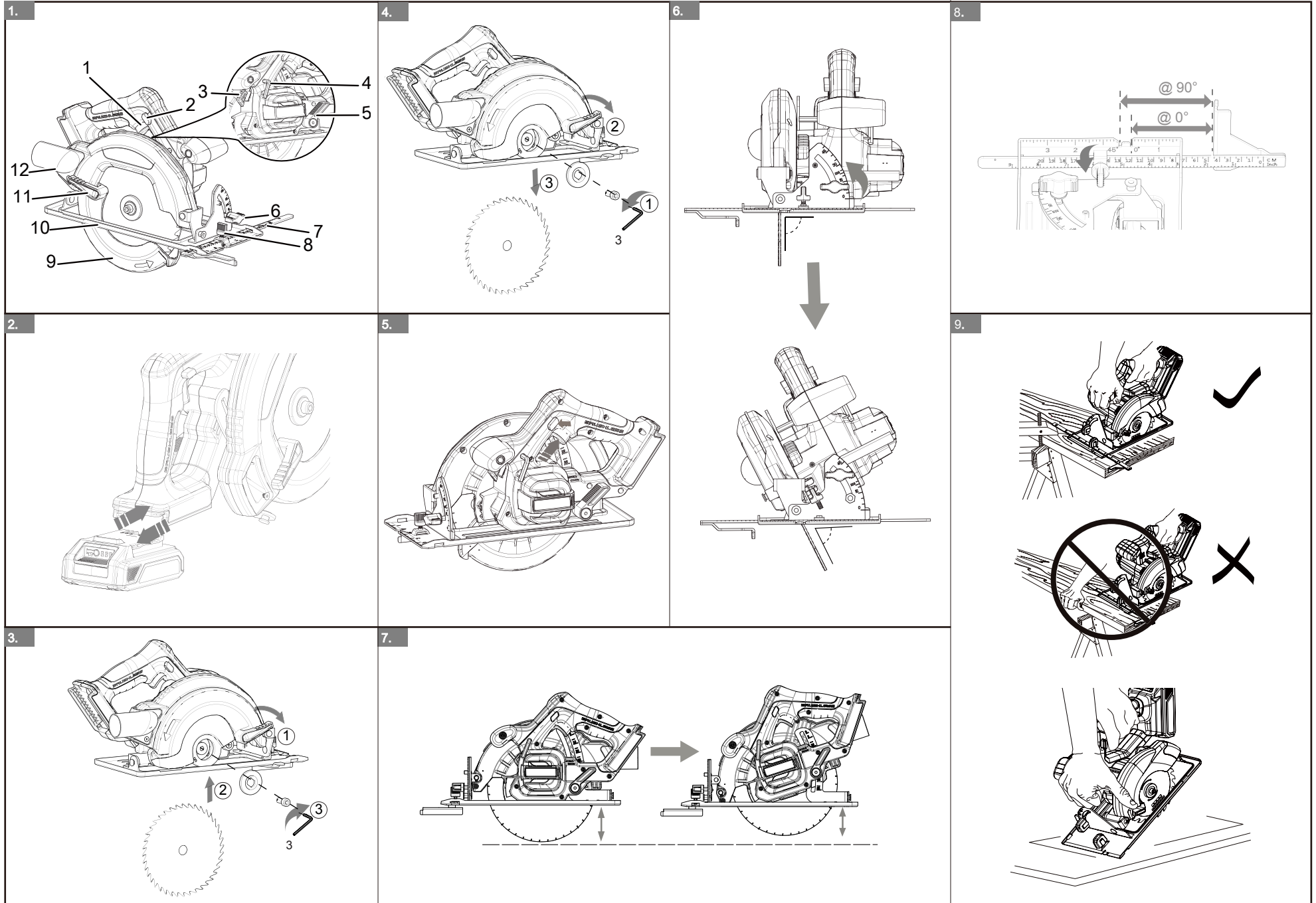


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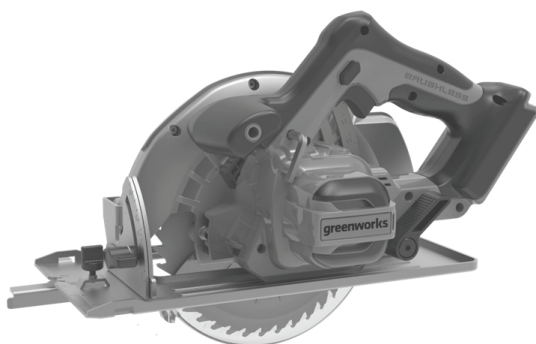
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CIRCULAR SAW

OPERATOR MANUAL



E8038

CRD401

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1 DESCRIPTION

1.1 PURPOSE

The machine is used to cut all types of wood.

1.2 OVERVIEW

Figure 1.

1 Switch trigger	7 Edge guide
2 Lock-off Button	8 Width adjustment knob
3 Spindle lock button	9 Lower guard
4 Hex key	10 Base
5 Depth adjustment lever	11 Lower guard lever
6 Bevel adjustment knob	12 Tube

1.3 PACKING LIST

1 Circular saw	6 Manual (operation manual, figure sheet)
2 Hex key	
3 Cutting blade	
4 Edge guide	
5 Dust tube with a screw	

2 INTRODUCTION

Your product has been engineered and manufactured to high standards for dependability, ease of operation, and operator safety. When properly cared for, it will give you years of rugged, trouble-free performance.

2.1 INTENDED USE

The machine is used to cut all types of wood.

3 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.

3.1 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.**

3.2 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 and 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.**

3.3 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 lapse of attention while operating power tools may result in serious personal injury.**
- **Use personal protection. Always wear eye protection. Protective products such as dust mask, non-skid safety shoes, hard hat or hearing protection used appropriately will reduce personal injuries.**
- **Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack and when picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing 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 over-reach. 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 jewelry. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewelry 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.*
- **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 fire.*
- **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with plenty of soap and water. If liquid contacts eyes, immediately 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.*

3.4 POWER TOOL USE AND CARE

- **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
- **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
- **Maintain power tools 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.*

3.5 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.*

- **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.*

