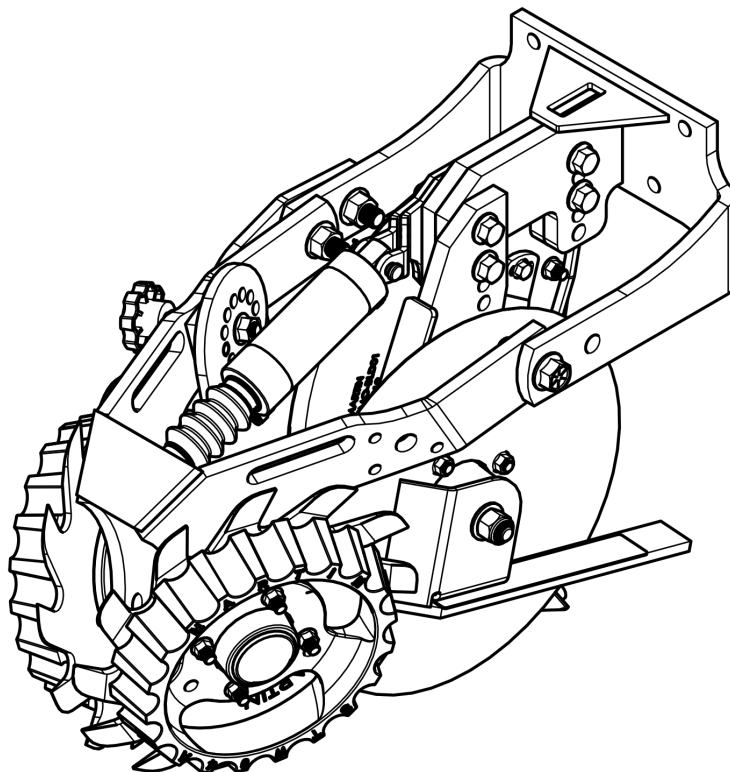


DUAL UMO-1345

1345 ROW CLEANER WITH TWO UNIT MOUNTED FERTILIZER OPENERS

INSTALLATION INSTRUCTIONS



**SHOWN WITH OPTIONAL AIR CYLINDER AND BRACKETS, RAZOR
WHEEL(RTW1412.5) , SIDE TREADER WHEELS (*STW-04*) & CAM
ADJUST (900160)**



Martin Planter Attachments

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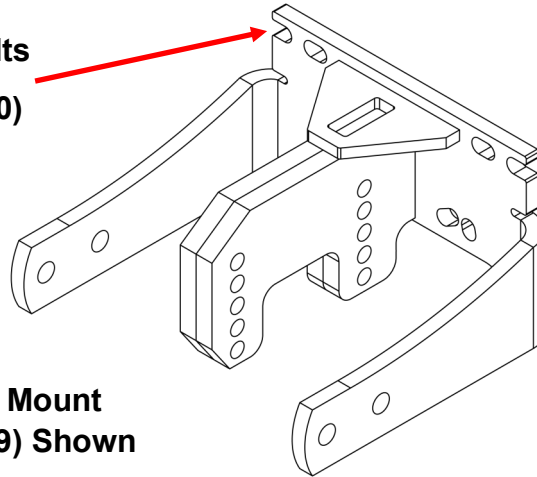
STEP 1 : ATTACH THE MOUNT TO THE PLANTER

Use a square or a level tool to make sure that the planter base plate is set parallel to the Planter's W-Bracket (The bracket that attaches the planter to the tool bar).

Using four 1/2" X 2" Flange Bolts, attach the Mount to the Planter's base plate, and torque mounting nuts to 57 ft-lbs.

**1/2" X 2" Flange Bolts
(B5F12NC2) (783520)**

**ADU Mount
(850309) Shown**



STEP 2 : INSTALLING THE UMOs

In this instruction, the left UMO is leading. We recommend installing half of the planter with left UMOs leading and half with right UMO leading.

If the Left Hand UMO is leading, the opposite hand (right hand) Stop Arm and Smart Clean Brackets will be used. If Right Hand UMO is leading, the Left Hand Stop Arm and Brackets are used.

STEP 2A: INSTALLING THE RIGHT HAND UMO

Looking at the pictures on page 3, select 1 of the following UMO vertical installation positions (A, B, or C)

Position A (Worked Ground):

The top bolt passes through the first holes of the mount and the UMO. The bottom bolt passes through the fifth hole of the mount and the forth hole of the UMO. This position will place the fertilizer 3/4" above seed depth.

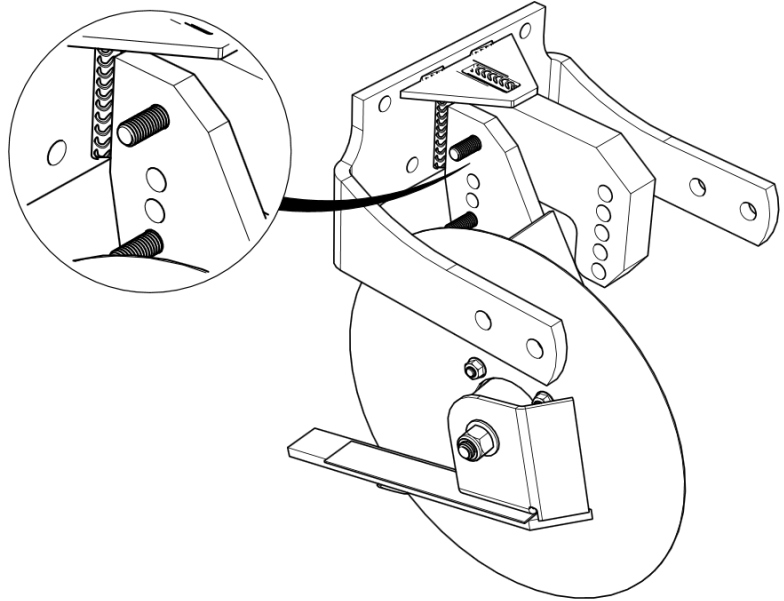
Position B (No-Till): (RECOMMENDED)

The top bolt passes through the second hole of the mount and the first hole of the UMO. The bottom bolt passes through the fifth holes of the mount and the third hole of the UMO. This position will place the fertilizer "even" with seed depth.

