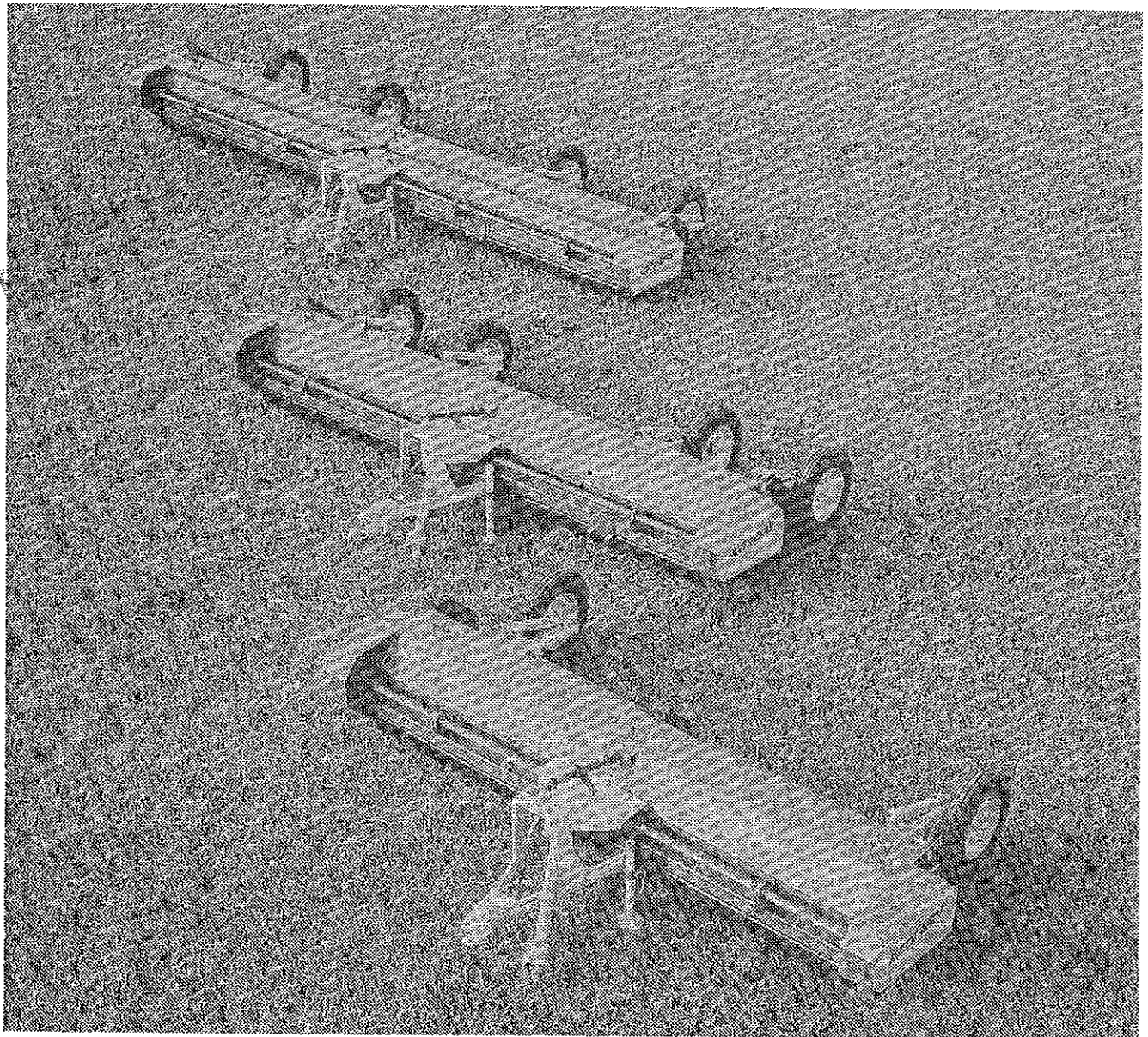


ARTS-WAY

MODELS 144B, 180B & 240B SHREDDERS

OPERATORS & PARTS MANUAL



ART'S-WAY MANUFACTURING CO., INC.
ARMSTRONG, IOWA 50514
(712) 864-3131

183910 (R)

0691

WORK SAFELY - FOLLOW THESE RULES

A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST AN ACCIDENT



CAUTION! Before handling ANY equipment, **READ** the OPERATOR'S MANUAL.

Always use proper safety precautions. Tell your workers how to work safely.

BEFORE OPERATING

Do not wear loose fitting clothing; it may catch in moving parts.

Make sure that all safety shields, including the tractor power take-off master shield, are in place and properly secured before operating the machine.

Be sure that the correct implement drive line parts are used and that they are properly secured.

After servicing, be sure that all tools, parts or servicing equipment are removed from the machine.

Make sure that there is no one near the machine before starting it.

Be sure the tractor power take-off is disengaged before starting the tractor engine.

Make sure the unit is adequately blocked before working on it.

DURING OPERATION

Shut off the tractor engine, put key in pocket, and be sure to wait until all rotation has come to a complete stop before opening any covers, adjusting, cleaning, or lubricating.

No riders while machine is in operation, do not attempt to unclog, clean, or adjust machine while it is running.

Keep all shields and guards in place.

Keep hands, feet and clothing away from moving parts.

Keep children and bystanders away from the machine while in operation.

Hydraulic fluid escaping under pressure can have enough force to penetrate the skin. Hydraulic fluid may also infect a minor cut or opening in the skin. If injured by escaping fluid, see a doctor at once. Serious infection or reaction can result if medical treatment is not given immediately. Make sure all connections are tight and that hoses and lines are in good condition before applying pressure to the system. Relieve all pressure before disconnecting the lines or performing other work on the hydraulic system. To find a leak under pressure use a small piece of cardboard or wood: Never use hands.

TRANSPORTING

Always use the safety chain and secure safely.

Tow at a maximum of 10 M.P.H. over rough roads and when going down inclines.

Maximum towing speed - 20 M.P.H.

The weight of the trailed machine should **NEVER** exceed the weight of the towing vehicle.

Always use SMV (slow moving vehicle) emblem.

For daytime and nighttime, accessory light and devices should be used for adequate warning to operators of other vehicles.

Comply with your state and local laws governing highway safety, and with regulations when moving machinery on a highway.

Check clearances carefully wherever machine is towed.

TO THE OWNER

This Art's-Way unit is another one of the fine products made and the purpose of this manual is to assist you in realizing the benefits you anticipated when you purchased this unit. Many people have contributed to the production of this product. They all have an interest in its successful performance and we are providing the operators manual to give you the benefit of the experience we have gained through years of building and testing this equipment. The way you operate and the care you give this unit will have much to do with the successful performance of this unit. The operators manual has been carefully prepared and illustrated to make it as easy as possible for you in the operation of your unit. It will pay you to read the entire manual carefully and familiarize yourself with all operations "before operating" this unit. Keep this manual handy for reference. We will be glad to answer any questions you may have. For further information call or write Art's-Way Manufacturing Co., Inc. (712) 864-3131, Armstrong, IA 50514.

LIMITED WARRANTY

The **ART'S-WAY MANUFACTURING CO., INC.** warrants products sold by it to be free from defects in material and workmanship for a period of one(1) **YEAR** after the date of delivery to the first purchaser subject to the following conditions:

(1) **ART'S-WAY MANUFACTURING CO., INC.'S** obligation and liability under this warranty is to repair or replace at the company's option, any parts which upon manufacture were defective in material or workmanship.

(2) All parts and repairs under this warranty shall be supplied at an authorized **ART'S-WAY MANUFACTURING CO., INC.** dealer or at the factory at the option of **ART'S-WAY MANUFACTURING CO., INC.**

(3) **ART'S-WAY MANUFACTURING CO., INC.'S** warranty does not extend to parts and elements not manufactured by **ART'S-WAY MANUFACTURING CO., INC.** and which carry the warranty of the other manufacturer.

(4) Transportation or shipping to an authorized dealer for necessary repairs is at the expense of the purchaser.

(5) **ART'S-WAY MANUFACTURING CO., INC. MAKES NO OTHER WARRANTY EXPRESSED OR IMPLIED AND MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE BEYOND THAT EXPRESSLY STATED IN THIS WARRANTY. ART'S-WAY MANUFACTURING CO., INC.'S LIABILITY IS LIMITED TO THE TERMS SET FORTH IN THIS WARRANTY AND DOES NOT INCLUDE ANY LIABILITY FOR DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSE OF DELAY AND THE COMPANY'S LIABILITY IS LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE PARTS AS SET FORTH HEREIN IN THE WARRANTY.**

(6) Any improper use, including operation after discovery of defective or worn parts, operation beyond rated capacity, substitution or parts not approved by **ART'S-WAY MANUFACTURING CO., INC.**, or any alteration or repair by other than an authorized **ART'S-WAY MANUFACTURING CO., INC.** dealer which affects the product materially and adversely, shall void this warranty.

(7) No dealer, employee or representative is authorized to change this warranty in any way or grant any other warranty unless such change is made in writing and signed by an officer of **ART'S-WAY MANUFACTURING CO., INC.** at its home office.

(8) Some states do not allow limitations on how long an implied warranty lasts or exclusions of or limitations on relief such as incidental or consequential damages so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

ACCIDENTS can be prevented

A large number of accidents can be prevented by the operator anticipating the result before it happens and doing something about it. No power-driven equipment can be safer than the man at the controls.

The manufacturer is striving to make the equipment safe, but one careless act by the operator can void all such efforts.

The best kind of a safety device is a careful operator. **BE THAT KIND OF AN OPERATOR**, as no accident-prevention program can be a success without the co-operation of the operator of the equipment.

INFORMATION FOR ORDERING PARTS

OWNERS NAME _____

ADDRESS _____

DEALERS NAME _____

ADDRESS _____

SERIAL NUMBER _____

DATE PURCHASED _____

A Careful Operator

IS THE BEST INSURANCE

AGAINST AN ACCIDENT

National Safety Council

Art's-Way reserves the right to make changes or add improvements to its products at any time without incurring any obligation to make such changes to products manufactured previously. Art's-Way, or its dealers, accept no responsibility for variations which may be evident in the actual specifications of its products and the statements and descriptions contained in this publication.

THE IMPORTANCE OF ADEQUATE PARTS AND SERVICE

The wise purchaser of a new machine gives consideration to the following factors:

- 1. ORIGINAL QUALITY**
- 2. AVAILABILITY OF SERVICE PARTS**
- 3. AVAILABILITY OF ADEQUATE SERVICE FACILITIES**

In many cases the machine becomes the only means of performing certain tasks that must be done in a limited period of time. Wear and even breakage of parts are to be expected due to operating conditions. However, the user can still be assured of getting his work done on time if service parts and adequate service facilities are available.

Foresighted Art's-Way dealers make every effort to provide good service and maintain a completely adequate stock of service parts.

NOTICE TO CUSTOMER

The illustrations and data used in this manual were current at the time of printing, but due to possible in-line production changes, your machine may vary slightly in detail. We reserve the right to redesign and change the machine as may be necessary without notification.

The warranty for this machine appears on page 2 of this manual. Record the model and serial number of your Shredder in the spaces provided on previous page.

The warranty registration form in the back of this book must be completed and returned to the factory in order to establish proper WARRANTY.

Whenever you correspond with the company, distributor or dealer concerning this machine, please specify model number and serial number. MACHINE SERIAL NO. LOCATION- LEFT HAND SIDE OF THE HOUSING.

This manual contains operating instructions for this machine only. It does not replace the manual(s) for any machine that it may be attached to or used with.

NOTES

144B, 180B, 240B SHREDDER

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INTRODUCTION

This manual has been prepared to acquaint you with the proper assembly, operation, adjustment, service and lubrication of the Art's-Way Shredder. Take time to be careful and better understand the efficient operation and care of your machine.

Whenever the terms "Left" and "Right" are used, it should be understood to mean standing behind the machine and facing the direction of the forward travel.

The 144B, 180B, and 240B Shredders have been designed to efficiently chop stalks, stubble, or just trim an area. The cupped knife design creates a suction that lifts plant material into the cutting chamber to allow running maximum height from the ground.

