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› BILT HARD 24-inch Tire Changer Machine User Manual

BILT HARD PLA-1033BH-N-0730

BILT HARD 24-inch Tire Changer Machine User Manual

Model: PLA-1033BH-N-0730

1. INTRODUCTION

Thank you for choosing the BILT HARD 24-inch Tire Changer Machine. This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your new equipment. Please read this manual thoroughly before installation and use to ensure proper function and to prevent injury or damage.

2. SAFETY INSTRUCTIONS

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

- Always wear appropriate personal protective equipment (PPE), including safety glasses, gloves, and steel-toed boots.
- Ensure the machine is properly grounded and connected to a suitable power supply (110V/60Hz).
- Do not operate the machine if any parts are damaged or missing.
- Keep hands, feet, and clothing clear of moving parts during operation.
- Ensure the work area is clean, well-lit, and free of obstructions.
- Never exceed the maximum tire and rim specifications of the machine.
- Always deflate tires completely before demounting.
- Use caution when inflating tires; over-inflation can cause explosions. Use a safety cage if available.
- Only trained personnel should operate and maintain this equipment.
- Disconnect power before performing any maintenance or adjustments.

3. PRODUCT OVERVIEW AND COMPONENTS

The BILT HARD Tire Changer Machine is designed for efficient tire mounting and demounting. Familiarize yourself with its key components:

3.1 Key Features

- **Wide Rim & Tire Compatibility:** Supports rims from 12" to 24" (10"-22" external clamp, 12"-24" internal clamp) and tires up to 39.4" diameter and 15" wide.
- **Powerful 2.0HP Copper Motor:** Provides consistent torque for bead breaking and rotation.
- **Enhanced Rim Protection:** Stainless steel mounting head with plastic covers and a reinforced 40mm hex shaft to prevent rim damage.
- **Heavy-Duty Bead Breaker:** Side-mounted system with up to 10 Bar (2700kg) pressing force and a nylon protective cover.
- **Efficient Hands-Free Operation:** Swing-arm structure and pedal controls for ease of use.

3.2 Main Components



Figure 3.2.1: Enhanced Stainless Steel Mount/Demount Head. Designed for easy removal of tires without damaging the rim.

