

71235 Chaff Spreader Pump Kit
9970 Self-Propelled
Peanut Combine
9570 Engine Platform

AMADAS

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AMADAS

Welcome To AMADAS Industries

With origins dating back to 1963, AMADAS Industries and its predecessors have a long history of providing high quality, reliable, and innovative equipment for the farming industry. AMADAS equipment is currently at work throughout the United States and in many other countries. This equipment ranges from the Magnum Fource Peanut Combine, Tree Bark Processing and Packaging Machinery, Hi-Speed Cotton Stalk Puller/Chopper, Reel Rain Traveler Irrigation Systems, to the 9970 Self-Propelled Peanut Combine.

Thank you for choosing AMADAS Industries. We are strongly committed to your satisfaction and safety. Our goal is for you to be satisfied with our machinery for many years and it is our hope that you will choose AMADAS again for your equipment needs.

One of the most important factors in both safety and maximum performance is for every machine operator to understand thoroughly the safe operation of this equipment. Please invest in the time to read this manual to ensure that injuries are prevented, and also to receive the maximum productivity from your AMADAS machine.

Chaff Spreader Pump Kit 71235 for 9970 SP Peanut Combine

Congratulations on your purchase of a chaff spreader pump kit for your 9970 Self-Propelled Peanut Combine. Kit 71235 is used with the 9570 engine platform and is intended to simplify the installation of aftermarket chaff spreader products. Note that this kit does NOT include aftermarket chaff spreaders; these need to be purchased separately.

Benefits

This kit allows you to add aftermarket chaff spreaders without impacting combine performance. If installed properly according to the directions in this manual, it eliminates hydraulic and electrical installation issues that have impacted the combine's performance due to improper installation of aftermarket products.

Specifications

The chaff spreader pump kit consists of the following:

- A hydraulic pump, which is mounted on the sheave
- A directional control valve assembly with relief which is mounted on the side of the combine
- All hydraulic hoses needed to add the chaff spreaders
- Electrical harness to tie wiring into main harness
- All fasteners, valves, and connectors necessary to install kit.

Parts List

71235 Kit

| Part Number | Description | Quantity |
|-------------|---|----------|
| 16269 | Hydraulic fitting, -12 ORB to 12 ORF M adapter | 1 |
| 16320 | Hydraulic fitting, 4 ORF to -4 F 90 degree swivel | 1 |
| 16446 | Harness, wiring; vine spreader | 1 |
| 51856 | Sheave, machined | 1 |
| 129688 | Mount, stabilizer | 1 |
| 129689 | Hub, mount pump | 1 |
| 129691 | Mount, engine | 1 |
| 129703 | Cover, weldment | 1 |
| 129724 | Mount, pump | 1 |
| 140488 | Hydraulic fitting, -8 ORB x 8 ORF M run tee | 1 |
| 140598 | Hydraulic fitting, -10 ORB x -8 ORF adapter | 1 |
| 140867 | Hydraulic fitting, -16 ORF tee MMF swivel | 1 |
| 140937 | Hose, 3/8 x 73 | 1 |
| 141008 | Hydraulic fitting, 16 – 10 ORF reducer MF | 1 |
| 141083 | Valve, relief | 1 |
| 141084 | Valve, directional; w/din connectors | 1 |
| 141085 | Subplate, valve | 1 |
| 141086 | Kit, bolt | 1 |
| 141087 | Pump, 1.87 | 1 |
| 141097 | Hose, 3/4 x 55 | 1 |
| 141098 | Hose, 1/2 x 67 | 1 |
| G102582 | Setscrew, 5/16-18 x 1/2 Allen cup | 2 |
| G11500193 | Lockwasher, M12 | 2 |
| G11500194 | Screw, M12 x 80mm Hex Cap | 2 |
| G128002 | Nut, 3/8-16 Serrated flange | 6 |
| G180124 | Screw, 3/8-16 x 1 1/4 USS cap | 6 |
| J38H1033 | Hydraulic fitting, swivel run tee 12-12-12 | 1 |
| J38H1161 | Hydraulic fitting, -8 ORF to -8 ORB M adapter | 3 |
| J38H1416 | Hydraulic fitting, -8 ORF cap assembly | 3 |
| J61H1007 | Hydraulic fitting, -12 ORB x -12 ORF M 90 deg. with O-rings | 1 |

1 Safety_____

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Overview

Safety is everyone's responsibility! Although safety features are incorporated into the machine and dangerous areas are marked. Ultimately, careful operation is the best way to prevent an accident. To reduce the risk of accidents, please read thoroughly and follow the safety instructions and messages included in this manual and on the machine.

In addition to the information in this manual, please read all safety information in Chapter 1, *Safety*, of the Model 9970 Self-Propelled Peanut Combine user manual before beginning the installation process.

Safety Symbols Used

Three safety symbols are used on the machine and in this manual.

 **DANGER**

 **WARNING**

 **CAUTION**

Please familiarize yourself with each symbol and its meaning. It is crucial to your safety, and the safety of others, that you follow the safety precautions indicated by these symbols. The section beginning on the next page explains each of these symbols in detail.

Protective Devices

Protective guards and shields have been installed to protect you from hazards.

CAUTION

NEVER remove, tamper with, or modify guards or shields!

NEVER open or take off the shields while the machine is operating!

NEVER run the machine if the shields are missing or removed!

CAUTION



Use extreme care when working with hydraulic components. Escaping fluid under pressure can penetrate the skin, causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury may call the Deere & Company Medical Department in Moline, Illinois, or other knowledgeable medical source.

Safety Symbols

Safety Alert Symbol



This symbol alerts you to possible hazards. Follow the recommended precautions and safe operating procedures. If you have any questions, please contact your dealer or the manufacturer.

DANGER

This symbol indicates an imminently hazardous situation, which if not avoided, will result in death or serious injury. The use of the word DANGER is limited to the most extreme situations. Extreme care should be taken when you are near these areas. DANGER decals are located at, or as near as possible to, these areas.

