

# 3-POINT HITCH DR<sup>®</sup> RAPID-FEED™ CHIPPER



## SAFETY & OPERATING INSTRUCTIONS



Serial No. \_\_\_\_\_

Order No. \_\_\_\_\_

**! DANGER!**

**READ AND UNDERSTAND THIS MANUAL AND ALL INSTRUCTIONS BEFORE OPERATING OR SERVICING THIS 3-POINT HITCH DR RAPID FEED CHIPPER.**

Congratulations on your purchase of a new 3-POINT HITCH DR RAPID FEED CHIPPER!

We have done our utmost to ensure that your 3-POINT HITCH DR RAPID FEED CHIPPER will be one of the most trouble-free and satisfying pieces of equipment you have ever owned. Please let us know of any questions you may have. We want to answer them as quickly as possible. When you do call, please have your order number handy. **For technical assistance, please contact us at [www.DRpower.com](http://www.DRpower.com) or call Toll-Free 1-800-DR-OWNER (376-9637) and one of our Technical Support Representatives will be happy to help you.** We also hope to hear from you on how much you like your new helper.

In addition, please tell your friends about your new 3-POINT HITCH DR RAPID FEED CHIPPER! Having DR Owners spread the word about our products and our way of doing business is the best advertising we can have, and the best way to help us provide even better service in the years to come.

Thanks once again!



for all of us at  
DR Power Equipment

**Sales Manager**

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DR® Power Equipment  
*A division of Country Home Products®*  
75 Meigs Road  
Vergennes, VT 05491

*Toll-free phone:* 1-800-DR-OWNER (376-9637)  
*Fax:* 1-802-877-1213  
*Web site:* [www.dr-owner.com](http://www.dr-owner.com)

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## INTRODUCING THE 3-POINT HITCH DR RAPID FEED CHIPPER

This manual will help you set up and safely operate your new 3-POINT HITCH DR RAPID FEED CHIPPER. Careful adherence to the safety and operating instructions in this manual will ensure many years of productive use.

Please let us know of any questions you may have. We want to answer them as quickly as possible. When you do call, please have your order number handy. **For technical assistance, please contact us at [www.DRpower.com](http://www.DRpower.com) or call Toll-Free 1-800-DR-OWNER (376-9637) and one of our Technical Support Representatives will be happy to help you.**

---

### **DANGER!**

THIS INDICATES A HAZARDOUS SITUATION, WHICH, IF NOT FOLLOWED, WILL RESULT IN DEATH OR SERIOUS INJURY.

---

### **WARNING!**

THIS INDICATES A HAZARDOUS SITUATION, WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY.

---

### **CAUTION!**

THIS INDICATES A HAZARDOUS SITUATION, WHICH, IF NOT AVOIDED, COULD RESULT IN MINOR OR MODERATE INJURY.

---

### **NOTICE!**

THIS INFORMATION IS IMPORTANT IN THE PROPER USE OF YOUR MACHINE. FAILURE TO FOLLOW THIS INSTRUCTION COULD RESULT IN DAMAGE TO YOUR MACHINE OR PROPERTY.

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### *Conventions used in this manual*

**Tip:** This is a helpful hint to guide you in getting the most out of your 3-POINT HITCH DR RAPID FEED CHIPPER.

**Tools Needed:** This indicates you will need a special tool to perform a maintenance function on your Chipper.

**NOTE:** *This information may be helpful to you.*

**If you are ever unsure about an action you are about to take, don't do it. Contact us at [www.DRpower.com](http://www.DRpower.com) or call DR Power Equipment's toll-free support at 1-800-DR-OWNER (376-9637) for help or information.**

## Specifications

### MECHANICAL SPECIFICATIONS

Tractor Horsepower	Category 1 – 65 HP Max.
Drive	Tractor PTO
PTO Speed	540 RPM
PTO Shaft Extension Sheave	14" – 3 Groove 3V
Chipping Capacity	4-1/2"
Rotor Speed	2,071 RPM
Rotor Pulley	3.65" DIA., 3 Groove 3V
Number of Chipper Knives	1
Chipper Knife Size	6-1/4" X 2" X 3/8"
Chipper Knife Material	Heat Treated Tool Steel
Adjustable Knife Wear Plate	Yes
Chipper Flywheel	16-1/2" DIA., 3/4" THK
Flywheel Weight	55 LBS.
Chipper Housing Material	7 GA Steel
Hopper Material	14 GA Steel
Belt	3V-3 Groove X 60"
Belt Adjustment	Spring Loaded Idler Pulley
Hopper Opening at Top	22-1/2" X 29"
Chipper Weight w/PTO Shaft	295 lbs.

### SHIPPING SPECIFICATIONS

Shipping Dimensions	54" L x 46" W x 46" H
Shipping Weight	382 lbs

### 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.

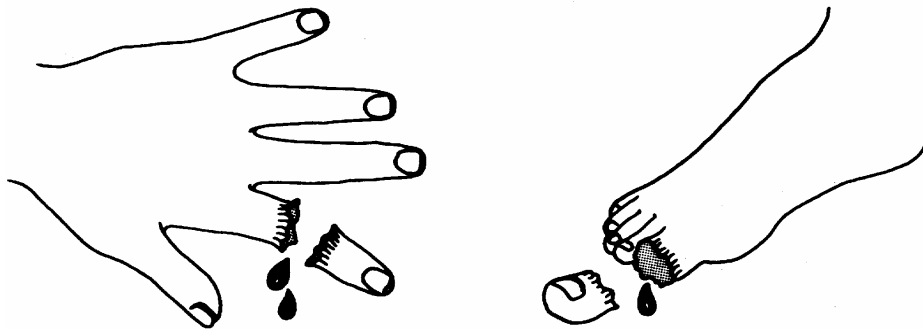
### Order Number

An Order Number is used to check and maintain your order history. The number is located on the upper left portion of your packing slip. For your convenience and ready reference, enter the Order Number in the space provided on the front cover of this manual.

## GENERAL SAFETY RULES

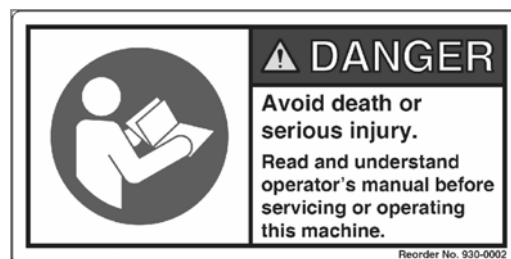
### **WARNING!**

- READ THIS SAFETY & OPERATING MANUAL AND YOUR TRACTOR OWNERS MANUAL BEFORE YOU USE THE 3-POINT HITCH DR RAPID FEED 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.



### *Labels*

Your 3-POINT HITCH DR RAPID FEED 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 3-POINT HITCH DR RAPID FEED CHIPPER as you assemble and *before* you operate the unit. Replace damaged or missing safety and operation labels immediately.



#241801

 	<p><b>⚠ DANGER</b></p> <p>Rotating knife and flywheel can cause death or severe injury.</p> <p>Do NOT place hands, body parts or other objects in or near the discharge chute while machine is running and parts are moving.</p> <p>Do NOT start or operate machine without discharge chute in place.</p> <p>Do NOT try to clear clogs while machine is running and parts are moving.</p> <p>Shut down engine, wait for all moving parts to come to a complete stop, remove spark plug wire, then wait 5 minutes before opening.</p>
	<p style="text-align: right;"><small>Reorder No. 930-0011</small></p>

#241811

<p><b>⚠ WARNING ⚠</b></p> <p>Set Tractor Throttle at IDLE before engaging PTO with Chipper attached.</p> <p>Increase Tractor Throttle to the RUN RPM's Required to obtain 540 PTO speed before chipping.</p> <p>Reduce Tractor Throttle to IDLE before disengaging PTO.</p> <p>Failure to follow these instructions may cause serious injury to the operator and will cause damage to the machine which will not be covered under warranty.</p>
<p style="text-align: right;"><small>091-0458</small></p>



#227391

 	<p><b>⚠ WARNING</b></p> <p>Rotating parts inside can cause severe injury.</p> <p>Do NOT start or operate machine without all guards in place.</p> <p>Improper use can cause machine damage.</p> <p>Keep hands, body parts and loose clothing clear of this area while machine is running and parts are moving.</p> <p>Shut down tractor, wait for PTO and all moving parts to come to a complete stop, then disconnect PTO shaft from tractor before opening.</p>
	<p style="text-align: right;"><small>Reorder No. 930-0023</small></p>

#248821

<p><b>⚠ WARNING</b></p> 	<p>Rotating knife and flywheel can cause severe injury.</p> <p>Do NOT start or operate machine without all guards in place.</p> <p>Shut down tractor, wait for PTO and all moving parts to come to a complete stop, then disconnect PTO shaft from tractor before opening.</p>
<p style="text-align: right;"><small>Reorder No. 930-0022</small></p>	

#248811

 	<p><b>⚠ WARNING</b></p> <p>High speed discharge and debris can cause severe injury.</p> <p>Stand clear of the discharge chute while machine is running and parts are moving.</p> <p>Keep bystanders, children, and pets 100 ft. from machine while in use.</p> <p>Always wear approved safety glasses when using this machine.</p> <p>Be aware of your surroundings, wind can cause the discharge and debris to change direction.</p>
	<p style="text-align: right;"><small>Reorder No. 930-0010</small></p>

#241831



<p><b>⚠ WARNING</b></p> 	<p>Rotating parts inside can cause severe injury.</p> <p>Shut down tractor, wait for PTO and all moving parts to come to a complete stop, then disconnect PTO shaft from tractor before opening.</p>
<p style="text-align: right;"><small>No. 930-0024</small></p>	

#248831









	 <b>DANGER</b>
	<p><b>Entanglement Hazard.</b>  Rotating drive shafts will cause serious injury or death.  Keep clothes, skin, hair, hands, etc. away from drive shaft.  Shut down tractor, wait for all moving parts to come to a complete stop, disconnect PTO shaft before performing any inspection, maintenance or repair to this machine.</p>
TPH	Reorder No. 091-0445

#248791

	 <b>WARNING</b>
	<p><b>Avoid serious injury and machine damage.</b>  Do NOT operate this machine with tractors that have PTO speeds greater than 540 RPM.  Damage caused by running this machine at excessive speed will not be covered under warranty.</p>
TPH	Reorder No. 091-0385

#250581

 <b>DANGER</b>				
<b>Avoid death or serious injury.</b>				
<p>Rotating cutting blades.  Do NOT insert hands, body parts, or metal objects in the hopper or discharge chute while the machine is running and parts are moving.</p>	<p>Shut down tractor, wait for PTO and all moving parts to come to a complete stop, then disconnect PTO shaft from tractor before clearing obstruction.</p>	<p>Keep hands, all body parts, and loose clothing away from moving parts.  Always wear approved safety glasses, hearing protection and gloves when using this machine.</p>	<p>Keep stones, nails, and other objects except branches out of the hopper.  Keep bystanders, children and pets 100 ft. from machine while in use.</p>	<p>Do NOT operate machine without the hopper, blow back shield, discharge chute and all guards securely in place.  Read and understand the operator's manual before servicing or operating this machine.</p>
				
TPH				Reorder No. 930-0025

#248841

## *Protecting Yourself and Those Around You*

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### **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 THE 3-POINT HITCH DR RAPID FEED CHIPPER.
- USE EAR PROTECTORS 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 100 FEET 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, DISCHARGE CHUTE AND BLOWBACK SHIELD.
- ALWAYS OPERATE THE MACHINE FROM THE OPERATOR ZONE (SEE *CHAPTER 4*). NEVER PASS OR STAND ON THE DISCHARGE SIDE OF THE MACHINE WHEN THE TRACTOR ENGINE IS RUNNING OR THE FLYWHEEL IS TURNING.
- NEVER TRANSPORT THE CHIPPER WITH THE PTO ENGAGED AND THE FLYWHEEL TURNING.

---

**! WARNING!**

- CLEAR THE AREA OF OBJECTS SUCH AS WIRE AND ROPE, ETC. INSERTING THESE OBJECTS INTO THE CHIPPER HOPPER COULD DAMAGE THE FLYWHEEL AND/OR CAUSE INJURY.
  - NEVER, UNDER ANY CONDITIONS, REMOVE, BEND, CUT, FIT, WELD, OR OTHERWISE ALTER STANDARD PARTS ON THE 3-POINT HITCH DR RAPID FEED CHIPPER. THIS INCLUDES ALL SHIELDS AND GUARDS. MODIFICATIONS TO YOUR MACHINE COULD CAUSE PERSONAL INJURIES AND PROPERTY DAMAGE AND WILL VOID YOUR WARRANTY.
- 

### *Safety for Children and Pets*

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**! WARNING!**

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 THE 3-POINT HITCH DR RAPID FEED CHIPPER.
- 

### *General Safety*

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**! DANGER!**

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. 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 DR 3-POINT HITCH 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.
-

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** DANGER!**

- YOUR 3-POINT HITCH DR RAPID FEED CHIPPER IS A POWERFUL TOOL, NOT A PLAYTHING. EXERCISE EXTREME CAUTION AT ALL TIMES. THE DESIGN OF THIS MACHINE IS TO CHIP WOOD. DO NOT USE IT FOR ANY OTHER PURPOSE.
  - 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 THE 3-POINT HITCH DR RAPID FEED 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.
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** DANGER!**

- YOUR 3-POINT HITCH DR RAPID FEED 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.
  - 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. CONTACT US AT [WWW.DRPOWER.COM](http://WWW.DRPOWER.COM) OR CALL 1 (800) DR-OWNER (376-9637) FOR ASSISTANCE.
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### *Transportation Safety*

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** CAUTION!**

- BEFORE TRANSPORTING, BE CERTAIN THE DR 3-POINT HITCH CHIPPER IS CORRECTLY AND SECURELY ATTACHED TO YOUR TRACTOR AND THE SAFETY CHAINS OF THE PTO ARE IN PLACE.
  - MAKE SURE THE DR 3-POINT HITCH 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 DR 3-POINT HITCH CHIPPER.
  - NEVER TRANSPORT ANYTHING ON THE MACHINE.
  - NEVER TRANSPORT THE DR 3-POINT HITCH 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 THE 3-POINT HITCH DR RAPID FEED CHIPPER ATTACHED TO YOUR TRACTOR.
-

## ***Additional Information and Potential Changes***

DR Power Equipment 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.

