

DISASSEMBLY AND ASSEMBLY OF THE HYDRAULIC PUMP (VICKERS)

Model 19-22 and 19-23 Loaders

TRAINING TIME: 35 Min.

TOOLS AND MATERIALS:

- a. Mechanic's Wrench Set
- b. Drain Pan
- c. Oil Can with Pour Spout
- d. Arbor Press
- e. Oil Seal (Vickers No. 122626)
- f. "O" Ring (Vickers No. 84120-2 req'd)

JOB PROCEDURE:

Step 1—Drain the oil from the loader.

Note: The high pressure section of the pump may be serviced without removing the pump assembly from the tractor, but for training purpose remove pump.

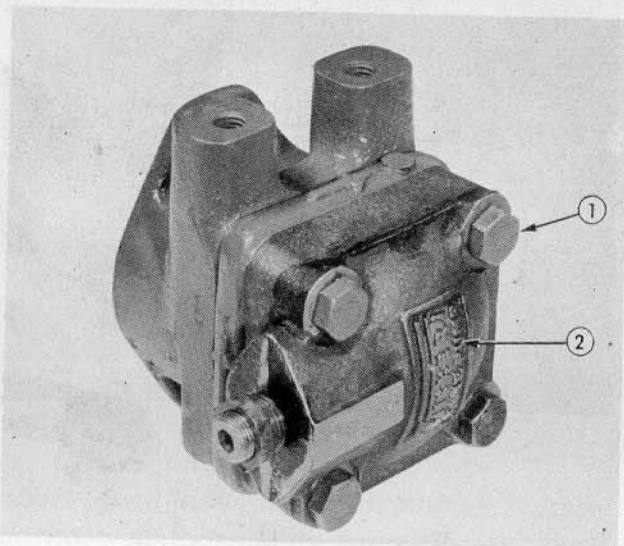


Fig. 28

Step 2—Remove the 4 cap screws, (1—Fig. 28) and remove the cover plate (2).

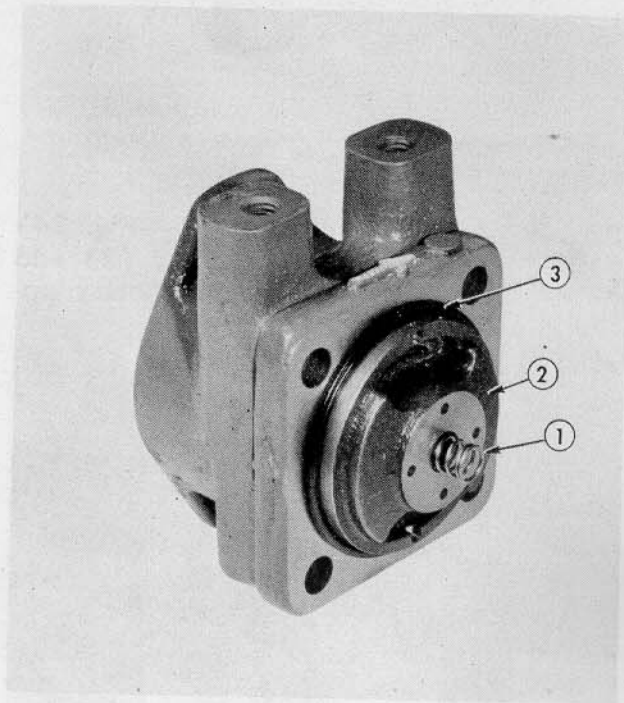


Fig. 29

Step 3—Remove the spring (1 — Fig. 29) pressure plate (2) and "O" ring seal (3).

Step 4—Before further disassembly, check the relative position of the ring, rotor and rotor vanes by checking the direction of the arrow on the ring.

