

Operator's manual (EPA)
324L_x-series 324LD_x-series

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



English

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.



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
- Hearing protection
- Approved eye protection



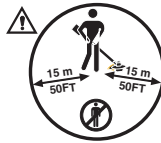
Max. speed of output shaft, rpm



Watch out for thrown objects and ricochets.



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



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. 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.

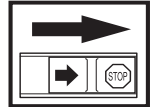


Only use non-metallic, flexible cutting attachments, i.e. trimmer heads with trimmer cord.

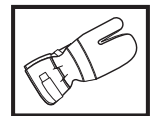


Other symbols/decals on the machine refer to special certification requirements for certain markets.

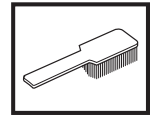
Switch off the engine by moving the stop switch to the STOP position before carrying out any checks or maintenance.



Always wear approved protective gloves.



Regular cleaning is required.



Visual check.



Approved eye protection must always be used.



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Note the following before starting:

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.

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



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.



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

This label certifies that the product has been certified in accordance with American exhaust requirements EPA 1.

 **Husqvarna**

HUSQVARNA AB HUSKVARNA SWEDEN
IMPORTANT ENGINE INFORMATION
THIS ENGINE CONFORMS TO U.S. EPA PH1
FOR SMALL NON - ROAD ENGINES.
REFER TO OPERATOR'S MANUAL FOR
MAINTENANCE SPECIFICATIONS AND ADJUSTMENTS.

This label certifies that the product has been certified in accordance with American exhaust requirements EPA 2.

IMPORTANT ENGINE INFORMATION

 **Husqvarna**

HUSQVARNA AB HUSKVARNA SWEDEN
THIS ENGINE CONFORMS TO U.S. EPA PH2
EMISSION REGULATIONS FOR SMALL NONROAD ENGINES.
REFER TO OPERATOR'S MANUAL FOR
MAINTENANCE SPECIFICATIONS AND ADJUSTMENTS.
EMISSIONS COMPLIANCE PERIOD: CATEGORY

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 emissions requirements. Category C = 50 hours, B = 125 hours, and A = 300 hours.

For customer assistance call: 704-921-7000 or contact us at our website: www.husqvarna.com



WARNING

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

SAFETY INSTRUCTIONS

Personal protective equipment

IMPORTANT! 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.

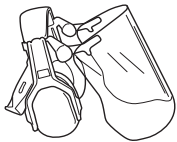
GLOVES

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



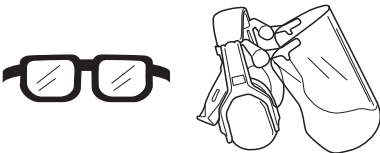
HEARING PROTECTION

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. Visors must comply with standard EN 1731.



BOOTS

Wear sturdy, non-slip boots.



CLOTHING

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

FIRST AID KIT

Always have a first aid kit nearby.



Machine's safety equipment

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

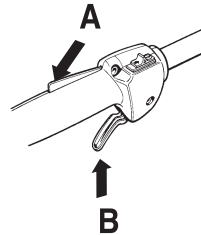
The life span of the machine can be reduced and the risk of accidents can increase if machine maintenance is not carried out correctly and if service and/or repairs are not carried out professionally. If you need further information please contact your nearest service workshop.



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

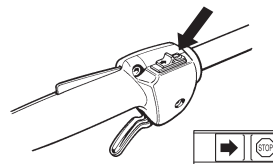
Throttle lock

The throttle lock 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 lock 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.



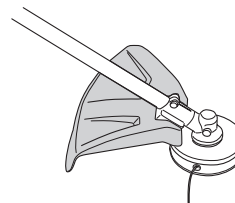
Stop switch

Use the stop switch to switch off the engine.



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.



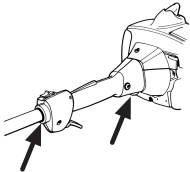
SAFETY INSTRUCTIONS



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.

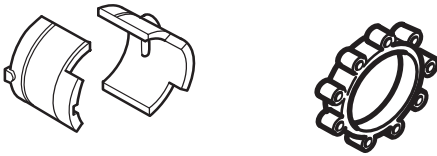
Vibration damping system

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



Use of incorrectly wound cord or an incorrect cutting attachment increases the level of vibration.

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



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

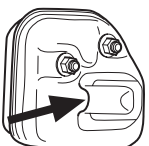
Muffler

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

A muffler fitted with a catalytic converter is also designed to reduce harmful exhaust gases.



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



For mufflers it is very important that you follow the instructions on checking, maintaining and servicing your machine. See instructions under the heading Checking, maintaining and servicing the machine's safety equipment.



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:

Engine exhaust fumes contain carbon monoxide, which can cause carbon monoxide poisoning. For this reason you should not start or run the machine indoors, or anywhere that is poorly ventilated.

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

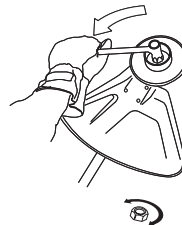
Cutting equipment

A trimmer head is intended for trimming grass.



Locking nut

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



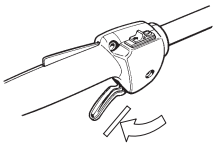
SAFETY INSTRUCTIONS

Checking, maintaining and servicing the machine's safety equipment

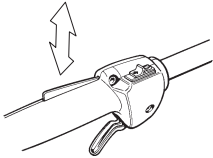
IMPORTANT! All servicing and repair work on the machine requires special training. This is especially true of the machine's safety equipment. If your machine fails any of the checks described below you must contact your service agent. When you buy any of our products we guarantee the availability of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

Throttle lock

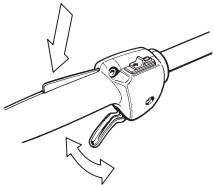
- Make sure the throttle control is locked at the idle setting when the throttle lock is released.



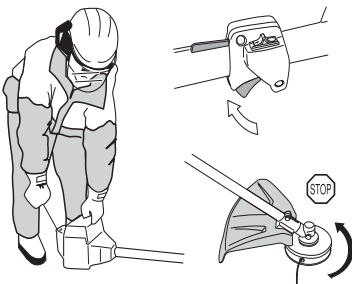
- Press the throttle lock and make sure it returns to its original position when you release it.



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

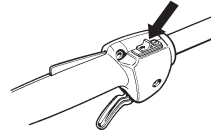


- See instructions under the heading Start. Start the machine and apply full throttle. Release the throttle and check that the cutting attachment stops and remains at a standstill. If the cutting attachment rotates with the throttle in the idle position then the carburettor idle setting must be checked.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

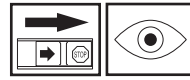


Stop switch

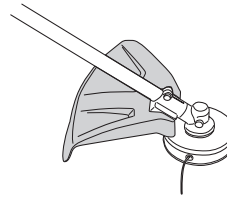
- Start the engine and make sure the engine stops when you move the stop switch to the stop setting.



Cutting attachment guard

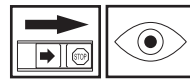


- Ensure that the guard is undamaged and is not cracked.

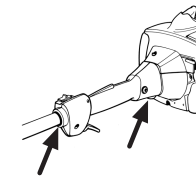


- Replace the guard if it has been exposed to impact or is cracked.
- Always use the recommended guard for the cutting attachment you are using. See chapter on Technical data.

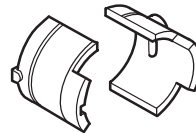
Vibration damping system



- Regularly check the vibration damping units for cracks or deformation.



- Check that the vibration damping element is undamaged and securely attached.



Muffler



- Never use a machine that has a faulty muffler.



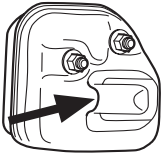
SAFETY INSTRUCTIONS

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



- The muffler on your machine is equipped with a spark arrestor mesh, this should be cleaned regularly. A blocked mesh will cause the engine to overheat and may lead to serious damage.

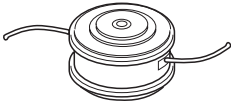
Never use a muffler with a defective spark arrestor mesh.



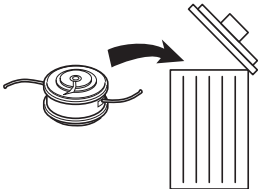
Cutting equipment



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



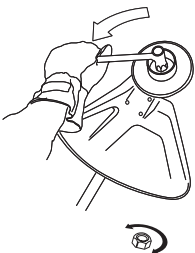
- Check the cutting attachment for damage or cracks. A damaged cutting attachment should always be replaced.



Locking nut



- 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).

CAUTION! 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.



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.

Cutting equipment

IMPORTANT!

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

Reduce the risk of blade thrust.

Obtain maximum cutting performance.

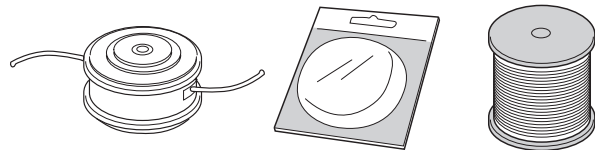
Extend the life of cutting equipment.

