



Opener Stop Update CTA4000HD Air Drill Implements

Used with:

- CTA4000HD-5010
- CTA4000HD-6575
- CTA4000HD-8006



When you see this symbol, the subsequent instruction and warnings are serious - follow without exception. Your life and the lives of others depend on it!

General Information

These instructions explain how to install an opener stop update kit on an existing drill that lacks these stops.

The stops reduce the risk of hose entanglement when the drill is folded.

These instructions apply to an installation of:

Kit	Kit Description
221-644A	CTA4000HD-6 OPENER STOP UPDATE
221-645A	CTA4000HD-7.5-10 OPENER STOPS

One kit updates one drill (several rows on both wings). Drills manufactured in March 2009 or later require no kits.

Drill Model	Kit Compatibility
CTA4000	None - not required on non-HD drills
CTA4000HD	Serial number A1159T or lower

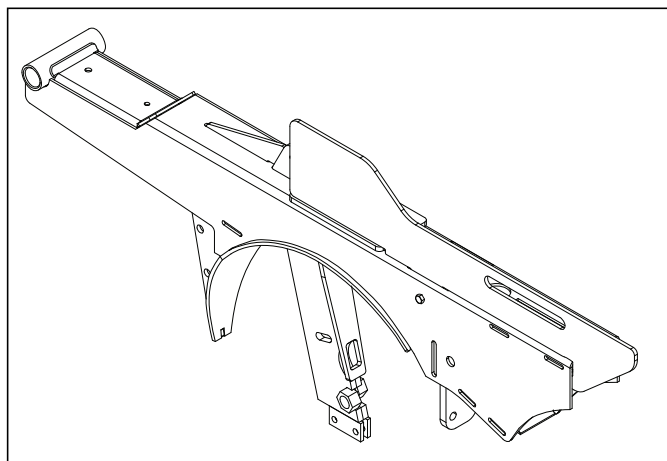


Figure 1
A Stop Installed

29461

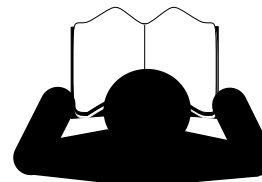
Related Documents

Have the Operator Manual at hand for drill movements.

160-037M Operator, CTA4000HD

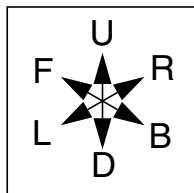
Have the current Parts Manual at hand for parts ID.

160-037M Parts, CTA4000HD



Notations and Conventions

“Left” and “Right” are facing in the direction of machine travel. An orientation rose in the line art illustrations shows the directions of Left, Right, Front, Back, Up, Down.



Call-Outs

- ① to ⑨ Single-digit callouts identify components in the currently referenced Figure or Figures. These numbers may be reused for different items from page to page.
- ⑪ to ⑭ Two-digit callouts in the range 11 to 14 reference new parts from the new parts lists beginning on page 7.

Before You Start

Compatibility

Refer to Figure 2

1. Check the serial number plate of the drill to ensure it is a compatible model, and serial number.

Inventory

2. Make sure all parts are present.

Comprehension

3. Review these instructions. Make sure the installers understand where each part or assembly is installed, and what tools are required for the task.

Note: Illustrations in this manual, based on the parts manuals for this family of drills, may show exploded views that are fully disassembled. Rely on the instructions for required disassembly and reassembly steps.

