From Machine No. 390 / 1056

BY APPOINTMENT TO
H.M. THE QUEEN
MANUFACTURERS OF
AGRICULTURAL MACHINERY
HAYTERS P.L.C.

HAYTER

AMBASSADOR 3

Cylinder Lawn Mower

(Code 390)

Instruction and Spare Parts Book

HAYTERS P.L.C.
BISHOP'S STORTFORD, HERTS, CM23 4BU, ENGLAND

⚠ This Symbol Warns of Potentially Hazardous Situations which could occur if GREAT CARE is not taken when using or maintaining your machine.

SAFETY PRECAUTIONS

⚠ Know your controls. Read the owner's manual carefully. Learn to stop the engine quickly in any emergency.

⚠ Make sure the lawn is clear of sticks, stones, wire and debris. They could be thrown by the cutting cylinder.

⚠ Stop the engine and disconnect the 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 for tightness often. Use only replacement parts made and guaranteed by Hayters P.L.C.

⚠ 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 securely in position and in good condition.

⚠ Do not mow barefoot or in open sandles.

⚠ Do not operate the engine in a confined space where exhaust fumes (carbon monoxide) can collect.

⚠ Start the engine carefully with feet well away from the cutting cylinder.

⚠ 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.

⚠ Never cut grass by pulling the mower towards you.

⚠ Do not overspeed the engine or alter governer settings. Excessive speed is dangerous and shortens mower life.

⚠ **WARNING :** The cutting cylinder can continue to rotate after the machines engine is switched off.

The Ambassador 3 is perfectly safe if used correctly. Failure to observe these simple precautions may result in serious injury.

INTRODUCTION

The Hayter Ambassador 3 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 and 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 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.

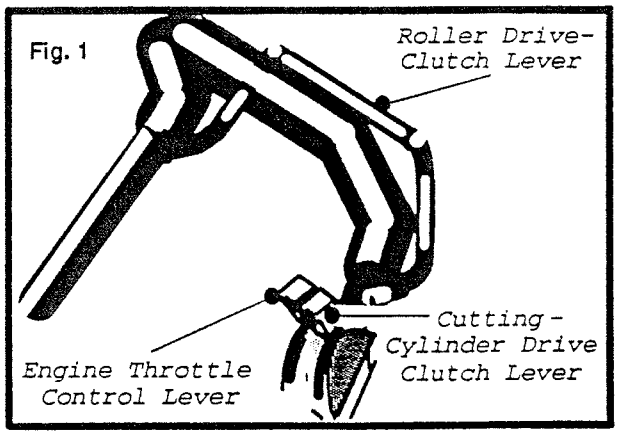
GUARANTEE

The machine is guaranteed against faulty workmanship for a period of 12 months from the date of purchase. In the case of components not manufactured by Hayters P.L.C., no guarantee is given but the purchaser shall be entitled to 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.

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 is given or is to be implied.

OPERATING INSTRUCTIONS

Engine : See the engine manufacturer's leaflet and carefully carry out the recommended instruc tions 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.

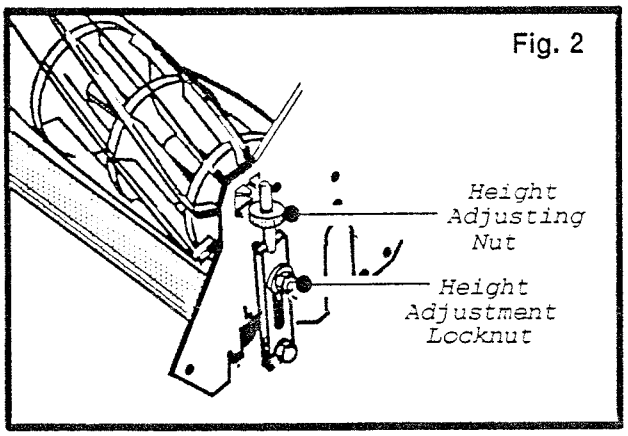


Roller Drive Clutch Lever :
The clutch lever which is mounted on the handle bar disengages the drive to the rear rollers.
(Refer to Fig. 1). Operate the clutch lever forwards against the handlebar to engage rear roller drive. Release the clutch lever nearwards to disengage rear roller drive.

