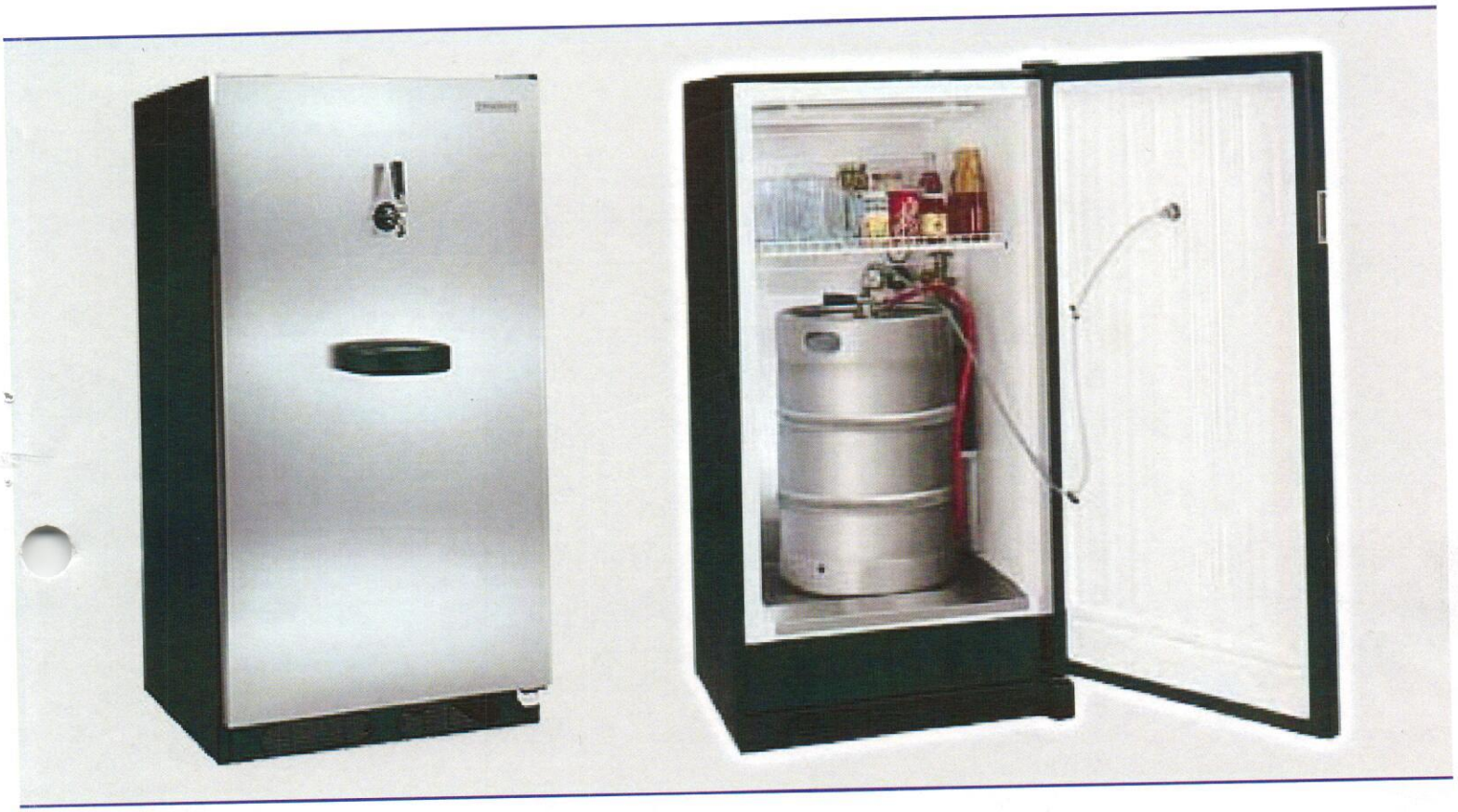
REFRIGERATOR CONVERSION KIT
WITH CO2 TANK



USER MANUAL & ASSEMBLY INSTRUCTIONS

NOTE: CO2 Tank not available with some kits. Check with dealers for availability.

TAPRITE
3248 NORTHWESTERN, * SAN ANTONIO, TX 78238 * TEL: 800-779-8488

P/N: TRRK
REV. A

SAFETY FIRST

Taprite strives to continuously improve all its products and reserves the right to implement changes to materials and specifications without notice.

C02 GAS

PLEASE READ FIRST

A. CO2 gas cylinders contain pressures from 800 - 1000 P.S.I. **NEVER** throw or drop gas cylinders.

B. Kegs are designed to withstand only 60 P.S.I. **ALWAYS** connect CO2 gas cylinders to a regulator. **NEVER** connect CO2 gas cylinders directly to a keg.

C. When a regulator is mounted on a CO2 gas cylinder they become unstable. **ALWAYS** insure that the cylinder is secure. Dropping a CO2 cylinder with the regulator mounted may damage either the cylinder or the regulator. Either may result in an explosion.

