

# Flange Bushing Rebuild

### **Installation Instructions**

**Premium Arm Kits** 

John Deere
MaxEmerge XP Pro
CCS Mini-Hoppers

#### BIT REQUIRED FOR INSTALLATION

Verify 11/16" reamer bit has been sourced, all reamers and bits are available through SI Distributing and should have been recommended at the time of purchase.

- 1. Row unit and support plate reamer: 11/16"
  - The bolts included in this kit are a 5/8" fine threaded bolt with an 11/16" shoulder. Once reamed the shoulder is designed to fit snugly into the row unit and support plate holes filling any gaps caused by wear or oversized holes from manufacturing.

#### PRE-INSTALLATION PREPARATION

- 1. Sort and lay out packaged components by part number. Each bag should be labeled with S.I. Distributing's part number which is helpful for reference.
  - The diagrams within these instructions will be used to reference to understand the placement of the various bolts you have in your kit.
- 2. Check each row for clearance issues with either the bolt and/or hex bushing.
  - o If you have any of the following call S.I. Distributing for alternative solutions.
    - A location that may not allow fitment of either the bolt or hex bushing.
    - Row unit has attachments to support plate (row cleaner mount, down pressure spring bracket) inhibiting the use of either the bolt or hex bushing.
    - Any clearance issue that inhibits the installation or functionality of these kits.

#### **SAFETY REMINDER**

Always wear proper safety equipment when using power tools.

SAFETY GLASSES, HEARING PROTECTION, AND GLOVES ARE A MUST WHEN WORKING WITH REAMERS AND METAL SHAVINGS!

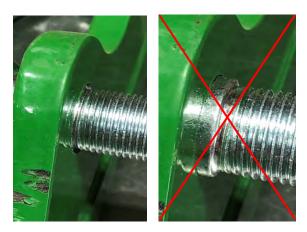


#### SUPPORT PLATE/ROW UNIT REAMING

- 1. Begin reaming the support plate and row unit holes with the 11/16" reamer.
  - o Use plenty of cutting fluid to extend the life of the bit.
  - o Do not pull reamer back through the hole while it is turning.
  - The "cup" or "puck" bracket (if applicable) used for the hopper hooks on box planters will also need to be reamed out to 11/16".
- 2. Tips for tight clearance areas.
  - $\circ$  A 12" long ½" bit extension can be used to reach from one side of the support plate to the other.
  - o A right-angle chuck/drill may be necessary in hard-to-reach areas.
  - o Longer reamers can be modified with a chop saw to shorten.
  - o Some situations may require the removal of the support plate.

#### **PARALLEL ARM INSTALLATION**

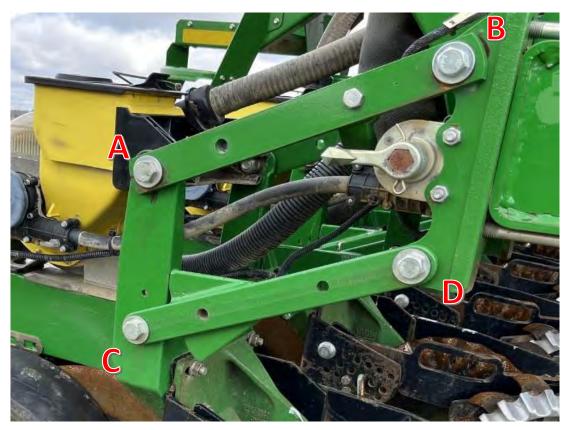
- 1. Check to make sure you have the correct bolts for each of the hole locations.
  - The shoulder on the bolts must be recessed and not protrude outside of the hole on the support plate/row unit. If the shoulder is too long, a washer can be placed under the head of the bolt to shim the shoulder back.
    - The hex bushing **MUST NOT** contact the bolt shoulder for proper fitment.



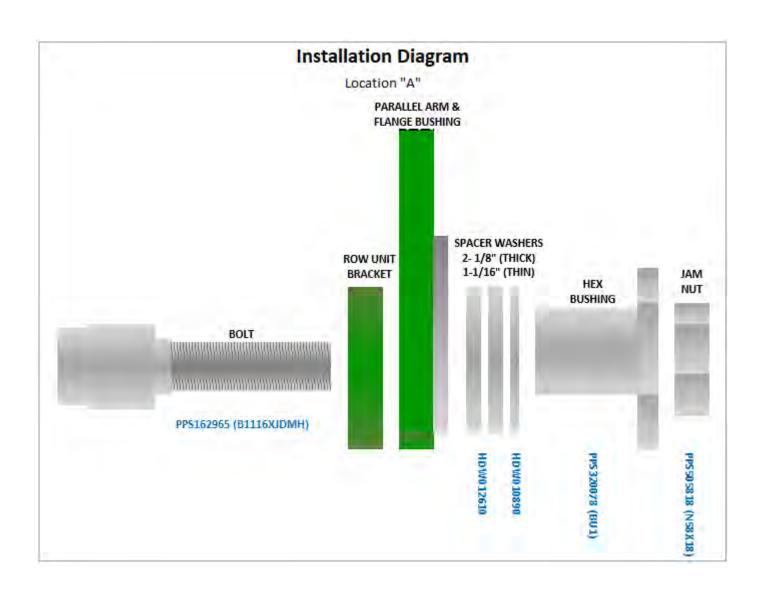
2. Install the bolts through the row unit/support plate holes then through the flange bushings in the parallel arms.

