



INSTRUCTIONS 360 CHAINROLL™

JOHN DEERE 600 SERIES



INSTRUCTIONS

360 CHAINROLL

JOHN DEERE 600 SERIES (ALL MODELS)

PARTS OVERVIEW

360 CHAINROLL ROW UNIT KIT - JD 600 SERIES 2012+ (PART NO. 451101)

- + Left 360 CHAINROLL (Part No. 450101)
- + Right 360 CHAINROLL (Part No. 450111)
- + (2) M20 Flange Nuts (All Models)

360 CHAINROLL ROW UNIT KIT - JD 600 SERIES 2008-2012 (PART NO. 451201)

- + Left 360 CHAINROLL (Part No. 450201)
- + Right 360 CHAINROLL (Part No. 450211)
- + (2) M20 Flange Nuts (All Models)
- + (8) M6 Cap Screws (2008-2012)

360 CHAINROLL RESIDUE KNIVES (PART NO. 450230)

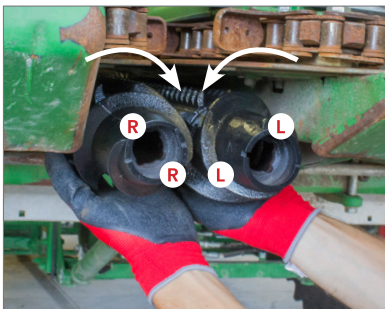
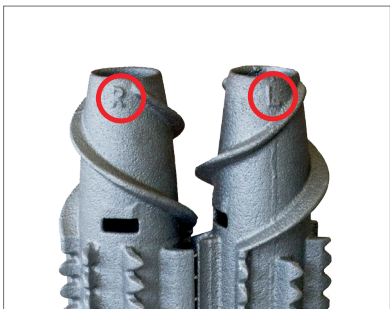
- + 360 CHAINROLL Residue Knife Left (Part No. 450240)
- + 360 CHAINROLL Residue Knife Right (Part No. 450250)

NOTE: IF YOU PURCHASED THE 360 CHAINROLL RESIDUE KNIFE CHOPPING HEAD KIT (PART NO. 450260) THAT WILL INCLUDE THE FOLLOWING:

- + 360 CHAINROLL Residue Knife (Chopping Head) Left (Part No. 450280)
- + 360 CHAINROLL Residue Knife (Chopping Head) Right (Part No. 450270)

ROLL ORIENTATION

IMPORTANT: Left ("L") and Right ("R") are defined from the perspective of the operator's seat. Make sure the rolls are properly aligned and intermeshed when installing them onto the drive shafts by aligning the yellow timing marks as shown in the figure below. Once installed, if the rolls are making contact with each other, remove rolls and rotate the shafts 90 degrees and reinstall the rolls. Repeat this process until the rolls do not make contact with each other. If the rolls continue to make contact with each other after rotating the shafts a full 360 degrees, contact your John Deere® dealer to have the shaft alignment inspected.



QUESTIONS

Call our Product Support team at **888-512-4890**.

I. OEM STALK ROLL REMOVAL JOHN DEERE 600 SERIES (ALL MODELS)

PART 1: REMOVE RESIDUE KNIVES

TOOLS AND PARTS REQUIRED:

+ 18mm Socket

FIGURE 1

STEP 1 Remove the four M12 Flange Head Cap Screws.

NOTE: Retain screws for installation of new residue knives.

STEP 2 Repeat Step 1 for the opposite side.

PART 2: REMOVE DRIVE SHAFT NUTS

TOOLS AND PARTS REQUIRED:

+ 30mm (1-3/16") Socket

FIGURE 2

STEP 1 Remove M20 Flange Nut and rounded washer from drive shaft.

NOTE: Retain washer for installation of new rolls, inspect for corrosion and damage. Replace as necessary.

STEP 2 Repeat Step 1 for adjacent roll.

PART 3: REMOVE OEM STALK ROLLS

TOOLS AND PARTS REQUIRED:

+ 360 CHAINROLL Puller or Equivalent

STEP 1 Orient old stalk rolls by manually turning the header until pulling features are facing towards stripper plate gap. Improve accessibility by opening up stripper plates, if needed.

FIGURES 3 & 4

STEP 2 Ensure that T-handle is fully retracted, then attach puller arms to pulling features on the castings, as shown. **Reference Puller Insert, Page 9.**

STEP 3 Apply initial tension on puller by tightening the 1-1/2" hex feature.

STEP 4 Extend hydraulic puller by turning T-handle, as shown.

NOTE: If necessary use the striking lug for added force after ram is fully extended.

STEP 5 Repeat steps 1-4 for adjacent roll.



FIGURE 1



FIGURE 2



FIGURE 3



FIGURE 4

IIa.

