

Ingco CAGLI27153

Ingco CAGLI27153 Cordless Angle Grinder User Manual

Model: CAGLI27153

1. INTRODUCTION

Thank you for choosing the Ingco CAGLI27153 Cordless Angle Grinder. This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your tool. Please read this manual thoroughly before use and keep it for future reference. This angle grinder features a powerful brushless motor, 20V battery compatibility, 1000W maximum input power, and variable speed settings for versatile applications.



Figure 1: Ingco CAGLI27153 Cordless Angle Grinder. This image displays the main unit of the angle grinder, highlighting its brushless motor, 1000W maximum power, and 115mm disc diameter. It also indicates that the battery and charger are sold separately.

2. GENERAL SAFETY INSTRUCTIONS

Always follow basic safety precautions to reduce the risk of fire, electric shock, and personal injury. Keep this manual handy for quick reference.

- **Work Area Safety:** Keep the work area clean and well-lit. 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 goggles) and hearing protection. Use a dust mask if operations create dust. Dress properly; avoid loose clothing or jewelry.
- **Tool Use and Care:** Do not force the power tool. Use the correct power tool for your application. Disconnect the battery pack before making any adjustments, changing accessories, or storing power tools.
- **Battery Tool Use and Care:** Recharge only with the charger specified by the manufacturer. Use power tools only with specifically designated battery packs.

3. SPECIFIC ANGLE GRINDER SAFETY WARNINGS

- This power tool is intended to function as a grinder or cut-off tool. Read all safety warnings, instructions, illustrations, and specifications provided with this power tool.
- **Wear appropriate Personal Protective Equipment (PPE):** Always wear safety glasses or goggles. Hearing protection, gloves, and a dust mask are also recommended.
- **Ensure the guard is properly installed:** The guard must be securely attached and positioned for maximum safety during operation.
- **Use correct accessories:** Only use grinding or cutting discs that are rated for the tool's speed and diameter (115mm) and have the correct M14 spindle thread.
- **Hold the tool firmly:** Always use the auxiliary handle and hold the tool with both hands to maintain control.
- **Avoid kickback:** Be aware of the potential for kickback, especially when cutting. Maintain a firm grip and proper body positioning.
- **Do not use for polishing or wire brushing:** This tool is designed for grinding and cutting only.

4. PRODUCT DESCRIPTION AND COMPONENTS

Familiarize yourself with the parts of your Ingco CAGLI27153 angle grinder.



Figure 2: Ingco CAGLI27153 Cordless Angle Grinder. This image provides a clear view of the angle grinder's main body, including the motor housing, gear head, and battery interface.

1. **Spindle Lock Button:** Used to lock the spindle for disc changes.
2. **Gear Head:** Houses the gears and spindle.
3. **Disc Guard:** Protects against sparks and debris.

4. **Auxiliary Handle:** Provides additional grip and control.
5. **On/Off Switch:** Activates and deactivates the tool.
6. **Speed Control Dial:** Adjusts the no-load speed (3000/6000/9000rpm).
7. **Battery Interface:** Where the 20V battery pack is inserted.
8. **Brushless Motor:** Provides efficient power and longer tool life.



Figure 3: Ingco CAGLI27153 Cordless Angle Grinder with Auxiliary Handle. This view emphasizes the ergonomic design and the attachment point for the auxiliary handle, crucial for two-handed operation.

5. SETUP

Before operating the angle grinder, ensure it is properly set up.

5.1 Attaching the Auxiliary Handle

1. The auxiliary handle can be screwed into either side of the gear head, depending on user preference and application.
2. Thread the handle clockwise until it is securely tightened.

5.2 Installing/Removing the Grinding Disc

Note: Grinding discs are not included and must be purchased separately. Ensure the disc diameter is 115mm and has an M14 spindle thread.

1. Ensure the battery pack is removed from the tool.
2. Press and hold the spindle lock button.
3. Using the provided wrench, loosen and remove the outer flange nut by turning it counter-clockwise.
4. Place the grinding disc onto the inner flange, ensuring it sits flush.
5. Replace the outer flange nut and tighten it clockwise with the wrench while holding the spindle lock button. Do not overtighten.
6. To remove, reverse these steps.

