

YIHUITONG YHT45T500

YIHUITONG 45T Firewood Processor User Manual

Model: YHT45T500

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, setup, and maintenance of your YIHUITONG 45T Firewood Processor. Please read this manual thoroughly before operating the machine to ensure proper usage and to prevent injury or damage.

The YIHUITONG 45T Firewood Processor is designed for processing logs into firewood efficiently. It features a powerful 20HP GX630 gas engine, a 25-inch chainsaw, a 3-meter conveyor, and hydraulic controls for ease of use.

2. SAFETY INFORMATION

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

- Always wear appropriate personal protective equipment (PPE), including safety glasses, hearing protection, gloves, and sturdy footwear, when operating the machine.
- Ensure the work area is clear of bystanders, children, and pets before starting operation.
- Inspect the machine for any damage or loose parts before each use. Do not operate if any components are damaged.
- Keep hands and feet away from all moving parts, especially the chainsaw and splitting wedge.
- Never attempt to clear jams or perform maintenance while the engine is running. Always shut off the engine and ensure all moving parts have stopped before approaching.
- Utilize the emergency stop button immediately if any unsafe condition arises or if the machine malfunctions.
- Ensure the safety net is properly in place over the chainsaw during operation to prevent accidental contact.
- Operate the machine on a stable, level surface to prevent tipping.

3. PRODUCT OVERVIEW AND COMPONENTS

The YIHUITONG 45T Firewood Processor integrates several key components to efficiently cut and split logs.



Figure 3.1: Overall view of the YIHUITONG 45T Firewood Processor, showcasing its main structure including the log table, chainsaw housing, splitting mechanism, and conveyor belt.

3.1 Key Features

- **20HP GX630 Gas Engine:** Provides robust power for cutting and splitting operations.
- **25-inch Chainsaw:** High-quality steel chain for efficient log cutting up to 19.6 inches in diameter.
- **3-Meter Conveyor Belt:** Facilitates continuous feeding of logs and removal of processed firewood. The conveyor height is 2.55 meters for smooth operation.
- **Hydraulic Manual Control:** User-friendly control panel for precise adjustments of cutting speed, depth, and feed rate.
- **4/6-Way Splitting Wedge:** Offers versatility to split logs into 4 or 6 equal parts with 45 tons of splitting force.
- **Safety Features:** Includes an emergency stop button and a protective safety net for the chainsaw.



Figure 3.2: The 20HP GX630 gas engine, which powers the firewood processor's hydraulic and cutting systems.



Figure 3.3: A 4-way splitting wedge, designed to divide logs into four pieces simultaneously.



Figure 3.4: A 6-way splitting wedge, capable of dividing logs into six pieces for increased efficiency.

4. SPECIFICATIONS

Feature	Specification
Brand	YIHUITONG
Model Number	YHT45T500
Engine	20HP GX630 Gas Engine
Splitting Force	45 Tons
Max Cutting Diameter	500mm (19.6 inches)
Max Split Wood Length	580mm (22.83 inches)
Chainsaw Size	25 inches
Conveyor Length	3 meters
Conveyor Height	2.55 meters
Operation Mode	Hydraulic
Product Dimensions (L x W x H)	249.29"D x 105.43"W x 80.31"H (approximate, based on image)

