

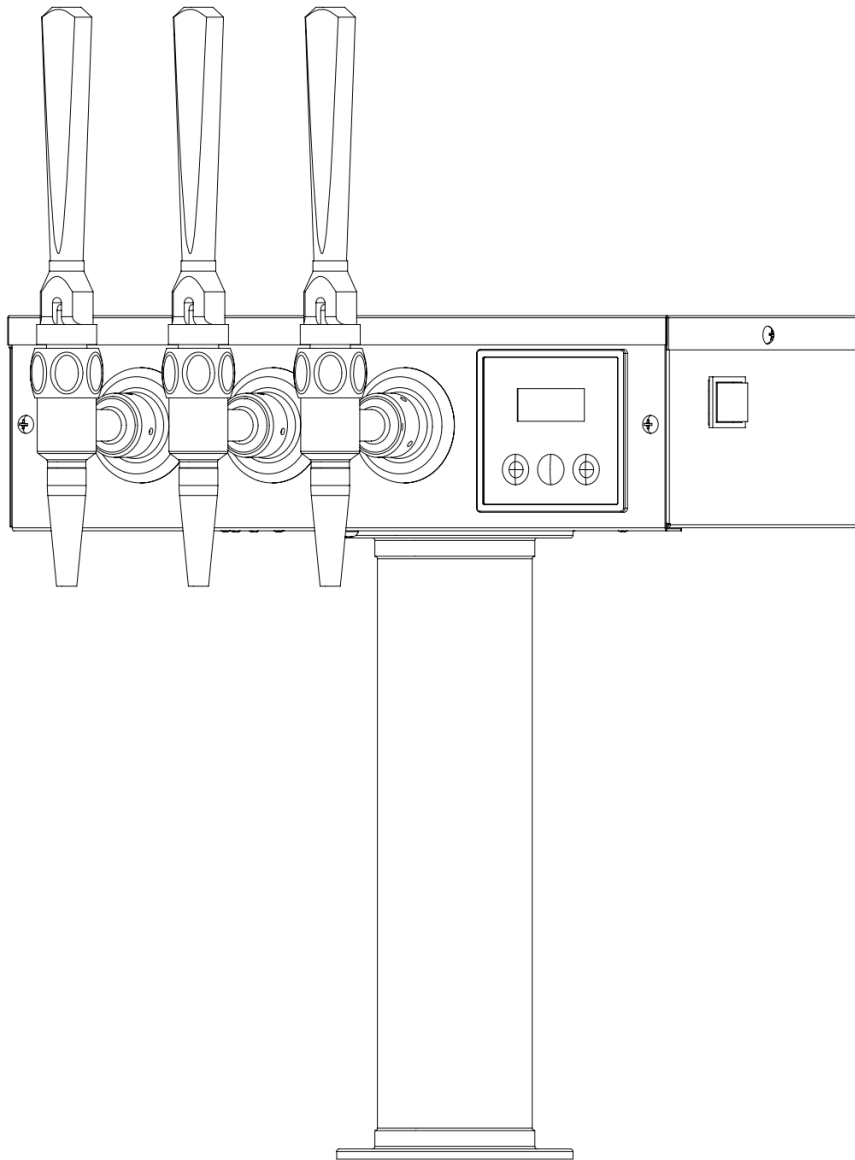


# HOT DRAFT

By Kegco

## Installation Guide

### Model: KC HDT301



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San Diego, CA 92126

(888) 980 - 4810


support@kegco.com

# SAFETY WARNING

When installing or using any high voltage electrical appliance, basic safety precautions should always be followed. Under no circumstance should you attempt to clean, install, inspect, repair, disassemble or otherwise service this product, without first shutting off all power to the unit and uncoupling the keg so that pressure is eliminated during the cleaning / inspection.

THIS PRODUCT SHOULD BE INSTALLED BY A QUALIFIED ELECTRICIAN AND A QUALIFIED PLUMBER IN ACCORDANCE WITH ALL NATIONAL, STATE, PROVINCIAL AND LOCAL ELECTRICAL & PLUMBING CODES.

PLEASE READ THESE INSTRUCTIONS THOROUGHLY AND COMPLETELY PRIOR TO INSTALLATION & USE. FAILURE TO DO SO COULD CAUSE PROPERTY DAMAGE, SERIOUS INJURY, OR DEATH.

	<p><b>Hot water can be dangerous, especially for infants or children, the elderly, or infirm. There is hot water scald potential if the thermostat is set too high.</b></p> <p>Water temperatures over 125° F (51° C) can cause severe burns or scalding resulting in death.</p> <p>Hot water can cause first degree burns with exposure for as little as:</p> <ul style="list-style-type: none"><li>3 seconds at 140° F (60° C)</li><li>20 seconds at 130° F (54° C)</li><li>8 minutes at 120° F (48° C)</li></ul> <p>Test the temperature of the water before placing a child in the bath or shower.</p> <p>Do not leave a child or an infirm person in the bath unsupervised.</p>
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SERIOUS BODILY INJURY OR DEATH COULD OCCUR IF YOU IGNORE THIS WARNING.

## WARNING

“Hot liquids under pressure can be dangerous and even fatal if installed improperly installed and maintained. “



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## IMPORTANT SAFETY INFORMATION

1. You must read and follow all instructions. Serious bodily injury or death could occur if you ignore this warning.
2. All circuit breakers and/or disconnect switches servicing the HOT DRAFT® Tower must be turned off when installing, uninstalling, or repairing this unit.
3. The Tower must be installed by a licensed electrician.
4. The Tower must be wired in accordance with the current version of the National Electrical Code (US) or Canadian Electric Code (Canada).
5. This installation must comply with all national, state, and local plumbing and electrical codes.
6. When the Tower is not within sight of the electrical circuit breakers, an additional local means of disconnection of all ungrounded conductors must be provided that is within sight of the appliance or a circuit breaker lockout must be used. (Ref. NEC 422.31)
7. If the Tower is installed in a location where liquid damage could occur in the event of a leak, it is recommended that a drip pan be installed and connected to a suitable drain.
8. This is a closed system meaning that the product is coming from a container under pressure or from a vacuum system of delivery. Adhere to the labeling requirements on the containers regarding allowable pressure and/or delivery recommendations so that system is not compromised.
9. Product containers such as kegs, bag-in-box, or other types of product packaging each come with guidelines as to maximum pressure allowed or recommended delivery instructions required for safe handling. It is imperative that operator follow these guidelines at all times!
10. This Tower must be installed in a location where it is not subject to freezing temperatures unless supplied with factory installed freeze protection.

**Beverage Factory**

**Phone: 1-(800) - 710-9939**



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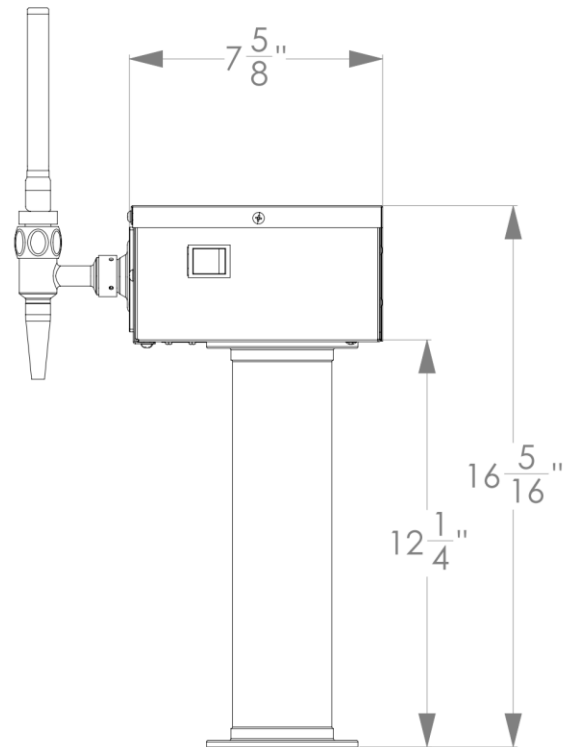
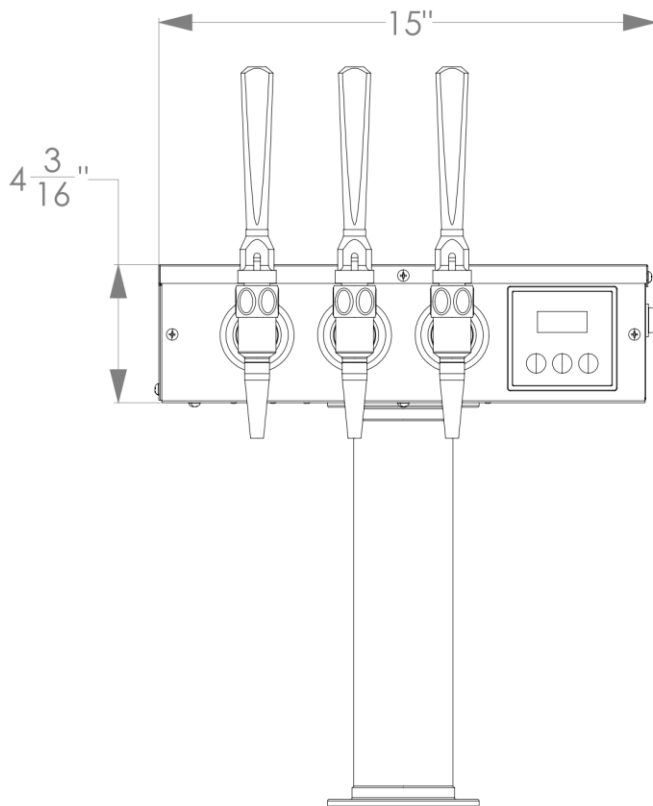
## ABOUT

Congratulations on the purchase of your new HOT DRAFT® Tower! This U.S. patented product (<https://kegco.com/pages/patents>) is the property of Ryan Bros. Coffee and is the World’s First Draft System that allows you to enjoy both cold and hot products at the point of dispense without the burning effects of holding tanks or the lessening of flavor from oxidation. Utilizing a tankless method of just-in-time heating, the structure and flavor integrity of the beverage is at its original maximum quality without the degradation of heretofore constant reheating. What does this mean? The HOT DRAFT® Tower delivers *constant freshness with zero waste!* Inside the keg, nitrogen is displacing oxygen, keeping the beverage 100% fresh while infusing the beverage with a creamy finish. The finished product is as good as when it was originally crafted—every ounce and all the time! With the HOT DRAFT® Tower, *you are serving products at their very best...highlighting peak freshness and flavor...and the last ounce is as good as the first!* We hope you enjoy having chosen our innovative solution and for helping us solve the many flavor pitfalls and waste traditional brewing yields. As you will soon discover yourself—The HOT DRAFT® Tower is “Not Your Same Old Drip!” ®

