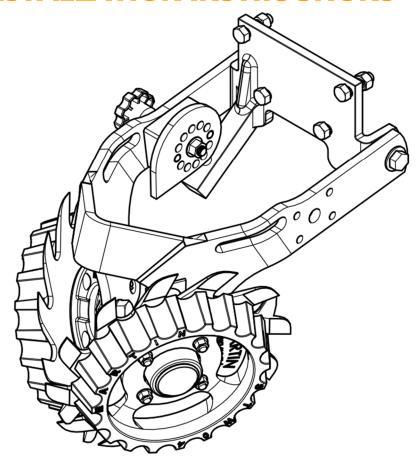
# **BĆIH**

# BD/BDC BK/KC/K4C BA1360 ROW CLEANER

#### **INSTALLATION INSTRUCTIONS**



SHOWN WITH BD MOUNT AND OPTIONAL SIDE TREADER WHEELS, CAM ADJUST, AND RAZOR WHEELS



#### **Martin Industries LLC**

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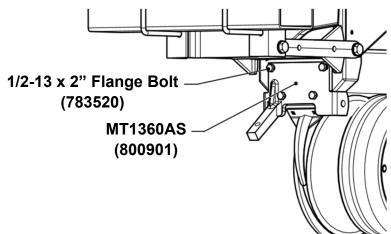
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#### STEP 1: ATTACH THE MOUNT TO THE PLANTER

Using four 1/2" X 2" Flange Bolts, attach the mount to the planter face plate, and torque mounting nuts to 57 ft-lbs.



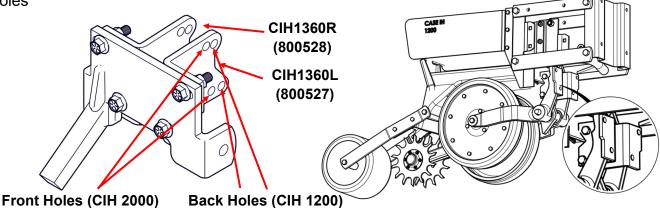
If you purchased the optional Smart Clean System, install the cylinder top brackets on the mount before attaching the mount to the planter. Some of the Smart Clean bracket sets (top and bottom brackets) are shown below . Use the instructions in Step 5 to install the cylinder brackets. Hardware for the PP755200 included in separate bag.

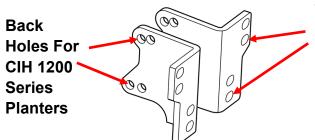


#### FOR CASEIH 1200 SERIES PLANTERS (BCIH1360)

Attach the Right and Left L-shaped brackets(CIH1360R&CIH1360L) using provided 1/2" X 3-1/2" bolts and nuts as shown in the picture. Torque to 80 ft-lbs. Using four 1/2" X 2" Flange bolts, attach the mount to the L shape brackets, and torque mounting nuts to 57 ft-lbs.

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

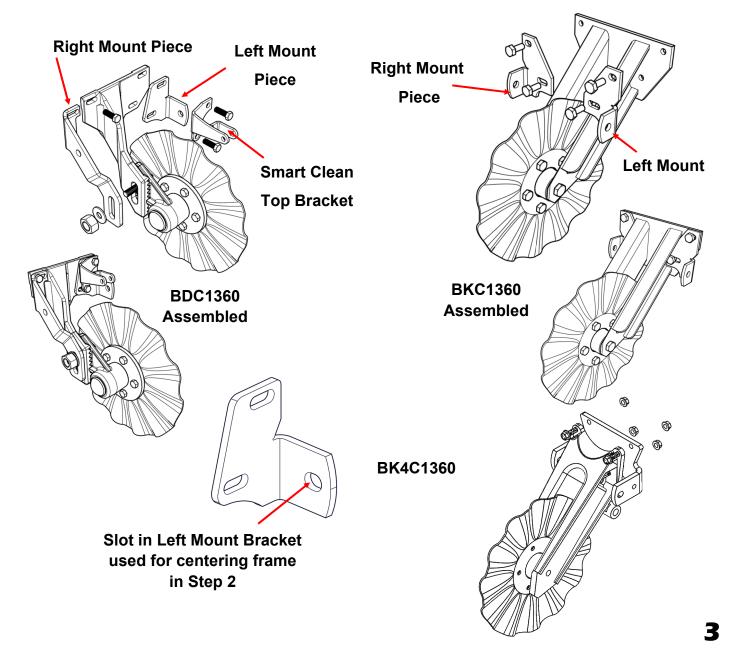




These bottom set of mounting holes are not recommended on 1360 Floating Row Cleaners or 1345 Narrow Row Cleaners (ACCR1360/45 on CIH 1200 Series Only)

