



HAYTER

OWNERS H A N D B O O K

HARRIER

CODES 305K,306K,307K,308K

41

ROTARY LAWN MOWER

FROM SERIAL No. 305K - 17451

306K - 20797

307K - 7081

308K - 5711

HAYTERS PLC.

BISHOP'S STORTFORD

HERTS CM 23 4BU ENGLAND

SAFETY PRECAUTIONS

THIS SYMBOL MEANS BE ALERT ! YOUR SAFETY IS INVOLVED. EXERCISE GREAT CARE AND FOLLOW THE ADVICE GIVEN TO AVOID POTENTIALLY HAZARDOUS SITUATIONS.

The Harrier 41 is perfectly safe if used correctly. Failure to observe the following simple precautions may result in serious injury.

TRAINING

-  Read the instructions carefully. Be familiar with the controls and the proper use of the equipment. Learn how to stop the engine quickly in an emergency.
-  Never allow children or people unfamiliar with these instructions to use the mower.
-  Never mow while people, especially children, or pets are nearby.
-  Keep in mind that the user is responsible for accidents or hazards occurring to other people or their property.

PREPARATION

-  While mowing, always wear substantial footwear. Do not operate the equipment when barefoot or wearing sandals.
-  Thoroughly inspect the area where the mower is to be used and remove all stones, sticks, wires, bones and other foreign objects.
-  **WARNING :** Petrol is highly flammable.
 - Store fuel in containers specifically designed for this purpose.
 - Refuel outdoors only and do not smoke while refuelling.
 - Add fuel before starting the engine. Never remove the cap from the fuel tank or add petrol while the engine is running or when the engine is hot.
 - If petrol is spilled, do not attempt to start the engine but remove the mower away from the area of spillage. Avoid creating any source of ignition until petrol vapours have dissipated.
-  Replace faulty silencers.
-  Always ensure that the mower is in safe operating condition. Frequently check all nuts, bolts and screws for tightness. Use only replacement parts made and guaranteed by Hayters plc.
-  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 must be immediately replaced. Use only replacement parts made and guaranteed by Hayters plc. Cutterbars can be resharpened, ensure that both cutting edges are resharpened equally to maintain balance. An unbalanced blade will cause serious damage to your machine.

OPERATION

Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.



Mow only in the daylight or in good artificial light.



Avoid using the mower on wet grass, where feasible.



Always be sure of your footing on slopes.



Walk, never run.



Mow across the face of slopes, never up and down.



Exercise extreme caution when changing direction on slopes.



Do not mow excessively steep slopes.



Use extreme caution when reversing or pulling the mower towards you.



Stop the engine if the mower has to be tilted for transportation when crossing surfaces other than grass, and when transporting the mower to and from the area to be mowed.



Never operate the mower unless the guards are securely in position and in good condition.



Do not change the engine governor setting or overspeed the engine.



Disengage the rear roller drive clutch before starting the engine (applies to 306K and 307K models only.)



Start the engine carefully, with feet well away from the cutterbar.



Do not tilt the mower when starting the engine.



Do not put hands or feet near or under rotating parts.



Never pick up or carry a mower while the engine is running.



Stop the engine and disconnect the spark plug wire :

- Before clearing blockages or unclogging the discharge chute.

- Before cleaning/checking or working on the mower.



Stop the engine:

- Whenever you leave the engine.

- Before refuelling.

- After striking a foreign object. Inspect the mower for damage and make repairs before restarting and operating the mower.

- If the mower starts to vibrate abnormally (check immediately).

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



WARNING : THE CUTTERBAR CAN CONTINUE TO ROTATE AFTER THE ENGINE IS SWITCHED OFF.

INTRODUCTION / WARRANTY

INTRODUCTION

Thank you for purchasing a Hayter mower. The following pages are designed to help you gain safe and efficient service from your machine.

IMPORTANT : Read and understand this handbook prior to operating your machine for the first time. Make sure you are familiar with all the controls and points of regular maintenance. If you have any doubts, consult your Hayter authorised dealer who will be pleased to give you assistance.

All Hayter mowers are robustly constructed and designed for efficient economical performance under normal mowing conditions. Correct operation and maintenance will ensure a long and satisfactory service life.

Prior to despatch from our factory every effort is made to ensure your machine arrives in perfect condition. Your dealer will carry out a pre-delivery inspection to ensure that there has been no transit damage prior to installation. Please allow your dealer to familiarise you with the controls and safety features of the machine during installation.

