## Installation Instructions



# Flip Reel Conversion Kit

HCC, Inc. 1501 1st Avenue Mendota, IL 61342 815-539-9371 www.hccincorporated.com

## **Safety**

Most work related accidents are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing potentially hazardous situations before an accident occurs. As you install the Flip Reel Conversion Kit you must be alert to potential hazards. You should also have the necessary training, skills, and tools to perform this installation properly.

Improper installation of this kit could cause the reel to function incorrectly, resulting in a dangerous situation that could result in injury or death.

Do not begin the installation of this kit until you read and understand the information contained in this supplement, as well as the OEM information provided by the manufacturer of the combine/header.



Safety precautions and warnings are provided in this manual and on the product. If these hazard warnings are not heeded, bodily injury or death could occur to you or to other persons.

HCC cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this supplement and on the product are, therefore, not all-inclusive. If an installation technique not specifically recommended by HCC is used, you must satisfy yourself that it is safe for you and for others. You should also ensure that the combine or header will not be damaged or be made unsafe by the installation method that you choose.

The information, specifications, and illustrations in this supplement are based on the information that was available at the time this material was written and can change at any time.

**NOTE**: In addition to this instruction sheet you should also to refer to the OEM service manual for specific disassembly and assembly procedures.

## **Safety Alert Symbols**



The safety alert triangle means Attention! Become Alert! Your Safety is Involved.

Hazards are identified by the "Safety Alert Symbol" and followed by a signal word such as "DANGER", "WARNING", or "CAUTION".

## A DANGER

**DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.

## **AWARNING**

**WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

## **ACAUTION**

**CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

#### IMPORTANT NOTICE

Indicates that equipment or property damage can result if instructions are not followed.

## **Safety Icon Nomenclature**



Read the manual



Eye protection



Adequate support



Multiple persons required



Turn off equipment



Protective guards



Safety alert symbol



Slipping injury



Tripping injury

## **General Safety**

## $oldsymbol{\Lambda}$ Warning



To avoid personal injury or death, carefully read and understand all instructions before attempting to install the Flip Reel Conversion

Kit. Do not operate or work on a machine unless you read and understand the instructions and warnings in this and all other applicable manuals. Contact HCC if any of the instructions provided are unclear or not understood. Proper care is your responsibility. Always follow all State and Federal health and safety laws and/or local regulations.



To avoid eye injury, always wear protective glasses. Make sure no one can be injured by flying objects or debris when using tools

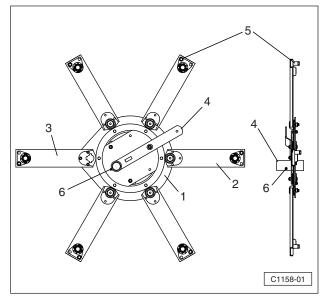
or working on a machine.



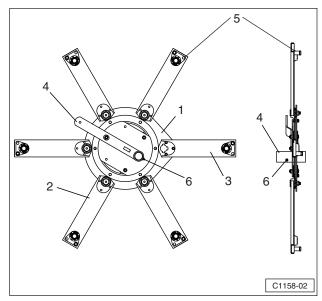
Personal injury can result from slips or falls. DO NOT leave tools or parts laying around the work

area, and clean up all spilled fluids immediately.

## **Nomenclature**



Left-Hand Assembly



Right-Hand Assembly

Flip Reel Conversion Kit					
Item	Description	Qty <sup>1</sup>			
1	Eccentric End Assembly	1			
2	Pivot Arm Assembly	5			
3	Fixed Arm Assembly	1			
4	Eccentric Roller Frame Assembly	1			
5	Stop Bolt Assembly	6			
6	Zerk Fitting	2			

<sup>&</sup>lt;sup>1</sup> Quantity per each left-hand or right-hand flip reel assembly.

#### Introduction

The Flip Reel Conversion Kit is designed to work with HCC tube type reels built since 1990, and improves performance by eliminating crop wrapping around the bat tubes.

Installation involves removing the existing reel end supports and installing the Flip Reel Conversion Kit.

Completely read and understand these instructions before beginning the installation. In addition you will need to refer to the OEM service manual for certain disassembly and assembly procedures.

#### IMPORTANT NOTICE

Installation of the left-hand and right-hand assemblies is based on a point of view as seen from inside the operators cab.

### Installation

## **A CAUTION**



Stop the engine, remove ignition key, and engage the parking brake before leaving the



If the header needs to be raised, make sure it is supported with secure blocking.



To avoid serious injury, make sure any quards or shields removed when installing the Flip Reel Conversion Kit are replaced once the installation is complete.

