



# Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for HUSQVARNA 235R. You'll find the answers to all your questions on the HUSQVARNA 235R in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

**User manual HUSQVARNA 235R**  
**User guide HUSQVARNA 235R**  
**Operating instructions HUSQVARNA 235R**  
**Instructions for use HUSQVARNA 235R**  
**Instruction manual HUSQVARNA 235R**

**Operator's manual**  
**235R 235FR**

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



**English**



[You're reading an excerpt. Click here to read official HUSQVARNA 235R user guide](http://yourpdfguides.com/dref/4739622)

<http://yourpdfguides.com/dref/4739622>

**Manual abstract:**

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

.....

.....

.....

.....

.....

.....

.....

.....

.. Note the following before starting: ...

.....

.....

..... INTRODUCTION Dear Customer, ....

.....

.....

.....

.....

.....

.....

..... WHAT IS WHAT? What is what? ..

.....

.....

.....

.....

.....

.....

.....

... GENERAL SAFETY PRECAUTIONS Important .....

.....

.....

.....

.....

.....

.....

.....

..... Personal protective equipment .....

.....

.....

.....

..... Machine's safety equipment .....

.....

.....

.....

..... Cutting equipment ...

.....

.....

.....

.....

.....

.....

ASSEMBLY Fitting the handlebar .....

.....

.....

.....

.....

.....

Transport position, handlebar .....

.....

.....

.....

. Assembling the cutting equipment .....

.....

.....

.... Fitting a blade guard, grass blade and grass cutter Fitting the blade guard and saw blade .....

.....

.. Fitting the trimmer guard and trimmer head Trimmy SH ..

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... Fitting other guards and cutting attachments .....

.. Adjusting the harness and brush cutter .....

.....

... FUEL HANDLING Fuel safety ..

.....

.....

.....

.....

.....

.....

.....

... Fuel ..

.....

.....

.....

.....

.....

.....

.....

.....

..... Fuelling ..

.....

.....

.....

.....

.....

.....

.....

.....

... *STARTING AND STOPPING* Check before starting .....

.....  
.....  
.....

. *Starting and stopping* ....

.....  
.....  
.....  
.....

..... *WORKING TECHNIQUES* General working instructions .

.....  
.....  
.....  
.....

. *MAINTENANCE* Carburettor .....

.....  
.....  
.....  
.....  
.....  
.....  
.....

*Muffler* .....

.....  
.....  
.....  
.....  
.....  
.....

..... *Cooling system* ....

.....  
.....  
.....  
.....  
.....  
.....

..... *Bevel gear* .

.....  
.....  
.....  
.....  
.....  
.....

..... *Air filter* .

.....  
.....  
.....  
.....  
.....

.....  
.....  
.....

.... Spark plug .....

.....  
.....  
.....

.....  
.....  
.....

.... Maintenance schedule .....

.....  
.....  
.....

.....  
.....

TECHNICAL DATA Technical data .....

.....  
.....  
.....  
.....  
.....

..... EC-declaration of conformity .

.....  
.....  
.....

.....

. 2 3 3 4 5 6 6 7 10 13 13 14 14 14 15 16 16 18 18 19 20 20 22 27 28 28 28 29 29 30 31 32 Note the following before starting: Please read the operator's manual carefully. **WARNING!** Long-term exposure to noise can result in permanent hearing impairment. So always use approved hearing protection.

**WARNING!** Under no circumstances may the design of the machine be modified without the permission of the manufacturer.

Always use genuine accessories. Non-authorized modifications and/or accessories can result in serious personal injury or the death of the operator or others.

