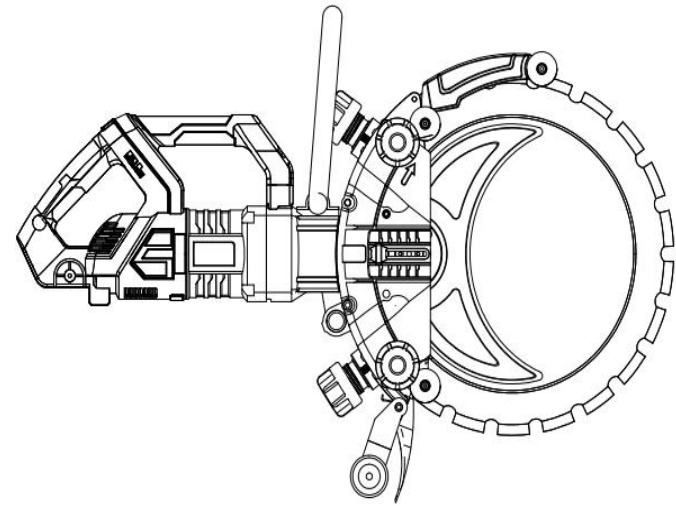

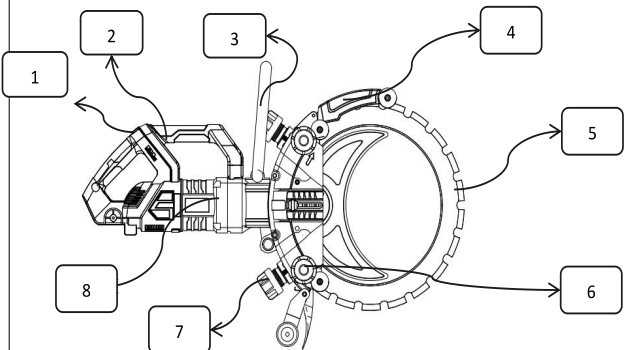



RING SAW



Instructions contained in warning this manual marked with a  symbol concern points which must be taken into consideration to prevent possible serious bodily injury, and for this reason you are requested to read all such instructions carefully and follow them without fail.

Model: RING SAW BHJ299 ; RING SAW (brushless) HJ296		
1、 Switch 2、 Handle 3、 Handle 4、 Guard		5、 blade 6. Pressure wheel knob 7、 Adjustment knob 8、 Motor case
The appearance of each product varies, please refer to the actual product.		
Synopsis  The Concrete Ring Cutting Saw is a hand-held power tool that cuts marble and other stone, tile, concrete and similar materials with a rotating diamond blade. Please make sure you read the instruction manual carefully before use and use this ring cut saw in strict accordance with the instructions.		
Specifications	MOD: BHJ299	MOD: HJ296
Rated voltage (V)	220	220
Rated frequency (Hz)	50/60	50/60
Rated Input Power (W)	3500	3500
No-load speed (/min)	3000	3000
Output shaft thread	M8	M8
Saw Blade Specifications	406X320	406X320
90° Maximum depth of cut (mm)	290	290
Weight (Kg)	14	15
Protection level	I	I
Insulation class	E	E
Mark:		

67	side cover	1
68	M6 screw	1
69	M6*75 screw	2
70	M8 screw+washer	2
71	square shim	2
72	torsion spring	1
73	mudguard	1
74	Carrying Handle + Carrying Handle Platen	1
75	dolly	2
76	M6*35 screw	2
77	M6*25 screw	4
78	blade 406*320*30T	1
79	Water inlet (water pan)	1
80	drainage outlet	3
81	pipe	1
82	pump	1
83	connection tube	1
84	kick	1

