## KIT CONTENTS <

PLEASE NOTE: Product photos for example only. Your kit may vary.

## 1. 8.5 GALLON STAINLESS KETTLE:

For boiling up to 6.5 gallons of wort. NOTE: Wrap threaded nipple, ball valve, barbed fitting, & plug with 5 wraps of teflon tape & install on kettle.

### 2. COPPER WORT CHILLER & FAUCET ADAPTER:

Place chiller inside the kettle to act as a heat exchanger. Cold water running though the chiller absorbs heat from your brew, cooling it to a temperature that is safe for adding yeast to perform the fermentation. The faucet adapter is for attaching the chiller to your sink for water.

## 3. INGREDIENT KIT & BREWER'S YEAST:

Everything you need to make your first batch of delicious Homebrew!

## 4. THREE MESH STEEPING BAGS:

Reusable, food-grade bags with drawstrings to hold specialty grains and hop pellets during brewing.

## 5. STAINLESS STEEL MIXING SPOON:

Used for stirring wort & mixing in malt extract and grain.

### 6. BREWER'S DIAL THERMOMETER:

Monitor temperatures throughout the process as needed.

### 7. 3-PIECE AIRLOCK & RUBBER STOPPER:

Creates a barrier between your beer and the environment outside the fermenter, while allowing the  $CO_2$  created by fermentation to escape. Mounts securely in the Fermonster lid via the stopper.

#### 8. 7 GALLON FERMONSTER FERMENTER WITH SPIGOT:

Where your beer will ferment. **NOTE**: Spigot for Fermonster does not come installed. You will need to install it before use.

## 9. FERMENTATION THERMOMETER:

Liquid Crystal Thermometer adheres to the side of the Fermonster so you can monitor fermentation temperature.

## 10. HYDROMETER & SAMPLE JAR:

Used before and after fermentation to measure the amount of sugar present. Measurements are made in Specific Gravity units, which are a comparison of your beer's density to the density of water.

## 11. 6 GALLON BUCKET WITH SPIGOT:

Used as your bottling bucket after fermentation is over. Can also be filled with sanitizer and used to sanitize equipment on brew day. **Note:** Bucket does not come with a lid. Spigot for bucket does not come installed. You will need to install it before use.

#### 12. BOTTLE FILLER:

Push against the bottom of the bottle (inside) and beer flows out, lift up and flow stops.

## 13. CORN SUGAR (AKA PRIMING SUGAR):

Used to "prime" beer to produce natural carbonation in the bottle.

## 14. BOTTLE CAPPER & 50 BOTTLE CAPS:

Capper crimps bottle caps onto bottles. 50 bottle caps are enough for 1-2 batches, depending on the size of bottles used.

## 15. FOOD-GRADE VINYL TUBING:

Used in the bottling process to transfer beer from the Fermonster to the Bottling Bucket, and then into your bottles.

## 16. BEER BOTTLE BRUSH:

Perfectly sized brush to clean out beer bottles after use.

## 17. SANITIZER SOLUTION:

Concentrated sanitizer used to eliminate wild yeast and bacteria.

#### 18. CLEANING TABLETS:

A non-caustic cleaner used to remove organic matter from inside your Fermonster Fermenter. Best left to soak overnight.



# KEGGING SYSTEM

PLEASE NOTE: Product photos for example only. Your kit may vary.

- **5 GALLON TORPEDO BALL LOCK KEG**
- BEER LINE ASSEMBLY WITH HAND HELD FAUCET
- **NEW ALUMINUM 5 LB CO<sub>2</sub> TANK**
- **GAS LINE ASSEMBLY**
- PREMIUM DUAL GAUGE REGULATOR

## **INSTRUCTIONS FOR USE:**

- 1. Connect your dual gauge regulator to the 5 lb CO2 tank with a crescent wrench. Do not overtighten the regulator as you may split the built-in gasket if too much force is applied. The gauge that goes to 2000 lbs psi is your tank gauge and tells you how much gas is left in your tank. A normal 5 lb CO2 tank will hold from 600–1000 lbs psi of pressure when filled, depending on the temperature the tank is stored in. The gauge that goes to 60 psi is your outgoing gauge and tells you what amount of pressure is being released into the keg.
- 2. You are now ready to adjust the pressure on the tank. Open the valve on top of the CO2 tank by turning the valve counter clockwise. Now find the large knob in the middle of the regulator body. This is called the adjustment knob and is in a loose position for shipment. Using your hand, thread in the adjustment knob clockwise until the needle on the low pressure gauge (0–30 psi) begins to read. This adjustment is good for now, we will fine tune the pressure later.

