

**FELIX STORCH, INC.
SUMMIT APPLIANCE DIVISION**

**770 GARRISON AVENUE
BRONX, NY 10474**

**SBC490BI(All Versions)
UNDER-COUNTER FULLSIZE
BEER DISPENSER**



Write the model and serial numbers here:

Model# _____
Serial # _____

Find these numbers on the back of the unit

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BEFORE PUTTING INTO USE

These instructions are important, and we request you read them before using this beer dispenser. They describe the appliance and the correct and safe way to use it.

The instructions were prepared for various models so you may find descriptions of some accessories and functions that do not apply to yours. All models of the SBC-490 can be converted into a beverage refrigerator. These units are designed for beer and beverages only, and are not recommended for perishable foods such as meats or dairy products.

Before connecting the appliance to the power supply, leave it standing for at least 8 hours. This allows the lubricants to drain back into the compressor and reduces the risk of malfunctions in the cooling system caused by shipping.

Clean the appliance thoroughly; especially the interior (See Maintenance and Cleaning). **Proper grounding must be ensured to reduce the risk of shock and fire. Do not cut or remove the grounding plug! Connect to 120V, 60Hz, and a minimum 15 amp grounded AC outlet. Do not use an extension cord. Use a three-prong plug with a three-prong grounded wall outlet. If you do not have one, have a certified electrician install the proper outlet.**

WE CARE ABOUT THE ENVIRONMENT

Our appliances are distributed in packaging made of environmental friendly materials which can safely be recycled, disposed of or destroyed with minimal environmental effects. Our instruction manuals are printed on recycled paper or chlorine free bleached paper.

TIPS FOR ENERGY SAVINGS

Try not to open the door too often, especially when the weather is hot and humid. Once you open the door try to close it as soon as possible.

If possible, disconnect the power before changing a keg of beer.

While this unit is designed for under-counter use, and the compressor cooling is fan assisted, a small air gap between the rear of the unit and the wall or counter surface behind will enhance cooling and reduce energy waste.

Set the thermostat from a higher to lower setting whenever possible, depending on how full the appliance is or what the ambient temperature is.

Keep the unit out of direct sunlight.

Periodically check that the refrigerator seals well and none of the contents prevent the door from closing.

WARNING!

To reduce the risk of fire, electric shock, or injury when using your appliance, follow these basic precautions:

- *Read all instructions before using the appliance.
- *The appliance must be correctly connected to the power supply.
- *Immediately replace worn power cords, loose plugs and power outlets.
- *Do not operate your appliance in the presence of explosive fumes.
- *Disconnect the appliance from the power supply before repairing or cleaning it (only qualified technician should repair it).
- *Do not let children play with this or any other appliance to reduce likelihood of injury.**
- *Never stand on top or inside of this appliance, or swing on the door.**
- *Do not operate valve control unless cylinder is completely installed and connected.

IMPORTANT SAFETY PRECAUTIONS OF CO₂-(CARBON DIOXIDE) GAS

Always connect the CO₂ cylinder to a regulator! Failure to do so may cause an explosion resulting in possible death or injury when the cylinder valve is opened.

Never connect the CO₂ cylinder directly to the product container.

Always keep CO₂ cylinders away from heat. Store extra cylinders in a cool place (preferably 70°F). Securely fasten cylinders with a chain in an upright position when storing.

Never drop or throw a CO₂ cylinder

Always check the D.O.T (Department of Transport) test date on the cylinder neck before installation. If it has been over 5 years, do not use. Return the cylinder to your gas supplier

Never connect a product container unless there are at least two safety devices in the pressure system; one on the CO₂ regulator and the other on the product container or in the pressure gas line.

