



**Operator's manual Manuel d'utilisation Istruzioni per
l'uso Manual de instrucciones Bedienungsanweisung
Instruções para o uso Kullanım kılavuzu Navodila za uporabo**

543 RBX 543 RBK

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

Lire attentivement et bien assimiler le manuel d'utilisation avant d'utiliser la machine

Prima di usare la macchina, leggere per intero le istruzioni per l'uso e accertarsi di averne compreso il contenuto.

Lea detenidamente el manual de instrucciones y asegúrese de entender su contenido antes de utilizar la máquina.

Lesen Sie die Bedienungsanweisung sorgfältig durch und machen Sie sich mit dem Inhalt vertraut, bevor Sie das Gerät benutzen.

Leia as instruções para o uso com toda a atenção e compreenda o seu conteúdo antes de fazer uso da máquina.

Makineyi kullanmadan önce kullanım kılavuzunu iyice okuyarak içeriğini kavrayınız

Natančno preberite navodila za uporabo in se prepričajte, da ste jih razumeli, predno začnete z uporabo stroja



GB 2-28

FR 29-56

IT 57-84

ES 85-112

DE 113-140

PT 141-168

TR 169-196

SI 197-222

KEY TO SYMBOLS

Symbols

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.

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

Always wear:

- A protective helmet where there is a risk of falling objects
- Approved hearing protection
- Approved eye protection

Max. speed of output shaft, rpm

This product is in accordance with applicable EC directives.

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.

Ignition; choke: Set the choke control in the choke position.

Air purge

Always wear approved protective gloves.



Wear sturdy, non-slip boots.



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



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

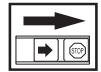


Keep all parts of your body away from hot surfaces.



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

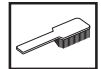
Switch off the engine by moving the stop switch to the STOP position before carrying out any checks or maintenance.



Always wear approved protective gloves.



Regular cleaning is required.



Visual check.



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Note the following before starting:

Please read the operator's manual carefully.



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



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



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

INTRODUCTION

Dear Customer,

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 Husqvarna 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 the more than 300 years in existence, 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. The business concept is to develop, manufacture and market motor-driven products for forestry and gardening, as well as for the building and construction industry. Husqvarna's aim is also to be at the front edge for ergonomics, usability, security and environmental protection. That is the reason why we have developed many different features to add to our products within these areas.

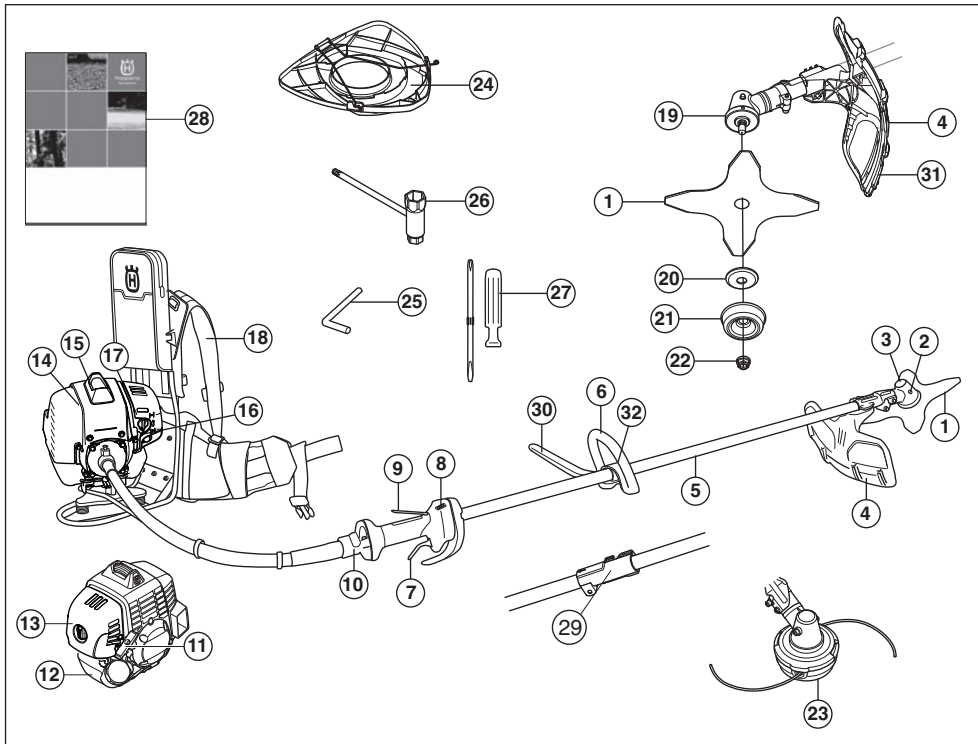
We are convinced that you will appreciate with great satisfaction the quality and performance of our product for a very long time to come. The purchase of one of our products gives you access to professional help with repairs and service whenever this may be necessary. If the retailer who sells your machine is not one of our authorised dealers, ask for the address of your nearest service workshop.

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 (usage, service, maintenance, etc), the life span and the second-hand value of the machine can be extended. If you sell this machine, make sure that the operator's manual is passed on to the buyer.

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.

WHAT IS WHAT?



What is what on the brush cutter?

