

# VITTETOE CHAFF SPREADER

**John Deere**

*Installation Instructions*

*Operator's Manual*

*Trouble-Shooting Guide*

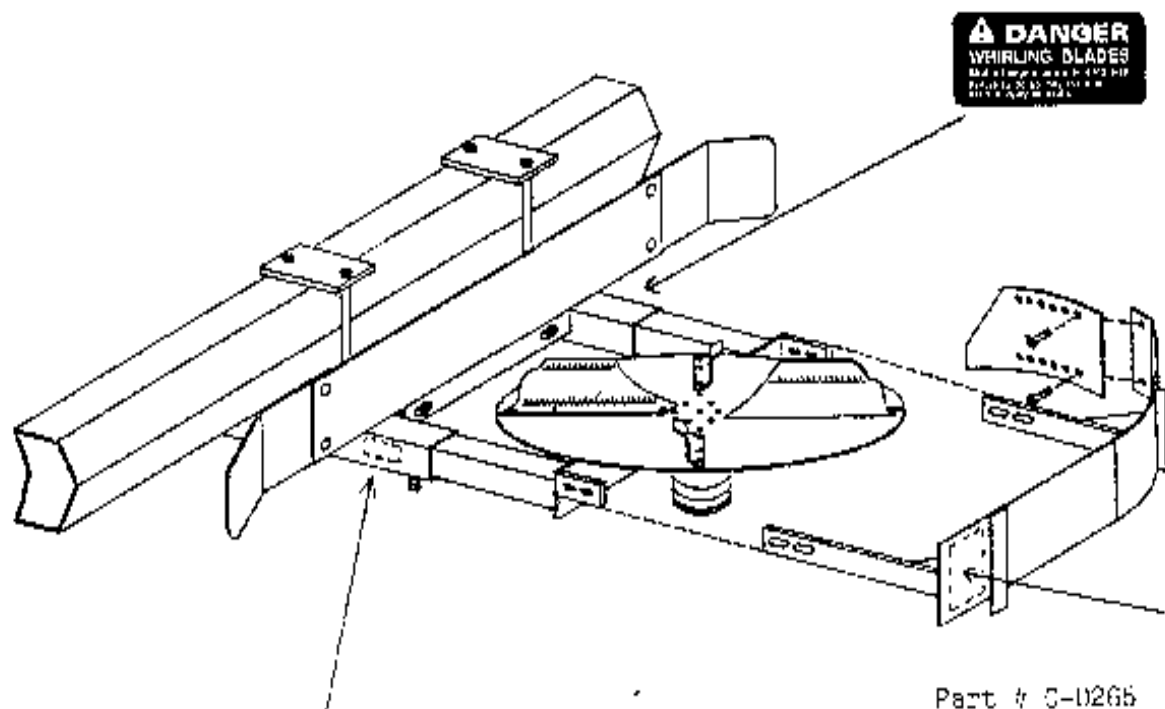
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**Vittetoe, Inc. Keota, IA 52248**  
**Phone: 641-636-2259**

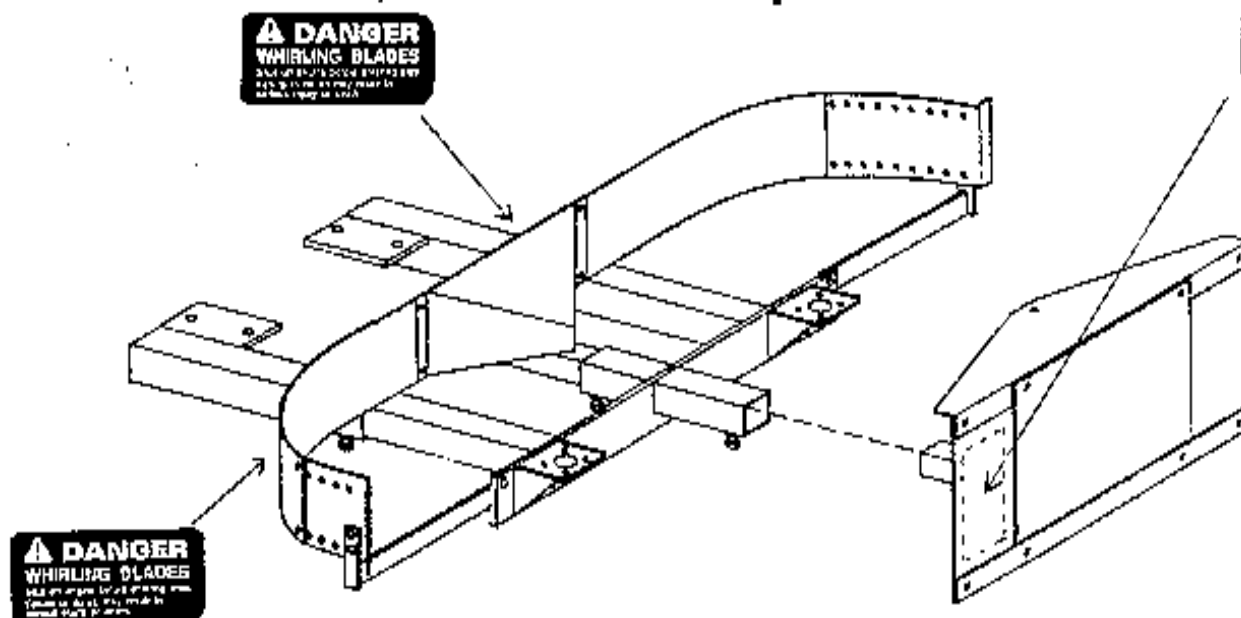
**9-2006**

**Anyone who handles, installs, uses, or services this chaff spreader should first read and understand the owner's manual.**

## Single Spreader



## Double Spreader



**Replacement Safety Decals May Be Obtained By Contacting  
Vittetoe, Inc. 1-800-848-8386**

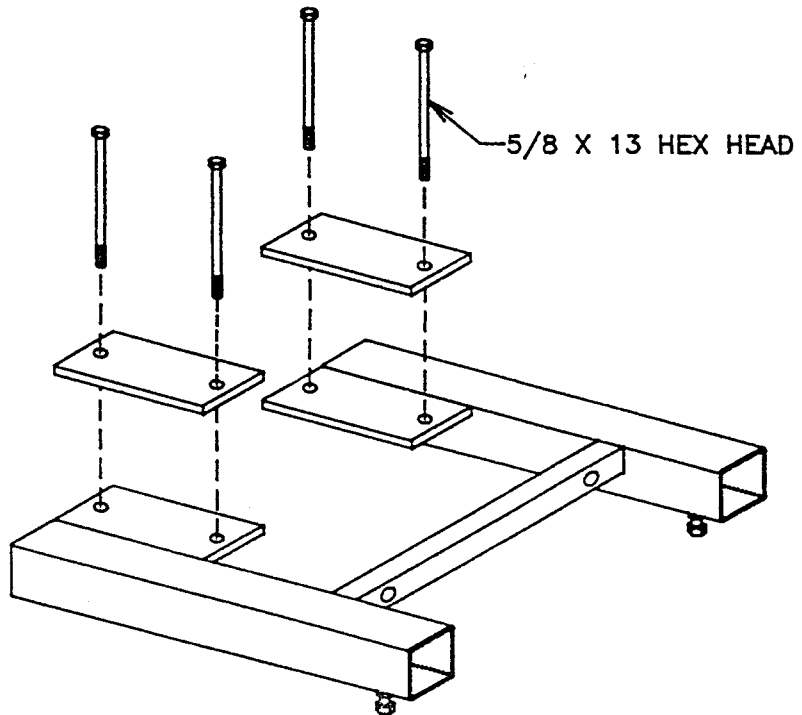
# Contents

DESCRIPTION	PAGE
Axle Mounts : 9000 JD / 9500 Sidehill.....	2
Axle Mounts: JD Standard / JD Heavy Duty.....	3
Axle Mounts : JD Titan II Heavy Duty / 4425 & 4435.....	4
Single Chaff Spreader Schematic .....	5
Single Chaff Spreader Step-by-Step Assembly Diagrams .....	6
Double Chaff Spreader Schematic .....	11
Double Chaff Spreader Step-by-Step Assembly Diagrams .....	12
Double Rear View / Double Side View .....	18
4400 Written Instructions.....	19
4420 Written Instructions.....	21
4425 & 4435 Written Instructions .....	22
JD Pull type Written Instructions.....	23
6600 through 8820 Written Instructions.....	24
Mac-Don Header Bulletin .....	27
Pan Mounting Diagram: 4400.....	28
20 Series JD Alternative Hydraulic Hookup.....	29
9000 JD Single Written Instructions .....	31
9000 JD Double Written Instructions .....	32
Valve Mount Placement: 4425 & 4435 / 9000 Series .....	34
Valve Mount Placement: 4400, 4420, 6600, 7700, 7701 .....	35
Valve Mount Placement: 6620, 7720, 7721, 8820.....	35
JD with Row Crop Head Hydraulic Hookup Diagram .....	36
JD Hydraulic Hookup Diagram .....	36
9000 Single Hydraulic Hookup Diagram.....	37
9000 Double Hydraulic Hookup Diagram .....	38
Pan Mounting Diagram: 4420.....	39
Flat Pan Mounting Diagram.....	40
Oval Pan Written Assembly Instructions.....	41
Oval Pan Subframe Diagram.....	42
Oval Pan Schematic.....	43
Oval Pan Side View Mounting Diagram / Belting Placement .....	44
Chopper Belt Cobguard Placement: 6620, 7720, 8820.....	45
Chopper Belt Cobguard Placement: 9400, 9500, 9600.....	46
Pan Wing Placement: 9000 Series, 1992 & Before.....	48
Pan Wing Placement: 9000 Series, 1993 & Later .....	49
Pan Mounting Diagram: 6620 Sidehill .....	50
Trouble Shooting Single Chaff Spreader.....	51
Trouble Shooting Double Chaff Spreader .....	54
Safety Bulletin.....	55
Warranty Information .....	56
Flow Control Valve Mounting.....	57

## **STEP 1**

### **JD 9000 AXLE**

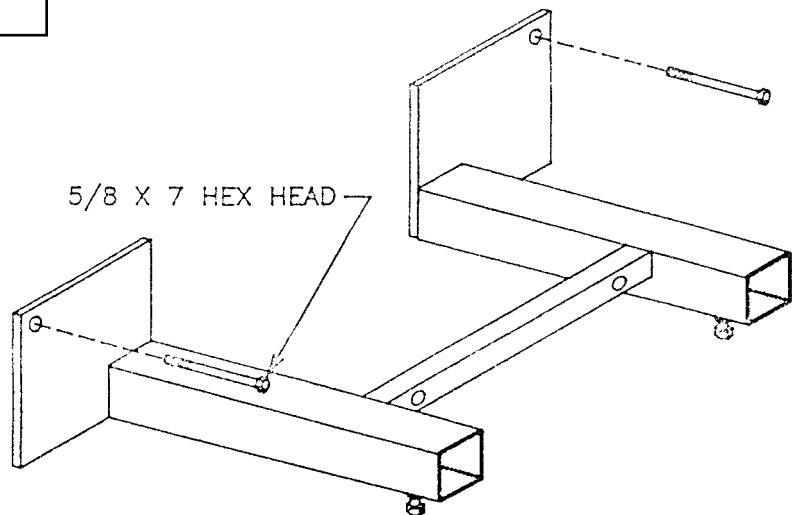
Part #C-0020



Bolt axle mount up to the ottom of the axle with blots in from of and behind the axle going down through the plates on top of the axle. The plates are long enough so tht the rear bolts will pass behind the braces welded to the back of the center of the axle.

### **JD 9000 SIDEHILL AXLE**

Part #C-0245



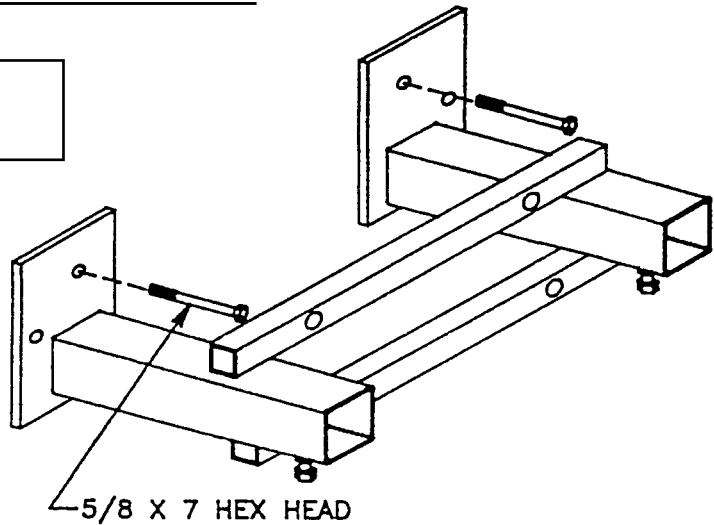
Bolt axle mount onto the axle with 2 bolts through the axle from front to rear.

## **STEP 1 CONT.**

### **JD STANDARD AXLE**

All 4400, 4420, 6600,  
7700, 6620 and 7720  
with Standard Axle.

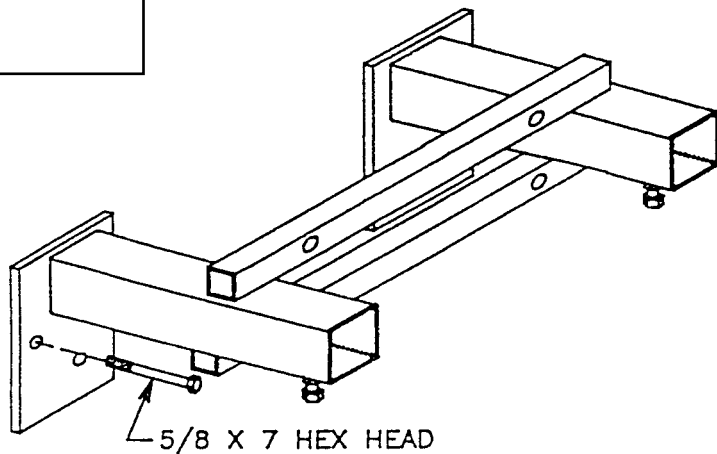
Part #C-0014



Bolt the axle mount to the rear side of the axle with the plates against the axle pointing **up**. Use one bolt on each side through the **centermost** holes. If the steering cylinder bracket interferes, space it out ½ inch from the axle so that the axle mount fits tight against the axle. You can also notch the axle mount plate to clear the steering cylinder. The set screws near the rear end of the axle mount should be placed in the bottom side of the axle mount.

### **JD HEAVY DUTY AXLE**

Part #C-0014

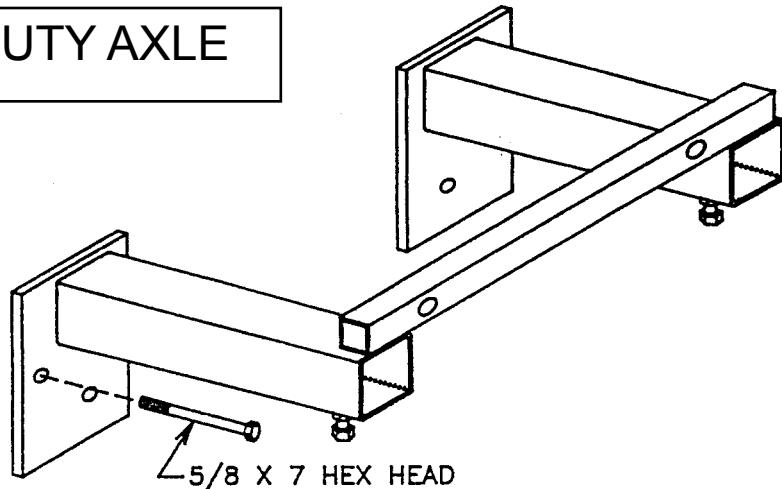


Bolt the axle mount to the rear side of the axle with the plates against the axle pointing **down**. Use one bolt on each side through the **outermost** holes. If the steering cylinder bracket interferes, space it out ½ inch from the axle so that the axle mount fits tight against the axle. You can also notch the axle mount plate to clear the steering cylinder. The set screws near the rear end of the axle mount should be placed in the bottom side of the axle mount. For solid non-adjustable axles, center the **outermost** two holes and drill two holes through the axle.

## **STEP 1 CONT.**

### **JD TITAN II HEAVY DUTY AXLE**

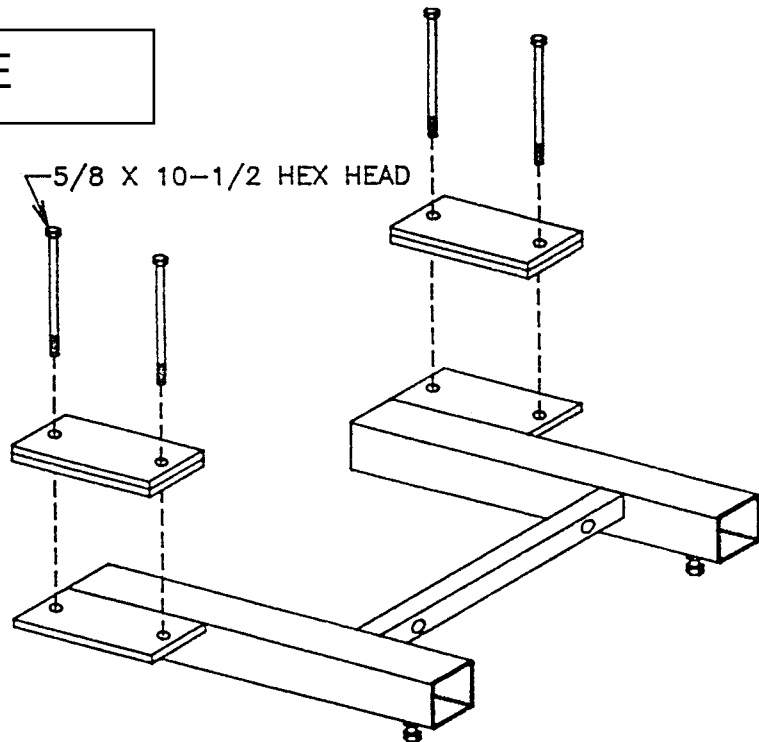
Part #C-0015



Bolt the axle mount to the rear side of the axle with the plates against the axle pointing **down**. Use one bolt on each side through the **outermost** holes. If the steering cylinder bracket interferes, space it out  $\frac{1}{2}$  inch from the axle so that the axle mount fits tight against the axle. You can also notch the axle mount plate to clear the steering cylinder. The set screws near the rear end of the axle mount should be placed in the bottom side of the axle mount. For solid non-adjustable axles, center the **outermost** two holes and drill two holes through the axle.

### **JD 4425, 4435 AXLE**

Part #C-0169

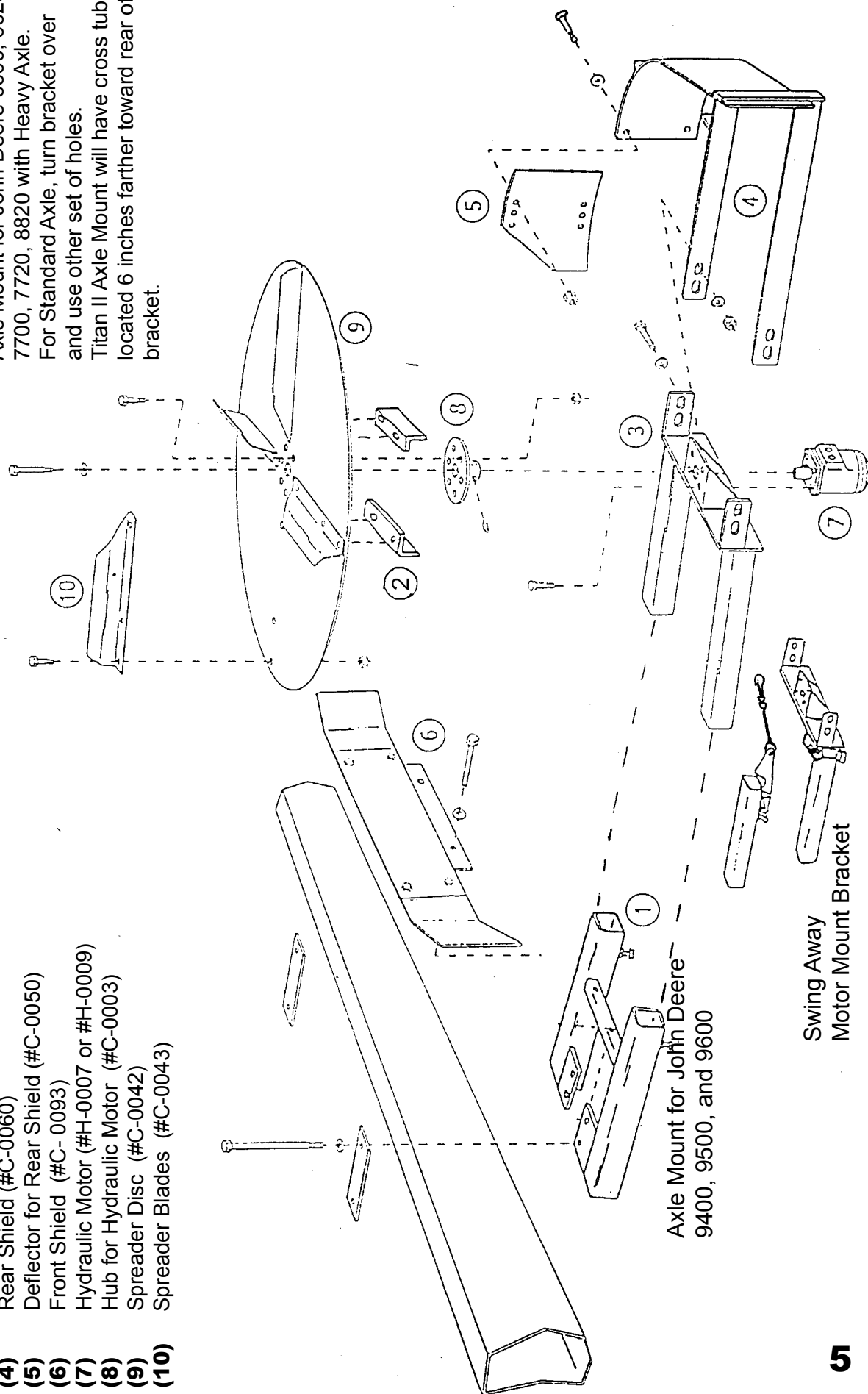
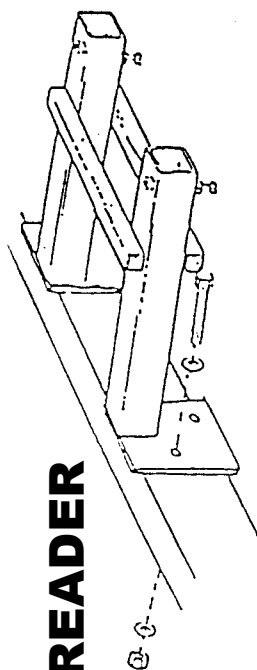


Bolt axle mount up to the bottom of the axle with bolts in front of and behind the axle going down through the plates on top of the axle.

# VITTETOE SINGLE CHAFF SPREADER

- (1) Axle Mount  
(see specific unit page for Part Number)
- (2) Trash Wipers (#C-0137)
- (3) Motor Mount  
Solid (#C- 0049)  
Swing-Away (#C-0306)
- (4) Rear Shield (#C-0060)
- (5) Deflector for Rear Shield (#C-0050)
- (6) Front Shield (#C- 0093)
- (7) Hydraulic Motor (#H-0007 or #H-0009)
- (8) Hub for Hydraulic Motor (#C-0003)
- (9) Spreader Disc (#C-0042)
- (10) Spreader Blades (#C-0043)

Axle Mount for John Deere 6600, 6620, 7700, 7720, 8820 with Heavy Axle.  
For Standard Axle, turn bracket over and use other set of holes.  
Titan II Axle Mount will have cross tube located 6 inches farther toward rear of bracket.