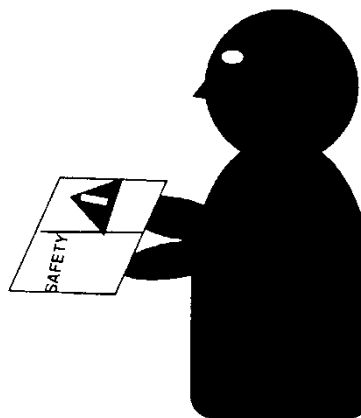
WARNING

This symbol identifies areas or practices, which if not avoided, could result in serious personal injury. These injuries could range from minor cuts to dismemberment. WARNING decals are located at, or as near as possible to, these areas.

CAUTION

This symbol identifies a potentially hazardous situation, which if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices that could cause damage to the machine. CAUTION decals are located at, or as near as possible, to these areas.

Safety Instructions



Safety features have been designed into the machine with hazardous areas marked. Please read and follow the instructions in this manual prior to operating, maintaining, or servicing this machine.

Notes

Throughout the manual, information that needs to be emphasized is set apart with either a "NOTE!" OR "IMPORTANT!" heading. Please be sure to carefully read this information, as it usually indicates a situation that could cause machine damage.

Example:

NOTE! Refer to the drawing on page 12 to help you route hydraulic hoses.

NOTES

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Before Installing

Before you install the chaff spreader kit, please read the following:

- Carefully read over the installation instructions and familiarize yourself with the installation procedure.
- Remove all packing materials.
- Carefully inspect the chaff spreader kit and all associated parts and equipment.
- If there is any evidence of damage from shipping or handling, report it immediately to your AMADAS representative.

CAUTION



Use extreme care when working with hydraulic components. Escaping fluid under pressure can penetrate the skin, causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury may call the Deere & Company Medical Department in Moline, Illinois, or other knowledgeable medical source.

Installation

Install Pump

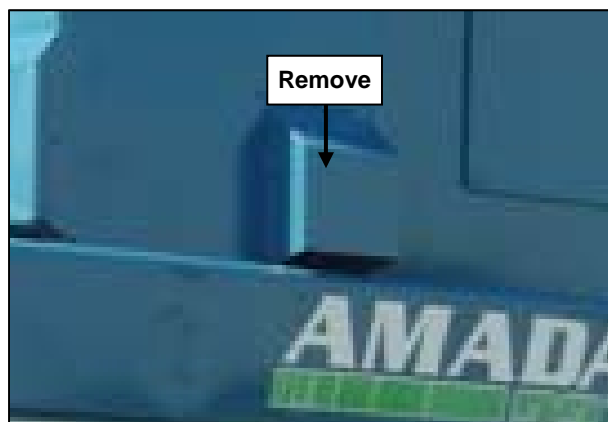


DANGER

Before beginning installation:

1. Shut off the combine and remove the ignition key.
2. Set parking brake.
3. Turn off battery disconnect (located in the engine bay).

1. Remove sheave cover from right side (facing front of combine).



2. Remove the outer sheave shown in photo.

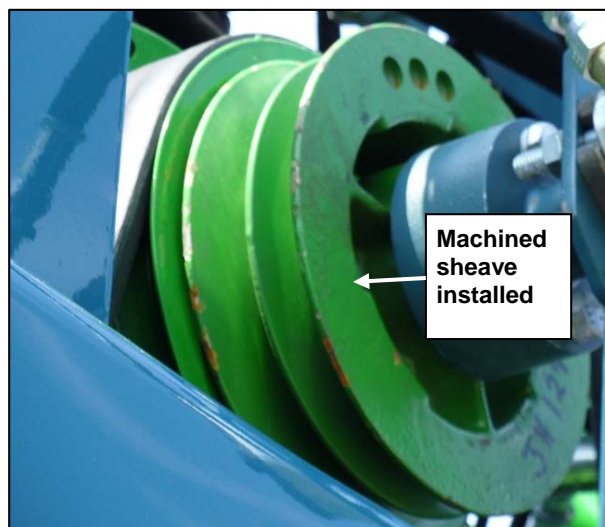
NOTE! The cover and sheave removed will not be re-used. Retain the fasteners for the cover, as they will be used to install the new cover included in the kit. Also retain the nut and key for the sheave as they will be needed when the new sheave is installed.



Remove outermost sheave (note that this view is from standing beneath the sheave and looking up and that the cover has not been removed)

3. Install the machined sheave on the shaft, using the original nut and key. This sheave replaces the sheave removed in Step 2.

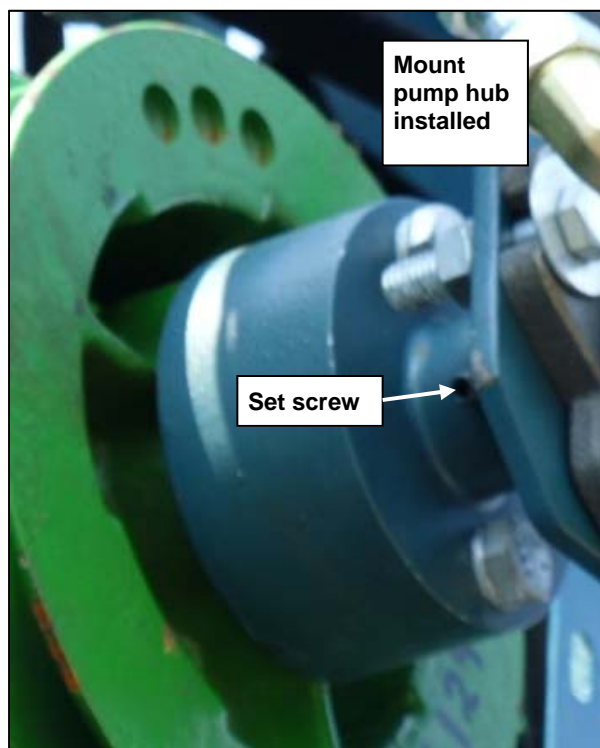
| Part # | Description |
|-----------------|-----------------|
| G11500794M51856 | Machined sheave |



Install Pump

4. Install the pump mount hub listed below on the shaft using the fasteners indicated. Make sure the key (supplied with the pump) is correctly inserted in the shaft as you install the pump mount hub and that the set screws are installed.

