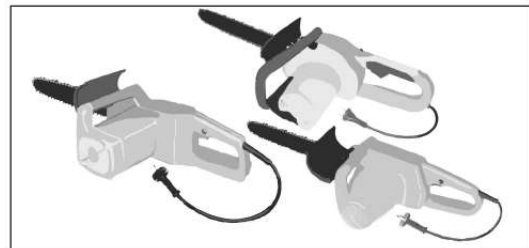




Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for MCCULLOCH ELECTRAMAC 330 CH. You'll find the answers to all your questions on the MCCULLOCH ELECTRAMAC 330 CH in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual MCCULLOCH ELECTRAMAC 330 CH
User guide MCCULLOCH ELECTRAMAC 330 CH
Operating instructions MCCULLOCH ELECTRAMAC 330 CH
Instructions for use MCCULLOCH ELECTRAMAC 330 CH
Instruction manual MCCULLOCH ELECTRAMAC 330 CH



GB	INSTRUCTION MANUAL IMPORTANT INFORMATION: Please read these instructions carefully and make sure you understand them before using this unit. Retain these instructions for future reference.	IT	LIBRETTO D'ISTRUZIONI INFORMAZIONI IMPORTANTI: Leggere le istruzioni attentamente e copiarle bene prima di usare l'utensile. Conservare per ulteriore consultazione.
DE	BETRIEBSANWEISUNG WICHTIGE INFORMATION: Lesen Sie diese Hinweise zur Handhabung des Geräts aufmerksam durch. Verwenden Sie es erst, wenn Sie sicher sind, daß Sie alle Anweisungen verstanden haben und gut zuhören.	HU	HASZNÁLATI ÚTMUTATÓ Jóvállást vállalni csak részletesen elolvastuk és megértettük a használati utasításokat, és megőrizzük azokat a jövőre való esetleges utasításokért.
FR	MANUEL D'INSTRUCTIONS RENSEIGNEMENTS IMPORTANTS: Avant d'utiliser cet appareil, veuillez lire attentivement les instructions et assurez-vous de les avoir comprises. Conservez les instructions pour référence ultérieure.	GR	ΕΓΧΕΙΡΙΔΙΟ ΧΕΙΡΙΣΜΟΥ ΣΗΜΑΝΤΗ ΠΛΗΡΟΦΟΡΩΣΗ: Διαβάστε προσεκτικά τις οδηγίες χρήσης και διατηρήστε τις, ώστε να έχετε πάντα πρόσβαση σε αυτές για μελλοντική χρήση.
NL	HANDLEIDING BELANGRIJKE INFORMATIE: Lees deze handleiding aandachtig en zorg dat u alles begrijpt alvorens de kettingzaag te gebruiken en te-waak ze voor toekomstige raadpleging.	CZ	ŇAVOD K POUŽITÍ DŇLEŽITÁ INFORMACE: Než začnete stroj používat přečtěte si prosím velmi pozorně tyto instrukce a ujeďte si je. Je třeba jim postupně i uschovat, abyste je mohli v budoucnu.
