is fitted which will maintain a constant speed whether the engine is running light or under load, according to the setting of the control lever. Adjustment to this device should not be attempted unless absolutely necessary.

*See illustration on Page 5*

### 6. FAILURE TO START.

*See Para. II 5, Page 6*

If all the points in *Para. II 5, Page 6* have been checked and the engine still will not start it may be due to one or more of the following causes.

(a) Plug cable in poor condition.

(b) Carburetter.

If it is suspected that foreign matter may have entered carburetter remove screws from lid of float chamber and remove float. Then clean out float chamber and needle seat.

For more detailed instructions, see section on Carburetter Maintenance.

(c) Magneto.

If after examining sparking plug and its cable, there is still no spark, remove the flywheel cover and check magneto.

See section on Magneto Service Instructions.

(d) Cylinder Compression.

Lack of compression may be caused by

(i) Insufficient valve clearance. There should be a clearance of .015 in. between exhaust valve stem and tappet and .007 in. between inlet valve stem and tappet throughout the closed period of the valves respectively

(ii) Valves sticking. Remove valve chest cover to see if valve stems are moving their full distance as engine is turned over.

If not, remove cylinder head, clean away any foreign matter under valve head on valve stem and free the valve.

(iii) Joint between cylinder and head of cylinder not tight. This is not likely to occur unless the cylinder head has been removed and replaced incorrectly, or replaced with a faulty gasket.

### 7. LUBRICATION.

Complete lubrication of all working parts of the engine including valves, etc., is automatically ensured by the special 'oil-mist' method, whereby it is unnecessary to add upper cylinder lubricant.

Always maintain oil in sump at correct level as indicated by marks on dipstick.



Do not remove the oil plug whilst the engine is running.

After every 30 hours running and preferably when the engine is hot drain the oil by unscrewing the drain plug in the sump at the base of the engine. Flush out with flushing oil (not paraffin). Make sure drain plug is replaced and tightened before refilling with fresh lubricating oil.

#### 8. IGNITION.

Ignition is fixed. If the magneto is removed for any reason, mark the relative position of engine and magneto in order that the timing should not be altered.

The magneto is timed to spark at 22–24 degrees before top dead centre.

### III. MAINTENANCE & REPAIRS.

#### 1. MAGNETO DESCRIPTION.

The Flywheel Magneto produces a high spark output at low-speeds for easy starting, and maintains a maximum spark output over a wide timing range.

It consists of two main parts: a FLYWHEEL and a STATOR PLATE. The Flywheel contains in its rim a permanent magnet of special alloy.

The Stator Plate contains the H.T. Coil mounted on a laminated core, the condenser and the breaker mechanism, all of which are easily accessible.

#### 2. MAGNETO SERVICE INSTRUCTIONS.

If the engine fails to start, and there is indication that the magneto is at fault, the following procedure should be adopted.

(a) Disconnect the H.T. lead from the spark plug, and hold it about  $\frac{1}{8}$ " away from some unpainted portion of the engine. Turn the engine over smartly and a spark should jump this gap.

If no spark is visible then,

(b) Remove the magneto cowling complete with starter.

(c) Remove the Flywheel. Remove the pawl hub and spacer. Unscrew the hexagon nut (L.H. thread) at the end of the crankshaft. If the flywheel will not withdraw easily, grasp it firmly and while attempting to pull it off tap the end of the crankshaft with a mallet. Be careful not to damage the thread. Make sure that there are no metallic particles inside the flywheel.

(d) Check that the H.T. cable is not broken, disconnected from the coil, or damaged in any way. Also check other wiring.

(e) Check that the contact breaker points are clean.

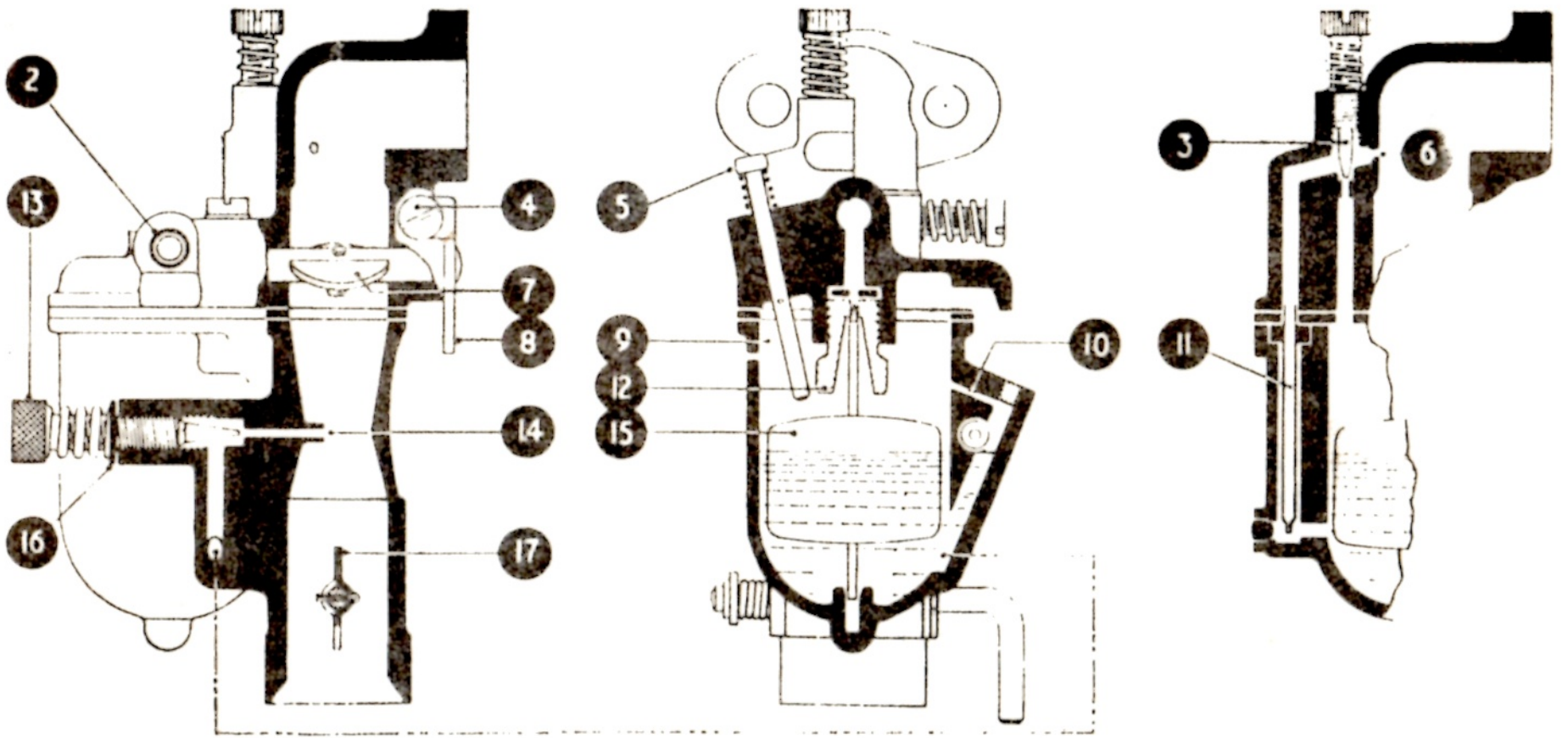
Turn the engine over until the points are fully open. Measure the opening with a feeler gauge. This opening should be .018"—.020". If the points need adjusting, loosen the large screw which locks the breaker plate and move the latter to give the correct opening by turning the small screw, which is eccentric. Then lock the large screw. Check the opening.

