# Operator's manual (EPA) 323L 325CX



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

# **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.

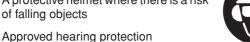


Please read the operator's manual carefully and make sure you understand the instructions before using the machine.



Always wear:

A protective helmet where there is a risk of falling objects



Approved 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.



Machines fitted with saw blades or grass blades can be thrown violently to the side when the blade comes into contact with a fixed object. This is called blade thrust. The blade is capable of amputating an arm or leg. Always keep people and animals at least 15 metres from the machine.



Arrows which show limits for handle positioning.



Always wear approved protective gloves.



Wear sturdy, non-slip boots.



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



Only intended for trimmer heads.



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.



Approved eye protection must always be used.





The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

# **CONTENTS**

### Contents

KEY TO SYMBOLS	
Symbols	2
CONTENTS	
Contents	3
Note the following before starting:	3
INTRODUCTION	
Dear customer!	4
WHAT IS WHAT?	
What is what?	5
GENERAL SAFETY PRECAUTIONS	
Important	6
Personal protective equipment	6
Machine's safety equipment	7
Cutting equipment	9
ASSEMBLY	
Fitting the loop handle	10
Fitting the loop handle	10
Assembling the cutting equipment	10
Fitting a trimmer guard and Superauto II 1" trimmer	
head	10
Fitting other guards and cutting attachments	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	16
MAINTENANCE	
Carburetor	18
Muffler	18
Cooling system	18
Spark plug	18
Air filter	19
Maintenance schedule	20
TECHNICAL DATA	
Technical data	21
FEDERAL AND CALIFORNIA EMISSIONS	
CONTROL WARRANTY STATEMENT	
YOUR WARRANTY RIGHTS AND OBLIGATIONS	25

# Note the following before starting:

Please read the operator's manual carefully.

Maintenance, replacement, or repair of the emission control devices and system may be performed by any nonroad engine repair establishment or individual.



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.

Your warranty may not cover damage or liability caused by the use of non-authorized accessories or replacement parts.



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.



The Emissions Compliance Period referred to on the Emission Compliance label indicates the number of operating hours for which the engine has been shown to meet Federal and Californian emissions requirements.

# INTRODUCTION

# Dear customer!

Congratulations on your choice to buy a Husqvarna product! Husqvarna is based on a tradition that dates back to 1689, when the Swedish King Karl XI ordered the construction of a factory on the banks of the Huskvarna River, for production of muskets. The location was logical, since water power was harnessed from the Huskvarna River to create the water-powered plant. During over 300 years of continuous operation, the Husqvarna factory has produced a lot of different products, from wood stoves to modern kitchen appliances, sewing machines, bicycles, motorcycles etc. In 1956, the first motor driven lawn mowers appeared, followed by chain saws in 1959, and it is within this area Husqvarna is working today.

Today Husqvarna is one of the leading manufacturers in the world of forest and garden products, with quality as our highest priority. We develop, manufacture and market high quality motor driven products for forestry and gardening as well as for building and construction industry.

Your purchase gives you access to professional help with repairs and service whenever this may be necessary. If the retailer who sells your machine is not one of our authorized dealers, ask for the address of your nearest servicing dealer.

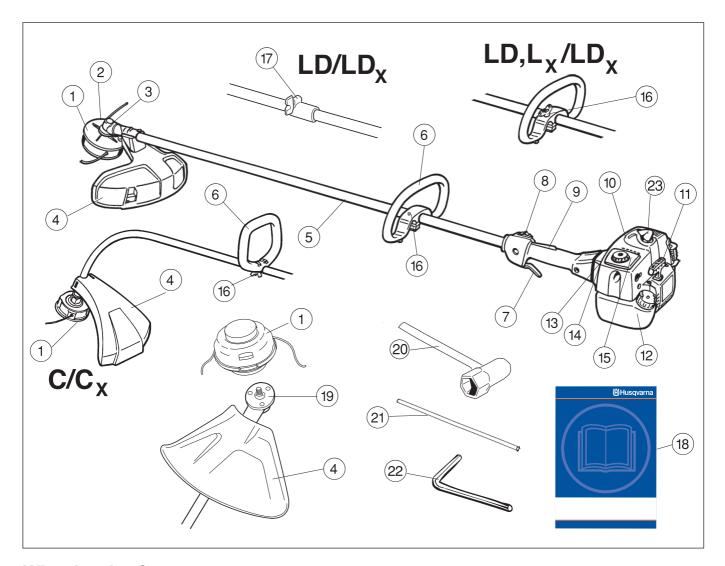
It is our wish that you will be satisfied with your product and that it will be your companion for a long time. Think of this operator's manual as a valuable document. By following its' content (using, service, maintenance etc) the life span and the second-hand value of the machine can be extended. If you ever lend or sell this machine, make sure that the borrower or buyer gets the operator's manual, so they will also know how to properly maintain and use it.

Thank you for using a Husqvarna product.

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.

For customer assistance, contact us at our website: www.usa.husqvarna.com

# WHAT IS WHAT?



# What is what?

- 1 Trimmer head
- 2 Grease filler cap, bevel gear
- 3 Bevel gear
- 4 Cutting attachment guard
- 5 Shaft
- 6 Loop handle
- 7 Throttle control
- 8 Stop switch
- 9 Throttle lockout
- 10 Cylinder cover
- 11 Starter handle
- 12 Fuel tank

- 13 Choke control
- 14 Air purge
- 15 Air filter cover
- 16 Handle adjustment
- 17 Shaft coupling
- 18 Operator's manual
- 19 Drive disc
- 20 Socket spanner
- 21 Locking pin
- 22 Allen key
- 23 Spark plug cap and spark plug

# **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! The ignition system of this machine produces an electromagnetic field during operation. This field may under some circumstances interfere with pacemakers. To reduce the risk of serious or fatal injury, we recommend persons with pacemakers to consult their physician and the pacemaker manufacturer before operating this machine.



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



WARNING! Never allow children to use or be in the vicinity of the machine. As the machine is equipped with a spring-loaded 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 servicing dealer.

#### IMPORTANT!

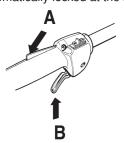
All servicing and repair work on the machine requires special training. This is especially true of the machine's safety equipment. If your machine fails any of the checks described below you must contact your service agent. When you buy any of our products we guarantee the availability of professional 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.



