

- GB Operator's manual 2-22
- SE Bruksanvisning 23-43
- DK Brugsanvisning 44-64
- FI Käyttöohje 65-86
- NO Bruksanvisning 87-107
- FR Manuel d'utilisation 108-129
- NL Gebruiksaanwijzing 130-150
- IT Istruzioni per l'uso 151-172
- ES Manual de instrucciones 173-194
- DE Bedienungsanweisung 195-217
- PT Instruções para o uso 218-239
- HU Használati utasítás 240-260
- PL Instrukcja obsługi 261-282
- EE Käsitsemisõpetus 283-303
- LV Lietošanas pamācība 304-324
- LT Naudojimosi instrukcijos 325-345

- SK Návod na obsluhu 346-366
- HR Priručnik 367-387
- RS Priručnik 388-408
- SI Navodila za uporabo 409-429
- BA Uputstvo o upotrebi 430-450
- CZ Návod k použití 451-471
- RO Instrucțiuni de utilizare 472-493
- ВС Ръководство за експлоатация 494-518
- RU Руководство по эксплуатации 519-543
- GR Οδηγίες χρήσεως 544-567
- **TR** Kullanım kılavuzu 568-589
- **UA** Посібник
- користувача 590-615



KEY TO SYMBOLS

Symbols

WARNING! Clearing saws.

brushcutters and trimmers can be dangerous! Careless or incorrect use can result in serious or fatal injury to the operator or others. It is extremely important that you read and



understand the contents of the operator's manual.

Please read the operator's manual carefully and make sure you understand the instructions before using the machine.



Always wear:

A protective helmet where there is a risk of falling objects

- Approved hearing protection
- Approved eye protection

Max. speed of output shaft, rpm





Watch out for thrown objects and ricochets

The operator of the machine must ensure, while working, that no persons or animals come closer than 15 metres.

Always wear approved protective gloves.

Wear sturdy, non-slip boots.

Only use non-metallic, flexible cutting attachments, i.e. trimmer heads with trimmer cord



Set the choke control in the choke position.

Air purge.

Noise emission to the environment according to the European Community's Directive. The machine's emission is specified in chapter Technical data and on label.



dB

Other symbols/decals on the machine refer to special certification requirements for certain markets.

The engine is switched off by moving the stop switch to the stop position. CAUTION! The stop switch automatically returns to the start position. In order to prevent unintentional starting, the spark plug



cap must be removed from the spark plug when assembling, checking and/or performing maintenance.

Always wear approved protective gloves.

Regular cleaning is required.



Visual check









CONTENTS

Contents

KEY TO SYMBOLS

Symbols	2
Symbols on the machine and/or in the manual:	2
CONTENTS	
Contents	3
Note the following before starting:	3
INTRODUCTION	
Dear Customer,	4
WHAT IS WHAT?	
What is what on the grass trimmer?	5
GENERAL SAFETY PRECAUTIONS	
Important	6
Personal protective equipment	6
Machine's safety equipment	7
Cutting equipment	9
ASSEMBLY	
Fitting the loop handle	10
Assembling and dismantling the two-piece shaft	10
Assembling the cutting equipment	10
Fitting the trimmer guard and trimmer head	11
Fitting the trimmer guard and trimmer head	11
FUEL HANDLING	
Fuel safety	12
Fuel	12
Fueling	13
STARTING AND STOPPING	
Check before starting	14
Starting and stopping	14
WORKING TECHNIQUES	
General working instructions	15
MAINTENANCE	
Carburettor	17
Muffler	17
Cooling system	18
Spark plug	18
Two-piece shaft	18
Air filter	19
Maintenance schedule	20
TECHNICAL DATA	
Technical data	
EC-declaration of conformity	22

Note the following before starting:

Please read the operator's manual carefully.



WARNING! Long-term exposure to noise can result in permanent hearing impairment. So always use approved hearing protection.



WARNING! Under no circumstances may the design of the machine be modified without the permission of the manufacturer. Always use genuine accessories. Non-authorized modifications and/or accessories can result in serious personal injury or the death of the operator or others.



WARNING! A clearing saw, brushcutter or trimmer can be dangerous if used incorrectly or carelessly, and can cause serious or fatal injury to the operator or others. It is extremely important that you read and understand the contents of this operator's manual.

INTRODUCTION

Dear Customer,

Thank you for choosing a McCulloch product. You are thereby part of a story that started long ago, when the McCulloch Corporation started its manufacturing of engines during World War II. In 1949, when McCulloch introduced its first light one-man chainsaw, woodworking would never be the same again.

