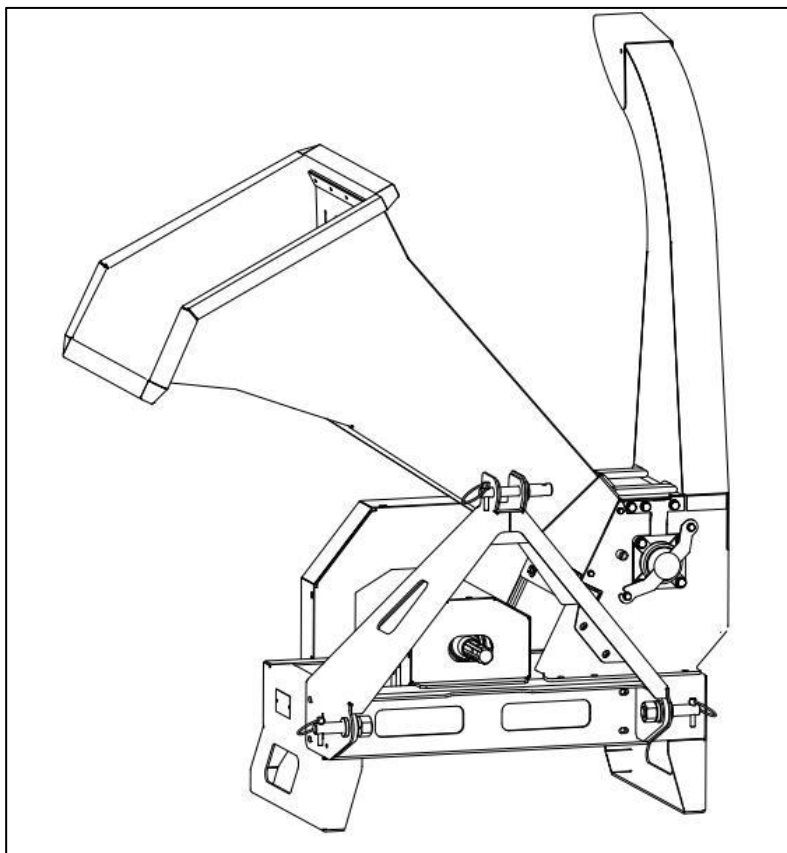




*Semi Commercial Wood Chipper
User's Manual*



R series 10 (PTO)

Please read through this owner's manual carefully before using the product, to ensure the safety of yourself and others.

**Due to continuing improvements, actual product may differ slightly from the product described herein.*

Content

<i>Semi Commercial Wood Chipper</i>	1
<i>User's Manual</i>	1
<i>R series 10 (PTO)</i>	1
1. Specifications	1
2 . General safety rules	2
2.1 Labels	2
2.2 Safety for Yourself and Those Around You	3
2.3 Safety for Children and Pets	5
2.4 General Safety	5
2.5 Transportation Safety	8
3. Setting up	9
3.1 Controls and Features	9
3.2 Unpacking	9
3.3 Assembly	11
3.3.1 Attaching hopper assembly	11
3.3.2 Attaching the conveyor assembly	11
3.4 Attaching chipper and tractor	11
3.4.1 Connecting the chipper and tractor	12
3.4.2 Calculating length of PTO Shaft needed	12
3.4.3 Modifying the PTO Shaft-if required	14
4. Operating	16
4.1 Starting	16
4.2 Processing	17
4.3 To Free a Jammed Rotor	18
5. Maintaining the chipper	19
5.1 Regular Maintenance Check List	20
5.2 Grease Fittings	20
5.3 The Drive Belt maintenance	21
5.4 The Blade and Counter Blade maintenance	22
5.5 Storage	23
6. Troubleshooting	24
7. Troubleshooting Table	24
8. Spare Parts Diagram	25



Attention!

Please read the manual and warning signs or security points carefully. Ignoring to read and understand the manual content, may cause failure to start machine, damage to the machine or serious injury to operator. Before using the machine, make sure you have read the manual and understand all.

1. Specifications

Tractor Horsepower	16 HP +
Drive	Tractor PTO
PTO Speed	540 RPM
Chipping Capacity	4"
Rotor Speed	2,200 RPM
Blade	2 blade, 1 anvil blade
Rotor	26kg
Hopper Opening at Top	480mmx340mm
Chipper Weight w/PTO Shaft	180kg

Shipping Dimensions	1100 x 750 x 1100 mm
Shipping Weight	210kg

Serial Number

A Serial Number is used to identify your machine. The number is located on the Serial Number Label on your machine. For your convenience and ready reference, enter the Serial Number in the space provided on the front cover of this manual.

2 . General safety rules




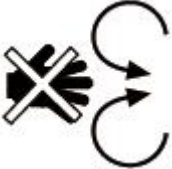




- *Read this safety & operating manual and your tractor owner's manual before you use PTO chipper. Become familiar with the operation and service recommendations to ensure the best performance from your machine.*
- *Thoroughly inspect the area in which you will be working and remove all foreign objects. Look for rope, wire, etc., and remove these objects before chipping. Inserting these objects into the chipper hopper could damage the machine and/or cause injury.*
- *This is a high-powered machine, with moving parts operating with high energy at high speeds. You must use proper clothing and safety gear when operating this machine to prevent or minimize the risk of severe injury. This machine can crush, grind, cut, and sever parts of your body if they enter the inlet or discharge area of your chipper.*

2.1 Labels

Your PTO CHIPPER carries prominent labels as reminders for its proper and safe use.

Shown below are copies of all the safety and operation labels that appear on the equipment.

Take a moment to study them and make a note of their location on your chipper as you assemble and before you operate the unit. Replace damaged or missing safety and operation labels immediately.

	<p>No entry in the area marked. Stay away from the machine in radius of 10 meters.</p>
	<p>No touch on rotor, be caution that rotor is easily rolling and very dangerous.</p>
	<p>Wear gloves</p>
	<p>Wear goggles</p>
	<p>Wear muffer</p>
	<p>Be careful of sharp blades.</p>

2.2 Safety for Yourself and Those Around You

! WARNING!

