

SeederForce™

SeederForce Row by Row Install

Precision Planting®

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Power Distribution Module, Alternator and Filter Manifold Installation

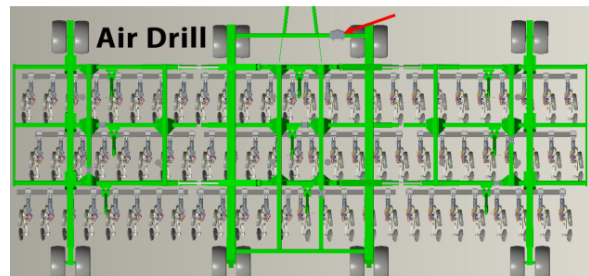
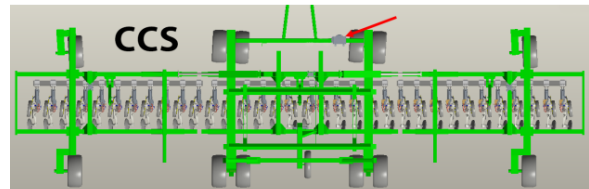
HIGH PRESSURE HYDRAULIC OIL CAN CAUSE SEVERE INJURY. Before installing components, lower row units to the ground, put SCV in float and turn tractor off.



Step 1:

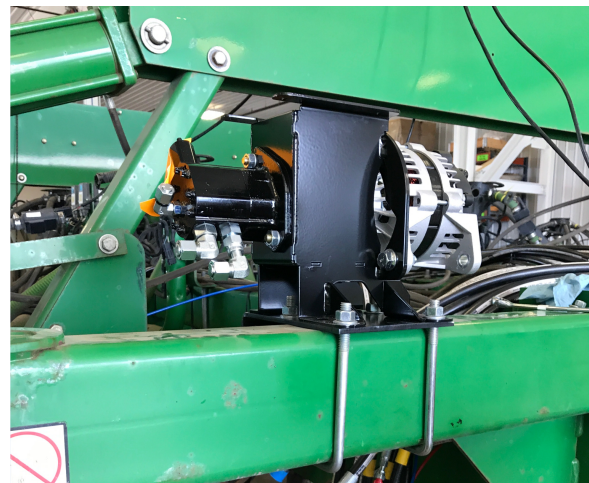
Install the Filter Manifold and bracket using the provided u-bolts on the front bar of the air seeder. See the below diagram for best mounting location.

Note: Install the filter manifold with the MP and MR ports pointed up.



Step 2:

Install the Alternator to the Filter Manifold bracket on the bar.



Step 3:

Mount the PDM to the top of the alternator.

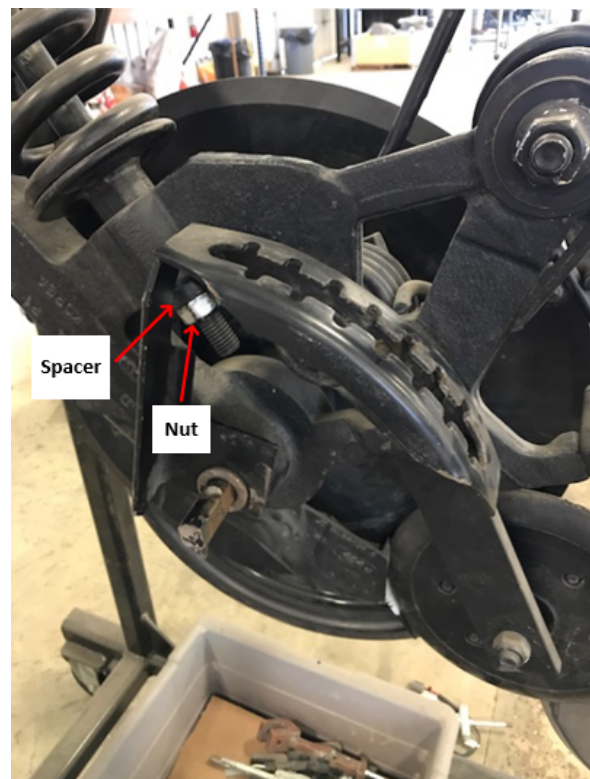


SeederForce Cylinder Installation

Step 1:

Remove the downforce spring by loosening the nut with a 15/16" socket. This is best accessed with a deep wall socket and long extension.

