

POWERTRIM

Code 407E

OWNER'S HANDBOOK

CODE SERIAL NO.
407E 270000001
Issue 01/15/2007

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Declared vibration emission values in accordance with Directive 98/37/EC.

Vibration Emission according to EN 836/A2:2001: 5.4 m/s².

Values determined at the handle when the machine was operated stationary on a concrete surface at 3700 min-1.

Declared Airborne Sound Power level of 106 dB(A) is in accordance with Directive 2000/14/EC.

Sound Pressure Level at operator position 88 dB.

Values determined at ear according to the specifications of EN 836/A2:2001.

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 **three years** from the date of purchase. The manufacturers of the engine and battery pack system (where applicable) furnish their own warranty and services are provided through their authorised network (Refer to "Engine/Battery Pack Warranty Statement"). To qualify for the full benefit of the warranty, the warranty registration card must be returned within 60 days of purchase. 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. If you are in doubt or experience any difficulty, please consult a **Hayter** Authorised Service Dealer for clarification..

To qualify for the extended warranty (second and third year) of the three year limited warranty, the machine must have annual services carried out by an Authorised Hayter Service Dealer. These chargeable services should be carried out within 12 and 24 months of the date of purchase.

Excluded from the extended warranty period are those items which are subject to normal wear and tear e.g. tyres, wheels, cutterbars, cables, batteries and other consumable wearing parts.

All consumer machines which are fitted with a **genuine** Hayter friction disc as original equipment, before use, are covered by a **Lifetime Warranty** against the engine crankshaft bending. **Note:** friction washers, blade brake units and other such devices are not applicable. Only machines fitted with a **genuine** Hayter friction disc, which are used in accordance with the recommended operating and maintenance procedures, are covered.

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 Owner's Handbook or a Hayter Authorised Service 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 stating the machine serial number and date of purchase. The service receipt(s) or this Owner's Handbook with the 1st/2nd year service boxes fully completed, must be produced as proof of entitlement to the extended warranty period. 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,
Hertfordshire. CM23 4BU

1st Year
Service
Record



2nd Year
Service
Record



Date

Date

Signed

Signed

SAFETY RULES

OWNER'S INFORMATION

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.



WARNING: Look for this symbol to indicate important safety precautions. This symbol indicates: "Attention! Become Alert! Your Safety Is At Risk."

Responsibility Of The Owner



WARNING: This cutting machine is capable of throwing objects. Failure to observe the following safety instructions could result in serious injury to the operator or bystanders.

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

SAFETY PRECAUTIONS

I. General Operation

1. Read, understand, and follow all instructions on the machine and in the manual(s). Be thoroughly familiar with the controls and the proper use of the machine before starting.
2. Familiarize yourself with all of the safety and operating decals on this equipment and on any of its attachments or accessories.
3. Do not put hands or feet near or under rotating parts.
4. Only allow responsible individuals, who are familiar with the instructions, to operate the machine.
5. Thoroughly inspect the area where the machine is to be used and remove all foreign objects. Your equipment can propel small objects at high speed causing personal injury or property damage. Stay away from breakable objects, such as house windows, automobiles, greenhouses, etc.
6. Keep the area of operation clear of all persons, particularly small children, and pets.

7. Wear appropriate clothing such as a long-sleeved shirt or jacket. Also wear long trousers. Do not wear shorts.
8. Do not wear loose clothing or jewelry. They can be caught in moving parts.
9. Always wear safety goggles or safety glasses with side shields when operating the machine to protect your eyes from foreign objects which can be thrown from the unit.
10. Always wear work gloves and sturdy footwear. Wear footwear that will improve footing on slippery surfaces. Do not operate product when barefoot or wearing open sandals. Leather work shoes or short boots work well for most people. These will protect the operator's ankles and shins from small sticks, splinters, and other debris.
11. It is advisable to wear protective headgear to prevent the possibility of being struck by small flying particles, or being struck by low hanging branches, twigs, or other objects which may be unnoticed by the operator.
12. Do not operate the machine without proper guards or other safety protective devices in place.
13. Use this equipment for its intended purpose only.
14. See manufacturer's instructions for proper operation and installation of accessories. Only use accessories approved by the manufacturer.
15. Operate only in daylight or good artificial light.
16. Do not operate product when fatigued or under the influence of alcohol, drugs or other medication which can cause drowsiness or affect your ability to operate this machine safely.
17. Never operate machine in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk; never run.
18. Before each use, inspect the throttle control lever and cable. Make sure that the cable is free and that the lever is not damaged. Also check the cable linkage running to the carburetor for kinks, loose fittings, and obstructions. Verify that the control bail is working properly.
19. Stop the rotating trimmer head when crossing gravel drives, walks, or roads. Wait for the cutting lines to stop rotating.
20. Watch for traffic when operating near, or when crossing roads.

SAFETY RULES

21. Stop the engine whenever you leave the equipment, before cleaning repairing or inspecting the unit, be sure the trimmer head and all moving parts have stopped. Let the engine cool, disconnect the spark plug wire and move it away from the spark plug.
22. If the equipment should start to vibrate abnormally, stop the engine, disconnect the spark plug wire and prevent it from touching the spark plug. Check immediately for the cause. Vibration is generally a warning of trouble.
23. After striking a foreign object, stop the engine. Remove the wire from the spark plug. Inspect the machine for damage. If damaged, repair before starting and operating the machine.
24. Never leave the machine unattended when the engine is running. Remove the wire from the spark plug.
25. Regularly inspect the machine. Make sure parts are not bent, damaged or loose.
26. Allow muffler and engine areas to cool before touching. Never pick up or carry the trimmer while the engine is running.
27. Prolonged exposure to noise and vibration from petrol engine powered equipment should be avoided. Take intermittent breaks and/or wear ear protection from engine noise as well as heavy work gloves to reduce vibration in the hands.

II. Slope Operation

Slopes are a major factor related to slip and fall accidents which can result in severe injury. All slopes require extra caution. If you feel uneasy on a slope, do not trim it.

Do trim across the face of slopes; never up and down. Do not trim excessively steep slopes (maximum 15 degrees) or areas where the ground is very rough. Exercise extreme caution when changing direction on slopes.

Do remove objects such as rocks, tree limbs, etc.

Do watch for holes, ruts, or bumps. Tall grass can hide obstacles.

Do not trim near drop-offs, ditches, or embankments. The operator could lose footing or balance.

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Do not trim on wet grass. Reduced footing could cause slipping.

III. Children

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the trimming activity. *Never* assume that children will remain where you last saw them.

