SAFETY WARNING: Do not use or operate this equipment until this manual and assembly instructions (as applicable) have been read and understood.

## **Owner's & Operator's Manual**

# KODIAK

8' Kodiak Rotary Cutter





This Safety Alert Symbol calls your attention to important safety messages in this manual.



Charleston, TN • (423) 336-2390

Congratulations on your purchase of a KODIAK MFG., INC. Rotary Cutter. Your new cutter is a durable, efficient and effective piece of equipment you can use with pride. With proper care and use it will have a long and satisfying working life.

Please read this manual before using your KODIAK cutter, even if you have had considerable experience with cutters. We have worked hard to include helpful information about safety, setup, operation and maintenance, as well as how to order parts and repair your cutter when the time comes. Time spent now picking up tips from the manual will pay off later in a more trouble-free operation.

The information and illustrations in this manual were as correct and complete as possible at the time of printing. However, KODIAK continually makes minor change and improvements, and your mower may have slight differences. KODIAK MFG., INC. reserves the right to change the design without notice.



NOTE: Instructions or parts designated "left" or "right" are determined as If standing behind the cutter.



## **SAFETY WARNINGS**

- NEVER operate rotary cutters near people, livestock or pets. Warn children to stay away, and stop if onlookers
  appear. Objects thrown by rotating blades can strike with fatal effect.
- READ this manual before using cutter. Do not let anyone operate this cutter without proper instructions.
- WHEN mowing, always wear proper tight-fitting and belted clothing to avoid entanglement with moving parts. Do
  not mow in bare feet, sandals or lightweight footwear.
- STOP the engine and disengage power to the cutter before making any adjustments.
- ALWAYS keep the blade carrier and blade bolts tight. Loose blades can easily pierce a quarter-inch steel plate and/ or cause fatal inury.



- ALWAYS ensure that shields and IID (Implement Input Driveline) guards furnished with equipment are in place and in good working order. Failure to do so could put operator at risk or injury or death from fast rotating blades, thrown objects, or entanglement in spinning parts.
- ALWAYS re-install all safety shields after servicing, and make sure shields are in proper place and in good condition before operating the cutter. Replace any damaged or worn parts before using cutter.
- ALWAYS stay clear of rotating parts. Be especially careful when inspection covers are removed. Keep fingers out
  of inspection and lubrication openings.
- ALWAYS inspect the area to be cut and remove foreign objects or debris before cutting. Failure to do this could
  put operator at risk or being hit by objects thrown by blades. Objects thrown by rotating blades can strike with
  killing force.
- ALWAYS stop the engine and cutter when any obstruction is hit. When rotation stops, inspect cutter and repair or replace damaged or worn parts before resuming operation.
- NEVER operate the cutter in transport position.
- NEVER assume that blades are not rotating while tractor is running. Be sure you are familiar with your tractor
  controls and cutter controls, and know how to stop in an emergency. Only the operator should ride on the tractor
  and NO ONE should ride on the cutter. FAILURE to do this could result in death or serious injury.
- AVOID slopes that are too steep for safe operation. Reduce speed on slopes. Avoid sharp turns. Be careful when changing direction on hills.
- When cutter is in roadway for whatever reason, high-visibility safety devices should be used to give adequate warning to other motorists. Watch for traffic and give way when possible. Observe state and local markings and lighting requirements.
- Make sure front and rear safety chain shielding, for front and rear of your cutter is in place at all times!

## **SERVICE**

Every 20 hours of operation - grease the telescoping surfaces of the PTO shaft.

Every 8 hours of operation - grease all universal joints (Coupling shafts and main PTO.)

Each gearbox should be filled with 90 wt. Gear oil to the check plug level. Oil is available from KODIAK MFG, INC. dealers and oil/fuel suppliers.

- Always replace blades IN PAIRS to maintain balance. NEVER try to straighten or weld blades. Unbalanced blades are dangerous.
- When installing stumpjumper, take care to time blades on each side 90 degrees apart to prevent contact at blade overlap point. Remember that, looking from the rear, the right stumpjumper rotates clockwise, while the left stumpjumper rotates counter-clockwise.
- Take care to reinstall blades and stumpjumper on the same side where they were removed. Installing them on the wrong side will result in the cutting edge being on the wrong side as well.
- When the slip clutch begins to slip excessively, the friction disc may be worn and have to be replaced. See dealer for repair and parts.

### 3-POINT LIFT TYPE SET-UP

- 1. Loosen A-Frame and Lift Assembly to upright position.
- 2. Remove Bolt and Nut at top of A-frame.
- 3. Back braces that were bolted to the outside of the upright arms should be moved to the inside of the upright arms and loosely tightened to the top of A-Frame. Attach back braces to the cutter deck. Tighten all bolts.
- Remove check plug from each gear box, inspect for proper oil level. Add 90 weight gear oil if level is below check plug.
- 5. Grease both universal joints of PTO shaft. Grease the telescoping surfaces of the PTO shaft. Grease universal joints of coupling shafts between gearboxes.
- 6. Grease tailwheel forks.
- 7. Install gearbox end (slip clutch) of PTO shaft onto center gearbox.

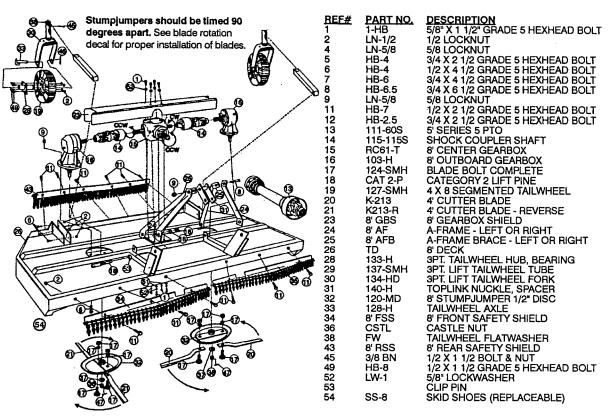
**Final Inspection of BOTH TYPES** inspect ALL bolts for Proper tightness. Check to see that cotter key is installed on nut holding each stumpjumper.

