



HAYTER

MAKERS OF THE FINEST MOWERS

**HARRIER
41**

CODE 319R

(Blade Brake Clutch - Auto Drive)

OWNER'S HANDBOOK

REFERENCE COPY ONLY

PART NO: 319013 **REV:** 0
UP REV FROM:
SUPERSEDED BY: /
AMENDMENT SHEET:

CERTIFICATE OF CONFORMITY

I, the undersigned M.A. Wright, of:

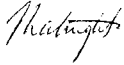
HAYTER LIMITED, Spellbrook, Bishop's Stortford
Herts CM23 4BU
ENGLAND

certify that the lawnmowers:

1. Machine Type No.	CODE 319R
2. Category.	Combustion Engine
3. Make.	Hayter
4. Type.	Rotary
5. Engine - Manufacturer.	Briggs & Stratton
- Type.	125882-0908-01
- Speed of rotation during test.	3100 rpm

Conforms to the specifications of Directive 84/538/EEC as adapted to technical progress by Directive 87/252/EEC and amended by Directive 88/180/EEC.

Guaranteed maximum sound power level.	95 dB(A)
- Type of cutting device	Cutterblade
- Width of cutting device	41 cm
- Speed of rotation of the cutting device	3100 rpm
TESTED AT SUDBURY, SUFFOLK, ENGLAND	17.02.97

Signed  M.A. Wright
(Technical Director)

EC DECLARATION OF CONFORMITY


Company Name	HAYTER LIMITED
Company Address	Spellbrook Bishop's Stortford Herts. CM23 4BU ENGLAND
Machine Type No.	Code 319R
Model	Harrier 41



Directives complied with: 89/392/EEC amended by 91/368/EEC, 93/44/EEC and 93/68/EEC
Essential Health & Safety Requirements Relating to the Design & Construction of Machinery
and Safety Components.
84/538/EEC amended by 87/252/EEC and 88/180/EEC Permissible Sound Power Levels of Lawn Mowers
89/336/EEC amended by 92/31/EEC Electromagnetic Compatibility

Standards Used: BS5107, EN292, ISO 5395, EN50081 and EN50082

I declare on behalf of Hayter Limited that these machines conform to the EC Essential Health & Safety Requirements.

Signed  Date: 21.02.97

M.A. Wright
(Technical Director)

Lawnmower vibration information. RMS acceleration measured in 3 - axes at operators contact position on the handlebars. Code 319R = 4ms^{-2} .

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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.**

Throughout this handbook all references to left hand and right hand are as viewed from behind the handlebar, facing in the direction of forward travel.

This handbook is based on information available at the time of publication.

HAYTER LIMITED reserve the right to make changes at any time without notice.

WARRANTY

LIMITED WARRANTY

Hayter Limited 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 two years from the date of purchase. To qualify for the full benefit of the warranty, the warranty registration card must be returned within 60 days of purchase. This warranty does not cover engines or wearing parts, i.e. cutterbars, wheels and tyres. If you have any doubt, consult a **Hayter** authorised dealer for clarification. Subject to the conditions and exclusions noted in this limited warranty, we shall at our option, repair or replace any warranted part during the applicable period. The engine is warranted by the engine manufacturer and services are provided through their authorised network, refer - "Engine Warranty". If you experience any difficulty, please contact a **Hayter** authorised dealer.

To qualify for the second twelve month period of the two year limited warranty, the machine must be serviced by a **Hayter** authorised dealer. This chargeable service should be carried out within 14 months of purchase and be in accordance with the recommendations for service determined by **Hayter**.

This warranty 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 a **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 a **Hayter** authorised dealer 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 and your statutory rights are not affected by this warranty. If you need additional information concerning this written warranty, or assistance in obtaining service please write to: **HAYTER LIMITED, Service Department, Spellbrook, Bishop's Stortford, Herts. CM23 4BU.**

Details of your local **Hayter** dealer are contained in Yellow Pages or contact :

Freephone 0800 616298.

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. Ensure that you are familiar with the controls and the proper use of the equipment. Learn how to stop the mower 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 and long trousers. Do not operate the equipment when barefoot or wearing sandals.
- Thoroughly inspect the area where the mower is to be used and remove all objects which may be thrown by the machine.
- 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. Allow the engine to cool for at least 2 minutes before refuelling.
 - Do not attempt to start the engine if petrol is spilled or a smell of petrol is present. Move the mower away from the area of spillage and avoid creating any source of ignition until petrol vapours have dissipated.
 - Always use fresh fuel. Stale fuel can block the carburettor and cause leakage.


SAFETY PRECAUTIONS

Continued.


- Replace fuel tank and container caps securely.


- Replace faulty exhaust mufflers.


 Always ensure that the mower is in a safe operating condition. Frequently check all nuts, bolts and screws for tightness. Use only genuine **Hayter** replacement parts.


 A damaged cutterblade and loose fixing bolt are major hazards. Before use, visually inspect the cutting mechanism to ensure that it is in good condition. A damaged cutterblade must be replaced immediately with a genuine **Hayter** replacement part. A cutterblade which is slightly worn can be re-sharpened. Ensure that both cutting edges are re-sharpened equally to maintain balance. An unbalanced cutterblade may cause serious damage to your machine. Refer to "Maintenance".


Operation:


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


 Always pull the starter cord slowly until resistance is felt, then pull the cord rapidly to avoid kickback and prevent hand or arm injury.


 Mow only in daylight or 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 cutterblade 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.


SAFETY PRECAUTIONS


Continued.


Operation continued:


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


 Disengage the rear roller drive clutch and the cutterblade clutch before starting the engine.

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

 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 lead:

- Before clearing blockages or unclogging the discharge chute.

- Before cleaning / checking or working on the mower.


- 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).

 Stop the engine:

- Whenever you leave the mower.

- Before refuelling.

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

 Never touch the engine muffler / muffler guard or cooling fins when the engine is hot.
















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

SAFETY PRECAUTIONS

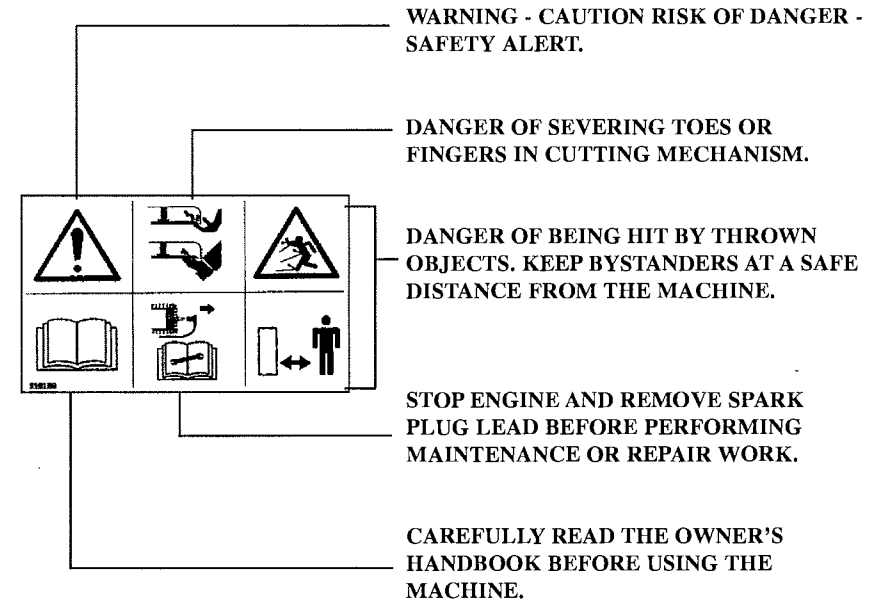
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Maintenance and Storage:

-  Keep all nuts, bolts and screws tight to ensure that the equipment is in safe operating condition.
-  Frequently check fuel lines and fittings for cracks or leaks and replace if necessary.
-  Never check for a spark with the spark plug removed. (Use an approved tester).
-  Never crank the engine with the spark plug removed. If the engine is flooded, move the throttle to the 'fast' position and crank the engine until it starts.
-  Never strike the flywheel with a hammer or hard object as this may cause the flywheel to shatter in operation. Always use the correct tools to service the engine.
-  Never operate the engine without a muffler guard. Inspect the muffler periodically and replace if worn or leaking.
-  Never start the engine with the air-cleaner or air-cleaner cover removed.
-  Never store the mower with petrol in the tank within an enclosed area where fumes may reach an open flame or spark.
-  Allow the engine to cool before storing in any enclosure.
-  To reduce the fire hazard, keep the engine, muffler, cooling fins, and petrol storage area free of grass, leaves, or excessive grease.
-  Check the grassbag frequently for wear or deterioration.
-  Replace worn or damaged parts for safety.
-  If the fuel tank has to be drained, it is essential that this be done outdoors.