1. Keep children out of the trimming area and under the watchful care of a responsible adult.
2. Be alert and turn machine off if children enter the area.
3. Before and while moving backwards, look behind and down for small children.
4. Never allow children to operate the machine.
5. Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

IV. Service

1. Use extra care in handling petrol and other fuels. They are flammable and vapors are explosive.
 - a. Use only an approved container.
 - b. Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smoke.
 - c. Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors or near appliances with pilot lights, heaters, or other ignition sources. Replace fuel tank cap securely. If fuel is spilled, do not start the engine but move product and fuel container from area. Clean up spilled fuel and allow to evaporate.
 - d. Never store the machine or fuel container inside where there is an open flame (such as a water heater), or other ignition source.
 - e. If the fuel tank has to be drained, this should be done outdoors. The drained fuel should be stored in a container specifically designed for fuel storage or it should be disposed of carefully.

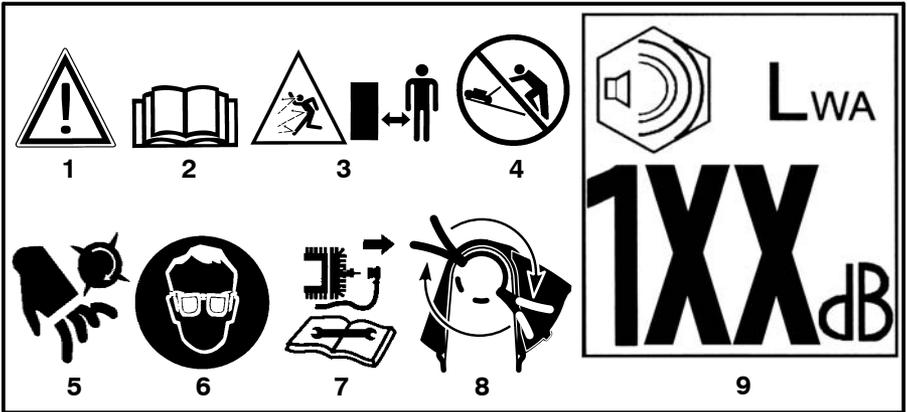
SAFETY RULES

- Never run the engine indoors or inside a closed area. The exhaust fumes are dangerous, containing CARBON MON-OXIDE, an ODORLESS and DEADLY gas.
- Never make adjustments or repairs with the engine running. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting. Always wear eye protection when you make adjustments or repairs.
- Check the trimmer head and engine mounting bolts at frequent intervals for proper tightness.
- Keep all nuts and bolts tight and keep equipment in good condition. Check mounting hardware on trimmer head every time you change trimmer line and prior to each use.
- Never tamper with safety devices. Check their proper operation regularly.
- When servicing or repairing the machine, do not tip the machine over or up unless specifically instructed to do so in this Manual. Service and repair procedures can be done with the machine in an upright position. Some procedures will be easier if the machine is lifted on a raised platform or working surface.
- To reduce fire hazard, keep machine free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Always disconnect spark plug wire before cleaning, repairing, or adjusting.
- Do not change the engine governor setting or over-speed the engine.
- Clean and replace safety and instruction decals as necessary.
- To guard against engine over-heating, always have engine debris filter mounted and clean.
- Inspect trimmer before storage. When not in use, disconnect spark plug lead and store product indoors in a dry place locked or otherwise inaccessible to children.
- Use only original equipment or authorized replacement parts.
- Never replace the cutting lines with metal parts.

SAFETY RULES

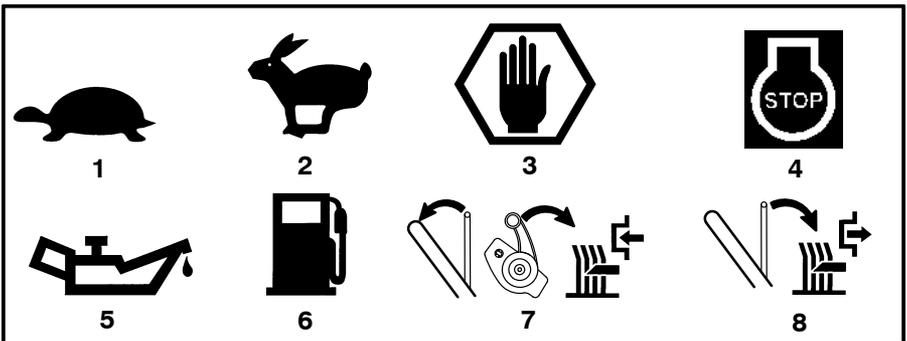
INTERNATIONAL PICTORIALS

IMPORTANT: The following pictorials are located on your unit or on literature supplied with the product. Before you operate the unit, learn and understand the purpose for each pictorial.



Safety Warning Pictorials

- | | |
|--|---|
| <p>1 WARNING</p> <p>2 IMPORTANT: Read Owner's Manual Before Operating This Machine.</p> <p>3 WARNING: Thrown Objects. Keep Bystanders Away. Read User Instructions Before Operating This Machine.</p> <p>4 Do Not Trim Up And Down Slopes. Trim Across Slopes.</p> | <p>5 WARNING: Rotating Parts. Stop Engine. Disconnect Spark Plug Wire Before Making Adjustments.</p> <p>6 WARNING: Wear Eye Protection</p> <p>7 DANGER: Disconnect Spark Plug Wire Before Servicing Unit.</p> <p>8 Direction of Rotating Line.</p> <p>9 Declared airborne sound power level of 106dB(A) is in accordance with Directive 2000/14/EC.</p> |
|--|---|



Control And Operating Pictorials

- | | |
|---|---|
| <p>1 Slow</p> <p>2 Fast</p> <p>3 Engine Stop</p> <p>4 Engine Stop</p> | <p>5 Oil</p> <p>6 Fuel</p> <p>7 Engage</p> <p>8 Disengage</p> |
|---|---|

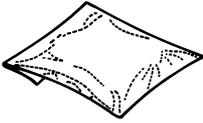
ASSEMBLY

ASSEMBLY

CONTENTS OF PARTS BAG

- 1 – Owner's Manual
- 1 – Parts Bag

(Not shown actual size)



1 – Bag (4 Screws)



1 – Safety Glasses



1 – 20 oz. Bottle Oil



2 Sets – Trimmer Line



WARNING: Always wear safety glasses or eye shields while assembling the machine.

TOOLS REQUIRED

- 1 – Knife to cut carton.
- 1 – T-Handle Wrench.

Figure 1 shows the machine completely assembled and positioned in the carton for shipment.

References to the right or left hand side of the machine are from the viewpoint of the operator's position behind the unit.

TO REMOVE THE TRIMMER FROM CARTON

1. Remove the parts bag and any loose parts from carton.
2. Remove the packing material positioned around the unit.
3. Cut down all four corners of the carton and lay the side panels flat.
4. Pull the trimmer out of the carton and off the base pad.
5. Remove packing material from around the trimmer head.
6. Remove protective plastic from front of frame.

