

RYOBI®

ORIGINAL INSTRUCTIONS

Cordless Chainsaw

RCS1830Li25
RCS1830Li15
OCS1825



Important!

It is essential that you read the instructions in this manual before assembling, operating, and maintaining the product.

Subject to technical modification.

Safety, performance, and dependability have been given top priority in the design of your cordless chainsaw.

INTENDED USE

The product is only intended for use outdoors in a well-ventilated area. For safety reasons the product must be adequately controlled by using two-handed operation at all times.

The product is designed for cutting branches, trunks, logs, and beams of a diameter determined by the cutting length of the guide bar. It is only designed to cut wood. It is only to be used in domestic application by adults who have received adequate training on the hazards and preventative measures/actions to be taken while using it.

Do not use the product for any purpose not listed above. It is not to be used for professional tree services. The product is not to be used by children or by persons not wearing adequate personal protective equipment and clothing.

⚠ WARNING

When using the product, the safety rules must be followed. For your own safety and that of bystanders, you must read and fully understand these instructions before operating the product. You should attend a professionally organised course on the use and maintenance of chainsaws, preventative actions and first aid. Please keep these instructions safe for later use.

⚠ WARNING

Chainsaws are potentially dangerous tools. Accidents involving the use of chainsaws often result in loss of limbs or death. It is not just the product that is the hazard. Falling branches, toppling trees, rolling logs can all kill. Diseased or rotting timber poses additional hazards. You should assess your capability of completing the task safely. If there is any doubt, leave it to a professional tree surgeon.

GENERAL SAFETY WARNINGS

⚠ WARNING

Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

WORK AREA SAFETY

- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.

- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.

- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

POWER TOOL USE AND CARE

- Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

BATTERY TOOL USE AND CARE

- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

SERVICE

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

ADDITIONAL GENERAL SAFETY WARNINGS

- Some regions have regulations that restrict the use of the product. Check with your local authority for advice.
- Never allow children or people unfamiliar with the instructions to use the product. Local regulations may restrict the age of the operator.
- Ensure before each use that all controls and safety devices function correctly. Do not use the power tool if the "off" switch does not stop the motor.
- Wear full eye and hearing protection, strong sturdy gloves as well as head protection while operating the product; use a face mask if operation is dusty.
- Do not wear loose fitting clothing, short trousers or jewellery of any kind.
- Secure long hair so it is above shoulder level to prevent entanglement in moving parts.
- Beware of thrown, flying or falling objects; keep all bystanders, children, and animals at least 15 m away from work area.
- Do not operate in poor lighting. The operator requires a clear view of the work area to identify potential hazards.
- Use of hearing protection reduces the ability to hear warnings (shouts or alarms). The operator must pay extra attention to what is going on in the working area.
- Operating similar tools nearby increases both the risk of hearing injury and the potential for other persons to enter your working area.
- Keep firm footing and balance. Do not overreach. Overreaching can result in loss of balance and can increase the risk of kickback.
- Keep all parts of your body away from any moving part.
- Inspect the machine before each use. Check for correct operation of all controls including the chain brake. Check for loose fasteners, make sure all guards, and handles are properly and securely attached. Replace any damaged parts before use.
- Do not modify the machine in any way or use parts and accessories which are not recommended by the manufacturer.

WARNING

If the machine is dropped, suffers heavy impact or begins to vibrate abnormally, immediately stop the machine and inspect for damage or identify the cause of the vibration. Any damage should be properly repaired or replaced by an authorized service centre.

CHAINSAW SAFETY WARNINGS

- Keep all parts of the body away from the saw chain when the chainsaw is operating. Before you start the chainsaw, make sure the saw chain is not

contacting anything. A moment of inattention while operating chainsaws may cause entanglement of your clothing or body with the saw chain.

- **Always hold the chainsaw with your right hand on the rear handle and your left hand on the front handle.** Holding the chainsaw with a reversed hand configuration increases the risk of personal injury and should never be done.
- **Hold the product by insulated gripping surfaces only, because the saw chain may contact hidden wiring.** Saw chains contacting a "live" wire may make exposed metal parts of the product "live" and could give the operator an electric shock.
- **Wear safety glasses and hearing protection. Further protective equipment for head, hands, legs and feet is recommended.** Adequate protective clothing will reduce personal injury by flying debris or accidental contact with the saw chain.
- **Do not operate a chainsaw in a tree.** Operation of a chainsaw while up in a tree may result in personal injury.
- **Always keep proper footing and operate the chainsaw only when standing on fixed, secure and level surface.** Slippery or unstable surfaces such as ladders may cause a loss of balance or control of the chainsaw.
- **When cutting a limb that is under tension be alert for spring back.** When the tension in the wood fibres is released the spring loaded limb may strike the operator and/or throw the chainsaw out of control.
- **Use extreme caution when cutting brush and saplings.** The slender material may catch the saw chain and be whipped toward you or pull you off balance.
- **Carry the chainsaw by the front handle with the chainsaw switched off and away from your body. When transporting or storing the chainsaw always fit the guide bar cover.** Proper handling of the chainsaw will reduce the likelihood of accidental contact with the moving saw chain.
- **Follow instructions for lubricating, chain tensioning and changing accessories.** Improperly tensioned or lubricated chain may either break or increase the chance for kickback.
- **Keep handles dry, clean, and free from oil and grease.** Greasy, oily handles are slippery causing loss of control.
- **Cut wood only. Do not use chainsaw for purposes not intended. For example: do not use chainsaw for cutting plastic, masonry or non-wood building materials.** Use of the chainsaw for operations different than intended could result in a hazardous situation.

Personal protective equipment

Good quality, personal protective equipment as used by professionals will help to reduce the risk of injury to the operator. The following items should be used when operating the product:

- Safety helmet
- Hearing protection

- Eye and face protection
- Gloves
- Leg protection (chaps)
- Chainsaw safety boots
- Chainsaw jackets for upper body protection

CAUSES AND OPERATOR PREVENTION OF KICKBACK

See Fig. 1 - 2.

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 sudden 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. As a chainsaw user, you should take several steps to keep your cutting jobs free from accident or injury.

Kickback is the result of tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:

- **Maintain a firm grip, with thumbs and fingers encircling the chainsaw handles, with both hands on the saw and position your body and arm to allow you to resist kickback forces.** Kickback forces can be controlled by the operator, if proper precautions are taken. Do not let go of the chainsaw.
- **Do not overreach and do not cut above shoulder height.** This helps prevent unintended tip contact and enables better control of the chainsaw in unexpected situations.
- **Only use replacement bars and chains specified by the manufacturer.** Incorrect replacement bars and chains may cause chain breakage and/or kickback.
- **Follow the manufacturer's sharpening and maintenance instructions for the saw chain.** Decreasing the depth gauge height can lead to increased kickback.