SAVE THESE INSTRUCTIONS FOR FUTURE USE

DISPOSING OF A WORN OUT APPLIANCE

- When your appliance finally wears out, dispose of it.
- Before you dispose of your old refrigerator or freezer: Take the door or the drawers off so that children may not easily climb inside.
- The refrigerating system of the appliance is filled with refrigerant and insulating substances which should be separately recycled. Either have a licensed appliance repair company or dealer remove the appliance or call your local recycling office for the appropriate disposal.
- For the sake of environmental protection be careful not to damage the rear wall of the appliance (the condenser unit or the tubes when moving the refrigerator) or any part of the refrigerating system inside the appliance.
- This refrigerator is 100% CFC-Free, but the coolant is under pressure and puncturing the sealed system could be dangerous. The coolant used in the sealed system is non-toxic.
- Many older refrigerators may contain refrigerants that are harmful to the environment, and should be recycled by a lawfully licensed company.

PLACING AND INSTALLATION

CHOOSING THE RIGHT PLACE

To ensure that your beer dispenser works at the maximum efficiency it was designed for, install it in a location where there is proper air circulation and electrical connections.

Choose a location where the beer dispenser will be away from heat and will not be exposed to direct sunlight.

Models SBC-490-BIFR, SBC-490-BIFR-7(for commercial use), SBC-490BISSTB and SBC-490BISSTB-7(for commercial use) are designed for indoor use only and should not be used outdoors. Outdoor model SBC-490-OS and SBC-490-OS-TWIN are U.L.approved for outdoor use.

CONNECTION TO POWER SUPPLY

Connect this appliance to a 3 prong power supply socket outlet (which has a ground terminal). **If you only have a two prong outlet have it replaced by a qualified technician with an outlet that meets the local codes.**

*****DO NOT USE AN EXTENSION CORD*****

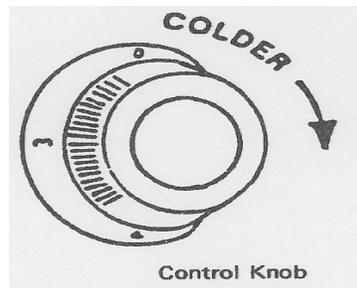
Required nominal voltage and frequency are indicated on the rating plate. The connection to the power supply and grounding has to be made according to current standards and regulations.

The appliance resists temporary voltage tolerance from -15 to 10%. On model SBC-490-OS only, a GFCI (ground fault circuit interrupter) built into every line cord. In the event the cooler is **not** operating, first check to see that the GFCI has not tripped, and **press the reset button.**

OPERATION CONTROL

How To Adjust The Thermostat

The refrigerator is controlled with a thermostat knob located inside the unit, towards the right-hand corner. Turn the knob clockwise from the **STOP (0)** position toward higher numbers for colder temperatures. Place drip tray under beer faucet. The recommended pressure for the CO₂ system is 8 -10 lbs.



TEMPERATURE SELECTION

The settings of the temperature control are from 0 (off) to 7 (max). Initially adjust the temperature control setting to 4 (norm), then adjust the thermostat to colder or warmer (as needed).

A higher setting on the knob (towards 7) means colder temperatures in all compartments of the appliance. On the highest setting, parts of the refrigerator may become extremely cold, especially in cooler or dry weather. Use the higher thermostat setting only when required or recommended.

The coolness of the refrigerator depends on how often you open and close the door or rarer.

To turn the refrigerator off you must turn the thermostat to 0 (off).

INSTALLATION

KEG TAPPER AND BEER KEG

The Sankey type keg tapper supplied with the beer dispenser is the most widely used in the United States. However, other types of keg tappers can be used. Before installing a keg taper check with your beer distributor to make sure that the Sankey type keg tapper can be used.

If you need a keg taper other than a Sankey type, it is recommended that you purchase the tapper you need from your beer distributor, please keep the Sankey type keg tapper for future use. The Sankey system is becoming more popular to use.

**YOU MAY PURCHASE IT FROM OUR SALES DEPARTMENT AT
718-893-3900**

*Make sure the shutoff valve on the CO₂ regulator is in a closed position. Connect pressure tube to the nipple of the keg tapper (use hose clamp). Connect beer tube from the draft arm to the keg tapper (fasten securely with washer and wing nut).

*Make sure the beer faucet and keg tappers are in a closed position, and then tap the keg Open keg tapper valve

*Make sure the keg is properly tapped, and then open shutoff valve on CO₂ regulator.

