REFERENCE COPY ONLY

PART NO: 343028 REV:
UP REV FROM: 0
SUPERSEDED BY:
AMENDMENT SHT:

HAYTER

MAKERS OF THE FINEST MOWERS

HARRIER 56

CODE 343R

(Blade Brake Clutch - Auto Drive)

OWNER'S HANDBOOK

HAYTER LIMITED, SPELLBROOK, BISHOP'S STORTFORD, HERTS, CM23 4BU, ENGLAND.

HAYTER LIMITED, SPELLBROOK, BISHOP'S STORTFORD, HERTS, CM23 4BU, ENGLAND

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 343R
2. Category.	Combustion Engine
3. Make.	Hayter
4. Type.	Rotary
5. Engine- Manufacturer.	Briggs & Stratton
- Type.	12F882-1581-21
- Speed of rotation during test.	3000 rpm

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

Guaranteed maximum sound power level.	100 dB(A)
- Type of cutting device.	Cutterblade
- Width of cutting device.	56 cm
- Speed of rotation of the cutting device.	3000 rpm

TESTED AT SUDBURY,
SUFFOLK, ENGLAND. 16-02-96

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 343R
Models	Harrier 56 (Blade Brake Clutch)

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. ISO5395. EN50081 and EN50082.

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

Signed: Date: 06-03-97

M.A. Wright
(Technical Director).

Lawnmower vibration information. RMS acceleration measured in 3 - axes at operators contact position on the handlebars. Code 343R = 11.0ms^{-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 a **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.

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 above 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** authorised 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 services, please write to: **HAYTER LIMITED, Service Department, Spellbrook, Bishop's Stortford, Herts. CM23 4BU.**

UK ONLY:-Details of your local **Hayter** authorised 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 56 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 two 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 screws 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. Cutterblades which are slightly worn can be resharpened. Ensure that both cutting edges are resharpened 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.

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

SAFETY PRECAUTIONS Continued.

Operation continued:

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 Continued.

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.

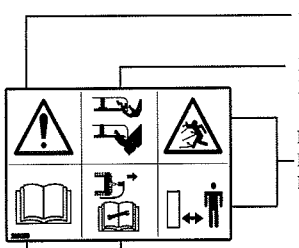
Check the grassbag frequently for wear or deterioration.

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



WARNING - CAUTION RISK OF DANGER - SAFETY ALERT.

DANGER OF SEVERING TOES OR FINGERS IN CUTTING MECHANISM.

DANGER OF BEING HIT BY THROWN OBJECTS. KEEP BYSTANDERS AT A SAFE DISTANCE FROM THE MACHINE.

STOP ENGINE AND REMOVE SPARK PLUG LEAD BEFORE PERFORMING MAINTENANCE OR REPAIR WORK.

CAREFULLY READ THE OWNERS HANDBOOK BEFORE USING THE MACHINE.

CUT HEIGHT ADJUSTMENT DECAL :
Part No. 320006



ENGINE SPEED DECAL :



BLADE BRAKE CLUTCH DECAL:
Part No: 343019

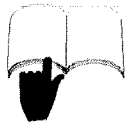


SPECIFICATIONS

MODEL	CODE 343R Blade Brake Clutch -Auto Drive
Engine	Briggs & Stratton Quantum XTL 50
Engine type	12F882-1581-21
Engine / cutterblade speed	3000 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	560mm (22 inch)
Cutting height	10 - 60mm (0.375 - 2.25 inch)
Overall dimensions	1,511 x 591 x 1,156mm (59.5 x 23.3 x 45.5 inch)
Dry Weight	47.4Kg (104.5 lbs)

