

SeederForce™

John Deere 1560 and 1590 Box Drill Row by Row Installation Manual



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Filter Manifold Installation

HIGH PRESSURE HYDRAULIC OIL CAN CAUSE SEVERE INJURY.

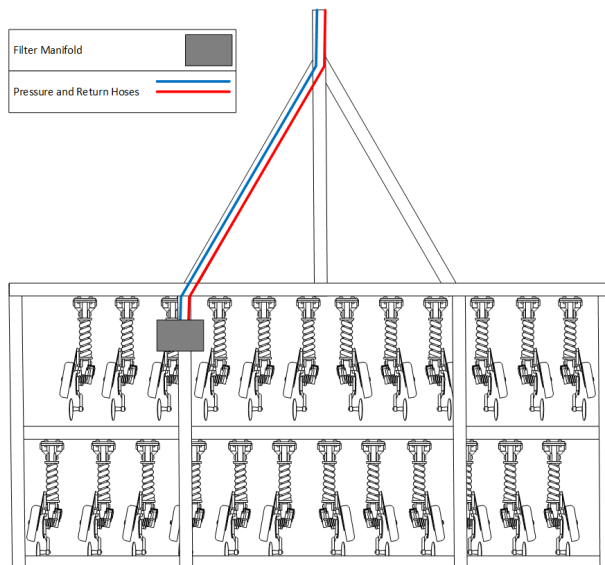
Before installing components, lower row units to the ground, put the SCV in float and turn the tractor off.



Step 1:

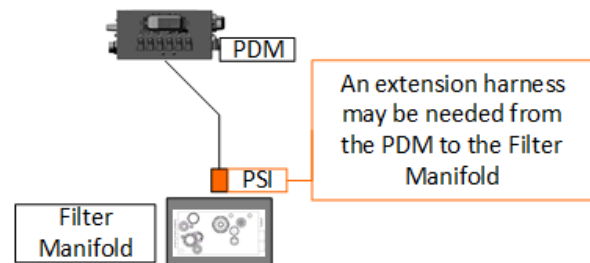
Install the Filter Manifold and bracket using the provided u-bolts on the front bar of the drill. See the diagram for best mounting location.

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



Step 2:

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

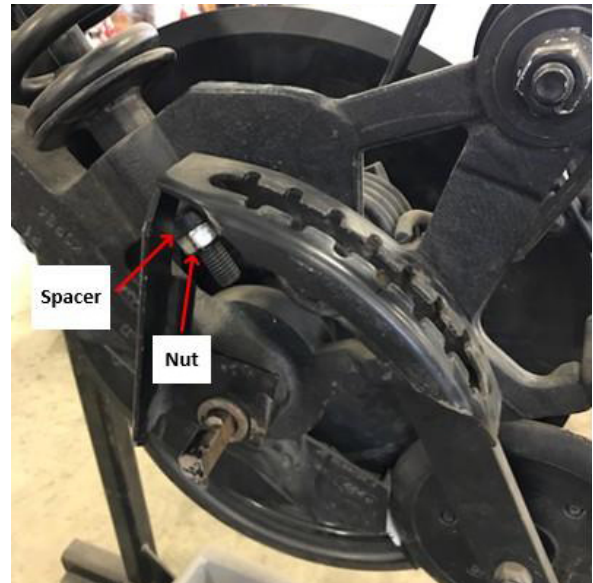


SeederForce Cylinder Installation

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:

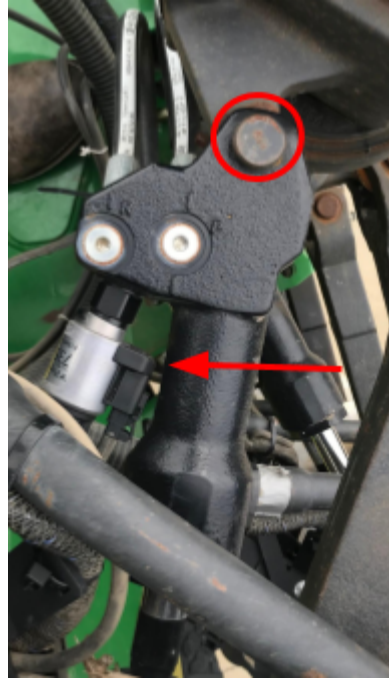
At the top of the downforce spring, drive the spring pin out with 1/4" punch provided in the kit.