3.6 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 authorized service providers.*

4 SAFETY WARNINGS FOR CIRCULAR SAW

4.1 CUTTING PROCEDURES

▲ DANGER

Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle, or motor housing. If both hands are holding the saw, they cannot be cut by the blade.

- **Do not reach underneath the workpiece.** *The guard cannot protect you from the blade below the workpiece.*
- **Adjust the cutting depth to the thickness of the workpiece.** *Less than a full tooth of the blade teeth should be visible below the workpiece.*
- **Never hold piece being cut in your hands or across your leg. Secure the workpiece to a stable platform.** *It is important to support the work properly to minimize body exposure, blade binding, or loss of control.*
- **Hold power tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring.** *Contact with a "live" wire will also make exposed metal parts of the power tool "live" and shock the operator.*

- **When ripping, always use a rip fence or straight edge guide.** *This improves the accuracy of cut and reduces the chance of blade binding.*
- **Always use blades with correct size and shape (diamond versus round) of arbour holes.** *Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.*
- **Never use damaged or incorrect blade washers or bolt.** *The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.*

4.2 CAUSES AND OPERATOR PREVENTION OF KICKBACK:

- Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator.
- When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator.
- If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.
- Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:
 - **Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade.** *Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.*
 - **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur.** *Investigate and take corrective actions to eliminate the cause of blade binding.*
 - **When restarting a saw in the workpiece, center the saw blade in the kerf and check that saw teeth are not engaged into the material.** *If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.*
 - **Support large panels to minimize the risk of blade pinching and kickback.** *Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.*
 - **Do not use dull or damaged blades.** *Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.*
 - **Blade depth and bevel adjusting locking knobs must be tight and secure before making cut.** *If*

blade adjustment shifts while cutting, it may cause binding and kickback.