NO	BRUKERHÅNDBOK VIKTIG INFORMASJON: Les disse anvisningene nøye og forsikre deg om at du forstår dem før du bruker enheten og oppbevar dem for seinere bruk.	PL	INSTRUKCJA OBSŁUGI GWARANCJA TRACI WYNOŚLIW: Gwarancja traci wydajności w przypadku uwydnia uszkodzenia lub złej jakości wytworzone w instrukcji obsługi. Prosimy o uważne przeczytanie instrukcji oraz o zbioranie ich do zabezpieczenia w niej zawartych.
FI	OHJEKIRJA TÄRKEÄÄ TIETOA: Lue nämä ohjeet huolellisesti ja varmista, että olet ymmärtänyt ne, ennen kuin alat käyttää tätä laitetta ja säilytä myöhempää tarvetta varten.	SK	ŇAVOD NA OBSLUHU DŇLEŽITÁ INFORMACIA: Pred použitím stroja si starostlivo prečítajte tento Ňavod na obsluhu a uistite sa, že ste mu dôkladne porozumeli. Ňavod starostlivo uschovajte pre potrebu v budúcnosti.
SE	BRUKSANVISNING VIKTIG INFORMATION: Läs instruktionerna noggrant och försäkra dig om att du förstår dem innan du använder utrustningen och spara dem för framtida behov.	RU	ВАЖНЫЕ ИНСТРУКЦИИ ВНИМАТЕЛЬНО ПРОЧИТАЙТЕ И ПОСЛЕ ИНСТРУКЦИИ ПЕРЕД ИСПОЛЬЗОВАНИЕМ ОБОРУДОВАНИЯ. ХРАНИТЕ ИНСТРУКЦИИ ДЛЯ ДАЛЕЙШЕЙ КОНСУЛЬТАЦИИ.
DK	BRUGERHÅNDBOG VIGTIGE OPLYSNINGER: Læs instruktionerne omhyggeligt, før du bruger enheden og gem dem til senere brug.	EE	KASUTUSJUHEND TÄHTIS INFORMATSIOON: Lugege kasutusjuhend enne seadme kasutamist kindlasti põhjalikult läbi ning veenduge, et olete kõiged tipid aru saanud.
ES	MANUAL DE INSTRUCCIONES INFORMACIÓN IMPORTANTE: Lea atentamente las instrucciones y asegúrese de entenderlas antes de utilizar este aparato. Conserve las instrucciones para la referencia en el futuro.	LV	ROKASĀRAMATA SVARĪGA INFORMĀCIJA: Pirms ierīces izmantošanas uzmanīgi izlasiet rokasgrāmatu un pārliecinieties, ka jūs labi saprotat tās saturu. Saglabājiet rokasgrāmatu, lai nākotnē būtu iespējama atkārtota tās izpaušana.
PT	MANUAL DO OPERADOR INFORMAÇÕES IMPORTANTES: Queria ler cuidadosamente estas instruções e tenha certeza de entendê-las antes de usar a serra e guardá-las para consulta futura.	TR	KULLANNA KÄYLAUVU OHJEKIRJAN TÄHTIS TIETOA: Käytännön ohjeita lue huolellisesti ennen laitteen käyttöä ja varmista, että olet ymmärtänyt ne, ennen kuin alat käyttää tätä laitetta ja säilytä myöhempää tarvetta varten.