DECALS

WARNING DECAL: Part No. 219189

BLADE BRAKE CLUTCH
DECAL:

Part No. 343019



CUT HEIGHT ADJUSTMENT DECAL:

Part No. 320006

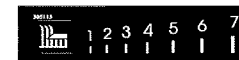


THROTTLE CONTROL:



HEIGHT OF CUT INDICATOR DECAL:

Part No. 305113




SPECIFICATIONS

MODELS	CODE 319R Blade Brake Clutch - Auto Drive
Engine	Briggs & Stratton Quantum XM 35
Engine Type	12S882-0908-01
Engine / Cutterblade Speed	3100 rpm
Fuel Type	Unleaded Petrol
Fuel Capacity	1.5 litres (2.6 UK pints)
Oil Type	SAE 30 engine oil
Oil Sump Capacity	0.6 litres (1.1 UK pints)
Cutting Width	410mm (16 inch)
Cutting Height	12 - 65mm (0.5 - 2.6 inch)
Overall Dimensions	1,340 x 451 x 1,041mm (52.75 x 17.75 x 41 inch)
Dry Weight	33.8 Kg (74.5 lbs)

ASSEMBLY INSTRUCTIONS

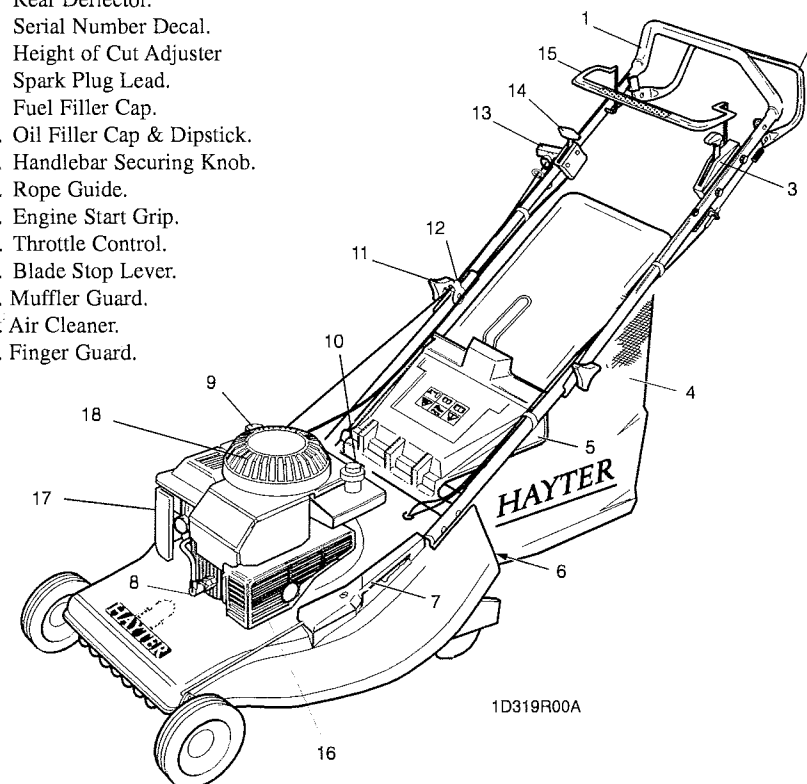
SAFETY NOTICE

 Before using the mower, read the owner's handbook carefully. Pay particular attention to the safety precautions.



GENERAL ASSEMBLY

1. Handlebar.
2. Ground Drive Clutch Lever.
3. Blade Brake Clutch Lever.
4. Grassbag Assembly.
5. Rear Deflector.
6. Serial Number Decal.
7. Height of Cut Adjuster.
8. Spark Plug Lead.
9. Fuel Filler Cap.
10. Oil Filler Cap & Dipstick.
11. Handlebar Securing Knob.
12. Rope Guide.
13. Engine Start Grip.
14. Throttle Control.
15. Blade Stop Lever.
16. Muffler Guard.
17. Air Cleaner.
18. Finger Guard.



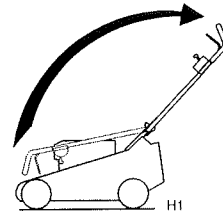
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ASSEMBLING THE MOWER FOR THE FIRST TIME

Check that parts are delivered correctly: Remove the mower from the packaging and check that all loose items have been supplied correctly. Refer to the delivery checklist opposite and the general assembly. If any items are missing contact your local Hayter dealer.

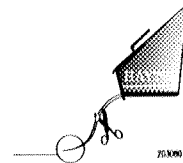
DELIVERY CHECKLIST	
Description	Quantity
Grassbag	1
Owner's handbook	1
Warranty registration card	1

Assemble the handlebar: Unscrew the knobs securing the handlebar sufficiently to allow it to be pivoted. Move the blade stop lever away from the engine to avoid damage and unfold the handlebar to its operating position. Tighten the two knobs to secure the handlebar.



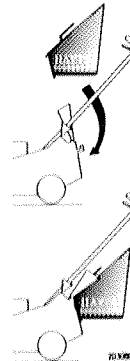
IMPORTANT - PREVENT DAMAGE : When unfolding the handlebar, take care to ensure that the controls and cables do not become damaged. Always replace damaged controls and cables before using the mower.

Assemble the grassbag: Remove the long ribbon label (when fitted) by cutting it off close to the grassbag. Discard the ribbon label.



WARNING - AVOID ENTANGLEMENT : Completely remove this ribbon before using the mower

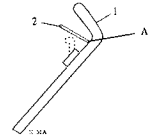
Raise the rear deflector. Lower the grassbag through the handlebar and hook in position behind the deflector springs. Lower the grassbag to rest against the rear of the mower. Finally lower the rear deflector to rest against the top of the grassbag.



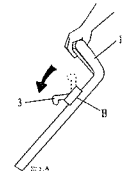
ASSEMBLING THE MOWER FOR THE FIRST TIME

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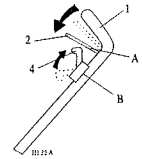
Check blade brake/clutch controls: Operate the blade stop lever (A) several times, to ensure the lever moves freely. Hold the lever against the handlebar in position (1) and check that it returns automatically to position (2) when released.



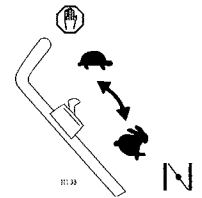
Use the right hand to hold the blade stop lever against the handlebar (1) and use the left hand to push the blade clutch lever (B) to the 'engaged' position (3). Remove the left hand and the blade clutch lever should return to position (4) leaving the blade drive clutch engaged.



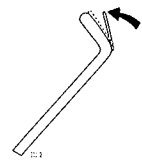
Remove the right hand and check that the blade stop lever automatically returns to position (2). There should be an audible 'clunk' to indicate that the blade drive clutch has disengaged.



Check throttle lever operation: Operate the throttle lever several times and ensure that the cable moves freely whilst operating the engine throttle mechanism.



Check ground drive clutch lever operation: Operate the clutch lever several times and ensure that the cable moves freely.



BEFORE STARTING THE ENGINE

IMPORTANT - PREVENT ENGINE DAMAGE: The engine is shipped without oil or petrol. The engine must be filled with the correct grade of oil and petrol before starting the engine.

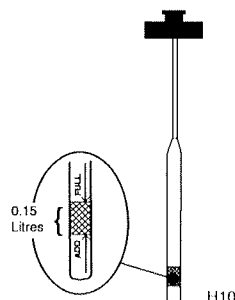
Oil recommendations: Always use high quality detergent oil classified "For service SE, SF, SG" SAE 30 oil. Never use additives with recommended oils. SAE 10W-30 multigrade oil may be used, but this will result in higher engine operating temperatures with consequential high oil consumption. It is imperative that the oil level is checked more frequently if this grade of oil is used in order to guard against serious engine damage.