Note: Set aside the spacer. It will be reused with the cylinder install.



Step 2:

At the top of the downforce spring, drive the spring pin out with 1/4" punch provided in the kit.

**Step 3:**

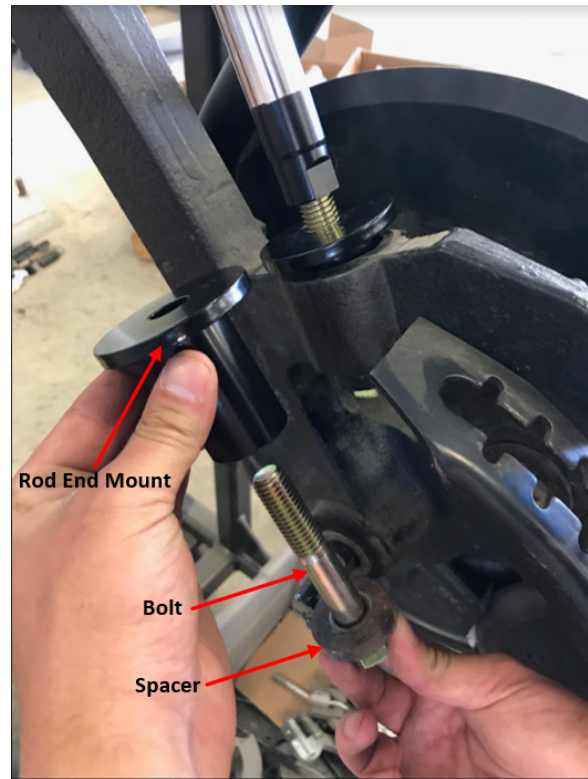
Install the head of the cylinder using the 3/4" pin removed in the previous step. Secure the cylinder pin with the new spring pin from the cylinder mount kit.

Note: The head of the cylinder should be oriented as shown, with the coil pointed towards the back of the row unit.



Step 4:

Install the rod end mount and bolt from the mount kit. Reuse the spacer set aside during Step 1.

**Step 5:**

Install the rod end mount using a 3/4" wrench on the flat area of the rod and a torque wrench to tighten the 5/8" bolt to 128 ft-lbs.



SeederForce Hydraulic Install

Hydraulic Routing to Filter Manifold

Note: Must be installed with closed center hydraulic system.

Recommended hydraulic connections are:

1. Power Beyond Supply and Return.
2. SCV Supply with Power Beyond Return.
3. SCV Supply and Return.
4. Tie into existing raise/ lower circuit.
5. Install a PTO pump from Rowe Manufacturing.