Electrolux Outdoor Products
Via Como 72
23868 Valmadrera (Lecco)
ITALIA

Phone + 39 0341 203111 - Fax +39 0341 581671
www.electrolux.com

Our policy of continuous improvement means that the specification of products may be altered from time to time without prior notice. Electrolux Outdoor Products manufacture products for a number of well known brands under various registered patents, designs and trademarks in several countries.
© Electrolux Outdoor Products

The Electrolux Group. The world's No.1 choice.

The Electrolux Group is the world's largest producer of powered appliances for kitchen, cleaning and outdoor use. More than 55 million Electrolux Group products (such as refrigerators, cookers, washing machines, vacuum cleaners, chain saws and lawn mowers) are sold each year to a value of approx. USD 14 billion in more than 150 countries around the world.



PN. 249411 REV. 03 (01/05)



[You're reading an excerpt. Click here to read official MCCULLOCH ELECTRAMAC 330 CH user guide](http://yourpdfguides.com/dref/931254)
<http://yourpdfguides.com/dref/931254>

Manual abstract:

@@@@USD 14 billion in more than 150 countries around the world. PN. 249411 REV. 03 (01/05) A. GENERAL DESCRIPTION 1) 2) 3) 4) 5) 6) 7) 8) 9) 10) 11) 12) 13) 14) 15) 16) Rear handle Rear hand guard Front handle Front hand guard/chain brake lever Chain tensioner knob/screw Chain tensioner pin Oil tank cap Oil tank inspection gauge Air vents Cable Manual Switch Switch block Chain Drive tooth Cutting link 17) 18) 19) 20) 21) 22) 23) 24) 25) 26) 27) 28) 29) 30) 31) Cutting depth gauge Cutting tooth Bar Chain cover Pinion Chain catcher Bar retaining screws Bar retaining knob / nuts Nose sprocket Guide bar cover guard Spiked bumper Chain tensioner pin housing Lubrication hole Guide groove Oil pump adjustment knob LEGEND: 1) 2) 3) 4) 5) 6) 7) 8) 9) 10) 11) 12) 13) 14) 15) Example of identification label 16) Guaranteed noise level according to directive 2000/14/EC Double insulation CE marking of conformity Protection degree Rated frequency Rated power Alternate current Rated voltage Type Prefix Product code Year of manufacture (last two figures; e.g. 04=2004) Maximum bar length Manufacturer's name and address Serial number Model ENGLISH 1 B. SAFETY PRECAUTIONS MEANING OF SYMBOLS Do not dispose inappropriately of the machine. Deliver it to an authorized organization. Always grip the machine with two hands Kickback danger Do not expose to rain or moisture.

Chain oil Warning! Read the instruction manual carefully Protective boots Protective goggles or visor, protective helmet and hearing protection Protective cutproof gloves Protective long, cut-proof trousers Chain brake: deactivated, activated Disconnect the plug if the cable is damaged Correct direction of the cutting teeth. Refrain from Turn the machine off Manual use. All persons using this machine must read the user manual completely with extreme care, (and where possible must also be present during a practical demonstration on correct machine use) in order to be familiar with all user operations in complete safety, as well as all the cutting techniques possible with this machine. For this reason, the user manual must be included with the machine in the case of sale or loan to another person. Please ENGLISH - 2 remember that ALL parts of the user manual are important, as they are included to help prevent injury to the user and damage to the machine.

Following correct manual procedure does not necessarily prevent all danger risk, but certainly reduces the probability or effects of injury or damage. Manual layout: Section B is divided into various parts that are referred to in the rest of the manual and marked with the "Warning" sign, followed by the reference number of the corresponding component to draw the reader's attention to the main safety procedure linked with that particular situation; the machine parts shown in "A GENERAL DESCRIPTION" are indicated in italics in the text for easy identification. Precautions prior to machine use. Never permit this machine to be used by any persons who are not perfectly familiar with the manual instructions, who are not in good physical and mental condition, who are not sufficiently competent and by children (local regulations may sometimes limit the age of operators permitted to use the machine). Inexperienced persons must follow a training period operating on a saw horse only.

The user is responsible for any accidents that may cause injury to other persons and damage to property, as well as any other type of danger risk. The machine must never be used for operations other than those specifically described in this manual, and exclusively with the bars and chains indicated. This machine must never be used when users are tired, or not in good physical condition, or if under the effect of any substance that may alter their physical or mental condition (pharmaceuticals, alcohol, drugs etc.) Make certain that the user knows how to stop the motor and chain in case of necessity. Take great care and pay close attention at all times when using this machine, following all general behaviour rules according to good sense. 1. Control checks. Control the machine with care before use each time, especially if it has been subject to strong impact, or if it shows any signs of malfunction. Check that the machine has been assembled correctly, that all components are in correct condition and perfectly clean. Perform all operations described in the chapter "Maintenance before each use".

Make sure that all spanners and tools used for adjustment operations have been removed, that all screws and nuts are in their correct housing and tightened correctly, and that the bar and the chain are mounted correctly. If even one single condition described above is not satisfactory DO NOT USE the machine. 2. Repairs and Maintenance. All the machine parts that can be replaced personally, are clearly explained in the "Assembly / disassembly" instructions chapter.