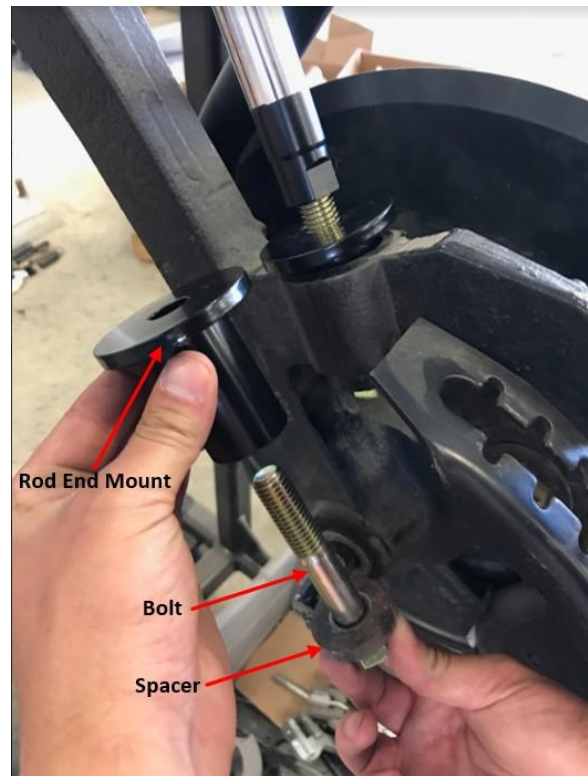
Step 3:

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.