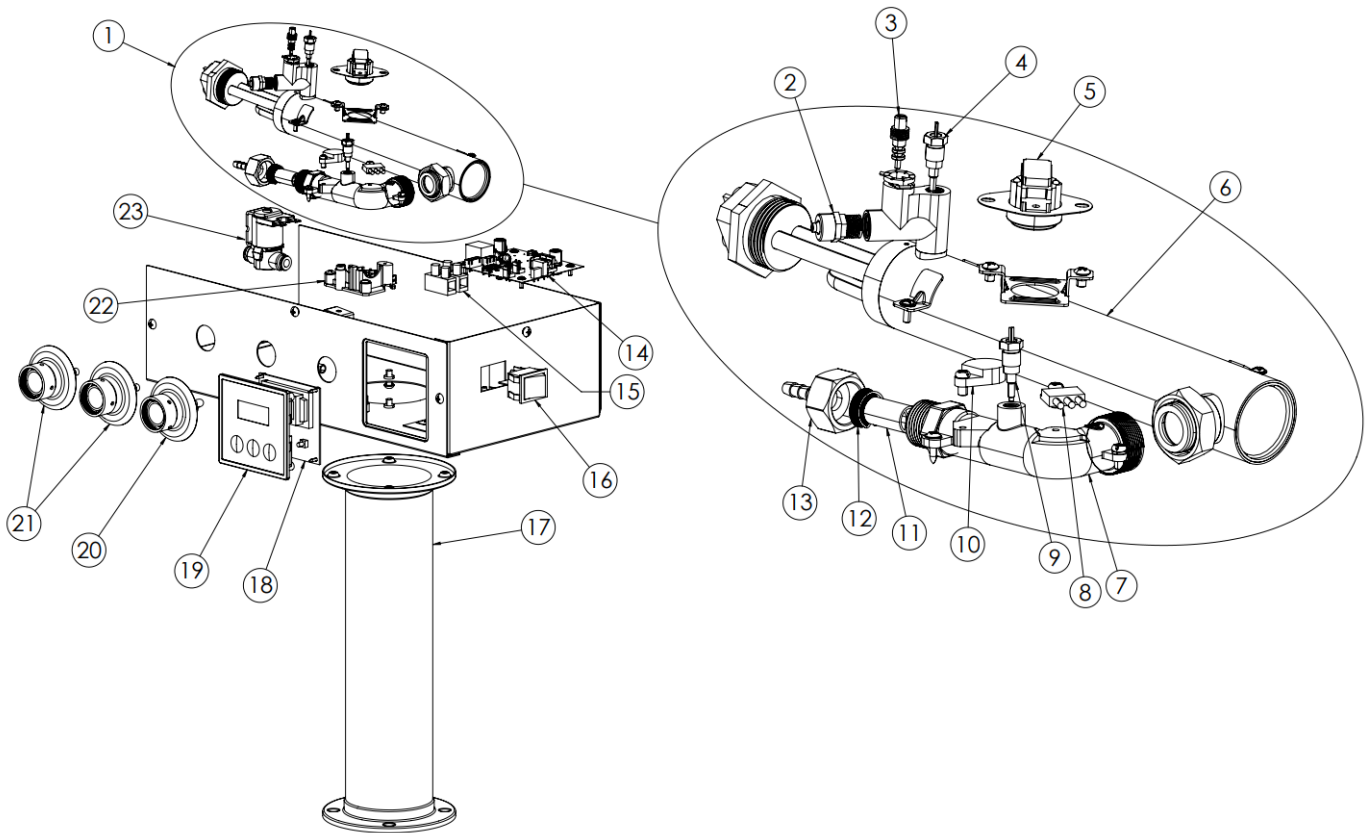


TECHNICAL SPECIFICATIONS	
Dimensions	16 <sup>5</sup> / <sub>16</sub> " (H) x 15" (W) x 7 <sup>5</sup> / <sub>8</sub> " (D)
Operating Temperature Range	140°F – 180°F
Wattage/Voltage/ Frequency/Amperage	4.8 kW/240 V/60 Hz/20A 4.4 kW/230 V/60 Hz/20A 3.6 kW/208 V/60 Hz/18A
Operating Pressure Range (Optimal Operating Pressure Range)	20 PSI – 40 PSI (25 PSI – 35 PSI)
Minimum Flow Rate	0.15 GPM
Minimum/Maximum Inlet Beverage Temperature	34°F/70°F

PRODUCT FEATURES	
On/Off Switch	Yes
Gas Used	Nitrogen
Electrical Plug	No
Taps Available	3
Display	LCD
Display Color	Blue
Buttons	Push
Appearance	Brushed Steel
Certifications	CSA C22.2 NO.109 NSF/ANSI STD.4 UL STD. 197



## PARTS DIAGRAM



- |   |                        |  |   |
|---|------------------------|--|---|
| 1. Heater Assembly                              | 6. Heating Chamber     | 13. Inlet Barbed Nipple<br>for 3/16" ID Tubing | 19. Control Panel                           |
| 2. Compression Fitting<br>for Hot Draft® Tubing | 7. Inlet Manifold      | 14. Power Board                                | 20. 90° Elbow Shank                         |
| 3. Flow Restriction<br>Spindle                  | 8. Triac               | 15. Terminal Block                             | 21. Straight Shanks                         |
| 4. Outlet Thermistor                            | 9. Inlet Thermistor    | 16. Power Switch<br>(On/Off)                   | 22. Inlet Manifold &<br>Beverage Line Mount |
| 5. ECO (Electrical<br>Cutoff)                   | 10. Hall Effect Sensor | 17. Tower Column                               | 23. Solenoid Valve                          |
|   | 11. Flow Meter         | 18. Control Board                              |   |
|   | 12. Inlet Screen       |  |   |

## BEFORE INSTALLATION OF YOUR HOT DRAFT® TOWER

READ THESE INSTRUCTIONS THOROUGHLY AND COMPLETELY PRIOR TO INSTALLATION & USE. FAILURE TO FOLLOW INSTRUCTIONS COULD CAUSE PROPERTY DAMAGE, SERIOUS PERSONAL INJURY, OR DEATH.

By installing this product, you acknowledge the terms of the manufacturer's warranty. Once the Tower is installed, do not return product to the place of purchase. If you have any questions regarding the warranty or product return policies, please contact **Beverage Factory** at 1-(800) 710-9939.

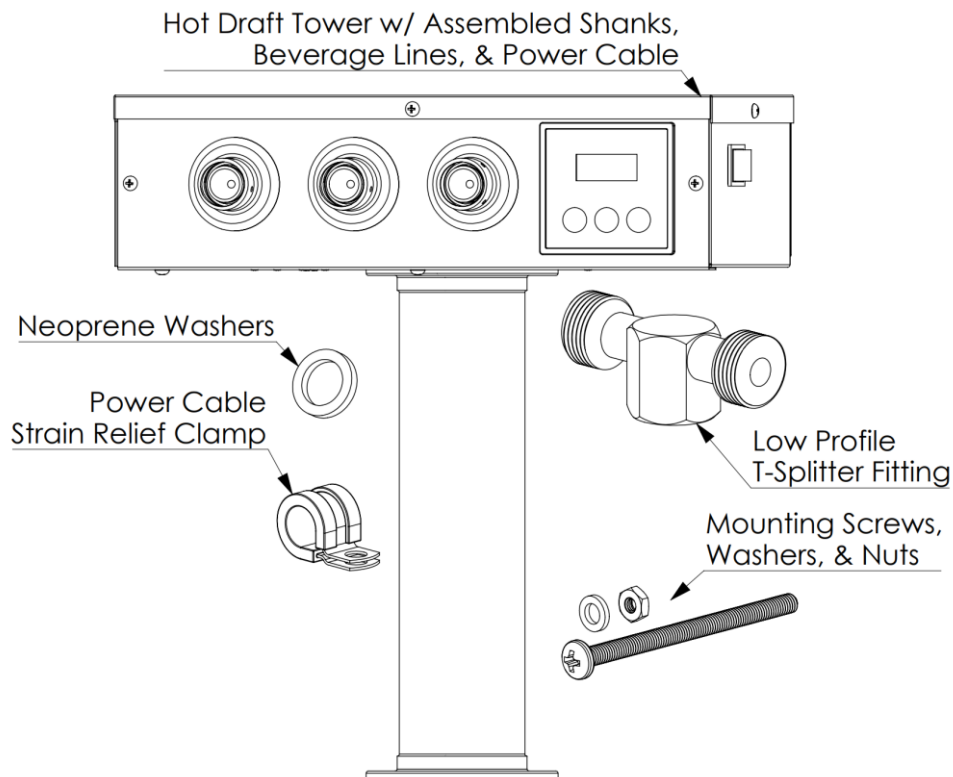
Before installation, inspect all components. Along with any add-ons purchased with your Hot Draft® Tower, the package includes:

- HOT DRAFT® Tower with assembled shanks, lines, and power cable
- Mounting Screws, Washers, and Nuts
- Power Cable Strain Relief Clamp
- Low Profile T-Splitter Fitting
- Neoprene Washers for Beer Lines and Fittings

Contact a licensed electrician to configure the electrical system.

Recommended tools for installation:

- Philips Head Screwdriver
- Flat Head Screwdriver
- Appropriately Sized Wrenches
- Faucet Wrench





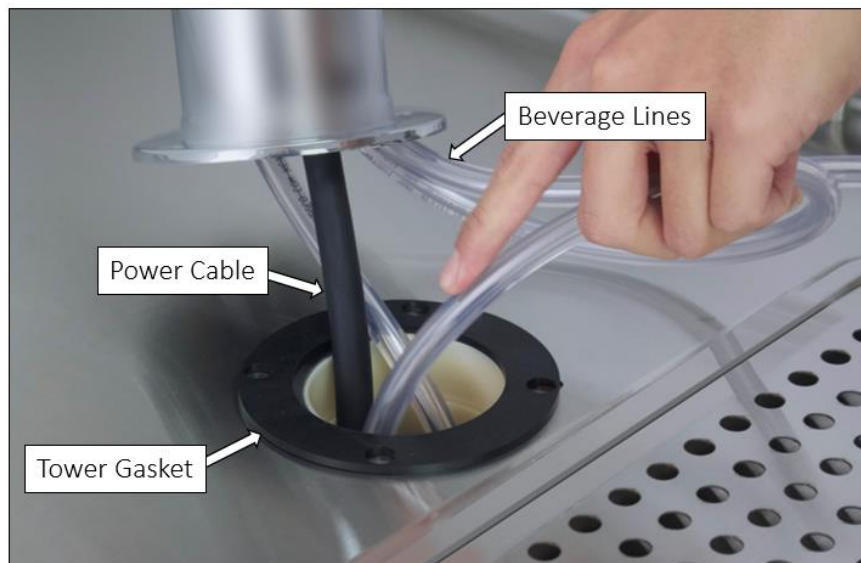
## ASSEMBLE THE HOT DRAFT® TOWER DISPENSE SYSTEM

### Safety Instructions:

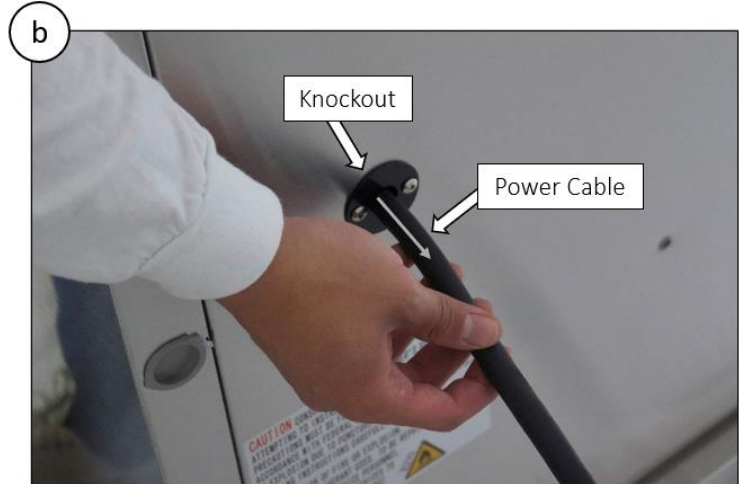
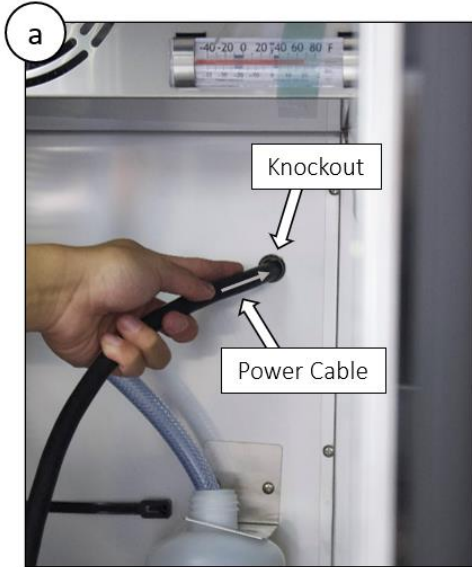
1. Pressurized Nitrogen can be dangerous. Handle with care.
2. Never exceed 60 PSI.
3. Always connect Nitrogen tank to regulator. Never connect the tank directly to keg.
4. Keep the Nitrogen tank in an upright position.
5. Ventilate area after Nitrogen leak.
6. The regulator may break if the tank falls on it. Secure the Nitrogen tank.
7. If it becomes difficult to breathe and your head starts to ache, high levels of Nitrogen may be present. LEAVE THE ROOM IMMEDIATELY.
8. Pressures above 50 PSI will release the coupler's built-in pressure relief valve.