360 CHAINROLL INSTALLATION

JOHN DEERE 600 SERIES (2012+)

PART 1: INSTALL 360 CHAINROLL

TOOLS AND PARTS REQUIRED:

- + Anti-Seize (Not Included)
- + 360 CHAINROLL Left
- + 360 CHAINROLL Right

FIGURE 5

NOTE: Remove all dirt and corrosion from shaft taper, splines and threads. Inspect shaft for wear, damage and straightness. Replace as necessary.

FIGURE 6

STEP 1 Apply anti-seize to the tapered portion of the drive shafts.

FIGURE 7

STEP 2 Orient 360 CHAINROLL such that the opposed facing flutes [cutting and retaining] are contained within the adjacent facing flutes [cutting and chaining].

Reference cutaway in Figure 7.

STEP 3 Use one hand to support the 360 CHAINROLL on the bottom side. With the other hand, grip the auger end of the 360 CHAINROLL.

FIGURE 8

STEP 4 Install both rolls simultaneously onto the drive shafts, taking note of the shaft keyway orientation and **ensuring that the cutting flutes remain interlocked.**

STEP 5 Recalling the orientation of the shaft keyways, use the machined pattern located on the inside of the nose cone to align the keyways. Continue to slide the rolls back onto the drive shafts until fully seated and the end of the drive shaft is flush with the end of the nose cone.



FIGURE 5



FIGURE 6



FIGURE 7

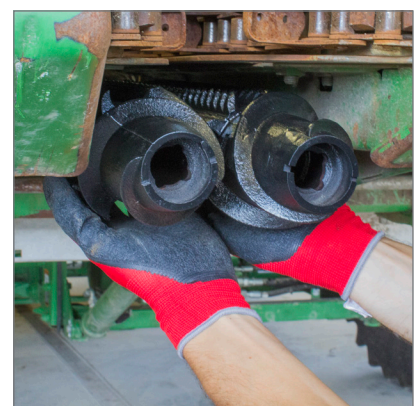


FIGURE 8

IIa.

360 CHAINROLL INSTALLATION

JOHN DEERE 600 SERIES (2012+)

PART 2: TIGHTEN 360 CHAINROLL

TOOLS AND PARTS REQUIRED:

- + 30mm (1-3/16") Socket
- + (2) M20 Flange Nuts
- + Torque Wrench
- + Breaker Bar

NOTE: IMPORTANT: Ensure that the cutting flutes remain intermeshed throughout installation.

FIGURES 9 & 10

STEP 1 Install the washers on the drive shafts flat face out.

STEP 2 Install the provided M20 Flange Nuts onto the drive shafts.

NOTE: Place a wooden block between 360 CHAINROLL to prevent rotation during torquing.

STEP 3 Tighten the M20 Flange Nut to 100ft-lbs (135Nm).

NOTE: Provided M20 Flange Nuts can be reused after torquing if necessary.

STEP 4 IMPORTANT: Manually turn 360 CHAINROLL a full revolution to ensure that no interferences exist.

STEP 5 Using a breaker bar rotate the M20 Flange Nut an additional 60 degrees.

PART 3: REINSTALL RESIDUE KNIVES

TOOLS AND PARTS REQUIRED:

- + 18mm Socket

STEP 1 Install new 360 CHAINROLL Residue Knives or reworked OEM knives using the (4) M12 Flange Head Cap Screws. Start from the rear and do not fully tighten.

NOTE: Call your 360 Yield Center Dealer or 360 Yield Center Product Support Team for the Residue Knife Template.

FIGURE 11

STEP 2 Adjust spacing of the residue knife to approximately 1/4" clearance from the 360 CHAINROLL. Tighten the first and third bolts.

FIGURE 12

STEP 3 Tighten the remaining bolts.

STEP 4 Repeat steps 1 through 3 for the opposite side.

+ **JOHN DEERE 600 SERIES (2012+)**
360 CHAINROLL INSTALLATION COMPLETE



FIGURE 9



FIGURE 10

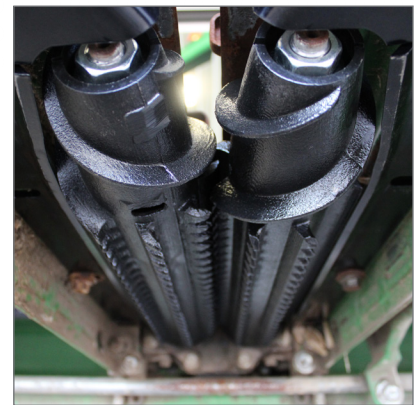


FIGURE 11



FIGURE 12

IIb.