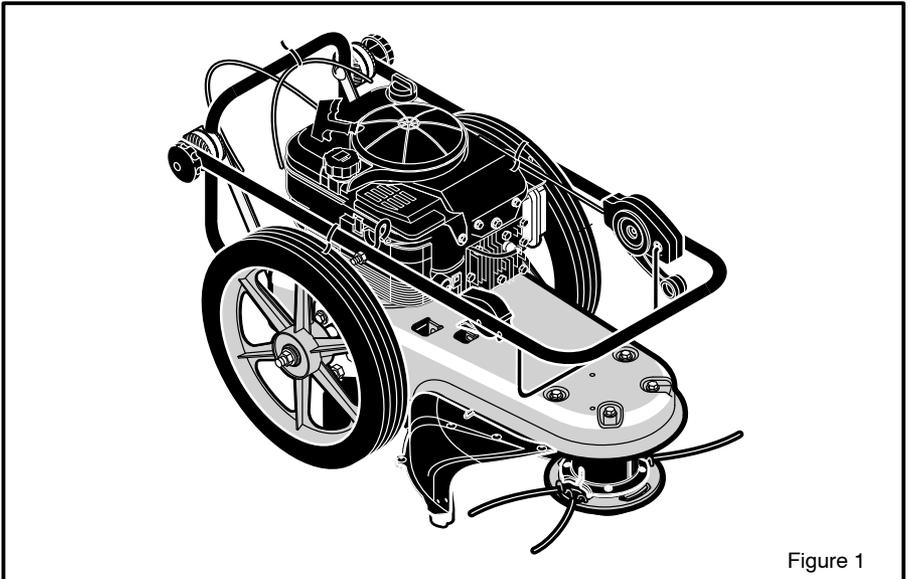


Figure 1

ASSEMBLY

HOW TO RAISE THE HANDLE

1. Hold the **handle** with one hand and loosen both **handle adjustment knobs** until the ratchet teeth are disengaged. Do not remove the **handle adjustment knobs**. See Figure 2.
2. Raise the **handle** to the operating position.

3. Stand in the operator's position behind the machine. Put the **handle** in a comfortable position. Make sure both sides of the **handle** are level.

NOTE: Make sure the cables are not caught between the upper and lower handle.

4. Tighten the **handle adjustment knobs**. Make sure the **handle pivots** are locked in place.

NOTE: The handlebar height is adjustable. See "How To Adjust The Height Of The Handlebar" in the Maintenance section.

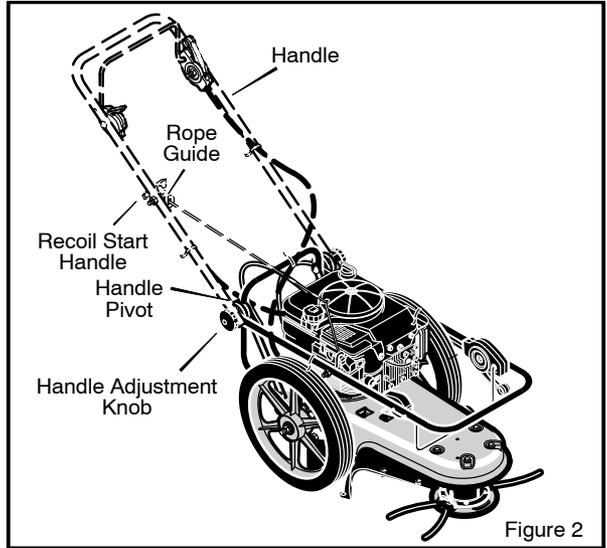


Figure 2

5. To attach the **recoil start handle** to the **rope guide**, twist the rope through the **rope guide** mounted on the right side of the handlebar.

HOW TO ATTACH THE GUARD

1. Attach the **guard** to the **machine** with the four **fasteners** as shown. See Figure 3.

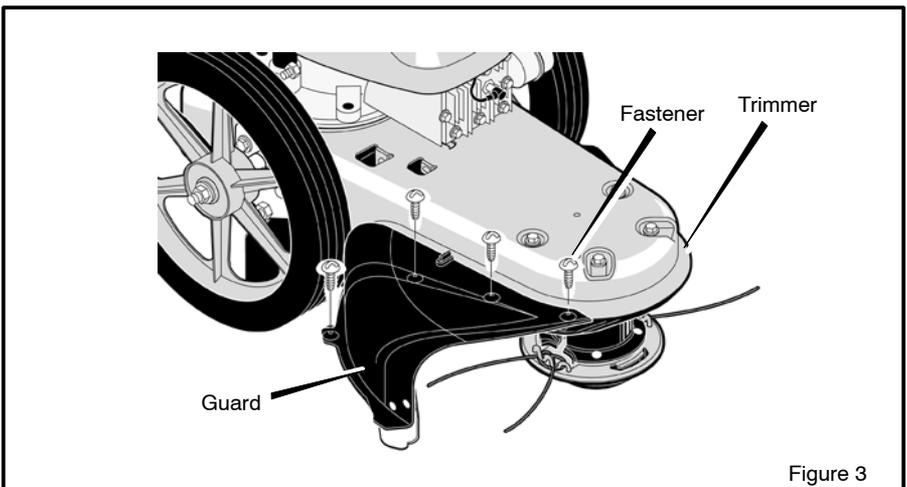


Figure 3

ASSEMBLY

ENGINE PREPARATION

Note: Engine does not contain OIL or PETROL.



WARNING: Follow the engine manufacturer's instructions for the type of petrol and oil to use.

Always use a safety petrol container. Do not smoke when adding petrol to the engine. When inside an enclosure, do not fill with petrol. Before you add petrol, stop the engine. Let the engine cool for several minutes.

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

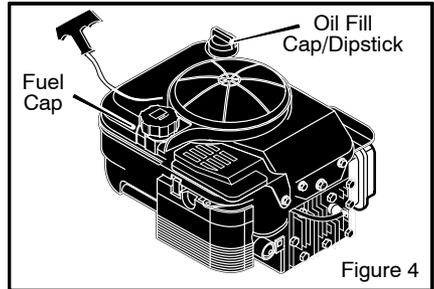
Note: Actual sustained horsepower will likely be lower due to operating limitations and environmental factors.

Fill Crankcase With Oil

1. Remove the oil fill cap/dipstick shown in Figure 4. Fill the crankcase to the **FULL** line on oil fill cap/dipstick. **DO NOT OVER-FILL.**
2. Install the oil fill cap/dipstick and tighten securely.

Fill Fuel Tank With Petrol

See the engine manufacturer's instructions for the type of petrol to use.



✓ CHECKLIST

For the best performance and satisfaction from this quality product, please review the following checklist before you operate the machine:

- ✓ All assembly instructions have been completed.
- ✓ Check carton. Make sure no loose parts remain in the carton.