Check oil level: Clean around the oil filler cap before removing. With the mower on a level surface, unscrew and remove the oil filler - dipstick. Wipe oil from it with a clean cloth. Screw the oil filler - dipstick back in place, then unscrew and remove it to check the oil level.

The oil level is correct when it is at the **full** mark on the dipstick. **DO NOT OVERFILL.**

Slowly fill with engine oil as necessary and replace the oil filler - dipstick.

IMPORTANT: The oil filler - dipstick must be secured to prevent oil leakage during operation.



BEFORE STARTING THE ENGINE

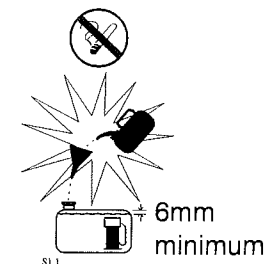
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Fuel Recommendations: Always use clean, fresh unleaded petrol. Purchase fuel in quantities which can be used within 30 days. Never mix oil with petrol. For added engine protection Briggs & Stratton recommend the use of their fuel additive which is available from an authorised Briggs & Stratton service dealer.

Check fuel level: Clean around the fuel filler cap before removing and fill the fuel tank with clean unleaded petrol.

Do not overfill the fuel tank. Allow 6mm minimum of tank space for fuel expansion.

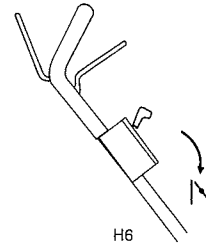
IMPORTANT: The fuel filler cap must be secured to prevent fuel leakage during operation.



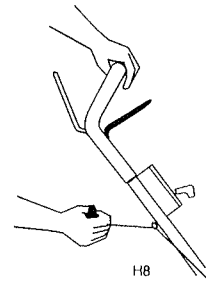
WARNING - PREVENT ACCIDENTS: The cutterblade rotates when the engine is operating and the cutterblade drive is engaged.

TO START THE ENGINE

Operate the throttle control lever: Push the lever to 'choke' position before starting a cold engine. It should only be necessary to push the lever to the 'fast' position before starting a warm engine.



Operate the engine start - grip: Stand behind the mower and maintain a firm hold on the handlebar to prevent the mower moving towards you. Use your right hand to hold the engine start - grip and pull slowly until resistance is felt, then pull rapidly to crank the engine. When the engine starts carefully return the engine start - grip to the storage position. If the engine does not start after 5 attempts - refer to "Fault Finding".



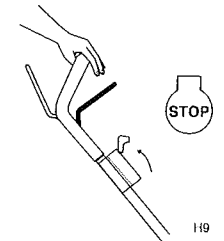
Allow the engine to warm up and return the throttle lever to the 'fast' position after starting a cold engine.

IMPORTANT - PREVENT ENGINE DAMAGE: Never pull the engine start - grip when the engine is running.

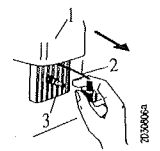
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STOPPING THE ENGINE

Stopping the engine: Operate the throttle control lever to the rearmost position to stop the engine.



Emergency stop: If the throttle control lever fails, disconnect the spark plug lead to stop the engine.



1. Engine
2. Spark Plug Lead.
3. Spark Plug

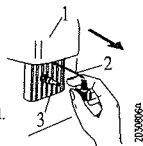
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SAFETY NOTICE



WARNING - PREVENT ACCIDENTAL STARTING : Always stop the engine and disconnect the spark plug lead before cleaning, inspecting or working on the machine.

1. Engine
2. Spark Plug Lead.
3. Spark Plug



SAFETY NOTICE



WARNING - PREVENT ACCIDENTS : Before mowing, thoroughly inspect the area where the mower is to be used and remove all objects which when contacted by the mower cutterblade could become dangerous projectiles. Inspect the area for hidden obstructions which when contacted by the cutterblade could risk health and safety. Remember the location of these obstructions and ensure that you mow around them.



IMPORTANT - PREVENT ENGINE DAMAGE : DO NOT use the mower on a slope greater than 20 degrees.



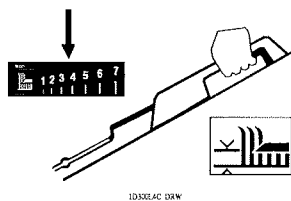
HEIGHT OF CUT

To adjust the height of cut : Hold the trigger against the handle and raise or lower the mower using the handle to achieve the desired cut height. Release the trigger to secure the mower at the required position.

There are seven height of cut positions. The setting is indicated by the position of the connecting rod relative to the height of cut indicator.

Always select a height of cut to suit operating conditions. Aim to prevent engine overloading and blockages by avoiding low cuts in long grass conditions. Be prepared to make two cuts when the grass is long.

When changing height of cut it is sometimes necessary to re-adjust the ground drive clutch cable - refer to "MAINTENANCE: Ground Drive Clutch Cable Adjustment".



TRAVEL

Forward travel: Hold the handlebar and operate the ground drive clutch lever to power the mower in a forward direction.

Travel speed is controlled by engine speed. Use the throttle control to increase or decrease forward travel speed.

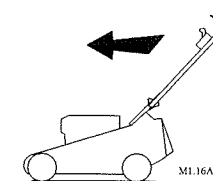
Release the ground drive clutch lever to stop the mower from travelling in a forward direction.

When the ground drive clutch lever is disengaged the mower can be operated as a push model. This feature is useful when mowing in confined areas.

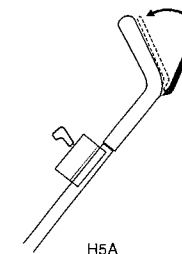
Reverse travel: Release the ground drive clutch lever. Hold and pull against the handlebar with both hands to reverse the mower towards you.



WARNING - PREVENT ACCIDENTS: Always reverse the mower carefully towards you. Always disengage the cutterblade drive before walking backwards with the mower.



M1.16A



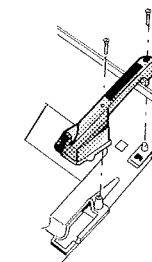
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TRAVEL SPEED RANGE

There are 3 travel speed ranges: fast, medium and slow. The machine is factory assembled in the medium speed range. If a faster or slower speed range is required the mower should be adjusted as follows:

Raise the cut height to the highest position: Refer "Height of Cut".

Remove the height adjuster handle: Remove the two screws and hold the trigger against the handle whilst carefully disconnecting the handle from the mower deck. When disconnecting the handle press down on the mower deck with one hand to assist disconnecting the handle. When the handle is removed allow the mower deck to raise slowly.

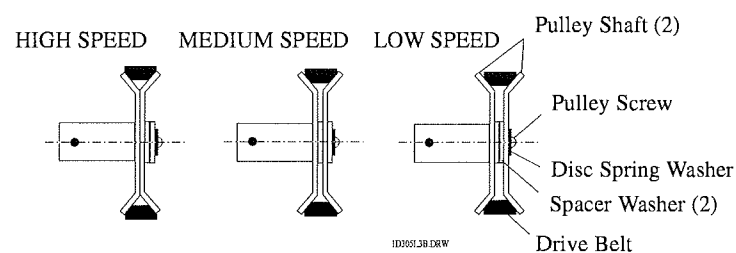


TRAVEL SPEED RANGE

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Remove the pulley screw:

Reconfigure the pulley assembly:



Secure the pulley screw: Tighten to 9Nm (12 lb. ft) torque.

Re-assemble the height adjuster handle: Offer up the height adjuster handle assembly whilst ensuring that the trigger engages in the height adjuster mechanism correctly. Press down on the mower deck to assist assembly as necessary. Tighten the two screws to secure the height adjuster handle.

Adjust cut height: Refer "Height of Cut".

Adjust the ground drive clutch cable: Refer "MAINTENANCE: Ground Drive Clutch Cable Adjustment".

TURNING THE MOWER

To make a wide turn: Steer the mower with the handlebar in the direction required.

To make a tight turn: Stop and apply downward pressure on the handlebar to raise the front wheels of the mower just above ground level and steer the mower using the handlebar in the required direction.

