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

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

Operator's manual (EPA)
Manuel d'utilisation (EPA)
Manual de instrucciones (EPA)

235 240



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

English (6-25)
French (26-47)
Spanish (48-67)



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Manual abstract:

In 1956, the first motor driven lawn mowers appeared, followed by chain saws in 1959, and it is within this area Husqvarna is working today. Today Husqvarna is one of the leading manufacturers in the world of forest and garden products, with quality as our highest priority. We develop, manufacture and market high quality motor driven products for forestry and gardening as well as for building and construction industry. @@@@Think of this operators manual as a valuable document. @@If you ever lend or sell this machine, make sure that the borrower or buyer gets the operators manual, so they will also know how to properly maintain and use it. Thank you for using a Husqvarna product. Husqvarna AB has a policy of continuous product development and therefore reserves the right to modify the design and appearance of products without prior notice. For customer assistance, contact us at our website: www.

Com Both of the operators hands must be used to operate the chain saw. Never operate a chain saw holding it with one hand only.

Contact of the guide bar tip with any object must be avoided. Tip contact may cause the guide bar to move suddenly upward and backward (so-called kickback), which may cause serious injury. Other symbols/decals on the machine refer to special certification requirements for certain markets. You will find the following labels on your chain saw: Careless or improper use can result in serious or fatal injury to the operator or others. @@The Emissions Compliance Period referred to on the Emission Compliance label indicates the number of operating hours for which the engine has been shown to meet Federal emissions requirements.

Category C = 50 hours, B = 125 hours, and A = 300 hours. Maintenance, replacement, or repair of the emission control devices and system may be performed by any nonroad engine repair establishment or individual. What is what on the chain saw?) 3 Front handle 4 Cylinder cover 5 Front hand guard 6 Muffler 7 Bumper spike 8 Bar tip sprocket 9 Rear handle with right hand guard 10 Throttle control 11 Clutch cover 12 Chain catcher 13 Guide bar 14 Saw chain 15 Starter handle 16 Chain oil tank 17 Starter 18 Fuel tank 19 Choke control/Start throttle lock 20 Rear handle 21 Stop switch (Ignition on/off switch.) 22 Adjuster screws carburetor 23 Air purge 24 Information and warning decal 25 Chain tensioning screw 26 Guide bar cover 27 Combination spanner 28 Two-stroke oil 29 Operator's manual (EPA) What is what on the chain saw? GENERAL SAFETY PRECAUTIONS Before using a new chain saw . important . Always use common sense . Before using a new chain saw Do not use the chain saw until sufficient chain oil has reached the chain. Long-term exposure to noise can result in permanent hearing impairment. So always use approved hearing protection. When using a chain saw, a fire extinguisher should be available. Keep handles dry, clean and free of oil. Do not attempt a pruning or limbing operation in a standing tree unless specifically trained to do so. Under no circumstances may the design of the machine be modified without the permission of the manufacturer. always use genuine accessories. Non-authorized modifications and/or accessories can result in serious personal injury or the death of the operator or others.

Your warranty may not cover damage or liability caused by the use of non-authorized accessories or replacement parts. wARNING! A chain saw is a dangerous tool if used carelessly or incorrectly and can cause serious, even fatal injuries. It is very important that you read and understand the contents of this operator's manual. wARNING! The inside of the muffler contain chemicals that may be carcinogenic. @@ wARNING! The ignition system of this machine produces an electromagnetic field during operation. This field may under some circumstances interfere with pacemakers. To reduce the risk of serious or fatal injury, we recommend persons with pacemakers to consult their physician and the pacemaker manufacturer before operating this machine. You should only use the saw with the bar and chain combinations we recommend in the chapter Technical data. Never use the machine if you are fatigued, while under the influence of alcohol or drugs, medication or anything that could affect your vision, alertness, coordination or judgement. Do not modify this product or use it if it appears to have been modified by others.

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. Never use any accessories other than those recommended in this manual.

Always wear protective glasses or a face visor to reduce the risk of injury from thrown objects. A chain saw is capable of throwing objects, such as wood chips, small pieces of wood, etc, at great force. This can result in serious injury, especially to the eyes. wARNING! Running an engine in a confined or badly ventilated area can result in death due to asphyxiation or carbon monoxide poisoning. wARNING! Faulty cutting equipment or the wrong combination of bar and saw chain increases the risk of kickback! Only use the bar/saw chain combinations we recommend, and follow the filing instructions.

Always use common sense (2) It is not possible to cover every conceivable situation you can face when using a chain saw. Always exercise care and use your common sense. Avoid all situations which you consider to be beyond your capability. If you still feel uncertain about operating procedures after reading these instructions, you should consult an expert before continuing. Do not hesitate to contact your dealer or us if you have any questions about the use of the chain saw. We will willingly be of service and provide you with advice as well as help you to use your chain saw both efficiently and safely. Attend a training course in chain saw usage if possible. Your dealer, forestry school or your library can provide information about which training materials and courses are available.