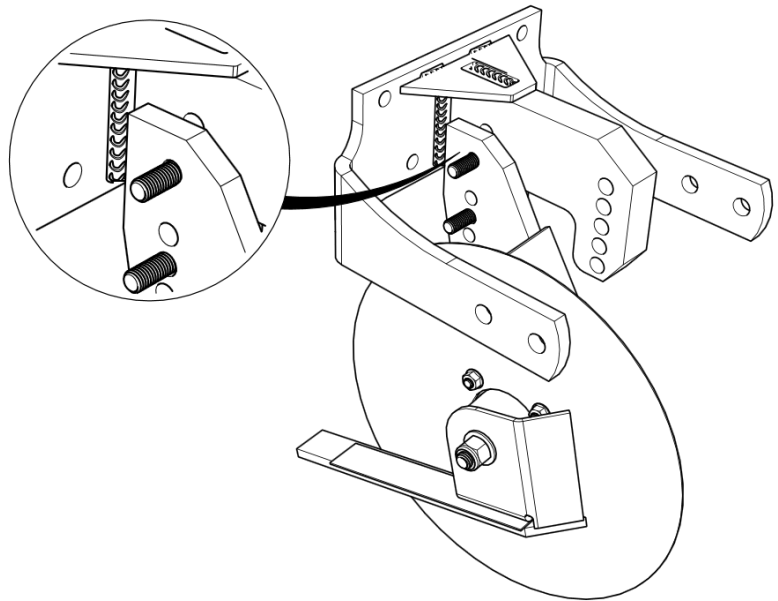
Position C (Special soil conditions only):

The top bolt passes through the third hole of the mount and the first hole of the UMO. The bottom bolt passes through the fifth holes of the mount and the second hole of the UMO. This position will place the fertilizer 3/4" below seed depth.

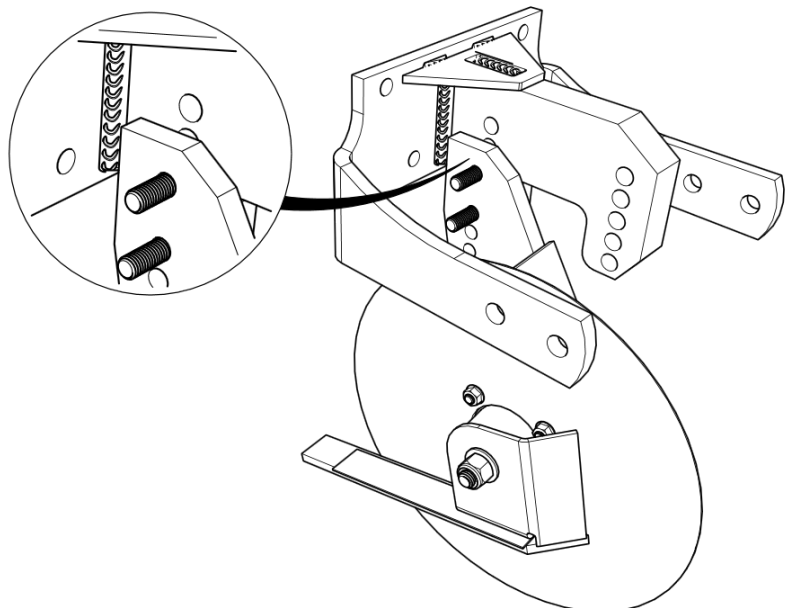
Position A
(Worked Ground)
3/4" above seed
depth



Position B
(No-Till)
Even with seed
depth
(Recommended)

