

RYOBI®

**RCS1830BLX4
OCS1830BL**

ORIGINAL INSTRUCTIONS

Cordless Chainsaw



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 intended for outdoor use only. For safety reasons, the product must be adequately controlled by using a 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 designed to cut wood only. It should be used in domestic applications only by adults who have received adequate training on the hazards and preventative measures to be taken while using the product.

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

WARNING

When using the product, the safety rules must be followed. For your safety and that of bystanders, read and fully understand these instructions before operating the product. The operator should attend a professionally organised safety course on the use and maintenance of chainsaws, preventative actions, first-aid. 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. Falling branches, toppling trees, rolling logs can kill. Diseased or rotting timber poses additional hazards. Assess your capability of completing the task safely. If there is any doubt, leave it to a professional tree surgeon.

GENERAL POWER TOOL SAFETY WARNINGS

WARNING

Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below 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 a 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 and clothing 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.

- **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

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 remove the battery pack, if detachable, 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 and accessories. 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.
- **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

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.
- **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130°C may cause explosion.
- **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

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.
- **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorised service providers.

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 who are 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 product if the OFF switch does not stop the motor.
- Wear full eye and hearing protection, strong, sturdy boots and gloves, and head protection while operating the product. Use a face mask if the operation is dusty.
- The 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 work area.
- Keep firm footing and balance. Do not overreach. Overreaching can result in loss of balance and can increase the risk of kickback.
- Do not wear loose-fitting clothing, short trousers, or jewellery of any kind.
- Secure long hair so that 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 the work area.
- Do not operate the product in poor lighting. The operator requires a clear view of the work area to identify potential hazards.
- Operating similar tools nearby increases both the risk

of hearing injury and the potential for other persons to enter your work area.

- Keep all parts of your body away from any moving part.
- Inspect the product before each use. Check for correct operation of all controls, including the chain brake. Check for loose fasteners. Make sure that all guards and handles are properly and securely attached. Replace any damaged parts before use.
- Do not modify the product in any way or use parts and accessories that are not recommended by the manufacturer.

WARNING

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

ADDITIONAL BATTERY SAFETY WARNINGS

WARNING

To reduce the risk of fire, personal injury, and product damage due to short circuit, never immerse your tool, battery pack, or charger in fluid or allow fluid to flow inside them. Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach-containing products, etc., can cause a short circuit.

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 chainsaw 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 chainsaw "live" and could give the operator an electric shock.
- **Wear eye protection. Further protective equipment for hearing, head, hands, legs and feet is recommended.** Adequate protective equipment will reduce personal injury by flying debris or accidental contact with the saw chain.
- **Do not operate a chainsaw in a tree, on a ladder, from a rooftop, or any unstable support.** Operation of a chainsaw in this manner could result in serious personal injury.

- **Always keep proper footing and operate the chainsaw only when standing on fixed, secure and level surface.** Slippery or unstable surfaces 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 the bar and chain.** Improperly tensioned or lubricated chain may either break or increase the chance for kickback.
- **Cut wood only. Do not use chainsaw for purposes not intended. For example: do not use chainsaw for cutting metal, plastic, masonry or non-wood building materials.** Use of the chainsaw for operations different than intended could result in a hazardous situation.
- **Do not attempt to fell a tree until you have an understanding of the risks and how to avoid them.** Serious injury could occur to the operator or bystanders while felling a tree.
- **Follow all instructions when clearing jammed material, storing or servicing the chain saw.** Make sure the switch is off and the battery pack is removed. Unexpected actuation of the chain saw while clearing jammed material or servicing may result in serious personal injury.

Causes and operator prevention of kickback:

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.
- **Use only replacement bars and chains that are 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 practise cutting logs on a saw-horse or cradle when operating the product for the first time.
- Ensure that all guards, handles, and spiked bumper are properly fitted and are in good condition.
- Persons using the product should be in good health. The product is heavy, 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 product.
- Do not start using the product until you have a clear work area, secure footing, and a planned retreat path away from a falling tree.
- Beware of the emission of lubricant mist and sawdust. Wear a mask or respirator, if required.
- Do not cut vines 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. The right hand must be on the rear handle and the left hand on the front handle.
- Before starting the product, make sure that the saw chain is not contacting any object.
- Do not modify the product in any way or use it to power any attachments or devices that are not recommended by the manufacturer for the product.
- 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.
- Wear a helmet at all times when operating the product. A helmet, equipped with mesh visor, helps reduce the risk of injury to the face and the 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 the chain depends on the temperature. Check the chain tension frequently.
- Get used to a 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 product, apply the chain

brake, remove the battery pack, and make sure that all moving parts have come to a stop:

- before cleaning or clearing a blockage
 - before leaving the product unattended
 - before installing or removing attachments
 - before checking, performing maintenance, or working on the product
- The size of the work area depends on the job being performed and the size of the tree or workpiece involved. For example, felling a tree requires a larger work area than making other cuts, such as bucking cuts. The operator needs to be aware and in control of everything happening in the work area.
 - Do not cut with your body in line with the guide bar and chain. If you experience kickback, this position helps prevent the chain from 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 do not 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 removed from the cut.

Personal protective equipment

Good quality personal protective equipment as used by professionals helps reduce the risk of injury to the operator. Wear the following items when operating a chainsaw:

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

ASSEMBLY

WARNING

If any parts are damaged or missing, do not operate the product until the parts are replaced. Failure to heed this warning could result in serious personal injury.

1. Remove the battery pack from the product. Wear protective gloves.
2. Loosen the chain tensioner knob, and remove the sprocket cover.
3. Install the chain on the bar. Insert the chain drive links into the bar groove. Position the chain so that there is a loop at the back of the bar.
The saw chain should face in the direction of chain rotation. If the saw chain faces backwards, turn the loop over.
4. Hold the chain in position on the bar, and place the loop around the drive sprocket. Lower the bar so that the bolt

goes through the hole in the attached chain tensioner assembly. Turn the chain tensioner counterclockwise to help align the bolt and hole. Turn the chain tensioner clockwise to tighten the chain and keep the guide bar in place.

5. Replace the sprocket cover, and turn the chain tensioner knob clockwise just enough to secure the cover in place. Turn the chain tension adjustment ring until the saw chain is properly tensioned. Push the guide bar upwards, then check the chain tension again. Do not tension the chain too tight.
6. Turn the chain tensioner knob clockwise to lock the chain tensioner adjustment ring and sprocket cover.

ADJUSTING THE CHAIN TENSION

See page 23.

1. Remove the battery pack.
2. Loosen the chain tensioner knob slightly by turning it counterclockwise.
3. Adjust the chain tension. Frequently check the chain tension while adjusting.
 - To increase the chain tension, turn the chain tensioner adjustment ring clockwise.
 - To reduce the chain tension, turn the chain tensioner adjustment ring counterclockwise.

The chain tension is correct when the gap between the cutter in the chain and the bar is between 4–5.5 mm. Pull the chain in the middle of the lower side of the bar downwards (away from the bar) and measure the distance between the bar and the chain cutters.

4. Tighten the chain tensioner knob by turning it clockwise.

NOTE: The temperature of the chain increases during normal operation, causing the chain to stretch. Check the chain tension frequently and adjust as required. A chain that is tensioned while warm may be too tight upon cooling. Make sure that the chain tension is correctly adjusted as specified in these instructions.

OPERATION

INSTALLING THE BATTERY PACK

1. Align the raised ribs on the battery pack with the grooves in the battery port.
2. Insert the battery pack into the port. Make sure that the latches on the battery pack snap in place and that the battery pack is secured in the chainsaw before beginning operation.

HOLDING THE CHAINSAW

Always hold the chain saw with the right hand at the rear handle and the left hand at the front handle. Grip both handles with the thumbs and fingers encircling the handles. Ensure that the left hand is holding the front handle so that the thumb is underneath.

STARTING THE PRODUCT

See page 13.

1. Install the battery pack, and make sure that the chain brake is in RUN position by pulling the chain brake lever toward the front handle.
2. Pull the trigger release, then press the switch trigger.

CHECKING AND OPERATING CHAIN BRAKE

1. Engage the chain brake by rotating your left hand around the front handle. Allow the back of your hand to push the chain brake lever towards the bar while the chain is rotating rapidly. Be sure to maintain both hands on the saw handles at all times.
2. Reset the chain brake back into the RUN position by grasping the top of the chain brake lever pulling towards the front handle until you hear a click.

ADDING CHAIN LUBRICATING OIL

WARNING

Never work without chain lubricant. If the saw chain is running without lubricant, guide bar and saw chain can be damaged. It is therefore essential to check the oil level in the oil level gauge frequently and every time before starting to use the chain saw.

1. Clear the surface around the oil cap to prevent contamination.
2. Loosen and remove the cap from the oil tank.
3. Pour the oil into the oil tank and monitor the oil level gauge. Ensure that no dirt enters the oil tank while filling.
4. Replace and tighten the oil cap. Wipe away any spillage.

One full oil tank enables the product to operate for 20- 40 min.

NOTE: A properly functioning chain and bar lubricating system normally discharges oil from the chain during use. To check the functionality of the chain and bar lubricating system, point the tip of the chain at a light coloured surface, such as a newspaper. A distinct line of oil splatter should be observed after a short time.

Recommended chain lubricating oil

- Use only RYOBI chainsaw lubricating oil available from an authorised service centre.

INSTRUCTIONS CONCERNING THE PROPER TECHNIQUES FOR BASIC FELLING, LIMBING, AND CROSS-CUTTING

Understanding the forces within the wood

When you understand the directional pressures and stresses inside the wood, you can reduce the pinches or at least expect them during your cutting. Tension in the wood means the fibers are being pulled apart, and if you cut in this area, the kerf or cut tends to open as the saw goes through. If a log is being supported on a saw-horse and the end is hanging unsupported over the end, then the tension is created on the upper surface due to the weight of the overhanging log stretching the fibers. Likewise, the underside of the log is compressed, and the fibers are being pushed together. If a cut is made in this area, the kerf tends to close up during the cut. This cut would pinch the blade.

Push and pull

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 machine 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.

Saw jammed in the cut

Stop the chainsaw, and engage the chain brake. 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, which forces 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.

Skating/Bouncing

When the chainsaw fails to dig in during a cut, the guide bar can dangerously begin hopping or skidding along the surface of the log or branch, possibly resulting in the loss of control of the chainsaw. To prevent or reduce skating or bouncing, always use the saw with both hands. Make sure that the saw chain establishes a groove for cutting.

Never cut small, flexible branches or brush with your chainsaw. Their size and flexibility can easily cause the saw to bounce towards you or bind up with enough force to cause a kickback. The best tool for that kind of work is a hand saw, pruning shears, an axe, or other hand tools.

