Operator's manual LC 48 LC 48VE LC 148VE



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

KEY TO SYMBOLS

Key to symbols

WARNING! The machine can be a dangerous tool if used incorrectly or carelessly, which can cause serious or fatal injury to the operator or others.



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



Never use the machine if persons, especially children or pets, are in the immediate vicinity.



Watch out for thrown objects and ricochets.



Warning: rotating cutter. Keep hands and feet clear.



Warning: rotating cutter. Keep hands and feet clear.



Never use the machine indoors or in spaces lacking proper ventilation. Exhaust fumes contain carbon monoxide, an odourless, poisonous and highly dangerous gas.



Risk of explosion



Always shut off the engine before refuelling.



Hot surface



Danger! Keep your hands and feet away from the rotating blades. Never place your hands or feet close to or under the body when machine is in operation.



Sound pressure level at the bystander's position.



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

Always wear protective gloves.



Regular cleaning is required.



Visual check.

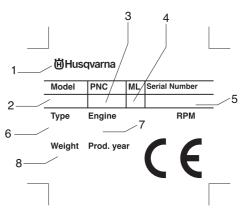


The ignition lead should always be removed from the spark plug before repair, cleaning or maintenance work.



Switch off the engine by releasing the engine brake handle before carrying out any checks or maintenance.





- Manufacturer
- 2 Model
- 3 Product number
- 4 Maintenance lever
- 5 Serial number
- 3 Type
- 7 Engine information
- 3 Weight

KEY TO SYMBOLS

Steps before using a new lawn mower

- · Please read the operator's manual carefully.
- Check that the cutting equipment is correctly fitted and adjusted. See instructions under the heading Assembly.
- Fill with fuel and oil in the engine. See the instructions under the heading fuel handling.



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 lawn mower is a dangerous tool if used carelessly or incorrectly and can cause serious, even fatal injuries. It is extremely important that you read and understand the contents of this operator's manual.



WARNING! Long-term inhalation of the engine's exhaust fumes can represent a health hazard.

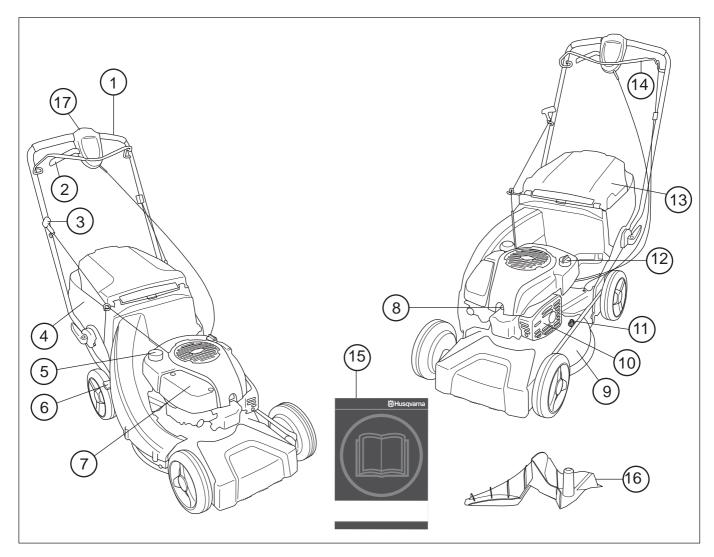
Husqvarna AB has a policy of continuous product development and therefore reserves the right to modify the design and appearance of products without prior notice.

CONTENTS

Contents

KEY TO SYMBOLS	
Key to symbols	2
Steps before using a new lawn mower	3
CONTENTS	
Contents	4
WHAT IS WHAT?	
What is what on the lawn mower?	5
SAFETY INSTRUCTIONS	
Personal protection	6
Machine's safety equipment	6
General safety precautions	7
General working instructions	8
ASSEMBLY	
Fitting the handlebar	10
FUEL HANDLING	
Fuel	11
STARTING AND STOPPING	
Starting and stopping	12
MAINTENANCE	
Maintenance	13
TECHNICAL DATA	
Tachnical data	16

WHAT IS WHAT?



What is what on the lawn mower?

- 1 Handle / handlebar
- 2 Drive (LC 48VE, LC 148VE)
- 3 Starter handle
- 4 Grass catcher
- 5 Fuel tank
- 6 Cutting height control
- 7 Air filter
- 8 Spark plug
- 9 Cutting cover

- 10 Muffler
- 11 Water connector
- 12 Oil tank
- 13 Rear deflector
- 14 Engine brake handle
- 15 Operator's manual
- 16 Mulching plug
- 17 Electric starter (LC 48VE, LC 148VE)

Personal protection



WARNING! You must use personal protection whenever you use the machine.