24	rotor	1
25	6202 RS rolling bearing TPI CHL	1
26	Center cap bearing gland	1
27	screw M4*10	2
28	Small bevel gears (25T)	2
29	M8 nut	1
30	transmission	1
31	gas nozzle	2
32	6000 rolling bearing	1
33	big bevel gears (T35)	2
34	double toothed axle	3
35	4*4*14 KEY HRC40-45	4
36	output tooth 39T	2
37	6001 rolling bearing	1
38	Gearbox cover	1
39	SCREW M6*35	8
40	6001 rolling bearing	1
41	output shaft tooth	1
42	middle tooth	1
43	40 Internal Clamping Reed	1
44	6203 rolling bearing	2
45	intermediate shaft	1
46	SCREW M6*16	4
47	Water pan assembly	1
48	30*20*6 Skeleton Seal	1
49	sprndle	1
50	inner platen	1
51	Main Friction Wheel	1
52	External Pressure Plate	1
53	small Pressure Plate	1
54	screw M8*25	1
55	tension spring	1
56	screw ST4.2*16	2
57	plastic wheel	4
58	enclosure	1
59	screw M6*60	1
60	Adjusting Wheel Assembly	2
61	Pressure Wheel Assemblies	2
62	inner cover	1
63	shroud	1
64	Compression spring bore $\Phi 7*15$	2
65	Compacting handwheel	2
66	screw M8*25	4

1. In order to improve, the specifications contained in this manual may be changed without prior notice.
2. The parameters provided in this manual are based on 220V, if there is a voltage lower or higher than this voltage, the data may be different.

General Safety Warning for Power Tools



Warning! Read all warnings and all instructions. Failure to follow these warnings and instructions can result in electric shock, fire, or serious injury.

The term "power tool" in all of the following warnings refers to either utility-powered (corded) power tools or battery-powered (cordless) power tools.

1. Workplace safety

- 1) Keep the workplace clean and bright. Messy and dark sites can cause accidents.
- 2) Do not operate power tools in explosive environments, such as those with flammable liquids, gases or dust. Sparks from power tools can ignite dust or gas.
- 3) Allow children and bystanders to maneuver the power tool after leaving. Lack of concentration can cause the operator to lose control of the tool.

2. Electrical Safety

- 1) Power tool plugs must be matched to the socket. Plugs should never be modified in any way. Power tools that require grounding cannot use any conversion plugs. An unmodified plug and mating receptacle will reduce the risk of electric shock.
- 2) Avoid body contact with grounded surfaces such as pipes, heat sinks and refrigerators. If you are physically grounded it will increase the risk of electric shock.
- 3) Do not expose power tools to rain or moisture. Water entering the power tool will increase the risk of electric shock.
- 4) Do not misuse electrical cords. Never use the cord to carry, pull or unplug a power tool. Keep cords away from heat sources, oil, sharp edges or moving parts. Damaged or tangled cords increase the risk of electric shock.
- 5) When using the power tool outdoors, use an external flexible cord suitable for outdoor use. A cord suitable for outdoor use will reduce the risk of electric shock.
- 6) If operating the power tool in a wet environment is unavoidable, use a residual current action protector (RCD). The use of an RCD will reduce the risk of electric shock.
- 7) Remove any adjustment keys or wrenches before the power tool is switched on. Wrenches or keys left on rotating parts of the power tool can cause personal injury.
- 8) Do not extend your hand too far. Always be aware of your feet and body balance. This allows good control of the power tool in the event of an accident.
- 9) Dress appropriately. Don't wear baggy clothes or peplums. Keep your hair, clothes and sleeves away from moving parts. Loose clothing, peplums or long hair may become entangled in moving parts.
- 10) If devices are provided for the attachment of chip removal devices and dust collection equipment, make sure they are properly attached and used. Use of these devices reduces the risk of debris.

3. Personal safety

1) Stay alert, pay attention to the operation and stay awake when operating power tools. Do not operate power tools when you are tired or in the presence of drugs, alcohol, or treatment. Momentary negligence while operating power tools can result in serious personal injury.

2) Use personal protective equipment. Always wear goggles. Safety devices, such as dust masks, non-slip safety shoes, helmets, hearing protection, etc., when used under proper conditions, can reduce personal injury.