D. Leaking CO2 is dangerous. If you find it difficult to breath or your head starts to ache, you may have a leak. LEAVE THE AREA IMMEDIATELY. **ALWAYS** ventilate the area after a CO2 leak.

KEG OPERATION & CLEANING CHEMICALS

A. Most domestic draft beers are dispensed using a pressure of 12 - 14 P.S.I. Stout beers require a pressure of 30 - 40 P.S.I. **NEVER** exceed keg pressure of 60 P.S.I.

B. Keg valves can only be removed with a special tool that are only available to breweries. **NEVER** Try to remove a keg valve. There are 5 different valves used in beer kegs. Each valve has a different coupler. These are displayed on pages 6-7.

C. Regulators come with built-in pressure relief valves (PRV). If this valve fails the keg coupler (PRV) will release preventing the CO2 from reaching the Keg. It is **IMPORTANT THAT YOU ALWAYS** use both a regulator and keg coupler that come with a built-in pressure relief valve (PRV).

D. Beer line cleaner (CFP-1) is not caustic, but the chemical can irritate eyes and skin. **ALWAYS** wear safety glasses to protect your eyes and gloves to protect your skin. **ALWAYS** wash your hands with soap and water after using CFP-1.

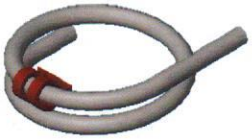
E. To ensure the freshest beer taste, **ALWAYS** thoroughly rinse beer lines and equipment. Flush chemicals from beer line, coupler and faucet completely with cold water before re-tapping the keg.

KIT COMPONENTS

CH5000
COUPLER, SANKEY "D"

T742
Beer Regulator W/60# Gauge
Tank Mount W/2000# Tank Gauge
5/16 Barb Shutoff (Ball-Check) &
Adjustable Poly Bonnet (Silver)

4334NA
SHANK ASSEMBLY



549C
TUBE, CLEAR
W/ (2) 1702-11
HOSE CLAMPS

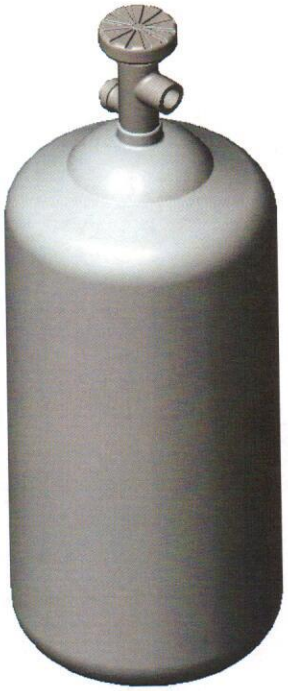
4301
KNOB, FAUCET

D19-60
HOSE ASSEMBLY

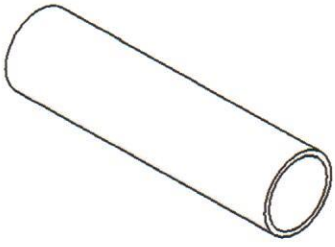
BF1001 FAUCET,
ASSEMBLY CHROME

759
WASHER, TAPROID

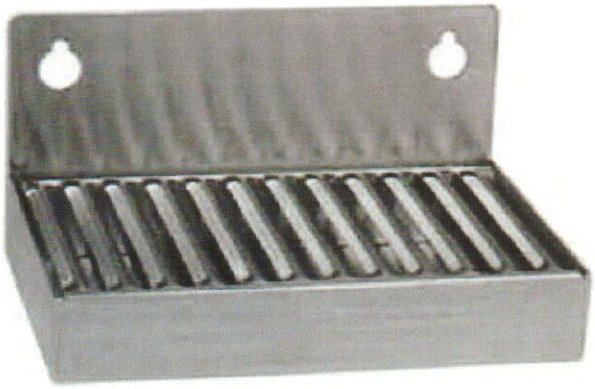
4350 WRENCH, SPANNER



430-5T CYLINDER, CO2



CK-6
SPACER, FAUCET



2460 DRIP TRAY

TRRCK
INSTRUCTIONS

REQUIRED TOOLS

Tape Measure

Drill

1/4" Drill bit

Hole Saw (1-1/8")

Pencil

Screwdriver

Hacksaw

Crescent
Wrench

NOTE:

If you intend on keeping the factory installed bottom drawers that come with your refrigerator. You will also need some kind of reinforcing material.

GETTING STARTED

Things to consider before you start converting an old refrigerator into a functional kegerator.

