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Draft Beer Systems and Trouble Shooting Guide

Common Problems

Foamy Beer:

Temperature:

- Temperature is the most common problem associated with draft beer; here are a few things to check.
- Beer cooler temperature is between 36°F and 38°F any higher temperature and you will start to experience foam problems. If cooler is above 38°F you should call your refrigeration company. After 40F you will have issues.
- Glycol bath in Power Deck is between 26°F and 29°F, any higher temperatures and you will start to experience foam problems.
- Power Deck bath is frozen (build up of ice on the refrigeration coils). Over time glycol will break down and turn to water. Your draft line service company should be checking the consistency of the glycol to ensure the proper mix of glycol and water. If the glycol bath is frozen you should call your draft line service company.
- Ensure the Pump and Motor is circulating. Check your circulating pump is working properly and has good flow. If the pump is not circulating or is trickling out you should call your draft line service company.

Pressure:

- First make sure you have pressure to your kegs by checking the secondary regulator in the cooler and making sure the shut off valves are in the on position on the air distributor. They should be inline with the tubing.
- If you don't have pressure:
 - Check if your gas is empty, if so change it
 - Make sure you have outgoing pressure on the Nitrogen Generator.
 - Check to see if the Nitrogen Generator indicators for the CO2 and Air are on. If not, check the source
 - Check the air compressor and make sure it has power and is on
- You should have a general idea of what your pressure should be at, if not check when the system is working at its best and write it down. Most remote systems should run between 23 and 30 PSI depending on how your system was installed and balanced.
- If your pressure is too high the beer will rocket out of the faucet and foam in the glass and if the pressure is too low it will not fill the line itself creating an air pocket thus foam.
- Most secondary regulators work the same. To decrease the pressure, turn the center screw counter clockwise and to increase the pressure turn the screw clockwise. Be sure to make small adjustments to the regulators. If you are decreasing the pressure, make sure to vent the keg by pulling the ring on the side of the coupler for a second to release excess pressure in the keg.

- Keg:** - When trouble shooting a bad keg problem the first thing to do is tap a "good keg" onto the bad line and tap the "bad keg" on to a good line. If the problem follows the keg than you know it is a keg problem, but if the good keg pours bad on the bad line than you know that it is a line problem.
- **Bad Keg** – Most Kegs have a shelf life of 2-3 months. Check the date stamp on the keg and change keg if necessary.
 - **Bad Keg Seal** - The rubber coupling seal on the keg itself can become damaged over time. Check to make sure the keg seal doesn't have any cuts or chips out of it. If the coupling seal is damaged it can allow pressure to enter directly into the line, creating foam. Change the keg if you find a damaged seal.



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Beer Will Not Pour:

- **No Pressure:** Refer to previous section on pressure.
- **Beer Lines Frozen:** If water or foam is left in the line over a long period of time, the line may become frozen due to the circulation of glycol. If you have a frozen line then disconnect power to the circulation pump on the power deck and wait. Leave the keg tapped and open the faucet every fifteen minutes or so to check if flow has been re-established. Make sure to plug the pump back in once flow has been re-established or you will have foamy beer. If the technique described above doesn't work within two hours, call your local draft line service company.

Leaky Faucet:

- **Faucet Washer Worn:** The faucet washer is a small rubber seal, which is located within the faucet body. Over time these washers can become damaged causing a small drip or leak from the faucet collar. These washers should be changed every time your beer lines are cleaned as preventative maintenance. These washers are easily changed with the use of a proper faucet wrench and washers. To save time and money faucet service kits are available.

Beer Line Maintenance: -What should be covered each visit (every 2-4 weeks)

- Cleaning and sanitation of draft lines using agitating cleaning tanks or pumps with a non-chlorine based cleaning agent
- All faucets are disassembled, scrubbed, and inspected for proper operation
- All faucet washers are replaced
- Keg couplers are cleaned and inspected for proper operation as well coupler washers are replaced as needed
- Power deck service sheet that is updated each visit to log the cleaning of the condenser, consistency and level of glycol as well as temperature
- If present we drain any fluid from the air compressor
- Check and record the beer cooler temperature

Draft Beer System Components:

In The Cooler:

