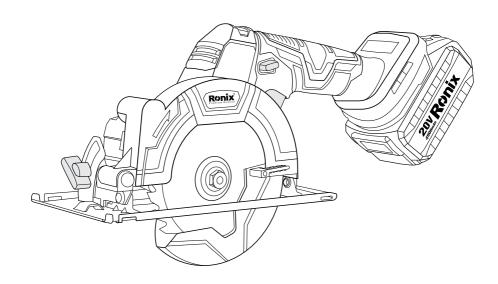


# BRUSHLESS CIRCULAR SAW - 125MM 8650



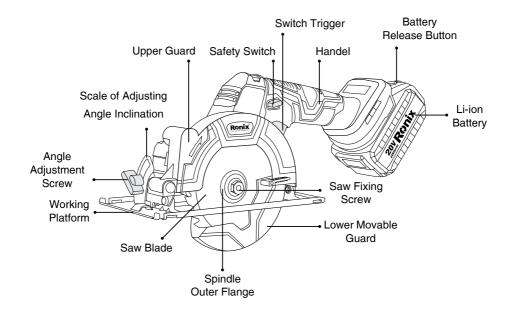


# **TECHNICAL SPECIFICATIONS**

| Model                    | 8650   |  |  |
|--------------------------|--|--|--|
| Motor Type               | Brushless  |  |  |
| Weight                   | 2.67Kg   |  |  |
| Battery Chemistry        | Lithium-lon  |  |  |
| Battery Voltage          | 20V  |  |  |
| Battery Capacity         | 4.0Ah  |  |  |
| Switch type              | Trigger Switch   |  |  |
| Max Cutting Depth at 45° | 28mm   |  |  |
| Max Cutting Depth at 0°  | 42mm   |  |  |
| No load speed            | 6000RPM  |  |  |
| Disc bore size           | 20mm   |  |  |
| Saw blade Max diameter   | 125mm  |  |  |
| Cutting angles           | 0°-45°   |  |  |
| Supplied in              | Ronix color box  |  |  |
| Included in              | Inner hexagon spanner 1pcs<br>Guide 1pcs 4.0Ah battery<br>1pcs 4.0A charger 1pcs |  |  |



#### PART LIST



#### **GENERAL SAFETY RULES**

# FOR ALL BATTERY- OPERATED TOOLS



# WARNING!

READ AND UNDERSTAND ALL INSTRUCTIONS.

Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

#### **WORK AREA**

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



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

#### **ELECTRICAL SAFETY**

- Do not abuse the cord. Never use the cord to carry the tool. Keep cord away from Heat, oil, sharp edges, or moving parts. Replace damaged cords immediately. Damaged cords may create a fire. Applies only to tools with a separable battery pack:
- A battery- operated tool with integral batteries or a separate battery pack must be Recharge only with the specified charger for the battery. A charger that may be suitable for one type of battery may create a risk of fire when used with another battery.
- Use battery operated tool only with specifically designated battery pack. Use of any other batteries may create a risk of fire.

#### PERSONAL SAFETY

- Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- Avoid accidental starting. Be sure switch is in the locked or off position before inserting battery pack. Carrying tools with your finger on the switch or in setting the battery pack into a tool with the switch on invites accidents.
- Remove adjusting keys or wrenches before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enable better control of the tool in



unexpected situations.

- Use safety equipment. Always wear eye protection. Dust mask, non- skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

#### **TOOL USE AND CARE**

- Use clamps or other practical way to secure and support the work piece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- Do not use tool if switch does not turn it on or off. A tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect battery pack from tool or place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
- 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 sparks, burns, or a fire.
- Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools with sharp cutting edge are less likely to bind and are easier to control.
- Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents



are caused by poorly maintained tools.

- Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may create a risk of injury when used on another tool.

#### **SERVICE**

- Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel may result in a risk of injury.
- When servicing a tool, use only identical replacement parts.

#### IMPORTANT CHARGING NOTES

- Do not store in locations where the temperature may exceed 40°C.
- Charge only at ambient temperatures between 4°C and 40°C.
- Charge only using the charger provided with the tool as other chargers might use different amperages and can damage or destroy your battery and /or screwdriver
- Unplug charger before attempting to clean.
- Do not immerse charger in water or any other liquid.
- Charging time around 1 hour.