The breaker points setting should only be adjusted in the manner described; at no time should the fixed contact be loosened to provide adjustment.

If either the fixed or moving points at any time need replacement, it is recommended that both be replaced at the same time.

(f) A weak or faulty condenser can be detected by badly burnt or pitted points, or a continuous blue spark across the contacts when running. A small white spark is normal. The condenser can be removed by undoing the screws holding the clamp and disconnecting the leads from it.





### 3. CARBURETTER DESCRIPTION.

The 13TCA-2 carburetter shown above has a high non-flooding angle in all directions, and consists of two principal castings. The upper portion or throttle body incorporates the right angle inlet bend and the fixing flange which is bolted on to the inlet manifold of the engine: the lower portion consists of the float chamber (or bowl) and the air intake. The choke tube is cast integrally as part of the air intake.

#### Operation.

Fuel enters the carburetter through the inlet spigot (2) at the top of the bowl cover. It then passes through the needle seating (12) into the bowl.

As the petrol rises it lifts the combined float and needle (15), thus cutting off further supplies when correct level is reached. The tickler (5) is provided so that the float may be depressed to raise the level temporarily, for easy starting from cold. A small hole is drilled in the side of the bowl, just above the petrol level, to prevent excessive flooding.

#### Starting From Cold.

The necessary rich mixture required for starting is supplied when the strangler flap (17) is closed and the engine is turned over. The resulting depression is consequently imposed on the tube (14), providing a very rich mixture, and the engine starts and continues to run.

In very cold weather the tickler (5) may also be used. If the engine has been switched off for a relatively short period only, it will not always be necessary to use the strangler when restarting: it may, however, be found advantageous in some cases to use the tickler to ensure an immediate fire when the engine is turned over.

#### Idling.

When the throttle is in the idling position, fuel will be drawn up through the combined slow-running jet and dip tube (11) to the air regulating screw (3). At this point it meets air from the inside of the bowl, and the resulting mixture is inspired by the engine through the orifice (6).

The mixture is enriched by turning the screw clockwise: unscrewing it has, of course, the opposite effect.

#### High Speed Operation.

The main jet adjustment screw (13) controls the fuel flow at high engine speeds. The main jet discharge tube (14) terminates in the restricted portion of the choke tube, where the depression is at its maximum. The tapered end



of the screw (13) enters the outer end of the discharge tube, thereby regulating the amount of fuel drawn into the choke tube. The volume of petrol/air mixture inspired by the engine is controlled by the butterfly throttle (7), which in turn is operated by the throttle lever (8). The small hole (10) bleeds air from the inside of the bowl into the main jet system, as shown.

This hole should not be allowed to become choked.

#### 4. ADJUSTMENTS.

##### Idling.

It is usual to set the idling speed at 1,000-1,100 r.p.m.; the throttle stop screw (4) must be turned clockwise to increase, and anti-clockwise to reduce this. Smooth idling is ensured by careful adjustment of the air regulating screw (3).

Should difficulty be found in obtaining satisfactory idling, check that the gasket between the barrel and the bowl is in good condition, and that the face of the attachment flange on the barrel is perfectly flat to ensure an airtight joint. A thin gasket should always be used at this flange point.

##### Main Jet.

The main jet screw (13) is set by the engine manufacturer, and the setting should not be changed without good reason. This adjustment is always sensitive on small engines, consequently it should not be altered more than one-eighth of a complete turn at a time until the effect has been carefully noted. (The shallow notch in the head is provided solely as a mark to indicate the position of the screw). Always regulate the screw with the engine under load, at normal full speed with the throttle wide open; it is not satisfactory to adjust the main jet when the engine is running light on the speed governor, with the throttle nearly closed. Turning the screw (13) clockwise will reduce the fuel flow, therefore weakening the mixture supplied to the engine. Turning it anti-clockwise will increase the flow and provide a richer mixture.

**DO NOT FORCE THE SCREW INTO ITS SEATING AS THIS WILL DAMAGE THE TAPER,** thereby making correct adjustment extremely difficult.

If the setting is too weak, it will result in lack of power and possibly overheating of the cylinder, together with poor pick-up, or cutting-out when the load is applied. Do not attempt to operate on a very lean mixture, as better performance and fuel economy will be obtained if the mixture is set for full power. An excessively rich mixture will produce black smoke from the exhaust, and may cause rapid carbon formation in the cylinder head and on the piston crown. Carbon will also quickly form on the sparking plug points, resulting in difficult starting.

The washer (16) is to prevent fuel leaking from the thread of the screw.

##### General.

Flooding may be caused by excessive engine vibration, dirt in the needle seating, a bent float, or possibly by the tickler (5) sticking down and depressing the float. Should the flooding continue after cleaning and checking the carburetter, fit a new float and needle (15) and needle seating (12), as these parts in time are subject to wear as a result of engine vibration.

