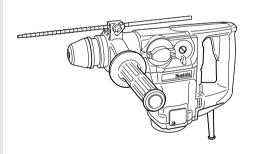


Rotary Hammer

30 mm (1 - 3/16") MODEL HR3000C



003097



INSTRUCTION MANUAL

⚠ WARNING:

For your personal safety, READ and UNDERSTAND before using. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

www.makitatools.com

SPECIFICATIONS

Mod	del	HR3000C	
	Concrete	30 mm (1-3/16")	
Consoition	Core bit	90 mm (3-1/2")	
Capacities	Steel	13 mm (1/2")	
	Wood	30 mm (1-3/16")	
No load spe	eed (RPM)	360 - 720/min.	
Blows pe	r minute	1,650 - 3,300	
Overall	length	391 mm (15-3/8")	
Net weight		4.6 kg (10.1 lbs)	

- Manufacturer reserves the right to change specifications without notice.
- · Specifications may differ from country to country.

GENERAL SAFETY RULES

USA002-2

(For All Tools)

⚠ WARNING:

Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

Work Area

- Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.
- 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.
- Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

Electrical Safety

4. Double insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it

- still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double insulation in eliminates the need for the three wire grounded power cord and grounded power supply system.
- Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock
- Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
- When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

Personal Safety

- 9. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- 10. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- 11. Avoid accidental starting. Be sure switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
- 12. Remove adjusting keys or wrenches before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

- 13. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
- 14. Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions. Ordinary eye or sun glasses are NOT eye protection.

Tool Use and Care

- 15. Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- 16. Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- 17. Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- 18. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- 19. Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
- 20. Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
- 21. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

22. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

SERVICE

23. Tool service must be performed only by qualified repair personnel. Service or main-

- tenance performed by unqualified personnel could result in a risk of injury.
- 24. When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of electric shock or injury.

USE PROPER EXTENSION CORD: Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Ampere Rating		Volts	Volts Total length of cord in feet			
		120 V	25 ft.	50 ft.	100 ft.	150 ft.
More Than	Not More Than	AWG				
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Reco	mmended

Table 1: Minimum gage for cord

SPECIFIC SAFETY RULES

USB010-2

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to rotary hammer safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

- Hold tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- Wear ear protectors when using the tool for extended periods. Prolonged exposure
- to high intensity noise can cause hearing loss.
- Wear a hard hat (safety helmet), safety glasses and/or face shield. Ordinary eye or sun glasses are NOT safety glasses. It is also highly recommended that you wear a dust mask and thickly padded gloves.

- Be sure the bit is secured in place before operation.
- Under normal operation, the tool is designed to produce vibration. The screws can come loose easily, causing a breakdown or accident. Check tightness of screws carefully before operation.
- In cold weather or when the tool has not been used for a long time, let the tool warm up for a while by operating it under no load. This will loosen up the lubrication. Without proper warm-up, hammering operation is difficult.
- Always be sure you have a firm footing.
 Be sure no one is below when using the tool in high locations.

- 8. Hold the tool firmly with both hands.
- 9. Keep hands away from moving parts.
- Do not leave the tool running. Operate the tool only when hand-held.
- Do not point the tool at any one in the area when operating. The bit could fly out and injure someone seriously.
- Do not touch the bit or parts close to the bit immediately after operation; they may be extremely hot and could burn your skin.
- Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.

SAVE THESE INSTRUCTIONS

⚠ WARNING:

MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

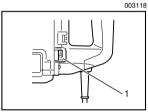
SYMBOLS USD202-2

The followings show the symbols used for tool.	
Vvolts	n₀no load speed
A amperes	Class II Construction
Hz hertz	/minrevolutions or reciprocation per minute
alternating current	number of blow

FUNCTIONAL DESCRIPTION

1

1. Switch trigger



1. Adjusting dial

↑ CAUTION:

 Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

Switch action

↑ CAUTION:

 Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

To start the tool, simply pull the switch trigger. Release the switch trigger to stop.