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.

Trimmer head

- 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.

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

SAFETY INSTRUCTIONS



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.

General safety precautions

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.

Never use the machine in extreme weather conditions such as severe cold, very hot and/or humid climates.

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

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

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 and guards must be fitted before starting. Make sure the spark plug cap and HT lead are not damaged. Otherwise you could get an 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! A faulty cutting attachment may increase the risk of accidents.

Starting



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.

- The complete clutch cover and shaft must be fitted before the machine is started, otherwise the clutch can come loose and cause personal injury.
- Never start the machine indoors. Exhaust fumes can be dangerous if inhaled.

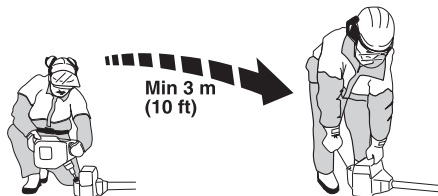
- Observe your surroundings and make sure that there is no risk of people or animals coming into contact with the cutting equipment.
- Place the machine on the ground, ensure the cutting attachment is clear of twigs and stones. Hold the body of the machine on the ground using your left hand (CAUTION! Not with your foot). Then grip the starter handle with your right hand and pull the starter cord. **Never wrap the starter cord around your hand**



Fuel safety



- Always use a fuel container with an anti-spill valve.
- Never refuel the machine while the engine is running. Always stop the engine and let it cool for a few minutes before refuelling.
- Always ensure there is adequate ventilation when handling fuel.
- Move the machine at least 3 m from the refuelling point before starting it.



- Never start the machine:
 - 1 If you have spilt fuel on it. Wipe off the spillage and allow remaining fuel to evaporate.
 - 2 If you have spilt fuel on yourself or your clothes, change your clothes. Wash any part of your body that has come in contact with fuel. Use soap and water.
 - 3 If the machine is leaking fuel. Check regularly for leaks from the fuel cap and fuel lines.
 - 4 Avoid all skin contact with fuel. Fuel is a skin irritant and may even cause skin changes.

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.

SAFETY INSTRUCTIONS

- 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.
- The transport guard must always be fitted to the cutting attachment when the machine is being transported or in storage.



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

General working instructions

IMPORTANT!

This section describes the basic safety precautions for working with clearing saws and trimmers.

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

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

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

Basic safety rules



- 1 Look around you:
 - To ensure that people, animals or other things cannot affect your control of the machine.
 - To ensure that people, animals, etc., do not come into contact with the cutting attachment or loose objects that are thrown out by the cutting attachment.
 - CAUTION! Do not use the machine unless you are able to call for help in the event of an accident.
- 2 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.
- 3 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.



- 4 Switch off the engine before moving to another area. Fit the transport guard before carrying or transporting the equipment any distance.
- 5 Never put the machine down with the engine running unless you have it in clear sight.

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.



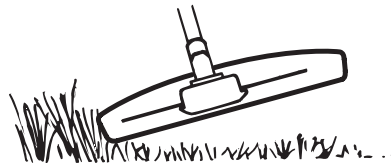
WARNING! Sometimes branches or grass get caught between the guard and cutting attachment. Always stop the engine before cleaning.

Grass trimming using a trimmer head and plastic blades

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.

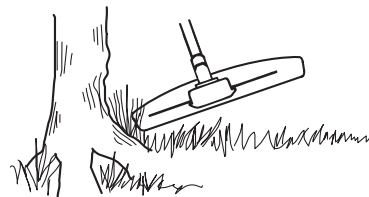


- The cord can easily remove grass and weeds up against walls, fences, trees and borders, however it can also damage sensitive bark on trees and bushes, and damage fence posts.
- Reduce the risk of damaging plants by shortening the cord to 10-12 cm and reducing the engine speed.

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.

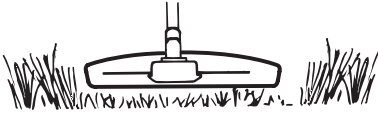
SAFETY INSTRUCTIONS

- 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.

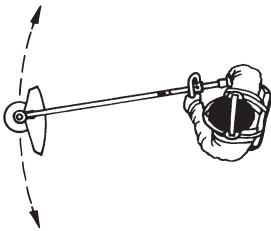


- Do not allow the trimmer head to constantly come into contact with the ground during normal cutting. Constant contact of this type can cause damage and wear to the trimmer head.

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.



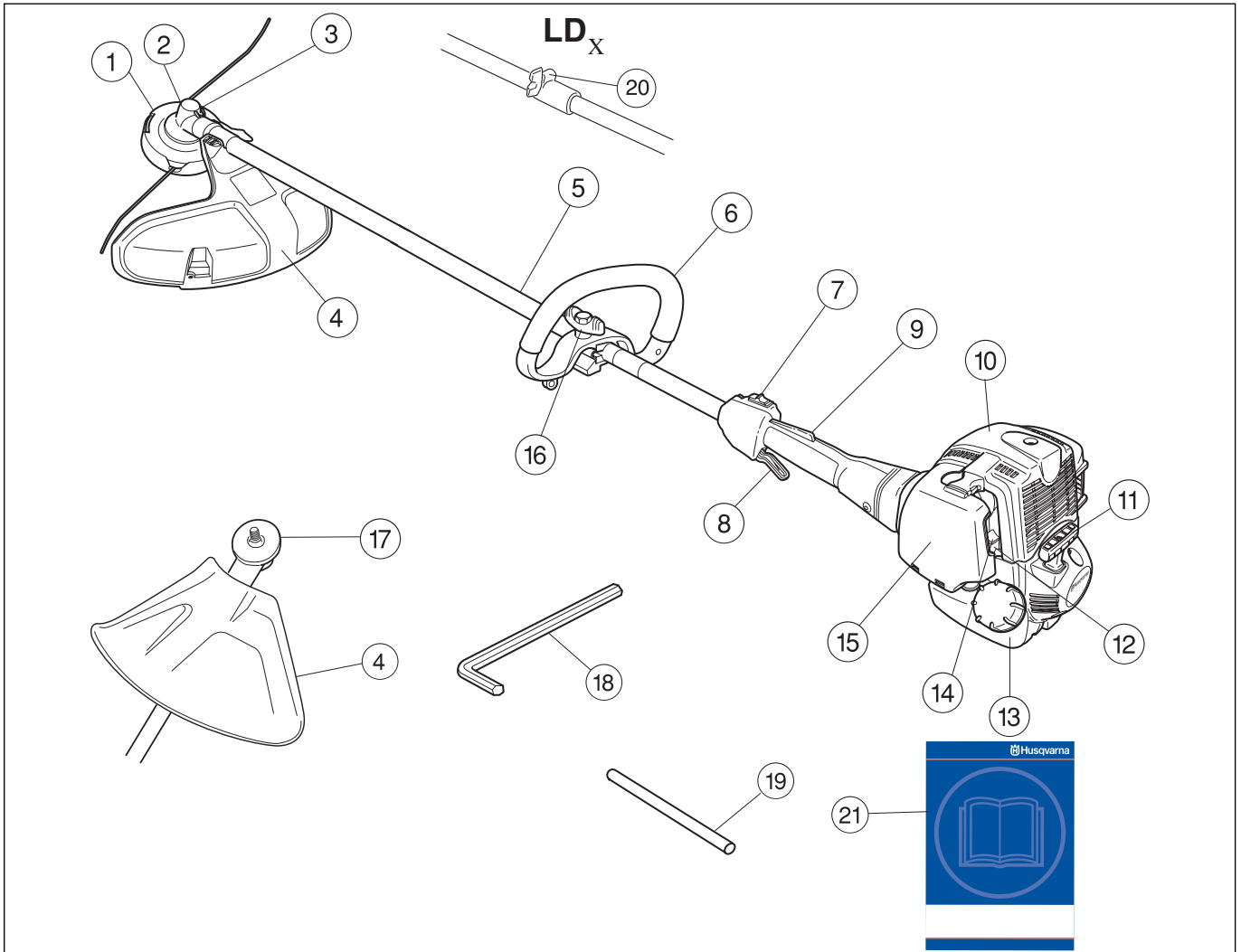
WARNING! Neither the operator of the machine nor anyone else may attempt to remove the cut material while the engine is running or the blade is rotating, as this can result in serious injury. Stop the engine and blade before you remove material that has wound around the blade shaft as otherwise there 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 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.

WHAT IS WHAT?



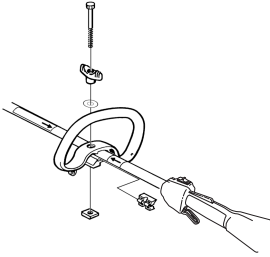
What is what?