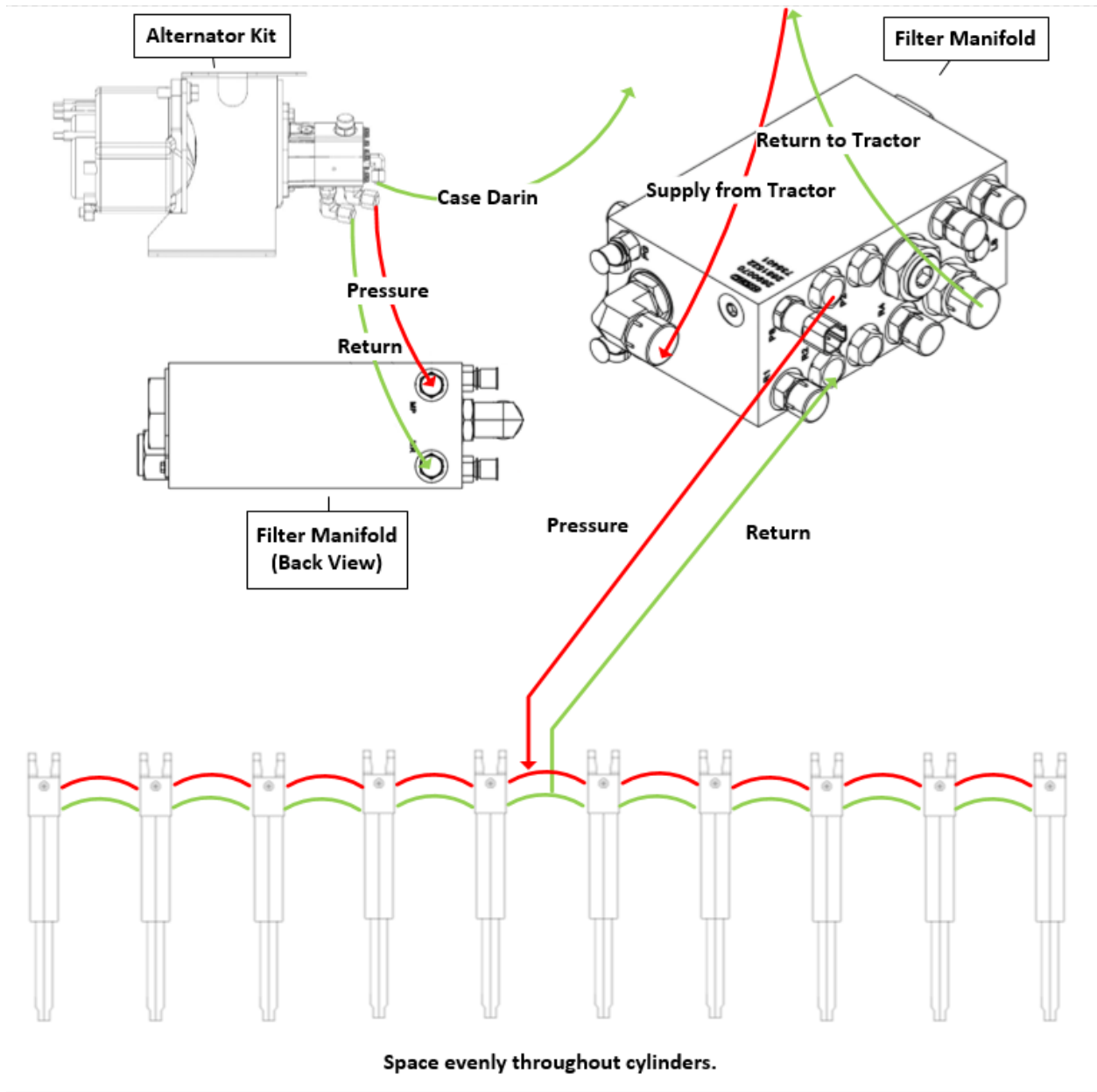
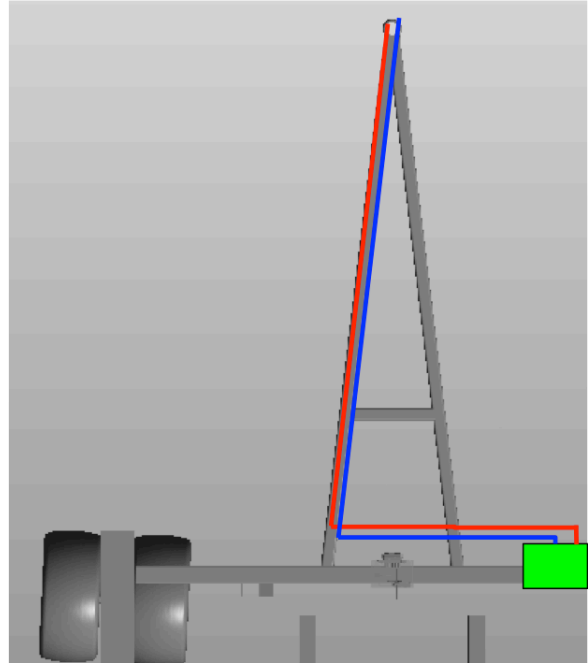