#### IMPORTANT NOTICE

Save all hardware and fasteners for reassembly. Replace any worn or damaged hardware with new.

## **A DANGER**



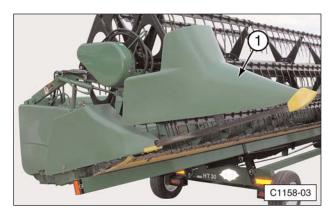
Before starting the removal procedure, make sure the reel is adequately supported using an overhead lifting device or a material

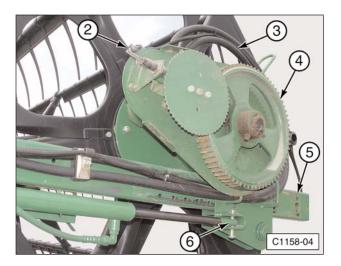
handling device (forklift). Follow all OEM safety recommendations when removing the reel. Reels can weigh between 500 and 1000 pounds and will result in serious injury or death if not adequately supported during removal.

**NOTE**: Taking reference photographs of the combine header and reel before disassembly, can be helpful during kit installation and reassembly.

- 1. Remove the reel from the header using OEM instructions. This may include:
  - Removing divider points (1)
  - Removing electrical connections such as reel speed sensors (2)
  - Disconnecting hydraulic hoses (3)
  - Removing drive gear or pulley (4)
  - Removing stop plates (5).
  - Removing linkages from cylinder rod connections (6)

**NOTE**: Mark the location of each hydraulic hose before disassembly. This will ensure the proper rotation of the reel when the hoses are reinstalled.





(1) Divider Points.(2) Reel Speed Sensor.(3) Hydraulic Hoses.(4) Drive Gear or Pulley.(5) Stop Plate.(6) Cylinder Rod Connections.

#### IMPORTANT NOTICE

Plug or cap the hydraulic connections of the hoses and/or motor to prevent contamination of the hydraulic system.



- 2. Securely attach a lifting device to the reel.
- 3. Remove the reel from the header reel arms.
- **4.** Place the reel on support stands capable of holding at least 1000 lbs. each.

## **A DANGER**



Inadequate support stands could collapse, causing serious injury or death. Always use support stands with the proper weight rating.

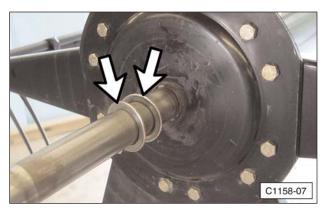
5. One at a time, remove the left-hand and right-hand end brackets and end shield eccentric assemblies. Remove the end bracket(s) from end shield(s). Refer to the OEM service manual for proper procedures and instructions.

## **A CAUTION**

The end shield and bracket assembly are heavy and can cause bodily injury, if not removed properly. Use an overhead lifting device or two people to remove the end shield.



**NOTE:** When removing the end shield from the end of the reel, be careful not to lose the thrust washer(s) (quantities may vary per reel size). These thrust washers must be saved and installed with the new flip reel eccentric assembly for proper operation of the reel.



- **6**. The new flip reel eccentric assemblies come pre-assembled. Install a new left-hand or right-hand assembly on the reel.
- 7. Install the previously removed end bracket on the installed flip reel eccentric assembly.

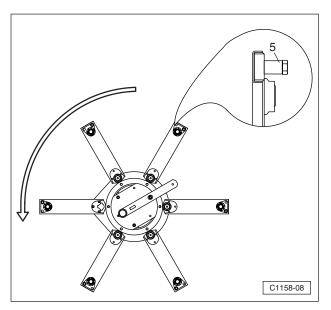
#### IMPORTANT NOTICE

When installing the flip reel eccentric assemblies, the fixed arm on each end of a double eccentric reel MUST be attached to the same bat tube.

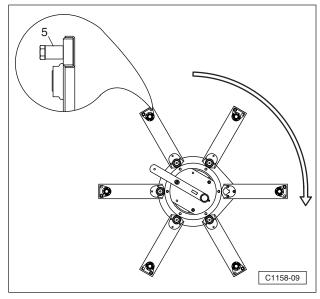
**8**. Repeat Step 5 through Step 7 to assemble the opposite end of the reel.

#### IMPORTANT NOTICE

A stop bolt (5) on each flip reel arm prevents the tine tubes from rotating forward. Make sure the stop bolts are on the "leading edge" of the eccentric assembly arms, based on the direction of reel rotation.



Left-Hand Flip Reel Eccentric Assembly. (5) Stop Bolt.



Right-Hand Flip Reel Eccentric Assembly. (5) Stop Bolt.

**NOTE**: There may be hardware that is not reused after installation of the new Flip Reel Conversion Kit. This hardware is not needed and may be discarded.