**WARNING!** A clearing saw, brushcutter or trimmer can be dangerous if used incorrectly or carelessly, and can cause serious or fatal injury to the operator or others. It is extremely important that you read and understand the contents of this operator's manual. !!! English – 3 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 Husqvarna River to create the waterpowered plant. During the more than 300 years of being, 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 building and construction industry. Husqvarna's aim is also to be in the front edge according to ergonomics, usability, security and environmental protection. That is the reason why we have developed many different features to provide 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 (using, service, maintenance etc) the life span and the second-hand value of the machine can be extended. If you will sell this machine, make sure that the buyer will get the operator's manual. 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. 4 – English WHAT IS WHAT? 29 28 27 What is what? 1 2 3 4 5 6 7 8 9 Blade Grease filler cap, bevel gear Bevel gear Cutting attachment guard Shaft Handlebar Throttle control Stop switch Throttle lockout 16 Air filter cover 17 Handle adjustment 18 Locking nut 19 Support flange 20 Support cup 21 Drive disc 22 Trimmer head 23 Socket spanner 24 Operator's manual 25 Transport guard 26 Allen key 27 Locking pin 28 Harness 29 Start throttle button 10 Support eyes for harness 11 Cylinder cover 12 Starter handle 13 Fuel tank 14 Choke control 15 Air purge English – 5 GENERAL SAFETY PRECAUTIONS Important IMPORTANT! The machine is only designed for trimming grass, grass clearing and/or forestry clearing. The only accessories you can operate with this engine unit are the cutting attachments we recommend in the chapter on Technical data. Never use the machine if you are tired, if you have drunk alcohol, or if you are taking medication that could affect your vision, your judgement or your co-ordination. Wear personal protective equipment.

See instructions under the heading "Personal protective equipment". Never use a machine that has been modified in any way from its original specification.

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

*See instructions under the heading Maintenance. All covers, guards and handles must be fitted before starting. Ensure that the spark plug cap and ignition lead are undamaged to avoid the risk of electric shock. The machine operator must ensure that no people or animals come closer than 15 metres while working. When several operators are working in the same area the safety distance should be at least twice the tree height and no less than 15 metres. WARNING! This machine produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their physician and the medical implant manufacturer before 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. GLOVES Gloves should be worn when necessary, e.g., when fitting cutting attachments. 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.*



[You're reading an excerpt. Click here to read official HUSQVARNA 235R user guide](http://yourpdfguides.com/dref/4739622)  
<http://yourpdfguides.com/dref/4739622>

*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 helmet should be worn if the trees being cleared are taller than 2 m. **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.*

***! 6 – English GENERAL SAFETY PRECAUTIONS BOOTS** Wear boots with steel toe-caps and non-slip sole. **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. **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. **A B** Make sure the throttle control is locked at the idle setting when the throttle lockout is released. **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 buyet very hot during use and remain so for some time after stopping. This also applies at idle speed. Contact can result in burns to the skin. Remember the risk of fire! **WARNING!** The inside of the muffler contain chemicals that may be carcinogenic. Avoid contact with these elements in the event of a damaged muffler. **WARNING!** Bear in mind that: The exhaust fumes from the engine are hot and may contain sparks which can start a fire. Never start the machine indoors or near combustible material! In colade so that it can be reused. Only use original blades of the specified type. The filing angle is 15°.*

*File alternate teeth to the right and those in between to the left. If the blade has been heavily pitted by stones it may be necessary to dress the top edges of the teeth with a flat file, in exceptional cases. If so, this should be done before filing with a round file. The top edges must be filed down by the same amount for all the teeth. Sharpening the saw blade • See the cutting attachment packaging for correct sharpening instructions.*

*Adjust the blade setting. This should be 1 mm. English – 11 **GENERAL SAFETY PRECAUTIONS** 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. •••12 – English **ASSEMBLY** Fitting the handlebar • Fit the wiring as shown. •• Remove the screw at the rear of the throttle handle. Slide the throttle handle onto the right side of the handlebar, (see diagram). • Put on the harness and hang the machine from the support hook. Now make a final adjustment so that the machine is in a comfortable working position when it hangs from the harness. Tighten the knob. ••• Align the screw hole in the throttle handle with the hole in the handlebar. Refit the screw in the hole in the rear of the throttle handle. Screw the screw through the handle and handlebar.*

