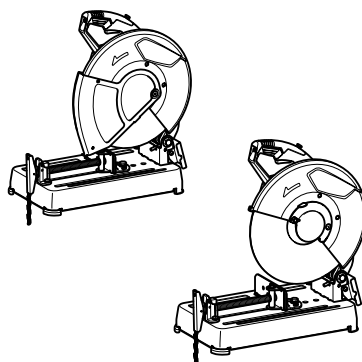


INSTRUCTION MANUAL



Portable Cut-Off

M2400



012155



DOUBLE INSULATION

IMPORTANT: Read Before Using.

ENGLISH (Original instructions)

SPECIFICATIONS

Model	M2400
Wheel diameter	355 mm
Hole diameter	25.4 mm
No load speed (min ⁻¹)	3,800
Dimensions (L x W x H)	500 mm x 280 mm x 620 mm
Net weight	15.7 kg
Safety class	□/II

- Due to our continuing program of research and development, the specifications herein are subject to change without notice.
- Specifications may differ from country to country.
- Weight according to EPTA-Procedure 01/2003

END201-7

GEA005-3

Symbols

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



- Read instruction manual.



- DOUBLE INSULATION



- Only for EU countries
Do not dispose of electric equipment together with household waste material! In observance of the European Directive, on Waste Electric and Electronic Equipment and its implementation in accordance with national law, electric equipment that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

ENE007-3

Intended use


The tool is intended for cutting in ferrous materials with appropriate abrasive cut-off wheel. Follow all laws and regulations regarding dust and work area health and safety in your country.

ENF002-2

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. They are double-insulated and can, therefore, also be used from sockets without earth wire.

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.

Work area safety

1. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
2. **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.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

Electrical safety

4. **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.
5. **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.
6. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
7. **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.

8. **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.
9. **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.
10. **Use of power supply via a RCD with a rated residual current of 30mA or less is always recommended.**

Personal safety

11. **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.
12. **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.
13. **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.
14. **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.
15. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
16. **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.
17. **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.

Power tool use and care

18. **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.
19. **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.

20. **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.
21. **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.
22. **Maintain power tools. 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.
23. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
24. **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.

Service

25. **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.
26. **Follow instruction for lubricating and changing accessories.**
27. **Keep handles dry, clean and free from oil and grease.**

ENB066-2

ADDITIONAL SAFETY RULES FOR TOOL

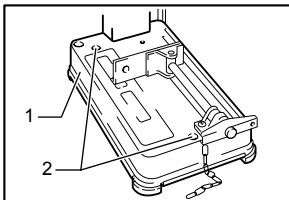
1. **Wear protective glasses. Also wear hearing protection during extended periods of operation.**
2. **Use only wheels recommended by the manufacturer which have a maximum operating speed at least as high as "No Load RPM" marked on the tool's nameplate. Use only fiberglass-reinforced cut-off wheels.**
3. **Check the wheel carefully for cracks or damage before operation. Replace cracked or damaged wheel immediately.**
4. **Secure the wheel carefully.**
5. **Use only flanges specified for this tool.**
6. **Be careful not to damage the spindle, flanges (especially the installing surface) or bolt, or the wheel itself might break.**

7. Keep guards in place and in working order.
8. Hold the handle firmly.
9. Keep hands away from rotating parts.
10. Make sure the wheel is not contacting the work-piece before the switch is turned on.
11. Before using the tool on an actual workpiece, let it simply run for several minutes first. Watch for flutter or excessive vibration that might be caused by poor installation or a poorly balanced wheel.
12. Watch out for flying sparks when operating. They can cause injury or ignite combustible materials.
13. Remove material or debris from the area that might be ignited by sparks. Be sure that others are not in the path of the sparks. Keep a proper, charged fire extinguisher closely available.
14. Use the cutting edge of the wheel only. Never use side surface.
15. If the wheel stops during the operation, makes an odd noise or begins to vibrate, switch off the tool immediately.
16. Always switch off and wait for the wheel to come to a complete stop before removing, securing workpiece, working vise, changing work position, angle or the wheel itself.
17. Do not touch the workpiece immediately after operation; it is extremely hot and could burn your skin.
18. Store wheels in a dry location only.
19. Ensure that ventilation openings are kept clear when working in dusty conditions. If it should become necessary to clear dust, first disconnect the tool from the mains supply (use non metallic objects) and avoid damaging internal parts.

SAVE THESE INSTRUCTIONS.

INSTALLATION

Securing cut-off



1. Base
2. Bolt holes

003980

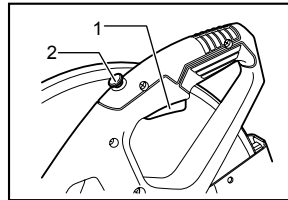
This tool should be bolted with two bolts to a level and stable surface using the bolt holes provided in the tool's base. This will help prevent tipping and possible personal injury.