### Attaching the Tower

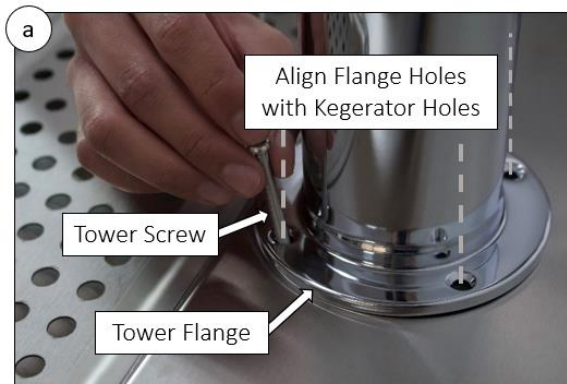
1. Start by guiding beverage lines and power cable through the hole on the kegerator top. For more than one beverage line, put the first line through and press the second nut into the hole next to the first tube. Then pull the first tube from inside the kegerator and it will bring the second nut through the hole. Ensure there is a rubber tower gasket between the tower and the kegerator top.



2. Once the power cable is inside the kegerator cabinet, (a) guide the cable through the knockout in the back wall and (b) out the other side.



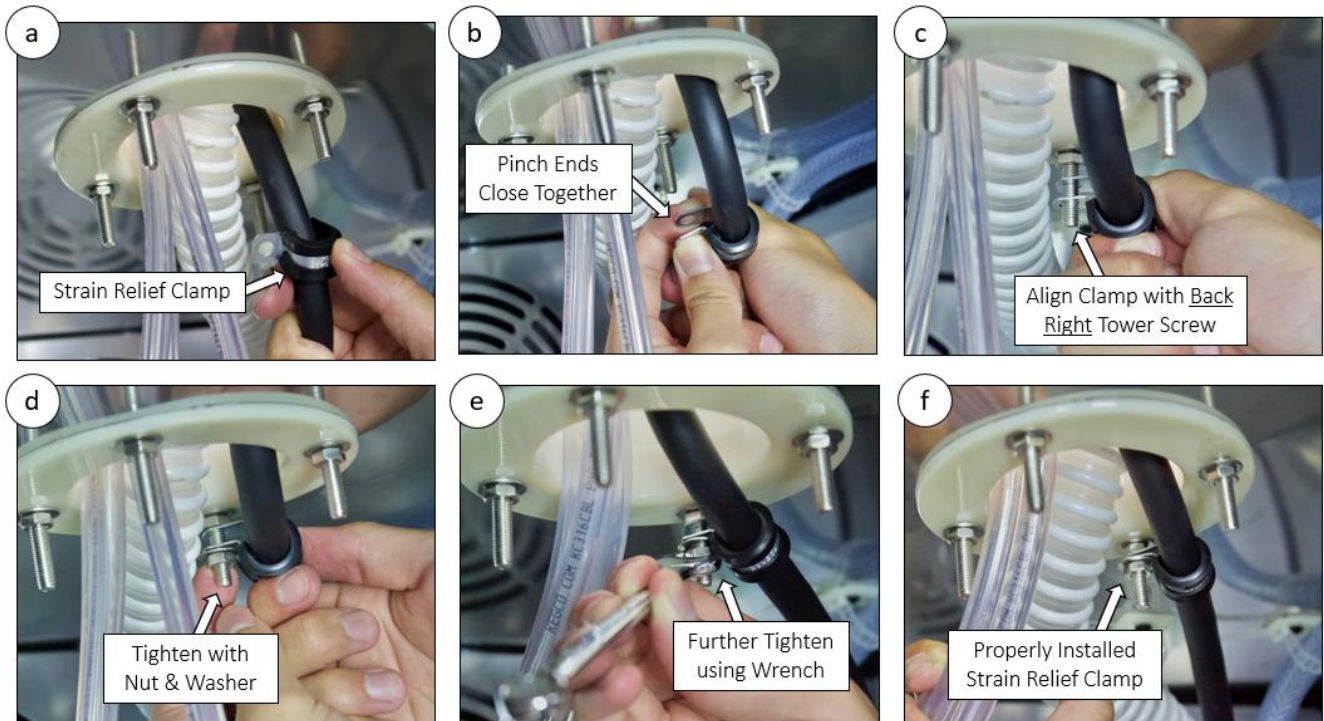
3. (a) Align the tower flange with the holes on top of the kegerator. Insert the provided Tower Screws into the holes. (b) Use a Philips Head Screwdriver and appropriate wrench to tighten the screws with provided nuts and washers.



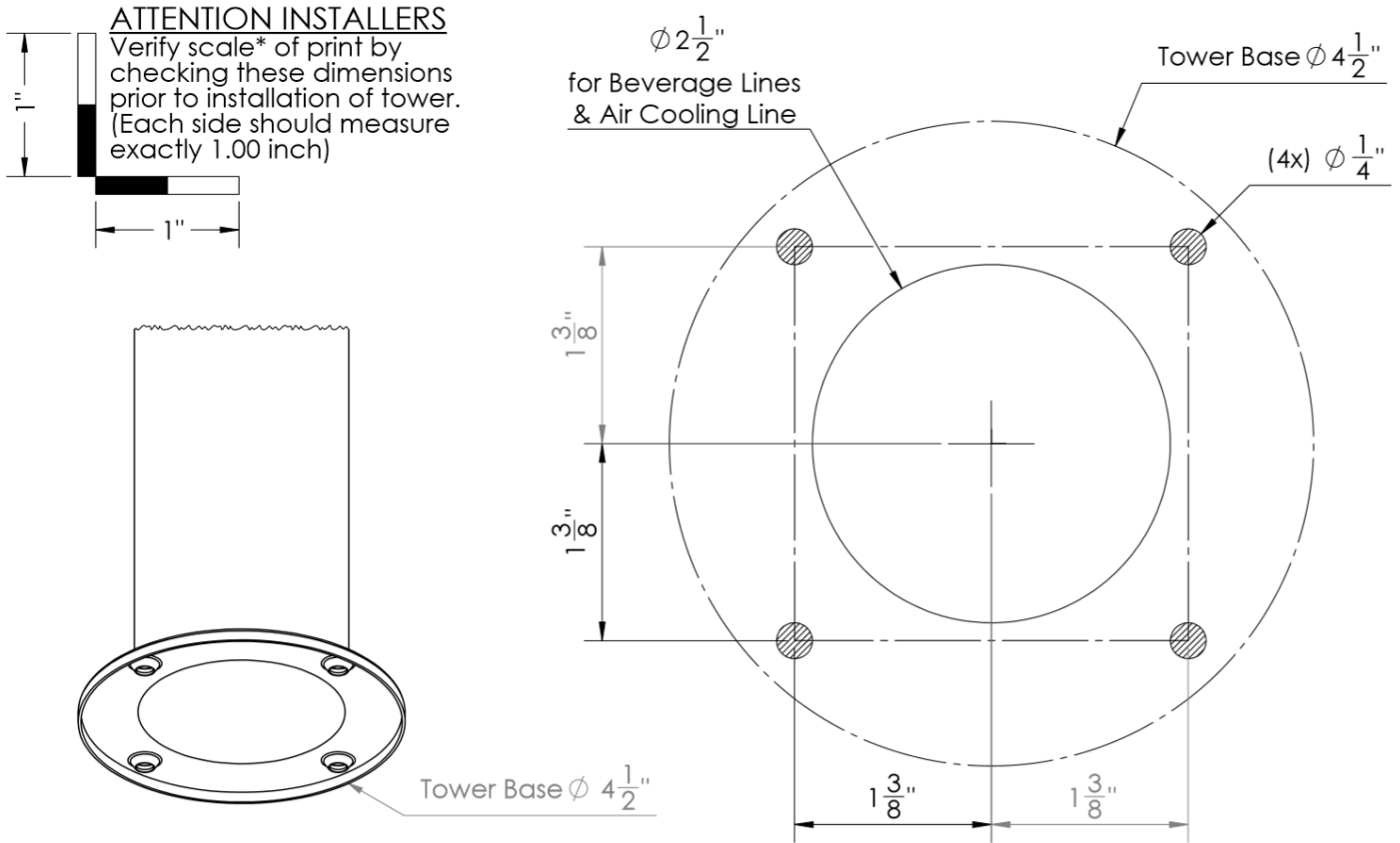
4. Feed the air-cooling line up into the tower.



5. Install the Power Cable Strain Relief Clamp. (a) Slip the Clamp around the power cable. (b) Pinch the ends of the Strain Relief Clamp close together. (c) Align the holes with the back right Tower Screw. (d) Use the provided nut and washer to tighten the clamp. (e) Use an appropriate wrench to further tighten the nut and washer until the clamp is shut, shown in (f).



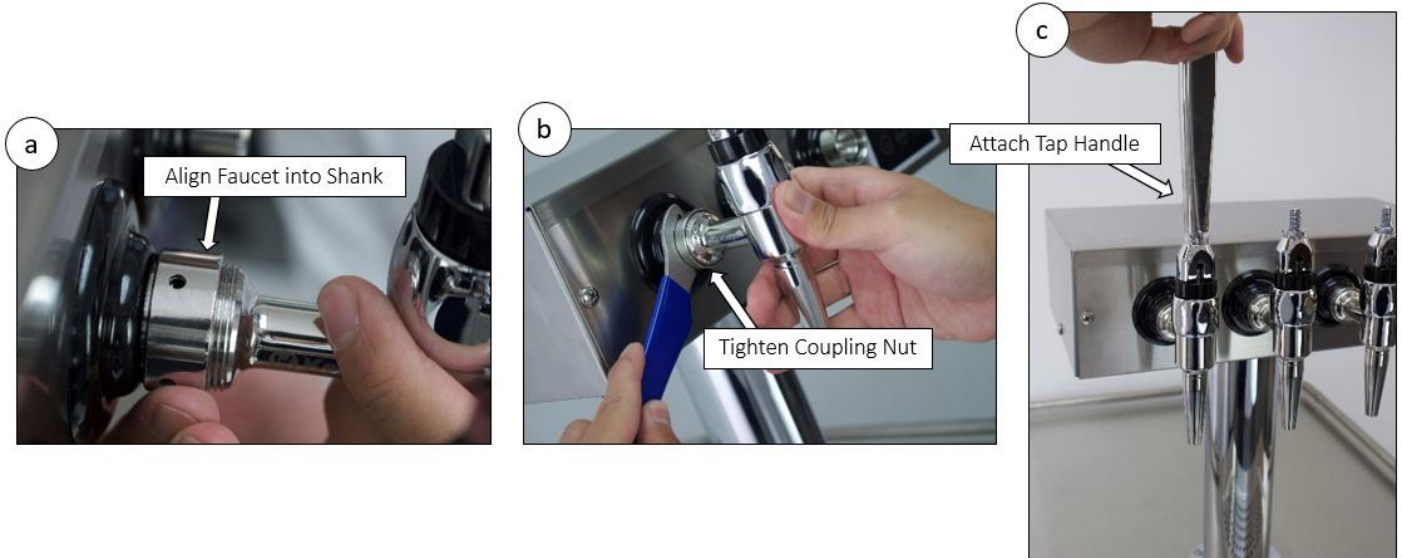
If you are installing the tower on a surface other than the kegerator top, you must use the necessary hardware to drill holes for screws and beverage lines. Follow the tower flange dimensions outlined below to match the screw positions on your surface. Visit [www.kegco.com](http://www.kegco.com) or call (888) 980-4810 for a printable template.



