

INGCO

Rotary Hammer

EN Rotary Hammer









*RGH9028-2 RGH9028-2M URGH9028-2 RGH9028-26
RGH9028-28 RGH9028S-2 RGH9028-29*

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The symbols in instruction manual and the label on the tool

	Double insulated for additional protection.
	Read the instruction manual before using.
	CE conformity.
	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.
	Safety alert. Please only use the accessories supported by the manufacture.

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) Service

- a) **Have your power tool serviced by a qualified repair person using only identical.** *This will ensure that the safety of the power tool is maintained.*

Additional Safety Warnings

Hammer safety warnings

- **Wear ear protectors.** *Exposure to noise can cause hearing loss.*
- **Use auxiliary handle(s), if supplied with the tool.** *Loss of control can cause personal injury.*
- **Hold 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.*

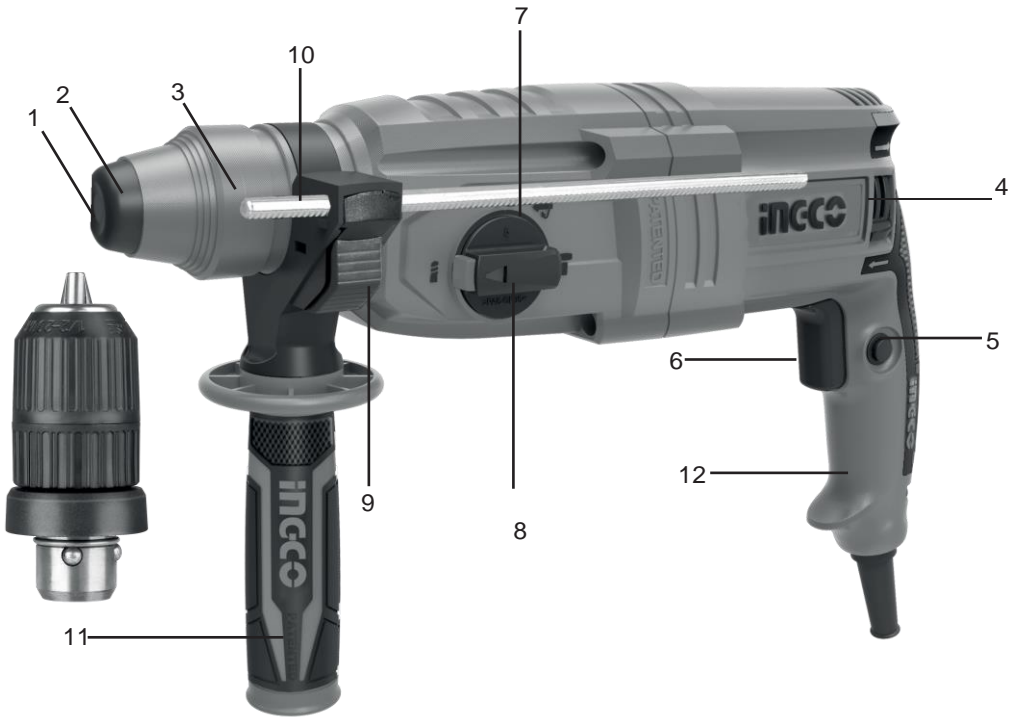
Residual risks

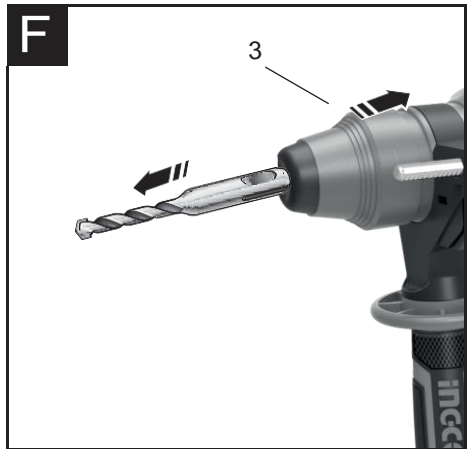
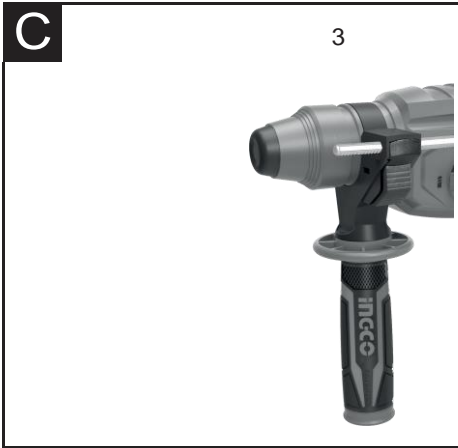
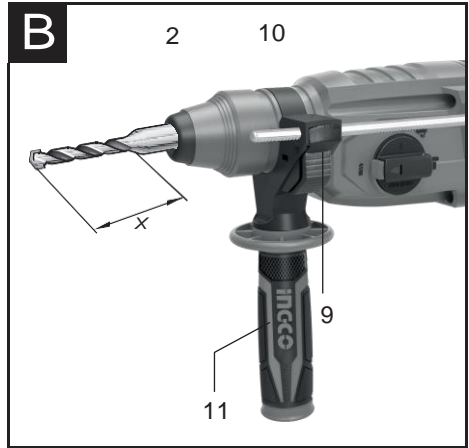
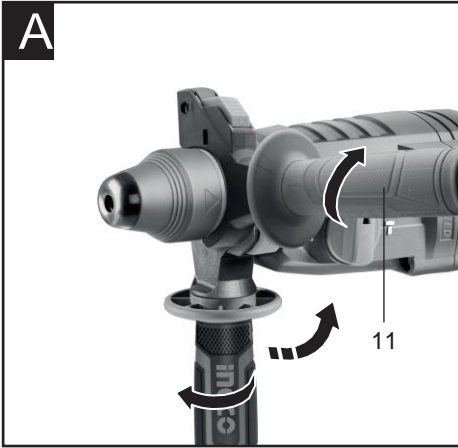
Even when the power tool is used as prescribed it is not possible to eliminate all residual risk factors. The following hazards may arise in connection with the power tool's construction and design:

- 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.







Hammer Safety Warnings

- ▶ **Wear ear protectors.** Exposure to noise can cause hearing loss.
- ▶ **Use auxiliary handle(s), if supplied with the tool.** Loss of control can cause personal injury.