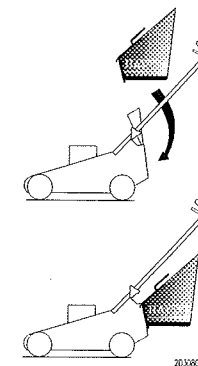
WARNING - PREVENT ACCIDENTS: DO NOT raise the front of the mower excessively when making a turn. NEVER raise the rear of the mower when the cutterblade drive is engaged.

MOWING WITH GRASS COLLECTION

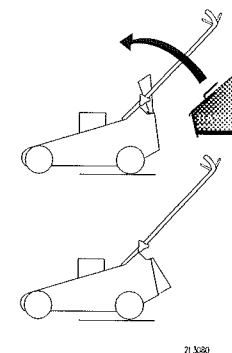
The grassbag is designed to collect grass clippings. For optimum performance, mow in dry conditions with the throttle control set at 'fast'.

WARNING - PREVENT ACCIDENTS: ALWAYS check the condition of the grassbag for signs of damage. Replace a damaged grassbag immediately. DO NOT operate the mower with a damaged grassbag. ALWAYS stop the engine and disconnect the spark plug lead before attempting to remove a grass blockage.

Grassbag attachment: Raise the rear deflector. Lower the grassbag through the handlebar and hook into position behind the deflector springs. Lower the grassbag to rest against the rear of the mower. Finally lower the rear deflector to rest against the top of the grassbag.



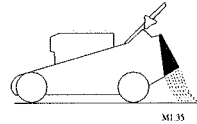
Grassbag removal: Raise the rear deflector and lift the grassbag away from the mower. Finally lower the rear deflector to rest against the rear of the mower.



Grassbag emptying: To empty the grassbag, pour out the grass clippings and shake the grassbag vigorously to clean the airways. Good grass collection depends on good air flow through the grassbag. When collecting grass clippings it is important that the grassbag is emptied regularly to prevent blockages and engine overloading.

MOWING WITHOUT GRASS COLLECTION

To mow without collecting the grass clippings, remove the grassbag and operate the mower with the rear deflector in its lowest position.



WARNING - PREVENT ACCIDENTS: ALWAYS check the condition of the rear deflector for signs of damage. Replace a damaged rear deflector immediately. Never operate the mower with a damaged rear deflector.

HEAVY GROWTH

Areas of heavy growth should be mown without grass collection. If grass collection is required, first mow the area without grass collection at the maximum height of cut setting. Allow the grass clippings to dry out and then mow the area at the maximum height of cut setting with the grassbag fitted. Reduce the height of cut and mow the area again as necessary until the required finish is obtained.

MOVING THE MOWER ACROSS NON-GRASSED AREAS

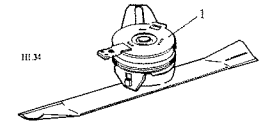
Set the mower to its maximum height of cut to protect the cutting mechanism when moving the mower over surfaces other than grass.



WARNING - PREVENT ACCIDENTS : Disengage the cutterblade drive before moving the mower over surfaces other than grass.

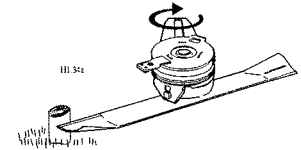
CUTTERBLADE OPERATION

General information: The cutterblade is driven by the engine via a brake/clutch device (1) which enables the cutterblade to be engaged / disengaged using control levers whilst the engine is running. The cutterblade will stop within three seconds of releasing the blade stop lever.



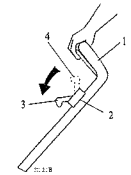
WARNING - PREVENT ACCIDENTS: DO NOT operate the mower if the cutterblade fails to stop within three seconds. Return the mower to your Hayter dealer for examination and repair.

A friction device in the brake/clutch helps prevent damage occurring to the cutting mechanism when a hidden obstruction or overload is encountered. When the obstruction or overload is removed, the friction device will automatically reset.

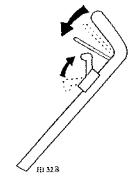


WARNING - PREVENT ACCIDENTS: ALWAYS disengage the cutterblade drive and stop the engine when a hidden obstruction or excessive vibration is encountered. Disconnect the spark plug lead and examine the cutting mechanism. ALWAYS replace a damaged cutterblade - refer to "Maintenance".

Engaging cutterblade drive: Use the right hand to hold the blade stop lever against the handlebar (1) and use the left hand to operate and engage the blade clutch lever (2) in the forward position (3). Remove the left hand and the blade clutch lever should return to position (4).



Disengaging cutterblade drive: Release the blade stop lever to disengage cutterblade drive.



Emergency stop: If the cutterblade drive mechanism fails, stop the engine.



WARNING - PREVENT ACCIDENTS: Do not operate the mower with a faulty cutterblade drive mechanism.

MOWING AND GRASS CARE TIPS

In dry weather conditions leave the grass long to help retain ground moisture.

Aerate the lawn to stimulate soil organisms and root growth. In spring and late summer remove dead grass and aerate the lawn by raking or similar means.

Keep the cutterblade sharp. A blunt cutterblade will tear the grass and cause the tips to turn brown.

Prevent scalping. Plan your direction of travel to mow across hollows and humps.

Prevent grass damage. Take care when turning the mower.

Prevent grass damage. **DO NOT** mow in wet conditions.

Brush the lawn surface to disperse worm casts before mowing.

Spike compacted lawn areas with a fork. Fill the holes with sand to improve aeration and drainage.

Mow lawns in a different direction to the previous cut.

As a general rule the grass clippings should be removed each time you mow. If weather conditions are dry and hot and the grass is weed free, leave the clippings on the lawn to help maintain ground moisture.

Mow lawns twice a week when the grass is growing vigorously in the summer.

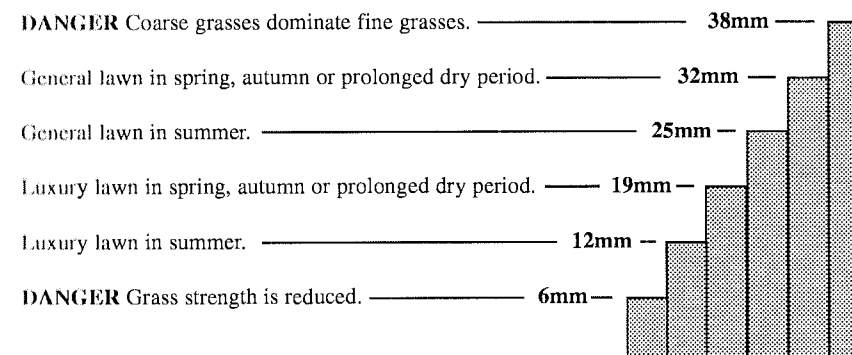
Mow lawns once a week in spring, autumn and during prolonged dry weather in the summer.

Prevent grass damage - DO NOT remove more than one third of the grass height in one cut.

MOWING AND GRASS CARE TIPS

Continued.

Recommended grass heights for lawns:

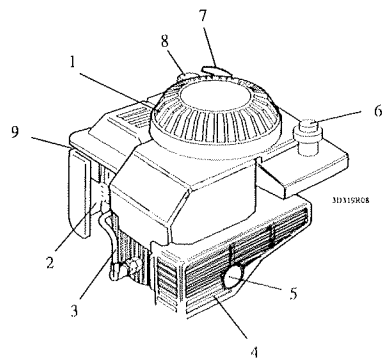


MAINTENANCE

WARNING - PREVENT ACCIDENTS: Stop the engine and disconnect the spark plug lead before attempting to carry out maintenance procedures on the mower.

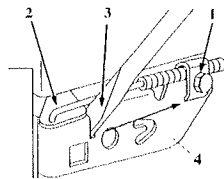
ENGINE

1. Finger Guard
2. Carburettor
3. Spark Plug / Lead
4. Muffler Guard
5. Muffler
6. Oil filler Cap/ Dipstick
7. Start Grip
8. Fuel Cap
9. Air Cleaner



THROTTLE CABLE ADJUSTMENT

Loosen the outer cable clamp screw (1) and move the governor control lever (2) to the left as far as possible. Insert a large, flat blade screw driver (3) into the slot in the engine control bracket (4) at the angle shown. Push the governor control lever to the right until it just touches the screw driver blade. Move the throttle control lever to the 'fast' position (not the 'choke' position) and re-tighten the outer cable clamp screw. Replace the engine cowl.



