

# **VITTETOE CHAFF SPREADER**

New Holland / Gleaner

Massey Ferguson / White

Installation Instructions  
Operator's Manual  
and  
Trouble Shooting Guide  
(Please keep with combine)

Vittetoe, Inc. Keota, Iowa

0701-

# **ATTENTION!**

The instructions in this book are to be used only if your combine has a hydraulically-driven reel.\*

Some combines are not equipped with hydraulically-driven reels. In these cases, Vittetoe Inc. does not have a system designed to power your chaff spreader. In most cases, these machines do not have sufficient hydraulic capacity to operate a chaff spreader.

Some combines without hydraulically-driven reels may have the hydraulic capacity to operate a chaff spreader, but there is no way to safely hook into the system.

If you don't have a hydraulically-driven reel, you will be on your own in finding a way to power a chaff spreader. Since we will have no control over oil flows or pressures, there will be NO WARRANTY on hydraulic motors or valves used on any hydraulic hookup other than the ones described in this instruction booklet.

Please contact your dealer  
if you have any questions.

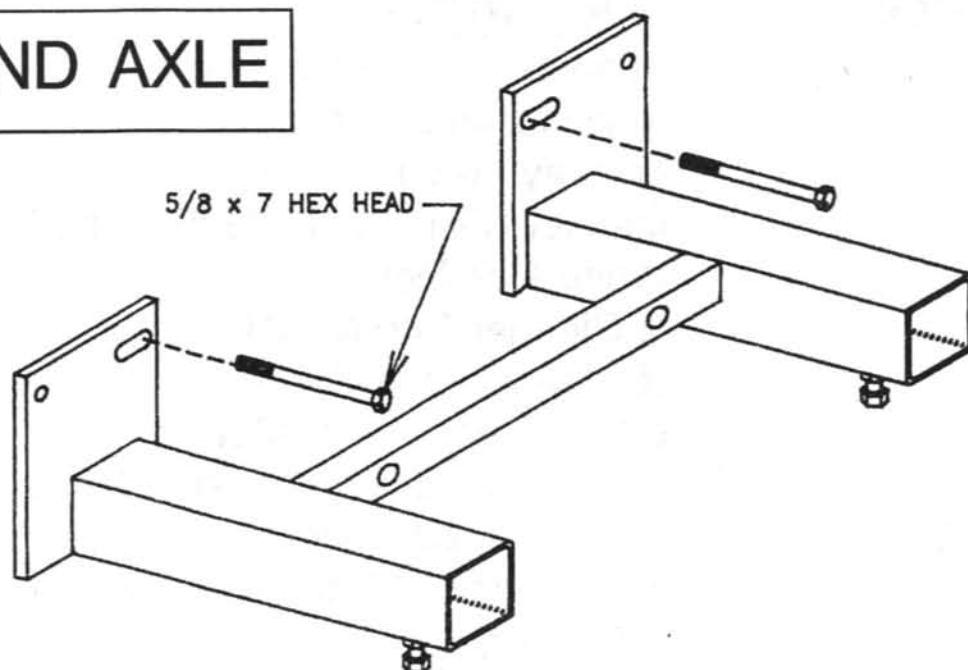
\*N-R Gleaners can be hooked up not using reel return if using our electric valve.

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# STEP 1

## NEW HOLLAND AXLE

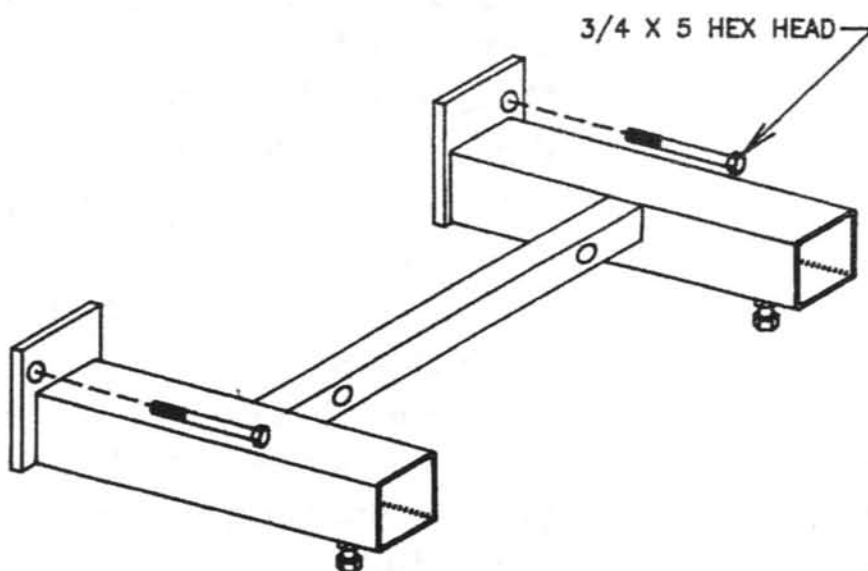
Part # C - 0023



Bolt axle mount to axle with plates welded on the end of the tubes pointing up. For the Gilcrest axle, it will be necessary to drill holes in the axle.

## MASSEY 750, 760, 850, 860 AXLE

Part # C - 0028

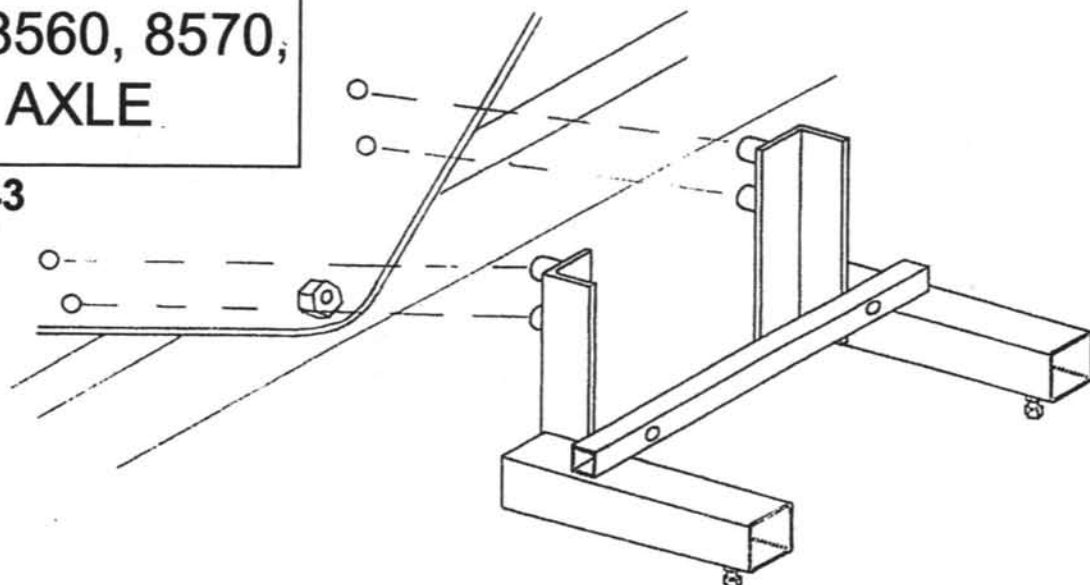


Bolt axle mount to axle with plates welded on the end of the tubes pointing up. For the Gilcrest axle, it will be necessary to drill holes in the axle.



## MASSEY 8560, 8570, 8590 AXLE

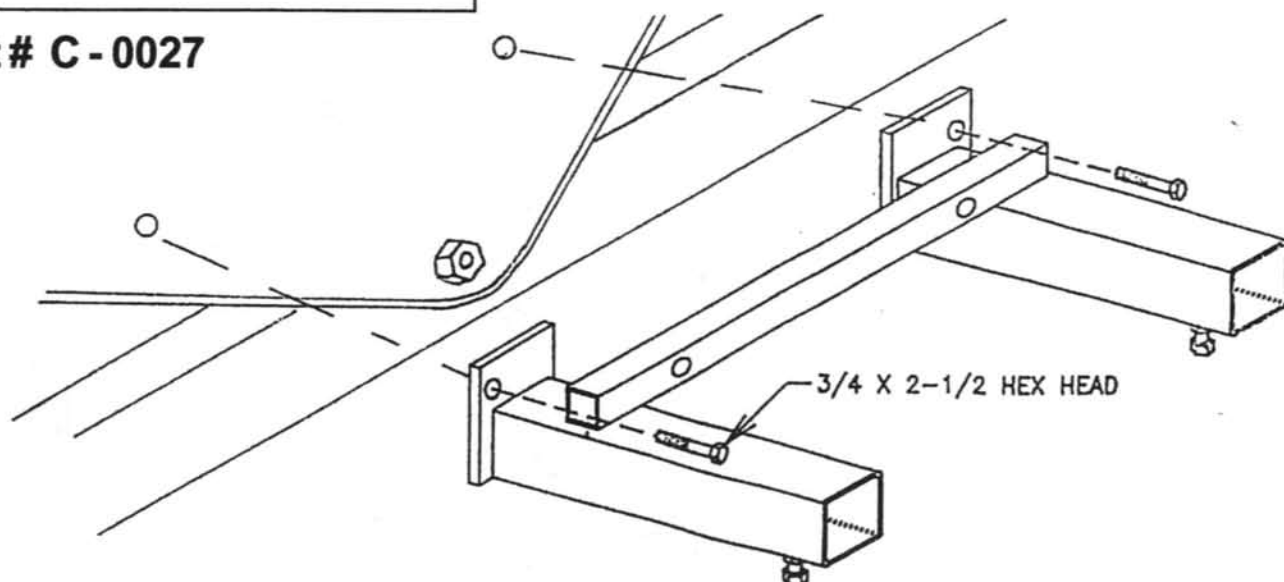
Part # C - 0243



Hold the axle mount up to the back axle pivot plate above the rear axle. Block up under the axle mount so that the bottom of the axle mount is approximately the same height as the bottom of the axle. Center the axle mount from side to side and make sure it is level with the combine (not the axle). Drill four holes to match the mounting holes (holes must accept 5/8" diameter bolts). Bolt the axle mount in place using four 5/8 " x 4" bolts, 8 flat washers, 4 lock washers, and 4 hex nuts.