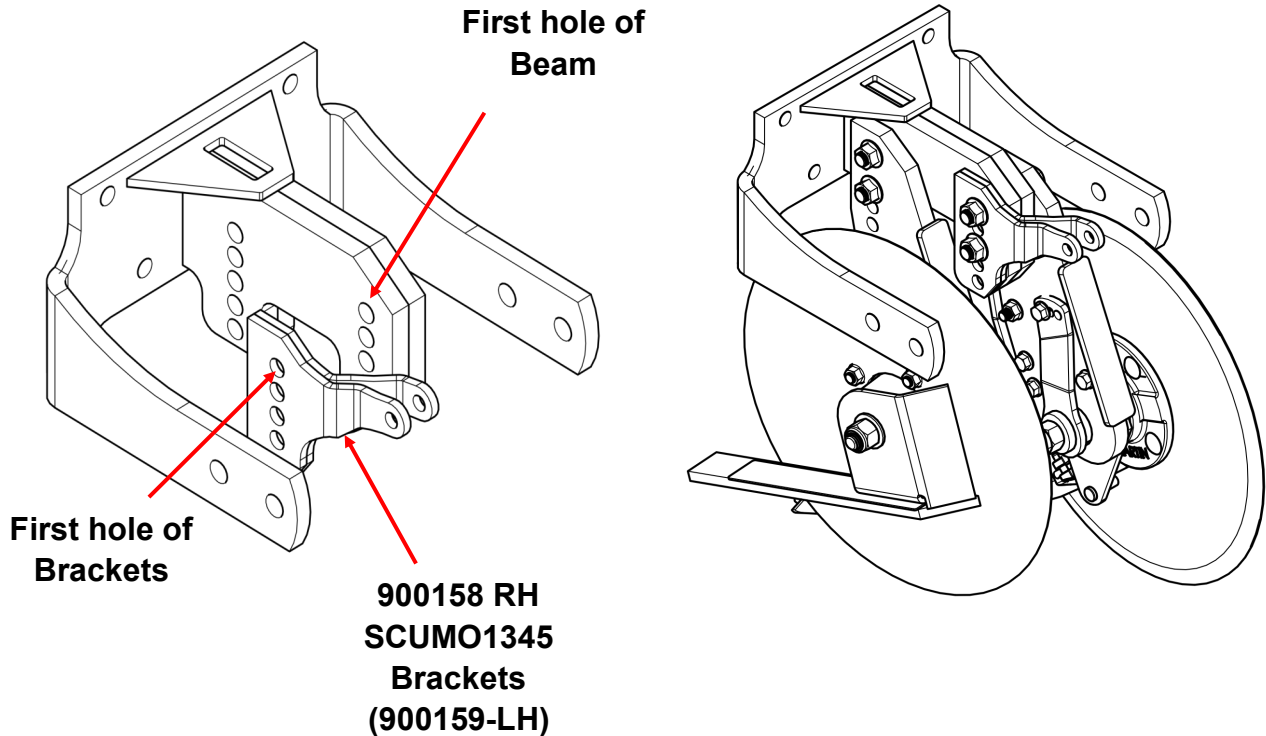


Position C
(Special soil
conditions only)
3/4" below seed
depth



STEP 2B: INSTALLING THE LEFT UMO AND AIR CYLINDER TOP BRACKETS

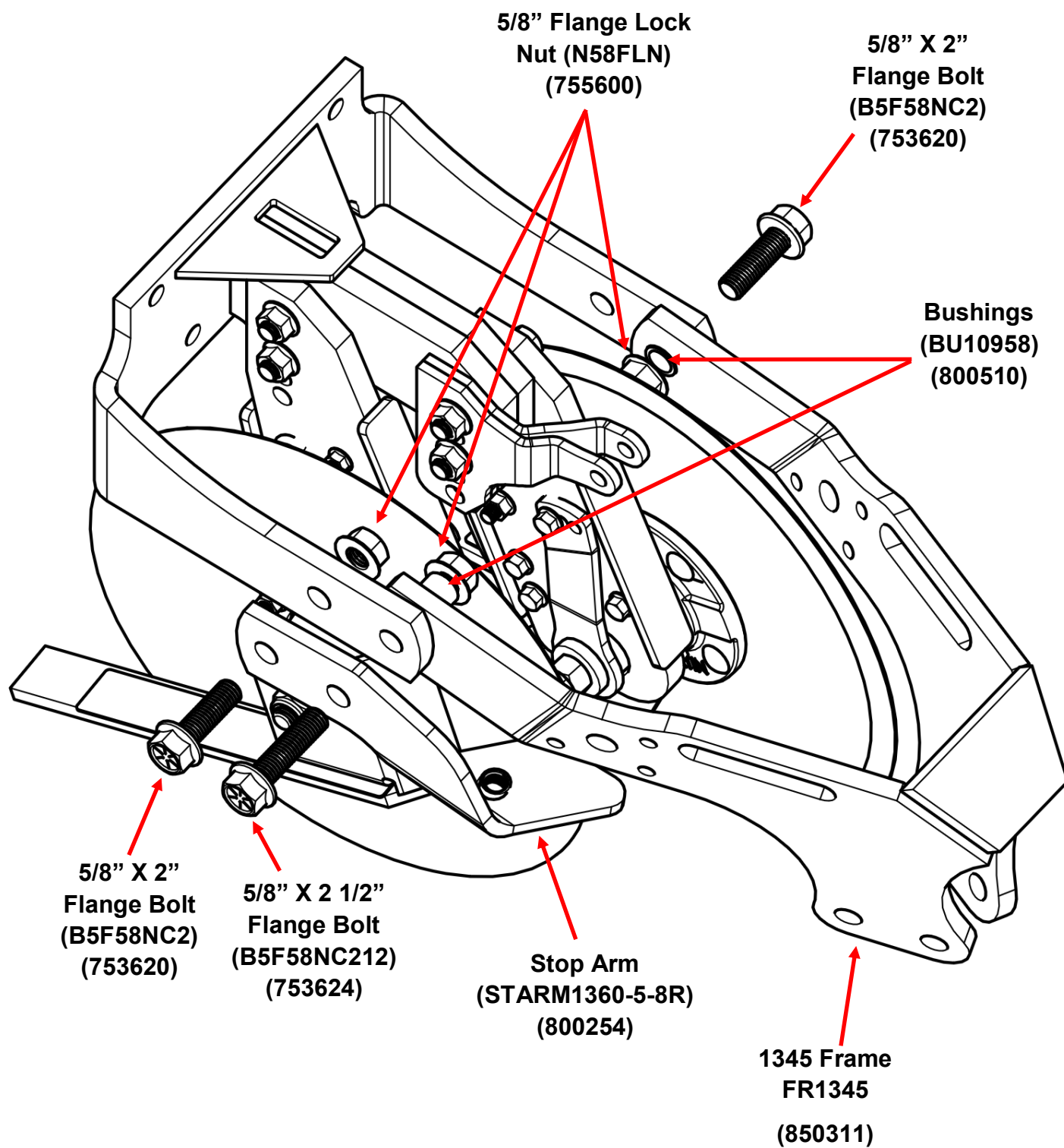
Attach the left UMO to the mount according to the picture using 1/2" X 2 1/2" bolts (Or 1/2" X 3" bolts when optional cylinder top brackets are used) and tighten the flange nuts to 80 ft-lbs.



STEP 3: ATTACH 1345 FRAME ASSEMBLY TO THE MOUNT

IMPORTANT: Stop arm installation, as shown in the picture, is for the left UMO configuration. For a right UMO configuration, install the left stop arm (STARM1360-5-8L) on the opposite side.

1. Place the bushings (BU10958) inside the frame's arms pin point holes.
2. Align the holes in the mount and the frame assembly. Insert the 5/8" x 2 1/2" and the 5/8" x 2" bolts from the outside. Add the Stop Arm and other 5/8" x 2" bolt as it is shown in the picture. Place nuts on the 5/8" bolts from inside and tighten the three bolts to 112 ft-lbs. Check after first day of use.
3. Check to ensure the frame is not binding on the mounting bracket and is free to float up and down
4. Install the 5/8 x 3" bolt on the Stop Arm as factory threaded adjustment assembly and tighten the 5/8" Thin Jam Nut to lock it after the adjustment.

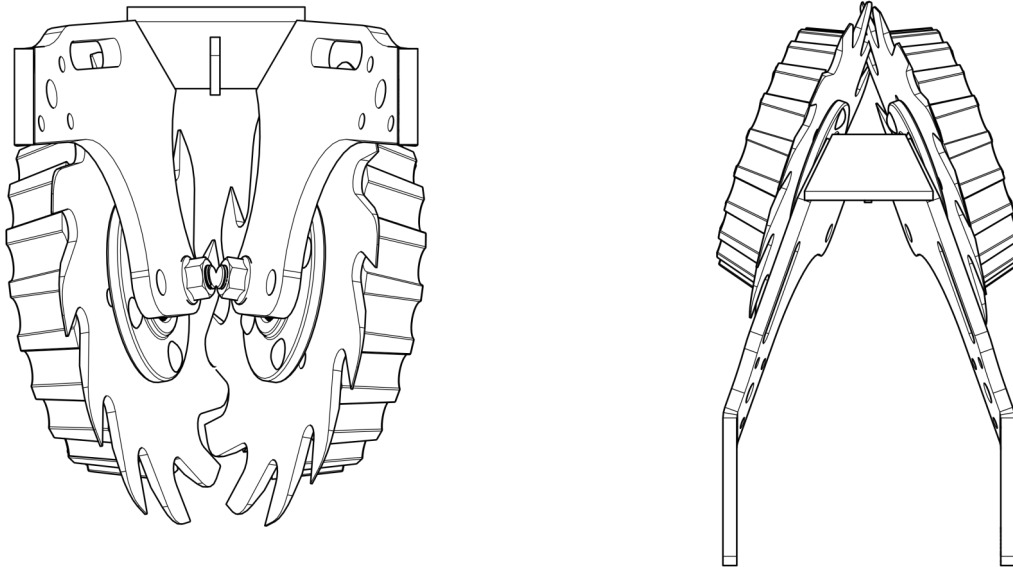


STEP 4 : DETERMINE THE BEST WHEEL CONFIGURATION FOR YOUR SOIL CONDITIONS

OPTION A: INTERSECTED

(Both wheels in front hole)

