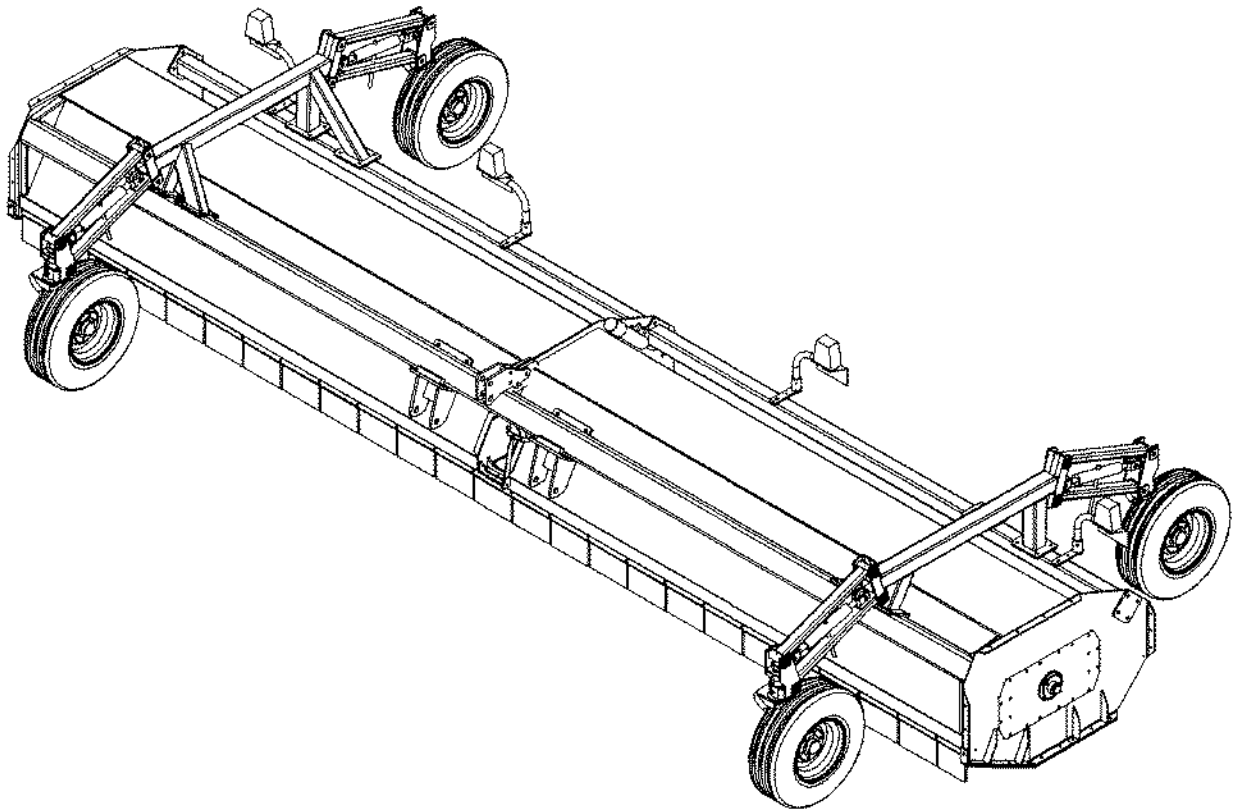




# OPERATION MANUAL



# SHREDDER

Printed in USA (74246) 8/05

 **WIL-RICH**

PO Box 1030  
Wahpeton, ND 58074  
PH (701) 642-2621  
Fax (701) 642-3372  
[www.wil-rich.com](http://www.wil-rich.com)

## WARRANTY

The only warranty Wil-Rich gives and the only warranty the dealer is authorized to give is as follows:

We warrant products sold by us to be in accordance with our published specifications or those specifications agreed to by us in writing at time of sale. Our obligation and liability under this warranty is expressly limited to repairing, or replacing, at our option, within 12 months after date of retail delivery, any product not meeting the specifications. ***We make no other warranty, express or implied and make no warranty of merchantability or of fitness for any particular purpose.*** Our obligation under the warranty shall not include any transportation charges or costs or installation or any liability for direct, indirect or consequential damage or delay. If requested by us, products or parts for which a warranty claim is made are to be returned transportation prepaid to our factory. Any improper use, operation beyond rated capacity, substitution of parts not approved by us, or any alteration or repair by others in such manner as in our judgment affects the product materially and adversely shall void this warranty. ***No employee or representative is authorized to change this warranty in any way or grant any other warranty.***

Wil-Rich reserves the right to make improvement changes on any of our products without notice.

***When warranty limited or not applicable:*** Warranty on hoses, cylinders, hubs, spindles, engines, valves, pumps or other trade accessories are limited to the warranties made by the respective manufactures of these components. Rubber tires and tubes are warranted directly by the respective tire manufacturer only, and not by Wil-Rich.

Warranty does not apply to any machine or part which has been repaired or altered in any way so as in the our judgment to affect its reliability, or which has been subject to misuse, negligence or accident.

***A Warranty Validation and Delivery Report Form must be filled out and received by Wil-Rich to initiate the warranty coverage.***

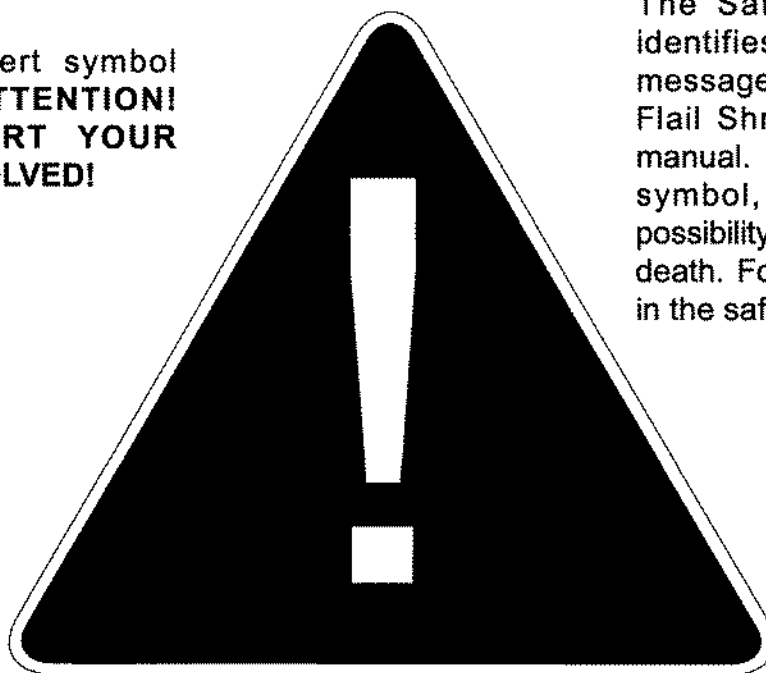
### WARRANTY CLAIMS PROCEDURE

1. The warranty form must be returned to Wil-Rich within fifteen (15) working days from the repair date.
2. Parts returned to Wil-Rich without authorization will be refused. The parts must be retained at the dealership for ninety (90) days after the claim has been filed. If the Service Department would like to inspect the parts, a packing slip will be mailed to the dealer. The packing slip must be returned with the parts. The parts must be returned prepaid within thirty (30) days of receiving authorization. After the parts are inspected and warranty is verified, credit for the return freight will be issued to the dealer.
3. Parts that will be scrapped at the dealership will be inspected by a Wil-Rich Sales Representative, District Sales Manager or Service Representative within the ninety (90) day retaining period.

# PERSONAL SAFETY IS IMPORTANT!

ALL PERSONNEL INVOLVED WITH THE ASSEMBLY AND/OR OPERATION OF THIS EQUIPMENT MUST BE INFORMED OF PROPER SAFETY PROCEDURES. OPERATOR'S/ ASSEMBLY MANUALS PROVIDE THE NECESSARY INFORMATION. IF THE MANUAL IS LOST FOR A PARTICULAR IMPLEMENT, ORDER A REPLACEMENT AT ONCE. OPERATOR'S AND ASSEMBLY MANUALS ARE AVAILABLE AT NO CHARGE UPON REQUEST.

This Safety Alert symbol means **ATTENTION!**  
**BECOME ALERT YOUR SAFETY IS INVOLVED!**



The Safety Alert symbol identifies important safety messages on the Wil-Rich Flail Shredder and in this manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Why is SAFETY important to you?

## 3 Big Reasons

**Accidents Disable and Kill**

**Accidents Cost**

**Accidents Can Be Avoided**

### SIGNAL WORDS:

Note the use of the signal words **DANGER**, **WARNING** and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guidelines:

### DANGER

An immediate and specific hazard which **WILL** result in severe personal injury or death if the proper precautions are not taken.

### WARNING

A specific hazard or unsafe practice which **COULD** result in severe personal injury or death if the proper precautions are not taken

### CAUTION

Unsafe practices which **COULD** result in personal injury if proper practices are not taken, or as a reminder of good safety practices.

ADDRESS INQUIRIES TO:  
WIL-RICH  
PO BOX 1030  
WAHPETON, ND 58074  
PH (701) 642-2621 FAX (701) 642-3372

# SPECIFICATIONS

Maximum Outside Body Width:	15'	187in. (4.7m)
	20'	247 in. (6.3m)
	22'	271 in. (6.9m)
	25'	307 in. (7.8m)
	26'8"	327 in. (8.3m)
	30'	367 in. (9.3m)

Cutting Height.....3 in. to 12 in. (7.62 cm to 30.5 cm)

Width of Cut	15'	178 in. (4.5m)
	20'	238 in. (6.0m)
	22'	262 in. (6.7m)
	25'	298 in. (7.6m)
	26'8"	318 in. (8.0m)
	30'	358 in. (9.0m)

Knives	" L "
Number on 15'	168
Number on 20'	224
Number on 22'	248
Number on 25'	288
Number on 26'8"	304
Number on 30'	344

Recommended Tire Size	9.5L - 15, 8 ply rated
Tire Inflation Pressure	25 psi
Rotor Speed	1350 RPM dynamically balanced
Drive: PTO	1000 RPM
Weight of Shredder (approximate)	15' 4875 lbs. (2211 kg)
	20' 6200 lbs. (2813 kg)
	22' 6750 lbs. (3062 kg)
	25' 7400 lbs. (3357 kg)
	26'8" 7625 lbs. (3458 kg)
	30' 9500 lbs. (4309 kg)

## PRE-DELIVERY CHECK LIST

### (DEALER'S RESPONSIBILITY)

Inspect the equipment thoroughly after assembly to make sure that it is set up properly before delivering it to the customer.

The following check lists are a reminder of points to inspect. Check off each item as it is found satisfactory or after proper adjustment is made.

- \_\_\_\_\_ Check that all safety decals are installed and in good condition.  
Replace if damaged
- \_\_\_\_\_ Properly attach implement to tractor and make all necessary adjustments.
- \_\_\_\_\_ Check all bolts to be sure they are properly torqued.
- \_\_\_\_\_ Check wheel bolts for proper torque.
- \_\_\_\_\_ Check the all cotter pins and safety pins are properly installed. Replace if damaged.
- \_\_\_\_\_ Check and grease all lubrication points
- \_\_\_\_\_ Check that hydraulic reservoir has been serviced and that hydraulic system and all functions have been operated through full cylinder stroke to purge air from system.

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## **DELIVERY CHECK LIST**

### **(DEALER'S RESPONSIBILITY)**

- \_\_\_\_\_ Show customer how to make adjustments.
- \_\_\_\_\_ Instruct customer how to lubricate and explain the importance of lubrication
- \_\_\_\_\_ Point out the safety decals. Explain their meaning and the need to keep them in place and in good condition. Emphasize the increased safety hazards when instructions are not followed.
- \_\_\_\_\_ Present Operator's manual and request that customer and all operators read it before operating equipment. Point out the manual safety rules, explain their meanings and emphasize the increased safety hazards that exist when safety rules are not followed.
- \_\_\_\_\_ Explain to customer the potential crushing hazards of going underneath raised equipment. Instruct customer that service work does not require going underneath unit and never to do so.
- \_\_\_\_\_ Show customer the safe, proper procedures to be used when mounting, dismounting, and storing equipment.
- \_\_\_\_\_ For mounted units, add wheel weights, ballast in front tires, and/or front tractor weight to enhance front end stability. A minimum 20% of tractor and equipment gross weight must be on front tractor wheels.
- \_\_\_\_\_ Explain to customer that when equipment is transported on a road or highway, a Slow Moving Vehicle (SMV) sign should be used to provide adequate warning to operators of other vehicles.

## **TO THE OWNER**

It is the responsibility of the user to read the Operator's Manual and comply with the safe and correct operating procedures as pertains to the operation, lubrication and maintenance of the product according to the information outlined in the Operator's Manual.

If this machine is used by an employee or is loaned or rented, make certain that the operator(s), prior to operating, is instructed in safe and proper use and reviews and understands the Operator's Manual.