Felling a tree

See page 17 - 18.

When bucking and felling operations are being performed by two or more persons at the same time, the felling operations 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 company should be notified immediately.

Stand on the uphill side of the terrain as the tree is likely to roll or slide downhill after it is felled.

Plan and clear an escape path before cuts are starting cuts. The escape path should extend back and diagonally to the rear of the expected line of fall.

Before starting to fell a tree, consider the natural lean of the tree, the location of larger branches and the wind direction to judge which way the tree will fall.

Remove dirt, stones, loose bark, nails, staples, and wire from the tree.

Do not attempt to fell trees that are rotten or have been damaged by wind, fire, lightning, etc. This is extremely dangerous and should only be completed by professional tree surgeons.

1. Notching undercut

See page 17 - 18.

Make the notch 1/3 the diameter of the tree, perpendicular to the direction of falls. Make the lower

horizontal notching cut first to avoid pinching either the saw chain or the guide bar when the second notch is being made.

2. Felling back cut

See page 17 - 18.

Make the felling back cut at least 50 mm (2 in.) higher than the horizontal notching cut. Keep the felling back cut parallel to the horizontal notching cut. Make the felling back cut so enough wood is left to act as a hinge. The hinge wood keeps the tree from twisting and falling in the wrong direction. Do not cut through the hinge.

As the felling gets close to the hinge, the tree should begin to fall. If there is any chance that the tree may not fall in desired direction or it may rock back and bind the saw chain, stop cutting before the felling back cut is complete, and use wedges of wood, plastic or aluminium to open the cut and drop the tree along the desired line of fall.

When the tree begins to fall, remove the chainsaw from the cut, stop the motor, put the chainsaw down, then use the retreat path planned. Be alert for overhead limbs falling, and watch your footing.

Removing buttress roots

See page 18.

A buttress root is a large root extending from the trunk of the tree above the ground. Remove large buttress roots before 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 after you have removed the large buttress roots.

Bucking a log

See page 19.

Bucking is the process of cutting a log into lengths. Make sure that your footing is firm and your weight is evenly distributed on both feet. When possible, the log should be raised and supported by the use of limbs, logs, or chocks. Follow the directions for easy cutting. When the log is supported along its entire length, it is cut from the top (overbuck).

When the log is supported on one end, cut 1/3 the diameter from the underside (underbuck). Make the finished cut by overbucking to meet the first cut.

When the log is supported on both ends, cut 1/3 the diameter from the top (overbuck). Make the finished cut by underbucking the lower 2/3 to meet the first cut.

When bucking on a slope, always stand on the uphill side of the log. When "cutting through", to maintain complete control 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.

Limbing a tree

See page 20.

Limbing is the process of removing the branches from a fallen tree. When limbing, leave larger lower limbs to support the log off the ground. Remove the small limbs in

one cut. Branches under tension should be cut from the bottom up to avoid binding the chainsaw.

Springpoles

See page 20.

A springpole is any log, branch, rooted stump, or sapling that 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 spring poles—they are dangerous. Do not attempt to cut bent branches or stumps that are under tension unless you are professionally trained and competent to do so.

WARNING

Springpoles are dangerous and could strike the operator, causing the operator to lose control of the chainsaw. This could result in a severe or fatal injury to the operator. This should be done by trained users.

TRANSPORTATION AND STORAGE

- Stop the product, remove the battery pack, and allow the product to cool down before storing or transporting.
- Remove all foreign materials from the product. Store the product in a cool, dry, and well-ventilated place that is inaccessible to children. Keep the product away from corrosive agents, such as garden chemicals and de-icing salts. Do not store the product outdoors.
- Fit the guide bar cover before storing the product or during transportation.
- For transportation, secure the product against movement or falling to prevent injury to persons or damage to the product.

TRANSPORTING LITHIUM BATTERIES

Transport the battery in accordance with local and national provisions and regulations.

Follow all special requirements on packaging and labelling when transporting batteries by a third party. Ensure that no batteries can come in contact with other batteries or conductive materials while in transport by protecting exposed connectors with insulating, non-conductive caps or tape. Do not transport batteries that are cracked or leaking. Check with the forwarding company for further advice.

MAINTENANCE

WARNING

Use only original manufacturer's replacement parts, accessories, and attachments. Failure to do so can cause possible injury, can contribute to poor performance, and may void your warranty.

WARNING

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. Have the product serviced by an authorised service centre only.

WARNING

Remove the battery pack before adjustment, maintenance, or cleaning. Failure to do so could result in serious personal injury.

- You may make adjustments or repairs described in this manual. For other repairs, contact an authorised service centre.
- Consequences of improper maintenance, removal, or modification of safety features, such as the chain brake, ignition switch, hand guard (front and back), spiked bumper, chain catcher, guide bar, and low kickback saw chain, may cause the safety features not to function correctly, thus increasing the potential for serious injury. Keep your chainsaw professionally maintained and safe.
- Sharpening the chain safely is a skilled task. Have a worn or dull chain replaced only by an authorised RYOBI service centre. The part number is available in the product specification table in this manual.
- Follow instructions for lubricating and chain tension checking and adjustment.
- After each use, clean the product with a soft, dry cloth.
- Check all nuts, bolts, and screws at frequent intervals for security to ensure that the product is in safe working condition. Any part that is damaged should be properly repaired or replaced by an authorised service centre.

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
Chain brake function	Before each use

Inspect and clean

Bar	Before each use
Complete saw	After each use
Chain brake	Every 5 hours*

* Hours of operation

RESIDUAL RISKS

Even when the product is used as prescribed, it is still impossible to eliminate certain residual risk factors. The following hazards may arise during 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.
- injury caused by exposure to noise
 - Wear hearing protection and limit exposure.
- injury caused by contact with exposed saw teeth of the chain (cutting hazards)
- injury caused by parts ejected from the saw chain (cutting/injection hazards)
- injury caused by thrown-out pieces of the workpiece (wood chips, splinters)
- injury caused by dust and particles
- injury to the skin caused by contact with lubricants

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 product, 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 reduce the effect of handle vibration.

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

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 reduce the possibility of a kickback event.

The rakers (depth gauges) ahead of each cutter can minimize the force of a kickback reaction by preventing the cutters from digging in too deeply. Use only replacement

guide bar and chain combinations recommended by the manufacturer.

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

Spiked bumper

The integral bumper spike may be used as a pivot when making a cut. It helps to keep the body of the chainsaw steady while cutting. When cutting, push the machine forward until the spikes dig into the edge of the wood, then by moving the rear handle up or down in the direction of the cutting line it can help ease the physical strain of cutting

Guide bars

Generally, guide bars with small radius tips have somewhat lower potential for kickback. Use a guide bar and matching chain that is just long enough for the job. Longer bars increase the risk of loss of control during sawing. Regularly check the chain tension. When cutting smaller branches (less than the full length of the guide bar), the chain is more likely to be thrown off if the tension is not correct.

Chain brake

Chain brakes are designed to quickly stop the chain rotating. When the chain brake lever is pushed towards the bar, the chain should stop immediately. A chain brake does not prevent kickback. It only lowers the risk of injury should the chain bar contact the operator's body during a kickback event. The chain brake should be tested before each use for correct operation in both the run and brake positions.

Chain catcher

A chain catcher prevents the saw chain from being thrown back towards the operator if the saw chain comes loose or breaks.

WHAT'S IN THE BOX

See pages 10-11.

- Chainsaw x 1
- Guide bar x 1
- Saw chain x 1
- Operator's manual x 1
- Guide bar cover x 1
- Battery pack x 1 (sold separately for OCS1830BL)
- Charger x 1 (sold separately for OCS1830BL)

NOTE: Chain and bar oil is sold separately.

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.



Do not expose the product to rain or damp condition.



Hold and operate the saw properly with both hands.



Do not operate the saw using only one hand.



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



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.



Regulatory Compliance Mark (RCM). Product meets applicable regulatory requirements.



Guaranteed sound power level



Bar and chain lubricant



Minimum lubricant level



Lock



Unlock



Rotate to adjust chain tension
+ = Tighten the chain
- = Loosen the chain



Moving direction of the chain.
(Marked under the sprocket cover)



Set the chain brake to the RUN position.



Set the chain brake to the BRAKE position.



V_0 : 10 m/s

No-load chain speed

L max: 300mm

Maximum guide bar length

SYMBOLS IN THIS MANUAL



Parts or accessories sold separately



Note



Warning



Wear eye and face protection.



Wear upper body protection.



Wear leg protection.



Stop the product.

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

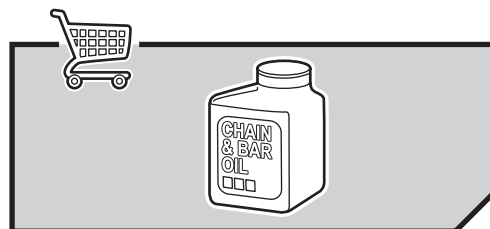
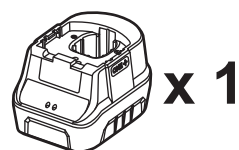
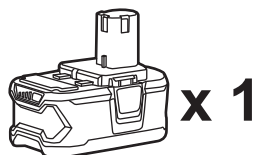
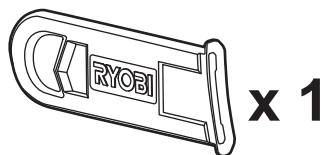
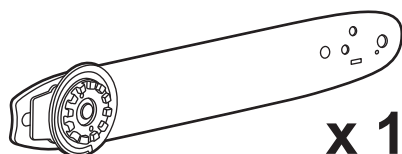
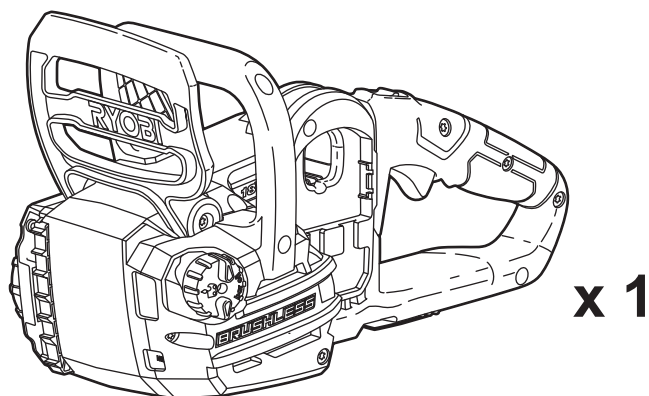
Without safety alert symbol

Indicates a situation that may result in property damage.