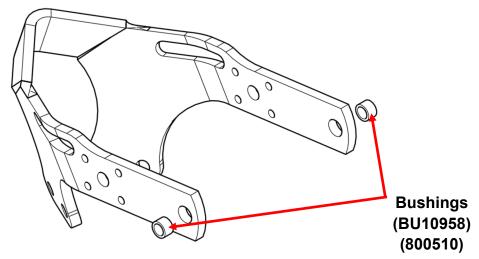
# FOR PLANTERS WITH A UNIT MOUNTED NO-TILL COULTER (BDC1360, BKC1360 & BK4C)

Most planters with a unit mounted no-till coulter usually require a two-piece mount. Using 1/2" X 2" bolts, attach the right and left mount pieces on the coulter frame and torque mounting nuts to 57ft-lbs. The Smart Clean top bracket comes in one piece and is attached to the top of the left mount piece. Kinze 4000 Coulters use a one piece mount as shown below.



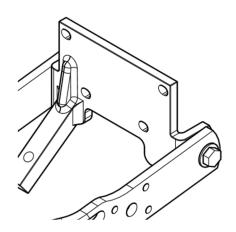
#### STEP 2: ATTACH 1360 FRAME ASSEMBLY TO THE MOUNT

- 1. Place the bushings (BU10958/800510) inside the pivot point holes of each frame arm.
- 2. Align the holes in the mount and the frame assembly. Insert the 5/8" x 2" flange bolts from the outside and place nuts on the 5/8" x 2" bolts from inside.
- 3. If installing with a No-Till Coulter, use slot in left hand mount bracket to center frame with coulter before tightening bolts. Hand tighten the right hand side of the frame and move the left side forward or back to center the frame. Look for clearance between the coulter blade and bottom of frame near the wheel holes. Re-check after installing optional cylinder brackets in Step 5.
- 4. Tighten the bolts to 112 ft-lbs. Check after first day of use.
- 5. Check to ensure the frame is not binding on the mounting bracket and is free to float up and down.

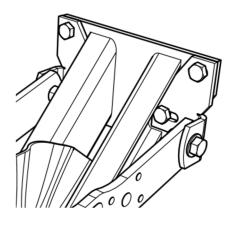


#### Note:

Normally the mount is installed inside the frame arms (as shown in the left picture). In some assemblies, (such as BKC1360), the mount is wide and the frame is installed inside the mount (as shown in the right picture).



Mount inside the frame

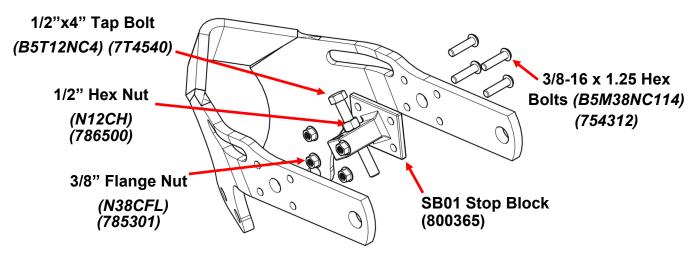


Frame arms inside the mount (BKC1360)

#### STEP 3: INSTALL THREADED ADJUSTMENT ASSEMBLY

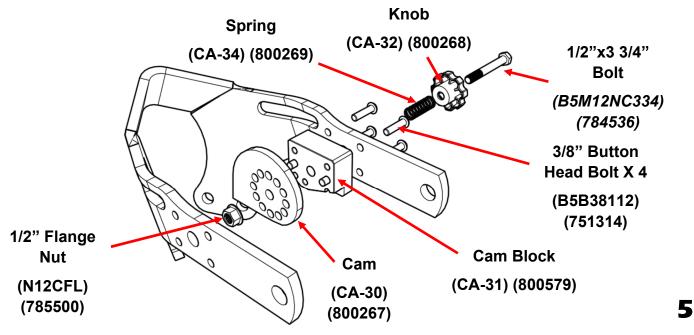
#### IMPORTANT: Skip to Step 3A if optional cam adjust was purchased

- 1. Place the adjustment assembly against the frame as shown in diagram below.
- 2. Secure the adjustment assembly to the frame using the four hex head screws and nuts provided.
- 3. Put the 1/2" nut on the 1/2" x 4" Tap Bolt and thread the bolt into the tapped hole of the adjustment assembly.
- 4. Use the 1/2" nut to lock the 4" adjustment bolt in place once the desired minimum depth setting has been determined.