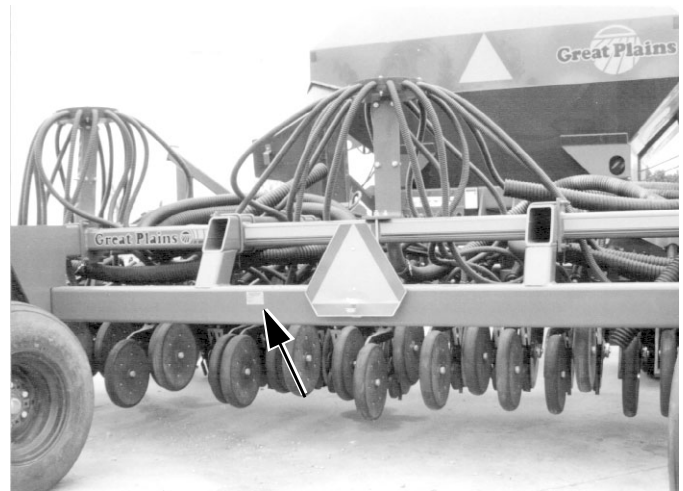


Figure 2
Serial Number Plate

17160

Pre-Assembly Preparation

Tools Required

- suitable tractor for positioning, unfolding and lowering drill
- basic hand tools

Prepare Drill

Work Location

4. Move the drill to a location with:
 - room to unfold it,
 - access to tractor or hydraulic power,
 - adequate illumination, and;
 - clear surface beneath for recovery of any falling or dropped parts - if the surface is not clear, have a tarp or drop cloth available.
5. Fully unfold drill. Completely lower drill and openers.
6. Shut off tractor or hydraulic source.

Install Stops at Rows

Insert Stops in Rows

Refer to Figure 3

Stop plates (12) are installed in the one of the two slots (1) on both sides of the top rear of the opener frame.

Which rows receive plates varies by drill model and whether left or right wing.

Which slot to use (left or right) is specific to the drill model and row. The placement charts call it out as:

- I Inside** Toward drill center. Right slot on left wing.
Left slot on right wing.
- O Outside** Toward wing end. Left slot on left wing.
Right slot on right wing.

Stop plate count varies by kit.

7. Select all of:
 - (12) 121-174D OPENER TRANSPORT STOP PLATE
8. Using the placement chart for your drill (below and on page 4) position each plate (12) in a specified row, with the center tab in the specified opener slot.

