RYOBI P517

RYOBI P517 18V Cordless Brushless Reciprocating Saw User Manual

Model: P517

Introduction

This manual provides essential information for the safe operation, maintenance, and setup of your RYOBI P517 18V Cordless Brushless Reciprocating Saw. Please read this manual thoroughly before using the tool to ensure proper function and to prevent injury.
The RYOBI P517 features a brushless motor for enhanced performance and durability, offering faster cutting speeds and an anti-vibration handle for user comfort. It is part of the RYOBI ONE+ 18V system, compatible with all RYOBI 18V ONE+ batteries.

Safety Information

WARNING: 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.

- Always wear eye protection and hearing protection when operating power tools.
- Keep 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.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
- Ensure the tool is switched off before making any adjustments, changing accessories, or storing power tools.
- Use the correct tool for your application. Do not force the tool.
- Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the power tool's operation.
- Use the power tool, accessories, and tool bits in accordance with these instructions, taking into account the working conditions and the work to be performed.

What's in the Box

Your RYOBI P517 Reciprocating Saw package includes:

- RYOBI P517 18V Cordless Brushless Reciprocating Saw (Bare Tool)

Note: Battery, charger, and saw blades are sold separately.



Figure 1: RYOBI P517 Reciprocating Saw in its retail packaging.

Features

The RYOBI P517 Reciprocating Saw is equipped with several features designed for efficiency and user comfort:

- **Brushless Motor:** Provides increased runtime, more power, and extended motor life compared to brushed models.
- **Pivoting Shoe:** A metal shoe at the operating end adjusts to various angles, facilitating straight cuts through different materials and orientations.
- **Tool-Free Blade Change:** Allows for quick and easy blade replacement without the need for additional tools. Simply lift the latch, insert or remove the blade, and close the latch.
- **Variable Speed Trigger:** Offers precise control over cutting speed. Press the trigger more firmly for faster reciprocations, enabling speed adjustment to suit the task.
- **Anti-Vibration Handle:** Internal spring-assisted components absorb shock during high-impact tasks, enhancing user comfort during prolonged use.
- **Orbital Action:** An easy on/off selector allows for faster, more aggressive cutting, particularly useful for wood and demolition tasks.
- **ONE+ Compatibility:** Compatible with the RYOBI 18V ONE+ battery system, including models P100, P102, P103, P104, P105, P107, and P108.



Figure 2: Side view of the RYOBI P517, showing the brushless motor designation.



Figure 3: Rear view of the tool, illustrating the AntiVibe handle design.

Setup

1. Battery Installation and Removal

The RYOBI P517 is powered by an 18V ONE+ Lithium-Ion battery (sold separately).

- **To Install:** Align the battery with the receptacle on the tool handle. Slide the battery into place until it clicks securely.
- **To Remove:** Press the release latches on the sides of the battery pack and pull the battery out of the tool.

WARNING: Always remove the battery pack from your tool when you are assembling parts, making adjustments, cleaning, or when the tool is not in use.

2. Blade Installation and Removal

The tool-free blade clamp allows for quick and easy blade changes.

- **To Install:**
    1. Ensure the battery pack is removed from the saw.
    2. Lift the blade clamp lever located on the side of the blade housing.
    3. Insert the shank of the reciprocating saw blade fully into the blade clamp opening.
    4. Release the blade clamp lever. Gently pull on the blade to ensure it is securely locked in place.
- **To Remove:**
    1. Ensure the battery pack is removed from the saw.
    2. Lift the blade clamp lever.
    3. Pull the blade straight out from the clamp.
    4. Release the blade clamp lever.



Figure 4: Close-up of the blade clamp lever for tool-free blade changes.



Figure 5: Example of a standard reciprocating saw blade.

Operating Instructions

1. Starting and Stopping the Saw

- **To Start:** Slide the lock-off button to the unlock position (if present), then depress the variable speed trigger.
- **To Stop:** Release the variable speed trigger.



Figure 6: Close-up of the trigger and lock-off switch for operation.

2. Variable Speed Control

The variable speed trigger allows you to control the cutting speed. Apply more pressure to the trigger for higher speeds and less pressure for lower speeds. This control is crucial for cutting different materials effectively and safely.

3. Orbital Action Selector

The orbital action feature provides a more aggressive cutting motion, ideal for faster cuts in wood and demolition applications. For smoother cuts in metal or other materials, turn the orbital action off.

- Locate the orbital action selector switch on the side of the tool.
- Slide the switch to the desired position (On for orbital, Off for linear).

4. Pivoting Shoe Adjustment

The pivoting shoe helps stabilize the saw against the workpiece and allows for depth-of-cut control. It can pivot to maintain contact with the material, improving stability and cut accuracy.

- Ensure the shoe is always in contact with the workpiece during cutting.
- The shoe will automatically adjust to the angle of the material.





Figure 7: Front view of the saw, illustrating the pivoting shoe.

Maintenance

Regular maintenance ensures the longevity and safe operation of your tool.

- **Cleaning:** Keep the tool's air vents clear and free of debris. Use a clean, dry cloth to wipe down the exterior. Do not use solvents or harsh chemicals.
- **Blade Inspection:** Regularly inspect saw blades for sharpness and damage. Replace dull or damaged blades immediately.
- **Battery Care:** Store batteries in a cool, dry place. Follow the battery manufacturer's instructions for charging and storage.
- **General Inspection:** Periodically check all screws and fasteners for tightness. Tighten any loose screws.

WARNING: To avoid serious personal injury, always remove the battery pack from the tool before performing any maintenance or cleaning.

Troubleshooting

If you encounter issues with your RYOBI P517, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Tool does not start	Battery not installed correctly or discharged. Lock-off button engaged.	Ensure battery is fully charged and properly seated. Slide lock-off button to unlock position.
Reduced power or slow cutting	Dull or incorrect blade. Low battery charge.	Replace blade with a sharp, appropriate type for the material. Recharge battery.
Excessive vibration	Loose blade. Incorrect cutting technique.	Ensure blade is securely clamped. Maintain firm grip and proper stance.
Blade not cutting straight	Dull blade. Improper technique or material support.	Replace blade. Ensure workpiece is stable and guide the saw steadily.

If problems persist, contact RYOBI customer service for assistance.

Specifications

Feature	Specification
Model Number	P517
Power Source	18V DC (Battery Powered)
No Load Speed	0-3,200 SPM (Strokes Per Minute)
Stroke Length	1-1/8 inches
Tool Weight (Bare)	5.6 lbs (2.5 kg)
Blade Material	High Speed Steel (compatible blades)
Dimensions (L x W x H)	17.5 x 3.5 x 6.5 inches
Battery Compatibility	RYOBI 18V ONE+ Lithium-Ion (P100, P102, P103, P104, P105, P107, P108, etc.)



Figure 8: Back of the product packaging, detailing specifications and features.

Warranty and Support

RYOBI provides a **3-year limited warranty** for the P517 18V Cordless Brushless Reciprocating Saw. For warranty details, service, or technical support, please refer to the official RYOBI website or contact their customer service.
It is recommended to register your tool to facilitate warranty claims and receive product updates. You can register your tool online at: RYOBI.COM/REGISTER
For further assistance, please visit the official RYOBI website or contact their customer support.

© 2023 RYOBI. All rights reserved. Information in this manual is subject to change without notice.

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.

Name

Anonymous

Email

you@example.com

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