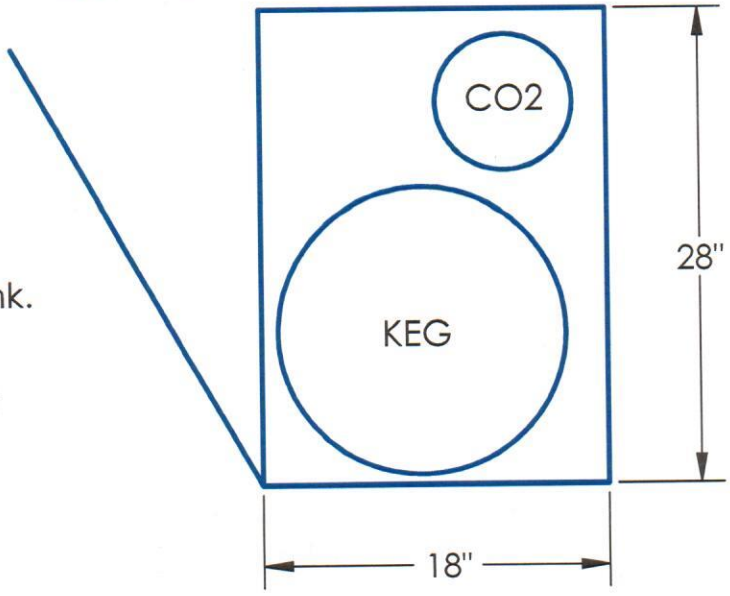
1. **Shelf Life:** Beer has a shelf life and you should not store more beer than you can go through in any given period of time. Larger Companies only give their beer a shelf life between 110 and 140 days. Most kegs have a expiration date on them.

2. **Equipment Maintenance:** With prolonged use, most beer systems build-up an accumulation in the beer lines. Hoses and other beer equipment will need to be cleaned out on a regular basis to keep bacteria and other unwanted organisms from growing. A manual cleaning kit is the best way to clean beer lines and equipment. Taprite sells cleaning kits that are simple and easy to use to keep your beer systems clean and bacteria free.

Jiffy Cleaning Kit
(Bucket not included in kit)

3. **Room:** Kegs come in different sizes. You will need to make sure your old Refrigerator (with all the shelves removed : This includes the bottom drawers) is big enough for your needs. Listed below is the most common keg and CO2 tanks sizes. You should check this before you get started.

Your Refrigerator Will require the following Minimum Inside Dimensions



NOTE:
If your old refrigerator is not big enough to store both the keg and CO2 tank. You may consider running lines to the outside for an external CO2 tank.

REMEMBER CO2 tanks are compressed gases. To prevent damage tanks will need to be kept cool and secured.

KEG, CYLINDER AND TAP/COUPLER INFORMATION

COMMON KEG SIZES

Pictured here is the most common domestic beer kegs (import kegs not shown) and the size of each keg. You will need to insure that your beer of choice comes in a keg that will fit into your new kegerator.

CAPACITY	1/2 KEG	1/4 SHORT KEG	1/4 SLIM KEG	1/6 KEG
GALLONS	15.5	7.75	7.75	5.23
OUNCES	1984	992	992	640
CASES	6.8	3.44	3.44	2.2
# OF 12oz BEERS	165	82	82	53
DIMENSIONS				
HEIGHT	23.3"	14.8"	23.3"	23.3"
DIAMETER	17.0"	17.0"	11.0"	9.25"
WEIGHT				
FULL (lbs)	160.7	83.3	81.87	55.5
EMPTY (lbs)	29.7	17.3	16.0	13.76

