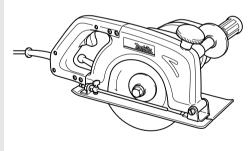


# Cutter

MODEL 4107RH



005164

## INSTRUCTION MANUAL

## **⚠ WARNING:**

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

## **SPECIFICATIONS**

Model	4107RH
Wheel diameter	180 mm
Max. cutting capacities	60 mm
No load speed (min <sup>-1</sup> )	5,000
Overall length	370 mm
Net weight	7.2 kg
Safety Class	Class I

- · Due to our continuing programme of research and development, the specifications herein are subject to change without notice.
- · Note: Specifications may differ from country to country.

The following show the symbols used for the tool. Be sure that you understand their meaning before use.



.....Read instruction manual.



......The tool should be used on horizontal surfaces.



......Do not use the tool upside down.



The tool should be used with the PRCD (Portable Residual Current Device).



...........Do not use the abrasive cut-off wheel.



... After use, brush off accumulation of dust on the base.



......Do not use the saw blade.

#### Intended use

The tool is intended for cutting in brick, concrete and stone with the use of water.

## Power supply

The tool should be connected only to a power supply of the same voltage as indicated on the nameplate, and can only be operated on single-phase AC supply. This tool should be grounded while in use to protect the operator from electric shock. Use only three-wire extension cords which have three-prong grounding-type plugs and three-pole receptacles which accept the tool's plug.

## **SAFETY INSTRUCTIONS**

ENA001-2

## **↑** WARNING:

When using electric tools, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electric shock and personal injury. Read all these instructions before operating this product and save these instructions.

## For safe operations:

## 1. Keep work area clean.

Cluttered areas and benches invite injuries.

#### 2. Consider work area environment.

Do not expose power tools to rain. Do not use power tools in damp or wet locations. Keep work area well lit. Do not use power tools where there is risk to cause fire or explosion.

#### Guard against electric shock.

Avoid body contact with earthed or grounded surfaces (e.g. pipes, radiators, ranges, refrigerators).

#### 4. Keep children away.

Do not let visitors touch the tool or extension cord. All visitors should be kept away from work area.

### Store idle tools.

When not in use, tools should be stored in a dry, high or locked up place, out of reach of children.

## 6. Do not force the tool.

It will do the job better and safer at the rate for which it was intended.

### Use the right tool.

Do not force small tools or attachments to do the job of a heavy duty tool. Do not use tools for purposes not intended; for example, do not use circular saws to cut tree limbs or logs.

## 8. Dress properly.

Do not wear loose clothing or jewellery, they can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protecting hair covering to contain long hair

#### 9. Use safety glasses and hearing protection.

Also use face or dust mask if the cutting operation is dustv.

## 10. Connect dust extraction equipment.

If devices are provided for the connection of dust extraction and collection facilities ensure these are connected and properly used.

## 11. Do not abuse the cord.

Never carry the tool by the cord or yank it to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.

## 12. Secure work.

Use clamps or a vice to hold the work. It is safer than using your hand and it frees both hands to operate the tool.

## 13. Do not overreach.

Keep proper footing and balance at all times.

## 14. Maintain tools with care.

Keep cutting tools sharp and clean for better and safer performance. Follow instructions for lubrication and changing accessories. Inspect tool cord periodically and if damaged have it repaired by an authorized service facility. Inspect extension cords periodically and replace, if damaged. Keep handles dry, clean and free from oil and grease.

#### 15. Disconnect tools.

When not in use, before servicing and when changing accessories such as blades, bits and cutters.

## 16. Remove adjusting keys and wrenches.

Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

## 17. Avoid unintentional starting.

Do not carry a plugged-in tool with a finger on the switch. Ensure switch is off when plugging in.

## 18. Use outdoor extension leads.

When tool is used outdoors, use only extension cords intended for outdoor use.

## 19. Stay alert.

Watch what you are doing. Use common sense. Do not operate tool when you are tired.

## 20. Check damaged parts.

Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorized service facility. Do not use the tool if the switch does not turn it on and off.

## 21. Warning.

The use of any accessory or attachment, other than those recommended in this instruction manual or the catalog, may present a risk of personal injury.

#### 22. Have your tool repaired by a qualified person.

This electric tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

## **ADDITIONAL SAFETY RULES**

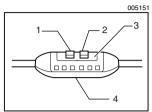
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- This tool is equipped with a portable residual current device. Do not connect the tool to a power supply without using the PRCD (Portable Residual Current Device). In case of damage of the cord, it has to be replaced by the manufacturer's service organization.
- For additional protection against electric shock, be sure to WEAR RUBBER GLOVES AND RUB-BER BOOTS during operation.
- Check the wheel carefully for cracks or damage before operation. Replace cracked or damaged wheel immediately.
- 4. Use only flanges specified for this tool.
- Be careful not to damage the spindle, flanges (especially the installing surface) or bolt. Damage to these parts could result in wheel breakage.
- When using the water feed, be careful not to let water get into the motor. If water runs into the motor, an electric shock hazard may result.

- 7. Hold the tool firmly.
- 8. Keep hands away from rotating parts.
- Make sure the wheel is not contacting the workpiece before the switch is turned on.
- Wait until the wheel attains full speed before cutting.
- Stop operation immediately if you notice anything abnormal.
- Never attempt to cut with the tool held upside down in a vise. This can lead to serious accidents, because it is extremely dangerous.(Fig. 1)
- Before setting the tool down after completing a cut, be sure that the wheel has come to a complete stop.
- Do not stop the wheel by lateral pressure on the disc.

