



Bundle, Scraper Update

RC101745

Parts Listing Installation Instructions



Please retain this document for future reference.

RC101744 Installation Instructions
Rev A (6 March 2017)
www.RCIengineering.com

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1. Contents of Bundle

1.1 Parts Listing

Note: For service parts, see your local dealer.

Part Number	Part Name	Qty	Notes
RC101554	Carrier, Roller	1	
RC101557	Scraper	1	
RC902240	SCREW, 1/4-20 X 1/2" BO FLANGE SOCKET HEAD CAP	8	
RC900271	Bolt, 1/4-20 x 2 Gr 8 YZ Hex	2	
RC900575	Nut, 1/4-20 YZ Nylock	2	
RC101741	Weldment, Scraper Support	1	
RC101553	Scraper	1	
RC101549	Shield	2	
RC101744	Instructions, Installation	1	

These parts have been incorporated in production for s/n 1074 and above.

2. Service Information

Purpose of Bundle

This bundle is intended to improve the trash handling capability of the scrapers inside each belt frame for corner conditions. The scrapers will close the gap to the roller and provide a sharper edge for ease of trash removal.

IMPORTANT:

1/ Follow all safety precautions as printed in the RCI 316M Operator Manual and John Deere W200/R450/500R/995 Operator Manual.

CAUTION: To help prevent personal injury caused by unexpected movement, be sure to service the machine on a level surface.

3.0 Installation Instructions

3.1 Prepare the Machine

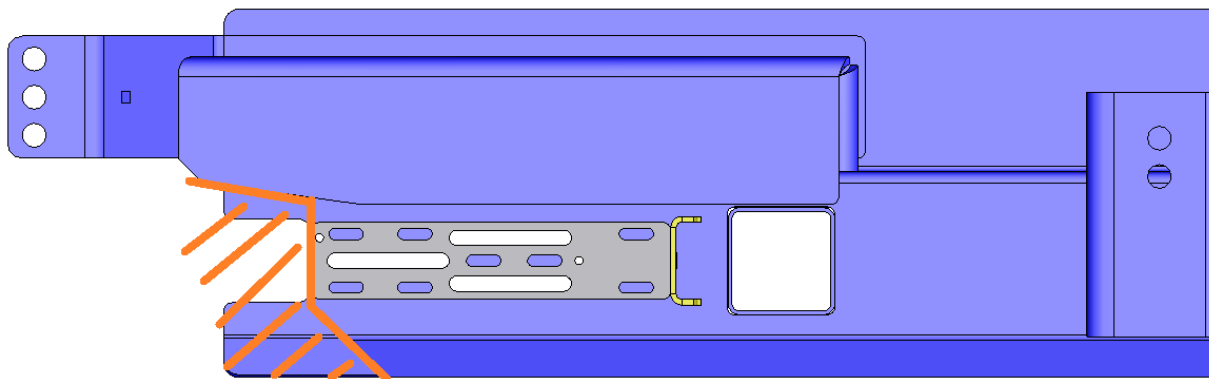
Note: Both conveyors may remain installed during the update process.

Rest the attachment and platform to a lowered position.

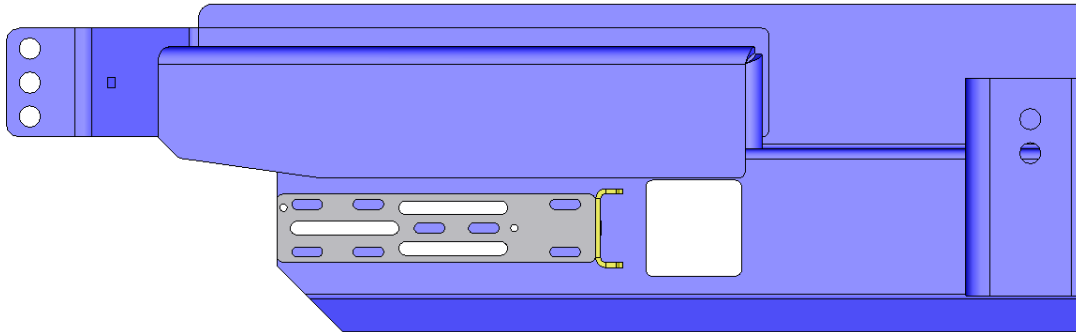
Shut off the engine, remove the key, and tag the unit accordingly.