- ▶ **Hold the tool by the insulated gripping surfaces when performing operations where the application tool or the screw could contact hidden wiring or its own power cord.** Contact with a “live” wire will also make exposed metal parts of the power tool “live” and shock the operator.
- ▶ **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.
- ▶ **When working with the machine, always hold it firmly with both hands and provide for a secure stance.** The power tool is guided more secure with both hands.
- ▶ **Secure the workpiece.** A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- ▶ **Always wait until the machine has come to a complete stop before placing it down.** The tool insert can jam and lead to loss of control over the power tool.

Product Features

The numbering of the product features refers to the illustration of the machine on the graphics page.

- 1 Tool holder
- 2 Dust protection cap
- 3 Locking sleeve
- 4 Rotational direction switch
- 5 Lock-on button for On/Off switch
- 6 On/Off switch
- 7 Release button for mode selector switch
- 8 Mode selector switch
- 9 Button for depth stop adjustment
- 10 Depth stop
- 11 Auxiliary handle
- 12 Handle

*Accessories shown or described are not part of the standard delivery scope of the product. A complete overview of accessories can be found in our accessories program.

Product Description and Specifications



Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Intended Use

The machine is intended for hammer drilling in concrete, brick and stone, as well as for light chiselling work. It is also suitable for drilling without impact in wood, metal, ceramic and plastic. Machines with electronic control and right/left rotation are also suitable for screwdriving.