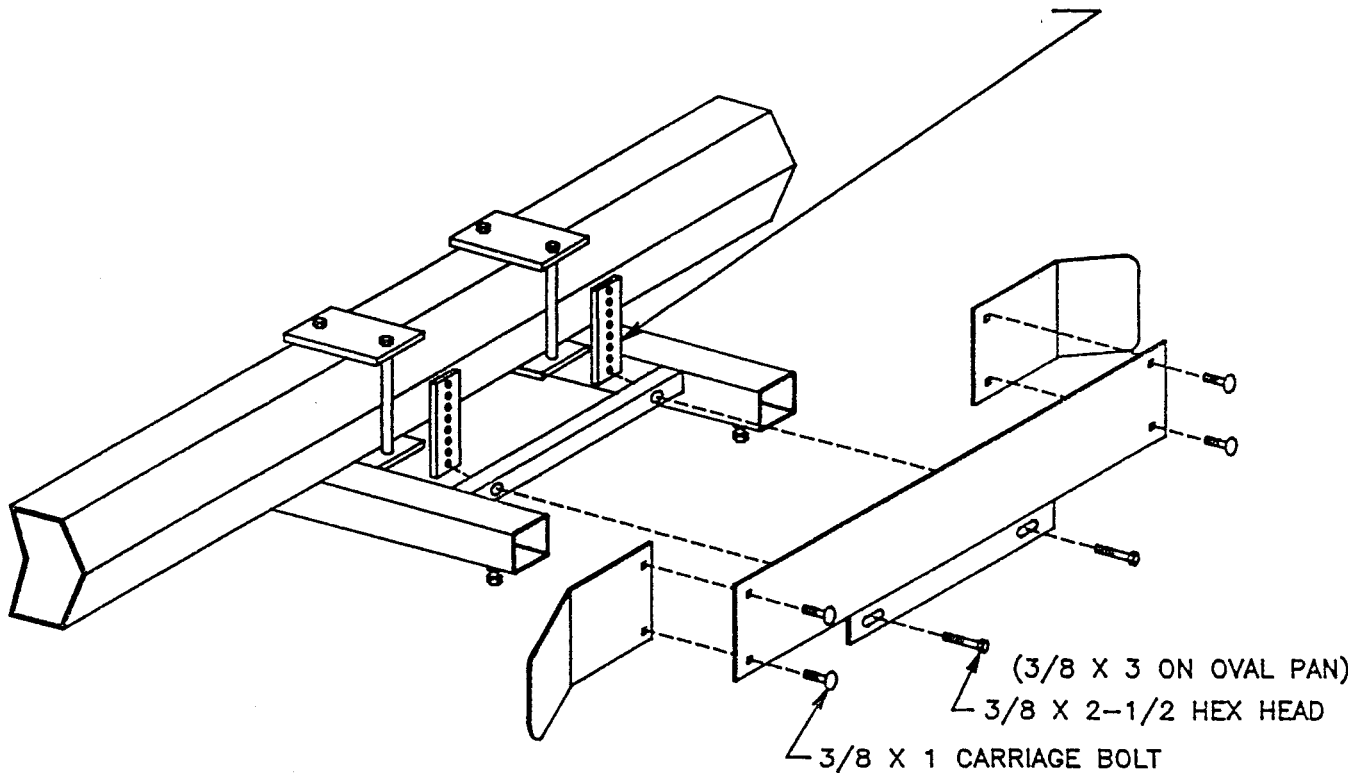


## **STEP 2**

### Single

#### **\*\*JD 20 SERIES OVAL PAN\*\***

Bolt adjustable pan bracket to front side of front shield tube using 3/8 inch x 3 inch bolts that hold on to the front shield.



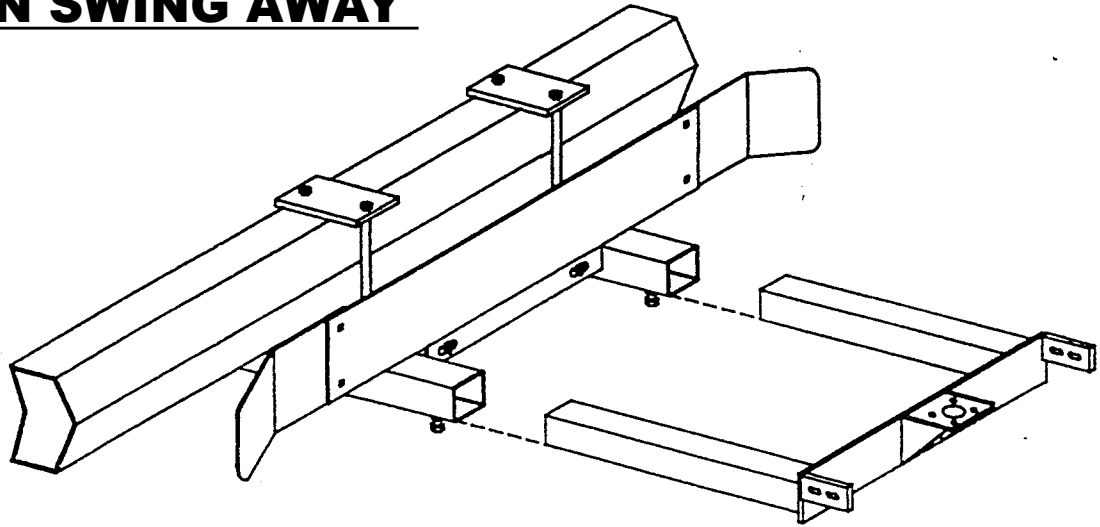
Bolt front shield on rear of cross tube of axle mount using 2-3/8 inch x 2 inch bolts.  
Bolt front shield extension to each side of front shield using 2-3/8 inch x 1 inch carriage bolts on each side.

**WARNING:** After installing the front shield, make sure that the tires will clear the shield when the wheels are turned or when the axle pivots. If the tires do not clear, unbolt the extension from each side and move them toward the center far enough that they will clear. Drill new holes and re-bolt them.



## **STEP 3 NON SWING AWAY**

Single

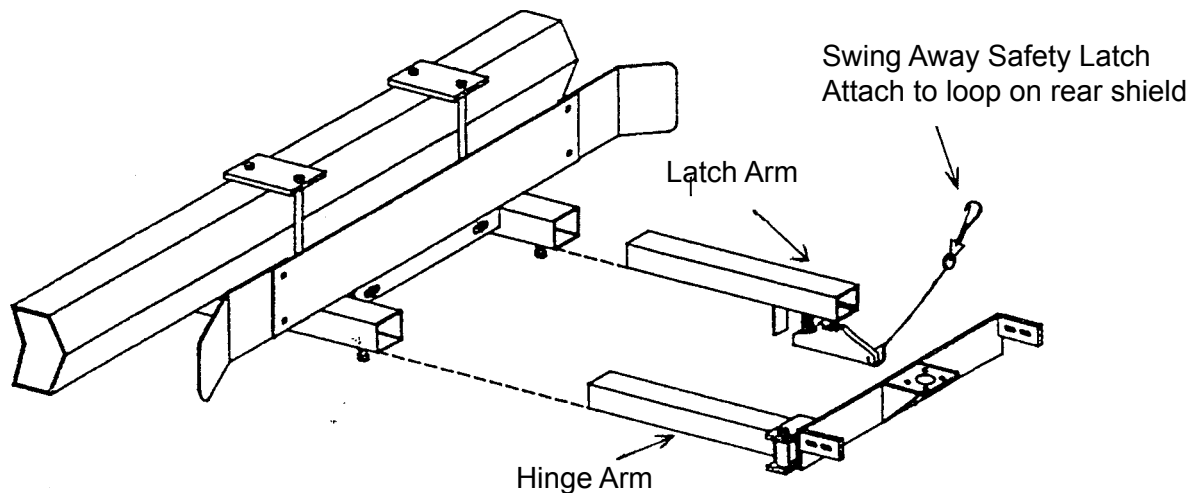


Slide the tubes of the motor mount into the tubes of the axle mount. Adjust so that the center of the hole on the motor mount plate is approximately 20 inches from the rear of the front shield. Tighten and lock the set screws on the bottom of each side of the axle mount.

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## **STEP 3 SWING AWAY**

Single



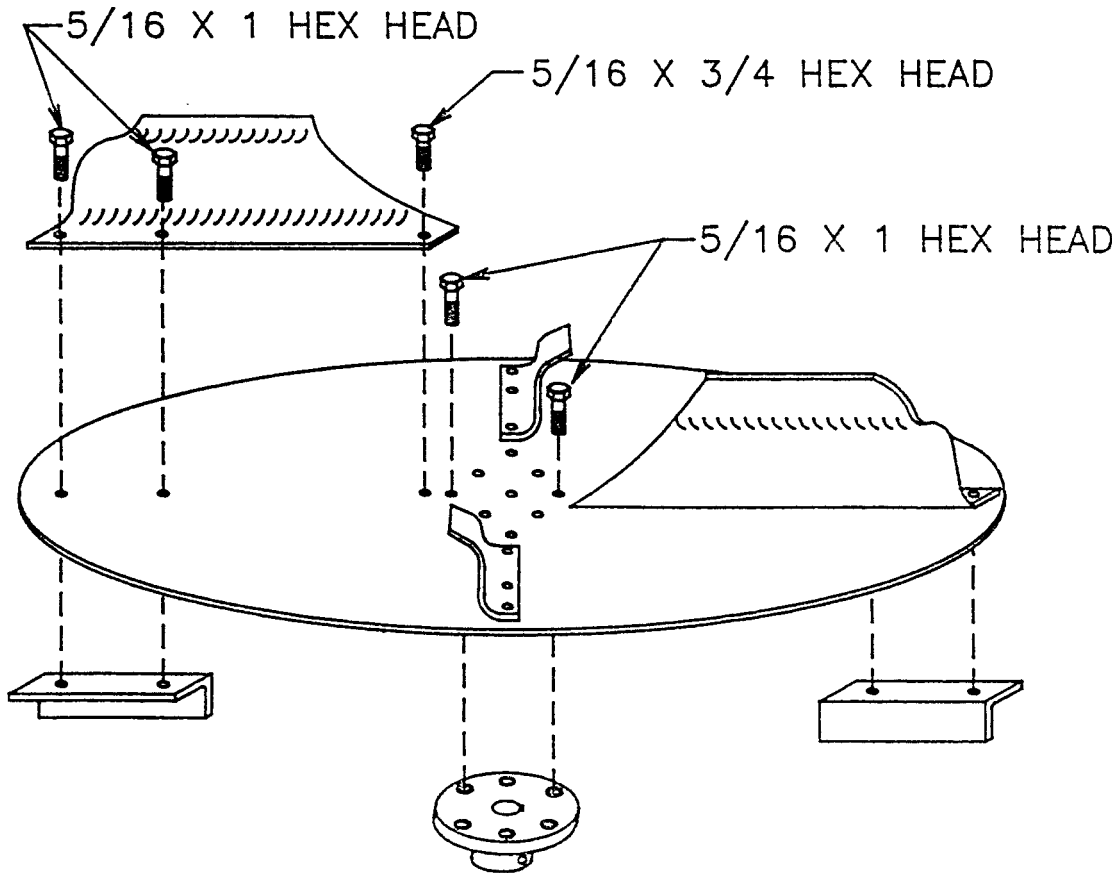
With the motor mount in the closed position, slide the motor mount hinge arm into the left tube of the axle mount. Slide in to the point at which the center of the large hole in the motor mount plate is 20 inches from the rear of the front shield. Swing the motor mount open and tighten the left axle mount set screw. Next, slide the motor mount latch arm into the right axle mount tube approximately the same distance as the hinge arm. Tighten the right axle mount set screw. Swing the hinge arm closed so that the latch arm latches. When you swing the motor mount closed it will strike high and will require considerable down pressure to close and latch. This is an intended pre-load condition and will latch properly when fully assembled. Adjust the latch arm in or out to make the motor mount parallel with the front shield.

## **STEP 4**

### Single

#### **STEP 4A**

Bolt the four spreader blades to the spreader disc, using three 5/16 inch x  $\frac{3}{4}$  inch bolts and **lock nuts** per blade in two opposing blades, and one 5/16 inch x  $\frac{3}{4}$  inch and two 5/16 inch x 1 inch bolts and **lock nuts** with trash wipers on the bottom side of the disc on the other two opposing blades.



**LOCKNUTS MUST BE USED WITH HUB AND DISCS**

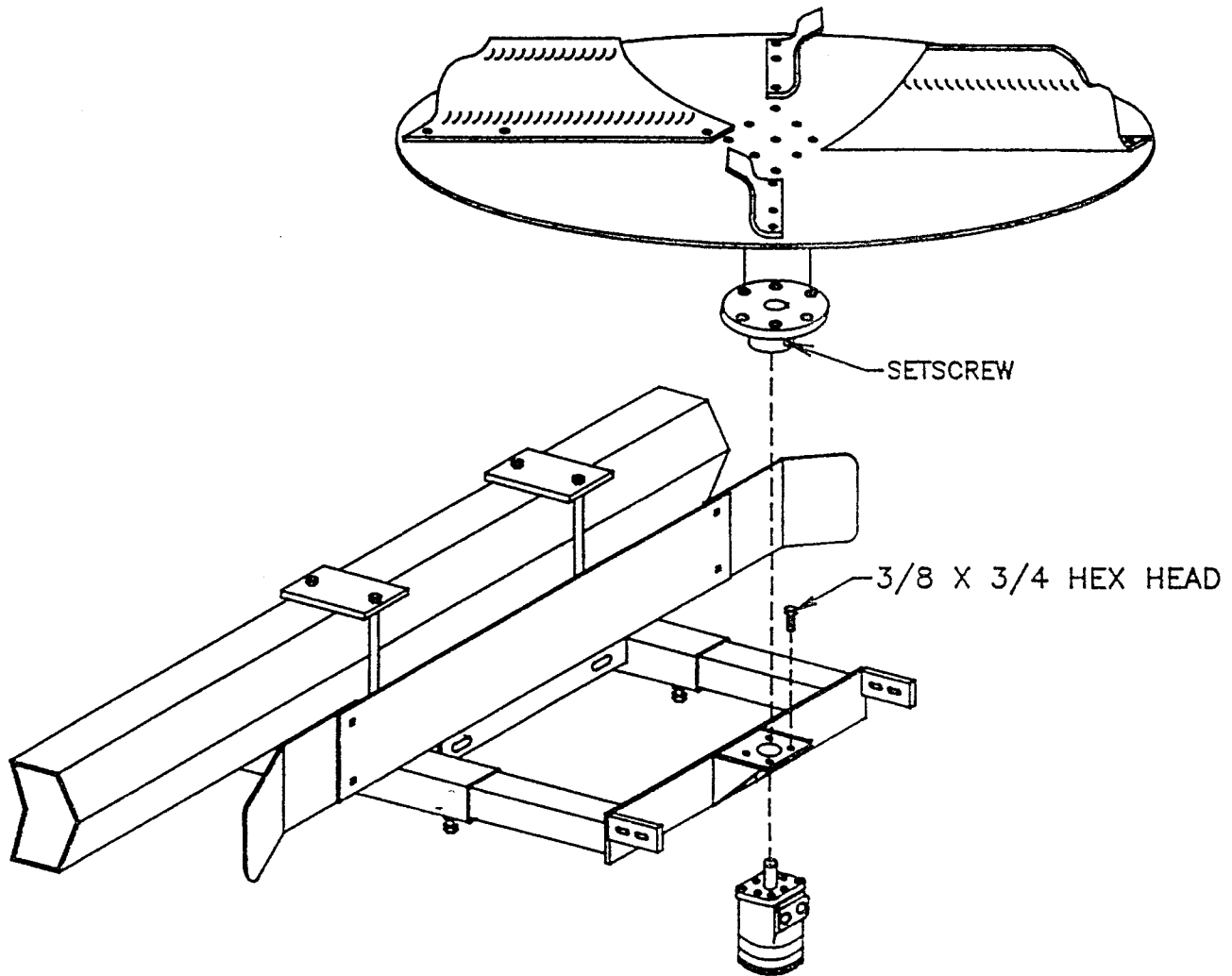
#### **STEP 4B**

Bolt the hub for the hydraulic motor to the spreader disc (on opposite side of the spreader blades) using six 5/16 inch x 1 inch bolts and **lock nuts**. Center the hub during the assembly by looking through the hub and centering the center hole of the disc.

## **STEP 5**

### Single

**STEP 5A CAUTION:** Feel the bottom side of the motor mount plate with your fingers to check for any foreign material, such as beads of weld spatter. Remove any foreign material found (failure to do so will cause a hairline fracture in the top plate of hydraulic motor when the motor is bolted in place, and hydraulic oil will leak during operation.) Bolt the hydraulic motor to the motor mount bracket using the 3/8 inch x 3/4 inch bolts already in the motor. The ports should be facing rearward.

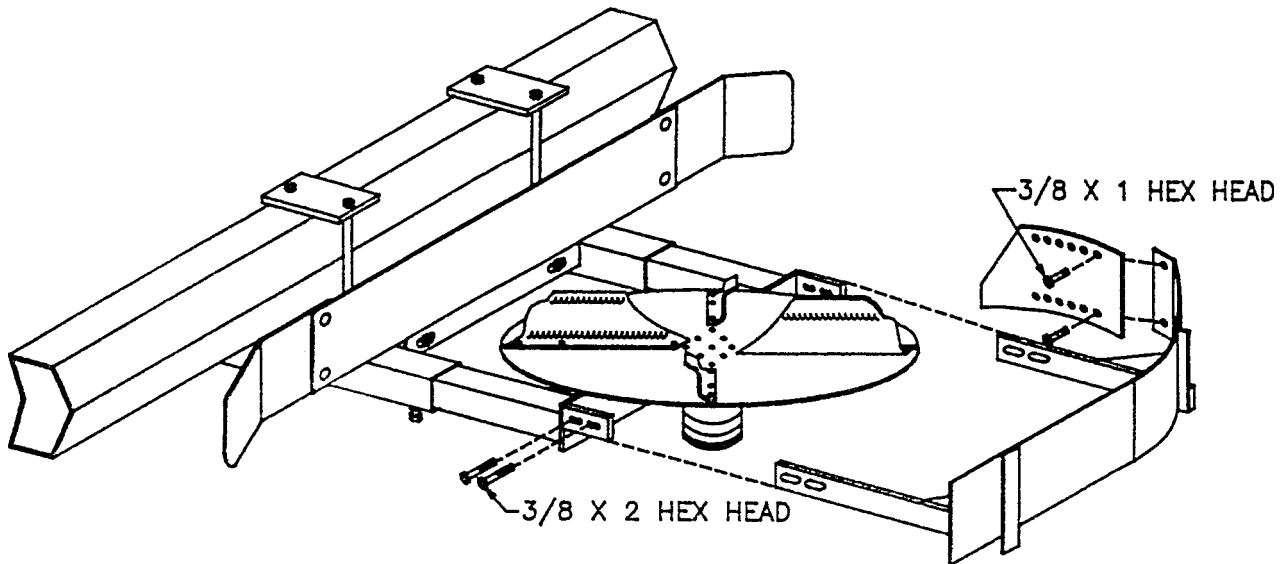


**STEP 5B** Slide the hub for the hydraulic motor (with disc attached) down over the shaft and shear key on the hydraulic motor. Bolt through the center of the disc into the end of the hydraulic motor shaft with one 1/4 inch x 3/4 inch bolt with lock washer and flat washer. Tighten the set screw in the hub keyway.

**NOTE:** Failure to assemble with the shear key installed, or failure to tighten either the set screw or top bolt may result in damage to the hub, motor shaft, and possibly combine, if not caught in time.

## **STEP 6**

### Single

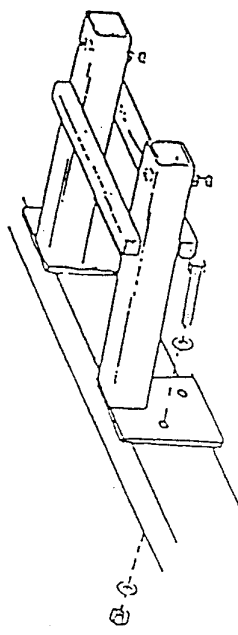


**STEP 6A** Bolt the rear shield deflector (using one of the center sets of holes) to the right inside of the rear shield using two 3/8 inch x 1 inch bolts.

**STEP 6B** Bolt the rear shield arms to the **inside** of the two mounting ears on each side of the motor mount using two 3/8 inch x 2 inch bolts.

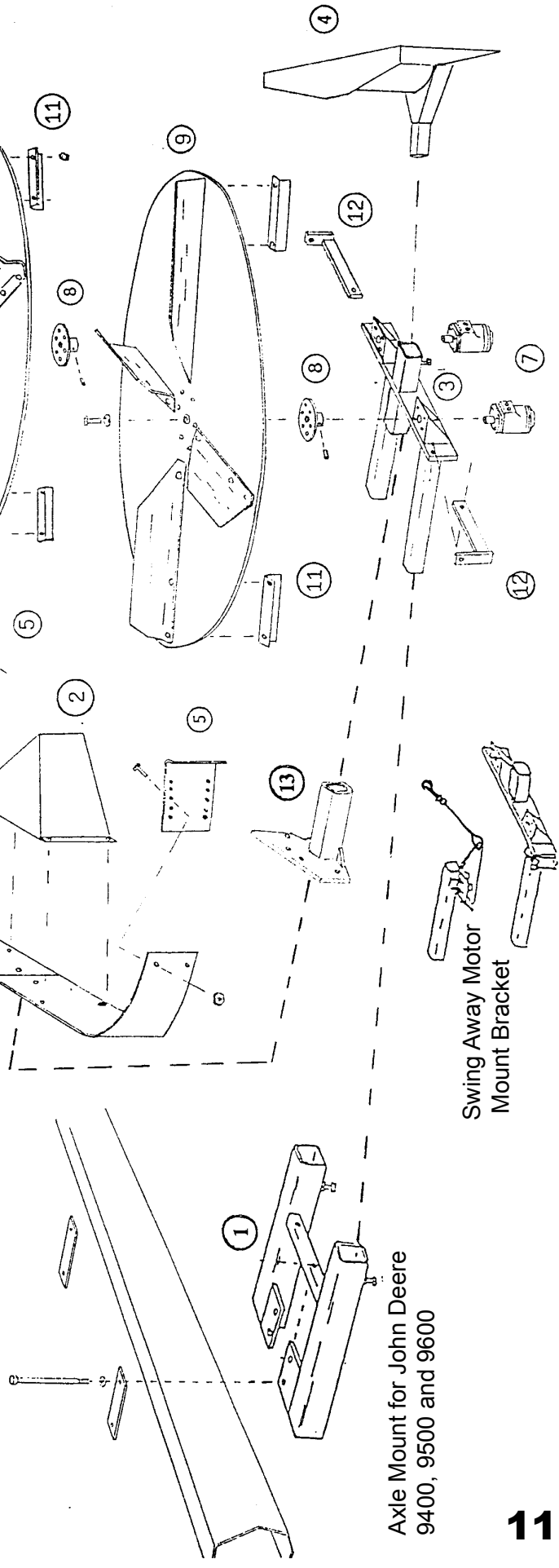
**NOTE:** The rear shield is made so that the deflector will be touching the disc. Slide the rear shield as close to the disc as possible. Adjust so that the gap between the disc and rear shield increases as you follow clockwise around the disc. Pull the deflector away from the disc so it is as close as possible without touching.

# VITTETOE DOUBLE CHAFF SPREADER



Axle mount for John Deere 6600, 6620, 7700, 7720, 8820 with Heavy Axle.  
For standard axle, turn bracket over and use other set of holes.  
Titan II Axle Mount will have cross tube located 6 inches farther toward rear of bracket.

- (1) Axle mount  
(See specific unit for Part Number)
- (2) Front Shield V (#C-0173)
- (3) Motor Mount  
Solid (#C-0142)  
Swing-Away (#C-0307)
- (4) Rear Shield (#C-0292)
- (5) Deflector for Front Shield (#C-0176)
- (6) Front Shield Half (#C-0174)
- (7) Hydraulic Motor (#H-0007 or #H-0009)
- (8) Hub for Motor (#C-0003)
- (9) Spreader Disc (#C-0154)
- (10) Spreader Blades  
Left Spreader Blade (#C-0155)  
Right Spreader Blade (#C-0156)
- (11) Trash Wipers (#C-0137)
- (12) Front Shield Brace (#C-0151)
- (13) Front Shield Mount (#C-0225)

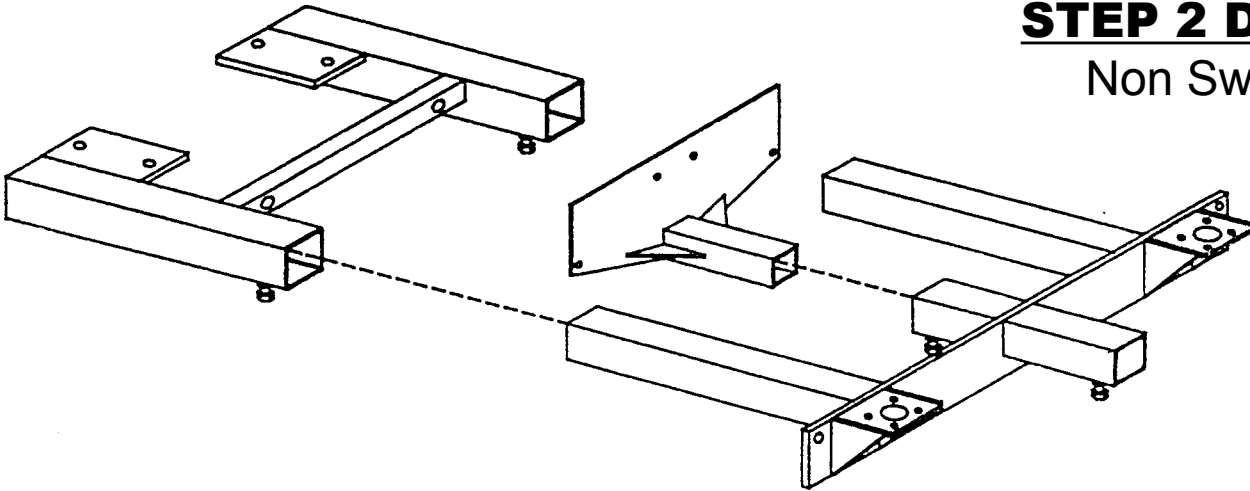


Axle Mount for John Deere 9400, 9500 and 9600

Swing Away Motor Mount Bracket

## **STEP 2 DOUBLE**

Non Swing Away



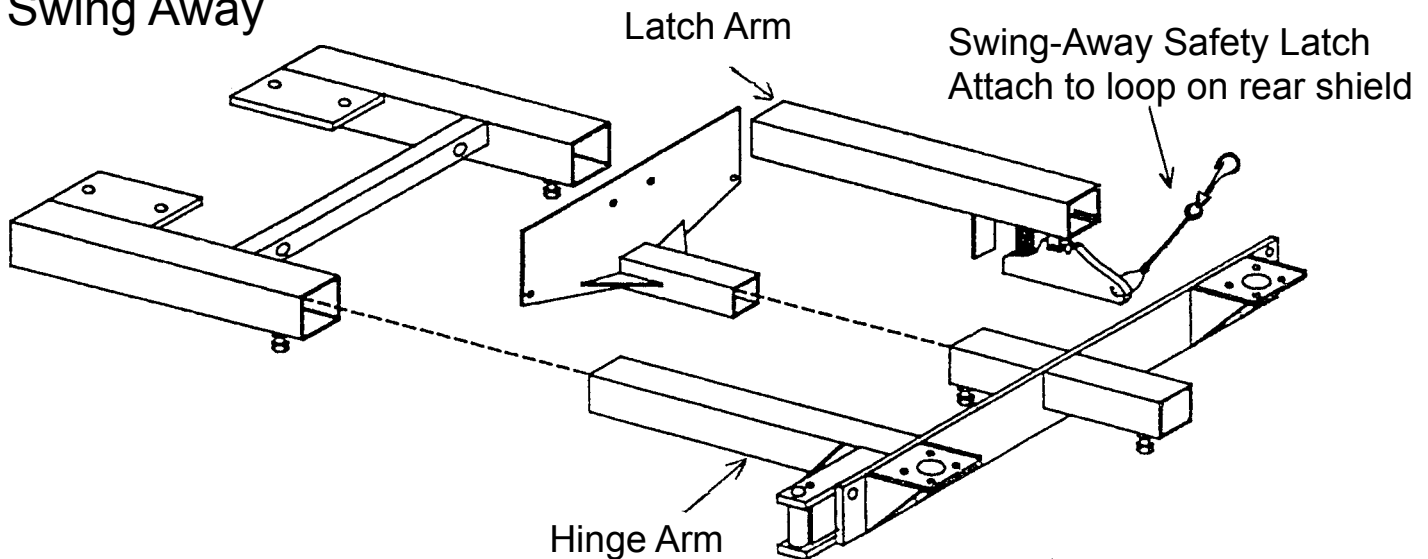
**STEP 2A** Slide the tube of the front shield mount into the motor mount about 4 inches and tighten the set screw.

