

Product: VIBRATORY COMPACTOR  
Model: CS-423E VIBRATORY COMPACTOR ASH  
Configuration: CS-423E Vibratory Compactor ASH00001-UP (MACHINE)

## Disassembly and Assembly CP-433E, CS-423E and CS-433E Vibratory Compactors Machine Systems

Media Number -KENR3584-05

Publication Date -01/09/2008

Date Updated -29/09/2008

i02077205

# Piston Pump (Axle Propel and Drum Propel) - Disassemble

SMCS - 5070-015

## Disassembly Procedure

Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	1P-1859	Retaining Ring Pliers	1
B	1P-1853	Retaining Ring Pliers	1
C	1P-1861	Retaining Ring Pliers	1
D	1P-1857	Retaining Ring Pliers	1

### Start By:

- A. Remove the piston pump (axle propel and drum propel). Refer to Disassembly and Assembly, "Piston Pump (Axle Propel and Drum Propel) - Remove".
-

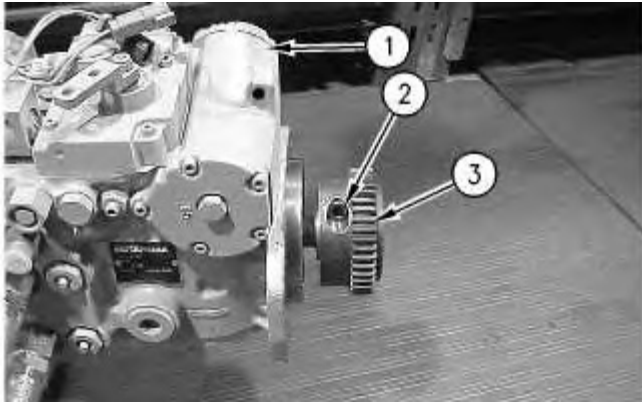


Illustration 1

g00856355

1. Loosen bolt (2) and remove hub (3) from propel pump (1) .

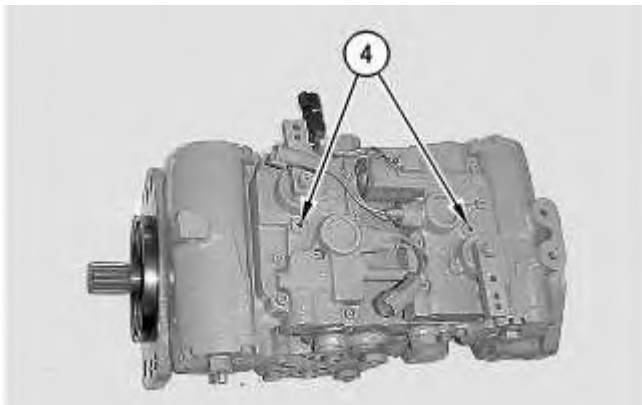


Illustration 2

g00856356

2. Remove plugs (4). Remove the O-ring seals from the plugs.

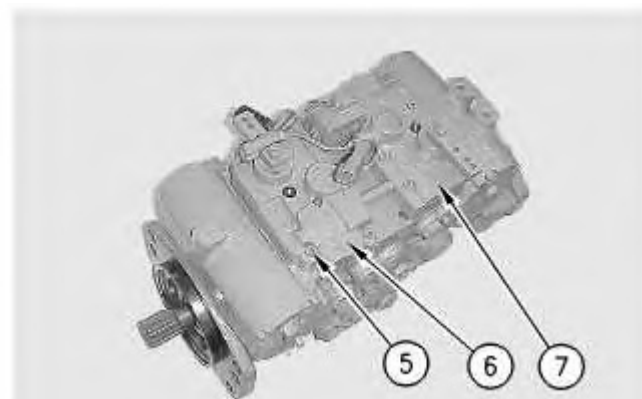


Illustration 3

g00856357

3. Remove screws (5) and control assembly (6) and (7) as a unit from the propel pump.