- | | |
|----------------------------------|----------------------|
| 1 Blade | 17 Choke control |
| 2 Grease filler cap, bevel gear | 18 Harness |
| 3 Bevel gear | 19 Drive disc |
| 4 Cutting attachment guard | 20 Support flange |
| 5 Shaft | 21 Support cup |
| 6 Loop handle | 22 Locking nut |
| 7 Throttle trigger | 23 Trimmer head |
| 8 Stop switch | 24 Transport guard |
| 9 Throttle lockout | 25 Locking pin |
| 10 Flexible drive shaft coupling | 26 Socket spanner |
| 11 Starter handle | 27 Screwdriver |
| 12 Fuel tank | 28 Operator's manual |
| 13 Air filter cover | 29 Shaft coupling |
| 14 Cylinder cover | 30 J-handle |
| 15 Spark plug cap and spark plug | 31 Guard extension |
| 16 Air purge | 32 Handle adjustment |

GENERAL SAFETY PRECAUTIONS

Important

IMPORTANT!

The machine is only designed for grass trimming and grass clearing.

National regulation can restrict the use of the machine.

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 "Personal protective equipment" heading.

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 safety 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 Maintenance heading.

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.

Carry out an overall inspection of the machine before use. See the maintenance schedule.



WARNING! This machine produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their physician and the medical implant manufacturer before 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 the ANSI Z87.1 standard in the USA or EN 166 in EU countries.



GENERAL SAFETY PRECAUTIONS

GLOVES

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



BOOTS

Wear sturdy, non-slip boots.



CLOTHING

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

FIRST AID KIT

Always have a first aid kit nearby.



Machine's safety equipment

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

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

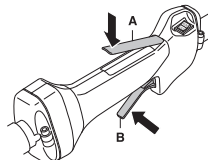
IMPORTANT! All servicing and repair work on the machine requires special training. This is especially true of the machine's safety equipment. If your machine fails any of the checks described below you must contact your service agent. When you buy any of our products we guarantee the availability of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



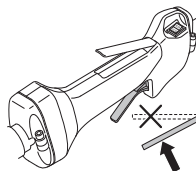
WARNING! Never use a machine with faulty safety equipment. The machine's safety equipment must be checked and maintained as described in this section. If your machine fails any of these checks contact your service agent to get it repaired.

Throttle lockout

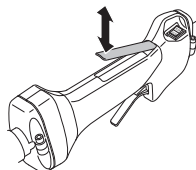
The throttle lockout is designed to prevent accidental operation of the throttle control. When you press the lock (A) (i.e. when you grasp the handle) it releases the throttle control (B). When you release the handle the throttle control and the throttle lockout both move back to their original positions.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



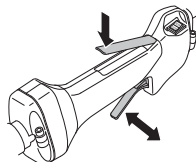
Make sure the throttle control is locked at the idle setting when the throttle lockout is released.



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



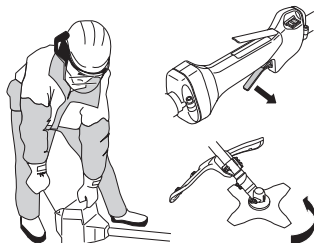
Check that the throttle trigger and throttle lockout move freely and that the return springs work properly.



See instructions under the heading Start. Start the machine and apply full throttle. Release the throttle and check that the cutting attachment stops and remains at a

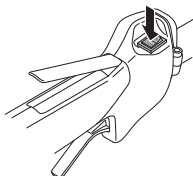
GENERAL SAFETY PRECAUTIONS

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

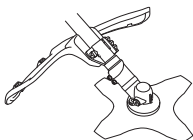
Use the stop switch to switch off the engine.



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.

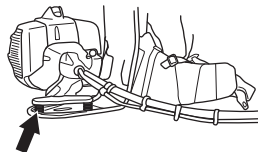


WARNING! Never use a cutting attachment without an approved guard. See the chapter on Technical data. If an incorrect or faulty guard is fitted this can cause serious personal injury.

Vibration damping system



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



Using incorrectly wound cord or a blunt or incorrect cutting attachment (wrong type or incorrectly filed, see instructions under the heading Filing the blade) 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.

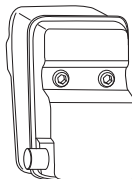
Regularly check the vibration damping units for cracks or deformation. Check that the vibration damping element is undamaged and securely attached.



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. 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.



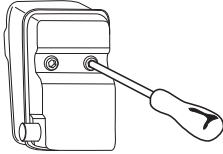
For mufflers it is very important that you follow the instructions on checking, maintaining and servicing your machine.

GENERAL SAFETY PRECAUTIONS

Never use a machine that has a faulty muffler.



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



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



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

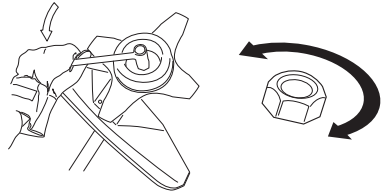
Locking nut

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



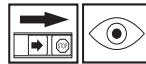
When fitting, tighten the nut in the opposite direction to the direction of rotation of the cutting attachment. To remove it, undo the nut in the same direction as the cutting

attachment rotates. (CAUTION! The nut has a left-hand thread.) Tighten the nut using the socket spanner.



