

MAN. 77

FROM MACHINE NUMBER 64/1589

Hayter

Instruction and Spare Parts Book

HAYTER
AMBASSADOR 2
CYLINDER LAWN MOWER

HAYTERS LTD

BISHOP'S STORTFORD · HERTS CM23 4BU · ENGLAND

TWENTY NEW PENCE

INTRODUCTION

The Hayter Ambassador 2 is robustly constructed and designed to give an efficient, economical performance combined with ease of operation. The correct operation and attention to routine maintenance as recommended will ensure long and efficient service from the machine. It is important that the machine is not abused or neglected.

The machine is carefully checked at our works prior to despatch, every effort is made by Hayters to see that it arrives in perfect condition. Your dealer will ensure this on delivery. It is recommended that you permit the dealer to go through the operating instructions with you.

Due to the possible settling in of new components, it is essential that after a short period of use all securing nuts be checked and tightened if necessary.

GUARANTEE

The machine is guaranteed against faulty workmanship and materials for a period of 12 months from the date of purchase. In the case of components not manufactured by Hayters Ltd, no guarantee is given but the Purchaser shall be entitled to the benefit of any guarantee given by the manufacturers of such components. Any claim under guarantee should be referred to the Hayter Agent through whom the machine was originally supplied, quoting the machine Serial Number which is located on the inside of the mainframe at the left hand side of the machine.

The guarantee becomes void if any parts not made or supplied by Hayters are fitted to the machine. In the case of machines being used for hiring out purposes no guarantee of any kind is given or is to be implied.

OPERATING INSTRUCTIONS

Engine: See the engine manufacturer's leaflet and carefully carry out the recommended instructions, paying particular attention to the lubricating instructions. **IMPORTANT:** No attempt must be made to start the engine until the sump has been filled with one of the recommended grades of lubricating oil.

Clutch Lever: The clutch lever, which is mounted on the handlebar disengages the drive to the rear rollers. Situated on the lever is a small trigger which holds the clutch in the disengaged position. Before starting the engine ensure that the clutch lever is locked in this position.

Reel Cut-Out Lever: This lever disengages the drive to the cutting cylinder allowing the machine to be driven along paths and drives without the cylinder rotating. To disengage the drive, the lever should be moved to the vertical position, and to engage the drive, the lever should be moved forward until the locating peg drops into its positioning hole.

To facilitate engine starting the lever should be set in the disengaged position.

Cutting Height Adjustment: Adjustment is obtained by raising or lowering the front roller assembly, to raise the height of cut the roller assembly should be lowered and vice-versa.

To obtain adjustment – slacken the nuts of the bolts which secure the roller assembly quadrant plates to the slots in the mainframe and adjust the roller assembly to give the required cutting height and re-tighten the securing nuts. Cutting height range is from $\frac{1}{8}$ " to $1\frac{1}{2}$ ".

HINTS ON OPERATION

The following recommended hints on operation will assist the Operator in obtaining the best possible results in the use of this machine.

Do not mow barefooted or in open sandals.

Prior to cutting, the lawn should be inspected and any loose stones or other debris removed.

Before starting the engine ensure that the roller drive and cylinder drive clutches are in the disengaged positions. Carry out starting procedure as detailed in the engine leaflet supplied.

The throttle control allows the forward speed of the machine to be varied to suit the conditions in which the machine is being used, and also to that of a comfortable walking pace of the user. The cutting cylinder gives 75 cuts per yard and remains constant irrespective of the forward speed of the machine.

The cylinder drive clutch may now be engaged. The roller drive clutch locking trigger should be released allowing the clutch to be smoothly engaged and cutting commenced. If a tight turn is to be made at the end of a cut, the clutch should be disengaged whilst the machine is manoeuvred for the next cut. Wide turns may be made with the clutch engaged.

Hints on Operation (Cont'd)

When working in confined or awkward areas the clutch may be fully disengaged thereby enabling the machine to be hand propelled.

When cutting close up to walls or fences, the direction of travel should be such that the offside of the machine is adjacent to the wall or fence.

