

## **Assembly Instructions**



# **Boxed Gray Row Unit**

**Kit Number: 6002087PP / 6002088PP**



## 1.1 Introduction

These instructions apply to the following models.

Your model number may not be listed if these instructions were published before your machine was manufactured.

### **Shipping damage and missing parts**

Inspect the machine and parts carefully for possible damage that occurred during shipping. Contact the shipping company immediately if damage is found.

Order any missing parts (see the bill of material in these instructions).

### **Illustrations**

The illustrations used will not always be identical to your specific model or configuration. However, the procedure shown is the same unless otherwise noted.

### **Direction references**

Right and left, as used in these installation instructions, are determined by facing the direction the machine will travel when in use.

### **Bolt torques**

Always replace hardware with the same grade or class. Tighten all hardware according to torque values listed in the machine service manual unless otherwise specified in these instructions.

## 1.2 Important safety information



This is the safety alert symbol. It means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! It will direct your attention to information that concerns your safety.



Read and understand all safety information in the machine operator's manual before continuing with these instructions.

Most personal injuries are the result of failure to observe basic safety rules and precautions. In most cases, an injury can be avoided by recognizing hazardous situations before an injury occurs and taking appropriate action to remove or avoid the hazard.

The person installing this kit must have the necessary training, skills, and tools.



### **WARNING:**

**To avoid personal injury and/or machine damage, do the following before starting to install this kit:**

- Use personal safety equipment appropriate to the task such as:
  - Protective eye wear
  - Gloves
  - Steel-toed shoes
  - Hearing protection
- Park the machine on a solid level surface.
- Disengage the power take-off (PTO), if equipped.
- Put the transmission in the parking position and apply the park brake.
- Turn off the control console.
- Stop the engine and take the key with you.
- Look and Listen! Make sure all moving parts have stopped.
- Put blocks in front of and behind the machine wheels before working on or under the machine.
- Remove or relieve all sources of stored energy such as:
  - Disconnect the battery
  - Relieve hydraulic or fuel pressure
  - Relieve air pressure
  - Relieve or block mechanical spring pressure
  - Properly block or lock pivoting joints
- Clean oil, dirt, and crop material from the area on the machine where the work is to be done.

## 1.3 Bill of material for kits 6002087PP / 6002088PP

### 6002087PP with seed tube

Number	Quantity	Description
700964244	1	Bundle - Row unit shank assembly for seed tube
700964246	1	Bundle - Sack of parts

#### Bundle 700964244

Number	Quantity	Description
ACW4265010	1	Row unit shank assembly for seed tube
ACW3803450	1	Sack of parts

#### Sack of parts ACW3803450

Number	Quantity	Description
K4666	1	5/8 hard plain washer
700726425	1	M16 x 2.0 x 75 cap screw
N858899	1	M16 x 2.0 x 75 cap screw, left hand
3009237X1	3	M16 x 2.0 x 45 flange screw
700745978	1	Load pin harness retainer
852080	2	0.912 / 0.0359 shim
700737605	1	Strap
7724347	4	Cable tie
ACW3818200	1	Disc opener guard
3009920X1	2	M8 x 1.25 x 16 flange screw

#### Bundle 700964246

Number	Quantity	Description
ACW4265000	1	Parallel link assembly
ACW4352970	1	Sack of parts

#### Sack of parts ACW4352970

Number	Quantity	Description
700731615	2	M16 U-bolt
339034X1	4	M16 x 2.0 hex nut
339377X1	4	M16 lock washer

### 6002080PP with speed tube

Number	Quantity	Description
700964245	1	Bundle - Row unit shank for speed tube
700964246	1	Bundle - Parallel link assembly

**Bundle 700964245**

Number	Quantity	Description
ACW4265020	1	Row unit shank for speed tube
ACW3803450	1	Sack of parts

**Sack of parts ACW3803450**

Number	Quantity	Description
K4666	1	5/8 hard plain washer
700726425	1	M16 x 2.0 x 75 cap screw
N858899	1	M16 x 2.0 x 75 cap screw, left hand
3009237X1	3	M16 x 2.0 x 45 flange screw
700745978	1	Load pin harness retainer
852080	2	0.912 / 0.0359 shim
700737605	1	Strap
7724347	4	Cable tie
ACW3818200	1	Disc opener guard
3009920X1	2	M8 x 1.25 x 16 flange screw

