

FROM MACHINE NUMBER 219 15892



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

# HAYTER

## **HARRIER 48**

### **ROTARY LAWNMOWER**

## **OPERATING INSTRUCTIONS**

SELF PROPELLED & ELECTRIC START MODELS

**HAYTERS P.L.C.**

**BISHOP'S STORTFORD · HERTS CM23 4BU · ENGLAND**



## SAFETY PRECAUTIONS

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



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



Make sure the lawn is clear of sticks, stones, bones, wire and debris. They could be thrown by the blade.



Stop the engine and disconnect spark plug wire before checking or working on the mower.



Damaged cutterbars and loose fixing bolts are major hazards. Before using, always visually inspect the cutting mechanism to ensure that it is in good condition. A damaged cutterbar should be replaced immediately, using only Hayter replacement cutterbars. Cutterbars can be resharpened, ensure that both cutting edges are evenly sharpened to maintain the balance.



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 P.L.C.



Add fuel BEFORE starting the engine. Avoid spilling petrol and do not fill the tank while 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 blades.



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 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 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.



WARNING: Blades continue to rotate after machine is switched off.



When using the machine without the grassbag, do not lift the deflector plate whilst the machine is in operation.



Never insert the hand into the grass discharge chute whilst the engine is running.



Stop the engine before pushing the mower across gravel drives, walks or roads.



Never pick up or carry a mower when it is operating.



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

## **INTRODUCTION**

The 19" Hayter Harrier 48 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 effective 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 the machine 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 & bolts are 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 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 Agent through whom the machine was originally supplied quoting the machine serial number which is located on 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.

## **ASSEMBLY INSTRUCTIONS**

Remove the grassbag and machine from the carton and pivot the upper handlebar assembly until it is in line with the lower handlebar section. Secure the upper handlebar to the lower by means of the locking knob situated at the base of the upper handlebar assembly. The locking knob being turned in a clockwise direction until tightly secured. To fit the grassbag, raise the grass deflector plate, and fit the grassbag over the ridge provided on the mainframe casing.

## **OPERATING INSTRUCTIONS**

See the engine manufacturers' handbook and carefully carry out the recommendations for starting the engine ensuring that engine sump is filled to the correct level with one of the recommended grades of lubricating oil. It is most important that oil other than those grades recommended should not be used in this engine. See recommended lubrication chart affixed to the engine.

### **Electric Start**

Set throttle in choke position, turn ignition key to the right for a quarter turn and release. After ignition return choke lever to fast setting.

### **Manual Start**

Set throttle to choke position, briskly pull starting cord. After ignition set throttle at fast speed.

The engine is governed to run at the maximum speed of 3,200 r.p.m. and this speed is obtained by setting the throttle control lever in the 'FAST' position. Should any adjustments be made to the engine it is essential that maximum governed speed of 3,200 r.p.m. is strictly adhered to.

### **Clutch Lever**

The Clutch incorporates a 'fail safe' device, i.e: the machine will only move forward whilst the clutch lever, which is situated on the handlebar is manually sustained. Release of the lever will cause the machine to stop.

### **CUTTING HEIGHT ADJUSTMENT**

The cutting height range is from 1/2" to 2 1/4". To increase the height of cut, turn the knob clockwise.

### **Cutting Height Indicator**

The height of cut is shown by 2 small indentations on the connecting rod being alongside one of 2 raised bars on the front rod channel. The front bar indicates the lower end of the height of cut range. The rear bar indicates the higher end.

### **HINTS ON OPERATION**

The Hayter Harrier 48 is a push or self propelled machine having a forward speed of 2.6 m.p.h. and although primarily designed for lawn mowing, it will deal efficiently with runaway growth on lawns, other areas and also for Autumn leaf collection.

The machine is capable of giving long and efficient service, observance of the following 'Hints on Operation' will ensure this.

### **Lawns**

Fit grassbag, raise cutting height to maximum ( 2 1/4" ) and cut area. This will help to predetermine the height setting for the next cut and also eliminate the possibility of 'scalping' occurring on any high spots in the lawn.



This symbol warns of potentially hazardous situations which could occur if Great Care is not taken when using or maintaining your machine.

### **Borders**

The inset wheels permit mowing over lawn edges. Edge grasses should be cut with edging cutters first, the cuttings will then be collected as the lawn is mown.

### **Walls , Fences and other Obstructions**

The machine can be safely used to cut close up to obstructions.

### **Runaway Growth on Lawns**

Set cutting height to maximum, remove grassbag and cut area. The cuttings can then be collected by fitting grassbag and working over area a second time; if cuttings are wet, leave to dry and collect later.

