ELECTRIC CHAINSAW

1900W 356mm

INSTRUCTION MANUAL

SPECIFICATIONS

Motor:	1900W
Bar Length:	356mm (14")
Cutting Length Max.:	325mm
Chain Speed:	15.5m/s
Oil Tank Capacity:	160ml
Noise Rating:	108dB
Weight:	4.8kg

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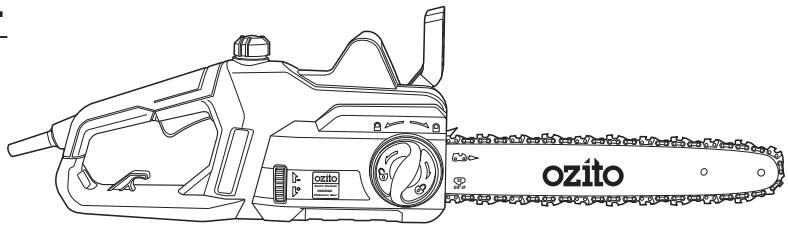
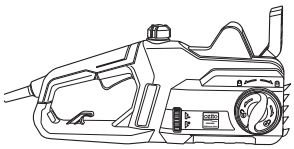


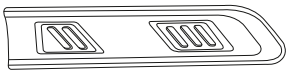
STANDARD EQUIPMENT



Electric Chainsaw

Chain

Guide Bar



Guide Bar Cover

3 YEAR REPLACEMENT WARRANTY*

ECS-1935

WARRANTY

IN ORDER TO MAKE A CLAIM UNDER THIS WARRANTY YOU MUST RETURN THE PRODUCT TO YOUR NEAREST BUNNINGS WAREHOUSE WITH YOUR BUNNINGS REGISTER RECEIPT. PRIOR TO RETURNING YOUR PRODUCT FOR WARRANTY PLEASE TELEPHONE OUR CUSTOMER SERVICE HELPLINE:

Australia: 1800 069 486
New Zealand: 0508 069 486

TO ENSURE A SPEEDY RESPONSE PLEASE HAVE THE MODEL NUMBER AND DATE OF PURCHASE AVAILABLE. A CUSTOMER SERVICE REPRESENTATIVE WILL TAKE YOUR CALL AND ANSWER ANY QUESTIONS YOU MAY HAVE RELATING TO THE WARRANTY POLICY OR PROCEDURE.

The benefits provided under this warranty are in addition to other rights and remedies which are available to you at law.

Our goods come with guarantees that cannot be excluded at law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Generally you will be responsible for all costs associated with a claim under this warranty, however, where you have suffered any additional direct loss as a result of a defective product you may be able to claim such expenses by contacting our customer service helpline above.

3 YEAR REPLACEMENT WARRANTY*

Your product is guaranteed for a period of **36 months from the original date of purchase.** If a product is defective it will be replaced in accordance with the terms of this warranty. Warranty excludes consumable parts, for example: guide bar, chain and included accessories.

*This product is intended for DIY use only and replacement warranty covers domestic use.

WARNING

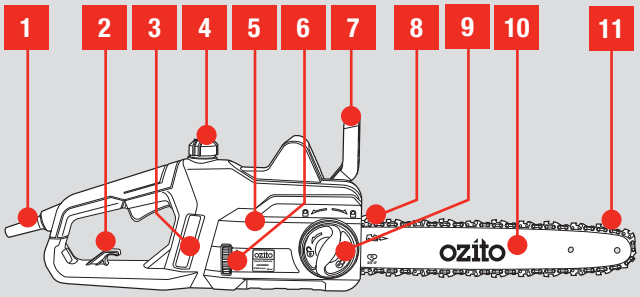
The following actions will result in the warranty being void.

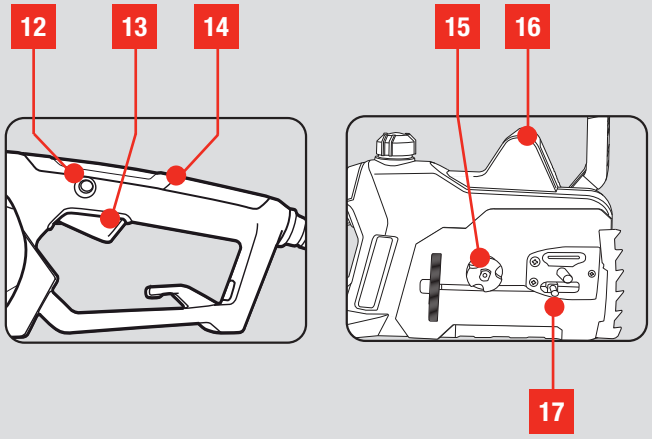
- If the tool has been operated on a supply voltage other than that specified on the tool.
- If the tool shows signs of damage or defects caused by or resulting from abuse, accidents or alterations.
- Failure to perform maintenance as set out within the instruction manual.
- If the tool is disassembled or tampered with in any way.
- Professional, industrial or high frequency use.