- | | |
|---------------------------------|----------------------------|
| 1 Trimmer head | 12 Air purge |
| 2 Bevel gear | 13 Fuel tank |
| 3 Grease filler cap, bevel gear | 14 Choke control |
| 4 Cutting attachment guard | 15 Air filter cover |
| 5 Shaft | 16 Handle adjustment |
| 6 Loop handle | 17 Drive disc |
| 7 Stop switch | 18 Allen key |
| 8 Throttle control | 19 Locking pin |
| 9 Throttle lock | 20 Shaft coupling |
| 10 Cylinder cover | 21 Operator's manual (EPA) |
| 11 Starter handle | |

ASSEMBLY

Fitting the loop handle

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



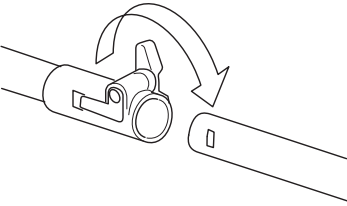
- Slide the spacer into the slot in the loop handle.
- Fit the nut, knob and screw. Do not overtighten.
- Now adjust the trimmer to give a comfortable working position. Tighten the bolt/knob.

Assembling and dismantling the two-piece shaft

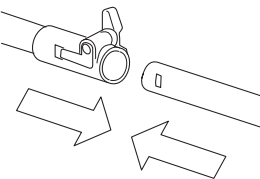
(324LDx)

Assembly:

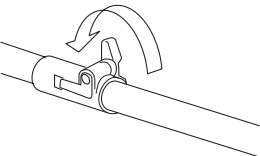
- Make sure the knob is loose.



- Align the cut-out in the lower part of the shaft with the coupling locking tab on the upper part of the shaft. Then lock the sections together.

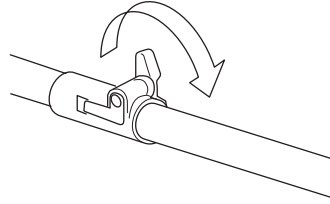


- Tighten the knob.



Dismantling:

- Undo the knob (at least three turns).



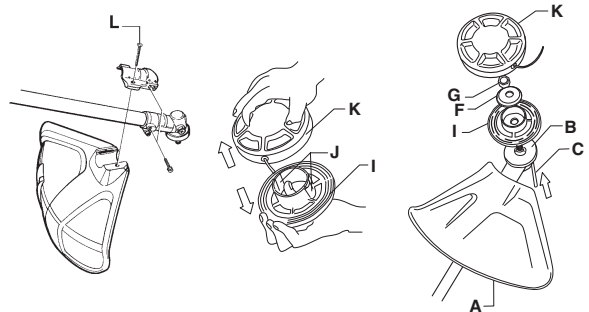
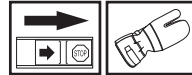
- Push the knob towards the coupling.
- Carefully twist the lower half of the shaft to unlock it.
- Hold both parts of the shaft and pull the lower part of the shaft out of the coupling.

Fitting the trimmer head



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

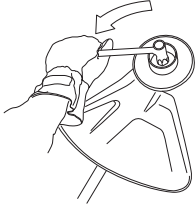


- Fit the correct trimmer guard (A) for use with the trimmer head. Hook the guard onto the fitting on the shaft and secure it with the bolt (L).
- Fit the drive disc (B) on the output shaft.
- Turn the blade shaft until one of the holes in the drive disc aligns with the corresponding hole in the gear 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. Ensure that the drive discs guide locates correctly in the covers centre hole.

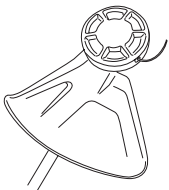
ASSEMBLY

- 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).

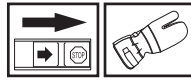


- Fit the bottom half of the trimmer head (K) to the cover (I) by pressing them together, with the cut-outs on the bottom half aligned with the catches on the cover.



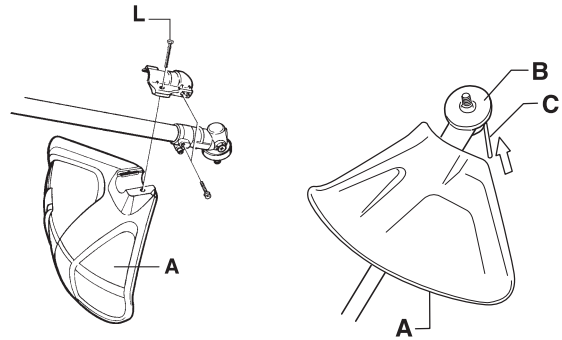
- To dismantle, follow the instructions in the reverse order.

Fitting other guards and cutting attachments

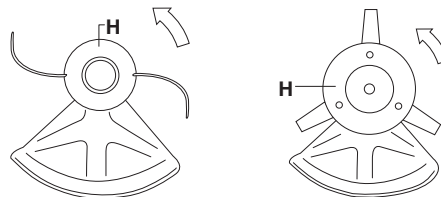


- Fit the correct trimmer guard (A) for use with the trimmer head.

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.

FUEL HANDLING

Fuel



CAUTION! The machine is equipped with a four-stroke engine. Make sure that there is always sufficient oil in the oil tank.



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

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.

Gasoline

- Use high-grade unleaded petrol of at least 86 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 machine. A too low oil level can cause serious damage to the engine.

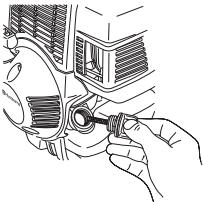
When the machine is new the engine oil should be changed after the first month or after 10 hours of operation.

- For the best result and function use HUSQVARNA engine oil.
- When HUSQVARNA engine oil is not available another high grade engine oil can be used. Contact your dealer when selecting oil. Mineral oil or semisynthetic oil should be used. In general SAE 10W-40 is recommended.
- Never use oil intended for two-stroke engines.

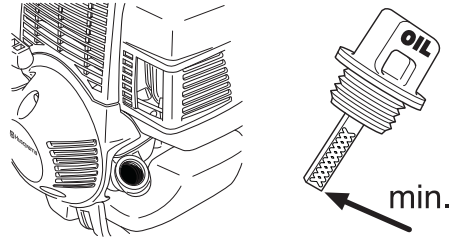
Oil level

The machine must be switched off and placed on a flat surface when you check the oil level.

Unscrew the oil cap, clean the dipstick located on the cap and insert the cap again without screwing it down. Check the oil level on the dipstick.



When the oil level is low, top up using engine oil to the edge of the oil refill hole.



Only use recommended engine oil.

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.

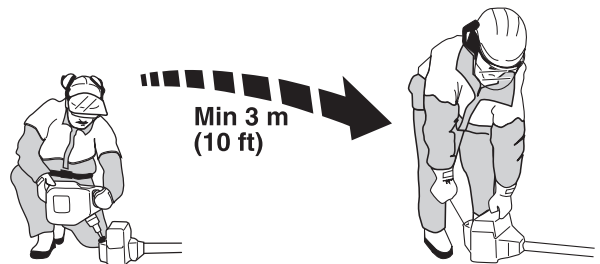
When refuelling, open the fuel cap slowly so that any excess pressure is released gently.

Tighten the fuel cap carefully after refuelling.

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

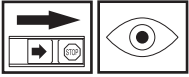
Clean around the fuel cap. Clean the fuel and oil tank regularly. The fuel filter should be changed at least once a year. Contamination in the tanks causes malfunction.

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

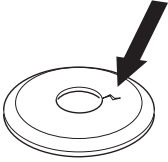


STARTING AND STOPPING

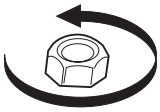
Check before starting



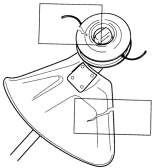
- Check that the support flange is not cracked due to fatigue or due to being tightened too much. Discard the support flange if it is cracked.



- 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 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.

Starting and stopping



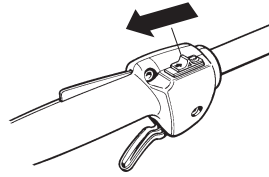
WARNING! The complete clutch cover and shaft must be fitted before the machine is started, otherwise the clutch can come loose and cause personal injury.

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.

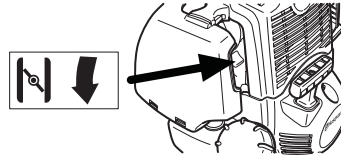
Make sure no unauthorised persons are in the working area, otherwise there is a risk of serious personal injury. The safety distance is 15 metres.

Cold engine

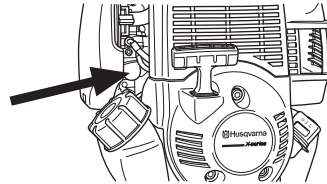
Ignition: Set the stop switch to the start position.



Choke: Set the choke control in the choke position.

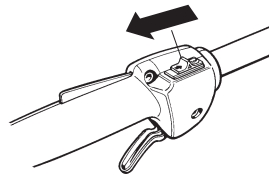


Primer bulb: Press the primer bulb repeatedly until fuel begins to fill the bulb. The bulb need not be completely filled.