Work is constantly in progress to improve the design and technology - improvements that increase your safety and efficiency. Visit your dealer regularly to see whether you can benefit from new features that have been introduced.

carried out professionally. If you need further information please contact your nearest servicing dealer. Never use a machine with defective safety components. Safety equipment must be inspected and maintained. See instructions under the heading Checking, maintaining and servicing chain saw safety equipment. If your machine does not pass all the checks, take the saw to a servicing dealer for repair. Chain brake and front hand guard Your chain saw is equipped with a chain brake that is designed to stop the chain if you get a kickback. The chain brake reduces the risk of accidents, but only you can prevent them. Take care when using your saw and make sure the kickback zone of the bar never touches any object.



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The chain brake (A) can either be activated manually (by your left hand) or automatically by the inertia release mechanism.

(3) · The brake is applied when the front hand guard (B) is pushed forwards. (3) · This movement activates a spring-loaded mechanism that tightens the brake band (C) around the engine drive system (D) (clutch drum). (4) · The front hand guard is not designed solely to activate the chain brake. Another important feature is that it reduces the risk of your left hand hitting the chain if you lose grip of the front handle. The chain brake must be engaged when the chain saw is started to prevent the saw chain from rotating.

Use the chain brake as a "parking brake" when starting and when moving over short distances, to reduce the risk of moving chain accidentally hitting your leg or anyone or anything close by. To release the chain brake pull the front hand guard backwards, towards the front handle. Kickback can be very sudden and violent. Most kickbacks are minor and do not always activate the chain brake. If this happens you should hold the chain saw firmly and not let go.

The way the chain brake is activated, either manually or automatically by the inertia release mechanism, depends on the force of the kickback and the position of the chain saw in relation to the object that the kickback zone of the bar strikes. If you get a violent kickback while the kickback zone of the bar is farthest away from you the chain brake is designed to be activated by the inertia in the kickback direction. If the kickback is less violent or the kickback zone of the bar is closer to you the chain brake is designed to be activated manually by the movement of your left hand. In the felling position the left hand is in a position that makes manual activation of the chain brake impossible. With this type of grip, that is when the left hand is placed so that it cannot affect the movement of the front hand guard, the chain brake can only be activated by the inertia action. Most chain saw accidents happen when the chain touches the operator. 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. Always have a first aid kit nearby. Fire Extinguisher and Shovel Generally clothes should be close-fitting without restricting your freedom of movement.

IMPORTANT! Sparks can come from the muffler, the bar and chain or other sources. Always have fire extinguishing tools available if you should need them.

In this section the machine's safety features and their function are explained. For inspection and maintenance see instructions under the heading Checking, maintaining and servicing chain saw safety equipment. see instructions under the heading , What is what? , to find where these parts are located 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 Will my hand always activate the chain brake during a kickback? no. It takes a certain force to move the hand guard forward. If your hand only lightly touches the front guard or slips over it, the force may not be enough to trigger the chain brake. You should also maintain a firm grip of the chain saw handles while working. If you do and experience a kickback, your hand may never leave the front handle and will not activate the chain brake, or the chain brake will only activate after the saw has swung around a considerable distance.

In such instances, the chain brake might not have enough time to stop the saw chain before it touches you. There are also certain positions in which your hand cannot reach the front hand guard to activate the chain brake; for example, when the saw chain is held in felling position. The machines vibration damping system reduces the transfer of vibration between the engine unit/cutting equipment and the machines handle unit. The body of the chain saw, including the cutting equipment, is insulated from the handles by vibration damping units. Cutting hardwoods (most broadleaf trees) creates more vibration than cutting softwoods (most conifers).

Cutting with a dull chain is more likely to break and lead to increased wear on the bar, chain and drive sprocket. The number of drive links is determined by the length of the bar, the chain pitch and the number of teeth on the bar tip sprocket. The bar must be matched to the chain saw design. Always wear gloves, when working with the chain, in order to protect your hands from injury. When the chain is blunt you have to exert more pressure to force the bar through the wood and the chips will be very small.

If the chain is very blunt it will produce wood powder and no chips or shavings. A sharp chain eats its way through the wood and produces long, thick chips or shavings. The cutters cutting maximum chain life and to minimise environmental damage. If our own chain oil is not available, standard chain oil is recommended. Never use waste oil! Using waste oil can be dangerous to you and damage the machine and environment. **IMPORTANT!** When using vegetable based saw chain oil, dismantle and clean the groove in the bar and saw chain before long-term storage. Otherwise there is a risk of the saw chain oil oxidizing, which will result in the saw chain becoming stiff and the bar tip sprocket jamming. Filling with chain oil - all our chain saws have an automatic chain lubrication system. On some models the oil flow is also adjustable. The saw chain oil tank and the fuel tank are designed so that the fuel runs out before the saw chain oil.

