

A.6.2 Double Check Valve Assembly (DC)

Preliminary Steps

- Notify
- Identify
- Inspect
- Observe

Test No. 1 - Tightness of No. 1 Check Valve

- 1a. Bleed test cocks.
- 1b. Install fittings.
- 1e. Attach sight tube to No. 3 test cock.
- 1d. Attach bleed valve arrangement and high side hose to No. 2 test cock.
- 1e. Open No. 2 test cock and open and close high bleed needle valve to bleed air.
- 1f. Open No. 3 test cock to fill tube, then close No. 3 test cock.
- 1g. Close No. 2 shutoff valve. Locate field test kit at proper elevation, then close No. 1 shutoff valve.
- 1h. Open test cock No. 3.
 - If water level and reading are stable, record reading and go to 1i.
 - If water continues to flow from tube go to T1
 - If water recedes in the tube, go to T4.
- 1i. Close test cocks, open No. 1 shutoff valve, and remove equipment.

Test No. 2 - Tightness of No. 2 Check Valve

- 2a. Attach bleed valve arrangement and high side hose to No. 3 test cock and attach sight tube to No. 4 test cock.
- 2b. Open No. 3 test cock and open and close high bleed needle valve to bleed air.
- 2c. Open No. 4 test cock to fill tube, then close No. 4 test cock.
- 2d. Locate field test kit at proper elevation, then close shutoff valve No. 1.
- 2e. Open test cock No. 4.
 - If water level and reading are stable, record reading and go to 2f.
 - If water continues to flow from tube go to T6.
 - If water recedes in tube go to T5.
- 2f. Close test cocks, remove equipment.
- 2g. Remove fittings, open shutoff valves.

Diagnostics

- T1. Observe reading, open bleed valve arrangement.
 - If water flows from the bleed valve arrangement and it can be adjusted so there is a drip at test cock No. 3, go to T2.
 - If not possible to adjust bleed valve arrangement so the flow can be reduced to a drip, then repair No. 1 shutoff valve. If that doesn't work repair both check valves and No. 2 shutoff valve. Go to 2f.
 - If water stops flowing from bleed valve arrangement go to T3.
- T2. Adjust bleed valve arrangement to drip at No. 3 test cock and record the reading. Go to 1i. (If less than 1.0 psi, the No. 1 check valve must be repaired before proceeding).
- T3. Record observed reading from T1, No. 2 check valve leaking. No. 2 shutoff valve is leaking with backpressure. Go to 2f.
- T4. Lower field test kit to centerline, record reading. No. 2 check valve is leaking and No. 2 shutoff valve is leaking. Go to 2f.
- T5. Lower field test kit to centerline, record reading for No. 2 check valve. Record No. 2 shutoff valve is leaking. Go to 2f.
- T6. Observe reading. Open bleed valve.
 - If water stops flowing from bleed valve arrangement go to T7.
 - If bleed valve arrangement can be adjusted go to T8.
 - If bleed valve arrangement cannot be adjusted (water flows from test cocks 3 and 4), go to T9.
- T7. Record observed reading from T6. No. 2 shutoff valve leaks with backpressure go to 2f.
- T8. Record reading for No. 2 check valve, and No. 1 shutoff valve leaking. Go to 2f
- T9. If No. 1 check valve had a reading of less than 1.0 psi, repair No. 1 check and go to 1a, otherwise go to T10.
- T10. Close bleed valve arrangement, open No. 2 test cock, open No. 4 test cock. Record reading for No. 2 check valve. Go to 2f.