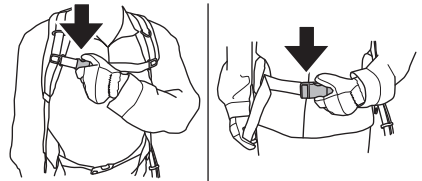
The nylon lining inside the locking nut must not be so worn that you can turn it by hand. The lining should offer a resistance of at least 1.5 Nm. The nut should be replaced after it has been put on approx. 10 times.

Harness



Check that the harness is not damaged.

In an emergency situation, release yourself from machine and harness according to the following method.



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.

Keep the teeth of the blade correctly sharpened! Follow our recommendations. Also refer to the instructions on the blade packaging.

GENERAL SAFETY PRECAUTIONS



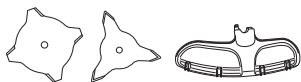
WARNING! Always stop the engine before doing any work on the cutting attachment. This continues to rotate even after the throttle has been released. Ensure that the cutting attachment has stopped completely and disconnect the HT lead from the spark plug before you start to work on it.



WARNING! Using an incorrect cutting attachment or an incorrectly sharpened blade increases the risk of blade thrust.

Cutting equipment

Grass blades and grass knives are intended for cutting coarse grass.



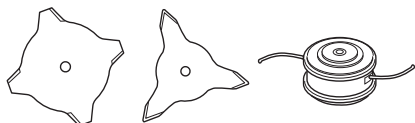
A trimmer head is intended for trimming grass.



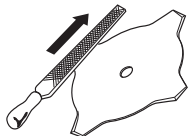
General rules



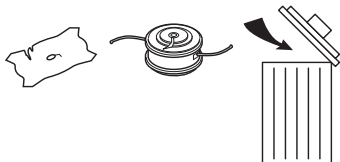
Only use cutting attachments with the guards we recommend! See the chapter on Technical data.



Keep the teeth of the blade correctly sharpened! Follow our instructions and use the recommended file gauge. An incorrectly sharpened or damaged blade increases the risk of accidents.



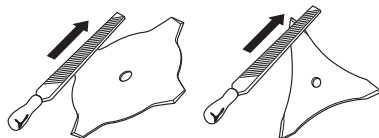
Check the cutting attachment for damage or cracks. A damaged cutting attachment should always be replaced.



Sharpening grass knives and grass blades



- See the cutting attachment packaging for correct sharpening instructions. Sharpen blades and knives using a single-cut flat file.
- Sharpen all edges equally to maintain the balance of the blade.



WARNING! Always discard a blade that is bent, twisted, cracked, broken or damaged in any other way. Never attempt to straighten a twisted blade so that it can be reused. Only use original blades of the specified type.

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.



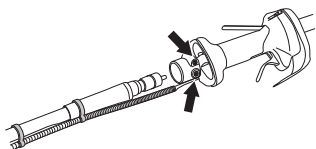
- Smaller machines generally require small trimmer heads and vice versa. This is because when clearing using a cord the engine must throw out the cord radially from the trimmer head and overcome the resistance of the grass being cleared.
- The length of the cord is also important. A longer cord requires 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

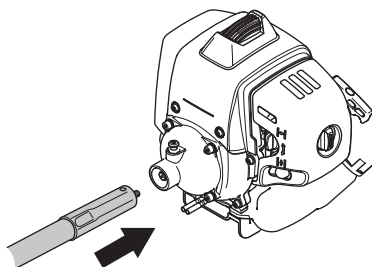
Fitting the flexible drive shaft



- Loosen two screws at the shaft coupling.



- Slide the flexible shaft through the loops at the cabling, and fit the flexible shaft to the shaft coupling. Make sure the shaft engages correctly by turning it and pushing at the same time.
- Tighten the two screws.
- Install the drive shaft sleeve in the clutch cover so that the hole is positioned directly underneath the locking button on the clutch cover.

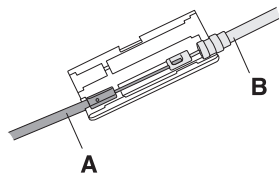


- Make sure the shaft engages correctly by turning it and pushing at the same time.
- Make sure the locking pin returns to its original position, so that the drive shaft sleeve cannot come off the clutch case.

Connecting throttle cable and stop switch wires

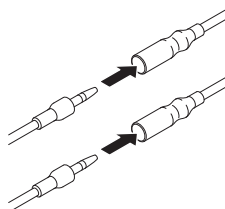


- Place the throttle wire from the cabling (A) and the throttle wire from the engine (B) in the plastic sleeve as shown.



- Close the plastic sleeve.

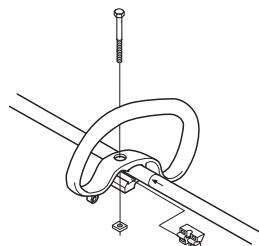
- Plug the stop switch wires into the matching connectors from the engine. Note that wire polarity is not important.



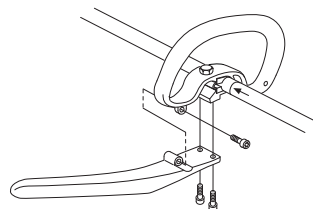
Fitting the J-handle



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

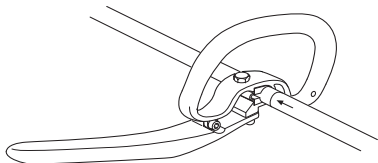


- Slide the spacer into the slot in the loop handle.
- Fit the nut and screw. Do not overtighten.
- Attach the J-handle to the loop handle using the three screws, as shown.