MAINTENANCE

Lubrication:

Cylinder Bearing Housings: Apply oil gun to nipple (see A in Fig. 1) on cylinder bearing housings before use.

Drive Roller Bearings: Apply oil gun to nipples (see B in Fig. 1) on the ends of drive roller shaft before use.

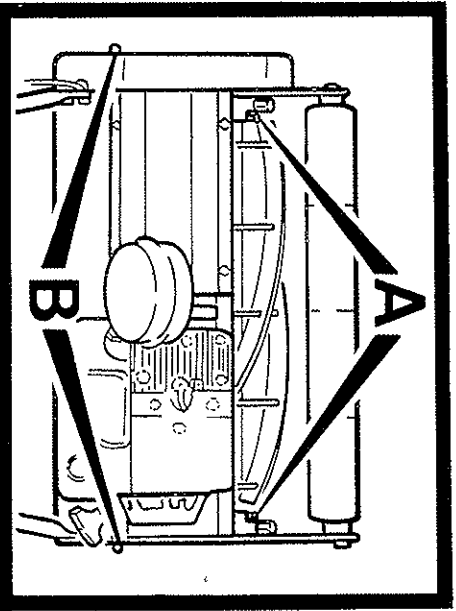


Fig. 1

Transmission Assembly: Periodically remove transmission cover and apply a light application of oil to the pivot points (see A in Fig. 2) and final drive roller chain.

Cleaning: Regular cleaning of the machine will maintain the finish and also prevent deterioration, attention being paid to the blade edges of the cutting cylinder, which can be lightly oiled after use to prevent rusting. Keep rollers free of compacted earth.

Securing Nuts and Bolts: It is essential that all securing nuts and bolts are examined periodically and tightened if necessary.

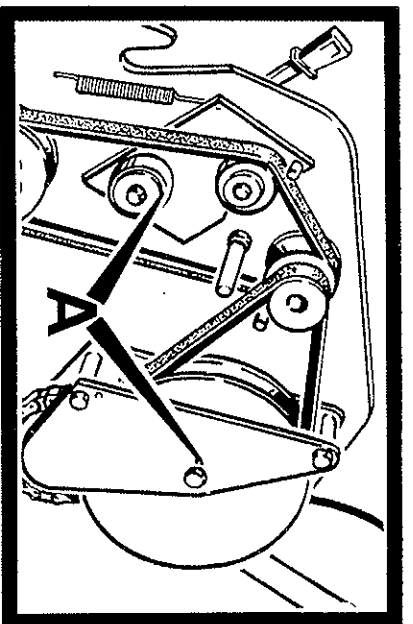


Fig. 2

Adjustments:

Roller Drive Clutch Adjustment: Check clutch roller adjustment periodically. When correctly adjusted the minimum amount of free play at the clutch lever must be $\frac{3}{8}$ " as shown in Fig. 3. Access to the cable adjuster (see A in Fig. 3) can be obtained by removing the transmission cover.

Belt Adjustment: Provided that the recommended clutch clearance is properly maintained, the drive belts will automatically be kept in correct tension. No other adjustment is necessary.

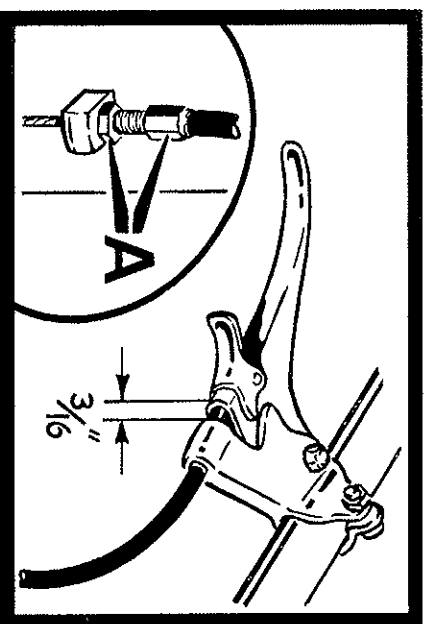


Fig. 3

Adjustments (Cont'd)

Cylinder Adjustment — **WARNING:** When adjusting the cylinder to bedknife clearance, turn the cylinder slowly, do not attempt to spin it quickly as fingers may become trapped. Ensure that the cylinder drive 'cut-out' lever is disengaged and the engine is stopped before making any adjustment. To adjust the cylinder to bed-knife turn the adjusting nuts (see A in Fig. 4) in a clockwise direction one flat of the nut at a time until the cylinder is close enough to the bedknife to be able to cleanly cut a piece of note-paper. It is recommended that this be tried along the whole length of the cylinder to ensure that the cylinder is evenly adjusted.