CARBURETTOR ADJUSTMENTS

Carburettor adjustments should only be made by an authorised Briggs & Stratton dealer. Under no circumstances should the engine be adjusted to run at a speed in excess of 3,100 r.p.m.

OIL SERVICE

Refer to the Maintenance Schedule at the end of this section and ensure that the recommendations are followed. More frequent service is required when operating in adverse conditions.

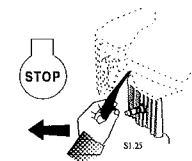
- Check the oil level every 5 hours or daily and ensure that the correct oil level is maintained. Refer to 'Before Starting the Engine: Oil Recommendations' for oil checking procedure and filling instructions.

- Drain the engine oil after the first 5 hours of operation and thereafter at the end of every grass cutting season.

- Change the oil while the engine is warm. Refill with fresh clean oil of the recommended SAE viscosity grade. Refer to 'Before Starting the Engine: Oil Recommendations'.

WARNING - PREVENT ACCIDENTS: Drain fuel from the tank by running the engine until the fuel tank is empty before attempting to tip the mower for oil draining purposes.

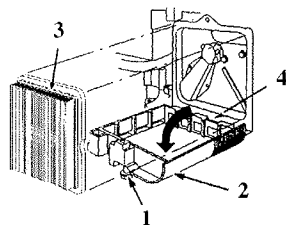
- Remove the spark plug lead and allow the engine to cool. Tip the mower over on to its left hand side thus ensuring that the air cleaner is kept uppermost to prevent engine damage. Remove the oil filler dipstick and drain the oil into a suitable container.



AIR CLEANER SERVICE

Refer to the Maintenance Schedule at the end of this section and ensure that the recommendations are followed. More frequent service is required when operating in adverse conditions.

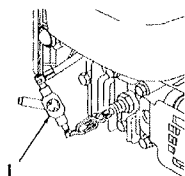
- Gain access to the cartridge (3) by loosening screw (1) and tilting cover (2).
- Replace the cartridge if very dirty or damaged.
- Clean the cartridge by tapping gently on a flat surface. Do not use petroleum solvents during cleaning as this will cause the cartridge to deteriorate. Do not use pressurised air as this may damage the cartridge. Do not oil the cartridge.
- After servicing the cartridge re-install it in the cover. Insert the tabs on the bottom of the cover into the slots in the bottom of the base (4). Tilt the cover upwards and securely tighten the screw to the base.



1. Screw
2. Cover
3. Cartridge
4. Base

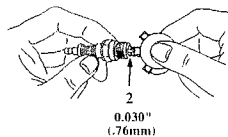
SPARK PLUG SERVICE

Use only Briggs & Stratton spark tester (1) to check for a spark as shown in the diagram.



Replace the spark plug every 100 hours or every season, whichever occurs first. A spark plug wrench is available from any authorised Briggs & Stratton service dealer.

The spark plug gap (2) should be checked with a feeler gauge and set at 0.76mm (0.030").

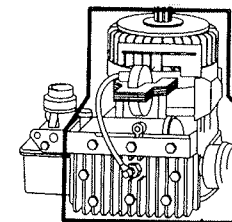
**KEEPING THE ENGINE CLEAN**

WARNING - PREVENT ACCIDENTS : Accumulation of debris around the muffler could cause a fire. Inspect and clean the engine after every use.

Remove all grass and debris from the engine including the muffler / muffler guard, the finger guard and the surrounding deck areas on a daily basis after use.

IMPORTANT - PREVENT ENGINE DAMAGE: Never spray the engine with water during cleaning. Water can contaminate the fuel. Always clean with a brush or compressed air.

NOTE: Grass and debris may clog the engine's air cooling system especially after prolonged operation while cutting tall, dry grass. The internal cooling fins and surfaces may require cleaning to prevent overheating and engine damage. This may be achieved by removing the blower housing and cleaning all areas shown within the black boundary line. We would recommend that this service be carried out by an authorised Briggs & Stratton dealer.

**GRASSBAG**

Remove grass debris from the grassbag immediately after use and check its condition for signs of damage.



WARNING - PREVENT ACCIDENTS: Replace a damaged grassbag immediately.

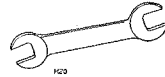
**DECK HOUSING**

Remove grass debris from the top and underside of the deck housing immediately after use.

IMPORTANT - PREVENT DAMAGE: Fertilisers and top dressings are particularly corrosive. Thoroughly clean the mower deck immediately after use on treated grass and store well away from corrosive materials.

SECURING NUTS AND BOLTS

Regularly check that all securing nuts and bolts are tight. Replace missing or damaged items immediately.



LUBRICATION

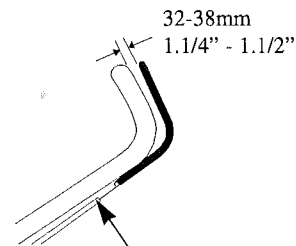
Lubricate the wheels, pivot points and linkages with engine oil every 25 operating hours.

Apply a good quality medium grease to the inner control cables at the point of entry and exit from their outer casings.

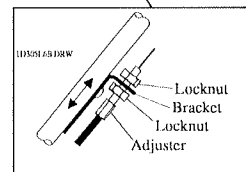


GROUND DRIVE CLUTCH CABLE ADJUSTMENT

Check the clutch cable operation every 25 operating hours and adjust if necessary. The clutch cable is adjusted correctly when the belt drive just engages with the clutch lever positioned 32-38mm (1.1/4" - 1.1/2") from the handlebar.



Unscrew the locknut and screw the adjuster as necessary. If there is insufficient thread adjustment the bracket position should be altered by removing the fastener and re-assembling the bracket using an alternative bracket hole. Tighten the locknut when correctly adjusted.



IMPORTANT - PREVENT DAMAGE: ALWAYS operate the mower with the clutch cable correctly adjusted. ALWAYS replace damaged cables.

CUTTERBLADE



WARNING - PREVENT ACCIDENTS: Never work on the cutterblade unless the spark plug lead has been removed. The cutterblade has sharp edges. ALWAYS wear strong gloves to protect your hands when working on the cutterblade. DO NOT rotate tools towards the cutting edges to avoid the risk of injury should the tool slip. ALWAYS use genuine Hayter replacement parts.

The condition of the cutterblade and its mounting arrangement should be checked regularly for signs of wear or damage. Ensure that the cutterblade is not bent or cracked.

A damaged cutterblade that is out of balance will vibrate excessively and may break. DO NOT use an unbalanced cutterblade.

Regularly check that the screws securing the cutterblade are tightened to the specified torque of 40Nm.

Replace the cutterblade and screws every 2 years or sooner if excessively worn or damaged.

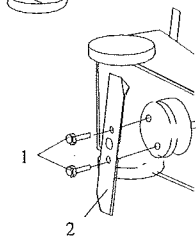
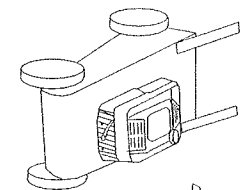
How to remove the cutterblade: Drain the fuel by operating the engine until the fuel tank is empty and the engine stops. Remove the spark plug lead and allow the engine to cool. Turn the mower on its left hand side and ensure that the air cleaner side of the engine is uppermost.

Firmly grip the end of the cutterblade with the gloved hand and remove the two fixing screws (1) securing the cutterblade (2).

How to assemble the cutterblade: Assemble the cutterblade with the turned up edges facing towards the engine. Secure the cutterblade using two new fixing screws (Hayter part no. 09747) and tighten to 40Nm torque.



WARNING - PREVENT ACCIDENTS: Never re-use the fixing screws. Always use new cutterblade fixing screws when refitting or replacing the cutterblade.

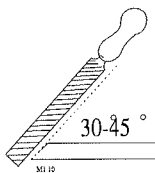


1. Fixing Screw
2. Cutterblade

CUTTERBLADE

Continued.

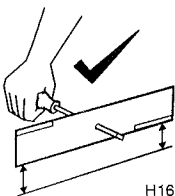
How to sharpen and balance the cutterblade: A slightly worn cutterblade may be re-sharpened. All cutting edges must be sharpened equally to ensure balance. Sharpen the cutterblade every 25 mowing hours or more frequently if conditions require. Remove the cutterblade from the mower and clean using a brush and water. Inspect the cutterblade for signs of damage.