- *This is a high-powered machine, with moving parts operating with high energy at high speeds. You must operate the machine safely.*
- *Unsafe operation can create a number of hazards for you, as well as anyone else in the nearby area.*

ALWAYS TAKE THE FOLLOWING PRECAUTIONS WHEN USING THIS MACHINE:

- Always wear protective goggles or safety glasses with side shields while chipping to

protect your eyes from possible thrown debris.

- Avoid wearing loose clothing or jewelry, which can catch on moving parts or the material fed into the chipper hopper.
- We recommend wearing gloves while chipping. Be sure your gloves fit properly and do not have loose cuffs or drawstrings.
- Wear shoes with non-slip treads when using your chipper. If you have safety shoes, we recommend wearing them. Do not use the machine while barefoot or wearing open sandals.
- Wear long pants while operating PTO chipper.
- Use mufflers or ear plugs rated for at least 20 dba to protect your hearing.
- Never allow people who are unfamiliar with these instructions to use the chipper. Allow only responsible individuals who are familiar with these rules of safe operation to use your machine.
- Never place your hands, feet, or any part of your body in the chipper hopper, discharge opening, or near or under any moving part while the machine is running. Keep area of discharge clear of people, animals, buildings, glass, or anything else that will obstruct clear discharge, cause injury, or damage. Wind can also change discharge direction, so be aware. If it becomes necessary to push material into the chipper hopper, use a small diameter stick, not your hands.
- Keep bystanders 10 meters away from your work area at all times. Wood chips exit the chipper at great speeds. To be safe, do not operate the machine near small children or pets, and never allow children to operate the chipper. Disengage the PTO and stop the tractor engine when another person or pet approaches.
- Never use the machine without ensuring that all guards and shields are in place, including the chipper hopper, conveyor and blowback shield.

- Always operate the machine from the operator zone. Never pass or stand on the discharge side of the machine when the tractor engine is running or the rotor is turning.
- Never transport the chipper with the PTO engaged and the rotor turning.
- Clear the area of objects such as wire and rope, etc. Inserting these objects into the chipper hopper could damage the rotor and/or cause injury.
- Never, under any conditions, remove, bend, cut, fit, weld, or otherwise alter standard parts on PTO chipper. Modifications to your machine could cause personal injuries and property damage and will void your warranty.

2.3 Safety for Children and Pets



- *Tragic accidents can occur if the operator is not alert to the presence of children and pets. Children are often attracted to the machine and the chipping activity. Never assume that children will remain where you last saw them.*

ALWAYS FOLLOW THESE PRECAUTIONS:

- Keep children and pets at least 100 feet from the working area and under the watchful care of a responsible adult.
- be alert and turn the machine off if children or pets enter the work area.
- never allow children to operate PTO chipper.

2.4 General Safety



- *PTO chipper is a powerful tool, not a plaything.*
- *Operating this chipper safely is necessary to prevent or minimize the risk of death or*

serious injury. Unsafe operation can create a number of hazards for you.

• Exercise extreme caution at all times. The design of this machine is to chip wood. Do not use it for any other purpose.

ALWAYS TAKE THE FOLLOWING PRECAUTIONS WHEN OPERATING THIS CHIPPER:

• This machine is designed to operate at 540 rpm only! Never operate the machine at a faster speed; doing so can cause serious injury to the operator or bystanders and could cause damage to the machine that is not covered under warranty.

• The PTO chipper must be operated with the weight of the machine on the ground.

Operating the machine while it is off the ground can result in injury to yourself or others, or can cause damage to the machine which is not covered under warranty.

• Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people, their property, and themselves.

• know how to stop the chipper quickly by disengaging the PTO and shutting down the tractor.

• Operate this machine on a level surface only. Never operate your unit on a slippery, wet, muddy, or icy surface. Exercise caution to avoid slipping or falling.

• Keep your face and body back from the chipper hopper to avoid accidental bounce back of any material.

• When feeding material into the chipper hopper, be extremely careful that pieces of metal, rocks, or other foreign objects are not included. Personal injury or damage to the machine could result.

• Whenever you leave the operating position or if you have to remove processed material,

leaves, or debris from the machine, always disengage the PTO, shut down the tractor engine, remove the key, wait for all moving parts to come to a complete stop, disconnect the PTO shaft from the tractor, then wait 5 minutes before removing processed material, leaves, or debris from the machine.

- If the cutting mechanism strikes a foreign object or if your machine should start making an unusual noise or vibration, immediately disengage the PTO, shut down the tractor engine, remove the key, wait for all moving parts to come to a complete stop, disconnect the PTO shaft from the tractor, then wait 5 minutes before inspecting for clogging or damage.

Vibration is generally a Warning of trouble. Clean and repair and/or replace damaged parts.

- Never tamper with safety devices. Check their proper operation regularly.
- Stay alert for hidden hazards or traffic. Never carry passengers on your machine.
- Never overload or attempt to chip material beyond the manufacturer's recommendation; see chapter 4. personal injury or damage to the machine could result.
- While using PTO chipper, don't hurry or take things for granted. When in doubt about the equipment or your surroundings, stop the machine and take the time to look things over.
- Never operate the machine when under the influence of alcohol, drugs, or medication.
- Use the machine only in daylight.
- Keep all nuts and bolts tight and keep the equipment in good operating condition.
- Your PTO chipper is driven by a PTO shaft that transfers power from your tractor. A PTO shaft is extremely dangerous and can cause serious injury or death. Read and understand all of the safety and operating instructions manual that came with your PTO shaft.

 **NOTICE!**

No list of warnings and cautions can be all-inclusive. If situations occur that are not covered by this manual, the operator must apply common sense and operate this chipper in a safe

manner.

2.5 Transportation Safety

- Before transporting, be certain the PTO chipper is correctly and Securely attached to your tractor and the safety chains of the PTO are in place.
- Make sure the PTO chipper is raised high enough to clear all obstacles during transportation.
- Never transport the machine for long distances.
- Never allow anyone to ride on the PTO chipper.
- Never transport anything on the machine.
- Never transport the PTO chipper with the PTO engaged.
- Obey local, state, and federal regulations when transporting the machine on public roads and highways.
- Allow for added length in driving situations, e.g., when turning, parking, and Crossing intersections.
- Adjust your transportation speed for terrain and conditions.
- Use caution when backing or turning. Be aware of the large turning radius Required with PTO chipper attached to your tractor.