Speed change

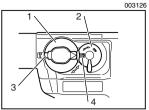
The revolutions and blows per minute can be adjusted just by turning the adjusting dial. The dial is marked 1 (lowest speed) to 6 (full speed).

Refer to the table below for the relationship between the number settings on the adjusting dial and the revolutions/ blows per minute.

Number on adjusting dial	Revolutions per minute	Blows per minute
6	720	3,300
5	690	3,150
4	590	2,700
3	490	2,250
2	390	1,800
1	360	1,650

⚠ CAUTION:

- If the tool is operated continuously at low speeds for a long time, the motor will get overloaded, resulting in tool malfunction.
- The speed adjusting dial can be turned only as far as 6 and back to 1. Do not force it past 6 or 1, or the speed adjusting function may no longer work.



- 2. Shift lever
- 3. Lock button
- 4. "Rotation with hammering" symbol

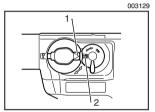
1. Change lever

Rotation with hammering

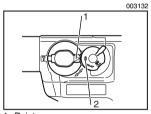
proceed as follows.

For drilling in concrete, masonry, etc., depress the lock button and rotate the change lever so that the pointer points to the **T** symbol. Use a tungsten-carbide tipped bit.

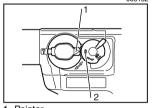
For drilling in wood, metal or plastic materials, depress the lock button and rotate the change lever so that the pointer points to the symbol. Use a twist drill bit or wood bit.



- 1. Pointer
- 2. "Rotation with hammering" symbol



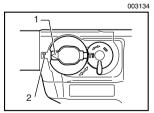
- 1. Pointer
- 2. "Rotation only" symbol



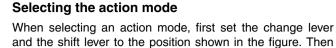
Hammering only

Rotation only

For chipping, scaling or demolition operations, depress the lock button and rotate the change lever so that the pointer points to the T symbol. Use a bull point, cold chisel, scaling chisel, etc.

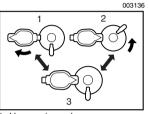


- 1. Pointer
- 2. "Hammering only" symbol



↑ CAUTION:

- Do not rotate the change lever and/or shift lever when the tool is running under load. The tool will be damaged.
- To avoid rapid wear on the mode change mechanism, be sure that the change lever and/or shift lever is always positively located in one of the three action mode positions.
- The action mode cannot be changed directly from "hammering only" to "rotation only" or from "rotation only" to "hammering only". First set the change lever and the shift lever to "rotation with hammering" mode position shown in figure. Then set them to the position for "hammering only" or "rotation only".



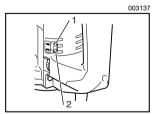
- 1. Hammering only
- 2. Rotation only
- 3. Rotation with hammering

Torque limiter

The torque limiter will actuate when a certain torque level is reached. The motor will disengage from the output shaft. When this happens, the bit will stop turning.

⚠ CAUTION:

 As soon as the torque limiter actuates, switch off the tool immediately. This will help prevent premature wear of the tool.



- Power-ON indicator lamp (green)
- 2. Service indicator lamp (red)

Indicator lamp

The green power-ON indicator lamp lights up when the tool is switched ON. If the indicator lamp is lit but the tool does not start, the carbon brushes may be worn out, or the electric circuit or the motor may be defective. If the indicator lamp does not light up and the tool does not start, the ON/OFF switch or the mains cord may be defective.

The red service indicator lamp lights up when the carbon brushes are nearly worn out to indicate that the tool needs servicing. After approx. 8 hours of use, the motor will automatically be shut off.

ASSEMBLY

003145

Side grip

↑ CAUTION:

 Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.

