

Model SVB - Spill-Resistant Pressure Vacuum Breaker

Installation Instructions

SVBs must be installed horizontally with the canopy in the upright position as shown in figure 1. The critical level of the valve must be above the highest water level downstream of the valve.

Field Testing Procedure

It is important that the device be tested periodically in compliance with local codes but at least once a year or more as service conditions warrant. For problems encountered during testing refer to trouble-shooting and maintenance sections.

Equipment Required

Differential Pressure Test Kits: Conbraco Model 40-200-TK (Aluminum Housing) or Conbraco Model 40-200-TKP (Acetal Housing).

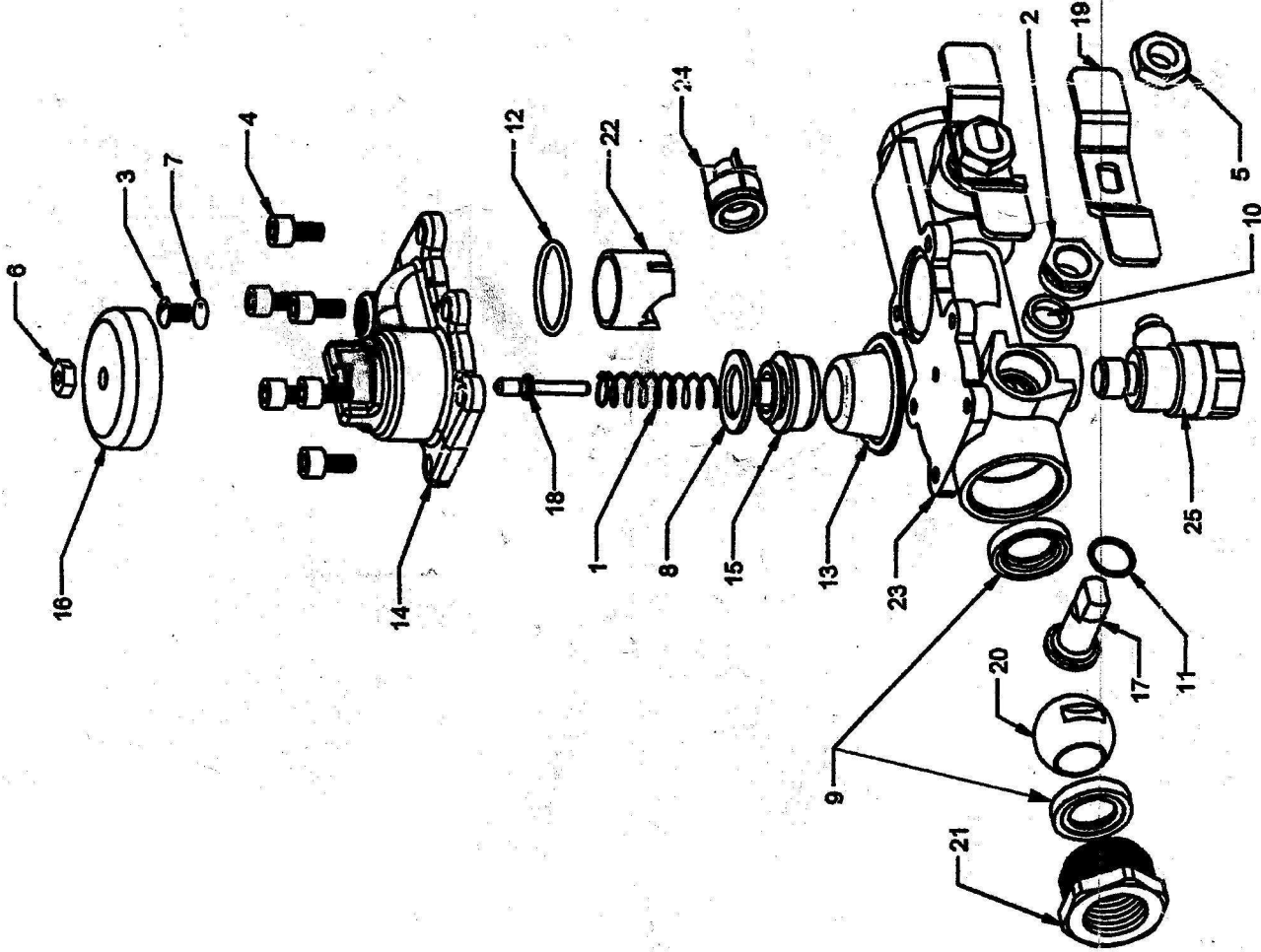
Test No. 1 - Air Inlet Opening Point

Requirement

The air inlet shall open when the inlet pressure is no less than 1.0 psi above atmospheric pressure and the outlet pressure is atmospheric pressure. The air inlet shall be fully open when the inlet pressure is atmospheric.