| Part # | Description |
|-----------|------------------------|
| 129688 | Pump mount hub |
| G11500744 | M12 bolts x 80mm |
| G11500193 | Lockwasher, M12 metric |
| G102582 | 5/16 Set screws |



5. Install the pump mount and gear pump with the fasteners indicated. Refer to photos for proper installation.

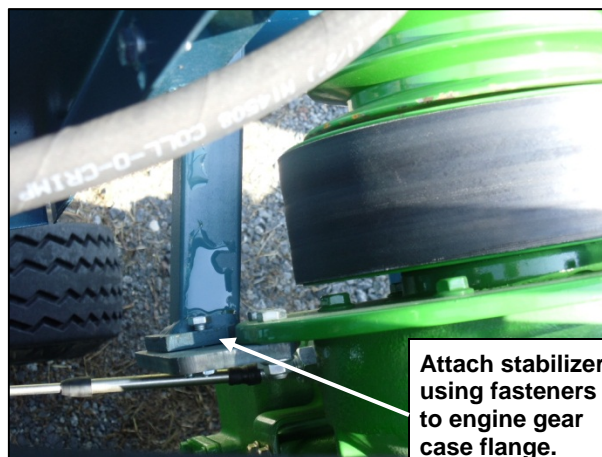
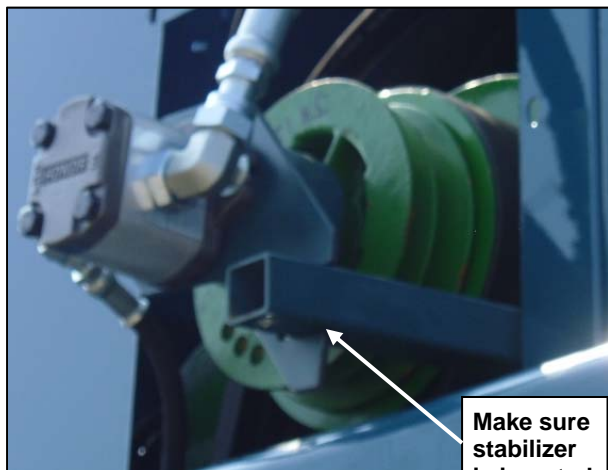
| Part # | Description |
|---------|-------------------|
| G180149 | 7/16 x 1½" bolts |
| 29724 | Pump mount |
| 141087 | Gear pump (Honor) |



Install Pump

6. Install the stabilizer mount as shown in the photos. Use the fasteners indicated.

| Part # | Description |
|---------|----------------------|
| G180124 | 3 3/8 x 1 1/4" bolts |
| 129688 | Stabilizer mount |
| 129691 | Engine mount |



Install Valves

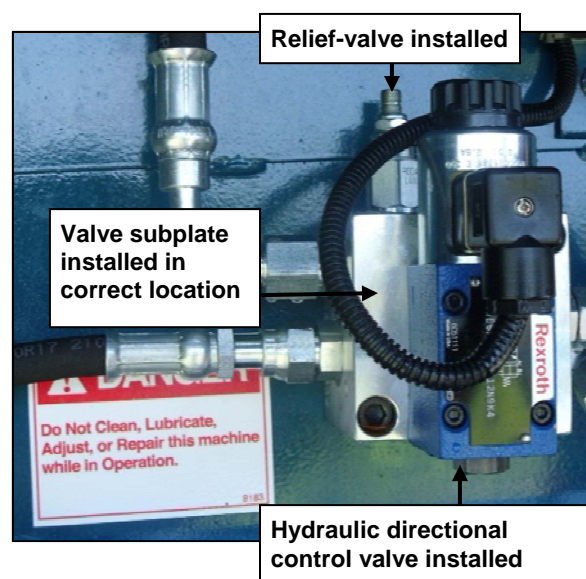
1. Locate the area shown in the photos to install the valve subplate. It is under the rear shield as shown in the photo.



2. After the area shown has been located, use the subplate as a template to mark holes for drilling.

3. After marking the location for the holes, drill two 13/32" holes. Before drilling, make sure the area behind the combine frame is clear of any hoses or wiring.
4. Install the aluminum valve subplate in the indicated area, using the fasteners below and the holes drilled in Step 3.

| Part # | Description |
|--------|-------------------------|
| 141086 | Bolt kit |
| 141085 | Aluminum valve subplate |



5. Install the hydraulic direct-control-valve as shown in the photo above. Use the fasteners indicated below.

| Part # | Description |
|--------|--|
| 141084 | Fasteners from bolt kit Hydraulic directional control valve |

6. Install the relief valve as shown in the photo above.

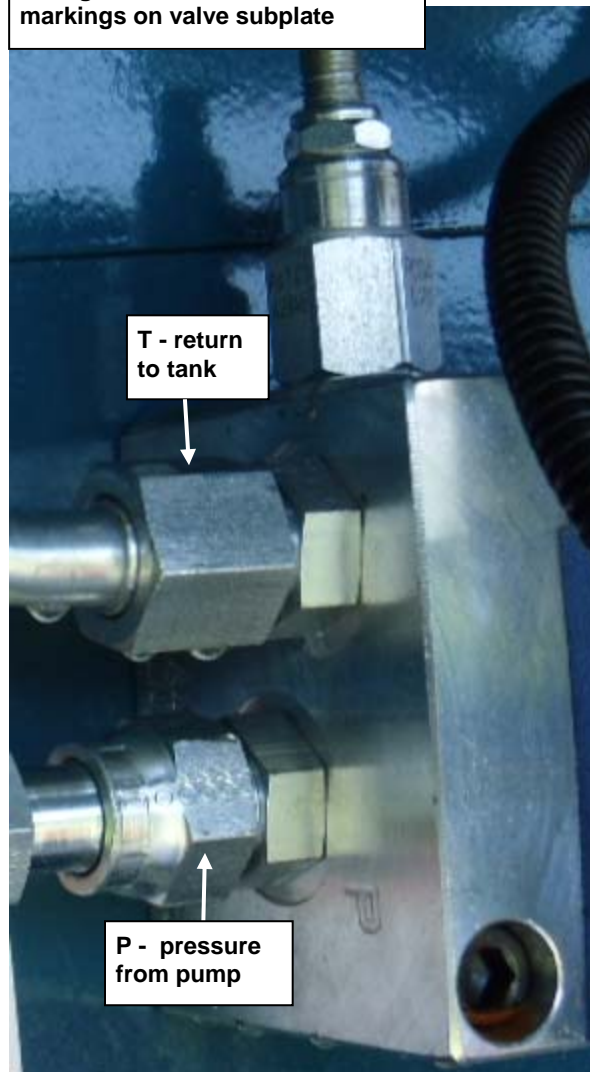
| Part # | Description |
|--------|--------------|
| 141083 | Relief valve |