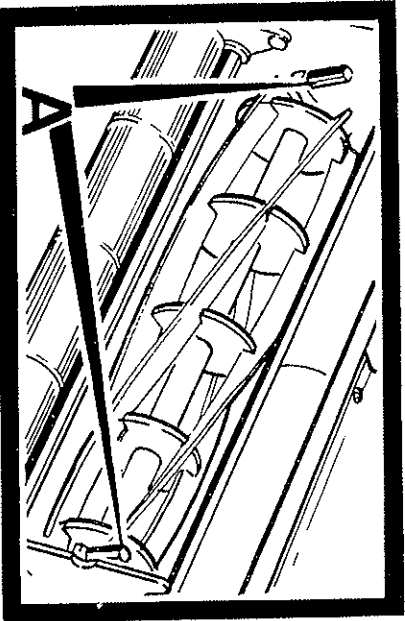


Fig. 4

Engine: Refer to the engine manufacturer's leaflet and carefully carry out the recommended instructions paying particular attention to the 'Regular Maintenance' section. Cover up the machine when not in use. The use of an upper cylinder lubricant is recommended where the machine is infrequently used and also towards the end of the season before winter storage. When storing the machine disconnect the spark plug lead and remove the spark plug, insert a small quantity of oil into the cylinder and turn the engine by means of the recoil starter a few times to distribute the oil. Replace the spark plug, ensuring that the piston is at the top of its compression stroke and that both the inlet and exhaust valves are closed.

Clean and lubricate the machine as recommended, and disengage the cylinder and roller drive clutches, thereby relieving the tension of the drive belts.

SAFETY PRECAUTIONS

(As recommended in B.S.5107:1974)

- Know your controls. Read the owner's manual carefully. Learn how to stop the engine quickly in any emergency.
 - Make sure the lawn is clear of sticks, stones, bones, wire and debris. They could be thrown by the cutting cylinder.
 - Stop the engine and disconnect spark plug wire before checking or working on the mower.
 - Always be sure the mower is in safe operating condition. Check all nuts, bolts and screws often. Use only replacement parts made and guaranteed by Hayters Ltd.
 - Add fuel BEFORE starting the engine. Avoid spilling petrol and do not fill the tank while the engine is running or while you are smoking.
 - Do not mow whilst people, especially children, or pets are in the mowing area.
 - Never use the mower unless the guards provided by the Manufacturers are in position.
 - Do not mow barefoot or in open sandals.
 - Start the engine carefully with feet well away from the cutting cylinder.
 - Do not operate the engine in a confined space where exhaust fumes (carbon monoxide) can collect.
 - Stop the engine whenever you leave the mower.
 - Do not allow children or people unfamiliar with these instructions to use the mower.
 - On slopes or wet grass, be extra careful of your footing.
 - Do not overspeed the engine or alter governor settings. Excessive speed is dangerous and shortens mower life.
 - Store fuel in a cool place in a container specifically designed for the purpose. In general, plastic containers are unsuitable.
 - Before starting the engine ensure the clutch lever is in the disengaged position and that the cutting cylinder drive clutch is disengaged.
 - When adjusting the cylinder to bedknife clearance, turn the cylinder slowly, do not attempt to spin it quickly as fingers may become entrapped.
 - Always disengage the cutting cylinder drive clutch before driving the mower across gravel drives, walks or roads.
- The Hayter Ambassador 2 is perfectly safe if used correctly. Failure to observe these simple precautions may result in serious injury.

