**KEY EXPLANATION:**

1. Bottom: System Port (1)
2. Second from bottom: System Port (2)
3. Third from bottom: System Port (3)
4. Fourth from bottom: System Port (4)
5. Cartridge Seal Seat (Teflon)
6. Filter: 10 micron Sintered Bronze (optional SST)
7. Vent to atmosphere (2 Places 180° apart)
8. Filter Retainer: Aluminum (optional SST)
9. Spool return Spring, Stainless Steel
10. Piston Wear Ring, UHMW (optional Teflon)
11. Actuator Guide Cylinder, Aluminum (optional SST)
12. Bonnet O-Ring, Buna-N (also see options)
13. Operator Knob (See part No. designations)
14. Upper Actuator Bonnet, Aluminum (optional SST)
15. Overtravel Protection Option (Prox. 1/8")
16. Operator Follower Assembly, Aluminum (Optional SST)
17. Spring Retainer Assembly
18. O-Ring Seal, Teflon
19. Spool Connector Linkage (Stainless Steel)
20. Retaining Ring, Carbon Steel (optional SST)
21. O-Ring Seal, Buna-N (also see options)
22. Cartridge Mounting Threads (7/8-14)
23. Spool Cage (Heat Treated Stainless)
24. Back Up Rings, Teflon (two used)
25. O-Ring Seal, Buna-N (also see options)
26. O-Ring Seal, Buna-N (also see options)
27. Back Up Rings, Teflon (two used)
28. O-Ring Seal, Buna-N (also see options)
29. Back Up Rings, Teflon (two used)
30. O-Ring Seal, Buna-N (also see options)

**SHIFT FORCE NOTES:**

10 to 15 Pounds of Force is required to shift the valve spool with zero pressure on port no. 1.

Any pressure on Port no. 1 will increase Force Requirement by .012 X Port no. 1 PSI.

**OPERATION**

Manually Operated Hydraulic Spool Valve.

Three Way, Directional Control or Selector Valve.

Maximum System Pressure: Ports 1, 2, 3 and 4, 3,000 PSI. See "SHIFT FORCE NOTES"

Spool Stroke is 1/4".

Stroke and Over Travel dimensions are approximate.

 Fluid temperatures: -40°F (-40°C) to 200°F (93.3°C)

Install Cartridge valve using 1” wrench

 Valve should screw in freely to the Mount Seal.

Final tightening 20 to 30 foot pounds torque.

Use lubricant on external seals and mounting threads.

**OPTIONS**

Available with or without Overtravel Protection.

Optional seals include Viton, Teflon and others.

Key 7 vents to atmosphere (2 Places). 1 Option provides 10-32 Threaded ports at these locations.

**ORDERING INFORMATION:**

Order P/N 44H237M###

No Overtravel Protection = 0
With Overtravel Protection = P

**PRESSURE DROP CHART**

4 Way Spool Valve, Manually Operated. Directional Control or Selector Valve.