

Delta 28-400

Delta 28-400 14-inch 1 HP Steel Frame Band Saw User Manual

Model: 28-400

IMPORTANT SAFETY INSTRUCTIONS

Always read and understand all instructions before operating this band saw. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury. Save these instructions for future reference.

- **Wear Eye Protection:** Always wear safety glasses or goggles that comply with ANSI Z87.1.
- **Use Hearing Protection:** Prolonged exposure to noise can cause hearing damage.
- **Dress Properly:** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that could get caught in moving parts. Secure long hair.
- **Keep Work Area Clean:** Cluttered areas and benches invite accidents.
- **Avoid Dangerous Environment:** 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.
- **Use the Right Tool:** Do not force tool or attachment to do a job for which it was not designed.
- **Maintain Tools With Care:** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- **Disconnect Power:** Always disconnect the power cord before making adjustments, changing accessories, or servicing the tool.
- **Secure Workpiece:** Always use clamps or a vise to hold work. This is safer than using your hand and it frees both hands to operate the tool.
- **Check for Damaged Parts:** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function.

SETUP AND ASSEMBLY

The Delta 28-400 band saw requires assembly before use. It is recommended to have assistance during assembly due to the weight and size of the components.

1. Unpacking and Inspection

Carefully remove all components from the packaging. Inspect for any shipping damage. Ensure all parts listed in the packing list are present. The saw, stand, 4-inch dust port, and a 93-1/2 inch blade are included.



Figure 1: The Delta 28-400 Band Saw fully assembled on its stand.

2. Stand Assembly

Assemble the heavy-duty steel stand according to the instructions provided in the separate stand manual. Ensure all bolts are securely tightened. The stand provides a stable base for the band saw.

3. Mounting the Saw to the Stand

With assistance, carefully lift the band saw body and place it onto the assembled stand. Secure it using the provided hardware. Ensure the saw is level and stable on the stand.

4. Blade Installation and Tensioning

1. Open the upper and lower wheel covers.
2. Loosen the blade tension knob to allow for blade installation.
3. Carefully place the blade around the upper and lower rubber-coated wheels, ensuring the teeth are pointing downwards towards the table.
4. Adjust the blade tracking so the blade runs centrally on the wheels.
5. Apply appropriate blade tension using the tensioning system. While there isn't a specific tension indicator, ensure the blade is taut enough to prevent twisting during operation.



Figure 2: Internal view showing the upper and lower wheels, and the blade path. This area is critical for blade installation and tracking adjustments.

5. Blade Guide Adjustment

Proper blade guide adjustment is crucial for accurate cuts and blade longevity. The saw features upper and lower blade guides.

- Adjust the upper blade guide assembly so it is approximately 1/8 inch above the workpiece.

- Ensure the side guides are set close to the blade, but not touching, allowing the blade to run freely.
- Adjust the thrust bearing (rear guide bearing) so it is just behind the blade, providing support during cutting without constant contact.



Figure 3: Close-up view of the blade and guide bearings, illustrating the components involved in supporting the blade during operation.

6. Table Adjustment

The precision ground cast iron table can tilt from 3° left to 45° right, with a positive stop at 90° for straight cuts.

1. Loosen the table locking knob.
2. Tilt the table to the desired angle. Use a protractor or angle gauge for precise settings if not using the 90° stop.
3. Tighten the table locking knob securely before operation.

