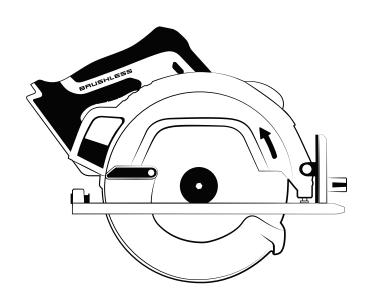
greenworks

EN CIRCULAR SAW OPERATOR MANUAL

FR SIERRA CIRCULAR MANUEL D'OPÉRATEUR

ES SCIE CIRCULAIRE MANUAL DEL OPERADOR



24V Brushless Circular saw

CRD401

CR24L00

www.greenworkstools.com

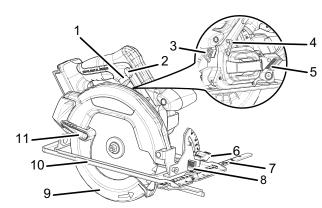
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1 DESCRIPTION

1.1 PURPOSE

The machine is used to cut all types of wood.

1.2 OVERVIEW



- 1 Trigger
- 2 Lock-off Button
- 3 Spindle Lock Button
- 4 Hex Key
- 5 Depth Adjustment Knob
- 6 Bevel Adjustment Knob
- 7 Edge Guide
- 8 Width Adjustment Knob
- 9 Lower Guard
- 10 Base
- 11 Lower Guard Lever

1.3 PACKING LIST

- 1 Circular saw
- 4 Edge guide
- 2 Hex key
- 5 Manual
- 3 Cutting blade

2 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 mainsoperated (corded) power tool or BATTERY-operated (cordless) power tool.

2.1 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.

2.2 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.

2.3 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 jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

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

2.4 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.

2.5 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.
- 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.
- 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.

2.6 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.

2.7 SPECIFIC SAFETY RULES

- Know your power tool. Read operator manual carefully. Learn its applications and limitations, as well as the specific potential hazards related to this power tool. Obey this instruction will reduce shock, fire or serious injury.
- Always wear safety glasses with side shields marked to comply with ANSI Z87.1. Obey this instruction will reduce the risk of serious injury.
- Protect your lungs. Wear a face or dust mask if the operation is dusty. Obey this instruction will reduce the risk of serious injury.
- Protect your hearing. Wear hearing protection during extended periods of operation. Obey this instruction will reduce the risk of serious injury.
- Battery tools do not have to be plugged into an electrical outlet; thus, they are always in operating condition. Be aware of possible hazards when not using your battery tool or when changing accessories. Obey this instruction will reduce the risk of electric shock, fire, or serious injury,
- Do not place battery tools or their batteries near fire or heat. This will reduce the risk of explosoion and possibl injury.
- Do not crush, drop or damage battery pack. Do not use a battery pack or charger that has been dropped or received a sharp blow. A damaged battery is subject to explosion. Properly dispose of a dropped or damaged battery immediately.

- Batteries can explode in the presence of a source of ignition, such as a pilot light. To reduce the risk of serious injury, never use any cordless product in the presence of open flame. An exploded battery can propel debris and chemicals. If exposed, flush with water immediately.
- **Do not charge battery tool in a damp or wet location.**Obey this instruction will reduce the risk of electric shock.
- For best results, your battery tool should be charged in a location where the temperature is more than 50°F but less than 100°F. To reduce the risk of serious injury, do not store outside or in vehicles.
- Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with your sink, wash immediately with soap and water. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention. Obey this instruction will reduce the risk of serious injury.
- Keep these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you borrow someone this tool, loan them these instructions also to prevent incorrect use of the machine and possible injury.

3 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 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.

5 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.

6 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
\triangle	Safety alert
	Read and understand all instructions before operating the product, and fol- low all warnings and safety instruc- tions.
	Wear ear protection.
	Wear eye protection
	Do not expose the product to rain or moist conditions.

Symbol	Explanation
	Wear a dust mask
	No Hands Symbol
	No Hands Symbol
	No Hands Symbol
	Hot Surface

7 RISK LEVELS

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

SYM- BOL	SIGNAL	MEANING
\triangle	DANGER	Indicates an imminently haz- ardous situation, which, if not avoided, will result in death or serious injury.
\triangle	WARNING	Indicates a potentially hazard- ous situation, which, if not avoided, could result in death or serious injury.
\triangle	CAUTION	Indicates a potentially hazard- ous 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.

8 PROPOSITION 65

▲ WARNING

This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm. Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- · Lead from lead-based paints;
- Crystalline silica from bricks and cement and other masonry products;
- Arsenic and chromium from chemically treated lumber.

Your risk of exposure to these chemicals varies depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

Save these instructions.

9 INSTALLATION

9.1 UNPACK THE MACHINE

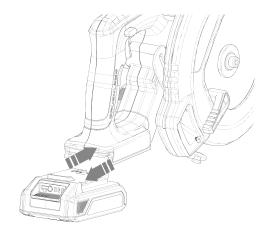
▲ WARNING

Make sure that you correctly assemble the machine before

▲ WARNING

- If the parts 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, speak to 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.