The line of innovative chainsaws would continue over the decades, and business was expanded, first by airplane and kart engines in the 1950s, then by mini chainsaws in the 1960s. Later, in the 1970s and 80s, trimmers and blower vacs were added to the range.

Today, as a part of the Husqvarna group, McCulloch continues the tradition of powerful engines, technical innovations, and strong designs that have been our hallmarks for more than half a century. Lowering fuel consumption, emissions and noise levels are of top priority to us, as is improving safety and user-friendliness.

We certainly hope that you will be satisfied with your McCulloch product, as it is designed to be your companion for a long time. By following this operators manual's advice on usage, service, and maintenance, its lifespan can be extended. If you should need professional help with repair or service, please use the Service Locator at www.mcculloch.biz.

McCulloch has a policy of continuous product development and therefore reserves the right to modify the design and appearance of products without prior notice.

This manual can also be downloaded at www.mcculloch.biz.

WHAT IS WHAT?



What is what on the grass trimmer?

- 1 Trimmer head
- 2 Grease filler cap, bevel gear
- 3 Bevel gear
- 4 Cutting attachment guard
- 5 Shaft
- 6 Shaft coupling
- 7 Loop handle
- 8 Throttle trigger
- 9 Stop switch
- 10 Throttle lockout
- 11 Spark plug cap and spark plug

- 12 Starter
- 13 Starter handle
- 14 Fuel tank
- 15 Air filter cover
- 16 Air purge.
- 17 Choke control
- 18 Drive disc
- 19 Operator's manual
- 20 Combination spanner
- 21 Locking pin

Important

IMPORTANT!

The machine is only designed for trimming grass.

The only accessories you can operate with this engine unit are the cutting attachments we recommend in the chapter on Technical data.

Never use the machine if you are tired, if you have drunk alcohol, or if you are taking medication that could affect your vision, your judgement or your co-ordination.

Wear personal protective equipment. See instructions under the heading "Personal protective equipment".

Never use a machine that has been modified in any way from its original specification.

Never use a machine that is faulty. Carry out the checks, maintenance and service instructions described in this manual. Some maintenance and service measures must be carried out by trained and qualified specialists. See instructions under the heading Maintenance.

All covers, guards and handles must be fitted before starting. Ensure that the spark plug cap and ignition lead are undamaged to avoid the risk of electric shock.

The machine operator must ensure that no people or animals come closer than 15 metres while working. When several operators are working in the same area the safety distance should be at least twice the tree height and no less than 15 metres.



WARNING! This machine produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their physician and the medical implant manufacturer before



WARNING! Running an engine in a confined or badly ventilated area can result in death due to asphyxiation or carbon monoxide poisoning.

operating this machine.



WARNING! Never allow children to use or be in the vicinity of the machine. As the machine is equipped with a springloaded stop switch and can be started by low speed and force on the starter handle, even small children under some circumstances can produce the force necessary to start the machine. This can mean a risk of serious personal injury. Therefore remove the spark plug cap when the machine is not under close supervision.

Personal protective equipment

IMPORTANT!

A clearing saw, brushcutter or trimmer can be dangerous if used incorrectly or carelessly, and can cause serious or fatal injury to the operator or others. It is extremely important that you read and understand the contents of this operator's manual.

You must use approved personal protective equipment whenever you use the machine. Personal protective equipment cannot eliminate the risk of injury but it will reduce the degree of injury if an accident does happen. Ask your dealer for help in choosing the right equipment.



WARNING! Listen out for warning signals or shouts when you are wearing hearing protection. Always remove your hearing protection as soon as the engine stops.

HELMET

A protective helmet where there is a risk of falling objects

HEARING PROTECTION

Wear hearing protection that provides adequate noise reduction.



EYE PROTECTION

Always wear approved eye protection. If you use a visor then you must also wear approved protective goggles. Approved protective goggles must comply with standard ANSI Z87.1 in the USA or EN 166 in EU countries.



GLOVES

Gloves should be worn when necessary, e.g., when fitting cutting attachments.



BOOTS

Wear sturdy, non-slip boots.



CLOTHING

Wear clothes made of a strong fabric and avoid loose clothing that can catch on twigs and branches. Always wear heavy, long pants. Do not wear jewellery, shorts sandals or go barefoot. Secure hair so it is above shoulder level.

FIRST AID KIT

Always have a first aid kit nearby.



Machine's safety equipment

This section describes the machine's safety equipment, its purpose, and how checks and maintenance should be carried out to ensure that it operates correctly. See the "What is what?" section to locate where this equipment is positioned on your machine.

The life span of the machine can be reduced and the risk of accidents can increase if machine maintenance is not carried out correctly and if service and/or repairs are not carried out professionally. If you need further information please contact your nearest service workshop.

IMPORTANT!

