# **Cordless Rotary Tool**

**User Manual** 



# Please read carefully before use and keep it for future use

### **Specification**

model	5012
Clamping capacity	6 mm
Rated speed	0-25,000(r/min)
length	250mm
Battery	2.0 Ah
net weight	0.6 kg
Rated voltage	D.C 12 V

Please keep all warnings and instructions for future reference.

# **Safety Warning**

# Work area safety matters:

- 1. Do not operate power tools in an explosive environment, such as an environment with flammable liquid, gas or dust.
- 2. Keep children and bystanders away when operating power tools.

### **Electrical safety matters:**

Do not expose power tools to rain or moisture.

### Personal safety precautions:

- 1. Please be vigilant when operating power tools, pay attention to your operation, and use common sense. Do not operate power tools when you are tired or under the influence of drugs, alcohol, or treatment.
- 2. Please use personal protective equipment. Please wear an eye mask.
- 3. Prevent accidental start. Before connecting to the battery pack, picking up or carrying the tool, make sure the switch is in the off position.
- 4. Pay attention to clothing. Do not wear loose clothing or jewelry. Keep your hair, clothes or gloves away from moving parts.

#### Use and maintenance of electric tools:

- 1. If the switch of the tool cannot turn the tool on and off, do not use the tool.
- **2.** Store idle power tools out of the reach of children, and do not allow anyone who is unfamiliar with the tools or these instructions to operate the tools.
- **3.** Maintenance of power tools. Check whether the moving parts have deviation or adhesion, whether the parts are damaged, and other conditions that may affect the operation of the tool. If the part is damaged, send the tool for repair before use.

### **Battery use and maintenance:**

- **1.** Please use only the charger specified by the manufacturer for charging.
- **2.** When the battery pack is not in use, please place it away from metal objects such as paper clips, coins, keys, screws, nails, or other small metal objects, which will form a connection from one end to the other.

### Repair:

- **1.** Please take your power tool to a qualified professional maintenance personnel, and only use replacement parts that are the same as the original parts.
- 2. Keep the handle dry, clean, free of oil and grease.

# **Cordless Rechargeable Rotary Tool Safety Warning:**

### General safety warnings for grinding operations:

- **1.** This power tool is designed for grinding operations. Please carefully read all the safety warnings (instructions/illustrations/specifications) attached to this power tool.
- **2.** It is best not to use this tool for operations such as sanding, wire brushing, polishing or cutting.
- **3.** Do not use non-dedicated accessories or accessories not recommended by the tool manufacturer.
- **4.** The outer diameter and thickness of the attachment must be within the rated capacity of the tool. Incorrectly sized accessories will not be safe to handle.

- **5.** Do not use damaged accessories. Please check the grinding wheel and other accessories for debris and cracks before each use. If the tool or accessory is dropped, check for damage or reinstall an undamaged accessory. After checking and installing the accessories, please keep bystanders and yourself away from the rotating accessories, and run the tool at the maximum number of revolutions for one minute. Damaged accessories will usually break during this test.
- **6.** Keep bystanders away from the work area and keep a certain safe distance. All personnel entering the work area must wear personal protective equipment. Pieces of the workpiece or broken accessories may splash outside the operating area and cause personal injury.
- **7.** The cutting attachment may come into contact with hidden wires when working. Please hold the insulated gripping surface of the power tool firmly.
- **8.** Do not put down the tool before the accessory has completely stopped.
- 9. Do not run power tools near flammable materials.
- 10. Do not use accessories that require coolant.
- 11. Rebound and related warnings:
- (1) Please hold the handle of the power tool firmly and adjust the position of your body and arms to prevent rebound force. If an auxiliary handle is provided, be sure to use it to control the rebound or torque reaction to the greatest extent when starting.
- (2) Do not put your hands near rotating accessories.
- (3) Do not place yourself in the area where the power tool may move when rebound occurs.
- (4) Please be especially careful when handling corners, sharp edges, etc. Avoid jumping and sticking accessories.
- (5) Do not install chain saw blades or toothed saw blades.
- 12. Safety warnings dedicated to grinding operations:
- (1) Only use the type of grinding wheel recommended by the manufacturer for your power tool.
- (2) Only use the grinding wheel for recommended applications, for example, do not use the side of the cutting wheel for grinding.
- (3) Do not use worn out wheels removed from larger power tools.