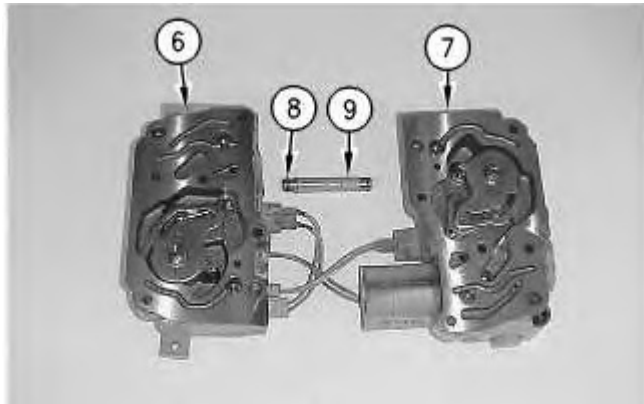


Illustration 4

g00856358

4. Separate control assembly (6) and (7). Remove connecting tube (9). Remove O-ring seals (8) from the connecting tube.

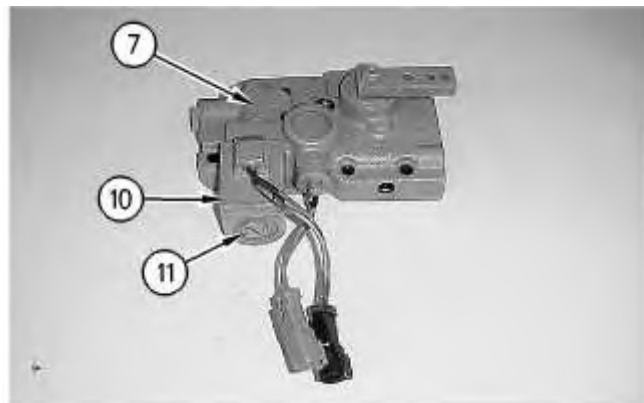


Illustration 5

g00856359

5. Remove nut (11), solenoid (10), and the washer from control housing (7) .

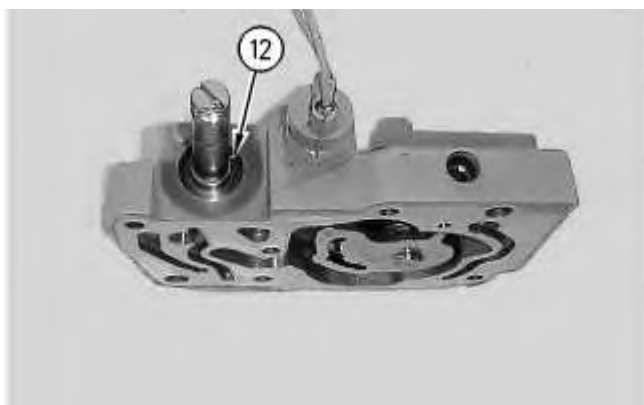


Illustration 6

6. Use Tooling (A) to remove retaining ring (12) .

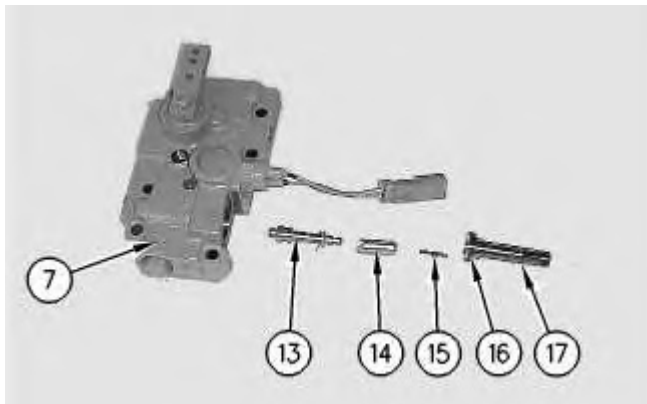


Illustration 7

**⚠ WARNING**

**Sudden release of spring force can cause injury.**

**To prevent the possibility of injury, follow the procedure to relieve the spring pressure.**

7. Remove stem (17), spring (15), spacer (14), and spool (13) from control housing (7). Remove O-ring seal (16) from stem (17) .

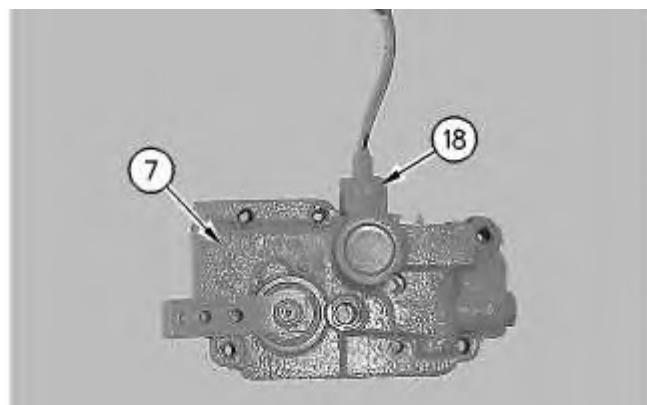


Illustration 8

8. Remove neutral start switch (18) from control housing (7) .

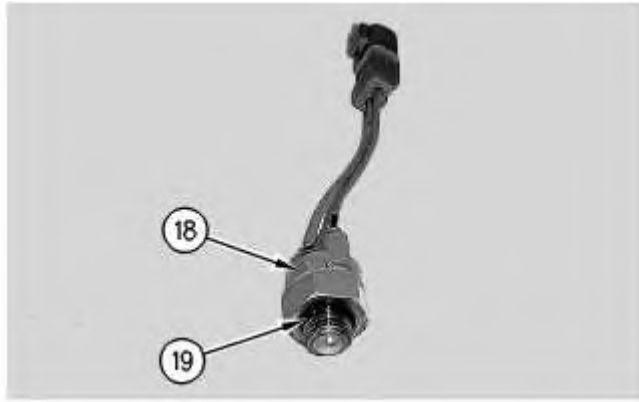


Illustration 9

g00856364

9. Remove O-ring seal (19) from neutral start switch (18) .

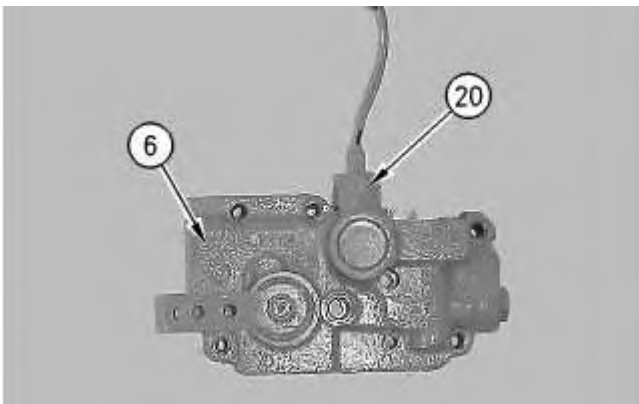
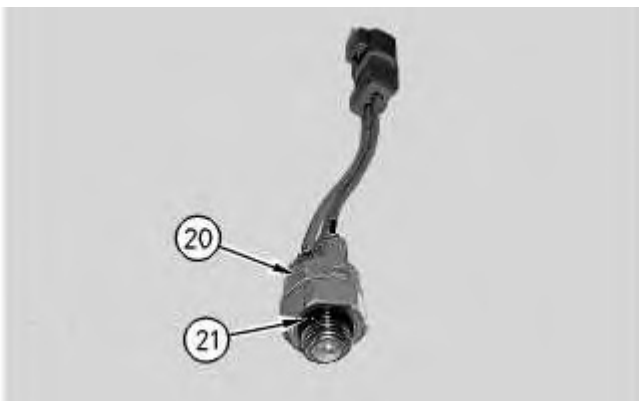