### **Hidden Obstructions**

When mowing overgrown areas, if practicable survey the area first, removing any large items of debris. Should an obstruction be encountered whilst mowing the attention of the user will immediately be drawn by the friction noise which is set up; draw the machine backwards without raising the front. Stop the engine and remove the spark plug lead, examine the cutting mechanism. If undamaged remove the obstruction or proceed to work round it. Should however the cutterbar be broken or badly damaged it should be replaced immediately.



### **Blockage in the Discharge Chute Aperture**

Observance of the preceding 'Hints' should eliminate the possibility of a blockage occurring in the Discharge Chute Aperture, for it is usually caused by attempting to remove too much grass initially with a low cutting height setting, especially when conditions are wet, or from allowing the grassbox to become overfilled. Remember that, whatever the conditions, it is better to cut higher and more frequently



### **Blockage in the Discharge Chute Aperture**

than to try to cut low at the first cutting. It is most important the engine is stopped and the spark plug lead removed before attempting to clear a blockage or examine the cutting mechanism.

### **Under Deck Cleanliness**

The underside of the mainframe casing is designed to permit the cutting mechanism to work efficiently and safely and also to provide the correct volume of air to pass through the casing to carry the cuttings through the rear aperture and into the grassbag or, alternatively, deflected downwards and onto the ground. After a period of use, and more especially when conditions are wet, grass cuttings can accumulate on the underside of the casing and if allowed to remain will eventually build up and greatly impair the efficiency of the machine. Regular cleaning of the underside of the casing by hosing or scraping off the debris will prevent this. Before attempting to clean the underside of the casing, stop the engine and remove the spark plug, the machine may then be turned on its side with the air cleaner uppermost.



## **MAINTENANCE**

### **Lubrication**

#### **Height Adjustment Linkage Points**

Apply a small amount of oil to the linkage and pivot points occasionally.

#### **Throttle Control Cable**

Apply a light application of oil to the inner cable occasionally.

### **Deflector Plate**

Apply a light application of oil to the deflector plate hinge points occasionally.

### **Wheels**

The wheel bearings are sealed units and are prepacked with grease sufficient to last a long period of time, should however, further lubrication be required remove wheel covers and run in a little lubricating oil.

### **Clutch Cable**

Apply a small quantity of light oil by means of an oil can to the inner cable at the point where the cable connects with the clutch cable bracket. Oil penetration down the cable will be facilitated if the clutch lever is worked backwards and forwards as the oil is applied.

### **Engine**

See engine manufacturer's handbook and carefully carry out the recommended instructions, paying particular attention to the lubricating instructions. 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, remove the spark plug, insert a small quantity of oil into the cylinder and turn the engine, by means of the recoil start, a few times to distribute the oil. Replace spark plug, ensuring that the piston is at the top of its compression stroke and that both the inlet and exhaust valves are closed.

## ADJUSTMENTS

### Clutch Adjustment

The clutch is a slipping belt clutch. Slacken the locknut on the bottom of the cable. If the drive will not disengage, screw the threaded sleeve into the casting. If the clutch slips and will not drive, screw the sleeve out of the casting. Re lock the nut. If in any doubt contact your Dealer.

### Securing Nuts and Bolts

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

### Cutterbar

The Hayter cutterbar is friction driven by the dished bottom plate when in use. In the event of the cutterbar striking an obstruction the cutterbar is free to move relative to the bottom plate to a new position at which it will continue to cut. Regular inspection of the cutting mechanism is recommended to ensure that the cutterbar is in good condition. Should the cutterbar be damaged to the extent that it is likely to become out of balance it should be



replaced immediately, ensuring that the new cutterbar is fitted exactly as shown in Fig.1 and that the retaining setscrew, Item No.25 is tightened securely, a torque setting of 40ft/lb is recommended. The cutterbar may be resharpened, ensuring that both cutting edges are evenly sharpened to maintain the balance.