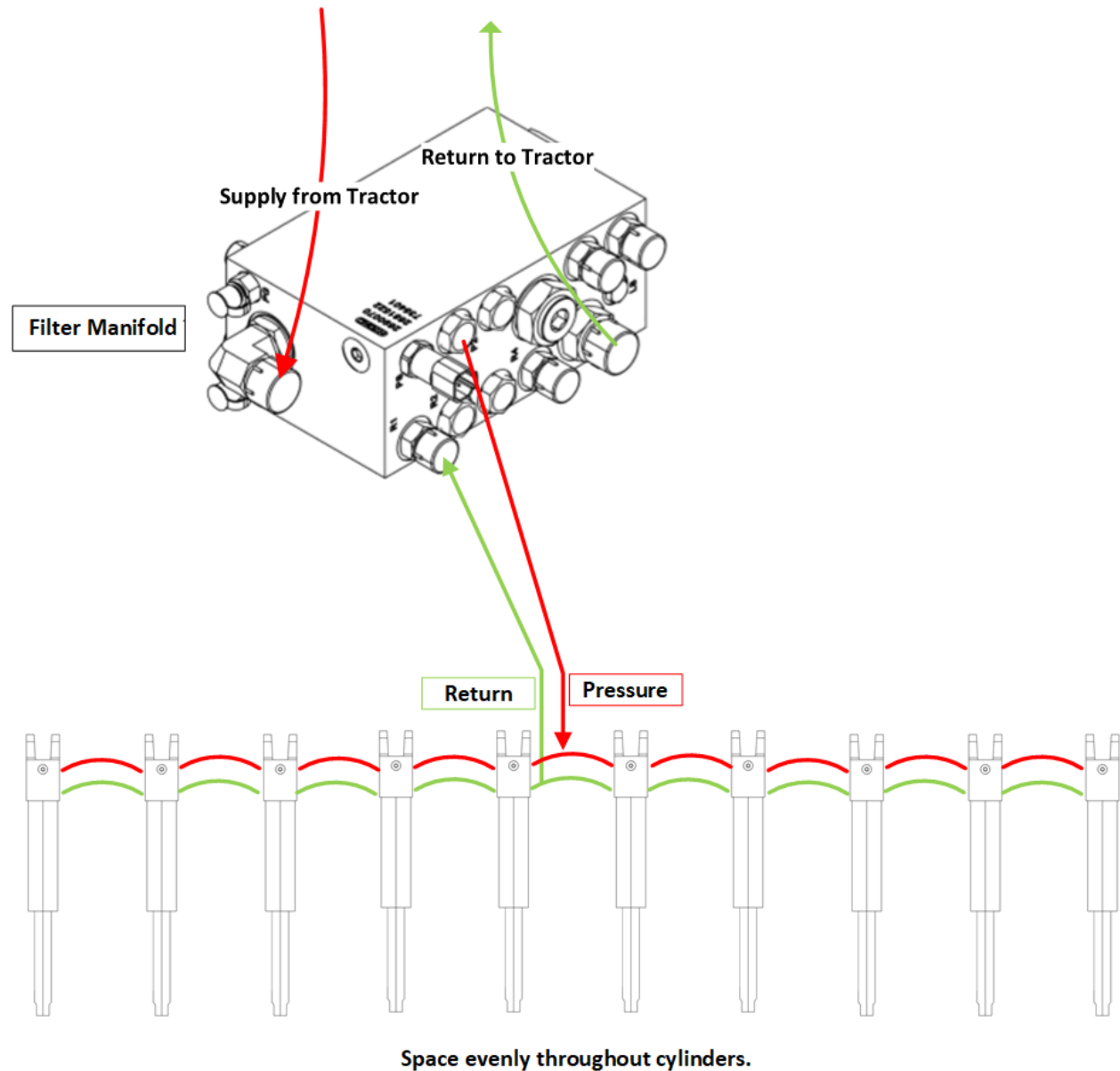


Hydraulic Routing to Filter Manifold

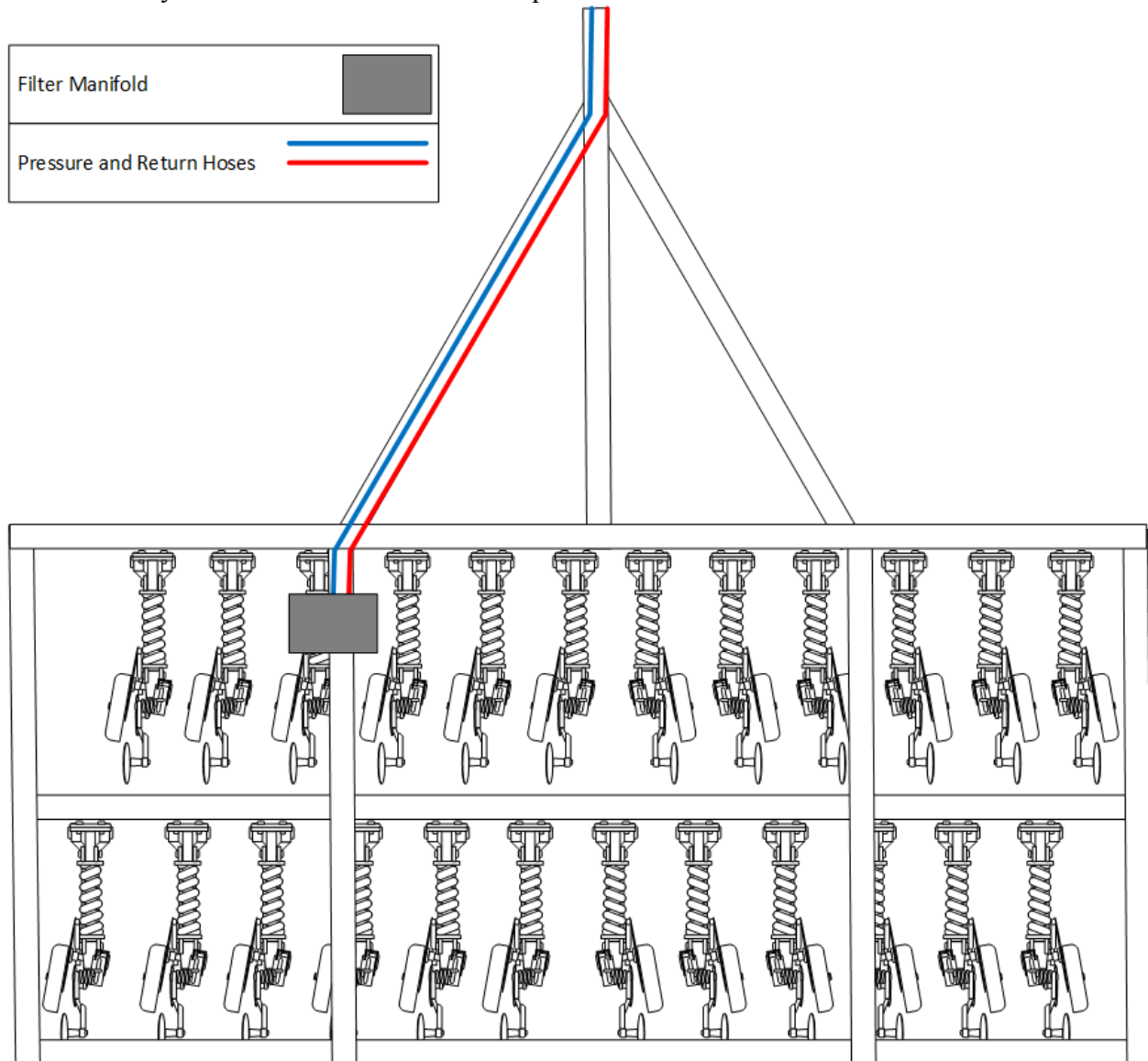
Note: Must be installed with a closed center hydraulic system.