KNOW YOUR PRODUCT

ELECTRIC CHAINSAW

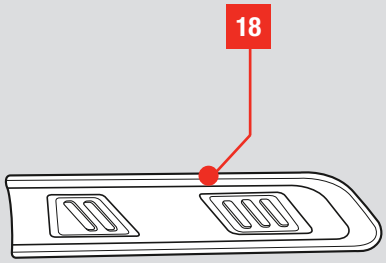
1. Power cord
2. Cord retainer
3. Oil level window
4. Oil tank cap
5. Side cover
6. Chain tensioning dial
7. Chain brake
8. Bucking spikes
9. Side cover lock
10. Guide bar
11. Chain
12. Lock-off switch
13. On/Off trigger
14 Rear handle
15. Sprocket
16. Front handle
17. Chain tensioning pin





ACCESSORIES

18. Guide bar cover



ONLINE MANUAL

Scan this QR Code with your mobile device to take you to the online manual.

3 YEAR REPLACEMENT WARRANTY*

ASSEMBLY

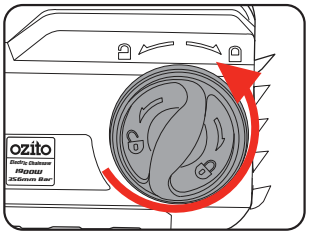
1. GUIDE BAR & CHAIN

WARNING! ENSURE THE TOOL IS TURNED OFF AND DISCONNECTED FROM THE POWER SUPPLY BEFORE PERFORMING ANY OF THE FOLLOWING OPERATIONS.

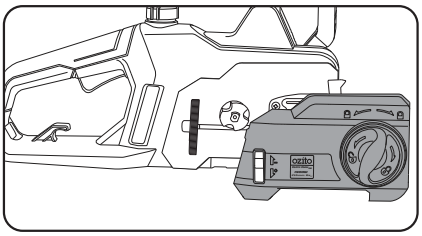
WARNING! ALWAYS WEAR HEAVY GLOVES WHEN HANDLING THE CHAIN AS IT IS VERY SHARP AND CAN CUT YOU WHEN IT IS NOT MOVING.

Fitting the Chain & Bar

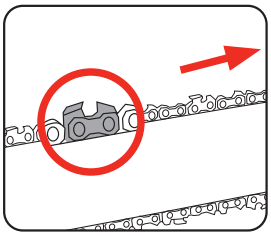
1. Fully unscrew the side cover lock by turning it in an anti-clockwise direction.



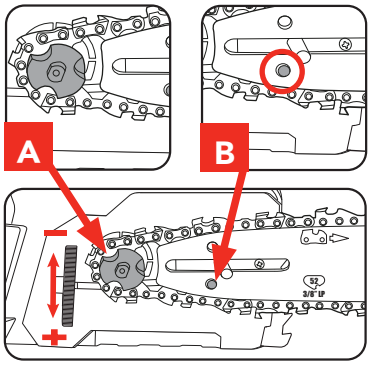
2. Remove the side cover.



3. Fit the chain over the guide bar, making sure that the cutters are facing in the direction of rotation.

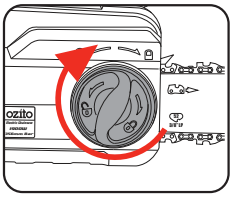


4. Place the guide bar and chain in position, ensuring that the chain is around sprocket (A). Also ensure that the chain tensioning pin (B) fits into the guide bar. If it does not fit, it can be adjusted slightly with the chain tensioning dial. The chain must not slip off the bar when you do this.



5. Pull the guide bar forward until the chain is closely seated. Make sure that all the drive links are in the groove of the guide bar.

6. Place the side cover at a slight angle at the beginning of assembly, then secure with the side cover lock, turning several times for the thread to engage.



