

AOBEN AT102D-115

AOBEN Cordless Angle Grinder 4-1/2 inch (Model AT102D-115) Instruction Manual

1. SAFETY INSTRUCTIONS

Always observe basic safety precautions when using electric tools to reduce the risk of fire, electric shock, and personal injury. Read all instructions before operating this tool.

1.1 General Power Tool Safety

- **Work Area Safety:** Keep the work area clean and well-lit. Cluttered or dark areas invite accidents. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- **Electrical Safety:** Avoid body contact with earthed or grounded surfaces. Do not expose power tools to rain or wet conditions.
- **Personal Safety:** Always wear eye protection (safety glasses or goggles) and hearing protection. Use a dust mask if operations create dust. Dress properly; avoid loose clothing or jewelry.

1.2 Angle Grinder Specific Safety

- **Guards:** Always use the appropriate guard for the type of operation (grinding or cutting). Ensure the guard is securely attached and positioned for maximum safety.
- **Proper Handling:** Hold the tool firmly with both hands. Always use the auxiliary handle. Keep hands away from rotating accessories.
- **Accessory Selection:** Only use accessories that are rated for the tool's maximum speed and are correctly sized. Inspect discs for damage before use.
- **Kickback Prevention:** Be aware of potential kickback. Maintain a firm grip and position your body to resist kickback forces.

2. PRODUCT OVERVIEW

The AOBEN Cordless Angle Grinder is designed for cutting, grinding, and polishing various materials. It features a brushless motor for enhanced performance and durability.



Image: AO BEN Cordless Angle Grinder kit including the grinder, two batteries, charger, handle, wheel guards, various discs, and a tool case.

2.1 Components Included

- 1x Cordless Angle Grinder
- 2x 21V 4.0Ah Lithium-Ion Battery
- 1x Battery Charger
- 1x Auxiliary Handle
- 2x Wheel Guards (one for grinding, one for cutting)
- 2x Cutting Wheels
- 2x Grinding Wheels
- 2x Sanding Wheels
- 1x Wrench
- 1x Tool Case

2.2 Key Features

- **Brushless Motor:** Provides longer tool life, increased power, faster heat dissipation, and improved energy efficiency.
- **3 Adjustable Speeds:** Max 9500 RPM for versatile applications.
- **2x 4.0Ah Batteries:** High-capacity lithium-ion batteries for extended runtime.
- **2 Wheel Guards:** Includes guards for both grinding and cutting operations to enhance user safety.
- **Universal Size:** Compatible with 4-1/2 inch wheels, 7/8" arbors, and 5/8"-11 spindles.



Image: Close-up of the AO BEN angle grinder in use, showing sparks from grinding, highlighting the brushless motor and 9500 RPM speed.



Image: Two 21V 4.0Ah lithium-ion batteries, emphasizing their large capacity and built-in protection features.

3. SETUP

3.1 Battery Installation and Removal

- **Installation:** Align the battery with the battery port on the grinder. Slide the battery into place until it clicks securely.
- **Removal:** Press the battery release button and slide the battery out of the tool.

3.2 Auxiliary Handle Installation

Screw the auxiliary handle into one of the threaded holes on the grinder's gear housing. Ensure it is tightened securely before operation.

3.3 Wheel Guard Installation

Select the appropriate wheel guard for your task (grinding or cutting). Loosen the guard clamp screw, position the

guard over the spindle, and tighten the clamp screw to secure it. Ensure the guard is positioned to deflect sparks and debris away from you.



Image: Two types of wheel guards (one for grinding, one for cutting) and the angle grinder in use with sparks, demonstrating their protective function.

3.4 Grinding/Cutting Wheel Installation

1. Ensure the tool is switched off and the battery is removed.
2. Press and hold the spindle lock button.
3. Use the provided wrench to loosen and remove the outer flange nut.
4. Place the desired grinding or cutting wheel onto the spindle, ensuring it sits flush against the inner flange.
5. Replace the outer flange nut and tighten it securely with the wrench while holding the spindle lock button.



Image: A five-step visual guide demonstrating how to install a grinding wheel on the angle grinder using a wrench.



Image: Diagram illustrating the universal size of the 4-1/2 inch wheel, 7/8-inch arbor, and 5/8-11 spindle of the angle grinder.

4. OPERATION

4.1 Charging the Battery

Connect the charger to a power outlet. Insert the battery into the charger. The indicator light on the charger will show the charging status. Ensure the battery is fully charged before use for optimal performance.

4.2 Powering On/Off

- **To Turn On:** Press the safety lock button (if present) and then squeeze the trigger switch.
- **To Turn Off:** Release the trigger switch.

4.3 Speed Selection

The grinder features 3 adjustable speeds. Use the speed control button on the tool's panel to cycle through the available speed settings. The display panel will indicate the selected speed and battery level.



Image: Close-up of the angle grinder's display panel showing speed and battery indicators for intuitive control and monitoring.