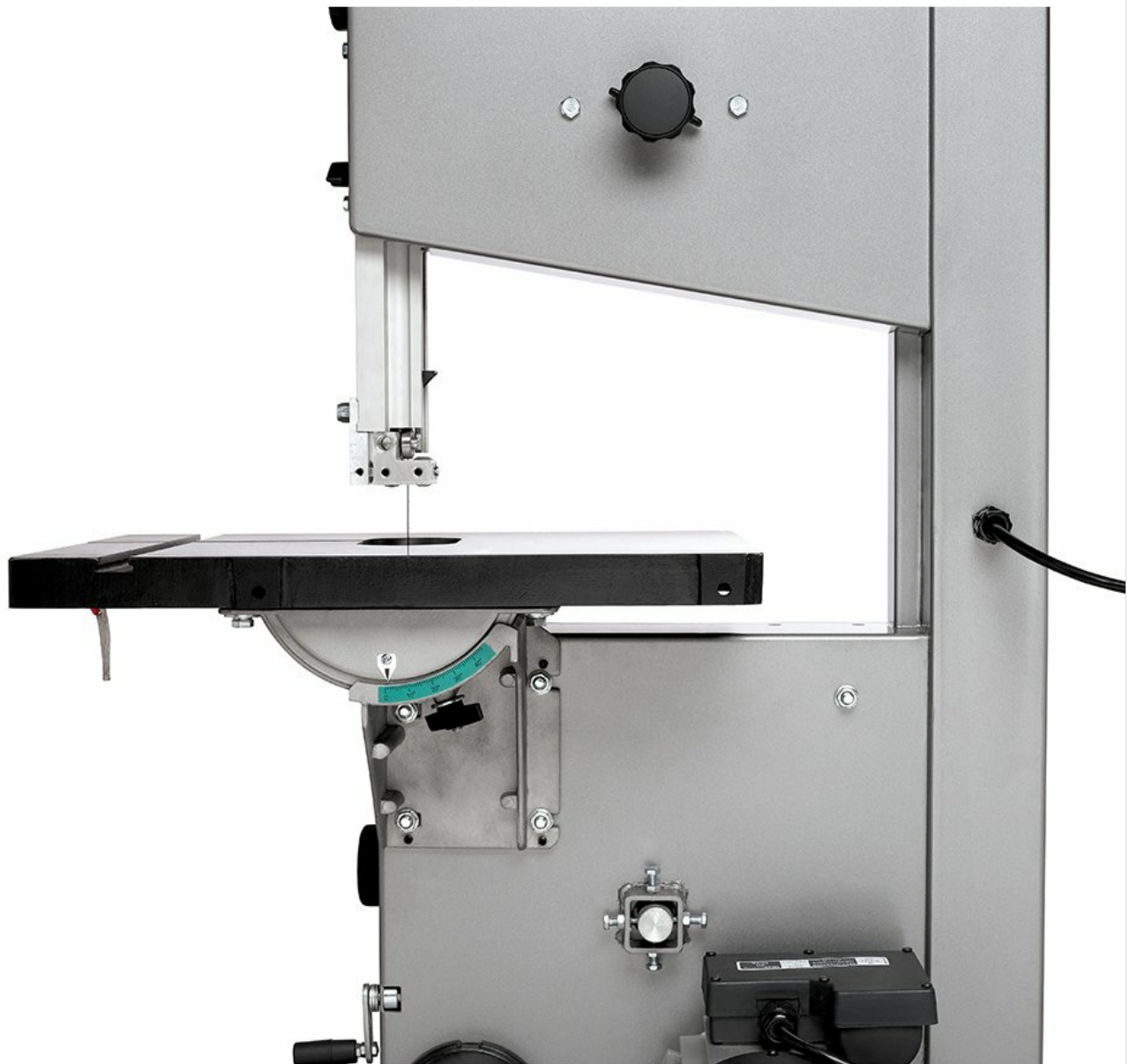


Figure 4: The band saw table set at a 90-degree angle, ideal for standard straight cuts.



Figure 5: The band saw table tilted to the right, demonstrating its miter capability for angled cuts.



Figure 6: The band saw table tilted to the left, showing the full range of angle adjustments.

7. Power Connection and Voltage Selection

The 1 HP TEFC motor can operate on either 115V or 230V. Ensure the motor is wired correctly for your power supply. Consult a qualified electrician if you are unsure about wiring for 230V. Always ensure the power switch is in the OFF position before connecting to power.

8. Dust Collection

Connect a dust collection system to the 4-inch dust port to maintain a clean work environment and improve visibility. The saw's design includes effective dust collection features.

OPERATING INSTRUCTIONS

Before operating, ensure all safety checks are performed, including blade tension, tracking, guide settings, and table angle.

