

# Clinebell Equipment Company

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## **General**

Your new Block Ice Maker has been carefully packaged for safe shipment. If there is any visible damage to the shipping carton or cabinet, make a notation on the freight bill and file a claim with the carrier.

The S-60 Block Ice Maker has been designed to use a 6 X 4 X 22 gusseted LEAK PROOF bag that will produce a 5-1/2 square block of ice for use in snow cone ice shavers. Follow the instructions in the section titled Instruction Bag Fill Device.

## **Block Ice Maker Installation**

- For an efficient work flow, place the cabinets in the same room so that the operator can conveniently move the bag fill device from cabinet to cabinet.
- The 1-1/2 HP condensing unit is to be located outside of the building so that all heat will vanish into the outdoor air.
- The 1-1/2 HP condensing unit requires a 108/230-volt, single phase, and 60 cycle electrical circuit. The minimum circuit amp capacity is 12.5 amps, and the maximum fuse size is 20 amps.
- The block ice maker should be grounded for safety. (Applications outside of the U.S. may have other electrical requirements.)
- The S-60 cabinet should be set-up so that it slants slightly towards the front. The back legs should be propped up by approximately 1°. This will allow for drainage during the defrost period.

## **Bag Fill Device Installation**

- If the fill device is to be stationary, it may be hooked up in front of the block ice maker by means of a 3/8" O.D. copper line.
- The fill device can be made portable by connecting it to a water valve by means of a food grade garden type hose.
- The fill device has two (2) bag racks on the front side, on which you place two 6" x 4" x 22" gusseted LEAK PROOF plastic bags.
- On the back of the fill device are two (2) containers for weights, one at the end of each balance beam.
- Place any, heavy, non-porous substance, (i.e., steel or rock), in each weight box and add water to each plastic bag hung on the bag rack on the front of the device, until the beams tip down in front with the specified amount of water.

## **Bag Fill Device w/Block Ice Maker Operation**

- Set the specified plastic bag into the tray on the front of the fill device and secure it by piercing the top of the bag over the protrusions on the top of the device.
- Turn the water valve on, on one side and fill the bag with water until the balance beam tilts down.
- Turn the water valve off and quickly close the top of the bag, trapping as much air as possible in the bag. (When water freezes, it expands by 11%, this needing extra space inside the bag later in the process.)

- Lift the closed bag out of the fill device tray and seal it using a hop ring type pliers.
- Watch for leaks from the bags as you remove them from the fill device. If a bag is leaking, discard the bag.

*DO NOT place a leaking bag in the block ice maker cabinet.*

*NOTE: Always allow the plates to get cold before starting to place bags of water into the cabinet, as the cold plates will allow the bags of water to slide in easier.*

### **Filling The Machine**

- Take the filled and sealed bag by the top and place it into the cabinet starting on the right side of the back row.
- Place an "L" shaped divider under each bag. The divider helps to form the block of ice.
- Continue this procedure until you have placed five (5) bags in half of the back row.
- Repeat this procedure for the left half of the cabinet, starting in the back row.
- When you get the five (5) bags in the left half of the row, there should be a couple of inches between the two (2) "L" shaped dividers.
- This center space is used to gently pry the plates to break the frost free from the bags so that the blocks can easily be removed from the machine.

With experience, you will learn to place a filled bag in the cabinet while filling a bag on the other side of the fill device.

### **Harvesting**

- To harvest the blocks of ice, gently flex the rows of plates with your hands or the 2×4.
- This will release the blocks of ice from the plates. Do so in the space left in the middle of each row.
- Now remove the blocks gently from the cabinet. Remove the blocks one row at a time, starting in the front of the cabinet.
- Continue flexing plates and pulling blocks in this manner to the back row of the machine.

*CAUTION* Do not use force or pry bars to remove the blocks. The bagged block is ready for storage in a refrigerated cabinet.

Repeat the instructions in the section titled "Operation- Bag Fill Device W/Block Ice Maker".

### **Condensing Unit Operating Pressures**

Suction gas temperature at start-up will be approximately 34 degrees and will reduce to ?10 degrees when all water is frozen.

The high side pressure control is factory set.

The low side pressure control is factory set, at approximately 15 PSIG cut in and 0 PSIG cut out.

Some controls have a low side differential. The differential setting should be set at approximately 15 PSIG to give a cut out of 0 PSIG. (The cut out is equal to the cut in, less the differential.

### **Maintenance & Service**

- The machine plates must be defrosted occasionally. To defrost, harvest and refill the cabinet using the instructions in the section titled "Operating" Bag Fill Device W/Ice Maker".
- Then, shut off the condensing unit and allow the machine to sit with the lid open for a few hours.

- When all frost is melted, the excess water will drain to the front of the cabinet.
- This method will utilize the heat of the water to help the defrost process.
- Turn the compressor back on and allow the bags of water to freeze as usual.
- Keep the condenser clean by periodically brushing out the lint and dust between the fins.
- To do so, first unplug the electrical cord or turn off the power, to avoid injury on the rotating blade.
- The blades may also be sharp.
- Order any replacement parts directly from the factory to insure correct operation.
- The address is shown on the front of these instructions.
- If the machine is to be shut off for a prolonged period, be sure to defrost and wipe all interior surfaces dry so that they will not corrode.

If you have any problems in filling or harvesting your S-12 Block Ice Maker.

Please feel free to call us.