Precision-Engineered Clamp

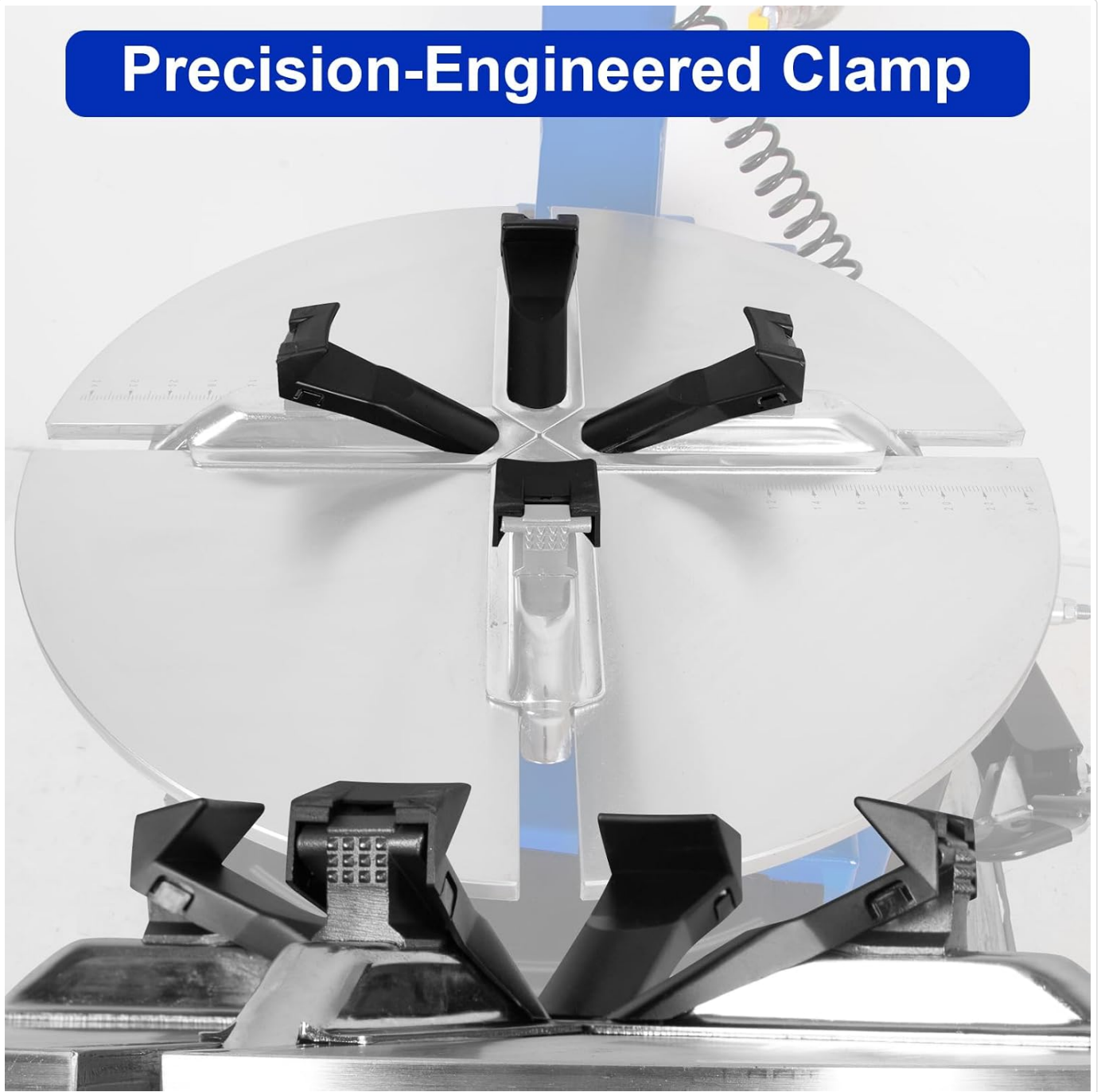


Figure 3.2.2: Precision-Engineered Clamp. Securely holds the wheel during tire changing operations.

Enhanced Stainless Steel Mount/Demount Head

Easy Removal of Explosion-proof Tire and Flat Tire, Lifetime Guarantee, Reasonable Angle