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

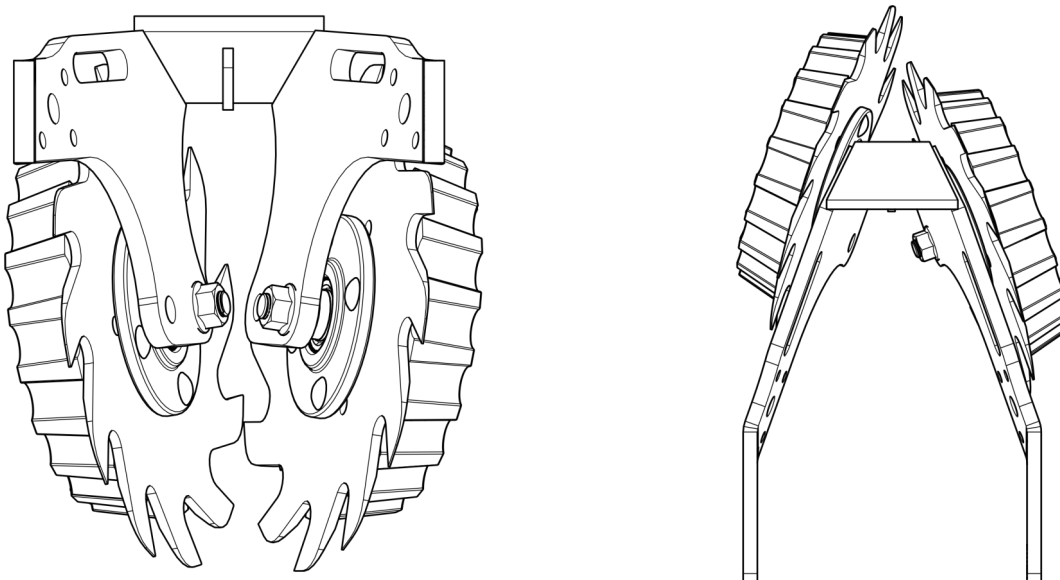


OPTION B: OFFSET

(One wheel in front hole and one wheel in rear hole)

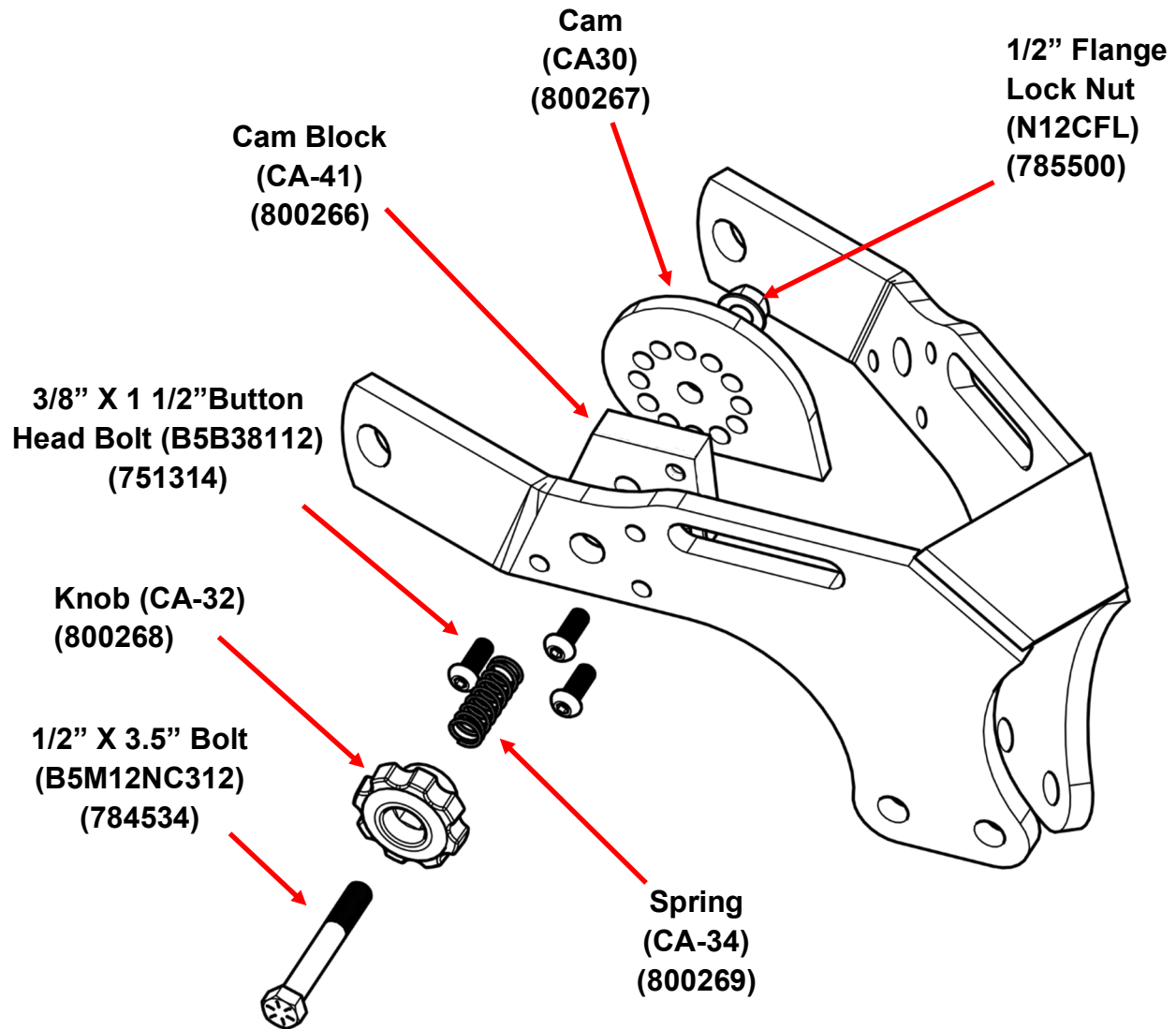
The staggered configuration allows the wheels to turn more easily in loose soil.

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 5: INSTALL OPTIONAL CAM ADJUSTMENT ASSEMBLY

1. Mount the cam block to the frame using the three 3/8" button head bolts.
2. Slide the 1/2" x 4" bolt through the knob, spring, and support block and thread it into the cam.
3. Tighten the bolt until the cam is directly adjacent the support block but still loose enough to be disengaged from the pin by pushing on the knob.
4. Install the 1/2" nut on the end of the bolt and tighten securely against the cam. Torque to 57 ft-lbs.