As you learn how to use the machine, pay extra attention to the following important items:

- ✓✓ Engine oil is at correct level.
- ✓✓ Fuel tank is filled with fresh, clean, regular unleaded petrol.
- ✓✓ Become familiar and understand the function of all controls. Before you start the engine, operate all controls.

OPERATION

KNOW YOUR POWERTRIM

READ THE OWNER'S HANDBOOK AND ALL SAFETY RULES BEFORE YOU OPERATE the machine. To familiarise yourself with the location of the controls, compare the illustrations with your machine. **Save this handbook for future reference.**

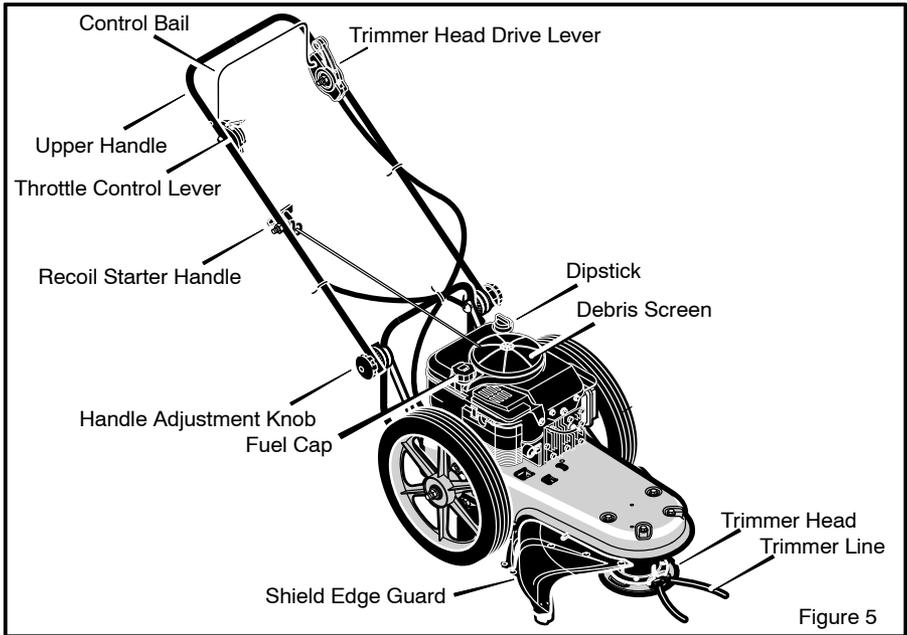


Figure 5

Trimmer Head Drive Lever – Engages the rotation of the trimmer head.

Throttle Control Lever – Controls the speed or stops the engine.

Control Bail – Release to stop the rotation of the trimmer head.

Recoil Starter Handle – The engine is equipped with an easy pull recoil starter.

EYE PROTECTION



WARNING: Debris thrown from the machine can result in foreign objects being thrown into the eyes, which can cause severe eye damage. Always wear safety glasses or eye shields when operating the machine.

Always wear safety glasses. If you wear eye glasses, put a Wide Vision Safety Mask over your eye glasses.

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HOW TO STOP THE TRIMMER HEAD

1. Release the **control bail**. It will return to its open position and disengage the trimmer head.

HOW TO STOP THE ENGINE



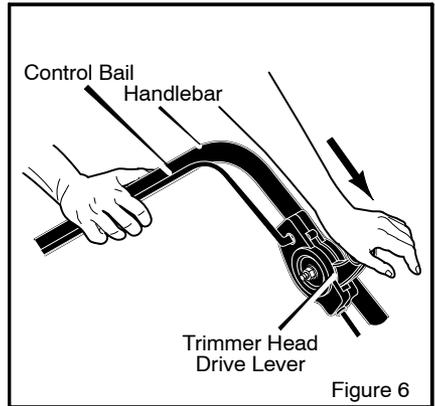
WARNING: The trimmer head will continue to rotate for several seconds after the engine has stopped

1. Move the **throttle control lever** completely back to the STOP position.

OPERATION

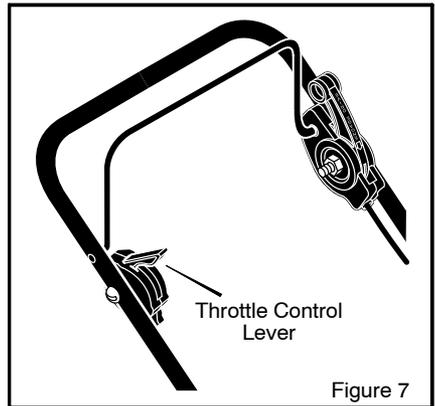
HOW TO USE THE TRIMMER HEAD DRIVE LEVER

1. To engage the trimmer head, hold the **control bail** against the **handle**. Move the **trimmer head drive lever** forward to engage the trimmer head. See Figure 6. The faster the engine runs, the faster the trimmer head will rotate.
2. Once the trimmer head is rotating, push the machine forward to trim.



HOW TO USE THE THROTTLE CONTROL

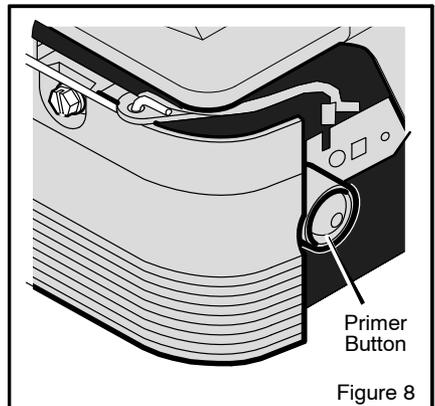
1. During normal use, set the **throttle control lever** in the FAST position to run the engine at full speed.
2. Pull the **throttle control lever** back to decrease engine speed. Push the **throttle control lever** forward to increase engine speed.
3. To stop the engine, pull the **throttle control lever** completely back to the STOP position.



HOW TO USE THE PRIMER BUTTON

1. Push the **primer button**. See Figure 8 for location. For the number of times to push the **primer button**, see the primer button decal located on the engine or follow the directions in the Engine Manual. Wait approximately two seconds between each push.

NOTE: Do not use the primer button to restart a warm engine after a short shutdown.



OPERATION

HOW TO START THE ENGINE

NOTE: DO NOT BE ALARMED, your engine will smoke the first time it is started. It is burning off the protective coating that is on the internal engine parts.



WARNING: Never leave the machine unattended while the engine is running. Wait for the trimmer lines to stop rotation.

1. Before each use, remove debris from the **debris screen** shown in Figure 5. Debris can cause the engine to overheat. Wipe the **debris screen** with a cloth or paper towel.
2. Move the throttle control lever forward to the **START** or **FAST** position.
3. To start a cold engine, push the primer button five times. Wait two seconds between each push of the primer button.

