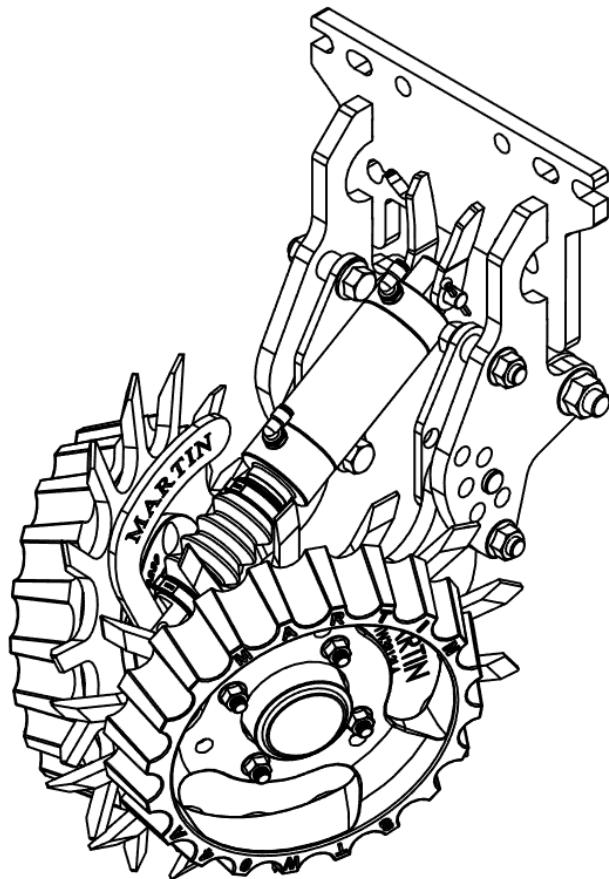


# **Kronos BA1350 ROW CLEANER**

## **INSTALLATION INSTRUCTIONS**



**SHOWN WITH OPTIONAL  
SIDE TREADER WHEELS, AIR CYLINDER AND SPIKE WHEELS**



**Martin Industries LLC**

206 Elk Fork Road

Elkton, KY 42220

Telephone: 270-265-5817

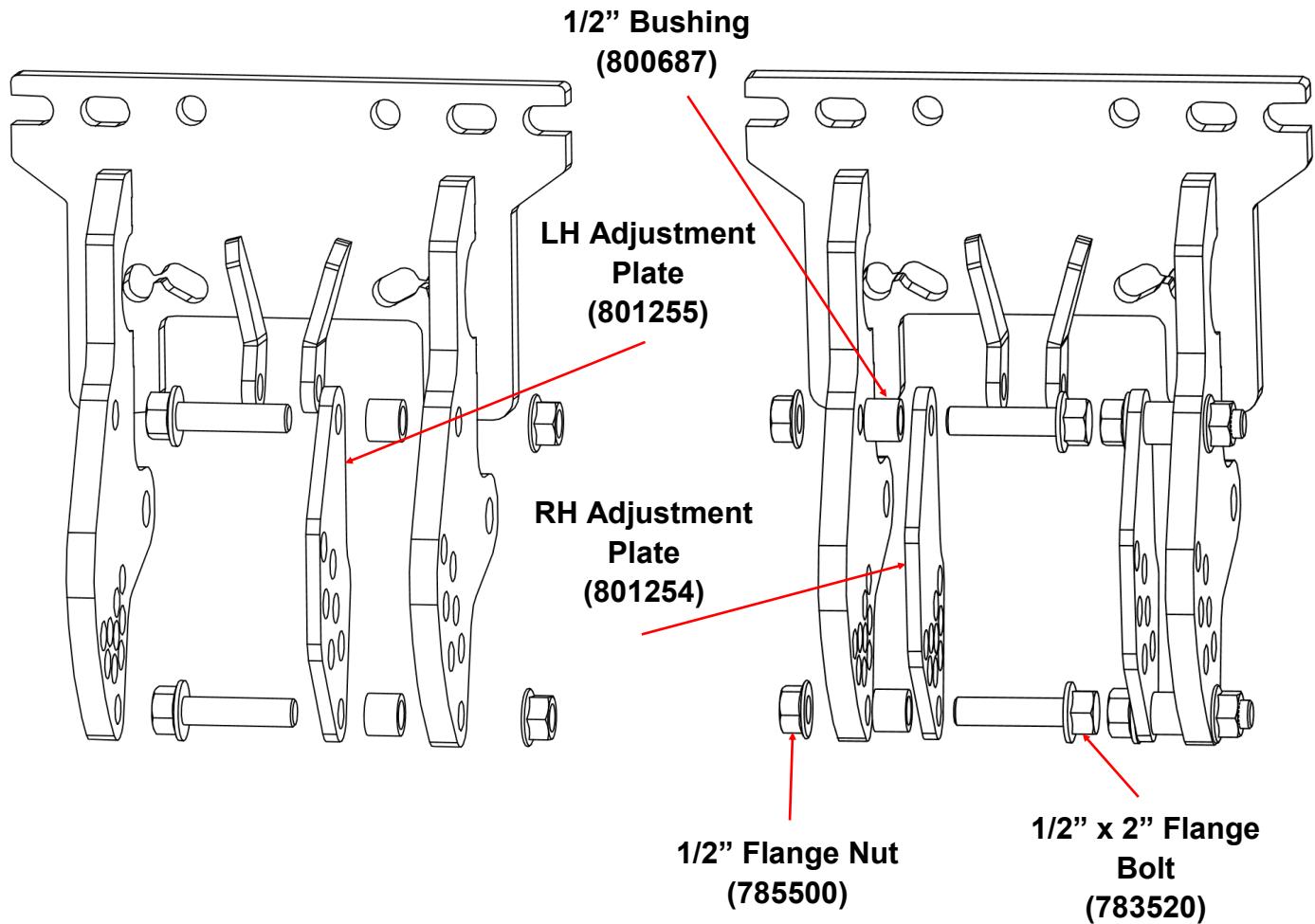
E-Mail: [martin@martintill.com](mailto:martin@martintill.com)

[www.martintill.com](http://www.martintill.com)



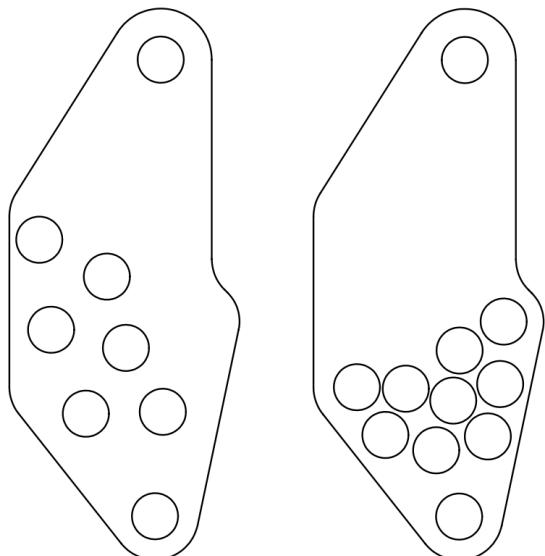
## STEP 1: ASSEMBLING SIDE PLATES ON MOUNT

Using four 1/2" X 2" (783520) flange bolts, four (800687) bushings and four 1/2" flange nuts (785500), attach and secure side plates onto mount. Pay attention to which side plate goes on either side. Like hole patterns should go together. See below tip on installing.



Left

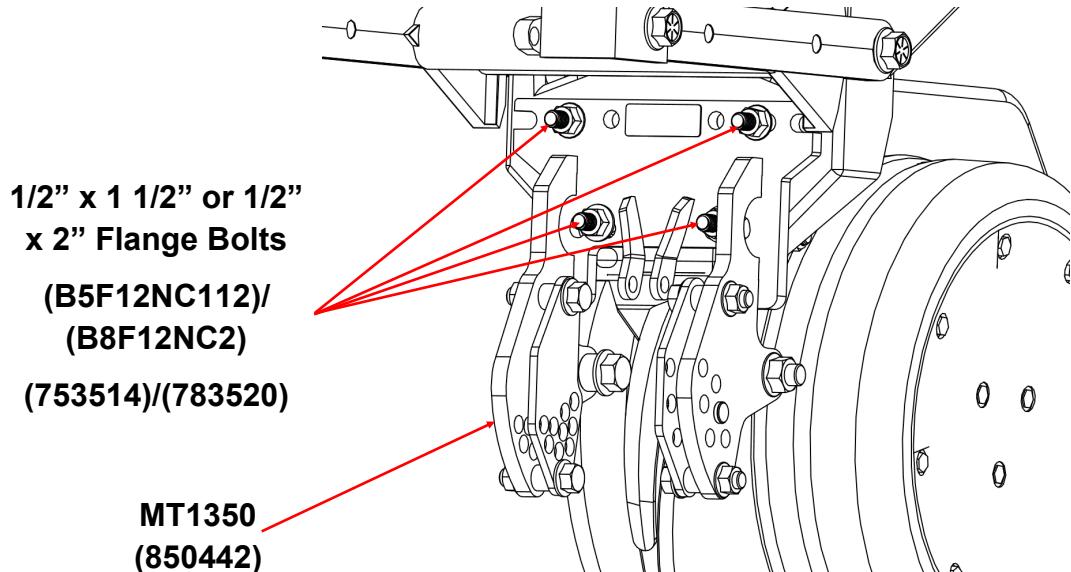
Right



**Tip:** When installing side plates, due to bolt hole tolerances slight misalignments may occur. This could result in difficulty when using the Clevis Pin. To avoid this issue, insert Clevis Pin in one of the holes prior to torquing. This will ensure clearance around Clevis Pin. Once Clevis Pin is added, torque to 57 ft-lbs. The Clevis Pin can then be removed to do the other side.