ADDITIONAL CHAINSAW SAFETY WARNINGS

- It is recommended to cut logs on a saw-horse or cradle when operating the product the first time.
- Ensure all guards, handles and spiked bumper are properly fitted and are in good condition.
- Persons using this chainsaw should be in good health. The chainsaw is a heavy unit so the operator requires to be physically fit. The operator should be alert, have good vision, mobility, balance and manual dexterity. If there is any doubt, do not operate the chainsaw.
- Do not start using the product until you have a clear work area, secure footing, and a planned retreat path away from the falling tree.
- Beware of the emission of lubricant mist and saw dust. Wear a mask or respirator if required.
- Do not cut vines and/or small undergrowth (less than 75 mm in diameter).

- Always hold the chainsaw with both hands when operating the saw. Use a firm grip with thumbs and fingers encircling the chainsaw handles. Right hand must be on the rear handle and left hand on the front handle.
- Before starting the tool, make sure the saw chain is not contacting any object.
- Do not modify your tool in any way or use it to power any attachments or devices not recommended by the manufacturer for your saw.
- There should be a first-aid kit containing large wound dressings and a means to summon attention (e.g., whistle) close to the operator. A larger more comprehensive kit should be reasonably nearby.
- The operator may be tempted to remove the helmet if there is no danger of falling objects in the work area, but remember the helmet, particularly with the mesh visor, can help reduce the potential for injury to the face and head if kickback occurs.
- An incorrectly tensioned chain can jump off the guide bar and could result in serious injury or fatality. The length of chain depends on the temperature of the chain and chain wear. Check the tension frequently.
- You should get used to your new chainsaw by making simple cuts on securely supported wood. Do this whenever you have not operated the saw for some time.
- To reduce the risk of injury associated with contacting moving parts, always stop the motor, apply chain brake, remove the battery pack and make sure all moving parts have come to a stop before:
 - cleaning or clearing a blockage
 - leaving the product unattended
 - installing or removing attachments
 - checking, maintenance or working on the machine
- The size of the work area depends on the job being performed as well as the size of the tree or work piece involved. For example, felling a tree requires a larger work area than making other cuts, i.e., bucking cuts, etc. The operator needs to be aware and in control of everything happening in this work area.
- Do not cut with your body in line with the guide bar and chain. If you do experience kickback this will help prevent the chain coming into contact with your head or body.
- Do not use a back and forward sawing motion, let the chain do the work, keep the chain sharp and don't try to push the chain through the cut.
- Do not put pressure on the saw at the end of the cut. Be ready to take on the weight of the saw as it cuts free from the wood. Failure to do so could result in possible serious personal injury.
- Do not stop the saw in the middle of a cutting operation. Keep the saw running until it is already removed from the cut.

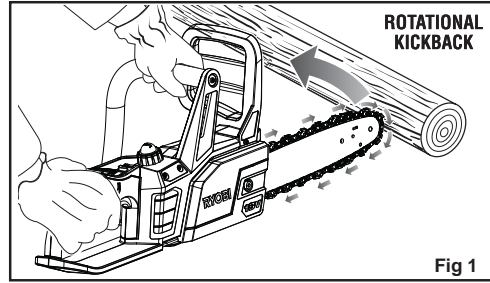


Fig 1

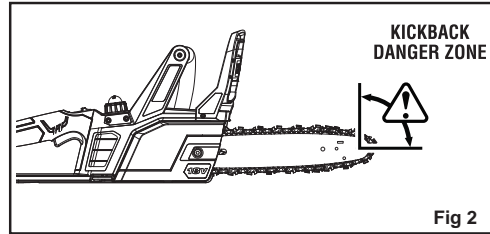


Fig 2

PUSH AND PULL

See Fig. 3.

The reaction force is always opposite to the direction the chain is moving. Thus, the operator must be ready to control the tendency for the product to pull away (forward motion) when cutting on the bottom edge of the bar and the push backwards (towards the operator) when cutting along the top edge.

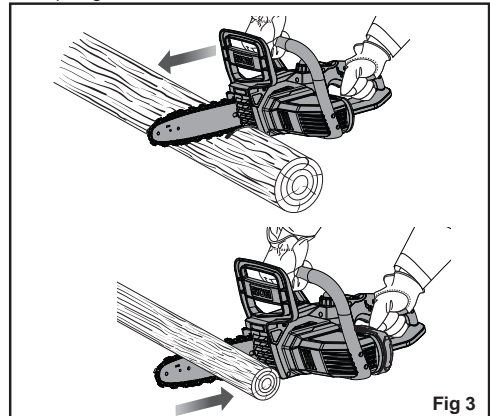


Fig 3

SAW JAMMED IN THE CUT

Stop the chainsaw and make it safe. Do not try to force the chain and bar out of the cut as this is likely to break the chain which may swing back and strike the operator. This situation normally occurs because the wood is incorrectly supported and forcing the cut to close under compression thereby pinching the blade. If adjusting the support does not release the bar and chain, use wooden wedges or a lever to open the cut and release the saw. Never try to start the chainsaw when the guide bar is already in a cut or kerf.

RESIDUAL RISKS

Even when the product is used as prescribed, it is still impossible to completely eliminate certain residual risk factors. The following hazards may arise in use and the operator should pay special attention to avoid the following:

- Injury caused by vibration. Always use the right tool for the job, use designated handles and restrict working time and exposure.
- Exposure to noise can cause hearing injury. Wear ear protection and limit exposure
- Contact with exposed saw teeth of the chain (cutting hazards).
- Unforeseen, abrupt movement or kickback of the guide bar (cutting hazards).
- Parts ejected from the saw chain (cutting/injection hazards).
- Thrown out pieces of the work piece (wood chips, splinters)
- Inhalation of saw dust and particles.
- Skin contact with lubricant/oil.

RISK REDUCTION

It has been reported that vibrations from hand-held tools may contribute to a condition called Raynaud's Syndrome in certain individuals. Symptoms may include tingling, numbness and blanching of the fingers, usually apparent upon exposure to cold. Hereditary factors, exposure to cold and dampness, diet, smoking and work practices are all thought to contribute to the development of these symptoms. There are measures that can be taken by the operator to possibly reduce the effects of vibration:

- Keep your body warm in cold weather. When operating the unit wear gloves to keep the hands and wrists warm. It is reported that cold weather is a major factor contributing to Raynaud's Syndrome.
- After each period of operation, exercise to increase blood circulation.
- Take frequent work breaks. Limit the amount of exposure per day.
- Protective gloves available from professional chainsaw retailers are designed specifically for chainsaw use which give protection, good grip and also reduce the effect of handle vibration.

If you experience any of the symptoms of this condition, immediately discontinue use and see your doctor about these symptoms.