## SETTING UP YOUR 3-POINT HITCH DR RAPID FEED CHIPPER

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 3-POINT HITCH DR RAPID FEED CHIPPER as shown in **Figure 1** before beginning these procedures. If you have any questions at all, please feel free to contact us at [www.DRpower.com](http://www.DRpower.com) or call our Customer Service Representatives at our toll free number: **1-800-DR-OWNER (376-9637)**.

### 3-POINT HITCH DR RAPID FEED CHIPPER Controls and Features

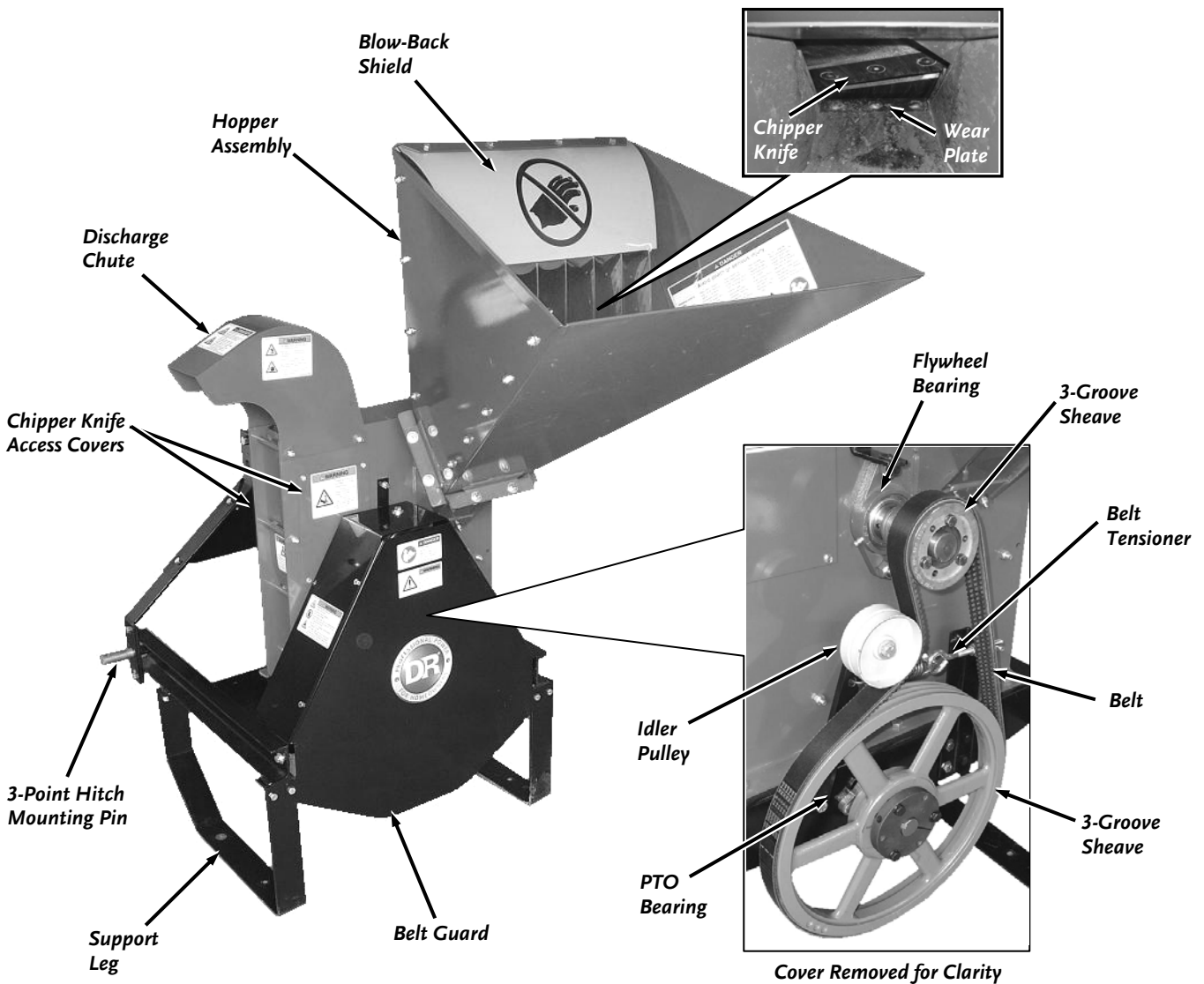


Figure 1

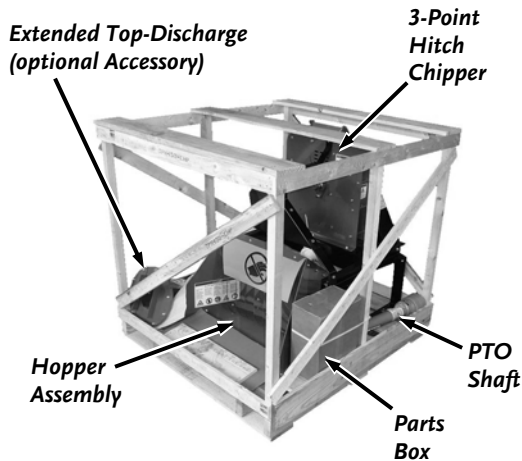


Figure 2

## Unpacking the 3-POINT HITCH DR RAPID FEED CHIPPER

**NOTE:** Unpacking the 3-POINT HITCH DR RAPID FEED CHIPPER is a two-person job. We recommend you have an extra set of hands available before you begin because the 3-POINT HITCH DR RAPID FEED CHIPPER weighs 282 lbs.

### Tools and Supplies Needed:

- Gloves
- Wire Cutters
- Pry Bar
- Hammer
- 1/2" Wrench

### Parts supplied on Skid (Figure 2):

- 3-POINT HITCH DR RAPID FEED CHIPPER
- Hopper Assembly
- PTO Shaft Assembly (with PTO Manual)
- Extended Top-Discharge Chute (if ordered, see Chapter 7 "Chipper Accessories")
- Parts Box containing (Items below and **Figure 3**):
  - Discharge Chute
  - Safety & Operation Instructions Manual
  - Hardware Package (**Figure 4 and Table below**)



Figure 3



Figure 4

HARDWARE PACKAGE CONTENTS (FIGURE 4)		
ITEM #	DESCRIPTION	QTY
1	Bolt, 5/16-18 X 5-1/4"	2
2	Nylon Locknut, 5/16-18	8
3	5/16-18 x 1" Bolts	6
4	5/16" Flat Washer	12
5	Key, 1/4" X 1/4" X 1-1/4"	1
6	Knife Gap Gauge	1
7	Set Screws, 3/8-16 X 3/8"	2



**! WARNING!**

- WEAR EYE PROTECTION WHEN REMOVING THE CRATE TOP TO PROTECT YOUR EYES FROM FLYING DEBRIS.
- STABILIZE THE SHIPPING CONTAINER ON CLEAN FLAT TERRAIN BEFORE ATTEMPTING TO UNPACK AND ASSEMBLE THE CHIPPER.
- FOR YOUR SAFETY WE RECOMMEND YOU HAVE TWO PEOPLE FOR THE FOLLOWING PROCEDURES.

1. Cut the Plastic Banding that is securing the Parts Box, PTO Shaft Assembly and any Accessories that may be strapped to the Crate (*Figure 5*).
2. Remove the Parts Box, PTO Shaft Assembly and any accessories (if ordered).
3. Pry off the two bottom side boards that connect the Crate top to the Pallet (*Figure 6*).
4. With help from another person, lift the Crate Top from the Pallet.

5. Remove the four Lag Bolts that secure the Chipper Support Legs to the Pallet (*Figure 7*).
6. With the help of another person, carefully slide the Chipper from the shipping pallet, resting it on the Support Legs.

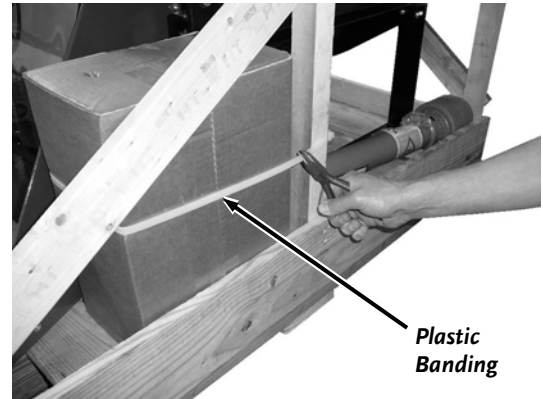


Figure 5

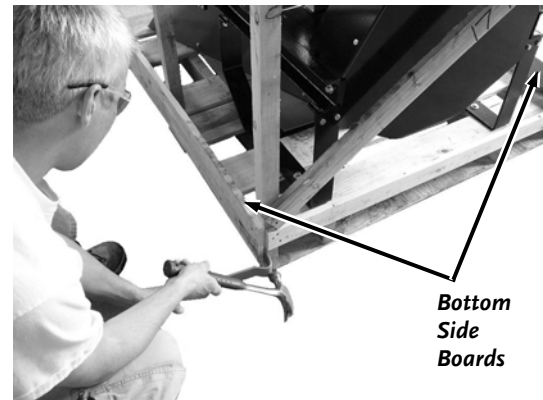


Figure 6

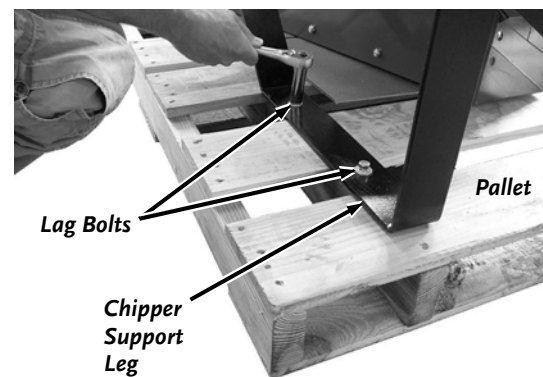


Figure 7

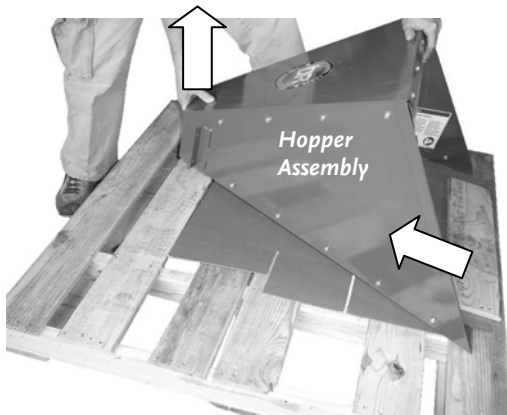


Figure 8

7. Pull up and then out on the small end of the Hopper Assembly to remove it from the Pallet (**Figure 8**).
8. Open the Parts Box and lay out the contents of the Box and the Hardware Package.

Compare the contents of the shipping container and the Parts Box with the Parts Supplied list on page 12. **If there are any questions contact us at [www.DRpower.com](http://www.DRpower.com) or call 1-800-DR-OWNER (376-9637).** Do not discard the shipping materials until you are fully satisfied with your new 3-POINT HITCH CHIPPER.

### Attaching the Hopper Assembly

**NOTE:** We recommend that you have someone help you lift the Hopper in place and support it until it is secured to the Chipper.

#### Tools Needed:

- Two 1/2" Wrenches

1. Attach the Hopper Assembly to the Chipper with six 5/16"-18 x 1" Bolts, twelve Flat Washers (one Washer on Bolt side and one on Lock Nut side) and six Nylon Lock Nuts (**Figure 9**).

**NOTE:** Install hardware with Bolt Head on the top side.

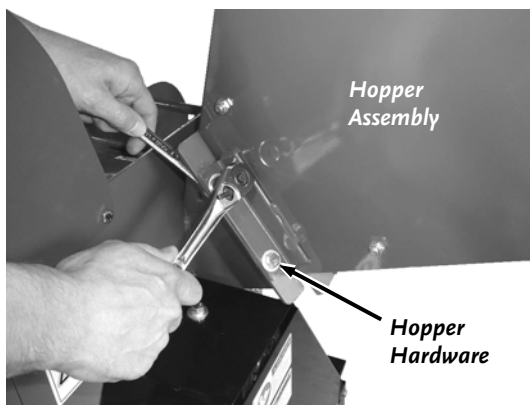


Figure 9

### Attaching the Discharge Chute

#### Tools Needed:

- Two 1/2" Wrenches

1. Position the Discharge Chute as shown and secure with two 5/16-18 x 5-1/4" Bolts and Nylon Locknuts (**Figure 10**).

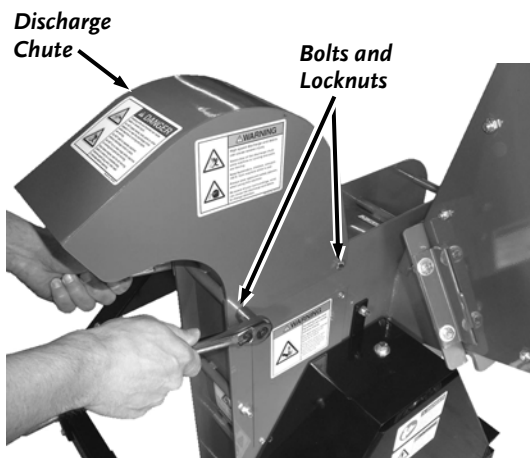


Figure 10

## Attaching the 3-POINT HITCH DR RAPID FEED CHIPPER

**NOTE:** The PTO Driveshaft 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 Driveshaft 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 Pins (**Figure 11**).
2. Slide the Lower Draft Arms onto the Chipper Hookup

### **WARNING!**

**BEFORE PERFORMING THE FOLLOWING PROCEDURE, BE SURE YOUR TRACTOR ENGINE IS OFF, BRAKE IS SET, AND THE KEY REMOVED FOR SAFETY.**

Pins and secure with Tractor Hitch Pins (**Figure 12**).

3. Position the Upper Draft Arm inside the Mounting Bracket and align with the Mounting Bracket Holes (**Figure 13**).
4. Insert the Tractor Hitch Pin to secure the Upper Draft Arm to the Chipper.

