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### Barkingside Co

Minneapolis, Minnesota 55423

### **BierMaster Draft System**

## General Instructions 3907 & 3908



#### **INTRODUCTION**

The BierMaster Draft System is of the ball-lock version and is made here at BARKINGSIDE. The Barking Draft System uses stainless steel tubing barb adapter for the quick-disconnects which allows for easy, thorough cleaning and sanitizing of quick-disconnects and tubing barb adapters.

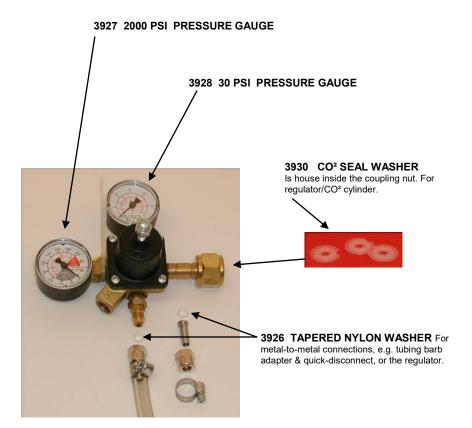
The BierMaster Draft System consists of several components: The CO<sup>2</sup> cylinder and Double Gauge Regulator (high pressure gauge reads out the pressure in the cylinder and low pressure gauge allows you to adjust the dispensing pressure), the CO<sup>2</sup> line, Product Tank (keg) and Beer line. Some of the spare parts to have on hand are tank plug O-ring, tapered nylon washer, CO<sup>2</sup> seal washer and tank cover O-ring (sold separately by Barkingside).

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### PICTORIAL VIEW & NAME OF PARTS THAT COMPRISE THE BIERMASTER DRAFT SYSTEM

(Item # is included for your ordering convenience):



Purge the air from the product tank by turning on the CO<sup>2</sup> for 10 seconds at 5 psi. Do this just before racking the beer into the product tank. Next, syphon the fermented beer from the fermenter to the bottom of the product tank. Avoid splashing!

Replace the tank cover and set the regulator to about 5 psi and fill the empty space in the top of the product tank with CO² (listen for the gas to stop flowing). Turn off the CO². Now pull up on the relief valve to release the pressure (This will allow the remaining oxygen to escape). Allow the beer to cool down to 42°F in the product tank with the tank cover on. When the beer is at 42°F, turn on the CO² with the low pressure regulator gauge set (at 12.2 psi for European style beer, see NOTES below). You can listen to the CO² flow and as the pressure reaches equilibrium, the flow will slow down and stop. This takes a few minutes. Shake the product tank to start the flow again. Eventually, the CO² will stop flowing no matter how much you shake the product tank. The beer is now fully carbonated. This process can take up to 15 minutes or more at 42°F.

Next, disconnect the product tank from the CO² source and set it upright in the refrigerator. After several hours the beer settles and is ready to serve. Carbonation level will improve with time (approx. 1-2 weeks and longer) and bubbles will seem finer and the head will last longer.

To dispense your fine beer, reconnect the  $CO^2$  source and the **out-quick disconnect to the out-tank plug adapter** of the product tank. The regulator is set at dispensing pressure of approximately 5.25 to 6.25 psi [(5' x 1/4"ID beer dispensing vinyl tubing x 0.85 restriction factor for 1/4" ID vinyl tubing) + 1 to 2 psi = 5.25 to 6.25]. Depress the level completely on the cobra faucet and fill your glass. If there is too much foaming, turn the pressure on the regulator down 1 to 2 psi and try again. Perfect dispensing depends on the length of the beer line, the height of the cobra faucet, temperature of the beer and beer line. You may also need to adjust the pressure to perfect your dispensing. After you are done serving for the day, top off the product tank with about 10 psi of  $CO^2$  so that the  $CO^2$  does not come out of the beer to the empty space in the product tank. Always clean the barking draft system immediately after use for storage or a new batch of beer.

For most types of beer, the average carbonation level is approximately 2.2 to 2.6 volume of CO<sup>2</sup>.