Cutting Cylinder Drive Clutch Lever : To allow the machine to be driven along paths and drives without its cutter cylinder rotating, the drive to the cylinder may be disengaged by operating the handlebar mounted lever. (Refer to Fig. 1).

Engine Throttle Control Lever : The engine throttle control lever which is mounted on the handlebar enables control of forward travel speed, choke setting and stopping the engine. Increasing engine speed increases forward travel speed and cylinder speed.
Decreasing engine speed reduces forward travel speed and cylinder speed. (Refer to Fig. 1).

Fig. 2



Cut Height Adjustment : Cut Height adjustment is obtained by loosening the height adjuster locknuts on both sides of the machine then raising or lowering the front roller assembly via the two height adjusting nuts. To raise the cut height turn the adjusting nut anti-clockwise. To lower the cutting height turn the adjusting nut clockwise. After altering the cut height tighten the height adjuster locknuts.
Reel to Bedknife Adjustment : To achieve a good quality cut the clearance between the reel and the bedknife must be accurately set. To adjust the reel to bedknife clearance, first loosen the reel adjuster clamp bolts (Items 1), turn the reel adjustment bolts (Item 2) anticlockwise to reduce clearance or clockwise to increase clearance. Recommended reel to bedknife clearance is 0.05mm (0.002 in). After correct adjustment tighten the 2 reel adjuster clamp bolts (Items 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.

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

The throttle control allows the forward travel speed of the machine to be varied to suit operating conditions and walking speed requirements.

If a tight turn is to be made at the end of a cut, the roller drive clutch should be disengaged whilst the machine is manoevred for the next cut to avoid turf damage.

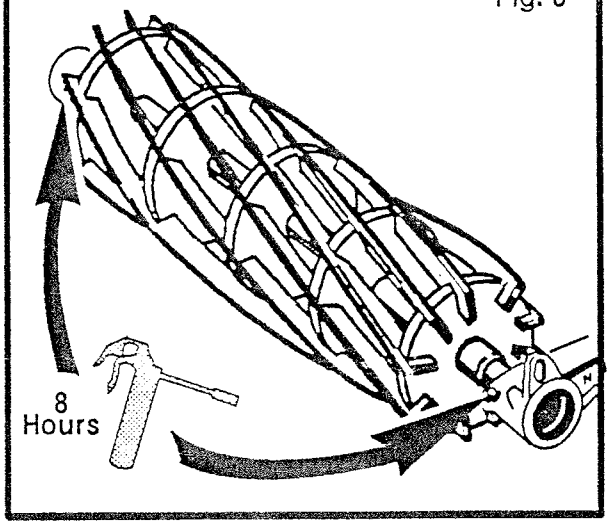
When working in confined or awkward areas the roller drive may be fully disengaged thereby enabling the machine to be hand propelled.

To enable 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 a good quality general purpose grease to the L/H and R/H cylinder bearing housings every 8 hours use. (Refer to Fig. 3).

Fig. 3



Transmission Assembly : Every 8 hours of use remove the side guard and apply a light application of oil to the pivot points

CLEANING :
Regular cleaning of the machine will help to maintain cut quality and also prevent deterioration of component parts. Attention should be paid to the edges of the cutting cylinder blades to prevent corrosion. Clean the rear rollers.

SECURING NUTS AND BOLTS :
It is essential that all securing nuts and bolts are examined periodically and tightened if necessary.

STORAGE

Cover up the machine when not in use. The use of an upper engine 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, insert a small amount 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

STORAGE Continued.

inlet and exhaust valves are closed.

Clean and lubricate the machine as recommended, disengage the cylinder and roller drive clutches, to relieve belt tension.

