HOW TO ORDER REPAIR PARTS

Use only manufacturer's authorized or approved replacement parts. The letter placed on the end of the part number denotes the type of finish for the part, C for chrome, Z for zinc, a PA for purchased assembly. It is important that you include this when ordering a part. Do not use attachments or accessories not specifically recommended for this unit. In order to obtain proper replacement parts you must supply the model number of your mower (see nameplate).

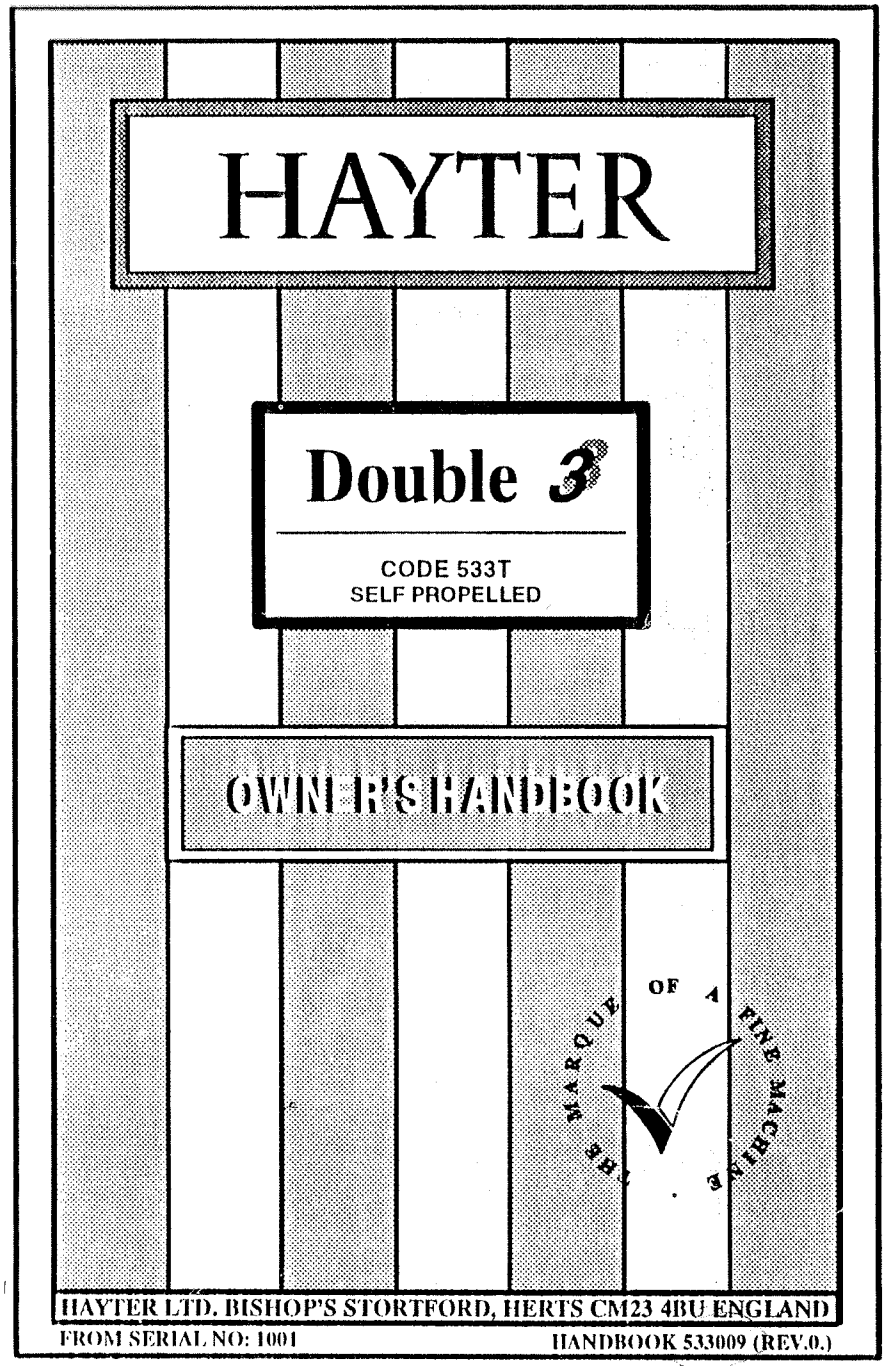
Replacement parts are available from your local Hayter dealer.

When ordering the following information is required:

(1) The Model Number
(2) Serial Number
(3) Part Number
(4) Description
(5) Quantity

F-94464

Reference



F-94464

LIMITED WARRANTY

Hayters PLC warrants to the original user / purchaser that this unit shall be free from defects in material and workmanship under normal use and service for a period of two years from the date of purchase. This warranty does not cover engines or wearing parts i.e. belts, blades, blade adaptors and tyres. 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.

Engine manufacturers furnish their own warranties and provide services through their authorised network. If you experience any difficulty in obtaining warranty for these items, please contact your specialist **Hayter** dealer.

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

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

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

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

OWNER'S INFORMATION

This instruction book is written for a person with some mechanical ability. Like most service books, not all the steps are described. Steps on how to loosen or tighten fasteners are steps anyone can follow with some mechanical ability. Read and follow these instructions before you use the unit.

Know your product: If you understand the unit and how the unit operates, you will get the best performance. As you read this manual, compare the illustrations to the unit. Learn the location and the function of the controls. To help prevent an accident, follow the operating instructions and the safety rules. Keep this manual for future reference.

IMPORTANT: It is the responsibility of the owner to make sure the assembly instructions in this manual are exactly followed. The owner must carefully check the unit according to the instructions in this manual before it is first used.

RESPONSIBILITY OF THE OWNER

The responsibility of the owner is to follow the instructions below.

1. Carefully read and follow the rules for safe operation.
2. Follow all the assembly and preparation instructions.
3. Inspect the unit.
4. Make sure that the operator of the unit knows how to correctly use all standard and accessory equipment.
5. Operate the unit only with guards, shields, and other safety items in place and working correctly.
6. Correctly adjust the unit.
7. Service the unit only with Hayter approved replacement parts.
8. Complete all maintenance on the unit.

IMPORTANT

SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS

Training

1. Carefully read the Owner's Handbook. Be thoroughly familiar with the controls and the proper use of the equipment.
2. Never allow children to operate a power mower. Do not allow adults to operate it without proper instructions.
3. Keep the area of operation clear of all persons, particularly small children.
4. Make sure the engine has stopped before leaving the operator's position.

Preparation

1. Thoroughly inspect the mower and area where the equipment is to be used. Remove all stones, sticks, wires, bones, and other foreign objects which might be thrown causing an injury or damage.
2. Always wear substantial footwear. Do not operate the equipment when barefoot or wearing open shoes.
3. Always wear safety glasses or an eye shield when you operate the unit to protect your eyes from foreign objects that can be thrown from the unit. Always wear eye protection when you make adjustments or repairs.
4. Check the fuel before starting the engine. Do not fill the petrol tank indoors, when the engine is running, or until the engine has been allowed to cool for several minutes after running. Do not smoke while refuelling. Clean off any spilled petrol before starting the engine
5. Disengage the drive clutch before starting the engine.
6. Never attempt to make any adjustments to items such as the wheel height or grass catcher while the engine is running.
7. Plan your mowing pattern to avoid discharge of material toward roads, pavements, bystanders and the like.

Operation

1. Do not change the engine governor settings or overspeed the engine.
2. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
3. Always be sure of your footing. Keep a firm hold on the handle and walk, never run. Never operate the equipment in wet grass.
4. Stop the engine when crossing gravel drives, walks, or roads.
5. After striking a foreign object, stop the engine. Remove the wire from the spark plug. Inspect the blade and mower for damage. If damaged, repair before starting and operating the mower.
6. If the equipment should start to vibrate abnormally, stop the engine, and check immediately for the cause. Vibration is generally a warning of trouble, such as a blade that is damaged, a loose blade, or the engine mounting bolts are loose.
7. Stop the engine; whenever you leave the equipment, before cleaning the mower housing, and when making any repairs, inspections, or adjustments (except for carburettor).
8. When cleaning, repairing, or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.
9. Do not run the engine indoors.
10. Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging the chute.
11. Mow across slopes; never up and down. Exercise extreme caution when changing directions on slopes. Do not mow excessively steep slopes (maximum 15 degrees) or areas where the ground is very rough. See the "Guide" in the back of this manual to check a slope.
12. Never operate the mower without proper guards, deflectors, safety controls, plates, or other safety protective devices in place.
13. Use extreme caution when reversing or pulling the mower towards you.
14. Mow only in daylight or in good artificial light.

Maintenance and Storage

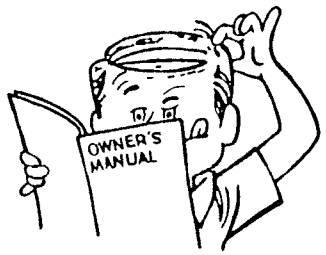
1. Frequently check the blade for wear or damage such as cracks and nicks. A blade that is bent or damaged must be immediately replaced with a factory replacement blade. For safety and good cutting performance, replace the blade every two years. Frequently check the blade bolt and the engine mounting bolts. Replace damaged bolts and tighten loose bolts.
2. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
3. Never store equipment with petrol in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
4. To reduce fire hazards, keep the engine free of grass, leaves, or excessive grease.
5. Replace faulty silencers.
6. Check the grass catcher bag frequently for wear or deterioration. For storage, always make sure the grass bag is empty. Replace a worn bag with a new factory replacement bag for safety
7. Use only Hayter approved replacement parts.