However, this safety feature requires that you use the right sort of chain oil (if the oil is too thin it will run out before the fuel), and that you adjust the carburetor as recommended (a lean mixture may mean that the fuel lasts longer than the oil) and that you also use the recommended cutting equipment (a bar that is too long will use more chain oil). checking chain lubrication · Check the chain lubrication each time you refuel. see instructions under the heading Lubricating the bar tip sprocket. Aim the tip of the bar at a light coloured surface about 20 cm (8 inches) away. After 1 minute running at 3/4 throttle you should see a distinct line of oil on the light surface. if the chain lubrication is not working: · Check that the oil channel in the bar is not obstructed. Check that the bar tip sprocket turns freely and that the lubricating hole in the tip sprocket is not blocked. A slack chain may jump off the bar and cause serious or even fatal injury. Even a non-moving chain can cause serious cuts to yourself or persons you bump into with an exposed chain. The more you use a chain the longer it becomes.

It is therefore important to adjust the chain regularly to take up the slack. Check the chain tension every time you refuel. **NOTE!** A new chain has a running-in period during which you should check the tension more frequently.



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Tension the chain as tightly as possible, but not so tight that you cannot pull it round freely by hand. Then tighten the bar nuts by hand as tight as you can. (10) · Raise the tip of the bar and stretch the chain by tightening the chain tensioning screw using the combination spanner. Tighten the chain until it does not sag from the underside of the bar. If the chain lubrication system is still not working after carrying out the above checks and associated measures you should contact your servicing dealer. Whether rivets and links are badly worn. Replace the saw chain if it exhibits any of the points above.

We recommend you compare the existing chain with a new chain to decide how badly the existing chain is worn. When the length of the cutting teeth has worn down to only 0. Whether there are burrs on the edges of the bar. Whether the groove in the bar has become badly worn. Whether the tip of the bar is uneven or badly worn. If a hollow forms on the underside of the bar tip this is due to running with a slack chain. To prolong the life of the bar you should turn it over daily. Switch off the engine before carrying out any checks or maintenance. the stop switch automatically returns to the start position. In order to prevent unintentional starting, the spark plug cap must be removed from the spark plug when assembling, checking and/or performing maintenance.

Always wear gloves, when working with the chain, in order to protect your hands from injury. Check that the chain brake is in disengaged position by moving the front hand guard towards the front handle. Remove the bar nuts and remove the clutch cover (chain brake). (16) Make sure that the edges of the cutting links are facing forward on the top edge of the bar. Fit the clutch cover (chain brake) and locate the chain adjuster pin in the cut-out in the bar. (17) Tension the chain by turning the chain tensioning screw clockwise using the combination spanner. The chain should be tensioned until it does not sag from the underside of the bar. see instructions under the heading Tensioning the chain. (18) The chain is correctly tensioned when it does not sag from the underside of the bar, but can still be turned easily by hand. hold up the bar tip and tighten the bar nuts with the combination spanner.

(19) When fitting a new chain, the chain tension has to be checked frequently until the chain is run-in. Most chain saw accidents happen when the chain touches the operator. Do not tackle any job that you feel you are not adequately trained for. see instructions under the headings Personal protective equipment , How to avoid kickback , Cutting equipment and General working instructions. Avoid situations where there is a risk of kickback.

See instructions under the heading Machines safety equipment. Use the recommended protective equipment and check its condition. See instructions under the heading General working instructions. Check that all the chain saw safety features are working. See instructions under the headings General working instructions and General safety precautions.

The machine is equipped with a two-stroke engine and must always be run using a mixture of gasoline 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. We recommend the use of special oil (chain oil) with good adhesion characteristics. Never use waste oil. This results in damage to the oil pump, the bar and the chain. It is important to use oil of the right grade (suitable viscosity range) to suit the air temperature. In temperatures below 32°F (0°C) some oils become too viscous. This can overload the oil pump and result in damage to the oil pump components. Contact your service agent when choosing chain oil.

Always ensure there is adequate ventilation when handling fuel. If you run the engine on a lower octane grade than 87 so-called knocking can occur. This gives rise to a high engine temperature and increased bearing load, which can result in serious engine damage. When working with continuous high revs (e. Running-in Avoid running at a too high speed for extended periods during the first 10 hours. Taking the following precautions, will lessen the risk of fire: Do not smoke and do not place any hot objects in the vicinity of fuel. Always stop the engine and let it cool for a few minutes before refuelling. When refuelling, open the fuel cap slowly so that any excess pressure is released gently. tighten the fuel cap carefully after refuelling. Always move the machine away from the refuelling area before starting.

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. Clean the area around the fuel cap. Clean the fuel and chain oil tanks regularly.

The fuel filter must be replaced at least once a year. contamination in the tanks causes malfunction. Make sure the fuel is well mixed by shaking the container before refuelling. The capacities of the chain oil tank and fuel tank are carefully matched. You should therefore always fill the chain oil tank and fuel tank at the same time.

