HAWKINS

CORN REEL OWNER'S MANUAL

FOR PART NUMBERS 427800 - 427975

REVISED 10.20

AN AGRDeviate COMPANY

308.708.8185 | Hawkins@HawkinsAg.com | Manual Part Number - 123012 | Rev. 10/20

TABLE OF CONTENTS

GENERAL INFORMATION

SAFETY

INSTALLATION

HYDRAULICS

OPERATIONS

PARTS GUIDE

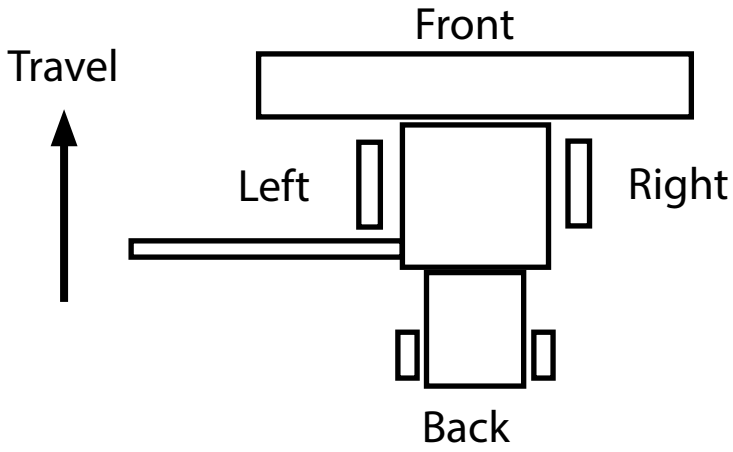
HOW TO USE THIS MANUAL

This manual is divided into sections. The first section contains a Table of Contents, General Information, Installation Guide and a Part Number Index. The remaining sections divide the machine into assemblies and sub-assemblies which illustrate and list all parts.

Hawkins Ag parts in this manual are specially designed for this machine and should be replaced with Hawkins Ag parts only.

Information in this manual was current at time of printing. However, due to Hawkins ongoing product improvement, production changes may cause your machine to appear slightly different in detail. Hawkins Ag reserves the right to change specifications or design without notice and without incurring obligation to install the same on machines previously manufactured.

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



MANUAL REPLACEMENT INFORMATION

Replacement manuals are available. Call the Hawkins Ag Main Office at 308.708.8185, or download a printable PDF from our website, www.HawkinsAg.com.

MANUAL REVISIONS

When this manual is revised, the modification date is printed on the front cover and on the revised page(s).

TOUCH-UP PAINT

Repaint parts where paint is worn or scratched to prevent rust. Aerosol touch-up paint is available. To order, call Hawkins Ag at 308.708.8185.

INTRODUCTION

Thank you for your purchase of a Hawkins Corn Reel. Putting your trust in our equipment is something we don't take lightly and are humbled that you chose Hawkins Ag. Having designed all of our equipment with farmers like you in mind, we hope you enjoy years of productive use from it. Please read and understand this manual before operation.

WARRANTY INFORMATION

AGROdeviate LLC (AGROdeviate) warrants each Hawkins Ag product it manufactures to be free from defects in material and workmanship for a period not to exceed one (1) year from the date of sale to the original owner. The warranty is valid provided written notice of the alleged defect is received by AGROdeviate during said period and within ten (10) working days after its discovery.

In addition, AGROdeviate warrants each TOOLBAR FRAMEWORK to be free from defects in material and workmanship for a period not to exceed three (3) years from the date of sale to the original owner. The warranty is valid providing written notice of the alleged defect is received by AGROdeviate during said period and within ten (10) working days after its discovery.

This warranty is subject to completion of Product Registration and submission to AGROdeviate. Warranty applies only if product is installed, operated, and maintained according to product manual and instructions. Warranty will be void if the product has been subject to misuse, misapplication, neglect, collision with obstruction, or alteration.

For products, parts, and components NOT manufactured by AGROdeviate, the warranty obligations of AGROdeviate shall be limited to the Original Equipment Manufacturers' warranty. Tires on AGROdeviate equipment are warranted through the respective tire manufacturer and their network of dealers.

All returns must be pre-approved by AGROdeviate and authorization issued before return. All returns must include a copy of the original invoice in order to be processed. Any returns without a copy of the original invoice will not be eligible to receive credit.

If determined that the product is defective in material and/or workmanship, the necessary parts will be replaced and/or repaired. All warranty repair or labor is to be performed by an AGROdeviate authorized party. AGROdeviate obligation under this warranty shall be limited to repairing or replacing parts deemed defective. Warranty does not cover travel expenses. AGROdeviate will bear no other costs including loss, incurred labor, rental fees, nor other.

All returns shall be pre-paid. If warranty is approved by AGROdeviate, return freight will be credited.

This warranty by AGROdeviate LLC is expressly in lieu of all other warranties, expressed or implied, including warranty of merchantability and fitness for use. We neither assume, nor authorize, any other entity to accept for us any liability relating to the sale of our products.

SAFETY

TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.

THIS SYMBOL MEANS:
-ATTENTION!
-BECOME ALERT!
-YOUR SAFETY IS INVOLVED!

SIGNAL WORDS:

Note the use of signal words DANGER, WARNING, and CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidelines:

⚠ DANGER

DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

⚠ WARNING

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

⚠ CAUTION

CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

If you have questions not answered in this manual, require additional copies, or the manual is damaged, please contact Hawkins Ag, 2120 4th Ave., Holdrege, NE 68949, 308.708.8185, or visit our website: www.hawkinsag.com.

SAFETY... YOU CAN LIVE WITH IT!

EQUIPMENT SAFETY GUIDELINES

Safety of the operator is one of the main concerns in designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or for you, follow them.

In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use.

Replace any CAUTION, WARNING, DANGER or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this booklet.

Do not attempt to operate this equipment under the influence of drugs or alcohol.

Review the safety instructions with all users annually.

This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operations. Do not allow persons to operate or assemble the unit until they have read this manual and have developed an understanding of the safety precautions and how it works.

To prevent injury or death, use a tractor with a Rollover Protective Structure (ROPS). Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice the instructions on them.

Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - DON'T TRY IT.

SAFETY SIGN LOCATIONS

These types of Safety Signs and locations on the equipment are shown in the illustration below. Good safety requires that you familiarize yourself with the various Safety Signs, the type of warning and the area, or particular function related to that area, that require your SAFETY AWARENESS.

461212

461211

REMEMBER: If Safety Signs have been damaged, removed, become illegible or parts replaced without decals, new decals must be applied. New decals are available from Hawkins Ag.

Hawkins Ag
2120 4th Ave.
Holdrege, NE 68949

308.708.8185
www.hawkinsag.com

RETURN TO INDEX

SAFETY SIGN CARE

- Keep safety signs clean and legible at all times.
- Replace safety signs that are missing or have become illegible.
- Replaced parts that displayed a safety sign should also display the current sign.
- Safety signs are available from Hawkins Ag.

HOW TO INSTALL SAFETY SIGNS

- Be sure that the installation area is clean and dry.
- Decide on the exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the decal over the specified area and carefully press the small portion with the exposed stick backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
- Small air pockets can be pierced with a pin and smoothed out using the piece of decal backing paper.

REMEMBER

Your best assurance against accidents is a careful and responsible operator. If there is any portion of this manual or function you do not understand, contact Hawkins Ag.

BEFORE OPERATION

- Carefully study and understand this manual.
- Do not wear loose-fitting clothing which may catch in moving parts.
- Always wear protective clothing and substantial shoes.
- It is recommended that suitable eye protection be worn.
- The operator may come in contact with certain materials which may require specific safety equipment (ie: extremely dusty, molds, fungus, bulk fertilizers).
- Keep bolts tightened to specific torque listed on page 26.
- Give the unit a visual inspection for any loose bolts, worn parts or cracked welds, and make necessary repairs. Follow the maintenance safety instructions included in this manual.
- Be sure that there are no tools lying on or near the equipment.
- Do not use the unit until you are sure that the area is clear, especially children and animals.
- Because it is possible that this equipment may be used in dry areas or in the presence of combustibles, special precautions should be taken to prevent fires and fire fighting equipment should be readily available.
- Don't hurry the learning process or take the unit for granted. Ease into it and become familiar with your new equipment.
- Practice operation of your equipment and its attachments. Completely familiarize yourself and other operators with its operation before using.

DURING OPERATION

- Keep hands, feet, and clothing clear of moving parts.
- Do not clean, lubricate or adjust your equipment while it is moving.
- Be especially observant of the operating area and terrain - watch for holes, rocks or other hidden hazards. Always inspect the area prior to operation.
- Periodically clear the equipment of brush, twigs or other materials to prevent buildup of dry combustible materials.
- Do not walk or work under raised components or attachments unless securely positioned and blocked.
- Keep all bystanders, pets and livestock clear of the work area.
- Never stand alongside of unit with engine running or attempt to start engine and/or operate machine while standing alongside of unit.
- As a precaution, always recheck the hardware on equipment following every 100 hours of operation. Correct all problems. Follow the maintenance safety procedures.

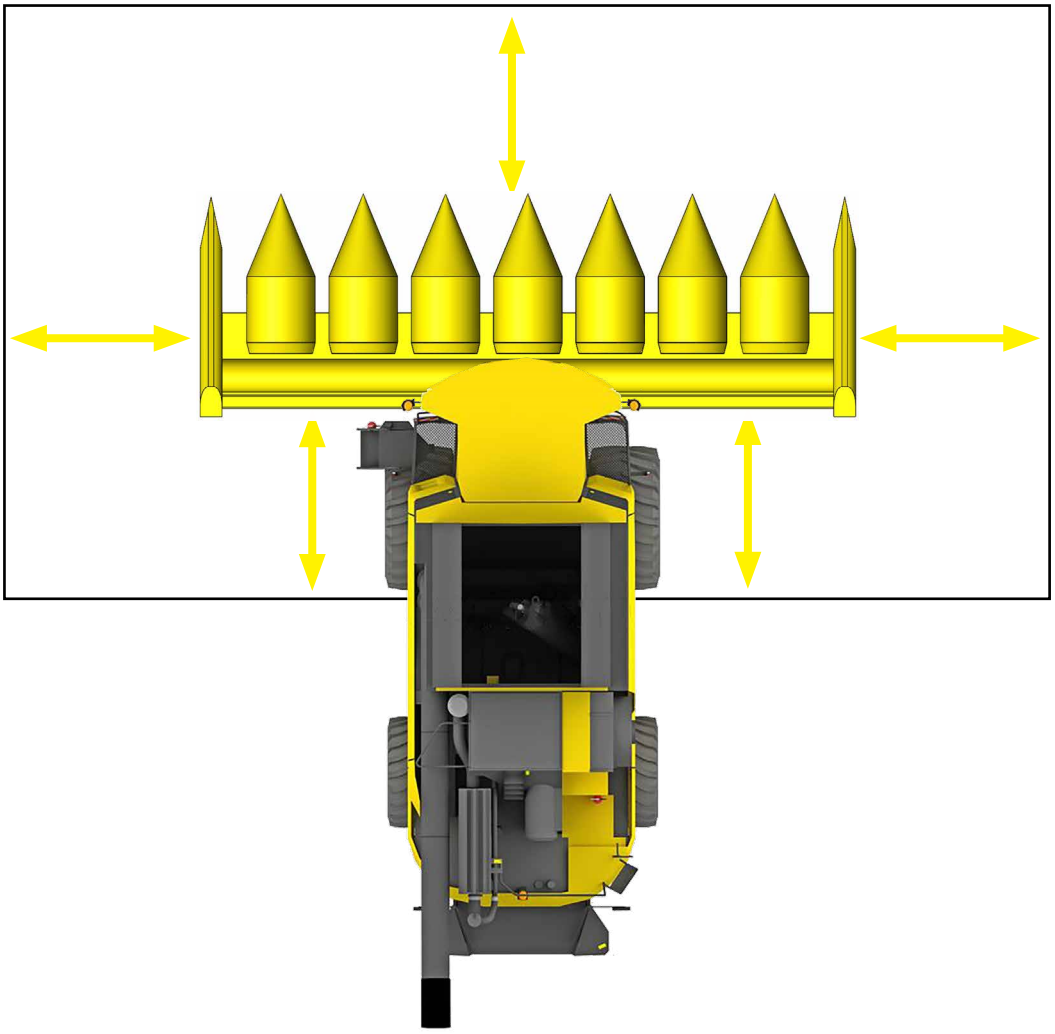
FOLLOWING OPERATION

- Store the unit in an area away from human activity.
- Do not park equipment where it will be exposed to livestock for long periods of time. Damage and livestock injury could result.
- Do not permit children to play on or around the stored unit.
- Make sure all parked machines are on a hard, level surface.

PERFORMING MAINTENANCE

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Before working on this machine, stop the towing vehicle, set the brakes, shut off the engine and remove the ignition keys.
- Be certain all moving parts on attachments have come to a complete stop before attempting to perform maintenance.
- Always use the proper tools or equipment for the job at hand.
- Use extreme caution when making adjustments.
- Follow the torque chart in this manual when tightening bolts.
- Replace all shields and guards after servicing and before moving.
- After servicing, be sure all tools, parts and service equipment are removed.
- Never replace hex bolts with less than Grade 5 bolts unless otherwise specified. Refer to bolt torque chart for head identification marking.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. The manufacturer will not claim responsibility for use of unapproved parts and/or accessories and other damages as a result of their use.
- If equipment has been altered in any way from the original design, the manufacturer does not accept any liability for injury or warranty.
- A first aid kit should be kept readily accessible while performing maintenance on this equipment.

(1) Place head in desired work area



1.1 - Park the combine on a level work surface, make sure parking brake is on. Leave ample room to work in front of and around the head during installation. We recommend an area of at least 20' to the front of the head and at least 10' around the sides and rear.

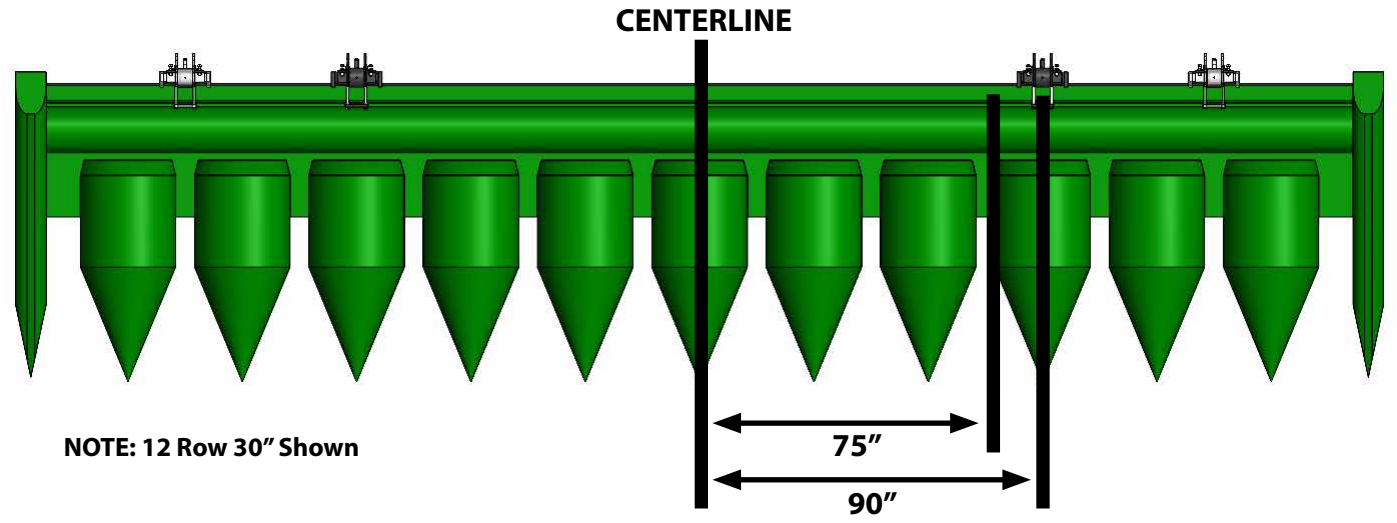
2.2 - Place the head on the ground, ensure head is on the ground and head connection to combine is secure before performing any work on the head.

⚠ CAUTION

DO NOT place any body part beneath the residue manager as you remove it.

(2) Mount/Hinge installation

2.1 - Mark location for inner mount/hinge brackets



NOTE: 12 Row 30” Shown

2.1.1 - Heads **WITHOUT** single point brackets:
- First Bracket Mount/Hinge should be located at 75” as measured from the centerline of the head.

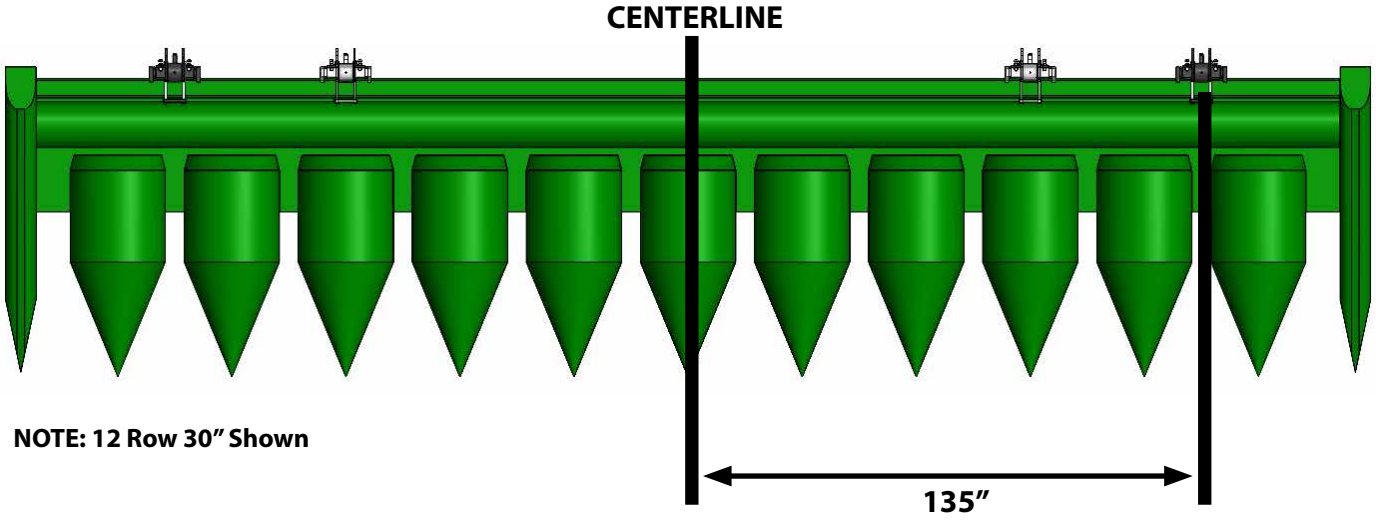
2.1.2 - Heads **WITH** single point brackets:
- First Bracket Mount/Hinge should be located at 90” as measured from the centerline of the head.

Step 2.1.2 - Heads with single point bracket

NOTE: THESE MEASUREMENTS ARE RECOMMENDATIONS. Your hinge placement may need to be adjusted to accomodate design variations that cause obstructions at these locations. The hinges DO NOT need to be symetric.

(2) - Mount/Hinge installation

2.2 - Mark location for outer mount/hinge brackets for models with four mounts/hinges



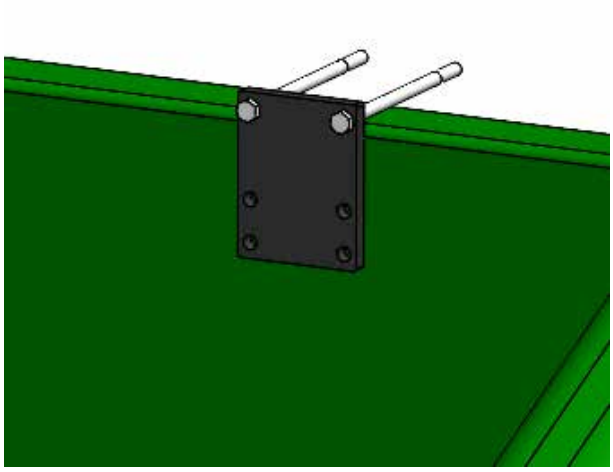
NOTE: 12 Row 30” Shown

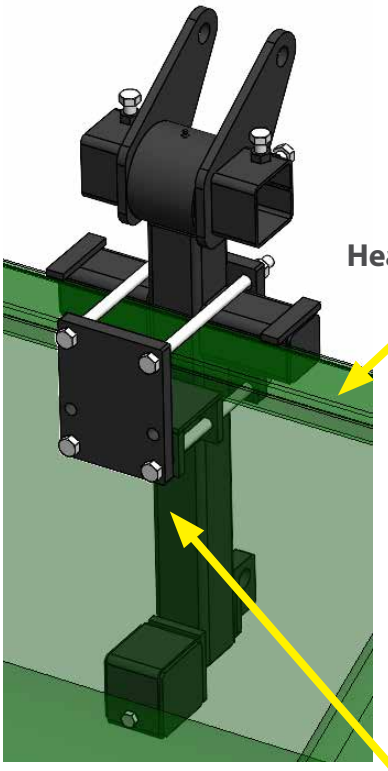
2.2.1 - Outer Bracket Mount/Hinge should be located at 135” as measured from the centerline of the head.

NOTE: THESE MEASUREMENTS ARE RECOMMENDATIONS. Your hinge placement may need to be adjusted to accomodate design variations that cause obstructions at these locations. The hinges DO NOT need to be symmetrical.

(2) - Mount/Hinge installation

2.3 - Mark mount/hinge bolt locations for drilling





Bolt holes closest to bottom of Head Top Tube

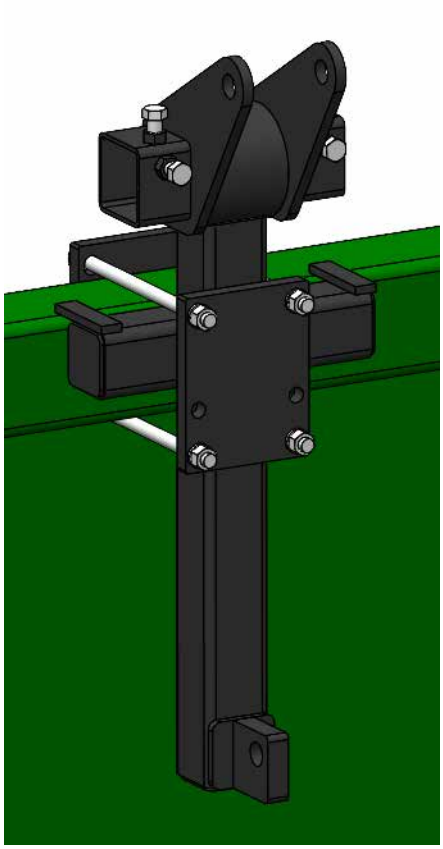
2.3.1 - Putting two 5/8"-11 X 11" bolts in the top holes of the mount plate, rest the bolts on top of the frame at your previously measured locations for the inner and outer mounts/hinges, mark out the holes closest to the bottom of your top tube frame for drilling. This varies between 3" tall head frame and 5" tall head frame.

2.3.2 - Using 5/8" Drill bit, drill through marked hole locations for mounting.

NOTE: Make sure that there are no braces in the way of the holes before marking and drilling. Only two 5/8" holes required for each mount.

(2) - Mount/Hinge installation

2.4 - Mount hinges to the frame.



***Backside of corn head shown**

2.4.1 – Safely lift the mounts/hinges into place at pre-drilled locations, and lower mount to rest on top of frame on the top support tabs.

2.4.2 – Install top two 5/8"-11 X 11" bolts and hardware through hinge and mounting plates.

2.4.3 – Install bottom two 5/8"-11 X 11"bolts and hardware through drilled holes and mounting plates.

2.4.4 – Tighten all hardware with a pair of 15/16" wrenches and/or 15/16" socket.

2.4.5 – Repeat process for all mounts/hinges.

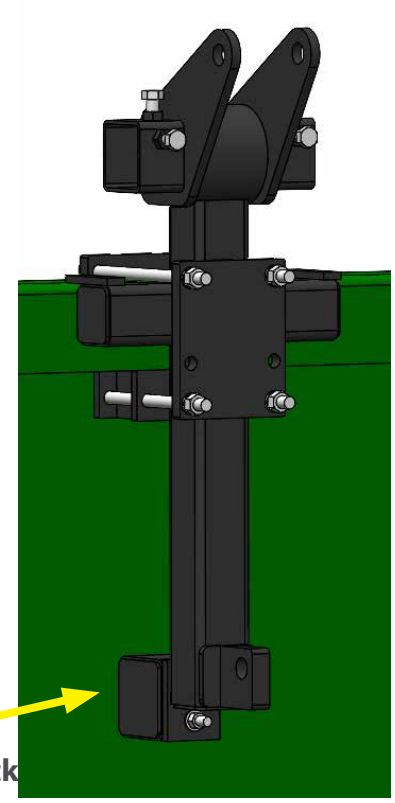
NOTE: Keep mount/hinge in lifting restraints until fully secured on the header.

⚠ CAUTION

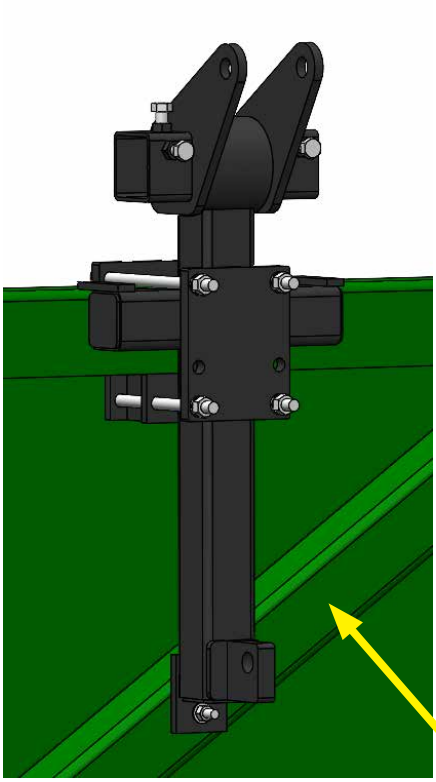
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(2) - Mount/Hinge installation

2.4 - Mount the hinges to the frame.



Hinge Spacer Block (HCR30043)



***Backside of corn head shown**

Head Diagonal Brace

2.4.1 - If installing hinges with a bottom brace, mark and drill a 9/16" hole through the head tin where the bottom brace will sit against the supplied **Hinge Spacer Block (HCR30043)** or, in some cases, through a diagonal brace on the rear of the corn head.

2.4.2 - Install Spacer Block with supplied ½"-13 X 6" Bolt (from front to back of head to provide clearance for auger), ½" Flat Washer, and ½"-13 Nut.

2.4.3 - Tighten hardware with ¾" wrenches.

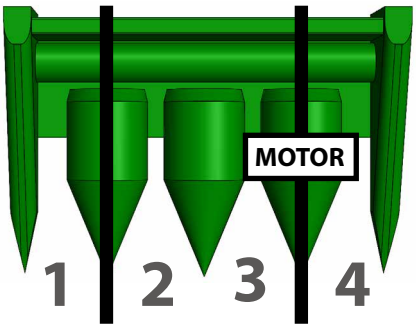
⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

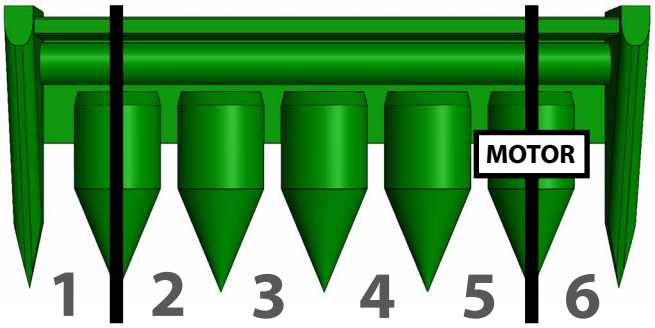
(3) - Lift Tube and Arm installation - Two (2) Arm (8 ROW 30" & SMALLER)

3.1 - Decide arm layout locations for your head model

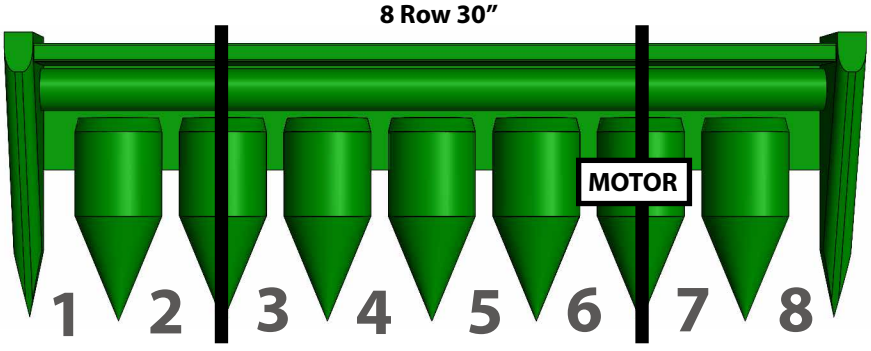
4 Row 30"



6 Row 30"



8 Row 30"

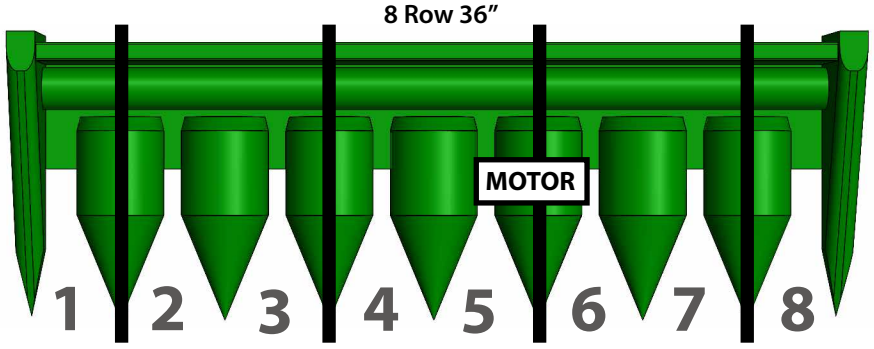


3.1.1 - Determine arm location based on head size from images above before moving to install step. **Note: Arm with motor/chain box must be placed in a location that allows the center paddle tube to be driven. The reel CANNOT be driven on extension tube. Arms should be centered over snouts to allow installation of paddles.**

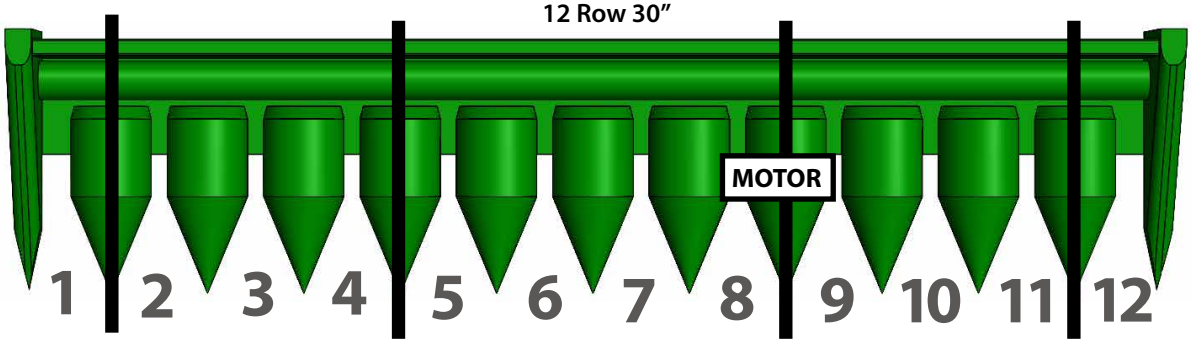
(3) - Lift Tube and Arm installation - Four (4) Arm (LARGER THAN 8 ROW 30")

3.1 - Decide arm layout locations for your head model

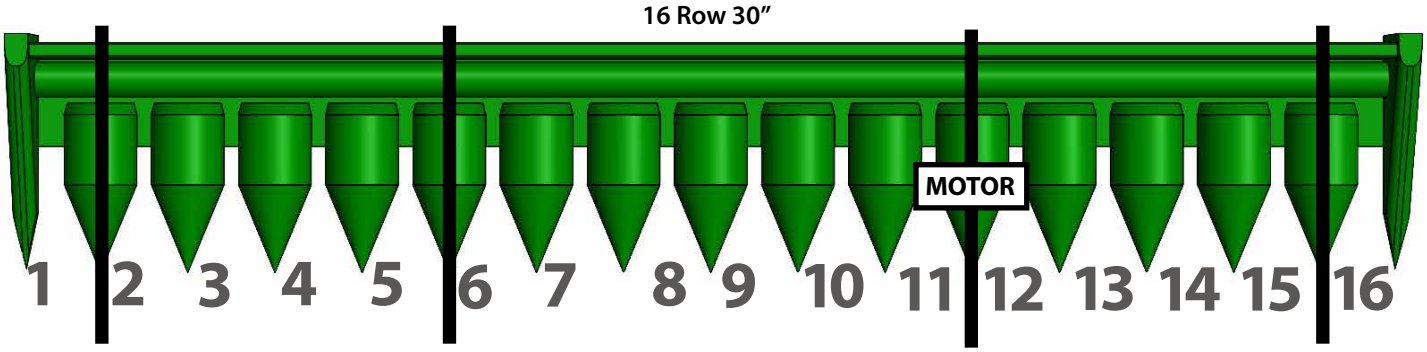
8 Row 36"



12 Row 30"



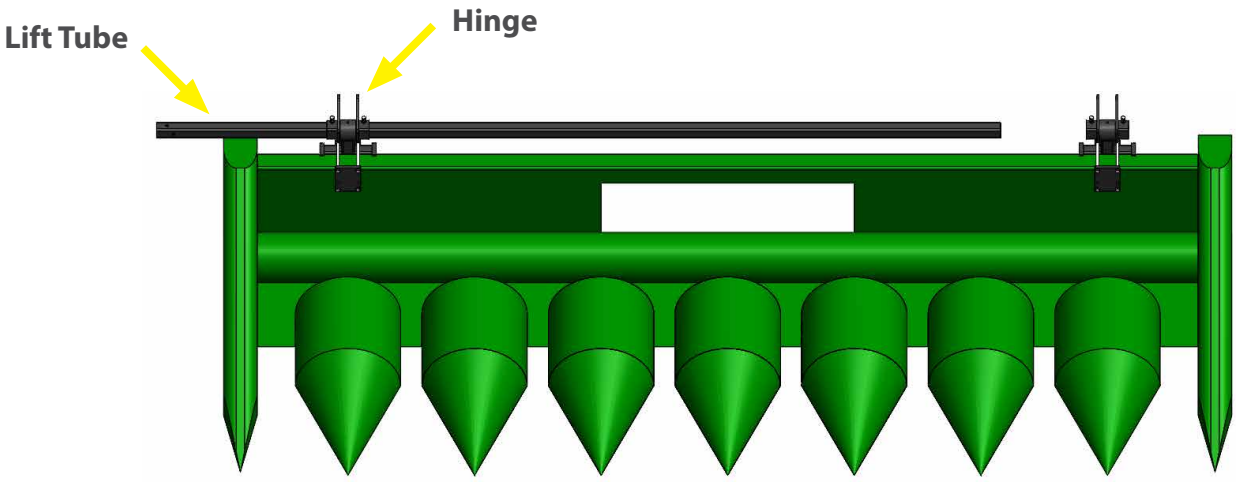
16 Row 30"



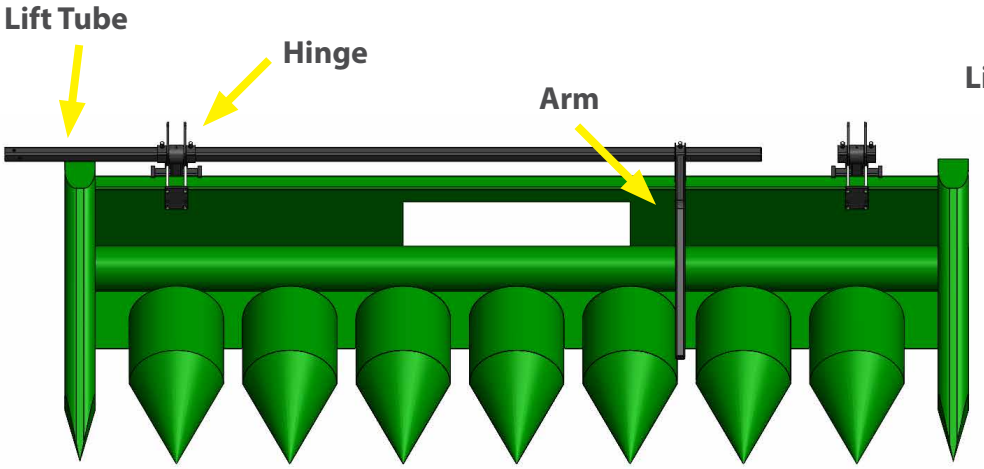
3.1.1 - Determine arm location based on head size from images above before moving to install step. **Note: Arm with motor/chain box must be placed in a location that allows the center paddle tube to be driven. The reel CANNOT be driven on extension tube. Arms should be centered over snouts to allow installation of paddles.**

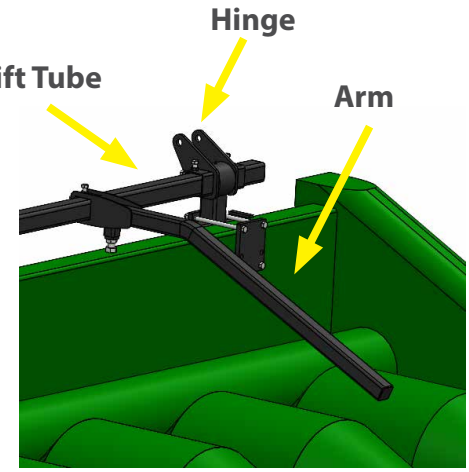
(3) - Lift Tube and Arm installation - Two arm set-up

3.2 - Install lift tube and arms in hinges for 2 arm setup. (8 Row 30" and smaller)



3.2.1 - With a person at each end of the 3" square tube, begin inserting the tube through the outer hinge on either side of the head, stopping at least 1 foot before reaching the next.





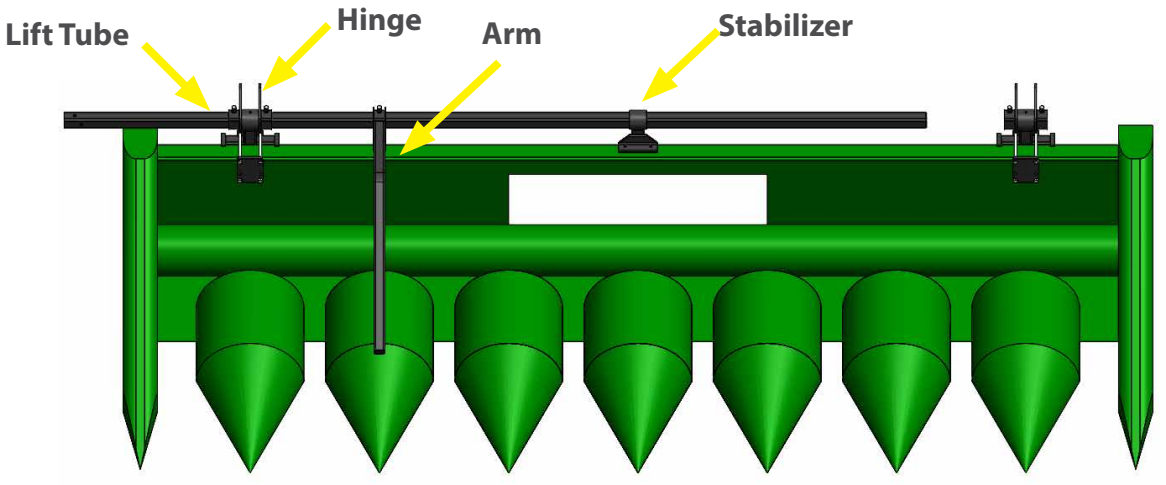
3.2.2 - Slide first arm over the square tube, and towards the first hinge. **Note: Hinge ears must be aligned up and towards rear of head for proper fitment with lift cylinders.**

⚠ CAUTION

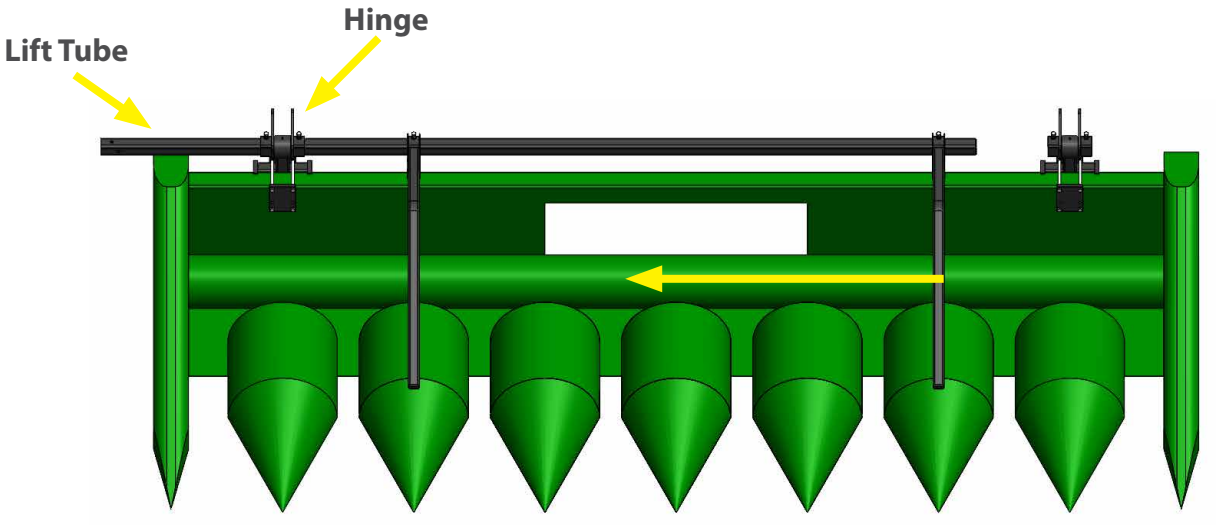
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Two arm set-up

3.2 - Install lift tube and arms in hinges for 2 arm setup. (8 Row 30" and smaller)



3.2.3 - If installing on a model (8 Row 30" JD 893 or 12 Row 30" JD 612C (2015 or Newer)) with a center stabilizer, slide on the Center Stabilizer towards the center of the head. For Center Stabilizer Installation, see page 21.



3.2.4 - Slide the 2nd arm over the square tube, and towards the center of the head.

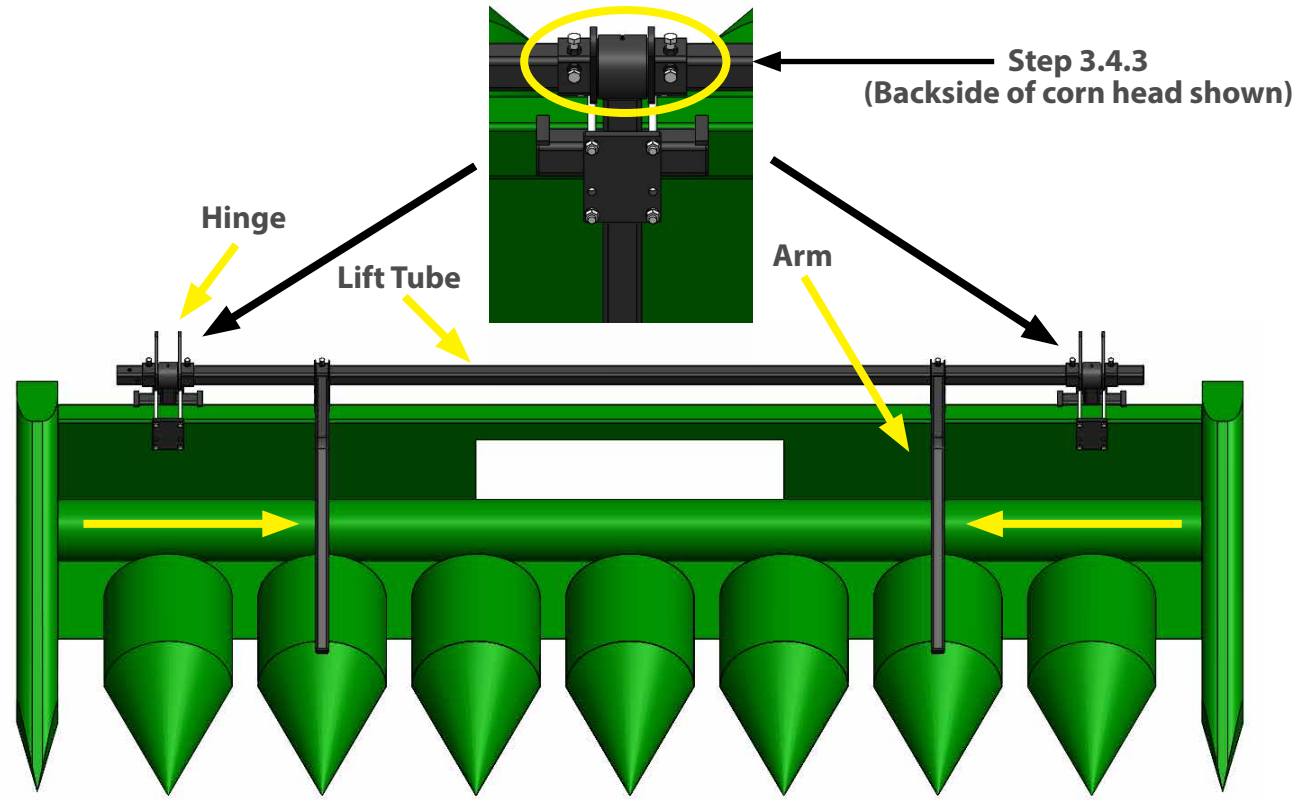
⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

RETURN TO INDEX

(3) - Lift Tube and Arm installation - Two arm set-up

3.4 - Install lift tube and arms in hinges for 2 arm setup. (8 Row 30" and smaller)



3.4.3 - Finish sliding the square tube through the second hinge. Center the tube with the head of the machine. Tighten 5/8"-11 X 1 1/4" set bolts on hinges with a 15/16" wrench or socket to secure the Lift Tube. There is no need to over-tighten these set bolts.

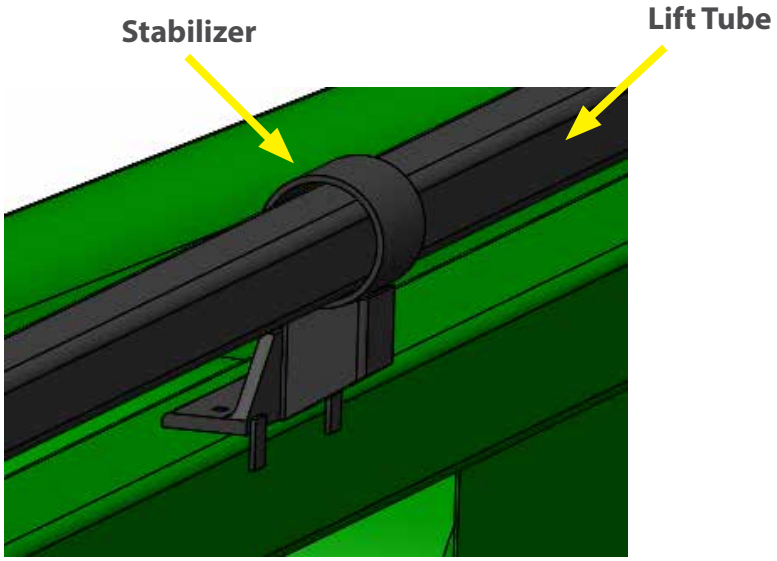
3.4.4 - Once the square tube is centered, move the lift arms to the predetermined location (See step 3.1.1). Leave arm set bolts loose to aid in further installation.

⚠ CAUTION

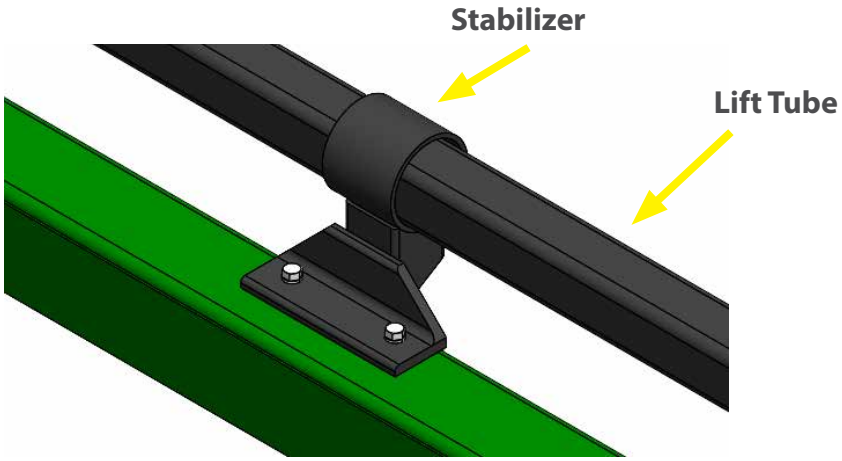
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Two arm set-up

3.5 - Install Center Stabilizer for 8 Row 30" JD 893 or 12 Row 30" JD 612C (2015 or Newer). Can also be installed on larger heads



3.5.1 - Lay center stabilizer angle iron supports against the rear face of the top tube. Using the bolt plate as the drill guide, drill through the frame with 1/2" bit, and tap to 1/2"-13 thread.



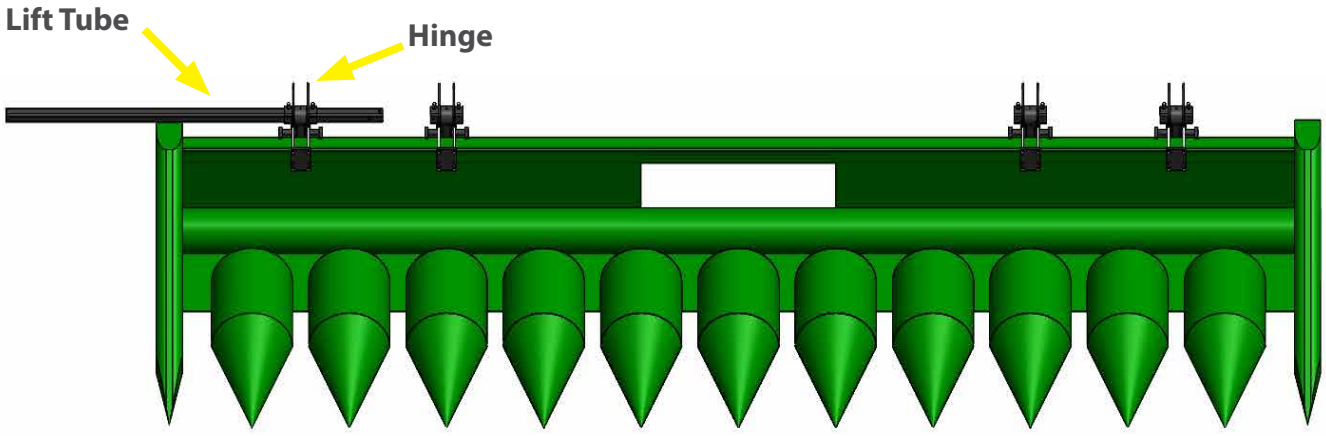
3.5.2 - Once the drill and tap are complete, secure the center stabilizer with **1/2" X 1 1/2" Bolt (411545)** and **1/2" Lock Washer (413508)** and tighten.

⚠ CAUTION

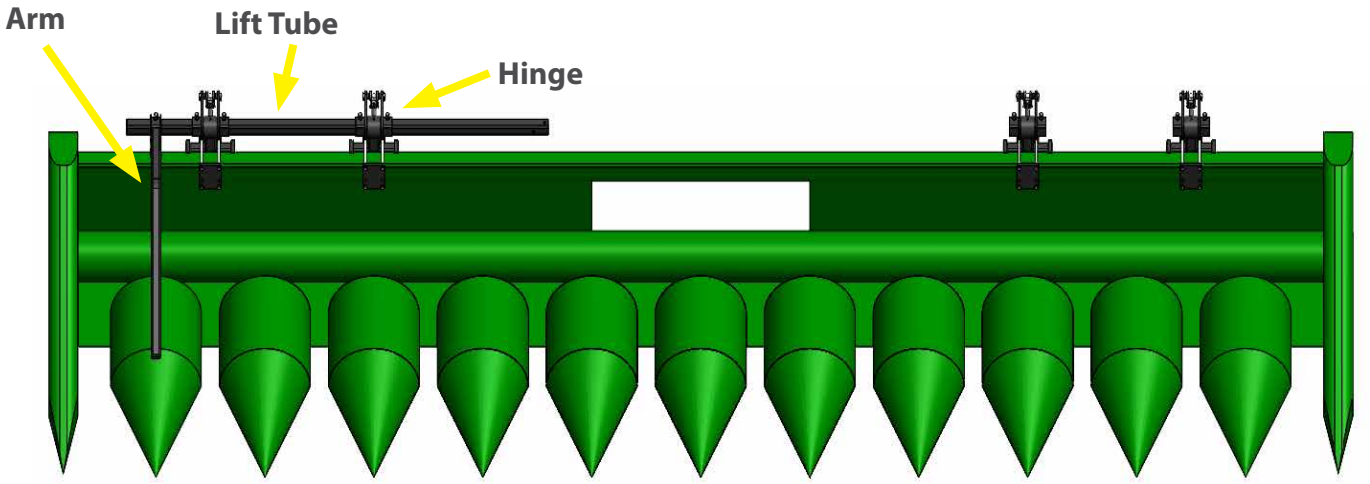
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.1 - With a person at each end of the 3" square tube, begin inserting the tube through the outer hinge, stopping at least 1 foot before reaching the next **if your layout requires an arm to be placed between the hinges.**



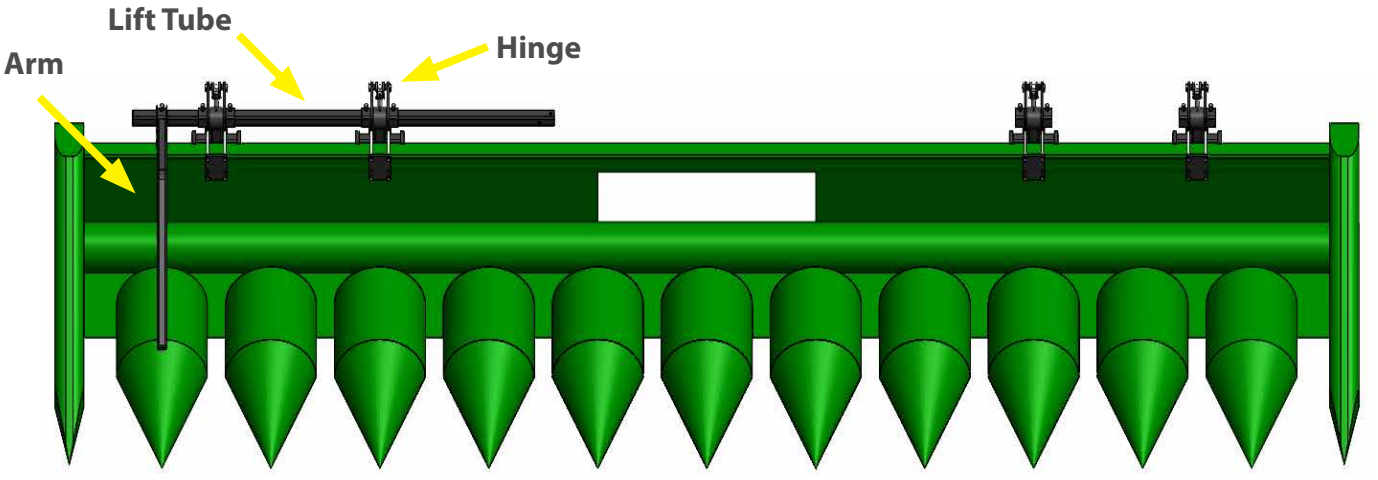
3.3.2 - Slide 1st arm over the square tube, and towards the first hinge.

⚠ CAUTION

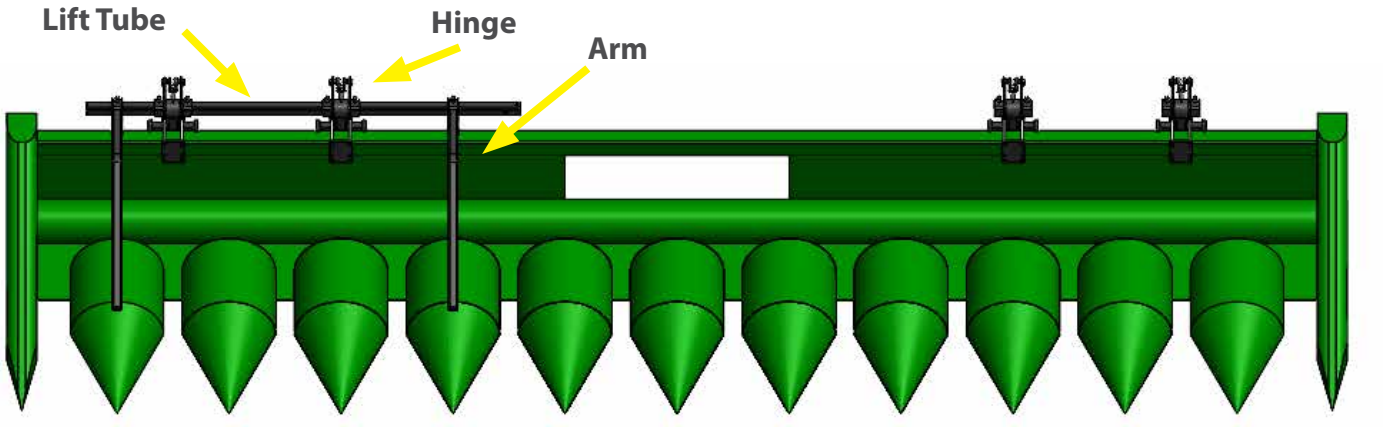
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.3 - With first arm installed, slide the square tube through the next hinge towards the center of the machine.



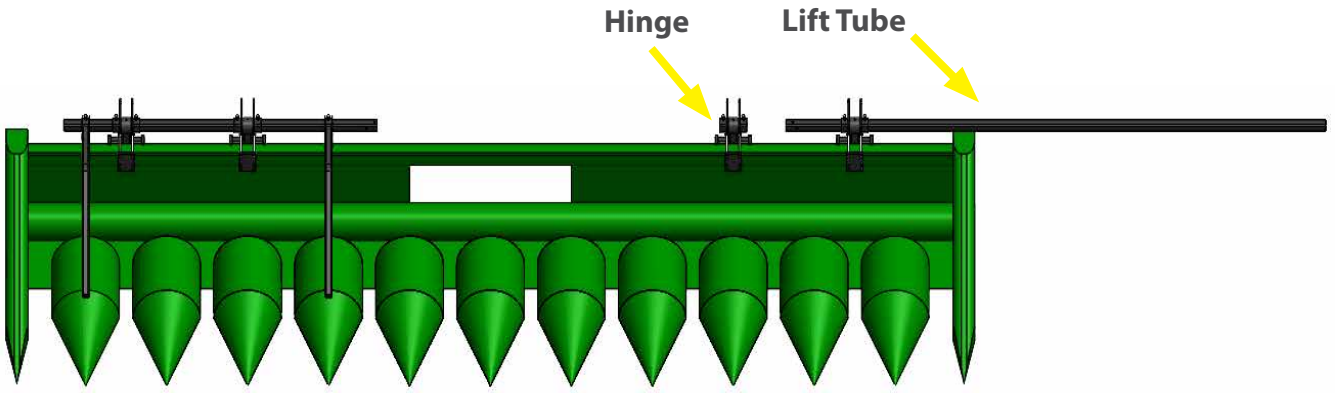
3.3.4 - Slide 2nd arm over the square tube, and towards the hinge.

⚠ CAUTION

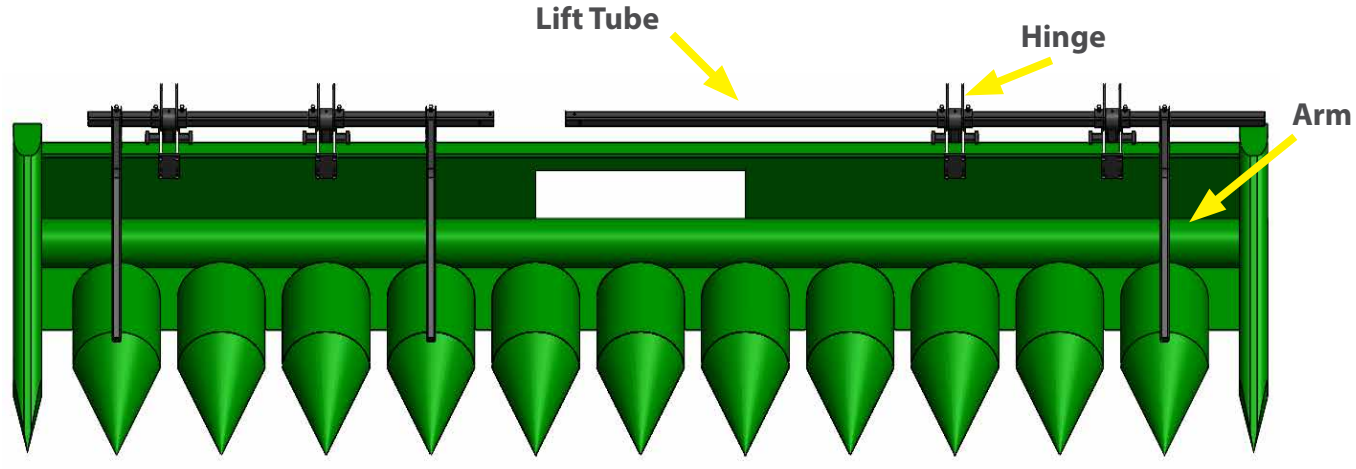
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.5 - Repeat the process, at the opposite side of the head. With a person at each end of the 3" square tube, begin inserting the tube through the second outer hinge, stopping at least one (1) foot before reaching the next **if your layout requires an arm to be placed between the hinges.**



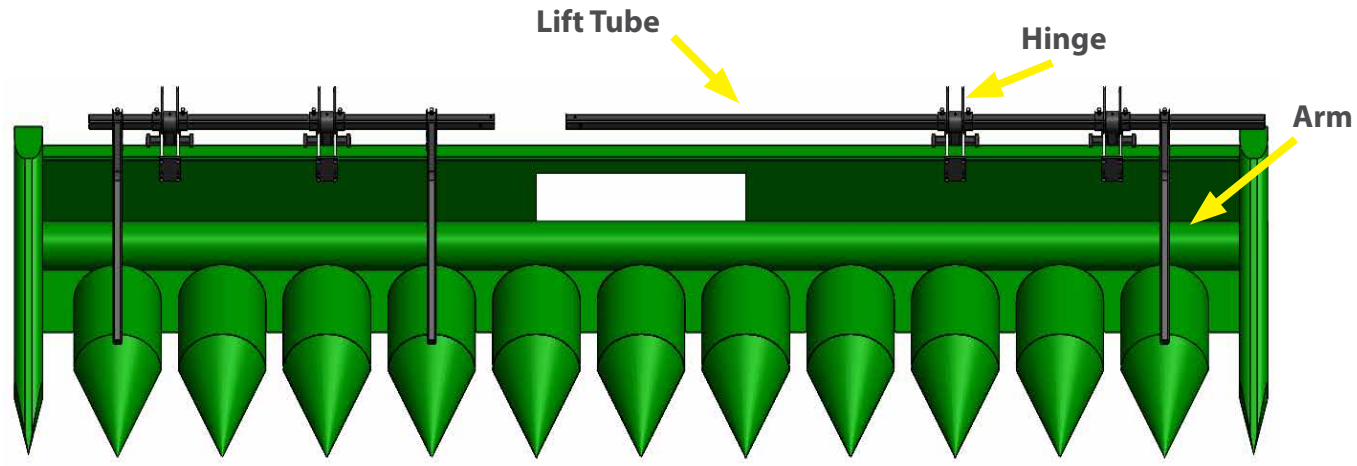
3.3.6 - Slide first arm over the square tube, and towards the first hinge.

⚠ CAUTION

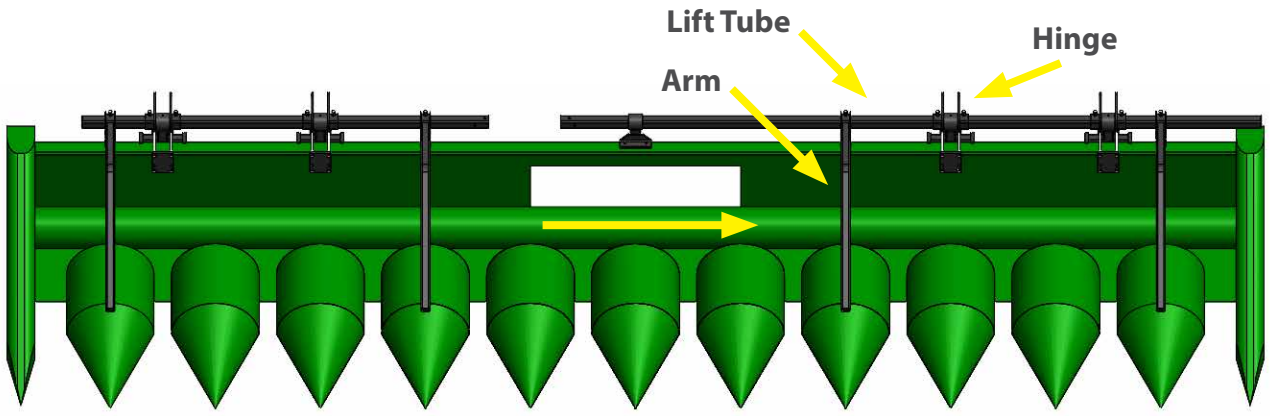
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.7 - With first arm installed, slide the square tube through the next hinge towards the center of the machine.



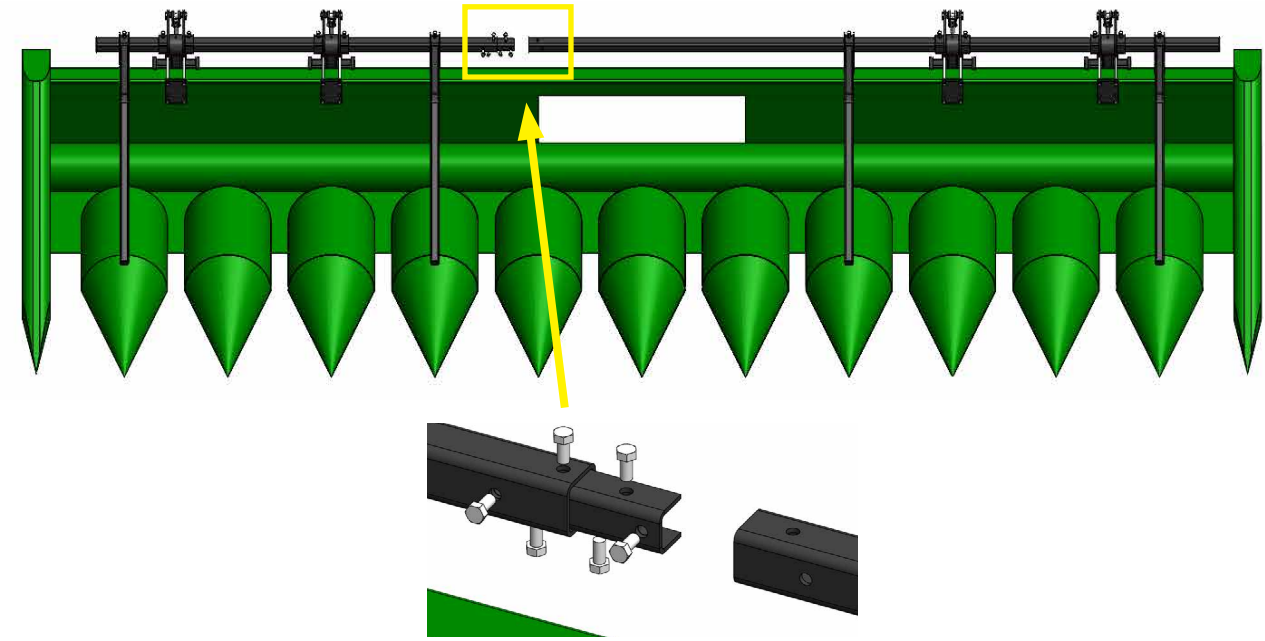
3.3.8 - Slide 2nd arm over the square tube, and towards the hinge. **NOTE: If installing on a model with a center stabilizer, slide on the center stabilizer towards the center of the head. Refer to Steps 3.5.1 and 3.5.2 to finish installing center stabilizer.**

⚠ CAUTION

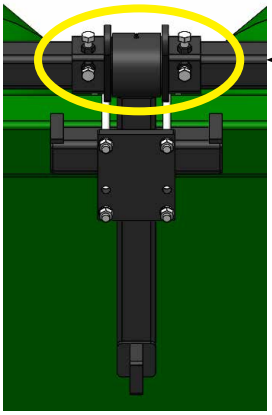
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.9 - Slide square tubes together and install square tube splice using six (6) **5/8" X 1 ¼" Bolts**. Tighten Bolts with 15/16" wrench. Center the Rear Tube on corn head.



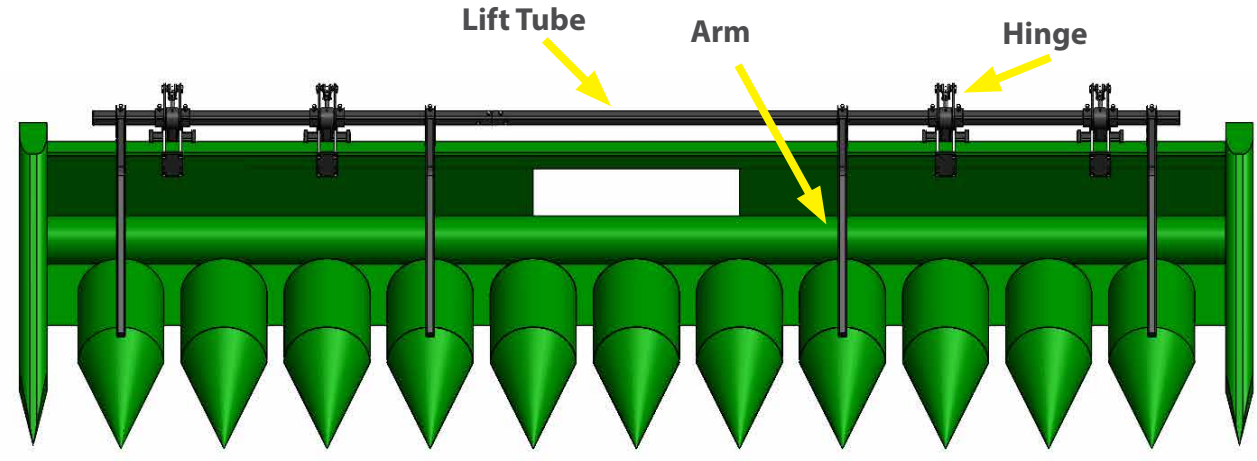
3.3.10 - Tighten set bolts with a 15/16" wrench to secure the 3" square tube. There is no need to over-tighten these set bolts.

⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)

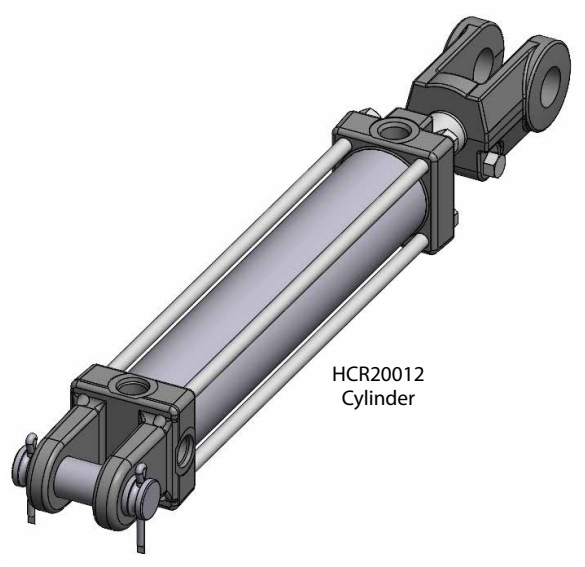


3.3.11 - Once the square tube is centered, move the lift arms to the predetermined location in step 3.1.1. Leave arm set bolts loose to aid in further installation.

NOTE: Location of all components are recommended for structural integrity and weight distribution of the reel, slight variations to position can be made to adapt to any differences you may encounter on your specific corn head.

(4) - Lift Cylinder installation

4.1 - Locate components and tools for install.

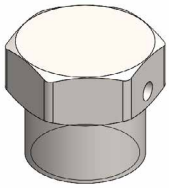


HCR20012
Cylinder

HCR30019
Pin

2 x HCR30018
Pin Spacer

2 x 416005
Cotter Pin

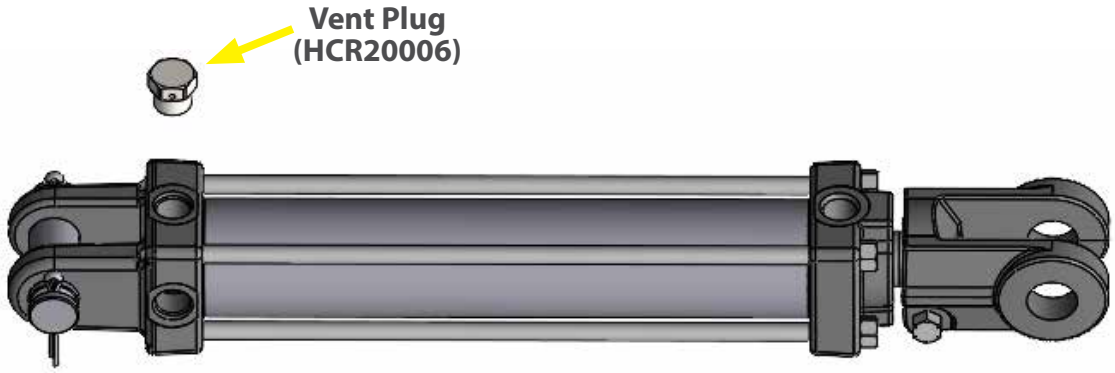


HCR20006
Vent Plug

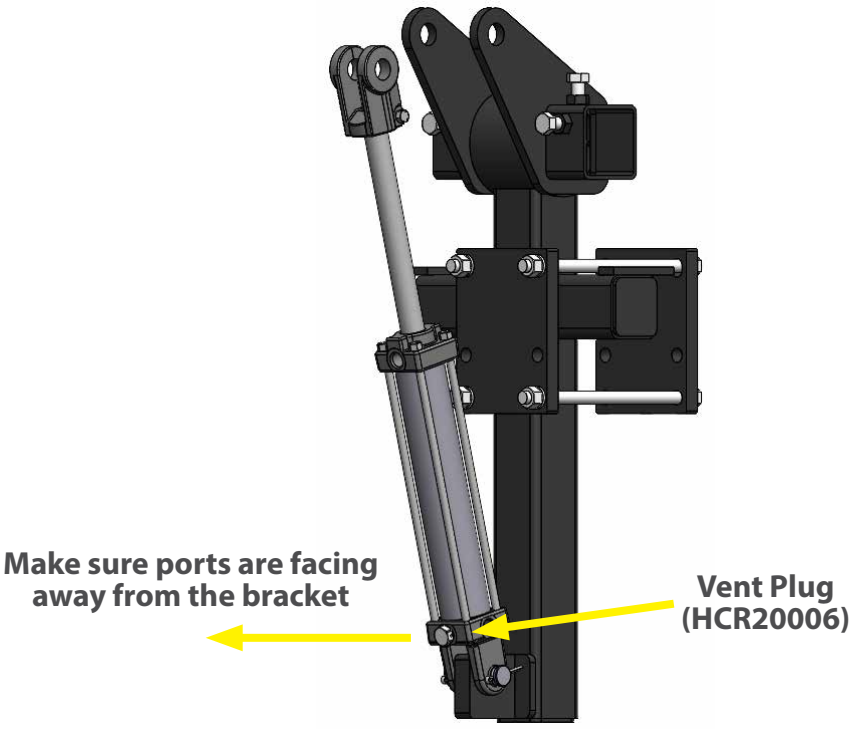
4.1.1 - In corn reel packaging find the above components for installation of the lift cylinders. Locate tools necessary.

(4) - Lift Cylinder installation

4.2 - Attach Cylinder base to bottom of Hinge



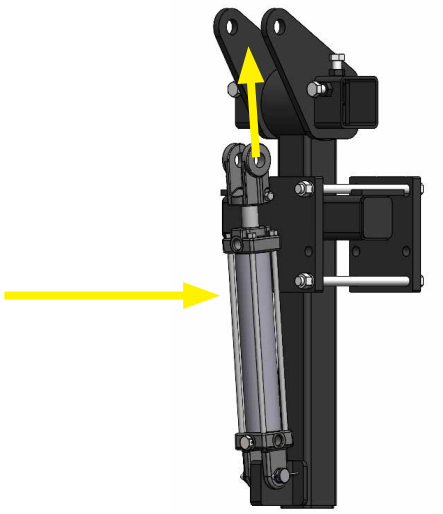
4.2.1 - Install **Vent Plug (HCR20006)** in **Cylinder (HCR20012)** the base port that is adjacent to the rod port using 7/8" wrench.



4.2.2 - Install **Cylinder (HCR20012)** base end using supplied pin and cotter pins to bottom hole on mounting hinge. Make sure that ports are facing towards the rear. Using a pair of pliers, bend cotter pins to secure the pin and base end of cylinder in place.

(4) - Lift Cylinder installation

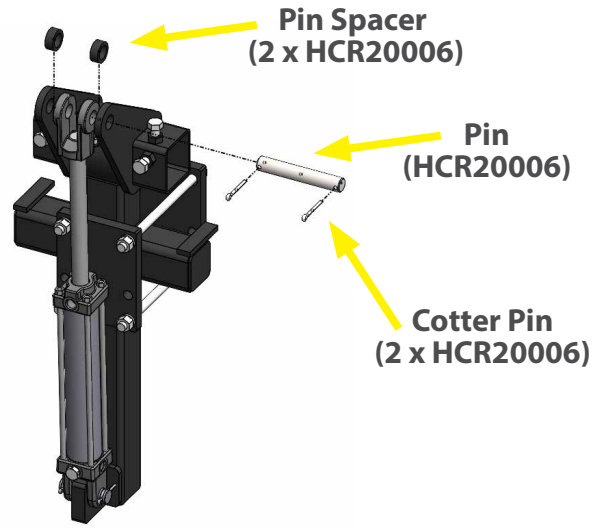
4.2 - Connect top of Cylinder to top of Hinge



4.2.1 - Using wrench, loosen rod end cylinder plug. Before moving cylinder, place a shop rag over fitting to avoid spraying hydraulic fluid. Locate top pin and cotter pins for connecting the rod end of the cylinder.