It is essential that all securing nuts and bolts are checked and tightened as necessary after a short period of use, due to possible settlement of new components.

LIMITED WARRANTY

Hayters PLC warrants to the original user/ purchaser that this unit shall be free from defects in material and workmanship under normal use and service for a period of one year from the date of purchase. This warranty does not cover wearing parts i.e. cutterbars, wheels and tyres.

This warranty which is your exclusive right, does not apply to any unit that has been tampered with, altered, misused, abused or used for hire and will become invalid if non genuine Hayter parts are fitted. This warranty does not cover minor mechanical adjustments unless they are due to defective materials or workmanship. Consult the owners handbook or your authorised Hayter dealer, for assistance when making these adjustments.

A warranty period of 90 days applies to machines used for commercial purposes.

To make a warranty claim, return the unit to the authorised Hayter dealer through whom the machine was originally supplied, along with proof of purchase indicating the machine serial number and purchase date. Subject to the conditions and exclusions in this limited warranty, the authorised dealer will, at our option, repair or replace any warranted part within the duration of the warranty period.

This limited warranty gives you specific legal rights and is in addition to any statutory rights to which you may be entitled. If you need additional information concerning this written warranty or assistance in obtaining services please write to: **HAYTERS PLC, Service Department, Spellbrook, Bishop's Stortford, Herts. CM23 4BU.**

MAINTENANCE AND STORAGE

-  Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition .
-  Never store the mower with petrol in the tank inside a building where fumes may reach a flame or spark .
-  Allow the engine to cool before storing in any enclosure.
-  To reduce fire hazard, keep the engine, silencer , battery compartment and storage area free of grass, leaves, or excessive grease.
-  Check the grass catcher frequently for wear or deterioration.
-  Replace worn or damaged parts for safety.
-  If the fuel tank has to be drained, this should be done outdoors.

WARNING DECAL

Part No. 320065

CAUTION!

 BLADE CONTINUES TO ROTATE AFTER MACHINE HAS BEEN SWITCHED OFF. STOP THE ENGINE AND DISCONNECT SPARK PLUG LEAD BEFORE CHECKING OR WORKING ON MOWER. DO NOT USE WITHOUT GRASS COLLECTOR OR DEFLECTOR IN PLACE.

 MESSER ROTIERT WEITER, NACHDEM MASCHINE ABGESCHALTET WURDE. MOTOR STOPPEN UND ZÜNDKERZENKABEL ABNEHMEN, BEVOR ÜBERPRÜFUNGEN ODER ARBEITEN AM MÄHER VORGENOMMEN WERDEN. NUR MIT ANGEBRACHTEM SCHUTZ ODER ABWEISER VERWENDEN.

 LA LAME CONTINUE À TOURNER APRÈS L'ARRÊT DU MOTEUR. ARRÊTER LE MOTEUR ET DÉBRANCHER LE FIL DE BOUCIE AVANT DE VÉRIFIER OU D'INTERVENIR SUR LE MOTEUR D'ENTRAÎNEMENT. NE PAS UTILISER SANS QUE LE COLLECTEUR D'HERBE ET LE DEFLECTEUR SOIENT EN PLACE.

SPECIFICATIONS

SPECIFICATIONS	305K	306K	307K	308K
Engine model	B&S Quantum XM 35			Tecumseh
Engine type	121802-0415-01	121882-0419-01	121887-0423-01	Vantage 35
Power rating	3.5 HP (2.6kw)			
Engine/cutterbar speed	3100 RPM			2800 RPM
Fuel type	Unleaded			
Fuel capacity	1.4 litres (2.7 pints)			1.0 litres (1.8pints)
Oil type	SAE 30			
Cutting width	410 mm (16")			
Cutting height	13mm-57mm (1/2-2 1/4")			
Weight	29 kg (64 lbs)	30 kg (66 lbs)	30 kg (66 lbs)	23 kg (50lbs)



Before using the machine, **READ** the operating instructions carefully, paying particular attention to the **SAFETY PRECAUTIONS**. Also read the engine manufactures handbook and carry out the recommended lubrication.

OPERATING THE MOWER

STARTING THE ENGINE : Please refer to engine manufactures hand book. **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.

