



说明书材质要求：105g 有光铜版纸	说明书成品尺寸：105*143mm
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：酒联中黄（防晒）2000g 酒联金红（防晒）225g 2.C色油墨：酒联天蓝墨 3.M色油墨：酒联金红墨 4.Y色油墨：pantone123C专色油墨 5.K色油墨：酒联黑墨	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 Black （两色印刷）
折叠方式：风琴折	备注：

特别注意： 此页内容不印刷

风琴折 + 对折 页面顺序

16P 页面顺序

9	10	11	封面
12	13	14	封底

1	2	3	4
5	6	7	8

20P 页面顺序

11	12	13	14	封面
15	16	17	18	封底

1	2	3	4	5
6	7	8	9	10

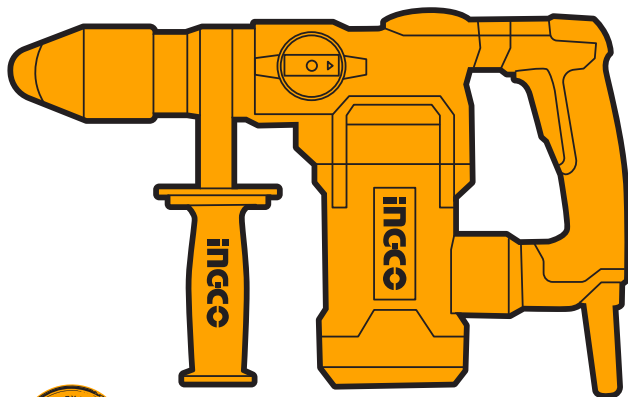
更改记录	1. 新制作			1. 改图文内容，-9单独一列 2. 封面封底改彩色			1. 加噪音值和振动值		
	0823.V01	2023.8.3	LJJ	0624.V02	2024.6.12	GWY	0125.V03	2025.1.26	CXY
	版本号	日期	设计师	版本号	日期	设计师	版本号	日期	设计师

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PRODUCT MANUAL

ROTARY HAMMER



RH1600388 URH1600388
RH1600388xy URH1600388xy
x(blank,1,2,3,4,5,6,7,8,9,E,S,A,M)
y(blank,-1,-2,-3,-4,-5,-6,-7,-8,-9,-E,-S,-A,-M)



GENERAL POWER TOOL SAFETY WARNINGS

⚠ WARNING Read all safety warnings, instructions, illustrations and specifications provided with this power tool. *Failure to follow all instructions listed below 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 or 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 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.*

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 a 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 energising 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 and clothing 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.*
- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** *A careless action can cause severe injury within a fraction of a second.*

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 remove the battery**

pack, if detachable, 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 and accessories. 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.***
- 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.***
- h) Keep handles and grasping surfaces dry, clean and free from oil and grease. *Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.***

5) 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.***

THE SYMBOLS IN INSTRUCTION MANUAL

	Read the instruction manual before using.
	Double insulated for additional protection
	CE conformity.
	Safety alert. Please only use the accessories supported by the manufacturer.
	Wear safety glasses, hearing protection and dust mask.
	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.

HAMMER SAFETY WARNINGS

Hammer safety warnings

1) Safety instructions for all operations

- a) **Wear ear protectors.** *Exposure to noise can cause hearing loss.*
- b) **Use auxiliary handle(s), if supplied with the tool.** *Loss of control can cause personal injury.*
- c) **Hold the power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** *Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.*

2) Safety instructions when using long drill bits with rotary hammers

- a) **Always start drilling at low speed and with the bit tip in contact with the workpiece.** *At higher speeds, the bit is likely to bend if allowed to rotate freely without contacting the workpiece, resulting in personal injury.*
- b) **Apply pressure only in direct line with the bit and do not apply excessive pressure.** *Bits can bend, causing breakage or loss of control, resulting in personal injury.*

Additional safety warning

- a) **Use suitable detectors to determine if utility lines are hidden in the work area or call the local utility company for assistance.** Contact with electric lines can lead to fire and electric shock. Damaging a gas line can lead to explosion. Penetrating a water line causes property damage or may cause an electric shock.
- b) **Always wait until the power tool has come to a complete stop before placing it down.** The application tool can jam and cause you to lose control of the power tool.
- c) **Secure the workpiece.** A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- d) **Do not touch any application tools or adjacent housing components shortly after operation.** These can become very hot during operation and cause burns.
- e) **The application tool may jam during drilling. Make sure you have a stable footing and hold the power tool firmly with both hands.** Otherwise, you could lose control of the power tool.