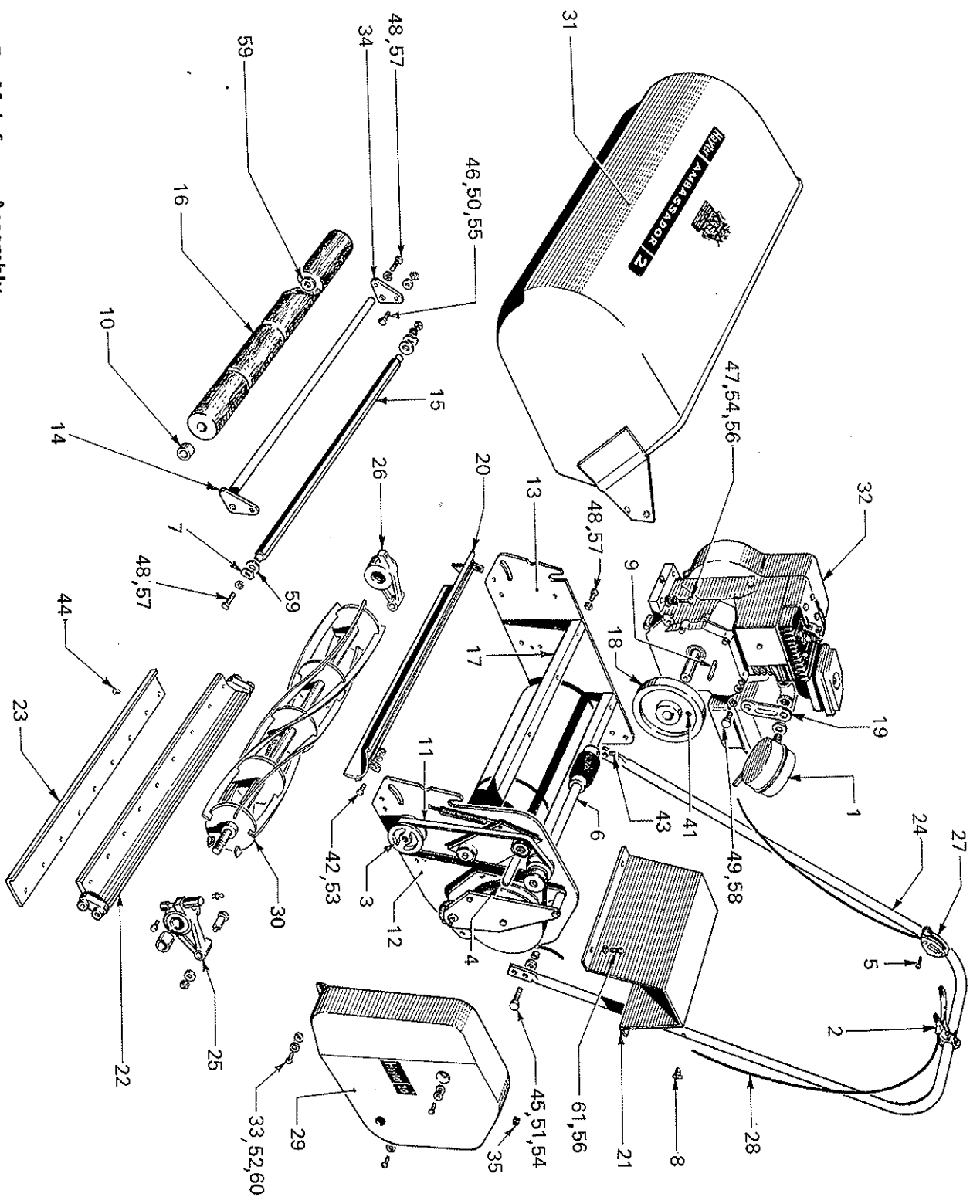


Fig. 5 Mainframe Assembly

SPARE PARTS LIST

(Subject to revision without notice)

FROM MACHINE NUMBER 64/1589

All spares must be ordered through an authorised Hayter Agent.

When ordering spares please quote the SERIAL NUMBER of your machine and the PART NUMBER, not the ITEM NUMBER, of the required part.