The rotors of the Shredder are balanced with knives in place to assure vibration free operation.

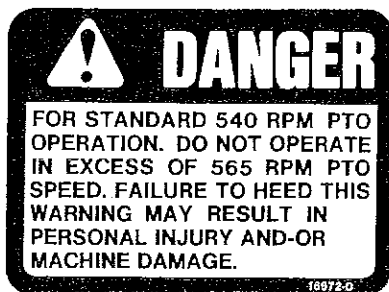
SAE GRADE 5 - Coarse Thread

SIZE	CLAMP LOAD	PLAIN	PLATED
1/4 - 20(.250)	2,025	8 ft. lbs.	76 in. lbs.
5/16 - 18(.3125)	3,338	17 ft. lbs.	13 ft. lbs.
3/8 - 16(.375)	4,950	31 ft. lbs.	23 ft. lbs.
7/16 - 14(.4375)	6,788	50 ft. lbs.	37 ft. lbs.
1/2 - 13(.500)	9,075	76 ft. lbs.	57 ft. lbs.
9/16 - 12(.5625)	11,625	109 ft. lbs.	82 ft. lbs.
5/8 - 11(.625)	14,400	150 ft. lbs.	112 ft. lbs.
3/4 - 10(.750)	21,300	266 ft. lbs.	200 ft. lbs.
7/8 - 9(.875)	29,475	430 ft. lbs.	322 ft. lbs.
1 - 8(1.000)	38,625	644 ft. lbs.	483 ft. lbs.
1-1/8 - 7(1.125)	42,375	794 ft. lbs.	596 ft. lbs.

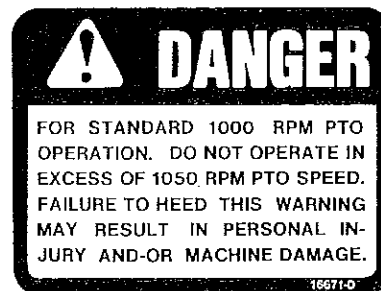
FIGURE 1 - Tightening Torque Guide

SAFETY DECALS

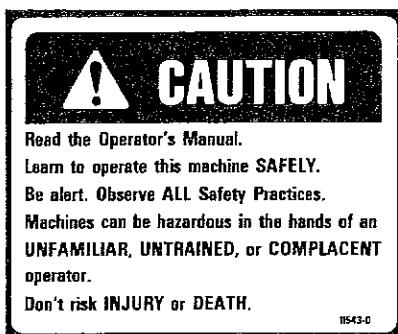
Located at strategic points on this machine are safety decals. These decals warn you of potential danger if the warnings on the decals are not followed.



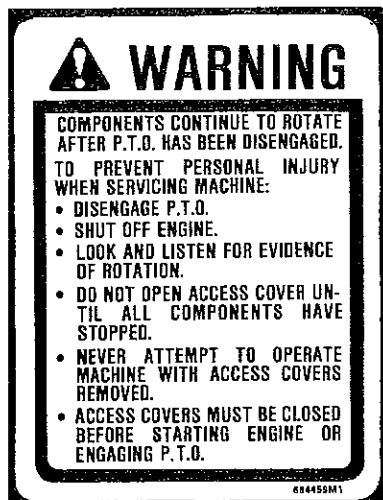
NO. 1 - "DANGER"-FOR 540 RPM PTO OPERATION, DO NOT OPERATE IN EXCESS OF 565 RPM PTO SPEED. PART NO. 166720.



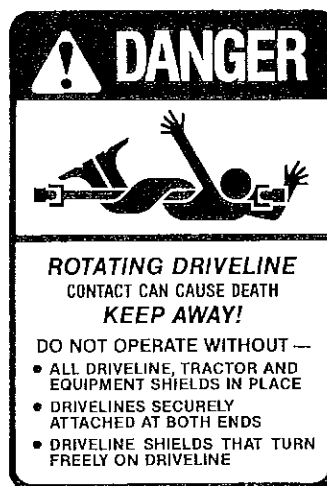
NO. 4 - "DANGER"-FOR 1000 RPM PTO OPERATION, DO NOT OPERATE IN EXCESS OF 1050 RPM PTO SPEED. PART NO. 166710.



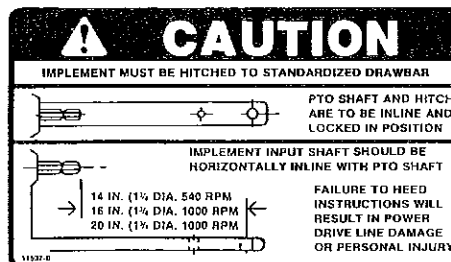
NO. 2 - "CAUTION"-LISTS FIVE ITEMS TO FOLLOW AND OBSERVE WHILE OPERATING THIS MACHINE. PART NO. 115430.



NO. 3 - "WARNING"-COMPONENTS CONTINUE TO ROTATE AFTER PTO HAS BEEN DISENGAGED. PART NO. 146010

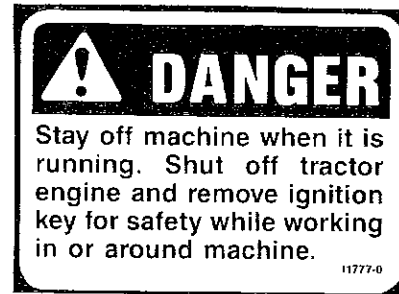


NO. 5 - "DANGER"-ROTATING DRIVE LINE. PART NO. 268860.



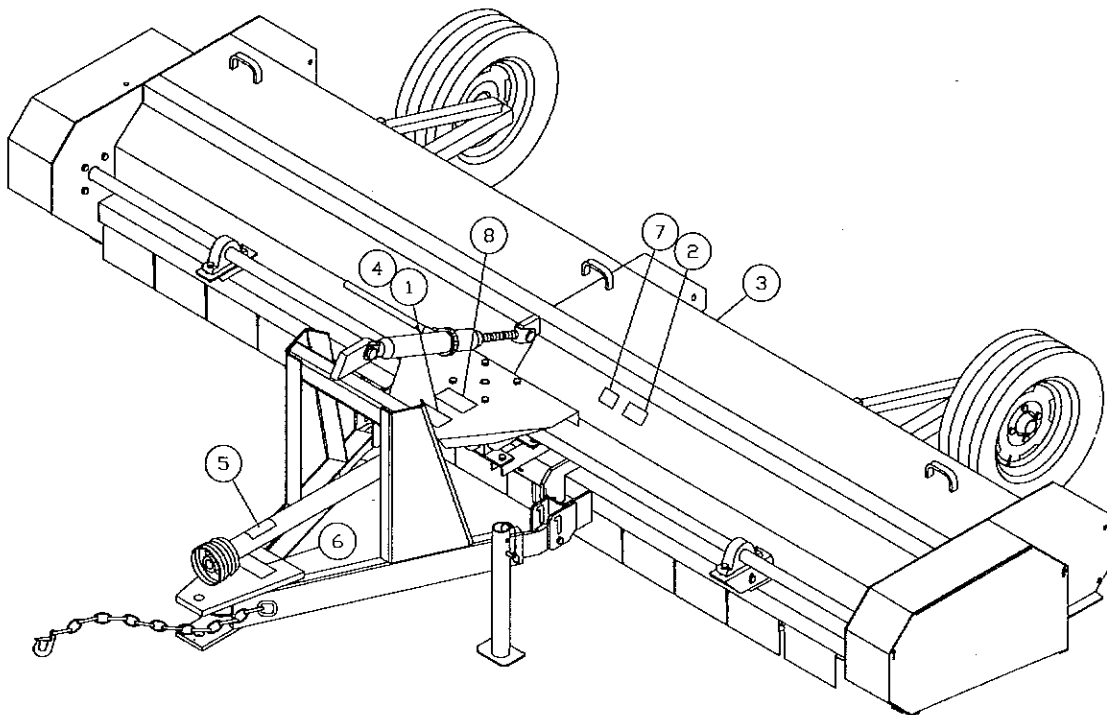
NO. 6 - "CAUTION"-IMPLEMENT MUST BE HITCHED TO ATANDARDIZED DRAWBAR. PART NO. 115370.

SAFETY DECALS



NO. 7 - "CAUTION"-LISTS FOUR ITEMS TO FOLLOW AND OBSERVE WHILE OPERATING THIS MACHINE. PART NO. 115380.

NO. 8 - "DANGER"-STAY OFF MACHINE WHEN IT IS RUNNING. PART NO. 117770.



NOTE: KEEP ALL DECALS CLEAN AND FREE OF DIRT FOR MAXIMUM VISIBILITY. REPLACE ANY AND ALL DECALS THAT ARE NO LONGER LEGIBLE. READ AND OBEY ALL SAFETY DECALS.

ASSEMBLY



CAUTION: In the set up procedure, keep **SAFETY IN MIND**. Use adequate blocking to prevent personal injury. Keep children away. Injury can occur from lifting too heavy of an item or from a falling member if it is not properly supported or blocked.

I. INSTALLING THE "A" HITCH AND DRIVE LINE

1. Carefully tilt Shredder to operating position and remove wood blocks. Do not allow flails to contact the ground, this could damage flails or rotor.
2. Raise and secure Shredder on wood blocks or other stand so that the flails are clear of the ground. This will protect the balanced shafts.
3. Slide the "A" Hitch into the front mounting brackets located on each side of the gear box (see page 24). Fasten in place with the 2(two) 1"-8 x 3" hex bolts and the 2(two) 1"-8 hex lock nuts provided.
4. Install Screw Jack or Hydraulic Cylinder from top of Hitch to tab on Shredder housing. Cylinder or Screw Jack must be purchased separately.
5. Fill Gearbox to top of shafts with SAE 90 gear lubricant.
6. Before installing the P.T.O., lubricate and inspect telescoping members and shields. Install P.T.O. on input shaft of gearbox. Make sure it is securely locked to shaft of gearbox.
7. Lubricate between rotating P.T.O. parts and plastic shield through plastic grease fitting on shield.
8. Secure the PTO shield from rotating with chain provided.

II. ATTACHING WHEEL ASSEMBLY

1. Calculate approximate position of axle brackets according to the row spacing desired. The outer wheels should run between the outer two rows being cut. The bracket should be mounted to the inside of the tire. The bracket as shown on page 22 is the left mounting. On the 180B & 240B, or if equipped with additional set of carrier wheels, install in reversed position on the next row in on the 180B or two rows in on the 240B.
2. Install the axle attaching brackets to rear 4x4 tube in the determined positions with 3/4" x 6-1/2" hex head cap screws, and 3/4" x 6" eye bolt, lock washers and hex nuts. Slide the axle arm into attaching bracket, secure with 1" x 8-1/2" hex head cap screws, lock washers and hex nuts. Set in top hole of attaching brackets and top hole of axle arm for most conditions.

Mount tire and wheel to hub. Tire pressure for 7.60-15 6 ply tire is 40 psi. Recheck tire spacing and tighten all bolts.

III. ROAD TRANSPORT (See Page 25) (Optional)

1. Bolt the Hitch Weldment (item 17) to the Shredder with 3/4" x 2" bolts, flat washers and lock nuts (items 8,10,13). One side of the Hitch Weldment bolts to the Transport End Plate and the other side bolts to the Transport Side Plate. The flat washers act as spacers between the Hitch Weldment Sidebars and the Transport End Plate and Side Plate.
2. Attach the end of the Brace Angle that has one bolt hole to the Hitch Weldment with a 3/4" x 2" bolt, flat washer and lock nut (items 8,10,13). The flat washer acts as a spacer and is placed between the Brace Angle and Transport Hitch Weldment. There are four(4) holes in the opposite end of the Brace Angle which is bolted to the upper most hole in the Side Plate, with a 3/4" x 2" bolt, lock washer and nut (items 6,7,10). This will position the Hitch Assembly in the transport position.
3. Position and pin the Transport Jack Assembly (item 18) to the Hitch Weldment (item 17). A piece of tubing with four(4) holes equally spaced on the circumference is welded to the Hitch so the Jack may be pinned in either a vertical or horizontal position. Position the Jack Mounting Tube over the mating tube on the Hitch and pin the Jack in the vertical position.
4. Bolt the Axle Weldments (item 16) to the Axle Mounting Plates previously welded on each side of the machine using four(4) 5/8" x 2-1/4" bolts, lock washers and nuts (items 1,3,4) per Axle Weldment.
5. The Hub and Spindle Assembly (item 19) is shown as an exploded view in the drawing for clarity but is actually pre-assembled at the factory. Bolt the Spindle Assembly to the Channel Weldments using the 1/2" x 4-1/2" bolts and 1/2" lock nuts (items 2,5).
6. Place the Channel Weldment (item 15) between the plates of the Axle Weldment Assembly, bolt the two together by passing a 3/4" x 5-1/2" bolt through the upper most hole in each piece and fasten with a 3/4" lock washer and nut, (items 6,7,9) This bolt acts as the pivot when raising or lowering the Transport Wheel. Secure the Channel Weldment in the transport position by placing a second 3/4" x 5-1/2" bolt through the lower hole in the Axle

ASSEMBLY

Weldment and the corresponding hole in the Channel Weldment. Fasten with a 3/4" lock washer and nut. Follow this procedure for each side of the machine.