Figure 1.
Hydraulic routing Overview

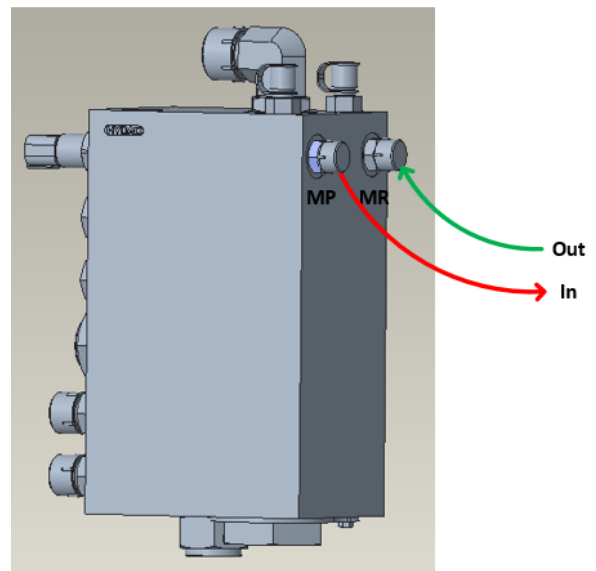
Step 1:

Start the hydraulic lines routing at the filter manifold. Locate the Hitch to Filter Manifold Hose Kit and connect the hose assembly with a red label to the “**P**” port on the Filter Manifold, and the hose assembly with the blue label to the “**R**” port.

Note: If a hydraulic driven cart is used, a Load Sense line is not required. If the cart or metering system is ground driven, a Load Sense kit will be required. Route along supply and return hydraulic lines and tie into the ‘LS’ port on the Filter Manifold.

**Step 2:**

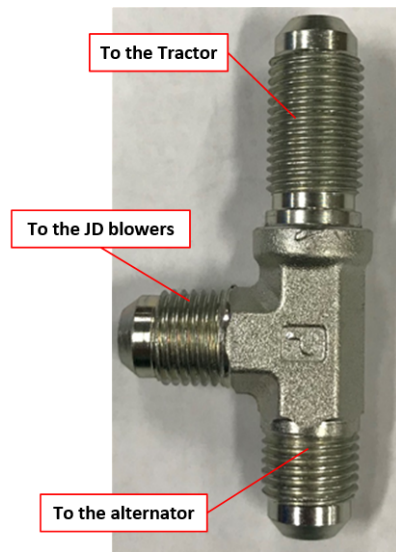
Route the hydraulic hoses in the 729160 kit from the “MP” port of the filter manifold to the “IN” port of the alternator motor and from the “MR” port of the filter manifold to the “OUT” port of the alternator motor.



Case Drain Install

Step 1:

Install the case drain bracket and bulkhead T fitting at the hitch. Use the provided u-bolt to mount the bracket to the frame.



Step 2:

Insert the bulkhead T with the longer end towards the tractor. Tighten the jam nut to secure the bulkhead T.

Note: The bulkhead T must be mounted horizontally.

