



FIGURE 42

Method 2

Utilizing "Duplex Gauge" or individual bourdon gauges, requires closing number 1 shut-off. (Figure 42)

Step 1 checking check valve number 1

1. Connect the high hose to test cock number 2.
2. Connect the low hose to test cock number 3.
3. Open test cocks number 2 and number 3.
4. Close number 2 shut-off valve; then close number 1 shut-off valve.
5. By means of the high side needle valve, lower the pressure at test cock number 2 about 2 psi below the pressure at test cock number 3. If this small difference can be maintained, then check valve number 1 is reported as "tight". Proceed to Step number 2. If the small difference cannot be maintained, proceed to Step number 3.

Step 2 checking check valve number 2.

Proceed exactly the same test procedure as in Step number 1, except that the high hose is connected to test cock number 3 and the low hose connected to test cock number 4.

Step 3

1. Open shut-off valve number 1 to repressurize the assembly.
2. Loosely attach the by-pass hose to test cock number 1, and bleed from the gauge through the by-pass hose by opening the low side needle valve to eliminate trapped air. Close low side needle valve. Tighten by-pass hose. Open test cock number 1.
3. Close number 1 shut-off valve.
4. By loosening the low side hose at test cock number 3, lower the pressure in the assembly about 10 psi below normal line conditions.
5. Simultaneously open both needle valves. If the check valve is holding tight the high pressure gauge will begin to drop while the low pressure gauge will increase. Close needle valves. If the gauge shows that a small (no more than 5 psi) backpressure is created and held, then the check valve is reported as tight. If the check valve leaks, a pressure differential is not maintained as both gauges tend to equalize or move back towards each other, then the check valve is reported as leaking. With both needle valves open enough to keep the needles on the gauge stationary, the amount of leakage is visible as the discharge from the upstream needle valve.