9.2 INSTALL THE BATTERY PACK



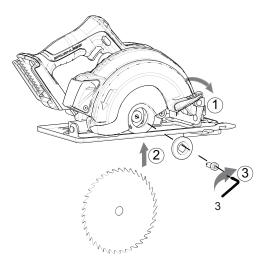
WARNING

- 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.

9.3 REMOVE THE BATTERY PACK

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

9.4 INSTALL THE BLADE



i NOTE

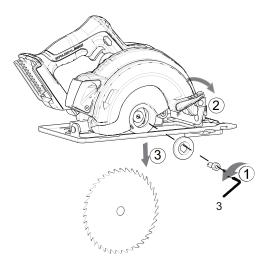
Before you install the blade, remove the battery pack from the machine.

- 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.

9.5 REMOVE THE BLADE



- 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.

10 OPERATION

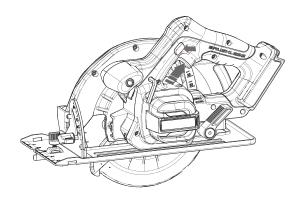
▲ WARNING

Always wear eye protection.

▲ WARNING

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

10.1 START THE MACHINE



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.

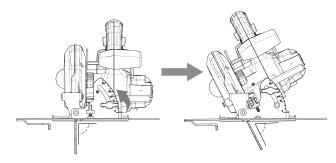
10.2 STOP THE MACHINE

1. Release the trigger to turn the machine OFF.

▲ WARNING

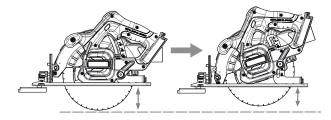
Release the trigger and allow the machine to come to a complete stop.

10.3 CUTTING ANGLE



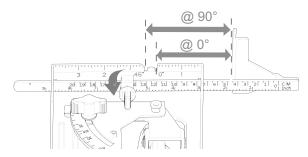
- 1. Loosen the bevel lock knob.
- 2. Use bevel scale to set the necessary angle.
- 3. Tighten the bevel lock knob.

10.4 CUTTING DEPTH



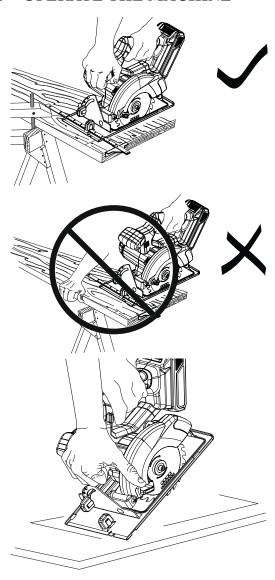
- 1. Loosen the depth adjustment knob.
- 2. Raise or lower the base until the depth scale reaches the required cutting depth.
- 3. Tighten the depth adjustment knob.

10.5 CUTTING WIDTH



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

10.6 OPERATE THE MACHINE



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 cuase 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.
- 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.

11 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.

11.1 CLEAN THE MACHINE

A 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.

12 TECHNICAL DATA

Voltage	24 V
Motor	Brushless
No Load Speed	4,500 RPM

Blade diameter	7.25 " (184 mm)
Max cutting Depth at 0°	2.48 " (63 mm)
Max cutting Depth at 45°	1.69 " (43 mm)
Weight without battery	7.39 lbs (3.35 kg)
Battery model	BAG711 and other BAG series
Charger model	CAG801 and other CAG series

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)

13 LIMITED WARRANTY



Greenworks hereby warranties this product, to the original purchaser with proof of purchase, for a period of three (3) years against defects in materials, parts or workmanship. Greenworks, at its own discretion will repair or replace any and all parts found to be defective, through normal use, free of charge to the customer. This warranty is valid only for units which have been used for personal use that have not been hired or rented for industrial/commercial use, and that have been maintained in accordance with the instructions in the owners' manual supplied with the product from new.

ITEMS NOT COVERED BY WARRANTY:

1. Any part that has become inoperative due to misuse, commercial use, abuse, neglect, accident, improper maintenance, or alteration; or

- 2. The unit, if it has not been operated and/or maintained in accordance with the owner's manual; or
- 3. Normal wear, except as noted below;
- 4. Routine maintenance items such as lubricants, blade sharpening;
- 5. Normal deterioration of the exterior finish due to use or exposure.

HELPLINE:

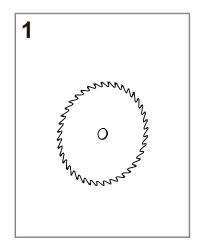
Warranty service is available by calling our toll-free helpline, at 1-888-909-6757.

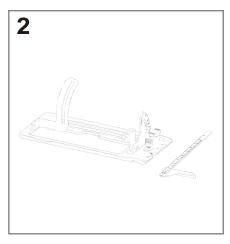
TRANSPORTATION CHARGES:

Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. It is the purchaser's responsibility to pay transportation charges for any part submitted for replacement under this warranty unless such return is requested in writing by Greenworks.

USA address:	Canadian address:
Greenworks Tools	Greenworks Tools Canada Inc.
P.O. Box 1238	1110 Stellar Drive Unit 102
Mooresville, NC 28115	Newmarket, ON, L3Y 7B7

14 EXPLODED VIEW





No.	Part No.	Description	Qty
1	R0202319-00	Blade	1
2	R0202318-00	Base Assembly Kit	1