## WHITE AXLE

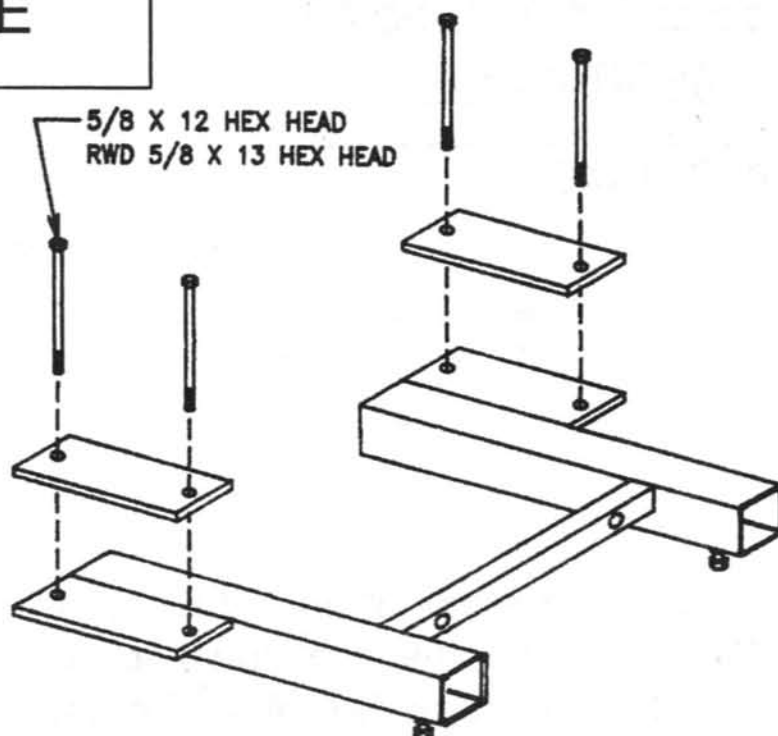
Part # C - 0027



Center axle mount at rear of combine frame behind and above the axle with plates on end of tubes pointing up. Mark holes and drill two 3/4" holes. Bolt on axle mount through these. 5

## N GLEANER AXLE

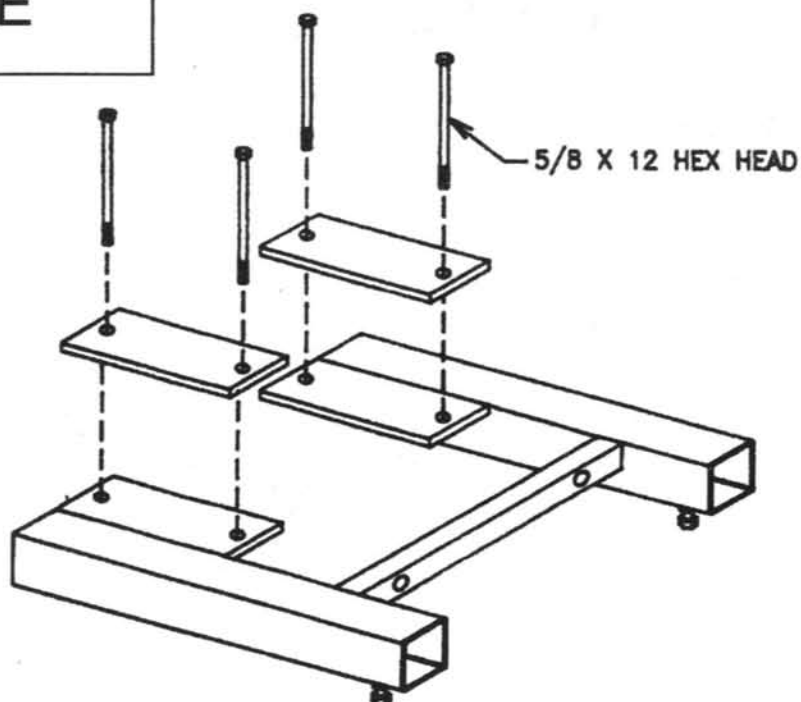
Part # C - 0018



The axle mount will fit up to bottom of the axle with bolts in front of and behind the axle. Insert the bolts down through the plates on top of the axle.

## R GLEANER AXLE

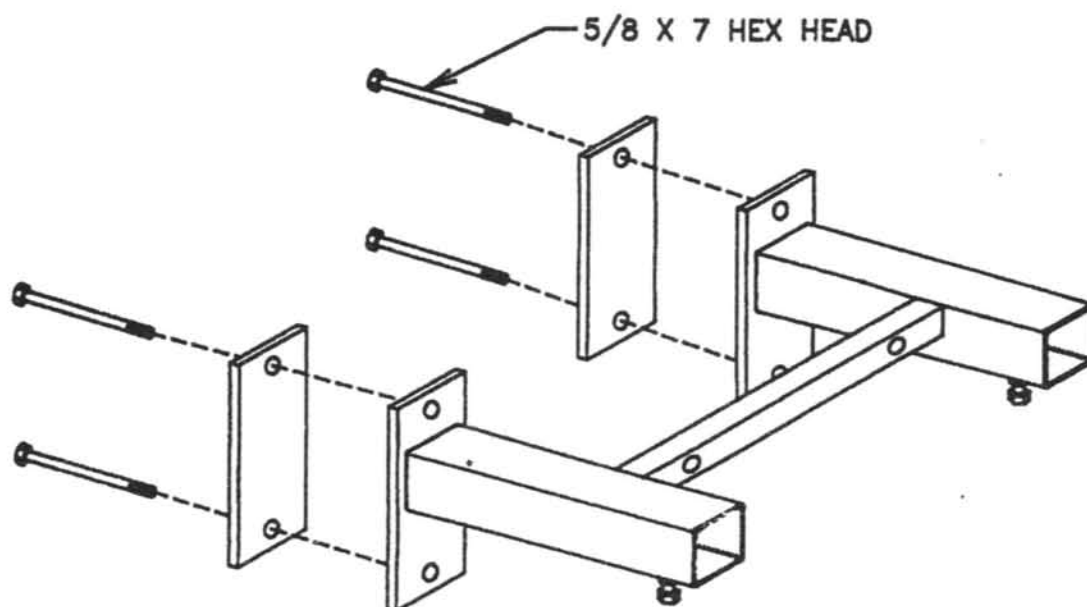
Part # C - 0020 R



The axle mount will fit up to the bottom of the axle with bolts in front of and behind the axle. Insert the bolts down through the plates on top of the axle.

# L - M - F GLEANER

Part # C - 0021



Bolt axle mount to rear of axle with bolts on top of and below the axle going through the two plates placed on the front side of the axle.