*Tighten it. Remove the mounting components from the handlebar mounting. Position the handlebar as shown. Fit the mounting components and tighten the knob lightly. Transport position, handlebar ••• The handlebar can easily be turned to fit along the shaft for easier transportation and storage.*

*Loosen the knob. Turn the handlebar clockwise so that the throttle handle rests against the engine. Now twist the handlebar around the shaft. Tighten the knob. • Fit the transport guard to the cutting attachment.*

*English – 13 **ASSEMBLY** Assembling the cutting equipment • @@ 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 the spanner in the opposite direction to the direction of rotation (Caution! left-hand thread). •! **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.*



[You're reading an excerpt. Click here to read official HUSQVARNA 235R user guide](http://yourpdfguides.com/dref/4739622)

<http://yourpdfguides.com/dref/4739622>

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 a blade guard, grass blade and grass cutter Fitting the blade guard and saw blade • G D A F E Remove the mounting plate (H). Fit the adapter (I) and bracket (J) with the two screws (K) as shown. Fit the blade guard (A) to the adapter using the 4 screws (L) as shown. J K B C H L A I A • Hook the blade guard/combination guard (A) onto the fitting on the shaft and secure with the bolt. **CAUTION!** Ensure that the guard extension is removed. Use the recommended blade guard.

See the Technical data section. • Fit the drive disc (B) on the output shaft. 14 – English **ASSEMBLY CAUTION!** Always use the recommended guard for the cutting attachment you are using. See chapter on Technical data. where you should operate the socket spanner when loosening or tightening the nut.

G F D Fitting the trimmer guard and trimmer head Trimmy SII B • Fit the correct trimmer guard (A) for use with the trimmer head. **CAUTION!** Ensure that the guard extension is fitted. Hang the trimmer guard/combination guard (A) on the two hooks on the plate holder (M). Bend the guard around the shaft and tighten it with the bolt (L) on the opposite side of the shaft. Use the locking pin (C).

Place the locking pin in the groove on the screw head and tighten. See diagram. C • • Fit the drive disc (B) on the output shaft. @@ Insert the locking pin (C) in the hole to lock the shaft. Place the blade (D) 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 the spanner in the opposite direction to the direction of rotation (Caution! left-hand thread). H L M C A • • • • • B M L A Fit the drive disc (B) on the output shaft. @@ Insert the locking pin (C) in the hole to lock the shaft. Screw on the trimmer head (H) in the opposite direction to the direction of rotation. • • H • When loosening and tightening the saw blade nut, there is a risk of injury from the teeth of the saw blade. You should therefore always ensure that your hand is shielded by the blade guard when doing this. Always use a socket spanner with a shaft that is long enough to allow this. The arrow in the diagram shows the area • • Tighten the trimmer head to a torque of 35-50 Nm (3.5-5 kpm). To dismantle, follow the instructions in the reverse order.

English – 15 **ASSEMBLY** Fitting other guards and cutting attachments Adjusting the harness and brush cutter • Fit the trimmer guard/combination guard (A) intended for use with the trimmer head/plastic blades. **CAUTION!** Ensure that the guard extension is fitted. Hang the trimmer guard/combination guard (A) on the two hooks on the plate holder (M). Bend the guard around the shaft and tighten it with the bolt (L) on the opposite side of the shaft. Use the locking pin (C).

Place the locking pin in the groove on the screw head and tighten. See diagram. ! **WARNING!** When using a brush cutter it must always be hooked securely to the harness. Otherwise you will be unable to control the brush cutter safely and this can result in injury to yourself or others. Never use a harness with a defective quick release.

