

Clausing 8000 Series

Clausing 17-inch Lathe 8000 Series Instruction and Parts Manual

Comprehensive Guide for Installation, Operation, Maintenance, and Parts Identification

1. INTRODUCTION

This manual provides detailed instructions for the Clausing 17-inch Lathe 8000 Series. It covers essential information for proper installation, safe operation, routine maintenance, and includes a comprehensive parts list with corresponding assembly breakdown drawings. This document is intended for qualified personnel responsible for the setup, operation, and maintenance of the lathe.

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Number of Pages: Approximately 90 (28 pages instruction, 68 pages parts)

2. SETUP AND INSTALLATION

Proper installation is crucial for the safe and efficient operation of your Clausing 17-inch Lathe. This section outlines the necessary steps for unpacking, positioning, leveling, and securing the machine. Adherence to these guidelines will ensure optimal performance and longevity.

- **Unpacking:** Carefully remove all packaging materials. Inspect the lathe for any shipping damage.
- **Location:** Choose a stable, level surface with adequate space for operation and maintenance. Ensure proper lighting and ventilation.
- **Leveling:** Use a precision level to ensure the lathe bed is perfectly level. Adjust leveling screws as required.
- **Securing:** Anchor the lathe to the floor using appropriate fasteners to prevent movement during operation.
- **Electrical Connection:** Connect the lathe to the correct power supply as specified in the electrical requirements section. Consult a qualified electrician if unsure.

3. OPERATING INSTRUCTIONS

This section details the control functions and operational procedures for the Clausing 17-inch Lathe. Familiarize

yourself with all controls before attempting any machining operations. Always prioritize safety.

3.1. Control Functions Overview

Understand the purpose and function of each control lever, knob, and switch on the lathe. Refer to the control panel diagram for specific locations.

3.2. Basic Operation

- **Power On/Off:** Locate and operate the main power switch.
- **Spindle Speed Selection:** Adjust the spindle speed according to the material and cutting tool being used.
- **Feed Rate Selection:** Set the desired feed rate for longitudinal and cross feeds.
- **Chuck Operation:** Learn how to safely mount and remove workpieces from the chuck.
- **Tool Post Operation:** Understand how to mount and adjust cutting tools in the tool post.

3.3. Safety Precautions

Always wear appropriate personal protective equipment (PPE), including safety glasses. Ensure all guards are in place before operation. Never leave the machine unattended while running.

4. MAINTENANCE

Regular maintenance is essential to maintain the accuracy, performance, and safety of your Clausing 17-inch Lathe. Follow the recommended schedules and procedures.

4.1. Lubrication

Proper lubrication prevents wear and ensures smooth operation. Refer to the lubrication chart for types of lubricants and application points.

- **Daily Checks:** Verify oil levels in headstock, gearbox, and apron.
- **Weekly Lubrication:** Apply grease to specified points and oil to sliding surfaces.
- **Monthly Lubrication:** Perform more thorough lubrication as indicated in the detailed lubrication schedule.

4.2. Service and Belt Adjustments

Periodically inspect and adjust drive belts to ensure proper tension. Check for wear on moving parts and replace as necessary.

- **Belt Tension:** Adjust drive belts to the specified tension to prevent slippage and excessive wear.
- **Cleaning:** Keep the lathe clean from chips and debris. Clean guideways and lead screws regularly.
- **Inspection:** Routinely inspect all components for signs of wear, damage, or loose fasteners.

5. PARTS LIST AND ASSEMBLY BREAKDOWN DRAWINGS

This section contains a complete list of parts for the Clausing 17-inch Lathe 8000 Series, accompanied by detailed assembly breakdown drawings. These resources are invaluable for identifying components for replacement or repair.

- **Component Identification:** Use the drawings to locate specific parts within assemblies.
- **Part Numbers:** Refer to the parts list for official part numbers when ordering replacements.
- **Exploded Views:** Detailed exploded views illustrate how components fit together.

6. WIRING DIAGRAMS

Detailed wiring diagrams are provided to assist with electrical troubleshooting and maintenance. Only qualified electricians should perform work on the lathe's electrical system.

- **Electrical Schematics:** Diagrams illustrate the complete electrical circuit of the lathe.
- **Component Layout:** Shows the physical location of electrical components.

7. SPECIFICATIONS

This section outlines the technical specifications and dimensions of the Clausing 17-inch Lathe 8000 Series.

Feature	Specification
Swing Over Bed	17 inches
Series	8000 Series
Publication Date of Manual	September 1978
Manual Page Count	Approx. 90 pages

8. TROUBLESHOOTING

This section provides guidance for identifying and resolving common operational issues that may arise with the Clausing 17-inch Lathe. For complex problems, consult a qualified technician.

8.1. Common Issues and Solutions

- **Machine Not Starting:** Check power supply, emergency stop button, and circuit breakers.
- **Excessive Vibration:** Inspect workpiece mounting, tool sharpness, and machine leveling.
- **Poor Surface Finish:** Verify tool geometry, cutting speed, feed rate, and machine rigidity.
- **Unusual Noises:** Investigate lubrication points, belt tension, and bearing conditions.

9. WARRANTY AND SUPPORT

This instruction and parts manual for the Clausing 17-inch Lathe 8000 Series does not contain specific warranty information for the lathe itself. For details regarding product warranty, technical support, or authorized service, please contact Clausing directly or refer to the original purchase documentation that accompanied your lathe.