

Simplified Kegging or Burch's Law

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Home brewers sometimes show an aversion to the practice of bottling. Over the years, we've been able to codify that into something we like to call Burch's Third Law: *"The tendency of a home brewer to look favorably on the idea of kegging homebrew is directly proportional to the number of bottles washed during the course of one's home brewing career."*



One of the best draft containers for homebrewers is the five-gallon soda syrup (corny) keg. The first reason is the convenience of the five gallon size. Five or ten gallons tends to be the normal batch size for most of us, and that makes it almost too easy to resist, especially for those who really want no more bottle washing whatsoever. That's not to mention that half or quarter barrel kegs are harder to carry around. There's also the convenience of needing only a few standard tools, instead of special wrenches, and the speed with which the quick disconnect fittings allow you to make an emergency change when you run out of beer. Most important of all, is the fact that this is an excellent system for draft beer, however you choose to work with it.

More than one way is available to carbonate your beer. The first is to "bottle" condition your keg. In this case, you prime your beer in the keg after fermentation is finished using half a cup of corn sugar. The keg is then sealed up and set aside for a week or two until your beer has had a chance to fully carbonate. The disadvantage of keg conditioning is that the yeast has to be active in the keg in order to carbonate the beer. Because the yeast is converting the sugar into CO₂, a new sediment layer is formed. There are two ways to avoid getting sediment into your glass. You can either cut an inch off of the bottom of your beverage downtube so that it rests above the sediment layer or assume that you will discard the first several pints of cloudy beer.

Eventually, most homebrewers move to force carbonation. There are a number of reasons to force carbonate the keg. First of all, this practice leaves the keg virtually sediment-free, which means you can leave the downtube uncut, and still draw beautifully clear beer right to the bottom. Second, the kegs are fully carbonated in three days time, and around any house, that can be an important consideration.

Bottling some beers may still be important for parties, club meetings, or competitions. If you would like to have some bottled beer on hand, for such events, siphon as much of the beer as you would like to serve on draft into the keg and reserve the rest to bottle. Make sure you are ready to bottle on the same day that you are kegging. We recommend you use 2 1/2 Tablespoons of corn sugar for each gallon you are bottle conditioning.

(Bottling instructions can be found on page 9).

Rinse out, clean and sanitize your keg before filling it. Use either RTDC™, Proxycarb or PBW™ for cleaning. Use BTF™ or Star-San™ for sanitizing. You can find the rates of use for each of these products on page 21 of this catalog. While the sanitation of the kegs is underway, go ahead and take steps to sanitize all of the equipment you will be using for moving the beer including through your beverage lines. At this point, you're ready to keg!

Elevate your secondary fermentor to siphon your beer into the keg. Measure the temperature with a sanitized thermometer. Keep the temperature recorded to refer to later. Seal the keg lid so it's ready for carbonation. To attach your beer line and spigot, begin by heating up some water on your stovetop or in the microwave and put the ends of the tubing in the hot water. The 3/16" tubing we recommend is slightly smaller than the 1/4" hose barbs on the spigot and the black beverage disconnect. Heating it will allow you to easily slip the tubing over the hose barbs. Now attach the gas line to the regulator and secure a tight fit with a stainless steel clamp. Then attach the other end of tubing to the (gray) gas quick disconnect and secure tubing with a stainless steel clamp. Hook up the gas to the IN post of the keg and turn on the gas at low pressure.

When gas stops rushing into the keg, turn off the valve and vent the keg by pulling up on the pressure release valve on the top of the keg. Then do the same sequence again. Each time the keg is vented, you are cutting the oxygen content of the airspace by half, and by half again, until you have a relatively pure CO₂ atmosphere.

Kegs must be kept cold and under constant pressure for good draft flow. First, turn the screw on your gas regulator clockwise until you reach your desired pressure. Having the beer as cold as 38 °F. and setting the gauge at 12 PSI is a great place to start. If your temperature isn't that cold, adjust your pressure with the carbonation chart in *Brewing Quality Beers* on page 109. It will provide you with more details regarding the relationships of pressure (PSI), temperature, and carbonation levels.

Even with the beer very cold, you need intimate contact between the gas bubbles and the beer to get the gas dissolved. With the gas on, turn the keg upside down and rock it back and forth for 5-10 minutes. This allows the CO₂ to bubble out of the gas inlet tube and on up through the beer. Now you can disconnect the keg and put it back in storage (cold storage is preferable) for three days. The beer can then be hooked back up to the CO₂ dispensing system.

Go ahead and assemble your dispensing system once the beer has had a chance to carbonate, usually several days to a week. Vent the keg to release any built up pressure. Attach the beverage quick disconnect to the OUT post on the keg. Attach the gas quick disconnect to the IN post on the keg. Once everything is connected put everything back into the refrigerator.

Set the delivery pressure after you turn on the gas and open the gas valve on the regulator. Adjust the regulator screw to the appropriate PSI. About 12 PSI is usually a good place to start. Dispense and adjust the PSI up or down according to the level of carbonation you desire. Now you can sit back and enjoy your very own draft beer as well as your newly found freedom away from the tiresome task of bottling. ***On behalf of all of us who have also made the leap we are happy to welcome you to Burch's Third Law of home brewing.***