WARNING

Injuries may be caused, or aggravated, by prolonged use of a tool. When using any tool for prolonged periods, ensure you take regular breaks.

SAFETY DEVICES

LOW KICKBACK SAW CHAIN

A low-kickback saw chain helps to reduce the possibility of a kickback event.

The rakers (depth gauges) ahead of each cutter can minimise the force of a kickback reaction by preventing the cutters from digging in too deeply. Only use replacement guide bar and chain combinations recommended by the manufacturer.

As saw chains are sharpened, they lose some the low kickback qualities and extra caution is required. For your safety, replace saw chains when cutting performance decreases.

GUIDE BARS

Generally, guide bars with small radius tips have somewhat lower potential for kickback. Only use replacement guide bar and chain combinations recommended by the manufacturer. The use of unrecommended guide bars increase the risk of loss of control during sawing.

KNOW YOUR PRODUCT

See Fig. 4.

The safe use of the product requires an understanding of the information on the product and in this operator's manual, as well as a knowledge of the project you are attempting to do. Before using the product, familiarise yourself with all operating features and safety rules

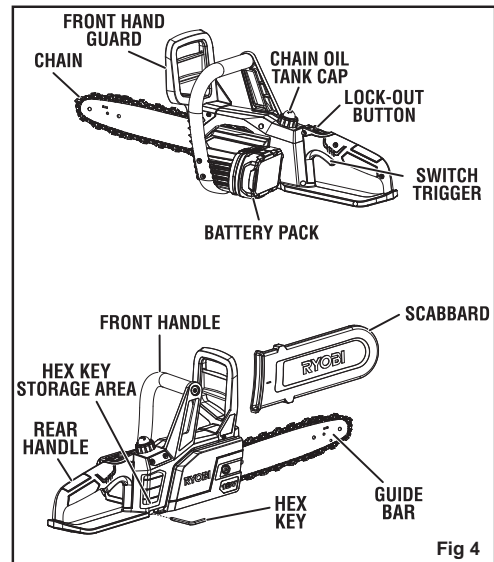


Fig 4

ASSEMBLY

UNPACKING

The product has been shipped completely assembled.

- Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.

⚠ WARNING

Do not use the product if it is not completely assembled or if any parts appear to be missing or damaged. Use of a product that is not properly and completely assembled could result in serious personal injury.

- Inspect the product carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.

PACKING LIST

- Chainsaw with Scabbard
- Hex Key
- Operator's Manual
- Charger (RCS1830Li25 and RCS1830Li15)
- Battery pack (RCS1830Li25 and RCS1830Li15)

⚠ WARNING

If any parts are damaged or missing do not operate the product until the parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury.

⚠ WARNING

Do not attempt to modify the product or create accessories not recommended for use. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

⚠ WARNING

To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the product when assembling parts.

OPERATION

⚠ DANGER

Never cut near power lines, electric cords, or other electric sources. If bar and chain jams on any electrical cord or line, do not touch the bar or chain! they become electrically live and very dangerous. Continue to hold the chainsaw by the insulated rear handle or lay it down and away from you in a safe manner. Disconnect the electrical service to the damaged line or cord before attempting to free the bar and chain from the line or cord. Contact with the bar, chain, other conductive parts of the chainsaw, or live electric cords or lines will result in death by electrocution, electric shock, or serious personal injury.

⚠ WARNING

Do not allow familiarity with this product to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury

⚠ WARNING

Always wear eye protection with side shields, along with hearing and head protection. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

⚠ WARNING

Do not use any attachments or accessories not recommended by the manufacturer of this product. The use of attachments or accessories not recommended can result in serious personal injury.

⚠ WARNING

Never fell a tree or cut a log or limb that has a diameter greater than the length of the guide bar. Only properly trained professionals should perform these cuts. Performing these types of cuts can cause an accident and result in death or serious personal injury.

CAUTION

Before each use, inspect the entire product for damaged, missing, or loose parts such as screws, nuts, bolts, and caps. Tighten securely all fasteners and caps and do not operate the product until all missing or damaged parts are replaced. Please contact customer service or an authorised service centre for assistance.

This product will accept Ryobi One+ 18 V lithium-ion battery packs and Ryobi One+ 18 V nickel-cadmium battery packs. For complete charging instructions, refer to the Operator's Manual for your Ryobi One+ battery pack and charger models.

⚠ WARNING

Always remove battery pack from the product when you are assembling parts, making adjustments, cleaning, carrying, transporting or when not in use. Removing battery pack will prevent accidental starting that could cause serious personal injury.

NOTE: To avoid serious personal injury, always remove the battery pack and keep hands clear of the lock-out button when carrying or transporting the product.

INSTALLING THE BATTERY PACK

See Fig.5.

- Place the battery pack in your chainsaw. Align raised rib on battery pack with groove in chainsaw's battery port.

- Make sure the latches on each side of the battery pack snap in place and that battery pack is secured in the chainsaw before beginning the operation.

REMOVING THE BATTERY PACK

See Fig.5.

Locate latches on side of battery pack and depress both sides to release the battery pack from the chainsaw.

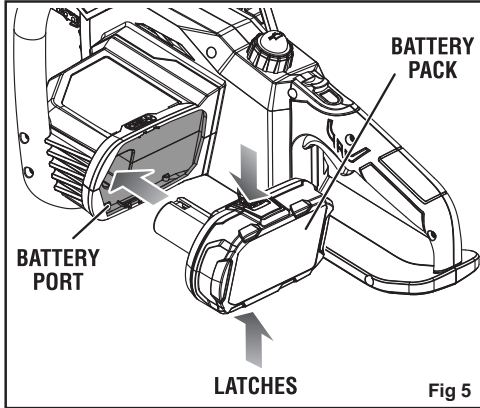


Fig 5

CAUTION

When placing battery pack in your chainsaw, be sure the raised rib on the battery pack aligns with groove in the product's battery port and latches snap in place properly. Improper assembly of battery pack can cause damage to internal components.

CAUTION

Remove battery pack from unit. Fill oil tank with Ryobi Bar and Chain Lubricant before starting the chainsaw. Failure to lubricate the chain will cause damage to the bar and chain.

CHAIN LUBRICATION SYSTEM

See Fig.6.

- Use Ryobi Bar and Chain Lubricant. It is formulated to perform over a wide temperature range with no dilution required.

NOTE: Do not use dirty, used or otherwise contaminated lubricants. Damage may occur to the bar or chain.

- Carefully pour the bar and chain lubricant into the tank.
- Check and fill the oil tank when battery is recharged, or as needed.
- Depress the oil tank cap once to pump the lubricant to the chain before starting the saw. This allows the oil to continually flow for 1.5-2 minutes.
- To keep the chain lubricated while cutting, depress the oil tank cap once every few minutes.