**STEP 2B** Slide the motor mount tubes 9 inches to 10 inches into the axle mount. Tighten and lock the two set screws on the bottom of mount.

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## **STEP 2 DOUBLE**

Swing Away



**STEP 2A** Same as above

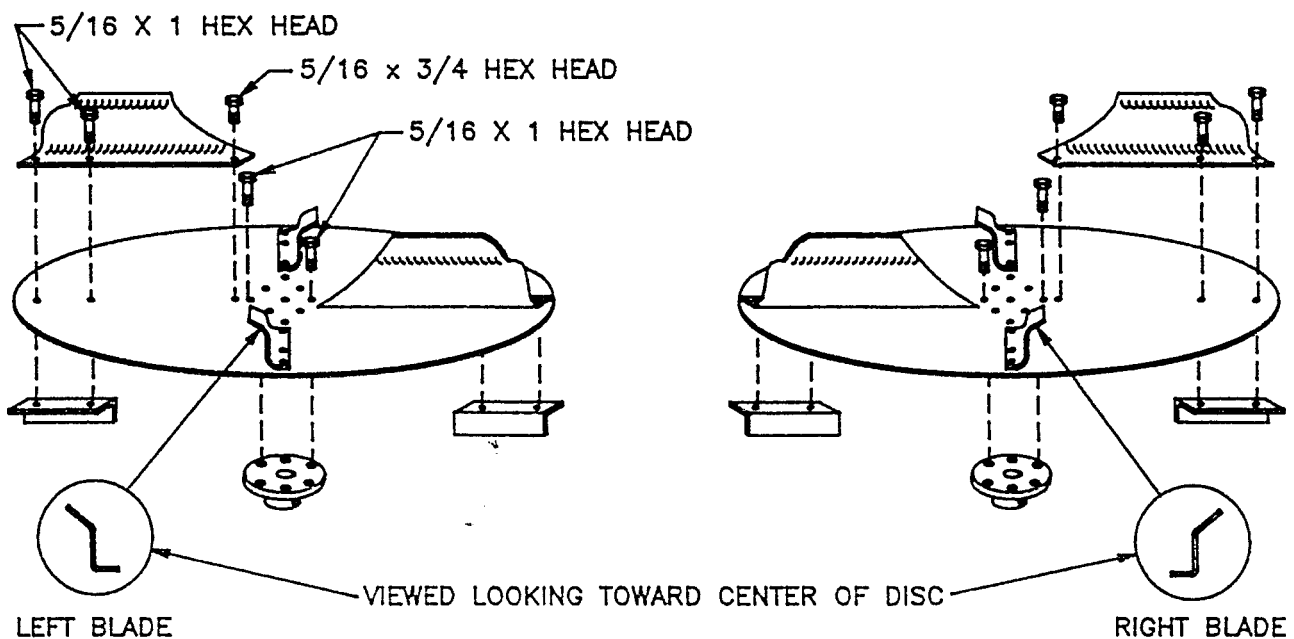
**STEP 2B** With the motor mount in the closed position, slide the motor mount hinge arm into the left tube of the axle mount. Slide in to the point at which the center of the large holes in the motor mount plate are 14 inches from the rear of the front shield. Swing the motor mount open and tighten the left axle mount set screw. Next, slide the motor mount latch arm into the right axle mount tube approximately the same distance as the hinge arm. Tighten the right axle mount set screw. Swing the hinge arm closed so that the latch arm latches. When you swing the motor mount closed, it will strike high and will require considerable down pressure to close and latch. This is an intended pre-load condition and will latch properly when fully assembled. Adjust the latch arm in or out to make the motor mount parallel with the front shield.

## **STEP 3**

### Double

#### **STEP 3A**

There are four right-hand and four left-hand blades. Bolt the four right-hand blades to one disc and the four left-hand blades to the other disc. Bolt the blades on by using three 5/16 inch x  $\frac{3}{4}$  inch bolts and **lock nuts** per blade on two opposing blades. Use one 5/16 inch x  $\frac{3}{4}$  inch and two 5/16 inch x 1 inch bolts and **lock nuts** with the trash wipers on the bottom side of the disc on the other two opposing blades.



### **LOCKNUTS MUST BE USED WITH HUBS AND PLATES**

#### **STEP 3B**

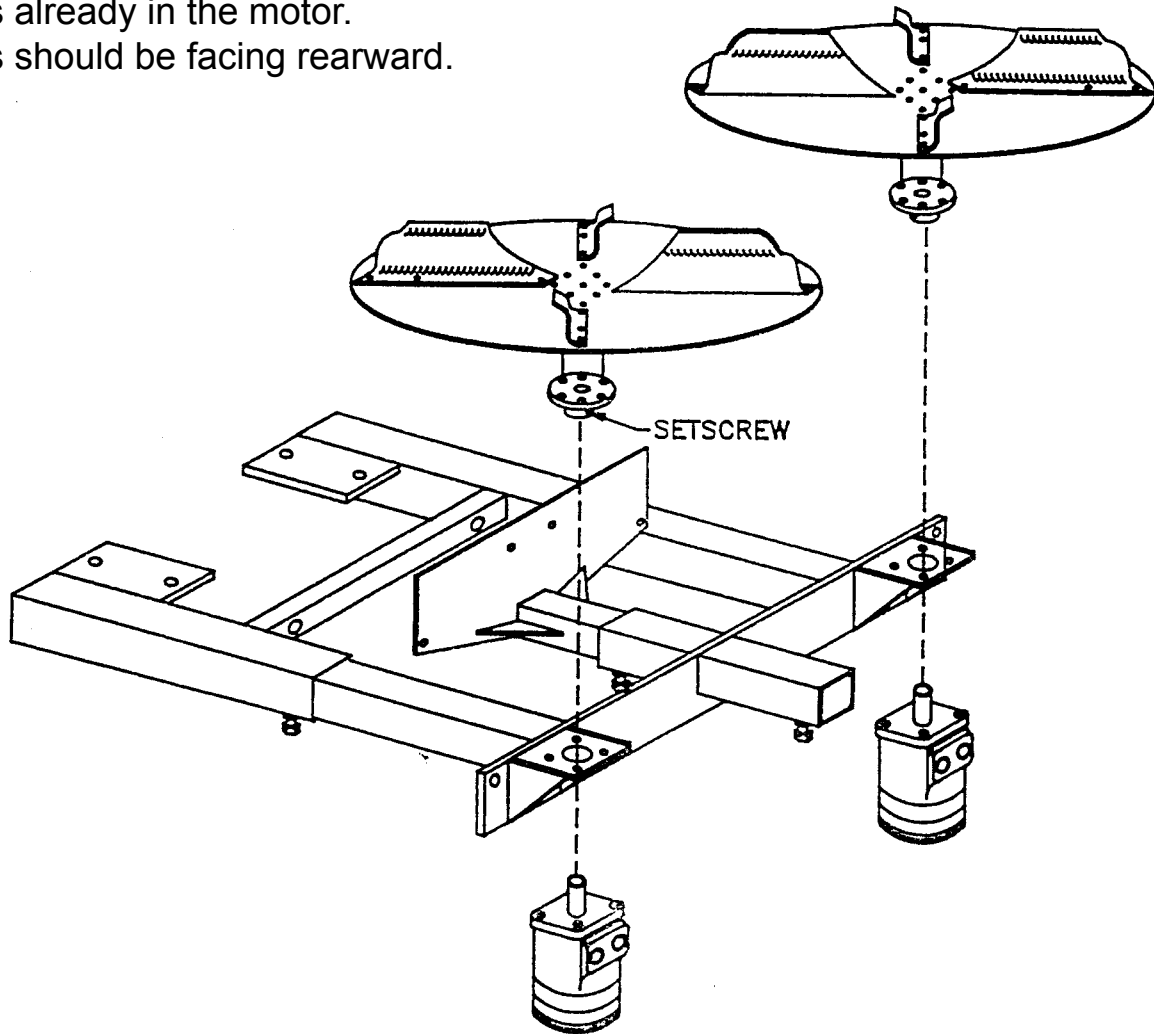
Bolt the hubs for the hydraulic motors to the spreader discs (on opposite sides of the spreader blades) using six 5/16 inch x 1 inch bolts and **lock nuts**. Center the hub during assembly by looking through the hub and centering the center hole of the disc.

## **STEP 4**

### **Double**

**STEP 4A CAUTION:** Feel the bottom side of the motor mount plate with your fingers to check for any foreign material, such as beads of weld spatter. Remove any foreign material found (failure to do so will cause a hairline fracture in the top plate of hydraulic motor when the motor is bolted in place, and hydraulic oil will leak during operation.) Bolt the hydraulic motor to the motor mount bracket using the 3/8 inch x 3/4 inch bolts already in the motor.

The ports should be facing rearward.



**STEP 4B** Slide the hub for the left-hand motor (with disc attached) down over the shaft and shear key of the left-hand motor. Bolt through the center of the disc into the end of the hydraulic motor shaft with one 1/4 inch x 3/4 inch bolt with lock washer and flat washer. Tighten the set screw in the hub key way. Repeat for right motor.

**NOTE: Failure to assemble with shear key installed, or failure to tighten the set screw or top bolt may result in damage to the hub, motor shaft, and possibly combine, if not caught in time.**



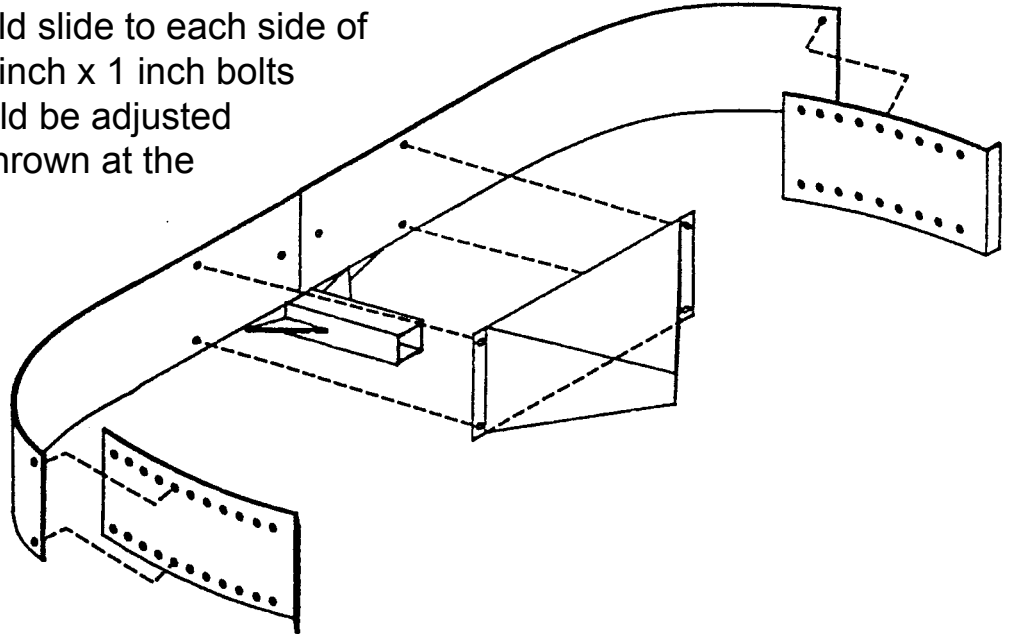
## **STEP 5**

### Double

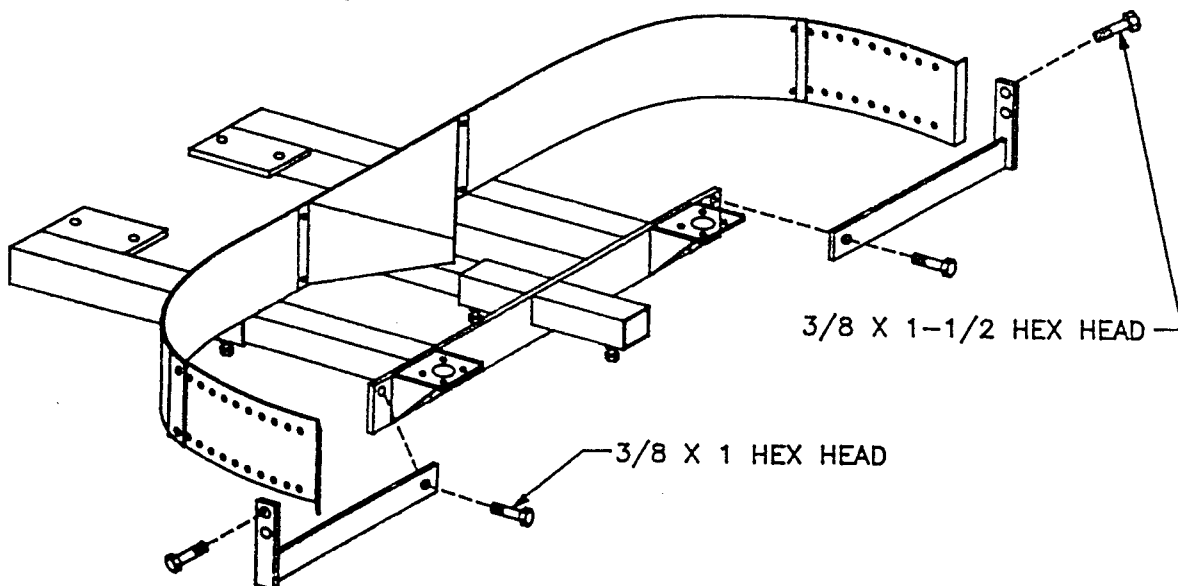
**STEP 5A** Bolt the front shield halves and nose cone to front mount bracket using 3/8 inch x 1 inch bolts.

shield

**STEP 5B** Bolt front shield slide to each side of front shield using two 3/8 inch x 1 inch bolts per side. The slides should be adjusted so that no chaff is being thrown at the rear tires.

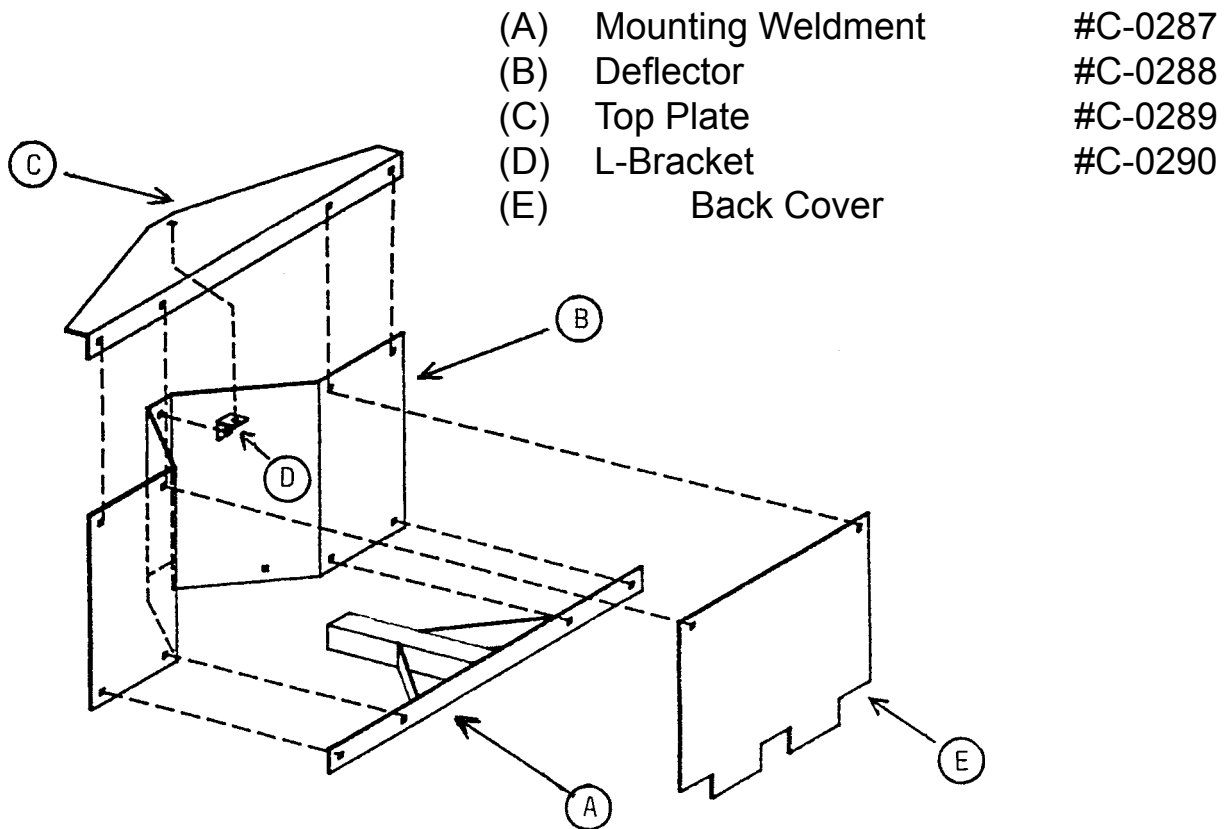


**STEP 5C** Bolt the front shield braces to motor mount using 3/8 inch x 1 inch bolts. Bolt to the front shield using 3/8 inch x 1-1/2 inch bolts.



## **STEP 6**

### **Double**

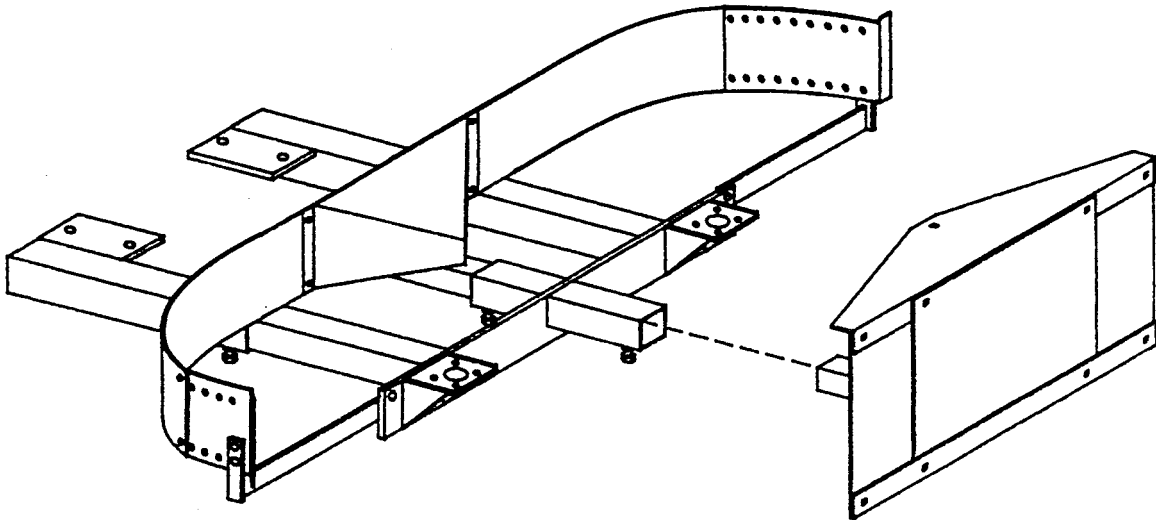


### **BOLT TOGETHER DOUBLE REAR SHIELD**

- Open the bolt bag which contains: six 5/16 inch flat washers, twelve 5/16 inch lock washers, twelve 5/16 inch hex nuts, and twelve 5/16 inch x  $\frac{3}{4}$  inch carriage bolts. Lay the mounting weldment (A) in front of you.
- Set the deflector (B) on the mounting weldment (A). The notch will fit over the square tube. Secure the deflector to the mounting weldment using 6 carriage bolts, lock washers, and nuts. Nuts should be opposite the side of the extended square tube.
- Set the top plate (C) over the deflector (B) and bolt it to the deflector using two carriage bolts, flat washers, lock washers and nuts. Bolt only the two ends at this time.
- Bolt the L-Bracket (D) to the top-plate (C) and the deflector (B) in the position shown using two carriage bolts, flat washers, lock washers, and nuts.
- Slide the notched side of the back cover (E) inside the mounting weldment (A). Align the two holes at the top and bolt with two carriage bolts, flat washers, lock washers and nuts.

## **STEP 7**

### **Double**

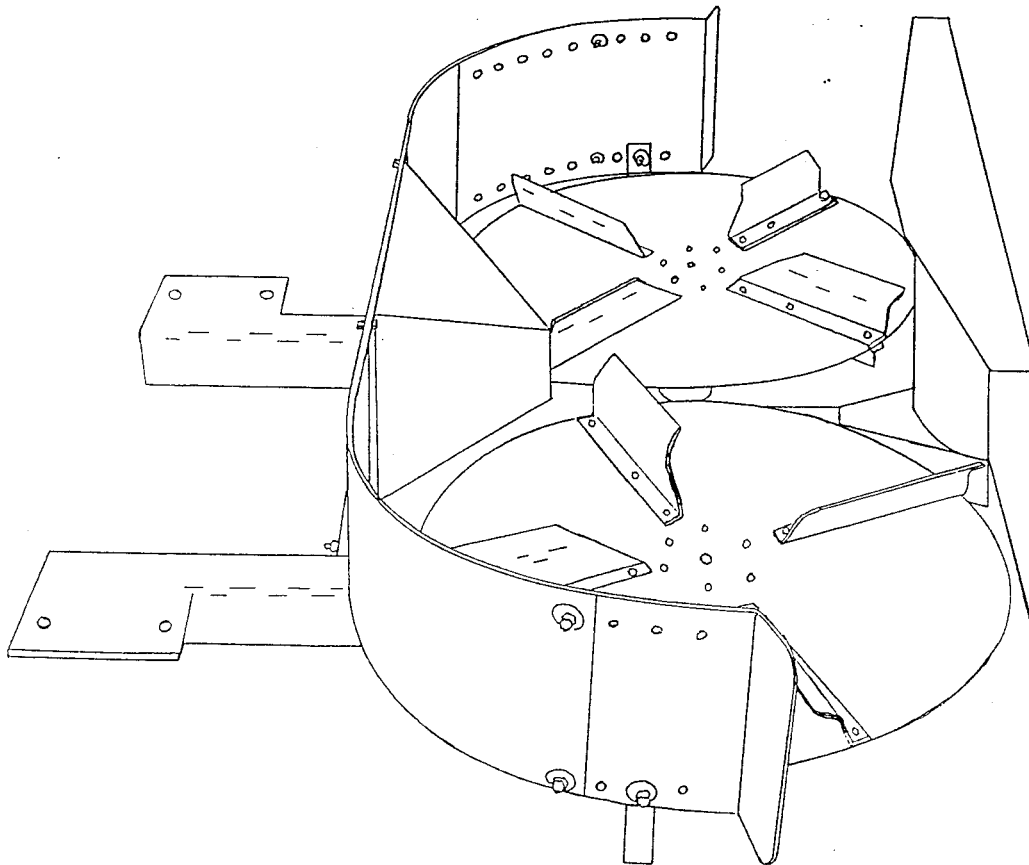


Slide the rear shield tube into the motor mount rear tube, adjust for approximately 1 inch of clearance between the shield and the disc, and tighten the set screw.

