KAKA INDUSTRIAL JB23-10

KAKA INDUSTRIAL JB23-10 10 Ton Punch Press Machine User Manual

Model: JB23-10

1. Introduction

This manual provides essential information for the safe and efficient operation, installation, maintenance, and troubleshooting of your KAKA INDUSTRIAL JB23-10 10 Ton Punch Press Machine. Please read this manual thoroughly before operating the machine to ensure proper usage and to prevent injury or damage. Keep this manual accessible for future reference.

2. Safety Instructions

Operating heavy machinery like the JB23-10 punch press requires strict adherence to safety protocols. Failure to follow these instructions can result in serious injury or death.

General Safety

- Always wear appropriate Personal Protective Equipment (PPE), including safety glasses, hearing protection, and safety footwear. Avoid loose clothing or jewelry that could get caught in moving parts.
- Ensure the work area is clean, well-lit, and free from obstructions. Keep unauthorized personnel away from the machine during operation.
- Only trained and authorized personnel should operate, maintain, or repair this machine.
- Familiarize yourself with all controls, especially the Emergency Stop button, before starting any operation.
- Never bypass or modify safety devices, guards, or interlocks. This machine is designed with OSHA-compliant safety guards.

Electrical Safety

- Ensure the machine is properly grounded and connected to a power source that matches the machine's voltage requirements.
- Disconnect power before performing any maintenance, adjustments, or repairs.
- Do not operate the machine with wet hands or in damp conditions.

Mechanical Safety

- Keep hands and fingers clear of the die area and all moving parts during operation. Use appropriate tools for material

handling.

- Ensure dies are securely mounted and properly aligned before operation.
- Do not overload the machine beyond its rated capacity of 10 tons.
- Regularly inspect the machine for loose fasteners, damaged components, or signs of wear. Address any issues immediately.

3. Product Overview

The KAKA INDUSTRIAL JB23-10 is a robust 10-ton mechanical power press designed for various metal forming operations including punching, blanking, bending, and forming. Its C-frame design offers stability and accessibility, while user-friendly controls ensure efficient and safe operation.

Key Features

- **Powerful 10-Ton Punching Force:** Delivers up to 10 tons of pressure for precise metalworking.
- **Stable and Flexible C-Frame Design:** Durable structure provides superior stability and accessibility, with a tilting body up to 20° for easier material handling.
- **Smooth and Efficient Operation:** Equipped with a high-grade flywheel and rigid clutch system, maintaining consistent strokes at 140 times per minute for high-speed production.
- **Safe and User-Friendly Controls:** Features both footswitch and dual-hand button controls with OSHA-compliant safety guards and a built-in work light for enhanced visibility.
- **Heavy-Duty Construction:** Reinforced steel frame, precision-ground slides, and bronze bushes ensure accuracy, smooth operation, and long service life.

Components and Controls

Familiarize yourself with the main components and control panel of the JB23-10 punch press.