OPERATOR CONTROLS

IMPORTANT : Read the engine manufacturers' leaflet and carefully carry out the recommended instructions. Do not start the engine until it has been checked as being correctly filled with one of the recommended grades of oil and fuel.

Engine Starting : ALWAYS ! Ensure that the roller drive clutch and the cutting cylinder drive clutch are fully disengaged before attempting to start the engine. Refer to the engine manufacturers' operating manual. Operate the throttle control lever to CHOKE and pull the engine starting rope to start a cold engine. Operate the throttle control lever to FAST and pull the engine starting rope to start a warm engine.

Engine Stopping : Operate the throttle control lever to the STOP position.

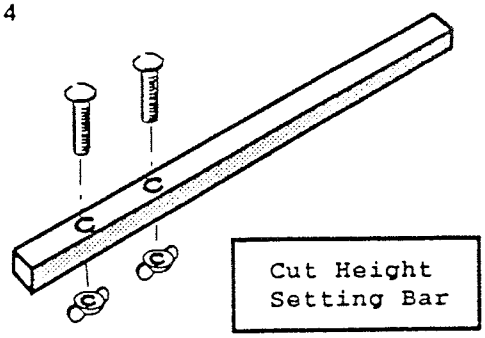
Engine Speed : To increase engine speed operate the throttle control lever forwards. To decrease engine speed operate the throttle control lever rearwards. NOTE : Engine speed determines rear roller speed and cutting cylinder speeds.

Rear Roller Drive : Engaging rear roller drive enables the mower to be self propelled. To engage rear roller drive operate the roller drive clutch lever forwards against the handlebar.

Cutting Cylinder Drive : To engage cutting cylinder drive operate the cutting cylinder drive clutch lever to its rear position. To disengage cutting cylinder drive operate the cutting cylinder drive clutch lever to its forward position.

Cutting Cylinder to Bedknife Adjustment : To set cut height accurately, use the setting bar across the full width of the bedknife. (Refer to Fig. 5).

Fig. 4



Setting Bar Operating Instructions : To ensure a consistent cut height across the full cut width the following procedure should be adopted :- Adjust the distance between the top of the underside of the adjusting screw to the desired cut height, secure in position by tightening the nut against the underside of the setting bar. With the engine switched off, assemble the setting bar as shown in Fig. 5.