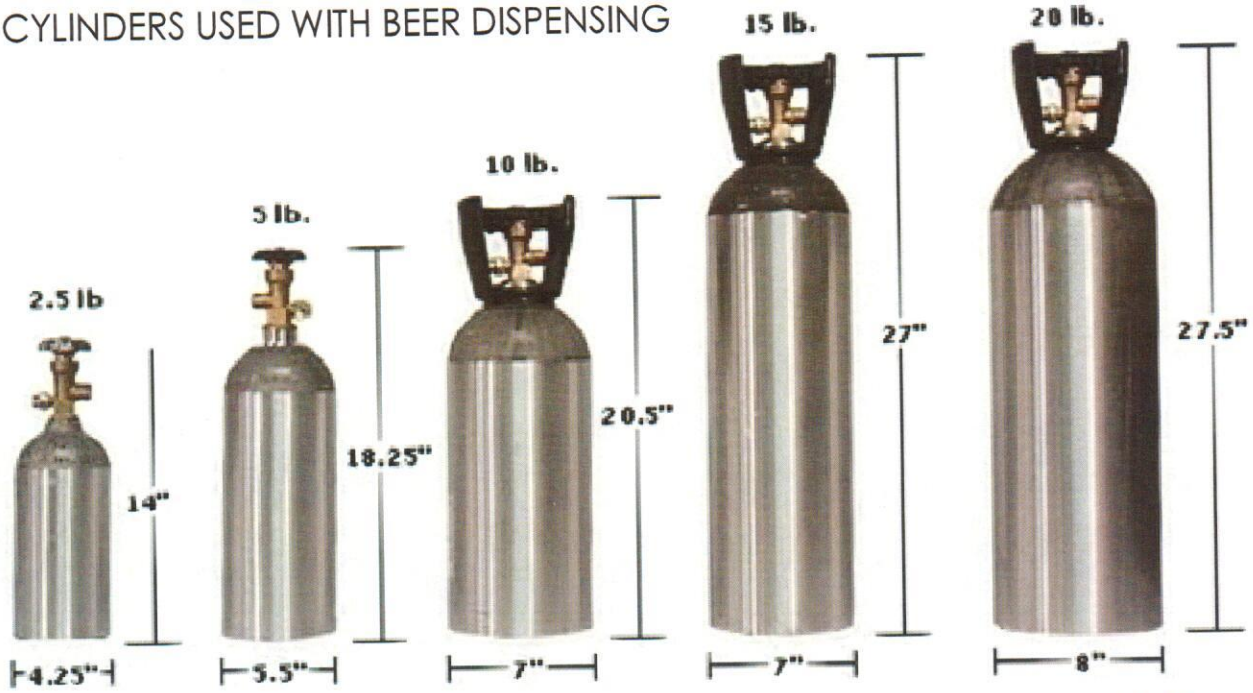
CYLINDERS

As you can see cylinders come in a wide range of sizes, and pressures.

Now that you have an idea of which keg will best fit your needs, you may want to know how to get the beer from the keg to that frosty glass. And how many CO2 cylinders will be needed to empty that keg?

The chart for cylinders is set up in pounds and not pressure. Remember you NEVER want more than 60 psig going into your keg. Most domestic draft beers dispense at 12-14 psig and most stouts require 30-40 psig.

CO2 CYLINDERS USED WITH BEER DISPENSING



It takes approximately 1/4 lb of CO2 to dispense 1/4 barrel of beer and 1/2 lb of CO2 to dispense a 1/2 barrel. The following chart will give you the number of barrels you can empty with each cylinder size.

	5.0 gal Home Brew	5.23 gal 1/6 Barrel	7.75 gal 1/4 Barrel	15.50 gal 1/2 Barrel
5# Cylinder	28-31	27-30	18-20	9-10
10# Cylinder	56-62	54-60	36-40	18-20
15# Cylinder	84-93	81-90	54-60	27-30
20# Cylinder	112-124	108-120	72-80	36-40

NOTE: 2.5 lb cylinder not shown in chart because most people don't like to use them to dispense beer.

But they are available for use for small quantity dispensing.

TAPS AND COUPLERS

The following is Keg Tapping heads and Couplers required for each head. The most common one used in the U.S. is the SANKEY "D" also known as the American Sankey. It is used by all the major breweries - Anheuser-Busch, Miller - Coors and Labatt as well as most craft breweries. Other couplers may be purchased to suit your Beer needs.

D System Keg Valve

CH5000 COUPLER

S System Keg Valve

CH5100 COUPLER

A System Keg Valve

CH5400A COUPLER

G System Keg Valve

CH5200G COUPLER

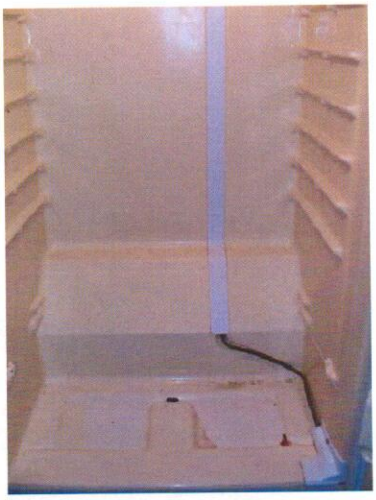
U System Keg Valve

CH5300U
COUPLER

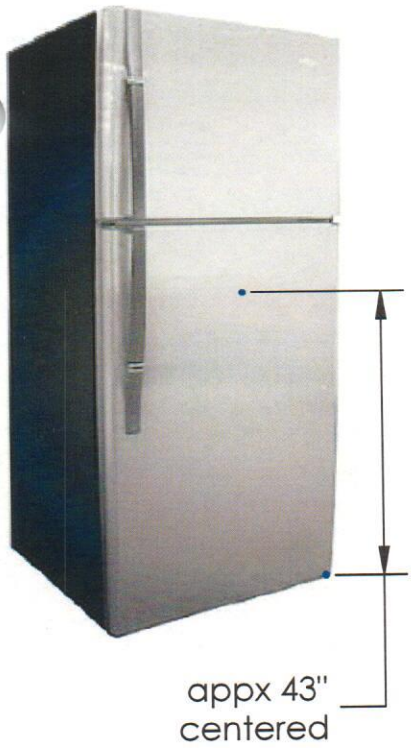
ASSEMBLY

1. Remove all the unwanted shelves and drawers.

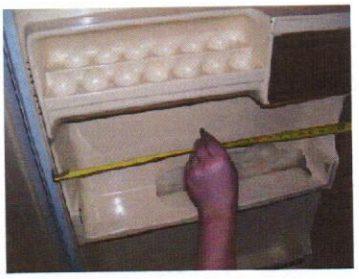
If you wish to leave the bottom drawer. It will need to be reinforced as a full keg will weigh approximately 160 lbs. and will break through the plastic.