# VITTETOE SINGLE CHAFF SPREADER

(See specific unit page

- 1 Axle Mount  
for part number)  
3 Motor Mount Bracket

Solid - C - 0049  
Swing Away - C - 0306

- 4 Rear Shield  
5 Deflector for Rear Shield  
6 Front Shield

C - 0060

C - 0050

C - 0093

H - 0007 or H - 0009

- 7 Hydraulic Motor  
8 Hub for Hydraulic Motor

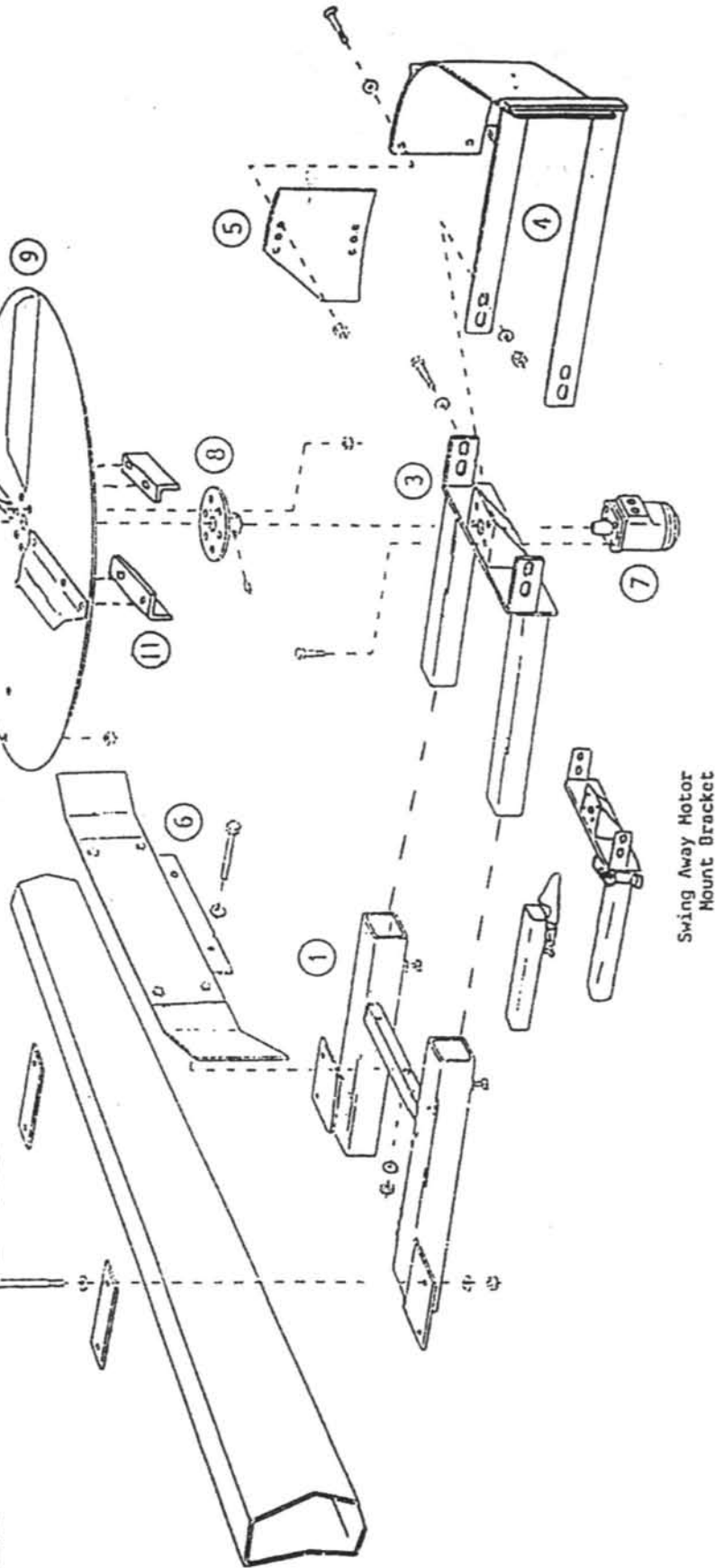
C - 0003

C - 0042

C - 0043

C - 0137

- 9 Spreader Disc  
10 Spreader Blades  
11 Trash Wipers

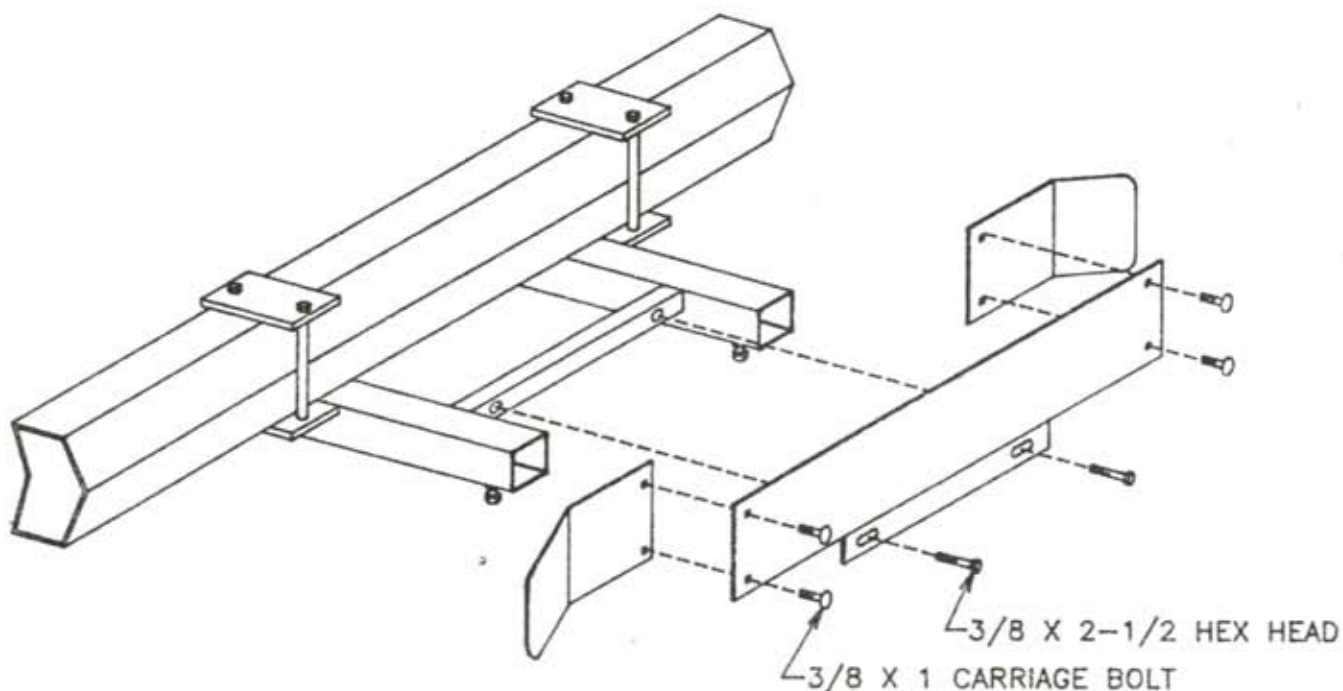


Swing Away Motor  
Mount Bracket



# STEP 2

SINGLE

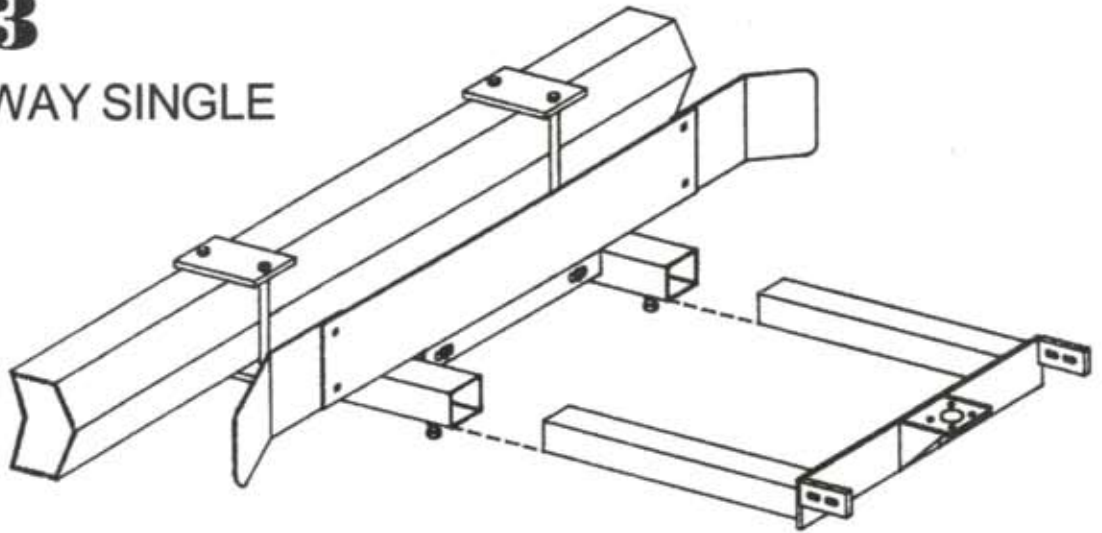


Bolt front shield on rear of cross tube of axle mount using two 3/8" x 2" bolts. Bolt front shield extension to each side of front shield using 2 3/8" x 1" carriage bolts on each side.

**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 rebolt them.

## STEP 3

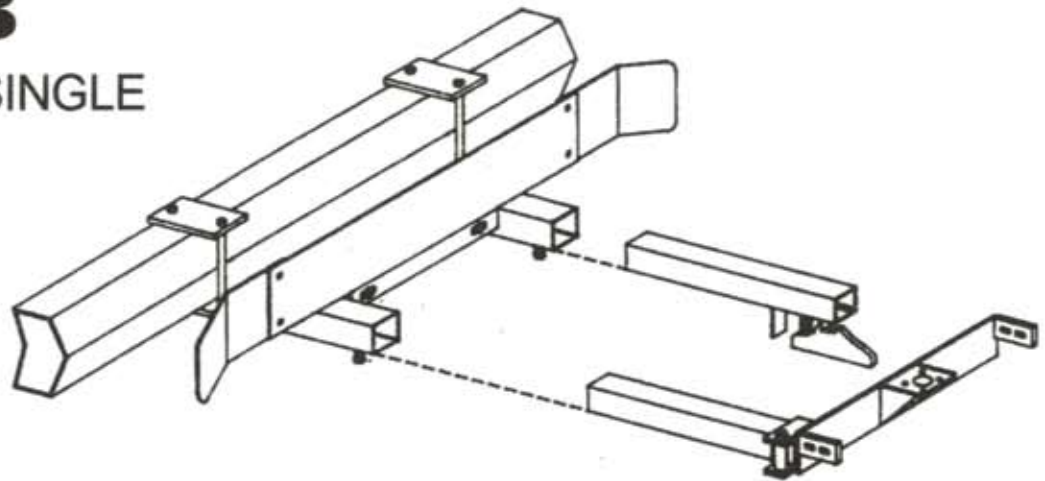
### NON SWING AWAY SINGLE



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" from the rear of the front shield. Tighten and lock the setscrews on the bottom of each side of the axle mount.

## STEP 3

### SWING AWAY SINGLE



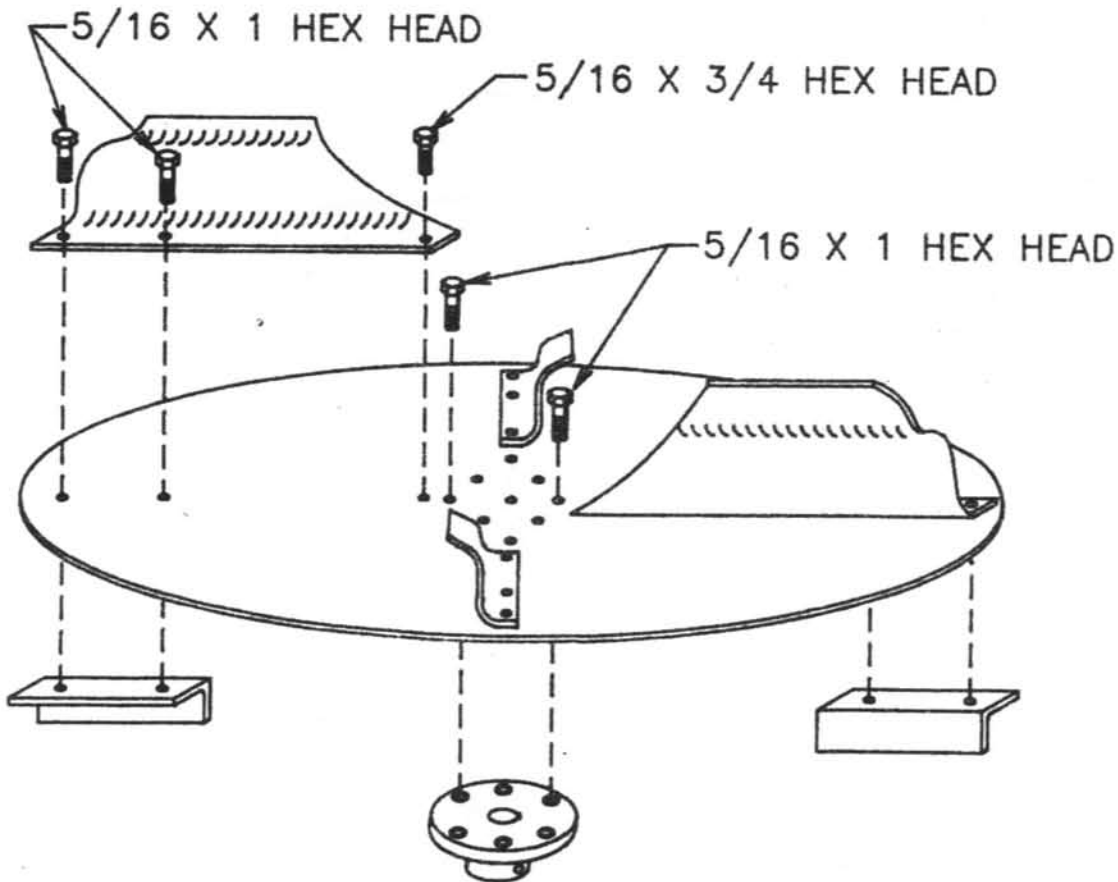
Slide the motor mount arm, with the spring loaded latch, approximately 9-10 inches into the right axle mount tube (latch mechanism down), and tighten and lock the set screw on the bottom of the right axle mount tube. Next, slide the remaining motor mount tube (with the hinged connection) into the left axle mount tube. Engage the latch and adjust so that the motor mount is square with the axle mount. Snug tighten and lock the left axle mount set screw. Unlatch motor mount and swing it clear open. Now, tighten and lock the left axle mount set screw. NOTE: 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 unit is fully assembled.