To install beer keg into cabinet follow the steps below:

- Lean the keg on the front bottom edge of cabinet
- Place the upper part of the keg in an upright position, then slide the keg into the cabinet (use the stainless steel floor to avoid damages to the unit).
- Make sure the keg and beer tube does not touch the cold plate.
- The keg and keg supports should be properly positioned in order for the door to remain closed.
- Release the air caught in the draft arm assembly by opening the beer faucet until foam appears.

CASTERS (For use as a freestanding beer cooler)

Empty the cabinet and lay down the beer dispenser sideways so the door hinge side comes to the top. Be careful not to cause dents or scratches on the cabinet. Placing a soft cloth or cardboard underneath the cabinet is recommended.

Install casters, and turn the nut clockwise to tighten

Remove all packing materials and parts. Inspect to make sure all parts listed below are present.

Note: allow the beer dispenser to stand in an upright position for 8-10 hours before turning on. Once all four casters have been tightened evenly, stand the cabinet in an upright position.

DRAFT ARM ASSEMBLY

- *Slide gasket over wing nut on bottom of draft arm assembly beer tubes. Slide gasket beer tube to draft arm base.
- *Push wing nut on beer tube of draft arm assembly through hole in top of cabinet until the draft arm is resting on cabinet top
- *Align holes in draft arm base with holes in gasket and pilot holes in cabinet, then secure guard rail with eight small screws.

GUARD RAIL

- *Place guard rail on top of the cabinet
- *Align all holes of the guard rail with the holes of the cabinet
- *Secure the guardrail to the cabinet with the eight small Phillips-head screws

CO₂ REGULATOR AND CO₂ CYLINDER

Note: Your CO₂ cylinder is shipped empty to avoid and possible accidents during transportation. When you purchase the first keg of beer, have your beer distributor fill the CO₂ cylinder. You must read and understand the following procedures for CO₂ cylinders before installation:

- *Install the CO₂ gas line tube to the regulator by attaching one end of the red tube to the hose bard connection on the CO₂ regulator.
- *Secure the tube by using one of the self locking black plastic snap-on clamps.
- *Insert a special washer into the regulator to cylinder attachment nut
- *Attach the CO₂ regulator to the CO₂ cylinder by screwing the regulator nut onto the cylinder valve and tightening with an adjustable wrench.
- *Remove the bolt with the nut from the cylinder retainer. Using two screws attach it inside the unit on the left side of the back wall. Holes are pre-drilled and screws are included.
- *Slide the cylinder through the retainer and secure it with the bolt and the nut. Position the cylinder this way so that you will be able to read the numbers on the gauges and easy access shut-off valves.

USE

UNPACK AND INSPECT THE PARTS OF THIS UNIT

Remove all packing materials and parts. Inspect to make sure all parts listed below are present.

- 1 Draft arm assembly (with washer)**
- 1 CO₂ cylinder**
- 1 CO₂ regulator**
- 1 Keg tap (American Sankey Type, see next section for other tap options)**
- 1 Cleaning kit**
- Vinyl tubing**
- 1 Stainless steel (removable) floor to protect the from keg insertion**
- 1 Guard rail**
- 1 Drip tray**
- 4 Casters (for conversion to portable beer cooler)**
- 2 Hose clamps**
- 2 Removable shelves (installed) for conversion to a beverage refrigerator**
- 8 Small Phillips head screws**
- 4 Large Phillips head screws**
- 2 Retainer fixing screws**

OPERATING

DISPENSING BEER

Follow the steps below to dispense beer:

1. Make sure that the beer dispenser is plugged in properly to a 120V, 60Hz, 15 amp grounded AC outlet.
2. Place the drip tray under the beer faucet
3. Open the beer faucet by pulling the tap towards you quickly and completely to dispense the beer
4. Increase the pressure if the beer runs too slowly. At the correct pressure and temperature; a 10oz. glass should be filled in 4 seconds.
5. Hold the glass steady at 45° angle. When it is 2/3 full, start straightening the glass. Proper foam should be a tight creamy head and the collar on an average glass should be ¾" to 1" high.