WHAT'S IN THE BOX

RCS1830BLX4

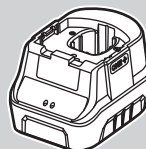
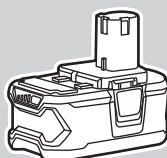
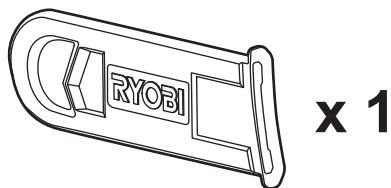
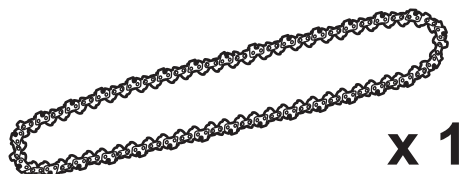
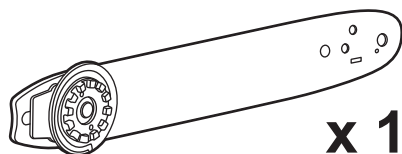
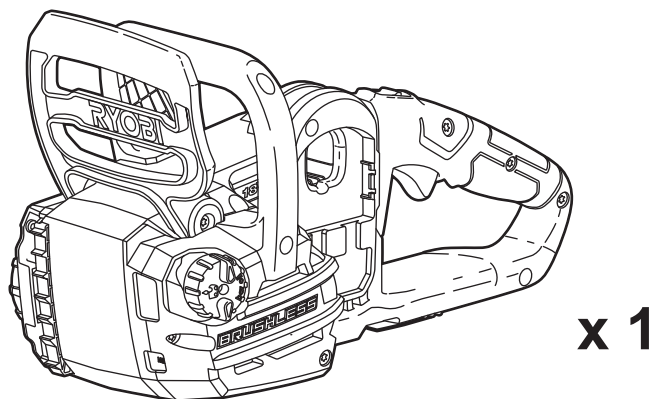
**Chain and bar oil is sold separately.*



WHAT'S IN THE BOX

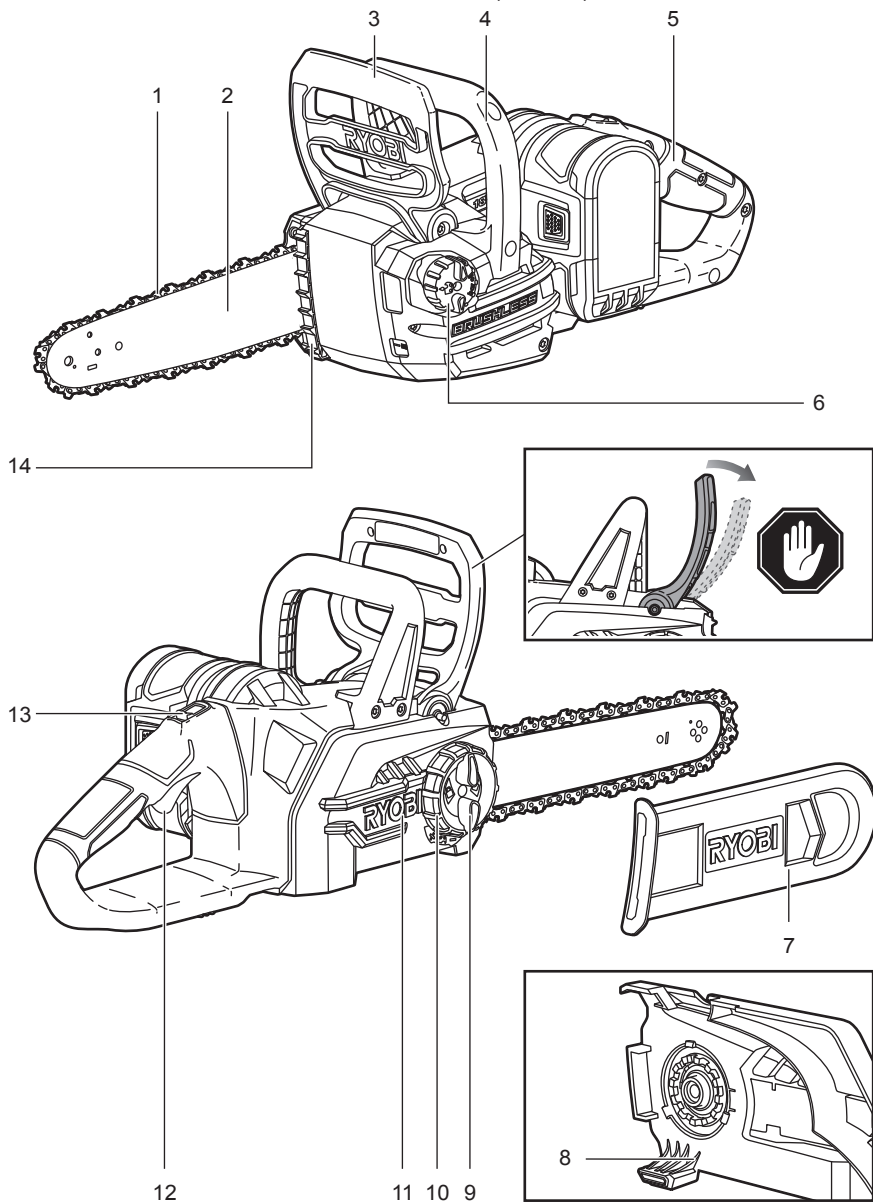
OCS1830BL

**Chain and bar oil, battery, and charger are sold separately.*

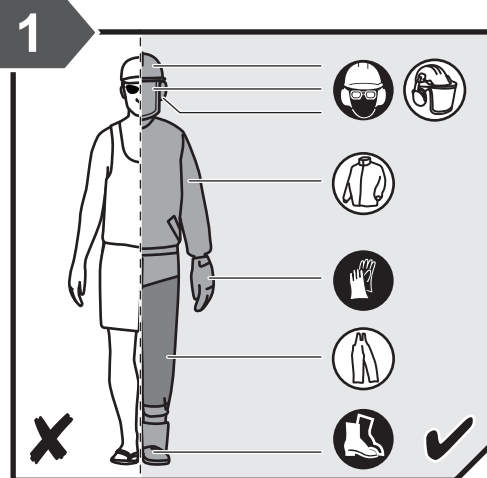


KNOW YOUR PRODUCT

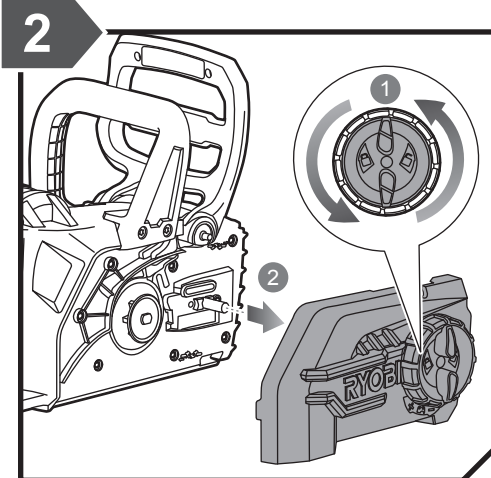
- | | |
|-----------------------------------|-------------------------------------|
| 1. Chain | 8. Chain catcher |
| 2. Guide bar | 9. Chain tensioner knob |
| 3. Front hand guard / Chain brake | 10. Chain tensioner adjustment ring |
| 4. Front handle | 11. Sprocket cover |
| 5. Rear handle | 12. Switch trigger |
| 6. Chain lubricant cap | 13. Trigger release |
| 7. Guide bar cover | 14. Spiked bumper |



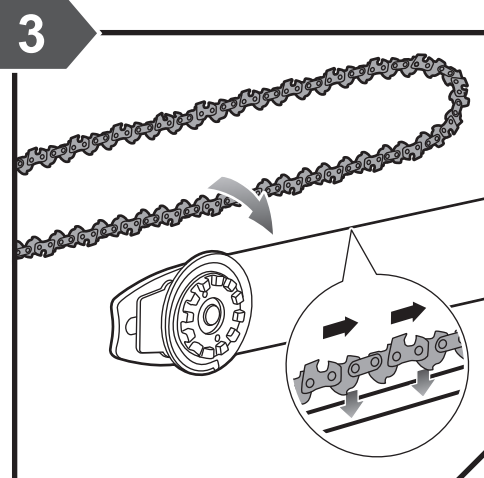
GETTING STARTED



Wear full eye protection, ear protection, non-slip heavy-duty gloves, substantial footwear, and long trousers at all times while operating the product. Do not operate the product when barefoot or wearing open sandals.

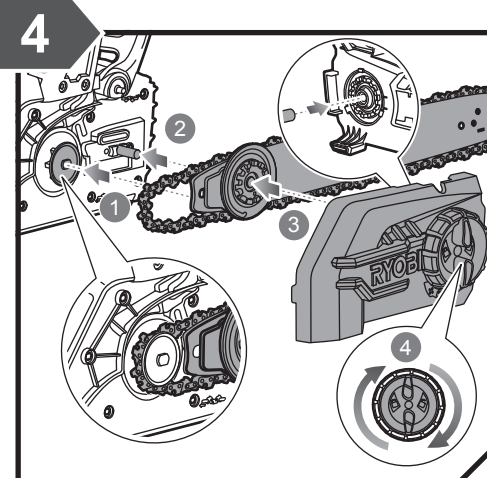


Turn the chain tensioner knob counterclockwise to loosen and remove the sprocket cover.



Install the chain on the bar. Insert the chain drive links into the bar groove. Position the chain so that there is a loop at the back of the bar.

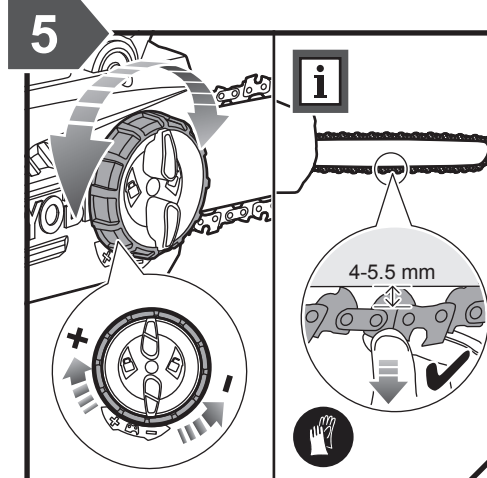
The saw chain should face in the direction of chain rotation. If the saw chain faces backwards, turn the loop over.