Illustration 10

g00856365

10. Remove neutral start switch (20) from control housing (6) .



11. Remove O-ring seal (21) from neutral start switch (20) .

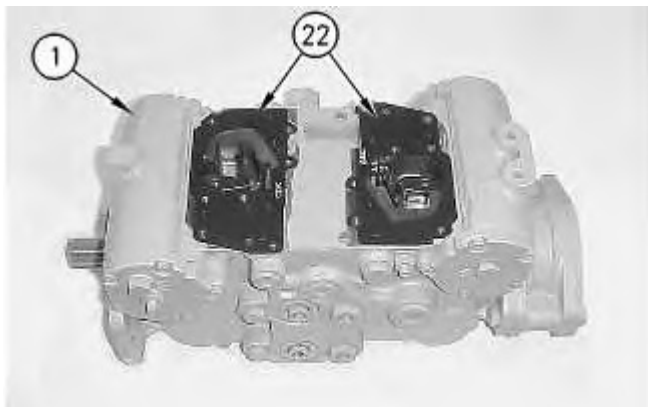


Illustration 12

12. Remove gaskets (22) from propel pump (1) .

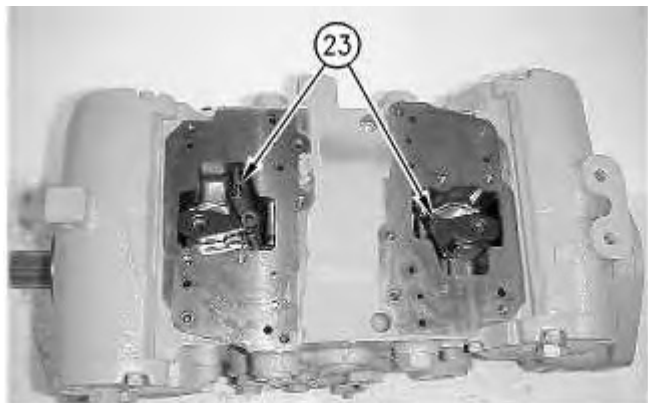


Illustration 13

13. Remove summing links (23) .
-

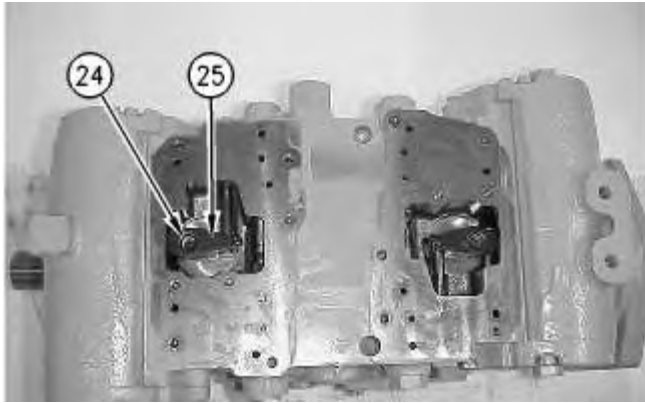


Illustration 14

g00856371

14. Remove screws (24), feedback links (25), and adjusting links.

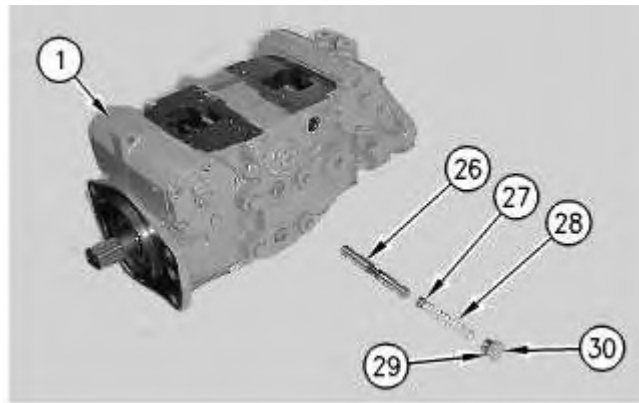


Illustration 15

g00856373

## **WARNING**

**Sudden release of spring force can cause injury.**

**To prevent the possibility of injury, follow the procedure to relieve the spring pressure.**

15. Remove plug (30), control spring (28), and control spring adapter (27). Remove spool assembly (26) from propeller pump (1). Remove O-ring seal (29) from plug (30) .

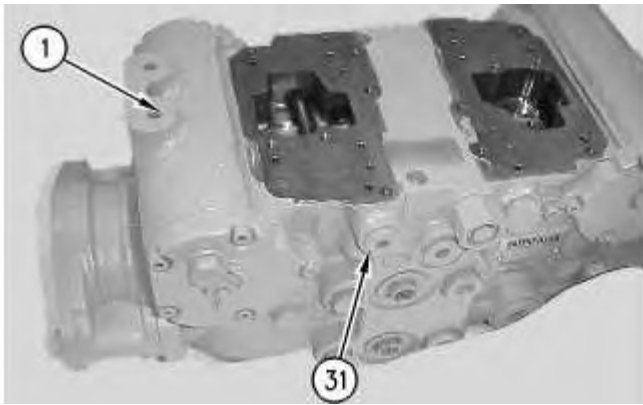


Illustration 16

g00856375

16. Remove plug (31) from propel pump (1). Remove the O-ring seal from the plug.

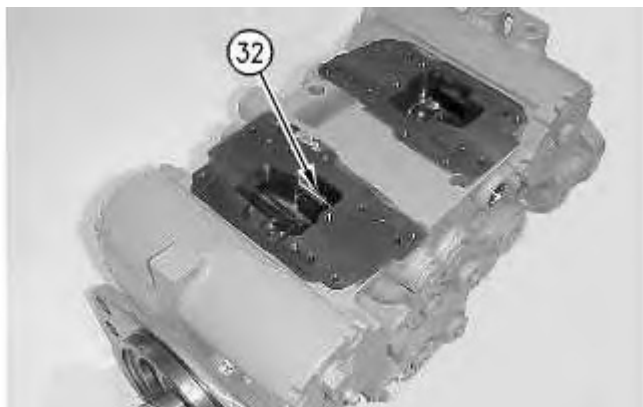


Illustration 17

g00856377

17. Repeat Steps 15 and 16 in order to remove control spool assembly (32) .

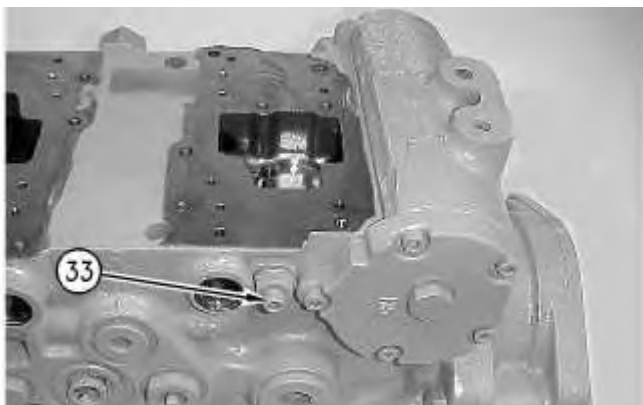


Illustration 18

g00856378

18. Remove the neutral adjustment screw (33) .



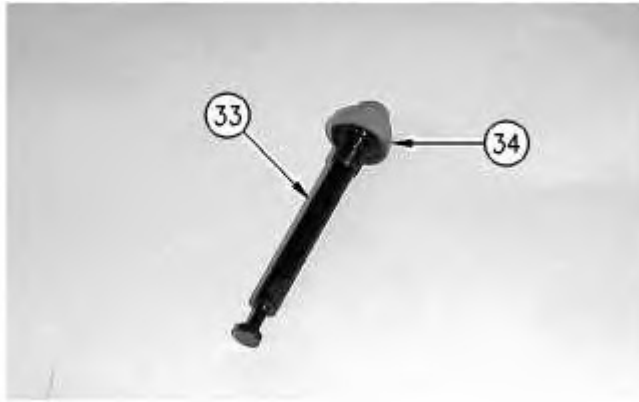


Illustration 19

g00856380

19. Remove seal nut (34) from neutral adjustment screw (33) .

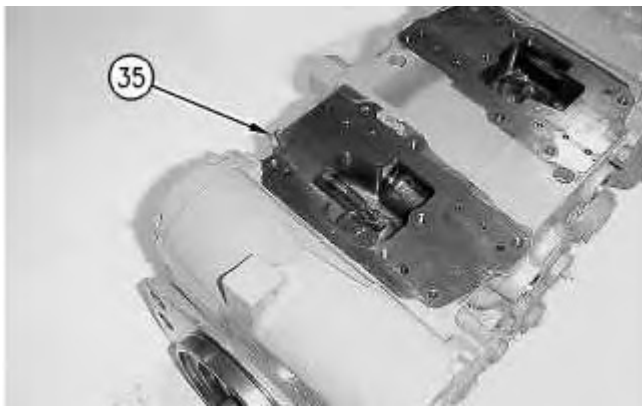
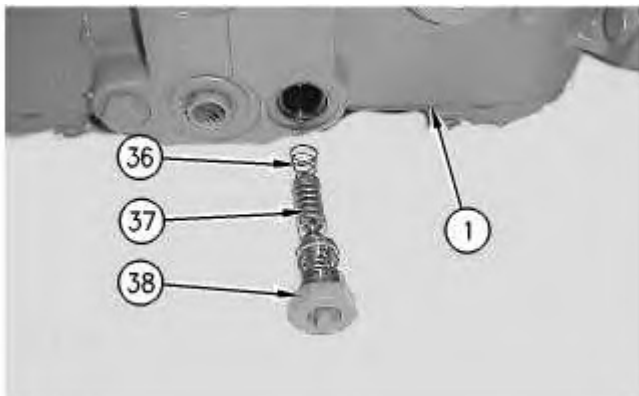