The user is responsible for inspecting his/her machine and for having parts repaired or replaced when continued use of this product would cause damage or excessive wear to the other parts. The word NOTE is used to convey information that is out of context with the manual text; special information such as specifications, techniques, reference information of supplementary nature.

### **SERIAL NUMBER BREAK**

Every implement has a serial number located on the front center of the main frame (3pt area). These serial numbers are consecutively assigned to the implements as they are manufactured. To aid in part ordering, we reference the serial number at the point the change occurred to provide an accurate means of determining the proper

<b>WIL-RICH LLC</b>	
Wahpeton, ND	
Serial Number:	<input type="text"/>
	
Made in USA	

parts. When in need of parts, always specify the model and serial number. Write this number in the space provided. The serial number plate is located on the top left area of the main toolbar.

## **MODIFICATIONS**

It is the policy of **WIL-RICH** to improve its products whenever possible and practical to do so. We reserve the right to make changes, improvements and modifications at any time without incurring obligation to make such changes, improvements on any equipment sold previously.

## **PREPARATION**

Before operating the **WIL-RICH** Flail Shredder, a careful inspection must become routine. A check must be made to ensure that all hardware and fasteners are securely tightened and moving parts properly lubricated.

Remove all wires and/or banding material. The parts have been conveniently arranged on the pallet for ease of assembly.

**NOTE: Always wear safety glasses or goggles and be careful when cutting wires and steel bands as they are under tension and will spring back when cut.**

Wherever the terms "left" and "right" are used, it must be understood to mean from a position behind and facing the machine.

Lubricate all bearings and moving parts as you proceed and make sure they work freely.

## **FASTENERS**

Loosely install all bolts connecting mating parts before final tightening.

When tightening bolts, they must be torqued to the proper number of foot-pounds as indicated in the table unless specified. It is important that all bolts be kept tight.

On new machines, all nuts and bolts must be rechecked after a few hours of operation.

When replacing a bolt, use only a bolt of the same grade or higher. Except in shear bolt applications, where you must use the same grade bolt.

Bolts with no markings are grade 2

Grade 5 bolts furnished with the machine are identified by three radial lines on the head.

Grade 8 bolts furnished with the machine are identified by six radial lines on the head.

All U-bolts are grade 5.

## TIRE INFLATION

The use of proper air pressure is the most important factor in satisfactory performance and maintenance of implement tire. Underinflation will damage the cord body of the tire and cause a series of diagonal breaks in the fabric sidewall area.

If the tire buckles or wrinkles, the air pressure must be increased to the point where the sidewall remains smooth while operating.

Check the air pressure every two or three weeks and do not allow the pressure to drop to a point where buckling or wrinkling of the tire may be possible.

**Note:** Do not inflate tires beyond the specified tire pressure.





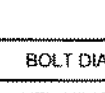
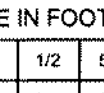
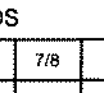
## WHEEL BOLTS

It is recommended that all wheel bolts be checked for tightness before using and again after one day of use. Check periodically to be sure the wheel bolts are tight.

## HYDRAULICS

Check hitch lift cylinder for proper alignment and operation. On any machine, check that

## GENERAL INFORMATION

GRADE 2	GRADE 5			GRADE 8		
						
TORQUE IN FOOT POUNDS						
BOLT DIA	3/8	1/2	5/8	3/4	7/8	1
HEX HEAD	9/16	3/4	15/16	1-1/8	1-5/16	1-1/2
UNC GR2	18	45	89	160	252	320
UNC GR5	30	68	140	240	360	544
UNC GR8	40	100	196	340	528	792
UNF GR2	21	51	102	178	272	368
UNF GR5	32	70	168	264	392	572
UNF GR8	46	112	216	368	792	840

TORQUE.EPS

the hydraulic system has been properly charged and purged.

## NOTE:

Gauge wheel hubs are not fully filled with grease when assembled. Though these hubs are usually equipped with grease fittings, pumping a few shots of grease on a regular interval into these hubs will not ensure that the grease enters or flushes the bearings. It is essential that all bearing assemblies be repacked at the end of the season, or before the next season.

## BEARING ASSEMBLIES

**IMPORTANT:** The spindle nuts on the wheel assemblies are preset at the factory.

Road transport and field working will seat the bearings and will require additional adjustment. After 20 hours of machine operation remove the grease cap and check the bearing tightness.

Remove the cotter pin and rotate the tire while tightening the spindle nut. Tighten until the drag on the tire stops the rotation. Locate the cotter pin hole in the spindle and loosen the spindle nut just enough to allow insertion of the cotter pin. Replace cotter pin and grease cap.



## **GENERAL SETUP**

### **Leveling unit**

Leveling the unit from side to side should be as level as possible for uniform cutting.

Leveling the unit 1/2" to 1" higher in the front than the rear will allow taller material to be guided into the shredder easier with less build up of material outside of the machine.

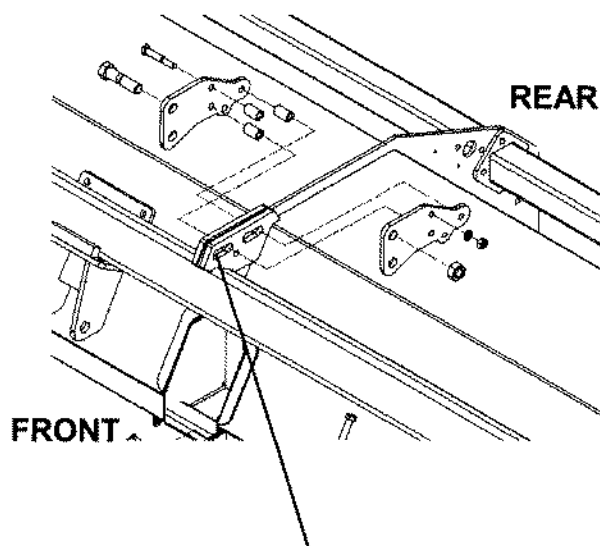
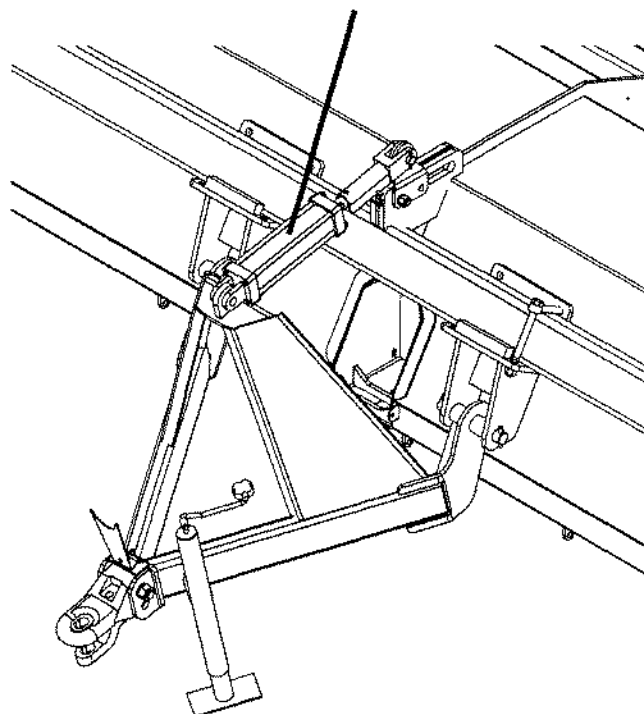
### **3-point hookup**

The 3-point hitch models require the tractor to be equipped with a category II or category III quick hitch. If the hitch can be converted from one to the other, use a category III to provide a wider stance and more stability.

Use the upper pin hole for category III and the lower hole for category II.

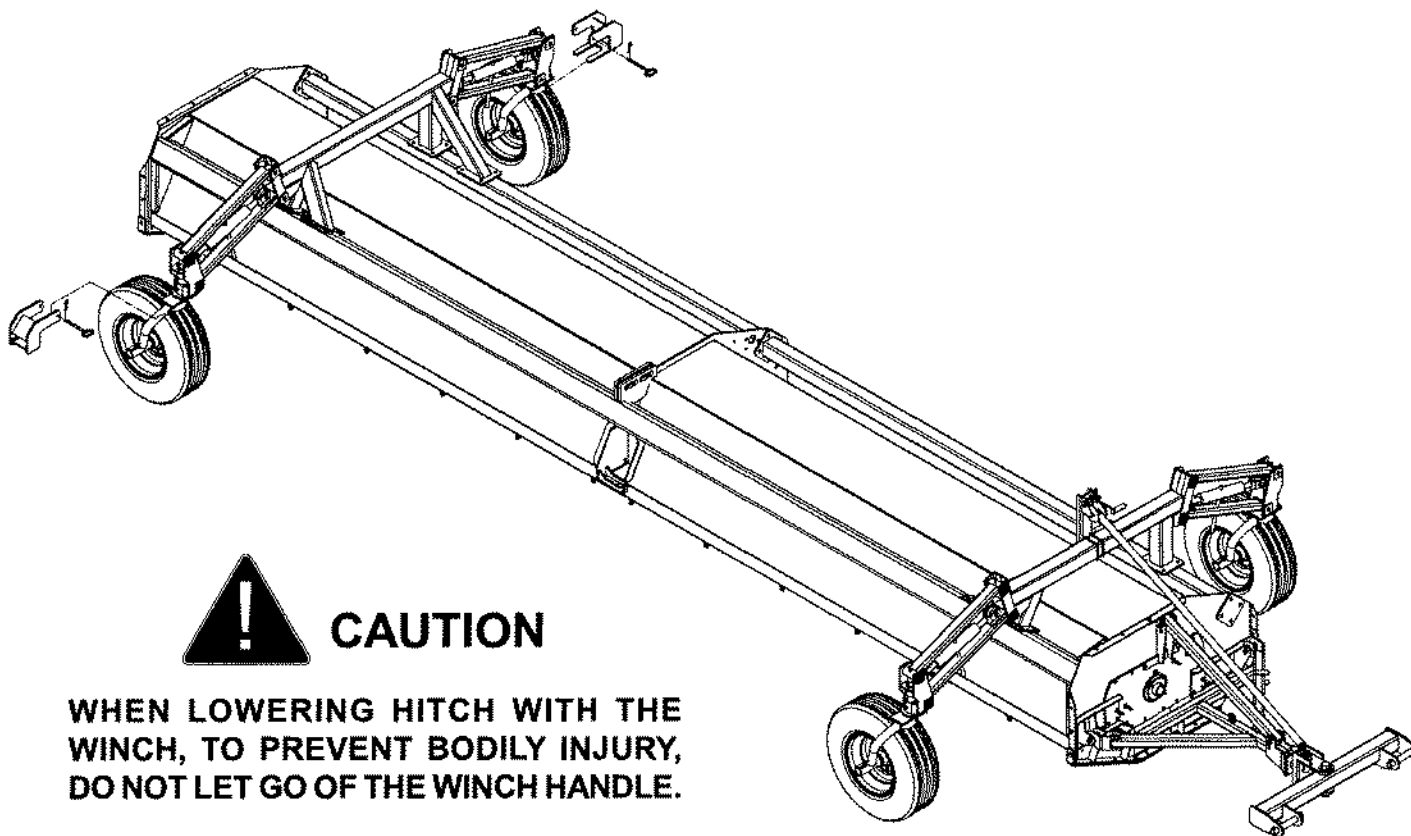
**NOTE:** When switching tractors with the flail shredder, check pto length in the down and up position.

**TO PREVENT DAMAGE TO HYDRAULIC CYLINDER, MOUNT CYLINDER WITH BUTT END FORWARD AND THE ROD END FACING THE REAR AS SHOWN.**



**NOTE:** Do not lock solid. Bolts should be able to slide back and forth freely. When unit is level and in cutting position, the bolts should be positioned in the front of the slots.