- Gloves must be worn when required, for example when fitting, inspecting or cleaning cutting attachments.
- Always wear heavy, long pants. Do not wear shorts, sandals or go barefoot.
- Wear sturdy, non-slip boots or shoes.

Generally clothes should be close-fitting without restricting your freedom of movement.

Machine's safety equipment

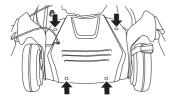
This section describes the machine's safety equipment, its purpose, and how checks and maintenance should be carried out to ensure that it operates correctly. See the "What is what?" section to locate where this equipment is positioned on your machine.



WARNING! Never use a machine that has faulty safety equipment! Carry out the inspection, maintenance and service routines listed in this section.

Cutting cover and protective cover

The protective cover is designed to reduce the risk of crush injuries and to catch a broken drive belt. Check that the protective cover is undamaged and that it is properly secured.



The cutting cover is designed to reduce vibration and to reduce the risk of cuts. Make sure the cutting cover is not damaged and that there are no visible defects such as cracks.

Engine brake handle

The engine brake is designed to stop the engine. When the grip on the engine brake handle is released the engine should stop.



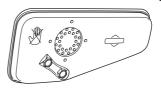
 Check that the engine brake works correctly and is undamaged.

Place the lawn mower on firm, flat surface and start it. Make sure that the cutter cannot come into contact with the ground or other objects.

Apply full throttle and then release the brake handle. The engine brake should always be adjusted so that the engine stops within 3 seconds.

Muffler

The muffler is designed to keep noise levels to a minimum and to direct exhaust fumes away from the user.





WARNING! 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!

In areas with a hot, dry climate there is a high risk of fires. These areas are sometimes controlled by legislation and requirements that among other things the muffler must be equipped with an approved type of spark arrestor mesh.

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



WARNING! The muffler gets very hot in use and remains so for a short time afterwards. Do not touch the muffler if it is hot!

- · Never use a machine that has a faulty muffler.
- Check that the muffler is securely attached and not damaged.

Cutting equipment

Make sure the cutter does not hit foreign objects such as stones, roots or the like. This can make the cutter dull and bend the engine shaft. Always ensure the cutter is well ground and balanced correctly. See also instructions under the heading Maintenance.

Check the cutting attachment. Never use blunt, cracked or damaged equipment. Damage blades and worn bolts are major hazards.



Also check that the cutter bolt is undamaged and that the engine shaft is not bent.





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.

General safety precautions

- Please read the operator's manual carefully and make sure you understand the instructions before using the machine.
- Know your controls. Learn how to stop the engine quickly in any emergency
- 3 Never mow while barefoot or wearing open sandals, or thongs. Wear long trousers and heavy shoes.
- 4 Make sure the lawn is clear of sticks, stones, bones, wire and debris. They could be thrown by the blade.
- 5 Stop the engine and disconnect spark plug wire before clearing blockages, checking or working on the mower.
- 6 Before using, always visually inspect to see that blades, blade bolts and cutter assembly are not worn or damaged. Replace worn or damaged blades and bolts in sets to preserve balance.

DAMAGED BLADES AND WORN BOLTS ARE MAJOR HAZARDS.

- 7 Check all nuts, bolts and screws often; always be sure the mower is in safe operating condition. Use only replacement parts made and guaranteed by the original manufacturer of the mower.
- 8 Refuel outdoors only. Do not smoke while fuelling engine. Add fuel before starting the engine. Never remove the cap off the fueltank or add petrol while the engine is running or the engine is hot. If petrol is spilled, do not attempt to start the engine but move machine away from the area of the spill and avoid creating any source of ignition until petrol vapours have dissipated.
- 9 Do not mow whilst people especially children, or pets are in the mowing area.
- 10 Replace worn or faulty silencers.
- 11 Mow only in good daylight.
- 12 Never use the mower unless the grass catcher, or guards provided by the manufacturer, are in position.
- 13 Start the engine carefully with feet well away from the blades.
- 14 Do not operate engine in a confined space where exhaust fumes (crbone monoxide) can collect.
- 15 Stop the engine whenever you leave the mower, even for a moment
- 16 Do not allow children or people unfamiliar with these instructions to use the mower.
- 17 Store the mower in a well-ventilated room away from naked flames such as may be found in hot water heaters.
- 18 Never leave wind-up starters in a wound condition.
- 19 Do not over-speed the engine or alter governor settings. Excessive speed is dangerous and shortens mower life.
- 20 It is advisable to wear suitable eye protection when operating a mower.
- 21 Turn the fuel off at the conclusion of mowing and reduce the throttle setting during engine run-out.
- 22 Store fuel in a cool place in a container specifically designed for the purpose. In general, plastics containers are unsuitable.
- 23 Stop the engine, disconnect the sparkl plug wire and inspect the mower if-
 - (a) the mower begins to vibrate abnormally
 - (b) after striking o foreign object.
- 24 Never cut grass while walking backwards.
- 25 Stop the engine before pushing mower across gravel drives, walk or roads.
- 26 Walk, never run.

