

## Installation Instructions

---



### Side Gauge Wheel

## Eliminator Kit

---

Used with:

- All Great Plains Row Units
- Kinze Row Units
- John Deere Row Units



*When you see this symbol, the subsequent instructions 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 the Eliminator. The Eliminator kit allows you to adjust the side gauge wheels on your row units easily and accurately to prevent plugging.

These instructions apply to:

404-102A	GP 5/8 Wheel Arm Kit
404-103A	Kinze 5/8 Wheel Arm Kit
404-104A	GP 3/4 Wheel Arm Kit
404-105A	JD Set Screw Arm Kit
404-106A	Kinze Set Screw Arm Kit
404-107A	JD MaxEmerge Plus Arm Kit
404-116A	JD 5/8 Pivot SN 024174 & Earlier

Refer to your operator's manual for detailed information on safe drill or planter operation.

### Before You Start

Page 3 is a detailed listing of parts included in the Eliminator package. Use this list to inventory parts received.

### Tools Required

- Basic hand tools

### Definitions

Right-hand and left-hand as used in this manual are determined by facing the direction the machine will travel while in use unless otherwise stated.

## Assembly

1. Remove side-gauge-wheel arm and side gauge wheel from row unit.

*Refer to Figure 1*

2. Remove side-gauge-wheel arm from side gauge wheel. Discard arm and replace with new arm provided in kit.

**Set Screw Wheel Arms:** Secure new arm to wheel with set screw and jam nut provided in kit.



**Figure 1**  
Side-Gauge-Wheel Arm

17908

*Refer to Figure 2*

**All Other Kits:** Secure new arm to wheel with existing bolt. If necessary, place one or two shim washers between wheel and arm. When assembled, the wheel should turn freely and not hit the arm at its curve.



**Figure 2**  
Existing Bolt

17907

*Refer to Figure 3*

3. Install eccentric bushing inside housing.

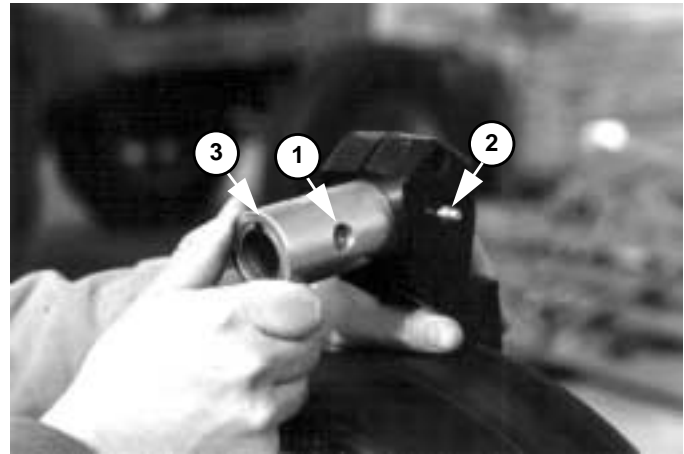


**Figure 3**  
Eccentric Bushing

17909

*Refer to Figure 4*

4. Install housing and bushing inside wheel arm so hole in housing (1) is aligned with grease zerk (2) and notch in eccentric bushing (3) is facing out.



**Figure 4**  
**Install Housing**

17910

*Refer to Figure 5*

5. Install hex-head bolt through arm. Secure bolt with lock washer and nut. Leave bolt loose for later adjustment
6. Assemble wheel arm on row unit.



**Figure 5**  
**Install Hex-Head Bolt**

17911

**MaxEmerge Plus:** Secure wheel arm to row unit with pivot bolt provided in kit. Under bolt, place hex adjuster so its roll pin is aligned with notch in eccentric bushing.

*Refer to Figure 6*

**All Other Kits:** Grease or apply anti-seize to row-unit shank. Mount arm on row-unit shank. Secure wheel arm to row unit with flange bolt. Install hex adjuster under bolt so its roll pin is aligned with notch in eccentric bushing.

**NOTE:** Some kits contain both 1/2-inch and 12-mm flange bolts. Use bolt that fits row-unit shank and discard extra bolt.