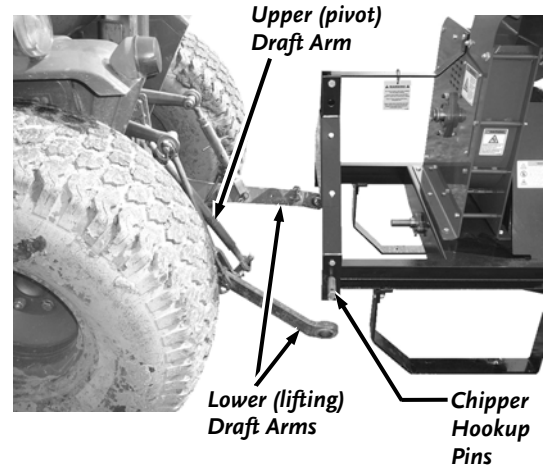


Figure 11

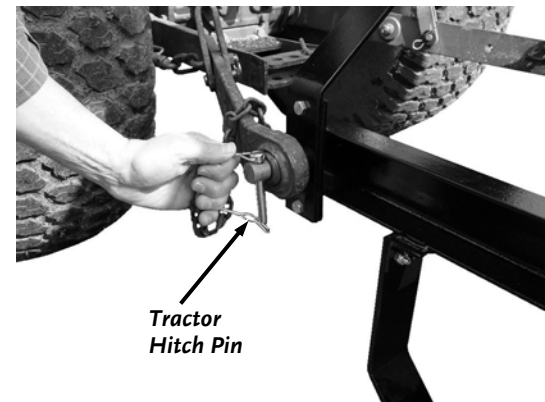


Figure 12

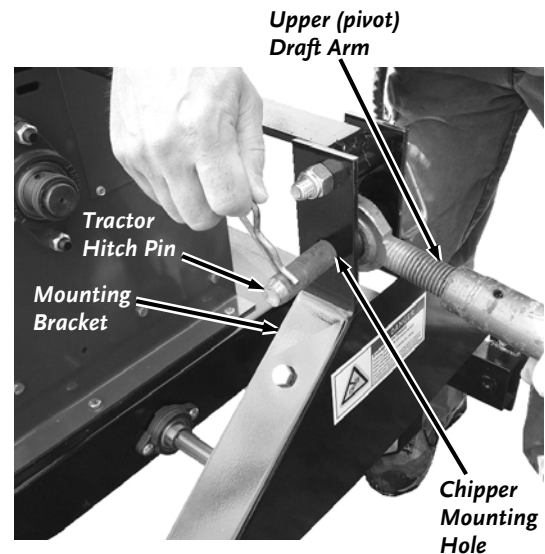


Figure 13

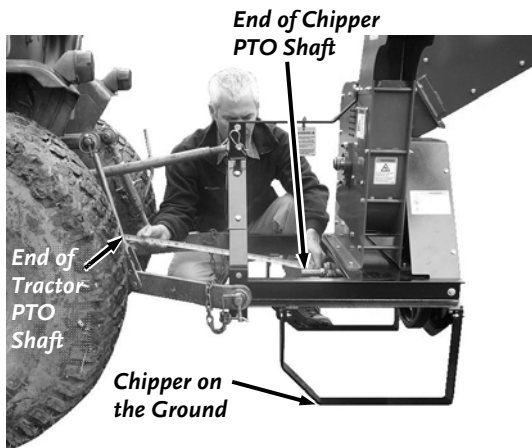


Figure 14

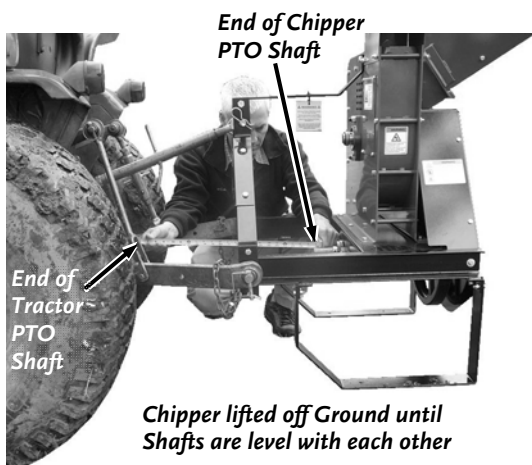


Figure 15

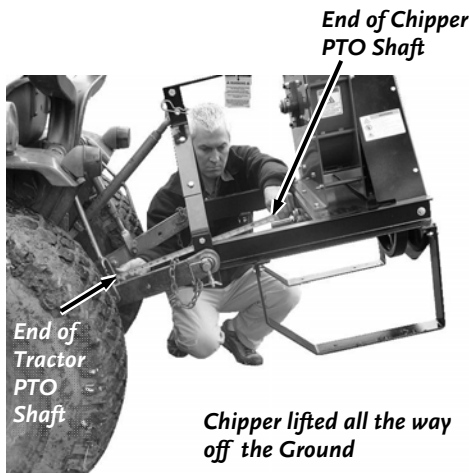


Figure 16

## Calculating length of PTO Shaft needed

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 (**Figure 14**).
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 (**Figure 15**).
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 (**Figure 16**).

**NOTE:** 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. If you have any questions, please visit us at [www.DRpower.com](http://www.DRpower.com) or call 1-800-DR-OWNER (376-9637).

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.

**NOTE:** 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.

If you have any questions, please visit us at [www.DRpower.com](http://www.DRpower.com) or call 1-800-DR-OWNER (376-9637).

### Modifying the PTO Shaft-if required

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

#### Tools and Supplies Needed:

- Hacksaw
- Bench Vise
- Tape Measure
- File
- General purpose Lithium Grease

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 (**Figure 17**).
3. Measure and cut the ends of both Guards the required amount (**Figure 18**).

**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.

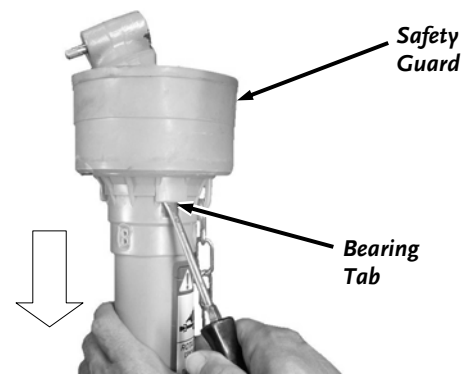


Figure 17

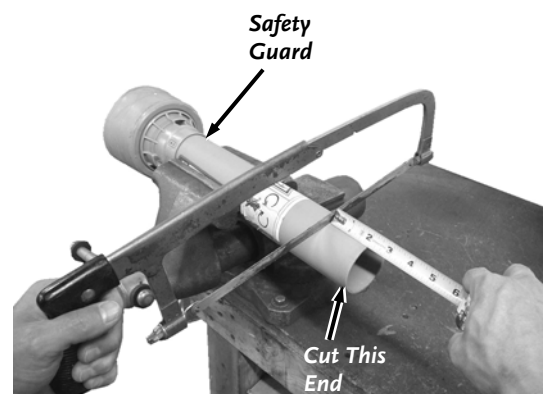


Figure 18

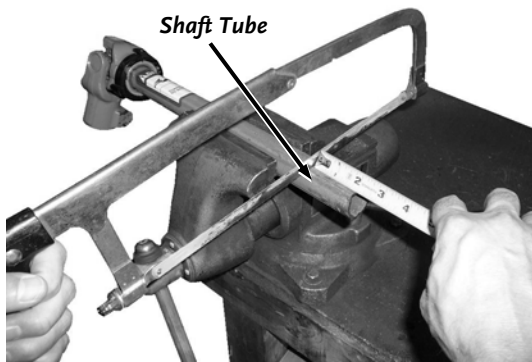


Figure 19

4. Measure and cut each Shaft Tubes to the required length using the hacksaw (**Figure 19**).

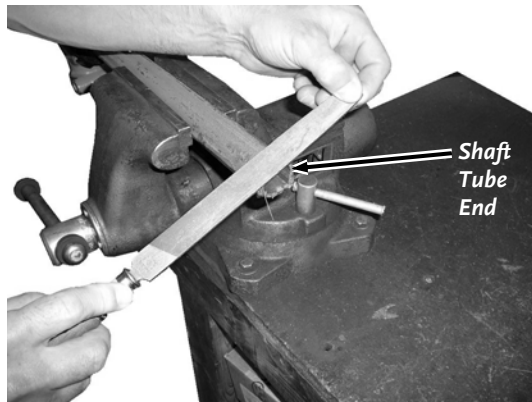


Figure 20

5. File or sand any burrs from the Shaft ends (**Figure 20**).

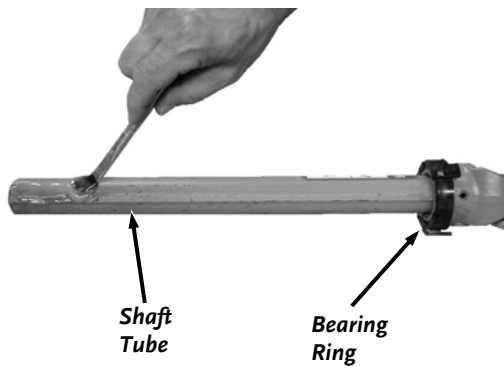


Figure 21

6. Grease both Shaft Tubes and under the Bearing Rings of each Shaft (**Figure 21**).

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 (**Figure 22**).
8. Slide the two PTO Shaft Halves together.

**NOTE:** 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).

See the following section to attach the PTO Shaft to the Tractor and Chipper.

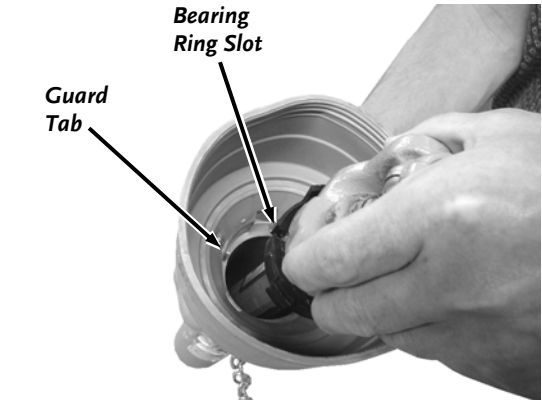


Figure 22

### Attaching the PTO Shaft to the Tractor and Chipper

1. Insert the Key into the 3-Point Hitch Drive Shaft of the Chipper (**Figure 23**).
2. Align the Key Slot of the PTO Shaft with the Key in the Shaft and slide it onto the Shaft.

#### **! NOTICE!**

**YOU MUST INSTALL THE 1/4" X 1/4" X 1-1/4" KEY SUPPLIED IN THE HARDWARE PACKAGE WHERE THE PTO SHAFT ATTACHES TO THE CHIPPER. FAILURE TO DO SO WILL RESULT IN DAMAGE TO THE MACHINE AND IS NOT COVERED UNDER WARRANTY.**

**NOTE:** Do not allow the 3-Point Hitch Shaft to extend more than 1/4" into the U-Joint. This will allow proper clearance to prevent hitting the Grease Fitting.

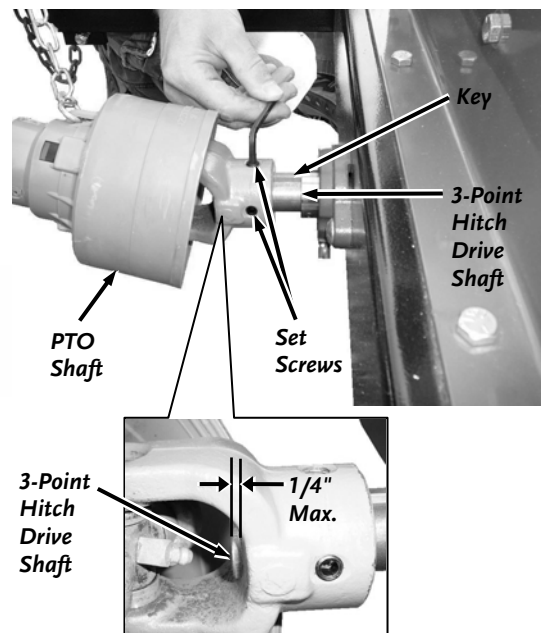


Figure 23

3. Secure the PTO Shaft with the two Set Screws from the Hardware Package.

**NOTE:** If you plan to leave the Chipper attached to the Tractor for extended periods, apply thread lock to the Set Screws to help secure them in place.

4. Push in the PTO Shaft Spring Pin and slide the PTO Shaft onto the Tractor Spline (**Figure 24**).
5. 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.

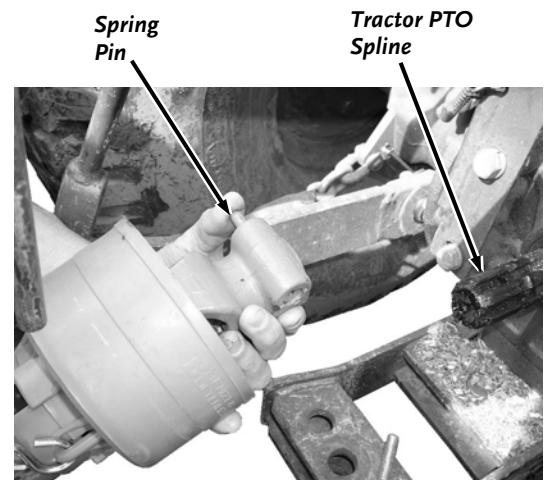


Figure 24

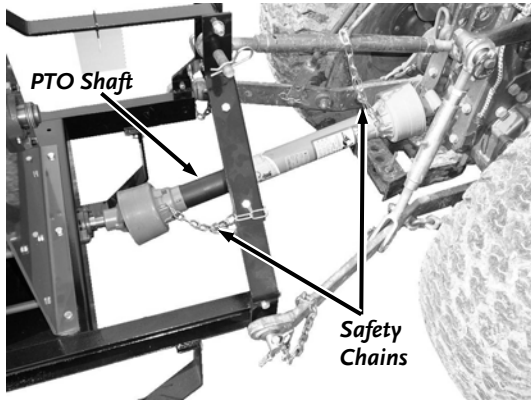


Figure 25

6. Secure the PTO Shaft Safety Chains to stationary parts of the Chipper Frame and Tractor to stop the Guard from turning (**Figure 25**).



## OPERATING YOUR 3-POINT HITCH DR RAPID FEED CHIPPER

This chapter covers the procedures for starting and stopping your new 3-POINT HITCH DR RAPID FEED CHIPPER and discusses basic operation features.