**Bundle 700964246**

Number	Quantity	Description
ACW4265000	1	Parallel link assembly
ACW4352970	1	Sack of parts

**Sack of parts ACW4352970**

Number	Quantity	Description
700731615	2	M16 U-bolt
339034X1	4	M16 x 2.0 hex nut
339377X1	4	M16 lock washer

## 1.4 Installation

### 1.4.1 Preparation of the gray row unit

The parallel link assembly and a sack of parts will come in one box. The row unit shank, assembly instructions, and a sack of parts will come in another box.

The row units will come with either the seed tube or the speed tube guard.



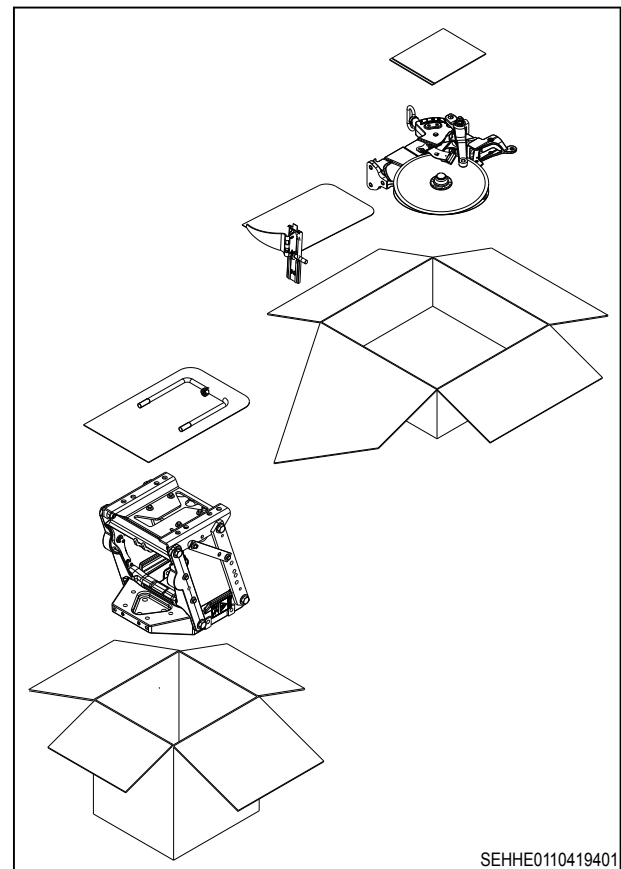
**DANGER: Cutting Hazard. The opener disc blades are sharp.**

**Personal injury can occur.**

**Do not allow the opener to fall. The opener assembly is heavy and the disc blade is sharp.**

#### Procedure

1. Remove the parallel link assembly, the shank, and the parts from the two boxes.



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Fig. 1

Number	Quantity	Description
700964244	1	Bundle - row unit shank for seed tube
700964246	1	Bundle - parallel link assembly

List of parts for the seed tube kit 6002087PP

Number	Quantity	Description
700964245	1	Bundle - row unit shank for speed tube
700964246	1	Bundle - parallel link assembly

List of parts for the speed tube kit 6002088PP

2. Turn the parallel link assembly right side up.

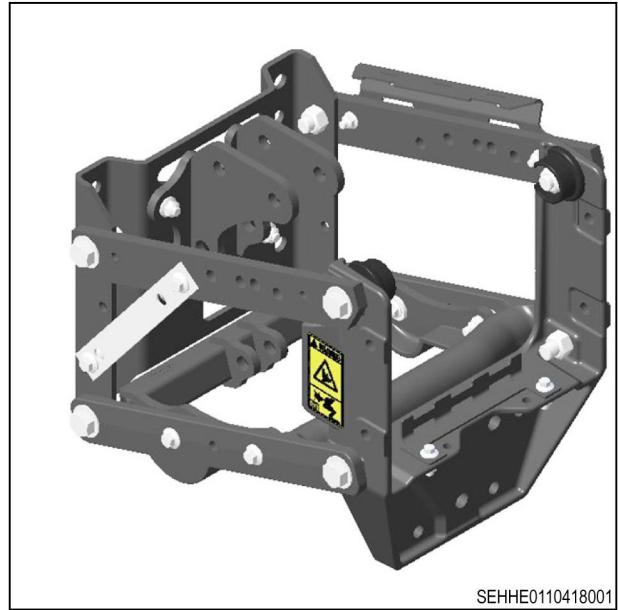


Fig. 2

3. Remove and discard the hardware (1) and the shipping strap (2) that is securing the row unit.
4. Keep the bushing (3) for a future replacement part.