**DOUBLE DISCS NOT SHOWN FOR CLARITY**

# **VITTETOE DOUBLE CHAFF SPREADER**

Side View

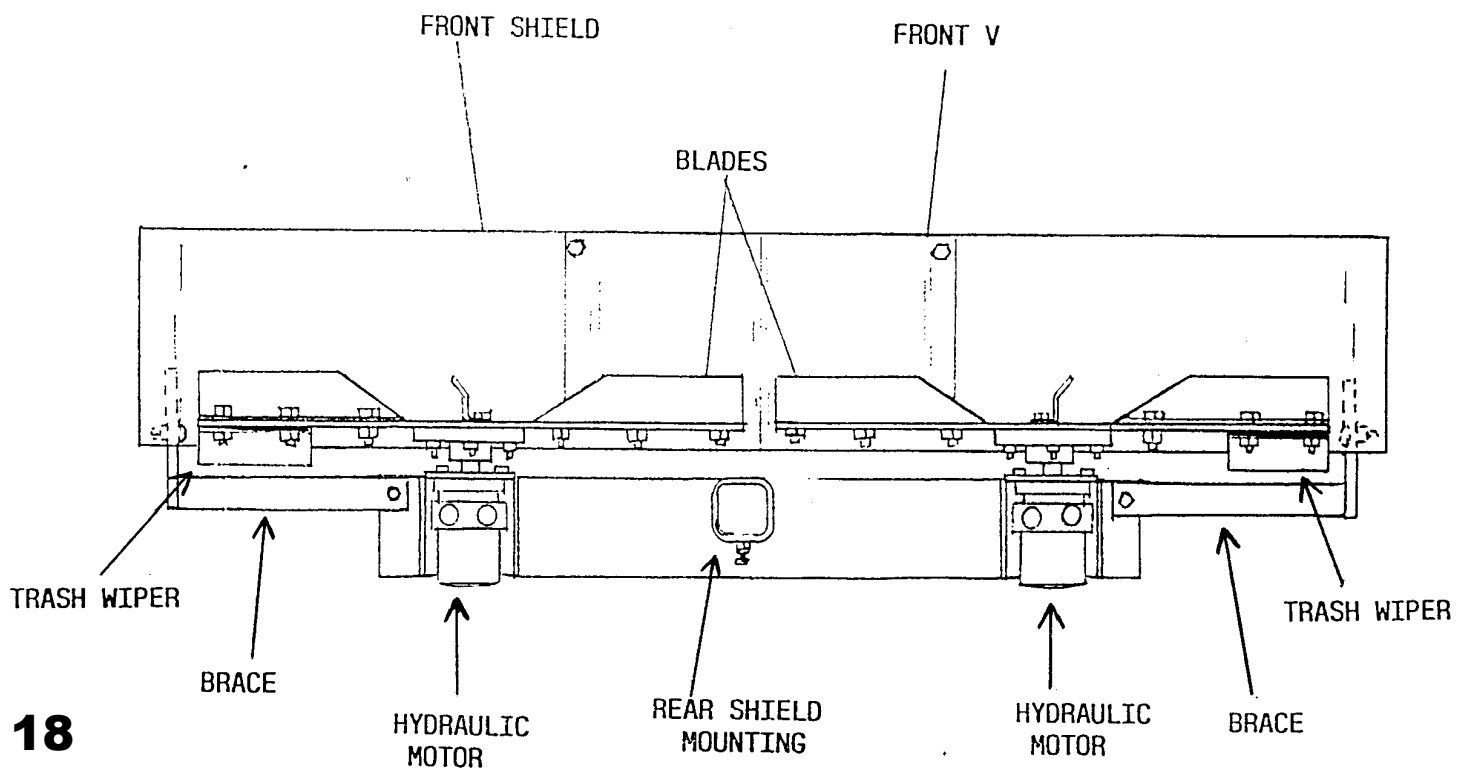


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# **VITTETOE DOUBLE CHAFF SPREADER**

Rear View



## **JOHN DEERE - 4400**

**PAGE 36 SHOWS DIAGRAM OF HYDRAULIC HOOKUP DESCRIBED HERE.**

Step 1: Bolt valve plate at top of oval straw shield that is just ahead of the ladder on the left rear of the combine. Use the bolts that hold the straw shield to its mounting bracket. **Refer to drawings pg 35.**

Step 2: Screw the third leg of the tee into the exhaust (EX) port of the flow control valve.

Step 3: Bolt the flow control valve to the valve mounting plate using two 1/4" x 2 1/2" bolts. Position the valve with the controlled flow (CF) port up.

### **IMPORTANT - SEE DIAGRAM ON PAGE 57.**

Step 4: Screw the 7/8"-14 JIC female swivel end of 8 1/2' hose into the back end of the tee at the EX port. Screw the 7/8" 90° o-ring boss swivel end of this hose into the right port of the hydraulic motor. (left and right determined by standing behind combine looking forward)

Step 5: Lay the 8 1/2' hose with two 90° 7/8" o-ring male swivel fittings beside the left rear of the combine. Screw the front fitting into the CF port of the flow control valve. Screw the rear fitting of the hose into the left port of the hydraulic motor.

Step 6: Screw the 7/8" -14 JIC female swivel end of the 15' hose (with the silver adapter on the other end) into the front of the tee in the EX port of the flow control valve.

Step 7: Screw the 7/8" o-ring male swivel end of the 20 1/2' hose (with the 3/4" male O-ring fitting on the other end) into the IN port of the flow control valve.

Step 8: Run the two hoses in the previous two steps to the front of the combine using the black plastic cable ties to fasten them safely out of the way.

Step 9: At the front of the combine, remove the male quick connect fitting from the hose on the combine and place this male quick connect on our hose running to the IN port of the flow control valve. This hose now connects to the head.

Step 10: Connect the hose that you took the male quick connect off of, to our hose running to the front side of the tee in the EX port of the flow control valve. Use the silver adapter to connect the two hoses.

**CAUTION: BE CERTAIN THAT THE HOSE RUNNING TO THE IN PORT OF OUR VALVE IS CONNECTING TO THE RETURN LINE FROM THE HYDRAULIC REEL MOTOR. SOMEONE MAY HAVE PREVIOUSLY SWITCHED THE MALE AND FEMALE FITTINGS ON THE TWO HOSES AND DAMAGE COULD OCCUR. CHECK TO SEE IF THE HOSE GOING FROM THE CF PORT OF THE FLOW CONTROL VALVE IS CONNECTED TO THE LEFT PORT OF THE HYDRAULIC MOTOR, AND THE DISC TURNS CLOCKWISE (LOOKING DOWN FROM ABOVE IT), THEN YOUR HYDRAULIC CONNECTIONS AT THE FRONT ARE CORRECT. IF THE DISC TURNS COUNTER CLOCKWISE, THEN THE CONNECTIONS AT THE FRONT NEED TO BE REVERSED.**

**SET THE FLOW CONTROL VALVE ON "3" AND ADJUST HIGHER AS NECESSARY TO THROW CHAFF THE SAME WIDTH AS THE HEAD. THE FLOW CONTROL VALVE SETTING WILL BE LOWER FOR CORN THAN THAT REQUIRED FOR SOYBEANS. REEL SPEED CONTROL VALVE IN CAB WILL AFFECT THE SPREADER SPEED.**

Step 11: Remove pan and brackets from combine.

**SEE DIAGRAM ON PAGE 28 FOR MOUNTING PAN.**

Step 12: Bolt one of our pan support brackets to the outside of each side of the aluminum pan with three bolts in each side.

Step 13: Bolt rubber belting underneath chaff pan to the four bolt holes already in center of pan. This belting will rest on the axle when the pan is bolted to the combine.

Step 14: Bolt front of pan support brackets to rear of sieves using the 1/2" bolt already present on each side of rear of sieves. Use the two self-locking nuts provided, and be certain the front of the pan is free to pivot.

**WARNING: AFTER INSTALLING THE PAN, MAKE SURE THE TIRES WILL CLEAR WHEN THE WHEELS ARE TURNED OR WHEN THE AXLE PIVOTS.**

## **JOHN DEERE - 4420**

**PAGE 36 SHOWS DIAGRAM OF HYDRAULIC HOOKUP DESCRIBED HERE.**

Step 1: Bolt valve plate at top of oval straw shield that is just ahead of the ladder on the left rear of the combine. Use the bolts that hold the straw shield to its mounting bracket. **Refer to drawings pg 35.**

Step 2: Screw the third leg of the tee into the exhaust (EX) port of the flow control valve.

Step 3: Bolt the flow control valve to the valve mounting plate using two 1/4" x 2 1/2" bolts. Position the valve with the tee to the bottom right (toward the rear of the combine) and the controlled flow (CF) port to the upper right (toward the rear of the combine).

### **IMPORTANT - SEE DIAGRAM ON PAGE 57.**

Step 4: Screw the 7/8"-14 JIC female swivel end of 8 1/2' hose into the back end of the tee at the EX port. Screw the 7/8" 90° o-ring boss swivel end of this hose into the right port of the hydraulic motor. (left and right determined by standing behind combine looking forward)

Step 5: Lay the 8 1/2' hose with two 90° 7/8" o-ring male swivel fittings beside the left rear of the combine. Screw the front fitting into the CF port of the flow control valve. Screw the rear fitting of the hose into the left port of the hydraulic motor.

Step 6: Screw the 7/8"-14 JIC female swivel end of the 15' hose (with the silver adapter on the other end) into the front of the tee in the EX port of the flow control valve.

Step 7: Screw the 7/8" o-ring male swivel end of the 20 1/2' hose (with the 3/4" male O-ring fitting on the other end) into the IN port of the flow control valve.

Step 8: Run the two hoses in the previous two steps to the front of the combine using the black plastic cable ties to fasten them safely out of the way.

Step 9: At the front of the combine, remove the male quick connect fitting from the hose on the combine and place this male quick connect on our hose running to the IN port of the flow control valve. This hose now connects to the head.

Step 10: Connect the hose that you took the male quick connect off of, to our hose running to the front side of the tee in the EX port of the flow control valve. Use the silver adapter to connect the two hoses.

**CAUTION: BE CERTAIN THAT THE HOSE RUNNING TO THE IN PORT OF OUR VALVE IS CONNECTING TO THE RETURN LINE FROM THE HYDRAULIC REEL MOTOR. SOMEONE MAY HAVE PREVIOUSLY SWITCHED THE MALE AND FEMALE FITTINGS ON THE TWO HOSES AND DAMAGE COULD OCCUR. CHECK TO SEE IF THE HOSE GOING FROM THE CF PORT OF THE FLOW CONTROL VALVE IS CONNECTED TO THE LEFT PORT OF THE HYDRAULIC MOTOR, AND THE DISC TURNS CLOCKWISE (LOOKING DOWN FROM ABOVE IT), THEN YOUR HYDRAULIC CONNECTIONS AT THE FRONT ARE CORRECT. IF THE DISC TURNS COUNTER CLOCKWISE, THEN THE CONNECTIONS AT THE FRONT NEED TO BE REVERSED.**

**SET THE FLOW CONTROL VALVE ON "3" AND ADJUST HIGHER AS NECESSARY TO THROW CHAFF THE SAME WIDTH AS THE HEAD. THE FLOW CONTROL VALVE SETTING WILL BE LOWER FOR CORN THAN THAT REQUIRED FOR SOYBEANS. REEL SPEED CONTROL VALVE IN CAB WILL AFFECT THE SPREADER SPEED.**

Step 11: Remove John Deere chaffer pan and bracket.

Step 12: Bolt two black pan braces onto front side of axle using bolts holding axle mount.

Step 13: Bolt rear of chaff pan on top edge of the front shield. The upper part of the chaff pan should rest on the pan braces on the front side of the axle. Bolt the pan braces to the chaff pan. **See diagram page 39.**

**WARNING: AFTER INSTALLING PAN, MAKE SURE THE TIRES WILL CLEAR WHEN THE WHEELS ARE TURNED OR WHEN THE AXLE PIVOTS.**

## **JOHN DEERE 4425-4435**

**PAGE 36 SHOWS DIAGRAM OF HYDRAULIC HOOKUP DESCRIBED HERE.**

Step 1: Bolt the valve plate to the combine (left rear) using 2 existing bolts. **Refer to sketch page 34.**

Step 2: Screw the third leg of the tee into the exhaust (EX) port of the flow control valve.

Step 3: Bolt valve to valve plate using two 1/4" x 2 1/2" bolts. Position valve with tee on lower right side of valve and CF port on upper right side.

### **IMPORTANT - SEE DIAGRAM ON PAGE 57.**

Step 4: Screw 7/8"-14 JIC female swivel end of 6' hose into rear side of tee on bottom of valve. Screw 7/8" 90° o-ring boss swivel on the other end of this hose into the right port of motor.

Step 5: Screw 7/8" 90° o-ring male swivel end of other 6' hose into CF port located on upper right side of valve. Screw 7/8" 90° o-ring male swivel on the other end of this hose into the left port of motor.

Step 6: Screw 7/8"-14 JIC female swivel end of one 25' hose with silver adapter on other end, into the front end of tee on bottom of valve.

Step 7: Screw 7/8" o-ring male swivel end of other 25' hose in the IN port of the valve.

Step 8: Run the hoses in the previous two steps, along left side to front of combine and secure them safely out of the way using the black plastic tie-downs provided.

Step 9: At front of combine, remove the male quick connect fitting from the hose on the combine and place this male quick connect on our hose running to the IN port of the valve. This hose now connects to the head.

Step 10: Connect the hose that you took the male quick connect off of to our hose running to the left side of the tee in the exhaust port of valve. Use the silver adapter to connect the two hoses.

**CAUTION: BE CERTAIN THAT THE HOSE RUNNING TO THE IN PORT OF OUR VALVE IS CONNECTING TO THE RETURN LINE FROM THE HYDRAULIC REEL MOTOR. SOMEONE MAY HAVE PREVIOUSLY SWITCHED THE MALE AND FEMALE FITTINGS ON THE TWO HOSES AND DAMAGE COULD OCCUR. CHECK TO SEE IF THE HOSE GOING FROM THE CF PORT OF THE FLOW CONTROL VALVE IS CONNECTED TO THE LEFT PORT OF THE HYDRAULIC MOTOR, AND THE DISC TURNS CLOCKWISE (LOOKING DOWN FROM ABOVE IT), THEN YOUR HYDRAULIC CONNECTIONS AT THE FRONT ARE CORRECT. IF THE DISC TURNS COUNTER CLOCKWISE, THEN THE CONNECTIONS AT THE FRONT NEED TO BE REVERSED.**

**SET FLOW CONTROL VALVE ON "3" AND ADJUST UP AS NECESSARY TO THROW CHAFF ONLY AS WIDE AS THE HEAD. SET FLOW CONTROL VALVE LOWER FOR CORN.**



# **JOHN DEERE PULL TYPE 7701-7721**

**PAGE 36 SHOWS DIAGRAM OF HYDRAULIC HOOKUP DESCRIBED HERE.**

**Step 1 (7721):** Bolt valve mounting plate to the combine in the middle of the “V” behind the lower end of the tailings auger (on the left rear of the combine) using one 3/8” x 4” bolt in the top right hole and two 5/16” x 3” bolts in the bottom two holes. Mount with the point at the bottom front (left). Three 2” spacers go between the valve plate and the combine, one on each bolt. **Refer to drawing page 35.**

**Step 1 (7701):** Bolt valve plate at top of oval straw shield that is just ahead of the ladder on the left rear of the combine. Use the bolts that hold the straw shield to its mounting bracket. **Refer to drawings page 35.**

**Step 2:** Screw the third leg of the tee into the exhaust (EX) port of the flow control valve.

**Step 3:** Bolt the flow control valve to the valve mounting plate using two 1/4” x 2 1/2” bolts. Position the valve with the tee to the bottom right (toward the rear of the combine) and the controlled flow (CF) port to the upper right (toward the rear of the combine).

## **IMPORTANT - SEE DIAGRAM ON PAGE 57.**

**Step 4:** Screw the 7/8”-14 JIC female swivel end of 8 1/2’ hose into the back end of the tee at the EX port. Screw the 7/8” 90° o-ring boss swivel end of this hose into the right port of the hydraulic motor. (left and right determined by standing behind combine looking forward)

**Step 5:** Lay the 8 1/2’ hose with two 90° 7/8” o-ring male swivel fittings beside the left rear of the combine. Screw the front fitting into the CF port of the flow control valve. Screw the rear fitting of the hose into the left port of the hydraulic motor.

**Step 6:** Screw the 7/8”- 14 JIC female swivel end of the 15’ hose (with the silver adapter on the other end) into the front of the tee in the EX port of the flow control valve.

**Step 7:** Screw the 7/8” o-ring male swivel end of the 20 1/2’ hose (with the 3/4” male o-ring fitting on the other end) into the IN port of the flow control valve. **NOTE: IF YOU HAVE THE NEWER STYLE 900 SERIES PLATFORM IT WILL BE NECESSARY FOR YOU TO ADD APPROXIMATELY A 3’ EXTENSION TO THE 20 1/2’ HOSE (EXTENSION NOT SUPPLIED WITH KIT).**

**Step 8:** Run the two hoses in the previous two steps to the front of the combine using the black plastic cable ties to fasten them safely out of the way.

**Step 9:** At the front of the combine, remove the male quick connect fitting from the hose on the combine and place this male quick connect on our hose running to the IN port of the flow control valve. This hose now connects to the head.

**Step 10:** Connect the hose that you took the male quick connect off of, to our hose running to the front side of the tee in the EX port of the flow control valve. Use the silver adapter to connect the two hoses.

**CAUTION:** BE CERTAIN THAT THE HOSE THAT IS RUNNING TO THE IN PORT OF OUR VALVE IS CONNECTING TO THE RETURN LINE FROM THE HYDRAULIC REEL MOTOR. SOMEONE MAY HAVE PREVIOUSLY SWITCHED THE MALE AND FEMALE FITTINGS ON THE TWO HOSES AND DAMAGE COULD OCCUR. CHECK TO SEE IF THE HOSE GOING FROM THE CF PORT OF THE FLOW CONTROL VALVE IS CONNECTED TO THE LEFT PORT OF THE HYDRAULIC MOTOR, AND THE DISC TURNS CLOCKWISE (LOOKING DOWN FROM ABOVE IT), THEN YOUR HYDRAULIC CONNECTIONS AT THE FRONT ARE CORRECT. IF THE DISC TURNS COUNTER CLOCKWISE, THEN THE CONNECTIONS AT THE FRONT NEED TO BE REVERSED.

SET THE FLOW CONTROL VALVE ON “3” AND ADJUST HIGHER AS NECESSARY TO THROW CHAFF IN A WIDER PATTERN. TOO MUCH SPEED MAY ONLY CREATE WIND AND NOT HELP THE SPREAD PATTERN.

## **JOHN DEERE 6600-8820**

**ROW CROP:** If a row crop head is always used for harvest, and the reel drive hydraulics is not needed or used for any header functions, then the flow control valve (REEL SPEED) in the cab can be used to control the speed of the chaff spreader and the cost of an additional flow control valve can be saved. This will not work properly if a platform header or a pick-up attachment is ever used. **GO TO STEP 11.**

**PAGE 36 SHOWS DIAGRAM OF HYDRAULIC HOOKUP DESCRIBED HERE.**

**Step 1 (20 Series):** Bolt valve mounting plate to the combine in the middle of the “V” behind the lower end of the tailings auger (on the left rear of the combine) using one 3/8” x 4” bolt in the top right hole and two 5/16” x 3” bolts in the bottom two holes. Mount with the point at the bottom front (left). Three 2” spacers go between the valve plate and the combine, one on each bolt. **REFER TO DRAWING PAGE 35.**

**Step 1 (6600-7700):** Bolt valve plate at top of oval straw shield that is just ahead of the ladder on the left rear of the combine. Use the bolts that hold the straw shield to its mounting bracket. **REFER TO DRAWING PAGE 35.**

**Step 2:** Screw the third leg of the tee into the exhaust (EX) port of the flow control valve.

**Step 3:** Bolt the flow control valve to the valve mounting plate using two 1/4” x 2 1/2” bolts. Position the valve with the tee to the bottom right (toward the rear of the combine) and the controlled flow (CF) port to the upper right (toward the rear of the combine).

### **IMPORTANT - SEE DIAGRAM ON PAGE 57.**

**Step 4:** Screw the 7/8”-14 JIC female swivel end of 8 1/2’ hose into the back end of the tee at the EX port. Screw the 7/8” 90° o-ring boss swivel end of this hose into the right port of the hydraulic motor. (left and right determined by standing behind combine looking forward)

**Step 5:** Lay the 8 1/2’ hose with two 90° 7/8” o-ring male swivel fittings beside the left rear of the combine. Screw the front fitting into the CF port of the flow control valve. Screw the rear fitting of the hose into the left port of the hydraulic motor.

**Step 6:** Screw the 7/8”- 14 JIC female swivel end of the 15’ hose (with the silver adapter on the other end) into the front of the tee in the EX port of the flow control valve.

**Step 7:** Screw the 7/8” o-ring male swivel end of the 20 1/2’ hose (with the 3/4” male O-ring fitting on the other end) into the IN port of the flow control valve. **NOTE: IF YOU HAVE THE NEWER STYLE 900 SERIES PLATFORM IT WILL BE NECESSARY FOR YOU TO ADD APPROXIMATELY A 3’ EXTENSION TO THE 20 1/2’ HOSE (EXTENSION NOT SUPPLIED WITH KIT).**

**Step 8:** Run the two hoses in the previous two steps to the front of the combine using the black plastic cable ties to fasten them safely out of the way.

**Step 9:** At the front of the combine, remove the male quick connect fitting from the hose on the combine and place this male quick connect on our hose running to the IN port of the flow control valve. This hose now connects to the head.

**Step 10:** Connect the hose that you took the male quick connect off of, to our hose running to the front side of the tee in the EX port of the flow control valve. Use the silver adapter to connect the two hoses.

**CAUTION:** BE CERTAIN THAT THE HOSE RUNNING TO THE IN PORT OF OUR VALVE IS CONNECTING TO THE RETURN LINE FROM THE HYDRAULIC REEL MOTOR. SOMEONE MAY HAVE PREVIOUSLY SWITCHED THE MALE AND FEMALE FITTINGS ON THE TWO HOSES AND DAMAGE COULD OCCUR. CHECK TO SEE IF THE HOSE GOING FROM THE CF PORT OF THE FLOW CONTROL VALVE IS CONNECTED TO THE LEFT PORT OF THE HYDRAULIC MOTOR, AND THE DISC TURNS CLOCKWISE (LOOKING DOWN FROM ABOVE IT), THEN YOUR HYDRAULIC CONNECTIONS AT THE FRONT ARE CORRECT. IF THE DISC TURNS COUNTER CLOCKWISE, THEN THE CONNECTIONS AT THE FRONT NEED TO BE REVERSED.

SET THE FLOW CONTROL VALVE ON “3” AND ADJUST HIGHER AS NECESSARY TO THROW CHAFF THE SAME WIDTH AS THE HEAD. THE FLOW CONTROL VALVE SETTING WILL BE LOWER FOR CORN THAN THAT REQUIRED FOR SOYBEANS. REEL SPEED CONTROL VALVE IN CAB WILL AFFECT THE SPREADER SPEED.

GO TO STEP 16.

**ROW CROP:** If a row crop head is always used for harvest, and the reel drive hydraulics is not needed or used for any header functions, then the flow control valve (REEL SPEED) in the cab can be used to control the speed of the chaff spreader and the cost of an additional flow control valve can be saved. This will not work properly if a platform header or a pick-up attachment is ever used. See page 35 for row crop hydraulic hookup diagram.

Step 11: Screw the 7/8” 90° o-ring male swivel end of the 28 1/2’ hose with the silver adapter on the other end, into the right port of the hydraulic motor.

Step 12: Screw the 7/8” 90° o-ring male swivel end of the other 28 1/2’ hose with the 3/4” male O-ring on the other end, into the left port of the hydraulic motor.

Step 13: Run the two hoses to the front of the combine using the black plastic cable ties to secure them out of the way.

Step 14: At the front of the combine, remove the male quick coupler fitting from the hose on the combine, and thread it on the end of the hose running to the left port of the hydraulic motor. This hose now connects to the combine hose with the female quick coupler.

Step 15: Connect the hose (that you removed the male quick coupler from) to our hose (with the silver adapter) running to the right port of the hydraulic motor.

Step 16: Assemble the aluminum pan according to the assembly diagram for your type of pan.

Step 17 (Flat Pan): Remove the five bolts at the front of the existing pan. Bolt our aluminum pan on top of your existing pan using the same five holes and the five 1/4” x 2 1/2” bolts provided. The formed U channel of the aluminum pan should rest on the existing pan leaving a gap between the two pans at the front. At the rear of the pan drill two holes through both pans and bolt the two pans securely together. Bolt the front shield onto the rear of the axle mount cross tube using two 3/8” x 2 1/2” bolts. Bolt a front shield extension to each end of the front shield. **SKIP TO STEP 20. FLAT PAN ASSEMBLY DIAGRAM PAGE 40.**

**IMPORTANT: TURN REAR WHEELS TO BE SURE THAT THEY CLEAR THE ALUMINUM PAN.**

Step 17 (Oval Pan): Remove the existing pan from the combine leaving the two front mounting arms attached to the combine. Bolt the aluminum pan (widest end to the front) to the two rear holes of the mounting arms which held the old pan. Make sure the bracket supports (refer to pan drawing) are in the assembly for added strength. Remove the two rubber support straps from the old pan and mount them to the support angle at the bottom of the new pan. Bolt the multi-holed metal adjustment straps to the bottom of the rubber straps and finger tighten. **OVAL PAN ASSEMBLY DIAGRAM PAGES 41-44.**

Step 18: Bolt the front shield to the rear of the axle mount cross tube using two 3/8" x 3" bolts and bolting through the metal adjustment straps at the front of the axle mount cross tube. Adjust pan to desired height. Bolt one front shield extension to each end of the front shield.

