

KAKA INDUSTRIAL TBK-11

KAKA INDUSTRIAL TBK-11 Double Column Horizontal Band Saw User Manual

MODEL: TBK-11

KAKA INDUSTRIAL

1. GENERAL SAFETY INSTRUCTIONS

Operating any heavy machinery requires strict adherence to safety protocols to prevent injury and equipment damage. Read and understand all instructions before operating the KAKA INDUSTRIAL TBK-11 band saw.

- **Personal Protective Equipment (PPE):** Always wear safety glasses, hearing protection, and appropriate work gloves. Avoid loose clothing or jewelry that could get caught in moving parts.
- **Work Area:** Ensure the work area is clean, well-lit, and free from obstructions. Keep bystanders, especially children, away from the machine.
- **Power Disconnection:** Always disconnect the power supply before performing any adjustments, maintenance, or when the machine is not in use.
- **Machine Stability:** Ensure the band saw is securely placed on a level, stable surface. This machine is heavy (approximately 1835 pounds) and requires proper handling during installation.
- **Electrical Safety:** Verify that the power supply matches the machine's requirements (230V, 3PH, 3kW motor). Do not operate with damaged cords or plugs.
- **Blade Safety:** Never touch the blade while the machine is running. Ensure the blade guards are in place and properly adjusted.
- **Material Securement:** Always secure the workpiece firmly in the vise before cutting.
- **Emergency Stop:** Familiarize yourself with the location and operation of the emergency stop button.

2. PRODUCT OVERVIEW AND COMPONENTS

The KAKA INDUSTRIAL TBK-11 is a double column horizontal band saw designed for precise straight cuts in

various materials. It features a robust construction and semi-automatic operation with hydraulic downfeed control.

FUNCTION INDICATION



Figure 2.1: Labeled diagram indicating key components of the TBK-11 band saw, including the working light, blade guide scale, double column, control panel, clamping vise, work stop, hand wheel, and gauges for the cooling and oil tanks.

- **Double Column Design:** Provides vertical lifting for enhanced stability during cutting operations.
- **Hydraulic Downfeed Control:** Ensures smooth and consistent blade lowering for clean, uniform cuts.
- **Control Panel:** Centralized interface for operating the machine, including power, start/stop, and speed selection.
- **Clamping Vise:** Secures the workpiece for stable cutting.
- **Working Light:** Illuminates the cutting area for improved visibility.
- **Cooling System:** Integrated system to extend blade and workpiece lifespan by reducing heat during cutting.
- **Auto Shut-off:** Automatically stops the machine once a cut is completed.



Figure 2.2: Front view of the KAKA INDUSTRIAL TBK-11 Double Column Horizontal Band Saw, showcasing its robust frame, control panel, and cutting mechanism.



Figure 2.3: Detailed view of the control panel, featuring various buttons and a dial for speed adjustment, along with safety warnings.

3. SETUP AND INSTALLATION

Proper setup is essential for the safe and efficient operation of your TBK-11 band saw.

3.1 Unpacking and Placement

- Due to the machine's weight (1835 lbs), professional assistance and appropriate lifting equipment are required for unpacking and placement.
- Place the band saw on a solid, level concrete floor capable of supporting its weight and operational forces.
- Ensure adequate space around the machine for material handling, operation, and maintenance.

3.2 Electrical Connection

- The TBK-11 requires a 230V, 3-phase power supply with a 3kW motor. Consult a qualified electrician for proper wiring and connection.
- Ensure the power circuit is protected by an appropriate circuit breaker.

3.3 Initial Checks

- Inspect all components for any shipping damage.
- Verify that all fasteners are tight.
- Check the coolant and hydraulic fluid levels. Replenish if necessary.
- Ensure the saw blade is correctly installed and tensioned according to manufacturer guidelines.

4. OPERATING INSTRUCTIONS

The TBK-11 is a semi-automatic band saw designed for efficient and precise cutting.

4.1 Power On and Speed Selection

- Turn on the main power switch.
- Use the control panel to select the desired blade speed. The machine offers cutting speeds of 28, 45, and 59 meters per minute (MPM). Select the appropriate speed based on the material being cut.