Hold the chain in position on the bar, and place the loop around the drive sprocket. Lower the bar so that the bolt goes through the hole in the chain tensioner. Turn the chain tensioner counterclockwise to help align the bolt and hole. Turn the chain tensioner clockwise to tighten the chain and keep the guide bar in place.

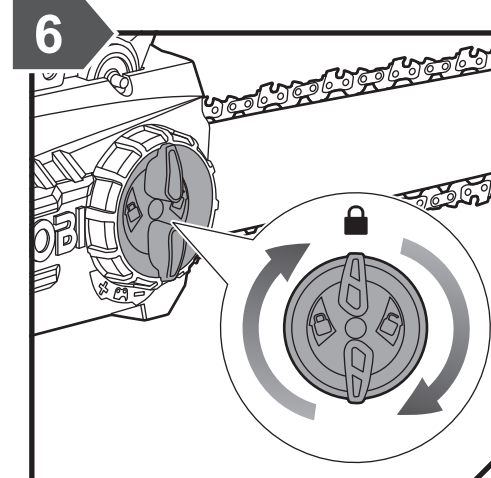
Reinstall the sprocket cover. Turn the chain tensioner knob clockwise just enough to secure the cover in place.

GETTING STARTED

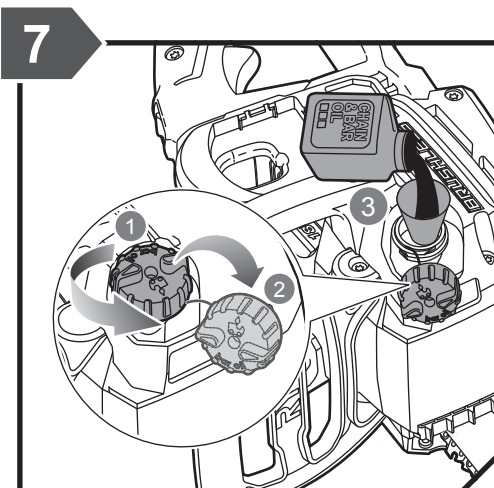


Adjust the chain tension until the gap between the drive teeth and the bar is between 4–5.5 mm. Turn the chain tensioner adjustment ring clockwise to increase the tension. Turn the adjustment ring counterclockwise to reduce the tension.

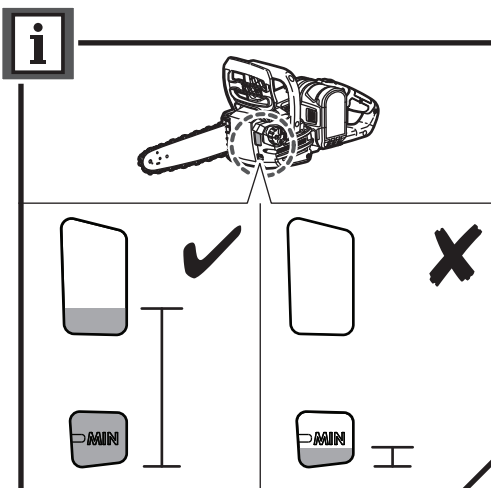
NOTE: Frequently check the chain tension while turning the adjustment ring. Always wear protective gloves when handling the chain.



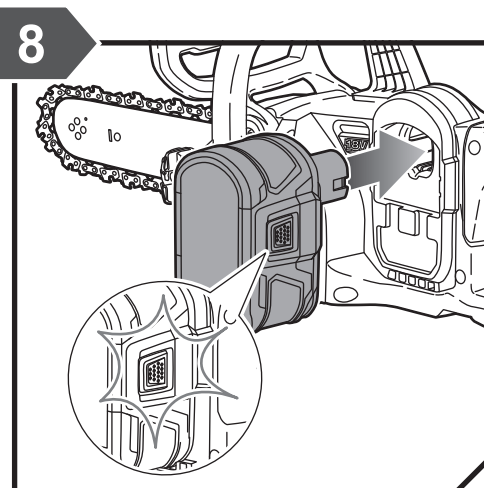
Turn the chain tensioner knob clockwise to lock the chain tensioner adjustment ring and sprocket cover.



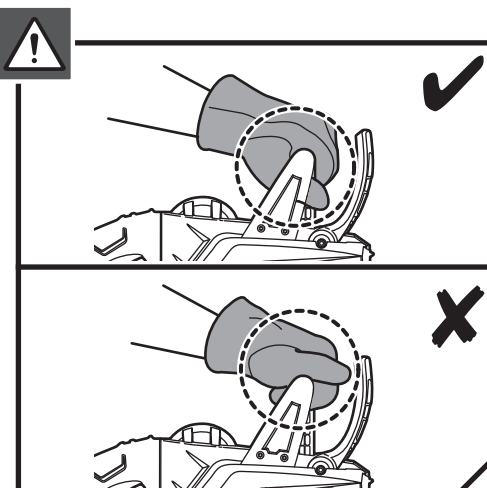
Remove the lubricant cap. Add chain and bar oil into the product. Install the lubricant cap.



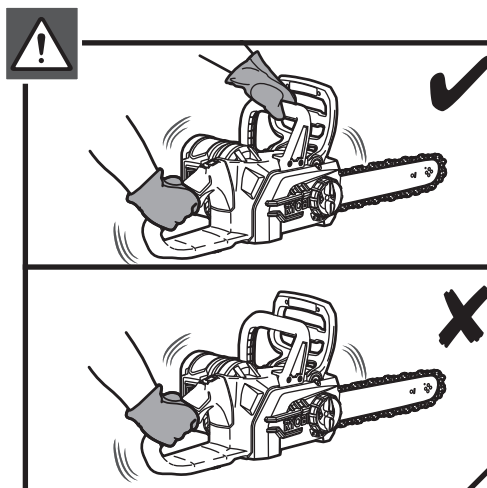
NOTE: Never work without chain and bar lubricant. If the product is running without lubricant, the guide bar and saw chain could be damaged. Frequently check the oil level in the oil level gauge while using the product and every time before using the product.



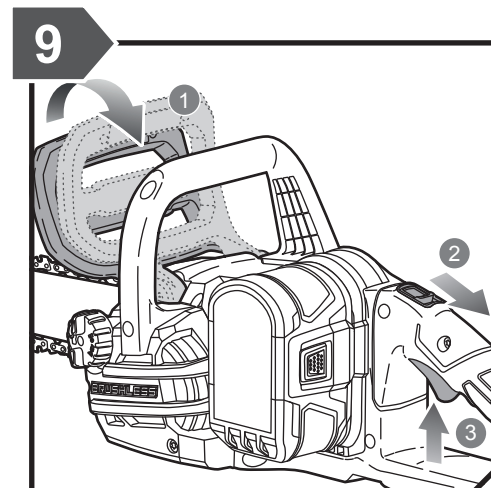
Insert the battery pack until the latches snap in place.



WARNING: Hold the front handle with the left hand so that the thumb is underneath the handle.

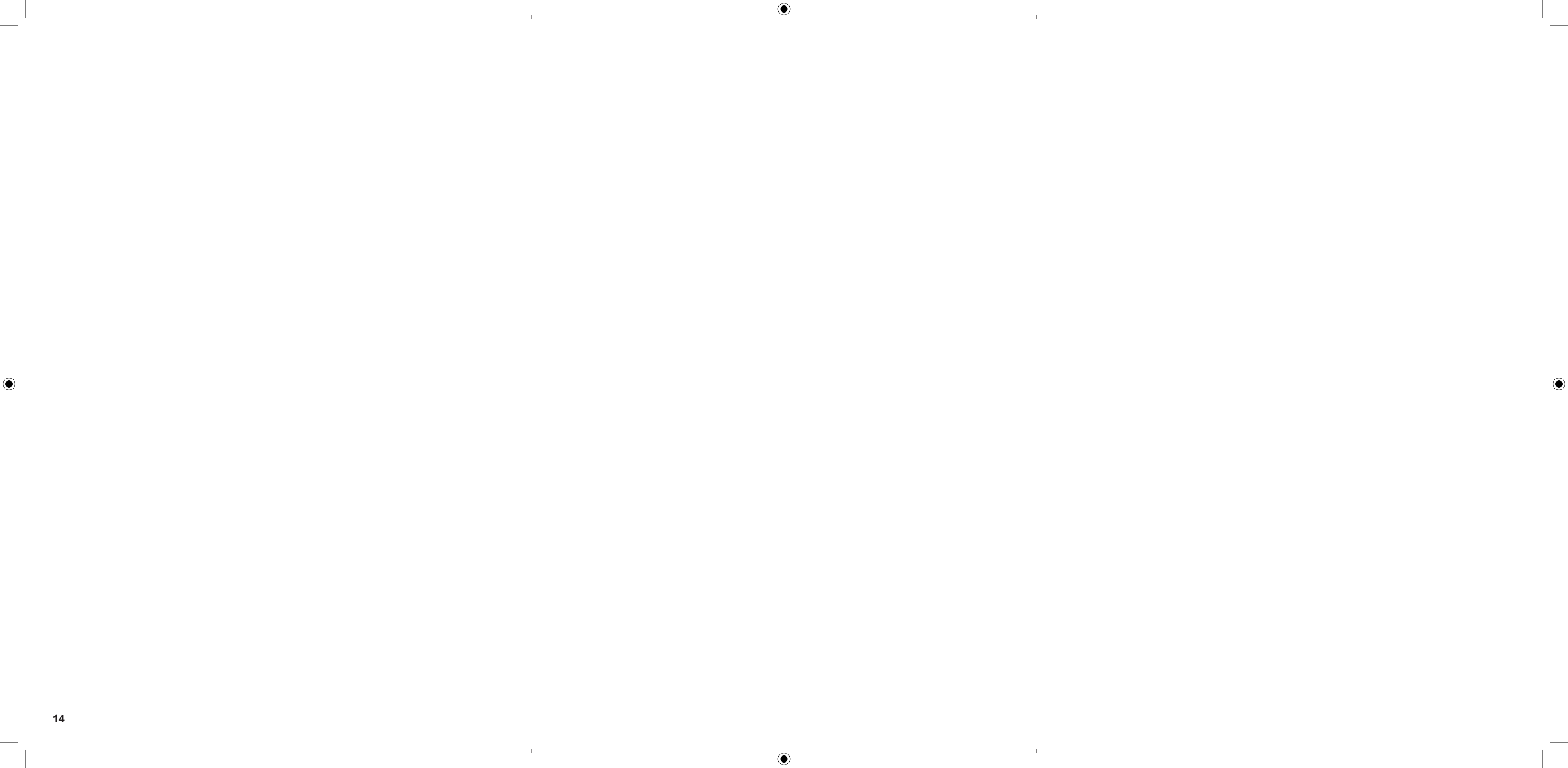


WARNING: Always hold the chainsaw with the right hand at the rear handle and with the left hand at the front handle. Grip both handles with the thumbs and fingers encircling the handles.

