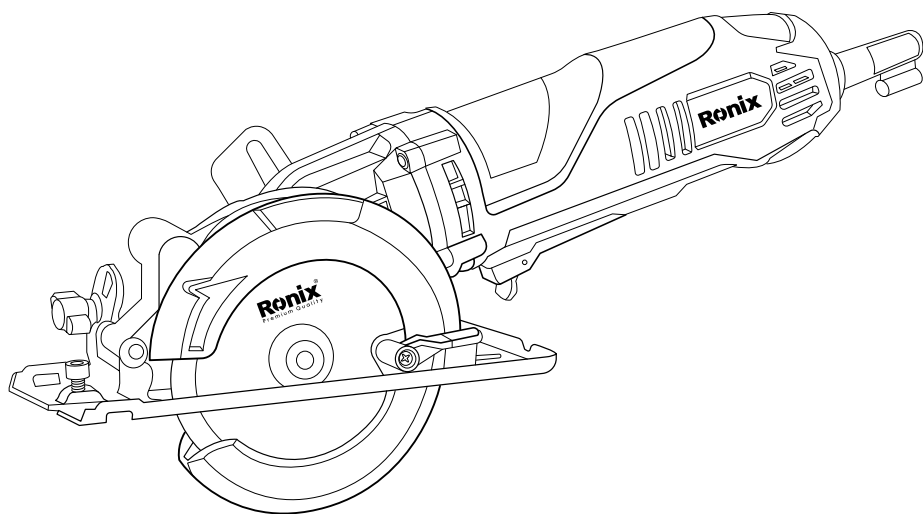


# Ronix<sup>®</sup>

Premium Quality

## CIRCULAR SAW 125mm 4312



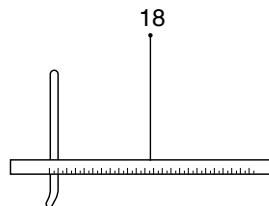
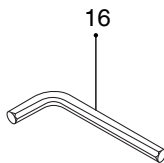
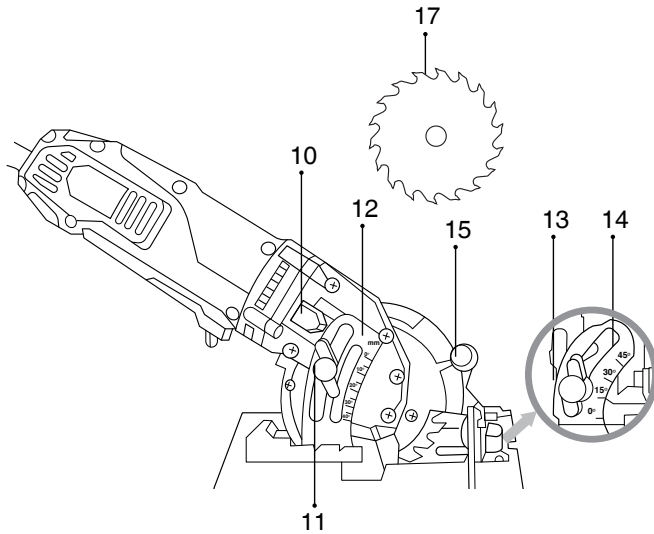
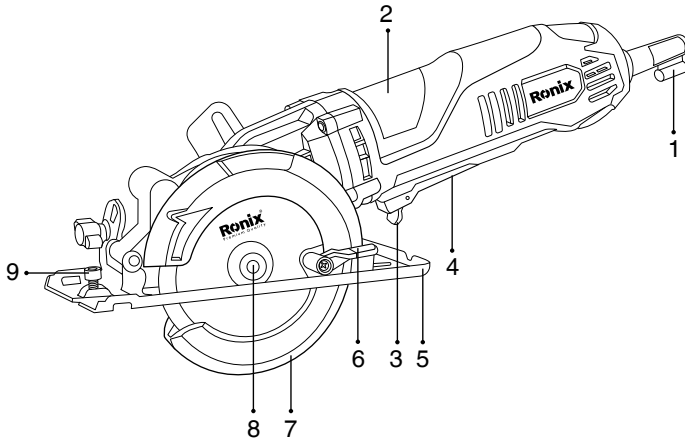
[www.ronixtools.com](http://www.ronixtools.com)



## TECHNICAL SPECIFICATION

Model	<b>4312</b>
Power	710W
Voltage	220-240V
Frequency	50-60Hz
No-load Speed	4500RPM
Max Cutting Blade Size	φ125mm
Max Cutting Capacity (0°/45°)	0°: 48mm 45°: 32mm
Weight	2.68Kg
Includes	1pc depth gauge, 1pc hex key, 1pc wood cutting blade

# PART LIST



- 1- Hex wrench rack
- 2- Main handle
- 3- Safety lock off switch
- 4- ON/OFF switch
- 5- Base plate
- 6- Saw blade retractable safety guard control knob
- 7- Saw blade retractable safety guard
- 8- Hex nut
- 9- Parallel guide locking bolt
- 10- Spindle lock button
- 11- Depth locking knob
- 12- Cutting depth scale
- 13- Angle locking knob
- 14- Cutting angle scale
- 15- Dust extraction port
- 16- Hex key
- 17- TCT blade
- 18- Parallel guide

## **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 tools or battery operated (cordless) power tool.

## **WORK AREA SAFETY**

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Don't 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.