Additional Information and Potential Changes

We reserves the right to discontinue, change, and improve its products at any time without notice or obligation to the purchaser. The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional.

Some illustrations may not be applicable to your machine.

3. Setting up

This chapter outlines unpacking and a few simple steps you will need to follow to set up your new machine before you use it. It may be helpful to familiarize yourself with the controls and features of your PTO CHIPPER as shown in before beginning these procedures.

3.1 Controls and Features



3.2 Unpacking

! WARNING!

- *Wear gloves when removing the crate top to protect your hands from debris.*
- *Stabilize the wood crate on clean flat terrain before attempting to unpack and assemble the chipper.*

! NOTICE!

Unpacking the PTO CHIPPER is a two-person job.

We recommend you have an extra set of hands available before you begin because the CHIPPER weighs 145KG.



Step A

- 1. Use the electric driller with socket 10mm to take off the fix screw (picture right)*
- 2. Lift up crate top and put it aside by two people*
- 3. Remove the carton board*
- 4. Take off the stretching plastic*
- 5. Cut plastic banding with wire cutter*

Step B

- 1. Put carton board under banding aside on a flat area*
- 2. Remove the conveyor*
- 3. Put the hopper aside with carton board cushioned*
- 4. With the help of another person, lift and slide the machine off the pallet. it is a lot of easier if you have forklift.*

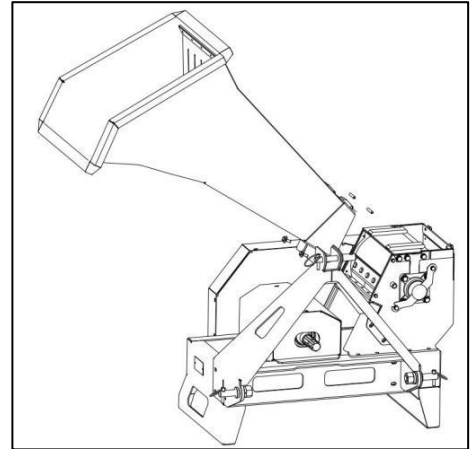


All the package materials are recyclable, please do not throw them away as waste.

3.3 Assembly

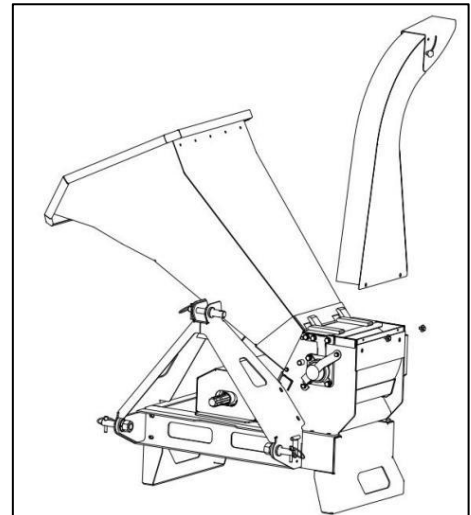
3.3.1 Attaching hopper assembly

1. First remove the two bolts pre-mounted with spanner.
2. With the help of another people, lift up the hopper with bottom panel upside.
3. Connect the hitch pin and holder.
4. Put the hopper down and bolt it tightly.



3.3.2 Attaching the conveyor assembly

1. First remove the two bolts pre-mounted with wrench.
2. Connect the hitch pin and hitch holder.
3. Bolt the conveyor tightly.



! NOTICE!

All the package materials are recyclable, please do not throw them away as waste.

3.4 Attaching chipper and tractor

- *Before performing the following procedure, be sure your tractor engine is off, brake is set, and the key removed for safety.*

3.4.1 Connecting the chipper and tractor

! NOTICE!

The PTO Drive shaft provided with your new machine is sized to fit a standard category 1 PTO (1-3/8" DIA. x 6" Spline). The PTO shaft on the tractor that is to use this machine must rotate clockwise when viewing the PTO from the rear of the tractor. If the PTO rotates counterclockwise, you must have your tractor modified by installing a gearbox to reverse the direction of rotation. The length of the PTO Drive shaft that is included with your new machine may need to be modified.

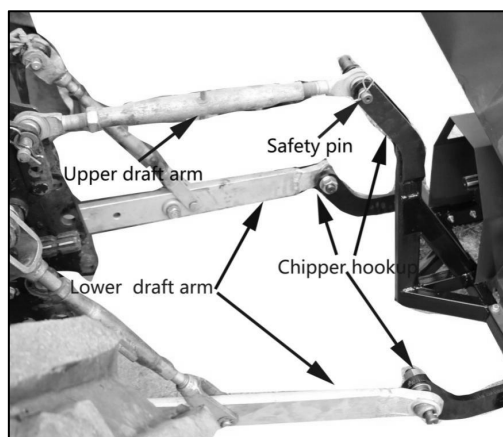
See the procedure for checking the PTO Shaft length needed and modification instructions in this chapter.

1. Back the Tractor to the Chipper and position the Lower Draft Arms near the Chipper Hookup.

2. Slide the Lower Draft Arms onto the Chipper Hookup Pins and secure with safety Pins.

3. Position the Upper Draft Arm inside the Mounting Bracket and align with the Mounting Bracket Holes

4. Insert the safety Pin to secure the Upper Draft Arm to the Chipper.



3.4.2 Calculating length of PTO Shaft needed

! NOTICE!

The PTO Shaft provided with your Chipper is 27" overall compressed length and will work for most applications without modifications. Before you install the PTO Shaft it is good practice to run through the following dimension checks to calculate optimum PTO Shaft

length to determine if modifications are needed.

Without the PTO Shaft installed, use the table below to record the dimensions as outlined in the following steps.