Fig.5

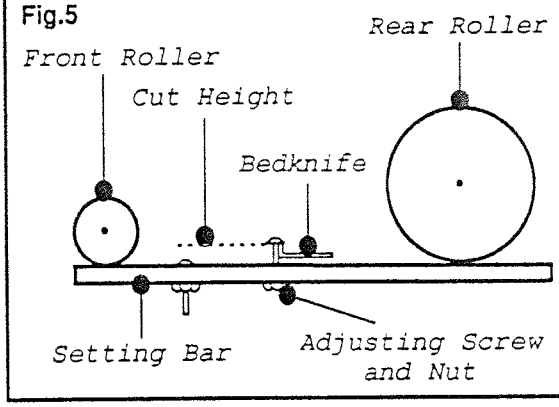
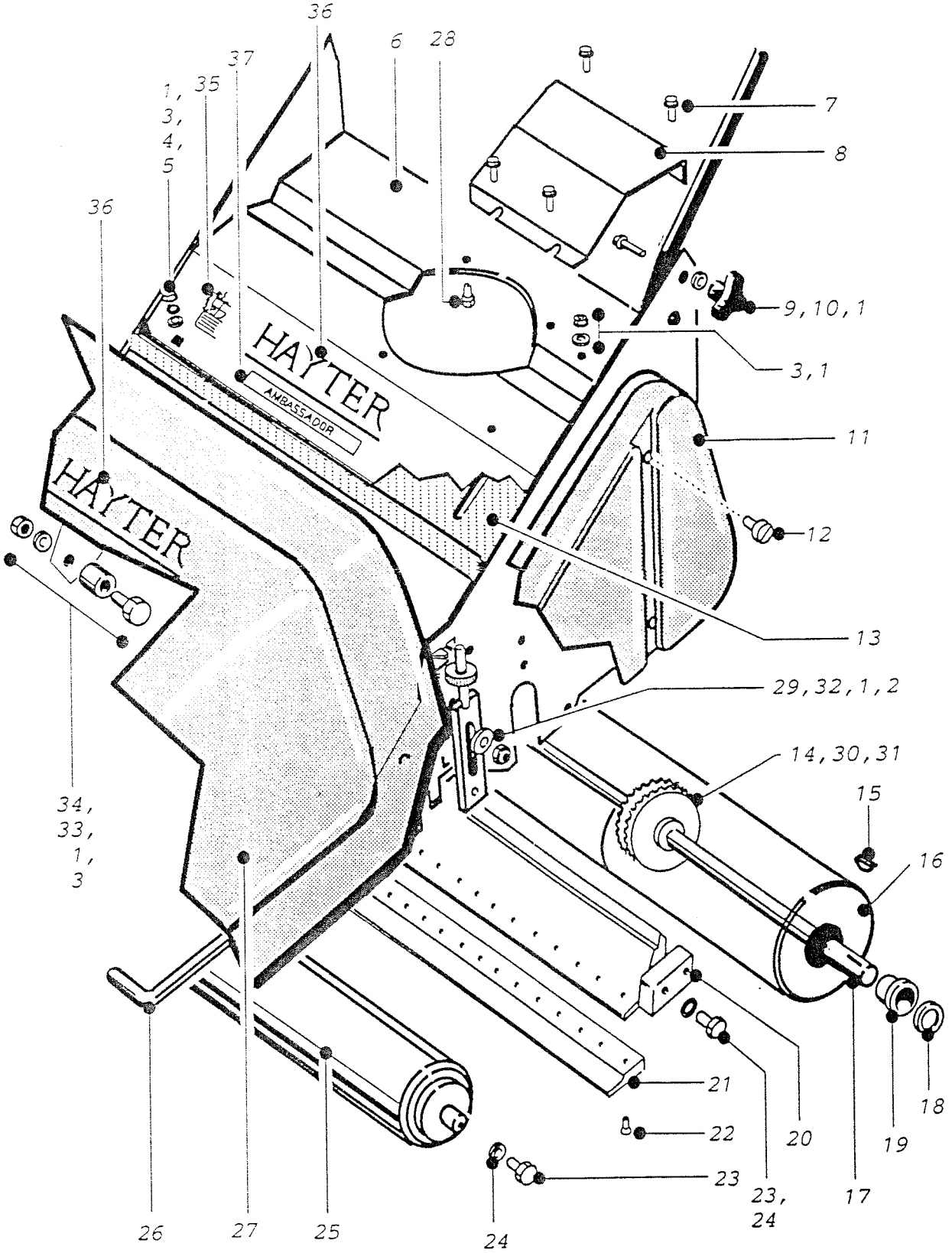