- 27 Mow across the surface of slopes, never up and down. Exercise extreme caution whem changing direction on slopes. Do not mowexcessively steep slopes.
- 28 Never pick up or carry a mower when it is operating
- A lawn mower is only designed to mow lawns. The only accessories you can use with this engine unit are the cutters we recommend in the Technical data chapter.
- 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.
- Keep in mind that the operator is responsible for accidents or hazards occurring to other people or their property.



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

- You must use personal protection whenever you use the machine. See the instructions under the heading Personal protection.
- Never use a machine that has been modified in any way from its original specification.
- Never use any accessories other than those recommended in this manual. See instructions under the headings Cutting equipment and Technical data.



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

- 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.
- Do not over-speed the engine or alter governor settings.
 Excessive speed is dangerous and shortens mower life.
- · Before use:
- 1 Check that the engine brake works correctly and is undamaged. See the instructions under the heading Checking the braking effect.
- 2 Check that all handles and controls are undamaged and free of oil.
- 3 Check that the muffler is securely attached and not damaged.
- 4 Check that all parts of the lawn mower are tightened correctly and that they are not damaged or missing.
- 5 Check that the cutter is undamaged and not cracked. Replace the cutter if necessary.

Starting



WARNING! Long-term inhalation of the engine's exhaust fumes can represent a health hazard.

- Never start a lawn mower unless the cutters and all covers are fitted correctly.
- Never start the machine indoors. Exhaust fumes can be dangerous if inhaled.
- Ensure that the working area is sufficiently illuminated to create a safe working environment.
- Observe your surroundings and make sure that there is no risk of people or animals coming into contact with the cutting equipment. The operator is responsible for any unsafe situations or risks that people and property are exposed to.
- Place the lawn mower on firm, flat surface and start it.
 Make sure that the cutter cannot come into contact with the ground or other objects.
- Never twist the starter cord around your hand.

See the instructions under the heading Start and stop.

Fuel safety



WARNING! Fuel and fuel vapour are highly inflammable. Take care when handling fuel and engine oil. Bear in mind the risk of fire, explosion and inhaling fumes.

- · Never refuel the machine while the engine is running.
- Always ensure there is adequate ventilation when refuelling and filling oil.
- Move the machine at least 3 m from the refuelling point before starting it.



- · Never start the machine:
 - 1 If you have spilt fuel or engine oil on the machine. Wipe off the spill and allow the remaining fuel to evaporate.
 - 2 If you spill fuel or engine oil on yourself or your clothes. Change your clothes.
 - 3 If the machine is leaking fuel. Check regularly for leaks from the fuel cap and fuel lines.

Transport and storage

- The fuel and engine oil tanks should be emptied before longer periods of storage or when transporting the lawn mower. Ask where you can dispose of surplus fuel and engine oil at your local petrol station.
- Always store the lawn mower and fuel so that any leakage or vapours do not risk coming into contact with sparks or naked flames. For example, electrical machines, electric motors, relays/switches, boilers, or the like.
- Always store fuel in an approved container designed for that purpose.

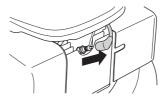
General working instructions



WARNING! This section describes basic safety precautions for working with the lawn mower. This information is never a substitute for professional skills and experience. If you get into a situation where you feel unsure about how to progress, stop and seek expert advice. Contact your dealer, service agent or an experienced lawn mower user. Avoid all usage which you consider to be beyond your capability

Basic safety rules

- Look around you:
- To ensure that people, animals or other things cannot affect your control of the machine.
- To make sure that none of the above might come into contact with the cutting equipment.
- Branches, twigs, stones, etc. should be removed from the lawn before you start to mow. Make sure the cutter does not hit foreign objects such as stones, roots or the like.
 This can make the cutter dull and bend the engine shaft.
- Never lift up the lawn mower or carry it around when the engine is running. If you must lift the lawn mower, first switch off the engine and disconnect the ignition lead from the spark plug.