ASSEMBLY INSTRUCTIONS

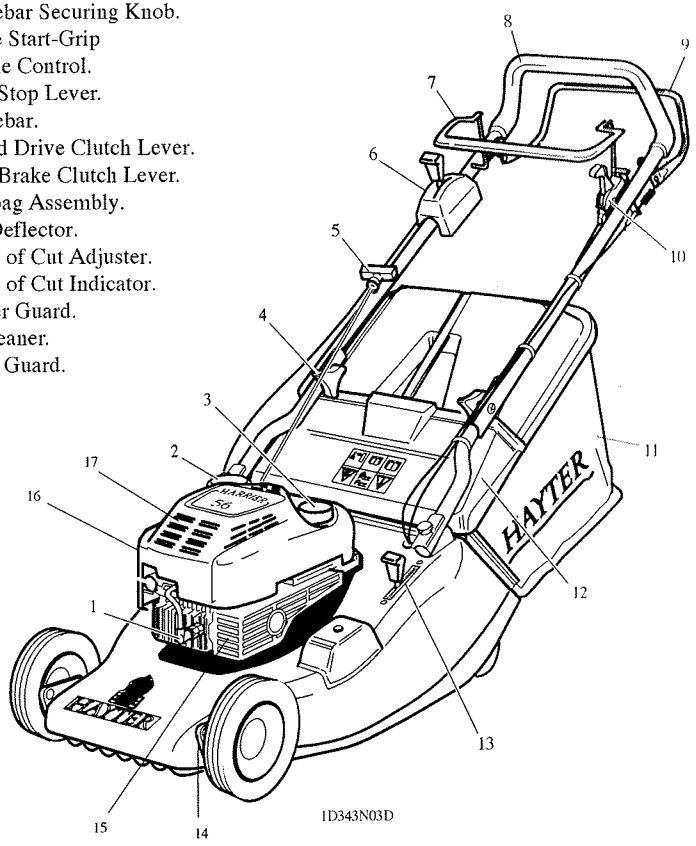
SAFETY NOTICE



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

GENERAL ASSEMBLY

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



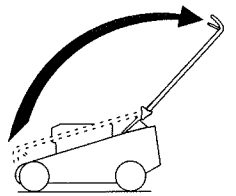
ASSEMBLING THE MOWER FOR THE FIRST TIME

DELIVERY CHECKLIST

Description	Quantity
Grassbag	1
Owner's Handbook	1
Warranty Registration Card	1

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.

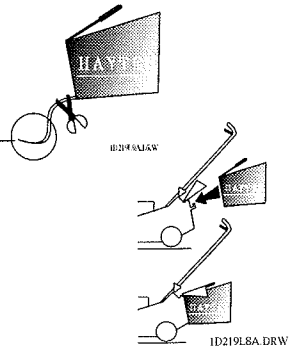
Assemble the handlebar: Unscrew the knobs securing the handlebar sufficiently to allow it to be pivoted. Move the blade stop lever away from the engine to avoid damage and unfold the handlebar to its operating position. Tighten the two knobs to secure the handlebar. Ensure that the knobs are assembled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



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: Identify the grassbag and 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

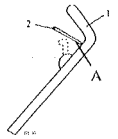


Raise the rear deflector and hook the grassbag over the raised lip at the rear of the mower deck. Lower the grassbag to rest against the rear of the mower. Finally lower the rear deflector to rest against the top of the grassbag.

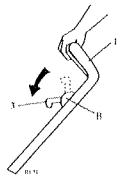
ASSEMBLING THE MOWER FOR THE FIRST TIME

Continued.

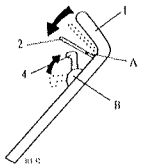
Check blade brake/clutch controls: Operate the blade stop lever (A) several times, to ensure the lever moves freely. Hold the lever against the handlebar in position (1) and check that it returns to position (2) when released.



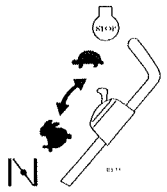
Use the right hand to hold the blade stop lever against the handlebar (1) and use the left hand to push the blade clutch lever (B) to the 'engaged' position (3). Remove the left hand and the blade clutch lever should remain engaged in the forward position (3).



Remove the right hand and check that the blade stop lever automatically returns to position (2) and that the blade clutch lever automatically returns to position (4).



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.



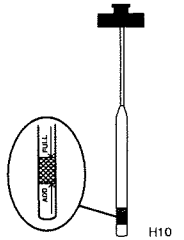
STARTING THE ENGINE

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.



H10

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.

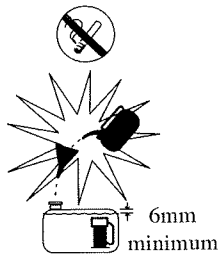
BEFORE STARTING THE ENGINE Continued.

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.

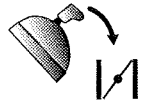
IMPORTANT: The fuel filler cap must be secured to prevent fuel leakage during operation.



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

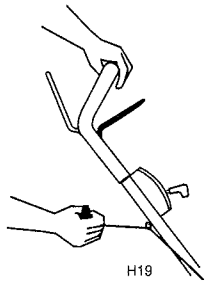
TO START THE ENGINE

Operate the throttle control lever: Push the lever to the '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".

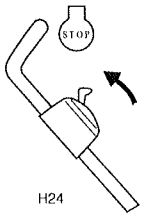
Allow the engine to warm up and return the throttle lever to the 'fast' position after starting a cold engine.



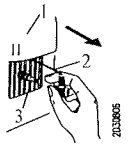
IMPORTANT - PREVENT ENGINE DAMAGE: Never pull the engine start-grip when the engine is running.