Install Valves

7. Install the following fittings in the “T” and “P” ports as shown:

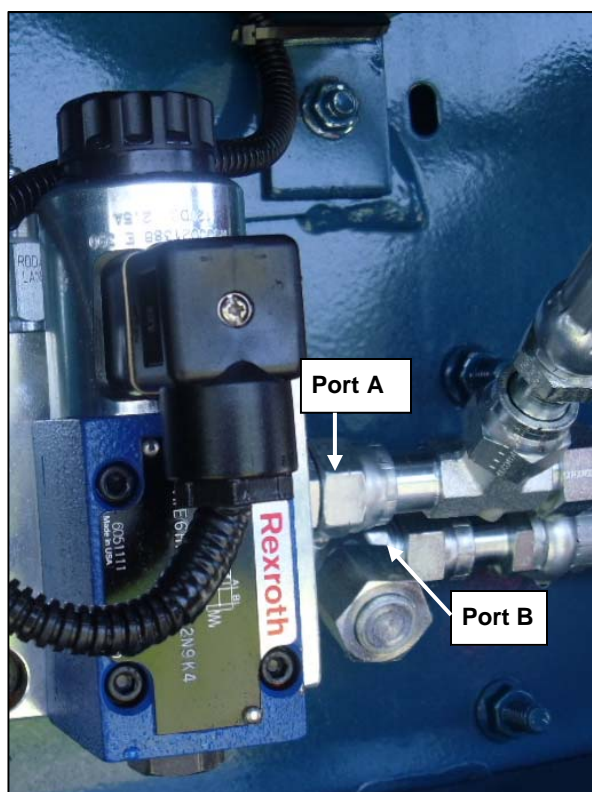
| Part # | Description |
|----------|--|
| J38H1161 | Hydraulic fitting, 8 Orf x 8 Orb M adapter (2) |

Fittings installed; note the T and P markings on valve subplate



8. Install the following fittings in the “A” and “B” ports as in the photo. Note that part #140488 is installed in the “A” port and part #J38H1161 in the “B” port. (Also refer to drawing on page 15.)

| Part # | Description |
|----------|--|
| 140488 | Hydraulic fitting, -8 ORB x 8 ORF M run tee |
| J38H1161 | Hydraulic fitting, 8 Orf x 8 Orb M adapter (2) |



Install Valves

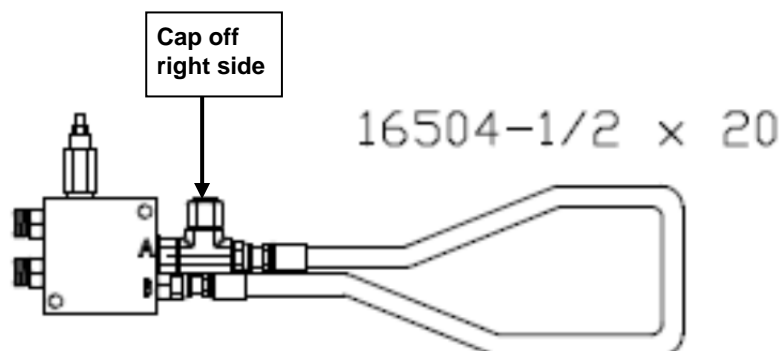
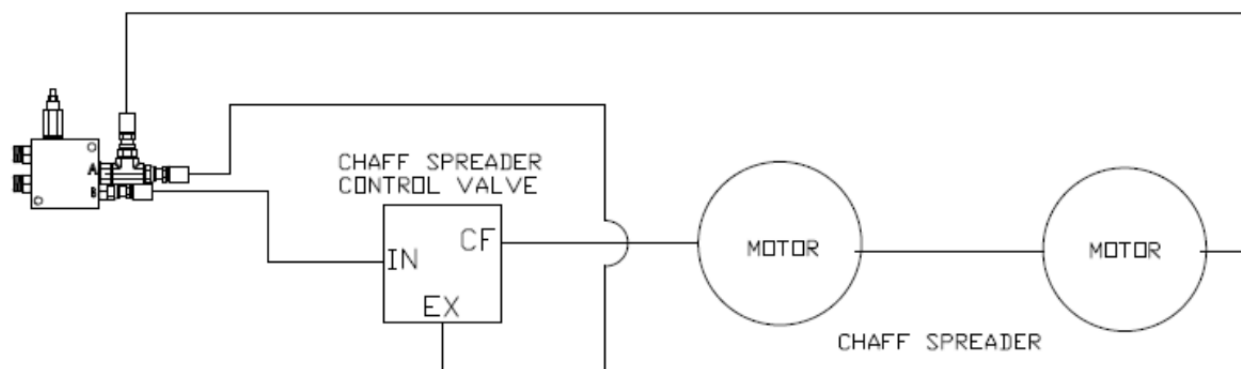
9. If the chaff spreaders are not being connected at this time, use the cap and hose below to close off the system as shown in Diagram 1.

If the chaff spreaders are being connected at this time, then the cap and hose below are not needed.

| Part # | Description |
|----------|---|
| J38H1416 | Hydraulic fitting, - 8 ORF Cap assembly |
| 16504 | Hydraulic hose, ½ x 20 |

10. Connect the hoses for the chaff spreader as shown in Diagram 2.

NOTE! Hoses shown in Diagram 2 for the chaff spreader are NOT included in this pump kit. They should be included with whatever chaff spreader kit you purchase.

