DEWALT DCS520B

DEWALT 60V MAX* Circular Saw (DCS520B) - Instruction Manual

Model: DCS520B | Brand: DEWALT

Product Overview

The DEWALT DCS520B 60V MAX* 6-1/2" (165mm) Cordless TrackSaw is designed for precise, splinter-free cuts. This tool offers cordless convenience with the power typically found in corded tools. It is compatible with TrackSaw™ dual-edged tracks for perfectly straight cuts in both directions. The brushless motor provides efficient power for cutting hardwoods up to 2-1/8" thick. Key features include a continuous anti-kickback mechanism, a riving knife for safety, and a straight plunge mechanism for optimal ergonomics. The enclosed low-profile guard ensures 90% dust extraction capability.



Figure 1: DEWALT 60V MAX* Circular Saw (DCS520B) - Main Unit

Key Features

- **Zero Clearance TrackSaw™ Cutting System:** Delivers straight, splinter-free, and precise cuts.
- **Dual-Edged Track Compatibility:** For use with TrackSaw™ dual-edged tracks, enabling perfectly straight cuts in both directions.
- **Anti-Kickback Mechanism & Riving Knife:** Continuous anti-kickback mechanism and riving knife prevent kickback when engaged, enhancing user safety.
- **Straight Plunge Mechanism:** Designed for optimal ergonomics during operation.
- **90% Dust Extraction:** Enclosed low-profile guard provides superior dust extraction capability, keeping the work area cleaner.
- **Brushless Motor:** Powers through hardwoods efficiently.



Figure 2: Key features highlighted, including the 6.5-inch blade diameter and electronic brake.

Setup

1. Unpacking and Inspection

Carefully remove all components from the packaging. Inspect the tool and accessories for any damage that may have occurred during shipping. Ensure all listed components are present:

- 1) DCS520 6-1/2" (165mm) TrackSaw
- 1) Blade
- 1) Blade change wrench

Note: This is a bare tool item. Battery and charger are sold separately.

2. Battery Installation

Insert a fully charged DEWALT 60V MAX* Lithium Ion battery into the battery port on the saw until it clicks securely into place. Ensure the battery is properly seated to prevent accidental disconnection during operation.

3. Blade Installation/Change

1. Ensure the saw is disconnected from any power source (remove battery).

2. Locate the blade lock button and press it to secure the blade.
3. Use the provided blade change wrench to loosen the arbor nut.
4. Carefully remove the old blade, noting its rotation direction.
5. Install the new 6-1/2" blade, ensuring the teeth are oriented correctly for cutting (usually indicated by an arrow on the blade matching the saw's rotation).
6. Tighten the arbor nut firmly with the wrench while holding the blade lock button.

4. Track Setup

Place the TrackSaw™ dual-edged track on your workpiece, aligning it with your desired cut line. The track's design allows for precise alignment without needing clamps for most applications, though clamping is recommended for added stability on long or heavy cuts.



Figure 3: The DEWALT TrackSaw positioned on its compatible track system.

Operating Instructions

1. Adjusting Depth of Cut

The depth of cut scale accurately accounts for the thickness of the track. Adjust the depth of cut using the depth adjustment lever/knob. The maximum cut at 90° is 2-1/8 inches, and at 45° is 1-5/8 inches.



Figure 4: Adjusting the depth of cut on the TrackSaw for precise material penetration.

2. Adjusting Bevel Angle

The saw features a bevel capacity of 47 degrees. Loosen the bevel adjustment knob, set the desired angle, and tighten the knob securely before making a cut.

3. Making a Cut

1. Ensure the workpiece is stable and properly supported.
2. Place the saw onto the track, ensuring it slides smoothly along the rails.
3. Engage the plunge mechanism to lower the blade into the material.
4. Maintain a firm grip on the saw and guide it along the track at a consistent speed.
5. Allow the blade to come to a complete stop before lifting the saw from the workpiece.



Figure 5: Demonstrating a precise cut using the TrackSaw system.



Figure 6: Close-up of the TrackSaw in action, showing the smooth cutting process.

Maintenance

1. Cleaning

Regularly clean the saw, especially the blade area and dust extraction port, to ensure optimal performance and dust collection. Use a dry cloth or compressed air to remove sawdust and debris. Do not use solvents or harsh chemicals.

2. Blade Sharpening/Replacement

A sharp blade is crucial for clean and efficient cuts. Replace the blade when it becomes dull or damaged. Refer to the "Blade Installation/Change" section for instructions.

3. Battery Care

Store batteries in a cool, dry place. Do not expose them to extreme temperatures. Always use a DEWALT-approved charger for recharging.

Troubleshooting

Problem	Possible Cause	Solution
Saw not starting	Battery not charged or improperly installed.	Ensure battery is fully charged and correctly inserted.
Poor cut quality (splintering, rough edges)	Dull or incorrect blade; improper feed rate; track not securely positioned.	Replace or sharpen blade; use appropriate blade for material; adjust feed rate; ensure track is stable.

Problem	Possible Cause	Solution
Saw binds or kicks back	Improper alignment; material pinching blade; anti-kickback mechanism not engaged.	Verify track and saw alignment; ensure material is properly supported; check riving knife and anti-kickback engagement.
Excessive dust	Dust port clogged; dust collection system not connected or inefficient.	Clear dust port; connect to a suitable dust extractor.

If you encounter issues not listed here, or if the suggested solutions do not resolve the problem, please contact DEWALT customer support.

Specifications

Specification	Value
Brand	DEWALT
Model Number	DCS520B
Blade Diameter	6-1/2 inches (165mm)
No Load Speed	1750-4000 rpm
Bevel Capacity	47 degrees
Max Cut at 90°	2-1/8 inches
Max Cut at 45°	1-5/8 inches
Power Source	Battery Powered (60 Volts)
Item Weight	12.5 Pounds
Product Dimensions	12"L x 10"W x 10"H
UPC	885911500555

Warranty and Support

Warranty Information

The DEWALT DCS520B TrackSaw comes with a**3-year limited warranty**. This warranty covers defects in material or workmanship. For full details regarding warranty coverage, limitations, and how to make a claim, please refer to the official DEWALT warranty documentation included with your product or visit the official DEWALT website.
Protection plans are also available for purchase separately:

- 3-Year Protection Plan
- 4-Year Protection Plan
- Complete Protect (monthly plan)

Customer Support

For technical assistance, replacement parts, or service, please contact DEWALT customer support. You can find contact information on the official DEWALT website or through the retailer where you purchased the product.

Visit the official DEWALT Store for more products and information:DEWALT Store on Amazon.

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