STOPPING THE ENGINE

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



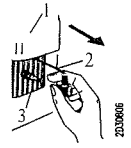
Emergency stop: If the throttle control lever fails, disconnect the spark plug lead to stop the engine.



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

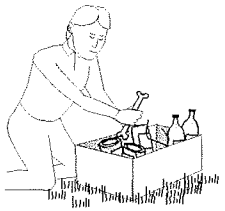
SAFETY NOTICE

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

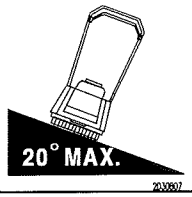


1. Engine.
2. Spark Plug Lead.
3. Spark Plug.

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.

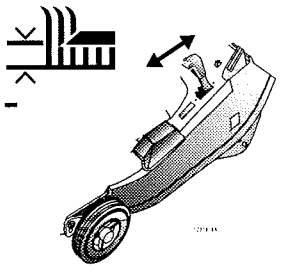


IMPORTANT - PREVENT ENGINE DAMAGE: DO NOT use the mower on a slope greater than 20 degrees.



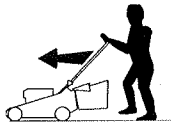
HEIGHT OF CUT

To adjust the height of cut: Grip the lever and pull sideways to disengage it from the locking notch, then push forwards to lower or pull backwards to raise the height of cut. Finally release the lever at the required position and ensure it locks firmly into one of the nine setting notches.



Always select a height of cut to suit the 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.

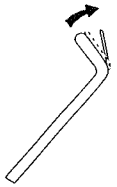
TRAVEL



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.

NOTE: The travel speed can be reduced, if desired, by using an optional 'Kit - Speed Reduction' Part No:- 219207 which is available through your Hayter Dealer.

TURNING THE MOWER

To make a wide turn : Steer the mower with the handlebar whilst travelling forward.

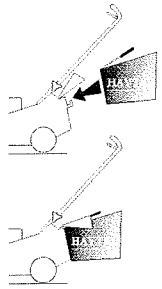
To make a tight turn : Stop and apply downward pressure on the handlebar to raise the front wheels of the mower just above ground level and steer the mower using the handlebar in the required direction.

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.

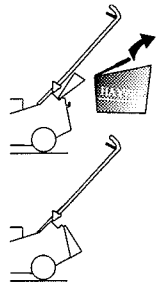
MOWING WITH GRASS COLLECTION

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.



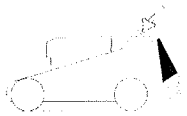
Grassbag attachment: Raise the rear deflector and hook the grassbag over the raised lip at the rear of the mower deck. Lower the grassbag to rest against the rear of the mower and finally lower the rear deflector to rest against the top of the grassbag.



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.

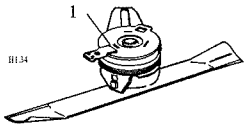
MOVING THE MOWER ACROSS NON-GRASSED AREAS

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

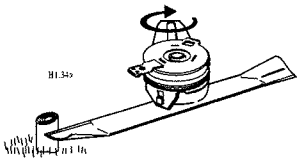
General information: The cutterblade is driven by the engine via a brake/clutch device (1) which enables the cutterblade to be engaged / disengaged using control levers whilst the engine is running. The cutterblade will stop within three seconds of releasing the blade stop lever.



1. Cutterblade brake/clutch

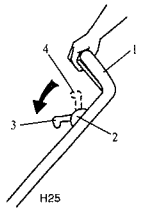
WARNING - PREVENT ACCIDENTS: DO NOT operate the mower if the cutterblade fails to stop within three seconds. Return the mower to your Hayter dealer for examination and repair.

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.

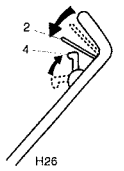


WARNING - PREVENT ACCIDENTS : ALWAYS disengage the cutterblade drive and stop the engine when a hidden obstruction or excessive vibration is encountered. Disconnect the spark plug lead and examine the cutting mechanism. ALWAYS replace a damaged cutterblade - refer to "Maintenance".

Engaging cutterblade drive: Use the right hand to hold the blade stop lever against the handlebar (1) and use the left hand to push the blade clutch lever (2) to the 'engaged' position (3). Remove the left hand and the blade cluch lever should remain engaged in the forward position (3).



Disengage cutterblade drive: Release the blade stop lever to disengage cutterblade drive. Check that the blade stop lever automatically returns to position (2) and that the blade clutch lever automatically returns to position (4) .



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.