4.4 Operating the Grinder

Hold the grinder firmly with both hands. Position the wheel at a slight angle to the workpiece for grinding, or perpendicular for cutting. Apply steady, even pressure. Allow the tool to reach full speed before contacting the workpiece. Avoid excessive pressure, which can reduce efficiency and damage the tool or accessory.

VERSATILE APPLICATION



Image: A collage of four images showing the angle grinder being used for various applications such as cutting metal, grinding, and polishing.

5. MAINTENANCE

- **Cleaning:** Regularly clean the tool's ventilation openings to prevent overheating. Use a soft brush or compressed air to remove dust and debris. Do not use water or chemical cleaners.
- **Battery Care:** Store batteries in a cool, dry place. Do not expose them to extreme temperatures. Charge batteries fully before long-term storage.
- **Disc Inspection:** Before each use, inspect grinding and cutting discs for cracks, chips, or excessive wear. Replace damaged discs immediately.
- **Gear Housing:** The gear housing is designed for high precision and wear resistance. No user maintenance is typically required for internal gears.

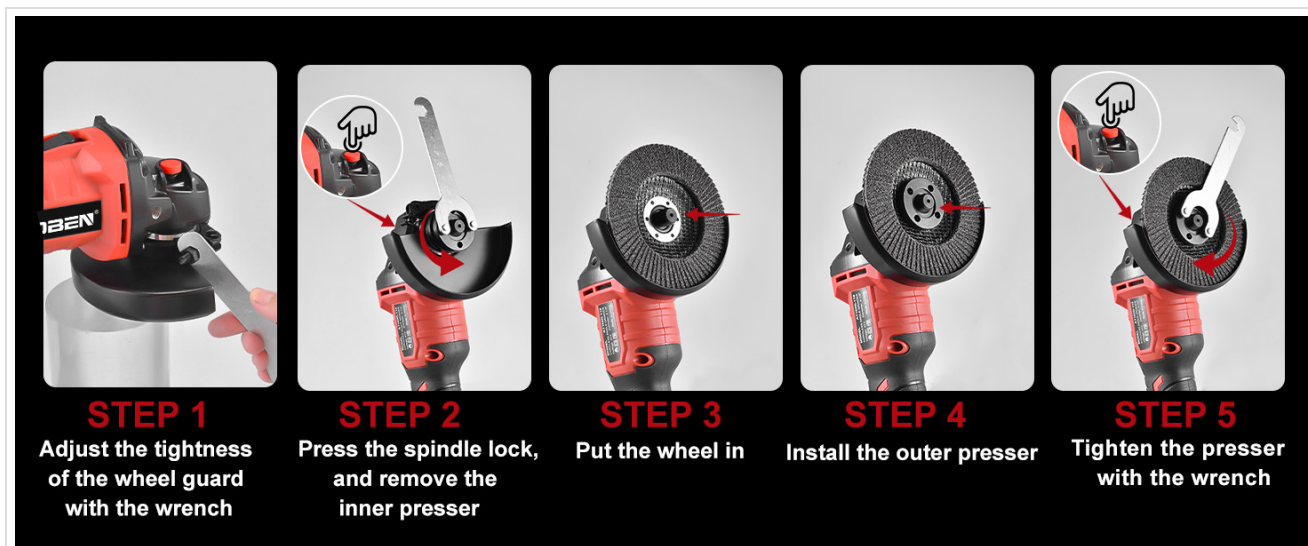


Image: Internal view of the angle grinder's high-strength gear construction, indicating precision control and wear resistance.

6. TROUBLESHOOTING

- **Tool Does Not Start:** Ensure the battery is fully charged and properly inserted. Check if the safety lock button is fully disengaged.
- **Reduced Power/Tool Stops During Use:** The tool's smart chip may trigger overload or overheating protection. Allow the tool to cool down for a moment. Ensure the battery is adequately charged.
- **Battery Not Charging:** Verify the charger is properly connected to a power outlet and the battery is correctly inserted into the charger. Check for any damage to the battery or charger.
- **Excessive Vibration:** Check if the grinding/cutting wheel is properly installed and not damaged. Ensure the outer flange nut is securely tightened.

7. SPECIFICATIONS

Specification	Value
Model Number	AT102D-115
Voltage	21 Volts
Maximum Rotational Speed	9500 RPM
Wheel Diameter	4-1/2 inches
Arbor Size	7/8 inch
Spindle Thread	5/8"-11
Battery Capacity	2x 4.0Ah Lithium-Ion
Motor Type	Brushless
Item Weight	10.61 pounds (4.82 kg)
Package Dimensions	16.77 x 11.81 x 5.08 inches

8. WARRANTY AND SUPPORT

For warranty information or technical support, please contact AOBEN customer service. Refer to your purchase documentation for specific warranty terms and contact details. Keep your proof of purchase for any warranty claims.

