



TPH123

Mighty Mac TPH123 3-Point Hitch Mounted Shredder Chipper User Manual

Model: TPH123

1. INTRODUCTION

Thank you for choosing the Mighty Mac TPH123 3-Point Hitch Mounted Shredder Chipper. This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your new equipment. Please read this manual thoroughly before assembly or operation to ensure proper use and to prevent injury or damage.

The Mighty Mac TPH123 is a robust shredder-chipper designed for use with Category 1 tractors, requiring 10 to 30 PTO horsepower and operating at 540 RPMs. It is engineered to handle branches up to 3-1/2 inches in diameter and effectively pulverize various organic materials such as leaves, small brush, stalks, and grass.



Figure 1: The Mighty Mac TPH123 3-Point Hitch Mounted Shredder Chipper. This image shows the shredder chipper unit, designed for attachment to a tractor's 3-point hitch system. It features a large hopper for feeding materials and a robust construction for durability.

2. SAFETY INSTRUCTIONS

Your safety and the safety of others are paramount. Always follow these safety precautions when operating the Mighty Mac TPH123. Failure to do so can result in serious injury or death.

- **Read the Manual:** Before operating, thoroughly read and understand this entire manual and your tractor's owner's manual.
- **Personal Protective Equipment (PPE):** Always wear appropriate PPE, including safety glasses or goggles, hearing protection, heavy-duty gloves, and sturdy footwear. Avoid loose clothing that could get caught in moving parts.
- **Clear Work Area:** Ensure the work area is clear of bystanders, children, and pets. Maintain a safe distance from the machine during operation.
- **Inspect Equipment:** Before each use, inspect the chipper/shredder for loose fasteners, damaged parts, or obstructions. Ensure all guards and safety devices are in place and functioning correctly.

- **Proper Tractor Connection:** Ensure the chipper is securely attached to the tractor's 3-point hitch and the PTO shaft is correctly connected and guarded.
- **Engine Off Before Servicing:** Always turn off the tractor engine, disengage the PTO, and allow all moving parts to stop completely before performing any adjustments, maintenance, or clearing clogs.
- **Feed Material Safely:** Never feed material larger than the specified capacity. Do not force material into the hopper. Use a push stick for smaller items, never your hands or feet.
- **Stable Ground:** Operate the chipper/shredder on level, stable ground to prevent tipping.
- **Awareness of Kickback:** Be aware that material can kick back from the feed opening. Stand to the side when feeding.
- **No Alcohol or Drugs:** Do not operate the machine under the influence of alcohol, drugs, or medication that could impair your judgment or reaction time.

3. SETUP AND ASSEMBLY

The Mighty Mac TPH123 is designed for easy attachment to Category 1 tractors. Follow these steps for proper setup.

1. **Prepare Tractor:** Ensure your tractor is a Category 1 model with 10-30 PTO HP and a 540 RPM PTO shaft. Park the tractor on a level surface, engage the parking brake, and turn off the engine.
2. **Attach 3-Point Hitch:** Align the chipper's lower hitch pins with the tractor's lower lift arms. Secure them with appropriate pins and clips. Connect the top link of the tractor's 3-point hitch to the chipper's upper hitch point, securing it with a pin.
3. **Connect PTO Shaft:** Carefully align the PTO shaft (included) with the tractor's PTO spline and the chipper's input shaft. Ensure both ends are fully engaged and locked into place. Verify that the PTO shaft guard is intact and properly positioned.
4. **Adjust Height:** Use the tractor's 3-point hitch controls to raise or lower the chipper to a comfortable and stable operating height. Ensure the chipper is level.
5. **Final Inspection:** Double-check all connections, pins, and guards. Ensure there are no loose parts or obstructions.

4. OPERATING INSTRUCTIONS

Once the Mighty Mac TPH123 is securely attached to your tractor, follow these steps for safe and effective operation.