## **■ ELECTRIC SAFETY**

- Power tool plugs must match the outlet. Never modify the plug in any way. Don't use any adaptor 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 pipe, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Don't expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Don't 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 increased the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Using a cord suitable for outdoor use will reduce 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.
- Use of power supply via a RCD with a rated residual current of 30mA

or less is always recommended.

## **PERSONAL SAFETY**

- Stay alert, watch what you are doing and use common sense when operating a power tool. Don't use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or 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.
- Don't overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Don't wear loose clothing or jewelry. Keep your hair, clothing, and gloves away from moving parts. Loose cloths, jewelry or long hair can be caught in moving parts.
- If devices are provided for connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

## **POWER TOOL USE AND CARE**

- Don't 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.

- Don't use the power tool if the switch doesn't 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 don't allow persons unfamiliar with power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- 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.
- 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 the instruction, 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.

## **CIRCULAR SAW SAFETY WARNINGS**

### **DANGER!**

- a- Keep hands away from cutting area and the blade. If both hands are holding the saw, they cannot be cut by the blade
- b- Do not reach underneath the workpiece. The guard cannot protect you from the blade below the workpiece
- c- 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.
- d- 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.

e- Hold power tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a “live” wire will also make exposed metal parts of the power tool “live” and shock the operator.

f- When ripping always use a rip fence or straight edge guide. This improves the accuracy of cut and reduces the chance of blade binding.

g- 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.

h- 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.

## **FURTHER SAFETY INSTRUCTIONS FOR ALL SAWS**

### **■ 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.

## **SAFETY INSTRUCTIONS FOR PLUNGE CUT CIRCULAR SAWS**

a- Check guard for proper closing before each use. Do not operate the saw if guard does not move freely and enclose the blade instantly. Never clamp or tie the guard with the blade exposed.

If saw is accidentally dropped, guard may be bent. Check to make sure that guard moves freely and does not touch the blade or any other part, in all angles and depths of cut.

b- Check the operation and condition of the guard return spring. If the guard and the spring are not operating properly, they must be serviced before use. Guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.

c- Assure that the guide plate of the saw will not shift while performing the “plunge cut” when the blade bevel setting is not at 90°. Blade shifting sideways will cause binding and likely kick back.

d- Always observe that the 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.

## **ADDITIONAL SAFETY INSTRUCTIONS FOR PLUNGE TYPE SAWS**

- Wear ear protectors. Exposure to noise can cause hearing loss.
- Wear a dust mask. Exposure to dust particles can cause breathing difficulty and possible injury.
- Do not use blades of larger or smaller diameter than recommended. For the proper blade rating refer to the technical data. Use only the blades specified in this manual, complying with standard EN 847-1.
- Never use abrasive cut-off wheels. Residual risks.

## SYMBOLS



To reduce risk of injury, user must read instruction manual before using the tool.



Wear eye protection



Wear ear protection



Wear dust mask

## OPERATING STRUCTURE

NOTE: Before using the tools, read the instruction book carefully.

### 1- ON/OFF SWITCH (SEE FIG.A)

- Check the correct function of the base plate before plugging in the power cord.
- Choose a corresponding saw blade and check its condition and sharpness.
- Make sure you keep the ventilation slots clear when holding the tool.
- Pull the safety lock switch back and then press the ON / OFF switch and wait, until the saw blade has reached maximum speed, and slowly push the tool forward through the safely fixed workpiece.
- Make sure the base plate always rests evenly on the workpiece.
- To switch off the tool, release the on / off switch.



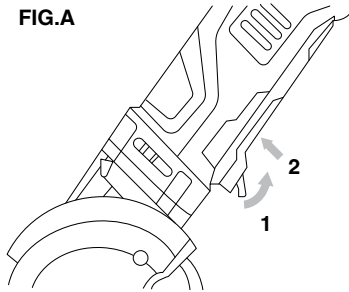
### CAUTION!

Do not overheat the blade tips of the saw blade. Always hold the machine by both hands.

Never start the machine with the blade in contact with the workpiece. Start cutting only after the motor reached its full speed. And always remove the machine from the workpiece before switching it off. Always carry out a test run before starting work and after every tool change!

Always ensure that the tools are in good condition, correctly mounted and able to turn freely. The trial run should be at least 30 sec.