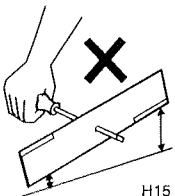
WARNING - PREVENT ACCIDENTS: DO NOT use a damaged or excessively worn cutterblade.

Sharpen both cutting edges with a flat file to restore the original cutting edges.

Ensure that the cutterblade is balanced. Use a screw driver with a round shaft to support the cutterblade through its centre hole. Hold the cutterblade horizontal and then release. A balanced cutterblade will remain horizontal. If the cutterblade is not balanced the heavy end will rotate downwards. Sharpen the heavy end until the cutterblade is correctly balanced.



H16



H15

MAINTENANCE SCHEDULE

Follow the hourly or calendar intervals, whichever occurs first. More frequent service will be required if working for prolonged periods under dusty, dry conditions, or when airborne debris is present or after extensive operation cutting tall, dry grass.

AFTER FIRST 5 HOURS

- Change engine oil

EVERY 5 HOURS OR DAILY

- Check oil level
- Remove grass debris from around engine, muffler/muffler guard and finger guard.
- Remove grass debris from top and underside of deck housing.
- Remove grass debris from the grassbag and check for signs of damage.
- Check condition of guards and safety devices.
- Check condition of cutterblade.

EVERY 25 HOURS OR EVERY SEASON

- Change engine oil if continuously operating under heavy load or high ambient temperature.
- Service air cleaner cartridge.
- Lubricate wheels, pivot points and linkages.
- Grease inner control cables at point of entry and exit from their outer casings.
- Check ground drive clutch cable adjustment.
- Sharpen cutterblade.

MAINTENANCE SCHEDULE Continued.

EVERY 50 HOURS OR EVERY SEASON

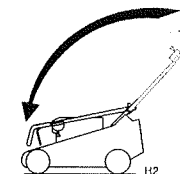
- Change engine oil.

EVERY 100 HOURS OR EVERY SEASON

- Clean engine cooling system. Clean more often under dusty conditions or when airborne debris is present or after prolonged operation whilst cutting tall, dry grass.
- Replace spark plug.

PREPARING THE MOWER FOR STORAGE

Handlebar storage: To lower the handlebar, unscrew the two securing knobs sufficiently to allow it to be pivoted forwards until it rests against the top of the engine. Take great care to ensure that the control cables do not become snagged at the handlebar pivot points.



Storage for periods in excess of 30 days: Engines stored in excess of 30 days need to be protected with Briggs & Stratton fuel additive or drained of fuel to prevent gum from forming in the fuel system or on essential carburettor parts. To ensure your mower is maintained in good working order it is important that the following procedure is adopted. Refer to the Maintenance section as necessary.

Drain fuel from the engine by operating the engine until it stops.

Disconnect the spark plug lead. Change the engine oil.

Remove the engine spark plug and pour 15ml of engine oil into the engine cylinder and replace the spark plug. Do not exceed the stated volume of oil as engine damage may occur on re-starting. **Do not replace the spark plug lead.** Slowly pull the engine start - grip once to crank the engine. This will distribute the oil and help prevent engine corrosion.

Clean grass and debris from the engine cylinder, cylinder head cooling fins, under top cowl, and around and behind muffler/muffler guard.

Clean all other areas of the mower and ensure that the grassbag is clean.

Lubricate the mower.

Treat metal parts with a water repellent anti-corrosion product.

Lower the handlebar, if desired.

Rest the mower deck on wooden blocks to remove the mower from its wheels / roller.

Cover the mower with a protective sheet and store it in a dry, ventilated area.

IMPORTANT - PREVENT DAMAGE: Fertilisers and top dressings are particularly corrosive. Thoroughly clean the mower immediately after use on treated grass and store well away from corrosive materials.

FAULT FINDING

PROBLEM	POSSIBLE FAULT	REMEDY
Engine will not turn over	Incorrect oil level	Check oil level
Engine smokes	Excess oil level Air cleaner cartridge oil soaked or plugged	Check oil level Service air cleaner
Engine runs then stops	Fuel starvation Fuel cap vent blocked	Fill fuel tank Clean fuel cap vent

FAULT FINDING

Continued.

PROBLEM	POSSIBLE FAULT	REMEDY
Engine will not start	Fuel starvation Engine cold Incorrect/contaminated fuel Spark plug lead disconnected Faulty spark plug	Fill fuel tank Set throttle to 'choke' position Drain fuel tank and fill with correct fuel Connect spark plug lead Clean and adjust gap or replace
Engine runs rough	Spark plug lead becoming disconnected in use Faulty spark plug Air cleaner cartridge blocked Incorrect/contaminated fuel	Connect spark plug lead Clean and adjust gap or replace Replace air cleaner cartridge Drain fuel tank and fill with correct fuel
Engine vibrates excessively	Mounting bolts loose Cutterblade screws loose Cutterblade out of balance Bent crankshaft	Tighten bolts Tighten screws Balance cutterblade Consult your dealer
Cutterblade drive will not engage/disengage	Faulty blade brake clutch	Consult your dealer

FAULT FINDING

Continued.

PROBLEM	POSSIBLE FAULT	REMEDY
Uneven cut	Undulating ground conditions	Change direction of travel
	Cutterblade worn	Sharpen the cutterblade
	Cutterblade out of balance	Balance the cutterblade
	Wheels / roller damaged	Inspect and replace as necessary
Discharge chute blocks	Grass is wet	Mow dry grass
	Cut height too low	Increase cut height
	Grassbag full	Empty grassbag
	Slow engine speed	Increase engine speed
	Airflow through the grassbag is restricted	Clean the grassbag
Mower is hard to push	Cut height too low	Increase cut height
	Wheels / roller damaged	Inspect and lubricate or replace as necessary
Mower will not self propel	Clutch out of adjustment	Adjust ground drive clutch cable
	Drive belt damaged	Replace drive belt
Poor grass collection	Airflow through the grassbag is restricted	Clean the grassbag
	Discharge chute blocked	Remove blockage
	Slow engine speed	Increase engine speed
	Wet grass	Mow dry grass
	Grassbag full	Empty grassbag