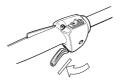
WARNING! Never use a machine with faulty safety equipment. The machine's safety equipment must be checked and maintained as described in this section. If your machine fails any of these checks contact your service agent to get it repaired.

#### Throttle lockout

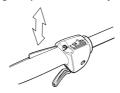
The throttle lockout is designed to prevent accidental operation of the throttle control. When you press the lock (A) (i.e. when you grasp the handle) it releases the throttle control (B). When you release the handle the throttle control and the throttle lockout both move back to their original positions.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



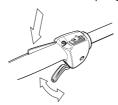
Make sure the throttle control is locked at the idle setting when the throttle lockout is released.



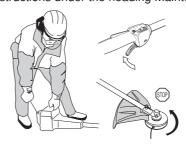
Press the throttle lockout and make sure it returns to its original position when you release it.



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

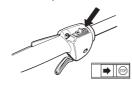


See instructions under the heading Start. Start the machine and apply full throttle. Release the throttle and check that the cutting attachment stops and remains at a standstill. If the cutting attachment rotates with the throttle in the idle position then the carburettor idle setting must be checked.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

# Vibration damping system



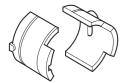


Your machine is equipped with a vibration damping system that is designed to reduce vibration and make operation easier.



Use of incorrectly wound cord or an incorrect cutting attachment increases the level of vibration. See instructions under the heading Cutting equipment.

The machine's vibration damping system reduces the transfer of vibration between the engine unit/cutting equipment and the machine's handle unit.





Regularly check the vibration damping units for cracks or deformation. Check that the vibration damping element is undamaged and securely attached.



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. These 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.

#### 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 screen. Check whether the muffler on your machine is fitted with this kind of screen.





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 screen this must be cleaned regularly. A blocked screen 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:



# Locking nut





A locking nut is used to secure some types of cutting attachment.

When fitting, tighten the nut in the opposite direction to the direction of rotation of the cutting attachment. To remove it, undo the nut in the same direction as the cutting attachment rotates. (CAUTION! The nut has a left-hand thread.)



Tighten the nut using the socket spanner. 35-50 Nm (3.5-5 kpm).

The nylon lining inside the locking nut must not be so worn that you can turn it by hand. The lining should offer a resistance of at least 1.5 Nm. The nut should be replaced after it has been put on approx. 10 times.

# **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.

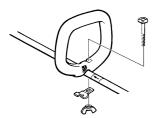
# **ASSEMBLY**

# Fitting the loop handle

#### (325Cx)



 Position the handle on the shaft. Note that the handle must be mounted below the arrow on the shaft.



- Fit the screw, securing plate and wing nut as shown in the diagram.
- · Tighten the wing nut.

# Fitting the loop handle

#### (323L)

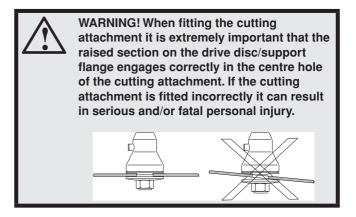


 Clip the loop handle onto the shaft. Note that the loop handle must be fitted between the arrows on the shaft.



- Slide the spacer into the slot in the loop handle. Fit the nut, washer and screw.
- Now adjust the trimmer to give a comfortable working position. Tighten the bolt/knob.

# Assembling the cutting equipment





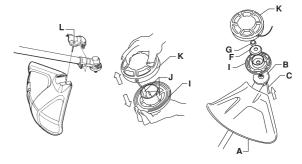
WARNING! Never use a cutting attachment without an approved guard. See the chapter on Technical data. If an incorrect or faulty guard is fitted this can cause serious personal injury.

# Fitting a trimmer guard and Superauto II 1" trimmer head

#### (323L)







- Fit the correct trimmer guard (A) for use with the trimmer head. Hook the guard onto the fitting on the shaft and secure it 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.
- To fit the trimmer head, first separate the two halves (see diagram). Proceed as follows:
- Insert a finger into the centre hole of the cover (I) while grasping the cover with your other fingers. Using the index finger and thumb of your other hand, release the two catches (J) that engage in the cut-outs in the bottom half (K). Pull apart the trimmer head, grasping the cover firmly.
- Place the cover (I) and the support flange (F) on the output shaft.

# **ASSEMBLY**

 Fit the nut (G). The nut must be tightened to a torque of 35-50 Nm (3.5-5 kpm). Use the socket spanner in the tool kit. Hold the shaft of the spanner as close to the blade guard as possible. To tighten the nut, turn the spanner in the opposite direction to the direction of rotation (Caution! left-hand thread).



 Fit the bottom half of the trimmer head (K) to the cover (I) by pressing them together, with the cut-outs on the bottom half aligned with the catches on the cover.



· To dismantle, follow the instructions in the reverse order.

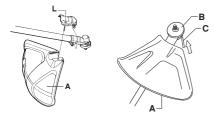
# Fitting other guards and cutting attachments

(323L)

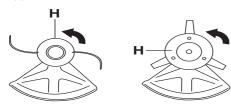




 Fit the correct trimmer guard (A) for use with the trimmer head. Hook the trimmer guard/combination guard onto the fitting on the shaft and secure with the bolt (L).



- 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.

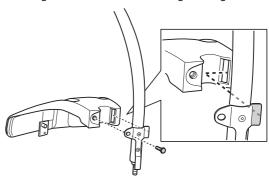
# Fitting the trimmer guard and trimmer head

(325Cx)



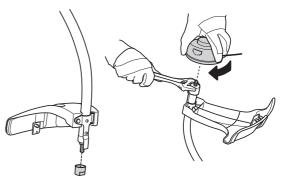
#### Guard

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



#### **Trimmer head**

- 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 spilled fuel on it. Wipe off the spillage and allow remaining fuel to evaporate.
- 2 If you have spilled 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 gas 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.
- 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 gasoline and two-stroke engine oil. It is important to accurately measure the amount of oil 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.

#### Gasoline



**CAUTION!** Always use a quality gasoline/oil mixture with an octane rating of at least 87 octane ((RON+MON)/2). If your machine is equipped with a catalytic converter (see chapter on Technical data) always use a good quality unleaded gasoline/oil mixture. Leaded gasoline will destroy the catalytic converter.

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



This engine is certified to operate on unleaded gasoline.

