



## Instruction Manual

### K7B 7' Abrasive Chop Saw

Kalamazoo Industries, Inc.

6856 EK Ave

Kalamazoo, Michigan

**1-800-592-2050**

[www.kalamazooind.com](http://www.kalamazooind.com)

# 1. Introduction

Thank you for choosing the Kalamazoo Industries K7B7-Inch Heavy Duty Abrasive Chop Saw. This compact, powerful industrial machine is designed to deliver exceptional cutting performance for mild steel, rebar, pipe, and other ferrous materials.

The K7B features a robust 1HP TEFC motor delivering a spindle speed of 4800 RPM for clean, efficient cuts. Built with a cast iron base and cast aluminum arm, this machine is engineered for durability and precision in demanding shop environments.

Please read this manual thoroughly before operating the equipment. Proper understanding of the machine's features, safety requirements, and maintenance procedures will ensure optimal performance and longevity.

## 1.1 Intended Use

The K7B is specifically designed for cutting ferrous metals and materials including:

- Low-carbon steel (bar stock, angle iron, flat stock)
- Structural steel
- Rebar
- Mild steel pipe

# 2. Safety Information

## ⚠ WARNING

WARNING: TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN, LIQUID, OR MOISTURE.

Read all safety instructions before operating this equipment. Failure to follow safety guidelines may result in serious injury or death.

## 2.1 General Safety Precautions

1. Always wear appropriate personal protective equipment (PPE) including safety glasses, hearing protection, and work gloves.
2. Keep the work area clean and well-lit. Cluttered or dark areas invite accidents.
3. Do not operate the saw under the influence of drugs, alcohol, or medication that may impair judgment.

4. Keep bystanders at a safe distance from the operating machine.
5. Never leave the machine running unattended.
6. Ensure proper ventilation when cutting to avoid inhaling metal particles and fumes.
7. Disconnect power before changing wheels or performing maintenance.
8. Securely clamp all workpieces before cutting.

## **2.2 Electrical Safety**

- Ensure proper grounding of the machine before operation.
- Verify voltage requirements match your facility's electrical supply (115V or 220V, single phase).
- Use only qualified electricians for electrical connections and repairs.
- Do not operate in wet or damp conditions.

## **2.3 Abrasive Wheel Safety**

- Use only 7-inch abrasive cutoff wheels rated for 4800 RPM or higher.
- Inspect wheels for cracks, damage, or excessive wear before each use.
- Replace damaged or worn wheels immediately.
- Allow the wheel to reach full speed before beginning a cut.
- Select the appropriate wheel type for your specific material.

# 3. Technical Specifications

## 3.1 Motor and Performance

Specification	Value
Motor Power	1 HP TEFC
Spindle Speed	4800 RPM
Spindle Arbor	1/2 inch
Phase/Voltage Options	1PH 115V or 1PH 220V
Amperage (115V)	9.8 Amps

## 3.2 Cutting Capacity

Material Type	Maximum Capacity
Solid Round (Mild Steel)	1 inch
Pipe (Mild Steel)	2 inches

## 3.3 Construction

Component	Material/Type
Base	Cast Iron
Arm	Cast Aluminum
Bearings	Sealed Ball Bearings
Switch	On/Off Toggle Switch
Vise System	Screw Vise with Replaceable Jaw
Wheel Size	7" diameter abrasive cutoff wheel ( <b>wheel not included</b> )

### 3.4 Dimensions and Weight

Dimension	Measurement
Shipping Length	36 inches
Shipping Width	24 inches
Shipping Height	28 inches
Shipping Weight	125 lbs.

# 4. Features and Components

## 4.1 Key Features

The K7B incorporates several features designed for industrial performance and operator convenience:

### Cast Iron Base

The base is constructed from heavy-duty cast iron, providing exceptional stability, vibration dampening, and long-term durability.

### Cast Aluminum Arm

The saw arm is made from cast aluminum, offering a balance of strength and lightweight operation for smooth, controlled cuts.

### Screw Vise System

The screw vise provides secure material clamping with a replaceable rectangular jaw. Adjustable work length stop and down stop enable precise positioning for repetitive cuts.

### TEFC Motor

The Totally Enclosed Fan Cooled (TEFC) motor provides reliable performance in dusty shop environments while maintaining optimal operating temperature.

### Sealed Ball Bearings

High-quality sealed ball bearings ensure smooth operation and extended service life with minimal maintenance requirements.

## 4.2 Available Options

- Steel Stand (Model 12-P): Provides a stable, ergonomic working height. Contact Kalamazoo Industries for pricing.
- KAB7N-7" abrasive cutoff wheels (designed to cut mild steel)
- 051-001 – Replacement V-belt

# 5. Installation and Setup

## 5.1 Unpacking and Inspection

1. Carefully remove all packing materials and inspect the machine for shipping damage.
2. Verify all components are present according to the packing list.
3. Report any damage or missing items to Kalamazoo Industries immediately.
4. Remove any protective coatings from machined surfaces.

## 5.2 Location Requirements

- Place the machine on a level, stable surface capable of supporting the machine weight.
- Ensure adequate clearance around all sides for operation and maintenance.
- Provide adequate lighting and ventilation.
- Consider spark and debris management when positioning the machine.

## 5.3 Electrical Connection

**CAUTION:** Electrical connections must be performed by a qualified electrician in accordance with local electrical codes.