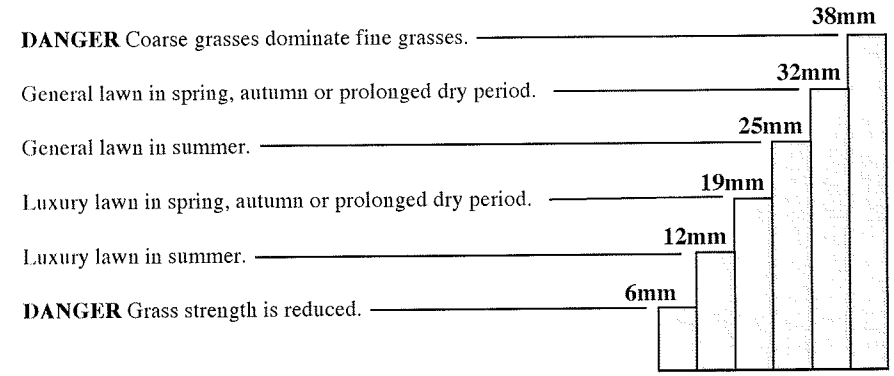
Mow lawns twice a week when the grass is growing vigorously in the summer.

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:



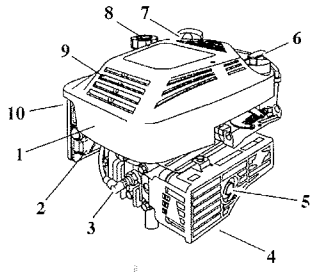
MAINTENANCE

MAINTENANCE

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

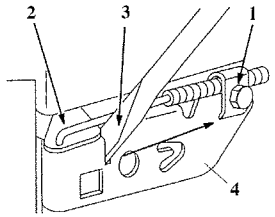
ENGINE

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



THROTTLE CABLE ADJUSTMENT

Remove two screws securing the engine cowl and remove the cowl to expose the throttle mechanism on the front of the engine. 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 3000 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.

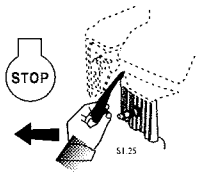
- Check the oil level every 5 hours or daily and ensure that the correct oil level is maintained. Refer to-'Before Starting the Engine: Oil Recommendations' for oil checking procedure and filling instructions.

- 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

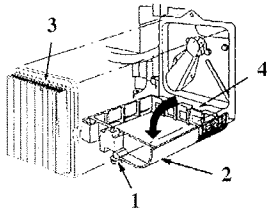
Refer to the Maintenance Schedule at the end of this section and ensure that the recommendations are followed. More frequent service is required when operating in adverse conditions.

- 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.

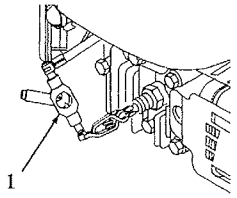
- After servicing the cartridge re-install it in the cover. Insert the tabs on the bottom of the cover into the slots in the bottom of the base (4). Tilt the cover upwards and securely tighten the screw to the base.



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

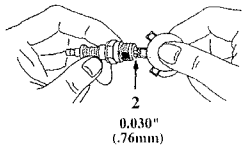
SPARK PLUG SERVICE

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").

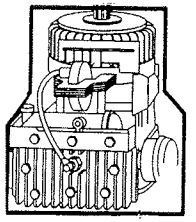


KEEPING THE ENGINE CLEAN

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 air ways in the top cowl 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

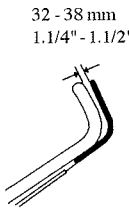
Lubricate the wheels, pivot points and linkages with engine oil every 25 operating hours.



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

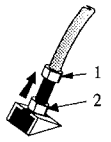
GROUND DRIVE CLUTCH CABLE ADJUSTMENT

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.Tighten the locknut when correctly adjusted.

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



1. Adjuster
2. Locknut

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.

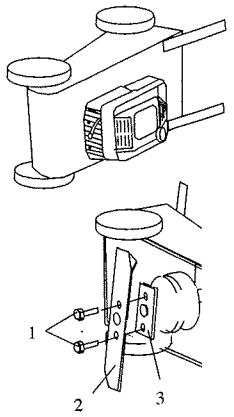
The condition of the cutterblade and its mounting arrangement should be checked regularly for signs of wear or damage. Ensure that the cutterblade is not bent or cracked.

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.



CAUTION- PREVENT INJURY : It is wise to seek assistance when turning the mower onto its side.

Firmly grip the end of the cutterblade with the gloved hand and remove the two fixing screws (1) and distance piece (3) securing the cutterblade (2).

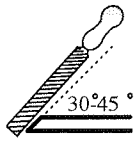
How to assemble the cutterblade: Assemble the cutterblade (2) with the turned up edges facing towards the engine. Fit the distance piece (3) and secure the cutterblade using two new fixing screws (HayterPart No: 09732) and tighten to 40 Nm torque.