- The lowest recommended octane grade is 87
   ((RON+MON)/2). If you run the engine on a lower octane
   grade than 87 so-called knocking can occur. This gives
   rise to a high engine temperature and increased bearing
   load, 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 HUSQVARNA twostroke 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.
- Mixing ratio

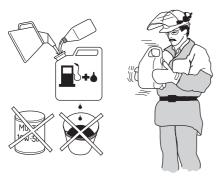
1:50 (2%) with HUSQVARNA two-stroke oil.

Gasoline, litre	Two-stroke oil, litre	
	2% (1:50)	
5	0,10	
10	0,20	
15	0,30	
20	0,40	
US gallon	US fl. oz.	
1	2 1/2	
2 1/2	6 1/2	
5	12 7/8	

# **FUEL HANDLING**

# **Mixing**

- Always mix the gasoline and oil in a clean container intended for fuel.
- Always start by filling half the amount of the gasoline to be used. Then add the entire amount of oil. Mix (shake) the fuel mixture. Add the remaining amount of gasoline.
- 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:

Do not smoke or place hot objects near fuel.

Always shut off the engine before refuelling.

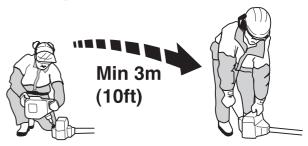
Always stop the engine and let it cool for a few minutes before refuelling.

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 before starting.

- 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 the blade to ensure that no cracks have formed at the bottom of the teeth or by the centre hole. The most common reason why cracks are formed is that sharp corners have been formed at the bottom of the teeth while sharpening or that the blade has been used with dull teeth. Discard a blade if cracks are found.



 Check that the support flange is not cracked due to fatigue or due to being tightened too much. Discard the support flange if it is cracked.



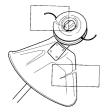
 Ensure the locking nut has not lost its captive force. The nut lock should have a locking force of at least 1.5 Nm.
 The tightening torque of the locking nut should be 35-50 Nm.



Check that the blade guard is not damaged or cracked.
 Replace the blade guard if it is exposed to impact or is cracked.



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

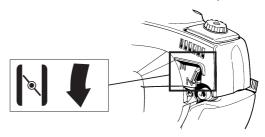
Make sure no unauthorised persons are in the working area, otherwise there is a risk of serious personal injury. The safety distance is 15 metres.

# **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 either the choke or start throttle positions 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 wrap 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.

# **STARTING AND STOPPING**

**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.



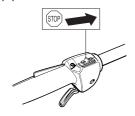
#### **CAUTION!**

Do not put any part of your body in marked area. Contact can result in burns to the skin, or electrical shock if the spark plug cap has been damaged. Always use gloves. Do not use a machine with damaged spark plug cap.



# **Stopping**

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.

# **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.
- 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.

6 Always hold the machine with both hands. Hold the machine on the right side of your body.



- 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 no-one is within the safety zone.

#### 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.

# **WORKING TECHNIQUES**

# 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

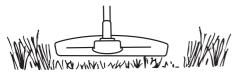
 The clearing technique removes all unwanted vegetation. Keep the trimmer head just above the ground and tilt it. Let the end of the cord strike the ground around trees, posts, statues and the like. CAUTION! This technique increases the wear on the cord.



- 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

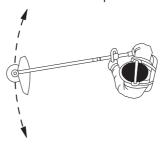
 The trimmer is ideal for cutting grass that is difficult to reach using a normal lawn mower. Keep the cord parallel to the ground when cutting. Avoid pressing the trimmer head against the ground as this can ruin the lawn and damage the tool.



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.

# **MAINTENANCE**

# Carburetor

# 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.



**Recommended 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.

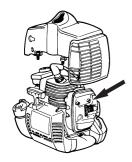
#### Muffler





**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 screen. If your machine has this type of muffler, you should clean the screen at least once a week. This is best done with a wire brush. On mufflers without a catalytic converter the screen should be cleaned weekly, or replaced if necessary. On mufflers fitted with a catalytic converter the screen should be checked, and if necessary cleaned, monthly. If the screen

**is damaged it should be replaced.** If the screen 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 screen will cause the machine to overheat and result in damage to the cylinder and piston.



CAUTION! Never use a machine with a defective muffler.



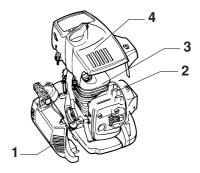
WARNING! Mufflers fitted with catalytic converters get very hot during use and remain so for some time after stopping. This also applies at idle speed. Contact can result in burns to the skin. Remember the risk of fire!

# 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 Fins on the flywheel.
- 3 Cooling fins on the cylinder.
- 4 Cylinder cover (directs cold air over 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



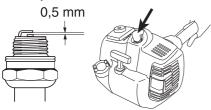
The spark plug condition is influenced by:

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

# **MAINTENANCE**

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 0.020 inch (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.

## 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.

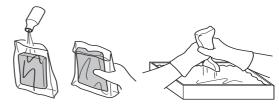
## Oiling the air filter





Always use HUSQVARNA 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

(323L)



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.

CAUTION! Use only HUSQVARNA replacement parts. Use of other brands of replacement parts can cause damage to your unit or injury to the operator or others. Your warranty does not cover damage or liability caused by the use of accessories and/or attachments not specifically recommended by HUSQVARNA.

# **MAINTENANCE**

# **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.

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 the locking nut of the cutting equipment is tighten correctly.	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.		X	
Check that the vibration damping elements are not damaged.		X	
Clean the outside of the spark plug. Remove it and check the electrode gap. Adjust the gap to 0.5 mm (.20"), or replace the spark plug. Check that the spark plug is fitted with a suppressor.		Х	
Clean the machine's cooling system.		X	
Clean or replace the spark arrestor screen on the muffler (only applies to mufflers without a catalytic converter).		Х	
Clean the outside of the carburettor and the space around it.		X	
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.			Х
Check all cables and connections.			X
Check the clutch, clutch springs and the clutch drum for wear. Replace if necessary by an autorized service workshop.			Х
Replace the spark plug. Check that the spark plug is fitted with a suppressor.			Х
Check and clean the spark arrestor screen on the muffler (only applies to mufflers fitted with a catalytic converter).			Х