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SAFE MOWING GUIDE

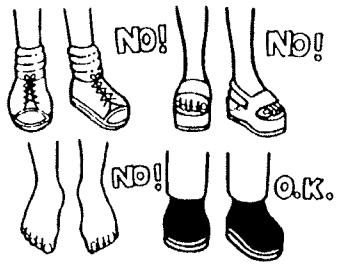
Every person who uses power equipment must learn the difference between proper and improper use, safe and unsafe mowing practices. **Read the next few pages carefully. They can help you learn.** Too often the mower user is inexperienced, not properly instructed, or has not read the Instruction Book and instructions on the unit before using it for the first time. This can result in unsafe use endangering the operator, bystanders, and the equipment. Another result can be a poor appearance of the area mowed.

Read this Instruction Book. Read the instructions on the unit. Operate the mower according to the Safe Mowing Guide and other safety rules and recommendations in this Instruction Book and on the unit. Make sure anyone who uses the unit has read the instructions and has been told how to operate the mower safely.



Your mower is designed to provide good service and durability in normal residential cutting. If the mower is not properly serviced and maintained or used on unsuitable terrain or in conditions not suitable for mowing, product performance and safety will be reduced.

Proper attire is an important part of safe mowing. Safety glasses protect the eyes from thrown objects. Safety shoes with steel toes can protect a foot from being cut by the blade. Sensible clothing that covers the arms and legs can stop or deflect a thrown object.



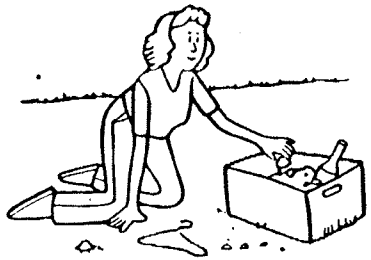
Practice using the mower before you actually begin cutting grass. Select a large open level area. Learn the location and function of the controls and how they work. It is important that the blade can be stopped quickly in an emergency. Learn how to cut and how to keep control of the mower at all times.

Many mowers are started manually. When using a pull start or rope start, place your feet firmly and away from the blade. Hold the rope handle securely, but never wrap the rope around your arm or fingers for a "better grip".

The mower is designed for use by one person. Always mow alone. A mower is not for amusement or for carrying objects.



Is the area you are planning to mow wet? Never cut a wet lawn. Cutting wet grass can cause an accident. It can affect mower performance and also cause problems with future lawn growth and appearance. Wet grass is slippery and might cause the operator to fall or the mower to slip. Someone could be hurt by touching the blade. Wet grass tends to clog the mower, causing poor discharge. Wet clippings bunch up on the lawn retarding the growth of grass. A wet mower can cause parts to rust and reduce the useful life of the unit.



When you look over the lawn, refresh your memory about hard, immovable obstacles such as pipes, stumps, and rocks and avoid them. They can cause damage to the mower or an accident injuring the operator or a bystander. Take a litter bag along and walk over the area to be cut. Pick up any stones, toys, wire, bones, or other loose objects. These items can damage the mower or they can become dangerous flying objects if the mower blade hits them. The blade of a power mower travels very fast. It can throw rocks and other objects with force over long distances. Objects thrown by mowers can break windows, cause bruises, or even put out an eye. Often the person hurt by a thrown object is a bystander such as a child, another family member or a neigh-

SAFE MOWING GUIDE

bor. Keep people and pets completely away from the mowing area. Direct the mower's discharge away from areas where people can be. Planning your mowing pattern has a double benefit. It can reduce chances of an injury and makes cleaning up after mowing easier.



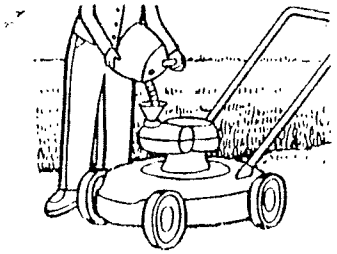
Are there ditches, walls, or major inclines in the area to be cut? Plan the mowing pattern to avoid such danger areas. Inclines and rough terrain must be mowed carefully and some areas must not be cut with a mower at all. With walk behind equipment, mow across the incline so that if you or the mower slip, you won't run into each other.

Never mow slopes greater than 15 degrees. See the "Guide" in the back of this Instruction Book to check any slopes.

Ready to start cutting? Not yet. Be sure the mower has been fully assembled according to directions in the Instruction Book. Even if assembly was done by a lawn and garden shop or the store where the unit was purchased, it must be checked. Are all nuts, bolts and screws tight? Does the engine have oil? These items must be checked periodically throughout the life of the mower.

Your mower has a petro engine. Petro is dangerous. Store fuel only in an approved petro container. Do not store large amounts of petro. Put out all cigarettes, pipes and cigars before working with petro. Store fuel and the mower itself in a well ventilated area away from any possible source of ignition such a pilot light on a boiler. If the mower is to be stored for an extended time, remove the fuel from the tank. This minimizes the chance of a fire and keeps the tank clear of deposits and old fuel, thus improving mower performance. Move the mower outside before adding petro. Use a funnel and wipe up any spilled fuel before starting. Remember, petro expands when heated so leave some expansion room. Also, most mower fuel caps are vented to allow for expansion. Always use the proper cap. People are needlessly burned by fires, hurt in explosions, mowers and other property are damaged because of failure to follow basic safety rules related to petro and fueling.

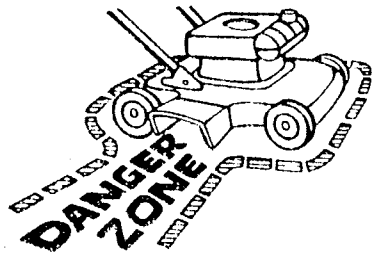
Never add petro to an engine that is running or that is hot from recent use, this can cause an accident. Remove dry grass and other debris from the mower. Keeping the mower clean will improve the performance, help the engine stay cooler, extend the life of moving parts, and minimize the danger of fire. People get burned working with and around their mowers for other reasons than fire and explosions. It takes only a few seconds of operation for the engine and the silencer to become hot. Do not touch these parts when the mower is running. Stop the engine and let it cool down before servicing the mower. Remember, exhaust fumes can be dangerous. Never operate the engine indoors or in an enclosed area.



Getting a new mower can be a big event for a family. Let family members satisfy their curiosity about the mower and at the same time, tell them about its dangers. Remember, a mower is not a toy and is not for use by children or anyone lacking in age, strength or experience.

As with any power equipment, a mower can be dangerous if not assembled, misused, or not properly maintained. The most important rule is to always use good judgement and common sense.

Your mower will cut thick grass and heavy plant stems with ease. Fingers and toes are no more resistant to the mower's blade. Many people are injured because they "forgot" and reached into the discharge chute. Always treat your lawn mower as if the blade is rotating. Never perform any service or try to make any adjustment,except carburettor, while the engine is running.

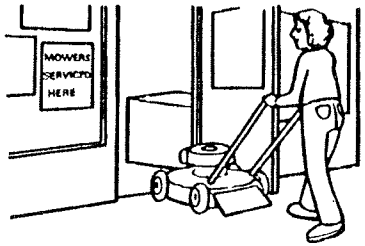


Use only accessories suited for your mower. Use of improper accessories can reduce the safety designed into both the mower and the accessory, it can even damage the unit. Read and follow the instructions which come with the accessory and the mower.

Use only Hayter approved service parts. If you need professional service, select a shop that is an Authorised Service Centre for your brand

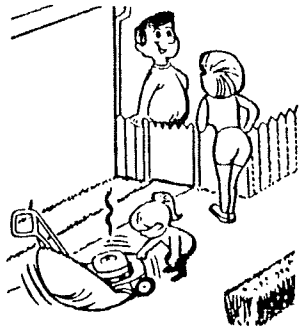
SAFE MOWING GUIDE

of mower. If you plan to service the unit yourself, follow directions in the Instruction Book.



As you mow, remember children and pets are sometimes attracted to the activity. Be especially careful when trimming around shrubbery or when reversing. If at all possible, don't mow when moving backwards. It is dangerous because vision is restricted. Also, blades are designed to cut while the unit is moving forward so cutting performance is reduced when mowing in reverse.

Never leave the mower running and unattended. Shut off the engine. Put the mower in a position so that it can not roll. If the unit is self–propelled, make sure the drive control is disengaged.



When mowing, be aware of your condition and the weather conditions. After mowing a long time, you will be tired. This is the time when reactions slow down, your attention wanders; the time when you are most likely to have an accident. Take a short break. If temperatures are high, take precautions to avoid becoming dehydrated. If you are angry, tired, or unable to give your full attention to mowing, if you have been consuming alcohol, medicines, or drugs, do not use your mower or any type of power equipment.

If weather conditions become worse while you are cutting, stop and finish later. Cutting grass in the rain is no fun and it is dangerous. Always seek shelter in an electrical storm. In extremely dry mowing conditions, your safety glasses can serve a dual purpose by protecting your eyes from dust and thrown objects, also a dust or pollen mask can be helpful.



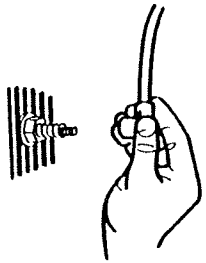
Your mower is equipped with a number of safety features which are important to the safety of the operator and bystanders and must never be altered or removed. If a safety feature becomes inoperable, lost, or damaged, it must be repaired or replaced before the mower is used.

Engine speed is a key to safe mowing and a nice looking lawn. The maximum speed of the engine on your mower has been set at the factory. Do not change the engine governor in any way.

Select the maximum engine and ground speed that is right for the terrain and the height of grass. You get the best cutting and bagging performance when using a grass catcher by operating the engine at maximum speed. Never walk fast or run just to get the job done sooner. On inclines, reduce ground speed and exercise extreme care.

It is best to mow only during daylight hours; however, if you must mow in the late afternoon or evening, make sure there is good artificial light.

Your mower will require maintenance including service and adjustments before and after use as with any machine. The frequency of the maintenance is generally based on hours of use, however, the frequency can vary because of mowing conditions. Check the Instruction Book for more detailed instructions. Proper maintenance protects your investment in the mower and helps ensure that it will function safely and reliably.