Procedure

1. Remove air inlet canopy.
2. Bleed water through the test cock and vent valve to eliminate foreign material.
3. Attach the high side hose to the test cock, open the test cock, and bleed air from the hose and gage by opening the high side bleed valve. Close the high side bleed valve.
4. Close No. 2 shutoff valve, then close No. 1 shutoff valve.
5. Open vent valve to lower outlet pressure to atmospheric. Slowly open the high side bleed valve. Record the pressure reading on the gage when the air inlet valve opens. The reading must be 1.0 psi or greater. Continue to reduce pressure to 0.0 psi. The air inlet must be completely open.



Test No. 2 - Check Valve Closing Point

Requirement

The static pressure drop across the check valve shall be at least 1.0 psi.

Procedure

1. Close No. 1 shutoff valve (No. 2 shutoff valve remains closed from Test No. 1).
2. Open vent valve. Allow water to stop flowing through the vent valve. Record gage reading. This gage reading must be 1.0 psi or greater.
3. Close test cock and bleed valve. Remove equipment.
4. Open No. 1 shutoff valve, then No. 2 shutoff valve.
5. Replace air inlet canopy.

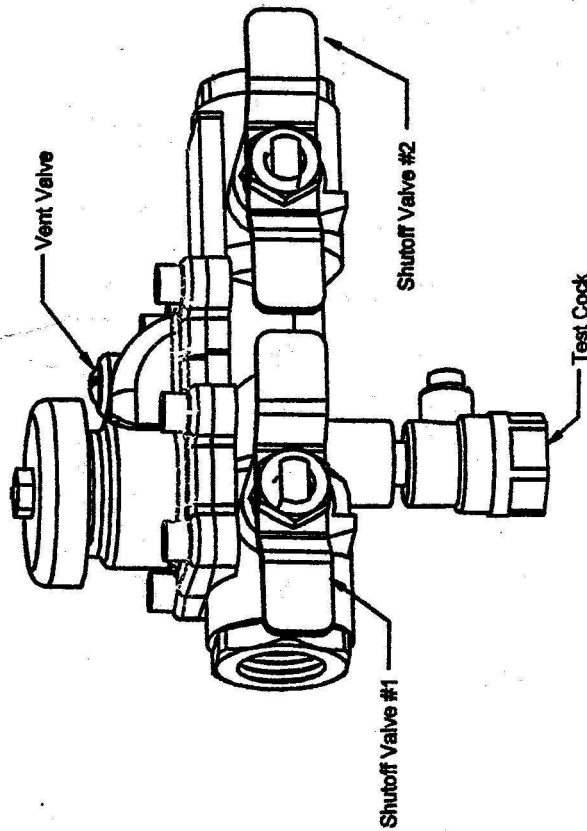


Figure 1

CONBRACO SVB SERIES PARTS LIST

ITEM	DESCRIPTION	QTY	PART NO.
1	SPRING	1	A-2042-00
2	GLAND	2	B-1260-06
3	SCREW	1	B-1910-00
4	CAP SCREW	6	B-1321-00
5	HEX NUT	2	C-1523-00
6	MACHINE HEX NUT	1	C-2004-00
7	O-RING	1	D-1661-00
8	SEAT DISC	1	D-1697-00
9	SEAT	4	D-1773-00
10	STEM PACKING	2	D-1780-00
11	STEM BEARING	2	D-1783-00
12	O-RING	1	D-2168-00
13	DIAPHRAGM	1	D-3695-00
14	BONNET	1	F-3163-05
15	ATMOSPHERIC CHECK	1	F-3164-00
16	CANOPY	1	F-3165-00
17	STEM, BALL VALVE	2	G-2396-06
18	CHECK GUIDE	1	G-3854-00
19	TEE HANDLE	2	H-2932-00
20	BALL	2	K-3123-11
21	RETAINER, BALL VALVE	2	L-3477-06
22	RETAINER, CHECK	1	L-5946-00
23	BODY	1	Q-5555-00
24	CHECK VALVE	1	W-8417-00
25	TEST COCK	1	78-257-01

TROUBLE-SHOOTING GUIDE

SYMPTOM	CAUSE	CORRECTIVE ACTION
Atmospheric vent valve fails to open as gage drops to 0.0 psi	A. Air inlet disc stuck to seat. B. Air inlet spring damaged or missing.	A. Clean vent seat and replace disc. B. Check and/or replace spring.
Atmospheric vent fails to close before check valve opens.	A. Diaphragm damaged or dirty. B. Initial start up supply pressure applied too rapidly.	A. Inspect and/or replace diaphragm. B. Open supply pressure valve slowly. Do not water hammer.
Check valve fails to hold 1 psi	A. Check valve fouled with debris. B. Check valve seat damaged.	A. Remove, clean, and/or replace check valve. B. Replace check valve.