1. Fixing Screw
2. Cutterblade.
3. Distance Piece

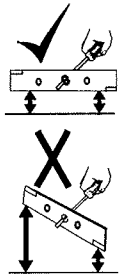
WARNING - PREVENT ACCIDENTS: Never reuse the fixing screws. Always use new cutterblade fixing screws when refitting or replacing the cutterblade.

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.

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 air ways in the top cowl.
- 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.

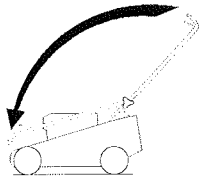
EVERY 50 HOURS OR EVERY SEASON

- 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 of 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, 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.	Check oil level.
	Air cleaner cartridge oil soaked or plugged.	Service air cleaner.
Engine runs then stops.	Fuel starvation.	Fill fuel tank.
	Fuel cap vent blocked.	Clean fuel cap vent.

FAULT FINDING

PROBLEM	POSSIBLE FAULT	REMEDY
Engine will not start.	Fuel starvation.	Fill fuel tank.
	Incorrect / contaminated fuel.	Drain fuel tank and fill with correct fuel.
	Spark plug lead disconnected.	Connect spark plug lead.
	Engine cold.	Set throttle to choke position.
	Faulty spark plug.	Clean and adjust gap or replace.
Engine runs rough.	Spark plug lead becoming disconnected in use.	Connect spark plug lead.
	Faulty spark plug.	Clean and adjust gap or replace.
	Air cleaner cartidge blocked.	Replace air cleaner cartidge.
	Incorrect / contaminated fuel.	Drain fuel tank and fill with correct fuel.
Engine vibrates excessively.	Mounting bolts loose.	Tighten bolts.
	Cutterblade screws loose.	Tighten screws.
	Cutterblade out of balance.	Balance cutterblade.
	Bent crankshaft.	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 contours.	Change direction of travel.
	Cutterblade worn.	Sharpen the cutterblade.
	Cutterblade out of balance.	Balance 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	Belt	340049	1
2	5/8" Circlip	1428	1
3	Cutterblade Packer	419029W	1
4	3/16" Washer	09257	4
5	Spring	5421	2
6	Cutterblade	343007	1
7	5/8" Plain Washer	09286	1
8	5/16" Spring Clip	04020	1
9	Bush	4452	1
10	M6 x 12 Csk. Pozi Taptite Screw	09545	4
11	Wheel	5218	2
12	Hub Cap	219143	2
13	M6 Nut - Nylon Insert 'T' type	09544	3
14	M6 x 20 Hex. Washer Hd. Taptite Screw	09575	2
15	1/2" Plain Washer	02575	1
16	Support Plate Assy	343012W	1
17	5/16" Plain Washer	09266	1
18	1/2" Plain Washer	09280	2
19	M6 Plain Washer	09472	8
20	Handlebar Clamp	340028	2
21	3/4" Circlip	02708	2
22	1/2" Circlip	03096	1
23	3/16" x 3/4" Roll Pin	03997	4
24	3/8" UNC x 2" Taptite Screw	09591	3
25	Spacer	321034	3
26	1/2" UNF Nylon Insert Nut	4486	2
27	5/16" Starloc Washer	0201086	2
28	Height Adjuster Knob	330053	1
29	Spring	343011	1
30	Pulley	219111	1
31	Spring	1246	1
32	Screw Taptite M5 x 35 Pozi	09358	2
33	M6 x 16 Hex. Washer Hd. Taptite Screw	09365	18
34	Frame Rear Roller	340044	1
35	M8 x 40 Coach Bolt	09379	2
36	M6 x 12 Washer Hd. Taptite Screw	09546	2
37	M8 Nut Nylon Insert 'T' Type	09441	2
38	Rivet	09320	4
39	M6 x 20 Coach Bolt	09668	1
40	M6 x 30 Hex. Hd. Bolt	09547	1
41	Nut Cap Plastic M6	343025	2