Technical Data

Model No.	RGH9028-2	RGH9028-26 (ISRAEL Plug)	RGH9028-28 (BS Plug)	RGH9028-2M
Rated voltage:	220-			
Rated input power:	240V~50/60Hz			
No-load speed:	800W			
Impact times:	0-			
Drilling capacity:	1100/min			
Concrete:	0-			
Steel:	4000/min			
	26m			
	m			
	13m			
	m			
Wood:	30mm			
Model No.	RGH9028S-2 (SAA Plug)	RGH9028-29 (IRAM Plug)	URGH9028-2	
Rated voltage:	220-240V~50/60Hz			
Rated input power:	800W			
No-load speed:	0-1100/min			
Impact times:	0-1100/min			
Drilling capacity:	0-1100/min			

Assembly

- ✘ Before any work on the power tool **itself**, pull the mains plug.

Auxiliary Handle

- ✘ Operate your power tool only with the **auxiliary handle 14**.

Rotating the Auxiliary Handle

The auxiliary handle 14 can be set to any position for a secure and low-fatigue working posture.

Turn the bottom part of the auxiliary handle 14 in counterclockwise direction and swivel the auxiliary handle 14 to the desired position. Then retighten the bottom part of the auxiliary handle 14 by turning in clockwise direction.

Pay attention that the clamping band of the auxiliary handle is positioned in the groove on the housing as intended for.

Adjusting the Drilling Depth

The required drilling depth can be set with the depth stop 13.

Press the button for the depth stop adjustment 12 and insert the depth stop into the auxiliary handle 14.

The knurled surface of the depth stop 13 must face downward.

Insert the SDS-plus drilling tool to the stop into the SDS-plus tool holder 3. Otherwise, the movability of the SDS-plus drilling tool can lead to incorrect adjustment of the drilling depth.

Pull out the depth stop until the distance between the tip of the drill bit and the tip of the depth stop correspond with the desired drilling depth

Selecting Drill ChucM and Tools

For hammer drilling and chiseling, SDS-plus tools are required that are inserted in the SDS-plus drill chuck.

For drilling without impact in wood, metal, ceramic and plastic as well as for screwdriving and thread cutting, tools without SDS-plus are used (e.g., drills with cylindrical shank). For these tools, a keyless chuck or a key type drill chuck are required.

Note: Do not use tools without SDS-plus for hammer drilling or chiseling! Tools without SDS-plus and their drill chucks are damaged by hammer drilling or chiseling.

The SDS-plus quick change chuck 2 can easily be replaced against the quick change key-less chuck 1 provided.

Removing/inserting the Quick Change

Removing the Quick Change Chuck

Pull the locking ring for the quick change chunk 6 toward the rear, hold it in this position and pull off the SDS-plus quick change chuck 2 or the quick chanpe keyless chuck 1 toward the front.

After removing, protect the replacement chuck against contamination.

Inserting the Quick Change Chuck

Before inserting, clean the quick change chuck and apply a light coat of grease to the shank end.

Grasp the SDS-plus quick change chuck 2 or the quick change keyless chuck 1 completely with your hand. Slide the quick change chuck with a turning motion onto the drill chuck mounting until a distinct latching noise is heard.

The quick change chuck is automatically locked. Check the locking effect by pulling the quick change chuck.

Changing the Tool

The dust protection cap 4 largely prevents the entry of drilling dust into the tool holder during operation. When inserting the tool, take care that the dust protection cap 4 is not damaged.

- ✘ **A damaged dust protection cap should be changed immediately.** We recommend having this carried out by an after-sales **service**.

Inserting SDS-plus Drilling Tools

The SDS-plus drill chuck allows for simple and convenient changing of drilling tools without the use of additional tools.

Insert the SDS-plus quick change chuck 2.

Clean and lightly grease the shank end of the tool.

Insert the tool in a twisting manner into the tool holder until it latches itself.

Check the latching by pulling the tool.

As a requirement of the system, the SDS-plus drilling tool can move freely. This causes a certain radial run-out at no-load, which has no effect on the accuracy of the drill hole, as the drill bit centers itself upon drilling.

Removing SDS-plus Drilling Tools

Push back the locking sleeve 5 and remove the tool.

Inserting Drilling Tools without SDS-plus

Note: Do not use tools without SDS-plus for hammer drilling or chiseling! Tools without SDS-plus and their drill chucks are damaged by hammer drilling or chiseling.