Side grip (auxiliary handle)

⚠ CAUTION:

- Always use the side grip to ensure operating safety when drilling in concrete, masonry, etc.
- When the bit begins to break through concrete or if the bit strikes reinforcing rods embedded in concrete, the tool may react dangerously. Maintain good balance and safe footing while holding the tool firmly with both hands to prevent dangerous reaction.

The side grip swings around to either side, allowing easy handling of the tool in any position. Loosen the side grip by turning it counterclockwise, swing it to the desired position and then tighten it by turning clockwise.

Bit grease (optional accessory)

Coat the bit shank head beforehand with a small amount of bit grease (about 0.5 -1 g; 0.02 - 0.04 oz.). This chuck lubrication assures smooth action and longer service life.

1 2

003150

Bit shank
 Bit grease

Installing or removing the bit

Clean the bit shank and apply bit grease before installing the bit.

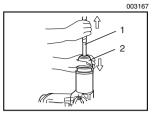


Bit
 Chuck cover

Insert the bit into the tool. Turn the bit and push it in until it engages.

If the bit cannot be pushed in, remove the bit. Pull the chuck cover down a couple of times. Then insert the bit again. Turn the bit and push it in until it engages.

After installing, always make sure that the bit is securely held in place by trying to pull it out.



1. Bit

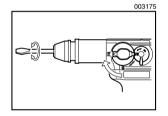
2. Chuck cover

To remove the bit, pull the chuck cover down all the way and pull the bit out.

003171

1. Lock button

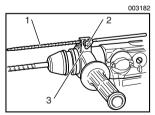
2. "O" symbol



Bit angle (when chipping, scaling or demolishing)

The bit can be secured at 12 different angles. To change the bit angle, depress the lock button and rotate the change lever so that the pointer points to the "O" symbol. Turn the bit to the desired angle.

Depress the lock button and rotate the change lever so that the pointer points to the Υ symbol. Then make sure that the bit is securely held in place by turning it slightly.



1. Depth gauge

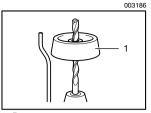
- 2. Clamp screw
- 3. Grip base

Depth gauge

The depth gauge is convenient for drilling holes of uniform depth. Insert the depth gauge into the hole in the grip base. Adjust the depth gauge to the desired depth and then tighten the clamp screw to secure the depth gauge.

NOTE:

 The depth gauge cannot be used at the position where the depth gauge strikes against the tool body.



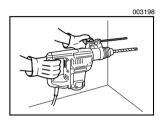
1. Dust cup

Dust cup (optional accessory)

Use the dust cup to prevent dust from falling over the tool and on yourself when performing overhead drilling operations. Attach the dust cup to the bit as shown in the figure. The size of bits which the dust cup can be attached to is as follows

	Bit diameter		
Dust cup 5	6 mm (1/4") - 14.5 mm (9/16")		
Dust cup 9	12 mm (15/32") - 16 mm (5/8")		

OPERATION



Hammer drilling operation

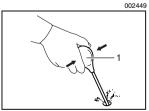
Set the change lever and the shift lever to the ${\$} {\$}$ symbol.

Position the bit at the desired location for the hole, then pull the switch trigger. Do not force the tool. Light pressure gives best results. Keep the tool in position and prevent it from slipping away from the hole.

Do not apply more pressure when the hole becomes clogged with chips or particles. Instead, run the tool at an idle, then remove the bit partially from the hole. By repeating this several times, the hole will be cleaned out and normal drilling may be resumed.

↑ CAUTION:

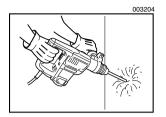
 There is a tremendous and sudden twisting force exerted on the tool/bit at the time of hole break-through, when the hole becomes clogged with chips and particles, or when striking reinforcing rods embedded in the concrete. Always use the side grip (auxiliary handle) and firmly hold the tool by both side grip and switch handle during operations. Failure to do so may result in the loss of control of the tool and potentially severe injury.