- **Keg Coupler:**
 - The most common coupler is the domestic keg coupler, special import beers may require their own coupler
- **DFC 9500 FOB:**
 - "Foam On Beer", the FOB is designed to stop the flow of beer to the faucet when the keg is empty. By stopping the flow of beer less beer is wasted when a keg is changed because you are not emptying out the line and having to re-purge the line with fresh beer. Time is also an advantage of the FOB, once the new keg is tapped you are able to continue pouring draft with out having to pour off any foam. The most common problem with fobs is people release the float below bleeding out the air between the new keg & the fob.
 - **Please see the important instruction sheet for proper usage.**
- **Secondary Regulator:**
 - The secondary regulator allows for the controlling or balancing of flow to the draft taps. Depending on how your system is balanced or what products you are carrying, you may have more than one secondary regulator.



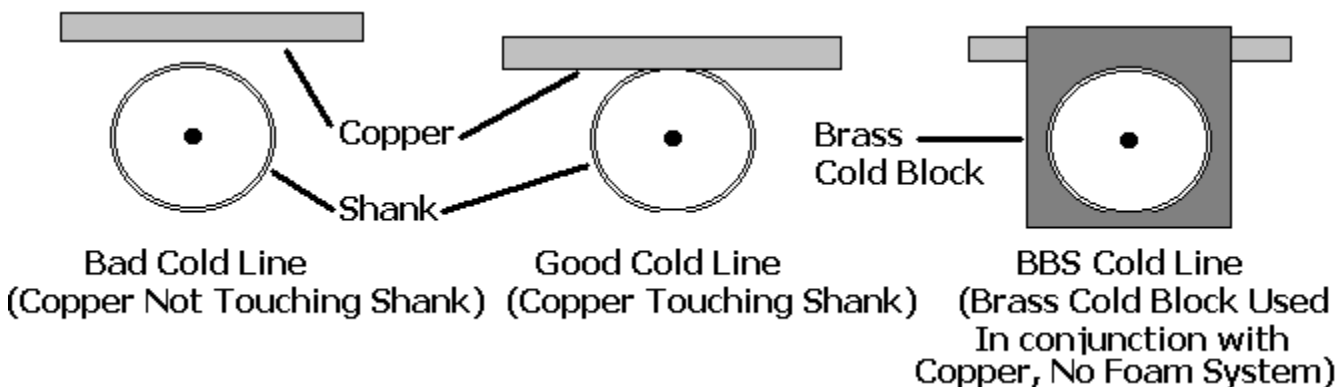
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At The Bar:

- Tower or Bracket:

- There are many different styles of dispensing heads available on the market today. The main consideration that must be taken is how the tower or bracket is **Cold Lined**. Cold lining refers to how the tower is internally insulated to reduce warm spots (which cause foam) but more importantly how the copper inside the tower is touching the Faucet Shank.



Other Key Components:

- Power Deck (Glycol Unit):

- The power deck is a self-contained refrigeration unit that's main function is to keep the beer cold in the trunk line on it's way to the faucet. The refrigeration coils cool a glycol bath (food grade antifreeze), which is circulated via a pump through the trunk line itself. The glycol bath should be maintained at 28° F to ensure the beer doesn't foam.

- Pressure Supply Nitrogen Generator or Nitrogen Based Mixed Gas:

- Draft Beer should be pushed using a Nitrogen based mixed gas. The most common used mix is 70% Nitrogen and 30% CO₂, certain beers require a certain gas mixes. Nitrogen is an inert gas, which doesn't affect the flavor or pouring characteristics of the beer, and the CO₂ is used to maintain carbonation levels in the beer. You may have a Nitrogen generation system, which makes nitrogen and then blends it with CO₂. A Nitrogen Generator takes the place of mixed gas tanks at a fixed cost.
- Some systems utilize either pure CO₂ or Compressed Air. When pure CO₂ is used, depending on the dispensing pressure and the length the keg sits under pressure, the beer can become over carbonated and lead to foamy beer.
- Compressed air has the reverse affect beer. Beer that sits for a long duration under compressed air can lose its carbonation thus creating flat beer. Another downside to using compressed air is that you are taking the ambient air around the air compressor and pushing it into the sterile environment of the keg, which can taint or change the flavor of the beer.

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Draft Beer System Components for reference:



Dispensing Tower



Glycol Deck



Trunkline



Beer Gas Cylinder



Nitrogen Generator



DFC 9500 FOB



Secondary Regulator



Keg Coupler