



THE
SUFFOLK
PONY MOTOR
MOWER
Mk. 111

OPERATING & MAINTENANCE
MANUAL

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The Suffolk Pony Motor Roller Lawnmower

INSTRUCTIONS

for the Operation and Maintenance

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RECOIL STARTER SPARE PARTS LIST &
ILLUSTRATION—SEE SEPARATE LEAFLET

INSTRUCTIONS FOR USE

DO NOT ATTEMPT TO USE THIS POWER MOWER BEFORE READING CAREFULLY THE INSTRUCTIONS FOR USE.

The numbers in brackets refer to the various components illustrated on the Spare Parts List.

PREPARATION FOR USE

1. **TO FIT THE HANDLE.** Remove bolts (10) from sideplates (2 and 3). Fit the forks of the handle (81) over the bosses of the sideplates. Replace bolts and nuts and tighten in the required position. Uncoil the control cable (85) and fix the clip (84) of the control lever on the R.H. handle, and the clip (86) about half-way along the handle.

2. **FUEL.** First ensure that the fuel tap is turned off. Fill the tank which holds approximately $1\frac{1}{2}$ pints, with a mixture of petrol and lubricating oil. **FUEL MUST BE WELL MIXED BEFORE FILLING THE TANK.** **WARNING:** It is important to use only those lubricating oils and mixture strengths recommended on the Engine nameplate.

3. Before starting disengage the Hand Clutch by pulling the outer cover (62) outwards (about $\frac{1}{2}$ in.) over the spring-loaded ball on the transmission shaft. To reconnect, push inwards, turning it with respect to the centrifugal clutch until it re-engages. **RE-ENGAGE THIS CLUTCH ONLY WHEN ENGINE IS IDLING.** The engine will now drive the mower when the throttle is opened. To disconnect the power from the Rear Roller pull the dog (40) outwards about $\frac{3}{4}$ in. and turn it in either direction about $\frac{1}{4}$ turn to hold it in position. To reconnect, close the control lever so that the engine is idling and turn the dog in the opposite direction until it springs back into position. The dog will automatically engage fully as the engine is speeded up.

4. TO START ENGINE WHEN COLD.

(i) Ensure that the petrol and oil are well mixed in the fuel tank before turning on the fuel tap.

(ii) Ensure hand clutch is disengaged.

(iii) Turn on fuel by means of tap under tank. Tap should be turned downwards.

(iv) Close strangler shutter on carburetter (Ref. 10 on Carburetter Leaflet).

(v) Set control lever about $\frac{1}{4}$ open.

(vi) Grip the rubber handle of the Recoil Starter firmly and pull smartly away from the cover. Do not pull the rope out to its full extent, and do not release your grip on the handle until the rope has recoiled back in position.

(vii) When engine commences firing, open the strangler shutter and throttle down to idling speed. If on opening the strangler the engine begins to falter, partly close again until engine runs regularly, then fully open strangler and leave open.

(viii) Allow 15 to 20 seconds for engine to warm up.

(ix) Engage hand clutch—but ONLY WHEN ENGINE IS IDLING.

5. TO START ENGINE WHEN HOT.

The same procedure should be adopted as for a cold engine except that it should not be necessary to close strangler.

6. 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.

MOWING ADJUSTMENTS

1. TO ADJUST THE CUTTING CYLINDER.

The Cylinder Bearing Housings (19 and 20) on each side of the machine are provided with an adjusting screw (31) which when turned in a clockwise direction will bring the Cutting Cylinder closer to the Bottom Blade. When correctly adjusted, the Cutting Cylinder should just touch the Bottom Blade throughout its entire length.

2. HEIGHT OF CUT.

To regulate the height of cut, loosen the bolts (10) holding the Roller Brackets (8 and 9) and set them to the desired position. It is important that the two brackets be adjusted equally.