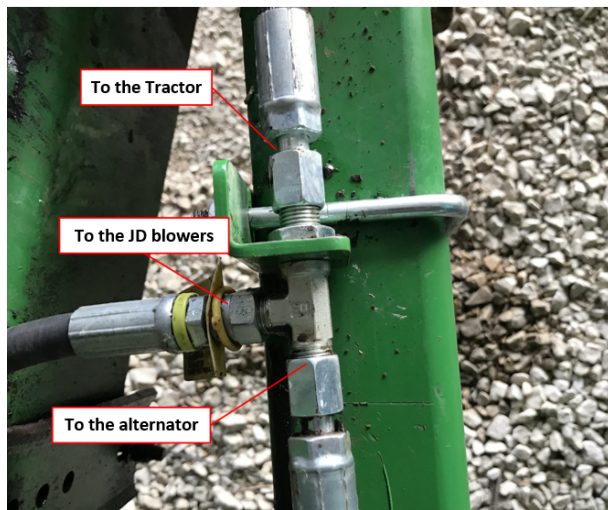


Figure 2.
Case Drain Top View

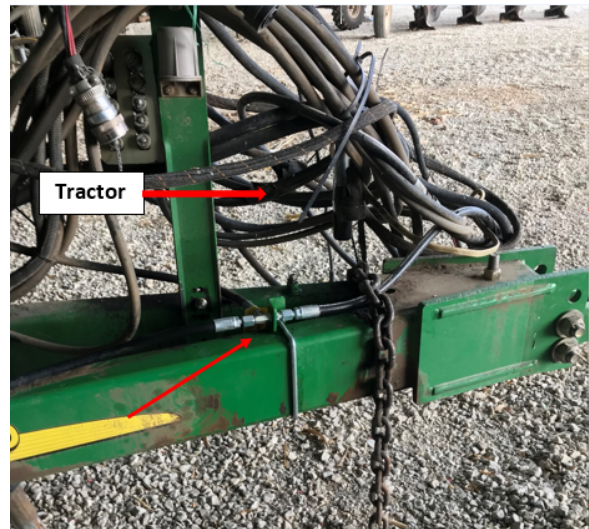
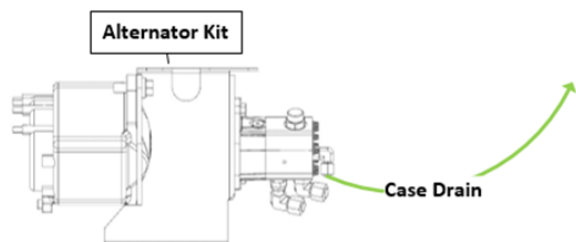


Figure 3.
Case Drain Side View

Step 3:

Using the provided hydraulic hose (735480) route the hydraulic line from the alternator case drain port to the back port of the T.



Step 4:

Locate the JD case drain hose running towards the hitch. Remove the flat faced quick coupler and adapter and set aside. Connect this hose to the center port of the T.

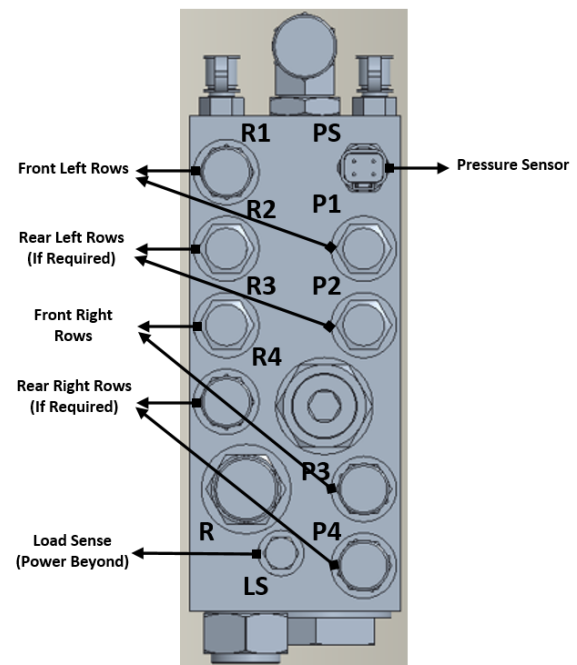
Step 5:

Connect the new hydraulic hose (735491) to the long end of the T facing the tractor. Route the hose to the hitch and install the previously removed quick coupler and adapter that was set aside in the previous step.

Hydraulic Routing from Filter Manifold to Row Units

Step 1:

From the Filter Manifold route a Pressure and Return line to each combination of frame section and rank. This could include Right and half Center Section-Front Rank, Right and half Center Section-Rear Rank, Left and half Center Section-Front Rank and Left, half Center Section-Rear Rank. Run each pair of hoses along the frame with the hydraulic lines running to the rockshaft cylinders on each wing. Then, just after the wing fold cylinder frames, turn the hoses 90 degrees towards the rockshaft. Locate the area where you want to install the inner row hydraulic line tees. Try to place the tees such that there is the same number of hydraulic cylinders on both sides of the tee.