STOPPING THE ENGINE : Operate the throttle control lever to the rear stop position to stop the engine. Ref to fig 1.

FORWARD SPEED CONTROL : (Applies to 306K & 307K models only). Operate the roller drive clutch lever forwards to engage forward travel. The roller drive clutch incorporates a fail-safe device, i.e the machine will only move forward whilst the clutch lever is manually sustained. Release the clutch lever to stop the machine moving forwards. Refer to fig 1.

HEIGHT OF CUT ADJUSTMENT : To change the height of cut, locate the height adjuster handle and squeeze the handle trigger. Raise or lower the mower as necessary using the handle and release the trigger to engage at the desired height of cut. Refer to fig 1.

MOWING PROCEDURES

The following practices are recommended to ensure satisfactory results and eliminate undue stress being imposed on the machine.

LAWNS : Fit the grass collector and set the mower to the desired height of cut. Prevent blockages and over working the machine by not setting the height of cut too low. In long grass conditions be prepared to make two cuts, the second cut being lower than the first.

HEAVY GROWTH ON LAWNS : In adverse heavy growth conditions set the height of cut to its maximum, remove the grass bag and ensure that the rear grass deflector is secured in its lowest position.

BORDERS : The inset wheels permit mowing over lawn edges and cutting close up to walls, fences and other obstructions.
Borders should be cut with edging shears before mowing.

HIDDEN OBSTRUCTIONS : If an obstruction is encountered whilst mowing, the machine should be carefully drawn backwards without raising the front, the engine stopped, and the spark plug lead removed. Examine the cutting mechanism and replace if severe damage or breakage is evident. If the cutting mechanism is undamaged, remove the obstruction or proceed to work around it. Refer to **MAINTENANCE - CUTTERBAR** on page 1.5.

BLOCKAGE IN THE DISCHARGE CHUTE : Never attempt to remove too much grass in one cut especially if the grass is wet as this will increase the possibility of a blockage occurring. If a blockage does occur :

ALWAYS check that the grass bag is not being overfilled as this will create a blockage.



NEVER put a hand in the discharge chute aperture while the engine is running.

ALWAYS stop the engine and disconnect the spark plug prior to cleaning the blockage.

MAINTENANCE

ENGINE : Read the engine manufactures handbook and carefully carry out the recommended procedures, paying particular attention to the lubricating instructions.

LUBRICATION : Periodically apply a quality lubrication oil to linkage points and control cables.

SECURING NUTS & BOLTS : Check all securing nuts and bolts periodically and tighten if necessary.

CUTTERBAR : The Hayter cutterbar incorporates a friction device for added engine protection. If the cutterbar strikes an obstruction it will move relative to the friction device 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. The cutterbar may be resharpened providing that both ends are evenly sharpened to maintain balance.

If the cutterbar is damaged to the extent that it becomes out of balance it should be replaced immediately. Fit the new cutterbar as shown in Fig 2. ensuring that the retaining setscrew is tightened securely to a torque of 54Nm. (40 ft. lb).

BATTERY: (Codes 307K only) : It is recommended that the battery is charged for 6 hours prior to use of the mower, to ensure optimum life. Charge the battery for 6 hours prior to storage during the winter period.



ALWAYS charge the battery in a well ventilated area.

NEVER charge the battery in the vicinity of naked flames or direct heat.

ALWAYS switch off the mains electricity supply before the disconnecting battery.