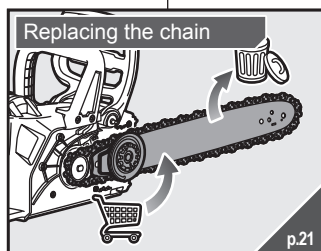
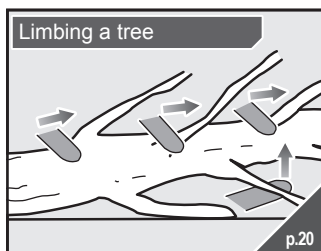
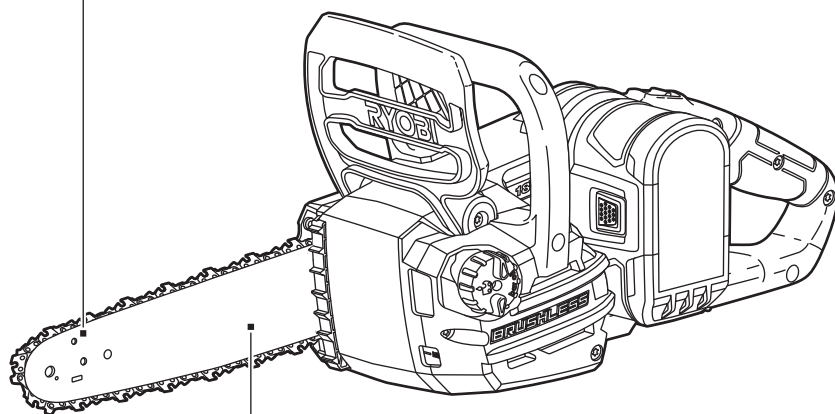
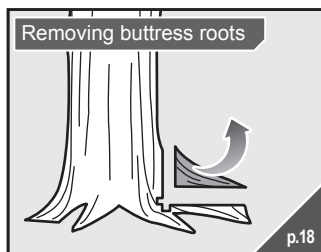


Pull the chain brake towards the front handle. Pull the trigger release, and squeeze the switch trigger to start the product.

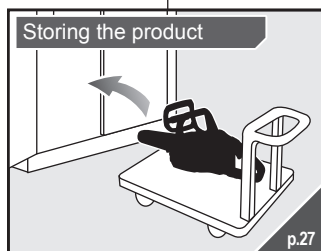
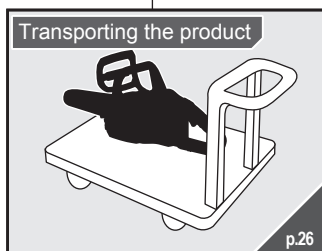
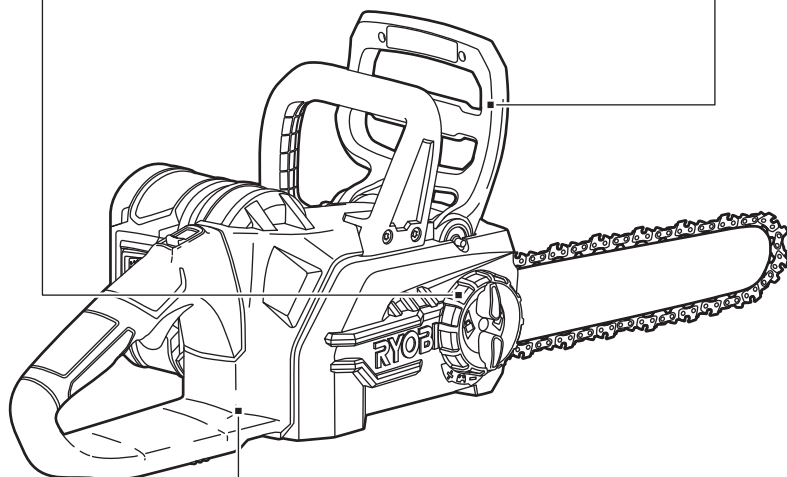
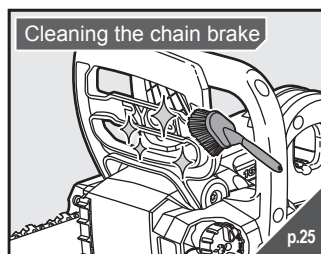
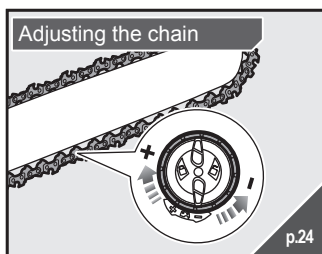
NOTE: Point the tip of the chain to a light-coloured surface, run the product, and check for a line of oil splatter on the surface to make sure that the chainsaw lubricates the chain and bar during use.



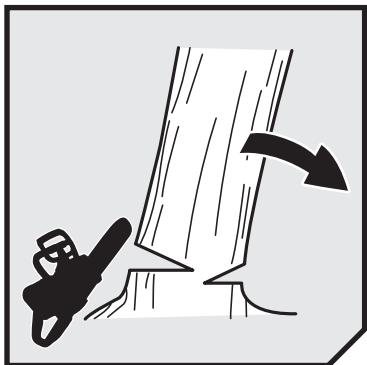
OVERVIEW



OVERVIEW



OPERATION



FELLING A TREE

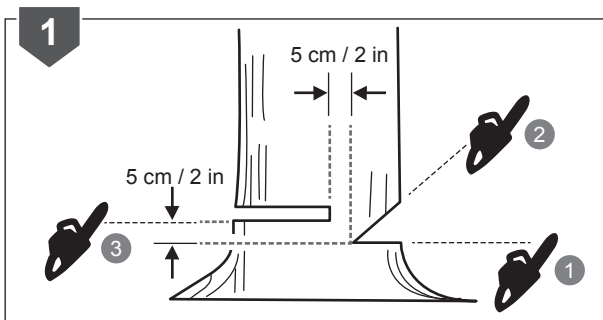
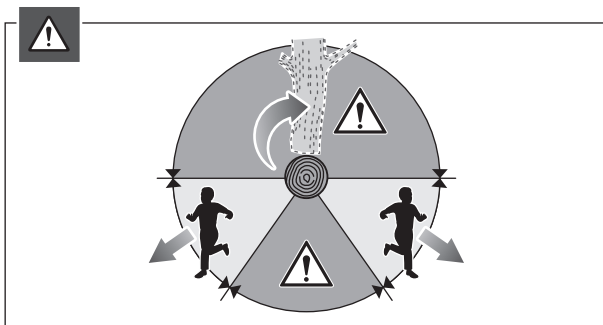
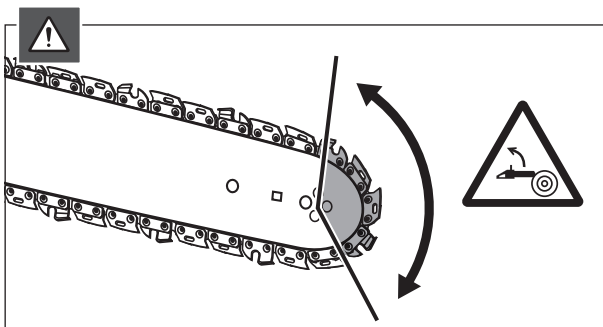
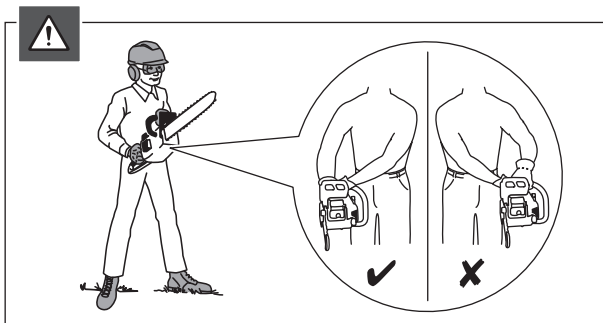
WARNING: Maintain a firm grip, with thumbs and fingers encircling the chainsaw handles, with both hands on the saw, and position your body and arm to allow you to resist kickback forces. Kickback forces can be controlled by the operator, if proper precautions are taken. Do not let go of the chainsaw.

WARNING: 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.

WARNING: Plan and clear an escape path before starting cuts. The escape path should extend back and diagonally to the rear of the expected line of fall.

1. Make the notch 1/3 the diameter of the tree, perpendicular to the direction of the fall.

Make the felling back cut at least 5 cm. (2 in.) higher than the horizontal notching cut. Keep the felling back cut parallel to the horizontal notching cut. Make the felling back cut so enough wood is left to act as a hinge.

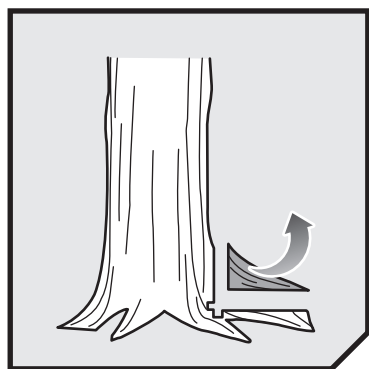
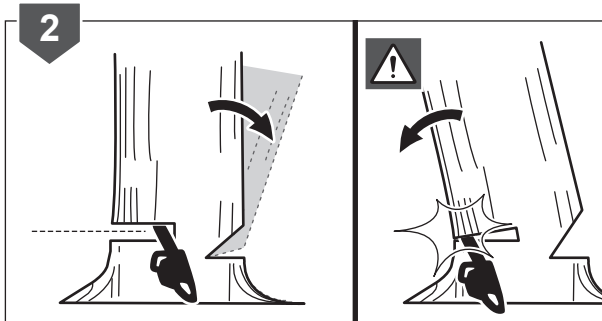
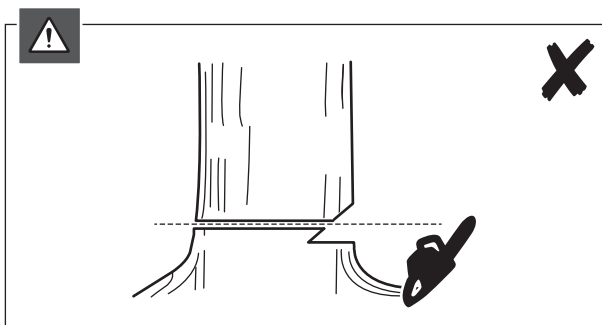


OPERATION

WARNING: Do not cut through the hinge.