Note: Do not fully tighten the side cover lock until after adjusting the chain tension.

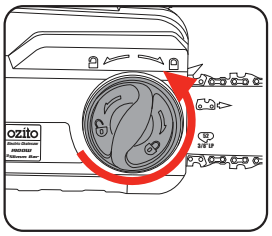
SETUP & PREPARATION

2. CHAIN TENSION

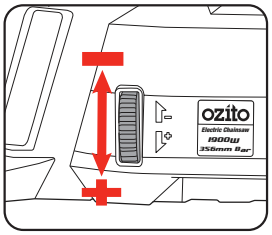
WARNING! ENSURE THE TOOL IS TURNED OFF AND DISCONNECTED FROM THE POWER SUPPLY BEFORE PERFORMING ANY OF THE FOLLOWING OPERATIONS.

Tensioning the Chain

1. Unscrew the side cover lock a few turns to ensure it is loose.

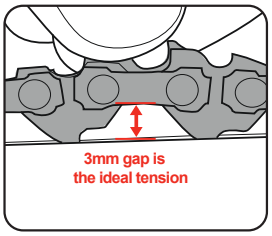


2. Adjust the chain tension with the chain tensioning dial. Rotating the dial downwards increases the tension and rotating the dial up decreases the chain tension.



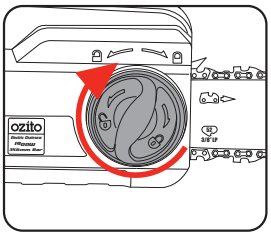
The tension is correct when the chain can be pulled 3mm away from the guide bar when using your finger and thumb.

Do not over-tighten as this will reduce the life of the chain and guide bar.



WARNING! ALL THE CHAIN LINKS MUST LIE PROPERLY IN THE GROOVE OF THE GUIDE BAR.

3. Tighten the side cover lock.



WARNING!: THE CHAIN SHOULD BE ADJUSTED BEFORE FIRST USE, AGAIN AFTER 2 - 3 MINUTES OF OPERATION AND RECHECKED AND ADJUSTED IF NECESSARY AFTER EACH 30 MINUTES OF USE. TAKE CARE NOT TO OVER TENSION THE CHAIN.

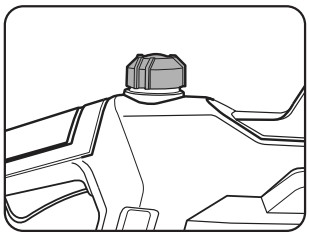
3. LUBRICATION

WARNING! ONLY USE OIL THAT IS EXPRESSLY LABELLED "CHAIN BAR OIL"

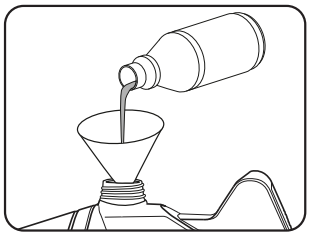
Filling with Oil

Use a funnel (not supplied) and fill the tank slowly to prevent spilling the oil. Do not overfill the tank.

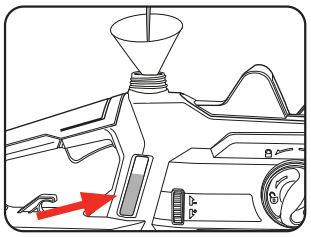
1. Place the chainsaw on a flat surface and remove the oil tank cap.



2. Slowly fill the tank with chain bar oil, ensuring that no dirt enters the tank. The capacity of the chain oil tank is 160ml.



3. Refit cap and clean any oil spillage.

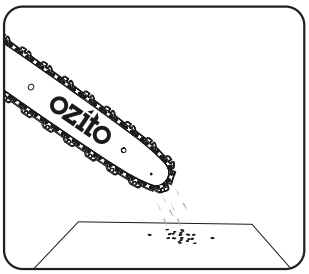


4. Always fill the oil tank when the oil level falls below the minimum mark on the oil level window.

Note: Always check the oil level window before and during the use of the chainsaw.

WARNING! NEVER OPERATE THE CHAINSAW UNLESS THE CHAIN AND BAR ARE LUBRICATED.

5. To check the lubricating system, switch on the chainsaw and hold it with the guide bar and chain above some light coloured paper such as newspaper. A steadily increasing stain caused by oil spray shows the lubricating system is working.