1. **Start Tractor:** Start the tractor engine and allow it to warm up.
2. **Engage PTO:** Slowly engage the tractor's PTO at a low RPM. Gradually increase the engine speed until the PTO reaches the recommended 540 RPM. Listen for any unusual noises or vibrations.
3. **Feeding Material:**
 - **Chipping:** For branches up to 3-1/2 inches in diameter, feed them into the chipper hopper. Allow the machine to pull the material in. Do not force large branches.
 - **Shredding:** For leaves, small brush, stalks, and other garden debris, feed them into the shredder hopper. The 24 free-swinging hammers will pulverize these materials efficiently.
4. **Monitor Performance:** Observe the machine's performance. If the engine bogs down significantly, reduce the feeding rate. Avoid overloading the chipper.
5. **Clearing Jams:** If a jam occurs, immediately disengage the PTO, turn off the tractor engine, and wait for all moving parts to stop. Refer to the Troubleshooting section for clearing instructions.

6. **Shut Down:** When finished, disengage the PTO, reduce the tractor engine to idle, and then turn off the engine. Allow the machine to cool before detaching or storing.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Mighty Mac TPH123. Always perform maintenance with the tractor engine off and the PTO disengaged.

- **Blade and Hammer Inspection:** Regularly inspect the chipper knife and shredding hammers for wear, damage, or dullness. The tool steel heat-treated knife can be resharpened. The 24 free-swinging hammers are heat-treated, case hardened, and reversible four times, extending their useful life.
- **Lubrication:** Refer to the lubrication points indicated on the machine (if any) and apply grease as recommended. Pay attention to bearings and pivot points.
- **Fastener Check:** Periodically check all nuts, bolts, and fasteners for tightness. Tighten as necessary to prevent vibration and component wear.
- **Cleaning:** After each use, clean the machine to remove debris, sap, and dirt. This prevents buildup that can hinder performance and cause corrosion.
- **Storage:** Store the chipper/shredder in a dry, protected area when not in use. Cover it to protect from elements.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your Mighty Mac TPH123.

Problem	Possible Cause	Solution
Machine not chipping/shredding effectively	Dull chipper knife or hammers; Insufficient PTO RPM; Overfeeding	Sharpen or replace chipper knife; Rotate or replace hammers; Ensure tractor PTO is at 540 RPM; Reduce feeding rate
Machine jams frequently	Overfeeding; Material too large or wet; Debris buildup	Reduce feeding rate; Ensure material is within capacity and relatively dry; Clear debris from hoppers and discharge chute (with engine off and PTO disengaged)
Excessive vibration	Unbalanced flywheel (unlikely due to factory balancing); Loose fasteners; Damaged knife or hammers	Check and tighten all fasteners; Inspect knife and hammers for damage and replace if necessary. If vibration persists, contact support.
PTO shaft not engaging	Incorrect alignment; Damaged spline; Locking pin not retracting	Ensure proper alignment; Inspect splines for damage; Check PTO shaft locking mechanism.

For issues not covered here, or if problems persist, please contact the manufacturer's customer support.

7. SPECIFICATIONS

- **Model:** TPH123
- **Chipping Capacity:** Up to 3-1/2 inches (8.9 cm)
- **Shredding Elements:** 24 free-swinging, heat-treated, case hardened, reversible hammers
- **Tractor Compatibility:** Category 1 Tractors

- **PTO Horsepower Requirement:** 10 - 30 HP
- **PTO Speed:** 540 RPM
- **Chipper Knife:** Heavy steel flywheel with tool steel heat-treated, resharpenable knife
- **Product Dimensions:** 48 x 48 x 48 inches (121.9 x 121.9 x 121.9 cm)
- **Item Weight:** 150 pounds (68 kg)
- **Included:** PTO Shaft
- **Origin:** Made in the USA

8. WARRANTY INFORMATION

Specific warranty details for the Mighty Mac TPH123 are typically provided at the time of purchase or can be found on the manufacturer's official website. Please retain your proof of purchase for warranty claims. For detailed warranty terms and conditions, contact the manufacturer directly.

9. CUSTOMER SUPPORT

Should you require assistance with your Mighty Mac TPH123, have questions regarding its operation, or need to order replacement parts, please contact the manufacturer or your authorized dealer.

For the most current contact information, please refer to the packaging, the manufacturer's website, or your purchase documentation.