# STEP 4

## SINGLE

### STEP 4A

Bolt the four spreader blades to the spreader disc, using three 5/16" x 3/4" and two 5/16" x 1" bolts and **lock nuts** with trashwipers on the bottom side of the disc on the other two opposing blades.



**\*\*Locknuts must be used with hub and discs.\*\***

**\*\*Lock nuts must be used with hub and discs.\*\***

### STEP 4B

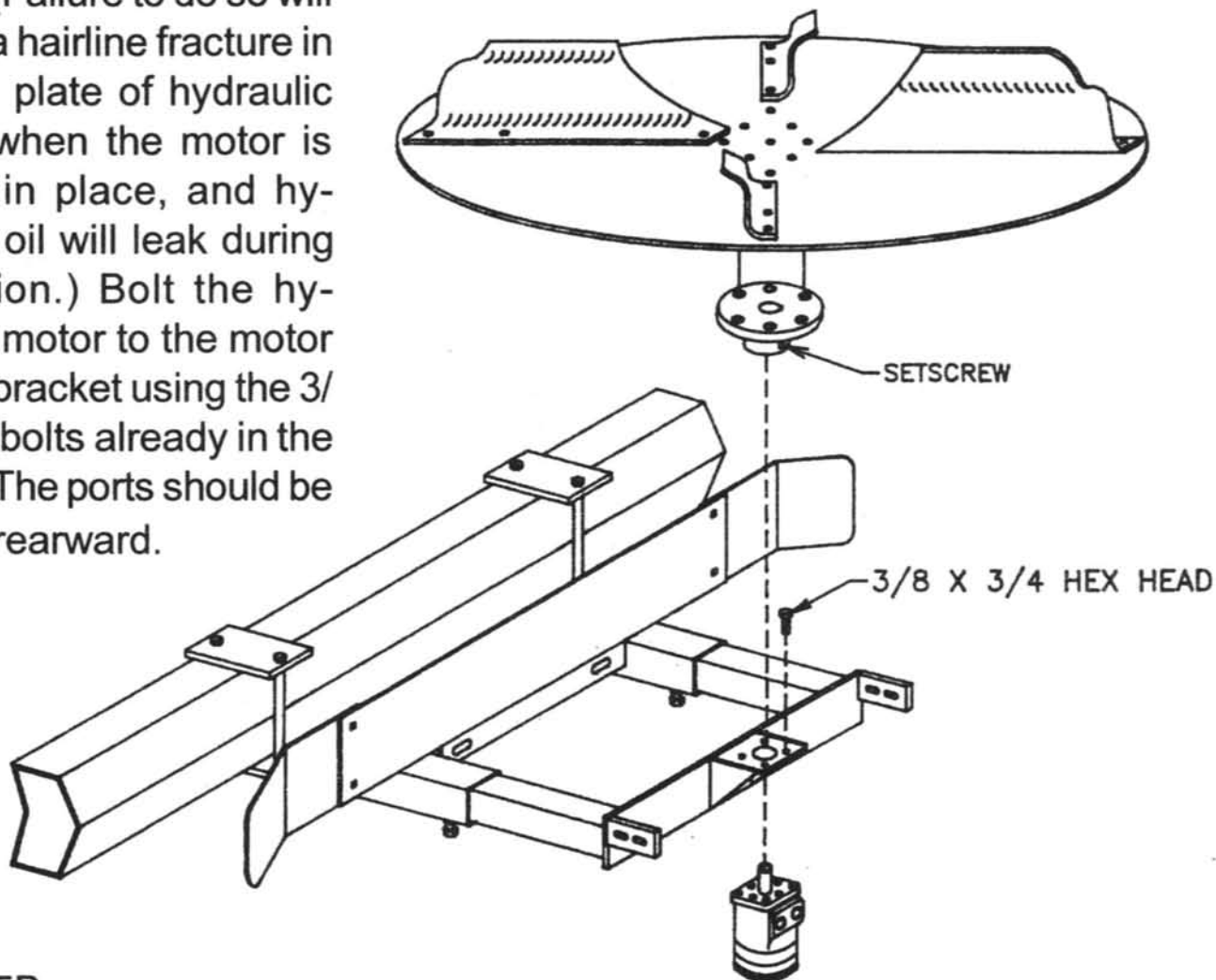
Bolt the hub for the hydraulic motor to the spreader disc (on opposite side of the spreader blades) using six 5/16" x 1" bolts and **lock nuts**. Center the hub during assembly by looking through the hub and centering the center hole of the disc.

# STEP 5

## SINGLE

### STEP 5A

**CAUTION:** Feel the bottom side of the motor mount plate with your fingers to check for 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" x 3/4" bolts already in the motor. The ports should be facing rearward.

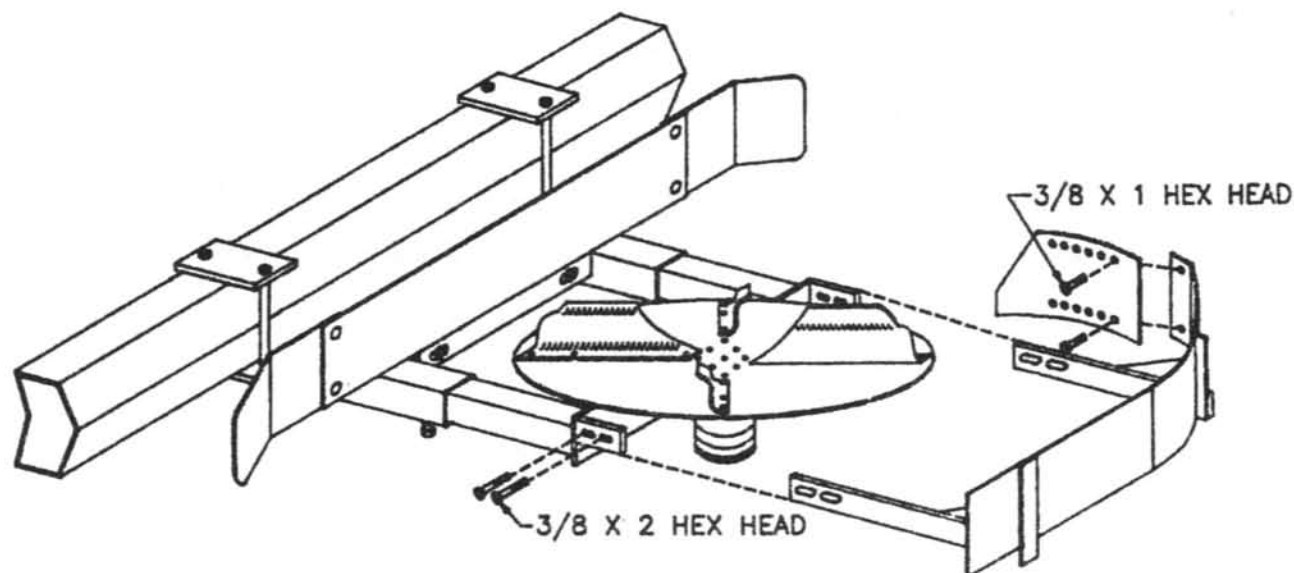


### STEP 5B

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" x 3/4" bolt with lock washer and flat washer. Tighten the setscrew in the hub keyway. **NOTE:** Failure to assemble with 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" x 1" 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" x 2" bolts.

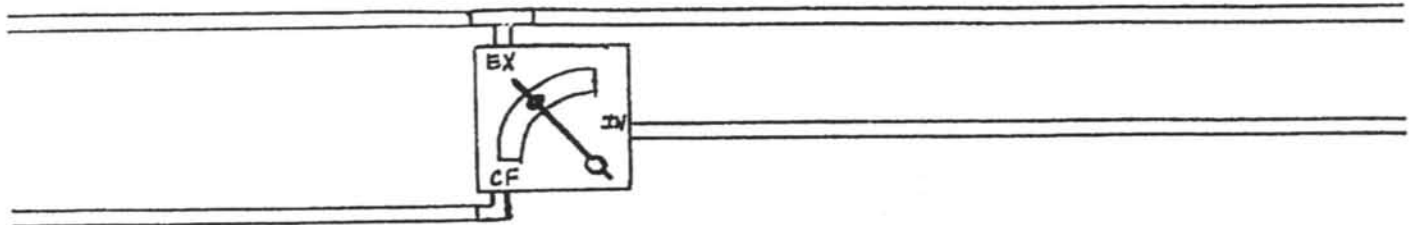
NOTE: The rear shield is made so that the deflector will be touching the disc. Slide the rear shield as close as possible to the disc. Adjust so that the gap between the disc and the rear shield increases as you follow from clockwise around the disc. Pull the deflector away from the disc so it is as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



## NEW HOLLAND TR 86 & TR 96

To Right Port of Motor

To Front Of Combine, Attach To The Hose On  
Combine That Male Quick Coupler Was Removed From