4.2 Workpiece Clamping

- Position the material to be cut on the work table.
- Use the hand wheel to adjust and firmly clamp the workpiece in the vise. Ensure the material is stable and cannot shift during the cut.



Figure 4.1: Close-up view of the band saw blade positioned above the material vise, ready for cutting.

4.3 Initiating the Cut

- Press the start button on the control panel to begin the cutting cycle.
- The hydraulic downfeed system will automatically lower the blade through the material at a controlled rate.
- The integrated cooling system will activate to lubricate the blade and workpiece, reducing heat and extending component life.

4.4 Completing the Cut

- Once the cut is complete, the machine's auto shut-off feature will stop the blade and the hydraulic system will retract the saw head.
- Release the vise and remove the cut material.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your KAKA INDUSTRIAL TBK-11 band

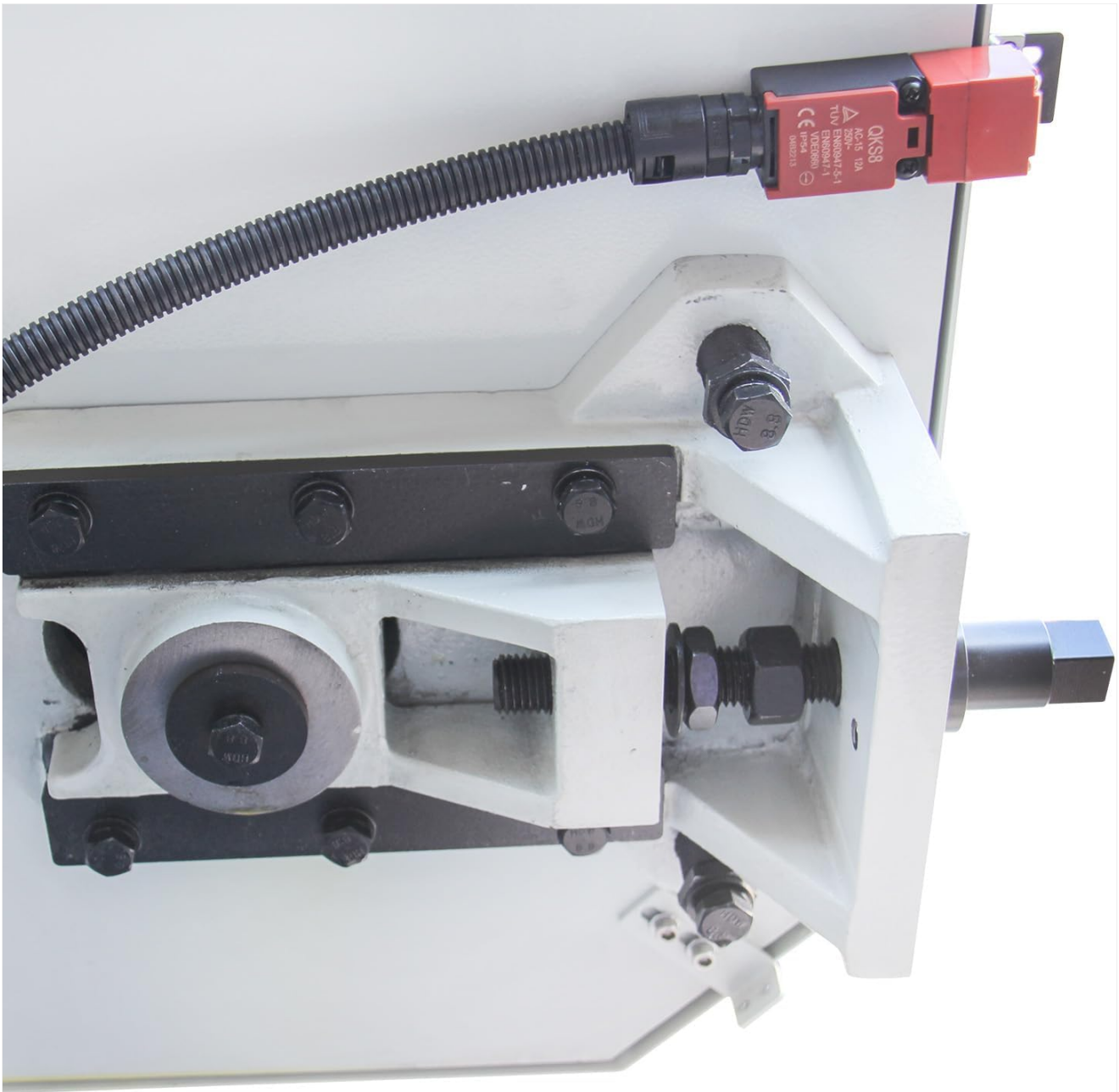


Figure 5.1: Detail of the blade guide and tensioning assembly, critical components for accurate cutting and blade life.

- **Daily Cleaning:** Clean the machine after each use, removing chips and debris from the work area, blade, and vise.
- **Coolant System:** Regularly check the coolant level and quality. Replace coolant as needed to ensure effective cooling and lubrication. Clean the coolant tank and filter periodically.
- **Blade Inspection and Replacement:** Inspect the saw blade for wear, damage, or dullness. Replace worn blades promptly to maintain cut quality and prevent machine strain. Ensure proper blade tension after replacement.
- **Hydraulic System:** Check hydraulic fluid levels and inspect hoses for leaks or damage.
- **Lubrication:** Lubricate all moving parts as indicated in the machine's lubrication points.
- **Electrical Components:** Periodically inspect electrical cords and connections for wear or damage.

Always power off and disconnect the machine from the electrical supply before performing any maintenance or adjustments.

6. TROUBLESHOOTING

This section provides general guidance for common operational issues. For complex problems, contact KAKA INDUSTRIAL customer support.

- **Machine Does Not Start:**

- Check if the main power switch is on.
