

**INSTALLATION, OPERATION, AND MAINTENANCE  
OF CONBRACO 4C SERIES CARBONATED  
BEVERAGE BACKFLOW PREVENTER (MODEL CBBP)**

The Conbraco 4C series carbonated beverage backflow preventer consists of two independently acting check valves biased to normally closed positions. An atmospheric port located between the check valves vents water and/or CO<sub>2</sub> under backflow conditions, thus protecting the potable water supply. Additionally, an integral strainer at the inlet insures debris does not enter the carbonator unit. Conbraco's 4C series CBBP is available with 1/4" or 3/8" 45° flare and connectors.

**INSTALLATION**

**NOTE:** Install carbonator per manufacturer's instructions and local plumbing codes. Copper tubing should never be used downstream of the backflow preventer.

- 1) Turn off water supply and carbonator. Disconnect water supply piping from carbonator. A small quantity of water may discharge from the supply piping and/or carbonator after disconnecting.
- 2) Connect the CBBP to the carbonator inlet with the marking arrows pointing in the direction of flow. Do not over tighten. Tighten holding end cap hex and connecting hardware only - do not hold body on nameplate flats.
- 3) Connect the water supply piping to the CBBP. Do not over tighten. Tighten holding end cap hex and connecting hardware only - do not hold body on nameplate flats.
- 4) A scribe tube may be attached to the atmospheric port, which is tapped to accept 1/8" NPT. A 1/8" male NPT X 1/4" barbed fitting is provided to accept a 1/4" I.D. hose. If desired, the scribe tube can extend the vent to an approved air-gapped termination.
- 5) Check all connections, then turn on water supply. Tighten any connections where leakage is detected.

**NOTE:** During back flow conditions, water and/or CO<sub>2</sub> will discharge from the atmospheric port. Appropriate measures should be taken to accommodate this potential flow.

**OPERATION**

Under static (non-flowing) conditions, the check valves remain in the closed position. When a valve is opened downstream (i.e. a drink is delivered from the carbonator), the check valves open and permit water flow. Under backflow conditions, the diaphragm seat on the first check lifts and permits flow through the atmospheric port, thus protecting the potable water supply. Under normal operation, the atmospheric port will not discharge.

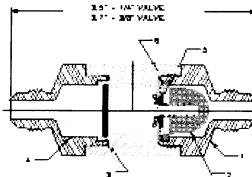
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**MAINTENANCE**

**NOTE:** Turn off water supply and carbonator prior to attempting maintenance on the CBBP. Always check for water and CO<sub>2</sub> leaks prior to returning to service. Do not expose the unit to freezing temperatures.

Conbraco's carbonated beverage backflow preventer should be serviced as required per local plumbing codes. Additionally:

- 1) Periodically remove and clean the strainer located in the upstream end cap. Frequency of cleaning is dependent on local water and plumbing conditions.
- 2) Once a year remove the check valves from the unit and inspect for excessive wear, fouling debris, spring and sealing surface integrity, etc. Clean or replace the check valves as required. See tabulation for repair kit part numbers on page 4.
- 3) If the atmospheric port discharges, disassemble, thoroughly inspect, clean and assemble with new parts as required. See tabulation for repair kit part numbers on page 4.

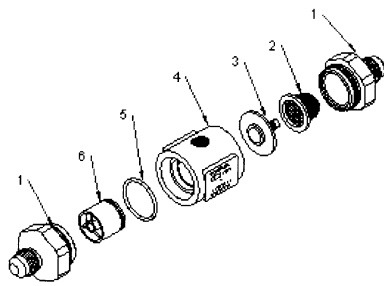


ITEM	DESCRIPTION	MATERIAL
1	End Cap	Acetal
2	Strainer	PVC/Stainless Steel
3	O-ring	Nitrile
4	Downstream Check Valve	Nitrile/Stainless Steel/Acetal
5	Upstream Check Valve	EPDM/Stainless Steel
6	Body	Acetal

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ITEM	DESCRIPTION	QTY	UNIT
C	VALVE ASSEMBLY (CARBONATED BEVERAGE BACKFLOW PREVENTER)	1	PC
D	REPAIR KIT (ITEMS 2-6)	1	PC
E	BARBED FITTING (NOT SHOWN)	1	PC

DATE: 08/11/2011  
TIME: 11:20 AM  
SHEET: 1 OF 1  
CONBRACO INDUSTRIES, INC.  
14313-00



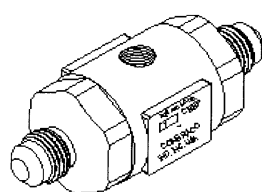
ITEM	PART NAME	1/4" CBBP PART NUMBER	3/8" CBBP PART NUMBER
--	VALVE ASSEMBLY	4C-101-01	4C-102-01
1	END CAP	F-3207-00	F-3208-00
2	STRAINER	G-3918-00	G-3918-00
3	UPSTREAM CHECK VALVE	W-8536-05	W-8536-05
4	BODY	Q-5612-00	Q-5612-00
5	O-RING	D-1860-00	D-1860-00
6	DOWNSTREAM CHECK VALVE	F-3209-00	F-3209-00
--	REPAIR KIT (ITEMS 2-6)	4C-100-00	4C-100-00
--	BARBED FITTING (NOT SHOWN)	K-4445-00	K-4445-00

14313-00 REV. C

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**'Apollo' Valves**  
MANUFACTURED BY CONBRACO INDUSTRIES INC.

**CARBONATED BEVERAGE  
BACKFLOW PREVENTER**



**INSTALLATION, OPERATION, AND MAINTENANCE  
GUIDE**

CONBRACO INDUSTRIES, INC.

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- NOTES:**
- 1) ALL PRINT TO BE ON ONE PAGE (FRONT AND BACK) UNLESS OTHERWISE INDICATED. FOUR PAGES TO MAKE A COMPLETE ASSEMBLY. PAGE NUMBER 1 MUST FACE OUTWARD.
  - 2) TYPE SET IN HELVETICA FONT (EXCEPTION FOR ITALICIZED PORTION OF NOTE ON PAGE 2 A.L.L.O.W.A.B.L.E.). TEXT MUST BE ORIENTED IN SAME DIRECTION FRONT AND BACK AND PRINTED IN BLACK INK.