



说明书材质要求: 105g铜版纸	说明书成品尺寸: 148x210mm
第一: 专色用6级防晒油墨+CMYK油墨要求: 1. PANTONE137C专色油墨(专色用6级防晒油墨): 如果自己配色, 油墨配比为: 洒联中黄(防晒)2000g 洒联金红(防晒)225g 2. C色油墨: 洒联天蓝墨 3. M色油墨: 洒联金红墨 4. Y色油墨: pantone123C专色油墨 5. K色油墨: 洒联黑墨	第二: 特别注意: 1. 印刷时看样请参考我司提供的实物样品颜色。不得偏色 2. 137C的专色不得参考C=0, M=35, Y=90, K=0对应的四色 色谱颜色来看样印刷 Pantone 137C C=0, M=100, Y=100, K=0 C=83, M=52, Y=0, K=0 Black (五色印刷)
折叠方式: 骑马钉	备注:
特别注意: 此页内容不印刷	

更改记录	1. 说明书英文字母不齐 有空缺 2. 认证标志调整 3. 删掉爆炸清单多余内容 (53-55)			
	0622_V03	2022.6.15	LX	
	版本号	日期	设计师	

INGCO

Lithium-Ion Rotary Hammer

EN Lithium-Ion Rotary Hammer



CRHLI1601



SCAN FOR VIDEO



Original instructions

The symbols in instruction manual and the label on the tool

	Read the instruction manual before using.
	CE conformity.
	Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.
	Safety alert. Please only use the accessories supported by the manufacturer.

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 tool or battery-operated (cordless) power tool.

1) Work area safety

- a) **Keep work area clean and well lit.** *Cluttered and dark areas invite accidents.*
- b) **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.*
- c) **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

2) Electrical safety

- a) **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.*
- b) **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.*
- c) **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
- d) **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 or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
- e) **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.*
- f) **If operating a power tools in a damp location is unavoidable, use**

a residual current device (RCD) protected supply. *Use of an RCD reduces the risk of electric shock.*

3) Personal safety

- a) **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 moment of inattention while operating power tools may result in serious personal injury.*
- b) **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.*
- c) **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.*
- d) **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.*
- e) **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
- f) **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.*
- g) **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.*

4) Power tool use and care

- a) **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.*
- b) **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.

- c) **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.*
- d) **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.*
- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*
- f) **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- g) **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.*

5) Battery tool use and care

- a) **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.*
- b) **Use power tools only with specifically designated battery packs.** *Use of any other battery packs may create a risk of injury and fire.*
- c) **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 a fire.*
- d) **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with**

water. If liquid contacts eyes, additionally seek medical help *Liquid ejected from the battery may cause irritation or burns.*

- e) **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.*
- f) **Do not expose a battery pack or tool to fire or excessive temperature** *Exposure to fire or temperature above 130 °C may cause explosion.*
- g) **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.*

6) Service

- a) **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.*
- b) **Never service damaged battery packs.** *Service of battery packs should only be performed by the manufacturer or authorized service providers.*

Additional Safety Warnings

– **Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring.** *Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.*

Residual risks

Even when the power tool is used as prescribed it is not possible to eliminate all residual risk factors. The following hazards may arise in connection with the power tool's construction and design:

- a) Health defects resulting from vibration emission if the power tool is being used over longer period of time or not adequately managed and properly maintained.
- b) Injuries and damage to property to due to broken accessories that are suddenly dashed.



Warning! This power tool produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their physician and the medical implant manufacturer before operating this power tool.

Description and Specifications

⚠ WARNING Disconnect battery pack from tool or place the switch in the locked or off position before making any assembly, adjustments or changing accessories. Such preventive safety measures reduce the risk of starting the tool accidentally.



Model Number	CRHLI1601	Maximum Capacities:	
Voltage rating	20 V ===	Material	
Shank style	SDS-quick	Concrete(optimum depth)	16mm(80mm)
		Steel	10mm
		Wood	20mm

NOTE: For tool specifications refer to the nameplate on your tool.