Take care when handling fuel and chain oil. Be aware of the risks of fire, explosion and those associated with inhalation. Never refuel the machine while the engine is running. Make sure there is plenty of ventilation when refuelling or mixing fuel (gasoline and 2-stroke oil). Move the machine at least 10 ft (3 m) from the refuelling point before starting it. Never start the machine: 1 If you have spilled fuel or chain oil on the machine. Wipe off the spillage and allow remaining fuel to evaporate. 2 If you have spilled fuel on yourself or your clothes, change your clothes. Wash any part of your body that has come in contact with fuel. Always mix the gasoline and oil in a clean container intended for fuel.

Then add the entire amount of oil. 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. Never use a machine with visible damage to the spark plug guard and ignition cable. A risk of sparking arises, which can cause a fire. Start throttle: The correct choke/start throttle setting is obtained by moving the control to the choke position. (23) Air purge: Press the air purge repeatedly until fuel begins to fill the bulb. The bulb need not be completely filled. Always store the chain saw and fuel so that there is no risk of leakages or fumes coming into contact with sparks or naked flames from electrical equipment, electric motors, relays/switches, boilers and the like. For longer periods of storage or for transport of the chain saw, the fuel and chain oil tanks should be emptied.

Ask where you can dispose of waste fuel and chain oil at your local gas station.



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Ensure the machine is cleaned and that a complete service is carried out before long-term storage. The bar guard must always be fitted to the cutting attachment when the machine is being transported or in storage, in order to prevent accident contact with the sharp chain. Even a non-moving chain can cause serious cuts to yourself or persons you bump into with an exposed chain. Use the same procedure as for starting a cold engine but without setting the choke control in the choke position.

Set the throttle to the start position by pulling out the blue choke control to the choke position and then pushing it in again. Grip the front handle with your left hand. Hold the chain saw on the ground by placing your right foot through the rear handle. Pull the starter handle with your right hand and pull out the starter cord slowly until you feel a resistance (as the starter pawls engage) then pull firmly and rapidly. Never wrap the starter cord around your hand (26)

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. Push in the choke control as soon as the engine fires which can be heard through a "puff" sound. Keep on pulling the cord powerfully until the engine starts. (27) As the chain brake is still engaged the speed of the engine must be set to idling as soon as possible, this is achieved by quickly pressing the throttle trigger once. This prevents unnecessary wear to the clutch, clutch drum and brake band. note! @@The chain saw is now ready for use. @@Empty the fuel/oil tanks in a well ventilated area. @@@@Otherwise the clutch can come loose and cause personal injuries. place the machine on firm ground. @@Keep people and animals well away from the working area.

@@@@Activate the chain brake by pushing the front hand guard forwards. @@@@@ see instructions under the heading Assembly. @@ (29) · The chain brake should be activated when starting. @@Exhaust fumes can be dangerous if inhaled. @@ Always hold the saw with both hands. @@All people, whether right or left handed, should use this grip. @@Stop the engine by pressing down the stop button. 1 Check that the chain brake works correctly and is not damaged. 2 Check that the rear right hand guard is not damaged. 3 Check that the throttle lockout works correctly and is not damaged.

4 Check that the stop switch works correctly and is not damaged. 5 Check that all handles are free from oil. 6 Check that the anti vibration system works and is not damaged. 7 Check that the muffler is securely attached and not damaged. @@Take great care when working on sloping ground.

5 Take great care when cutting a tree that is under tension. @@@@Both situations can cause serious personal injury. @@Carry the chain saw with the bar and chain pointing backwards. @@@@@@By being prepared you reduce the risk. @@@@Wrap your fingers and thumbs around the handles.

You should use this grip whether you are right-handed or left-handed. @@@@@ have control over the workpiece. @@@@Never saw stacked logs or branches without first separating them. Only saw one log or one piece at a time. Remove the cut pieces to keep your working area safe. @@Never use the chain saw one-handed! @@Never work on a ladder, in a tree or on any other insecure support. (35) 6 Always use a fast cutting speed, i. 7 Take great care when you cut with the top edge of the bar, i. e. When cutting from the underside of the object.

This is known as cutting with a pushing chain. The chain tries to push the chain saw back towards the user. If the saw chain is jamming, the saw may be pushed back at you. @@(36) Cutting with the bottom edge of the bar, i. e. @@This information is never a substitute for professional skills and experience. If you get into a situation where you feel unsafe, stop and seek expert advice. Contact your chain saw dealer, service agent or an experienced chain saw user. Do not attempt any task that you are not sure you can handle! Before using a chain saw you must understand the effects of kickback and how to avoid them. see instructions under the heading How to avoid kickback.

Before using a chain saw you must understand the difference between cutting with the top and bottom edges of the bar. To ensure that people, animals or other things cannot affect your control of the machine. To make sure that none of the above might come within reach of your saw or be injured by falling trees. cAUTION! Follow the instructions above, but do not use a chain saw in a situation where you cannot call for help in case of an accident. 2 Do not use the machine in bad weather, such as dense fog, heavy rain, strong wind, intense cold, etc.