Note: It is normal to see condensation forming in the faucet. It is caused by the difference in temperature between the cold beer and the inner surfaces of the faucet when beer is flowing through the line.

UNDERSTANDING BEER TEMPERATURE

The recommended temperature for serving chilled beer is between 43° and 38° F. To maintain this temperature in average room conditions of 70° F, set the "Normal".

Note: During the summertime when temperatures are warmer, we recommend that you adjust the control to a cooler setting accordingly. Select and maintain the proper temperatures inside the refrigerator cabinet; this is necessary for maintaining the flavor freshness of beer. The best temperature for storing a keg is approximately 38° F; excessively cold or warm temperatures inside the refrigerator cabinet may cause a loss of flavor.

Note: Sour beer is produced as a result of secondary fermentation above 45° F.

BEER SERVING TIPS

The following tips will help you serve the perfect beer. To serve beer from the tap similar to the way it left the vat, check the following:

- * **Cleanliness** (see Maintenance and Cleaning)
- * **Temperature** (see Temperature Selection)
- * **Pressure** (see Troubleshooting)
- * **Use CO₂ gas**

CONVERTING THE BEER DISPENSER TO AN ALL-REFRIGERATOR

For your convenience, this beer dispenser can be converted to an all-refrigerator application. Simply follow the steps below for a quick and easy conversion.

Note: When using as a refrigerator, we do not recommend the use of casters, as stored items may fall off the shelves when the unit is in motion.

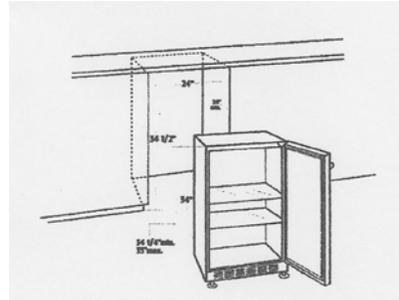
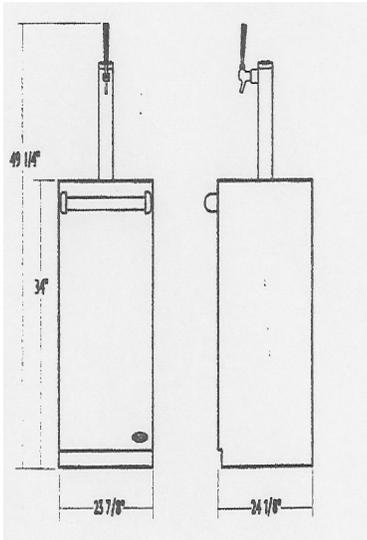
1. Close the main valve on the CO₂ cylinder
2. Close the connection between the beer keg and the keg tap by pulling and lifting the handle of the keg into an upright position
3. Disconnect both the beer line and the CO₂ gas line from the keg tap
4. Remove the beer keg from the cabinet
5. Disconnect the gas line from the CO₂ regulator
6. Remove the CO₂ cylinder from the cabinet
7. Remove the beer tower from the workshop unscrewing 4 screws.
8. Pull the beer line through the top pf the cabinet
9. Install the cabinet plug on the worktop
10. Lay the unit down sideways. We recommend that you place a piece of cardboard or cloth underneath the cabinet to avoid dents or scratches to the cabinet. Remove the casters and install leveling legs and raise the unit back into upright position
11. Install the two wire shelves.
 - A. Insert on end of each support pin into the holes on the right side of the cabinet
 - B. Place one end of the wire shelf into the left side of the cabinet and rest the other end onto the exposed support pins on the right side
 - C. Repeat the same with the second shelf
12. The conversion process is now complete. Store all removed accessories in a safe place for future use
13. Adjust the temperature of the unit as required for beverage storage

Note: allow the beer dispenser to stand in an upright position for 8 hours before turning on the power.

CONVERTING THE BEER DISPENSER TO A BUILT-IN UNIT

For your convenience, we offer beer dispensers that can be quickly built-in under your counters. Simply follow the steps below for a quick and easy installation.