9. Verify the voltage requirements match your facility's power supply (115V or 220V single phase).
10. Connect to an appropriately rated circuit with proper overcurrent protection.
11. Ensure proper grounding according to electrical code requirements.
12. Check motor rotation direction before operating. The wheel should rotate down and toward the workpiece.

## 5.4 Abrasive Wheel Installation

5. Disconnect power from the machine.
6. Verify the wheel is rated for at least 4800 RPM and is designed for the material you will be cutting.
7. Install the wheel on the 1/2-inch spindle arbor.
8. Secure with the flange and arbor nut, tightening firmly.
9. Reconnect power and verify proper wheel rotation.

# 6. Operation Instructions

## 6.1 Pre-Operation Checklist

- Inspect the abrasive wheel for damage, cracks, or excessive wear
- Verify the wheel is properly secured and rated for 4800 RPM
- Ensure the work area is clean and free of obstructions
- Put on required personal protective equipment

## 6.2 Cutting Procedure

13. Position the material in the vise, ensuring it is square to the wheel.
14. Adjust the work length stop for desired cut length if making repetitive cuts.
15. Tighten the vise screw to securely clamp the material.
16. Turn on the machine using the toggle switch.
17. Allow the wheel to reach full operating speed (4800 RPM).
18. Lower the saw arm smoothly and steadily, applying consistent pressure.
19. Complete the cut and raise the saw arm to the full up position.
20. Turn off the machine and wait for the wheel to stop completely.
21. Release the vise and remove the workpiece.

## 6.3 Cutting Tips for Best Results

- Use consistent, moderate feed pressure; let the wheel do the work.
- Select the appropriate wheel type for your material.
- Support long materials adequately to prevent movement during cutting.
- Allow the wheel to clear debris naturally; do not force cuts.

# 7. Maintenance

## 7.1 Daily Maintenance

- Clean metal shavings, dust, and debris from the machine after each use
- Inspect the abrasive wheel for damage or wear
- Check vise operation and tighten if necessary

## 7.2 Weekly Maintenance

- Inspect V-belt for wear, cracks, or proper tension
- Check all fasteners for tightness

## 7.3 Monthly Maintenance

- Inspect bearings for noise or rough operation
- Clean motor housing to prevent dust accumulation and overheating
- Check wiring and electrical connections for wear or loose contacts
- Verify motor mounting hardware is secure

## 7.4 Wheel Replacement

Replace wheels when they show signs of wear (reduced diameter), visible damage, cracks, or chips. Follow the wheel installation procedure in Section 5.4.

## 8. Troubleshooting

Problem	Possible Cause	Solution
Motor will not start	Power disconnected	Check power supply and connections
	Faulty switch	Replace toggle switch
Excessive vibration	Loose wheel	Check arbor nut tightness
	Damaged wheel	Replace wheel
	Worn bearings	Replace spindle bearings
Poor cut quality	Worn wheel	Replace wheel
	Wrong wheel for material	Select appropriate wheel type
	Feed rate too fast	Reduce feed pressure
Wheel overheating	Excessive feed pressure	Reduce feed rate
	Improper wheel selection	Use wheel rated for material
Material slipping	Vise not tight	Increase vise pressure
	Worn vise jaw	Replace vise jaw
Belt slippage	Belt worn	Replace V-belt
	Improper tension	Adjust belt tension

## 9. Replacement Parts

Genuine Kalamazoo Industries replacement parts are kept in stock and shipped from Kalamazoo, Michigan. Using genuine parts ensures optimal machine performance and maintains warranty coverage.

### 9.1 Recommended Spare Parts

We recommend keeping the following parts on hand to minimize downtime:

Part Number	Description	Quantity
KAB7N	7" Abrasive Cutoff Wheels (Mild Steel)	5
051-001	Replacement V-Belt	1
701-012	Saw Spindle and Flange	1

### 9.2 Ordering Parts

To order replacement parts, contact Kalamazoo Industries directly or visit the online parts store at [www.kalamazooind.com](http://www.kalamazooind.com). Have your machine model number (K7B) ready when ordering.

# 10. Warranty Information

## 10.1 Warranty Coverage

Parts warranty is guaranteed for one year from the original date of purchase by the original purchaser, covering defects in material or workmanship under normal use. This warranty covers the replacement of defective parts. Some exclusions may apply.

## 10.2 Warranty Exclusions

This warranty does not cover:

- Normal wear items including abrasive wheels, belts, and bearings
- Damage resulting from misuse, abuse, or improper maintenance
- Damage from cutting inappropriate materials
- Modifications or alterations to the machine
- Damage from improper electrical connection

## 10.3 Return Authorization

Obtain written authorization before returning any merchandise by contacting Customer Service at (269)382-2050. Unauthorized returns may not be accepted.

## 11. Contact Information

### **KALAMAZOOINDUSTRIES, INC.**

Kalamazoo, Michigan

**Toll-Free: 1-800-592-2050**

Local: (269) 382-2050

Website: [www.kalamazooind.com](http://www.kalamazooind.com)

*Office Hours: Monday – Friday, 8:00 AM – 4:30 PM EST*

#### **Online Resources**

- Product Registration: [www.kalamazooind.com/product-registration](http://www.kalamazooind.com/product-registration)
- Parts Orders: [www.kalamazooind.com/parts-by-category](http://www.kalamazooind.com/parts-by-category)
- Technical Videos: [www.kalamazooind.com/videos](http://www.kalamazooind.com/videos)
- Contact Form: [www.kalamazooind.com/contact-us](http://www.kalamazooind.com/contact-us)

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