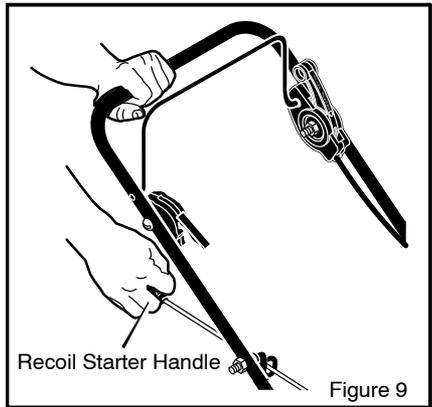
NOTE: Do not use the primer to start a warm engine.

4. Firmly hold the **recoil starter handle** with your right hand. See Figure 9.
5. Pull back sharply on the **recoil starter handle**. **DO NOT** allow the starter rope to snap back. Let the starter rope slowly re-wind as you hold the recoil starter handle.

NOTE: If engine fails to start after three pulls, push the primer button two times and again pull the recoil starter handle.



WARNING: Never run the engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas. Keep hands, feet, hair and loose clothing away from the machine and any moving parts on the engine. Avoid the muffler and surrounding areas. Temperatures may exceed 150°F.



TRIMMER TIPS



WARNING: Debris such as sticks, gravel or stones, can be thrown with sufficient force to cause personal injury or property damage.

- Set the throttle control in the **FAST** position. If the weeds or grass are tall and thick, operate the machine at a slower walking speed.
- Frequently clean the underside of the machine to remove any grass build up.
- For best results and longer lasting line, use the ends of the line to do the cutting. This is easily done by moving slowly through very thick or heavy weeds.
- If the trimmer lines become too short, it will take longer to complete the job. If the trimmer lines are worn to less than half their original length, change to a new trimmer line. "See How To Change The Trimmer Line" in the Maintenance section.
- Do not trim on excessively steep slopes. If a slope is difficult to stand on, do not trim. Do not trim on slopes when the ground is slippery or wet. Trim across the face of a slope, not up and down.
- Trimming may be done at slower engine speeds especially when trimming around flowers, shrubs, and small trees. Operating at slower speeds will also reduce engine noise and vibration at the upper handle.

MAINTENANCE

CUSTOMER RESPONSIBILITIES

SERVICE RECORDS Fill in dates as you complete regular service.	Before	Every	Every	Every	As Noted	SERVICE DATES
	Each Use	5 Hours	25 Hours	100 Hours		
Check Engine Oil Level	√					
Check trimmer Lines	√				1	
Check Trimmer Head Engagement	√					
Engine/Machine Cleaning	√				2	
Check Nuts and Bolts	√					
Check Spark Plug			√			
Change Engine Oil			√			
Service Air Filter			√		3	
Lubricate Jackshaft Assembly			√			
Lubricate Wheel Bearings			√			

Note 1 – When old line is half the original length, replace with new line.

Note 2 – Clean daily if used in extremely dusty or dirty conditions.

Note 3 – Change more often if used in extremely dusty or dirty conditions.

PRODUCT SPECIFICATIONS

Trimmer Line Diameter	3.9mm (0.155")
Trimmer Line Length	520mm (21.5")
Height Of Cut (Fixed)	76mm (3")
Dimensions	1400 x 555 x 1000
Engine	Briggs 122H02-0134-B1
KW	2.56
Displacement	11.5 cu. in.
Petrol Capacity	1.5 litre (1.6 quarts)
Oil Capacity	0.6 litre (20 oz.)
Spark Plug	Champion RJ-19LM
Spark Plug Gap	0.030"
Weight	34kg

MAINTENANCE

LUBRICATION

How To Lubricate The Jackshaft Assembly

A **grease fitting** is provided to lubricate the jackshaft assembly. Use a grease gun with automotive type grease to lubricate the jackshaft assembly as shown in Figure 10.

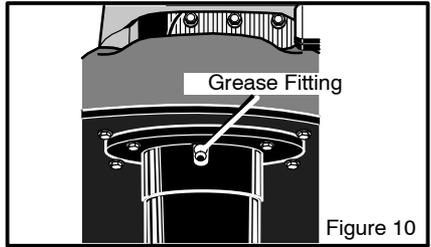


Figure 10

How To Change Engine Oil

Change the engine oil when the engine is warm. For the proper oil capacity, see the engine manufacturer's instructions.

1. Disconnect spark plug wire from the spark plug.
2. Remove the **oil drain plug** as shown in Figure 11.
3. Drain all the engine oil into a flat pan.
4. Install the **oil drain plug**. Make sure the **oil drain plug** is tight.
5. Remove the dipstick.
6. Fill the engine crankcase. **DO NOT OVERFILL**. For proper oil capacity, see the engine manufacturer's instructions.
7. Connect the spark plug wire to the spark plug.

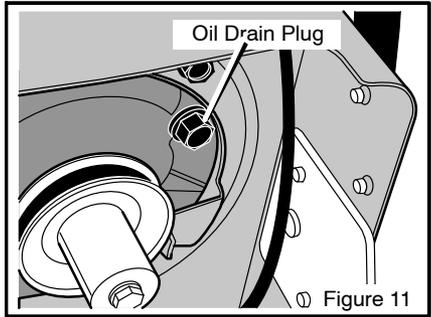


Figure 11

Engine Power Rating Information

The gross power rating for individual gas engine models is labeled in accordance with SAE (Society of Automotive Engineers) code J1940 (Small Engine Power & Torque Rating Procedure), and rating performance has been obtained and corrected in accordance with SAE J1995 (Revision 2002-05). Torque values are derived at 3060 RPM; horsepower values are derived at 3600 RPM. Actual gross engine power will be lower and is affected by, among other things, ambient operating conditions and engine-to-engine variability. Given both the wide array of products on which engines are placed and the variety of

environmental issues applicable to operating the equipment, the gas engine will not develop the rated gross power when used in a given piece of power equipment (actual "on-site" or net horsepower). This difference is due to a variety of factors including, but not limited to, accessories (air cleaner, exhaust, charging, cooling, carburetor, fuel pump, etc.), application limitations, ambient operating conditions (temperature, humidity, altitude), and engine-to-engine variability. Due to manufacturing and capacity limitations, Briggs & Stratton may substitute an engine of higher rated power for this Series engine.

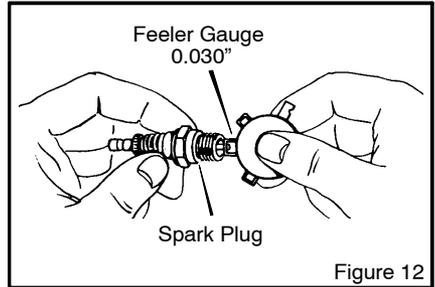
MAINTENANCE

SPARK PLUG

Check the **spark plug** every 25 hours. Replace the **spark plug** if the electrodes are pitted or burned or if the porcelain is cracked.