- **Use extra caution when sawing into existing walls or other blind areas.** *The protruding blade may cut objects that can cause kickback.*

4.3 LOWER GUARD SAFETY INSTRUCTIONS

- **Check lower guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.** *If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.*
- **Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use.** *Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a buildup of debris.*
- **The lower guard may be retracted manually only for special cuts such as "plunge cuts" and "compound cuts".** *Raise the lower guard by the retracting handle and as soon as the blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.*
- **Always observe that the lower guard is covering the blade before placing saw down on bench or floor.** *An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.*

5 SYMBOLS ON THE PRODUCT




Some of the following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

Symbol	Explanation
V	Volts
min ⁻¹	No-load speed
	Direct current
	Safety alert
	Read and understand all instructions before operating the product, and follow all warnings and safety instructions.
	Wear ear protection.




Symbol	Explanation
	Wear eye protection
	Do not expose the product to rain or moist conditions.
	Wear a dust mask
	No Hands Symbol
	No Hands Symbol
	No Hands Symbol
	Hot Surface

6 RISK LEVELS

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

SYM-BOL	SIGNAL	MEANING
	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.

7 RECYCLE

	Separate collection. You must not discard with usual household waste. If it is necessary to replace the machine, or if it is no more use to you, do not discard it with household waste. Make this machine available for separate collection.
	Separate collection of used machine and packaging let you recycle materials and use them again. Use of the recycled materials helps prevent environmental pollution and decreases the requirements for raw materials.
	At the end of their useful life, discard batteries with a precaution for our environment. The battery contains material that is dangerous to you and the environment. You must remove and discard these materials separately at a equipment that accepts lithium-ion batteries.

8 INSTALLATION

8.1 UNPACK THE MACHINE

▲ WARNING

Make sure that you correctly assemble the machine before use.

▲ WARNING

- If parts of the machine are damaged, do not use the machine.
- If you do not have all the parts, do not operate the machine.
- If the parts are damaged or missing, contact the service center.

1. Open the package.
2. Read the documentation in the box.
3. Remove all the unassembled parts from the box.
4. Remove the machine from the box.
5. Discard the box and package in compliance with local regulations.

8.2 INSTALL THE BATTERY PACK

Figure 2.

▲ WARNING

- If the battery pack or charger is damaged, replace the battery pack or the charger.
- Stop the machine and wait until the motor stops before you install or remove the battery pack.
- Read, know, and do the instructions in the battery and charger manual.

1. Align the lift ribs on the battery pack with the grooves in the battery compartment.
2. Push the battery pack into the battery compartment until the battery pack locks into place.
3. When you hear a click, the battery pack is installed.

8.3 REMOVE THE BATTERY PACK

Figure 2.

1. Push and hold the battery release button.
2. Remove the battery pack from the machine.

8.4 INSTALL THE BLADE

Figure 3.

i NOTE

Before you install the blade, remove the battery pack from the machine.

1. Use the lower guard lever to lift the lower guard and hold the lever.
2. Install the new blade.
3. Put the outer flange and the blade bolt on the spindle.
4. Push the spindle lock button to lock the spindle.
5. Use the hex key to tighten the bolt clockwise.

i NOTE

The arrow on the blade points the same direction as the arrow on the top guard.

8.5 REMOVE THE BLADE

Figure 4.

i NOTE

Before you remove the blade, remove the battery pack.

1. Push the spindle lock button to lock the spindle.
2. Use the hex key to loosen the blade bolt counterclockwise.
3. Remove the bolt and outer flange.
4. Use the lower guard lever to lift the lower guard and hold the lever.
5. Remove the blade.

9 OPERATION**▲ WARNING**

Always wear eye protection.

▲ WARNING

Do not use any attachments or accessories not recommended by the manufacturer of this product.

9.1 START THE MACHINE

Figure 5

i NOTE

The machine can not work until the lock-off Button is pushed fully to the left or right. Do not operate the machine at low speeds for extended periods of time.