Assembly

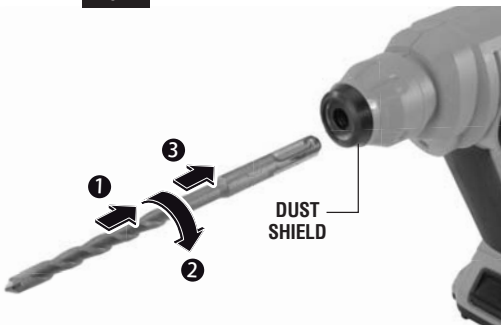
⚠ WARNING Disconnect battery pack from tool or place the switch in the locked or off position before making any assembly, adjustments or changing accessories. Such preventive safety measures reduce the risk of starting the tool accidentally.

INSTALLING ACCESSORIES

Clean the insert shank end of the accessory to remove any debris, then lightly grease with a light oil or lubricant

Insert accessory into the chuck through the dust shield, while twisting and pushing inward

FIG. 2



until it locks automatically into place. Pull outward on the accessory to be certain it is locked into the chuck (Fig. 2).

REMOVING ACCESSORIES

⚠ WARNING Accessories may be hot after use. Avoid contact with skin and use proper protective gloves or cloth to remove.

To remove an accessory, pull locking sleeve backward and pull bit forward. All accessories should be wiped clean after removing (Fig. 3).

FIG. 3



Operating Instructions

VARIABLE SPEED CONTROLLED TRIGGER SWITCH

Your tool is equipped with a variable speed trigger switch. The tool can be turned "ON" or "OFF" by squeezing or releasing the trigger. The speed can be adjusted from the minimum to maximum nameplate RPM by the pressure you apply to the trigger. Apply more pressure to increase the speed and release pressure to decrease speed Fig. 1).

FORWARD/REVERSING LEVER & TRIGGER LOCK

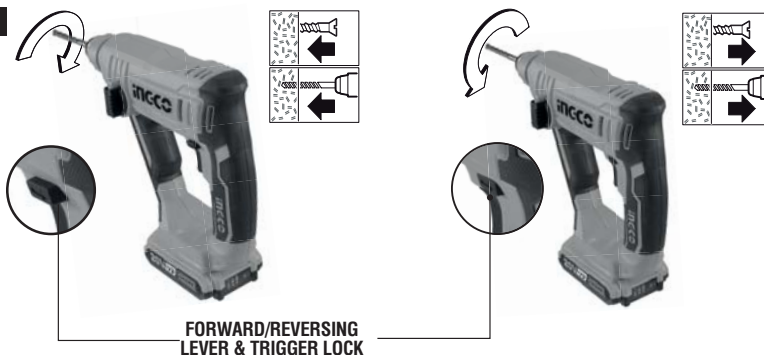
Your tool is equipped with a forward/reversing lever and trigger lock located above

the trigger (Fig. 4). This lever was designed for changing rotation of the chuck, and for locking the trigger in an "OFF" position to help prevent accidental starts and accidental battery discharge.

For forward rotation, (with chuck pointed away from you) move the lever to the far left. For reverse rotation move the lever to the far right. To activate trigger lock move lever to the center off position.

⚠ CAUTION Do not change direction of rotation until the tool comes to a complete stop. Shifting during rotation of the chuck can cause damage to the tool.

FIG. 4

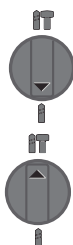


DRILL/HAMMER DRILL SELECTION DIAL

The selector dial allows the tool to be set for various drilling/hammer drilling applications. Rotate the selector dial right or left depending on the below applications (Fig. 1).

CAUTION Do not operate the selection dial until the tool come to a complete stop. Shifting during rotation of the chuck can cause damage to the tool.

Do not use demolition or chipping bits such as bull points, chisels, spades, gouges, etc.



Drill only action: For drilling in woods, metals, plastics or other non concrete materials.

Drill with hammer action: For drilling in concrete, asphalt, tile or other similar hard materials.

BRAKE

When the trigger is released it activates the electrical brake to stop the chuck quickly. This is especially useful in the repetitive driving and removal of screws.

INSERTING AND RELEASING BATTERY PACK

Set Forward/Reversing lever to the center (off position). Slide charged battery pack into the housing until the battery pack locks into position (Fig. 5).

To remove the battery pack, press the battery pack release button and slide the battery pack forward.



TOOL TIPS

Following a few simple tips will reduce wear on the tool and the chance of injury to the operator.

NOTE: The high efficiency available from the rotary hammers can only be obtained if sharp and undamaged accessories are used. The “cost” to maintain sharp and undamaged accessories is more than offset by the “time saved” in operating the tool with sharp accessories.

