Bullard Cutmaster Turret Lathe

Bullard Cutmaster Turret Lathe Service and Operation Manual

Comprehensive guide for installation, operation, maintenance, and service.

Introduction

This manual provides essential information for the service, instruction, operation, maintenance, and parts of the Bullard Cutmaster Turret Lathe. It is designed to assist operators and service personnel in ensuring the efficient and safe operation of the machine.
This edition was originally published in 1950 and contains detailed diagrams and instructions pertinent to the models listed below.

Models Covered

This manual is applicable to the following Bullard Cutmaster Turret Lathe models:

- Cut Master 30"
- Cut Master 36"
- Cut Master 42"
- Cut Master 54"
- Cut Master 64"
- Cut Master 74"

Manual Contents Overview

This comprehensive manual includes detailed sections on:

- Operation Procedures
- Installation Instructions
- Lubrication Guidelines
- Maintenance Schedules and Procedures

- Service Information
- Parts Identification
- Wiring Diagrams
- Hydraulic Diagrams

Setup and Installation

Proper installation is crucial for the safe and efficient operation of your Bullard Cutmaster Turret Lathe. This section provides guidelines for site preparation, machine placement, leveling, and initial power connections. Refer to the detailed diagrams for specific requirements.
Key steps include:

1. Unpacking and inspection for shipping damage.
2. Selecting a suitable foundation that can support the machine's weight and operational stresses.
3. Leveling the machine precisely to ensure accuracy during operation.
4. Connecting electrical power according to local codes and the machine's specifications.
5. Initial lubrication of all moving parts as specified in the lubrication section.

Image: Cover of the Bullard Cutmaster Turret Lathe Service and Operation Manual. This image illustrates the front cover of the comprehensive guide, which contains all necessary instructions for the machine.

Operating Procedures

This section details the correct procedures for operating the Bullard Cutmaster Turret Lathe. It covers machine controls, safety precautions, workpiece setup, and various machining operations. Adherence to these procedures is essential for operator safety and optimal machine performance.

Important operational considerations:

- Understanding all control levers, buttons, and indicators.

- Proper chucking and securing of workpieces.
- Selecting appropriate cutting speeds and feeds for different materials.
- Using coolant effectively to prolong tool life and improve surface finish.
- Emergency stop procedures.

Lubrication and Maintenance

Regular lubrication and maintenance are critical for the longevity and reliability of your Bullard Cutmaster Turret Lathe. This section provides detailed schedules and instructions for lubricating all moving parts, checking fluid levels, and performing routine inspections.

Lubrication Schedule

Refer to the lubrication chart for specific points and recommended lubricants. Daily, weekly, and monthly checks are outlined to ensure all critical components are adequately lubricated.

Preventative Maintenance

This includes cleaning, inspection of wear parts, adjustment of gibs, and checking electrical connections. Follow the guidelines to prevent premature wear and unexpected downtime.

Parts and Service

This section contains exploded views and parts lists to assist in identifying and ordering replacement components. Detailed service procedures are provided for common repairs and adjustments.

Parts Identification

Use the provided diagrams and tables to accurately identify the part number for any component requiring replacement. Always use genuine Bullard replacement parts.

Service Procedures

Instructions for disassembling, inspecting, repairing, and reassembling various machine sub-assemblies are included. Always ensure power is disconnected before performing any service work.

Wiring and Hydraulic Diagrams

Detailed wiring and hydraulic diagrams are provided to aid in troubleshooting electrical and hydraulic system issues. These diagrams are essential for qualified technicians performing diagnostics and repairs.

Wiring Diagram

Illustrates the electrical circuits, components, and connections within the machine. Use this diagram for diagnosing electrical faults and ensuring correct wiring during repairs.

Hydraulic Diagram

Shows the hydraulic system layout, including pumps, valves, cylinders, and fluid lines. This is crucial for understanding hydraulic flow and troubleshooting pressure or movement issues.

Troubleshooting

This section offers a guide to common operational problems and their potential solutions. It is designed to help operators and technicians quickly diagnose and resolve minor issues, minimizing downtime.

Problem	Possible Cause	Solution
Machine not starting	No power, emergency stop engaged, safety interlock open	Check power supply, disengage E-stop, close all guards
Poor surface finish	Dull tool, incorrect speed/feed, machine vibration	Replace/sharpen tool, adjust parameters, check machine leveling/bearings
Hydraulic system malfunction	Low fluid level, clogged filter, faulty pump/valve	Check fluid, replace filter, inspect/replace pump/valve (refer to hydraulic diagram)

Note: For complex issues, consult the detailed service sections or contact a qualified technician.

Specifications

Key specifications for the Bullard Cutmaster Turret Lathe are provided below. These details are important for understanding the machine's capabilities and requirements.

- **Publisher:** Bullard
- **Publication Date:** January 1, 1950
- **Language:** English
- **Approximate Pages:** 122
- **Approximate Item Weight:** 13 ounces (for the manual)
- **ASIN:** B004THD6SS

Note: Machine specifications (e.g., dimensions, motor power, capacities) are detailed within the respective operational and service sections of the manual.

Warranty and Support

This manual is a historical document from 1950. Information regarding original product warranties or direct manufacturer support for machines of this vintage may be limited or no longer available. For operational assistance or parts sourcing for vintage machinery, it is recommended to consult with specialized industrial machinery restoration experts or historical machinery forums.
For inquiries regarding this specific manual (ASIN: B004THD6SS), please refer to the vendor from whom it was acquired.