



**\*\*\*USE EXPLODED VIEW ON BACK FOR REFERENCE\*\*\***

To Replace the Seal Kit/Input Shaft

1. With the pump held tightly in a vise with the input shaft facing down, loosen bolts (25 & 26) and remove.
2. Remove the charge pump (15).
3. Remove the o-ring (24) from charge pump.
4. Remove the stator (21) and the rotor (20).
5. Remove the pin (22) from input shaft (46).
6. Loosen the four assembly bolts (12) and remove.
7. Remove the head (2).
8. Remove the wear plate (31) from head.
9. Remove the cylinder block (subassembly of 27, 28, 29 and 30). It is recommended to turn the housing on its side while doing this to keep the cylinder block assembly from coming apart.
10. Return the housing to the vise and remove the spring (32) from input shaft (46).
11. Remove swash plate assembly (subassembly of 33, 34, 35, 36 and 37).
12. Remove the block (40) from the control arm (39).
13. Remove the journals (38).
14. Turn the housing over and place on the work surface. Remove the outer snap ring (50).
15. Remove the shaft seal (51).
16. If changing the input shaft, remove the inner snap ring (51).
  - a. Remove the input shaft (46).
  - b. Replace with new input shaft.
  - c. Install the inner snap ring (51).
17. Turn the housing on its side and remove the snap ring (44) from around the control arm.
18. Remove the oil seal (43) and replace.
19. Install the snap ring (44).
20. Place the housing back in the vise. Replace the journals (38). We recommend using grease to hold them in place so they do not become dislodged during re-assembly.
21. Install the block (40) on the control arm (39).
22. Install the swash plate assembly (subassembly of 33, 34, 35, 36 and 37) on the block.
23. Install the spring (32) on the input shaft (46).
24. Remove the housing from the vise and turn on its side, install the cylinder block assembly (subassembly of 27, 28, 29 and 30).
25. Return the housing to the vise.
26. Install the wear plate (31) onto the head (2).
27. Please the new housing gasket (45) on the housing.
28. Return the head to the housing. Install the four assembly bolts (12) and tighten to 18.5 ft-lb +/- 2 ft-lb. Make sure to bring the bolts down equally.
29. Loosen and remove the locking nut (10) from the bypass valve.
30. Remove the bypass valve and replace the seal (9).
31. Install the bypass valve and tighten to 5 ft-lb +/- 1 ft-lb.
32. Replace the locking nut (9) and tighten to 14.5 ft-lb +/- 2 ft-lb.
33. Loosen and remove the check valve plug (5).
34. Replace the o-ring (7) and install in the head. Tighten to 18 ft-lb +/- 2 ft-lb.
35. Repeat for the other side of the head.
36. Install the pin (22) in the input shaft (46).
37. Place the rotor (20) over the pin.
38. Place the stator (21) over the rotor.
39. Replace the o-ring (24) in the charge pump housing (15).
40. Place the charge pump and install the bolts (25 and 26). Tighten the bolts to 18.5 ft-lb +/- 2 ft-lb.

### To Replace the Charge Relief Valve

1. Loosen the relief valve plug (16) and remove.
2. Remove the spring (14).
3. Remove the valve (13).
4. Install the new valve (13).
5. Install the new spring (14).
6. Install the relief valve plug and tighten to 18.5 ft-lb +/- 2 ft-lb.

### To Replace the Check Valve Kit

1. Loosen and remove the check valve plug (5).
2. Remove the spring (4).
3. Remove the check valve (6).
4. Install the new check valve (6).
5. Install the new spring (4).
6. Install the new check valve plug (5). Tighten to 18 ft-lb +/- 2 ft-lb.