ASSEMBLY

- Now adjust the trimmer to give a comfortable working position. Tighten the bolt/knob.



WARNING! Only grass blades/grass cutters or trimmer heads/plastic blades may be used when the J-handle is fitted. Saw blades must never be used with the J-handle.

Fitting blades and trimmer heads



WARNING! When fitting the cutting attachment it is extremely important that the raised section on the drive disc/support flange engages correctly in the centre hole of the cutting attachment. If the cutting attachment is fitted incorrectly it can result in serious and/or fatal personal injury.



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.

IMPORTANT! If a saw blade or grass blade are to be used the machine must be equipped with the correct handlebar, blade guard and harness.

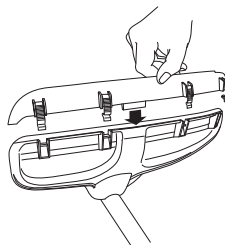
Fitting the guard extension



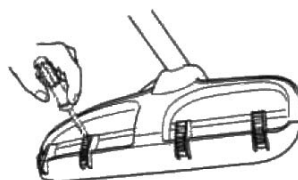
CAUTION! The guard extension shall always be fitted when using the trimmer head/plastic blades and combination guard. The guard extension shall always be removed when using the grass blade and combination guard.

Hook the blade guard/combination guard (A) onto the fitting on the shaft and secure with the bolt.

Enter the guard extension guide in the slot of the combination guard. Then click the guard extension into position on the guard with the four quick-fasteners.



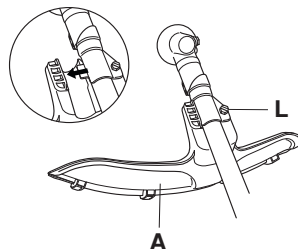
The guard extension is removed easily using a screwdriver, see illustration.



Fitting a blade guard, grass blade and grass cutter



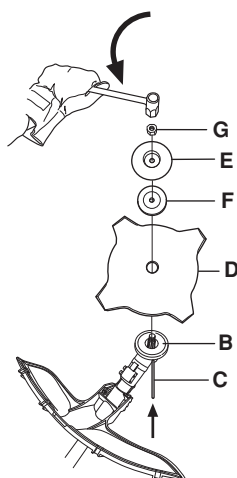
- Hook the blade guard/combination guard (A) onto the fitting on the shaft and secure with the bolt (L). Use the recommended blade guard. See the Technical data section. **CAUTION!** Ensure that the guard extension is removed.



- Fit the drive disc (B) on the output shaft.
- Turn the output 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.
- Place the blade (D), support cup (E) and support flange (F) on the output shaft.
- 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

ASSEMBLY

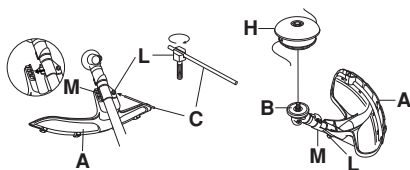
the spanner in the opposite direction to the direction of rotation (Caution! left-hand thread).



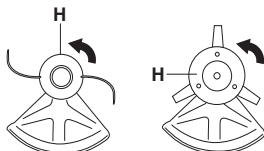
Fitting the trimmer guard and trimmer head



- Fit the correct trimmer guard (A) for use with the trimmer head. **CAUTION!** Ensure that the guard extension is fitted.



- 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 output 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.

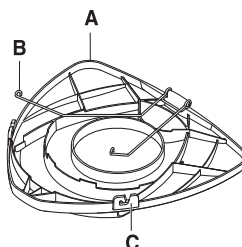


- To dismantle, follow the instructions in the reverse order.

Fitting the transport guard



- Insert the blade in the transport guard (A).
- Snap the two fasteners (B) into the slots (C) to secure the transport guard.

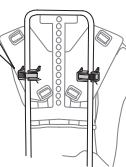
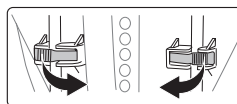


Adjusting the harness and brush cutter

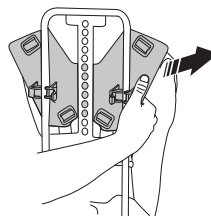


Adjusting the backplate height

- Loosen the two fasteners holding the backplate.

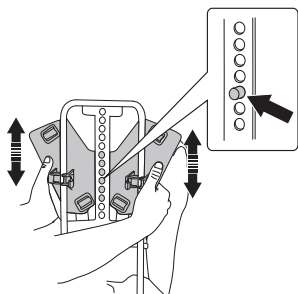


- Loosen the backplate from the frame on one side.



ASSEMBLY

- Move the backplate to the desired height and fasten it. Make sure the pin aligns with one of the holes on the frame, see picture.



Adjusting the harness

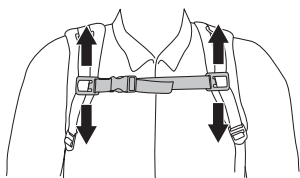
- Put on the harness.
- Tighten the waist strap so that it sits securely.



- Tighten the chest strap.



- Adjust the chest strap vertically if needed and make sure it fits well.