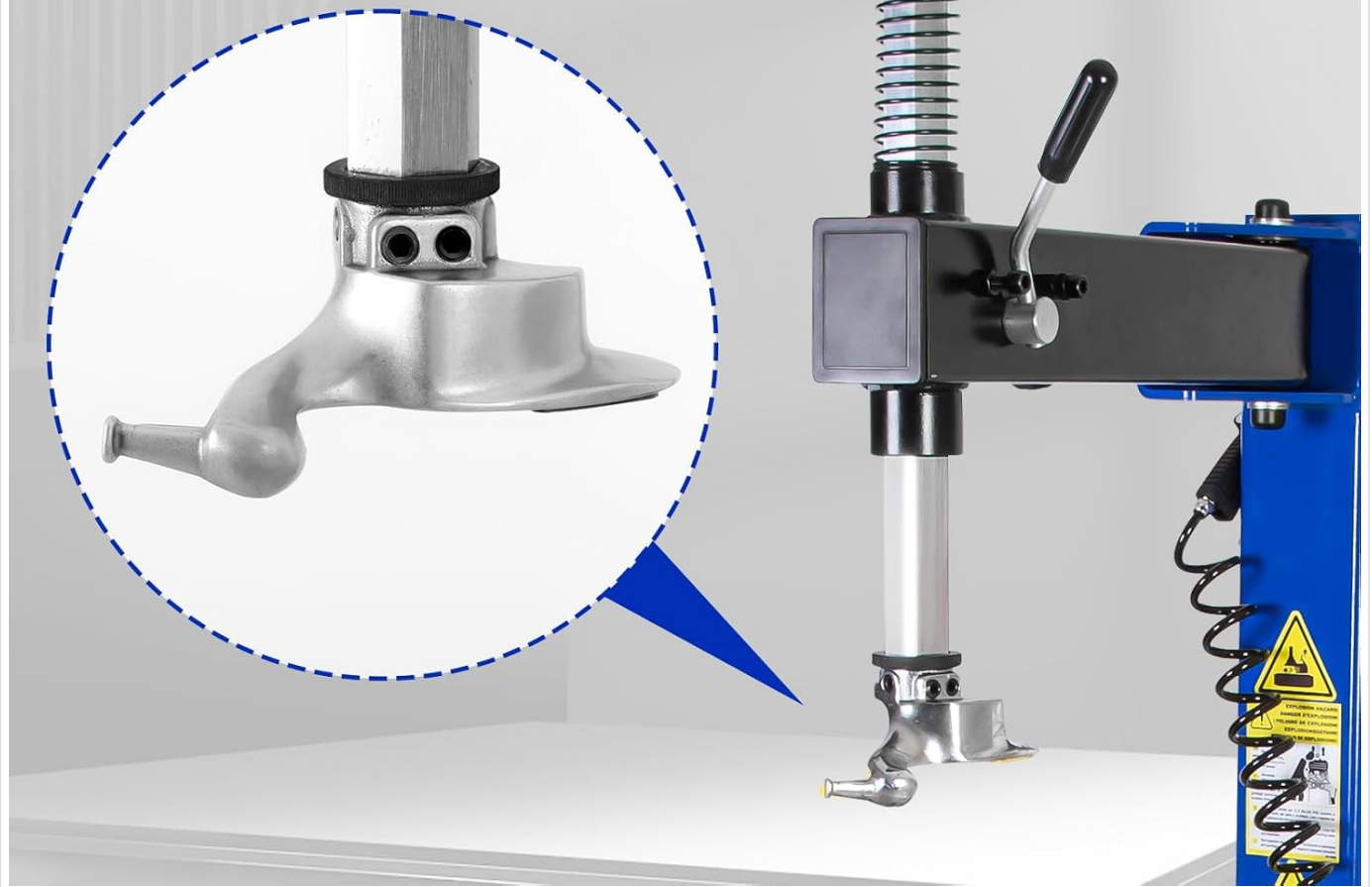


Figure 3.2.3: Powerful Turntable and Rugged Cylinder. Provides stable and strong rotation for tire manipulation.

High-Force Bead Breaker



Figure 3.2.4: High-Force Bead Breaker. Used to separate the tire bead from the rim.