Diagram 1**Diagram 2**

Install Hydraulic Lines

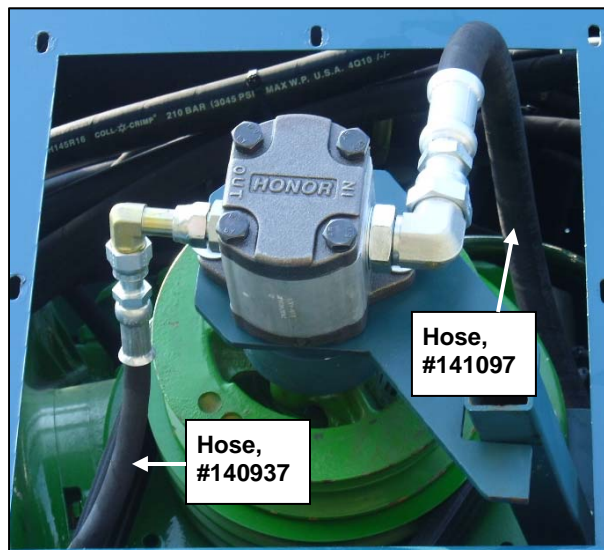
To aid in installation of the hydraulic hoses, one of two methods should be used:

- Connect a vacuum pump to the hydraulic tank.
- OR**
- Drain hydraulic tank.

NOTE! Refer to the drawing on page 15 to help you route hydraulic hoses.

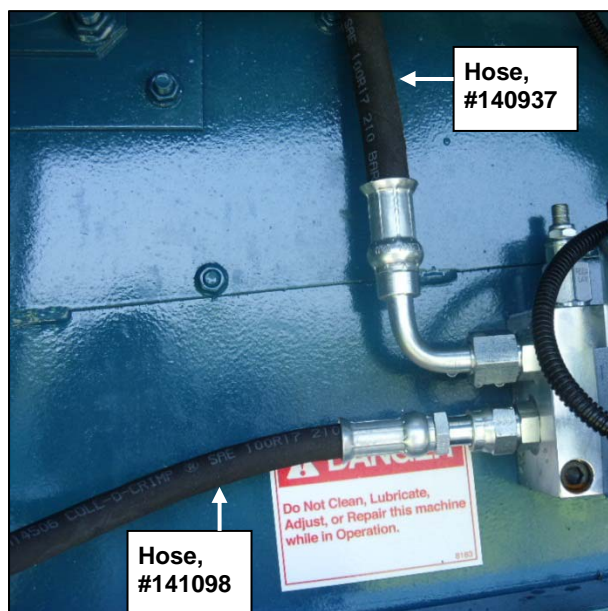
1. Attach the following hoses and fittings as shown in the photo to the gear pump.

| Part # | Description |
|--------|------------------------|
| 140937 | 3/8 x 73 hose |
| 141097 | 3/4 x 55 hose fittings |



2. Attach the 3/8x73 hose (part #140937) to the valve block as shown in the photo. Use the following fittings.

| Part # | Description |
|----------|---|
| J38H1161 | Hydraulic fitting, -8 Orf x 8 Orb M Adapter |



3. Attach the 1/2 x 67 hose (part # 141098) to the bottom fitting of the valve block as shown in the photo above.
4. Route hose #141098 through the guide shown in the photo.



5. Attach hose #141098 from the valve block to the hydraulic tank as shown in the photo on the next page. Use the fittings described below.

| Part # | Description |
|--------|--|
| 140867 | Hydraulic fitting, 16 orf sw run tee mmf |
| 141008 | Hydraulic fitting, 16-12 reducer mf orf |