⚠ CAUTION

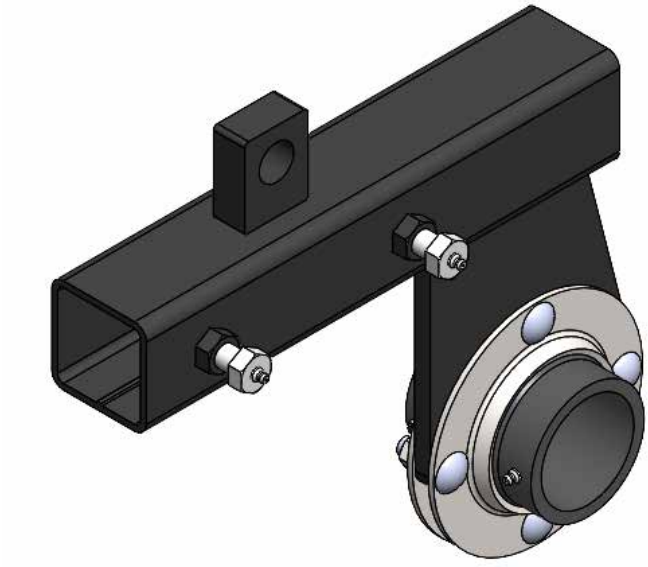
Use caution when extending cylinder as oil will shoot out of the cylinder.



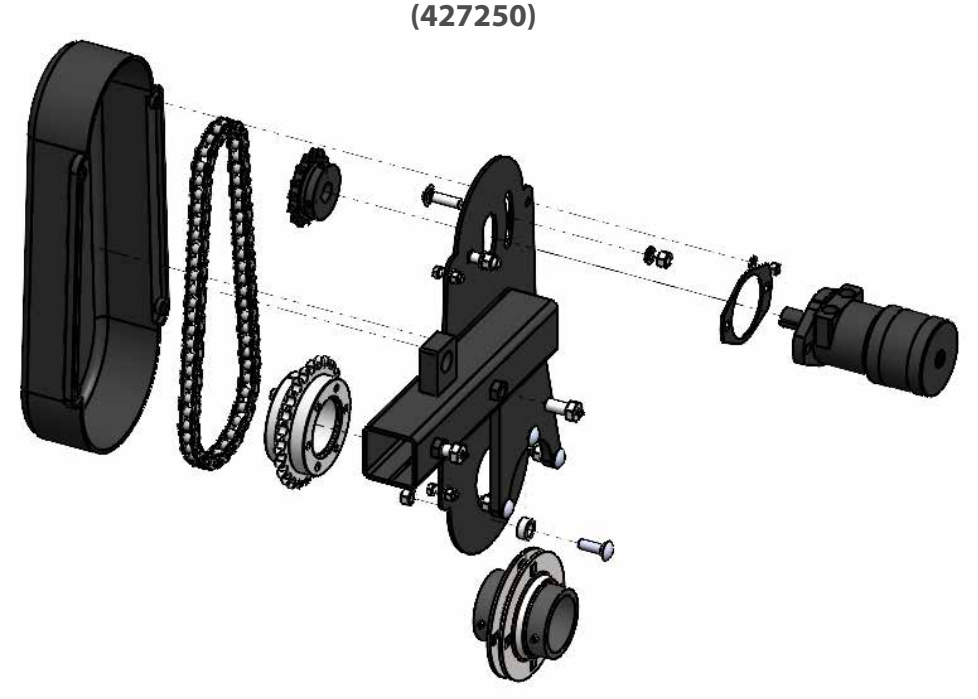
4.2.3 - With rod end plug loosened, cylinder rod should move by hand. Pulling on the rod end clevis, extend the cylinder to line up the top tug and mount hinge hole. Once aligned install the pin and mounting hardware. Once cylinder is pinned, install cotter pins in each end of the pin, and bend using pliers to complete install of the top pin.

4.2.4 - Repeat this step for the rest of the mounting hinge cylinders.

(5) - Reel Hub & Chain Box Assembly - Part Identification



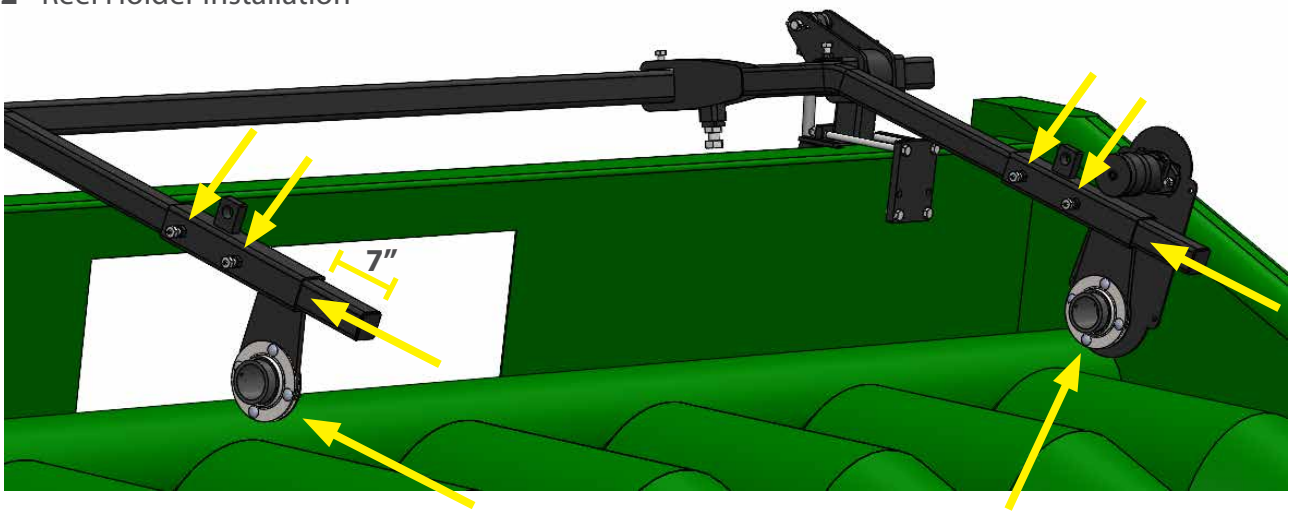
Reel Hub Holder
(427250)



Chain Box Hub Holder
(427251)

(5) - Reel Hub & Chain Box Assembly

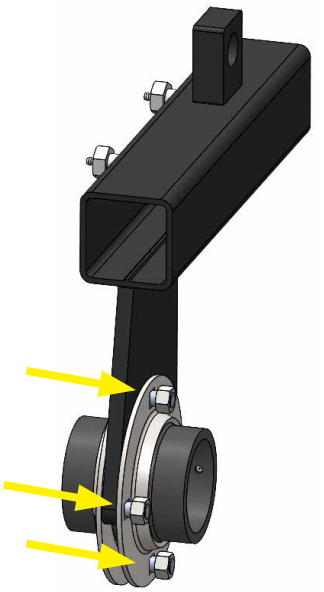
5.2 - Reel Holder Installation



Reel Hub Holder (427250)

Chain Box Hub Holder (427251)

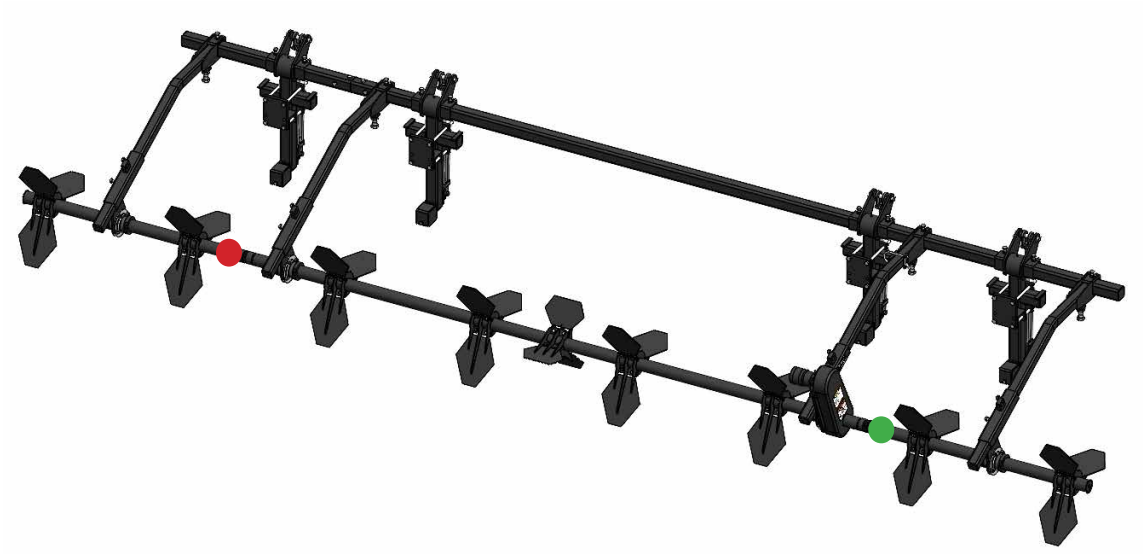
5.2.1 - Slide Reel Holders and Chain Box Assembly onto Arms. Position bearing end of Reel Holder Tube 7" from end of arm for now. Tighten Zerk Bolts on Reel Holders and Chain Box tubes to hold in place on Arms while inserting Reel Tube.

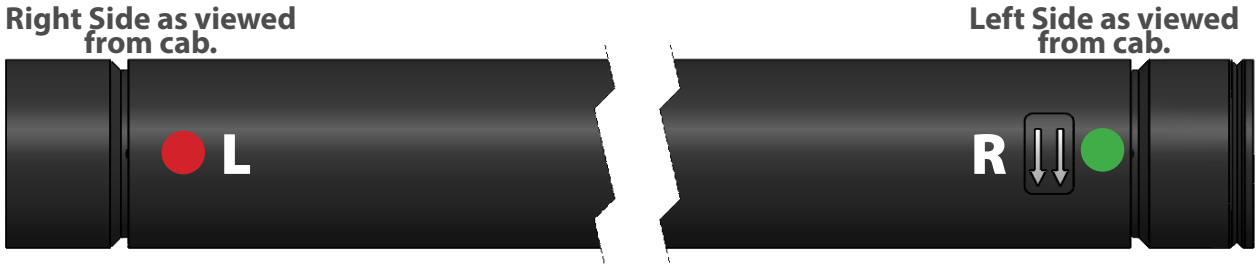


5.2.2 - Make sure that Bearing Flange Carriage Bolts are slightly loose to allow faster installation of Reel Tube.

(6) - Reel Tube

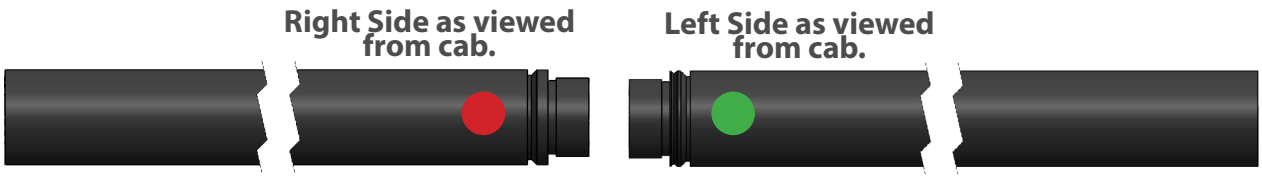
6.1 - Reel Holder Installation





6.1.1 - The Left-Hand side (as viewed from cab of combine) has a GREEN DOT decal and is stamped with an "R" to indicate right-hand threads.

The Right-Hand side (as viewed from cab of combine) has a RED DOT decal and is stamped with an "L" to indicate left-hand threads.



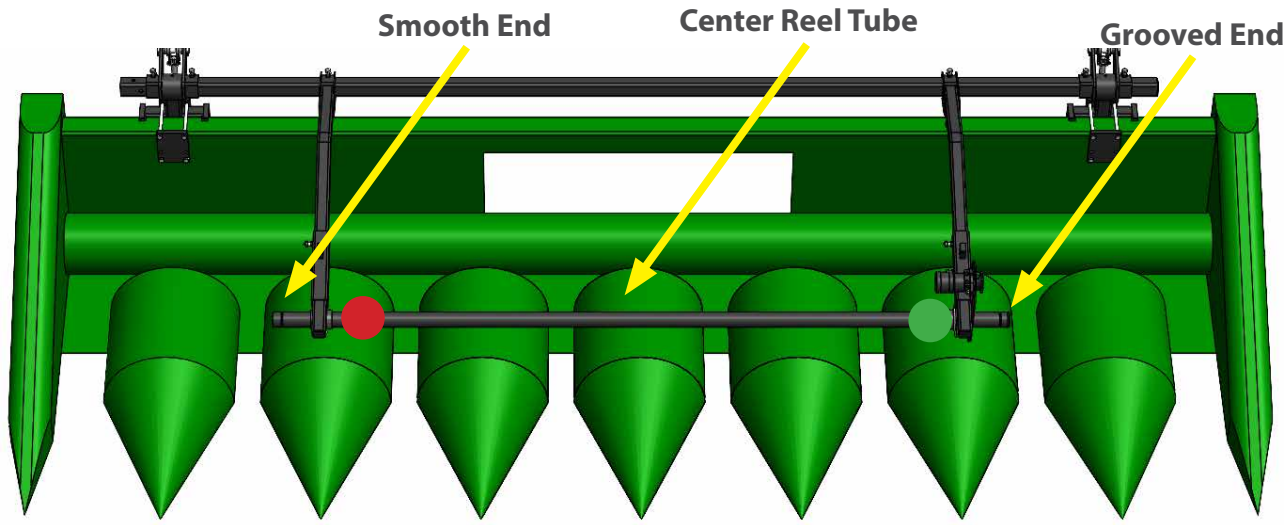
6.1.2 - The Reel Tube Extensions have corresponding colored dot decals that match same for same with the Center Reel Tube. (GREEN DOT for Left-Hand side, RED DOT for Right-Hand side)

NOTE: Right hand side of machine uses left hand threads. Left hand side of machine uses right hand threads.

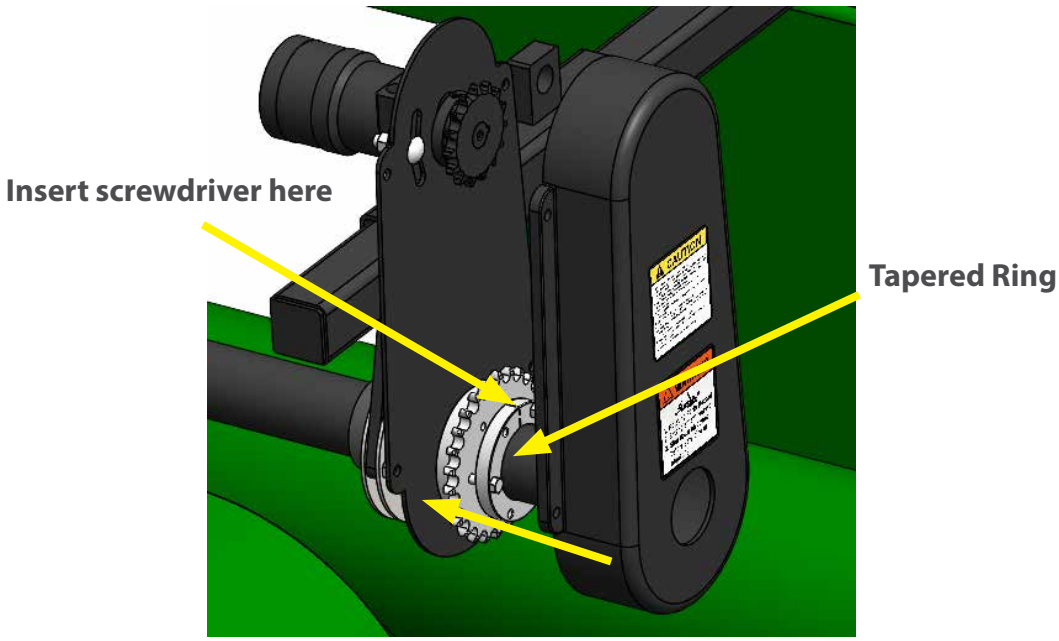
RETURN TO INDEX

(6) - Reel Tube

6.2 - Assemble Center Reel Tube on Reel Hub Holder and Chain Box Hub Holder



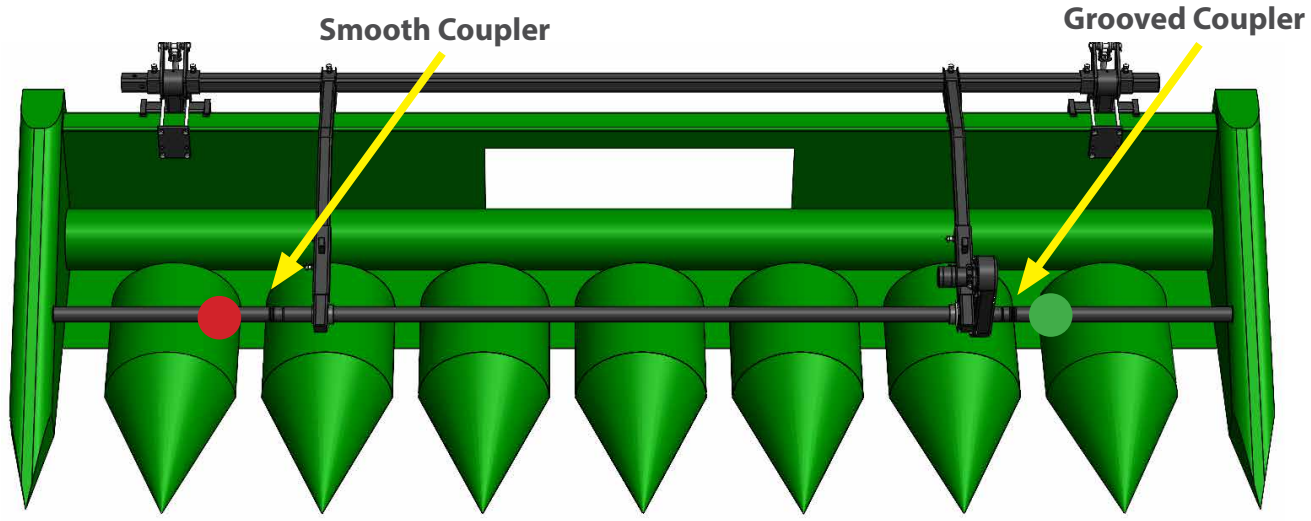
6.2.1 - Slide Center Reel Tube through the poly spherical bearings on the Reel Holders so that the GREEN DOT ends up near the Chain Box Hub Holder. Approximately center the Reel Tube with the head before moving on.



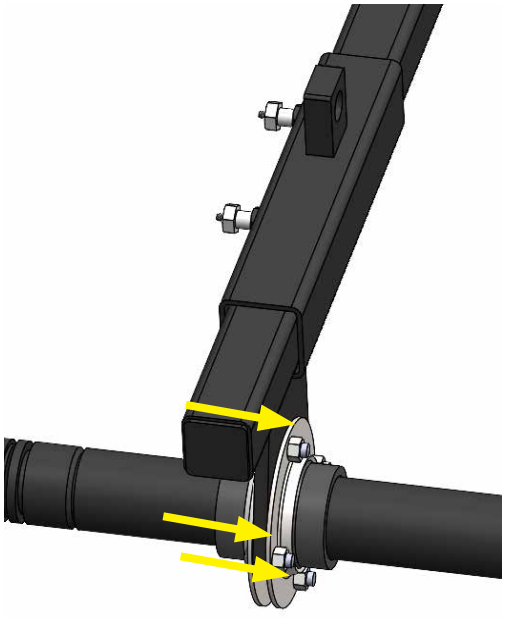
6.2.2 - Install Tapered Hub Assembly onto the Center Reel Tube on the outboard side of the Chain Box Hub Holder using a flat screwdriver to spread the tapered ring so it will slide over the end of the tube. Leave wedge bolts loose for now. The Chain Box Cover should be slid over the Center Reel Tube at this time and bolted on loosely, leaving the installation of the chain until after Reel Tube Extensions and paddles are installed.

(6) - Reel Tube

6.3 - Attach Reel Tube Extensions to Center Reel Tube



6.3.1 - Install Reel tube extensions, matching GREEN DOT ends together and RED DOT ends together, using a pair of large pipe wrenches (or similar) to tighten. A gap may remain between the rims on the threaded couplers when tight, this is normal.

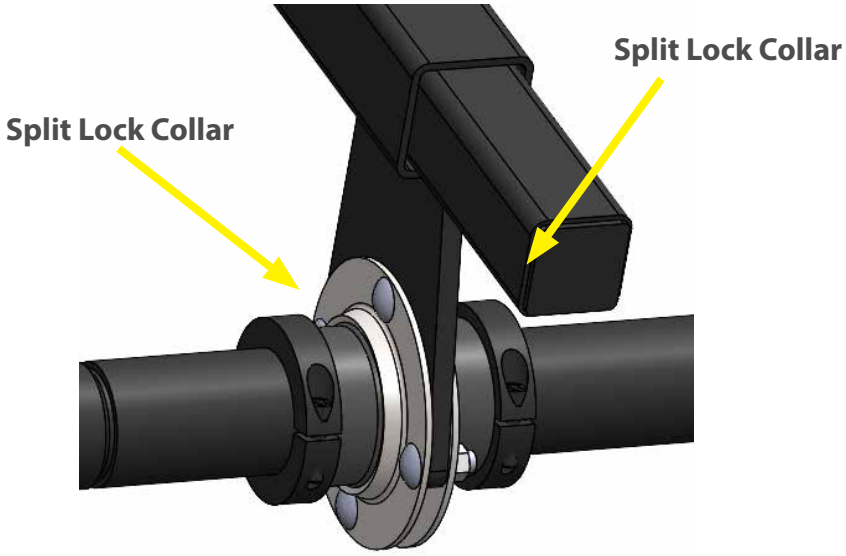


6.3.2 - Using 3/4" wrench, tighten the carriage bolts on the Bearing flanges. Be sure to position the grease zerks on each Spherical Bearing towards the back of the Corn Head. Take care not to over-tighten the bottom bolt. The bolt only needs to be tight enough to keep the Spherical Bearing from turning in the flange.

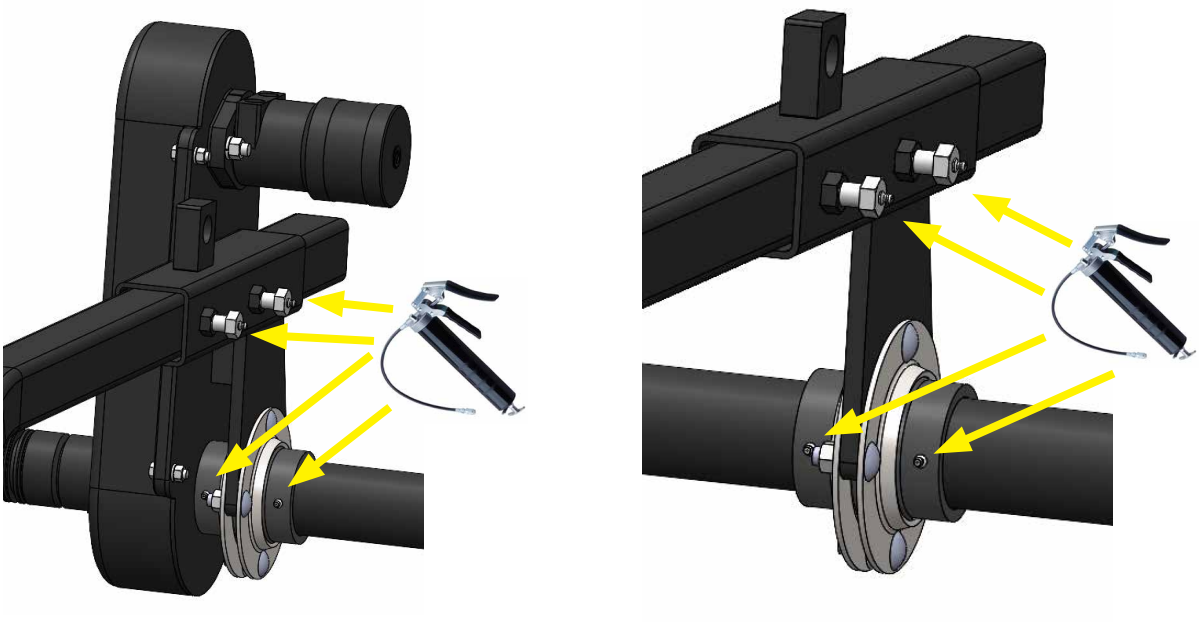
Note: Re-check the tightness of these bolts periodically over the first several days of use.

(6) - Reel Tube

6.3 - Finish Reel Tube Installation



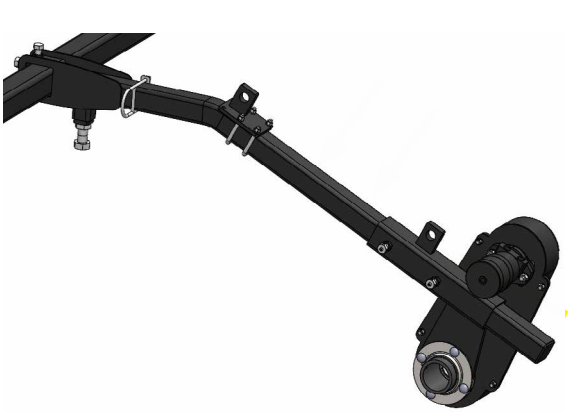
6.3.3 -Center the Reel Tube Assembly on the Corn Head and install Split Lock Collars flush against each side of Bearings, tighten with 5/16" Allen wrench.



6.3.4 - Grease Reel Holder Zerk Bolts and Bearings liberally. The Reel Tube should turn freely. If Reel Tube does not turn freely, check that the Reel Tube is level with the Corn Head and that the Reel Hub Holders are aligned evenly on the Arms.

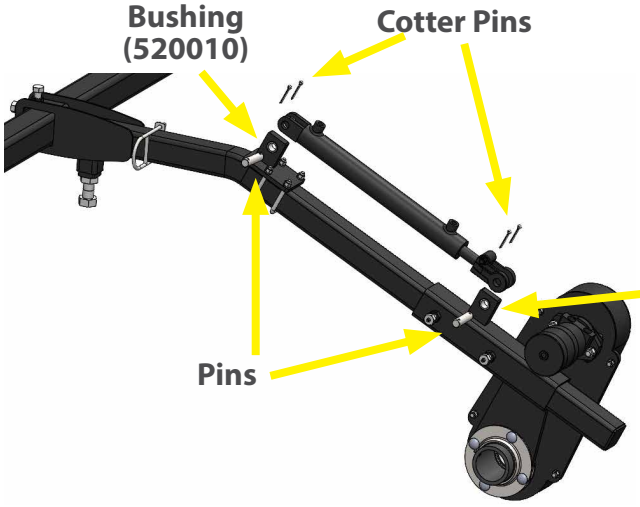
(7) - Fore & Aft Cylinder Installation

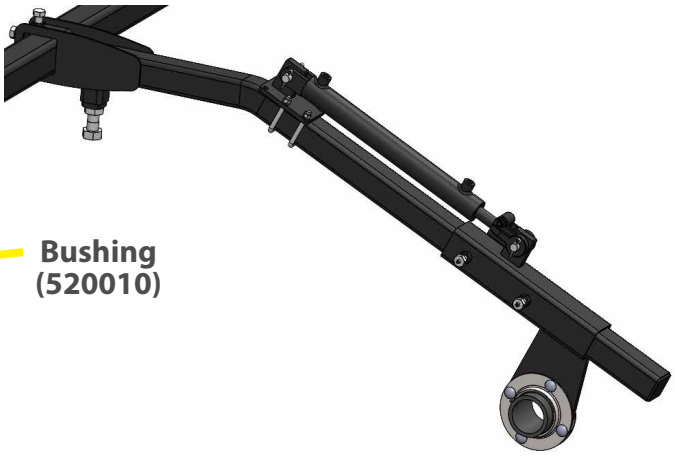
7.1 - Fore & Aft Installation



7.1.1 - Install Fore & Aft **Cylinder Point (520006)** on arms using included **3/8"-16 X 2-1/2" X 3-1/2" U-Bolts (415111)**, **3/8" Lock Washers (413506)**, and **3/8"-16 Nuts (412056).** Also install the **Hose Guide (HCR30075**) on the Arm with the Chain Box with (2) **5/16" Lock Washers (413505)**, and (2) **5/16"- 18 Nuts (412005)**.

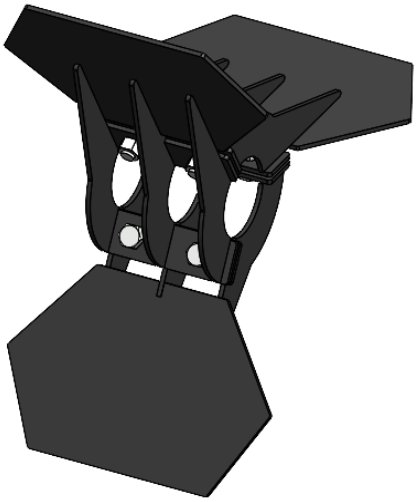
Note: To make cylinder installation easier, leave Cylinder Points loose until after cylinders are pinned in.



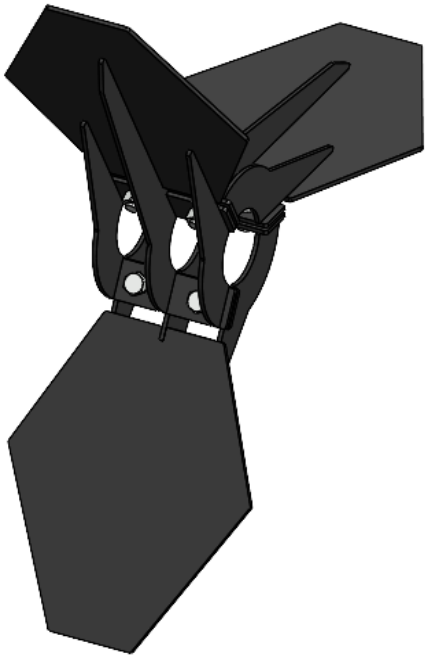


7.1.2 - Install **Fore & Aft Cylinders (476032)** with included pins and **Bushings (520010)** and secure with hair cotter pins.

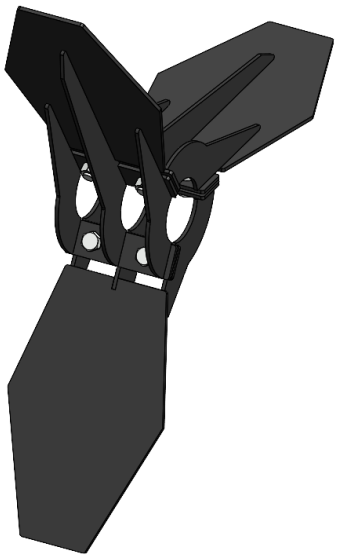
(8) - Paddles Identification



Center Paddle
(427201)



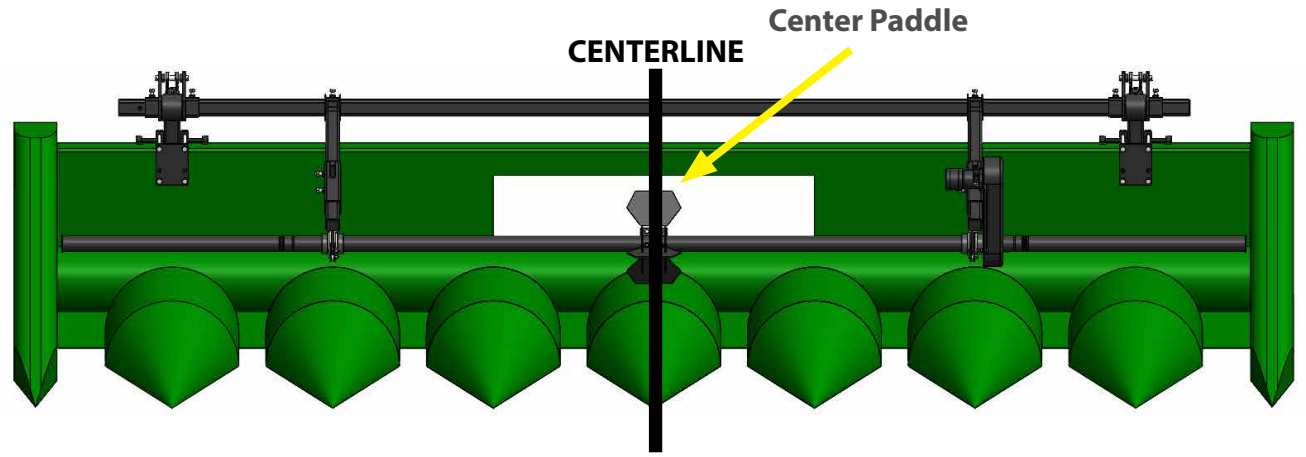
30" Row Paddle
(427200)



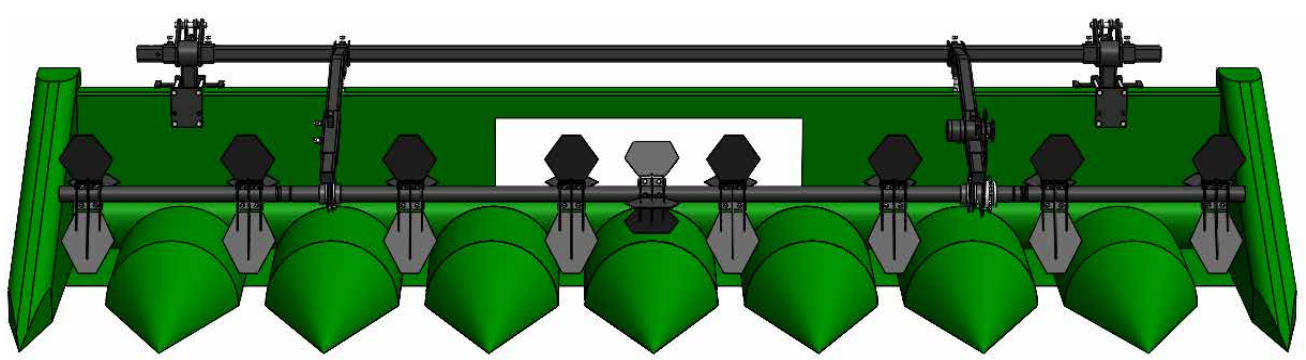
20" Row Paddle
(427202)

(8) - Paddle Installation

8.2 - Install Center and Row Paddles on Center Reel Tube



8.2.1 - Install **Center Paddle (427201)** in center of the head using **(6) 1/2" X 1" Bolts** and **(6) 1/2" Center Lock Nuts**.



8.2.2 - Install **30" Row Paddles (427200)** centered between snouts using (6) 1/2" X 1 Bolts and (6) 1/2" Center Lock Nuts on each row.

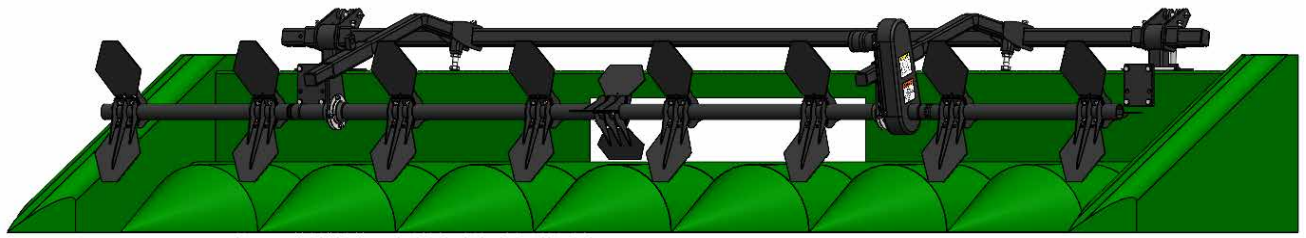
Note: Row Paddles should be offset 1/6 of a turn from the Center Paddle for improved flow into the feeder house.

Note: If on narrow rows, 20" Paddles (427202) go on either of the chain box.

Note: Leave off the paddle by the chain box to make drive chain installation easier.

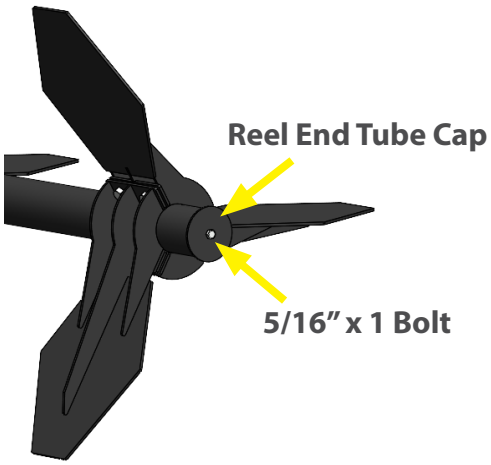
(8) - Paddle Installation

8.3 - Set Reel Height Stop Bolts



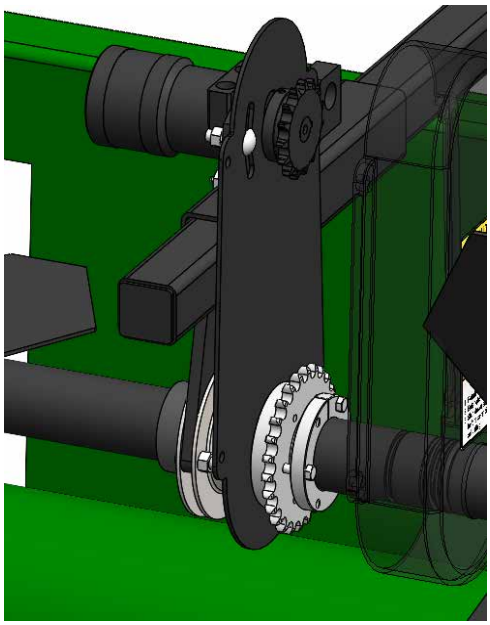
8.3.1 - Once Paddles are installed, set Reel Height Stop Bolts on Arms so the Center Paddle clears the center snout by at least 1 ¾". Keep in mind that this distance will change as Reel is moved fore and aft on Arms.

8.4 - Install Reel Tube End Caps



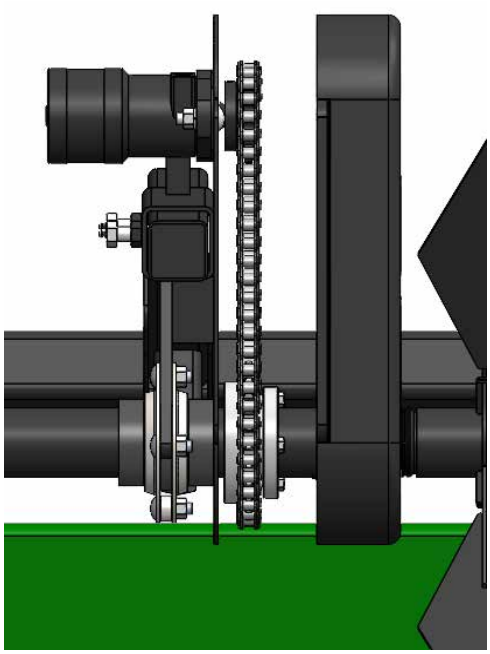
8.4.1 - Affix **Reel Tube End Caps (HCR30024)** to each end of Reel Tube using **5/16" X 1 Bolts (411484)**

(9) - Chain



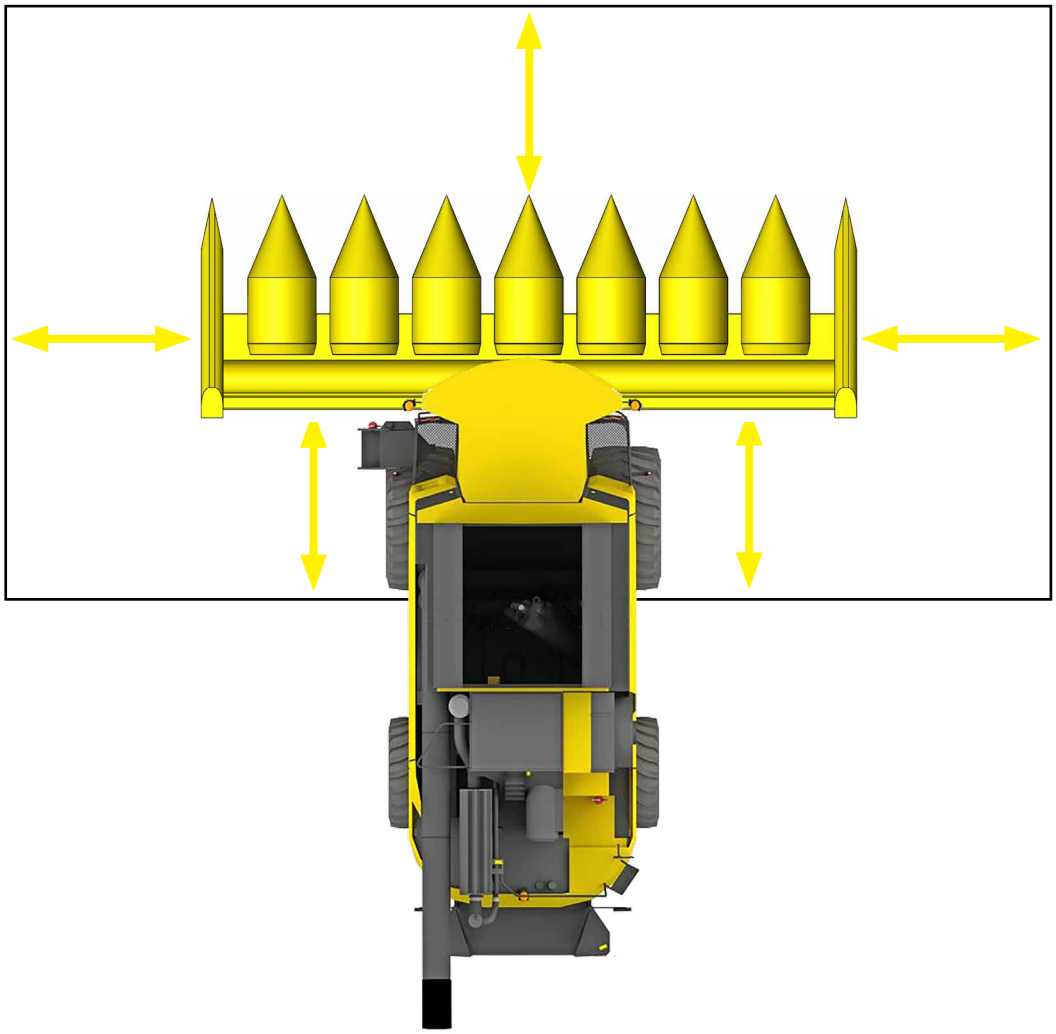
9.1 - Install chain

9.1.1 - Finish placing Tapered Hub sprocket in line with drive sprocket on motor. Tighten pinch bolts.



9.1.2 - Install chain and tighten until snug with 1/4"-1/2" of play.

(1) Place head in desired work area



1.1 - Park the combine on level work surface, make sure the parking brake is on. Leave ample room to work in front of and around the head during installation. We recommend an area of at least 20' to the front of the head and at least 10' around the sides and rear.

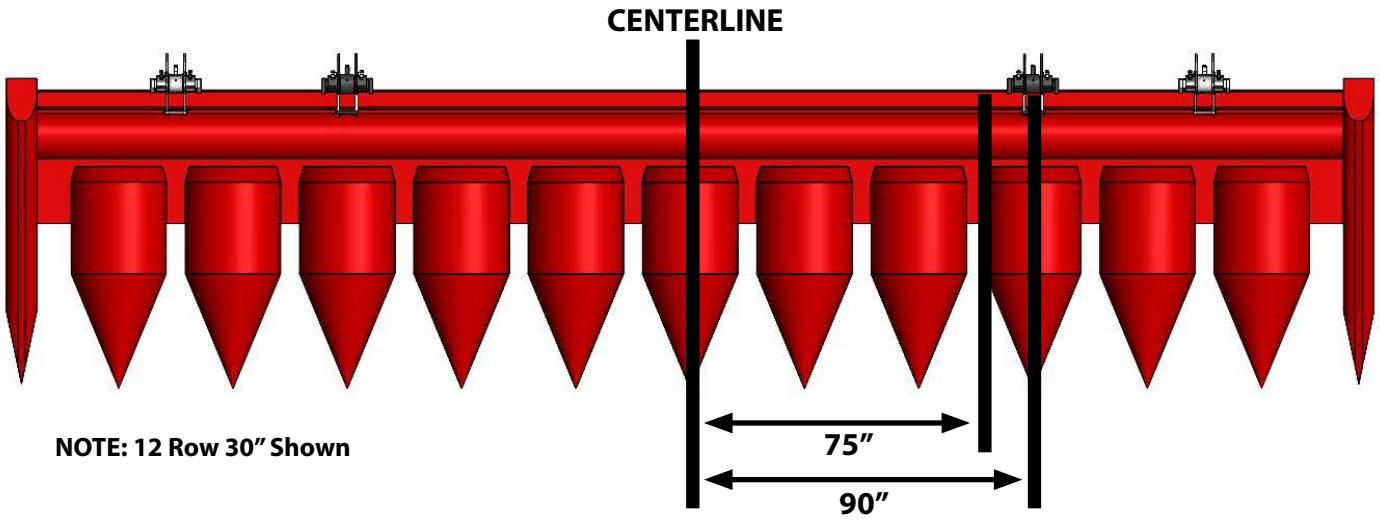
2.2 - Place the head on the ground, ensure head is on the ground and head connection to combine is secure before performing any work on the head.

⚠ CAUTION

DO NOT place any body part beneath the residue manager as you remove it.

(2) Mount/Hinge installation

2.1 - Mark location for inner mount/hinge brackets



NOTE: 12 Row 30” Shown

2.1.1 - Heads **WITHOUT** single point brackets:
- First Bracket Mount/Hinge should be located at 75” as measured from the centerline of the head.

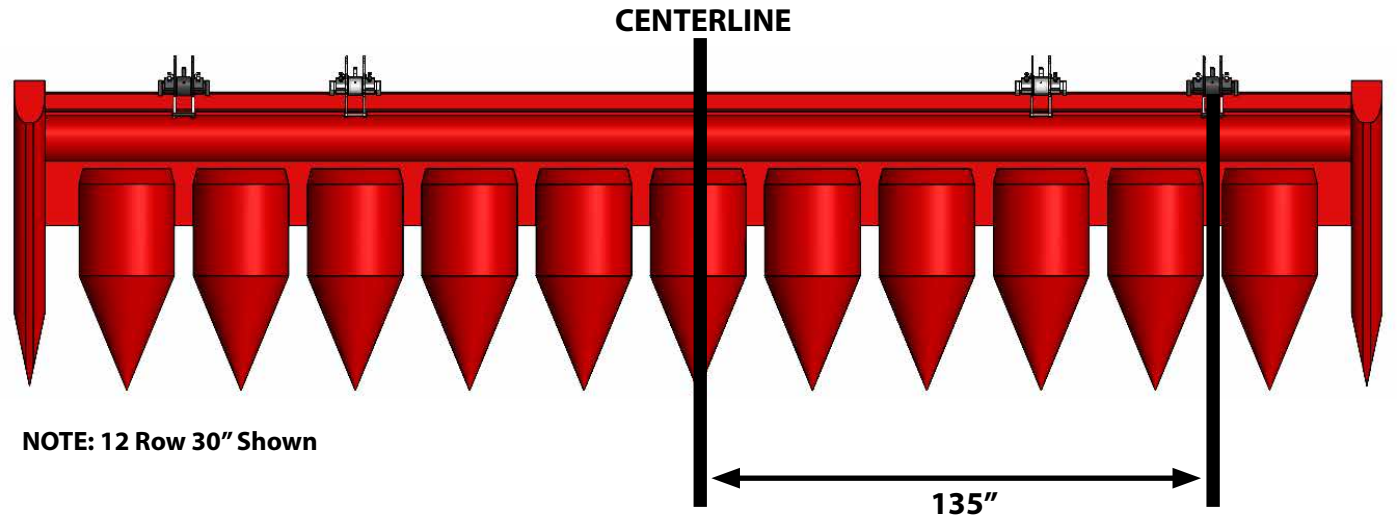
2.1.2 - Heads **WITH** single point brackets:
- First Bracket Mount/Hinge should be located at 90” as measured from the centerline of the head.

Step 2.1.2 - Heads with single point bracket

NOTE: THESE MEASUREMENTS ARE RECOMMENDATIONS. Your hinge placement may need to be adjusted to accomodate design variations that cause obstructions at these locations.

(2) - Mount/Hinge installation

2.2 - Mark location for outer mount/hinge brackets for models with four mounts/hinges



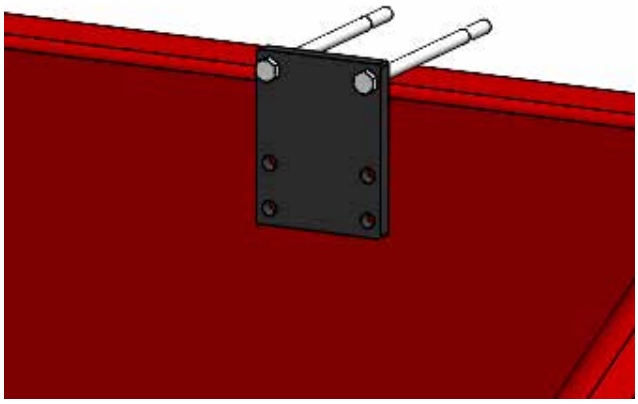
NOTE: 12 Row 30” Shown

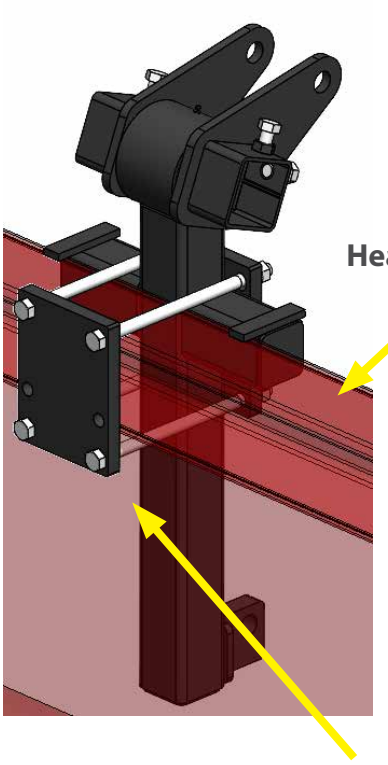
2.2.1 - Outer Bracket Mount/Hinge should be located at 135” as measured from the centerline of the head.

NOTE: THESE MEASUREMENTS ARE RECOMMENDATIONS. Your hinge placement may need to be adjusted to accomodate design variations that cause obstructions at these locations.

(2) - Mount/Hinge installation

2.3 - Mark mount/hinge bolt locations for drilling





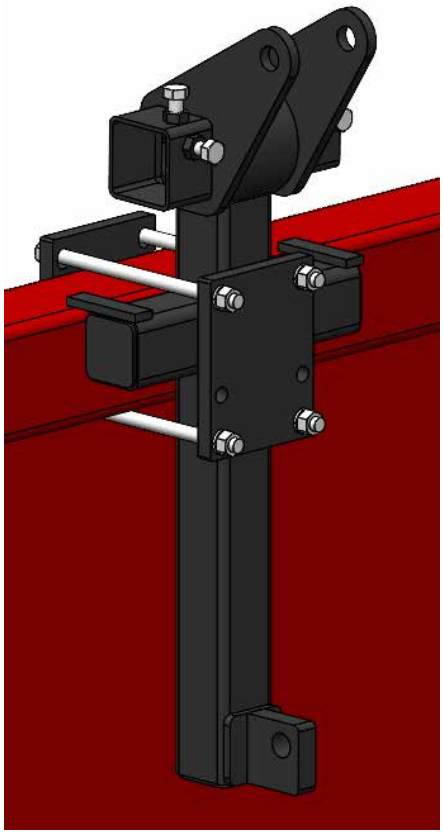
2.3.1 - Putting two 5/8"-11 X 11" bolts in the top holes of the mount plate, rest the bolts on top of the frame at your previously measured locations for the inner and outer mounts/hinges, mark out the holes closest to the bottom of your top tube frame for drilling. This varies between 3" tall head frame and 5" tall head frame.

2.3.2 - Using 5/8" Drill bit, drill through marked hole locations for mounting.

NOTE: Make sure that there are no braces in the way of the holes before marking and drilling. Only two holes required for each mount.

(2) - Mount/Hinge installation

2.4 - Mount the hinges to the frame.



***Backside of corn head shown**

2.4.1 – Safely lift the mounts/hinges into place at pre-drilled locations, and lower mount to rest on top of frame on the top support tabs.

2.4.2 – Install top two 5/8"-11 X 11" bolts and hardware through hinge and mounting plates.

2.4.3 – Install bottom two 5/8"-11 X 11"bolts and hardware through drilled holes and mounting plates.

2.4.4 – Tighten all hardware with a pair of 15/16" wrenches and/or 15/16" socket.

2.4.5 – Repeat process for all mounts/hinges.

NOTE: Keep mount/hinge in lifting restraints until fully secured on the header.

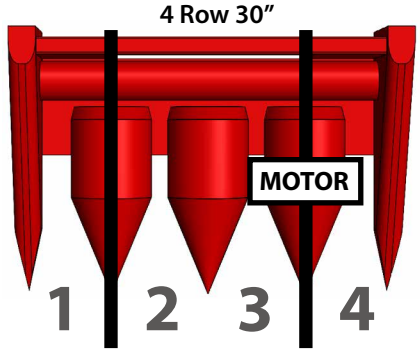
⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

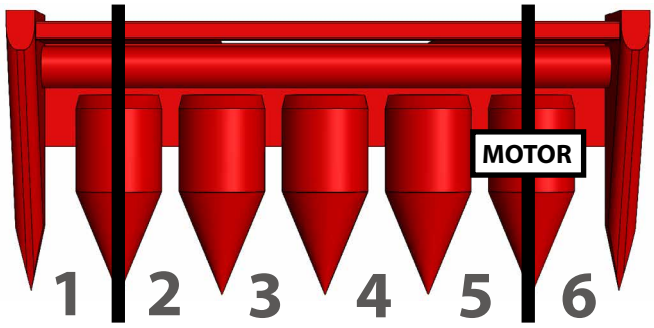
(3) - Lift Tube and Arm installation - Two (2) Arm (8 ROW 30" & SMALLER)

3.1 - Decide arm layout locations for your head model

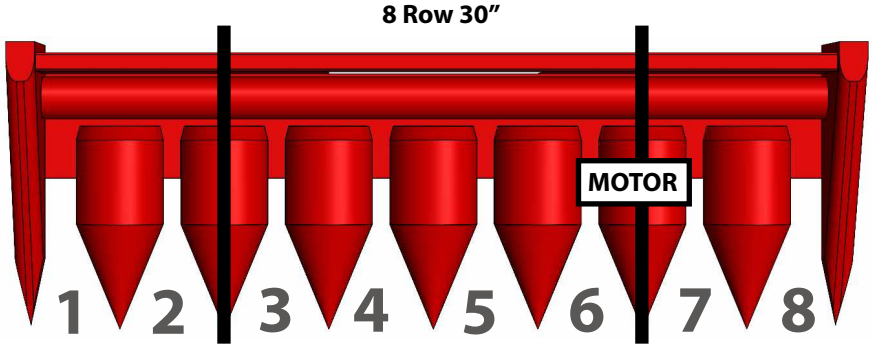
4 Row 30"



6 Row 30"



8 Row 30"



3.1.1 - Determine arm location based on head size from images above before moving to install step.

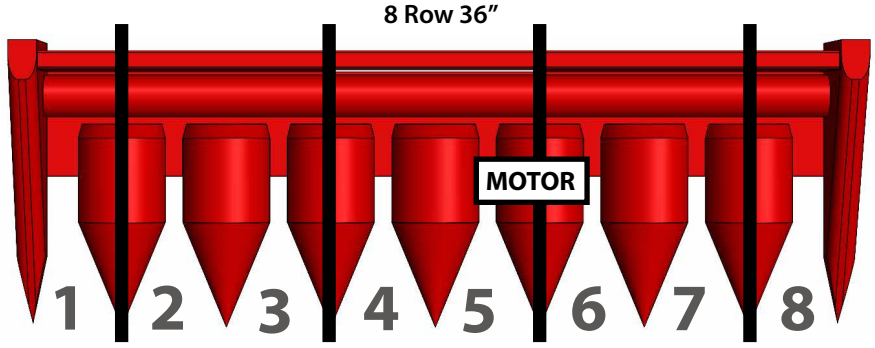
Note: Arm with motor/chain box must be placed in a location that allows the center paddle tube to be driven. The reel CANNOT be driven on extension tube.

Note: Arm and hinges DO NOT need to be symmetrical

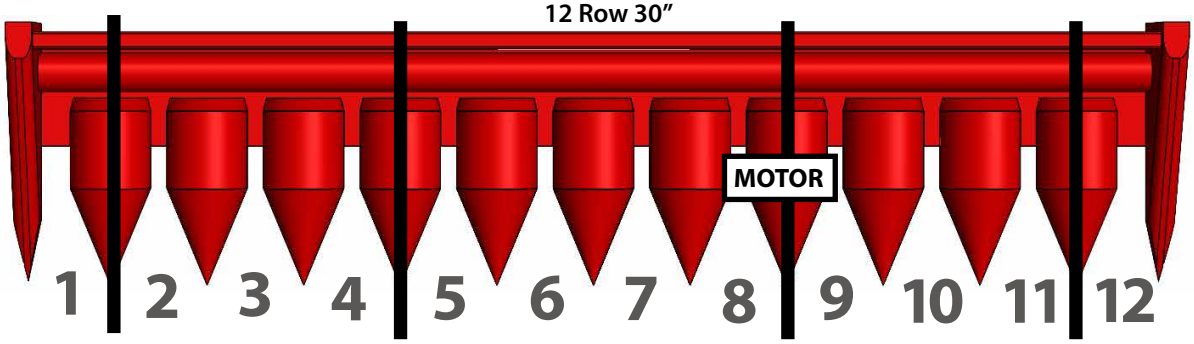
(3) - Lift Tube and Arm installation - Four (4) Arm (LARGER THAN 8 ROW 30")

3.1 - Decide arm layout locations for your head model

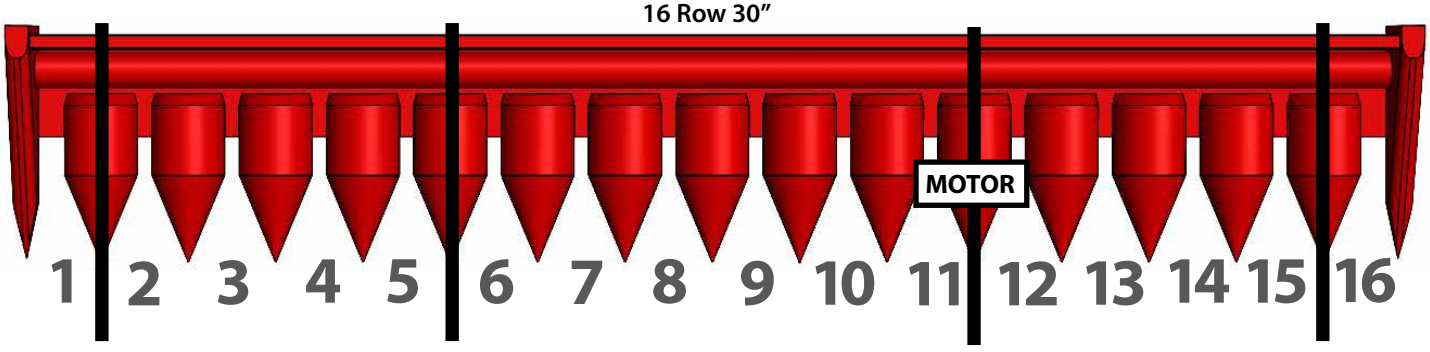
8 Row 36"



12 Row 30"



16 Row 30"



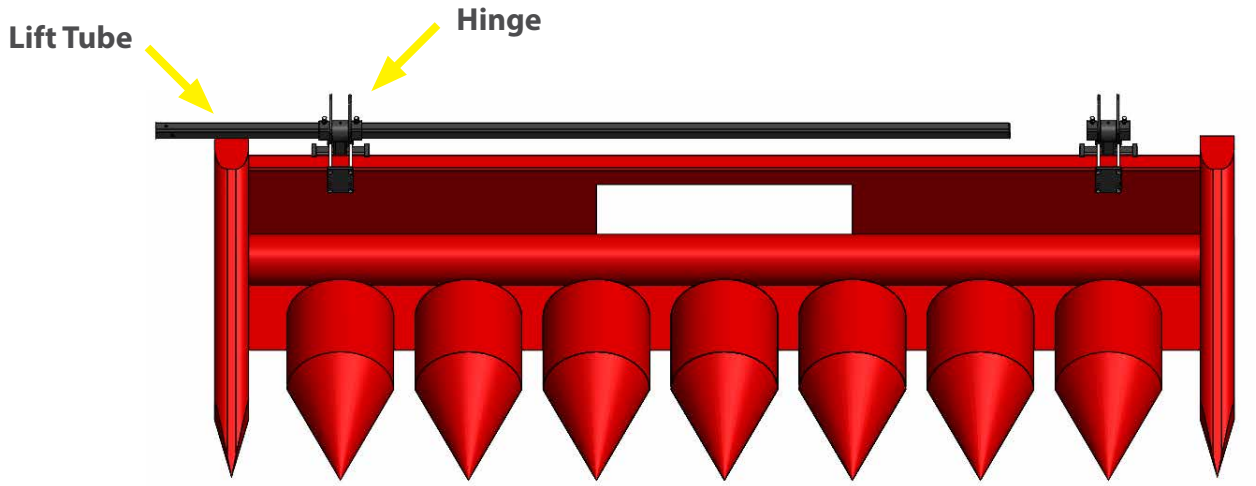
3.1.1 - Determine arm location based on head size from images above before moving to install step.

Note: Arm with motor/chain box must be placed in a location that allows the center paddle tube to be driven. The reel CANNOT be driven on extension tube.

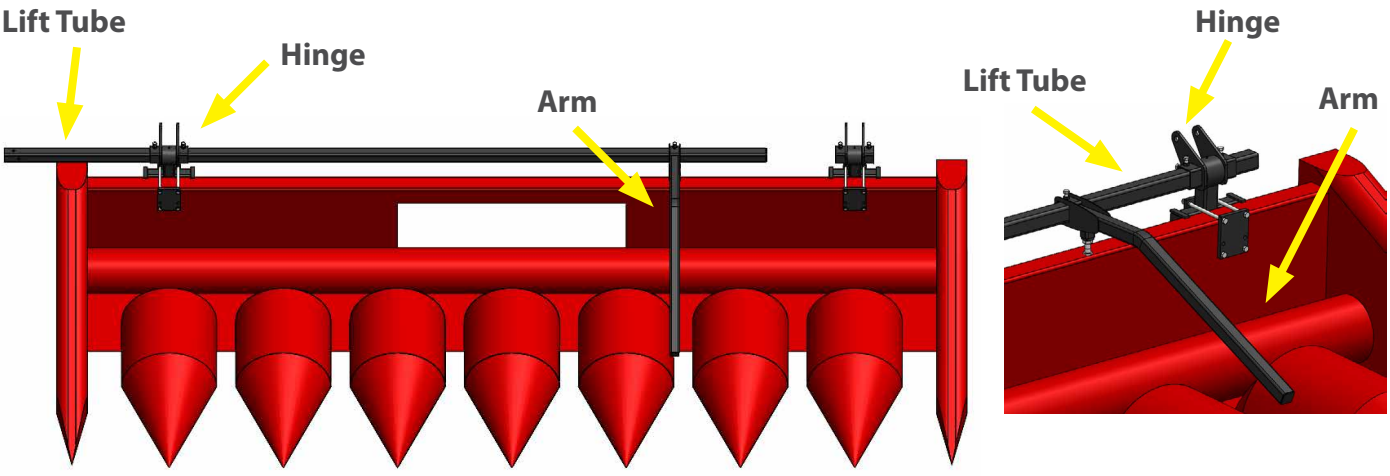
Note: Arm and hinges DO NOT need to be symmetrical

(3) - Lift Tube and Arm installation - Two arm set-up

3.2 - Install lift tube and arms in hinges for 2 arm setup. (8 Row 30" and smaller)



3.2.1 - With a person at each end of the 3" square tube, begin inserting the tube through the outer hinge on either side of the head, stopping at least 1 foot before reaching the next.



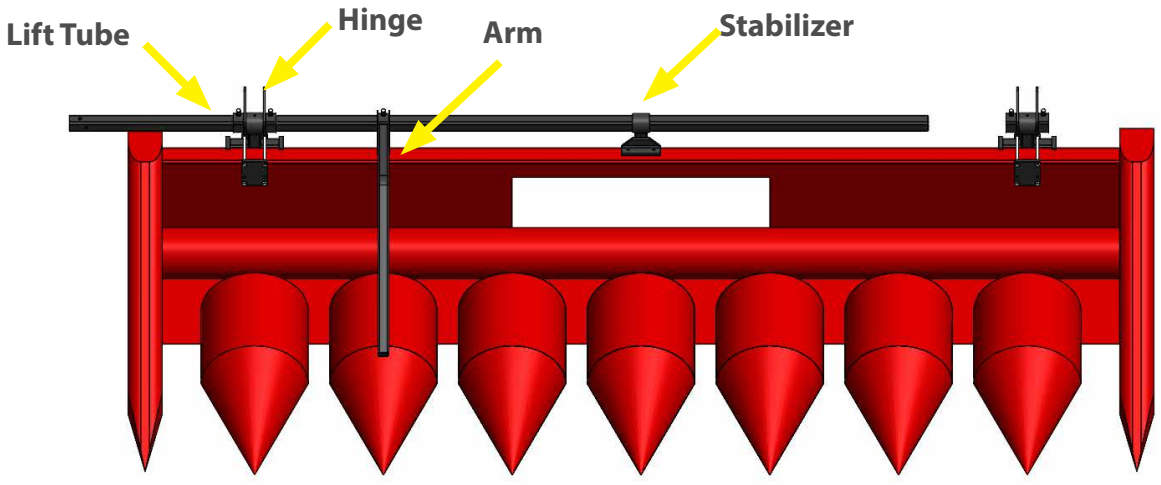
3.2.2 - Slide first arm over the square tube, and towards the first hinge. **Note: Hinge ears must be aligned up and towards rear of head for proper fitment with lift cylinders.**

⚠ CAUTION

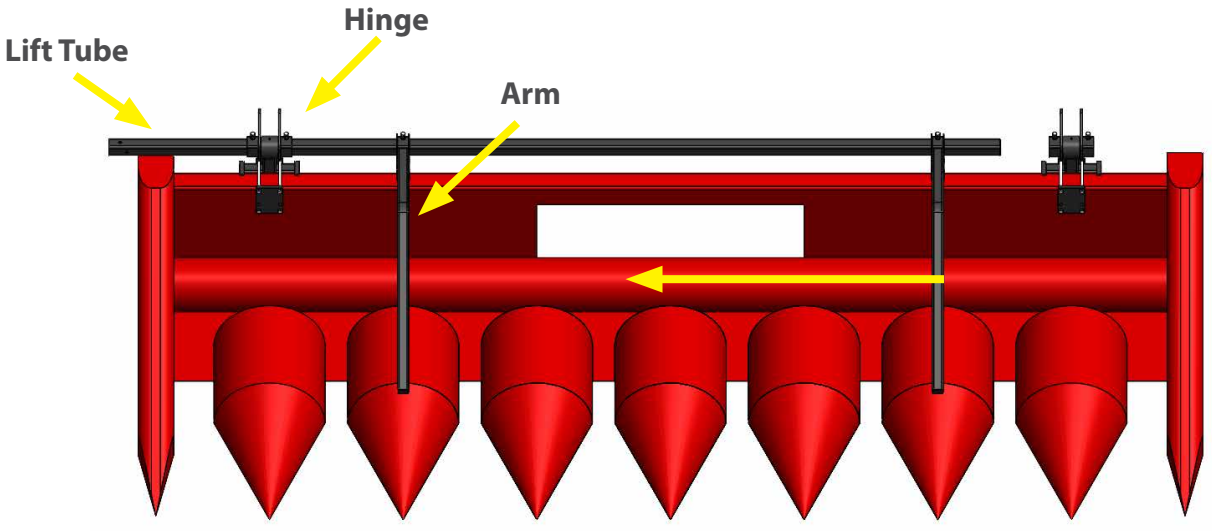
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Two arm set-up

3.2 - Install lift tube and arms in hinges for 2 arm setup. (8 Row 30" and smaller)



3.2.4 - If installing on a model with a center stabilizer, slide on the Center Stabilizer towards the center of the head.



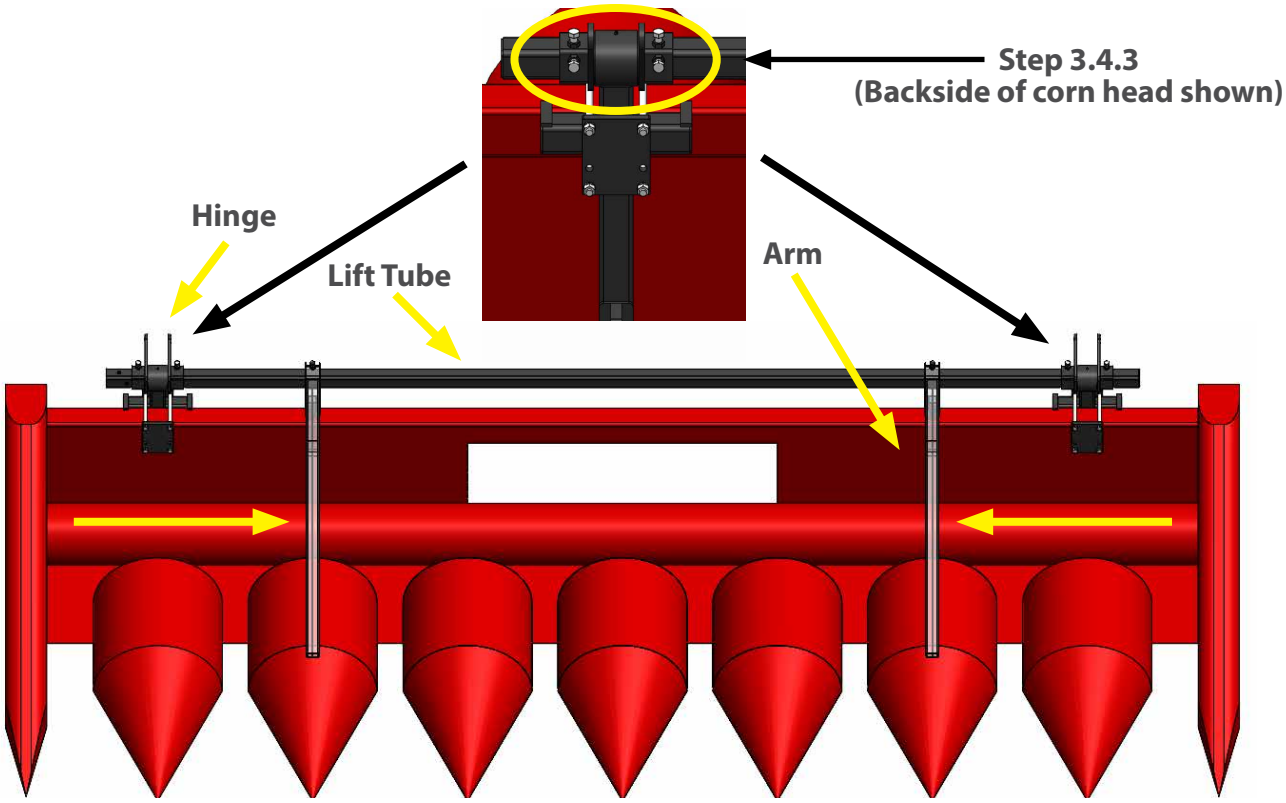
3.4.2 - Slide the 2nd arm over the square tube, and towards the center of the head.

⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Two arm set-up

3.4 - Install lift tube and arms in hinges for 2 arm setup. (8 Row 30" and smaller)



3.4.3 - Finish sliding the square tube through the second hinge. Center the tube with the head of the machine. Tighten 5/8"-11 X 1 1/4" set bolts on hinges with a 15/16" wrench or socket to secure the Lift Tube. There is no need to over-tighten these set bolts.

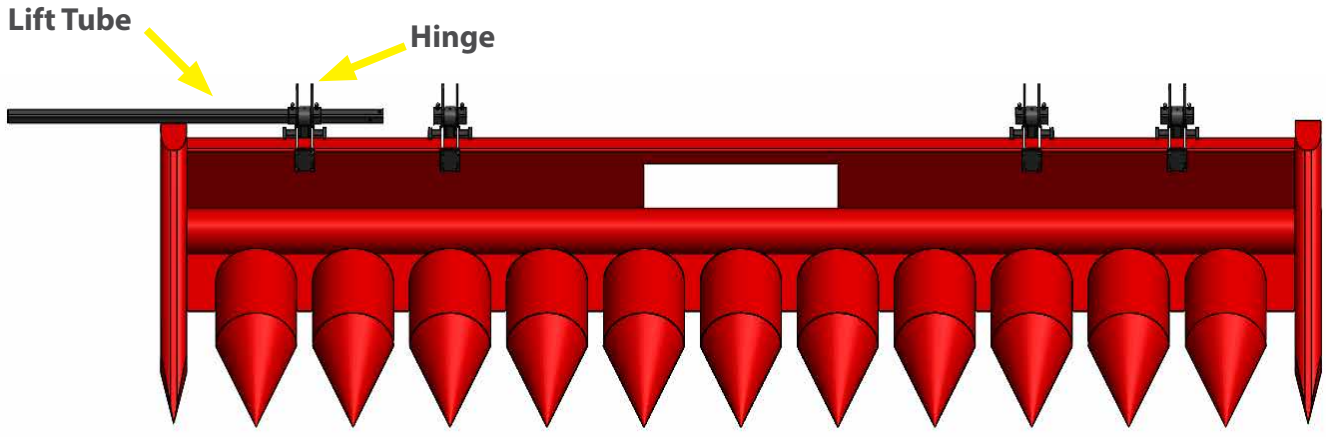
3.4.4 - Once the square tube is centered, move the lift arms to the predetermined location (See step 3.1.1). Leave arm set bolts loose to aid in further installation.

⚠ CAUTION

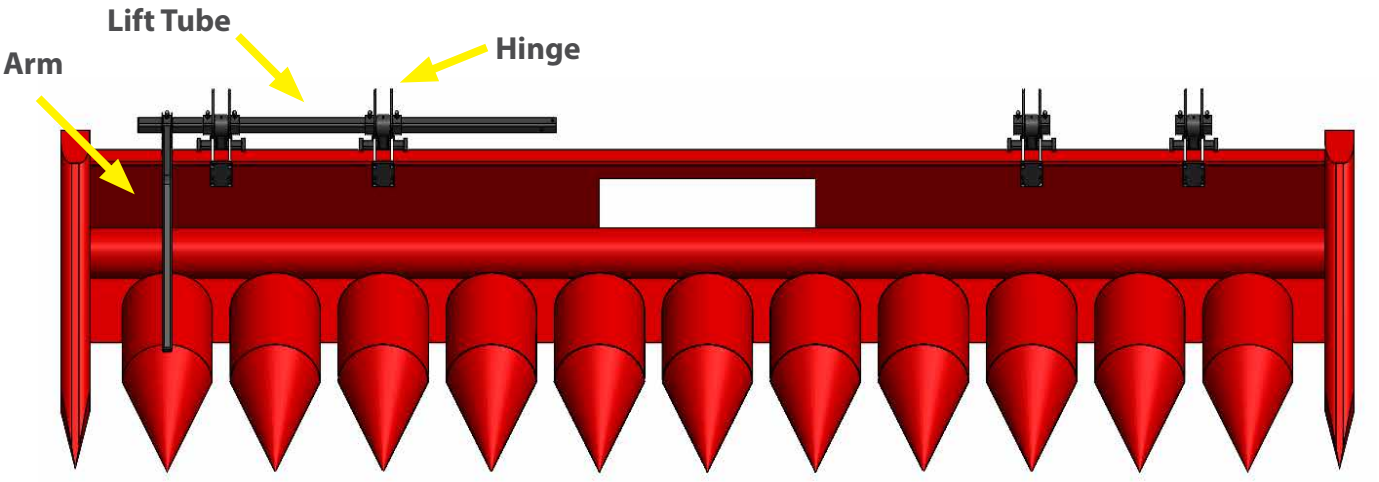
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.1 - With a person at each end of the 3" square tube, begin inserting the tube through the outer hinge, stopping at least 1 foot before reaching the next **if your layout requires an arm to be placed between the hinges.**



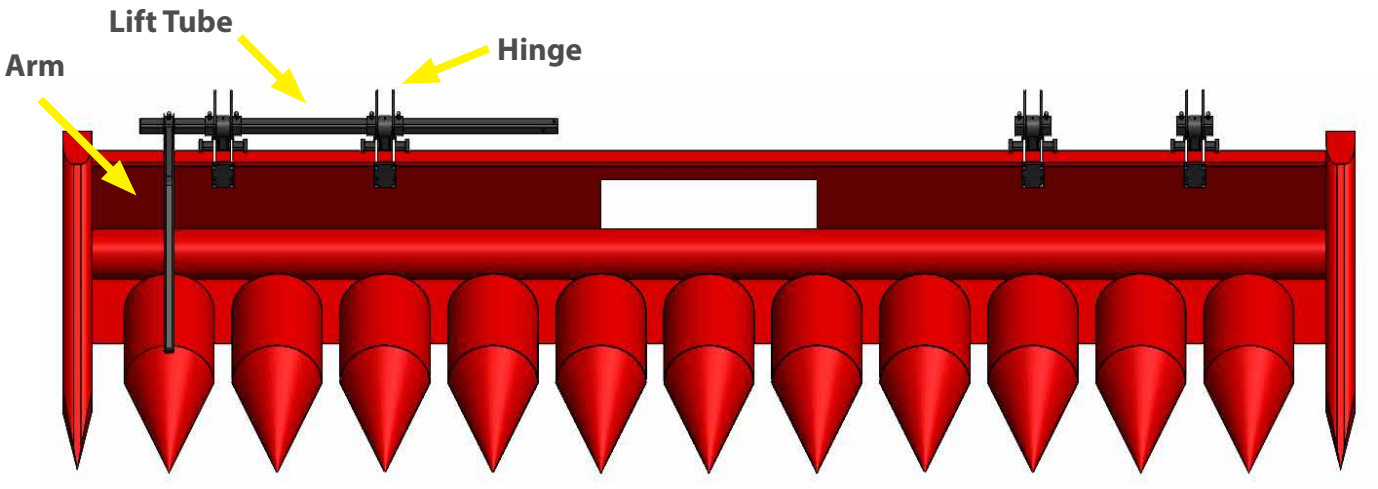
3.3.2 - Slide 1st arm over the square tube, and towards the first hinge.