Step 19: Bolt the 10" wide belting across the top front edge of the pan covering the gap between the pan and the end of the shoe. Cut the belting to relieve for monitors if so equipped. You will have to drill your own holes through the belting and pan, but do not fasten the belting to the back end of the shoe.

Step 20: If necessary, loosen the set screws in the axle mount tubes and adjust the spreader disc so there is approximately 1"-2" clearance at the front shield. Retighten and relock the set screws.

**WARNING: AFTER INSTALLING THE FRONT SHIELD, MAKE SURE THE TIRES WILL CLEAR THE SHIELD AND PAN WHEN THE WHEELS ARE TURNED OR WHEN THE AXLE PIVOTS. IF THE TIRES DO NOT CLEAR, SLIDE THE FRONT SHIELD EXTENSIONS IN AND RE-DRILL.**

Step 21: Bolt the 2-piece cob guard on the right side of the combine just in front of the pulley . Refer to chop-per guard mounting instructions, for information on drilling 2 holes and mounting. **DIAGRAM PAGE 45.**

## **MAC-DON HEADERS**

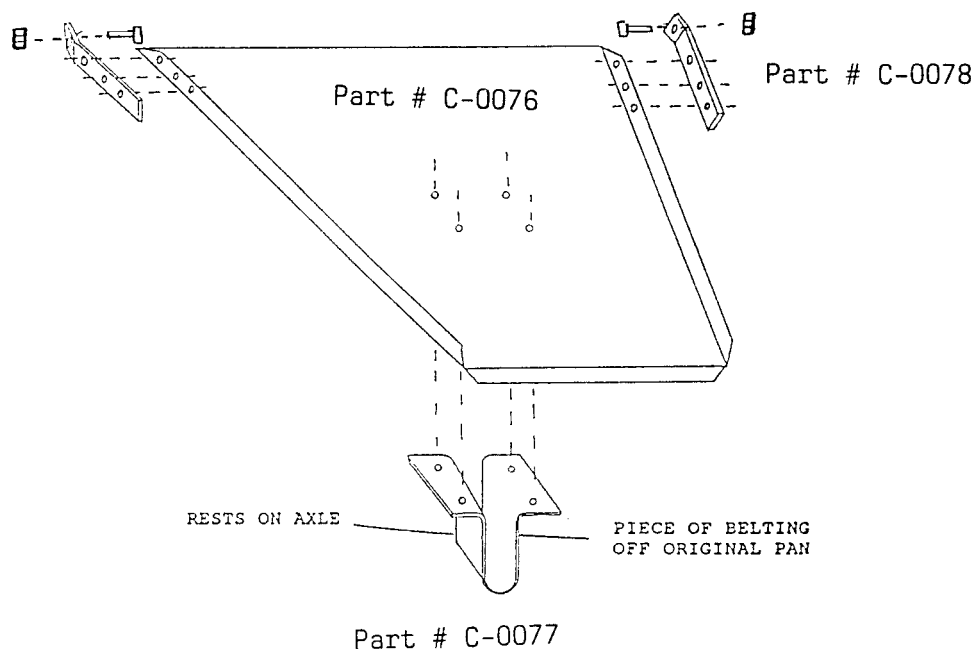
We have had problems in the past when a Vittetoe Chaff Spreader is used on combines equipped with an older Mac Don Header. There is a potential for seals being blown on draper drive motors on older Mac Don Headers that were driven off of the reel drive system.

The newer Mac Don Headers (1992 or so) have a self contained draper drive system thus eliminating these seal problems. Therefore, we do not recommend using a Vittetoe Chaff Spreader in conjunction with the Mac Don Heads that do not have a self contained draper drive system.

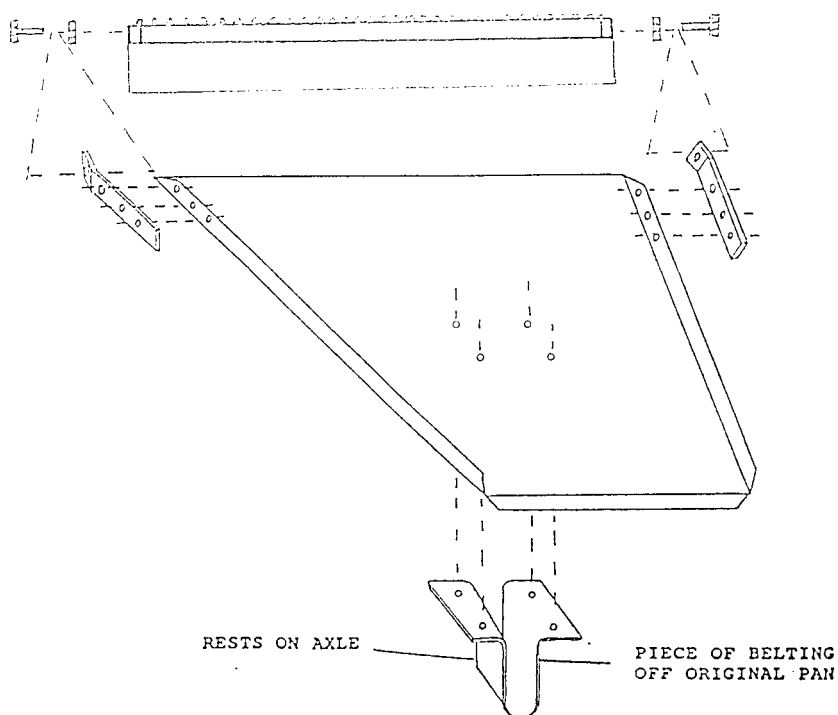
If you have any questions, please contact Mac Don or Vittetoe, Inc. @ 515-636-2259.

# **JOHN DEERE 4400 PAN ASSEMBLY**

**NOTE:** Bolt to rear of sieves using ½ inch bolts already present on each side. (Do not loosen or remove these bolts). Use 2, ½ x 13 self-locking nuts to mount our bracket so that pan will pivot at these points. The old pan and brackets must be removed prior to assembly.



**NOTE:** Some 4400's have a sieve bolted in similar to the configuration below. In this case, remove the bolts, assemble pan bracket to bolt, assemble thin jam nut to bolt, and reassemble to hold sieve in place. Make sure bracket can pivot between the jam nut and the head of the bolt.



## 20 SERIES JOHN DEERE COMBINES DOUBLE CHAFF SPREADERS

We recommend using only single chaff spreaders on 20 Series John Deere combines. When using our recommended hydraulic hookup, there is not enough oil flow to see any advantage using a double chaff spreader over a single chaff spreader.

It takes more oil to spin the smaller spinners on the double fast enough to obtain the spread that is easily achieved with the single chaff spreader. In many cases, a superior spread will be obtained with a single chaff spreader over a double chaff spreader.

### ALTERNATIVE HYDRAULIC HOOKUP

If you insist upon using a double chaff spreader on 20 Series John Deere combines, you can get a better spread by using an alternative hydraulic hookup. The problem with this hookup is that it is extremely difficult to do.

The alternative hookup is at the reel speed control valve in the combine cab. The return line (which runs to the oil cooler) should be removed from the back side of the tee in the exhaust port of the reel speed control valve. The hose running to the IN port of the chaff spreader flow control valve should be connected to the tee in the reel speed control valve (where you removed other hose). The hose from the tee in the EX port of the chaff spreader flow control valve should be connected to the hose you removed from the reel speed control valve.

**WARNING:** Be sure that you are hooking in before the oil cooler. If not, serious damage will occur to the oil cooler.

## **JD 9000 SERIES SINGLE**

**PAGE 37 SHOWS DIAGRAM OF HYDRAULIC HOOKUP DESCRIBED HERE.**

Step 1: Bolt the valve plate to the combine (left rear) using two existing bolts. **Refer to sketch pg 34.**

Step 2: Screw the third leg of the tee into the exhaust (EX) port of the flow control valve.

Step 3: Screw a 90° elbow into the CF Port and the In Port of the Flow Control Valve.

Step 4: Bolt the flow control valve to the valve mounting plate using two 1/4" x 2 1/2" bolts. Position the valve with the tee on the lower left (toward the front of the combine) and the controlled flow (CF) port to the lower right (toward rear of combine).

### **IMPORTANT - SEE DIAGRAM ON PAGE 57.**

Step 5: Screw a 90° elbow into both ports of the Hydraulic Motor.

Step 6: Screw the 7/8" -14 JIC female swivel end of a 10' hose onto the lower end of the tee at the EX port of the flow control valve. Screw the 3/4" JIC Female swivel end on the other end of this hose onto the elbow in the right port of the hydraulic motor.

Step 7: Screw 3/4" JIC female swivel end of other 10' hose onto the elbow in the CF port of the flow control valve. Screw the 3/4" JIC female swivel end on the other end of this hose onto the elbow in the left port of the motor.

Step 8: Screw 7/8"-14 JIC female swivel end of 4' hose with 90° 1/2" flat face o-ring hose end on the other end (Hose end E) onto the top of the tee in the EX port of the flow control valve.

Step 9: Screw 3/4" JIC female swivel end of the other 4' hose onto the elbow in the IN port of the flow control valve.

Step 10: Remove the steel line from the top side of the tee next to the combine at the valve stack. **SEE DIAGRAM PAGE 37.**

Step 11: Screw the 3/4" flat face o-ring to 1/2" flat face o-ring adapter (Adapter D) onto the tee that the steel line was removed from. Screw the 90° 1/2 " flat face o-ring hose end (hose end E) onto the adapter just assembled to the tee.

Step 12: Insert the 3/4" flat face o-Ring to male hose end on Hose #1 (Hose End F). Use the black cable ties to secure all hoses safely out of the way.

**CAUTION: BE CERTAIN THE HYDRAULIC CONNECTIONS ARE CORRECT OR DAMAGE MAY BE DONE TO THE HYDRAULIC MOTOR SEALS. CHECK TO SEE THAT THE HOSE FROM THE CF PORT OF THE FLOW CONTROL VALVE RUNS TO THE LEFT PORT OF THE HYDRAULIC MOTOR. THEN WITH THE ENGINE AT AN IDLE AND THE HEAD ENGAGED, CHECK TO SEE THAT THE DISC IS TURNING CLOCKWISE (LOOKING DOWN FROM ABOVE). IF THE DISC IS TURNING CLOCKWISE THEN ALL HYDRAULIC CONNECTIONS ARE CORRECT. IF THE DISC IS TURNING COUNTER CLOCKWISE THEN THE TWO 4 FOOT HOSES NEED TO BE REVERSED AT THE FLOW CONTROL VALVE.**



## **JD 9000 SINGLE**

**SET THE FLOW CONTROL VALVE ON “3” AND ADJUST HIGHER AS NECESSARY TO THROW CHAFF THE SAME WIDTH AS THE HEAD. THE FLOW CONTROL VALVE SETTING WILL BE LOWER FOR CORN THAN THAT REQUIRED FOR SOYBEANS.**

**REFER TO PAGES 44 & 49 TO MOUNT WINGS ON SHAKER PAN.**

**REFER TO PAGES 46 & 47 FOR CHOPPER BELT COBGUARD MOUNTING INSTRUCTIONS.**

**ROW CROP:** If a row crop head is always used for harvest, and the reel drive hydraulics is not needed or used for any header functions, then the flow control valve (reel speed) in the cab can be used to control the speed of the chaff spreader and the cost of an additional flow control valve can be saved. This will not work properly if a platform header or a pick-up attachment is ever used.

**Step 11:** Attach the 7/8” 90° o-ring male pipe swivel end of the 38’ hose (with the 3/4” male o-ring fitting on the other end) to the left port of the hydraulic motor. (left and right referenced, standing behind combine looking forward) Feed the hose along the left side of the combine to the front. Remove the male quick coupler from the reel drive hose at the right front of the feeder house. Attach this male quick coupler to the hose you inserted into the left port of the chaff spreader motor. Couple this hose into the other hose at the right front of the feeder house.

**Step 12:** Attach the 7/8” 90° o-ring male pipe swivel end of the other 38’ hose to the right port of the hydraulic motor. Run the hose along the left side of the combine with the first 38’ hose. Using the silver adapter assembled to the end of this hose, connect this hose end to the hose end from which you removed the male quick coupler.

**Step 13:** Use the black cable ties to secure the hoses safely out of the way.

**THE SPREADER DISC SHOULD SPIN CLOCKWISE. IF IT DOES NOT THEN SWITCH THE TWO HOSES AT THE SPREADER. (ROWCROP HEAD ONLY)**

**ADJUST THE REEL SPEED KNOB IN THE COMBINE CAB SO THE SPREAD JUST COVERS THE WIDTH OF THE HEAD.**

**REFER TO PAGES 48 & 49 TO MOUNT WINGS ON TO SHAKER PAN.**

**REFER TO PAGES 46 & 47 FOR CHOPPER BELT COBGUARD MOUNTING INSTRUCTIONS**

## **JD 9000 SERIES DOUBLE**

**PAGE 38 SHOWS DIAGRAM OF HYDRAULIC HOOKUP DESCRIBED HERE.**

Step 1: Screw a 90° elbow into both ports of both hydraulic motors.

Step 2: Attach the 2' hose to the 90° elbow in the right port of the right motor and the 90° elbow in the right port of the left motor.

Step 3: Bolt the valve plate to the combine (left rear) using 2 existing bolts. **Refer to sketch page 34.**

Step 4: Screw the third leg of the tee into the exhaust (EX) port of the flow control valve.

Step 5: Screw a 90° elbow into the CF Port and the In port of the flow control valve.

Step 6: Bolt the flow control valve to the valve mounting plate using two 1/4" x 2 1/2" bolts. Position the valve with the tee on the lower left (toward the front of the combine) and the controlled flow (CF) port to the lower right (toward rear of combine).

### **IMPORTANT - SEE DIAGRAM ON PAGE 57.**

Step 7: Screw the 7/8"-14 JIC female swivel end of a 10' hose onto the lower end of the tee at the EX port of the flow control valve. Screw the 3/4" JIC female swivel end on the other end of this hose onto the elbow in the Left port of the Right hydraulic motor.

Step 8: Screw the 3/4" JIC female swivel end of the other 10' hose onto the elbow in the CF Port of the flow control valve. Screw the 3/4" JIC female swivel end on the other end of this hose onto the elbow in the left port of the left motor.

Step 9: Screw 7/8"-14 JIC female swivel end of 4' hose with 90° 1/2" flat face o-ring hose end on the other end (Hose end E) onto the top of the tee in the EX port of the flow control valve.

Step 10: Screw 3/4"-14 JIC female end of the other 4' hose onto the elbow in the IN Port of the flow control valve.

Step 11: Remove the steel line from the top side of the tee next to the combine at the valve stack. **SEE DIAGRAM PAGE 38.**

Step 12: Screw the 3/4" flat face o-ring to 1/2" flat face o-ring adapter (adapter D) onto the tee that the steel line was removed from. Screw the 90° 1/2" flat face o-ring hose end (hose end E) onto the adapter just assembled to the tee.

Step 13: Insert the 3/4" flat face o-ring to male hose end on Hose #1 (Hose End F). Use the black cable ties to secure all hoses safely out of the way.

**CAUTION: BE CERTAIN THE HYDRAULIC CONNECTIONS ARE CORRECT OR DAMAGE MAY BE DONE TO THE HYDRAULIC MOTOR SEALS. CHECK TO SEE THAT THE HOSE FROM THE CF PORT OF THE**

**FLOW CONTROL VALVE RUNS TO THE LEFT PORT OF THE LEFT HYDRAULIC MOTOR. THEN WITH JD 9000 SERIES DOUBLE**

**WITH THE ENGINE AT AN IDLE AND THE HEAD ENGAGED, CHECK TO SEE THAT THE LEFT DISC IS TURNING CLOCKWISE AND THE RIGHT DISC IS TURNING COUNTER CLOCKWISE (LOOKING DOWN FROM ABOVE). IF THE LEFT DISC IS TURNING CLOCKWISE THEN ALL HYDRAULIC CONNECTIONS ARE CORRECT. IF THE LEFT DISC IS TURNING COUNTER CLOCKWISE THEN THE TWO 4 FOOT HOSES NEED TO BE REVERSED AT THE FLOW CONTROL VALVE.**

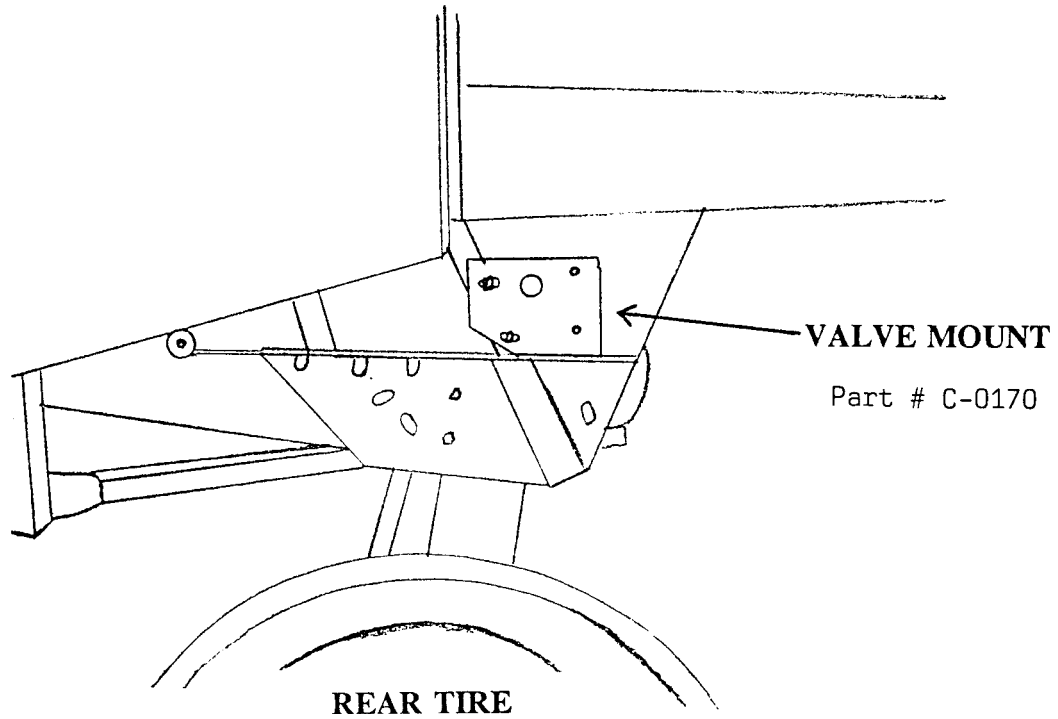
**SET THE FLOW CONTROL VALVE ON “4” AND ADJUST HIGHER AS NECESSARY TO THROW CHAFF THE SAME WIDTH AS THE HEAD. THE FLOW CONTROL VALVE SETTING WILL BE LOWER FOR CORN THAN THAT REQUIRED FOR SOYBEANS.**

**REFER TO PAGES 48 & 49 TO MOUNT WINGS ON TO SHAKER PAN**

**REFER TO PAGES 46 & 47 FOR CHOPPER BELT COBGUARD MOUNTING INSTRUCTION.**

## **JOHN DEERE 4425, 4435**

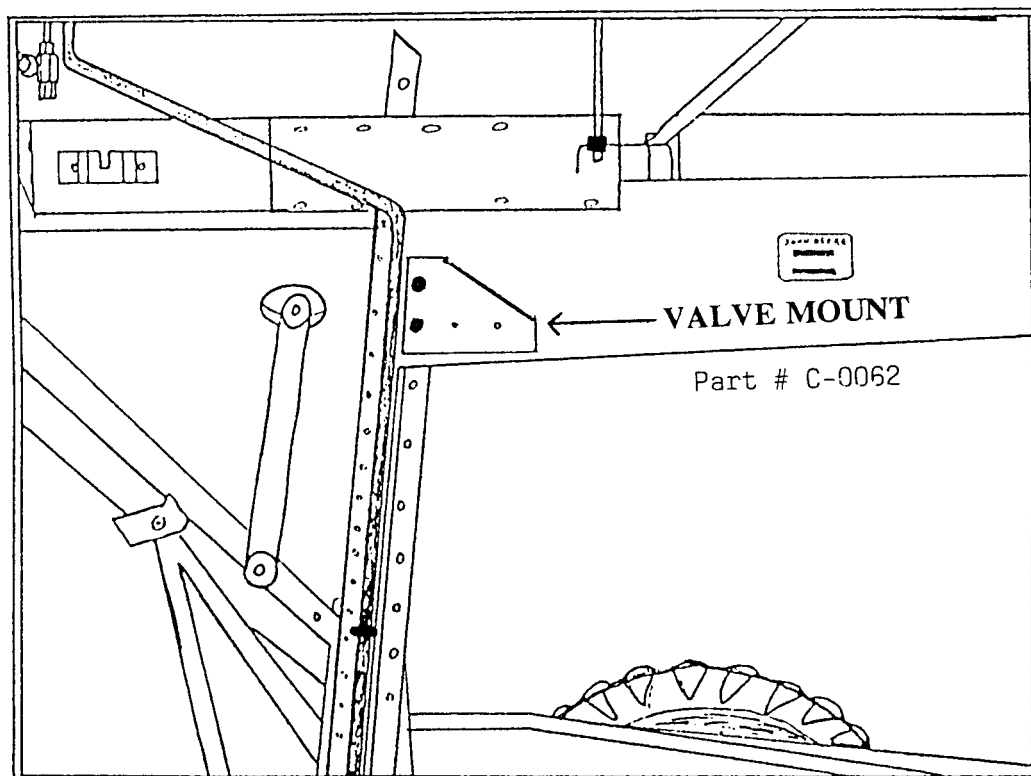
### **Valve Mount Placement**



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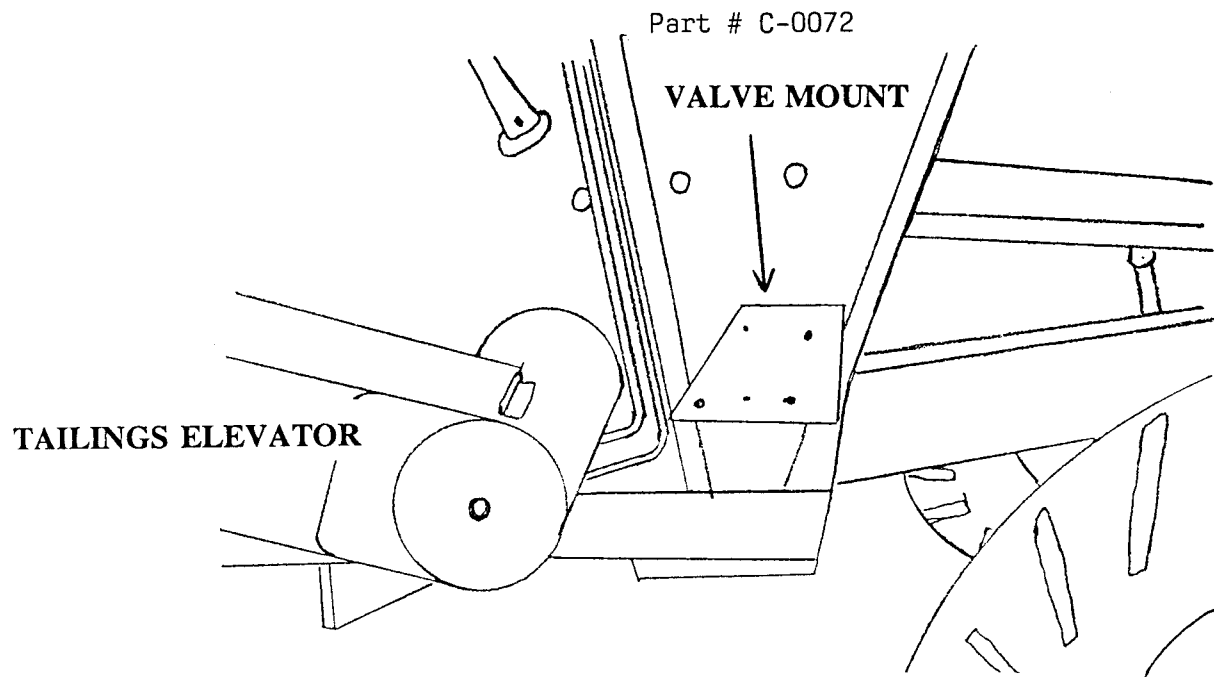
## **JOHN DEERE 9400, 9500, 9600**