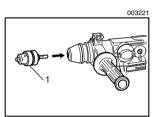


1. Blow-out bulb

Blow-out bulb (optional accessory)

After drilling the hole, use the blow-out bulb to clean the dust out of the hole.





1. Drill chuck assembly

Chipping/Scaling/Demolition

Set the change lever and the shift lever to the Υ symbol.

Hold the tool firmly with both hands. Turn the tool on and apply slight pressure on the tool so that the tool will not bounce around, uncontrolled. Pressing very hard on the tool will not increase the efficiency.

Drilling in wood or metal

Use the optional drill chuck assembly. When installing it, refer to "Installing or removing the bit" described on the previous page.

Set the change lever and the shift lever to the gasymbol.

You can drill up to 13 mm (1/2") diameter in metal and up to 30 mm (1-3/16") diameter in wood.

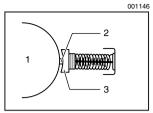
⚠ CAUTION:

- Never use "rotation with hammering" when the drill chuck assembly is installed on the tool. The drill chuck assembly may be damaged.
- Pressing excessively on the tool will not speed up the drilling. In fact, this excessive pressure will only serve to damage the tip of your bit, decrease the tool performance and shorten the service life of the tool.
- There is a tremendous twisting force exerted on the tool/ bit at the time of hole breakthrough. Hold the tool firmly and exert care when the bit begins to break through the workpiece.
- Always secure small workpieces in a vise or similar holddown device.

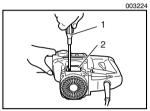
MAINTENANCE

↑ CAUTION:

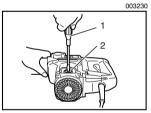
 Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.



- 1. Commutator
- 2. Insulating tip
- 3. Carbon brush



- Screwdriver
- 2. Brush holder cover



- 1. Screwdriver
- 2. Brush holder cap

Replacing carbon brushes

When the resin insulating tip inside the carbon brush is exposed to contact the commutator, it will automatically shut off the motor. When this occurs, both carbon brushes should be replaced. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.

Use a screwdriver to remove the brush holder cover.

Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.

Lubrication

003235

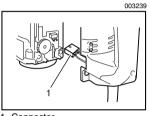
1. Screws

This tool requires no hourly or daily lubrication because it has a grease-packed lubrication system. Lubricate the tool every time the carbon brushes are replaced.

Run the tool for several minutes to warm it up. Switch off and unplug the tool.

Loosen the six screws and remove the handle. Note that the top screws are different from other screws.

Disconnect the connector by pulling it.

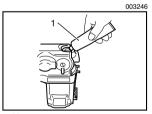


Connector



i. Crank cap

2. Hex wrench

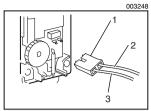


1. Hammer grease

Remove the crank cap using a hex wrench. Rest the tool on the table with the bit end pointing upwards. This will allow the old grease to collect inside the crank housing.

Wipe out the old grease inside and replace with a fresh grease (30 g; 1 oz). Use only Makita genuine hammer grease (optional accessory). Filling with more than the specified amount of grease (approx. 30 g; 1 oz) can cause faulty hammering action or tool failure. Fill only with the specified amount of grease.

Reinstall the crank cap and tighten with the hex wrench.



- 1 Connector
- 2 Black
- 3. White

Connect the connector and reinstall the handle.

↑ CAUTION:

- Do not tighten the crank cap excessively. It is made of resin and is subject to breakage.
- Be careful not to damage the terminals or lead wires especially when wiping out the old grease or installing the handle.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

ACCESSORIES

↑ CAUTION:

 These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita service center.

- · SDS-Plus Carbide-tipped bits
- Bull point
- Cold chisel
- Drill chuck assembly
- Drill chuck S13
- Chuck adapter
- Chuck kev S13
- · Hammer grease
- Bit grease
- Depth gauge
- Blow-out bulb
- Dust cup
- Safety goggles
- Plastic carrying case