## **END TRANSPORT**



### **CAUTION**

**WHEN LOWERING HITCH WITH THE WINCH, TO PREVENT BODILY INJURY, DO NOT LET GO OF THE WINCH HANDLE.**

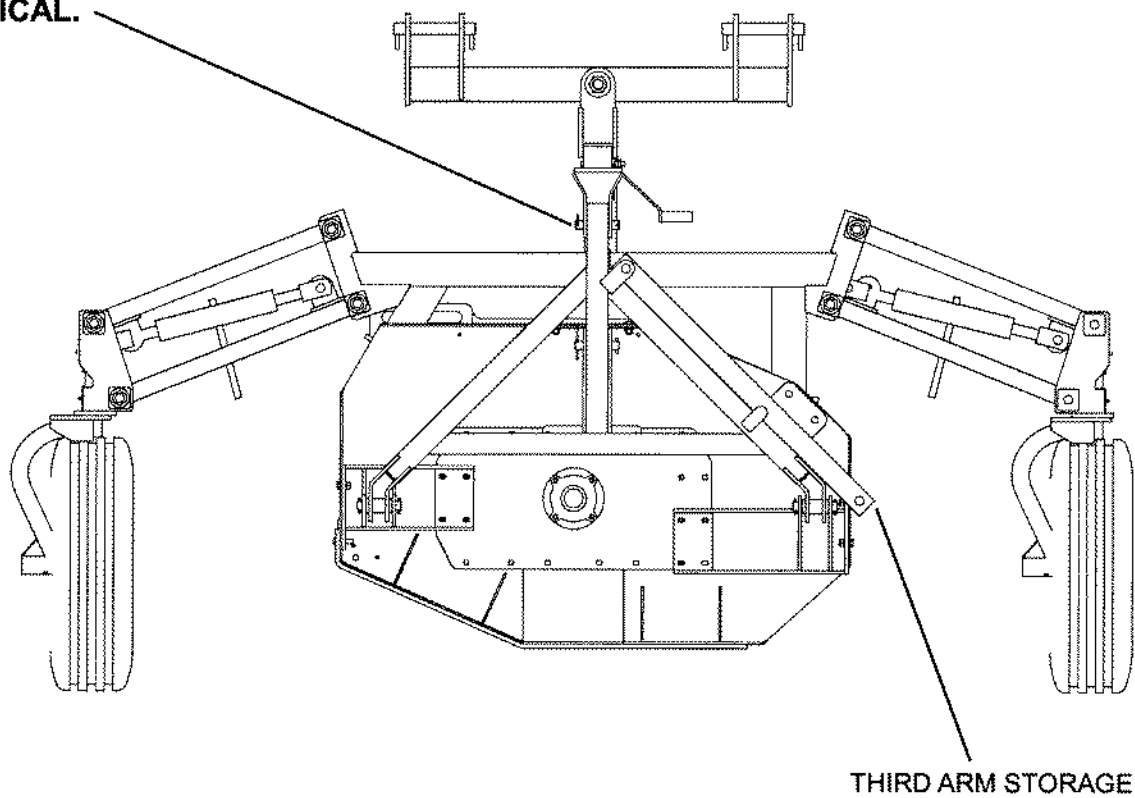
The end transport hitch is made to hook-up with a quick hitch. Starting from a vertical position - lower the end transport hitch with the two way winch.

- 1.) Remove upper pin.
- 2.) lower hitch to a horizontal position.
- 3.) Attach third arm tube using two pins and secure with hair pins.
- 4.) Unhook winch from end transport hitch and wrap up strap.
- 5.) Attach front and rear wheel locks on right hand end of unit, secure with pin and hair pin.
- 6.) Make sure shredder body is raised high enough to prevent damage to end sheets.
- 7.) Unit is now ready for road transport.

**NOTE: THE BEST WAY TO ATTACH THE WHEEL LOCKS IS TO RAISE THE SHREDDER BODY SLIGHTLY USING THE 3 POINT HITCH, THIS WILL TAKE SOME OF THE WEIGHT OFF THE TIRES MAKING IT EASIER TO ROTATE TO THE CORRECT POSITION TO ATTACH THE WHEEL LOCKS. IF THE SHREDDER BODY IS RAISED TO MUCH, VERTIACL MOVEMENT ON THE PIVOT SHAFT (CASTER WHEEL) WILL PREVENT THE WHEEL LOCKS FROM MOUNTING PROPERLY.**

## FIELD OPERATING POSITION

**THIS PIN MUST BE IN PLACE  
WHEN OPERATING UNIT IN THE  
FIELD. DO NOT USE STRAP TO  
HOLD END TRANSPORT HITCH  
VERTICAL.**



# REPLACING FLAILS

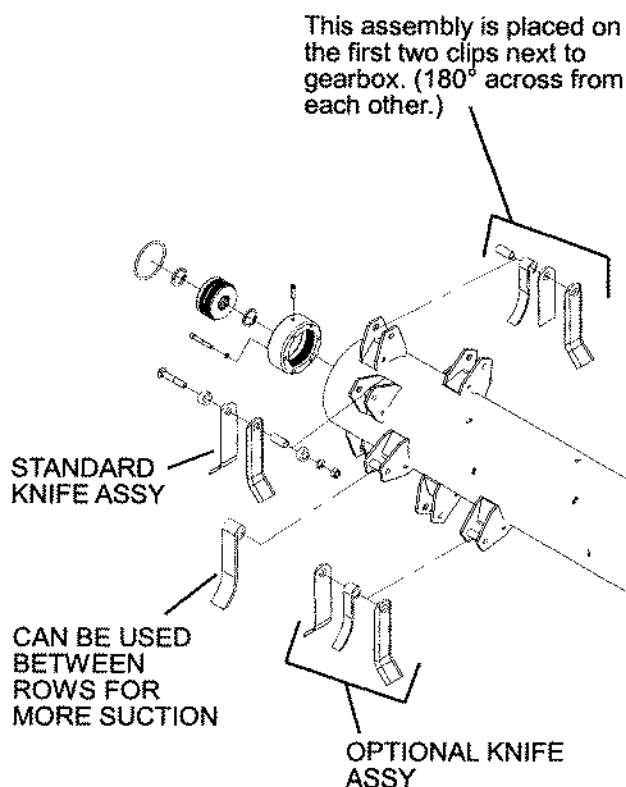
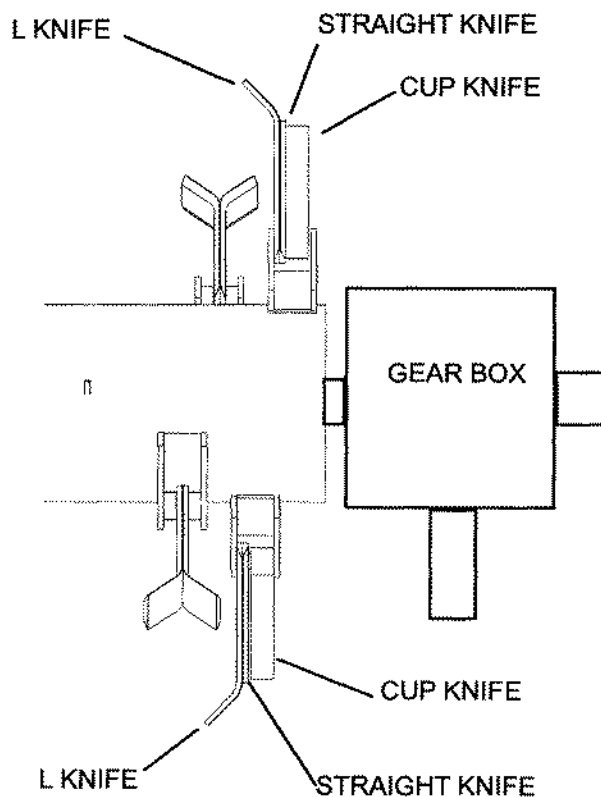
■ Do not handle blades with bare hands. Careless or improper handling may result in serious injury.

■ To maintain rotor balance, always replace opposite pairs of flails and mounting hardware. Failure to do so will cause excessive wear on drive components.

■ Any vibration caused by missing knives or worn drive components can cause excessive damage to the shredder. Vibration is also transmitted through the PTO shaft to the tractor and will damage tractor.

■ Blades closest to the gear box need to have a short cup knife (234231) inside of the machine closest to the gear box, next is a straight blade(238461) and last is a L-knife,(233987) and the same setup on the opposite side. (see illustration)

- 1 Clear area of bystanders, especially children.
- 2 Shut off tractor, place all controls in neutral, set parking brake, remove key, and wait for all moving parts to stop.
- 3 Disconnect driveline and hydraulic lines from tractor.
- 4 Place safety stands or large blocks under the frame.
- 5 Loosen and remove the mounting bolt on the worn flail and its opposite on the other side of rotor. Discard worn flails and their mounting hardware.
- 6 Replace with new flails and mounting hardware.
- 7 Tighten flail mounting bolt to its specified torque.
- 8 Replace additional worn flails following step 5,6,and 7.
- 9 Remove safety stands or blocks from under frame.
- 10 Lower unit and remove jack.
- 11 Attach driveline and hydraulic line to tractor.



## **REPLACING RUBBER SHIELD FLAPS**

Rubber shield flaps on the front of the unit deflect or prevent stones or debris from being ejected when operating unit. Replace if damaged or missing to provide a safe work environment. To replace follow this procedure:

Clear the area of bystanders, especially children.

Lower the unit to the ground, place all controls in neutral, shut off engine, set park brake, remove key, and wait for all moving parts to stop before dismounting.

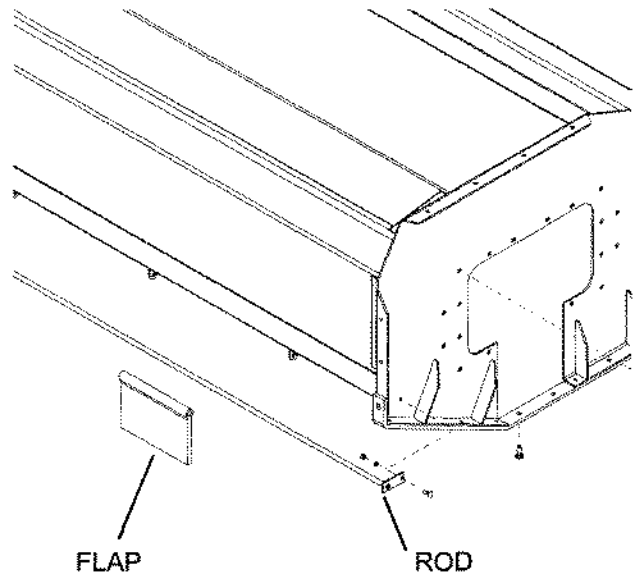
**NOTE:** For 3-point hitch units, unhook to gain access to center flaps.

Remove the bolt from the end of the flap rod and pull rod until the flaps come off.

Install new shield flap.

Push rod through flaps and re-install bolt.

Flaps next to end shafts are cut to fit.



## **SERVICING ROTORS**

The shredder rotors are dynamically balanced from the factory and should be maintained to keep them in balance and to prevent excessive wear on drive components.

When servicing rotors, follow this procedure:

- 1 Clear area of bystanders, especially children.
- 2 Shut off tractor, place all controls in neutral, set parking brake, remove key, and wait for all moving parts to stop.
- 3 Disconnect unit from the tractor.
- 4 Remove the PTO driveline from unit.
- 5 Remove wheel arms



■ **Use a suitable lifting device of sufficient capacity. Use adequate personnel to handle heavy components.**

- 6 Use a hoist, crane, or a frame of sufficient capacity to raise the front of the unit and allow back of unit to rest on a solid surface.
- 7 Leave lifting device attached while working on rotors to prevent tipping
- 8 Remove knives. Wear heavy canvas or leather gloves to protect your hands.

## SERVICING ROTORS

### (Cont'd)

#### Removing components:

- 1 With unit raised support each end of rotor with crane or hoist.
- 2 Remove bearing locking collar.
- 3 Remove shoe plate, cover end plate, then remove the 16 - 1/2NCx1.5" bolts that hold the bearing plate on.
- 4 Slide rotor out to disengage from the center drive hub.
- 5 Check drive hubs for wear and replace if necessary. If O-ring grease seal is cut or worn, replace it.

#### Replacing components:

- 1 Insert outer shaft through bearing plate.
- 2 Install drive hub to gearbox output shaft. Thoroughly clean both halves of the drive couplers and apply new grease to all gear teeth.

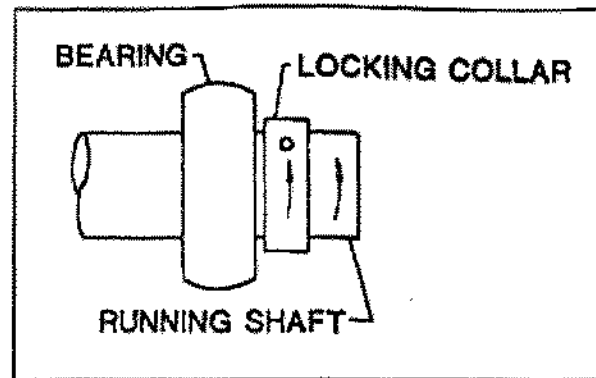
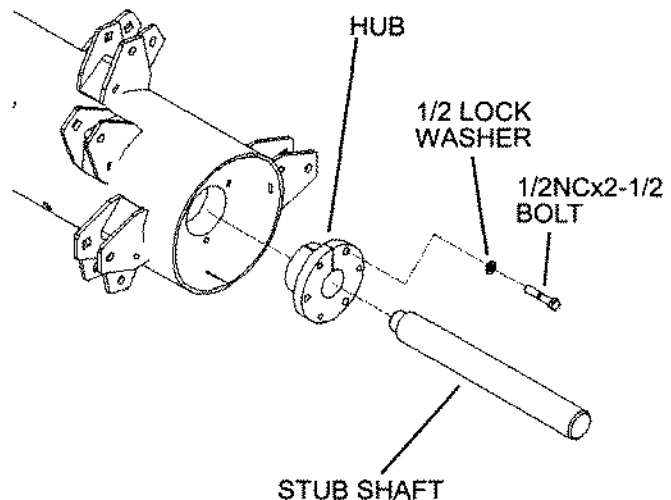


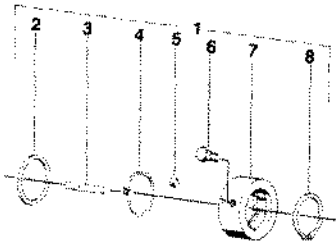
Figure 44 Locking Collar

- 3 Install bearing plate bolts and tighten to specified torque.
- 4 Install cover end plate, tighten to specified torque.
- 5 Install shoe plate, tighten bolts to specified torque

## REPLACING STUB SHAFT

- 1 Remove rotor (see servicing rotors)
  - 2 Remove three 1/2x2-1/2 hex bolts in taper lock hub and re-install in three threaded holes.
  - 3 Tighten bolts evenly to release taper lock hub from stub shaft.
- NOTE:** You may have to give a sharp blow directly to each bolt head to help the hub disengage.
- 4 Unscrew stub shaft from the rotor tube.
  - 5 Install new stub shaft, reversing steps 1-3.