## STEP 2: ATTACH THE MOUNT TO THE PLANTER

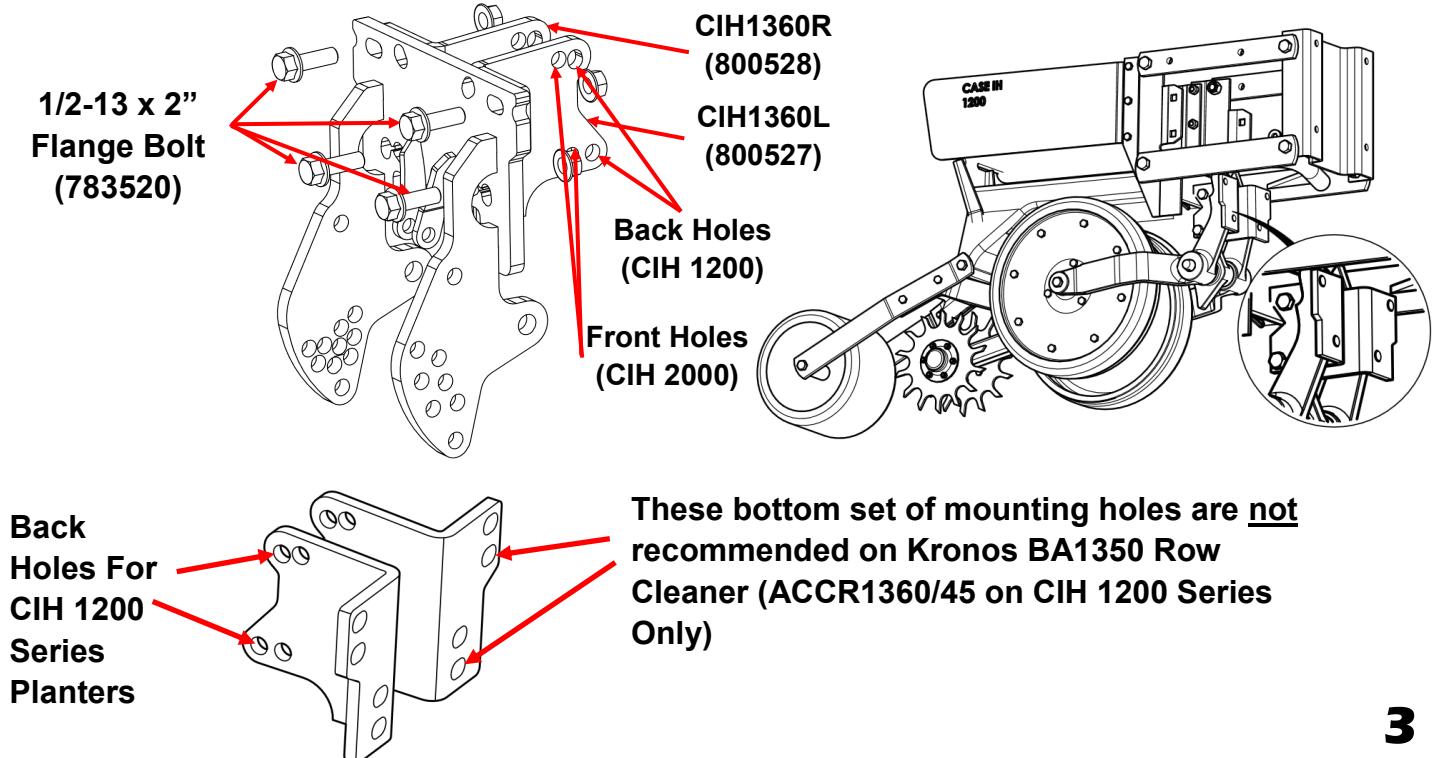
Using four 1/2" X 2" (783520) **OR** two 1/2" X 1 1/2" (753514) bolts and two 1/2" x 2" (783520), depending on the row unit base plate thickness, attach the Mount but leave nuts loose until after step 3. Hardware must be installed as shown in the picture below.



### FOR CASEIH 1200 SERIES PLANTERS

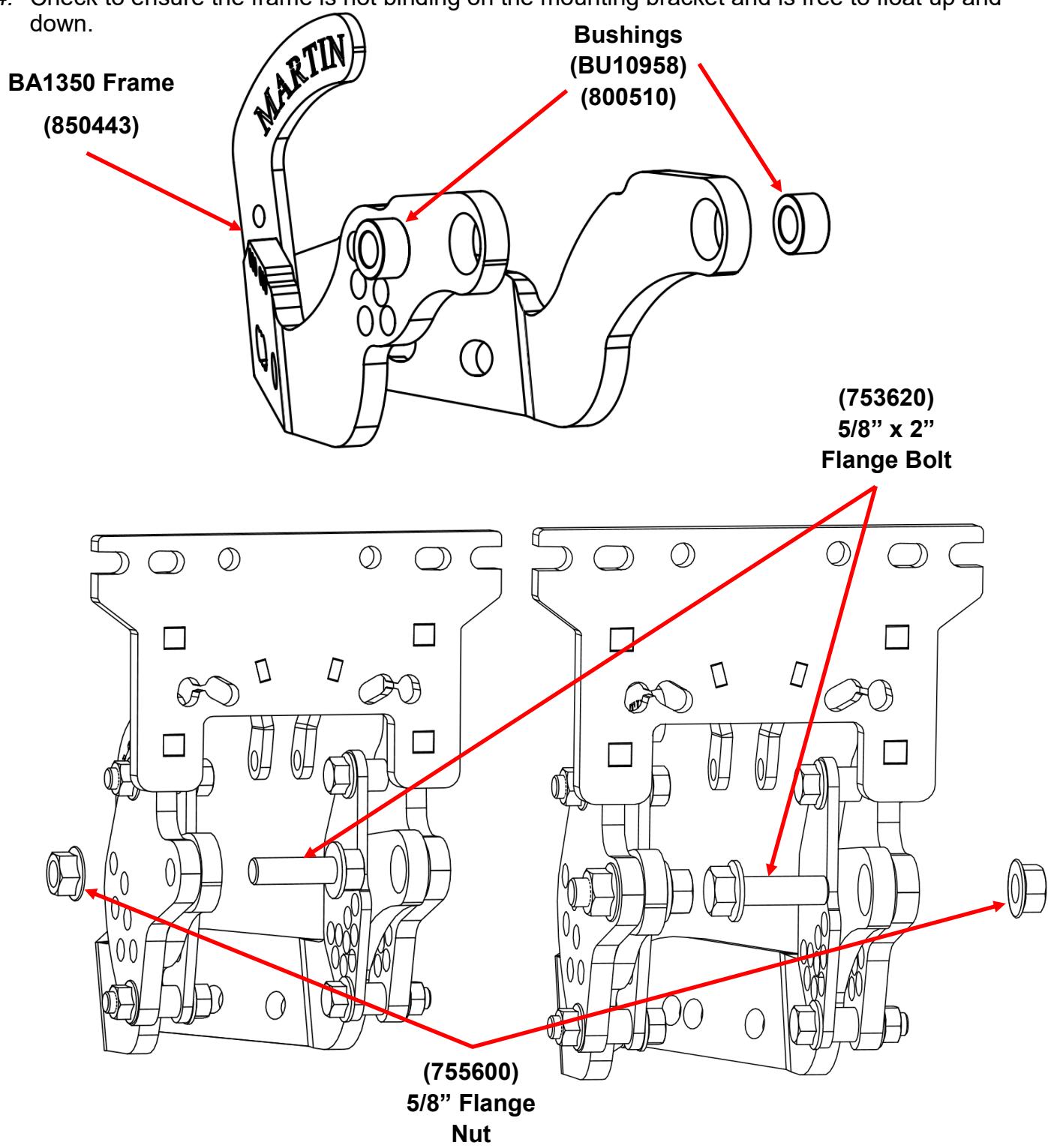
Attach the right and left L shaped brackets (CIH1360R & CIH1360L) using provided two 1/2" X 3-1/2" bolts (783534) and 1/2" nylock nuts (787500). Torque to 80 ft-lbs. Using four 1/2" X 2" flange bolts, attach the mount to the L shape brackets to the mount (850442) but leave loose for next step.