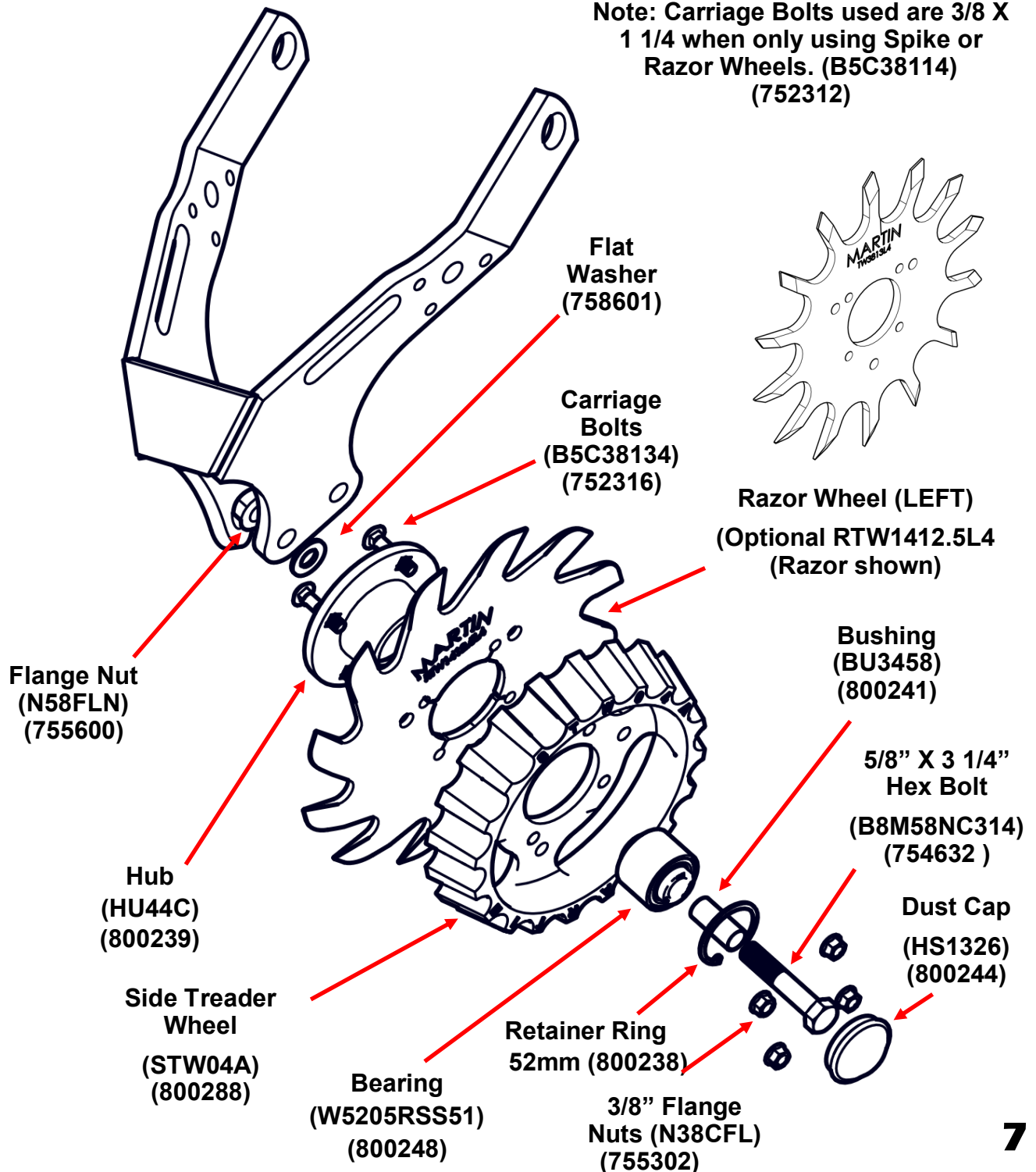


STEP 6: INSTALL WHEEL ASSEMBLIES

- 1) Secure the hub to the frame with the 5/8" X 3 1/4" 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 side treader wheel 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.

Spike Wheel (TW3813L4 Shown)

Note: Carriage Bolts used are 3/8 X 1 1/4 when only using Spike or Razor Wheels. (B5C38114) (752312)



STEP 7: INSTALL OPTIONAL DEFLECTOR (SCRAPER)

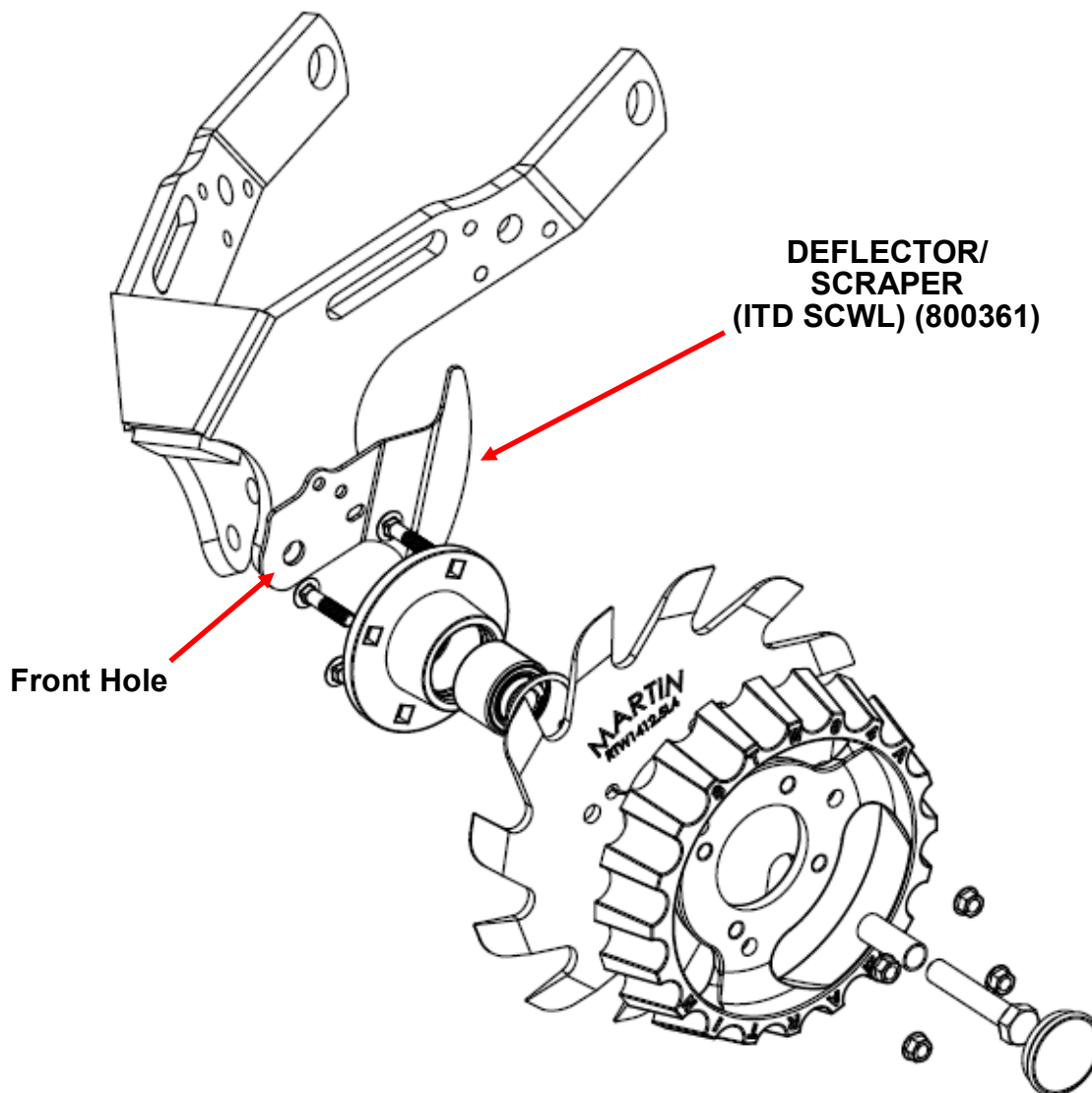
NOTE: The Deflector (Scraper) is recommended when operating in wetter conditions, or damp stringy residue, to reduce wrapping.

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 (N58FLN), 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.