3) Prevent accidental starting. Ensure that switches are in the OFF position when connecting power and/or battery packs, picking up or carrying tools. Placing your fingers on a switch that has been energized or inserting a plug while the switch is on may result in a hazard.

4. Power tool use and precautions

1) Do not misuse power tools. Use the appropriate power tools for the purpose for which they are intended. Selecting power tools with appropriate design ratings will make your work more efficient and safer.

2) If the switch does not turn the power to the tool on or off, the power tool cannot be used. Power tools that cannot be controlled by a switch are dangerous and must be repaired.

3) Before making any adjustments, replacing accessories, or storing the power tool, it must be unplugged from the power source and/or the battery pack must be disconnected from the power source. This protective measure will reduce the risk of sudden starting of the power tool.

4) Store unused power tools out of the reach of children and keep power tools from being operated by persons unfamiliar with the power tools or who do not understand these instructions. Power tools are dangerous in the hands of untrained users.

5) Maintain the power tool. Check that moving parts are not adjusted in place or jammed, check for broken parts and other conditions that affect the operation of the power tool. If damaged, the power tool must be repaired before use. Many accidents are caused by poorly maintained power tools.

6) Keep cutting tools sharp and clean. Well-maintained tools with sharp cutting edges are less likely to jam and are easier to control.

7) Use power tools, attachments, tool bits, etc., in accordance with the instruction manual, taking into account the operating conditions and the work to be performed. Using the power tool for operations that are not in accordance with the requirements may result in a hazardous situation.

5. Maintenance


Take your power tool to a professional repairer and have it repaired using the same spare parts. This will ensure the safety of the repaired power tool.


Representative Symbols


The following symbols help you to use this power tool correctly. Please memorize the symbols and their meanings. Correct knowledge of the symbols will help you to operate the power tool with greater confidence and safety.

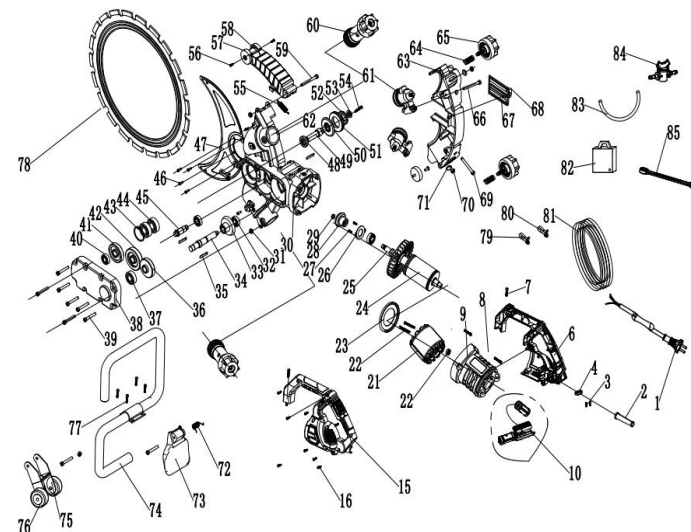
Symbols

To minimize the risk of injury from these toxic chemicals, ensure that you work in a ventilated environment and that you wear proper safety equipment when working.

 Danger Range! Palms, arms and fingertips must be kept as far away from this range as possible.