1. Powering On/Off

To start the saw, press the green "ON" button. To stop, press the red "OFF" button. Always allow the blade to reach full speed before beginning a cut.

2. Speed Selection

The band saw offers two speeds: 1,620 FPM (Feet Per Minute) and 3,340 FPM. The lower speed is suitable for cutting non-ferrous metals, while the higher speed is for woodworking. Change speeds by adjusting the belt on the two-speed pulley system. Refer to the motor compartment for detailed instructions on changing belt positions.

3. Making a Cut

- Ensure the workpiece is free of foreign objects (nails, screws).
- Adjust the upper blade guide to be approximately 1/8 inch above the workpiece.
- Hold the workpiece firmly against the table.
- Feed the workpiece slowly and steadily into the blade. Do not force the cut.
- Use a push stick for small pieces or when hands are close to the blade.
- For curved cuts, use a narrower blade and feed slowly, allowing the blade to follow the curve without twisting.

MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your Delta 28-400 band saw. Always disconnect power before performing any maintenance.

1. Cleaning

- After each use, clear sawdust and debris from the table, blade guides, and inside the wheel covers.
- Use a brush or vacuum cleaner. Do not use compressed air as it can force dust into bearings.
- Keep the motor vents clear of dust to prevent overheating.

2. Blade Replacement

Replace dull or damaged blades promptly. Follow the blade installation steps in the Setup section. Ensure the new blade is the correct length (93-1/2 inches) and width for your application.

3. Wheel and Bearing Inspection

- Periodically inspect the rubber tires on the upper and lower wheels for wear or damage. Replace if necessary.
- Check the blade guide bearings for smooth operation. Replace any bearings that are seized or excessively worn.

4. Table Surface Care

Keep the cast iron table clean and apply a rust preventative or paste wax periodically to maintain its smooth surface and prevent corrosion.

TROUBLESHOOTING

This section addresses common issues you might encounter with your band saw.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Saw does not start	No power, tripped circuit breaker, faulty switch, incorrect voltage wiring.	Check power connection, reset breaker, inspect switch, verify motor wiring (115V/230V).
Blade drifts or cuts inaccurately	Incorrect blade tension, improper blade tracking, worn blade guides, dull blade, base guide block movement.	Adjust blade tension and tracking, inspect and adjust/replace blade guides, replace dull blade. Ensure the base guide block is secure.
Excessive vibration or noise	Loose components, unbalanced wheels, worn bearings, incorrect blade tension.	Check all fasteners, inspect wheels for damage, replace worn bearings, adjust blade tension.
Blade breaks frequently	Over-tensioning, improper blade tracking, forcing cuts, incorrect blade for material, worn blade guides.	Reduce blade tension, adjust tracking, avoid forcing cuts, use appropriate blade, check blade guides.
Motor overheats	Blocked motor vents, continuous heavy use, incorrect voltage.	Clean motor vents, allow motor to cool, verify correct voltage wiring.

SPECIFICATIONS

Key technical specifications for the Delta 28-400 Band Saw.

- **Model Number:** 28-400
- **Motor:** 1 HP, 115V/230V, 1 Phase TEFC
- **Blade Speeds:** 1,620 FPM (low), 3,340 FPM (high)
- **Blade Length:** 93-1/2 inches
- **Table Size:** 15 3/4 in. x 18 7/8 in. precision ground cast iron
- **Table Tilt:** 3° left to 45° right (with positive stop at 90°)
- **Dust Port:** 4 inches
- **Material:** Heavy-duty steel frame, aluminum trunnion, cast iron table
- **Item Weight:** Approximately 165 pounds
- **Product Dimensions:** 45 x 18 x 21 inches (approximate, without stand)
- **UPC:** 847962004819

WARRANTY AND SUPPORT

For warranty information, technical support, or to order replacement parts, please contact Delta Power Equipment Corporation directly. Refer to your purchase documentation or the official Delta website for the most current contact details and warranty terms.

Proposition 65 Warning: This product may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Always follow safety guidelines and wear appropriate personal protective equipment.

OFFICIAL PRODUCT VIDEOS

No relevant official seller videos were provided for this product in the available data.