All servicing and repair work on the machine requires special training. This is especially true of the machine's safety equipment. If your machine fails any of the checks described below you must contact your service agent. When you buy any of our products we guarantee the availability of professional repairs and service. If the retailer who sells your machine is not a servicing dealer, ask him for the address of your nearest service agent.



WARNING! Never use a machine with faulty safety equipment. The machine's safety equipment must be checked and maintained as described in this section. If your machine fails any of these checks contact your service agent to get it repaired.

Throttle lockout

The throttle lockout is designed to prevent accidental operation of the throttle control. When you press the lock (A) (i.e. when you grasp the handle) it releases the throttle control (B). When you release the handle the throttle control and the throttle lockout both move back to their original positions. This movement is controlled by two independent return springs. This arrangement means that the throttle control is automatically locked at the idle setting.



Make sure the throttle control is locked at the idle setting when the throttle lockout is released.



Press the throttle lockout and make sure it returns to its original position when you release it.



Check that the throttle trigger and throttle lockout move freely and that the return springs work properly.



See instructions under the heading Start. Start the machine and apply full throttle. Release the throttle and check that the cutting attachment stops and remains at a standstill. If the cutting attachment rotates with the throttle in the idle position then the carburettor idle setting must be checked. See instructions under the heading Maintenance.

Stop switch

Use the stop switch to switch off the engine.



Start the engine and make sure the engine stops when you move the stop switch to the stop setting.

Cutting attachment guard



This guard is intended to prevent loose objects from being thrown towards the operator. The guard also protects the operator from accidental contact with the cutting attachment.



Check that the guard is undamaged and not cracked. Replace the guard if it has been exposed to impact or is cracked.

Always use the recommended guard for the cutting attachment you are using. See chapter on Technical data.



WARNING! Never use a cutting attachment without an approved guard. See the chapter on Technical data. If an incorrect or faulty guard is fitted this can cause serious personal injury.

Muffler



The muffler is designed to keep noise levels to a minimum and to direct exhaust fumes away from the user. A muffler fitted with a catalytic converter is also designed to reduce harmful exhaust gases.



In countries that have a warm and dry climate there is a significant risk of fire. We therefore fit certain mufflers with a spark arrestor mesh. Check whether the muffler on your machine is fitted with this kind of mesh.



For mufflers it is very important that you follow the instructions on checking, maintaining and servicing your machine.

Never use a machine that has a faulty muffler. Regularly check that the muffler is securely attached to the machine.

If the muffler on your machine is fitted with a spark arrestor mesh this must be cleaned regularly. A blocked mesh will cause the engine to overheat and may lead to serious damage.



WARNING! Mufflers fitted with catalytic converters get very hot during use and remain so for some time after stopping. This also applies at idle speed. Contact can result in burns to the skin. Remember the risk of fire!



WARNING! The inside of the muffler contain chemicals that may be carcinogenic. Avoid contact with these elements in the event of a damaged muffler.



WARNING! Bear in mind that:

The exhaust fumes from the engine are hot and may contain sparks which can start a fire. Never start the machine indoors or near combustible material!

Cutting equipment

This section describes how to choose and maintain your cutting equipment in order to:

- Reduce the risk of blade thrust.
- Obtain maximum cutting performance.
- Extend the life of cutting equipment.

IMPORTANT!

Only use cutting attachments with the guards we recommend! See the chapter on Technical data.

Refer to the instructions for the cutting attachment to check the correct way to load the cord and the correct cord diameter.



WARNING! Always stop the engine before doing any work on the cutting attachment. This continues to rotate even after the throttle has been released. Ensure that the cutting attachment has stopped completely and disconnect the HT lead from the spark plug before you start to work on it.



WARNING! A faulty cutting attachment may increase the risk of accidents.

Trimmer head

IMPORTANT!

Always ensure the trimmer cord is wound tightly and evenly around the drum, otherwise the machine will generate harmful vibration.

Only use the recommended trimmer heads and trimmer cords. These have been tested by the manufacturer to suit a particular engine size. This is especially important when a fully automatic trimmer head is used. Only use the recommended cutting attachment. See the chapter on Technical data.



- Smaller machines generally require small trimmer heads and vice versa. This is because when clearing using a cord the engine must throw out the cord radially from the trimmer head and overcome the resistance of the grass being cleared.
- The length of the cord is also important. A longer cord requires greater engine power than a shorter cord of the same diameter.
- Make sure that the cutter on the trimmer guard is intact. This is used to cut the cord to the correct length.
- To increase the life of the cord it can be soaked in water for a couple of days. This will make the line tougher so that it lasts longer.