7. Hook a tractor to the Shredder as it would be when in field operation. Either remove the cylinder stops or move stops as close as possible to the clevis so maximum cylinder stroke may be obtained. Leave the PTO disconnected.

8. With the Jack Stands lowered and pinned retract the Hydraulic Cylinder so the Carrier Wheels are as far off the ground as possible.

9. Place a 6" block under the two Carrier Wheels closest to the center of the Shredder. Extend the Cylinder, raising the front of the Shredder.

10. Pin Jack Stands in the lowered position.

11. Retract Cylinder fully, causing the Shredder to pivot on the Jack Stand, this will lift the rear of the machine.

12. Place wheel with tire on REAR Hub and Spindle Assembly and secure with lug nuts.

13. Extend the Cylinder completely pivot the Shredder on the rear transport tire, raising the front of the Shredder.

14. Bolt wheel with tire on FRONT Hub Assembly and secure with lug nuts. (Tires not supplied, 9.5L-15 6 ply implement tire recommended)

15. Raise and pin Jack Stands in the upper position.

16. Retract Cylinder until the Shredder is resting on the Transport Wheels and Transport Hitch Jack.

17. See operation for instructions on transport and field operation procedure.

PREPARING FOR FIELD OPERATION

REVIEW THE MACHINE

Generally review the machine for:

- Any loose bolts or set screws.
- Proper tensioning of drive belts.
- Proper P.T.O. installation.
- Hydraulic cylinders and hoses being properly installed.
- Oil level in gearbox.
- All shields and guards being in place.
- Proper installation of any options.

HITCHING TO THE TRACTOR



CAUTION: Never put your hands inside of the machine during operation. Keep children and bystanders away from machine in operation. Shut off tractor engine and place ignition key in pocket before adjusting, lubricating or repairing machine.

Adjust front and rear wheels of the tractor to fit desired row spacing.

Adjust the tractor drawbar as shown in Fig. 2 for 540 or 1000 RPM operation of P.T.O.

Attach Shredder to tractor with suitable hitch pin. Attach Safety Chain as shown on page 7.

Connect P.T.O. driveline to proper tractor P.T.O. shaft. Secure rotating shield of P.T.O. with chain provided.

Raise Shredder to retract Jack Stands.

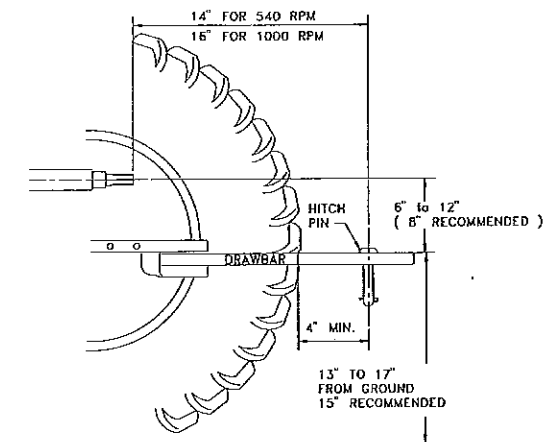


FIGURE 2

TEST RUN SHREDDER

Check flails to make sure they are free swinging and all in place.

Run tractor at low RPM, slowly engage P.T.O. Check operation of machine at low RPM. Slowly increase RPM's to proper operating speed of 540 or 1000 RPM. Check operation, alignment and clearances of all moving parts. Make any necessary adjustments.



CAUTION: Keep well clear of moving parts. Be sure to shut off tractor and place key in pocket while making adjustments. Wait for all movement to stop before approaching machine.

Run machine for 10 to 15 minutes. After running is complete recheck machine for any loose hardware and recheck drives.

It is important that the Shredder be operated and adjusted correctly. The following explains how to get the best service out of the machine.

FIELD OPERATION AND ADJUSTMENT



CAUTION: Never make any adjustment or replace any part without first observing all safety procedures outlined in this manual and waiting until all moving parts have stopped.



CAUTION: Flails rotate at high speed while shredding. Bystanders must stay clear of machine to prevent injury from thrown objects.

LEVELING AND HEIGHT ADJUSTMENT

The end of the blade tips should be 4" to 6" from the top of the ground. The rear wheels will most likely be adjusted to top hole of attaching brackets and top hole of arms.

Lower front of machine to height desired, run as high as possible. Use cylinder stop to maintain height. Use of Screw Jack instead of a Hydraulic Cylinder helps prevent lowering knives into ground. If necessary, reposition rear wheel height.

Damage to knives and excessive wear will occur with knives too close to ground.

Shredder bars (item 10, page 18) are adjustable. For a finer cut, move the Shredder bar towards the knives; for a coarser cut, move the Shredder bar away from the knives. If a coarse cut is acceptable, the bars may be removed.

GEARBOX OIL LEVEL

Check to insure that the gearbox has sufficient oil. DO NOT over fill the gearbox. Correct gearbox lubricant level is verified by removing top vent plug. Then use clean dip stick or visually verify that oil is even (level) with the top of main cross shaft. Use EP90 gear lubricant or equal as required.

BELT TENSION

It is important to maintain belt tension. Be sure to check daily. Extend springs as shown in figure 3, a nickel will just pass between each coil.



FIGURE 3 - SPRING ADJUSTMENT

FLAIL INSPECTION (see Service Section also)

Check flails regularly especially if rocks are struck. Any bent or broken knives should be replaced immediately. Remember, always replace two knives, the one needed and one directly opposite to maintain balance.

If vibration is present, check bearings and flails and correct problem. Continual running with vibration will result in damage to the machine.

FROM TRANSPORT TO FIELD OPERATION (See Page 25)

1. Lower Hitch Jack and unhook tractor from Transport Hitch.
2. Connect tractor to field hitch and attach Hydraulic Cylinder.
3. Extend Cylinder until FRONT Transport Wheel raises from the ground.
4. Raise front Transport Wheel and bolt in the up position by removing the lower 3/4" x 5-1/2" bolt joining the Axle Weldment Assembly (item 16) and Channel Weldment (item 15). Pivot Channel Weldment and tire about the upper 3/4" bolt until the holes in the Channel Weldment align with the upper holes in the Axle Weldment and bolt in place using the 3/4" x 5-1/2" bolt, lock washer and nut.
5. Lower and pin Jack Stands.
6. Retract Cylinder until REAR Transport Wheels are lifted from the ground.
7. Lift REAR Transport Wheel and bolt in the raised position using the same procedure as in step 4.
8. Rotate Transport Hitch Jack to the horizontal/transport position.
9. Remove the bolt that joins the Brace Angle (item 14) to the Side Plate, lift Hitch and bolt to tab.
10. Extend cylinder until pressure from Jack Stands is removed. Raise Jack Stands and pin in the raised position.

FROM FIELD OPERATION TO TRANSPORT (See Page 25)

1. Extend Lift Cylinder which will raise the front of the Shredder.
2. Lower and pin Jack Stands.
3. Retract Cylinder which will raise the back of the Shredder allowing the REAR Carrier Wheel to be lowered into position.

FIELD OPERATION AND ADJUSTMENT

4. Lower REAR Carrier Wheel into position and secure by first removing the lower 3/4" x 5-1/2" bolt that passes through the Axle Weldment Assembly (item 16). Pivot the Transport Wheel about the upper 3/4" bolt until the holes in the Channel Weldment align with the lower holes in the Axle Weldment Assembly. Replace the 3/4" x 5-1/2" bolt and fasten with lock washer and nut.

5. Position Transport Hitch. Remove bolt fastening Brace Angle (item 14) to Tab then refasten Brace Angle to top hole in Side Plate. Rotate Transport Hitch to the horizontal position and extend until Jack has pressure on the ground.

6. Extend Lift Cylinder; Shredder will pivot on the REAR Transport Wheel and Transport Hitch Jack.

7. Lower FRONT Transport Wheel and bolt in position using the same procedure as in step 4.

8. Raise and pin Jack Stands.

9. Lower Shredder so that it rest on Transport Wheels and Transport Hitch Jack.

10. Disconnect tractor from field hitch and Hydraulic Cylinder.

11. Hook tractor to Transport Hitch and place Hitch Jack in horizontal position.

12. Fasten safety chain to tractor.

13. Remove and secure Hydraulic Cylinder and PTO.

DAILY MAINTENANCE AND LUBRICATION

I. GREASE BEARINGS WITH ONE OR TWO PUMPS OF GREASE FROM A HAND GREASE GUN EVERY 10(TEN) HOURS OF OPERATION. THIS IS ESPECIALLY IMPORTANT ON FOUR ROTOR BEARINGS. SEE DRAWING BELOW.

II. CHECK GEARBOX LUBRICATION LEVEL SEASONALLY. CORRECT GEARBOX LUBRICANT LEVEL IS VERIFIED BY REMOVING TOP VENT PLUG. THEN USE CLEAN DIP STICK OR VISUALLY VERIFY THAT OIL IS EVEN (LEVEL) WITH THE TOP OF MAIN CROSS SHAFT. USE EP90 GEAR LUBRICANT OR EQUAL AS REQUIRED.

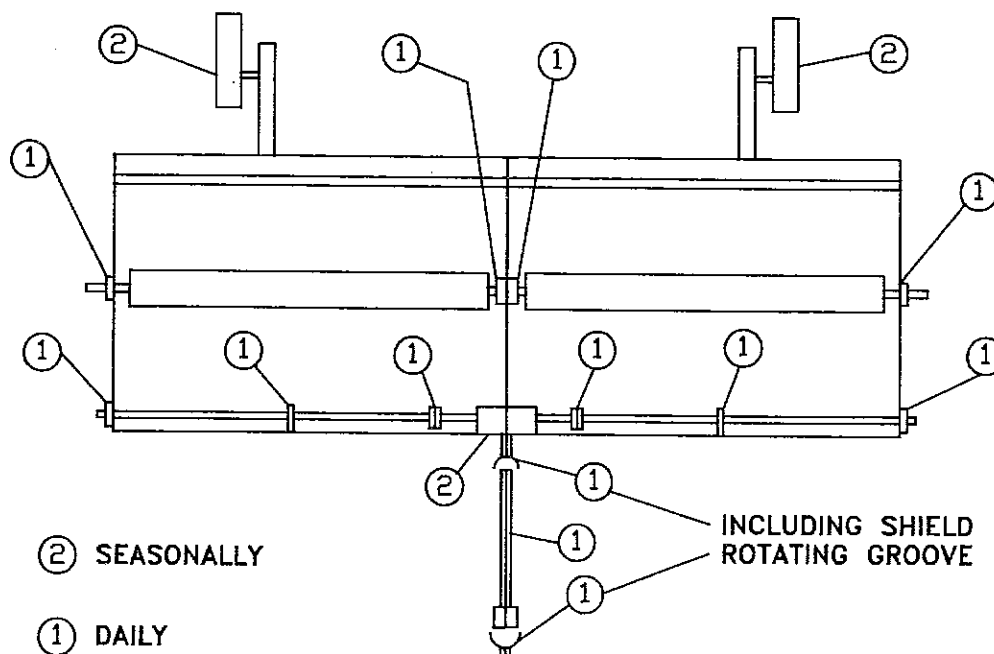
III. CHECK SPRING TENSION ON DRIVE BELTS.