Note: Not all models have Built-in capabilities; only models with letters *BI* are built-in compatible. These units are specially built with additional features for those customers who wish to install this unit under their counter; we do not advise that other models be built-in under your counter.



Your dimensions of the unit are:

Height 34 inches

Width 24 inches

Depth 25 inches

Make sure the available space is adequate this unit.

Built-in Instructions:

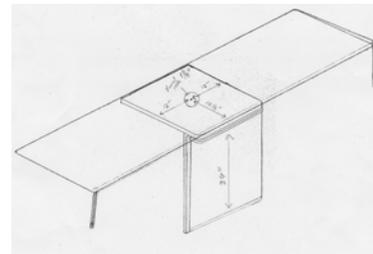
Find the Midpoint.

From the Left to right and vice versa is 24 inches in width. Also from back to front and vice versa is 25 inches. Therefore the mid point is located wherever these coordinates cross each other. Use a pencil or a marker to note this spot.

Note: 12 inches from left to midpoint.

12 inches from right to midpoint

12.5 inches from front to midpoint



Drill a Round Hole

2. Place the drill bit on the midpoint and make a round hole with a diameter of 1 7/8 inches.

Installation:

See Installation Instructions.

MAINTENANCE AND CLEANING

AUTOMATIC DEFROSTING OF THE REFRIGERATOR

There is usually no need to defrost the refrigerator, because the ice deposited on the inner back wall is automatically defrosted. Ice deposits on the inner back wall during compressor operation; later on, when the compressor is not operating, the ice defrosts and water drains through the outlet in the inner back wall into the drain pan situated above the compressor where it evaporates. If you see water building up in the rear of the unit, check that the drain trough is not clogged. Use a pipe cleaner or a piece of flexible wire. During extremely hot and humid weather some ice may build up. If necessary, remove contents of the refrigerator, turn the thermostat to 0 and allow defrosting. A hair dryer may facilitate the process.

INSTALLING THE CLEANING KIT

Read and understand the following instructions before installing the cleaning kit.

1. Mix one gallon of warm water and one ounce (one tablespoon) of cleaner in a bucket.
Note: Do not use lye, soap or hot water.
2. Remove the cleaner cap. Fill the jar and replace the cap. Leave the remaining solution in the bucket
3. Turn off either the air cock on the regulator or the valve on the CO² tank.
4. Disconnect the tap from the barrel. Then disconnect the beer line from the tap by turning the nut counterclockwise. Place the tap and end of the hose in the bucket.
5. Remove the faucet form the tower with the wrench and attach the fitting on the cleaning bottle in its place.
Note: Make sure there is a washer in the back of the fitting.
6. Hold the cleaning jar upside down until the solution runs through the system into the bucket
7. Fill the jar with cold clean water and repeat the process until the water runs clean.
8. Rinse the tap in the bucket with cold water
9. Remove the fitting from the tower and reinstall the faucet. Make sure the washer is in the back of the faucet
10. Re-attach the beer hose to the tap and attach the tap to the barrel.
Note: Beer lines should be flushed after each keg is emptied.

CLEANING THE APPLIANCE

Disconnect the power supply before cleaning the appliance.

Do not use coarse or abrasive cleaning agents as you can damage the surface.

Periodic cleaning of the beer dispenser is required. A complete cleaning kit is provided for your convenience.

Every now and then wipe the wall and bottom of the refrigerator. **Use a soft nonmetal brush or vacuum cleaner**

To clean the cabinet inside and outside, mix 2 tablespoons baking soda with 1 quarter warm water, or use mild soap

Do not put drip tray in the dishwasher (it is not dishwasher safe)

Vacuum the tubing on the outside back **twice a year**

To provide protective care of painted finish:

Regular applications of wax or polish provide vital protection against rust. Waxing cleans the surface and seals out moisture and other contaminants.

Use a wax polish that is suitable for appliances

Apply the wax or polish when the refrigerator is new and then at least twice a year

Door Gasket Cleaning

Clean the door gasket with a damp cloth every three months. The gasket must be kept clean and pliable to ensure a proper seal

Petroleum jelly applied lightly to the hinge side of the gaskets will keep the gasket pliable and ensure a good seal

Cleaning behind the Beer Dispenser

We recommend that you clean the rear of the refrigerator at least twice a year.