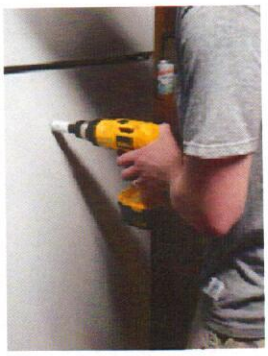
2. Build a suitable platform for your keg & CO2 bottle to sit on.

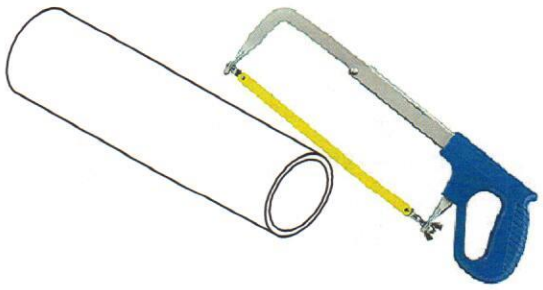


1. You will need to drill a pilot hole approximately 43" from the floor. You will need to hold your drill level with the ground. It is best if you drill from the inside out but you may drill from the outside (you will have to drill half way then finish from the inside) first. Remember this is a pilot hole.



2. Now using a 1-1/8" hole saw cut a 1-1/8" hole all the way through. (Again it is better if you drill half way through then finish drilling from the other way).

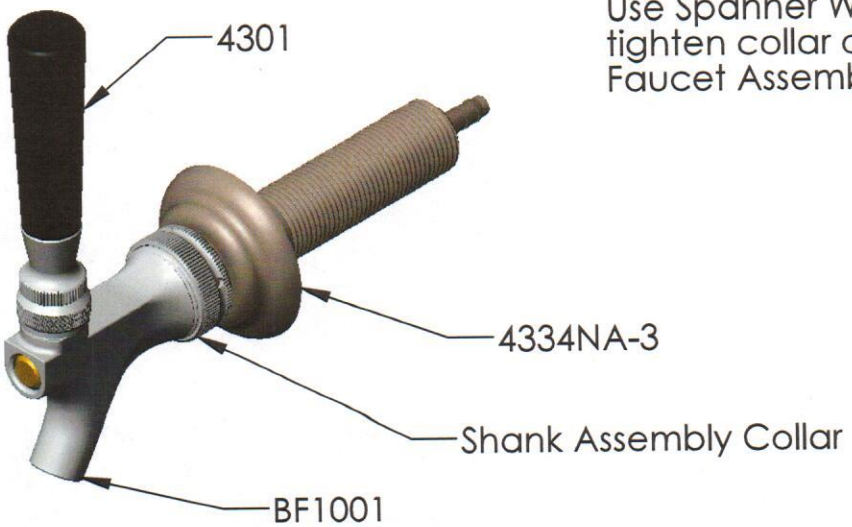


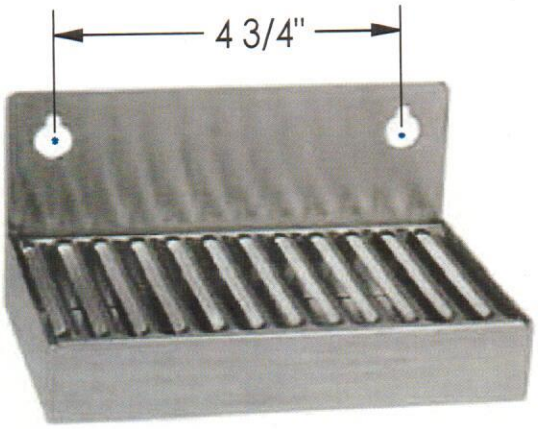


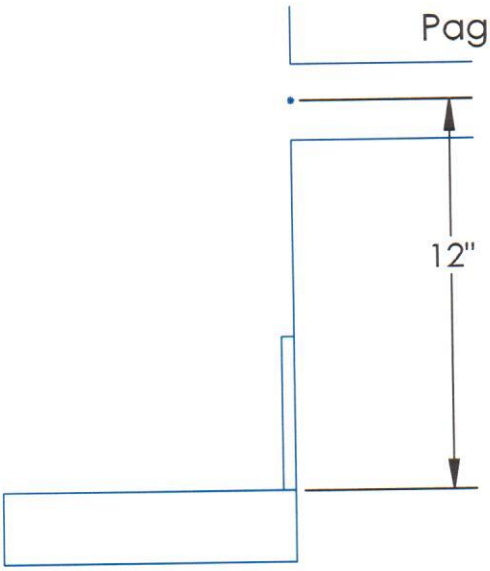
3. Now measure the depth of the hole and use the Hacksaw to cut the Spacer (part# CK-6) approximately 1/8" shorter than what you measured.