**IMPORTANT.** In all cases of bad starting or unsatisfactory performance, first check the setting of the **MAIN JET SCREW (13)** and **SLOW RUNNING JET ADJUSTING SCREW (3)**.

*See Illustration on Page 16*

#### 5. AIR FILTER (PLASTIC FOAM TYPE).

This filter is intended to be used dry, and when necessary the element should be washed in petrol and wrung out dry.



## **6. CONTROL CABLE ADJUSTMENT.**

The control lever is connected to the carburetter by the cable (4) which is located in the carburetter manifold by the ferrule (5). If after considerable use it is found that the cable has stretched, adjustment can be made by rotating the ferrule (5). This adjustment should be made with the control lever in the closed position and the throttle control spring (6) fully expanded.

*See Illustration on Page 5*

## **7. ENGINE DISMANTLING.**

1. Disconnect plug lead from sparking plug.
2. Remove sparking plug.
3. Disconnect petrol pipe from top of carburetter.
4. Remove cowl complete with petrol tank and starter.
5. Remove governor blade from spindle and disconnect from throttle link.
6. Remove carburetter assembly at joint between inlet manifold and cylinder block.
7. Remove flywheel, woodruff key, cam sleeve and wave washer.
8. Remove cylinder head.
9. Remove magneto stator unit, drawing H.T. lead through rubber sleeve in magneto backplate.
10. Remove engine sump.
11. Remove big end setscrews, locking strip, oil splasher, and big end bearing cap.
12. Remove piston and connecting rod complete by drawing upwards through cylinder.
13. Remove rings from pistons, one circlip and gudgeon pin.
14. Remove magneto backplate.
15. Remove crankshaft.
16. Remove valve chest cover, breather retaining spring and crankcase breather.
17. Compress valve springs and remove cotter pins.
18. Remove camshaft by tapping out camshaft spindle **TOWARDS** magneto end of engine with a brass drift.
19. Remove tappets.

**TO RE-ASSEMBLE, REVERSE THE ABOVE PROCEDURE.**



**SUFFOLK SUPER PUNCH PARTS LIST**

Ref. No.	Description.	Part No.	No. per set
<b>FRAME ASSEMBLY.</b>			
1.	Engine Platform ... ..	L.5954	1
2.	Screw for fixing Engine ... ..	1D086A	4
3.	Spire Grip Nut ... ..	L.6960	4
4.	Screw for fixing Platform ... ..	3D039A	6
5.	Washer for fixing Platform ... ..	L.3843	6
6.	Sideplate R.H. ... ..	L.6114	1
7.	Sideplate L.H. ... ..	L.6113	1
8.	Tubular Handle ... ..	L.4367	1
9.	Handle Grip ... ..	L.3742	2
10.	Bolt for Tubular Handle ... ..	1M863A	2
11.	Washer for Tubular Handle ... ..	1N562A	2
12.	Nut for Tubular Handle ... ..	1N46A	2
13.	Tie Rod—rear ... ..	L.4347	1
14.	Nut for front and rear Tie Rod ... ..	L.6956	4
15.	Tie Rod—front ... ..	L.5355	1
16.	Front Roller Spindle ... ..	L.6125	1
17.	Wood Rollers ... ..	L.4377	4
<b>CYLINDER ASSEMBLY.</b>			
22.	Cylinder ... ..	L.4355	1
23.	Dust Cover ... ..	L.4380	2
24.	Cylinder Bearing ... ..	L.3729	2
25.	Cylinder Bearing Link—L.H. ... ..	L.3628	1
26.	Cylinder Bearing Link—R.H. ... ..	L.3629	1
27.	Grease Nipple ... ..	L.3841	2
28.	Nut for Cylinder Spindle ... ..	L.6957	1
29.	Pivot Pin ... ..	L.3651	2
30.	Nut for Pivot Pin ... ..	1N33A	2
31.	Sleeve for Cylinder Adjustment ... ..	L.3652	2
32.	Screw for Cylinder Adjustment ... ..	L.3653	2
33.	Nut for Cylinder Adjustment ... ..	L.6955	2
34.	Spring for Cylinder Adjustment ... ..	L.4233	2
35.	Mills Pin for Soleplate ... ..	L.3842	2
36.	Delivery Plate ... ..	L.7026	1
37.	Screws for Delivery Plate ... ..	1D020A	3
38.	Washers for Delivery Plate ... ..	3N623	3
39.	Soleplate ... ..	L.4339	1
40.	Screw for Soleplate ... ..	1D74A	4
41.	Washer for Soleplate ... ..	1N562A	4
42.	Screw for Soleplate Bottom Blade ... ..	L.4668	7
43.	Bottom Blade—lipped ... ..	L.4365	1
44.	Felt Sealing Pad ... ..	L.3858	1
<b>CHAIN ASSEMBLY.</b>			
45.	Chain Case Inner Section ... ..	L.4370	1
46.	Screws for Clutch Shaft Bearing Housing ... ..	1D020A	3
47.	Washer for Clutch Shaft Bearing Housing ... ..	L.3844	3
48.	Driving Sprocket ... ..	L.3661	1
49.	Screws for Chain Case Inner Section ... ..	1D021A	2
50.	Washer for Chain Case Inner Section ... ..	L.3843	2
51.	Rear Sprocket ... ..	L.4671	1
52.	Chain—36 Pitches (Intermediate to rear) ... ..	L.3735	1
53.	Intermediate Sprocket ... ..	L.4406	1
54.	Intermediate Sprocket Bush ... ..	L.5127	1
55.	Chain—40 Pitches (Intermediate to Cyl.) ... ..	L.3734	1
56.	Cylinder Sprocket ... ..	L.3663	1
57.	Distance Piece for Cylinder Spindle ... ..	L.3638	1
58.	Woodruff Key for Cylinder Spindle ... ..	L.3839	1
59.	Chain—58 Pitches (Drive to Cylinder) ... ..	L.4401	1
60.	Chain Case Outer Section ... ..	L.4372	1
61.	Screws for Chain Case Outer Section ... ..	L.3758	3
62.	Chain Adjuster ... ..	L.3699	1



