

DEWALT D27113-QS

DEWALT D27113-QS 1600W 305mm Radial Miter Saw Instruction Manual

Model: D27113-QS | Brand: DEWALT

1. INTRODUCTION AND PRODUCT OVERVIEW

The DEWALT D27113-QS Radial Miter Saw is a powerful and versatile tool designed for precision cutting in various woodworking applications. This saw combines cross-cutting and ripping capabilities, making it suitable for a wide range of tasks.

Key Features:

- **Reversible Saw Design:** Engineered for both cross-cutting and ripping operations.
- **Innovative Blade Guard:** Ensures maximum safety and visibility during use.
- **XPS System:** DEWALT's exclusive XPS system provides highly accurate cut line projection and excellent visibility of the work surface, ideal for fast, repetitive cuts without adjustment.
- **Adjustable Miter Scale:** Made from stainless steel for unique precision throughout the saw's lifespan.
- **Powerful 1600W Motor:** Robust motor designed to meet common cutting needs.
- **Lightweight and Portable:** Easy to transport for various job site requirements.

2. SAFETY INSTRUCTIONS

Always follow basic safety precautions to reduce the risk of fire, electric shock, and personal injury when using power tools.

- **Read the Manual:** Familiarize yourself with all instructions and warnings before operation.
- **Wear Eye Protection:** Always wear safety goggles or safety glasses with side shields.
- **Wear Hearing Protection:** Use earplugs or earmuffs during operation.
- **Keep Work Area Clean:** Cluttered areas invite accidents.
- **Avoid Dangerous Environments:** Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lit.
- **Keep Children Away:** All visitors should be kept a safe distance from the work area.
- **Secure Workpiece:** Always clamp or otherwise secure the workpiece to prevent movement during cutting.
- **Use Correct Blade:** Ensure the blade is sharp, clean, and appropriate for the material being cut.
- **Disconnect Power:** Always disconnect the saw from the power supply before making adjustments, changing accessories, or performing maintenance.
- **Maintain Guard in Place:** Never operate the saw with guards removed or damaged.

3. SETUP

3.1 Unpacking and Assembly

Carefully remove all components from the packaging. Inspect for any damage. Refer to the assembly diagrams in your printed manual for detailed steps on attaching handles, guards, and other accessories. Ensure all fasteners are securely tightened before use.

3.2 Blade Installation and Inspection

Ensure the saw is unplugged. Follow the instructions for safely installing the saw blade, ensuring it is oriented correctly and the arbor nut is tightened to the specified torque. Always inspect the blade for damage or dullness before each use. A dull or damaged blade can cause kickback and reduce cutting accuracy.

3.3 Workpiece Support and Clamping

Properly support the workpiece to prevent it from tipping or shifting during the cut. Use the provided workpiece clamp to secure the material firmly against the fence and table.



Figure 3.3.1: Workpiece clamping mechanism. Always secure the material firmly before cutting to prevent movement and ensure safety.

3.4 Dust Extraction Connection

Connect a suitable dust extraction system to the saw's dust port. This helps maintain a clear work area, improves visibility of the cut line, and reduces airborne dust particles.

4. OPERATING INSTRUCTIONS

4.1 Powering On/Off

To start the saw, press the power switch. To stop, release the switch. Ensure the saw reaches full speed before beginning a cut.

4.2 Adjusting Miter Angle

The miter saw allows for precise angle adjustments for cross-cuts. Loosen the miter lock knob, rotate the turntable to the desired angle indicated on the scale, and then securely tighten the knob.