ROUTINE MAINTENANCE

1. CUTTING CYLINDER REMOVAL.

To remove the cutting cylinder for regrinding the following procedure should be adopted:

- (a) Loosen the cylinder adjusting screws (31).
- (b) Remove chain case cover.
- (c) Remove both chains (72 and 73).
- (d) Remove the chain wheels from the cylinder spindle.
- (e) Remove the nuts (6) off the ends of the tie rods on the R.H. side of the mower, the screw (15) holding the soleplate, and the screw (14) holding the delivery plate.
- (f) Remove the R.H. sideplate and withdraw the cutting cylinder. To replace the cylinder reverse the above procedure.

2. CENTRIFUGAL CLUTCH.

The clutch consists of a backplate (47) on which are mounted two lined shoes (51) which pivot on pins (54). As the engine speed is increased, these shoes, which are spring-loaded, swing outwards by centrifugal action and grip the drum (57). Access to the clutch is readily obtained by removing the Recoil Starter unit and slackening the bolts fixing the engine cowling to the tie rods (5) and sliding the engine along to the R.H. side.

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 on the inside of the drum. Clean thoroughly with petrol or other degreasing agent.

(b) Clutch shoes are unable to turn on pivot pins. Clean and free obstruction.

(c) Linings of clutch shoes worn. Remove shoes by withdrawing split pins (56) which secure the shoes to their pivot pins. Fit new linings using new rivets.

(d) If after attention to the foregoing points, the clutch is found still to be slipping, turn the spring adjusting screws (53) in the clutch shoes in an anti-clockwise direction to allow the shoes to exert a greater pressure on the clutch drum.

AFTER ADJUSTMENT, CHECK THAT THE CUTTING CYLINDER DOES NOT TURN WHEN THE ENGINE IS IDLING.

3. REAR ROLLER CLUTCH.

Access to the rear roller clutch is obtained by removing the chain case cover (79). The clutch teeth can then be lubricated with a few drops of machine oil.

4. CHAIN ADJUSTMENT.

(a) Remove the chain case cover.

(b) Slacken nut (78) and set the chain adjuster to give the correct tension. Re-tighten nut. The ideal play is $\frac{1}{4}$ in. in the tightest position. Replace chain case cover.

5. ENGINE.

Attention to the following points is all that is normally required to keep the engine in a satisfactory condition:—

(a) Magneto contact breaker points. Clean regularly and keep adjusted to a gap of .018 in. (For description of Magneto see separate leaflet supplied.)

(b) Cylinder head and exhaust pipe. After every 50 hours operation, remove cylinder head (1) and unscrew exhaust silencer. Carefully clean off carbon deposit from the internal surfaces of the engine. Care must be taken not to score these surfaces. Fit new cylinder head gasket, clean sparking plug, and adjust the point to .020 in.

NOTE: The above operation must not be carried out when the engine is hot.

6. REMOVAL OF ENGINE.

Remove Recoil Starter. Slacken the nuts (29a) on the cowl clamping bolts (2a and 2b) and slide engine and cowl along the tie rods away from the clutch. Engine and cowl can now be removed as a complete unit.

ENGINE DISMANTLING.

- (i) Remove carburetter from manifold (33).
- (ii) Remove exhaust silencer.
- (iii) Remove clutch backplate.
- (iv) Remove engine fixing screws and withdraw engine from cowl.
- (v) Remove sparking plug.
- (vi) Remove cylinder head.
- (vii) Remove inlet manifold.
- (viii) Remove nut (20—L.H. thread) and pull off Magneto Flywheel.

The manufacturers do not recommend the dismantling of the engine beyond this point by other than an appointed Service Agent.

To re-assemble reverse the above procedure.

