

VEVOR BS-712R

VEVOR Metal Horizontal/Vertical Band Saw

MODEL: BS-712R

User Manual

1. Safety Instructions

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

- **Personal Protective Equipment (PPE):** Always wear safety glasses, hearing protection, and appropriate work gloves. Avoid loose clothing or jewelry that could get caught in moving parts.
- **Work Area:** Ensure your work area is clean, well-lit, and free from clutter. Keep children and bystanders at a safe distance.
- **Electrical Safety:** Verify the power supply matches the machine's requirements (110V/220V). Ensure the power cord is in good condition and properly grounded. Do not operate in damp or wet conditions.
- **Material Securement:** Always firmly clamp the workpiece before cutting. Unsecured material can shift, causing kickback or inaccurate cuts.
- **Blade Safety:** Ensure the blade is correctly installed and tensioned. Never touch the blade while the machine is running or still coasting. Replace dull or damaged blades immediately.
- **Machine Stability:** Confirm the band saw is on a stable, level surface. Utilize the locking wheels to prevent movement during operation.
- **Emergency Stop:** Familiarize yourself with the location and operation of the emergency stop button.
- **Automatic Shut-Off:** The machine features an automatic shut-off after completing cuts. Do not bypass this safety feature.

2. Product Overview

The VEVOR BS-712R is a versatile metal band saw designed for both horizontal and vertical cutting applications. It features a robust motor, variable speed settings, and precise angle adjustment for a wide range of materials.

Efficient Dual-Purpose Metal Band Saw



1.1 kW
Motor



Horizontal & Vertical
Cutting



4-Speed
Adjustment



Image: The VEVOR BS-712R band saw shown in both its horizontal and vertical cutting configurations, highlighting its dual-purpose design. Key features like the 1.1 kW motor, horizontal & vertical cutting, and 4-speed adjustment are indicated.

Key Features:

- Powerful 1.1 kW Motor:** Delivers consistent power for efficient cutting tasks with a speed of 1680 RPM. Supports 110V/220V dual voltage (pre-wired to 110V).
- Dual Cutting Modes:** Easily switches between horizontal and vertical cutting for straight, curved, and intricate shapes.
- Large Cutting Capacity:** Rectangular cutting capacity of 7 x 8.25 inches.
- Variable Speed Settings:** Four adjustable speeds (86 FPM, 132 FPM, 178 FPM, 260 FPM) to optimize cutting for various materials. Speed adjustment is achieved by changing the V-belt position on the pulley.
- Precision Angle Adjustment:** Saw bow base provides 0° to 45° rotation angles with a locking feature and built-in scale for accurate miter cuts.
- Durable Construction:** Crafted from sturdy, wear-resistant cast iron with a stable base and four rolling wheels for durability and portability.
- Hydraulic Downfeed System:** Reduces manual effort and ensures consistent cutting pressure.
- Automatic Shut-Off:** Machine automatically stops after completing cuts, preventing motor overrun and extending service life.
- Safety Features:** Includes a chip guard to minimize mess and an emergency stop button.

1.1 kW High-Performance Motor

- Stable Power
- Continuous Operation
- High Efficiency

1.1 kW

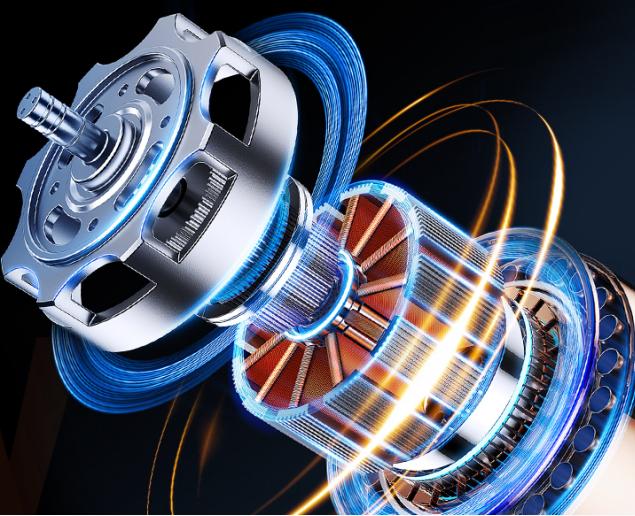


Image: An internal view of the 1.1 kW high-performance motor, illustrating its stable power, continuous operation, and high efficiency.

3. Setup

Carefully unpack all components and ensure all parts are present before beginning assembly.

- 1. Unpacking:** Remove the band saw and all accessories from the packaging. Retain packaging for future transport or storage.
- 2. Base Assembly:** Attach the main saw unit to the wheeled base using the provided hardware. Ensure all bolts are securely tightened.
- 3. Blade Installation:**
 - Open the blade guard.
 - Carefully position the blade around the wheels, ensuring the teeth are pointing in the correct cutting direction.
 - Adjust blade tension according to the manufacturer's guidelines (refer to specific markings on the machine if available).
 - Close and secure the blade guard.
- 4. Power Connection:** Connect the power cord to a suitable grounded electrical outlet. The unit is pre-wired for 110V. If 220V operation is required, consult a qualified electrician for proper wiring adjustment.
- 5. Workpiece Support:** Position any external workpiece supports if necessary for long or heavy materials.

