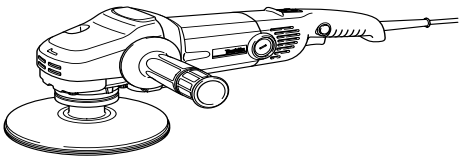
ENGLISH

Angle Sander

MODEL SA7000C



005015

DOUBLE INSULATION

I N S T R U C T I O N M A N U A L

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

SPECIFICATIONS

Model	SA7000C
Disc diameter	180 mm
Spindle thread	M14
No load speed (min^{-1})	0 - 4,000
Overall length	453 mm
Net weight	3.2 kg
Safety class	⧈ /II

- 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.

Symbols END202-2

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

 .....Read instruction manual.

 .....DOUBLE INSULATION

 .....Wear safety glasses.

 .....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.

Intended use

The tool is intended for the sanding of large surface of wood, plastic and metal materials as well as painted surfaces.

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 in accordance with European Standard and can, therefore, also be used from sockets without earth wire.

For European countries only

Noise and Vibration

The typical A-weighted noise levels are
sound pressure level: 89 dB (A)
sound power level: 102 dB (A)

– Wear ear protection. –

The typical weighted root mean square acceleration value is not more than 2.5 m/s^2.

EC-DECLARATION OF CONFORMITY

We declare under our sole responsibility that this product is in compliance with the following standards of standardized documents, HD400, EN50144, EN55014, EN61000 in accordance with Council Directives, 73/23/EEC, 89/336/EEC, 98/37/EC.

Yasuhiko Kanzaki **CE 2003**

Director

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GENERAL SAFETY RULES

ENA100-1

⚠ **WARNING:**

Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term “power tool” in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

SAVE THESE INSTRUCTIONS

Work area

1. **Keep work area clean and well lit.** Cluttered and 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.

Personal safety

9. **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.
10. **Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
11. **Avoid accidental starting. Ensure the switch is in the off position before plugging in.** Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
12. **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.
13. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
14. **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.
15. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust related hazards.

Power tool use and care

16. **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.
17. **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.
18. **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.
19. **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.
20. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and**

any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

21. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
22. **Use the power tool, accessories and tool bits etc. in accordance with these instructions and in the manner intended for the particular type of power tool, 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

23. **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.

ADDITIONAL SAFETY RULES

ENB048-6

1. **Always use eye and ear protection. Other personal protective equipment such as dust mask, gloves, helmet and apron should be worn.**
2. **Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.**
3. **Accessories must be rated for at least the speed recommended on the tool warning label.** Wheels and other accessories running over rated speed can fly apart and cause injury. Maximum operating speed of accessories should be higher than the highest no load speed marked on the tool's nameplate.
4. **Check the backing pad carefully for cracks, damage or deformity before operation. Replace cracked, damaged or deformed pad immediately.**
5. **Check that the workpiece is properly supported.**
6. **Hold the tool firmly.**
7. **Keep hands away from rotating parts.**
8. **Make sure the abrasive disc is not contacting the workpiece before the switch is turned on.**
9. **When sanding metal surfaces, watch out for flying sparks. Hold the tool so that sparks fly away from you and other persons or flammable materials.**
10. **Do not leave the tool running. Operate the tool only when hand-held.**
11. **Pay attention that the wheel continues to rotate after the tool is switched off.**
12. **Do not touch the workpiece immediately after operation; it may be extremely hot and could burn your skin.**
13. **If working place is extremely hot and humid, or badly polluted by conductive dust, use a short-circuit breaker (30 mA) to assure operator safety.**
14. **Do not use the tool on any materials containing asbestos.**
15. **Do not use water or grinding lubricant.**
16. **Ventilate your work area adequately when you perform sanding operations.**
17. **Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.**
18. **Always use the correct dust mask/respirator for the material and application you are working with.**
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

FUNCTIONAL DESCRIPTION

⚠ **CAUTION:**

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

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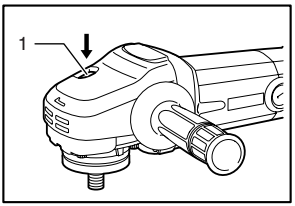

1. Shaft lock

Shaft lock

⚠ **CAUTION:**

- Never actuate the shaft lock when the spindle is moving. The tool may be damaged.

Press the shaft lock to prevent spindle rotation when installing or removing accessories.

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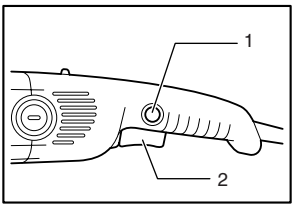

1. Lock button
2. Switch trigger

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. Tool speed is increased by increasing pressure on 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.