IV. CHECK FOR LOOSE OR DAMAGED FASTENERS.

V. CHECK ALL KNIVES FOR EXCESSIVE WEAR, OR BENT, OR BROKEN KNIVES. (REMEMBER, ALWAYS REPLACE TWO KNIVES, THE ONE NEEDED AND ONE DIRECTLY OPPOSITE TO MAINTAIN BALANCE).

VI. DO NOT OPERATE THE MACHINE IF EXCESSIVE VIBRATION IS PRESENT.

LUBRICATION SCHEDULE



SERVICE AND STORAGE

SERVICE

I. REPLACEMENT OF KNIVES

1. Disconnect P.T.O. from tractor. Make sure machine is adequately blocked.
2. When replacing knife, replace in pairs, replace damaged knife plus knife most directly opposite. Be sure to inspect other parts and replace if necessary torque bolts to 150 ft.lb.

IMPORTANT: AN UNBALANCED ROTOR WILL CAUSE THE MACHINE TO VIBRATE EXCESSIVELY AND MAY DAMAGE BOTH THE BEARINGS AND THE SHAFTS.

II. REPLACEMENT OF ROTOR SHAFT BEARINGS

Do not attempt to replace bearings from underneath the Shredder. The safe and proper way is:

1. Remove the axle arms and "A" Hitch.
2. Loosen spring loaded idler and remove belts.
3. Turn the Shredder on its back.
4. Remove drive sheave from rotor shaft and clean and smooth shaft. Remove remote lubrication line.
5. Loosen bearing lock collar and remove bearing mounting bolts on drive end. Remove bearing from shaft, taking care not to damage shaft.
6. Shaft seal should extend approximately 1/16" past the end plate on the bearing side when reinstalled. Place lube plate between end plate and bearing.

7. If center bearing must be replaced, remove remote lubrication line, loosen bearing collar and remove bolts. Lift rotor up until bearing can be removed and replaced.

8. When reassembling be sure to note lube fitting locations and make sure center shaft clears center housing plate. Torque bearing bolts to proper torque 9/16" diameter, GR5, plated to 82 ft. lb. and 5/8" diameter, GR5 plated to 112 ft. lb.

9. Reattach remote lubrication lines, turn Shredder over and reassemble. Lubricate new bearings with three(3) pumps of grease.



CAUTION: Never put your hands inside of the machine during operation, or perform any kind of an adjustment, lubrication or repair to the machine without shutting off the tractor ignition and placing key in pocket. Keep children and bystanders away from machine in operation.

Remove all wrenches, tools, parts, or other foreign objects from the machine, when work is complete.

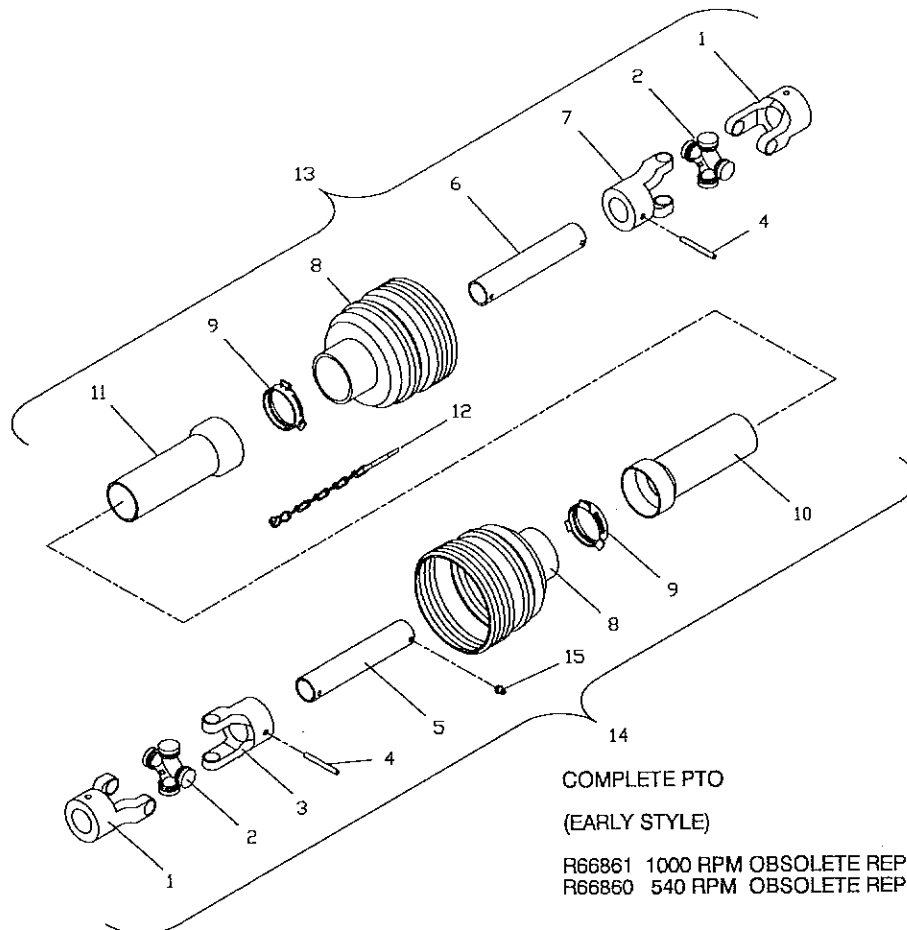
STORAGE

To obtain a long life and trouble free service from this unit, it should be properly prepared and stored.

First, flush entire unit with water to remove all accumulations of dirt, grease, or material. Then check for cracked, worn, or damaged belts, bearings, blades or other parts. Early detection and replacement of failing parts will save "Downtime" next season. Repaint any area(s) where the paint has been worn or chipped off. Replace all safety decals that are no longer legible. Remove and grease driveline and store in a dry place. Repack wheel bearings. Set machine on blocks and store inside.

NOTES

POWER TAKE OFF **FOR 540 & 1000 RPM STANDARD 1-3/8 TRACTOR PTO SHAFT**



*STYLE MAY BE DETERMINED BY SHAPE (PROFILE) OF INNER TUBE (TORQUE) MEMBERS



EARLY STYLE



LATE STYLE

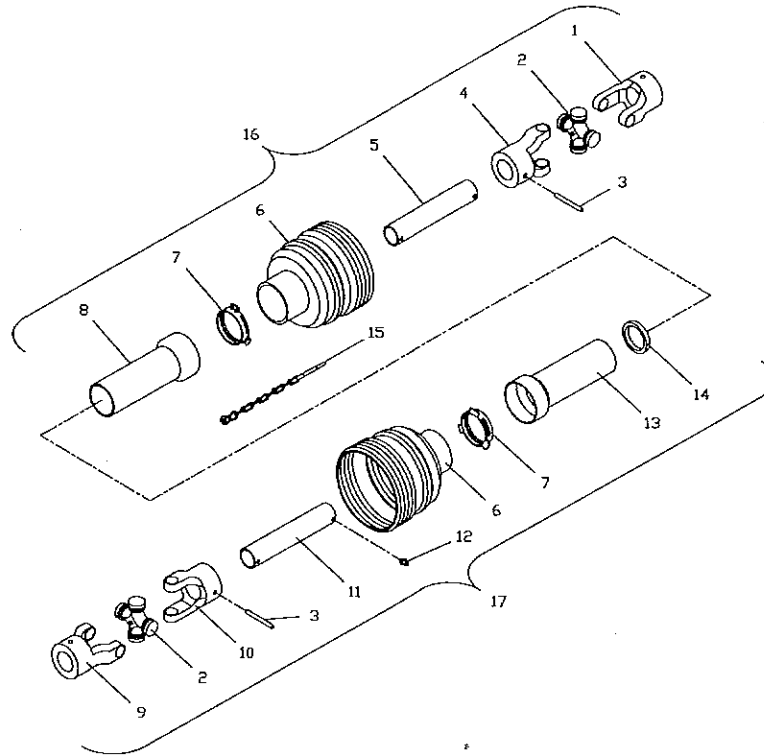
COMPLETE PTO
(EARLY STYLE)

(LATE STYLE)

R66861 1000 RPM OBSOLETE REPLACED BY 196820 1000 RPM
R66860 540 RPM OBSOLETE REPLACED BY 196810 540 RPM

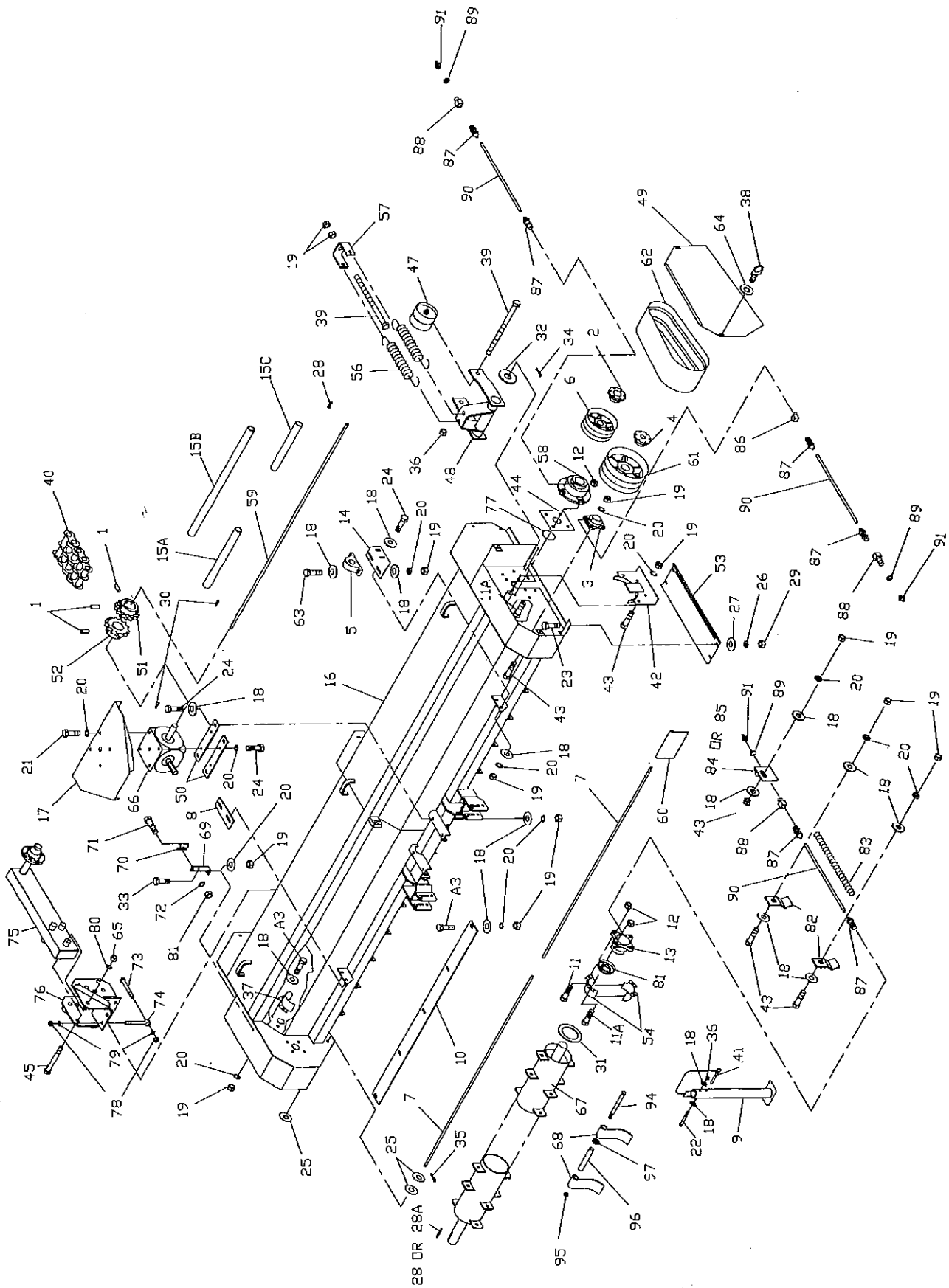
ITEM	PART NUMBER	QTY 144B	QTY 180B	QTY 240B	DESCRIPTION
1	182870	1	-	-	YOKE, 1-3/8" 6SPL QD 540 RPM
1	182980	1	1	1	YOKE, 1-3/8" 21SPL QD 1000 RPM
2	182230	2	2	2	KIT, CROSS AND BEARING
3	182950	1	1	1	INBOARD YOKE(EARLY STYLE)*
3	196770	1	1	1	INBOARD YOKE(LATE STYLE)*
4	182880	2	2	2	PIN, SPRING 10mm x 85mm(EARLY STYLE)*
4	196740	2	2	2	PIN, SPRING 10mm x 90mm(LATE STYLE)*
5	182970	1	1	1	OUTER PROFILE(EARLY STYLE)*
5	196760	1	1	1	OUTER PROFILE(LATE STYLE)*
6	182960	1	1	1	INNER PROFILE(EARLY STYLE)*
6	196750	1	1	1	INNER PROFILE(LATE STYLE)*
7	182940	1	1	1	INBOARD YOKE(EARLY STYLE)*
7	196730	1	1	1	INBOARD YOKE
8	182930	2	2	2	SHIELD, CONE 6 RIB
9	182900	2	2	2	BEARING RING
10	196790	1	1	1	SHIELD, INNER TUBE
11	196780	1	1	1	SHIELD, OUTER TUBE
12	182890	1	1	1	SAFETY CHAIN
13	183210	1	1	1	TRACTOR HALF, 1000 RPM(EARLY STYLE)*
13	196840	1	1	1	TRACTOR HALF, 1000 RPM(LATE STYLE)*
13	183220	1	-	-	TRACTOR HALF, 540 RPM(EARLY STYLE)*
13	196860	1	-	-	TRACTOR HALF, 540 RPM(LATE STYLE)*
14	183190	1	1	1	IMPLEMENT HALF(EARLY STYLE)*
14	196850	1	1	1	IMPLEMENT HALF(LATE STYLE)*
15	196890	1	1	1	GREASE ZERK
16					
Optional Overrunning Clutch					
18	340050	1	1	1	PTO, IMP HALF W/OVERRUNNING CLUTCH (parts only)
19	340060	1	1	1	YOKE, IMP OVERRUNNING CLUTCH (parts only)