ASSEMBLY

Fitting the loop handle



Clip the loop handle onto the shaft. Note that the loop handle must be fitted between the arrows on the shaft.



• Fit the bolt, securing plate and wing nut as shown in the diagram. Tighten the wing nut.

Assembling and dismantling the two-piece shaft



Assembly:

• Loosen the coupling by turning the knob.



• Align the tab of the attachment (A) with the hole in the coupling (B).



• Push the attachment into the coupling until the attachment snaps into place.

· Before using the unit, tighten the knob securely.



Dismantling:

Loosen the coupling by turning the knob (at least 3 times).



Push and hold the button (C). While securely holding the engine end, pull the attachment straight out of the coupling.



Assembling the cutting equipment



WARNING! Never use a cutting attachment without an approved guard. See the chapter on Technical data. If an incorrect or faulty guard is fitted this can cause serious personal injury.

ASSEMBLY

Fitting the trimmer guard and trimmer head (T22LS)



 Fit the correct trimmer guard (A) for use with the trimmer head. Hook the trimmer guard/combination guard onto the fitting on the shaft and secure with the bolt (L).



- Fit the drive disc (B) on the output shaft.
- Turn the blade shaft until one of the holes in the drive disc aligns with the corresponding hole in the gear housing.
- Insert the locking pin (C) in the hole to lock the shaft.
- Screw on the trimmer head/plastic blades (H) in the opposite direction to the direction of rotation.



 To dismantle, follow the instructions in the reverse order.

Fitting the trimmer guard and trimmer head (T22LCS)



 Fit the guard as shown in the diagram. Tighten securely.



• Fit the dust cup on the shaft. The nut must be completely covered by the dust cup.



- Hold the dust cup with a spanner to prevent the shaft from rotating.
- · Screw the trimmer head onto the shaft.

FUEL HANDLING

Fuel safety

Never start the machine:

- 1 If you have spilt fuel on it. Wipe off the spillage and allow remaining fuel to evaporate.
- 2 If you have spilt fuel on yourself or your clothes, change your clothes. Wash any part of your body that has come in contact with fuel. Use soap and water.
- 3 If the machine is leaking fuel. Check regularly for leaks from the fuel cap and fuel lines.

Transport and storage

- Store and transport the machine and fuel so that there is no risk of any leakage or fumes coming into contact with sparks or naked flames, for example, from electrical machinery, electric motors, electrical relays/ switches or boilers.
- When storing and transporting fuel always use approved containers intended for this purpose.
- When storing the machine for long periods the fuel tank must be emptied. Contact your local petrol station to find out where to dispose of excess fuel.
- Ensure the machine is cleaned and that a complete service is carried out before long-term storage.
- The transport guard must always be fitted to the cutting attachment when the machine is being transported or in storage.
- Secure the machine during transport.
- In order to prevent unintentional starting of the engine, the spark plug cap must always be removed during long-term storage, if the machine is not under close supervision and when performing all service measures.



WARNING! Take care when handling fuel. Bear in mind the risk of fire, explosion and inhaling fumes.

Fuel

CAUTION! The machine is equipped with a two-stroke engine and must always been run using a mixture of petrol and two-stroke oil. It is important to accurately measure the amount of oit to be mixed to ensure that the correct mixture is obtained. When mixing small amounts of fuel, even small inaccuracies can drastically affect the ratio of the mixture.



WARNING! Fuel and fuel fumes are highly inflammable and can cause serious injury when inhaled or allowed to come in contact with the skin. For this reason observe caution when handling fuel and make sure there is adequate ventilation.

Petrol



CAUTION! Always use a quality petrol/oil mixture at least 90 octane (RON). If your machine is equipped with a catalytic converter (see chapter on Technical data) always use a good quality unleaded petrol/oil mixture. Leaded petrol will destroy the catalytic converter.

Use low-emission petrol, also known as alkylate petrol, if it is available.



- The lowest octane recommended is 90 (RON). If you
 run the engine on a lower octane grade than 90 socalled knocking can occur. This gives rise to a high
 engine temperature, which can result in serious
 engine damage.
- When working at continuous high revs a higher octane rating is recommended.

Two-stroke oil

- For best results and performance use Universal, Universal powered by McCULLOCH two-stroke engine oil, which is specially formulated for our aircooled two-stroke engines.
- Never use two-stroke oil intended for water-cooled engines, sometimes referred to as outboard oil (rated TCW).
- · Never use oil intended for four-stroke engines.
- A poor oil quality and/or too high oil/fuel ratio may jeopardise function and decrease the life time of catalytic converters.
- Mixing ratio

1:50 (2%) with Universal, Universal powered by McCULLOCH two-stroke oil.