If installing the kegerator under a countertop, ensure you have the proper amount of air circulation around the kegerator with no obstructions. If the top of the kegerator touches the bottom of the countertop, seal the gap with caulk or silicone. If there is a gap between the top of the kegerator and the bottom of the countertop, you can create a spacer using PVC pipe and seal around that. Drop the line beverage line and power cable through the countertop and spacer and attach the tower to the countertop.

## Attaching the Faucets

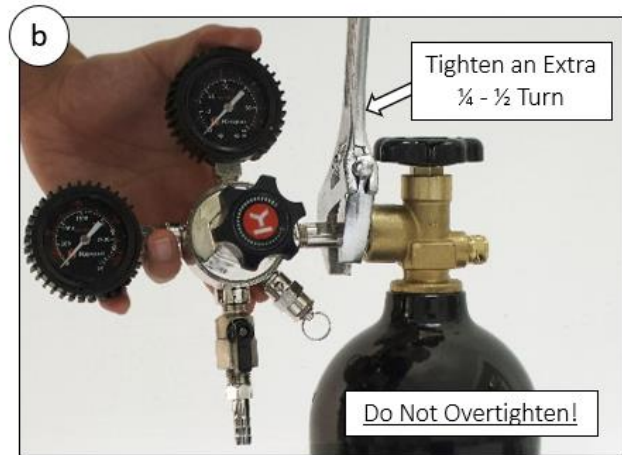
When attaching the faucet to the tower, (a) line up the teeth on the inside of the faucet with the teeth inside the shank. (b) Screw the coupling nut onto the faucet and tighten with the faucet wrench. (c) Screw the tap handle onto the faucet lever. The lever is an industry standard thread size to allow for aftermarket tap handles.



## Gas Connection

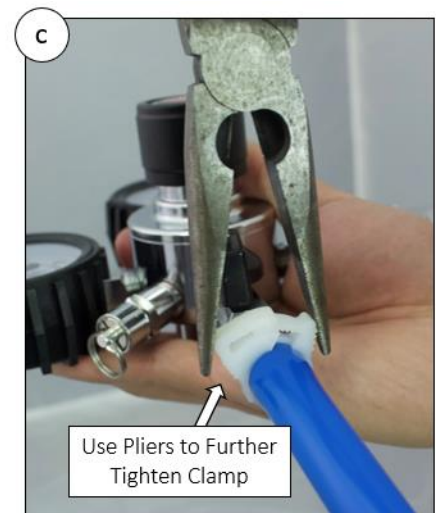
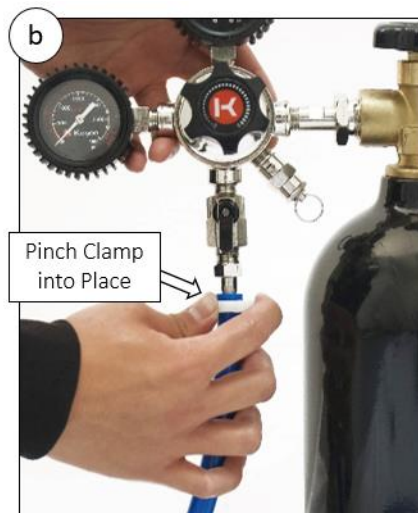
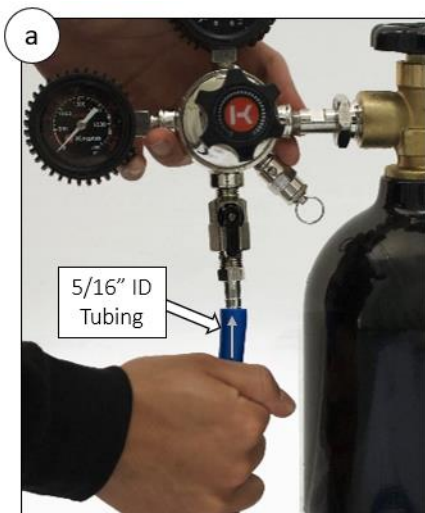
The Nitrogen tank will arrive empty, and you will need to have it filled locally. The best way to find a place to fill the tank is to search for a welding supply store in your zip code. We recommend the use of **Industrial Grade Nitrogen** for the best result. Be sure to position the tank in an upright manner.

1. Attach the regulator to the Nitrogen tank. If there is a washer built on to the end of your regulator, you do not need to use any additional washer. (a) Hand tighten the coupling nut. (b) Use a 1 1/8" wrench to tighten an extra quarter to half turn. Overtightening the coupling nut may cause a leak.



2. (a) Attach 5/16" I.D. Gas Line Tubing to regulator nipple. The tubing can be made more pliable by heating the end in hot water. (b) Pinch white plastic clamp into place. (c) Use a pair of pliers to further tighten the clamp.

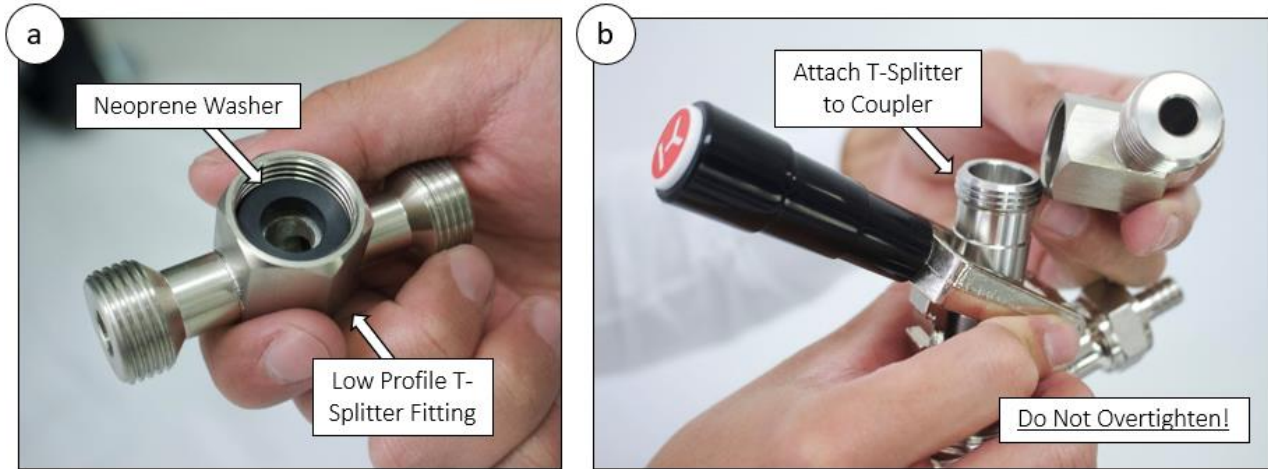
Note: Ensure the clamp is very tight as this system requires higher pressure than typical beverage systems.



## Coupler Connection

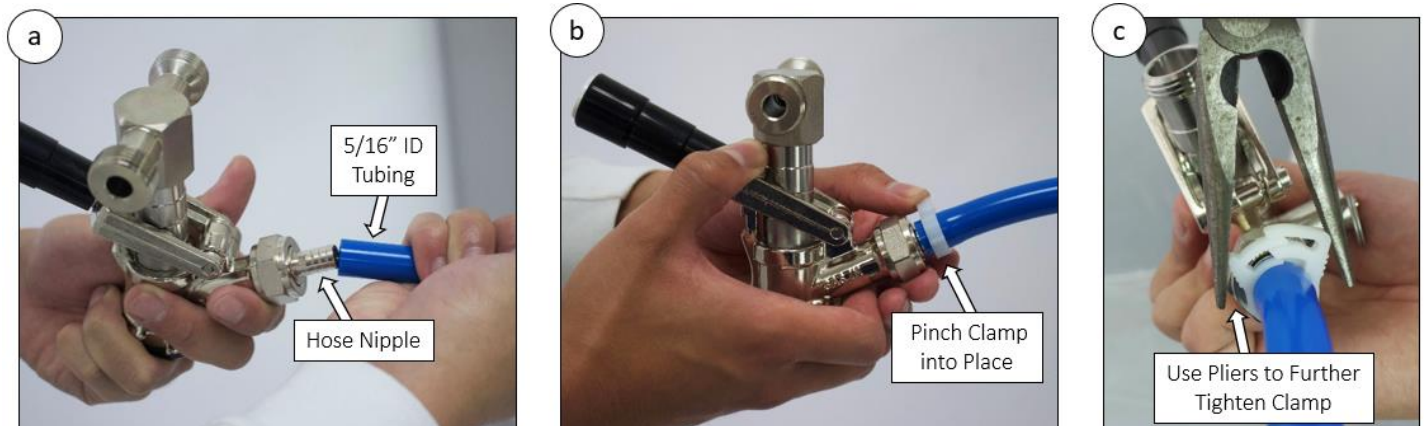
Commercial keg couplers attach to both the beverage and gas lines. With this unit, you can use one keg to dispense both cold and hot beverage by using the provided Low Profile T-Splitter Fitting.

1. (a) Place a neoprene washer between the T-Splitter and the top of the coupler. (b) Attach the T-Splitter to the top of the coupler. Do not overtighten the T-Splitter as this will cause a leak.



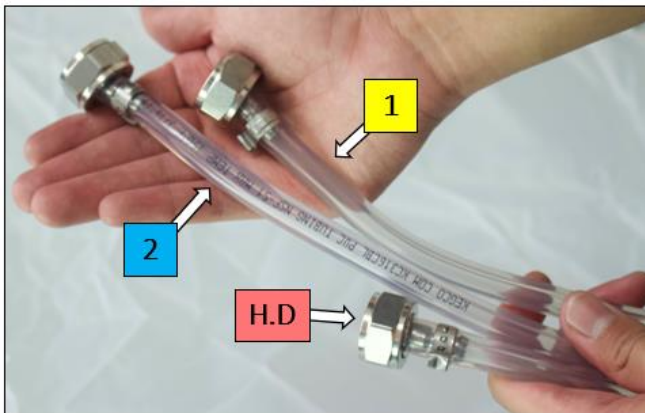
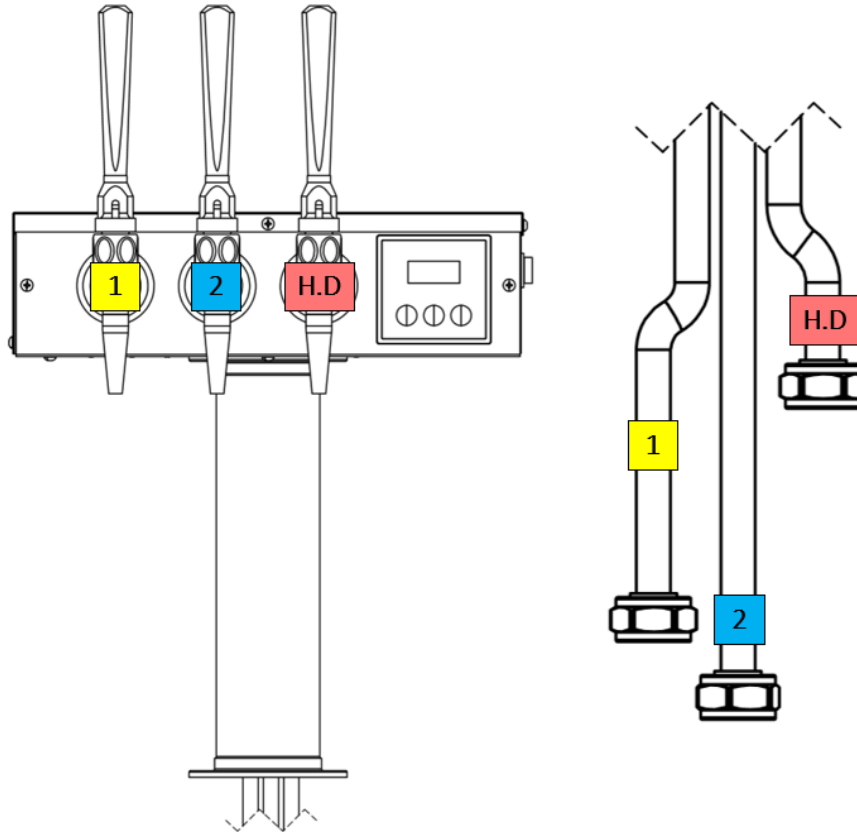
2. (a) Connect the 5/16" ID Gas Line Tubing to a hose nipple on the side of the coupler. (b) Clamp the into place. Use a pair of pliers to further tighten the clamp.