360 CHAINROLL INSTALLATION

JOHN DEERE 600 SERIES (2008-2012)

PART 1: INSTALL 360 CHAINROLL

TOOLS AND PARTS REQUIRED:

- + 360 CHAINROLL Left
- + 360 CHAINROLL Right

FIGURE 13

NOTE: Remove all dirt and corrosion from shaft taper, splines and threads. Inspect shaft for wear, damage and straightness. Replace as necessary.

FIGURE 14

STEP 1 Orient 360 CHAINROLL such that the opposed facing flutes [cutting and retaining] are contained within the adjacent facing flutes [cutting and chaining].

Reference cutaway in Figure 14.

STEP 2 Use one hand to support the 360 CHAINROLL on the bottom side. With the other hand, grip the auger end of the 360 CHAINROLL.

FIGURE 15

STEP 3 Install both rolls simultaneously onto the drive shafts, taking note of the shaft keyway orientation and **ensuring that the cutting flutes remain interlocked.**

STEP 4 Recalling the orientation of the shaft keyways, use the machined pattern located on the inside of the nose cone to align the keyways. Continue to slide the rolls back onto the drive shafts until fully seated and the end of the drive shaft is flush with the end of the nose cone.



FIGURE 13

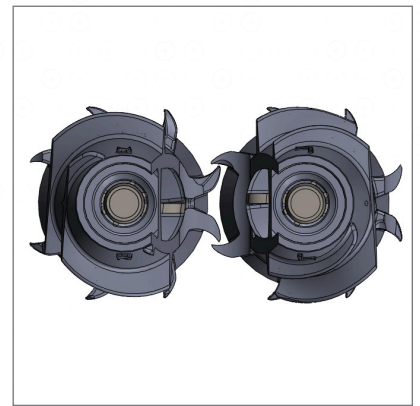


FIGURE 14



FIGURE 15

IIb.

360 CHAINROLL INSTALLATION

JOHN DEERE 600 SERIES (2008-2012)

PART 2: TIGHTEN 360 CHAINROLL

TOOLS AND PARTS REQUIRED:

- + 30mm (1-3/16") Socket
- + (2) M20 Flange Nuts
- + (4) M6 Cap Screws
- + M5 Hex Drive
- + Torque Wrench
- + Breaker Bar

NOTE: IMPORTANT: Ensure that the cutting flutes remain intermeshed throughout installation.

FIGURE 16

STEP 1 Install the washers on the drive shafts flat face out.

STEP 2 Install the provided M20 Flange Nuts onto the drive shafts.

NOTE: Place a wooden block between 360 CHAINROLL to prevent rotation during torqueing.

STEP 3 Tighten the M20 Flange Nut to 90ft-lbs (122Nm).

NOTE: Provided M20 Flange Nuts can be reused after torqueing if necessary.

STEP 4 IMPORTANT: Manually turn 360 CHAINROLL a full revolution to ensure that no interferences exist.

STEP 5 Using a breaker bar rotate the M20 Flange Nut an additional 60 degrees.

FIGURE 17

STEP 6 Install (4) M6 Cap Screws and torque to 18ft-lbs (24Nm).

PART 3: REINSTALL RESIDUE KNIVES

TOOLS AND PARTS REQUIRED:

- + 18mm Socket

STEP 1 Install new 360 CHAINROLL Residue Knives or reworked OEM knives using the (4) M12 Flange Head Cap Screws. Start from the rear and do not fully tighten.

NOTE: Call your 360 Yield Center Dealer or 360 Yield Center Product Support Team for the Residue Knife Template.



FIGURE 16



FIGURE 17

IIb.

360 CHAINROLL INSTALLATION

JOHN DEERE 600 SERIES (2008-2012)

FIGURE 18

STEP 2 Adjust spacing of the residue knife to approximately 1/4" clearance from the 360 CHAINROLL. Tighten the first and third bolts.

FIGURE 19

STEP 3 Tighten the remaining bolts.

STEP 4 Repeat steps 1 through 3 for the opposite side.

+ JOHN DEERE 600 SERIES (2008-2012)
360 CHAINROLL INSTALLATION COMPLETE

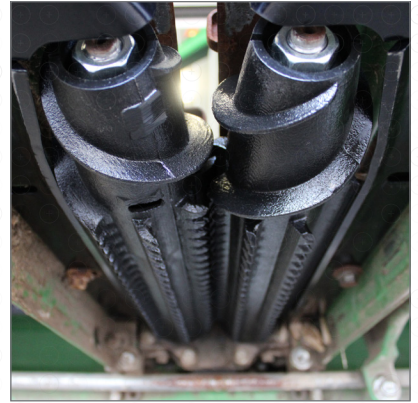


FIGURE 18



FIGURE 19

PULLER INSERT

JOHN DEERE 600 SERIES (2012+)

