

## Contact Drive Wheel Update Kit

## **Yield-Pro Ground Drive Planters**

Used with:

• Pre-2007 12- and 16-row Yield-Pro Planters with ground drive

# **General Information**

These instructions explain how to install the Contact Drive Wheel Update Kit. This feature is now standard on new products, and is available as an upgrade to provide more consistent ground-drive performance in unusually challenging conditions.

These instructions apply to:

401-462A Contact Drive Wheel Update Kit

## **Before You Start**

Each kit converts an entire planter. Inventory the contents per the "Parts List" on page 4. You may want to check tire pressure on the new tire before installation.

Raise and fold the planter. Install lift cylinder locks

Note: Although this update can be performed with the planter unfolded, it is much more complicated that way. These instructions assume a folded planter.

If necessary, move the implement to a dry well-lighted location suitable for disassembly.

Park and secure the implement. Secure the tractor if left connected. Disconnect any hydraulic and electrical power to the implement.

"Left" and "Right" are facing in the direction of machine travel.

Have the following tools at hand:

Basic hand tools (including an assortment of roll-pin punches)

Also have an assistant for the wheel assembly portion of this upgrade. Removing the old wheel and installing the new wheel is not easily done by one person.

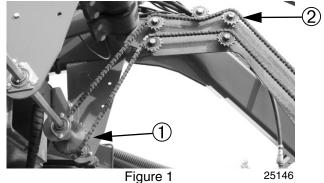
# Installation

# **Install New Sprocket**

The contact drive wheel sprocket ① to be replaced is located at the center of the planter, beneath the peak of the overhead frame tubes.

Refer to Figure 1

1. Loosen idler ②, and lift the drive chain off the old sprocket ①.



Remove Old Sprocket

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#### Refer to Figure 2

- Drive out the roll pin ① that attaches the right side drive shaft U-joint ② to the center drive shaft ③. Save the pin, unless also performing the drive shaft update.
- Slide the U-joint ② off the right end of the center shaft ③.
- 4. If a second pin ④ is installed outside the bearing, remove it as well. Save this pin.

#### Refer to Figure 3

If pins ①② are present at the insides of the center shaft brackets, remove and save them.

#### Refer to Figure 4

- 6. Loosen the set screws ① on the retaining collar ② to the right of the sprocket ③ to be removed.
- Slide the drive shaft 4 to the left, until the locking collar 2, and then the sprocket 3, are off the end of the shaft. Save the locking collar. The old sprocket is not reused.

Note: If it is not possible to slide the drive shaft ④ far enough to remove the collar and sprocket:

- a. Mark the shaft location of the left collar 5
- b. Loosen that collar's set screws 6
- c. Remove the sprocket and right collar (only)
- Slide the new sprocket, and then the locking collar
   onto the shaft. If it was necessary to loosen the left collar <sup>(5)</sup>, re-position it to the mark and tighten its set screws.
- Re-insert the shaft 

   through all bearings and brackets.
- 10. Firmly slide the locking collar ② against the new sprocket. Tighten its set screws.
- 11. Re-install any pins removed in steps 4 and 5.

#### Refer to Figure 1

- 12. Remount the chain.
- 13. Tighten idler  $\ 3\$  (previous page) until there is  $\ 3\$ 4in slack in the longest chain span.
- 14. Skip this next step if also installing the drive shaft update.
- 15. Re-insert the roll pin in the right drive shaft universal joint.