# **TECHNICAL DATA**

# **Technical data**

	323L	323L (USA)	325Cx
Engine			
Cylinder displacement, cu.in/cm <sup>3</sup>	1,50/24,5	1,50/24,5	1,50/24,5
Cylinder bore, inch/mm	1,34/34,0	1,34/34,0	1,34/34,0
Stroke, inch/mm	1,06/27	1,06/27	1,06/27
Idle speed, rpm	2700	2700	2700
Recommended max. fast idle speed, rpm	11000-11700	11000-11700	11000-11700
Speed of output shaft, rpm	8014	8014	11700
Max. engine output, acc. to ISO 8893, kW/ rpm	0,9/9000	0,8/9000	0,9/9000
Catalytic converter muffler	No	Yes	Yes
Speed-regulated ignition system	No	No	No
Emissions Durability Period according to California Air Resources Board, h.	125	125	125
Ignition system			
Manufacturer/type of ignition system	Walbro MB	Walbro MB	Walbro MB
Spark plug	Champion RCJ 7Y	Champion RCJ 7Y	Champion RCJ 7Y
Electrode gap, inch/mm	0,02/0,5	0,02/0,5	0,02/0,5
Fuel and lubrication system			
Manufacturer/type of carburetor	Zama C1Q	Zama C1Q	Zama C1Q
Fuel tank capacity, US pint/litre	1,06/0,5	1,06/0,5	1,06/0,5
Weight			
Weight without fuel, cutting attachment and guard, Lbs/kg	9,0/4,1	9,0/4,1	9,3/4,2
Sound levels			
(see note 1)			
Equivalent sound pressure level at the user's ear, measured according to ANSI B175.3-1997, dB(A), min/max:	91/97	91/97	92/97
Vibration levels			
Vibration levels at handles, measured according to ANSI B175.3-1997, m/s <sup>2</sup>			
At idle, left/right handles, min.:	1,8/1,4	1,8/1,4	3,6/3,2
At idle, left/right handles, max.:	2,8/1,8	2,8/1,8	3,7/3,3
At max. speed, left/right handles, min.:	2,7/5,2	2,7/5,2	2,6/5,2
At max. speed, left/right handles, max.:	7,2/9,8	7,2/9,8	3,5/5,6

Note 1: Equivalent noise pressure level is calculated as the time-weighted energy total for noise pressure levels under various working conditions with the following time distribution: 1/2 idle and 1/2 max. speed.

NOTE! Noise pressure at the user's ear and vibration on the handles are measured with all the machine's approved cutting equipment fitted. The table indicates the highest and lowest values.

# **TECHNICAL DATA**

The accessories are recommended for use in combination with the specified power heads and have been evaluated to applicable ISO- and EN safety requirement standards by the Swedish Machinery Testing Institute.

Powerhead model	Accessories	Art No.
323L	Saw attachment without shaft PA	537 18 33-12

The accessories used in combination with the specified power heads have been evaluated to ANSI B175.3-2003 Grass Trimmers and Brushcutters - Safety Requirements. These combinations have been evaluated by Underwriters Laboratories Inc. (UL) and are consequently UL listed.

Powerhead model	Accessories	Туре	Cutting attachment guard, Art. no.
325Cx	Blade shaft thread 3/8 R		
		Trimmy Fix 3/8" (R)	537 18 96-03
323CX	Trimmer head	T25 (R)	537 18 96-03
		T25C (R)	537 18 96-03
323L	Arbor shaft thread M10		
	Plastic blades	Tricut Ø 300 mm	503 93 42-02
	Grass blade/grass cutter	Grass 255-8 1" (Ø 255 8- teeth)	503 93 42-02
		Trimmy Fix	503 93 42-02 / 503 97 71-01
	Trimmer head	Superauto II 1"	503 93 42-02 / 503 97 71-01
	mmmer nead	S35	503 93 42-02 / 503 97 71-01
		T35, T35x	503 93 42-02 / 503 97 71-01

# FEDERAL AND CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT

**IMPORTANT:** This product is compliant with U.S. EPA Phase 3 regulations for exhaust and evaporative emissions. To ensure EPA Phase 3 compliance, we recommend using only genuine Husqvarna brand replacement parts. Use of noncompliant replacement parts is a violation of federal law.

# YOUR WARRANTY RIGHTS AND OBLIGATIONS

The EPA (U.S. Environmental Protection Agency), CARB (California Air Resources Board), Environment Canada and Husqvarna Forest & Garden are pleased to explain the emissions control system's warranty on your 2015-2016\* small off-road engine. In U.S. and Canada, small off-road engines must be designed, built, and equipped to meet the applicable Federal or California stringent anti-smog standards. Husqvarna Forest & Garden must warrant the emissions control system on your small off-road engine for the period of time listed below provided there has been no abuse, neglect or improper maintenance of your small offroad engine. Your emission control system may include parts such as the carburetor, fuel-injection system, the ignition system, catalytic convertor, fuel tanks, fuel lines, fuel caps, valves, canisters, filters, vapor hoses, clamps, connectors, and other associated emission-related components. For engines less than or equal to 80 cc, only the fuel tank is subject to the evaporative emission control warranty requirements of this section (California only). Where a warrantable condition exists, Husqvarna Forest & Garden will repair your small off-road engine at no cost to you including diagnosis, parts and labor.

# MANUFACTURER'S WARRANTY COVERAGE

The emissions control system is warranted for two years. If any emissions-related part on your small off-road engine is defective, the part will be repaired or replaced by Husqvarna Forest & Garden.

#### OWNER'S WARRANTY RESPONSIBILITIES

- As the small off-road engine owner, you are responsible for performance of the required maintenance listed in your operator's manual. Husqvarna Forest & Garden recommends that you retain all receipts covering maintenance on your small off-road engine, but Husqvarna Forest & Garden cannot deny warranty solely for the lack of receipts or your failure to ensure the performance of all scheduled maintenance.
- As the small off-road engine owner, you should however be aware that Husqvarna Forest & Garden may deny you warranty coverage if your small off-road engine or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.
- You are responsible for presenting your small off-road engine to a Husqvarna Forest & Garden distribution center or service center as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. If you have any questions regarding your warranty coverage, you should contact Husqvarna Forest & Garden in USA at 1-800-487-5951, in CANADA at 1-800-805-5523 or send e-mail correspondence to emissions@husqvarnagroup.com

#### WARRANTY COMMENCEMENT DATE

The warranty period begins on the date the engine or equipment is delivered to an ultimate purchaser.