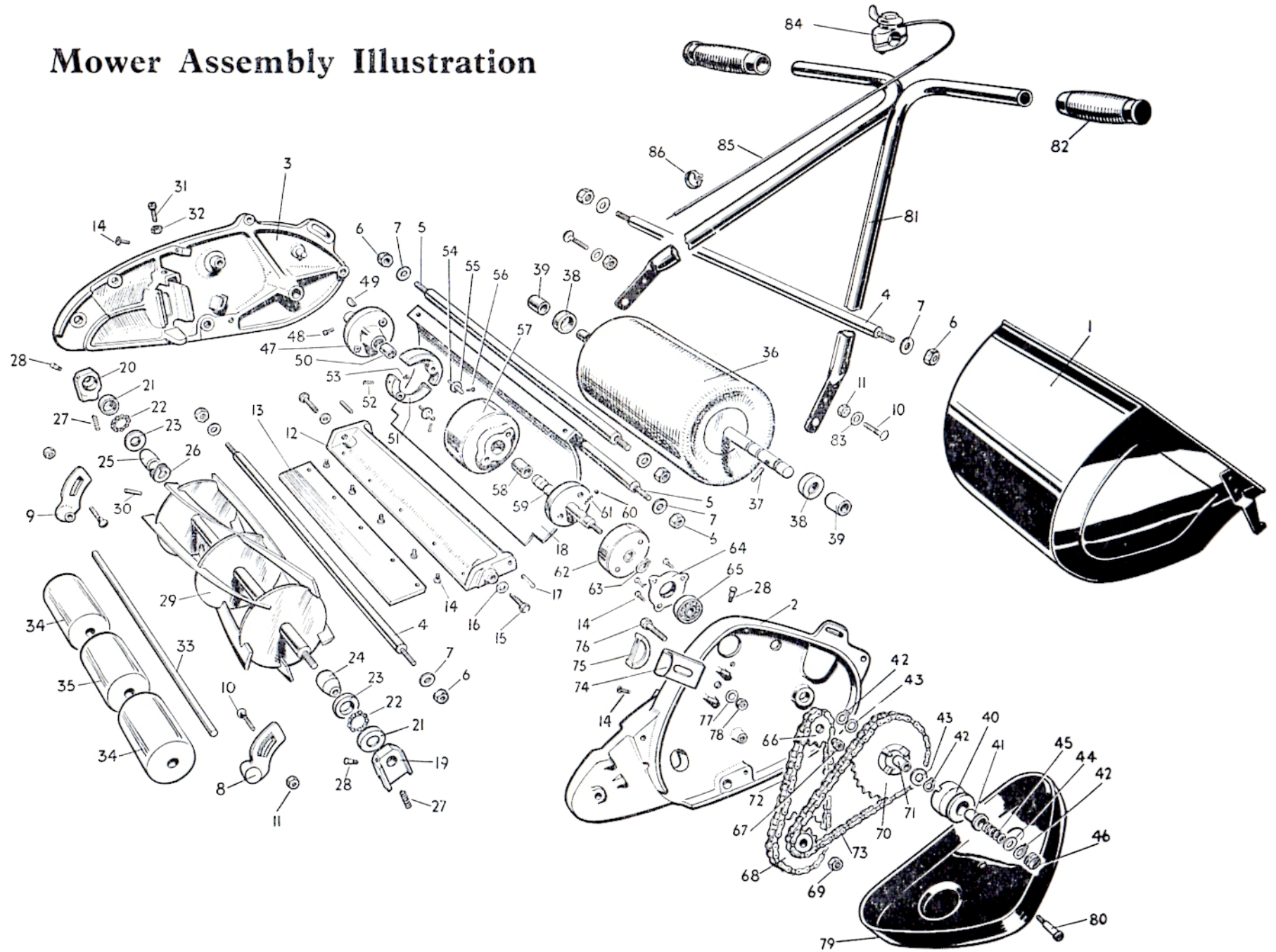
7. LUBRICATION.

Oil the machine regularly through the lubricator nipples (28) before use with light machine oil or bicycle oil at the following points:—

- (a) The rear roller bearings (39).
- (b) The cutting cylinder bearings (22).
- (c) The clutch shaft bearing (65).
- (d) The front rollers (34) and brackets (8 and 9).

The chain case cover (79) should occasionally be removed and a good quality grease applied to the chains (72 and 73).