1. Pull the trigger to turn the machine ON.

9.2 STOP THE MACHINE

Figure 5.

1. Release the trigger to stop the machine.

9.3 ADJUST THE CUTTING ANGLE

Figure 6.

1. Loosen the bevel lock knob.
2. Use bevel scale to set the necessary angle.
3. Tighten the bevel lock knob.

9.4 ADJUST THE CUTTING DEPTH

Figure 7.

1. Loosen the depth adjustment lever.
2. Raise or lower the base until the depth scale reaches the required cutting depth.
3. Tighten the depth adjustment lever.

9.5 ADJUST THE CUTTING WIDTH

Figure 8.

1. Loosen the width adjustment knob to move the edge guide to the necessary width.
2. Tighten the width adjustment knob after adjustment.

9.6 OPERATE THE MACHINE

Figure 9.

Kickback occurs when the blade stalls quickly and the machine is driven back to you. A step which pinches the blade in the wood can cause blade stalling.

▲ WARNING

To prevent kickback, release switch trigger immediately if the blade stalls.

1. Keep the blade at the correct depth position.
2. Examine the workpiece for nails before you cut. Do not saw into a nail.
3. Make straight cuts. Use a straight edge guide when rip cutting. This helps prevent you twist the blade.
4. Use clean, sharp, and correctly set blades. Do not make cuts with blunt blades.
5. Support the workpiece correctly before you begin a cut.
6. Use stable pressure when you make a cut. Do not force a cut.
7. Do not cut warped or wet lumber.
8. Hold the saw tightly with the two hands and keep your body in a balanced position to against the forces if kickback occurs.

10 MAINTENANCE**▲ CAUTION**

Do not let brake fluids, gasoline, petroleum-based materials touch the plastic parts. Chemicals can cause damage to the plastic, and make the plastic unserviceable.

▲ CAUTION

Do not use strong solvents or detergents on the plastic housing or components.

▲ WARNING

Remove the battery pack from the machine before maintenance.

10.1 CLEAN THE MACHINE**▲ CAUTION**

The machine must be dry. Humidity can cause risks of electrical shocks.

- Clear the unwanted material out of the air vent with a vacuum cleaner.
- Do not spray the air vent or put the air vent in solvents.
- Clean the housing and the plastic components with a moist and soft cloth.

11 TECHNICAL DATA

Voltage	24 V
No Load Speed	4,500 min ⁻¹
Blade diameter	184 mm

Weight without battery	3.35 kg
Max cutting depth at 0°	63 mm
Max cutting depth at 45°	43 mm
Battery model	G24B2/G24B4 and other BAG series
Charger model	2913907 and other CAG series
Measured sound pressure level	84.6dB(A), K _{pA} = 3 dB(A)
Measured sound power level	95.6 dB(A), K _{wA} = 3 dB(A)
Vibration	< 2.5 m/s ² , K = 1.5 m/s ²

The recommended ambient temperature range:

Item	Temperature
Appliance storage temperature range	32°F (0°C) - 113°F (45°C)
Appliance operation temperature range	32°F (0°C) - 113°F (45°C)
Battery charging temperature range	39°F (4°C) - 104°F (40°C)
Charger operation temperature range	39°F (4°C) - 104°F (40°C)
Battery storage temperature range	32°F (0°C) - 113°F (45°C)
Battery discharging temperature range	32°F (0°C) - 113°F (45°C)

12 WARRANTY

(The full warranty terms and conditions can be found on Greenworks webpage)

The Greenworks warranty is 4 years on the product, and 2 years on batteries (consumer/private usage) from the date of purchase. This warranty covers manufacturing faults. A faulty product under warranty might be either repaired or replaced. A unit that has been misused or used in other ways than described in the owner's manual might be rejected for warranty. Normal wear, and wear parts are not considered as warranty. The original manufacturer warranty is not affected by any additional warranty offered by a dealer or retailer.

A faulty product must be returned to the point of purchase in order to claim for warranty, together with the proof of purchase (receipt).