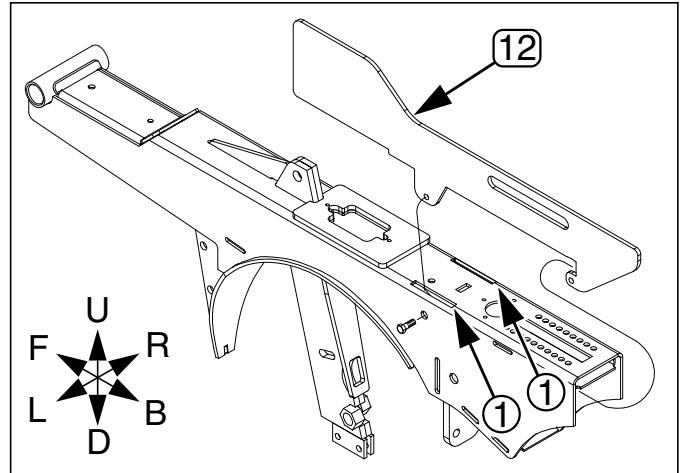


Figure 3
Installing a Stop 29461

CTA4000HD-8006 (6 inch) Placement

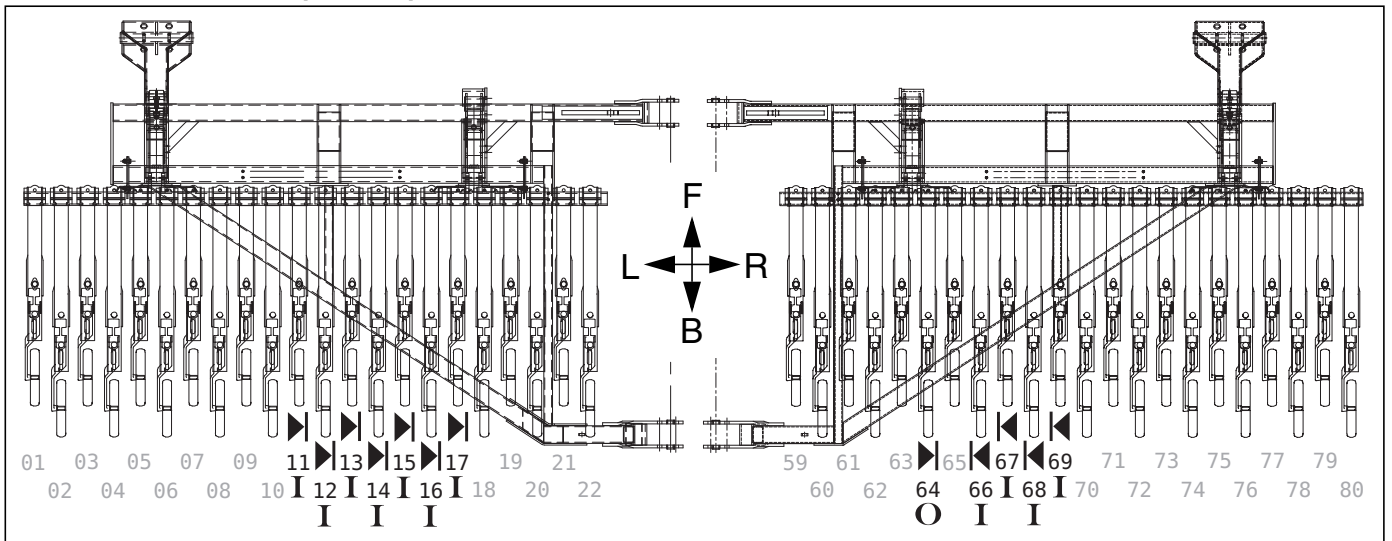


Figure 4
Stop Plate Placement for 6-inch Row Spacing 29459

Left Wing			
Row	Plate Side	Row	Plate Side
11	Inside (right)	15	Inside (right)
12	Inside (right)	16	Inside (right)
13	Inside (right)	17	Inside (right)
14	Inside (right)		

Right Wing			
Row	Plate Side	Row	Plate Side
64	Outside (right)	68	Inside (left)
65	- no plate -	69	Inside (left)
66	Inside (left)	70	- no plate -
67	Inside (left)		