⚠ CAUTION

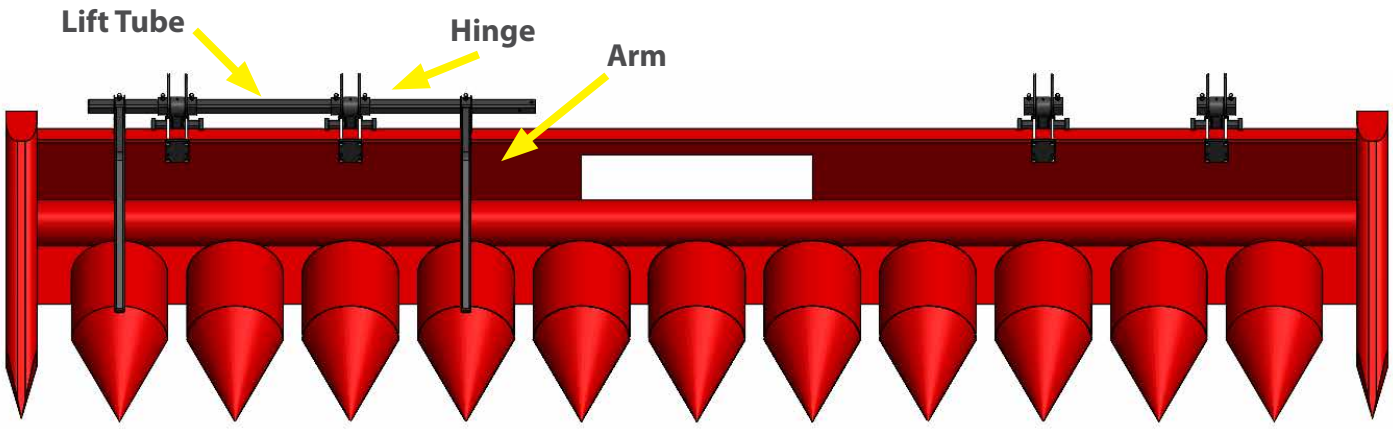
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.3 - With first arm installed, slide the square tube through the next hinge towards the center of the machine.



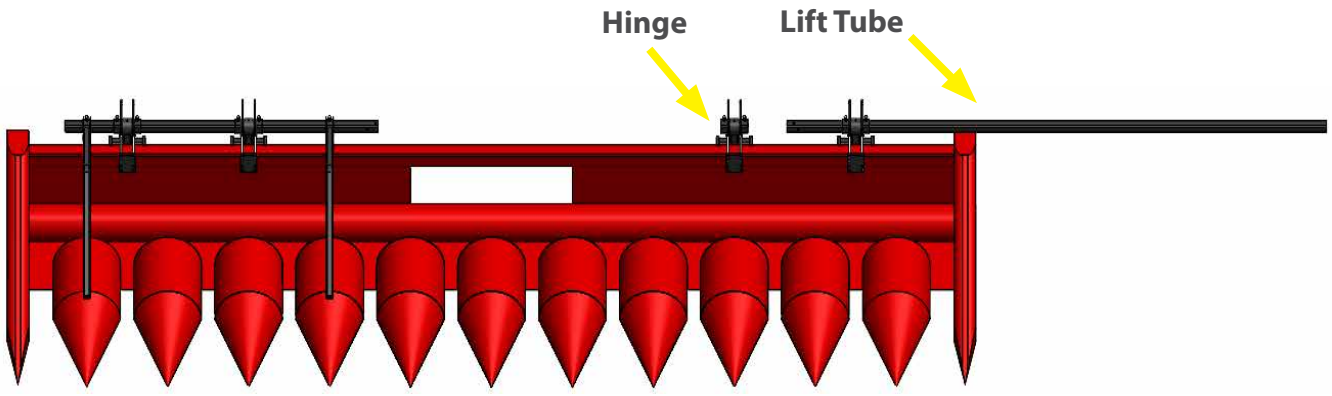
3.3.4 - Slide 2nd arm over the square tube, and towards the hinge.

⚠ CAUTION

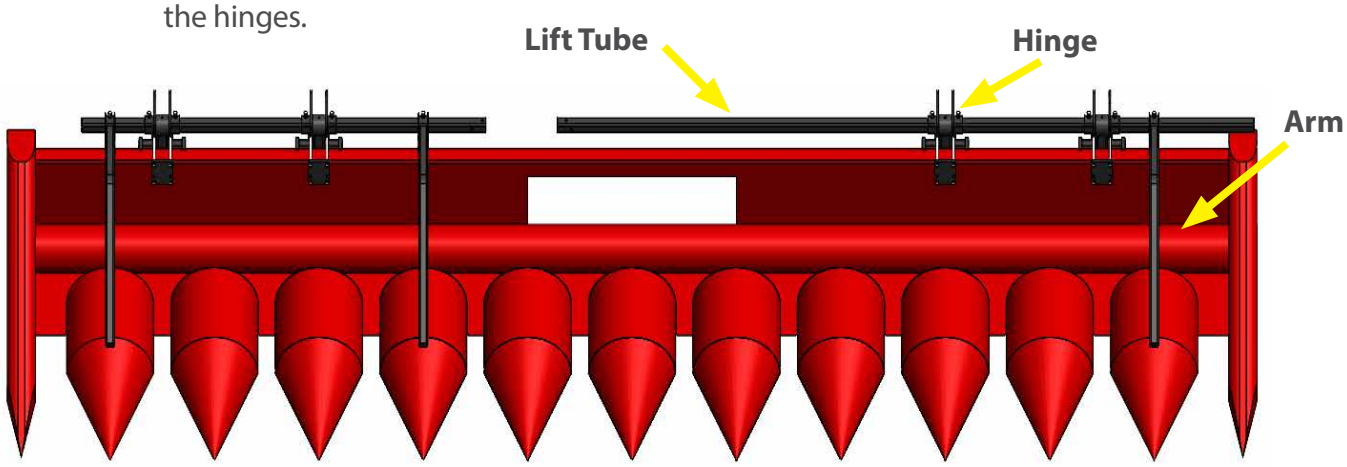
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and large



3.3.5 - Repeat the process, at the opposite side of the head. With a person at each end of the 3" square tube, begin inserting the tube through the second outer hinge, stopping at least one (1) foot before reaching the next if your layout requires an arm to be placed between the hinges.



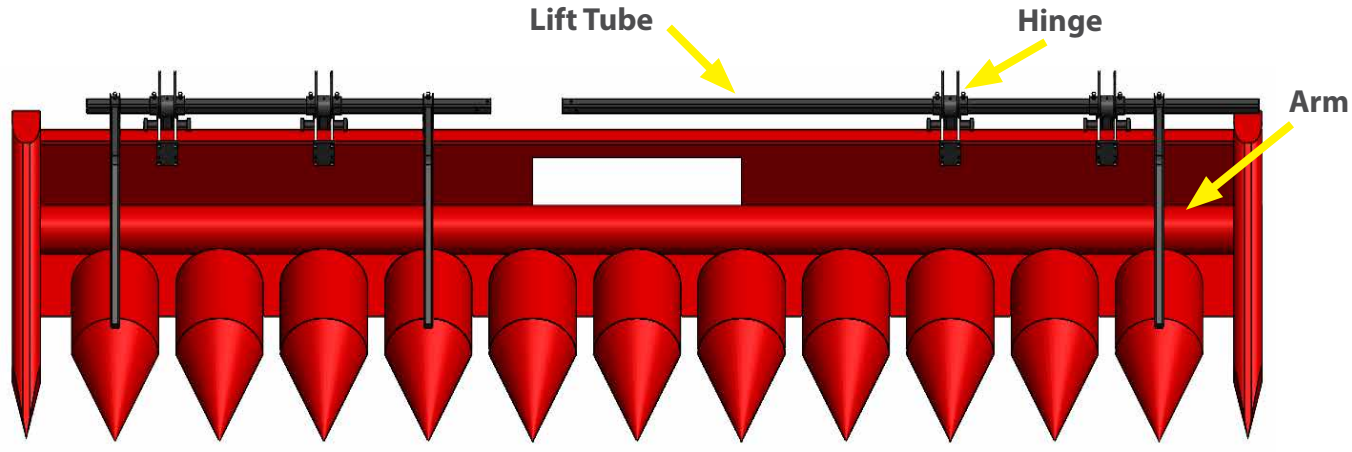
3.3.6 - Slide first arm over the square tube, and towards the first hinge.

⚠ CAUTION

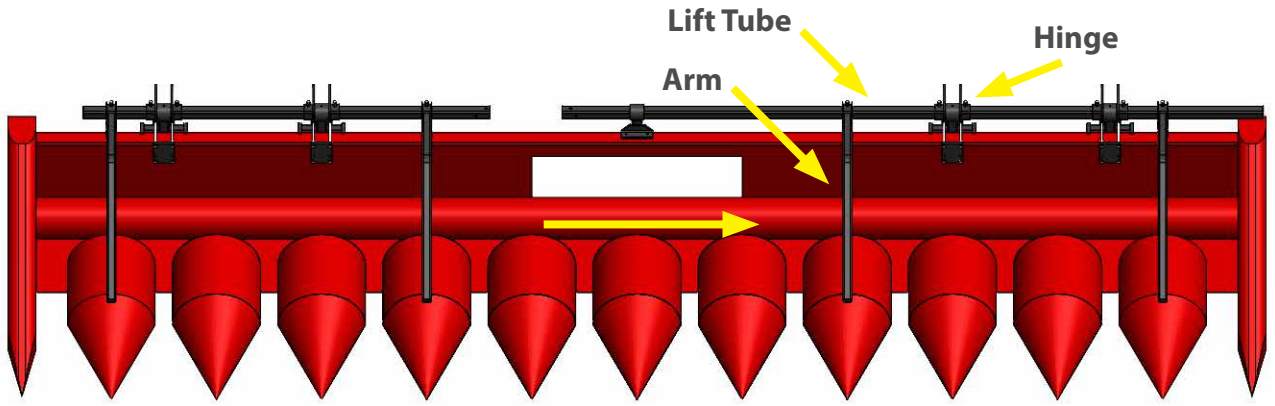
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.7 - With first arm installed, slide the square tube through the next hinge towards the center of the machine.



3.3.8 - Slide 2nd arm over the square tube, and towards the hinge.

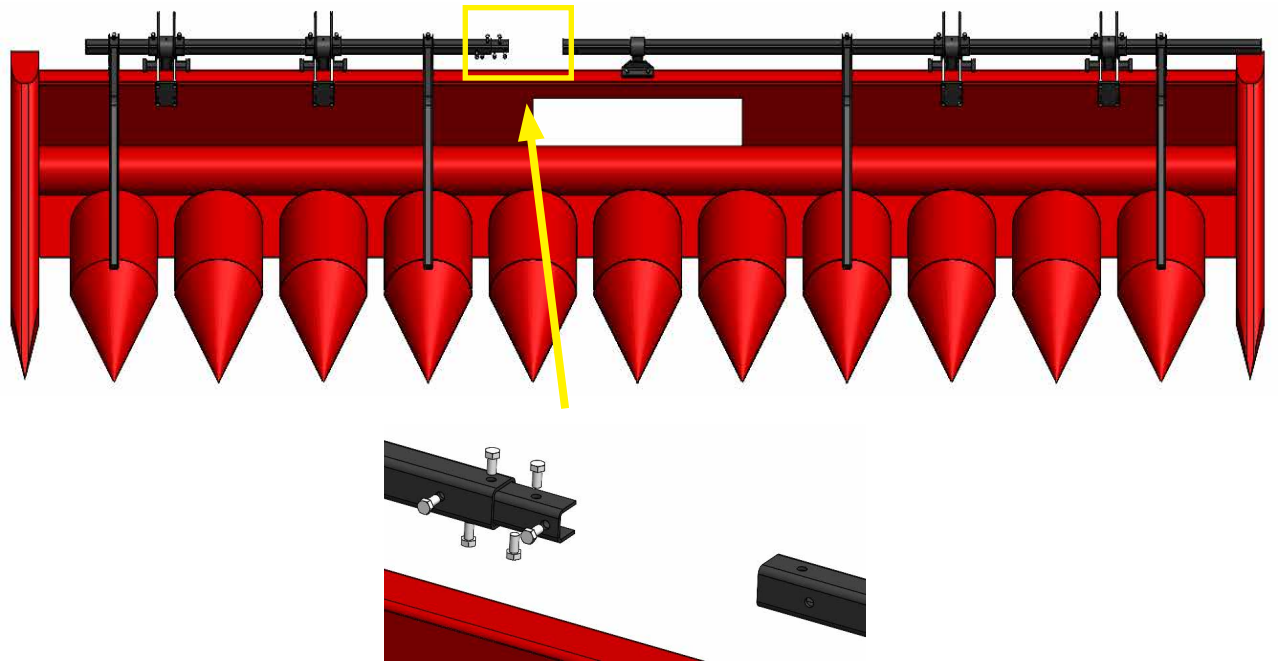
Note: Arm and hinges DO NOT need to be symmetrical

⚠ CAUTION

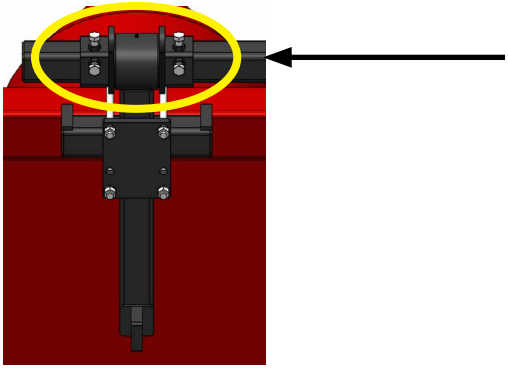
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.9 - Slide square tubes together and install square tube splice using six (6) **5/8" X 1 ¼" Bolts**. Tighten Bolts with 15/16" wrench. Center the Rear Tube on corn head.

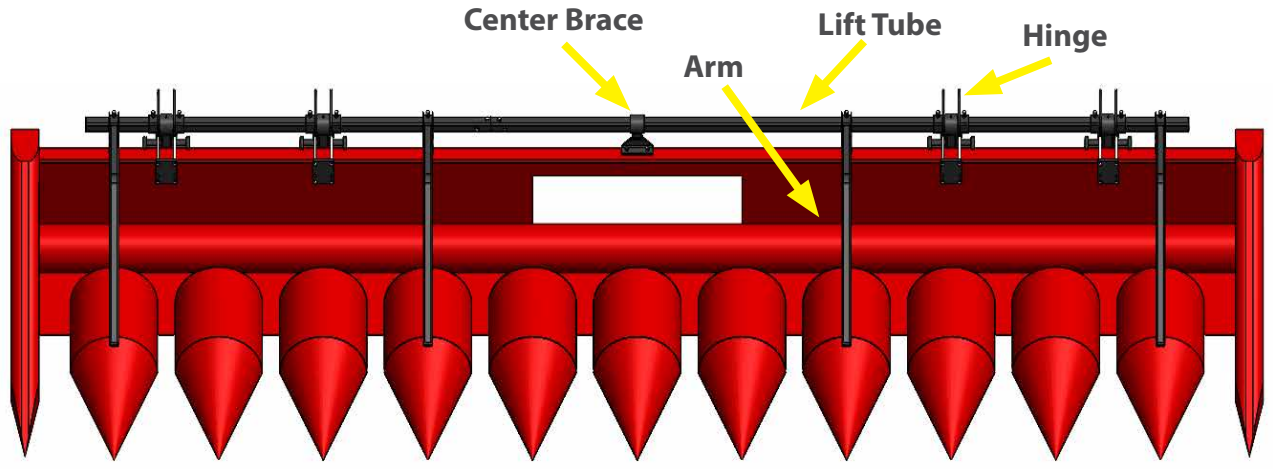


3.3.10 -Tighten set bolts with a 15/16" wrench to secure the 3" square tube. There is no need to over-tighten these set bolts.

⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up



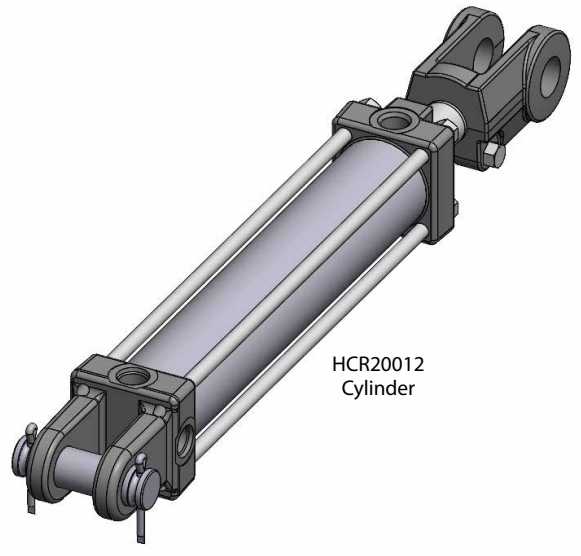
3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)

3.3.11 - Once the square tube is centered, move the lift arms to the predetermined location in step 3.1.1. Leave arm set bolts loose to aid in further installation.

NOTE: Location of all components are recommended for structural integrity and weight distribution of the reel, slight variations to position can be made to adapt to any differences you may encounter on your specific corn head.

(4) - Lift Cylinder installation

4.1 - Locate components and tools for install.

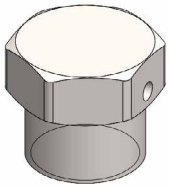


HCR20012
Cylinder

HCR30019
Pin

2 x HCR30018
Pin Spacer

2 x 416005
Cotter Pin

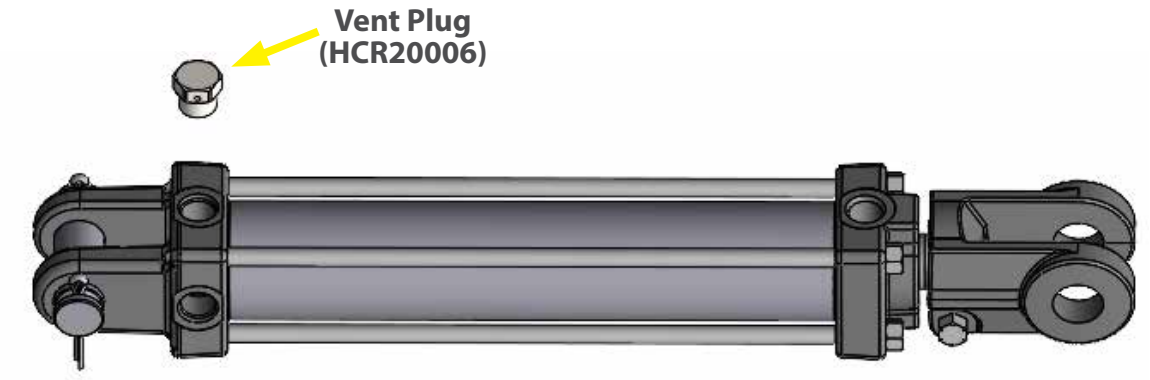


HCR20006
Vent Plug

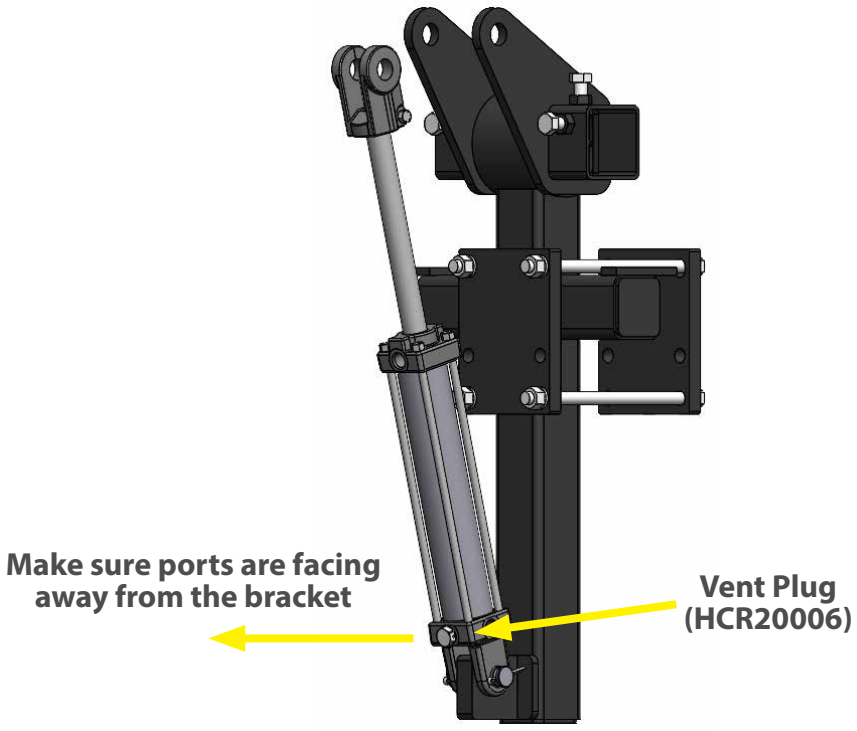
4.1.1 - In corn reel packaging find the above components for installation of the lift cylinders. Locate tools necessary.

(4) - Lift Cylinder installation

4.2 - Attach Cylinder base to bottom of Hinge



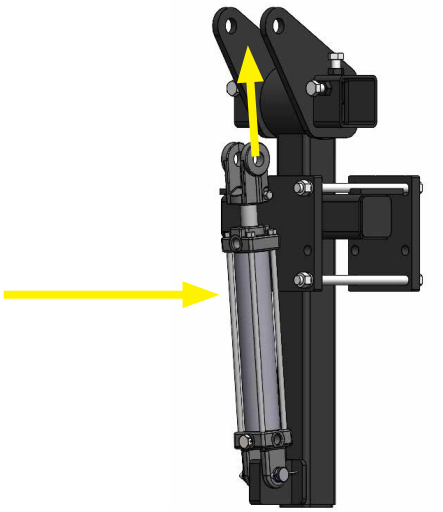
4.2.1 - Install **Vent Plug (HCR20006)** in **Cylinder (HCR20012)** the base port that is adjacent to the rod port using 7/8" wrench.



4.2.2 - Install **Cylinder (HCR20012)** base end using supplied pin and cotter pins to bottom hole on mounting hinge. Make sure that ports are facing towards the rear. Using a pair of pliers, bend cotter pins to secure the pin and base end of cylinder in place.

(4) - Lift Cylinder installation

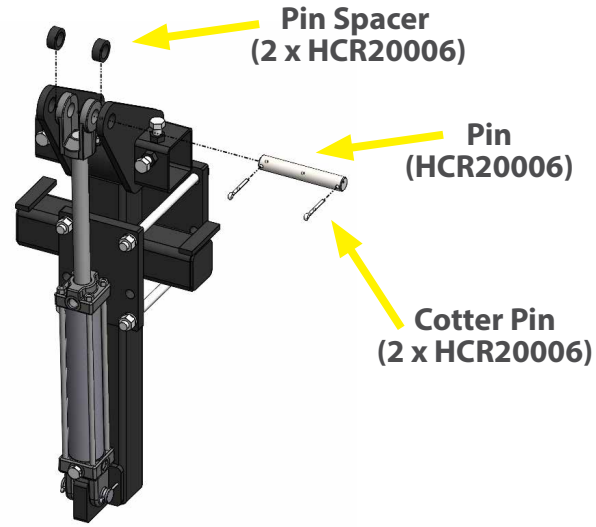
4.2 - Connect top of Cylinder to top of Hinge



4.2.1 - Using wrench, loosen rod end cylinder plug. Before moving cylinder, place a shop rag over fitting to avoid spraying hydraulic fluid. Locate top pin and cotter pins for connecting the rod end of the cylinder.

⚠ CAUTION

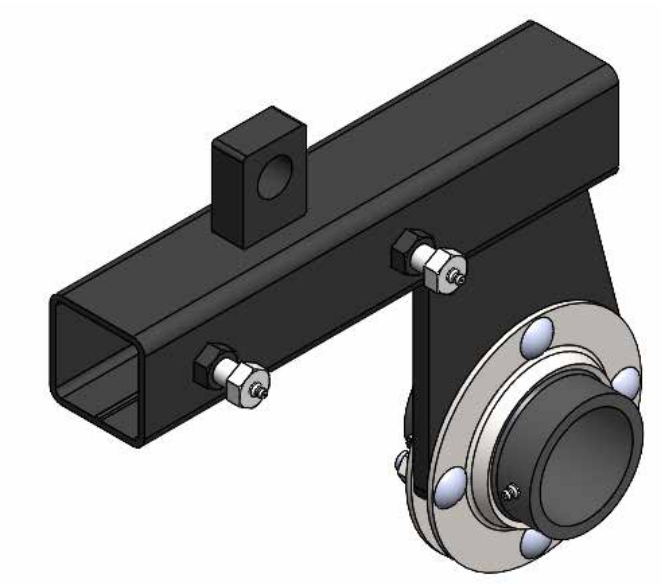
Use caution when extending cylinder as oil will shoot out of the cylinder.



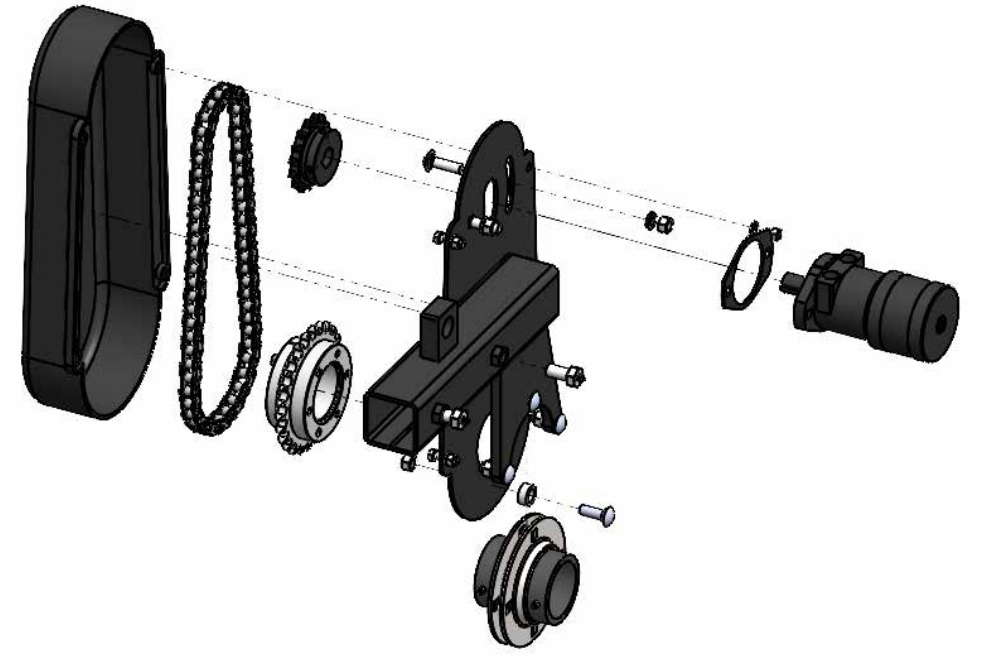
4.2.3 - With rod end plug loosened, cylinder rod should move by hand. Pulling on the rod end clevis, extend the cylinder to line up the top tug and mount hinge hole. Once aligned install the pin and mounting hardware. Once cylinder is pinned, install cotter pins in each end of the pin, and bend using pliers to complete install of the top pin.

4.2.4 - Repeat this step for the rest of the mounting hinge cylinders.

(5) - Reel Hub & Chain Box Assembly - Part Identification



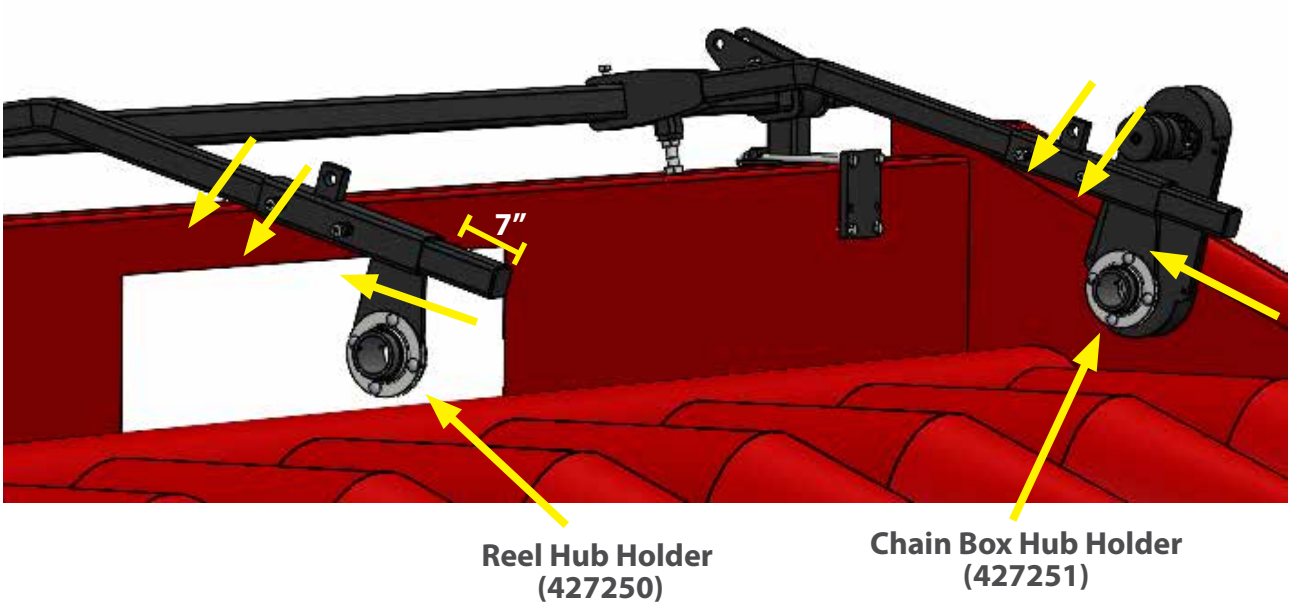
Reel Hub Holder
(427250)



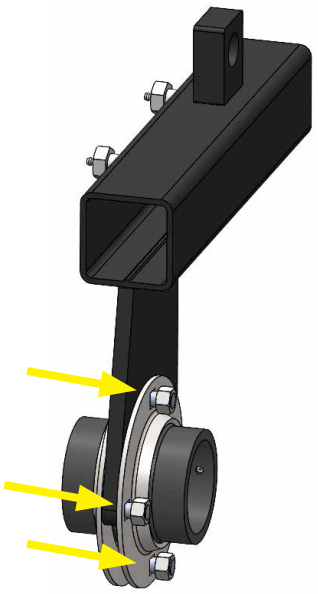
Chain Box Hub Holder
(427251)

(5) - Reel Hub & Chain Box Assembly

5.2 - Reel Holder Installation



5.2.1 - Slide Reel Holders and Chain Box Assembly onto Arms. Position bearing end of Reel Holder Tube 7" from end of arm for now. Tighten Zerk Bolts on Reel Holders and Chain Box tubes to hold in place on Arms while inserting Reel Tube.

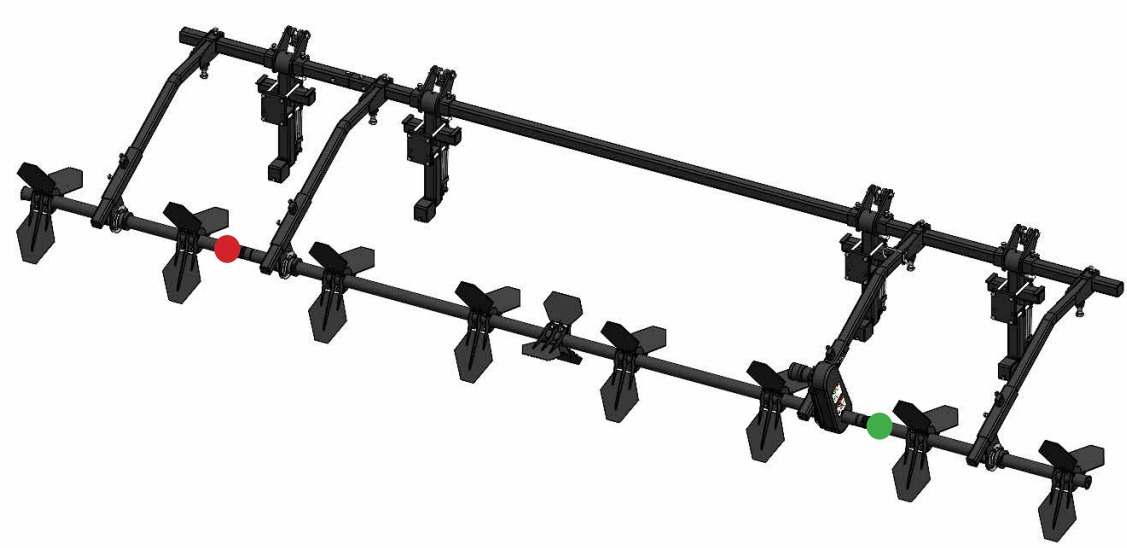


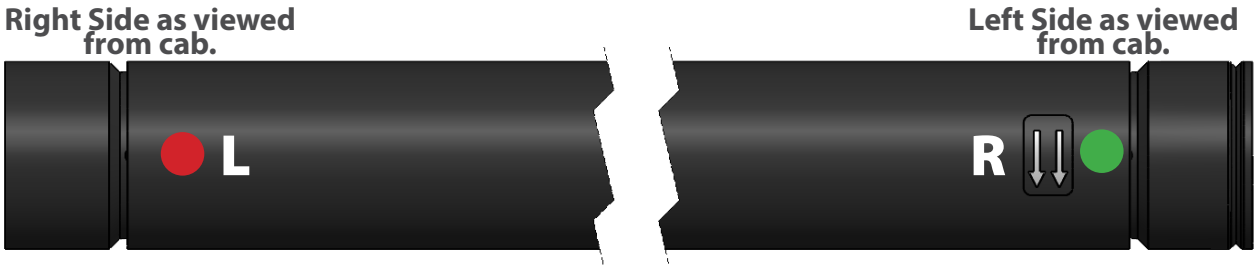
5.2.2 - Make sure that Bearing Flange Carriage Bolts are slightly loose to allow faster installation of Reel Tube.

RETURN TO INDEX

(6) - Reel Tube

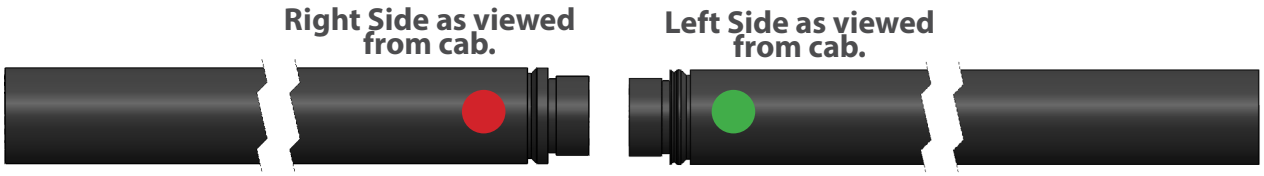
6.1 - Reel Holder Installation





6.1.1 - The Left-Hand side (as viewed from cab of combine) has a GREEN DOT decal and is stamped with an "R" to indicate right-hand threads.

The Right-Hand side (as viewed from cab of combine) has a RED DOT decal and is stamped with an "L" to indicate left-hand threads.

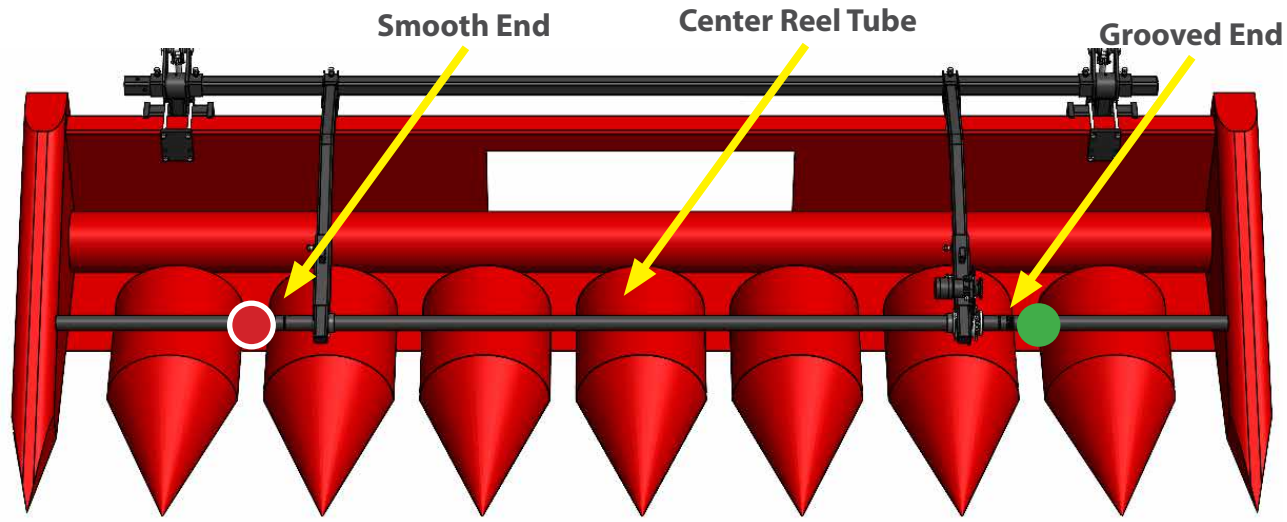


6.1.2 - The Reel Tube Extensions have corresponding colored dot decals that match same for same with the Center Reel Tube. (GREEN DOT for Left-Hand side, RED DOT for Right-Hand side)

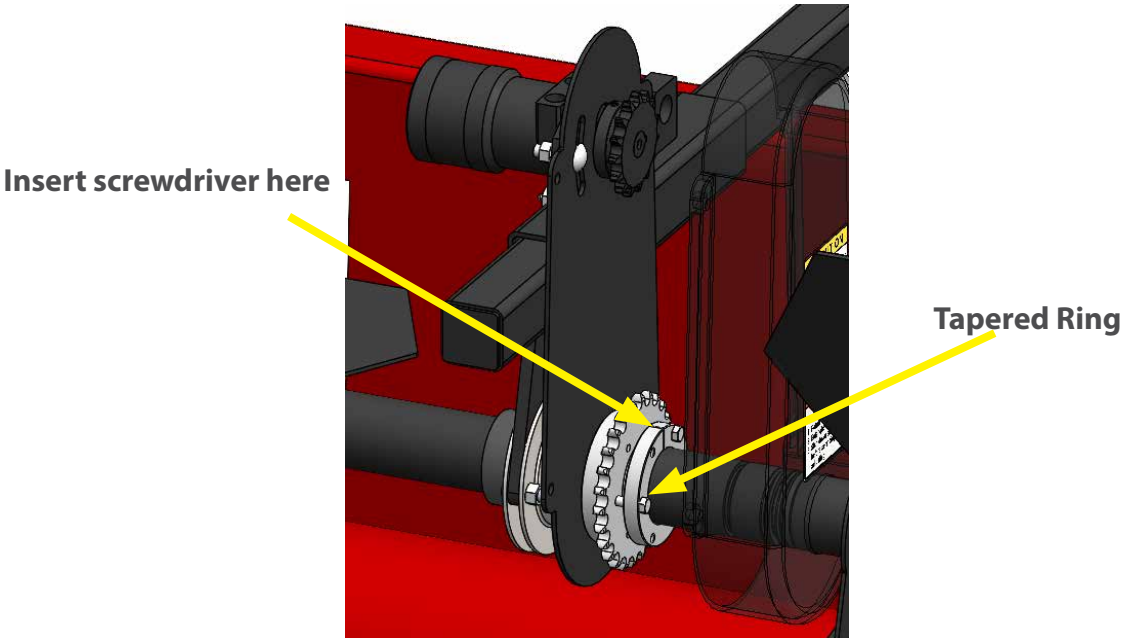
NOTE: Right hand side of machine uses left hand threads. Left hand side of machine uses right hand threads.

(6) - Reel Tube

6.2 - Assemble Center Reel Tube on Reel Hub Holder and Chain Box Hub Holder



6.2.1 - Slide Center Reel Tube through the poly spherical bearings on the Reel Holders so that the GREEN DOT ends up near the Chain Box Hub Holder. Approximately center the Reel Tube with the head before moving on.

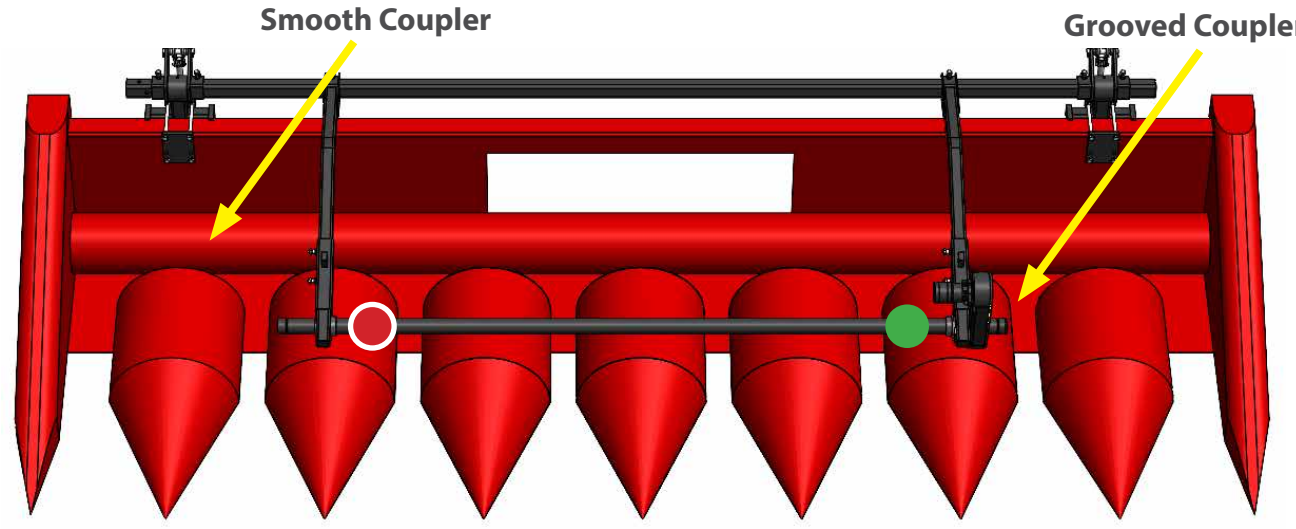


6.2.2 - Install Tapered Hub Assembly onto the Center Reel Tube on the outboard side of the Chain Box Assembly using a flat screwdriver to spread the tapered ring. Leave loose for now. The Chain Box cover should be slid over the Reel Tube at this time and bolted on loosely, leaving the installation of the chain until after Reel Tube Extensions and all paddles are installed.

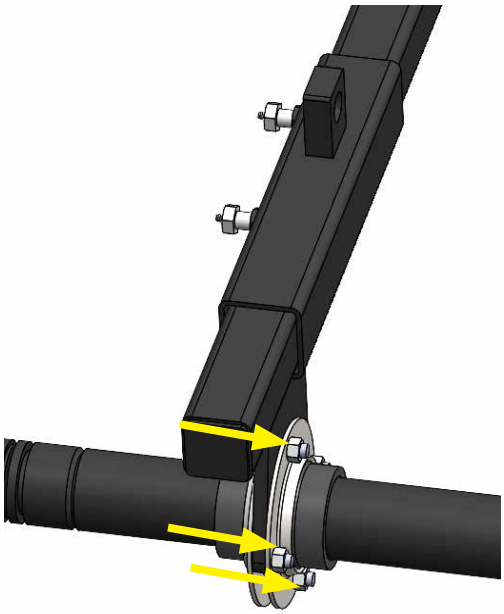
RETURN TO INDEX

(6) - Reel Tube

6.3 - Attach Reel Tube Extensions to Center Reel Tube



6.3.1 - Install Reel tube extensions, matching GREEN DOT ends together and RED DOT ends together, using a pair of large pipe wrenches (or similar) to tighten. A gap may remain between the rims on the threaded couplers when tight, this is normal.

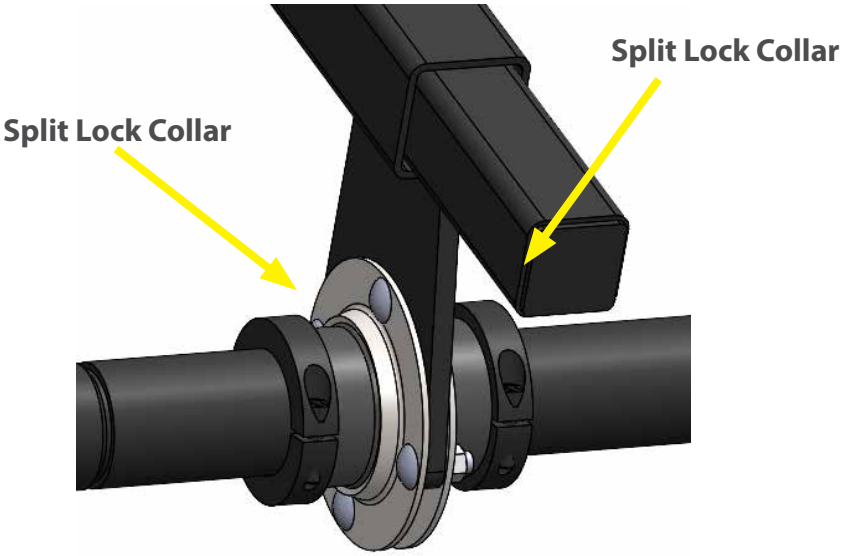


6.3.2 - Using 3/4" wrench, tighten the carriage bolts on the Bearing flanges. Be sure to position the grease zerks on each Spherical Bearing towards the back of the Corn Head. Take care not to over-tighten the bottom bolt. The bolt only needs to be tight enough to keep the Spherical Bearing from turning in the flange.

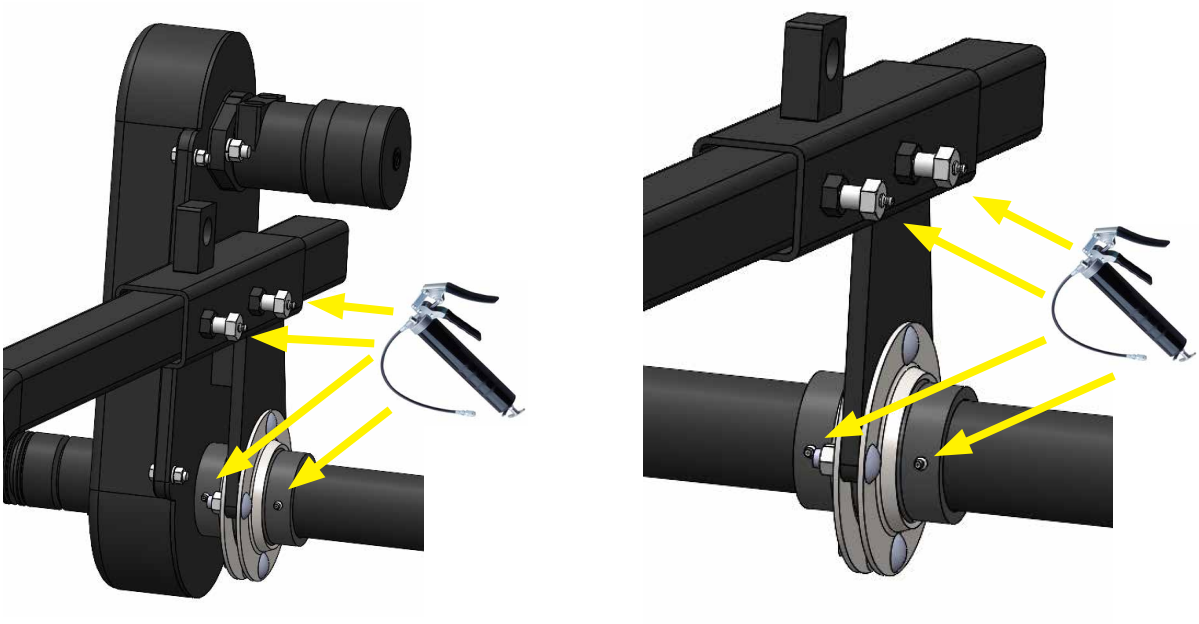
Note: Re-check the tightness of these bolts periodically over the first several days of use.

(6) - Reel Tube

6.3 - Finish Reel Tube Installation



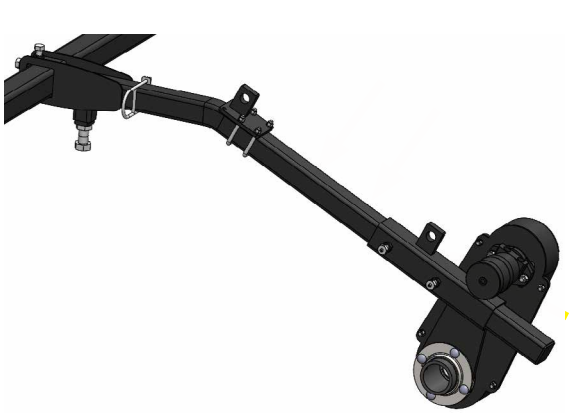
6.3.3 -Center the Reel Tube Assembly on the Corn Head and install Split Lock Collars flush against each side of Bearings, tighten with 5/16" Allen wrench.



6.3.4 - Grease Reel Holder Zerk Bolts and Bearings liberally. The Reel Tube should turn freely. If Reel Tube does not turn freely, check that the Reel Tube is level with the Corn Head and that the Reel Hub Holders are aligned evenly on the Arms.

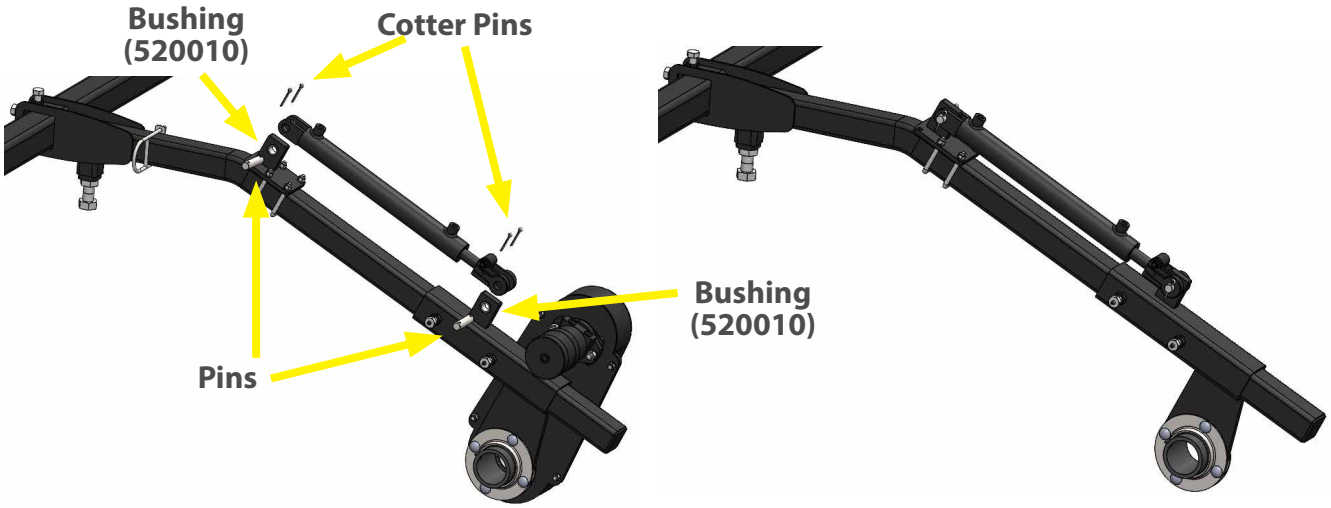
(7) - Fore & Aft Cylinder Installation

7.1 - Fore & Aft Installation



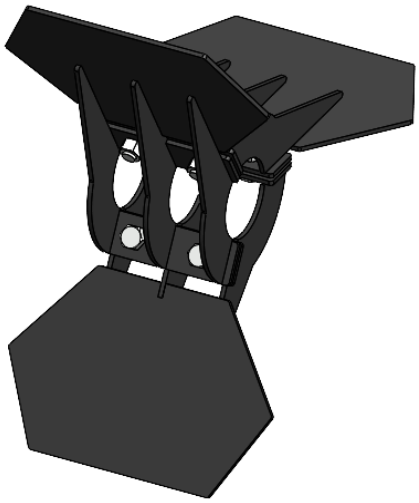
7.1.1 - Install Fore & Aft **Cylinder Point (520006)** on arms using included **3/8"-16 X 2-1/2" X 3-1/2" U-Bolts (415111)**, **3/8" Lock Washers (413506)**, and **3/8"-16 Nuts (412056).** Also install the **Hose Guide (HCR30075**) on the Arm with the Chain Box with (2) **5/16" Lock Washers (413505)**, and (2) **5/16"- 18 Nuts (412005)**.

Note: To make cylinder installation easier, leave Cylinder Points loose until after cylinders are pinned in.

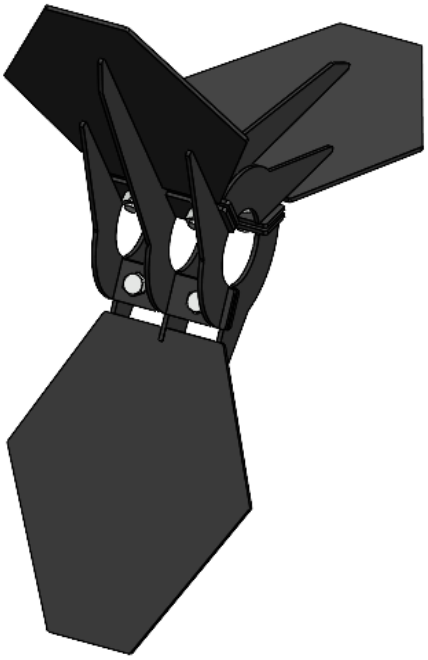


7.1.2 - Install **Fore & Aft Cylinders (476032)** with included pins and **Bushings (520010)** and secure with hair cotter pins.

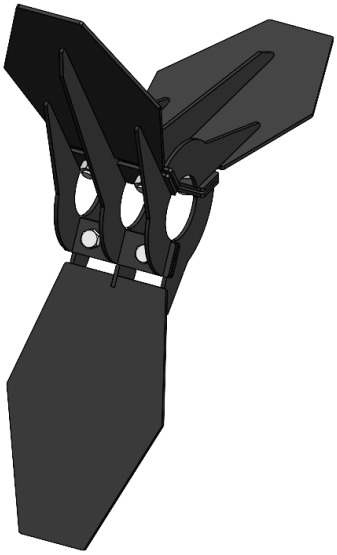
(8) - Paddles Identification



Center Paddle
(427201)



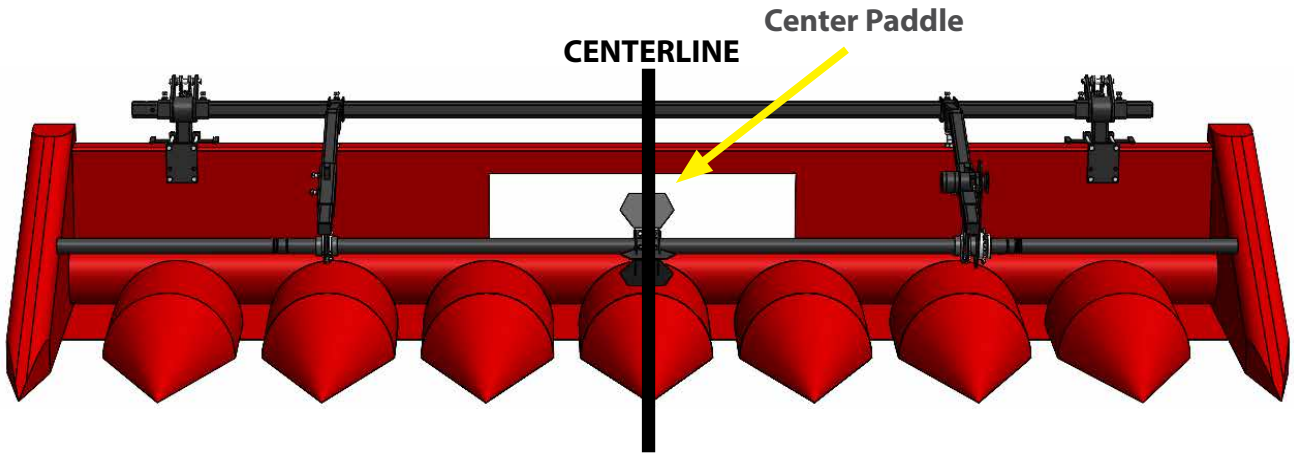
30" Row Paddle
(427200)



20" Row Paddle
(427202)

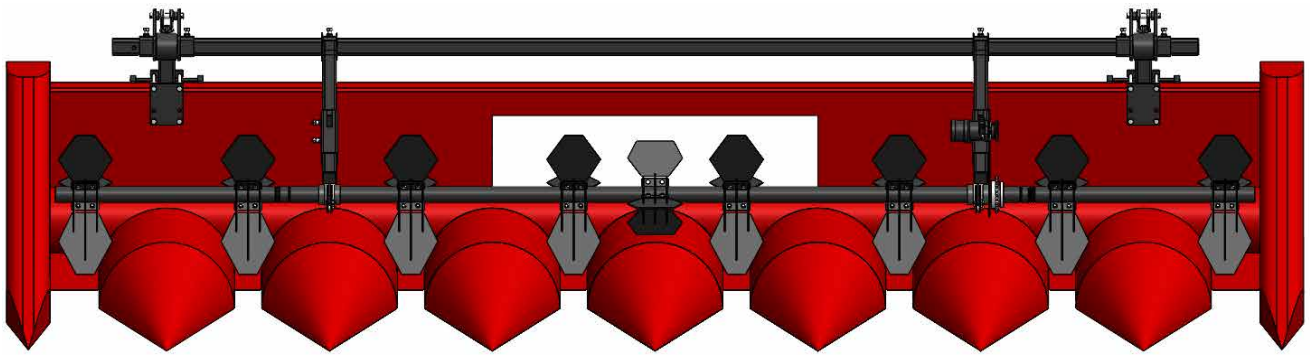
(8) - Paddle Installation

8.1 -Install Center and Row Paddles on Center Reel Tube



8.2 - Install Center Paddle on Center Reel Tube

8.2.1 - Install **Center Paddle (427201)** in center of the head using **(6) 1/2" X 1" Bolts** and **(6) 1/2" Center Lock Nuts**.



8.2.2 - Install **30" Row Paddles (427200)** centered between snouts using (6) 1/2" X 1 Bolts and (6) 1/2" Center Lock Nuts on each row.

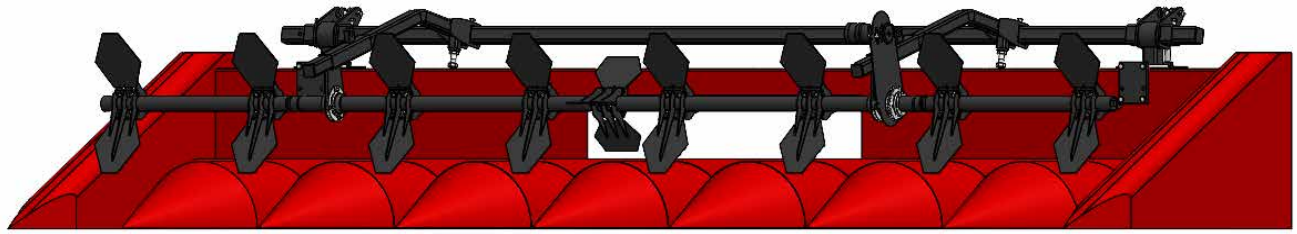
Note: Row Paddles should be offset 1/6 of a turn from the Center Paddle for improved flow into the feeder house.

Note: If on narrow rows, 20" Paddles (427202) go on either of the chain box.

Note: Leave off the paddle by the chain box to make drive chain installation easier.

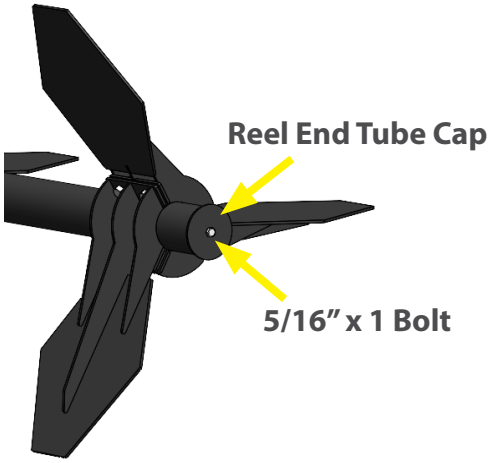
(8) - Paddle Installation

8.3 - Set Reel Height Stop Bolts



8.3.1 - Once Paddles are installed, set Reel Height Stop Bolts on Arms so the Center Paddle clears the center island by at least 1 ¾". Keep in mind that this distance will change as Reel is moved fore and aft on Arms.

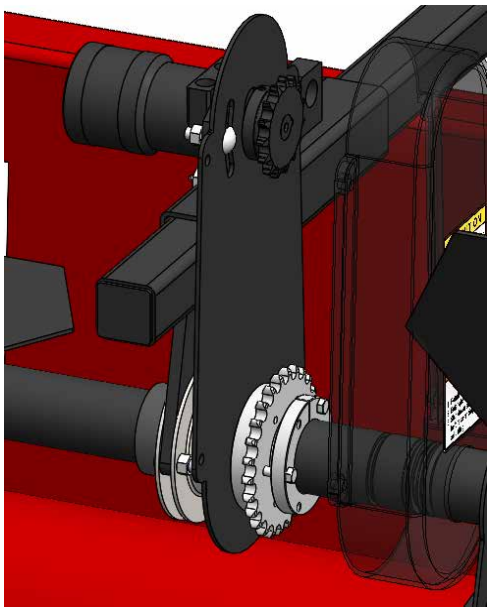
8.4 - Install Reel Tube End Caps



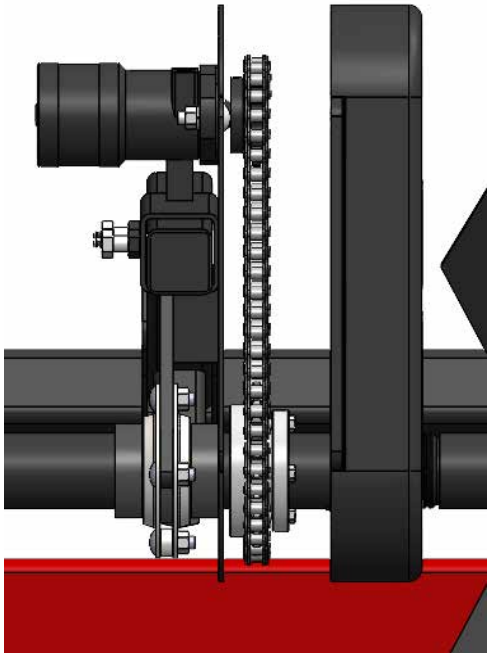
8.4.1 - Affix **Reel Tube End Caps (HCR30024)** to each end of Reel Tube using **5/16" X 1 Bolts (411484)**

(9) - Chain

9.1 - Install chain

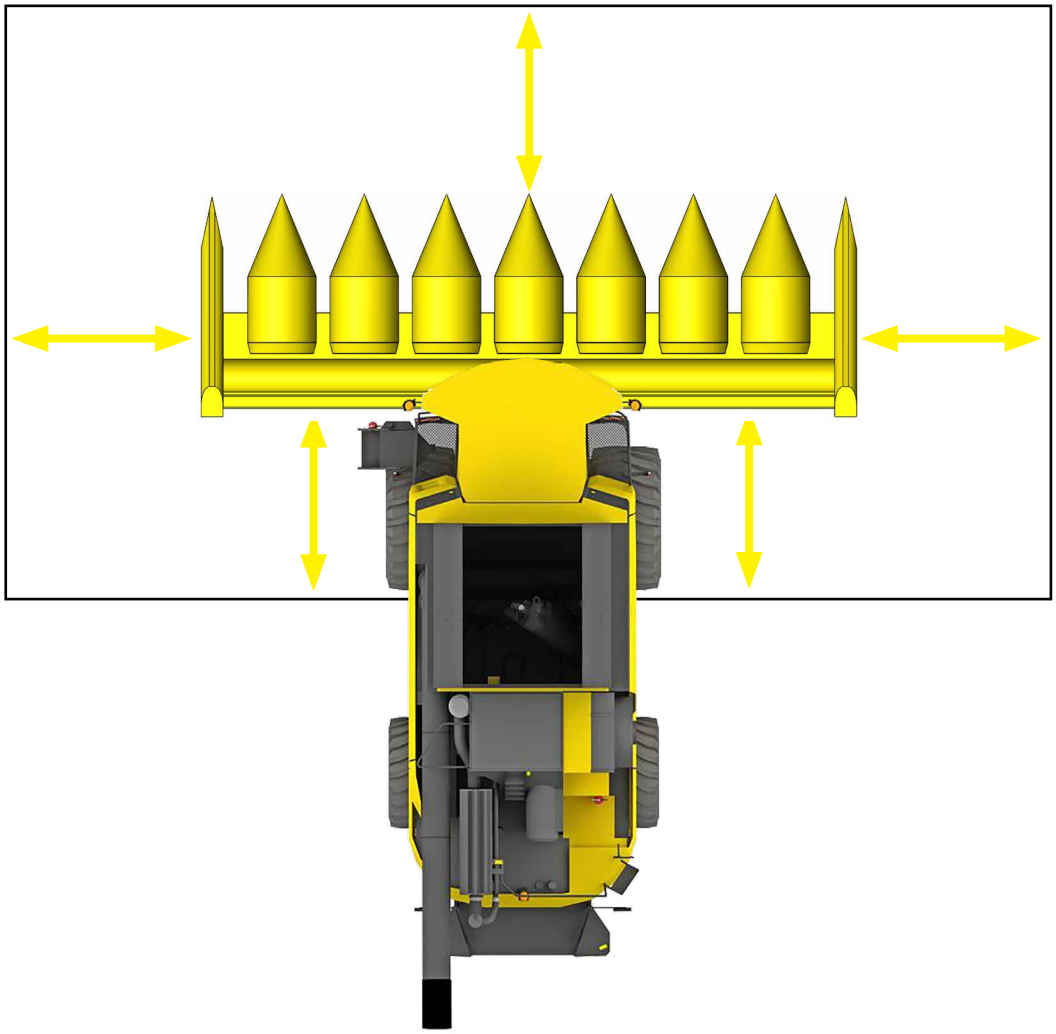


9.1.1 - Finish placing Tapered Hub sprocket in line with drive sprocket on motor. Tighten pinch bolts.



9.1.2 - Install chain and tighten until snug with 1/4"-1/2" of play.

(1) Place head in desired work area



1.1 - Park the combine on a level work surface, make sure parking brake is on. Leave ample room to work in front of and around the head during installation. We recommend an area of at least 20' to the front of the head and at least 10' around the sides and rear.

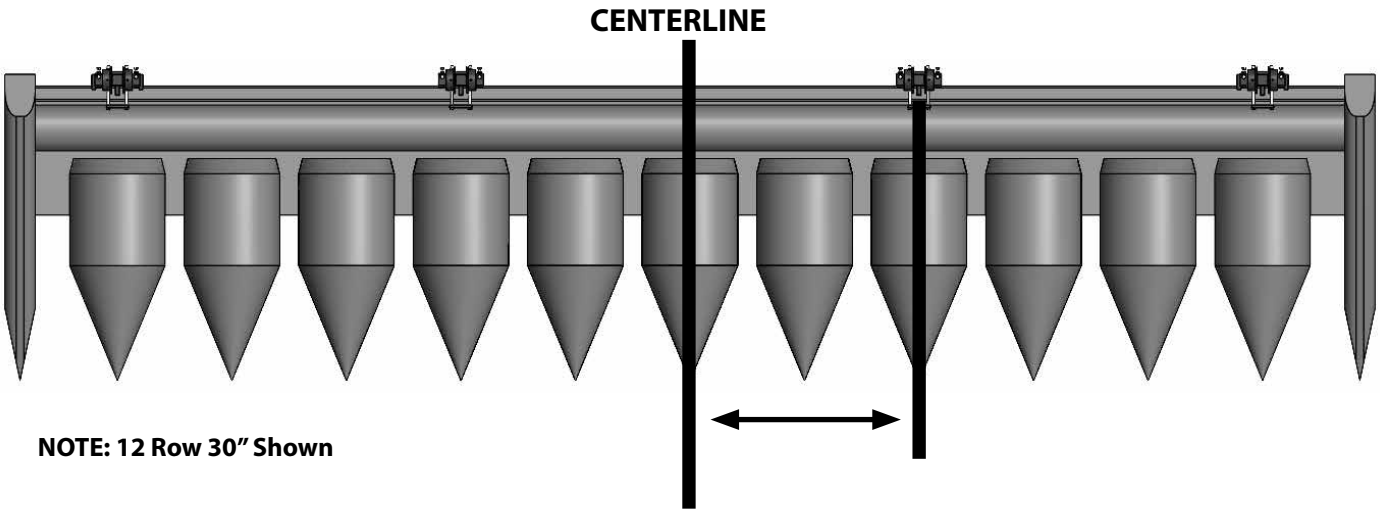
2.2 - Place the head on the ground. Ensure head is on the ground and head connection to combine is secure before performing any work on the head.

⚠ CAUTION

DO NOT place any body part beneath the residue manager as you remove it.

(2) Mount/Hinge installation

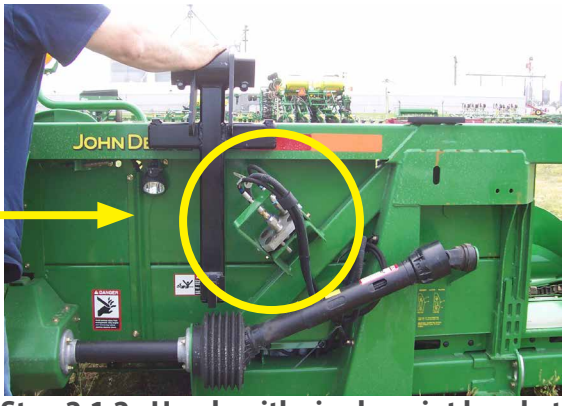
2.1 - Mark location for inner mount/hinge brackets



NOTE: 12 Row 30" Shown

2.1.1 - Heads **WITHOUT** single point brackets:
- First Bracket Mount/Hinge should be located above first available snout outside of the feeder house.

2.1.2 - Heads **WITH** single point brackets:
- First Bracket Mount/Hinge should be located at above first available snout outside the single point.



Step 2.1.2 - Heads with single point bracket

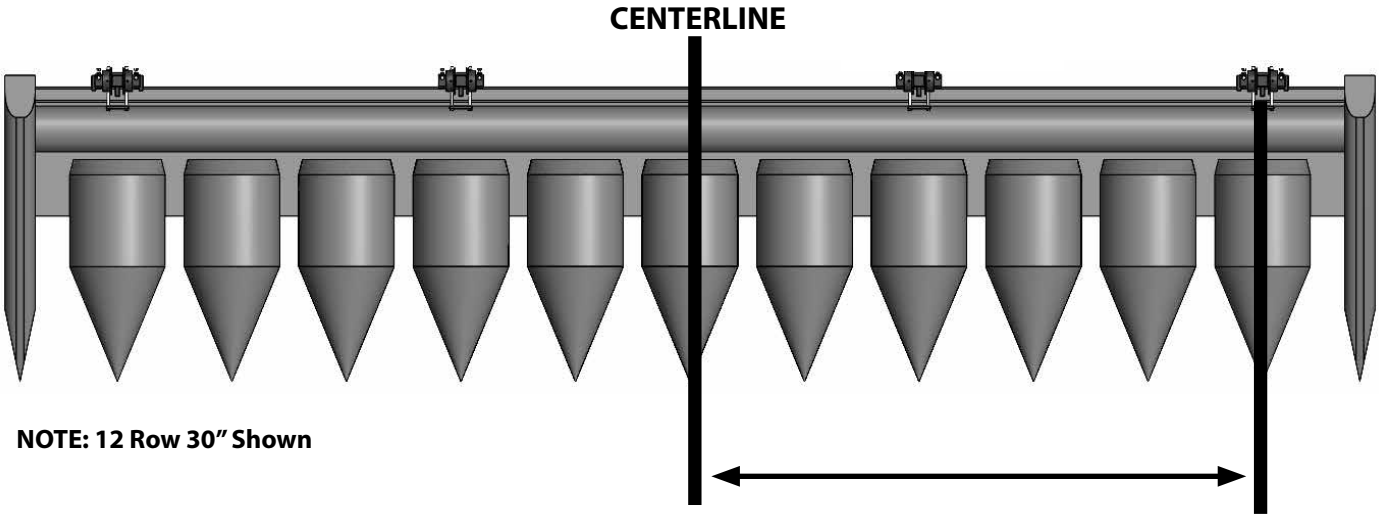
IMPORTANT: Hinges on Drago heads must be positioned between rows and over poly snouts, due to the arms mounting directly between hinge ears. If mounted over row, arms will interfere with mounting of paddles.

NOTE: Your hinge placement may need to be adjusted to accomodate design variations that cause obstructions at these locations.

RETURN TO INDEX

(2) - Mount/Hinge installation

2.2 - Mark location for outer mount/hinge brackets for models with four mounts/hinges



NOTE: 12 Row 30" Shown

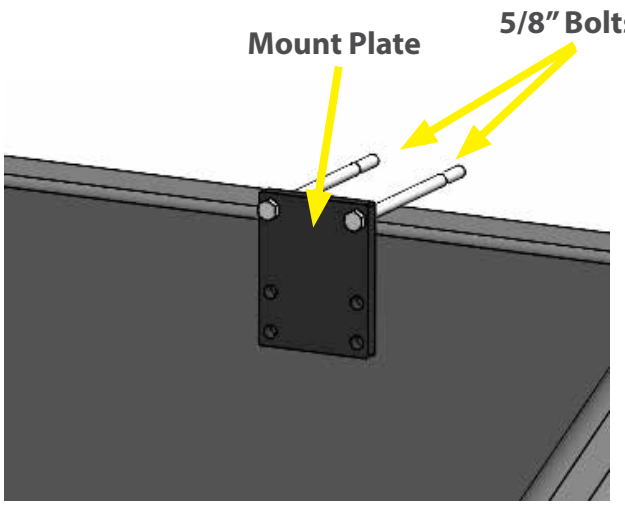
2.2.1 - Outer Bracket Mount/Hinge should be located over the last snout.

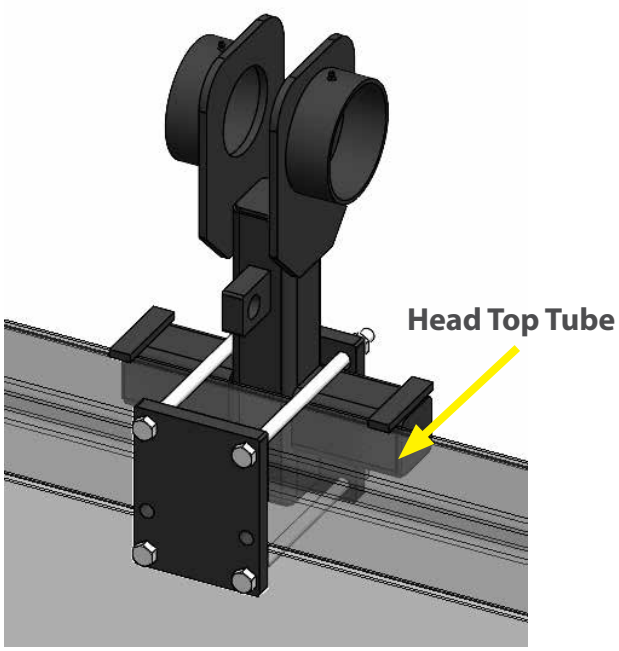
NOTE: Your hinge placement may need to be adjusted to accomodate design variations that cause obstructions at these locations.

NOTE: Location of all components are recommended for structural integrity and weight distribution of the reel, slight variations to position can be made to adapt to any differences you may encounter on your specific corn head.

(2) - Mount/Hinge installation

2.3 - Mark mount/hinge bolt locations for drilling





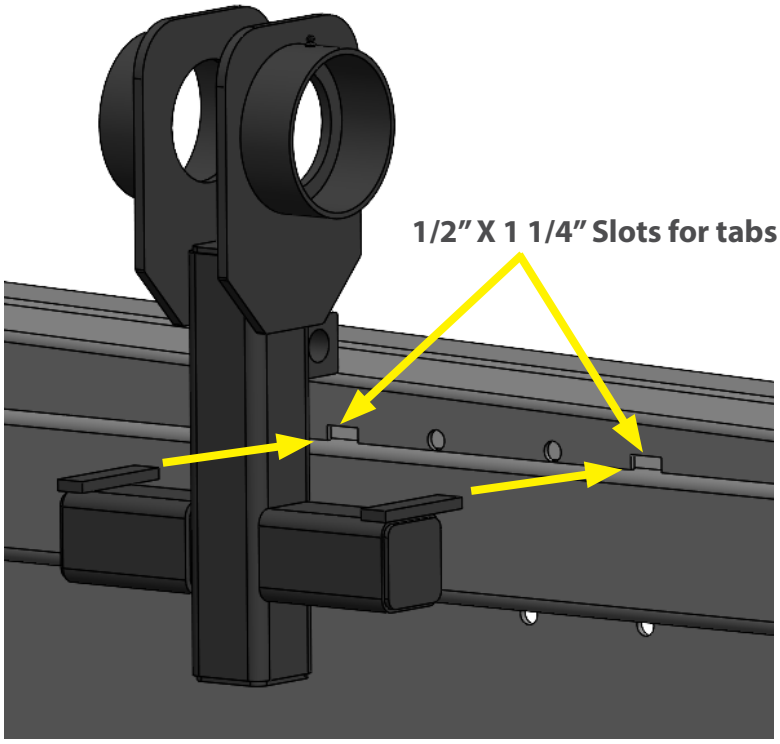
2.3.1 - Putting two 5/8"-11 X 11" bolts in the top holes of the mount plate, rest the bolts on top of the frame at your previously measured locations for the inner and outer mounts/hinges, mark out the holes closest to the bottom of your top tube frame for drilling. This varies between 3" tall head frame and 5" tall head frame.