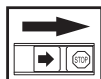


- Adjust the shoulder straps to distribute the load evenly across your shoulders.



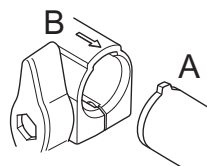
- Loosen or tighten the waist strap so that approx. 70% of the load is on your waist and 30% on your shoulders.

Assembling and dismantling the two-piece shaft

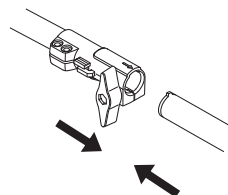


Assembly

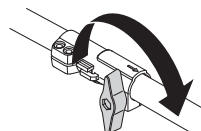
- Loosen the coupling by turning the knob.
- Align the tab of the attachment (A) with the arrow on the coupling (B).



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

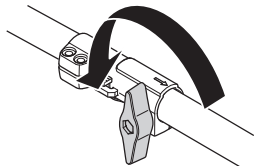


- Before using the unit, tighten the knob securely.

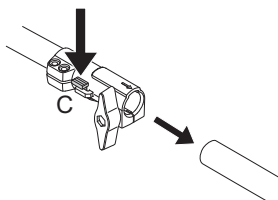


Dismantling

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



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



FUEL HANDLING

Fuel safety

Never start the machine:

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

Transport and storage

- Store and transport the machine and fuel so that there is no risk of any leakage or fumes coming into contact with sparks or naked flames, for example, from electrical machinery, electric motors, electrical relays/ switches or boilers.
- When storing and transporting fuel always use approved containers intended for this purpose.
- When storing the machine for long periods the fuel tank must be emptied. Contact your local petrol station to find out where to dispose of excess fuel.
- Ensure the machine is cleaned and that a complete service is carried out before long-term storage.
- The transport guard must always be fitted to the cutting attachment when the machine is being transported or in storage.
- Secure the machine during transport.



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

Fuel

CAUTION! The machine is equipped with a two-stroke engine and must always been run using a mixture of petrol and two-stroke oil. It is important to accurately measure the amount of 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.



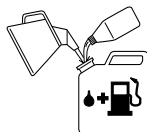
WARNING! Fuel and fuel fumes are highly inflammable and can cause serious injury when inhaled or allowed to come in contact with the skin. For this reason observe caution when handling fuel and make sure there is adequate ventilation.

Petrol



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

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



Ethanol blended fuel, E10 may be used (max 10% ethanol blend). Using ethanol blends higher than E10 will create lean running condition which can cause engine damage.

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

Two-stroke oil

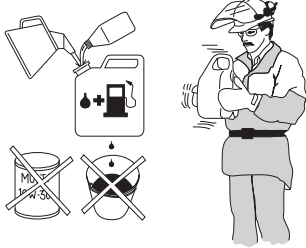
- For best results and performance use HUSQVARNA two-stroke engine oil, which is specially formulated for our air-cooled two-stroke engines.
- Never use two-stroke oil intended for water-cooled engines, sometimes referred to as outboard oil (rated TCW).
- Never use oil intended for four-stroke engines.
- A poor oil quality and/or too high oil/fuel ratio may jeopardise function and decrease the life time of catalytic converters.
- Mixing ratio
1:50 (2%) with HUSQVARNA two-stroke oil.
1:33 (3%) with oils class JASO FB or ISO EGB formulated for air-cooled, two-stroke engines.

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

FUEL HANDLING

Mixing

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



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



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

Fueling



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

Do not smoke or place hot objects near fuel.

Always shut off the engine before refuelling.

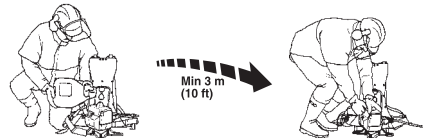
Always stop the engine and let it cool for a few minutes before refuelling.

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

Tighten the fuel cap carefully after refuelling.

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

- Always use a fuel container with an anti-spill valve.
- 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.

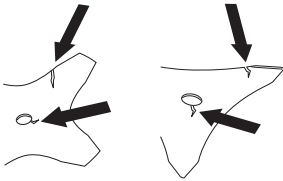


STARTING AND STOPPING

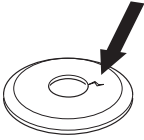
Check before starting



- 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.
- 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.



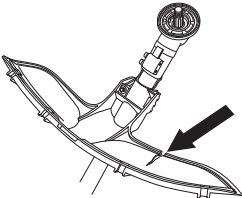
- Check that the support flange is not cracked due to fatigue or due to being tightened too much. Discard the support flange if it is cracked.



- 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.

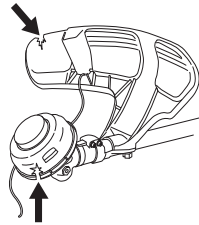


- Check that the blade guard is not damaged or cracked. Replace the blade guard if it is exposed to impact or is cracked.



- 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.



Starting and stopping



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

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

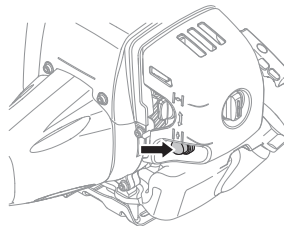
Make sure no unauthorised persons are in the working area. Otherwise there is a risk of serious personal injury. The safety distance is 15 metres.