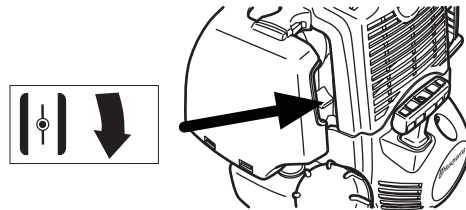


Warm engine

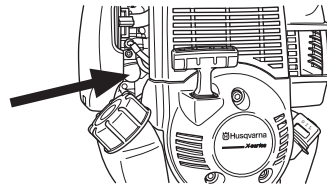
Ignition: Set the stop switch to the start position.



Choke: Put the choke in working position.



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



STARTING AND STOPPING

Starting



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**

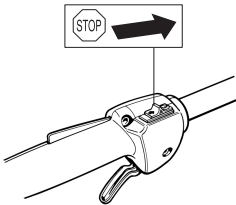
Reset the choke when the engine fires, repeat pulling the cord until the engine starts.

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



Stopping

Stop the engine by switching off the ignition with the stop button.



MAINTENANCE

Carburettor



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.

Function



- The carburettor governs the engine's speed via the throttle control. Air and fuel are mixed in the carburettor. The air/fuel mixture is adjustable. Correct adjustment is essential to get the best performance from the machine.
- Adjusting the carburettor involves adapting the engine to suit local conditions, e.g. climate, altitude and the petrol.

Basic setting

The basic carburettor settings are adjusted during testing at the factory.

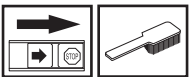
The carburettor should be adjusted to prevent damaging the engine when the machine is always used at altitudes over 1500 metres above seal level.

CAUTION! For optimum adjustment of the carburettor, contact a qualified dealer/service workshop that has a revolution counter at their disposal.



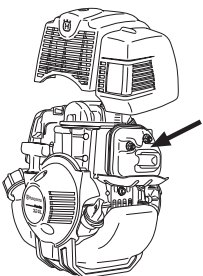
WARNING! If the idle speed cannot be adjusted so that the cutting attachment stops, contact your dealer/service workshop. Do not use the machine until it has been correctly adjusted or repaired.

Muffler

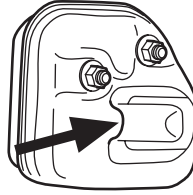


CAUTION! Some mufflers are fitted with a catalytic converter. See chapter on Technical data to see whether your machine is fitted with a catalytic converter.

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.



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

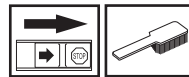


CAUTION! Never use a machine with a defective muffler.

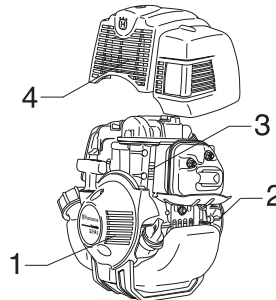


WARNING! Mufflers fitted with catalytic converters get very hot during use and remain so for some time after stopping. This also applies at idle speed. Contact can result in burns to the skin. Remember the risk of fire!

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



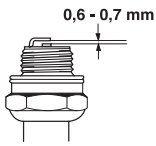
The spark plug condition is influenced by:

- Incorrect carburettor adjustment.
- A dirty air filter.

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

MAINTENANCE

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 0,6-0,7 mm. The spark plug should be replaced after about a month in operation or earlier if necessary.

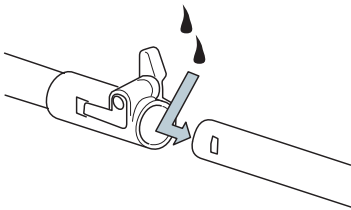


CAUTION! Always use the recommended spark plug type! Use of the wrong spark plug can damage the piston/cylinder. Check that the spark plug is fitted with a suppressor.

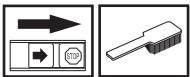
Two-piece shaft



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



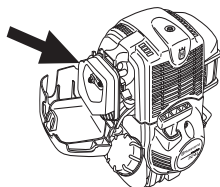
Air filter



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

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

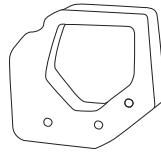
Clean the filter every 25 hours, or more regularly if conditions are exceptionally dusty.



Cleaning the air filter

Remove the air filter cover and take out the filter. Wash it clean in warm, soapy water.

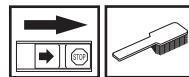
Ensure that the filter is dry before refitting it.



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

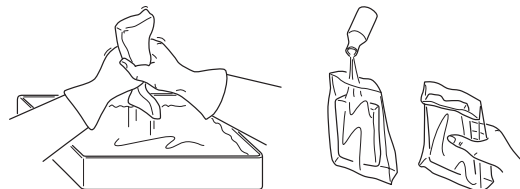
If the machine is used in dusty conditions the air filter should be soaked in oil. See instructions under the heading Oiling the air filter.

Oiling the air filter



Always use 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.

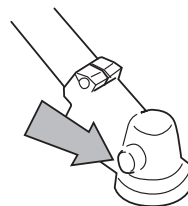
Put the filter in a plastic bag and pour the filter oil over it. Knead the plastic bag to distribute the oil. Squeeze the excess oil out of the filter inside the plastic bag and pour off the excess before fitting the filter to the machine. Never use common engine oil. This would drain through the filter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



Bevel gear



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



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

MAINTENANCE

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 schedule

Below you will find some general maintenance instructions.

Daily maintenance

- Check the engine oil level and top up if necessary.
- Check throttle trigger and throttle trigger lockout function.
- Check that the stop switch works correctly.
- Check that there are no fuel leaks from the engine, tank or fuel lines.
- Check that the cutter does not rotate when the engine is idling.
- Clean the outside of the machine.
- Check that the harness is not damaged.
- Check that the blade guard is not damaged or cracked. Replace the blade guard if it is exposed to impact or is cracked.
- A non-balanced blade/trimmer head induces heavy vibrations that may damage the machine.
- Check that nuts and screws are tight.
- Check that the screws that hold the bevel gear are tight.

Weekly maintenance

- Check the starter and starter cord.
- Clean the carburettor area.
- Clean the outside of the spark plug. Remove it and check the electrode gap. Adjust the gap to 0,6-0,7 mm, or replace the spark plug. Check that the spark plug is fitted with a suppressor.
- Clean the cooling fins on the cylinder and check that the air intake near the starter is not blocked.
- Check that the bevel gear is filled with grease up to 3/4. Use special grease.
- Clean the air filter.

Monthly maintenance

- Clean the fuel tank.
- Clean the outside of the carburettor and the space around it.
- Check fuel hose for cracks or other damage. Change if necessary.
- Change the fuel filter in fuel tank.
- Check electrical wires and connections.
- Replace the spark plug. Check that the spark plug is fitted with a suppressor.
- Change the air filter.
- Check and clean the spark arrestor mesh on the muffler.
- Change the engine oil.

TECHNICAL DATA

Technical data

	324Lx	324LDx
Engine		
Cylinder volume, cu.in/cm ³	1,53/25,0	1,53/25,0
Cylinder bore, inch/mm	1,38/35	1,38/35
Stroke, inch/mm	1,03/26	1,03/26
Idle speed, rpm	3100	3100
Recommended max. speed, rpm	11000	11000
Speed of output shaft, rpm	8300	8300
Max. engine output, acc. to ISO 8893, kW/ rpm	0,8 / 7000	0,8 / 7000
Catalytic converter muffler	No	No
Speed-regulated ignition system	No	No
Ignition system		
Manufacturer/type of ignition system	Ikeda	Ikeda
Spark plug	NGK CMR5H	NGK CMR5H
Electrode gap, inch/mm	0,024/0,6	0,024/0,6
Fuel and lubrication system		
Manufacturer/type of carburettor	Walbro	Walbro
Fuel tank capacity, US pint/litre	1,06/0,5	1,06/0,5
Weight		
Weight without fuel, cutting attachment and guard, Lbs/kg	11,2/5,1	11,9/5,4
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:	90/97	90/97
Vibration levels		
Vibration levels at handles, measured according to ANSI B175.3-1997, m/s ²		
At idle, left/right handles, min.:	1,9/1,8	1,7/1,6
At idle, left/right handles, max.:	2,2/1,9	2,2/1,7
At max. speed, left/right handles, min.:	5,8/5,5	3,2/4,5
At max. speed, left/right handles, max.:	6,1/5,7	5,4/5,6

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.