- 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.
- 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.

 The engine should be switched off when moving over ground that is not to be mowed. For example, gravel paths, stone, shingle, asphalt, etc.



The brake handle must never be permanently anchored in handle when the machine is running.



Follow the instructions above, but do not use a lawn mower in a situation where you cannot call for help in case of an accident.

Basic mowing technique



WARNING! Make sure that your hands and feet do not come near the cutting attachment when the engine is running.

General

- Mowing slopes can be dangerous. Do not use the lawn mower on very steep slopes.
- The lawn mower should not be used on inclines greater than 30 degrees.
- On sloping ground you should work along the slope. It is much easier to work along a slope than it is to work up and down it.
- Branches, twigs, stones, etc. should be removed from the lawn before you start to mow.
- Do not mow the lawn while walking backwards.
- Never lift up the lawn mower or carry it around when the engine is running. If you must lift the lawn mower, first switch off the engine and disconnect the ignition lead from the spark plug.
- Make sure the cutter does not hit foreign objects such as stones, roots or the like. This can make the cutter dull and bend the engine shaft. A bent axle gives imbalance and heavy vibration, which results in a great risk of the cutter becoming loose.
- If any foreign object is hit or if vibrations occur stop the machine immediately. Disconnect the HT lead from the spark plug. Check that the machine is not damaged. Repair any damage.

Never mow more than 1/3 of the length of the grass. This
especially applies during dry periods. Mow first with the
cutting height set high. Then check the result and lower to
an appropriate height. If the grass is really long, drive
slowly and mow twice if necessary.



- Never run with the machine when it is running. You should always walk with the lawn mower.
- Pay particular attention when pulling the machine towards you during work.

Cutting height



Shut down the engine before changing the cutting height.

The cutting height can be adjusted in five different steps, mm.



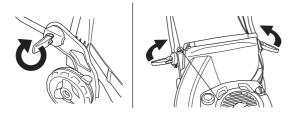
Do not set the cutting height too low as there is a risk that the cutters might hit ground with unevenness.

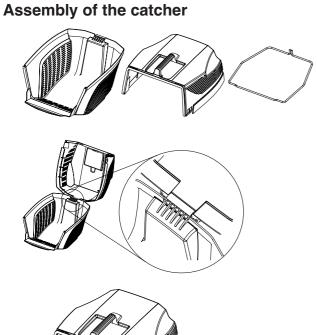
ASSEMBLY

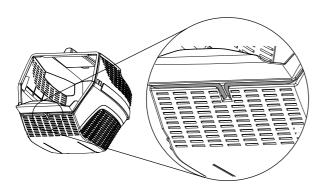
Fitting the handlebar

Take care not to damage the cables and wires when you fold up the handlebar.

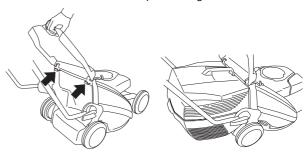
Lift up the handlebar until the handlebar's upper tubular construction comes directly opposite to the handlebar's lower section. Tighten the knob correctly.







Lift the hind shield and suspend the grass container.



Mulching function

Machines equipped with a catcher can be used with mulching function in the following way.

Lift up the back shield and remove the container.



Insert the mulching plug into the collector channel.



Close the shield and ensure that it is locked with the mulching plug.



FUEL HANDLING

Fuel



WARNING! Always ensure there is adequate ventilation when handling fuel.

Petrol

- Use good quality unleaded petrol. Leaded petrol can be used if unleaded petrol is not available.
- · Fuel should be at least 77 octane.
- If the machine is not used for some time the fuel tank should be emptied and cleaned.

Engine oil

Check the oil level before starting the lawn mower. A too low oil level can cause serious damage to the engine.

- For the best result and function use HUSQVARNA fourstroke oil.
- If HUSQVARNA four-stroke oil is not available, you may use another four-stroke oil of good quality. Contact your dealer when selecting oil. In general SAE 30 is recommended.
- · Never use oil intended for two-stroke engines.

Check the oil level before starting the lawn mower. A too low oil level can cause serious damage to the engine.

