

Delta 40-694

Delta 40-694 20-Inch Variable Speed Scroll Saw Instruction Manual

INTRODUCTION

Welcome to the Delta 40-694 20-inch Variable Speed Scroll Saw. This manual provides essential information for the safe and efficient operation, maintenance, and setup of your new scroll saw. Please read it thoroughly before use to ensure proper handling and to maximize the lifespan of your tool. This scroll saw is designed for precision cutting in various materials, primarily wood, offering variable speed control for optimal performance.

GENERAL SAFETY INSTRUCTIONS

Always follow basic safety precautions when operating power tools to reduce the risk of fire, electric shock, and serious personal injury. Keep this manual for future reference.

- **Wear Eye Protection:** Always wear safety glasses or goggles that comply with applicable standards.
- **Secure Workpiece:** Ensure the material being cut is firmly secured to prevent movement during operation.
- **Keep Hands Clear:** Never place hands or fingers near the blade while the saw is running.
- **Proper Ventilation:** Operate the saw in a well-ventilated area to avoid inhaling dust.
- **Unplug Before Adjustments:** Always disconnect the saw from the power source before changing blades, making adjustments, or performing maintenance.
- **Maintain Awareness:** Stay alert and use common sense. Do not operate the saw when tired or under the influence of drugs, alcohol, or medication.
- **Use Correct Blade:** Select the appropriate blade for the material and type of cut.

SETUP AND ASSEMBLY

Unpacking and Inspection

Carefully remove all components from the packaging. Inspect the saw for any damage that may have occurred during shipping. Report any damage immediately to your dealer. Ensure all parts listed in the packing list are present before proceeding with assembly.

Blade Installation and Tensioning

The Delta 40-694 features a single-lever, tool-free blade tensioning system for quick and easy blade changes. The

upper arm lifts and locks in the raised position, providing ample space for blade access, especially for fretwork.

1. Lift the upper arm to its fully raised position and engage the locking mechanism.
2. Loosen the blade clamps on both the upper and lower arms.
3. Insert the new scroll saw blade, ensuring the teeth are pointing downwards.
4. Securely tighten the blade clamps.
5. Release the upper arm and apply tension using the blade tensioning lever. Adjust until the blade is taut but not over-stressed.



Detail view of the scroll saw's upper arm, highlighting the blade tensioning lever, variable speed dial, and flexible dust blower. This area is crucial for blade changes and precise adjustments.

Table Adjustment

The large, cast-iron table can be tilted from 0° to 45° left and right for angled cuts. Use the angle scale and locking knob located beneath the table to set the desired angle. Ensure the table is securely locked before operation.

Dust Blower Adjustment

The flexible dust blower helps keep the cutting line clear of sawdust. Position the nozzle directly over the cutting area for optimal visibility.



An overview of the Delta 40-694 scroll saw, showing its main components including the table, arm, and base.

OPERATING INSTRUCTIONS

Power On/Off and Speed Control

The On/Off switch and electronic variable speed dial are conveniently located on the arm for easy access. Turn the dial to adjust the Strokes Per Minute (SPM) from 400 to 1,750, allowing you to match the speed to the material and blade type for optimal cutting results.

Cutting Capacities

- At 90°: 2-1/8 inches
- At 45° (Left and Right): 1-5/8 inches

General Cutting Techniques

Always feed the workpiece slowly and steadily into the blade. Avoid forcing the material, as this can cause the blade to break or result in an uneven cut. For intricate cuts, use a finer blade and a slower speed. For thicker materials, a coarser blade and moderate speed may be more effective.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your scroll saw.

- **Cleaning:** After each use, unplug the saw and use a brush or vacuum to remove sawdust from the table, blade area, and motor vents.
- **Blade Care:** Proper blade tensioning is crucial for maximizing blade life and accuracy. Replace dull or damaged blades promptly.
- **Inspection:** Periodically check all fasteners and moving parts for tightness and wear. Tighten any loose screws and replace worn components as needed.



A view of the integrated blade storage compartment located on the scroll saw, designed for convenient access to different blade types.

TROUBLESHOOTING

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

Problem	Possible Cause	Solution
Blade breaks frequently	Incorrect blade tension, wrong blade type for material, forcing workpiece, worn blade.	Adjust blade tension, select appropriate blade, reduce feed rate, replace blade.

Problem	Possible Cause	Solution
Excessive vibration	Loose components, saw not securely mounted, unbalanced workpiece.	Check and tighten all fasteners, ensure saw is stable, support workpiece properly.
Poor cut quality (rough edges, inaccurate cuts)	Dull blade, incorrect blade type, improper feed rate, incorrect table angle.	Replace blade, use finer blade for detail, adjust feed rate, verify table angle.
Saw does not start	No power, faulty switch, motor issue.	Check power connection, ensure switch is ON, consult qualified service personnel.

SPECIFICATIONS

Key technical specifications for the Delta 40-694 20-inch Variable Speed Scroll Saw:

- **Amperage:** 1.3 Amps
- **Speeds:** 400-1,750 SPM (Strokes Per Minute)
- **Capacity:** 20 inches
- **Stroke Length:** 3/4 inch
- **Table Size:** 16 inches x 24 inches
- **Table Tilt:** 0° – 45°, Left and Right
- **Product Dimensions:** 30"L x 20"W x 13"H
- **Item Weight:** 60 Pounds
- **Voltage:** 120 Volts
- **Wattage:** 156 watts
- **Blade Material:** High Speed Steel
- **Surface Recommendation:** Wood
- **Power Source:** Electrical cable

WARRANTY AND SUPPORT

Warranty Information

This Delta 40-694 Scroll Saw is covered by a **5 Year Limited Warranty**. Please refer to the warranty card included with your product for full terms and conditions, or visit the official Delta Power Tools website for detailed warranty information.

Customer Support

For technical assistance, replacement parts, or warranty claims, please contact Delta Power Tools customer service. Contact information can typically be found on the manufacturer's website or on the product packaging.