4. Operating Instructions

Follow these steps for safe and effective operation of your band saw.



Image: A worker operating the VEVOR BS-712R band saw in a workshop setting, demonstrating its use for cutting materials.

4.1. Selecting Cutting Mode (Horizontal/Vertical)

- **Horizontal Cutting:** For straight cuts on longer stock. The saw bow is lowered onto the material.
- **Vertical Cutting:** For curved or intricate cuts. The saw bow is positioned upright, and the material is fed manually into the blade.

Vertical Cutting

• Curved Cutting



• Manual Cutting

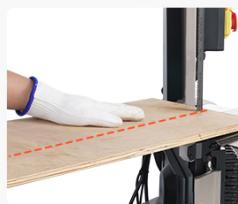


Image: The band saw configured for vertical cutting, showing examples of curved and manual cutting operations.

4.2. Adjusting Cutting Speed

The cutting speed is adjusted by repositioning the V-belt on the motor pulleys. Always ensure the machine is powered off and unplugged before adjusting the belt.

1. Open the belt cover.
2. Loosen the motor mount to allow belt movement.
3. Move the V-belt to the desired pulley combination for the required speed (86 FPM, 132 FPM, 178 FPM, 260 FPM). Refer to the machine's speed chart for material recommendations.
4. Retighten the motor mount and close the belt cover.

Adjust speeds via V-belt position



86 FPM

Alloy Steel, Stainless Steel



132 FPM

Hard Brass, Bronze, Mild Steel



178 FPM

Soft Brass, Aluminum



260 FPM

Plastic

NOTE: EU model features 4 adjustable speeds: 22 m/min, 33 m/min, 45 m/min, 65 m/min.



Image: A diagram illustrating how to adjust cutting speeds by changing the V-belt position on the pulleys, with recommended speeds for different materials like steel, brass, aluminum, and plastic.

4.3. Setting Cutting Angle

The saw bow base can be rotated from 0° to 45° for miter cuts.

1. Loosen the locking mechanism for the saw bow base.
2. Rotate the base to the desired angle, using the built-in scale for precision.
3. Securely tighten the locking mechanism to prevent movement during cutting.

0°-45° Adjustable Angles

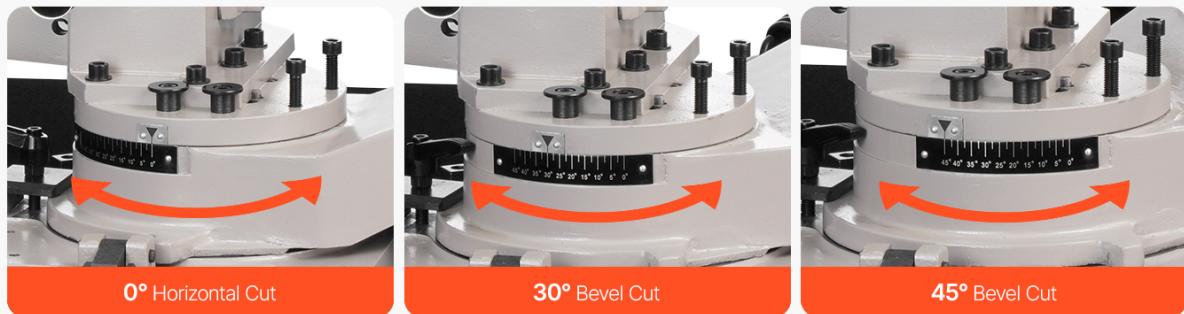


Image: Visual representation of the 0°-45° adjustable angles for the saw base, showing settings for 0° horizontal cut, 30° bevel cut, and 45° bevel cut.

4.4. Clamping the Workpiece

Use the quick-lock clamp plate to firmly secure the material. Ensure the material is stable and will not shift during the cut.

Quick-Position Clamp Plate, Precise Material Fixation

- Fast Clamping
- No Shifting
- Fit Various Material Shapes



Image: A close-up of the quick-position clamp plate, demonstrating its function for fast clamping and precise material fixation, accommodating various material shapes without shifting.

4.5. Engaging the Hydraulic Downfeed

For horizontal cutting, the hydraulic downfeed system controls the rate at which the saw bow lowers through the material. Adjust the hydraulic cylinder to achieve the desired feed rate.

Hydraulic Gravity Feed, Minimal Shifting



Coolant System,
Reduced Blade
Temperature



Built-in Scale,
Uniform Dimensions



Image: The hydraulic gravity feed system, showing the mechanism that ensures minimal shifting during cuts and includes a built-in scale for uniform dimensions.