Mower Assembly Illustration

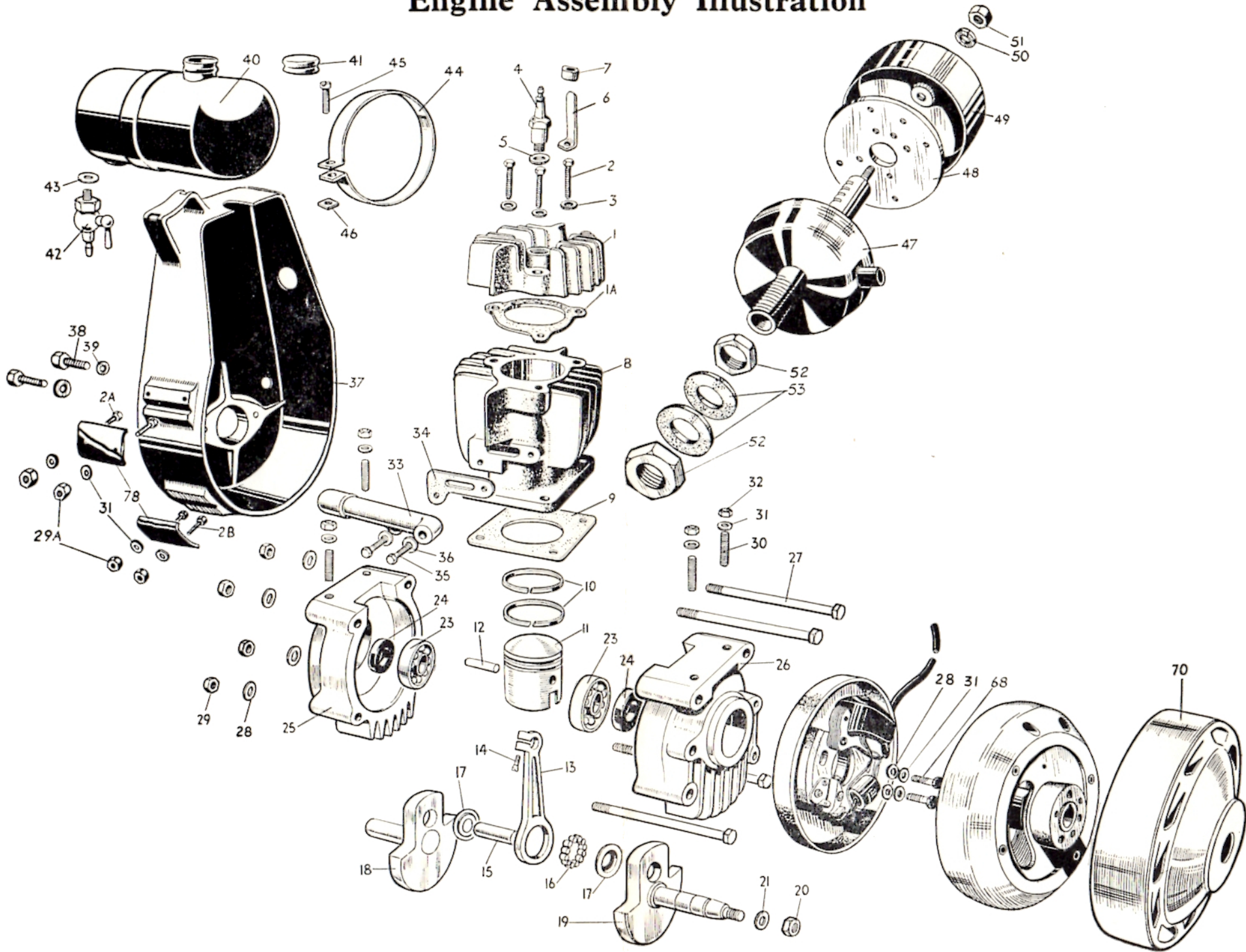


SPARE PARTS LIST FOR MOWER

Ref. No.	Description	Part No.	No. per set
1	Grassbox	L-5134	1
2	Sideplate L.H.	L-5102	1
3	Sideplate R.H.	L-5103	1
4	Tie Rod—Long	L-5107	2
5	Tie Rod—Short	L-5108	2
6	Nuts for Tie Rods	93014	8
7	Washers for Tie Rods	L-5154	8
8	Roller Bracket—L.H.	L-5199	1
9	Roller Bracket—R.H.	L-5198	1
10	Bolts for Roller Bracket and Tubular Handle	L-5531	4
11	Nuts for Roller Bracket and Tubular Handle	93254	4
12	Soleplate	L-2947	1
13	Bottom Blade	L-4673	1
14	Screw for Bottom Blade, Delivery Plate, Bearing Cover	L-4668	10
15	Soleplate Fixing Screws	94134	2
16	Washer for Soleplate Fixing Screws	93404	2
17	Mills Pin for Soleplate	L-5151	2
18	Delivery Plate	L-5111	1
19	Bearing Block L.H.	L-2965	1
20	Bearing Block R.H.	L-2966	1
21	Cup for Ball Retainer	L-2969	2
22	Ball Retainer	L-2968	2
23	Oil Seal	L-3274	2
24	Cone for Ball Retainer—Long (L.H.)	L-3272	1
25	Cone for Ball Retainer—Short (R.H.)	L-3273	1
26	Spring Washer for Cutting Cylinder	L-2970	1
27	Springs for Bearing Blocks	L-3494	2
28	Lubricator	L-667	3
29	Cutting Cylinder	L-5116	1
30	Mills Pin for Cutting Cylinder R.H.	L-5118	1
31	Adjusting Screw for Bearing Block	L-4321	2
32	Nut for Bearing Block Adjusting Screw	NT/D.106	2
33	Wood Roller Spindle	L-5197	1
34	Wood Roller—Long	L-3436	2
35	Wood Roller—Short	L-3435	1
36	Rear Roller	L-5962	1
37	Mills Pin for Rear Roller	L-4978	1
38	Rear Roller Spacer	L-5963	2
39	Rear Roller Bush	L-5145	2
40	Rear Roller Dog	L-4981	1
41	Bush for Rear Roller Dog	L-4972	1
42	Circlip for Rear Roller Spindle	L-4976	3
43	Washer for Rear Roller Spindle (Large)	L-4974	2