3.2 Front Conveyor Parts Installation

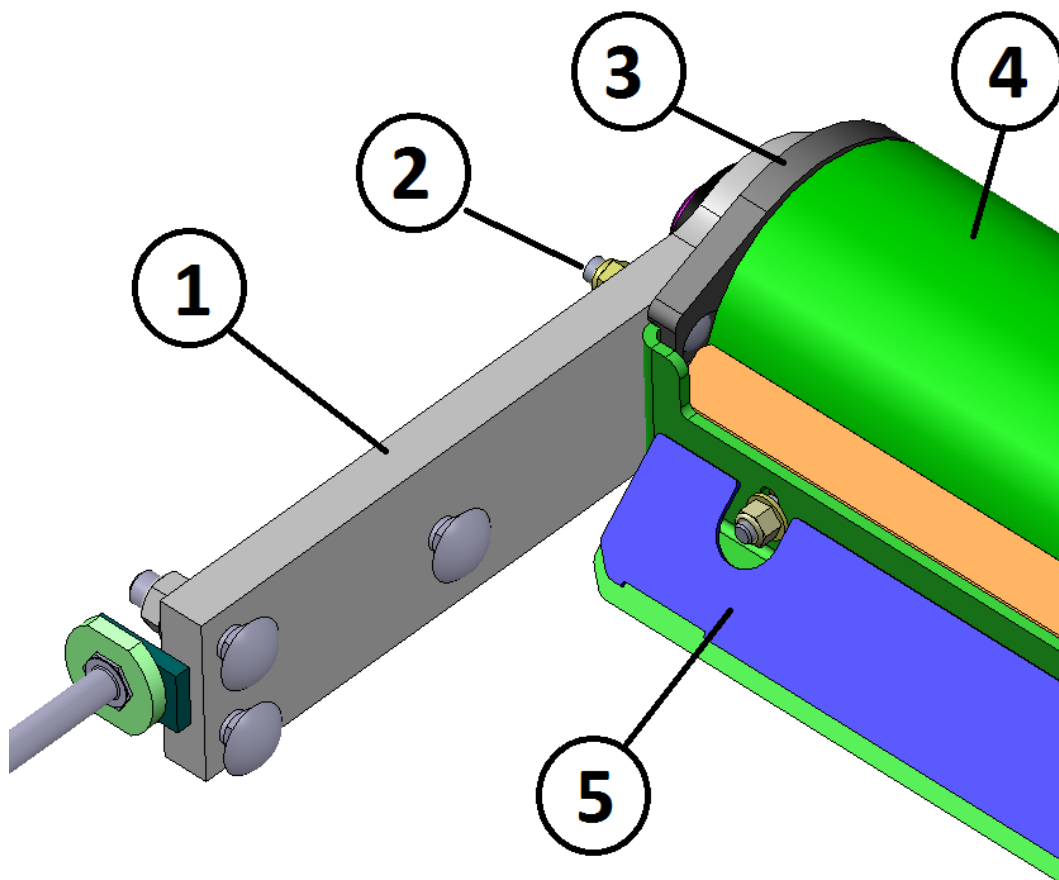
- A. Remove front conveyor belt tension.
- B. Remove front conveyor belt.
- C. Remove three carriage bolts from each side of bearing carrier at front roller (tensioner).
- D. Remove front roller (tensioner) from frame along with bearing carriers.
- E. Remove front roller scraper. Retain all hardware.
- F. Remove scraper from support. Retain all hardware.
- G. Modify front conveyor frame by cutting out area indicated below on both sides. Lower angle cut is 45 degrees.