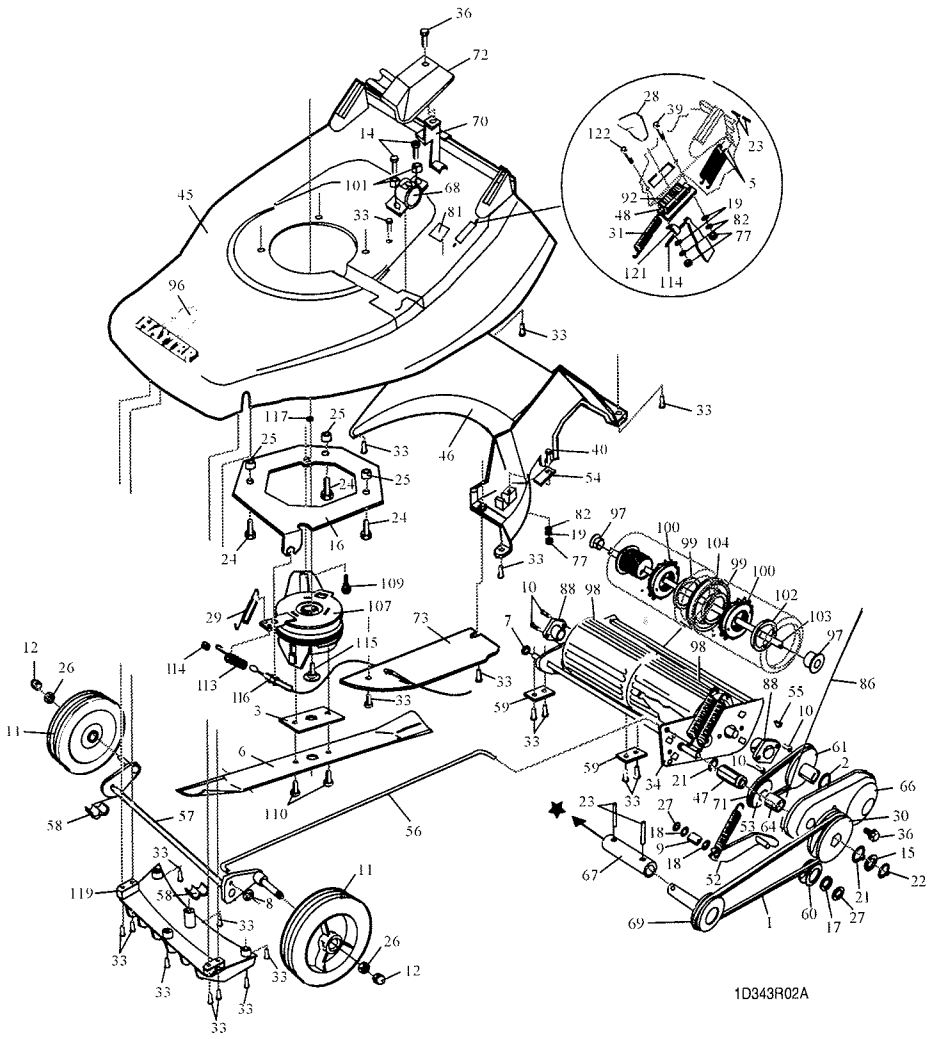
PARTS LIST

ITEM NO.	DESCRIPTION	PART NO.	QTY.
42	M8 x 45 Coach Bolt	226024	2
43	Screw Pan Hd M6 x 55	09384	2
44	Setscrew M4 x 35	09704	1
45	Mainframe Assembly	340205V	1
46	Throwplate	340011	1
47	Idler Sprocket Sleeve Assembly	219095	1
48	Ratchet Plate	340102	1
49	Cable Clip	219097	1
50	Nut Cap	234051	2
51	Lower Handlebar - Nearside	340103	1
52	Jockey Lever	219023	1
53	Sprocket - 10 Teeth	219106	1
54	Securing Plate	219028	1
55	Woodruff Key	5321	1
56	Connecting Rod	340014	1
57	Front Axle Assembly	340020	1
58	Bearing Moulding	219036	2
59	Securing Plate	219037	2
60	Jockey Pulley	219156	1
61	Sprocket - 17 Teeth	219051	1
62	Lower Handlebar - Offside	340104	1
63	Engine	343026	1
64	Spacer	219053	1
65	Clutch Cable Bracket Stop	306108	1
66	Transmission Cover	219055	1
67	Coupling	340109	1
68	Bearing Housing Moulding	219060	1
69	Pulley Assembly	340105	1
70	Belt Guide Bracket	219064	1
71	Chain	219054	1
72	Transmission Cover	340050	1
73	Underguard	343015	1
74	Rear Deflector	340022	1
75	Pivot Rod	340024	1
76	Deflector Spring	340052	2
77	M6 Plain Nut	09437	3
78	Bush Lever	226034	3
79	Rope Guide	305093	1
80	Clutch Lever	219090	1
81	Decal - Height of Cut	320006	1
82	M6 Spring Washer	09474	3