324Lx, 324LDx		
Approved accessories	Type	Cutting attachment guard, Art. no.
Arbor shaft thread M10		
Plastic blades	Tricut Ø 255 mm	503 93 42-02 / 503 97 71-01
	Tricut Ø 300 mm	503 93 42-02
Trimmer head	Trimmy Fix	503 93 42-02 / 503 97 71-01
	Superauto II 1"	503 93 42-02 / 503 97 71-01
	S35	503 93 42-02 / 503 97 71-01
	T25	503 93 42-02 / 503 97 71-01
	T35	503 93 42-02 / 503 97 71-01

FEDERAL EMISSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The EPA (The US Environmental Protection Agency), Environment Canada and Husqvarna Forest & Garden are pleased to explain the emissions control system warranty on your 2001 and later small nonroad engine. In U.S. and Canada, new small nonroad engines must be designed, built and equipped to meet the federal stringent anti-smog standards. Husqvarna Forest & Garden must warrant the emission control system on your small nonroad engine for the period of time listed below provided there has been no abuse, neglect or improper maintenance of your unit. Your emission control system includes Parts such as the carburetor and the ignition system. Where a warrantable condition exists, Husqvarna Forest & Garden will repair your small nonroad engine at no cost to you. Expenses covered under warranty include diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE

The 2001 and later small nonroad engines are warranted for two years. If any emission related part on you engine (as listed above) is defective, the part will be repaired or replaced by Husqvarna Forest & Garden.

OWNER'S WARRANTY RESPONSIBILITIES

As the small nonroad engine owner, you are responsible for the 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 nonroad engine, but Husqvarna Forest & Garden cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance. As the small nonroad engine owner, you should, however, be aware that Husqvarna Forest & Garden may deny you warranty coverage if your small nonroad engine or a part of it has failed due to abuse, neglect, improper maintenance, unapproved modifications or the use of parts not made or approved by the original equipment manufacturer. You are responsible for presenting your small nonroad engine to a Husqvarna Forest & Garden authorized servicing dealer as soon as a 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 rights and responsibilities, you should contact your nearest authorized servicing dealer or call Husqvarna Forest & Garden at 1-800-487-5963.

WARRANTY COMMENCEMENT DATE

The warranty period begins on the date small nonroad engine is delivered.

LENGTH OF COVERAGE

Husqvarna Forest & Garden warrants to the initial owner and each subsequent purchaser that the engine is free from defects in materials and workmanship which cause 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 will be performed at no charge to the owner at an approved Husqvarna Forest &

Garden servicing dealer. If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized servicing dealer or call Husqvarna Forest & Garden at 1-800-487-5963.

WARRANTY PERIOD Any warranted part which is not scheduled for replacement as required maintenance, or which is scheduled only for regular inspection to the effect of "repair or replace as necessary" shall be warranted for 2 years. Any warranted part which is scheduled for replacement as required maintenance shall be warranted for the period of time up to the first scheduled replacement point for that part.

DIAGNOSIS The owner shall not be charged for diagnostic labor which leads to the determination that a warranted part is defective, if the diagnostic work is performed at an approved Husqvarna Forest & Garden servicing dealer.

CONSEQUENTIAL DAMAGES Husqvarna Forest & Garden may be liable for damages to other engine components caused by the failure of a warranted part still under warranty.

WHAT IS NOT COVERED

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

ADD -ON OR MODIFIED PARTS

The use of add-on or modified parts can be grounds for disallowing a warranty claim. Husqvarna Forest & Garden is not liable to cover failures of warranted parts caused by the use of add-on or modified parts.

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 & Garden at 1-800-487-5963.

WHERE TO GET WARRANTY SERVICE

Warranty services or repairs shall be provided at all Husqvarna Forest & Garden authorized servicing dealers.

MAINTENANCE, REPLACEMENT AND REPAIR OF EMISSION-RELATED PARTS

Any Husqvarna Forest & Garden approved replacement part used in the performance of any warranty maintenance or repairs on emission-related parts, will be provided without charge to the owner if the part is under warranty.

EMISSION CONTROL 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 Ignition System
 - 1 Spark Plug, covered up to maintenance schedule
 - 2 Ignition Module