1:33 (3%) with oils class JASO FB or ISO EGB formulated for air-cooled, two-stroke engines.

Petrol, litre	Two-stroke oil, litre		
	2% (1:50)	3% (1:33)	
5	0,10	0,15	
10	0,20	0,30	
15	0,30	0,45	
20	0,40	0,60	

FUEL HANDLING

Mixing

- Always mix the petrol and oil in a clean container intended for fuel.
- Always start by filling half the amount of the petrol to be used. Then add the entire amount of oil. Mix (shake) the fuel mixture. Add the remaining amount of petrol.
- Mix (shake) the fuel mixture thoroughly before filling the machine's fuel tank.



- Do not mix more than one month's supply of fuel at a time.
- If the machine is not used for some time the fuel tank should be emptied and cleaned.



WARNING! The catalytic converter muffler gets very hot during and after use. This also applies during idling. Be aware of the fire hazard, especially when working near flammable substances and/ or vapours.

Fueling





WARNING! Taking the following precautions, will lessen the risk of fire:

Mix and pour fuel outdoors, where there are no sparks or flames.

Do not smoke or place hot objects near fuel.

Always shut off the engine before refuelling.

Always stop the engine and let it cool for a few minutes before refuelling.

When refuelling, open the fuel cap slowly so that any excess pressure is released gently.

Tighten the fuel cap carefully after refuelling.

Always move the machine away from the refuelling area and source before starting.

- Always use a fuel container with an anti-spill valve.
- If you have spilt fuel on it. Wipe off the spillage and allow remaining fuel to evaporate.
- Clean the area around the fuel cap. Contamination in the tank can cause operating problems.
- Ensure that the fuel is well mixed by shaking the container before filling the tank.



STARTING AND STOPPING

Check before starting



Check that the trimmer head and trimmer guard are not damaged or cracked. Replace the trimmer head or trimmer guard if they have been exposed to impact or are cracked.



- Never use the machine without a guard nor with a defective guard.
- All covers must be correctly fitted and undamaged before you start the machine.

Starting and stopping



WARNING! The complete clutch cover and shaft must be fitted before the machine is started, otherwise the clutch can come loose and cause personal injury.

Always move the machine away from the refuelling area and source before starting. Place the machine on a flat surface. Ensure the cutting attachment cannot come into contact with any object.

Make sure no unauthorised persons are in the working area, otherwise there is a risk of serious personal injury. The safety distance is 15 metres.

Starting

Primer bulb: Press the air purge repeatedly until fuel begins to fill the bulb. The bulb need not be completely filled.



Choke: Set the choke control in the choke position.





WARNING! When the engine is started with the choke in choke position the cutting attachment will start to rotate immediately.

Hold the body of the machine on the ground using your left hand (CAUTION! Not with your foot!). Grip the starter handle, slowly pull out the cord with your right hand until you feel some resistance (the starter pawls grip), now quickly and powerfully pull the cord. Never twist the starter cord around your hand.

Repeat pulling the cord until the engine starts. When the engine starts. return choke control to run position and apply full throttle; the throttle will automatically disengage from the start setting.

CAUTION! Do not pull the starter cord all the way out and do not let go of the starter handle when the cord is fully extended. This can damage the machine.



Stopping

Stop the engine by switching off the ignition.



CAUTION! The stop switch automatically returns to the start position. In order to prevent unintentional starting, the spark plug cap must be removed from the spark plug when assembling, checking and/or performing maintenance.

WORKING TECHNIQUES

General working instructions

IMPORTANT!

This section takes up the basic safety precautions for working with a trimmer.

If you encounter a situation where you are uncertain how to proceed you should ask an expert. Contact your dealer or your service workshop.

Avoid all usage which you consider to be beyond your capability.

You must understand the difference between forestry clearing, grass clearing and grass trimming before use.

Basic safety rules



1 Look around you:

- To ensure that people, animals or other things cannot affect your control of the machine.
- To ensure that people, animals, etc., do not come into contact with the cutting attachment or loose objects that are thrown out by the cutting attachment.
- CAUTION! Do not use the machine unless you are able to call for help in the event of an accident.
- 2 Inspect the working area. Remove all loose objects, such as stones, broken glass, nails, steel wire, string, etc. that could be thrown out or become wrapped around the cutting attachment.
- 3 Do not use the machine in bad weather, such as dense fog, heavy rain, strong wind, intense cold, etc. Working in bad weather is tiring and often brings added risks, such as icy ground, unpredictable felling direction, etc.
- 4 Make sure you can move and stand safely. Check the area around you for possible obstacles (roots, rocks, branches, ditches, etc.) in case you have to move suddenly. Take great care when working on sloping ground.