### **Valve Mount Placement**



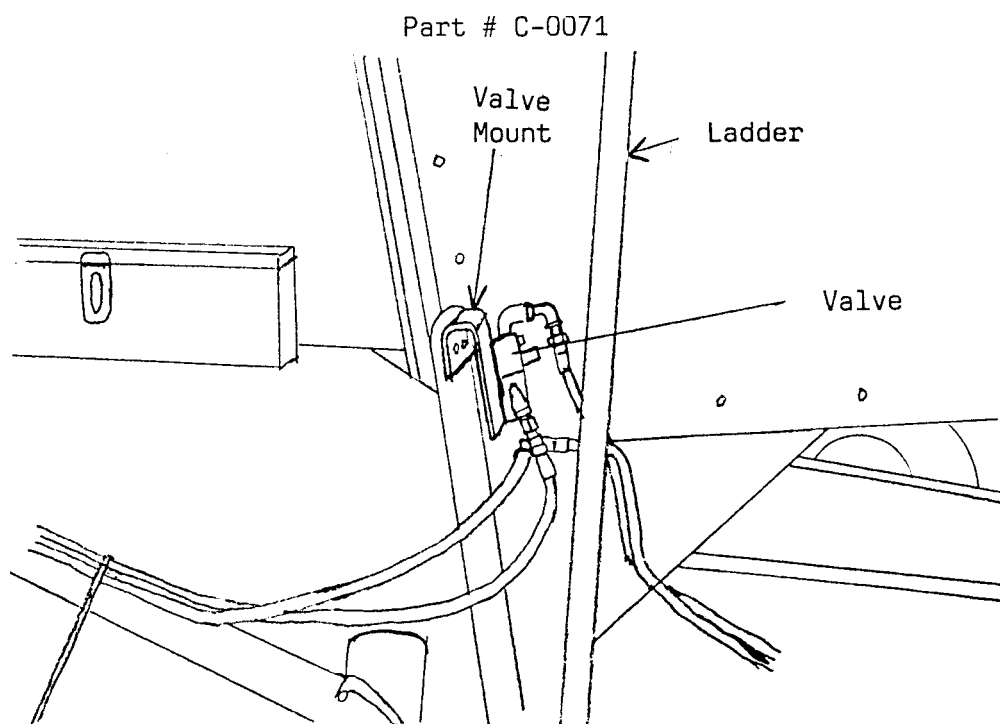
## **JOHN DEERE 6620, 7720, 7721, 8820**

### **Valve Mount Placement**

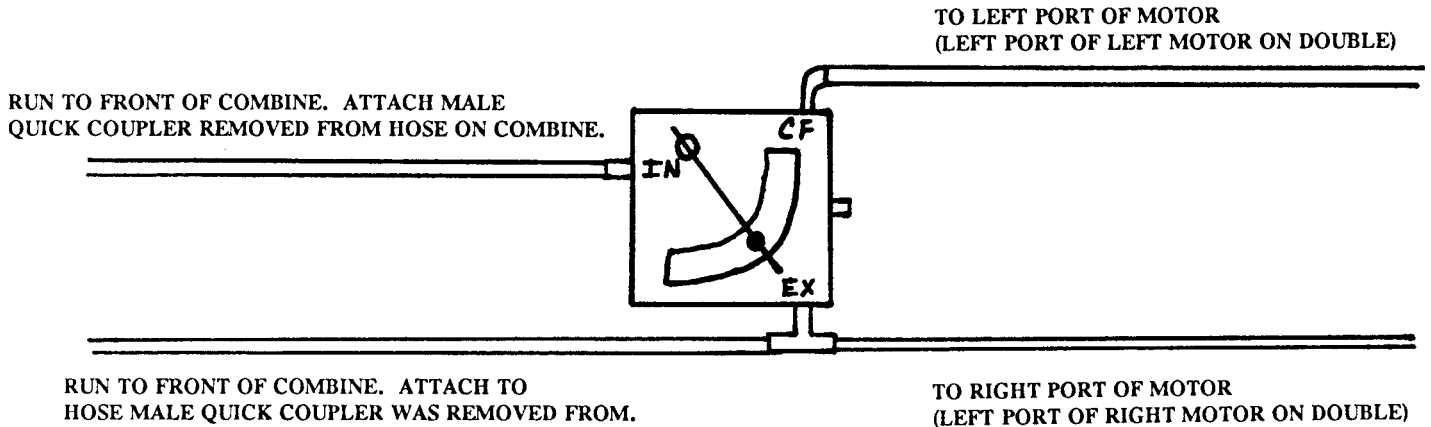


## **JOHN DEERE 4400, 4420, 6600, 7700, 7701**

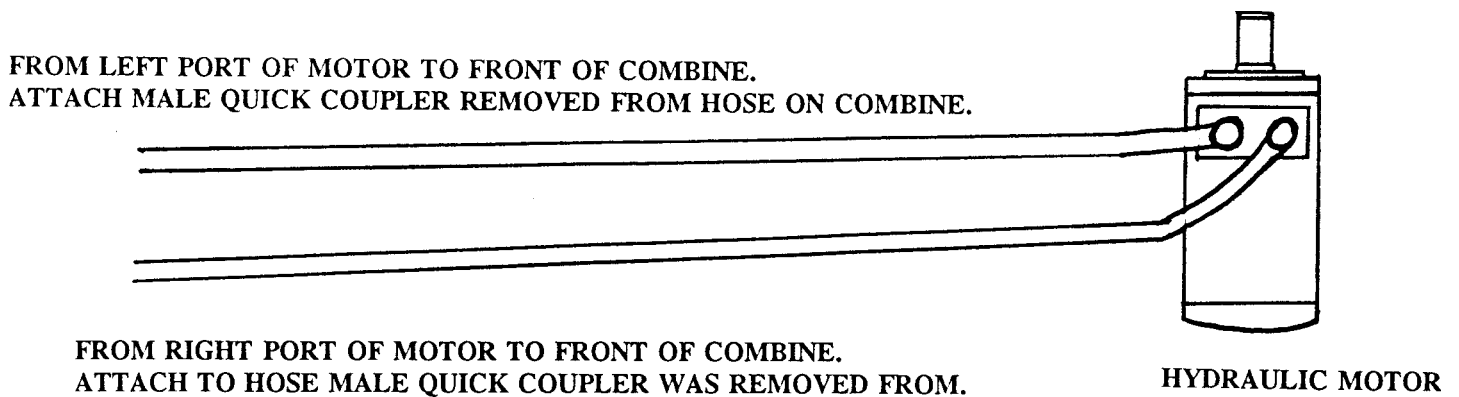
### **Valve Mount Placement**



**JOHN DEERE 4400, 4420, 4425, 4435, 6600, 6620**  
**7700, 7701, 7720, 7721, 8820**  
Valve Mount Placement

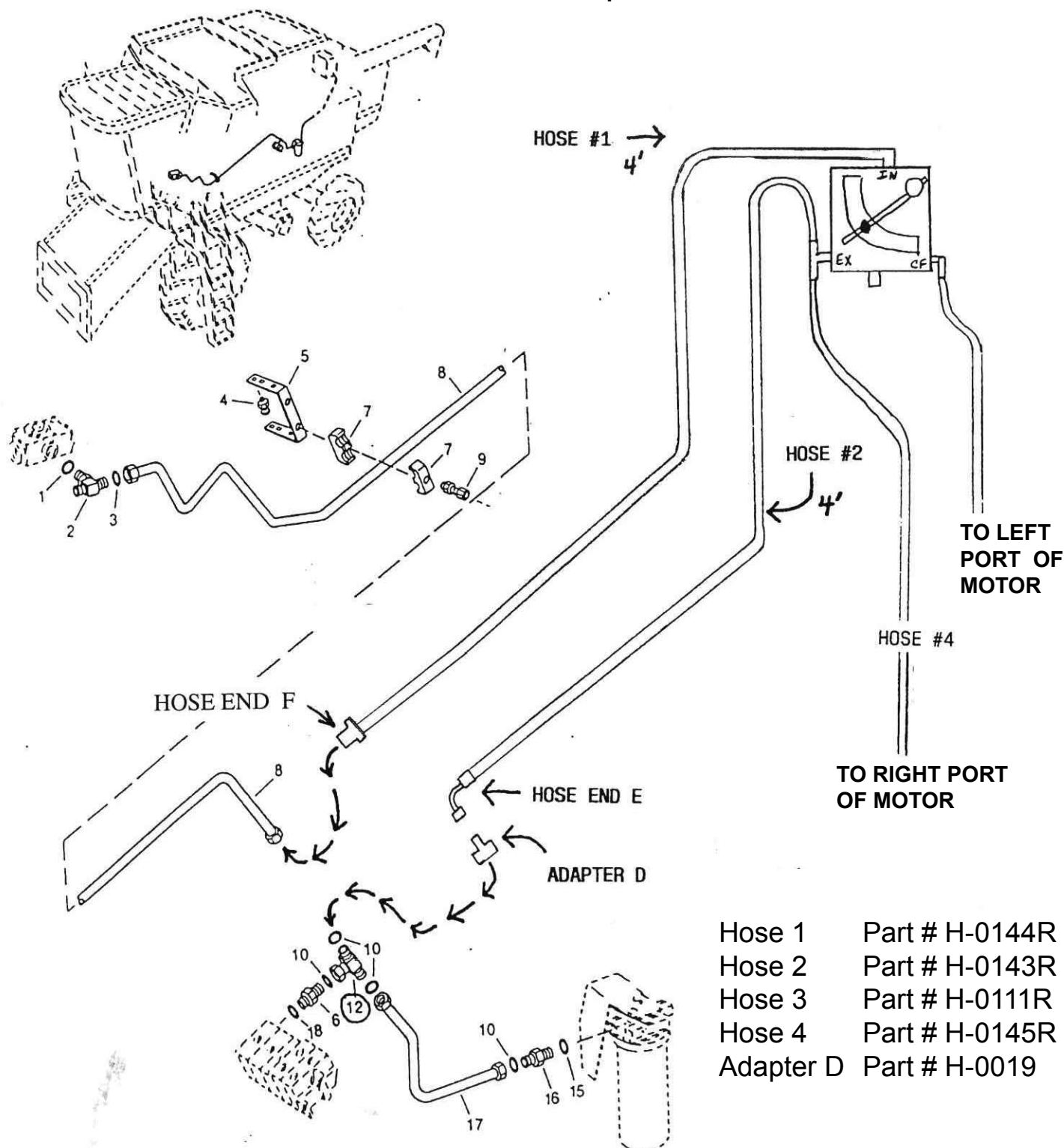


**JOHN DEERE ROW CROP HEAD**  
(For Those Not Using Our Flow Control Valve)



# **JOHN DEERE 9000 SERIES (SINGLE)**

## **Hose Hookup**



Step 1 – Screw the 3/4" JIC female end on Hose #1 onto the elbow in the IN port of the valve.

Step 2 – Screw the 7/8" - 14 JIC female end on Hose #2 onto the top side of the tee in the EX port of the valve.

Step 3 - Remove steel line #8 from tee # 12.

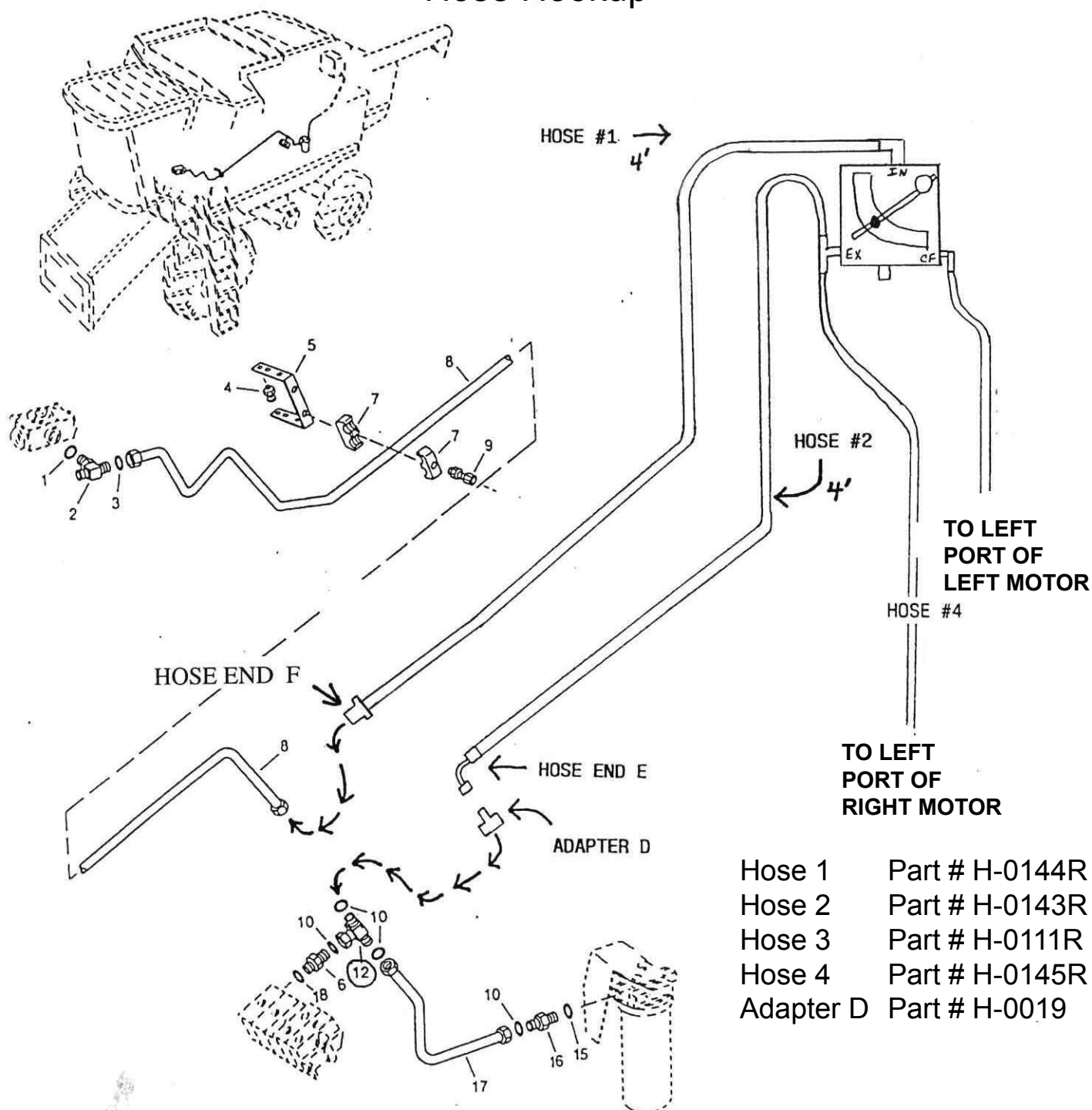
Step 4 – Insert Hose End F (on Hose #1) into steel line # 8.

Step 5 – Put Adapter D onto tee #12 where you removed the steel line.

Step 6 - Screw Hose End E (on Hose # 2) onto Adapter D.

# **JOHN DEERE 9000 SERIES (DOUBLE)**

## **Hose Hookup**



Step 1 – Screw the 3/4" JIC female end on Hose #1 onto the elbow in the IN port of the valve.

Step 2 – Screw the 7/8" - 14 JIC female end on Hose #2 onto the top side of the tee in the EX port of the valve.

Step 3 - Remove steel line #8 from tee # 12.

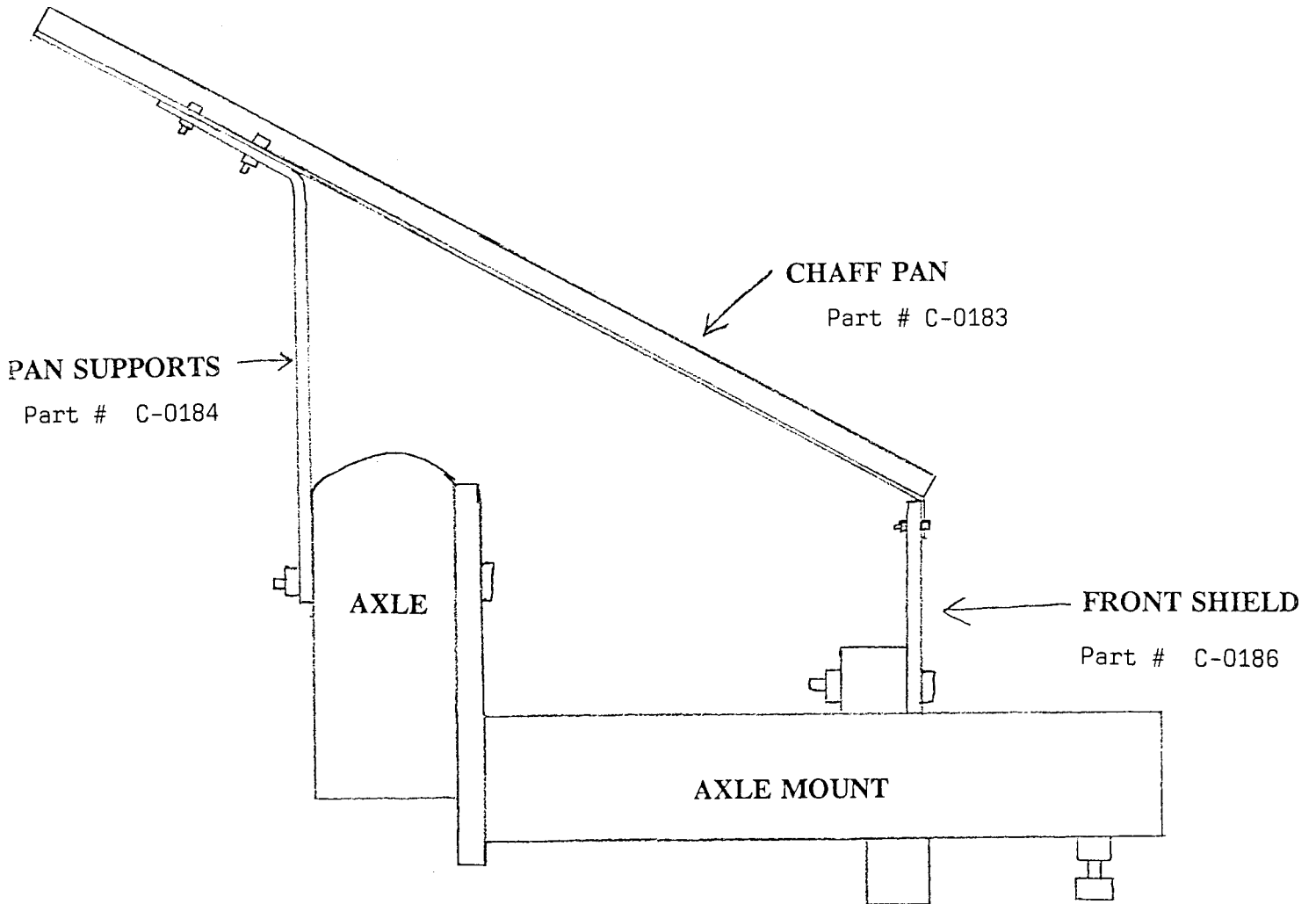
Step 4 – Insert Hose End F (on Hose #1) into steel line # 8.

Step 5 – Put Adapter D onto tee #12 where you removed the steel line.

Step 6 - Screw Hose End E (on Hose # 2) onto Adapter D.



# **JOHN DEERE 4420 PAN**



# **JOHN DEERE FLAT PAN**

(Present with Standard Axle)

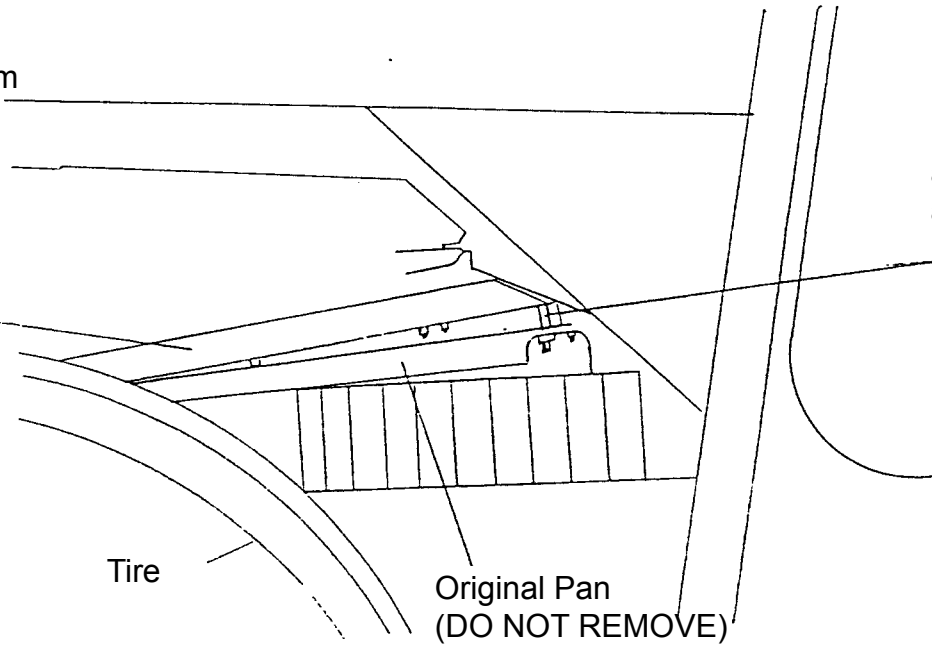
NOTE: 2 holes  
drilled and bolted to  
hold rear of aluminum  
pan to original pan

Aluminum  
pan and  
wings sup-  
plied

Tire

Original Pan  
(DO NOT REMOVE)

Bolts holding  
aluminum pan  
and original  
pan both in  
place



- A. Bolt wings onto center section of aluminum pan.
- B. Remove bolts holding original pan on at rear of sieves.
- C. Bolt aluminum pan on top of existing pan using longer bolts supplied.
- D. Drill 2 holes through lower end of aluminum pan and existing pan and bolt aluminum pan to existing pan.

**BE SURE TO TURN REAR WHEELS TO MAKE SURE THERE IS CLEARANCE BETWEEN THE PAN AND TIRES.**

## **CHAFF SPREADER PAN ASSEMBLY**

The chaff spreader pan should be assembled with the bottom side facing up.

(1) As the basis for assembly, place the main sheet (#1) with the bolt holes located as shown on the drawing.

(2) Place #5 (left wing, slant angle turned down) under the main sheet and #3 (2-1/2 x 2-1/2 x 24" angle) on top of the main sheet so that the bolt holes are in line and secure with four (4) 5/16 x 1" slot head bolts and lock washers.

(3) Place #6 (right wing, slant angle turned down) under the main sheet and #4 (2-1/2 x 2-1/2 x 24" angle) on top of the main sheet so that the bolt holes are in line and secure with four (4) 5/16 x 1" slot head bolts and lock washers.

(4) Place #2 (2-1/2 x 2-1/2 x 24" angle) on top of the main sheet and secure with three (3) 5/16 x 1" slot head bolts and lock washers.

(5) Place #7 (left side bracket) on the inner side of the #3 (angle) at the lower end and secure with three (3) 5/16 x 1" cap head bolts and lock washers.

(6) Place #8 (right side bracket) on the inner side of the #4 (angle) at the lower end and secure with three (3) 5/16 x 1" cap head bolts and lock washers.

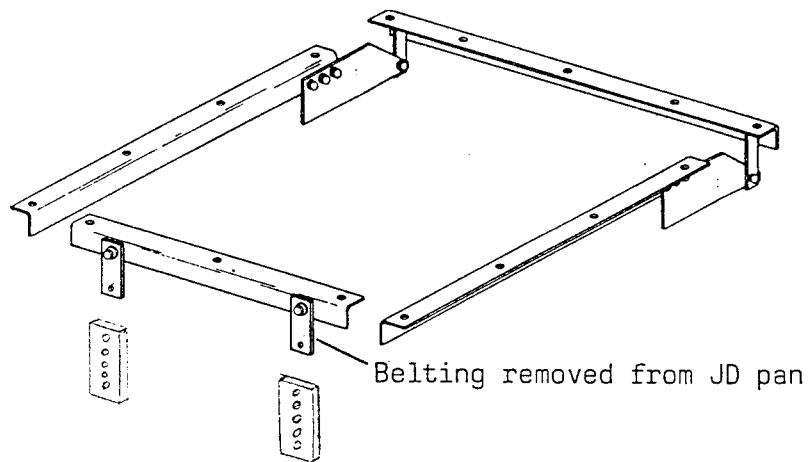
(7) Place #11 (2-1/2 x 2-1/2 x 60" angle) on the lower part of the main assembly and secure with seven (7) 5/16 x 1" slot head bolts and lock washers.

(8) Place #9 (bracket support) on the upper side of #11 angle. Secure with one (1) 5/16 x 1" cap bolt and lock washer through sheets #5 and #1.

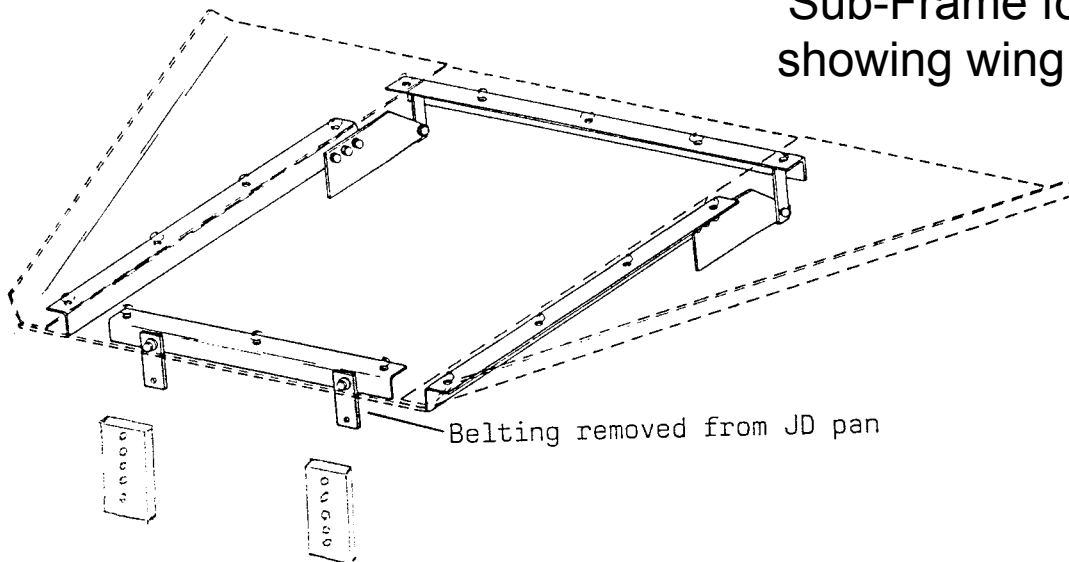
(9) Place #8 (bracket support) on the upper side of #11 angle. Secure with one (1) 5/16 x 1" cap bolt and lock washer through sheets #5 and #1.