Item No.	Part No.	No. Off	DESCRIPTION	Item No.	Part No.	No. Off	DESCRIPTION
MAINFRAME ASSEMBLY (see Fig. 5)							
1	2675	1	Silencer and Nut	37		1	$\frac{1}{4}$ " UNF x $\frac{3}{8}$ " Socket Hd. Screw
2	3015	1	Clutch Lever	38		2	$\frac{1}{4}$ " UNF x $\frac{5}{8}$ " Setscrew
3	3075	1	Single Groove Reel Pulley	39		1	$\frac{1}{16}$ " UNF x $\frac{3}{8}$ " Socket Hd. Screw
4	3094	1	Belt	40		1	$\frac{7}{16}$ " UNF x $\frac{1}{4}$ " C'sk Screw
5	3201	2	Screw securing Part No. 4721	41	9035	9	$\frac{1}{16}$ " UNF x $\frac{3}{4}$ " Setscrew
6	3293	1	Drive Shaft	42	9064	4	$\frac{7}{16}$ " UNF x $\frac{3}{4}$ " C'sk Screw
7	3608	2	Navy Washer	43	9066	4	$\frac{1}{16}$ " UNF x $\frac{7}{8}$ " Coach Bolt
8	3966	1	Cable Clip	44	9070	4	$\frac{1}{16}$ " UNF x $\frac{1}{2}$ " Setscrew
9	4294	1	Key for Part Nos. 4687 and 3293	45	9071	2	$\frac{1}{16}$ " UNF x $\frac{1}{2}$ " Setscrew
10	4603	2	Spacer	46	9080	4	$\frac{3}{8}$ " UNF x $\frac{1}{2}$ " Setscrew
11	4672	1	Belt	47	9114	5	$\frac{1}{16}$ " UNF Plain Nut
12	4680	1	Frame Plate N/S	48	9153	1	$\frac{1}{16}$ " UNF x $\frac{3}{4}$ " Setscrew
13	4681	1	Frame Plate O/S	49	9209	2	$\frac{1}{16}$ " UNF Self Lock Nut
14	4682	1	Front Roller Axle Plate	50	9261	4	$\frac{1}{16}$ " Plain Washer
15	4683	1	Front Roller Pivot Bar	51	9262	3	$\frac{1}{4}$ " x $\frac{3}{8}$ " O/D x 16G Plain Washer
16	4684	4	Front Roller	52	9266	2	$\frac{1}{16}$ " Plain Washer
17	4685	2	Engine Support Bar	53	9267	8	$\frac{1}{16}$ " x $\frac{5}{8}$ " O/D x 14G Plain Washer
18	4687	1	Flywheel	54	9268	6	$\frac{1}{16}$ " Spring Washer S/C
19	4688	1	Exhaust Bracket	55	9273	4	$\frac{3}{8}$ " Spring Washer S/C
20	4689	1	Deflector Plate	56	9282	1	$\frac{1}{2}$ " Spring Washer S/C
21	4690	1	Shaft Guard	57	9286	5	$\frac{1}{2}$ " x $1\frac{1}{2}$ " O/D x 15G Plain Washer
22	4703	1	Bedknife Support	58	9264	3	$\frac{1}{16}$ " Spring Washer S/C
23	4704	1	Bedknife	60	9067	4	$\frac{1}{16}$ " UNF x $\frac{1}{2}$ " Setscrew
24	4718	1	Handlebar	61			
25	4719	1	Reel Support Arm N/S				
26	4720	1	Reel Support Arm O/S				
27	5503	1	Throttle Control and Cable				
28	4722	1	Clutch Cable				
29	4724	1	Transmission Cover				
30	4725	1	Reel				
31	4728	1	Grassbox				
32	4732	1	Engine Spec. No. 80202				
33	4734	3	Screw				
34	4750	1	Front Roller Plate				
35	4819	1	Grommet				
36							

