

PowerSmart PS76410A

PowerSmart 20V 5-1/2 Inch Cordless Circular Saw Instruction Manual

Model: PS76410A

1. INTRODUCTION

This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your PowerSmart 20V 5-1/2 Inch Cordless Circular Saw, Model PS76410A. Please read these instructions thoroughly before using the tool and retain them for future reference.



Figure 1: PowerSmart 20V 5-1/2 Inch Cordless Circular Saw with included battery and charger.

2. SAFETY INFORMATION

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

General Safety Guidelines:

- Wear appropriate personal protective equipment (PPE), including safety glasses, hearing protection, and gloves.
- 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.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
- Avoid accidental starting. Ensure the switch is in the off-position before connecting to battery pack, picking up or carrying the tool.

Specific Saw Safety Features:

- **Double Safety Switch:** The saw is equipped with a double safety switch to prevent accidental activation. Both the safety lock-off button and the trigger must be engaged to start the saw.
- **Blade Guard:** The saw features an adjustable blade guard that automatically covers the blade when not in use, reducing the risk of accidental contact.

3. PACKAGE CONTENTS

Verify that all items are present upon unpacking:

- 1 × PowerSmart Cordless Circular Saw
- 1 × 20V 1.5Ah Lithium-ion battery
- 1 × Fast Charger
- 1 × 18T Carbide-tipped Blade (5-1/2 inch)
- 1 × Parallel guide
- 1 × Allen Wrench
- 1 × User Manual (this document)

4. PRODUCT FEATURES

The PowerSmart 20V 5-1/2 Inch Cordless Circular Saw is designed for efficient and precise cutting tasks. Key features include:

- **20V Universal Battery System:** The included 20V 1.5Ah lithium-ion battery is compatible with all PowerSmart cordless tools, offering versatility and convenience. A fast charger is included for quick recharging.
- **High Performance Blade:** Equipped with a 5-1/2 inch 18T carbide-tipped blade, engineered for long-lasting performance and efficient cutting through wood and plastics. Maximum speed output is 3800 RPM.
- **Adjustable Cutting Depth and Angle:** Features a 0-45° bevel capacity for angled cuts. The adjustable depth knob allows for a maximum cutting depth of 1-5/8 inches (41mm) at 90° and 1-7/16 inches (35.5mm) at 45°.
- **Ergonomic Design:** A comfortable grip handle reduces fatigue during extended use. The lightweight design (7.5 lbs) facilitates one-handed operation and improved control.
- **Enhanced Safety:** Includes a double safety switch and a blade guard to minimize operational accidents and ensure a safer cutting experience.

7.5 Lb Ultralight Design



Figure 2: Key components of the circular saw, including the safety lock-off button, switch trigger, spindle lock button, depth clamp button, comfortable grip handle, adjustable bevel, base plate, and parallel guide.

5. SETUP

5.1. Battery Charging and Installation

1. Connect the fast charger to a power outlet.
2. Insert the 20V 1.5Ah lithium-ion battery into the charger. The indicator light on the charger will show the charging status.
3. Once fully charged, remove the battery from the charger.
4. Align the charged battery with the battery slot on the saw handle and slide it in until it clicks securely into

place.

5. To remove the battery, press the release button on the battery pack and slide it out.



Figure 3: Illustration of the 20V Lithium-ion battery and its charging process, highlighting the ease of battery upgrade.

5.2. Blade Installation/Replacement

Always disconnect the battery before installing or replacing the blade.

1. Press and hold the spindle lock button.
2. Use the included Allen wrench to loosen the blade bolt.
3. Remove the outer flange and the old blade.
4. Place the new 5-1/2 inch blade onto the spindle, ensuring the teeth direction matches the arrow on the

saw guard.

5. Reinstall the outer flange and tighten the blade bolt securely with the Allen wrench while holding the spindle lock button.



Figure 4: The 5-1/2 inch 18T carbide-tipped blade and the double trigger safety mechanism.

6. OPERATION

6.1. Adjusting Cutting Depth

1. Loosen the depth clamp button.
2. Adjust the base plate to the desired cutting depth. Ensure the blade extends slightly below the material

being cut.

3. Tighten the depth clamp button firmly.

6.2. Adjusting Bevel Angle

1. Loosen the adjustable bevel lever.
2. Tilt the base plate to the desired angle (0-45°).
3. Tighten the adjustable bevel lever securely.



Figure 5: Visual guide for adjusting the cutting depth and setting the bevel cutting angle up to 45 degrees.

6.3. Making a Cut

1. Ensure the material is securely clamped.
2. Hold the saw firmly with both hands.
3. Press the safety lock-off button and then squeeze the trigger to start the saw.
4. Allow the blade to reach full speed before engaging the material.
5. Guide the saw smoothly along the cutting line, applying steady, even pressure. Do not force the saw.
6. Release the trigger and allow the blade to stop completely before setting the saw down.