4. Insert the spacer into the hole.

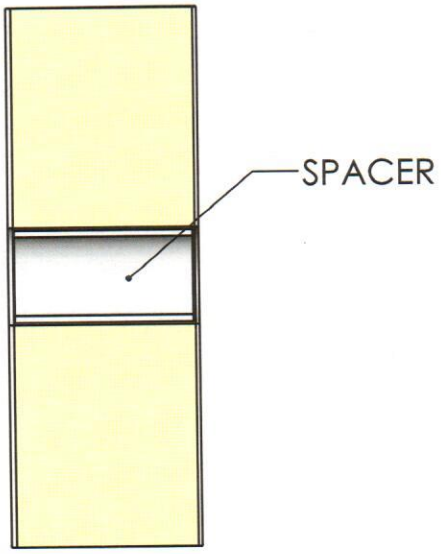
5. Assemble part #'s 4334NA-3 (Shank Assembly), BF1001 (Faucet Assembly) & 4301 (Knob, Faucet) As Shown. Use Spanner Wrench (part# 4350) to tighten collar of Shank Assembly to the Faucet Assembly.



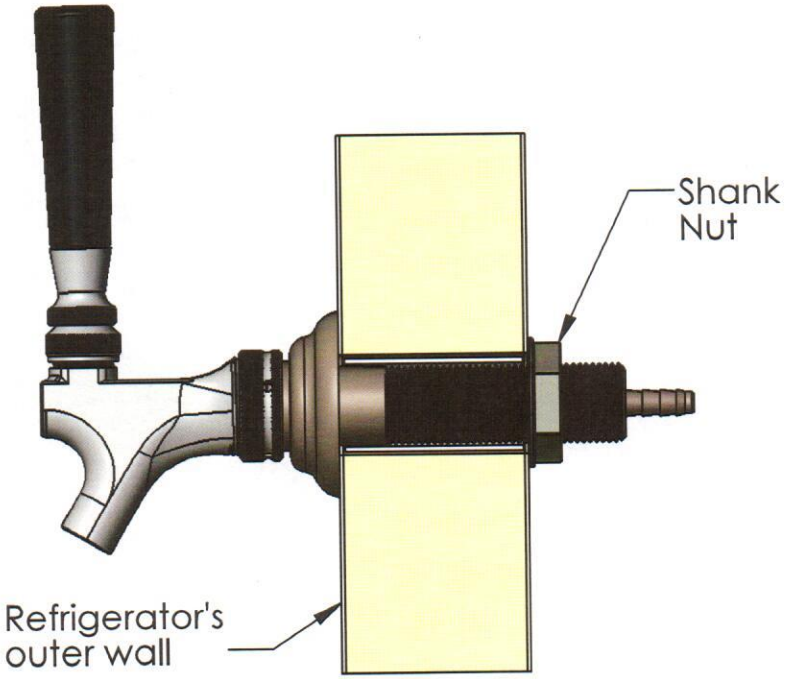




6. You will want to mount the Drip Tray (part# 2460) next. From the center of the hole you've drilled measure down 12" and then use a level to draw a line. You will want to center the drip tray under the hole and use zip screws to mount the drip tray to the door.

