

# Hydraulic Fluid

## CHANGING HYDRAULIC FLUID



**CAUTION:** With tractor engine off, relieve the internal system hydraulic pressure before disconnecting any hydraulic lines or components.

At the beginning of each season, replace the fluid with new universal hydraulic transmission fluid.

Lower the planter to the ground.

Run the PTO pump for a short period to warm the fluid to suspend or trap fluid contaminants.

Stop the tractor engine and turn off the PTO.

**FIG. 21:** Drain the fluid by removing the filter and tank drain plug (1).

Remove the pump supply hose at the tank.

Remove the internal filter screen by removing the large hex fitting from the tank.

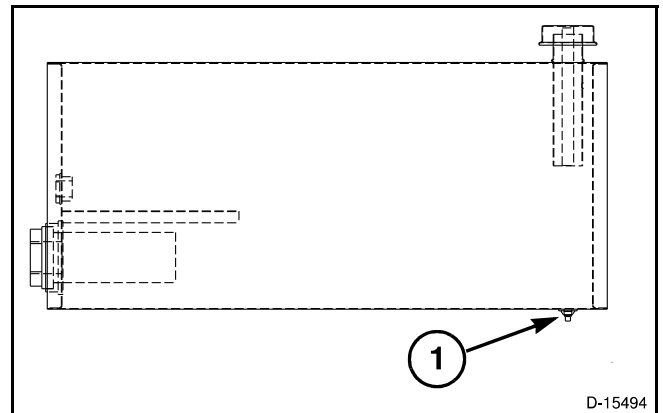
Clean screen. Install the fitting and connect the hose.

**IMPORTANT:** Do not use sealing tape to seal hex fitting pipe threads. Do not over tighten the fitting.

When completely drained, install new filter and drain plug.

Add about seven gallons of fluid to the tank through the fill port. Fill to the opening and install the breather dipstick.

Operate the pump for 10 to 20 seconds, then stop the tractor engine and check the fluid level. Add as needed.



**FIG. 21**

## HYDRAULIC FLUID FILTER

**FIG. 22:** After the first 50 hours use and at the beginning of each season thereafter, replace the spin-on type filter (1).

**NOTE:** Lift the filter-to-tank hose above the tank fluid level to minimize fluid loss when the filter is removed.

Always clean around the housing before removing the filter. Apply a light coat of oil on the new filter seal before installation.