PARTS LIST

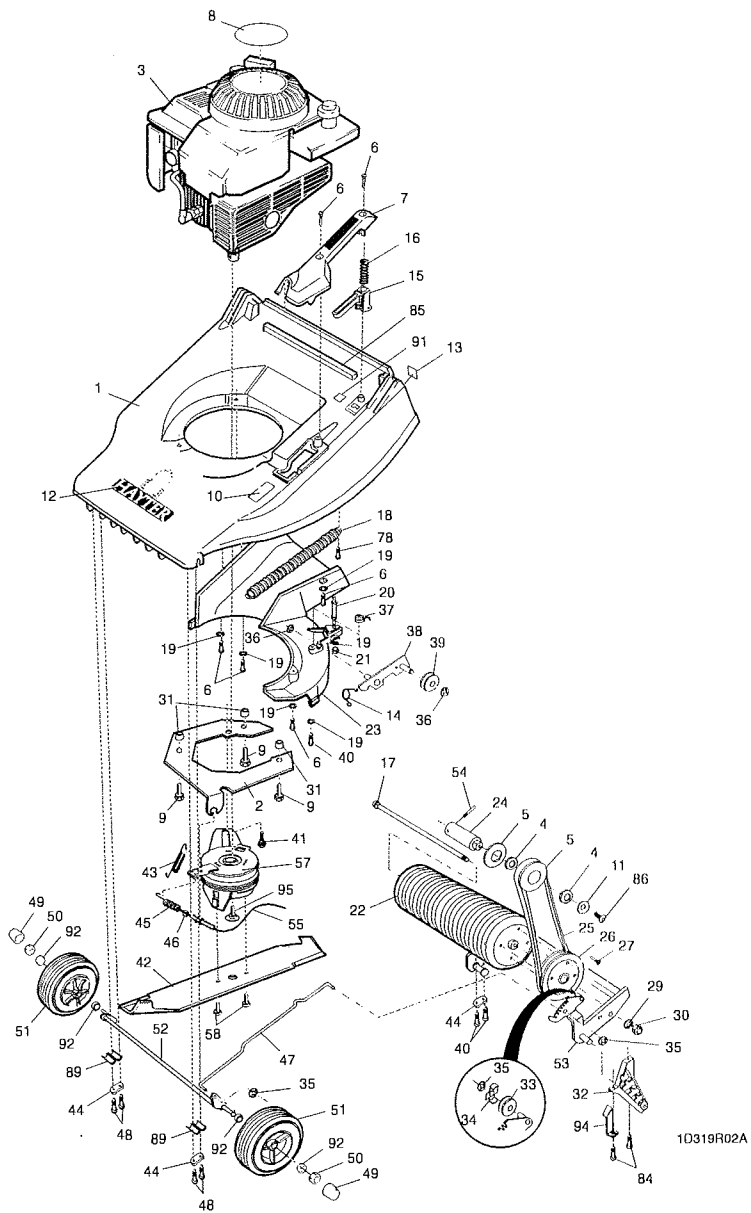
ITEM NO.	DESCRIPTION	PART NO.	QTY
1	Deck	319017	1
2	Plate Support W/A	319008W	1
3	Engine	319003	1
4	Spacer Washer	ZWQ1L000U	2
5	Pulley Half	306104	2
6	M6 x 16 Pan. Pozi Taptite Screw	09596	6
7	Height Adjuster Handle	305112	1
8	Decal (Engine Code 319R)	319012	1
9	3/8" x 2" UNC Taptite Screw	09591	3
10	Decal (Height of Cut)	305113	1
11	Disc Spring Washer	306110	1
12	Decal (Hayter / Royal Warrant)	300157	1
13	Decal (Serial No.)	—	1
14	Spring	301031	1
15	Trigger	300066	1
16	Trigger Spring	300067	1
17	Axle Bolt	308021	1
18	Compensating Spring	300070	1
19	M6 Plain Washer	09472	7
20	Pillar	300137	1
21	M6 Nylon Ins Nut	09544	4
22	Rear Roller	239065	1
23	Throwplate	300124	1
24	Shaft Drive	306103	1
25	Belt - V	306050	1
26	Driven Pulley	306102	1
27	No. 10 x 3/4" Screw	09706	4
28	Ferrule	305115	3
29	3/8" Plain Washer (Axle spacers)	09271	As Required
30	3/8" UNF Nylon Ins. 'T' Type Nut	09216	1
31	Spacer	321034	3
32	Axle Support	305130	1
33	Compensating Pulley	301020	1
34	Compensating Plate	301050	1
35	Grip-Fix	02385	3
36	Grip-Fix	04020	2
37	Bearing Half	301030	1
38	Jockey Arm Assembly	301015	1
39	Pulley Tensioner	239021	1
40	M6 x 16 Pozidrive Screw	09634	3
41	Screw Soc Shld M12 x M10 x 30	ZIS8L030S	1
42	Cutterblade	319002	1

PARTS LIST

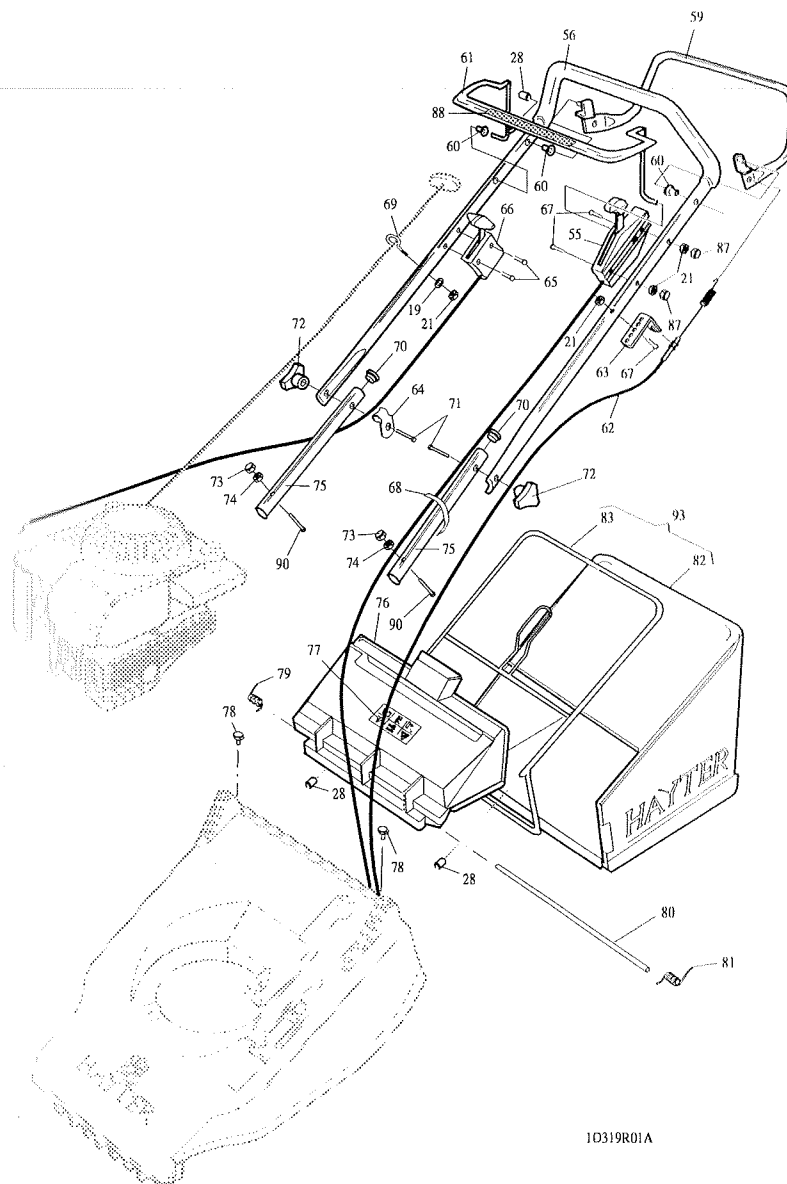
ITEM NO.	DESCRIPTION	PART NO.	QTY
43	Spring Tension	343011	1
44	Securing Plate	219037	3
45	Spring Compensating	319018	1
46	Nipple Split	510118	1
47	Connecting Rod	305109	1
48	M6 x 12 Hex W/Hd Screw	09546	4
49	Hub Cap	300155	2
50	1/2" Nyloc Wheel Nut	4486	2
51	6" Wheel (includes item 92)	300153	2
52	Front Axle Assembly	300111	1
53	Rear Roller Frame	306115W	1
54	Roll Pin	03997	1
55	Control Blade Brake	319005	1
56	Handlebar Upper	319007W	1
57	Warner BBC Soft Start	319010	1
58	Screw Soc Hd M10 x 25	09747	2
59	Lever Clutch	219090	1
60	Bush Clutch Lever	226034	3
61	Bail Arm Blade Clutch	319006W	1
62	Clutch Cable	306107	1
63	Bracket Clutch Cable	306108	1
64	Rope Guide	305127	1
65	Screw Taptite M5 x 35 Pozi	09359	2
66	Throttle Control	319004	1
67	Screw Pan Hd M6 x 55	09384	2
68	Cable Tie	3966	3
69	Rope Guide	305093	1
70	Tube Plug	300160	2
71	M8 x 45 Saddle Hd Bolt	226024	2
72	Knob	226013	2
73	M8 Nut Cap	234051	2
74	M8 Nylon Ins. 'T' Type Nut	09441	2
75	Handlebar Lower	300062	2
76	Deflector	305102	1
77	Decal (Caution)	219189	1
78	M6 x 20 Hex Washer Hd Screw	09575	3
79	Deflector Spring O/S	305111	1
80	Deflector Rod	305103	1
81	Deflector Spring N/S	305110	1
82	Grassbag	305104	1
83	Grassbag Frame	305105W	1

PARTS LIST

ITEM NO.	DESCRIPTION	PART NO.	QTY
84	M6 x 16 Hex Washer Hd Screw	09365	2
85	Sealing Strip	305119	1
86	Screw	ZHS1H016U	1
87	Nut Cap Plastic M6	343025	2
88	Decal (Operation)	343019	1
89	Axle Bush	305108	2
90	M8 x 40 Coach Bolt	09379	2
91	Decal (Height Of Cut)	320006	1
92	Bearing 1/2" Ball (suits item 51)	300154	4
93	Grassbag Complete Assembly	305118	1
94	Cable Clip	319011	1
95	Centre Bolt BBC	343029	1



10319R02A



10319R01A

These parts are available through an authorised Briggs & Stratton dealer.