For CIH 1200 Series, use Back holes. If mounting on a CIH 2000 without HD Adaptor, use Front Holes



## STEP 3: ATTACH 1350 FRAME ASSEMBLY TO THE MOUNT

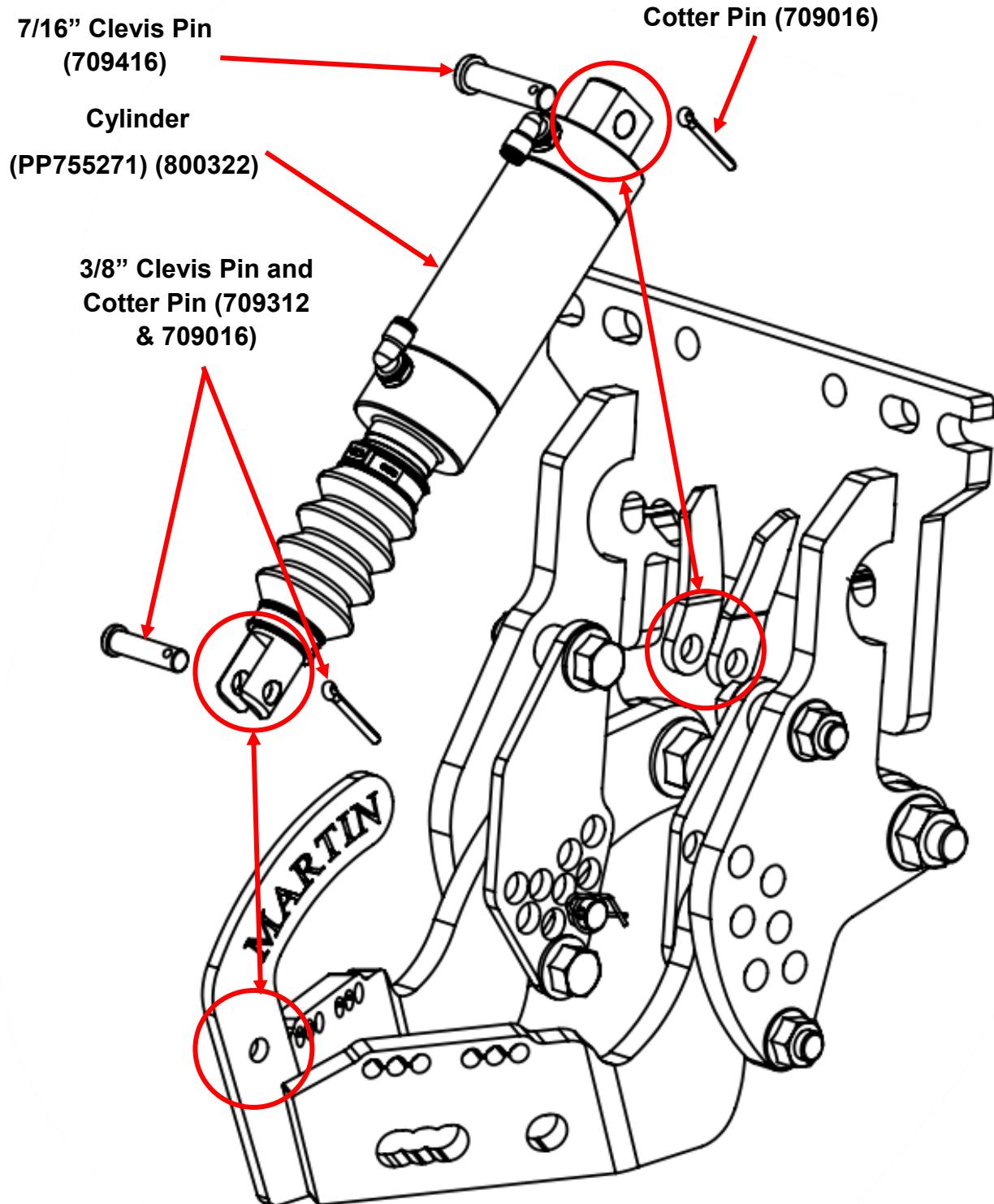
1. Place the bushings (800510) inside the pivot point holes of each frame arm.
2. Align the holes in the mount (850442) and the frame (850443) assembly. Insert the 5/8" x 2" flange bolts (753620) from the inside and place nuts (755600) on the bolts from outside.
3. Tighten the bolts to 112 ft-lbs. Check after first day of use. Torque 1/2" mount bolts (installed in step 2) to 55 Ft-Lbs.
4. Check to ensure the frame is not binding on the mounting bracket and is free to float up and down.



## STEP 4: INSTALL THE OPTIONAL AIR CYLINDER

Install the air cylinder between the top and bottom brackets. Use thicker (7/16") pin on the top brackets and thinner (3/8") pin on the handle as shown in the picture below.

**NOTE:** Cylinder may be installed with elbow valves in either up or down orientation, depending on user preference. **BE SURE TO INSTALL CYLINDER PRIOR TO MOUNTING WHEELS.**

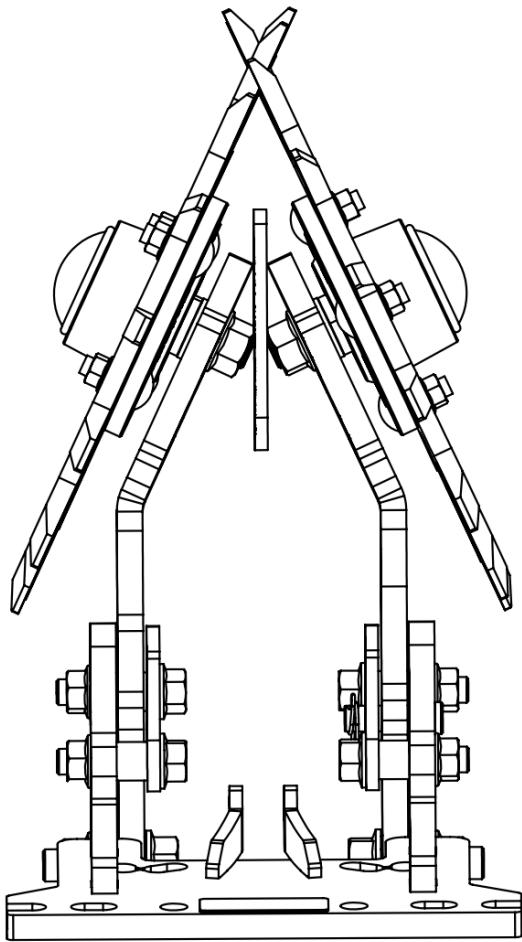


## STEP 5: DETERMINE THE BEST WHEEL CONFIGURATION FOR YOUR SOIL CONDITIONS

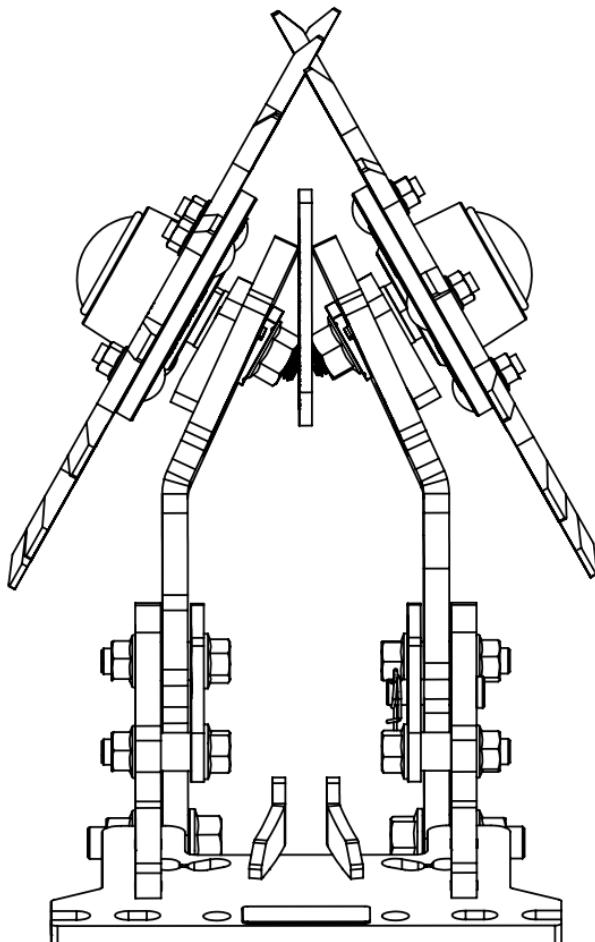
### Wide or Narrow:

The Kronos is capable of running either a Wide or Narrow frame angle. This impacts the width of the cleared path. By default, the Kronos clears a Narrow path. This is ideal for 15" row spacing. By installing the supplied angle adjustment blocks, the frame angle can be increased. This will increase the cleared path, ideal for 30" row spacings. To install angle adjustment blocks refer to Step 6.