SHAFT TO SHAFT MEASUREMENTS	
ON GROUND	_____Inches
SHAFTS LEVEL	_____Inches
FULLY RAISED	_____Inches

1. Lower the Chipper all the way onto the ground in the operating position. Measure from the end of the Tractor PTO Shaft to the end of the Chipper PTO Shaft and record this dimension in the “**ON GROUND**” row of the table above.
2. Raise the Chipper up until the Tractor PTO Shaft and Chipper PTO Shaft are parallel with each other. Measure from the end of the Tractor PTO Shaft to the end of the Chipper PTO Shaft and record this dimension in the “**SHAFTS LEVEL**” row of the table above.
3. Raise the Chipper up as far as it will go. Measure from the end of the Tractor PTO Shaft to the end of the Chipper PTO Shaft and record this dimension in the “**FULLY RAISED**” row of the table above.

If your longest measurement exceeds 32" you will require a longer PTO Shaft. Do not proceed with installation until you have a longer PTO Shaft.

4. Take the shortest recorded measurement you wrote in the table and add 2".
5. Take that number and subtract it from 27" (overall compressed length of the supplied PTO Shaft).
6. This final number is the length that you will need to cut off of the PTO Shaft for it to fit properly to your Tractor.

EXAMPLE:

Let's assume the shortest center-to-center measurement in the table is 22".

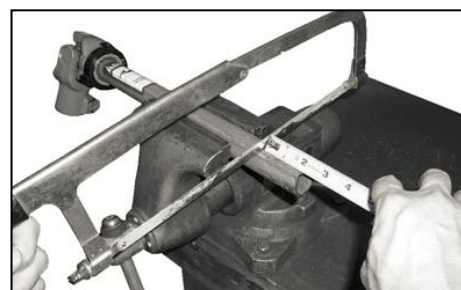
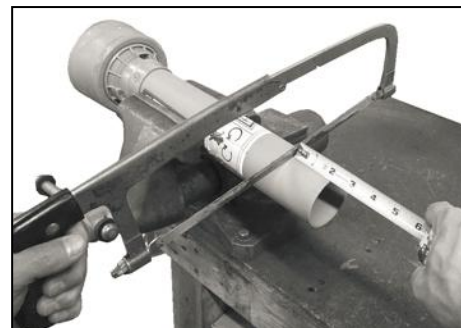
- $22 + 2 = 24$ (step 4 above)
- $27 - 24 = 3$ (step 5 above)
- You would be required to cut 3" off both halves of the PTO Shaft and 3" off of the Guard.

If you end up with 0" or a negative number, then no changes are needed until you reach a maximum long measurement of 32" as indicated on previous page.

3.4.3 Modifying the PTO Shaft-if required

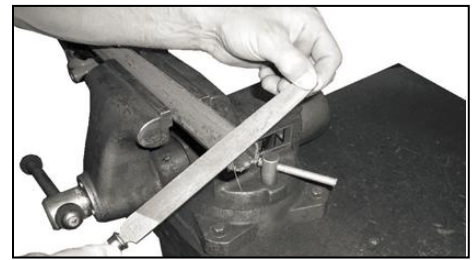
The PTO Shaft included with your new Chipper may be too long for your tractor. To shorten the Driveshaft, proceed as follows:

1. Separate the PTO Shaft Halves by pulling them apart.
2. Separate the Guards from the PTO Shaft Halves by inserting a flat tip screwdriver into the Bearing Tab Slots as you pull down on the Safety Guard to release the Safety Guard from the Shaft (see the right ref. picture).
3. Measure and cut the ends of both Guards the required amount (see the right ref. picture).

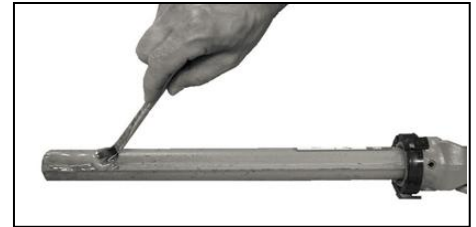


NOTE: If you put the Guards in a vise to hold them, be careful not to clamp it too tight because it could crack the plastic.

4. Measure and cut each Shaft Tubes to the required length using the hacksaw (*see the right ref. picture*).



5. File or sand any burrs from the Shaft ends (*see the right ref. picture*).



6. Grease both Shaft Tubes and under the Bearing Rings of each Shaft (*see the right ref. picture*).

7. Insert the Shaft Halves into the Guards making sure that

the Bearing Ring Slot lines up with the Tab on the inside of the Guards for proper installation (*see the right ref. picture*).

8. Slide the two PTO Shaft Halves together.

! NOTICE!

When inserting one half of the PTO Shaft to the other you must line up the splines correctly (two pointed splines and one flat spline).



3.4.4 Attaching the PTO Shaft to the Tractor and Chipper

1. Push in the PTO Shaft Spring Pin and slide the PTO Shaft onto the Tractor Spline (*see the right ref. picture*).



2. Release the Spring Pin and continue sliding the PTO Shaft on until the Spring Pin Pops out and locks into the detent in the Tractor PTO Spline.



3. Secure the PTO Shaft Safety Chains to stationary parts of the Chipper Frame and Tractor to stop the Guard from turning (*see the right ref. picture*).

4. Operating

This chapter covers the procedures for starting and stopping your new PTO CHIPPER and discusses basic operation features.

WARNING!

- *This machine is designed to operate at 540 rpm only! Never operate the machine at a faster speed; doing so can cause serious injury to the operator or bystanders and could cause damage to the machine that is not covered under warranty.*
- *The PTO chipper must be operated with the weight of the machine on the ground. Operating the machine while it is off the ground can result in injury to yourself or others, and can cause damage to the machine which is not covered under warranty.*
- *Contact with internal rotating parts will cause serious personal injury. Never put hands, face, feet, or clothing into chipper hopper or discharge opening or near the discharge area or PTO shaft at any time.*
- *Never operate the machine without the hopper or conveyor or PTO shaft properly installed.*

4.1 Starting

1. Ensure that the Chipper is lowered to the ground and all Guards are in place and properly secured before using.
2. Remove any debris buildup from the machine before every use of the Chipper.
3. Set Tractor throttle at IDLE before engaging PTO with Chipper attached.