  On the top of your keg, near the valves (also called posts or body connects), the words "In" and "Out" are stamped. Attach the gray quick connect to the "In" valve for the CO2. Attach
- the black quick connect to the "Out" valve for the beverage.
- After everything is connected, you will need to fine tune your CO2 pressure. Usually 8-12 lbs psi is considered the norm, but different beers might have different requirements and ultimately your preference will rule. You increase the outgoing pressure by turning in the adjustment knob. In reverse, by loosening the knob, you decrease the pressure.
- To fill your keg with your homebrew you will need to clean and sanitize it first. A general pre-sanitizing cleaning of the keg can be performed by scrubbing the inside with a scotch brite pad or carboy brush (if you can't reach into the keg). Remember that you always must clean before you sanitize. Do not use chlorine to sanitize stainless steel as the bleach can pit the stainless steel. Star San (CL26), IO Star (CL36), or Sani Clean (CL27) are the recommended sanitizers. We also recommend that you remove the valve and lid and sanitize those as well.
- 6. After filling your keg and reattaching the lid flush the headspace with CO2 by filling with CO2 and releasing the valve on top of the keg lid. Do this 3-5 times to effectively remove the oxygen from the keg.

## CARBONATION:

Carbonation is influenced by both temperature and pressure. The lower the temperature of the liquid, the higher CO<sub>2</sub> pressure, and the more surface area for contact between the liquid and  $CO_2$ , the easier  $CO_2$  goes into solution. Thus the fastest way to carbonate your

beer is to chill it down as much as possible, turn the CO2 to about 30 lbs p.s.i., and shake it for around 3 minutes. A better quick method is to use the chart below. Select your temperature and desired volume of CO<sub>2</sub> (2.2–2.7 is a good range to start with) and shake the keg until no more CO2 goes into solution. For those who want to carbonate like the pros (quickly, with precision, and without shaking), we do sell a carbonation stone. It hooks to the inside of the CO2 in valve and hangs to the bottom of the keg. The stainless steel stone releases thousands of .5–2 micron bubbles of  $CO_2$ , creating so much surface area that the CO2 is instantly absorbed into solution until saturation is reached at whatever level of carbonation you choose.

The paragraph above explains how to carbonate fast when you need it quick, but just like bottling, your beer is going to benefit from a week or two of aging. What most people who keg do, is hook the keg up at whatever pressure CO2 they are going to dispense at, on average around 8--12 psi. Leave it on, in the refrigerator, for 1-2 weeks after which time the beer will be carbonated. Our personal method of carbonation is to keep our refrigerator at around 38 degrees. We hook up the gas line assembly to the keg, adjust pressure to 10 psi, and leave it for one week.

A keg of beer can be thought of as having two parts: the beer (liquid) and the headspace (gas). These two parts want to equalize the pressure ... your beer will keep accepting CO2 until the pressures are equal. If you leave your flat beer with 30 psi of CO2 in the headspace, you will eventually end up with fizz as the beer keeps accepting CO2 into solution in an attempt to equalize the pressures. If you have a carbonated beverage of any sort (beer, soda, seltzer) and you have no pressure in the headspace the CO2 comes out of solution to try and equalize the pressure between the liquid and the gas (headspace). You witness this every time you buy a 2 liter soda bottle and it goes flat in a few days. So the idea is to equalize them at the carbonation level you prefer. The easiest way to do this is to carbonate at the pressure you dispense. It may take a couple of days longer, but your beer ages and clears and dispenses very nicely without foaming problems.

**SERVING YOUR BEER:** After drawing off the first few pints, all the sediment around the dip tube in the bottom will be drawn off and you will start to get clear beer. A nice benefit of the keg is since it is constantly aging at a very cold temperature, the chill haze you see when you chill a bottle of homebrew will settle out within a few weeks.

## CARBONATION CHART AND HOW TO READ IT:

First choose the average temperature of the beer on the left side of the chart and then find the level of carbonation you want in the center of the chart. Once you have determined the carbonation level, follow the column up to the top of the chart to find your PSI setting.