1. Make sure the **spark plug** is clean. Clean the **spark plug** by carefully scraping the electrodes (do not sand blast or use a wire brush).
2. Check the **spark plug** gap with a **feeler gauge**. See "Product Specifications" for the correct **spark plug** gap and replacement **spark plug**.
3. Before installing the **spark plug**, coat the threads lightly with oil for easy removal.

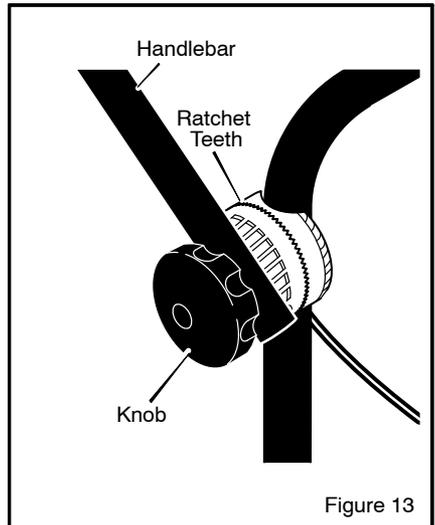
Tighten the spark plug to a torque of 15 foot-pounds.



HOW TO ADJUST THE HEIGHT OF THE HANDLEBAR

Use the **knobs**, on each side of the **handlebar**, to adjust the height of the handlebar.

1. Hold the **handlebar** with one hand and loosen both **knobs** until the **ratchet teeth** are disengaged. Do not remove the **knobs**. See Figure 13.
2. Move the **handlebar** up or down to the desired position, then align the **ratchet teeth**. Make sure both sides of the **handlebar** are level.
3. Tighten the **knobs**.



MAINTENANCE

SERVICE AND ADJUSTMENT



WARNING: Before you inspect, clean or service the machine, stop the engine. Make sure that all moving parts have stopped. Disconnect the wire from the spark plug.

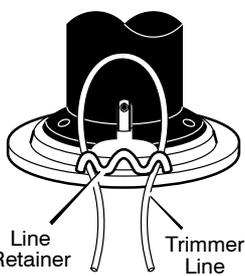
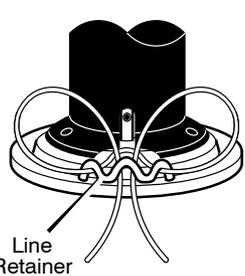
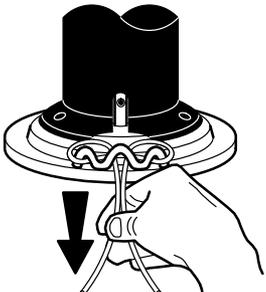
HOW TO REPLACE THE TRIMMER LINE

For the best performance, use a heavy gauge 3.9mm (0.155" diameter) **trimmer line**. Cut the length of the **trimmer line** to 52cm (21.5 inches). Do not allow the length of the lines to vary more than one inch. This is important to make sure the trimmer head is balanced and does not vibrate.

IMPORTANT: To extend the life of the trimmer line, keep the trimmer line moist. If not kept moist, the nylon trimmer line will become dry and brittle. Keep extra trimmer line in a can of water. The line will then stay flexible and easy to change. A flexible line will also last much longer.

HOW TO CHANGE TRIMMER LINES

When the trimmer line becomes worn to half the original length, replace the trimmer line as follows:

 <p>Line Retainer Trimmer Line</p>	 <p>Line Retainer</p>	
<ol style="list-style-type: none">1. Stop the engine. Wait for all moving parts to stop.2. Remove worn trimmer line from line retainer.3. First, thread the ends of the new trimmer line through the outside loops.	<ol style="list-style-type: none">4. Next, take the ends of the line, cross over the line retainer, and thread the ends through the centre hole.	<ol style="list-style-type: none">5. Then, check to make sure that the ends of the line are even.

MAINTENANCE

HOW TO REPLACE THE DRIVE BELT

To replace the drive belt, the trimmer head and shield must be removed as follows.



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

1. Remove the two fasteners that hold the rear of the **shield** to the **trimmer housing** (See Figure 14).
2. Remove the four fasteners that hold the front of the **shield** and **trimmer head** to the **trimmer housing**.
3. Remove the “V” pulley from the idler bracket.
4. Raise the front of the **trimmer housing** and remove the **drive belt**. On some models, it is necessary to loosen the **mounting bolt** for the **drive pulley** to remove the drive belt (see Figure 15). Do not bend the belt guides.

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

5. To assemble the **drive belt**, reverse the above steps. Make sure all fasteners are tight. Make sure the **mounting bolt** for the **drive pulley** is tight.
6. Check the routing of the **drive belt**. Make sure the **drive belt** is inside of all **belt guides** shown in Figure 15.

IMPORTANT: Test the drive system. Start the engine and move the throttle control to the **FAST** position. Engage and disengage the trimmer head several times. When disengaged, make sure the trimmer head completely stops when resting on the ground. If the trimmer head continues to rotate, take the machine to the nearest authorised Service Dealer.

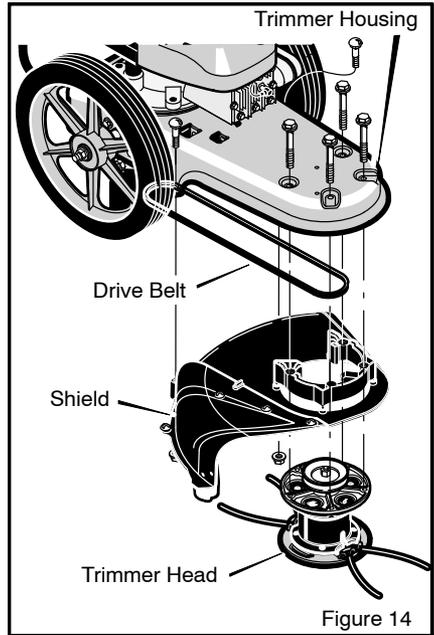


Figure 14

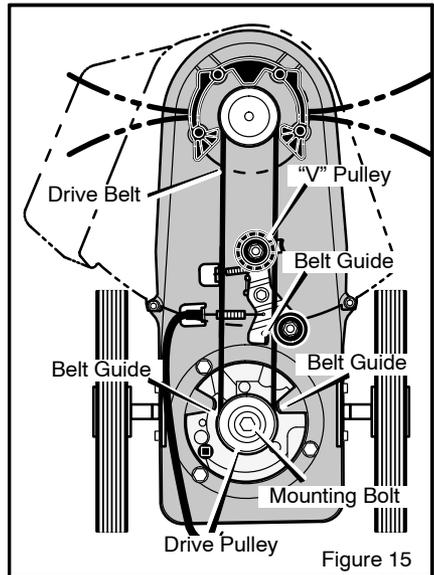


Figure 15

MAINTENANCE

STORAGE



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

When the machine is put in storage for thirty days or more, follow the steps below to make sure the machine is in good condition the following season.

