RYOBI PBLAG01B

RYOBI ONE+ HP 18V Brushless Cordless 4-1/2 in. Angle Grinder

MODEL: PBLAG01B USER MANUAL

1. Important Safety Information

Always read and understand 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.

- **Eye Protection:** Always wear eye protection with side shields marked to comply with ANSI Z87.1.
- **Hearing Protection:** Wear hearing protection during extended operation.
- **Respiratory Protection:** Wear a dust mask or respirator when working in dusty environments.
- **Proper Guarding:** Ensure the correct guard is installed for the specific application (grinding or cutting). Never operate the tool without a guard.
- **Secure Workpiece:** Always secure the workpiece to prevent movement during operation.
- **Avoid Flammable Materials:** Do not operate the tool near flammable liquids, gases, or dust.
- **Battery Safety:** Use only RYOBI ONE+ 18V batteries. Refer to your battery and charger manuals for specific safety instructions.

2. Package Contents

The RYOBI ONE+ HP 18V Brushless Cordless 4-1/2 in. Angle Grinder (PBLAG01B) package includes the following items:

- RYOBI PBLAG01B 18V ONE+ HP Brushless 4-1/2 in. Angle Grinder/Cut-Off Tool
- Comfort Grip Auxiliary Handle
- Grinding Wheel
- Cutting Wheel
- Type 27 Grinding Guard
- Type 1 Cutting Guard Attachment
- FIXTEC Nut
- Spanner Wrench
- Operator's Manual (this document)

Note: Battery and charger are sold separately.

3. Product Overview

The RYOBI ONE+ HP 18V Brushless Cordless 4-1/2 in. Angle Grinder is a versatile tool designed for grinding, cutting, and polishing various materials. Its brushless motor delivers efficient performance and extended runtime.



Image 1: RYOBI ONE+ HP 18V Brushless Cordless 4-1/2 inch Angle Grinder with auxiliary handle and grinding guard attached.

Key Features:

- Brushless motor for up to 9,200 RPM and increased efficiency.
- Tool-free accessory wheel removal for quick changes.
- Includes both grinding and cutting wheels and guards.
- 3-position side handle for enhanced comfort and control.
- Paddle switch design for easy operation.

4. Setup

4.1 Battery Installation

1. Ensure the tool is off and the paddle switch is disengaged.
2. Align the ribs on the battery with the grooves in the tool's battery port.
3. Slide the battery into the tool until it clicks securely into place.

4. To remove, press the battery release latch and pull the battery out.

Important: Always use a fully charged RYOBI ONE+ 18V battery. Battery and charger are not included with this tool.

4.2 Guard and Wheel Installation

Always install the appropriate guard and wheel for your application (grinding or cutting).

1. **Guard Installation:** Loosen the guard clamp screw. Place the desired guard (Type 27 for grinding, Type 1 for cutting) over the spindle flange, ensuring it covers the wheel adequately. Rotate the guard to the desired position for maximum protection and tighten the clamp screw firmly.
2. **Wheel Installation:** Press and hold the spindle lock button. Place the inner flange onto the spindle. Position the grinding or cutting wheel onto the inner flange. Thread the FIXTEC Nut onto the spindle and tighten it securely by hand. For final tightening, use the provided spanner wrench.



Image 2: Angle Grinder configured with a grinding wheel and Type 27 grinding guard.



Image 3: Angle Grinder configured with a cutting wheel and Type 1 cutting guard.

4.3 Auxiliary Handle Installation

The auxiliary handle can be installed in three positions for optimal control and comfort.

1. Thread the auxiliary handle into one of the three threaded holes on the gear housing.
2. Tighten the handle firmly by hand.

5. Operating Instructions

5.1 Powering On/Off

- **To Turn On:** Depress the paddle switch. The tool will start.
- **To Turn Off:** Release the paddle switch. The tool will stop.

5.2 Grinding and Cutting Techniques

Always wear appropriate personal protective equipment (PPE) including eye, hearing, and respiratory protection.

- **Grinding:** Hold the tool firmly with both hands. Position the grinding wheel at a slight angle (15-30 degrees) to the workpiece. Apply light, even pressure and move the tool smoothly across the surface.
- **Cutting:** Use the Type 1 cutting guard. Hold the tool firmly with both hands. Position the cutting wheel perpendicular to the workpiece. Allow the wheel to reach full speed before making contact. Apply light, consistent pressure, allowing the wheel to cut through the material. Avoid twisting or binding the wheel.
- **Material Compatibility:** This tool is suitable for grinding and cutting metal, masonry, and other materials as specified by the abrasive wheel manufacturer. Always use wheels rated for the tool's maximum RPM.

6. Maintenance

6.1 General Cleaning

Keep the tool's air vents clean and free of debris to ensure proper cooling. Use a clean, dry cloth to wipe down the exterior. Do not use solvents or harsh chemicals.

6.2 Wheel Replacement

Replace grinding and cutting wheels when they become worn, chipped, or damaged. Follow the wheel installation steps in Section 4.2.

6.3 Inspection

Regularly inspect the tool for any signs of damage, loose parts, or wear. Check the guards, auxiliary handle, and power switch for proper function. If any issues are found, discontinue use and contact RYOBI customer service.

7. Troubleshooting

- **Tool Does Not Start:** Ensure the battery is fully charged and properly inserted. Check if the paddle switch is fully depressed.
- **Reduced Performance/Overheating:** This may indicate a dull wheel, excessive pressure, or prolonged continuous use. Allow the tool to cool down. Replace worn wheels.
- **Excessive Vibration:** Check for a damaged or improperly installed wheel. Ensure the FIXTEC Nut is securely tightened.

For further assistance, refer to the RYOBI customer support resources.

8. Specifications

Feature	Specification

Feature	Specification
Brand	RYOBI
Model Number	PBLAG01B
Power Source	Battery Powered (18V ONE+)
Voltage	18 Volts
Maximum Rotational Speed	9200 RPM
Wheel Diameter	4-1/2 inches
Item Weight	5.2 Pounds
Special Features	Brushless Motor, Compact, Lightweight
UPC	737669728265

9. Warranty and Support

This RYOBI ONE+ HP 18V Brushless Cordless 4-1/2 in. Angle Grinder (PBLAG01B) is backed by a**RYOBI 3-Year Manufacturer's Warranty**.

For warranty claims, technical support, or service inquiries, please contact RYOBI customer service or visit the official RYOBI website. Keep your proof of purchase for warranty validation.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question