13. Remove the washer.

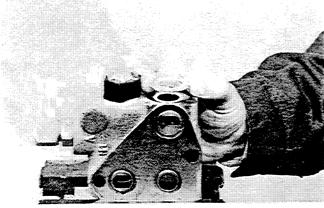


Figure 60

14. Remove the backup ring.

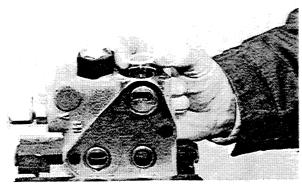


Figure 61

15. Remove the O-ring.

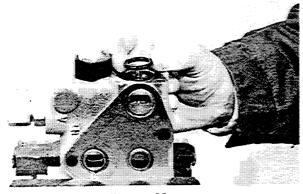
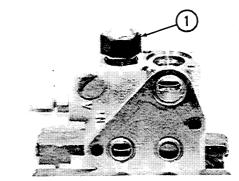


Figure 62

16. Loosen and remove the secondary relief valve.



1. Secondary Relief Valve Figure 63

17. Remove the spring.

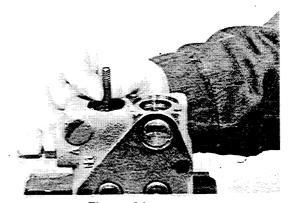
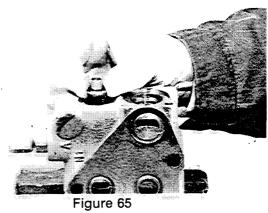
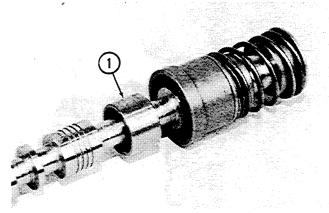


Figure 64

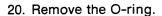
18. Remove the poppet.



19. Put the spool on a clean bench. Remove the spool sleeve from the spool.



 Spool Sleeve Figure 66



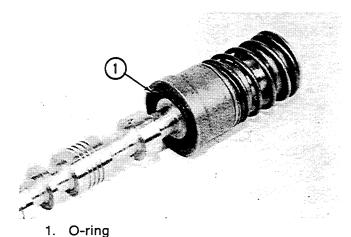


Figure 67

21. Put the spring compressor tool shown in Figure 5 on the spool. Put the spool in the vise.

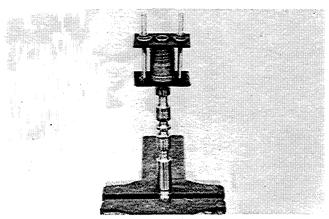


Figure 68

22. Tighten the nuts on the bolts for the spring compressor tool so that the snap ring can be removed. Remove the snap ring.

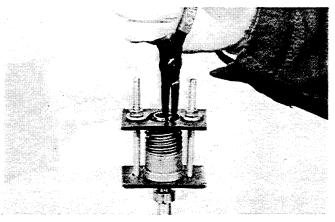


Figure 69

23. Loosen the nuts on the bolts for the spring compressor tool to release the tension on the spring.

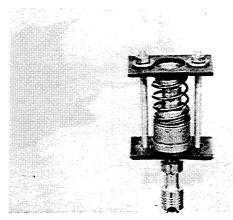
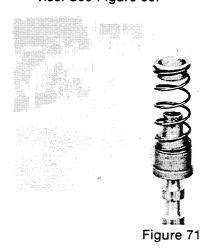


Figure 70

24. Remove the top plate of the spring compressor tool. Lower the bottom plate and bolts to the vise. See Figure 99.



25. Remove the spring seat.

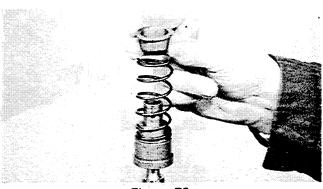


Figure 72

26. Remove the spring.

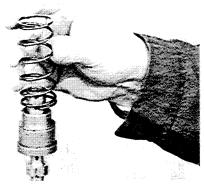


Figure 73

27. There is a plunger and spring in the spool which keep the steel balls against the spring seat. Push down the plunger with a punch and lift up the spring seat.