---

### **DANGER!**

- **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 DR 3-POINT HITCH 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.**
  - **THE DESIGN OF THIS MACHINE IS FOR CHIPPING WOOD. NEVER USE THIS MACHINE FOR ANY OTHER PURPOSE AS IT COULD CAUSE SERIOUS INJURY.**
  - **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.**
  - **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 MOVING OR PERFORMING MAINTENANCE/INSPECTION ON THE CHIPPER. USE ONLY A WOODEN STICK TO CLEAR JAMMED MATERIAL.**
  - **NEVER OPERATE THE MACHINE WITHOUT THE HOPPER OR DISCHARGE CHUTE OR PTO SHAFT PROPERLY INSTALLED.**
- 

### *Starting the Chipper*

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.

**NOTE:** Check the Drive Belt, if necessary, after an initial break-in period of one (1) hour (see Chapter 5 "Maintaining the 3-POINT HITCH DR RAPID FEED CHIPPER").

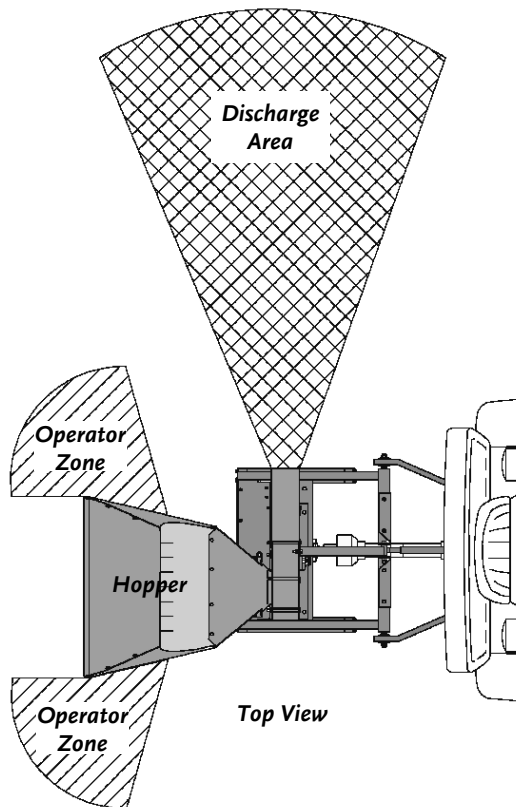


Figure 26

## Operation Notes

- Visually check the Chipper Knife for damage before each use of the machine. See “**VISUAL INSPECTION OF THE CHIPPER KNIFE (before each use)**” in Chapter 5 for info on accessing the Chipper Knife.
- Always operate the Tractor PTO at 540 RPM when chipping.
- Only operate the DR RAPID-FEED CHIPPER from the Operator Zones shown in **Figure 26**.
- Keep proper balance and footing while operating the DR RAPID-FEED CHIPPER.
- ALWAYS disengage the PTO when leaving the Operating Zones or when moving the machine.
- Never move the Chipper while the PTO is turning.

## Processing Material

The Chipper is designed to accept wood only. The Chipper Knife mounted on a revolving flywheel turns branches fed into the Chipper Hopper into “chips”. The Chipper can chip branches ranging in size up to 4-1/2" in diameter. Cut your materials into manageable lengths before feeding them into the Chipper Hopper.

## **! WARNING!**

- 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 MIGHT 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 THE DR RAPID-FEED CHIPPER.
- USE EAR PROTECTORS OR EAR PLUGS RATED FOR AT LEAST 20 DBA TO PROTECT YOUR HEARING.

---

**! WARNING!**

**THE CHIPPER HOPPER MUST BE SECURELY BOLTED TO YOUR DR RAPID-FEED CHIPPER AND THE BLOWBACK SHIELD IN PLACE BEFORE USING THE MACHINE!**

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**! 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.**

---

- Your DR RAPID-FEED CHIPPER can process dry or green wood up to 4.5" in diameter.
- The Chipper will self-feed the wood once it contacts the knife edge so forcing the branches into the Hopper is not necessary if the knife is sharp.
- Green wood will process quicker and easier than dry wood.
- Softwood processes easier than hardwood.
- Your operator experience will teach you how different types of wood will chip and how fast you can process them.
- When chipping branches, sometimes a tail will develop at the end of a branch. To avoid this, rotate the branch while feeding it into the Chipper Hopper.
- Rotating the branch as you feed it into the machine will improve chipping performance.
- 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.
- Make sure the DR RAPID-FEED CHIPPER finishes processing material in the Hopper before disengaging the PTO and shutting the Tractor engine off.
- Do not force material into the Chipper. If the machine does not chip well, the Chipper Knife may need sharpening or replacement, or the gap between the Knife and the Wear Plate needs adjusting. See "Removing, Replacing and Adjusting the Chipper Knife and Wear Plate" in Chapter 5.

---

**! NOTICE!**

**NEVER THROW REMAINING STUBS OR KNOTS INTO THE CHIPPER HOPPER; DAMAGE WILL RESULT.**

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- 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.
- Cut the material to be chipped into manageable lengths of no more than five or six feet long before chipping them.

- 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.

### To Free a Jammed Flywheel

#### **! 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 MOVING OR PERFORMING MAINTENANCE/INSPECTION ON THE CHIPPER.

#### **! NOTICE!**

NEVER PRY AGAINST THE SCROLL WELDMENT WHEN REMOVING THE DEFLECTOR OR DISCHARGE CHUTE, OR AT ANY OTHER TIME. THIS WILL CAUSE DAMAGE TO THE MACHINE.

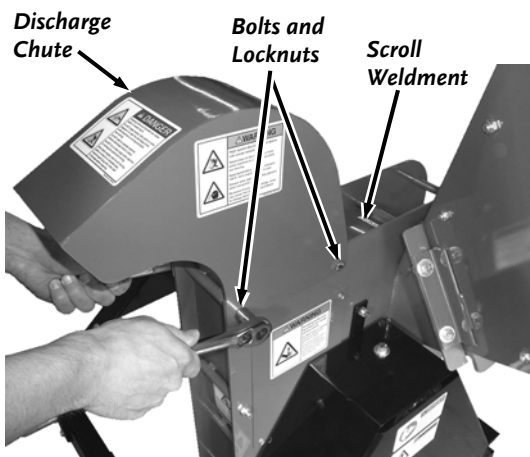


Figure 27

#### Tools Needed:

- Two 1/2" Wrenches

#### 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 Discharge Chute to the Chipper Basic Assembly with two 1/2" wrenches and then remove the Discharge Chute (**Figure 27**).
4. Check to see if the Discharge Chute or Discharge opening is clogged. If it is, clear it with a branch.
5. With a wooden stick, loosen and remove any material left in the Chipping Chamber and make sure the Flywheel turns freely with the stick.

#### Reassemble:

1. Position the Discharge Chute onto the Chipper Basic Assembly and secure with two Bolts and Locknuts using two 1/2" wrenches.
2. Reconnect the PTO Shaft, start the Tractor engine and engage the PTO; allowing the remaining material in the Chipping Chamber to discharge.
3. If the Chipping Chamber doesn't clear and the flywheel is still jammed, repeat above process.

**NOTE:** Be certain the Flywheel turns freely before trying to process more material into the Chipper Hopper.

## CHAPTER 5

# MAINTAINING THE 3-POINT HITCH DR RAPID FEED CHIPPER

This chapter covers regular maintenance procedures that will ensure the best performance and long life of your 3-POINT HITCH DR RAPID FEED CHIPPER.

Maintenance Kits and Accessories are available through our website at [www.DRpower.com](http://www.DRpower.com).

### **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.**

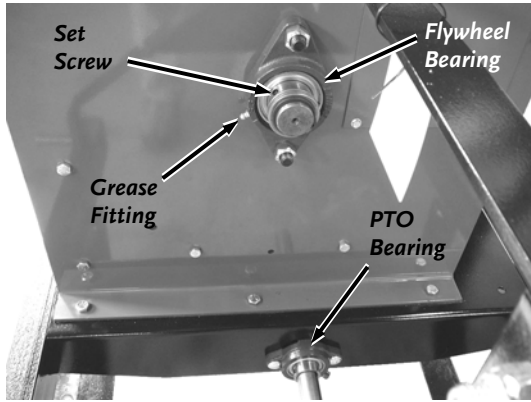
### *Regular Maintenance Check List*

**NOTE:** Consider that the service intervals shown are the maximum under normal operating conditions. Increase frequencies under extremely dirty or dusty conditions. See the Owners Manual that came with the Tractor and with the PTO Shaft for Specific Tractor and PTO Shaft maintenance.

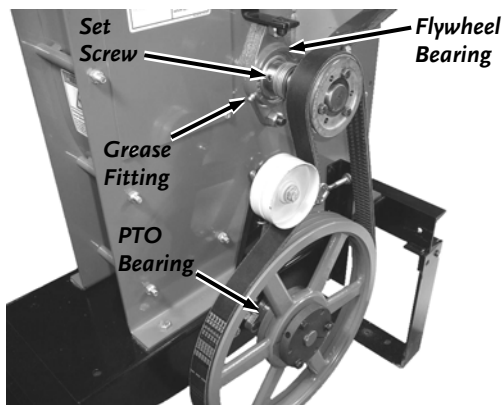
Procedure	Before Each Use	Every 8-10 Hours	Every 18-20 Hours	Every 40 Hours
Check General Equipment Condition	▲			
Check that the Flywheel turns freely (with a long stick only)	▲			
Visually inspect Knife for damage	▲			
Check Knife and Wear Plate for Sharpness		▲		
Check Knife and Wear Plate Attachment Screws		▲		
Check Flywheel Bearing Collar Set Screws		▲		
Check Knife to Wear Plate Gap		▲		
Lubricate Flywheel Bearings		▲		
Lubricate PTO Shaft Grease Fittings		▲		
Lubricate PTO Sheave Bearings		▲		
Check Belt Tension and Condition	1 <sup>st</sup> time 1 hour	▲		
Lubricate PTO Shaft Spline ends and center overlap			▲	
Inspect or replace Drive Belt				▲

## Grease Fittings

Your RAPID-FEED CHIPPER was greased at the Factory. The operator needs to periodically lubricate the four Bearings of the Chipper Assembly and the PTO Shaft.



Front Chipper Bearings



Rear Chipper Bearings (under Belt Cover)

Figure 28

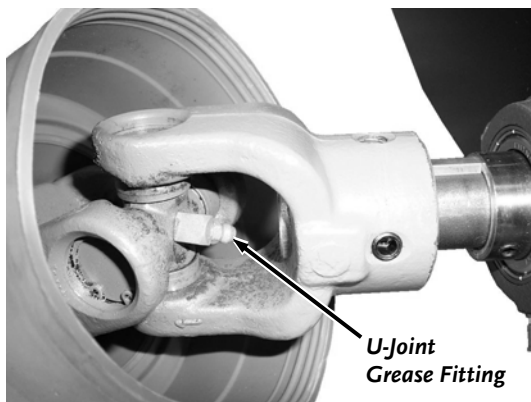


Figure 29

### **! 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.

#### Tools and Supplies needed:

- Flexible hose grease gun
  - Lithium grease
  - Clean cloth
  - 5/32" Allen Wrench
  - Thread Lock
1. Remove the Belt Cover (see "Removing, Replacing and Adjusting the Drive Belt" in this Chapter).
  2. Wipe all dirt, etc., from the grease fittings with a clean cloth.

### **! NOTICE!**

OVER LUBRICATION CAN DAMAGE THE BEARINGS.

3. Apply no more than three pumps of quality general-purpose lithium grease with a hand-pumped grease gun to each Bearing Grease Fitting (**Figure 28**), two on either side of the Chipper Assembly and the two U-Joint Grease Fittings (**Figure 29**).
4. 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. Replace the Belt Guard.

## Removing, Replacing and Adjusting the Drive Belt

### Tools Needed:

- Tape Measure
- Two 1/2" Wrenches
- 7/16" Wrench
- Straightedge

### **! 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.

### Removing the Belt

1. Remove the two Bolts and Locknuts from the bottom of the Belt Guard using two 1/2" Wrenches (**Figure 30**).
2. Remove three Bolts, Lock Washers and Flat Washers from the top and sides of the Belt Guard.
3. Remove the Belt Guard.

**NOTE:** Before continuing with the next step, check the measurements as described in "Checking the Belt and Belt Tension Spring" in the next section below to determine Belt and Spring condition.

4. Loosen the outer two Nuts on the Tensioner Eye Bolt until the Belt can be easily removed (**Figure 31**).

### Checking the Belt and Belt Tension Spring

1. Measure the distance from the inside of the Tension Spring hooks as shown (**Figure 32**).
2. If the distance between the Tension Spring hooks is not 4-1/2" then the Eye Bolt must be adjusted until the measurement is 4-1/2". Loosen the two outside Nuts, adjust the inner Nut, and then retightening the outer Nuts until the required dimension is obtained.