NOTE: It is normal for lubricant to seep from the saw when not in use. To prevent seepage, empty the oil tank after each use. When storing the unit for a long period of

time (three months or longer) be sure the chain is lightly lubricated; this will prevent rust on the chain and bar sprocket.

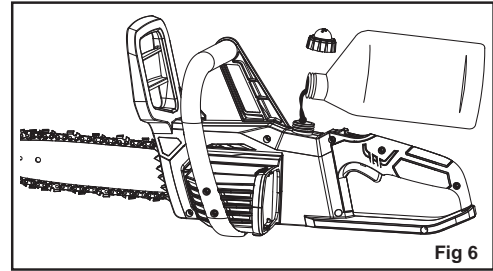


Fig 6

STARTING THE CHAINSAW

See Fig.7.

WARNING

Keep body to the left of the chain line. Never straddle the saw or chain, or lean over past the chain line.

- Place the chainsaw on a flat bare surface and make sure no objects or obstructions are in the immediate vicinity which could come in contact with the bar and chain.
- Press and hold the lock-out button. This makes the switch trigger operational.
- Press and hold the switch trigger, release the lock-out button and continue to squeeze the switch trigger for continued operation.

STOPPING THE CHAINSAW

See Fig.7.

- Release the switch trigger to stop the chainsaw.
- Upon release of the switch trigger, the lock-out button will be automatically reset to the lock position.

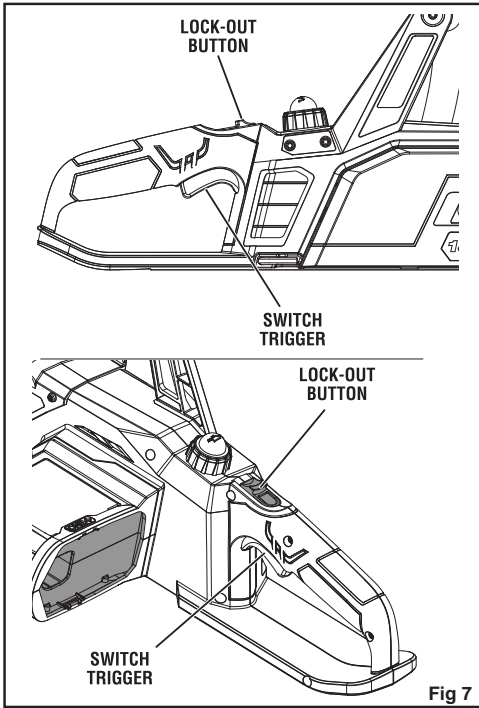


Fig 7

PREPARATION FOR CUTTING

PROPER GRIP ON HANDLES

See Fig. 8-10.

Refer to Important Safety Instructions in this manual for appropriate safety equipment.

- Wear non-slip gloves for maximum grip and protection.
- Hold the saw firmly with both hands. Always keep your left hand on the front handle and your right hand on the rear handle so that your body is to the left of the chain line.

⚠ WARNING

Never use a left-handed (cross-handed) grip, or any stance which would place your body or arm across the chain line.

- Maintain a proper grip on the saw whenever the unit is running. The fingers should encircle the handle and the thumb should wrap under the handlebar. This grip is least likely to be broken (by a kickback or other sudden reaction of the saw). Any grip in which the thumb and fingers are on the same side of the handle, is dangerous because a slight kick of the saw can cause loss of control.

⚠ WARNING

Do not operate the switch trigger with your left hand and hold the front handle with your right hand. Never allow any part of your body to be in the chain line while operating a saw. Improper operation of the chainsaw could result in serious personal injury.

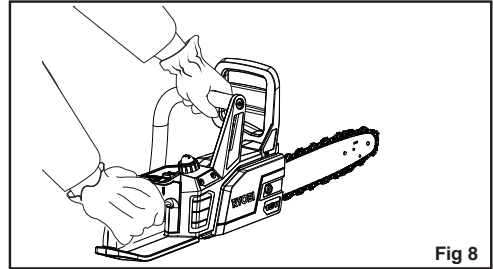


Fig 8



Fig 9



Fig 10

PROPER CUTTING STANCE

See Fig. 11.

⚠ WARNING

Always use the proper cutting stance described in this section. Never kneel when using the chainsaw except when felling a tree as shown in figure 15. Kneeling could result in loss of stability and control of the saw resulting in serious personal injury.

- Weight should be balanced with both feet on solid ground.
- Keep left arm with elbow locked in a "straight arm" position to withstand any kickback force.
- Your body should always be to the left of the chain line.
- Thumb should be on underside of handlebar.

BASIC CUTTING PROCEDURE

Practice cutting a few small logs using the following technique to get the "feel" of using the saw before you begin a major sawing operation.

- Support log on a saw horse or cradle.
- Take the proper stance in front of the wood with the saw off.
- Squeeze the switch trigger and let the chain accelerate to full speed before entering the cut.
- Begin cutting with the saw against the log.
- Keep the unit running the entire time you are cutting, maintain a steady speed.
- Allow the chain to cut for you; exert only light downward pressure. If you force the cut, damage to the bar, chain, or unit can result.
- Release the switch trigger as soon as the cut is completed, allowing the chain to stop. If you run the saw without a cutting load, unnecessary wear can occur to the chain, bar, and unit.
- Do not put pressure on the saw at the end of cut.

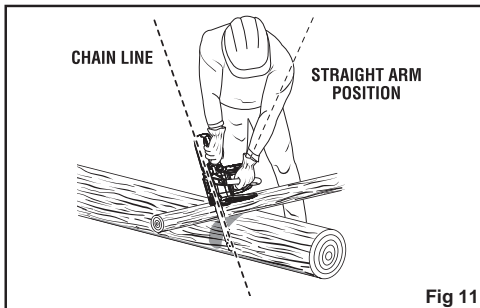


Fig 11

WORK AREA PRECAUTIONS

- Cut only wood or materials made from wood, no sheet metal, no plastics, no masonry, no non-wood building materials.
- Never allow children to operate the saw. Do not allow any person who has not read this Operator's Manual or received adequate instructions on the safe and proper

use of the product to operate the product.

- Keep everyone - helpers, bystanders, children, and animals - a safe distance from the cutting area. During felling operations, the safe distance should be at least twice the height of the largest trees in the felling area. During bucking operations, keep a minimum distance of 15 m between workers.
- Always cut with both feet on solid ground to prevent being pulled off balance.
- Do not cut above chest height, as a saw held higher is difficult to control against kickback forces.
- Do not fell trees near electrical wires or buildings. Leave this operation for professionals.
- Cut only when visibility and light are adequate for you to see clearly.

FELLING TREES

See Fig. 12-15.

⚠ WARNING

Do not fell trees during periods of high wind or heavy precipitation. Wait until the hazardous weather has ended.