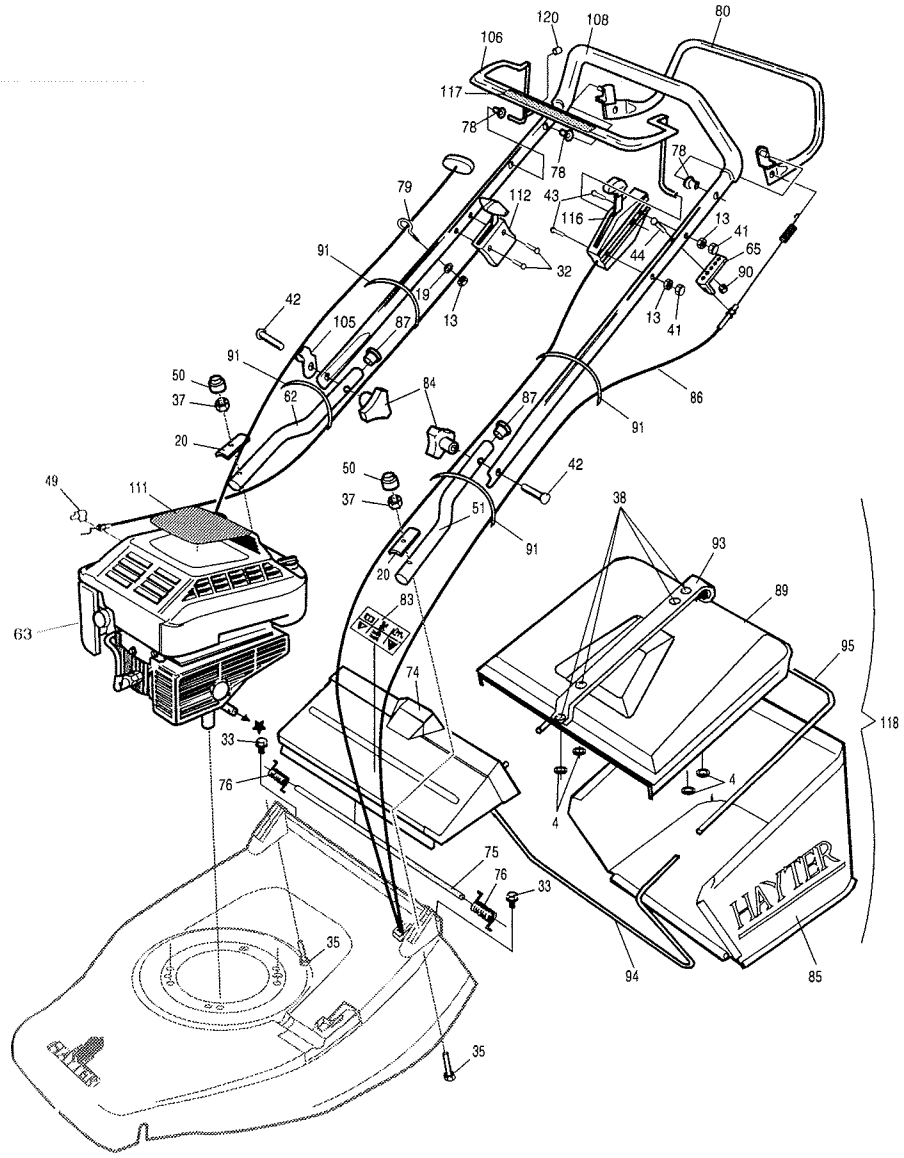
PARTS LIST

ITEM NO.	DESCRIPTION	PART NO.	QTY.
83	Decal - Caution	219189	1
84	Handwheel	226013	2
85	Grassbag Fabric	340071	1
86	Clutch Cable	340056	1
87	Tube Plug	300160	2
88	Roller Bearing Housing	219102	2
89	Grassbag Cover	340072	1
90	Nut M4 Nyloc Insert	09657	1
91	Cable Tie	3966	4
92	Brush Seal	340082	1
93	Grassbag Handle	340073	1
94	Grassbag Frame Assembly	340075	1
95	'U' Tube	340078	1
96	Decal - Hayter & Royal Warrant	219186	1
97	Oilite Bush - Roller	340129	2
98	Roller Assembly	340139	2
99	Spacer - Nylon	340149	2
100	Roller Free Wheel	340150	2
101	Bush	340154	2
102	Locknut	340163	1
103	Roller Shaft	340162	1
104	Shroud Freewheel	340168	1
105	Rope Guide	305127	1
106	Blade Stop Lever	319006W	1
107	Blade Brake Clutch	343008	1
108	Upper Handlebar	319007W	1
109	Screw Soc Shld M10 x 12 x 30	ZIS8L030S	1
110	M10 x 25 Soc. Hd Csk. Screw	09732	2
111	Decal - Engine (CODE 343R)	343017	1
112	Throttle Control & Cable	319004	1
113	Compensating Spring	319018	1
114	Nipple Split	510118	1
115	Centre Bolt BBC	343029	1
116	Control BBC Assy	343030	1
117	Decal - Operation	343019	1
118	Grassbag Assembly (Includes Items 4, 38, 85, 89, 93, 94 & 95)	340070	1
119	Front Fin Insert	340190	1
120	Ferrule Plastic	305115	1
121	Cable Clip	287034	1
122	M6 x 25 Coach Bolt	09735	1