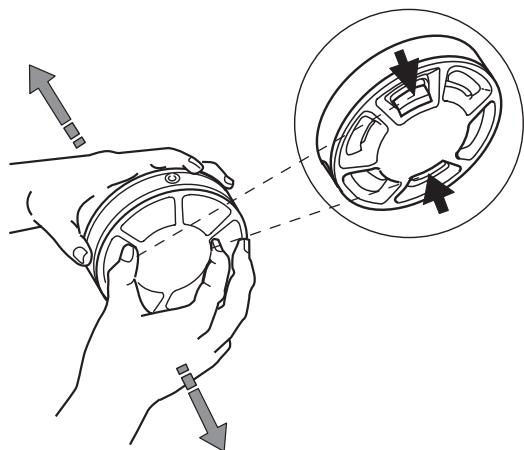
MAINTENANCE STATEMENT

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

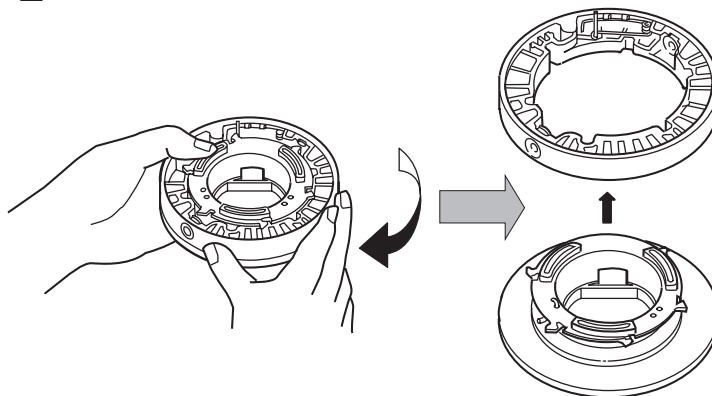
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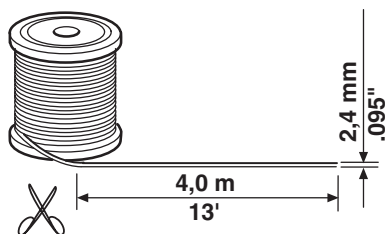
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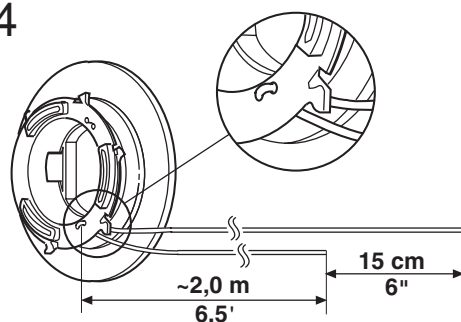
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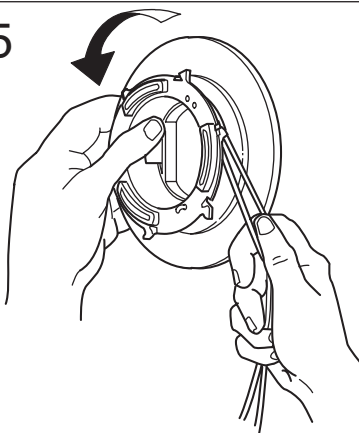
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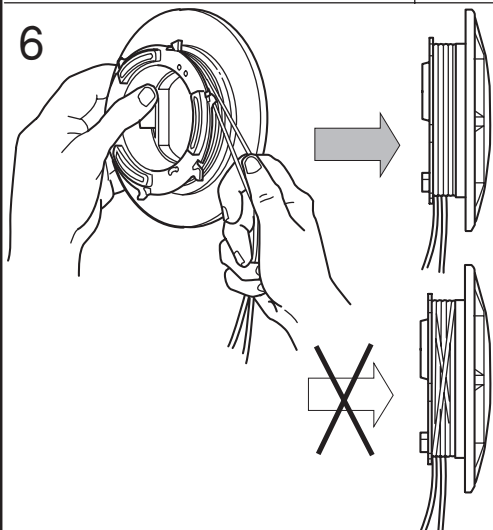
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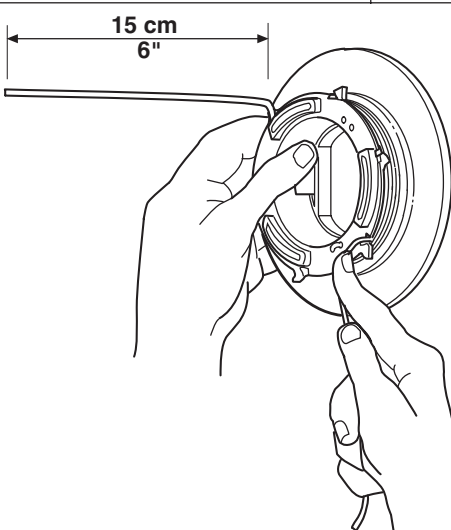
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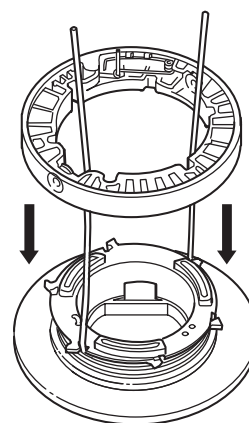
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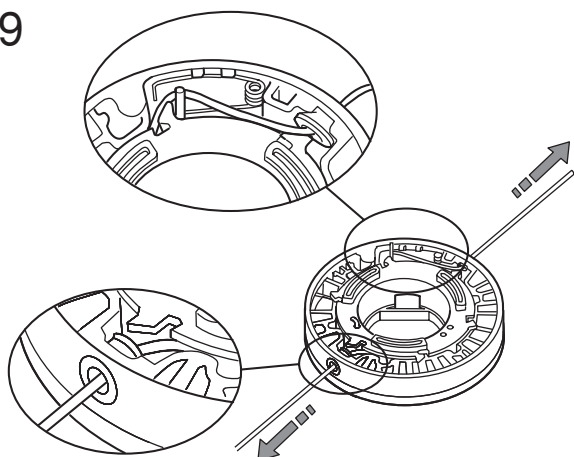
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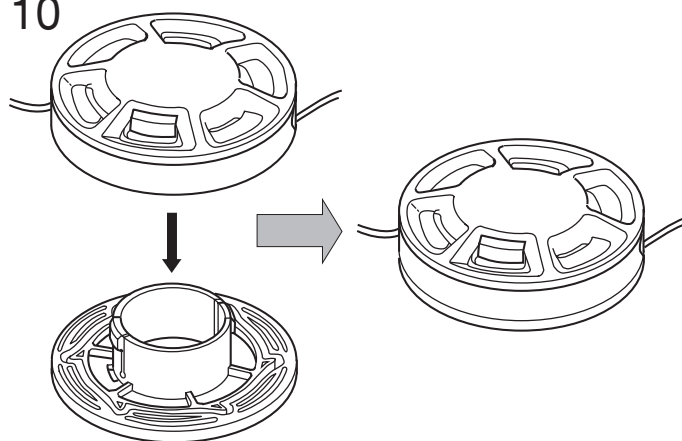
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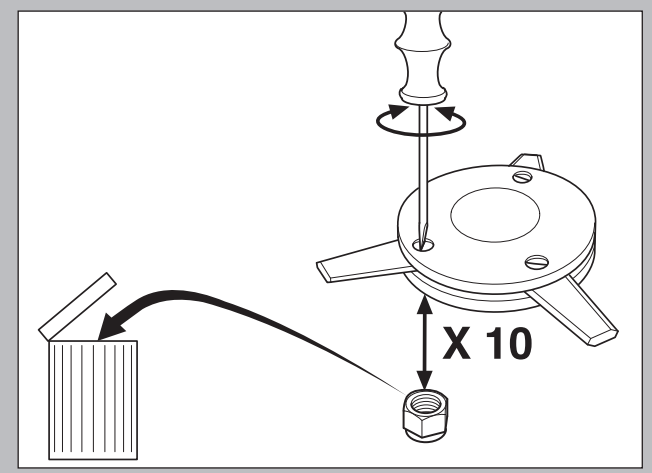
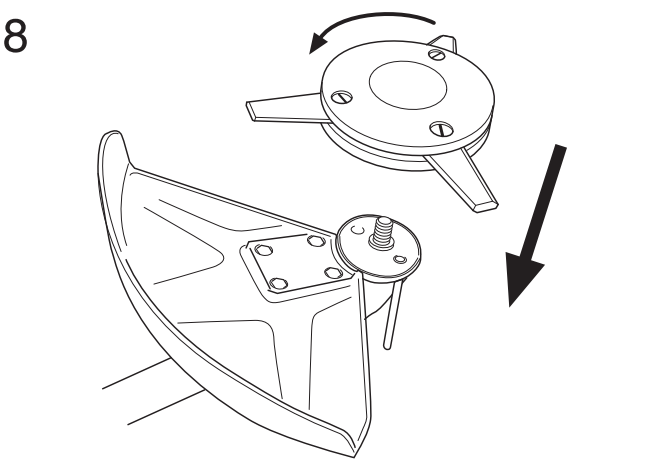
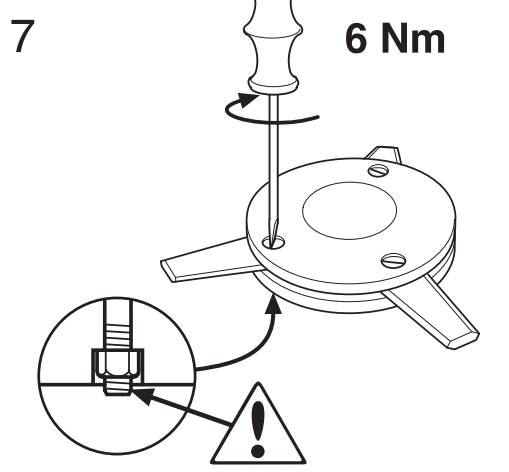
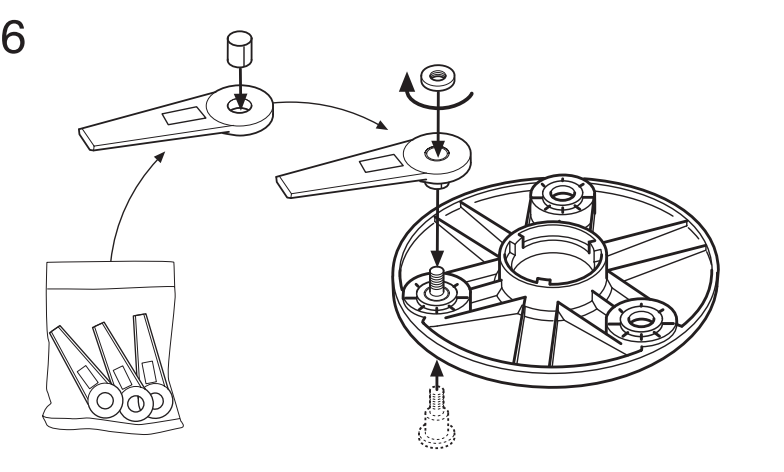
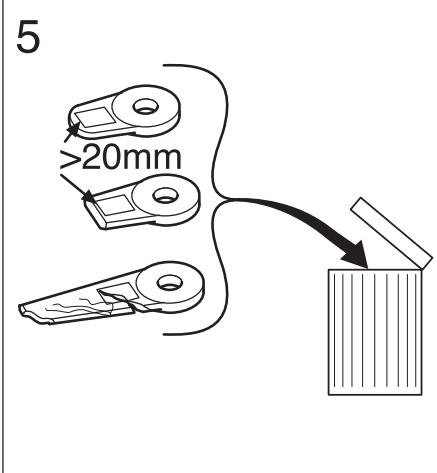
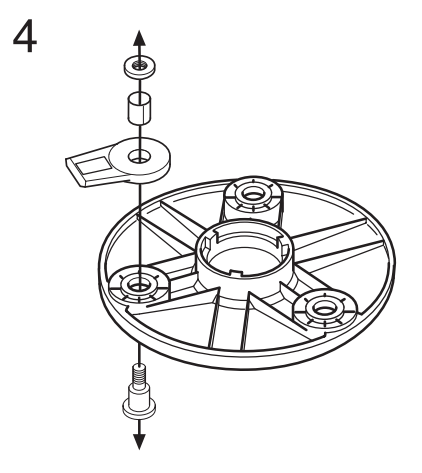
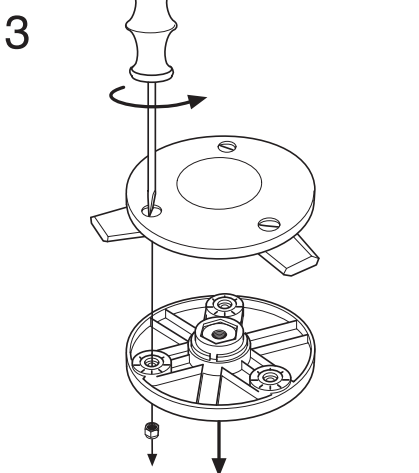
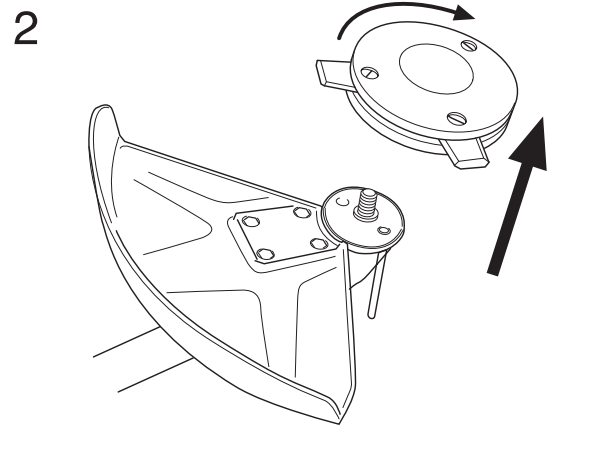