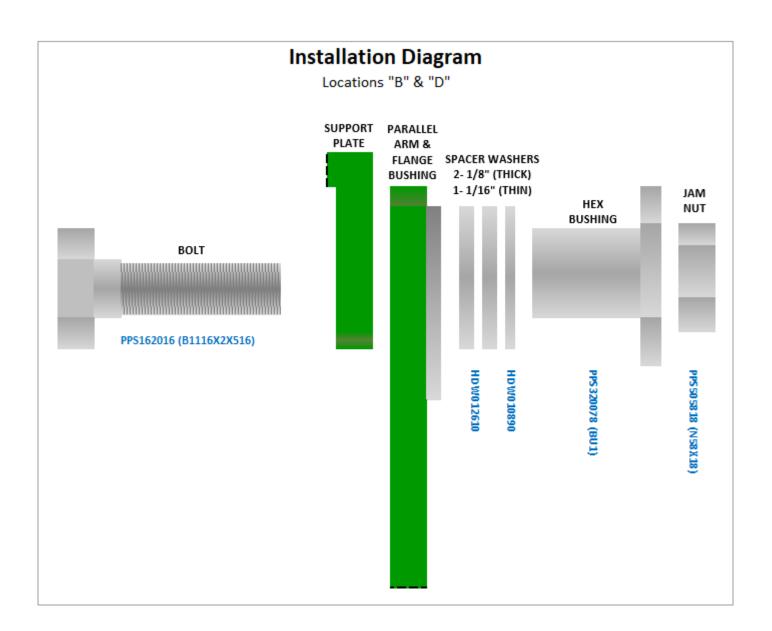
- 3. Add spacer washers to hex bushings according to diagram.
  - o Locations "A", "B", & "D" in diagram below, front support plate and upper row unit locations, will use two 1/8" (thick) spacer washers and one 1/16" (thin) spacer washer.
  - Location "C" in diagram below, lower rear row unit, will use up to three 1/16" (thin) spacer washers.

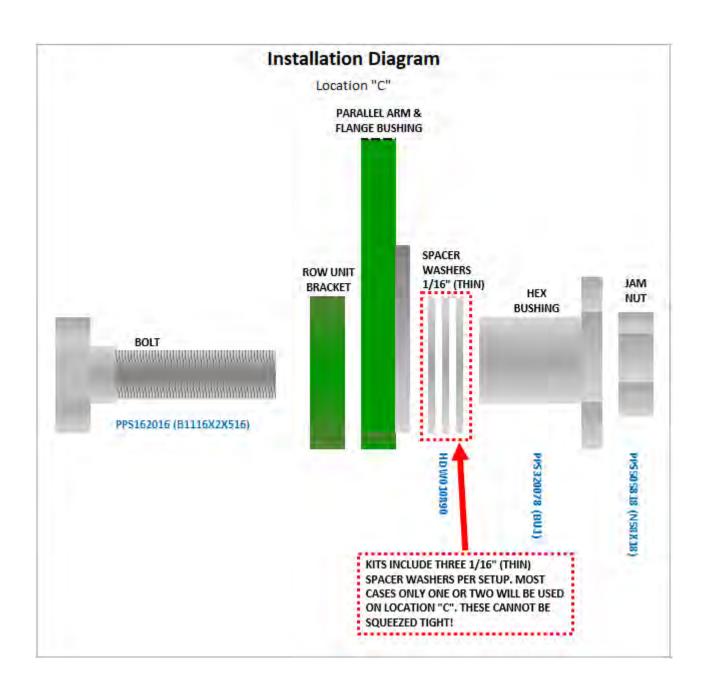
Washers must be free to turn on the top parallel arm holes and at least one side of the bottom parallel arm holes. Remove washers if necessary.



- 4. Apply high strength threadlocker (Vibra-Tite 131) starting ½" from bolt end, then hand thread hex bushing with spacer washers onto bolt through the flange bushing in the parallel arm.
  - o The hex bushing must "bottom out" against the row unit and support plate brackets.
  - o **DO NOT** tighten with an impact as damage to bushings may occur.
- 5. Using torque wrench tighten hex bushing to 145 ft. lbs.
  - Make sure the spacer washers still turn after torqued.
- 6. Apply threadlocker to remaining threads on the bolt, then thread jam nut on by hand.
  - o Torque jam nut to 100 ft. lbs.
- 7. When assembly is complete, spray each bushing with a small amount of penetrating oil and make sure row unit moves freely.









## <u>S.I. DISTRIBUTING</u>

13540 Spencerville Road • Spencerville, Ohio 45887

Phone: 800-368-7773 • 419-647-4909

Fax: 877-398-8074 • 419-647-6290

www.sidist.com • info@sidist.com