Quick release At the front is an easily accessible, quick release. Use this if the engine catches fire or in any other emergency situation that requires you to free yourself from the machine and harness. H L M C A • • B M L A Fit the drive disc (B) on the output shaft. @@ Insert the locking pin (C) in the hole to lock the shaft. @@ Adjust the harness for the best working position. @@ The blade should be angled forward a little. @@@@ Wipe off the spillage and allow remaining fuel to evaporate. @@ Wash any part of your body that has come in contact with fuel. Use soap and water. If the machine is leaking fuel.

@@ Always use a quality petrol/oil mixture at least 90 octane (RON). @@ Leaded petrol will destroy the catalytic converter. @@ When storing and transporting fuel always use approved containers intended for this purpose. @@@@ Never use oil intended for four-stroke engines. @@ Mixing ratio 1:50 (2%) with HUSQVARNA two-stroke oil. @@@@ Take care when handling 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. @@@@ Always shut off the engine before refuelling. @@@@ Tighten the fuel cap carefully after refuelling. Always move the machine away from the refuelling area before starting. • • • 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.

• • • 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. ! **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. English – 19 **STARTING AND STOPPING** Check before starting trimmer guard if they have been exposed to impact or are cracked. • 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. • • Never use the machine without a guard nor with a defective guard. All covers must be correctly fitted and undamaged before you start the machine. Starting and stopping • 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.

**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. ! • 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.



[You're reading an excerpt. Click here to read official HUSQVARNA 235R user guide](http://yourpdfguides.com/dref/4739622)

<http://yourpdfguides.com/dref/4739622>



Replace the blade guard if it is exposed to impact or is cracked. Cold engine Ignition: Set the stop switch to the start position. Choke: Set the choke control in the choke position. • Check that the trimmer head and trimmer guard are not damaged or cracked.

Replace the trimmer head or 20 – English STARTING AND STOPPING Primer bulb: Press the air purge repeatedly until fuel begins to fill the bulb. The bulb need not be completely filled. you feel some resistance (the starter pawls grip), now quickly and powerfully pull the cord. 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. Warm engine Ignition: Set the stop switch to the start position. Choke: Set the throttle to the start position by moving the choke control to the choke position and then returning it to its original position. 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. For throttle handles with a start throttle lock: Set the throttle to the start position by first pressing the throttle lockout and the throttle trigger, then pressing the start throttle button (A). @@The throttle function is now activated. @@@@Not with your foot!). @@@@@Contact your dealer or your service workshop. Avoid all usage which you consider to be beyond your capability.

@@6 7 Keep a good balance and a firm foothold. Always hold the machine with both hands. Hold the machine on the right side of your body.

@@@@@CAUTION! Do not use the machine unless you are able to call for help in the event of an accident. Inspect the working area. Remove all loose objects, such as stones, broken glass, nails, steel wire, string, etc. that could be thrown out or become wrapped around the cutting attachment. 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. 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. • 2 8 9 Keep the cutting attachment below waist level. Switch off the engine before moving to another area.

Fit the transport guard before carrying or transporting the equipment any distance. 3 4 10 Never put the machine down with the engine running unless you have it in clear sight. The ABC of clearing •••••Always use the correct equipment. Make sure the equipment is well adjusted. Follow the safety precautions.

Organise your work carefully. Always use full throttle when starting to cut with the blade. Always use sharp blades. Avoid stones. 5 Take great care when cutting a tree that is in tension. A tree that is in tension may spring back to its normal position before or after being cut. If you position 22 – English WORKING TECHNIQUES • Control the felling direction (take advantage of the wind). Working methods 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. • Before you start clearing, check the clearing area, the type of terrain, the slope of the ground, whether there are stones, hollows etc. Start at whichever end of the area is easiest, and clear an open space from which to work. Work systematically to and fro across the area, clearing a width of around 4-5 m on each pass. This exploits the full reach of the machine in both directions and gives the operator a convenient and varied working area to work in. ! WARNING! Neither the operator of the machine nor anyone else may attempt to remove the cut material while the engine is running or the cutting equipment is rotating, as this can result in serious injury. Stop the engine and cutting equipment before you remove material that has wound around the blade shaft as otherwise there is a risk of injury.