Note: Ensure the clamp is very tight as this system requires higher pressure than typical beverage systems.



3. Identify the beverage lines. Pull the beverage lines away from the Hot Draft® Tower until they are taut. The beverage lines will be different lengths. Follow the guide pictured below to identify the lines and corresponding faucet.

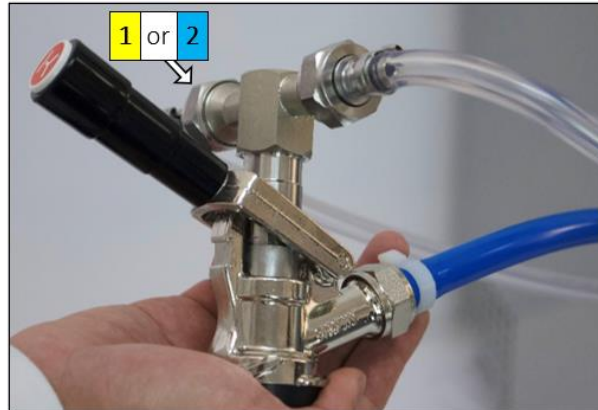
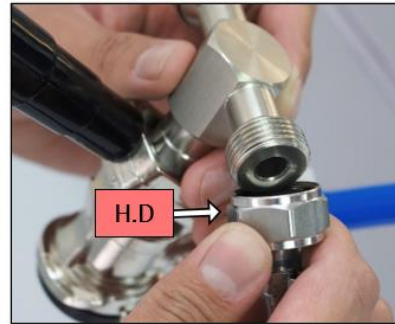
Note: The **H.D** Hot Draft® faucet will dispense hot beverage. Faucet **1** and Faucet **2** will dispense cold beverage.



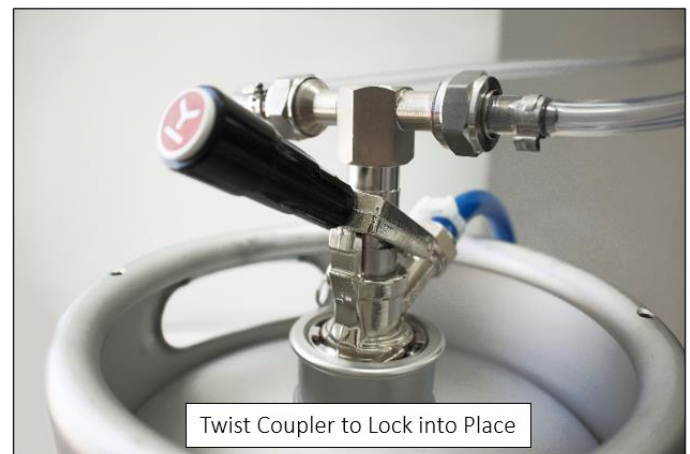
<b>1</b>	Left Faucet ↔	Second Longest Beverage Line
<b>2</b>	Middle Faucet ↔	Longest Beverage Line
<b>H.D</b>	HOT DRAFT Faucet ↔	Shortest Beverage Line



4. The beverage lines come with Beer Nuts at the end that attach to the T-splitter. (a) Be sure to insert a neoprene washer into the Beer Nut before attaching to the T-splitter. (b) Attach the **H.D** Hot Draft® Beverage Line to one end of the T-Splitter. (c) Attach Beverage Line **1** or Beverage Line **2** to the other end of the T-splitter.



5. The keg coupler attaches to the top of a keg. Slide the coupler into the keg's Coupler Receiver. Twist to lock the coupler to the keg. This keg can now be dispensed as either a hot or cold beverage.



## Setting Pressure

If dispensing coffee, the pressure should be set to about 30-40 PSI. The best way to set the pressure is to turn the dial on the front of the regulator counterclockwise until it is all the way out. This will turn the regulator off. Turn the valve on the bottom of the regulator to the side to ensure no Nitrogen will pass through the regulator. Pull the pin on the side of the coupler to release built up pressure from the keg. Open the cold draft faucet. Nothing should come out initially as there is no pressure to the keg. Put a container under the faucet and open the valve at the bottom of the regulator. Turn the dial clockwise with the faucet open and beverage will start to pour. Stop turning when you get the best flow rate. This should be about 30-40 PSI. This method should prevent your regulator from creeping.

If you are dispensing at altitude, you will need to increase your output pressure by one pound for every 2,000 feet of elevation above sea level.

## Setting Kegerator Temperature

Refer to your kegerator's manual to change your kegerator temperature. **We recommend coffee to be kept at 37 degrees. Do not store coffee above 40 degrees.**

The air temperature inside the kegerator can fluctuate greatly as you open and close the door. Check the liquid temperature by putting a thermometer in a glass of water inside the kegerator. Let the glass cool for 24 hours with the door shut for the most accurate reading.

## ELECTRICAL CONFIGURATION

Beverage Factory recommends that this product be installed by a **licensed and qualified electrician** in accordance with all applicable national, state, provincial, and local electrical codes. As with all electrical appliances, under no circumstances should you attempt to install, repair, or disassemble this water heater without first shutting off all power to the unit directly at the fuse or breaker box. Make sure to shut off all breakers. **SERIOUS BODILY INJURY OR DEATH COULD OCCUR IF YOU IGNORE THIS WARNING.**

All wiring (wire gauge) and circuit protection (breakers) must comply with the U.S. National Electrical Code (NEC) in the USA, or the Canadian Electrical Code (CEC) in Canada. Failure to do so could result in property damage and/or personal injury, and void your warranty.

### Electrical specifications

MODEL	VOLTAGE/PHASE	KW	TOTAL AMPS	RECOMMENDED WIRE SIZE (CU) 90° C	RECOMMENDED MINIMUM BREAKER SIZE (PER NEC – INTERMITTENT DUTY)
KC HDT301	240 1Φ Δ	4.8	20	14	20
	230 1Φ Δ	4.4	20	14	20
	208 1Φ Δ	3.6	18	14	20

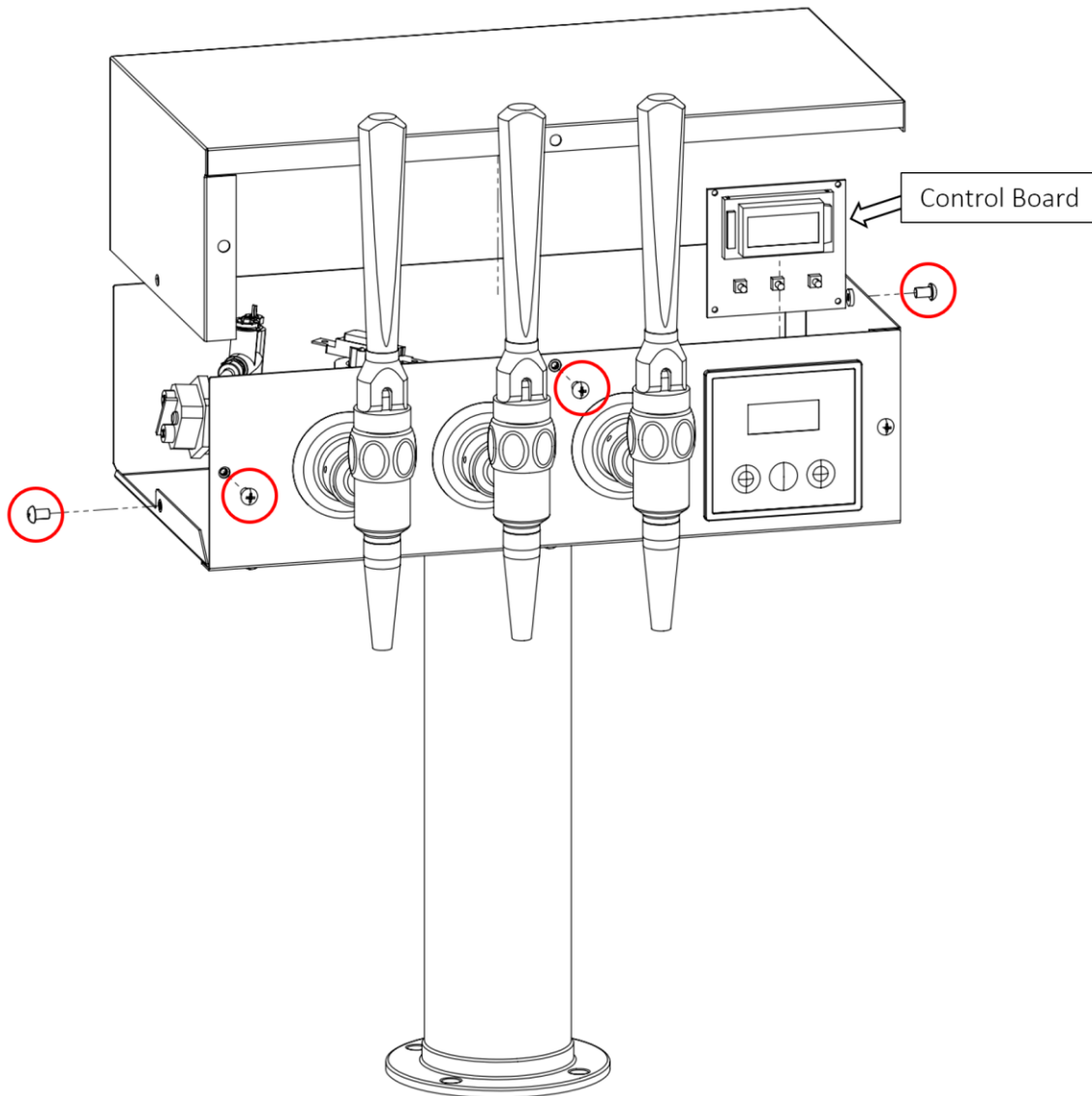
### Electrical Plug Installation

The HOT DRAFT® Tower will arrive without an electrical plug installed at the end of the power cable. We recommend a plug to be installed by a **licensed and qualified electrician**. Ensure the plug matches the power outlets found in your installation location.