In the case of damaged or worn components, always use exclusively original homologated accessories and spare parts that are available from official distributors. Where necessary, all other machine parts must be replaced exclusively by an Authorised Service Centre. All danger risks increase considerably if maintenance operations are not performed regularly, not performed by competent professional personnel, or if non-original accessories /spare parts are mounted on the machine. In any of the cases described above, the manufacturer will not be held responsible for any injury to persons or damage to property.

In the case of any doubt, please contact an Authorised Service Centre.

3. Maintenance in complete safety. All maintenance, assembly, disassembly and oil tank filling operations must be performed with the machine set in a stable position on a flat solid surface and with the cable plug disconnected from the electricity supply (unless this is explicitly specified otherwise). The chain must be arrested and the user must wear suitable protective gloves. 4.

Clothing. When using this machine the user must wear the following homologated individual protective clothing : close-fitting protective clothing, safety boots with non-slip soles, crush-proof toe puffs and cutproof protection; cut-proof vibration-proof gloves, protective goggles or safety visor (remove protective film where present); ear protection muffs; helmet (if there is any danger of falling objects); some efficient method to cover or tie hair back from shoulder length (if hair is longer than shoulders); dust-proof mask. DO NOT WEAR shorts, loose clothing, unbuttoned clothing, or any jewellery that could become caught in moving machine parts. Do not wear sandals and never work bare-footed. 5.

Health precautions Vibrations and Noise levels. Avoid using the machine for long periods of time: the noise and vibrations can be dangerous causing irritation, stress, fatigue and hypacusia (hearing problems). Prolonged machine use exposes the user to vibrations that can generate "white finger phenomenon" (Raynaud's Phenomenon), carpal tunnel syndrome and similar disturbances.



[You're reading an excerpt. Click here to read official MCCULLOCH ELECTRAMAC 330 CH user guide](http://yourpdfguides.com/dref/931254)
<http://yourpdfguides.com/dref/931254>

This can lead to a lack of sensitivity in the hands making it difficult to notice changes in temperature as well as causing numbness. When using the machine regularly or in continuation, the user must control the condition of his hands very carefully. If any of the symptoms described above appear, consult a doctor immediately. ENGLISH 3 6. Health precautions Chemical agents. Avoid all chain oil contact with skin and eyes. 7.

Health precautions - Electricity. All extension cords, plugs, and electricity lines must be homologated, to standard and in compliance with current regulations. Make sure that the main line to which the machine is connected is equipped with a residual current device (RCD) with a current capacity no higher than 30mA. Make sure that all cables, plugs, and the residual current device are in correct working condition, that they comply with required characteristics, are mounted or hooked up correctly and are perfectly clean. Never disconnect the machine from the main line by pulling on the cable. Never use or store the machine and extension cord in damp environments. If the cable is damaged in any way, disconnect immediately from the main line socket, taking great care not to touch any exposed wires. Avoid all contact with grounded surfaces when using the machine (metal piping, cables, lightening conductors, etc). When working outdoors, all extension cords attached to the machine must be homologated for use out of doors. Avoid tying any knots in electric cables and never use rolled up extension cords.

8. **Health precautions - Heat.** During use pinion and chain reach very high temperatures, take care not to touch these parts while hot. 9. **Health precautions Sharp or moving parts.**

Never touch the chain except when the machine is switched off; in any case, always take great care since the chain is very sharp and can cut even when stopped. Remember that the chain will continue to rotate for a short time after the machine has been switched off. 10. **Work area.** Control the whole work area carefully to check for any danger source (e.