- Verify the power cord is securely plugged in.
- Check the circuit breaker for tripped circuits.
- Ensure the emergency stop button is not engaged.

- **Poor Cut Quality (Rough, Uneven):**

- Inspect the saw blade for dullness or damage; replace if necessary.
- Ensure the blade is properly tensioned.
- Verify the workpiece is securely clamped in the vise.
- Adjust the cutting speed for the material being cut.

- **Blade Stops During Cut:**

- Check for excessive downfeed pressure; adjust the hydraulic downfeed rate.
- Ensure the blade is not binding in the material.
- Inspect the motor for overheating.

- **Coolant System Not Functioning:**

- Check the coolant level in the tank.
- Inspect the coolant pump for blockages or malfunction.
- Clean the coolant lines and nozzles.

7. SPECIFICATIONS

Key technical specifications for the KAKA INDUSTRIAL TBK-11 Double Column Horizontal Band Saw.

OVERALL DIMENSIONS



Figure 7.1: Overall dimensions of the TBK-11 band saw, indicating approximate length, width, and height.

Specification	Value
Model Number	TBK-11
Brand	KAKA INDUSTRIAL
Capacity	11 inches
Power Source	Corded Electric
Voltage	230 Volts (AC)
Wattage	3000 Watts (3 kW)
Motor Type	3 Phase
Cutting Speeds	28, 45, 59 MPM
Blade Material	Metal
Blade Length	138 Inches
Number of Teeth	24 (typical, may vary with blade)
Product Dimensions (L x W x H)	90"L x 60"W x 70"H
Item Weight	1835 Pounds
Special Features	Hydraulic Downfeed Control, Auto Shut-off
Included Components	Saw blade, Coolant pump, Working light, Material stand
UPC	720314476642

8. WARRANTY AND SUPPORT

KAKA INDUSTRIAL provides support and warranty coverage for its products.

8.1 Warranty Information

The KAKA INDUSTRIAL TBK-11 Double Column Horizontal Band Saw comes with a Limited Warranty. For specific terms and conditions of your warranty, please refer to the documentation included with your purchase or contact KAKA INDUSTRIAL directly.

8.2 Customer Support

For technical assistance, parts, or service inquiries, please contact KAKA INDUSTRIAL customer support. You can find contact information on the official KAKA INDUSTRIAL website or through your purchase platform.

For additional product information and to explore other KAKA INDUSTRIAL products, visit the official [KAKA INDUSTRIAL Store](#).