Narrow

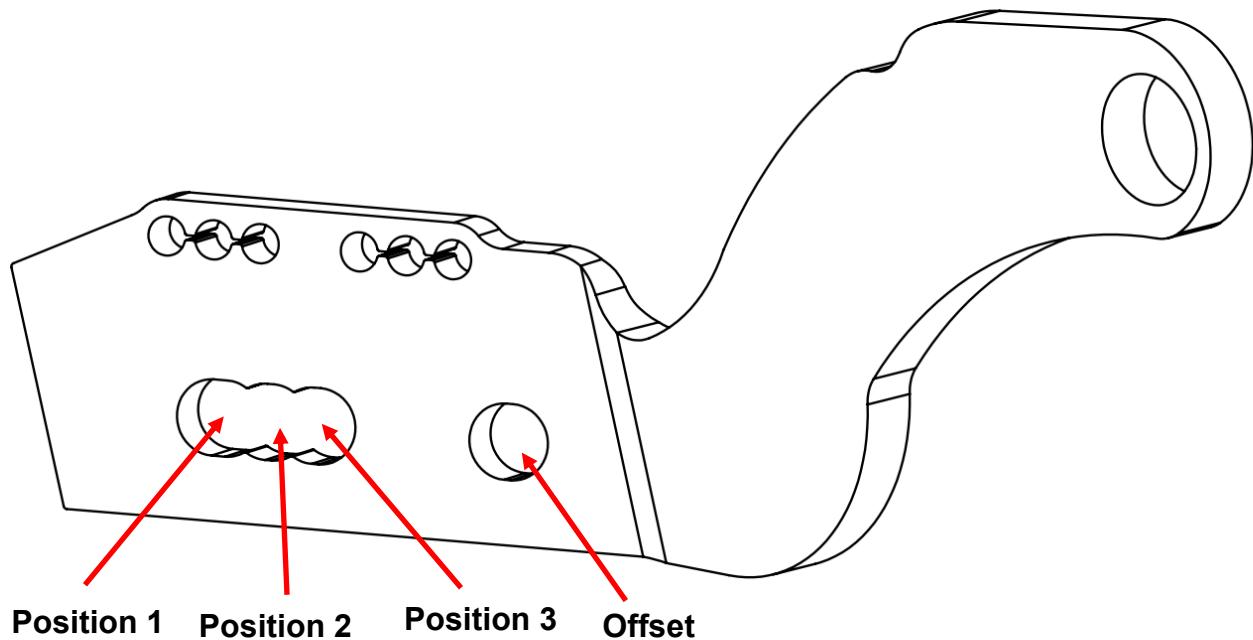


Wide



## STEP 5 (Cont.): DETERMINE THE BEST WHEEL CONFIGURATION FOR YOUR SOIL CONDITIONS

The Kronos frame has three running positions for the front holes. These positions are for setting the depth of intersect for all the running combinations. Below is a guide for what position should be used and when. Match the desired combination with the chart below for the recommended running position.



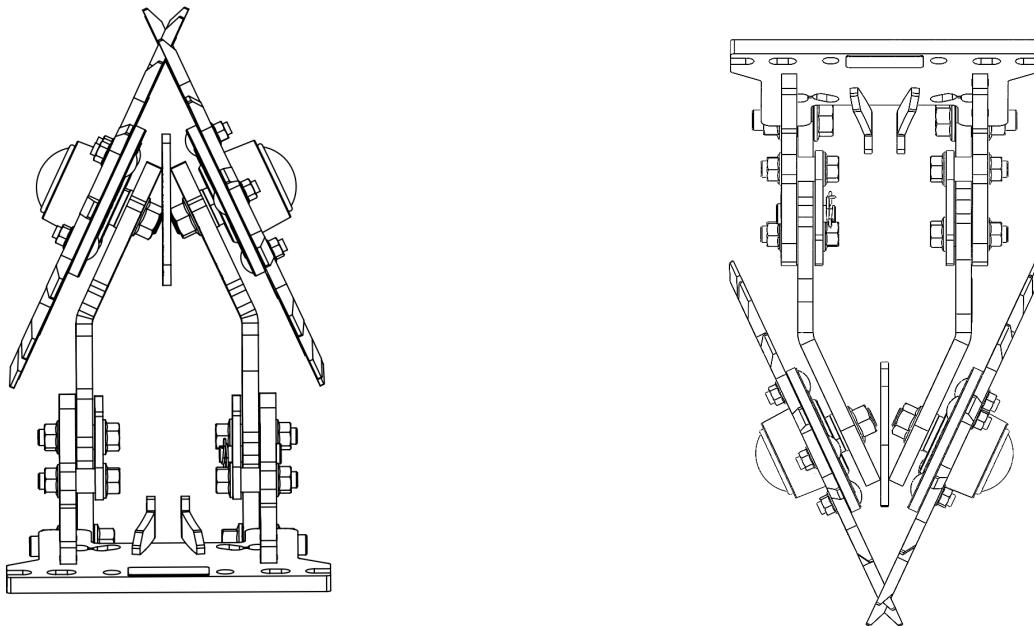
	Position 1	Position 2	Position 3	Offset
<b>C-Hub Wide Spike</b>	✗	✓	✗	✓
<b>C-Hub Wide Razor</b>	✗	✗	✓	✓
<b>C-Hub Narrow Spike</b>	✗	✓	✗	✓
<b>C-Hub Narrow Razor</b>	✗	✓	✗	✓

## STEP 5 (Cont.): DETERMINE THE BEST WHEEL CONFIGURATION FOR YOUR SOIL CONDITIONS

### OPTION A: INTERSECTED

(Both wheels in front holes)

Both wheels interlocked provides maximum cleaning effect. The interlocked wheels till the middle of the seed row.

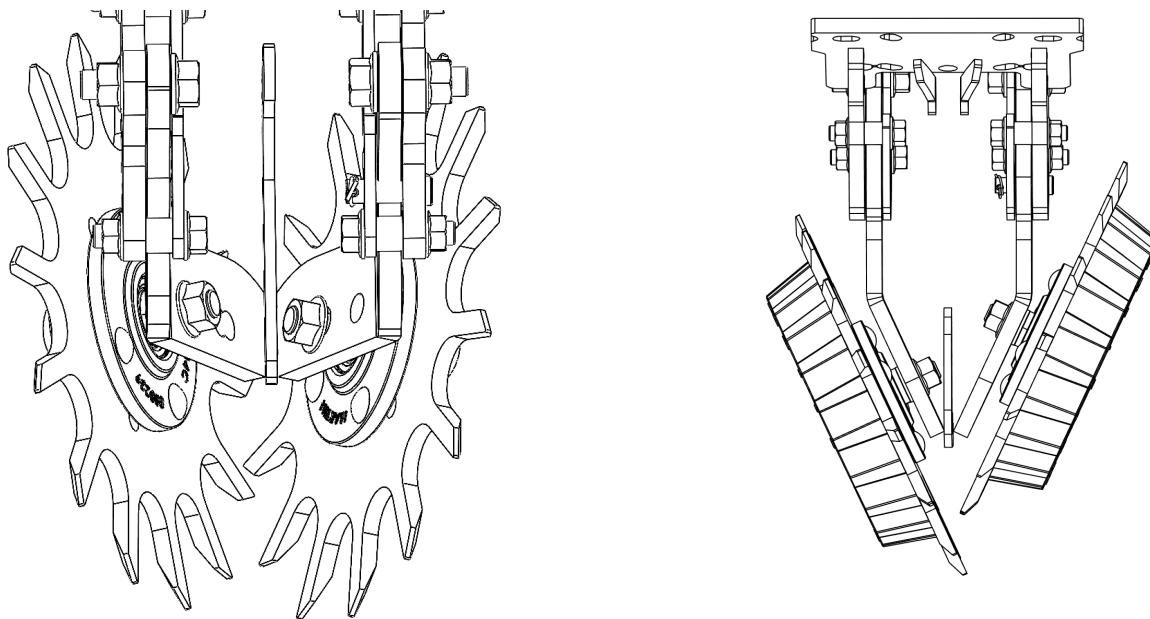


### OPTION B: OFFSET

(One wheel in front holes and one wheel in the back hole)

The staggered configuration allows the wheels to turn more easily in loose soil.

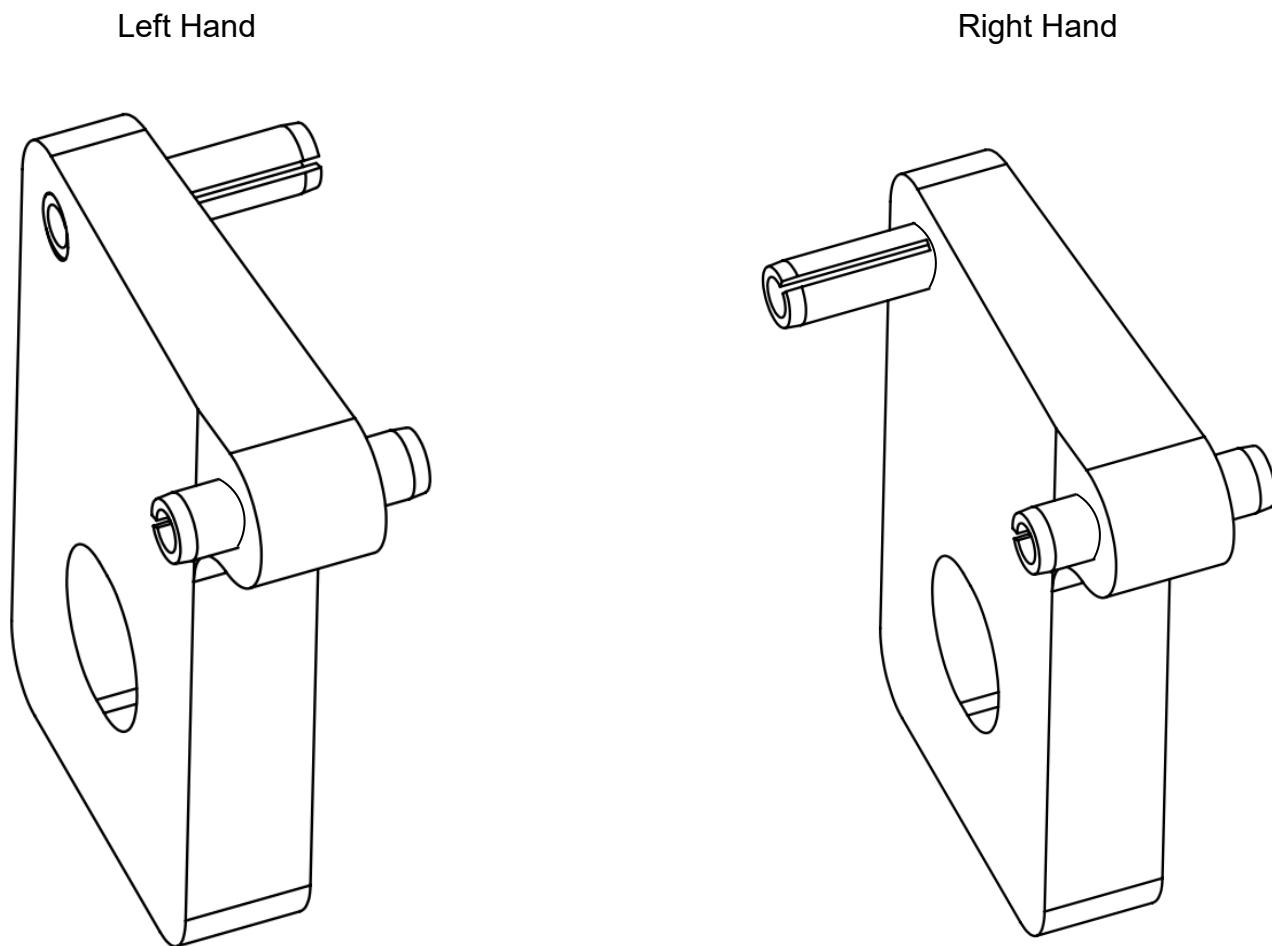
With this configuration, we suggest running the left wheels in the rear hole on the half of the planter and the right wheels in the rear hole on the other half of the planter (when viewed from behind).