#### STEP 3A: INSTALL THE OPTIONAL CAM ADJUSTMENT ASSEMBLY

- 1. Mount the cam block to the frame using the four 3/8" button head bolts (751314).
- 2. Slide the 1/2" x 3.75" bolt through the knob, spring, and support block and thread it into the cam.
- 3. Tighten the bolt until the cam is directly against 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.

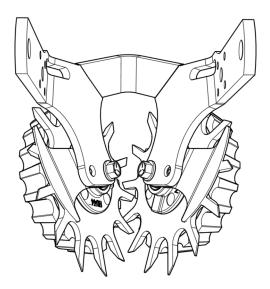


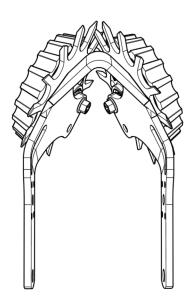
## STEP 4 : DETERMINE THE BEST WHEEL CONFIGURATION FOR YOUR SOIL CONDITIONS

#### **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.



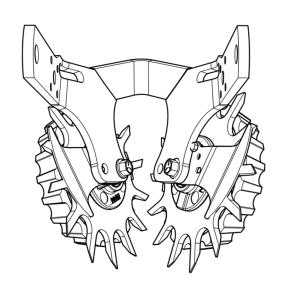


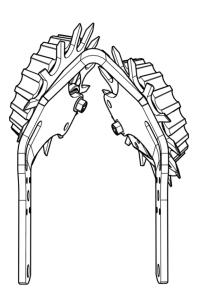
#### **OPTION B: OFFSET**

(One wheel in front hole and one wheel in 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 5: Installing Optional Top Cylinder Brackets**

Optional Top Cylinder Brackets are installed using the top and bottom left mounting bolts, usually 1/2" x 2" Flange Bolts.

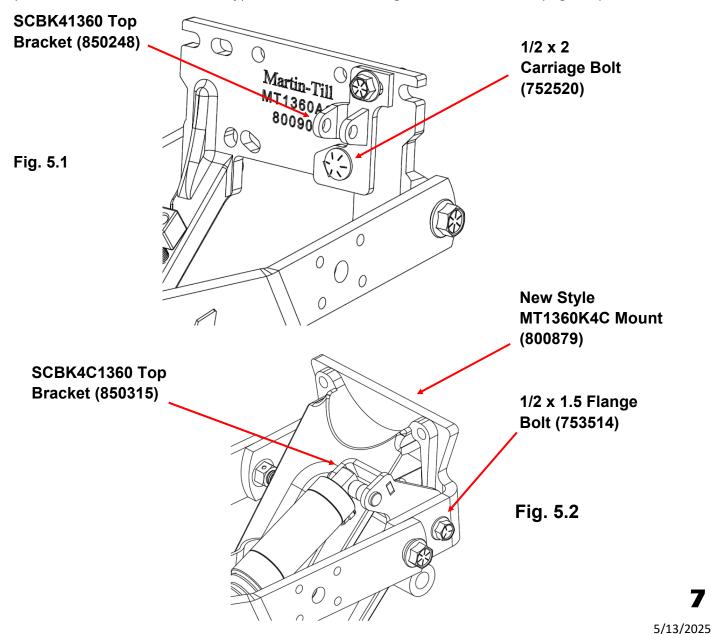
If installing Brackets on a MT1360AS mount, use the PP755200 Precision Kit and refer to the P755200 Instructions. (Fits all except the Kinze 4000)

If installing on a Kinze 4000 with the MT1360AS mount, use the SC-BK41360 Top Bracket with the square hole on the bottom as shown below. The bottom mounting bolt will need to be replaced with a carriage bolt inserted from the cylinder bracket side (Fig. 5.1).