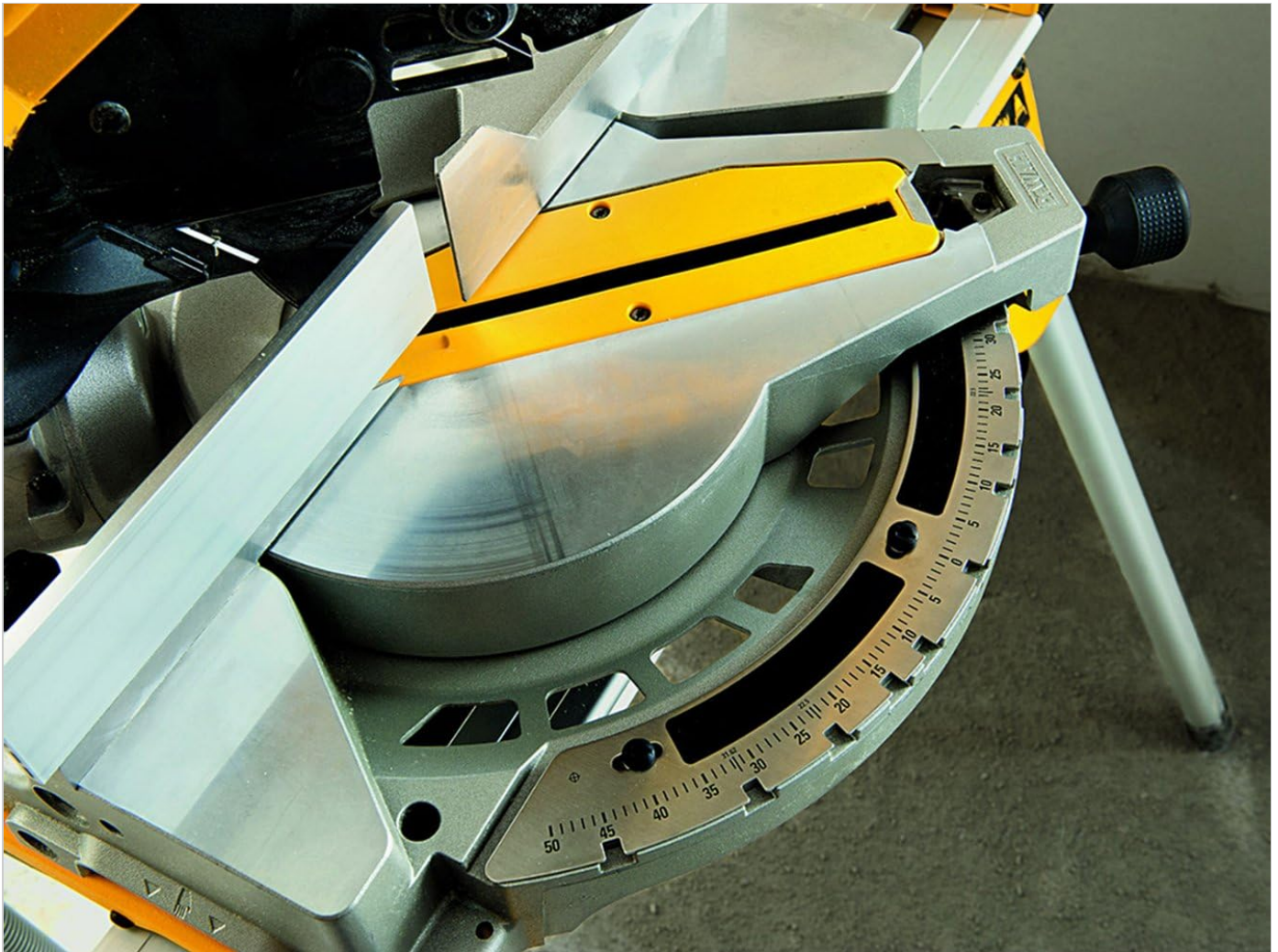


Figure 4.2.1: Miter angle adjustment. The stainless steel scale ensures accurate angle settings for various cuts.

4.3 Adjusting Bevel Angle

For bevel cuts, adjust the angle of the saw head. Loosen the bevel lock lever, tilt the saw head to the desired angle shown on the bevel scale, and then re-tighten the lever firmly.



Figure 4.3.1: Bevel angle adjustment. Use the lever to set the saw head to the required bevel angle.

4.4 Making Cuts (Cross-cutting and Ripping)

Position the workpiece and secure it. Align the blade with the cut line, utilizing the XPS system for enhanced visibility. Slowly lower the blade through the material, maintaining a steady and controlled motion. For ripping operations, ensure the workpiece is guided parallel to the blade.



Figure 4.4.1: Performing a cross-cut. Ensure the workpiece is stable and the blade is aligned with the cut line.



Figure 4.4.2: Performing a miter cut. The saw's design allows for precise angled cuts.

4.5 XPS Cut Line System

The XPS system projects a bright shadow line onto the workpiece, indicating the exact path of the blade. This eliminates the need for constant adjustments and significantly improves cutting accuracy and speed.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your DEWALT D27113-QS Radial Miter Saw. Always disconnect the power supply before performing any maintenance.

- **Cleaning:** Regularly clean the saw, especially the blade area, dust port, and moving parts, to prevent sawdust buildup. Use a brush or compressed air.
- **Blade Inspection:** Inspect the saw blade before each use for sharpness, cracks, or missing teeth. Replace dull or damaged blades immediately.
- **Lubrication:** Refer to your full manual for specific lubrication points and recommended lubricants.
- **Fastener Check:** Periodically check all nuts, bolts, and screws for tightness.
- **Carbon Brushes:** If applicable, inspect and replace carbon brushes as recommended in the detailed service manual.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your radial miter saw. For more complex problems, consult a qualified service technician.

Problem	Possible Cause	Solution
Saw does not start	No power supply; Faulty switch; Tripped circuit breaker	Check power connection; Test switch; Reset circuit breaker
Inaccurate cuts	Dull blade; Incorrect angle setting; Loose fence/table; Workpiece not secured	Replace blade; Re-adjust angles; Tighten fence/table; Secure workpiece with clamp
Excessive vibration	Damaged blade; Loose mounting bolts; Unbalanced workpiece	Replace blade; Tighten all mounting bolts; Ensure workpiece is stable
Motor overheating	Overloading the motor; Poor ventilation; Dull blade	Reduce cutting pressure; Ensure clear ventilation; Replace blade

7. SPECIFICATIONS

Specification	Value
Model Number	D27113-QS
Brand	DEWALT
Power	1600 Watts
Voltage	220 Volts
Blade Length / Diameter	30.5 Centimeters (305mm)
Product Dimensions (L x W x H)	66 x 56 x 45 cm
Weight	620 grams
Sound Level	103 Decibels
Power Source	Electric
Special Feature	Reversible
Recommended Surface	Wood
Blade Material	High-speed steel
Certification	CE, EMC, ISO 9001

Note: The weight specification of 620 grams appears unusually low for a radial miter saw. Please refer to the official product documentation for the most accurate weight information.

8. WARRANTY AND SUPPORT

For detailed warranty information, please refer to the warranty card included with your product or visit the official DEWALT website.

If you require technical assistance, spare parts, or service, please contact DEWALT customer support or an authorized service center. Keep your purchase receipt and product model number (D27113-QS) handy when contacting support.

- **Online Support:** Visit the official DEWALT website for FAQs, product registration, and service center locators.
- **Customer Service:** Contact information can typically be found on the DEWALT website or in your product packaging.



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