## STEP 6: ASSEMBLING ANGLE ADJUSTMENT BLOCKS

### Angle Adjustment Blocks

1. If the angle adjustment blocks are to be used, the installer must insert the 0.25" pins (709003). This will create a LH and RH version.
2. Insert pins as shown below (there will be a Left and Right version).
3. The front pin should always be flush on the outside and the rear pin should be split in the blocks.  
If the wide configuration is desired, skip to Page 13.



## STEP 7A: INSTALL OPTIONAL DEFLECTOR (SCRAPER)

**IMPORTANT:** Skip to **Step 7B** if not using optional Deflector (Scraper)

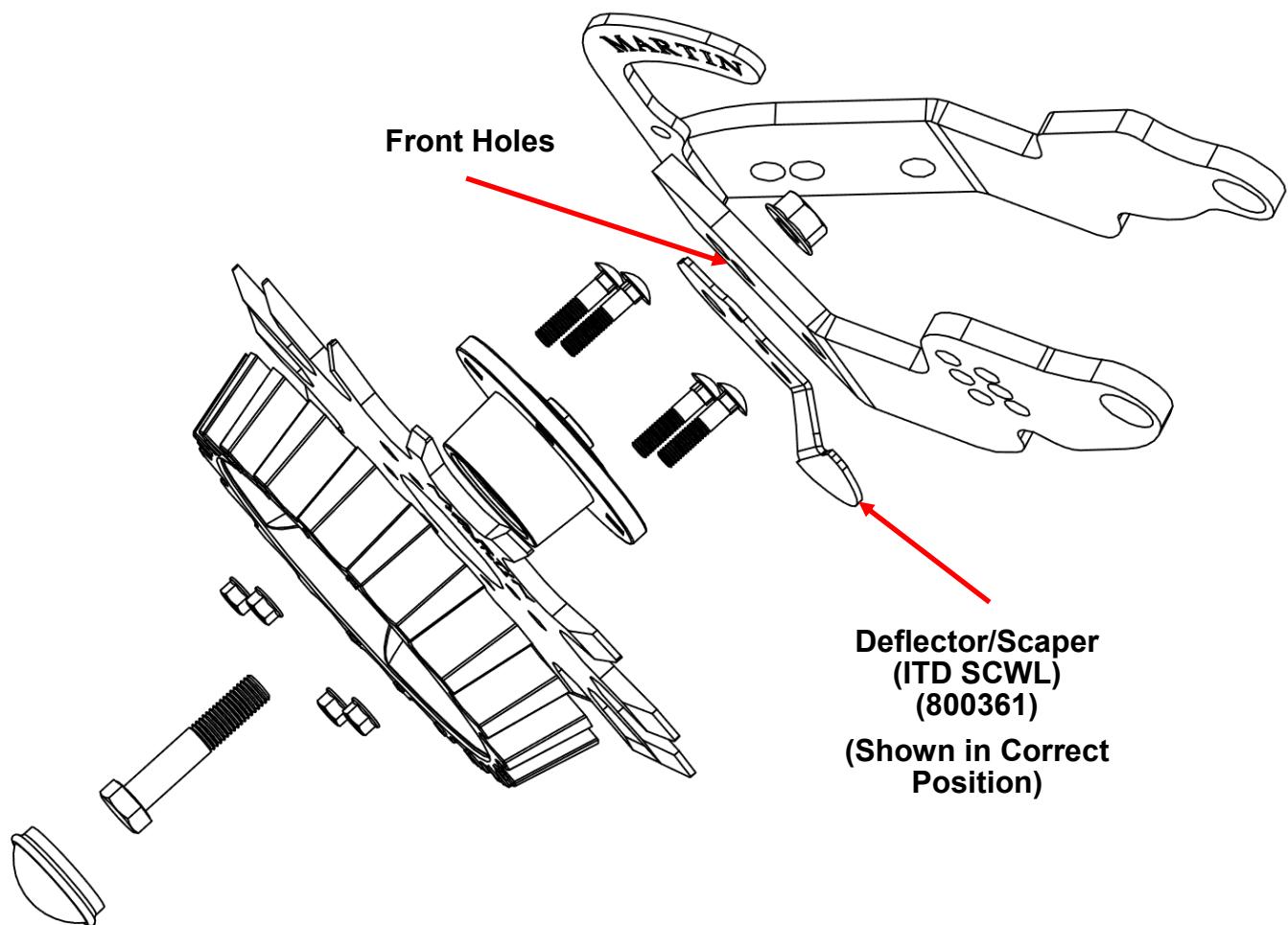
**NOTE:** The Deflector (Scraper) is recommended when operating in wetter conditions, or damp stringy residue, to reduce wrapping.

**NOTE:** The Deflector (Scraper) comes in pair of left and right for left and right wheels.

### Intersected Configuration (Wheel in front hole)

1. Place the deflector (Scraper) on the back of the assembled wheel unit (previously assembled in step 6) as shown here and pass the hex bolt through the wheel assembly and the deflector and attach the flange nut hand tighten and locate the deflector as shown and torque the hex bolt to 116 ft-lbs being careful not to allow the deflector to rotate during bolt tightening.
2. The wheel marked TW3813L4 (Or RTW1412.5L4 for the Razor wheel) is for use on the left side of the frame (as viewed from behind the machine). Repeat for opposite side.

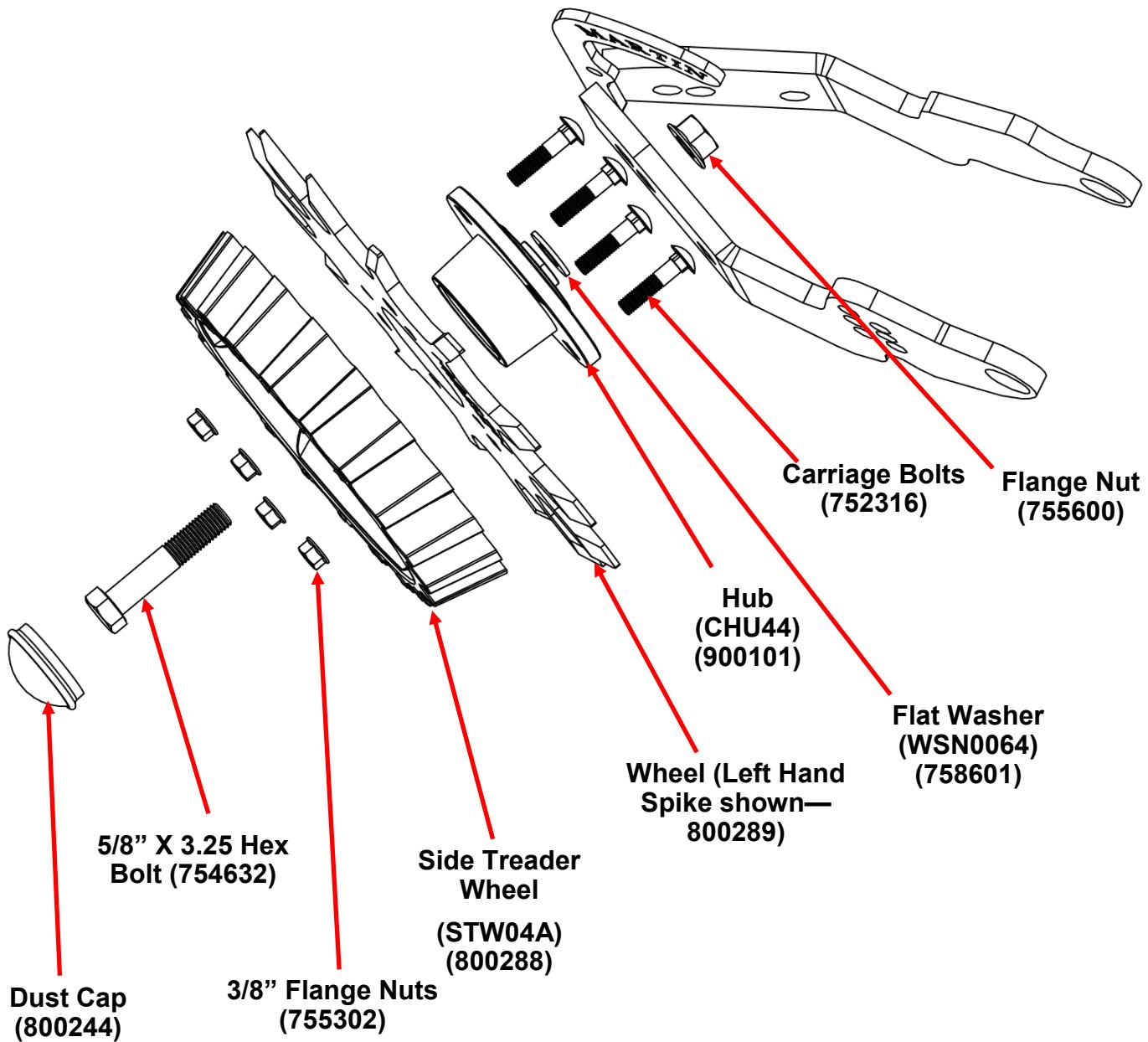
**NOTE:** When the deflector (scraper) is to be installed the washer (758601) is NOT used.