g.: roads, paths, electric cables, dangerous trees, etc) Take special care when working on sloping ground. Cluttered areas can lead to injuries: before using the machine remove any stones, glass, cables, metal components, cans, bottles and any other foreign matter from the work area. Also take into consideration any danger risks that may not be noticed because of machine noise. Make sure that a second person is within calling distance in the case of accident. When working in isolated areas, always carry a first aid kit and make sure you have advised others of your exact location. ENGLISH - 4 11. **Work operations** Never start work with the machine before performing the following: remove the guide bar cover guard; make sure that a sufficient amount of oil has reached the chain; make sure you have a planned retreat path from falling trees (when cutting trees). It is strictly forbidden to use the machine for: moving branches or roots; in cases where there is any danger that the chain may come into contact with the ground, electric protection, or piled wood; for cutting very thin branches or bushes (these will break easily and can whip bystanders or the user causing serious injury); for felling trees without adequate training and equipment (correct ropes, hooks, etc); starting sawing operations with the blade already engaged in a previous groove or slit; using the machine while standing on stepladders or other unstable surfaces; using the machine in extreme weather conditions, inclement weather, with reduced visibility and insufficient lighting (very low temperatures, very hot damp climates, fog, rain, wind, at night, etc.); using the machine with arms stretched: work must always be performed in a manner to ensure that the user can react immediately to unexpected conditions; it is forbidden to leave the machine unguarded; permitting others to touch the cable, extension cord, or the machine; forcing the machine during cutting action (this can lead to motor damage or loss of control over the machine); blocking the switch or the switch block with adhesive tape or other materials.

Always remember to: cut wood only (never cut plastic, metal, or other materials); make sure that the switch is NOT turned ON before inserting the plug in the socket or releasing the chain brake lever; make sure that the chain is not in contact with any objects at the moment the switch is turned ON; Keep all bystanders and animals well clear of the work area (where necessary, fence off the area and use warning signs) at a minimum distance of 2.5 m times the trunk height; in any case no less than ten meters. Wherever possible use a vice or a saw horse to block the wood to be cut; always hold the machine as follows: Grip the front handle with the left hand and the rear handle with the right hand, closing the thumb and other fingers firmly around the handle (blocks the chain in a few fractions of a second in the case of kickback. The chain brake is released when the front hand guard is pulled backwards and blocked in position (the chain is able to move). The chain brake is activated when the front hand guard is pushed forward (the chain is blocked). ENGLISH 5 The chain brake can be activated in two modes: the first using the left wrist by pushing forwards, or when it comes into contact with the brake system as a result of kickback; or by inertia, in the case of particularly violent kickback. When the machine is used with the bar in horizontal position, for example during tree felling, the chain brake offers less protection, because it can be activated by inertia only, since the user's hand is outside the range of action of the front hand guard (fig.3). N.B.

: When the chain brake is activated, a safety switch cuts off all current to the motor. **CHAIN CATCHER** This machine is equipped with a chain catcher (fig.4) located under the pinion. This mechanism is designed to arrest the backward chain movement in the case of chain breaking or derailing. These situations can be avoided by ensuring correct chain tension (Refer to chapter "D.

Assembly/disassembly"). **REAR HAND GUARD** This acts to protect (fig.5) the hand in the case of chain breaking or derailing. **D. ASSEMBLY / DISASSEMBLY 2,3,6,7,8,9,12 BAR AND CHAIN ASSEMBLY** Assembly methods change according to the type of your machine- so please take care to refer to the illustrations and machine type marked on the label (A- Legend 9 [ES15 / ES16 / ES18]), Take great care when assembling to ensure this is performed correctly.

FOR ES 15 / ES 16 FOR ES 18 1. Control that the chain brake is not activated. If so, deactivate it. 2a. Unscrew the bar retaining nuts and remove 2b. Unscrew the bar retaining knob and remove the the chain cover. chain cover. 3a. Mount the bar on the bar retaining screws 3b. @@as possible.

4. @@Attention! @@@@5a. Close the bar retaining nuts, screwing by 5b. Screw the bar retaining knob loosely tightened. hand.