**9**. Install the reel back on the header. Refer to the OEM service manual for proper procedures and instructions.



## **Final Assembly**

- **1.** Install the components removed in Step 1, including the divider points, if necessary.
- 2. Set the pitch adjustment to suit crop conditions.
- **3.** Grease the eccentric tube Zerk fitting (6) at both ends of the reel shaft.
- **4.** Adjust the cutter-bar-to-tine distance, as per manufacturer's recommendation.

## IMPORTANT NOTICE

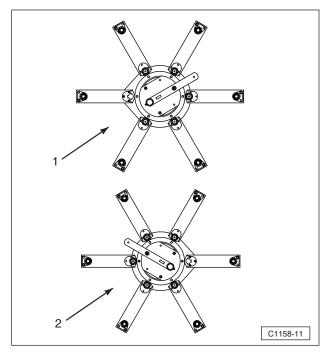
Failure to make proper adjustments could result in cutting off the tips of the plastic tine fingers.

**5**. Check and adjust the reel fore/aft position as per manufacturer's recommendation.

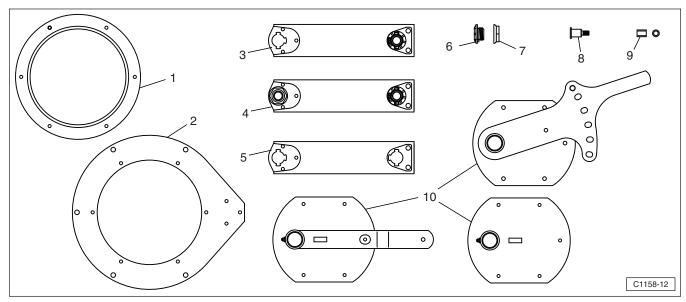
#### IMPORTANT NOTICE

Failure to make proper adjustments could result in the reel contacting the auger, causing damage.

## **Parts List**



	Flip Reel Conversion Kit	
1	Left-Hand Eccentric Flip Reel Assembly	1
2	Right-Hand Eccentric Flip Reel Assembly	1



Flip Reel Conversion Kit

Item	Part Number	Description	Item	Part Number	Description
1	480750	Eccentric Control Ring	6	243720	Eccentric Bearing
2	483411	Eccentric Arm Ring	7	243721	Eccentric Bearing Nut
3	784249	Fixed Arm Assembly	8	204800	Shoulder Bolt
4	784250	Pivot Arm Assembly	9	483440	Stop Spacer
5	784251	Eccentric Arm	10	_	Eccentric Roller Frame Assembly

## HCC, inc.

1501 1st Avenue – Mendota, Illinois 61342 (815) 539-9371 Fax (815) 539-3135

#### LIMITED WARRANTY

HCC, inc. warrants each new HCC, inc. product to be free from defects in material and workmanship. This warranty is applicable only for the normal service life expectancy of the product or components, not to exceed 12 consecutive months from the date of delivery of the new HCC, inc. product to the original purchaser.

Genuine HCC, inc. replacement parts and components will be warranted for 90 days from date of purchase, or the remainder of the original equipment warranty period, whichever is longer. There is no warranty for tines.

Under no circumstances will it cover any merchandise or components thereof, which, in the opinion of the company, has been subjected to misuse, unauthorized modifications, alteration, an accident, or if repairs have been made with parts other than those obtainable through HCC, inc.

Our obligation under this warranty shall be limited to repairing or replacing, free of charge to the original purchaser, any part that, in our judgment, shall show evidence of such defect, provided further that such part shall be returned within thirty (30) days from date of failure to HCC, inc., routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.

This warranty shall not be interpreted to render HCC, inc. liable for injury or damages of any kind or nature to person or property. This warranty does not extend to the loss of crops, loss because of delay in harvesting, or any expense or loss incurred for labor, substitute machinery, rental, or for any other reason.

Except as set forth above, HCC, inc. shall have no obligation or liability of any kind on account of any of its equipment and shall not be liable for special or consequential damages. HCC, inc. makes no other warranty, expressed or implied, and specifically, HCC, inc. disclaims any implied warranty of merchantability or fitness for a particular purpose. Some states or provinces do not permit limitations or exclusions of implied warranties or incidental or consequential damages, so the limitations or exclusion in this warranty may not apply.

This warranty is subject to any existing conditions of supply which may directly affect our ability to obtain materials or manufacture replacement parts.

HCC, inc. reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligation to owners of units previously sold.

No one is authorized to alter, modify, or enlarge this warranty nor the exclusion, limitations, and reservations.

Effective with products delivered to original user on or after January 1, 2006

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