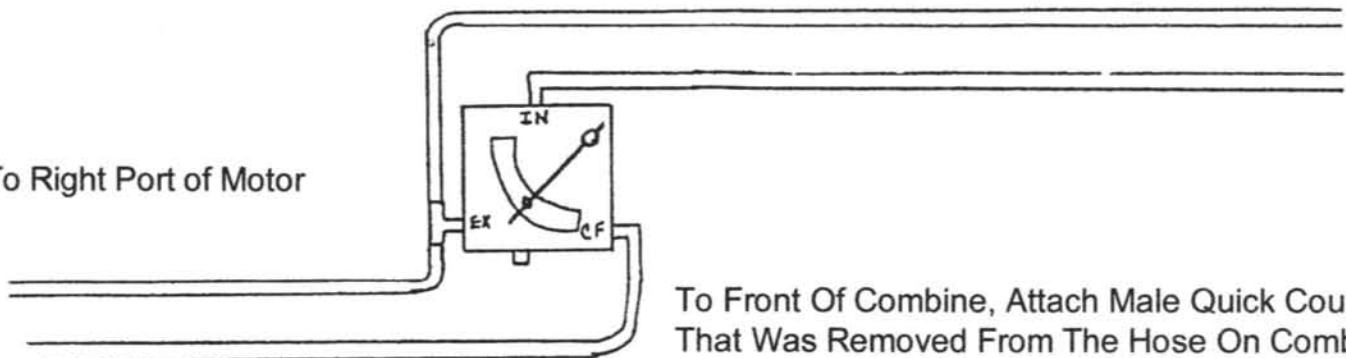
To Left Port of Motor

To Front Of Combine, Attach Male Quick Coupler  
That Was Removed From The Hose On Combine

## MASSEY FERGUSON 760 & 860

To Front Of Combine, Attach To The Hose On  
Combine That Male Quick Coupler Was Removed From

To Right Port of Motor



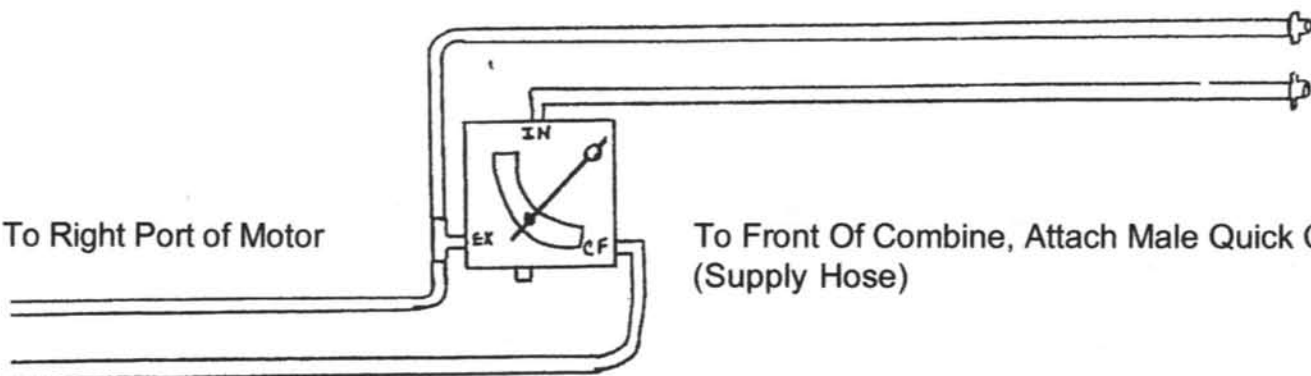
To Front Of Combine, Attach Male Quick Coupler  
That Was Removed From The Hose On Combine

To Left Port of Motor

## MASSEY FERGUSON 8570

To Front Of Combine, Attach Male Quick Coupler  
(Return Hose)

To Right Port of Motor

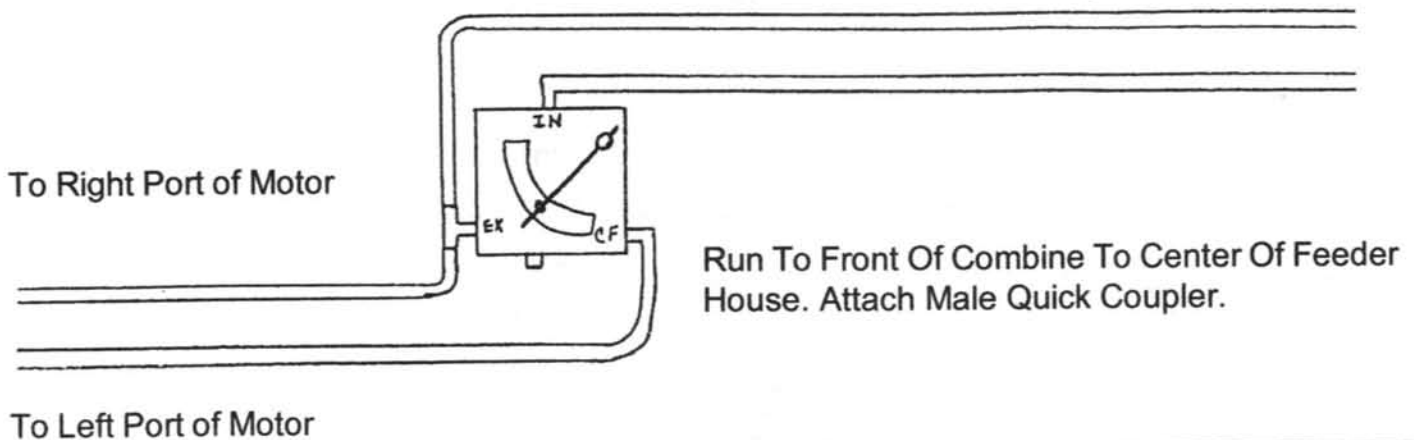


To Front Of Combine, Attach Male Quick Coupler  
(Supply Hose)

To Left Port of Motor

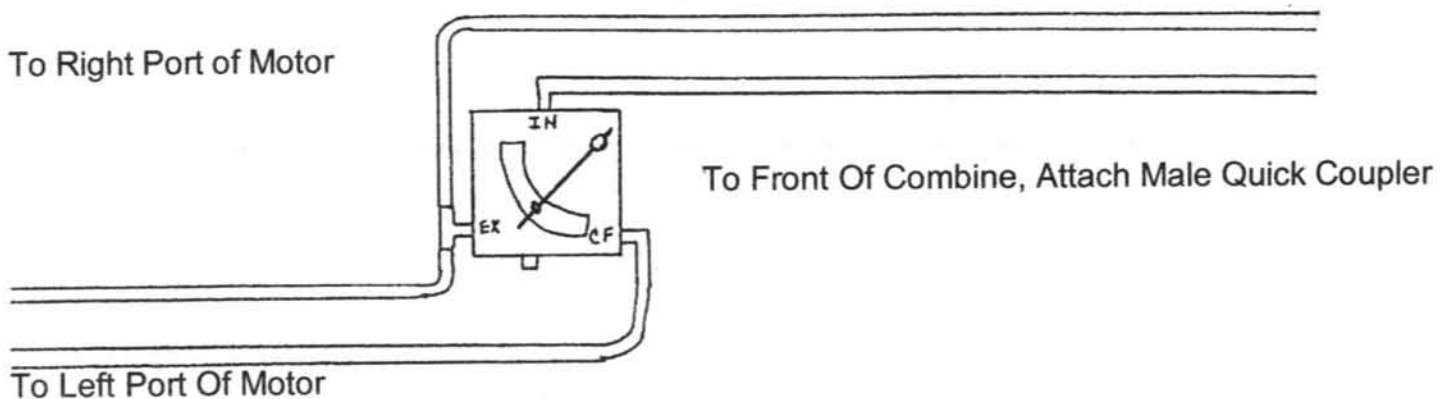
## MASSEY 8560 & 8590

Run To Front Of Combine To Center Of Feeder House.  
Attach Female Quick Coupler



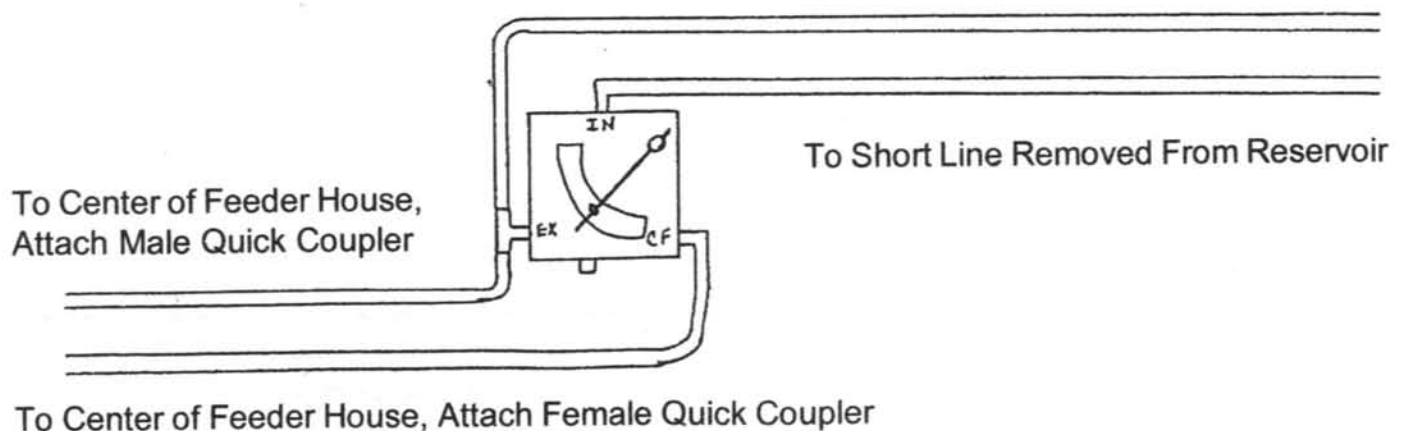
## WHITE WITH HYDRAULIC REEL

To Front Of Combine, Attach Female Quick Coupler



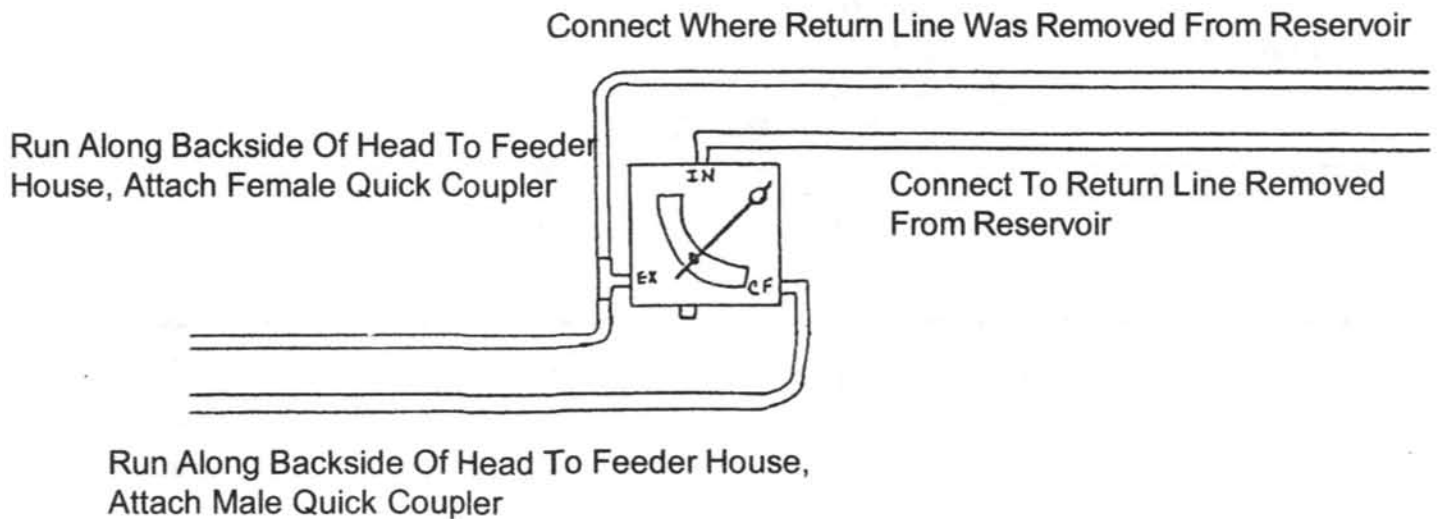
## L - M - F GLEANER WITH HYDRAULIC REEL