2.3.2 - Using 5/8" Drill bit, drill through marked hole locations for mounting.

NOTE: Make sure that there are no braces in the way of the holes before marking and drilling. Only two holes required for each mount.

(2) - Mount/Hinge installation

2.3 - Mark mount/hinge bolt locations for drilling



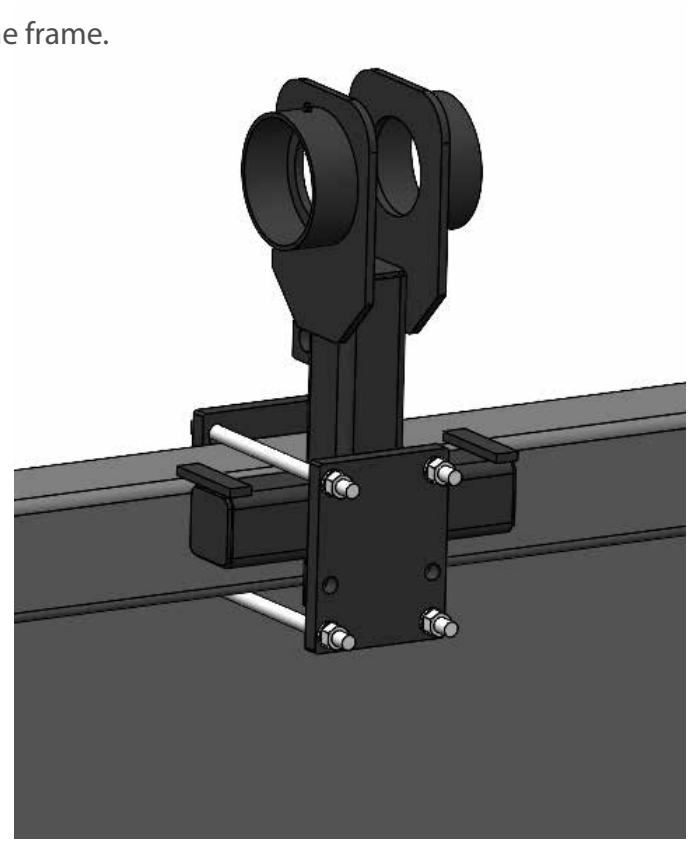
***Backside of cornhead shown**

2.3.3 – If your head has a top angle brace, you will need to cut two (2) ½" X 1 ¼" slots in the back side of the angle brace to allow hinge tabs to rest on top of the main head beam. Use hinge to mark location of slots for tabs. You will also need to drill two (2) additional holes in the angle brace for the top hinge mounting bolts.

NOTE: Make sure that there are no other items in the way of the holes before marking and drilling.

(2) - Mount/Hinge installation

2.4 - Mount the hinges to the frame.



***Backside of cornhead shown**

2.4.1 – Safely lift the mounts/hinges into place at pre-drilled locations, and lower mount to rest on top of frame on the top support tabs.

2.4.2 – Install top two 5/8"-11 X 11" bolts, securing with 5/8" Lock Washer (413510) and 5/8"-11 Nut (412060) through hinge and mounting plates.

2.4.3 – Install bottom two 5/8"-11 X 11"bolts and securing with 5/8" Lock Washer (413510) and 5/8"-11 Nut (412060) through drilled holes and mounting plates.

2.4.4 – Tighten all hardware with a pair of 15/16" wrenches and/or 15/16" socket.

2.4.5 – Repeat process for all mounts/hinges.

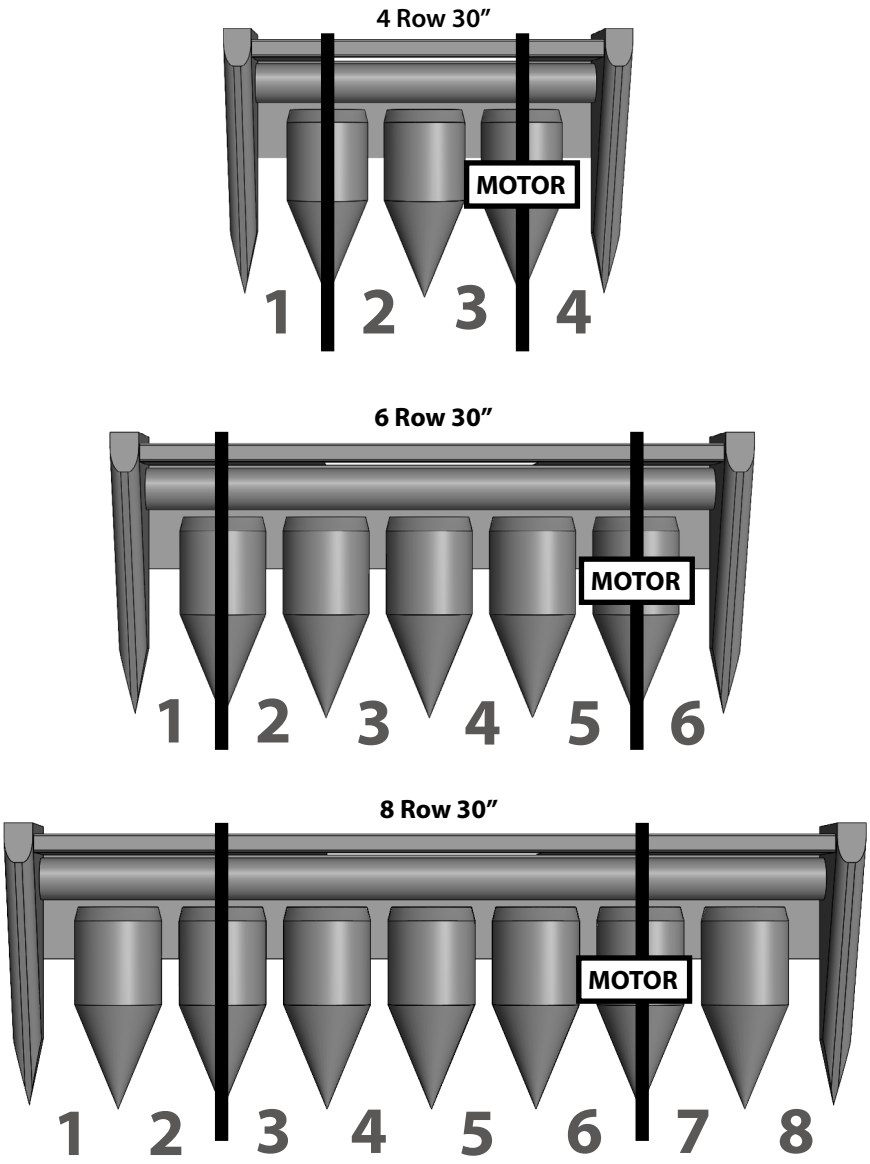
NOTE: Keep mount/hinge in lifting restraints until fully secured on the header.

⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Two (2) brackets (8 ROW 30" & SMALLER)

3.1 - Decide arm layout locations for your head model

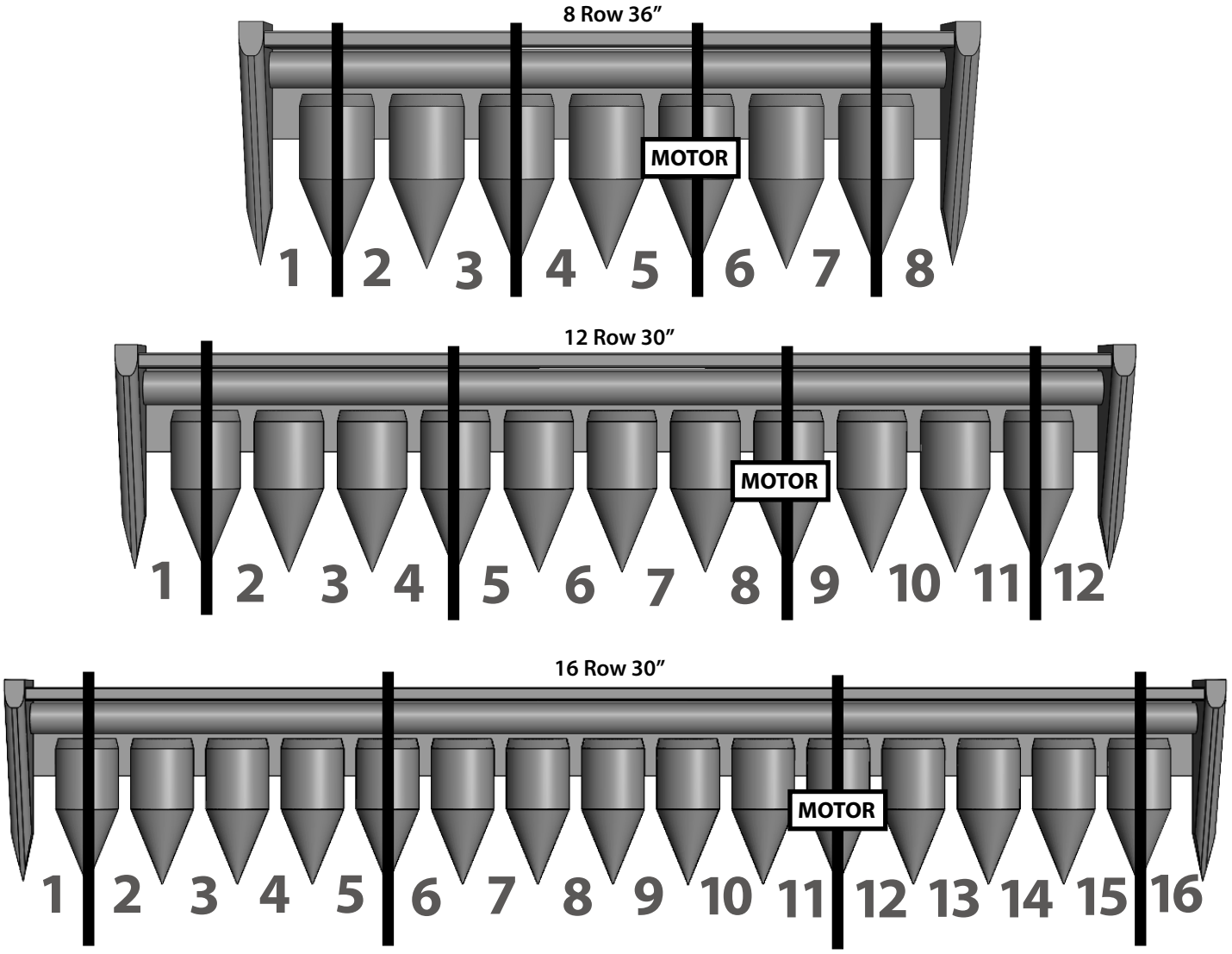


3.1 - Decide arm layout locations for your head model

3.1.1 - Determine arm location based on head size from images above before moving to install step. **Note: Arm with motor/chain box must be placed in a location that allows the center paddle tube to be driven. The reel CANNOT be driven on extension tube.**

(3) - Lift Tube and Arm installation - Four (4) brackets (LARGER THAN 8 ROW 30")

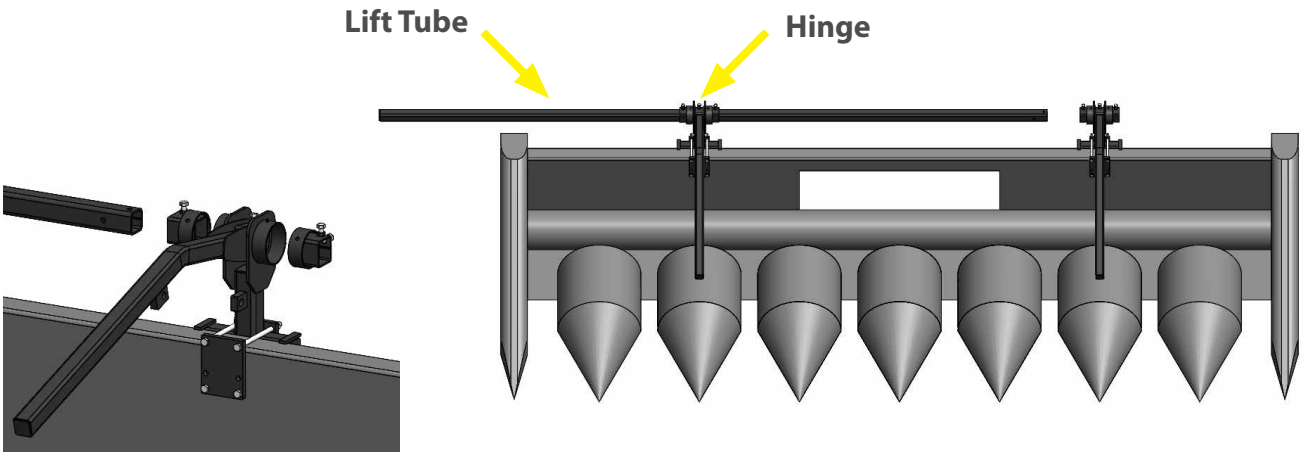
3.1 - Decide arm layout locations for your head model



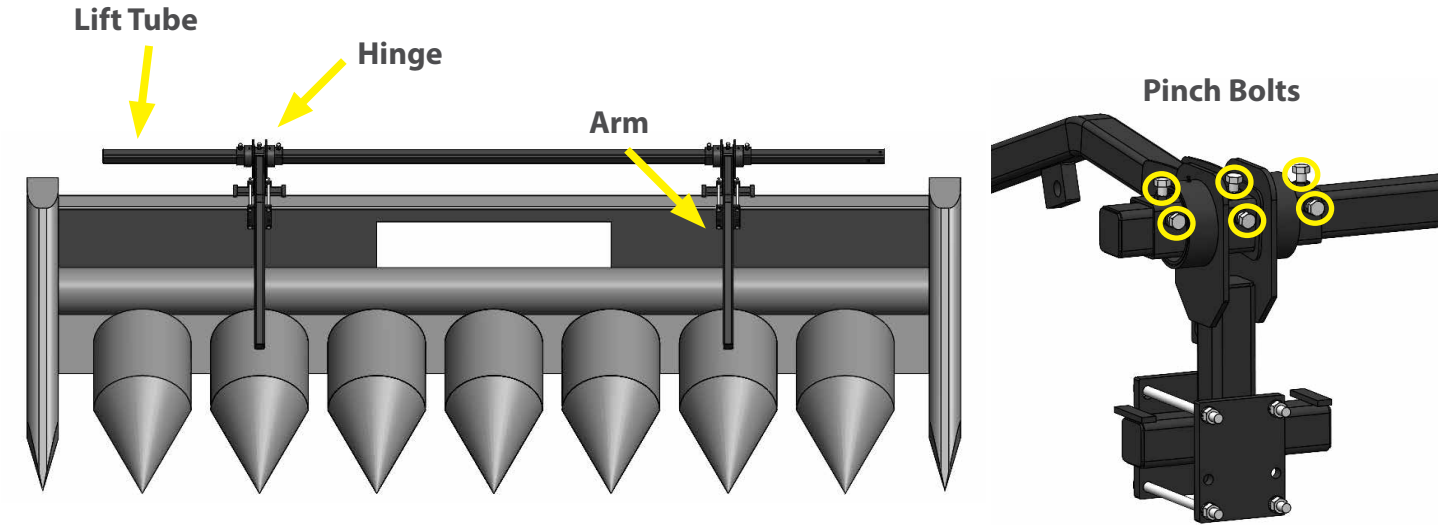
3.1.1 - Determine arm location based on head size from images above before moving to install step. **Note: Arm with motor/chain box must be placed in a location that allows the center paddle tube to be driven. The reel CANNOT be driven on extension tube.**

(3) - Lift Tube and Arm installation - Two arm set-up

3.2 - Install lift tube and arms in hinges for 2 arm setup. (8 Row 30" and smaller)



3.2.1 - With a person at each end of the 3" square tube, begin inserting the tube through the outer hinge on either side of the head, stopping at least 1 foot before reaching the next. Slide Hinge Lock Collars (HCR30004) over square tube on either side of each hinge.



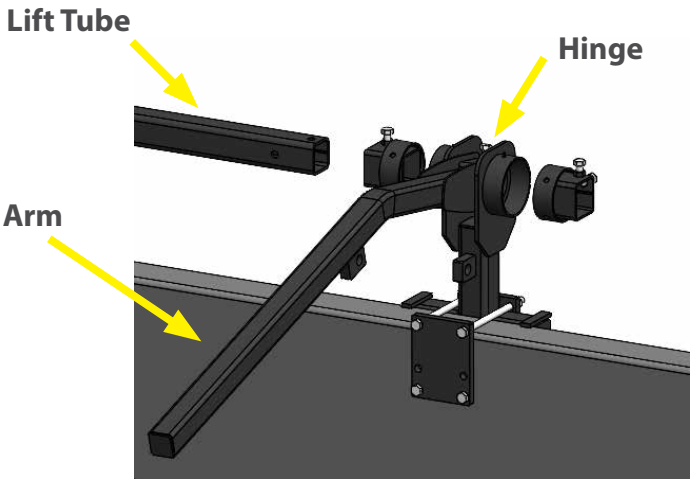
3.2.2 - Slide 3" square tube through next hinge and center on head. Tighten pinch bolts to secure square tube in Arms and Hinge Lock Collars.

⚠ CAUTION

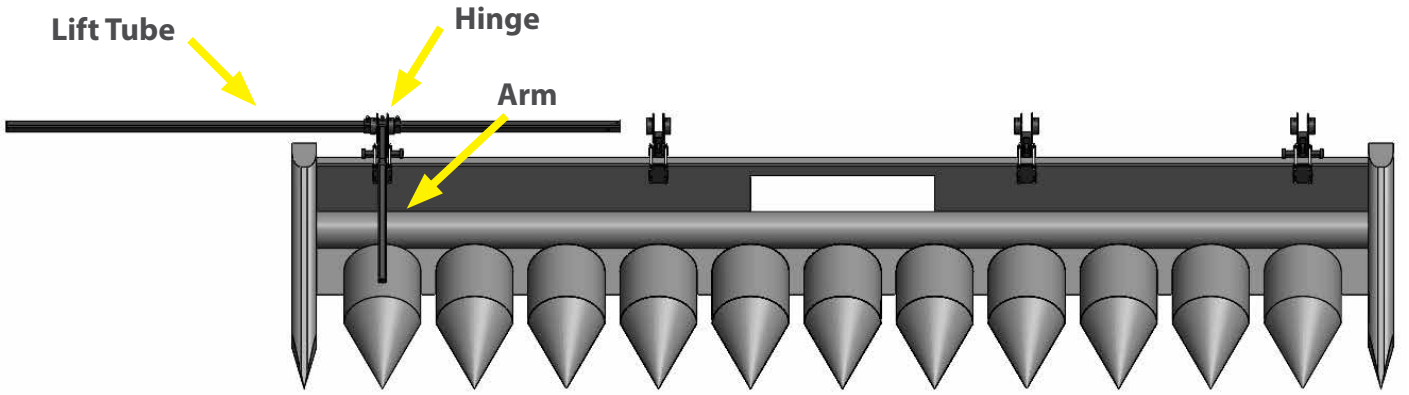
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.1 - With a person at each end of the 3" square tube, begin inserting the tube through the outer right hinge, with arm between hinge ears and hinge lock collars on either side, stopping about 1 foot before reaching the next.



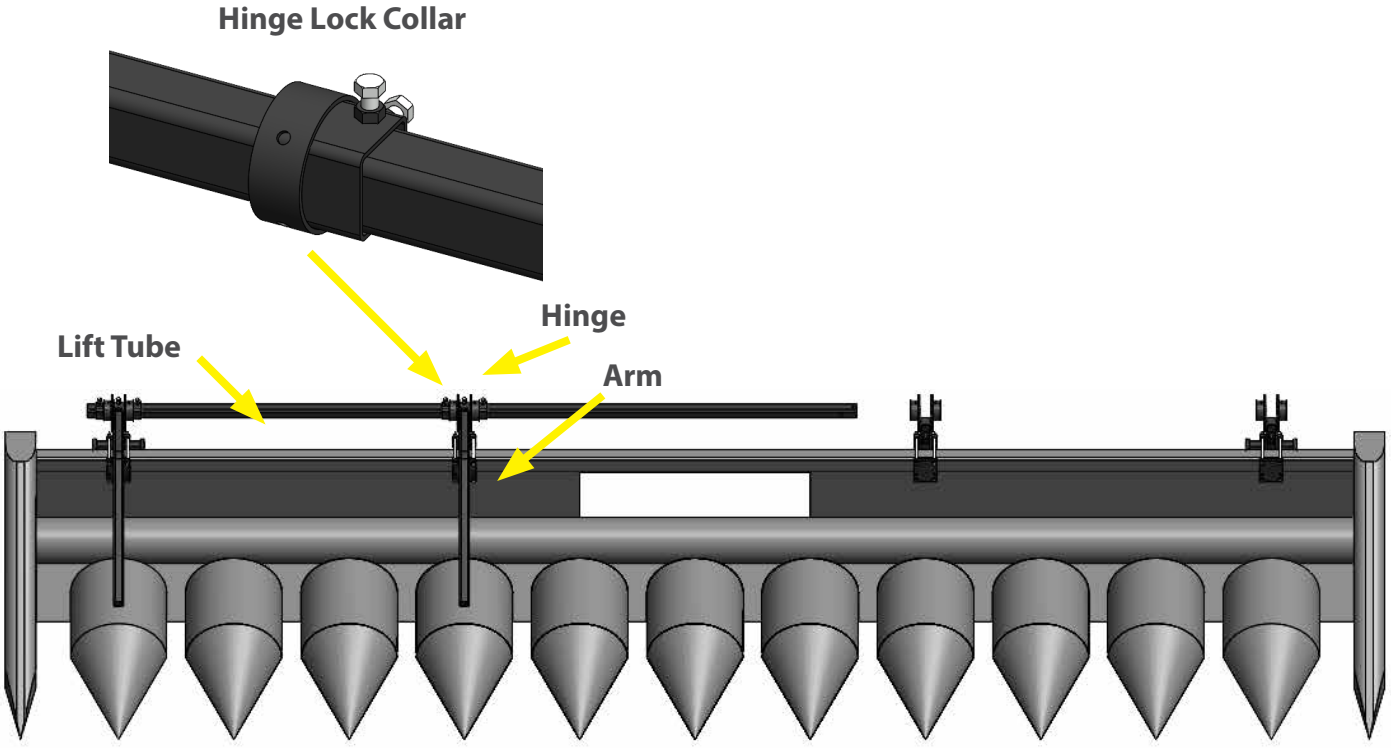
3.3.2 - Slide next hinge lock collar over tube and prepare next arm to insert between hinge ears.

⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.3 - With first arm installed, slide the square tube through the next hinge towards the center of the machine.

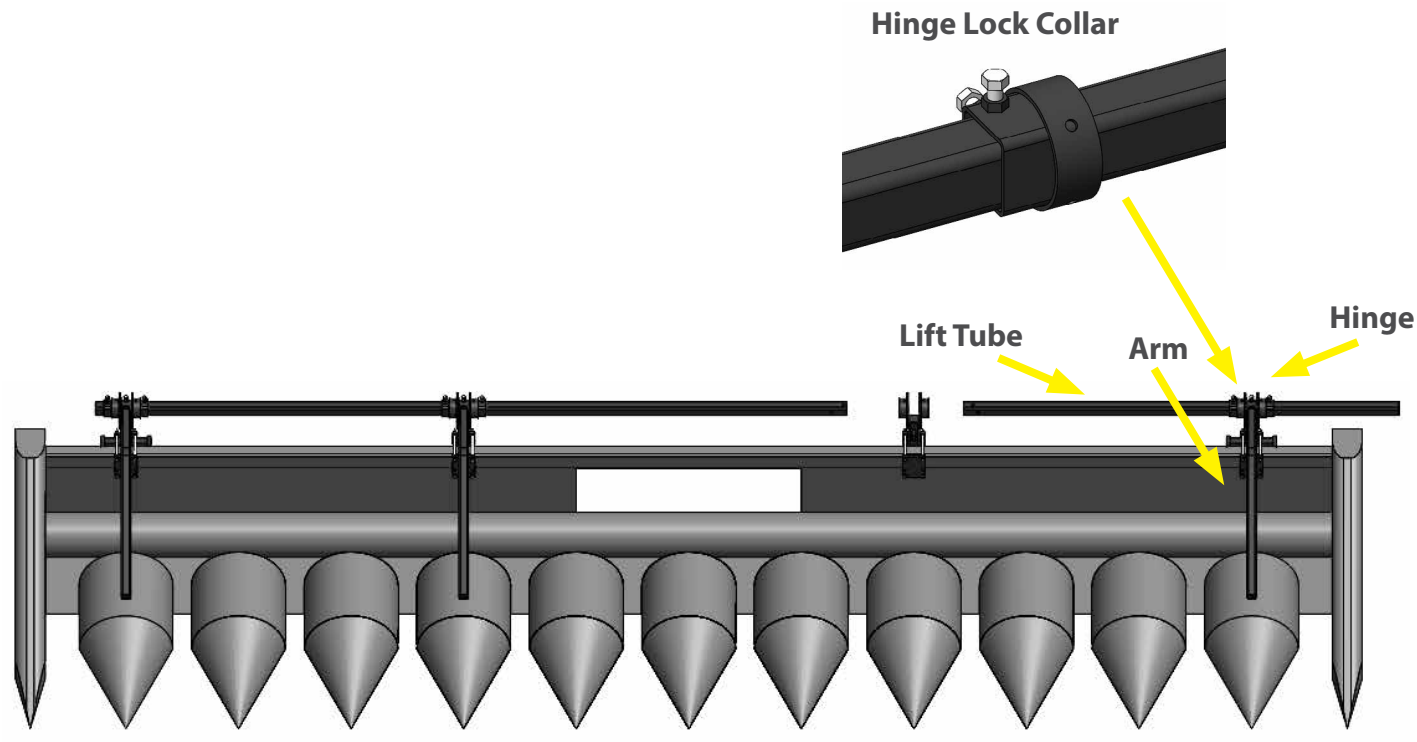
3.3.4 - Slide hinge lock collar over tube.

⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.5 - Repeat the process, at the opposite side of the head. With a person at each end of the 3" square tube, begin inserting the tube through the second outer hinge, stopping at least one (1) foot before reaching the next.

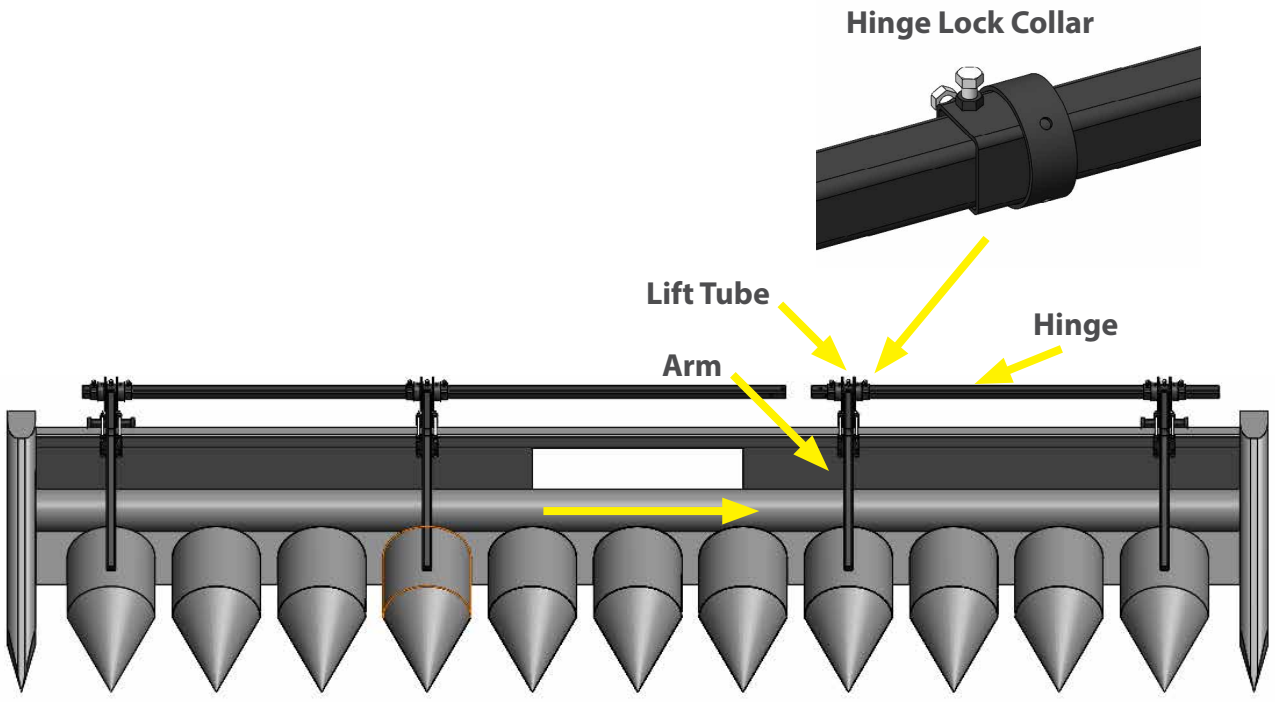
3.3.6 - Slide hinge lock collar over tube.

⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.7 - With first arm installed, slide the square tube through the next hinge towards the center of the machine.

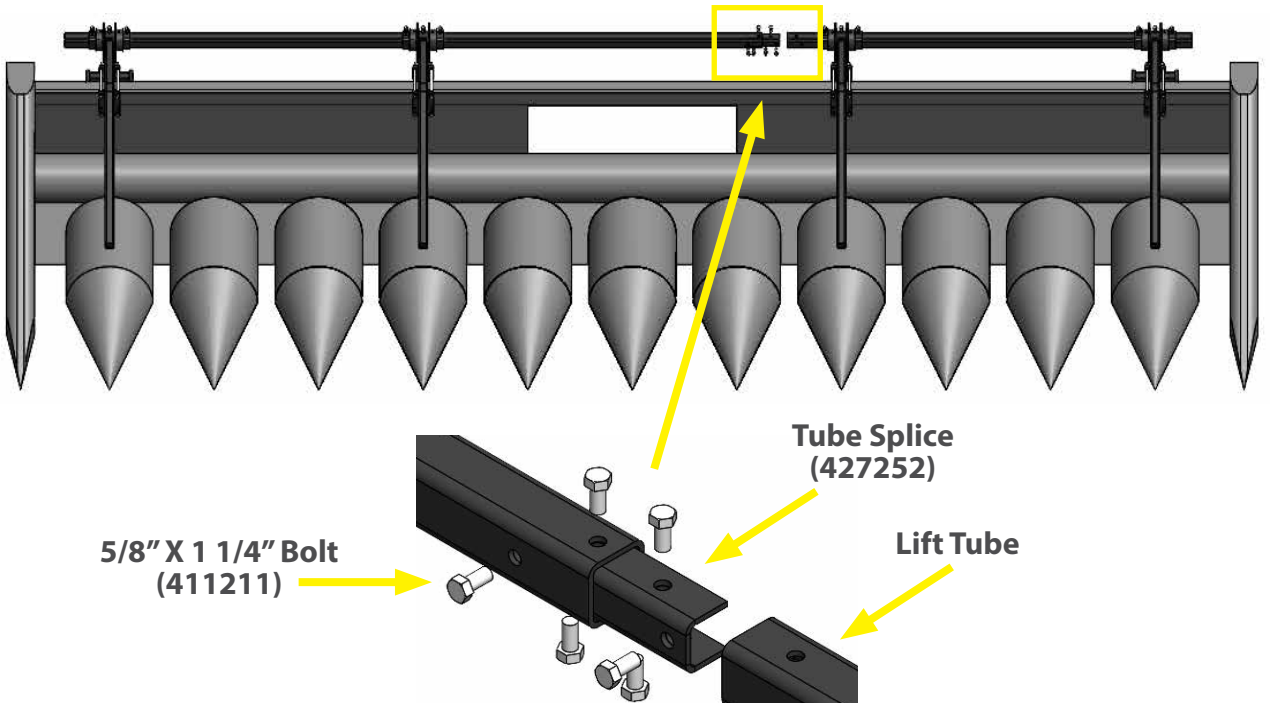
3.3.8 - Slide hinge lock collar over tube.

⚠ CAUTION

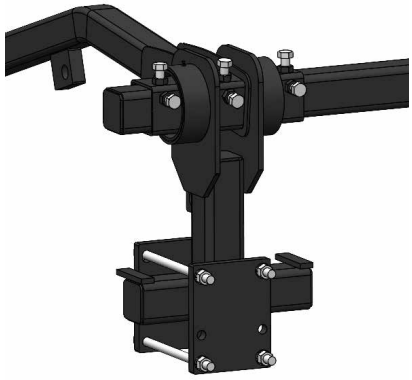
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.9 - Slide square tubes together and install square tube splice using six (6) **5/8" X 1 ¼" Bolts**. Tighten Bolts with 15/16" wrench. Center the Rear Tube on corn head.



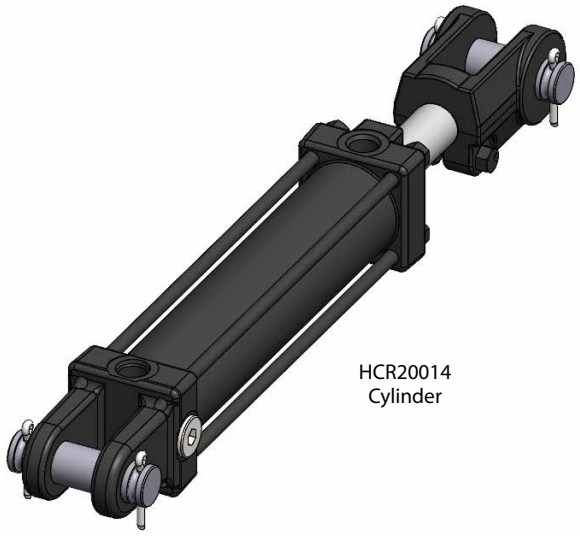
3.3.10 - Tighten set-bolts to secure the 3" square tube.

⚠ CAUTION

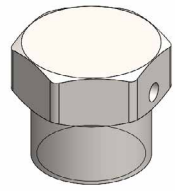
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(4) - Lift Cylinder installation

4.1 - Locate components and tools for install.



HCR20014
Cylinder

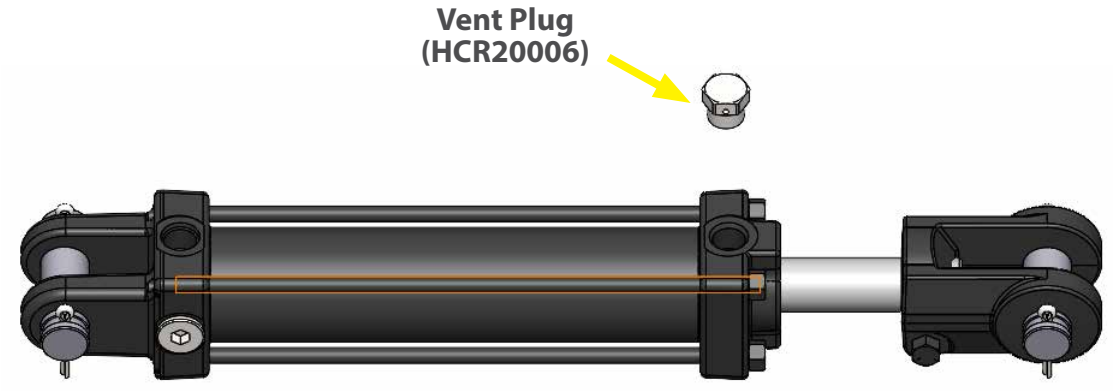


HCR20006
Vent Plug

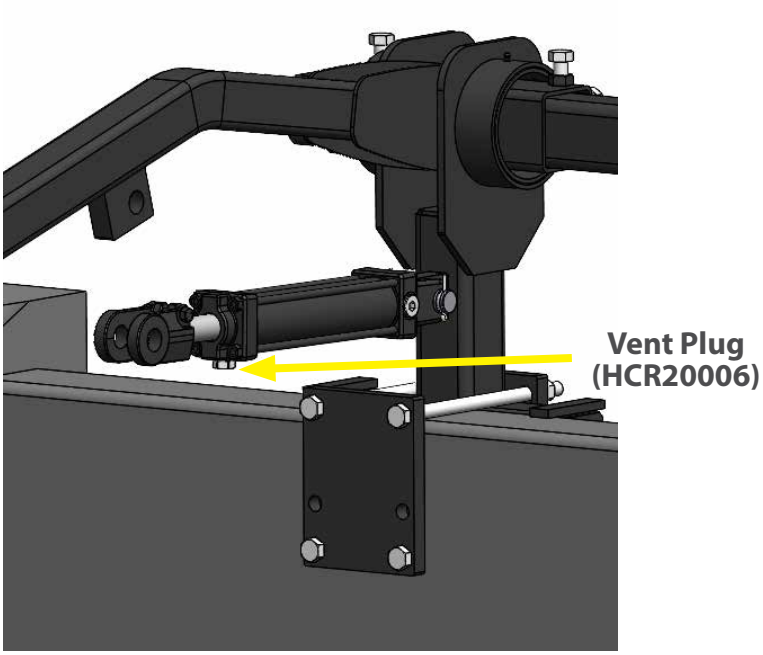
4.1.1 - In corn reel packaging find the above components for installation of the lift cylinders. Locate tools necessary.

(4) - Lift Cylinder installation

4.2 - Attach Cylinder base to bottom of Hinge



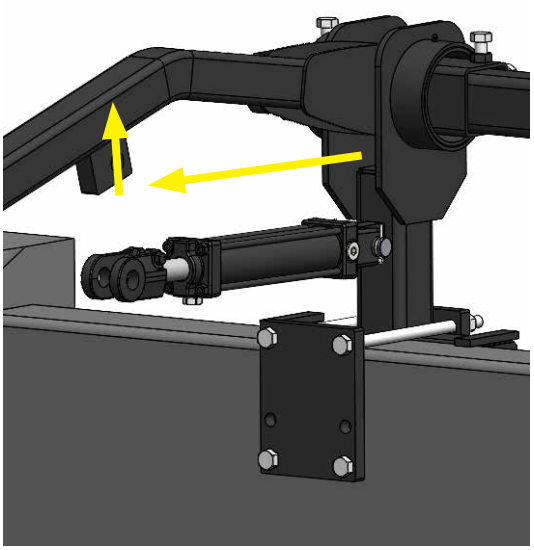
4.2.1 - Install **Vent Plug (HCR20006)** in **Cylinder (HCR20014)** in the rod port using 7/8" wrench.



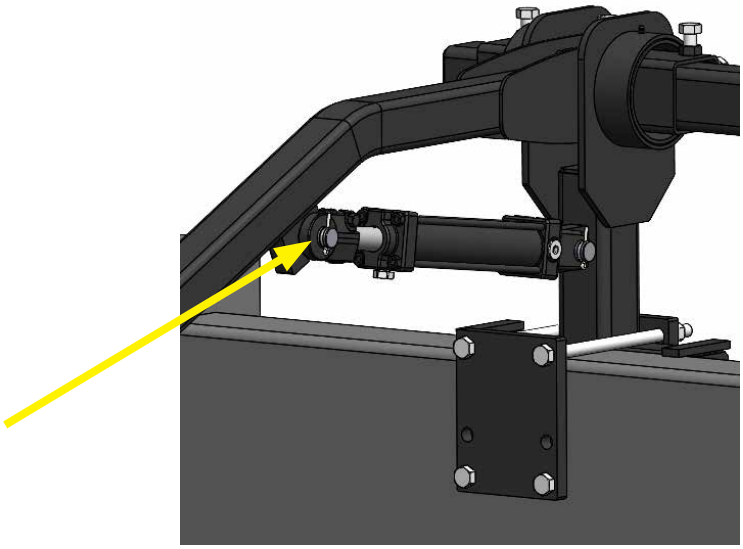
4.2.2 - Install **Cylinder (HCR20014)** base end using supplied pin and cotter pins to bottom hole on mounting hinge. **Make sure that ports are facing down, away from the reel arm.** Using a pair of pliers, bend cotter pins to secure the pin and base end of cylinder in place.

(4) - Lift Cylinder installation

4.2 - Connect top of Cylinder to top of Hinge



4.2.3 - Using wrench, loosen base end cylinder plug. Before moving cylinder, place a shop rag over fitting to avoid spraying hydraulic fluid. Locate top pin and cotter pins for connecting the rod end of the cylinder.

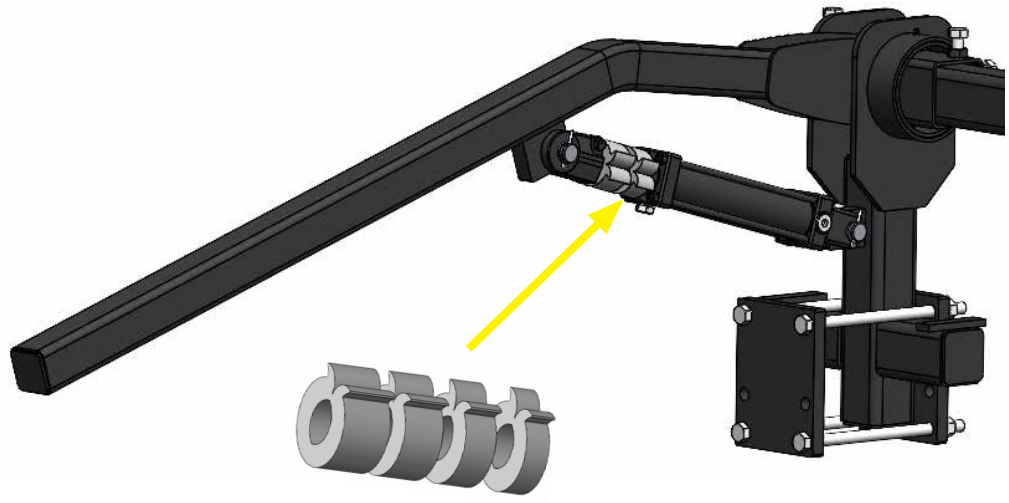


4.2.4 - With base end plug loosened, cylinder rod should move by hand. Pulling on the rod end clevis, extend the cylinder to line up the top tug and mount hinge hole. Once aligned install the pin and mounting hardware. Once cylinder is pinned, install cotter pins in each end of the pin, and bend using pliers to complete install of the top pin.

4.2.5 - Repeat this step for the rest of the mounting hinge cylinders.

(4) - Lift Cylinder installation

4.2 - Connect top of Cylinder to top of Hinge

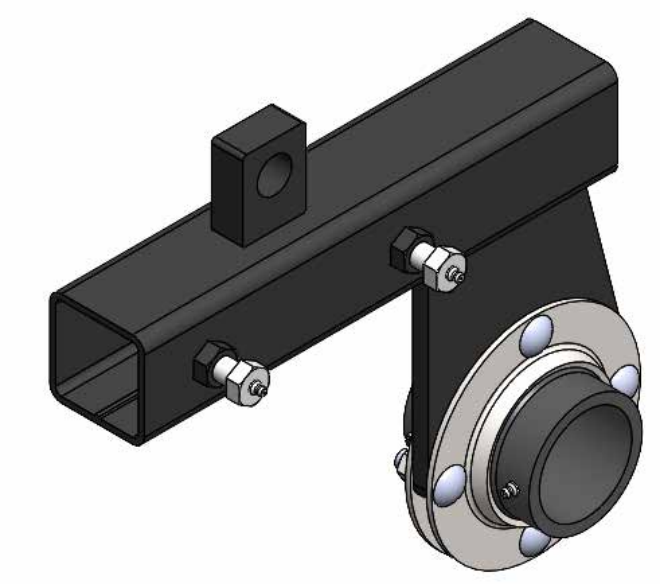


Stroke Control Blocks (10000401)

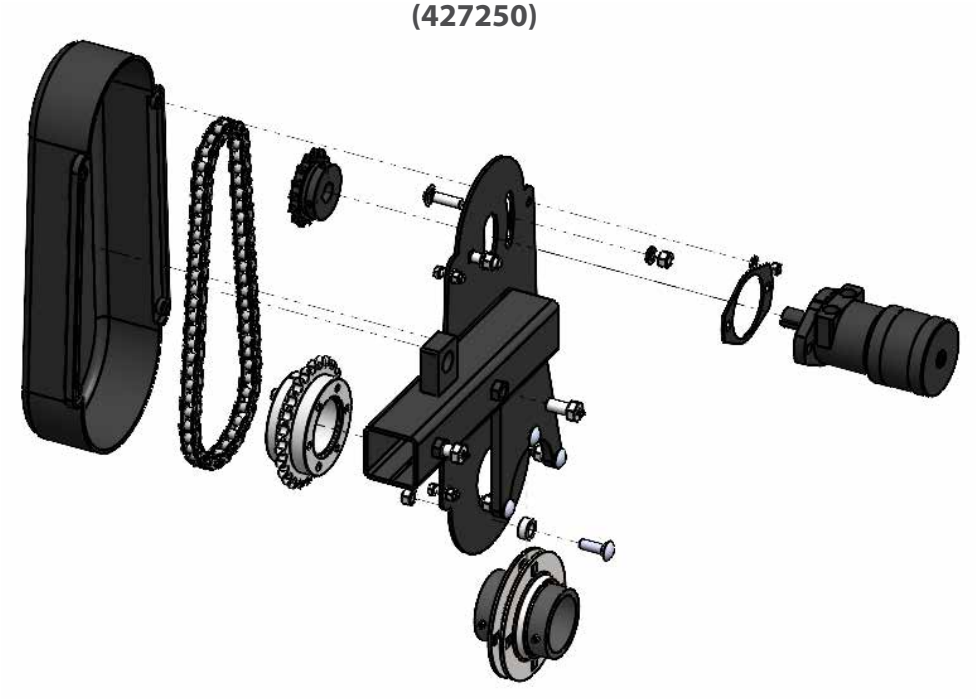
4.2.6 - Install **Stroke Control Blocks (10000401)** on lift cylinder rods to set the stop height of the reel. You may want to install more blocks than needed at this stage to aid in assembly of the reel tube and paddles.

4.2.7 – Repeat this step for the rest of the hinge cylinders.

(5) - Reel Hub & Chain Box Assembly - Part Identification



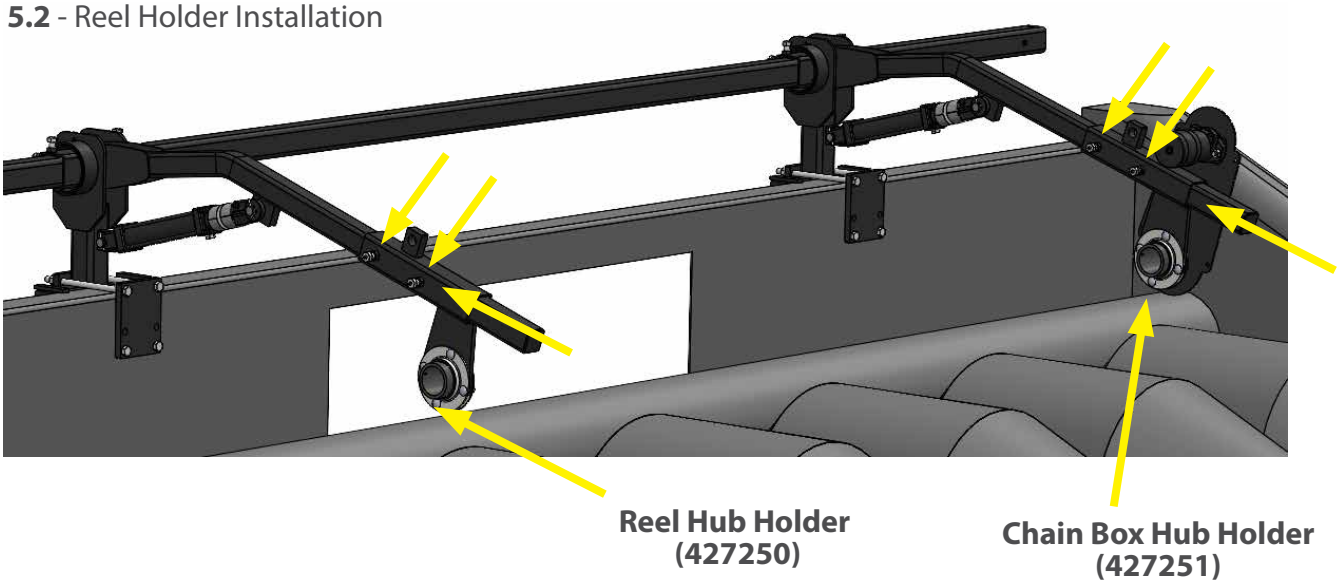
Reel Hub Holder
(427250)



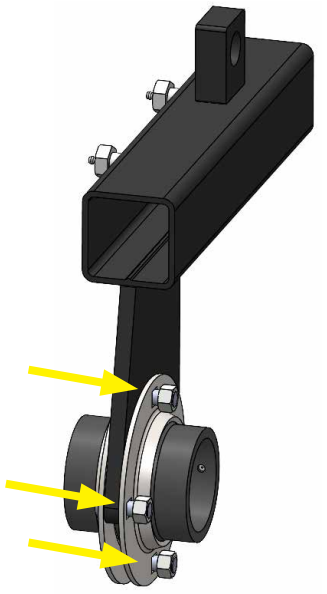
Chain Box Hub Holder
(427251)

(5) - Reel Hub & Chain Box Assembly

5.2 - Reel Holder Installation



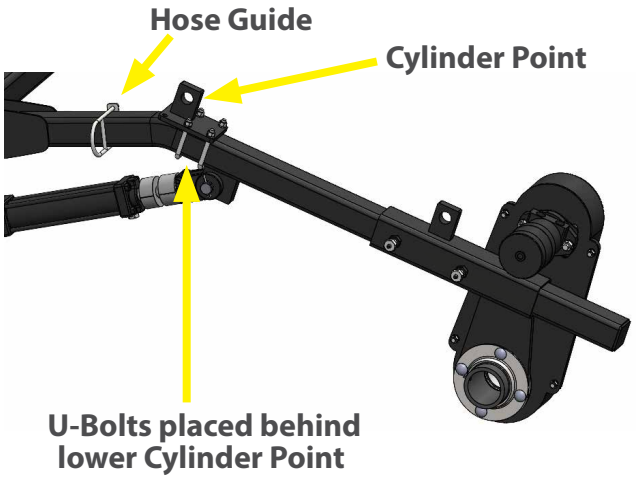
5.2.1 - Slide Reel Holders and Chain Box Assembly onto Arms. Position bearing end of Reel Holder Tube 7" from end of arm for now. Tighten Zerk Bolts on Reel Holders and Chain Box slide tubes to hold in place on Arms while inserting Reel Tube.

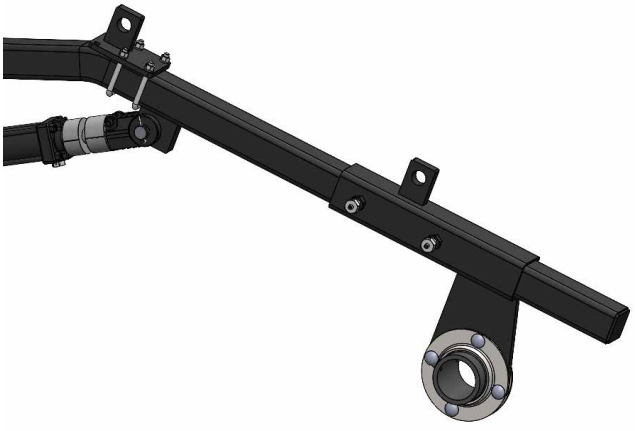


5.2.2 - Make sure that Bearing Flange Carriage Bolts are slightly loose to allow compliance while inserting Reel Tube.

(5) - Reel Hub & Chain Box Assembly

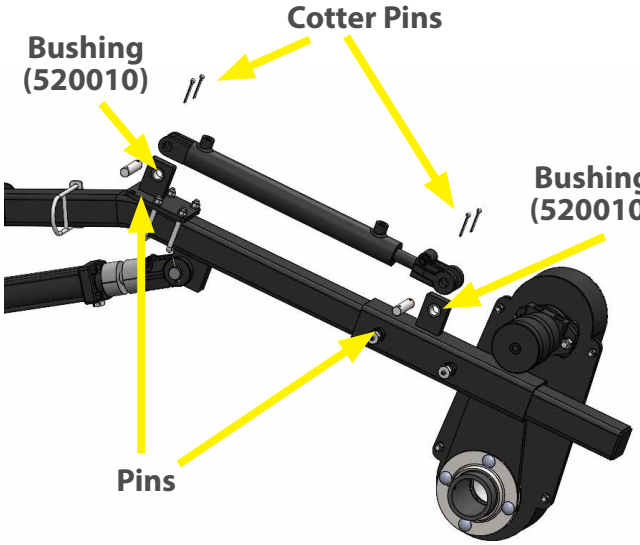
5.3 - Reel Holder Installation





5.3.1 - Install Fore & Aft **Cylinder Point** on arms using included **3/8"-16 X 2-1/2" X 3-1/2" U-Bolts (415111)**, **3/8" Lock Washers (413506)**, and **3/8"-16 Nuts (412056).** Also install the **Hose Guide (HCR30075**) on the Arm with the Chain Box with (2) **5/16" Lock Washers (413505)**, and (2) **5/16"- 18 Nuts (412005)**.

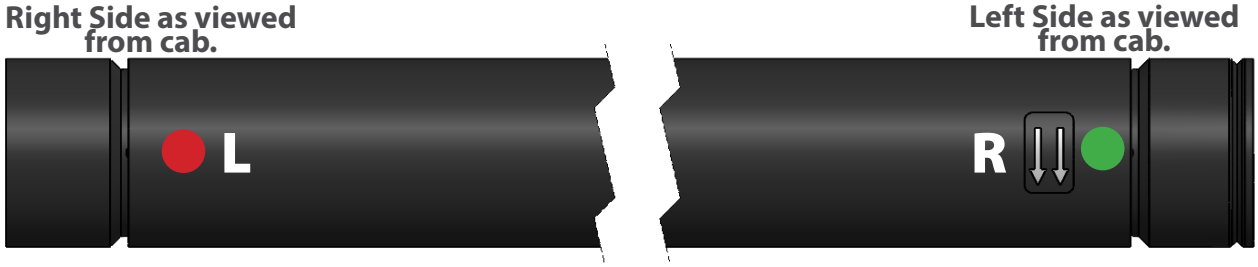
Note: To make cylinder installation easier, leave Cylinder Points loose until after cylinders are pinned in.



5.3.2 - Install **Fore & Aft Cylinders (476032)** with included pins and secure with hair cotter pins.

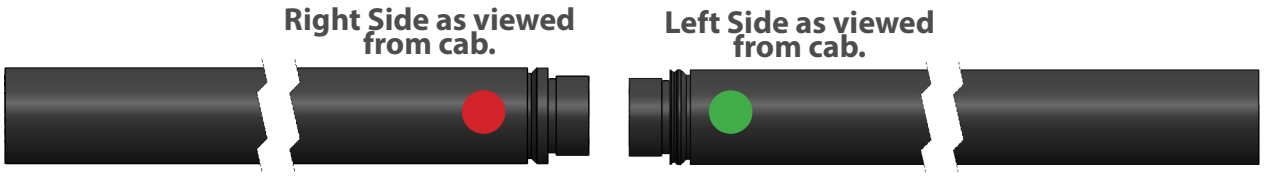
(6) - Reel Tube

6.1 - Reel Holder Installation



6.1.1 - The Left-Hand side (as viewed from cab of combine) has a GREEN DOT decal and is stamped with an "R" to indicate right-hand threads.

The Right-Hand side (as viewed from cab of combine) has a RED DOT decal and is stamped with an "L" to indicate left-hand threads.

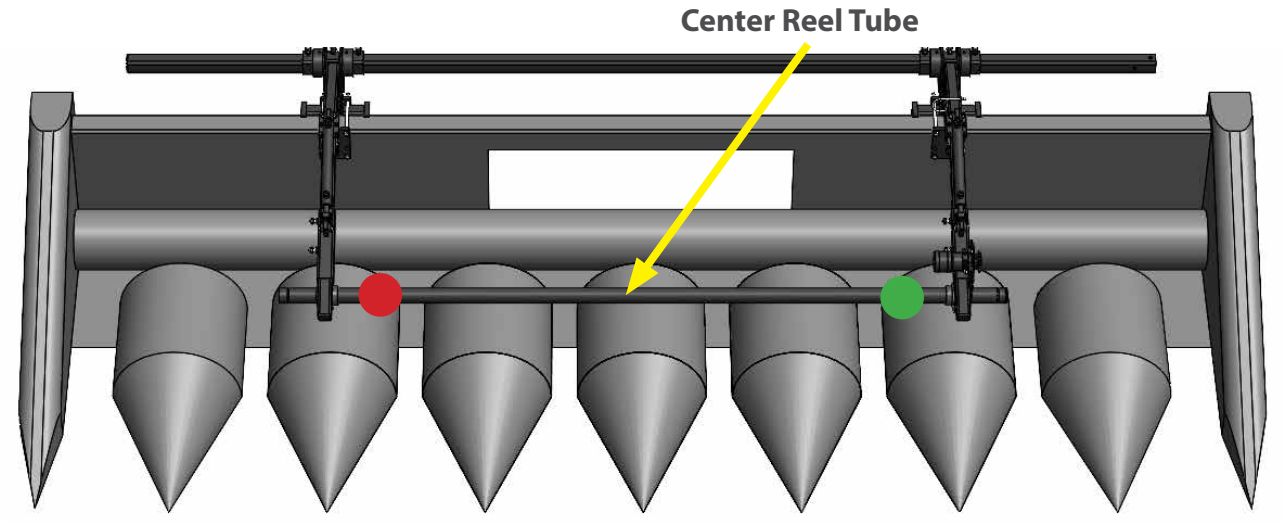


6.1.2 - The Reel Tube Extensions have corresponding colored dot decals that match same for same with the Center Reel Tube. (GREEN DOT for Left-Hand side, RED DOT for Right-Hand side)

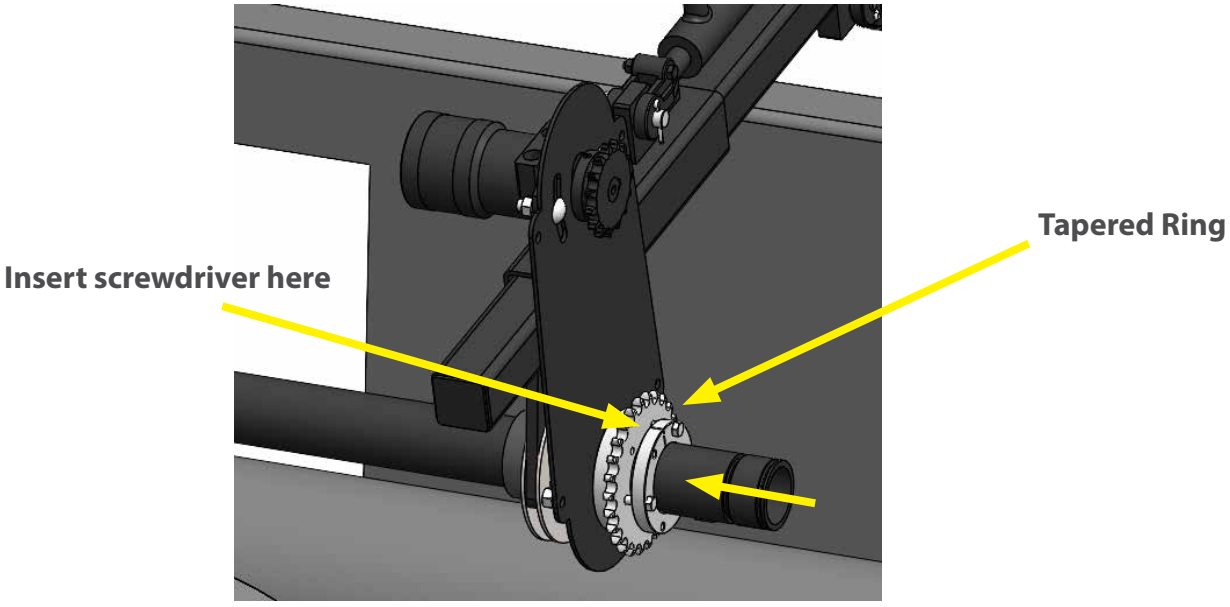
NOTE: Right hand side of machine uses left hand threads. Left hand side of machine uses right hand threads.

(6) - Reel Tube

6.2 - Assemble Center Reel Tube on Reel Hub Holder and Chain Box Hub Holder



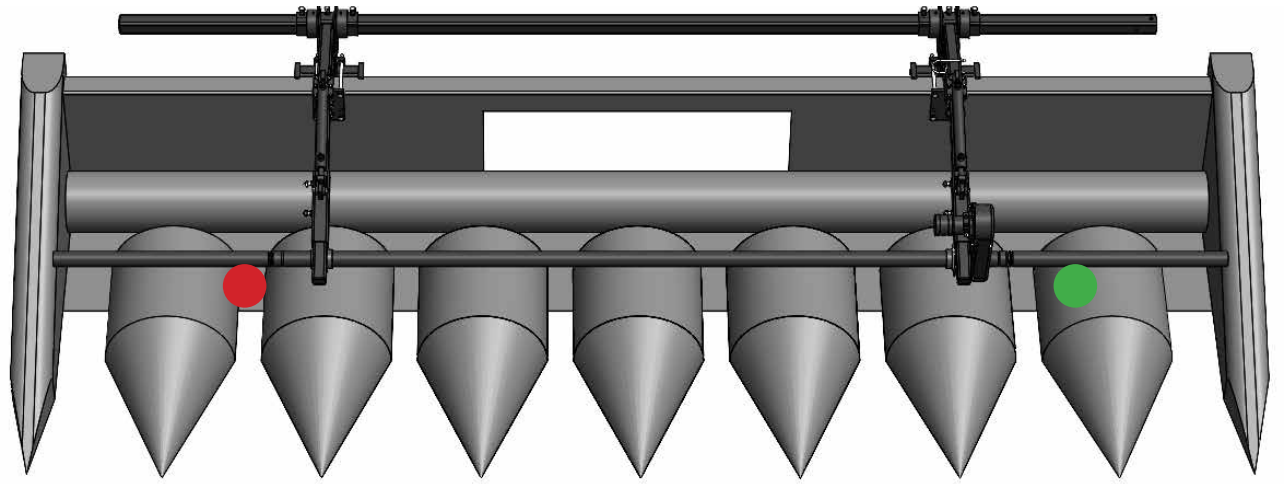
6.2.1 - Slide Center Reel Tube through the poly spherical bearings on the Reel Holders so that the GREEN DOT ends up near the Chain Box Hub Holder. Approximately center the Reel Tube with the head before moving on.



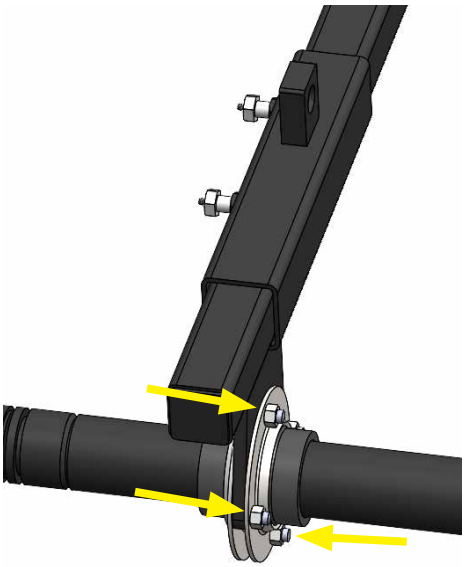
6.2.2 - Install Tapered Hub Assembly onto the Center Reel Tube on the outboard side of the Chain Box Hub Holder using a flat screwdriver to spread the tapered ring so it will slide over the end of the tube. Leave wedge bolts loose for now. The Chain Box Cover should be slid over the Center Reel Tube at this time and bolted on loosely, leaving the installation of the chain until after Reel Tube Extensions and paddles are installed.

(6) - Reel Tube

6.3 - Attach Reel Tube Extensions to Center Reel Tube



6.3.1 - Install Reel tube extensions, matching GREEN DOT ends together and RED DOT ends together, using a pair of large pipe wrenches (or similar) to tighten. A gap may remain between the rims on the threaded couplers when tight, this is normal.

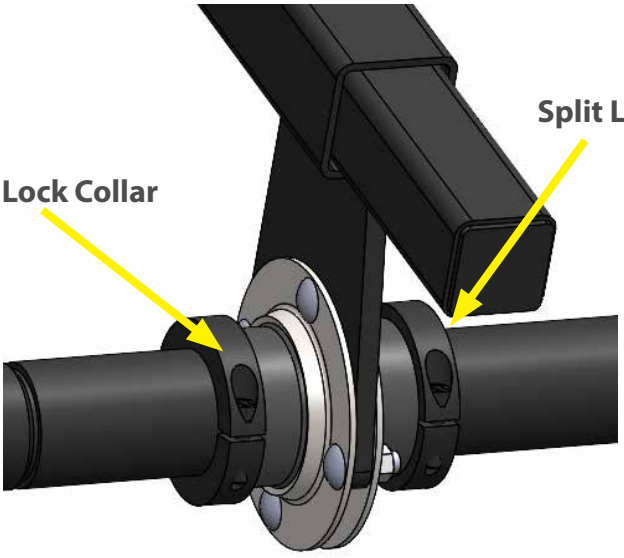


6.3.2 - Using 3/4" wrench, tighten the carriage bolts on the Bearing flanges. Be sure to position the grease zerks on each Spherical Bearing towards the back of the Corn Head. Take care not to over-tighten the bottom bolt. The bolt only needs to be tight enough to keep the Spherical Bearing from turning in the flange.

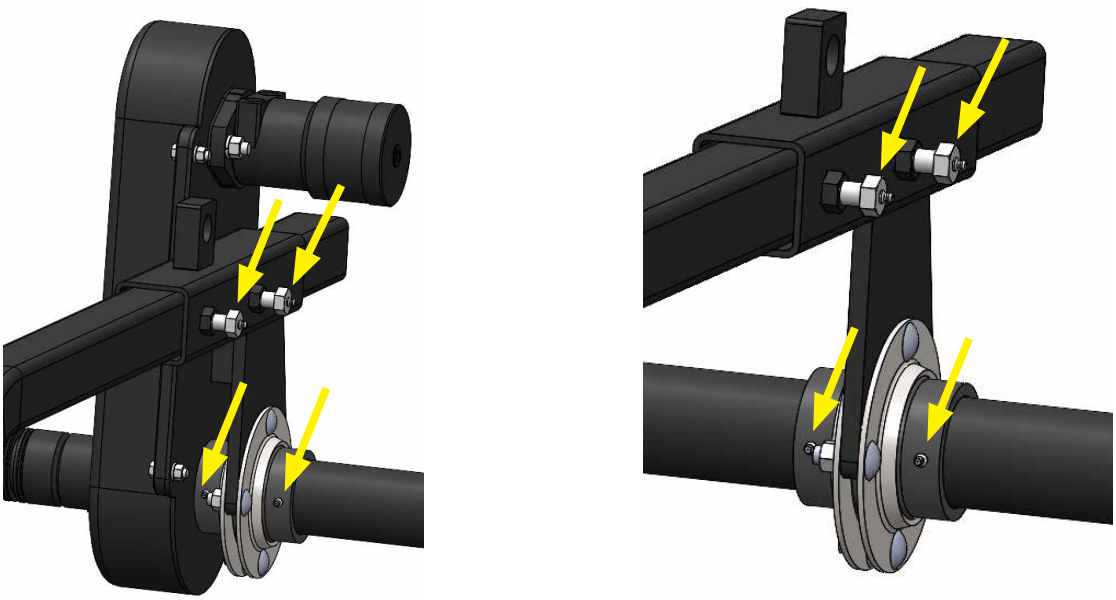
Note: Re-check the tightness of these bolts periodically over the first several days of use.

(6) - Reel Tube

6.3 - Finish Reel Tube Installation

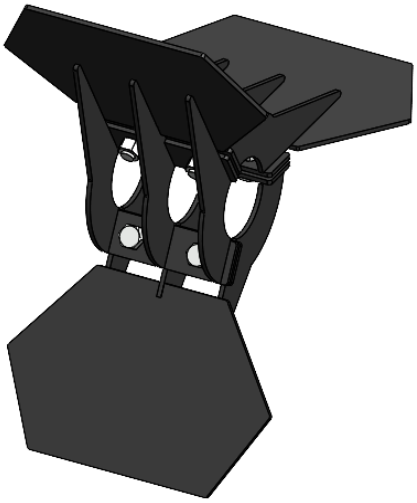


6.3.3 -Center the Reel Tube Assembly on the Corn Head and install Split Lock Collars flush against each side of Bearings, tighten with 5/16" Allen wrench.

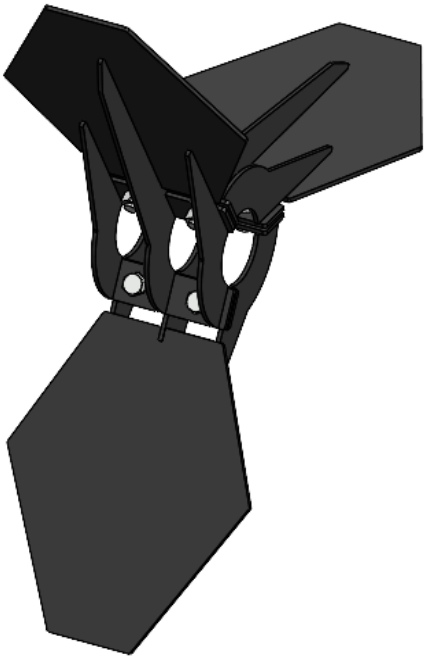


6.3.4 - Grease Reel Holder Zerk Bolts and Bearings liberally. The Reel Tube should turn freely. If Reel Tube does not turn freely, check that the Reel Tube is level with the Corn Head and that the Reel Hub Holders are aligned evenly on the Arms.

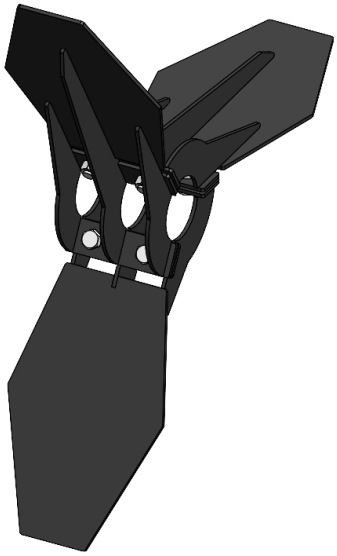
(7) - Paddles Identification



Center Paddle
(427201)



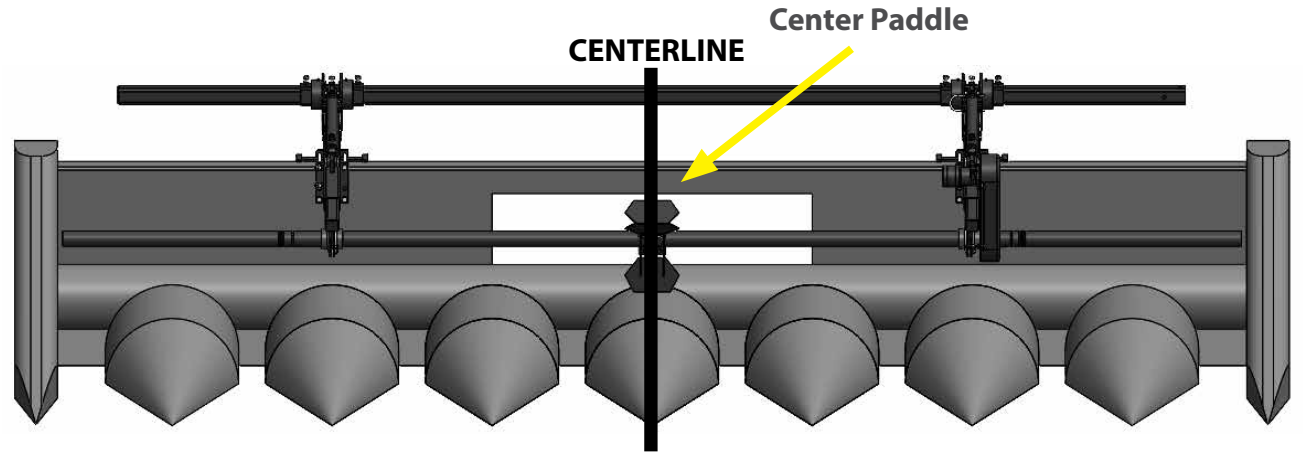
30" Row Paddle
(427200)



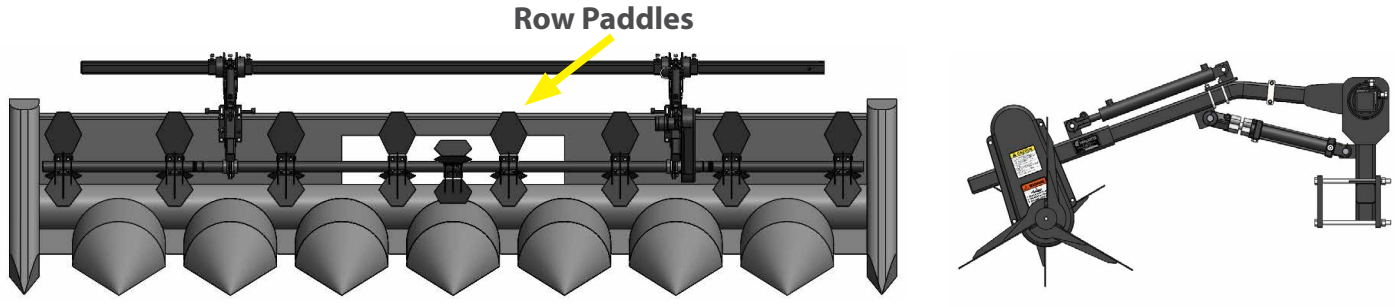
20" Row Paddle
(427202)

(7) - Paddle Installation

7.2 - Install Center Paddle on Center Reel Tube



7.2.1 - Install **Center Paddle (427201)** in center of the head using **(6) 1/2" X 1" Bolts** and **(6) 1/2" Center Lock Nuts**.



7.2.2 - Install **Row Paddles (427200)** centered between snouts using (6) 1/2" X 1 Bolts and (6) 1/2" Center Lock Nuts on each row.

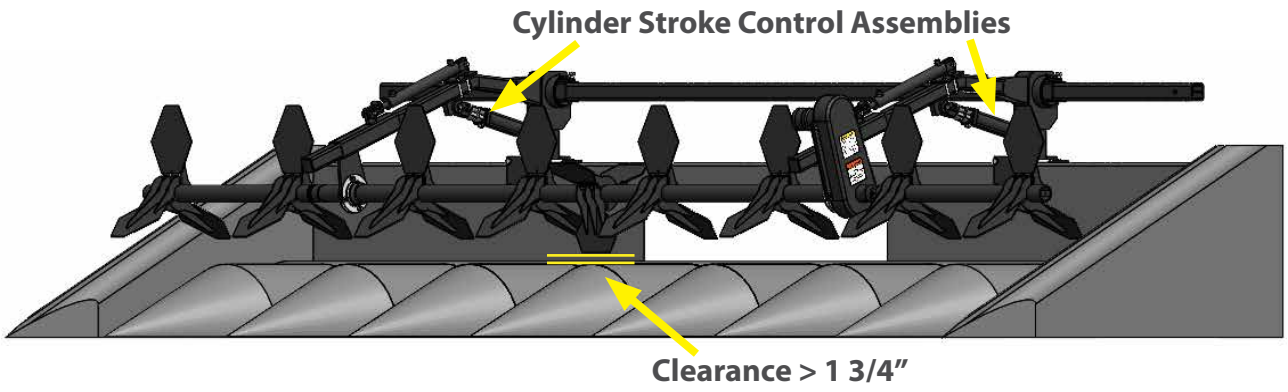
Note: Row Paddles should be offset 1/6 of a turn from the Center Paddle for improved flow into the feeder house.

Note: If on narrow rows, 20" Paddles (427202) go on either of the chain box.

Note: Leave off the paddle by the chain box to make drive chain installation easier.

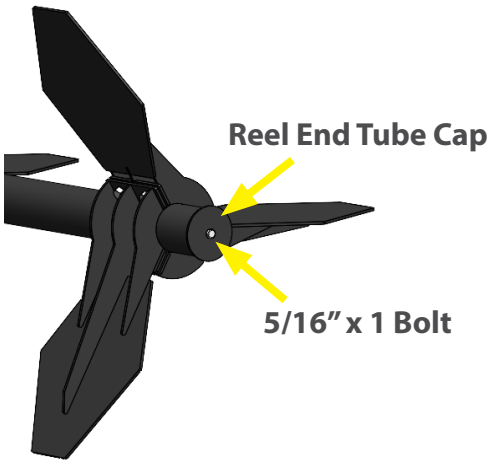
(7) - Paddle Installation

7.3 - Install Paddles



7.3.1 - Once Paddles are installed, set reel height using Cylinder Stroke Control Assemblies so the Center Paddle clears the center island by at least 1 ¾“. Keep in mind that this distance will change as Reel is moved fore and aft on Arms.