Never attempt any service (with the possible exception of carburettor adjustment) with the engine running. After turning the engine off, always disconnect the spark plug wire to prevent accidental restarting while the unit is being serviced.

While mowing, if you hit a foreign object, stop the engine. Remove the spark plug wire. Carefully and thoroughly inspect the mower for damage. Make necessary repairs before restarting. If the unit starts to vibrate abnormally,

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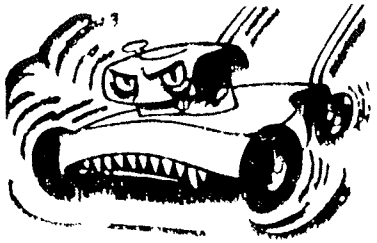
...engine immediately and check for the cause. Vibration is generally a warning that so... Keep all nuts, bolts, and screws tight. The blade is the most dangerous part of the mower and also the most important part in obtaining a nice lawn appearance. Check the blade and the blade mounting hardware frequently. Keep it tight. If the blade hits a solid object, check it thoroughly for deformation or cracks and replace if damaged. For safety, replace the blade every two years. A sharp blade reduces the work load on the engine and cuts grass more cleanly, for a better looking cut with ... The blade is always close to the outside of the mower housing. For best trimming on side discharge mowers, cut with the left side of the housing toward the area that needs trimming.

A useful accessory for your mower is a grass catcher. There are grass catchers available for most models. For best performance and safety, be sure the grass catcher is approved for use with your mower. Assemble as directed and follow operating and safety instructions with the catcher and in the Instruction Book. Before mounting, checking or emptying the grass catcher, always turn the engine off. Remember to check the grass catcher before each use for cracks, wear, or deterioration. Replace any part that is damaged with the manufacturer's recommended replacement part before using the grass catcher again.



Proper cutting technique is important if your ... Avoid the temptation to cut grass too short. Cutting grass too ... of the plant, cause grass to turn yellow, or make the lawn look brown and thatchy. Use the ... cutting heights in cool months when the grass is lush. Use the higher cutting heights in extremely dry periods. Cutting with dull blades or low engine speed bruises, shreds, and can uproot some grass making the lawn look dull and brown a few days after cutting. Always put the throttle control in FAST position when mowing and bagging. When ... slower ground speed will provide the ...

Change the mowing pattern slightly each time you cut. If you always cut the same way, the grass will develop a "set" and clippings will accumulate more heavily in some areas more than in others causing grass to get thinner in those areas. Do not service your mower over the grass. Spilled oil or fuel can kill the grass. In tall grass or very heavy grass, do not try to cut it all at once. Raise the height of cut on the first cutting and lower it for the next cutting the same day or within a few days. Another way is to cut only part of the width of the mower and adjust your ground speed (not the engine) to move more slowly so the mower can clear itself as it moves forward.



When cutting with a walk behind mower, always push the unit. Do not pull it. Pushing the unit keeps the operator behind the mower in the "operator's zone" for better control. Pushing the unit also gives you a chance to see exactly where and what you are mowing. There will be times while you are mowing that you will have to pull the mower backwards (such as when the front of the mower has come up against a wall or fence). If you must back up, make sure your feet are in the clear. Stand well back from the mower, plant your feet firmly with each step and back up being careful to look behind you. Resume normal mowing as soon as possible.

If your unit is self-propelled, remember that the drive mechanism is not designed to do all the work, but the unit can move without your help. Always keep your hands on the handle near the controls when the engine is running. Remember too that the self-propelled mechanism can be dangerous. Keep hands and feet away from belts and chains. Always turn off the engine before attempting to remove anything that becomes entangled in the self-propelled system.

Remember, your mower is a useful tool, but it can be dangerous. Follow the instructions in this Instruction Book. Use the mower properly and carefully and it will give you many hours of trouble free, accident free operations.

STEPS TO FOLLOW

BEFORE MOWING

- Be sure to dress correctly. Wear hard shoes, not sandals or soft shoes.
- Examine the blade. A blade that is bent, cracked, or damaged must be replaced with a factory replacement blade.
- Fill the fuel tank outside. Clean off spilled fuel.
- Read and follow the Owner's Handbook, the instructions with the engine, and the instructions with any attachments. These instructions are for your safety and the safety of others.
- Exhaust fumes are dangerous. Start the engine outside.
- Make sure all safety devices are in place and working correctly.
- Operation of the mower is only for a person that has experience.
- Wet grass can be dangerous. Let the grass dry.
- Instruct children and others to keep away from the work area.
- Never cut the grass without good light.
- Pick up loose objects. Remove them from the mowing area.

WHILE MOWING

- Watch for fixed objects and avoid them. They can damage the mower or cause injury.
- A hot engine and silencer will cause a burn. Do not touch.
- Inclines and slopes must be carefully mowed. See the "Guide" in the back of this book to check a slope.
- Lack of daylight or good artificial light is cause to stop mowing.
- Examine the mower, the blade, and other parts for damage after hitting a foreign object or if the unit vibrates excessively.
- Do not make adjustments or repairs without stopping the engine (except for carburettor). Disconnect the spark plug wire.
- On or near roads, watch out for traffic. Direct discharge away from roads.
- When mowing, avoid areas where traction is unsure. Look back before changing direction of travel.
- In heavy grass, raise the cutting height. Cut slower. Stop the engine to remove clogged grass from the mower.
- Never remove any safety related parts.
- Do not pour fuel into a engine that is hot or running.

AFTER MOWING

- Always let the mower cool before storing in an enclosed area.
- Foreign material on the mower is dangerous. Clean off grass, leaves, grease and oil before storing.
- Tighten all loose nuts, bolts and screws before you use the unit.
- Empty and clean any grass catcher or other accessory.
- Disconnect the spark plug wire to prevent unauthorized use.
- Make sure the mower is not kept near a source of ignition. Petro fumes can cause an explosion.
- Only Hayter approved replacement parts can be used to service the mower.
- When storing the mower for an extended period, remove the fuel from the fuel tank.
- Instruct children to leave the mower alone. It is not a toy.
- Never keep petro near a source of ignition. Always use an approved container. Keep petro away from children.
- Lubricate according to the Instruction Book. See "Lubrication".

IMPORTANT—Read the Instruction Book. Keep this book for future use and reference.

WARNING: Look for this symbol to point out important safety precautions. It means: "Attention! Become Alert! Your Safety Is Involved."

PREPARATION

UNPACKING INSTRUCTIONS

The mower was fully assembled at the factory. When the mower was put in the carton, the handle was put in the storage position. To put the handle in the operating position, follow the steps below.

1. Remove the mower from the carton.
2. Put the **handle supports** in the operating position (Figure 1).
3. The three holes in the **adjuster straps** change the height of the **handle** six inches. Mount the **adjuster straps** to the **pins** on each side of the **handle supports**. Fasten with the **R–clips**.
4. Put the **handle** in the operating position. Tighten the **knob**.

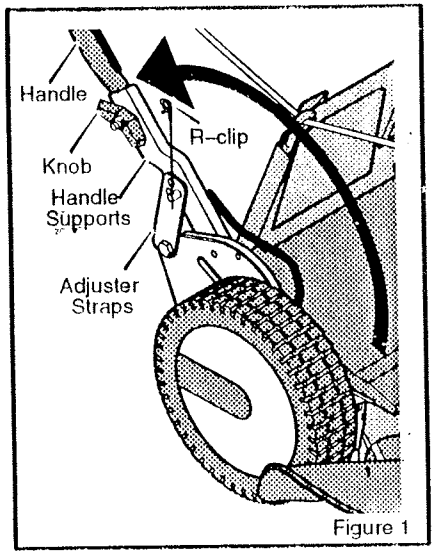


Figure 1

HOW TO PREPARE THE ENGINE

ENGINE DOES NOT CONTAIN
OIL OR PETRO

See the engine manufacturer's instructions for the type of fuel and oil to use. Before you use the unit, read the information on safety, operation, maintenance, and storage.

WARNING: Follow the engine manufacturer's instructions for the type of fuel and oil to use. Always use an approved petro container. Do not smoke when adding petro to the engine. When inside an enclosure, do not fill with petro. Before you add petro, stop the engine. Let the engine cool for several minutes.

PREPARATION

HOW TO MOUNT THE GRASS BAG

1. Slide the **frame assembly** into the ends of the **support tube** (Figure 2).
2. Slide the **support tube** and the **frame assembly** into the **grass bag**.

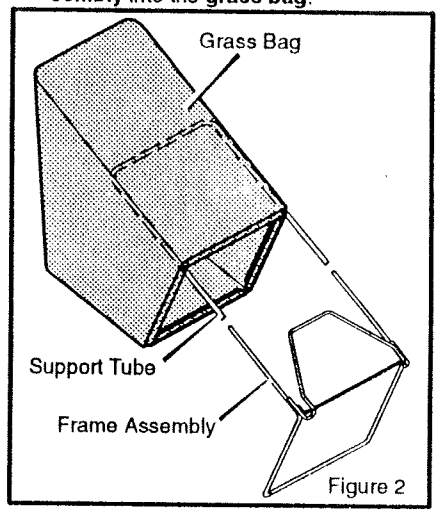


Figure 2

3. Attach the **plastic clips**, on all four sides of the grass bag, to the frame assembly (Figure 3).

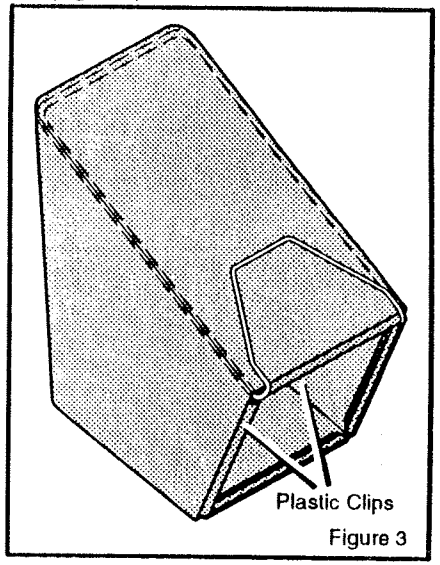


Figure 3

4. Hold the **handle** on top of the grass bag. Open the **rear door** and remove the mulcher plug (Figure 7). Mount the grass bag to the **rear plate** (Figure 4). Make sure the **top corners** of the frame assembly lock over the **rear plate**.