[You're reading an excerpt. Click here to read official MCCULLOCH ELECTRAMAC 330 CH user guide](http://yourpdfguides.com/dref/931254)
<http://yourpdfguides.com/dref/931254>

6a. To spread the chain screw the chain 6b. @@(the chain must never droop on the underside of the bar) 8a. Tighten the bar retaining nuts using an 8b. Tighten the bar retaining knob strongly.

appropriate tool. @@@@E. @@@@BAR AND CHAIN LUBRICATION ATTENTION! @@Bar and chain lubrication is performed by an automatic pump. @@@@If chain oil is not available, EP 90 transmission oil can be used. @@@@Contact your Authorised Service Centre for advice on oil choice.

@@MAINTENANCE ATTENTION! @@@@Then check chain brake function as follows: release the chain brake, grip the machine correctly and start up the machine, activate the chain brake by pushing the front hand guard forward with the left wrist or arm but without removing the hand from the handle(fig.2). If the chain brake is working correctly, the chain should be blocked immediately. ENGLISH 7 Check that the chain is sharpened correctly (See below), in good working condition and that the tension is correct. If the chain is irregularly worn, or if the cutting teeth are only 3 mm high, the chain must be replaced(fig.

3). Clean the air vents regularly to prevent motor overheating. Check that the switch and switch block function correctly (to be performed with the chain brake released): press the switch and the switch block and control that they return to idle position as soon as they are released; control that it is impossible to press the switch without activating the switch block. Check that the chain catcher and the right hand guard are in correct condition without any visible faults such as damaged material. Every 2-3 hours of use Control the bar condition, if necessary clean the lubrication holes(fig.4) and the guide grooves(fig.5) carefully; If the groove is worn or shows signs of deep notching, it must be replaced. Turn the bar to ensure even wear(fig.6). Clean the pinion regularly and check that it has not been subject to excess wear(fig.

7). Lubricate the nose sprocket with bearing grease through the hole shown in the illustration (fig.8). Chain sharpening (When necessary) If the chain does not cut correctly, or requires hard bar pressure against the wood, and if the sawdust is very fine, this is a sign that it is not sharpened correctly. If the cutting action produces no sawdust, this means the cutting edge has been worn completely and the chain is pulverising the wood during cutting. A well-sharpened chain crosses through the wood without effort or pressure and produces large long wood shavings. The cutting side of the chain is composed of the cutting link (fig.9) with a cutting tooth(fig.10) and a cutting limit gauge(fig.11).

The difference between these determines the cutting depth; a file guide and a 4mm diameter round file are needed to obtain good sharpening results; Follow the instructions below: Once the chain has been mounted and the tension is correctly adjusted, and the chain brake is activated, position the file guide perpendicular to the bar as shown in the illustration(fig.12), filing the cutting teeth at the angle shown(fig.13), always working from the interior towards the exterior, lessening the pressure during the return stage (it is very important to follow the instructions perfectly: excessive or insufficient sharpening angles, or an incorrect file diameter will increase the risk of kickback.) To obtain higher precision on side angles, it is advisable to position the file so that it exceeds the upper cutter by about 0.5 mm.

File all the teeth on one side first, then turn the machine over and repeat the operation. Make sure that after sharpening operations, all teeth are the same length and that the height of the depth gauge is 0.6 mm lower than the upper cutter: check the height using a proper template and file (with a flat file) all protruding parts, rounding off the front part of the depth gauge(fig.14), paying attention to not file the kickback protection tooth(fig.15) Every 30 hours use.

Take the machine to the Authorised Service Centre for general revision and control check on brake components. PERIODS OF PROLONGED DISUSE Always empty the fuel tank with the same precautions used in filling it. H. CUTTING TECHNIQUES When using the machine, prevent: (fig.1) - cutting in conditions where the trunk could split during cutting (wood under pressure, dry dead trees, etc): sudden splitting can be very dangerous. - the bar or the chain from becoming blocked in the cutting notch: if this should occur, disconnect the machine from the main electricity supply and try to raise the trunk using an appropriate tool as a lever; do not attempt to free the machine by shaking or pulling as this could cause damage or injury. ENGLISH - 8 1,2,3,4,5,6,7,8,9,10,11,12,13,14 - situations that can lead to kickback reactions. During machine use: (fig.1) - When cutting on sloping ground, always work uphill of the trunk to avoid being hit if the trunk should roll downhill. - Release the switch after each cutting action: prolonged dry running of the motor will provoke serious damage.