(10) After the assembly is completed, turn the assembly over for mounting on the combine.

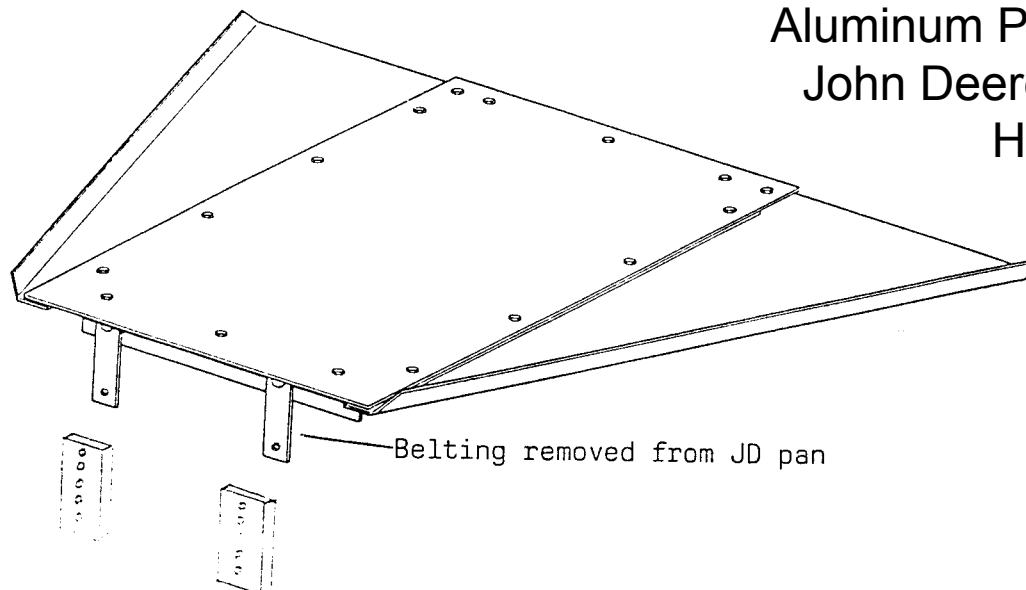
## **SUBFRAME FOR JOHN DEERE PAN**



Sub-Frame for J.D. pan  
showing wing placement



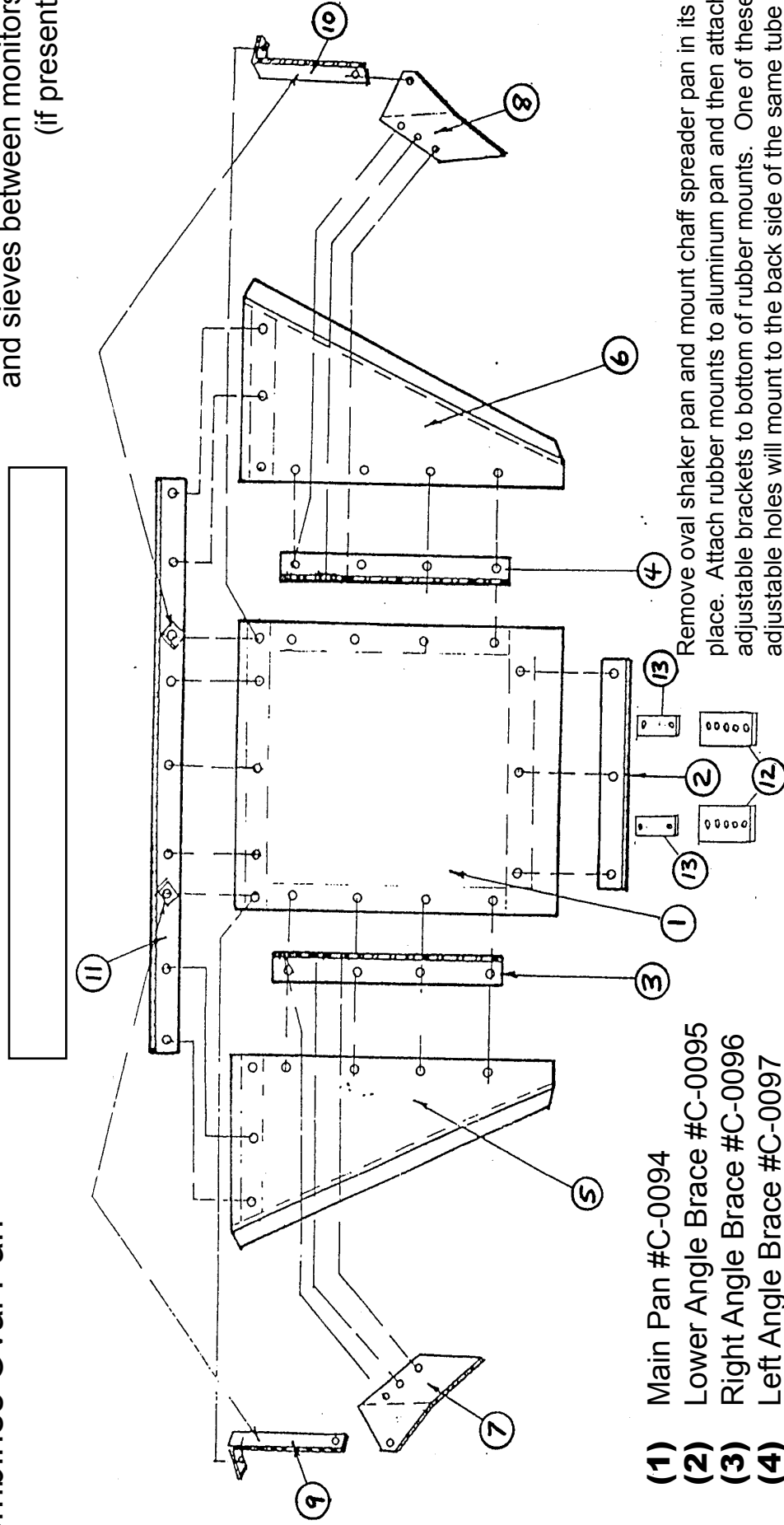
Aluminum Pan for 20 Series  
John Deere combines with  
Heavy Duty Axles



# CHAFF SPREADER PAN

John Deere 20 Series  
Combines Oval Pan

10 inch belting - Bolt on top of  
main pan. Fills gap between pan  
and sieves between monitors  
(if present)

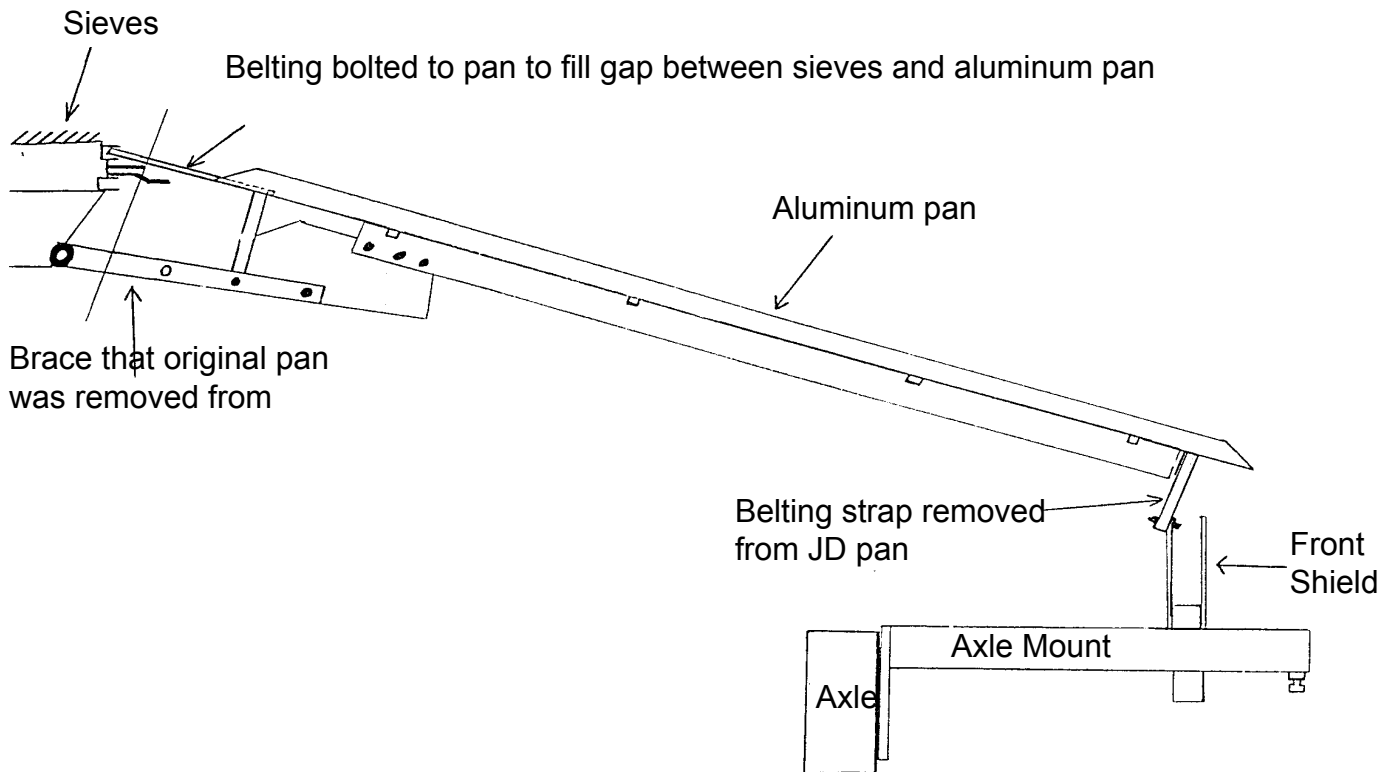


- (1) Main Pan #C-0094
- (2) Lower Angle Brace #C-0095
- (3) Right Angle Brace #C-0096
- (4) Left Angle Brace #C-0097
- (5) Right Pan Wing
- (6) Left Pan Wing
- (7) Right Brace Bracket #C-0105
- (8) Left Brace Bracket #C-0106
- (9) Bracket Support #C-0104
- (10) Bracket Support #C-0104
- (11) Upper Angle Brace
- (12) Adjustable Brackets #C-0111
- (13) Belting Straps-Removed from JD pan & reused.

## VIEW OF BOTTOM SIDE

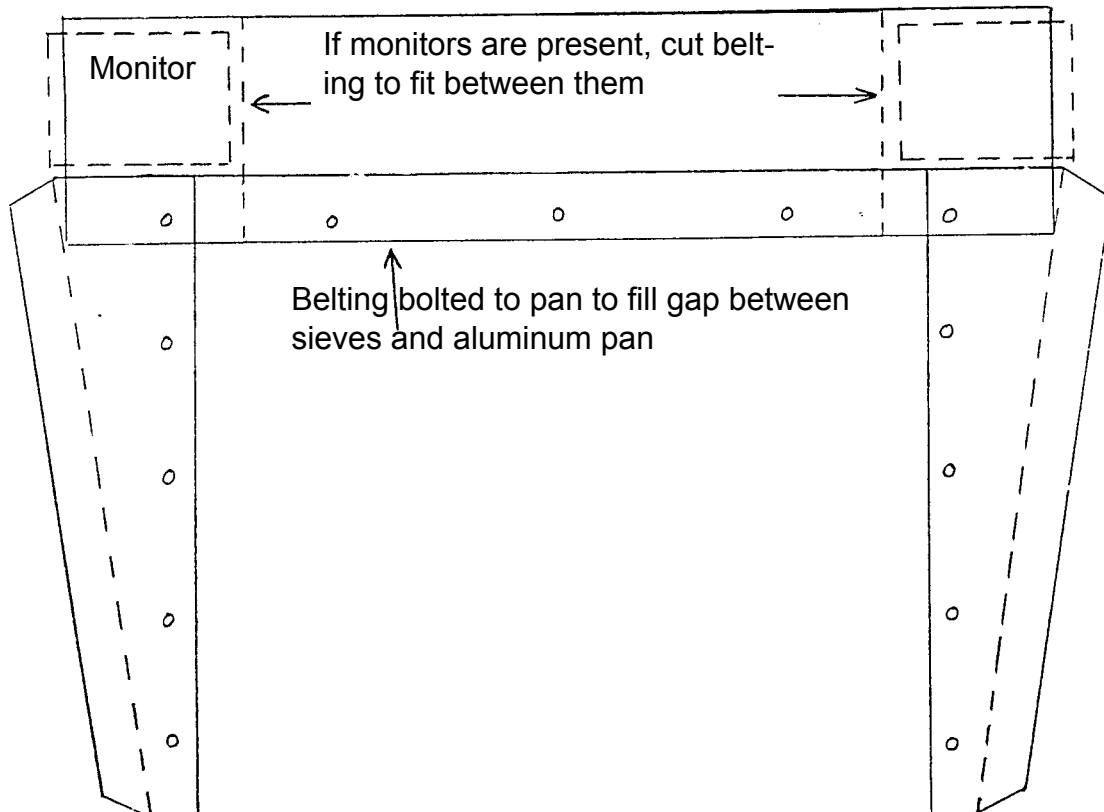
↑  
Front of Combine  
RIGHT Rear of Combine LEFT  
↓  
Turn over to Mount on Combine!

## **SIDE VIEW OF OVAL PAN MOUNTING**



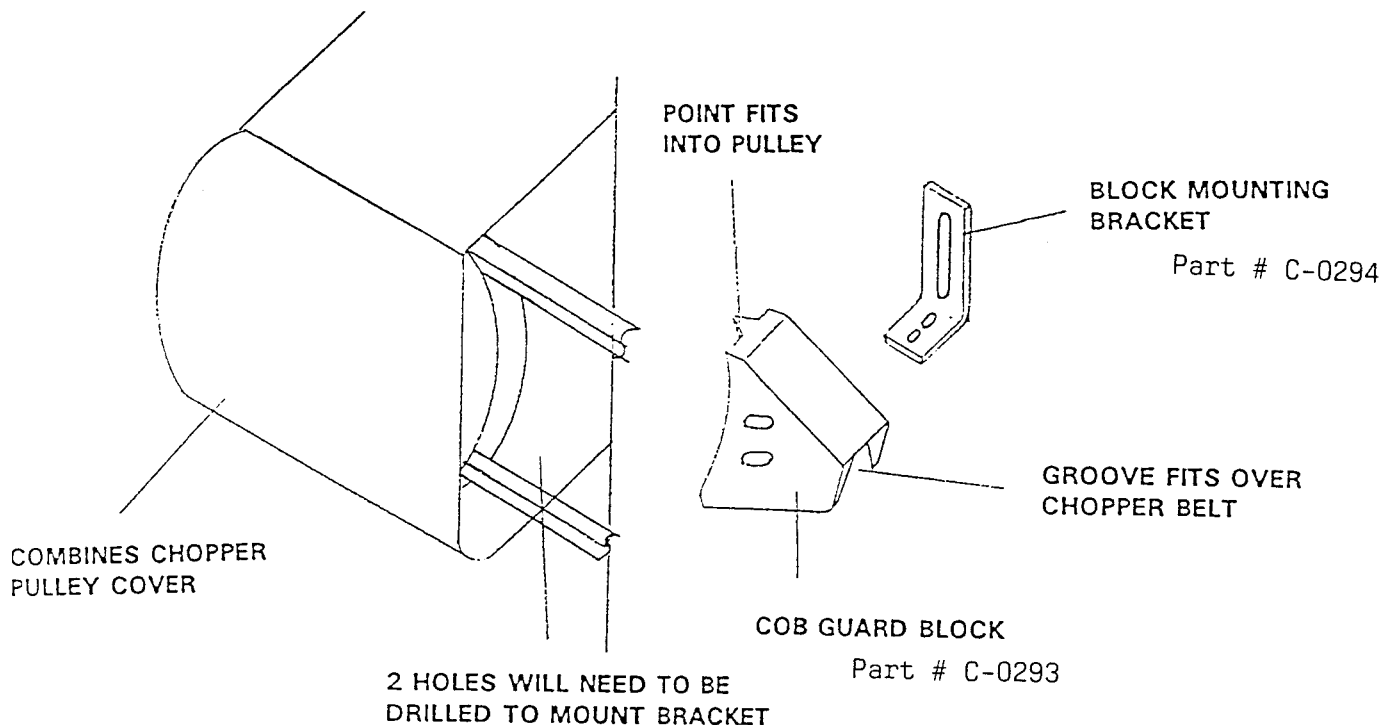
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## **BELTING PLACEMENT**



# **CHOPPER PULLEY COB GUARD 6620, 7720, 8820**

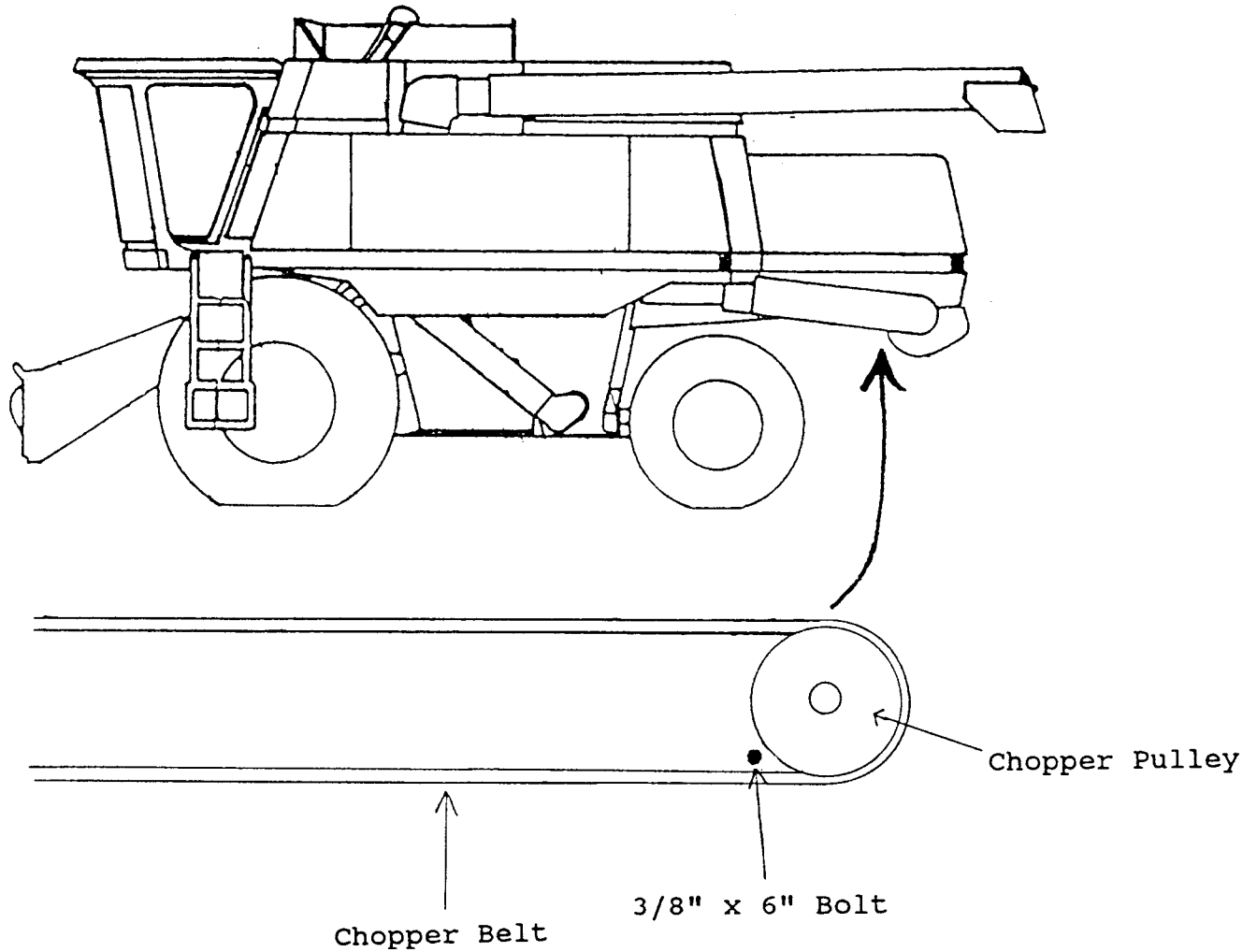
## **Complete Cob Guard Part # C-0253**



- (1)** Loosely assemble the cob guard block to the block mounting bracket using the carriage bolts supplied.
- (2)** Slide the block up to the pulley and position it so the point fits in the pulley and the belt fits in the groove of the block. NOTE: The block mounting bracket may be bolted to either side of the block and the brackets foot may face toward or away from the block in order to obtain the best position for drilling two holes in the chopper pulley cover.
- (3)** To mount the block mounting bracket, mark and drill the two holes and bolt the block mounting bracket to the combine chopper pulley cover.
- (4)** Make your final adjustments of the block and brackets and tighten the four bolts. The block should not be making contact with the pulley or the belt.

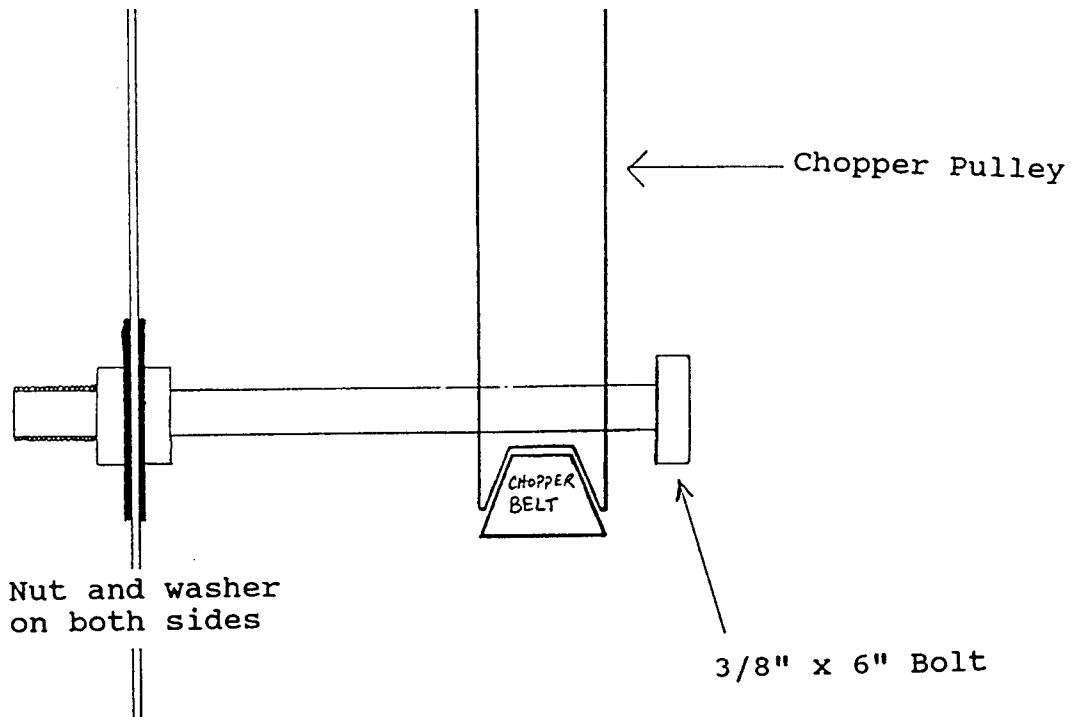
# **9400, 9500, 9600 Chopper Belt Cob Guard**

## **Side View**



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## **Front View**





## **9400, 9500, 9600 Straw Chopper Belt Cob Guard**

Occasionally a corn cob can cause the straw chopper belt on the 9000 series John Deere combines to come off of the rear pulley. This problem has been present with or without a chaff spreader on the combine.

Vittetoe Inc. is providing a 3/8" x 6" bolt to be positioned in front of- the pinch point at the intersection of the chopper pulley and the chopper belt.

### **Installation**

At the rear of the combine you will see where the straw chopper belt meets the pulley on the pulley on the straw chopper. (The lower point of contact) At this point there is a slotted hole present on the straw chopper housing. **\*\* Note 1\*\***

Screw a 3/8" nut onto the 6" bolt all of the way to the end of the threads. Then put a flat washer onto the bolt and insert the bolt through the slotted hole in the straw chopper housing. on the end of the bolt protruding to the other side of the straw chopper housing put on a flat washer, lock washer and the other 3/8" nut. Then tighten the nut.

The body of the 6" bolt should be positioned equidistance from the belt and the pulley and a little less than an inch from the contact point of the belt and the pulley. The head of the bolt should protrude just outside of the belt and pulley.