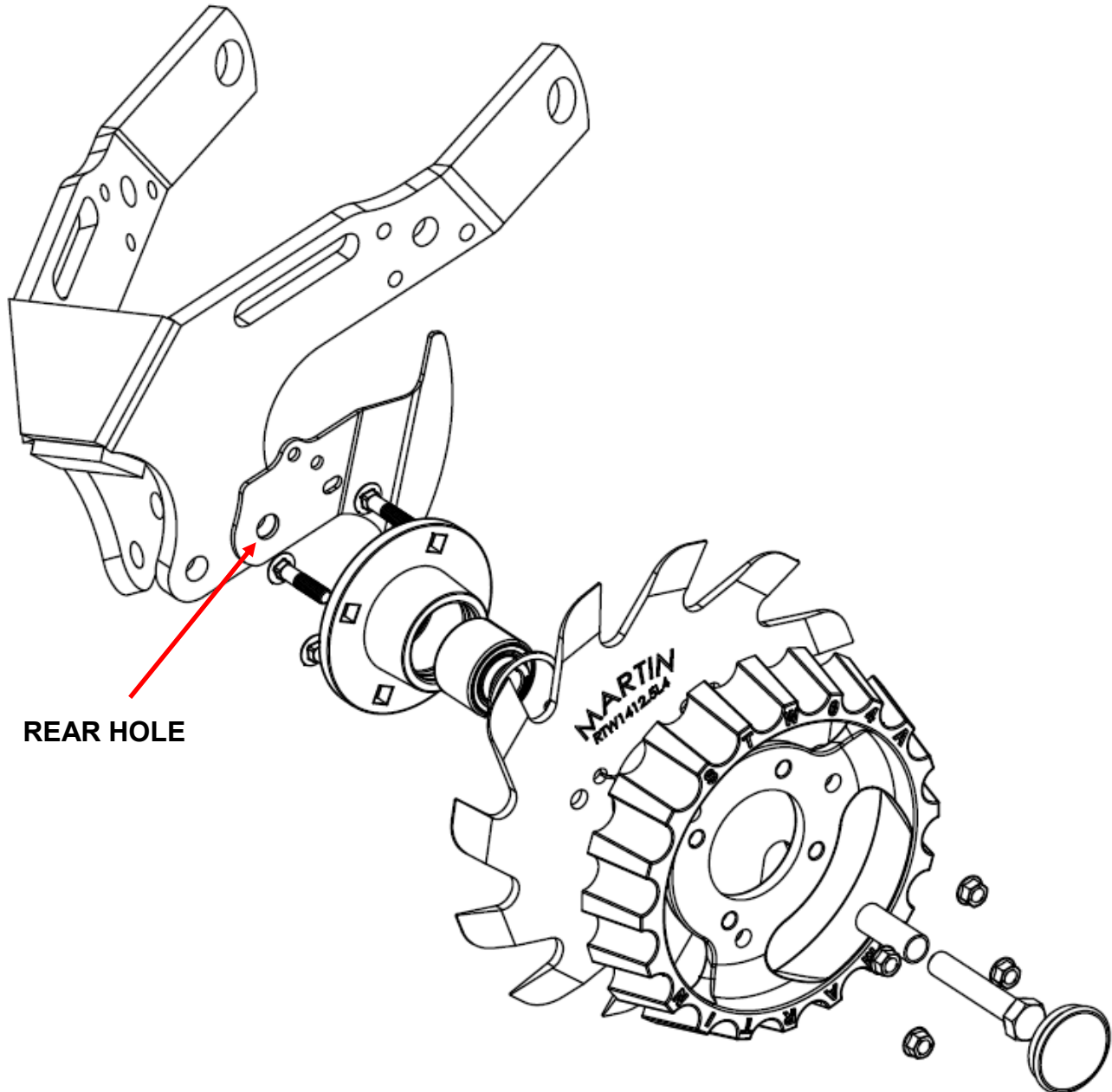
NOTE: When the deflector (scraper) is to be installed the washer (758601) is NOT used



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 (N58FLN), 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.

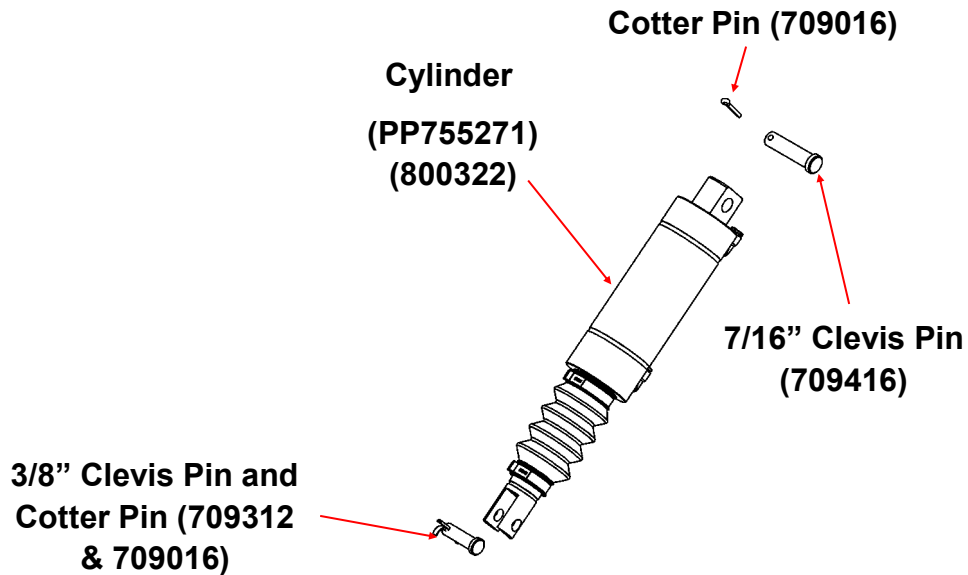
NOTE: When the deflector (scraper) is used the washer (758601) is NOT used