- When felling trees, always finish the job: a partially cut tree could break and fall. - At the end of each cutting operation the user will notice a considerable change in the strength necessary for controlling the machine. Great care must be taken not to lose control. Below is a description of two different types of cutting operation: Cutting action by pulling the chain (from top to bottom) (fig.2) can lead to dangerous sudden movement of the machine towards the trunk with consequential loss of control. Where possible, use the spiked bumper during cutting operations. Cutting action pushing the chain (from bottom to top) (fig.3) will lead to the danger of a sudden movement of the machine in the direction of the user, with the risk of hitting the user, or an impact of the "kickback danger zone" on the trunk resulting in strong kickback; extreme care must be taken when cutting in this manner. The safest method for using the machine, is to block the log on a sawhorse, cutting from top to bottom, on the portion outside the sawhorse. (fig.

4) Spiked bumper use. Where possible, use the spiked bumper to ensure safer cutting action: plant it in the bark or surface of the trunk in order to maintain more control over the machine. Below are descriptions of typical cutting procedure to be adopted for specific situations. However, these should be assessed each time to calculate whether the method is most suitable or not, in order to use a method with the least possible risk. Trunk on the ground.

(Risk of touching the ground with the chain once the bar has passed through the trunk). (fig.5) Cut from top to bottom through the whole trunk. Towards the end of the cut, proceed very carefully to prevent the chain from hitting the ground. If it is possible, cut 2/3 of the trunk, roll it over, and cut the remaining third from top to bottom to limit the risk of the chain touching the ground.

Trunk supported at one end only (Risk of trunk breaking during cutting action). (fig.6) Begin the cut from underneath for about 1/3 of the diameter, and then finish the cutting action from the top to meet the undercut.



[You're reading an excerpt. Click here to read official MCCULLOCH ELECTRAMAC 330 CH user guide](http://yourpdfguides.com/dref/931254)
<http://yourpdfguides.com/dref/931254>

Trunk supported at both ends. (Risk of pinching the chain). (fig.7) Begin the cut from above for about 1/3 of the diameter, and then continue from underneath to meet the overcut. Tree felling. ATTENTION! : Never attempt to fell a tree if you do not have the necessary experience, and in any case never fell trees that have trunks with a diameter larger than the length of the bar ! This operation is reserved for expert machine users with adequate equipment. When felling a tree, the aim is to have the tree fall in the most convenient position for the following limbing and bucking operations.

(Avoid trees falling on top of other trees: Felling trees that are entangled with other trees is a very dangerous operation). First of all decide which is the best direction for the tree to fall by evaluating the following: objects or other plants around the tree, the inclination, the curve, wind direction, and greatest branch concentration. Take into account dead or broken branches that may break off during felling creating a further danger risk. ATTENTION! During tree felling operations in critical conditions, always remove ear protection immediately after cutting operations to be able to listen for unusual noises and any warning signals. Preliminary cutting operations and identifying the retreat path. Eliminate any branches that interfere with the job (fig.8), starting from top to bottom, and then, always keeping the trunk between the user and the machine eliminate the more difficult branches afterwards, piece by piece. Eliminate all plants that interfere with work operations and control the area for possible obstacles (rocks, roots, ditches, etc.) when planning the retreat path (to follow during tree fall); Refer to the illustration (fig.9) for the directions to be maintained (A. predicted tree fall direction. B. Retreat path. C. Danger zone).