Your browser does not support the video tag.

Video 1: Demonstration of the PowerSmart 20V 5-1/2 Inch Circular Saw in operation, showcasing its cutting capabilities.

7. MAINTENANCE

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

- **Cleaning:** After each use, clean the saw with a soft, dry cloth. Remove any sawdust or debris from the blade guard, base plate, and motor vents. Do not use solvents or abrasive cleaners.
- **Blade Inspection:** Regularly inspect the blade for sharpness, damage, or missing teeth. Replace dull or damaged blades immediately.
- **Battery Care:** Store batteries in a cool, dry place away from direct sunlight. Do not store fully discharged batteries for extended periods.
- **Storage:** Store the saw in a dry, secure location out of reach of children.

8. TROUBLESHOOTING

If you encounter issues with your PowerSmart Circular Saw, refer to the following common solutions:

- **Saw does not start:**
 - Ensure the battery is fully charged and properly inserted.
 - Verify that both the safety lock-off button and the trigger are engaged simultaneously.
- **Blade not cutting efficiently:**
 - Check if the blade is dull or damaged and replace if necessary.
 - Ensure the cutting depth is set correctly for the material.
- **Excessive vibration or noise:**
 - Check if the blade is securely installed and not warped.
 - Inspect the saw for any loose parts.

For persistent issues or repairs, contact PowerSmart customer support.

9. SPECIFICATIONS



Specification	Value
Brand	PowerSmart
Model Number	PS76410A

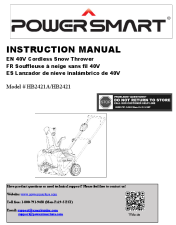



Power Source	Battery Powered
Voltage	20 Volts
Battery Type	Lithium Ion (1.5Ah included)
Speed	3800 RPM
Blade Size	5-1/2 Inches (18T Carbide-tipped)
Max Cutting Depth (90°)	1-5/8 Inches (41mm)
Max Cutting Depth (45°)	1-7/16 Inches (35.5mm)
Cutting Angle	0-45 Degrees
Item Weight	7.5 Pounds
Product Dimensions	12.5"L x 8"W x 7.5"H
Surface Recommendation	Plastic, Wood
Safety Features	Double Safety Switch, Blade Guard
Certification	UL certified

10. WARRANTY AND SUPPORT

This PowerSmart product comes with a **2-year warranty**. For warranty claims, technical support, or replacement parts, please contact PowerSmart customer service. Refer to the contact information provided in your product packaging or on the official PowerSmart website.

Related Documents - PS76410A

	<p>PowerSmart 20V Cordless String Trimmer PS76112A Instruction Manual</p> <p>The PowerSmart 20V Cordless String Trimmer Model PS76112A instruction manual provides comprehensive safety, operation, maintenance, and troubleshooting information for this battery-powered lawn care tool. Learn about its technical specifications, assembly, usage, and proper battery disposal.</p>
	<p>PowerSmart 20V Cordless Drill Instruction Manual - Model PS76430A</p> <p>This manual provides comprehensive instructions for the safe operation, maintenance, and troubleshooting of the PowerSmart 20V Cordless Drill, Model PS76430A. It includes technical specifications, safety warnings, operating procedures, parts list, and warranty information.</p>

	<p>PowerSmart HB2421A/HB2421 40V Cordless Snow Thrower Instruction Manual</p> <p>This instruction manual provides essential safety information, operating procedures, maintenance guidelines, and troubleshooting tips for the PowerSmart HB2421A/HB2421 40V Cordless Snow Thrower.</p>
	<p>PowerSmart DB2322SR 22" 3-in-1 Gas Self-Propelled Lawn Mower Instruction Manual</p> <p>This instruction manual provides essential information for the safe operation, maintenance, and troubleshooting of the PowerSmart DB2322SR 22" 3-in-1 gas self-propelled lawn mower. Includes technical data, safety guidelines, and parts list.</p>
	<p>PowerSmart PS3051 Portable Band Saw Instruction Manual</p> <p>Comprehensive instruction manual for the PowerSmart PS3051 Portable Band Saw, covering technical data, safety information, assembly, operation, maintenance, troubleshooting, and warranty.</p>
	<p>PowerSmart PSM2521SR 21-Inch 3-in-1 Gas Self-Propelled Lawn Mower Instruction Manual</p> <p>This instruction manual provides detailed information on the safe operation, maintenance, and troubleshooting of the PowerSmart PSM2521SR 21-inch 3-in-1 gas self-propelled lawn mower.</p>