

IMI CORNELIUS INCImage: One Cornelius PlaceImage: Anoka, MN 55303-6234Telephone (800) 238-3600Facsimile (800) 535-4231

IMPORTANT:

TO THE INSTALLER. It is the responsibility of the Installer to ensure that the water supply to the dispensing equipment is provided with protection against backflow by an air gap as defined in ANSI/ASME A112.1.2-1979; or an approved vacuum breaker or other such method as proved effective by test.

Water pipe connections and fixtures directly connected to a potable water supply shall be sized, installed, and maintained according to Federal, State, and Local Codes.

Installation Manual **"I" Series** "REMOTE" Ice Cube Machine

Part No. 166240001 Date of Creation 10/31/94 Revised: 10/8/2003 Control Code A <u>THIS DOCUMENT CONTAINS IMPORTANT INFORMATION</u> This Manual must be read and understood before installing or operating this equipment

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GENERAL

FREIGHT DAMAGE CLAIMS PROCEDURE

The deliverer of your equipment (freight company, distributor or dealer) is responsible for loss or damage of your shipment. All claims must be filed with the deliverer of your equipment. Please follow the steps below to determine if your shipment is satisfactory or if a claim must be filed:

- 1. Check the number of products delivered against the number of products listed on the delivery receipt. Should the totals not match, have the driver note all errors on both copies and both you and the driver sign and date said notation.
- 2. Inspect all cartons for visible damage. Open and inspect as required before the driver leaves and have him or her note any damage on the receipts. All damaged claims must be inspected within 15 days of delivery. Notify your carrier immediately if concealed damage is found after delivery.
- 3. Should concealed damage be found when product is unpacked, retain the packing material and the product and request an inspection from the deliverer.
- 4. All claims for loss or damage should be filed at once. Delays in filing will reduce the chance of achieving a satisfactory resolution to the claim.

INSTALLATION INSTRUCTIONS REMOTE CONDENSERS



- 1. Follow the standard installation instructions supplied with cuber. Do not hook cuber into the power source until the remote condenser and line set installation is complete.
- 2. Assembly of remote condenser (see drawing):
 - A. Assemble legs to base panel. Install leg supports on legs.
 - B. Locate the remote condenser in a well ventilated area on the roof away from other refrigeration equipment's condenser discharge air flow.
 - C. Use the mounting holes provided to secure the remote condenser to the roof. Seal over heads of bolts or fasteners with tar or pitch to prevent entrance of moisture.



- 3. Remote condenser electrical hook-up:
 - A. Connect remote condenser to a power source (208/230VAC, 60 HZ) separate from the cuber. An external disconnect switch must be used.
 - B. Make sure the electrical connections follow all local and national codes.
 - C. DO NOT turn condenser on until cuber install and refrigerant line connections are complete!

- a. Never wire condenser into cuber section. The condenser is an independent electrical connection.
- b. Fan motor will not start until pressure rises to 205 PSIG [14.07 Bars] closing fan cycling switch.
- c. The condenser fan may cycle off during the harvest cycle This would be normal.
- NOTE: Installing an IMI Cornelius remote cuber with other than an IMI Cornelius remote condenser and line set may be reason to void the cuber warranty.



CORRECT

- 4. Each condenser and cuber is connected with two (2) pre-charged lines.
 - A. The pre-charged lines are ordered separately from the condenser to suit each individual application.
 - B. The pre-charged line lengths are 20 feet [6.096 meters], 35 feet [10.66 meters] and 55 feet [16.76 meters].

NOTE: *(Pre-charged is defined as a vapor holding charge - not a portion of the system charge.)

- 5. Installation of line kits (see drawing) Remove the tubing from the carton. Carefully uncoil the lines so the tubing doesn't become kinked, and route lines to cuber and condenser.
- 6. Keep line set as short as possible. Place a 3 foot service loop behind cuber to allow for rear service should it ever be required.

REMOTE CONDENSER LOCATION

NOTE: NOTE: Max. line set length for IMI Cornelius cubers is 55 ft. - Do not confuse line length with calculated line distance.

1. Physical Line Set Length: 55 Ft. Maximum [16.764 meters]

The ice machine compressor must have the proper oil return. Line-set rises, drop, or horizontal runs greater than the maximum distance allowed will exceed the compressor start-up and pumping design limits, and will result in poor oil return to the compressor.

Line Set Rise: 35 Ft. Maximum [10.66 meters] Line Set Drop: 15 Ft. Maximum [4.57 meters]

2. Calculated Line Set Distance: 100 Ft. [30.48 meters]

To prevent the combination of rises, drops and horizontal runs exceeding the compressor start-up and pumping design limit, the following calculations should be made:





A - (RISE)_ CONDENSER HIGHER THEN EVAP. MAX. <u>35</u> <u>B -</u> LINE LENGTH <u>15'</u>: EXAMPLE

B - LINE LENGTH <u>35'</u>: EXAMPLE C - (DROP) CONDENSER LOWER THAN EVAP. <u>15'</u>: MAX.