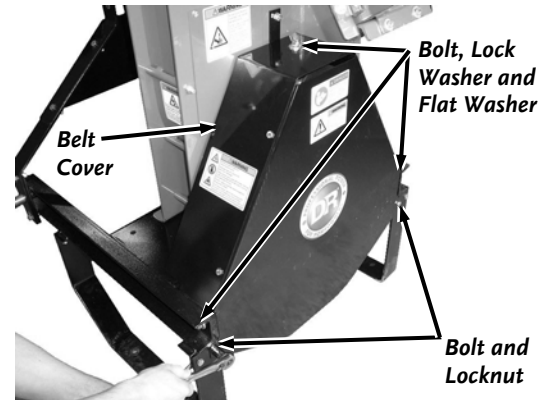


Figure 30

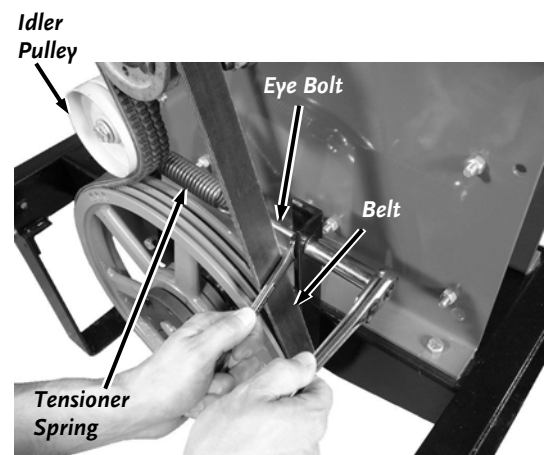


Figure 31

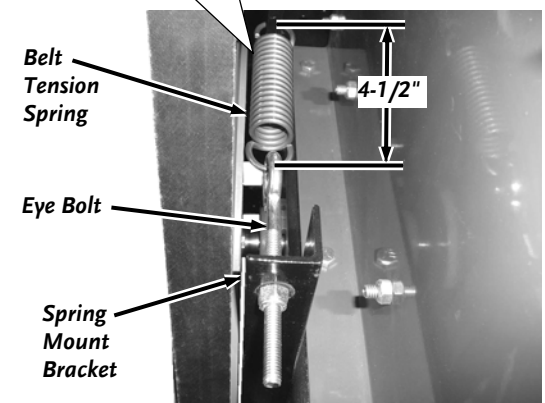
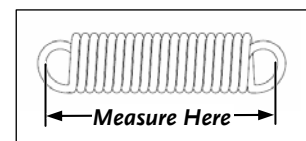


Figure 32

## Installing and Adjusting the Belt

### **! NOTICE!**

**USE ONLY DR BELTS ON YOUR MACHINE. THE BELTS HAVE BEEN THOROUGHLY TESTED AND PROVEN FOR MANY HOURS OF USE.**

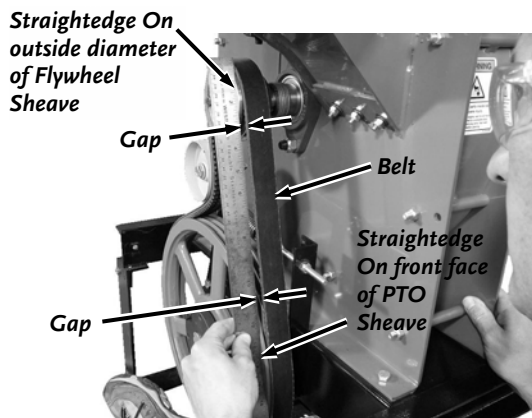


Figure 33

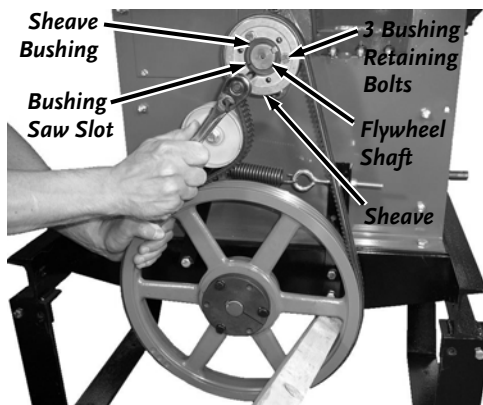


Figure 34

1. Install the new Belt onto the Sheaves and Idler Pulley.
2. Adjust and tighten the Eye Bolt Nuts so the Tension Spring measures 4-1/2" between hooks as described on the previous page.
3. Check the alignment of the Belt Sheaves by placing a Straightedge across the PTO Sheave front face and resting the other end on the outside diameter of the Flywheel Sheave (**Figure 33**).
4. Check the gap from the Straightedge to the Belt near the Flywheel Sheave and near the PTO Sheave. If the gap is the same then no adjustment is needed. If the gap is not the same then adjustment is necessary, correct the alignment as follows:

- a) Loosen the Sheave Bushing Bolt with a 7/16" Wrench (**Figure 34**).

**NOTE:** Place a block of wood into the PTO Sheave Spokes to help hold the belt to loosening the Sheave Bolts.

- b) Remove the three Bushing Retaining Bolts using a 7/16" Wrench.
- c) Reinstall the three Bolts in the unused Threaded Holes adjacent to the three Bushing Retaining Bolt holes.
- d) Slowly tighten the Bolts evenly and alternately (1/4 to 1/2 turn) starting with the Bolt farthest from the Bushing Saw Slot (this acts as a Hub puller) until the Bushing releases from the Flywheel Shaft.
- e) When the Sheave is loose, remove the three Bolts and reinsert them into the original Retaining Bolt holes.



- f) Move the Sheave Bushing in or out on the Flywheel Shaft as needed to take up the difference that you measured for the gaps between the Straightedge and Belt.

**NOTE:** Prior to retightening the Bushing Retaining Bolts, The untightened Sheave will need to be approximately 1/8" past the original straightedge to allow for compression of the Bushing during the tightening process.

- g) Slowly tighten the Bushing Retaining Bolts evenly and alternately (1/4 to 1/2 turn) starting with the Bolt farthest from the Bushing Saw Slot.

- h) Recheck the alignment after tightening the Bolts, and then retighten the Sheave Bushing Bolt.

**NOTE:** Make sure that the Belt or Sheave is not hitting the Hopper.

**NOTE:** The belt on your DR 3-POINT HITCH CHIPPER is tensioned with a spring-loaded idler arm and pulley that is set at the factory. As the Belt stretches from use, the Belt tension may need to be adjusted.

5. Reinstall the Belt Guard onto the Chipper.

## **Removing, Replacing and Adjusting the Chipper Knife and Wear Plate**

### **Inspecting the Chipper Knife and Wear Plate**

Routine inspection of the Chipper Knife and Wear Plate will ensure that your 3-Point Hitch DR Rapid Feed Chipper is operating at full efficiency (see "Regular Maintenance Checklist" at the beginning of this Chapter). Operating with a worn or damaged Chipper Knife or Wear Plate will cause extreme stress and vibration to the machine and make chipping difficult for the operator.

---

### **! NOTICE!**

**ROUTINELY CHECK THE CHIPPER KNIFE FOR SHARPNESS. USING A DULL KNIFE WILL DECREASE PERFORMANCE AND CAUSE EXCESSIVE VIBRATION THAT WILL CAUSE DAMAGE TO THE DR RAPID-FEED CHIPPER.**

**ROUTINELY CHECK THE WEAR PLATE FOR A SHARP SQUARE EDGE. USING A ROUNDED OR CHIPPED WEAR PLATE WILL DECREASE PERFORMANCE AND CAUSE EXCESSIVE VIBRATION THAT WILL CAUSE DAMAGE TO THE DR RAPID-FEED CHIPPER.**

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### **! 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.**

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#### **VISUAL INSPECTION OF THE CHIPPER KNIFE BEFORE EACH USE**

##### **Tools Needed:**

- 5/16" Wrench

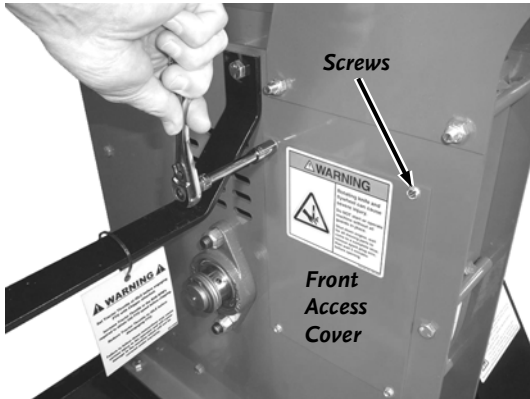


Figure 35

1. Remove the four Screws that secure the Front Access Cover with a 5/16" wrench and remove the Access Cover (**Figure 35**).
2. Rotate the Flywheel with a long stick until the Knife is visible.
3. If the Knife has visible nicks or damage it must be sharpened or replaced (see "Removing and Replacing the Chipper Knife" in this chapter).
4. If the Knife does not appear to have any damage, replace the Access Cover and secure with four Screws using a 5/16" wrench.

## **! CAUTION!**

THE HOPPER SHOULD BE SUPPORTED WHEN THE MOUNTING HARDWARE IS REMOVED. REMOVAL OF THE HOPPER IS DIFFICULT FOR ONE PERSON. TWO PEOPLE ARE NEEDED FOR THE HOPPER REMOVAL PROCESS.

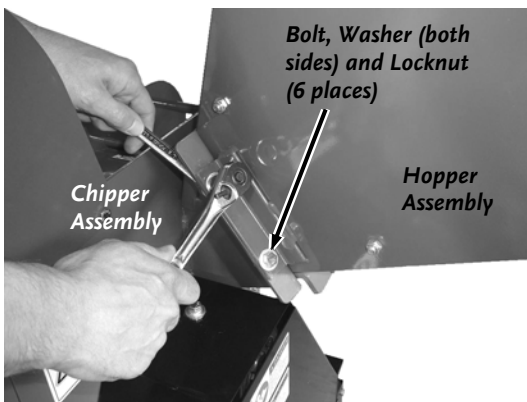


Figure 36

### VISUAL INSPECTION OF THE CHIPPER KNIFE AND WEAR PLATE EVERY 8-10 HOURS

#### Tools Needed:

- Two 1/2" Wrenches

1. Have someone support the Hopper as you use two 1/2" wrenches to remove the six Bolts, Washers and Locknuts that support the Hopper to the Chipper Assembly (**Figure 36**).
2. Remove the Hopper from the Chipper Assembly.
3. Use a stick to rotate the Flywheel until the Knife is next to the Wear Plate.
4. Closely inspect the Chipper Knife and Wear Plate for nicks or dull (rounded) edges (**Figure 37**).
5. If necessary, repair or replace the Chipper Knife and/or Wear Plate per the following procedures. If the Knife and Wear plate do not need maintenance or adjustment, replace the Hopper.

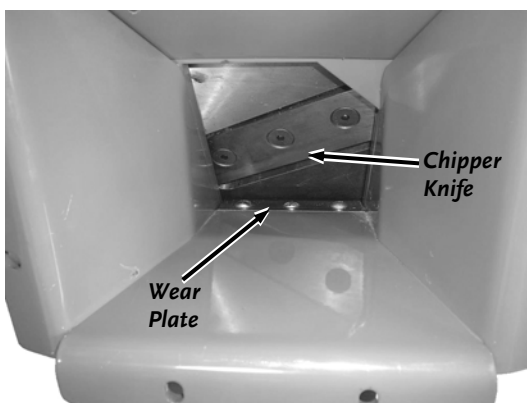


Figure 37

## Removing and Replacing the Chipper Knife

### CAUTION!

IF THE FLYWHEEL SURFACE IS NOT CLEANED PROPERLY AND THE CHIPPER KNIFE IS NOT MOUNTED FLUSH ON THE FLYWHEEL, THE KNIFE COULD CRACK WHEN THE HARDWARE IS TIGHTENED.

#### Tools Needed:

- 5/16" Wrench
- 9/16" Socket
- 7/32" Allen wrench
- Awl or Sharp Tool
- Gloves

### WARNING!

BE CAREFUL AND WEAR GLOVES WHEN WORKING NEAR THE CHIPPER KNIFE. THE KNIFE EDGE CAN CUT YOU IF YOU COME IN CONTACT WITH IT.

1. Remove the Belt Guard (see "Removing and Replacing the Drive Belt" in this Chapter to remove the Belt Guard).
2. Using a 5/16" Wrench, remove the Self-Tapping Screws and remove both Knife Access Covers from the front and back of the Chipper Assembly (**Figure 38**).
3. Rotate the Flywheel using a stick until the three countersunk Allen Screws and Lock Nuts attaching the Knife to the Flywheel are visible through the Access Openings.
4. Clean out the heads of the Allen Screws with an Awl or Sharp Tool.
5. Insert a 7/32" Allen Wrench into the head of a screw (**Figure 39**).
6. While holding the Allen Wrench, remove the Lock Nut using a 9/16" socket.
7. Repeat Steps 5 and 6 for the remaining two Allen Screws.

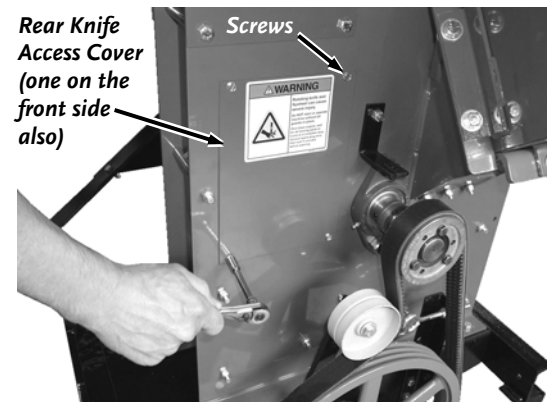


Figure 38

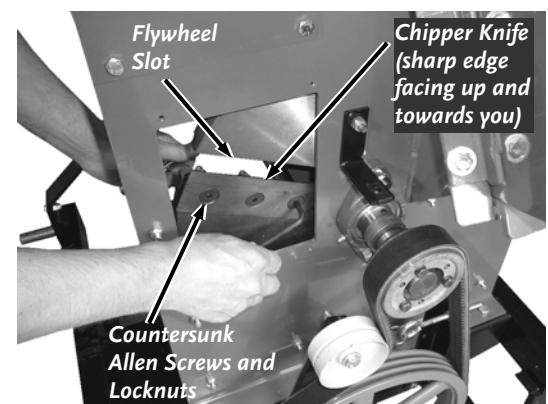


Figure 39

8. Remove the dull or damaged Knife and visually inspect the Flywheel Slot and Knife mounting area and be sure they are clean and that the replacement Knife will be able to mount flush against the Flywheel.
9. Install a new or sharpened Knife as shown with the Knife edge facing up and towards you and finger tighten the Allen screws and Lock Nuts (use the new hardware supplied with a new Knife kit) to hold the Knife to the Flywheel.
10. Using a 7/32" Allen wrench and a 9/16" socket, tighten the center Screw and Locknut, then tighten the outer Screw and Locknut, and finally tighten the inner Screw and Locknut.
11. Double-check that all three Locknuts on the Allen Screws are tight.
12. Reinstall the two Access Covers.
13. Replace the Belt Guard.
14. Check and if needed adjust the gap between the Knife and Wear Plate (See "Checking and Adjusting the Knife to Wear Plate Gap" in this Chapter).

### Removing and Replacing the Wear Plate

#### Tools Needed:

- 7/16" Wrench

1. Remove the Hopper (See "Inspecting the Chipper Knife and Wear Plate" in this Chapter)
2. Remove the three Locknuts and Carriage Bolts that attach the Wear Plate to the Chipper Assembly with a 7/16" wrench and then remove the Wear Plate (**Figure 40**).
3. Install the new Wear Plate and secure with the three Carriage Bolts and Locknuts.