Insert the quick change keyless chuck 1.

Firmly hold the retaining ring 6 of the quick change chuck. Open the tool holder by turning the front sleeve 5 until the tool can be inserted. Tightly hold the retaining ring 6 and firmly turn the front sleeve 5 in the direction of the arrow until a distinct latching noise can be heard.

Check the tight seating by pulling the tool.

Note: If the tool holder was opened to the stop, then the latching noise possibly may be heard while closing the tool holder and the tool holder will not close.

In this case, turn the front sleeve 5 once in the opposite direction of the arrow. Afterwards, the tool holder can be closed (tightened) again.

Turn the mode selector switch 11 to the "Drilling" position.

Removing Drilling Tools without SDS-plus

Firmly hold the retaining ring 6 of the quick change chuck. Open the tool holder by turning the front sleeve 5 in the direction of the arrow until the tool can be removed.

Operation

Starting Operation

- Observe correct mains voltage! The voltage of the power source must agree with the voltage specified on the type plate of the power tool.

Setting the Operating Mode

The operating mode of the power tool is selected with the mode selector switch 11.

Note: Change the operating mode only when the machine is switched off! Otherwise, the machine can be damaged.

To change the operating mode, push the release button 10 and turn the mode selector switch 11 to the requested position until it can be heard to latch.



Position for hammer drilling in concrete or stone



Position for **drilling** without impact in wood, metal, ceramic and plastic as well as for screwdriving and thread cutting



Vario-Lock position for adjustment of the chiseling position

The mode selector switch 11 does not latch in this position.



Position for Chiseling

Reversing the Rotational Direction

The rotational direction switch 7 is used to reverse the rotational direction of the machine. However, this is not possible with the On/Off switch 9 actuated.

Right rotation: Turn the selector switch for drilling/hammer drilling 7 on both sides to the stop in the position R.

Left rotation: Turn the selector switch for drilling/hammer drilling 7 on both sides to the stop in the position L.

Set the direction of rotation for hammer drilling, drilling and chiseling always to right rotation.

Switching On and Off

To start the machine, press the On/Off switch 9.

To lock the On/Off switch, keep it pressed and additionally push the lock-on button 8.

To switch off the machine, release the On/Off switch 9. When the On/Off switch 9 is locked, press it first and then release it.

Setting the Speed/Impact Rate

The speed/impact rate of the switched on power tool can be variably adjusted, depending on how far the On/Off switch 9 is pressed.

Light pressure on the On/Off switch 9 results in low speed/impact rate. Further pressure on the switch increases the speed/impact rate.

Overload Clutch

- ▶ **If the tool insert becomes caught or jammed, the drive to the drill spindle is interrupted. Because of the forces that occur, always hold the power tool firmly with both hands and provide for a secure stance.**
- ▶ **If the power tool jams, switch the machine off and loosen the tool insert. When switching the power tool on with the drilling tool jammed, high reaction torques can occur.**

Working Instructions

Changing the Chiselling Position (Vario-Lock)

The chisel can be locked in 36 positions. In this manner, the optimum working position can be set for each application.

Insert the chisel into the tool holder.

Turn the mode selector switch **11** to the "Vario-Lock" position (see "Setting the Operating Mode", page 11).

Turn the tool holder to the desired chiselling position.

Turn the mode selector switch **11** to the chiseling position. The tool holder is now locked.

For chiseling, set the rotation direction to right rotation.

Maintenance and Service

Maintenance and Cleaning

- ▶ **Before any work on the machine itself, pull the mains plug.**
- ▶ **For safe and proper working, always keep the machine and ventilation slots clean.**
- ▶ **A damaged dust protection cap should be changed immediately. We recommend having this carried out by an after-sales service.**