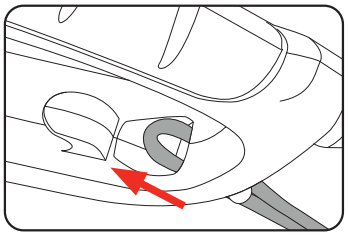
Note: Chain bar oil may leak if the tool is left for long periods. This is normal. If the tool is to be left unused for an extended time, drain the oil from the tool. Refill before use.

OPERATION

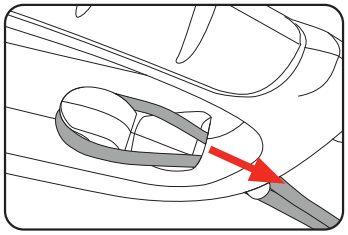
4. CORD RETAINER

The cord retainer is used to “anchor” an extension lead (not included) when it is connected to the power cord of the tool. It prevents the extension lead from being accidentally disconnected from the chainsaw’s power cord or shaken loose during use. Only use Heavy Duty extension lead suitable for outdoor use with electric garden tools, no longer than 25 meters.

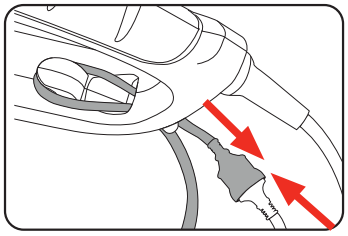
1. Make a loop in the end of the extension lead and pass the loop though the hole in the handle.



2. Hook the loop over the cord retainer. Pull the extension lead to secure it in position over the cord retainer.



3. Connect the extension lead to the power cord of the tool. Route the power cord and extension lead away from the work area to prevent contact with the chainsaw.



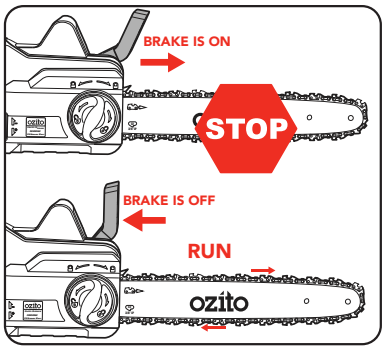
Note: Always use an approved extension lead suitable for the power input of the tool and outdoor use.

5. CHAIN BRAKE

The chain brake operates automatically in the event of kick back.

The chainsaw is fitted with a hand guard/chain brake which, when operated brings the chain to a stop within a tenth of a second.

The chain brake can be operated manually by pushing it forward or automatically as a result of kickback.



Kick back occurs if the chain catches on the wood being cut and the chainsaw pushes back suddenly.

In the event of kick back, your hand (which is on the front handle during operation) jerks forward causing the back on your hand to push the guard forward, engaging the chain brake and quickly stopping the chain.

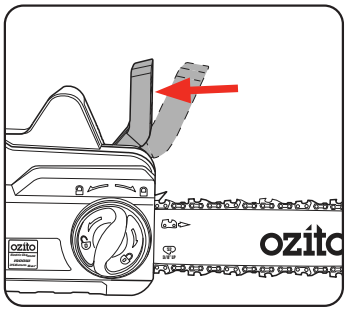
WARNING!: CHECK THE OPERATION OF THE CHAIN BRAKE ON A REGULAR BASIS. NEVER USE THE CHAINSAW IF THE CHAIN BRAKE IS NOT WORKING PROPERLY.

6. SWITCHING ON/OFF

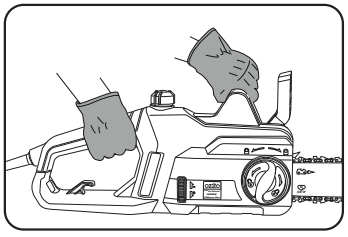
WARNING: TO REDUCE THE RISK OF ELECTRICAL SHOCK, WE RECOMMEND THE USE OF A RESIDUAL CURRENT DEVICE (RATED 30mA OR LESS).

Switching On

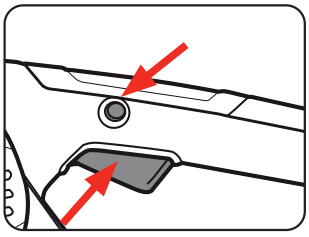
1. Pull the hand guard/chain brake towards you. The brake may be stiff and may require to be moved with some force. If the brake is engaged the chain will not operate.