To Reservoir Where Short Line Was Removed



## N-R GLEANER USING REEL RETURN OIL

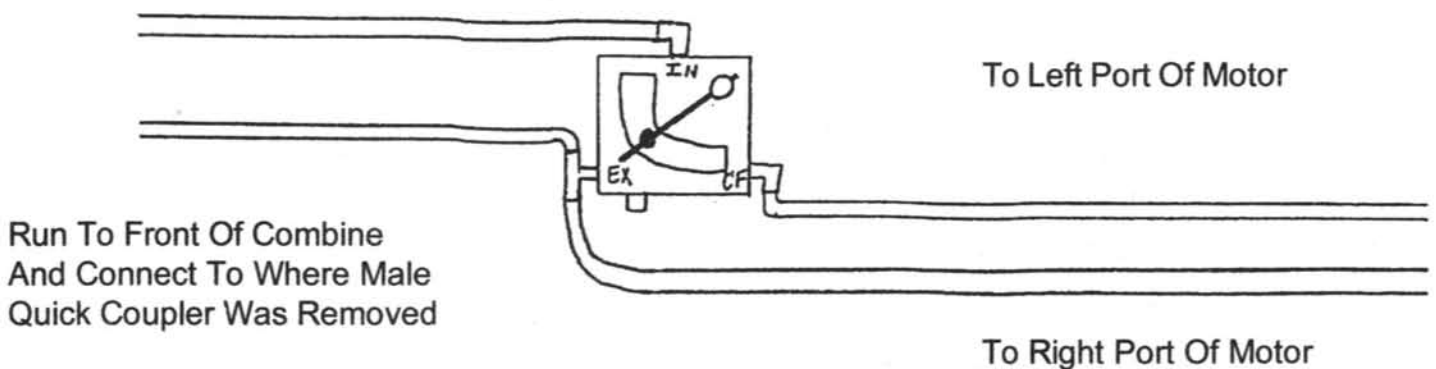
R 60 Below Serial #16101  
R70 Below Serial #12001



## R GLEANER

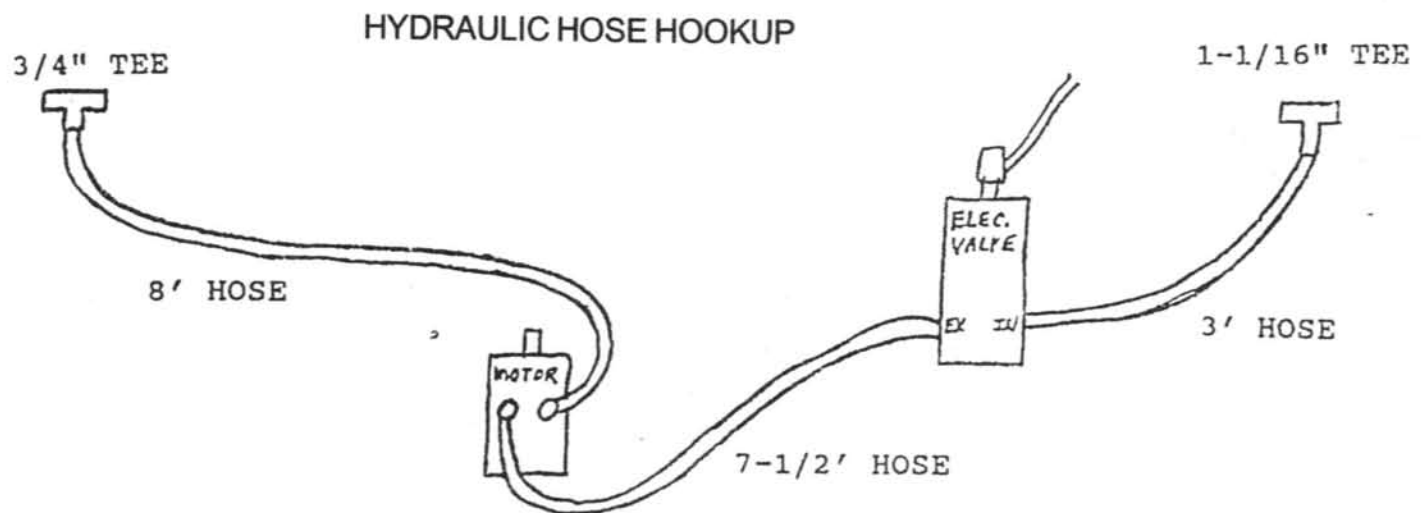
R 60 Serial #16101 And Above  
R70 Serial #12001 And Above

Run To Front Of Combine And Attach Male Quick Coupler Removed From Gleaner Valve



# N-R GLEANER, NOT USING RETURN OIL

USING ELECTRIC VALVE  
R 60 Below Serial #16101  
R70 Below Serial #12001



## **NEW HOLLAND TR86 & TR9G WITH HYDRAULIC REEL**

### **PAGE 14 SHOWS DIAGRAM OF HYDRAULIC HOOKUP**

NOTE: Determine whether you will be running the hoses up the right or left side of the combine by looking to see which side of your combine has the least obstructions such as belts, pulleys, etc.

Step A (Hoses on right): Open rear door on right side of combine and mount valve plate in existing holes where upper and lower pieces of sheet metal are bolted together. Bolt on with plate above the lip of sheet metal. The valve will be mounted with the IN port of the valve toward the front of the combine and the EX port toward the upper rear.

Step A (Hoses on left): Bolt valve mounting plate to frame of combine at left rear of combine. The valve will be mounted with the IN port of the valve toward the front of the combine and the EX port toward the lower rear of the combine.

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

Step C (Hoses on right): Bolt valve to valve plate with IN port on right side and tee on top left side of valve. Use two 1/4" x 2 1/2" bolts. **IMPORTANT - SEE DIAGRAM ON PAGE 31.**

Step C (Hoses on left): Bolt valve to valve plate with IN port on left side and the tee on bottom right side of valve. Use two 1/4" x 2 1/2" bolts. **IMPORTANT - SEE DIAGRAM ON PAGE 31.**

Step D: Screw 7/8"-14 JIC female swivel end of 8 1/2' hose onto the rear side of tee in exhaust port on valve. Screw 7/8" 90° 0-ring boss male swivel on the other end of this hose into the right port of spreader motor. (RIGHT AND LEFT DETERMINED BY STANDING BEHIND COMBINE LOOKING FORWARD)

Step E: Screw 7/8" 90° 0-ring male swivel end of other 8 1/2' hose into CF port of valve. Screw 7/8" 90° 0-ring male swivel on the other end of this hose into the left port of spreader motor.

Step F: Take the other 17' hose with 7/8" 0-ring male swivel end and 3/4" male 0-ring and screw the 7/8" 0-ring male swivel end into the IN port on valve. Run this hose along right or left side of combine to front. At front, remove the male quick coupler from hose on combine. Place this male quick coupler on the hose running to IN port on valve.

CAUTION: Be certain that this hose is connected 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 result. 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). If it does, your hydraulic connections are correct. If the disc turns counter clockwise, then the connections at the front need to be reversed.

Step G: Take the other 17' hose with 7/8"-14 JIC female swivel end and the silver adapter on the other end. Screw the 7/8"-14 JIC female swivel end onto the front side of the tee in the exhaust port of valve. Run this hose along the right or left side of combine to the front. Connect this hose to the hose you removed the male quick coupler from in the previous step, using the silver adapter.

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.



# **MASSEY FERGUSON 760 & 860 W/HYDRAULIC REEL**

## **PAGE 14 SHOWS DIAGRAM OF HYDRAULIC HOOKUP**

Step A: Mount valve plate on right side of combine, in front of grain tank, below hydraulic reel pump, on the pump bracket.

Step B: Screw third leg of the tee into the exhaust port on the flow control valve.

Step C: Mount valve to valve plate with tee on lower left side of valve and IN port on top.  
**IMPORTANT - See Diagram on Page 31**

Step D: Screw the 7/8" 90° O-ring male swivel end of the 17' hose, with the 7/8" 90° O-ring male swivel on the other end, into the CF port on the valve. Screw the 7/8" 90° O-ring male swivel on the other end of this hose into the left port of spreader motor.

Step E: Screw the 7/8"-14 JIC female swivel end of the other 17' hose, with the 7/8" 90° O-ring male swivel on the other end, onto the lower end of the tee in the exhaust port of valve. Screw the 7/8" 90° O-ring male swivel on the other end of this hose into the right port of spreader motor.

Step F: Screw the 7/8" 90° O-ring male swivel end of 15' hose into the IN port of flow control valve. Remove the male pioneer fitting from hose that connects to the head on combine. Put the male pioneer fitting on the 15" hose running to the IN port of valve, and this hose now hooks to the head.

Step G: Screw the 7/8"-14 JIC female swivel end of the 13' hose, with the 1/2" male swivel on the other end, (with silver adapter) onto the top of the tee in the exhaust port of valve. Connect the 1/2" male swivel on the other end of this hose, to the hose you took the male pioneer coupler off, using the 1/2" pipe to 3/4" O-ring adapter (silver adapter).