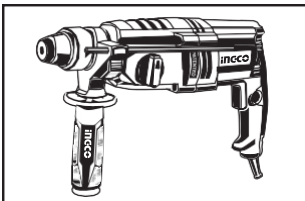
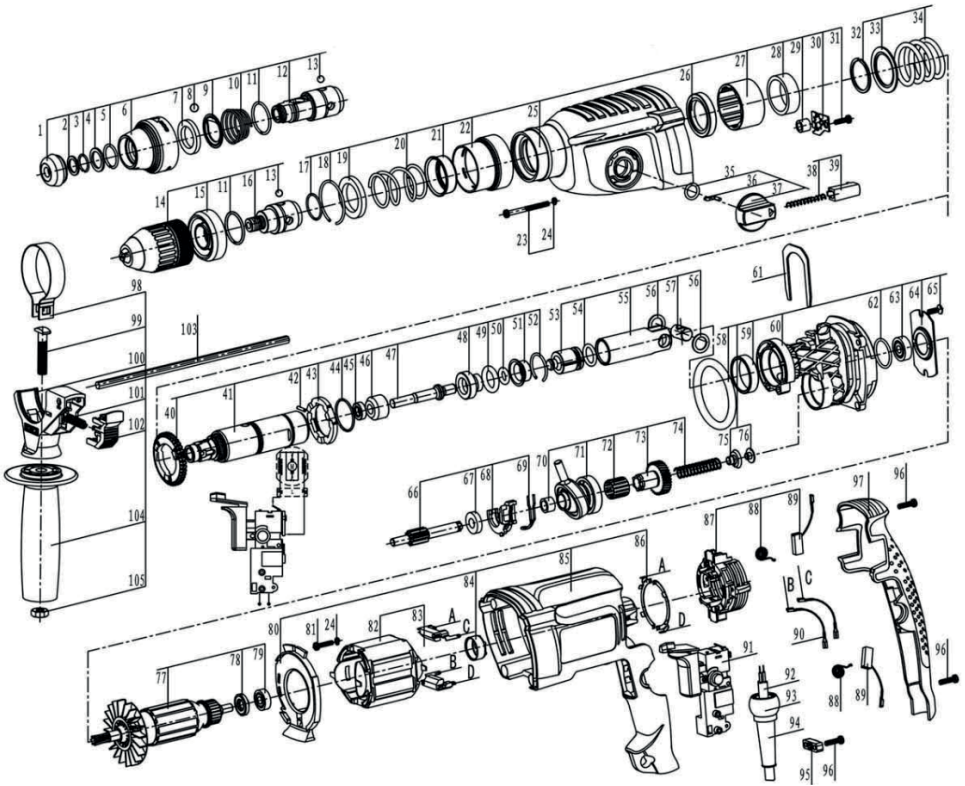
–Clean the tool holder 1 each time after using.

If the machine should fail despite the care taken in manufacturing and testing procedures, repair should be carried out by an after-sales service centre for our power tools.