#### LENGTH OF COVERAGE

Husqvarna Forest & Garden warrants to the ultimate purchaser and each subsequent owner that the engine or equipment is designed, built, and equipped so as to conform with all applicable regulations adopted by EPA and CARB, and is free from defects in materials and workmanship that causes the failure of a warranted part for a period of two years.

#### WHAT IS COVERED

REPAIR OR REPLACEMENT OF PARTS Repair or replacement of any warranted part under the warranty must be performed at no charge to the owner at a warranty station. Warranty services or repairs will be provided at all Husqvarna Forest & Garden distribution centers that are franchised to service the subject engines. Throughout the emissions warranty period of two years, Husqvarna Forest & Garden must maintain a supply of warranted parts sufficient to meet the expected demand for such parts.

WARRANTY PERIOD Any warranted part that is scheduled for replacement as required in the maintenance schedule, is warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part will be repaired or replaced by Husqvarna Forest & Garden at no cost. Any such part repaired or replaced under warranty is warranted for the remainder of the period prior to the first scheduled replacement point for the part. Any warranted part that is not scheduled for replacement as required in the maintenance schedule, is warranted for two years. If any such part fails during the period of warranty coverage, it will be repaired and replaced by Husqvarna Forest & Garden at no cost. Any such part repaired or replaced under the warranty is warranted for the remaining warranty period. Any warranted part that is scheduled only for regular inspection in the maintenance schedule will be warranted for a period of two years. A statement in such written instructions to the effect of "repair or replace as necessary" will not reduce the period of warranty coverage. Any such part repaired or replaced under warranty will be warranted for the remaining warranty period.

**DIAGNOSIS** The owner must not be charged for diagnostic labor that leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at a warranty station.

**CONSEQUENTIAL DAMAGES** Husqvarna Forest & Garden is liable for damages to other engine components proximately caused by a failure under warranty of any warranted part.

#### **EMISSION WARRANTY PARTS LIST**

- 1 Carburetor and internal parts
- 2 Intake pipe, airfilter holder and carburetor bolts.
- 3 Airfilter and fuelfilter covered up to maintenance schedule.
- 4 Spark Plug, covered up to maintenance schedule
- 5 Ignition Module
- 6 Fuel tank, line and cap

# FEDERAL AND CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT

#### WHAT IS NOT COVERED

All failures caused by abuse, neglect or improper maintenance are not covered.

#### **ADD -ON OR MODIFIED PARTS**

Add-on or modified parts that are not exempted by CARB or EPA may not be used. The use of any non-exempted add-on or modified parts will be grounds for disallowing a warranty claim. Husqvarna Forest & Garden will not be liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

### **HOW TO FILE A CLAIM**

If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized servicing dealer or call Husqvarna Forest & Gardenin USA at 1-800-487-5951, in CANADA at 1-800-805-5523 or send e-mail correspondence to emissions@husqvarnagroup.com

#### WHERE TO GET WARRANTY SERVICE

Warranty services or repairs are provided through all Husqvarna Forest & Garden authorized servicing dealers.