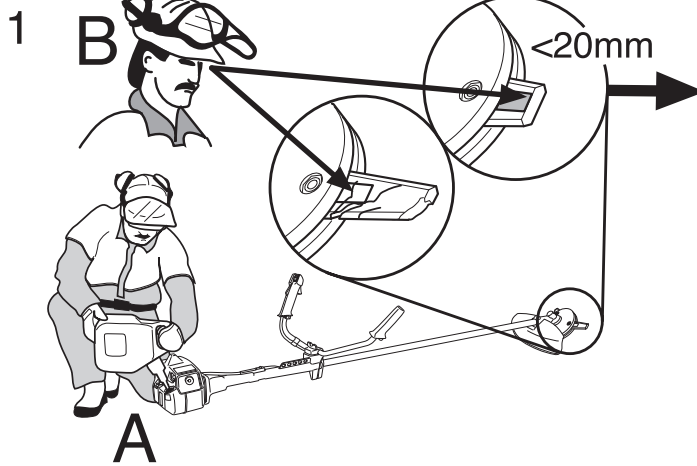
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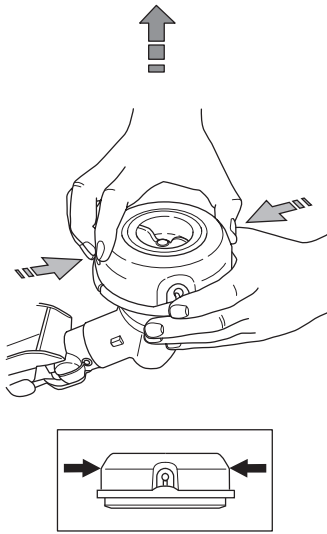
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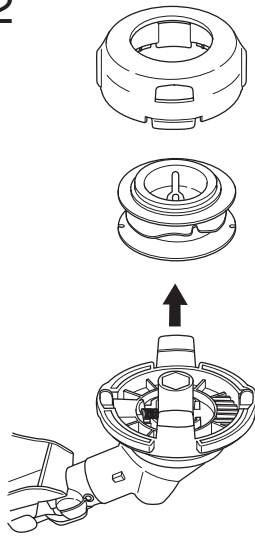
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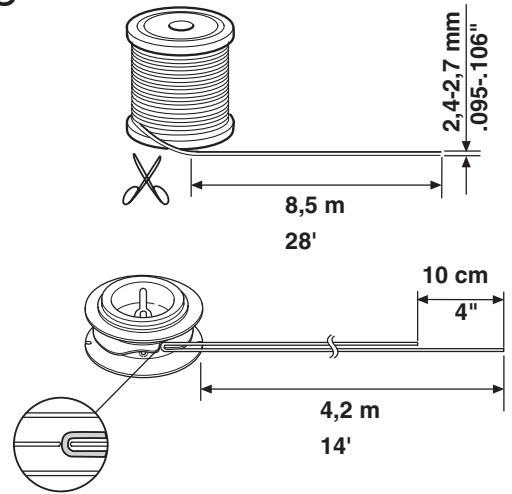
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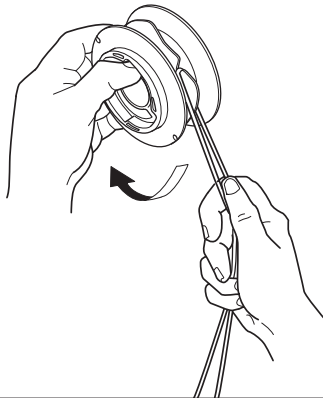
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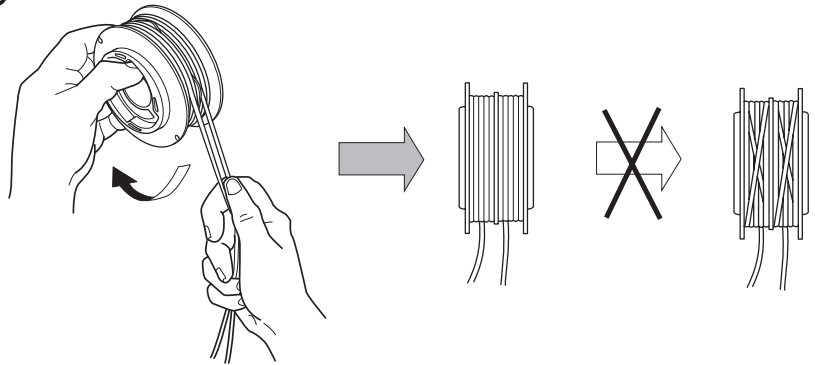
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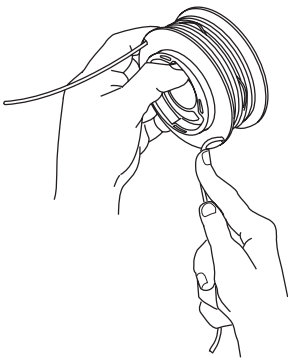
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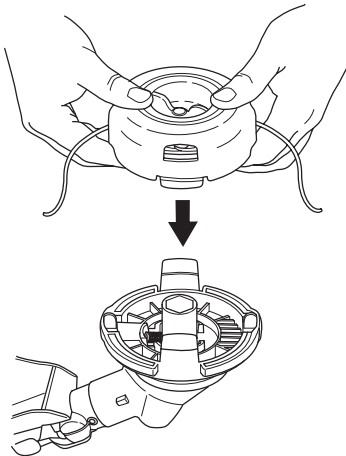
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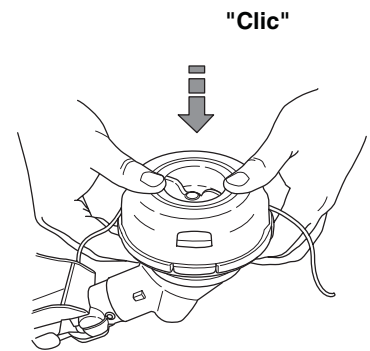
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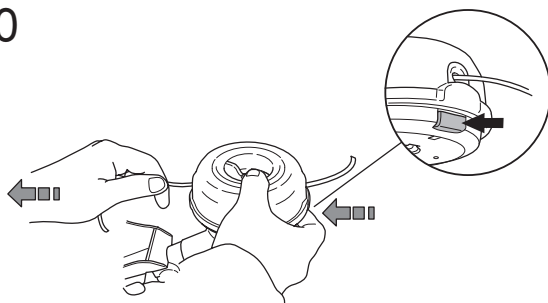
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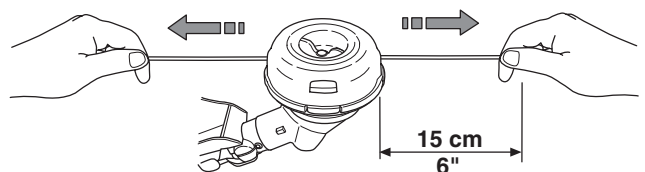
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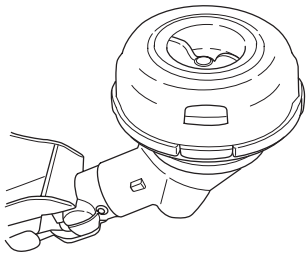
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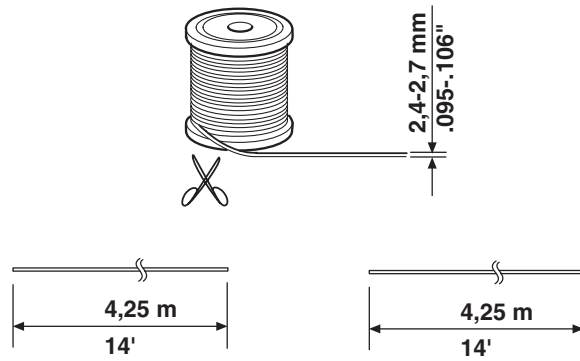
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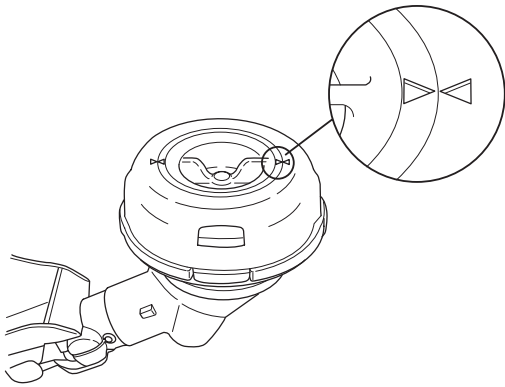