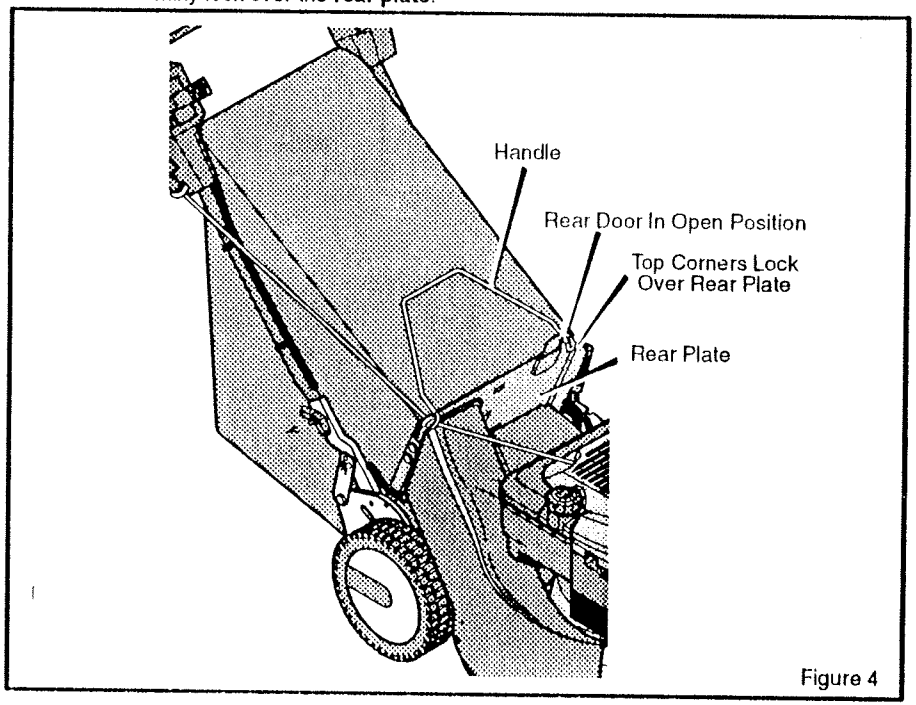


Figure 4

HOW TO MOUNT THE SIDE DEFLECTOR

WARNING: To prevent the engine from starting, disconnect the wire from the spark plug.

1. Remove the **rear discharge assembly** (Figure 6).
2. Slide the notch in the **side deflector** around the **shoulder bolt** (Figure 5).
3. Fasten the front and back of the **side deflector** with two **wing nuts**.

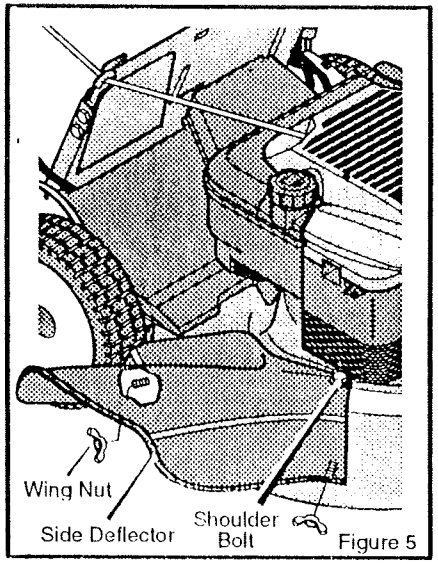


Figure 5

HOW TO MOUNT THE REAR DISCHARGE ASSEMBLY

WARNING: To prevent the engine from starting, disconnect the wire from the spark plug.

1. Remove the **side deflector** (Figure 5).
2. Remove the mulcher plug.
3. Slide the notch in the **rear discharge assembly** around the **shoulder bolt** (Figure 6).
4. Fasten the bottom of the **rear discharge assembly** with two **wing nuts**.

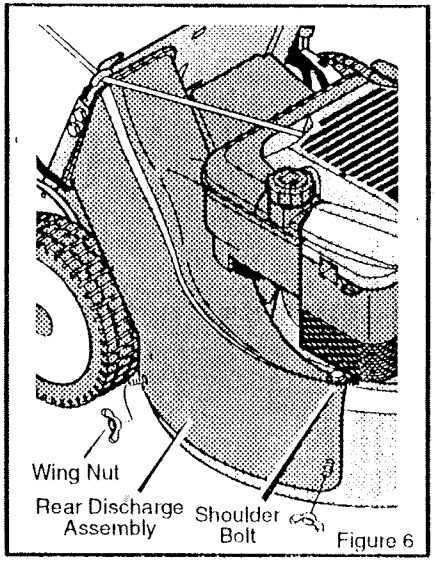


Figure 6

FINAL ASSEMBLY

Before you use the mower, check the assembly of the wheels, the handle, and the controls. Make sure all the fasteners are tight. Make sure the throttle control and the engine stop lever work correctly.

HOW TO CHANGE THE MULCHER PLUG

WARNING: To prevent the engine from starting, disconnect the wire from the spark plug.

The **mulcher plug** lets you mulch the grass for a clean, fine cut. To discharge the grass into the grass bagger, remove the **mulcher plug** as follows.

How To Remove The Mulcher Plug

1. Open the **rear door**.
2. Remove the **mulcher plug** from the discharge opening (Figure 7).

How To Install The Mulcher Plug

1. Open the **rear door**.
2. Slide the **mulcher plug** into the discharge opening.
3. Close the **rear door**. Make sure the **rear door** is tightly against the **rear panel**.

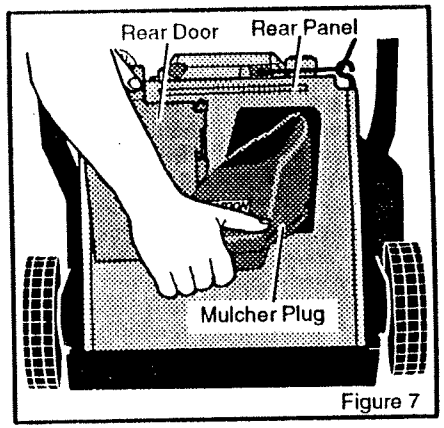


Figure 7

MULCHING TIPS

Mulching finely cuts the grass so that the grass can be easily recycled. Because the nutrients are returned to the soil, the lawn will need less fertilizer. To correctly mulch the lawn, follow the tips below.

- The grass must be dry. If the grass is wet, it will be difficult to cut and cause heavy clumps of grass.
- The grass must not be too tall. The maximum height to effectively cut is 4 1/2 inches (11.5 cm.). Set the height adjusters so that only the top third of the grass is cut.
- If the grass is more than 4 1/2 inches (11.5 cm.) high, two mowings will be necessary. For the first mowing, set the height adjusters in the highest position. Then, lower the height adjusters for the second mowing.
- Keep a sharp edge on the blade. A blade that is not sharp will cause the ends of the grass to become brown.
- Clean the underside of the mower housing. Grass and other debris can keep the mower from working correctly.

If the quality of cut is marginal, try the following:

- Set the height adjusters at a higher cutting height.
- Cut the grass more frequently.
- Operate the mower at a slower ground speed.
- Overlap the cutting swaths instead of cutting a full swath with each pass.
- Mow across the marginal areas a second time.

ENGINE STOP LEVER

Release the **engine stop lever** and the engine and the blade will automatically stop. To run the engine, hold the **engine stop lever** in the **Operating position** (Figure 8).

Before you start the engine, operate the **engine stop lever** several times. Make sure the cable moves easily.

HOW TO STOP THE ENGINE

To stop the engine, release the **engine stop lever.** Disconnect the wire from the spark plug to prevent the engine from starting.

If the engine will not stop, hold a screwdriver against the spark plug and against the engine cooling fins. The spark will go to ground and the engine will stop. Before you start the engine, check the engine stop cable. Make sure the engine stop cable is assembled correctly. Before you operate the unit, replace a bent or damaged engine stop cable.

REAR WHEEL DRIVE SYSTEM

CAUTION: Before you move the speed control, release the drive lever . If the drive lever is not released, the transmission can be damaged.

The mower has a three-speed transmission with a rear wheel drive system. To change the speed, follow the steps below.

1. The **drive lever** must be in the **DISENGAGED** position.
2. Move the **transmission speed control** to the desired speed.
3. To go forward, hold the **drive lever** against the handle in the **ENGAGED** position (Figure 8).
4. To shift to a different speed, release the **drive lever.** The mower will automatically stop. Move the **transmission speed control** to another speed.
5. To stop, release the **drive lever.** The **drive lever** will automatically move to the **DISENGAGED** position.

Check the operation of the drive system as follows.

1. With the engine *not running* and the **drive lever** in the DISENGAGED position, pull the mower backwards. The rear wheels must freely turn.
2. With the engine *not running* and the **drive lever** in the **ENGAGED Position**, pull the mower backwards. The rear wheels must now be engaged and will not turn.
3. If the drive system does not operate correctly, adjust the drive cable. See "How To Adjust The Drive Cable" in the maintenance section.

NOTE: To stop the engine, release the engine stop lever.

WARNING: For safe operation, the drive system must immediately disengage when the drive lever is released. If the drive system does not disengage correctly, do not operate the mower until the drive system is adjusted or repaired by an authorised service centre.