Illustration 20

g00856381

20. Repeat Steps 18 and 19 in order to remove neutral adjustment screw (35) .





**Sudden release of spring force can cause injury.**

**To prevent the possibility of injury, follow the procedure to relieve the spring pressure.**

---

21. Remove bypass valve assembly (38). Remove relief valve (37) and spring (36) from propel pump (1) .

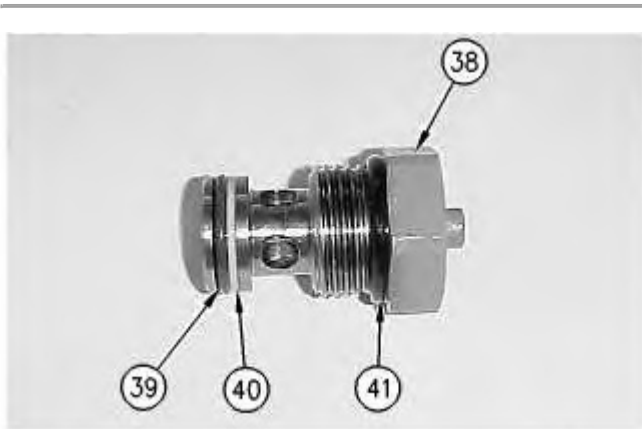


Illustration 22

g00856383

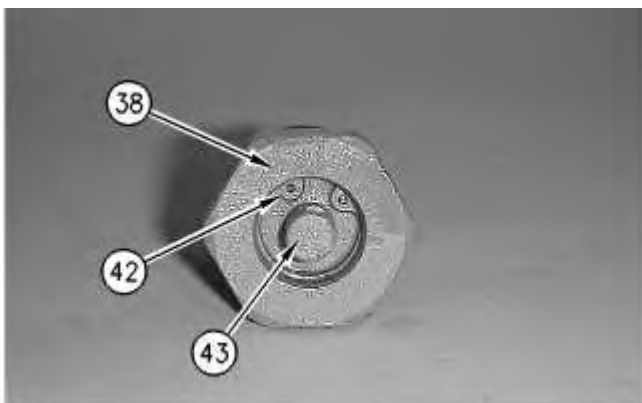


Illustration 23

g00856385

22. Remove O-ring seal (39) and O-ring seal (41) from bypass valve assembly (38). Remove backup ring (40) from the bypass valve assembly.

23. Use Tooling (B) to remove retaining ring (42). Remove bypass valve (43) and O-ring seals from the bypass valve assembly.



Illustration 24

g00856386

24. Repeat Steps 21 through 23 in order to remove the remaining bypass valve assemblies and the system check relief valves (44) .