All hammers require a short period of time to warm up. Depending on the room temperature, this time may vary from approximately 15 seconds (90 F) to 2 minutes (32).

A new hammer requires a break-in period before full performance is realized. This period may require up to 5 hours of operation.

You will extend the life of your bits and do neater work if you always put the bit in contact with the workpiece BEFORE pulling the trigger. During operation, hold the drill firmly and exert moderate, steady pressure. Too much pressure at low speed will stall the hammer. Too little pressure will keep the bit from cutting and cause excess friction by sliding over the surface. This can be damaging to the drill and bit.

Carbide tipped bits: Used for drilling stone, concrete, cement, brick, cinder block and other unusually hard non-metals.

Shanks of all drill bits should be wiped clean prior to using and immediately after removing.

Recall these instructions for safe operation:

1. All work must be supported or secured before drilling and steady, even pressure applied in line with the drill bit.
2. As the drill bit cuts through the opposite side, reduce the pressure and continue running the drill as the bit is withdrawn.

3. Some materials require slow drilling speeds; whereas, others require higher speed to produce the best results. Materials such as glass, porcelain, ceramics, tiles, plastics, etc., should be drilled at low speeds with specially designed drill bits and lubricants.

DRILLING WOOD OR PLASTIC

(Drill only mode)

If backing block is not used, ease up on the pressure just before the bit breaks through the wood to avoid splintering. Complete the hole from the opposite side immediately after the point breaks through. If bit binds, reverse the drilling operation to help remove the bit from the work.

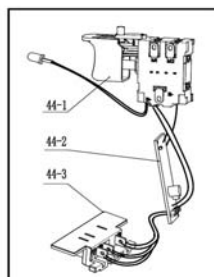
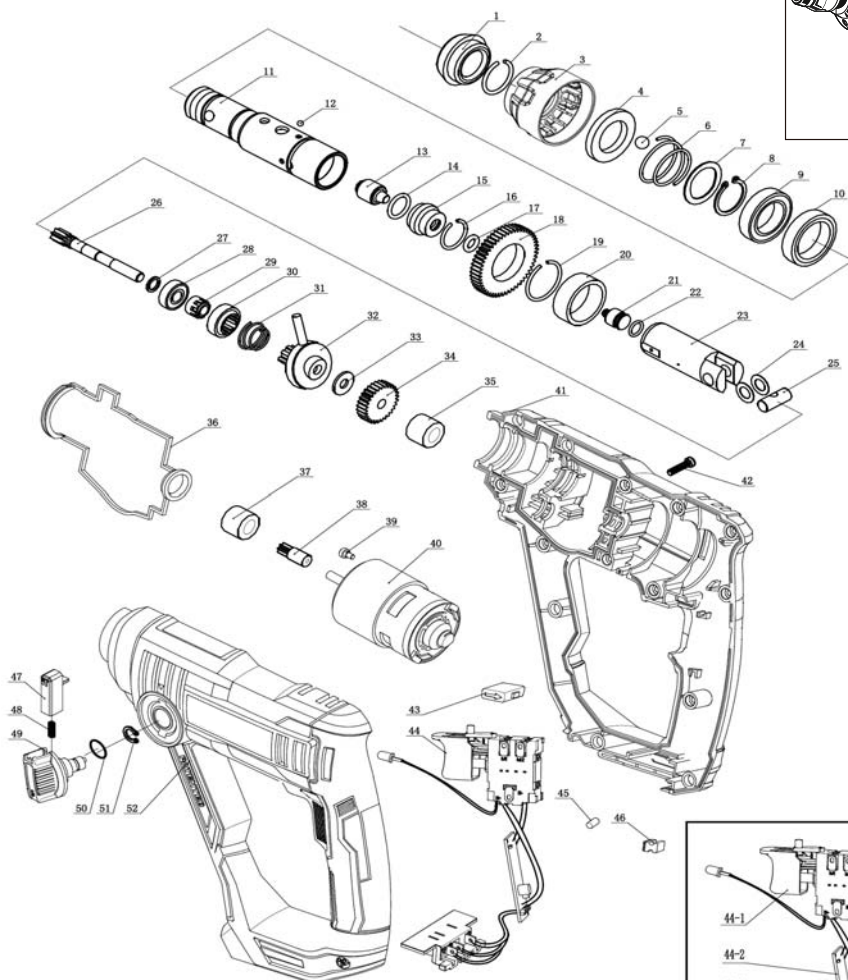
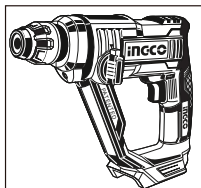
DRILLING METAL