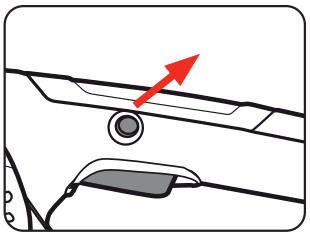
2. Hold the front handle with your left hand and the rear handle with your right hand.



3. Use the thumb of your right hand to push the lock-off switch in and squeeze the on/off trigger to start the motor.

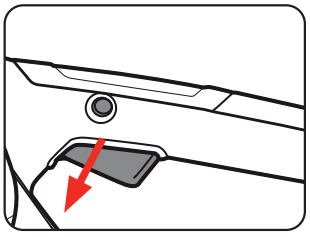


4. The chain will now be running, ready to make a cut. Release the lock-off switch.



Switching Off

1. Release the ON/OFF trigger. The integrated brake will bring the running chainsaw to a standstill within a very short space of time.



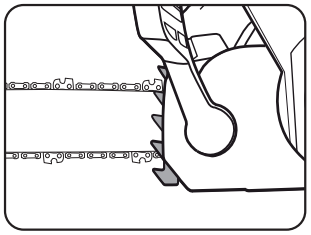
WARNING!: ALWAYS CARRY THE CHAINSAW BY THE FRONT HANDLE. IF THE CHAINSAW IS PLUGGED IN AND YOU CARRY IT BY THE REAR HANDLE, THERE IS A RISK THAT YOU COULD ACCIDENTALLY PRESS THE LOCK-OFF SWITCH AND THE ON/OFF TRIGGER AT THE SAME TIME, INADVERTENTLY STARTING THE CHAINSAW.

7. CUTTING

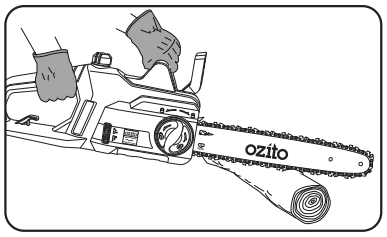
WARNING! FIRST TIME USERS SHOULD, AS A MINIMUM PRACTISE, CUT LOGS ON A SAW-HORSE OR CRADLE.

WARNING! POSITION THE POWER LEAD SO THAT IT WILL NOT BE CAUGHT IN BRANCHES DURING CUTTING.

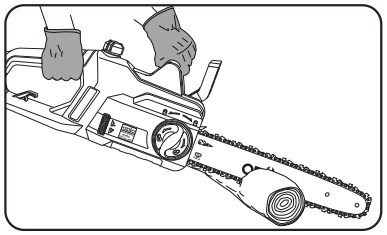
1. Press the bucking spikes against the timber ensuring the chain is not making contact with the material being cut.



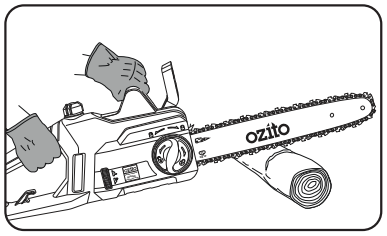
2. Start cutting by holding the chainsaw by the front handle and raising the rear handle.



3. If you cannot cut the timber in a single stroke, apply light pressure to the front handle and continue sawing, draw the chainsaw back a little then apply the bucking spikes a little lower and finish the cut by raising the rear handle.



4. Withdraw the chainsaw from the cut while the chain is still running.



Hints and Tips

- Do not force the saw into the cut. Apply only light pressure whilst running the motor at full speed.
- If the chain gets caught in the cut, switch off and disconnect the product from the power supply. Do not try to remove it by twisting the guide bar or pulling forcibly. Use a lever or wedge to open up the cut so that the chain is freed.
- While cutting, always:
  - Run the chainsaw motor at full revs. This makes the job safer, as there is less chance of pull-in or kick-back.
  - Position your body to the left of the chainsaw so if it kicks back uncontrollably, it goes over your right shoulder, never stand in the cutting line of the saw.
  - Keep a firm grip with your left hand on the front handle, with your thumb securely below the handle.

APPLICATIONS

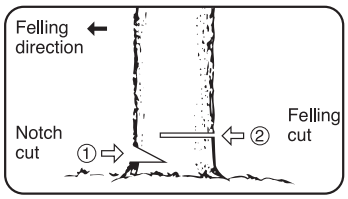
8. CUTTING APPLICATIONS

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. TIP CONTACT IN SOME CASES MAY CAUSE A LIGHTNING FAST REVERSE REACTION, KICKING THE GUIDE BAR UP AND BACK TOWARDS THE OPERATOR.