POWER TAKE OFF - 340070
FOR 1000 RPM LARGE 1-3/4-20 TRACTOR PTO SHAFT



ITEM	PART NUMBER	QTY	DESCRIPTION
1	340100	1	YOKE, 1-3/4" 20 SPL
2	182230	2	KIT, CROSS AND BEARING
3	196740	2	PIN, SPRING 10mm x 90mm
4	196730	1	INBOARD YOKE
5	340110	1	INNER PROFILE
6	340140	2	CONE, SHIELD 7 RIB
7	182900	2	RING, BEARING
8	340150	1	SHIELD, OUTER TUBE
9	340130	1	YOKE, 1-3/8" 6 SPL
10	196770	1	INBOARD YOKE
11	340120	1	PROFILE AND SLEEVE
12	196890	1	ZERK
13	340160	1	SHIELD, INNER TUBE
14	340190	1	BEARING, SUPPORT
15	182890	1	CHAIN, SAFETY
16	340090	1	PTO, TRACTOR HALF 1-3/4" 20 SPL
17	340080	1	PTO, IMP HALF 1-3/8" 6 SPL
18	340200	1	KIT, COLLAR (for item 1)
19	340210	1	KIT, COLLAR (for item 9)
20	340050	1	PTO, IMP HALF W/OVERRUNNING CLUTCH (parts only)
21	340060	1	YOKE, IMP OVERRUNNING CLUTCH (parts only)

BASIC UNIT



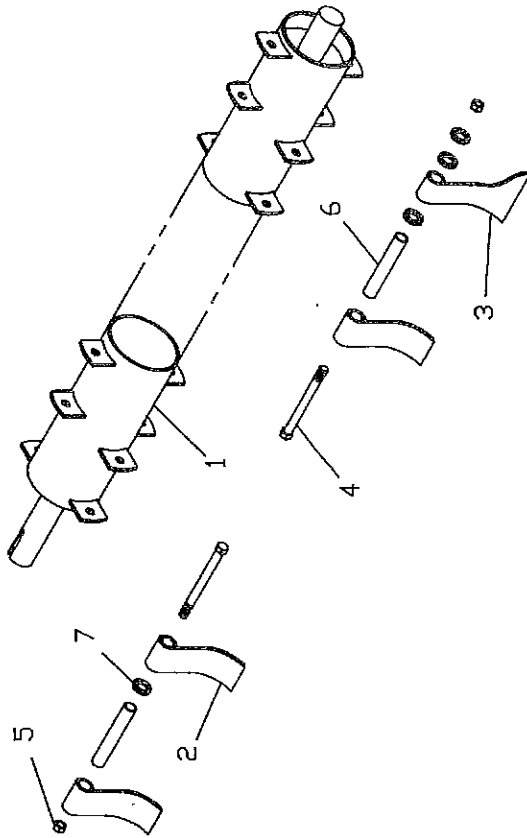
BASIC UNIT

ITEM	PART NUMBER	QTY 144B	QTY 180B	QTY 240B	DESCRIPTION
1	120970	-	-	-	SCREW, AHSS NY-LK 3/8" x 1/2"
2	R37960	2	2	-	HUB, ROTOR SHEAVE QD, SK 1-3/4"
2	R66251	-	-	2	HUB, ROTOR SHEAVE QD, SF 2-3/16"
3	R40290	2	2	2	BEARING, FLANGE 1-3/8" 4-BOLT
4	R40340	2	2	-	HUB, JACKSHAFT SHEAVE
4	R64765	-	-	2	HUB, JACKSHAFT SHEAVE
5	R40741	2	2	4	BEARING, PILLOW BLOCK 1-3/8"
6	R41180	-	2	-	SHEAVE, ROTOR 4B QD 8.35" O.D.
6	R40750	2	-	-	SHEAVE, ROTOR 3B QD 8.38" O.D.
6	R64761	-	-	2	SHEAVE, ROTOR 5B QD 8.35" O.D.
7	R42360	-	2	-	ROD, SKIRT 92"
7	R42340	1	-	-	ROD, SKIRT 80"
7	R42870	1	-	-	ROD, SKIRT 67"
7	R45310	-	-	2	ROD, SKIRT 123.5"
8	R60608	1	1	2	BEARING MOUNTING, JACKSHAFT R.H.
9*	R60636	1	1	2	STAND, JACK
9	254350	1	1	2	STAND, JACK
10	R61055	-	2	-	BAR, SHREDDER
10	R60589	2	-	-	BAR, SHREDDER
10	R64368	-	-	2	BAR, SHREDDER
11	254550	-	-	-	BOLT, HHCS 1/2" x 1-1/2"
11	254440	-	-	-	BOLT, HHCS 5/8" x 1-3/4"
11A	252840	-	-	-	BOLT, HHCS 1/2" x 1-3/4"
11A	213250	-	-	-	BOLT, HHCS 5/8" x 2"
12	1795104	-	-	-	NUT, HEX LOCK 5/8" 2WAY
12	R61479	-	-	-	NUT, HEX LOCK 1/2"
13*	R16260	2	2	-	BEARING, FLANGE 1.75 W/ECCEN
13*	R66250	-	-	2	BEARING, FLANGE 2.18 W/ECCEN
13	253860	2	2	-	BEARING, FLANGE 1.75 W/ECCEN
13	253870	-	-	2	BEARING, FLANGE 2.18 W/ECCEN
14	R62891	1	1	2	BEARING MOUNTING, JACKSHAFT L.H.
15A	R64473	-	2	-	SHIELD, SPIN 54-1/2"
15A	R64470	2	-	-	SHIELD, SPIN 37-1/2"
15A	R64476	-	-	2	SHIELD, SPIN 51.00"
15B	R64469	-	-	2	SHIELD, SPIN 32-3/4"
15C	119641	2	2	2	SHIELD, SPIN 23-5/8"
16	R64622	-	1	-	HOUSING, 180B
16	R64451	1	-	-	HOUSING, 144B
16	R45220	-	-	1	HOUSING, 240B
17	R67020	-	1	1	SHIELD, GEARBOX
18	005200	-	-	-	WASHER, FLAT .562" x 1.375" x .109"
19	005360	-	-	-	NUT, HEX 12" G5 ZN
20	005370	-	-	-	WASHER, LOCK 1/2"
21	010730	-	-	-	BOLT, HHCS 1/2" x 1-1/4"
22	038560	1	1	2	BOLT, HHCS 1/2" x 4"
23	012260	-	-	-	BOLT, HHCS 3/8" x 1"
24	014770	-	-	-	BOLT, HHCS 1/2" x 1-1/2"
25	020430	-	-	-	WASHER, FLAT .688" x 1.75" x .13"
26	021180	-	-	-	WASHER, LOCK 3/8"
27	021190	-	-	-	WASHER, FLAT .438" x 1.00" x .083"
28	021530	4	4	2	KEY, 3/8" SQ x 2"
28A	R66305	-	-	2	KEY, 1/2" SQ x 2"
29	027260	-	-	-	NUT, HEX 3/8"
30	039950	8	8	8	KEY, SQ 3/8" x 1-3/4"
31	250590	-	-	2	SPACER, ROTOR
31	250550	2	2	-	SPACER, ROTOR
32	1107389	-	-	-	WASHER, FLAT 1.06" x 2.00" x .134"
33	031080	-	-	-	BOLT, HHCS 1/2" X 1"
34	124340	-	-	-	PIN, COTTER 3/16" x 1-1/2"
35	124350	-	-	-	PIN, COTTER 1/8" x 1-1/2"
36	127890	-	-	-	NUT, HEX LOCK 1/2"
37	250370	2	2	-	ROTOR GUARD WELDMENT, UPPER END
37	250480	-	-	2	ROTOR GUARD WELDMENT, W/TABS END
38	156510	4	4	4	LATCH, MAIN DRIVE SHIELD
39	162930	4	4	4	BOLT, HHCS 1/2" x 5-1/2"
40	163770	2	2	2	CHAIN ASSY, 60" x 14"
41*	167160	1	1	2	PIN & CHAIN ASSY
41	255320	1	1	2	PIN, COTTERLESS HITCH
42	250330	2	2	-	PLATE, SPLICE WELDMENT
42	250430	-	-	2	PLATE, SPLICE WELDMENT
43	1770500	-	-	-	BOLT, HHCS 1/2"
44	250560	2	2	-	PLATE, SEAL
44	250580	-	-	2	PLATE, SEAL
45	1070034	4	8	8	BOLT, HHCS 1" x 8-1/2"