Fig 1
OPERATOR CONTROLS

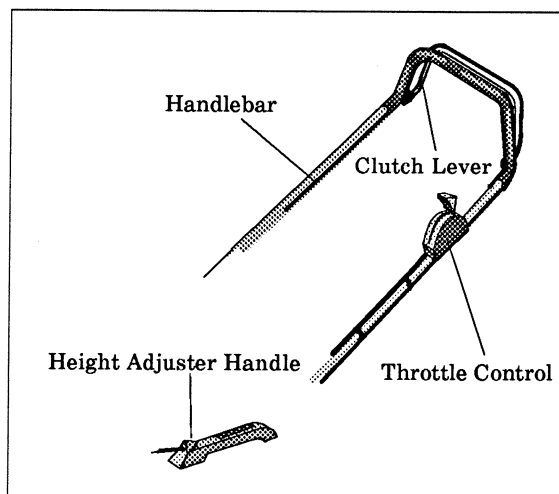
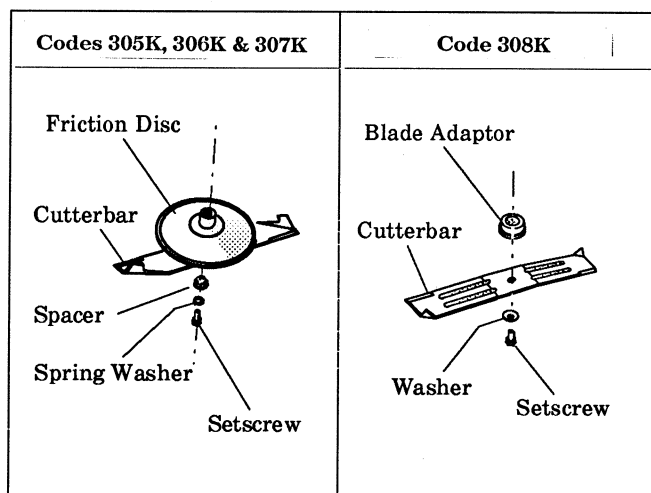
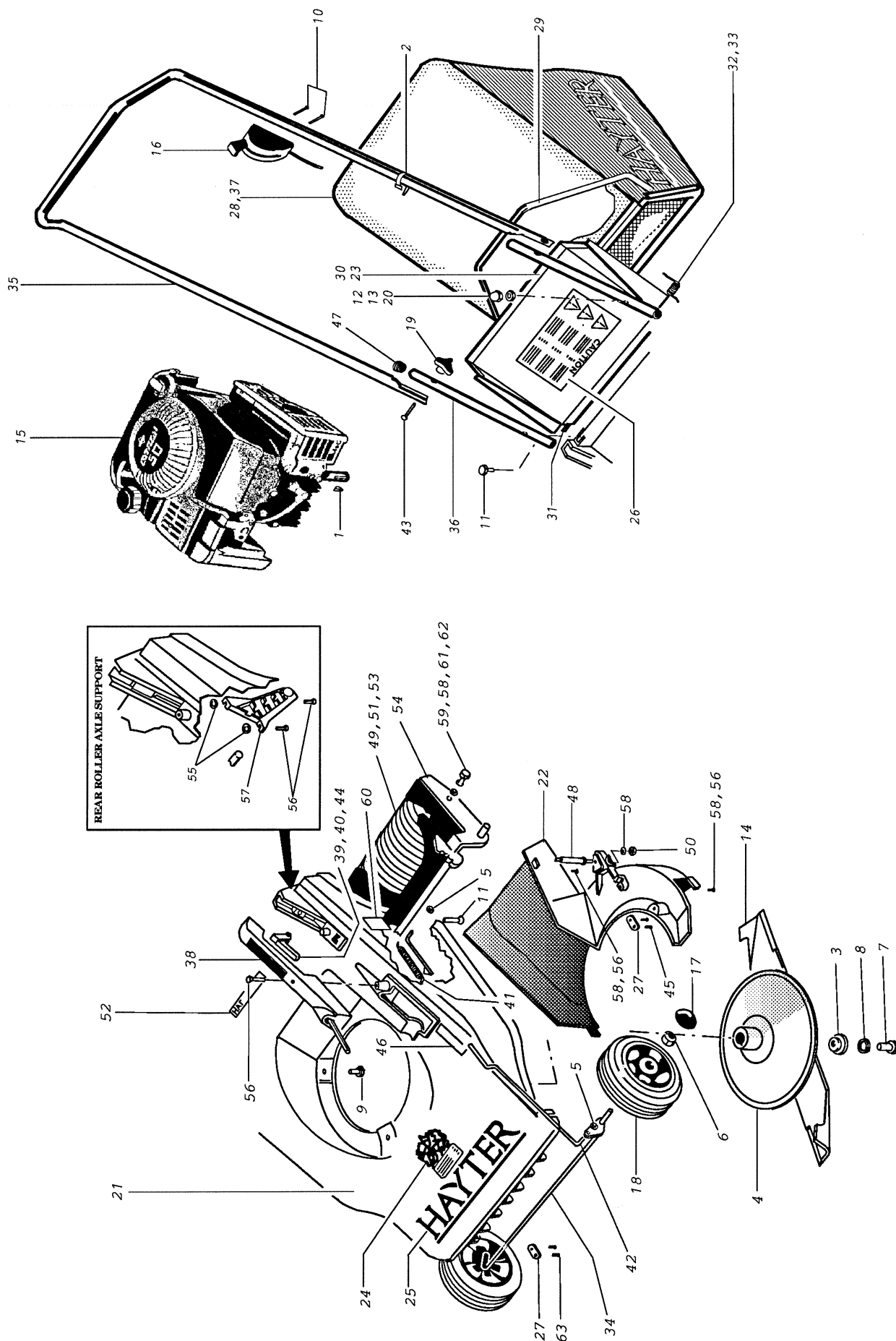