Oil level

Unscrew the oil filler cap and check the oil level on the dipstick fitted to the cover.



The oil filler cap must be completely screwed down to give a correct picture of the oil level.

If the oil level is low, fill using engine oil up to the upper level on the dipstick.



Only use recommended engine oil. See the Technical data section.

Fuelling



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

Do not smoke or place hot objects near fuel.

Always shut off the engine 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 before starting.

Do not fill too much petrol. Leave about 35 mm under the filler cap so that the fuel can expand.

Clean around the fuel cap. Clean the fuel and oil tank regularly. The fuel filter should be changed at least once a year. Contamination in the tanks causes malfunction.

Always move the machine about 3 metres from the refuelling position before starting.



STARTING AND STOPPING

Starting and stopping



WARNING! Note the following before starting:

Do not start a lawn mower unless the cutter and all covers are fitted correctly. Otherwise the cutter could come loose and cause personal injuries.

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

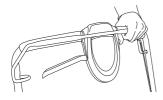
Place the machine on a flat surface. Ensure the cutting attachment cannot come into contact with any object.

Keep people and animals well away from the working area.

Starting

Ensure the ignition lead sits correctly on the spark plug.

 Pull the engine brake handle against the upper handlebar with your left hand.



 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.

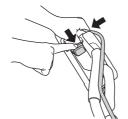


CAUTION! Do not pull the starter cord all the way out and do not let go of the starter handle when the cord is fully extended. This can damage the machine.

LC 48VE and LC 148VE are equipped with electronic start which is used in the following way.

- Before using the electronic start for the first time you need to charge the battery. See instructions under the heading Maintenance.
- · Fold in the engine brake handle towards the handlebar.
- · Insert the ignition key and push the key.





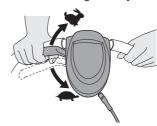
Drive LC 48VE, LC 148VE

The machines are self-propelling with backwheel drive.

To use the drive on the wheel pull the clutch lever towards you.



The drive can be gradually controlled.



Stopping

Stop the engine by releasing the engine brake handle.



Machines with electric start remove the key.



MAINTENANCE

Maintenance









WARNING! Make sure the cutting attachment has stopped before cleaning, carrying out repairs or an inspection. Disconnect the HT lead from the spark plug.

The ignition lead should always be removed from the spark plug before repair, cleaning or maintenance work.

Air filter

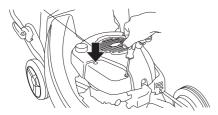
The air filter must be regularly cleaned to remove dust and dirt in order to avoid:

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

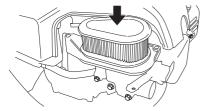
An air filter that has been in use for a long time cannot be cleaned completely. The filter must therefore be replaced with a new one at regular intervals. A damaged air filter must always be replaced.

Cleaning the air filter

Remove the air filter cover.



Remove the air filter and check that it is undamaged. Replace with a new air filter if you believe it to be defective.



Clean the filter by knocking the filter against a flat surface. Never use solvent with petroleum, for example, kerosene, or compressed air to clean the filter.

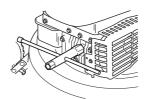
When reassembling, make sure that the filter completely seals against the filter holder.

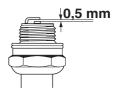
Spark plug



WARNING! The muffler gets very hot in use and remains so for a short time afterwards. Do not touch the muffler if it is hot!

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.

Muffler

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.

Regularly check that the muffler is securely attached to the machine.



Never use a machine that has a faulty muffler.



Cutter







WARNING! Always wear heavy-duty gloves when repairing the cutting attachment. The blades are very sharp and can easily cause cuts.

Damaged blades should be replaced when hitting obstacles that result in a breakdown.

Replacing or sharpening the blades should be conducted by an authorised service workshop.

MAINTENANCE

Changing the oil

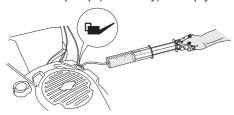
The engine oil should be changed each year and every 25 working hours.

When changing the oil proceed as follows::

- Empty the fuel tank by running the machine until the tank is empty.
- · Disconnect the HT lead from the spark plug.
- Unscrew the oil filler cap.



Use the oil pump (accessory) to empty the oil tank.



Ask where you can dispose of surplus engine oil at your local petrol station.

- Fill with new engine oil of a good quality. See the Technical data section.
- · Check the oil level with the dipstick on the oil filler cap.
- The oil filler cap must be completely screwed down to give a correct picture of the oil level. If the oil level is low, fill using engine oil up to the upper level on the dipstick.