Working in bad weather is tiring and often brings added risks, such as icy ground, unpredictable felling direction, etc. 3 Take great care when removing small branches and avoid cutting bushes (i. Small branches can be grabbed by the chain and thrown back at you, causing serious injury. 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 In this case the chain saw pulls itself towards the tree and the front edge of the chain saw body rests naturally on the trunk when cutting. Cutting with a pulling chain gives the operator better control over the chain saw and the position of the kickback zone. 9 Follow the instructions on sharpening and maintaining your bar and chain. When you replace the bar and chain use only combinations that are recommended by us. see instructions under the headings Cutting equipment and Technical data. Limbing When limbing thick branches you should use the same approach as for cutting. Cut difficult branches piece by piece. Never attempt to cut logs while they are in a pile or when a couple of logs are lying together. Such procedures drastically increase the risk of kickback which can result in a serious or fatal injury. Never use a chain saw by holding it with one hand.

A chain saw is not safely controlled with one hand. Always have a secure, firm grip around the handles with both hands. Always use full throttle when cutting!

Reduce the speed to idle after every cut (running the engine for too long at full throttle without any load, i. e. @@ Cutting from above = Cutting with a pulling chain. Cutting from below = Cutting with pushing chain. Cutting with a pushing chain increases the risk of kickback. @@@@2 Make sure the object you are cutting will not split. @@4 Is there a risk of kickback? @@@@@@Don't try to pull the chain saw free. @@Use a lever to open up the cut and free the chain saw.

@@@@Remove the cut pieces from the cutting area. By leaving them in the cutting area, you increase the risk for inadvertently getting a kickback, as well as increasing the risk of losing your balance while working. the log is lying on the ground. There is little risk of the chain jamming or the object splitting. However there is a risk that the chain will touch the ground when you finish the cut.



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Cut all the way through the log from above. Avoid letting the chain touch the ground as you finish the cut. Maintain full throttle but be prepared for what might happen. (37) If it is possible (can you turn the log?) stop cutting about 2/3 of the way through the log. Turn the log and finish the cut from the opposite side.

the log is supported at one end. There is a high risk that it will split. Start by cutting from below (about 1/3 of the way through). Finish by cutting from above so that the two cuts meet. the log is supported at both ends. There is a high risk that the chain will jam. Start by cutting from above (about 1/3 of the way through). Finish by cutting from below so that the two cuts meet. It takes a lot of experience to fell a tree. inexperienced users of chain saws should not fell trees.

Do not attempt any task beyond your experience level! Safe distance The safe distance between a tree that is to be felled and anyone else working nearby is at least 2 1/2 tree lengths. Make sure that no-one else is in this "risk zone" before or during felling. (38) Felling direction The aim is to fell the tree in a position where you can limb and cross-cut the log as easily as possible. You want it to fall in a location where you can stand and move about safely. Once you have decided which way you want the tree to fall you must judge which way the tree would fall naturally. Weight of snow · Obstacles within the reach of the tree: for example, other trees, power lines, roads and buildings. Look for signs of damage and rot in the stem, this makes it more probable that the tree will break and start to fall before you expect it to. You may find you are forced to let the tree fall in its natural direction because it is impossible or dangerous to try to make it fall in the direction you first intended. Another very important factor, which does not affect the felling direction but does affect your safety, is to make sure the tree has no damaged or dead branches that might break off and hit you during felling. The main point to avoid is letting the tree fall onto another tree.

It is very dangerous to remove a trapped tree and there is high accident risk. See instructions under the heading Freeing a tree that has fallen badly. **IMPORTANT!** During critical felling operations, hearing protectors should be lifted immediately when sawing is completed so that sounds and warning signals can be heard. clearing the trunk and preparing your retreat Delimb the stem up to shoulder height. It is safer to work from the top down and to have the tree between you and the saw.

Remove any undergrowth from the base of the tree and check the area for obstacles (stones, branches, holes, etc.) so that you have a clear path of retreat when the tree starts to fall. Your path of retreat should be roughly 135 degrees away from the intended felling direction. (39) Felling Make the felling cut about 1. 5-2 inches (3-5 cm) above the bottom directional cut.

(42) Finish the felling cut parallel with the directional cut line so that the distance between them is at least 1/10 of the trunk diameter. (43) All control over the felling direction is lost if the felling hinge is too narrow or non-existent, or if the directional cuts and felling cut are badly placed. When the felling cut and directional cut are complete the tree should start to fall by itself or with the aid of a felling wedge or breaking bar. We recommend that you use a bar that is longer than the diameter of the tree, so that you can make the felling cut and directional cuts with single cutting strokes. See instructions under the heading Technical data section to find out which lengths of bar are recommended for your saw. There are methods for felling trees with a diameter larger than the bar length. However these methods involve a much greater risk that the kickback zone of the bar will come into contact with the tree. Freeing a tree that has fallen badly Freeing a "trapped tree" It is very dangerous to remove a trapped tree and there is high accident risk. Never try to fell the tree that is trapped. Never work in the risk zone of the hanging trapped tree.