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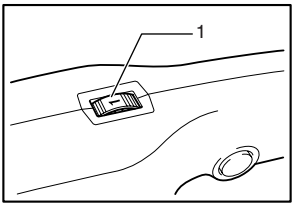

1. Speed adjusting dial

Speed adjusting dial

The rotating speed can be changed by turning the speed adjusting dial to a given number setting from 1 to 6 (6 at the time when the switch trigger is fully pulled).
Higher speed is obtained when the dial is turned in the direction of number 6. And lower speed is obtained when it is turned in the direction of number 1.
Refer to the table for the relationship between the number settings on the dial and the approximate rotating speed.

C00115

Number	min^{-1} (R.P.M.)
1	1,500
2	1,700
3	2,000
4	2,500
5	3,300
6	4,000

⚠ **CAUTION:**

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.

- If the tool is operated continuously at low speeds, the motor will get overloaded and heated up.

Electronic function

The tools equipped with electronic function are easy to operate because of the following features.

Constant speed control

Possible to get fine finish, because the rotating speed is kept constant even under the loaded condition.

Additionally, when the load on the tool exceeds admissible levels, power to the motor is reduced to protect the motor from overheating. When the load returns to admissible levels, the tool will operate as normal.

Soft start feature

Soft start because of suppressed starting shock.

ASSEMBLY

⚠ **CAUTION:**

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

Installing side grip (handle)

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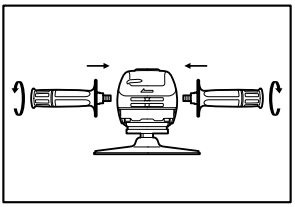

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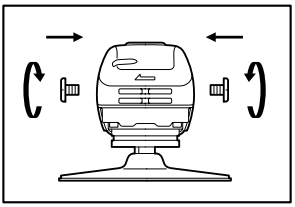

⚠ **CAUTION:**

- Always be sure that the side grip is installed securely before operation.

Remove one of the screws which secure gear housing and head cover, then screw the side grip on the tool.

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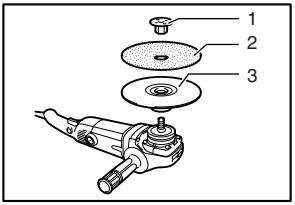

1. Lock nut
2. Abrasive disc
3. Rubber pad

Installing or removing abrasive disc

NOTE:

- Use sander accessories specified in this manual. These must be purchased separately.

Mount the rubber pad onto the spindle. Fit the disc on the rubber pad and screw the lock nut onto the spindle. To tighten the lock nut, press the shaft lock firmly so that the spindle cannot revolve, then use the lock nut wrench and securely tighten clockwise.

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

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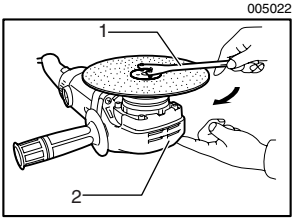

1. Lock nut wrench
2. Shaft lock

OPERATION

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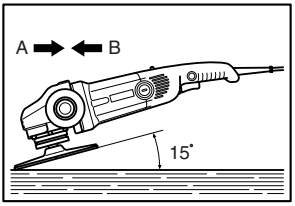

⚠ **WARNING:**

- It should never be necessary to force the tool. The weight of the tool applies adequate pressure. Forcing and excessive pressure could cause dangerous disc breakage.

⚠ **CAUTION:**

- Never switch on the tool when it is in contact with the workpiece, it may cause an injury to operator.
- Never run the tool without the abrasive disc. You may seriously damage the pad.
- Always wear safety goggles or a face shield during operation.
- After operation, always switch off the tool and wait until the disc has come to a complete stop before putting the tool down.

ALWAYS hold the tool firmly with one hand on rear handle and the other on the side handle. Turn the tool on and then apply the abrasive disc to the workpiece.

In general, keep the abrasive disc at an angle of about 15 degrees to the workpiece surface.

Apply slight pressure only. Excessive pressure will result in poor performance and premature wear to abrasive disc.

MAINTENANCE

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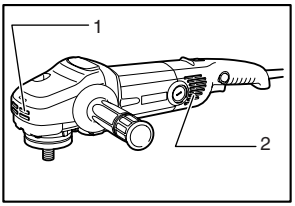

1. Exhaust vent
2. Inhalation vent

⚠ **CAUTION:**

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

The tool and its air vents have to be kept clean. Regularly clean the tool's air vents or whenever the vents start to become obstructed.

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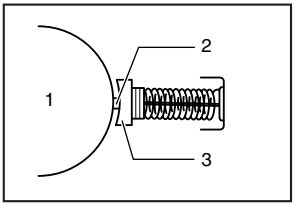

1. Commutator
2. Insulating tip
3. Carbon brush

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.

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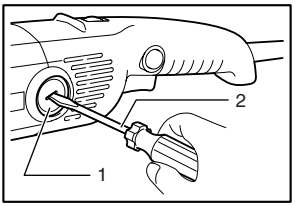

1. Brash holder cap
2. Screwdriver

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.

- Rubber pad
- Abrasive discs
- Lock nut
- Lock nut wrench
- Side grip (handle)

Memo

Memo

Memo

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