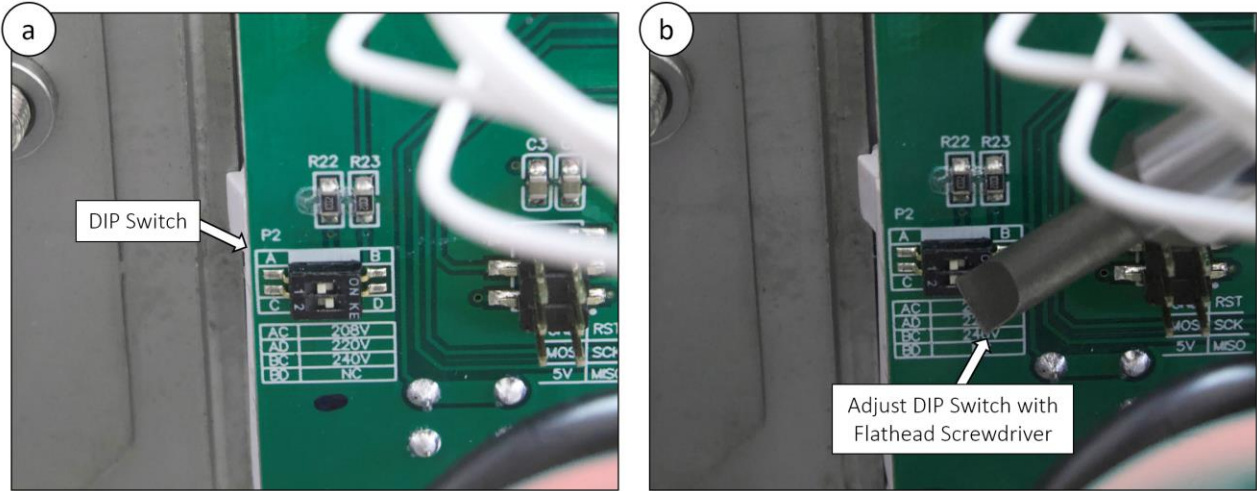
## Voltage Setting Configuration

The HOT DRAFT® Tower will be operable on either 208V, 220V, or 240V electrical systems. Contact a **licensed and qualified electrician** to confirm your installation location's voltage supply. The unit must be configured for your specific voltage supply. Configure the unit by setting a DIP Switch located inside the unit, behind the Control Panel. The lid must be removed to access the DIP Switches. **DO NOT ATTEMPT TO INSTALL, REPAIR, OR DISASSEMBLE THIS WATER HEATER WITHOUT FIRST SHUTTING OFF ALL POWER TO THE UNIT DIRECTLY AT THE FUSE OR BREAKER BOX.**

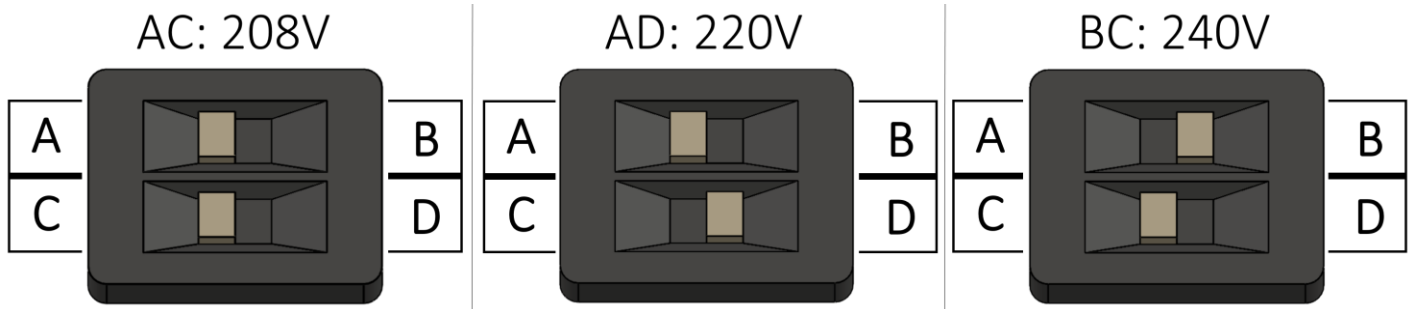
1. Remove the lid by removing 4 screws, circled in red below. Lift the lid to open the HOT DRAFT® Tower. The Control Board will now be accessible. It is located behind the Control Panel, as shown below.



2. (a) The DIP Switch will be located on the left edge of the backside of the Control Board. (b) Use a Flathead Screwdriver, or suitable tool, to adjust the DIP Switch.

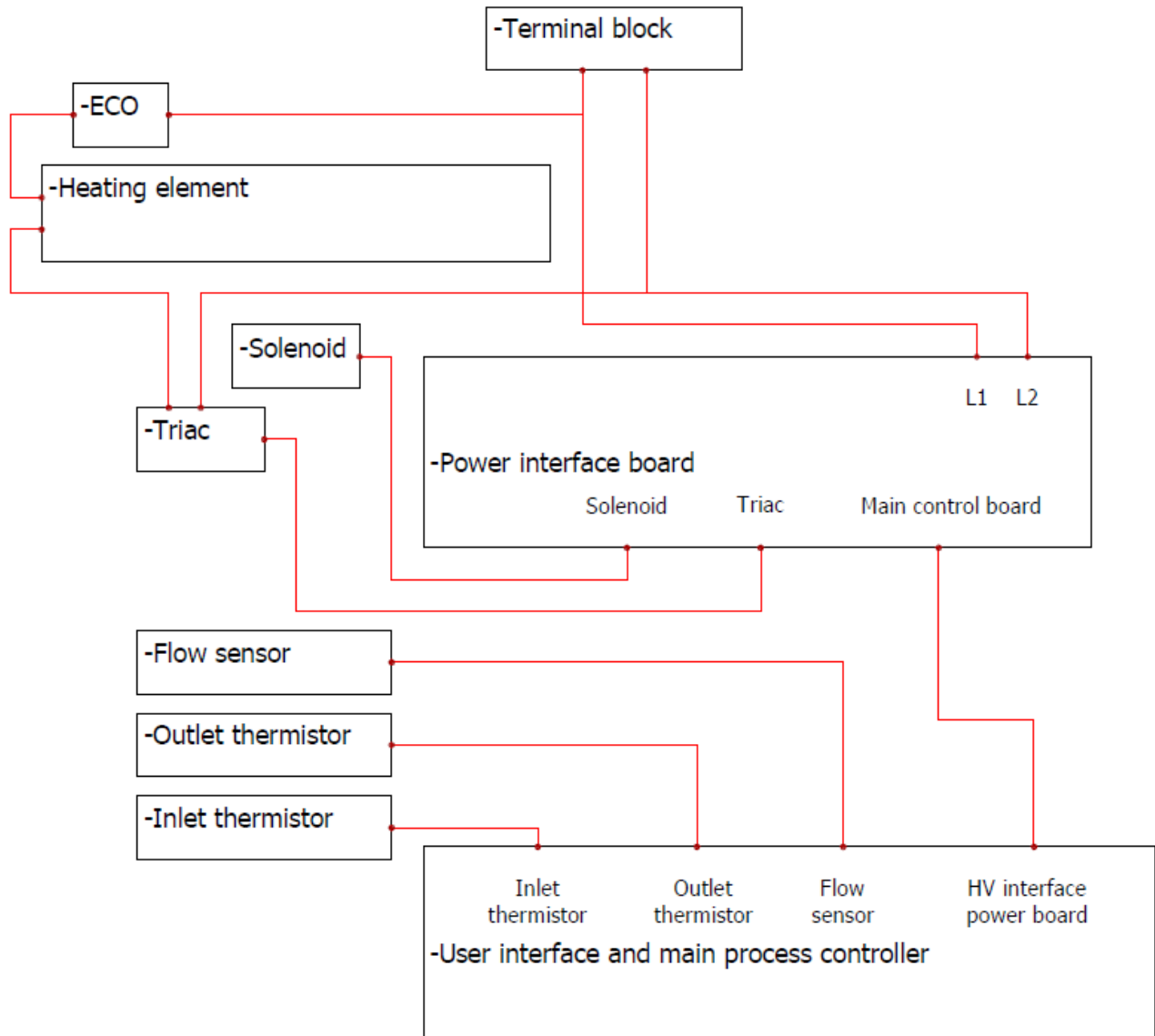


3. Configure the DIP Switch for your electrical supply according to the guide below. This information is also printed on the Control Board directly underneath the DIP Switch.



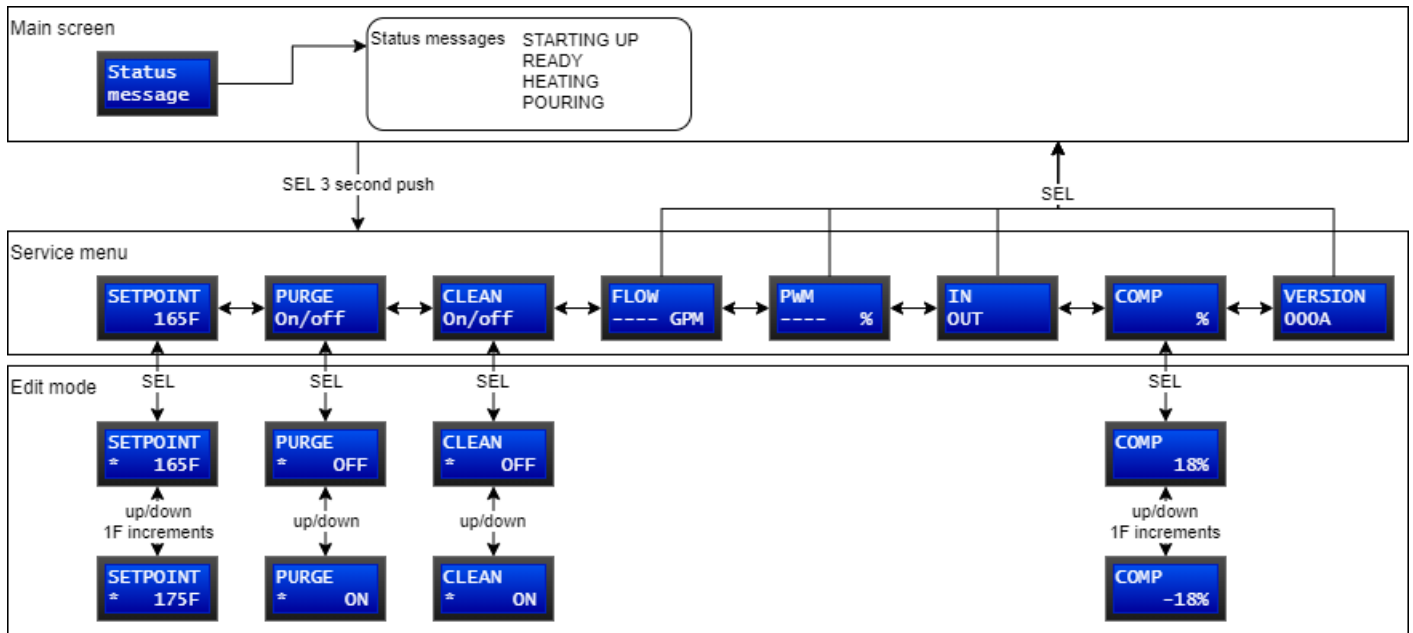
4. Reattach the lid. The lid must be closed and securely shut before the unit can be safely operated.

Electrical Diagram



## NAVIGATING YOUR HOT DRAFT® TOWER

When you first plug in your Hot Draft® Tower, the LED Display will show the Main Screen with the message “Starting Up”. The display panel includes several other features to operate and control the Hot Draft® Tower.



### Accessing the Service Menu

To open the Service Menu, hold the “SEL” button for 3 seconds while in the Main Screen. Use “Up” and “Down” to display other menu options in the Service Menu.

NOTE: To exit the Service Menu, you must navigate to either the “FLOW”, “PWM”, “IN/OUT”, or “VERSION” screens and press “SEL”. You cannot exit the Service Menu from the “SETPOINT”, “PURGE”, or “CLEAN” screens.

### SETPOINT

“SETPOINT” will display and allow you to change the setpoint temperature. When you first plug in and install this product, the default temperature will be 165F. To edit the setpoint temperature, press “SEL” and a \* will appear next to the temperature. \* indicates that the temperature can be changed. Each press of either “Up” or “Down” will increase or decrease the temperature incrementally by one degree Fahrenheit, between 140 – 180 degrees Fahrenheit. Press “SEL” to lock the temperature, at which point the \* will disappear.

NOTE: Different beverages have different optimal pouring temperatures. Choose the best temperature for your needs.