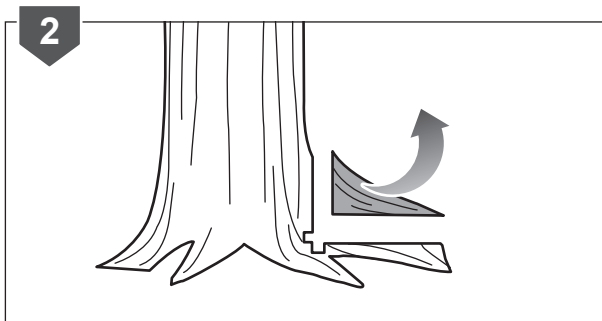
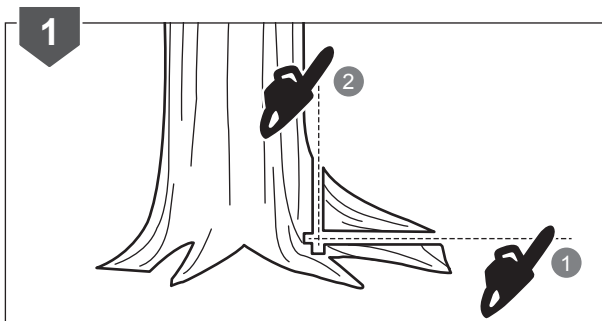
- As the felling gets close to the hinge, the tree should begin to fall. When the tree begins to fall, remove the chainsaw from the cut, stop the motor, put the chainsaw down, then use the retreat path planned. Be alert for overhead limbs falling, and watch your footing.

WARNING: If there is any chance that the tree may not fall in the intended direction or it may rock back and bind the saw chain, stop cutting before the felling back cut is complete. Use wedges of wood, plastic, or aluminium to open the cut and drop the tree along the intended line of fall.

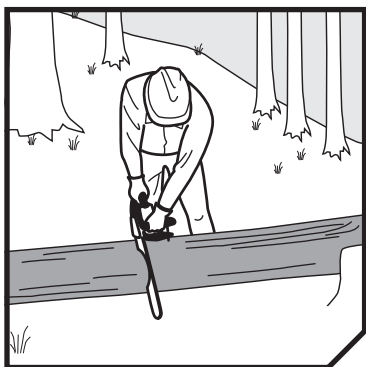


REMOVING BUTTRESS ROOTS

- Remove large buttress roots prior to felling. Pull the trigger release, and squeeze the switch trigger to start the product. 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 after you have removed the large buttress roots.



OPERATION



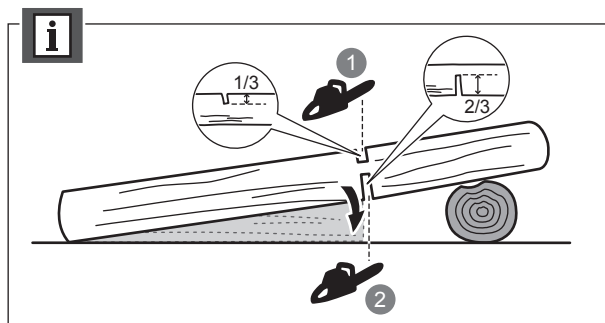
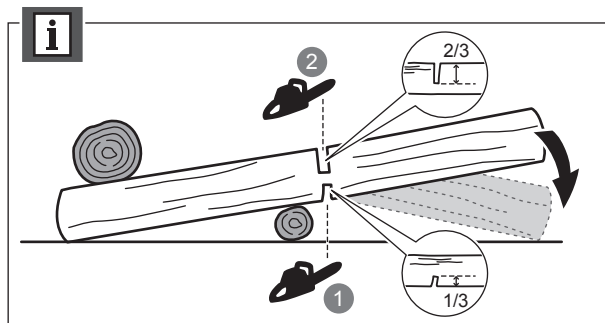
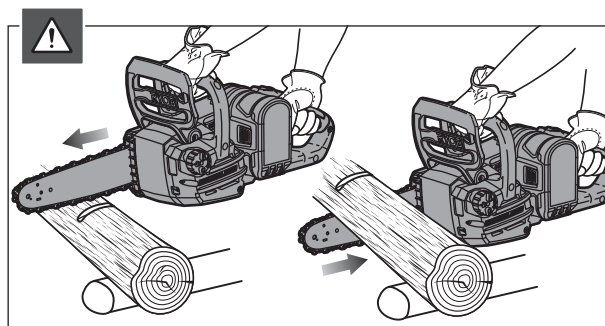
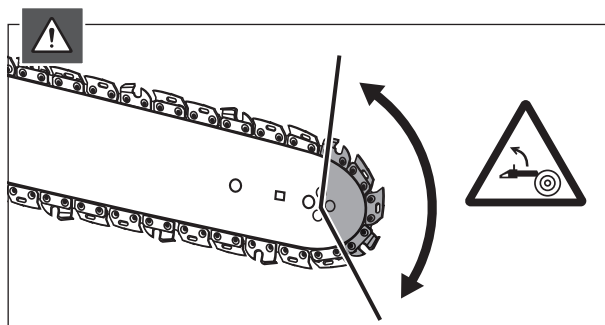
BUCKING A LOG

WARNING: 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.

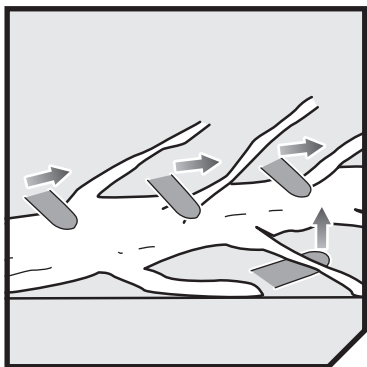
WARNING: The reaction force is always opposite to the direction the chain is moving. The operator must be ready to control the tendency for the product to pull away (forward motion) when cutting on the bottom edge of the bar. Always firmly engage the bumper spike to avoid such movement. The product can be pushed backwards (towards the operator) when cutting along the top edge. To avoid this, make sure that the chain is not jammed when cutting along the top edge.

NOTE: When the log is supported on one end, cut $1/3$ the diameter from the underside (underbuck), then make the finished cut by overbucking to meet the first cut.

NOTE: When the log is supported on both ends, cut $1/3$ the diameter from the top (overbuck), then make the finished cut by underbucking the lower $2/3$ to meet the first cut.



OPERATION

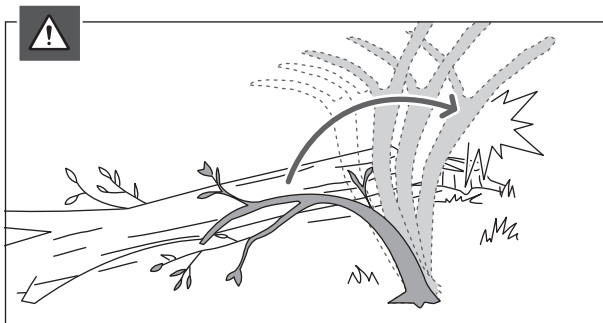
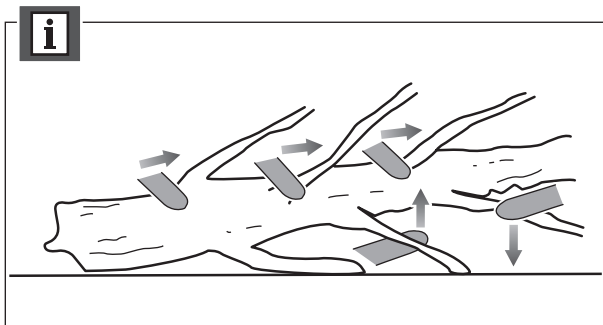


LIMBING A TREE

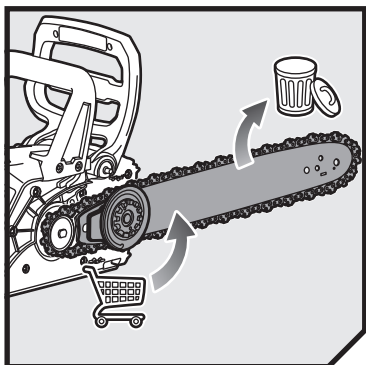
WARNING: Do not stand on any unstable surface while using the product. This includes, but is not limited to, ladders, scaffolds, and trees.

NOTE: Leave larger lower limbs to support the log off the ground. Remove the small limbs in one cut. Branches under tension should be cut from the bottom up to avoid binding the product.

WARNING: Watch out for spring poles—they are dangerous. Do not attempt to cut bent branches or stumps that are under tension unless you are professionally trained and competent to do so.

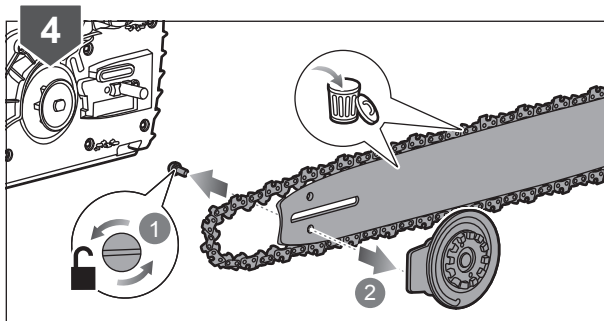
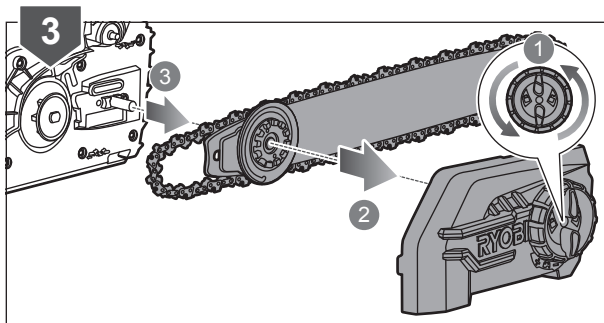
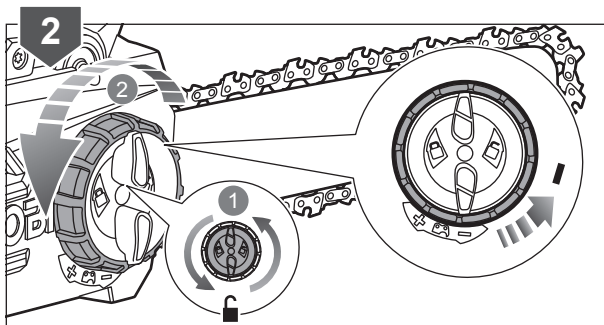
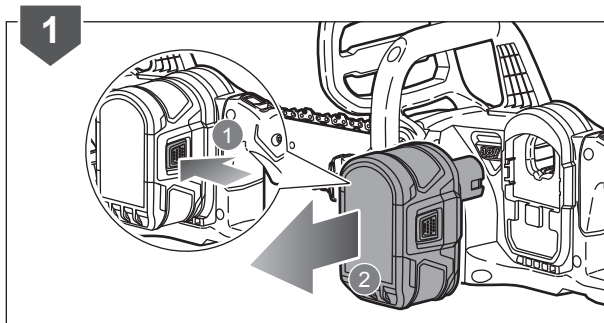


OPERATION



REPLACING THE CHAIN

1. Remove the battery pack.
2. Turn the chain tensioner knob counterclockwise to unlock the chain tensioner adjustment ring. Turn the chain tensioner adjustment ring counterclockwise to loosen the chain tension.
3. Turn the chain tensioner knob counterclockwise to loosen the sprocket cover. Remove the sprocket cover. Remove the bar and chainsaw assembly.
4. Remove the chain and bar assembly. Remove the chain tensioner assembly from the guide bar. Dispose of the used bar and chain properly.