- f) **Take care when carrying out demolition work using the chisel.** Falling fragments of the demolition material could injure you or any bystanders.
- g) **Hold the power tool firmly with both hands and make sure you have a stable footing.** The power tool can be more securely guided with both hands.

Product description and specifications



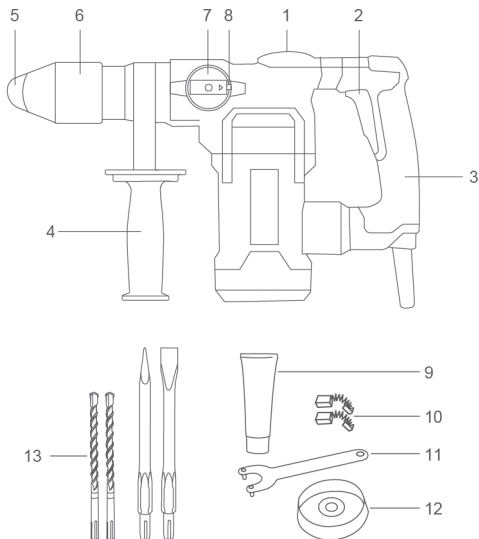
Read all the safety and general instructions.

Failure to observe the safety and general instructions may result in electric shock, fire and/or serious injury. Please observe the illustrations at the beginning of this operating manual.

INTENDED USE

The power tool is intended for hammer drilling in concrete, brick and stone, as well as for light chiseling work.

SPECIFICATIONS



1. Grease cap
2. ON / OFF Switch
3. Anti-vibration handle
4. Auxiliary handle
5. Tool holder
6. Locking sleeve
7. Drilling/chiseling selection switch

8. Locking button for drilling/chiseling switch
9. Grease 1pcs
10. Carbon brush 1set (optional)
11. Key for grease cap 1pcs
12. Dust cap(optional)
13. Accessories

Accessories(optional, see your product specification):

1. Pointed chisel 1pcs
2. Flat chisel 1pcs
3. Masonry drill bits 2pcs

Technical specifications

Mode No.	RH1600388 RH1600388xy	RH1600388-9	URH1600388 URH1600388xy	URH1600388- 9
Rated voltage	220- 240V~50/60Hz	220-240V~60Hz	110- 120V~50/60Hz	127V~60Hz
Rated input power	1600W	1600W	1600W	1600W
No-load speed	630/min	630/min	630/min	630/min
Impact rate	3850/min	3850/min	3850/min	3850/min
Impact energy	10J	10J	10J	10J
Max.drilling capacity				
Concrete	40mm	40mm	1-9/16"	1-9/16"
Protection class	□ \ II	□ \ II	□ \ II	□ \ II

Model No. Note: x (blank, 1,2,3,4,5,6,7,8,9,E,S,A,M,D); y (blank, -1,-2,-3,-4,-5,-6,-7,-8,-9,E,S,A,M,D)

- Due to our continuing program of research and development, the specifications herein are subject to change without notice.

Noise/Vibration information

The noise emission, measured in accordance with **EN62841-2-6** as follows:

A-weighted sound pressure level	L_{pA}	100 dB (A)
A-weighted sound power level	L_{wA}	108 dB (A)
Uncertainty	K	3 dB (A)

Wear hearing protection!

The vibration total value and its uncertainty measured in accordance with **EN62841-2-6**

Hammer drilling into concrete:

Vibration emission value $a_{h,HD}$	a_h	29,1 m/s ²
Uncertainty	K	1,5 m/s ²

Chiselling:

