

NOTE: Pressure gauge and thermometer are calibrated from the manufacturer. Calibrate pressure gauge and thermometer if you suspect incorrect reading.

General Information

- Use an NIST (National Institute for Standards and Technology) reference thermometer to calibrate the carbonation tester thermometer at or near the sample testing temperature.
- Use an NIST certified dead weight tester or an NIST certified pressure gauge calibrator.
- Do not turn the hex nut when calibrating the thermometer.** The hex nut immediately below the head of the thermometer is used to hold the thermometer while turning the head to calibrate.

Calibration—Thermometer

- Submerge both the carbonation tester thermometer and the NIST reference thermometer in an insulated ice cold bath of water. Allow the ice cold bath to reach thermal equilibrium by gently stirring the water bath until the temperature readings don't change.
- If the two thermometer readings differ by any detectable amount, the carbonation tester thermometer must be calibrated. Adjust the tester thermometer by securing the hex nut immediately under the head of the thermometer. **DO NOT TURN THE HEX NUT WITH THE WRENCH.** While holding the thermometer hex nut securely turn the head of the thermometer with your hand until its reading matches the NIST reference thermometer.

Calibration—Pressure Gauge

Pressure gauge calibration can be verified by two methods: the use of an NIST certified dead weight tester or an NIST certified electronic pressure gauge calibrator.

Dead weight tester—accuracy less than 0.5%

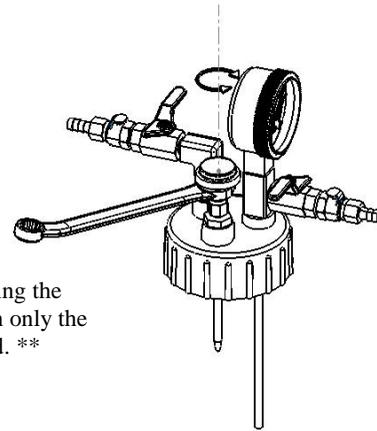
- Install the pressure gauge per manufacture instructions and pressurize the gauge.
- Carefully rotate the disk several times while gently tapping the pressure gauge.
- The pressure gauge is to be calibrated at 10, 15, 20, 25, and 30 psig.

Electronic pressure gauge calibrator—accuracy less than 0.5%

- Install the pressure gauge per manufacture instructions and pressurize the gauge with compressed air.
- As the pressure gauge is pressurized allow for the pressure to stabilize. Compare the electronic calibrator reading to the pressure gauge and adjust as needed.
- The pressure gauge is to be calibrated at 10, 15, 20, 25, and 30 psig.

Note

- Gauge readings may not be equal, but variation is uniform throughout the entire range of the scale of the gauge.
- If the gauge pressure readings are not equal, and variation is uneven throughout the pressure range, replace the gauge.



** When calibrating the thermometer, turn only the thermometer head. **

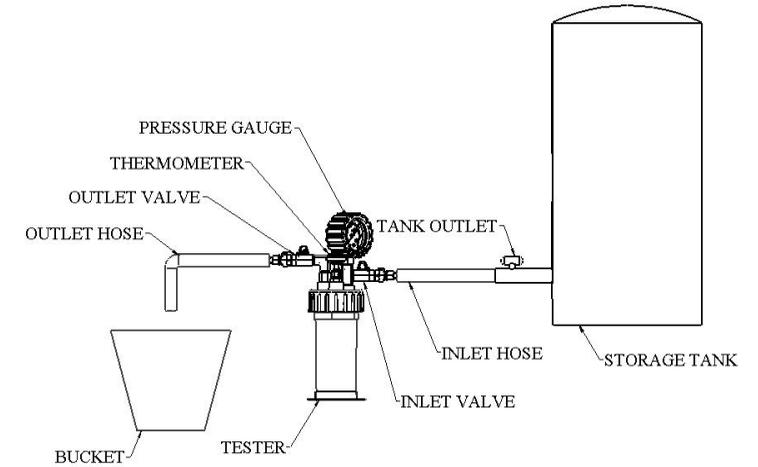
Beer Carbonation Tester Operating Instructions

Pre-test preparations

- Tighten cap until it bottoms and turn it an additional ¼ turn to properly seal tester.
- Chill tester in refrigerator or cooler for 60 minutes.
- Close all valves on tester prior to testing.

Test procedures

- Attach ¼ ID hose (2 ft min.) from storage tank or keg to ‘Inlet’ (gauge side) of tester and another ¼ ID hose (2 ft min.) from ‘Outlet’ (relief valve side) of tester to bucket or equivalent.
- Open both valves on tester then open outlet on storage tank or keg to allow beer to flow into the tester. Let the beer flow out of the tester until you see minimal foaming from the outlet valve.
- Once minimal foam is observed ‘Close’ all valves in the following order (1) outlet from storage tank or keg (2) tester inlet (3) tester outlet.
- Open the outlet valve of the tester (this will release any false pressure), and then close the valve.
- Disconnect the hoses by pressing the tabs of the valves from the tester.
- Vigorously shake the carbonation tester for 30 seconds.
- Note both the temperature and pressure readings from the top of the tester.
- Determine the volume (%) of carbonation from the label on the side of the tester, based on the value at the Temperature and Pressure intersection.
- Open the outlet valve (to relieve inside pressure) and remove cap to empty contents of tester.
- Wash the tester in mild detergent and then dry thoroughly.



PARTS LIST

P/N	DESCRIPTION
2701-BCT	Beer Carbonation Tester
2701-10A	Thermometer Assembly, Carb Tester
2701-200A	Canister Assembly, Carb Tester
2701A-10	Cap, Carb Tester (must be purchased with Gasket)
45-0011-01	Gasket w/ Adhesive (for Cap)
2701-12	Gauge 0-30 psi, Carb Tester
600GPS	Gauge Protection Boot
38-0062-00	Fitg, Quick Connect Insert – ¼ barb w/ valve
548C-3	Inlet / Outlet Hose – 3 ft.
525	Wing Nut
759	Washer, Wing Nut