Fig.6

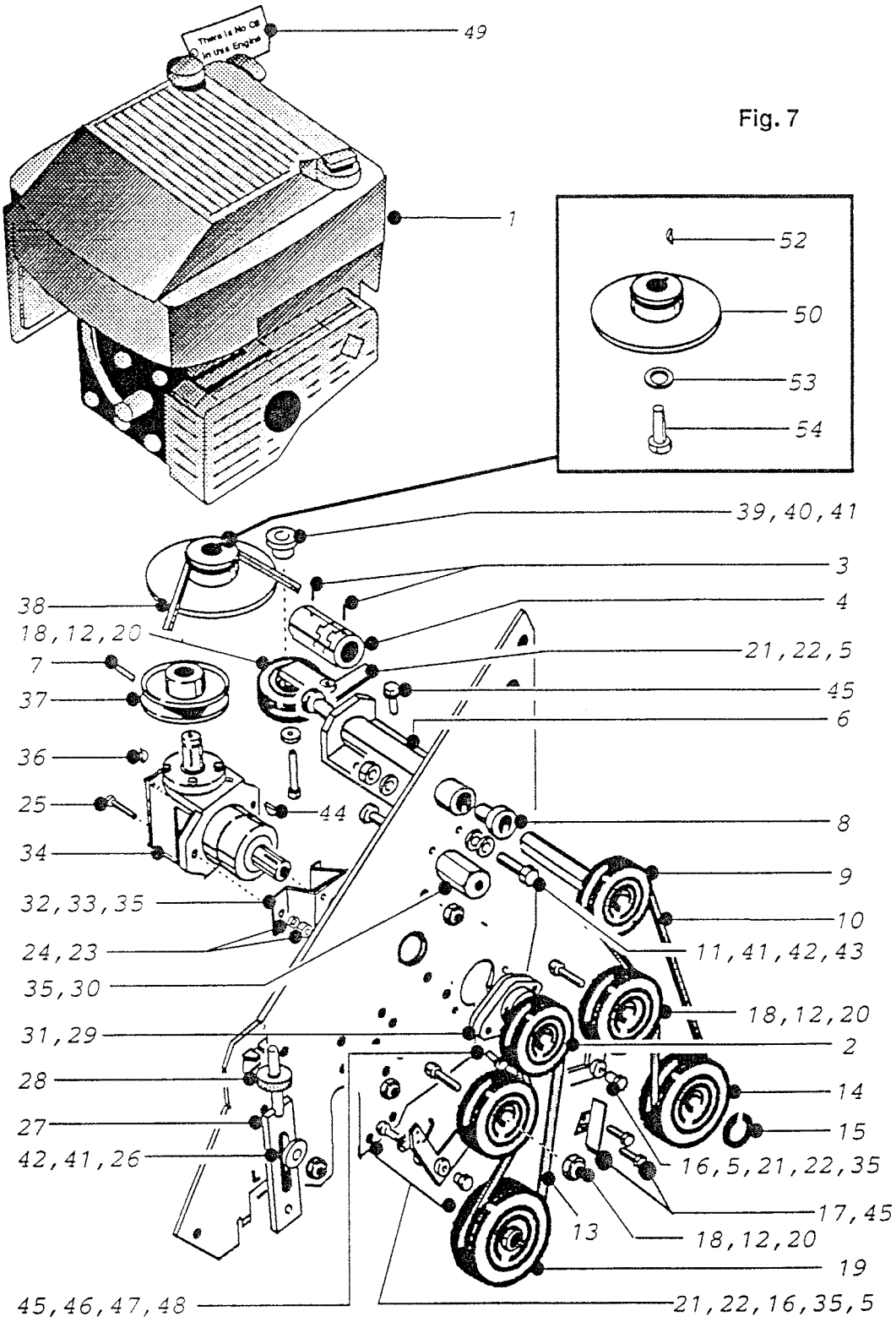
Ambassador 3
Mainframe Assembly



Ambassador 3 Mainframe Assembly

Item No.	Part No.	No. Off	Description
1	09475	9	Plain Washer
2	03469	2	Spring Washer
3	09441	5	M8 Nut Insert 'T'-type (Nylon)
4	09666	2	M8 x 20 Coach Bolt
5	234051	2	M8 Nut Cap
6	390040	1	Mainframe
7	09546	4	M6 x 12 Hex. Washer Hd. Screw
8	390057	1	Drive Shaft Guard
9	226013	2	Plastic Knob
10	226024	2	M8 x 45 Handlebar Bolt
11	390006	1	Guard Drive
12	09374	2	M8 x 25 Mushroom Hd. Screw
13	390002	1	Throwplate
14	340150	2	Roller Freewheel
15	5321	1	Woodruff Key
16	390009	2	Roller
17	390011	1	Roller Shaft Assembly
18	390015	1	Spacer
19	340129	2	Oilite Bush
20	390025	1	Bedknife Support
21	390026	1	Bedknife
22	09667	9	M6 x 12 Countersunk Screw
23	09391	6	M10 x 20 Hex. Hd. Setscrew
24	09480	6	Spring Washer (S / C)
25	390060	1	Front Roller
26	390030	1	Grassbox Frame
27	391005	1	Grassbox
28	09349	3	3/8" X 1.1/4" Taptite Screw
29	09373	2	M8 x 25 Coach Bolt
30	340149	1	Nylon Washer
31	340163	1	Lock Nut
32	09443	2	M8 Plain Nut
33	09631	2	M8 x 35 Setscrew
34	390056	2	Grassbox Stop
35	5877	1	Royal Warrant Label
36	201116	2	Hayter Label
37	390066	1	Ambassador Label
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Fig. 7