Fig 2.
CUTTERBAR ASSEMBLY





HARRIER 41 MAINFRAME ASSEMBLY (CODE 305K)

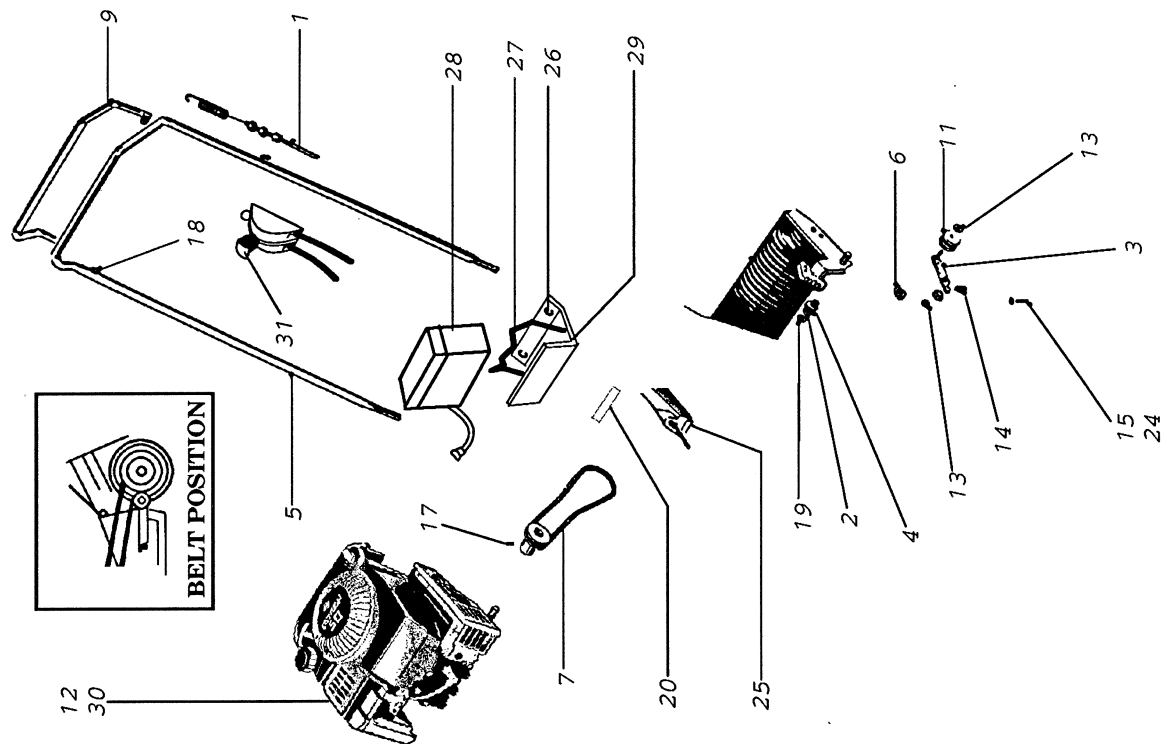
Item No.	Part No.	No. Off	Description	Item No.	Part No.	No. Off	Description
1	1662	1	Key	48	300137	1	Pillar
2	3966	2	Cable Tie	49	09271	4	3/8" Plain washer
3	4014	1	Spacer	50	09544	1	M6 Nyl. Ins. "T" type Nut
4	6164	1	Friction Disc Assembly	51	305019	1	Rear Axle
5	02385	2	Gripfix	52	305005	1	Harrier 41 Label
6	4486	2	Wheel Nut	53	201007	2	Roller
7	09118	1	3/8" UNF x 1.1/2" Setscrew	54	305028	1	Roller Frame Welded Assembly
8	09273	1	3/8" Spring Washer	55	09262	2	Plain Washer
9	09349	3	3/8" UNC x 1.1/4" Tapitite Screw	56	09596	6	Screw
10	09600	2	No. 8 Pozipan Head Screw	57	305040	1	Axle Support
11	09575	3	M6 x 20 Tapitite Screw	58	09472	8	Plain washer
12	09441	2	M8 Nyl. Ins. "T" type Nut	59	09362	2	M6 x 16 Hex. Hd. Screw
13	09379	2	M8 x 40 Coachbolt	60	N / A	1	Serial Number Label
14	201026	1	Cutterbar	61	09261	2	Plain Washer
15	320100	1	Engine(Briggs & Stratton 3.5h.p.)	62	09474	2	Spring Washer
16	325012	1	Throttle Control & Cable	63	09546	4	M6 x 12 Hex. Hd. Tapitite Screw
17	201091	2	Hub Cap				
18	201095	2	6" Wheel c/w Bearing 5221				
19	226013	2	Knob				
20	234051	2	M8 Nut Cap				
21	300123V	1	Deck				
22	300124	1	Throwplate				
23	300110	2	Buffer Anti-Rattle				
24	5877	1	Royal Warrant Label				
25	201110	1	Hayter Label				
26	320065	1	Caution Label				
27	219037	3	Securing Plate				
28	300040	1	Grassbag Assy. c/w Item 29 & 37				
29	300045	1	Frame				
30	300050	1	Deflector				
31	300051	1	Deflector Rod				
32	300052	1	Deflector Spring O/S				
33	300053	1	Deflector Spring N/S				
34	300111	1	Front Axle Assembly				
35	306061	1	Handlebar Upper				
36	300062	2	Handlebar lower				
37	300043	1	Grassbag				
38	300065	1	Height Adjuster handle				
39	300066	1	Trigger				
40	300067	1	Trigger Spring				
41	300070	1	Compensating Spring				
42	300104	1	Connecting Rod				
43	226024	2	M8 x 45 Coachbolt				
44	301074	1	Roll Pin				
45	09634	2	M6 x 16 Pozidrive Screw				
46	300006	1	Height of Cut Label				
47	320048	2	Tube Plug				