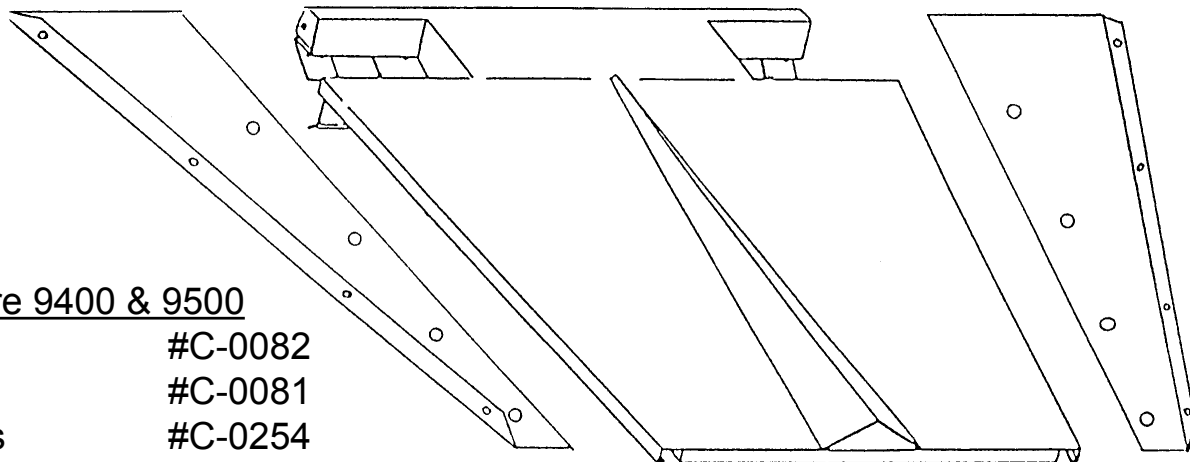
This bolt should prevent a corn cob from being able to get between the belt and the pulley thus eliminating any possibility of a cob causing the belt to come off of the pulley.

**\*\* Note 1 \*\*** This slotted hole may not be present on the earlier combines. In this case you will need to drill a 3/8" hole. The hole should be drilled so that the 3/8" x 6" bolt is positioned approximately 1/2" from both the chopper pulley and the chopper belt.

**\*\* Note 2 \*\*** You will find it beneficial to slow the chaff spreader down when combining corn. This will reduce the velocity at which the cobs are thrown.

## **9400, 9500, 9600 Pan Wing Placement**

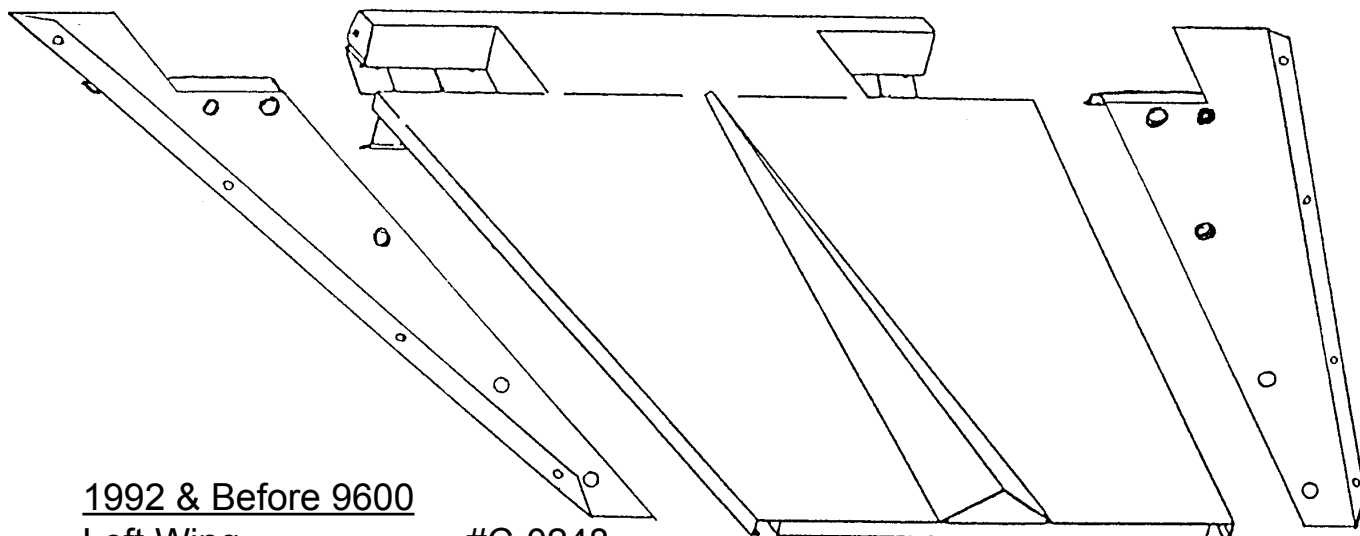
1992 and Before



### **1992 & Before 9400 & 9500**

Left Wing	#C-0082
Right Wing	#C-0081
Pair of Wings	#C-0254
Plastic for Wings	#C-0085
Pair with Plastic	#C-0254P

Holes must be drilled in pans to mount wings. Holes should be drilled approximately 2 inches in from the edge of pan in order to catch double thickness of metal. 6 inch wide belting should be bolted to the outside lip of each wing.

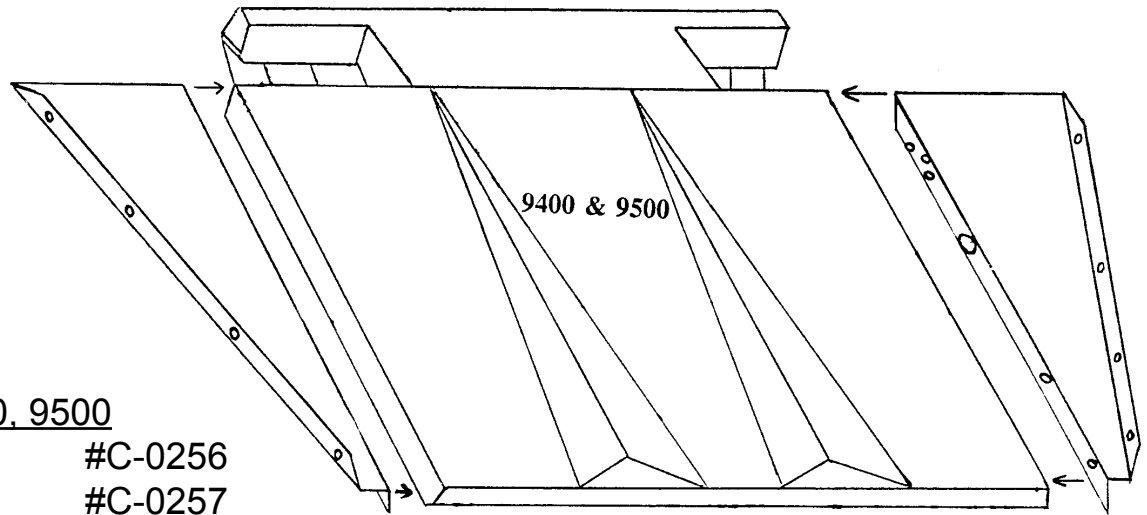


### **1992 & Before 9600**

Left Wing	#C-0248
Right Wing	#C-0247
Pair of Wings	#C-0255
Plastic for Wings	#C-0085
Pair with Plastic	#C-0255P

## **9400, 9500, 9600 Pan Wing Placement**

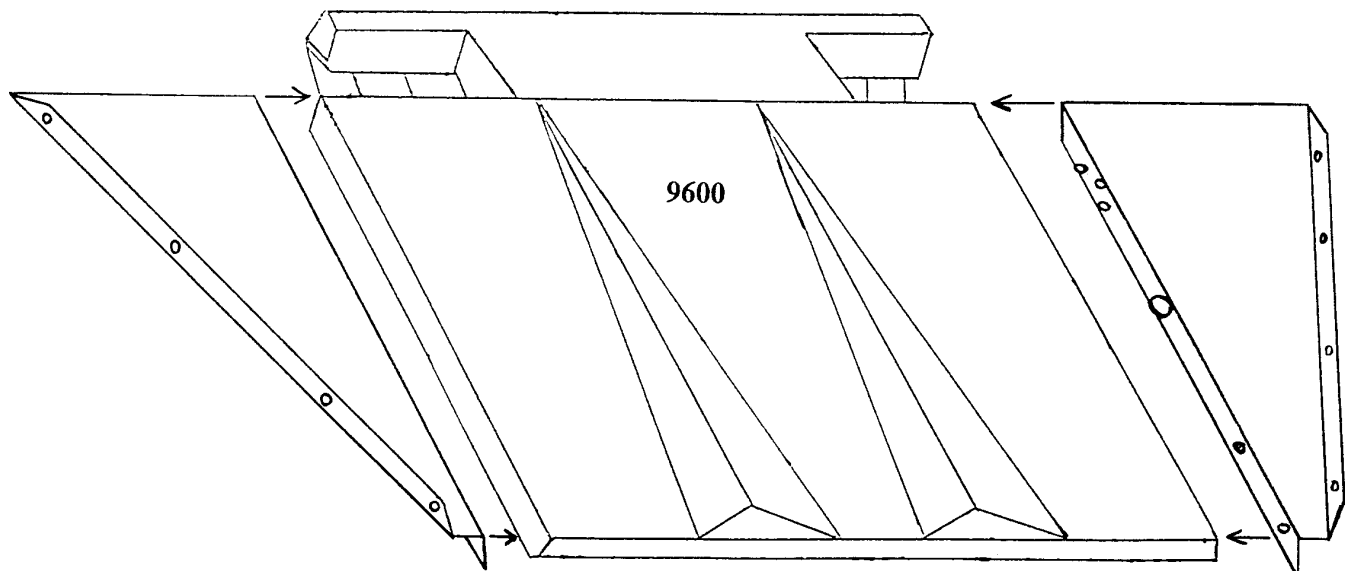
1993 & Later



### **1993 & Later 9400, 9500**

Left Wing	#C-0256
Right Wing	#C-0257
Pair of Wings	#C-0258
Plastic for Wings	#C-0085
Pair with Plastic	#C-0258P

The Pan Wings will bolt to each side of the pan. NOTE: Be certain to use a flat washer next to the pan and next to the wing (2 flat washers per bolt) when mounting pan wings. Do not put washers between the pan and wing. Bolt the belting inside of each wing with the long end of the belting extending forward to the shoe.

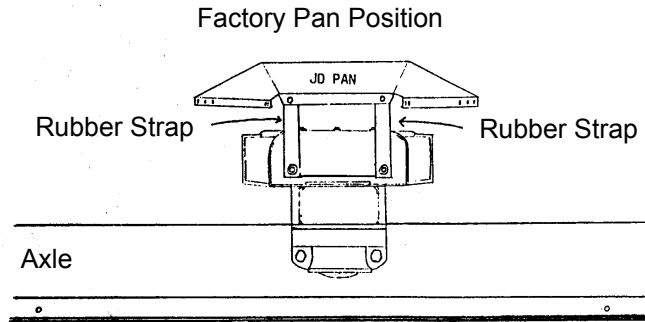


### **1993 & Later 9600**

Left Wing	#C-0259
Right Wing	#C-0260
Pair of Wings	#C-0261
Plastic for Wings	#C-0085
Pair with Plastic	#C-0261P

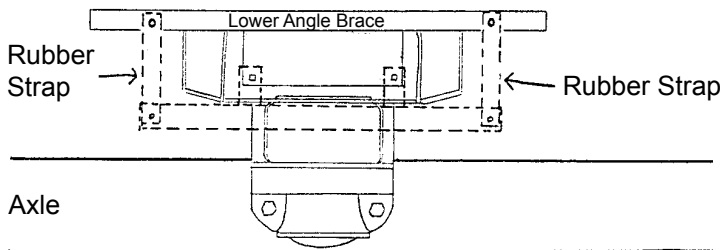
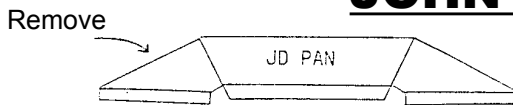
# **JOHN DEERE 6620 SIDEHILL**

## **Titan II & Not Titan II**



# **JOHN DEERE 6620 SIDEHILL**

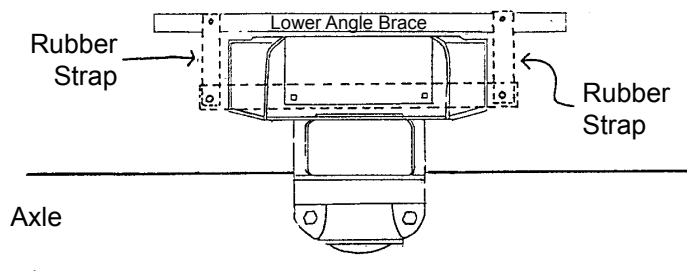
## **Not Titan II**



- (1)** Remove JD shaker pan
- (2)** Remove straps from rear of JD pan.
- (3)** Bolt our black bracket to the bracket on combine where rubber straps were bolted.
- (4)** Bolt bottom end of rubber straps to the outside holes of our bracket.
- (5)** Bolt top end of rubber straps to the 2 holes in the lower angle brace.

# **JOHN DEERE 6620 SIDEHILL**

## **Titan II**



- (1)** Remove JD shaker pan.
- (2)** Remove straps from rear of JD pan.
- (3)** Bolt our black 17 inch bracket to bracket on combine where rubber straps were bolted.
- (4)** Bolt bottom end of rubber straps to the outside holes of our bracket.
- (5)** Bolt lower pan brace, #2 on pan diagram, to the 3 holes 7 inches from end of main pan.
- (6)** Bolt top end of the rubber straps to the 2 holes in the lower angle brace.

# TROUBLE SHOOTING GUIDE

PROBLEM	PROBABLE CAUSES	REMEDY
Chaff spreader throws more chaff to the right side of the combine than to the left.	Rear shield slide needs adjustment.	Adjust rear shield forward to reduce the amount of chaff thrown to the right and increase the amount thrown to the left.
	Disc adjusted too far back.	Move disc closer to front shield by loosening set screws and sliding motor mount tubes further into axle mount, re-tighten set screws.
Chaff spreader throws more chaff to the left side of the combine than to the right.	Rear shield slide needs adjustment.	Adjust rear shield slide back to increase the amount thrown to the right and decrease the amount thrown to the left.
	Disc adjusted too far forward.	Move disc away from front shield by loosening set screws and sliding motor mount tubes out of axle mount, re-tighten set screws.
Chaff is being thrown onto standing crop.	Flow control valve needs to be adjusted.	Adjust flow control valve to a lower number setting.
Chaff does not spread to edge of standing crop.	Flow control valve needs to be adjusted. NOTE: Under some field conditions chaff may be too light to be thrown this far. (3 to 4 is a normal setting for flow control valve)	Adjust flow control valve to a higher number setting.
Windrow directly behind combine. (IH w/chopper or in some dry conditions without chopper)	Straw off rotor is wind-rowing behind combine.	Add divider offered by CASE IH. Part # 1319485C1 Steel V Part # 1321019C1 Belting
Straw wind-rowing to the right side of combine.	CIH combines w/chopper: chopper is the culprit, not the spreader.	Move CIH Internal Divider 2" to the right.
Chaff spreader disc spins backwards. (Counter-clockwise)	Check hydraulic hose attachments between flow control valve and hydraulic motor.	Re-route hydraulic hoses if incorrect connections were made. (Hose from control flow port has to go to the left side of motor).
	Check hydraulic hose attachments between hydraulic reel and flow control valve.	Re-route hydraulic hoses if incorrect connections were made.
Chaff spreader spin disc wobbles.	Disc off center of hub.	Loosen hub bolts and hydraulic motor bolt, re-center disc and tighten bolts.

<b>PROBLEM</b>	<b>PROBABLE CAUSES</b>	<b>REMEDY</b>
Chaff spreader spin disc wobbles. (Continued)	Half moon key between hydraulic motor shaft & hub missing or sheared, hub loose, hub set screw loose.	Inspect hydraulic motor shaft and hub, replace if necessary. Re-assemble with new half moon key, bolt thru disc in end of hydraulic motor shaft, and tighten set screw on hub.
Hydraulic reel runs ok, but chaff disc may turn slow and plugs easily.	Drive belt on reel hydraulic pump is slipping.	Tighten belt.
	Reel hydraulic pump is weak and not putting out rated gallons per minute.	Rebuild or replace pump.
	Half moon key either sheared or missing between Half moon key either sheared or missing between hydraulic motor shaft and disc hub.	Replace key. (Tighten set screw of hub)
	Oil leak or hole in hydraulic hose between header and chaff spreader.	Repair or replace.
	Flow control valve bypass is weak or stuck open (will generally make a squeal or chatter noise).	Replace flow control valve.
Both hydraulic reel and chaff spreader slow down and may even stop.		Adjust or replace belt.
	Check hose connections between header and flow control valve for correct attachments.	Re-route if incorrect.
	Chaff spreader disc may be plugged or have an obstruction preventing it from turning.	Unplug or remove obstruction.
	Hydraulic motor may be seized.	Replace hydraulic motor.
	Belt, pulley, or pump failure.	Refer to CIH Service Bulletin Document No. NHESB 10890.
	Reel hydraulic pump may be weak and not putting out rated gallons per minute.	Repair or replace reel hydraulic pump.
Chaff spreader plugs.	Header is shut off too quickly when coming to the end of the field (this also turns off chaff spreader) while combine continues to operate. This will pile trash on spreader and prevent it from turning when header is started again.	Run header longer when coming to the end of the field, or shut head off only when machine is shut off.

<b>PROBLEM</b>	<b>PROBABLE CAUSES</b>	<b>REMEDY</b>
Chaff spreader plugs. (Continued)	Adjustable slide of the spreader rear shield is not close enough (within 1/4" at tip) to disc and material is jamming between disc and rear shield.	Bend rear shield if necessary to get leading edge of adjustable slide within 1/8" of disc.
	JD Combines without straw choppers: Straw spreaders may be throwing straw at front shield causing a jam between disc and front shield.	Adjust disc closer to or further away from front shield. Under worst field conditions it may be necessary to rig a shield to prevent straw spreader from throwing straw at the front shield.
		Add chopper.
		Install optional Vittetoe Chaff Spreader Monitor.
Hydraulic motor leaks oil.	Check fittings for tightness and cracked fittings.	Tighten or replace fittings.
	Check for leak around hydraulic motor shaft.	Install seal kit or replace hydraulic motor.
	Check for cracked motor mounting plate.	Replace motor mounting plate.
Spreader doesn't run while machine is operating, but parked.	Reel speed adjustment in cab is turned off.	Turn on reel speed.
	Ground to reel speed control.	Adjust control or set on manual.
Header doesn't lift, power steering doesn't work.	Not a chaff spreader related problem, this is a separate hydraulic system.	Refer to combine operators manual trouble shooting section.
Chaff spreader needs to be removed.	For baling or any other reason.	Remove hoses with swivels at motor, and connect together with nipple (mark left and right hoses for reassembly). NOTE: Motor mount tube set screws can be loosened and unit can be slid out leaving axle mounted to axle.
Chaff spreader speed varies and, or plugs. (Especially CIH-1992: 1640, 1660, 1680)	Hydraulic hook-up not done per written installation instructions.	See Dealer to get chaff spreader hydraulics properly hooked up.

# **Trouble Shooting Guide For Double Chaff Spreaders**

<b>PROBLEM</b>	<b>PROBABLE CAUSES</b>	<b>REMEDY</b>
Material is not thrown evenly to both sides.	Check hose connections-left disc should spin clockwise, right disc should spin counter-clockwise.	Correct hose connections if necessary.
	Front shield wings are incorrectly adjusted or not set alike.	Adjust front shield wings.
Left disc turns, right disc doesn't.	Hydraulic leak between the two motors.	Check connections and hose, replace if necessary.
	Hub or right disc has sheared or missing shear key and set screw is not tightened.	Replace shear key and tighten set screw.
Right disc turns, left disc doesn't.	Hub on left disc has sheared or missing shear key and set screw is loose.	Replace shear key and tighten set screw.
IH 1660 & 1680 with straw choppers-chaff is spread evenly but straw is laid in windrow behind combine.	If your combine was manufactured between Nov. 1989 & Nov. 1990, it is missing an internal straw divider.	Add Divider IH Part # 1319485C1 Steel V 1321019C1 Belting
Material hits tires.	Front shield wings are adjusted too wide open.	Close wings so chaff can't hit the tire.
Buildup on rear shield plugging.	Beater/chopper tray is set for corn, not up for beans.	Set tray up so it throws straw to the straw spreader.

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**NOTE: CHAFF SPREADER WARRANTY IS VOID IF HYDRAULIC HOOK-UPS ARE NOT MADE AS RECOMMENDED IN WRITTEN VITTETOE INSTALLATION INSTRUCTIONS.**

**Helpful Hint:** 1992 CIH Recommended hydraulic hook-up, should have an electrically operated solenoid valve to turn spreader on and off with combine threshing unit, or

**Alternate Hook-up:** Use oil from hydraulic reel motor to drive chaff spreader hydraulic motor. If header is shut off too quickly when coming to the end of the field (this also turns off chaff spreader) while combine continues to operate. This will pile trash on spreader and prevent it from turning when header is started again.



# **OPERATOR SAFETY PRECAUTIONS**

## **READ BEFORE OPERATING COMBINE EQUIPPED WITH VITTETOE CHAFF SPREADER**

1. Never approach the chaff spreader with the combine engaged or chaff spreader running. Anything that can conceivably come off the chaffer of the combine (grain, cobs, broken metal piece of combine) will be propelled with great speed and force when it drops on the chaff spreader. The heavier the object, the farther it will fly, and the greater the danger.
2. Never attempt to make any adjustments or repairs to the chaff spreader unless the combine motor is shut off.
3. Inspect chaff spreader daily, before operation, for loose or broken bolts, bent or broken shields, shields which need adjustment, and any hydraulic leaks. NOTE: The four blades on the disc were meant to be installed with self-locking nuts. If any of the blade bolts should work loose, all the blade nuts should be checked to insure that they are of the self-locking variety
4. After making any adjustments, the chaff spreader disc should be turned at least one full revolution by hand to insure that no interference exist.
5. On the SWING-AWAY models, make sure units are fully latched before operating.
6. Be sure of proper hydraulic hookup that will disengage the chaff spreader when the separator or header is shut off.

The VITTETOE single and double disc chaff spreaders are intended for the spreading of the fine chaff and other crop residue which exits the combine over the chaffer and sieve, and is designed to be mounted on the rear axle or other framework of the combine.

### **DANGER DECALS**

A “DANGER WHIRLING BLADES” decal with “pinch point” pictorial should be on the rear shield of your chaff spreader. If it is damaged, unreadable, or missing, it should be replaced with a new one.

A smaller “DANGER WHIRLING BLADES” decal without a pictorial should be on each side of the axle mount. If it is damaged, unreadable, or missing, it should be replaced with a new one.

## **WARRANTY INFORMATION**

The hydraulic motors and valves on the Vittetoe Combine Chaff Spreader carry a one-year warranty. This warranty is one year from the original date of purchase.

If a motor or valve is found to be defective, please contact the dealer you purchased the unit from. The dealer should have a new part on hand to get your unit back into operation.

We will replace a defective part at no charge, but the customer must remove the defective part and return it to the dealer within 30 days of the shipment date of the replacement. We DO NOT pay for repairing defective parts or labor for replacement.

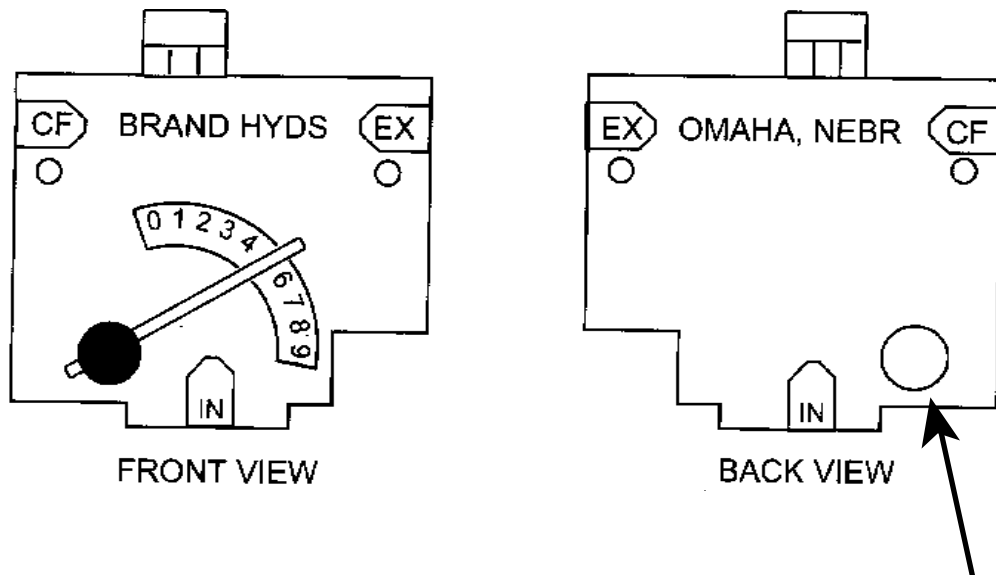
Any connections other than those authorized by Vittetoe, Inc. will void all warranties.

All other parts on the Vittetoe Chaff Spreader are inspected prior to shipment and are warranted against poor workmanship and material defect. If you have a defective part, we will send out a new one. However, the defective part must be returned to Vittetoe, Inc. for inspection. If we determine the returned part to be defective, there will be no charge for the replacement part.

Vittetoe, Inc. makes no guarantees nor will Vittetoe, Inc. be held liable for any real or imagined loss or liability which occurs as a result of using its products.

**All warranties handled through dealers only.**

## **FLOW CONTROL VALVE MOUNTING**



Note: When mounting valve to mounting plate, be certain that back end of spool is not touching the mounting plate. The mounting plate is designed to let the spool hang over the edge of the plate. If the valve is bolted on without the spool hanging over the edge of the plate, the valve will be damaged.



**I've been kicking this chaff spreader  
around my shop for 2 days.**

**Silly Me, I should have read the instructions!**