Trimmer

- Completely clean the machine.
- Put the machine in a building that has good ventilation.

Engine

To prevent engine damage when the machine is in storage for 30 days or more, follow the steps below:

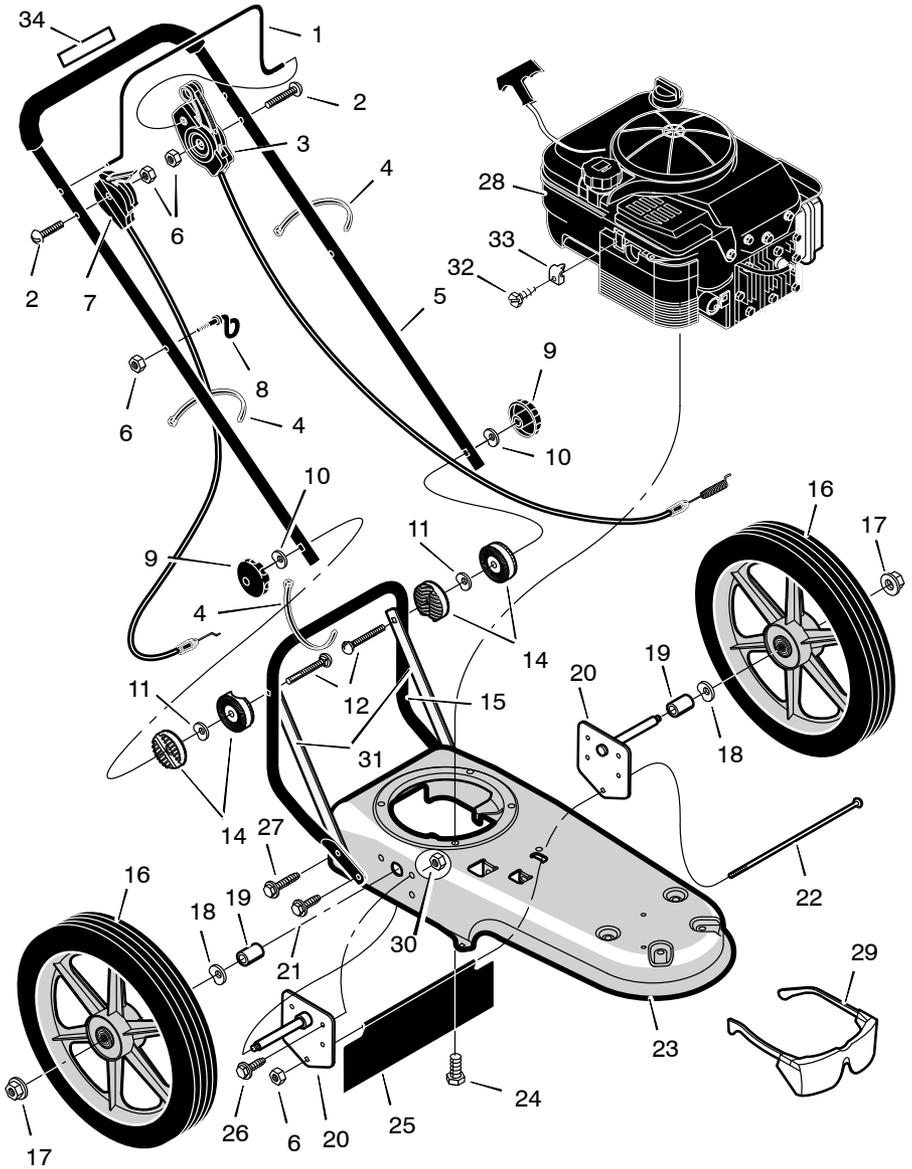
- Let the engine run until it is out of petrol.
- Drain the oil from the warm engine. Fill the engine crankcase with new oil.
- Remove the spark plug from the cylinder. Pour one ounce of oil into the cylinder. Slowly pull the recoil starter handle so that the oil will protect the cylinder. Install a new spark plug in the cylinder.
- Clean dirt and debris from the cylinder cooling fins and the engine housing.

TROUBLE SHOOTING CHART

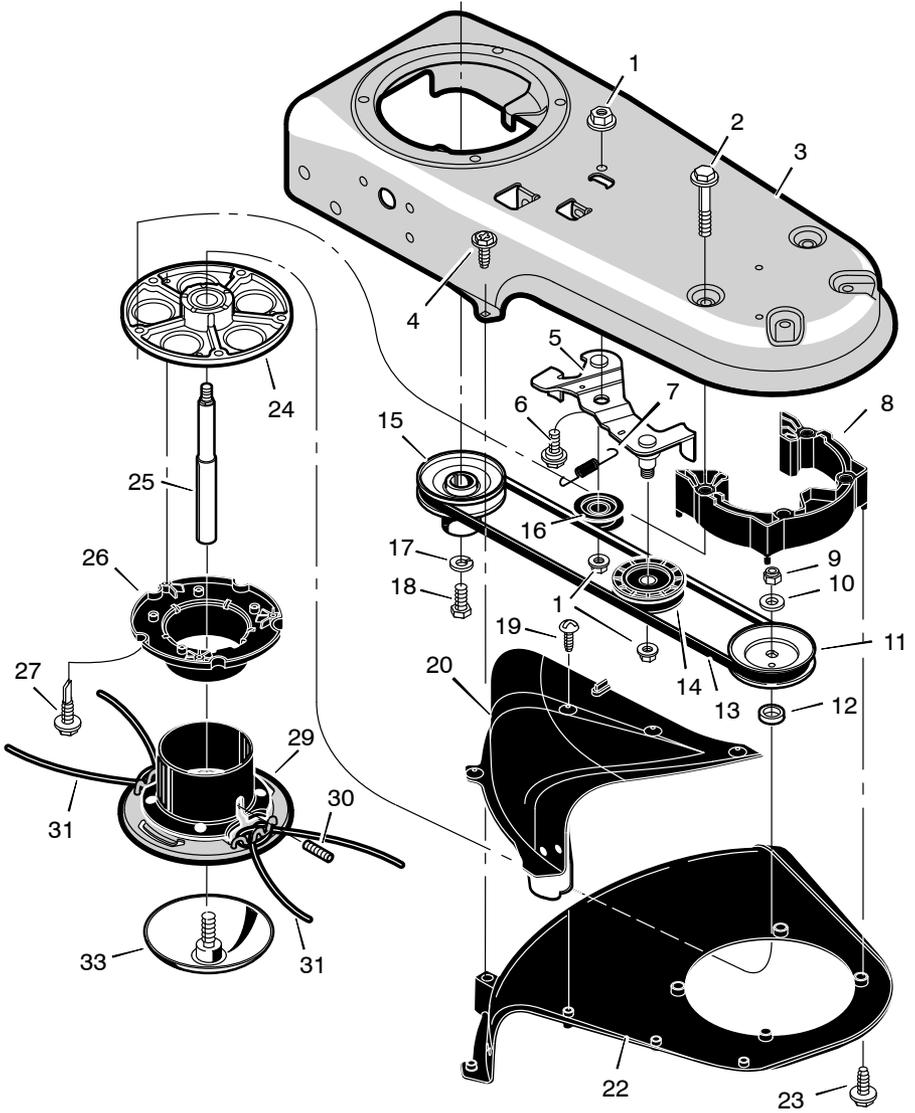
TROUBLE	CAUSE	CORRECTION
Engine does not start	Spark plug wire disconnected.	Connect spark plug wire.
	Engine not primed.	Prime engine.
	Defective or incorrectly gapped spark plug.	Inspect or replace spark plug.
	Fuel tank empty.	Add fuel.
	Dirty carburetor or fuel line.	Clean carburetor or fuel line.
	Dirty air filter.	Replace air filter.
	Carburetor out of adjustment.	For carburetor adjustment, take the unit to an authorised Service Dealer.
	Engine flooded.	Wait several minutes before starting.
	Throttle control lever in incorrect position.	Move throttle lever to FAST or START position.
	Stale petrol.	Drain old petrol and add fresh petrol.
	Defective throttle control lever or wire.	Inspect lever and wire. Replace if damaged or defective.
	Engine runs poorly.	Bad spark plug.
Dirty air filter.		Replace air filter.
Carburetor out of adjustment.		Adjust carburetor. Take the unit to an authorised Service Dealer.
Stale petrol.		Drain old petrol. Add fresh petrol.
Engine cooling system clogged.		Clean engine screen and cooling fins.