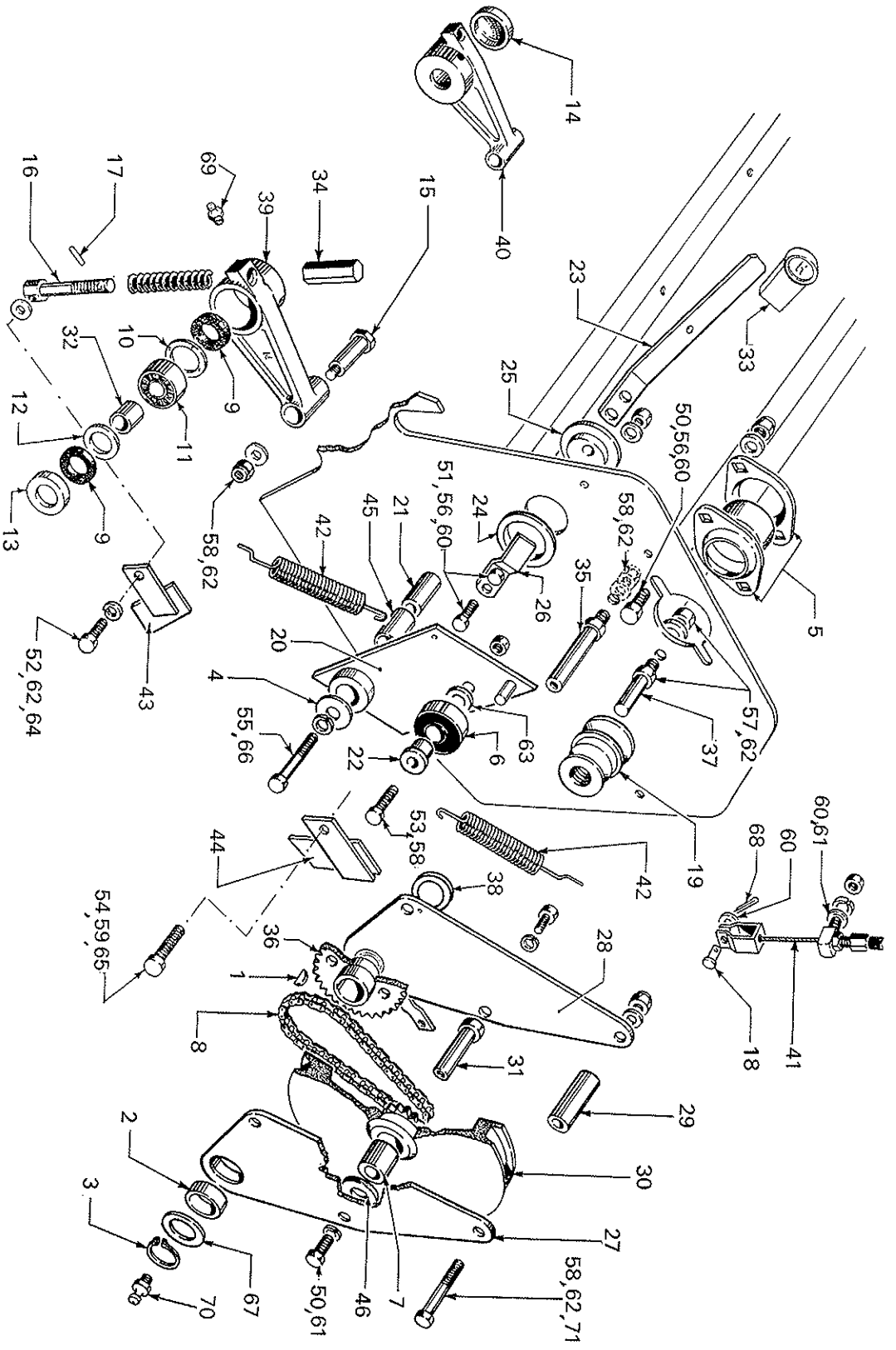


Fig. 6 Transmission Assembly

Item No.	Part No.	No. Off	DESCRIPTION	Item No.	Part No.	No. Off	DESCRIPTION
TRANSMISSION ASSEMBLY (see Fig. 6)							
1	1662	1	Key for Part No. 4709	41	4722	1	Clutch Cable
2	2380	2	Bush	42	4723	2	Spring
3	2382	1	Circlip	43	4726	1	Reel Slot Closer
4	2394	1	Washer	44	4727	1	Roller Slot Closer
5	3058	1	Bearing and Flange	45	4730	1	Bush
6	3061	1	Bearing	46	4731	1	Felt Seal
7	3070	1	Bush	47			
8	3074	1	Chain 48 Link	48			
9	3078	4	Felt Seal	49			
10	3079	2	Spacer Washer	50	9036	3	$\frac{1}{4}$ " UNF x $\frac{5}{8}$ " Setscrew
11	3080	2	Bearing	51	9043	2	$\frac{1}{4}$ " UNF x 1" Bolt
12	3081	2	Fibre Washer	52	9070	2	$\frac{1}{8}$ " UNF x $\frac{3}{4}$ " Setscrew
13	3082	1	Bearing Cap N/S	53	9075	1	$\frac{7}{16}$ " UNF x 1 $\frac{1}{4}$ " Bolt
14	3083	1	Bearing Cap O/S	54	9114	1	$\frac{3}{8}$ " UNF x 2" Setscrew
15	3085	2	Pivot Pin and Nut	55	9121	1	$\frac{3}{8}$ " UNF x 2" Bolt
16	3088	2	Reel Adjuster Bolt with Nylon Insert	56	9201	4	$\frac{1}{4}$ " UNF Self Lock Nut
17	3098	2	Nylon Insert for Part No. 3088	57	9207	2	$\frac{1}{8}$ " UNF Plain Nut
18	4265	1	Clevis Pin	58	9209	6	$\frac{1}{8}$ " UNF Self Lock Nut
19	4686	1	Engine Pulley	59	9216	1	$\frac{1}{8}$ " UNF Self Lock Nut