Ref. No.	Description.	Part No.	No. per set.
63.	Nylon Slipper ... ..	L.4255	1
64.	Screw for Chain Adjuster ... ..	1D324A	1
65.	Washer for Chain Adjuster ... ..	1N562A	1
66.	Nut for Chain Adjuster ... ..	1N46A	1
67.	Bolt for Intermediate Sprocket ... ..	L.6071	1
68.	Washer for Intermediate Sprocket ... ..	L.4247	1
69.	Nut for Intermediate Sprocket ... ..	1N87A	1
70.	Sleeve for Intermediate Sprocket... ..	L.4390	1
71.	Saddle for Intermediate Sprocket ... ..	L.4396	1
72.	Bush for Rear Sprocket ... ..	L.4400	1
73.	Washer for Rear Roller Spindle ... ..	L.4394	2
74 & 74A.	Circlip for Rear Roller Spindle ... ..	L.5149	2
75.	Rear Roller Dog ... ..	L.4386	1
76.	Spring for Rear Roller Spindle ... ..	L.4397	1
77.	Slipper for Clutch Lever ... ..	L.4404	2
78.	Clutch Lever ... ..	L.4381	1
80.	Plastic Knob for Clutch Lever ... ..	L.4403	1
81.	Fork for Clutch Lever ... ..	L.4388	1
82.	Washer for Fork ... ..	L.3843	1
83.	Nut for Fork ... ..	1N32A	1
84.	Pivot Pin for Fork ... ..	L.4407	1
85.	Washer for Pivot Pin ... ..	E.7132/P	1
86.	Split Pin for Pivot Pin ... ..	L.4710	1
87.	Gate ... ..	L.4389	1
89.	Nut for Gate ... ..	L.4672	1
90.	Washer for Gate ... ..	1N599A	2
91.	Pivot Pin for Gate ... ..	L.4391	1
92.	Rear Bearing Bush ... ..	L.3731	2
93.	Washer for Rear Roller Spindle ... ..	L.5598	2
94.	Thrust Washer for Roller Spindle ... ..	L.4054	2
95.	Square Key for Roller Spindle ... ..	L.4387	1
96.	Locking Screw for Square Key ... ..	L.4664	1
157.	Felt Sealing Pad for Soleplate (not illustrated)	L.4747	1

#### REAR ROLLER ASSEMBLY.

100.	Roller Barrel ... ..	L.4685	2
101.	Bush for Roller Barrel and Bevel Wheel	L.4399	4
102.	Adjusting Collar ... ..	L.4385	2
103.	Screws for Adjusting Collar ... ..	L.3846	4
104.	Bevel Wheel ... ..	L.4724	2
105.	Roller Stud ... ..	L.4674	6
106.	Washer for Roller Stud ... ..	1N624	6
107.	Nut for Roller Stud ... ..	1N32A	6
108.	Mills Pin for Pinion Carrier ... ..	L.4702	1
109.	Pinion Carrier ... ..	L.4345	1
110.	Spindle for Pinion Carrier ... ..	L.4353	2
111.	Mills Pin for Spindle ... ..	L.4405	2
112.	Fibre Washer ... ..	L.4408	4
113.	Tab Washer ... ..	L.4395	2
114.	Double Coil Spring Washer ... ..	L.4341	2
115.	Nut for Spindle ... ..	L.6957	2
116.	Rear Roller Spindle ... ..	L.4384	1
117.	Bevel Pinion ... ..	L.7770	2
118.	Bush for Bevel Pinion ... ..	L.7771	2
156.	Dirt Seal Hoop (not illustrated) ... ..	L.6043	1

#### CLUTCH ASSEMBLY.

119.	Woodruff Key for Backplate ... ..	L.3845	1
120.	Clutch Spring ... ..	L.3756	2
121.	Clutch Bush ... ..	L.3733	2
122.	Screw for Backplate ... ..	L.7178	1
123.	Clutch Shoe Assembly ... ..	L.5319	2
124.	Washer for Mills Pin ... ..	1N562A	2
125.	Mills Pin for Backplate ... ..	L.3725	2



Ref. No.	Description.	Part No.	No. Per set.
126.	Split Pin for Mills Pin	L.3847	2
127.	Drum	L.3658	1
128.	Driving Shaft	L.5956	1
129.	Ball for Driving Shaft	L.3848	1
130.	Spring for Driving Shaft	L.4231	1
131.	Pin Cover	L.3660	1
132.	Circlip...	L.5149	1
133.	Clutch Shaft Bearing Housing	L.3642	1
134.	Grease Nipple	L.3841	1
135.	Clutch Shaft Bearing	L.3730	1
136.	Spacing Ring	L.3643	1
137.	Clutch Backplate	L.3656	1
138.	Screw for Clutch Shoe	L.4037	2
139.	Cable Clip	E.6015	1

#### FRONT ROLLER ASSEMBLY.

140.	Front Roller Carrier Sub. Assembly	L.6130	1
141.	Finger Wheel	L.5350	1
142.	Mills Pin for Finger Wheel	L.6776	1
143.	Adjusting Screw	L.6127	1
144.	Trunnion Nut	L.5352	1
145.	Spacer for Adjusting Screw	L.7058	1
146.	Anchor Block	L.5348	1
147.	Washer for Anchor Block	1N562A	1
148.	Nut for Anchor Block	L.6956	1
149.	Spring Washer	1N664	1
150.	Washer for Adjusting Screw	1N562A	1
151.	Nut for Adjusting Screw	1N111A	1
152.	Split Pin for Adjusting Screw	L.5376	1
153.	Nut for Front Roller Spindle	L.6956	2
154.	Washer for Front Roller Spindle	1N562A	4
155.	Bush for Front Carrier Tube	L.6135	2
158.	Grass Box (not illustrated)	L.7267	1
159.	Cable	E.7165	1
160.	Control Lever	E.6947	1
161.	Screw for Delivery Plate	3K298A	2
162.	Nut for Delivery Plate	L.7028	2
163.	Washer for Delivery Plate	E.7132/P	2

#### AUXILIARY WHEELS

The following items (not illustrated) may be fitted in place of items, 16, 17, 153, 154,

164.	Split Pin	L.675/P	2
165.	Auxiliary Wheel	L.4726	2
166.	Nut	L.6956	2
167.	Spindle	L.7899	1
168.	Washer	3N562A	4
169.	Washer	3N564A	2
170.	Auxiliary Wheel Sub-Assembly comprising items 164-169 inc.	L.7898	1

The above list to be read in conjunction with  
MOWER ASSEMBLY ILLUSTRATION

### INSTRUCTIONS FOR ORDERING SPARE PARTS

It is essential to quote the following.