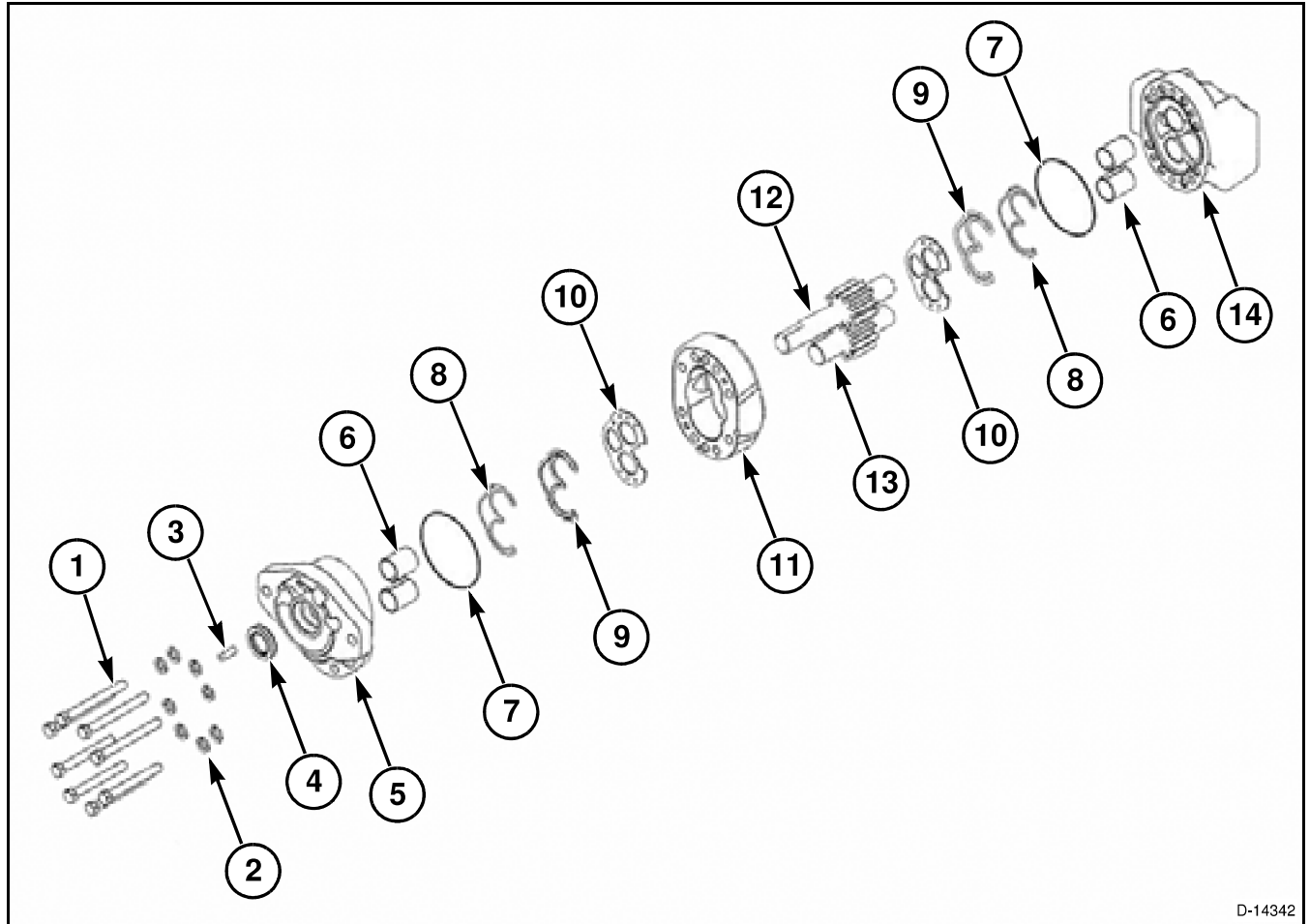
Check the fluid level and add as needed.



**FIG. 22**

# PTO PUMP

## GENERAL INFORMATION



D-14342

**FIG. 23**

**FIG. 23:** Pump Component List

- |                      |                     |
|----------------------|---------------------|
| (1) Stud             | (8) E-Ring Seal     |
| (2) Lock Washer      | (9) E-Ring Retainer |
| (3) Key (Not Used)   | (10) Pressure Plate |
| (4) Inner shaft seal | (11) Center Section |
| (5) Front Cover      | (12) Drive Gear     |
| (6) Bushing          | (13) Driven Gear    |
| (7) O-Ring           | (14) Rear Cover     |

## PTO Pump

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### SPECIFICATIONS

Theoretical Displacement: 54.6 cu cm/rev (3.33 cu in/rev)

Continuous Rated Pressure: 250 bar (3625 psi)

Operated Speed: 1000 rpm

Output: 38 lpm (10 gpm)

Rated Speed: 2500 rpm

Minimum Speed: 600 rpm

### OPERATION

**FIG. 24:** The PTO pump is attached to the tractor's PTO shaft. The PTO pump is for the hydraulic drive of row units and the blower motors for the air supply to the seed meters.



FIG. 24

### REMOVAL

Properly position the planter before beginning.



**WARNING:** Before working around or under the planter:

Place the planter on a flat, hard, level surface.

Set the brakes.

Shift to park or neutral position.

Lower implement.

Shut off the tractor engine.

Securely block planter tires.



**CAUTION:** With tractor engine off, relieve the internal system hydraulic pressure before disconnecting any hydraulic lines or components.