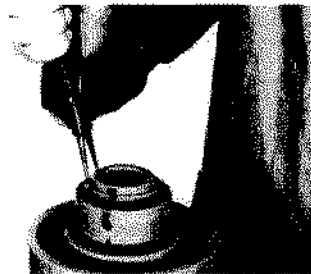


- 1 - QC-lock complete
- 2 - Washer
- 3 - Clamping key
- 4 - Torsional spring
- 5 - Ball
- 6 - Self-locking hex screw
- 7 - Lock ring
- 8 - Retaining ring

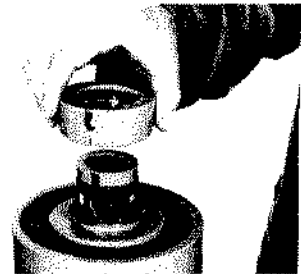
## DISMANTLING EFK/97



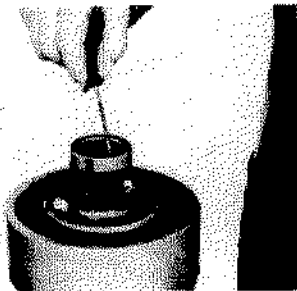
Loosen hex screw.



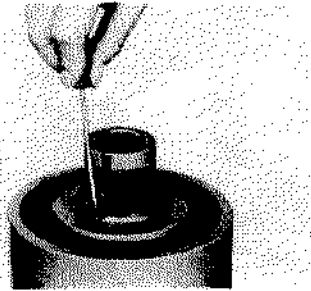
Remove retaining ring



Remove lock ring



Take out balls

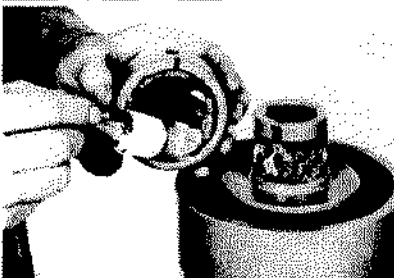


Detach torsional spring with screw driver and remove it

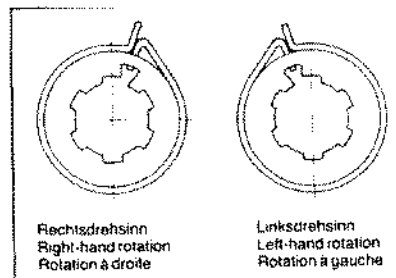


Remove washer and clamping key.

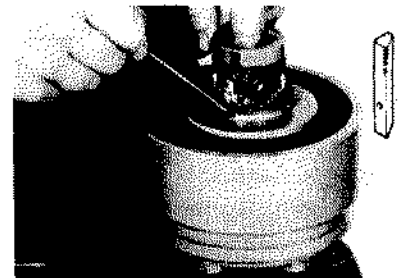
## ASSEMBLY



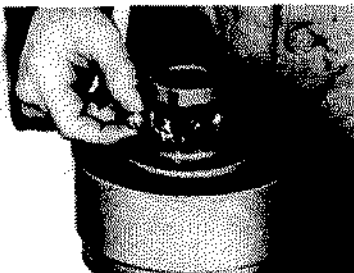
Lubricate lock ring and hub



Install torsional spring. Note direction of rotation.



Connect torsional spring with clamping key.



Place balls



Install lock ring and retaining ring



Tighten self-locking hex-screw. Replace hex bot after tightening and loosening three times. Check tight od screw regularly.

## DISMANTLING FRICTION CLUTCH EFK/97



See dismantling and assembly instructions for QC-lock on page 13.



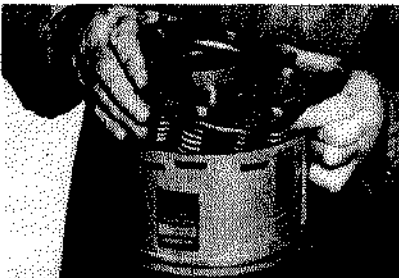
It is not necessary to remove the torsional spring when replacing the friction disks.



Tighten the 6 nuts of the spring pack to relieve the setting ring.



Mark assembly position of the setting ring in relation to the housing. Then remove setting ring.



Take spring pack out of housing.



Remove flange hub together with friction disks and drive plates.

## ASSEMBLY



Fit friction disks and drive plates on flange hub in the correct sequence. **NOTE:** The friction surfaces must be clean and exempt of any grease.



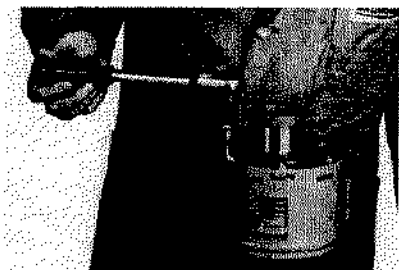
Insert flange hub with friction disks and drive plates into clutch housing.



Insert spring pack into clutch housing.



Fit setting ring (make sure that it is in the correct position)



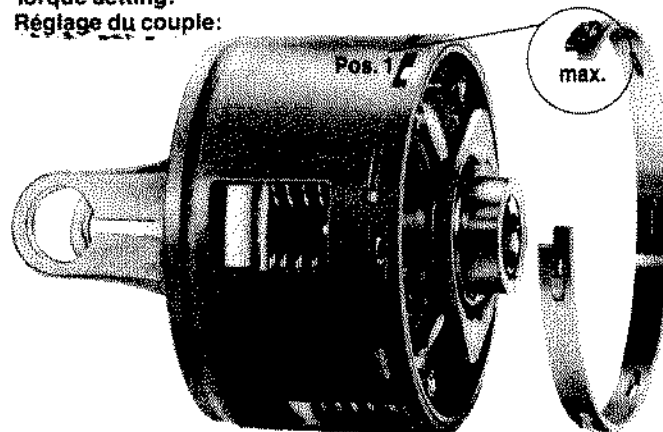
Loosen the 6 nuts at the spring pack to end of thread. The clutch is now ready for use.



Fit QC-lock (see page 13)

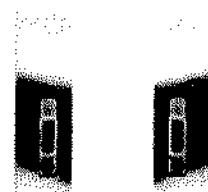


**Drehmomenteinstellung:**  
**Torque setting:**  
**Réglage du couple:**



**Einstellring**  
**Setting ring**  
**Bague de réglage**

**max. / maxi**    **min. / mini**



Drehmoment Torque / Couple		Einstellung Setting ring Bague de réglage	Kupplungsgehäuse Clutch housing Boîtier
Stufe / Level Niveau	%		Pos
I	70	min.	1
<b>II*</b>	<b>80</b>	<b>max.</b>	<b>1</b>
III	90	min.	2
IV	100	max.	2

The torque setting can be modified with the aid of a setting ring and two alternative location slots in the clutch housing.

- 1 The setting ring provides for a min position and a max. position.
- 2 The clutch housing incorporates two locating positions for the setting ring (1 & 2) which are situated at different levels

For each spring pack, four torque settings are possible (see table)

Drehmoment in daNm Torque in daNm Tarage en daNm											
Kupplungstypen K96 (2 Reibscheiben) Clutch types K96 (2 friction disks) Types de limiteur K96 (2 disques de friction)				Kupplungstypen K96/4 (4 Reibscheiben) Clutch types K96/4 (4 friction disks) Types de limiteur K96/4 (4 disques de friction)				Federpaket Kennzeichnung Spring pack marking Marquage du bloc-ressorts		Ersatzteil-Nr. Spare part No. Réf. pièce de rechange	
Stufe / Level / Niveau				Stufe / Level / Niveau						Bestell-Nr. Part No. Référence	
I	II*	III	IV	I	II*	III	IV				
18	20	23	25	35	40	45	50	20/40		171283	
26	30	34	38	53	60	68	75	30/60		171284	
35	40	45	50	70	80	90	100	40/80		171285	
				80	90	105	115	/90		171286	
45	50	58	63	88	100	115	128	50/100		377677	
				95	110	125	140	/110		377676	
53	60	70	78	105	120	138	153	60/120		377675	
				120	135	155	173	/135		377674	
65	75	85	95	133	150	173	190	75/150		377673	
				145	165	190	210	/165		175022	
80	90	103	115	158	180	208	230	90/180		377671	
				170	195	225	247	/195		175023	
90	105	118	130	180	210	235	260	105/210		377672	

\* Vorzugsdrehmoment  
 \* Preferred torque  
 \* Couple préféré



## **SAFETY RULES**



**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

It has been said "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

### **TRAINING**

**Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. Failure to follow instructions or safety rules can result in serious injury or death.**

**If you do not understand any part of this manual and need assistance, see your dealer.**

**Know your controls and how to stop engine and attachment quickly in an emergency.**

**Operators must be instructed in and be capable of the safe operation of the equipment, its attachments, and all controls. Do not allow anyone to operate this equipment without proper instructions.**

**Keep hands and body away from pressurized lines. Use paper or cardboard, not hands or other body parts to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.**

**Make sure that all operating and service personnel know that if hydraulic fluid penetrates skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury of gangrene, serious injury, or death will result. CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.**

**Never allow children or untrained persons to operate equipment.**

### **PREPARATION**

**Use a suitable lifting device of sufficient capacity. Use adequate personnel to handle heavy components.**

**Check that all hardware is properly installed. Always tighten to torque chart specifications unless instructed otherwise in this manual.**

**Air in hydraulic systems can cause erratic operation and allows loads or equipment components to drop unexpectedly. When connecting equipment or hoses or performing any hydraulic maintenance, purge any air in hydraulic system by operating all hydraulic functions several times. Do this before putting into service or allowing anyone to approach the equipment.**

**Make sure all hydraulic hoses, fittings, and valves are in good condition and not leaking before starting power unit or using equipment. Check and route hoses carefully to prevent damage. Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come in to contact with any moving parts. Operate moveable components through full operational range to check clearances. Replace any damaged hoses immediately.**

**Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.**

**When attaching a pull-type unit to the tractor drawbar, always use a high-strength drawbar pin. The drawbar pin must have a device that will lock it into position. Secure safety chain to attachment and tractor.**

**Make sure attachment is properly secured, adjusted, and in good operating condition.**

**Make sure spring-activated locking pin or collar slides freely and is seated firmly in tractor PTO spline groove.**

**Make sure driveline shield tether chains are attached to the tractor and equipment as shown in this manual. Replace if damaged or broken. Check that driveline guards rotate freely on driveline before putting equipment into service.**

## **SAFETY RULES**



**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



Before starting power unit, check all equipment driveline guards for damage. Replace any damaged guards. Make sure all guards rotate freely on all drivelines. If guards do not rotate freely on drivelines, repair and replace bearings before putting equipment into service.

Power unit must be equipped with ROPS or ROPS cab and seat belt. Keep seat belt securely fastened. Falling off power unit can result in death from being run over or crushed. Keep foldable ROPS systems in "locked up" position at all times.

Connect PTO driveline directly to power unit PTO shaft. Never use adapter sleeves or adapter shafts. Adapters can cause driveline failures due to incorrect spline or incorrect operating length and can result in personal injury or death.

Inspect rubber flaps and swing rod before each use. Replace if damaged or missing. Flaps must pivot and hang freely so there are no gaps. Do not put equipment into service until repaired.

Remove accumulated debris from this equipment, power unit, and engine to avoid fire hazard.

Make sure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)

Make sure shields and guards are properly installed and in good condition. Replace if damaged.

A minimum 20% of tractor and equipment weight must be on the tractor front wheels when attachments are in transport position. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with a loader, front wheel weights, ballast in tires or front tractor weights. Weigh the tractor and equipment. Do not estimate.

Inspect and clear area of stones, branches, or other hard objects that might be thrown, causing injury or damage.

### **TRANSPORTATION**

Always sit in power unit seat when operating controls or starting engine. Securely fasten seat belt, place transmission in neutral, engage brake, and ensure all other controls are disengaged before starting power unit engine.