## STEP 7B: INSTALL WHEEL ASSEMBLIES

1. Secure the hub to the frame with the 5/8" X 3.25" (754632) hex bolt, washer and nut. Using a torque-wrench, tighten to 116 ft-lbs. Install the dust cap.
2. Install the wheel (part # to the outside) and optional wheel attachment on the hub, using the four carriage bolts and flange nuts. Torque to 23 ft-lbs. Re-tighten after first day's use.
3. The wheel marked TW3813L4 is for use on the left side of the frame (as viewed from behind the machine). Repeat for opposite side.

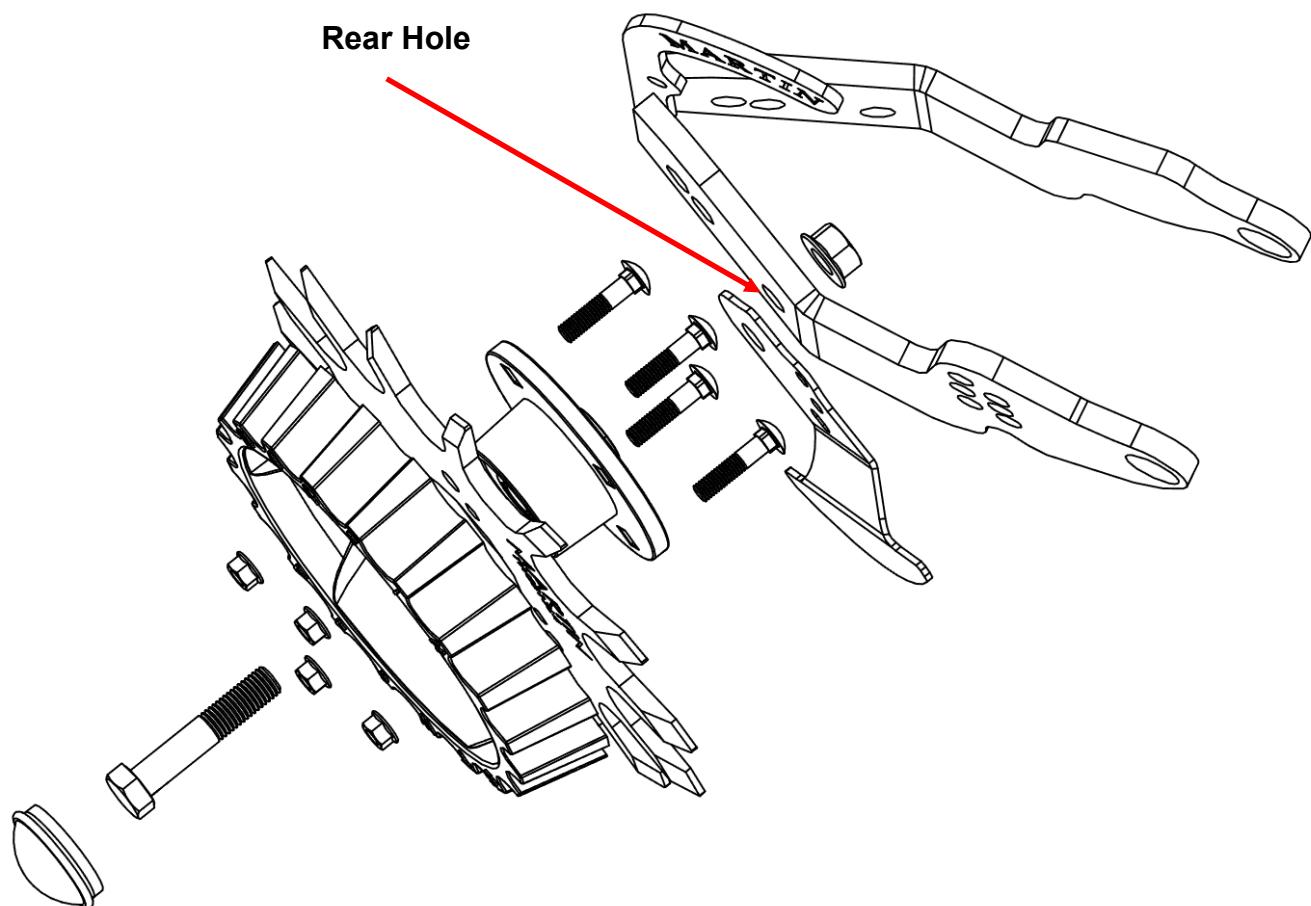
**Note: The air cylinder cannot be installed once both wheels are installed. If a cylinder is going to be used, install the cylinder prior to installing wheels. Refer to page 5.**



## Offset Configuration (Wheel in rear hole)

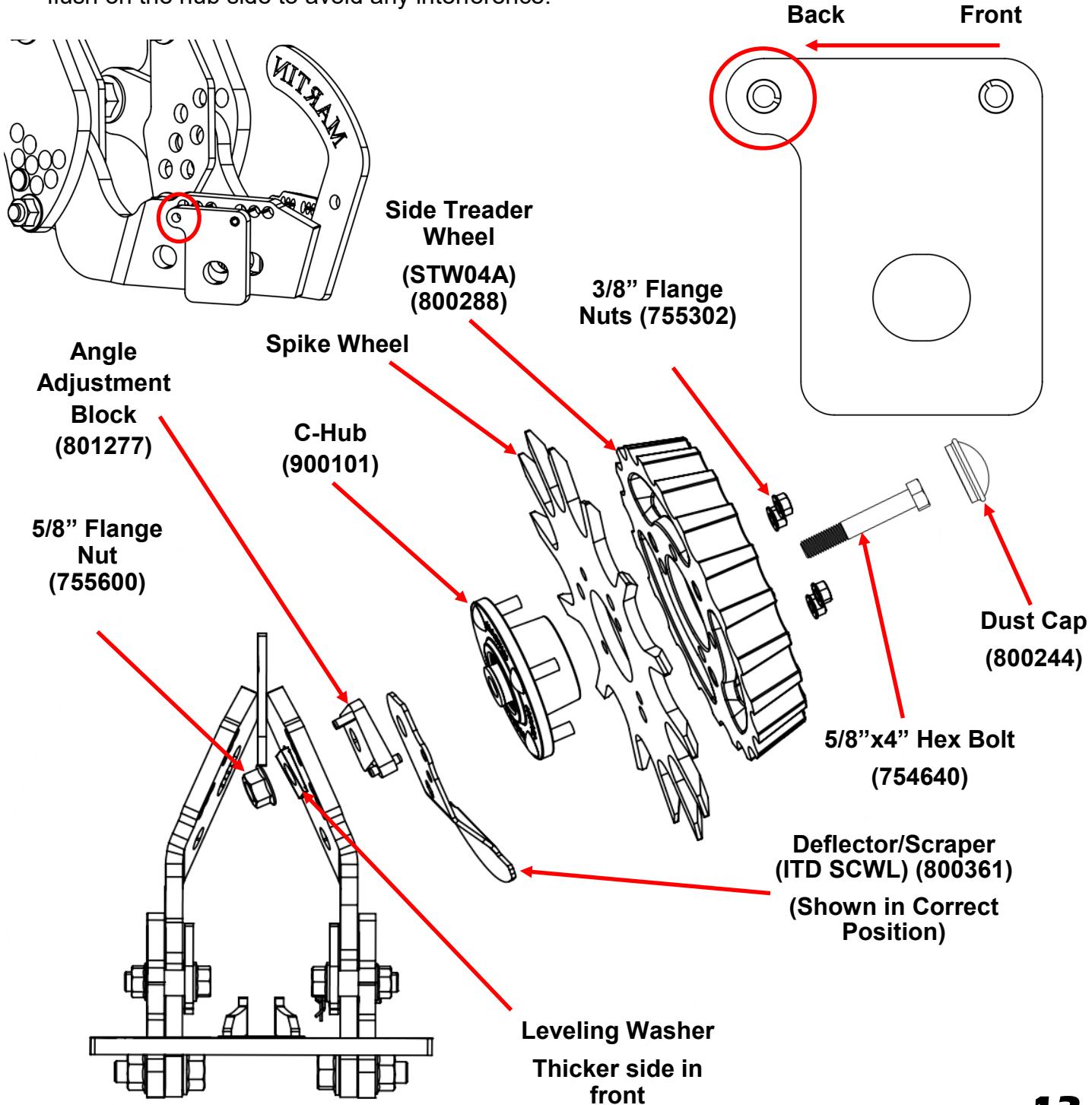
1. Place the deflector (scraper) on the back of the assembled wheel unit (previously assembled in step 6) as shown here and pass the hex bolt through the wheel assembly and the deflector using the rear hole in the frame unit and attach the flange nut hand tighten and locate the deflector (scraper) as shown and torque the hex bolt to 116 ft-lbs being careful not to allow the deflector to rotate during bolt tightening.
2. The wheel marked TW3813L4 (Or RTW1412.5L4 for the Razor wheel) is for use on the left side of the frame (as viewed from behind the machine). Repeat for opposite side.

