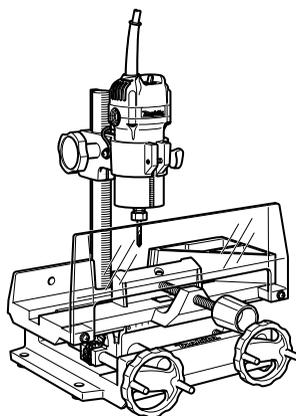


INSTRUCTION MANUAL

Sash Router

4403



006822

 DOUBLE INSULATION

IMPORTANT: Read Before Using.

ENGLISH (Original instructions)

SPECIFICATIONS

Model	4403
Collet chuck capacity	6 mm (1/4")
No load speed (min ⁻¹)	30,000
Max. width of work	123 mm
Max. width of work (45°)	77 mm
Max. height of work	185 mm
Transverse travel of table (bed)	113 mm
Longitudinal travel of table (bed)	73 mm
Overall dimensions (Lx W x H)	327 mm x 350 mm x 355 mm
Net weight	16 kg
Safety class	□/II

- Due to our continuing programme 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

END201-5

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 European Directive 2002/96/EC 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.

ENE011-1

Intended use

The tool is intended for use in working aluminum sashes.

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.**

ENB054-1

ADDITIONAL SAFETY RULES

1. **Hold tool 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.
2. **Wear hearing protection during extended period of operation.**
3. **Handle the bits very carefully.**

4. Check the bit carefully for cracks or damage before operation. Replace cracked or damaged bit immediately.
5. Avoid cutting nails. Inspect for and remove all nails from the workpiece before operation.
6. Hold the tool firmly.
7. Keep hands away from rotating parts.
8. Make sure the bit is not contacting the workpiece before the switch is turned on.
9. Before using the tool on an actual workpiece, let it run for a while. Watch for vibration or wobbling that could indicate improperly installed bit.
10. Be careful of the bit rotating direction and the feed direction.
11. Do not leave the tool running. Operate the tool only when hand-held.
12. Always switch off and wait for the bit to come to a complete stop before removing the tool from workpiece.
13. Do not touch the bit immediately after operation; it may be extremely hot and could burn your skin.
14. Always lead the power supply cord away from the tool towards the rear.
15. Do not smear the tool base carelessly with thinner, gasoline, oil or the like. They may cause cracks in the tool base.
16. Draw attention to the need to use cutters of the correct shank diameter and which are suitable for the speed of the tool.

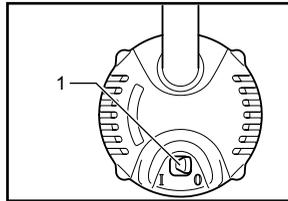
SAVE THESE INSTRUCTIONS.

FUNCTIONAL DESCRIPTION

⚠CAUTION:

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

Switch action



1. Switch lever

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⚠CAUTION:

- Before plugging in the tool, always be sure that the tool is switched off.

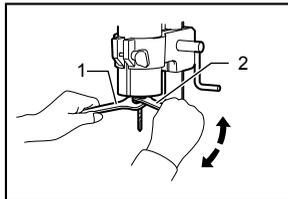
To start the tool, move the switch lever to the I (ON) position. To stop the tool, move the switch lever to the O (OFF) position.

ASSEMBLY

⚠CAUTION:

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

Installing or removing the bit



1. Wrench 10
2. Wrench 17
3. Tighten
4. Loosen

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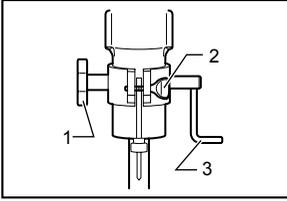
⚠CAUTION:

- Use only the wrenches provided with the tool.
- Do not tighten the collet nut without inserting the bit. The collet cone will break.

Insert the bit all the way into the collet cone and tighten the collet nut securely with the two wrenches.

To remove the bit, follow the installation procedure in reverse.

Adjusting the motor height

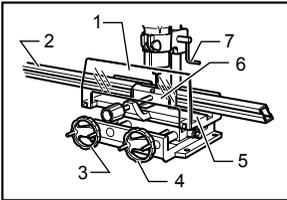


1. Knob
2. Thumb screw
3. Crank handle

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Loosen the knob and turn the crank handle to raise or lower the motor. After obtaining the desired height, always retighten the knob to secure the motor.