Precision Copper Core Motor & Zero-Maintenance Gearbox

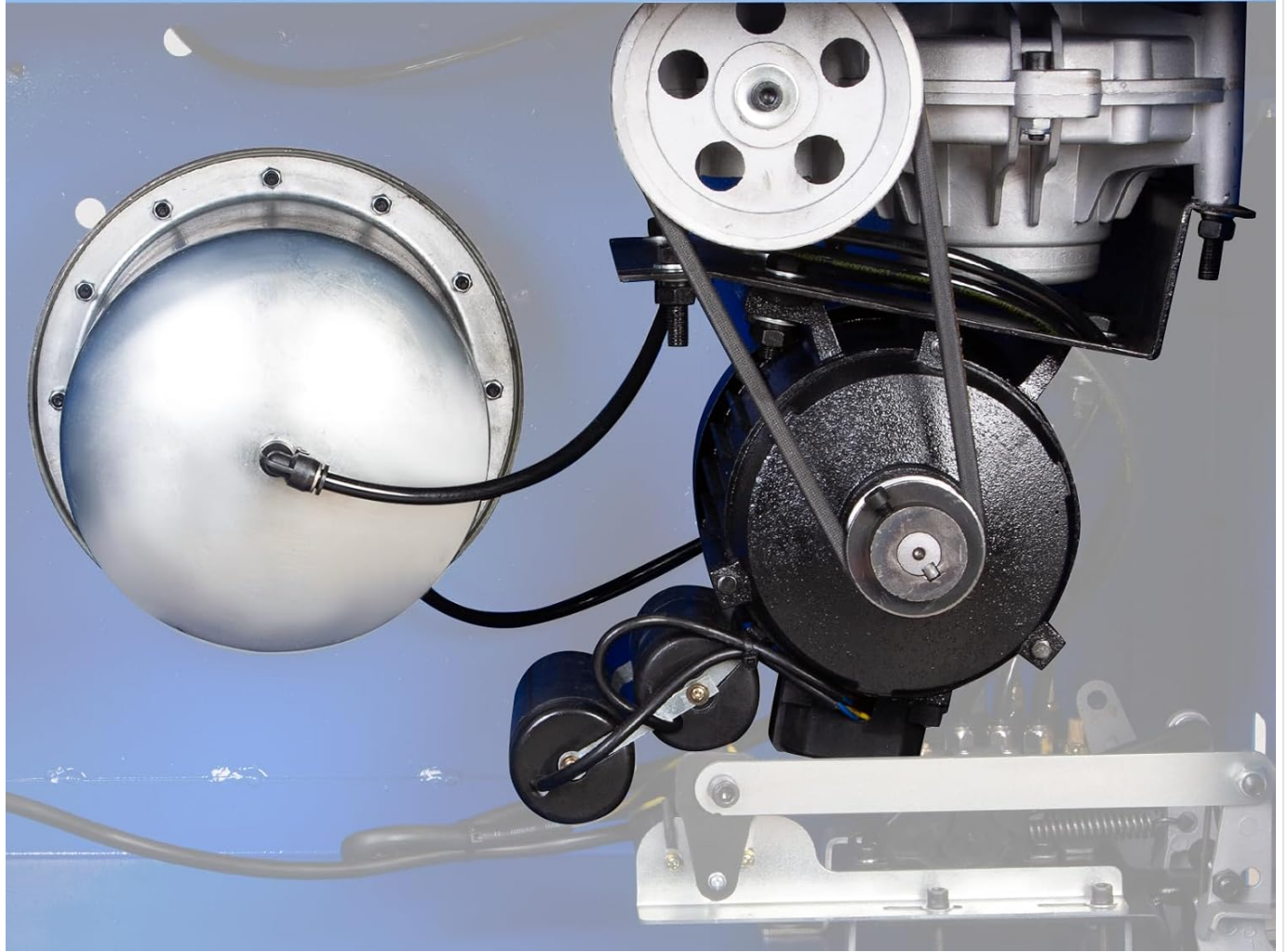


Figure 3.2.5: Precision Copper Core Motor & Zero-Maintenance Gearbox. The power unit for the machine's operations.

High-flow tire inflator gun



Figure 3.2.6: High-flow tire inflator gun. For controlled and efficient tire inflation.