Step 2:

Plug the Pressure Sensor harness connection from the PDM into the Pressure Sensor connection on the Filter Manifold.

**Step 3:**

Run the hydraulic lines to every row. Use the inner row hose kits to connect each cylinder together, ensuring that you always connect the P port on the cylinder to the other P port, and R port to R port.

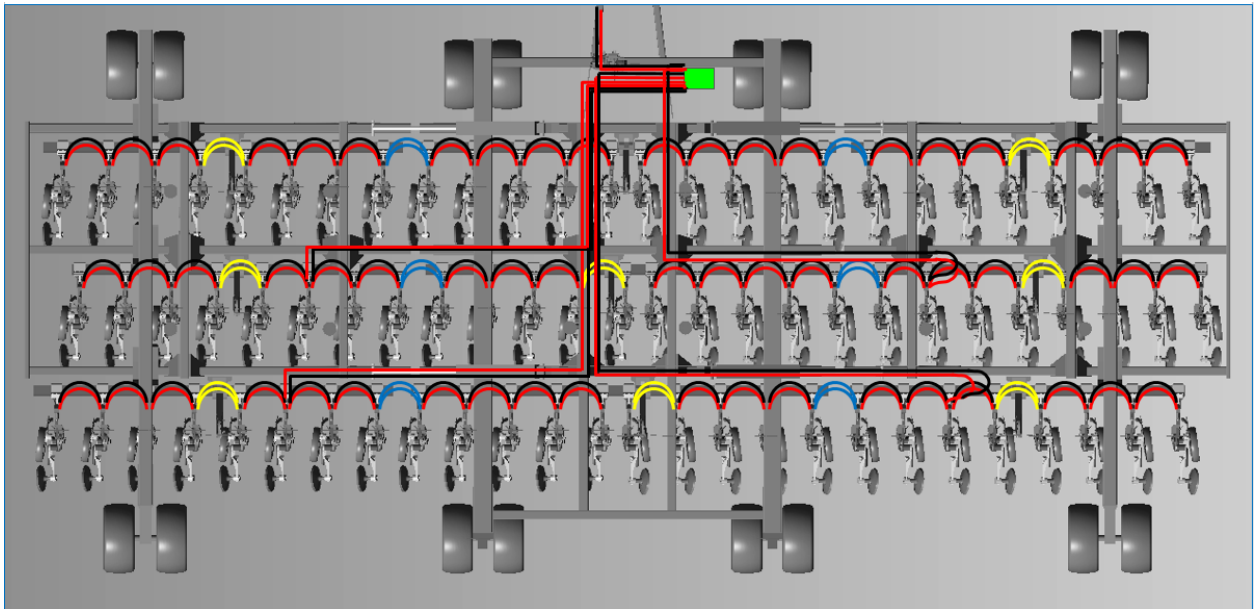
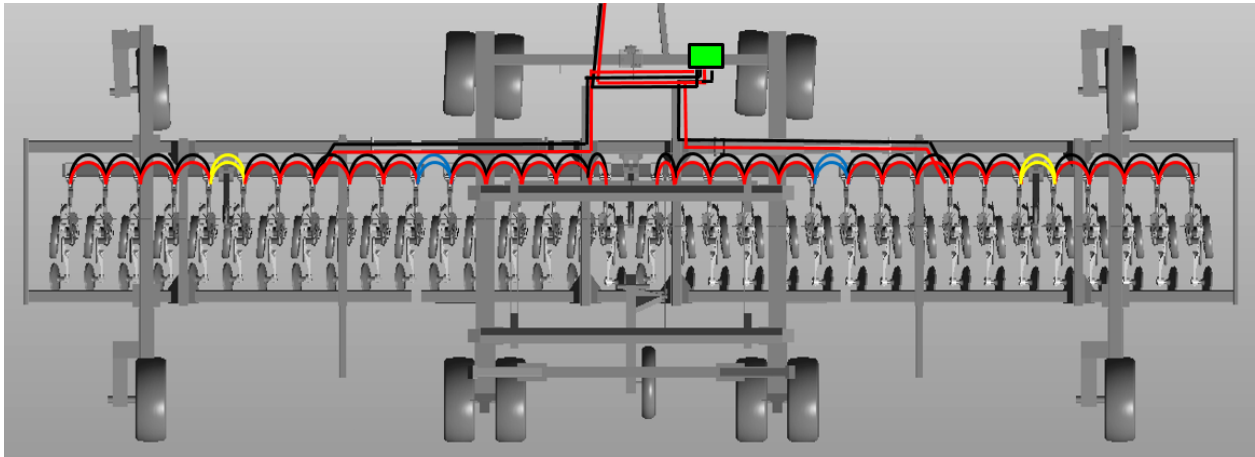
Note: When routing hydraulic lines around Rockshaft cylinders and between Rockshaft section, longer hydraulic hose kits are required for additional clearance.

