The Homebrewer's Clubhouse Introduction to Kegging

*__Safety Warning__: Homebrew kegging utilizes CO_2 to force carbonate your beer. These cylinders are under pressure and thus potentially dangerous. A damaged valve can cause serious injury or death. When storing your tank, please use secure means to store your cylinder in an upright fashion. Additionally, a leak in an enclosed area can lead to asphyxiation. Always test for leaks.

The Kit:

1. One cornelius soda keg (pin lock or ball lock)
2. CO_2 cylinder, filled
3. CO_2 Pressure Regulator
4. Draft Line (5' 3/16" ID with picnic faucet and black beverage disconnect)
5. Gas Line (5' 5/16" ID with grey gas disconnect)

The Homebrewer's Clubhouse recommends kegging in converted chest freezer or refrigerator for the best results.

Overview

Recycled Cornelius (Corny) kegs are an excellent way to get into a kegging system for your homebrew. These kegs are used by the soft drink industry to serve those products, but your homebrew can be siphoned into them after fermentation and then either force carbonated, or primed with sugar as in bottling and then served from a tap.

The use of carbon dioxide keeps the beer fresh and carbonated.

Carbon Dioxide Cylinder

Most of the cylinder's available in the Homebrewer's Clubhouse are 5 gallon, pressure-tested and made of either steel or aluminum. They contain liquid carbon dioxide that is used in conjunction with a pressure regulator to carbonate and serve your homebrew.

The head space in the cylinder contains CO2 in a gaseous state that remains the same as long as liquid CO2 exists in the cylinder to maintain vapor pressure. As you draw CO2 from the cylinder the liquid in the cylinder depletes to a gaseous state to maintain the pressure inside the cylinder.

Carbon Dioxide Regulator

Regulators sold in The Homebrewer's Clubhouse contain 2 gauges (High pressure and Low Pressure), and adjusting screw or dial, and a shutoff valve. Most, though not all, will also include a pressure relief valve.

Using the cylinder coupling nut, attach the regulator to the cylinder. Next, ensure that the shutoff valve is in the off position and attach the 5/16" ID tubing from the regulator to the gray gas connector. Note: The Homebrewer's Clubhouse recommends an optional manifold to protect your regulator from backflow due to pressure changes. This can cause damage to your

regulator if beer leeches into it.

Now, connect the gray connector to your corny keg. Open the shutoff valve and using the screw or dial, set your desired pressure. Turn the black shutoff valve on top of the cylinder halfway in a counter-clockwise direction to open. Check your system for leaks. I recommend, using your spray bottle of sanitizer, to spray a healthy amount of the solution anywhere there is a connection, as well as around the large top port on the keg.

Corny Kegs

Corny kegs come in two different styles: Pin Lock and Ball Lock. Used corny's tend to be 5 gallons. Smaller sizes are available, though only as new products and generally cost as much, or more, than new 5 gallon cornys.

Pin Locks (Coke) are shorter and wider in diameter and are distinctive by the posts that the beverage and gas lines connect to. The beverage line has three external pins and is connected with a black, three pronged connector.

Ball Locks (Pepsi) are taller and narrower in diameter. The posts are more difficult to distinguish. The gas side posts are either notched, or have a star burst pattern to distinguish from the beverage line post.

Carbonating

http://www.kegerators.com/carbonation-table.php

Using the table shown in the link above, determine where you want your beer based on style guideline and the current temperature of your beer. This will give you the pressure to set your regulator to. Allow the beer to sit at this pressure for 4-7 days.

Example: I have an American Pale Ale I want to carbonate to 2.5 volumes of CO2. I have my temperature set to 48° in my keezer. Therefore, I should set my regulator to 17 psi and let it sit for 4-7 days to carbonate properly.

Dispensing

There are two ways to dispense your beer. Balancing your system, or manipulating the pressure.

Balancing your System

Balancing your system is the more difficult option, so we'll handle it first. The beverage tubing acts as a restrictor for the beer flowing through it. The reason a low internal diameter is “standard” in beverage tubing is because it offers better restriction of the beverage flowing through it than wider ID. With 3/16” vinyl tubing at 15 psi, you only need between 5 and 7 feet to get enough flow. Keep in mind however, that the higher the psi, the longer the beer line that will be necessary. Thus if you are having problems with too much or too little foam, adjusting your beer line may become necessary.

Manipulating Pressure

Manipulating simply requires you to adjust the pressure to a different serving pressure (usually between 2 and 5 psi). The you reduce the pressure in the keg with the relief valve and allow the keg to normalize to the new pressure and the serve. After serving, you then return the keg to carbonation temperature.

Cleaning

The best way to clean your kegs is to completely disassemble them with each use and clean all of the parts. You will need a deep socket (with notches if you have pin lock kegs) to remove the posts. Remove the poppets and the dip tubes and soak in a PBW solution. Clean the keg itself with a non abrasive cleanser. Do not use bleach, as the chlorine can cause damage to stainless steel.