 Please wear goggles and helmet

 Wear ear muffs. Work noise can damage hearing



NO.	NAME	QTY
1	CABLE	1
2	cablе sheath	1
3	pressure plate	1
4	screws	7
7	SCREW M5*16	2
8	screw M5X35	4
9	body	1
10	controller 8850	1
15	left handel	1
16	screw ST4.2*10	4
17	screw M4*10	2
19	screw ST4.2*16	6
20	629RS rolling bearing TPI CHL	1
21	stator 98*65	1
22	screw ST4.8*80	2
23	windscreen	1

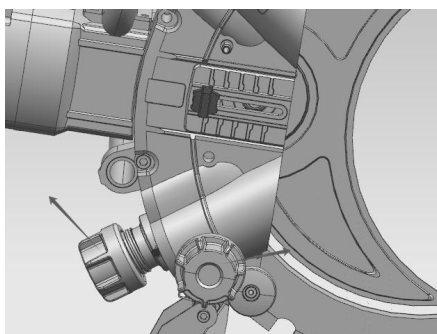
58	enclosure	1
59	screw M6*60	1
60	Adjusting Wheel Assembly	2
61	Pressure Wheel Assemblies	2
62	inner cover	1
63	shroud	1
64	Compression spring bore $\Phi 7 \times 15$	2
65	Compacting handwheel	2
66	screw M8*25	4
67	side cover	1
68	M6 screw	1
69	M6*75 screw	2
70	M8 screw+washer	2
71	square shim	2
72	torsion spring	1
73	mudguard	1
74	Carrying Handle + Carrying Handle Platen	1
75	dolly	2
76	M6*35 screw	2
77	M6*25 screw	4
78	blade 406*320*30T	1
79	Water inlet (water pan)	1
80	drainage outlet 出水口	3
81	pipe	1
82	pump	1
83	connection tube	1
84	kick	1
85	spanner	1

	Please wear a dust mask
	Wear insulated work gloves.
	Wear insulated waterproof shoes
	In order to minimize the damage caused by these toxic chemicals, it is important to work in a ventilated environment and to wear qualified safety gear when working.
<p>WARNING: Dust generated during operation of the appliance may contain chemicals that are carcinogenic or harmful to humans.</p> <p>Example:</p> <p>Lead contained in paint.</p> <p>Arsenic and chromium also produce toxic substances when they react with wood.</p>	
<p>Attachments</p> <ul style="list-style-type: none"> ● Wrenches ● Hexagonal wrench ● Water pumps ● Water hose <p>In some countries or special models, the equipment provided may differ slightly from the above information.</p>	
<p>Operating Instructions</p> <p>Checking the power supply voltage</p> <p>When connecting single-phase AC power, be sure to note that the power supply voltage should be the same as the voltage shown on the nameplate of the tool to avoid overloading the tool and affecting the work accuracy.</p> <p> Before installing the saw blade make sure that the plug has been separated from the socket and that the machine is in the disconnected state!!!!</p> <p> Caution! For your safety and protection, do not attempt to cut poorly secured workpieces until the tool is fully assembled and installed.</p>	

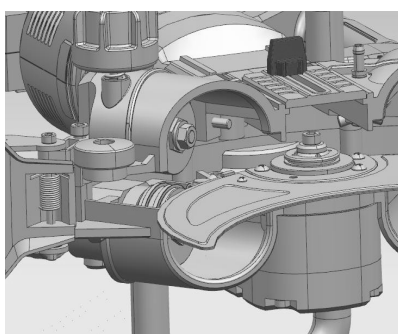


Attention! Voltage of the power supply! The voltage of the power supply must correspond to the voltage indicated on the nameplate of the power tool.

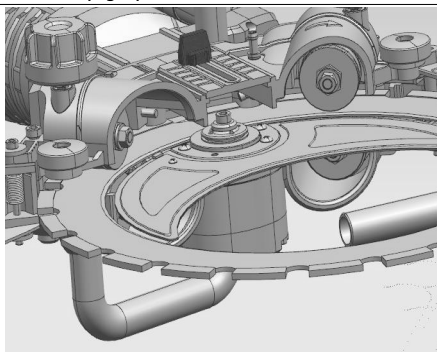
1. Check whether the saw blade is stuck in place before operation;
2. Turn the saw blade by hand, the friction wheel pressure wheel and adjusting wheel should be able to follow the turn;
3. The water pump should be connected before testing the machine;
4. The machine should be tested without load for at least 30 seconds;
5. Do not use damaged, deformed or vibrating saw blades. Damaged saw blades may break and cause injury;
6. After a period of use, check the wear and tear of the friction wheels, rollers and adjusting wheels, and replace them in time. Damaged friction wheels, rollers and adjusting wheels will damage the saw blade and may cause injury.