⚠ WARNING

Closely check for broken or dead branches that could fall while cutting and do not cut near buildings or electrical wires if you do not know the direction of tree fall. Do not cut at night or during bad weather conditions, such as rain, snow, or strong winds, which can reduce visibility and control of the chainsaw. If the tree you are felling makes contact with any utility line, you should discontinue use of the chainsaw and immediately notify the utility company. Failure to follow these instructions could result in death or serious personal injury.

When felling a tree, it is important that you follow these warnings and instructions to prevent possible serious injury.

- Do not cut down trees having an extreme lean or large trees with rotten limbs, loose bark, or hollow trunks. Have these trees pushed or dragged down with heavy equipment, then cut them up.
- Do not cut trees near electrical wires or buildings.
- Check the tree for damaged or dead branches that could fall and hit you during felling.
- Periodically glance at the top of the tree during the backcut to assure the tree is going to fall in the desired direction.
- If the tree starts to fall in the wrong direction, or if the saw gets caught or hung up during the fall, leave the saw and save yourself!
- Felling a tree - When bucking and felling operations are being performed by two or more persons, at the same time, the felling operation should be separated from the bucking operation by a distance of at least twice the height of the tree being felled. Trees should not be felled in a manner that would endanger any person,

strike any utility line or cause any property damage. If the tree does make contact with any utility line, the utility company should be notified immediately.

- Before any cuts are started, an escape path should be planned and cleared as necessary before cuts are started. The escape path should extend back and diagonally to the rear of the expected line of fall. See Fig. 12.

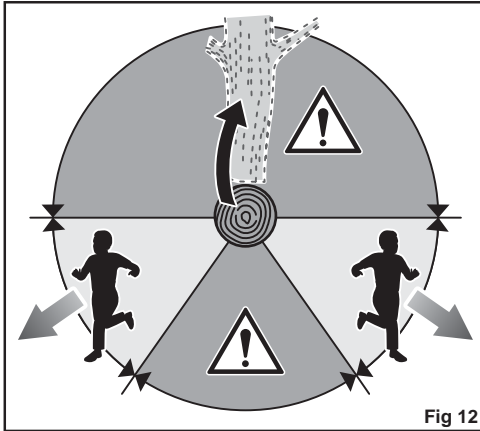


Fig 12

- Before felling is started, consider the force and direction of the wind, the lean and balance of the tree, and the location of large limbs. These things influence the direction in which the tree will fall. Do not try to fell a tree along a line different from its natural line of fall.
- The chainsaw operator should keep on the uphill side of the terrain as the tree is likely to roll or slide downhill after it is felled.
- Remove dirt, stones, loose bark, nails, staples, and wire from the tree where felling cuts are to be made.
- **Notched Undercut.** Cut a notch about 1/3 the diameter of the tree, perpendicular to the direction of fall. Make the cuts of the notch so they intersect at a right angle to the line of fall. This notch should be cleaned out to leave a straight line. To keep the weight of the wood off the saw, always make the lower cut of the notch before the upper cut. See Fig. 13.
- **Felling Backcut.** The backcut is always made level and horizontal, and at a minimum of 50 mm (2 in) above the horizontal cut of the notch. See Fig. 13-14.
- Never cut through to the notch. Always leave a band of wood between the notch and backcut (approximately 50 mm (2 in), or 1/10 the diameter of the tree). This is called "hinge" or "hingewood." It controls the fall of the tree and prevents slipping or twisting or shoot-back of the tree off the stump. See Fig. 13-14.
- On large diameter trees, stop the back cut before it is deep enough for the tree to either fall or settle back on the stump. Then insert soft wooden or plastic wedges into the cut so they do not touch the chain. The wedges can be driven in, little by little, to help jack the tree over. See Fig. 15.
- As tree starts to fall, stop the chainsaw and put it down

immediately. Retreat along the cleared path, but watch the action in case something falls your way. Be alert for overhead limbs or branches that may fall and watch your footing.

⚠ WARNING

Never cut through to the notch when making a backcut. The hinge controls the fall of the tree, this is the section of wood between the notch and backcut.

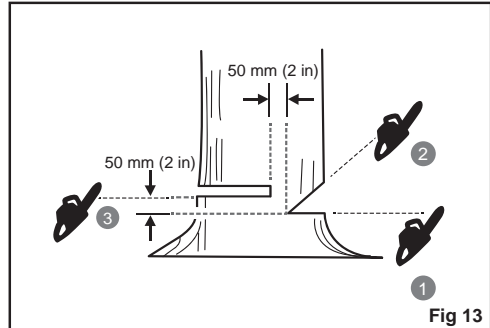


Fig 13

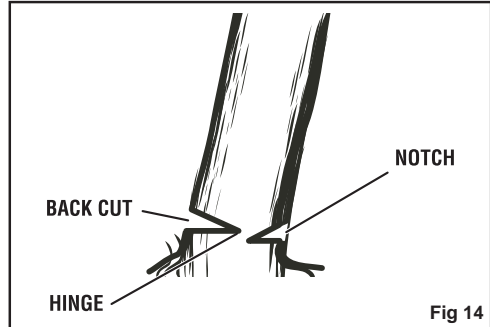


Fig 14

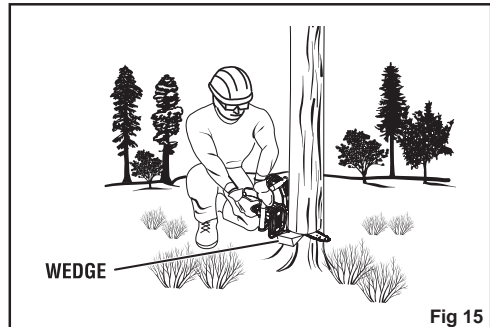


Fig 15

REMOVING BUTTRESS ROOTS

See Fig. 16.

A buttress root is a large root extending from the trunk of the tree above the ground. Remove large buttress roots prior to felling. Make the horizontal cut into the buttress

first, followed by the vertical cut. Remove the resulting loose section from the work area. Follow the correct tree felling procedure as staged in **Felling Trees** after you have removed the large buttress roots.

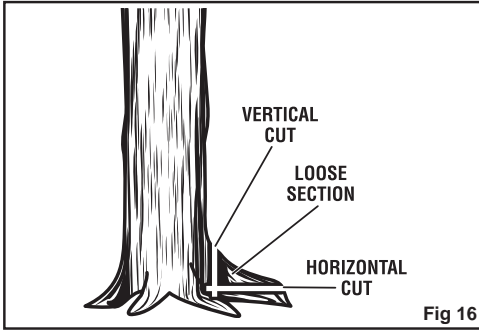


Fig 16

BUCKING

See Fig.17-20.

Bucking is the term used for cutting a fallen tree to the desired log length.

