KAKA INDUSTRIAL HP-25

KAKA INDUSTRIAL 25-Ton Electric Hydraulic Press HP-25 Instruction Manual

Model: HP-25

1. Introduction

This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your KAKA INDUSTRIAL 25-Ton Electric Hydraulic Press, Model HP-25. Please read this manual thoroughly before assembly, installation, or operation to ensure proper usage and to prevent injury or damage to the equipment.

The KAKA INDUSTRIAL HP-25 is a robust H-frame hydraulic shop press designed for various industrial and workshop applications, including pressing, bending, forming, and straightening tasks. It features a 25-ton capacity, an electric pump, and an adjustable work table.

2. Safety Information

WARNING: Failure to follow these safety instructions may result in serious injury or death.

- Always read and understand the entire instruction manual before operating the press.
- Wear appropriate personal protective equipment (PPE), including safety glasses, gloves, and steel-toed boots.
- Ensure the press is installed on a stable, level, and non-slip surface capable of supporting its weight and the maximum pressing force.
- Keep the work area clean, well-lit, and free from obstructions.
- Do not exceed the rated 25-ton capacity of the press. Overloading can cause structural failure and injury.
- Ensure all electrical connections are properly grounded and conform to local electrical codes. The press operates on a 220V single-phase power supply.
- Keep hands and body clear of the ram and work area during operation.
- Never leave the press unattended while it is operating.
- Regularly inspect the press for any signs of damage, wear, or leaks. Do not operate a damaged press.
- Only trained and authorized personnel should operate this equipment.
- Disconnect power before performing any maintenance, adjustments, or repairs.

3. Product Overview and Components

The KAKA INDUSTRIAL HP-25 hydraulic press is constructed with a sturdy H-frame design, featuring reinforced steel for durability and stability. Key components are designed for efficient and precise operation.





Figure 3.1: Overall view of the KAKA INDUSTRIAL 25-Ton Electric Hydraulic Press HP-25.