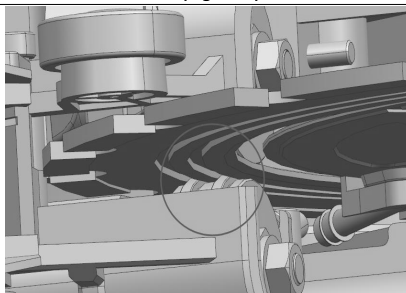
1. Loosen the pressure wheel knob screw and knob nut (Fig. 1)



2. Pull the pressure wheel assembly upward to install the saw blade (Figure 2)

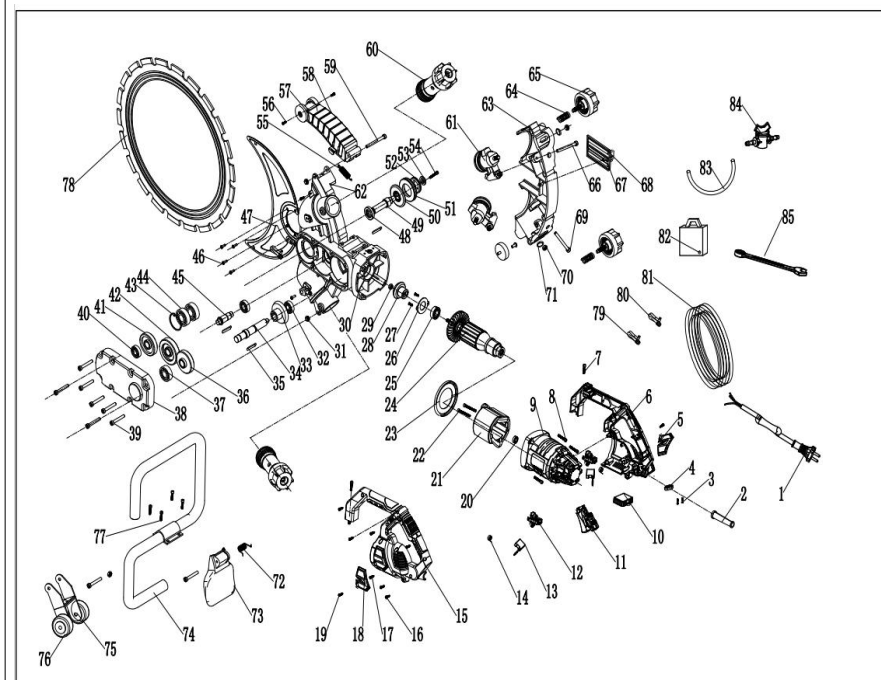


3. Attach the saw blade to the machine. The



4. Saw blade groove snap to the mediation wheel raised position, and adjust the

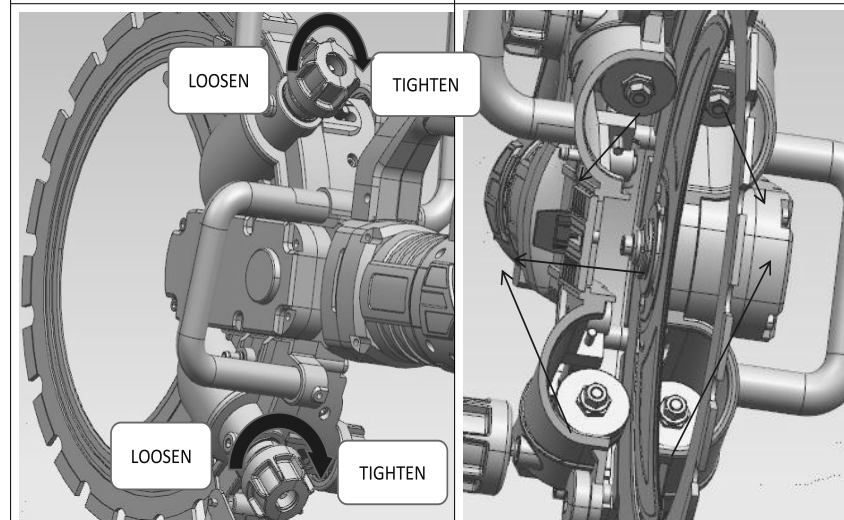
15	left handel	1
16	screw ST4.2*10	4
17	screw M4*10	2
18	left carbon brush cover	1
19	screw ST4.2*16	6
20	629RS rolling bearing TPI CHL	1
21	stator 98*65	1
22	screw ST4.8*80	2
23	windscreen	1
24	rotor	1
25	6202 RS rolling bearing TPI CHL	1
26	Center cap bearing gland	1
27	screw M4*10	2
28	Small bevel gears (25T)	2
29	M8 nut	1
30	transmission	1
31	gas nozzle	2
32	6000 rolling bearing	1
33	big bevel gears (T35)	2
34	double toothed axle	3
35	4*4*14 KEY HRC40-45	4
36	output tooth 39T	2
37	6001 rolling bearing	1
38	Gearbox cover	1
39	SCREW M6*35	8
40	6001 rolling bearing	1
41	output shaft tooth	1
42	middle tooth	1
43	40 Internal Clamping Reed	1
44	6203 rolling bearing	2
45	intermediate shaft	1
46	SCREW M6*16	4
47	Water pan assembly	1
48	30*20*6 Skeleton Seal	1
49	sprndle	1
50	inner platen	1
51	Main Friction Wheel	1
52	External Pressure Plate	1
53	small Pressure Plate	1
54	screw M8*25	1
55	tension spring	1
56	screw ST4.2*16	2
57	plastic wheel	4



NO.	NAME	QTY
1	CABLE	1
2	cable sheath	1
3	pressure plate	1
4	screws	7
5	Right carbon brush cover	1
7	SCREW M5*16	2
8	screw M5X35	4
9	body	1
10	soft start	1
11	switch	1
12	carbon brush holder	2pcs/set
13	carbon brush	2pcs/set
14	soiled spring	2pcs/set

V-shaped chamfer of the saw blade snaps into the V-shaped groove of the friction wheel.

pressure wheel and saw blade clearance smaller



5. Turn the 2 adjusting handwheels to the right and adjust until the saw blade is even with the water guide plate and can turn the saw blade