Portable Cutting trees and branches that are in tension Preparations: Work out which side is in tension and where the point of maximum tension is (i. e. Where it would break if it was bent even more). Decide which is the safest way to release the tension and whether you are able to do it safely. In complicated situations the only safe method is to put aside your chain saw and use a winch. General advice: Position yourself so that you will be clear of the tree or branch when the tension is released. Make one or more cuts at or near the point of maximum tension. Make as many cuts of sufficient depth as necessary to reduce the tension and make the tree or branch break at the point of maximum tension. Never cut straight through a tree or branch that is in tension! If you must cut across tree/limb, make two to three cuts, one inch apart, one to two inches deep. Continue to cut deeper until tree/limb bends and tension is released. Cut tree/limb from outside the bend, after tension has been released. Unless you have special training we advise you not to fell trees with a diameter larger than the bar length of your saw! Felling is done using three cuts. First you make the directional cuts, which consist of the top cut and the bottom cut, then you finish with the felling cut. By placing these cuts correctly you can control the felling direction very accurately. Directional cuts To make the directional cuts you begin with the top cut.

Stand to the right of the tree and cut on the pull stroke. Next make the bottom cut so that it finishes exactly at the end of the top cut. (40) The directional cuts should run 1/4 of the diameter through the trunk and the angle between the top cut and bottom cut should be 45°. The line where the two cuts meet is called the directional cut line. This line should be perfectly horizontal and at right angles (90°) to the chosen felling direction.

(41) Felling cut The felling cut is made from the opposite side of the tree and it must be perfectly horizontal. Stand on the left side of the tree and cut on the pull stroke. Correct adjustment is essential to get the best performance from the machine. If the T-screw is turned clockwise this gives a higher idle speed; turning it anti-clockwise gives a lower idle speed. Kickback can happen very suddenly and violently; kicking the chain saw, bar and chain back at the user. If this happens when the chain is moving it can cause very serious, even fatal injuries. It is vital you understand what causes kickback and that you can avoid it by taking care and using the right working technique. The basic carburetor settings are adjusted during testing at the factory. Fine adjustment should be carried out by a skilled technician. Fine adjustment of the idling speed T Adjust the idle speed with the T-screw.

If it is necessary to re-adjust, turn the T-screw clockwise while the engine is running, until the chain starts to rotate.



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Then turn counterclockwise until the chain stops. A correctly adjusted idle speed setting occurs when the engine runs smoothly in every position. It should also be good margin to the rpm when the chain starts to rotate. The word kickback is used to describe the sudden reaction that causes the chain saw and bar to jump off an object when the upper quadrant of the tip of the bar, known as the kickback zone, touches an object. (44) Kickback always occurs in the cutting plane of the bar. Normally the chain saw and bar are thrown backwards and upwards towards the user. However, the chain saw may move in a different direction depending on the way it was being used when the kickback zone of the bar touched the object. Be extremely cautious and avoid contacting the log, other limbs or objects with the nose of the guide bar. be extremely cautious of limbs under tension.

They can spring back toward you and cause loss of control resulting in injury. Contact your servicing dealer, if the idle speed setting cannot be adjusted so that the chain stops at idle. Do not use the chain saw until it has been properly adjusted or repaired. All servicing and repair work on the machine requires special training. This is especially true of the machines safety equipment.

If your machine fails any of the checks described below we recommend you to contact our servicing dealer. Any maintenance other than that described in this manual must be carried out by your servicing dealer (retailer). Switch off the engine and take off the ignition cable before repairs or maintenance Make sure that you can stand and move about safely. Work on the left side of the trunk. Work as close as possible to the chain saw for maximum control.

If possible, let the weight of the chain saw rest on the trunk. Keep the trunk between you and the chain saw as you move along the trunk. Cutting the trunk into logs See instructions under the heading Basic cutting technique. Chain brake and front hand guard Checking brake band wear Brush off any wood dust, resin and dirt from the chain brake and clutch drum. Checking the front hand guard Make sure the front hand guard is not damaged and that there are no visible defects such as cracks. Move the front hand guard forwards and back to make sure it moves freely and that it is securely anchored to the clutch cover. The user must only carry out the maintenance and service work described in this manual. More extensive work must be carried out by an authorised service workshop. Checking the inertia brake release With the engine turned off, hold the chain saw over a stump or other firm object. Let go of the front handle so that the bar drops towards the stump as the chain saw rotates around the rear handle.

When the bar hits the stump the brake should be applied. (48) Checking the brake trigger Place the chain saw on firm ground and start it. Make sure the chain does not touch the ground or any other object. see the instructions under the heading Start and stop. Grasp the chain saw firmly, wrapping your fingers and thumbs around the handles. Apply full throttle and activate the chain brake by tilting your left wrist forward onto the front hand guard. Do not let go of the front handle. Never use a machine with a muffler that is in poor condition. Never use a muffler if the spark arrestor screen is missing or defective. For normal homeowner use, the muffler and spark arresting screen will not require replacement.