#### A CAUTION!

Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, return it to a service center for recycling.



# WARNING!

Do not allow liquid to enter charger. Electric shock could result. To cool the battery pack after use, avoid placing the charger in a warm environment such as in a metal shed or non-insulated trailer.



Ronix service Authorized Service Center.

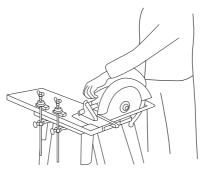
#### CORDLESS CIRCULAR SAW SAFETY WARNINGS

#### **Cutting procedures**



# A 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.



A typical illustration of proper hand support and workpiece support.

- Hold the power tool by insulated gripping surfaces only, 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 could give the operator an electric shock.

- 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 arbor 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.

#### KICKBACK CAUSES AND RELATED WARNINGS

- 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.

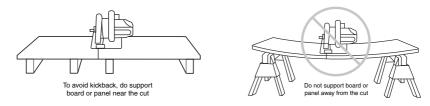
Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- 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 levers 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.
- ALWAYS hold the tool firmly with both hands. NEVER place your hand or fingers behind the saw. If kickback occurs, the saw could easily jump backwards over your hand, leading to serious personal injury.





- Never force the saw. Push the saw forward at a speed so that the blade cuts without slowing. Forcing the saw can cause uneven cuts, loss of accuracy, and possible kickback.
- Lower guard function
- 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 build- up of debris.
- Lower guard should be retracted manually only for special cuts such as "plunge cuts" and "compound cuts". Raise lower quard by retracting handle and as soon as 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.



- To check lower guard, open lower guard by hand, then release and watch guard closure. Also check to see that retracting handle does not touch tool housing. Leaving blade exposed is VERY DANGEROUS and can lead to serious personal injury.

#### ADDITIONAL SAFETY WARNINGS

- Intended use this tool is intended to cut wood products only. Accumulated sawdust on the lower guard and hub from other materials may effect the proper closure of the lower guard which could lead to serious personal injury.
- Use extra caution when cutting damp wood, pressure treated lumber, or wood containing knots. Maintain smooth advancement of tool without decrease in blade speed to avoid overheating the blade tips.
- Do not attempt to remove cut material when blade is moving. Wait until blade stops before grasping cut material. Blades coast after turn off.
- Avoid Cutting Nails. Inspect for and remove all nails from lumber before cutting.
- Place the wider portion of the saw base on that part of the workpiece which is solidly supported, not on the section that will fall off when the cut is made. As examples, Fig.1 illustrates the RIGHT way to cut off the end of a board, and Fig.2 the WRONG way. If the workpiece is short or small, clamp it down. DO NOT TRY TO HOLD SHORT PIECES BY HAND!







#### WARNING!

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product. MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

### **SYMBOLS**

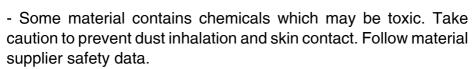
The followings show the symbols used for tool.

| V              | volts                                   |
|----------------|---|
|                | direct current                          |
| n <sub>o</sub> | no load speed                           |
| /min<br>r/min  | revolutions or reciprocation per minute |

- Before setting the tool down after completing a cut, be sure that the lower guard has closed and the blade has come to a complete stop.

- Never attempt to saw with the circular saw held upside down in a vise. This is extremely dangerous and can lead to serious





- Do not stop the blades by lateral pressure on the saw blade.
- Do not use any abrasive wheels.
- Only use the saw blade with the diameter that is marked on the



tool or specified in the manual. Use of an incorrectly sized blade may affect the proper guarding of the blade or guard operation which could result in serious personal injury.

- Keep blade sharp and clean. Gum and wood pitch hardened on blades slows saw and increases potential for kickback. Keep blade clean by first removing it from tool, then cleaning it with gum and pitch remover, hot water or kerosene. Never use gasoline.
- Wear a dust mask and hearing protection when use the tool.

#### IMPORTANT SAFETY INSTRUCTIONS

#### FOR BATTERY CARTRIDGE

- Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
- Do not disassemble battery cartridge.
- If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
- If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your evesiaht.
- Do not short the battery cartridge:
- 1) Do not touch the terminals with any conductive material.
- Avoid storing battery cartridge in a container with other 2) metal objects such as nails, coins, etc.
- Do not expose battery cartridge to water or rain. 3)
- A battery short can cause a large current flow, overheating, possible burns and even a breakdown.
- Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 45°C (113°F).
- Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can



explode in a fire.