Vibration emission value $a_{h,CH}$	a_h	16,5 m/s ²
Uncertainty	K	1,5 m/s ²

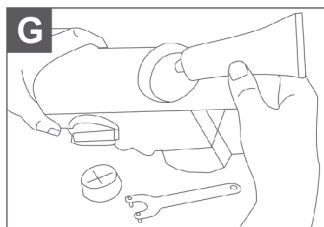
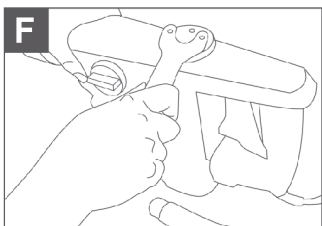
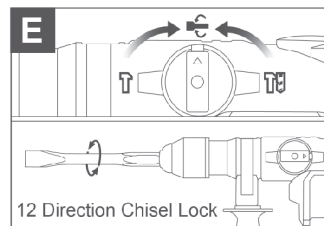
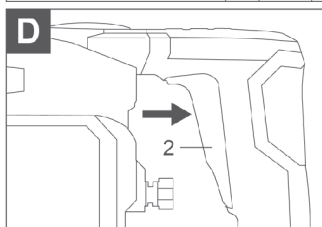
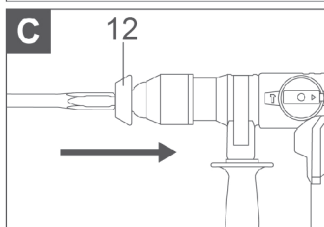
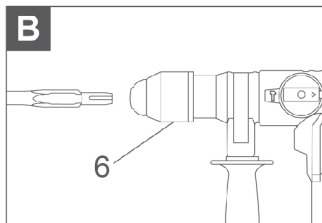
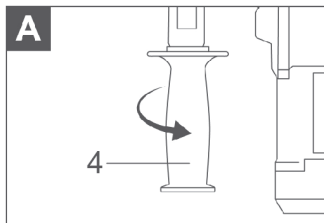
That the declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another.

That the declared vibration total value may also be used in a preliminary assessment of exposure.

WARNING!

- That the vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used;
- Identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

OPERATION PICTURE



OPERATION

1. Fitting the auxiliary handle (see Figure A)

WARNING!

Only use the drill with the auxiliary handle fitted. Loss of control over the machine can lead to injury.

The auxiliary handle 4 provides you with additional grip when guiding the hammer drill.

- Slide the auxiliary handle with the round opening over the chuck on the clamping neck of the hammer drill.
- Position the handle by rotating it around the clamping neck, so you can work comfortably.
- Tighten the auxiliary handle by rotating the lower part of the handle in clockwise direction.
- To loosen the auxiliary handle again, or to change the position, proceed in reverse order.

2. Inserting / removing the tools (see Figure B)

NOTE

Ensure that the tool shaft and the tool holder are free from dust and lightly grease the shaft using tool insert lubricant before inserting it into the chuck .This extends the lifetime of the chuck and the machine.

- Slide the accessories (chisel / drill) 13 into the tool holder 5.
- Turn the accessories, if necessary in the tool holder until it audibly clicks into place. Check the locking mechanism by gently pulling the inserted tool.
- To remove the accessories, pull the locking sleeve 6 back as far as it goes and pull the accessories out of the tool holder 5 from the front.

3. Fit the dust cap (see Figure C)

CAUTION!

Always use the supplied dust cup when drilling over head to prevent dust from entering the chuck.

- Slide the dust cup 12 firmly onto the drill.
- When using large diameter drills, the dust cup can be fitted to the drill shaft.

4. Function selection (see Figure E)

The drilling/chiseling selection switch 7 of the machine is selected to change the

operating mode. Press the Locking button for drilling/chiseling switch 8 to the desired position until it can be heard to latch.

WARNING!

The selector switches may only be used when the motor has come to a complete standstill. Otherwise the inserted tool can turn unintentionally or cause damage to the machine.



Hammer drilling:

Position for hammer drilling in concrete or stone



Chiseling:

Position for chiseling



Changing the Chiseling Position (Vario-Lock):

Vario-Lock position for adjustment of the chiseling position

The Drilling/chiseling selection switch 7 does not latch in this position

5.Switching on and off (see Figure D)

1. Press the On / Off switch 2.
2. Release the On / Off switch 2.

Drilling and chiseling

WARNING!

Do not apply excessive force on the hammer drill. Excessive pressure may damage the drill, chisel or the hammer drill and increases the risk of accident. For this reason is it important to always grip the drill firmly with two hands and maintain a stable posture. The greater the diameter of the drill bit, the greater is the force on your arm.

Always secure your workpiece in a vice or in any other clamping device. Secure particularly large workpieces against sliding or support them properly.

Drilling

1. Choose a drill bit appropriate for the application and insert it into the tool as described in chapter 'Inserting the tools'.
2. Insert the drill bit properly at the desired location.
3. Press the On / Off switch 2 to start drilling.

Drilling with a keyed chuck (not included)

NOTE

Only work with the gear rim drill chuck (not included in the scope of delivery) when the percussion function is switched off.



With the toothed rim drill chuck (not included in the scope of delivery), the hammer drill can also be used for drilling in iron, non-ferrous metals, wood or plastic.