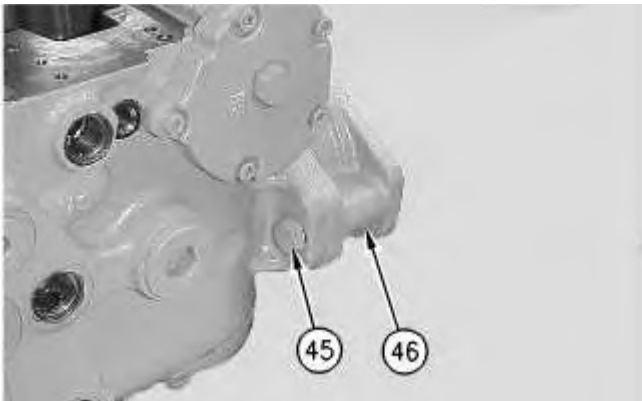


Illustration 25

g00856387

25. Remove bolts (45) and mounting flange (46) .
-



Illustration 26

g00856388

26. Remove O-ring seal (47) from propeller pump (1) .

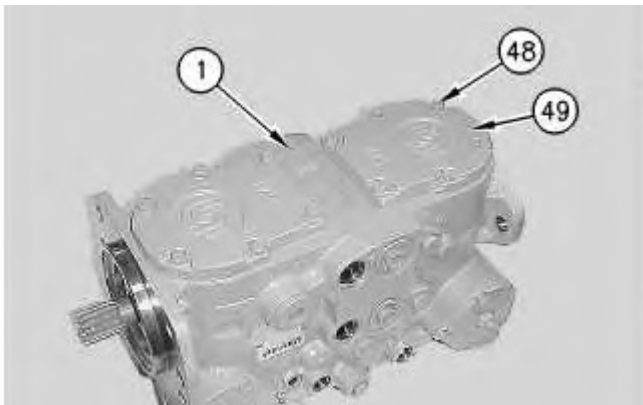


Illustration 27

g00856389

**Note:** Discard bolts (48) after removal.

27. Remove bolts (48) and cover (49) from propeller pump (1) .

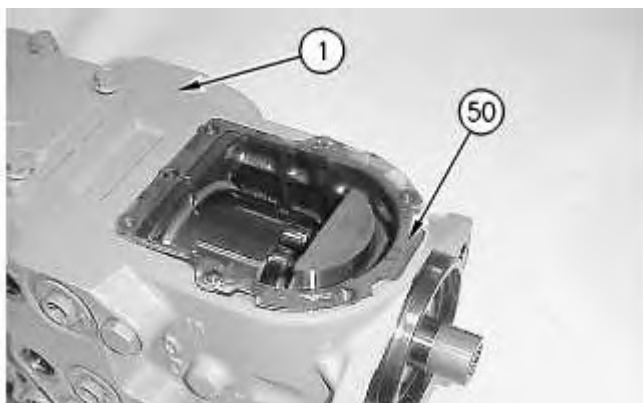


Illustration 28

g00856391

28. Remove gasket (50) from propel pump (1) .

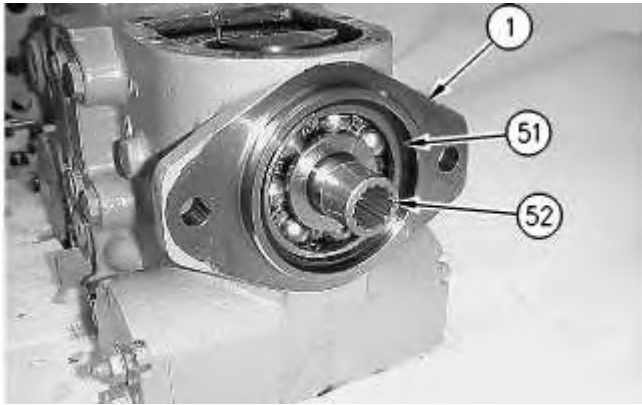


Illustration 29

g00856392

29. Use Tooling (C) to remove retaining ring (51). Remove shaft (52) from propel pump (1) .

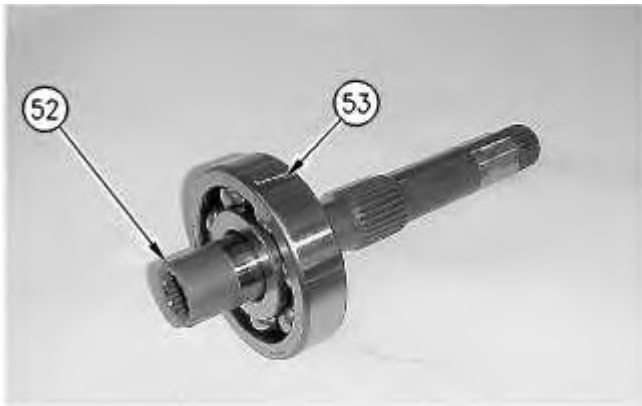
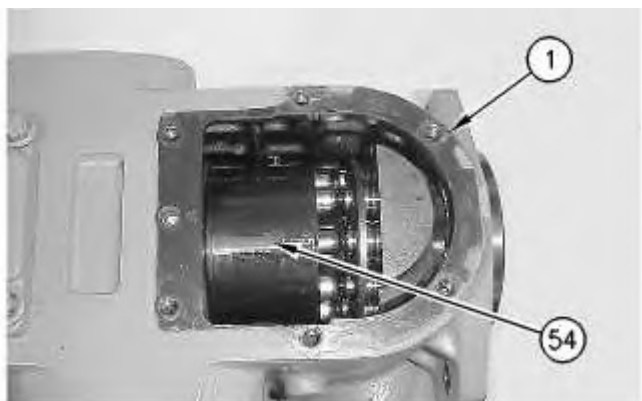


Illustration 30

g00856393

30. Place shaft (52) in a suitable press and remove bearing (53) .



31. Remove cylinder block assembly (54) from propel pump (1) .

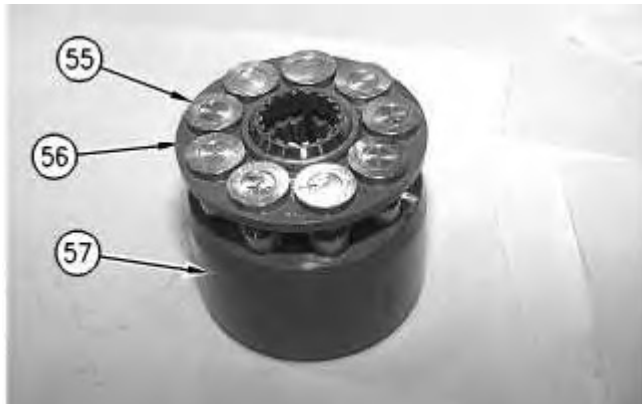


Illustration 32

32. Remove piston assemblies (55) and slipper retainer (56) from cylinder block (57) .

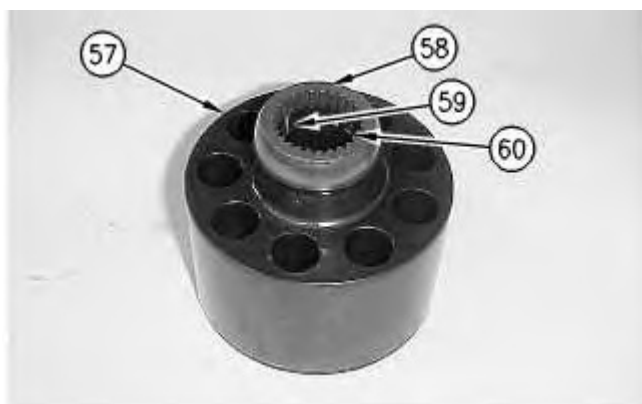


Illustration 33

33. Remove slipper retainer guide (58), pins (59), and pin retainer (60) from cylinder block (57) .
-

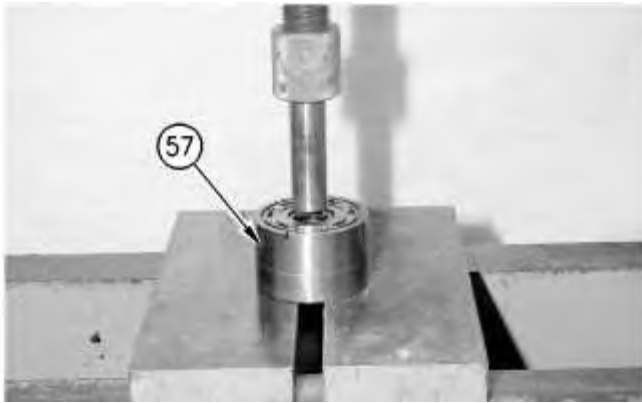


Illustration 34

g00856398

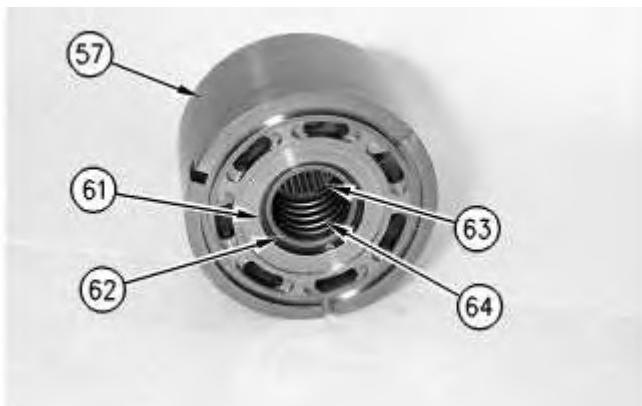


Illustration 35

g00856399

## **WARNING**

**Possible injury can result when removing the retaining ring and spring.**

**Spring force will be released when the retaining ring is removed.**

**Be prepared to hold the cylinder assembly as the retaining ring is removed.**

- 
34. Put cylinder block (57) in a suitable press. Install a suitable drive plate of the same size as washer (62). Put slight compression on washer (62) with the press. Use Tooling (D) to remove retaining ring (61). Slowly release the spring compression.
  35. Remove washer (62), spring (64), and washer (63) from the cylinder block.
-