4. Increase Tractor throttle to the RUN RPM's required to obtain 540 PTO speed before chipping.
5. Reduce Tractor throttle to IDLE before disengaging PTO.

Operation Notes

- Check the Drive Belt, if necessary, after an initial break-in period of one hour.
- Visually check the Chipper Blade for damage before each use of the machine.
- Always operate the Tractor PTO at 540 RPM when chipping.
- Keep proper balance and footing while operating the PTO CHIPPER.
- ALWAYS disengage the PTO when leaving the Operating Zones or when moving the machine.
- Never move the Chipper while the PTO is turning.

4.2 Processing

1. The Chipper is designed to accept wood only. The Chipper Blade mounted on a revolving rotor turns branches fed into the Chipper Hopper into "chips". The Chipper can chip branches ranging in size up to 4" in diameter.
2. Your PTO CHIPPER can process dry or green wood up to 4" in diameter.
3. The Chipper will self-feed the wood once it contacts the blade edge so forcing the branches into the Hopper is not necessary if the blade is sharp.
4. Green wood will process quicker and easier than dry wood.
5. Softwood processes easier than hardwood.
6. Your operator experience will teach you how different types of wood will chip and how fast you can process them.

7. Use caution with small diameter green saplings and branches less than 2" in diameter. Chip these grouped or bundled together to provide support for each other. If the material is 2" or larger, feed only one at a time into the Chipper Hopper.
8. Make sure the PTO CHIPPER finishes processing material in the Hopper before disengaging the PTO and shutting the Tractor engine off.
9. Do not force material into the Chipper. If the machine does not chip well, the Chipper Blade may need sharpening or replacement, or the gap between the Blade and the Counter blade needs adjusting.

! NOTICE!

- *Use common sense when using the machine. Learn to recognize the change in sounds when overloaded. Disengage PTO and turn off the tractor engine immediately if the machine becomes jammed to prevent damage to the drive system.*
- *Never throw remaining stubs or knots into the chipper hopper; damage will result.*
- *Extremely hard knots will not process very well. Push any short stubs that have not self-fed through the Chipper, with the next branch to be chipped.*
- *Overloading the Chipper Hopper will cause the rotor speed to decrease. If you hear the engine RPM decreasing, stop feeding material into the Chipper Hopper until the engine has returned to full speed.*

4.3 To Free a Jammed Rotor

Disassemble:

1. Disconnect the PTO Shaft.
2. Remove any material left in the Chipper Hopper.

3. Remove the two Bolts and Locknuts that secure the Conveyor to the Chipper
4. Check to see if the Conveyor or Discharge opening is clogged. If it is, clear it with a branch.
5. Take off the bearing cover holder and turn the rotor shaft clockwise with rotor spanner.
6. With a wooden stick, loosen and remove any material left in the rotor housing and make sure the rotor turns freely with the spanner.

Reassemble:

1. Position the Conveyor onto the Chipper Assembly and secure with two Bolts.
2. Reconnect the PTO Shaft, start the Tractor and engage the PTO; allowing the remaining material in the rotor housing to discharge.
3. If the Chipping Chamber doesn't clear and the rotor is still jammed, repeat above process.

! NOTICE!

Be certain the rotor turns freely before trying to process more material into the Chipper Hopper.

5. Maintaining the chipper

This chapter covers regular maintenance procedures that will ensure the best performance and long life of your PTO CHIPPER.

! WARNING!

• Disengage PTO, shut down the tractor engine, remove the key, wait for all moving parts to come to a complete stop, disconnect the PTO shaft from the tractor, then wait 5 minutes before performing any maintenance procedure or inspection on the chipper.

5.1 Regular Maintenance Check List

NOTICE!

• Consider that the service intervals shown are the maximum under normal operating conditions. Increase frequencies under extremely dirty or dusty conditions. See the Owner's Manual that came with the Tractor and with the PTO Shaft for Specific Tractor and PTO Shaft maintenance.

Procedure	Before Each Use	Every 8-10 Hours	Every 18-20 Hours	Every 40 Hours
Check General Equipment Condition	○			
Check that the ROTOR turns freely (with SPANNER only)	○			
Visually inspect Blade for damage	○			
Check Blade bolts' tightness		○		
Check counter blade bolts' tightness		○		
Check Rotor Bearing Collar Set Screws		○		
Check Blade to Counter blade Gap		○		
Lubricate Rotor Bearings		○		
Lubricate PTO Shaft Grease Fittings		○		
Lubricate PTO Sheave Bearings		○		
Check Belt Tension and Condition	○	○		
Lubricate PTO Shaft Spline ends and center overlap			○	
Inspect or replace Drive Belt				○

5.2 Grease Fittings

NOTICE!

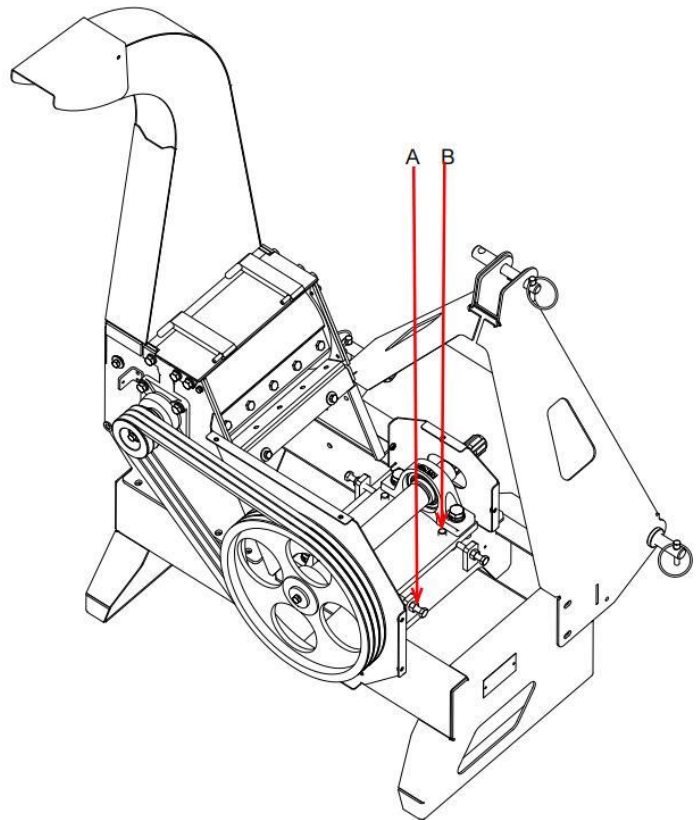
- Your PTO CHIPPER was greased at the Factory. The operator needs to periodically lubricate the four Bearings of the Chipper Assembly and the PTO Shaft.
- Over lubrication can damage the bearings.