- Always make sure your footing is secure and your weight is distributed evenly on both feet.
- Cut only one log at a time.
- Support small logs on a saw horse or another log while bucking.
- Keep a clear cutting area. Make sure that no objects can contact the guide bar nose and chain during cutting, this can cause kickback. Refer to **Kickback** section in this manual.
- When bucking on a slope, always stand on the uphill side of the log. To maintain complete control of the chainsaw when cutting through the log, release the cutting pressure near the end of the cut without relaxing your grip on the chainsaw handles. Do not let the chain contact the ground. After completing the cut, wait for the saw chain to stop before you move the chainsaw. Always stop the motor before moving from tree to tree.

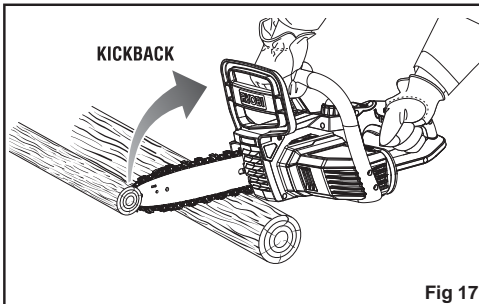


Fig 17

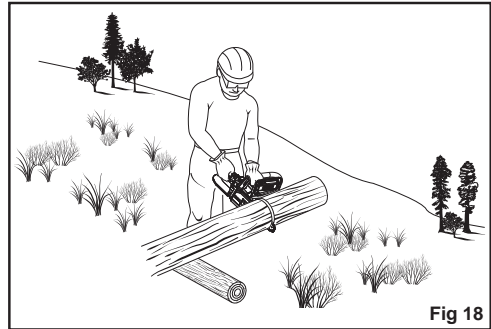


Fig 18

BUCKING LOGS UNDER STRESS

See Fig.19-20.

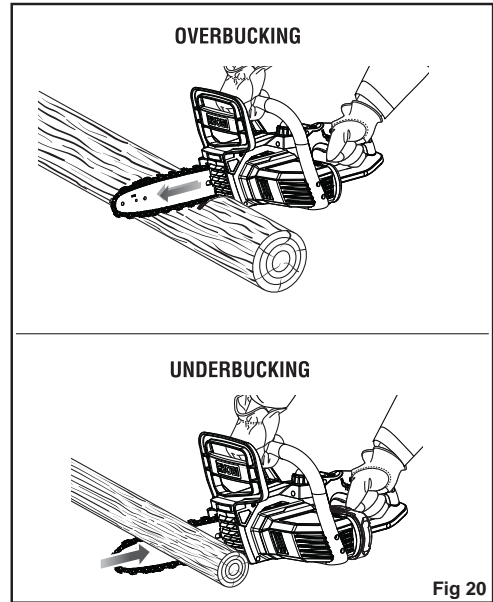
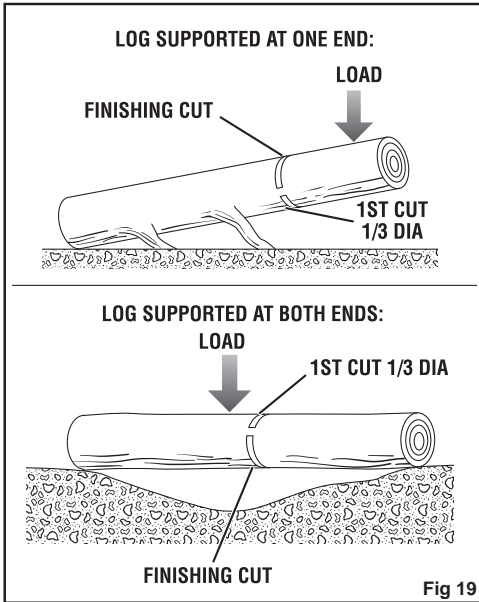
When the log is supported along its entire length, it should be cut from the top or overbucking.

When the log is supported on one end, cut 1/3 the diameter from the underside or underbucking. Then make the finishing cut by overbucking to meet the first cut.

As the log is being cut, it will tend to bend. The saw can become pinched or hung in the log if you make the first cut deeper than 1/3 of the diameter of the log.

Give special attention to logs under stress to prevent the bar and chain from pinching.

When bucking on a slope, always stand on the uphill side of the log as shown in figure 18. When "cutting through," to maintain complete control of the chainsaw, release the cutting pressure near the end of the cut without relaxing your grip on the chainsaw handles. Do not let the chain contact the ground. After completing the cut, wait for the saw chain to stop before you move the chainsaw. Always stop the motor before moving from tree to tree.



TYPES OF CUTTING USED

See Fig.20.

OVERBUCKING

Begin on the top side of the log with the bottom of the saw against the log; exert light pressure downward. Note that the saw will tend to pull away from you.

UNDERBUCKING

Begin on the under side of the log with the top of the saw against the log; exert light pressure upward. During underbucking, the saw will tend to push back at you. Be prepared for this reaction and hold the saw firmly to maintain control.

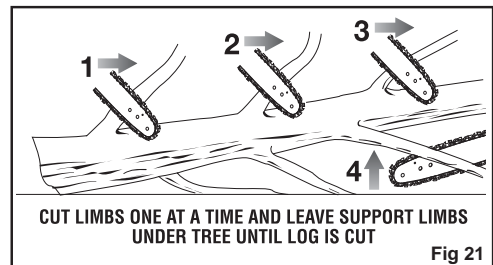
LIMBING A TREE

See Fig.21.

- Work slowly, keeping both hands on the saw with a firm grip. Maintain secure footing and balance.
- Keep the tree between you and the chain while limbing.
- Do not cut from a ladder. This is extremely dangerous. Leave this operation for professionals.
- Do not cut above chest height. A saw held higher than chest height is difficult to control against kickback.

⚠ WARNING

Never climb on a tree to limb or prune. Do not stand on ladders, platforms, rooftops, a log, or in any position which can cause you to lose your balance or control of the saw and cause death or serious personal injury.



SPRINGPOLES

See Fig.22.

A springpole is any log, branch, rooted stump, or sapling which is bent under tension by other wood so that it springs back if the wood holding it is cut or removed. On a fallen tree, a rooted stump has a high potential of springing back to the upright position during the bucking cut to separate the log from the stump. Watch out for springpoles, they are dangerous.

⚠ WARNING

Springpoles are dangerous and could strike the operator, causing the operator to lose control of the chainsaw. This could result in severe or fatal injury to the operator.

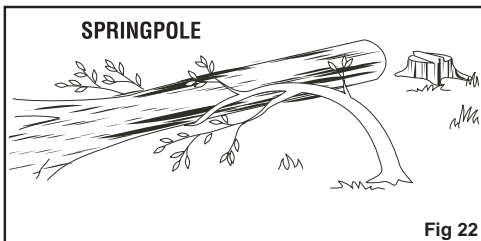


Fig 22

⚠ WARNING

To avoid serious personal injury, always remove the battery pack from the product when cleaning or performing any maintenance.