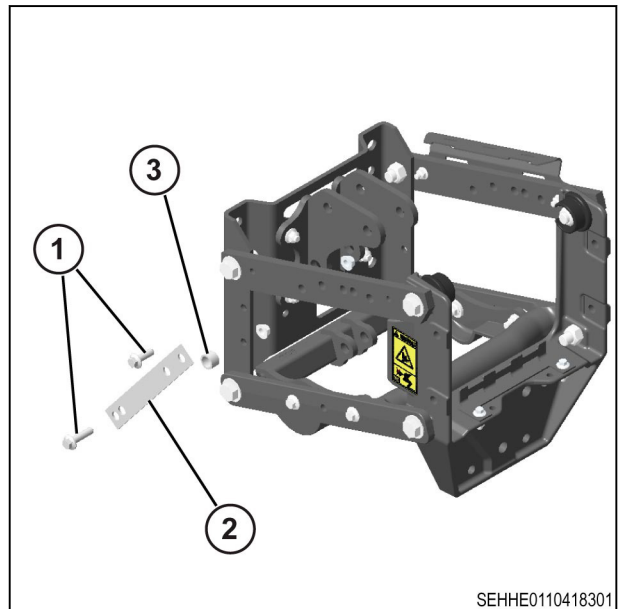


Fig. 3



## 1.4.2 Assemble the gray row unit

### Procedure

1. Install the parallel link assembly (1) to the toolbar.

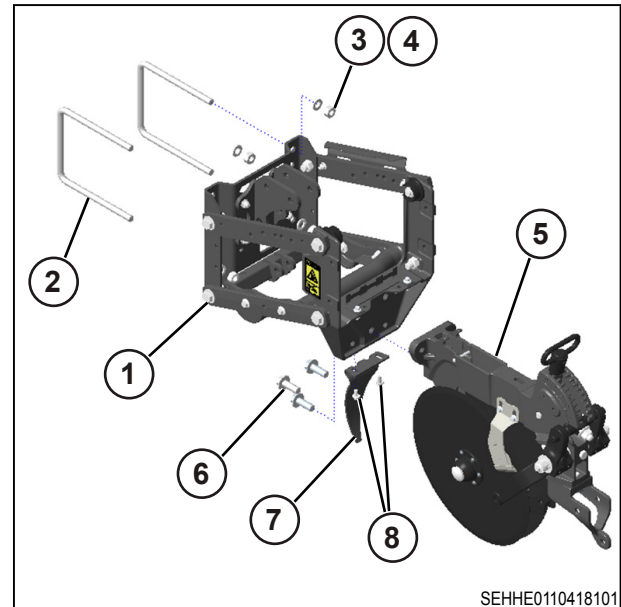


Fig. 4

Item	Number	Qty	Description
1	700964246	1	Parallel link assembly
2	700731615	2	M16 U-bolt
3	339377X1	4	M16 lock washer
4	339034X1	4	M16 x 2.0 hex nut
5	700964244	1	Row unit shank for seed tube
	700964245	1	Row unit shank for speed tube
6	3009237X1	3	M16 x 2.0 x 45 full thread flange screw
7	ACW3818200	1	Disc opener guard
8	3009920X1	2	M8 x 1.25 x 16 flange screw

2. Use two M16 U-bolts (2), four M16 lock washers (3), and four M16 x 2.0 hex nuts (4).
3. Install the row unit shank (5) to the parallel link assembly using three M16 x 2.0 x 45 full thread flange screws (6).
4. Torque the M16 x 2.0 x 45 full thread flange screws to 312 Nm (230 lbf ft)
5. Install the disc opener guard (7) to the parallel link assembly using two M8 x 1.25 x 16 flange screws (8).