- Be careful not to drop or strike battery.
- Do not use a damaged battery.
- Follow your local regulations relating to disposal of battery.



# A CAUTION!

Only use genuine Ronix batteries.

Use of non-genuine Ronix batteries, or batteries that have been altered, may result in the battery bursting causing fires, personal injury and damage. It will also void the Ronix warranty for the Ronix tool and charger.

#### TIPS FOR MAINTAINING MAXIMUM BATTERY LIFE

Charge the battery cartridge before completely discharged.

Always stop tool operation and charge the battery cartridge when you notice less tool power.

Never recharge a fully charged battery cartridge.

Overcharging shortens the battery service life.

Charge the battery cartridge with room temperature at 5°C - 45°C (41° F - 113°F).

Let a hot battery cartridge cool down before charging it.

Charge the battery cartridge if you do not use it for a long period (more than six months).

#### SWITCH ACTION

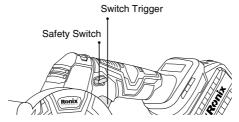


# A CAUTION!

Before installing the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

- Do not pull the switch trigger hard without pressing the lock- off lever. This can cause switch breakage.





# **OVERLOAD PROTECTION**

When the tool is operated in a manner that causes it to draw an abnormally high current, the tool automatically stops without any indications. In this situation, turn the tool off and stop the application that caused the tool to become overloaded. Then turn the tool on to restart

#### OVERHEAT PROTECTION FOR TOOL

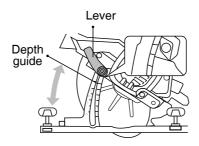
When the tool is overheated, the tool stops automatically. In this situation, let the tool cool before turning the tool on again.

# **ADJUSTING DEPTH OF CUT**



#### A CAUTION!

- After adjusting the depth of cut, always tighten the lever securely.



To prevent the switch trigger from being accidentally pulled, a lockoff lever is provided. To start the tool, press the lock- off lever and pull



the switch trigger. Release the switch trigger to stop.



#### WARNING!

- For your safety, this tool is equipped with lock- off lever which prevents the tool from unintended starting. NEVER use the tool if it runs when you simply pull the switch trigger without pressing the lock- off lever.
- Never tape down or defeat purpose and function of lock- off lever.

#### TOOL / BATTERY PROTECTION SYSTEM

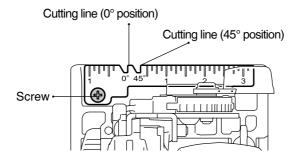
The tool is equipped with a tool/battery protection system. This system automatically cuts off power to the motor to extend tool and battery life.

The tool will automatically stop during operation if the tool or battery are placed under one of the following conditions. In some conditions, the indicator lights up.

Loosen the lever on the side of the rear handle and move the base up or down. At the desired depth of cut, secure the base by tightening the lever.

For cleaner, safer cuts, set cut depth so that no more than one blade tooth projects below workpiece. Using proper cut depth helps to reduce potential for dangerous KICKBACKS which can cause personal injury.

## SIGHTING





For straight cuts, align the 0° position on the front of the base with your cutting line. For 45° bevel cuts, align the 45° position with it. The position of the top guide is adjustable.

### **ASSEMBLY**



# A CAUTION!

Always be sure that the tool is switched off and the battery cartridge is removed before carrying ou any work on the tool.

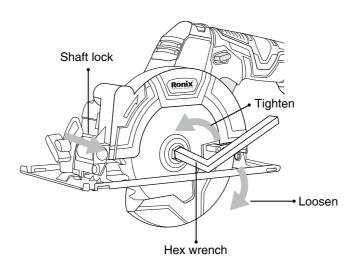
#### REMOVING OR INSTALLING SAW BLADE



#### A CAUTION!

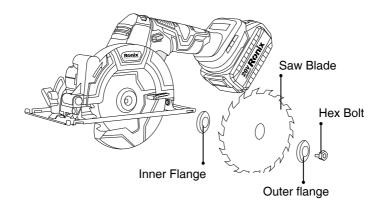
Be sure the blade is installed with teeth pointing up at the front of the tool.