1. Wipe all dirt, etc., from the grease fittings with a clean cloth.
2. Apply no more than three pumps of quality general purpose lithium grease with a hand-pumped grease gun to each Bearing Grease Fitting
3. Check the Bearing Set Screws for tightness. If they are not tight then remove them, apply Thread Lock to the threads, then reinstall and tighten the Set Screws.

5.3 The Drive Belt maintenance

Removing the Belt

1. Remove the seven Bolts from the Belt cover using 10MM Hex socket.
2. Remove the Belt cover and shaft cover.
3. Loosen the set bolts(B*4PCS) on the *(see the right ref. picture)*.
4. Use adjust bolts(A*4PCS) to move the shaft holder back and forth to loosen /tighten /change belt.
5. Reinstall the Belt cover onto the cover holder.



Checking the Belt Tension

1. Push down two belts together, check the measurement of its movement up and down.

2. Check if the distance in between is +/- 8 MM. Make necessary adjustment according to tension scope until the required tension is obtained.

! NOTICE!

Make sure that the Belt, pulley or tension pulley are in alignment.

- *The belt on your PTO CHIPPER is tensioned with tension pulley that is set at the factory.*

As the Belt stretches from use, the Belt tension may need to be adjusted.

- *Make sure all nuts and bolts are tightly fixed after your adjustment.*

5.4 The Blade and Counter Blade maintenance

! WARNING!

- *Routine inspection of the Chipper Blade and counter blade will ensure that your PTO Chipper is operating at full efficiency. Operating with a worn or damaged Chipper Blade or Counter blade will cause extreme stress and vibration to the machine and make chipping difficult for the operator.*

- *Routinely check the chipper blade for sharpness. Using a dull blade will decrease performance and cause excessive vibration that will cause damage to the chipper.*

- *Routinely check the distance between blade and counter blade. Wrong distance will decrease performance and cause excessive vibration that will cause damage to the PTO chipper.*

- *Disengage PTO, shut down the tractor engine, remove the key, wait for all moving parts to come to a complete stop, disconnect the PTO shaft from the tractor, then wait 5 minutes before performing any maintenance procedure or inspection on the chipper.*

- *If the rotor surface is not cleaned properly and the chipper blade is not mounted flush on*

the rotor, the blade could crack when the hardware is tightened.

- *Be careful and wear gloves when working near the chipper blade. The blade edge can cut you if you come in contact with it.*

! NOTICE!

- The torque of Blade bolts is around 60-70NM
- Fix the bolts from centre one to both sides evenly.

1. Remove the conveyor and hopper.
2. Rotate the rotor with spanner until the Blade is visible.
3. Lock the rotor with rotor latch.
4. If the Blade has visible nicks or damage it must be sharpened or replaced
5. Remove the blade bolts and remove both blade from the rotor Assembly.
6. Clean the blade holder on the rotor.
7. Replace the new blade with bolts.

5.5 Storage

! WARNING!

- *Disengage PTO, shut down the tractor engine, remove the key, wait for all moving parts to come to a complete stop, disconnect the PTO shaft from the tractor, then wait 5 minutes before performing any maintenance procedure or inspection on the chipper.*
- *when not in use, your PTO chipper should be stored out of the reach of children.*

! NOTICE!

Please refer to the Safety and Operation Manual that came with the PTO Shaft for specific

PTO Shaft procedures.

- Lubricate PTO Shaft Grease Fittings.
- Lubricate two rotor Bearings.
- Lubricate two PTO Sheave Bearings.
- Check the Drive Belt for wear. Replace as needed.
- Release Drive Belt from Tensioner to relieve Belt stress.
- Check the Chipper Blade and Counter blade for nicks and wear. Sharpen or replace as needed.
- Check the general condition of the machine, e.g.; nuts, bolts, welds, etc. Replace parts or tighten hardware as needed.
- Clean any debris from the Hopper and Conveyor.
- Store in a dry covered area to protect from moisture.

6. Troubleshooting

Most problems are easy to fix. Consult the Troubleshooting Table below for common problems and their solutions.