ITEM	PART NUMBER	BASIC UNIT			DESCRIPTION
		QTY 144B	QTY 180B	QTY 240B	
46	204510	2	2	2	NAIL, 1/4" GRIP
47	210270	2	2	2	PULLEY ASSY. IDLER
48	210330	2	2	2	IDLER WELDMENT
49	210390	1	1	1	SHIELD, RIGHT
49	210400	1	1	1	SHIELD, LEFT
50	210650	2	2	2	BRACKET, GEARBOX
51	210690	2	2	2	SPROCKET, 1-3/8" 60B14
52	210700	2	2	2	SPROCKET, 1-1/2" 60B14
53	210890	2	2	2	CHANNEL, WELDMENT BOTTOM
54	254390	4	4	4	ROTOR GUARD WELDMENT, CENTER
54	254340	-	-	4	ROTOR GUARD WELDMENT, CENTER RH
55					
56	220860	4	4	4	SPRING, EXTENSION 5.75" OAL
57	224400	2	2	2	CLIP, TAKE-UP BOLT
58	250640	2	2	-	BEARING, SPHER. ROLLER 1-3/4"
58	250630	-	-	2	BEARING, SPHER. ROLLER 2-3/16"
59	243530	-	2	-	SHAFT, JACK 180B 1-3/8"
59	243540	2	-	-	SHAFT, JACK 144B 1-3/8"
59	210680	-	-	2	SHAFT, JACK 240B 1-3/8"
60	243650	13	2	25	DEFLECTOR, STEEL 9.50" x 5.5"
60	243660	-	17	-	DEFLECTOR, STEEL 9.25" x 5.5"
61	R40330	2	-	-	SHEAVE, JACKSHAFT 540 RPM 12.75 O.D.
61	R41170	-	2	-	SHEAVE, JACKSHAFT 540 RPM 12.75 O.D.
61	243590	-	2	-	SHEAVE, JACKSHAFT 1000 RPM 11.35 O.D.
61	243580	-	-	2	SHEAVE, JACKSHAFT 1000 RPM 11.35 O.D.
62	242300	2	-	-	BELT, 3B x 72"
62	242290	-	2	-	BELT, 4B x 72" 540 RPM
62	R41190	-	2	-	BELT, 4B x 70" 1000 RPM
62	R65108	-	-	2	BELT, 5B x 70"
63	023950	-	-	-	BOLT, HHCS 1/2" x 2"
64	I120393	-	-	-	WASHER, FLAT 5/16" x .340" x .690"
65	J14H805	-	-	-	NUT, HEX 1"
66	189720	1	1	-	GEARBOX, 540 RPM COMPLETE (see page 21)
66	189730	-	1	1	GEARBOX, 1000 RPM COMPLETE (see page 21)
67					ROTOR ASSY (see page 20)
68					CUP KNIVES (see page 20)
69	I493166R1	1	1	1	BRACKET, SOCKET MOUNTING
70	167330	1	1	1	SOCKET, S.M.V. MOUNTING
71	012410	-	-	-	BOLT, CRG 5/16" x 3/4"
72	023620	-	-	-	WASHER, LOCK 5/16"
73	036730	4	8	8	BOLT, HHCS 3/4" x 6-1/2"
74	254320	4	8	8	BOLT, EYE 3/4" x 6"
75	273700	2	4	4	CARRIER ARM ASSY (see page 22)
76	254680	2	4	4	BRACKET, CARRIER ARM ADJ. (see page 22)
77	251120	1	1	-	SEAL, V-RING
77	251130	-	-	1	SEAL, V-RING
78	J14H794	-	-	-	NUT, HEX 3/4"
79	036800	-	-	-	WASHER, LOCK 3/4"
80	003350	-	-	-	WASHER, LOCK 1"
81	252500	2	2	-	COLLAR, ECCEN LOCK
81	252510	-	-	2	COLLAR, ECCEN LOCK
82	254330	4	4	4	CLIP, GREASELINE
83	254470	2	2	2	SPRING, 1/2"ODx.063x12-1/2
84	244230	1	1	1	CLIP, CENTER LUBE LINE
85	244240	1	1	1	CLIP, CENTER LUBE LINE
86	244250	4	4	4	ELBOW, 45 DEG. STREET 1/8"
87	244260	12	12	12	CONNECTOR, TUBE 1/8" TO 1/4"
88	244280	6	6	6	CONNECTOR, BULKHEAD 1/4"
89	244290	-	-	-	NUT, LOCK BULKHEAD
90	962500	-	-	-	TUBE, NYLON 1/4" OD
91	I102467H	6	6	6	ZERK, 1/4"
92					
93					
94	R61567	20	24	32	BOLT, HHCS 5/8" x 7"
95	R66867	-	-	-	NUT, HEX LOCK 5/8"
96	R41650	-	-	-	BUSHING, BLADE
97	R41660	-	-	-	SPACER, BLADE

*USE THESE PARTS FOR SHREDDERS PREVIOUS TO SERIAL NO. 2184

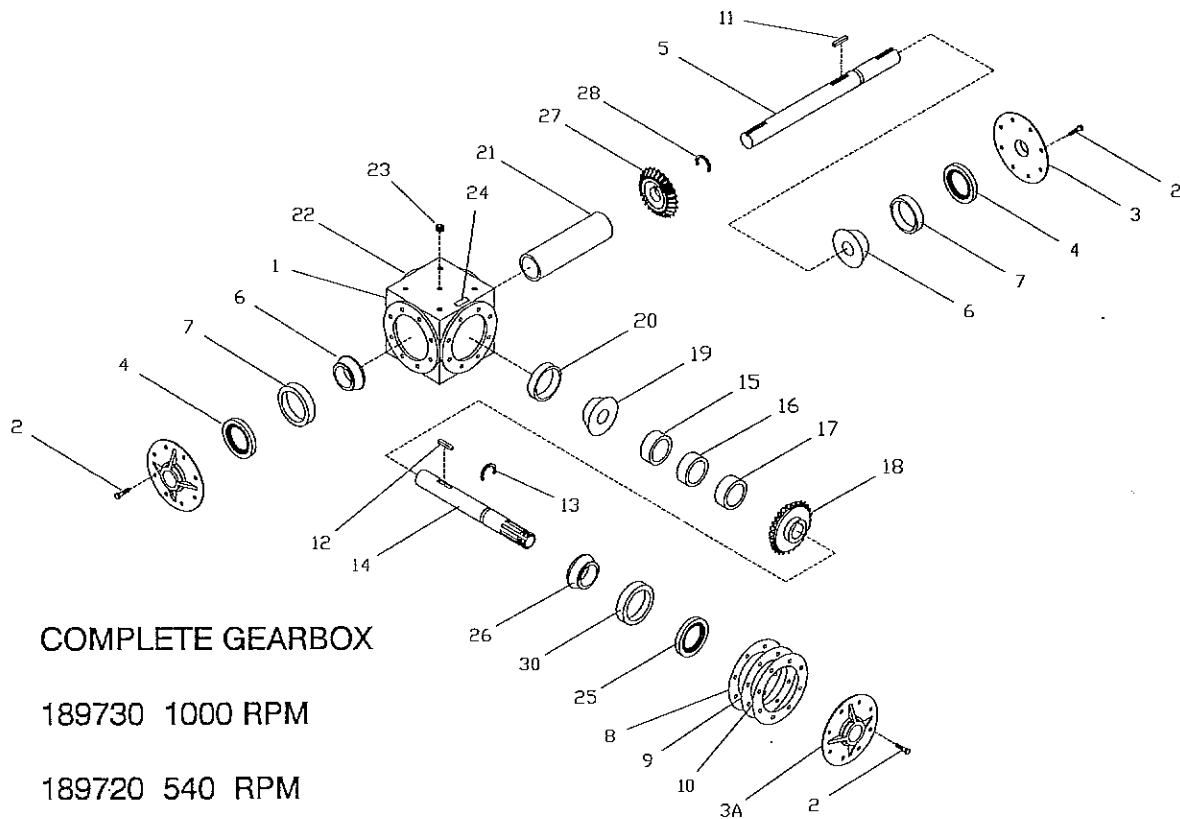
ROTOR ASSEMBLIES



PART NUMBER	DESCRIPTION
R40140	KNIFE, 6" STANDARD
R40141	KNIFE, 6" HARD SURFACED
R41650	BUSHING, BLADE
R41660	SPACER, BLADE
R45400	KNIFE, 6" OFFSET HARD SURFACED LH
R45420	KNIFE, 6" OFFSET HARD SURFACED RH
R45450	KNIFE, 5" HARD SURFACED
R48340	KNIFE, 5" OFFSET HARD SURFACED LH
R48350	KNIFE, 5" OFFSET HARD SURFACED RH
R61567	BOLT, 5/8-11 X 7 HHCS GR 8 ZN
R66867	NUT, 5/8-11 LOCK
250650	144 ROTOR WELDMENT
250660	180 ROTOR WELDMENT
250670	240 ROTOR WELDMENT

MODEL	PART NO.	DESCRIPTION	ITEM NUMBER						
			1	2	3	4	5	6	7
144	182740	ROTOR, STD. KNIVES W/OFFSETS R.H.	250650 (1)	R40140 (39)	213150 (1)	R61567 (20)	R66867 (20)	R41650 (20)	R41660 (22)
	182750	ROTOR, STD. KNIVES W/OFFSETS L.H.	250650 (1)	R40140 (39)	213140 (1)	R61567 (20)	R66867 (20)	R41650 (20)	R41660 (22)
	182760	ROTOR, H.S. KNIVES W/OFFSETS R.H.	250650 (1)	R40141 (39)	R45420 (1)	R61567 (20)	R66867 (20)	R41650 (20)	R41660 (20)
	182770	ROTOR, H.S. KNIVES W/OFFSETS L.H.	250650 (1)	R40141 (39)	R45400 (1)	R61567 (20)	R66867 (20)	R41650 (20)	R41660 (22)
180	182780	ROTOR, STD. KNIVES W/OFFSETS R.H.	250660 (1)	R40140 (47)	213150 (1)	R61567 (24)	R66867 (24)	R41650 (24)	R41660 (26)
	182790	ROTOR, STD. KNIVES W/OFFSETS L.H.	250660 (1)	R40140 (47)	213140 (1)	R61567 (24)	R66867 (24)	R41650 (24)	R41660 (26)
	182800	ROTOR, H.S. KNIVES W/OFFSETS R.H.	250660 (1)	R40141 (47)	R45420 (1)	R61567 (24)	R66867 (24)	R41650 (24)	R41660 (26)
	182810	ROTOR, H.S. KNIVES W/OFFSETS L.H.	250660 (1)	R40141 (47)	R45400 (1)	R61567 (24)	R66867 (24)	R41650 (24)	R41660 (26)
240	182840	ROTOR, H.S. KNIVES W/OFFSETS R.H.	250670 (1)	R45450 (63)	R48350 (1)	R61567 (32)	R66867 (32)	R41650 (32)	R41660 (34)
	182850	ROTOR, H.S. KNIVES W/OFFSETS L.H.	250670 (1)	R45450 (63)	R48340 (1)	R61567 (32)	R66867 (32)	R41650 (32)	R41660 (34)