5.3 Installing/Removing the Battery Pack

Note: Battery and charger are sold separately.

1. To install, align the battery pack with the battery interface on the tool and slide it in until it clicks securely into place.
2. To remove, press the battery release button and slide the battery pack out.

6. OPERATING INSTRUCTIONS

Follow these steps for safe and effective operation.

6.1 Powering On/Off

1. Ensure a fully charged battery is installed and the disc is correctly mounted.
2. To start the tool, slide the On/Off switch forward.
3. To stop the tool, slide the On/Off switch backward.

6.2 Adjusting Speed

The tool features a variable speed control dial with settings for 3000, 6000, and 9000 RPM (revolutions per minute). Adjust the speed according to the material and application:

- **Lower Speeds (e.g., 3000 RPM):** Suitable for softer materials or applications requiring more control.
- **Higher Speeds (e.g., 9000 RPM):** Ideal for harder materials and faster material removal.

6.3 Grinding and Cutting Techniques

- **Grinding:** Hold the tool at a 15-30 degree angle to the workpiece. Apply moderate pressure and move the tool smoothly across the surface.
- **Cutting:** Hold the tool perpendicular (90 degrees) to the workpiece. Allow the disc to do the work; do not force it. Ensure the workpiece is securely clamped.
- Always allow the tool to reach full speed before contacting the workpiece.
- Avoid overloading the tool, which can lead to overheating and damage.

7. MAINTENANCE

Regular maintenance ensures optimal performance and extends the life of your tool.

- **Cleaning:** After each use, clean the tool with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners. Keep ventilation openings clear of dust and debris.
- **Disc Inspection:** Regularly inspect grinding and cutting discs for wear, cracks, or damage. Replace damaged discs immediately.
- **Guard Inspection:** Ensure the disc guard is securely attached and undamaged.
- **Battery Care:** Store battery packs in a cool, dry place away from direct sunlight. Do not store fully discharged batteries for extended periods.
- **Brushless Motor:** The brushless motor requires less maintenance compared to brushed motors, as there are no carbon brushes to replace.
- **Storage:** Store the tool and accessories in a dry, secure location out of reach of children.

8. TROUBLESHOOTING

If you encounter issues with your angle grinder, refer to the following common problems and solutions.

Problem	Possible Cause	Solution
Tool does not start	Battery not charged or improperly inserted. Faulty switch.	Ensure battery is fully charged and correctly inserted. Check switch for damage.
Reduced power or speed	Low battery charge. Overloading the tool.	Recharge battery. Reduce pressure on the workpiece.

Problem	Possible Cause	Solution
Excessive vibration	Damaged or improperly mounted disc. Loose auxiliary handle.	Inspect disc for damage and replace if necessary. Ensure disc is correctly mounted. Tighten auxiliary handle.
Tool overheats	Continuous heavy use. Blocked ventilation.	Allow tool to cool down. Clear ventilation openings.

9. SPECIFICATIONS

Technical data for the Ingco CAGLI27153 Cordless Angle Grinder.

- **Model:** CAGLI27153
- **Motor Type:** Brushless
- **Voltage:** 20V
- **Maximum Input Power:** 1000W
- **No-load Speed:** 3000/6000/9000 rpm (variable)
- **Disc Diameter:** 115 mm (4-1/2")
- **Spindle Thread:** M14
- **Weight (Tool Only):** Approximately 1.85 kg
- **Dimensions:** Approximately 32.5 x 12.5 x 10.5 cm
- **Included Components:** Auxiliary Handle (Battery and charger sold separately)

10. WARRANTY AND SUPPORT

Ingco products are manufactured to high-quality standards. For information regarding warranty terms and conditions, please refer to the warranty card included with your purchase or contact your local Ingco dealer or customer support. Keep your proof of purchase for any warranty claims.