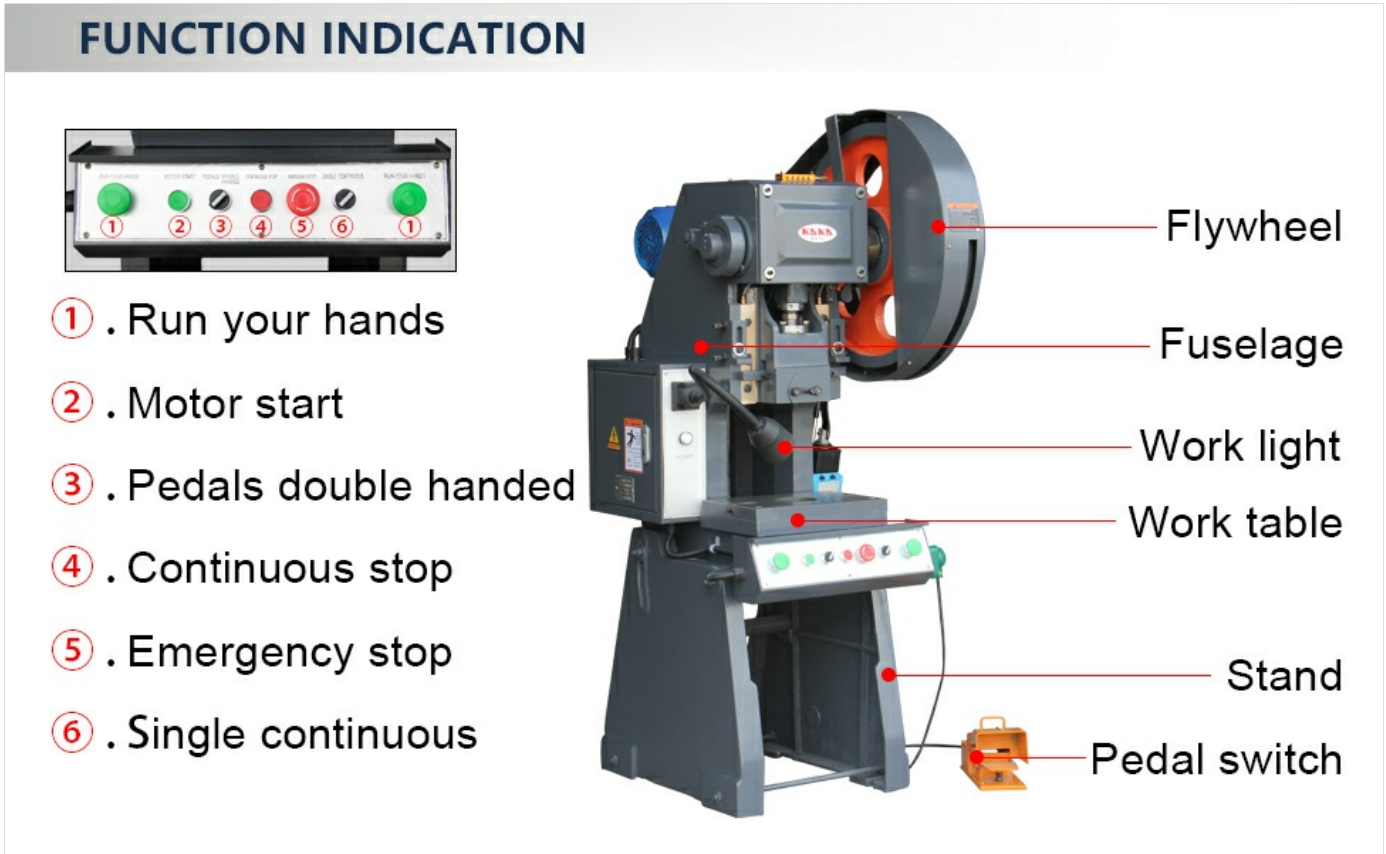


Figure 3.1: Labeled components of the JB23-10 Punch Press Machine. Key components include the flywheel, fuselage, work light, work table, stand, and pedal switch. The control panel features buttons for 'Run your hands', 'Motor start', 'Pedals double handed', 'Continuous

stop', 'Emergency stop', and 'Single continuous'.



Figure 3.2: Control Panel. This panel includes buttons for 'Run Your Hands' (green), 'Motor Start' (green), 'Pedals Double Handed' (selector), 'Continuous Stop' (red), 'Emergency Stop' (red), and 'Single Continuous' (selector).