STEP 8 : INSTALL THE OPTIONAL SMARTCLEAN CYLINDER

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

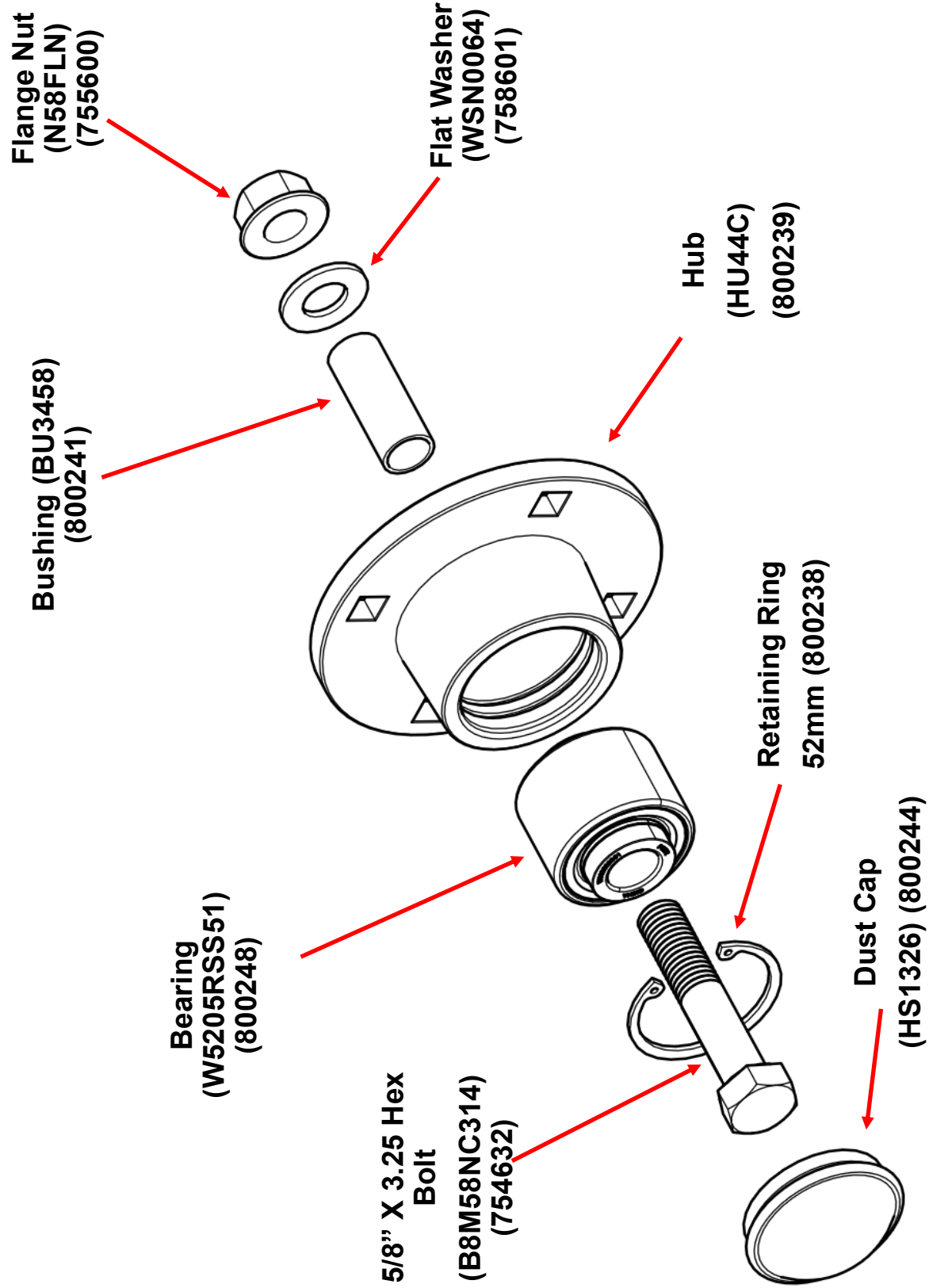
NOTE: Cylinder may be installed with elbow valves in either up or down orientation, depending on user preference.



Note:

It is very important to limit the row cleaner down travel by threaded or cam adjustment assembly to prevent the air cylinder from extending fully by setting stop bolt or cam to catch the row cleaner just before the cylinder reaches the end of its stroke. Failure to do so will destroy the cylinder prematurely.

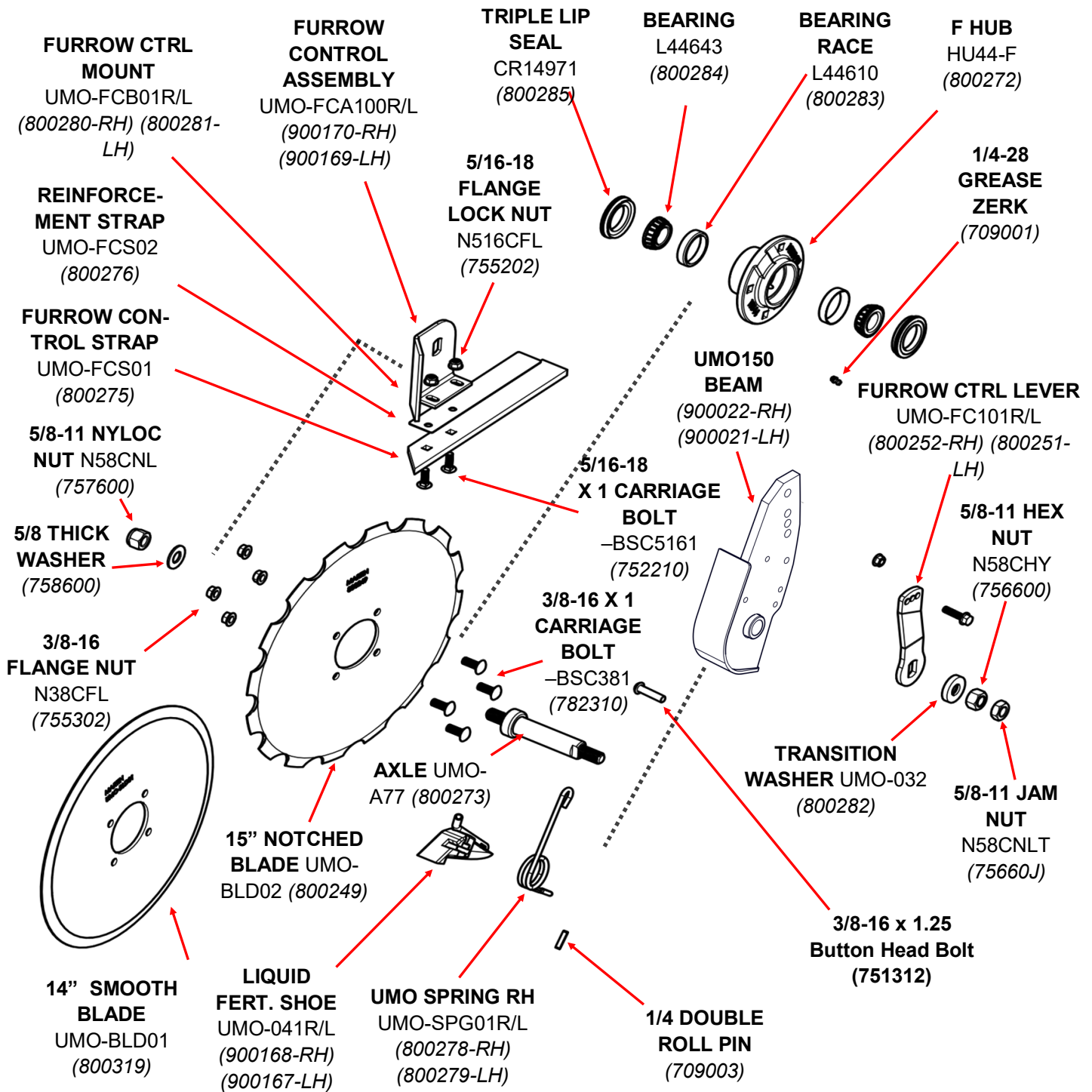
PARTS LIST FOR 1345 C-HUB ASSEMBLY (HU44C) (900101)