After 75 hours of use, we recommend that your muffler be replaced by your authorized Husqvarna service dealer. The air filter must be regularly cleaned to remove dust and dirt in order to avoid: · Unnecessary wear to engine parts · Remove the air filter (3) after taking off the cylinder cover, screw (1) and filter cover (2). When refitting make sure that the air filter seals tightly against the filter holder. clean the filter by brushing or shaking it. (50) The filter can be cleaned more thoroughly by washing it in water and detergent.

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. A HUSQVARNA chain saw can be equipped with different types of air filters according to working conditions, weather, season, etc. Make sure the throttle control is locked at the idle setting when the throttle lockout is released.

Press the throttle lockout and make sure it returns to its original position when you release it. Check that the throttle control and throttle lockout move freely and that the return springs work properly. Release the throttle control and check that the chain stops and remains stationary. If the chain rotates when the throttle control is in the idle position you should check the carburetor idle adjustment. Check that the chain catcher is not damaged and is firmly attached to the body of the chain saw. Check that the right hand guard is not damaged and that there are no visible defects, such as cracks. Make sure the vibration damping units are securely attached to the engine unit and handle unit. 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.

The spark plug should be replaced after about a month in operation or earlier if necessary. Use of the wrong spark plug can damage the piston/cylinder. Start the engine and make sure the engine stops when you move the stop switch to the stop setting. The following is a list of the maintenance that must be performed on the machine. Replace when less than 0. Clean the outside of the machine. The bar should be turned daily for more even wear. Check the lubrication hole in the bar, to be sure it is not clogged. Check the saw chain with regard to visible cracks in the rivets and links, whether the saw chain is stiff or whether the rivets and links are abnormally worn. Check that nuts and screws are tight.

check that the stop switch works correctly. Check that there are no fuel leaks from the engine, tank or fuel lines. File off any burrs from the edges of the bar. Clean the outside of the carburetor. Empty the fuel tank and clean the inside.

Empty the oil tank and clean the inside. In/cm³ Stroke, inch/mm Idle speed, rpm Power, kW Ignition system Manufacturer of ignition system Type of ignition system Spark plug Electrode gap, inch/mm Fuel and lubrication system Manufacturer of carburetor Carburetor type Fuel tank capacity, US pint/litre Oil pump capacity at 8,500 rpm, ml/min Oil tank capacity, US pint/litre Type of oil pump Weight Chain saw without bar or chain, empty tanks, lb/kg Chain/bar Standard bar length, inch/cm Recommended bar lengths, inch/cm Usable cutting length, inches/cm Chain speed at max. Power, m/sec Pitch, inch/mm Thickness of drive links, inch/mm Number of teeth on drive sprocket 14/35, 16/40 14/35, 16/40 13.



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Following is a list of recommended cutting equipment for the Husqvarna chain saw models 235 and 240. The combinations of power head, bar and chain have been tested and found to be in accordance with the kickback and vibration requirements of ANSI B 175.

12000. The guide bar nose radius is determined by either the maximum number of teeth in the nose sprocket or the corresponding maximum nose radius of a solid bar. The following list is the chain saw manufacturers recommendations. There may be other combinations available, which will also achieve kickback reduction. As we are listing the maximum guide bar nose radius, you may use a guide bar with smaller nose radius than in our list. For guide bars of the same length, all sprocket-nose guide bars of the same pitch and having the same number of sprocket teeth may be considered to have equivalent kickback energy. A hard nose bar having the same length and nose radius as a sprocket-nose bar may be considered to have equivalent or less kickback energy than the sprocket-nose bar. chain saw models Husqvarna 235 and 240 met the kickback performance requirements of ANSI B 175. 1-2000 when tested with the combinations of bars and saw chains listed below. The saw chains Oregon 91VG and 90SG are also classified as a low kickback saw chain since it met the requirements for low kickback saw chain outlined in ANSI B 175.

1-2000. We recommend to use only the listed combinations of bars and chains for chain saw models Husqvarna 235 and 240. Other chain saw models may not meet the kickback requirements when equipped with the listed bar and chain combinations. The guide bar nose radius is determined by either the maximum number of teeth in the nose sprocket or the corresponding maximum nose radius of a solid bar. As we are listing the maximum guide bar nose radius, you may use a guide bar with smaller nose radius than in our list. For guide bars of the same length, all sprocket-nose guide bars of the same pitch and having the same number of sprocket teeth may be considered to have equivalent kickback energy. A hard nose bar having the same length and nose radius as a sprocket-nose bar may be considered to have equivalent or less kickback energy than the sprocket-nose bar. We recommend that you as replacement use the listed bars and chains or "Type C Low-Kickback Saw Chains" which are available at your dealer. Nose radius 7T 7T 7T 7T 7T Type H36 / 91VG H36 / 91VG Oregon 91VJ H36 / 91VG Oregon 91VJ Chain Drive link count 52 56 56 62 62 The EPA (The US Environmental Protection Agency), CARB (California Air Resources Board) and Husqvarna are pleased to explain the emissions control system warranty on your 2007 and later small nonroad engine.