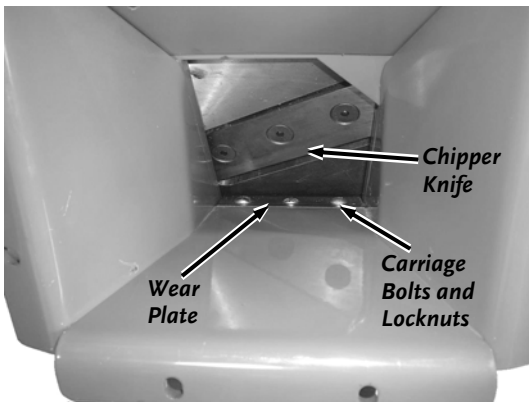


Figure 40

**NOTE:** The Gap between the Knife and Wear Plate must be adjusted whenever the Wear Plate is removed. See the following instructions.

### Checking and Adjusting the Knife to Wear Plate Gap

When you replace the Knife you must check and set the clearance between the Knife and Wear Plate. Set this clearance or gap to 1/16" by using the Gap Tool that is supplied with the Chipper and with a new Knife kit. If the gap between the Wear Plate and the Knife is not set correctly, you will have excessive vibration when chipping and the Knife will seem to be dull. The Wear Plate should have a square edge and be free of dents or gouges. The Wear Plate can be hand sharpened (see steps below). Be careful not to overheat it during the sharpening process. This will change the characteristics of the steel and you will then have to replace the Wear Plate.

#### Tools Needed:

- Gap Gauge (provided with 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.

### Checking the Knife to Wear Plate Gap

1. Remove the Hopper (See “Inspecting the Chipper Knife and Wear Plate” in this Chapter).
2. Use a stick to rotate the Flywheel until the Knife can be positioned next to the Wear Plate.
3. Slide the Knife Gauge in between the Knife and Wear Plate to check the clearance (**Figure 41**).
  - If the Knife Gauge slides freely, with no resistance and extra space, the Wear plate must be adjusted.
  - If the Knife Gauge will not slide down between the Knife and Wear Plate, the Wear Plate must be adjusted.
  - If the Knife Gauge slides in between the Knife and Wear Plate with some resistance felt against them both then the Wear plate is properly adjusted.
4. Install the Hopper when finished.

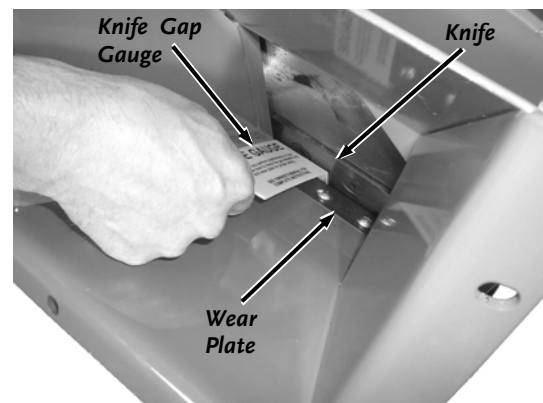


Figure 41

### Adjusting the Knife to Wear Plate Gap

#### Tools Needed:

- 7/16" wrench
  - Gap Gauge (provided with Chipper)
1. To adjust the Wear Plate Gap, loosen the three Nuts on the Carriage Bolts with a 7/16" wrench just enough so the Wear Plate will move but still have a slight resistance. Now you can slide the Wear Plate up or down (in or out) to achieve the correct gap setting (**Figure 42**).

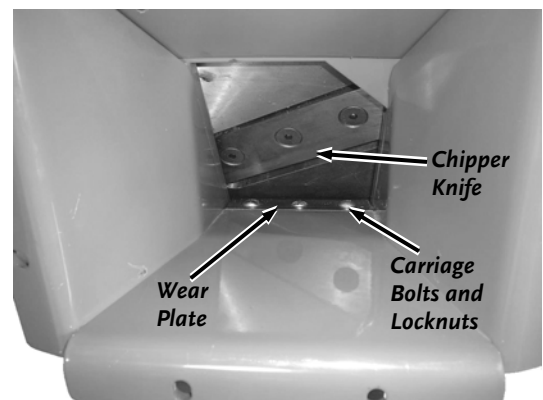


Figure 42

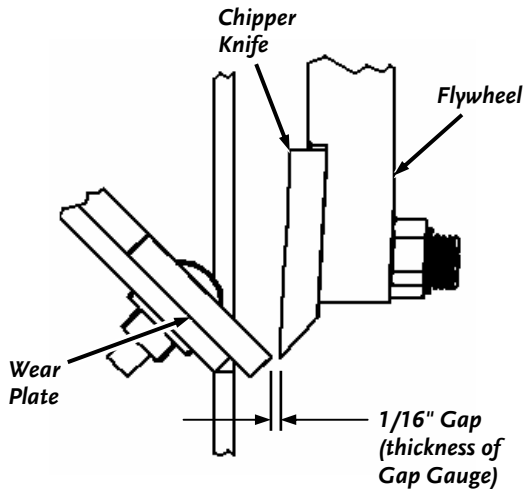


Figure 43

2. Take the Gap Gauge and slide it between the Knife and Wear Plate (**Figure 41**). Adjust the Wear Plate against the Knife Gauge and tighten the Locknuts.

**NOTE:** See **Figure 43** for a more detailed look at the relationship of the Knife to Wear Plate.

3. Check the adjustment as described in the “Checking the Gap” in the previous section.
4. Reinstall the Hopper Assembly when finished.

## **! NOTICE!**

**AFTER ANY KNIFE OR WEAR PLATE MAINTENANCE OR ADJUSTMENT, ROTATE THE CHIPPER FLYWHEEL BY USING A WOODEN STICK AND WATCH AND LISTEN CAREFULLY FOR ANY UNUSUAL NOISES, CLICKING OR VIBRATION. IF YOU DETECT ANY OF THESE, INSPECT THE MACHINE FOR DAMAGE, OR ANY LOOSE PARTS. REPAIR OR REPLACE ANY DAMAGED PARTS AND TIGHTEN ANY LOOSE PARTS BEFORE STARTING THE DR RAPID-FEED CHIPPER.**

### Chipper Knife Sharpening

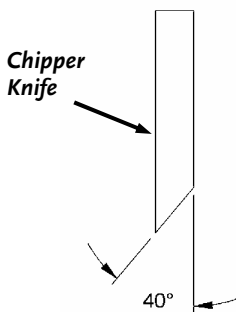


Figure 44

- You should never attempt to sharpen the Chipper Knife freehand.
- It is extremely important to consistently maintain the 40-degree angle for proper performance (**Figure 44**).
- Excessive heat generated during the sharpening process will damage Knives and weaken the metal. Be sure not to overheat the Knife during sharpening because it will shorten the life of the Knife.
- Take the Chipper Knife to a machine shop for proper sharpening.
- How many times a Knife can be sharpened is determined by how much material needs to be taken off to sharpen or to compensate for dents or gouges.

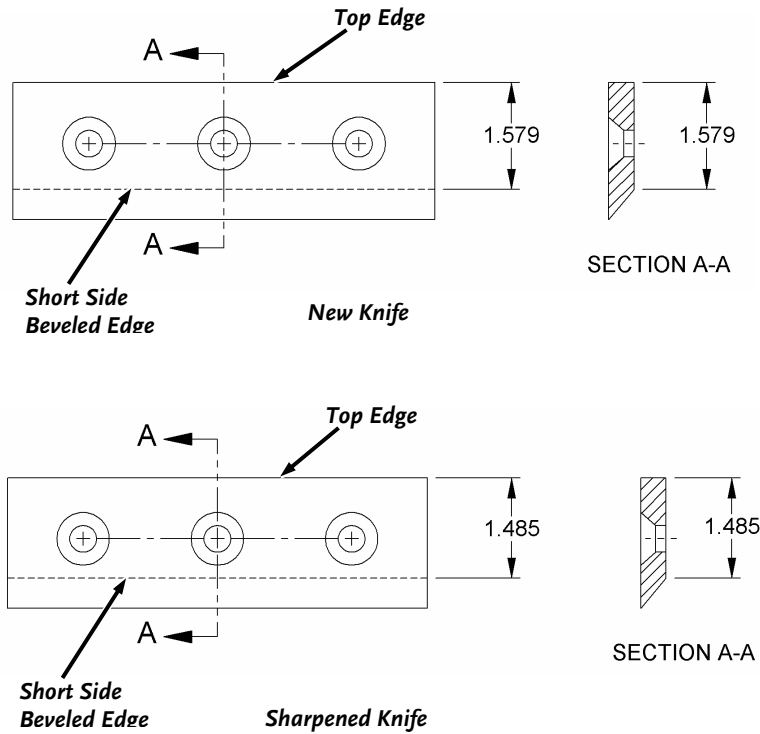


Figure 45

- A new Chipper Knife has 1.579" measurement between the short side bevel edge and the Knife Top Edge (**Figure 45 "New Knife"**).
- The knife should never be sharpened to the extent that more than 3/32" is taken off this measurement.
- Once this measurement is below 1.485" (see **Figure 45 "Sharpened Knife"**), or if you are unable to remove dents or gouges with these guidelines, replace the Knife.

### Wear Plate Sharpening

The Wear Plate edges become rounded and chipped during use and must be squared off to ensure efficient operation.

#### Tools Needed:

- Flat File

1. Secure the Wear Plate in a vise.
2. File the edge of the Wear Plate to take out any nicks and to square rounded edges (**Figure 46**).

**NOTE:** If the Wear Plate is filed enough times that the proper gap between the Knife and Wear Plate can not be set with the Gap Gauge, You will need to replace the Wear Plate.

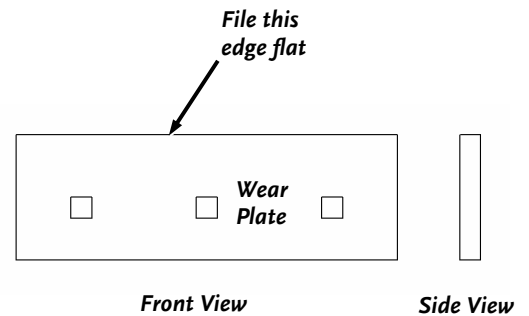


Figure 46

## End of Season and Storage

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### **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 DR RAPID-FEED CHIPPER SHOULD BE STORED OUT OF THE REACH OF CHILDREN.**
- 

**NOTE:** *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 Flywheel 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 Knife and Wear Plate 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 Discharge Chute.
- Store in a dry covered area to protect from moisture.



## TROUBLESHOOTING

Most problems are easy to fix. Consult the Troubleshooting Table below for common problems and their solutions. If you continue to experience problems, contact us at [www.DRpower.com](http://www.DRpower.com) or call DR Power Equipment for support.

### **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.**

### *Troubleshooting Table*

SYMPTOM	POSSIBLE CAUSE/FIX
<i>Flywheel won't turn.</i>	<ul style="list-style-type: none"> <li>⇒ The Flywheel may be jammed. Immediately disengage the PTO and stop the tractor engine. Remove any built-up debris from the Chipper Hopper Inlet and Discharge Chute.</li> <li>⇒ Check the Drive Pulley alignment and adjust if necessary.</li> <li>⇒ Replace the Drive Belt or reinstall if the Belt has come off the pulleys.</li> <li>⇒ Turn the Flywheel with a wooden stick to be sure it turns freely. If the Flywheel still won't turn, call <b>1-800-DR-OWNER (376-9637)</b> for assistance.</li> </ul>
<i>The Belt frays or rolls over the Drive Pulley.</i>	<ul style="list-style-type: none"> <li>⇒ The Drive Pulley groove may have a nick in it. File off any nicks on the Pulley.</li> <li>⇒ Check the Drive Belt for wear and hard spots.</li> <li>⇒ The Drive Belt may be stretched; replace it. See page 27.</li> <li>⇒ The Pulleys may be misaligned. See Chapter 5.</li> <li>⇒ If the Drive Belt still rolls off the Drive Pulley, call <b>1-800-DR-OWNER (376-9637)</b> for assistance.</li> </ul>
<i>Chipping action seems too slow or flywheel stalls.</i>	<ul style="list-style-type: none"> <li>⇒ The PTO speed is too slow causing the belt to slip. Run the PTO at 540 RPM.</li> <li>⇒ Check for loose or damaged Drive Belt; replace as needed. See Chapter 5.</li> <li>⇒ Check for a dull or damaged Knife; sharpen or replace the Knife. See Chapter 5.</li> </ul>

**! 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.

*Troubleshooting Table (continued)*

SYMPTOM	POSSIBLE CAUSE/FIX
<p>- Belt burns.</p> <p>- Flywheel won't turn.</p>	<p>⇒ Immediately disengage the PTO and shut off the tractor.</p> <p>⇒ Turn the Flywheel with a wooden stick to be sure it turns freely.</p> <p>⇒ Check for a loose Drive Belt. See Chapter 5.</p> <p>⇒ Remove any built-up debris from the Chipper Hopper Inlet and Discharge Chute.</p>
<p><i>The machine has excessive vibration.</i></p>	<p>⇒ Check for a dull or damaged Knife; sharpen or replace the Knife. See Chapter 5.</p> <p>⇒ The Knife is not properly seated on the flywheel. Loosen the Knife mounting screws, reset the Knife and tighten the screws. Also, check the Knife to Wear Plate Gap. See Chapter 5.</p> <p>⇒ If the machine still exhibits excessive vibration, contact us at <b>www.DRpower.com</b> or call <b>1(800) DR-OWNER (376-9637)</b> for assistance.</p>
<p><i>When chipping, the log seems to vibrate excessively and "hammers" my hands.</i></p>	<p>⇒ The Knife is dull; sharpen or replace it. See Chapter 5.</p> <p>⇒ The gap between the Knife and Wear Plate is too great; adjust the Gap. See Chapter 5.</p> <p>⇒ Check PTO RPMs; run PTO at 540 RPM when chipping.</p>
<p><i>Chipper Knife is hitting the Wear Plate.</i></p>	<p>⇒ The gap between the Knife and the Wear Plate is set incorrectly; adjust the Knife to Wear Plate Gap. See Chapter 5.</p>
<p><i>PTO turns but the flywheel doesn't rotate.</i></p>	<p>⇒ Loose Drive Belt; Replace Belt. See Chapter 5.</p> <p>⇒ Remove any built-up debris from the Chipper Hopper Inlet and Discharge Chute.</p>

## CHIPPER ACCESSORIES

### **! 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.

### *Extended Top-Discharge Chute*

The Extended Top-Discharge Chute enables you to better control the direction of the discharged chips and allows you to direct them into a trailer or truck bed for transport.