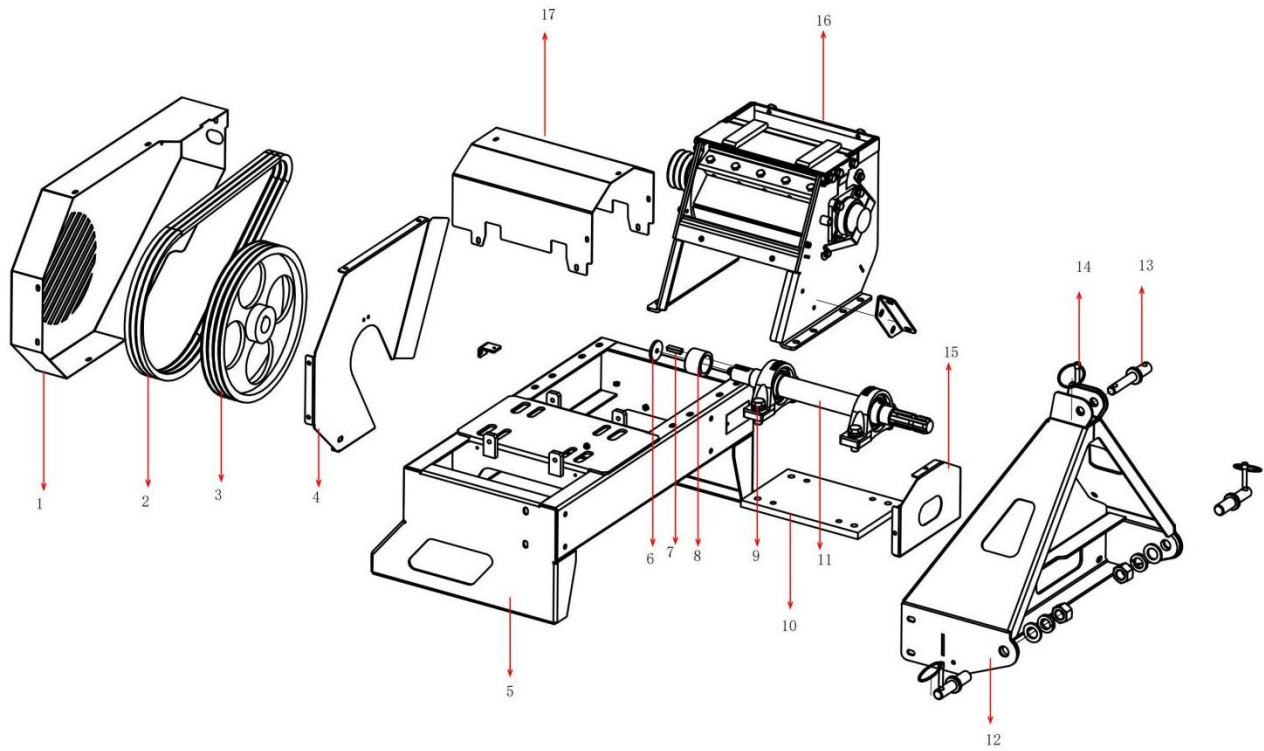
• Disengage PTO, shut down the tractor engine, remove the key, wait for all moving parts to come to a complete stop, disconnect the PTO shaft from the tractor, then wait 5 minutes before performing any maintenance procedure or inspection on the chipper.

7. Troubleshooting Table

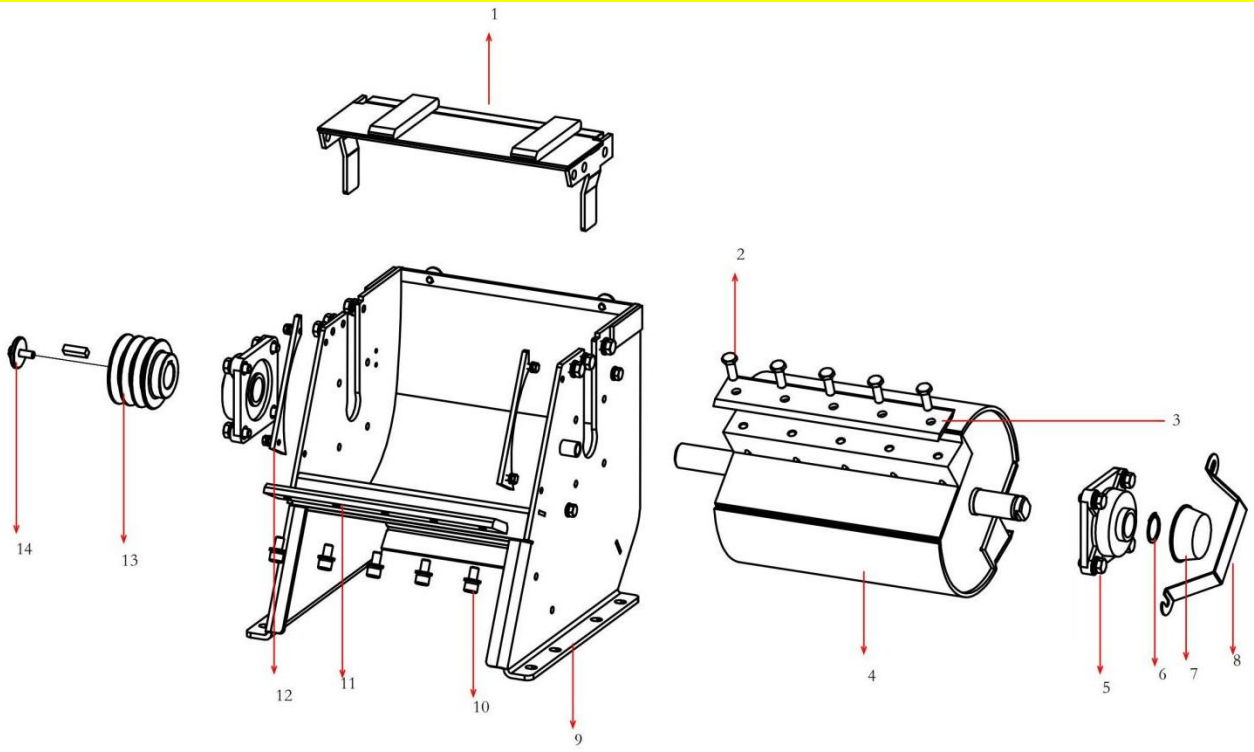
SYMPTOM	POSSIBLE CAUSE/FIX
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<p><i>Rotor won't turn</i></p>	<p>⇒ The Rotor may be jammed. Immediately disengage the PTO and stop the tractor engine. Remove any built-up debris from the Chipper Hopper Inlet and Conveyor.</p> <p>⇒ Check the Drive Pulley alignment and adjust if necessary.</p> <p>⇒ Replace the Drive Belt or re install if the Belt has come off the pulleys.</p> <p>⇒ Turn the Rotor with rotor spanner to be sure it turns freely.,</p>
<p><i>The Belt frays or rolls over the Drive Pulley.</i></p>	<p>⇒ The Drive Pulley groove may have a nick in it. File off any nicks on the Pulley.</p> <p>⇒ Check the Drive Belt for wear and hard spots.</p> <p>⇒ The Drive Belt may be stretched; replace it.</p> <p>⇒ The Pulleys may be misaligned.</p>
<p><i>Chipping action seems too slow or rotor stalls.</i></p>	<p>⇒ The PTO speed is too slow causing the belt to slip. Run the PTO at 540 RPM.</p> <p>⇒ Check for loose or damaged Drive Belt; replace as needed.</p> <p>⇒ Check for a dull or damaged Blade; sharpen or replace the Blade.</p>