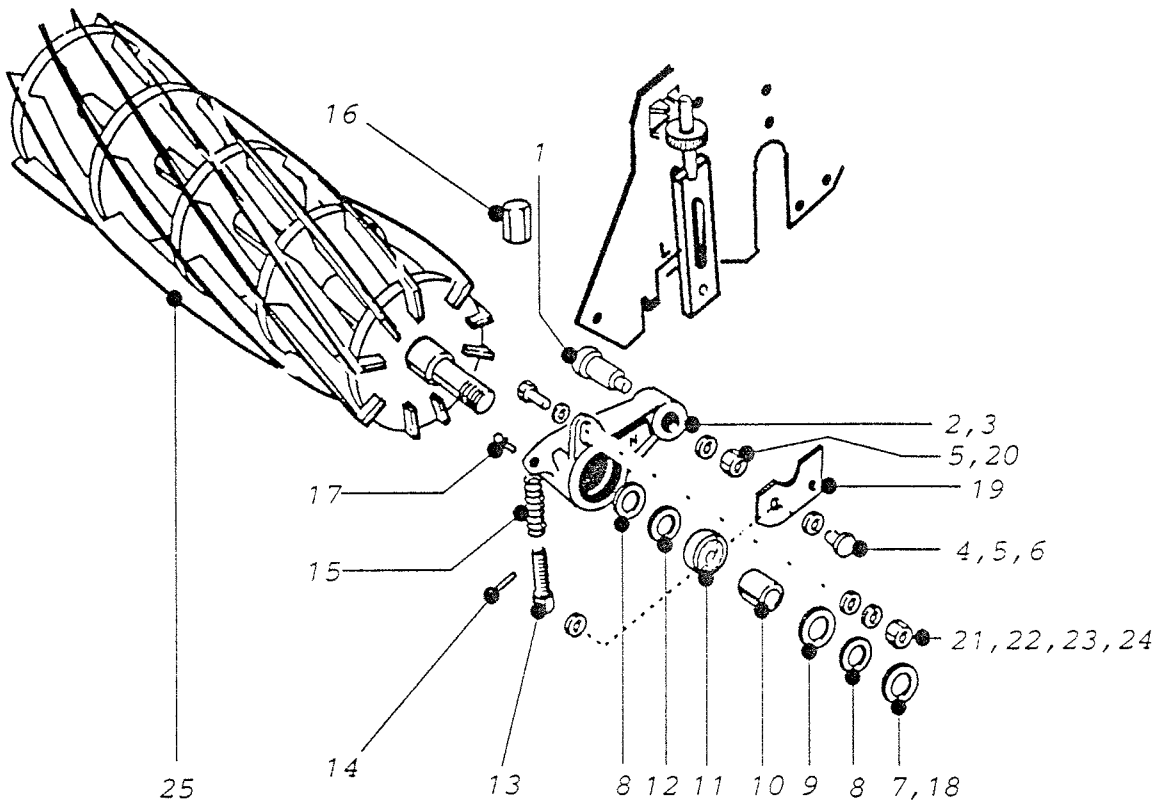
Ambassador 3
Drive Assembly

Ambassador 3 Drive Assembly

Item No.	Part No.	No. Off	Description
1	219145	1	Engine
2	390058	1	Pulley
3	03354	2	Roll Pin
4	390046	1	Coupling
5	3296	3	Oilite Bush
6	390044	1	Bearing Tube
7	09034	2	1/4" UNF x 1/4" Socket Hd. Setscrew
8	3260	2	Oilite Bush
9	390050	1	Pulley
10	390054	1	Belt
11	09565	1	M8 x 55 Hex. Hd. Bolt
12	208054W	3	Pulley
13	390053	1	Belt
14	390013	1	Pulley
15	1428	1	Circlip
16	390032	2	Pivot Clutch
17	390065	1	Belt Guide
18	09216	3	3/8" UNF Nut Insert 'T'-type (Nylon)
19	390017	1	Pulley
20	09118	3	3/8" UNF x 1.1/2" Hex. Hd. Bolt
21	390031	3	Spring
22	390028	3	Clutch Lever Assembly
23	09479	2	M10 Washer Plain
24	09447	2	M10 Nut Insert 'P'-type (Nylon)
25	09392	2	M10 x 30 Setscrew
26	03469	2	M8 Spring Washer (S / C)
27	390020	2	Height Adjuster
28	390023	2	Nut Adjuster
29	3058	2	Bearing
30	390063	2	Post Cover
31	390047	1	Closer Roller Slot (N / S)
32	09441	4	M8 Nut Insert 'T'-type (Nylon)
33	390035	1	Gearbox Bracket
34	5645	1	Gearbox
35	201060	8	M8 x 18 Serrated Bolt
36	4325	1	Woofruff Key
37	390018	1	Pulley
38	390055	1	Belt
39	390034	1	Pivot Clutch
40	09654	1	M8 x 45 Hex. Hd. Bolt
41	09475	3	M8 Plain Washer
42	09443	3	M8 Plain Nut
43	09442	1	M8 Nut Insert 'P'-type (Nylon)
44			
45	09546	7	M6 x 12 Hex.Washer Hd. Screw (N / S)
46	09361	2	M6 x 12 Setscrew (O / S)
47	09472	2	M6 Plain Washer (O / S)
48	09544	2	M6 Nut Insert 'T'-type (Nylon) (O / S)
49	5911	1	No Oil Label
50	390095	1	Fly Wheel
51			
52	1662	1	Woodruff Key No. 505
53	09273	1	3/8" Spring Washer (S / C)
54	09116	1	3/8" UNF x 1.1/4" Hex. Hd. Screw