DISASSEMBLY OF THE HYDRAULIC PUMP (VICKERS)

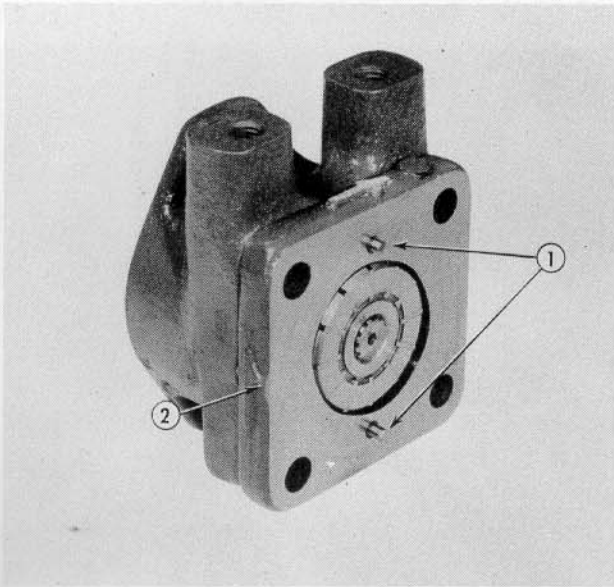


Fig. 30

Step 6—Remove locating pins (1—Fig. 30) and ring (2).

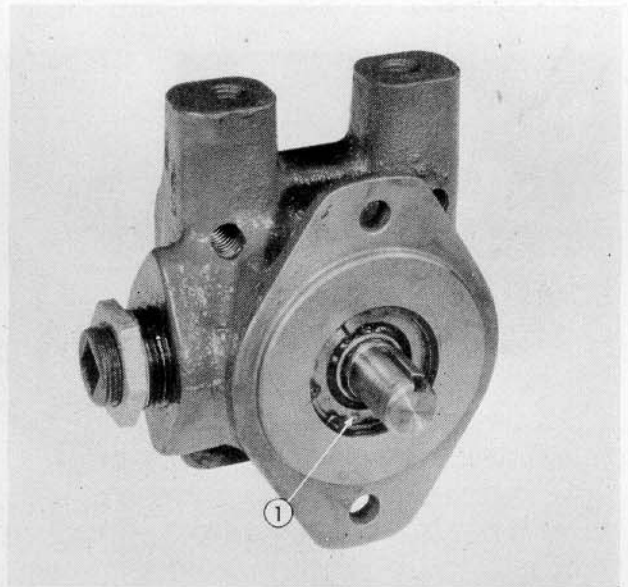


Fig. 32

Step 9—Remove the snap ring (1—Fig. 32).

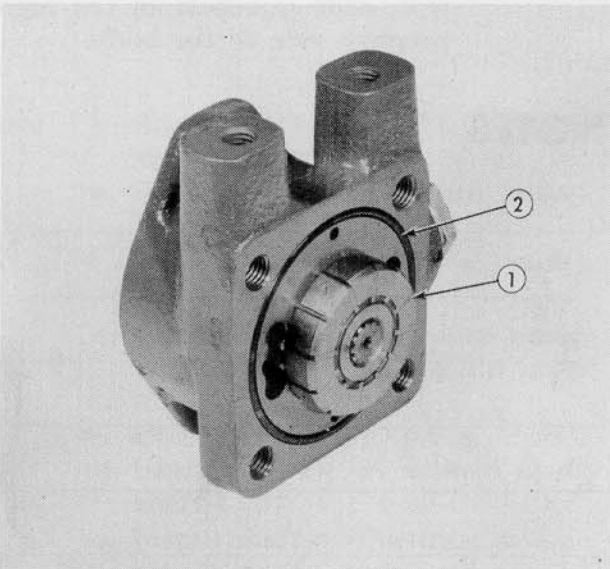


Fig. 31

Step 7—Remove the rotor (1—Fig. 31) being careful not to lose any of the vanes.

Step 8—Remove the "O" ring seal (2).

Note: The pump assembly must be removed from the tractor to service the low pressure end of the pump.

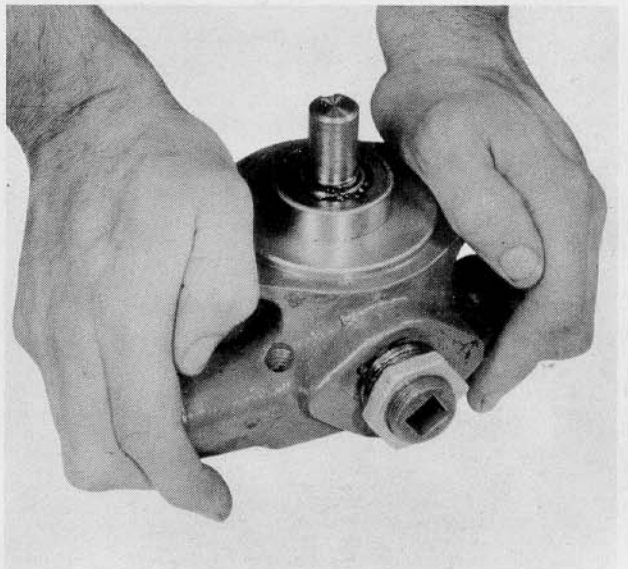


Fig. 33

Step 10—Remove the shaft and large bearing by placing the splined end of the shaft on a block of soft wood and pressing from the pump housing.