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 Command Hydraulics.



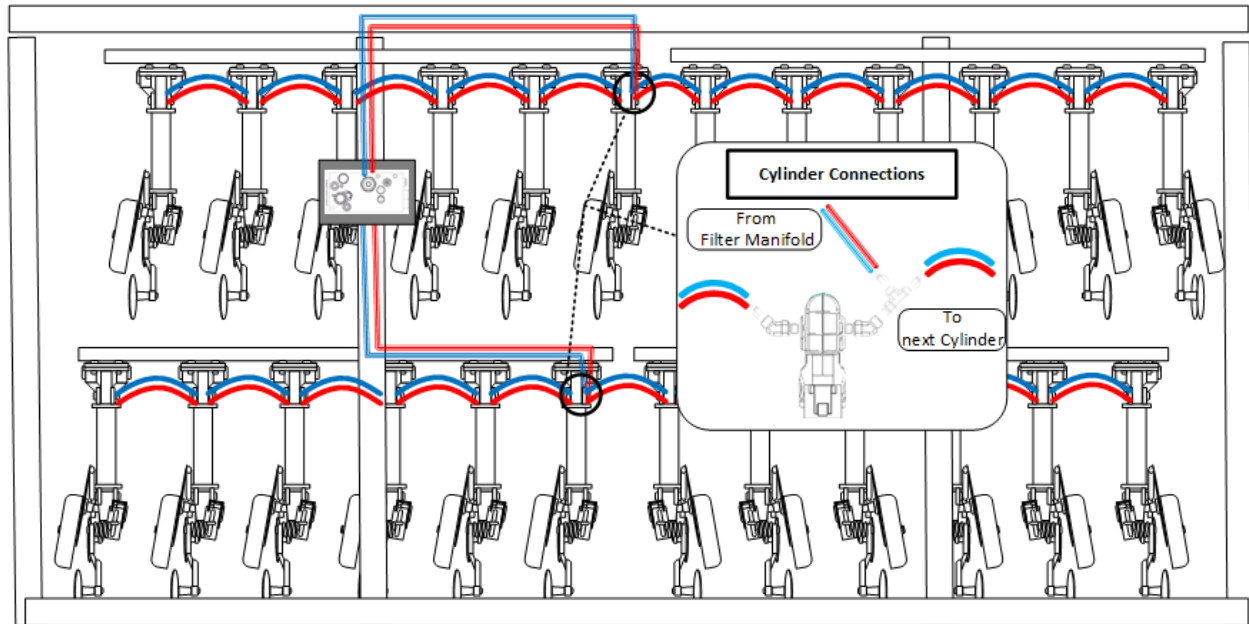
Start the hydraulic lines routing at the filter manifold. Locate the Hitch to Filter Manifold Hose Kit and connect the hose assembly with a red label to the “P” port on the Filter Manifold, and the hose assembly with the blue label to the “R” port.



Hydraulic Routing from Filter Manifold to Row Units

Step 1:

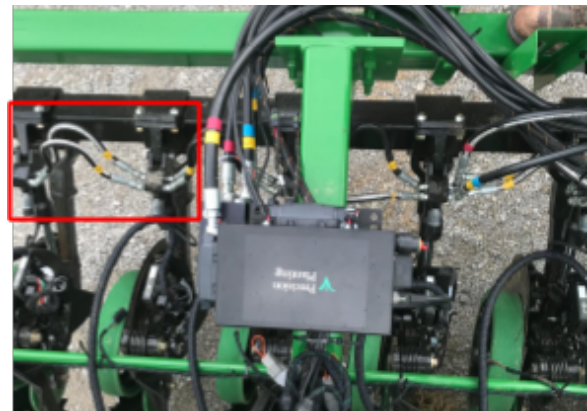
From the Filter Manifold route a Pressure and Return line to each rank of the drill. Use P1 (Pressure port 1) & R1 (return port 1) for the front rank of the drill, and R2 & P2 for the rear rank. Locate the area where you want to install the inner row hydraulic line tees. If possible, T as close as possible to the middle of each section. **Use the diagram below for clarification.**



Step 2:

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.

