

## Makita HR2470

# Makita HR2470 Rotary Hammer Drill Instruction Manual

MODEL: HR2470

Manufacturer: Makita

## 1. Introduction

The Makita HR2470 Rotary Hammer Drill is a robust and versatile power tool designed for a variety of drilling, hammer drilling, and chiseling applications in materials such as concrete, masonry, wood, and metal. This manual provides essential information for safe and effective operation, maintenance, and troubleshooting of your tool. Please read it thoroughly before first use and keep it for future reference.

## 2. Safety Instructions

Always observe basic safety precautions to reduce the risk of fire, electric shock, and personal injury.

### 2.1 General Power Tool Safety

- **Work Area Safety:** Keep the work area clean and well-lit. Cluttered or dark areas invite accidents. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- **Electrical Safety:** Power tool plugs must match the outlet. Never modify the plug. Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges, and refrigerators.
- **Personal Safety:** Always wear eye protection. Use hearing protection when operating the tool for extended periods. Wear a dust mask if working in dusty conditions. Dress properly; avoid loose clothing or jewelry. Secure long hair.
- **Tool Use and Care:** Do not force the power tool. Use the correct power tool for your application. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools.

### 2.2 Specific Rotary Hammer Safety

- **Hold Tool Firmly:** Always hold the tool firmly with both hands during operation to maintain control.
- **Beware of Hidden Wiring:** Before drilling into walls, floors, or ceilings, check for hidden electrical wires, gas pipes, or water pipes. Use a suitable detector to locate them.

- **Safety Clutch:** This tool is equipped with a safety clutch. If the bit jams, the clutch will disengage the drive. Immediately release the trigger switch.
- **Hot Bits:** Drill bits and chisels become very hot during operation. Avoid touching them immediately after use.

### 3. Product Overview

Familiarize yourself with the components of your Makita HR2470 Rotary Hammer Drill.



**Figure 1:** Makita HR2470 Rotary Hammer Drill. This image shows the complete tool with its SDS-Plus chuck, side handle, and main body, highlighting its ergonomic design.

#### 3.1 Components

- **SDS-Plus Chuck:** For quick and secure bit changes.
- **Mode Selector Switch:** Allows selection between drilling, hammer drilling, and chiseling modes.
- **Trigger Switch:** Activates the tool and controls speed.
- **Lock-on Button:** For continuous operation (use with caution).
- **Forward/Reverse Switch:** Changes the direction of rotation.
- **Side Handle:** Provides additional grip and control.
- **Depth Stop:** Used to set a precise drilling depth.
- **Rubberized Grip:** Enhances comfort and reduces vibration.

## 3.2 Key Features

- **Powerful Motor:** 780W motor for demanding applications.
- **High Impact Energy:** Delivers 2.7 joules for efficient drilling and chiseling.
- **SDS-Plus Tool Holder:** Ensures fast and secure bit installation.
- **Safety Clutch:** Protects the user and tool in case of bit jamming.
- **Variable Speed Control:** Electronically adjustable rotation and impact speed.
- **40 Chisel Bit Angle Settings:** Allows for optimal chisel positioning.

## 4. Setup

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Before operating the tool, ensure it is properly set up.

### 4.1 Attaching the Side Handle

1. Loosen the side handle by turning it counter-clockwise.
2. Slide the handle onto the barrel of the tool to the desired position.
3. Tighten the handle by turning it clockwise until secure.

### 4.2 Installing/Removing SDS-Plus Bits

1. **Installation:** Clean the bit shank and apply a small amount of grease. Insert the bit into the chuck until it locks into place. Pull on the bit to ensure it is securely seated.
2. **Removal:** Pull back the chuck cover and pull the bit out.

### 4.3 Setting the Depth Stop

1. Insert the depth stop into the hole on the side handle.
2. Adjust the depth stop to the desired drilling depth.
3. Tighten the side handle to secure the depth stop.

## 5. Operating Instructions

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Follow these steps for safe and effective operation of your rotary hammer drill.