Starting



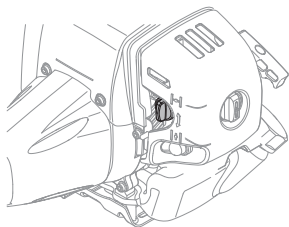
Ignition: Set the stop switch to the start position.

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



STARTING AND STOPPING

Choke: Set the choke control in the choke position.

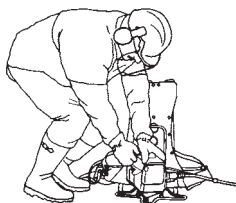


WARNING! When the engine is started with the choke in either the choke or start throttle positions the cutting attachment will start to rotate immediately.

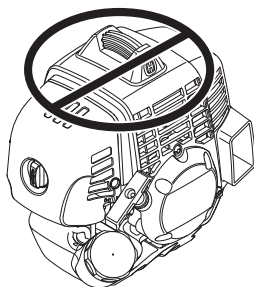
Hold the body of the machine on the ground using your left hand (CAUTION! Not with your foot!). Grip the starter handle, slowly pull out the cord with your right hand until you feel some resistance (the starter pawls grip), now quickly and powerfully pull the cord. **Never twist the starter cord around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

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

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



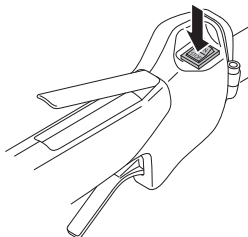
CAUTION! Do not put any part of your body in marked area. Contact can result in burns to the skin, or electrical shock if the spark plug cap has been damaged. Always use gloves. Do not use a machine with damaged spark plug cap.



Stopping



Stop the engine by switching off the ignition.



WORKING TECHNIQUES

General working instructions

IMPORTANT!

This section describes the basic safety precautions for working with brush cutters 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 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 can lead to dangerous conditions, e.g. slippery surfaces.
- 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 Always carry this backpack type brushcutter in it's shoulder harness while operating.
- 6 Do not overreach. Keep proper footing and balance at all times.

- 7 Always hold the machine with both hands. Keep all parts of your body away from the hot surfaces. Keep all parts of your body away from the rotating cutting attachment.
- 8 Always work with the cutting attachment below waist level.
- 9 Switch off the engine before moving to another area. Fit the transport guard before carrying or transporting the equipment any distance.
- 10 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 metres. 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



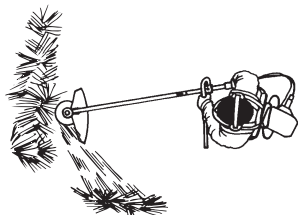
WARNING! Machines fitted with saw blades or grass blades can be thrown violently to the side when the blade comes into contact with a fixed object. This is called blade thrust. A blade thrust can be violent enough to cause the machine and/or operator to be propelled in any direction, and possibly lose control of the machine. Blade thrust can occur without warning if the machine snags, stalls or binds. Blade thrust is more likely to occur in areas where it is difficult to see the material being cut.

Avoid cutting with the area of the blade between the 12 o'clock and 3 o'clock positions. Because of the speed of rotation of the blade, blade thrust can occur if you attempt to cut thick stems with this area of the blade.

Grass clearing using a grass blade



- Grass blades and grass knives must not be used on woody stems.
- A grass blade is used for all types of tall or coarse grass.
- The grass is cut down with a sideways, swinging movement, where the movement from right-to-left is the clearing stroke and the movement from left-to-right is the return stroke. Let the left-hand side of the blade (between 8 and 12 o'clock) do the cutting.



- If the blade is angled to the left when clearing grass, the grass will collect in a line, which makes it easier to collect, e.g. by raking.
- Try to work rhythmically. Stand firmly with your feet apart. Move forward after the return stroke and stand firmly again.
- Let the support cup rest lightly against the ground. It is used to protect the blade from hitting the ground.
- Reduce the risk of material wrapping around the blade by following these instructions:
 - Always work at full throttle.
 - Avoid the previously cut material during the return stroke.

- Stop the engine, unclip the harness and place the machine on the ground before you start to collect the cut material.

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

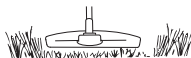
- The clearing technique removes all unwanted vegetation. Keep the trimmer head just above the ground and tilt it. Let the end of the cord strike the ground around trees, posts, statues and the like. CAUTION! This technique increases the wear on the cord.



- 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 (80%) 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.

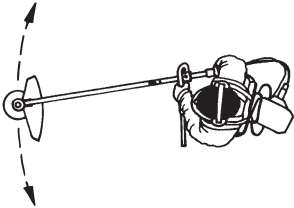


- Do not allow the trimmer head to constantly come into contact with the ground during normal cutting. Constant contact of this type can cause damage and wear to the trimmer head.

WORKING TECHNIQUES

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.



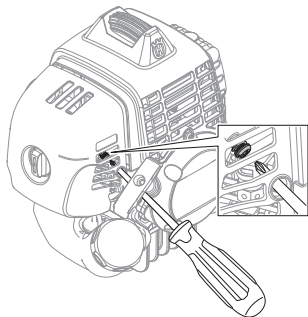
- When cutting and sweeping you should use full throttle to obtain the best results.