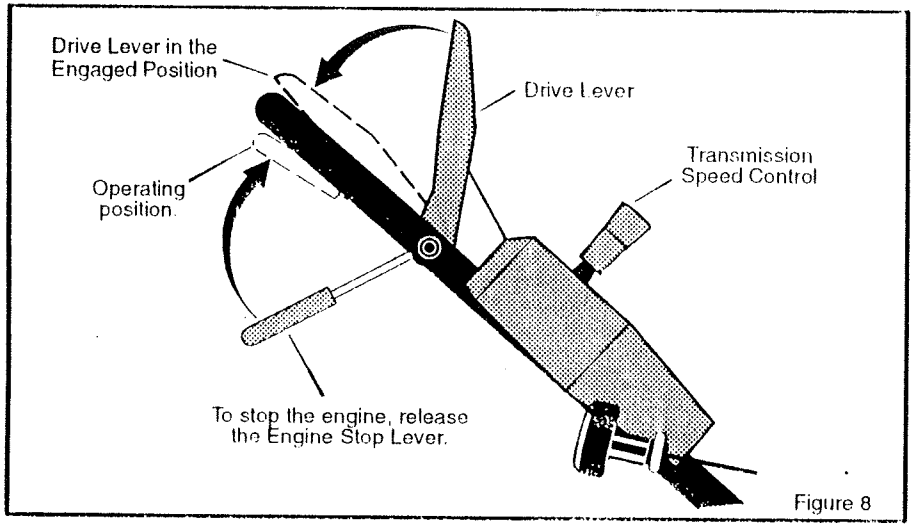


Figure 8

HOW TO START ENGINE

WARNING: The blade will rotate when the engine runs.

IMPORTANT: Before you start the engine, operate the engine stop lever several times. Make sure the engine stop cable moves freely.

1. Check the oil.
2. Fill the fuel tank with regular unleaded petro. Make sure the petro is clean. Leaded petro will increase deposits and shorten the life of the valves.

   NOTE: Do not use premium unleaded petro.

   WARNING: Always use an approved petro container. Do not smoke when adding petro to the fuel tank. When inside an enclosure, do not add petro. Before you add petro, stop the engine and let the engine cool for several minutes.
3. Move the throttle control to the FAST or START position.
4. Make sure the spark plug wire is connected to the spark plug.
5. Make sure the **drive lever** is in the DISENGAGED position.

   WARNING: To prevent an accident, make sure the drive lever is in the DISENGAGED position. When the drive lever is in the ENGAGED position, do not start the engine.
6. Some models have a **primer button** on the engine (Figure 9). Push the **primer button** five times. Every time you push the **primer button**, wait two seconds.

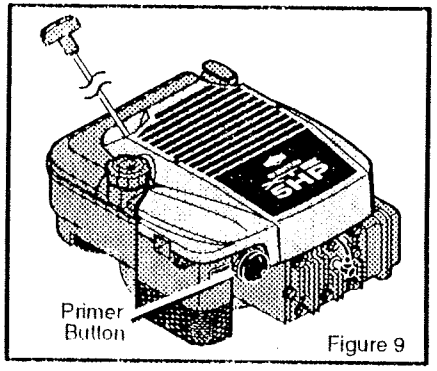


Figure 9

NOTE: Do not use the primer button to start a warm engine.

7. Stand behind the mower (Figure 10). Use one hand to hold the **engine stop lever** in the operating position as shown. Use the other hand to hold the **recoil–start grip.**
8. Rapidly pull the **recoil–start grip.** Slowly return the **recoil–start grip.**
9. If the engine does not start in 5 or 6 tries, See the "Problem and Repair" Instructions.

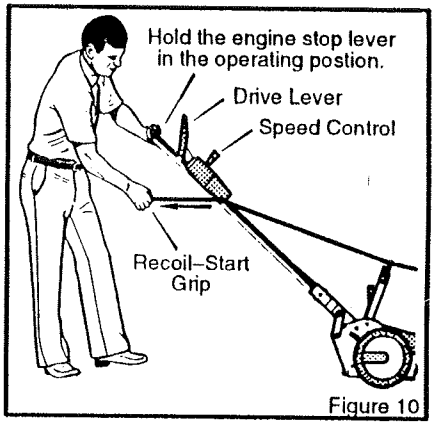


Figure 10

HOW TO OPERATE WITH THE GRASS BAG

WARNING: Check the condition of the grass bag for wear or deterioration. If worn or damaged, replace the parts only with approved factory replacement parts. For replacement parts, see the parts list in this book.

To completely fill the grass bag, operate the engine with the throttle control in the FAST position.

HOW TO EMPTY THE GRASS BAG

WARNING: Before you remove the grass bag, stop the engine. Before you remove any grass from the mower housing, disconnect the wire from the spark plug.

1. Hold the handle on top of the grass bag. Lift the grass bag.
2. Empty the grass from the bag.
3. To mount the grass bag on the mower, open the rear door. Mount the grass bag to the rear plate.

MAINTENANCE

ENGINE MAINTENANCE

Use the following maintenance section to keep your unit in good operating condition. All the maintenance information for the engine is in the "Engine Instruction Book". Before you start the engine, read this book.

WARNING: Before you make an inspection, adjustment (except carburettor), or repair, disconnect the wire from the spark plug.

LUBRICATION

1. Lubricate the drive bearings on each end of the drive shaft as follows.
   - Remove the rear wheel and the pinion gear (Figure 11).
   - Clean the inside of the wheel and the pinion gear of dirt and debris.
   - Lubricate the drive shaft and the inside of the pinion gear with Permatex Anti-seize lubricant or a dry graphite spray lubricant. In non-sandy areas, standard grease is acceptable.
   - Assemble the pinion gear and the rear wheel.
2. For maximum performance, lubricate the wheels and all pivot points with engine oil every 25 hours.
3. To lubricate the engine, see the instruction book for the engine.

NOTE: Do not lubricate the engine stop cable. Lubricants will damage the cable and prevent the cable from moving freely. Replace the cable if bent or damaged.

HOW TO CLEAN THE MOWER HOUSING

WARNING: The blade will rotate when the engine runs. Before you clean the mower housing, stop the engine and disconnect the wire from the spark plug.

Grass and other debris can keep the mower from working correctly. After you mow, clean the mower housing as follows.

1. Stop the engine.
2. Disconnect the wire from the spark plug.

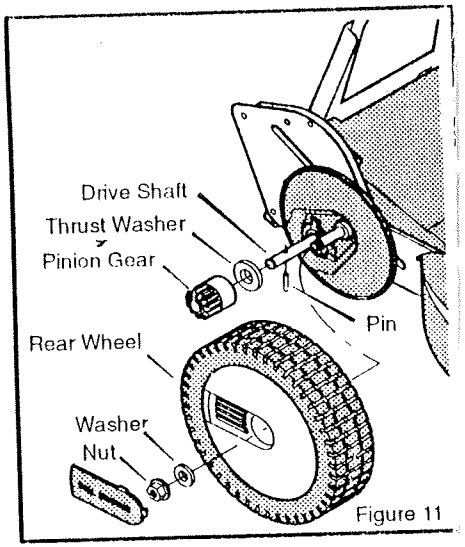


Figure 11

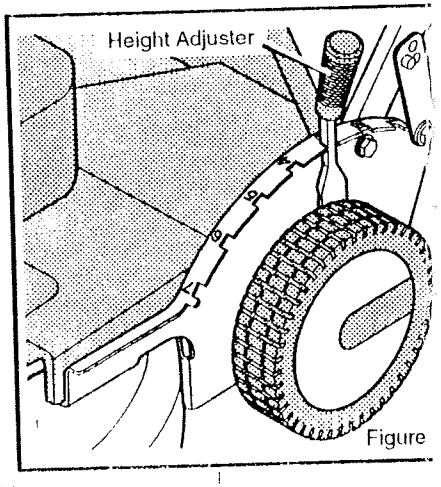
3. Clean the top and the bottom of the mower housing.

HOW TO ADJUST THE HEIGHT OF CUT

WARNING: The blade will rotate when the engine runs.

To change the height of cut, move the position of the **adjuster arm** (Figure 12).

1. Disengage the **adjuster arm**.
2. Move the **adjuster arm** to another position.



Figure

MAINTENANCE

HOW TO ADJUST THE DRIVE CABLE

WARNING: Before you adjust the drive cable, release the engine stop lever and wait for the engine to stop.

If the drive system does not engage and disengage correctly, check the handle for correct assembly. Make sure that all parts are in good condition, not broken or bent, and that all fasteners are tight.

Worn parts and cable stretch will change the performance of the drive system. When you mow in high or thick grass or on hills, the drive system can slip. If the drive system is slipping, adjust as follows or take the mower to an authorised service center.

1. The **drive lever** must be in the **DISENGAGED** position.
2. Hold the **engine stop lever** in the **OPERATING** position. Start the engine.
3. Turn the **drive adjustment** approximately two complete turns in the direction shown in Figure 13.
4. Move the **drive lever** to the **ENGAGED** position and check the drive system.
5. If the drive system still slips, turn the **drive adjustment** one more turn. Again test the drive system.
6. Repeat the adjustment and test until the drive system does not slip.
7. Before you begin to mow, make sure the drive system will correctly disengage and that the mower will stop. If the drive system will not disengage, take the mower to an authorised service centre before you operate the mower.