CTA4000HD-6575 (7.5 inch) Placement

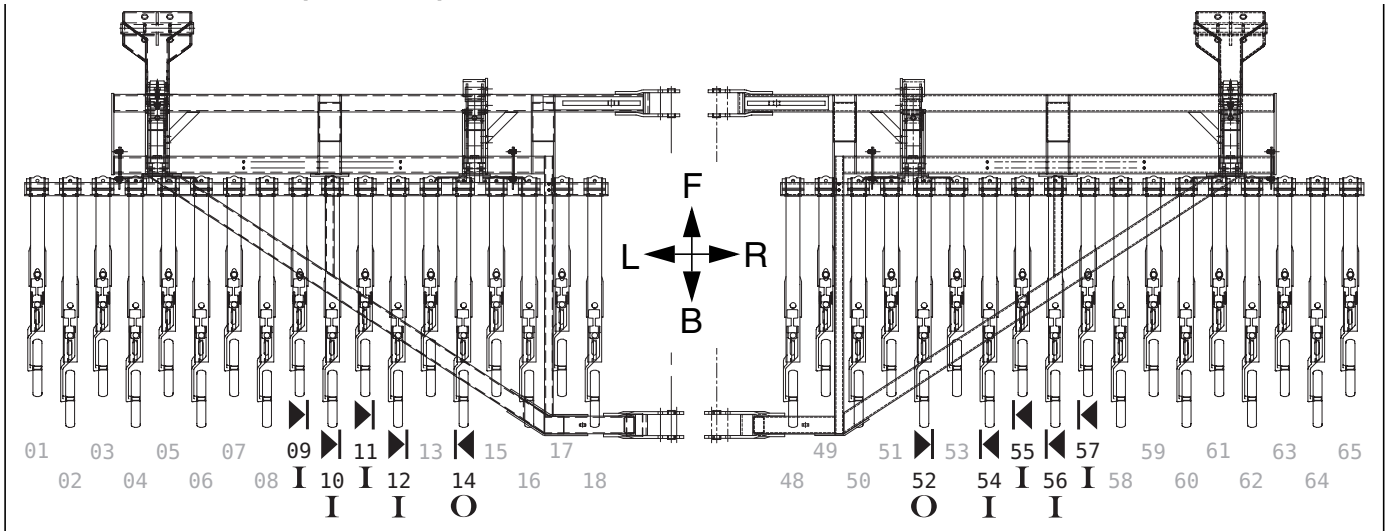


Figure 5

29459

Stop Plate Placement for 7.5-inch Row Spacing

Left Wing			
Row	Plate Side	Row	Plate Side
9	Inside (right)	12	Inside (right)
10	Inside (right)	13	- no plate -
11	Inside (right)	14	Outside (left)

Right Wing			
Row	Plate Side	Row	Plate Side
52	Outside (right)	55	Inside (left)
53	- no plate -	56	Inside (left)
54	Inside (left)	57	Inside (left)

CTA4000HD-5010 (10 inch) Placement

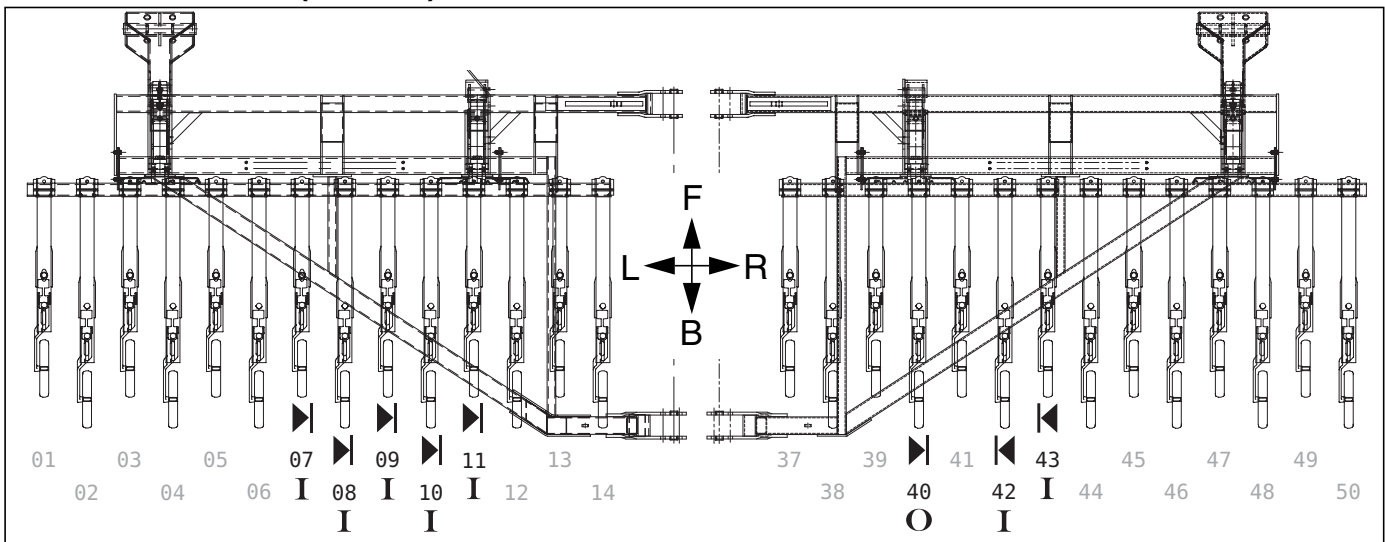


Figure 6

29459

Stop Plate Placement for 10-inch Row Spacing

Left Wing			
Row	Plate Side	Row	Plate Side
7	Inside (right)	10	Inside (right)
8	Inside (right)	11	Inside (right)
9	Inside (right)		

Right Wing			
Row	Plate Side	Row	Plate Side
40	Outside (right)	43	Inside (left)
41	- no plate -	44	Inside (left)
42	Inside (left)		

Fasten Stops to Rows

Refer to Figure 7

9. Select all of:
 - ⑭ 801-025C SCREW HEX 5/16-12X3/4 THD FRM

Insert the screw at the opener frame hole aligned with the stop plate tab hole, from the side of the same slot. Drive the self-tapping screw in to a final torque of:

15 foot-pounds (22 N-m)

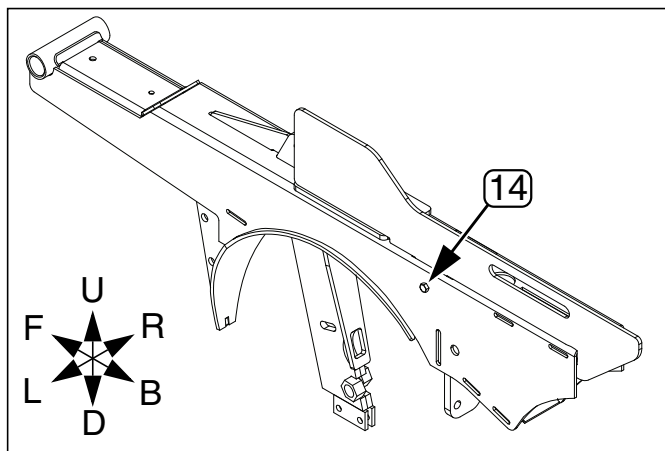


Figure 7
Securing a Stop
29461

Adjust Wing Primary Seed Hose

Primary seed hoses on the wings are re-routed to improve clearance. These are the larger 2½in (6.4cm) diameter hoses from the airbox to the tower inlets (bases). Only Towers 1 (left wing end) and Tower 5 (right wing end) are involved.

Start with Tower 1 (left wing).

Reconfigure Wing Towers

Refer to Figure 8

10. Loosen the hose clamp (not shown) securing the primary hose (not shown) at the tower inlet ②.
11. If the vertical plate of the mount ③ is to drill front, remove the vertical (lower) U-bolts ④ and re-install the mount so the vertical plate is to the back.
12. Loosen the horizontal U-bolts ⑤ securing the tower to the mount.

The tower inlet previously faced forward, perpendicular to the frame tube. Rotate the tower so that the inlet faces along the frame tube toward drill center.

Adjust the vertical position of the tower so that the distance from the top of the frame tube to the bottom of the turret plate is 25in (63.5cm). Re-secure the U-bolts.

13. Repeat step 10 through step 12 for the right wing and Tower 5. Reset mount plate to back and point inlet toward drill center.

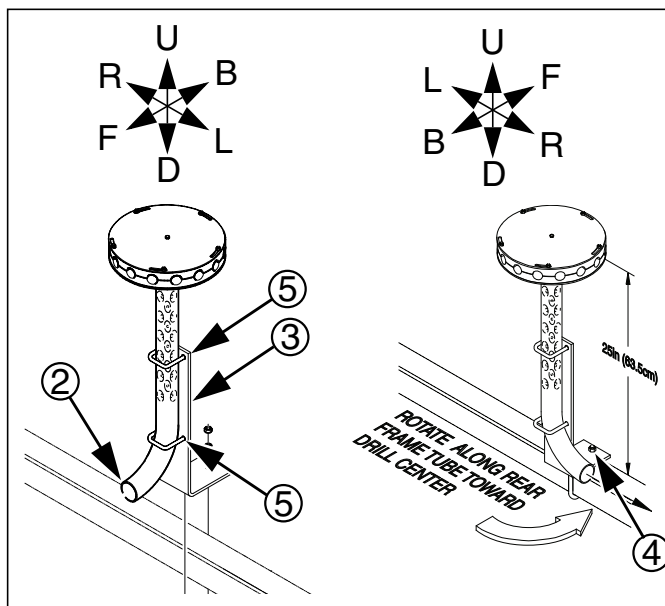


Figure 8
Reconfigure (Left) Wing Tower 1
16205
29338

Re-Route Wing Seed Hose

Refer to *Figure 9*

14. Cut the wing tower primary hose out of any tie wraps back to the welded loop at the wing fold point.
15. Re-route the hose along the rear outside of the wing as shown in *Figure 9*.
16. Re-connect the hose to the re-positioned tower inlets and secure with hose clamp.
17. Secure it to the frame using three ties on each wing.