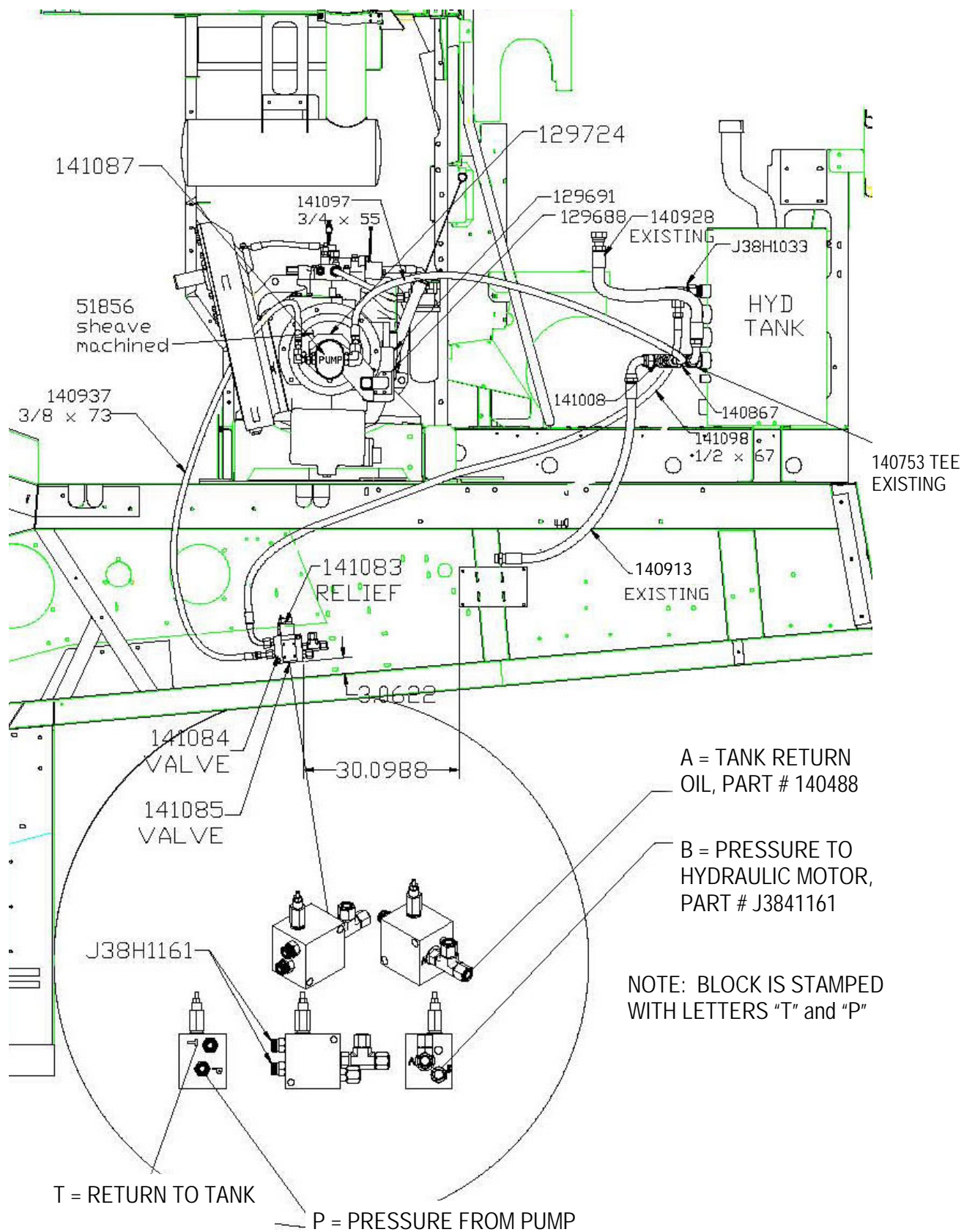
Install Hydraulic Lines

6. Attach hose #141097 from the pump to the hydraulic tank as shown in the photo and drawing on page 15. Use the fittings described below.

| Part # | Description |
|----------|--|
| J38H1033 | Hydraulic fitting, 12 orf swivel run tee mmf |

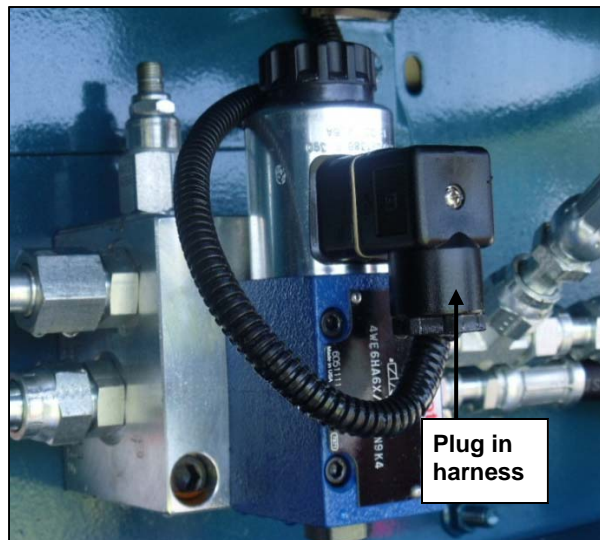
7. Once all connections have been made, disconnect the vacuum pump (if used) from the tank. If the tank was drained, then refill the tank. Regardless of the method, ensure the hydraulic tank is full to the top of the sight glass.
8. Upon completion of the installation, run the combine for a few minutes.
9. Stop combine and check for leaks. Correct as needed.
10. Top off hydraulic tank with oil.



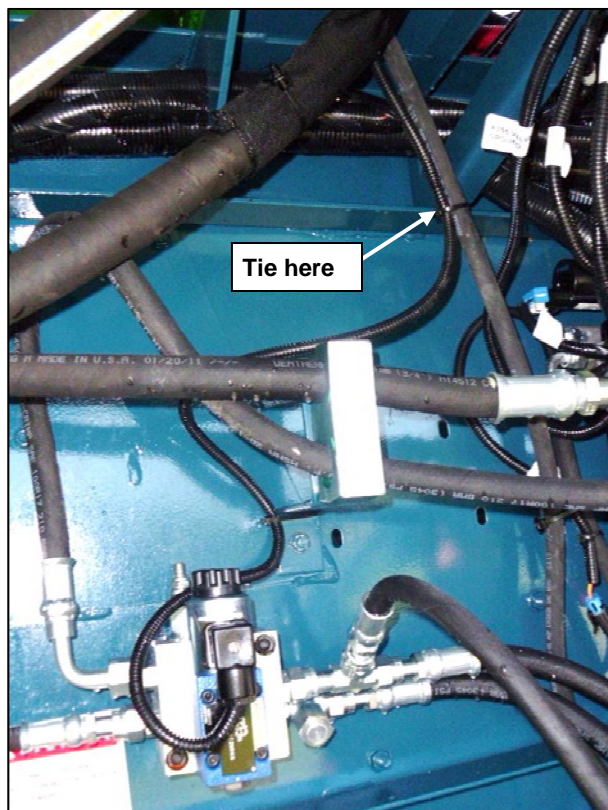


Install Harness

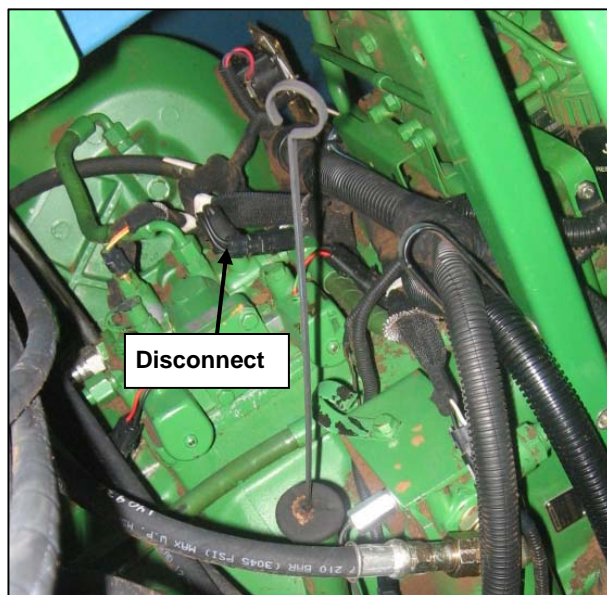
1. Plug the electrical harness (part #16446) into the front of the hydraulic directional control valve.