Maximum Line Set Distance Formula

- 3. Measured rise x 1.7=Calculated (Rise 35 ft. Max.) [10.66 meters]
- 4. Measured drop x 6..6=Calculated (Drop 15ft. Max.) [4.57 meters]
- 5. Measured Horizontal Distance= actual measurement.
- 6. Total Calculated distance (A+B+C)=Total Calculated Distance (100 ft. Max.) [30.48 meters]

Examples:

a. Insert measured rise (R) into formula and multiply it by 1.7 to get a calculated rise.
 example: A condenser located 15 ft. [4.572 meters] above the ice machine has a 25.5 ft. [8.874 meters] calculated total (15 ft. x 1.7 = 25.5).



b. Insert measured drop (D) into formula and multiply by 6.6 to get a calculated drop.

example: A condenser located 8 ft. [2.438 meters] below the ice machine has a 52.8 ft. [16.093 meters] calculated total (8 ft. x 6.6 = 52.8 ft.)



c. Insert measured horizontal distance into formula. No calculation is necessary. (6 ft.) [1.828 meters]. COMBIATION OF RISE AND DROP(S)WITH HORIZONTAL



d. Add the calculated rise, calculated drop, and horizontal distance together to get the total calculated distance (25.5 + 52.8 + 6) equals 84.3 ft. [25.694 meters]. If 100 ft. [30.48 meters] total calculated distance is exceeded, the condenser must be moved to a new location which permits proper equipment operation..



CAUTION: If a line set rise is followed by a line set drop, a second line set rise cannot be made. or If a line set drop is followed by a line set rise, a second line set drop cannot be made.

7. Lengthening Or Reducing The Line Set Lengths

In most cases, by routing the line set properly, shortening will not be necessary (refer to illustration). However when shortening or lengthening is required, do so before connecting the line set to the ice machine or the remote condenser. This prevents the loss of refrigerant from the ice machine or the condenser.

The quick connect fittings on the line sets are equipped with Schrader Valves. Use these valves to recover any vapor charge from the line set. When lengthening or shortening lines, apply good refrigeration practices and insulate new tubing. Do not change the tube sizes. Evacuate the lines and place approximately 5 oz. of vapor refrigerant charge in each line.



8. Connection of Line Set

- A. Remove the plastic caps from the line set, the condenser, and the ice machine.
- B. Apply refrigeration oil to the threads on the quick connect couplers before connecting them to the condenser.
- C. Carefully thread the female fitting onto the condenser or ice machine by hand.
- D. Using the proper size wrench, tighten the couplings until they bottom out. Turn an additional 1/4 turn to ensure proper brass-to-brass seating.
- E. Check all fittings for leaks.

9. Final Installation:

- A. Remove grill from the right hand side panel of cuber.
- B. Turn service port on receiver tank to open position releasing refrigerant to the balance of the system.
- C. Leak check line set connections at cuber and condenser.
- D. Replace grill.
- E. Connect cuber to power source.
- F. Make sure electrical connections follow all local and national codes.

10. Start Up:

- A. Use standard procedures from cuber installation instructions.
- B. After the cuber is running, check the remote condenser and verify that the condenser fan is running.

CAUTION: Once the refrigerant lines are connected, the seal is broken in the fittings. If the line are removed or loosened from the cuber or remote condenser, the refrigerant charge will be discharges to the atmosphere. DISCHARGING TO THE ATMOSPHERE IS IN VIOLATION OF THE CLEAN AIR ACT OF JULY, 1992.

ICE CUBER SPECIFICATION – 60 HERTZ							
MODEL	IRC630	IRC830	IRC1030 IRC1030L	IRC1230			
UNIT							
Volts	230	230	230	230			
Phase	1	1	1	1			
Hertz	60	60	60	60			
No. Wires	2+ground	2+ground	2+ground	2+ground			
MIN. CIRCUIT				_			
Amps	20	20	20	20			
MAX FUSE SIZE (HV	AC CIRCUIT BREAK	ER REQUIRED)					
Amps	20	20	20	20			
REFRIGERANT							
Туре	R404a(HP62)	R404a(HP62)	R404a(HP62)	R404a(HP62)			
Weight (oz)	170	170	210	210			
Weight (g)	4820	4820	5954	5954			
COMPRESSOR							
Volts	230	230	230	230			
Phase	1	1	1	1			
Hertz	60	60	60	60			
LRA 69 61		61	82	96			
RLA 8.8		12.5 13.0		13.5			
CONDENSER FAN M	CONDENSER FAN MOTOR (AIR COOLED SYSTEMS ONLY AIR CIRCUILATION FAN MOTOR (WATER-COOLED & REMOTE SYSTEMS ONLY)						
Volts	230	230	230	230			
Phase	1	1	1	1			
Hertz	60	60	60	60			
Amps Running	0.36	0.36	0.36	0.36			
Watts	6	6	6W	6			
WATER PUMP							
Volts	230	230	230	230			
Phase	1	1	1	1			
Hertz	60	60	60	60			
Amps Running	0.5	0.5	0.5	0.5			
HP	1/30	1/30	1/30	1/30			