2.4 343R MAINFRAME DIAGRAM 2.4



2.5 343R UPPER MAINFRAME DIAGRAM 2.5



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

Fuel Additive



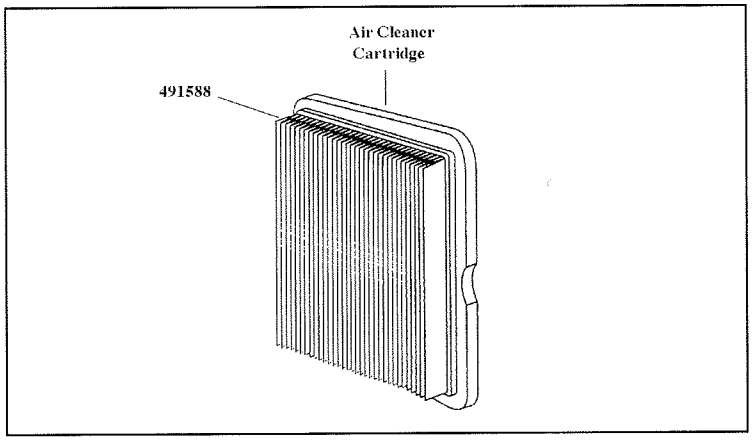


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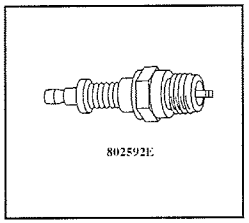
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999005E

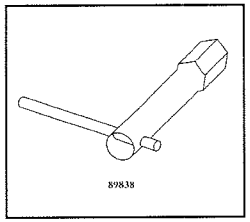
Air Cleaner Cartridge



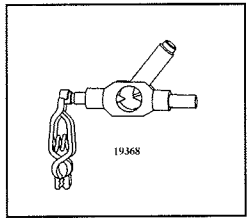
Spark Plug



Spark Plug Wrench



Spark Plug Tester



About Your Engine Warranty

Briggs & Stratton welcomes warranty repair and apologizes to you for being inconvenienced. Any Authorized Service Dealer may perform warranty repairs. Most warranty repairs are handled routinely, but sometimes requests for warranty service may not be appropriate. For example, warranty would not apply if engine damage occurred because of misuse, lack of routine maintenance, shipping, handling, warehousing or improper installation. Similarly, warranty is void if the serial number of the engine has been removed or the engine has been altered or modified.

If a customer differs with the decision of the Service Dealer, an investigation will be made to determine whether the warranty applies. Ask the Service Dealer to submit all supporting facts to his Distributor or the Factory for review. If the Distributor or the Factory decides that the claim is justified, the customer will be fully reimbursed for those items that are defective. To avoid misunderstanding which might occur between the customer and the Dealer, listed below are some of the causes of engine failure that 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 lifters, pumps 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® element or the foam pre-cleaner, and replace the cartridge.) Read "Owner's Manual."
7. Parts damaged by over-speeding, or overheating caused by grass, debris, or dirt, which plugs or clogs the cooling fins, or flywheel area, or damage caused by operating the engine in a confined area without sufficient ventilation. (Clean fins 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, liquified petroleum, natural gas, altered gasolines, etc.

Warranty is available only through service dealers which have 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, 1994, replaces all undated Warranties and all Warranties dated before February 1, 1994

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 submitted 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. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO ONE YEAR FROM PURCHASE, OR 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*
All Vanguard™ engines.	2 year - engine / Lifetime** - Magnetron® ignition			
All Diamond Plus®, Europa™, Industrial Plus™ and all I/C®.	2 year	1 year	2 year	1 year
Quantum® and Diamond Power®.	2 year	90 days	2 year †	90 days
All standard 2 through 18 HP engines installed on lawn mowers, riders, edgers, chippers, shredders, tillers, and all Sno/Gard engines.	2 year	90 days	1 year	90 days
All 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 on commercial or rental tracks are not warranted.*

** Lifetime limited warranty of the Magnetron® 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)

5 320 795	5 265 700	5 197 422	5 105 331	5 040 503	4 995 357	4 895 119	4 520 288	4 355 253	4 168 288	DES. 308 872
5 271 363	5 243 878	5 191 864	5 088 690	5 016 588	4 977 879	4 819 593	4 453 507	4 270 509	DES. 309 458	DES. 308 871
5 269 713	5 197 425	5 150 674	5 040 844	4 996 956	4 971 219	4 694 792	4 430 984	4 233 534	DES. 309 457	