## SAVE THESE INSTRUCTIONS

# FUNCTIONAL DESCRIPTION



- 1. TEST button
- 2. "RESET" or "ON" button
- 3. Pilot lamp
- Portable residual current device(PRCD)

## ⚠ CAUTION:

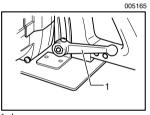
 Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

## Portable residual current device

Connect the tool to a power supply and test the Portable Residual Current Device (PRCD) before using the tool. Push the "RESET" or "ON" button and confirm that the pilot lamp lights. Push the "TEST" button and confirm that the pilot lamp goes out. Push the "RESET" or "ON" button again to use the tool.

## ⚠ WARNING:

 Do not use the tool if the pilot lamp does not go out when the "TEST" button is pushed.



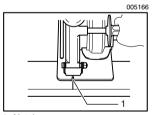
1. Lever

## Adjusting the depth of cut

Loosen the lever on the depth guide and move the base up or down. At the desired depth of cut, secure the base by tightening the lever.

## **⚠** CAUTION:

After adjusting the depth of cut, always tighten the lever securely.

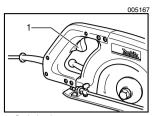


1. Notch

## **Sighting**

Align the notch in the front of the base with your cutting line on the workpiece.

## Switch action



1. Switch trigger

## 

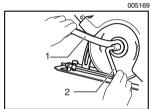
Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

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

## **ASSEMBLY**

## 

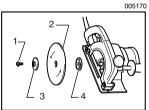
Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.



1. Offset wrench

## Installing or removing diamond wheel

Hold the outer flange with the offset wrench and loosen the hex bolt counterclockwise with the socket wrench. Then remove the hex bolt, outer flange and diamond wheel.



2. Socket wrench

To install the wheel, follow the removal procedure in reverse. Always install the wheel so that the arrow on the wheel points in the same direction as the arrow on the blade case.

BE SURE TO TIGHTEN THE HEX BOLT SECURELY.

1. Hex bolt

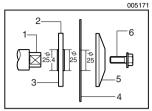
2. Diamond wheel

3. Outer flange

4. Inner flange

## 

Use only the Makita wrench to install or remove the wheel.



1. Mounting shaft

2. Inner flange

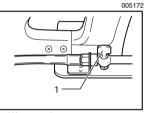
3. 25.4 mm marking

4. Diamond wheel

5. Outer flange

6. Hex bolt

The inner flange has a 25 mm diameter on one side and 25.4 mm diameter on the other. The side with 25.4 mm diameter is marked by "25.4". Use the correct side for the hole diameter of the wheel you intend to use. Mounting the wheel on the wrong side can result in dangerous vibration.



1. Water cock

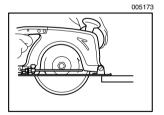
## Water flow

Attach the vinyl tube onto the water pipe and attach the adapter on the vinyl tube to a faucet of water mains pressure. Adjust the amount of water flow by simply adjusting the water cock.

## **↑** CAUTION:

 Adjust the water cock so that the water flow rate does not exceed 1.2 liters per minute.

## **OPERATION**



Adjust the amount of water flow. Hold the tool firmly. Set the base plate on the workpiece to be cut without the wheel making any contact. Then turn the tool on and wait until the wheel attains full speed. Now simply move the tool forward over the workpiece surface, keeping it flat and advancing smoothly until the cutting is completed. Keep your cutting line straight and your speed of advance uniform.

### 

- THIS TOOL SHOULD ONLY BE USED ON HORIZONTAL SURFACES.
- Be sure to move the tool forward in a straight line and gently. Forcing and exerting excessive pressure or allowing the wheel to bend, pinch or twist in the cut can cause overheating of the motor and dangerous kickback of the tool

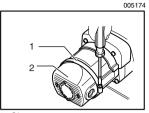
## **MAINTENANCE**

## **↑** CAUTION:

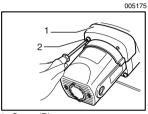
 Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

#### After use

Blow away dust from the inside of the tool by running the tool at an idle for a while. Brush off accumulation of dust on the base. Accumulation of dust in the motor or on the base may cause a malfunction of the tool.



- 1. Clamp
- 2. Cover (A)



- 1. Cover (B)
- 2. Screw

When changing the wheel, clean the cover (B) at the same time. Loosen the screw securing the cover (B) and remove the cover (B). Wash off accumulation of dust inside the cover (B) and wipe it. Then attach the cover (B) to the tool by tightening the screw. Accumulation of dust inside the covers may cause a malfunction of the tool.

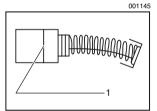
When accumulation of dust on the cover (A) looks excessive, loosen the clamp and remove the cover (A). Wash off accumulation of dust inside the cover (A) and wipe it. Then install the cover (A) on the tool so that its side with "Upside 11" mark faces upward. Push the cover (A) toward the motor as far as it will go

## 

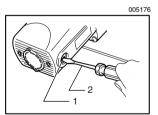
Cleaning covers

and secure it by tightening the clamp.

When using the tool, be sure to attach the covers (A) and (B).



1. Limit mark



- 1. Brush holder cap
- 2. Screwdriver

## Replacing carbon brushes

Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. 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.

First, remove the cover (A).

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.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized 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.

Diamond wheelsSocket wrench

Offset wrench

Memo	

Memo			

Makita Corporation