Note: Some operating environments may require more frequent cleaning.

Use a vacuum or brush to clean the coils.

The stainless steel doors (on some models) can be cleaned with a commercially available stainless steel cleaner.

Do not use appliance wax or polish on the stainless steel.

Do not wipe the door with a soiled dish cloth or wet towel. These may leave a residue

Use stainless steel cleaner only on stainless steel surfaces

Dry with a soft cloth

TROUBLESHOOTING

BEER CONDITION: CLOUDY BEER:

The beer in the glass appears hazy and not clear.

Cause #1

Excessively low temperatures may cause hazy or cloudy beer, particularly when the beer lies in the cold coil for long periods of time.

Correction

*Do not wash beer glasses together with glasses that have contained milk or any other fatty substance. An excessive amount of germicide build-up may also leave a fatty film, which will cause beer to go flat.

*It is preferable to steam and sterilize glasses where health laws permit.

*Wash glasses thoroughly with a good detergent to remove all fatty substances(i.e.lipstick)

*Do not use soap

*Do not wipe the glasses dry. Permit glasses to air-dry by placing them on a wire rack or on a corrugated metal

*Rinse the glasses in fresh cold water just before serving beer. It is best to serve beer in a wet glass.

Cause #2

Improper drawing of beer into glass

Correction

Open the faucet quickly and completely; proper foam should be a tight creamy head. The collar on the average glass should be ¾” to 1” high. Beer drawn without head has the appearance of being flat

Cause #3

Not enough **pressure**

Correction

Increase the pressure if beer runs too slowly. The correct flow should fill a 10oz glass in 4 seconds. (Approx.8oz of liquid). Check the pressure source to determine whether there are obstructions in the air line. Replace a sluggish air source or the CO2 regulator and gauge. The tank pressure must always be higher than the pressure used on the keg.

Always apply pressure to the keg before drawing beer.

BEER CONDITION: OFF TASTE BEER

Often bitter and bity; sometimes completely lacking flavor and zest. It may also have an oily or foul odor which may carry an unpleasant taste.

Cause #1

Improper cleaning of the tap

Correction

Brush and clean the tap properly. It should be scoured using a detergent, then rinsed clean.

Cause #2

Contaminated air line

Correction

Beer tube should be examined. If contaminated, it should be replaced.

BEER CONDITION:

CONDENSATION IS FORMING ON FAUCET

Cause #1

It is normal to see condensation forming in the faucet. It is caused by a difference in temperature between the cold beer and the inner surfaces of the faucet when beer is flowing through the line. Beer that is left in the faucet is not cooled by the refrigerator.

Correction

As a result, after a period of non-use, a few ounces should be drained before drinking

NOISE

Modern refrigerators rely on energy efficient high speed compressors. Cooling is accomplished through a system where the compressor cycles on and off pressurizing the refrigerant. **This system will produce certain noises which you may not be used to.** How noisy the appliance is depends on where it is placed, how it's used and how old the appliance is.

During the operation of the compressor, a liquid noise is heard and when the compressor is not operating a refrigerant flow is heard. This is a normal condition and it has no influence whatsoever on the lifetime of the appliance.

After starting the new appliance, the operation of the compressor and the refrigerant flow may be noticeable this does not mean something is wrong with the appliance. The noise will reduce gradually, over time and will not affect the lifetime of the appliance.

Many complaints of excessive noise are traced to improper placement or leveling of the refrigerator. **This noise is often a consequence of poor installation. To avoid this noise make sure the appliance is placed and leveled firmly on a solid base. Make sure the appliance is not touching the wall or kitchen units standing next to it in a way that vibrations can occur. And always make sure you check the accessories in the interior of the appliance; they should be placed correctly in their positions. Check the bottles, tins and other vessels that might touch each other and rattle.**

Summit Outdoor refrigerators contains a rear fan which runs only when the compressor is on, and some models have an internal air circulation fan which runs continuously. **A small fan hum (similar to a computer fan) is normal.**