Felling a Tree

WARNING!: FELLING A TREE SHOULD ONLY BE DONE BY TRAINED OPERATORS.

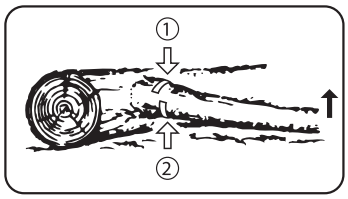
Decide the direction in which you wish the tree to fall, taking into account the direction of the wind, the position of branches, lean of the tree, ease of subsequent limbing and bucking and other factors prevalent at the time.



Limbing

WARNING! ALWAYS KEEP A BALANCED STANCE. DO NOT STAND ON THE LOG. BE ALERT TO THE FACT THAT THE LOG MAY ROLL OVER. WHEN WORKING ON A SLOPE, ALWAYS STAND ON THE UP HILL SIDE OF THE LOG.

Limbing is the process of removing the branches from a fallen tree. Check the direction in which a branch will bend before cutting it. Always cut on the opposite side to the bending direction so that the guide bar is not pinched in the cut. For large limbs that cannot be removed in one cut, make an initial cut from the bent side and finish by sawing from the opposite direction. Do not remove limbs that are supporting the fallen tree on the ground until the tree has been cut into lengths.

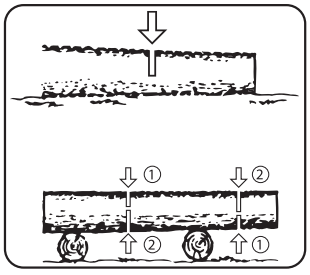


Bucking

WARNING!: AVOID CUTTING INTO THE GROUND AS THIS WILL VERY QUICKLY DULL THE CHAIN.

Bucking is cutting a log into lengths for easier handling. To saw a log lying on the ground, first saw halfway, then roll the log over and cut from the opposite side.

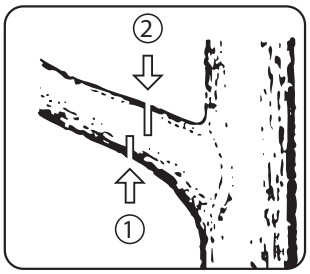
To saw the end of a log supported off the ground, first saw up from the bottom one-third through the log then finish by sawing down from the top. To saw a log in the middle of two supports holding it off the ground, first saw down from the top one-third through the log then finish by sawing up from the bottom.



Pruning

WARNING! DO NOT USE AN UNSTABLE FOOT-HOLD OR LADDER. DO NOT OVERREACH. DO NOT SAW ABOVE SHOULDER HEIGHT. ALWAYS USE BOTH HANDS TO HOLD THE SAW. FIRST CUT UP FROM THE BOTTOM AND FINISH DOWN FROM THE TOP.

Pruning is the removal of a limb or branch from a standing tree.



MAINTENANCE

WARNING! ENSURE THE TOOL IS TURNED OFF AND DISCONNECTED FROM THE POWER SUPPLY BEFORE PERFORMING ANY OF THE FOLLOWING OPERATIONS.

WARNING! ALWAYS WEAR HEAVY GLOVES WHEN HANDLING THE CHAIN AS IT IS VERY SHARP AND CAN CUT YOU WHEN IT IS NOT MOVING.

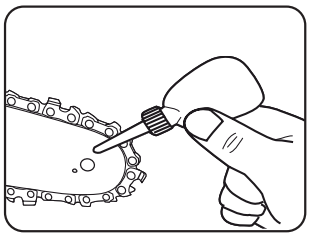
Chain Tension

Check the chain tension frequently and adjust as often as necessary. (see Tensioning the chain)

Maintaining the Guide Bar

Most guide bar problems can be prevented by keeping the chainsaw well maintained. Insufficient guide bar lubrication and operating the saw with a chain that is TOO TIGHT will contribute to rapid bar wear.

To help minimize bar wear, the following guide bar maintenance procedures are recommended.



- The bar should be reversed every 8 working hours to ensure uniform wear. Keep the bar groove and lubrication hole clean.
- Check the bar rails frequently for wear and, if necessary, remove the burs and square-up the rails using the flat file.
- Oil passages on the bar should be cleaned to ensure proper lubrication of the bar and chain during operation. Grease the nose sprocket at the tip of the guide bar.