5 Keep a good balance and a firm foothold. Do not overreach. Keep proper footing and balance at all times. 6 Always hold the machine with both hands. Hold the machine on the right side of your body. Keep all parts of your body away from the hot surfaces. Keep all parts of your body away from the rotating cutting attachment.



- 7 Keep the cutting attachment below waist level.
- 8 The engine must be switched off before moving.
- 9 Never put the machine down with the engine running unless you have it in clear sight.



WARNING! Neither the operator of the machine nor anyone else may attempt to remove the cut material while the engine is running or the cutting equipment is rotating, as this can result in serious injury.

Stop the engine and cutting equipment before you remove material that has wound around the blade shaft as otherwise there is a risk of injury. The bevel gear can get hot during use and may remain so for a while afterwards. You could get burnt if you touch it.



WARNING! Watch out for thrown objects. Always wear approved eye protection. Never lean over the cutting attachment guard. Stones, rubbish, etc. can be thrown up into the eyes causing blindness or serious injury.

Keep unauthorised persons at a distance. Children, animals, onlookers and helpers should be kept outside the safety zone of 15 m. Stop the machine immediately if anyone approaches. Never swing the machine around without first checking behind you to make sure noone is within the safety zone.

WORKING TECHNIQUES

Basic working techniques

Always slow the engine to idle speed after each working operation. Long periods at full throttle without any load on the engine can lead to serious engine damage.



WARNING! Sometimes branches or grass get caught between the guard and cutting attachment. Always stop the engine before cleaning.



WARNING! Overexposure to vibration can lead to circulatory damage or nerve damage in people who have impaired circulation. Contact your doctor if you experience symptoms of overexposure to vibration. Such symptoms include numbness, loss of feeling, tingling, pricking, pain, loss of strength, changes in skin colour or condition. These symptoms normally appear in the fingers, hands or wrists. The risk increases at low temperatures.

Grass trimming with a trimmer head





Trimming

 Hold the trimmer head just above the ground at an angle. It is the end of the cord that does the work. Let the cord work at its own pace. Never press the cord into the area to be cut.



- The cord can easily remove grass and weeds up against walls, fences, trees and borders, however it can also damage sensitive bark on trees and bushes, and damage fence posts.
- Reduce the risk of damaging plants by shortening the cord to 10-12 cm and reducing the engine speed.

Clearing

 The clearing technique removes all unwanted vegetation. Keep the trimmer head just above the ground and tilt it. Let the end of the cord strike the ground around trees, posts, statues and the like. $\ensuremath{\mathsf{CAUTION!}}$ This technique increases the wear on the cord.



- The cord wears quicker and must be fed forward more often when working against stones, brick, concrete, metal fences, etc., than when coming into contact with trees and wooden fences.
- When trimming and clearing you should use less than full throttle so that the cord lasts longer and to reduce the wear on the trimmer head.

Cutting

 The trimmer is ideal for cutting grass that is difficult to reach using a normal lawn mower. Keep the cord parallel to the ground when cutting. Avoid pressing the trimmer head against the ground as this can ruin the lawn and damage the tool.



 Do not allow the trimmer head to constantly come into contact with the ground during normal cutting.
 Constant contact of this type can cause damage and wear to the trimmer head.

Sweeping

 The fan effect of the rotating cord can be used for quick and easy clearing up. Hold the cord parallel to and above the area to be swept and move the tool to and fro.



When cutting and sweeping you should use full throttle to obtain the best results.

Carburettor

Adjustment of the idle speed

Before any adjustments are made, make sure that the air filter is clean and the air filter cover is fitted.

Adjust the idle speed using the idle adjustment screw T, if it is necessary to readjust. First turn the idle adjustment screw T clockwise until the cutting attachment starts to rotate. Then turn the screw anticlockwise until the cutting attachment stops. The idle speed is correctly adjusted when the engine will run smoothly in every position. The idle speed should also be well below the speed at which the cutting attachment starts to rotate.



Rec. idle speed: See the Technical data section.

WARNING! If the idle speed cannot be adjusted so that the cutting attachment stops, contact your dealer/service workshop. Do not use the machine until it has been correctly adjusted or repaired.

Muffler



CAUTION! Some mufflers are fitted with a catalytic converter. See chapter on Technical data to see whether your machine is fitted with a catalytic converter.

The muffler is designed to reduce the noise level and to direct the exhaust gases away from the operator. The exhaust gases are hot and can contain sparks, which may cause fire if directed against dry and combustible material.



