

CRAFTSMAN 103.23070, 103.23071

CRAFTSMAN Wood Lathe Models 103.23070 & 103.23071 Instruction and Parts Manual

Comprehensive Guide for Setup, Operation, and Maintenance

INTRODUCTION

This manual provides essential instructions for the safe and efficient operation, installation, and maintenance of your CRAFTSMAN Wood Lathe, models 103.23070 and 103.23071. Please read this manual thoroughly before operating the machine to ensure proper use and to prevent injury or damage. Keep this manual for future reference.

SAFETY INSTRUCTIONS

Operating any power tool can be dangerous if proper safety precautions are not observed. Always follow these guidelines:

- **Wear Eye Protection:** Always wear safety glasses or a face shield to protect against flying debris.
- **Use Hearing Protection:** Prolonged exposure to noise can cause hearing damage.
- **Keep Work Area Clean:** Cluttered areas invite accidents. Ensure good lighting.
- **Do Not Operate Under Influence:** Never operate the lathe while under the influence of drugs, alcohol, or medication.
- **Secure Workpiece:** Always ensure the workpiece is securely mounted before starting the lathe.
- **Avoid Loose Clothing and Jewelry:** These can get caught in moving parts. Tie back long hair.
- **Disconnect Power:** Always disconnect the power supply before making adjustments, changing accessories, or performing maintenance.
- **Use Correct Tools:** Do not force a small tool or attachment to do the job of a heavy-duty tool.
- **Maintain Tools:** Keep tools sharp and clean for better and safer performance.

SETUP AND INSTALLATION

Proper installation is crucial for the stability and performance of your wood lathe. Follow these steps carefully:

1. **Unpacking:** Carefully remove all components from the packaging. Verify that all parts listed in the packing list are present.
2. **Mounting:** Securely mount the lathe to a sturdy workbench or stand using appropriate bolts and washers. Ensure the mounting surface is level and capable of supporting the lathe's weight and operational forces.
3. **Assembly:** Attach the tailstock, tool rest, and other accessories as per the assembly diagrams. Ensure all fasteners are tightened securely.
4. **Electrical Connection:** Connect the lathe to a grounded electrical outlet with the correct voltage and amperage as specified on the motor nameplate. Do not use extension cords unless absolutely necessary, and ensure they are rated for the tool's power requirements.
5. **Initial Inspection:** Before first use, manually rotate the spindle to check for any obstructions or binding. Ensure all guards are in place and functional.

OPERATING INSTRUCTIONS

Familiarize yourself with the controls and functions before beginning any turning operations.

Basic Operation:

- **Selecting Speed:** Adjust the belt to the appropriate pulley setting for the desired spindle speed. Lower speeds are generally used for larger diameter workpieces and roughing cuts, while higher speeds are for smaller diameters and finishing.
- **Mounting Workpiece:**
 - For spindle turning, secure the workpiece between the headstock drive center and the tailstock live center.
 - For faceplate turning, attach the workpiece securely to the faceplate using screws.
- **Adjusting Tool Rest:** Position the tool rest as close as possible to the workpiece without touching it, and slightly below the center line of the workpiece. Lock it securely.
- **Starting the Lathe:** Turn on the power switch. Allow the lathe to reach full speed before engaging the cutting tool.
- **Turning Techniques:** Always use sharp turning tools. Apply light, controlled cuts, moving the tool smoothly across the workpiece. Never force the tool.
- **Stopping the Lathe:** Turn off the power switch and allow the spindle to come to a complete stop before removing the workpiece or making adjustments.

MAINTENANCE AND LUBRICATION

Regular maintenance ensures the longevity and optimal performance of your CRAFTSMAN Wood Lathe.

- **Cleaning:** After each use, clean the lathe thoroughly, removing all wood chips and dust. Use a brush or vacuum cleaner. Do not use compressed air as it can force dust into bearings.
- **Lubrication:**

- Apply a light coat of machine oil to the bedways and tailstock quill periodically to ensure smooth movement.
- Check and lubricate motor bearings if specified in the motor's separate instructions. Most modern motors have sealed bearings that do not require lubrication.
- Lubricate the lead screw (if applicable) with a light grease or oil.
- **Belt Tension:** Periodically check the drive belt tension. It should be taut enough to prevent slipping but not so tight as to cause excessive wear on bearings.
- **Fastener Check:** Regularly inspect all nuts, bolts, and screws for tightness. Tighten any loose fasteners.
- **Tool Sharpening:** Keep all turning tools sharp. Dull tools can cause kickbacks and produce poor results.

PARTS LIST AND EXPLODED VIEW DIAGRAMS

This section provides a detailed list of all components for CRAFTSMAN Wood Lathe models 103.23070 and 103.23071, along with exploded view diagrams. These diagrams illustrate the assembly of various parts, making it easier to identify components for replacement or repair.

Refer to the numbered callouts in the diagrams to locate specific parts and their corresponding descriptions in the parts list. When ordering replacement parts, always specify the model number of your lathe and the part number from this manual to ensure compatibility.

Note: Actual diagrams are not included in this digital text format. Please refer to the physical manual for visual representations.

TROUBLESHOOTING

This section addresses common issues you might encounter during the operation of your wood lathe.

Problem	Possible Cause	Solution
Lathe does not start	No power supply; tripped circuit breaker; faulty switch; motor overload.	Check power cord and outlet; reset circuit breaker; inspect switch for damage; allow motor to cool.
Excessive vibration	Unbalanced workpiece; loose mounting; worn bearings; loose belt.	Rebalance workpiece; tighten mounting bolts; inspect and replace bearings if necessary; adjust belt tension.
Motor overheats	Overload; insufficient ventilation; worn bearings.	Reduce load; ensure clear airflow around motor; inspect and replace bearings.
Poor turning finish	Dull tools; incorrect speed; improper tool presentation; workpiece not secure.	Sharpen tools; adjust speed; refine turning technique; ensure workpiece is firmly mounted.

SPECIFICATIONS

The following specifications apply to CRAFTSMAN Wood Lathe Models 103.23070 and 103.23071. Please note that specifications may vary slightly based on manufacturing revisions.

- **Model Numbers:** 103.23070, 103.23071
- **Type:** Wood Lathe

- **Power Source:** Electric (specific voltage/amperage typically found on motor nameplate)
- **Swing Over Bed:** *(Specific measurement would be here, e.g., 12 inches)*
- **Distance Between Centers:** *(Specific measurement would be here, e.g., 36 inches)*
- **Spindle Speeds:** *(Specific range or steps would be here, e.g., 4 speeds, 600-2400 RPM)*
- **Motor:** *(Specific horsepower, e.g., 1/2 HP)*
- **Weight:** *(Specific weight, e.g., 150 lbs)*

Note: For precise specifications, refer to the data plate on your specific machine.

WARRANTY AND SUPPORT

CRAFTSMAN products are manufactured to high-quality standards. For information regarding warranty coverage, service, or to obtain replacement parts, please contact CRAFTSMAN customer support or visit their official website. Keep your purchase receipt as proof of purchase.

For technical assistance or further inquiries, please refer to the contact information provided with your original purchase documentation or on the manufacturer's official support channels.