FIG.A



## 2- USING THE PARALLEL GUIDE (SEE FIG.B & C)

The parallel guide can be used for making cuts parallel to a work piece edge at a chosen distance. To set the cutting width, slide the guide arm through the slot and rotate the knob to the required width. Then lock the guide in place.

### ⚠ NOTE:

If the distance between the side of the work piece and the cutting position is too wide, or the side of the work piece is not straight, firmly clamping a straight board to the work piece and use this as a guide.

FIG.B

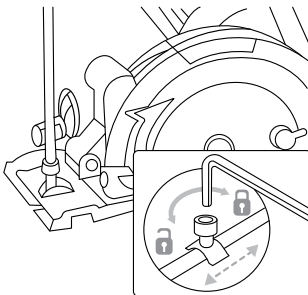
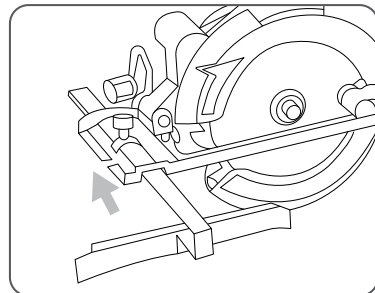


FIG.C



## 3- CHANGING BLADE (SEE FIG.D& E & F)

The mounting hole of blade must fit with the mounting flange.

Do not use reducers or adapters.

The direction-of-rotation arrow on blade and machine should be same.

To change the blade, switch off and unplug form power supply.

Press the spindle-lock button in deep and hold it in this position continuously, insert the Hex key provided into the blade bolt, turn the spindle slightly with the free hand until it locks into position, remove the blade bolt, washer, outer flange and blade form spindle.

Put new blade between two parts of flange, place the washer and screw in position and then tighten blade blot with hex key provided.

### **⚠ CAUTION!**

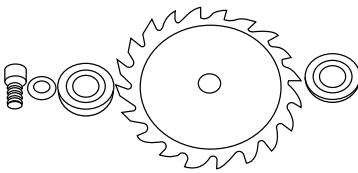
Never use blade whose diameter is larger than that indicated.

The maximum rotation speed of blade must be greater than the idling speed of the machine.

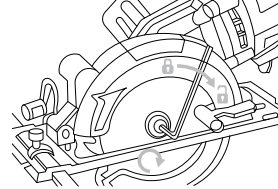
Blade teeth are very sharp and wear gloves. For best cutting results ensure you use a saw blade suited to the material and cut quality you need.

Check the blade regularly during use. If it has been jammed or is deformed, replace it!

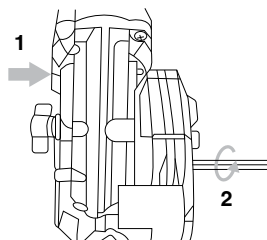
**FIG.F**



**FIG.E**



**FIG.D**



#### **4- ADJUSTING THE CUTTING DEPTH (SEE FIG.G)**

For optimal quality of cutting, the saw blade should not extend more than 3 mm below the workpiece.

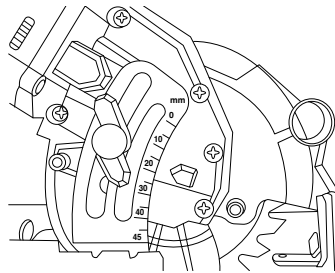
To adjust the cutting depth (0-45mm), please follow below steps:

- 1- Loosen the depth locking knob by hand.
- 2- Raise/lower the locking knob and set the blade to the required depth - as shown on the cutting depth scale.
- 3- Tighten the depth locking knob.

#### **⚠ CAUTION!**

Always check the locking lever before working. A loose locking lever may cause serious injury.

**FIG.G**



#### **5- ADJUSTING THE CUTTING ANGLE (SEE FIG.H)**

To adjust the cutting angle (0-45°), please follow below steps:

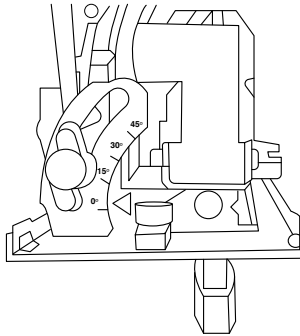
- 1- Loosen the angle locking knob by hand.
- 2- Raise/lower the locking knob and set the blade to the required angle as shown on the cutting angle scale.
- 3- Tighten the angle locking knob.

**⚠ NOTE:** The location of the blade cut-line will change depending on the bevel angle that is being used. The blade cut-line location when cutting at 0° degrees or 45° degrees is marked with a notch on the front of the base plate.