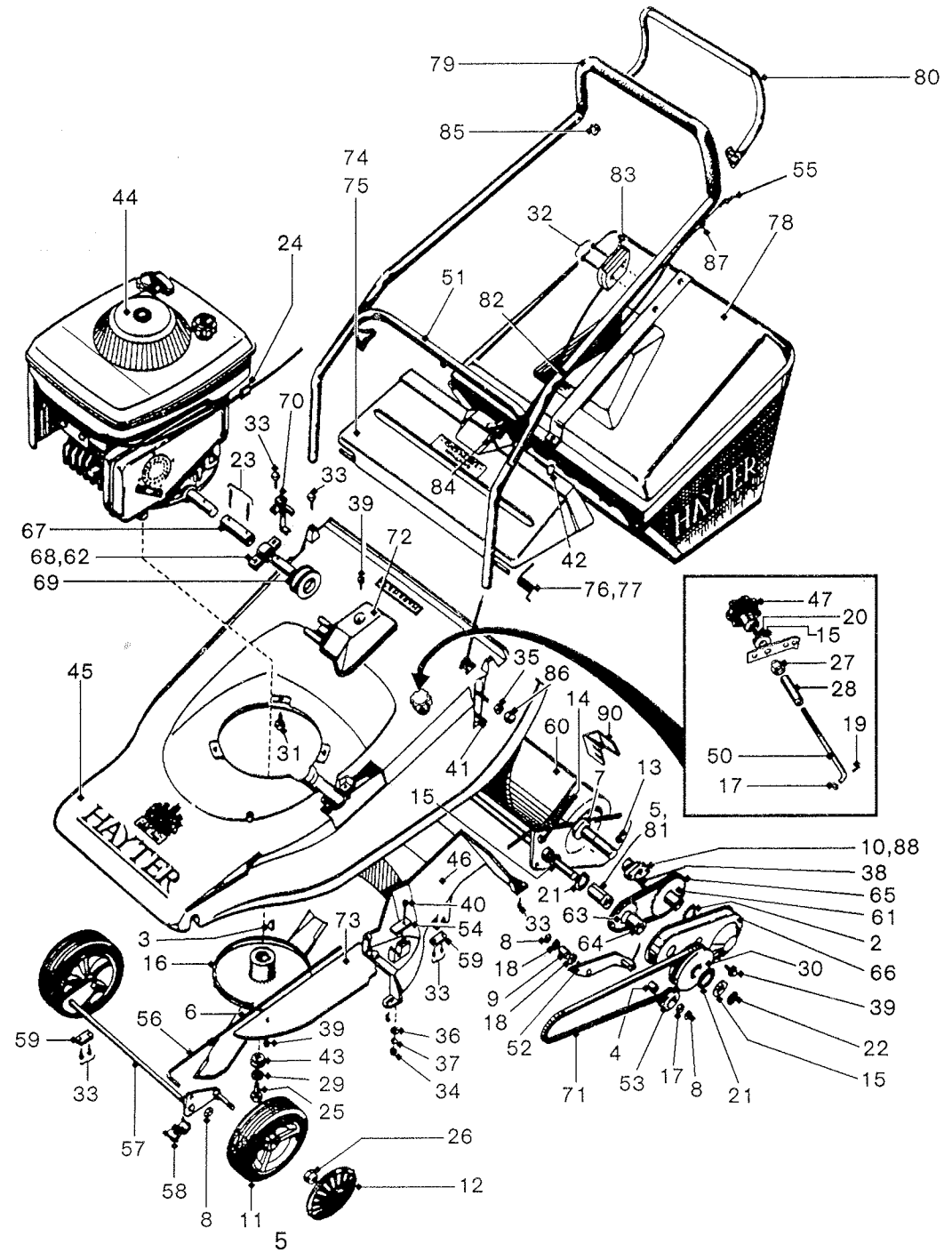


It is important, when examining, cleaning or making any adjustment to the cutting mechanism that the engine be stopped and the spark plug lead disconnected.

### Battery

To obtain optimum battery life the following procedure is recommended, charge for 14 hours before putting into service, recharge monthly for 10 hours before Winter storage charge for 14 hours to avoid the possibility of overcharging the battery, the charger is fitted with an automatic charge regulator. Whilst charging keep away from naked flames or direct heat. Always switch off at the mains before disconnecting.

**CODES 219 & 225**  
**Fig. 1 SELF PROPELLED**  
**MOWER ASSEMBLY**



## SELF PROPELLED MOWER ASSEMBLY SPARE PARTS LIST

(Subject to revision without notice)

Item No.	Part No.	No. Off	Description
1	1246	1	Spring
2	1428	1	Circlip external
3	1662	1	Woodruff key
4	3064	1	Oilite bush
5	3296	2	Oilite bush
6	4013	1	Cutterbar
7	4017	2	Nylon washer
8	04020	3	Spring fix
9	4452	1	Bush
10	4730	2	Oilite bush
11	5218	2	Wheel
12	5220	2	Wheel Cover
13	5321	1	Woodruff key
14	5421	1	Tension spring
15	02575	3	Washer
16	6164	1	Friction disc assembly
17	09266	2	Plain washer
18	09280	2	Plain washer
19	09303	1	Split pin
20	09267	1	Washer
21	02708	2	Circlip external
22	03096	1	Circlip external
23	03997	2	Roll pin
24	219097	1	Cable clip
25	09116	1	3/8" UNF x 1 1/4" Setscrew
26	09232	2	1/2" UNF Locknut
27	219016	1	Handwheel nut
28	219017	1	Screw adjuster nut
29	09273	1	Spring washer
30	219111	1	Pulley
31	09349	3	3/8" UNC x 1 1/4" Taptite screw
32	09358	2	M5 x 35 Pozi taptite screw