TROUBLE SHOOTING CHART

Engine overheats.	Engine cooling system clogged.	Clean debris screen and engine cooling fins.
	Carburetor out of adjustment.	Adjust carburetor. Take the unit to an authorised Service Dealer.
	Oil level is low.	Add oil.
Engine will not stop running.	Defective throttle control lever or wire.	Inspect and replace damaged parts.
	Throttle not adjusted properly.	Move throttle to the full OFF position.
Poor trimming performance. Trimmer vibrates	Trimmer line length is too short.	Correct line length is 52cm (21.5 inches). When less than 1/2 this length, replace the line.
	Engine not set at FAST speed.	Move engine throttle lever to FAST position.
	Trimmer line lengths are substantially different.	Adjust trimmer line to approximately equal lengths.
	Loose nuts or bolts.	Check all bolts and nuts, including engine bolts.
	Broken trimmer head.	Replace broken part.
Trimmer head does not retain line	Trimmer line not properly attached.	Follow instructions on decal or in the Maintenance section of the owner's handbook.
	Broken line retainer.	Replace trimmer head assembly.
	Trimmer line not correct size.	Use 3,9mm (0.155 inch) diameter trimmer line.



Key No.	Part No.	Description
1	MU740198E701MA	Lever, Stop
2	MU323035MA	Bolt
3	MU740193MA	Cable, Control Latching
4	MU071372MA	Tie, Cable
5	MU740196E701MA	Handlebar
6	MU15x116MA	Nut
7	MU1601039MA	Control, Throttle
8	MU672510MA	Guide, Rope
9	MU740202MA	Knob, Handlebar
10	MU783000MA	Washer
11	MU711936MA	Washer, Spring
12	MU711937MA	Bolt
14	MU740158MA	Pivot, Handlebar
15	MU740195E701MA	Handlebar, Lower
16	MU740185MA	Wheel & Tire
17	MU015x84MA	Nut, Axle
18	MU0020x3MA	Washer
19	MU740190MA	Spacer
20	MU740188MA	Assembly, Axle & Bracket
21	MU26x274MA	Screw
22	MU711935MA	Bolt, Carriage
23	MU740150E701MA	Frame, Trimmer
24	MU0025x6MA	Bolt
25	MU740192MA	Shield, Trailing
26	MU001x45MA	Bolt
27	MU26x267MA	Screw
28	-----	Engine
29	MU711890MA	Protection, Eye
30	MU015x88MA	Nut
31	MU1601040MA	Support, Handle
32	MU26x268MA	Screw
33	MU042294MA	Clamp, Throttle
34	MU712409MA	Decal, Engine Stop
--	MU407002	Decal, Powertrim (not shown)
--	MU410087	Decal, Hayter (not shown)
--	MU713006MA	Decal, Warning (not shown)
--	1740514	Instruction Book & Parts List



Code 407E

REPAIR PARTS

Key No.	Part No.	Description
1	MU015x84MA	Nut
2	MU025x11MA	Screw
3	MU740150E701MA	Frame, Trimmer
4	MU26x256MA	Screw
5	MU740732MA	Bracket, Idler Assembly
6	MU009x48MA	Bolt
7	MU712403MA	Spring
8	MU740292MA	Jackshaft, Spacer
9	MU15x119MA	Nut
10	MU17x104MA	Washer
11	MU740171MA	Pulley, Cutting Head
12	MU740173MA	Spacer
13	MU711933MA	Belt
14	MU740244MA	Pulley, Idler
15	MU740179MA	Pulley, Engine
16	MU740183MA	Pulley, Idler
17	MU018x31MA	Lockwasher
18	MU001x20MA	Bolt
19	MU26x235MA	Screw
20	MU770070MA	Guard Assembly
22	MU740206MA	Guard
23	MU26x294MA	Screw
24	MU1001049MA	Jackshaft Housing Assembly
25	MU740300MA	Shaft, Cutting
26	MU740163MA	Wrap, Upper Head
27	MU712126MA	Screw
29	MU770037MA	Assembly, Cutting Disc
30	MU712127MA	Screw, Set
31	MU740164MA	Line, Cutting
33	MU740299MA	Guide Assembly, Metal Height

NOTES

NOTES

How To Order Replacement Parts

Use only manufacturer's authorised 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 machine (see serial number).

Replacement parts, except for the engine, transmission, transaxle or differential, are available from your local **Hayter** authorised dealer, the store where the mower was purchased or a service shop recommended by the store.

If you are unable to obtain parts or service in the manner outlined above, then contact:

HAYTER LIMITED,
Service Department,
Spellbrook,
Bishop's Stortford,
Hertfordshire. CM23 4BU

When ordering the following information is required:

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