If installing on a JD7200+ with Coulter, use the SC-BDC1360 Top Bracket and reuse the existing flange mounting bolts (783520).

If installing on a Kinze 2000-3000, use SC-BKC1360 Brackets and use provided SCBKC1360 Cylinder Bracket Instructions.

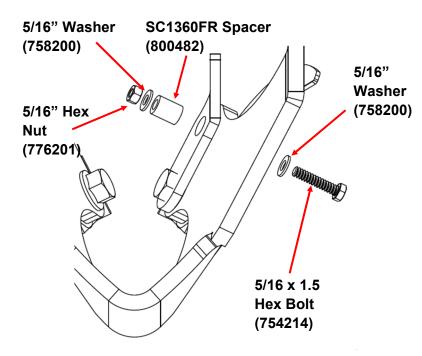
If installing on a Kinze 4000 with Coulter, use SC-BK4C1360 Top Brackets as shown below. (Newer MT1360K4C Mount only). Install 1/2 x 1.5 flange bolt in back hole. (Fig. 5.2).



### STEP 5A: Installing Bottom Cylinder Brackets for BDC1360, BK4C1360, and BK41360

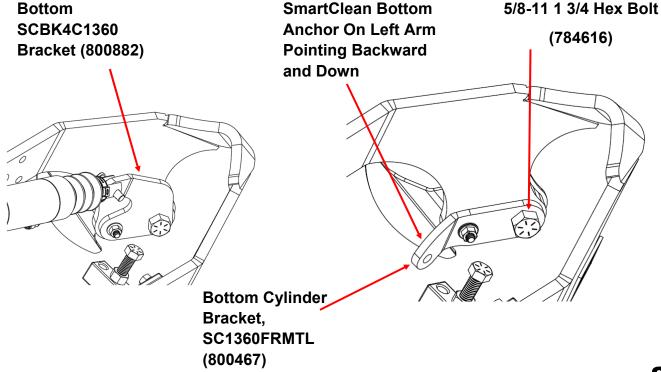
Optional Bottom Cylinder Brackets are installed on the left arm of the frame using provided hardware shown below (Hardware fits most bottom brackets).

Note: Wheel patch bolt replaced with 5/8-11 x 1 3/4" Hex bolt on side with SC Bottom Anchor. This gives additional distance from coulter.



Note: 5/16 Hardware shown should be installed in the front or back hole of the left frame arm depending on which hole the wheel is not installed in.

If optional cylinder brackets are installed, use 5/16 Hardware here instead of the 5/16" hardware shown in the Intersected Configuration in Step 6A on the next page.



#### STEP 6: INSTALL WHEEL ASSEMBLIES

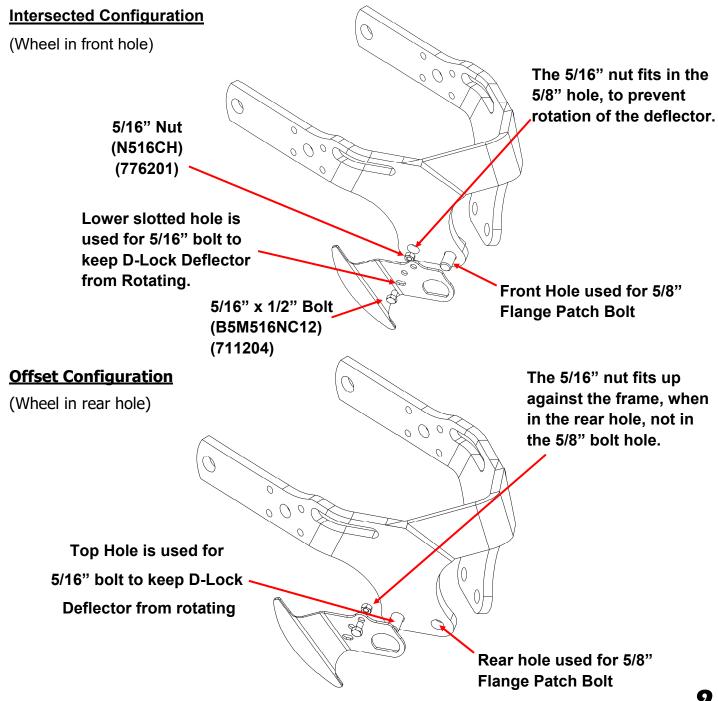
#### IMPORTANT: Skip to Step 6C if not using optional D-Lock Deflector (Scraper)

**NOTE:** The D-Lock Deflector (Scraper) is recommended (in place of the standard D-Lock) when operating in wetter conditions, or damp stringy residue, to reduce wrapping.