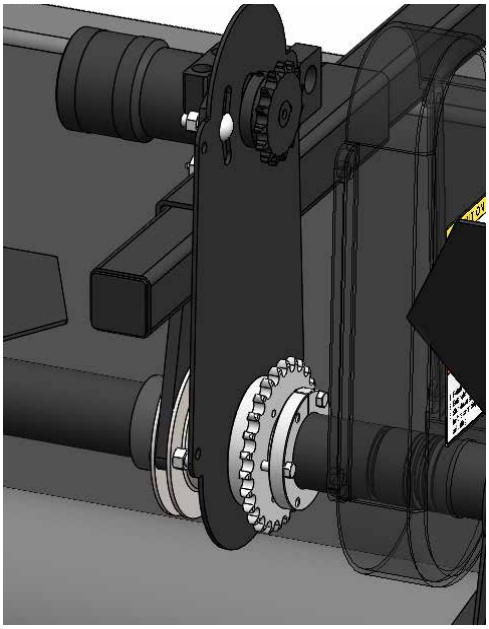
7.4 - Install Reel Tube End Caps



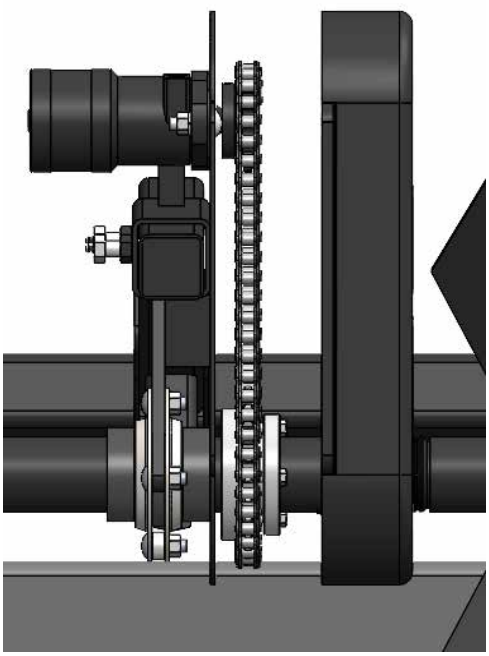
7.4.1 - Affix **Reel Tube End Caps (HCR30024)** to each end of Reel Tube using **5/16” X 1 Bolts (411484).**

(8) - Chain

8.1 - Install chain

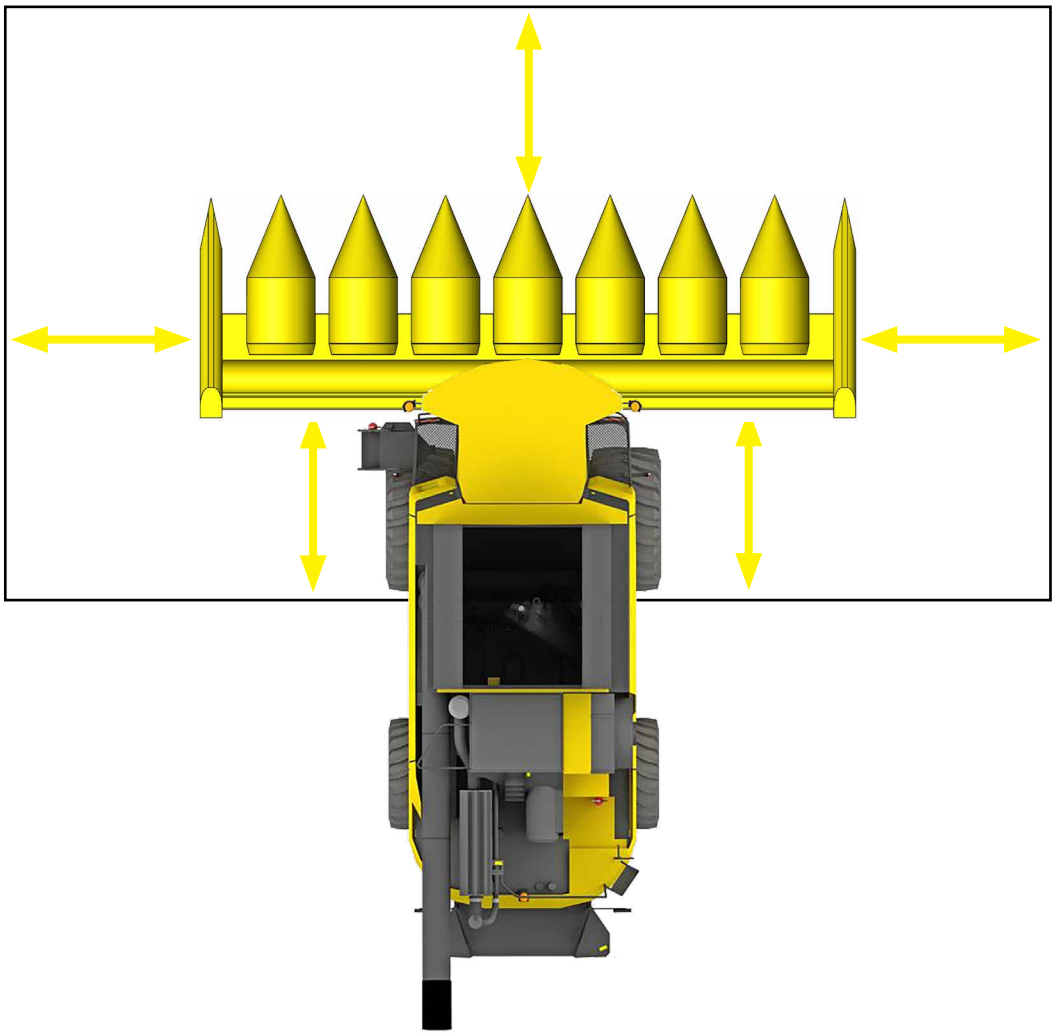


8.1.1 - Finish placing Tapered Hub sprocket in line with drive sprocket on motor. Tighten pinch bolts.



8.1.2 - Install chain and tighten until snug with 1/4"-1/2" of play.

(1) Place head in desired work area



1.1 - Park the combine on a level work surface, make sure parking brake is on. Leave ample room to work in front of and around the head during installation. We recommend an area of at least 20' to the front of the head and at least 10' around the sides and rear.

1.2 - Place the head on the ground. Ensure head is on the ground and head connection to combine is secure before performing any work on the head.

⚠ CAUTION

DO NOT place any body part beneath the residue manager as you remove it.

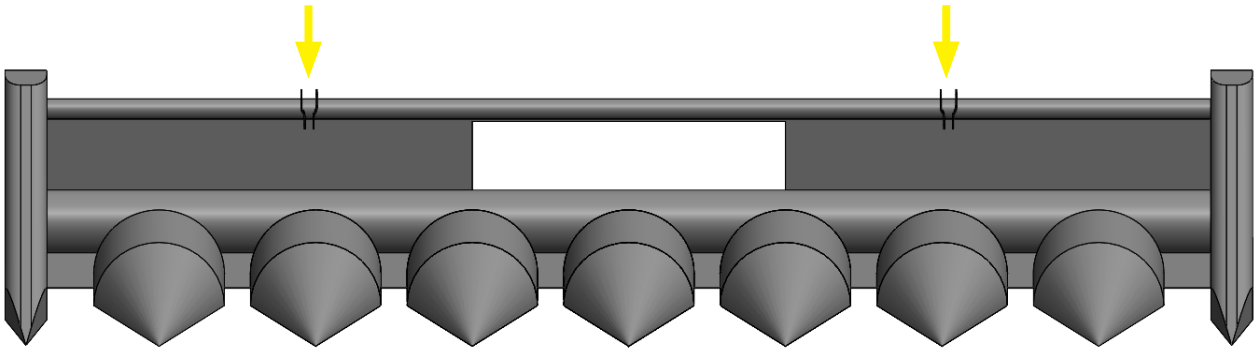
(2) - Mount/Hinge installation - Elite

2.1 - Determine location for mount/hinge bracket (Elite Series).

NOTE: Elite Series heads have hinge point tabs welded to the round main head tube. These tabs will be used to mount your corn reel.

2.1.1 – For heads 8 row 30" and narrower, there should be two sets of tabs, one on each side of the head.

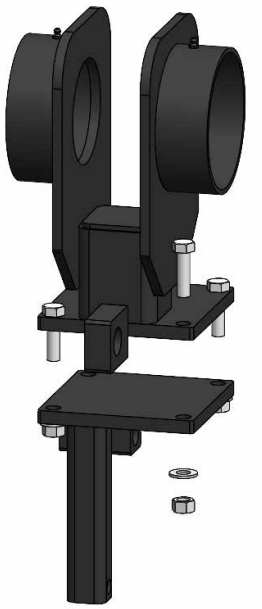
2.1.2 – For heads larger than 8 row 30" there should be four sets of tabs, two on each side of the head.



(2) - Mount/Hinge installation - Elite

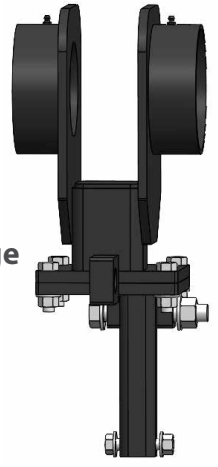
2.2 - Assemble Hinge Components (Elite Series).

NOTE: Elite Series heads have hinge point tabs welded to the round main head tube. These tabs will be used to mount your corn reel.

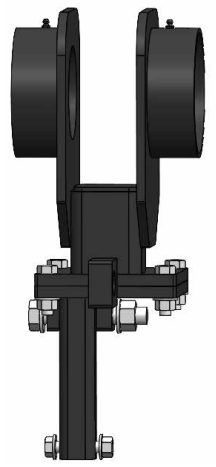


2.2.1 – Pre-assemble each upper hinge to left and right adapter plates using (4) 1/2"-13 Bolts, (4) 1/2" Flat Washers, and (4) 1/2"-13 Nuts.

Right Hand Hinge



***Front View**



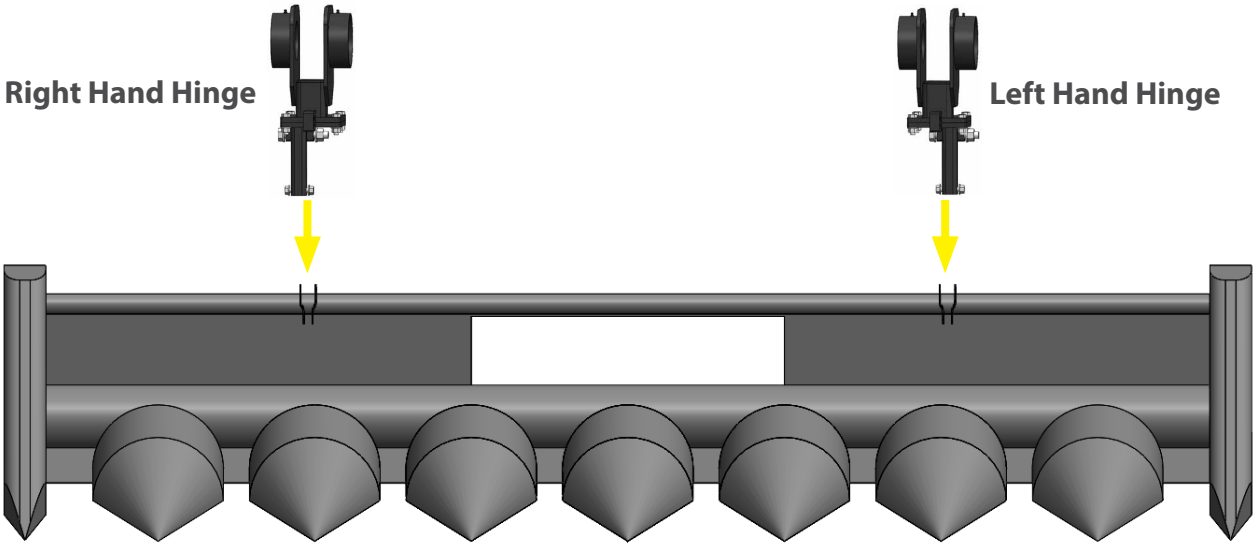
Left Hand Hinge

2.2.2 – Identify Right-Hand and Left-Hand Hinge Assemblies for next steps.

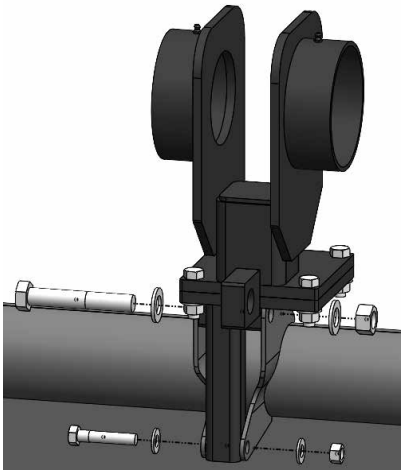
(2) - Mount/Hinge installation - Elite

2.3 - Assemble Hinge Components (Elite Series).

NOTE: Elite Series heads have hinge point tabs welded to the round main head tube. These tabs will be used to mount your corn reel.



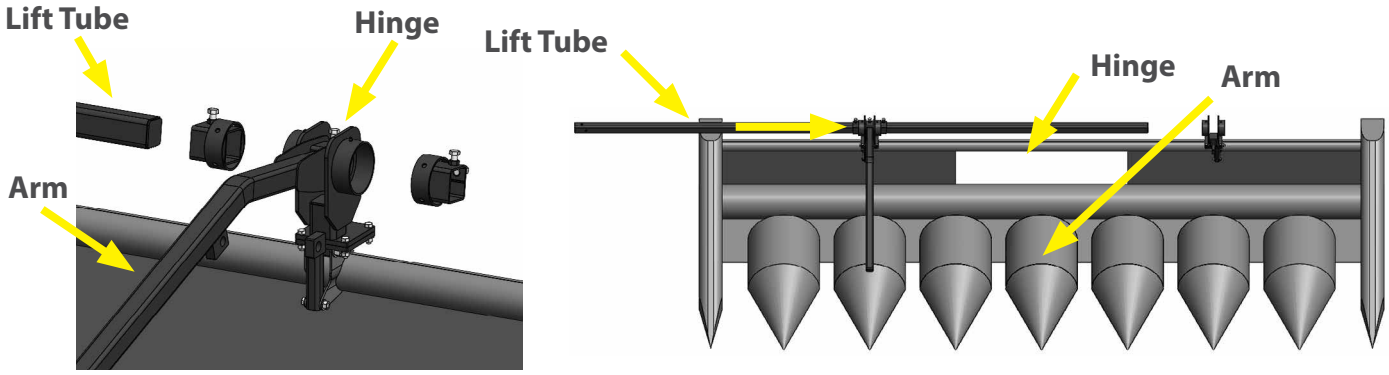
2.3.1 – Locate the left and right hinge point tabs on your corn head.



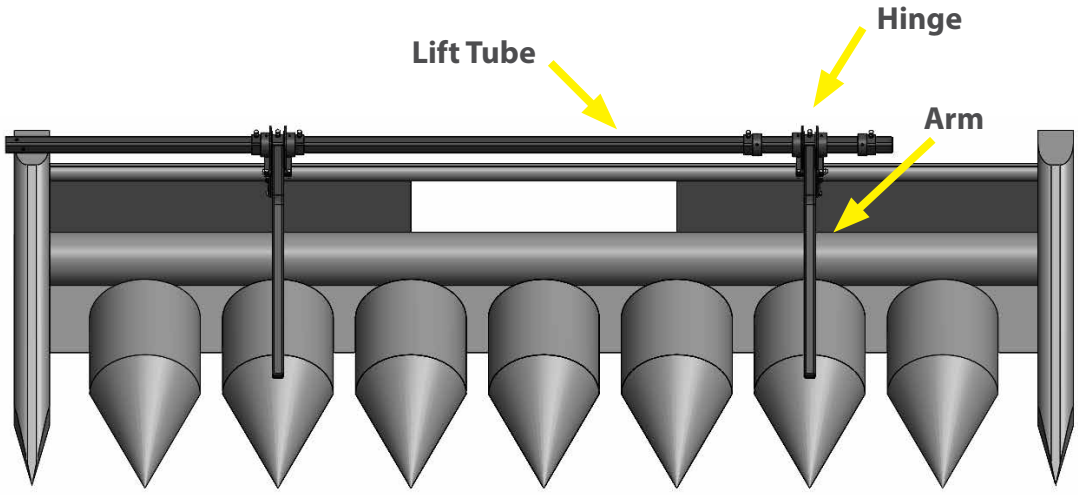
2.3.2 – Mount the Right-Hand Hinge and Left-Hand Hinge to the corresponding hinge point tabs on each side of the head using (1) 3/4"-10 X 4 ½" Bolt, (2) 3/4" Flat Washers, (1) 3/4"-10 Nut, (1) 1/2"-13 X 2 ½" Bolt, (2) 1/2" Flat Washers, (1) 1/2"-13 Nut.

(3) - Lift Tube and Arm installation - Two arm set-up - Elite

3.1 - Install lift tube and arms in hinges for ELITE 2 arm setup. (8 Row 30" and smaller)



3.1.1 - Align Arm between Hinge ears and place Hinge Lock Collars onto tube on each side of hinge. With a person at each end of the 3" square tube, begin inserting the tube through one of the Hinges, Hinge Lock Collars, and Arm, stopping at least 1 foot before reaching the next.



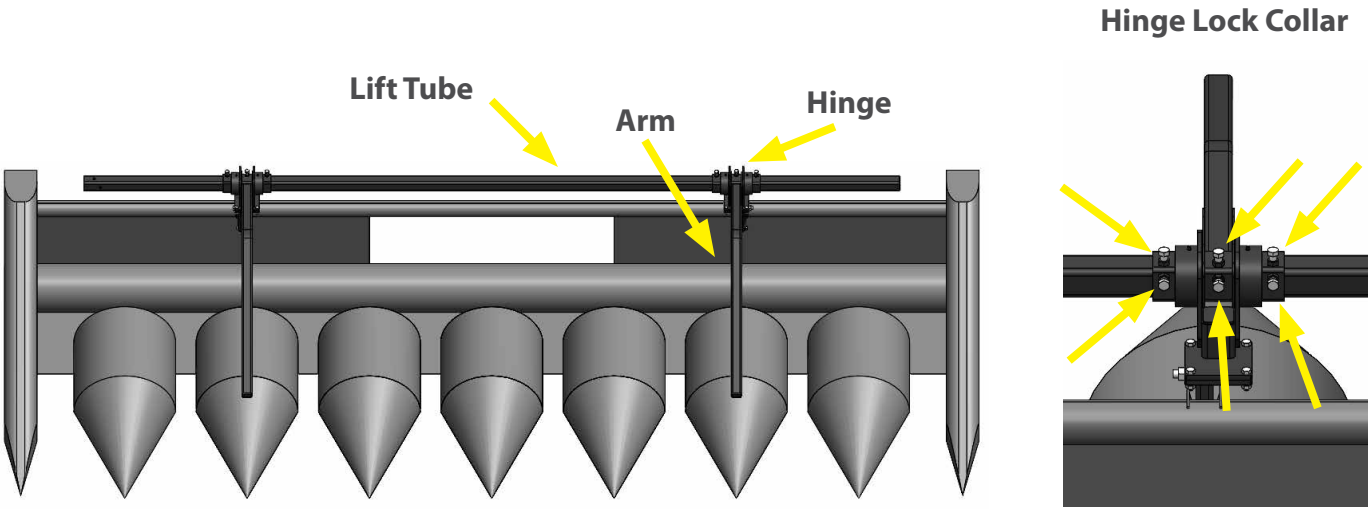
3..2 - Repeat the previous step to install second arm.

⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Two arm set-up - Elite

3.2 - Install lift tube and arms in hinges for ELITE 2 arm setup. (8 Row 30" and smaller)



3.2.3 - Center the rear tube with the head of the machine. Tighten set bolts on Hinge Lock Collars and Arms to secure the 3" square tube.

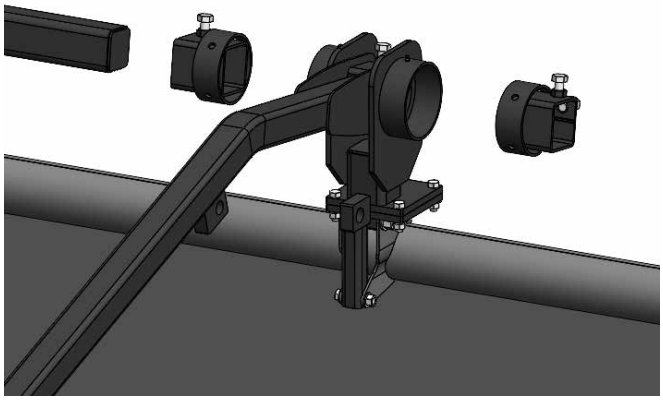
⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

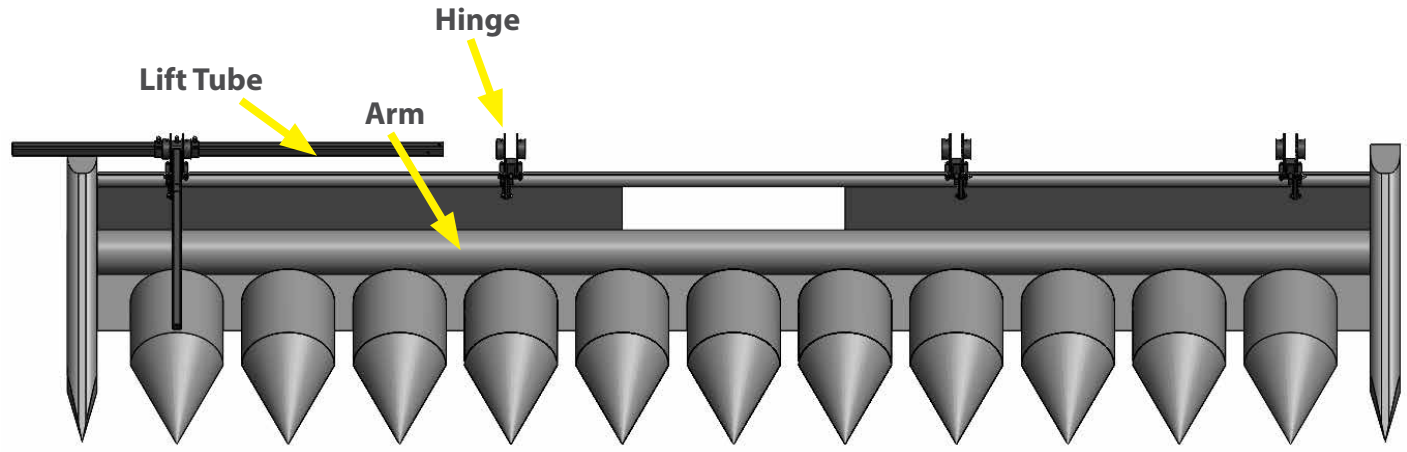
(3) - Lift Tube and Arm installation - Four arm set-up - Elite

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)

3.3.1 - With a person at each end of the 3" square tube, begin inserting the tube through the outer right hinge, with arm between hinge ears and hinge lock collars on either side, stopping about 1 foot before reaching the next.



3.3.2 - Slide next hinge lock collar over tube and prepare next arm to insert between hinge ears.



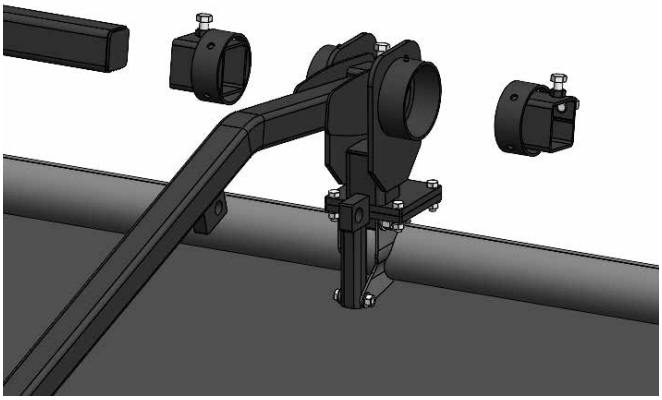
⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

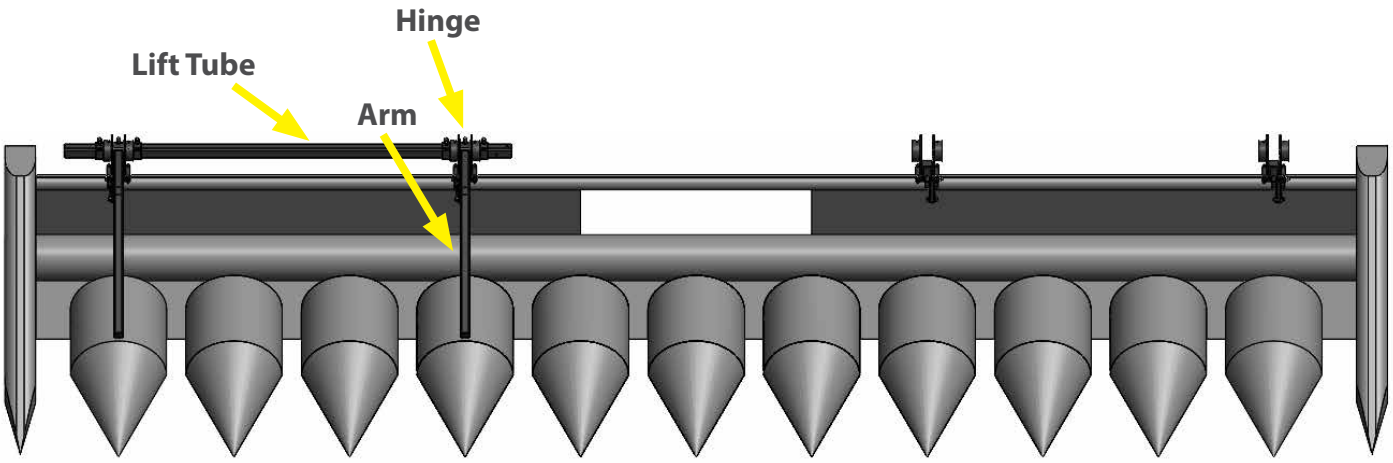
(3) - Lift Tube and Arm installation - Four arm set-up - Elite

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)

3.3.3 - With first arm installed, slide the square tube through the next hinge and arm towards the center of the machine.



3.3.4 - Slide hinge lock collar over tube.



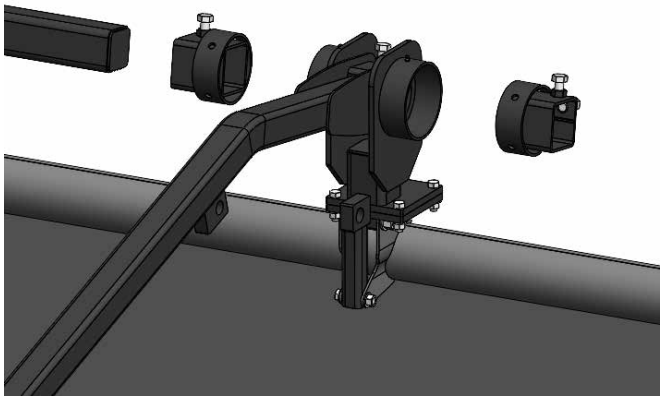
⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

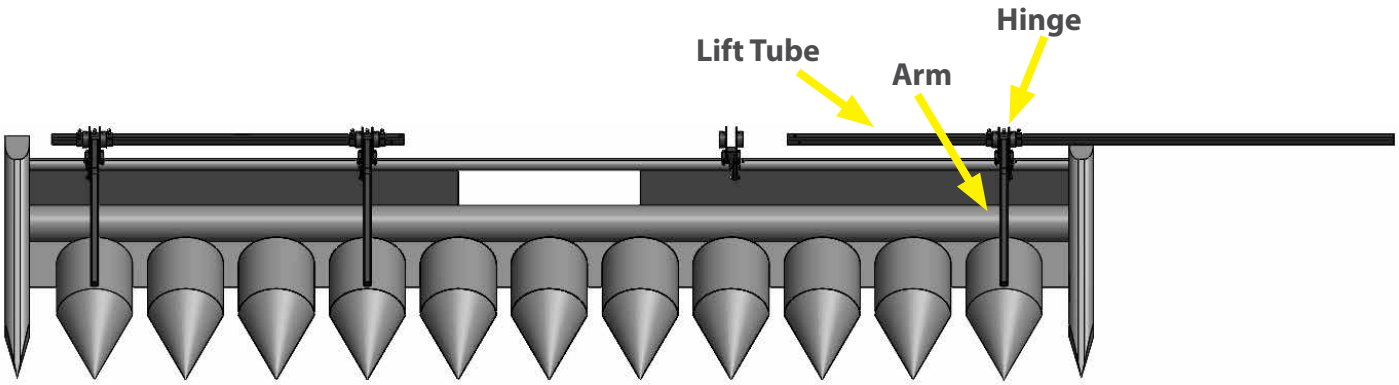
(3) - Lift Tube and Arm installation - Four arm set-up - Elite

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)

3.3.5 - Repeat the process, at the opposite side of the head. With a person at each end of the 3" square tube, begin inserting the tube through the outer left hinge, stopping about 1 foot before reaching the next.



3.3.6 - Slide hinge lock collar over tube.



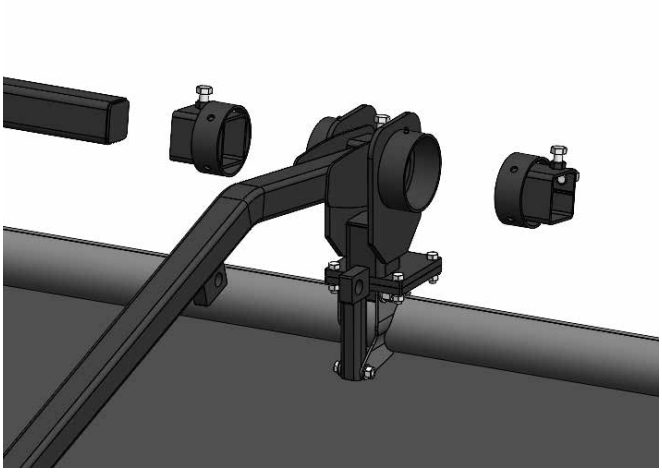
⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

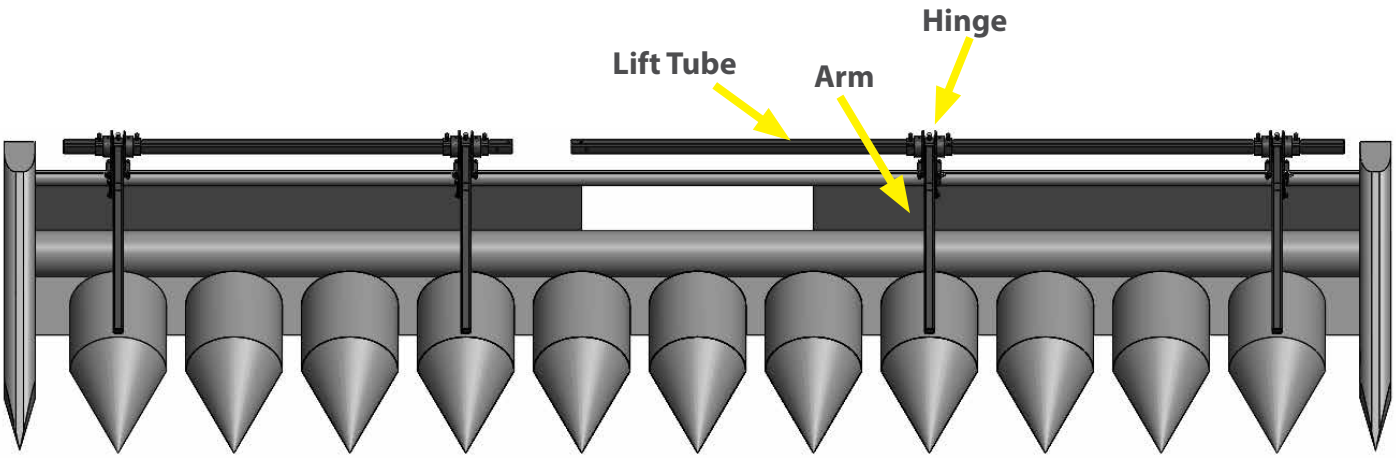
(3) - Lift Tube and Arm installation - Four arm set-up - Elite

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)

3.3.7 - With first arm installed, slide the square tube through the next hinge towards the center of the machine.



3.3.8 - Slide hinge lock collar over tube.

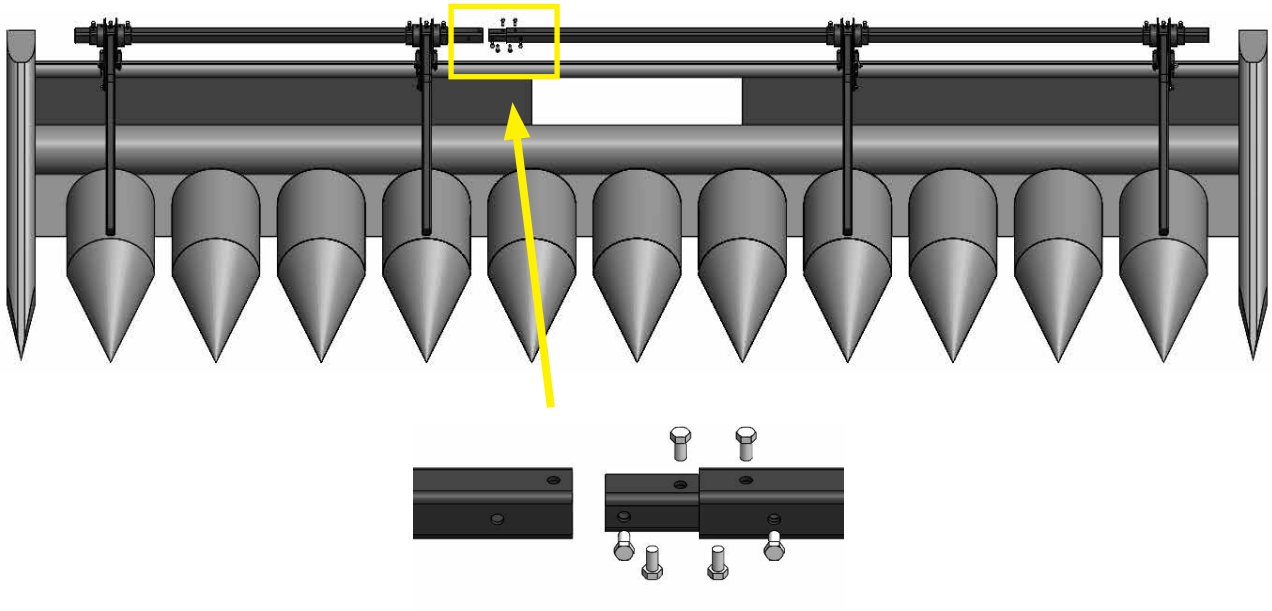


⚠ CAUTION

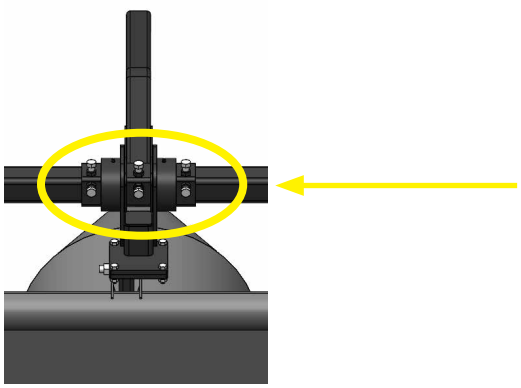
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up - Elite

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.9 - Slide square tubes together and install square tube splice using six (6) **5/8" X 1 ¼" Bolts**. Tighten Bolts with 15/16" wrench. Center the Rear Tube on corn head.



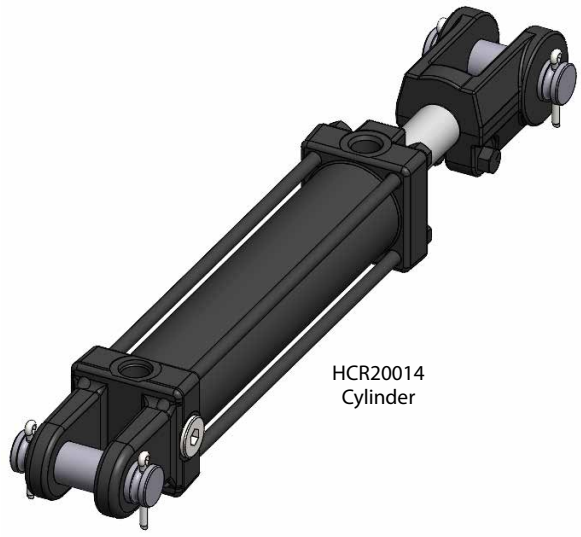
3.3.10 - Tighten set bolts with a 15/16" wrench to secure the 3" square tube. There is no need to over-tighten these set bolts.

⚠ CAUTION

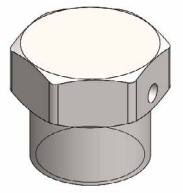
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(4) - Lift Cylinder installation - Elite

4.1 - Locate components and tools for install.



HCR20014
Cylinder

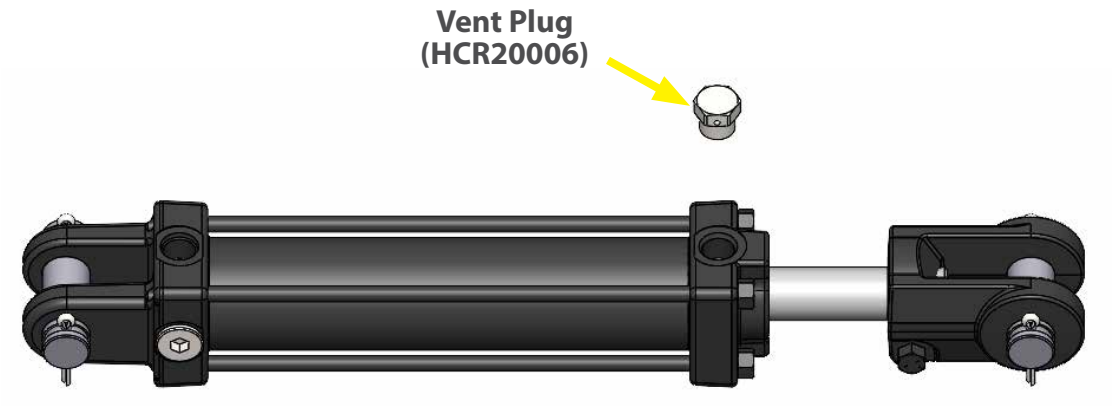


HCR20006
Vent Plug

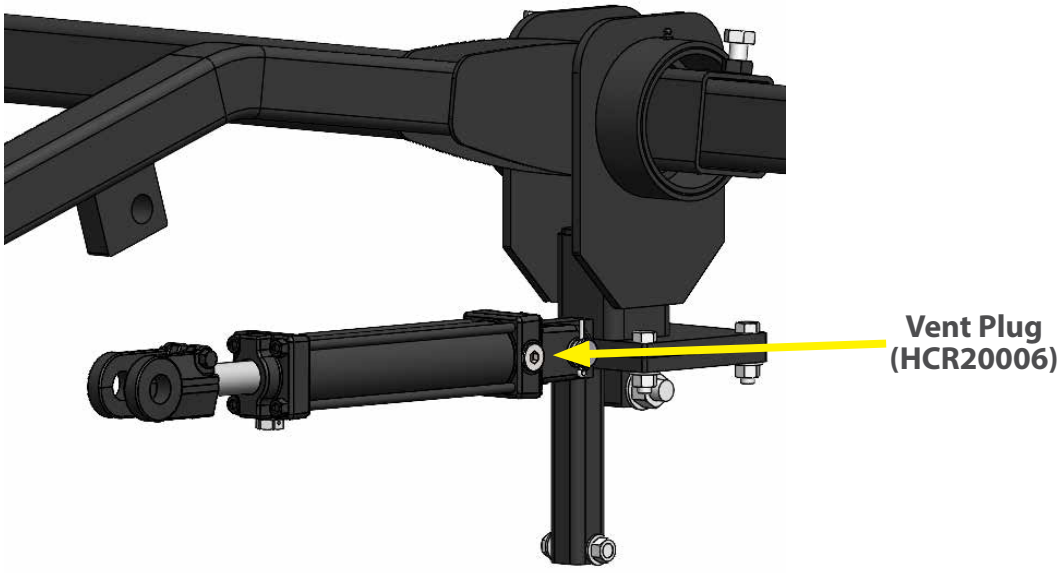
4.1.1 - In corn reel packaging find the above components for installation of the lift cylinders. Locate tools necessary.

(4) - Lift Cylinder installation - Elite

4.2 - Attach Cylinder base to bottom of Hinge



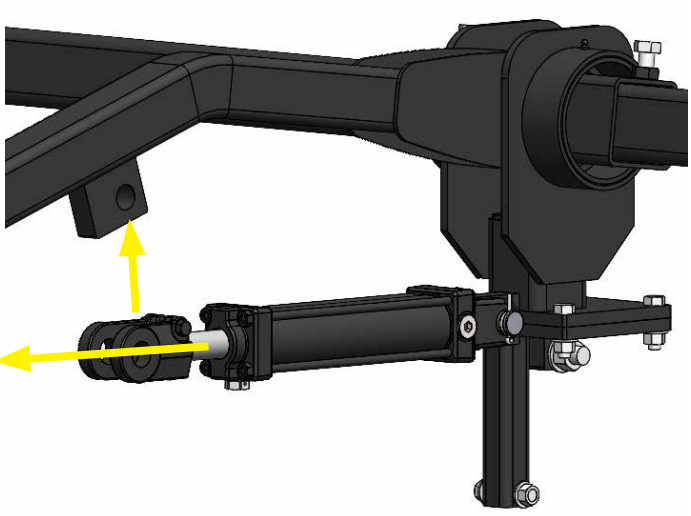
4.2.1 - Install **Vent Plug (HCR20006)** in **Cylinder (HCR20014)** in the rod port using 7/8" wrench.



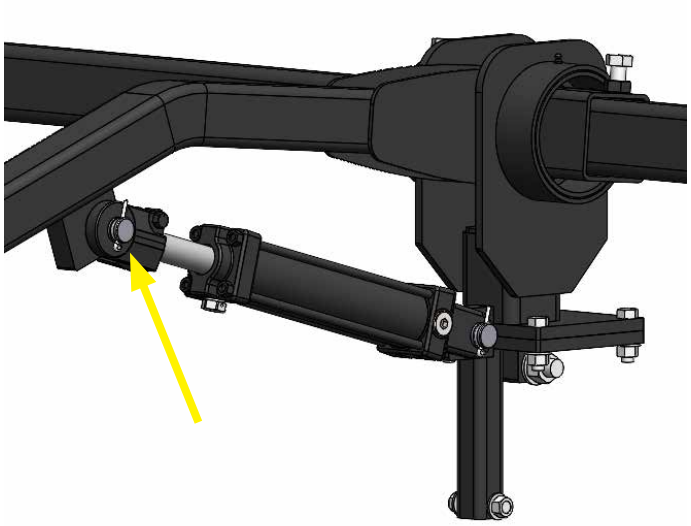
4.2.2 - Install **Cylinder (HCR20014)** base end using supplied pin and cotter pins to bottom hole on mounting hinge. **Make sure that ports are facing down, away from the reel arm.** Using a pair of pliers, bend cotter pins to secure the pin and base end of cylinder in place.

(4) - Lift Cylinder installation - Elite

4.2 - Connect top of Cylinder to top of Hinge



4.2.3 - Using wrench, loosen base end cylinder plug. Before moving cylinder, place a shop rag over fitting to avoid spraying hydraulic fluid. Locate top pin and cotter pins for connecting the rod end of the cylinder.

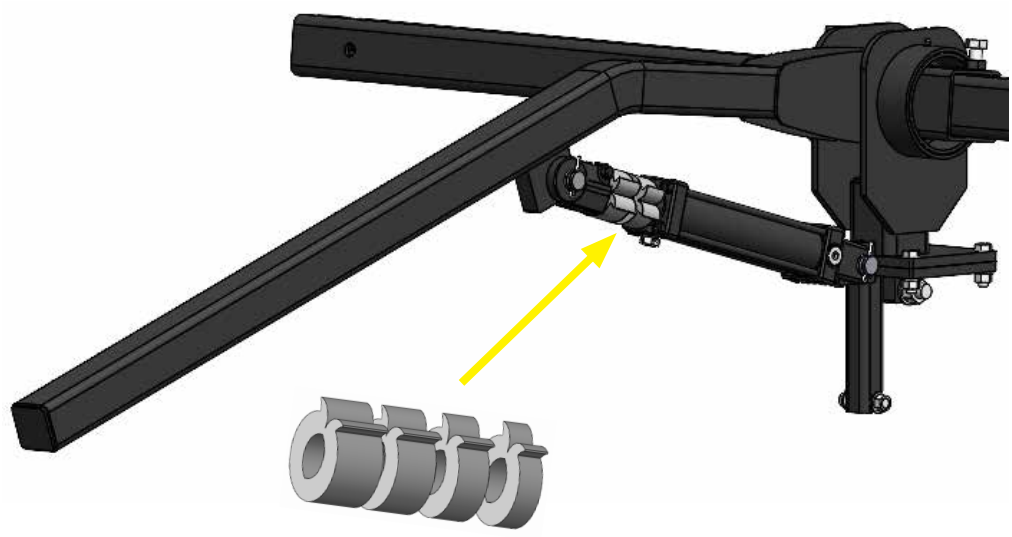


4.2.4 - With rod end plug loosened, cylinder rod should move by hand. Pulling on the rod end clevis, extend the cylinder to line up the cylinder clevis and arm cylinder point hole. Once aligned install the pin and cotter pins and bend using pliers to complete install of the rod end clevis pin.

4.2.5 - Repeat this step for the rest of the mounting hinge cylinders.

(4) - Lift Cylinder installation - Elite

4.2 - Connect top of Cylinder to top of Hinge



Stroke Control Blocks (10000401)

4.2.6 - Install **Stroke Control Blocks (10000401)** on lift cylinder rods to set the stop height of the reel. You may want to install more blocks than needed at this stage to aid in assembly of the reel tube and paddles.

4.2.7 – Repeat this step for the rest of the hinge cylinders.

(2) Mount/Hinge installation - Pre-Elite

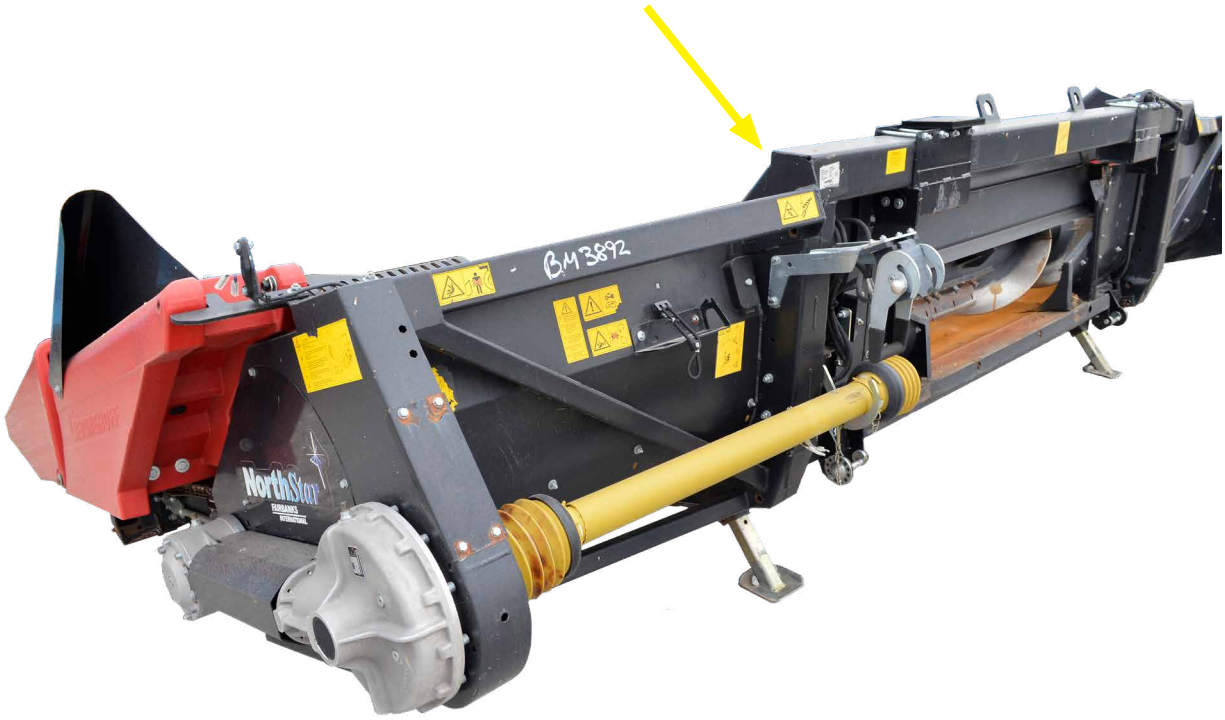
2.1 - Determine location for mount/hinge brackets (Pre-Elite Series).

NOTE: Pre-Elite Series heads have a large square tube spanning the center section of the head, which transitions to smaller angled square tubes toward the outside of the head.

2.1.1 - For 8 row 30" and smaller, the hinges will be placed, along with an adapter plate, at the outer edges of the large square tube.

2.1.2 - For Pre-Elite Series heads larger than 8 row 30", the outer set of hinges will be placed at the outer edge of the large square tube with an adapter plate and inner hinges will be placed just outside of the feeder house vertical tubes.

NOTE: THESE MEASUREMENTS ARE RECOMMENDATIONS. Your hinge placement may need to be adjusted to accomodate design variations that cause obstructions at these locations.



(2) - Mount/Hinge installation - Pre-Elite

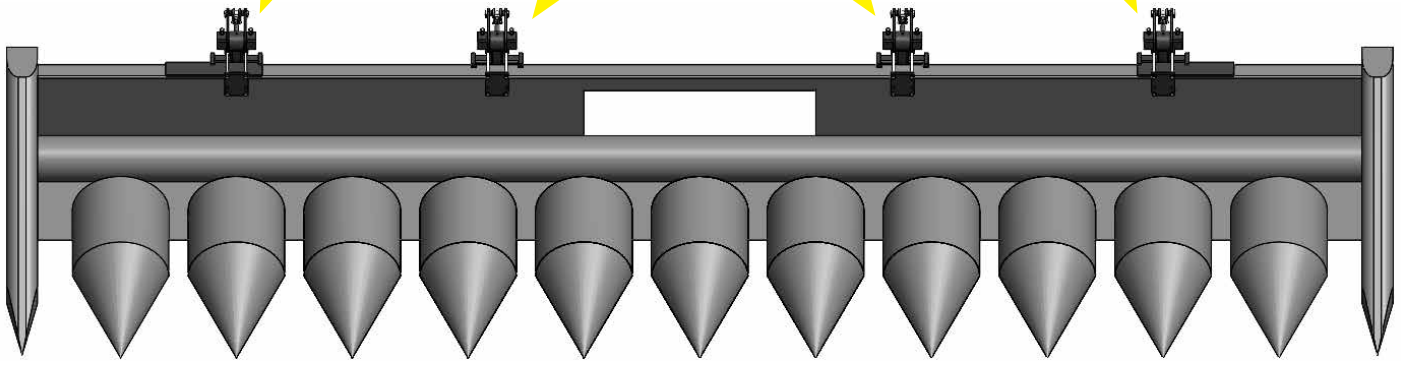
2.1 - Determine location for mount/hinge brackets (Pre-Elite Series).

2.1.3 - Shown below is an example of approximate locations of hinges and adapter plates for a 4-Arm Pre-Elite Series head.

Hinge Assembly (427210)
Adapter (HCR30058)

Hinge Assembly (427214)

Hinge Assembly (427210)
Adaptor (HCR30059)



NOTE: Location of all components are recommended for structural integrity and weight distribution of the reel, slight variations to position can be made to adapt to any differences you may encounter on your specific corn head.

NOTE: Head shown is for representation only for part placement.

(2) - Mount/Hinge installation - Pre-Elite

2.3 - Mark mount/hinge bolt locations for drilling

2.2.1 - Set Adapter Plate on top of one end of the center tube. Putting two 5/8 bolts in the mount plate, rest the bolts on top of the frame at your previously measure locations for the inner and outer mounts/hinges, mark out the holes closest to the bottom of your top tube frame for drilling. Repeat for other side.

2.3.2 - For heads with 4 Hinges, determine locations for inner hinges along the inner part of the main top tube, near the feeder house, and repeat same procedure, without adapter plates.

2.3.2 - Using 5/8" Drill bit, drill through marked hole locations for mounting.

NOTE: Make sure there are no items in the way of the holes before marking and drilling. Only two holes required for each mount.

(2) - Mount/Hinge installation - Pre-Elite

2.3 - Mount the hinges to the frame.

***Backside of cornhead shown**

2.3.1 – Safely lift the mounts/hinges into place at pre-drilled locations, and lower mount to rest on top of frame on the top support tabs.

2.3.2 – Install top two 5/8"-11 X 11" bolts, securing with 5/8" Lock Washer (413510) and 5/8"-11 Nut (412060) through hinge and mounting plates.

2.3.3 – Install bottom two 5/8"-11 X 11"bolts and securing with 5/8" Lock Washer (413510) and 5/8"-11 Nut (412060) through drilled holes and mounting plates.

2.3.4 – Tighten all hardware with a pair of 15/16" wrenches and/or 15/16" socket.

2.3.5 – Repeat process for all mounts/hinges.

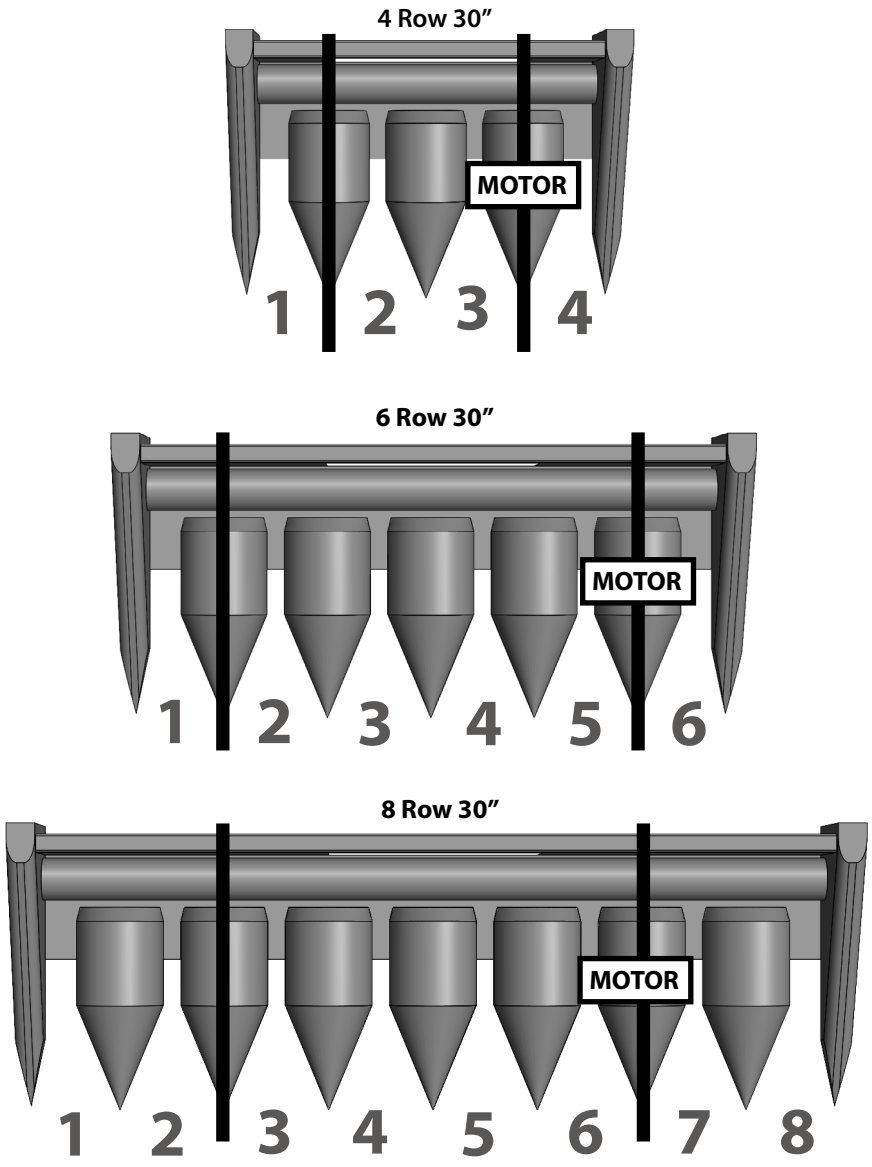
NOTE: Keep mount/hinge in lifting restraints until fully secured on the header.

⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Pre-Elite

3.1 - Decide arm layout locations for your head model.



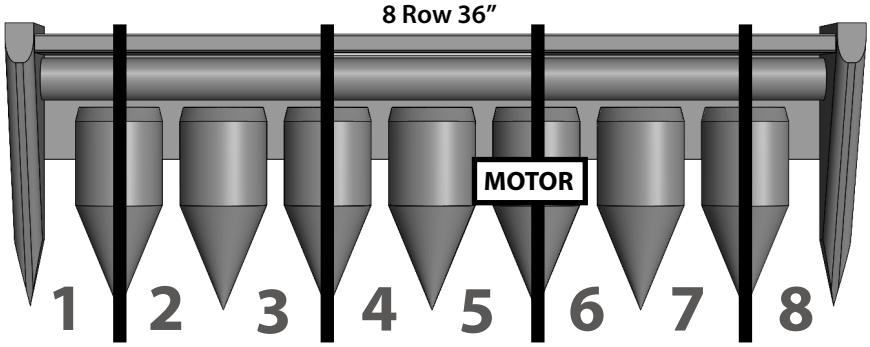
3.1 - Decide arm layout locations for your head model

3.1.1 - Determine arm location based on head size from images above before moving to install step. **Note: Arm with motor/chain box must be placed in a location that allows the center paddle tube to be driven. The reel CANNOT be driven on extension tube.**

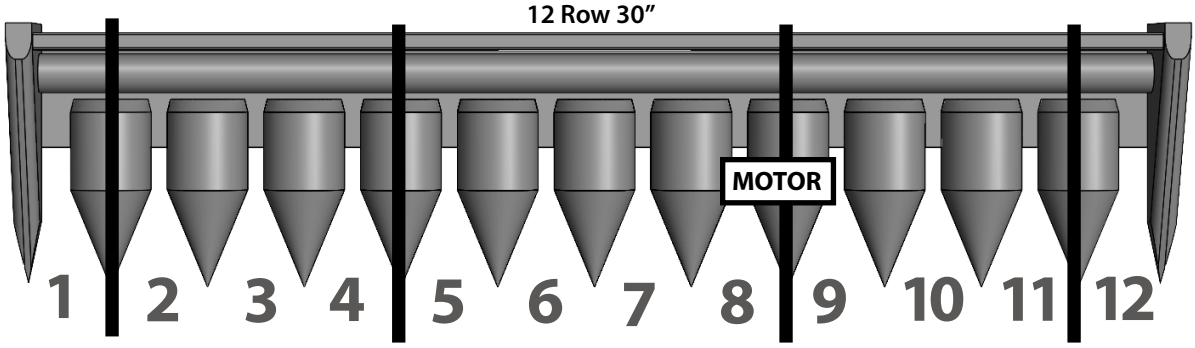
(3) - Lift Tube and Arm installation - Pre-Elite

3.1 - Decide arm layout locations for your head model

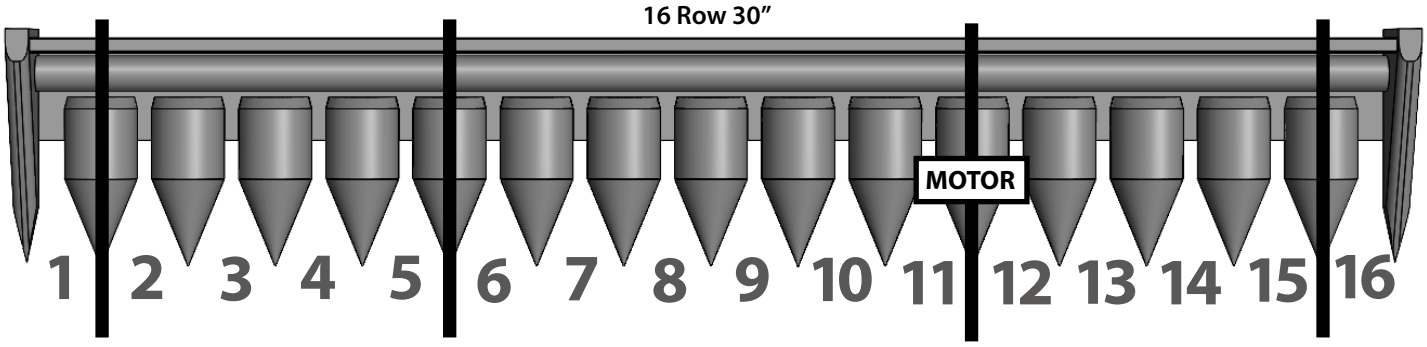
8 Row 36”



12 Row 30”



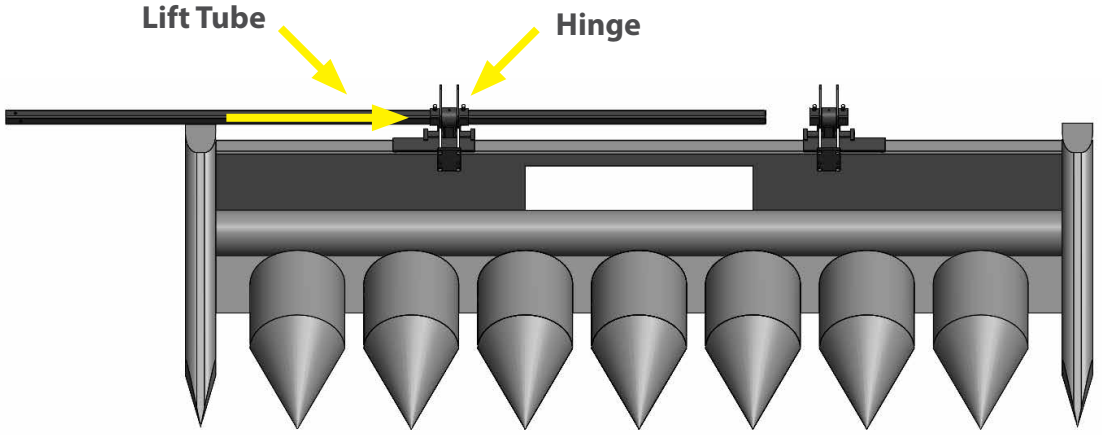
16 Row 30”



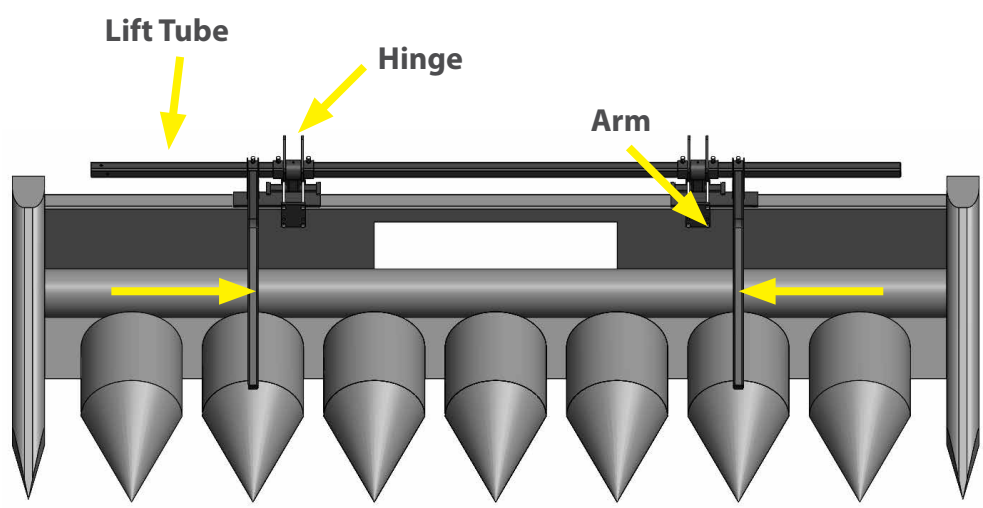
3.1.1 - Determine arm location based on head size from images above before moving to install step. **Note: Arm with motor/chain box must be placed in a location that allows the center paddle tube to be driven. The reel CANNOT be driven on extension tube.**

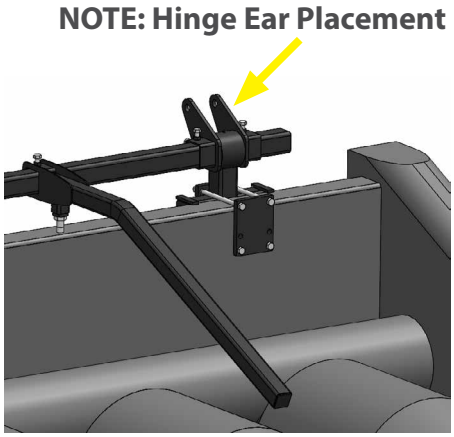
(3) - Lift Tube and Arm installation - Two arm set-up - Pre-Elite

3.2 - Install lift tube and arms in hinges for PRE-ELITE 2-arm setup. (8 Row 30" and smaller)



3.2.1 - With a person at each end of the 3" square tube, begin inserting the tube through the outer hinge on either side of the head, stopping at least 1 foot before reaching the next. **If your reel install requires Arms between the hinges, slide Arms onto lift tube now.**





3.2.2 - If your reel requires arms to be placed outside of hinges, slide lift tube through second hinge then slide arms over each end of the tube, toward the hinges.

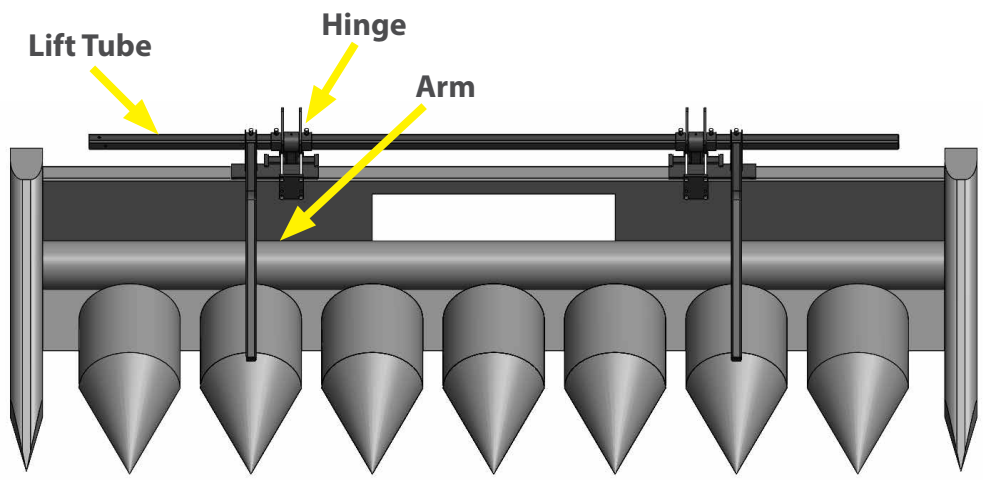
NOTE: Hinge ears must be aligned up and toward rear of head for proper fitment with lift cylinders.

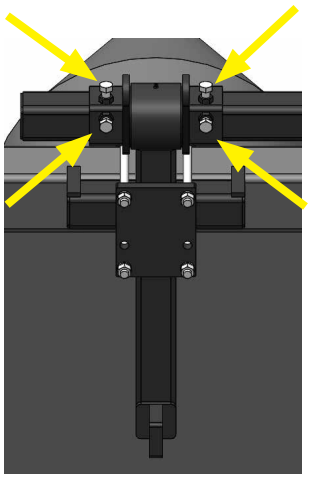
⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Two arm set-up - Pre-Elite

3.2 -Install lift tube and arms in hinges for PRE-ELITE 2 arm setup. (8 Row 30" and smaller)





3.2.3 - Center the rear tube with the head of the machine. Tighten set bolts in hinges to secure the 3" square tube.

3.2.4 - Once the square tube is centered, move the lift arms to the predetermined location in step 3.1.1. Leave arm set bolts loose to aid in further installation.

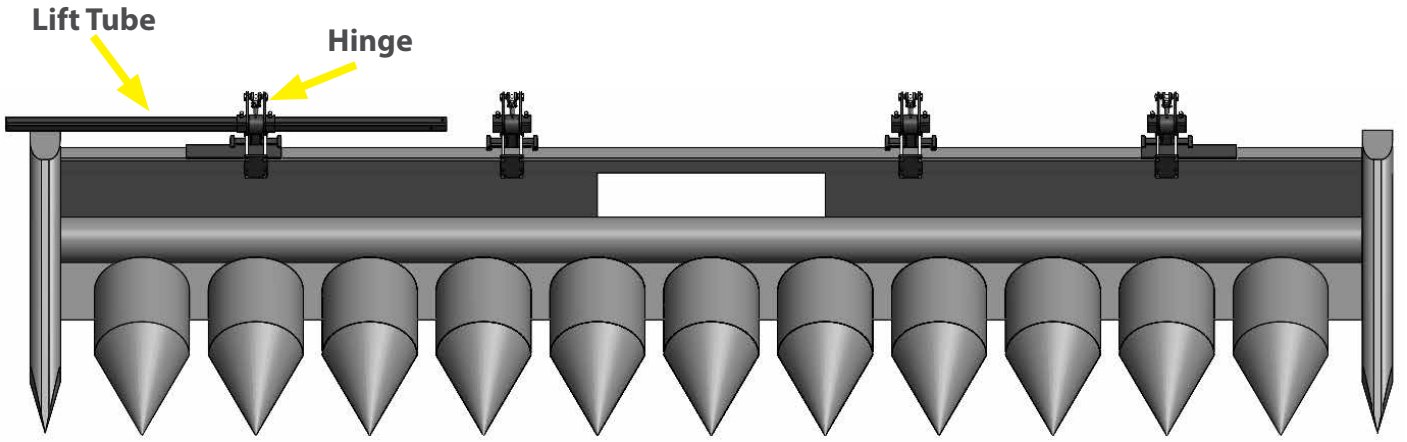
⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

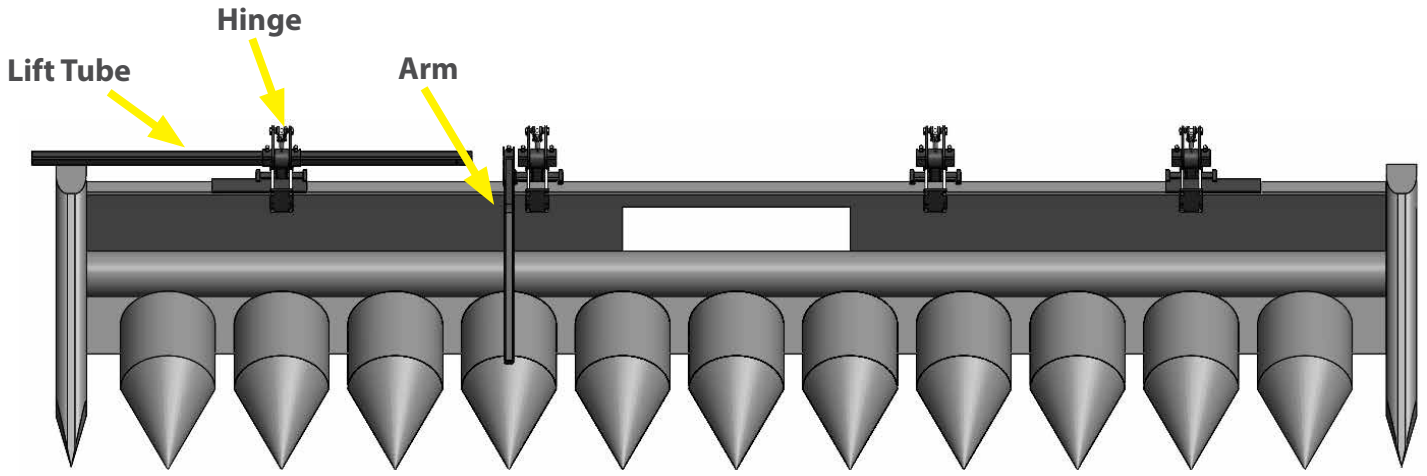
(3) - Lift Tube and Arm installation - Four arm set-up - Pre-Elite

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)

3.3.1 - With a person at each end of the 3" square tube, begin inserting the tube through the outer right hinge, stopping at least 1 foot before reaching the next if your layout requires an arm to be placed between the hinges.



3.3.2 - Slide 1st arm over the square tube, and towards the first hinge.



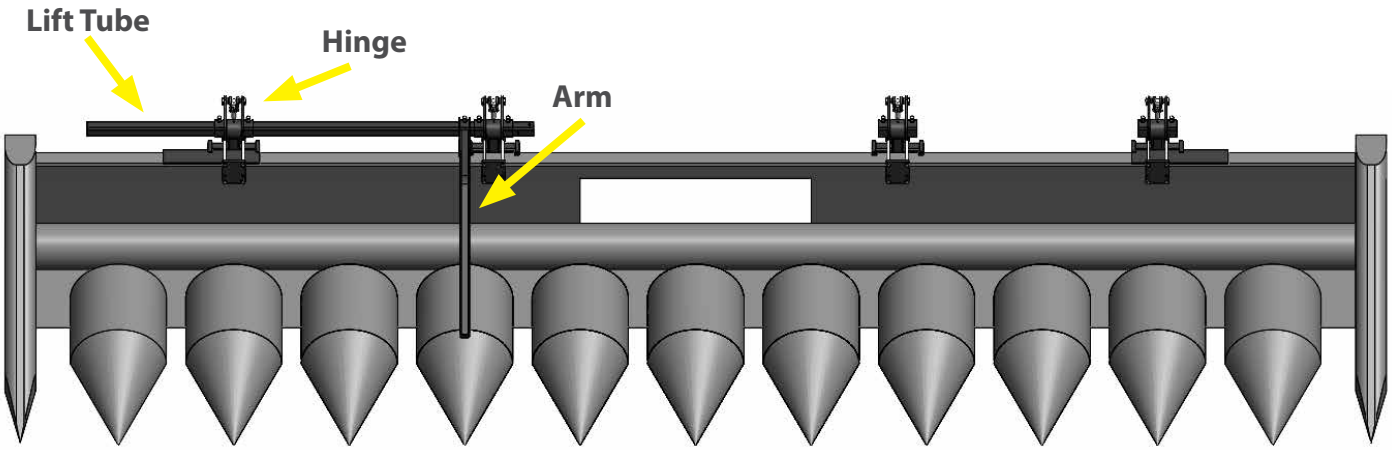
⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

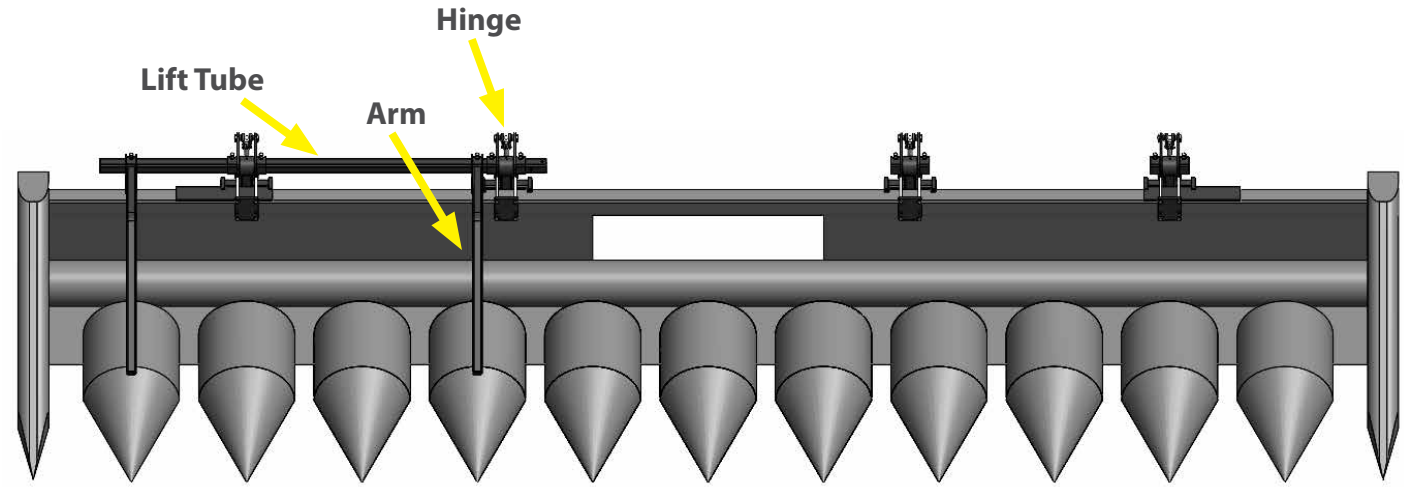
(3) - Lift Tube and Arm installation - Four arm set-up - Pre-Elite

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)

3.3.3 - With first arm installed, slide the square tube through the next hinge towards the center of the machine.



3.3.4 - Slide 2nd arm over the square tube, and towards the hinge.