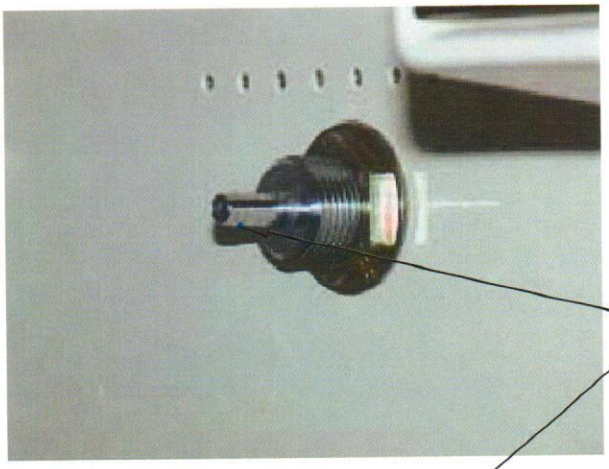


REFRIGERATOR CUT-A-WAY SECTION VIEW



CUT-A-WAY WITH FAUCET ASSEMBLY

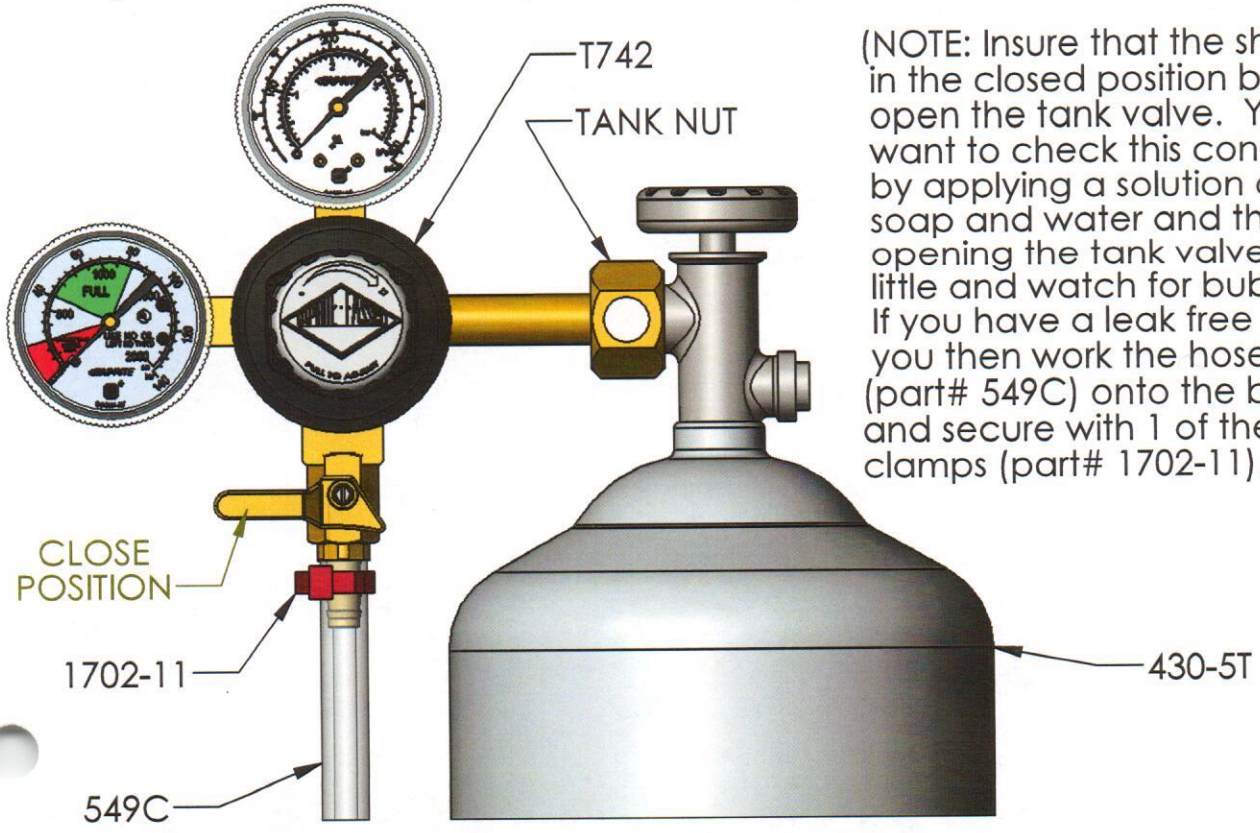
7. After assembling Faucet and Shank Assemblies insert them into the refrigerator as shown above and tighten the shank nut down with the crescent wrench.



8. This is the finished product. You can now take the Hose Assembly (part# D19-60) and (be sure the nut is still on the hose assembly) work the hose end onto the barb on the end of the shank assembly. NOTE: No clamp required here)

9. Then insert the Washer (part# 759) into the D19-60 nut. Remove the protective (blue) cap from the coupler Probe (PART# CH5000) and screw the hose assembly nut onto the top of the coupler. Tighten with crescent wrench. Then push hose (part# 549C) onto the barb of the coupler and secure with a hose clamp (part# 1702-11). (Assembly should look like picture to the left).

10. Now that you have all the connections to the coupler its time to set up the CO2 cylinder. First you mount the T742 Reg. to the Cylinder by threading the Tank Nut onto the cylinder as shown. Use the crescent wrench to tighten this connection.



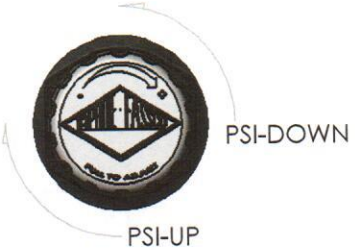
(NOTE: Insure that the shut-off is in the closed position before you open the tank valve. You may want to check this connection by applying a solution of dish soap and water and then opening the tank valve just a little and watch for bubbles.) If you have a leak free connection you then work the hose (part# 549C) onto the barb end and secure with 1 of the hose clamps (part# 1702-11).

ADJUSTING PRESSURE, TAPPING THE KEG & KEG TEMPERATURE

11. The regulator is shipped with the pressure set at approximately 20 psig. To re-adjust pressure, pull cap out (as shown). Then rotate cap counter-clockwise to adjust psi down rotate clockwise to adjust psi up.

ADJUSTMENT CAP LOCKED


ADJUSTMENT CAP UNLOCKED



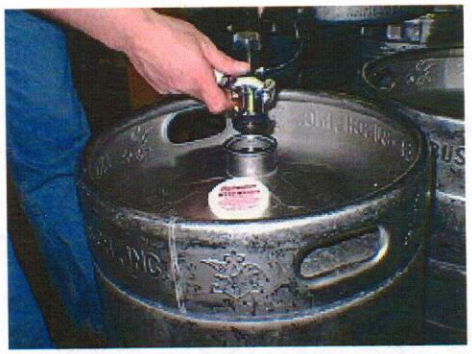

PSIG SET AT 12-14

OK, now that you've set the pressure. You should be ready to tap that first keg. But lets check through everything to make sure.