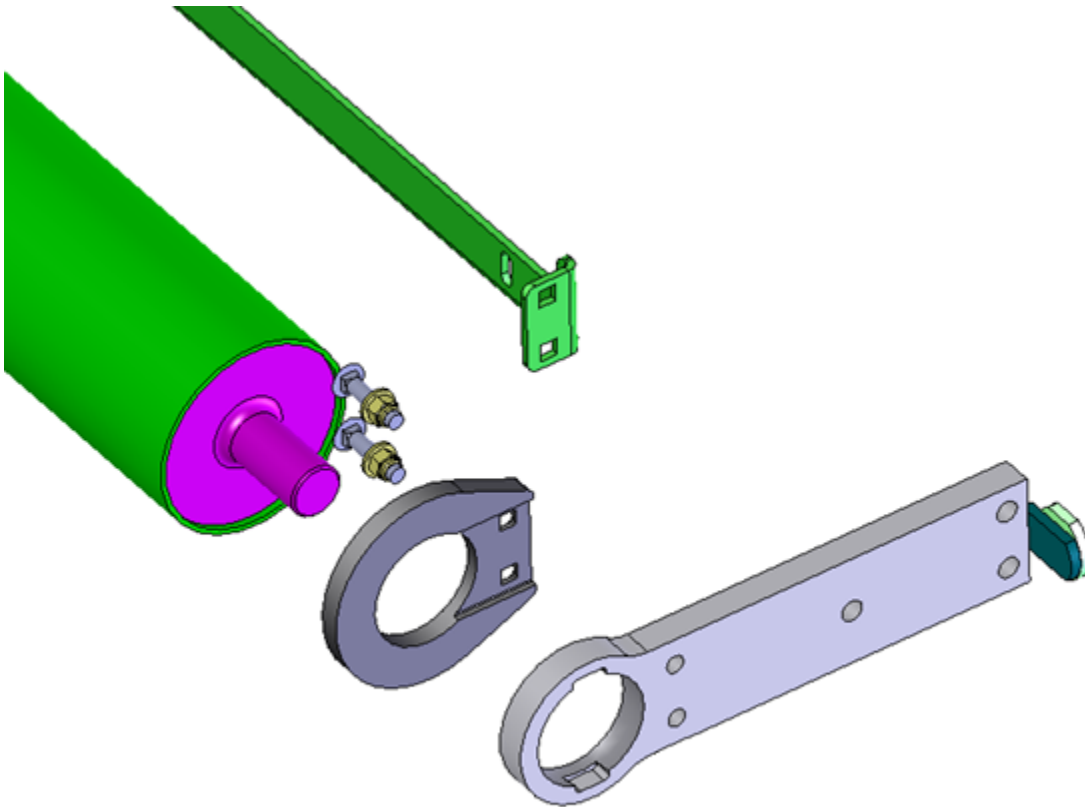
- H. End result should look like this. Grind and radius all edges and corners so there are no sharp edges to hook crop.



- I. Install new scraper support and Delrin (Black Plastic) shields at the roller with the bearing carriers. Do not tighten the bearing lock collars at this time.



Key 1 – Bearing Carrier Key 2 – Longer Carriage Bolts (provided)
Key 3 – Delrin Insert Key 4 – Roller – Ref Key 5 – Scraper Support



- J. Repeat assembly and mirror for opposite side. Remember, do not tighten the lock collars on the bearings.
- K. It is a tight fit to put the Delrin parts over the roller shafts. If hardware is left loose and the lock collar is not installed on the bearing, it is possible to shift the roller on the assembly to install the parts. The best approach is to assemble the scraper support around the roller with the Delrin parts and the carriage bolts, then attach the bearing carriers at the ends.
- L. Install roller and carrier assembly to the frame.

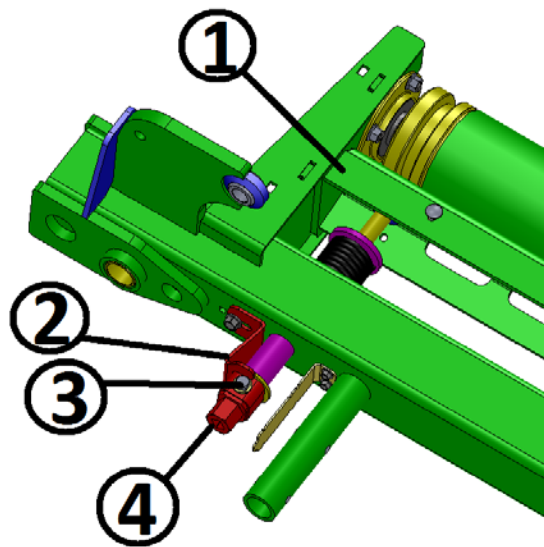
IMPORTANT: Remember to leave the three (3) carriage bolts slightly loose at each bearing carrier such that the carrier can slide along the frame during operation. Washers should be able to be rotated by hand. Do not overtighten as this can bow the scraper support out.