The base plate must always be held firmly against the material being cut

to reduce saw vibration, blade jumping, or blade breakage

FIG.H



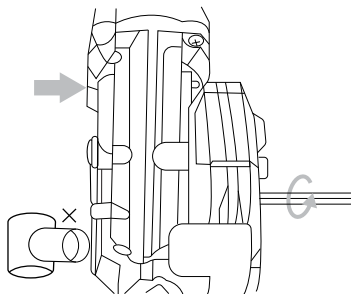
### 6- Dust collecting (See Fig.I)

Use of dust collection can reduce dust-related hazards. To prevent personal injuries, make sure to connect a suitable vacuum cleaner to the dust extraction port by means of the dust collecting system adaptor.

To connect a dust collection system, fit the dust adaptor( PROVIDED) to the dust extraction port.

Connect the vacuum cleaner to the dust extraction port with adaptor(PROVIDED). The dust will be collected by the vacuum.

FIG.I



## WORKING HINTS FOR YOUR TOOL

- If your power tool becomes too hot, please run your mini circular saw no load for 2-3 minutes to cool the motor. Avoid prolonged usage under

strenuous cutting loads. Protect saw blades against impact and shock. Excessive feed significantly reduces the performance capability of the machine and reduces the service life of the saw blade. Sawing performance and cutting quality depend essentially on the condition and the tooth count of the saw blade. Therefore, use only sharp saw blades that are suited for the material to be worked.

Choice of blades: 24 teeth for general work, approx. 40 teeth for finer cuts, more than 40 teeth for very fine cuts into delicate surfaces, diamond for tile, cement board, etc.

## TROUBLESHOOTING

Although your new mini circular saw is really very simple to operate, if you do experience problems, please check the following:

SYMPTOM	POSSIBLE CAUSES	POSSIBLE SOLUTION
Tool will not start when operating the on/off switch.	Power cord not plugged in. Power cord is broken. Carbon brush has worn down.	Check to make sure power cord is connected well into a working outlet. Unplug the power cord. Replace it by a qualified maintenance person. Replace the carbon brush by a qualified maintenance person.
Cutting depth is less than that is set.	Sawdust accumulated at the rear of the base.	Shake out sawdust. Consider connecting a vacuum for dust collection.
Blade spins or slips	Blade is not tightly engaged with the spindle.	Remove the blade, and reassemble it as described in Changing the blade section.
Blade will not cut a straight	Blade is dull. Blade is mounted properly. Saw is not being guided properly.	Mount a new, sharp blade on the saw. Check that blade is properly mounted. Use a parallel guide.



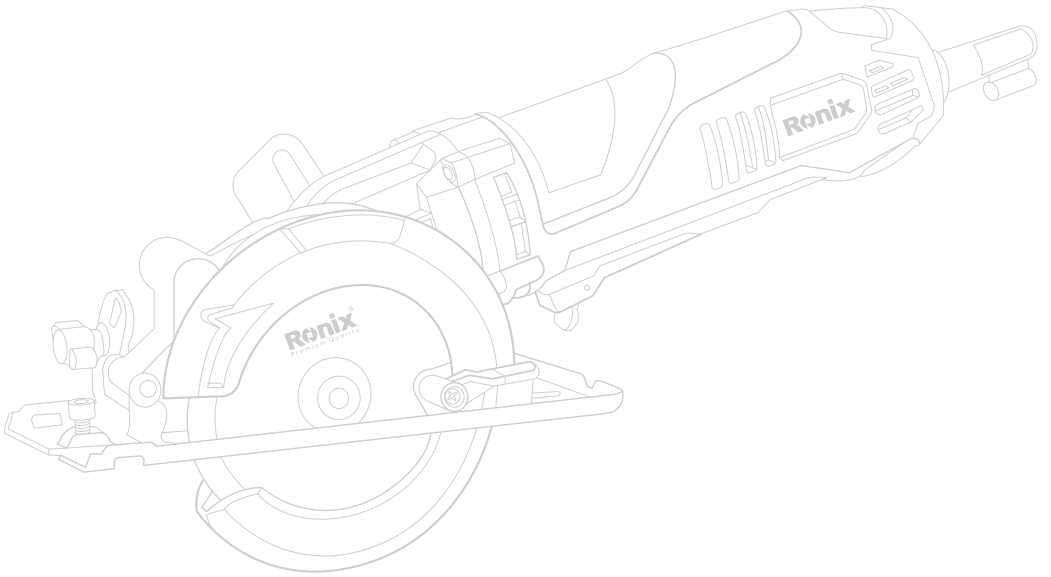
Blade kicks back when beginning a cut.

Blade is not spinning fast enough.

Allow the saw blade to reach full speed prior to beginning a cut in the material.

## **SERVICE**

- Have your power tool serviced by qualified repair person using only identical replacement parts. This will ensure that the safety of power tool is maintained.
- Follow instruction for lubricating and changing accessories.
- Keep handles dry, clean and free from oil and grease.







[www.ronixtools.com](http://www.ronixtools.com)