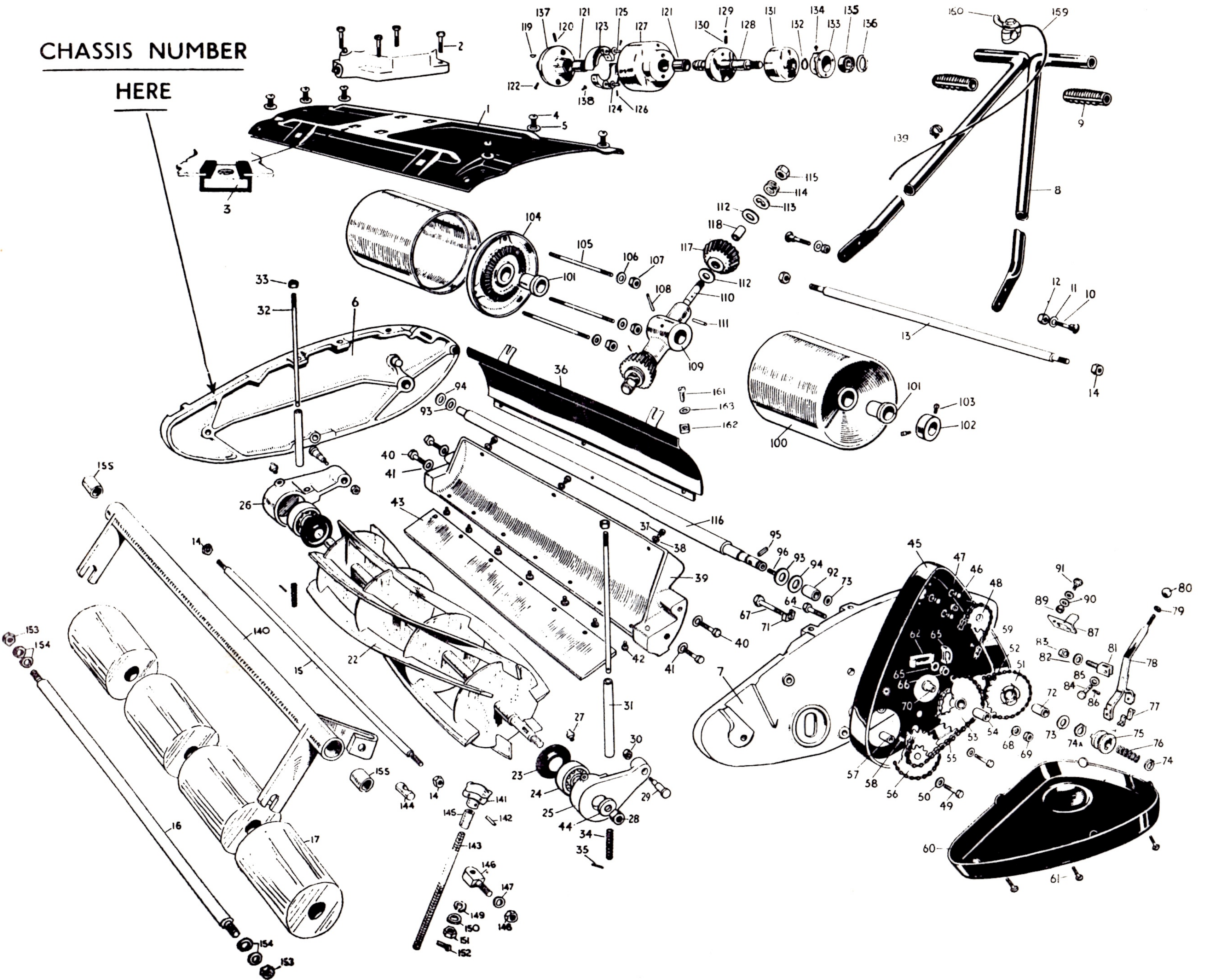
- (a) The Model Name of the machine.
- (b) The chassis serial number stamped on the R.H. side plate. (*See mower assembly illustration*).
- (c) The engine serial number. (*See engine assembly illustration*.)
- (d) The PART NO. of the part, NOT the illustration No.