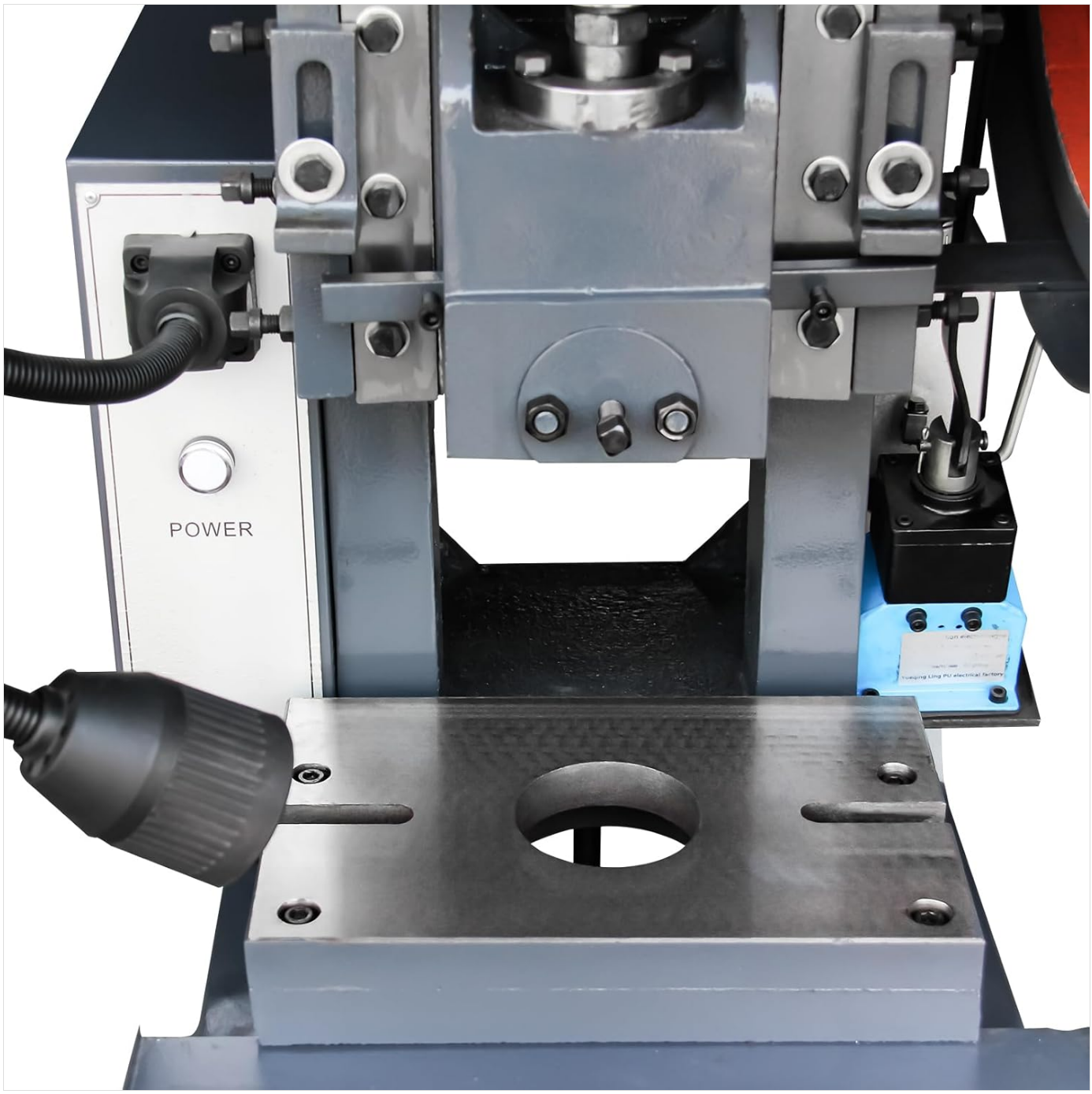


Figure 3.3: Work Area with Work Light. The integrated work light provides illumination for precise material positioning and operation.

4. Setup

Unpacking and Inspection

- Carefully unpack the machine and all accessories.
- Inspect all components for any shipping damage. Report any damage to the carrier and supplier immediately.
- Ensure all parts listed in the packing list are present.

Placement

- Place the punch press on a solid, level, and stable surface capable of supporting its weight (approximately 1102 lbs).
- Ensure adequate clearance around the machine for safe operation, material handling, and maintenance.
- The machine's body can tilt up to 20 degrees; ensure sufficient space for this adjustment if needed.



Figure 4.1: Overall Dimensions. The machine measures approximately 63 inches (160 cm) in height, 39.5 inches (100 cm) in width, and 27.5 inches (70 cm) in depth.

Electrical Connection

- Connect the machine to a power supply that matches the voltage and frequency specified on the machine's nameplate.
- Ensure the power outlet is properly grounded and protected by a circuit breaker.
- Consult a qualified electrician if you are unsure about the electrical requirements or connection.

Die Installation

- Ensure the machine is powered off and locked out before installing or changing dies.
- Carefully position the upper and lower dies according to your specific application.
- Securely fasten the dies using appropriate clamps and bolts. Ensure they are properly aligned to prevent damage to the dies or machine.