NOTE: When the deflector (scraper) is used, the washer 758601 is NOT used.

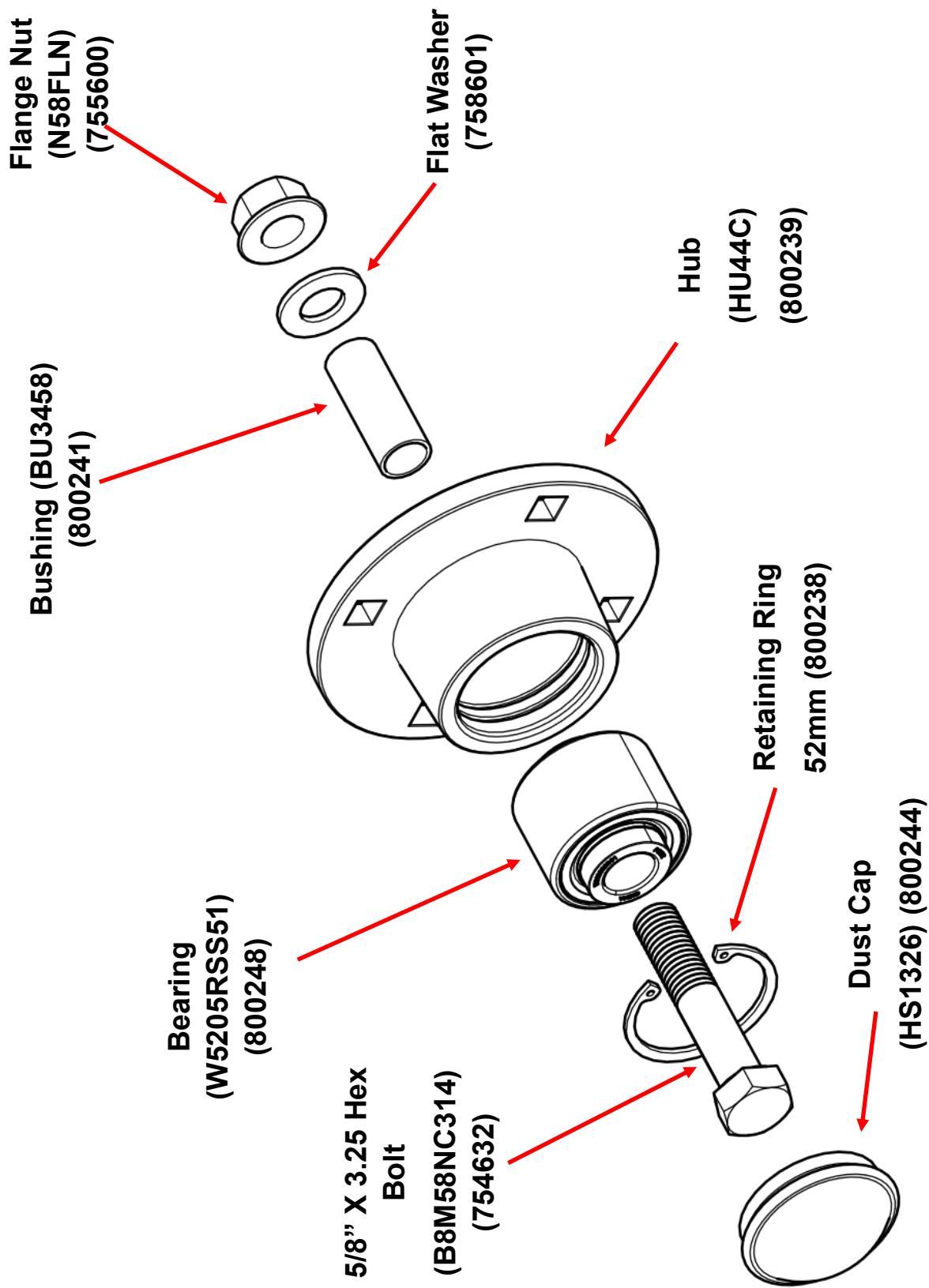


## Wide Configuration

1. If the wide configuration is desired, the angle blocks (801277) must be used along with the provided leveling washers (801278).
2. Align items to the recommended hole position (refer to Page 9). Ensure angle adjustment blocks (801277) have 0.25" pins facing inward toward the frame and that the thicker portion is towards the rear of the chassis. This is what creates the increased angle. When installing the angle washer, the thicker portion goes towards the front. Use provided 5/8" X 4" Hex bolts (754640).
3. If the pins are not facing inward, gently tap the pins in the direction required to have the pins flush on the hub side to avoid any interference.



## PARTS LIST FOR BA1350 C-HUB ASSEMBLY (HU44C) (900101)



## Operating the Kronos BA1350

The BA1350 has two unique operating modes: Rigid and Floating. The system is designed to allow the user to insert a clevis pin in either side of the system to reduce the unit's ability to flex.

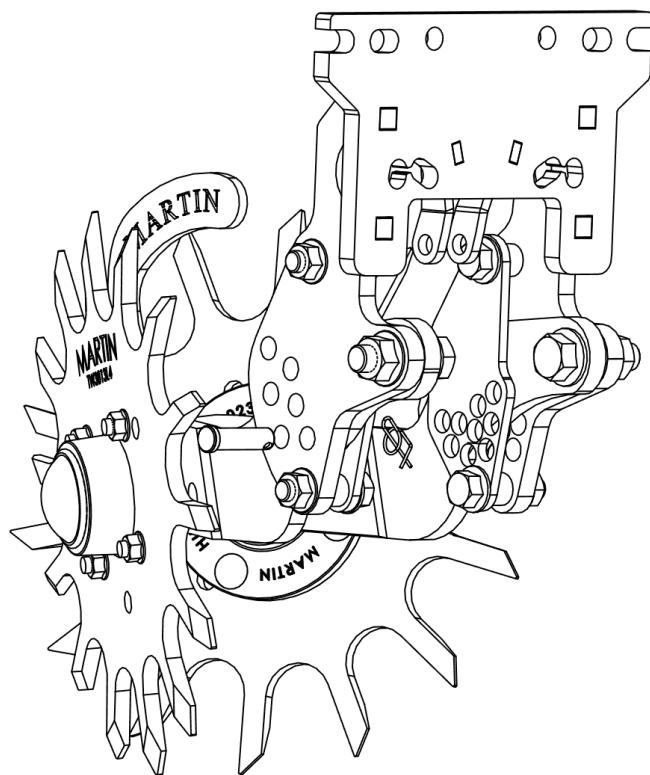
### Rigid

Rigid mode behaves as a standard pin-adjust row cleaner. The operator can set a desired height and pin it there. In this mode, the row cleaner's motion is locked at a fixed angle. These holes allow for 3/8" height increments at the wheels. Air cylinders are not recommended for this mode.

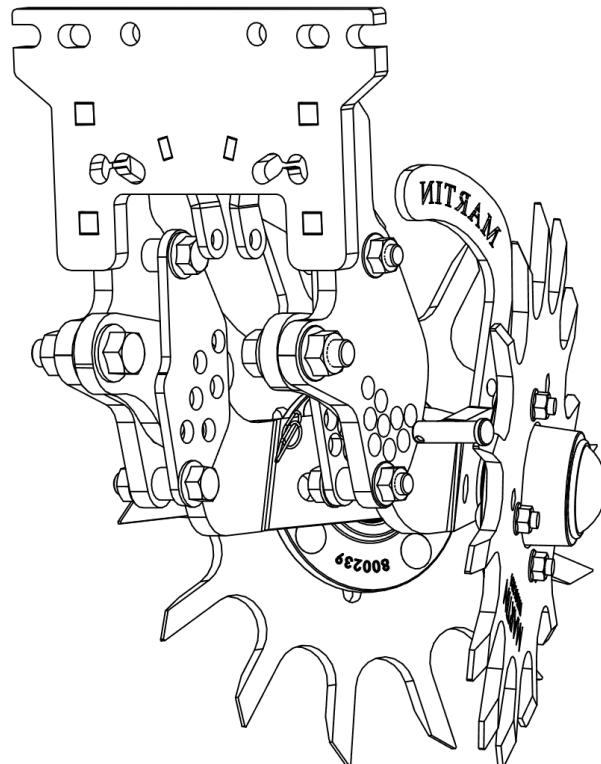
### Floating

Float mode allows the operator to adjust the lower limiter to his/her desired height by simply inserting the clevis pin in the desired hole. These holes allow for 3/8" height increments at the wheels. In this mode, it is recommended to pair an air cylinder for the best overall experience.