# Mower Assembly Illustration

CHASSIS NUMBER

HERE

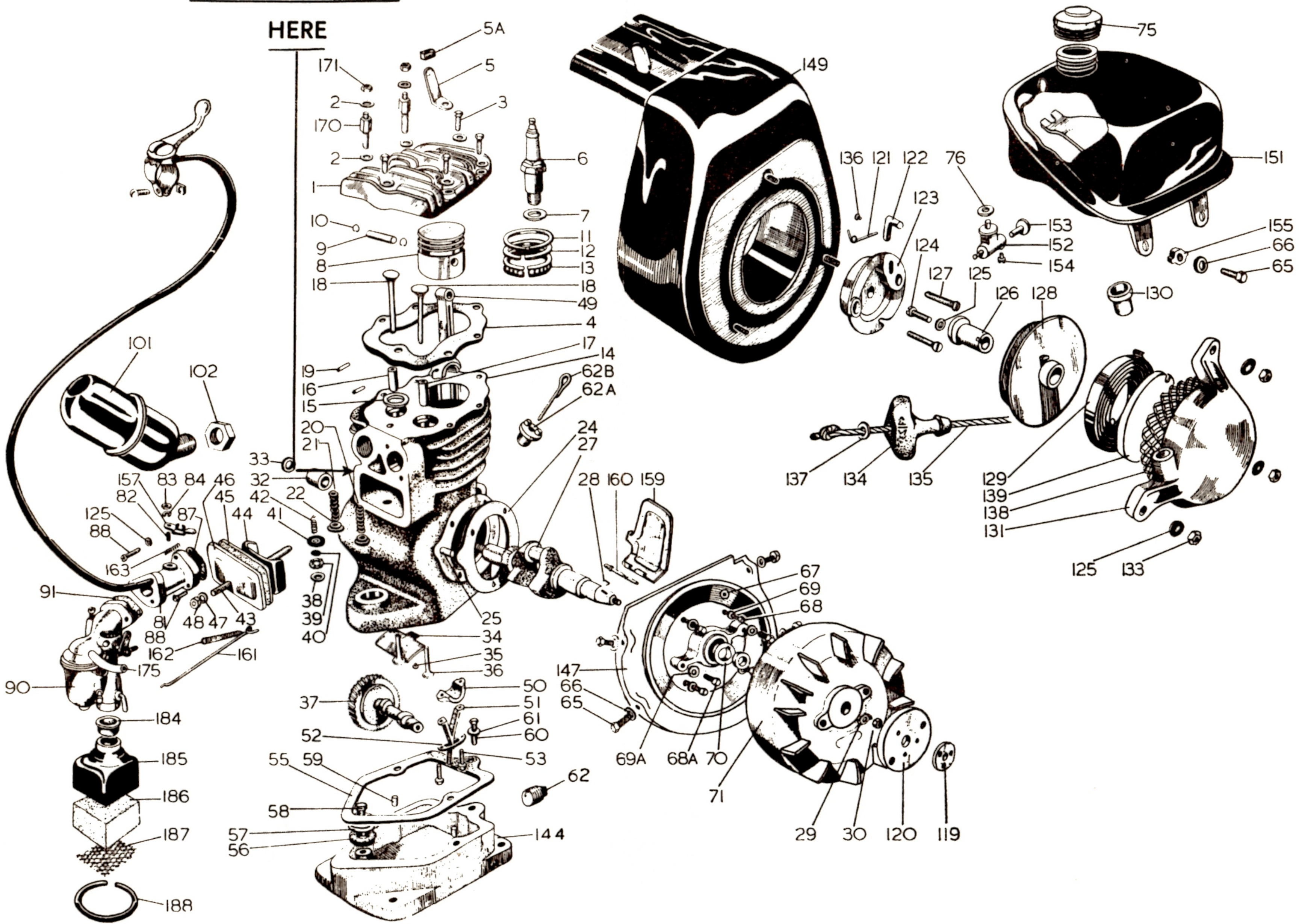




# Engine Assembly Illustration

ENGINE NUMBER

HERE





## ENGINE SPARE PARTS LIST

### MODEL 75 G 14—13A

Ref. No.	Description	Part No.	No. per set
1.	Cylinder Head	E.7257	1
2.	Washer for Cylinder Head	3N561A	8
3.	Set-Screws for Cylinder Head	5D336S	4
4.	Cylinder Head Gasket	E.7280	1
5.	Cut-out Switch	E.3969	1
5a.	Rubber Tube for Cut-out Switch	E.4083	1
6.	Spark Plug	E.3808	1
7.	Washer for Spark Plug		
8.	Piston	E.3513	1
9.	Gudgeon Pin	E.3517	1
10.	Wire Circlips	E.3518	2
11.	Compression Ring	E.3514	1
12.	Scraper Ring	E.3515	1
13.	Oil Ring	E.3516	1
14.	Cylinder Block	E.7438	1
15.	Valve Seat Insert--Exhaust	E.3534	1
16.	Exhaust Valve Guide	E.3532	1
17.	Inlet Valve Guide	E.3533	1
18.	Inlet Valve and Exhaust Valve	E.3526	2
19.	Valve Spring Cotter Pin	E.3531	2
20.	Inlet Valve Spring	E.3529	1
21.	Exhaust Valve Spring	E.3528	1
22.	Valve Spring Retainer	E.3968	2
24.	Paper Gasket for Flywheel Magneto Backplate	E.3859	3
25.	Camshaft Spindle	E.6789	1
27.	Crankshaft	E.3524	1
28.	Key for Magneto Flywheel	E.3597	1
29.	Washer for Crankshaft	1N562A	1
30.	Nut for Crankshaft (Left Hand Thread)	E.7842	1
32.	Main Bearing	E.3536	2
33.	Oil Seal	E.3813	2
34.	Breather Baffle	E.3561	1
35.	Drive Screw for Breather Baffle	E.3814	1
36.	Tappets	E.3535	2
37.	Camshaft	E.3510	1
38.	Washer for Crankcase Breather	E.3594	1
39.	Breather Body	E.3555	1
40.	Disc Valve	E.3557	1
41.	Breather Cap	E.3556	1
42.	Breather Retainer Spring	E.3558	1
43.	Stud for Valve Chest Cover	E.7098	1
44.	Baffle for Valve Chest Cover	E.3560	1
45.	Gasket for Valve Chest Cover	E.3549	1
46.	Cover for Valve Chest	E.3543	1
47.	Washer for Stud	E.7132	1
48.	Nut for Stud	1N44A	1
49.	Connecting Rod	E.3519	1
50.	Big End Bearing Cap		
51.	Oil Splasher	E.3522	1
52.	Locking Strip	E.3523	1
53.	Screws for Big End Bearing Cap	1D585S	2
55.	Paper Gasket for Sump	E.3547	1
56.	Washer for Bolt--Asbestos	E.3749	1
57.	Collar for Bolt	E.3566	1
58.	Bolt for Sump	1A139A	1
59.	Dowels for Sump	E.3819	2
60.	Setscrew for Sump	1DO87A	1
61.	Shakeproof Washer for Setscrew	E.3821	1
62.	Drain Plug	E.3822	1