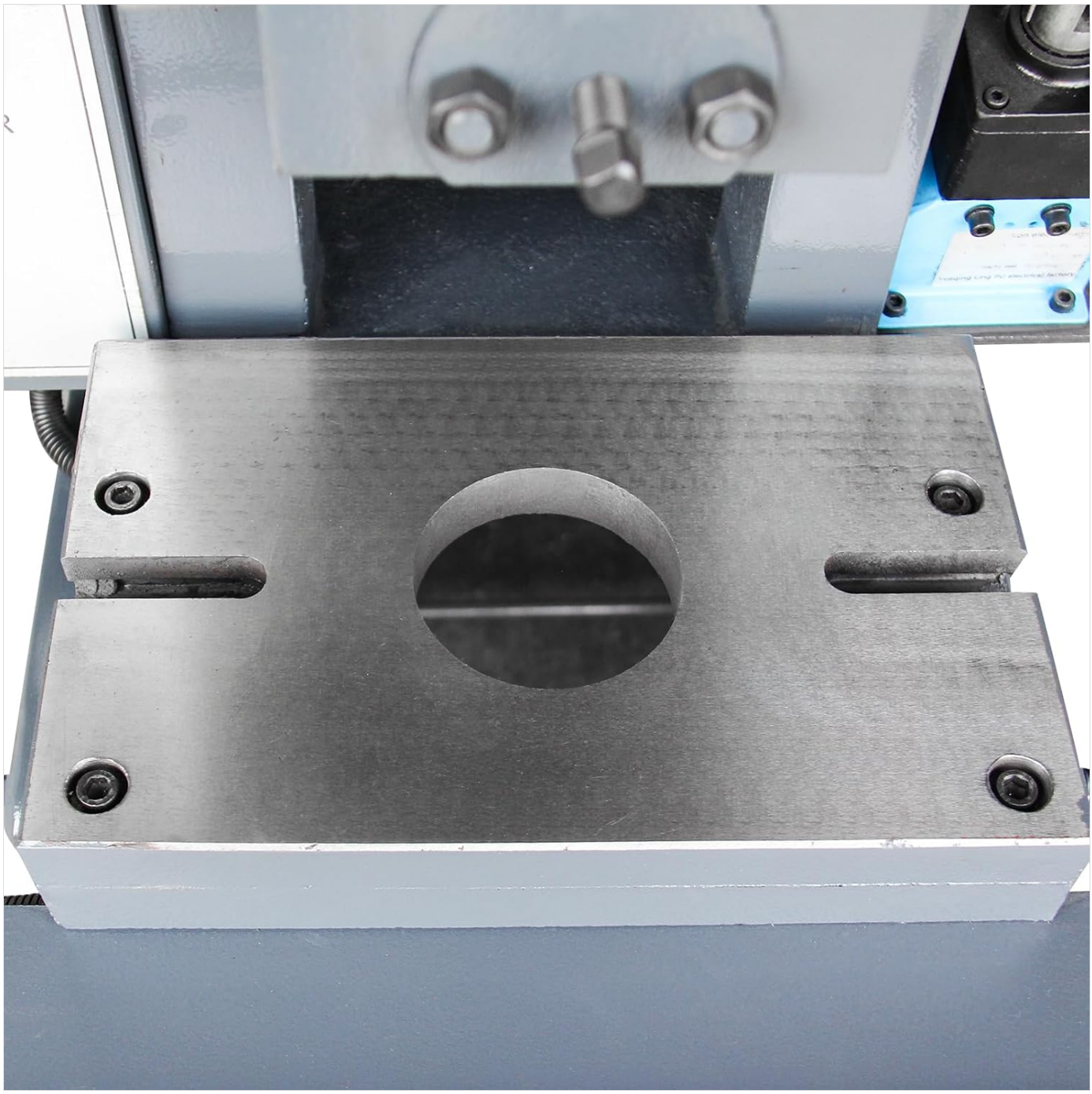


Figure 4.2: Work Table and Die Area. The lower die is shown with a circular opening, ready for material placement and punching operations.