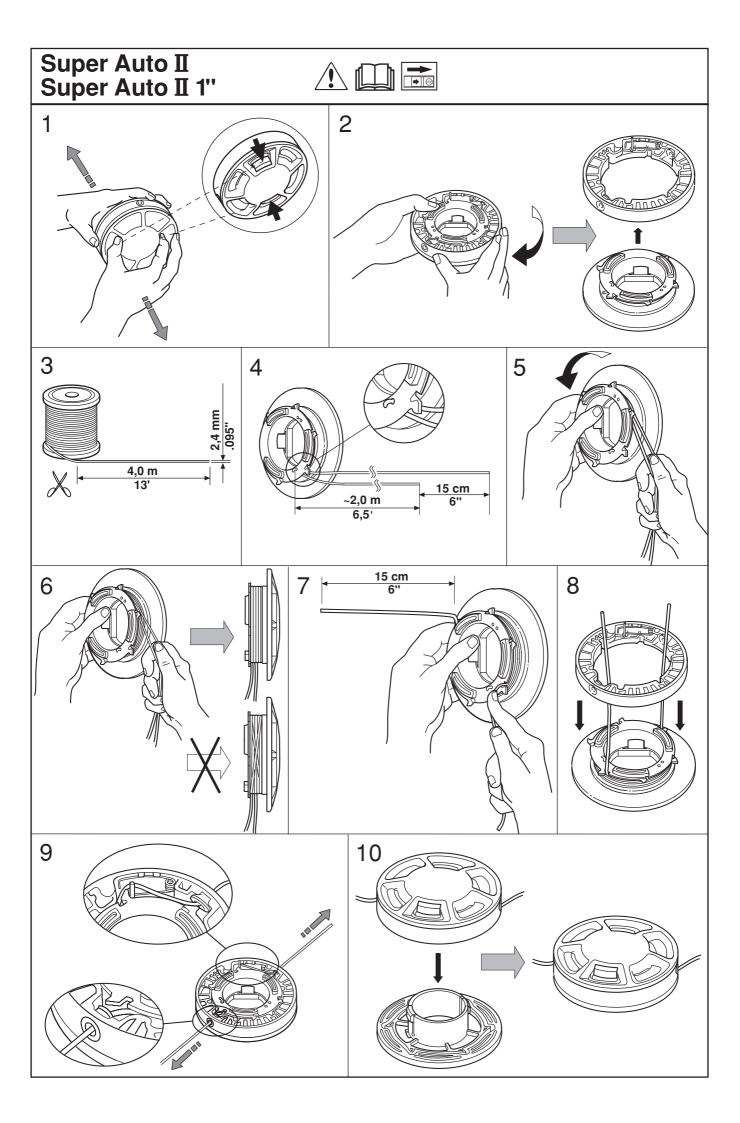
# MAINTENANCE, REPLACEMENT AND REPAIR OF EMISSION-RELATED PARTS

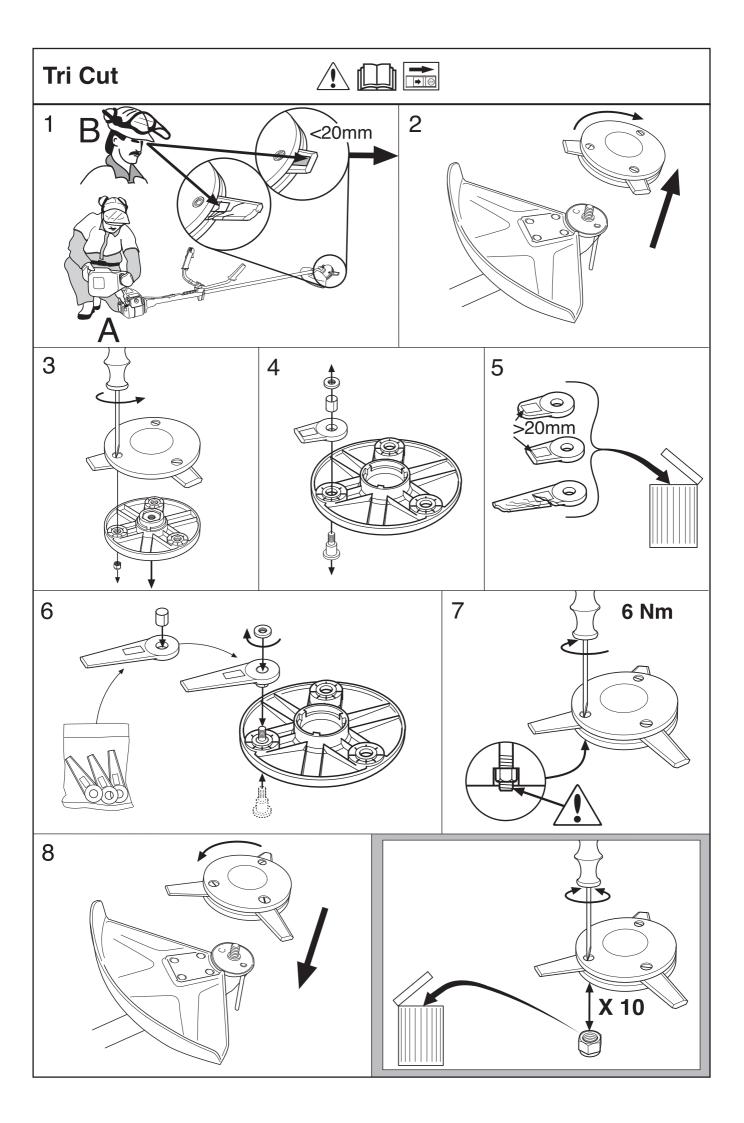
Any replacement part may be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of the manufacturer.