Use only Ronix company wrench to install or remove the blade.



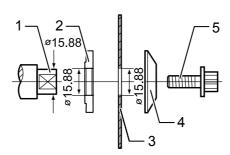
To remove the blade, press the shaft lock so that the blade cannot revolve and use the wrench to loosen the hex bolt clockwise. Then remove the hex bolt, outer flange and blade.





To install the blade, follow the removal procedure reverse. BE SURE TO TIGHTEN THE HEX BOLT COUNTERCLOCKWISE SECURELY.

When changing blade, make sure to also clean the upper and lower blade guards of accumulated sawdust as discussed in the Maintenance section. Such efforts do not replace the need to check lower guard operation before each use.



- 1) Mounting shaft
- 2) Inner flange
- 3) Saw blade
- 4) Outer flange
- 5) Hex bolt



Mount the inner flange with its recessed side facing outward onto the mounting shaft and then place saw blade, outer flange and hex bolt.

BE SURE TO TIGHTEN THE HEX BOLT COUNTERCLOCKWISE SECURELY.

#### **OPERATIONS**



# A CAUTION!

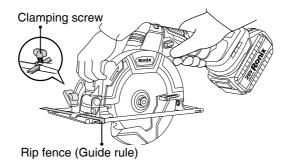
Be sure to move the tool forward in a straight line gently. Forcing or twisting the tool will result in overheating the motor and dangerous kickback, possibly causing severe injury.

Set the base on the workpiece to be cut without the blade making any contact. Then turn the tool on and wait until the blade attains full speed. Now simply move the tool forward over the workpiece surface, keeping it flat and advancing smoothly until the sawing is completed.

To get clean cuts, keep your sawing line straight and your speed of advance uniform. If the cut fails to properly follow your intended cut line, do not attempt to turn or force the tool back to the cut line. Doing so may bind the blade and lead to dangerous kickback and possible serious injury. Release switch, wait for blade to stop and then withdraw tool. Realign tool on new cut line, and start cut again. Attempt to avoid positioning which exposes operator to chips and wood dust being ejected from saw. Use eye protection to help avoid injury.



# RIP FENCE (GUIDE RULE) (OPTIONAL ACCESSORY)



The handy rip fence allows you to do extra- accurate straight cuts. Simply slide the rip fence up snugly against the side of the workpiece and secure it in position with the clamping screw on the front of the base It also makes repeated cuts of uniform width possible.

#### **MAINTENANCE**



#### A CAUTION!

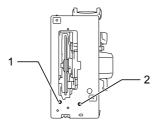
Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

Clean out the upper and lower guards to ensure there is no accumulated sawdust which may impede the operation of the lower guarding system. A dirty guarding system may limit the proper operation which could result in serious personal injury. The most effective way to accomplish this cleaning is with compressed air. If the dust is being blown out of the guards be sure the proper eye and breathing protection is used.

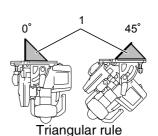
Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.



# ADJUSTING FOR ACCURACY OF 0° AND 45° CUT (VERTICAL AND 45° CUT)

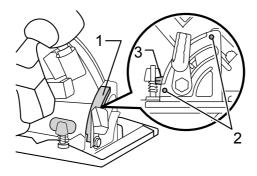


- 1) Adjusting screw for 45°
- 2) Adjusting screw for 0°



This adjustment has been made at the factory. But if it is off, adjust the adjusting screws with a screwdriver/hand while inspecting 0° or 45°the blade with the base using a triangular rule or square rule, etc. Use the 45° stopper for adjusting 45° angle.

#### **ADJUSTING BEVEL GUIDE**



- 1) Bevel guide
- 2) Screw
- 3) Guide

The bevel guide has been factory adjusted. But if it is off, you can adjust it as the following procedure.

To adjust the bevel guide, loosen the two screws. Align the 0° line



on the bevel guide with the guide on the base when the base is set to 0° angle.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by our company Authorized or Factory

Service Centers, always using our company replacement parts.

#### **OPTIONAL ACCESSORIES**



#### A CAUTION!

These accessories or attachments are recommended for use with your tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.



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