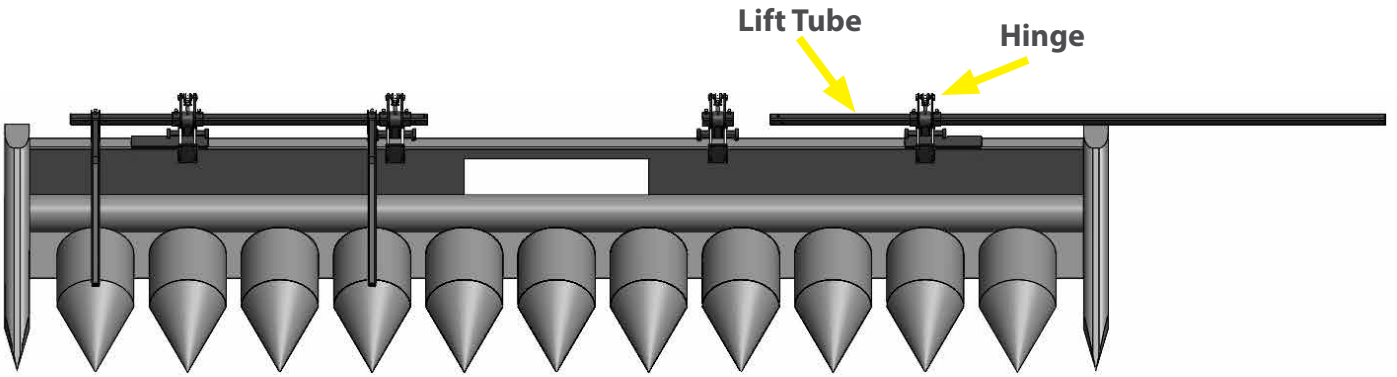
⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

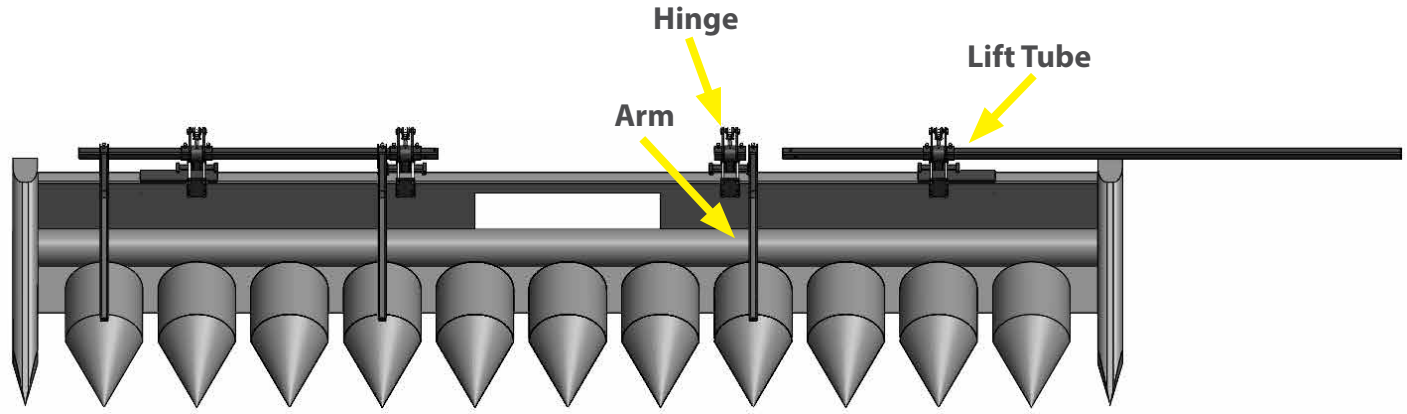
(3) - Lift Tube and Arm installation - Four arm set-up - Pre-Elite

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)

3.3.5 - Repeat the process, at the opposite side of the head. With a person at each end of the 3" square tube, begin inserting the tube through the outer left hinge, stopping at least 1 foot before reaching the next.



3.3.6 - Slide 1st arm over the square tube, and towards the first hinge.



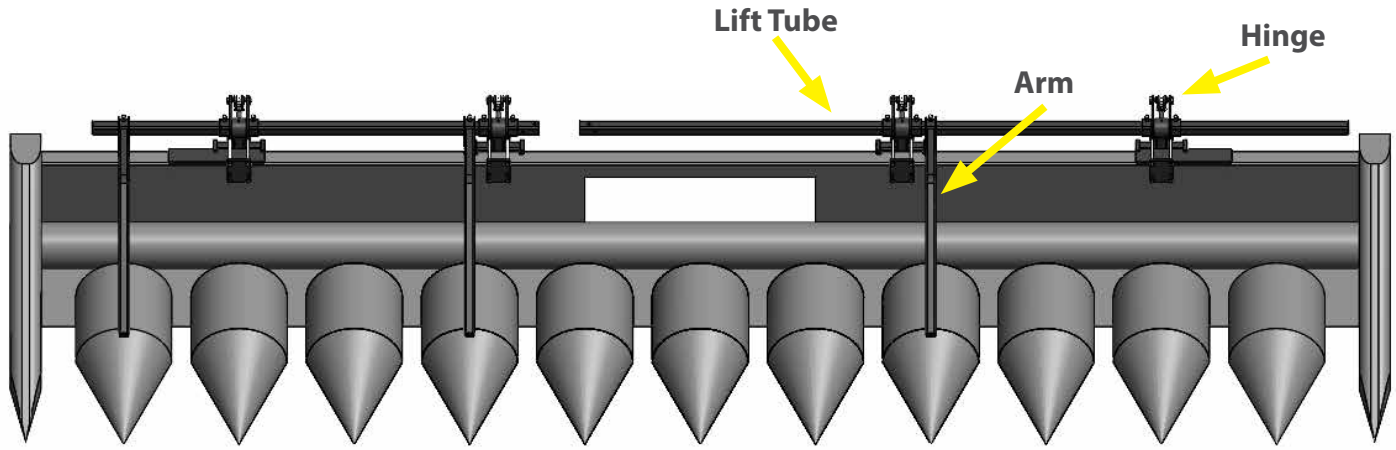
⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

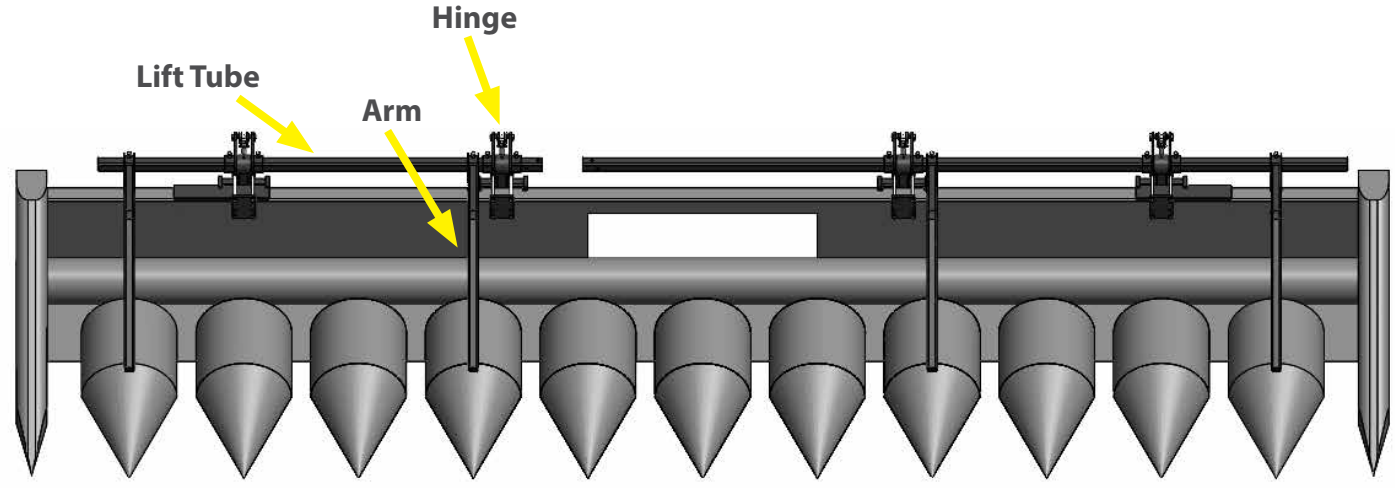
(3) - Lift Tube and Arm installation - Four arm set-up - Pre-Elite

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)

3.3.7 - With first arm installed, slide the square tube through the next hinge towards the center of the machine.



3.3.8 - Slide 2nd arm over the square tube, and towards the hinge. If installing on a model with a center stabilizer, slide on the center stabilizer towards the center of the head. **Refer to Steps 3.2.7 and 3.2.8 to finish installing center stabilizer.**

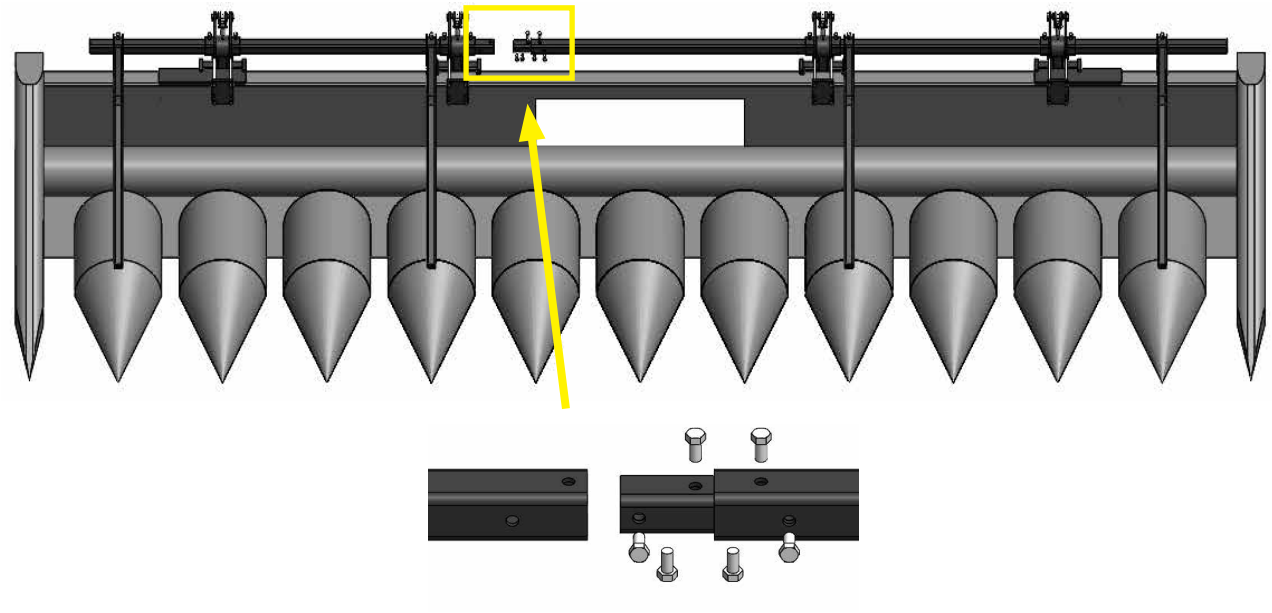


⚠ CAUTION

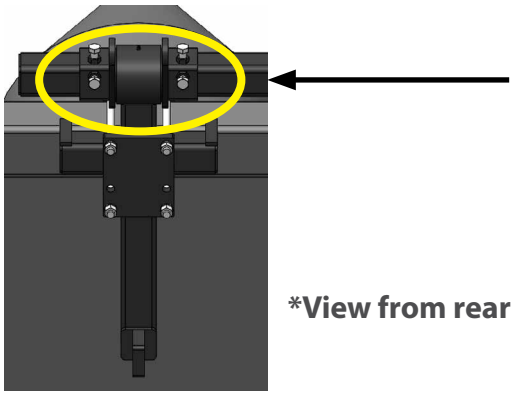
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up - Pre-Elite

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.9 - Slide square tubes together and install square tube splice using six (6) **5/8" X 1 ¼" Bolts**. Tighten Bolts with 15/16" wrench. Center the Rear Tube on corn head.



***View from rear of head**

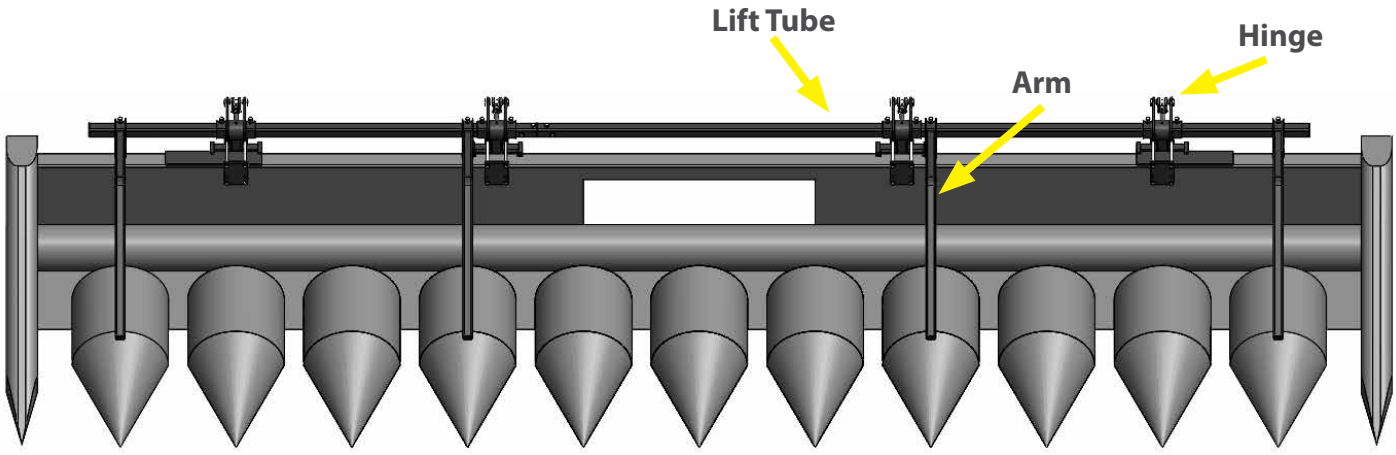
3.3.10 - Tighten set bolts with a 15/16" wrench to secure the 3" square tube. There is no need to over-tighten these set bolts.

⚠ CAUTION

Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(3) - Lift Tube and Arm installation - Four arm set-up - Pre-Elite

3.3 - Install lift tube and arms in hinges for four (4) arm setup. (8 Row 36" and larger)



3.3.11 - Once the square tube is centered, move the lift arms to the predetermined location in step 3.1.1. Leave arm set bolts loose to aid in further installation.

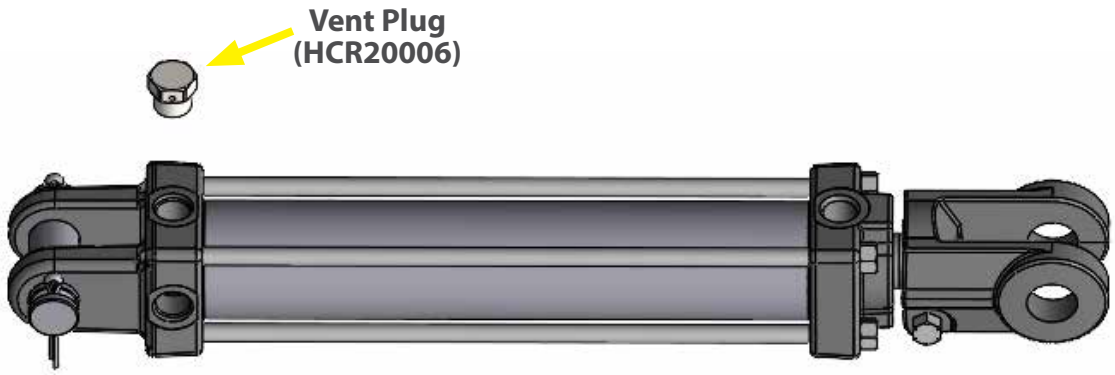
NOTE: Location of all components are recommended for structural integrity and weight distribution of the reel, slight variations to position can be made to adapt to any differences you may encounter on your specific corn head.

⚠ CAUTION

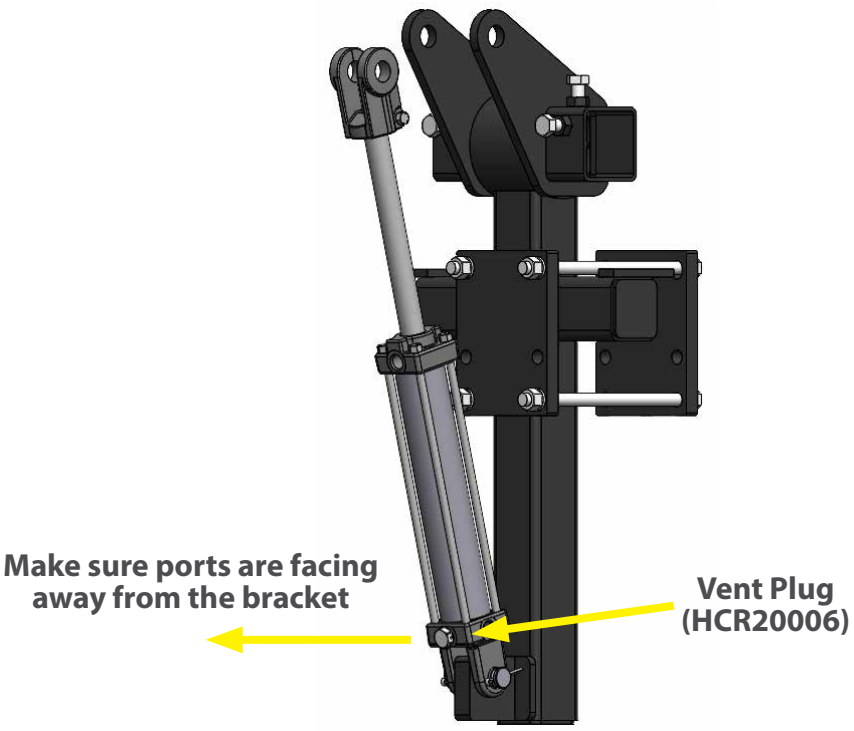
Use safe lifting devices to install the mounts, and DO NOT place any body parts beneath the mounts while installing.

(4) - Lift Cylinder installation - Pre-Elite

4.2 - Attach Cylinder base to bottom of Hinge



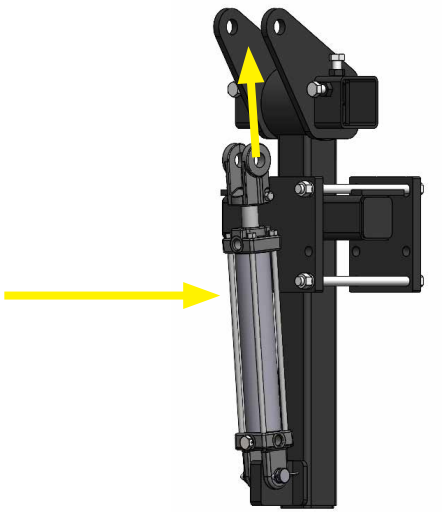
4.2.1 - Install **Vent Plug (HCR20006)** in **Cylinder (HCR20012)** the base port that is adjacent to the rod port using 7/8" wrench.



4.2.2 - Install **Cylinder (HCR20012)** base end using supplied pin and cotter pins to bottom hole on mounting hinge. Make sure that ports are facing towards the rear. Using a pair of pliers, bend cotter pins to secure the pin and base end of cylinder in place.

(4) - Lift Cylinder installation - Pre-Elite

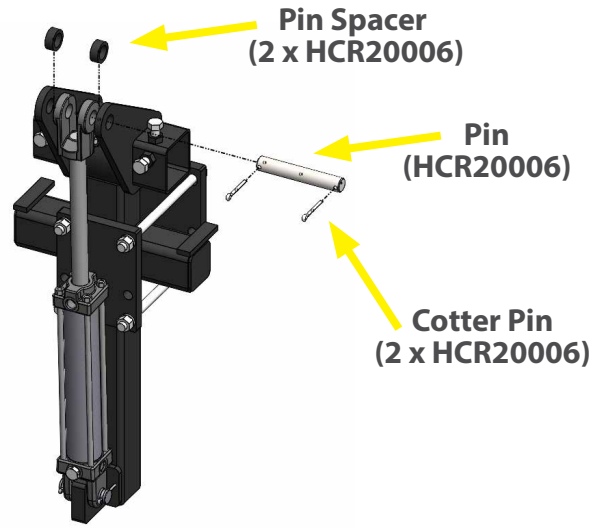
4.2 - Connect top of Cylinder to top of Hinge



4.2.1 - Using wrench, loosen rod end cylinder plug. Before moving cylinder, place a shop rag over fitting to avoid spraying hydraulic fluid. Locate top pin and cotter pins for connecting the rod end of the cylinder.

⚠ CAUTION

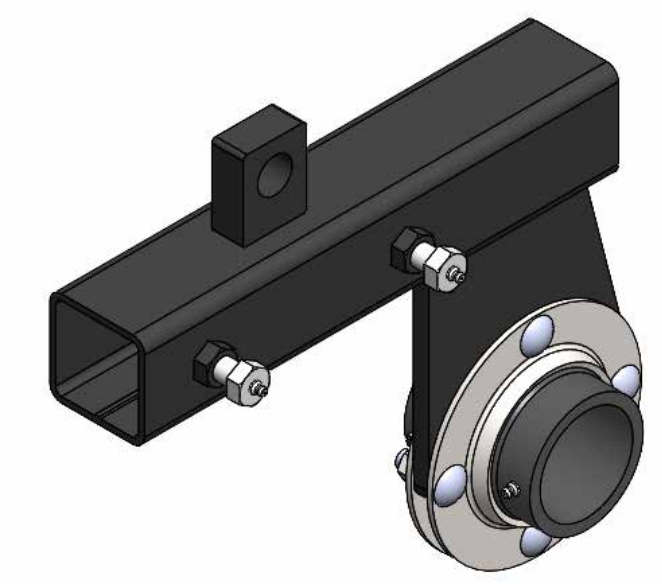
Use caution when extending cylinder as oil will shoot out of the cylinder.



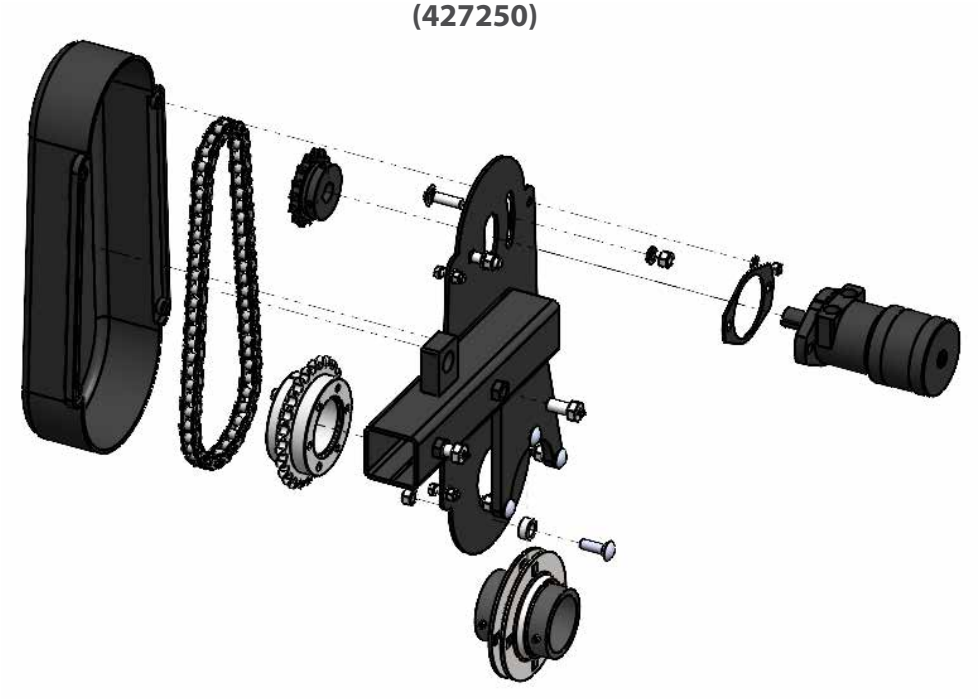
4.2.3 - With rod end plug loosened, cylinder rod should move by hand. Pulling on the rod end clevis, extend the cylinder to line up the top tug and mount hinge hole. Once aligned install the pin and mounting hardware. Once cylinder is pinned, install cotter pins in each end of the pin, and bend using pliers to complete install of the top pin.

4.2.4 - Repeat this step for the rest of the mounting hinge cylinders.

(5) - Reel Hub & Chain Box Assembly - Part Identification



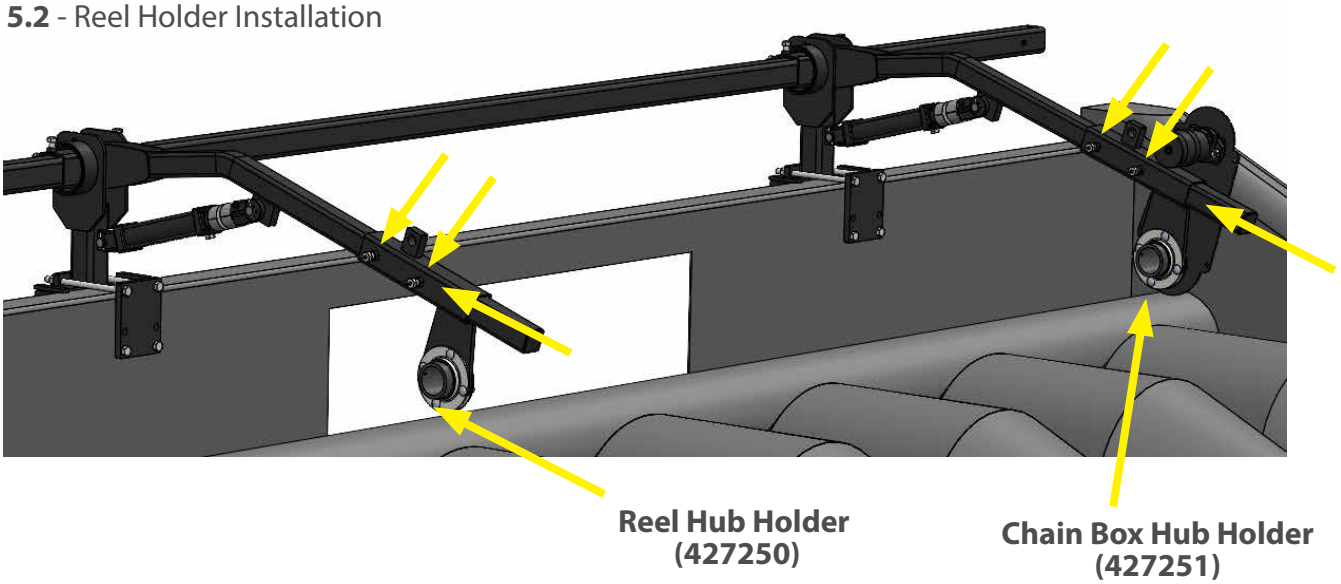
Reel Hub Holder
(427250)



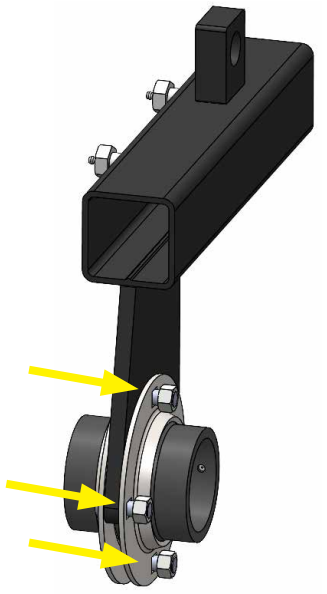
Chain Box Hub Holder
(427251)

(5) - Reel Hub & Chain Box Assembly

5.2 - Reel Holder Installation



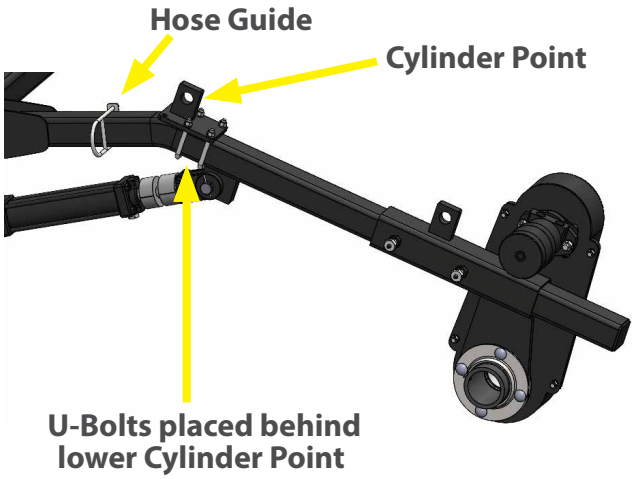
5.2.1 - Slide Reel Holders and Chain Box Assembly onto Arms. Position bearing end of Reel Holder Tube 7" from end of arm for now. Tighten Zerk Bolts on Reel Holders and Chain Box slide tubes to hold in place on Arms while inserting Reel Tube.

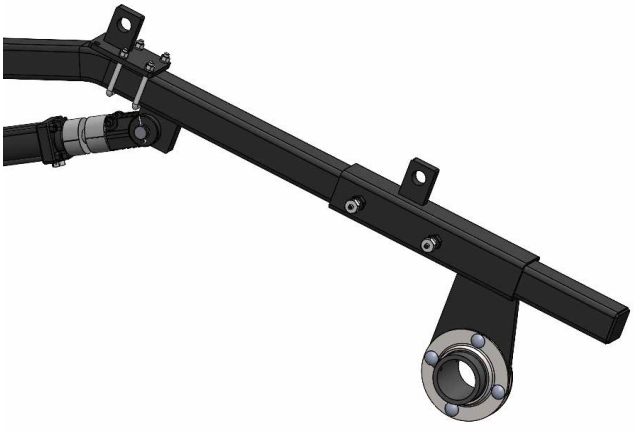


5.2.2 - Make sure that Bearing Flange Carriage Bolts are slightly loose to allow compliance while inserting Reel Tube.

(5) - Reel Hub & Chain Box Assembly

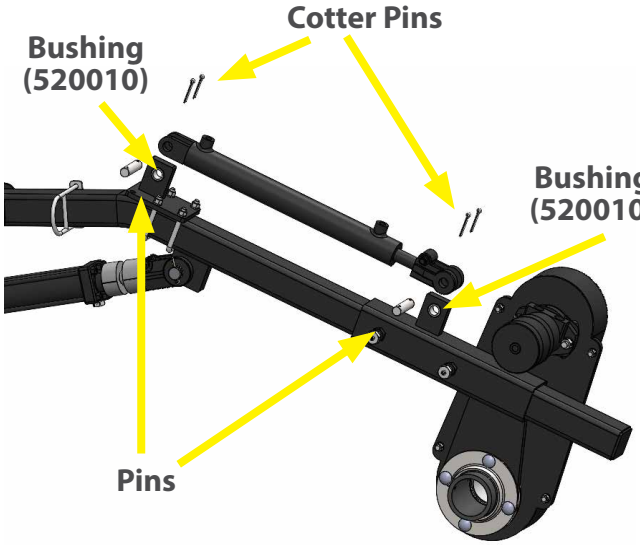
5.3 - Reel Holder Installation





5.3.1 - Install Fore & Aft **Cylinder Point** on arms using included **3/8"-16 X 2-1/2" X 3-1/2" U-Bolts (415111)**, **3/8" Lock Washers (413506)**, and **3/8"-16 Nuts (412056).** Also install the **Hose Guide (HCR30075**) on the Arm with the Chain Box with (2) **5/16" Lock Washers (413505)**, and (2) **5/16"- 18 Nuts (412005)**.

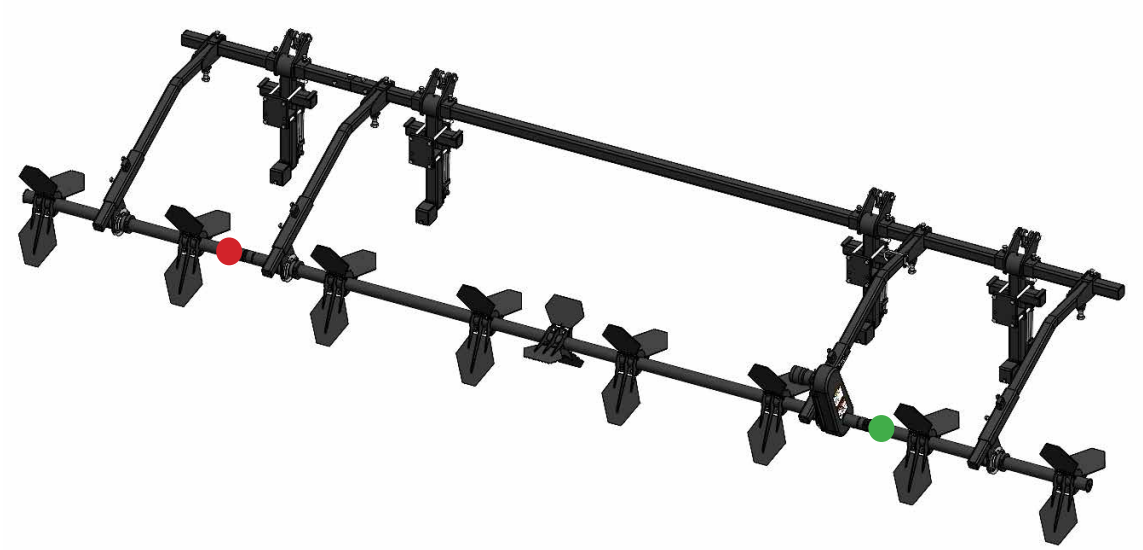
Note: To make cylinder installation easier, leave Cylinder Points loose until after cylinders are pinned in.

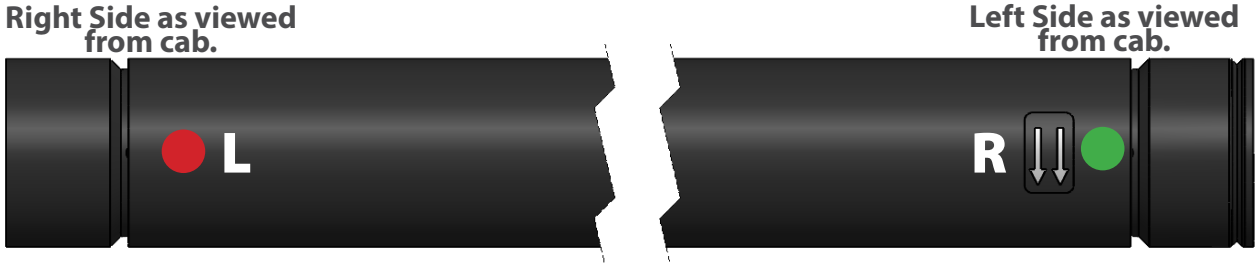


5.3.2 - Install **Fore & Aft Cylinders (476032)** with included pins and secure with hair cotter pins.

(6) - Reel Tube

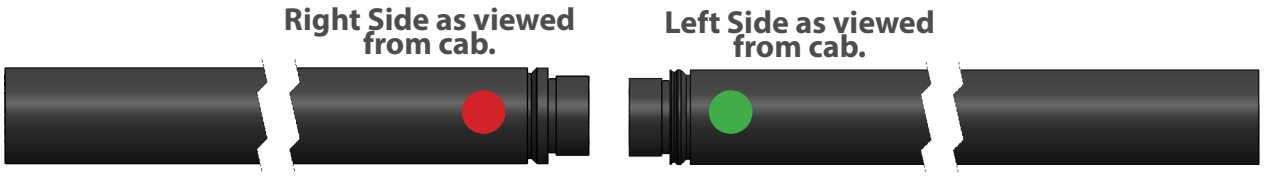
6.1 - Reel Holder Installation





6.1.1 - The Left-Hand side (as viewed from cab of combine) has a GREEN DOT decal and is stamped with an "R" to indicate right-hand threads.

The Right-Hand side (as viewed from cab of combine) has a RED DOT decal and is stamped with an "L" to indicate left-hand threads.

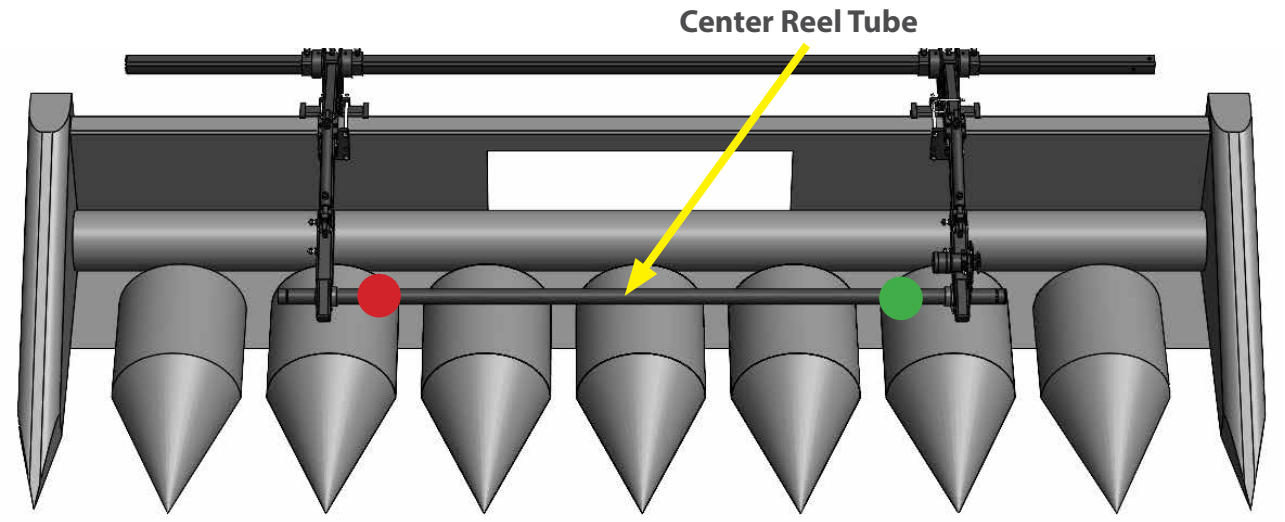


6.1.2 - The Reel Tube Extensions have corresponding colored dot decals that match same for same with the Center Reel Tube. (GREEN DOT for Left-Hand side, RED DOT for Right-Hand side)

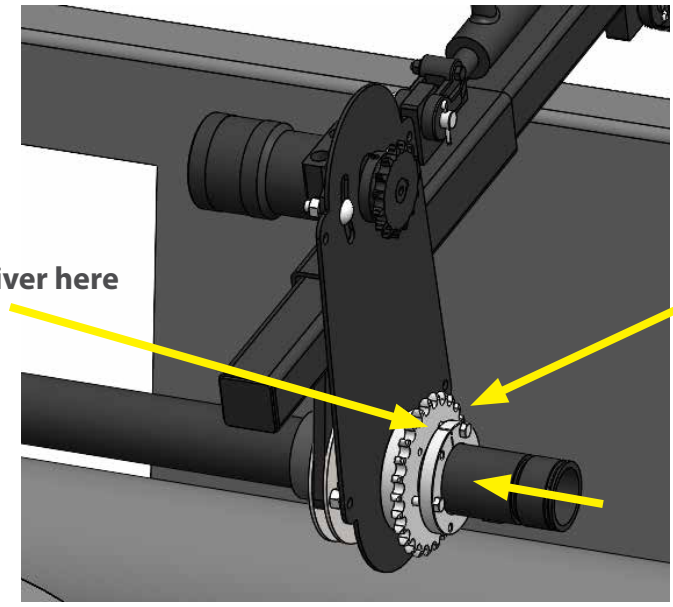
NOTE: Right hand side of machine uses left hand threads. Left hand side of machine uses right hand threads.

(6) - Reel Tube

6.2 - Assemble Center Reel Tube on Reel Hub Holder and Chain Box Hub Holder



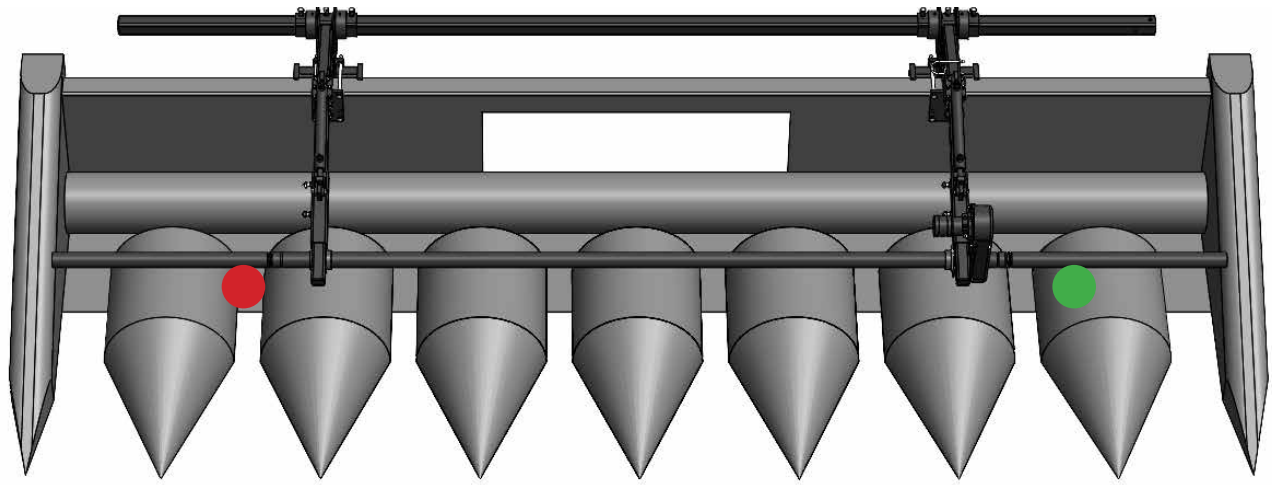
6.2.1 - Slide Center Reel Tube through the poly spherical bearings on the Reel Holders so that the GREEN DOT ends up near the Chain Box Hub Holder. Approximately center the Reel Tube with the head before moving on.



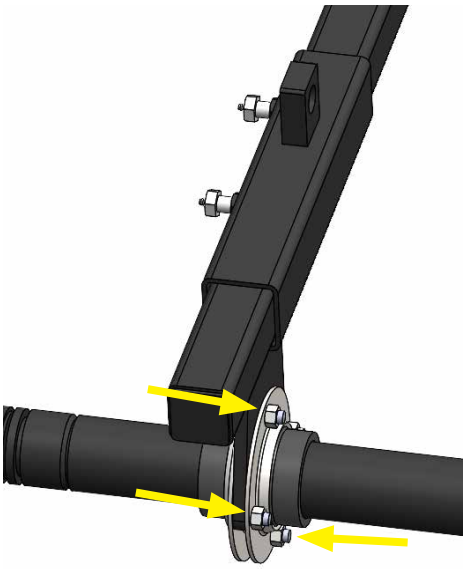
6.2.2 - Install Tapered Hub Assembly onto the Center Reel Tube on the outboard side of the Chain Box Hub Holder using a flat screwdriver to spread the tapered ring so it will slide over the end of the tube. Leave wedge bolts loose for now. The Chain Box Cover should be slid over the Center Reel Tube at this time and bolted on loosely, leaving the installation of the chain until after Reel Tube Extensions and paddles are installed.

(6) - Reel Tube

6.3 - Attach Reel Tube Extensions to Center Reel Tube



6.3.1 - Install Reel tube extensions, matching GREEN DOT ends together and RED DOT ends together, using a pair of large pipe wrenches (or similar) to tighten. A gap may remain between the rims on the threaded couplers when tight, this is normal.

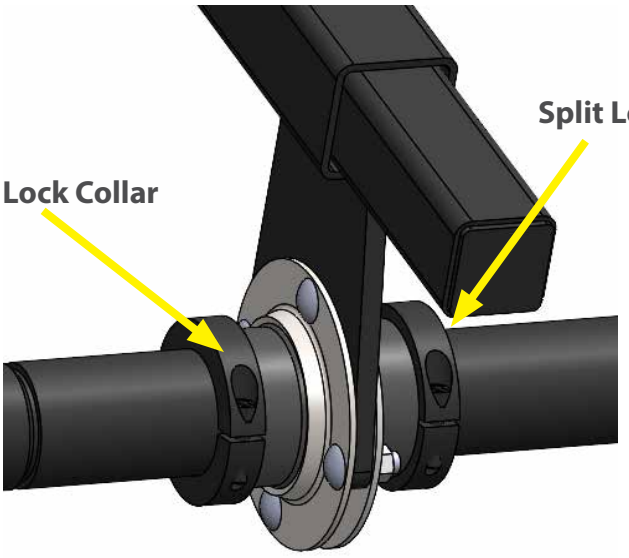


6.3.2 - Using 3/4" wrench, tighten the carriage bolts on the Bearing flanges. Be sure to position the grease zerks on each Spherical Bearing towards the back of the Corn Head. Take care not to over-tighten the bottom bolt. The bolt only needs to be tight enough to keep the Spherical Bearing from turning in the flange.

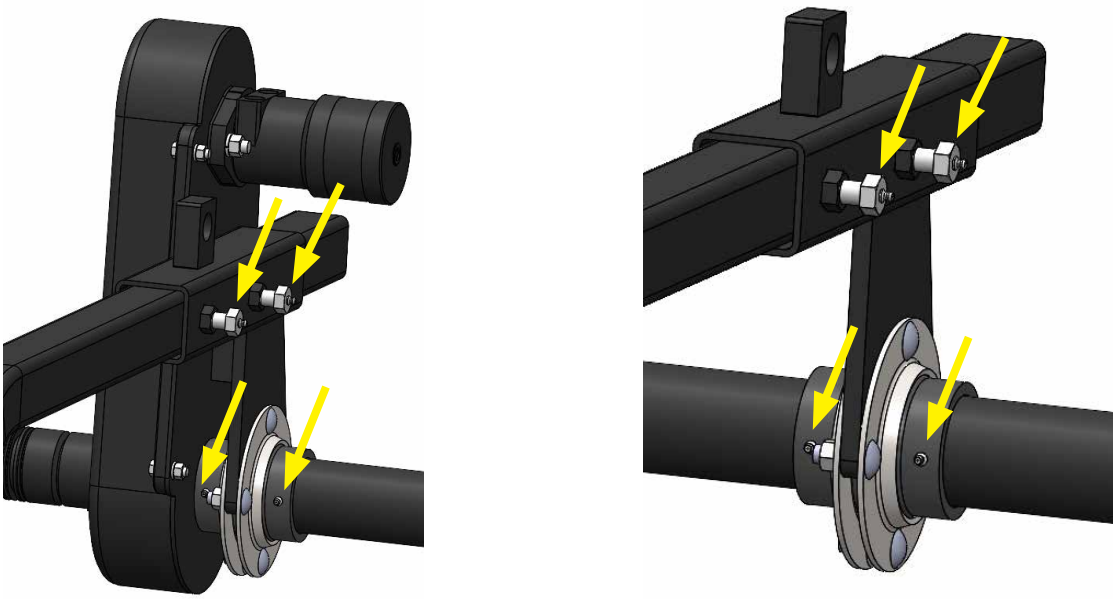
Note: Re-check the tightness of these bolts periodically over the first several days of use.

(6) - Reel Tube

6.3 - Finish Reel Tube Installation

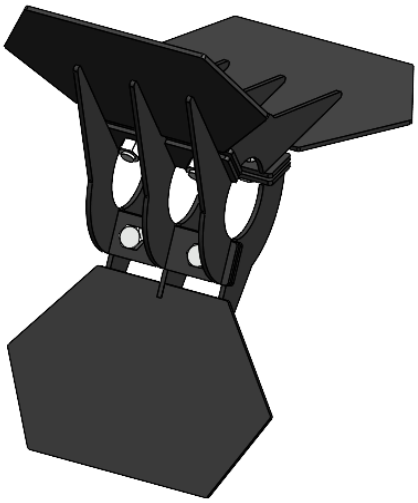


6.3.3 -Center the Reel Tube Assembly on the Corn Head and install Split Lock Collars flush against each side of Bearings, tighten with 5/16" Allen wrench.

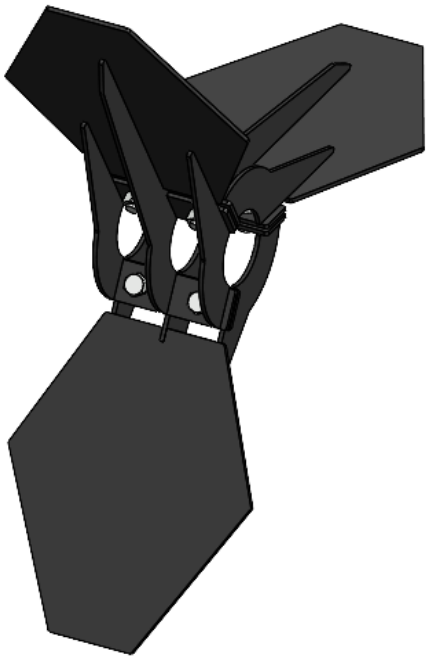


6.3.4 - Grease Reel Holder Zerk Bolts and Bearings liberally. The Reel Tube should turn freely. If Reel Tube does not turn freely, check that the Reel Tube is level with the Corn Head and that the Reel Hub Holders are aligned evenly on the Arms.

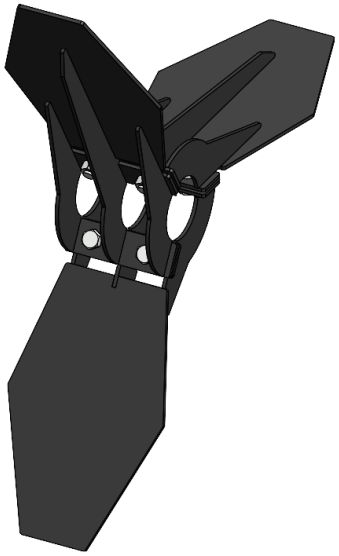
(7) - Paddles Identification



Center Paddle
(427201)



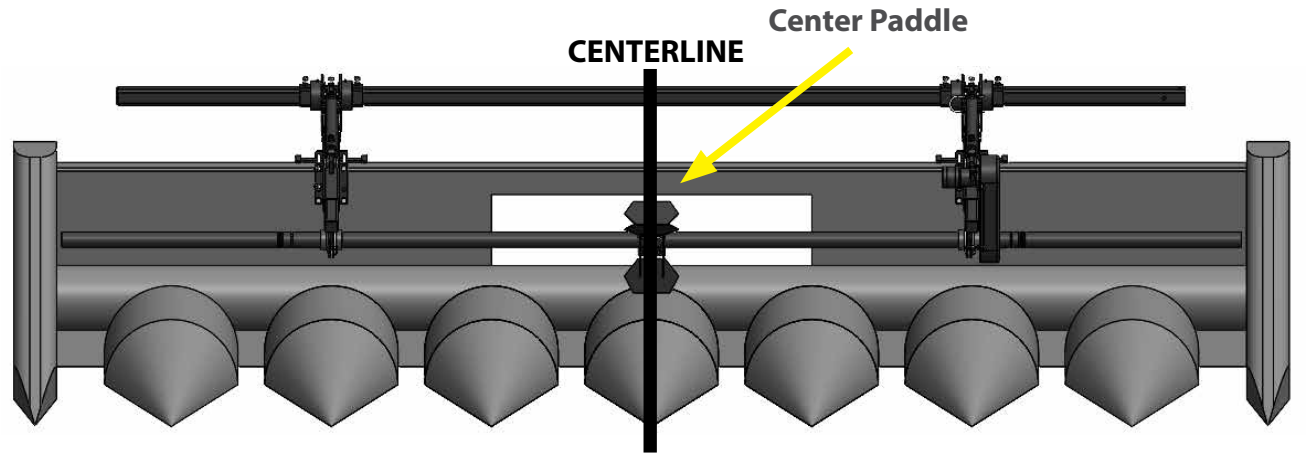
30" Row Paddle
(427200)



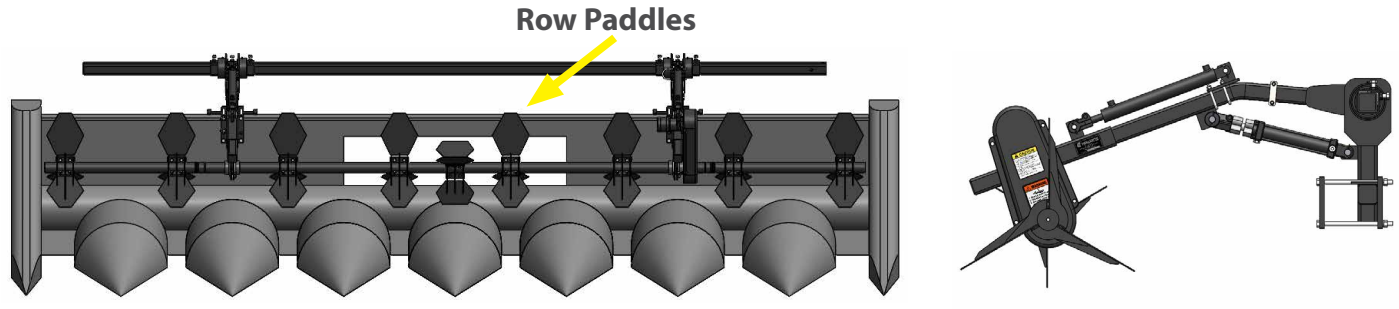
20" Row Paddle
(427202)

(7) - Paddle Installation

7.2 - Install Center Paddle on Center Reel Tube



7.2.1 - Install **Center Paddle (427201)** in center of the head using **(6) 1/2" X 1" Bolts** and **(6) 1/2" Center Lock Nuts**.



7.2.2 - Install **Row Paddles (427200)** centered between snouts using (6) 1/2" X 1 Bolts and (6) 1/2" Center Lock Nuts on each row.

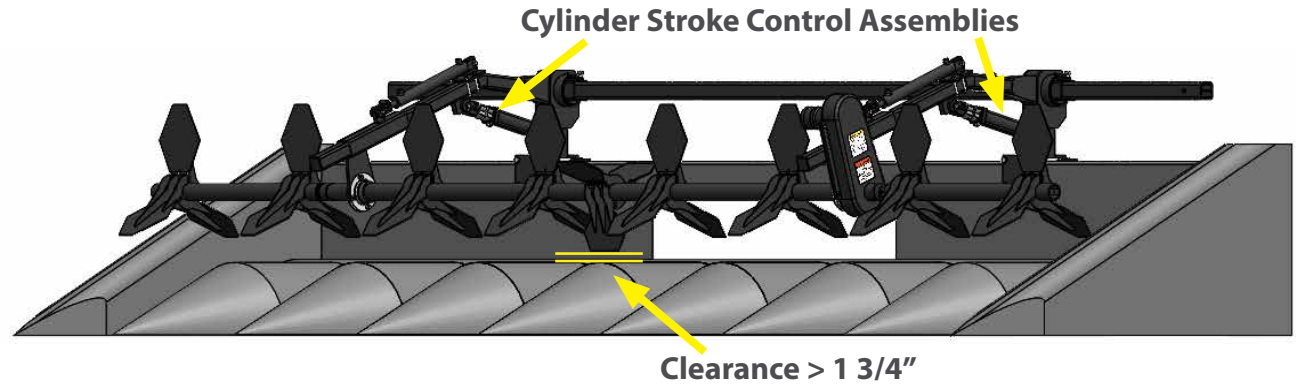
Note: Row Paddles should be offset 1/6 of a turn from the Center Paddle for improved flow into the feeder house.

Note: If on narrow rows, 20" Paddles (427202) go on either of the chain box.

Note: Leave off the paddle by the chain box to make drive chain installation easier.

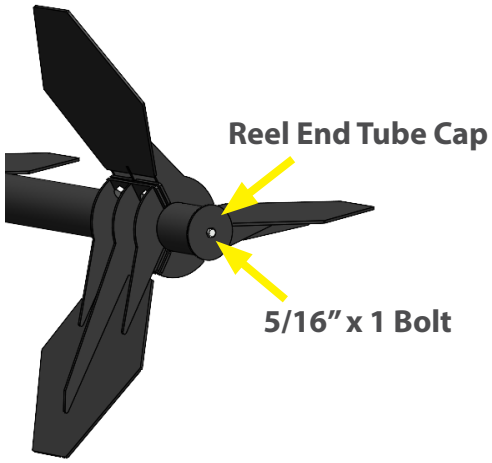
(7) - Paddle Installation

7.3 - Install Paddles



7.3.1 - Once Paddles are installed, set reel height using Cylinder Stroke Control Assemblies so the Center Paddle clears the center island by at least 1 ¾“. Keep in mind that this distance will change as Reel is moved fore and aft on Arms.

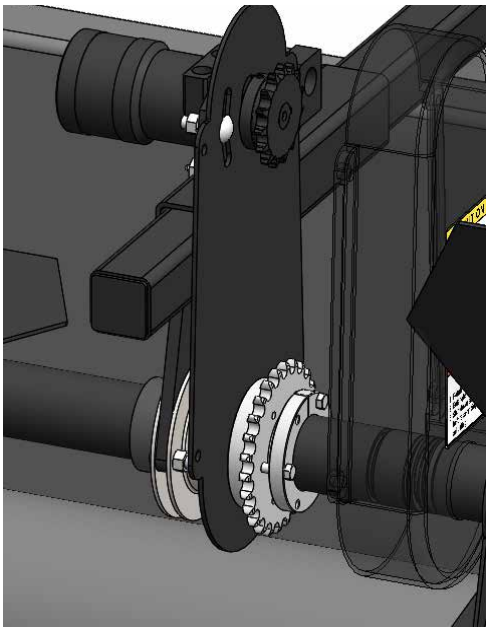
7.4 - Install Reel Tube End Caps



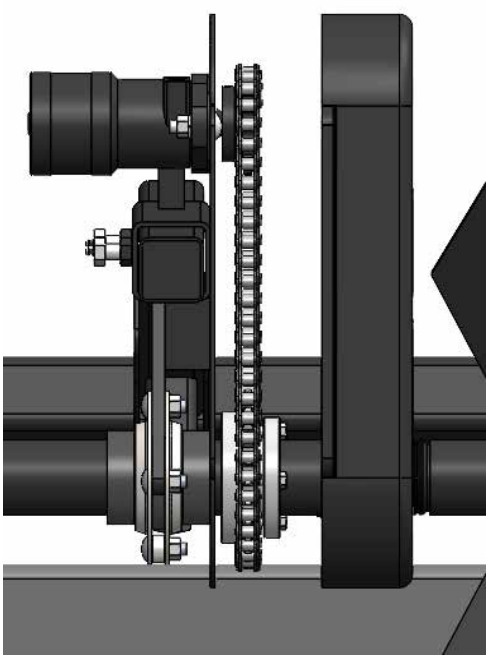
7.4.1 - Affix **Reel Tube End Caps (HCR30024)** to each end of Reel Tube using **5/16” X 1 Bolts (411484).**

(8) - Chain

8.1 - Install chain



8.1.1 - Finish placing Tapered Hub sprocket in line with drive sprocket on motor. Tighten pinch bolts.

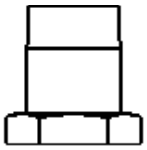


8.1.2 - Install chain and tighten until snug with 1/4"-1/2" of play.

HYDRAULIC FITTING IDENTIFICATION

Hydraulic fitting styles, types and sizes are numerous and at times easily confused. The chart below shows the most common types and sizes of hydraulic fittings for the industry, male ends depicted. This chart is printed at 1 to 1 for ease of identification.

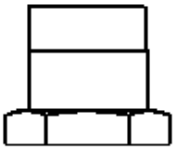
NPTF (National Pipe Taper Fuel) uses tapered threads to create a seal.
ORB (O-Ring Boss) uses an O-ring to seal after threads.
JIC (Joint Industry Council) 37-degree flare sealing surface before threads.
ORFS (O-Ring Face Seal) uses an O-ring to seal before threads.


-4 NPTF


-4 ORB

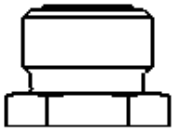

-4 JIC

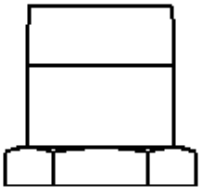

-4 ORFS

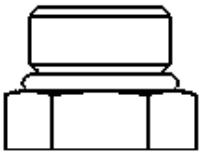

-6 NPTF

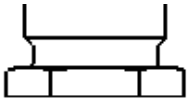

-6 ORB

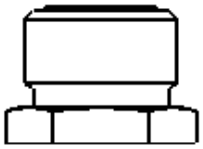

-6 JIC


-6 ORFS

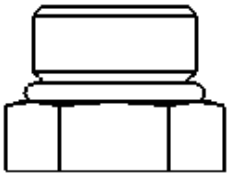

-8 NPTF

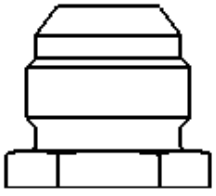

-8 ORB

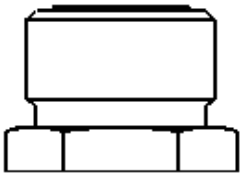

-8 JIC

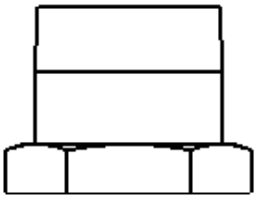

-8 ORFS

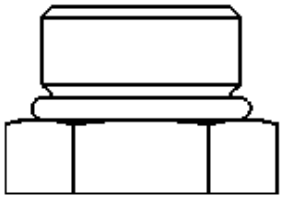
N/A

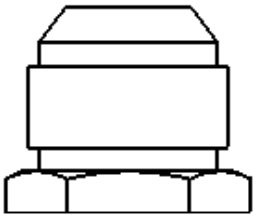

-10 ORB

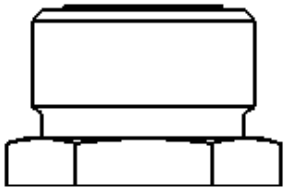

-10 JIC


-10 ORFS


-12 NPTF

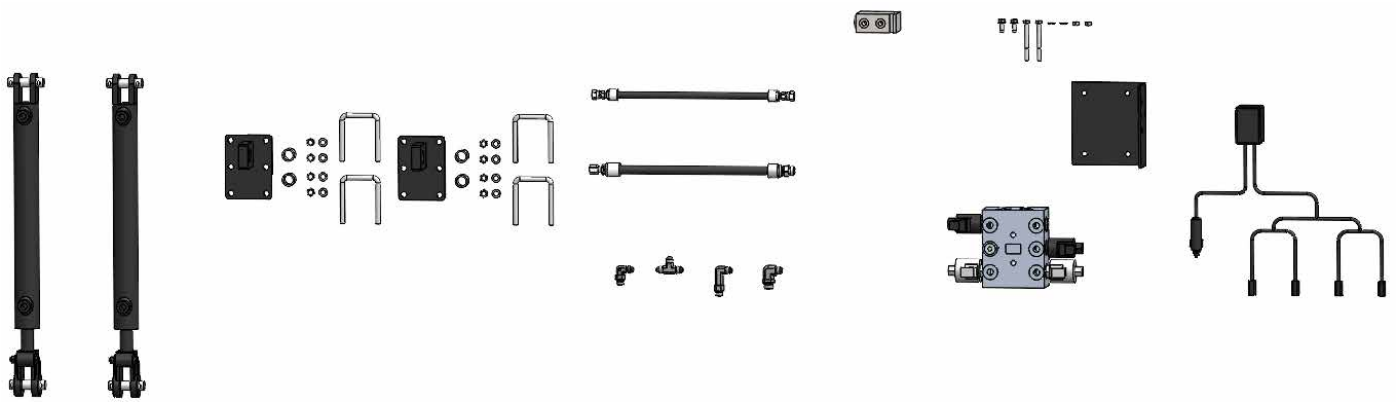

-12 ORB


-12 JIC


-12 ORFS

(1) - Parts Identification

1.1 - 2-Arm Fore & Aft Kit (427702)

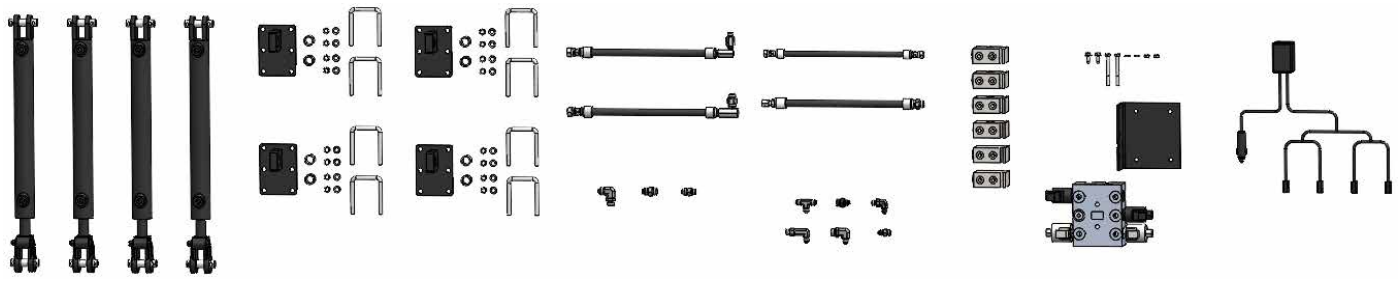


Note: Some reels may require additional hoses and/or fittings to be purchased from your dealer.

Note: Hoses in image are for visual reference only, hose kits will contain various counts and lengths of each hose shown.

(1) - Parts Identification

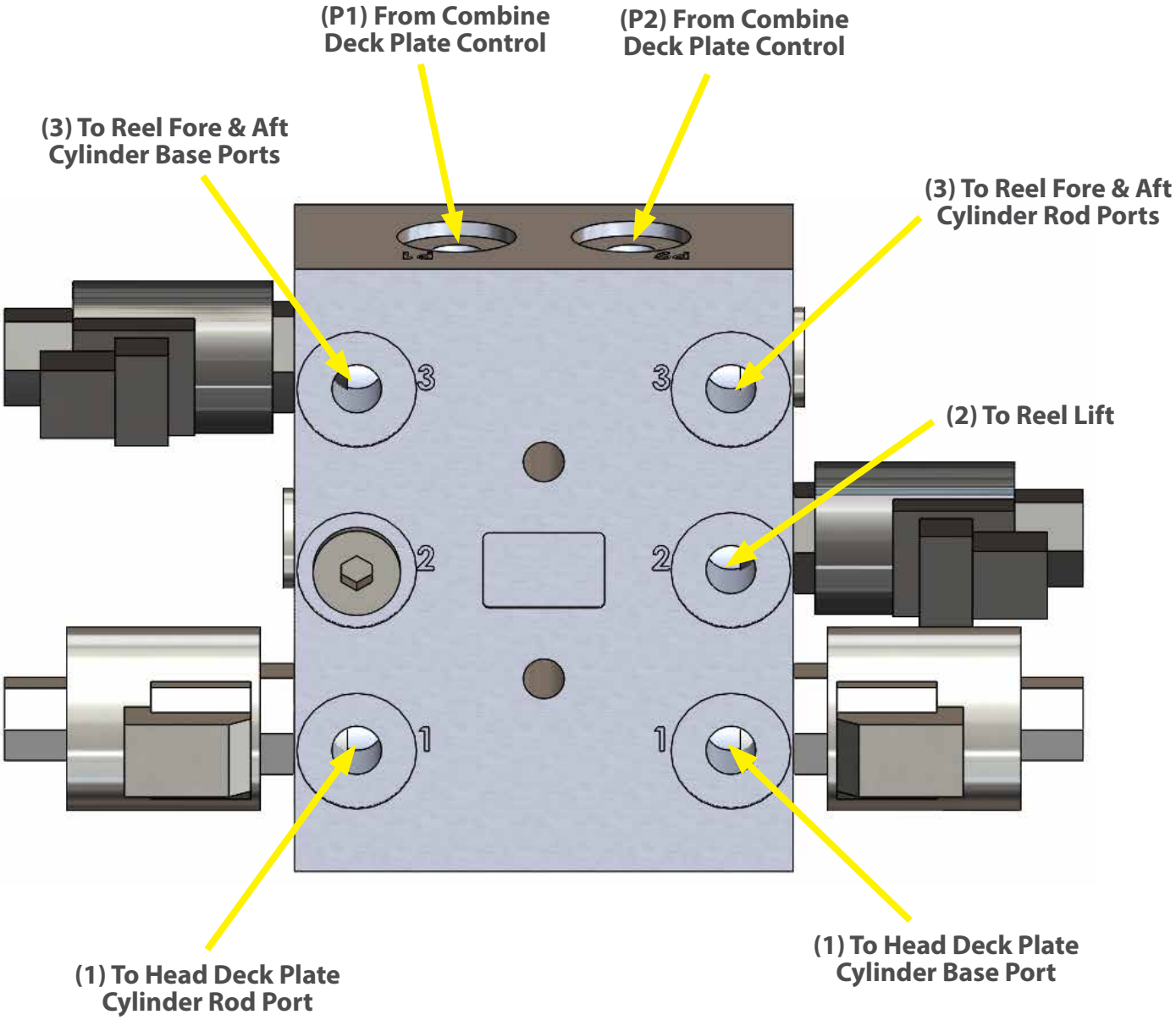
1.2 - 4-Arm Fore & Aft Kit (427701)



Note: Some reels may require additional hoses and/or fittings to be purchased from your dealer.

Note: Hoses in image are for visual reference only, hose kits will contain various counts and lengths of each hose shown.

(2) - General Principles for 3-Position Selector Valve



(2) - General Principles for 3-Position Selector Valve

1. P1 and P2 are the input ports on all of our Selector Valves. These are always receiving the input for functions that are controlled through the Selector Valve.

2. The #1 ports on valve are open when there is no power to valve. They are used to operate the primary function on the corn head, e.g. deck plates or variable speed. This way your Corn Reel could be removed, and normal function would remain by leaving valve mounted but having the cord removed.

3. Some Hose kits provided include the input Hoses for Selector Valves, others will require specific hoses to be made by your dealer. All Selector Valve ports are #8 ORB (some describe as ¾" O ring or #8 SAE)

4. Hose kits will include hoses to connect Corn Reel functions to Selector Valves.

5. The first step for connecting your Selector Valve is determining the input source of controlled hydraulic function, e.g. Fore and Aft Control.

6. Disconnect, if necessary, the hoses on the head side from Single/Multi port connection or other supply source and supply the P1 and/or P2 ports from this source. (The 90 series John Deere will remove lever valves from head and put on hoses that supply the selector).

7. Connect the removed function to #1 port on Selector Valve.

8. Connect the hose that operates the reel lift on the Corn Reel to the #2 port on Selector Valve. (Use the port with the plastic dust plug, not the high-pressure plug.)

9. Connect the Fore and Aft Hoses to the #3 ports.

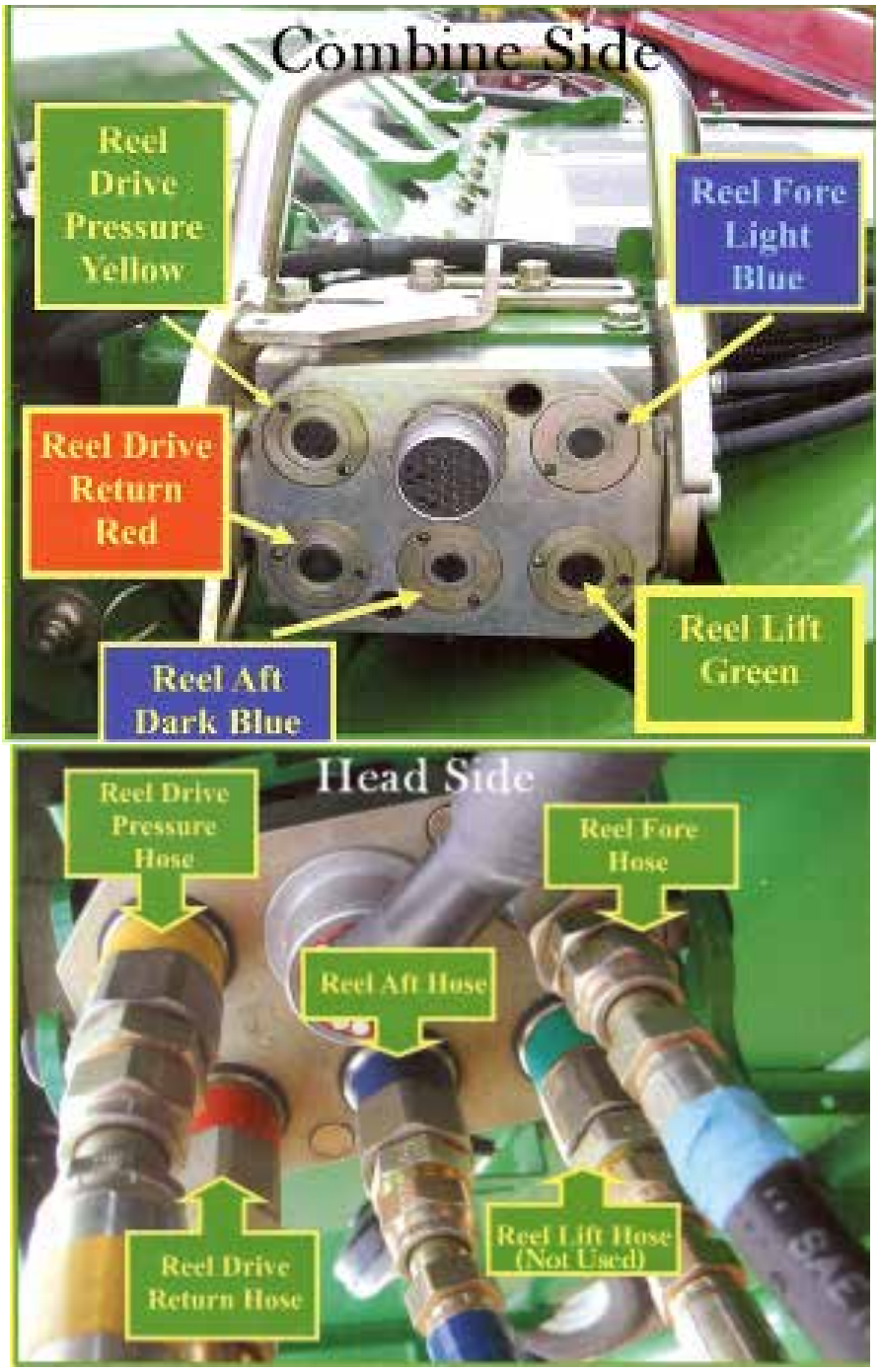
10. When hose assembly is complete, and hoses are secured attach cord set by plugging into same numbered solenoids as are indicated by corresponding port numbers.

11. Route the cord into the cab being sure to leave enough slack to allow full travel of the feeder house raising and lowering.

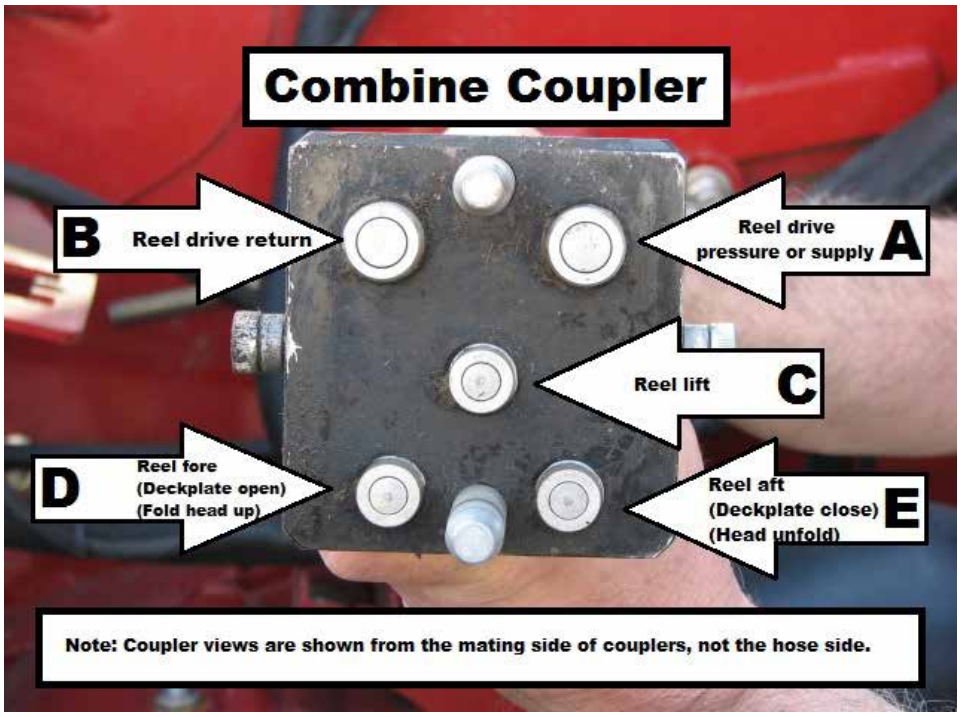
12. The Three Position Cord Switch has an upper on position and lower on position. Center position is off. Each on position has a light to indicate that that position is activated. With cords at the base, when cord switch is forward (or up) the #1 and #2 solenoids are activated. Closing the #1 port and opening the #2 port. When the switch is in the rear (or down) position the #1 and #3 solenoids are activated. Closing #1 port and opening #3 ports. Activated solenoids will be magnetic at the nut on top of solenoid.

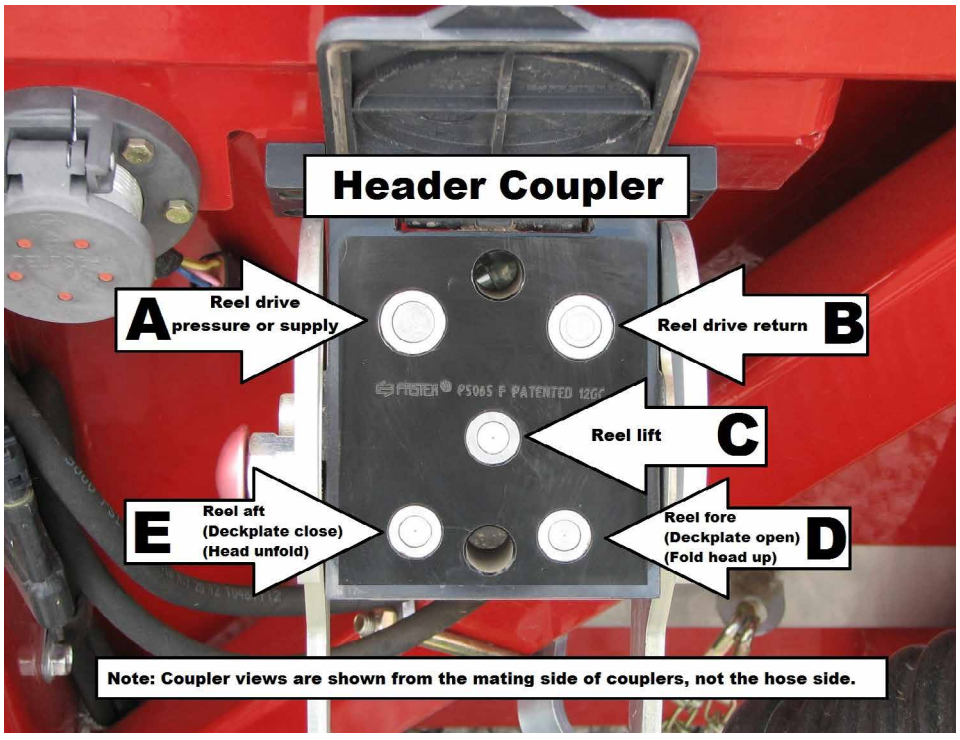
13. For heads with end augers, connect corn reel drive motor in series with end augers. Connecting in parallel could cause reel or end augers to stall.