6. Press the load pin harness wire into the bottom of the cover (1).

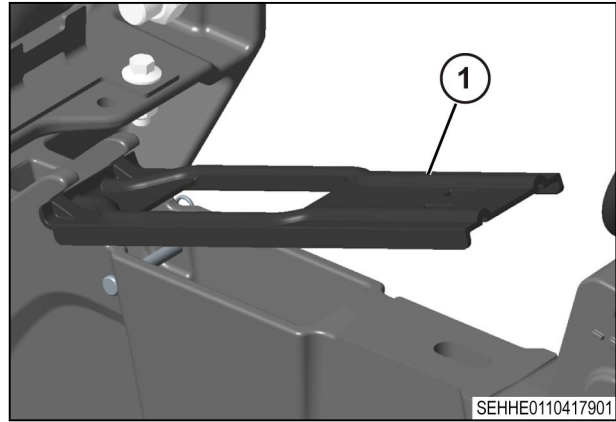


Fig. 5

Item	Number	Qty	Description
1	700745978	1	Cover, load pin harness wire

7. Install the load pin harness retainer onto the row unit.
8. Rotate down until the latch engages into the slot in the shank.  
Seed tubes and speed tubes can be removed without removal of the cover.

### 1.4.3 Setup for the disc openers

#### Procedure

1. If the opener disc is removed, keep the shims and bearing distance. Do not let the shims fall out.
2. Align the marks (A) on the opener disc at the pinch point.
3. Adjust the shim pack to provide 57 to 63 mm (2.2 to 2.5 in) (B) of contact at the pinch point. You can move a shim to the inside or the outside of the gauge wheel arm to obtain the proper adjustment.  
The left hand disc opener uses a left-hand cap screw.

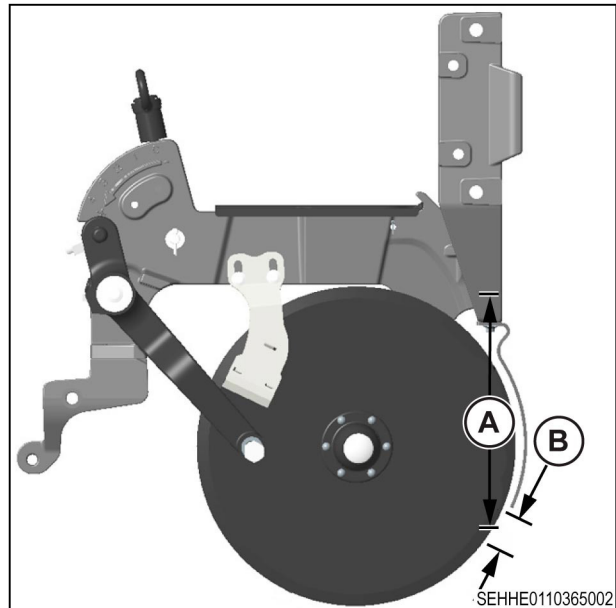


Fig. 6

## 1.4.4 Attach the gauge wheels

### Procedure

1. Attach the gauge wheels using one M16 x 2.0 x 75 cap screw (1), one 0.912 / 0.0359 shim.

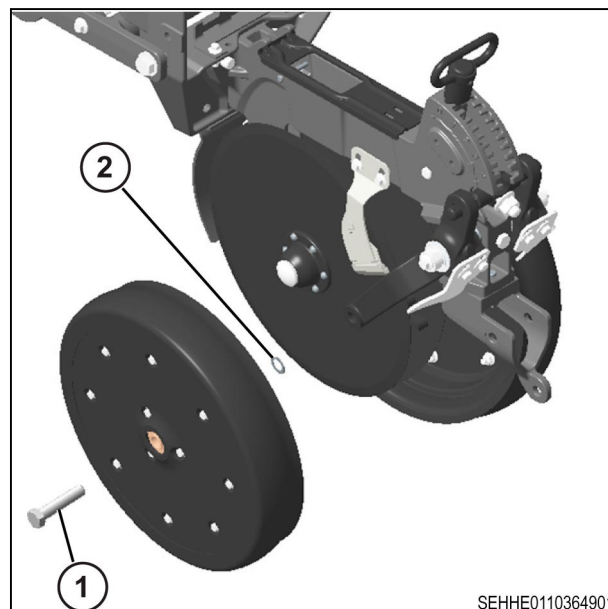


Fig. 7

Item	Number	Qty	Description
1	700726425	1	M16 x 2.0 x 75 cap screw (for right side)
1	N858899	1	M16 x 2.0 x 75 cap screw, left hand (for left side)
2	852080	2	0.912 / 0.0359 shim

2. On the left side, use the left hand threaded cap screw.
3. Make sure the shim washer (2) is assembled between the gauge wheel and the shim. A shim is required between the gauge wheel and the arm.