Г.						Ροι	ınds 1	oer Sc	uare	Inch	(PSI)					$\Box$
		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Degrees in Fahrenheit	33	2.23	2.33	2.43	2.53	2.63	2.74	2.84	2.96	3.06	3.15	3.25				
	34	2.18	2.28	2.38	2.48	2.58	2.69	2.79	2.9	3.0	3.09	3.19				
	35	2.14	2.24	2.34	2.43	2.52	2.63	2.73	2.83	2.93	3.02	3.12	3.22			
	36	2.09	2.19	2.29	2.38	2.47	2.57	2.67	2.77	2.86	2.96	3.05	3.15	3.24		
	37	2.04	2.14	2.24	2.33	2.42	2.52	2.62	2.71	2.8	2.9	3.0	3.09	3.18	3.27	
	38	2.0	2.1	2.2	2.29	2.38	2.48	2.57	2.66	2.75	2.85	2.94	3.03	3.12	3.21	
	39	1.96	2.06	2.15	2.25	2.34	2.43	2.52	2.61	2.7	2.8	2.89	2.98	3.07	3.16	3.25
	40	1.92	2.01	2.1	2.2	2.3	2.39	2.47	2.56	2.65	2.75	2.84	2.93	3.01	3.1	3.19
	41	1.88	1.97	2.06	2.16	2.25	2.34	2.43	2.52	2.6	2.7	2.79	2.88	2.96	3.05	3.14
	42	1.85	1.94	2.02	2.12	2.21	2.3	2.39	2.48	2.56	2.65	2.74	2.83	2.91	3.0	3.09
	43	1.81	1.9	1.99	2.08	2.17	2.26	2.34	2.43	2.52	2.61	2.69	2.78	2.86	2.95	3.04
	44	1.78	1.87	1.95	2.04	2.13	2.22	2.3	2.39	2.47	2.56	2.64	2.73	2.81	2.9	2.99
	45	1.75	1.84	1.91	2.0	2.08	2.17	2.26	2.34	2.42	2.51	2.6	2.69	2.77	2.86	2.94
	46	1.71	1.8	1.88	1.96	2.04	2.13	2.22	2.3	2.38	2.47	2.55	2.64	2.72	2.81	2.89
	47	1.68	1.76	1.84	1.92	2.0	2.09	2.18	2.26	2.34	2.42	2.5	2.59	2.67	2.76	2.84
	48	1.65	1.73	1.81	1.89	1.96	2.05	2.14	2.22	2.3	2.38	2.46	2.54	2.62	2.71	2.79
	49	1.62	1.7	1.79	1.86	1.93	2.01	2.1	2.18	2.25	2.34	2.42	2.5	2.58	2.67	2.75
	50	1.59	1.66	1.74	1.82	1.9	1.98	2.06	2.14	2.21	2.3	2.38	2.46	2.54	2.62	2.7
	51	1.57	1.64	1.71	1.79	1.87	1.95	2.02	2.1	2.18	2.26	2.34	2.42	2.49	2.57	2.65
	52	1.54	1.61	1.68	1.76	1.84	1.92	1.99	2.06	2.14	2.22	2.3	2.38	2.45	2.53	2.61
	53	1.51	1.59	1.66	1.74	1.81	1.89	1.96	2.03	2.1	2.18	2.26	2.34	2.41	2.49	2.57
	54		1.56	1.63	1.71	1.78	1.86	1.93	2.0	2.07	2.15	2.22	2.3	2.37	2.45	2.52
	55		1.53	1.6	1.68	1.75	1.82	1.89	1.97	2.04	2.12	2.19	2.26	2.33	2.4	2.47
	56		1.5	1.57	1.65	1.72	1.79	1.86	1.93	2.0	2.08	2.15	2.22	2.29	2.36	2.43
	57			1.54	1.62	1.7	1.77	1.83	1.9	1.97	2.04	2.11	2.18	2.25	2.32	2.39
	58			1.51	1.59	1.67	1.74	1.8	1.87	1.94	2.01	2.08	2.15	2.21	2.28	2.35
	59				1.56	1.64	1.71	1.77	1.84	1.91	1.98	2.04	2.11	2.17	2.24	2.31
	60				1.54	1.62	1.69	1.75	1.82	1.88	1.95	2.01	2.08	2.14	2.21	2.27
							Volu	mes (	Of CO	)2						

### MORE INFO ON KEGGING:

For more in-depth information on kegging, please see our manual on "Kegging" located in the Articals section at MoreBeer.com.