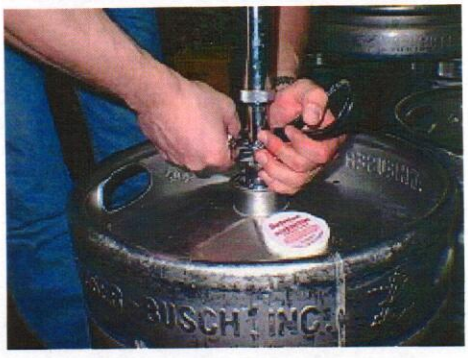
1. Mounted faucet assembly into the door.
2. Insured that Keg/CO2 tanks have a secure platform to sit on.
3. Mounted the drip tray.
4. Ran a line from faucet assembly to coupler assembly.
5. Ran a line from coupler assembly to regulator.
6. Mounted regulator onto CO2 tank (we did charge that tank didn't we).
7. Checked the entire system for leaks.

If all the answers are yes then we are ready to tap that keg.

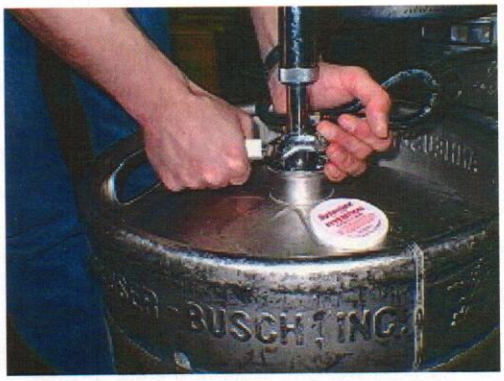
TAPPING THE KEG



1. Insert the coupler assembly into the tap on the top of the keg.



2. Push down on the coupler and turn clockwise.



3. Pull out on coupler handle and push handle assembly down then slowly release the handle and it will lock the coupler assembly into the open position.

NOW YOUR READY

If the keg is cold then pour yourself a cold one and enjoy.

YOU'VE EARNED IT

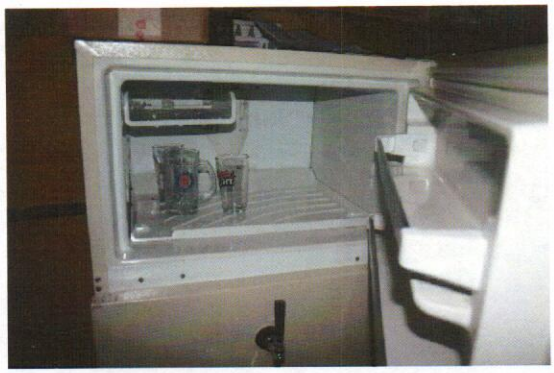
KEG/BEER TEMPERATURE

Not being pasteurized beer will spoil if not kept cold. Beer is best served between 36-38°. Remember this is a liquid temperature not the temp of the inside of the refrigerator. So the temperature inside the refrigerator may fluctuate but you need to keep the liquid temp at 36-38°.

How you ask.

There are many ways to measure liquid temperature. But the simplest way is to set a glass of water with a candy thermometer in it inside your refrigerator. Check this regularly, if the temperature is too high or low adjust the refrigerator's thermostat till you get the right temp. Then try not to open the refrigerator door any more than you have to.

TIPS



If your refrigerator has a separate freezer compartment on the top this is a good place, to not only store, but chill your favorite beer mugs/glasses.

Beer mugs/glasses are best chilled but with no ice build up. So make sure they are dry when you place them into the freezer.

THE PERFECT BEER

Now that all the work is done, its time to enjoy the fruits of your labor. Pouring that first cold draft beer.

Pouring beer is not as easy as it looks. Most people don't know the proper way to pour beer or how to get that perfect head on the beer they do pour. Listed below are 3 steps to pouring beer and some tips on what to look for in the beer you do pour.

1. First hold the glass at about 45° to the faucet, and down about 1". You don't want the faucet to touch the glass. Open the faucet all the way.

2. As the beer reaches the half way mark on the glass start bringing the glass back to the upright position. Make sure the beer is pouring into the middle of the glass as this insures proper release of CO2 into the beer.

3. Close the faucet quickly as the beer reaches the top of the glass. If you did it right you should have about 3/4-1" of foam, or a perfect head.

THINGS TO LOOK FOR IN YOUR BEER AND WHAT TO KNOW ABOUT THEM

1. If you are getting cloudy or flat beers.

   a. Check your liquid Temperature:
   It could be too cold

   b. Check your Equipment:
   With prolonged use equipment becomes dirty. You may need to clean your equipment.

   c. Check you beer mugs/glasses:
   Detergents leave a film on your mugs/glasses. You may want to hand wash & dry them.

2. If you are getting a Wild* or False* Head beer.

   a. Again check the liquid temperature:
   It could be too warm.

   b. Check your mugs/glasses:
   Ice in the glass will cause beer head to go wild and detergent or other contaminates can cause False heads.

   c. CO2 pressure:
   With Wild heads the pressure may be too high and with False head it may be too low. Check your CO2 pressure.

NOTE: Wild means the beer over foams or is all foam and False Head is where your head looks like large soap bubbles