OPERATION

5. Install the new chain on the bar. Insert the chain drive links into the bar groove. Position the chain so there is a loop at the back of the bar.

The saw chain should face in the direction of chain rotation. If the saw chain faces backwards, turn the loop over.

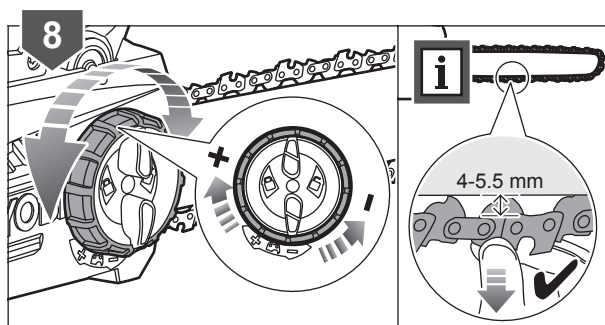
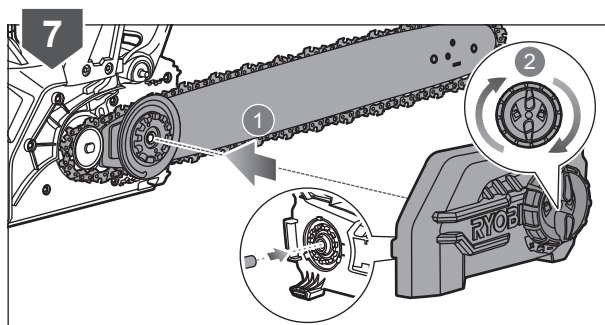
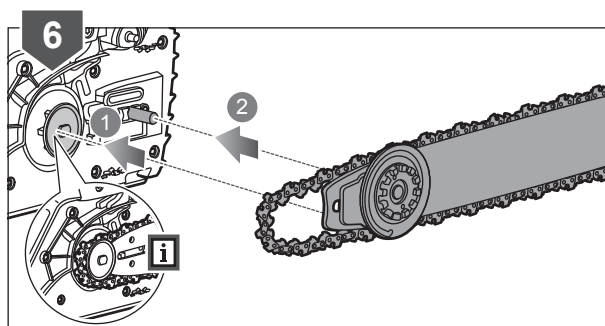
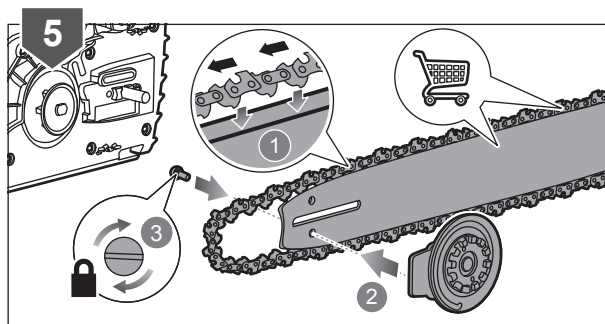
6. Hold the chain in position on the bar, and place the loop around the drive sprocket. Lower the bar so that the bolt goes through the hole in the attached chain tensioner assembly.

NOTE: Turn the chain tensioner counterclockwise to help align the bolt and hole. Turn the chain tensioner clockwise to tighten the chain and keep the guide bar in place.

7. Reinstall the inner chain tensioner and sprocket cover. Turn the chain tensioner knob clockwise to secure the sprocket cover in place.

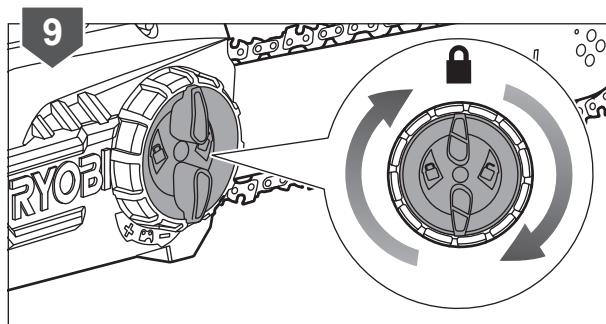
8. Adjust the chain tension until the gap between the drive teeth and the bar is 4-5.5 mm. Turn the chain tensioner adjustment ring clockwise to increase the tension. Turn the adjustment ring counterclockwise to reduce the tension.

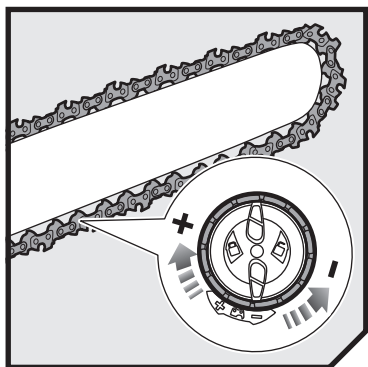
NOTE: Frequently check the chain tension while turning the adjustment ring.



OPERATION

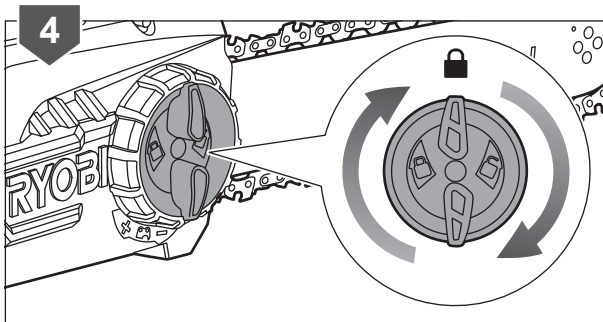
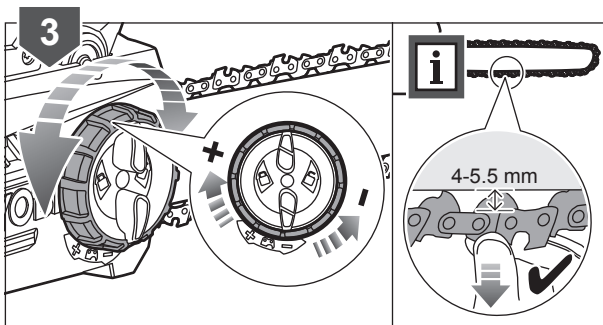
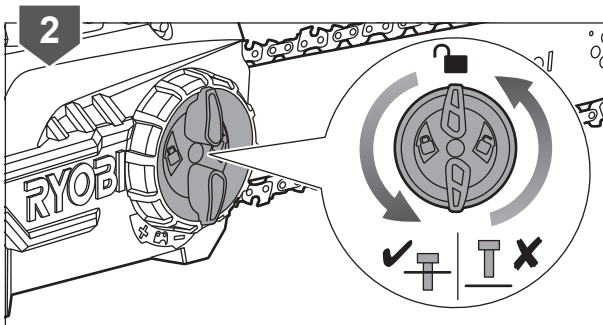
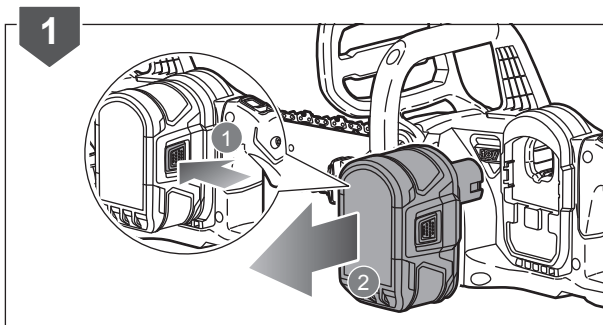
9. Turn the chain tensioner knob clockwise to lock the chain tensioner adjustment ring and sprocket cover.

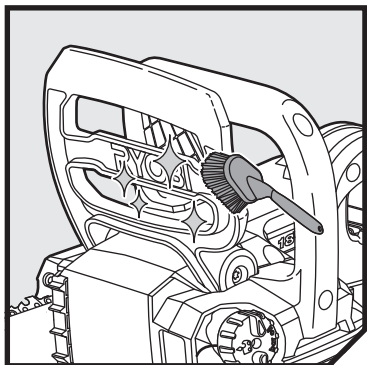




ADJUSTING THE CHAIN TENSION

1. Remove the battery pack. Wear protective gloves.
2. Turn the chain tensioner knob counterclockwise to unlock the chain tensioner adjustment ring.
3. Adjust the chain tension until the gap between the drive teeth and the bar is 4-5.5 mm. Turn the chain tensioner adjustment ring clockwise to increase the tension. Turn the adjustment ring counterclockwise to reduce the tension.
NOTE: Frequently check the chain tension while turning the adjustment ring.
4. Turn the chain tensioner knob clockwise to lock the chain tensioner adjustment ring.