The bevel gear can get hot during use and may remain so for a while afterwards. You could get burnt if you touch it. WARNING! Watch out for thrown objects. Always wear approved eye protection. Never lean over the cutting attachment guard.

Stones, rubbish, etc. can be thrown up into the eyes causing blindness or serious injury. Keep unauthorised persons at a distance. Children, animals, onlookers and helpers should be kept outside the safety zone of 15 m. Stop the machine immediately if anyone approaches.

Never swing the machine around without first checking behind you to make sure no one is within the safety zone. WARNING! Sometimes branches or grass get caught between the guard and cutting attachment. Always stop the engine before cleaning. ! • • • • Clear a strip around 75 m long. Move your fuel can as work progresses. On sloping ground you should work along the slope. It is much easier to work along a slope than it is to work up and down it. You should plan the strip so that you avoid going over ditches or other obstacles on the ground. You should also orient the strip to take advantage of wind • English – 23 WORKING TECHNIQUES conditions, so that cleared stems fall in the cleared area of the stand. 3 o'clock and 5 o'clock so that the direction of rotation of the blade pushes the bottom of the tree to the left.

• Forestry clearing using a saw blade To fell a tree forwards, the bottom of the tree should be pulled backwards. Pull the blade backwards with a quick, firm movement. • The risk of blade thrust increases with increasing stem size. You should therefore avoid cutting with the area of the blade between 12 o'clock and 3 o'clock. • Large stems must be cut from two sides. First determine which direction the stem will fall. Make the first cut on the felling side. Then finish cutting the stem from the other side. Adjust the cutting pressure to match the size of the stem and the hardness of the wood. Small stems require more pressure, while large stems require less pressure.

• To fell to the left, the bottom of the tree should be pushed to the right. Tilt the blade and bring it diagonally down to the right, exerting firm pressure.



[You're reading an excerpt. Click here to read official HUSQVARNA 235R user guide](http://yourpdfguides.com/dref/4739622)

<http://yourpdfguides.com/dref/4739622>

At the same time push the stem using the blade guard. Cut with the area of the blade between 3 o'clock and 5 o'clock. Apply full throttle before advancing the blade.

- To fell to the right, the bottom of the tree should be pushed to the left. Tilt the blade and bring it diagonally up to the right. Cut with the area of the blade between
- If the stems are tightly packed, adapt your walking pace to suit. If the blade jams in a stem, never jerk the machine free. If you do this the blade, bevel gear, shaft or handlebar may be damaged.

Release the handles, grip the shaft with both hands and gently pull the machine free. 24 – English WORKING TECHNIQUES Brush cutting with a saw blade • 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: 1 Always work at full throttle. 2 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. ••• Thin stems and brush are mown down.

Work with a sawing movement, swinging sideways. Try to cut several stems in a single sawing movement. With groups of hardwood stems, first clear around the group. Start by cutting the stems high up around the outside of the group to avoid jamming. Then cut the stems to the required height. Now try to reach in with the blade and cut from the centre of the group. If it is still difficult to gain access, cut the stems high up and let them fall. This will reduce the risk of jamming. • 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. Grass clearing using a grass blade • 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. ••• Grass blades and grass cutters 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. •

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. •• 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. 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. English – 25 WORKING TECHNIQUES • 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. 26 – English MAINTENANCE Carburettor Your Husqvarna product has been designed and manufactured to specifications that reduce harmful emissions. After the engine has used 8-10 tanks of fuel the engine will be run-in. To ensure that it continues to run at peak performance and to minimise harmful exhaust emissions after the running-in period, ask your dealer/ service workshop (who will have a rev counter at their disposal) to adjust your carburettor. The optimal setting and should be maintained for the first few hours the machine is in use. The carburettor should then be finely adjusted. Fine adjustment should be carried out by a skilled technician. CAUTION! If the cutting attachment rotates when the engine is idling the idle adjustment screw T should be turned anti-clockwise until the cutting attachment stops. Adjustment of the idle speed Before any adjustments are made, make sure that the air filter is clean and the air filter cover is fitted. Adjust the idle speed using the idle adjustment screw T, if it is necessary to readjust.