4.6. Starting and Stopping

- Press the green START button to begin operation.
- For horizontal cuts, the machine will automatically shut off once the cut is complete.
- Press the red STOP button or the emergency stop button to halt operation at any time.



Image: An illustration of the automatic shut-off feature after cutting, emphasizing security protection, overload protection, and extended service life.

5. Maintenance

Regular maintenance ensures optimal performance and extends the lifespan of your band saw.

- **Cleaning:** After each use, clean the machine to remove metal chips, dust, and debris. Use a brush or shop vacuum. Do not use compressed air as it can embed debris into moving parts.
- **Blade Inspection:** Regularly inspect the blade for sharpness, cracks, or missing teeth. Replace worn or damaged blades promptly.
- **Blade Tension:** Check blade tension periodically and adjust as needed to prevent blade breakage or inaccurate cuts.
- **Lubrication:** Apply appropriate lubricant to moving parts, such as the hydraulic cylinder and pivot points, as

recommended in the detailed product manual (if available).

- **Belt Inspection:** Check the V-belt for wear, cracks, or slippage. Replace if necessary.
- **Electrical Components:** Inspect the power cord and electrical connections for any signs of damage.

6. Troubleshooting

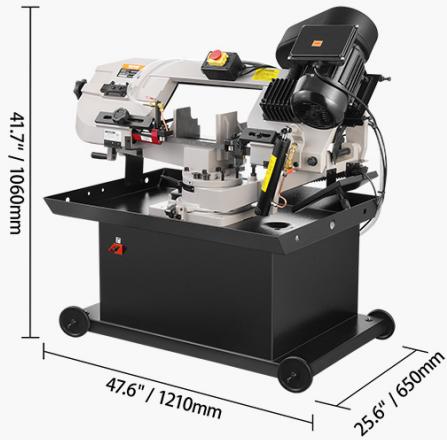
This section addresses common issues you might encounter.

Problem	Possible Cause	Solution
Machine does not start	No power, emergency stop engaged, faulty switch	Check power connection, release emergency stop, inspect power switch.
Poor cut quality (rough, uneven)	Dull blade, incorrect blade tension, wrong speed setting, unsecured material	Replace blade, adjust blade tension, select appropriate speed, firmly clamp workpiece.
Blade breakage	Incorrect blade tension, wrong blade for material, excessive feed pressure	Adjust blade tension, use correct blade type, reduce feed pressure.
Motor overheating	Overload, insufficient ventilation, continuous operation without rest	Reduce load, ensure clear ventilation, allow motor to cool.

7. Specifications

Detailed technical specifications for the VEVOR BS-712R Band Saw.

- **Item Model Number:** BS-712R
- **Power:** 1.1 kW (1100 watts)
- **Voltage:** AC110/220V 60Hz (US), AC220V 50Hz (EU)
- **Rectangular Cutting Size:** 7 x 8.25 inches
- **Max Speed:** 260 FPM (US), 65 m/min (EU)
- **Blade Teeth:** 5/8 TPI steel
- **Blade Length:** 93 inches / 2362 mm
- **Miter Vise Adjustment Angle:** 0-45°
- **Base Wheels:** 4
- **Item Weight:** 407.86 lbs / 186 kg
- **Product Dimensions (L x W x H):** 47.6" x 25.6" x 41.7" / 1210 x 650 x 1060 mm
- **Item Height with Blade Upright:** 65.8 inches / 1670 mm
- **Power Source:** Corded Electric
- **Included Components:** 1 x Metal Horizontal Band Saw



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Power: **1.1kW**
Rectangular Cutting Size: **7 x 8.25 in**
Max Speed: **260 FPM (US), 65 m/min (EU)**
Blade Teeth: **5/8 TPI**
Explosion-Proof Wheels: **4**
Blade Length: **93 in/2362 mm**
Miter Vise Adjustment Angle: **0-45°**
Power Cord Length: **78.7 in/2 m**
Item Weight: **410.1 lbs/186 kg**
Item Dimensions: **47.6 x 25.6 x 41.7 in/1210 x 650 x 1060 mm**
Item Height with Blade Upright: **65.8 in/1670 mm**

Image: A comprehensive diagram showing the dimensions of the VEVOR BS-712R band saw, along with a list of its key specifications including model number, power, voltage, cutting capacity, speed, blade details, and weight.

8. Warranty and Support

The VEVOR BS-712R Metal Horizontal/Vertical Band Saw comes with a full warranty. For specific warranty terms and conditions, please refer to the documentation included with your purchase or visit the official VEVOR website.

For technical support, parts, or service inquiries, please contact VEVOR customer service through their official channels. Always provide your model number (BS-712R) and purchase date when seeking support.

Online Resources: For additional information, FAQs, and product registration, visit the official VEVOR website: www.vevor.com