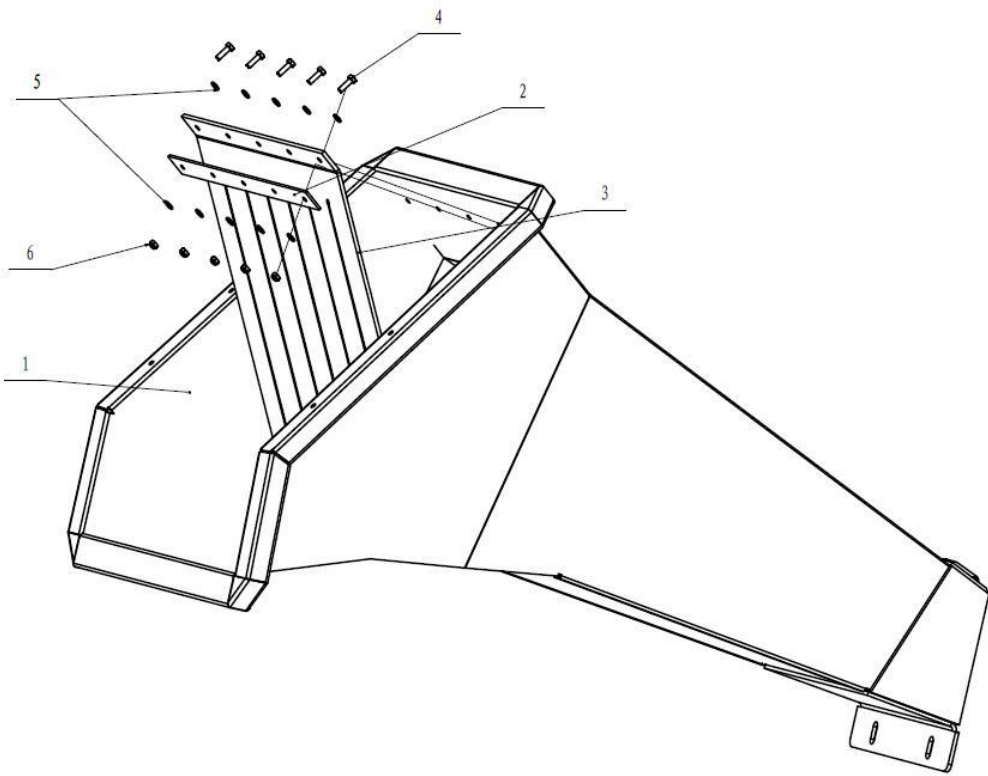
8. Spare Parts Diagram



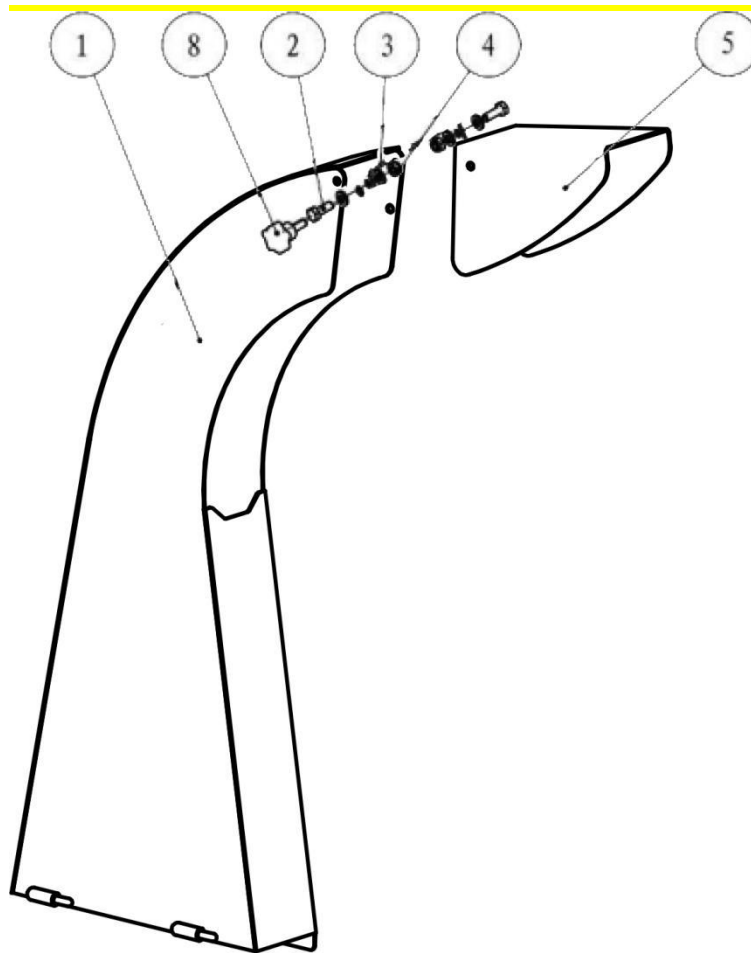
No	Item
1	Belt cover
2	Belts
3	Pulley 35
4	Cover holder
5	Frame
6	Lock washer
7	Key
8	Shaft bush
9	Bearing
10	Shaft plate
11	Shaft
12	Hinge holder
13	Pin
14	Clevis pin
15	Side cover
16	Rotor housing
17	Shaft cover



No	Item
1	Housing cover
2	Bolt blade
3	Blade
4	Drum/rotor
5	Bearing
6	Clip
7	Bearing cover
8	Cover holder
9	Rotor housing
10	Bolt anvil
11	Anvil
12	Rotor protector
13	Pulley rotor
14	Lock washer



No	Name
1	Hopper
2	Washer rubber flap
3	Rubber flap
4	Bolt M6 x 20
5	Washer M6
6	Nut M6



No.	Name
1	Output
2	Bolt M6×16
3	Washer M6
4	Lock nut M6
5	Deflector
8	Knob M6