MAINTENANCE

Carburettor

Adjusting the idle speed (T)

Check that the air filter is clean. When the idle speed is correct, the cutting attachment should not rotate. If adjustment is required, close (turn clockwise) the idle adjustment screw T, with the engine running, until the cutting attachment starts to rotate. Open (turn anticlockwise) the screw until the cutting attachment stops. The idle speed is correctly set when the engine runs smoothly in all positions, and there is a clear margin to the speed at which the cutting attachment starts to rotate.

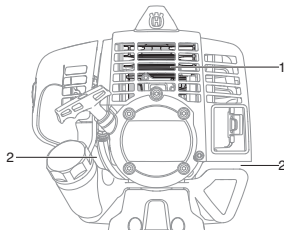


WARNING! If the idle speed cannot be adjusted so that the cutting attachment stops, contact your dealer/service workshop. Do not use the machine until it has been correctly adjusted or repaired.

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 Cooling fins on the cylinder.
- 2 Air intake.

Clean the cooling system with a brush once a week, more often in demanding conditions. A dirty or blocked cooling

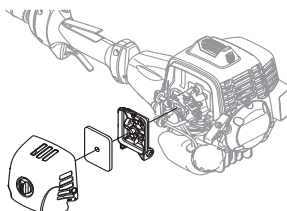
system results in the machine overheating which causes damage to the piston and cylinder.

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.



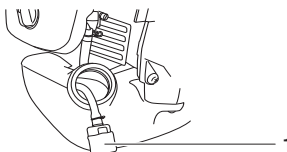
Clean the filter every 25 hours, or more regularly if conditions are exceptionally dusty.

Cleaning the air filter

Remove the air filter cover and take out the filter. Blow clean with compressed air.

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.**

Fuel filter



- 1 Fuel filter

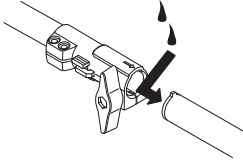
When the engine runs short of fuel supply, check the fuel cap and the fuel filter for blockage.

MAINTENANCE

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.

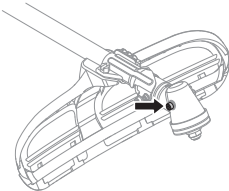


Bevel gear



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.



Spark plug



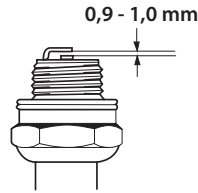
The spark plug condition is influenced by:

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

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

If the machine is low on power, difficult to start or runs poorly at idle speed: always check the spark plug first before taking any further action. If the spark plug is dirty, clean it and check that the electrode gap is 0,9-1,0 mm.

The spark plug should be replaced after about a month in operation or earlier if necessary.



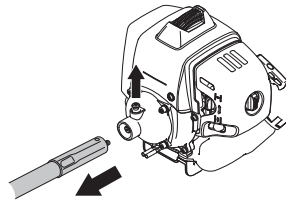
CAUTION! Always use the recommended spark plug type! Use of the wrong spark plug can damage the piston/cylinder. Check that the spark plug is fitted with a suppressor.

Drive shaft

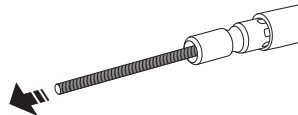


The flexible drive axle is lubricated with Husqvarna drive axle grease. The axle must be lubricated at least every 6 months.

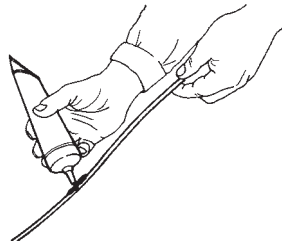
- Lift up the locking button that holds the drive shaft sleeve in the clutch cover.



- Pull the drive shaft sleeve out of the clutch cover.
- Remove the drive shaft from the sleeve either by shaking it out or pulling it out using pliers.

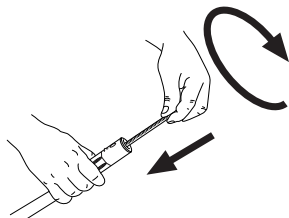


- Apply the grease from the tube along the whole axle. Spread with a brush or cloth.

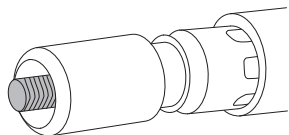


MAINTENANCE

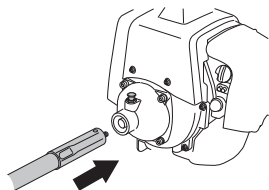
- Slide the drive shaft back into the sleeve. Make sure the shaft engages correctly by turning it and pushing at the same time.



- When the shaft is correctly installed in the sleeve, the end of the shaft should project about 10 mm beyond the edge of the sleeve.



- Install the drive shaft sleeve in the clutch cover so that the hole is positioned directly underneath the locking button on the clutch cover.



- Make sure the shaft engages correctly by turning it and pushing at the same time.

