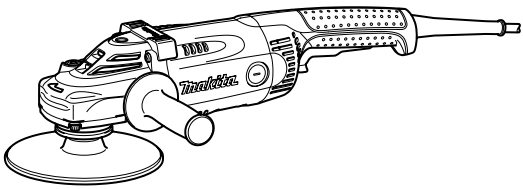
ENGLISH

INSTRUCTION MANUAL

Angle Sander

SA7021



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DOUBLE INSULATION

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

ENGLISH

SPECIFICATIONS

Model	SA7021
Disc diameter	180 mm
Spindle thread	M14
No load speed (min^{-1})	6,600
Overall length	473 mm
Net weight	4.7 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.

END202-1

Symbols

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

· Read instruction manual.

· DOUBLE INSULATION

· Wear safety glasses.

ENE052-1

Intended use

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

ENF002-1

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.

ENA001-2

SAFETY INSTRUCTIONS

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.
3. **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.
5. **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.
7. **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 dusty.
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.

ENB048-6

ADDITIONAL SAFETY RULES

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.**

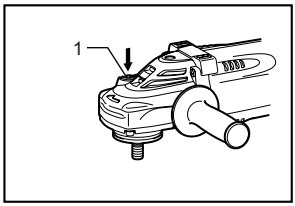
SAVE THESE INSTRUCTIONS.

FUNCTIONAL DESCRIPTION

⚠CAUTION:

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

Shaft lock



1. Shaft lock

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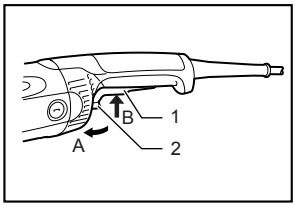
⚠CAUTION:

- 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.

Switch action



1. Switch trigger
2. Lock lever

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⚠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 the lock-on switch

To start the tool, simply pull the switch trigger (in the B direction). Release the switch trigger to stop. For continuous operation, pull the switch trigger (in the B direction) and then push in the lock lever (in the A direction). To stop the tool from the locked position, pull the switch trigger fully (in the B direction), then release it.

For tool with the lock-off switch

To prevent the switch trigger from accidentally pulled, a lock lever is provided.

To start the tool, push in the lock lever (in the A direction) and then pull the switch trigger (in the B direction). Release the switch trigger to stop.

For tool with the lock on and lock-off switch

To prevent the switch trigger from accidentally pulled, a lock lever is provided.

To start the tool, push in the lock lever (in the A direction) and then pull the switch trigger (in the B direction). Release the switch trigger to stop.

For continuous operation, push in the lock lever (in the A direction), pull the switch trigger (in the B direction) and then push the lock lever (in the A direction) further in.

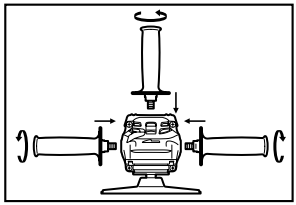
To stop the tool from the locked position, pull the switch trigger fully (in the B direction), then release it.

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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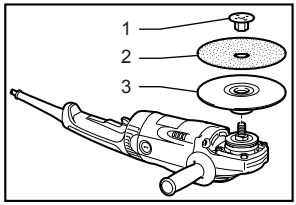
⚠CAUTION:

- 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.

Installing or removing abrasive disc



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

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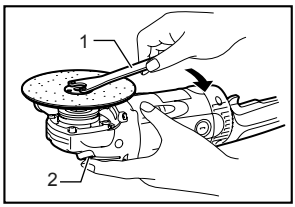

1. Lock nut wrench
2. Shaft lock

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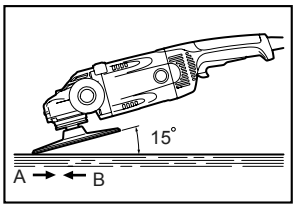
NOTE:

- 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.

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.

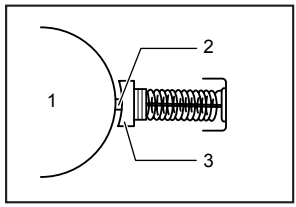
Apply slight pressure only. Excessive pressure will result in poor performance and premature wear to abrasive disc.

MAINTENANCE

⚠CAUTION:

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

Replacing carbon brushes



1. Commutator
2. Insulating tip
3. Carbon brush

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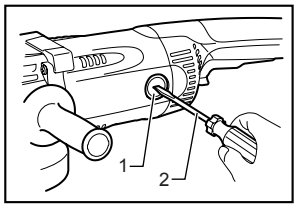
When the resin insulating tip inside the carbon brush is exposed to contact the commutator, it will automatically shut off the motor. When this occurs, both carbon brushes should be replaced. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the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

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



1. Brush holder cap
2. Screwdriver

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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.

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)

Makita Corporation