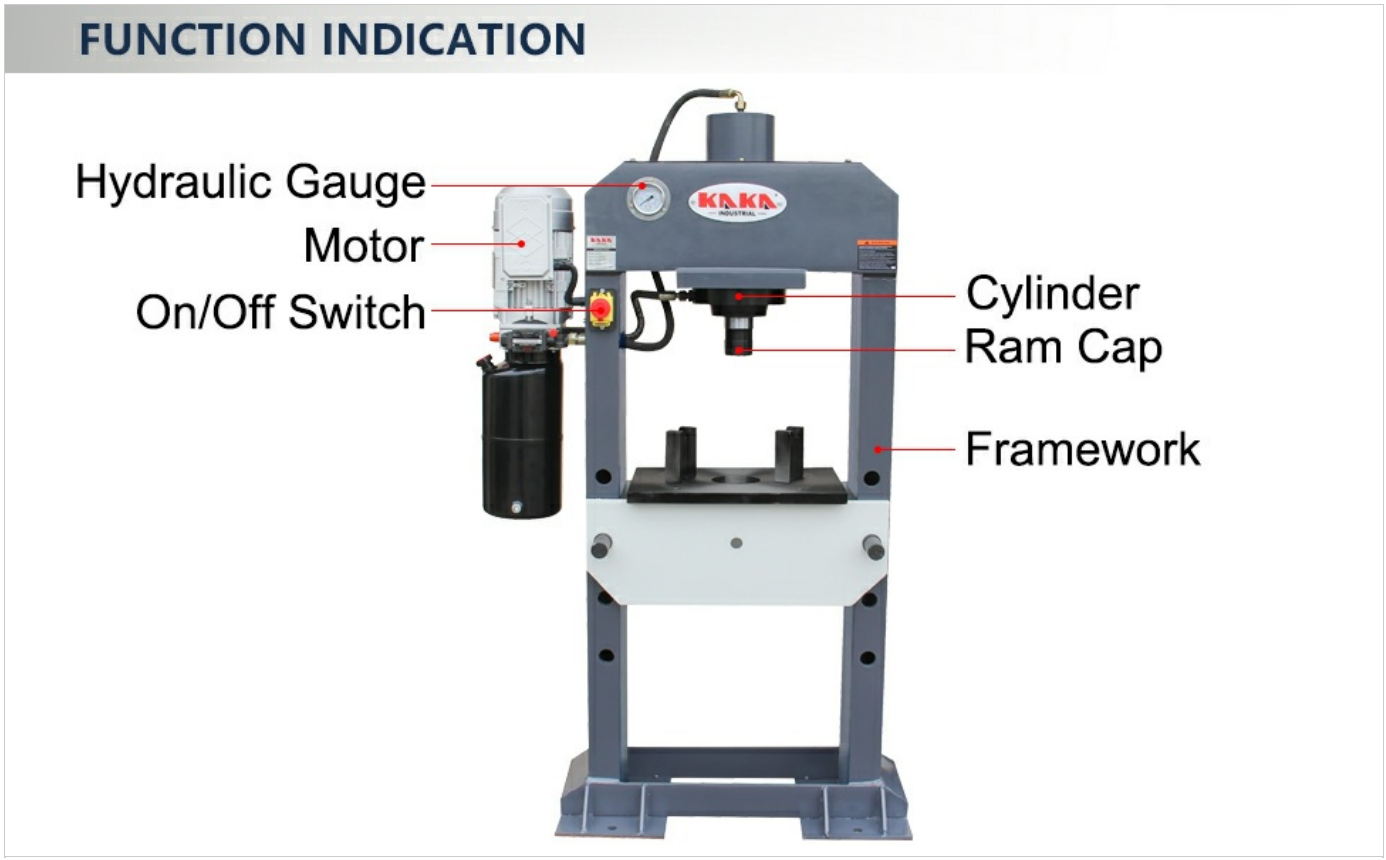


Figure 3.2: Labeled components of the HP-25 Hydraulic Press.

Key Components:

- **H-Frame Structure:** Reinforced steel frame providing stability and support.
- **Hydraulic Cylinder and Ram:** Delivers 25-ton force with a 9.84-inch stroke and 4.92-inch ram diameter.
- **Electric Pump:** Equipped with a 220V single-phase gear pump (CBN2.0) and an 8L reservoir for smooth and powerful operation.
- **Pressure Gauge:** Fluid-filled dual-scale gauge for precise pressure readings.
- **Adjustable Work Table:** Features 4 bed adjustment holes spaced 5.31 inches apart, allowing for versatile workpiece positioning.
- **Control Valve:** Manages the hydraulic fluid flow for ram movement (up/down).
- **On/Off Switch:** Controls the electric motor for the hydraulic pump.




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Figure 3.3: Close-up of the Hydraulic Ram.



Figure 3.4: Adjustable Work Table with V-blocks.