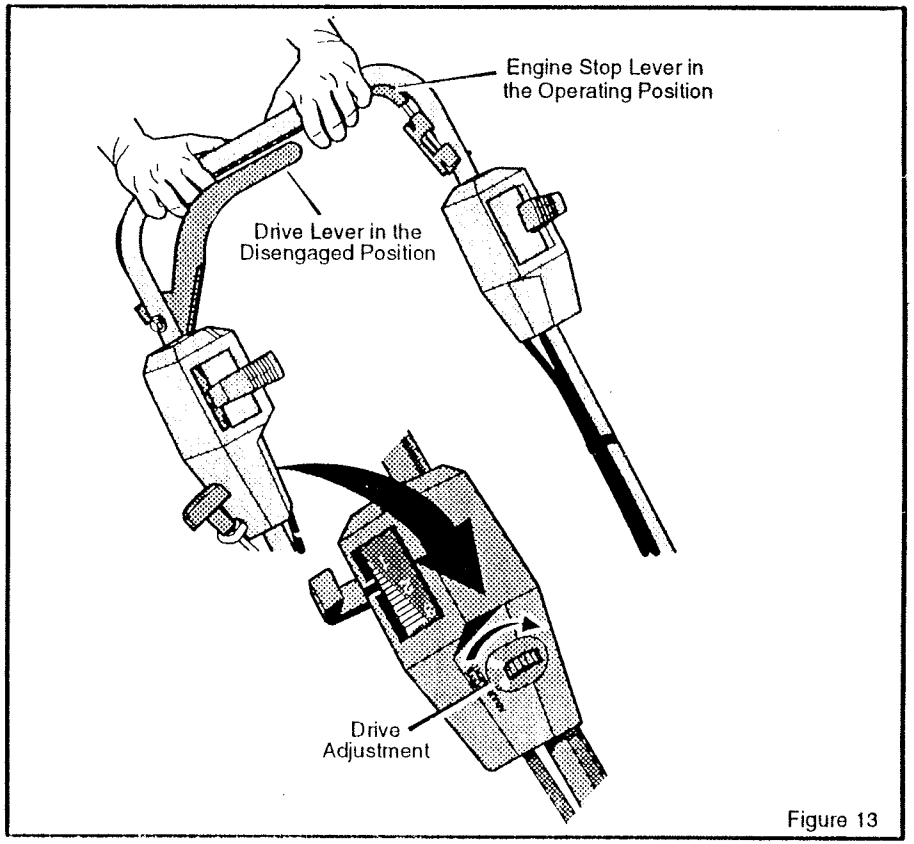


Figure 13

MAINTENANCE

HOW TO REMOVE THE DRIVE BELT

WARNING: Before you remove the belt, disconnect the wire from the spark plug.

1. Remove the **belt cover** (Figure 14).
2. Remove the **transmission cover**.

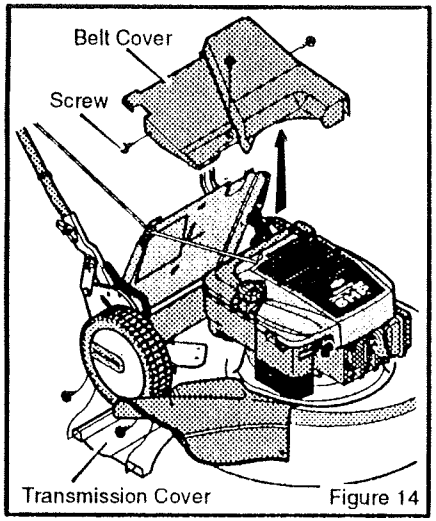


Figure 14

3. Disconnect the **idler spring** (Figure 15).

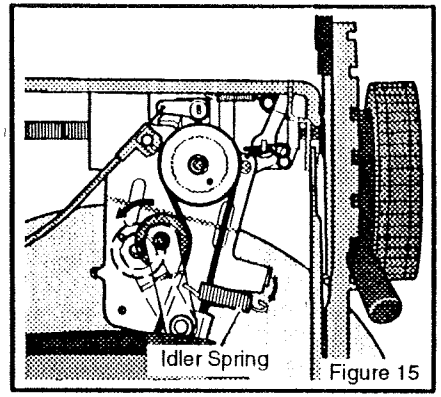


Figure 15

4. Remove the **drive belt** from the **drive pulley** (Figure 16).

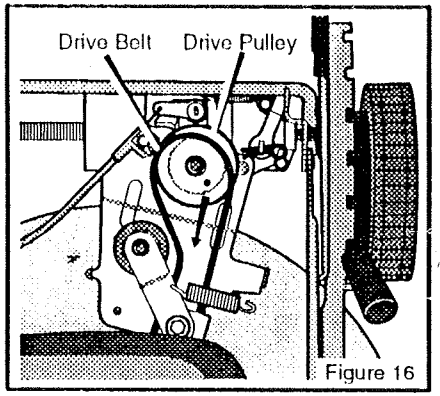


Figure 16

5. Pull the **drive belt** under the mower housing. (Figure 17).
6. Remove the **drive belt**.

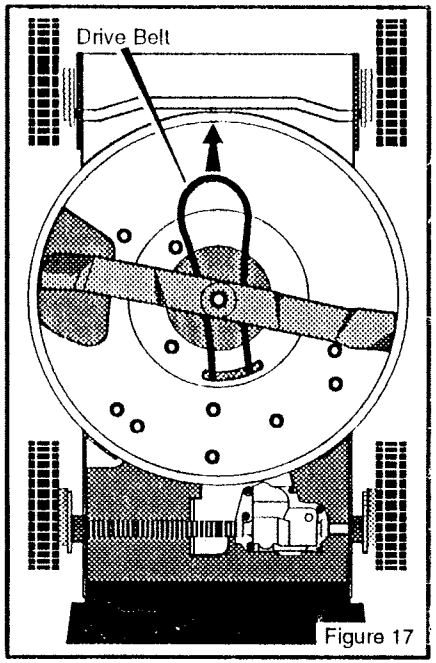


Figure 17

NOTE: Make sure you replace the drive belt only with a replacement belt from the factory.

7. To assemble the **drive belt**, reverse the above steps.

MAINTENANCE

MULCHING BLADE REPLACEMENT

A mulching mower is equipped with a special mulching blade. If the mulching blade becomes worn or damaged, replace with an original equipment mulching blade. A standard blade will not mulch correctly.

BLADE SERVICE

WARNING: Before you inspect the blade or the blade adaptor, disconnect the wire to the spark plug. If the blade hits an object, stop the engine. Disconnect the wire to the spark plug. Check the unit for damage.

Frequently check the blade for wear or damage such as cracks. Frequently check the bolt that holds the blade. Keep the bolt tight. If the blade hits an object, stop the engine. Disconnect the wire to the spark plug. Check the blade adaptor for damage. Check for a bent or damaged blade, a badly worn blade, or other damage. Before you operate the unit, damaged parts must be replaced with factory replacement parts. For safety, replace the blade every two years. Keep a sharp edge on the blade. A blade that is not sharp will cause the ends of the grass to become brown. Remove the blade as follows.

HOW TO REMOVE THE BLADE

WARNING: Before you remove the blade, disconnect the wire to the spark plug. The blade has sharp edges. When you hold the blade, use gloves or cloth material to protect your hands.

1. Drain the fuel tank.
2. Lift the side of the mower that has the silencer or spark plug.
3. Use a piece of wood to keep the blade from rotating.
4. Remove the **bolt** that holds the **blade**.
5. Check the blade according to the "Blade Service" instructions. Replace a badly worn or damaged blade with a factory replacement blade.
6. Mount the blade with the curved edges toward the housing. If the blade is upside down, the blade will not cut correctly and can cause an accident.
7. Fasten the **blade** with the original **washers** and **bolt**. Make sure the outside rim of the **Belleville washer** is against the **blade** (Figure 18).
8. Tighten the **bolt** that holds the **blade** to a torque of 35 foot pounds (47.5 Nm). When the torque is correct, the **Belleville washer** will look flat

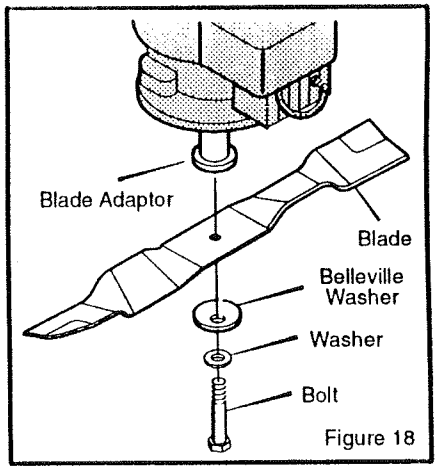


Figure 18

WARNING: Always keep the bolt that holds the blade tight. A loose bolt or blade can cause an accident.

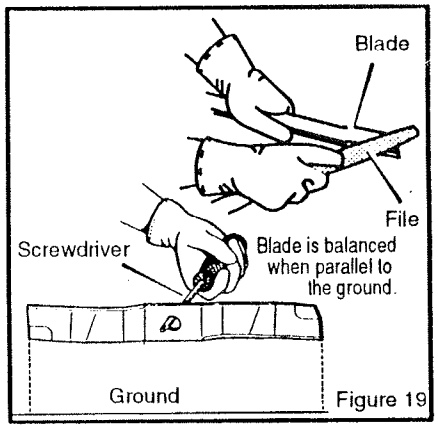


Figure 19

HOW TO SHARPEN THE BLADE

WARNING: Vibration is the result if the blade is not correctly balanced. A blade that is damaged with cracks can break and cause an accident.

1. Sharpen the blade two times a year or every 25 hours (Figure 19).
2. If the blade is on the unit, do not sharpen. Remove the blade according to the instructions in "How To Remove The Blade".

(Continued following page)

MAINTENANCE

3. Clean the blade with a brush, soap, and water. Check the blade. Look for cracks, nicks, or other damage. Replace a blade that is badly worn, bent, or damaged with a factory replacement blade.
4. Sharpen the **blade** with a **file.** Make sure you keep the original bevelled cutting edge (Figure 19).
5. Make sure the **blade** is balanced. Use a **screwdriver** and hold the blade parallel to the ground as shown. A blade that is balanced will stay parallel to the ground. If the blade is not balanced, the heavy end will rotate toward the ground. Sharpen the heavy end until the blade is balanced.
6. A new blade will cut better than a badly worn blade. Every two years replace the old blade with a factory replacement blade.