Always raise unit and install transport locks before transporting. Leak down or failure of mechanical or hydraulic system can cause equipment to drop. Always attach safety chain to tractor drawbar when transporting unit.

Never exceed 20 MPH during transport. See the Speed vs. Weight Ratio Table in "Field Operation, Transporting the Unit" for proper tow vehicle to machine weight ratios.

If unit is equipped with end transport option, transport ONLY from end transport hitch. Lighting and markings are supplied for the end transport only.

Watch for hidden hazards on the terrain.

Always comply with all state and local lighting and marking requirements.

Never allow riders on power unit or attachment.

Do not operate PTO during transport.

Look down and to the rear and make sure area is clear before operating in reverse.

Do not operate or transport on steep slopes.

Use extreme care and reduce ground speed on slopes and rough terrain.

Do not operate or transport equipment while under the influence of alcohol or drugs.

Always travel at a safe speed. Reduce speed and use caution when making corners or meeting traffic.

Make sure SMV (Slow Moving Vehicle) emblem and all lights and reflectors that are required by the local highway and transport authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic

Keep to the right and yield the right-of-way to allow faster traffic to pass. Drive on the road shoulder, if permitted by law.

Always use hazard warning flashers on tractor when transporting unless prohibited by law.



## **SAFETY RULES**

**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



### **OPERATION**

Do not allow bystanders in the area when operating, attaching, removing, assembling, or servicing equipment.

Keep bystanders away from equipment.

Operate only in daylight or good artificial light.

Never go underneath equipment (lowered to the ground or raised) unless it is properly blocked and secured. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death. Follow Operator's Manual instructions for working underneath and blocking requirements or have work done by a qualified dealer.

Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.

Always comply with all state and local lighting and marking requirements.

Never allow riders on power unit or attachment.

Operate tractor PTO at the RPM speed stated in "Specifications" section.

Do not operate PTO during transport.

Look down and to the rear and make sure area is clear before operating in reverse.

Do not operate or transport on steep slopes.

Do not stop, start, or change directions suddenly on slopes.

Use extreme care and reduce ground speed on slopes and rough terrain.

Watch for hidden hazards on the terrain during operation.

Stop power unit and equipment immediately upon striking an obstruction. Turn off engine, remove key, inspect, and repair any damage before resuming operation.

Leak down or failure of mechanical or hydraulic system can cause equipment to drop.

Before dismounting power unit or performing any service or maintenance, follow these steps: disengage power to equipment, lower the 3-point hitch and all raised components to the ground, operate valve levers to release any hydraulic pressure, set parking brake, stop engine, remove key, and unfasten seat belt.

Before performing any service or maintenance, lower equipment to ground or block securely, turn off engine, remove key, and disconnect driveline from tractor PTO.

Before working underneath, read manual instructions, securely block up, and check stability. Secure blocking prevents equipment from dropping due to hydraulic leak down, hydraulic system failure, or mechanical component failure.

### **MAINTENANCE**

Work not covered in SERVICE & MAINTENANCE must be done by a qualified dealership. Special skills, tools, and safety procedures may be required. Failure to follow these instructions can result in serious injury or death.

Do not modify or alter or permit anyone else to modify or alter the equipment or any of its components in any way.

Your dealer can supply original equipment hydraulic accessories and repair parts. Substitute parts may not meet original equipment specifications and may be dangerous.

Use a suitable lifting device of sufficient capacity. Use adequate personnel to handle heavy components.

Do not allow bystanders in the area when operating, attaching, removing, assembling. Make sure attachment is properly secured, adjusted, and in good operating condition.

Keep all persons away from operator control area while performing adjustments, service, or maintenance.

Make certain all movement of equipment components has stopped before approaching for service.



## **SAFETY RULES**

**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



Do not handle blades with bare hands. Careless or improper handling may result in serious injury.

Your dealer can supply genuine replacement blades. Substitute blades may not meet original equipment specifications and may be dangerous.

Tighten all bolts, nuts and screws to torque chart specifications. Check that all cotter pins are installed securely to ensure equipment is in a safe condition before putting unit into service.

Make sure all shields and guards are properly installed and in good condition. Replace if damaged.

Do not disconnect hydraulic lines until engine is stopped, power unit is properly secured, equipment and all components are lowered to the ground, and system pressure is released by operating all valve control levers.

Safety decals appear at various locations on your machine. These decals are provided for your safety, your family's safety and your employee's safety. Replace any decal that becomes worn, damaged, painted over or difficult to read.

Keep safety decals and signs clean and legible at all times.

Replace safety decals and signs that are missing or have become illegible.

Replaced parts that displayed a safety sign should also display the current sign.

Safety decals or signs are available from your Dealer Parts Department.

### **How to install Safety Decals:**

Be sure that the installation area is clean and dry.

Decide on the exact position before you remove the backing paper.

Remove the smallest portion of the split backing paper.

Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.

Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.

Small air pockets can be pierced with a pin and smoothed out using the piece of decal backing paper.

## **STORAGE**

Block equipment securely for storage.

Keep children and bystanders away from storage area.

At the end of the season, the shredder should be thoroughly inspected and prepared for storage. Repair or replace any worn or damaged components to prevent unnecessary down time at the beginning of the next season.

## **TIRES**

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death.

Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.

Have a qualified tire dealer or repair service perform required tire maintenance.



## SAFETY RULES

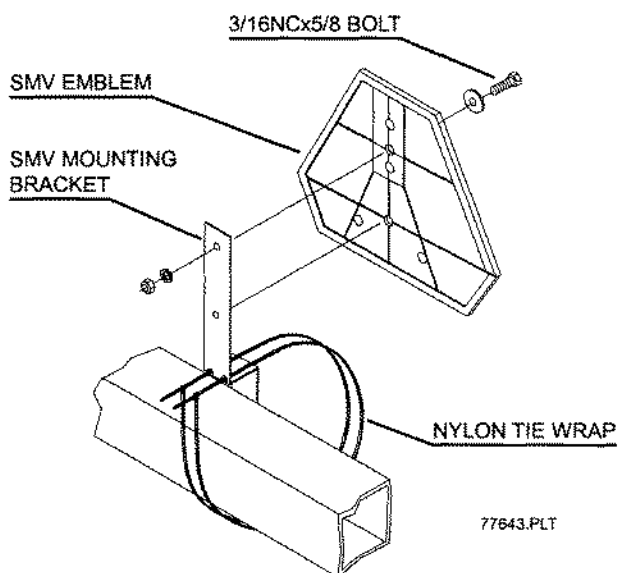


**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

### SMV

The SMV emblem is to be secured as near to the rear and centered, or as near to the left center of the implement as possible.

The bracket provided is designed to mount to numerous frame sizes and can be orientated in numerous positions to avoid interference with implement components.



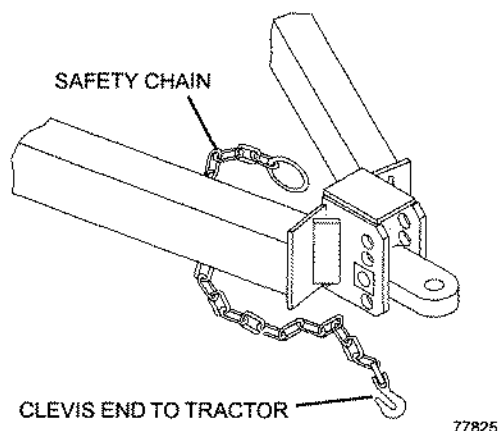
Emblem is to be 2 to 6 feet above the ground measured from the bottom edge of the emblem.

Keep safety decals clean. Replace any safety decals that are damaged, destroyed, missing, painted over or can no longer be read. Replacement safety decals are available through your dealer.

### SAFETY CHAINS

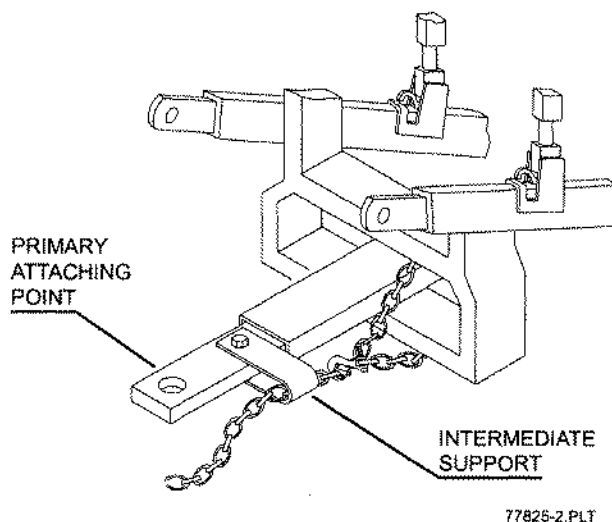
The purpose of the safety chain is to provide an auxiliary attaching system to retain the connection between towing and towed machine in the event of separation of the primary attaching system.

The safety chain should be hooked long enough to permit full turns. Unnecessary slack should be taken up.



The intermediate support is to be used if there is more than 6" of unsupported chain on either side of the primary attaching point.

The intermediate support must not be mounted more than 6" from the primary attaching point (see illustration below.)



# TRACTOR REQUIREMENTS

To ensure safe and reliable operation of the flail shredder, use a tractor with the correct specifications. Use the following guidelines to select the correct tractor.

## 1. HORSEPOWER

Use table 1 for selecting the tractor horsepower class appropriate for your units width.

**NOTE:** Increase the horsepower level by 25% when operating in hilly, soft, or wet conditions.

## 2. TRACTOR WEIGHT

By following recommendations for tractor horsepower, the tractor will have sufficient weight to provide stability for unit during field operation or when transporting.

**NOTE:** When using a 3-point mounted shredder, it is recommended that each tractor be equipped with a full complement of suitcase weights on the tractor front. This will provide the required front weight for turning and extra traction if equipped with front wheel assist.

## 3. 3-POINT HITCH

The 3-point hitch models require the tractor to be equipped with a category II or category III quick hitch. If the hitch can be converted from one to the other, use a category III to provide a wider stance and more stability.

Use the upper pin hole for category III and the lower hole for category II.

## 4. LOAD SENSING HYDRAULICS (3-POINT MODELS ONLY)

Many newer tractors are equipped with "load sensing" hydraulics. The operator is responsible for setting the tractor hydraulic system to provide "float" on the 3-point hitch.

**Table 1: Tractor Horsepower vs. Unit Width**

W i d t h	M i n i m u m   H o r s e p o w e r
1 5 '	8 5
2 0 '	1 0 0
2 2 '	1 1 0
2 5 '	1 2 5
2 6 '8 "	1 3 5
3 0 '	1 5 5

Refer to the tractor manual for specific instructions.

The float feature will allow the unit to follow the ground contours during operation. This applies to 3-point mounted machines only.

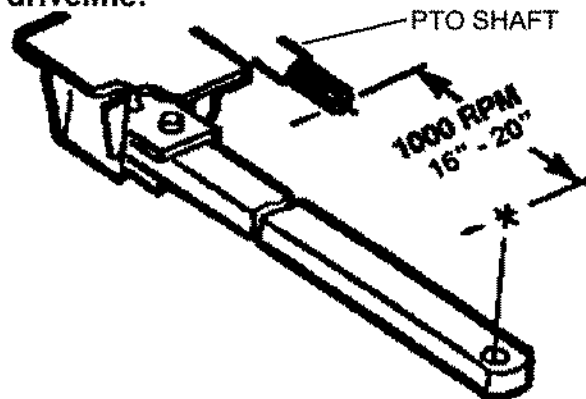
## 5. DRAWBAR (PULL-TYPE MODELS ONLY)

The tractor drawbar must be set to provide 16"-20" (406mm - 508mm) between the end of the PTO shaft and the center of the drawbar pin for all and 1000 rpm PTO. See illustration. This dimension will provide the required clearance for the CV (constant velocity) joint on the front of the driveline.

### IMPORTANT

**DO NOT USE PTO SHAFT ADAPTERS. THEY WILL CHANGE THE DRAWBAR DIMENSION AND CAN CAUSE DRIVELINE FAILURES.**

**NOTE:** On pull-type models, do not cut driveline.



## **WARNING**

- DO NOT ALLOW BYSTANDERS IN THE AREA WHEN OPERATING, ATTACHING, REMOVING, ASSEMBLING, OR SERVICING EQUIPMENT
- DO NOT HANDLE BLADES WITH BARE HANDS. CARELESS OR IMPROPER HANDLING MAY RESULT IN SERIOUS INJURY

## **CAUTION**

- ALWAYS WEAR RELATIVELY TIGHT AND BELTED CLOTHING TO AVOID ENTANGLEMENT IN MOVING PARTS. WEAR STURDY, ROUGH-SOLED WORK SHOES AND PROTECTIVE EQUIPMENT FOR EYES, HAIR, HANDS, HEARING, AND HEAD; AND RESPIRATOR OR FILTER MASK WHERE APPROPRIATE.