OPERATION



1. Chip guard
2. Workpiece
3. Transverse feed handle
4. Longitudinal feed handle
5. Table
6. Vise
7. Crank handle

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Grip the workpiece in the vise. Use spacer blocks or pieces of scrap to prevent deformation of the aluminum workpiece if necessary. Operate the two feed handles when cutting the workpiece. For better cutting action, coat the aluminum workpiece with the oil provided.

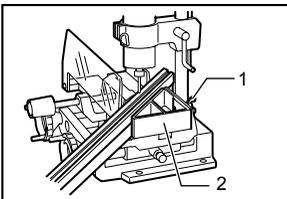
⚠ CAUTION:

- Never apply the oil when the bit is rotating.

When cutting rectangular cutouts, proceed as follows.

1. Hold the crank handle with your right hand and loosen the knob with your left hand.
2. Hold the transverse feed handle with your left hand so that the table (bed) does not move. Turn the crank handle to drill a hole in the workpiece.
3. Tighten the knob to secure the motor in this position. Then operate the two feed handles to cut the rectangular cutouts.

Angle gauge

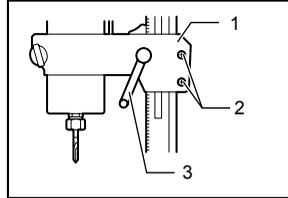


1. Wing nut
2. Angle gauge

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Use the angle gauge for the angle work. Secure it to the table (bed) using the wing nut. Then fasten the workpiece in position as shown in the figure. If the workpiece is big or long, remove the chip guard (chip deflector).

Adjusting for smooth motor travel



1. Screw (A)
2. Screw (B) (2 pcs.)
3. Crank handle

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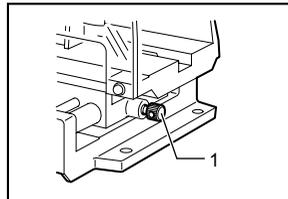
If the motor does not travel smoothly, proceed as follows.

1. Loosen the screw (A).
2. Tighten the screw (B) (2 pcs.) evenly until you cannot turn the crank handle easily.
3. Tighten the screw (A) until you can turn the crank handle smoothly.

NOTE:

- Clean the contacting portions and occasionally lubricate them.

Adjusting for smooth table (bed) travel

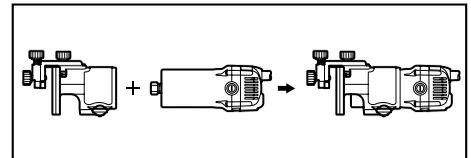


1. Brake screw

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If the table (bed) does not travel smoothly in the longitudinal direction, tighten the brake screw accordingly.

Using as a trimmer



1. Trimmer base assembly (optional accessory)
2. Motor
3. Trimmer

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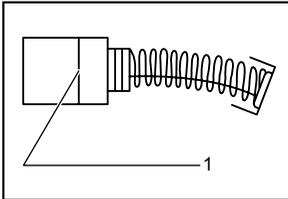
To use as a trimmer, remove the motor from the tool and attach the trimmer base assembly (optional accessory) to the motor as shown in the figure.

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.

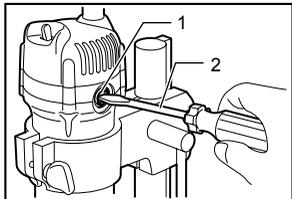
Replacing carbon brushes



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



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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.

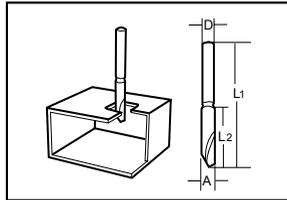
1. Brush holder cap
2. Screwdriver

OPTIONAL 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.
Drill point sash router bit



006844

(mm)			
D	A	L1	L2
6	6	65	18
1/4"	6	65	18

006845

NOTE:

- Some items in the list may be included in the tool package as standard accessories. They may differ from country to country.

Makita Corporation