GEARBOX



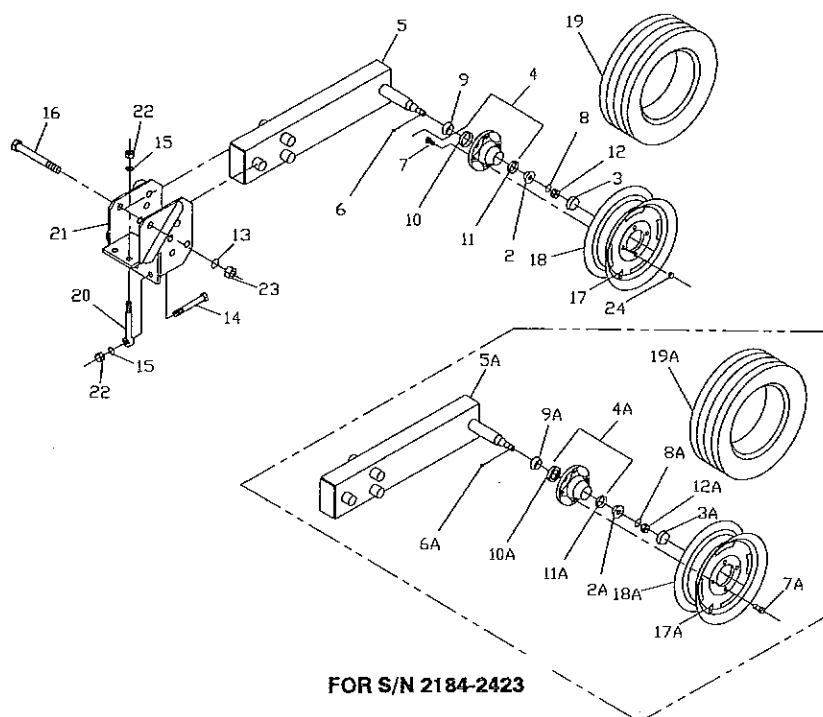
COMPLETE GEARBOX

189730 1000 RPM

189720 540 RPM

ITEM	PART NUMBER	QTY 144B	QTY 180B	QTY 240B	DESCRIPTION
1	R67294	1	1	1	HOUSING
2	184750				BOLT, CS SEMS 3/8" x 1-1/4"
3	R67295	2	2	2	CAP
3A	R67295	2	2	2	CAP, EARLY W/R67308 & R67299 BRG
3A	189750	2	2	2	CAP, LATE W/189740 & 189760 BRG
4	R67296	2	2	2	SEAL, NTL 470136 1.50" x 2.25" x .50"
5	237390	1	1	1	SHAFT, OUTPUT
6	R67298	2	2	2	CONE, BEARING 1.50"
7	R67299	2	2	2	CUP, BEARING 3.15"
8	R67301	-	-	-	GASKET
9	R67302	-	-	-	GASKET
10	R67303	-	-	-	GASKET
11	235700	1	1	1	KEY
12	236580	1	1	1	KEY
13	R67305	1	1	1	RETAINING RING
14	237400	1	1	1	SHAFT
15	R67309	-	-	-	SHIM, .002
16	R67310	-	-	-	SHIM, .005
17	R67311	-	-	-	SHIM, .010
18	R67312	1	1	1	GEAR, 22 TOOTH 1000 RPM
18	R67313	1	1	1	GEAR, 30 TOOTH 540 RPM
19	R67314	1	1	1	CONE, BEARING 1.16"
20	R67315	1	1	1	CUP, BEARING 2.62"
21	R67316	1	1	1	SPACER
22	R66580	2	2	2	PLUG, PIPE 1/2" NPT SOC HD
23	R66581	1	1	1	PLUG, PIPE 1/2" NPT SOC HD VENT
24					
25	R67307	1	1	1	SEAL, 1.37" x 2.25" x .50"
26	189740	1	1	1	CONE, BEARING W/189760
26	R67308	1	1	1	CONE, BEARING 1.38" W/R67299
27	R67317	1	1	1	GEAR, 22 TOOTH 1000 RPM
27	R67318	1	1	1	GEAR, 20 TOTH 540 RPM
28	R67319	1	1	1	RETAINING RING
29					
30	189760	1	1	1	CUP, BEARING 2.84" W/189740
30	R67299	1	1	1	CUP, BEARING T 3.15" W/R67083

WHEEL ASSEMBLY

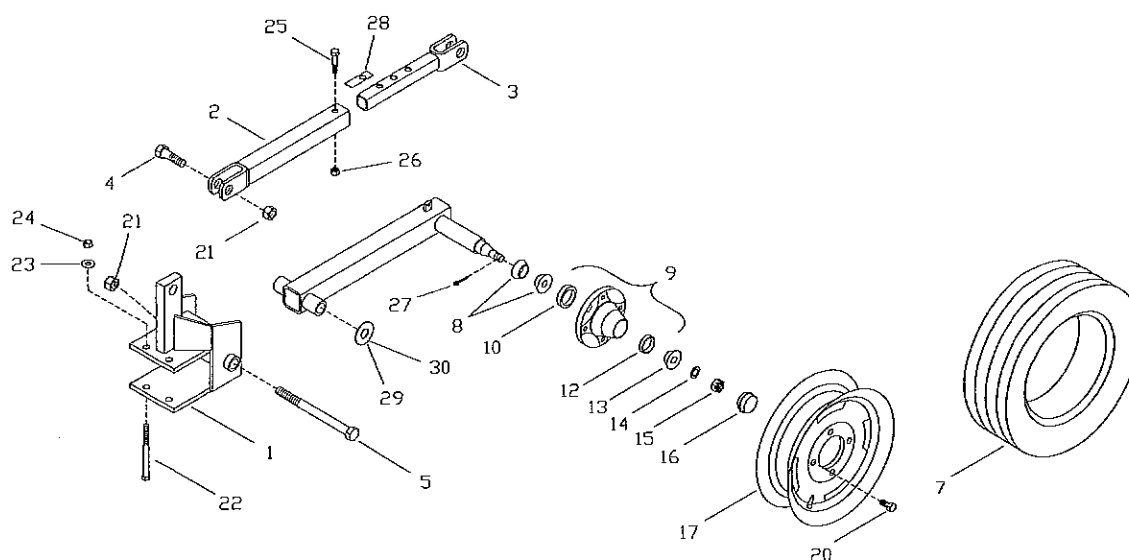


*Includes Items 2-12, ** Includes Items 2A-12A(S/N 2184-2423)

ITEM	PART NUMBER	QTY 144B	QTY 180B	QTY 240B	DESCRIPTION
1*	273710	1	1	1	ARM ASSY, CARRIER
1A**	254730	1	1	1	ARM ASSY, CARRIER
2	012630	1	1	1	CONE, 1.25 ID
2A	1758209	1	1	1	CONE, .75 ID
3	035420	1	1	1	CAP, WHEEL HUB 2-1/2"
3A	1799509	1	1	1	CAP, WHEEL HUB
4	016530	1	1	1	HUB, 6-BOLT
4A	250610	1	1	1	HUB, 4-BOLT W/CUPS W/ZERK
5	273700	1	1	1	ARM WELDMENT, CARRIER
5A	254740	1	1	1	ARM WELDMENT, CARRIER
6	026630	-	-	-	PIN, COTTER 5/32" x 1-1/2"
6A	1120123	-	-	-	PIN, COTTER 1/8" x 1-1/4"
7	020740	1	1	1	STUD, HUB 1/2" x 1-1/2"
7A	1351079R1	1	1	1	BOLT, WHEEL HUB
8	020720	-	-	-	WASHER, FLAT 3/4" x 1-3/4"
8A	1575813R1	-	-	-	WASHER, FLAT 3/4" x 1-1/4"
9	016520	1	1	1	CONE, W/SEAL 1.25" ID
9A	1602958R91	1	1	1	CONE, W/SEAL, 1.25" ID
10	018850	1	1	1	CUP
10A	1651814R1	1	1	1	CUP
11	018860	1	1	1	CUP
11A	1651817R1	1	1	1	CUP
12	020710	-	-	-	NUT, SLOTTED HEX 3/4"
12A	169448D	-	-	-	NUT, SLOTTED HEX, JAM 3/4"
13	003350	-	-	-	WASHER, LOCK 1.0"
14	036730	2	2	2	BOLT, HHCS 3/4" x 6-1/2"
15	036800	1	1	1	WASHER, LOCK 3/4"
16	1070034	4	8	8	BOLT, HHCS 1" x 8.5"
17	164420	1	1	1	VALVE STEM W/CORE & CAP
18	273740	1	1	1	WHEEL, 15" x 6 LB
18A	1757903	1	1	1	WHEEL, 15" x 4-1/2"
19	273730	1	1	1	TIRE, 7.60 x 15-6 PLY
19A	219620	1	1	1	TIRE, 6.70 x 15-4 PLY
20	254320	2	2	2	EYEBOLT, 3/4" x 6"
21	254680	1	1	1	BRACKET, CARRIER ARM ADJ.
22	J14H794	-	-	-	NUT, HEX 3/4"
23	J14H805	-	-	-	NUT, HEX 1"
24 ***	020730	-	-	-	NUT, HUB 1/2"

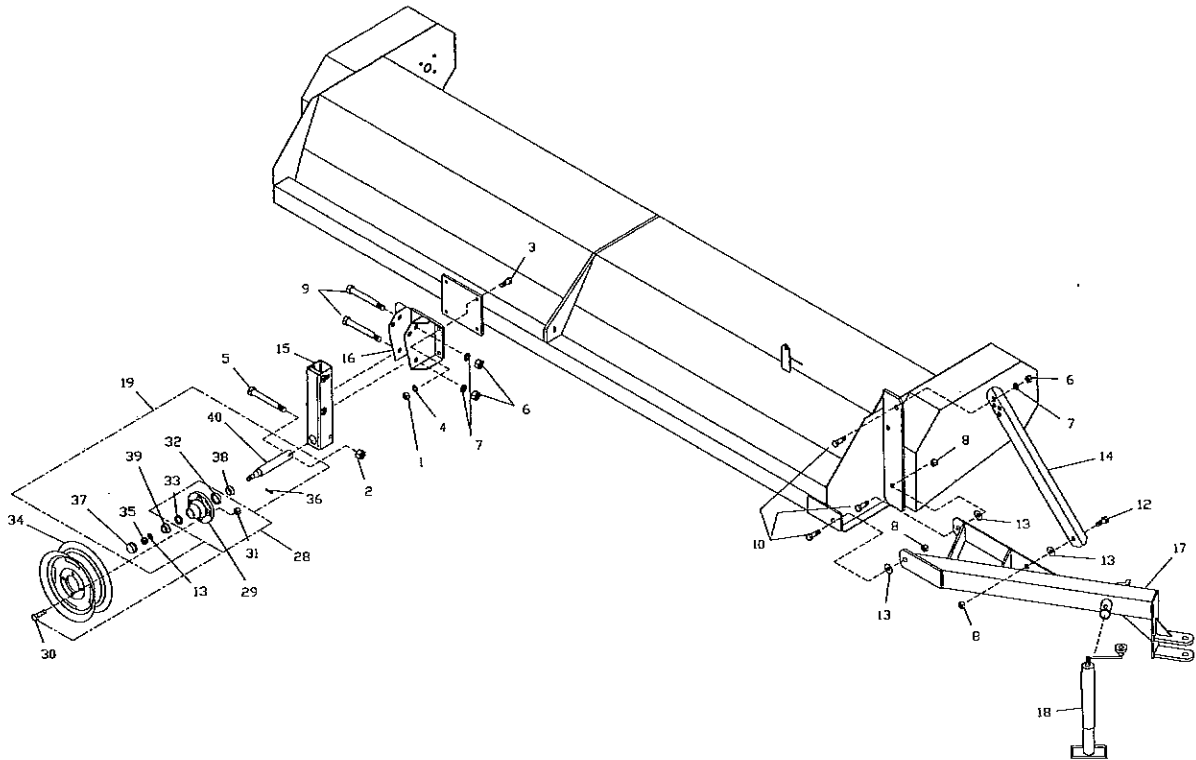
WHEEL ASSEMBLY

USED ON MACHINES SERIAL NUMBER 2183 AND BELOW



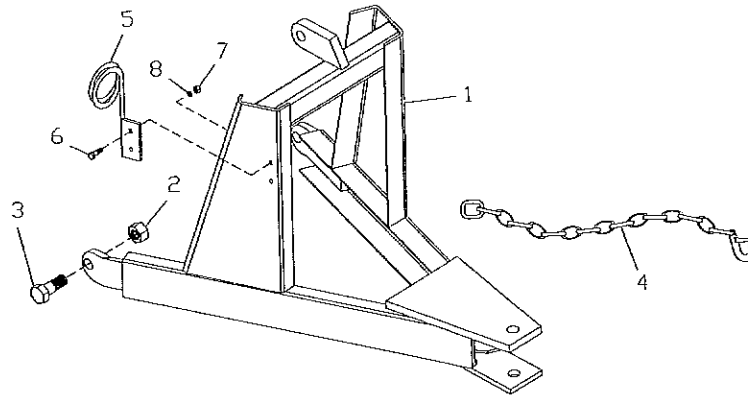
ITEM	PART NUMBER	QTY 144B	QTY 180B	QTY 240B	DESCRIPTION
1	R40440	1	1	1	BRACKET, AXLE ADJ & ATT ASSY
2	R60428	1	1	1	TUBE, OUTER ADJ ASSY
3	R60429	1	1	1	TUBE, INNER ADJ ASSY
4	R66338	-	-	-	BOLT, HHCS 1" x 3"
5	243640	1	1	1	BOLT, HHCS 1" x 10"
6	182100	1	1	1	AXLE ARM ASSY, L.H.
6	182110	1	1	1	AXLE ARM ASSY, R.H.
7	219620	1	1	1	TIRE
8	I602958R91	1	1	1	CONE, W/SEAL 1.25"
9	250610	1	1	1	HUB, 4-BOLT W/CUPS W/ZERK
10	I651817R1	1	1	1	CUP
11					
12	I651814R1	1	1	1	CUP
13	1758209	1	1	1	CONE, .75"
14	I575813R1	-	-	-	WASHER, FLAT 3/4"
15	I69448D	-	-	-	NUT, SLOTTED HEX JAM 3/4"
16	1799509	1	1	1	CAP, WHEEL HUB
17	1757903	1	1	1	RIM, 15" x 4-1/2"
17	164420	1	1	1	VALVE STEM W/CORE & CAP
18	181840	1	1	1	KIT, WHEEL ASSY L.H. (COMP)
19	181850	1	1	1	KIT, WHEEL ASSY R.H. (COMP)
20	I351079R1	-	-	-	BOLT, WHEEL HUB
21	990510	-	-	-	NUT, HEX LOCK 1" 2WAY
22	201660	2	2	2	BOLT, HHCS 5/8" x 6"
23	020430	-	-	-	WASHER, FLAT 5/8"
24	R61476	-	-	-	NUT, HEX LOCK 5/8"
25	990650	-	-	-	BOLT, HHCS 5/8" x 3"
26	R61480	-	-	-	NUT, HEX LOCK 5/8"
27	I120123	-	-	-	PIN, COTTER 1/8" x 1-1/4"
28	243630	2	2	2	SHIM, ADJUSTING TIRE
29	003360	-	-	-	WASHER, 1.03" x .075"
30	003870	-	-	-	WASHER, 1.03" x .060"