## **WARNING**

- KEEP HANDS AND BODY AWAY FROM PRESSURIZED LINES. USE PAPER OR CARDBOARD, NOT HANDS OR TOHER BODY PARTS TO CHECK FOR LEAKS. WEAR SAFETY GOGGLES. HYDRAULIC FLID UNDER PRESSURE CAN EASILY PENETRATE SKIN AND WILL CAUSE SERIOUS INJURY OR DEATH.
- MAKE SURE THAT ALL OPERATING AND SERVICE PERSONNEL KNOW THAT IF HYDRAULIC FLUID PENETRATES SKIN, IT MUST BE SURGICALLY REMOVED AS SOON AS POSSIBLE BY A DOCTOR FAMILIAR WITH THIS FORM OF INJURY OR GANGRENE, SERIOUS INJURY, OR DEATH WILL RESULT.
- CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.
- CHECK THAT ALL HARDWARE IS PROPERLY INSTALLED. ALWAYS TIGHTEN TO TORQUE CHART SPECIFICATIONS UNLESS INSTRUCTED OTHERWISE IN THIS MANUAL.

### Break-in of the Flail Shredder

The following should be observed when operating the unit for the first time:

#### IMPORTANT

Before operating the unit in the field, run the PTO clutch.

After operating for 1/2 hour

1. Check all nuts, bolts, and other fasteners. Tighten to specifications given in the Bolt Torque Chart, page 8.
2. Tighten wheel bolts to specifications given in the torque chart on page 8.

3. Check that the flails are in good condition and swing freely.

4. Check oil level in the gearbox. Add oil if needed.

5. Check that the PTO driveline shield turns freely.

6. Lubricate all grease points.

After operating for 5 to 10 hours

1. Repeat steps 1 to 5
2. Follow regular service schedule as outlined in page



## HAZARD AREA

### **WARNING**

Make certain all movement of equipment components has stopped before approaching for service.

Stay away from front, side, and rear of unit while it is running. Flails can pick up stones, sticks, wire, and other debris and throw it out with enough force to severely injure bystanders.

Keep out of shaded area shown in illustration.

Shut down unit and wait for moving parts to stop before approaching.

#### Ground Speed

Travel speed can vary between 3 and 8 mph (5 and 13 kmph) depending on the bulk of residue and terrain conditions. The operator is responsible for noting the condition of the work, setting the speed to obtain a quality shredding job, and maintaining control of the unit.

#### Turning

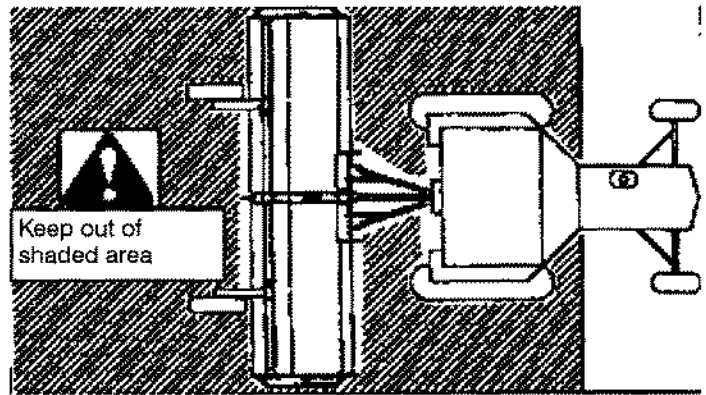
##### 3-Point mounted units:

Always raise the unit slightly to lift rear wheels off the ground before turning. This will eliminate side loads on the wheel assembly, unless unit is equipped with castor wheels.

If unit is equipped with front caster stops, unit must be raised before going in reverse.

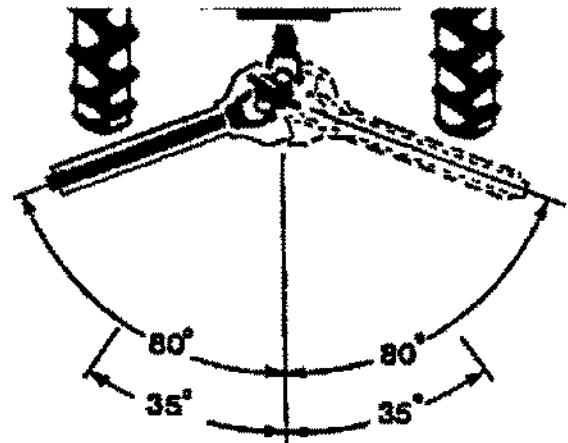
##### Pull-type units:

The front universal is equipped with a CV (constant velocity) joint to allow for turning. Although the CV joint allows for sharper turns than a regular driveline, it does have some limitations. Refer to illustration.



Speed may be increased if shredding quality is good.

Decrease speed if trash is left standing or if some is not picked up.



CV joint angle should not exceed 80 degrees in either operating or standstill condition of the driveline. Larger angles will damage the joint.

The angle should never exceed 35 degrees when the driveline is under full load

#### IMPORTANT

■ **Disengage PTO when making sharp turns.**

■ **When slowing down to turn, down shift instead of throttling back engine. Frequent changes in RPM speed cause excessive wear on CV joint and overrunning clutch.**

# **LUBRICATION**



## **WARNING**

- Before dismounting power unit or performing any service of maintenance, follow these steps: disengage power to equipment, lower the 3-point hitch and all raised components to the ground, operate valve levers to release any hydraulic pressure, set parking brake, stop engine, remove key, and unfasten seat belt.
- Before working underneath, read manual instructions, securely block up, and check stability. Secure blocking prevents equipment from dropping due to hydraulic leak down, hydraulic system failure, or mechanical component failure.
- Keep all persons away from operator control area while performing adjustments, service, or maintenance.
- Make sure shields and guards are properly installed and in good condition. Replace if damaged.
- Do not handle blades with bare hands. Careless or improper handling may result in serious injury.



## **CAUTION**

- Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.
- Make certain all movement of equipment components has stopped before approaching for service.

## **Lubrication Schedule**

**NOTE:** Recommendations are based on normal operating conditions. Severe or unusual conditions may require more frequent lubrication or oil changes.

### **Daily or every 8 hours of operation**

**PTO Driveline:** Lubricate daily or every 8 hours of operation (every 4 hours if U-joints run at angles).

- Check gearbox daily or every 8 hours of operation.

### **Every 25 hours of operation**

- Lubricate PTO driveline telescoping section
- Lubricate rotor end bearings
- Lubricate hanger bearings-30' units
- Lubricate wheel rockshaft bearings

### **Every 40 hours of operation**

#### **IMPORTANT**

- Lubricate rotor drive hubs next to the couplers on underside of unit (2 locations) (30' units 4 locations)**
- Grease the drive hubs until grease is visible between the gearbox spline and the drive hub.**

### **Annually**

- Change gearbox oil. Refill with SAE 85W90 gear oil.
- Repack wheel bearings
- Lubricate ratchets as necessary (2 locations each ratchet)

## Lubrication

### 1. Grease

Use an SAE multi-purpose high temperature grease with extreme pressure (EP) performance. An SAE multi-purpose lithium-based grease is also acceptable.

### 2. Gearbox oil

Use an EP 80W90 gear oil for all operating conditions. Capacity: 3.44 U.S. quarts (3.25 liters)

### 3. Storing lubricants

Your unit can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture, and other contaminants.

## Greasing

1. Use a hand-held grease gun for all greasing.

2. Wipe grease fitting with a clean cloth before greasing to avoid injecting dirt and grit.

3. Replace and repair any broken fittings immediately.

4. If fittings will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.

## Acceptable oil leakage from gearbox

Not all gearbox oil leakage or seepage is serious

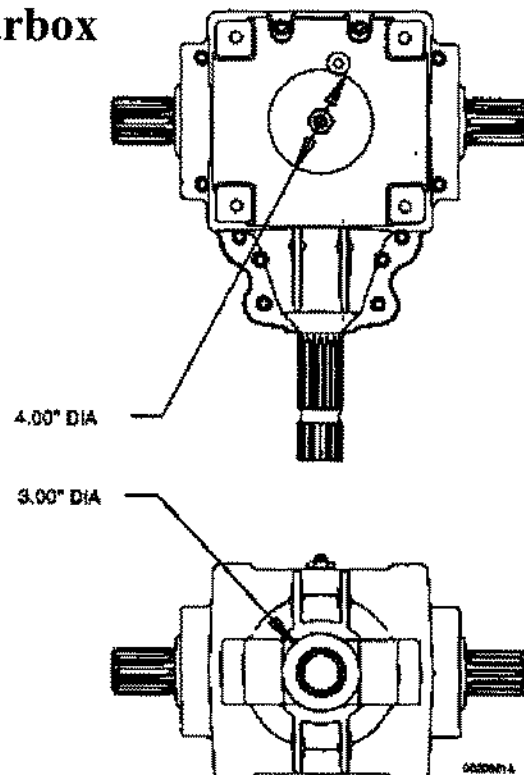
### IMPORTANT

Gearbox oil seepage is acceptable if:

1. Oil covers less than a 3-inch diameter area around the shaft seal area. (see illustration)
2. Oil covers 4-inches around the vent or drain plugs
3. You add up to 1 pint for every 30 hours of operation.

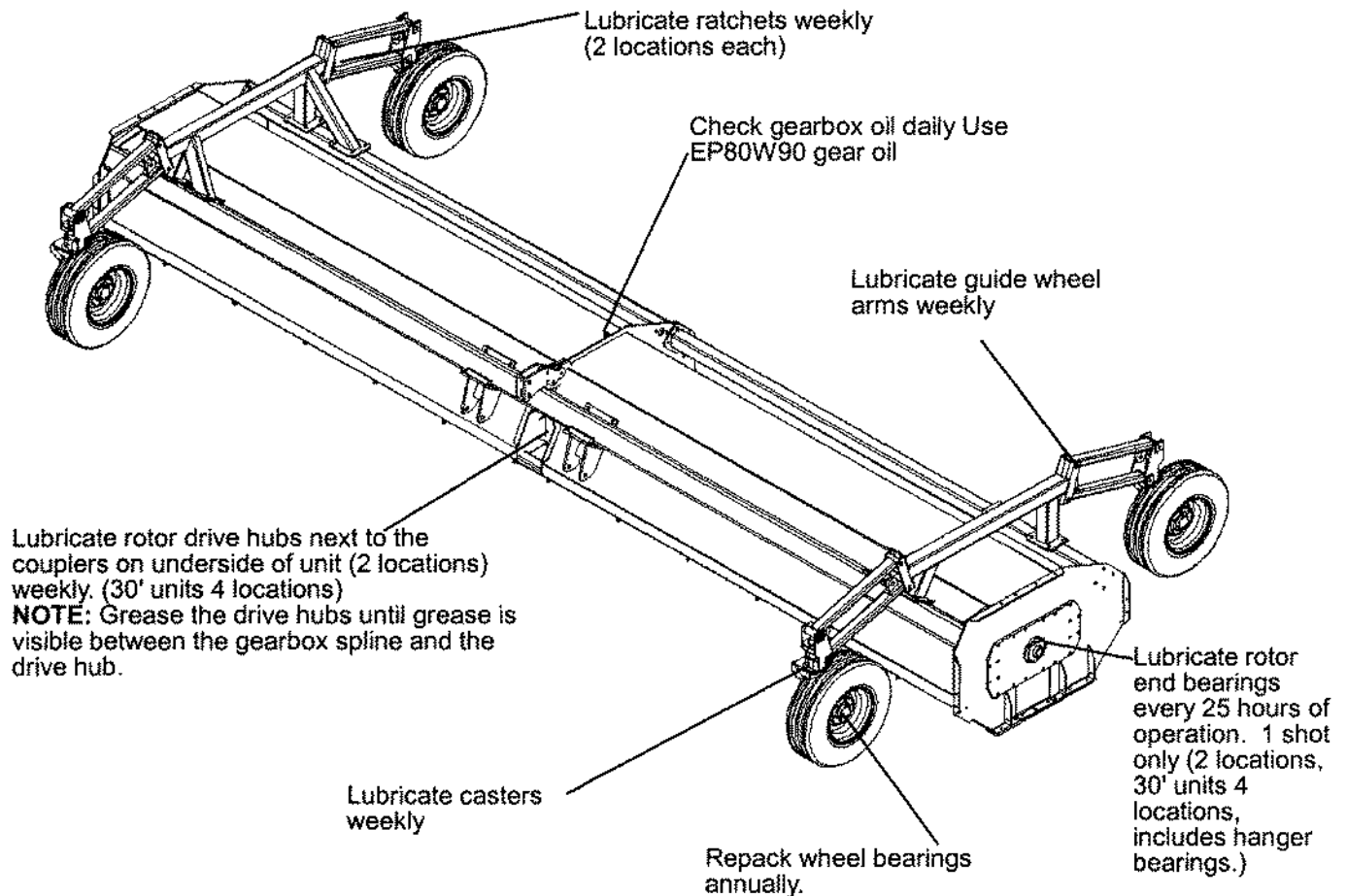
**If oil covers an area larger than that described, do the following:**

- a. Check gearbox oil level. If it is low, fill to proper level.
- b. Clean oily area of gearbox. Use a degreaser to remove all oil
- c. Closely monitor gearbox for 10 hours of operation. Check oil level often.
- d. If after 10 hours of operation oil covers less than area described, leakage is acceptable.