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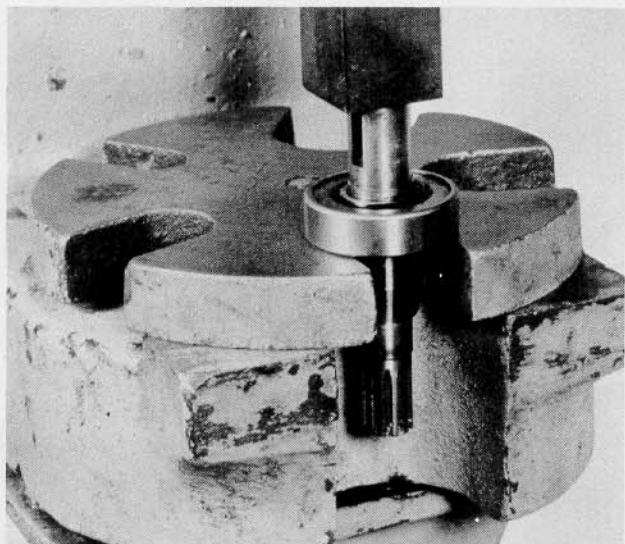


Fig. 34

Step 11—Remove the large bearing from the shaft using an arbor press.

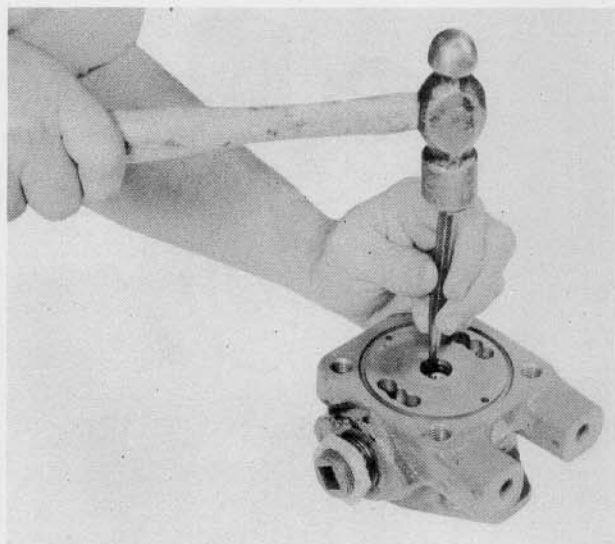


Fig. 36

Step 13—Remove the small bearing from the pump body by tapping it out with drift punch from the high pressure side of the body.

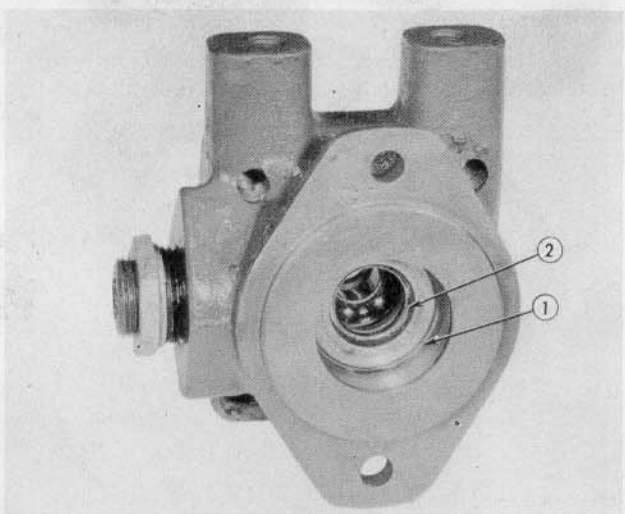


Fig. 35

Step 12—Remove the seal (1—Fig. 35 and spacer (2).