First turn the idle adjustment screw T clockwise until the cutting attachment starts to rotate. Then turn the screw anticlockwise until the cutting attachment stops. The idle speed is correctly adjusted when the engine will run smoothly in every position. The idle speed should also be well below the speed at which the cutting attachment starts to rotate. 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 means that the engine is adapted to local operating conditions, e.g. climate, altitude, petrol and the type of 2-stroke oil. The carburettor has three adjustment controls: L = Low speed jet H = High speed jet T = Idle adjustment screw •• Rec. idle speed: See the Technical data section. ! WARNING! If the idle speed cannot be adjusted so that the cutting attachment stops, contact your dealer/service workshop. Do not use the machine until it has been correctly adjusted or repaired.

Adjusting the start throttle speed The correct start throttle speed is set by means of an adjuster on the rear of the handle next to the cable. Use this screw (4 mm Allen screw) to increase or decrease the start throttle speed. • The L and H-jets are used to adjust the supply of fuel to match the rate that air is admitted, which is controlled with the throttle. If they are screwed clockwise the air/fuel ratio becomes leaner (less fuel) and if they are turned anti-clockwise the ratio becomes richer (more fuel). A lean mixture gives a higher engine speed and a rich mixture gives a lower engine speed.



[You're reading an excerpt. Click here to read official HUSQVARNA 235R user guide](http://yourpdfguides.com/dref/4739622)

<http://yourpdfguides.com/dref/4739622>

The T-screw regulates the throttle setting at idle speed. If the T-screw is turned clockwise this gives a higher idle speed; turning it anti-clockwise gives a lower idle speed.

- Basic setting • The basic carburettor settings are adjusted during testing at the factory. The basic setting is richer than 4 mm Proceed as follows: 1 Run the machine at idle. English – 27 MAINTENANCE 2 3 Press the start throttle lock as described under the heading Starting and stopping. If the start throttle speed is too low (below 4000 rpm), turn the adjuster screw A clockwise until the cutting attachment starts to rotate. Then turn A clockwise a further 1/2 turn. 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! Muffler Cooling system 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.

To keep the working temperature as low as possible the machine is equipped with a cooling system. 4 3 2 Some mufflers are equipped with a special spark arrestor mesh. If your machine has this type of muffler, you should clean the mesh at least once a week. This is best done with a wire brush. The cooling system consists of: 1 2 3 4 Air intake on the starter. Fins on the flywheel. Cooling fins on the cylinder. 1 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.

On mufflers without a catalytic converter the mesh should be cleaned weekly, or replaced if necessary. On mufflers fitted with a catalytic converter the mesh should be checked, and if necessary cleaned, monthly. If the mesh is damaged it should be replaced. If the mesh is frequently blocked, this can be a sign that the performance of the catalytic converter is impaired. Contact your dealer to inspect the muffler. A blocked mesh will cause the machine to overheat and result in damage to the cylinder and piston. 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. 28 – English MAINTENANCE The grease in the bevel gear does not normally need to be changed except if repairs are carried out.

use common engine oil. This would drain through the filter quite quickly and collect in the bottom. 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. 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. Spark plug These factors cause deposits on the spark plug electrodes, which may result in operating problems and starting difficulties. Clean the filter every 25 hours, or more regularly if conditions are exceptionally dusty. If the machine is low on power, difficult to start or runs poorly at idle speed: always check the spark plug first before taking any further action.