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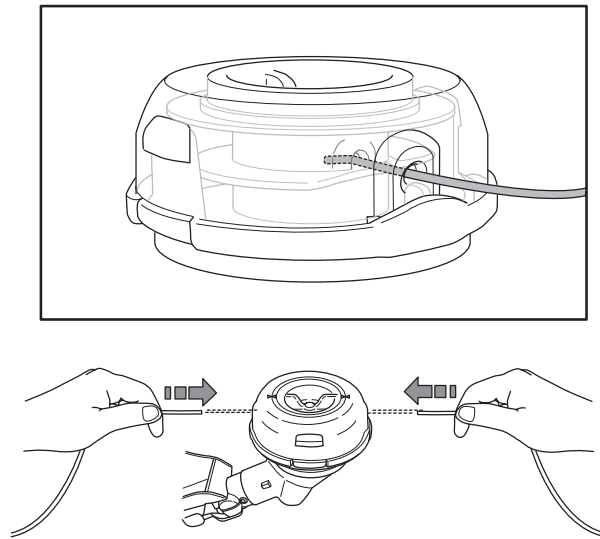
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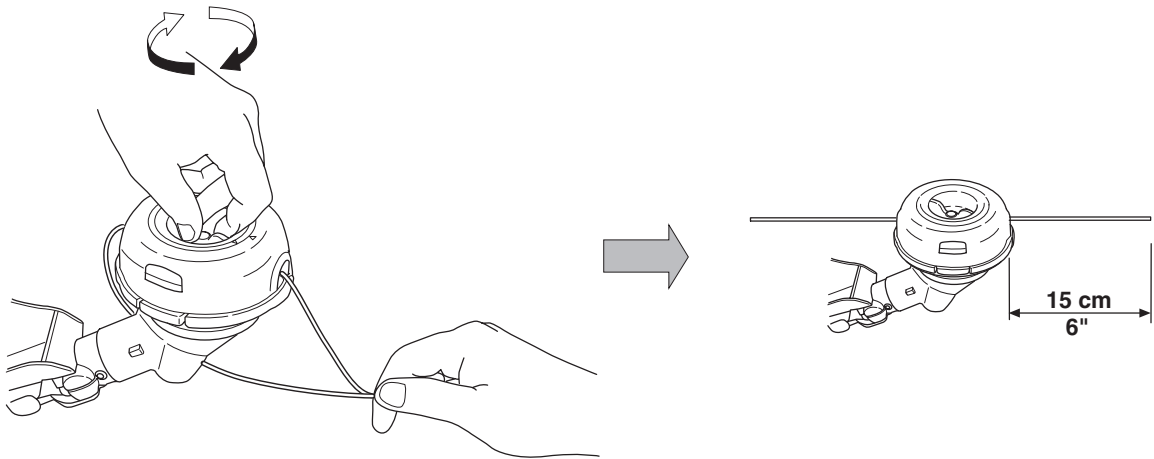
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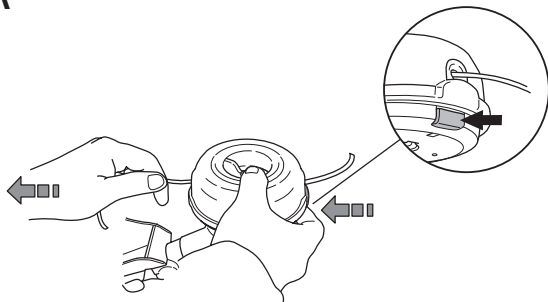
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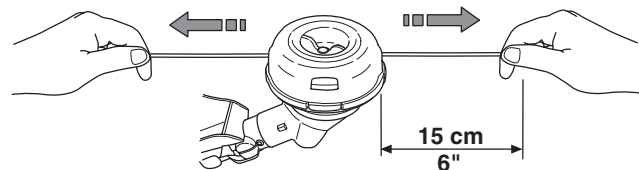
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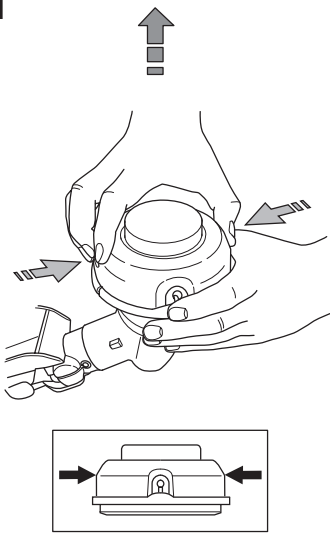
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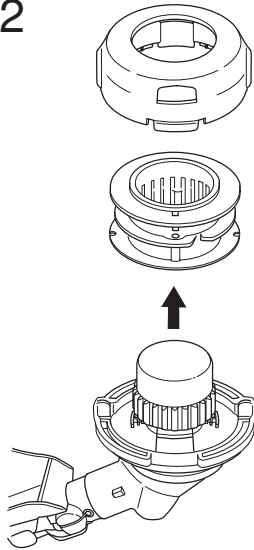
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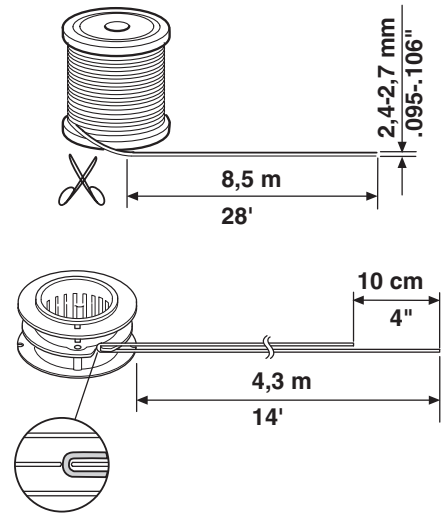
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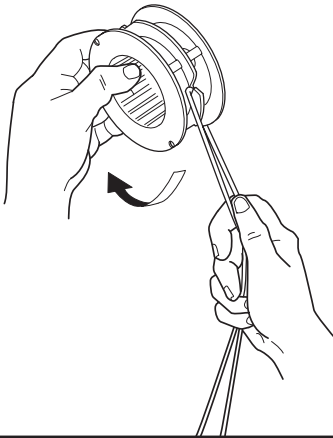
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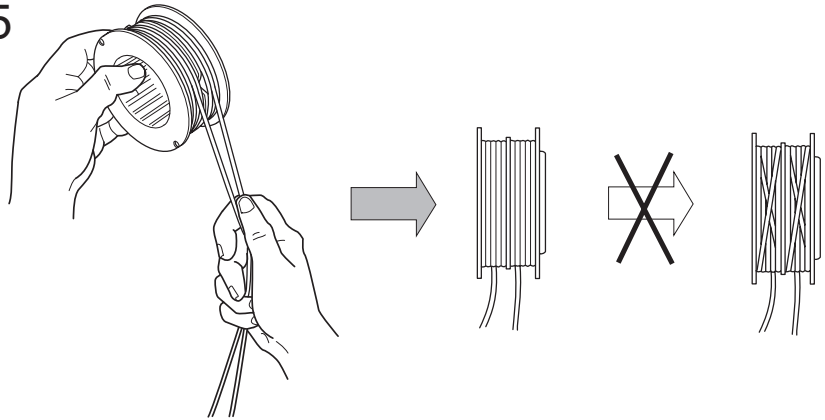
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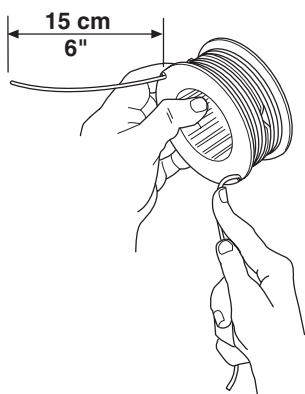
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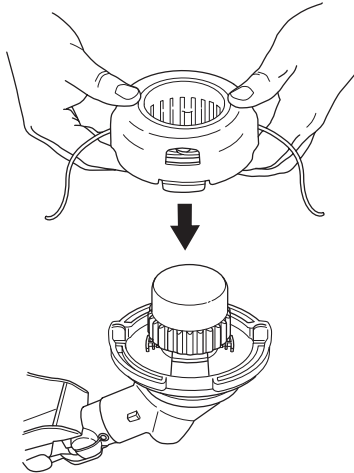
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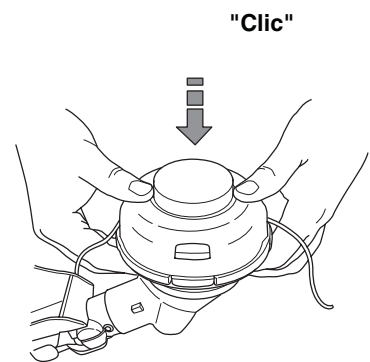
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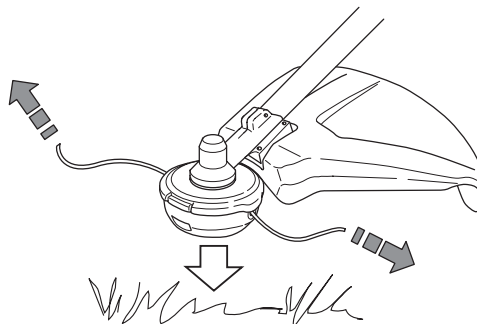
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