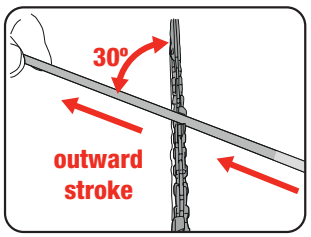
Note: The condition of the oil passages can be easily checked. If the passages are clear, the chain will automatically give off a spray of oil within seconds of starting the saw. Your saw is equipped with an automatic oiler system.

Chain Sharpening

WARNING! WEAR HEAVY GLOVES WHEN HANDLING THE CHAIN. HOLD THE GUIDE BAR SECURELY IN A VICE.

Chain File: 3.96mm (5/32")
Chain Pitch: 9.53mm (3/8")
Chain Gauge: 1.3mm (.050")

Sharpen the chain regularly to maintain optimum performance of the saw. Signs of a dull chain are:



- The sawdust becomes powder-like
- Extra force is required to execute a cut
- The cut does not track in a straight line
- Increased vibration

Sharpen each cutter using a chain file. Always use outward strokes and maintain a 30° angle between the chain and file. After sharpening, the cutters must all have the same width and length.

After every 3 – 4 uses get an authorised repair centre to professionally sharpen your chain. They have the special tools necessary to ensure the correct cutting angles and depths.

MAINTENANCE (cont.)

Cleaning & Storing

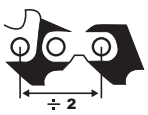
- Keep the handles free of grease and oil so that you can maintain a firm grip.
- Clean the device as required with a damp cloth and, if necessary, mild washing up liquid.
- If the chainsaw is not to be used for an extended period of time then you should remove the chain bar oil from the tank. Briefly immerse the chain and the guide bar in an oil bath and then wrap them in oil paper and store in guide bar cover.

Ozito Industries will not be responsible for any damage or injuries caused by repair of the tool by an unauthorised person or mishandling or mistreatment of the tool. This tool is designed for Domestic Home Use only. Use in commercial or industrial environments will void the warranty.

SPARE PARTS

Chain Replacement

The chain can be purchased through Ozito spare parts or from your local Bunnings Warehouse. The correct chain can be purchased by matching the pitch, gauge and number of links as shown below:



9.53mm (3/8")

1.3mm (.050") Gauge

52 Links

Spare parts can be ordered from the Special Orders Desk at your local Bunnings Warehouse.

For further information, or any parts not listed here, visit

www.ozito.com.au or contact Ozito Customer Service:

Australia 1800 069 486

New Zealand 0508 069 486

E-mail: enquiries@ozito.com.au

DESCRIPTION OF SYMBOLS

V	Volts	Hz	Hertz
~	Alternating Current	W	Watts
/min	Revolutions or reciprocations per minute	n_0	No load speed
⧈	Double insulated		Wear hearing & eye protection
Ø	Diameter		Wear non-slip heavy duty gloves
	Regulatory Compliance Mark (RCM)		Warning
	Disconnect and discontinue use should the power cord be damaged.		Beware of kickback
	Read Instruction Manual		Do not expose to rain
	Sound power level		Always hold the chainsaw with both hands
			Chain drive links 52
	**IMPORTANT!** When placing the chain on the guide bar, ensure the chain direction is the same as the image on the guide bar		

TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Chainsaw will not work.	Chain brake engaged	Disengage brake
	No power supply	Try alternative source of electrical power
	Defective mains outlet	Try alternative source of electrical power
	Power extension cord damaged	Check the cable and replace if required
Chainsaw operates intermittently	Power cable damaged	Replace power cable
	On/Off switch defective	Replace switch
Dry chain	No oil in oil tank	Fill oil tank with chain bar oil
	Oil tank cap breather blocked	Clean oil tank cap
	Oil outlet blocked	Clear oil outlet
Chain or guide rail hot	No oil in oil tank	Fill oil tank with chain bar oil
	Oil tank cap breather blocked	Clean oil tank cap
	Oil outlet blocked	Clear oil outlet
	Blunt chain	Sharpen or replace chain
Wont cut	Blunt chain	Sharpen or replace chain
	Chain on backwards (chain teeth pointing in the wrong direction)	Remove chain and reinstall with the teeth facing in the correct direction
	Worn chain	Replace the chain
Chainsaw vibrating or not cutting properly	Chain tension too loose	Adjust chain to correct tension
	Blunt chain	Sharpen or replace chain
	Worn chain	Replace the chain
	Chain on backwards (chain teeth pointing in the wrong direction).	Remove chain and reinstall with the teeth facing in the correct direction

CARING FOR THE ENVIRONMENT

Power tools that are no longer usable should not be disposed of with household waste but in an environmentally friendly way. Please recycle where facilities exist. Check with your local council authority for recycling advice.