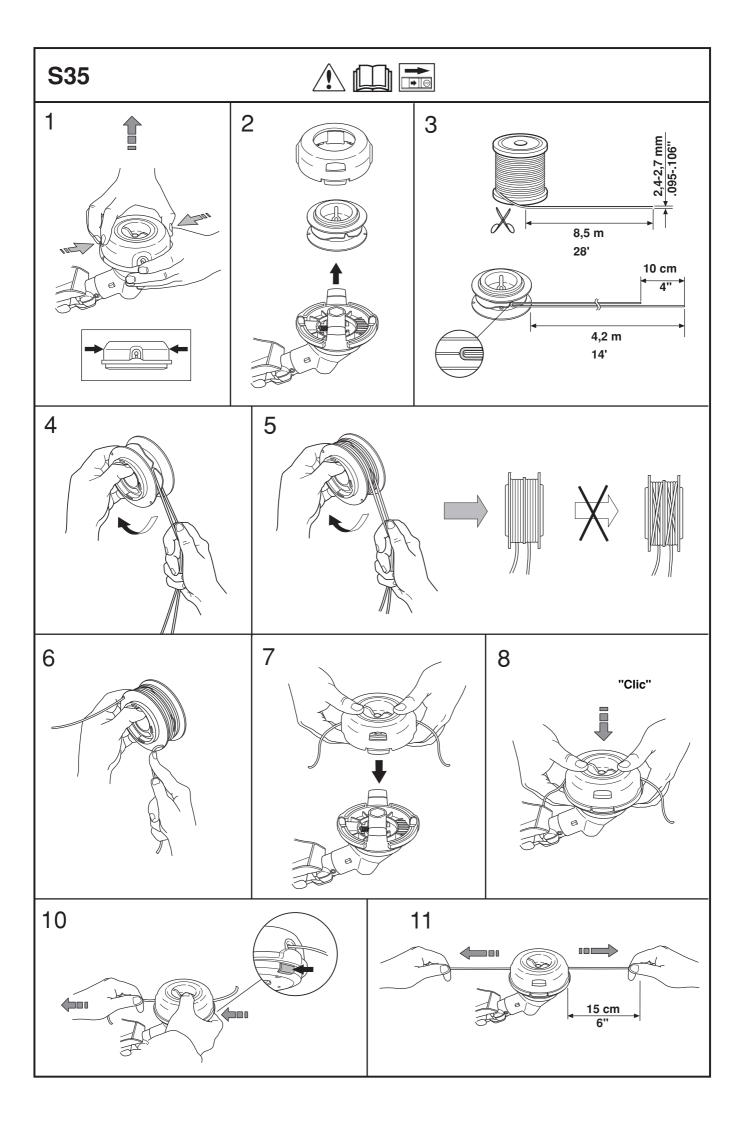
#### **MAINTENANCE STATEMENT**

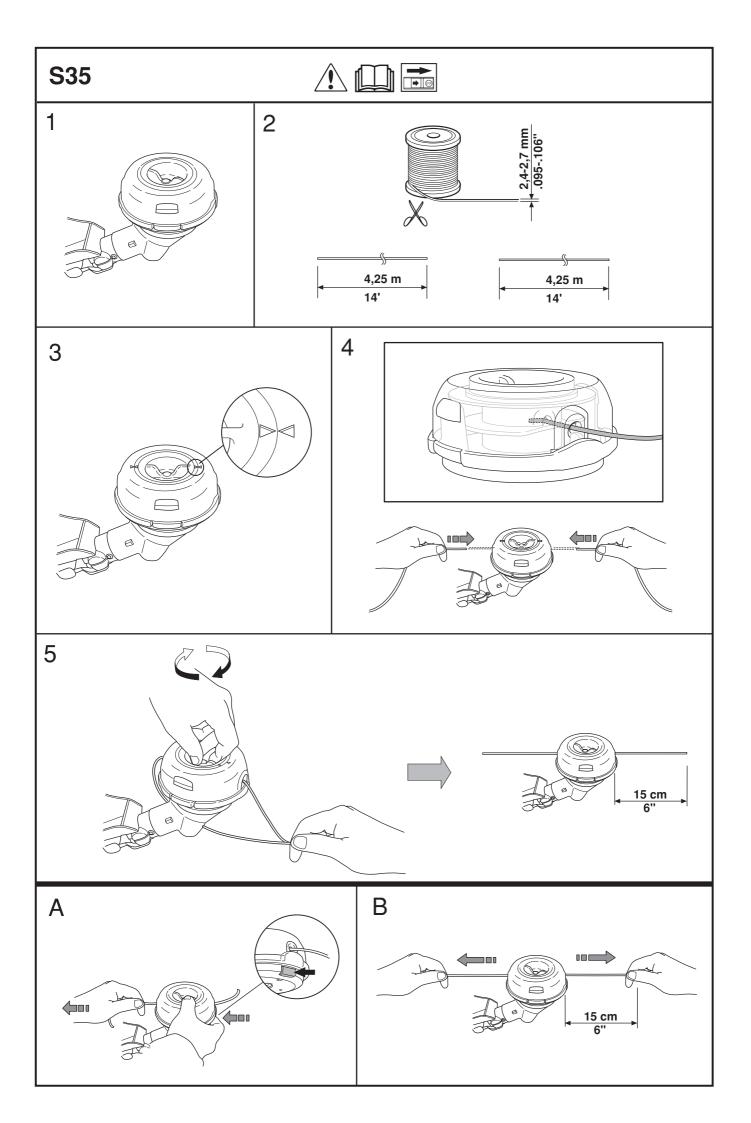
The owner is responsible for the performance of all required maintenance, as defined in the operator's manual.

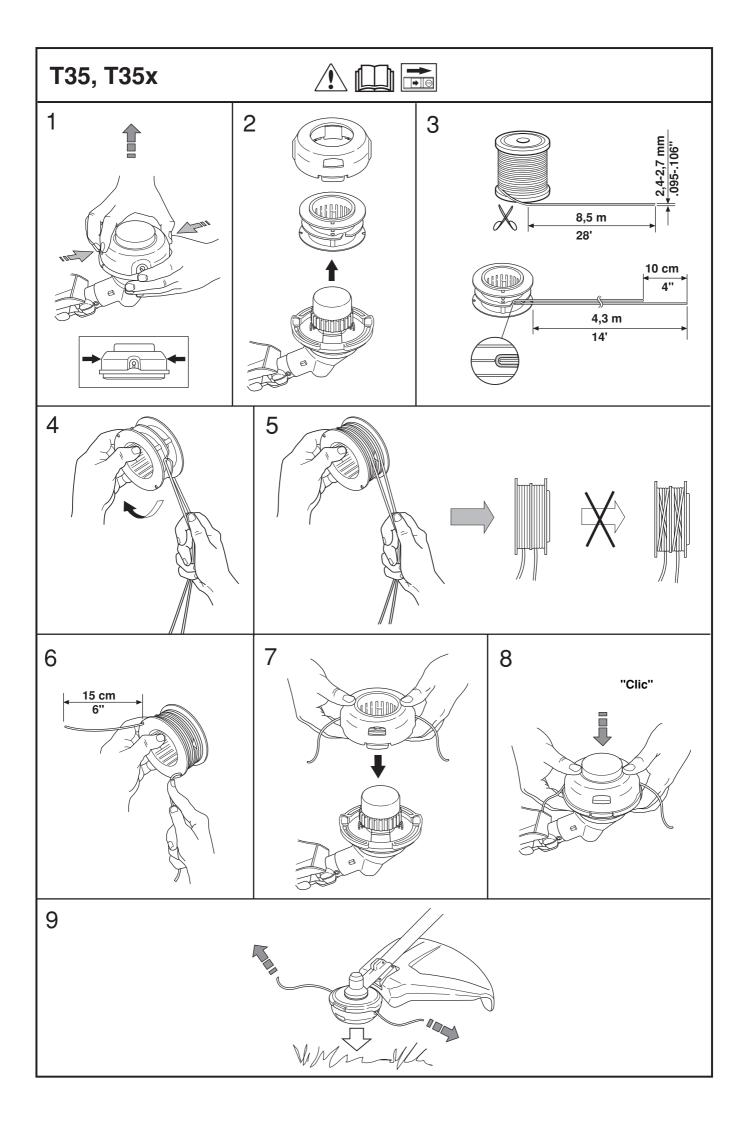
\*Current and following model year will be updated annually in the warranty statement provided to the consumer. For example, in 2012 model year, 2012-2013 will be specified.