NOTES

ASSEMBLY OF THE HYDRAULIC PUMP (VICKERS)

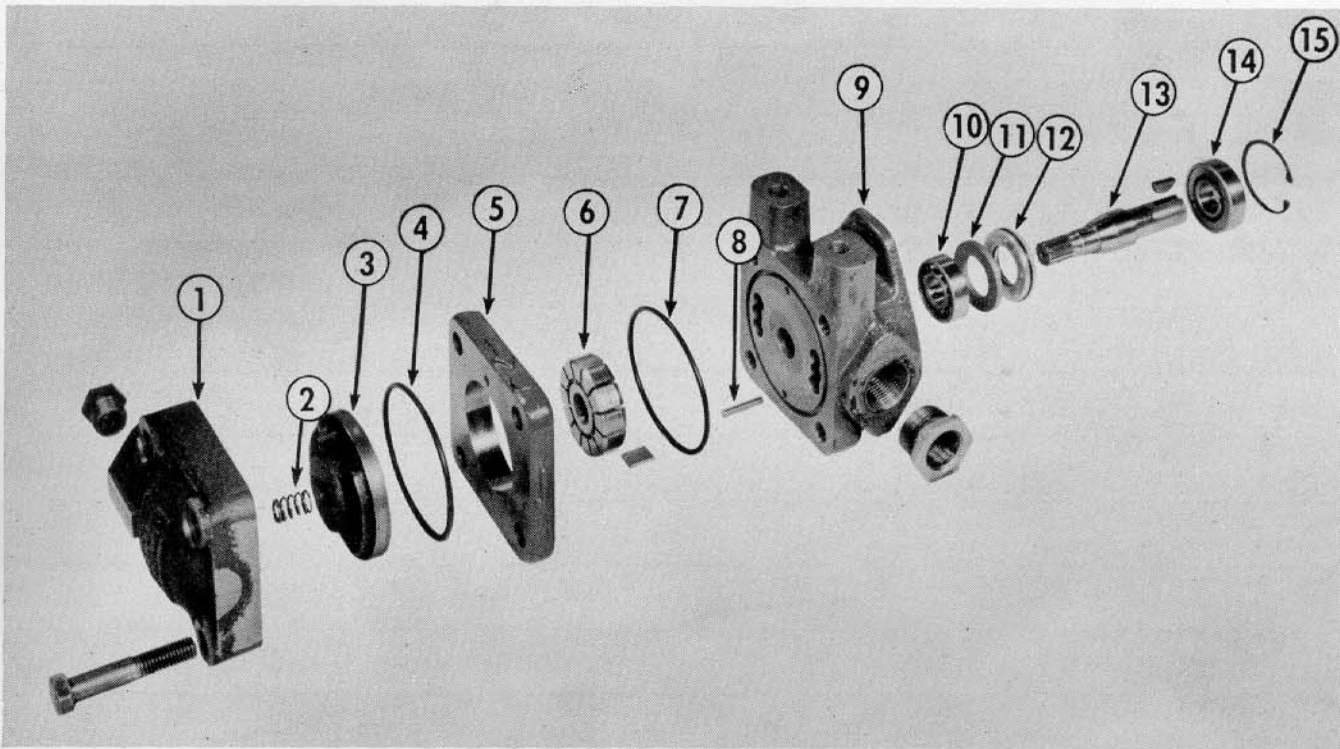


Fig. 37

Step 14—Reassembly of Low Pressure section of pump.

- a. Press bearing (10), into pump body (9).
- b. Install spacer (11), in pump body.
- c. Press oil seal (12), into pump body. Be sure sealing lip faces out.
- d. Using an arbor press, install bearing (14), on splined shaft (13).
- e. Install shaft and bearing assembly in pump body and tap in place with a soft hammer.
- f. Install snap ring (15), in place. See Step 9, Fig. 32.

Step 15—Assembly of high pressure section of the Hydraulic pump.

- a. Install "O" Ring seal (7), in pump body.

- b. Install pins (8), in pump body.
- c. Install rotor assembly (6), on splined end of shaft.
- d. Install ring (5), in place on locating pins.
Be sure arrows on ring point in direction of crankshaft travel.
- e. Install "O" ring (4).
- f. Install pressure plate (3), on pins.
- g. Install spring (2), and cap (1).
- h. Tighten the 4 cap screws securely. Torqued to 110 ft. lbs.

Step 16—Install pump.

Step 17—Refill the system with oil and operate a few times with air vent screw loose to work air out of system.