Ref. No.	Description	Part No.	No. per set
62a.	Filler Plug ... ..	E.7506	1
62b.	Dip Stick for Filler Plug ... ..	E.6895	1
65.	Screw for Cowl and Tank ... ..	3D270A	7
66.	Washer for Cowl and Tank ... ..	E.7132/P	7
67.	Grommet ... ..	E.5051	1
68.	Screw for Flywheel Magneto Backplate ... ..	3DO48A	4
68a.	Screw for Magneto Stator Plate ... ..	3DO48A	2
69.	Washer for Flywheel Magneto Backplate ... ..	L.3844/P	4
69a.	Washer for Screw for Magneto Stator Plate ... ..	E.7132/P	2
70.	Cam—Contact Breaker ... ..	E.5038	1
71.	Flywheel ... ..	E.5010	1
75.	Petrol Tank Cap ... ..	E.3589	1
76.	Washer for Petrol Tap ... ..	L.7613	2
81.	Inlet Manifold ... ..	E.7437	1
82.	Stud for Throttle Lever ... ..	E.3565	1
83.	Nut for Throttle Lever ... ..	L.6958	1
84.	Washer for Throttle Lever... ..	3N610A	1
87.	Gasket for Inlet Manifold ... ..	E.7469	1
88.	Screw for Carburetter Assembly and Inlet Manifold ... ..	E.7772	4
90.	Carburetter ... ..	E.7179	1
91.	Gasket for Carburetter ... ..	E.3550	1
101.	Exhaust Silencer ... ..	E.4000	1
102.	Locknut for Exhaust Silencer ... ..	E.3568	1
119.	Spacer (Small) for Recoil Starter ... ..	E.5527	1
120.	Spacer (Large) for Recoil Starter ... ..	E.5535	1
121.	Spring for Recoil Starter ... ..	E.7778	1
122.	Driving Pin ... ..	E.7339	1
123.	Pawl Hub ... ..	E.7337	1
123a.	Pawl Hub Sub. Assy. Comprising Ref. No's. 121, 122 and 123	E.7407	1
124.	Centre Screw ... ..	1K298A	1
125.	Shakeproof Washer for Centre Screw, Cover, Inlet Manifold and Carburetter Assembly ... ..	E.6865/P	8
126.	Bush ... ..	E.5524	1
127.	Screws for Pawl Hub/Spacer ... ..	1H387A	2
128.	Ratchet Pulley ... ..	E.7338	1
129.	Recoil Spring ... ..	E.5516	1
130.	Rope Guide Bush ... ..	E.5522	1
131.	Cover for Recoil Starter ... ..	E.5534	1
133.	Nuts for Cover ... ..	3N31A	3
134.	Rope Handle ... ..	E.5518	1
135.	Nylon Rope ... ..	E.5517	1
136.	Screw for Spring ... ..	E.5528	1
137.	Washer for Rope Handle ... ..	E.7132/P	1
138.	Screen ... ..	E.6590	1
139.	Housing for Recoil Spring ... ..	E.7340	1
139a.	Recoil Starter Assembly comprising Ref. No's. 119 to 139, inc., except 123a ... ..	E.7336	1
144.	Sump ... ..	E.6974	1
147.	Flywheel Magneto Backplate ... ..	E.6533	1
149.	Cowl ... ..	E.6532	1
151.	Petrol Tank ... ..	E.6756	1
152.	Petrol Tap Body ... ..	E.6596	1
153.	Petrol Control Button ... ..	E.6597	1
154.	Screw for Petrol Tap ... ..	E.6598	1
154a.	Petrol Tap Assy. comprising Ref. No's. 152, 153, 154	E.7250	1
155.	Nut for Tank Fixing Screw ... ..	L.6961	3
157.	Throttle Lever ... ..	E.7161	1
159.	Governor Blade ... ..	E.6529	1
160.	Governor Blade Spindle ... ..	E.6528	1
161.	Throttle Link ... ..	E.6752	1
162.	Governor Spring ... ..	E.6536	1



Ref. No.	Description	Part No.	No. per set
163.	Throttle Return Spring ... ..	E.6531	1
170.	Studs for Cylinder Head ... ..	E.6619	2
171.	Nuts for Cylinder Head Studs ... ..	3N45A	2
175.	Petrol Tube ... ..	E.5309	1
184.	Rubber Bush for Air Filter ... ..	E.7174	1
185.	Air Filter Body ... ..	E.7173	1
186.	Air Filter Element (Foam) ... ..	E.7172	1
187.	Air Filter Screen ... ..	E.7175	2
188.	Wire Circlip for Air Filter ... ..	E.3579	1
189.	Air Filter Sub. Assembly, comprising Ref. No's. 184 to 188, inc. ...	E.7176	1
190.	Spring Washer for Cylinder Head Stud ... ..	3N624	2

The above list to be read in conjunction with  
ENGINE ASSEMBLY ILLUSTRATION

## INSTRUCTIONS FOR ORDERING SPARE PARTS

It is essential to quote the following:

- (a) The Model Name of the machine.
- (b) The chassis serial number stamped on the R.H. side plate. (*See mower assembly illustration*).
- (c) The engine serial number. (*See engine assembly illustration*).
- (d) The PART NO. of the part, NOT the illustration No.



**SPARE PARTS LIST FOR ZENITH CARBURETTER  
TYPE 13.TCA—2**

Ref. No.	Description	Part No.
1.	Air Regulating Screw ... ..	015457
2.	Spring for Ref. No. 1 ... ..	015458
3.	Screw and Spring Washer fixing Bowl to Barrel (Short) ..	020584
3a.	Screw and Spring Washer fixing Bowl to Barrel (Long) ...	019651
4.	Throttle Stop Screw ... ..	015547
5.	Spring for Ref. No. 4 ... ..	08539
6.	Carburetter Barrel Assembly ... ..	020573
7.	Washer for Needle Seating ... ..	08523
8.	Needle Seating ... ..	020574
9.	Gasket (Bowl to Barrel) ... ..	020583
10.	Float and Needle Assembly ... ..	020507
11.	Adjustment Needle ... ..	020576
12.	Spring for Ref. No. 11 ... ..	09846
13.	Fibre Washer for Ref. No. 11 ... ..	16709
14.	Strangler Spindle and Pin Assembly ... ..	020579
15.	Strangler Flap ... ..	013635
16.	Split Pin for Ref. No. 15 ... ..	05370
17.	Split Pin for Spindle ... ..	05370
18.	Washer for Spindle ... ..	08860
19.	Friction Spring ... ..	013650
20.	Carburetter Bowl ... ..	020575
21.	Slow running Tube ... ..	020582
22.	Split Pin for Tickler Stem ... ..	05890
23.	Tickler Spring ... ..	015454
24.	Tickler Stem ... ..	020572

This list to be read in conjunction with  
**EXPLODED ILLUSTRATION OF CARBURETTER** on Page 26