- M. Retract the assembly as far as possible on each side.

- N. Center the roller between the Delrin parts. Then install the bearing lock collar on the RH side only (non v-groove end) to secure the gap between the Delrin and the roller. When properly installed, there should be .040" to .070" of gap between the Delrin part at the roller.
- O. Install the scraper at the scraper support using old hardware.
- P. Set to roller such that the scraper is as close to the roller as possible. It is permissible to rub the roller in some spots for some of the rotation due to run out of the roller. It should not rub the roller during a complete revolution.
- Q. Install the belt. Tension properly.
- R. Install the bearing lock collar on the LH side. Tighten collar in the normal belt rotation direction.

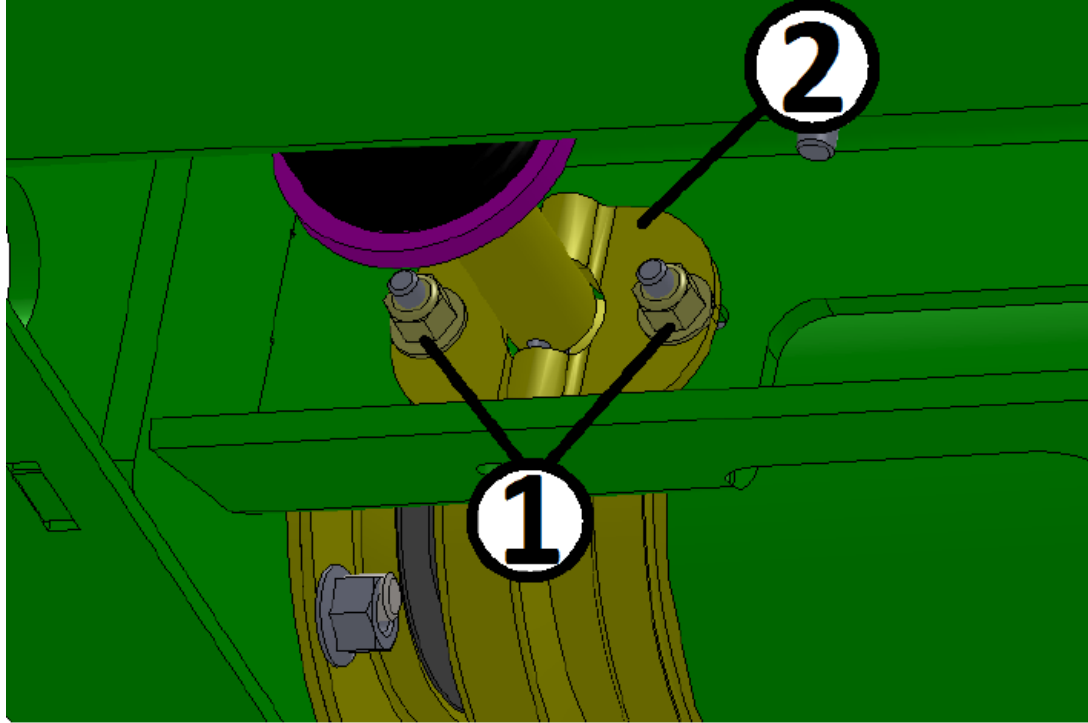
3.3 Cross Belt Parts Installation

- A. Release tension on cross belt.
- B. Remove belt.
- C. Remove lock plate, cross bolt2 (2), and hex adjusters (2) from assembly.



Key 1 – Roller Carrier Key 2 – Lock Plate
Key 3 – Cross Bolt Key 4 – Hex Adjuster

- D. Remove carrier assembly from frame by sliding out of the frame.
- E. Remove scraper. Retain hardware.
- F. Remove retainers over roll pins.