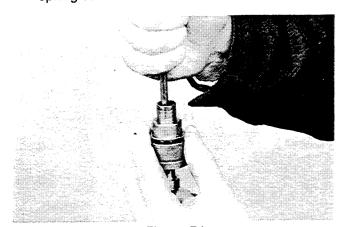


Figure 74

28. Release the plunger and spring slowly. Remove the spring seat from the spool.

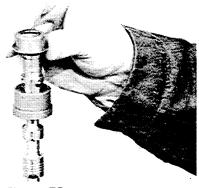


Figure 75

29. Remove the plunger.

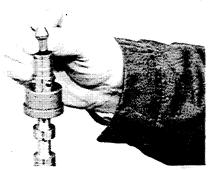


Figure 76

30. Remove the spring.

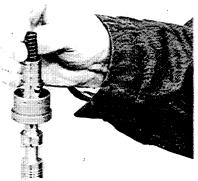


Figure 77

31. Remove the four steel balls from the spool.



Figure 78

32. Remove the detent sleeve.

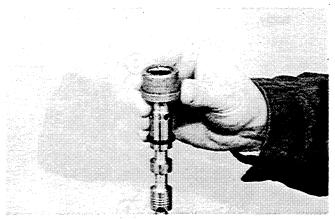


Figure 79

33. Remove the quad ring.

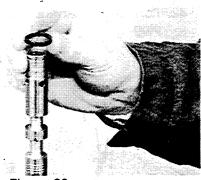


Figure 80

34. Put the secondary relief valve in the vise with soft jaws.

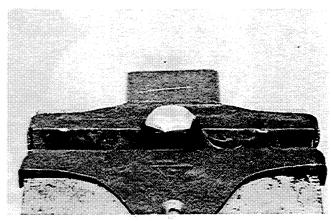
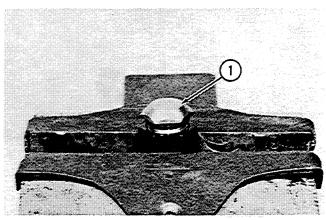


Figure 81

35. Loosen and remove the plug from the body.



1. Plug

Figure 82

36. Remove the spring.

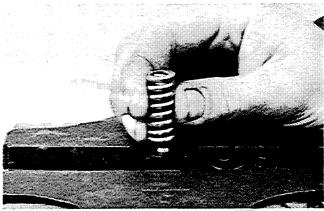


Figure 83

37. Remove the plunger.

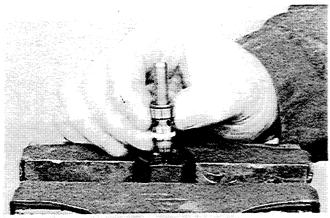
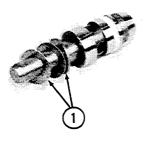


Figure 84

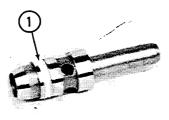
38. Remove the shims from the plunger.



1. Shims

Figure 85

39. Remove the seal from the plunger.



1. Seal

Figure 86

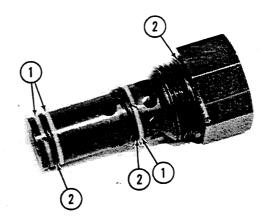
40. Remove the O-ring from the plug.



1. O-ring

Figure 87

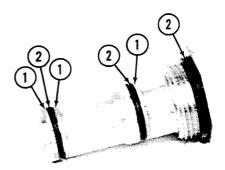
41. Remove the O-rings and backup rings from the body.



- 1. Backup Rings
- 2. O-rings

Figure 88

42. Remove the O-rings and backup rings from the plug.

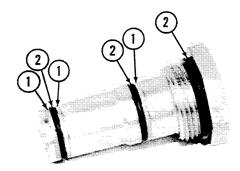


- 1. Backup Rings
- 2. O-rings

Figure 89

Assembly

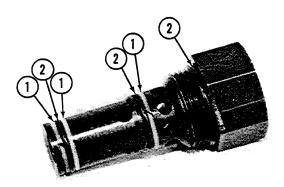
- 1. See page 8009-48 and inspect the parts of the lift section.
- 2. Install new O-rings and backup rings on the plug.



- 1. Backup Rings
- 2. O-rings

Figure 90

3. Install new O-rings and backup rings on the body of the secondary relief valve.



- 1. Backup Rings
- 2. O-rings

Figure 91

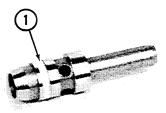
4. Install a new O-ring on the plug for the secondary relief valve.



1. O-ring

Figure 92

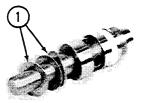
5. Install a new seal on the plunger.



1. Seal

Figure 93

6. Install the shims that were removed from the plunger.



1. Shims

Figure 94

7. Put the body of the secondary relief valve in the vise with soft jaws. Install the plunger in the body.

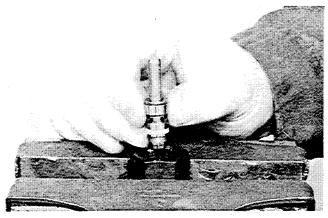


Figure 95

8. Install the spring.

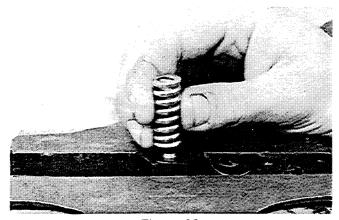


Figure 96

9. Put clean oil on the O-ring on the plug. Install the plug in the body.

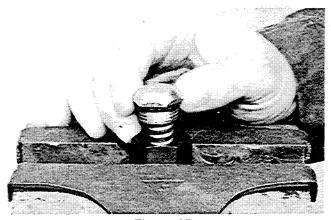
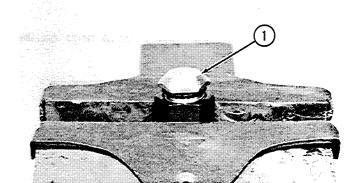


Figure 97

10. Tighten the plug.



1. Plug

Figure 98

11. Put the spool in the vise with soft jaws. Put the bottom plate and bolts for the spring compressor tool on the spool.

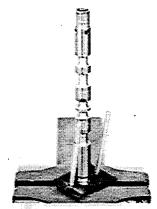


Figure 99

12. Install a new quad ring on the spool.

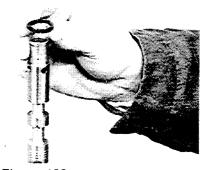


Figure 100