Feature	Specification
Item Weight	2000 Pounds
Material	Metals

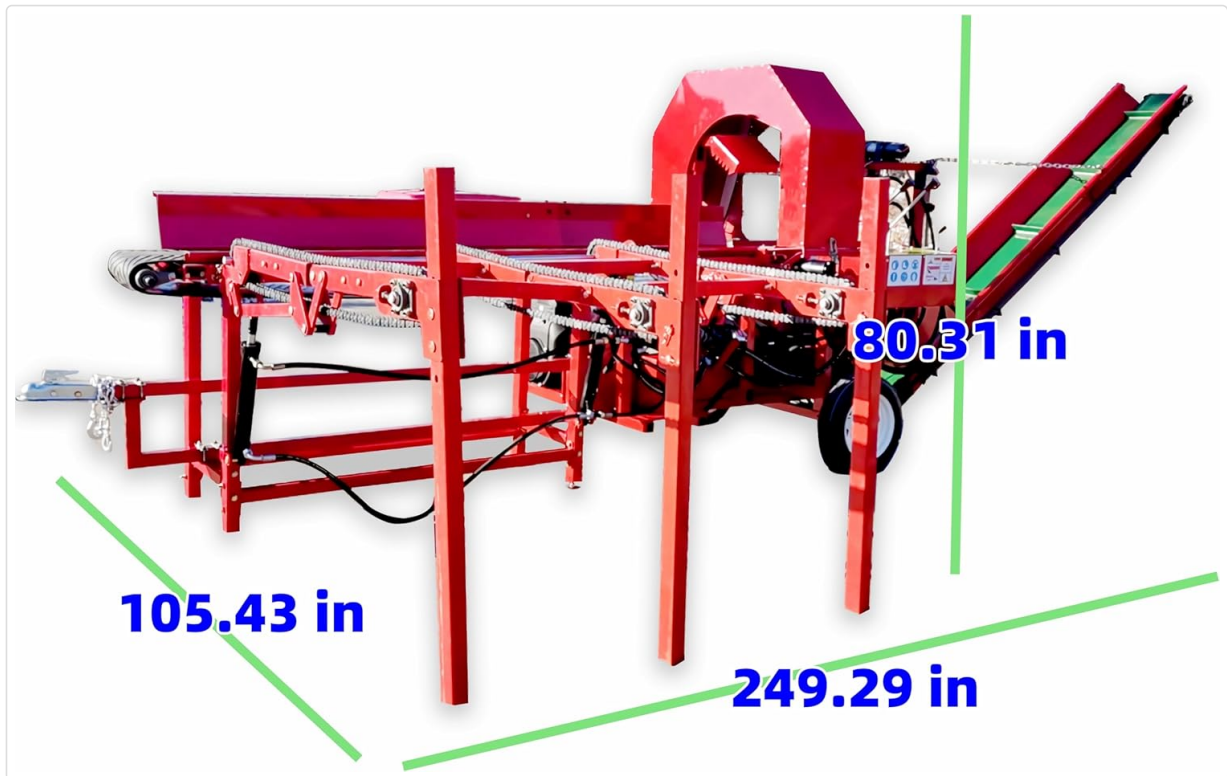


Figure 4.1: Key dimensions of the firewood processor, including overall length, width, and height.