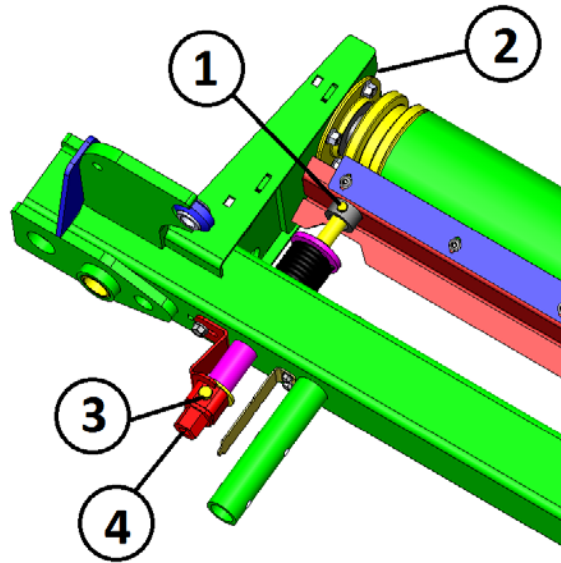


Key 1 – Hardware Key 2 – Retainer

- G. Remove bearing lock collar at non-v-groove end of roller.
- H. Remove all bearing bolts from carrier frame.
- I. Install roller and bearings on new carrier frame.
- J. At threaded rod, drill out roll pin hole to ¼". (If there is insufficient material, turn rod 90 degrees and drill a new hole with a slightly larger distance to the end of the rod.)
- K. Install new carrier assembly in belt frame.
- L. Install rods into pockets and secure with ¼" bolts provided.

IMPORTANT: DO NOT TIGHTEN THE BOLTS COMPLETELY. THEY MUST BE ALLOWED TO PIVOT IN THE HOLE AND TILT ON AN ANGLE FOR PROPER BELT TENSION. ONLY INSTALL NUTS SUCH THAT THE THREADS PASS THROUGH THE NYLON.

M. Install hex adjuster and cross bolt.



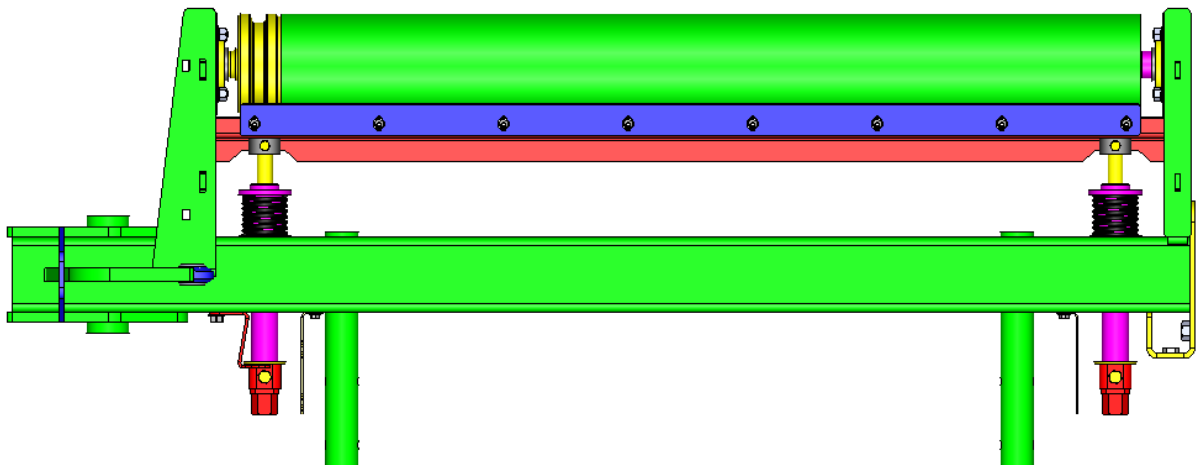
Key 1 – ¼" Bolt Location (Do not tighten completely)

Key 2 – New Carrier Frame

Key 3 – Cross Bolt Key 4 – Hex Adjuster

N. Install new scraper using old hardware.

IMPORTANT: Set to roller such that the scraper is as close to the roller as possible. It is permissible to rub the roller in some spots for some of the rotation due to run out of the roller. It should not rub the roller during a complete revolution. Notches should align with cutout on support at RH side so that the scraper does not interfere with tensioner. The scraper is reversible.



Scraper Installation

O. Install belt.

P. Tension belt. Install lock collars.

3.4 Start-Up

IMPORTANT:

With this change, it is important to note that the scrapers will make a squeaking sound during initial startup.

Once installed, run the merger at wide open throttle and full belt speed in the lowered position for 15 to 20 minutes, or until the squeaking noise subsides, whichever occurs first.

Please contact RCI with any questions.