44	Washer for Rear Roller Spindle (Small)	L-4980	1
45	Spring for Rear Roller	L-4975	1
46	Plug Button	L-4977	1
47	Clutch Backplate	L-5106	1
48	Screw for Clutch Backplate	L-3846	1
49	Woodruff Key for Clutch Backplate	L-3845	1
50	Bush for Clutch Backplate	L-5105	1
51	Clutch Shoe Assembly	L-4704	2
52	Clutch Spring	L-4473	2
53	Adjusting Screw	L-4474	2
54	Mills Pin for Clutch Backplate	L-4476	2
55	Washer for Mills Pins	93513	2
56	Split Pin for Mills Pin	L-4710	2
57	Drum for Centrifugal Clutch	L-5104	1
58	Bush for Drum	L-5127	1
59	Clutch Shaft	L-5124	1
60	Ball for Clutch Shaft	L-3848	1

Ref. No.	Description	Part No.	No. per set
61	Spring for Clutch Shaft	L.4231	1
62	Pin Cover	L.3660	1
63	Cirelip for Clutch Shaft	L.5149	1
64	Bearing Cover	L.3926	1
65	Clutch Shaft Bearing	L.5150	1
66	Driving Sprocket	L.5144	1
67	Nut for Driving Sprocket	L.2946	1
67a	Spring Washer for Driving Sprocket (not illustrated)	N.627	1
68	Cylinder Sprocket	L.5121	1
69	Nut for Cylinder Sprocket	L.5153	1
70	Rear Sprocket... ..	L.5129	1
71	Bush for Rear Sprocket	L.4973	1
72	Chain (Drive-Cylinder)	L.5147	1
73	Chain (Cylinder-Rear Roller)	L.5148	1
74	Chain Adjuster	L.3699	1
75	Nylon Slipper for Chain Adjuster	L.4255	1
76	Screw for Chain Adjuster	91772	1
77	Washer for Chain Adjuster... ..	93615	1
78	Nut for Chain Adjuster	93123	1
79	Chain Guard	L.5112	1
80	Screw for Chain Guard	L.5146	1
81	Tubular Handle	L.5131	1
82	Handle Grip	L.3389	2
83	Washer for Tubular Handle	93512	2
84	Control Lever... ..	L.5314	1
85	Cable	L.5316	1
86	Cleat for Cable	L.5315	1
87	Mills Pin for Cutting Cylinder, L.H. (not illustrated)	L.3319	1