### 5.1 Selecting the Operating Mode

Rotate the mode selector switch to the desired setting:

- **Drilling Mode (Rotation Only):** For drilling in wood, metal, or plastic.
- **Hammer Drilling Mode (Rotation with Hammering):** For drilling in concrete, brick, or masonry.
- **Chiseling Mode (Hammering Only):** For light chiseling, chipping, or breaking concrete/masonry.

### 5.2 Starting and Stopping

- **To Start:** Plug the tool into a suitable power outlet. Press the trigger switch. The tool speed increases with trigger pressure.
- **To Stop:** Release the trigger switch.
- **Continuous Operation:** For continuous operation, press the trigger switch and then press the lock-on button. To stop, press the trigger switch again.

### 5.3 Forward/Reverse Rotation

The forward/reverse switch is located near the trigger. Push it to the left for forward rotation (clockwise) and to the right for reverse rotation (counter-clockwise).

## 5.4 Working with the Tool



**Figure 2:** Makita HR2470 in use. This image illustrates the rotary hammer drill being used for chiseling concrete, demonstrating its application in demolition tasks.

- **Drilling:** Apply light, steady pressure. Do not force the tool. Allow the tool to do the work.
- **Hammer Drilling:** The hammering action is most effective with moderate pressure. Excessive pressure will reduce efficiency.
- **Chiseling:** Hold the tool firmly and guide the chisel along the desired line. Adjust the chisel angle using the mode selector if needed.

## 6. Maintenance

Regular maintenance ensures optimal performance and extends the life of your tool.

### 6.1 Cleaning

- Always unplug the tool before cleaning.
- Clean the ventilation openings regularly to prevent overheating.
- Wipe the tool body with a soft, damp cloth. Do not use harsh chemicals or solvents.
- Clean the SDS-Plus chuck and bit shanks regularly to ensure smooth operation.

### 6.2 Carbon Brushes

The motor uses carbon brushes. When they are worn, the motor will stop automatically. Replace both carbon brushes at the same time. Consult a Makita service center for brush replacement.

### 6.3 Storage

Store the tool in a dry, secure place out of reach of children. Protect it from direct sunlight and extreme temperatures.

## 7. Troubleshooting

If you encounter issues with your Makita HR2470, refer to the following table for common problems and solutions.

Problem	Possible Cause	Solution
Tool does not start	No power supply; Damaged power cord; Worn carbon brushes	Check power outlet and cord; Replace power cord (by qualified personnel); Replace carbon brushes (by qualified personnel)
Reduced drilling/hammering performance	Worn drill bit/chisel; Insufficient lubrication in chuck; Worn internal components	Replace bit/chisel; Apply grease to bit shank; Contact a Makita service center
Excessive vibration or noise	Damaged bit; Loose components; Internal mechanical issue	Replace bit; Check for loose parts and tighten; Contact a Makita service center
Bit jams frequently	Incorrect bit for material; Overheating; Obstruction in material	Use appropriate bit; Allow tool to cool; Clear obstruction or reposition drilling point

If the problem persists after attempting these solutions, please contact a Makita authorized service center.

## 8. Specifications

Technical data for the Makita HR2470 Rotary Hammer Drill.

Specification	Value
Model	HR2470
Power Input	780 W
Impact Energy	2.7 Joules
No-Load Speed	0 - 1,100 RPM
Impact Rate	0 - 4,500 BPM
Max. Drilling Capacity (Concrete)	24 mm (15/16")
Max. Drilling Capacity (Wood)	32 mm (1-1/4")
Max. Drilling Capacity (Steel)	13 mm (1/2")
Chuck Type	SDS-Plus

Specification	Value
Dimensions (L x W x H)	368 x 83 x 209 mm (14-1/2" x 3-1/4" x 8-1/4")
Net Weight	2.9 kg (6.4 lbs)
Power Cord Length	4.0 m (13.1 ft)

## 9. Warranty and Support

For warranty information, please refer to the warranty card included with your product or contact your local Makita dealer or authorized service center. Keep your purchase receipt as proof of purchase.

For technical support, spare parts, or service, please contact your authorized Makita service provider.