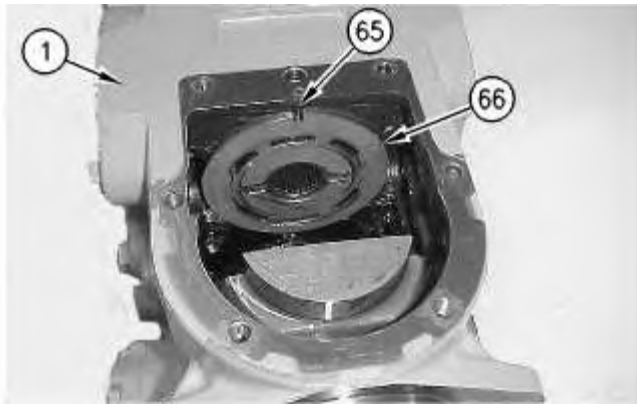


Illustration 36

g00856400

36. Remove pin (65) and valve plate (66) from propel pump (1) .

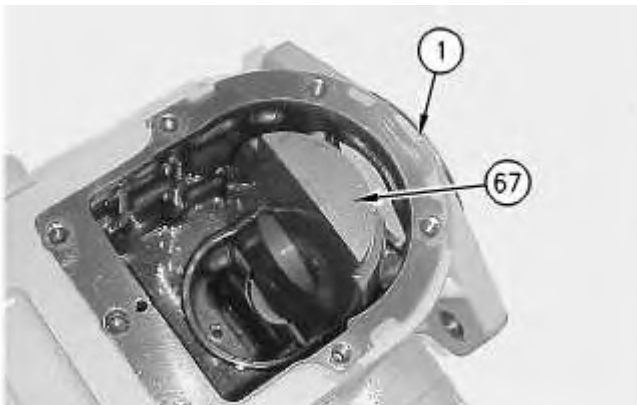


Illustration 37

g00856402

37. Remove swashplate (67) from propel pump (1) .

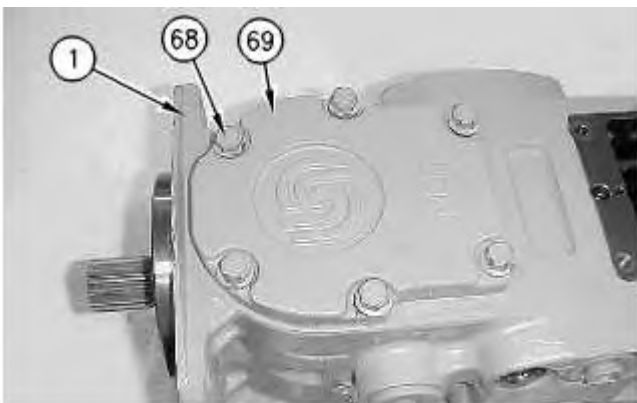


Illustration 38

g00856403

**Note:** Discard bolts (68) after removal.



38. Remove bolts (68) and cover (69) from propel pump (1) .

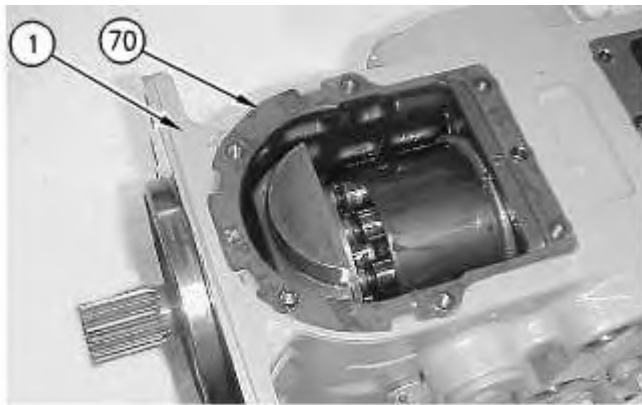


Illustration 39

g00856404

39. Remove gasket (70) from propel pump (1) .

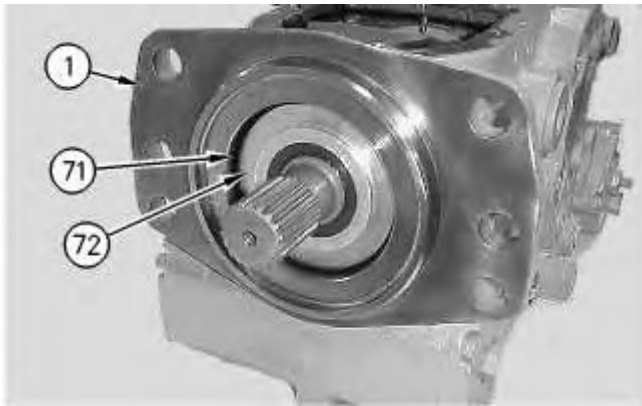


Illustration 40

g00856405

40. Use Tooling (C) to remove retaining ring (71). Remove seal cover (72) from propel pump (1) .

---

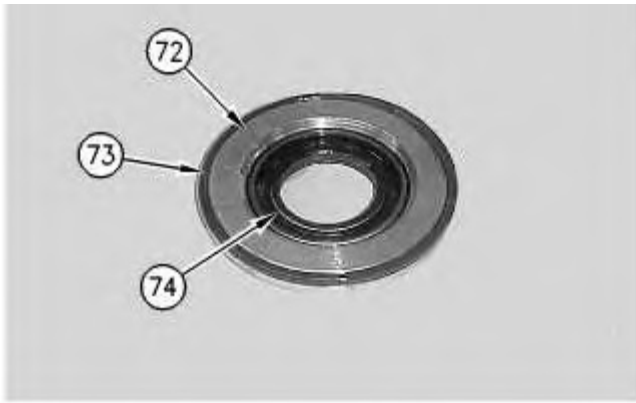


Illustration 41

g00856406

41. Remove O-ring seal (73) and lip type seal (74) from seal cover (72) .

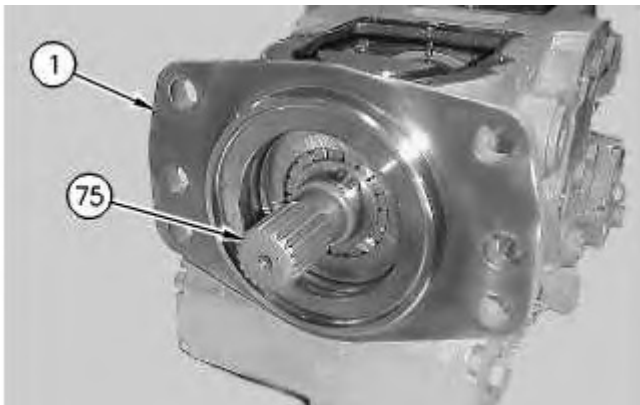


Illustration 42

g00856407

42. Remove shaft (75) from propel pump (1) .

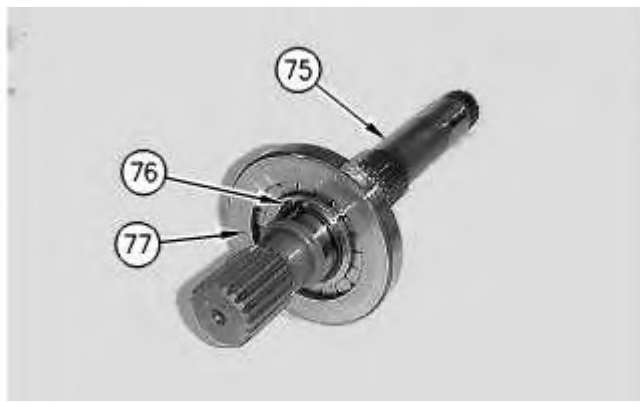


Illustration 43

g00856409

43. Use Tooling (A) to remove retaining ring (76). Remove bearing (77) from shaft (75) .