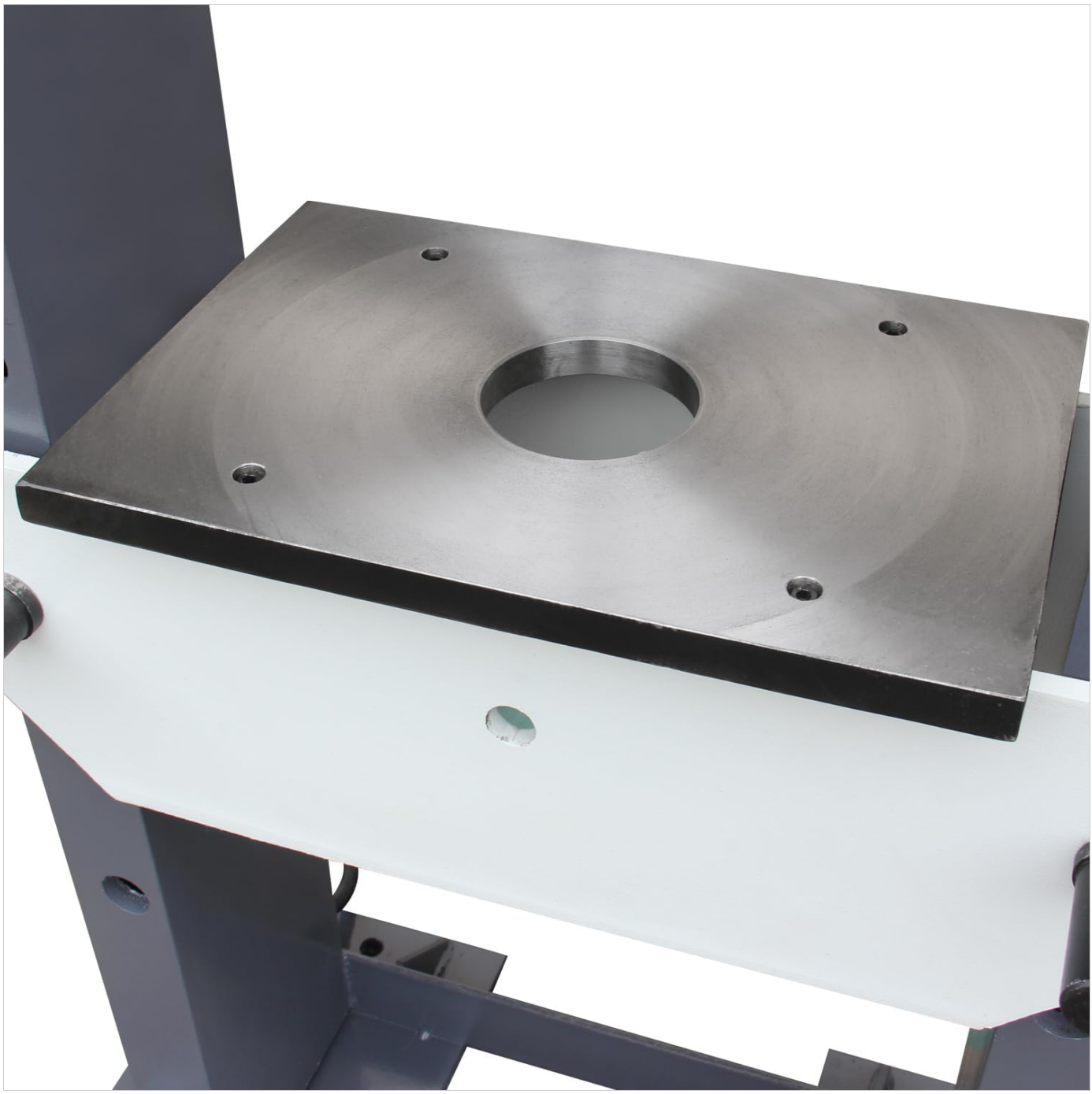


Figure 3.5: Electric Hydraulic Pump and Control Valve.

4. Specifications

Feature	Specification
Model Number	HP-25
Pressing Capacity	25 Tons
Ram Stroke	9.84 inches
Ram Diameter	4.92 inches
Work Table Adjustment Holes	4 holes, 5.31 inches apart
Pump Type	220V Single-Phase Gear Pump (CBN2.0)

Feature	Specification
Hydraulic Reservoir Capacity	8 Liters
Overall Dimensions (L x W x H)	43 x 20 x 69 inches
Item Weight	661 pounds
Material	Metal (Reinforced Steel)
Color	Gray
Included Components	HP-25 unit, Table Plates, V-blocks

5. Setup

5.1 Unpacking and Inspection

- Carefully unpack all components from the shipping crate. Due to the weight (661 lbs), ensure proper lifting equipment and personnel are used.
- Inspect all parts for any shipping damage. Report any damage to the carrier and KAKA INDUSTRIAL immediately.
- Verify that all components listed in the packing list are present.

5.2 Assembly

The HP-25 hydraulic press requires assembly. Refer to the separate assembly diagram (not included in this general manual) for detailed steps. General assembly involves:

1. Securing the H-frame base to a stable foundation.
2. Mounting the hydraulic cylinder and ram assembly.
3. Installing the electric pump and hydraulic lines.
4. Attaching the adjustable work table and V-blocks.

5.3 Placement

- Choose a location with a solid, level concrete floor capable of supporting the press's weight and operational forces.
- Ensure adequate clearance around the press for safe operation and maintenance.
- The area should be well-ventilated and free from flammable materials.

5.4 Electrical Connection

- Connect the press to a dedicated 220V single-phase electrical supply.
- Ensure the circuit is properly fused and grounded according to local electrical codes.
- Consult a qualified electrician if you are unsure about electrical connections.