### 1.4.5 Calibrate for proper depth adjustment

#### Procedure

1. Put the depth adjustment handle (1) in the 1.5 inch position.
2. Park the row unit on level hard surface with a 1.5 inch spacer under the gauge wheels.  
A 2x4 piece of wood will work.
3. Adjust the nut to remove all the looseness in the system.
4. Verify in the field.

The depth adjustment handle provides a visual indication of the planting depth along all row units from 0.25 to 4.5 inches in 0.25 inch increments. Each notch aligned left and right changes the depth 0.5 inch. The angle is 0.25 inch.

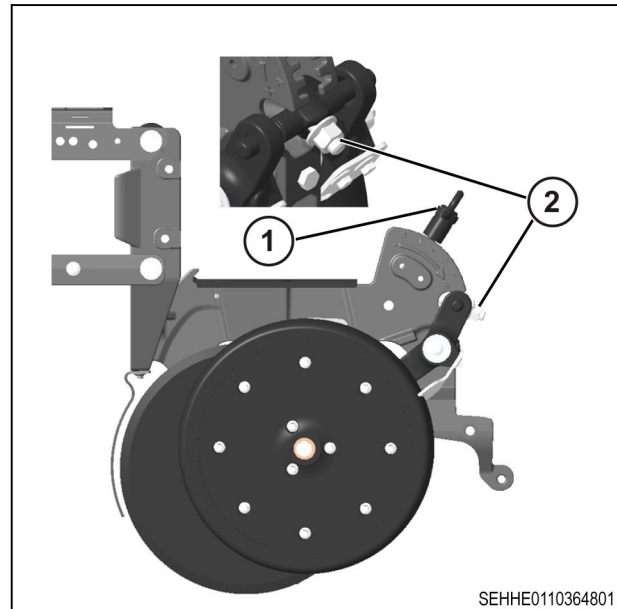


Fig. 8

### 1.4.6 Adjust the gauge wheel disc opener contact

#### Procedure

1. Loosen the bolt (1) on the end of the pivot shaft.
2. Rotate the threaded bushing to move the gauge wheel arm to properly position the gauge wheel to the disc opener.
3. Make sure the distance from the gauge wheel to the disc opener is light touch to 1.6 mm clearance to be measured at the 2.0 inch planting depth.

Minimum clearance between the arm and the shank after assembly should be 3 mm (A).

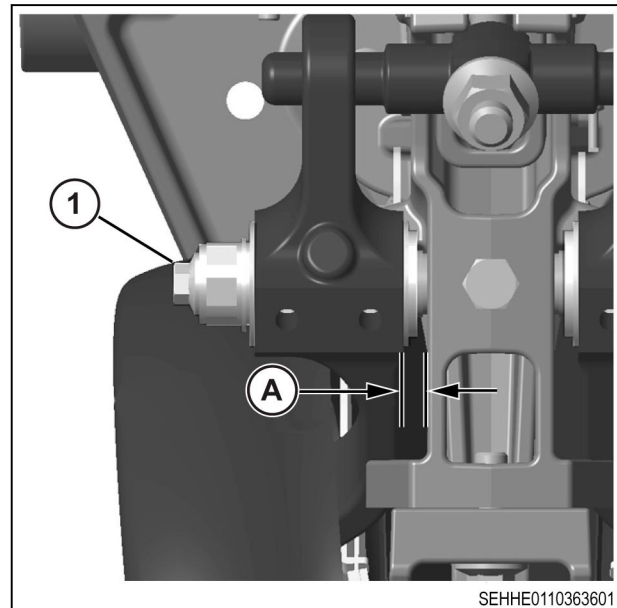


Fig. 9



