

# Instruction Manual

## Counter Pressure Bottle Filler



- **Foam free filling** from keg to bottle
- **Purge oxygen** from your bottle before filling
- **Font mountable** (can also be mounted to fridge door type kegerator)
- Will fit any **PET soft drink bottle** and some glass bottles
- **No loss of carbonation** in the beer during filling!



## Understanding the Counter Pressure Bottle Filler

As many kegerator owners will know, it is not a good idea to fill a bottle at home from your regular draft tap for the two reasons that:

1. You will lose a lot of carbonation due to the beer fobbing when it lands in the container that you are filling.
2. You expose your beer to oxygen meaning that the quality of your beer is compromised and shelf life will be reduced.

The counter pressure bottle filler overcomes both of these issues by filling your bottles up under pressure and in a sealed environment that has been purged of oxygen. This is the same reason why similar type of equipment is used in a professional Brewery.

Firstly you need to inject CO<sub>2</sub> or some other inert gas into the bottle you are filling to push out or "purge" the bottle of oxygen. This is done by using a gas in line (B) to fill the bottle while opening the bleed valve (D) which will let the oxygen blow out the blow off tube (B).



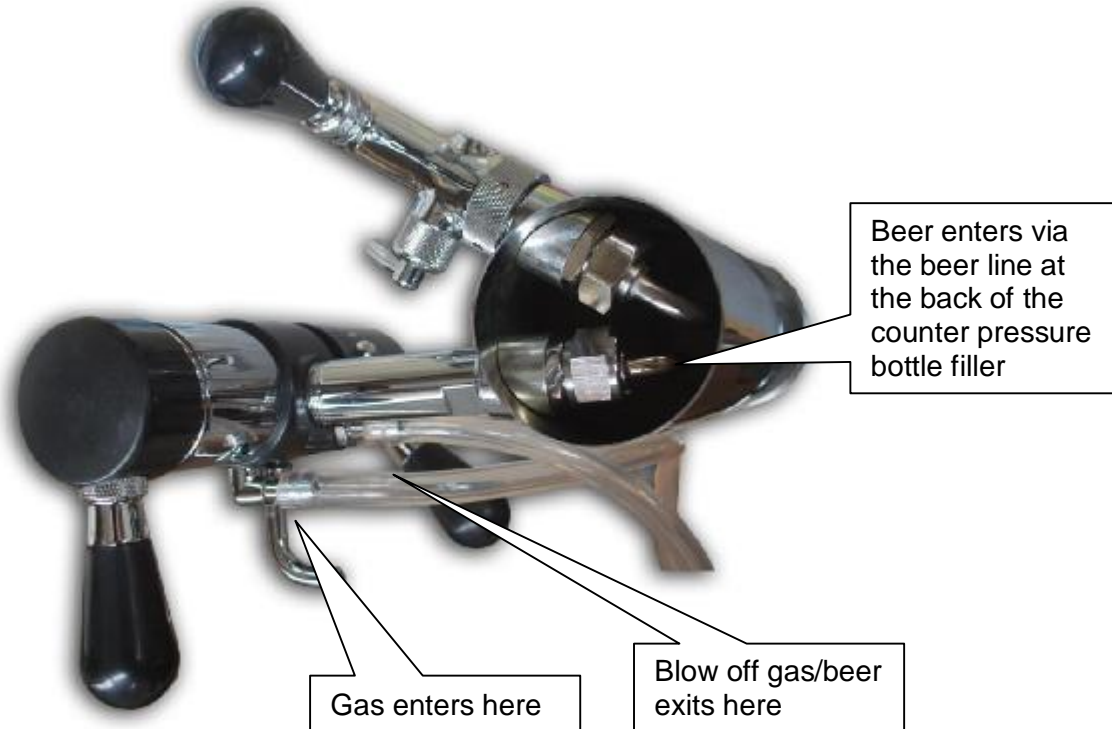
Filling is done in a similar manner whereby the beer will enter via the front (A) into the counter pressure bottle filler and into the bottle that you are filling. During this process a small amount of pressure is released with bleed valve (D) which will allow the beer to flow into the bottle under pressure. As the bottle fills, the beer will push the gas out of the bottle and out the blow off tube (B). Once the bottle is almost full the bleed valve (D) can be gradually closed to slow down the gas being released and therefore slow or stop the filling process.

The speed at which you fill the bottle is controlled by the speed that you bleed gas out of the bleed valve (D). The faster you let the gas out, the faster the beer will fill the bottle. However if you totally open the bleed valve then no pressure will be applied to the bottle and the foam reducing effects of the counter pressure will not take effect. For this reason the bleed valve (D) should only be opened enough to let out enough pressure to let your beer enter the bottle. If higher speed filling is required then it is more effective to increase the pressure on your gas in line (C) which should be set to the same pressure as the pressure on your keg. Typical filling speed is 1litre per 30seconds at a pressure of 1 bar (14psi, or 100kPa) but can be increased at higher pressures up to 2 bar (29psi, 200kPa)



## Instructions – Step 1 – Setting up Plumbing

Before using the counter pressure bottle filler it is important to make sure it has been correctly assembled at attached to a font (as shown below) and the plumbing has been correctly set up.



It is quite common to mount the counter pressure bottle filler to your font right next to your tap (as shown in photo above).

- (A) Font with beer line connected to back of counter pressure bottle filler
- (B) Gas/Beer blow off pipe that runs into your drip tray, bucket or drain. Once you are experience at using the counter pressure bottle filler you may not need this tube as you may be good enough to not spill any beer out this outlet.
- (C) Gas inlet tube. This tube is connected to your gas supply.





## Step 1 – Check configuration

- (A) Check that the barb on the back of the counter pressure bottle filler is attached to your beer line and runs down to your kegs.
- (B) Check that the blow off tube is connected to the straight barb. It is a good idea to have this running into your drip tray, nearby sink, or bucket. Beer will flow out this tube in the off instance that you try to overfill the bottle. Once you become experienced at using the counter pressure bottle filler you may not need this.
- (C) Check this line is connected to your CO2 regulator. You can run the pressure on this line the same as the pressure on your kegs. (Between 12psi - 30psi)
- (D) Check the bleed valve is in the off position. (turn clockwise)
- (E) Check the gas/beer mixer tap is in the full down and left position.

## Step 2 – Fit bottle to the counter pressure bottle filler

1. Turn the cam lock (F) to the right to open the gate where you bottle will sit.
2. Push your PET bottle into the counter pressure bottle filling station.
3. Turn cam cam lock (F) to the left to secure the bottle into the counter pressure bottle filler.

## Step 3 – Purge bottle with CO2

1. Turn (E) CO2 and beer mixer tap to the far right and up to turn on the gas.
2. Turn on (anticlockwise) the bleed valve (D) to let CO2 fill the bottle and blow out oxygen. This is known as purging. You will hear a hissing sound as the CO2 blows the oxygen out of the bottle. 3 seconds of purging should be sufficient to blow out most of the oxygen.
3. Turn off the bleed valve (D)

## Step 4 – Filling the bottle with Beer

1. Turn the gas/beer mixer tap to the far left then up. This will turn on the beer and turn off the gas.
2. Gradually open the bleed valve (D) until the beer starts to flow. The more you open the bleed valve, the faster your bottle will fill. However if you open the bleed valve too much the bottle will not fill under any pressure and defeat the purpose of using a counter pressure bottle filler. Use the bleed valve to fill the bottle
3. Once the bottle is full turn off the bleed valve (D). Turn the gas/beer mixer valve down and to the far left so everything is in the off position.
4. Remover the bottle from the counter pressure bottle filter unit.