⚠ WARNING

Always wear eye protection with side shields, along with hearing and head protection. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injury.

⚠ WARNING

When servicing, use only identical replacement parts. Use of any other parts could create a hazard or cause product damage.

CAUTION

Periodically inspect the entire product for damaged, missing, or loose parts such as screws, nuts, bolts, and caps. Tighten securely all fasteners and caps and do not operate this product until all missing or damaged parts are replaced. Please contact customer service or an authorised service centre for assistance.

MAINTENANCE

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, and grease.

⚠ WARNING

Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which could result in serious personal injury.

REPLACING BAR AND CHAIN

See Fig.23-26.

⚠ WARNING

Remove the battery pack from the chainsaw and make sure the chain has stopped before you do any work on the saw. Failure to do so may result in accidental starting and possible serious injury.

⚠ WARNING

To avoid serious personal injury, read and understand all the safety instructions in this section.

⚠ WARNING

Never touch or adjust the chain while the motor is running. The saw chain is very sharp; always wear protective gloves when performing maintenance to the chain to avoid possible serious lacerations.

⚠ CAUTION

Always wear gloves when handling the bar and chain; these components are sharp and may contain burrs.

- Remove the battery pack before you do any work on the chainsaw.
- Remove the hex key from the storage area and use it to remove the chain cover screw, washer and chain cover from the chainsaw.
- Loosen the chain tension by turning the chain tensioning screw counterclockwise. See Fig.25.
- Remove the bar and chain from mounting surface.
- Remove the old chain from the bar.
- Lay out the new saw chain in a loop and straighten any kinks. The cutters should face in the direction of chain rotation. If they face the opposite direction, turn the loop over.
- Place the chain drive links into the bar groove. Position the chain so there is a loop at the back of the bar. Hold the chain in position on the bar and place the loop

around the sprocket of the chainsaw. Fit the bar flush against the mounting surface so that the bar stud is in the long slot of the bar.

⚠ WARNING

When placing the bar on the bar studs, ensure the chain tensioning pin is in the chain tension pin hole. Failure to properly place the chain tensioning pin in the chain tension pin hole could cause the chain to come loose, resulting in serious personal injury.

- Replace the chain cover, washer and chain cover screw. Tighten the chain cover screw only by hand. The bar must be free to move for tension adjustment.
- Remove all the slack from the chain by turning the chain tensioning screw clockwise until the chain seats snugly against the bar with the drive links in the bar groove.
- Lift the tip of the guide bar up to check for sag. Release the tip of the guide bar and turn the chain tensioning screw 1/2 turn clockwise. Repeat this process until sag does not exist.
- Hold the tip of the guide bar up and tighten the chain cover screw securely.
- Chain is correctly tensioned when there is no sag on the underside of the guide bar, the chain is snug, but it can be turned by hand without binding.

NOTE: If chain is too tight, it will not rotate. Loosen the chain cover screw slightly and turn tension adjuster 1/4 turn counterclockwise. Lift the tip of the guide bar up and retighten chain cover screw securely. Assure that the chain will rotate without binding.

- Tighten the chain cover screw securely by 3 N.m torque.
- Place the hex key back into the storage area.

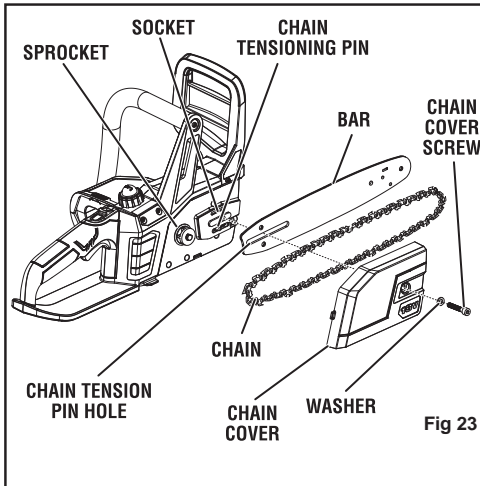


Fig 23

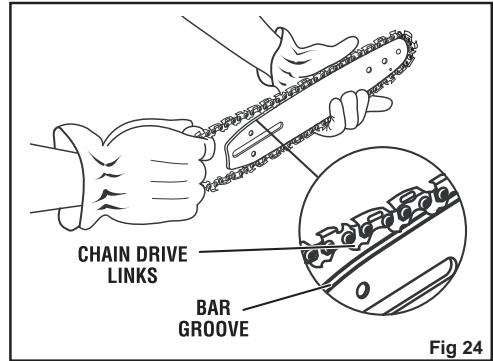


Fig 24

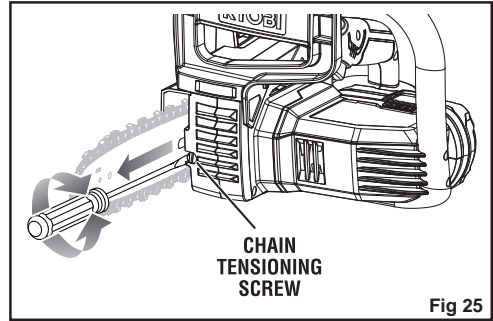


Fig 25

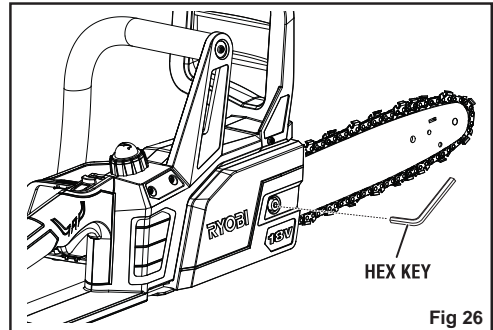


Fig 26

ADJUSTING THE CHAIN TENSION

See Fig.27-28.

⚠ WARNING

Never touch or adjust the chain while the motor is running. The saw chain is very sharp. Always wear protective gloves when performing maintenance on the chain.

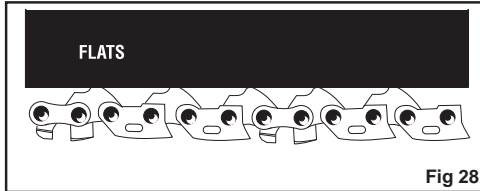
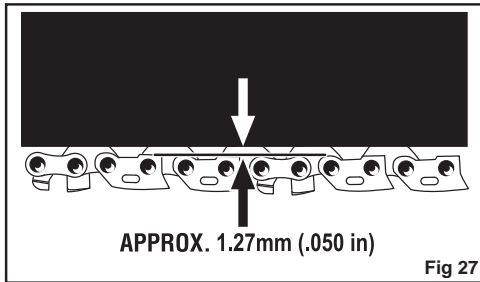
- Stop the motor before setting the chain tension. Make sure the chain cover screw is loosened to finger tight, turn the chain tensioner clockwise to tension the chain. Refer to **Replacing Bar and Chain** section in this manual for additional information.