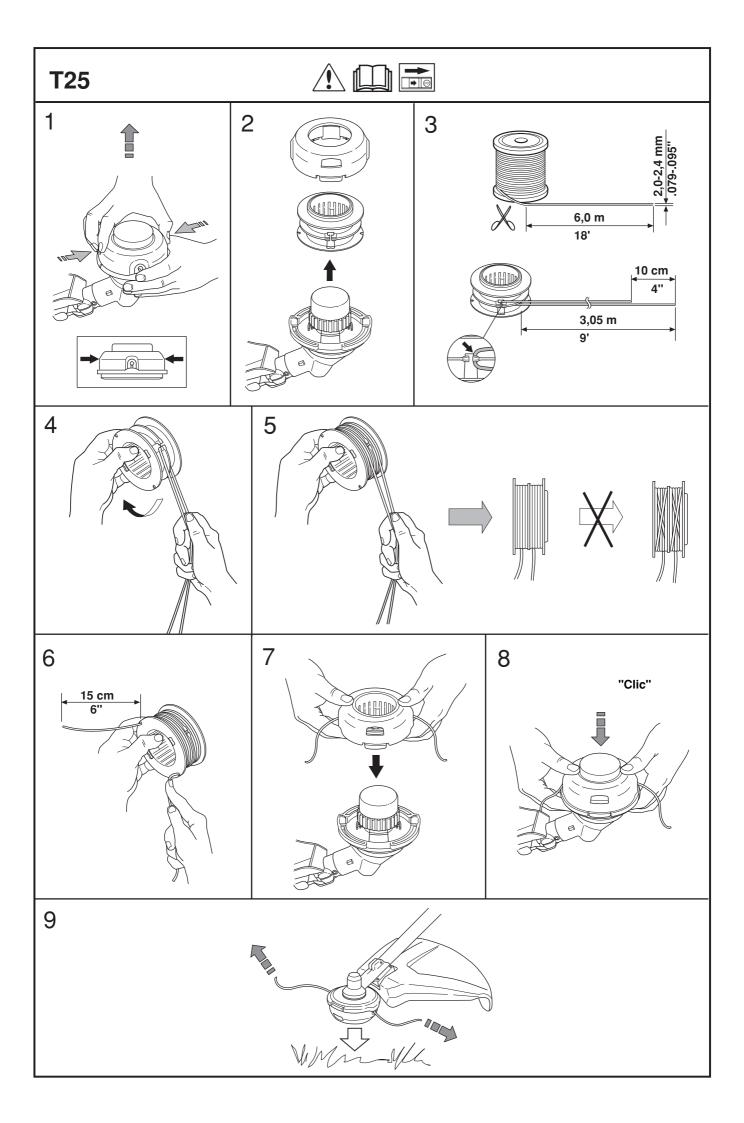


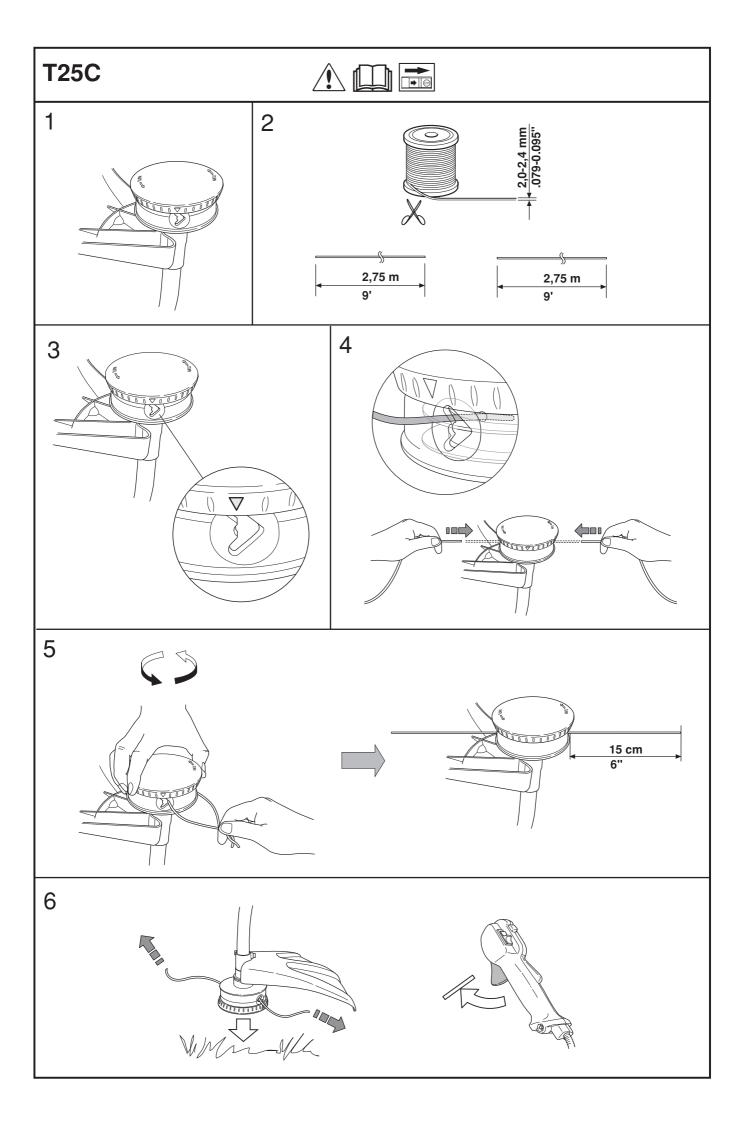


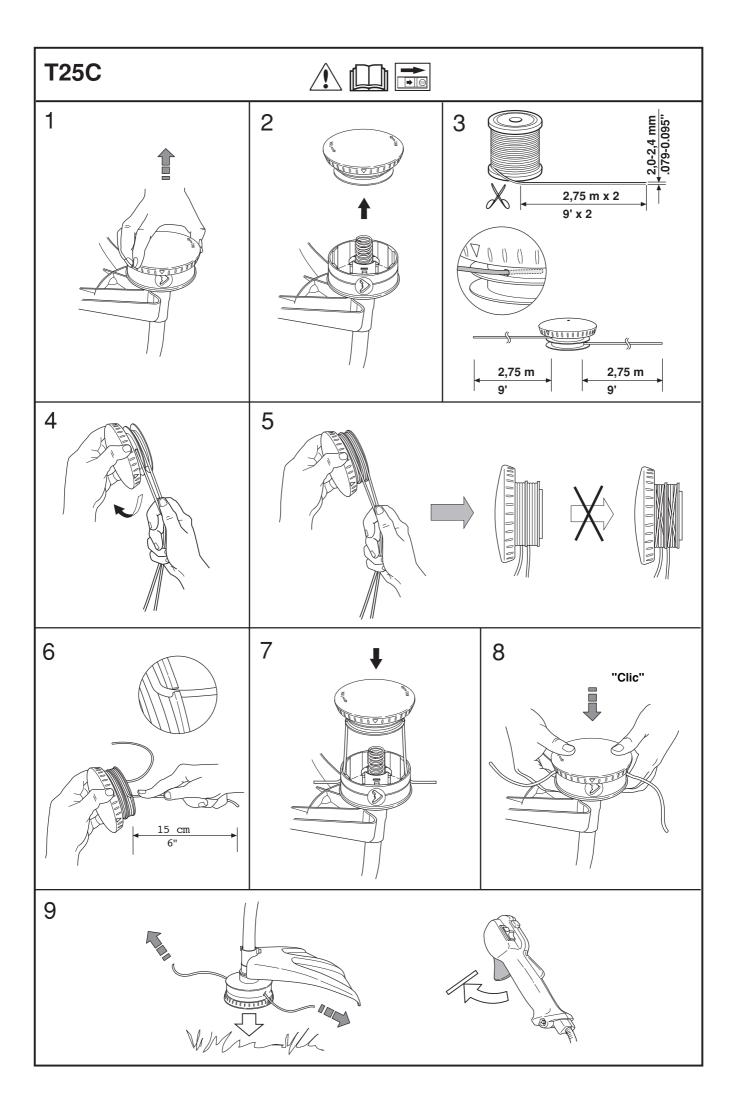














1155648-95