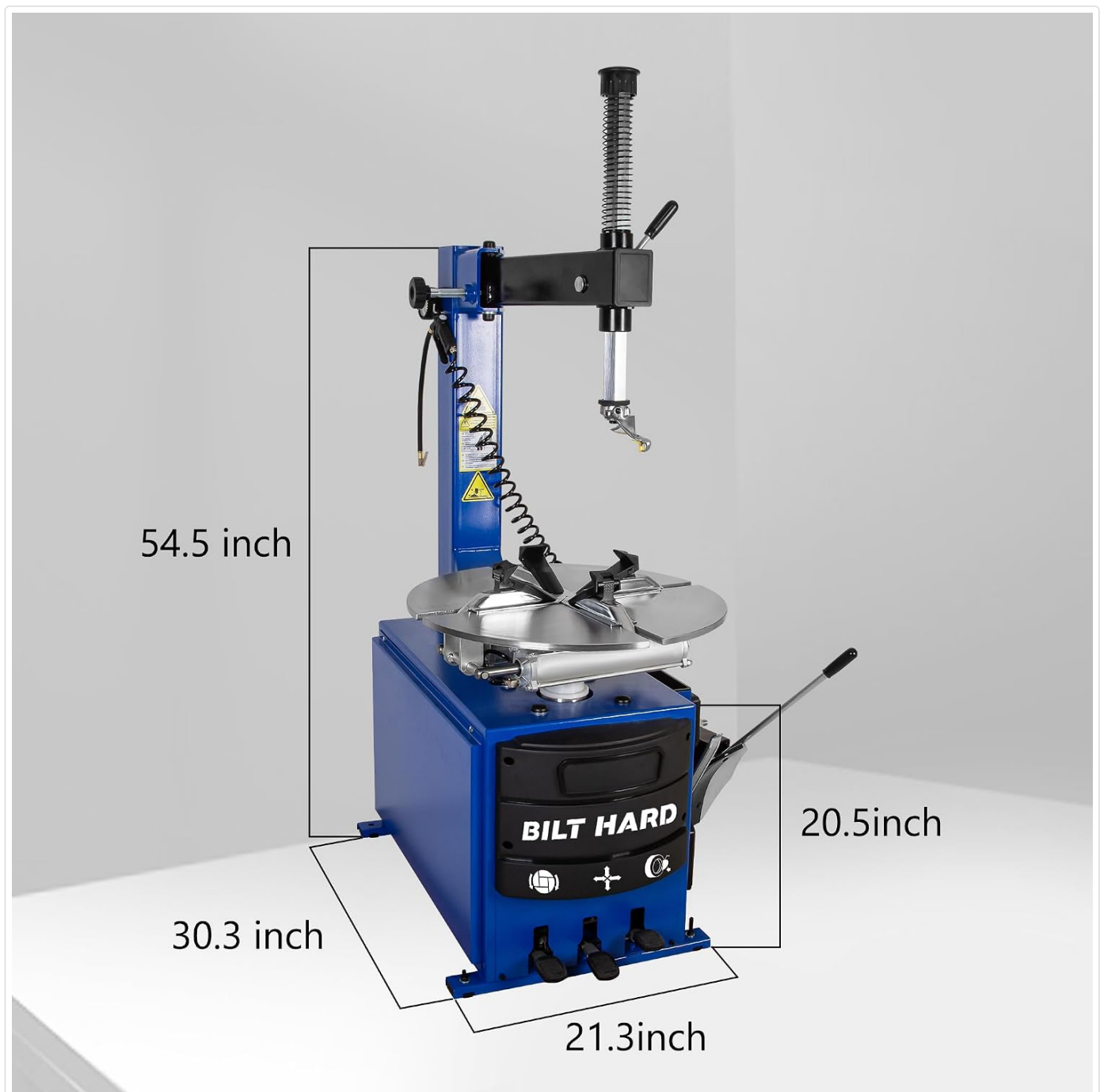


Figure 3.2.7: Overall dimensions of the BILT HARD Tire Changer Machine.

4. SETUP

1. **Unpacking:** Carefully remove all components from the packaging. Inspect for any shipping damage. Report any damage immediately to the carrier and supplier.
2. **Assembly:** Follow the assembly instructions provided with your machine. Typically, this involves attaching the swing arm, bead breaker, and other accessories to the main body.
3. **Placement:** Position the tire changer on a level, stable surface capable of supporting its weight and the forces generated during operation. Ensure adequate clearance around the machine for safe operation and maintenance.
4. **Anchoring:** Securely anchor the machine to the floor using appropriate fasteners to prevent movement during use.
5. **Electrical Connection:** Connect the machine to a dedicated 110V/60Hz power outlet with proper grounding. Ensure the circuit can handle the 2.0HP motor's power requirements.
6. **Air Supply Connection:** Connect a compressed air line to the machine's air inlet. Ensure the air supply provides the recommended working pressure (8-10 bar).

7. **Initial Checks:** Before first use, check all fasteners for tightness. Verify that all moving parts operate smoothly without obstruction.

5. OPERATING INSTRUCTIONS

This section outlines the general procedure for changing tires. Always refer to specific tire and rim manufacturer guidelines.