Some mufflers are equipped with a special spark arrestor mesh. If your machine has this type of muffler, you should clean the mesh at least once a week. This is best done with a wire brush. On mufflers without a catalytic converter the mesh should be cleaned weekly, or replaced if necessary. On mufflers fitted with a catalytic converter the mesh should be checked, and if necessary cleaned, monthly. If the mesh is damaged it should be **replaced**. If the mesh is frequently blocked, this can be a sign that the performance of the catalytic converter is impaired. Contact your dealer to inspect the muffler. A blocked mesh will cause the machine to overheat and result in damage to the cylinder and piston.



CAUTION! Never use a machine with a defective muffler.

WARNING! Mufflers fitted with catalytic converters get very hot during use and remain so for some time after stopping. This also applies at idle speed. Contact can result in burns to the skin. Remember the risk of fire!

Cooling system



To keep the working temperature as low as possible the machine is equipped with a cooling system.



The cooling system consists of:

- 1 Air intake on the starter.
- 2 Cooling fins on the cylinder.

Clean the cooling system with a brush once a week, more often in demanding conditions. A dirty or blocked cooling system results in the machine overheating which causes damage to the piston and cylinder.

Spark plug



The spark plug condition is influenced by:

- · Incorrect carburettor adjustment.
- An incorrect fuel mixture (too much or incorrect type of oil).
- A dirty air filter.

These factors cause deposits on the spark plug electrodes, which may result in operating problems and starting difficulties.

If the machine is low on power, difficult to start or runs poorly at idle speed: always check the spark plug first before taking any further action. If the spark plug is dirty, clean it and check that the electrode gap is 0,5 mm. The spark plug should be replaced after about a month in operation or earlier if necessary.



CAUTION! Always use the recommended spark plug type! Use of the wrong spark plug can damage the piston/ cylinder. Check that the spark plug is fitted with a suppressor.

Two-piece shaft



The drive shaft end in the lower shaft should be lubricated with grease every 30 hours. There is a risk that the drive shaft ends (splined coupling) on models with two-piece shafts will seize if they are not lubricated regularly.



Air filter



The air filter must be regularly cleaned to remove dust and dirt in order to avoid:

- Carburettor malfunctions
- Starting problems
- Loss of engine power
- · Unnecessary wear to engine parts.
- Excessive fuel consumption.



Clean the filter every 25 hours, or more regularly if conditions are exceptionally dusty.

Cleaning the air filter

Remove the air filter cover and take out the filter. Wash it clean in warm, soapy water. Ensure that the filter is dry before refitting it.

An air filter that has been in use for a long time cannot be cleaned completely. The filter must therefore be replaced with a new one at regular intervals. A damaged air filter must always be replaced.

If the machine is used in dusty conditions the air filter should be soaked in oil. See instructions under the heading Oiling the air filter.

Oiling the air filter



Always use filter oil, art. no. 531 00 92-48. The filter oil contains a solvent to make it spread evenly through the filter. You should therefore avoid skin contact.

Put the filter in a plastic bag and pour the filter oil over it. Knead the plastic bag to distribute the oil. Squeeze the excess oil out of the filter inside the plastic bag and pour off the excess before fitting the filter to the machine. Never use common engine oil. This would drain through the filter quite quickly and collect in the bottom.



Bevel gear



The bevel gear is filled with the right quantity of grease at the factory. However, before using the machine you should check that the bevel gear is filled three-quarters full with grease. Use HUSQVARNA special grease.



The grease in the bevel gear does not normally need to be changed except if repairs are carried out.

Maintenance schedule

The following is a list of the maintenance that must be performed on the machine. Most of the items are described in the Maintenance section. The user must only carry out the maintenance and service work described in this Operator's Manual. More extensive work must be carried out by an authorized service workshop.

Maintenance	Daily maintenance	Weekly maintenance	Monthly maintenance
Clean the outside of the machine.	Х		
Make sure the throttle trigger lock and the throttle function correctly from a safety point of view.	х		
Check that the stop switch works correctly.	Х		
Check that the cutting attachment does not rotate at idle.	Х		
Clean the air filter. Replace if necessary.	Х		
Check that the guard is undamaged and not cracked. Replace the guard if it has been exposed to impact or is cracked.	х		
Check that the trimmer head is undamaged and not cracked. Replace the trimmer head if necessary.	х		
Check that nuts and screws are tight.	Х		
Check that there are no fuel leaks from the engine, tank or fuel lines.	х		
Check the starter and starter cord.		Х	
Check that the vibration damping elements are not damaged.		Х	
Clean the outside of the spark plug. Remove it and check the electrode gap. Adjust the gap to 0.5 mm or replace the spark plug. Check that the spark plug is fitted with a suppressor.		x	
Clean the machine's cooling system.		Х	
Clean or replace the spark arrestor mesh on the muffler (only applies to mufflers without a catalytic converter).		x	
Clean the outside of the carburettor and the space around it.		Х	
Check that the bevel gear is filled three-quarters full with lubricant. Fill if necessary using special grease.		х	
Check the fuel filter from contamination and the fuel hose from cracks or other defects. Replace if necessary.			x
Check all cables and connections.			Х
Check the clutch, clutch springs and the clutch drum for wear. Replace if necessary by an autorized service workshop.			x
Replace the spark plug. Check that the spark plug is fitted with a suppressor.			x

