

9936-20

Frame Lift/lower and Central Fill Fan Circuit

FIG. 3: The frame lift/lower and central fill fan circuit operates the lift and lower operations of the planter. This circuit also operates the central fill system fan circuit.

This picture is an example of one tractor hydraulic hose connections. If the tractor's hydraulic ports are different, follow the wording for correct connections.

NOTE: Tractor return line connection is an example. See your tractor dealer for specific line location.

NOTE: Tractor return line must hook up to a 0 pressure return that dumps straight into reservoir.

Tractor Remote Hydraulic Connections for the Lift/lower and Central Fill Fan:

Connect the 1/2 inch hydraulic hose labeled Fan Case Drain hose to the tractor zero pressure return (1). The case drain must have zero back pressure. This hydraulic hose drains excess oil from the fan motor.

Connect the 3/4 inch hydraulic hose labeled Lift Pressure to the tractor outlet showing an extended cylinder (2) or a + symbol.

Connect the 3/4 inch hydraulic hose labeled Lift Return to the tractor outlet showing the retracting cylinder (3) or a - symbol.

NOTE: Machine Damage Risk:

Make sure the Fan Case Drain hose is connected first, prior to the pressure and return hoses being connected.

Make sure the Fan Case Drain hose is disconnected last, to prevent damage to the fan motor.

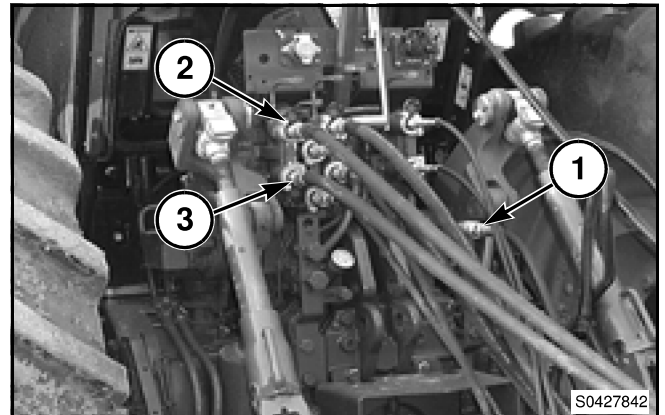


FIG. 3

Hydraulic Schematics

Frame Lift/Lower and Central Fill Fan Schematic

Fig. 2

- (1) Pilot Check Valve
 - Port 1 - Return
 - Port 2 - High Pressure - In
 - Port 3 - High Pressure - Exit
- (2) Flow Control Valve
 - Port 1 - High Pressure - In
 - Port 2 - Return
 - Port 3 - High Pressure - Exit
- (3) Central Fill Fan Motor - Right-Hand Rotation
 - (A) - Port A - High Pressure - In
 - (B) - Port B - Return
 - (C) - Port C - Case Drain
 - (D) - Port D - Return
 - (E) - Orifice
 - (F) - Built in make up valve
- (4) Check Valve
- (5) 4 x 12 Sequence cylinder - right-hand side
- (6) 4 x 12 Sequence cylinder - left-hand side
- (7) 3-1/2 x 12 Sequence cylinder
- (8) 4 x 12 Sequence cylinder
- (13) Yellow - Return
- (14) Red - Pressure
- (15) Green - Case Drain

The schematic shows the hydraulic lift cylinders in the retracted position, this is the normal operating position.

The oil dead heads in these cylinders and is forced to go through the central fill fan motor (blows the seed out to the individual row units).

When the operator gets to the end of the field the oil flow is reversed. The check valve in front of the fan motor stops the oil from going through the fan motor. Oil is forced to the base end of the lift cylinders to raise the row units off the ground.

Arrows indicate oil flow during normal field operation.