1. Insert the toothed rim drill chuck (not included in the scope of delivery) into the tool holder (see chapter "Inserting the tool").
2. Choose a drill bit suitable for the machining and insert it into the keyed chuck.
3. Place the drill chuck key (not included in the scope of delivery) in one of the holes on the spider.
4. To tighten the chuck, turn the keyed chuck clockwise.
5. To loosen the chuck, turn the keyed chuck anti-clockwise.
6. Insert the drill bit properly at the desired location.
7. Press the On / Off switch 2 to start drilling.

Selecting the appropriate drill bit

For drilling concrete and stone	Carbide tipped masonry drill bit
For metal	HSS drill bit (not included)
For wood	Twist drill bits for wood (not included)

Chiseling

1. Choose a chisel appropriate for the material and insert it into the tool as described in chapter "Fitting and changing tools".
2. Position the chisel using the rotation stop position, if necessary, as described in "Function selection".
3. Insert the chisel properly at the desired location.
4. Press the On / Off switch 2 to start chiseling.

Maintenance

WARNING!

Disconnect the mains plug before any adjustment, maintenance or repair.

Only use spare parts / accessories from the manufacturer or authorized and qualified workshops.

Repairs should only be carried out by qualified technicians or by an authorized service center. Qualified technicians must have relevant training and experience, be familiar with the design and construction requirements of the product and understand and follow the safety regulations.

Changing / Refilling grease (see Figure F and Figure G)

The drill is completely airtight to prevent grease leaking and dust entering the machine. Refill grease after 30-40 operating hours or when the impact power decreases.

1. Open the grease cap 1 with the supplied key for grease cap 11.
2. Refill with the supplied grease and close the cover in reverse order. Refill with gear grease for central lubrication.
3. Spray a small amount of MOS2 oil into the tool holder if you do not intend to use the drill for a longer period of time. This prevents the hammer to seize up.

Replacing the carbon brushes

The carbon brushes may only be replaced by an authorized specialist workshop or by qualified skilled personnel.

Replacing the mains cable

Damaged mains cables may only be replaced with genuine replacement cables available from the manufacturer.

Mains cables may only be replaced by the manufacturer, an authorized service center or a qualified person.

MAINTENANCE&MALFUNCTIONS

Possible malfunctions and methods of their eliminations

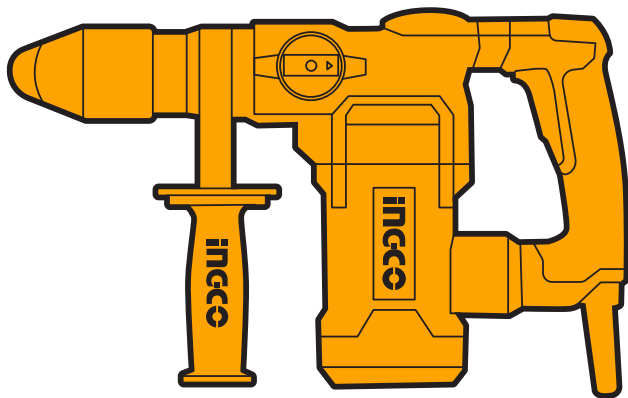
Malfunction	Probable causes	Actions
When the machine is turned on, the electric motor does not work.	• Switch failure • The power cord or wiring is broken, power cord plug malfunction; • No brush contact with the collector; • Wear/damage of brushes	Disconnect the machine from the mains and contact a qualified specialist.
Formation of a circular fire on the collector	• Brush wear/damage of the brush holder; • Malfunction in the armature coil	Disconnect the machine from the mains and contact a qualified specialist. Please don't repair the machine by your own.
When working, smoke or the smell of burning insulation appears from the ventilation openings.	• Malfunction in the electric motor coil; • Malfunction of the electrical part of the tool.	
Increased noise in the gearbox	• Wear/breakage of gears or bearings	
When the machine is turned on, the spindle does not rotate	• Gearbox failure.	

Critical state criteria

Critical state criteria	Probable causes	Actions
Cracks on the surfaces of bearing and housing parts	Fatigue deformation of metal	Disconnect the machine from the mains and contact a qualified specialist. Please don't repair the machine by your own.
The power cord or plug is damaged	Overload or breakage	
Excessive wear or damage to the motor or reductor mechanism, or a combination of signs	Fatigue deformation of metal	

Critical state criteria

List of critical failures	Actions
Electric motor sparking	It is necessary to contact a qualified specialist
The appearance of extraneous noise	It is necessary to contact a qualified specialist
If the above malfunctions are detected, it is necessary to disconnect the machine from the mains and contact a qualified specialist	



MADE IN CHINA 0125.V03

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