Rigid Mode



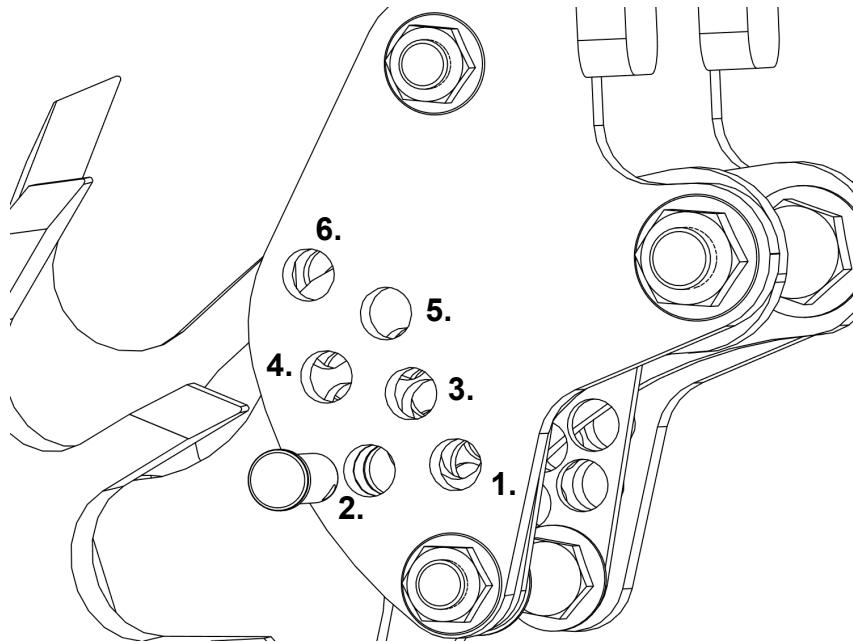
Float Mode



## Operating the Kronos BA1350

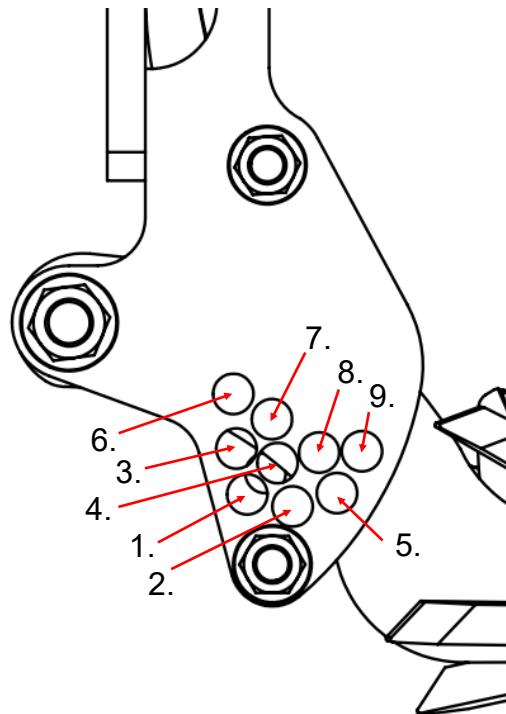
### Rigid

Rigid mode utilizes an array system to maximize increments while minimizing holes cut into the frame and mount. To get the most out of this system, the array must be used correctly. The holes align in a repeating pattern. In the picture below, the numbered holes represent the order of which the holes will produce the 3/8" increment. Every full cycle of those holes, the lowest two will no longer be used until the system is at its highest setting.

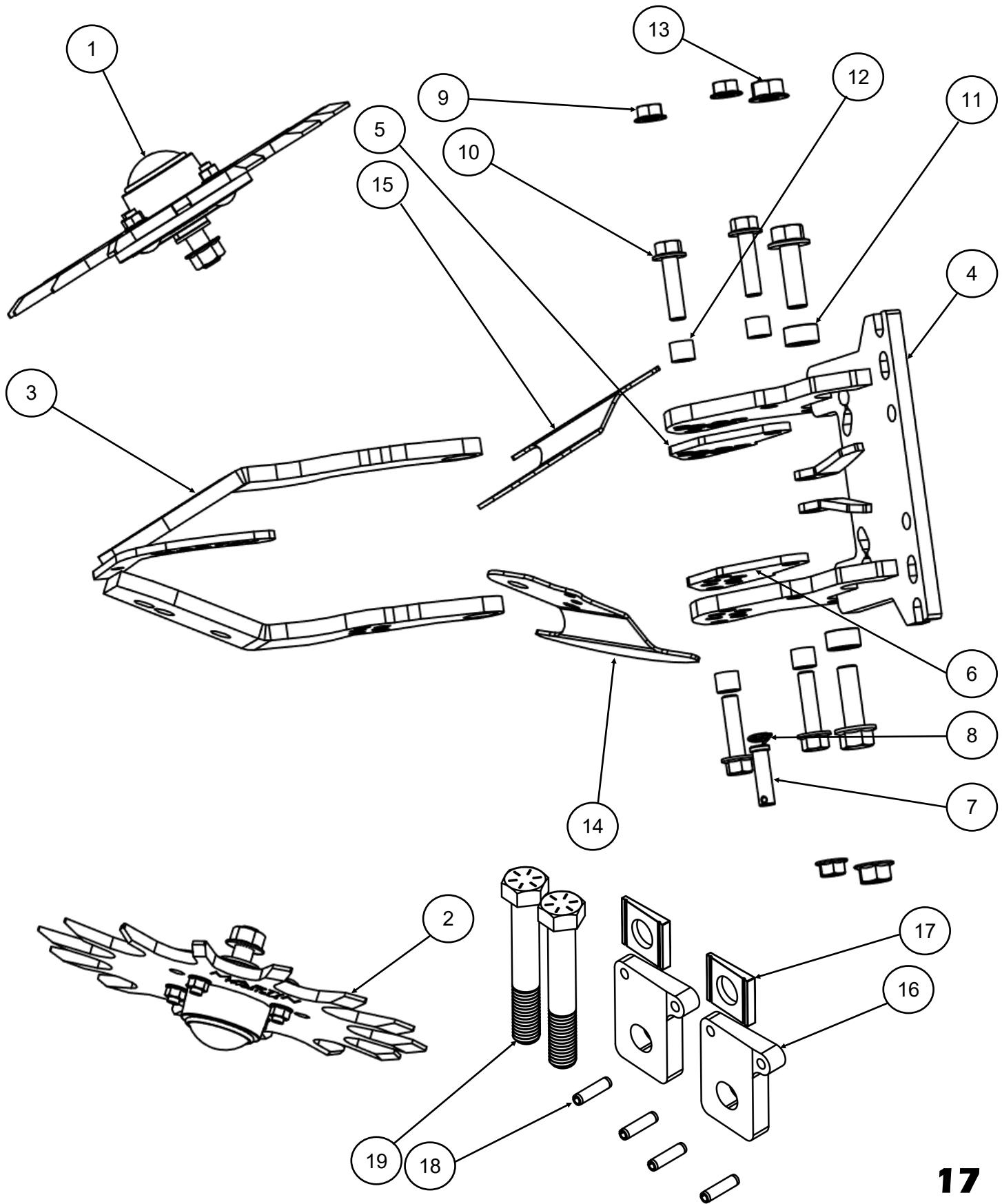


### Floating

Floating mode allows the frame freely float upward while still being able to adjust the aggressiveness using adjustable lower limiters. Each adjustment hole increases the height of the wheels by 3/8".



## EXPLODED VIEW OF BA1350



## BOM OF BA1350

Item No.	Part No.	Description	QTY
1	900152	Assembly, RH 13" Spike Wheels w HU44C Hub	1
2	900153	Assembly, LH 13" Spike Wheels w HU44C Hub	1
3	850443	Frame, 1350 Row Cleaner	1
4	850442	Mount, MT1350	1
5	801254	Plate, RH Depth Adjustment	1
6	801255	Plate, LH Depth Adjustment	1
7	709514	Pin, 1/2x1.5 Clevis ZP	1
8	709126	Pin, 1/16x1.375 Locking Cotter ZP	1
9	785500	Nut, 1/2-13 Center Punch Flange Lock ZY	4
10	783520	Bolt, 1/2-13x2 Flange ZY	4
11	800510	Bushing, 1.09x.625x.562	2
12	800687	Bushing, .750x.52x.595	4
13	755600	Nut, 5/8-11 Center Punch Flange Lock ZY	2
14	800361	Scraper, LH Internal Deflector	1
15	800360	Scraper, RH Internal Deflector	1
16	801277	Angle Adjustment Blocks	2
17	801278	Leveling Washers	2
18	709003	1/4"x1" Spring Pins	4
19	754640	5/8"x4" Hex Bolt	2

\* Items 1 & 2 are preassembled parts. For a detailed breakdown, refer to Page 8.

## Notes



**The most trusted name in no-till  
Established 1991**

**Martin Industries LLC**

206 Elk Fork Road  
Elkton, KY 42220

Telephone: 270-265-5817

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