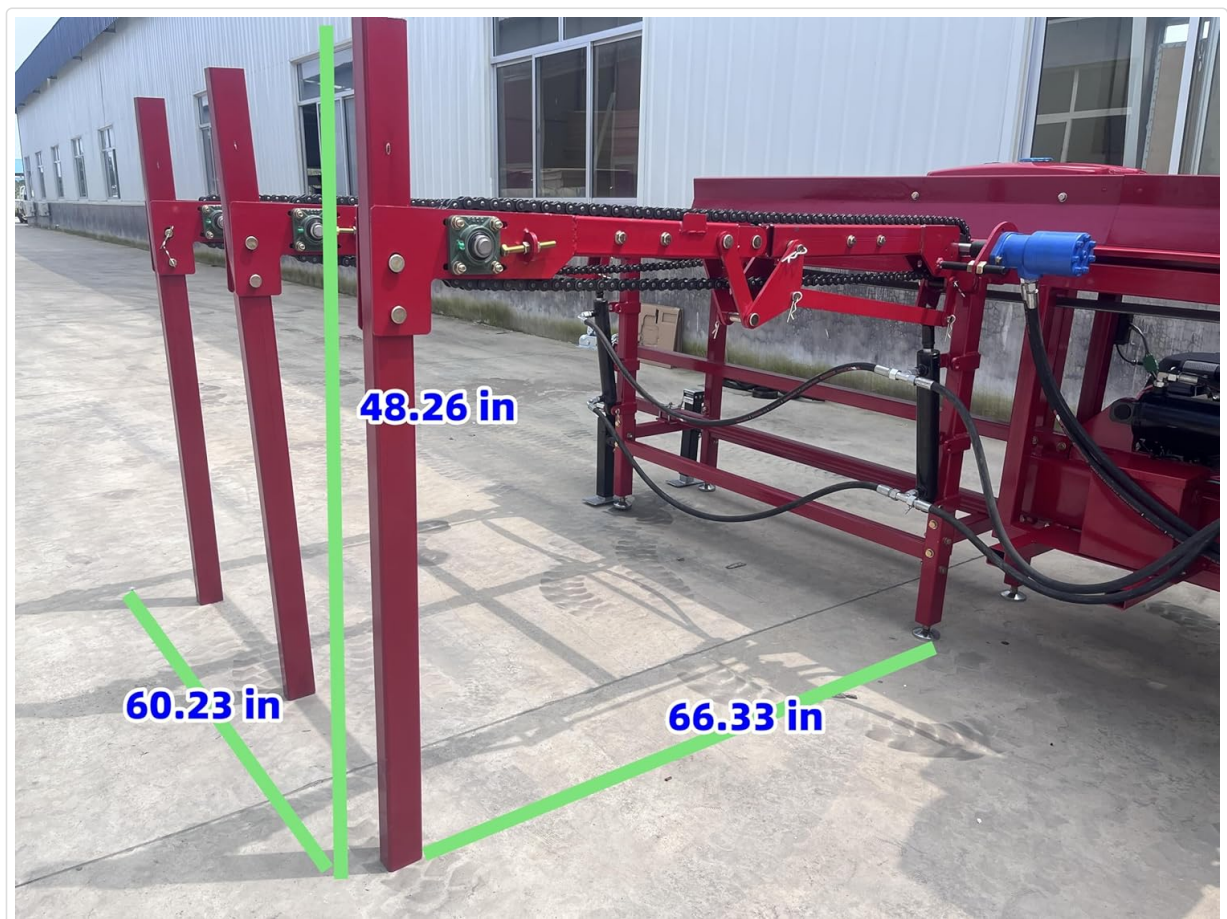


Figure 4.2: Detailed dimensions of the log chain table, indicating its length and height for log placement.

5. SETUP AND ASSEMBLY

The YIHUITONG 45T Firewood Processor requires assembly upon delivery. Detailed installation instructions and video tutorials are provided by the manufacturer to guide you through the process.

5.1 Pre-Assembly Checks

- Unpack all components and verify against the packing list.
- Inspect all parts for any shipping damage. Report any damage immediately.
- Ensure you have all necessary tools for assembly.
- Prepare a large, level, and stable area for assembly. Note that the machine weighs approximately 2000 pounds (907 kg), and appropriate lifting equipment (e.g., forklift) may be required for unloading and positioning heavy components.

5.2 Assembly Steps (General Guidelines)

1. Attach the main frame components securely.
2. Mount the engine and connect fuel lines and electrical wiring as per instructions.
3. Install the hydraulic system components, ensuring all hoses are correctly connected and secured.
4. Assemble the log chain table and conveyor belt system.
5. Install the chainsaw unit and splitting wedge.
6. Attach all safety guards and covers.
7. Perform a thorough check of all fasteners to ensure they are tightened to the specified torque.

Refer to the specific assembly manual and video tutorials for detailed, step-by-step instructions.



Figure 5.1: The firewood processor with its log chain table in a raised position, ready for log loading.

6. OPERATION

Operating the YIHUITONG 45T Firewood Processor involves several steps, from starting the engine to cutting and splitting logs. Always ensure safety protocols are followed.

6.1 Pre-Operation Checklist

- Verify all safety guards are in place and secure.

- Check engine oil and hydraulic fluid levels. Replenish if necessary.
- Ensure the fuel tank is adequately filled.
- Inspect the chainsaw chain for sharpness and proper tension.
- Clear the work area of any obstructions or debris.