**NOTES**: The required CO<sup>2</sup> pressure on the regulator to carbonate most beer at 42°F are:

10.0 psi for 2.2 volume of CO<sup>2</sup> desired (British beers)

11.1 psi for 2.3 volume of CO<sup>2</sup> desired

12.2 psi for 2.4 volume of CO<sup>2</sup> desired (European beers)

13.3 psi for 2.5 volume of CO<sup>2</sup> desired

14.4 psi for 2.6 volume of CO<sup>2</sup> desired (American beers)

#### THE BIERMASTER DRAFT SYSTEM (Ball-Lock Version) - Semi-assembled

**Includes:** Double gauge regulator (2000 PSI & 30 PSI), gas in & liquid out 1/4" MFL quick disconnects, 6' x 1/4" ID & 1/2" OD clear food grade vinyl tubing, 3 tubing barb adapter sets (one with tapered nylon washer), 4 screw clamps, cobra faucet & instructions. Spare parts: CO² seal washer, tapered nylon washer, 2 tank plug O-rings.

Product information is courtesy of their respective manufacturers and suppliers.

#### **OPERATING INSTRUCTIONS FOR MODEL 3907, 3908, 3909**

#### **CLEANING:**

Sanitize all fittings, tubings and the product tank with BLC Beer Line Cleaner (75204) or similar cleanser. DO NOT let liquid get into the regulator as it may cause damage. Fill the product tank with BLC Beer Line Cleaner solution (about 5 gallons). Put the tank cover on and shake it a few second and let it sit for 15 minutes. With the BLC Beer Line Cleaner solution still in it. let it stand upside down for another 15 minutes. Next. rinse it out with hot water and let the inside of the product tank dry by itself. A 22mm socket wrench (available at most hardware stores) is use to remove the tank plug adapters, dip tubes and dip tube orings from the product tank for cleaning. Another optional step to cleaning the tank plug adapter, dip-tube, beer line, quick-disconnect (liquid out) and cobra faucet is to pressurize the product tank (with BLC Beer Line Cleaner solution still in the product tank as discussed above) and dispense BLC Beer Line Cleaner solution out as if it were beer. Do it again with warm clean water to remove traces of cleanser. The inside of cobra faucet and quickdisconnect (liquid out) can also be clean by unscrewing the tops off with your hand and a nickel coin (Do this on a table and away from the sink to prevent tiny parts from falling into hard to reach areas!). BE CAREFUL not to lose the tiny parts, otherwise the cobra faucet and quick-disconnect (liquid out) may not work properly!! Washer, Poppet (for quick-disconnects) and most replacement parts that are not described in this manual for the BierMaster Draft System are available.

#### **CONNECTIONS & OPERATING:**

Connect the  $CO^2$  cylinder to the product tank, attach the tubing barb adapter end of gas line to the regulator and the other end with the Gas in quick-disconnect  $\frac{1}{4}$ " MFL (Grey) to the in (gas) tank plug adapter on the product tank.

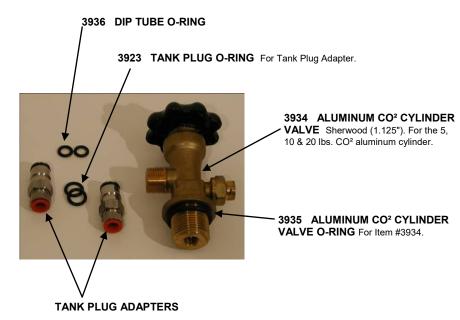
Instructions on how to install new CO<sup>2</sup> regulator assembly on CO<sup>2</sup> cylinder or replace empty CO<sup>2</sup> cylinder in existing system are derived from the regulator manual:

- 1. Fully close CO<sup>2</sup> cylinder valve handwheel by turning to the right (clockwise).
- Loosen CO<sup>2</sup> regulator adjustment screw lock nut, then back adjustment screw all the way out.
- Loosen CO<sup>2</sup> regulator coupling nut to allow CO<sup>2</sup> pressure to escape to atmosphere, then remove regulator from empty CO<sup>2</sup> cylinder.
- Always keep dust away from the CO<sup>2</sup> cylinder valve. Open cylinder valve momentarily to blow any dust from valve, then close valve.
- Make sure nylon washer is in place inside CO<sup>2</sup> regulator coupling nut, then install regulator on CO<sup>2</sup> cylinder.
- Open CO<sup>2</sup> cylinder valve slightly to allow regulator to slowly fill with gas, then open valve fully to back-seat valve. (Back-seating valve prevents leakage around valve shaft)
- Adjust CO<sup>2</sup> regulator output to desired CO<sup>2</sup> pressure (see NOTES below) by turning adjustment screw to the right (clockwise) until low-pressure gauge indicates pressure reading, then tighten lock nut.
- 8. Check for CO2 leaks.

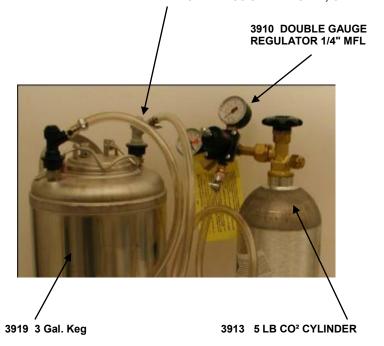
**IMPORTANT:** CO<sup>2</sup> check valves in the system must be cleaned and O-ring seat replaced when regulator is serviced.

WARNING: Improper use of this CO² cylinder could cause serious bodily injury or property damage. Secured CO² cylinder in the upright position at all times. Keeping the product tank upright will keep liquid out of the regulator, which could damage it. Keep the BierMaster Draft System out of the reach of children. This system is built of quality parts to last you many years of enjoyment. However, in the event that your system needs servicing, parts are available on our website or consult a professional installer at your local fire protection equipment & supply store. If you have any questions please give us a call.

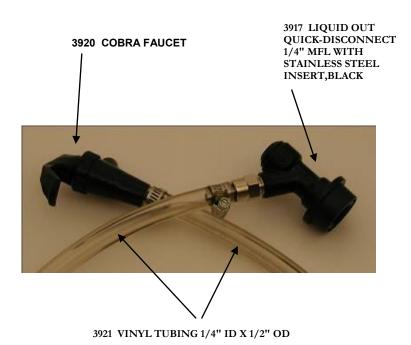
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3916 GAS IN QUICK-DISCONNECT 1/4" MFL WITH STAINLESS STEEL INSERT, GREY

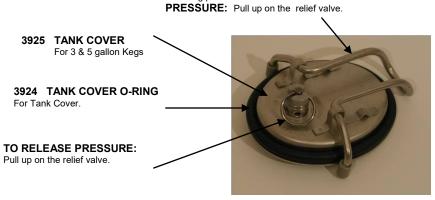


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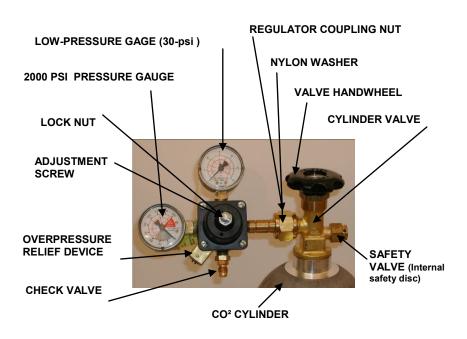




TO REMOVE COVER: Lift bail after releasing pressure. TO RELEASE



# HOW TO INSTALL NEW CO<sup>2</sup>CYLINDER ASS'Y ON CO<sup>2</sup> CYLINDER OR REPLACE EMPTY CO<sup>2</sup> CYLINDER IN EXISTING SYSTEM.



**NOTE:** When indicator on CO² cylinder regulator assembly 2000-psi high-pressure gauge is in grey ("change CO² cylinder") portion of the dial, CO² cylinder is almost empty and should be replaced.

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