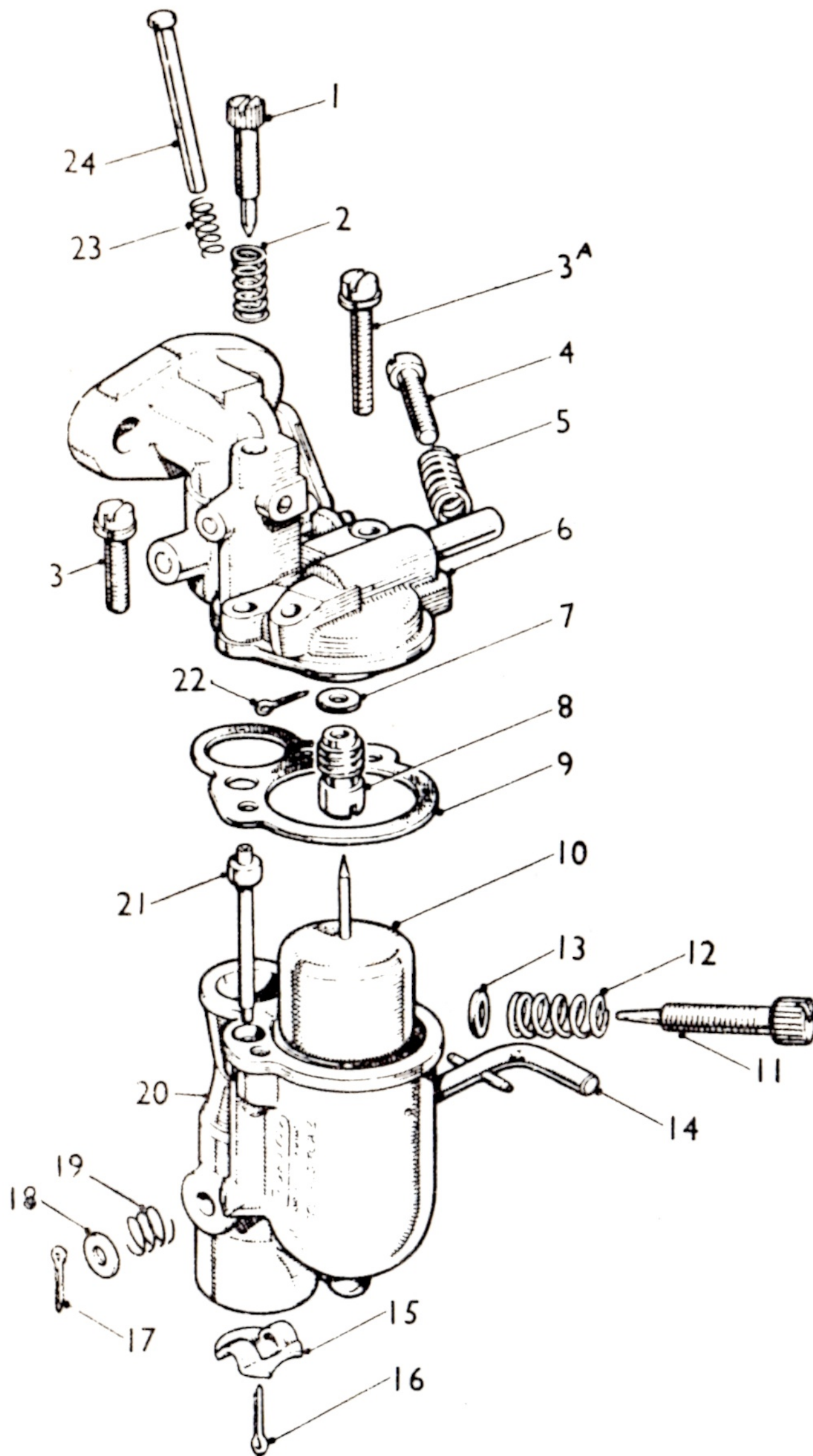
**INSTRUCTIONS FOR ORDERING SPARE PARTS**

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- (a) The Model Name of the machine.
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- (c) The engine serial number. (*See engine assembly illustration*).
- (d) The PART NO. of the part, NOT the illustration No.



# Carburettor Illustration





## MAGNETO SPARE PARTS LIST

Ref. No.	Description	Part No.	No. per set
1.	Flywheel ... ..	E.5010	1
2.	Clip for Condenser ... ..	E.5013	1
3.	Adjuster Plate ... ..	E.5014	1
4.	Inspection Cover ... ..	E.5019	1
5.	Eccentric Rivet ... ..	E.5020	1
6.	Screw for Condenser Clip ... ..	E.5021	2
7.	Breaker Arm and Contact ... ..	E.7468	1
8.	Contact Point and Bolt ... ..	E.5026	1
9.	Nut for Contact Point and Bolt ... ..	1N471A	1
10.	Washer for Contact Point and Bolt ... ..	1N611A	2
11.	Screw, locking Adjusting Plate ... ..	1K007A	1
12.	Washer for Screw, locking Adjusting Plate ... ..	1N610A	1
13.	Spring Retainer ... ..	E.5032	1
14.	Breaker Spring ... ..	E.5033	1
15.	Washer ... ..	E.5034	2
17.	Condenser ... ..	E.5037	1
18.	Cam Sleeve ... ..	E.5038	1
19.	Coil ... ..	E.7220	1
20.	Screw for Inspection Cover ... ..	E.5041	2
21.	Washer for Inspection Cover and Contact Point and Bolt ... ..	E.5042	3
22.	Pad—Lubricating ... ..	E.5047	1
23.	Lead—High Tension ... ..	E.7409	1
23a.	Suppressor ... ..	E.7858	1
24.	Grommet—Rubber ... ..	E.5051	1
25.	Cam Spring ... ..	E.5052	1
26.	Stator Assembly ... ..	E.5053	1
29.	Spring Washer for Item 11 ... ..	E.5043	1

This list to be read in conjunction with  
MAGNETO ASSEMBLY ILLUSTRATION on Page 28

## INSTRUCTION FOR ORDERING SPARE PARTS

It is essential to quote the following:

- (a) The Model Name of the machine
- (b) The chassis serial number stamped on the R.H. side plate. (*See mower assembly illustration*).
- (c) The engine serial number. (*See engine assembly illustration*).
- (d) The PART NO. of the part, NOT the illustration No.



# Magneto Assembly Illustration