MAINTENANCE

Maintenance schedule

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

Maintenance	Daily maintenance	Weekly maintenance	Monthly maintenance
Clean the outside of the machine.	X		
Check that the harness is not damaged.	X		
Make sure the throttle trigger lock and the throttle function correctly from a safety point of view.	X		
Check that the handle and handlebar are undamaged and secured correctly.	X		
Check that the stop switch works correctly.	X		
Check that the cutting attachment does not rotate at idle.	X		
Clean the air filter. Replace if necessary.	X		
Check that the guard is undamaged and not cracked. Replace the guard if it has been exposed to impact or is cracked.	X		
Check that the blade is correctly centred, is sharp, and is not cracked. An off-centre blade will cause vibration that could result in damage to the machine.	X		
Check that the trimmer head is undamaged and not cracked. Replace the trimmer head if necessary.	X		
Check that the locking nut of the cutting equipment is tighten correctly.	X		
Check that the transport guard for the blade is intact and that it can be secured correctly.	X		
Check that nuts and screws are tight.	X		
Check that there are no fuel leaks from the engine, tank or fuel lines.	X		
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 0,9-1,0 mm or replace the spark plug. Check that the spark plug is fitted with a suppressor.		X	
Clean the machine's cooling system.		X	
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.		X	
Check the fuel filter from contamination and the fuel hose from cracks or other defects. Replace if necessary.			X
Check all cables and connections.			X
Check the clutch, clutch springs and the clutch drum for wear. Replace if necessary by an authorized service workshop.			X
Replace the spark plug. Check that the spark plug is fitted with a suppressor.			X
Lubricate the drive axle with Husqvarna drive axle grease.	Do this every six months.		

TECHNICAL DATA

Technical data

	543 RBX	543 RBK
Engine		
Cylinder displacement, cm ³	40,1	40,1
Cylinder bore, mm	40,5	40,5
Stroke, mm	31,1	31,1
Idle speed, rpm	3000	3000
Recommended max. speed, rpm	12000	12000
Speed of output shaft, rpm	8570	8570
Max. engine output, acc. to ISO 8893, kW/ rpm	1,47/9000	1,47/9000
Catalytic converter muffler	No	No
Ignition system		
Spark plug	NGK CMR7H-10	NGK CMR7H-10
Electrode gap, mm	0,9-1,0	0,9-1,0
Fuel and lubrication system		
Fuel tank capacity, litre	0,75	0,75
Weight		
Weight without fuel, cutting attachment and guard, kg	11,4	11,5
Noise emissions		
(see note 1)		
Sound power level, measured dB (A)	112	112
Sound power level, guaranteed L _{WA} dB (A)	114	114
Noise levels		
(see note 2)		
Equivalent sound pressure level at the operator's ear, measured according to EN ISO 11806 and ISO 22868, dB(A):		
Equipped with trimmer head (original)	99	99
Equipped with grass blade (original)	99	99
Vibration levels		
(see note 3)		
Equivalent vibration levels (a _{h_{veq}}) at handles, measured according to EN ISO 11806 and ISO 22867, m/s ²		
Equipped with trimmer head (original), left/right	4,8/4,6	4,8/4,6
Equipped with grass blade (original), left/right	4,4/3,6	4,4/3,6

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

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

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

TECHNICAL DATA

Approved accessories	Type	Cutting attachment guard, Art. no.
Grass blade/grass cutter	Multi 300-3 (Ø 300 3 teeth)	537 33 16-03
	Multi 255-3 (Ø 255 3 teeth)	537 33 16-03
	Grass 275-4 (Ø 275 4 teeth)	537 33 16-03
	Grass 255-4 (Ø 255 4 teeth)	537 33 16-03
Trimmer head	T35, T35x (Ø 2.4 - 3.0 mm cord)	537 33 16-03
	T45x (Ø 2.7 - 3.3 mm cord)	537 33 16-03
	T55x (Ø 2.7 - 3.3 mm cord)	537 33 16-03
	F35 (Ø 2.0 - 3.5 mm cord)	537 33 16-03
Support cup	Fixed	-

The following attachments are recommended for the specified models.

Attachments	Art No.	Use with
Hedge trimmer attachment with shaft HA 850	967 02 67-01	543 RBK
Brushcutter attachment with SA 850 shaft.	967 02 69-01	543 RBK
Brushcutter attachment with GTA 850 shaft.	967 11 31-01	543 RBK

EC-declaration of conformity (Applies to Europe only)

We, **Husqvarna AB**, SE-561 82 Huskvarna, Sweden, tel: +46-36-146500, declare that the brush cutters **Husqvarna 543 RBX, 543 RBK** with serial numbers dating from 2012 onwards (the year is clearly stated on the rating plate, followed by the serial number), comply with the requirements of the COUNCIL'S DIRECTIVE:

- of May 17, 2006 "relating to machinery" **2006/42/EC**
- of December 15, 2004 "relating to electromagnetic compatibility" **2004/108/EC**.
- of May 8, 2000 "relating to the noise emissions in the environment" **2000/14/EC**. Conformity assessment according to Annex V. For information relating to noise emissions, see the Technical data chapter.

The following standards have been applied:

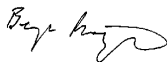
EN ISO 12100:2010, CISPR 12:2007, EN ISO 11806-1:2011, EN ISO 11806-2:2011

SMP Svensk Maskinprovning AB, Fyrisborgsgatan 3, SE-754 50 Uppsala, Sweden, has carried out voluntary type approval for Husqvarna AB.

The certificate has the number:

543 RBX, 543 RBK - SEC/12/2362

Huskvarna, 21 December 2012



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