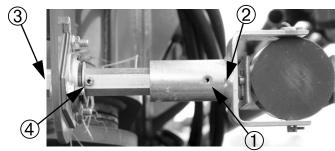
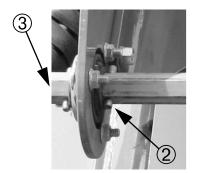


Figure 2
Disconnect Right U-Joint





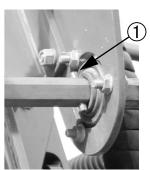


Figure 3 Remove Pins

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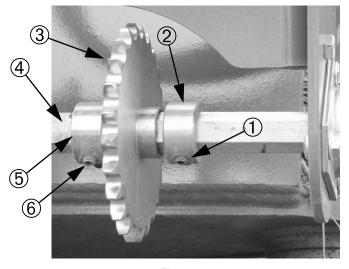


Figure 4 Loosen Collar

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### **Install New Drive Wheel**

Refer to Figure 5

1. Loosen the bolt on idler ①, and remove the chain from sprocket ②.

Refer to Figure 6

- 1. Remove the pin ③ from the inside end of the drive wheel shaft ④. Save the pin.
- 2. Remove three nuts ⑤ attaching the right bearing flangettes to the contact wheel bracket, and remove the bearing assembly ⑥. Save all parts.
- 3. With the assistant supporting the weight of the old wheel assembly, slide the shaft ④ completely out.
- Remove the old wheel assembly. It will be necessary to push it back a bit through the inside bearing mount hole, and angle the other end clear of the bracket plates.

Refer to Figure 7

5. Remove the ½-20 lug nuts ⑦ attaching the old wheel to the hub ⑧. Save the hub, studs and nuts. The old rim and tire are not reused.

Note: The wheel rim and hub are not symmetrical. The stud holes are tapered on the (front) side of the wheel with the valve stem.

- 6. Insert the end of the hub ® with the stud threads into the back side of the new wheel assembly.
- 7. Loosely tighten on a lug nut ⑦, with tapered end toward hub. Repeat for all four holes.
- 8. Tighten all lug nuts ⑦ to 85 ft-lb (115 N-m).

Refer to Figure 6

- Have the assistant position the new wheel assembly on the shaft axis. Orient it for easiest access to the inflation valve.
- 10. Insert the shaft ④ through the wheel hub and through the inside bearing mounting hole.
- 11. Re-install the inside bearing 6.
- 12. Re-install pin 3.

Refer to Figure 5

- 13. Re-mount chain on sprocket ②.
- 14. Slide idler ① into engagement with chain and tighten so that the longest chain span has <sup>3</sup>/8in slack.
- 15. Check and adjust tire pressure to 16 psi.

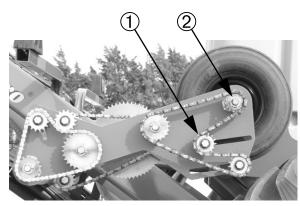


Figure 5 Loosen Outside Idler

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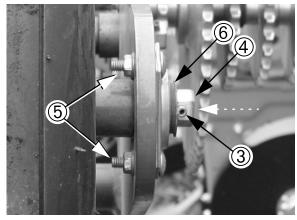
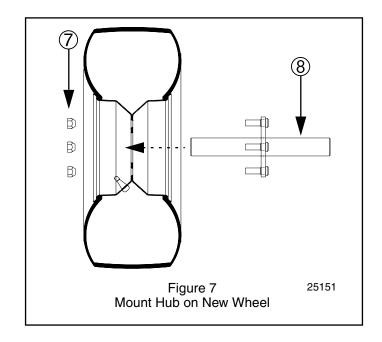


Figure 6 Remove Drive Wheel Shaft

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# **Using the Updated Ground Drive**

The sprocket change in this kit could not entirely compensate for the rate change changes introduced by the new wheel, so do not use previous seed rate manuals. Your implement now performs just like a current production unit, so the latest Great Plains seed rate manual applies. A copy is included in this kit.

## **Maintenance**

## Tire size

Replace worn or damaged tire with this specific tire: Titan International 474318 20X8.00-10 NHS MULTI-TRAC C/S

# Tire pressure

16 psi

# **Parts List**

## 401-462A Contact Drive Wheel Update Kit

Your kit includes:

# Qty. Part No. Part Description

- 1 401-465M This manual
- 1 401-347B MANUAL, SEED RATE, YP12/16
- 1 808-307C SPKT 50C23 X 7/8 HEX BORE
- 1 814-318C TIRE WHL ASM 20X8.00-10 TURF

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