PARTS LIST FOR UMO150

UMO150R- 900172 or 900172N (Notched Blade)

UMO150L- 900171 or 900171N (Notched Blade)

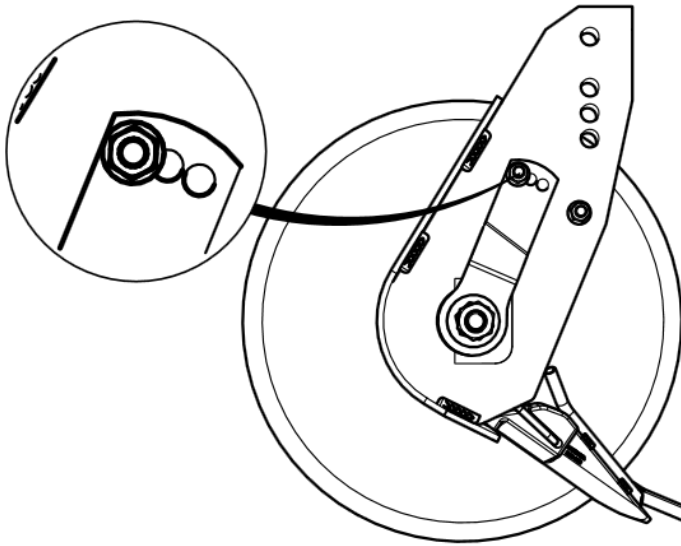


NOTE: UMO-150R SHOWN

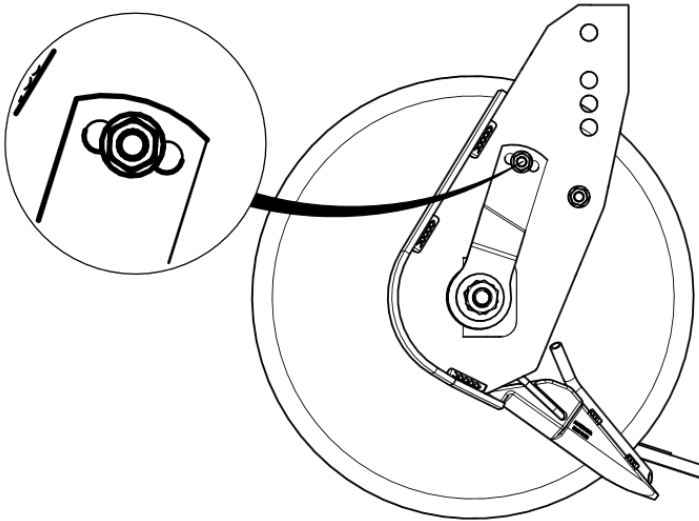
- R DESIGNATES RIGHT HAND PARTS
- L DESIGNATES LEFT HAND PARTS
- N DESIGNATES NOTCHED BLADE

NOTE: INSTALL THE BLADE WITH BEVEL FACING HUB.

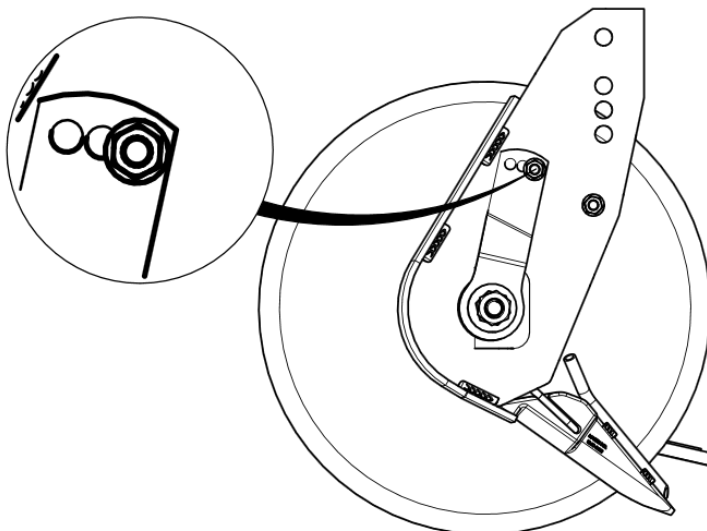
FURROW CONTROL LEVER GROUND PRESSURE ADJUSTMENT



SETTING #1: This configuration provides maximum ground pressure.



SETTING #2: This configuration provides medium ground pressure.



SETTING #3: This configuration provides the least ground pressure.

NOTE: This is the default and recommended position.

MAINTENANCE TIPS

UMO 150 Hub Preventative Maintenance

The UMO hub is designed to be “flushed out” with lubrication, without damaging the triple lip seal. To flush the hub, lubricate until fresh grease is visible around the seal.

- In worked ground, lubricate every 20 hours of run time
- In No-Till ground, lubricate every 40 hours of run time

NOTE: Hubs may feel tight when first installed. They will loosen after they “run in”.

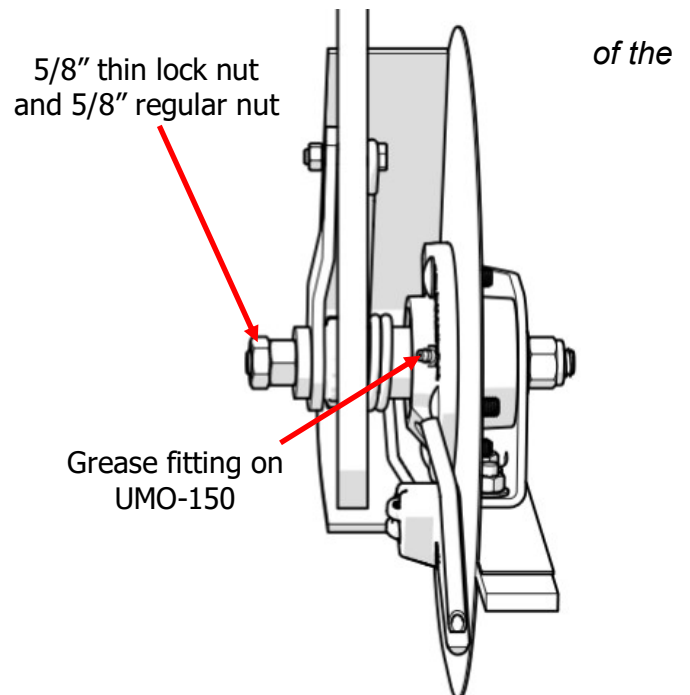
UMO 150 Hub Bearing Preload Adjustment

Maintaining proper bearing preload is crucial to bearing life. Monitor and adjust annually.

To adjust:

- Loosen the 5/8” thin lock nut
- Tighten the 5/8” regular nut until you feel zero end play
- Gently back the nut off, leaving .01” - .012” end play
- Hold the 5/8” regular nut in place with a wrench and tighten the 5/8” thin lock nut

NOTE: End play is checked by pulling out on the top blade while pushing in on the bottom





The most trusted name in no-till
Established 1991

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