6.2 Starting the Engine

1. Ensure the emergency stop button is disengaged (pulled out).
2. Follow the engine manufacturer's instructions for starting the 20HP GX630 engine. This typically involves checking the choke, throttle, and ignition switch.
3. Allow the engine to warm up for a few minutes before engaging hydraulic functions.

6.3 Control Panel Functions

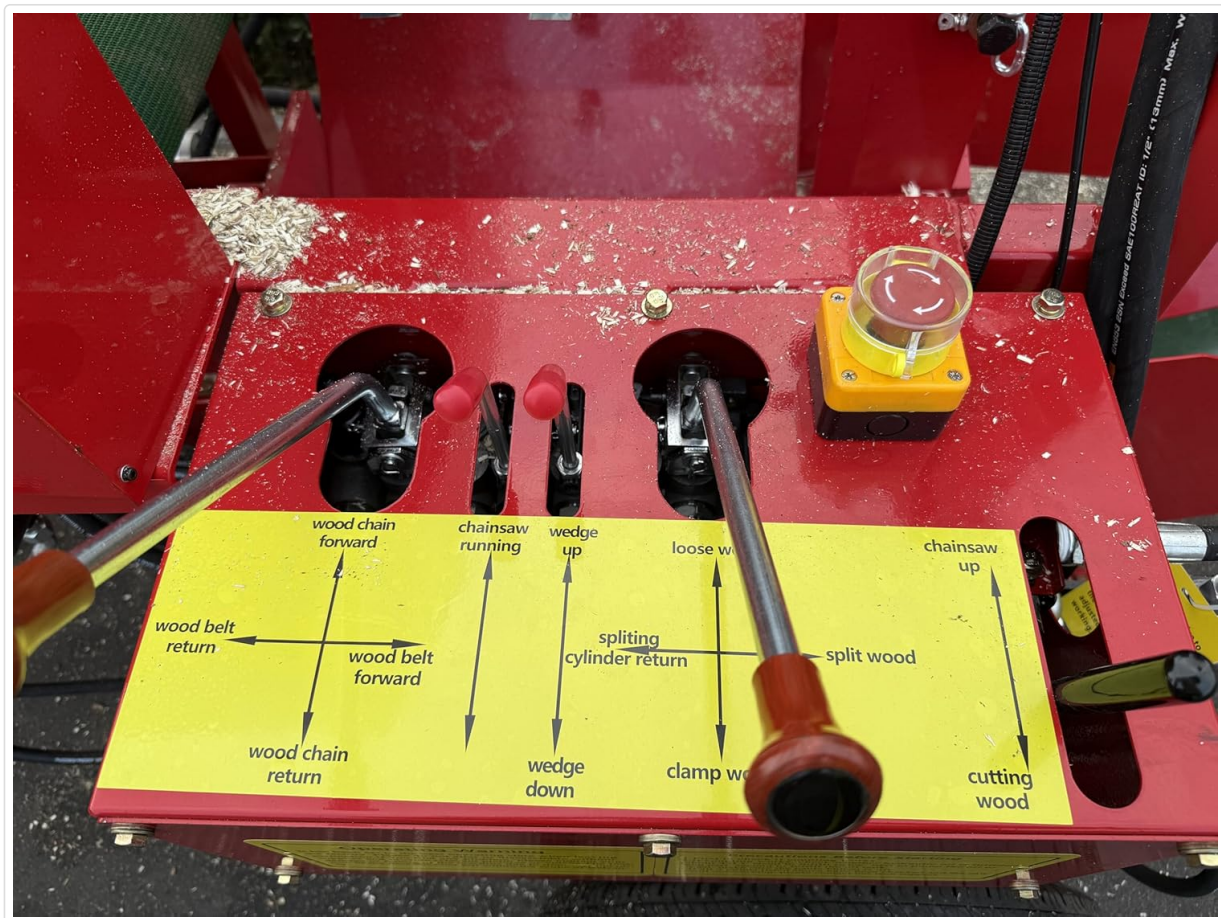


Figure 6.1: The hydraulic control panel, showing levers for various functions such as wood chain movement, chainsaw operation, and splitting wedge control.