Recycling packaging reduces the need for landfill and raw materials. Reuse of recycled material decreases pollution in the environment. Please recycle packaging where facilities exist. Check with your local council authority for recycling advice.

ELECTRICAL SAFETY

WARNING! When using mains-powered tools, basic safety precautions, including the following, should always be followed to reduce risk of fire, electric shock, personal injury and material damage. Read the whole manual carefully and make sure you know how to switch the tool off in an emergency, before operating the tool.

Save these instructions and other documents supplied with this tool for future reference.

The manufacturer cannot accept any liability for damage or accidents which arise due to a failure to follow these instructions and the safety information.

This product has been designed for 230V and 240V only. Always check that the power supply corresponds to the voltage on the rating plate.

If the supply cord is damaged, it must be replaced by an electrician or a power tool repairer in order to avoid a hazard.

Note: The supply of 230V and 240V is interchangeable for Australia and New Zealand. This tool is double insulated in accordance with AS/NZS 62841-1; therefore no earth wire is required.

The power supply for this product should be protected by a residual current device (rated at 30mA or less). A residual current device reduces the risk of electric shock.

If the supply cord is damaged, it must be replaced by an electrician or a power tool repairer in order to avoid a hazard.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Note: Double insulation does not take the place of normal safety precautions when operating this tool. The insulation system is for added protection against injury resulting from a possible electrical insulation failure within the tool.

Using an Extension Lead

Always use an approved extension lead suitable for the power input of this tool. Before use, inspect the extension lead for signs of damage, wear and ageing. Replace the extension lead if damaged or defective. When using an extension lead on a reel, always unwind the lead completely. Use of an extension lead not suitable for the power input of the tool or which is damaged or defective may result in a risk of fire and electric shock.

GENERAL POWER TOOL 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.

1. Work area safety

a. **Keep work area clean and well lit**. Cluttered or dark areas invite accidents.

b. **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.

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

2. Electrical safety

a. **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.

b. **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.

c. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

d. **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.

e. **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.

f. **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.

3. Personal safety

a. **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.

b. **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.

c. **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.

d. **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.

e. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.

f. **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.

g. **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.

h. **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.

4. Power tool use and care

a. **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.

b. **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.

c. **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.

d. **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.

e. **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.

f. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g. **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.

h. **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.

5. Service

a. **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.

b. **If the supply cord is damaged, it must be replaced by the manufacturer,** its service agent or similarly qualified persons in order to avoid a hazard.

ADDITIONAL SAFETY INSTRUCTIONS FOR CHAINSAWS

- **Keep all parts of the body away from the saw chain when the chain saw is operating. Before you start the chain saw, make sure the saw chain is not contacting anything.** A moment of inattention while operating chain saws may cause entanglement of your clothing or body with the saw chain.
- **Always hold the chain saw with your right hand on the rear handle and your left hand on the front handle.** Holding the chain saw with a reversed hand configuration increases the risk of personal injury and should never be done.
- **Hold the power tool by insulated gripping surfaces only, because the saw chain may contact hidden wiring or its own cord.** Saw chains contacting as a "live" wire may make exposed metal parts of the tool "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 from flying debris or accidental contact with the saw chain.
- **Do not operate a chain saw in a tree, on a ladder, from a rooftop, or any unstable support.** Operation of a chain saw in this manner could result in serious personal injury.
- **Always keep proper footing and operate the chain saw 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 chain saw.
- **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 chain saw 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 chain saw by the front handle with the chain saw switched off and away from your body. When transporting or storing the chain saw always fit the guide bar cover.** Proper handling of the chain saw 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 chain saw for purposes not intended. For example: do not use chain saw for cutting plastic, masonry or non-wood building materials.** Use of the chain saw 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. Felling a tree will require a larger work area. Ensure the work area is adequate while felling a tree.

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 chain saw 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 chain saw 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 chain saw.
- **Do not overreach and do not cut above shoulder height.** This helps prevent unintended tip contact and enables better control of the chain saw 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.