@@@@@@@@The felling cut that provokes the tree fall, is performed at 3 to 5 cm above the lower part of the directional felling cut line, finishing at a distance of 1/10 of the trunk from the notch. Remain on the left hand side of the tree and cut using the chain pulling method and the spiked bumper. Check that the tree does not move in a direction other than that predicted for the fall. As soon as possible insert a felling lever or wedge into the cut. The uncut part of the trunk is called the "hinge", as it is intended to guide the tree as it falls; in cases where the cuts are not sufficient, not straight, or have been cut through completely, the tree fall cannot be controlled (extremely dangerous!).

For this reason the various cuts must be performed with great precision. When cutting operations are completed the tree will begin to fall. Where necessary help tree fall using wedges or felling levers . Limbing Once the tree has been felled, the trunk must be limbed: in other words, the branches are removed from the trunk. Do not underestimate this operation because the large majority of kickback accidents occur during this stage. For this reason pay close attention to the position of the bar nose during cutting operations and always work on the left hand side of the trunk. I. ENVIRONMENTAL INFORMATION This section contains information useful for maintaining the characteristic of ecocompatibility included in the origin design of the machine, and as regards proper use and disposal of chain oil DESIGN In the design stage, care was taken to develop an engine with reduced consumption and low emission of noise. USE OF THE MACHINE The operations of filling the oil tank should be carried out in such a way as to avoid spilling oil and contaminating the soil and the environment. DISPOSAL Do not dispose inappropriately of the machine when it is no longer usable.

Deliver it to an authorized organization for proper disposal in compliance with the regulation in force. on the product or on its packaging indicates that this product may not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local council office, your household waste disposal service or the shop where you purchased the product. ENGLISH - 10 M.

TROUBLESHOOTING TABLE Motor does not start Make sure the main line is powered Make sure the machine is properly plugged in Make sure your cable/ext. cord is not damaged Make sure that chain brake is not activated Check that chain is properly assembled Check chain lubrication as in chapters F and G Make sure that the chain is sharp Contact your authorised centre Motor turns with difficulty or loses power The machine starts but does not cut properly Motor turns improperly or at reduced speeds Braking devices do not stop the chain properly ENGLISH 11 N. DECLARATION OF CONFORMITY The undersigned, authorized by E.O.

P.I., declares that the following products model: type ES15, ES 15/1, ES 15/2, ES16, ES 16/1, ES18 starting from 2004 onwards, manufactured by E.O.P. I., Valmadrera, Italy, comply with European Directive: 98/37/EEC (Machine Directive), 93/68/EEC (EEC Marking Directive) & 89/336/CEE (Electromagnetic Compatibility Devices), directive 2000/14/EEC (Enclosure V). Valmadrera, 19/05/2004 Pino Todero (Technical Manager) Electrolux Outdoor Products Italy S.p.A.

Via Como 72, 23868 Valmadrera (Lecco) ITALIA O. Technical Data Type: Dry weight (Kg) Oil tank volume (cm³) Bar length (cm/inches) Chain Chain pitch (inches) Vibration Front handle (m/s²) (ISO 7505) Rear handle (m/s²) (ISO 7505) Measured sound power level LWav dB(A) (ISO 9207) Guaranteed sound power level Lwav dB(A) (ISO 9207) Sound pressure level at operator's ear dB(A) (EN 27182) Minimum wire cross-section (wires num./mm²) Maximum cable length (m) ES 15 ES 15/1 ES 15/2 3,5 200 ES 16 ES 16/1 ES 18 3,5 150 3/8 1,96 7,30 103 104 94 2x1 30 3,5 200 30/12" 35/14" 40/16" MPG370GLX 91VJ 3/8 3/8 3,5 7,9 111,14 113 98 2x1 30 3,5 7,9 111,14 113 98 2x1 30 ENGLISH - 12 .



[You're reading an excerpt. Click here to read official MCCULLOCH ELECTRAMAC 330 CH user guide](http://yourpdfguides.com/dref/931254)
<http://yourpdfguides.com/dref/931254>