And Canada, new small nonroad engines must be designed, built and equipped to meet the federal stringent anti-smog standards.

Husqvarna must warrant the emission control system on your small nonroad engine for the period of time listed below provided there has been no abuse, neglect or improper maintenance of your unit. Your emission control system includes parts such as the carburetor, the ignition system and the fuel tank (California only). Where a warrantable condition exists, Husqvarna will repair your small nonroad engine at no cost to you. Expenses covered under warranty include diagnosis, parts and labor. charge to the owner at an approved Husqvarna servicing dealer.

@@WARRANTY PERIOD Any warranted part which is not scheduled for replacement as required maintenance, or which is scheduled only for regular inspection to the effect of "repair or replace as necessary" shall be warranted for 2 years. Any warranted part which is scheduled for replacement as required maintenance shall be warranted for the period of time up to the first scheduled replacement point for that part. DIAGNOSIS The owner shall not be charged for diagnostic labor which leads to the determination that a warranted part is defective, if the diagnostic work is performed at an approved Husqvarna servicing dealer. CONSEQUENTIAL DAMAGES Husqvarna may be liable for damages to other engine components caused by the failure of a warranted part still under warranty. The 2007 and later small nonroad engines are warranted for two years.

If any emission related part on you engine (as listed above) is defective, the part will be repaired or replaced by Husqvarna. ADD -ON OR MODIFIED PARTS The use of add-on or modified parts can be grounds for disallowing a warranty claim. Husqvarna is not liable to cover failures of warranted parts caused by the use of add-on or modified parts. As the small nonroad engine owner, you are responsible for the performance of the required maintenance listed in your Operators Manual. Husqvarna recommends that you retain all receipts covering maintenance on your small nonroad engine, but Husqvarna cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance. As the small nonroad engine owner, you should, however, be aware that Husqvarna may deny you warranty coverage if your small nonroad engine or a part of it has failed due to abuse, neglect, improper maintenance, unapproved modifications or the use of parts not made or approved by the original equipment manufacturer. You are responsible for presenting your small nonroad engine to a Husqvarna authorized servicing dealer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. @@@@Husqvarna warrants to the initial owner and each subsequent purchaser that the engine is free from defects in materials and workmanship which cause the failure of a warranted part for a period of two years. Safety precautions for chain saw users Kickback may occur when the nose or tip of the guide bar touches an object, or when the wood closes in and pinches the saw chain in the cut.

Tip contact in some cases may cause a lightning fast reverse reaction, kicking the guide bar up and back towards the operator. Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator. Either of these reactions may cause you to lose control of the saw which could result in serious personal injury. Do not rely exclusively upon the safety devices built into your saw. @@Do not operate a chain saw with one hand! @@Do not operate a chain saw when you are fatigued. @@Use caution when handling fuel. @@Do not allow other persons to be near the chain saw when starting or cutting with the chain saw. Keep bystanders and animals out of the work area. Do not start cutting until you have a clear work area, secure footing and a planned retreat path from the falling tree. Keep all parts of your body away from the saw chain when the engine is running.

Before you start the engine, make sure that the saw chain is not contacting anything. Carry the chain saw with the engine stopped, the guide bar and saw chain to the rear, and the muffler away from your body. Do not operate a chain saw that is damaged, improperly adjusted, or not completely and securely assembled.



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Be sure that the saw chain stops moving when the throttle control trigger is released. Shut off the engine before setting the chain saw down. Use extreme caution when cutting small size brush and saplings because slender material may catch the saw chain and be whipped toward you or pull you off balance. When cutting a limb that is under tension be alert for springback so that you will not be struck when the tension in the wood fibers is released. Keep handles dry, clean and free of oil or fuel mixture. operate the chain saw only in well-ventilated areas. Do not operate a chain saw in a tree unless you have been specifically trained to do so.

Do not operate a chain saw above shoulder height. All chain saw service, other than the items listed in the operator's/owner's safety and maintenance instructions, should be performed by competent chain saw service personnel. (For example, if improper tools are used to remove the flywheel or if an improper tool is used to hold the flywheel in order to remove the clutch, structural damage to the flywheel could occur and subsequently cause the flywheel to burst.) When transporting your chain saw, use the appropriate guide bar guard. With a basic understanding of kickback, you can reduce or eliminate the element of surprise. sudden surprise contributes to accidents. Keep a good firm grip on the saw with both hands, the right hand on the rear handle, and the left hand on the front handle, when the engine is running. @@Make sure that the area in which you are cutting is free from obstacles. Do not let the nose of the guide bar contact a log, branch, or any other obstacle which could be hit while you are operating the saw. Cut at high engine speeds.

Do not overreach or cut above shoulder height. Follow manufacturer's sharpening and maintenance instructions for the saw chain. Distance de sécurité La distance de sécurité à respecter entre un arbre à abattre et le lieu de travail doit être d'au moins 2 1/2 fois la hauteur de l'arbre. .



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