If the spark plug is dirty, clean it and check that the electrode gap is 0.5 mm. The spark plug should be replaced after about a month in operation or earlier if necessary. 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. @A damaged air filter must always be replaced. @@@@Always use the recommended spark plug type! Use of the wrong spark plug can damage the piston/ cylinder. @@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 English – 29 MAINTENANCE Maintenance schedule The following is a list of the maintenance that must be performed on the machine. Most of the items are described in the Maintenance section. The user must only carry out the maintenance and service work described in this Operator's Manual. @@Maintenance Clean the outside of the machine.

Check that the harness is not damaged. Check that the suspension ring is not damaged. @@Check that the stop switch works correctly. @@Check that the cutting attachment does not rotate at idle. Clean the air filter.

Replace if necessary. Check that the guard is undamaged and not cracked. Replace the guard if it has been exposed to impact or is cracked. @@An off-centre blade will cause vibration that could result in damage to the machine. Check that the trimmer head is undamaged and not cracked.

Replace the trimmer head if necessary. Check that the locking nut of the cutting equipment is tighten correctly. Check that nuts and screws are tight. Check that there are no fuel leaks from the engine, tank or fuel lines. Check that the transport guard for the blade is intact and that it can be secured correctly.

Check the starter and starter cord. Check that the vibration damping elements are not damaged. Clean the outside of the spark plug. Remove it and check the electrode gap. Adjust the gap to 0.

5 mm or replace the spark plug. Check that the spark plug is fitted with a suppressor. Clean the machine's cooling system. Clean or replace the spark arrestor mesh on the muffler (only applies to mufflers without a catalytic converter). Clean the outside of the carburettor and the space around it. Check that the bevel gear is filled three-quarters full with lubricant. Fill if necessary using special grease. Check the fuel filter from contamination and the fuel hose from cracks or other defects. Replace if necessary. Check all cables and connections.

Check the clutch, clutch springs and the clutch drum for wear. Replace if necessary by an authorized service workshop. Replace the spark plug. Check that the spark plug is fitted with a suppressor. Check and clean the spark arrestor mesh on the muffler (only applies to mufflers fitted with a catalytic converter).

Daily maintenance X Weekly maintenance Monthly maintenance 30 – English TECHNICAL DATA

Technical data Technical data Engine Cylinder displacement, cm<sup>3</sup> Cylinder bore, mm Stroke, mm Idle speed, rpm Recommended max.



**You're reading an excerpt. Click here to read official HUSQVARNA 235R user guide**  
<http://yourpdfguides.com/dref/4739622>

speed, rpm Speed of output shaft, rpm Max. engine output, acc. to ISO 8893, kW/ rpm Catalytic converter muffler Speed-regulated ignition system Ignition system Spark plug Electrode gap, mm Fuel and lubrication system Fuel tank capacity, litre Weight Weight without fuel, cutting attachment and guard, kg 7,3 Noise emissions (see note 1) Sound power level, measured dB(A) Sound power level, guaranteed LWA dB(A) Sound 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) Equipped with grass blade (original) Equipped with saw blade (original) Vibration levels (see note 3) Equivalent vibration levels (ahv,eq) at handles, measured according to EN ISO 11806 and ISO 22867, m/s<sup>2</sup> Equipped with trimmer head (original), left/right Equipped with grass blade (original), left/right Equipped with saw blade (original), left/right 5,1/4,8 5,9/3,4 5,1/4,8 5,9/3,4 6,8/2,9 96 98 96 98 97 111 113 111 113 7,3 0,5 0,5 NGK BPMR 7A/ Champion RCJ 7Y 0,5 NGK BPMR 7A/ Champion RCJ 7Y 0,5 40,2 40 32 2700 11500-12500 10000 1,3/9000 Yes Yes 40,2 40 32 2700 11500-12500 10000 1,3/9000 Yes Yes 235R 235FR Note 1: Noise emissions in the environment measured as sound power (LWA) 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/s<sup>2</sup>. English – 31 TECHNICAL DATA Approved accessories 235R, 235FR Centre hole in blades/cutters, Ø 25,4 mm Output shaft thread M12 Multi 255-3 (Ø 255 3 teeth) Grass blade/grass cutter Multi 275-4 (Ø 275 4 teeth) Multi 300-3 (Ø 300 3 teeth) Saw blade Plastic blades Scarlet 200-22 (Ø 200 22 teeth) Tricut Ø 300 mm (Separate blades have part number 531 01 77-15) Trimmy S II (Ø 2.4 - 3.3 mm cord) T35, T35x (Ø 2.4 - 3.0 mm cord) Trimmer head T45x (Ø 2.7 - 3.3 mm cord) S35 (Ø 2.