HARRIER 41 SELF PROPELLED (CODE 306K & 307K) VARIANTS

1.8

1.8

CODE 306K VARIANTS		Part No.	No. Off	Description
Item No.				
1	301005	1	Clutch Cable	
2	301050	1	Plate	
3	301015	1	Jockey Arm Assembly	
4	301020	1	Compensating Pulley	
5	306061	1	Handlebar Upper c/w Item 18	
6	301030	1	Bearing Half	
7	306050	1	Belt	
8	239065	1	Roller	
9	219090	1	Clutch Lever	
10	301094	1	Engine Pulley	
11	239021	1	Tensioner Pulley	
12	301093	1	Engine	
13	04020	2	Springfix	
14	301031	1	Spring	
15	09634	1	M6 x 16 Pozidrive Screw	
16	306028	1	Rear Axle Frame	
17	03997	1	Roll Pin	
18	226034	2	Bush	
19	02385	1	Starlock Washer	
20	321009	1	Autodrive Label	
21	239010	1	Pulley	
22	306021	1	Axle Spacer	
23	09533	4	Screw	
24	09472	1	Plain Washer	
25	300090	1	Clip Edge	
26	09318	2	Rivet	
CODE 307K VARIANTS				
Item No.	Part No.	No. Off	Description	
27	220014	1	Battery Clip	
28	220015	1	Battery 12v	
29	220013	1	Battery Bracket	
30	307007	1	Engine	
31	307017	1	Throttle Control & Cable	
32	307021	1	Mainframe Drilled (Not Shown)	



CODE 308K VARIANTS		Part No.	No. Off	Description
Item No.				
1	302011	1	Engine Tecumseh Vantage.	
2	302015	1	Handlebar	
3	302021	1	Throttle Control & Cable	
4	308010	1	Harrier 41 SE Label	
5	302026	1	Cutterbar	
6	MU17x137	1	Belleville Washer	
7	302016	2	6" Wheel	
8	MU42734	1	Blade Adaptor	
9	09524	2	M5 x 25 Pozi Tapitite Screw	
10	219143	2	Cap-Hub	
11	09601	2	M8 Pushnut Bolt Retainer	