**NOTE:** Either the D-Lock deflector (illustrated below and on next page) or the D-Lock (illustrated on page 11) must be installed to allow the 5/8" bolt to tighten without the hub rotating.

NOTE: Proper location of the D-Lock Deflector is determined by wheel configuration chosen on page 6.

#### STEP 6A: PROPERLY CONFIGURE THE D-LOCK DEFLECTOR (SCRAPER)

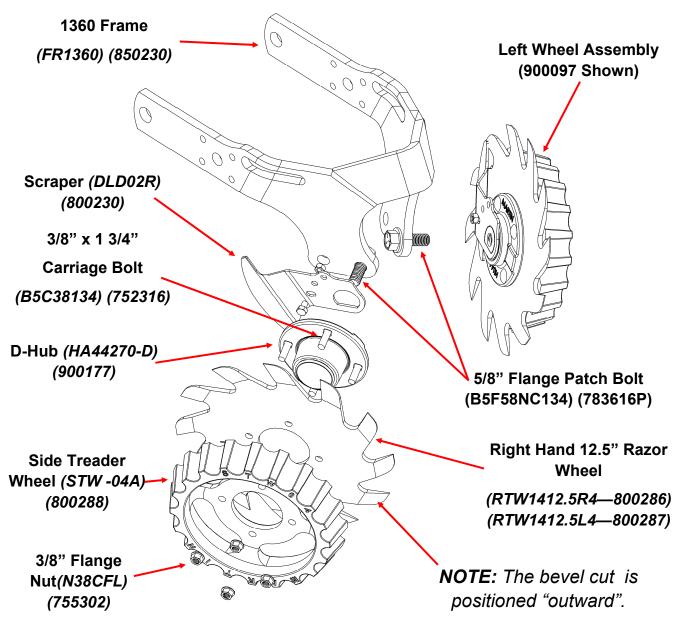


#### STEP 6: INSTALL WHEEL ASSEMBLIES (CONT.)

IMPORTANT: Skip to Step 6C if not using optional D-Lock Deflector (Scraper)

### STEP 6B: INSTALL WHEEL ASSEMBLIES USING OPTIONAL D-LOCK DEFLECTOR (SCRAPER)

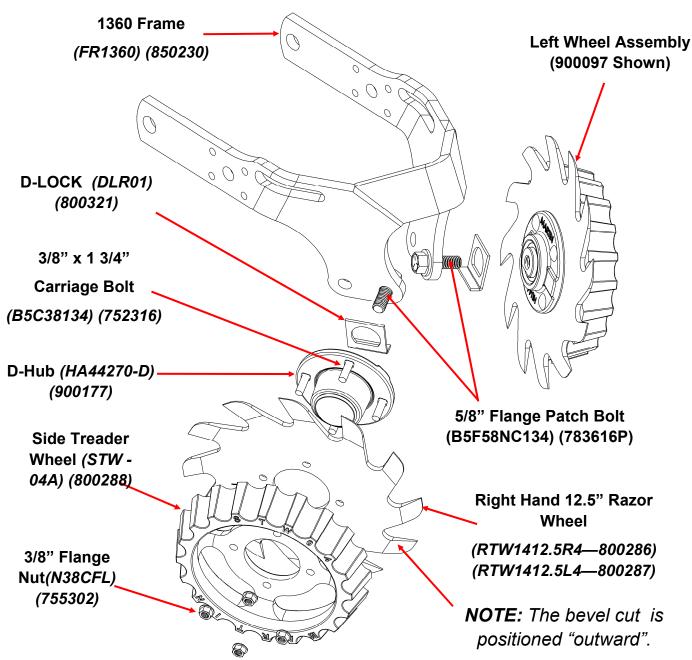
- 1) Attach the D-lock deflector (DLD-02L) to the end of the hub axle, making sure it is flush with the end of the axle, before bolting the axle to the frame. (For placement of 5/16" stop bolt see figure on previous page)
- 2) Secure the hub to the frame with the 5/8" flange patch bolt. Using a torque-wrench, tighten to 112 ft-lbs. Re-tighten after first day's use.
- 3) 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.
- 4) The wheel marked TW3813-R4 or RTW1412.5-R4 is for use on the right side of the frame (as viewed from behind the machine). Repeat for opposite side.



