

## Installation of 'CU' Range (Feb 2015).

## **Under counter 'Super Dice Ice' Self Contained Ice machines)**

## Unpacking

- Remove the two banding strips securing equipment to pallet.
- Remove cardboard carton and packaging material.
- Inspect exterior of machine for damage.

Open bin door and remove:

- 1 x Brass Adaptor (5/16 to <sup>3</sup>/<sub>4</sub> BSP)
- 1 x leg kit

Also supplied (Separate package), should be an 'Installation Kit' with a part number of:

• ICE0401 (parts to aid installation of unit)

Remove transit tapes from internal ice making areas and spray plate -

Ensure all internal components are secure and in the correct position following transit.



Front view of freezing compartment, arrow points to dear plastic curtain. After checking spray platform, pull curtain down to hang freely. This is its normal position.



Front view of freezing compartment, right arrow points to Spray Platform, under the Cube Deflector. Push curtain back and check that it is in this position.

Check ID on rear of machine for correct voltage, e.g. 230 volt 50 hz for UK use.

Remove protective film from outer panels.



## **Installation**

Check the following services are within 1 metre of machine location:

- Cold water supply terminated with a washing machine style stop valve.
- Mains drainage with a connection point lower then the drain outlet of the machine. Connection point must be at least 1 <sup>1</sup>/<sub>4</sub>" diameter open and trapped (similar to a domestic washing machine). If drain is too high a stand or condensate pump must be used.
- A suitable' Backflow' prevention device (Airgap) to 'EN1717' should be installed to the waste upstand.
- 13 amp socket outlet. Due to high starting current, it is suggested that any multiway adaptors with other appliances are not used.

## Note:

If a condensate pump is to be used, then 2 x 13 amp socket outlets are required.

## **Check the following:**

- Ambient temperature minimum 10 ℃, maximum 40 ℃
- Adequate space at rear of machine for water and drain connections.
- Minimum airflow clearance requirement of 15cm to both sides of machine.

## Note:

If airflow clearance is restricted, ice production rate will decrease by as much as 25% due to overheating.

- Fit legs to CU 415, 715 or 920.
- Level equipment in both directions: left to right and front to rear.
- Fit 13 amp plug top (fitted with 13A fuse) to mains lead.
- Connect supplied water inlet hose (with inline NRV) to machine.

If using the supplied inlet hose/NRV (XP194), ensure the flow arrow on the NRV faces the correct direction - Do not overtighten.

- Using the supplied drain fitting (XP168), first use 8 10 turns of PTFE tape to the thread of the fitting before installing to the machine.
- Fit flexible drain hose to machine and secure using clip provided.
- Connect drain hose to main drain by inserting hose into upstand/backflow prevention device.

## Note:

To prevent drainage problems caused by loops in the hose, reduce hose length as far as reasonably practicable.



#### Component Location





## Start Up Procedure for Models - CU 0415, 0715 & 0920

NOTE – The machine's control PCB (Base of unit, behind air grill) is fitted with a Status screen which will glow to highlight its current cycling position or should the machine stop on either 'Bin full' or through a fault condition.

## Initial Start Up

1. Remove the front panel by removing the two screws holding it to the cabinet and pulling the panel down and off the machine.

2. Turn on the water supply, correct any leaks.

# Note: Water supply MUST be turned on first to allow water to enter the machine properly.

3. Locate the On/Off/Wash master switch.

4. Move the switch to the On position.

5. Ice bridge thickness and harvest time indicator lights will switch on. They will not change unless the cube size or harvest times are manually adjusted. The timer light will also be on.

6. The unit begins to fill the reservoir with water. Two streams of water can be seen behind the curtain. The compressor and hot gas valve will be energized, but the fan motor and pump will be off. After a time the water will have filled the reservoir but will continue to fill and excess water will drain from the machine. This is normal and helps the machine from forming excessive mineral scale.

7. After approx 2 minutes the water and hot gas valves will close and the pump and fan motors will start. A blue light in the control panel will glow indicating the beginning of the freeze cycle.

8. Warm air will begin to blow out the left front of the machine and water will spray up at the inverted ice making mold. It is normal for a small amount of water to drip from the ice making area into the ice storage area.

When the water temperature reaches a pre-set point the water pump will stop for about 30 seconds then resume.

Freezing then continues for many minutes until the temperature of the refrigeration system drops to a set point, indicated by a yellow light glowing on the control panel. In colder rooms the fan motor may turn on and off. After the yellow light switches on, the freeze cycle continues for seven more minutes. At that time the unit changes to the ice release or harvest cycle. During the ice harvest the hot gas valve and inlet water valve are open, while the pump and fan motors will stop. The blue and yellow lights will go out. Water will refill the reservoir.

9. Within a minute or so the ice formed in the mold will fall down and slide into the ice storage bin. The ice will release as a group so all of the ice formed will fall at once and the next freeze cycle will begin in a few seconds. The timer light may switch on at the end of the harvest cycle.

10. Check the thickness of the ice connecting the cubes to each other, that connection is known as a bridge and it should be about 1/8 inch or 3 to 4 mm thick. It is preset from the factory and should be satisfactory.



## Adjustments:

If the ice bridge is too big or too small, the thickness may be adjusted.

Note: The bridge thickness adjustment is used to obtain the CORRECT size, not to adjust to individual preferences.

Do NOT make the ice bridge too thick or too thin, as either will reduce ice making capacity.

# Do NOT attempt to adjust the machine to release individual cubes. There is only ONE correct size.

11. Ice making will continue until the ice level reaches the metal tube in the storage bin, when ice contacts that tube the machine will stop making ice. This can occur in any part of any cycle.

12. Removing ice from the ice storage bin will restart the ice making process.

13. Check for and correct any water leaks from the unit or drain system.

14. Return the front panel to its normal position and secure it to the cabinet with the original screws.



## Control Panel and Adjustments

Ice Bridge Thickness Adjustment Area



Master Switch. Move to ON (left side depressed) to make ice, OFF (centered) to shut off and VVASH (right side depressed) for use in cleaning.

Harvest Time Adjustment Area

Indicator Light Area.

Freeze Mode light is ON when unit is in a Freeze cycle.

Timer On light is ON when trigger point temperature is reached in Freeze or Harvest.

Hubbard Systems (A division of HTG TRADING LTD) – Unit 106 Claydon Business Park, Great Blakenham, Ipswich. Suffolk. IP6 ONL.



#### Ice Bridge Thickness Adjustment

Ice Thickness Diagram

#### **Adjustment Indicator Lights**

Each push and release of the + or - button will change the lights that glow or blink indicating a change in ice size or harvest time. Example: pushing + one time changes a blinking light to steady on type. If the lights are on steady a single push of + will add one more light to the right and it will blink. There are 10 settings. All 5 lights on steady is the maximum setting and one blinking light is the minimum.

Ice Too Thick

Adjust by pushing the + sign or – sign on the ice bridge adjustment section of the control panel. Changing bridge thickness should be a one-time adjustment as the machine will automatically maintain that ice thickness.

Once the storage bin is full of ice, the **LED** to indicate 'Bin Full'. The machine will automatically resume making ice once the level has lowered in the bin



Typical Full Bin

**NOTE** - The above procedures are designed to supplement guidance given in the user handbook, not replace it.