#### Additional safety warning:

- **13.** Please make sure that the grinding wheel is not in contact with the workpiece before turning on the switch
- **14.** Before using the tool on the actual workpiece, please let the tool idling for a while. Please note that vibration or swing may indicate improper installation or unbalanced grinding wheel.
- **15.** Please use the specified surface of the grinding wheel to perform grinding.
- **16.** Be careful of flying sparks. When holding the tool, avoid sparks splashing on yourself and other people or flying onto combustible materials.
- **17.** The running tool cannot be placed away from the hand, and the tool can only be run with the tool in hand.
- **18.** Do not touch the workpiece immediately after the operation because it may be very hot and cause burns to the skin.
- **19.** Before performing any assembly operations on the tool, be sure to turn off the power of the tool and take out the battery pack.
- **20.** Please follow the manufacturer's instructions for proper installation and use of the grinding wheel. Please handle and store the grinding wheel carefully.
- **21.** If the workplace is very hot and humid, or is seriously polluted by conductive dust, please use a short circuit breaker (30mA) to protect the personal safety of the operator.
- **22.** Do not use this tool on any material containing asbestos.
- **23.** This tool is not waterproof, so please keep the surface of the workpiece dry.
- **24.** When working in a dusty environment, make sure that the vents are kept clean. If dust must be removed, please disconnect the tool from the power source (use non-metallic objects) and avoid damaging the internal components.

#### Important safety precautions for battery packs:

- 1. Before using the battery pack, please carefully read all the instructions and (1) the battery charger (2) the battery (3) the warning marks on the product that uses the battery.
- 2. Do not disassemble the battery pack.
- **3.** If the machine running time becomes too long, please stop using it immediately, otherwise it may cause overheating, fire or even explosion.
- 4. Do not short-circuit the battery pack.
- (1) Do not let any conductive material touch the terminal.
- (2) Avoid placing the battery pack and other metal objects such as nails and coins in the same container.
- (3) Do not put the battery pack in water or expose it to rain.
- (4) Do not use damaged batteries.
- **5.** Even if the battery pack is severely damaged or completely worn out, do not burn the battery pack. The battery pack will explode in the fire.
- 6. Do not use damaged batteries.
- **7.** Do not place tools and battery packs in places where the temperature may reach or exceed  $50^{\circ}$ C ( $122^{\circ}$ F).
- 8. Be careful not to hit the battery or drop it.

### Tips for maintaining maximum battery life:

- Charge the battery pack in time before it is completely exhausted.
  When you find that the power of the tool is low, stop the tool operation and charge the battery pack.
- **2.** Do not recharge a fully charged battery pack. Overcharging will shorten the life of the battery.
- **3.** Please charge the battery pack at room temperature of  $10^{\circ}\text{C}-40^{\circ}\text{C}$  (50 °F-104°F). Please charge the hot battery pack after it cools down.

# **Application**

This tool is used for grinding, cutting, engraving, punching, trimming, etc. of various materials.

### WARNING

⚠BE CAREFUL: Before adjusting or checking the function of the tool, be sure to turn off the power to the tool and remove the battery pack.

### **Install or Remove the Battery Pack**

⚠ BE CAREFUL: Before installing or removing the battery pack, be sure to turn off the power of the tool !BE CAREFUL: Hold the tool and battery pack firmly when installing or removing the battery pack.

# **Battery Protection System**

This tool is equipped with a battery protection system. The system can automatically cut off the motor power to extend battery life.

During operation, if the tool or battery is in the following conditions, the tool will automatically stop running:

#### Overload:

Operate the tool in a way that causes an abnormally high current. In this case, please close the tool and stop the application operation that caused the tool to overload. Then open the tool and restart. If the tool cannot be started, the battery is overheated. In this case, wait for the battery to cool down before turning on the tool.

#### **Battery voltage is low:**

The remaining battery power is too low and the tool does not run. If you start the tool, the motor will run again, but it will stop soon. In this case, remove the battery and charge it.