## PURGE

“PURGE On/Off” is the setting to toggle Purging Mode. Pressing “SEL” will bring you to a screen where you can toggle Purging Mode “ON” or “OFF” by pressing either “Up” or “Down”. Pressing “Select” will return you back to the service menu.

NOTE: Purging Mode will allow you to purge the Hot Draft® lines of any air pockets that may be affecting the outlet temperature. While Purging Mode is toggled on, open the Hot Draft® faucet until all air pockets have been purged. If you exit the Service Menu and return to the Main Screen, the Main Screen will display the status message “Purging”.

## CLEAN

“CLEAN On/Off” is the setting to toggle Cleaning Mode. Cleaning mode will disable the heating chamber and allow you to clean the dispense system (see *Cleaning and Maintenance For Your Hot Draft® Tower* below). Pressing “SEL” will bring you to a screen where you can toggle Cleaning Mode “ON” or “OFF” by pressing either “Up” or “Down”. Pressing “SEL” will return you back to the service menu.

NOTE: If you exit the Service Menu and return to the Main Screen, the Main Screen will display the status message “Cleaning”.

## FLOW, PWM, IN/OUT, & VERSION

“FLOW” displays the flow rate of the Hot Draft® line, displayed in GPM (gallons per minute). “PWM” displays the power output of the heating element, displayed as a percentage. “IN/OUT” displays the temperature in degrees Fahrenheit at the inlet and outlet of the Hot Draft® heating element, allowing you to monitor the outlet temperature of your beverage. “VERSION” displays the current version number of the software.

NOTE: The “FLOW”, “PWM”, “IN/OUT”, and “VERSION” options of the Service Menu cannot be changed and are displayed for troubleshooting.

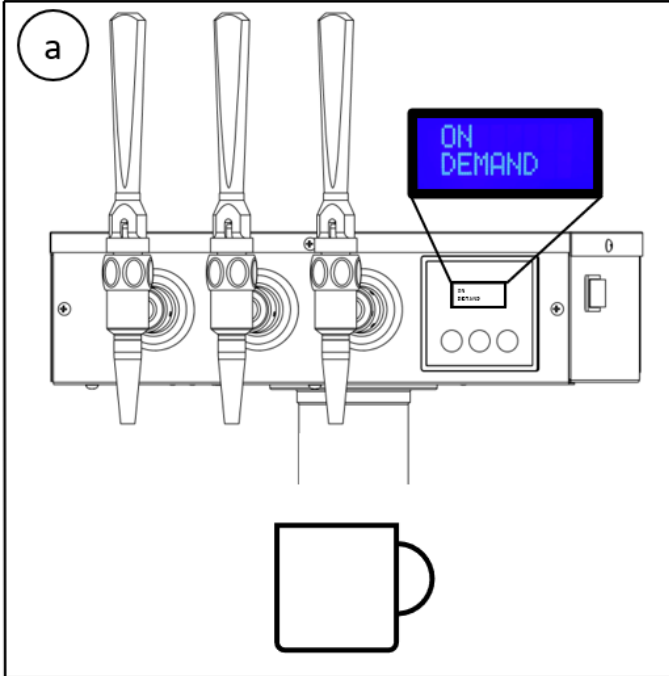
## COMP

“COMP” displays the compensation factor, displayed as a percentage, of the Hot Draft® heating element. This is used to fine tune the outlet temperature of your Hot Draft® beverage. To edit the compensation factor, press “SEL” and a \* will appear next to the compensation factor. \* indicates that the temperature can be changed. Each press of either “Up” or “Down” will increase or decrease the compensation factor by 2%, between –18% and +18%. Press “SEL” to lock the temperature, at which point the \* will disappear.

NOTE: The compensation factor will not immediately take into effect. A noticeable difference can be seen after 2-3 pours.



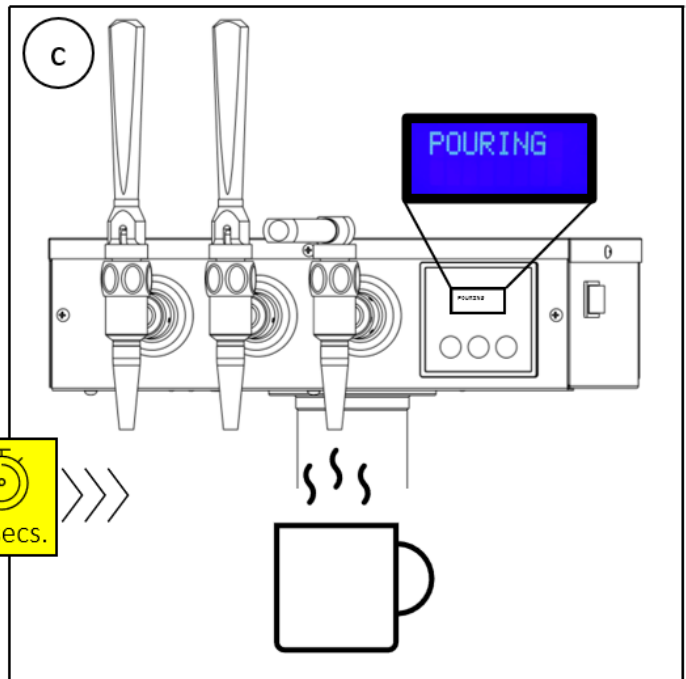
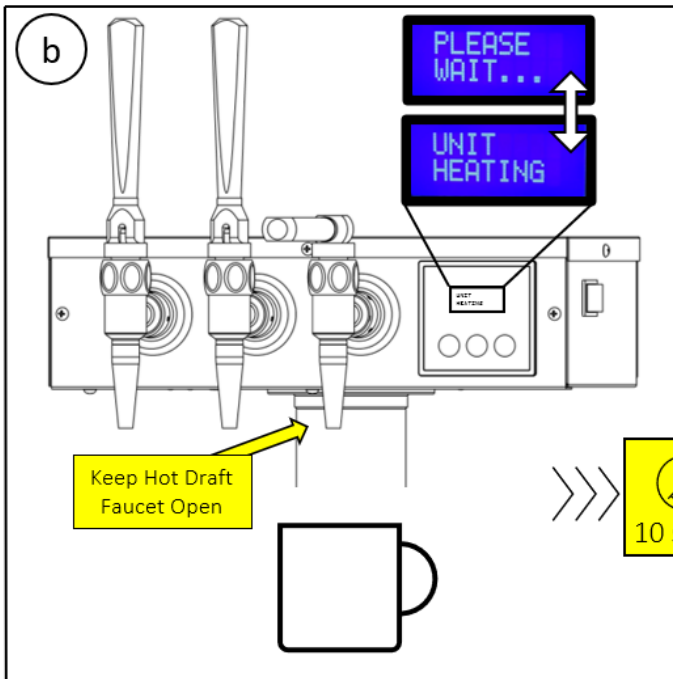
## POURING WITH YOUR HOT DRAFT® TOWER



(a) While idle, the Main Screen will display “On Demand”, indicating that your Hot Draft® Tower is ready for operation.

(b) Open the Hot Draft® Faucet to begin heating your beverage. The Main Screen will display the messages “Please Wait...” and “Unit Heating”. This indicates that your Hot Draft® Tower is heating the beverage up to the setpoint temperature. **Keep the faucet open while the unit is heating the beverage.** Heating may take up to 10 seconds.

(c) The Hot Draft® Tower will begin dispensing your heated beverage from the Hot Draft® Faucet when the beverage is within 15°F of the setpoint temperature. The Main Screen will display the message “Pouring”. At least a 12 oz pour is recommended to reach a consistent in-cup temperature.



## FINE TUNING YOUR HOT DRAFT® TOWER SYSTEM

If the beverage is not pouring accurately to the setpoint temperature, the Hot Draft® Tower can be fine-tuned to achieve consistent and accurate pours. Two settings can be manually fine-tuned to improve the accuracy of the Hot Draft® Tower: Compensation Factor and Flow Rate adjustment. While fine-tuning, monitor your temperature with an accurate and calibrated thermometer.

### Compensation Factor

Fine tuning the Compensation Factor may be required if the exit temperature is slightly inaccurate from the setpoint temperature. Fine tuning the Compensation Factor will ensure that the unit outputs the correct amount of power to heat the beverage to the setpoint temperature. To adjust the Compensation Factor, navigate to the COMP screen in the Service Menu (see *Service Menu: COMP* in *Navigating your Hot Draft® Tower*). Adjust the Compensation Factor until the beverage is pouring accurately to the setpoint temperature. For a 208V electrical system, we recommend tuning the Compensation Factor between 10% - 18%.

### Flow Rate

Fine tuning the Flow Rate may be required if the exit temperature is drastically inaccurate from the setpoint temperature. Fine tuning the Flow Rate will ensure the beverage has optimal contact time with the unit's heating element.

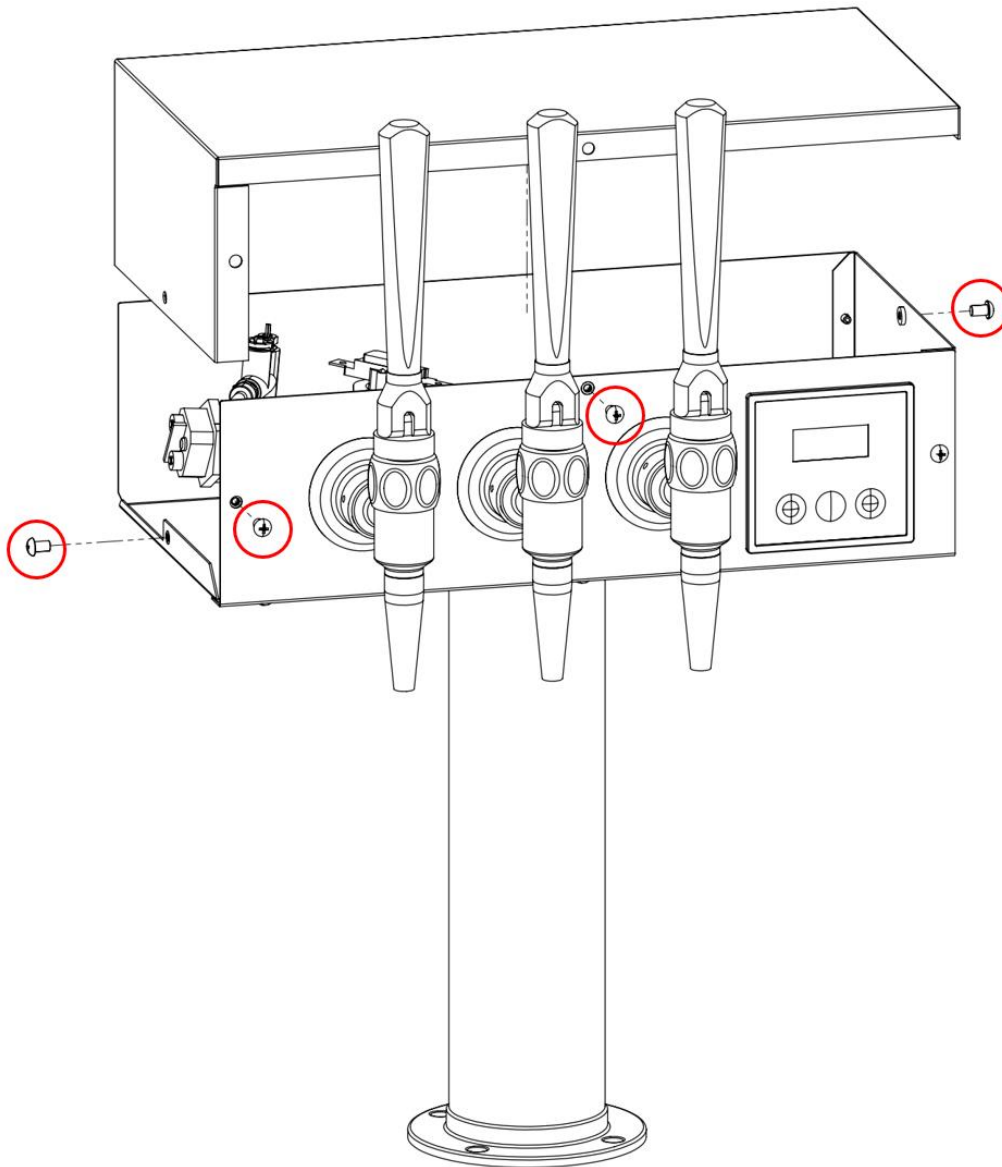
Begin by checking the flow rate. Plug in the unit, navigate to "FLOW" in the service menu, open the hot beverage faucet, and begin pouring a beverage. The flow rate can be monitored while pouring a beverage. The Flow Rate will be set to about 0.20 GPM by default. See the table below for recommended flow rates according to your electrical system.