ROAD TRANSPORT



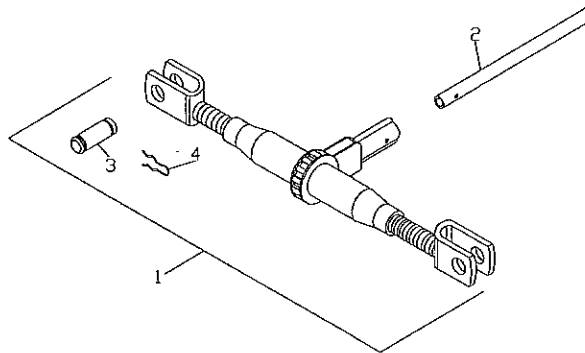
ITEM	PART NUMBER	QTY	DESCRIPTION
1	I124589	-	NUT, HEX 5/8"
2	I9413967	-	NUT, HEX 1/2" LOCK
3	013430	-	BOLT, HHCS 5/8" x 2-1/4"
4	020440	-	WASHER, LOCK 5/8"
5	030420	2	BOLT, HHCS 1/2" x 4-1/2"
6	036750	-	NUT, HEX 3/4"
7	036800	-	WASHER, LOCK 3/4"
8	991040	-	NUT, HEX 3/4" NYLON LOCK
9	147150	4	BOLT, HHCS 3/4" x 5-1/2"
10	990540	-	BOLT, HHCS 3/4" x 2"
11	990680	2	BOLT, HHCS 5/8" x 5-1/2"
12	1769804	-	BOLT, HHCS 3/4" x 1-3/4"
13	990710	-	WASHER, FLAT .81" x 2.0" x .149"
14	248970	1	ANGLE, BRACE
15	249170	2	CHANNEL WELDMENT
16	249230	2	AXLE ASSY WELDMENT
17	249270	1	HITCH WELDMENT
18	251300	1	JACK, SCREW TOP WIND
19	250960	2	SPINDLE ASSY
20	R60636	2	STAND, PARKING
28	016530	2	HUB ASSY
29	016531	2	HUB CASTING
30	018850	6	BOLT, STUD FOR HUB
31	018860	6	NUT, HEX 1" WHEEL
32	020730	1	CUP, BEARING 2.56"OD
33	020740	1	CUP, BEARING 2.33"OD
34	018710	2	RIM
35	020710	2	NUT, SLOTTED 3/4"
36	026630	2	PIN, COTTER 5/32" x 1-1/2"
37	035420	2	CAP, HUB 2-1/2"
38	016520	2	CONE, BEARING 1-3/8" TAPERED ROLLER
39	012630	2	CONE, BEARING 1-1/4" TAPERED ROLLER
40	249290	2	SPINDLE, 1-7/8" DIA x 13.0"

HITCH



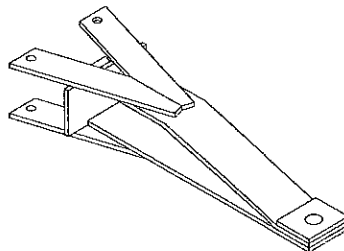
ITEM	PART NUMBER	QTY 144B	QTY 180B	QTY 240B	DESCRIPTION
1	254140	1	1	1	HITCH ASSY
2	R65072	-	-	-	NUT, HEX LOCK 1"
3	R66338	-	-	-	BOLT, HHCS 1" x 3"
4	1765302	1	1	1	KIT, SAFETY CHAIN
5	E150004	1	1	1	HOSE CARRIER
6	006690	-	-	-	BOLT, HHCS 3/8" x 1-1/4"
7	027260	-	-	-	NUT, HEX 3/8"
8	021180	-	-	-	WASHER, LOCK 3/8"

JACK RATCHET



ITEM	PART NUMBER	QTY 144B	QTY 180B	QTY 240B	DESCRIPTION
1	R39520	1	1	1	JACK, RATCHET
2	R41830	1	1	1	HANDLE, JACK
3	R41810	2	2	2	PIN, YOKE
4	R41820	4	4	4	PIN, COTTER HAIR

DISK HITCH



ITEM	PART NUMBER	QTY 144B	QTY 180B	QTY 240B	DESCRIPTION
1	R42650	1	1	1	DISK HITCH
	201660	2	2	2	BOLT, HHCS 5/8" x 6"
	020440	-	-	-	WASHER, LOCK 5/8"
	1124589	-	-	-	NUT, 5/8"
	181940	-	-	-	KIT, DISK HITCH COMPLETE

PAINT AND DECALS

PART NUMBER	QTY	DESCRIPTION
043121	-	SPRAY CAN, ART'S-WAY GREEN
043161	-	SPRAY CAN, ART'S-WAY YELLOW
021990	-	QUART CAN, ART'S-WAY GREEN
022000	-	QUART CAN, ART'S-WAY YELLOW
022010	-	GALLON CAN, ART'S-WAY GREEN
022020	-	GALLON CAN, ART'S-WAY YELLOW
183000	-	DECAL KIT, 144B
247650	-	DECAL KIT, 180B
183120	-	DECAL KIT, 240B

NOTES

SPECIFICATIONS

	144B	180B	240B
TRACTOR REQUIREMENTS	65HP MIN	75HP MIN	100HP MIN
CUTTING WIDTH	144"	180"	240"
LAP 40" ROWS	12"	-	20"
LAP 30" ROWS	-	15"	15"
NO. & SIZE KNIVES	80 6-1/2"	96 6-1/2"	128 5"
ROTOR TUBE DIAMETER	6"	6"	8"
ROTOR BEARING	1-3/4"	1-3/4"	2 -3/16"
	FLANGE	FLANGE	FLANGE
GEARBOX	200HP	200HP	200HP
BELTS	(2) 3-B	(2) 4-B	(2) 5-B
OVER-ALL DIMENSIONS	159"x120"	195"x120"	260"x120"
SHIPPING WEIGHT (APPROX)	2128 LBS	2689 LBS	4000 LBS
PTO RPM	540/1000	1000	1000

OPTIONS

HARD SURFACED KNIVES
 (STANDARD ON 240B)
 DISK HITCH
 EXTRA WHEEL ASSEMBLIES
 OVERRIDING CLUTCH ASSEMBLY

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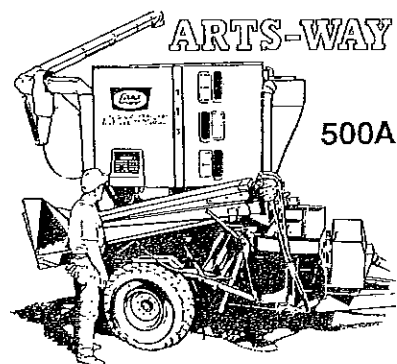
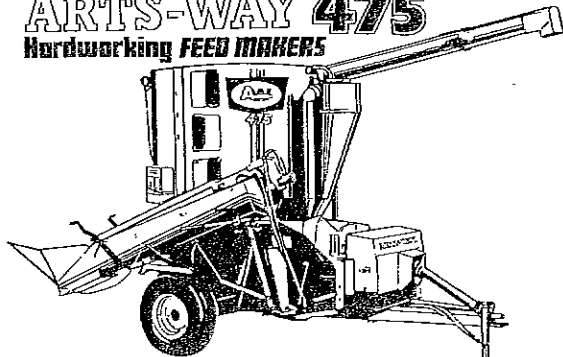
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ARTS-WAY

ARTS-WAY 475

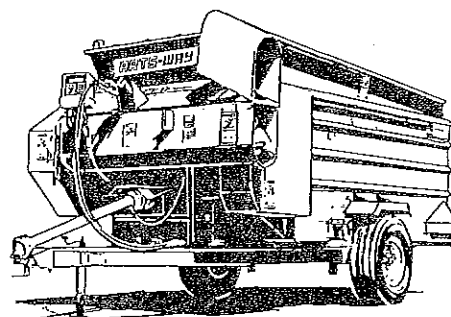
Hardworking FEED MAKERS



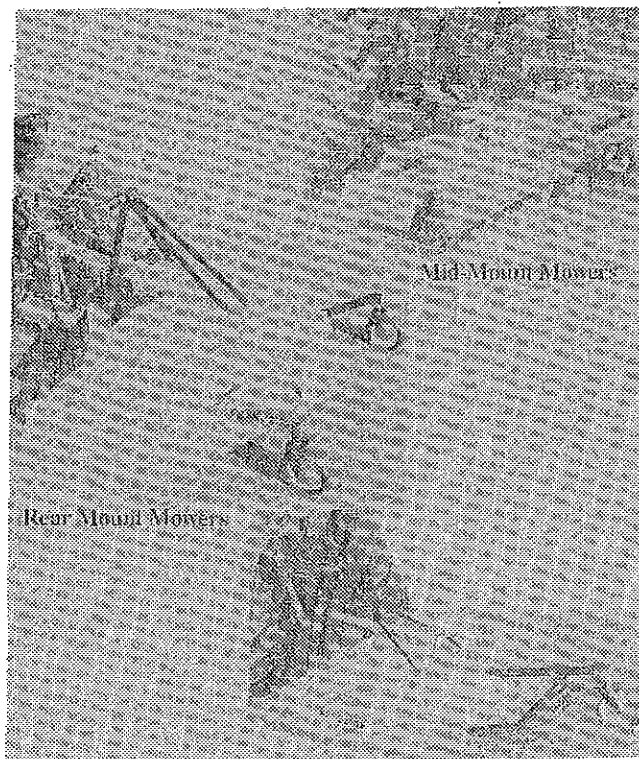
ARTS-WAY

500A

Extra Capacity, Extra Value

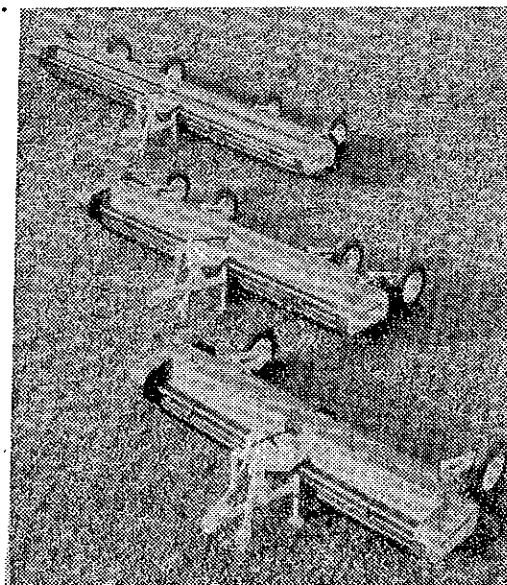


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SILAMIX

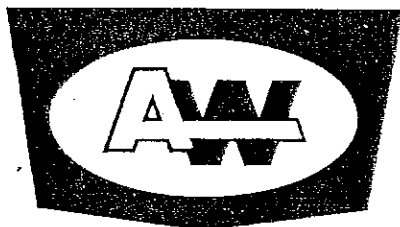


Mid-Mount Mowers

Rear Mount Mowers



Flail Shredders
3 Sizes
12' 15' 20'



ART'S-WAY MANUFACTURING CO., INC.
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