## **OPERATION**

#### Before operating:

- Make sure there is nothing under the cutter (tools, feet, hands, etc.) that should not be there. Check to make sure all
  parts are assembled correctly.
- Set tractor lift control stop at a position that will prevent the drive shaft from contacting the front edge of the cutter when cutter is at full lift. (On some tractors, this won't be necessary.)
- The cutter should only be engaged with the tractor PTO shaft when the tractor engine is at idle speed. Engaging the
  cutter at higher engine speeds will shorten the life of the cutter drive line. This may also damage the tractor.
- For most cutting, ground speed of 3 to 5 MPH and a PTO speed of 540 RPM is recommended. However, you may
  wish to adjust ground speeds for specific conditions.
- After using the cutter for a full day, check the stumpjumper to make sure it is tight on the output shaft. If loose, torque
  the nut holding it at 200 pounds (equivalent to 200 pounds of weight on a 12" wrench handle). Replace cotter key
  through output shaft to secure nut.
- Check blade pivot bolts and blade carrier nuts frequently for looseness or wear. Loose blades can easily pierce a 1/4" steel plate, and cause serious injury or death.
- Make sure safety chain shielding is in place at all times.

## 8' 3-POINT LIFT TYPE ROTARY CUTTER



## **OUTBOARD GEARBOX REMOVAL**

If gearboxes operate without gear oil, they will burn up and have to be replaced. Avoid this by checking gearbox oil levels periodically.

Squeeze the spring-loaded lock pin on the main PTO shaft, and then remove from center gearbox.

Disconnect the PTO from tractor, raise the cutter to an upright position and block for safety.

Next, it will be necessary to remove that gearbox's stumpjumper. Remove the cotter pin at the bottom of the gearbox output shaft. Next, remove the castle nut holding the stumpjumper, and then **re-install castle nut** upside down, flush with the end of the output shaft. (This is done to protect the threads on the output shaft.) Apply pressure to the back (top) of the stumpjumper. If stumpjumper does not come off, it will be necessary to tap with a hammer on the end of the output shaft and inverted castle nut while applying pressure to the stumpjumper. Continue tapping and applying pressure until stumpjumper comes loose, then remove castle nut and remove stumpjumper.

When stumpjumper has been removed, the next step is to remove four bolts holding the gearbox shield and remove shield. Then remove all four bolts holding the outboard gearbox you with to remove. This allows you to pivot the outboard gearbox away from the center gearbox. Now you may remove the gearbox.

## RE-INSTALLING OUTBOARD GEARBOX

To re-install the outboard gearbox, install the top outer bolt and nut to hold the gearbox in place. Pull the outboard gearbox away from the center, install the coupling shaft on the center gearbox shaft using the snap pin. Pivot the outer gearbox outward from center gearbox, twist the coupling shaft so it will line up with the center gearbox, pivot the outboard gearbox into position and install the remaining three bolts.

Tighten all bolts <u>securely</u>. Install gearbox shield. Install stumpjumper, taking care to time blades on each side 90 degrees apart to prevent contact at blade overlap point. Remember that, looking from the rear, the right stumpjumper rotates clockwise, while the left stumpjumper rotates counter-clockwise. When removing blades, take care to reinstall blades and stumpjumper on the same side where they were removed. Installing them on the wrong side will result in the cutting edge being on the wrong side as well. See blade rotation decal.

## **CENTER GEARBOX**

If center gearbox is removed, be sure to label "top" before removing. If center gearbox is re-installed upside down, blade rotation will be reversed. (See parts drawing for correct center gearbox rotation.)

Use Locktite #242 threadlocker to secure center gearbox bolts from premature loosening.

## **FARM EQUIPMENT LIMITED WARRANTY**

Kodiak Mfg., Inc. hereby warrants to the original Purchaser that each item of farm equipment shall be free of defects in material and workmanship under normal use and service for a period of twelve (12) months after delivery of the product to the original Purchaser.

The obligation of Kodiak Mfg., Inc. is hereby expressly limited to the repair and/or replacement of defects in workmanship or materials, which occur during the warranty period. This warranty does not cover damages or defects which result form alteration, accident, misuse, abuse, neglect, improper maintenance or installation of attachments or equipment, or the use of any part of component not manufactured or provided with the product by Kodiak Mfg., Inc.

Expendable replacement items such as blades, clutch facings, points, cross and bearings, etc., used in connection with normal service maintenance, are not covered by this warranty. Charges for pick up, delivery and/or shipment are also not covered by this warranty.

THIS WARRANTY AND THE OBLIGATION OF KODIAK MFG., INC. AS DESCRIBED HEREIN, IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, THE IMPLIED

WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND IN NO EVENT WILL KODIAK MFG., INC. BE LIABLE FOR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF CROPS, LOSS OF PROFITS, RENTAL OR SUBSTITUTE EQUIPMENT OR ANY OTHER COMMERCIAL LOSS.

If a problem develops with the product during the warranty period, contact the **KODIAK MFG.**, **INC.** dealer form whom you purchased this product.

Warranty claims are completely at the discretion of KODIAK MFG., INC. Any work performed on mowers prior to notification to KODIAK WARRANTY DEPARTMENT will be Void of warranty.