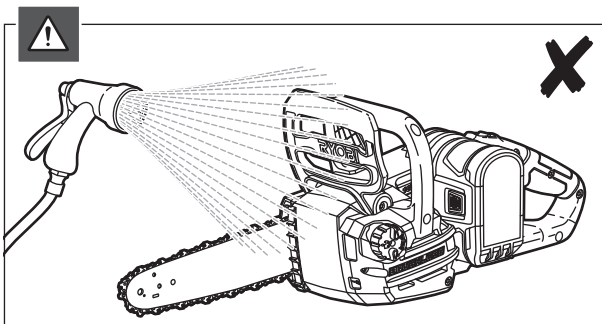
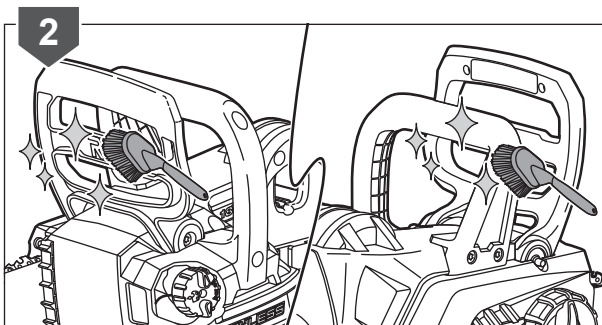
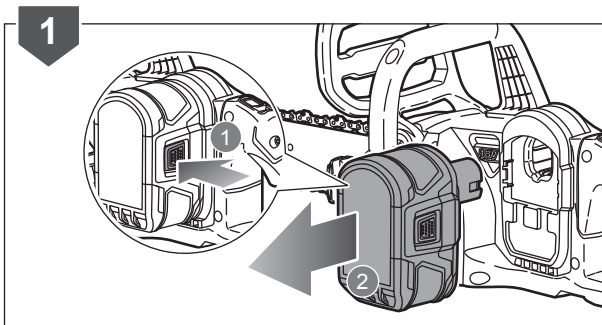




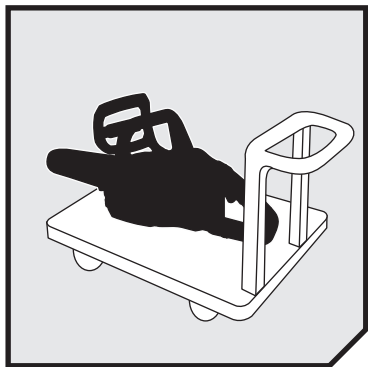
CLEANING THE CHAIN BRAKE

1. Remove the battery pack.
2. Clean the product with a brush. Remove as much loose dirt and sawdust from around the chain brake as possible

WARNING: Do not spray the product with water.

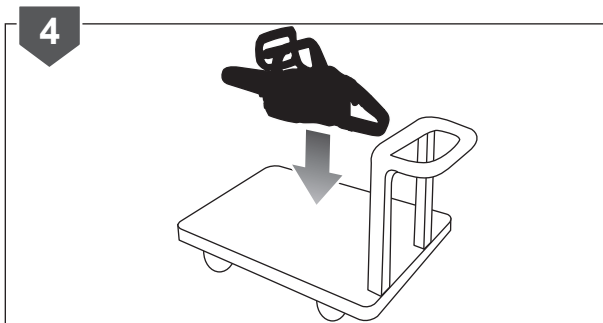
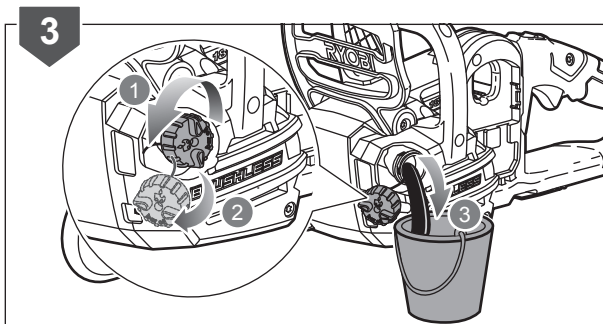
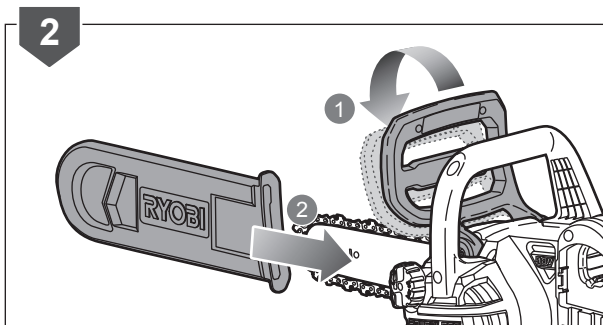
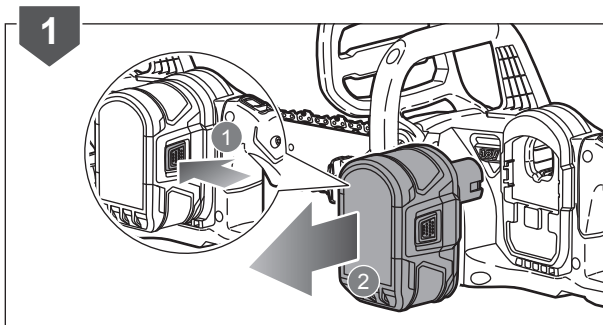


TRANSPORTATION

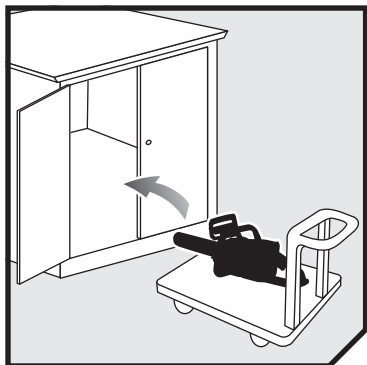


TRANSPORTING THE PRODUCT

1. Remove the battery pack.
2. Engage the chain brake. Install the guide bar cover.
3. Remove all chain and bar oil from the product.
4. Use a trolley to transport the product. Secure it against movement or falling to prevent injury to persons or damage to the product.



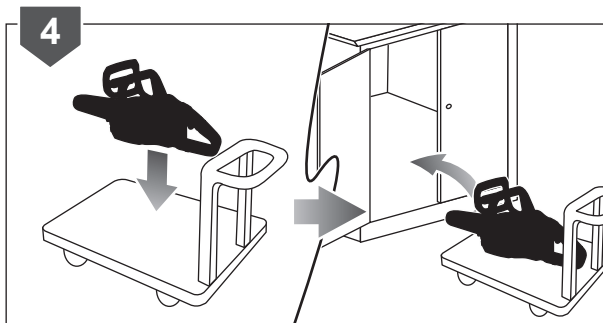
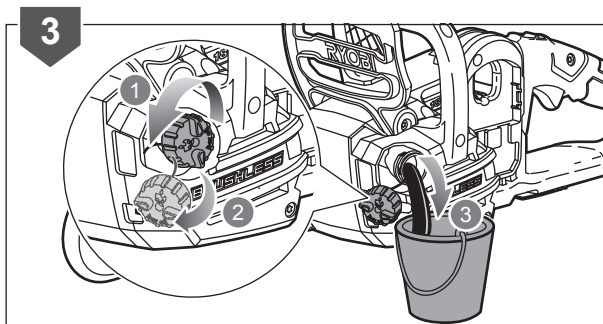
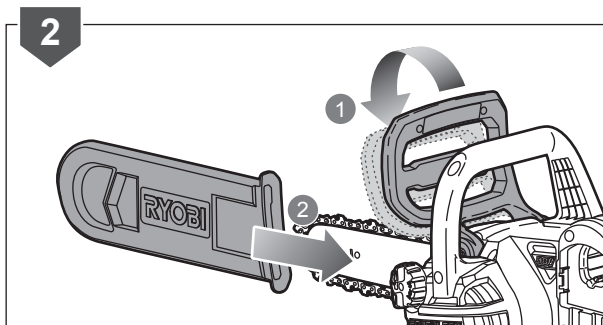
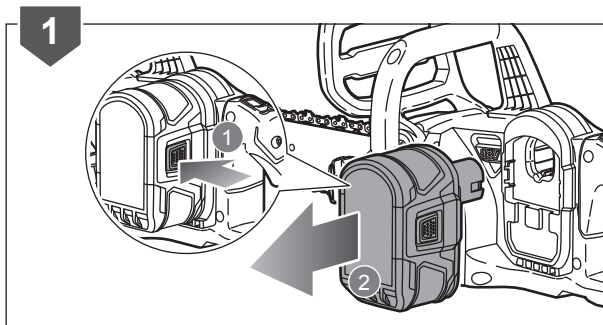
STORAGE



STORING THE PRODUCT

1. Remove the battery pack.
2. Engage the chain brake. Install the guide bar cover.
3. Remove all chain and bar oil from the product.
4. Use a trolley to transport the product to the storage location. Secure it against movement or falling to prevent injury to persons or damage to the product.

Store the product in a cool, dry, and well-ventilated place that is inaccessible to children. Keep the product away from corrosive agents, such as garden chemicals and de-icing salts. Do not store the product outdoors.



PRODUCT SPECIFICATIONS

Cordless Chainsaw

Model	OCS1830BL/ RCS1830BLX4
Rated voltage	18 V d.c.
No-load speed	10 m/s
Guide bar length	300 mm
Usable cutting length	250 mm (10 in.)
Chain pitch	9.525 mm (0.375 in.)
Drive links	45
Drive sprocket	6 teeth x 0.375 in.
Chain oil tank capacity	210 mL
Weight (without battery pack, with guide bar, chain and empty tank)	3.2 kg
Vibration level (in accordance with EN 60745-1 & EN 60745-2-13)	
Front handle	4.0 m/s ²
Rear handle	6.6 m/s ²
Uncertainty of measurement	1.5 m/s ²
Noise emission level (in accordance with EN 60745-1 & EN 60745-2-13)	
A-weighted sound pressure level at operator's position	83.1 dB(A)
Uncertainty of measurement	2.5 dB
A-weighted sound power level	94.1 dB(A)
Uncertainty of measurement	2.5 dB
Sound power level (in accordance with ISO 3744)	
Measured sound power level	93.5 dB(A)
Guaranteed sound power level	96 dB(A)

BATTERY AND CHARGER

Model	OCS1830BL	RCS1830BLX4
Battery pack	-	RB18L40A
Weight	-	0.72 kg
Charger	-	RC18115
Compatible battery packs	RB18L13, RB18L15, RB18L20, RB18L25, RB18L26, RB18L40, RB18L40A, RB18L50, RB18L60A, RB18L90A,	
Compatible Charger	BCS618, BCL14181H, BCL14183H, *BCL14181V, RC1185, RC18120, RC18150, RC18627	

For best performance, use RYOBI 6.0 Ah and 9.0 Ah batteries.

*The compatible charger is for charging in vehicles with 12 V DC outlets.

REPLACEMENT PART (BAR AND CHAIN)

Manufacturer	OREGON	TRI-LINK
Bar	591057	M1431245-1041HL
Chain	90PX045XTT	PWFTCA1201

The chain must be fitted with a bar from the same manufacturer according to the above combinations.

VIBRATION LEVEL

⚠ WARNING

The declared vibration value has been measured with a standard test method and may be used to compare one tool with another.

The declared vibration value may be used in a preliminary assessment of exposure.

The vibration emission during actual use of power tool can differ from the declared total value depending on the ways in which the tool is used.

Identify safety measures to protect yourself based on an estimation of exposure in the actual conditions of use, taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time.



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