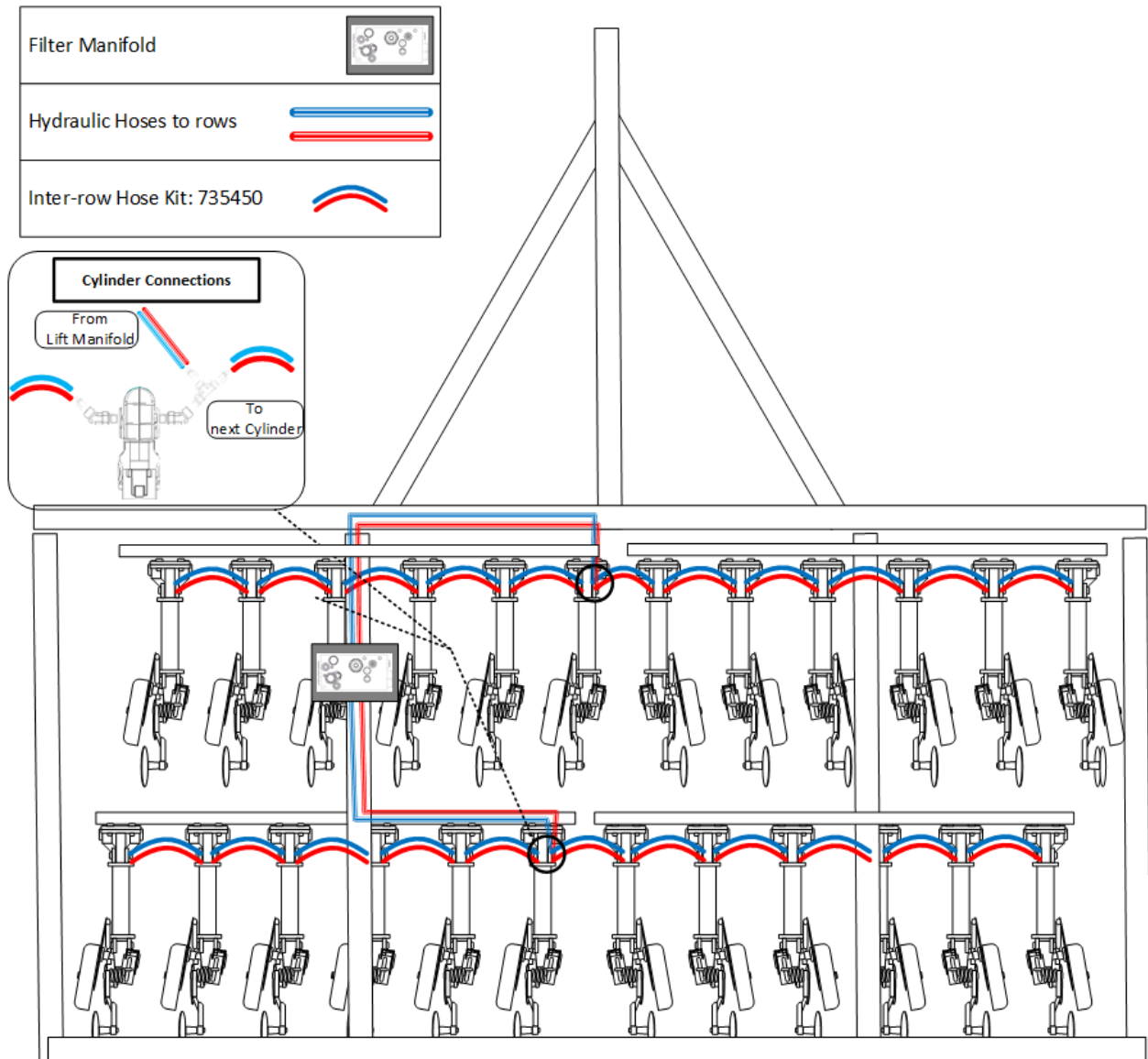
Note: When routing hydraulic lines around Rockshaft cylinders and between Rockshaft sections, longer hydraulic hose kits may be required for additional clearance.



Step 3:

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

Hydraulic Routing Overview



John Deere Manifold Bypass

Step 1:

Remove the John Deere Hydraulic valve controlling the seeding ranks. (shown in picture)



Step 2:

Install the cavity plug shown in the seeding manifold.