20	4691	1	Jockey Bearing Plate	60	9264	3	$\frac{1}{4}$ " Plain Washer
21	4692	1	Bearing Sleeve	61	9266	6	$\frac{1}{4}$ " Spring Washer S/C
22	4693	1	Bearing Clamp	62	9267	8	$\frac{1}{16}$ " Plain Washer
23	4694	1	Lever for Reel Control	63	9268	1	$\frac{1}{8}$ " x $\frac{7}{8}$ " O/D x 14G Plain Washer
24	4695	1	Nylon Bush	64	9271	1	$\frac{1}{16}$ " Spring Washer S/C
25	4696	1	Nylon Pivot	65	9273	1	$\frac{3}{8}$ " Plain Washer
26	4697	1	Reel Control Link	66	9296	1	$\frac{3}{8}$ " Spring Washer S/C
27	4698	1	Outer Plate	67	9303	1	1" x 1 $\frac{7}{8}$ " O/D x 15G Plain Washer
28	4699	1	Inner Plate	68	9337	1	$\frac{3}{16}$ " Split Pin x $\frac{1}{2}$ "
29	4700	1	Spacer	69	9340	2	$\frac{1}{4}$ " UNF Grease Nipple
30	4701	1	Pulley	70	9091	1	$\frac{1}{8}$ " B.S.P. Grease Nipple
31	4702	1	Pulley Spindle	71			$\frac{1}{16}$ " UNF x 2 $\frac{1}{4}$ " Lg. Hex. Hd. Bolt
32	4705	1	Reel Pulley Spacer				
33	4706	1	Plastic Handle				
34	4707	2	Reel Adjusting Nut				
35	4708	1	Roller Drive Belt Pin				
36	4709	1	Roller Sprocket				
37	4710	1	Reel Drive Belt Pin				
38	4715	1	Roller Shaft Spacer				
39	4719	1	Reel Support N/S				
40	4720	1	Reel Support O/S				
Transmission Assembly (Continued)							