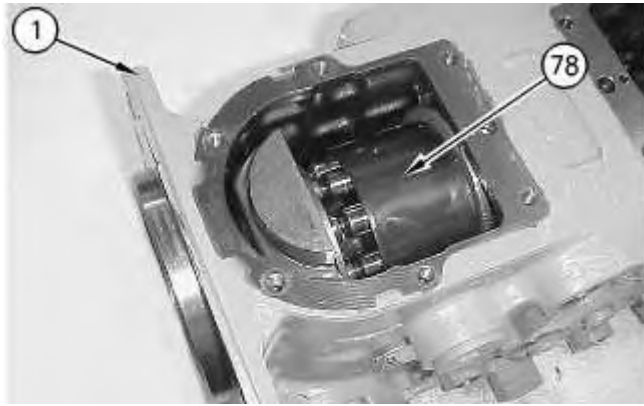


Illustration 44

g00856410

44. Remove cylinder block assembly (78) from propel pump (1) .

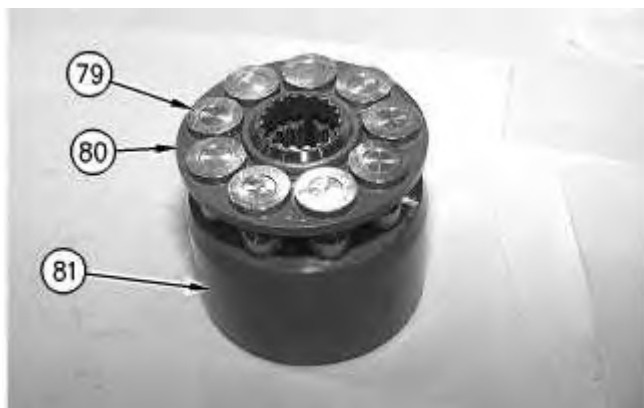
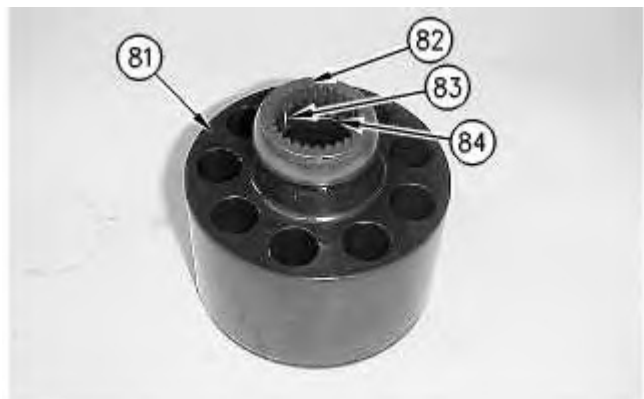


Illustration 45

g00856412

45. Remove piston assemblies (79) and slipper retainer (80) from cylinder block (81) .



46. Remove slipper retainer guide (82), pins (83), and pin retainer (84) from cylinder block (81) .

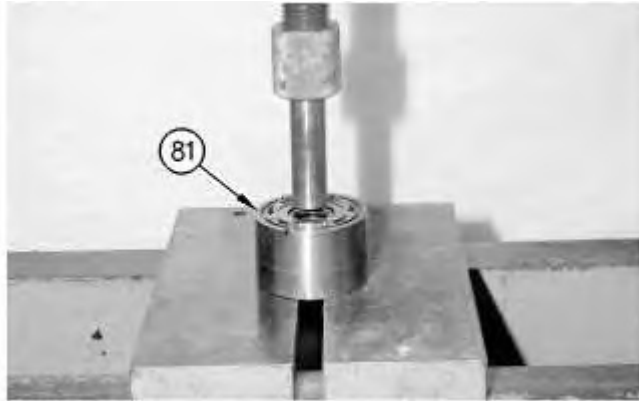


Illustration 47

g00856416

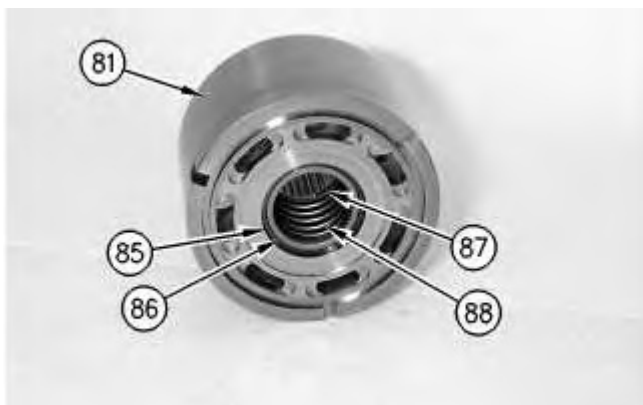


Illustration 48

g00856417

**! WARNING**

**Possible injury can result when removing the retaining ring and spring.**

**Spring force will be released when the retaining ring is removed.**

**Be prepared to hold the cylinder assembly as the retaining ring is removed.**

47. Put cylinder block (81) in a suitable press. Install a suitable drive plate of the same size as washer (86). Put slight compression on washer (86) with the press. Use Tooling (D) to remove retaining ring (85). Slowly release the spring compression.
48. Remove washer (86), spring (88), and washer (87) from the cylinder block.