(3) - Combine Single Point Connectors (John Deere)

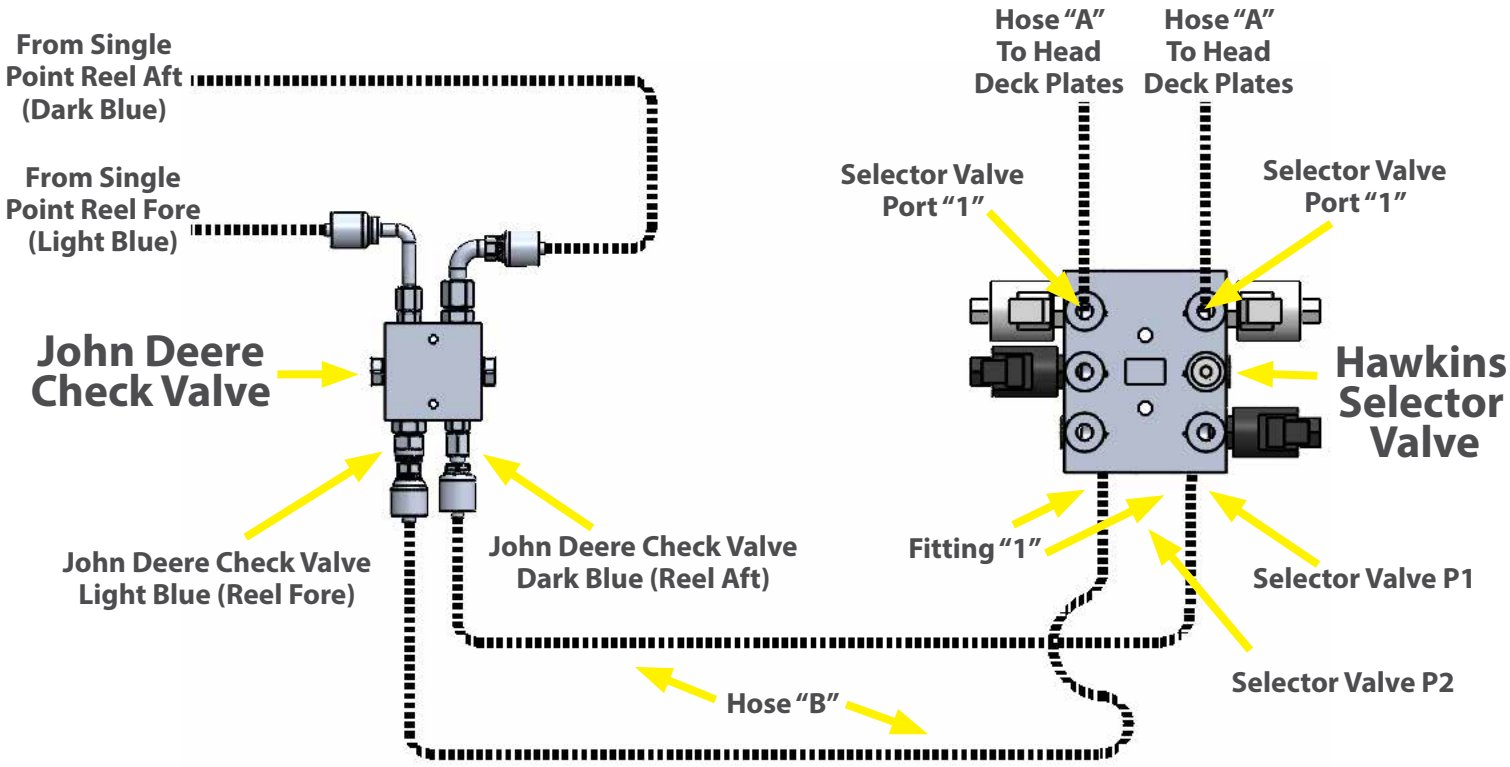


(3) - Combine Single Point Connectors (CASE IH)





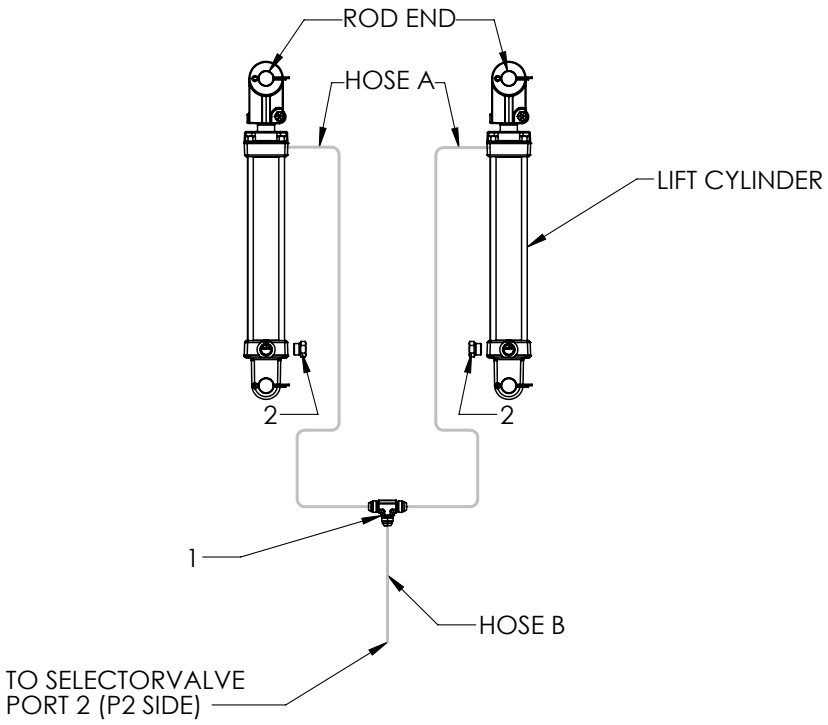
(4) - John Deere 6xxC & 7xxC-Series Heads Serial Numbers 745100+ on S-Series Combine



1. Disconnect hoses from the bottom side (restrictor side) of the John Deere check valve and connect the "B" Hoses from the John Deere Check Valve Fitting Kit in their place. (If your head has -4 fittings on the check valve, use Hose "C" and Fitting "2" to adapt to the -6 fittings on the "B" Hoses.)

2. Connect the "A" Hoses to the #1 ports on the Selector Valve and the removed hoses from the John Deere Check Valve.

(4) - 2-Arm Lift Hydraulic Diagram - Standard Lift Configuration



FOR MODIFIED LIFT CONFIGURATION
VENT PLUGS AND HOSES SWITCH
ON CYLINDER

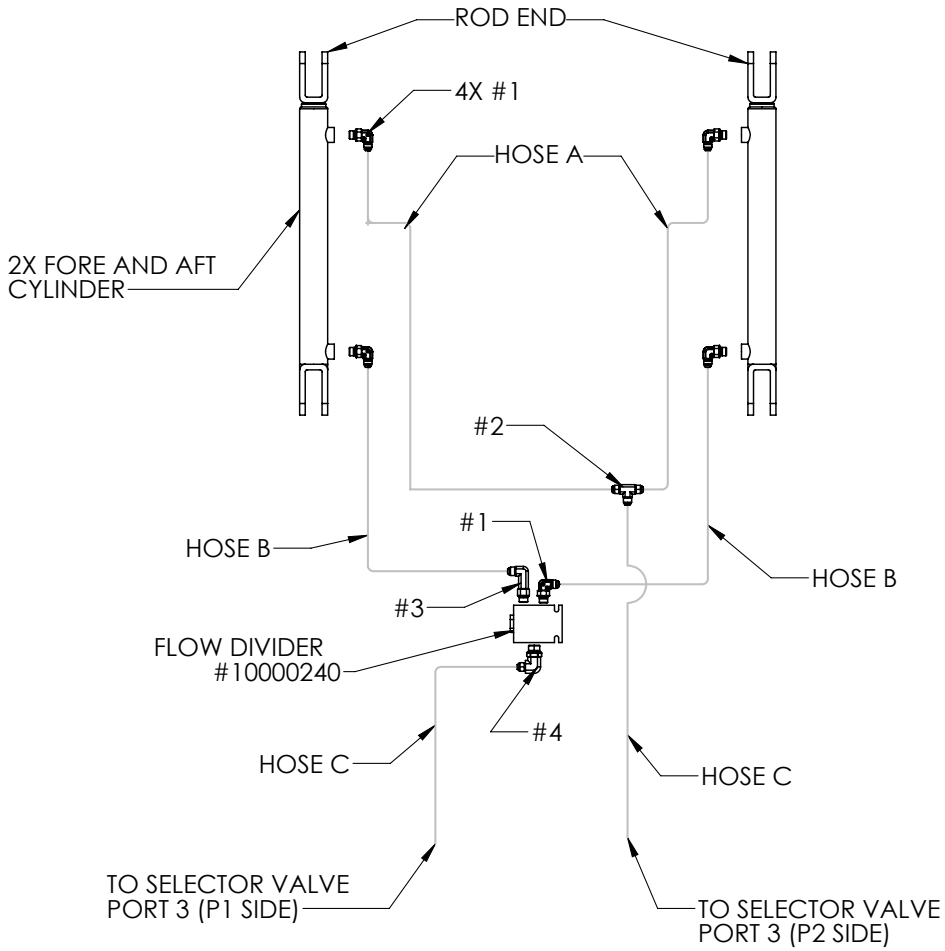
HOSE TABLE

HOSE NUMBER	LENGTH (IN)	HOSE END 1	HOSE END 2	QUANITY
A	94	#8 FEMALE JIC 37° FLARE	#8 MALE O-RING BOSS 90°	2
B	72	#8 FEMALE JIC 37° FLARE	#8 MALE O-RING BOSS	1

FITTING TABLE

FITTING NUMBER	END #1	END #2	SHAPE	QUANITY
1	#8 MALE JIC 37° FLARE (ALL SIDE SAME)		TEE	1
2	#8 MALE O-RING BOSS		VENT PLUG	2

(4) - 2-Arm Fore & Aft Hydraulic Diagram



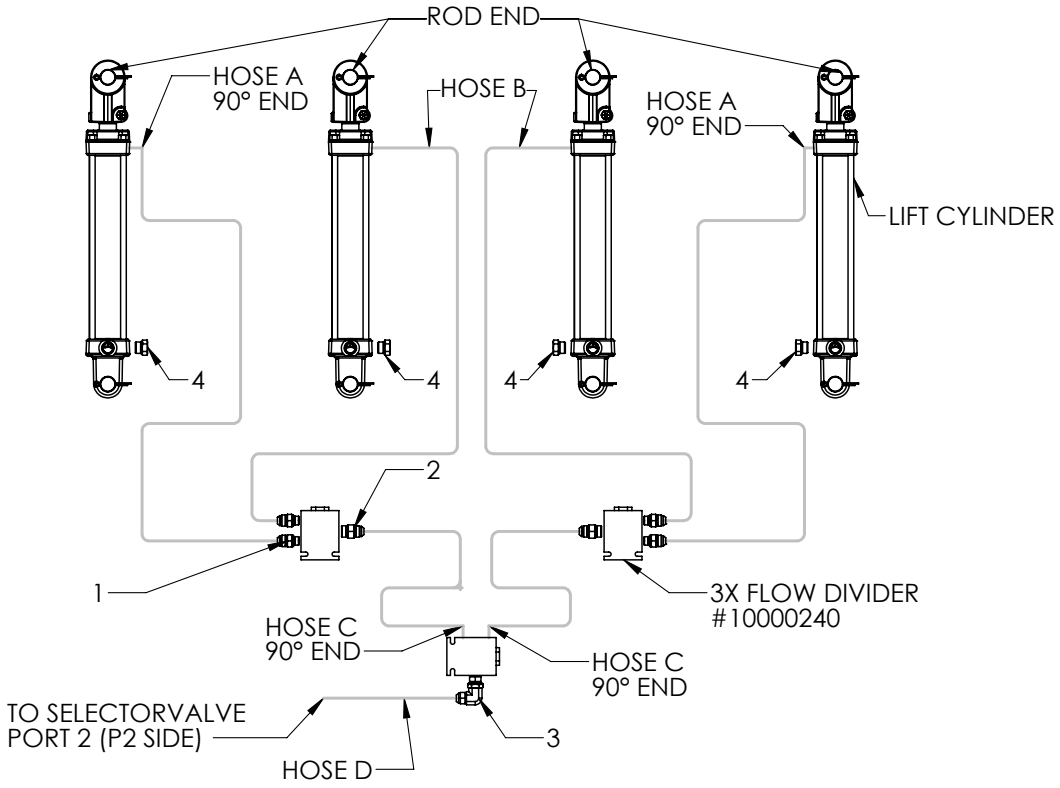
HOSE TABLE

HOSE NUMBER	LENGTH (IN)	HOSE END 1	HOSE END 2	QUANITY
A	114	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	2
B	98	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	2
C	72	#6 FEMALE JIC 37° FLARE	#8 MALE O-RING BOSS	2

FITTINGS TABLE

FITTING NUMBER	END #1	END #2	SHAPE	QUANITY
1	#6 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	90° FITTING	5
2	#6 MALE JIC 37° FLARE ALL SIDES		TEE	1
3	#6 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	90° FITTING LONG	1
4	#8 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	90° FITTING	1

(4) - 4-Arm Lift Hydraulic Diagram - Standard Lift



FOR MODIFIED LIFT CYLINDER
VENT PLUGS AND HOSES SWITCH
ON CYLINDER

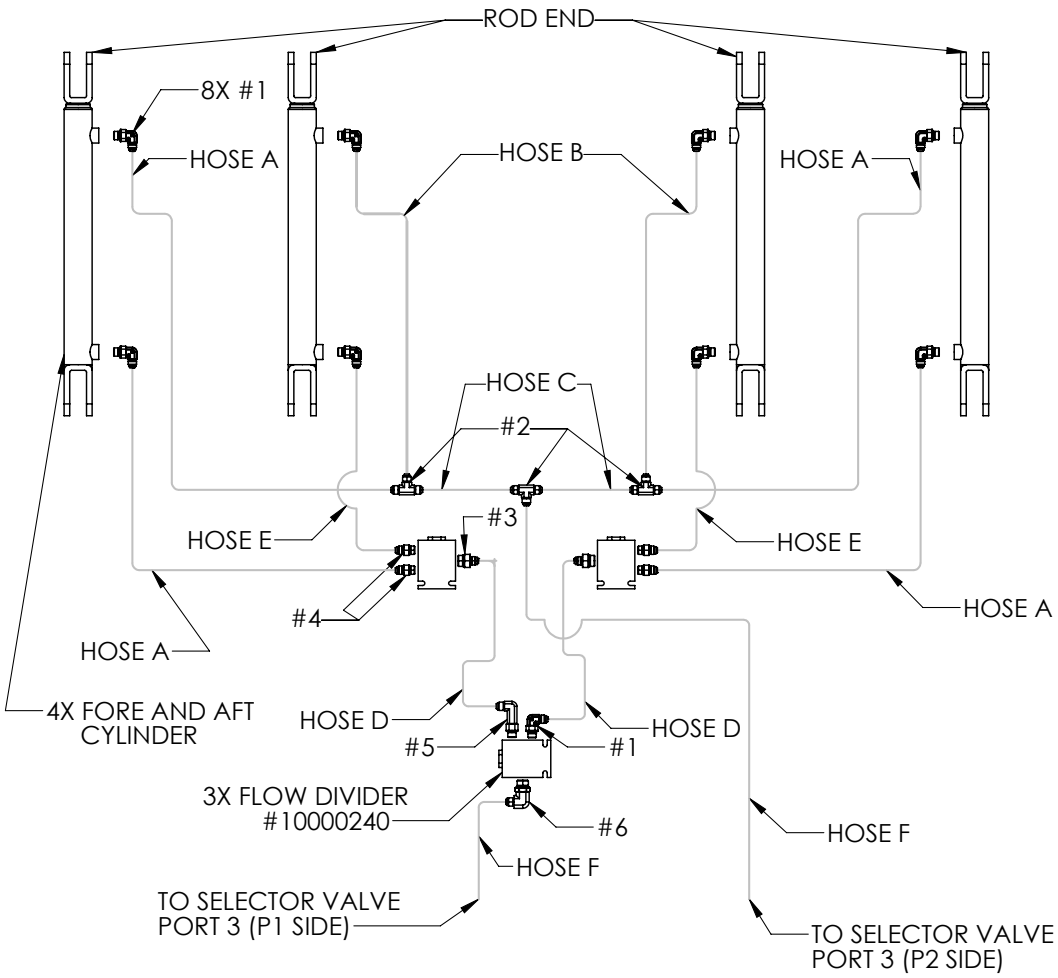
HOSE TABLE

HOSE NUMBER	LENGTH (IN)	HOSE END 1	HOSE END 2	QUANITY
A	126	#8 FEMALE JIC 37° FLARE	#8 MALE O-RING BOSS 90°	2
B	94	#8 FEMALE JIC 37° FLARE	#8 MALE O-RING BOSS	2
C	24	#8 FEMALE JIC 37° FLARE	#6 MALE O-RING BOSS 90° SWIVEL	2
D	72	#8 FEMALE JIC 37° FLARE	#8 MALE O-RING BOSS	1

FITTING TABLE

FITTING NUMBER	END #1	END #2	SHAPE	QUANITY
1	#6 MALE O-RING BOSS	#8 MALE JIC 37° FLARE	STRAIGHT	4
2	#8 MALE O-RING BOSS	#8 MALE JIC 37° FLARE	STRAIGHT	2
3	#8 MALE O-RING BOSS	#8 MALE JIC 37° FLARE	90°	1
4	#8 MALE O-RING BOSS		VENT PLUG	4

(4) - 4-Arm Fore & Aft Hydraulic Diagram



HOSE TABLE

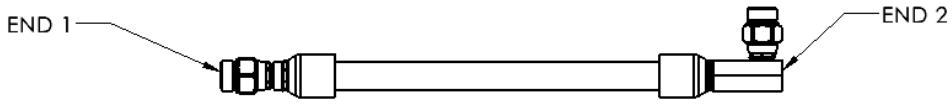
HOSE NUMBER	LENGTH (IN)	HOSE END 1	HOSE END 2	QUANITY
A	148	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	4
B	42	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	2
C	80	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	2
D	70	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	2
E	25	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	2
F	72	#6 FEMALE JIC 37° FLARE	#8 MALE O-RING BOSS	2

FITTINGS TABLE

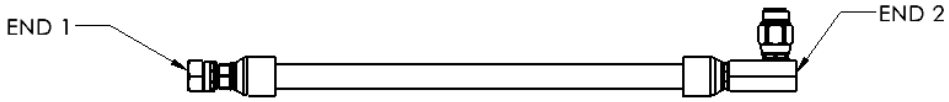
FITTING NUMBER	END #1	END #2	SHAPE	QUANITY
1	#6 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	90° FITTING	9
2	#6 MALE JIC 37° FLARE ALL SIDES		TEE	3
3	#8 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	STRAIGHT	2
4	#6 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	STRAIGHT	4
5	#6 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	90° FITTING LONG	1
6	#8 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	90° FITTING	1

(5) - Hose Kits - 10’ Base (HCR20050)

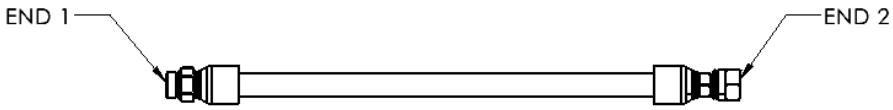
HOSE NUMBER	END 1	END 2	HOSE SIZE	HOSE LENGTH	QTY	DESCRIPTION
1	10 ORB MALE STRAIGHT	10 ORB MALE SWIVEL 90°	-8	120 IN	2	REEL DRIVE



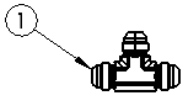
HOSE NUMBER	END 1	END 2	HOSE SIZE	HOSE LENGTH	QTY	DESCRIPTION
2	8 JIC FEMALE STRAIGHT	8 ORB MALE SWIVEL 90°	-6	94 IN	2	4 LIFT (B) / 2 LIFT (A)



HOSE NUMBER	END 1	END 2	HOSE SIZE	HOSE LENGTH	QTY	DESCRIPTION
3	8 ORB MALE STRAIGHT	8 JIC FEMALE STRAIGHT	-6	72 IN	1	4 LIFT (D) / 2 LIFT (B)

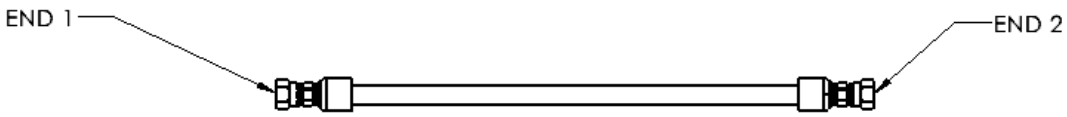


FITTING NUMBER	ENDS	SHAPE	QTY	DESCRIPTION
1	8 JIC MALE	TEE	1	2 LIFT (1)

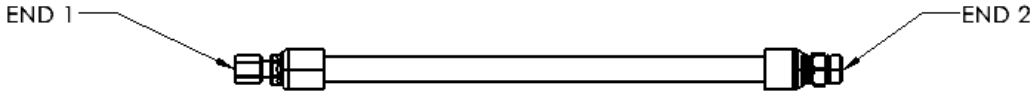


(5) - Hose Kits - 2-Arm Fore & Aft (HCR120045)

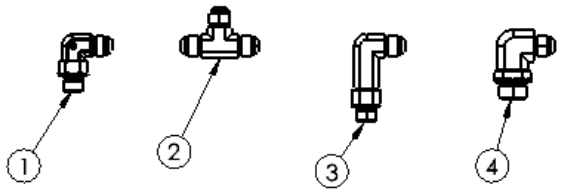
HOSE NUMBER	END 1	END 2	HOSE SIZE	HOSE LENGTH	QTY	DESCRIPTION
1	6 JIC FEMALE STRAIGHT	6 JIC FEMALE STRAIGHT	-4	114 IN	2	2 F/A (A)
2	6 JIC FEMALE STRAIGHT	6 JIC FEMALE STRAIGHT	-4	98 IN	2	2 F/A (B)



HOSE NUMBER	END 1	END 2	HOSE SIZE	HOSE LENGTH	QTY	DESCRIPTION
3	6 JIC FEMALE STRAIGHT	8 ORB MALE STRAIGHT	-6	72 IN	2	2 F/A (C)

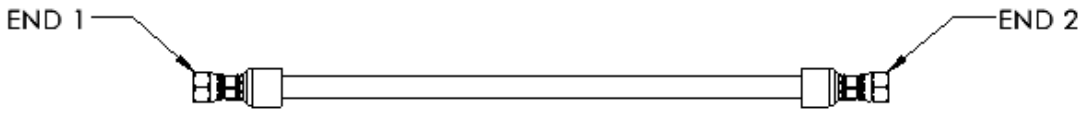


FITTING NUMBER	END 1	END 2	SHAPE	QTY	DESCRIPTION
1	6 JIC MALE	6 ORB MALE	90° ELBOW	5	2 F/A (1)
2	6 JIC MALE		TEE	1	2 F/A (2)
3	6 JIC MALE	6 ORB MALE	90° ELBOW LONG	1	2 F/A (3)
4	6 JIC MALE	8 ORB MALE	90° ELBOW	1	2 F/A (4)

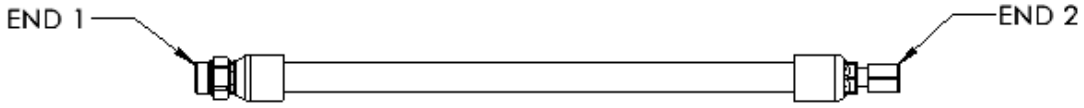


(5) - Hose Kits - 4-Arm Fore & Aft (HCR120065)

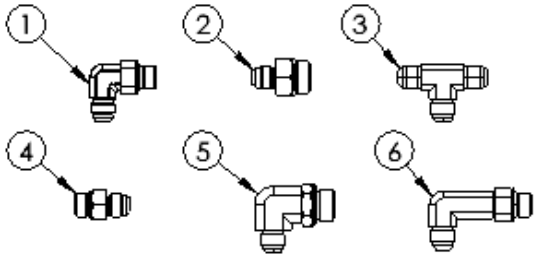
HOSE NUMBER	END 1	END 2	HOSE SIZE	HOSE LENGTH	QTY	DESCRIPTION
1	6 JIC FEMALE	6 JIC FEMALE	-4	148 IN	4	4 F/A (A)
2	6 JIC FEMALE	6 JIC FEMALE	-4	42 IN	2	4 F/A (B)
3	6 JIC FEMALE	6 JIC FEMALE	-4	80 IN	2	4 F/A (C)
4	6 JIC FEMALE	6 JIC FEMALE	-4	70 IN	2	4 F/A (D)
5	6 JIC FEMALE	6 JIC FEMALE	-4	25 IN	2	4 F/A (E)



HOSE NUMBER	END 1	END 2	HOSE SIZE	HOSE LENGTH	QTY	DESCRIPTION
1	8 ORB MALE	6 JIC FEMALE	-6	72 IN	2	4 F/A (F)

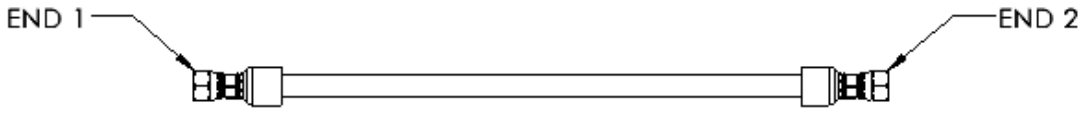


FITTING NUMBER	END 1	END 2	SHAPE	QTY	DESCRIPTION
1	6 ORB MALE	6 JIC MALE	90° ELBOW	9	4 F/A (1)
2	8 ORB MALE	6 JIC MALE	STRAIGHT	2	4 F/A (2)
3	6 JIC MALE		TEE	3	4 F/A (3)
4	6 ORB MALE	6 JIC MALE	STRAIGHT	4	4 F/A (4)
5	8 ORB MALE	6 JIC MALE	90° ELBOW	1	4 F/A (5)
6	6 ORB MALE	6 JIC MALE	90° ELBOW LONG	1	4 F/A (6)

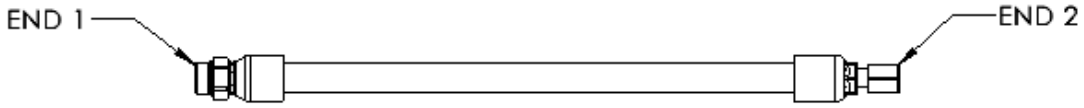


(5) - Hose Kits - Additional 4-Arm Fore & Aft (427700)

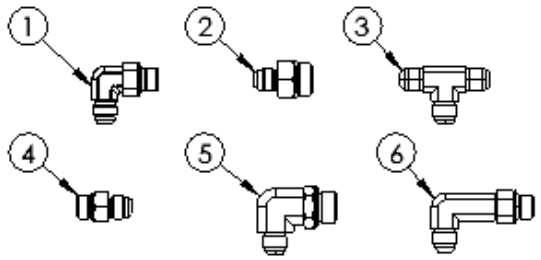
HOSE NUMBER	END 1	END 2	HOSE SIZE	HOSE LENGTH	QTY	DESCRIPTION
1	6 JIC FEMALE	6 JIC FEMALE	-4	148 IN	4	4 F/A (A)
2	6 JIC FEMALE	6 JIC FEMALE	-4	42 IN	2	4 F/A (B)
3	6 JIC FEMALE	6 JIC FEMALE	-4	80 IN	2	4 F/A (C)
4	6 JIC FEMALE	6 JIC FEMALE	-4	70 IN	2	4 F/A (D)
5	6 JIC FEMALE	6 JIC FEMALE	-4	25 IN	2	4 F/A (E)



HOSE NUMBER	END 1	END 2	HOSE SIZE	HOSE LENGTH	QTY	DESCRIPTION
1	8 ORB MALE	6 JIC FEMALE	-6	72 IN	2	4 F/A (F)

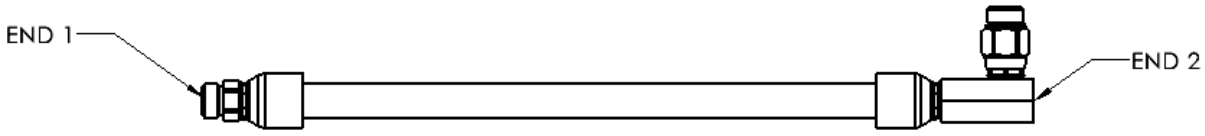


FITTING NUMBER	END 1	END 2	SHAPE	QTY	DESCRIPTION
1	6 ORB MALE	6 JIC MALE	90° ELBOW	9	4 F/A (1)
2	8 ORB MALE	6 JIC MALE	STRAIGHT	2	4 F/A (2)
3	6 JIC MALE		TEE	3	4 F/A (3)
4	6 ORB MALE	6 JIC MALE	STRAIGHT	4	4 F/A (4)
5	8 ORB MALE	6 JIC MALE	90° ELBOW	1	4 F/A (5)
6	6 ORB MALE	6 JIC MALE	90° ELBOW LONG	1	4 F/A (6)

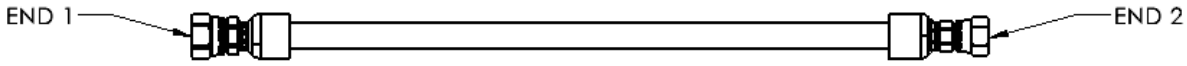


(5) - Hose Kits - Fitting Kit for John Deere Check Valve (HCR20080)

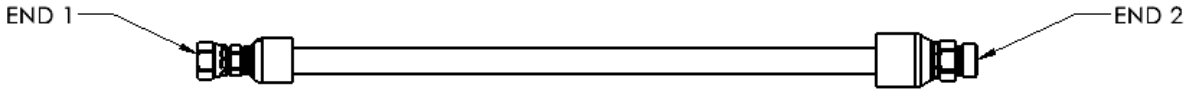
HOSE #	END 1	END 2	HOSE SIZE	HOSE LENGTH	QTY	DESCRIPTION
A	6 ORFS MALE STRAIGHT	8 ORB MALE 90	-6	36 IN	2	SELECTOR VALVE #1 PORTS TO DECK PLATES



HOSE #	END 1	END 2	HOSE SIZE	HOSE LENGTH	QTY	DESCRIPTION
B	6 ORFS FEMALE STRAIGHT	6 JIC FEMALE STRAIGHT	-4	36 IN	2	HEAD CHECK VALVE TO SELECTOR VALVE P1 & P2



HOSE #	END 1	END 2	HOSE SIZE	HOSE LENGTH	QTY	DESCRIPTION
C	4 ORFS FEMALE STRAIGHT	6 ORFS MALE STRAIGHT	-4	6 IN	1	ADAPT -4 CHECK VALVE TO HOSE B



FITTING #	END 1	END 2	SHAPE	QTY	DESCRIPTION
1	6 JIC MALE	8 ORB MALE	STRAIGHT	2	HOSE B TO SELECTOR VALVE
2	4 ORFS MALE	6 ORFS FEMALE	STRAIGHT	1	ADAPT -4 CHECK VALVE TO HOSE B

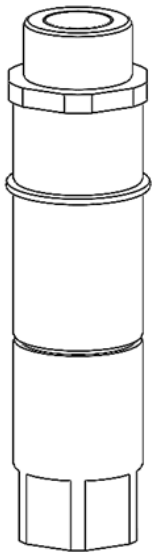
COMBINE HOSE KITS - JOHN DEERE

S-SERIES SINGLE POINT (SN GREATER THAN 745100) - HCR140361

Part #	Description	Qty
10000700	SINGLE PORT HOOKUP MULTI-COUPLER	2
HCR20050	HOSE KIT 10' BASE	1
HCR20080	FITTING KIT FOR JD CHECK VALVE	1

JD 60, 70, AND S-SERIES SINGLE POINT - HCR140360

Part #	Description	Qty
10000700	SINGLE PORT HOOKUP MULTI-COUPLER	2
HCR20050	HOSE KIT 10' BASE	1
HCR31012	HOSE 42" (-8 MALE ORB STRAIGHT TO -8 MALE ORB 90°)	2



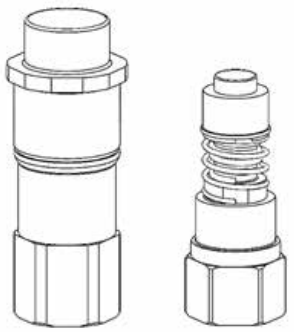
COMBINE HOSE KITS - CASE IH

CASE IH - 4010, 8010, 5088, 6088, 7088, 7120, 8120, 9120, 5130, 6130, 7130, 7230, 8230, 9230, & NH 9070 (HCR40160)

Part #	Description	Qty
10000720	SINGLE PORT HOOKUP MULTIFASTER CIH	2
10000795	FITTING -8 ORB MALE TO -6 ORB FEMALE STRAIGHT	2
10000795	FITTING -8 ORB FEMALE TO -6 ORB MALE STRAIGHT	2
10001040	FITTING -10 ORB FEMALE TO -8 ORB MALE STRAIGHT	2
HCR20050	HOSE KIT 10' BASE	1
HR31012	HOSE 42" (-8 MALE ORB STRAIGHT TO -8 MALE ORB 90°)	2

CASE IH - 1400/2300/2500 STANDARD HOSE KIT WITH ISO MALE AND FEMALE CONNECTORS INCLUDED (HCR140100)

Part #	Description	Qty
10000740	HYDRAULIC VALVE 1/4 TURN MANUAL -8 ORB FEMALE PORTS	1
10001011	FITTING -8 ORB MALE TO -8 ORB MALE STRAIGHT	3
10001032	FITTING 1/2" MALE BALL AG TIP QUICK COUPLER -8 ORB FEMALE STRAIGHT	2
10001035	FITTING 4050-15 1/2 X 3/4-16 FEMALE 8FB ORB TIP	1
10001045	FITTING 8010-16 1/2 X 7/8-14 MALE 10FB ORB TIP	1
10001050	FITTING 4050-16 1/2 X 7/8-14 FEMALE 10FB ORB TIP	1
HCR20050	HOSE KIT 10FT BASE	1
HCR31003	HOSE 48" (-8 ORB MALE STRAIGHT TO -8 ORB MALE STRAIGHT)	1



COMBINE HOSE KITS - CAT/CLAAS

CAT/CLAAS - 10' HOSE KIT - HCR40140

Part #	Description	Qty
10000795	FITTING -8 ORB MALE TO -6 ORB FEMALE STRAIGHT	2
HCR20050	HOSE KIT 10' BASE	1
HCR31006	HOSE 24" (-8 ORB MALE 90° TO -6 ORB MALE 90°)	2

CAT/CLAAS LEXION - 14' HOSE KIT - HCR140140

Part #	Description	Qty
10000700	FITTING -8 ORB MALE TO -6 ORB FEMALE STRAIGHT	2
HCR20050	HOSE KIT 14FT BASE (SAME AS 10FT, BUT -8 HOSES ARE 14FT LONG)	1
HCR31012	HOSE 24" (-8 ORB MALE 90° TO -6 ORB MALE 90°)	2

COMBINE HOSE KITS - GLEANER/OTHER

14FT BASE HOSE KIT (COMBINES OTHER THAN JD OR CIH)- HCR40000

Part #	Description	Qty
HCR20075	HOSE KIT 14FT BASE (SAME AS 10FT, BUT -8 HOSES ARE 14FT LONG)	1

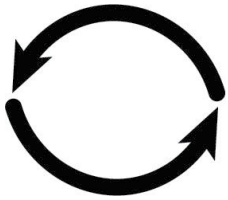
GLEANER 3000 - HCR140390

Part #	Description	Qty
HCR31012	HOSE 42" (-8 ORB MALE STRAIGHT TO -8 ORB MALE 90°)	1
HCR20050	HOSE KIT 10' BASE	1

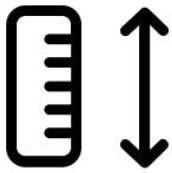
(1) In the field

1.1 - Initial startup

-See (3.1) for information on how to enable the reel function in your combine monitor.

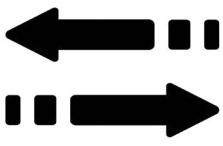


-Check that all reel functions are working in the desired direction before going to the field. Reverse hydraulic hoses, if necessary.



-Make sure Stop Bolts/Stroke Control Blocks are installed for proper lower height limit.

-After first 5 hours of use check all bolts, drive chain, and fittings for tightness. Loose parts and oil leaks can be hazardous.



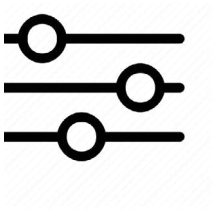
-Check that Zerk Bolts on Reel Holders are unlocked and greased to allow Fore & Aft function to work.

(1) In the field

1.2 - General Tips for Operating your Hawkins Corn Reel

Slow down! Down corn typically requires slower operating speeds to feed material into the corn head and through the combine, even with a corn reel.

If possible, wait for dry conditions to allow smooth feeding of material into the head.



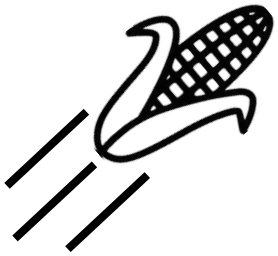
Conditions can change quickly. Reel settings will need to be adjusted as conditions evolve to optimize material flow.

(1) In the field

1.3 - Setting Corn Reel speed

- A good starting point for reel speed is approximately equal to ground speed.

- Make small adjustments to reel speed to optimize flow into the corn head.

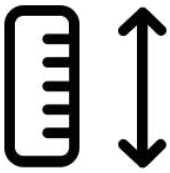


- Running the reel too fast can cause ears to be thrown out of the corn head.

- Running the reel too slow can inhibit material flow into the corn head.

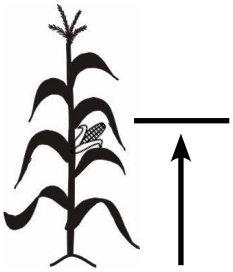
(1) In the field

1.4 - Setting Corn Reel height

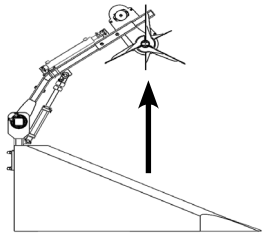


- Reel height should be set just low enough to create a conveying action into the corn head.

- Running the reel height too low can cause stalk wrapping and overthrow of material.



- When harvesting corn that is mostly upright with tops broken, set reel paddles near ear height to aid in moving "fluff" into the corn head.

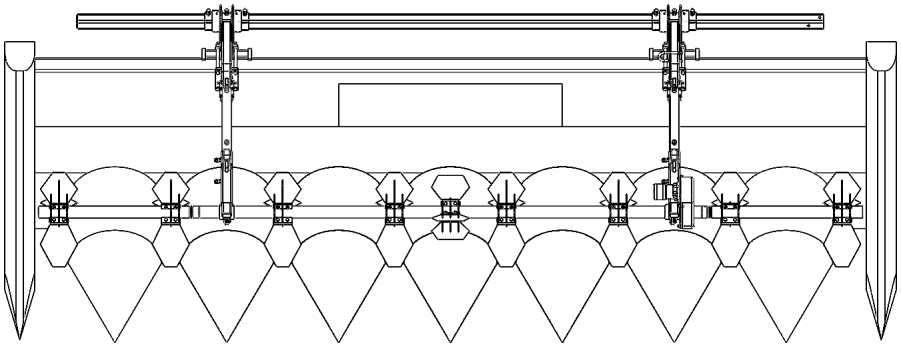


- When harvesting areas of standing corn, raise the reel out of the way of incoming corn.

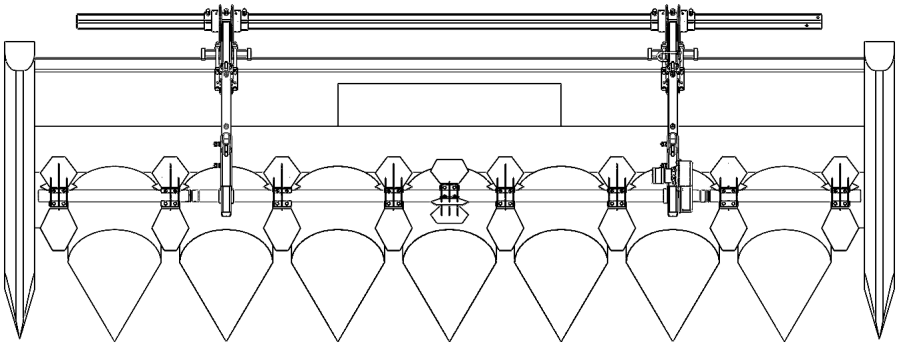
(1) In the field

1.5 - Setting Corn Reel Fore & Aft

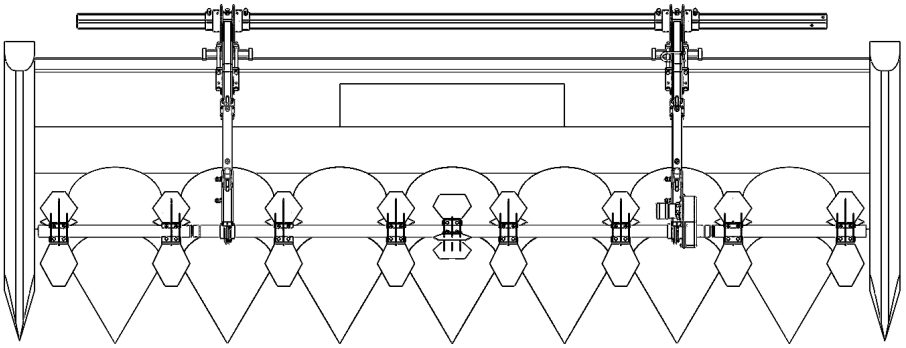
A good starting point for reel fore & aft is to set the reel just behind the ear saver flaps to aid in moving material as it is sheared off by the stalk rolls.



In dry conditions it may help to run the reel closer to the head auger, leaving at least an ear width between the paddle tips and the flighting to avoid shelling.



Generally, the reel will need to be run forward in its range in heavy down corn conditions and further back in less severe "dry fluff" conditions.



(1) - In the field

1.6 - Fore & Aft Control Switch

- The Selector Valve for hydraulic functions on the Hawkins Corn Reel is controlled from the combine cab with a 3-position switch.

Up Position: Reel Lift function activated

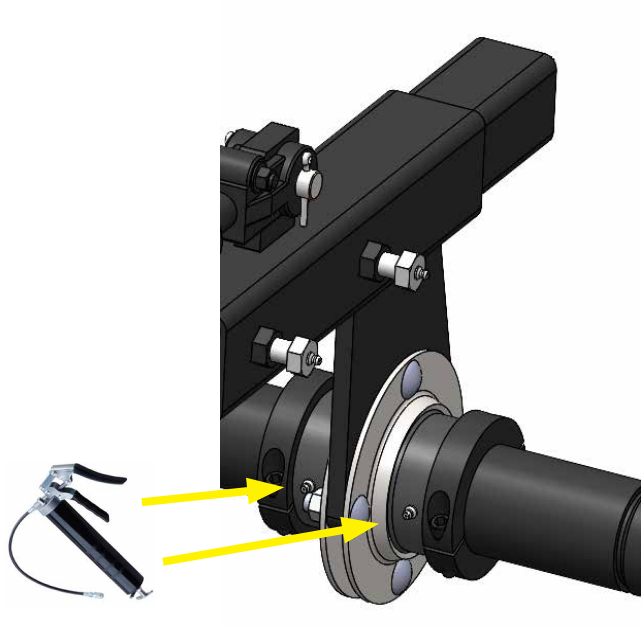
Middle Position: Combine deck plate function activated

Down Position: Reel Fore & Aft function activated

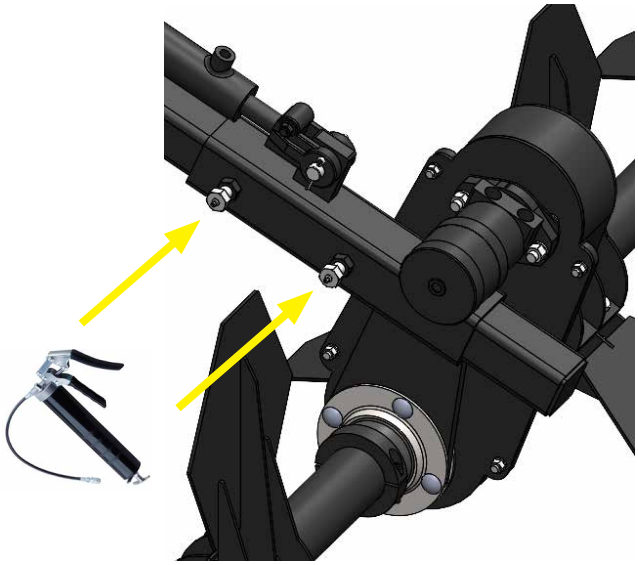
(2) - Service

2.1 – The Hawkins Corn Reel is equipped with grease zerks at critical wear points. These should be greased according to recommendations listed below. Graphite grease is recommended.

- Grease Corn Reel bearings daily (10 hours).



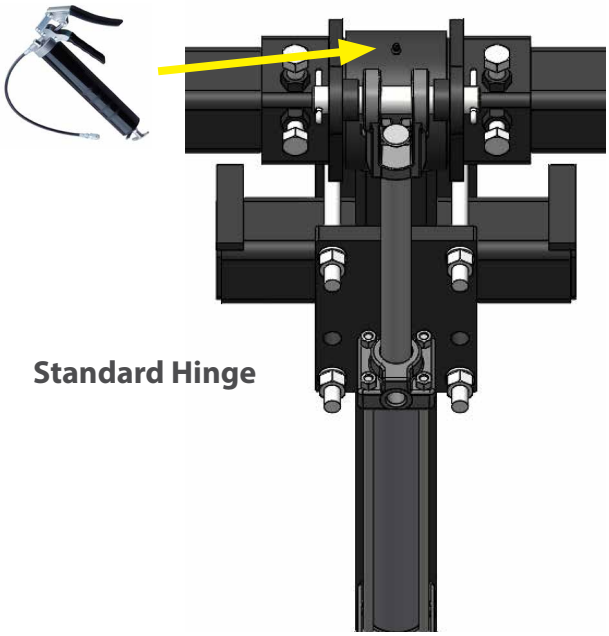
- Grease Reel Holders & Chain Box Zerk Bolts/Arms daily (10 hrs) to weekly (50 hrs) depending on Fore & Aft usage



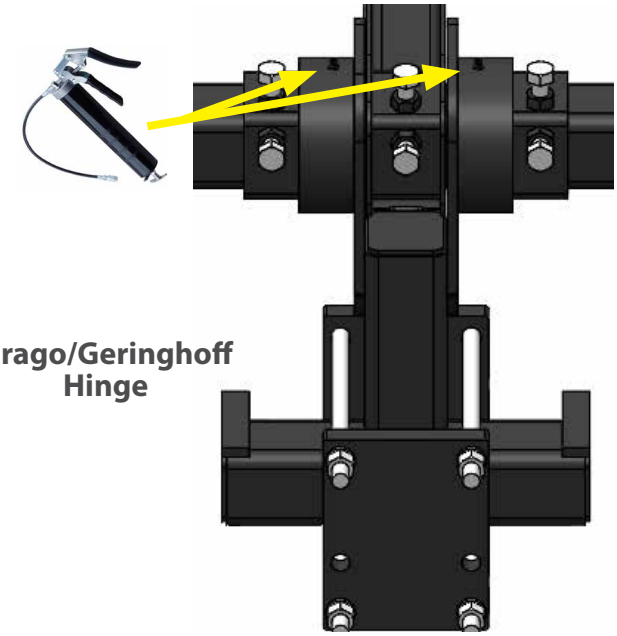
(2) - Service

2.1 – The Hawkins Corn Reel is equipped with grease zerks at critical wear points. These should be greased according to recommendations listed below. Graphite grease is recommended.

- Grease Corn Reel hinges weekly (50 hours) - If reel height is adjusted frequently, grease daily (10 hours)

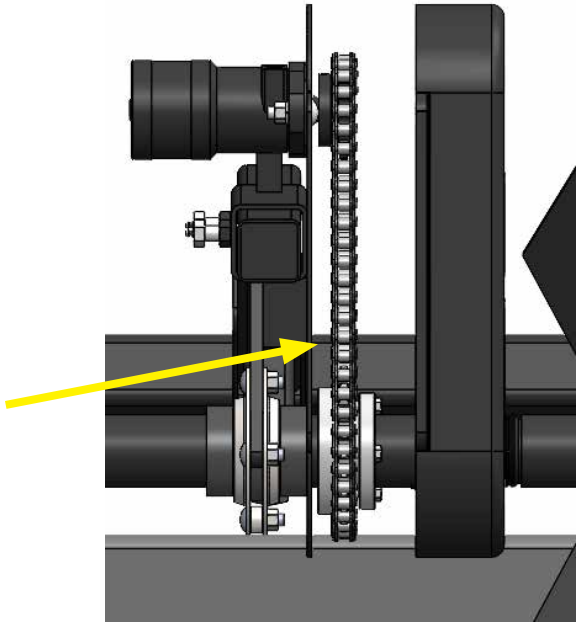


Standard Hinge



Drago/Geringhoff Hinge

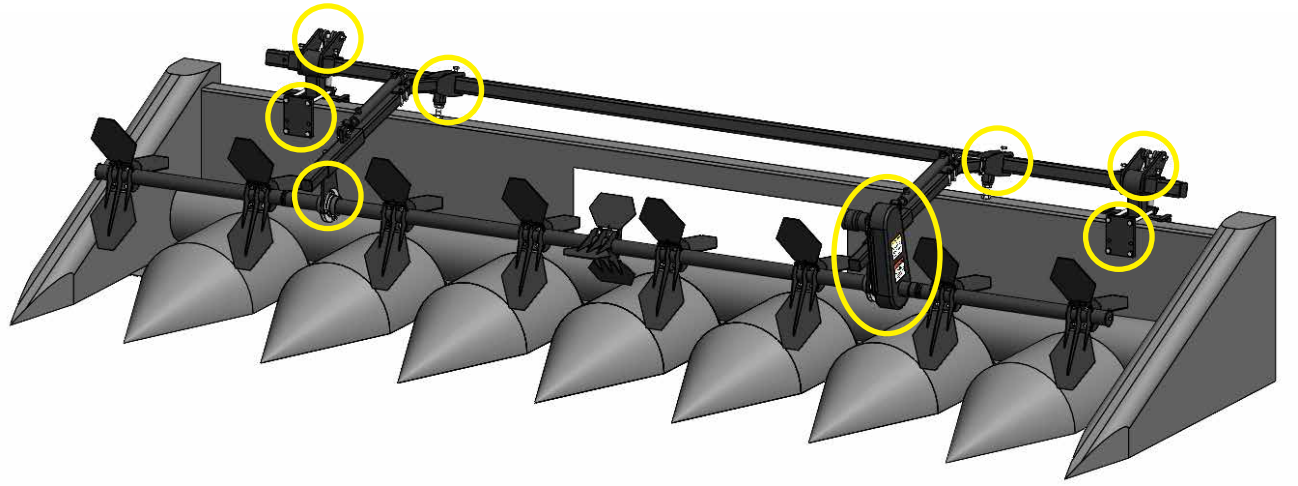
- Lubricate Chain weekly (50 hours)



(2) - Service

2.2 – General Maintenance

- Check all bolts for tightness after the first 5 hours of operation and periodically throughout the harvest season

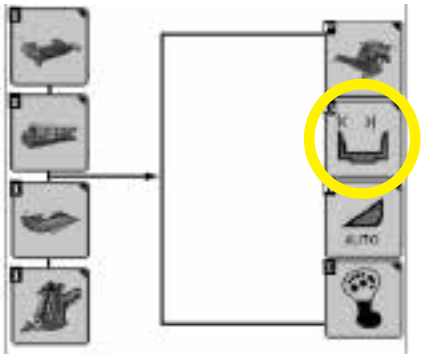


- Recheck all bolts, tension chain, and check for any worn parts before each season of use.

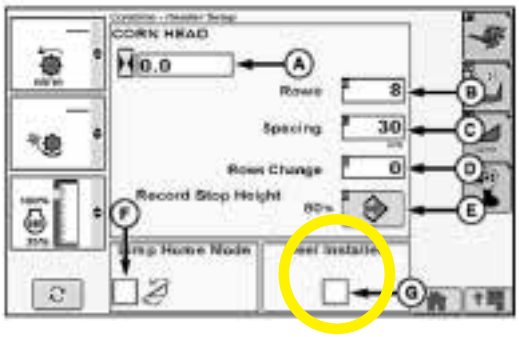
(3) - Enable Reel Function

3.1 - In order for the Hawkins Corn Reel to turn when using a 2600 series monitor, the reel option must be selected in the setup process. The following steps layout the process for enabling the reel function.

- Select header setup from the right side menu in the main harvest screen.



- Select header width settings



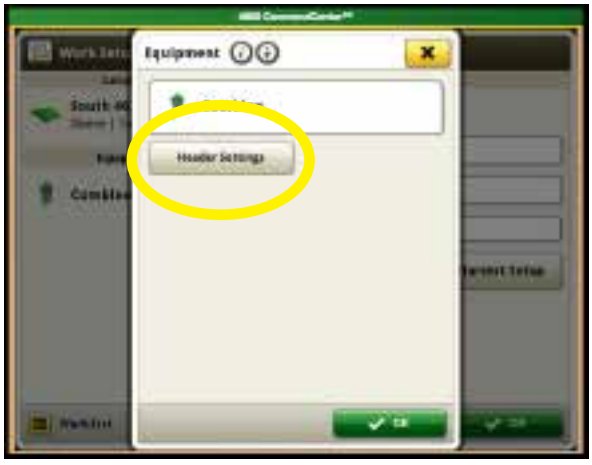
- Select header width settings

(3) - Enable Reel Function

3.1 - In order for the Hawkins Corn Reel to turn when using a 4600 series monitor, the reel option must be selected in the setup process. The following steps layout the process for enabling the reel function.

- Select "Setup" from the bottom left side in the main harvest screen.

- Select "Combine" under "Equipment" in the Work Setup screen.



- Select "Header Settings" in the Equipment Setup screen.

(3) - Enable Reel Function

3.1 - In order for the Hawkins Corn Reel to turn when using a 4600 series monitor, the reel option must be selected in the setup process. The following steps layout the process for enabling the reel function.

- Press anywhere in the top selectable area in the Header Setup screen.

- Press on the Box next to "Reel Installed" in the Header Details screen to enable the Reel.

- With the check mark in the "Reel Installed" box, you can wexit the setup menus and return back to the operating screen.

(3) - Enable Reel Function

3.1 - In order for the Hawkins Corn Reel to turn when using a Pro 700 series monitor, the reel option must be selected in the setup process. The following steps layout the process for enabling the reel function.

- On the main Run screen, press "Back".

- Select "Toolbox".

- Press the arrow button to scroll over to next page of tabs

(3) - Enable Reel Function

3.1 - In order for the Hawkins Corn Reel to turn when using a Pro 700 series monitor, the reel option must be selected in the setup process. The following steps layout the process for enabling the reel function.

- Select "Head 2" from the bottom tabs to enter the Header Setup menu.

- Press down arrow to get to the second page of selections under Header Setup 2.

- Press the arrow button to scroll over to next page of tabs

(3) - Enable Reel Function

3.1 - In order for the Hawkins Corn Reel to turn when using a Pro 700 series monitor, the reel option must be selected in the setup process. The following steps layout the process for enabling the reel function.

- Select the dropdown arrow under "Reel End Dividers" and select "Yes". This is how you would enable the corn reel.

- Press the Back button to get out of the Toolbox Setup Menu.

- Press the "Run Screen" button to return to the operating screen.

TROUBLESHOOTING

Before attempting to troubleshoot your Hawkins Corn Reel, make sure your combine head is fully stopped and that your combine is in park.

Troubleshooting		
Problem	**Possible Cause**	**Solution**
Reel not turning.	Hydraulic hoses not connected correctly.	Check that Reel Drive hoses are hooked up to combine single-point connection correctly (see Hydraulic Install Guide).
	Reel function not activated in combine monitor.	See Operation Guide for how to activate reel function in combine monitor.
	Reel is plugged.	Unplug reel.
Reel turns wrong direction.	Hydraulic hoses not connected correctly.	Switch Reel Drive hose connections.
Reel won't lift.	Hydraulic hoses not connected correctly.	See Hydraulic Install Guide.
	Vent plug installed in wrong port.	See Reel Install Guide for placement.
	Selector Valve not switching.	Check 12v power to/from switch box. Check port #2 solenoid on Selector Valve.
Reel won't move fore & aft.	Hydraulic hoses not connected correctly.	See Hydraulic Install Guide.
	Reel Holder Grease Zerk Bolts tightened against Arm tube.	Loosen Zerk Bolts to allow Reel Holders to slide on Arms.
	Selector Valve not switching.	Check 12v power to/from switch box Check port #3 solenoid on Selector Valve.
Reel extensions unscrew and/or fall off when running reel	Reel Tube installed backwards.	See Reel Install Guide. (Machine Right = Left-Hand Threads, Machine Left = Right-Hand Threads)
	Chain Box/Motor installed on reel extension.	Reel can ONLY be driven on the Center Reel Tube: move Arm, Chain Box, and Tapered Split Hub inward to drive Center Reel Tube.

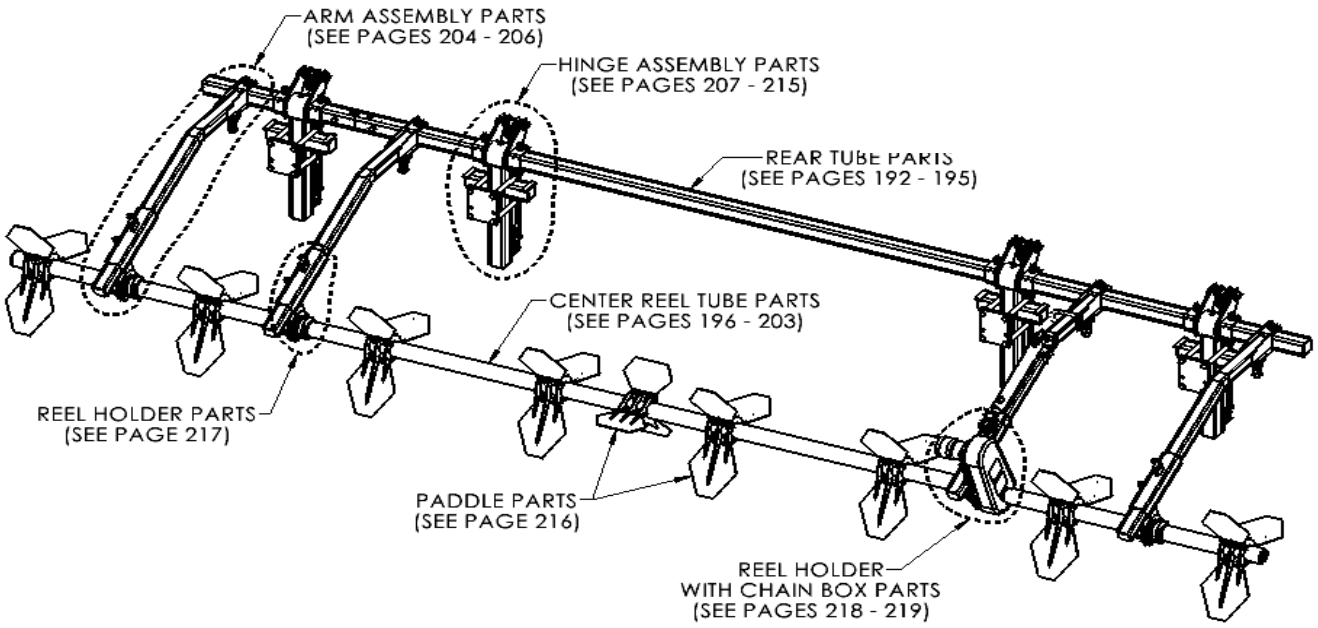
CONTINUED ON NEXT PAGE

Troubleshooting		
Problem	**Possible Cause**	**Solution**
Fore & Aft function moves reel wrong way.	Hydraulic hoses not connected correctly.	Switch Fore & Aft hoses around.
Hydraulics don't change function with Switch.	Switch not sending/receiving power.	Switch Reel Drive hose connections.
	Bad solenoid valve	Solenoid nut will be magnetic when activated (except deck plate solenoids, which are normally open) If not magnetic, check wiring or replace solenoid.
Reel won't stay up.	Combine has open center hydraulics.	If newer John Deere C-Series head, check that Reel hydraulics are spliced in after check valve on head. If no check valve present, purchase from your local dealer.
Some hydraulic functions work, others don't.	Hydraulic hoses not connected correctly.	See Hydraulic Install Guide.
	Selector Valve malfunctioning.	Check solenoids Check wiring from switch box.
Corn Reel raises too fast.	Air is trapped in the hydraulic lines.	Cycle through functions and run reel up and down/fore and aft repeatedly until air clears from lines.
Corn Reel moves a little even when not on that function.	Air is trapped in the hydraulic lines.	Cycle through functions and run reel up and down/fore and aft repeatedly until air clears from lines.
Material building up on reel/head.	Ground speed too fast.	Reduce ground speed.
	Reel speed too slow.	Speed up Corn Reel.
	Reel height too low.	Raise Corn Reel.

CONTINUED ON NEXT PAGE

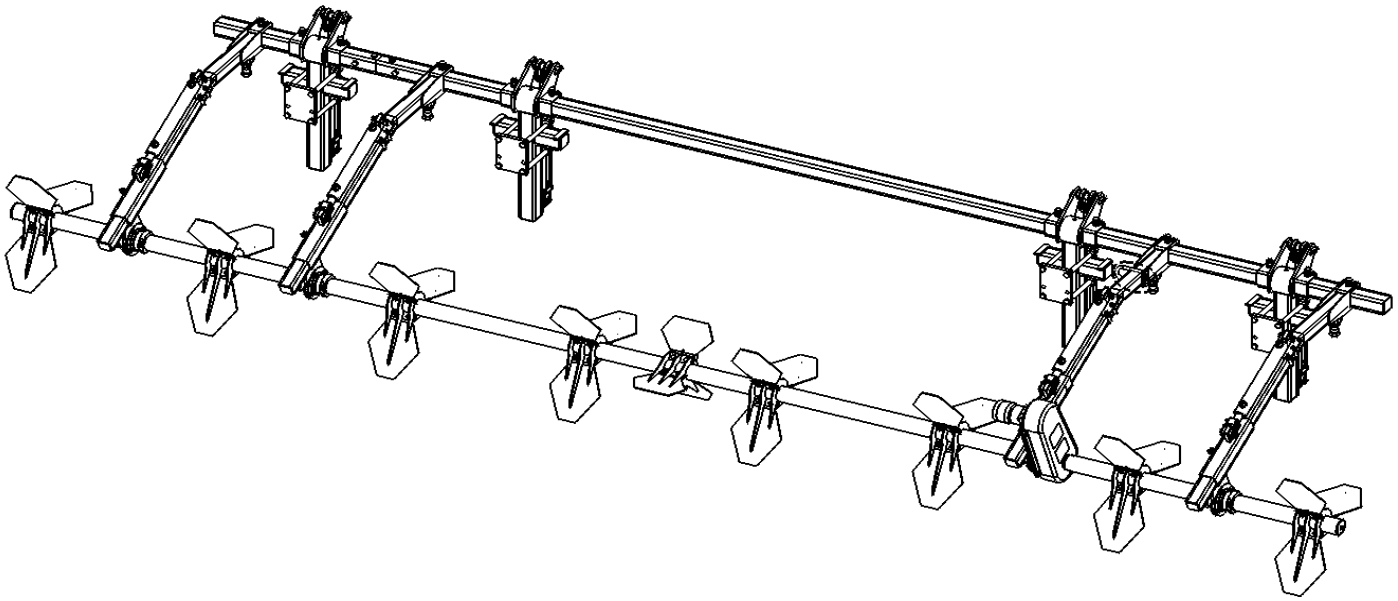
Troubleshooting		
Problem	**Possible Cause**	**Solution**
Material being thrown off front/over back of head.	Reel speed too fast.	Reduce Reel speed.
Paddles hit row dividers when lowered.	Reel height not optimized.	Adjust Corn Reel Height Set Bolts or Stroke Control collars to limit downward travel of reel.

CORN REEL ASSEMBLY COMMON PARTS

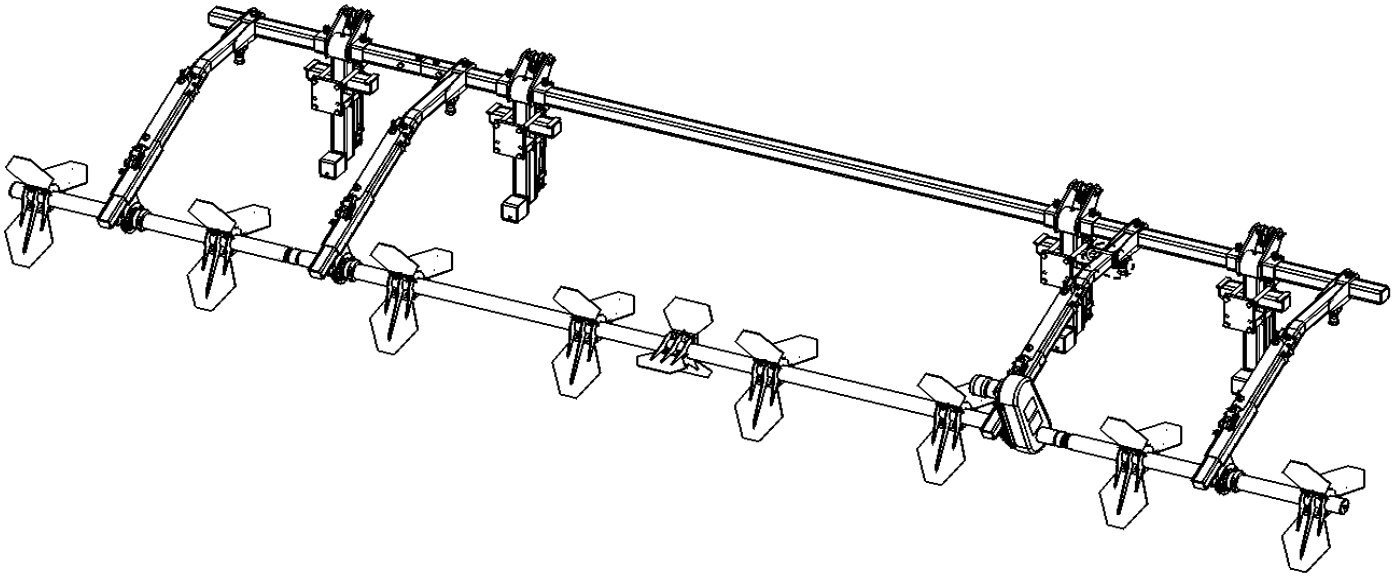


CORN REEL ASSEMBLY COMMON PARTS

Standard and some John Deere Corn Reel Models

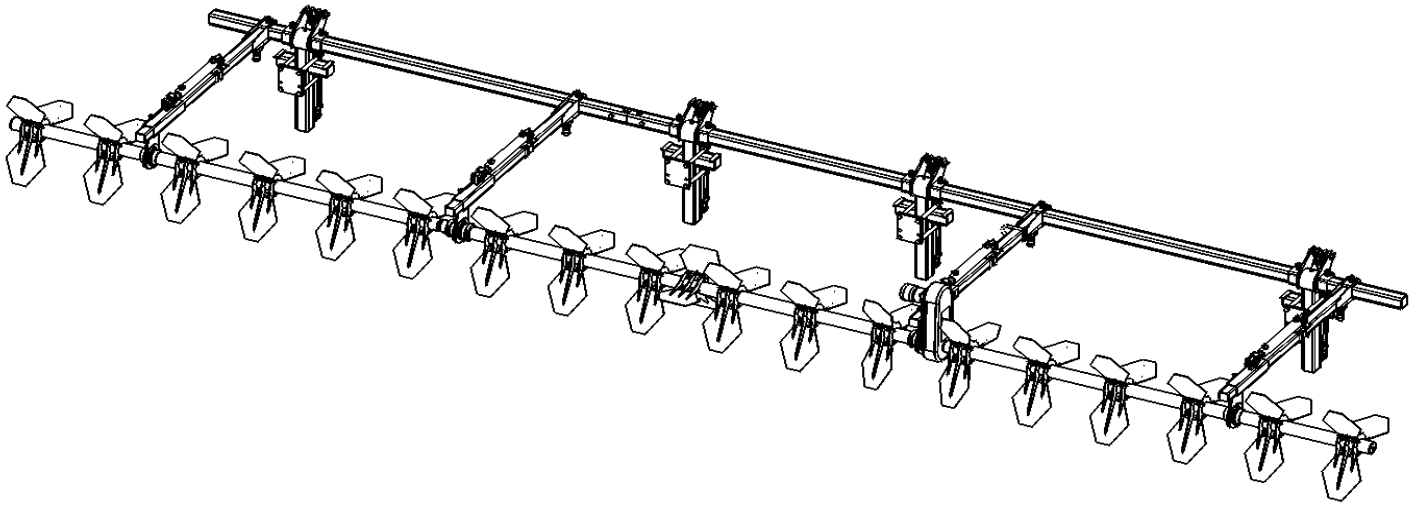


Most John Deere Corn Reel Models

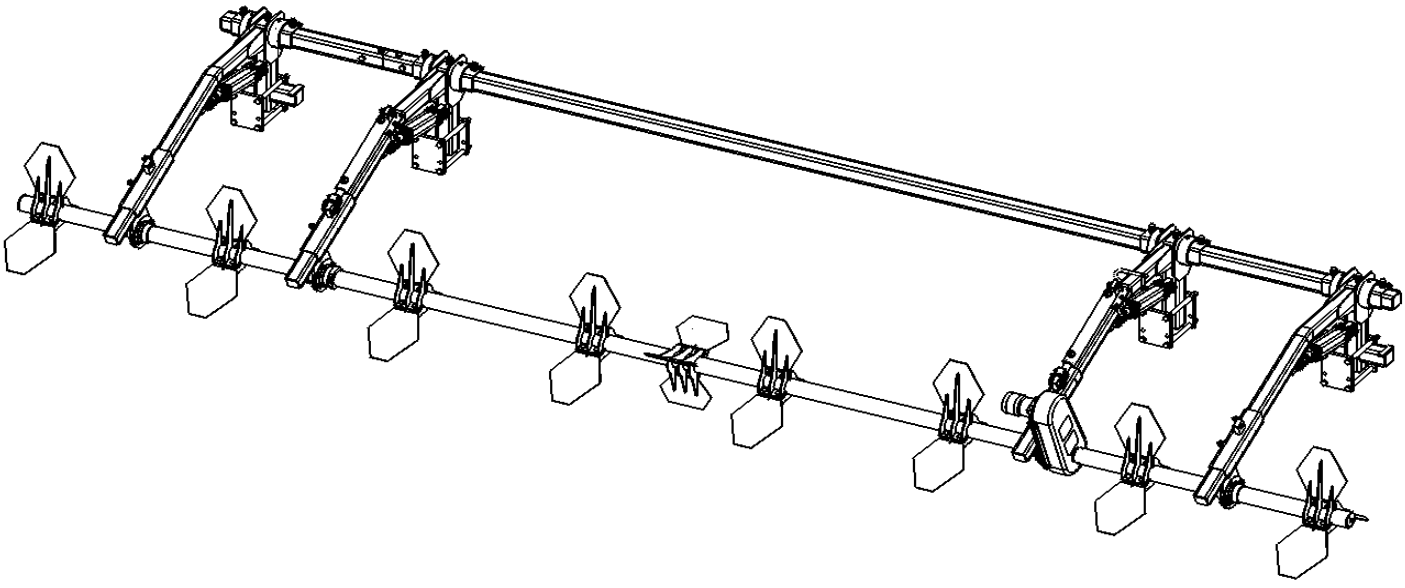


CORN REEL ASSEMBLY COMMON PARTS

Case IH Corn Reel Models

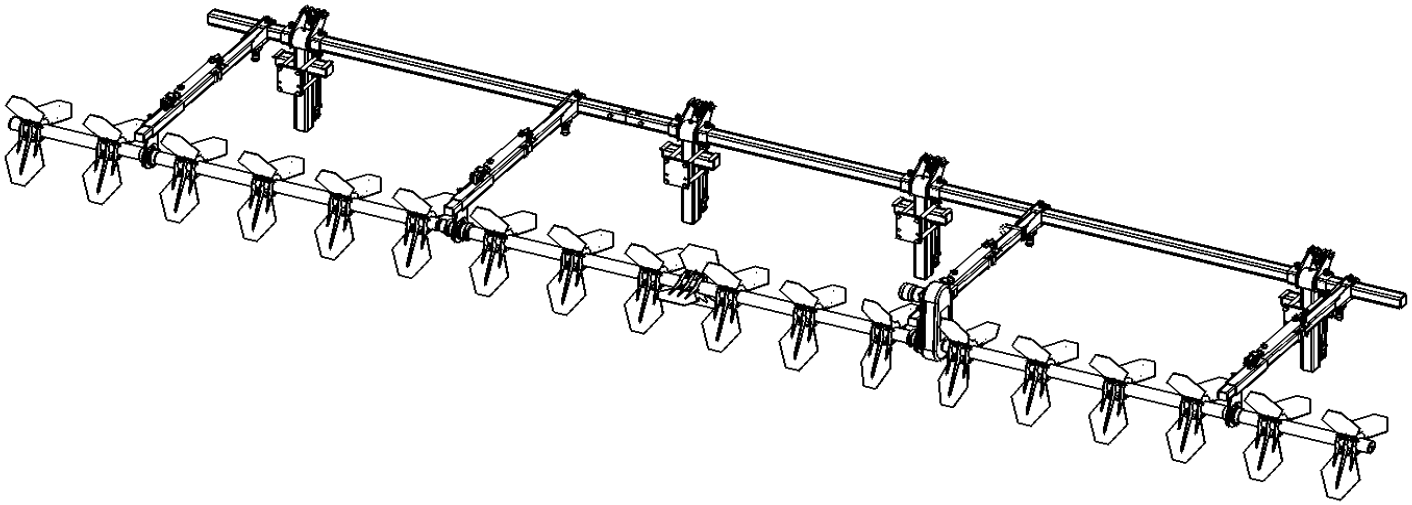


Drago Corn Reel Models

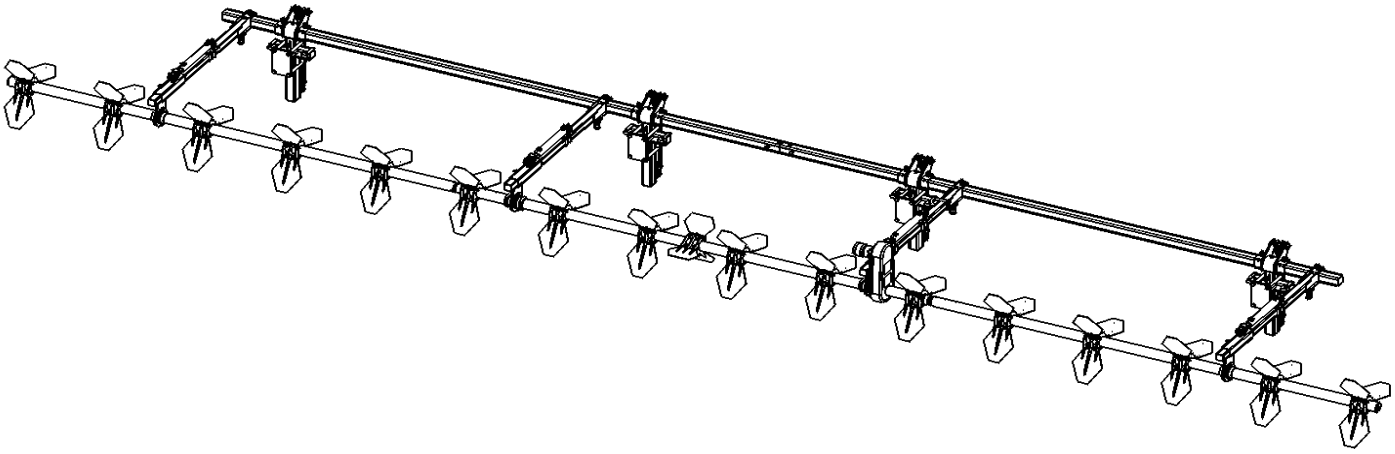


CORN REEL ASSEMBLY COMMON PARTS

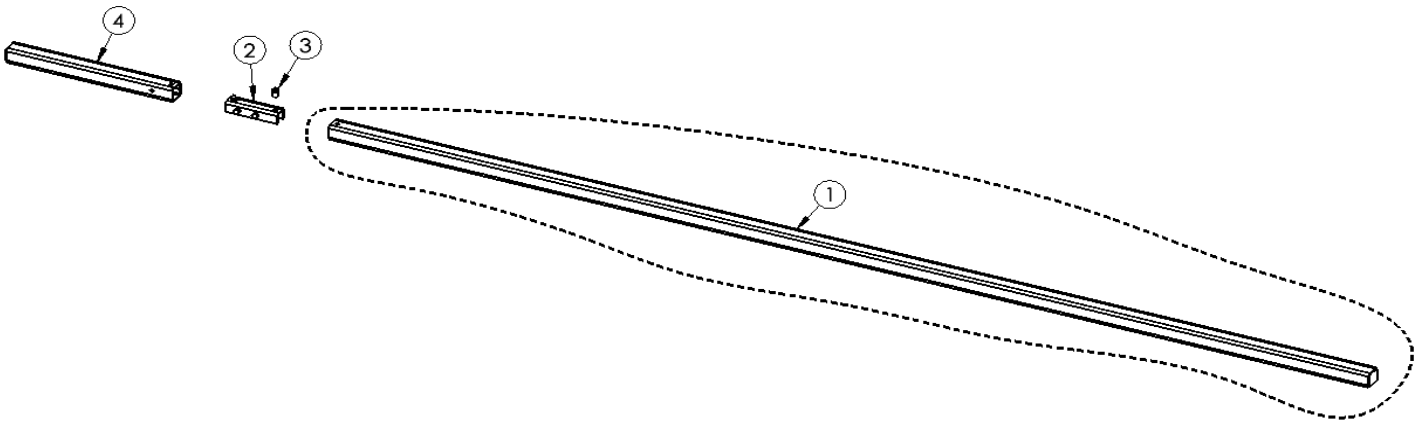
Geringhoff Corn Reel Models



CAT Corn Reel Models



REAR TUBE



STANDARD

Item Number	Part #	Description	Quantity
1ST-1	HCR30401	4R30 & 12R20 REAR TUBE - 108" NOMINAL	1
1ST-2	HCR30094	4R38 REAR TUBE 130" NOMINAL	1
1ST-3	HCR30100	6R30 REAR TUBE - 156" NOMINAL	1
1ST-4	HCR30098	6R36 REAR TUBE - 180" NOMINAL	1
1ST-5	HCR30407	6R38, 8R30, 36, 38, 40 & 12R30 REAR TUBE - 200" NOMINAL	1
1ST-6	HCR30403	12R22 REAR TUBE - 122" NOMINAL	2
1ST-7	HCR30157	14R30 & 16R30 REAR TUBE - 188" NOMINAL	2