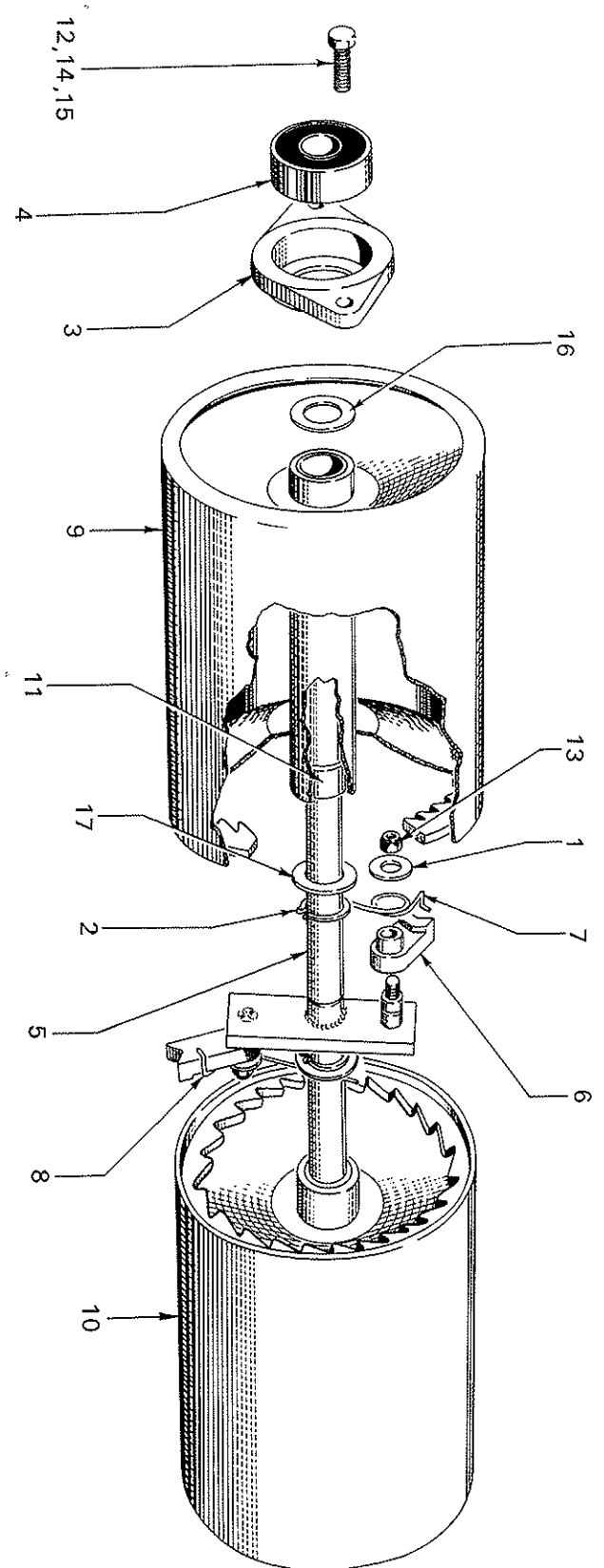


Fig. 7 Rear Roller Assembly

Item No.	Part No.	No. Off	DESCRIPTION	Item No.	Part No.	No. Off	DESCRIPTION
REAR ROLLER ASSEMBLY (see Fig. 7)							
1	591	2	Washer	12	9114	4	$\frac{3}{8}$ " UNF x 1" Setscrew
2	935	2	Circlip	13	9209	2	$\frac{1}{16}$ " UNF Self Lock Nut
3	4217	2	Bearing Housing	14	9216	4	$\frac{3}{8}$ " UNF Self Lock Nut
4	4221	2	Bearing	15	9271	4	$\frac{3}{8}$ " Plain Washer
5	4711	1	Roller Shaft	16	9289	2	$\frac{3}{4}$ " x $1\frac{1}{2}$ " O/D x 15G Plain Washer
6	4712	2	Pawl	17	9296	2	1" x $1\frac{7}{8}$ " O/D x 15G Plain Washer
7	4713	1	Spring N/S				
8	4714	1	Spring O/S				
9	4716	1	Roller N/S				
10	4717	1	Roller O/S				
11	4733	4	Bush				
							TOOLS
					367		Double Ended Spanner
					4034		Plug Spanner