FUNCTIONAL DESCRIPTION

⚠CAUTION:

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

Switch action



012057

1. Switch trigger
2. Lock button / Lock-off button

⚠CAUTION:

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

For tool with lock button

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

For continuous operation, pull the switch trigger and then push in the lock button.

To stop the tool from the locked position, pull the switch trigger fully, then release it.

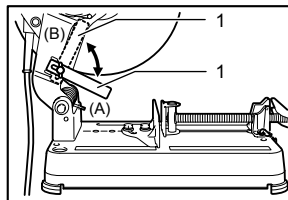
For tool with lock-off button

To prevent the switch trigger from being accidentally pulled, a lock-off button is provided.

To start the tool, depress the lock-off button and pull the switch trigger. Release the switch trigger to stop.

Stopper plate

(except for European countries)

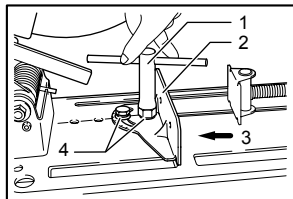


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1. Stopper plate

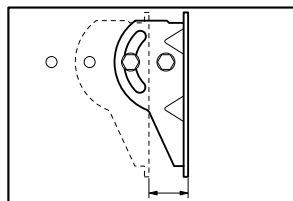
The stopper plate prevents the cut-off wheel from contacting the workbench or floor. When a new wheel is installed, set the stopper plate to position (A). When the wheel wears down to the extent that the lower portion of the workpiece is left uncut, set the stopper plate to position (B) to allow increased cutting capacity with a worn down wheel.

Interval between vise and guide plate



003983

1. Socket wrench
2. Guide plate
3. Move
4. Hex bolts



003759

The original spacing or interval between the vise and the guide plate is 0 - 170 mm. If your work requires wider spacing or interval, proceed as follows to change the spacing or interval.

Remove the two hex bolts which secure the guide plate. Move the guide plate as shown in the figure and secure it using the hex bolts. The following interval settings are possible:

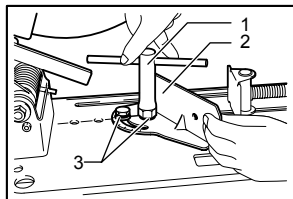
35 - 205 mm

70 - 240 mm

⚠CAUTION:

- Remember that narrow workpieces may not be secured safely when using the two, wider interval settings.

Setting for desired cutting angle



003984

1. Socket wrench
2. Guide plate
3. Hex bolts

To change the cutting angle, follow the procedure below:

1. Loosen the two hex bolts.
2. Set the guide plate to the desired angle ($0^\circ - 45^\circ$).
3. For more accurate angle, use a protractor or triangle ruler. Keep the handle down so that the cut-off wheel extends into the base. At the same time, adjust the angle between the guide plate and the cut-off wheel with a protractor or triangle ruler.

4. Tighten the hex bolts securely. At this time, make sure that the guide rule does not move.
5. Check the angle again.

⚠CAUTION:

- Never perform right miter cuts when the guide plate is set at the 35 - 205 mm or 70 - 240 mm position.

NOTE:

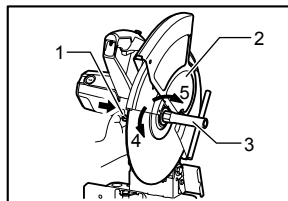
- The scale on the guide plate is only a rough indication.

ASSEMBLY

⚠CAUTION:

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

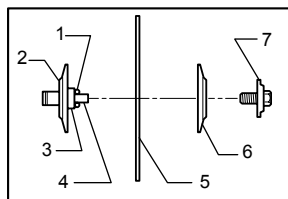
Removing or installing cut-off wheel (Accessory)



012087

To remove the wheel, raise the wheel guard. Press the shaft lock so that the wheel cannot revolve and use the socket wrench to loosen the hex bolt by turning it counterclockwise. Then remove the hex bolt, outer flange and wheel. (Note: Do not remove the inner flange, ring and O-ring.)

To install the wheel, follow the removal procedures in reverse.

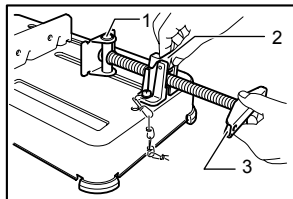


003762

⚠CAUTION:

- Be sure to tighten the hex bolt securely. Insufficient tightening of the hex bolt may result in severe injury. Use the socket wrench provided to help assure proper tightening.
- Always use only the proper inner and outer flanges which are provided with this tool.
- Always lower the wheel guard after replacing the wheel.