(Drill only mode)

There are two rules for drilling hard materials. First, the harder the material, the greater the pressure you need to apply to the tool. Second, the harder the material, the slower the speed. Here are a couple of tips for drilling in metal. Make a center punch in the material for easier starting. Lubricate the tip of the bit occasionally with cutting oil except when drilling soft metals such as aluminum, copper or cast iron. If the hole to be drilled is fairly large, drill a smaller hole first, then enlarge to the required size, it's often faster in the long run. Maintain enough pressure to assure that the bit does not just spin in the hole. This will dull the bit and greatly shorten its life.

DRILLING MASONRY

Use carbide-tipped masonry bit for cinder block, mortar, common brick, soft stone and other materials. The amount of pressure to be used is dependent upon the type of material being drilled. Soft materials require less pressure while the hard materials need more pressure to prevent the drill bit from spinning.

INGCO**EXPLODED VIEW****CRHLI1601**

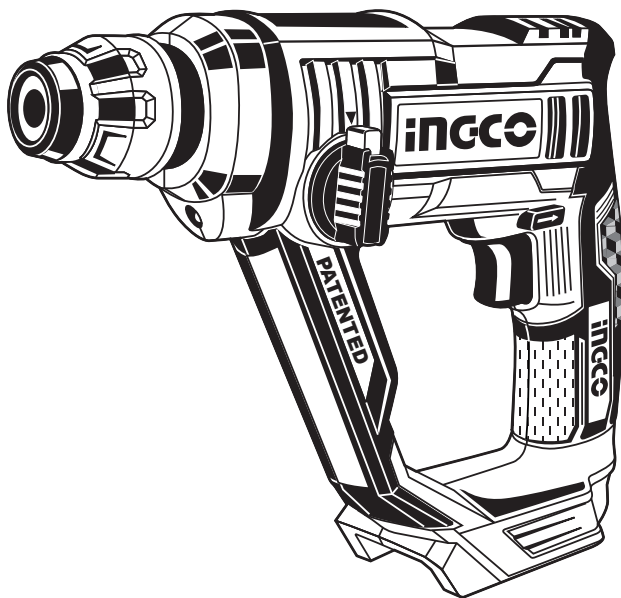


SPARE PART LIST

CRHLI1601

No.	Part Description	QTY	No.	Part Description	QTY
1	Rubber Head	1	27	Washer7×10×0.8	1
2	Steel Ring 19×1.8	1	28	Bearing 697z	1
3	Steel Frame	1	29	Impact Cover	1
4	Top Ring	1	30	Impact Cover 2	1
5	Steel Ball 7.14	2	31	Washer	1
6	Springw24-29.5×1.5×21	1	32	Pendulum Rod Bearing	1
7	Big Washer	1	33	Bearing6×14×2.5	1
8	Steel Ring 20	1	34	Small Gear	1
9	Bearing 6804rs	1	35	Needle Bearinghk0608	1
10	Oil Seal Fb 24×33×7	1	36	Swing Ring	1
11	Cylinder	1	37	Copper BushΦ9*Φ12*8	1
12	Steel Ball 3	4	38	Rotor Gear	1
13	Punch Hammer	1	39	Screw	1
14	O-ring 12×2	1	40	Motor	1
15	Cover	1	41	Right Cover	1
16	Steel Ring20×2	1	42	Screwst3.5×14	14
17	O-ring 6×3.5	1	43	Konb	1
18	Gig Gear	1	44	Inner Electric Device	1
19	Steel Ring24×2	1	45	Rubber Column	2
20	Needle Bearinghk242910	1	46	Block Rubber	2
21	Impact Hammer	1	47	Lock Knob	1
22	O-ring11×3	1	48	Spring	1
23	Piston	1	49	Function Konb	1
24	Washer7.8×13×0.5	2	50	O-ring9×1.5	1
25	Pin7.5×18	1	51	Steel Ring 8	1
26	Gear Axle	1	52	Left Cover	1

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MADE IN CHINA
0622.V03

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