**NOTE:** Warranty only covers oil leakage that is in excess of above limits.

# LUBRICATION



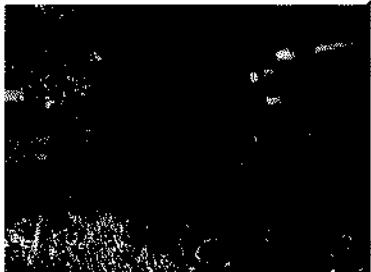
## PTO GREASE POINTS

Lubricate daily

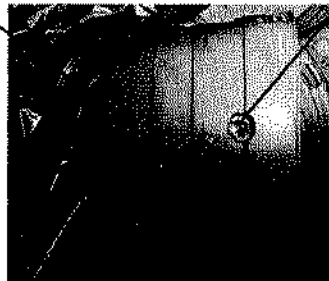
### PULL TYPE ONLY



### ALL MODELS



### PULL TYPE ONLY



### ALL MODELS

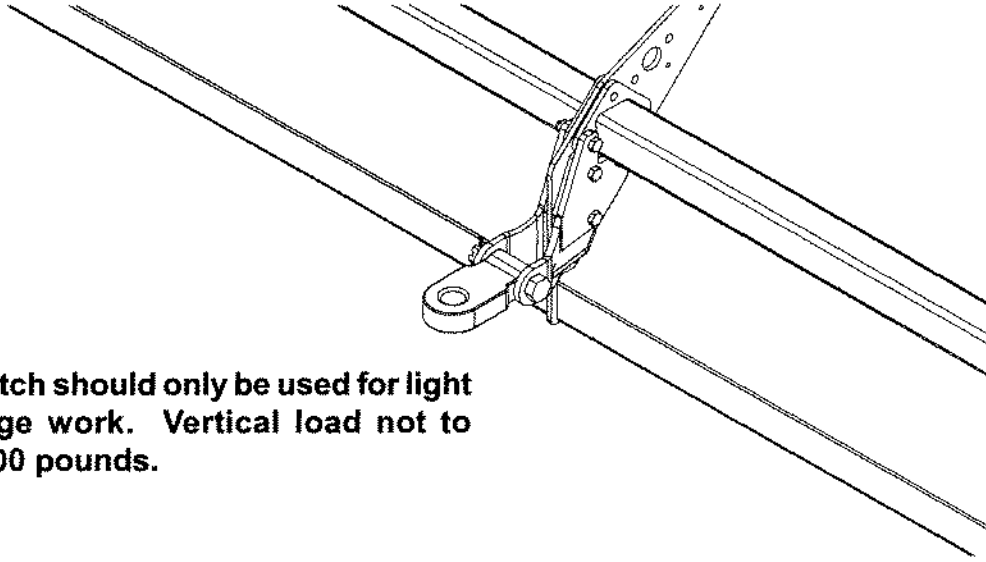


### 3-POINT ONLY



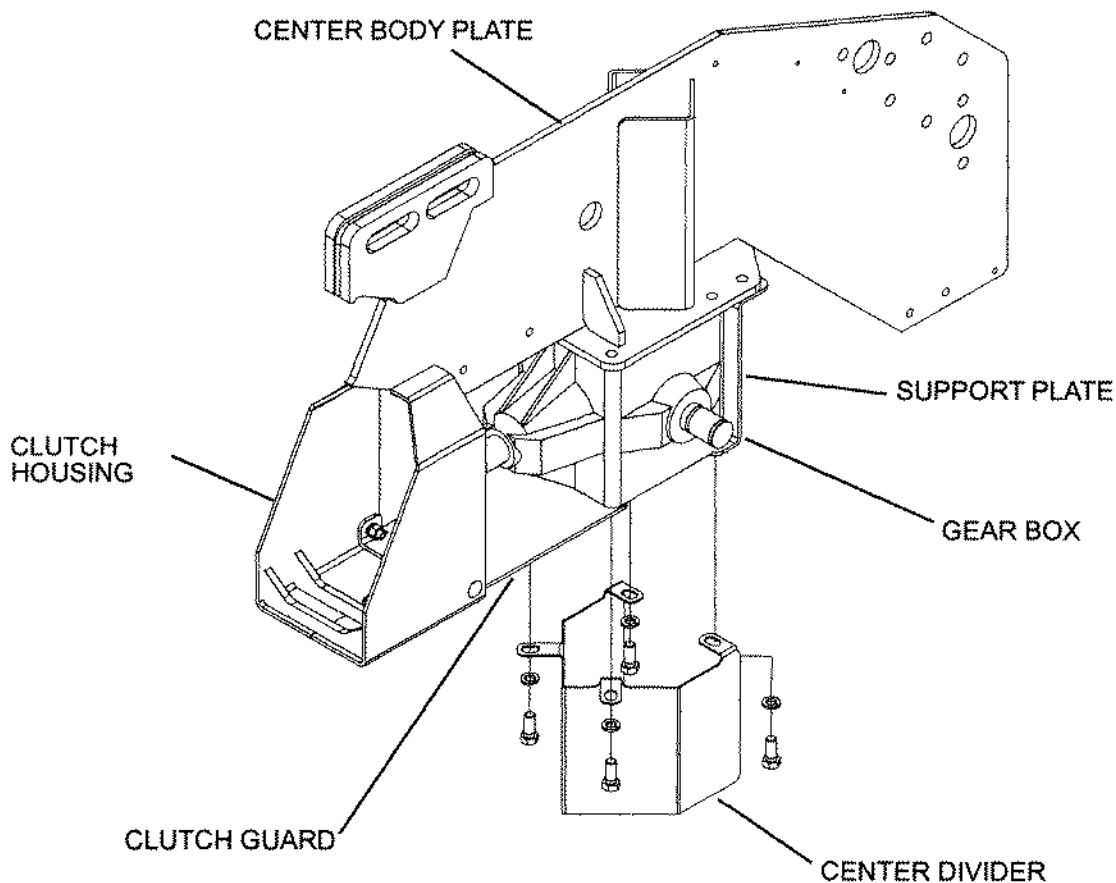
## OPTIONS

### REAR HITCH



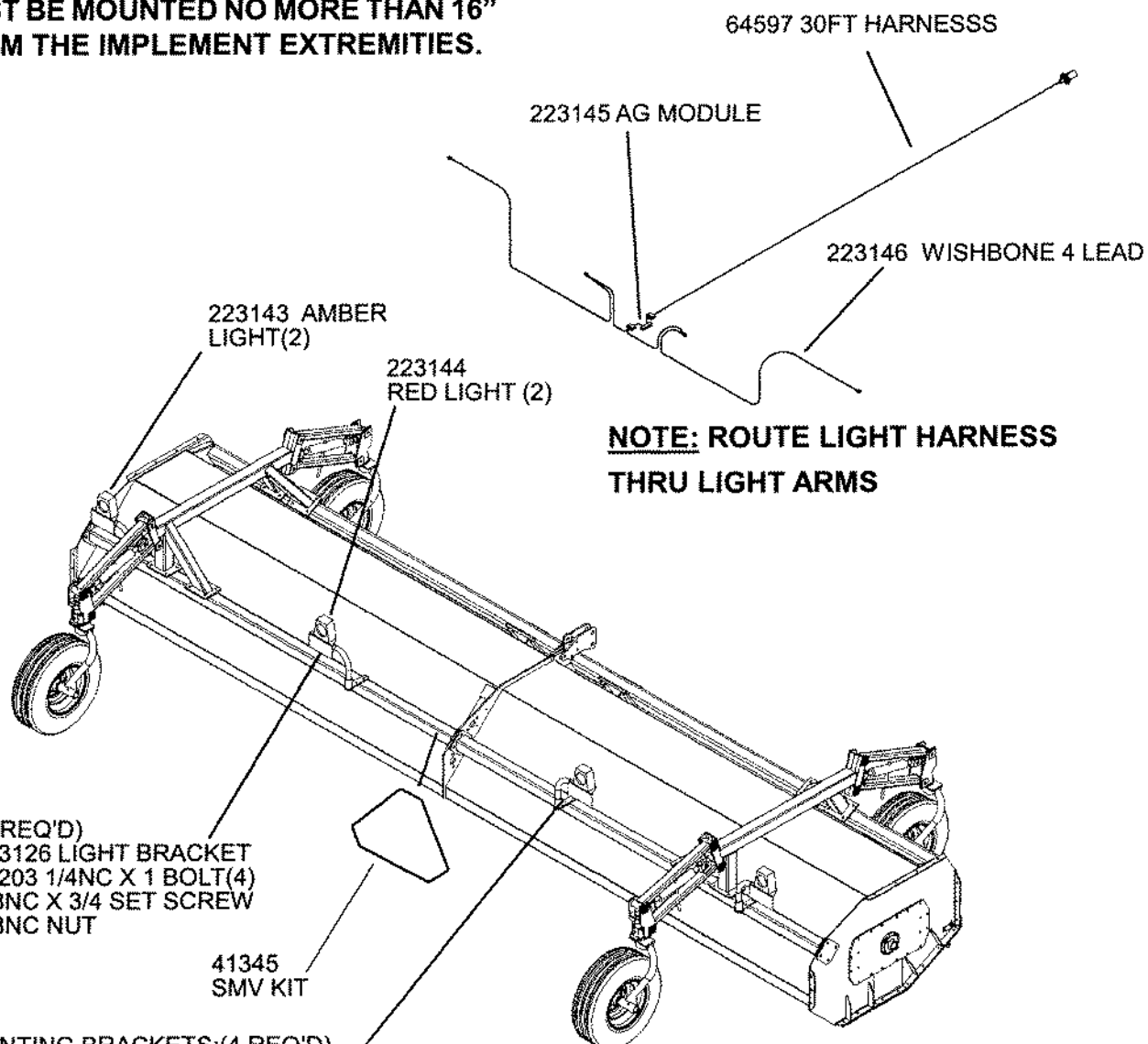
**NOTE:** Hitch should only be used for light duty tillage work. Vertical load not to exceed 500 pounds.

### CENTER DIVIDER

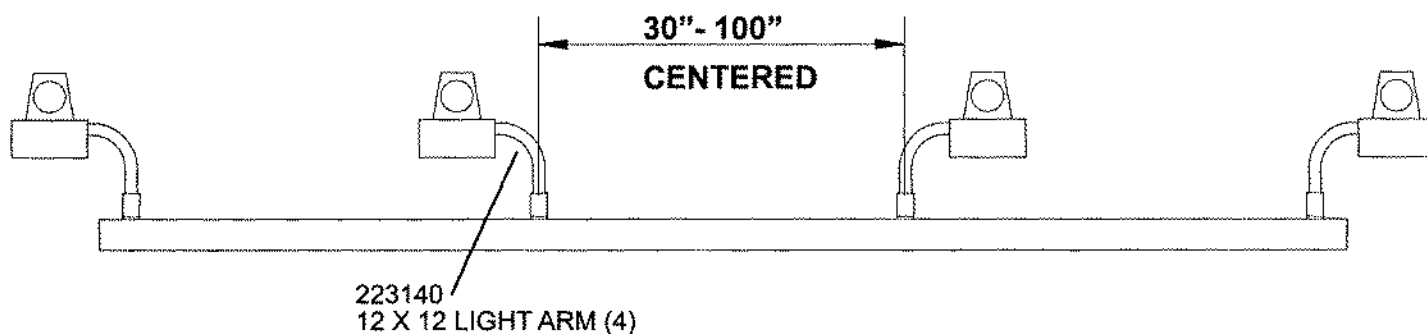


## **SAFETY LIGHTS**

**NOTE:** MOUNT AMBER LIGHTS AS WIDE AS POSSIBLE. THE AMBER LIGHTS MUST BE MOUNTED NO MORE THAN 16" FROM THE IMPLEMENT EXTREMITIES.

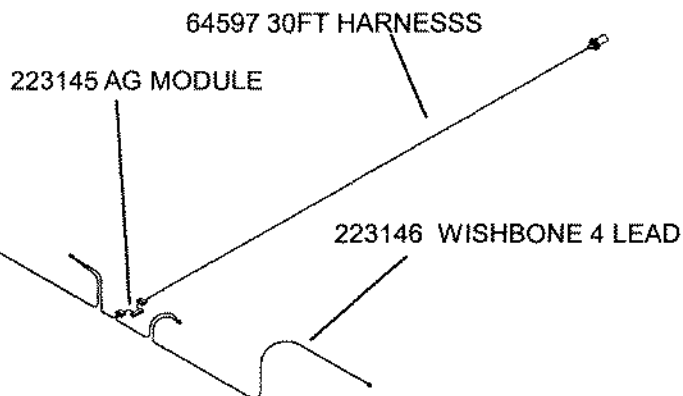


**NOTE:** MOUNT THE RED LIGHTS AS REARWARD AS PRACTICAL ON THE CENTER FRAME. SPACE EVENLY, 2' TO 5' FROM THE MACHINE CENTER.