6. Rotate the saw blade when the 5 wheels to synchronize the rotation, and finally press the pressure wheel pressure



Attention! Please check the size of the carbon brushes after a long time working, if the size of the carbon brushes is less than 7mm, you need to replace the carbon brushes in time. Failure to replace the carbon brushes in time will result in damage to the motor of the machine.



Before replacing the carbon brushes make sure that the plug has been separated from the socket and that the machine is in the de-energized state!!!!

Installation of water pipes for water pumps

1、1, test whether the pump is normal water, such as submersible pumps will be immersed in the motor in a bucket of water, turn on the power, the water outlet has a water column, the pump is normal.

2、2, if there is no water column, then shake the pump in the water, the air out of the pump body, it will come out.

- 3、3, such as the linkage pump, the water inlet pipe and filter into the bucket, boot can be.
- 4、4、 Link one end of the water pipe to the water pump outlet, and the other end to the machine pre-installed faucet.
- 5、 Start the water pump power, the machine chain at the water splash..

Brushless machine switch operation

Switch on/off: Press the machine to turn on, then press the machine to stop.



Switch operation

Power on: Press the anti-self-locking button and then press the on/off button to turn on the power.
Shutdown: Release the on/off button to turn off the power



How to use the machine with leakage protection

- 1) (1) Plug into the 16A socket, the indicator light is on, press the test key (yellow) can cut off the power.
- 2) Press the recovery key (white) power indicator light, leakage insurance is normal.