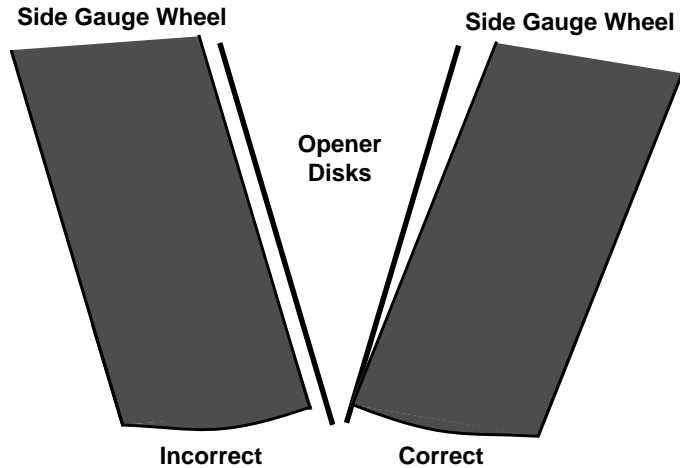
**Figure 6**  
**Grease or Anti-seize**

17913

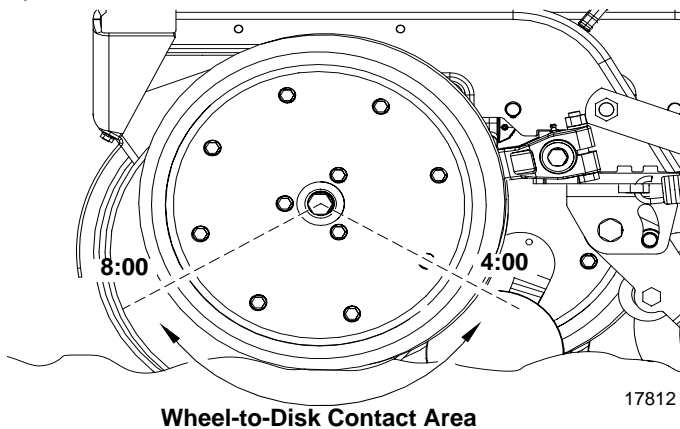
## Adjustment

The Eliminator involves two, interrelated adjustments:

- angle of side gauge wheel, and
- distance between side gauge wheel and opener disk.



Adjust side-gauge-wheel angle so the wheels contact the opener disks between 4 and 8 o'clock.



At the same time, keep the side gauge wheels close to the opener disks so the row unit does not plug with soil or trash, but far enough out so the disks and wheels turn freely.

To adjust side gauge wheels:

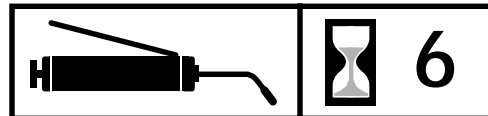
1. Raise implement slightly to remove weight from side gauge wheels. Secure all transport locks.
2. Move wheel and arm out on o-ring bushing.
3. Turn hex adjuster so roll pin (1) is at 1 o'clock. Use this as the starting point for adjustment.



4. Move wheel arm in so side gauge wheel contacts opener disk. Tighten hex-head bolt to clamp arm around bushing and shank.
5. Check the wheel-to-disk contact. Lift wheel and arm. When let go, the wheel should fall freely.
  - **If wheel does not contact disk from 4 to 8 o'clock**, move hex adjuster until wheel is angled for proper contact with disk.
  - **If wheel does not fall freely**, loosen hex-head bolt and side wheel arm out just until wheel and arm move freely. Retighten hex-head bolt.
6. Keep turning hex adjuster and moving wheel arm until the wheel is adjusted properly. When satisfied, tighten flange pivot bolt to 110 foot-pounds.

NOTE: Tightening the pivot bolt on the MaxEmerge Plus row unit will change the position of the side gauge wheel slightly. Check side gauge wheel for proper position after tightening pivot bolt.

## Lubrication



Type of Lubrication: Grease

Quantity: Until resistance is felt

**404-102A GP 5/8 Wheel Arm Kit**

Your kit includes:

Qty.	Part No.	Part Description
2	404-108S	GP ADJUSTER ASSEMBLY
1	404-114M	MANUAL ELIMINATOR KITS
2	404-167D	GAUGE WHEEL ARM 5/8 THD
2	404-171D	O-RING BUSHING
2	404-174D	ECCENTRIC BUSHING
2	800-001C	GREASE ZERK STRAIGHT 1/4-28
2	802-039C	HHCS 1/2-13 X 3 GR5
2	802-456C	HFS 1/2-13 X 2 GR8 PLT
2	803-020C	NUT HEX 1/2-13 PLT
2	804-015C	WASHER LOCK SPRING 1/2 PLT
8	804-040C	WASHER MACH 1.19 X .63 X 1
4	816-368C	O-RING SQ 1 1/4ID X 1 1/2OD X 1/8

**404-103A Kinze 5/8 Wheel Arm Kit**

Your kit includes:

Qty.	Part No.	Part Description
2	404-109S	JD/KINZE ADJUSTER ASSEMBLY
1	404-114M	MANUAL ELIMINATOR KITS
2	404-167D	GAUGE WHEEL ARM 5/8 THD
2	404-171D	O-RING BUSHING
2	404-174D	ECCENTRIC BUSHING
2	800-001C	GREASE ZERK STRAIGHT 1/4-28
2	802-039C	HHCS 1/2-13 X 3 GR5
2	802-664C	HFS 1/2-13 X 1 GR8 PLT
2	803-020C	NUT HEX 1/2-13 PLT
2	804-015C	WASHER LOCK SPRING 1/2 PLT
8	804-040C	WASHER MACH 1.19 X .63 X 18GA
4	816-368C	O-RING SQ 1 1/4ID X 1 1/2OD X 1/8

**404-104A GP 3/4 Wheel Arm Kit**

Your Kit Includes:

Qty.	Part No.	Part Description
2	404-108S	GP ADJUSTER ASSEMBLY
1	404-114M	MANUAL ELIMINATOR KITS
2	404-168D	GAUGE WHEEL ARM 3/4 THD
2	404-171D	O-RING BUSHING
2	404-174D	ECCENTRIC BUSHING
2	800-001C	GREASE ZERK STRAIGHT 1/4-28
2	802-039C	HHCS 1/2-13 X 3 GR5
2	802-456C	HFS 1/2-13 X 2 GR8 PLT
2	803-020C	NUT HEX 1/2-13 PLT
2	804-015C	WASHER LOCK SPRING 1/2 PLT
8	804-099C	WASHER 1 1/4 X 3/4 X 18 GA PLT
4	816-368C	O-RING SQ 1 1/4ID X 1 1/2OD X 1/8

## 6 Option

**404-105A JD Set Screw Arm Kit**

Your kit includes:

Qty.	Part No.	Part Description
2	404-109S	JD/KINZE ADJUSTER ASSEMBLY
1	404-114M	MANUAL ELIMINATOR KITS
2	404-169D	GAUGE WHEEL ARM SET SCREW
2	404-171D	O-RING BUSHING
2	404-174D	ECCENTRIC BUSHING
2	800-001C	GREASE ZERK STRAIGHT 1/4-28
2	801-007C	SCREW SQ HD SET 3/8-16 X 7/8 PLT
2	802-039C	HHCS 1/2-13 X 3 GR5
2	802-663C	HFS 1/2-13 X 1 1/2 GR8 PLT
2	802-665C	HFS 12-1.75 MM X 25 MM PLT
2	803-012C	NUT HEX JAM 3/8-16 PLT
2	803-020C	NUT HEX 1/2-13 PLT
2	804-015C	WASHER LOCK SPRING 1/2 PLT
4	816-368C	O-RING SQ 1 1/4 ID X 1 1/2 OD X 1/8

**404-106A Kinze Set Screw Arm Kit**

Your kit includes:

Qty.	Part No.	Part Description
2	404-109S	JD/KINZE ADJUSTER ASSEMBLY
1	404-114M	MANUAL ELIMINATOR KITS
2	404-169D	GAUGE WHEEL ARM SET SCREW
2	404-171D	O-RING BUSHING
2	404-174D	ECCENTRIC BUSHING
2	800-001C	GREASE ZERK STRAIGHT 1/4-28
2	801-007C	SCREW SQ HD SET 3/8-16 X 7/8 PLT
2	802-039C	HHCS 1/2-13 X 3 GR5
2	802-664C	HFS 1/2-13 X 1 GR8 PLT
2	803-012C	NUT HEX JAM 3/8-16 PLT
2	803-020C	NUT HEX 1/2-13 PLT
2	804-015C	WASHER LOCK SPRING 1/2 PLT
4	816-368C	O-RING SQ 1 1/4 ID X 1 1/2 OD X 1/8

**404-107A JD Maxemerge Plus Arm Kit**

Your kit includes:

Qty.	Part No.	Part Description
1	404-114M	MANUAL ELIMINATOR KITS
2	404-115S	JD MAXEMERGE ADJUSTER ASSEMBLY
2	404-169D	GAUGE WHEEL ARM SET SCREW
2	404-171D	O-RING BUSHING
2	404-175D	JD ECCENTRIC BUSHING
2	800-001C	GREASE ZERK STRAIGHT 1/4-28
2	801-007C	SCREW SQ HD SET 3/8-16 X 7/8 PLT
2	802-039C	HHCS 1/2-13 X 3 GR5
2	802-665C	HFS 12-1.75 MM X 25 MM PLT
2	803-012C	NUT HEX JAM 3/8-16 PLT
2	803-020C	NUT HEX 1/2-13 PLT
2	804-015C	WASHER LOCK SPRING 1/2 PLT
4	816-368C	O-RING SQ 1 1/4 ID X 1 1/2 OD X 1/8

---

**404-116A JD 5/8 Pivot #024174 and Below**

Your kit includes:

Qty.	Part No.	Part Description
2	404-109S	JD/KINZE ADJUSTER ASSEMBLY
1	404-114M	MANUAL ELIMINATOR KITS
2	404-169D	GAUGE WHEEL ARM SET SCREW
2	404-171D	O-RING BUSHING
2	404-174D	ENTRIC BUSHING
2	800-001C	GREASE ZERK STRAIGHT 1/4-28
2	801-007C	SCREW SQ HD SET 3/8-16 X 7/8 PLT
2	802-039C	HHCS 1/2-13 X 3 GR5
2	802-407C	HFS 5/8-11 X1 1/4 GR8
2	803-012C	NUT HEX JAM 3/8-16 PLT
2	803-020C	NUT HEX 1/2-13 PLT
2	804-015C	WASHER LOCK SPRING 1/2 PLT
4	816-368C	O-RING SQ 1 1/4 ID X 1 1/2 OD X 1/8