#### STEP 6: INSTALL WHEEL ASSEMBLIES (CONT.)

#### STEP 6C: INSTALL WHEEL ASSEMBLIES USING STANDARD D-LOCK

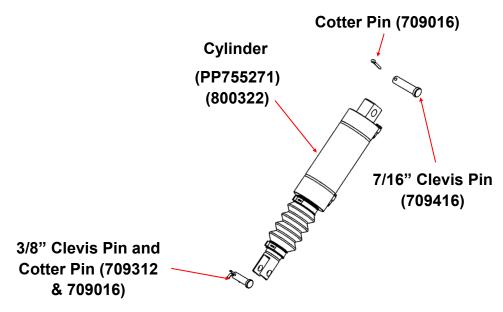
- 1. Attach the D-lock to the end of the hub axle making sure it is flush with the end of the axle before bolting the axle to the frame.
- 2. Secure the hub to the frame with the 5/8" bolt. Using a torque-wrench, tighten to 112 ft-lbs. Retighten after first day's use.
- 3. Install the wheel (part # to 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.
- 4. The wheel marked TW3813-R4 or RTW1412.5-R4 is for use on the right side of the frame (as viewed from behind the machine). Repeat for opposite side.



#### STEP 7: INSTALL THE OPTIONAL SMARTCLEAN 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 bottom bracket as shown in the picture below.

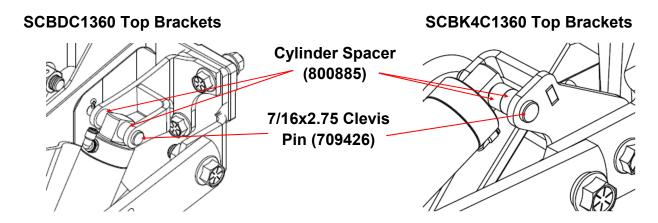
**NOTE:** Cylinder may be installed with elbow valves in either up or down orientation, depending on user preference.



For JD 7200+ with Coulter (SCBDC1360), it is recommended to use 2 x 800885 to position the Cylinder with one on each side as shown below.

For Kinze 4000 with Coulter (SCBK4C1360), it is recommended to use 2 x 800885 on the outside as shown below.

SCBDC1360 and SCBK4C1360 use 7/16 x 2.75 Clevis Pins for Top Brackets.



#### Note:

It is very important to limit the row cleaner down travel to prevent the air cylinder from extending fully. This is accomplished by setting the threaded stop bolt adjustment or optional cam adjustment to catch the row cleaner just before the cylinder reaches the end of its stroke. Failure to do so can result in premature cylinder failure.

#### **Row Cleaner Hub Preventative Maintenance**

The Row Cleaner 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 most conditions annual lubrication of the Row Cleaner hub is sufficient
- More frequent lubrication is recommended in dusty or sandy conditions

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

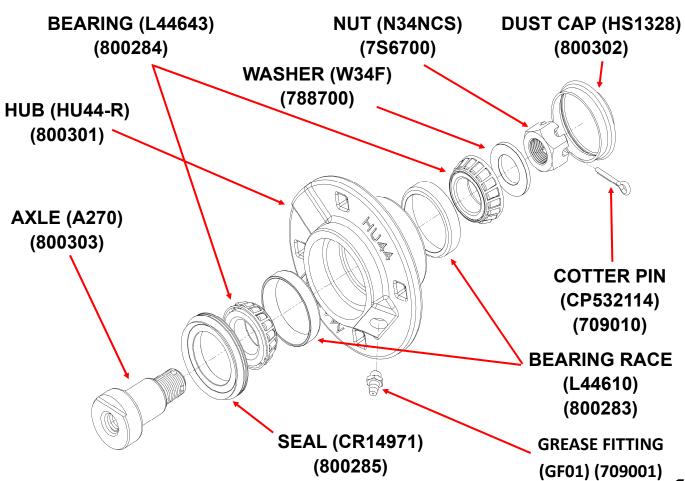
#### **Row Cleaner Hub Bearing Preload Adjustment**