CHECK THE LEVEL OF CUT

Test the unit in a small area. If the height of cut is not level or if the cut grass is not discharged, the cause can be: (1) the blade is bent or damaged, (2) the blade is not sharp, (3) a worn blade, (4) or a broken **blade adaptor.** Before you use the unit, correct the problem.

FOLDING HANDLE STORAGE

CAUTION: Be careful when you fold the handle. Do not damage the cables. A cable that is bent will not work correctly. Before you use the unit, replace a bent or damag cable.

How To Fold The Handle

1. Loosen the fasteners that hold the up part of the handle to the handle suppo As you fold the handle, make sure cables are not around the loose faster and do not become damaged (Figure 2

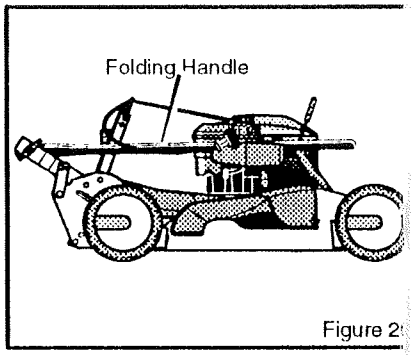


Figure 2

2. Rotate the handle forward over the en as shown. Make sure the cables are damaged.

How To Raise The Handle

1. Lift the upper part of the handle into the erator's position. Tighten the fasteners hold the handle.

HOW TO PREPARE THE MOWER FOR STORAGE

WARNING: Do not remove petro while inside a building, near a fire, or while you smoke. Petro fumes can cause an explosion or a fire.

1. Drain the fuel tank.
2. Let the engine run until it is out of fuel.
3. Drain the oil from the warm engine. Fill the engine crankcase with new oil.
4. Remove the spark plug from the cylinder. Pour 1/2 ounce (15ml) of oil into the cylinder. Slowly pull the recoil-start gri that the oil will protect the cylinder. Inst new spark plug in the cylinder.
5. Clean the dirt and debris from the cyli cooling fins and the engine housing.
6. Clean the bottom of the mower housi
7. Make sure the grass bag is empty of gr Grass remaining in the bag during sto will damage the bag.
8. Completely clean the mower to protec paint.
9. Put the unit in a building that has good tilation.

TROUBLE SHOOTING CHART

The Engine will not start.

1. Move the throttle control lever to the FAST or START position.
2. Make sure the fuel tank is filled with clean petro. Do not use old petro.
3. On a cold engine, push the primer button (optional on some models) five times.
4. Make sure the wire for the spark plug is connected to the spark plug.
5. Adjust the Carburettor. See the "Engine Instruction Book".
6. There is too much fuel in the engine cylinder. Remove and dry the spark plug. Put the throttle control in the SLOW position. Pull the recoil-start grip several times. Install the spark plug. Connect the wire to the spark plug. Start the engine.
7. The engine is difficult to start in heavy or high grass. Move the mower to a clean dry surface.
8. Make sure the engine stop lever is in the operating position.
9. Make sure the fuel valve is in the ON position. See the "Engine Instruction Book".

The Engine will not stop.

1. Release the engine stop lever.
2. Check the engine stop cable. Replace the cable if bent or damaged.

The Engine performance is bad.

1. Check the height of cut settings. Raise the height of cut if the grass is high.
2. Check the bottom of the blade housing. Clean the blade housing of grass and other debris.
3. Check the wire to the spark plug. Make sure the wire is connected.
4. Clean the engine cooling fins of grass and other debris.
5. Check the carburettor adjustments. See the "Engine Instruction Book".
6. Check the spark plug gap. Set the spark plug gap at 0.030" (0.76 mm)
7. Check the amount of oil in the engine. Fill with oil if necessary.
8. Check the engine air cleaner. See the "Engine Instruction Book".
9. The fuel is bad. Drain and clean the fuel tank. Fill the fuel tank with clean petro.
10. Check the throttle control. Make sure the lever is not in the CHOKE position.

Excessive Vibration.

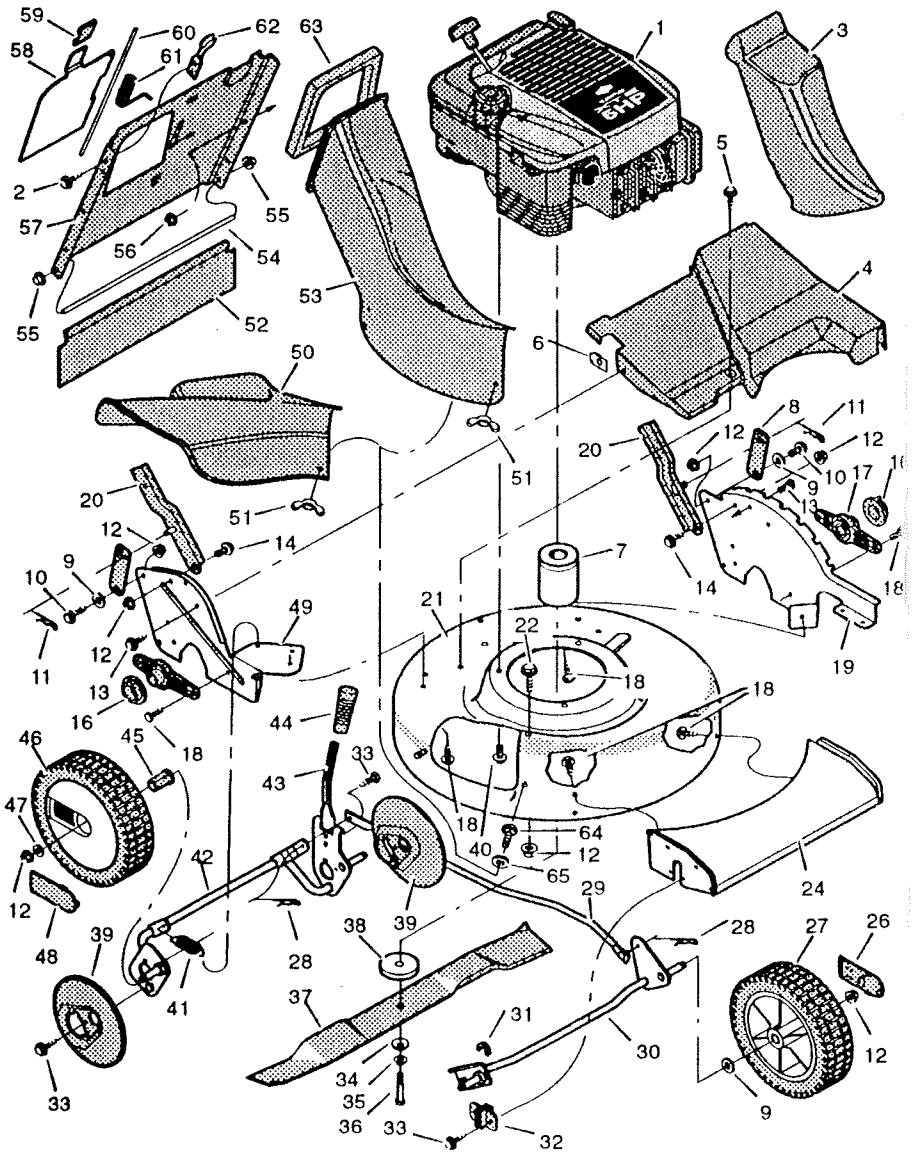
1. Remove the blade. Check the blade and balance if necessary. See the blade maintenance instructions.
2. Check for a bent or broken blade. A DAMAGED BLADE IS DANGEROUS AND MUST BE REPLACED.
3. Check the blade adaptor. REPLACE A BROKEN BLADE ADAPTOR.
4. If the vibration continues, take the mower to an Authorised Service Centre.

The grass will not discharge correctly.

1. Clean the bottom of the mower housing.
2. Check for a badly worn blade. Remove and sharpen the blade. For safety, replace the blade every two years with a factory replacement blade.
3. Move the throttle control lever to the FAST position. Check the speed of the engine according to the "Engine Instruction Book".