**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. IF it is, all hydraulic connections are correct.

Step H: Secure hoses safely out of the way using the black plastic cable ties provided.

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

**NOTE:** The pan which is on the combine will not get all of the chaff back to our spreader. We do not offer pan extensions or wings, and **DO NOT RECOMMEND THAT YOU ATTEMPT TO ADD THEM**, since all past attempts have resulted in damage to the sieve mounts.

# **MASSEY 8560, 8590**

## **PAGE 15 SHOWS DIAGRAM OF HYDRAULIC HOOKUP**

Step A: Bolt valve plate at right rear of combine where rear sieve arm fastens to frame.

Step B: Screw third leg of the tee into EX port of flow control valve.

Step C: Bolt valve onto valve plate using two 1/4" x 2 1/2" bolts.

**IMPORTANT - SEE DIAGRAM ON PAGE 31.**

Step D: Screw 7/8" - 14 JIC female swivel end of one 8 1/2' hose onto the bottom side of tee in valve. Screw the 7/8" 90° O-ring male swivel on the other end of this hose into the right port of the spreader motor.

Step E: Screw 7/8" 90° O-ring male swivel end of other 8 1/2' hose onto the CF port of valve. Screw the 7/8" 90° O-ring male swivel on the other end of this hose into the left port of the spreader motor.

Step F: Screw 7/8"-14 JIC female swivel end of one 20' hose onto the topside of the tee in flow control valve. Screw female quick coupler onto the other end of this hose.

Step G: Screw 7/8" 90° O-ring male swivel end of the other 20' hose onto the IN port of valve. Screw male quick coupler onto the other end of this hose.

Step H: Run hoses in previous two steps along right side of combine to the top front of the feeder house.

Step I: Screw a female quick coupler onto the 17' hose you have left that has a 7/8"-14 JIC female swivel on the other end. Screw a male quick coupler onto the 17' hose that has a 7/8"-14 JIC male on the other end.

Step J: Remove the return line from the reel pump reservoir. Connect the 17' hose with the 7/8"-14 JIC female swivel to this return line.

Step K: Connect the 7/8"-14 JIC male end of other 17' hose to the place you removed the return line from.

Step L: Run the two hoses just connected up toward the center of the head. These hoses connect to the hoses running to our valve.

**CAUTION:** Be certain that this hose is connected to the return line from the hydraulic reel motor seals. 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. Then with the engine at idling and the head engaged, check to see that the disc is turning clockwise (looking down from above it). If it does, your hydraulic connections are correct.

Step M: Secure the hoses safely out of the way using the black plastic cable ties provided.

SET FLOW CONTROL VALVE ON "3" FOR SOYBEANS. ADJUST UP AS NECESSARY TO THROW CHAFF ONLY AS WIDE AS HEAD. SETTING FOR CORN WILL BE LOWER THAN THAT REQUIRED FOR BEANS.

# **MASSEY 8570**

## **PAGE 14 SHOWS DIAGRAM OF HYDRAULIC HOOKUP**

Step A: Bolt valve plate at right rear of combine where rear sieve arm fastens to frame.

Step B: Screw third leg of the tee into EX port of flow control valve.

Step C: Bolt valve onto valve plate using two 1/4" x 2 1/2" bolts.

**IMPORTANT - SEE DIAGRAM ON PAGE 31.**

Step D: Screw the 7/8"-14 JIC female swivel end of one 8 1/2' hose onto the bottom side of the tee in our valve. Screw the 7/8" 90° 0-ring male swivel on the other end of this hose into the right port of the spreader motor.

Step E: Screw the 7/8" 90° 0-ring male swivel end of the other 8 1/2' hose into the CF port of our valve. Screw the 7/8" 90° 0-ring male swivel on the other end of the hose into the left port of the spreader motor.

Step F: Screw 7/8"-14 JIC female swivel end of one 20' hose onto the top side of the tee in the flow control valve. Screw a male quick coupler onto the other end of this hose. NOTE: This is the return hose.

Step G: Screw 7/8" 90° 0-ring male swivel end of the other 20' hose into the IN port of the valve. Screw a male quick coupler onto the other end of this 20' hose. NOTE: This is the spreader supply hose.

**CAUTION:** Be certain that this hose is connected to the return line from the hydraulic reel motor seals. 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. Then with the engine at idling and the head engaged, check to see that the disc is turning clockwise (looking down from above it). If it does, your hydraulic connections are correct.

Step H: Connect the 2 female quick couplers together with the close nipple supplied. NOTE: These will be used for connections when the grain platform is used, and will not be needed when running the corn head.

Step I: Run the two 20' hoses along the right side of the machine to the front.

Step J: Secure hoses safely out of the way using the black plastic cable ties provided.

**FOR BEANS:** Connect the supply line for the hydraulic reel motor, to the supply quick connect mounted on the combine. Connect the reel return line to the spreader supply line with the two coupled female quick connects. The spreader return line will couple with the return quick coupler mounted on the combine.

**FOR CORN:** Connect the spreader supply line to the supply quick connect mounted on the combine. Connect the spreader return line to the return quick connect mounted on the combine.

**SET FLOW CONTROL VALVE ON "3" FOR SOYBEANS. ADJUST UP AS NECESSARY TO THROW CHAFF ONLY AS WIDE AS HEAD. SETTING FOR CORN WILL BE LOWER THAN SETTING REQUIRED FOR BEANS.**

Step K: On combine electrical connection plug by the hydraulic quick couplers, use the electrical quick connector to connect the yellow wire with red stripe and yellow wire with pink stripe. This will complete the reel enable loop allowing the spreader to work in corn. (See Drawing)

# **WHITE WITH HYDRAULIC REEL**

## **PAGE 15 SHOWS DIAGRAM OF HYDRAULIC HOOKUP**

Step A: Bolt valve plate at right rear of combine where rear sieve arm fastens to frame.

Step B: Screw third leg of the tee into EX port of flow control valve.

Step C: Bolt valve onto valve plate using two 1/4" x 2 1/2" bolts.  
**IMPORTANT - See Diagram on Page 31.**

Step D: Screw 7/8"-14 JIC female swivel of one 8 1/2' hose onto the bottom side of tee in valve. Screw the 7/8" 90° 0-ring male swivel on the other end of this hose into the right port of the spreader motor.

Step E: Screw 7/8" 90° 0-ring male swivel end of other 8 1/2' hose into the CF port of valve. Screw the 7/8" 90° 0-ring male swivel on the other end of this hose into the left port of the spreader motor

Step F: Screw 7/8"-14 JIC female swivel end of one 20' hose onto the topside of the tee in flow control valve. Screw female quick coupler onto the other end of this hose.

Step G: Screw 7/8" 90° 0-ring male swivel end of the other 20' hose into the IN port of valve. Screw male quick coupler onto the other end of this hose.

Step H: Run hoses in previous two steps along right side of combine to the top front of the feeder house.

Step I: Screw a female quick coupler onto the 17' hose you have left that has a 7/8"-14 JIC female swivel on the other end. Screw a male quick coupler onto the 17' hose that has a 7/8"-14 JIC male on the other end

Step J: Remove the return line from the reel pump reservoir. Connect the 17' hose with the 7/8"-14 JIC female swivel to this return line.

Step K: Connect the 7/8"-14 JIC male end of other 17' hose to the place you removed the return line from.

Step L: Run the two hoses just connected up toward the center of the head. These hoses connect to the hoses running to our valve.

**CAUTION:** Be certain that this hose is connected to the return line from the hydraulic reel motor seals. 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. Then with the engine at idling and the head engaged, check to see that the disc is turning clockwise (looking down from above it). If it does, your hydraulic connections are correct.

Step M: Secure the hoses safely out of the way using the black plastic cable ties provided.

**SET FLOW CONTROL VALVE ON "3" FOR SOYBEANS. ADJUST UP AS NECESSARY TO THROW CHAFF ONLY AS WIDE AS HEAD. SETTING FOR CORN will BE LOWER THAN THAT REQUIRED FOR BEANS.**

# **N-R GLEANER - USING REEL RETURN OIL**

R60 Below Serial #16101  
R70 Below Serial #12001

## **PAGE 16 SHOWS DIAGRAM OF HYDRAULIC HOOKUP**

Step A: Bolt valve plate on end of head by the pump using two bolts already present.

Step B: Screw third leg of the tee into the exhaust port of valve. Screw 7/8" - 1 4 JIC male to 7/8"-14 O-ring boss adapter into the IN port on valve.

Step C: Mount valve to valve plate using two 1/4" x 2 1/2" bolts.  
IMPORTANT - See Diagram on Page 31.

Step D: Remove the return line from reservoir and connect this line to adapter in the IN port of valve.

Step E: Screw the 7/8"-1 4 JIC female swivel end of the 3' hose onto the tee in exhaust port of valve. Connect the other end of this hose to the reservoir, where you removed the hose in step D.

Step F: Screw the 7/8" 90° O-ring male swivel end of one 13' hose into the CF port of valve. Screw a male quick coupler on the other end of this hose.

Step G: Screw the 7/8"-1 4 JIC female swivel end of the other 13' hose onto the tee in the exhaust port of valve. Screw a female quick coupler on the other end of this hose, and run the two hoses in the previous two steps along the back of the head to the center of the head.

Step H: Screw the 7/8" 90° O-ring male swivel end of one 28' hose into the left port of the spreader motor. Run this hose along the right side of the combine to the front of the feeder house. Screw a female quick coupler on the end of this hose.

Step I: Screw the 7/8" 90° O-ring male swivel end of the other 28' hose into the right port of spreader motor. Run this hose to the front of the combine with the other 28' hose. Screw a male quick coupler on the end of this hose. The hoses in the previous two Steps connect to the hoses that run to the flow control valve.

**CAUTION:** Be certain that this hose is connected to the return line from the hydraulic reel motor seals. 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. Then with the engine at idling and the head engaged, check to see that the disc is turning clockwise (looking down from above it). If it does, your hydraulic connections are correct.

SET FLOW CONTROL VALVE ON "3" FOR BEANS AND ADJUST UP AS NECESSARY TO THROW CHAFF ONLY AS WIDE AS THE HEAD. CHAFF SPREADER WILL NOT BE ABLE TO BE USED IN CORN SINCE THE PUMP WHICH DRIVES IT IS MOUNTED ON THE PLATFORM AND WILL NOT ON COMBINE WHEN HARVESTING CORN.