Do not allow the motor to get wet, and do not put the entire body into the water, as this may cause motor failure and electric shock!

Environmental protection



End-of-life power tools and accessories contain a lot of valuable raw materials, which can also be recycled. Dust from grinding or cutting can contain hazardous substances and should not be dumped as ordinary waste, but should be disposed of in special waste recycling stations.

Warranty Card

Dear customers, users: purchase products, warranty service provisions are as follows

I. Warranty period:

Under normal use, within three months from the date of purchase, and the rotor commutator wear < 0.2mm, indeed due to the quality of the tool caused by internal damage, belongs to the scope of warranty.

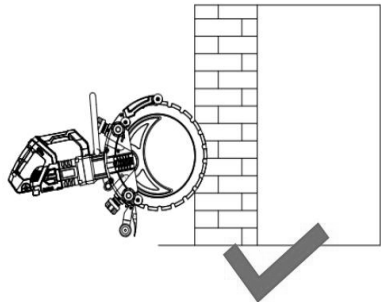
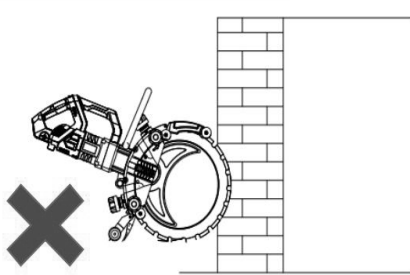

Second, in the warranty period occurs in the following cases, does not belong to the warranty coverage

1. No valid legal documents (invoice) to prove the date of purchase.
2. Damage caused by natural wear and tear and overloading.
3. Damage caused by carrying, transportation, improper storage.
4. Products that have been opened, repaired, replaced or modified on their own.
5. Tool models that do not meet national standards and cannot be sold domestically.
6. Due to misuse, beyond the scope of use of the tool, not in accordance with the provisions of the instructions for use.
7. Damage caused by lack of proper maintenance.

Note: The company reserves the right to modify the above provisions, and the warranty service in the case of no violation of national laws, has the final interpretation.

The following typical faults are not covered by warranty

- 1、Wear of rotor commutator exceeds 0.2mm.
- 2、User overload, continuous operation for a long time, motor overheating caused by the stator and rotor burnt.
- 3、Foreign objects enter into the body of the machine, resulting in damage to the parts or even damage to scrap, can not be regarded as the warranty object.

	 <p>Half-round arc on the saw blade to cut, easy to generate rebound force</p>
<p>Correct operation can be effective for safe cutting, otherwise it may cause mechanical injuries.</p>	
<p>Tool maintenance and care</p>	
<p> Warning! Before performing a service check on the machine, the plug must be removed from the electrical outlet.</p> <ol style="list-style-type: none"> 1. Check the mounting screws. Always check that the mounting screws are securely fastened. Loosening the screws can cause serious accidents. 2. Check the cable regularly. The power cord is specially prepared, and any damage should be immediately entrusted to an authorized maintenance center. The power cord used for this tool is a special structure, do not replace the power cord without authorization, if you need to replace the power cord, please go to the authorized maintenance center to deal with. 3. Keep the ventilation slots clean and smooth. Often remove dust, oil, and prevent debris from entering. 4. Replace the carbon brushes. When the carbon brushes wear to a certain length, the machine will stop, once this happens, you should replace the carbon brushes in time, in order to ensure the safety and reliability of the product. The carbon brushes should be checked and replaced by authorized maintenance center to prevent electric shock and ensure the long-term safe use of the tool. 5. Repair must be carried out by authorized repair center, only use authorized accessories, parts. 6. Cleaning. Avoid wiping plastic parts with solvents that cause damage to the plastic. It is recommended to use a soft cloth slightly moistened with soapy water. 7. Avoid shocks, impacts or grease on the tool. 	