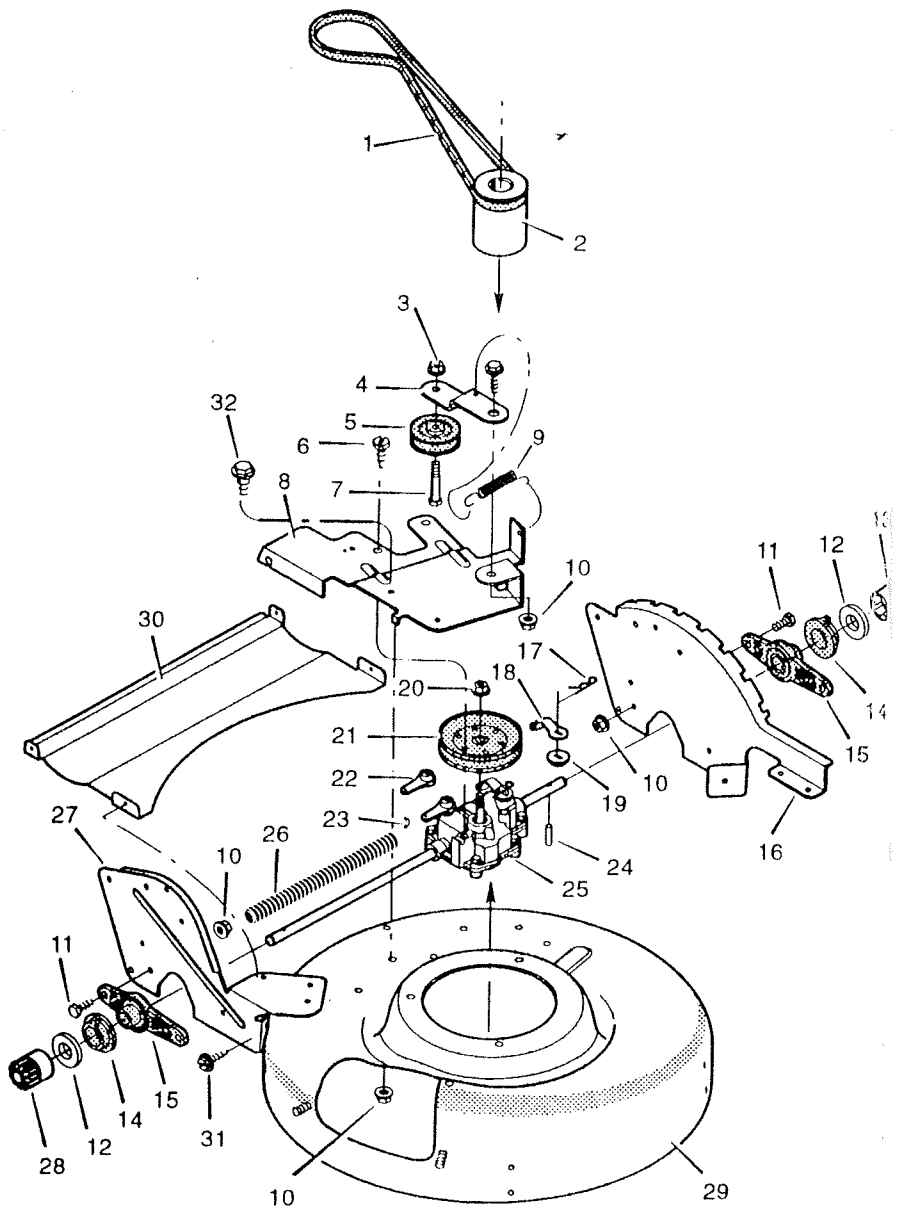
The grass is not cut even.

1. Check the height adjustment at each wheel. The height adjustment must be the same for each wheel.
2. Make sure the blade is sharp.
3. Check for a bent or broken blade. A DAMAGED BLADE IS DANGEROUS AND MUST BE REPLACED.
4. Check for a broken blade adaptor. REPLACE A BROKEN BLADE ADAPTOR.

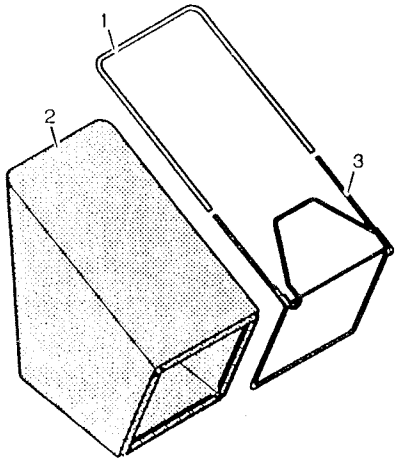


KEY NO.	DESCRIPTION	PART NO.	KEY NO.	DESCRIPTION	PART NO.
1	Engine	‡	34	Washer, Belleville	17x137
2	Screw	25x2	35	Washer	17x124
3	Plug, Mulcher	71373	36	Bolt, Hex	1x148
4	Cover, Rear	71404	37	Blade	71113E701
5	Screw	26x220	38	Spacer, Adaptor	71470
6	Fastener, U-type	400315	39	Cover, Dust	43616
7	Adaptor, Blade	71285	40	Bolt, Engine	25x6
8	Strap, Adjuster	71318E701	41	Spring, Extension	165x97
9	Washer, Spring	20x3	42	Crossbar Assembly, Rear	71315E701
10	Bolt, Shoulder	9x29	43	Lever, Height Adjuster	71293E701
11	Pin, Hair	31x10	44	Grip, Height Adjuster	71297
12	Locknut, Flange	15x68	45	Bushing	43886
13	Nut, Hex	1x100	46	Wheel, Rear (White)	43617
14	Bolt, Shoulder	9x48	47	Washer	17x169
16	Bearing, Lifter	43788	48	Hub Cap (Grey)	43615
17	Support, Axle	71411	49	Support, Wheel	71370E701
18	Screw	26x275	50	Deflector, Chute	71295
19	Index, Height Adjuster	71368E701	51	Nut, Wing	14x86
20	Bracket, Handle	71317E701	52	Guard, Rear	71289
21	Housing	71308	53	Deflector, Rear	71381
22	Bolt, Shoulder	9x17	54	Rod	71319Z
23	Support, Left Wheel	71367E701	55	Cap, Push On	28x42
24	Panel, Front	71329E701	56	Locknut, Flange	15x82
25	Support, Right Wheel	71366E701	57	Plate, Bagger	71298E701
26	Cap – Ball Bearing (Grey)	43847	58	Door, Rear	71299E701
27	Wheel, Front (White)	43724	59	Grip, Door	71306
28	Pin, Hair	31x9	60	Rod, Door	71300Z
29	Link, Lifter	71328	61	Spring, Torsion	166x36
30	Crossbar Assembly, Front	71325E701	62	Guide, Rope	71443
31	Bushing	71291	63	Seal	71471
32	Clip, Front Axle	71292	64	Bolt, Carriage	2x53
33	Screw	26x221	65	Nut, Speed	28x51

‡ Parts are available from a Authorised Engine Service Centre.

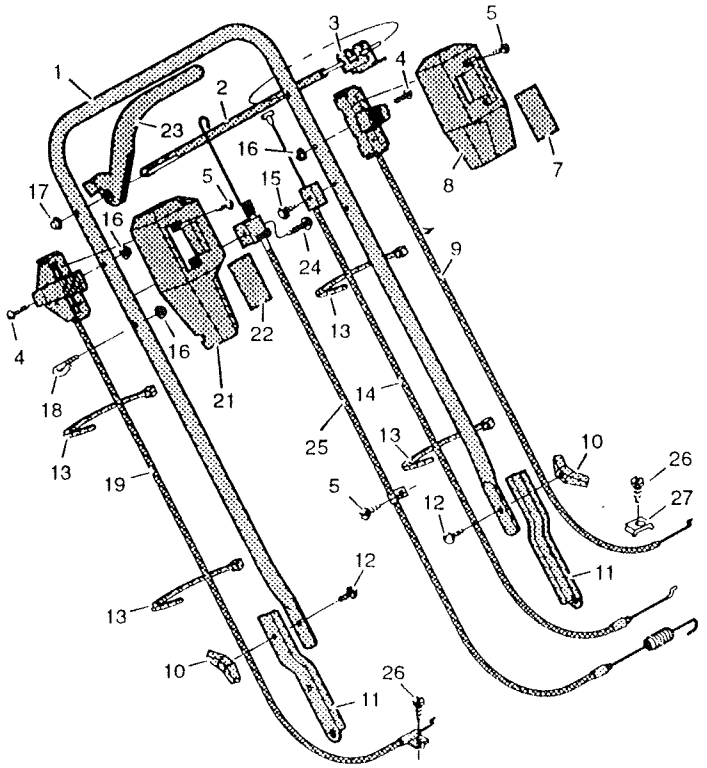


KEY NO.	DESCRIPTION	PART NO.	KEY NO.	DESCRIPTION	PART NO.
1	Belt	37x77	17	Pin, Hair	31x6
2	Adaptor, Blade	71285	18	Arm, Clutch	400312
3	Locknut, Flange	15x88	19	Support, Clutch	400313
4	Arm, Idler	71309Z	20	Locknut	190x15
5	Pulley, Idler	71054	21	Pulley, Transmission	71288
6	Screw	26x216	22	Arm, Shift	400311
7	Bolt	1x141	23	Key, Woodruff	400314
8	Bracket, Transmission	71376Z	24	Pin, Drive	43629
9	Spring, Extension	165x10	25	Transmission	71374
10	Locknut, Flange	15x68	26	Shield, Axle	43649
11	Screw	26x275	27	Support, Wheel	71370E701
12	Washer	17x186	28	Gear, Right Pinion	71286
13	Gear, Left Pinion	71287	29	Housing	71308
14	Bearing, Lifter	43788	30	Cover, Transmission	71498E701
15	Support, Axle	71411	31	Screw	26x259
16	Index, Height Adjuster	71368E701	32	Bolt, Shoulder	9x29



KEY NO.	DESCRIPTION	PART NO.
1	Tube, Grass Bag	71307
2	Bag	71302
3	Frame	71303

MODEL 533T REPLACEMENT PART



KEY NO.	DESCRIPTION	PART NO.	KEY NO.	DESCRIPTION	PART NO.
1	Handle (Black)	71382E701	15	Screw	26x220
2	Stop Lever	71375	16	Locknut	15x116
3	Bracket, Stop Lever	43628 BC	17	Push On Cap	28x48
4	Bolt	3x105	18	Guide, Rope	71442
5	Screw	26x276	19	Control, Speed	71388
7	Cover, Logo	71463	21	Cover, Speed Control	71386
8	Cover, Throttle	71383	22	Cover, Logo	71464
9	Throttle Control	71384	23	Lever, Drive	43722
10	Knob	71495	24	Screw	26x256
11	Bracket, Handle (Black)	71317E701	25	Cable, Drive	71387
12	Bolt, Carriage	2x81	26	Screw	26x268
13	Fastener, Cable	71372	27	Clamp	42294
14	Engine Stop Cable	43845			

A 15 degree slope is a hill that increases in height at approximately 2.5 feet in 10 feet (1 metre in 4 metres).
A 10 degree slope is a hill that increases in height at approximately 1.7 feet in 10 feet (0.7 metres in 4 metres).

Use extreme care at all times, and avoid sudden turns or maneuvers. Follow other instructions in this manual for safety in mowing on slopes. Operate a walk-behind mower across the face of slopes, never up or down slopes. Use extra care when operating on or near slopes and obstructions.