Maintaining proper bearing preload is crucial to bearing life. Monitor and adjust <u>annually</u>. To adjust:

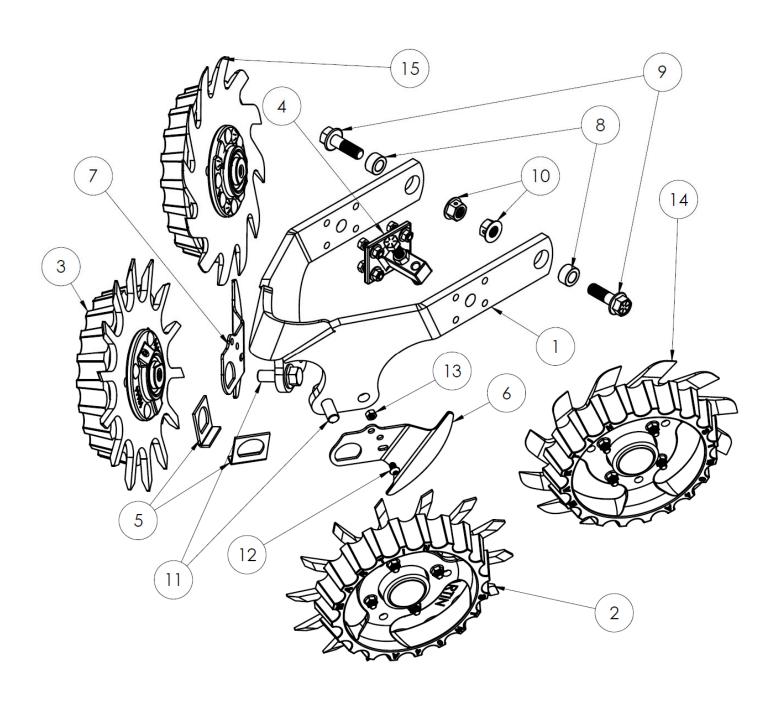
- Remove the dust cap
- Remove the cotter pin
- Tighten the 3/4" nut until you feel zero end play
- Gently back the nut off, leaving .01" .012" end play
- Replace the cotter pin and dust cap

**NOTE:** End play is checked by pulling out on the top of the wheel while pushing in on the bottom.

#### PARTS LIST FOR 1360 HUB ASSEMBLY (HA44270-D)



# **EXPLODED VIEW FOR WA1360 (w/ Spike or Razor STW Assemblies**



# **EXPLODED VIEW FOR WA1360 (w/ Spike or Razor STW Assemblies**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	FR1360 (850320)	Frame, 1360 Row Cleaner	1
2	ATW13L27044STW (900179)	Assembly, LH 13" Spike Wheel w HA44270D Hub w Side Treader	1
3	ATW13R27044STW (900178)	Assembly, RH 13" Spike Wheel w HA44270D Hub w Side Treader	1
4	SB01 (900326)	Kit, RH Stop Block	1
5	DLR-01 (800321)	Brkt, D Lock (Not used with Scrapers)	2
6	DLD-02L (800231)	Scraper, LH Internal Deflector D Locking	1
7	DLD-02R (800230)	Scraper, RH Internal Deflector D Locking	1
8	BU10958 (800510)	Bushing, 2020+ and later 1360/45 frame pivot	2
9	B8F58NC2 (753620)	Bolt, 5/8-11x2 Flange ZY	2
10	N58FLN (755600)	Nut, 5/8-11 Center Punch Flange Lock ZY	2
11	B5M58NC134MICRO (783616P)	Bolt, 5/8-11x1.75 GR8 Flange Patch ZY	2
12	B5M516NC12 (711204)	Bolt, 5/16-18x.5 Button Socket Head ZP	2
13	N516CH (776201)	Nut, 5/16-18 Tri Lock Hex	2
14	ARTW125L27044STW (900097)	Assembly, LH 12.5" Razor Wheel w HA44270D Hub w Side Treader	1
15	ARTW125R27044STW (900098)	Assembly, RH 12.5" Razor Wheel w HA44270D Hub w Side Treader	1



# The most trusted name in no-till Established 1991

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