Installation of All Scotsman Self-Contained Cubers

Unpacking

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

Open bin door and remove:

- 1 x water inlet tube
- 1 x drain tube complete with clip
- 1 x leg kit (not supplied on AC/EC46 or Ice-1)

Remove all ‘transit tapes’ from ice curtain and spray plate, ensure the spray plate(s) are correctly positioned and the curtain located the right way around on the holders in front of the sump chamber.

Check the ‘Sump’ cap and spring are correctly located.

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

- Cold water supply terminated with a ¾ BSP 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 ¼" diameter open and trapped (similar to a domestic washing machine) with any connection made to include a suitable ‘back flow’ prevention device to ‘EN1717’. If drain is too high, a stand or condensate pump must be used.
- 13 amp socket outlet. (Due to potential high starting current, a socket adaptor with other appliances should not be used.)

Note:

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

Check the following:

- Ambient temperature - minimum 10°C, maximum 40°C
- Adequate space at rear of machine for water and drain connections.

- Minimum airflow clearance requirement of 15cm to both sides of machine.

Note:

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

- Adjustable feet are supplied for the ICE-1, B21/31, AC/EC46 and leg kits fitted to ICE-3, B40, AC/EC56 through to 226.
- Level equipment in both directions: left to right and front to rear.
- Fit 13 amp plug top (fitted with a 13A fuse) to mains lead.
- Fit water inlet hose to machine. Do not overtighten.
- Fit flexible drain hose to machine and secure using clip provided.

Note:

Both hoses are fitted with one straight end and one angled end. Use which ever is the most suitable for that installation.

- Connect water inlet hose to water supply. Do not overtighten.
- Connect drain hose to main waste drain provided by inserting hose into upstand (similar to domestic washing machine).

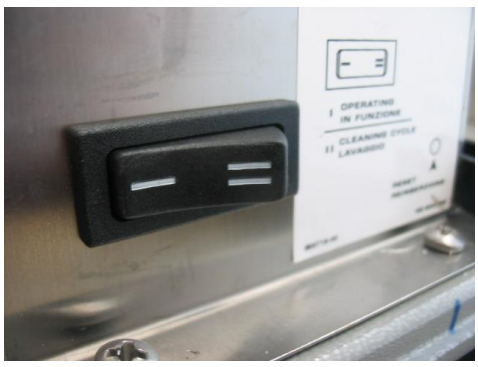
Note:

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

Start Up Procedure for Electro-Mechanical Models –

ICE1 & 3, B21/31 & 40, AC/EC46/56 & 86

- Remove front panel of machine.
- Locate switch on control panel and move to position II (Possible orange tape covering it).

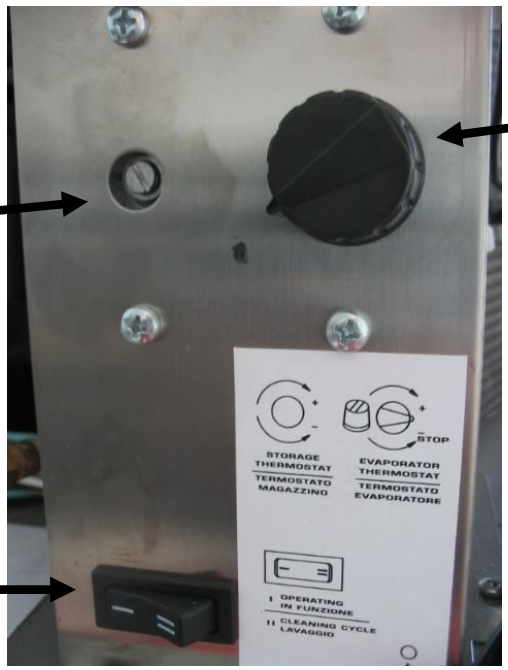


- Turn on water and power supply (AC/EC units - Green pushbutton on front panel).
- At this point water will enter the machine and fill the water tank, the water pump and fan motor will also run.
- When the water tank is full and excess water is running straight through to the drain, move switch back to position I. The machine should now start an ice making cycle.
- After approximately 25 minutes, ice cubes will fall through the curtain and into the storage bin. The machine will automatically refill with water and start the next cycle.

Count and inspect the cubes:

- ICE1, B21, AC/EC 46 = 18
- ICE3, B31/40, AC/EC 56 & 86 = 24

- Each cube should be clear and solid with a small depression of about 6mm at the base.
- If the depression is greater than 6mm adjust the evaporator thermostat fitted with a knob turn one- eighth turn clockwise and recheck the size of the cubes after the next production cycle – NOTE, only adjust sizing during harvest cycle.
- If the depression is less than 6mm or the cube is rounded at the base, adjust the evaporator thermostat counter clockwise one - eighth turn and recheck after next production cycle.



- NOTE – During install/commissioning, adjust the 'Bin Stat' control fully clockwise to prevent nuisance tripping off under a bin full condition...

Start Up Procedure for 'Electronic' AC/EC106, 126, 176, 206 & 226

- Turn on water and power supply (Green pushbutton on front panel).

- At this point solenoids coils will be heard and water should then enter the machine and begin to fill the water tank, the water pump and fan motor will also begin to operate.

- When the water tank is full and excess water is running through the drain (or being pumped out on the EC versions), the machine should now start an ice making cycle (this after approx 5 minutes) with the compressor in operation.

- After approximately 20 - 25 minutes, ice cubes should fall through the curtain and into the storage bin. The machine will then automatically refill with water and start the next cycle.

Count and inspect the cubes:

- AC/EC 106 = 32
- AC/EC 126 = 48
- AC/EC 176 = 48
- AC/EC 206 = 102
- AC/EC 226 = 102

- Each cube should be clear and solid with a small depression of about 6mm at the base.
- Any adjustments to 'dip-switch' settings for ice size should be discussed with the engineer installing the equipment or Hubbard Ice Technical Department in the first instance.

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