FUEL ADDITIVE



P/N 5041
999005E

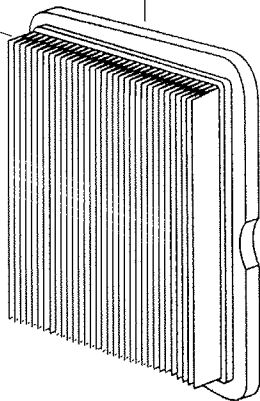


992030

AIR CLEANER CARTRIDGE

Air Cleaner Cartridge

491588

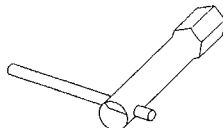


SPARK PLUG



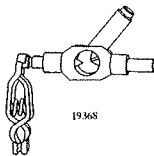
803593E

SPARK PLUG WRENCH



39838

SPARK PLUG TESTER



19368

About Your Engine Warranty

Briggs & Stratton will cover warranty repair and apologize to you if a defect is discovered. Any Authorized Service Dealer may perform warranty repairs. Most warranty repairs are handled routinely, but some repairs require special attention. For example, warranty repairs may not be appropriate if the engine has been damaged because of misuse, lack of routine maintenance, shipping, handling, or improper installation. Similarly, warranty repairs may not be made if the serial number of the engine has been removed or altered in any way.

If a customer wishes to return an engine to the factory for repair, the customer must first consult with the dealer to determine whether the warranty applies. The dealer must submit all supporting facts to the Distributor in order for the factory to review. If the Distributor or the Factory decides that the engine is defective, the customer will be fully reimbursed for the cost of the engine. To avoid misunderstanding which could occur between the customer and the Dealer, listed below are some of the conditions of the engine for which the warranty does not cover:

Improper maintenance: The life of an engine depends upon the conditions under which it operates and the care it receives. Some applications, such as lawnmowers and rotary mowers, are very often used in dusty or dirty conditions, which can cause what appears to be premature wear. Such wear, when caused by dirt, dust, spark plug cleaning grit, or other abrasive material that has entered the engine because of improper maintenance, is not covered by warranty.

This warranty covers engine related defective material and/or workmanship only, and not replacement or refund of the equipment to which the engine may be mounted. Nor does the warranty extend to repairs required because of:

1. PROBLEMS CAUSED BY PARTS THAT ARE NOT ORIGINAL BRIGGS & STRATTON PARTS.
2. Equipment controls or installations that prevent starting, cause unsatisfactory engine performance, or shorten engine life. (Contact equipment manufacturer.)
3. Leaking carburetors, clogged fuel pipes, sticking valves, or other damage, caused by using contaminated or stale fuel. (Use clean, fresh, lead-free gasoline and Briggs & Stratton gasoline stabilizer, Part No. 5041.)
4. Parts which are scored or broken because an engine was operated with insufficient or contaminated lubricating oil, or an incorrect grade of lubricating oil (check oil level daily or after every 8 hours of operation. Refill when necessary and change at recommended intervals.) Read "Owner's Manual."
5. Repair or adjustment of associated parts or assemblies such as clutches, transmissions, remote controls, etc., which are not manufactured by Briggs & Stratton.
6. Damage or wear to parts caused by dirt, which entered the engine because of improper air cleaner maintenance, re-assembly, or use of a non-original air cleaner element or cartridge. (At recommended intervals, clean and re-oil the Oil

Foam or elastomer of the foam pre-cleaner, and replace the cartridge.) Read "Owner's Manual."

7. Parts damaged by over speeding, or overloading caused by grass, debris, or dirt, which plugs or clogs the cooling fan, or flywheel area, or damage caused by operating the engine in a confined area without sufficient ventilation. (Clean fans on the cylinder, cylinder head and flywheel at recommended intervals.) Read "Owner's Manual."
8. Engine or equipment parts broken by excessive vibration caused by a loose engine mounting, loose cutter blades, unbalanced blades or loose or unbalanced impellers, improper attachment of equipment to engine crankshaft, over speeding or other abuse in operation.
9. A bent or broken crankshaft, caused by striking a solid object with the cutter blade of a rotary lawn mower, or excessive v-belt tightness.
10. Routine tune-up or adjustment of the engine.
11. Engine or engine component failure, i.e., combustion chamber, valves, valve seats, valve guides, or burned starter motor windings, caused by the use of alternate fuels such as, liquefied petroleum, natural gas, altered gasolines, etc.

Warranty is available only through a dealer which has been authorized by Briggs & Stratton Corporation, your nearest Authorized Service Dealer is listed in the "Yellow Pages" of your telephone directory under "Engines, Gasoline" or "Gasoline Engines," "Lawn Mowers," or similar category.

Briggs & Stratton Engine Owner Warranty Policy

Effective February 1, 1984, replaces all undated Warranties and all Warranties dated before February 1, 1984.

LIMITED WARRANTY

Briggs & Stratton Corporation will repair or replace, free of charge, any part, or parts of the engine that are defective in material or workmanship or both. Transportation charges on parts ordered for repair or replacement under this Warranty must be borne by purchaser. This warranty is effective for the time periods and subject to the conditions provided for in this policy. For warranty service contact your nearest Authorized Service Dealer as listed in the "Yellow Pages" under "Engines, Gasoline," "Gasoline Engines," "Lawn Mowers" or similar category. THERE IS NO OTHER EXPRESS WARRANTY APPLIED TO THIS WARRANTY, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO ONE YEAR FROM PURCHASE. ON TO THE EXTENT PERMITTED BY LAW ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED. LIABILITY FOR CONSEQUENTIAL DAMAGES UNDER ANY AND ALL WARRANTIES ARE EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Briggs & Stratton Corporation
F. P. Stratton, Jr.
Chairman and Chief Executive Officer

WARRANTY PERIOD

ENGINES	WITHIN U.S.A. AND CANADA		OUTSIDE U.S.A. AND CANADA	
	CONSUMER USE*	COMMERCIAL USE*	CONSUMER USE*	COMMERCIAL USE*
24 Magneton® engines	2 year - engine / Lifetime** - Magneton® Ignition			
24 Hercules® Power®, Europa™, Industrial Plus™ and all I/C®.	2 year	1 year	2 year	1 year
Diamond® and Diamond Power®.	2 year	90 days	2 year †	90 days
24 standard 2 through 18 HP engines installed on lawn mowers, riders, chainsaws, chainsaws, tillers, and all Sno-Gard engines.	2 year	90 days	1 year	90 days
24 other standard 2 through 18 HP engines	1 year	90 days	1 year	90 days

* For purposes of this warranty policy, "consumer use" means personal residential household use by the original retail consumer. "Commercial use" means all other uses, including use for commercial, income producing or rental purposes. Once an engine has experienced commercial use, it shall thereafter be considered as a commercial use engine for purposes of this warranty. Engines used in competitive racing or in commercial or rental fleets are not warranted.

** Lifetime limited warranty of the Magneton® Ignition covers parts and labor for the first five (5) years from the date of purchase, thereafter only parts. "Lifetime" means lifetime of the engine in the hands of the original purchaser.

† One (1) year in Australia, New Zealand, Middle East and Africa.

NO WARRANTY REGISTRATION CARD IS NECESSARY TO OBTAIN WARRANTY ON BRIGGS & STRATTON ENGINES. YOU MUST SAVE THE PURCHASE RECEIPT. A PROOF OF PURCHASE DATE WILL BE REQUIRED TO OBTAIN WARRANTY.

Briggs & Stratton Engines Are Made Under One Or More Of The Following Patents: Design D. 247,177 (Other Patents Pending)	4,520,288	4,355,253	4,168,268	DES. 308,872
2,711,869	4,243,676	5,191,854	5,058,890	5,016,588
2,899,113	5,197,425	5,150,674	5,040,644	4,996,956
				5,040,563
				4,995,119
				4,819,593
				4,694,792
				4,453,507
				4,430,594
				DES. 309,459
				DES. 309,457