Engine Assembly Illustration



SPARE PARTS LIST FOR ENGINE 50-G-14.2A

Ref. No.	Description	Part No.	No. per set
1	Cylinder Head	E.5932	1
1a	Cylinder Head Gasket	E.5933	1
2	Screws for Cylinder Head	94123	3
2a	Screws for Cowling—Short	1A124R	2
2b	Screws for Cowling—Long	1A176R	2
2c	Washers for Cowling Screws (Not illustrated)...	93511	4
3	Washers for Cylinder Head Screws	93511	3
4	Spark Plug	E.5285	1
5	Washer for Spark Plug	E.3809	1
6	Cut-Out Switch	E.5289	1
7	Rubber Washer for Cut-Out Switch	E.4083	1
8	Cylinder Block	E.5996	1
9	Gasket for Cylinder Block	E.5230	1
10	Piston Rings	E.5243	2
11	Piston	E.5242	1
12	Gudgeon Pin	E.5244	1
13	Connecting Rod	E.5398	1
14	Screw for Connecting Rod	E.5227	1
15	Crank Pin	E.5208	1
16	Big End Rollers	E.5233	11
17	Crank Pin Washers	E.5209	2
18	Crankshaft—Drive Side	E.5216	1
19	Crankshaft—Magneto Side	E.5971	1
20	Nut for Crankshaft	E.5247	1
21	Washer for Crankshaft Nut	93512	1
23	Main Bearing... ..	E.5232	2
24	Oil Seal	E.5241	2
25	Crankcase—Drive Side	E.5203	1
26	Crankcase—Magneto Side	E.5204	1
27	Bolts for Crankcase	91382	4
28	Washers for Crankcase Bolts and Magneto Side Crankcase Screws	93511	6
29	Nuts for Crankcase Bolts	93103	4
29a	Nuts for Cowling Screws	1N5	4
30	Studs for Crankcase	E.5245	4
31	Washers for Crankcase Studs, Cowling Screws and Magneto Side Crankcase Screws	E.5317	10
32	Nuts for Crankcase Studs	93113	4
33	Inlet Manifold	E.5201	1
34	Gasket for Inlet Manifold	E.5231	1
35	Screws for Inlet Manifold	94121	2
36	Washers for Inlet Manifold Screws	E.5277	2
37	Cowling	E.5951	1
38	Screws for Cowling	96111	2
39	Washers for Cowling Screws	E.3844	2
40	Petrol Tank	E.6001	1
41	Cap for Petrol Tank	E.6004	1
42	Petrol Tap	E.3593	1
43	Washer for Petrol Tap	E.4967	2
44	Hose Clip for Tank	E.6039	1
45	Screw for Hose Clip... ..	E.5311	1
46	Nut for Hose Clip Screw	E.5312	1
47	Silencer—Inner Half	E.6023	1
48	Baffle Plate	E.5992	1
49	Silencer—Outer Half	E.5990	1
50	Spring Washer for Silencer	1N624	1
51	Nut for Silencer	1N266	1
52	Back Nut for Silencer	E.3568	2
53	Exhaust Washer	E.5467	2
68	Screw for Crankcase—Magneto Side	3A361B	2
70	Fan Cover	E.5272	1
75	Woodruff Key for Crankshaft (not illustrated)	E.5246	1
76	Rubber Grommet for Cowl (not illustrated)	E.3826	1
77	Petrol Tube (not illustrated)	E.5309	1
78	Cowl Clamping Plates	E.6000	2
79	Suppressor (not illustrated)	E.5521	1

