INSTRUCTION MANUAL



Angle Sander GA7911



IMPORTANT: Read Before Using.

SPECIFICATIONS

| Model | GA7911 |
|---------------------|-----------------------------------|
| No load speed (RPM) | 7,000/min. (7,500/min. in Mexico) |
| Overall length | 412 mm (16-1/4") |
| Net weight | 4.9 kg (10.6 lbs) |
| Spindle thread | 5/8" |

General Power Tool Safety Warnings

AWARNING 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

- 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.
- 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.
- 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.
- 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.
- If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply. Use of an GFCI reduces the risk of electric shock.

Personal Safety

- 10. 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.
- 11. 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.
- 12. 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.
- 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.
- 14. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- 15. 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.
- 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

- 17. 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.
- 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.
- 19. 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.
- 20. 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.

- 21. 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.
- 22. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- 23. 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

24. 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.

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

USE PROPER EXTENSION CORD. Use only three-wire extension cords that have three-prong grounding-type plugs and three-pole receptacles that accept the tool's plug. Make sure your extension cord is in good condition. Replace or repair damaged or worn cord immediately. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

| Ampere Rating | | Volts | Total length of cord in feet | | | |
|---------------|---------------|-------|------------------------------|--------|-----------------|---------|
| | | 120V | 25 ft. | 50 ft. | 100 ft. | 150 ft. |
| More Than | Not More Than | AWG | | | | |
| 0 | 6 | | 18 | 16 | 16 | 14 |
| 6 | 10 | | 18 | 16 | 14 | 12 |
| 10 | 12 | | 16 | 16 | 14 | 12 |
| 12 | 16 | | 14 | 12 | Not Recommended | |

Table 1: Minimum gage for cord

GROUNDING INSTRUCTIONS:

This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with a three-conductor cord and threeprong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. Your unit is for use on 120 volts and has a plug that looks like Fig. "A".



DISC SANDER SAFETY WARNINGS

Safety Warnings Common for Sanding Operation:

 This power tool is intended to function as a sander. Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/ or serious injury.

- Operations such as grinding, wire brushing, polishing or cutting-off are not recommended to be performed with this power tool. Operations for which the power tool was not designed may create a hazard and cause personal injury.
- Do not use accessories which are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation.
- 4. The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.
- 5. The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.
- 6. Threaded mounting of accessories must match the tool spindle thread. For accessories mounted by flanges, the arbour hole of the accessory must fit the locating diameter of the flange. Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
- 7. Do not use a damaged accessory. Before each use inspect the accessory such as backing pad for cracks, tear or excess wear. If power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged accessories will normally break apart during this test time.

- 8. Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop apron capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtrating particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.
- Position the cord clear of the spinning accessory. If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.
- Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control.
- Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
- Regularly clean the power tool's air vents. The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- 14. Do not operate the power tool near flammable materials. Sparks could ignite these materials.
- 15. Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.

Kickback and Related Warnings

Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation at the point of the binding. Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

a) Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torgue reaction during start-up. The operator can control torque reactions or kickback forces, if proper precautions are taken. b) Never place your hand near the rotating accessory. Accessory may kickback over your hand. c) Do not position your body in the area where power tool will move if kickback occurs. Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging. d) Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.

e) **Do not attach a saw chain woodcarving blade or toothed saw blade.** Such blades create frequent kickback and loss of control.

Safety Warnings Specific for Sanding Operations: a) Do not use excessively oversized sanding disc paper. Follow manufacturers recommendations, when selecting sanding paper. Larger sanding paper extending beyond the sanding pad presents a laceration hazard and may cause snagging, tearing of the disc or kickback.

Additional safety warnings:

- 16. Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.
- 17. Ventilate your work area adequately when you perform sanding operations.
- Use of this tool to sand some products, paints and wood could expose user to dust containing hazardous substances. Use appropriate respiratory protection.
- 19. Make sure the abrasive disc is not contacting the workpiece before the switch is turned on.
- 20. Do not leave the tool running. Operate the tool only when hand-held.
- 21. Do not touch the workpiece immediately after operation; it may be extremely hot and could burn your skin.
- 22. Check that the workpiece is properly supported.
- 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.
- 24. Do not use the tool on any materials containing asbestos.

SAVE THESE INSTRUCTIONS.

AWARNING: DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product. MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

Symbols

The followings show the symbols used for tool.

| v | volts |
|--------|-------------------------------|
| А | amperes |
| Hz | hertz |
| \sim | alternating current |
| \sim | alternating or direct current |

| n | no load speed |
|----------------|-----------------------------------------|
| n₀ | |
| /min r /min | revolutions or reciprocation per minute |

FUNCTIONAL DESCRIPTION

ACAUTION:

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

Shaft lock



1. Shaft lock

ACAUTION:

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 button

ACAUTION:

- Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.
- Switch can be locked in "ON" position for ease of operator comfort during extended use. Apply caution when locking tool in "ON" position and maintain firm grasp on tool.

To start the tool, simply pull the trigger. Release the trigger to stop. For continuous operation, pull the trigger and then push in the lock button. To stop the tool from the locked position, pull the trigger fully, then release it.

ASSEMBLY

ACAUTION:

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

Installing side grip (handle)



ACAUTION:

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

Screw the side grip securely on the position of the tool as shown in the figure.

Installing or removing abrasive disc (optional accessory)

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.



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

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.



▶ 1. Lock nut wrench 2. Shaft lock

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

OPERATION

ACAUTION:

 After operation, always switch off the tool and wait until the wheel has come to a complete stop before putting the tool down.

Sanding operation



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 wheel or disc to the workpiece. In general, keep the edge of the wheel or disc at an angle of about 15 degrees to the workpiece surface. During the break-in period with a new wheel, do not work the grinder in the B direction or it will cut into the workpiece. Once the edge of the wheel has been rounded off by use, the wheel may be worked in both A and B direction.

MAINTENANCE

ACAUTION:

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

NOTICE: Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

Air vent cleaning

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.



• 1. Exhaust vent 2. Inhalation vent

Replacing carbon brushes



1. Limit mark

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. Brush holder cap 2. Screwdriver

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

OPTIONAL ACCESSORIES

ACAUTION:

- 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 decide to use your Makita sander with approved accessories which you purchase from your Makita distributor or factory service center, be sure to obtain and use all necessary fasteners and guards as recommended in this manual. Your failure to do so could result in personal injury to you and others.

If you need any assistance for more details regarding these accessories, ask your local Makita Service Center.



| 1 Grip 36 2 Rubber pad 170 3 Abrasive disc 4 Sanding lock nut 5/8-48 - Lock nut wrench 28 | | GA7911 |
|---------------------------------------------------------------------------------------------------|---|-------------------------|
| 3 Abrasive disc 4 Sanding lock nut 5/8-48 | 1 | Grip 36 |
| 4 Sanding lock nut 5/8-48 | 2 | Rubber pad 170 |
| | 3 | Abrasive disc |
| - Lock nut wrench 28 | 4 | Sanding lock nut 5/8-48 |
| | - | Lock nut wrench 28 |

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