TECHNICAL DATA

Technical data

	T22LCS	T22LS
Engine		
Cylinder displacement, cm ³	21,7	21,7
Cylinder bore, mm	32,0	32,0
Stroke, mm	27	27
Idle speed, rpm	2900	2900
Recommended max. speed, rpm	7200	9100
Speed of output shaft, rpm	7200	6232
Max. engine output, acc. to ISO 8893, kW/ rpm	0,6/7800	0,6/7800
Catalytic converter muffler	Yes	Yes
Speed-regulated ignition system	No	No
Ignition system		
Spark plug	NGK CMR6A	NGK CMR6A
Electrode gap, mm	0,5	0,5
Fuel and lubrication system		
Fuel tank capacity, litre	0,3	0,3
Weight		
Weight without fuel, cutting attachment and guard, kg	4,6	4,9
Noise emissions		
(see note 1)		
Sound power level, measured dB(A)	103	105
Sound power level, guaranteed L _{WA} dB(A)	103	104
Noise levels		
(see note 2)		
Equivalent sound pressure level at the operator's ear, measured according to EN ISO 11806 and ISO 22868, dB(A):	88	90
Vibration levels		
(see note 3)		
Equivalent vibration levels ($a_{hv,eq}$) at handles, measured according to EN ISO 11806 and ISO 22867, m/s ²		
Equipped with trimmer head (original), left/right	4,22/3,49	3,76/3,12

Note 1: Noise emissions in the environment measured as sound power (L_{WA}) in conformity with EC directive 2000/14/ EC. Reported sound power level for the machine has been measured with the original cutting attachment that gives the highest level. The difference between guaranteed and measured sound power is that the guaranteed sound power also includes dispersion in the measurement result and the variations between different machines of the same model according to Directive 2000/14/EC.

Note 2: Reported data for equivalent sound pressure level for the machine has a typical statistical dispersion (standard deviation) of 1 dB (A).

Note 3: Reported data for equivalent vibration level has a typical statistical dispersion (standard deviation) of 1 m/s².

TECHNICAL DATA

T22LS		
Approved accessories	Туре	Cutting attachment guard, Art. no.
Blade shaft thread M10		
Trimmer head	P25 (Ø 2.0 mm cord)	574 55 72-01
T22LCS		
Approved accessories	Туре	Cutting attachment guard, Art. no.
Blade shaft thread 3/8 R		
Trimmer head	P25 (Ø 2.0 mm cord)	574 61 31-01

The following attachments are recommended for the specified models.

Approved accessories	Art No.	Use with
Cultivator attachment CAC	577 61 62-02	T22LCS, T22LS
Blower attachment BAC	577 61 62-03	T22LCS, T22LS
Edger attachment EAC	577 61 62-04	T22LCS, T22LS
Pole saw attachment PAC	577 61 62-05	T22LCS, T22LS

EC-declaration of conformity (Applies to Europe only)

We, Husqvarna AB, SE-561 82 Huskvarna, Sweden, tel: +46-36-146500, declare that the grass trimmers MccULLOCHT22LS and T22LCS with serial numbers dating from 2012 onwards (the year is clearly stated on the rating plate, followed by the serial number), comply with the requirements of the COUNCIL'S DIRECTIVE:

- of May 17, 2006 "relating to machinery" 2006/42/EC
- of December 15, 2004 "relating to electromagnetic compatibility" 2004/108/EC.

- of May 8, 2000 "relating to the noise emissions in the environment" **2000/14/EC**. Conformity assessment according to Annex V. For information relating to noise emissions, see the chapter Technical data.

The following standards have been applied: EN ISO 12100-2/A1:2009, CISPR 12:2007, EN ISO 11806:2008

SMP Svensk Maskinprovning AB, Fyrisborgsgatan 3, SE-754 50 Uppsala, Sweden, has performed voluntary type examination on behalf of Husqvarna AB. The certificates are numbered:

SEC/11/2328, 01/164/080, - T22LCS, SEC/11/2329, 01/164/079, - T22LS

Huskvarna 31 October 2011

By hy

Bengt Frögelius, Development manager (Authorized representative for Husqvarna AB and responsible for technical documentation.)