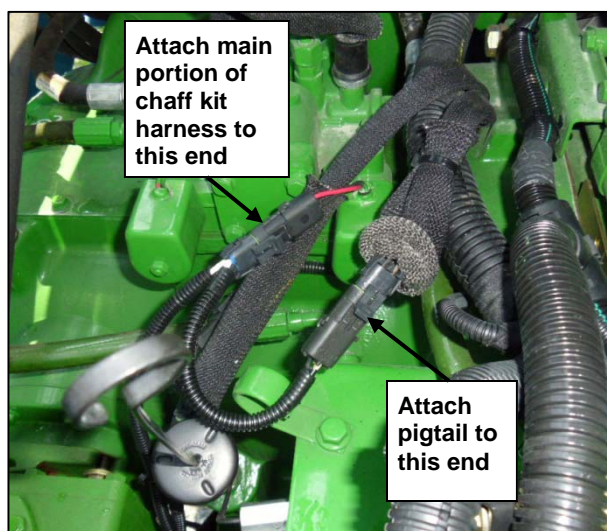
2. Route the harness up, attaching with ties as shown in the photo.



3. In the engine bay, disconnect the combine harness connection indicated in the photo.



4. Connect the main plug of the chaff kit harness into the left side of the connection you just separated.
5. Plug the pigtail portion of the chaff kit harness into the right side of the connection.



Install Cover

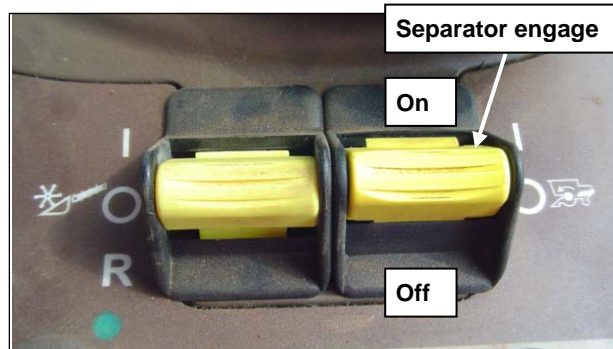
Install the cover (part #129703) over the gear pump. Use the fasteners removed with the original cover.



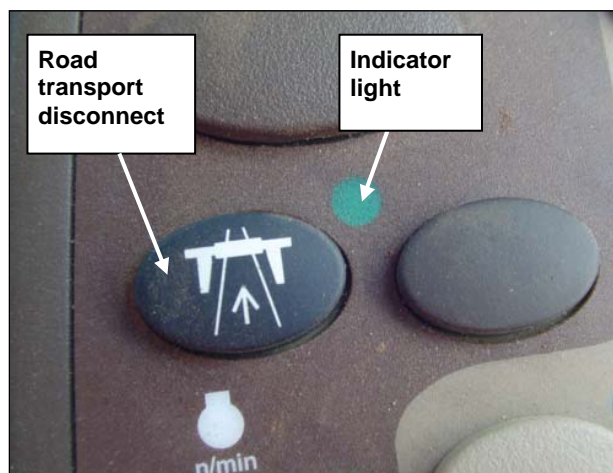
Operation

When properly installed with this kit, aftermarket chaff spreaders run automatically with the separator engage function. The separator engage switch turns on the separator and functions as follows:

- Push up to turn ON; pull down to turn OFF.



- The road transport disconnect switch must be in field position to turn the separator engage switch to ON (the indicator light must be OFF).



- This switch must be off to start the engine.
- The separator should only be engaged at low idle speed.
- When the combine is run at high idle, the separator should be disengaged after the engine is brought down to mid idle.
- When the separator engage switch is turned off, the chaff spreaders also stop.
- The only way to shut off the chaff spreaders and still engage the separators is to disconnect the wiring.

Troubleshooting

If the chaff spreaders do not function automatically when the separators are engaged:

1. Start up the combine according to instructions in your combine user manual.
2. Turn on the separator engage switch, as described on the previous page.
3. Check to make sure the chaff spreaders are functioning.
4. If yes, everything is correctly plumbed/installed. If no:
 - a. Turn off the combine.
 - b. Make sure all plumbing is installed as indicated in this manual.
 - c. Make sure the electrical harness is correctly installed.
5. If everything is correctly installed and the chaff spreader still does not run with the separator engage switch, turn the combine ignition switch to the RUN position. The accessories should be turned on but the engine not running.
6. Turn the separator engage switch to the ON position.
7. Check to make sure there are 12 volts of power to the chaff relief valve assembly.