The control panel features levers for managing different operations:

- **Wood Chain Forward/Return:** Controls the movement of logs on the feeding table.
- **Chainsaw Running/Up:** Engages the chainsaw for cutting and retracts it.
- **Wedge Up/Down:** Controls the vertical position of the splitting wedge.
- **Splitting Cylinder Return/Split Wood:** Activates the hydraulic ram to split the log.
- **Wood Belt Forward/Return:** Controls the direction of the conveyor belt.

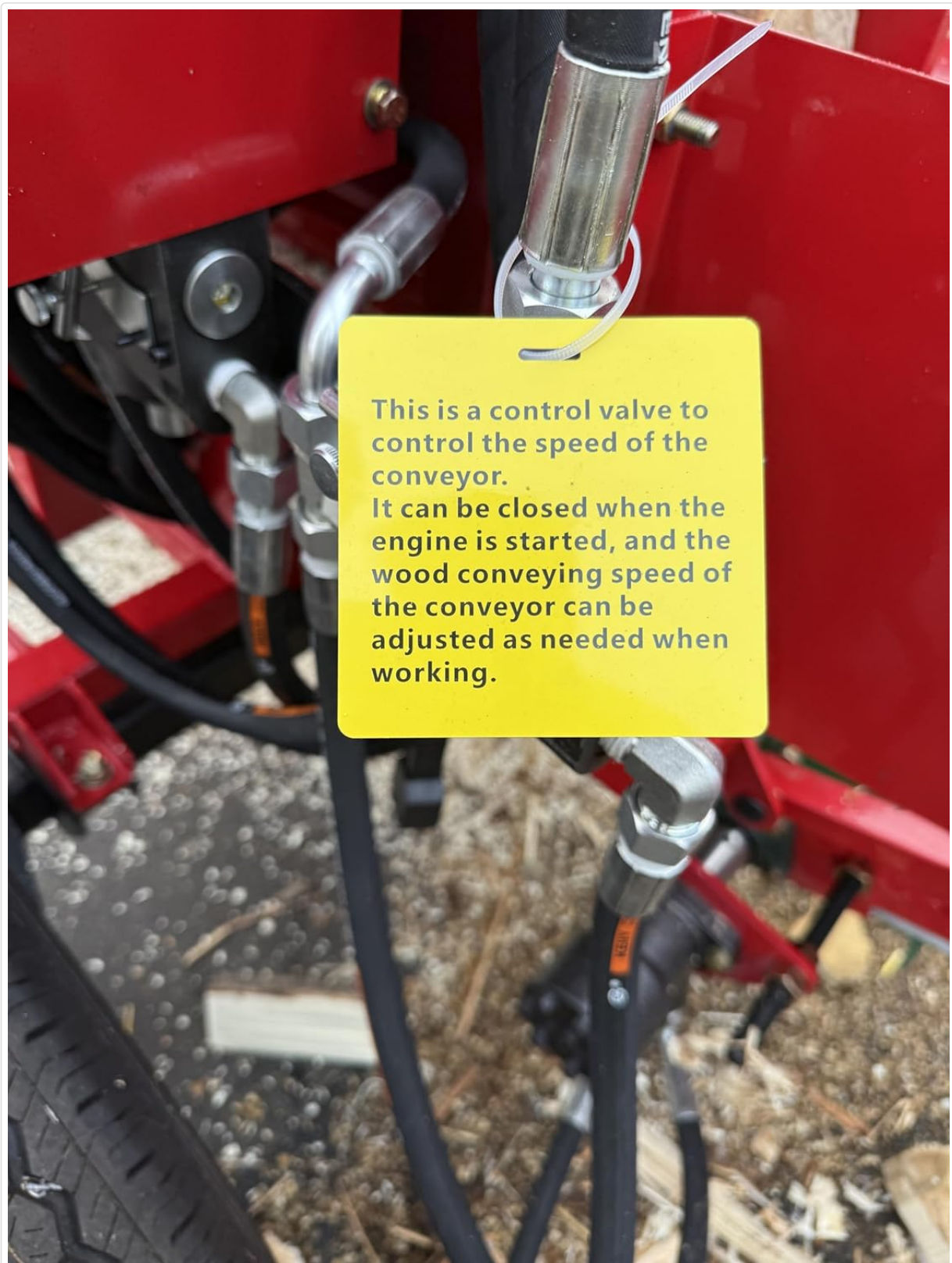


Figure 6.2: A control valve for adjusting the speed of the conveyor. This valve should be closed when starting the engine and adjusted as needed during operation.

