RYOBI P518

RYOBI 18-Volt ONE+ Cordless Brushless Reciprocating Saw P518 User Manual

Model: P518

Introduction

Thank you for choosing the RYOBI 18-Volt ONE+ Cordless Brushless Reciprocating Saw P518. This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your new tool. Please read this manual thoroughly before first use and keep it for future reference.

Safety Information

Always prioritize safety when operating power tools. Failure to follow safety instructions can result in serious injury or property damage.

- **Eye Protection:** Always wear appropriate eye protection, such as safety goggles, when operating the saw.
- **Hand Protection:** Wear heavy-duty gloves to protect your hands from sharp blades and debris.
- **Secure Workpiece:** Ensure the material you are cutting is securely clamped or held to prevent movement during operation.
- **Proper Grip:** Maintain a firm grip on the saw with both hands during operation.
- **Clear Work Area:** Keep your work area clean and well-lit. Remove any obstacles that could cause tripping or entanglement.
- **Avoid Kickback:** Be aware of potential kickback, especially when cutting through dense materials or if the blade binds.
- **Blade Selection:** Use the correct blade type for the material being cut (e.g., wood, metal).
- **Battery Safety:** Only use RYOBI ONE+ 18V Lithium-Ion batteries. Do not expose batteries to water or extreme temperatures.
- **Child Safety:** The saw features a safety switch to prevent accidental activation. Always engage the safety switch when the tool is not in use, especially around children.

Product Overview

Familiarize yourself with the main components of your RYOBI Reciprocating Saw.



Figure 1: The RYOBI 18-Volt ONE+ Cordless Brushless Reciprocating Saw P518, showcasing its compact and ergonomic design.



Figure 2: Side view of the RYOBI P518 Reciprocating Saw, highlighting the brushless motor housing and overall profile.

Key Components:

1. **Blade Clamp Lever:** Used for quick and tool-free blade changes.
2. **Adjustable Shoe:** Provides support against the workpiece and helps control cutting depth.
3. **Trigger:** Activates the saw.
4. **Lock-Off Switch:** A safety feature to prevent accidental starting.
5. **Handle with Overmold Grip:** Ergonomically designed for comfortable and secure handling.
6. **Battery Port:** Accepts RYOBI ONE+ 18V Lithium-Ion batteries.

Setup

Battery Installation:

This tool is sold as a bare tool and requires a RYOBI ONE+ 18V Lithium-Ion battery (sold separately).

1. Ensure the saw's lock-off switch is engaged (in the locked position).
2. Align the battery with the battery port on the bottom of the saw.
3. Slide the battery into the port until it clicks securely into place.

4. To remove the battery, press the release latches on the sides of the battery and pull it out.

Blade Installation:

The RYOBI P518 features a tool-free blade change system.



Figure 3: Close-up view of the blade clamp lever, used for quick blade changes.

1. Ensure the saw is disconnected from its power source (battery removed) before changing blades.
2. Lift the blade clamp lever located near the front of the saw.
3. Insert the shank of the reciprocating saw blade fully into the blade clamp.
4. Release the blade clamp lever. The blade should be securely locked in place. Gently pull on the blade to confirm it is seated properly.
5. To remove a blade, lift the blade clamp lever and pull the blade straight out.

Operating Instructions

General Operation:



Figure 4: Detail of the ergonomic handle and trigger with the integrated lock-off switch.

1. Ensure a fully charged battery is installed and the correct blade is attached.
2. Grip the saw firmly with both hands.
3. To start the saw, push the lock-off switch to the unlocked position, then depress the trigger. The saw will begin to operate.
4. To stop the saw, release the trigger. Always engage the lock-off switch when finished cutting or when setting the tool down.

Cutting Techniques:

- **Starting a Cut:** Place the shoe firmly against the workpiece. Start the saw before the blade contacts the material.
- **Cutting Wood:** Use a wood-cutting blade. Apply steady, even pressure. Allow the saw to do the work; do not force it.
- **Cutting Metal:** Use a metal-cutting blade. For thicker metals, consider using cutting fluid to prolong blade life and improve cutting efficiency. Maintain a moderate speed.
- **Plunge Cutting:** For plunge cuts (starting a cut in the middle of a workpiece), ensure the blade is sharp and the shoe is firmly pivoted against the material. Slowly angle the saw until the blade penetrates the surface.
- **Demolition:** This saw is ideal for demolition tasks. Be aware of hidden wires or pipes within walls or structures.

Maintenance

Regular maintenance ensures the longevity and optimal performance of your reciprocating saw.

- **Cleaning:** After each use, wipe down the tool with a clean, damp cloth. Remove any sawdust, metal shavings, or debris from the ventilation openings and blade clamp area. Do not use harsh chemicals or abrasive cleaners.
- **Blade Care:** Inspect blades before and after each use for sharpness and damage. Replace dull or bent blades

immediately. Store blades in a dry place to prevent rust.

- **Battery Storage:** Store batteries in a cool, dry place away from direct sunlight and extreme temperatures. For long-term storage, ensure batteries are partially charged.
- **General Inspection:** Periodically check all screws and fasteners for tightness. Ensure the shoe moves freely and locks securely.

Troubleshooting

If you encounter issues with your saw, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Saw does not start.	Battery not installed correctly or discharged. Lock-off switch engaged.	Ensure battery is fully seated and charged. Disengage the lock-off switch.
Blade not cutting effectively.	Dull or incorrect blade for material. Excessive force applied.	Replace with a sharp, appropriate blade. Reduce cutting pressure.
Excessive vibration.	Loose blade. Damaged blade.	Ensure blade is securely clamped. Replace damaged blade.
Saw stops during operation.	Overload protection activated. Battery discharged.	Reduce load on the saw. Allow tool to cool. Recharge or replace battery.

Specifications

Brand: RYOBI

Model: P518

Voltage: 18 Volts

Power Source: Battery Powered (RYOBI ONE+ 18V Lithium-Ion)

Blade Material: High Speed Steel (dependent on blade installed)

Surface Recommendation: Wood and Metal

Item Weight: Approximately 4.27 pounds (bare tool)

Included Components: Bare Tool (battery and charger sold separately)

Warranty and Support

This RYOBI tool comes with a limited warranty. For specific warranty details, including coverage period and terms, please refer to the warranty card included with your purchase or visit the official RYOBI website. For technical support, replacement parts, or service inquiries, please contact RYOBI customer service directly. Do not attempt to repair the tool yourself beyond the maintenance steps outlined in this manual, as this may void the warranty.
For the most up-to-date information and support resources, please visit www.ryobitools.com.