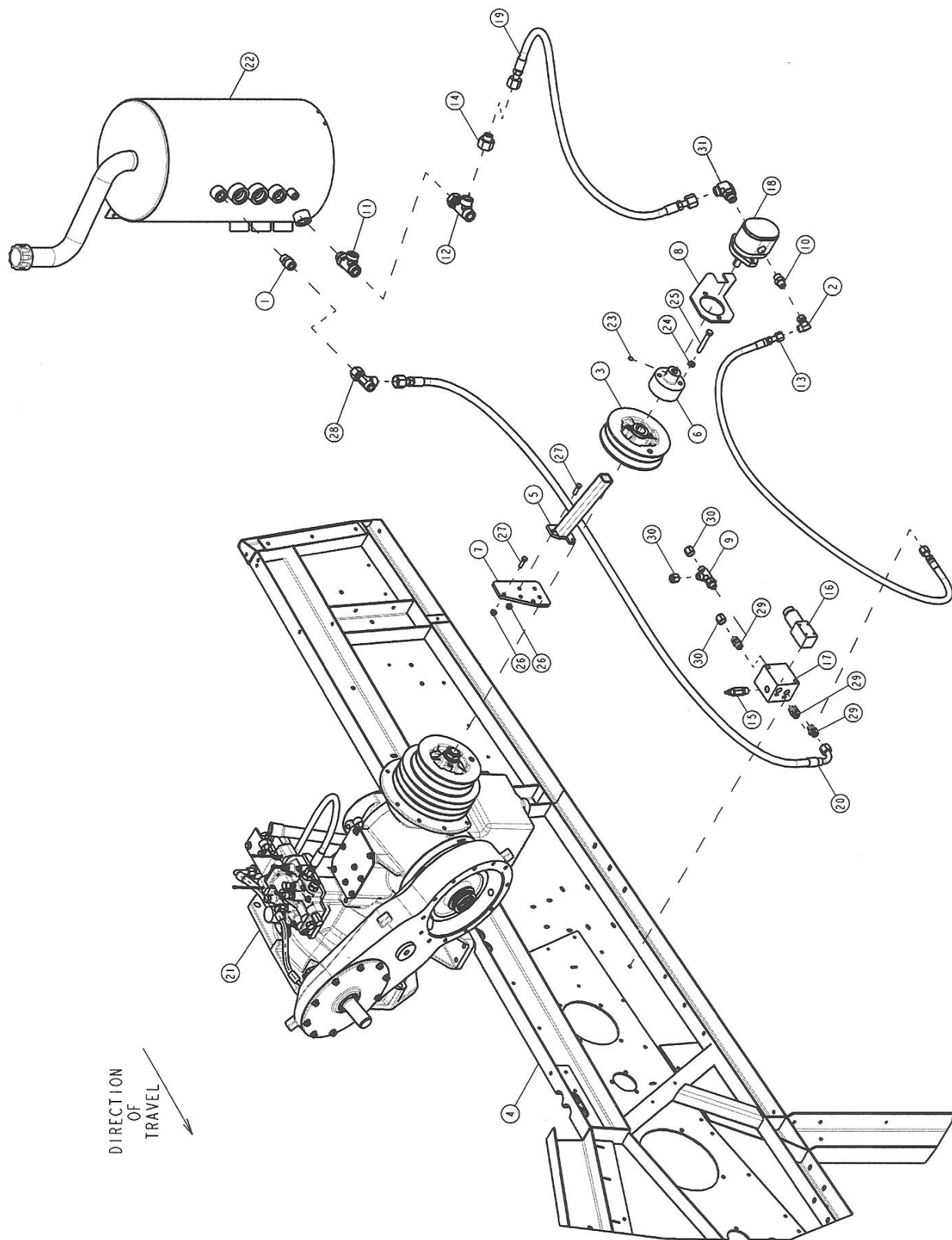


CAUTION

Make sure engine is turned off and key removed from ignition before checking plumbing, connections, etc.

NOTES

3 Parts Catalog

Kit 71235

71235 CHAFF SPREADER PUMP KIT - OPTIONAL

| ITEM | PART NUMBER | DESCRIPTION | QTY SHOWN | QTY REQ'D | COMMENTS |
|------|-------------|--|-----------|-----------|------------------------------|
| 1 | 16269 | HYDF, -12 ORB TO 12 ORF M ADAPTER | 1 | | |
| 2 | 16320 | HYDF, -4 ORF TO -4 F 90 DEGREE SWIVEL | 1 | | |
| 3 | 51856 | SHEAVE, MACHINED | 1 | | |
| 4 | 94388 | FRAME, MAIN SIDE; LEFT | 1 | | |
| 5 | 129688 | MOUNT, STABILIZER | 1 | | |
| 6 | 129689 | HUB, MOUNT PUMP | 1 | | |
| 7 | 129691 | MOUNT, ENGINE | 1 | | |
| 8 | 129724 | MOUNT, PUMP | 1 | | |
| 9 | 140488 | HYDF, -8 ORB X 8 ORF M RUN TEE | 1 | | |
| 10 | 140598 | HYDF, -10 ORB X -8 ORF ADAPTER | 1 | | |
| 11 | 140753 | HYDF, TEE-16-16-12 | 1 | | |
| 12 | 140867 | HYDF, -16 ORF TEE MMF SWIVEL | 1 | | |
| 13 | 140937 | HOSE, 3/8 x 73 | 1 | | |
| 14 | 141008 | HYDF, 16 - 10 ORF REDUCER MF | 1 | | |
| 15 | 141083 | VALVE, RELIEF | 1 | | |
| 16 | 141084 | VALVE, DIRECTIONAL; W/DIN CONNECTORS | 1 | | |
| 17 | 141085 | SUBPLATE, VALVE | 1 | | |
| 18 | 141087 | PUMP, GEAR | 1 | | |
| 19 | 141097 | HOSE, 3/4 X 55 | 1 | | |
| 20 | 141098 | HOSE, 1/2 X 67 | 1 | | |
| 21 | GEARBOX | ASSEMBLY, PTO GEARBOX | 1 | | SEE JOHN DEERE PARTS CATALOG |
| 22 | TANK | ASSEMBLY, HYDRAULIC TANK | 1 | | SEE JOHN DEERE PARTS CATALOG |
| 23 | G102582 | SETSCREW, 5/16-18 X 1/2 ALLEN CUP | 1 | 2 | |
| 24 | G11500193 | LOCKWASHER, M12 | 1 | 2 | |
| 25 | G11500794 | SCREW, M12 X 80MM HEX CAP | 1 | 2 | |
| 26 | G128002 | NUT, 3/8-16 SERRATED FLANGE | 2 | 6 | |
| 27 | G180124 | SCREW, 3/8-16 X 1-1/4 USS CAP | 2 | 6 | |
| 28 | J38H1033 | HYDF, SWIVEL RUN TEE 12-12-12 | 1 | | |
| 29 | J38H1161 | HYDF, -8 ORF TO -8 ORB M ADAPTER | 3 | | |
| 30 | J38H1416 | HYDF, -8 ORF CAP ASSEMBLY | 3 | | |
| 31 | J61H1007 | HYDF, -12 ORB X -12 ORF M 90 DEG. WITH O-RINGS | 1 | | |

| -- NOT SHOWN -- | | | | |
|-----------------|--------------------------------|-----------|----------|--|
| PART NUMBER | DESCRIPTION | QTY REQ'D | COMMENTS | |
| 141086 | KIT, BOLT | 1 | | |
| 129703 | COVER, WELDMENT | 1 | | |
| 16446 | HARNESS, WIRING; VINE SPREADER | 1 | | |

NOTES