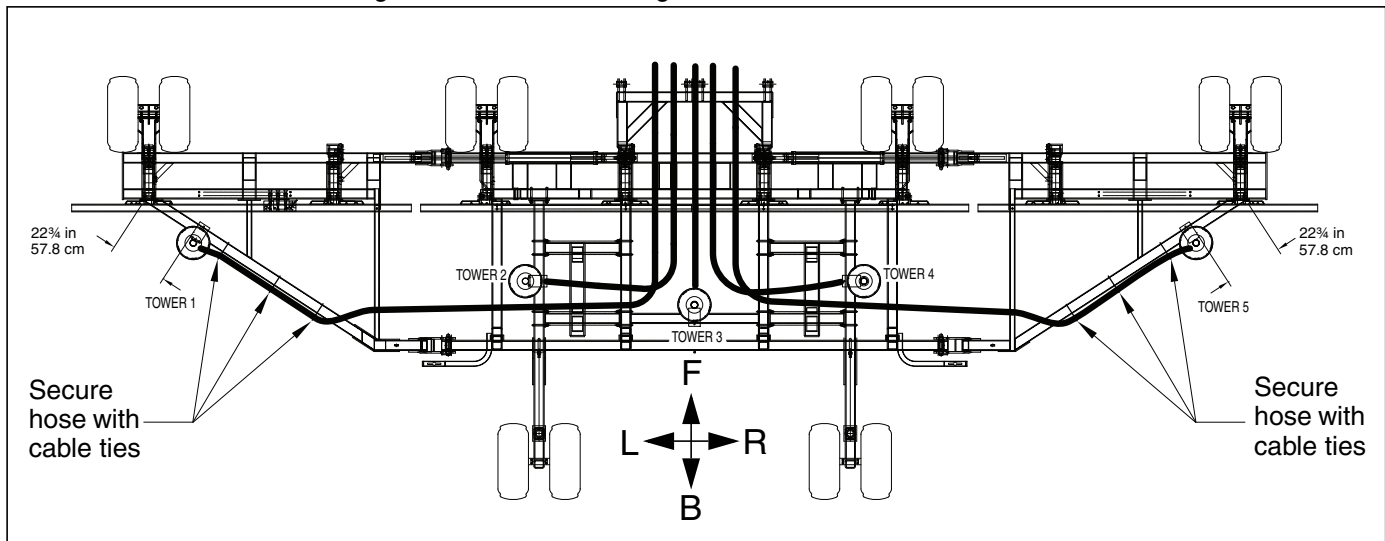


Figure 9
New Primary Hose Route for Wings

29462

Close-Out

Raise openers. Raise drill. Slowly fold the wings, checking for any clearance problems. Fold and unfold the wings several times to verify.

Drill Operation

This update causes no changes to drill operations.

Drill Maintenance

This update causes no changes to drill maintenance.

Appendix

New Parts

This manual covers the installation of two kits.
Quantities are units ("ea").

The part call-out numbers in this list match all Figures in these installation instructions. Part descriptions match those in your updated Parts Manual.

Kit Contents

Callout	Quantity in Kit		Part Number	Part Description
	221-644A	221-645A		
(11)	1	1	221-646M	MANUAL CTA4000HD OPNR STP UPDT
(12)	12	10	121-174D	OPENER TRANSPORT STOP PLATE
(13)	6	6	800-035C	CABLE TIE .31X28 8DIA 120LB
(14)	12	10	801-025C	SCREW HEX 5/16-12X3/4 THD FRM

Abbreviations

CTA	Conventional Till Air (drill)
DIA	Diameter
HD	Heavy Duty
HEX	Hexagonal
LB	Pound

STP	Stop
THD FRM	Thread Forming (self-tapping)
UPDT	Update
X	by

Great Plains Manufacturing, Inc.

Corporate Office P.O. Box 5060
Salina, Kansas 67402-5060 USA