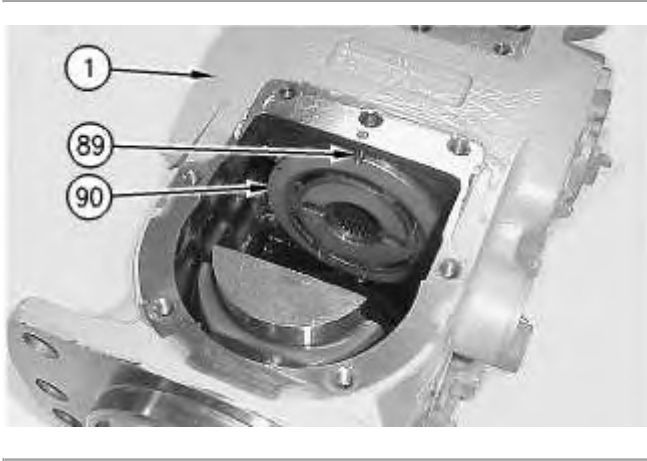


Illustration 49

g00856419

49. Remove pin (89) and valve plate (90) from propel pump (1) .

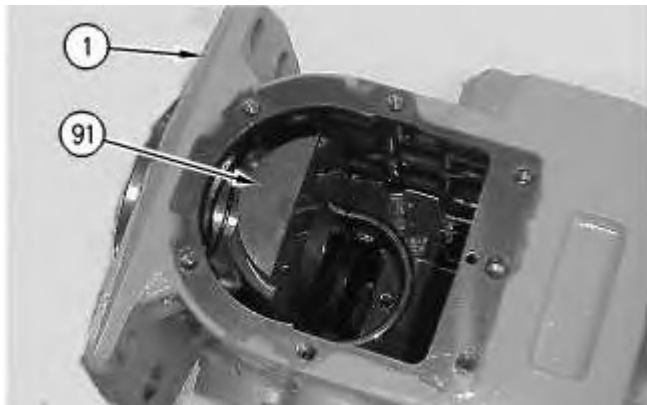


Illustration 50

g00856420

50. Remove swashplate (91) from propel pump (1) .
-



Illustration 51

g00856421

51. Remove bearings (92) and the coupling on the inside of propel pump (1) .

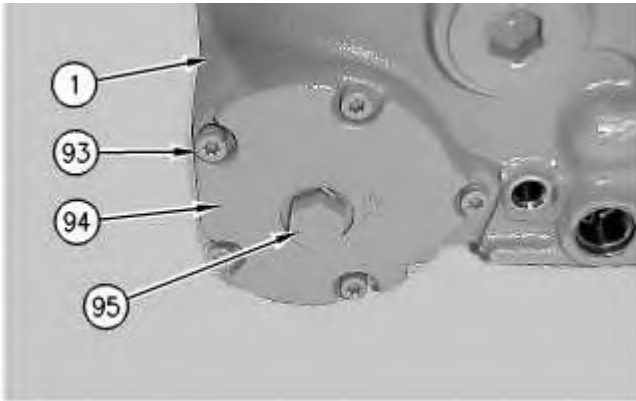
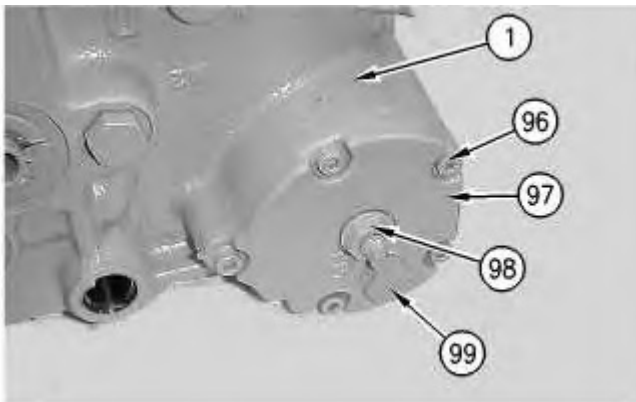


Illustration 52

g00856423

52. Remove plug (95) from cover (94). Remove the O-ring seal from the plug.
53. Remove screws (93) and cover (94) from propel pump (1). Remove the gasket from cover (94) .



54. Remove plug (99) from cover (97). Remove the O-ring seal from plug (99) .
55. Remove seal nut (98) from cover (97) .
56. Remove screws (96) and remove the servo assembly from propel pump (1) .



Illustration 54

g01067491

57. Remove cover (97) from servo assembly (101) .
58. Remove gasket (100) from cover (97) .
59. Remove bearing (102) from servo assembly (101) .

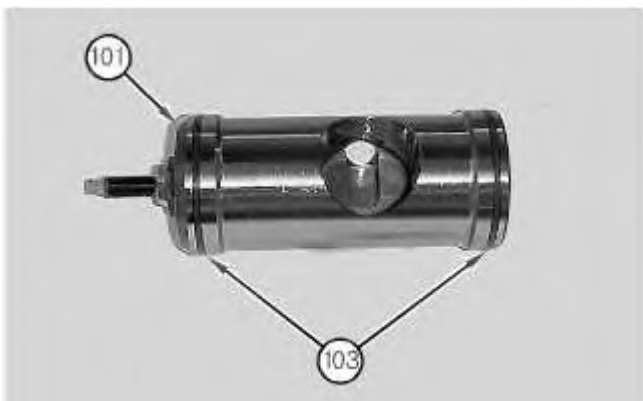


Illustration 55

g01067495

60. Remove rings (103) from servo assembly (101) .
-



Illustration 56

g01067497

61. Remove O-ring seals (104) from servo assembly (101) .

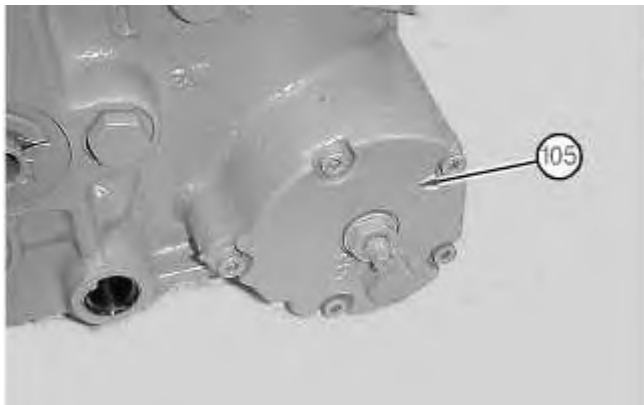


Illustration 57

g01067500

62. Repeat Steps 52 through 61 in order to remove servo assembly (105) .

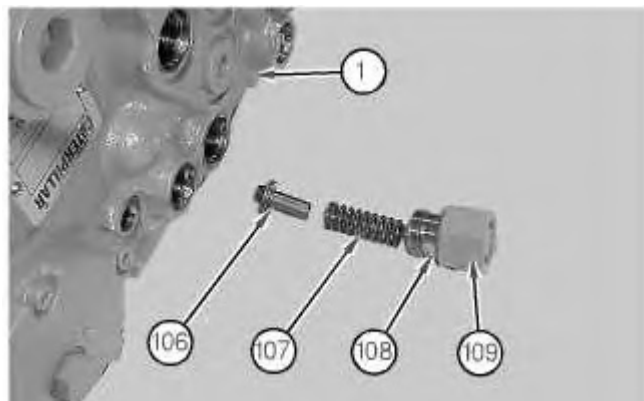


Illustration 58

g01067503



Thank you so much for reading.  
Please click the “Buy Now!”  
button below to download the  
complete manual.



After you pay.

You can download the most  
perfect and complete manual in  
the world immediately.

Our support email:

[ebooklibonline@outlook.com](mailto:ebooklibonline@outlook.com)