5.5 Hydraulic Fluid Check

- Before first use, check the hydraulic fluid level in the 8L reservoir.
- Ensure the fluid level is between the minimum and maximum marks. Use only recommended hydraulic fluid.
- Bleed any air from the hydraulic system as per manufacturer guidelines (refer to specific pump instructions if provided).

6. Operating Instructions

6.1 Pre-Operation Checklist

- Confirm all safety guards are in place.
- Ensure the work area is clear.
- Verify hydraulic fluid level.
- Check all connections for leaks.
- Wear appropriate PPE.

6.2 Adjusting the Work Table

- To adjust the height of the work table, remove the retaining pins from the H-frame.
- Carefully lower or raise the work table to the desired height, aligning it with one of the 4 adjustment holes.
- Reinsert the retaining pins securely through the frame and work table. Ensure both sides are evenly adjusted and pinned.

6.3 Powering On and Ram Operation

1. Place the workpiece centrally on the V-blocks or table plates.
2. Turn on the main power switch for the electric pump. The motor will start.
3. To lower the ram, push the control valve lever to the 'DOWN' position. The ram will descend, applying pressure to the workpiece.
4. Monitor the fluid-filled pressure gauge to ensure the applied force does not exceed the 25-ton capacity.
5. To raise the ram, push the control valve lever to the 'UP' position. The ram will retract.
6. Once the operation is complete, return the control valve lever to the neutral position and turn off the main power switch.

6.4 General Operation Tips

- Always center the workpiece under the ram to ensure even pressure distribution.
- Use appropriate tooling (e.g., V-blocks, pressing plates) for the specific task.
- Apply pressure gradually and observe the workpiece for deformation.
- Never attempt to press materials that are brittle or may shatter under pressure without adequate shielding.

7. Maintenance

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

7.1 Daily Checks

- Inspect for any visible leaks in hydraulic lines or connections.
- Check the ram and cylinder for smooth movement and any signs of damage.
- Ensure all bolts and fasteners are tight.

7.2 Weekly/Monthly Checks

- Check the hydraulic fluid level and top up if necessary with recommended fluid.
- Clean the press, removing any debris, metal shavings, or accumulated dirt.
- Inspect electrical wiring for fraying or damage.
- Lubricate moving parts as specified by the manufacturer (refer to specific lubrication points if available).

7.3 Hydraulic Fluid Replacement

Hydraulic fluid should be replaced periodically, typically annually or after a certain number of operating hours, depending on usage. Consult a hydraulic specialist if unsure. Always dispose of used hydraulic fluid responsibly.

8. Troubleshooting

This section outlines common issues and their potential solutions. For problems not listed here or if solutions do not resolve the issue, contact KAKA INDUSTRIAL customer support.

Problem	Possible Cause	Solution
Ram does not move or moves slowly	Low hydraulic fluid level Air in hydraulic system Faulty pump or motor Control valve issue	Check and refill hydraulic fluid Bleed air from the system Inspect pump/motor, contact support Check valve operation, contact support
Loss of pressure	Hydraulic leak Faulty seals in cylinder or pump Relief valve malfunction	Inspect for leaks and tighten connections Replace seals (professional service recommended) Inspect/replace relief valve (professional service recommended)
Motor does not start	No power supply Faulty on/off switch Motor overload protection tripped	Check power connection and circuit breaker Inspect/replace switch Allow motor to cool, check for obstructions
Excessive noise during operation	Low hydraulic fluid Air in hydraulic system Loose components Worn pump bearings	Check and refill hydraulic fluid Bleed air from the system Tighten all fasteners Contact support for pump inspection

9. Warranty and Support

KAKA INDUSTRIAL stands behind the quality of its products. This product is typically covered by a manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation provided at the time of purchase or contact KAKA INDUSTRIAL directly.

For returns, the product may be eligible for 30-day easy returns. Please consult your purchase platform or KAKA INDUSTRIAL for return procedures.

For technical assistance, parts, or any other inquiries, please contact KAKA INDUSTRIAL Customer Support. Contact information can usually be found on the manufacturer's website or your purchase invoice.

Manufacturer: KAKA INDUSTRIAL LLC

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

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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