- A cold chain is correctly tensioned when there is no slack on the underside of the guide bar, the chain is snug, but it can be turned by hand without binding.
- Chain must be re-tensioned whenever the flats on the drive links hang out of the bar groove.
- During normal saw operation, the temperature of the chain will increase. The drive links of a correctly tensioned warm chain will hang approximately 1.27 mm (.050 in.) out of the bar groove.

NOTE: New chain tends to stretch, check chain tension frequently and tension as required.

CAUTION

Chain tensioned while warm, may be too tight upon cooling. Check the "cold tension" before next use.



MAINTAINING THE GUIDE BAR

See Fig.29-30.

CAUTION

Make sure the chain has stopped and the battery pack has been removed before you do any work on the saw.

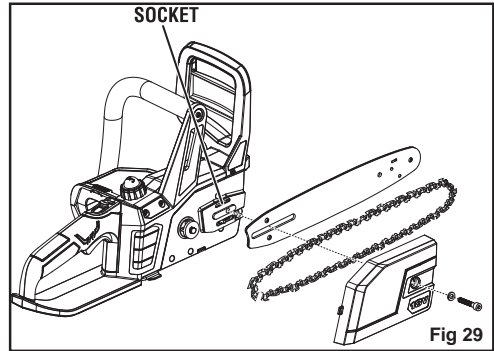
Proper maintenance will maximize the useful life of the guide bar.

Each day of use:

- Clean the bar and check for wear and damage. Feathering or burring of the bar rails is a normal process of bar wear, but such faults should be smoothed with a file as soon as they occur.

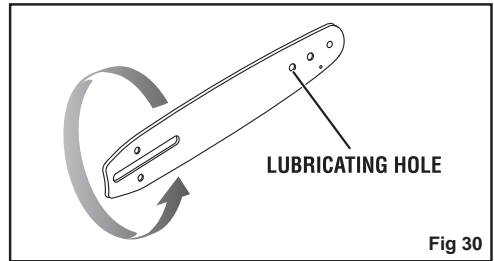
Each week of use:

- Lubricate the socket at the end of the guide bar using a grease syringe in the lubricating hole.
- Turn the guide bar and check that the lubrication holes and chain groove are free from impurities.



A bar with any of the following faults should be replaced immediately:

- Wear inside the bar rails that permits the chain to lay over sideways
- Bent guide bar
- Cracked or broken rails
- Spread rails



MAINTENANCE SCHEDULE

Daily check	
Bar lubrication	Before each use
Chain tension	Before each use and frequently
Chain sharpness	Before each use, visual check
For damaged parts	Before each use
For loose fasteners	Before each use

INSPECT AND CLEAN:

Bar	Before each use
Complete saw	After each use

TRANSPORTATION AND STORAGE

See Fig.31.

- Stop the product, remove the battery pack and allow the product to cool down before storing or transporting.
- Do not store or transport the chainsaw when it is running. The chainsaw should always be idle before storing or transporting.
- Always place the guide bar scabbard on the bar and chain before storing or transporting the chainsaw. Use caution to avoid the sharp teeth of the chain.
- Clean the chainsaw thoroughly before storing. Store the chainsaw indoors, in a dry place that is locked and/or inaccessible to children.
- Keep away from corrosive agents such as garden chemicals and de-icing salts

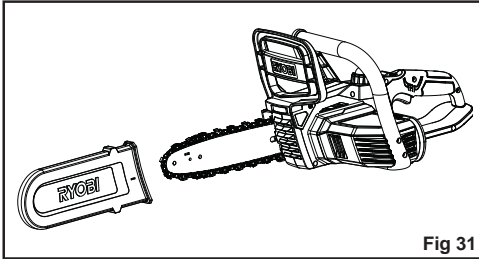


Fig 31



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

SYMBOLS IN THIS MANUAL

The following signal words and meanings are intended to explain the levels of risk associated with the product.

⚠ DANGER

Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.

⚠ WARNING

Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

⚠ CAUTION

Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.

CAUTION

Without safety alert symbol

Indicates a situation that may result in property damage.

SYMBOLS ON THE PRODUCT



Safety alert



Read and understand all instructions before operating the product, follow all warnings and safety instructions.



Wear eye, ear and head protection.



Wear non-slip safety footwear when using the product.



Wear non-slip, heavy duty gloves.



Beware of chainsaw kickback and avoid contact with bar tip.



Hold and operate the product properly with both hands.



Do not operate the product using only one hand.



Do not expose to rain or damp condition.



Remove the battery pack before starting any work on the product.

TROUBLESHOOTING

Problem	Possible cause	Solution
Bar and chain running hot and smoking.	Check chain tension for over tight condition	Tension chain. Refer to Chain Tension section in this manual.
	Chain oil tank empty.	Check oil tank.
Motor runs, but chain is not rotating.	Chain tension too tight.	Retension chain. Refer to Chain Tension section in this manual.
	Check guide bar and chain assembly.	Refer to Assembling the Bar and Chain section in this manual.
	Check guide bar and chain for damage.	Inspect guide bar and chain for damage.

PRODUCT SPECIFICATIONS

Cordless Chainsaw	
Model	RCS1830Li25/RCS1830Li15/OCS1825
Rated voltage	DC 18 Volts
Bar length	10 in (25.4 cm)
Chain oil tank capacity	120 ml
Weight (without battery pack, with guide bar, chain and empty tank)	2.6 kg
Chain speed	3.6 m/s
Usable cutting length	6.3 in (16.0 cm)
Chain length	10 in (25.4 cm)
Chain pitch	0.375 in (0.95 cm)
Chain gauge	0.043 in (0.11 cm)
Drive links	40

BATTERY AND CHARGER

Model	RCS1830Li25	RCS1830Li15	OCS1825
Charger	RC18120	BCL14181H	(not included)
Compatible chargers	RC18120, BCL14181H, BCL14183H, BCL14181V, RC18150U, BCS618G, RC18627U		
Battery pack	RB18L25	RB18L15	(not included)
Compatible battery packs	BPL-1815, BPL-1820, RB18L13, RB18L15, RB18L20, RB18L25, RB18L26, RB18L40, RB18L50		

REPLACEMENT PART (BAR AND CHAIN)

Manufacturer	Tri-link
Chain	CL14340XPB
Bar	M1431040- 1041HL

Chain must be fitted with bar from the same manufacturer according to above combinations.



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