5.1 Demounting a Tire

1. **Deflate Tire:** Completely deflate the tire by removing the valve core.
2. **Bead Breaking:** Position the wheel on the bead breaker arm. Use the pedal to activate the bead breaker, applying force to separate the tire bead from the rim on both sides. Ensure the nylon protector is in place to prevent rim damage.
3. **Mounting on Turntable:** Place the wheel onto the turntable. Use the clamping pedals to secure the wheel. Choose external or internal clamping based on rim size (10"-22" external, 12"-24" internal).
4. **Position Mount Head:** Swing the mount/demount head into position, ensuring it clears the rim. Lock it in place.
5. **Demounting Top Bead:** Use a tire lever to pry the top bead over the mount head. Rotate the turntable using the pedal to fully demount the top bead.
6. **Demounting Bottom Bead:** Carefully pry the bottom bead over the mount head. Rotate the turntable to fully demount the bottom bead.
7. **Remove Tire and Rim:** Release the clamps and remove the tire and rim from the turntable.

5.2 Mounting a Tire

1. **Lubricate:** Apply appropriate tire lubricant to both tire beads and the rim flanges.
2. **Mount Bottom Bead:** Place the rim on the turntable and secure it with the clamps. Position the tire over the rim, ensuring the bottom bead is below the mount head. Rotate the turntable to guide the bottom bead onto the rim.
3. **Mount Top Bead:** Push down on the top bead of the tire, ensuring it is below the mount head. Rotate the turntable to guide the top bead onto the rim.
4. **Inflate Tire:** Connect the high-flow tire inflator gun to the valve stem. Slowly inflate the tire to the manufacturer's recommended pressure. Listen for the beads to seat properly. **Do not over-inflate.**
5. **Check for Leaks:** After inflation, check for any air leaks around the beads and valve stem.
6. **Remove Wheel:** Release the clamps and remove the inflated wheel from the turntable.

6. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your BILT HARD Tire Changer Machine.

- **Daily:**

- Clean the machine, especially the turntable and clamping jaws, to remove dirt and tire residue.
- Check air pressure and lubricator oil levels (if applicable).
- Inspect all hoses and electrical cables for wear or damage.

- **Weekly:**

- Lubricate all pivot points and moving parts with appropriate grease.
- Check tightness of all bolts and fasteners.
- Inspect the mount/demount head and bead breaker for wear; replace if necessary.

- **Monthly/Quarterly:**
 - Inspect the motor and gearbox for unusual noises or vibrations.
 - Check the air filter and drain any accumulated moisture from the air system.
 - Verify the accuracy of the tire inflator gauge.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Machine does not power on.	No power supply; tripped circuit breaker; faulty wiring.	Check power connection; reset breaker; inspect wiring (contact qualified electrician if needed).
Turntable does not rotate.	Motor issue; pedal malfunction; obstruction.	Check motor connection; inspect pedals; remove any obstructions.
Bead breaker is weak or not working.	Low air pressure; air leak; faulty cylinder.	Check air supply and pressure; inspect air lines for leaks; contact service for cylinder repair.
Clamps do not hold wheel securely.	Worn clamping jaws; low air pressure to clamping cylinders.	Inspect and replace worn jaws; check air supply.
Tire inflator not working.	No air supply; hose kinked or damaged; faulty gauge/valve.	Check air connection; inspect hose; replace inflator gun if defective.

8. SPECIFICATIONS

Feature	Specification
External Locking Rim Dimensions	10" - 22"
Internal Locking Rim Dimensions	12" - 24"
Max. Tire Diameter	39.4" (1000mm)
Max. Rim Width	3" - 16"
Bead Breaker Force	5952.5lb (2700kg) / 10 bar
Working Pressure	8-10 bar
Motor Power	1.5kW (2.0HP)
Net Weight	418.88lb (190kg)
Dimensions (L x W x H)	20.5" x 30.3" x 54.5"
Working Noise	< 70 dB
Power Supply Voltage	110V/60Hz

9. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation included with your purchase or contact BILT HARD customer service. For technical support, parts, or service inquiries, please visit the official BILT HARD website or contact their customer support team directly.

Manufacturer: BILT HARD
Model Number: PLA-1033BH-N-0730
ASIN: B0HC5XNZBJ

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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