5. Operating Instructions

Pre-Operation Checks

- Verify that all safety guards are in place and functioning correctly.
- Check that the dies are securely mounted and aligned.
- Ensure the lubrication system is adequately filled and functioning (refer to Figure 5.1).
- Clear the work area of any tools or debris.



Figure 5.1: Lubrication System. This system ensures moving parts are adequately lubricated for smooth operation and longevity.

Starting the Machine

1. Ensure the main power switch (Figure 5.2) is in the 'OFF' position before connecting to power.
2. Connect the machine to the appropriate power supply.
3. Turn the main power switch to the 'ON' position.
4. Press the green 'Motor Start' button on the control panel (Figure 3.2) to engage the motor. The flywheel will begin to rotate.



Figure 5.2: Main Power Switch. Located on the side control box, this switch controls the overall power to the machine.

Operation Modes

The JB23-10 offers different operation modes:

- **Single Continuous Mode:** Select 'Single Continuous' on the control panel. The machine will perform one stroke each time the 'Run Your Hands' buttons are pressed simultaneously or the foot pedal is activated.
- **Continuous Mode:** Select 'Continuous' on the control panel. The machine will perform continuous strokes as long as the 'Run Your Hands' buttons are pressed or the foot pedal is held down. Use with extreme caution and only for appropriate applications.
- **Foot Pedal Operation:** The foot pedal provides an alternative control method. Ensure the 'Pedals Double Handed' selector is engaged for foot pedal use.

Punching Procedure

1. Select the desired operation mode (Single Continuous or Continuous).
2. Place the material to be punched accurately on the lower die.

3. For single stroke operation, simultaneously press both green 'Run Your Hands' buttons or activate the foot pedal. The ram will descend, perform the punch, and return to the top position.
4. For continuous operation, hold down the 'Run Your Hands' buttons or foot pedal. The machine will cycle continuously until released.
5. After punching, carefully remove the workpiece and any scrap material.

Demonstration Video

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Video 5.1: KAKA INDUSTRIAL Mechanical Power Press Punching Machine in operation. This video demonstrates the machine's functionality, including the control panel interaction and the punching process on a metal rod.

6. Maintenance

Regular maintenance is crucial for the longevity and safe operation of your punch press.

Daily Maintenance

- Clean the machine, especially the work table and die area, to remove metal chips and debris.
- Check the oil level in the lubrication system and replenish if necessary.
- Inspect dies for wear or damage.

Weekly Maintenance

- Lubricate all moving parts as indicated in the lubrication points diagram (if available, otherwise general moving parts).
- Check all fasteners for tightness and tighten as needed.
- Inspect electrical cables for damage.

Monthly/Quarterly Maintenance

- Inspect the clutch and brake system for proper adjustment and wear.
- Check the condition of the flywheel and its bearings.
- Verify the functionality of all safety devices and emergency stops.

7. Troubleshooting

This section provides solutions to common issues you might encounter.

Problem	Possible Cause	Solution
Machine does not start	No power supply Emergency Stop engaged Motor overload	Check power connection and circuit breaker Disengage Emergency Stop Check motor for overheating, reset overload protection
Inconsistent strokes	Clutch/brake maladjustment Low lubrication Worn components	Adjust clutch/brake according to service manual Replenish lubricant Inspect and replace worn parts
Excessive noise/vibration	Loose fasteners Lack of lubrication Worn bearings	Tighten all fasteners Lubricate all moving parts Inspect and replace bearings

For issues not listed or if solutions do not resolve the problem, contact KAKA INDUSTRIAL customer support.

8. Specifications

Technical specifications for the KAKA INDUSTRIAL JB23-10 10 Ton Punch Press Machine:

Attribute	Value
Model Number	JB23-10
Punching Force	10 Tons
Strokes Per Minute	140
Body Tilt Angle	Up to 20°
Item Weight	1102 pounds
Material	Metal
Manufacturer	KAKA Industrial LLC
UPC	709616685761

9. Warranty and Support

For warranty information, technical support, or to order replacement parts, please contact KAKA INDUSTRIAL customer service. Refer to your purchase documentation for specific warranty terms and contact details.

KAKA INDUSTRIAL LLC

Contact information typically found on the product packaging or official website.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question