Fig. 8

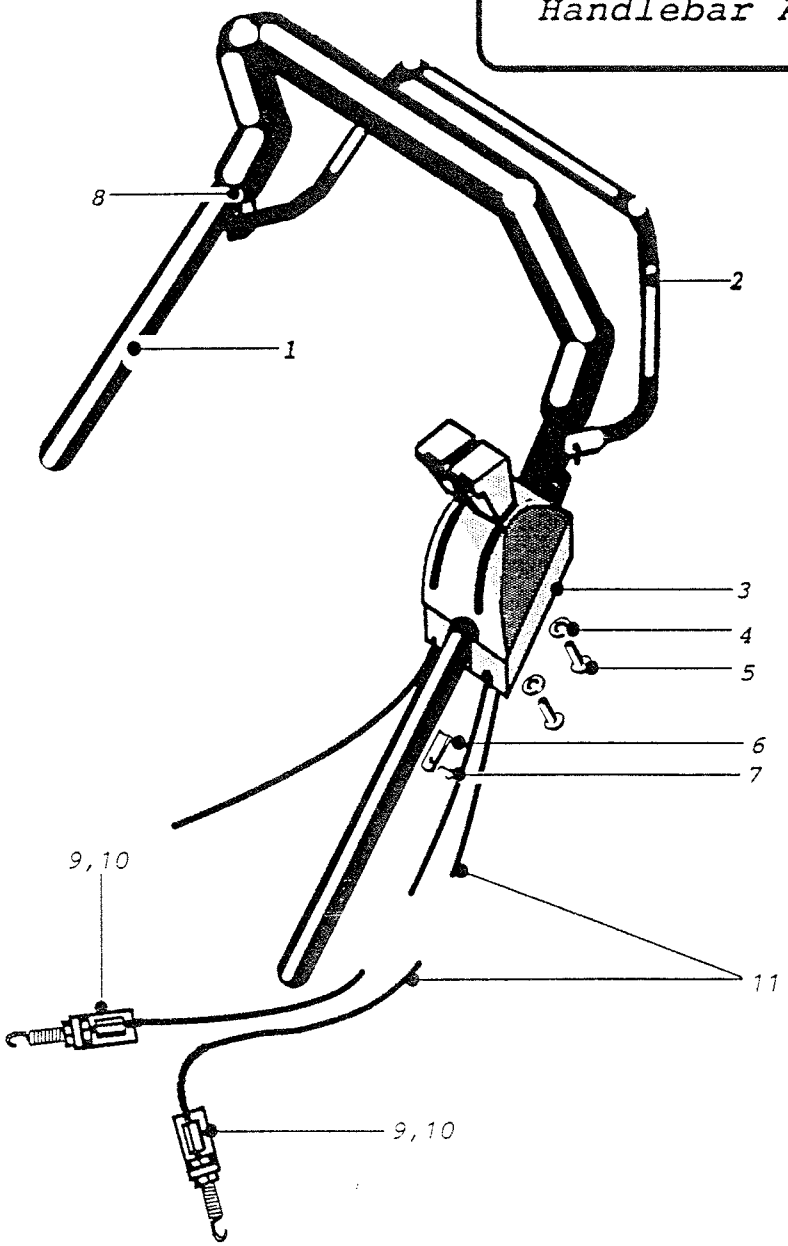
Ambassador 3
Reel Assembly



Item No.	Part No.	No. Off	Description
1	6382	2	Pivot Pin and Nut
2	4719W	1	Reel Support N / S
3	4720W	1	Reel Support O / S
4	09070	2	5/16" UNF x 3/4" Setscrew
5	09266	4	5/16" Plain Washer
6	09268	2	5/16" Spring Washer S / C
7	3082	1	Bearing Cap N / S
8	03078	4	Felt Seal
9	03081	2	Fibre Washer
10	4705	1	Reel Pulley Spacer
11	3080	2	Bearing
12	3079	2	Spacer Washer
13	3088	2	Reel Adjuster Bolt with Nylon Insert
14	3098	2	Nylon Insert for Part No. 3088
15	03087	2	Spring
16	4707	2	Reel Adjusting Nut
17	09337	2	Grease Nipple
18	3085	1	Bearing Cap (O / S)
19	390041	1	Closer Reel Slot
20	09209	2	5/16" UNF Nut Insert (Nylon)
21	09368	2	M8 x 20 Setscrew
22	09475	4	M8 Plain Washer
23	03469	2	M8 Spring Washer
24	09443	2	M8 Plain Nut
25	4964	1	Reel (10 Bladed)

Fig. 9

Ambassador 3
Handlebar Assembly



Item No.	Part No.	No. Off	Description
1	390008	1	Handlebars
2	219090	1	Clutch Lever
3	390007	1	Throttle Control
4	09257	2	Plain Washer
5	09600	2	No.8 x 1.1/4" Pos-pan Screw
6	239052	1	Cable Anchor
7	09318	1	Avdel Rivet
8	226034	2	Clutch Lever Bush
9	390052	2	Cable Anchor
10	09546	2	M6 x 12 Hex. Washer Hd. Screw
11	390051	1	Clutch Cable

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