Step 4:

Install end row plug kit (735406) on the end of each hydraulic section, on both sides of the seeder and in the middle of the seeder.

Hydraulic Routing Overview

-  Filter Manifold
-  Kit 735497 Rockshaft to Rockshaft
-  Kit 735451 Rockshaft Cylinder
-  Kit 735450 Inter-row
-  Kit 735450 Inter- row



John Deere Manifold Bypass

Step 1:

Remove the John Deere Hydraulic valve controlling the seeding ranks.

Note: On 1895 Air Seeders there will be two blocks. Be sure to install the cavity plug on the seed block which is on the left.

Note: If there is one hydraulic block per seeding rank, then each block needs a cavity plug installed. Do not install on block controlling fertilizer rank.



Figure 4.
Five Frame Section Hydraulic Block



Figure 5.
Three Frame Section Hydraulic Block

Step 2:

Install the cavity plug provided in the JD manifold kit

Note: 3 frame section and 5 frame section air seeders will require a different sized cavity plug.



Figure 6.
Three Frame Section Cavity Plug



Figure 7.
Five Frame Section Cavity Plug

Tow Between Cart Hydraulic Install

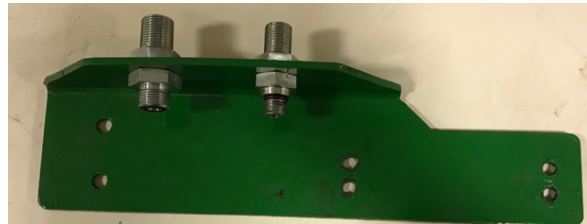
Step 1:

Step 1: Install provided bracket to the cart in the location shown in picture below. The black bolts shown with arrows in the picture are reused from the bracket normally installed in this location.



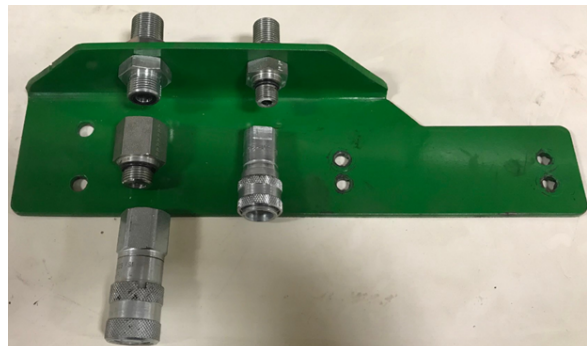
Step 2:

Start by mounting the bulkhead adapters to the bracket using jam nuts on each to keep in place.



Step 3:

: Now for the case drain side (left in picture) install a reducer followed by the quick coupler. For the load sense port if required (right in picture) install the quick coupler.



Step 4:

Run hyd lines to all the ports pictured below and connect to each port. Route the hydraulic lines inside the cart along with the JD hydraulic lines already ran. When you get to the hitch area, you will need to zip tie the hoses to the outside of the frame, preferable on the top of the tongue to prevent the hydraulic hoses from hitting debris.

