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Central Machinery 45861

Central Machinery 9" x 20" Metal Lathe Model 45861 Instruction Manual

SET UP AND OPERATING INSTRUCTIONS

This manual provides comprehensive instructions for the safe and efficient operation, maintenance, and parts identification of the Central Machinery 9" x 20" Metal Lathe, Model 45861.

1. Important Safety Information

Operating any machinery, especially a metal lathe, requires strict adherence to safety protocols to prevent injury and damage. This section outlines critical safety instructions.

- **General Power Tool Safety Warnings:** Familiarize yourself with all general safety warnings applicable to power tools.
- **Lathe Safety Warnings:** Specific warnings related to lathe operation, including rotating parts, chip hazards, and proper workholding.
- **Grounding:** Ensure the lathe and all associated electrical components are properly grounded. This includes tools with three-prong plugs and the correct use of extension cords.
- **Symbol Definitions:** Understand the meaning of all safety symbols and warning labels present on the machine and within this manual.

2. Specifications

This section details the technical specifications of the Central Machinery 9" x 20" Metal Lathe Model 45861. Refer to the original manual for precise measurements and capabilities.

The manual itself contains 39 pages of detailed information, including specifications for the lathe's dimensions, motor, capacities, and other operational parameters.

3. Setup and Initial Use

Proper setup is crucial for the performance and longevity of your metal lathe. Follow these steps carefully.

- **Unpacking:** Instructions for safely removing the lathe from its packaging and inspecting for any shipping damage.
- **Mounting:** Guidance on securely mounting the lathe to a workbench or stand, ensuring stability and level operation.
- **Functions:** An overview of the main components and their functions, preparing you for operation.

4. Operating Instructions

This section provides detailed guidance on how to operate the Central Machinery 9" x 20" Metal Lathe for various machining tasks.

- **Tool Set Up:** Instructions for selecting, installing, and adjusting cutting tools.
- **Workpiece and Work Area Set Up:** Procedures for securing workpieces, ensuring proper clearance, and maintaining a safe work environment.
- **Spindle Speeds:** Guidance on selecting appropriate spindle speeds for different materials and operations.
- **General Operating Instructions:** Step-by-step procedures for common lathe operations, including turning, facing, and drilling.

5. Maintenance and Servicing

Regular maintenance is essential to ensure the longevity, accuracy, and safe operation of your metal lathe.

- **Cleaning and Maintenance:** Procedures for routine cleaning, chip removal, and general upkeep.
- **Lubrication:** Detailed instructions and diagrams for lubricating all moving parts, including recommended lubricants and frequency.

6. Parts Lists and Diagrams

This section provides comprehensive exploded view diagrams and corresponding parts lists, crucial for identification, ordering replacement parts, and assembly/disassembly.

- **Headstock Parts List & Diagram:** Detailed breakdown of the headstock components.
- **Drive Parts List & Diagram:** Components related to the lathe's drive system.
- **Tensioning Roller Parts List:** Specific parts for the tensioning roller mechanism.
- **Quadrant Parts List & Diagram:** Components of the gear quadrant.
- **Motor Housing Parts List:** Parts associated with the motor housing.
- **Bed Parts List:** Components of the lathe bed.
- **Gear Box Parts List & Diagram:** Detailed view of the gear box assembly.
- **Apron Parts List:** Components of the apron assembly.
- **Saddle and Cross Slide Parts List & Diagram:** Breakdown of the saddle and cross slide mechanisms.
- **Tailstock Parts List & Diagram:** Components of the tailstock assembly.
- **Travelling Rest Parts List:** Parts for the travelling rest.
- **Steady Rest Parts List:** Parts for the steady rest.
- **Wiring Diagram:** Electrical schematic for the lathe's wiring.

CENTRAL MACHINERY

9" X 20" GEARED HEAD, BELT DRIVEN, BENCH LATHE

Model 45861

SET UP AND OPERATING INSTRUCTIONS



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Figure 1: Cover page of the Central Machinery 9" x 20" Metal Lathe Model 45861 Instruction Manual, showing the lathe and model number.

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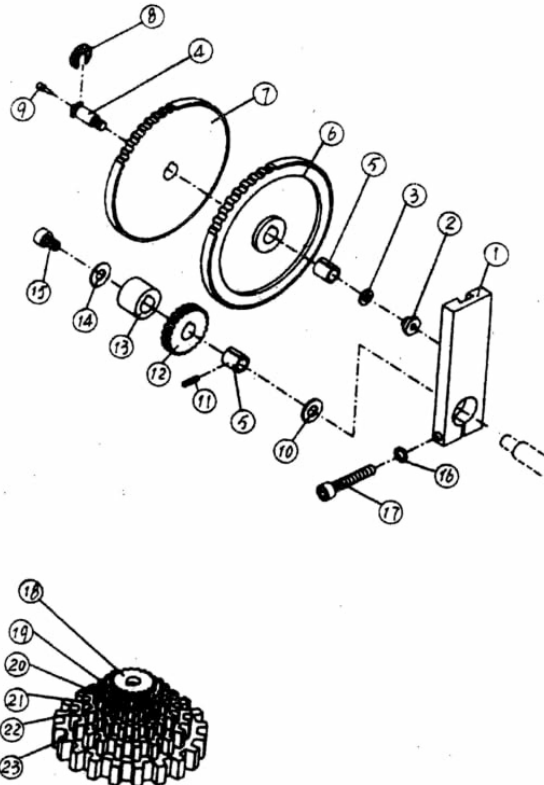
Figure 2: Table of Contents from the manual, outlining sections such as safety, specifications, setup, operating instructions, maintenance, and various parts lists.

QUADRANT PARTS LIST

Part	Description	Qty.
1C	Bracket	1
2C	T-nut	1
3C	Washer	1
4C	Shaft	1
5C	Bushing	2
6C	Gear	1
7C	Gear	1
8C	Washer	1
9C	Oil Feeder	1
10C	Washer	1
11C	Pin	1
12C	Gear	2

QUADRANT PARTS LIST

Part	Description	Qty.
13C	Spacer	1
14C	Washer	1
15C	Screw M6x10	1
16C	Spring Washer	1
17C	Screw M6x35	1
18C	Gear 28T	1
19C	Gear 36T	1
20C	Gear 42T	1
21C	Gear 45T	1
22C	Gear 60T	1
23C	Gear 80T	1



Note: When ordering parts from this list be sure to include the correct suffix.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

Figure 3: An example page from the manual showing the Quadrant Parts List with corresponding part numbers, descriptions, quantities, and an exploded view diagram for assembly reference.