# **Function Description**

#### Indicator light

The machine is equipped with a battery pack start switch, and the indicator light on the machine will light up to show the remaining battery power. The indicator light will turn on for a few seconds and go out automatically.

PS: Under different conditions of use and ambient temperature, the power shown by the indicator light may be slightly different from the actual situation.



# **Switch operation**

MARNING: Before inserting the battery pack into the tool, be sure to check whether the switch trigger can be pulled freely and whether it can be returned to the "O" (closed) position when released.

- 1. Speed governor
- 2. Power display
- 3. Switch



To start the tool, slide the slide switch to the "I (ON)" position. For continuous operation, press the front of the slide switch to lock it.

To stop the tool, press the back of the slide switch, and then slide the switch to the "O (OFF)" position.

#### -Prevent Accidental Restart Function

If the battery pack is inserted into the tool and the slide switch is in the "I (ON)" position, the tool will not start. At this time, the indicator light will flash slowly, which means that the accidental restart prevention function is being enabled.

At this time, you can slide the slide switch to the "O (OFF)" position, and then slide it to the "I (ON)" position.

# **Change Speed**

By turning the speed adjustment wheel, the machine operating speed can be adjusted from 25000r/min to 4000r/min. The number 1 (minimum speed) to 6 (maximum speed) is printed on the adjustment wheel. The speed is adjusted according to the processing material and work accessories.



1.speed governor

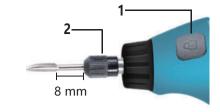
# **Installing And Removing The Grinding Head**

#### ATTENTION:

Before performing any assembly operations on the tool, be sure to turn off the power of the tool and take out the battery pack.

Grasp the tool with your left hand and press the shaft lock button with your female finger to prevent the spindle from rotating. Loosen the chuck counterclockwise with your right hand, insert the required grinding head into the chuck, and tighten the chuck clockwise with the matching special wrench.

- 1.Axle lock button
- 2. Chuck



#### ATTENTION:

The assembly distance of the grinding nead should not be installed at a distance greater than 8 mm of the chuck nut. Exceeding this distance will cause vibration or fracture of the rotating shaft.

When disassembling the grinding head and grinding wheel, proceed in the reverse order of the installation steps!

### **Collets Accessories**

MARNING: Always make sure the rotary tool is "OFF" and disconnect the plug from the power source or the battery pack from the tool before changing accessories.





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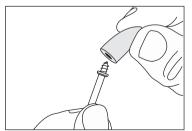
Notice: When removing or installing the chuck, please press the axle lock button.

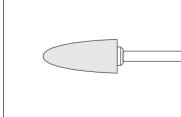
### **Accessories Installation**

#### **Screw Mandrel Accessories**

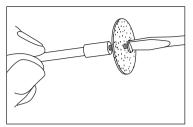
MARNING: Always make sure the rotary tool is "OFF" and disconnect the plug from the power source or the battery pack from the tool before changing accessories.

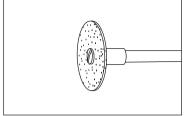
Notice: Please hold down the button when installing the grinding head.





Screw mandrel is used with the felt polishing tip and wheels. Thread the tip on screw carefully. The felt tip must thread down straight on the screw Mandrel, and be turned all the way to the collar.





Small screw mandrel has a small screw at its tip, and is used with emery cutting wheels and sanding discs.

# **Charging Battery Pack**

Plug charger cord into your standard poweroutlet, then insert battery pack into charger. The charger's green indicator light will begin to "BLINK". This indicates that the battery isreceiving a fast charge. Fast-charging will automatically stop when the battery pack isfully charged.



### Maintainance

#### ATTENTION:

- **1.** Before checking or maintaining the tool, be sure to turn off the power to the tool and remove the battery pack.
- **2.** Do not use gasoline, benzene, thinner, alcohol or similar items to clean tools. Otherwise, the tool may become discolored, deformed, or cracked.
- **3.** These accessories or devices are dedicated to the cordless electric grinder tools listed in this manual. Do not use accessories or devices from other brands.