#### Tools Needed:

- Two 1/2" Wrenches

#### INSTALLATION

1. Remove the two Bolts and Locknuts from the Low Discharge Assembly with two 1/2" wrenches (**Figure 47**).
2. Remove the Low Discharge Chute from the Chipper.
3. Position the Extended Top-Discharge Chute onto the Chipper with the Locking pin on the outside (side furthest away from the hopper) (**Figure 48**).
4. Install the two Bolts and Locknuts and tighten with two 1/2" wrenches.

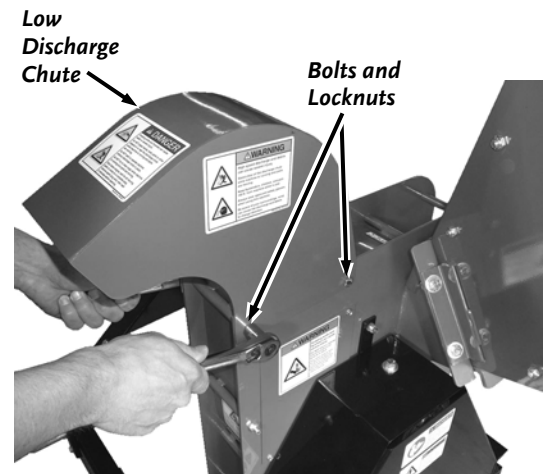


Figure 47

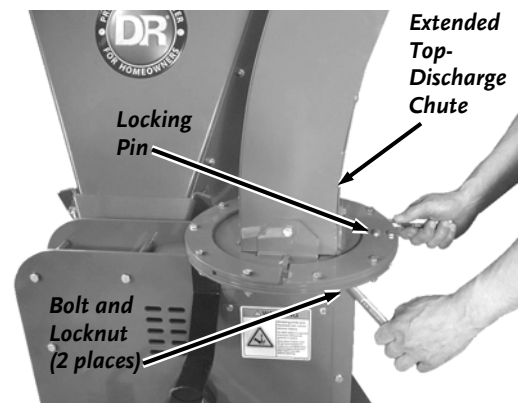


Figure 48

## OPERATION

### Adjusting the Extended Top-Discharge Chute Discharge Direction:

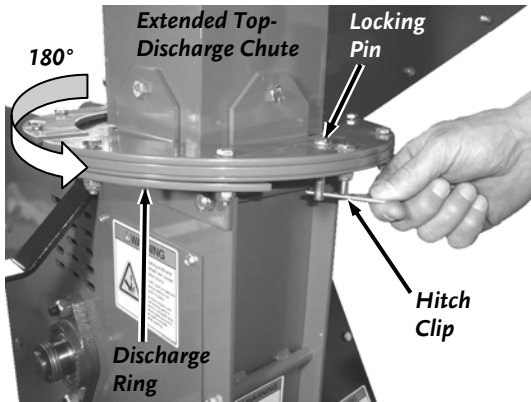


Figure 49

1. Pull the Hitch Clip and remove the Locking Pin (**Figure 49**).
2. Rotate the Extended Top-Discharge Chute to the direction desired.

**NOTE:** The Extended Top-Discharge Chute has a range of motion of 180° that spans the front and both sides of the Chipper. There are 11 different hole settings at 18° increments that you can use.

3. Line up the Locking Pin hole to the closest hole setting in the Discharge Ring.
4. Install the Locking Pin and secure it with the Hitch Clip.

### Adjusting the Deflector Direction:

1. Grab the Deflector Handle and rotate the Deflector to the desired discharge position (**Figure 50**).

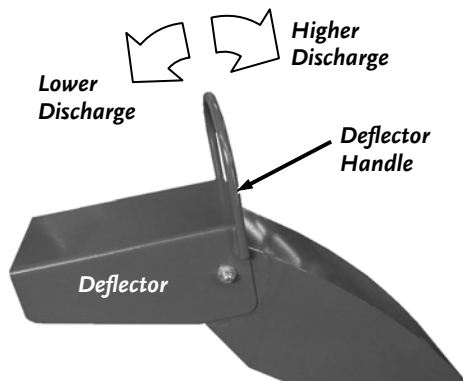


Figure 50

## MAINTENANCE

### Tools and Supplies Needed:

- All Purpose Grease

### Lubricating the Extended Top-Discharge Chute:

1. Pull the Hitch Clip and remove the Locking Pin from the Discharge Ring (**Figure 49**).
2. Apply some all-purpose grease in each hole of the Discharge Ring and Center Ring as you rotate the Chute.
3. Rotate the Extended Top-Discharge Chute for the full 180° of rotation for a few times to spread the grease inside the Discharge Ring.
4. Reposition the Extended Top-Discharge Chute to the desired angle and insert the Locking Pin and Hitch Clip.



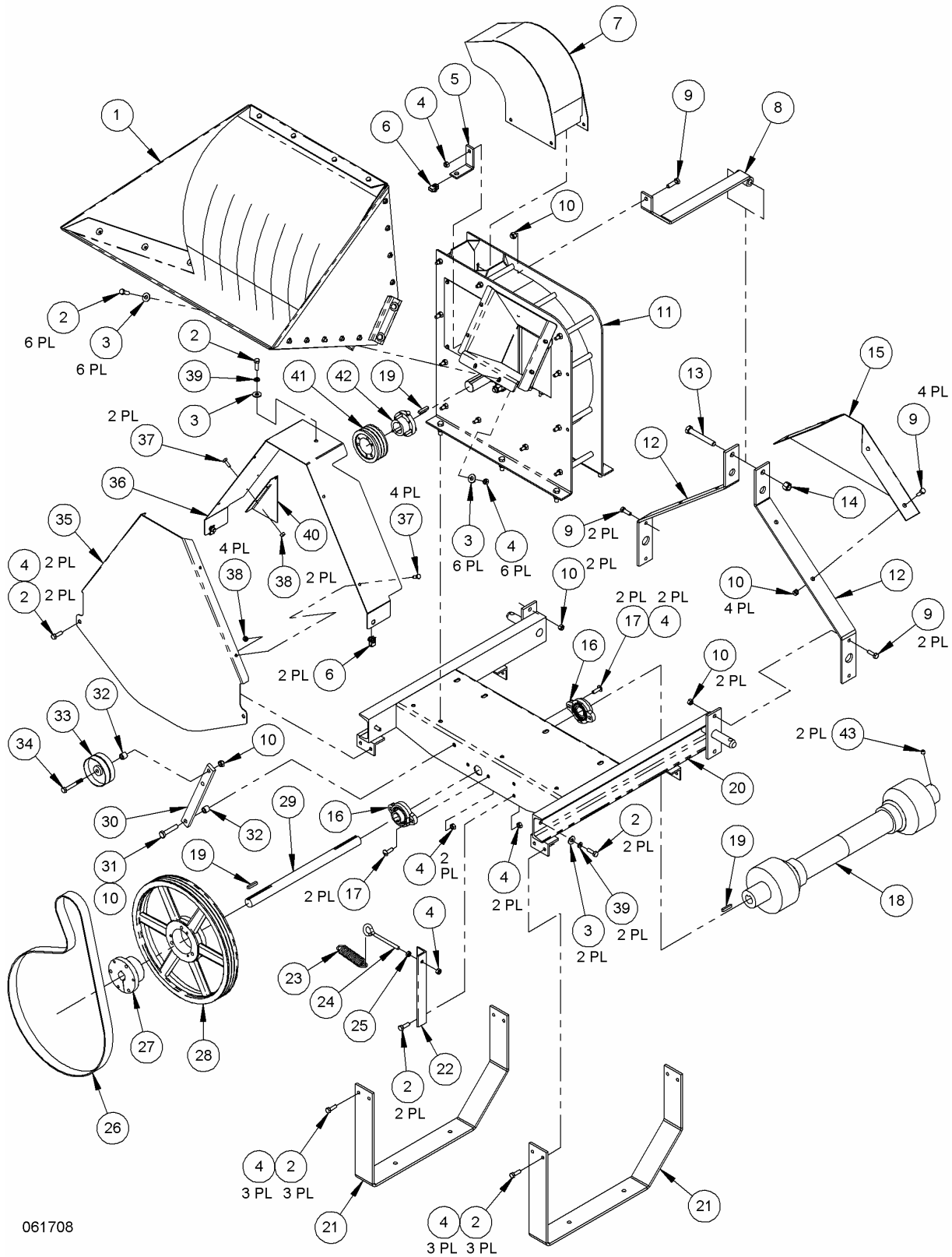
## PARTS LIST AND SCHEMATIC DIAGRAMS

### *Parts List - 3-POINT HITCH DR RAPID FEED CHIPPER*

*NOTE: Part numbers listed are available through DR Power Equipment.*

<b>Ref#</b>	<b>Part#</b>	<b>Description</b>	<b>Ref#</b>	<b>Part#</b>	<b>Description</b>
01	248621	Hopper Assembly	29	248681	Shaft, TPH Drive
02	146051	Bolt, HCS, 5/16-18 X 1", Gr 5	30	248721	Idler Arm, TPH
03	145150	Washer, Flat, 5/16"	31	216581	Bolt, HCS, 3/8-16 x 2", Gr 5
04	143130	Nut, Nylon Lock, 5/16-18	32	184511	Spacer, Idler
05	248781	Bracket, Belt Guard	33	217100	Pulley, Idler
06	185891	Nut "J" Plain, 5/16-18	34	184591	Bolt, HCS, 3/8-16 x 2-1/2", Gr 5
07	242061	Discharge Chute Weldment	35	248761	Guard, Belt Front
08	248661	Support, Upper TPH Mount	36	248751	Guard, Belt Sides
09	111521	Bolt, HCS, 3/8-16 X 1", Gr 5	37	119831	Bolt, HCS, 1/4-20 X 3/4", Gr 5
10	154480	Nut, Nylon Lock, 3/8-16	38	143400	Nut, Nylon Lock, 1/4-20
11	248611	Chipper Basic Assembly, TPH	39	155110	Washer, Lock, Split, 5/16"
12	248641	Bracket, TPH Mount	40	248771	Guard, Belt Back
13	184601	Bolt, HCS, 1/2-13 X 3-1/2", Gr 5	41	248701	Sheave, 3 Groove, 3.65" Dia
14	242091	Nut, Nylon Lock, 1/2-13	42	242111	Bushing, 1-1/4"
15	248651	Brace, TPH Mount	43	194231	Screw, Set, 3/8-16 X 3/8"
16	184441	Bearing, 2 Bolt, 1"			
17	187621	Bolt, Carriage, 5/16-18 X 1"			
18	184831	PTO, 3 Point Hitch			
19	148551	Key, Shaft, 1/4" SQ X 1-1/2"	<u>Safety &amp; Information Labels</u>		
20	248631	Base Weldment	241811		Label, Danger, Rotating Knife and Flywheel
21	248671	Leg, Base Support	248821		Label, Warning, Rotating Parts
22	184521	Bracket, Spring Mount	192391		Label, DR Logo, 5-3/4" Silver
23	248731	Spring, TPH Belt Tension	250581		Label, PTO Speed
24	248741	Eyebolt, 5/16-18 x 5"	248791		Label, Danger, Entanglement
25	144180	Nut, 5/16-18, Whiz Lock	227391		Warning Tag, 3-Point Hitch
26	248711	Belt, Banded, 3/3V x 60"	241851		Label, Warning, Do Not Climb
27	217170	Bushing, Shoulder, 1"	241801		Label, Danger, Read Operators Manual
28	248691	Sheave, 3 Groove, 14" Dia	241831		Label, Warning, High Speed Discharge

**Schematic - 3-POINT HITCH DR RAPID FEED CHIPPER**



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## Parts List – Chipper Basic

**NOTE:** Part numbers listed are available through DR Power Equipment.

<u>Ref#</u>	<u>Part#</u>	<u>Description</u>
01	155301	Screw, 3/8-16 X 1-3/4", FHSCS, GR 8
02	154480	Nut, Nylon Lock, 3/8-16
03	242341	Knife, PTO Chipper
04	242351	Flywheel Weldment
05	242361	Side plate, Vent
06	242371	Side plate Weldment, Hopper
07	242381	Scroll Weldment
08	242391	Plate, Wear
09	242501	Cover, Access
10	242411	Tube, Scroll, 1/4"
11	242421	Bearing, 2 Bolt, 1-1/4"
12	242431	Shim, Shaft, 1-1/4", .025" Thick
13	242441	Shim, Shaft, 1-1/4", .050" Thick
14	242451	Shim, Shaft, 1-1/4", .075" Thick
15	242461	Shim, Shaft, 1-1/4", .125" Thick
16	242471	Ring, Retaining, 1-1/4"
17	242481	Bolt, HCS, 1/2-13 X 1-1/2", GR 5
18	242091	Nut, Nylon Lock, 1/2-13
19	242491	Bolt, HCS, 5/16-18 X 5-1/4", Gr 5
20	155121	Screw, Self Tapping, 10-32 X 3/8"

<u>Ref#</u>	<u>Part#</u>	<u>Description</u>
21	143130	Nut, Nylon Lock, 5/16-18
22	195661	Bolt, Carriage, 1/4-20 X 1"
23	143390	Washer, Flat, 1/4"
24	143400	Nut, Nylon Lock, 1/4-20
25	111521	Bolt, HCS, 3/8-16 X 1", Gr 5
26	248861	Bolt, HCS, 5/16-18 X 5-1/2"