6.4 Processing Logs

1. Load a log onto the feeding table using the wood chain control. Ensure the log is positioned securely.
2. Use the chainsaw control to lower the chainsaw and cut the log to the desired length (max 19.6 inches diameter).
3. Once cut, retract the chainsaw. The cut log section will move towards the splitting wedge.
4. Engage the splitting cylinder to push the log against the 4-way or 6-way wedge, splitting it into pieces.

5. The split firewood will then be transported away by the conveyor belt.
6. Repeat the process for subsequent logs.



Figure 6.3: The firewood processor actively cutting a log on the feeding table, demonstrating the initial stage of wood processing.



Figure 6.4: The firewood processor splitting logs and conveying the processed wood away, illustrating the complete operational cycle.



Figure 6.5: A log positioned on the feeding table of the firewood processor, ready for cutting and splitting.

6.5 Winch Operation



Figure 6.6: The integrated winch system, used for pulling logs onto the feeding table.

The integrated winch system assists in loading heavy logs onto the feeding table. Operate the winch using its dedicated controls, ensuring the cable is properly spooled and the log is securely attached before activation.

7. MAINTENANCE

Regular maintenance is crucial for the longevity and safe operation of your firewood processor.

7.1 Daily Checks

- Check engine oil and hydraulic fluid levels.
- Inspect the chainsaw chain for sharpness, tension, and lubrication.
- Clean debris from the machine, especially around moving parts and the engine cooling fins.
- Check all hydraulic hoses for leaks or damage.

7.2 Weekly/Monthly Maintenance

- Lubricate all grease points as indicated in the engine and machine manuals.
- Inspect the splitting wedge for wear or damage.
- Check the conveyor belt for tension and wear.
- Clean or replace air filters as needed.
- Inspect all electrical connections for corrosion or damage.

7.3 Seasonal/Annual Maintenance

- Change engine oil and filter.
- Replace hydraulic fluid and filter.
- Inspect and replace spark plugs.
- Check and adjust valve clearances (refer to engine manual).
- Thoroughly clean the entire machine and apply rust preventative to exposed metal surfaces before storage.

8. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your firewood processor.

Problem	Possible Cause	Solution
Engine fails to start	No fuel, stale fuel, spark plug issue, emergency stop engaged, choke setting incorrect.	Check fuel level, use fresh fuel, inspect/replace spark plug, disengage emergency stop, adjust choke.
Chainsaw not cutting efficiently	Dull chain, incorrect chain tension, insufficient chain lubrication.	Sharpen or replace chain, adjust chain tension, check chain oil reservoir and pump.
Splitting force is weak	Low hydraulic fluid, air in hydraulic system, worn hydraulic pump, log too large/hard.	Check/fill hydraulic fluid, bleed air from system, consult service for pump issues, ensure logs are within specified diameter.
Conveyor belt not moving	Conveyor speed control valve closed, hydraulic issue, belt jammed or broken.	Open conveyor speed control valve, check hydraulic fluid, clear any jams, inspect belt for damage.
Unusual noises or vibrations	Loose fasteners, worn bearings, engine issue, hydraulic system problem.	Inspect and tighten all fasteners, check bearings, consult engine manual, or seek professional service.

For issues not listed here or if troubleshooting steps do not resolve the problem, please contact YIHUITONG customer support.

9. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided at the time of purchase. YIHUITONG offers customer support for assistance with product inquiries, technical issues, and parts. You can typically find contact information on the manufacturer's website or through your point of purchase.

When contacting support, please have your model number (YHT45T500) and purchase date readily available.