# **N-R GLEANER - NOT USING REEL RETURN OIL**

R60 Below Serial #16101

R70 Below Serial #12001

## **PAGE 17 SHOWS DIAGRAM OF HYDRAULIC HOOKUP**

Step A: Bolt valve plate on the left side of the combine to the rear of the arm that moves the sieve. Drill two 25/64" holes in the angle frame and bolt valve plate to it.

Step B: Screw the 1/2" male swivel end of 8-1/2' hose into the exhaust port of the shut-off valve. Screw the 7/8" 90° O-ring male swivel on the other end of this hose into the left port of the spreader motor.

Step C: Screw the 1/2" male swivel end of the 3' hose into the IN port of the valve.

Step D: Mount the valve on the valve plate using washers to block it away from the valve plate about 1/8".

Step E: Locate the return line hose that comes out of the back of the stack of valves on the combine. You may drain the reservoir into a clean container or pinch the hose with locking pliers to prevent oil from running out while connections are being made. Break this line at the first fitting out from where it connects to the stack of valves. Install the 3/4" JIC tee in this line.

Step F: Connect the 3/4" female JIC fitting on the 9' hose, with the 7/8" 90° O-ring male swivel on the other end, to the tee you just installed. Connect the 7/8" 90° O-ring male swivel on the other end of this hose to the right port of the spreader motor. (Left and right determined by standing behind combine looking forward)

Step G: Remove the power line at the pump and install the 1-1/1 6" JIC tee in this line.

Step H: Connect the loose end of the 3' hose to the tee you just installed.

Step I: Connect one wire from our valve to the only single solenoid valve on the stack of valves on the combine. Connect these wires with the scotch lock supplied in the kit. Connect the other wire to a bolt for a ground.

**NOTE: The valve has been preset to supply the approximate amount of oil needed to drive the hydraulic motor. The speed of the spreader can be adjusted, if necessary, by turning the set-screw on the valve. To speed it up, turn the setscrew in; to slow it down, turn the setscrew out.**

## **R GLEANER**

RGO Serial #16101 and Above  
R70 Serial #12001 and Above

### **PAGE 16 SHOWS DIAGRAM OF HYDRAULIC HOOKUP**

Step A: Bolt valve plate on left rear of combine. Use one existing hole and drill one 1/4" hole to do so.

Step B: Screw the third leg of the tee into the exhaust port of valve.

Step C: Mount valve to valve plate using two 1/4" x 2 1/2" bolts.

**IMPORTANT: See Diagram on Page 31.**

Step D: Screw the 7/8" 90° 0-ring male swivel end of one 8 1/2' hose into the CF port of our valve. Screw the 7/8" 90° 0-ring male swivel on the other end of this hose into the left port of the spreader motor.

Step E: Screw the 7/8"-14 JIC female swivel end of the other 8-1/2' hose onto the bottom side of the tee in the exhaust port of our valve. Screw the 7/8" 90° 0-ring male swivel on the other end of this hose into the right port of the spreader motor.

Step F: Screw the 7/8" 0-ring boss straight male swivel end of one 12' hose into the IN port on our valve.

Step G: Screw the 7/8"-14 JIC female swivel end of the other 12' hose onto the top side of the tee in the exhaust port of our valve.

Step H: Run the two 12' hoses in the previous two steps along the left side of the combine to the Gleaner valve below the step platform.

Step I: Remove the male quick coupler from the Gleaner valve. Screw the 1/2" straight pipe female swivel end of the 12' hose running to the tee in our valve onto the Gleaner valve where you took off the male quick coupler.

Step J: Screw the male quick coupler, removed from the Gleaner valve, onto our 12' hose running to the IN port of our valve. You now connect the hose from the head to our hose.

Step K: Secure hoses safely out of the way using the plastic tie-downs provided.

**CAUTION:** Be certain that this hose is connected to the return line from the hydraulic reel motor seals. 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. Then with the engine at idling and the head engaged, check to see that the disc is turning clockwise (looking down from above it). If it does, your hydraulic connections are correct.

SET FLOW CONTROL VALVE ON "3" FOR BEANS AND ADJUST UP AS NECESSARY TO THROW CHAFF ONLY AS WIDE AS THE HEAD. SET FLOW CONTROL VALVE LOWER FOR CORN. REEL SPEED CONTROL VALVE IN CAB WILL AFFECT THE SPREADER SPEED.

# **L-M-F GLEANER WITH HYDRAULIC REEL**

## **PAGE 15 SHOWS DIAGRAM OF HYDRAULIC HOOKUP**

Step A: Bolt valve plate on the end of the reel pump bracket located on the right end of head.

NOTE: On 300 Series flex heads, valve plate should be mounted to the left end of header.

Step B: Screw adapter, 7/8" O-ring boss to 7/8" JIC male, into the IN port of the flow control valve.

Step C: Screw third leg of the tee into exhaust port of valve.

**IMPORTANT - See Diagram on Page 31**

Step D: Bolt valve to valve mount using two 1/4" x 2 1/2 " bolts with IN port on topside of valve.

Step E: Remove the short return hose that runs from the steel line to the filter, at the reservoir and screw it onto the fitting in the IN port of valve.

NOTE: On 300 series flex heads, disconnect steel line from filter. It will be necessary to make up a hose not supplied with kit, the hose is 1/2" one wire, 2 1/2 ft. long with a 90° male 7/8 JIC one end, and a 90° female 7/8 JIC on other end. Connect the male end of the hose to the metal line disconnected from the filter. Connect the female end to the fitting in the IN port of the valve.

Step F: Screw 7/8"-14 JIC female swivel fitting on 2' hose onto the top end of the tee in the exhaust port of valve. Screw the other end of this 2' hose on where you removed the return line you connected to the IN port of valve.

Step C: Screw one female quick coupler on the end of one of the 13' hoses. Screw the 7/8" 90° O-ring male swivel end on the other end of this hose into the CF port of valve.

Step H: Screw a male quick coupler on one end of the other 13' hose. Screw the 7/8"-1 4 JIC female swivel end on the other end of this hose onto the lower end of the tee in the exhaust port of the valve.

Step I: Run the two hoses in the previous two steps along the backside of the head to the center of the head.

Step J: Screw a male quick coupler on the 1/2" male swivel end of one 24' hose. Run this hose along the right side of the combine back to the chaff spreader. Screw the 7/8" 90° O-ring male swivel on the end of this hose into the left port of hydraulic motor. (Left and right determined by standing behind combine and looking forward.)

Step K: Screw a female quick coupler on the 1/2" male swivel end of the other 24' hose. Run this hose along the right side of the combine back to the chaff spreader. Screw the 7/8" 90° O-ring male swivel on the end of this hose into the right port of the hydraulic motor.

**CAUTION:** Be certain that this hose is connected to the return line from the hydraulic reel motor seals. 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. Then with the engine at idling and the head engaged, check to see that the disc is turning clockwise (looking down from above it). If it does, your hydraulic connections are correct.

SET FLOW CONTROL VALVE ON "3" FOR BEANS AND ADJUST UP AS NECESSARY TO THROW CHAFF ONLY AS WIDE AS THE HEAD. CHAFF SPREADER WILL NOT BE ABLE TO BE USED IN CORN SINCE THE PUMP WHICH DRIVES IT IS MOUNTED ON THE PLATFORM AND WILL NOT BE ON THE COMBINE WHEN HARVESTING CORN.

# **Trouble Shooting Guide**

<b>Problem</b>	<b>Probable Causes</b>	<b>Remedy</b>
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 the 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 the 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 setting number.
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 the 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 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 belt, re-center disc and tighten bolts.
	Disc is bent.	Straighten and replace.
	Half moon key between hydraulic motor shaft and 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 through disc is end of hydraulic motor shaft, and tighten setscrew on hub.

<b>Problem</b>	<b>Probable Causes</b>	<b>Remedy</b>
Hydraulic reel runs okay, 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 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.	Drive belt on reel hydraulic pump may be slipping or broken.	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
Chaff spreader plugs.	Reel hydraulic pump may be weak and not putting out rated gallons per minute.	Repair or replace reel hydraulic pump.
	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.
	Adjustable slide of the spreader rear shield is not close enough (within ¼" 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 with 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.



<b>Problem</b>	<b>Probable Causes</b>	<b>Remedy</b>
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 operator's 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 re-assembly) 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.

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

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

Alternate Hook-up: Use oil from 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**

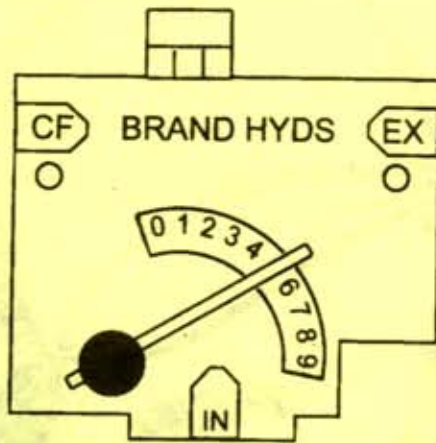
1. Never approach the chaff spreader with the combine engaged or chaff spreader running. Anything that can conceivably come off the chaffer of the combine (grain, cobs, broken metal piece of combine) will be propelled with great speed and force when it drops on the chaff spreader. The heavier the object, 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 that 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 exists.
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.

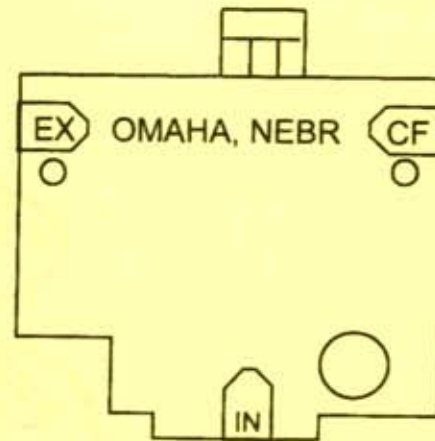
### **DANGER DECALS**

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.

## **FLOW CONTROL VALVE MOUNTING**



FRONT VIEW



BACK VIEW

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.

### **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 purchase date.

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.





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

**SILLY ME!**

**I should have read the instructions!**