Voltage (V)	Current (A)	Power (kW)	Rec. Flow Rate (GPM)
240	20	4.8	0.25
220	19	4.0	0.21
208	18	3.6	0.19

There are 2 methods of adjusting Flow Rate: (1) Adjust pressure at the regulator, and (2) Adjust the Flow Adjustment Spindle.

1. One method of adjusting Flow Rate is to adjust pressure at the regulator. A lower pressure at the regulator will decrease Flow Rate, while a higher pressure at the regulator will increase Flow Rate. We recommend dispensing coffee at 30-40 PSI. **Never exceed 60 PSI.**

2. The second method of adjusting Flow Rate is to adjust the Flow Adjustment Spindle (see 7 in *Parts Diagram*). To access the flow adjustment spindle, the lid must be removed. **ENSURE THE UNIT IS UNPLUGGED AND TURNED OFF BEFORE REMOVING LID AND REACHING INSIDE. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.** To remove the lid, use a Philips head screwdriver to remove 4 screws, circled in red below.



Flow rate is adjusted by using a flathead screwdriver to tighten or loosen the flow adjustment spindle, as shown below.



To increase the flow rate, loosen the flow adjustment spindle by turning counterclockwise. To decrease the flow rate, tighten the flow adjustment spindle by turning clockwise, as shown below.



After adjusting the flow adjustment spindle, check the flow rate by plugging in the unit, navigating to “FLOW” in the service menu, and opening the hot beverage faucet to pour a beverage. Adjust the flow rate until you are at the recommended value corresponding to your electrical system according to the table on page 26. **ENSURE THE UNIT IS UNPLUGGED AND TURNED OFF BEFORE REACHING INSIDE THE UNIT.** When finished, re-attach the lid before operating the Hot Draft® Tower.



## CLEANING AND MAINTENANCE FOR YOUR HOT DRAFT® TOWER

Regular cleaning and maintenance of your Hot Draft® Tower is key to ensuring peak performance over time. Kegco offers a full line of cleaning products to keep your draft lines free of contaminants that may affect your beverage flavor and flow. Use Kegco chemical solutions, cleaning containers, and cleaning accessories with your Hot Draft® Tower to best maintain original beverage flavor and peak heating performance.

### Chemical Solution

Only use chemical solutions specifically designed and manufactured for beer line cleaning. Only chemicals specifically designed for beer line cleaning will dissolve the build-up of residue in your lines without leaving behind any harmful residue. Completely follow all safety instructions and directions included with your cleaning chemical solutions. Contact Kegco at (888) 980-4810 or visit [www.kegco.com](http://www.kegco.com) for more information and placing an order.

To clean lines used to dispense beverages such as coffee or tea, we recommend ALC Acid Post Wash Beer Line Cleaner. This solution will descale calcium deposits which may build up in your lines due to high calcium brewing water. This cleaner is specifically formulated to protect metals, such as those used in the Hot Draft® heating components, from potent acids found in this product.

To clean lines used to dispense beverages such as beer or kombucha, we recommend Kegco Beer Line Cleaner. This solution will remove organic deposits which may build up in your lines due to organics left behind during the brewing process.

### Pressurized Cleaning Containers

Kegco offers a wide range of pressurized and unpressurized cleaning containers used to clean your Hot Draft® lines. Completely follow all safety instructions and directions included with your cleaning containers. We recommend the pressurized cleaning containers below for cleaning your Hot Draft® lines. Contact Kegco at (888) 980-4810 or visit [www.kegco.com](http://www.kegco.com) for more information and placing an order.

We recommend our Kegco Keg Beer Cleaning Can, best suited for commercial environments where there are many beverage lines to clean with less downtime available. This cleaning can will hold up to 18 Liters of cleaning solution, featuring up to 4 different keg valves to directly connect to multiple dispense systems without any disassembly.

### Cleaning Accessories

Kegco offers numerous accessories to guarantee a deeper clean. There are various brushes available for cleaning couplers, faucets, and loosening residue in beer lines. We offer many types of fittings to allow cleaning for all ranges of dispense systems. There are also multiple cleaning kits available which include everything you will need for cleaning your Hot Draft® dispense system. Contact Kegco at (888) 980-4810 or visit [www.kegco.com](http://www.kegco.com) for more information.



## Cleaning Procedure

1. To clean your Hot Draft® Tower, set the unit to “Cleaning Mode” (see section *Navigating your Hot Draft® Tower*). This will disable the heating process and allow for cleaning solution to pass through the Hot Draft® components. **Failure to do so may result in the formation of toxic vapors and gases. Avoid inhalation, use personal protective equipment, and work in a well-ventilated area.**
2. Begin by filling your cleaning container with diluted cleaning chemical, as directed by the specifications on the cleaning chemical label. Follow all your cleaning chemical’s safety instructions and directions. **When diluting chemical concentrate, always add chemical to water and never add water to chemical. FAILURE TO DO SO MAY RESULT IN SERIOUS BODILY INJURY.**
3. Disconnect your kegs from the Hot Draft® Tower. Hook up your cleaning container, filled with diluted cleaning chemical, to a Hot Draft® beverage line. Refer to your cleaning container’s instructions on connecting to a dispense system. Some disassembly may be required.
4. Place a bucket or pitcher under the faucet corresponding to the beverage line\* connected to your cleaning container. Open the faucet and allow the cleaning solution to run through the lines as if pouring a beverage. Repeat for all beverage lines\*\*.  
\* Refer to page 16 of this manual to identify the faucets and corresponding beverage lines.  
\*\* If cleaning solution is not pouring from the Hot Draft® Faucet, ensure that the unit is set to “Cleaning Mode”.
5. **VERY IMPORTANT: Rinse out the lines with clean water before serving a beverage again.** When the cleaning container is empty, rinse and fill with fresh water. Repeat step 4 with fresh water.
6. Disconnect your cleaning container from the Hot Draft® Tower and hook up your kegs. Some reassembly may be required. Exit “Cleaning Mode” (see section *Navigating your Hot Draft® Tower*) to re-enable the heating process. The unit is now ready to heat and dispense your beverage.

## Cleaning and Maintenance Schedule

**Every 2 weeks**, disassemble and clean all faucets. Scrub clean all keg couplers and tapping devices.

**Every 2 weeks or between switching kegs**, clean your beverage lines with a chemical cleaner solution.

**Every year**, replace your vinyl jumpers and vinyl direct draw lines.

## TROUBLESHOOTING THE HOT DRAFT® TOWER

PROBLEM	Possible causes	Possible solutions
<b>Display Off</b>	The unit is not connected to a power source.	- Check electrical plug for proper connections. - Ensure circuit breaker is turned on.
	Control Board failure.	- Contact customer service.
	Display wiring is disconnected or improperly wired.	- Check display wiring connections and ensure connections are secure and properly wired as shown in the Electrical Diagram (under section <i>Electrical Configuration</i> ). - Ensure DIP Switches are correctly configured as shown in section <i>Electrical Configuration</i>
<b>No Heat (Display On)</b>	Improper beverage flow.	- Adjust the flow rate as shown under section <i>First Time Flow Adjustment</i> . - Increase gas pressure. - Clean the faucet as it may be clogged with debris.
	The unit is set to either “Clean” or “Purge” Mode	- Exit out of “Clean” or “Purge” Mode through the main screen (see <i>Navigating your Hot Draft® Tower</i> )
	Failure in the Heating Element, ECO, Triac, and/or Control Board.	- Contact customer service.
<b>Underheated Beverage Pour</b>	The unit is not supplied with enough voltage.	- Verify power supply voltage - Ensure DIP Switches are correctly configured as shown in section <i>Electrical Configuration</i>
	The flow is too high.	- Adjust the flow rate as shown under section <i>First Time Flow Adjustment</i>
	Inlet and/or outlet thermistor(s) failure	- Contact customer service.
	Beverage is under-pressurized.	- Adjust pressure to 25-35 PSI.
<b>Beverage not Pouring</b>	The unit is not supplied with enough voltage.	- Verify power supply voltage - Ensure DIP Switches are correctly configured as shown in section <i>Electrical Configuration</i>
	The Inlet Screen is clogged.	- Remove and clean the Inlet Screen
	The faucet is clogged.	- Remove and clean the faucet.
	Nitrogen Tank is empty	- Check nitrogen tank and replace if necessary.
	Solenoid Valve malfunction.	- Contact customer service.
Control Board malfunction	- Contact customer service.	
<b>Beverage Leaks</b>	For Faucet leaks, shank coupling nut is not fully tightened	- Tighten shank coupling nut with a faucet wrench
	For T-Splitter leaks, T-Splitter is over- or under-tightened	- Remove T-Splitter and ensure there is a neoprene washer - Tighten until hand-tight
	For Beer Nut leaks, it is missing a neoprene washer	- Remove Beer Nut and ensure there is a neoprene washer

## WARRANTY INFORMATION

### WHAT IS COVERED LIMITED ONE-YEAR WARRANTY:

For one year from the date of purchase by the original owner, Kegco will, at its option, repair or replace any part of the unit, which proves to be defective in material or workmanship under normal use. During this period Kegco will provide all parts and labor necessary to correct such defects free of charge, so long as the unit has been installed and operated in accordance with the written instructions in this manual. Kegco will provide you with a reasonably similar replacement product that is either new or factory refurbished. In rental or commercial use, the warranty period is 90 days. All Kegco Appliances of 3.5 cubic feet capacity or less must be brought/sent to the appliance service shop for repair.

### WHAT IS NOT COVERED:

- Content losses of food or other, due to spoilage.
- Incidental or consequential damages.
- Parts and labor costs for the following will not be considered as warranty:
  - Door springs, and/or frames.
  - Inner door panels, door rails and/or door supports.
  - Light bulbs and/or plastic housing.
  - Plastic cabinet liners.
  - Punctured evaporator that voids the warranty on the complete sealed system.
  - Repairs performed by unauthorized servicers.
  - Shipping and handling costs associated with the replacement of the unit.
  - Service calls that do not involve defects in material or workmanship such as customer education, door reversal, or proper installation.
  - Surcharges including, but not limited to, any after hour, weekend, or holiday service calls, tolls, ferry trip charges, or mileage expense for service call to remote areas, including the State of Alaska.
  - Service calls that are related to external problems, such as abuse, misuse, inadequate electrical power, accidents, fire, floods, or acts of God.
  - Replacement of house fuses or resetting circuit breakers.
- Failure of the product if it is used for other than its intended purpose.
- This warranty does not apply outside the Continental USA.

### SERVICE FOR YOUR HOT DRAFT® TOWER:

With the purchase of your Kegco appliance, you can have the confidence that if you ever need additional information or assistance, the Kegco Customer Service team will be here for you. Whatever your questions are about our products, help is available. Just call us toll-free.

### KEGCO PRODUCT CUSTOMER SERVICES:

Product Information, Part Orders and In-Home Repair Service: **888-980-4810**