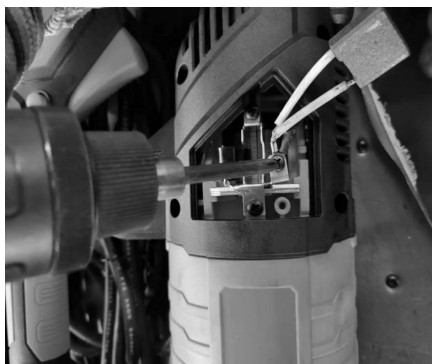
 <p>The light is not on, press the long key, the light is on and the leakage protector is energized. Press the test button (yellow), the light does not come on, the leakage protector function is normal. Before using the machine, press the long key again to keep it energized.</p>	 <p>Press the long button again before using the machine to keep it energized</p>
<p>Carbon Brush Replacement</p>	
 <p>1. Unscrew the screws of the brush holder cover.</p>	 <p>2. Remove the brush grip cover.</p>



3.Pull Apart Coil Spring.



4.Remove the carbon brushes.



5.Install the original accessory carbon brushes onto the brush grips.



6.Cover the brush holder cover and turn the screws to secure the brush holder cover.

5



Attention! Please check the size of the carbon brushes after a long time working, if the size is less than 7mm, you need to replace the carbon brushes in time. Failure to replace the carbon brushes in time will result in damage to the motor of the machine.



Before replacing the carbon brushes make sure that the plug has been separated from the socket and that the machine is in the de-energized state!!!!

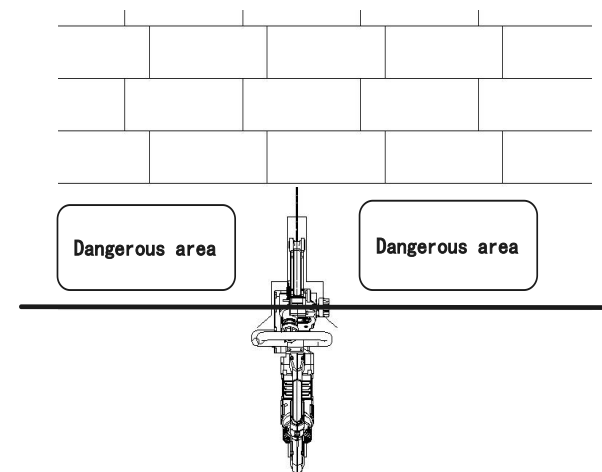
Practical Notes

1. To ensure that there is water splash at the saw blade before cutting.
1. 2. Pay attention to the cutting angle when cutting, so that the saw blade before the lower half arc to

contact the cut object . Every time just before cutting, check the saw blade and friction wheel, pressure wheel, adjusting wheel with smooth and saw blade tightness, rotating the saw blade friction wheel, pressure wheel, adjusting wheel does not follow the turn, there is a possibility and risk of accidental injury;.

2. 1. The positioning slot of the saw blade must be stuck to the protrusion of the adjusting wheel.
3. 2. to cut the cut object does not have to rush, should be gradual cutting, cutting, pay attention to the water guide disk with the saw blade to cut into the cutting groove;.
4. 3. According to the knife mark can first cut a straight line, and then repeat the cut, but also directly cut through the wall, and then free down, relying on the weight of the machine, control the machine, you can easily cut.
5. 4. When cutting horizontally, pay more attention to the uniformity of force, otherwise it is easy to accidental injury and saw blade damage.
6. 5. After cutting for a period of time, we should adjust the adjusting handwheel and the pressure handwheel, so that the saw blade and the friction wheel have enough friction.
7. Every time after cutting to do a good job of cleaning and maintenance of the machine, effective maintenance will extend the service life of the machine, and can work more efficiently.

Warnings and alerts



WARNING: Both sides of the saw blade are danger zones, no one is allowed to enter, otherwise accidental injuries may easily occur;