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EXPLODED VIEW

RGH9028-2, RGH9028-2, URGH9028-2, RGH9028-2M
 RGH9028-26, RGH9028-28, RGH9028S-2, RGH9028-29



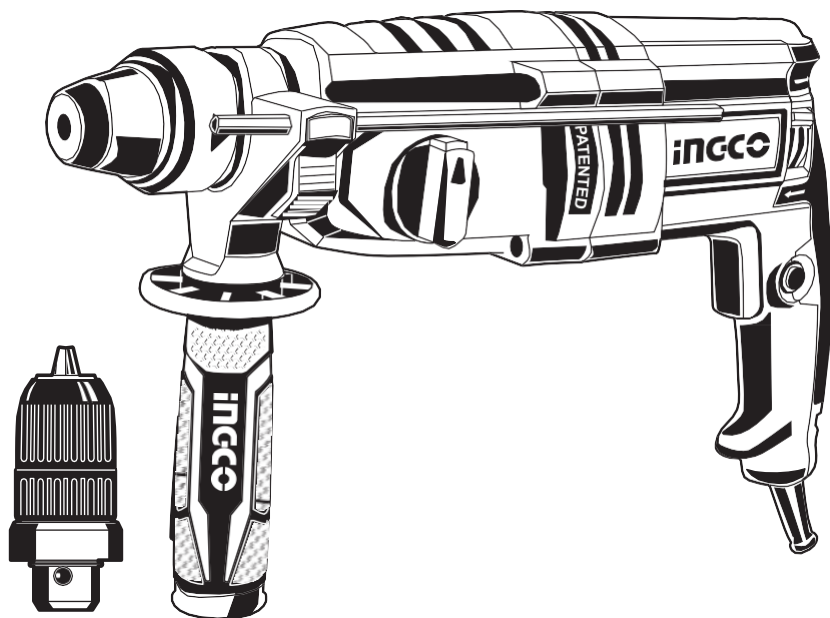


SPAREPARTLIST

**RGH9028-2, RGH9028-2M, URGH9028-2, RGH9028-2M
RGH9028-26, RGH9028-28, RGH9028S-2, RGH9028-29**

NO.	Part Description	Qty	NO.	Part Description	Qty
1	Dust Cap	1	54	O Ring	1
2	Dust Cap Washer 9.3X13X0.5	1	55	Cylinder	1
3	Snap Ring	1	56	Cylinder Pin Washer	1
4	Washer	1	57	Cylinder Pin	1
5	Snap Ring	1	58	O-Ring	1
6	Locking Sleeve	1	59	Holder Bushing	1
7	Thick Washer	1	60	Holder	1
8	Steel Ball	1	61	Press Fork	1
9	Washer	1	62	O-Ring	1
10	Spring	1	63	Bearing 609Z	1
11	Snap Ring	2	64	Bearing Press Plate	1
12	Drill Bit Cover	1	65	M4*8 Screw	2
13	Steel Ball	8	66	Gear Shaft	1
14	Keyless Chuck	1	67	Bearing 699Z	1
15	Connecting Bushing	1	68	Model Selector Fork	1
16	Chuck Adaptor	1	69	Fork Spring	1
17	Snap Ring	1	70	Needle Roller Bearing Hk0908	1
18	Snap Ring	1	71	Rocker Bearing	1
19	Ring	1	72	Needle Roller Bearing K15	1
20	Spring	1	73	33 Teeth Gear	1
21	Bushing	1	74	Spring	1
22	Chuck Sleeve	1	75	Spring Holder	1
23	St4.1*45 Self Tapping Screw	4	76	Position Washer	1
24	Torsional Spring	4	77	Rotor	1
25	Cylinder Housing	1	78	Insulation Washer	1
26	Oil Sea	1	79	Bearing 607Z	1
27	Bushing	1	80	Wind Guide	1
28	Needle Roller Bearing Hk3012	1	81	St3.7*17 Self Tapping Screw	2
29	Needle Roller Bearing Hk0709	1	82	Stator	1
30	Nine Teeth Washer	1	83	Inductor	2
31	St3.9*14 Self Tapping Screw	4	84	Bearing Bush	1
32	Flat Snap Ring	1	85	Gear Housing(Black)	1
33	Washer	4	86	Switch Contact	2
34	Spring	1	87	Carbon Brush Holder	1
35	O-Ring	1	88	Spring	2
36	Model Selector Pole	1	89	Carbon Brush	2
37	Model Selector	1	90	Stator Insert Line 120	2
38	Spring	1	91	Switch	1
39	Locking Button	1	92	Cable 2*0.75Mm	1
40	Big Gearing	1	93	Protective Sleeve Locating Sleeve	1
41	Connect Pipe	1	94	Rubber Sleeve	1
42	Pin	3	95	Press Cable Board	1
43	Clutch Disk	1	96	St4.1*16 Self Tapping Screw	5
44	Snap Ring	1	97	Back Cover(021C)	1
45	Oil Sea	1	98	Clamping Band	1
46	Thrust Ring	1	99	T Screw	1
47	Striker Shaft	1	100	Support Clamp	1
48	Striker Bushing	1	101	Locking Button Spring	1
49	O Ring	1	102	Locking Button	1
50	O-Ring	1	103	Depth Gauge	1
51	Holding Jacket	1	104	Auxiliary Handle	1
52	Snap Ring	1	105	Nut	1
53	Piston	1			

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INGCO TOOLS CO.,LIMITED

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MADE IN CHINA

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