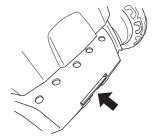


· Screw on the oil filler cap.

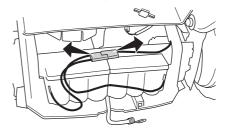
Charge the battery LC 48VE, LC 148VE

The battery can be charged as follows:

Push the locking open and remove the battery cover.



· Loosen the battery cable connections.



 Connect the battery charger and charge the battery for max. 24 hours.



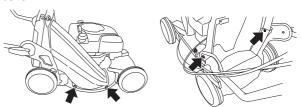
Drive and gearbox



 Ensure the wheels and wheel axles are clean and free from leaves, grass, etc. It is also important to keep clean around the drive gearbox.

LC 48VE, LC 148VE

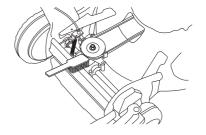
- · Lift up the back shield and remove the container.
- Remove the collector cover's 4 screws and lift off the cover.



Remove the protective cover by unscrewing the screws.



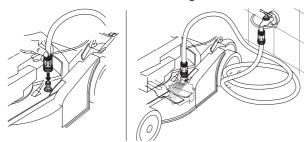
- Now guide the protective cover out and upwards.
- Clean the gearbox with a brush. Also check that the drive belt and belt pulley are undamaged, for example, no



MAINTENANCE

Cleaning cutting cover

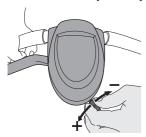
Connect a water hose to the cutting cover connection.



• Start the engine and let the blade rotate for a while. The water is thrown out and cleaning the cutting cover.

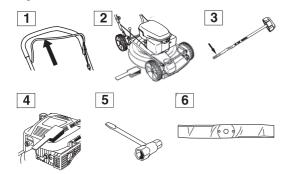
Adjusting the clutch wire

The clutch wire is adjusted by turning the adjustment screw.



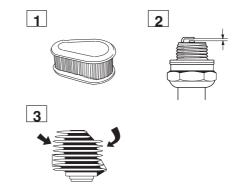
Below you will find some general maintenance instructions.

Daily maintenance



- 1 Check that the engine brake handle works safely.
- 2 Brush leaves, grass and the like off of the lawn mower.
- 3 Check the oil level.
- 4 Clean the air intake on the starter. Check the starter and starter cord.
- 5 Check that nuts and screws are tight.
- 6 Check the cutting attachment. Never use blades that are dull, cracked or damaged.

Weekly maintenance



- 1 Clean the air filter. Replace if necessary.
- 2 Clean the spark plug. Check that the electrode gap is 0.51 mm.
- 3 Clean the cooling fins on the cylinder.

At least once a year

1 Carry out annually service at authorised dealer (at least once a year or every 30 hours).

TECHNICAL DATA

Technical data

	LC 48	LC 48 VE	LC 148 VE
Engine	Briggs & Stratton	Briggs & Stratton	Briggs & Stratton
Cylinder displacement, cm ³	190	190	161
Speed, rpm	2900	2900	2900
Ignition system			
Spark plug	Champion RJ19LM	Champion RJ19LM	Champion QC12YC
Electrode gap, mm	0,5	0,5	0,5
Fuel and lubrication system			
Fuel tank capacity, litre	1,2	1,2	1,6
Oil tank capacity, litre	0,6	0,6	0,6
Engine oil	SAE 30	SAE 30	SAE 30
Weight			
Lawn mower with empty tanks, kg	38	43	43
Sound pressure levels			
(see note 1)			
Sound pressure level at the bystander's position, dB(A)	70	70	70
Sound pressure level at the operator's ear position, dB(A)	78	80	80
Vibration levels			
(see note 2)			
Handle left, m/s ²	6,0	6,0	6,0
Handle right, m/s ²	5,0	5,0	5,0
Cutting			
Cutting system	3 in 1	3 in 1	3 in 1
The cutting height can be adjusted in five different steps, mm.	25-70	25-70	25-70
Cutting width, mm	480	480	480
Cutter	Fixed	Fixed	Fixed
Drive			
Speed, km/h	-	5,4	5,4
Starting			
Electric starter	-	Yes	Yes

Note 1 Measured according to Australian Standard AS 3534

Note. 2: Vibrations and sound pressure measured according to EN 836:1997/A2:2001

1154714-28