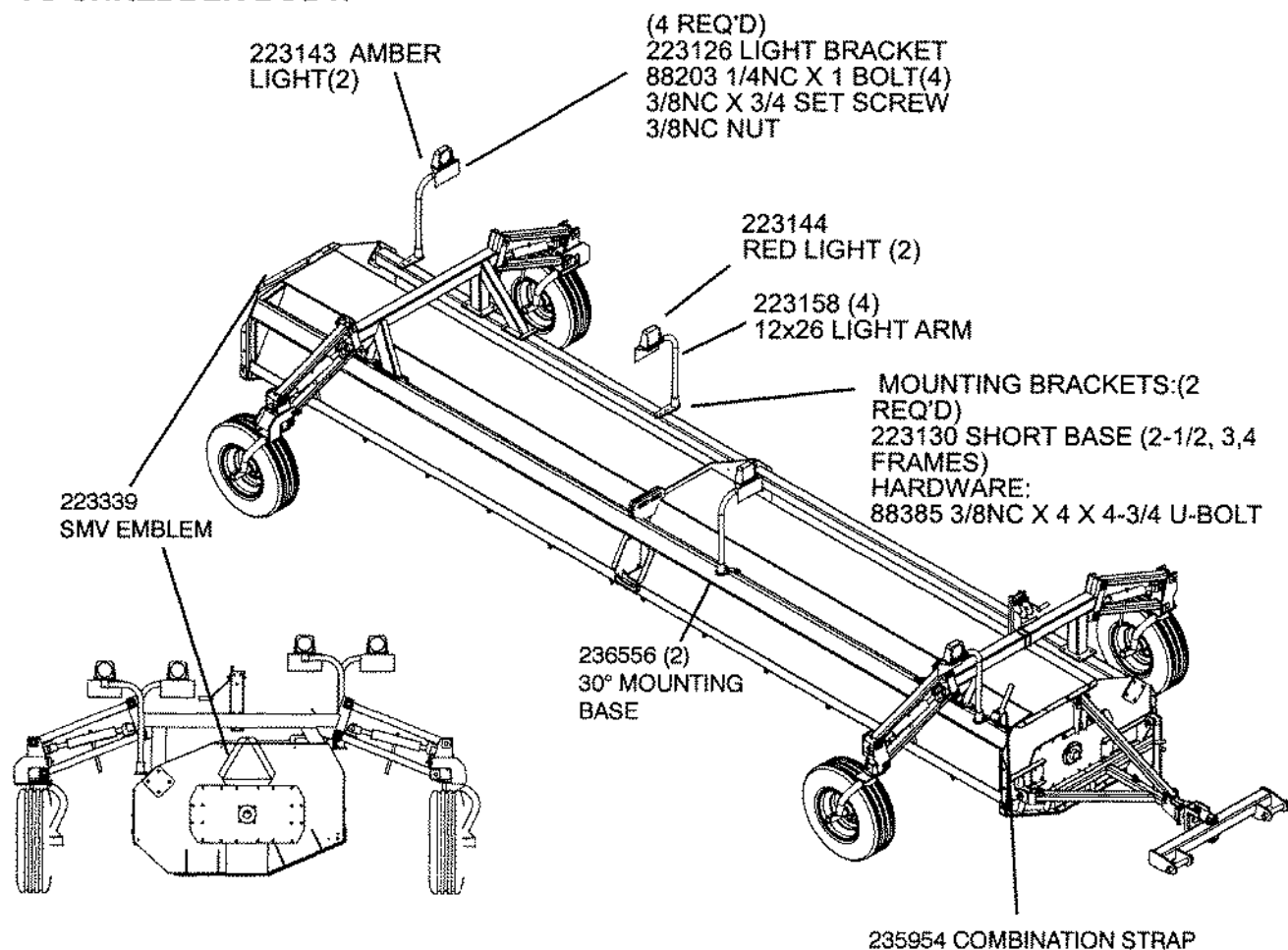


# END TRANSPORT SAFETY LIGHTS

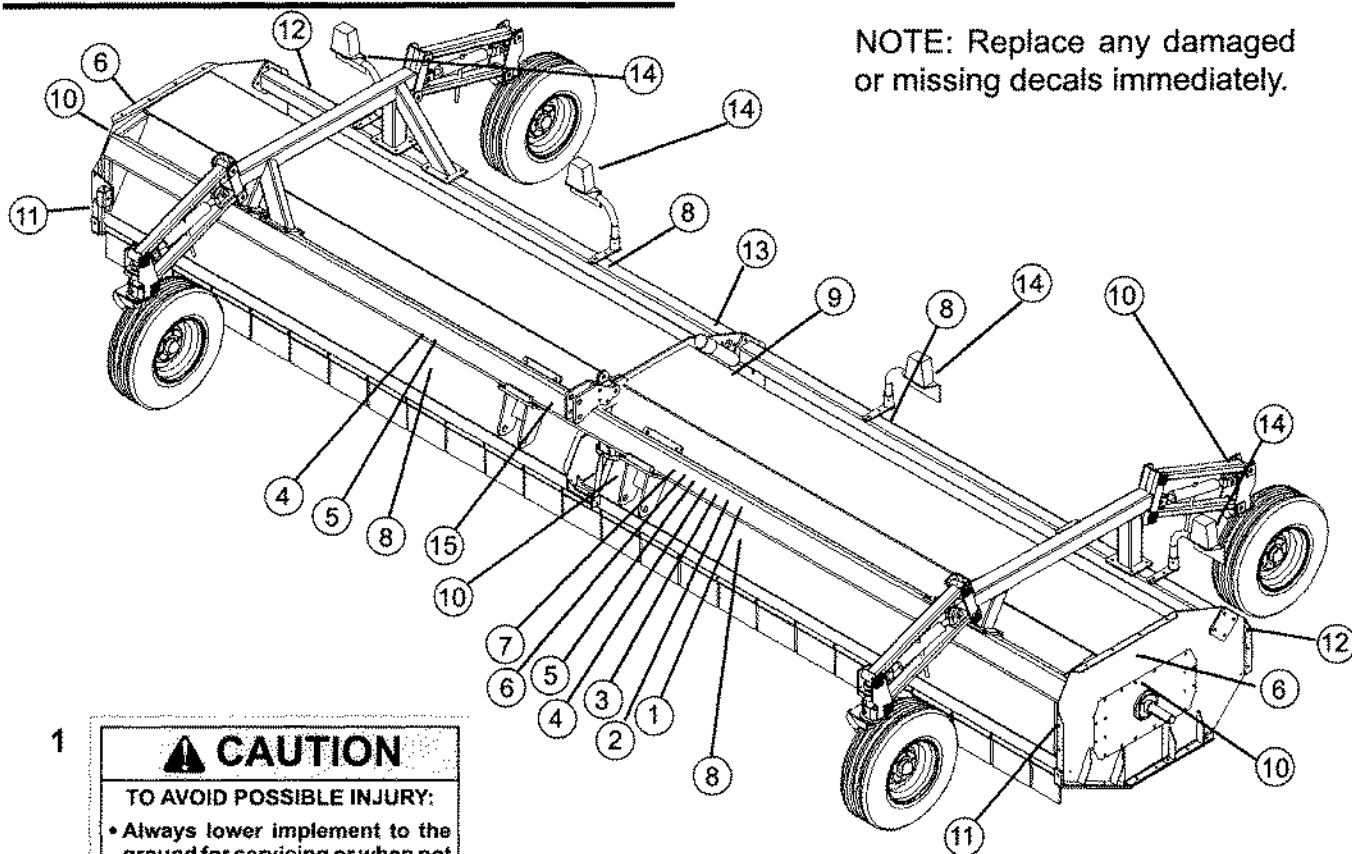
WHEN MOUNTING AN END TRANSPORT HITCH ON EXISTING UNITS, THE 12x12 LIGHT ARMS 223140(4) MUST BE REMOVED AND THE 12x26 LIGHT ARMS ADDED, 223158(4). REMOVE ITEM 223130(2). THIS IS DONE TO KEEP THE LIGHT ARMS RUNNING VERTICAL. MOUNT ALL 4 LIGHTS AS SHOWN. ON UNITS WITH END TRANSPORT HITCH ITEM 235954 IS LOCATED AS SHOWN. TO PREVENT DAMAGE TO LIGHT CORD MAKE SURE IT IS ATTACHED SECURELY TO SHREDDER BODY.



**NOTE: ROUTE LIGHT HARNESS THRU LIGHT ARMS**



# SAFETY DECAL PLACEMENT



NOTE: Replace any damaged or missing decals immediately.

1

**CAUTION**

TO AVOID POSSIBLE INJURY:

- Always lower implement to the ground for servicing or when not in use.
- Never allow anyone to ride on implement.
- Keep everyone clear of tractor and implement while in use or while tractor is running.

31926

31926

4

**DANGER**

CRUSHING HAZARD

To prevent serious injury or death:

- Do not stand between implement and moving tractor.
- Stop tractor engine and set park brake before installing pins.

222802

222802

2

**CAUTION**

1. Read Operator's Manual before using machine.
2. Stop tractor engine, lower machine to ground, place all controls in neutral, set parking brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing, unplugging or filling.
3. Install and secure all guards before starting.
4. Keep hands, feet, hair and clothing away from moving parts.
5. Do not allow riders.
6. Keep all hydraulic lines, fittings and couplers tight and free of leaks before using.
7. Clean reflectors, SMV and lights before transporting.
8. Install safety locks before transporting or working beneath components.
9. Add extra lights and use pilot vehicle when transporting during times of limited visibility.
10. Use hazard flashers in tractor when transporting.
11. Install safety chain when attaching to tractor.
12. Keep away from overhead electrical lines. Electrocution can occur without direct contact.
13. Review safety instructions with all operators annually.

234338

234338

5

**DANGER**

THROWN OBJECT HAZARD

To prevent serious injury or death:

- Do not operate unless all guards are installed and in good condition.
- Stop blade rotation if bystanders come within several hundred feet.

234337

234337

3

**WARNING**

To avoid injury, death or machine damage:

- Avoid unsafe operation or maintenance.
- Make sure tractor engine is turned off before performing maintenance.
- Do not operate or work on this machine without reading and understanding the operator's manual.
- If manual is lost, contact your nearest dealer for a new manual.

62503 SERVICE DECAL

62503 SERVICE DECAL

6

**DANGER**

ROTATING BLADE HAZARD

To prevent serious injury or death from rotating blade:

- Do not go under frame when blades are turning or tractor PTO is engaged. Keep others away.
- Do not service machine while machine is running.
- Keep hands, feet, hair and clothing away from moving parts.

234339

234339



7

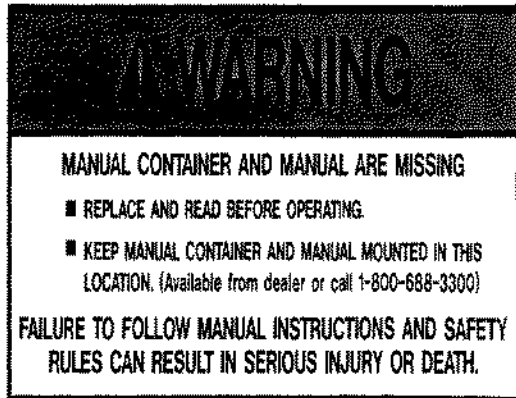


78132

8



9



234335

10



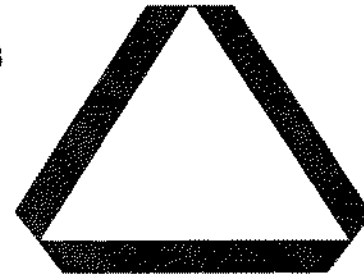
62557

16



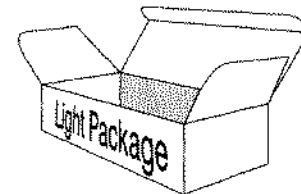
235549 General Safety Decal

13



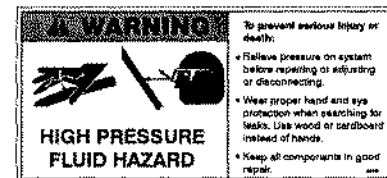
41345 SMV KIT

14



223163 CLEARANCE LIGHT PACKAGE (STANDARD)  
236559 CLEARANCE LIGHT PACKAGE (END TRANSPORT UNITS ONLY)

15



62558

12



22371 RED REFLECTOR

11



22372 AMBER REFLECTOR

Item 16 to be used in place of items:  
1,2,3,4,5,6 and 7.