JOHN DEERE ONLY

Item Number	Part #	Description	Quantity
1JD-1	HCR30096	6R30 JD 606C REAR TUBE - 159" NOMINAL	1
1JD-2	HCR30407	6R38 JD 606C, 8R30 JD 608C, 8R30 JD 893, 8R38 JD 608C, 12R30 JD 612C, 12R38 JD 612C, 18R20 JD 618C REAR TUBE - 200" NOMINAL	1
1JD-3	HCR30100	8R22 JD 608C REAR TUBE - 156" NOMINAL	1
1JD-4	HCR30401	12R20 JD 612C REAR TUBE - 108" NOMINAL	1
1JD-5	HCR30403	12R22 JD 612C REAR TUBE - 122" NOMINAL	1

REAR TUBE

CASE IH ONLY

Item Number	Part #	Description	Quantity
1CH-1	HCR30100	6R30 REAR TUBE - 156" NOMINAL	1
1CH-2	HCR30098	6R36 REAR TUBE - 180" NOMINAL	1
1CH-3	HCR30407	8R30 & 8R36 & 12R30 REAR TUBE - 200" NOMINAL	1
1CH-4	HCR30403	12R22 REAR TUBE - 122" NOMINAL	1

DRAGO

Item Number	Part #	Description	Quantity
1DR-1	HCR30100	6R30 REAR TUBE - 156" NOMINAL	1
1DR-2	HCR30098	6R36 REAR TUBE - 180" NOMINAL	1
1DR-3	HCR30407	8R30 & 8R36 & 12R30 REAR TUBE - 200" NOMINAL	1
1DR-4	HCR30403	12R22 REAR TUBE - 122" NOMINAL	1

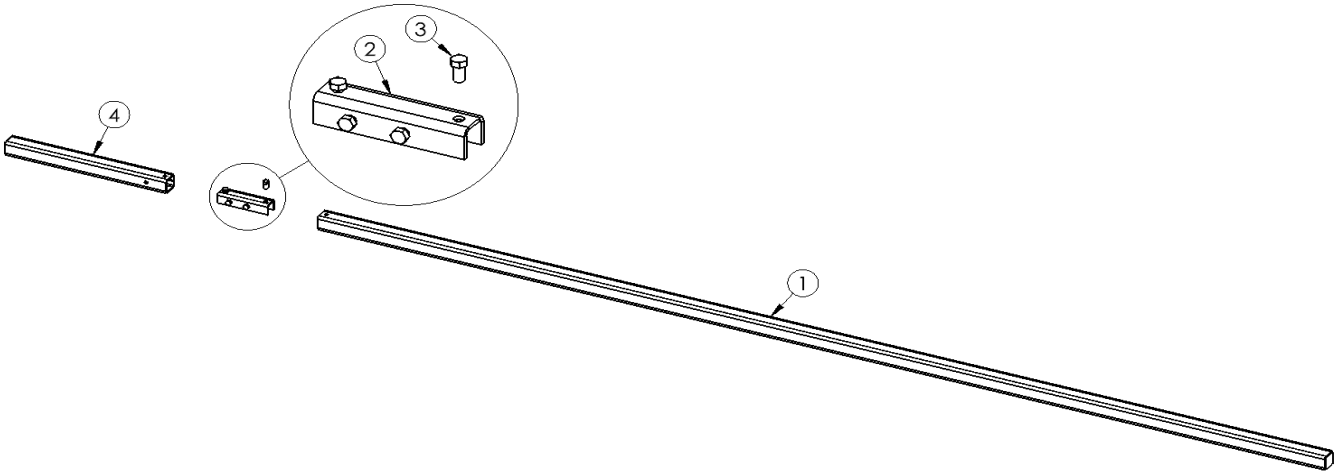
GERINGHOFF

Item Number	Part #	Description	Quantity
1GH-1	HCR30100	6R30 PRE-ELITE REAR TUBE - 156" NOMINAL	1
1GH-2	HCR30407	8R30 PRE-ELITE, 12R30 PRE-ELITE, 8R30 ELITE, 8R36 ELITE, 12R30 ELITE REAR TUBE - 200" NOMINAL	1
1GH-3	HCR30403	12R22 PRE-ELITE, 12R22 ELITE REAR TUBE - 122" NOMINAL	2
1GH-4	HCR30088	18R20 PRE-ELITE REAR TUBE - 142.5" NOMINAL	2

CAT

Item Number	Part #	Description	Quantity
1CT-1	HCR30157	REAR-TUBE - 188" Nominal	2

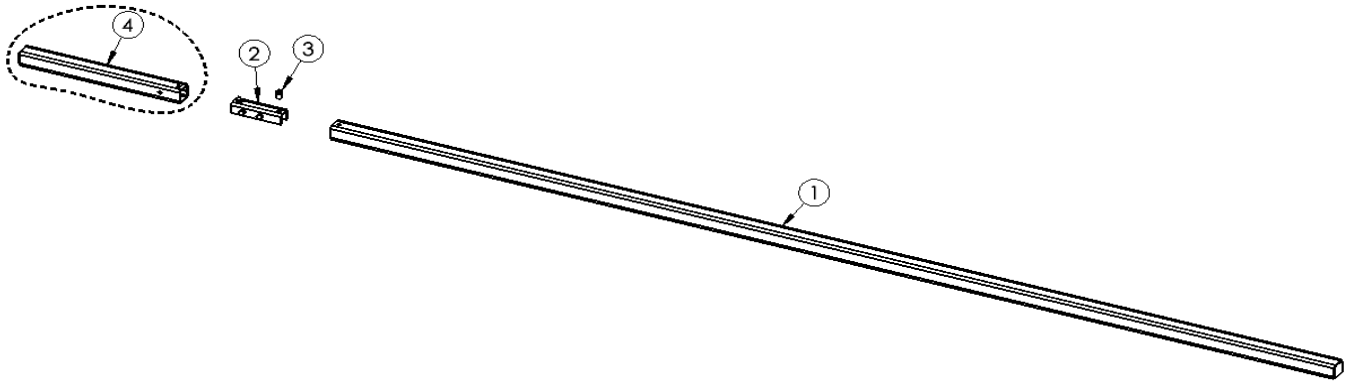
REAR TUBE



ALL PARTS

Item Number	Part #	Description	Quantity
2	HCR30041	SQUARE TUBE SPLICE	1
3	411211	5/8-11 X 1 1/4 BOLT GR2	6

REAR TUBE - EXTENSION



STANDARD

Item Number	Part #	Description	Quantity
4ST-1	HCR30400	8R36 REAR TUBE EXT. - 32" NOMINAL	1
4ST-2	HCR30399	8R38 REAR TUBE EXT. - 44" NOMINAL	1
4ST-3	HCR30398	8R40 REAR TUBE EXT. - 56" NOMINAL	1
4ST-4	HCR30402	12R30 REAR TUBE EXT. - 116" NOMINAL	1

JOHN DEERE ONLY

Item Number	Part #	Description	Quantity
4JD-1	HCR30399	8R38 JD 608C REAR TUBE EXTENSION - 44" NOMINAL	1
4JD-2	HCR30402	12R30 JD 612C REAR TUBE EXTENSION - 116" NOMINAL	1
4JD-3	HCR30401	18R20 JD 618C REAR TUBE EXTENSION - 108" NOMINAL	1

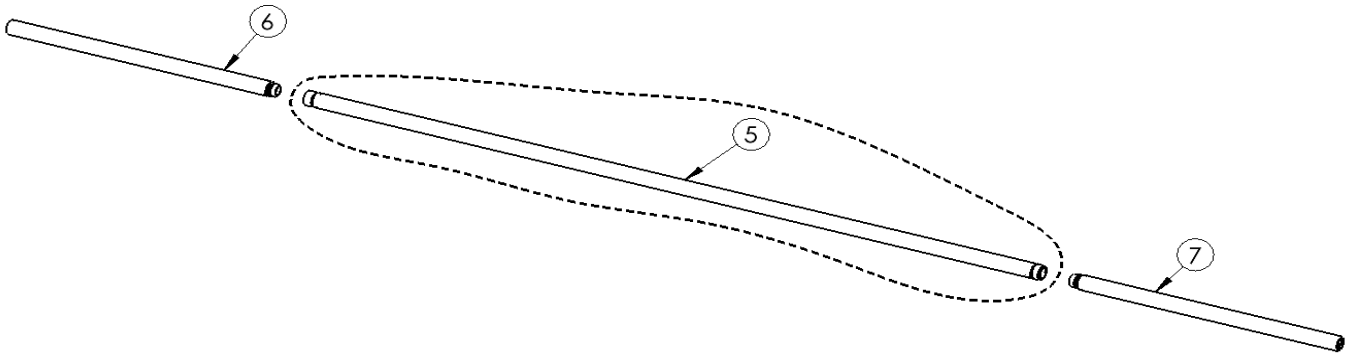
CASE IH ONLY & DRAGO

Item Number	Part #	Description	Quantity
4CHDR-1	HCR30400	8R36 REAR TUBE EXT. - 32" NOMINAL	1
4CHDR-2	HCR30402	12R30 REAR TUBE EXT. - 116" NOMINAL	1

GERINGHOFF

Item Number	Part #	Description	Quantity
4GH-1	HCR30402	12R30 PRE-ELITE, 12R30 ELITE REAR TUBE EXT. - 116" NOMINAL	1
4GH-2	HCR30400	8R36 ELITE REAR TUBE EXT. - 32" NOMINAL	1

CENTER REEL TUBE



STANDARD

Item Number	Part #	Description	Quantity
5ST-1	HCR30208	4R30, 38 & 12R20 CENTER REEL TUBE - 129" NOMINAL	1
5ST-2	HCR30203	6R30 & 8R30 & 12R30 CENTER REEL TUBE - 138" NOMINAL	1
5ST-3	HCR30212	6R36 & 8R36 CENTER REEL TUBE - 149.5" NOMINAL	1
5ST-4	HCR30198	6R38 & 8R38 CENTER REEL TUBE - 161" NOMINAL	1
5ST-5	HCR30199	8R40 CENTER REEL TUBE -169" NOMINAL	1
5ST-6	HCR30151	12R22 CENTER REEL TUBE -144" NOMINAL	1
5ST-7	HCR30205	14R30 & 16R30 CENTER REEL TUBE 159" NOMINAL	1

JOHN DEERE ONLY

Item Number	Part #	Description	Quantity
5JD-1	HCR30203	6R30 JD 606C, 8R30 JD 608C, 8R30 JD 893, 12R30 JD 612C CENTER REEL TUBE - 138" NOMINAL	1
5JD-2	HCR30198	6R38 JD 606C, 8R38 JD 608C, 12R38 JD 612C CENTER REEL TUBE - 161" NOMINAL	1
5JD-3	HCR30151	8R22 JD 608C, 12R22 JD 612C CENTER REEL TUBE - 144" NOMINAL	1
5JD-4	HCR30208	12R20 JD 612C, 18R20 JD 618C CENTER REEL TUBE - 129" NOMINAL	1

CENTER REEL TUBE

CASE IH ONLY & DRAGO

Item Number	Part #	Description	Quantity
5CHDR-1	HCR30203	6R30 & 8R30 CENTER REEL TUBE - 138" NOMINAL	1
5CHDR-2	HCR30098	6R36 CENTER REEL TUBE - 180" NOMINAL	1
5CHDR-3	HCR30212	8R36 CENTER REEL TUBE - 149.5" NOMINAL	1
5CHDR-4	HCR30151	12R22 CENTER REEL TUBE - 144" NOMINAL	1
5CHDR-5	HCR30205	12R30 CENTER REEL TUBE - 159" NOMINAL	1

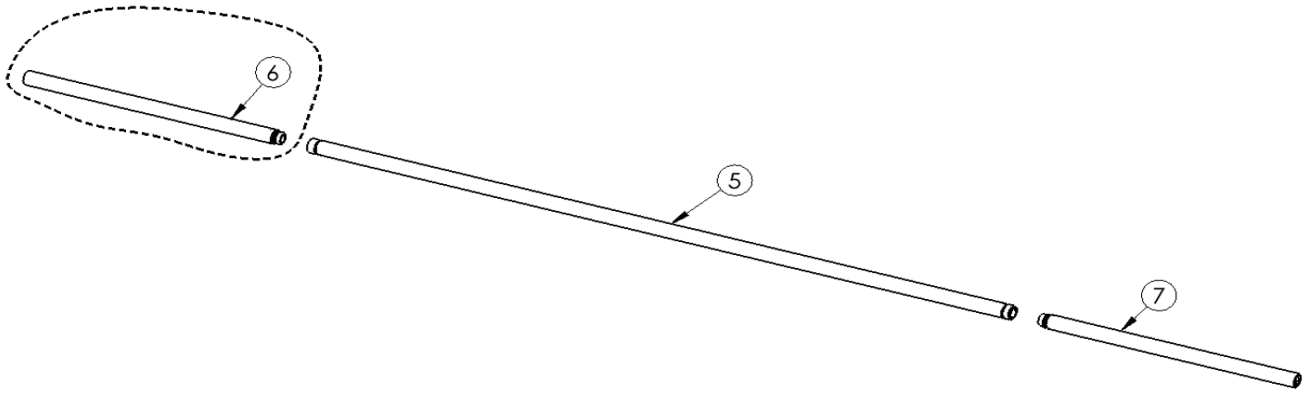
GERINGHOFF

Item Number	Part #	Description	Quantity
5GH-1	HCR30203	6R30 PRE-ELITE, 8R30 PRE-ELITE, 12R30 PRE-ELITE, 8R30 ELITE, 12R30 ELITE CENTER REEL TUBE - 138" NOMINAL	1
5GH-2	HCR30151	12R22 PRE-ELITE CENTER REEL TUBE - 144" NOMINAL	1
5GH-3	HCR30208	18R20 PRE-ELITE CENTER REEL TUBE -129" NOMINAL	1
5GH-4	HCR30212	8R36 ELITE CENTER REEL TUBE - 149.5" NOMINAL	1
5GH-5	HCR30151	12R22 ELITE CENTER REEL TUBE - 144" NOMINAL	1

CAT

Item Number	Part #	Description	Quantity
5CT-1	HCR30205	CENTER REEL TUBE - 159" NOMINAL	1

CENTER REEL TUBE - LH THREAD EXTENSION



STANDARD

Item Number	Part #	Description	Quantity
6ST-1	HCR30249	6R30 CR TUBE LH THREAD EXT. - 11" NOMINAL	1
6ST-2	HCR30289	6R36 CR TUBE LH THREAD EXT. - 18.5" NOMINAL	1
6ST-3	HCR30246	6R38 CR TUBE LH THREAD EXT. - 19.5" NOMINAL	1
6ST-4	HCR30272	8R30 CR TUBE LH THREAD EXT. - 41" NOMINAL	1
6ST-5	HCR30251	8R36 CR TUBE LH THREAD EXT. - 54.5" NOMINAL	1
6ST-6	HCR30245	8R38 CR TUBE LH THREAD EXT. - 57.5" NOMINAL	1
6ST-7	HCR30288	8R40 CR TUBE LH THREAD EXT. - 60.5" NOMINAL	1
6ST-8	HCR30287	12R20 CR TUBE LH THREAD EXT. - 53" NOMINAL	1
6ST-9	HCR30270	12R22 CR TUBE LH THREAD EXT. - 56" NOMINAL	1
6ST-10	HCR30244	12R30 CR TUBE LH THREAD EXT. - 101" NOMINAL	1
6ST-11	HCR30256	14R30 CR TUBE LH THREAD EXT. - 120" NOMINAL	1
6ST-12	HCR30242	16R30 CR TUBE LH THREAD EXT. - 150.5" NOMINAL	1

JOHN DEERE ONLY

Item Number	Part #	Description	Quantity
6JD-1	HCR30249	6R30 JD 606C, 8R22 JD 608C CENTER REEL TUBE LH THREAD EXTENSION - 11" NOMINAL	1
6JD-2	HCR30246	6R38 JD 606C CENTER REEL TUBE LH THREAD EXTENSION - 19.5" NOMINAL	1
6JD-3	HCR30272	8R30 JD 608C, 8R30 JD 893 CENTER REEL TUBE LH THREAD EXTENSION - 41" NOMINAL	1
6JD-4	HCR30245	8R38 JD 608C CENTER REEL TUBE LH THREAD EXTENSION - 57.5" NOMINAL	1
6JD-5	HCR30287	12R20 JD 612C CENTER REEL TUBE LH THREAD EXTENSION - 53" NOMINAL	1
6JD-6	HCR30270	12R22 JD 612C CENTER REEL TUBE LH THREAD EXTENSION - 56" NOMINAL	1
6JD-7	HCR30244	12R30 JD 612C CENTER REEL TUBE LH THREAD EXTENSION - 101" NOMINAL	1
6JD-8	HCR30241	12R38 JD 612C CENTER REEL TUBE LH THREAD EXTENSION - 133.5" NOMINAL	1
6JD-9	HCR30243	18R20 JD 618C CENTER REEL TUBE LH THREAD EXTENSION -110.5" NOMINAL	1

CASE IH ONLY

Item Number	Part #	Description	Quantity
6CH-1	HCR30249	6R30 CR TUBE LH THREAD EXT. - 11" NOMINAL	1
6CH-2	HCR30289	6R36 CR TUBE LH THREAD EXT. - 18.5" NOMINAL	1
6CH-3	HCR30272	8R30 CR TUBE LH THREAD EXT. - 41" NOMINAL	1
6CH-4	HCR30251	8R36 CR TUBE LH THREAD EXT. - 54.5" NOMINAL	1
6CH-5	HCR30270	12R22 CR TUBE LH THREAD EXT. - 56" NOMINAL	1
6CH-6	HCR30254	12R30 CR TUBE LH THREAD EXT. - 90.5" NOMINAL	1

DRAGO

Item Number	Part #	Description	Quantity
6DR-1	HCR30249	6R30 CR TUBE LH THREAD EXT. - 11" NOMINAL	1
6DR-2	HCR30289	6R36 CR TUBE LH THREAD EXT. - 18.5" NOMINAL	1
6DR-3	HCR30272	8R30 CR TUBE LH THREAD EXT. - 41" NOMINAL	1
6DR-4	HCR30251	8R36 CR TUBE LH THREAD EXT. - 54.5" NOMINAL	1
6DR-5	HCR30270	12R22 CR TUBE LH THREAD EXT. - 56" NOMINAL	1
6DR-6	HCR30254	12R30 CR TUBE LH THREAD EXT. - 90.5" NOMINAL	1

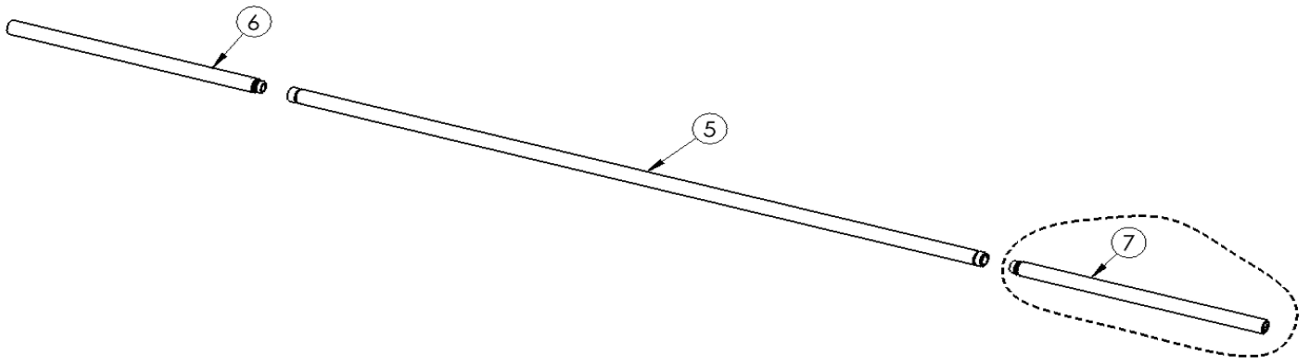
GERINGHOFF

Item Number	Part #	Description	Quantity
6GH-1	HCR30249	6R30 PRE-ELITE CENTER REEL TUBE LH THREAD EXT. - 11" NOMINAL	1
6GH-2	HCR30272	8R30 PRE-ELITE, 8R30 ELITE CENTER REEL TUBE LH THREAD EXT. - 41" NOMINAL	1
6GH-3	HCR30270	12R22 PRE-ELITE, 12R22 ELITE CENTER REEL TUBE LH THREAD EXT. - 56" NOMINAL	1
6GH-4	HCR30244	12R30 PRE-ELITE, 12R30 ELITE CENTER REEL TUBE LH THREAD EXT. - 101" NOMINAL	1
6GH-5	HCR30243	18R20 PRE-ELITE CENTER REEL TUBE LH THREAD EXT. - 110.5" NOMINAL	1
6GH-6	HCR30251	8R36 ELITE CENTER RELL TUBE LH THREAD EXT. - 54.5" NOMINAL	1

CAT

Item Number	Part #	Description	Quantity
6CT-1	HCR30242	CENTER REEL TUBE LH THREAD EXTENSION - 150.5" NOMINAL	1

CENTER REEL TUBE - RH THREAD EXTENSION



STANDARD

Item Number	Part #	Description	Quantity
7ST-1	HCR30274	6R30 CR TUBE RH THREAD EXT. - 11" NOMINAL	1
7ST-2	HCR30263	6R36 CR TUBE RH THREAD EXT. - 18.5" NOMINAL	1
7ST-3	HCR30290	6R38 CR TUBE RH THREAD EXT. - 19.5" NOMINAL	1
7ST-4	HCR30265	8R30 CR TUBE RH THREAD EXT. - 41" NOMINAL	1
7ST-5	HCR30276	8R36 CR TUBE RH THREAD EXT. - 54.5" NOMINAL	1
7ST-6	HCR30271	8R38 CR TUBE RH THREAD EXT. - 57.5" NOMINAL	1
7ST-7	HCR30262	8R40 CR TUBE RH THREAD EXT. - 60.5" NOMINAL	1
7ST-8	HCR30260	12R20 CR TUBE RH THREAD EXT. - 53" NOMINAL	1
7ST-9	HCR30268	12R22 CR TUBE RH THREAD EXT. - 56" NOMINAL	1
7ST-10	HCR30266	12R30 CR TUBE RH THREAD EXT. - 101" NOMINAL	1
7ST-11	HCR30281	14R30 CR TUBE RH THREAD EXT. - 120" NOMINAL	1
7ST-12	HCR30293	16R30 CR TUBE RH THREAD EXT. - 150.5" NOMINAL	1

JOHN DEERE ONLY

Item Number	Part #	Description	Quantity
7JD-1	HCR30274	6R30 JD 606C, 8R22 JD 608C CENTER REEL TUBE RH THREAD EXTENSION - 11" NOMINAL	1
7JD-2	HCR30290	6R38 JD 606C CENTER REEL TUBE RH THREAD EXTENSION - 19.5" NOMINAL	1
7JD-3	HCR30265	8R30 JD 608C, 8R30 JD 893 CENTER REEL TUBE RH THREAD EXTENSION - 41" NOMINAL	1
7JD-4	HCR30271	8R38 JD 608C CENTER REEL TUBE RH THREAD EXTENSION - 57.5" NOMINAL	1
7JD-5	HCR30260	12R20 JD 612C CENTER REEL TUBE RH THREAD EXTENSION - 53" NOMINAL	1
7JD-6	HCR30268	12R22 JD 612C CENTER REEL TUBE RH THREAD EXTENSION - 56" NOMINAL	1
7JD-7	HCR30266	12R30 JD 612C CENTER REEL TUBE RH THREAD EXTENSION - 101" NOMINAL	1
7JD-8	HCR30294	12R38 JD 612C CENTER REEL TUBE RH THREAD EXTENSION - 133.5" NOMINAL	1
7JD-9	HCR30292	18R20 JD 618C CENTER REEL TUBE RH THREAD EXTENSION - 110.5" NOMINAL	1

CASE IH ONLY

Item Number	Part #	Description	Quantity
7CH-1	HCR30274	6R30 CR TUBE RH THREAD EXT. - 11" NOMINAL	1
7CH-2	HCR30263	6R36 CR TUBE RH THREAD EXT. - 18.5" NOMINAL	1
7CH-3	HCR30265	8R30 CR TUBE RH THREAD EXT. - 41" NOMINAL	1
7CH-4	HCR30276	8R36 CR TUBE RH THREAD EXT. - 54.5" NOMINAL	1
7CH-5	HCR30268	12R22 CR TUBE RH THREAD EXT. - 56" NOMINAL	1
7CH-6	HCR30279	12R30 CR TUBE RH THREAD EXT. 90.5" NOMINAL	1

DRAGO

Item Number	Part #	Description	Quantity
7DR-1	HCR30274	6R30 CR TUBE RH THREAD EXT. - 11" NOMINAL	1
7DR-2	HCR30263	6R36 CR TUBE RH THREAD EXT. - 18.5" NOMINAL	1
7DR-3	HCR30265	8R30 CR TUBE RH THREAD EXT. - 41" NOMINAL	1
7DR-4	HCR30276	8R36 CR TUBE RH THREAD EXT. - 54.5" NOMINAL	1
7DR-5	HCR30268	12R22 CR TUBE RH THREAD EXT. - 56" NOMINAL	1
7DR-6	HCR30279	12R30 CR TUBE RH THREAD EXT. 90.5" NOMINAL	1

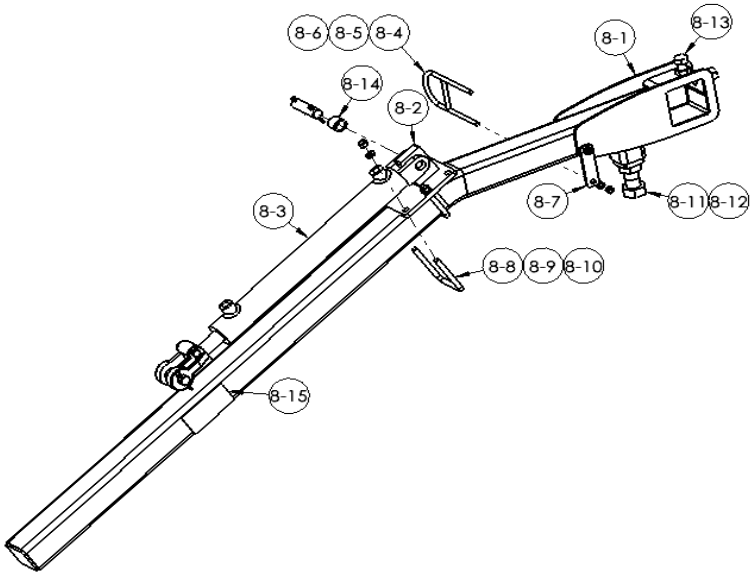
GERINGHOFF

Item Number	Part #	Description	Quantity
7GH-1	HCR30274	6R30 PRE-ELITE CENTER REEL TUBE RH THREAD EXT. - 11" NOMINAL	1
7GH-2	HCR30265	8R30 PRE-ELITE, 8R30 ELITE CENTER REEL TUBE RH THREAD EXT. - 41" NOMINAL	1
7GH-3	HCR30268	12R22 PRE-ELITE, 12R22 ELITE CENTER REEL TUBE RH THREAD EXT. - 56" NOMINAL	1
7GH-4	HCR30266	12R30 PRE-ELITE, 12R30 ELITE CENTER REEL TUBE RH THREAD EXT. - 101" NOMINAL	1
7GH-5	HCR30292	18R20 PRE-ELITE CENTER REEL TUBE RH THREAD EXT. - 110.5" NOMINAL	1
7GH-6	HCR30276	8R36 ELITE CENTER RELL TUBE RH THREAD EXT. - 54.5" NOMINAL	1

GERINGHOFF

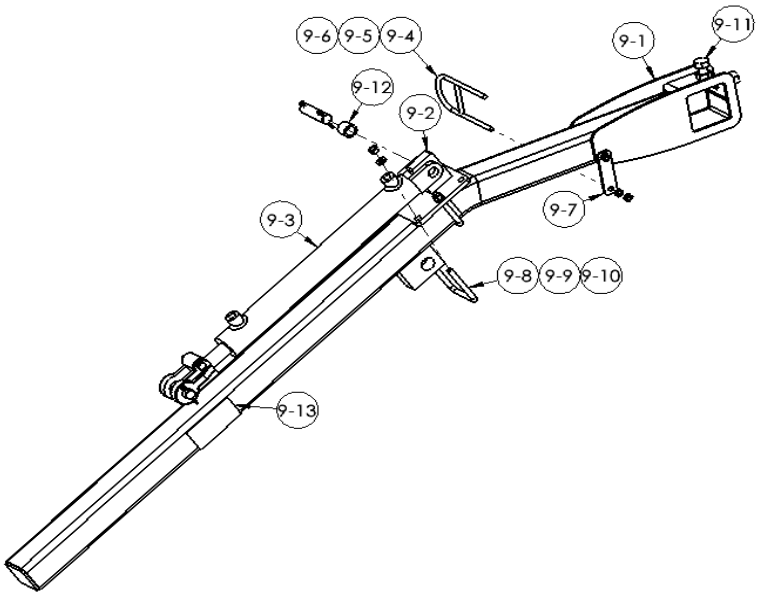
Item Number	Part #	Description	Quantity
7CT-1	HCR30274	6R30 PRE-ELITE CENTER REEL TUBE RH THREAD EXT. - 11" NOMINAL	1

STANDARD CURVED ARM ASSEMBLY



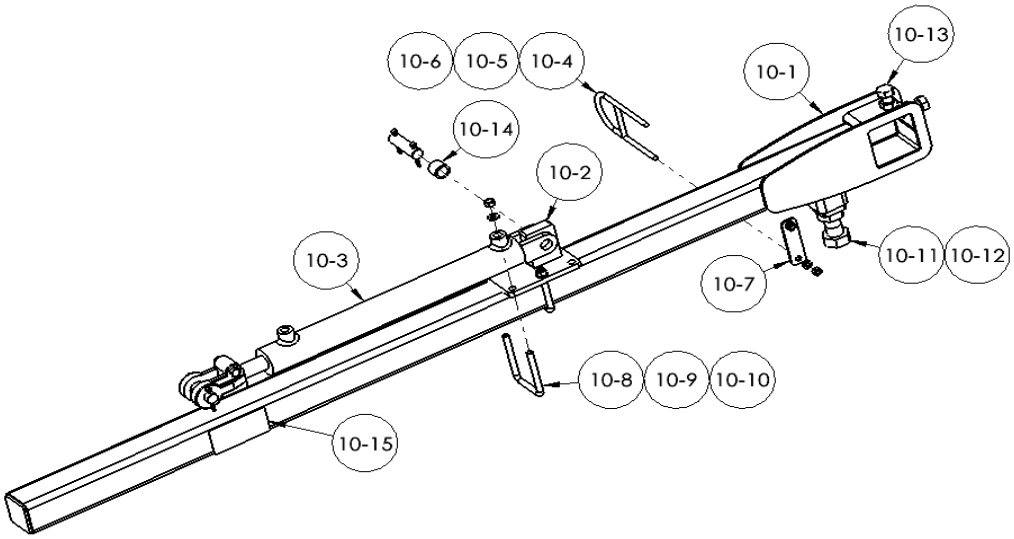
Item Number	Part #	Description	Quantity
8-1	427260	MODIFIED CURVED ARM	1
8-2	520006	FORE & AFT 3/4 THICK CYL POINT	1
8-3	476032	CYLINDER 1.5 X 14	1
8-4	HCR30069	HOSE GUIDE A SHAPED UBOLT	1
8-5	413505	5/16 LOCK WASHER	2
8-6	412005	5/16-18 NUT	2
8-7	HCR30074	HOSE GUIDE BACK STRAP	1
8-8	415111	3/8-16 X 2 1/2 X 3 1/2 UBOLT	4
8-9	413506	3/8 LOCK WASHER	4
8-10	412056	3/8-16 NUT	4
8-11	411641	1-8 X 3 BOLT GR5	1
8-12	412415	1-8 JAM NUT	1
8-13	411558	5/8-11 X 1 1/4 BOLT GR 5	2
8-14	520010	1 TO 3/4 CYLINDER BUSHING	2
8-15	DECAL12	SERIAL PLATE NUMBER	1

MODIFIED CURVED ARM ASSEMBLY



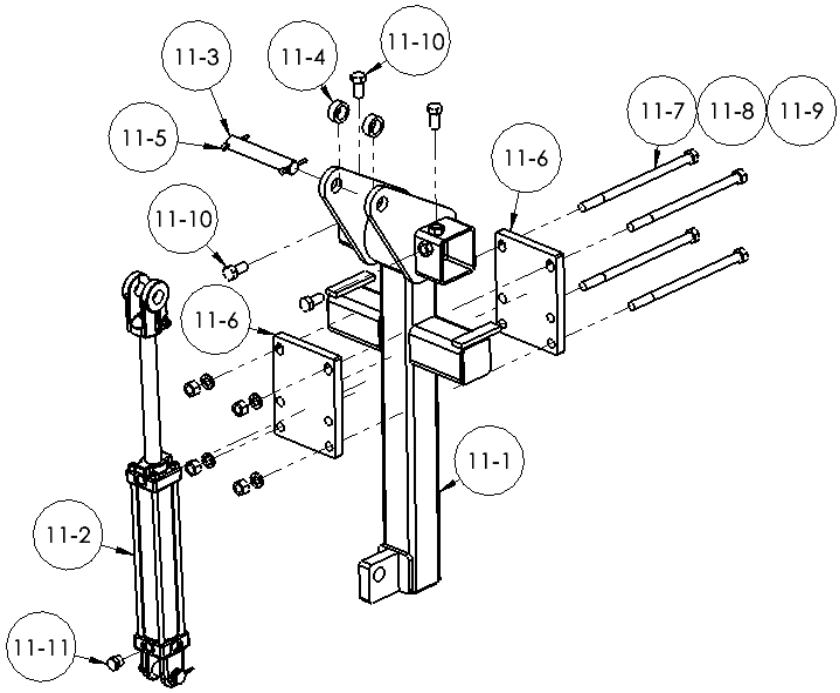
Item Number	Part #	Description	Quantity
9-1	427260	MODIFIED CURVED ARM	1
9-2	520006	FORE & AFT 3/4 THICK CYL POINT	1
9-3	476032	CYLINDER 1.5 X 14	1
9-4	HCR30069	HOSE GUIDE A SHAPED UBOLT	1
9-5	413505	5/16 LOCK WASHER	2
9-6	412005	5/16-18 NUT	2
9-7	HCR30074	HOSE GUIDE BACK STRAP	1
9-8	415111	3/8-16 X 2 1/2 X 3 1/2 UBOLT	4
9-9	413506	3/8 LOCK WASHER	4
9-10	412056	3/8-16 NUT	4
9-11	411558	5/8-11 X 1 1/4 BOLT GR5	2
9-12	520010	1 TO 3/4 CYLINDER BUSHING	2
9-13	DECAL12	SERIAL NUMBER PLATE	1

STRAIGHT ARM ASSEMBLY



Item Number	Part #	Description	Quantity
10-1	HCR130032	STRAIGHT ARM	1
10-2	520006	FORE & AFT 3/4 THICK CYL POINT	1
10-3	476032	CYLINDER 1.5 X 14	1
10-4	HCR30069	HOSE GUIDE A SHAPED UBOLT	1
10-5	413505	5/16 LOCK WASHER	2
10-6	412005	5/16-18 NUT	2
10-7	HCR30074	HOSE GUIDE BACK STRAP	1
10-8	415111	3/8-16 X 2 1/2 X 3 1/2 UBOLT	4
10-9	413506	3/8 LOCK WASHER	4
10-10	412056	3/8-16 NUT	4
10-11	411558	5/8-11 X 1 1/4 BOLT GR5	2
10-12	520010	1 TO 3/4 CYLINDER BUSHING	2
10-13	411558	5/8-11 X 1 1/4 BOLT GR 5	2
10-14	520010	1 TO 3/4 CYLINDER BUSHING	2
10-15	DECAL12	SERIAL PLATE NUMBER	1

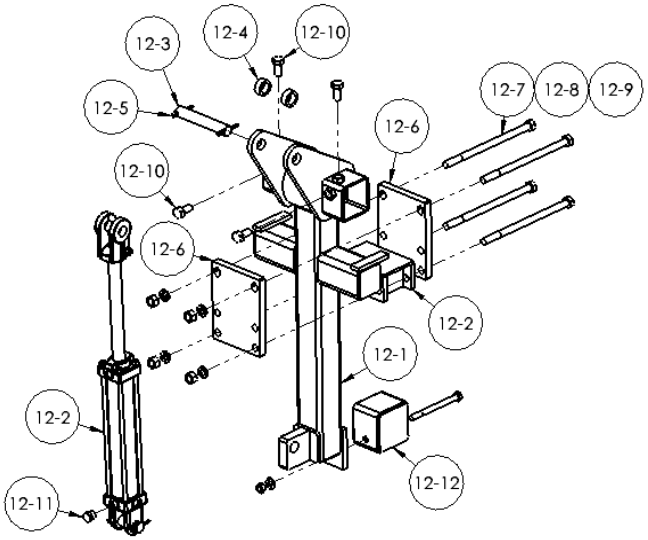
HINGE ASSEMBLY - STANDARD



FITS:
Standard - All Models
John Deere - 893 8R30 – 612, 712 FOLDING 12R30
CASE IH - 8-10 SERIES 6R30 & 8R30, 4418 5.5" HEADER 18R20
GERINGHOFF PRE-ELITE - 6R30, 8R30, 12R22, 12R30 & 18R20

Item Number	Part #	Description	Quantity
1	HCR30020	STANDARD HINGE	1
2	HCR20012	CYLINDER 2 X 10 TIE ROD	1
3	HCR30019	HINGE CYLINDER PIN	1
4	HCR30018	CYLINDER PIN SPACER 1" SHAFT	2
5	416005	1/4 X 2 COTTER PIN	2
6	HCR30027	HINGE MOUNT PLATE	2
7	411242	5/8-11 X 11 BOLT GR5	4
8	412060	5/8-11 NUT	4
9	413510	5/8 LOCK WASHER	4
10	411558	5/8-11 X 1 1/4 BOLT GR5	4
11	HCR20006	FITTING BERT PLUG 8MORB	1

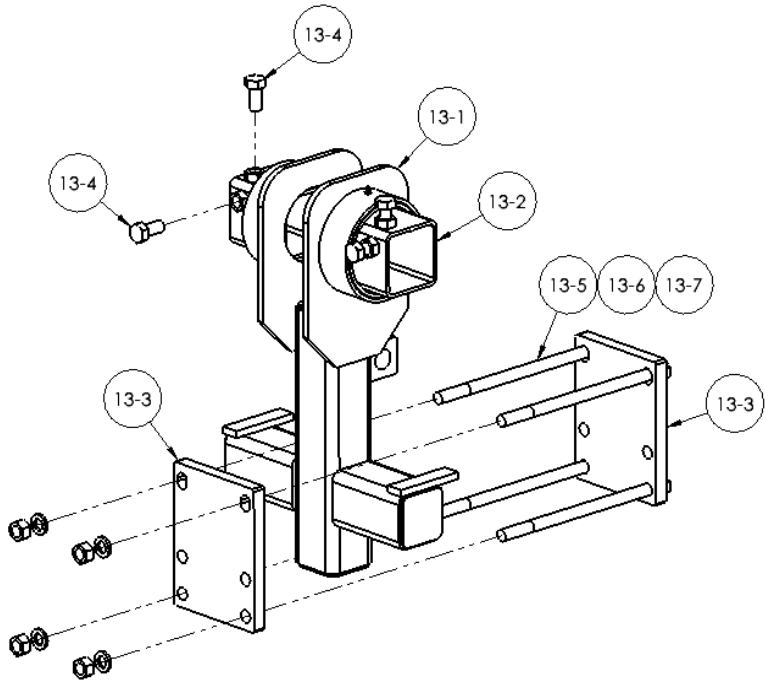
HINGE ASSEMBLY - JOHN DEERE



FITS:
-606C - 6R30 & 6R38
-608C – 8R22, 8R30 & 8R38
-612C – 12R20, 12R22, 12R30 & 12R38
-618C – 18R20

Item Number	Part #	Description	Quantity
12-1	HCR30044	JD 606 12C REEL MOUNT HINGE	1
12-2	HCR30042	JD 606 8C HINGE MOUNT BRACKET	1
12-3	HCR30019	HINGE CYLINDER PIN	1
12-4	HCR30018	CYLINDER PIN SPACER 1" SHAFT	2
12-5	416005	1/4 X 2 COTTER PIN	2
12-6	HCR30027	HINGE MOUNT PLATE	2
12-7	411242	5/8-11 X 11 BOLT GR5	4
12-8	412060	5/8-11 NUT	4
12-9	413510	5/8 LOCK WASHER	4
12-10	411558	5/8-11 X 1 1/4 BOLT GR5	4
12-11	HCR20006	FITTING VENT PLUG 8MORB	1
12-12	HCR30043	JD 606 8C HINGE MOUNT SPACER WELDMENT	1
12-13	HCR20012	CYLINDER 2 X 10 TIE ROD	1
12-14	411200	1/2-13 X 6 BOLT GR5	1
12-15	413007	1/2 SAE WASHER	1
12-16	410008	1/2-13 CENTER LOCK NUT	1

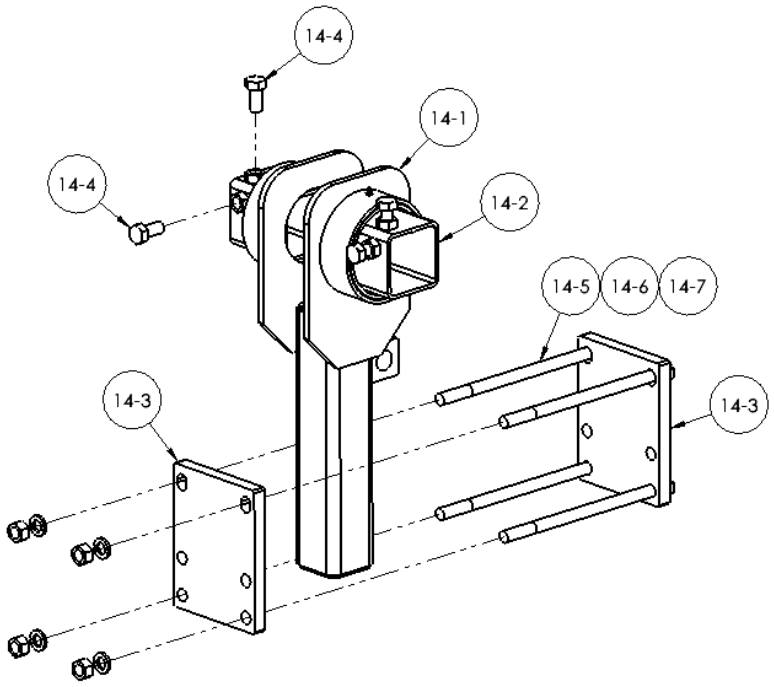
OUTSIDE HINGE ASSEMBLY - DRAGO



FITS:
All Models

Item Number	Part #	Description	Quantity
13-1	HCR30048	DRAGO MOUNT HINGE	1
13-2	HCR30004	HINGE LOCK COLLAR	2
13-3	HCR30027	HINGE MOUNT PLATE	2
13-4	411558	5/8-11 X 1 1/4 BOLT GR5	4
13-5	411242	5/8-11 X 11 BOLT GR5	4
13-6	413510	5/8 LOCK WASHER	4
13-7	412060	5/8-11 NUT	4

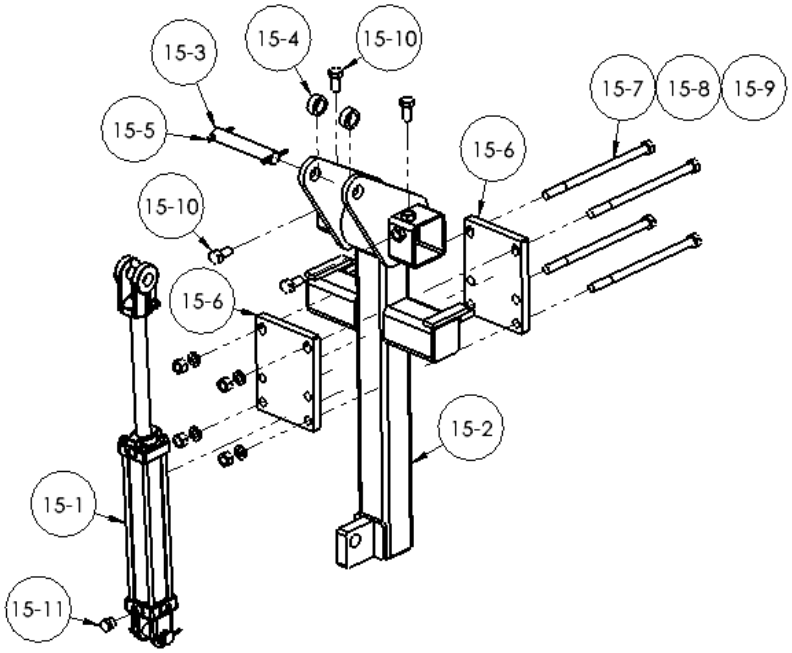
INSIDE HINGE ASSEMBLY - DRAGO



FITS:
8R36, 12R22 & 12R30

Item Number	Part #	Description	Quantity
14-1	HCR30004	HINGE LOCK COLLAR	2
14-2	HCR30027	HINGE MOUNT PLATE	2
14-3	411558	5/8-11 X 1 1/4 BOLT GR5	4
14-4	411242	5/8-11 X 11 BOLT GR5	4
14-5	413510	5/8 LOCK WASHER	4
14-6	412060	5/8-11 NUT	4
14-7	HCR30071	DRAGO GT SPECIAL CENTER HINGE	1

HINGE ASSEMBLY – GERINGHOFF PRE-ELITE

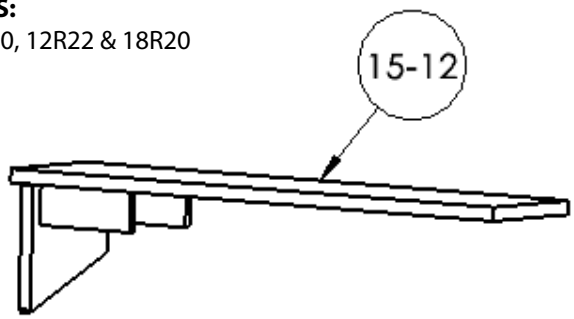


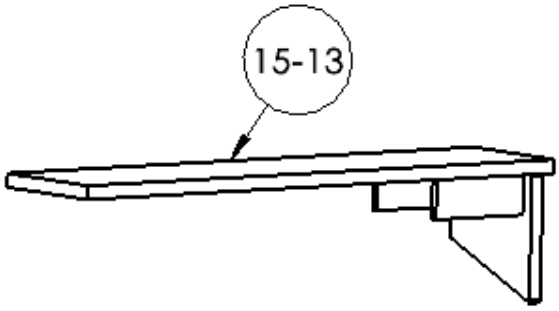
FITS:
12R22, 12R30 & 18R20

Item Number	Part #	Description	Quantity
15-1	HCR20012	CYLINDER 2 X 10 TIE ROD BLACK	1
15-2	HCR30049	GERINGHOFF PRE-ELITE SERIES HINGE	1
15-3	HCR30019	HINGE CYLINDER PIN	1
15-4	HCR30018	CYLINDER PIN SPACER	2
15-5	416005	1/4 X 2 COTTER PIN	2
15-6	HCR30027	HINGE MOUNT PLATE	2
15-7	411242	5/8-11 X 11 BOLT GR5	4
15-8	412060	5/8-11 NUT	4
15-9	413510	5/8 LOCK WASHER	4
15-10	411558	5/8-11 X 1 1/4 BOLT GR5	4
15-11	HCR20006	VENT PLUG 8MORB	1

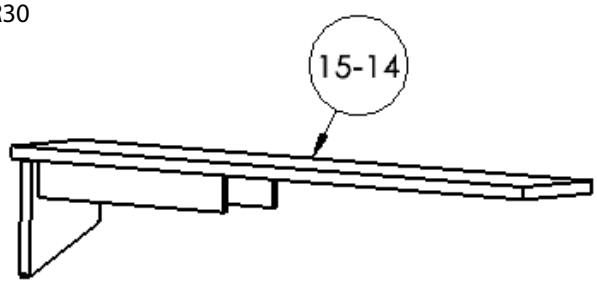
GERINGHOFF PRE-ELITE SERIES MOUNT STOP ARM

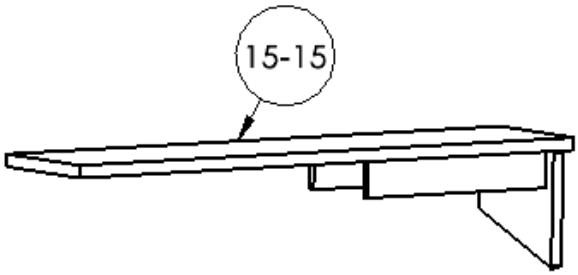
FITS:
8R30, 12R22 & 18R20





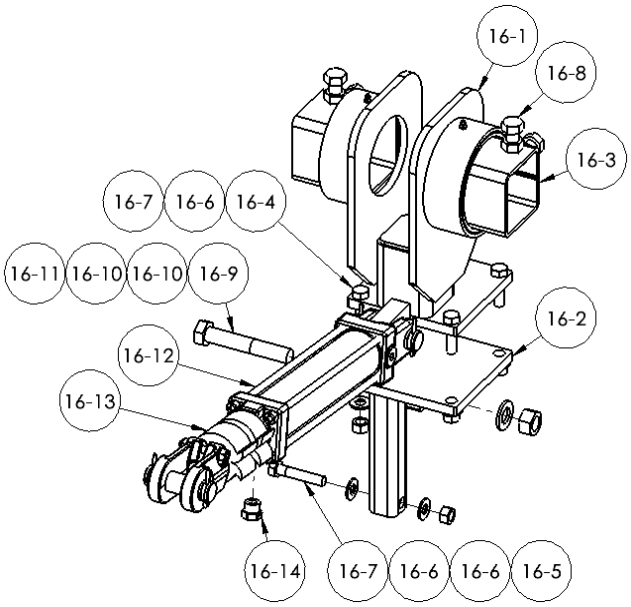
FITS:
12R30





Item Number	Part #	Description	Quantity
15-12	HCR30046	RH MOUNT STOP ARM 21.5"	1
15-13	HCR30047	LH MOUNT STOP ARM 21.5"	1
15-14	HCR30058	RH MOUNT STOP ARM 25"	1
15-15	HCR30059	RH MOUNT STOP ARM 25"	1

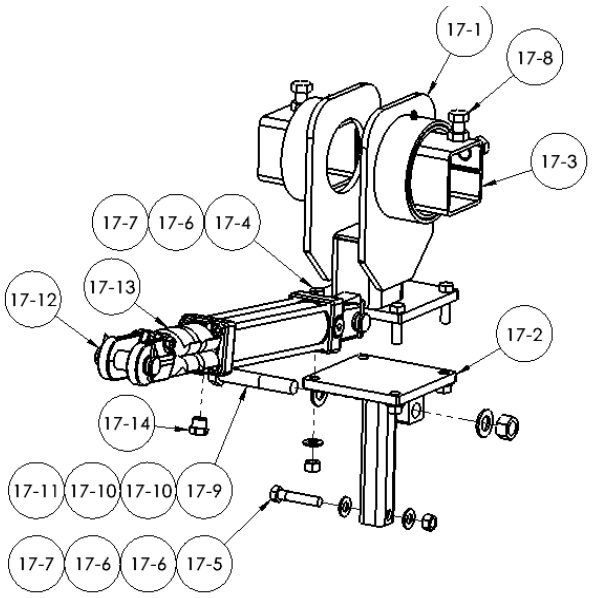
HINGE ASSEMBLY - GERINGHOFF ELITE SERIES RH SIDE



FITS:
8R30, 8R36, 12R22 & 12R30

Item Number	Part #	Description	Quantity
16-1	HCR30062	GERINGHOFF ELITE SERIES HINGE	1
16-2	HCR30067	GERINGHOFF ELITER SERIES RH REEL MOUNT	1
16-3	HCR30004	HINGE LOCK COLLAR WELDMENT	2
16-4	411546	1/2-13 X 1 3/4 BOLT GR5	4
16-5	411549	1/2-13 X 2 1/2 BOLT GR5	1
16-6	413007	1/2 SAE WASHER	6
16-7	412058	1/2-13 NUT	5
16-8	411558	5/8-11 X 1 1/4 BOLT GR5	4
16-9	411592	3/4-10 X 4 1/2 BOLT GR5	1
16-10	413072	3/4 SAE WASHER	2
16-11	410012	3/4-10 CENTER LOCK NUT	1
16-12	HCR20014	CYLINDER 2 X 8 TIE ROD	1
16-13	10000401	CYLINDER STROKE CONTROL	1
16-14	HCR20006	VENT PLUG 8MORB	1

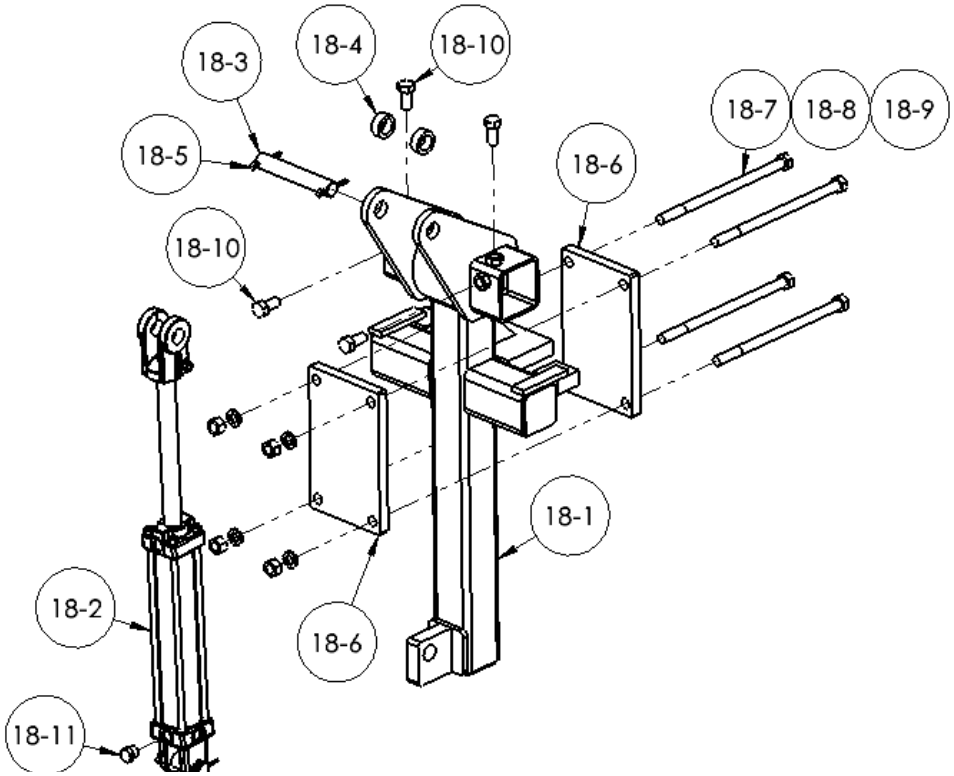
HINGE ASSEMBLY - GERINGHOFF ELITE SERIES LH SIDE



FITS:
8R30, 8R36, 12R22 & 12R30

Item Number	Part #	Description	Quantity
17-1	HCR30062	GERINGHOFF ELITE SERIES HINGE	1
17-2	HCR30068	GERINGHOFF ELITER SERIES LH REEL MOUNT	1
17-3	HCR30004	HINGE LOCK COLLAR WELDMENT	2
17-4	411546	1/2-13 X 1 3/4 BOLT GR5	4
17-5	411549	1/2-13 X 2 1/2 BOLT GR5	1
17-6	413007	1/2 SAE WASHER	6
17-7	412058	1/2-13 NUT	5
17-8	411558	5/8-11 X 1 1/4 BOLT GR5	4
17-9	411592	3/4-10 X 4 1/2 BOLT GR5	1
17-10	413072	3/4 SAE WASHER	2
17-11	410012	3/4-10 CENTER LOCK NUT	1
17-12	HCR20014	CYLINDER 2 X 8 TIE ROD	1
17-13	10000401	CYLINDER STROKE CONTROL	1
17-14	HCR20006	VENT PLUG 8MORB	1

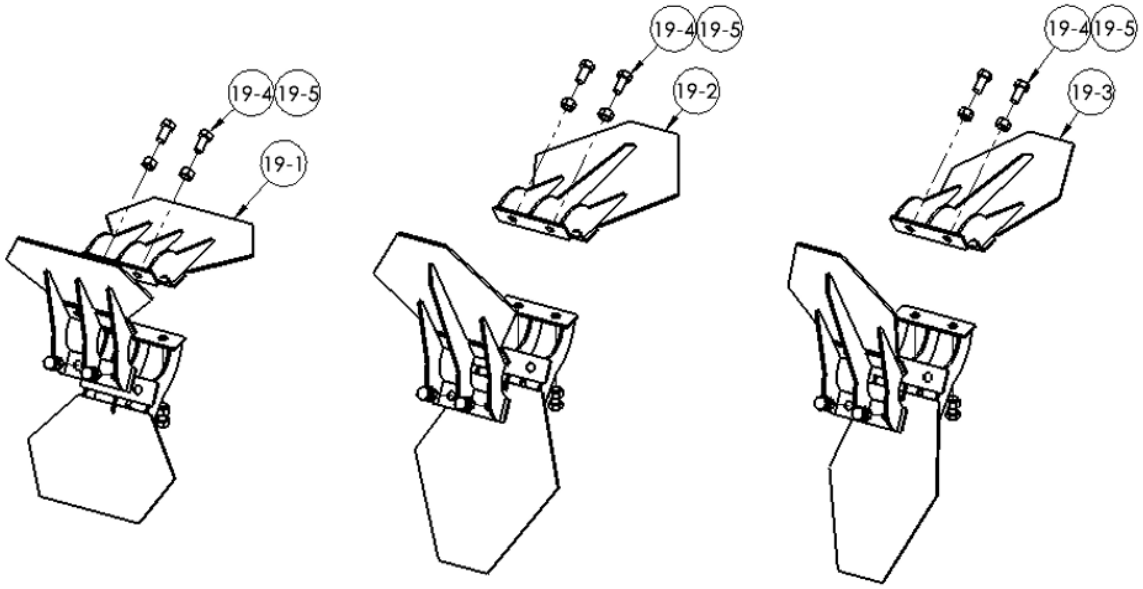
HINGE ASSEMBLY - CAT



FITS:
All CAT Models

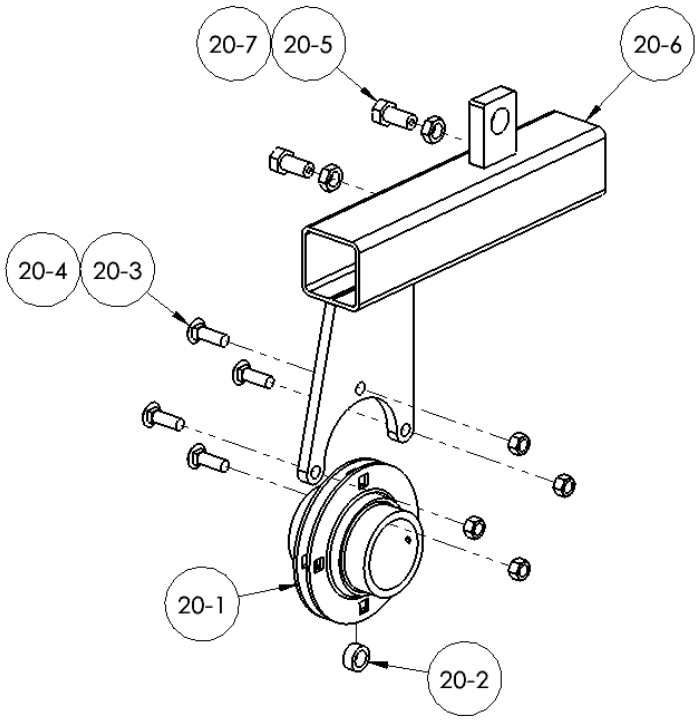
Item Number	Part #	Description	Quantity
18-1	HCR30030	CAT HINGE ASSEMBLY	1
18-2	HCR30019	HINGE CYLINDER PIN	1
18-3	HCR30018	CYLINDER PIN SPACER	2
18-4	416005	1/4 X 2 COTTER PIN	2
18-5	HCR30011	HINGE MOUNT PLATE	2
18-6	411242	5/8-11 X 11 BOLT GR5	4
18-7	412060	5/8-11 NUT	4
18-8	413510	5/8 LOCK WASHER	4
18-9	411558	5/8-11 X 1 1/4 BOLT GR5	4
18-10	HCR20006	VENT PLUG 8MORB	1
18-11	HCR300030	REEL MOUNT HINGE	1

PADDLE ASSEMBLIES



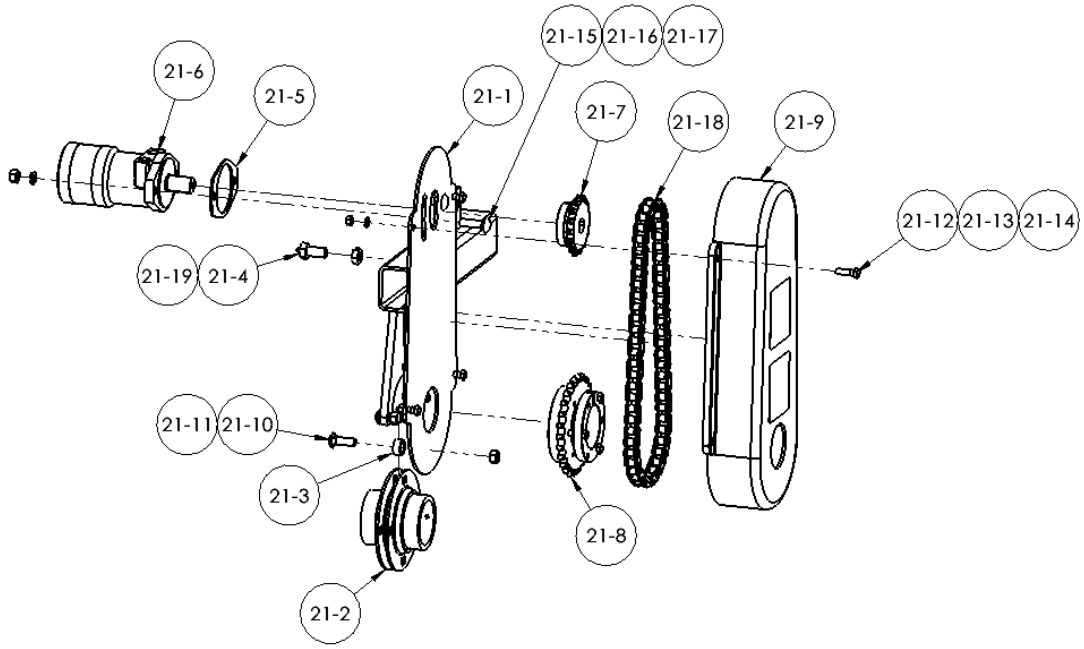
Item Number	Part #	Description	Quantity
19-1	HCR30007	CENTER PADDLE	3
19-2	HCR30008	30" STANDARD ROW PADDLE	3
19-3	HCR30005	20"NARROW ROW PADDLE	3
19-4	411543	1/2-13 X 1 BOLT GR5	6
19-5	410008	1/2-13 CENTER LOCK NUT	6

REEL HOLDER SUB ASSEMBLY



Item Number	Part #	Description	Quantity
20-1	HCR120025	FLANGED BEARING ASSEMBLY	1
20-2	HCR130045	SPHERICAL HUB HOLDER WITH CYLINDER POINT	1
20-3	HCR130016	FLANGED BEARING SPACER	1
20-4	411785	1/2-13 X 1 1/2 CARRIAGE BOLT	4
20-5	410008	1/2-13 CENTER LOCK NUT	4
20-6	HCR130067	FORE & AFT GREASE ZERK BOLT	2
20-7	412410	5/8 JAM NUT	2

REEL HOLDER DRIVE ASSEMBLY



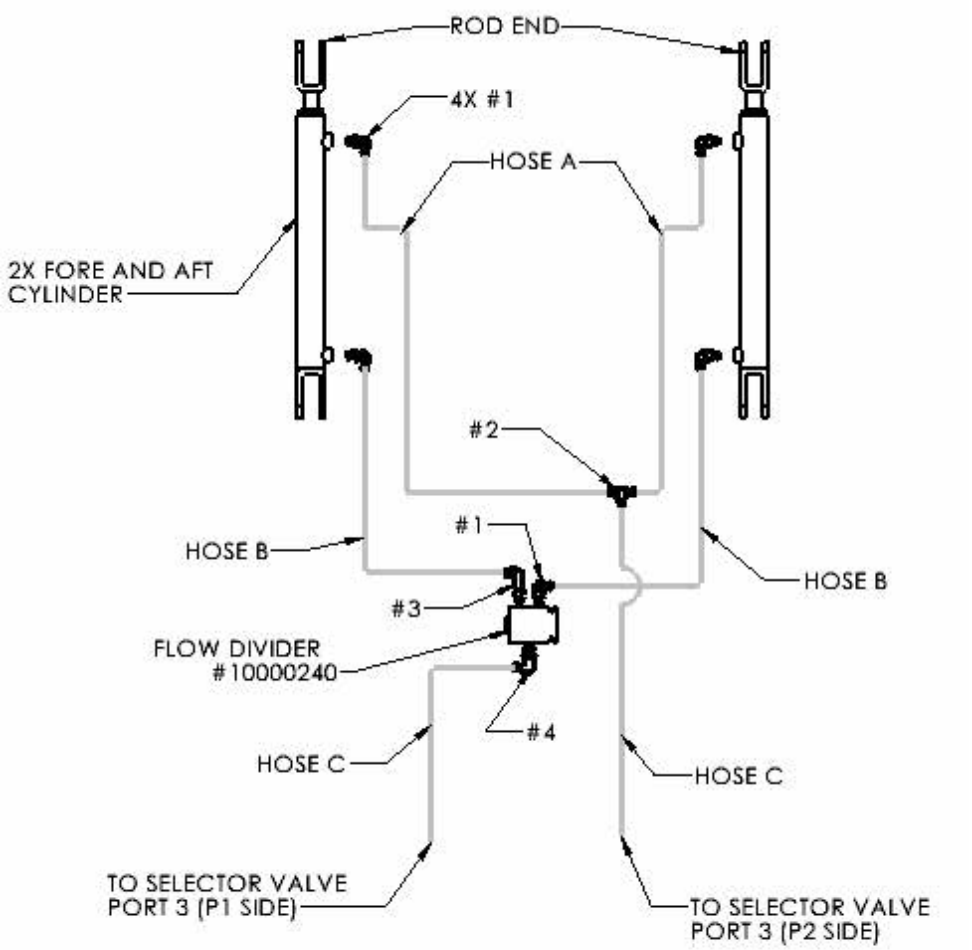
Item Number	Part #	Description	Quantity
21-1	HCR130039	HUB HOLDER CHANI BOX WITH CYLINDER POINT	1
21-2	HCR120025	FLANGED BEARING ASSEMBLY	1
21-3	HCR130016	FLANGED BEARING SPACER	1
21-4	HCR130067	FORE & AFT GREASE ZERK BOLT	2
21-5	HCR30002	HYDRAULIC MOTOR BASE PLATE	1
21-6	HCR20005	HYD MOTOR DYNAMIC FLUID COMPONENTS 1"KEYED SHAFT	1
21-7	HCR20001	DRIVE SPROCKET	1
21-8	427100	DRIVE SPROCKET TAPERED HUB ASSEMBLY	1
21-9	HCR130014	DRIVE CHAIN SHIELD COMPOSITE	1
21-10	411785	1/2-13 X 1 1/2 CARRIAGE BOLT	4
21-11	410008	1/2-13 CENTER LOCK NUT	4
21-12	411508	3/8-16 X 1 1/4 BOLT GR5	4
21-13	413506	3/8 LOCK WASHER	4

CONTINUED ON NEXT PAGE

REEL HOLDER DRIVE ASSEMBLY

Item Number	Part #	Description	Quantity
21-14	410006	3/8-16 CENTER LOCK NUT	4
21-15	411726	1/2-13 X 1 3/4 SHORT NECK CARRIAGE BOLT	2
21-16	413508	1/2 LOCK WASHER	2
21-17	412058	1/2-13 NUT	2
21-18	HCR30012	60 ROLLER CHAIN 56 PITCHES (42")	1
21-19	412410	5/8 JAM NUT	2

2-ARM FORE & AFT



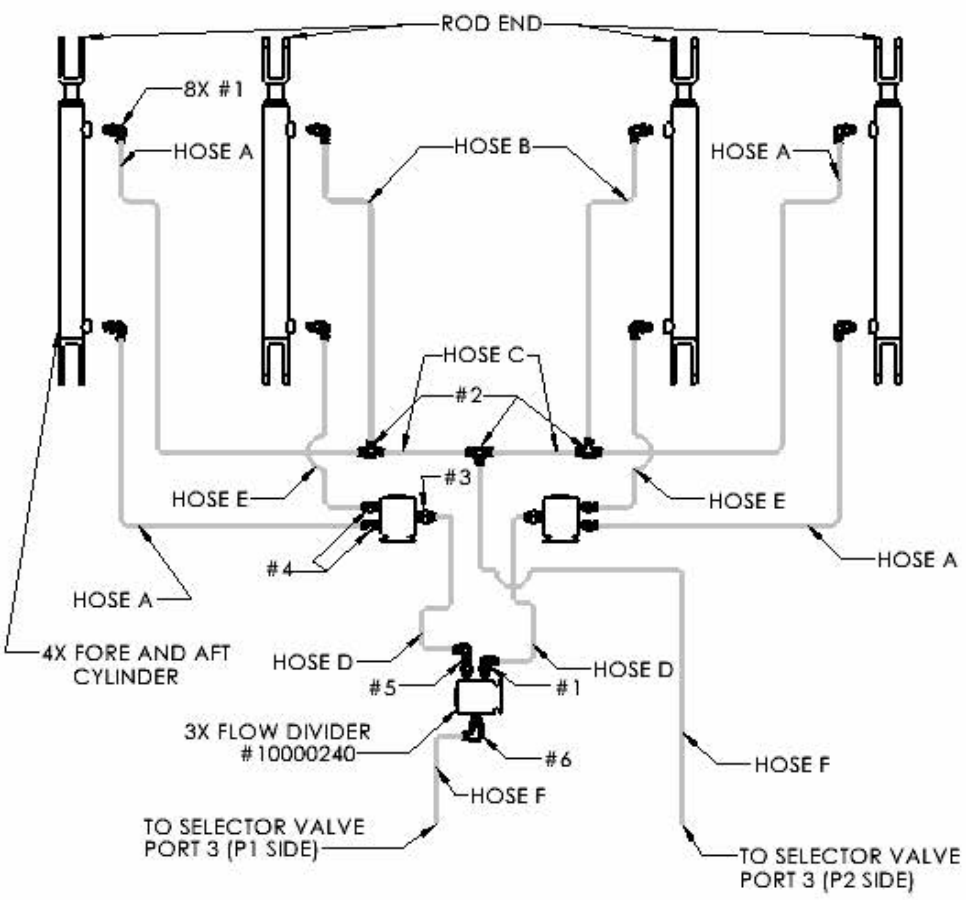
HOSE TABLE

HOSE NUMBER	LENGTH (IN)	HOSE END 1	HOSE END 2	QUANITY
A	114	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	2
B	98	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	2
C	72	#6 FEMALE JIC 37° FLARE	#8 MALE O-RING BOSS	2

FITTINGS TABLE

FITTING NUMBER	END #1	END #2	SHAPE	QUANITY
1	#6 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	90° FITTING	5
2	#6 MALE JIC 37° FLARE ALL SIDES		TEE	1
3	#6 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	90° FITTING LONG	1
4	#8 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	90° FITTING	1

4-ARM FORE & AFT



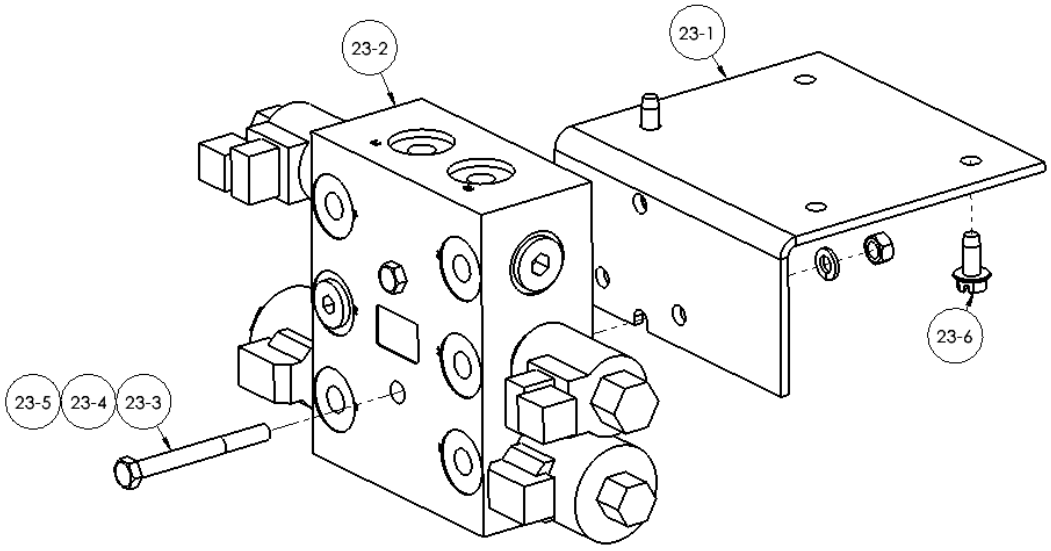
HOSE TABLE

HOSE NUMBER	LENGTH (IN)	HOSE END 1	HOSE END 2	QUANITY
A	148	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	4
B	42	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	2
C	80	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	2
D	70	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	2
E	25	#6 FEMALE JIC 37° FLARE	#6 FEMALE JIC 37° FLARE	2
F	72	#6 FEMALE JIC 37° FLARE	#8 MALE O-RING BOSS	2

FITTINGS TABLE

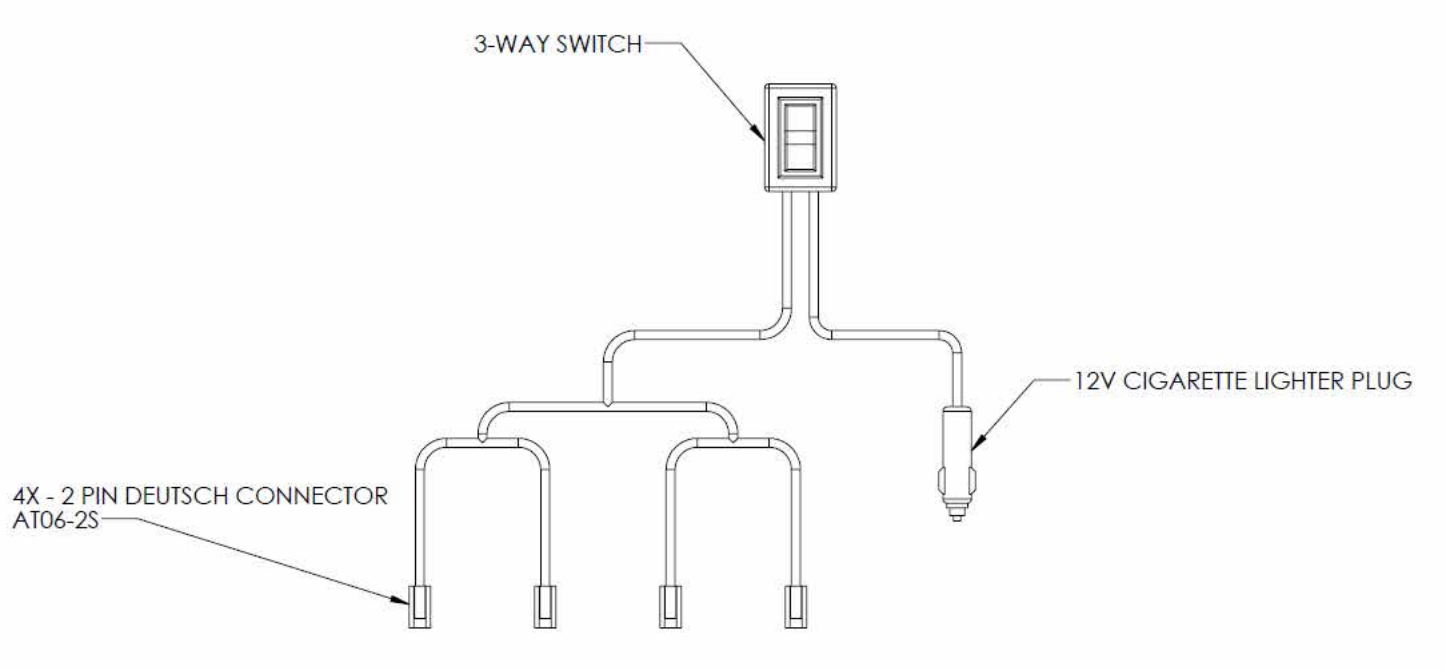
FITTING NUMBER	END #1	END #2	SHAPE	QUANITY
1	#6 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	90° FITTING	9
2	#6 MALE JIC 37° FLARE ALL SIDES		TEE	3
3	#8 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	STRAIGHT	2
4	#6 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	STRAIGHT	4
5	#6 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	90° FITTING LONG	1
6	#8 MALE O-RING BOSS	#6 MALE JIC 37° FLARE	90° FITTING	1

SELECTOR VALVE ASSEMBLY



Item Number	Part #	Description	Quantity
23-1	10000030	SELECTOR VALVE BODY MOUNT	1
23-2	10000262	3-POSITION SELECTOR VALVE	1
23-3	411131	5/16-18 X 3 BOLT GR5	2
23-4	413505	5/16 LOCK WASHER	2
23-5	412005	5/16-18 NUT	2
23-6	305078	5/16-18 X 3/4 THREAD CUTTING WASHER HEAD BOLT	2

CORD SET 4-PLUG STYLE B-2380 (10000230)



HAWKINS

308.708.8185 | HAWKINSAG.COM
2120 4TH AVE, HOLDREGE, NE 68949

RETURN TO INDEX