4 - 3.0 mm cord) F35 (Ø 2.0 - 3.5 mm cord) Auto 55 (Ø 2.7 - 3.3 mm cord) Support cup Fixed With ball bearing 537 33 16-01 537 33 16-01 537 33 16-01 537 38 77-01 537 33 16-01 / 537 34 94-01 537 33 16-01 / 537 34 94-01 537 33 16-01 / 537 34 94-01 537 33 16-01 / 537 34 94-01 537 33 16-01 / 537 34 94-01 537 33 16-01 / 537 34 94-01 537 33 16-01 / 537 34 94-01 Type Cutting attachment guard, Art. no. 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 235FR and 235R with serial numbers dating from 2009 onwards (the year is clearly stated on the rating plate, followed by the serial number), comply with the requirements of the COUNCIL'S DIRECTIVE: - of May 17, 2006 "relating to machinery" 2006/42/EC - of December 15, 2004 "relating to electromagnetic compatibility" 2004/108/EC. - of May 8, 2000 "relating to the noise emissions in the environment" 2000/14/EC. Conformity assessment according to Annex V.

For information relating to noise emissions, see the chapter Technical data. The following standards have been applied: EN ISO 12100-2:2003, CISPR 12:2005, EN ISO 11806:1997 SMP Svensk Maskinprovning AB, Fyrisborgsgatan 3, SE-754 50 Uppsala, Sweden, has carried out voluntary type approval for Husqvarna AB. The certificates have the numbers: SEC/09/2167, 01/164/050 Huskvarna December 29, 2009 Bo Jonsson, Development manager (Authorized representative for Husqvarna AB and responsible for technical documentation.) 32 – English S35 1 2,4-2,7 mm .095-.106" 8,5 m 28' 10 cm 4" 4,2 m 14' 2 3 4 5 6 7 8 "Clic" 10 11 15 cm 6" S35 2,4-2,7 mm .095-.106" 4,25 m 14' 4,25 m 14' 1 2 3 4 5 15 cm 6" A B 15 cm 6" T35, T35x 1 2,4-2,7 mm .095-.106" 8,5 m 28' 10 cm 4" 4,3 m 14' 2 3 4 5 6 15 cm 6" 7 8 "Clic" 9 T45, T45x 1 2,7-3,3 mm . 106-.130" 10 m 32' 10 cm 4" 4,3 m 14' 2 3 4 5 6 15 cm 6" 7 8 "Clic" 9 Auto 55 1 2 3 >1,1 Kw 1.) <1,1 Kw 2.) 2,7-3,3 mm .106-.130" 4 5 2,7 mm - 9,0 m 3,0 mm - 7,5 m 3,3 mm - 6,0 m 15 cm 6" 6 15 cm 6" 7 15 cm 6" 8 10 11 Trimmy SII 2,4-3,3 mm .095"-.130" 7,0 m 23' 12 cm 5" ~ 3,5 m 11' 1 2 3 4 5 ~ 15 cm 6' 6 7 "Clic" 8 9 35-50 NM Original instructions 1153284-26 "®z+U<J¶6N" "®z+U<J¶6N" 2010-03-04 .



[You're reading an excerpt. Click here to read official HUSQVARNA 235R user guide](http://yourpdfguides.com/dref/4739622)  
<http://yourpdfguides.com/dref/4739622>