### Safety & Information Labels

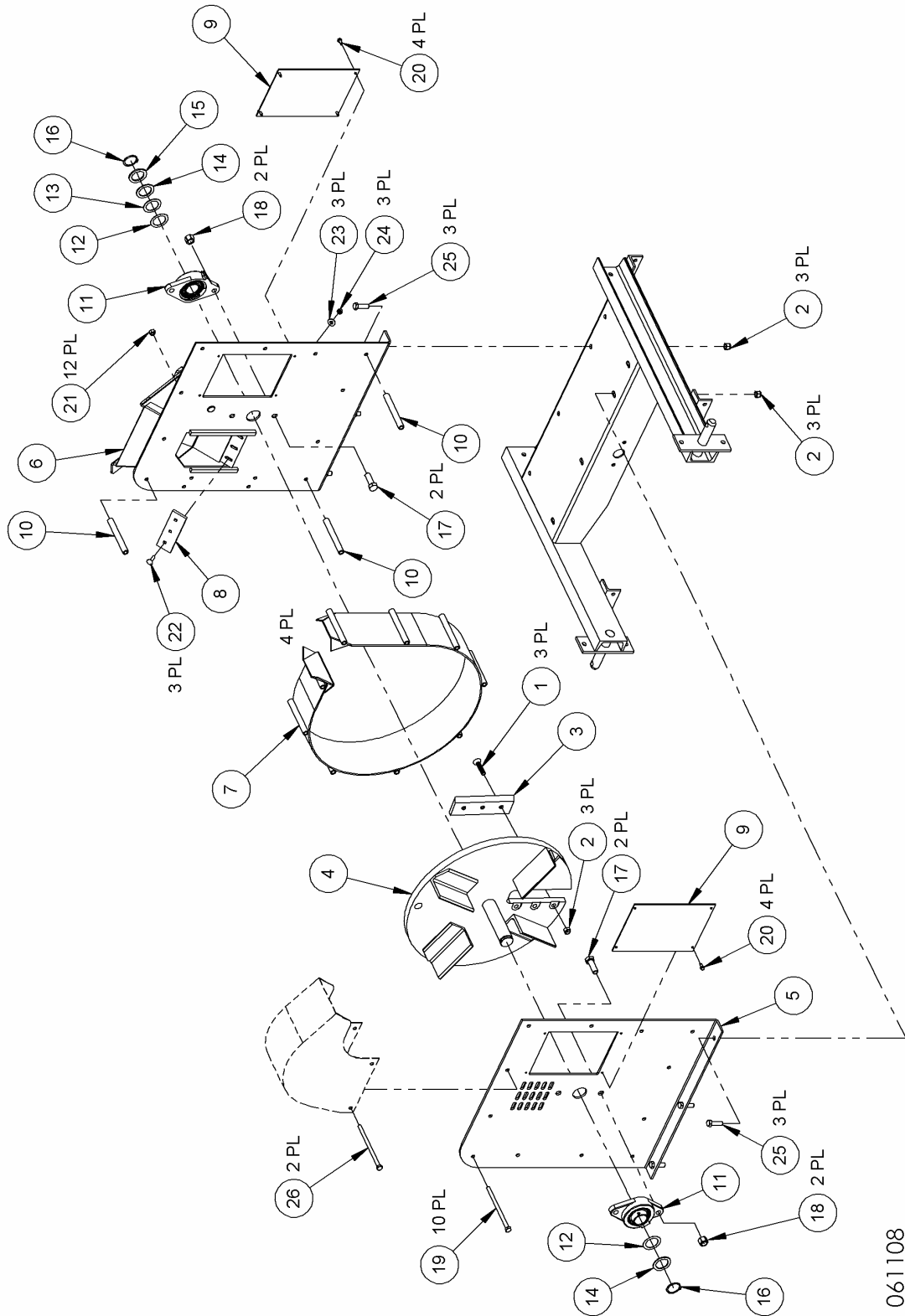
227171	Label, USA
248811	Label, Warning, Rotating Knife and Flywheel
248831	Label, Warning, Rotating Parts Inside

### Not Illustrated

244121	Knife Kit
197091	Gauge, Knife Gap



# Schematic – Chipper Basic



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## Parts List – Hopper Assembly

**NOTE:** Part numbers listed are available through DR Power Equipment.

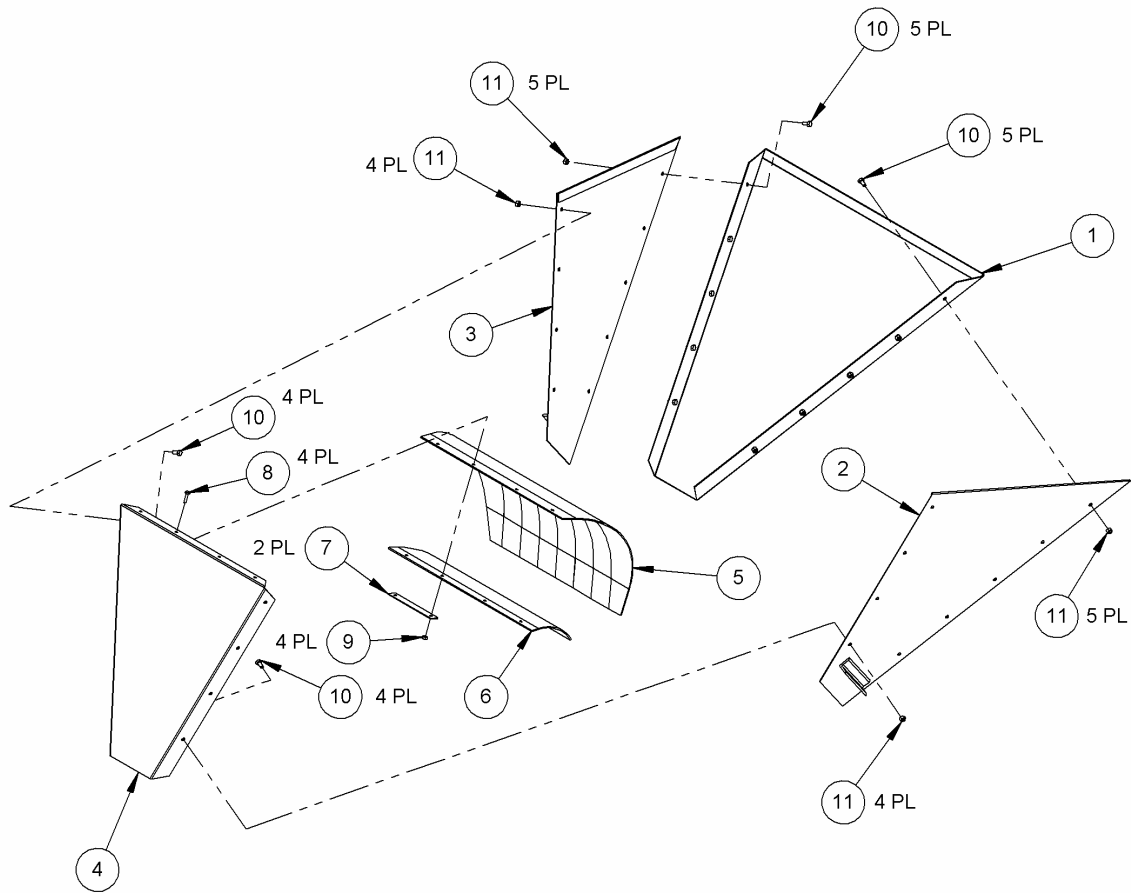
<u>Ref#</u>	<u>Part#</u>	<u>Description</u>
01	242511	Hopper Weldment, Bottom
02	242521	Hopper Weldment, Left
03	242531	Hopper Weldment, Right
04	242541	Hopper, Top
05	242551	Shield, Blow-Back
06	242561	Support, Blow-Back
07	241581	Bracket, Guard
08	241611	Bolt, 1/4-20 X 1", GR 5
09	143400	Nut, Nylon Lock, 1/4-20

<u>Ref#</u>	<u>Part#</u>	<u>Description</u>
10	241621	Bolt, Philips Head, 5/16-18 X 1/2", GR 5
11	241631	Nut, Nylon Lock, Thin, 5/16-18

### Safety & Information Labels

248841	Label, Danger, Avoid Death
234941	Label, DR Logo, 6" Black

# Schematic – Hopper Assembly



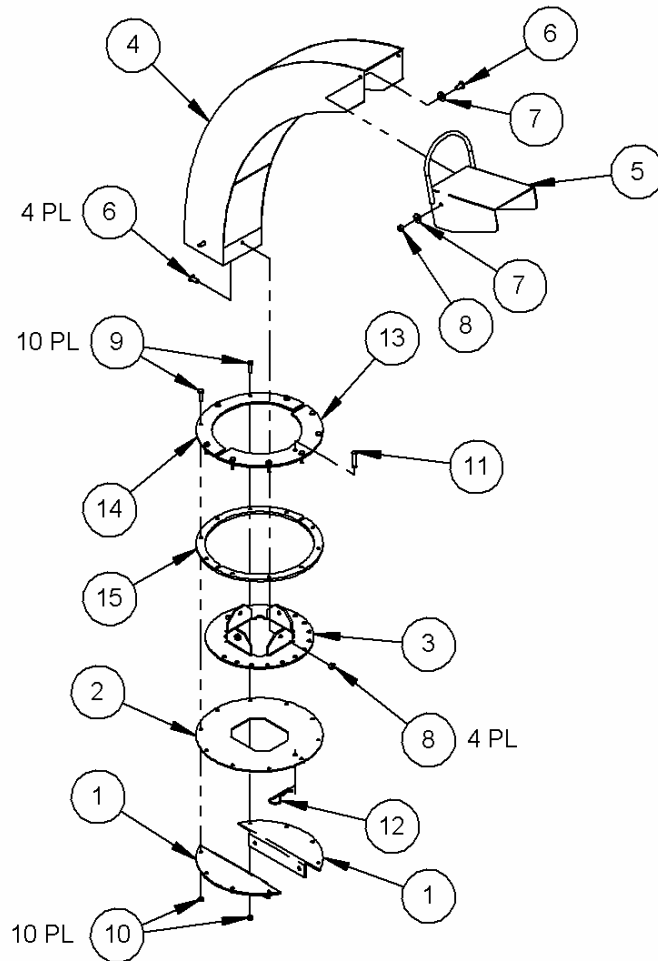
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## Parts List – Extended Top Discharge Chute

**NOTE:** Part numbers listed are available through DR Power Equipment.

<u>Ref#</u>	<u>Part#</u>	<u>Description</u>	<u>Ref#</u>	<u>Part#</u>	<u>Description</u>
1	242621	Flange, Side	11	242671	Pin, Locking
2	242631	Plate, Bottom	12	182581	Hitch Clip
3	242641	Swivel Weldment	13	242681	Swivel Top, Pin Side
4	242651	Top Discharge Weldment	14	242691	Swivel Top
5	242661	Deflector Weldment	15	242701	Spacer, Swivel
6	146051	Bolt, Carriage, 5/16-18 X 1", GR 5	<b><u>Safety &amp; Information Labels</u></b>		
7	145150	Washer, Flat, 5/16"	241831		Label, Warning, High Speed Discharge
8	143130	Nut, Nylon Lock, 5/16-18	241811		Label, Danger, Rotating Knife and Flywheel
9	241611	Bolt, 1/4-20 X 1", GR 5			
10	143400	Nut, Nylon Lock, 1/4-20			

# Schematic – Extended Top Discharge Chute



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*Notes:*

# 3-POINT HITCH DR<sup>®</sup> RAPID-FEED™ CHIPPER



## 2-Year Limited Warranty

### Terms and Conditions

The 3-POINT HITCH DR<sup>®</sup> RAPID-FEED™ CHIPPER is warranted for two (2) years against defects in materials or workmanship when put to ordinary and normal consumer use; ninety (90) days for any other use.

For the purposes of all the above warranties, "ordinary and normal consumer use" refers to non-commercial residential use and does not include misuse, accidents or damage due to inadequate maintenance.

DR Power Equipment certifies that the 3-POINT HITCH DR<sup>®</sup> RAPID-FEED™ CHIPPER is fit for ordinary purposes for which a product of this type is used. DR Power Equipment however, limits the implied warranties of merchantability and fitness in duration to a period of two (2) years in consumer use, ninety (90) days for any other use.

The 2-Year Limited Warranty on the 3-POINT HITCH DR<sup>®</sup> RAPID-FEED™ CHIPPER starts on the date the machine ships from our factory. The 2-Year Limited Warranty is applicable only to the original owner.

The warranty holder is responsible for the performance of the required maintenance as defined by the manufacturer's owner's manuals. The warranty holder is responsible for replacement of normally wearing parts such as the PTO Shaft, Drive Belt, Knife, and Wear Plate. Attachments and accessories to the machine are not covered by this warranty.

During the warranty period, the warranty holder is responsible for the machine transportation charges, if required. During the warranty period, warranty parts will be shipped by standard method at no charge to the warranty holder. Expedited shipping of warranty parts is the responsibility of the warranty holder.

SOME STATES DO NOT ALLOW LIMITATIONS ON THE LENGTH OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

DR Power Equipment shall not be liable under any circumstances for any **incidental or consequential damages or expenses** of any kind, including, but not limited to, cost of equipment rentals, loss of profit, or cost of hiring services to perform tasks normally performed by the 3-POINT HITCH DR<sup>®</sup> RAPID-FEED™ CHIPPER.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

### Customer Service Hotline

DR Power Equipment's objective is to have 100% satisfied customers. For that reason, we operate a 6-day-a-week Technical Service Department for our Owners. You can access a Representative by dialing our TOLL-FREE Hotline at **1-800-DR-OWNER (376-9637)**. The sole job of our well-trained and friendly folks is to ensure that you get any help you need in a timely fashion. They are there to answer all your questions including: (1) inquiries on any of the above warranties, (2) inquiries about replacement parts, or (3) your questions regarding service, maintenance and operation.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

## Daily Checklist for the 3-POINT HITCH DR RAPID FEED CHIPPER

To help maintain your 3-POINT HITCH DR RAPID FEED CHIPPER for optimum performance, we recommend you follow this checklist each time you use your Chipper.

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### **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.**

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- BELT:** Check the Belt for wear, proper alignment and tension.
- KNIFE and WEAR PLATE:** Check the Knife and Wear Plate for tightness, nicks and wear.
- GENERAL CONDITION:** Check the general condition of the machine, e.g.; nuts, bolts, welds, etc.
- HOPPER:** Check that there is no material left in the hopper before starting the Chipper.



DR® Power Equipment

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75 MEIGS ROAD, P.O. BOX 25, VERGENNES, VERMONT 05491

1-800-DR-OWNER (376-9637) • [www.DRpower.com](http://www.DRpower.com)

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