Securing workpiece



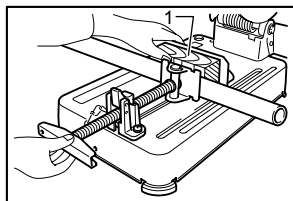
003986

By turning the vise handle counterclockwise and then flipping the vise nut to the back, the vise is released from the shaft threads and can be moved rapidly in and out. To grip workpieces, push the vise handle until the vise plate contacts the workpiece. Flip the vise nut to the front and then turn the vise handle clockwise to securely retain the workpiece.

⚠CAUTION:

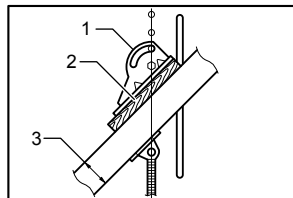
- Always set the vise nut to the front fully when securing the workpiece. Failure to do so may result in insufficient securing of the workpiece. This could cause the workpiece to be ejected or cause a dangerous breakage of the wheel.

When the cut-off wheel has worn down considerably, use a spacer block of sturdy, non-flammable material behind the workpiece as shown in the figure. You can more efficiently utilize the worn wheel by using the mid point on the periphery of the wheel to cut the workpiece.



003987

When cutting workpieces over 85 mm wide at an angle, attach a straight piece of wood (spacer) to the guide plate as shown in the figure. Attach this spacer with screws through the holes in the guide plate.



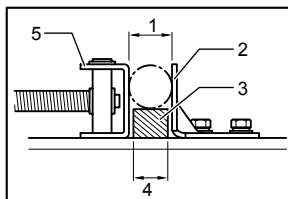
003988

1. Vise plate
2. Vise nut
3. Vise handle

1. Spacer block

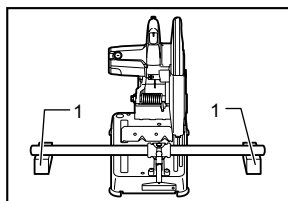
1. Guide plate
2. Straight piece of wood (Spacer)
3. Over 85 mm long

If you use a spacer block which is slightly narrower than the workpiece as shown in the figure, you can also utilize the wheel economically when worn down the wheel.



003989

Long workpieces must be supported by blocks of non-flammable material on either side so that it will be level with the base top.



012058

1. Diameter of workpiece
2. Guide plate
3. Spacer block
4. Width of spacer block
5. Vise plate

1. Blocks

OPERATION

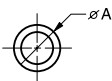

Hold the handle firmly. Switch on the tool and wait until the wheel attains full speed before lowering gently into the cut. When the wheel contacts the workpiece, gradually bear down on the handle to perform the cut. When the cut is completed, switch off the tool and WAIT UNTIL THE WHEEL HAS COME TO A COMPLETE STOP before returning the handle to the fully elevated position.

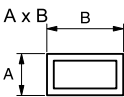
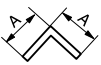
⚠CAUTION:

- Proper handle pressure during cutting and maximum cutting efficiency can be determined by the amount of sparks that is produced while cutting. Your pressure on the handle should be adjusted to produce the maximum amount of sparks. Do not force the cut by applying excessive pressure on the handle. Reduced cutting efficiency, premature wheel wear, as well as, possible damage to the tool, cut-off wheel or workpiece may result.

Cutting capacity

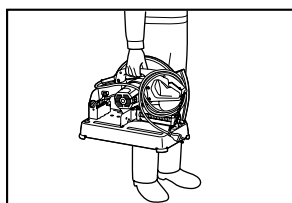
Max. cutting capacity varies depending upon the cutting angle and workpiece shape. Applicable wheel diameter: 355 mm

Workpiece shape Cutting angle		
90°	115 mm	119 mm
45°	115 mm	106 mm

Workpiece shape Cutting angle		
90°	102 mm × 194 mm 70 mm × 233 mm	137 mm
45°	115 mm × 103 mm	100 mm

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Carrying tool



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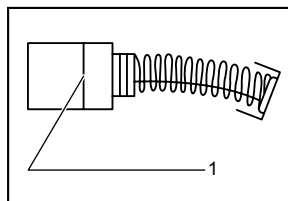
Fold down the tool head to the position where you can attach the chain to the hook on the handle.

MAINTENANCE

⚠CAUTION:

- Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.
- Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

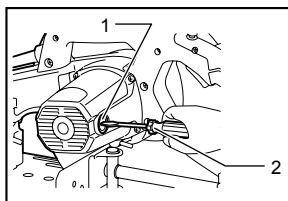
Replacing carbon brushes



001145

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.

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.



1. Limit mark

1. Brush holder cap
2. Screwdriver

012059

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.

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