## HAYTERS

Item No.	Part No.	No. Off	Description
33	09365	11	M6 x 16 Hex. hd taptite screw
34	09437	1	M6 Plain nut
35	09442	4	M8 Locknut 'P' type
36	09472	1	M6 Plain washer
37	09474	1	M6 Plain washer
38	09545	2	M6 x 12 C'sk Pozitaptite screw
39	09546	3	M6 x 12 Hex w/head taptite
40	09547	1	M6 x 30 Bolt
41	09548	4	M8 x 35 Coach bolt
42	09569	2	M8 x 45 Coach bolt
43	216008	1	Cutterbar distance piece
44	216038	1	Engine Briggs & Stratton Max 40 (code 219
44	225002	1	Engine Briggs & Stratton Max 40 I/C (225)
45	219005	1	Mainframe
46	219011	1	Throwplate
47	219014	1	Handwheel
48			
49			
50	219018	1	Height adjuster screw
51	219019	1	Lower handlebar
52	219023	1	Jockey lever
53	219027	1	Jockey pulley
54	219028	1	Securing plate
55	219029	1	Cable
56	219030	1	Connecting rod
57	219021	1	Front axle assembly
58	219036	2	Bearing moulding
59	219037	4	Securing plate
60	219044	1	Roller assembly
61	219048	1	Sprocket
62	219050	2	Bush
63	219052	1	Sprocket

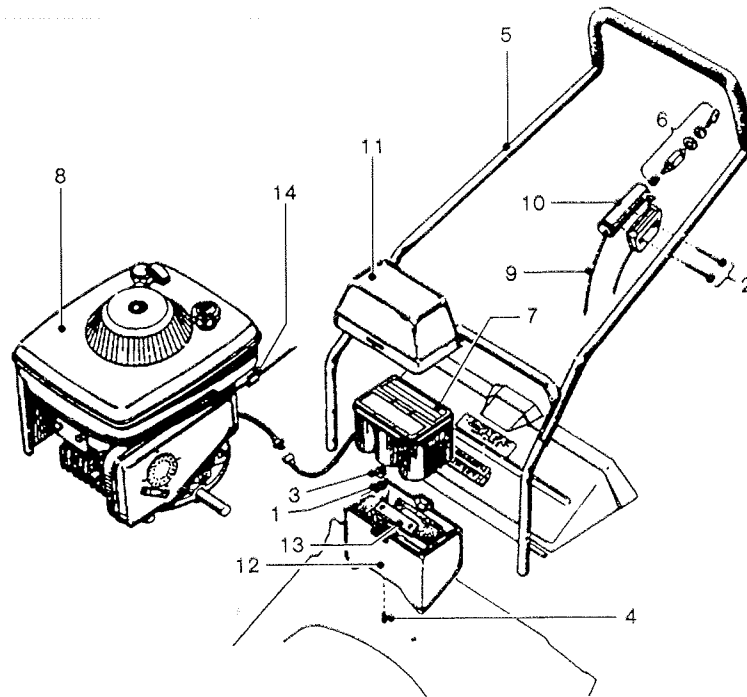


**SELF PROPELLED MOWER ASSEMBLY SPARE PARTS LIST****HAYTERS****(Subject to revision without notice)**

Item No.	Part No.	No. Off	Description
64	219053	1	Sleeve sprocket tube
65	219054	1	Chain
66	219055	1	Transmission cover
67	219059	1	Coupling tube
68	219060	1	Bearing housing moulding
69	219061	1	Pulley
70	219064	1	Belt guide
71	219110	1	Belt
72	219067	1	Cover
73	219069	1	Underguard
74	219072	1	Rear deflector
75	219074	1	Pivot rod
76	219075	1	Deflector spring L/H
77	219096	1	Deflector spring R/H
78	219076	1	Grassbag assembly
79	219086	1	Upper handlebar
80	219090	1	Clutch lever
81	219093	1	Idler sprocket sleeve
82	3966	1	Cable strap
83	219101	1	Throttle control & cable
84	226013	2	Hand wheel
85	226034	2	Bush
86	234051	4	Nut cap
87	239052	1	Cable stop
88	3971	2	Roller bearing housing
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90	5323	1	Deflector stop
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**Fig. 2 CODE 220 ELECTRIC START VARIANTS**  
 (Subject to revision without notice)

**HAYTERS**



Item No.	Part No.	No. Off	Description
1	9474	2	M6 Spring washer S/C
2	9574	2	M5 x 50 Pozi-pan hd. screw
3	9437	2	M6 Plain nut
4	9570	2	M6 x 16 Coach bolt
5	220086	1	Upper handlebar
6	226002	1	Starter switch
7	226005	1	Battery
8	220100	1	Engine Briggs & Stratton Max 40
9	226014	1	Wiring loom
10	226031	1	Switch holder
11	226091	1	Battery cover top
12	226092	1	Battery cover base
13	226094	1	Clamp
14	219097	1	Cable clip
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