ICE CUBER SPECIFICATION – 60 HERTZ						
MODEL	IRC1448	IRC1448-3PH	IRC2448	IRC2448-3PH		
UNIT						
Volts	230	230	230	230		
Phase	1	3	1	3		
Hertz	60	60	60	60		
No. Wires	2+ground	3+ground	2+ground	3+ground		
MIN. CIRCUIT						
Amps	25	25	30	25		
MAX FUSE SIZE (HV	AC CIRCUIT BREAK	ER REQUIRED)				
Amps	25	25	30	25		
REFRIGERANT						
Туре	R404a(HP 62)	R404a(HP 62)	R404a(HP 62)	R404a(HP 62)		
Weight (oz)	250	250	320	320		
Weight (g)	7088	7088	9072	9072		
COMPRESSOR						
Volts	230	230	230	230		
Phase	1	3	1	3		
Hertz	60	60	60	60		
LRA	95.6	82 125		90		
RLA	23.9	10	20	13		
CONDENSER FAN MOTOR (AIR COOLED SYSTEMS ONLY						
AIR CIRCULATION F		-COOLED & REMOTE	SYSTEMS ONLY)	I		
Volts	230	230	230	230		
Phase	1	1	1	1		
Hertz	60	60	60	60		
Amps Running	0.36	0.36				
Watts	6	6W				
WATER PUMP						
Volts	230	230	230	230		
Phase	1	1	1	1		
Hertz	60	60	60	60		
Amps Running	0.5	0.5	0.77	0.77		
HP	1/30	1/30	1/50	1/50		

ICE CUBER SPECIFICATION – 50 HERTZ						
MODEL	IRC630E50 IRC630E50L	IRC830E50 IRC830E50L	IRC1030E50 IRC1030E50L	IRC1230E50 IRC1230E50L		
UNIT						
Volts	220	220	220	220		
Phase	1	1	1	1		
Hertz	50	50	50	50		
No. Wires	2+ground	2+ground	2+ground	2+ground		
MIN. CIRCUIT						
Amps	20	20	20	25		
MAX FUSE SIZE (HV	AC CIRCUIT BREAK	ER REQUIRED)				
Amps	20	20	20	25		
REFRIGERANT						
Туре	R404a(HP62)	R404a(HP62)	R404a(HP62)	R404a(HP62)		
Weight (oz)	170	170	210	250		
Weight (g)	4820	4820	4820	4820		
COMPRESSOR						
Volts	220	220	220	220		
Phase	1	1	1	1		
Hertz	50	50	50	50		
LRA	53	58 64		75.9		
RLA	8	12	12.5	13		
CONDENSER FAN N AIR CIRCULATION F	OTOR (AIR COOLED	SYSTEMS ONLY -COOLED & REMOTE	SYSTEMS ONLY)			
Volts	220	220	, 220	220		
Phase	1	1	1	1		
Hertz	50	50	50	50		
Amps Running	0.3	0.3	0.3	0.3		
Watts	6	6	6	6		
WATER PUMP						
Volts	220	220	220	220		
Phase	1	1	1	1		
Hertz	50	50	50	50		
Amps Running	0.5	0.5	0.5	0.5		
HP	1/30	1/30	1/30	1/30		

MODEL	CR800	CR1200	CR1400	CR2400	CR800E50	CR1200E50	CR1400E50
Volts	230	230	230	230	220	220	220
Phase	1	1	1	1	1	1	1
Hertz	60	60	60	60	50	50	50
Amps	1.0	1.0	1.0	3.6	1.1	1.1	1.1
Output, HP	1/6	1/6	1/6	3/4	1/6	1/6	1/6
Max. fuse size, Amps (HVAC circuit breaker re- quired)	20	20	20	20	20	20	20

REMOTE CONDENSER SPECIFICATION

INSTALLATION INSTRUCTIONS

Installation and start-up of the equipment should be performed by the distributor or the dealer's professional staff.

LOCATION OF EQUIPMENT

For maximum performance the location should be away from heat sources such as ovens, direct sunlight, hot air discharge, etc.

To reduce cost of maintenance and loss of efficiency, avoid placing air-cooled equipment in areas where grease, flour and other airborne contaminants are present. Allow a minimum of 6" (15.24 cm) clearance on all sides and top for proper air circulation. Restricted air circulation will affect the efficiency and required maintenance of the product.

IMPORTANT: Never operate your equipment in room temperature below $50^{\circ}F$ ($10^{\circ}C$) or above $100^{\circ}F$ ($38^{\circ}C$). Should the location of your product ever be exposed to freezing temperatures, it must be shut down and winterized.

EQUIPMENT SET-UP



The following steps refer to the set-up of the ice bin and the cuber:

- 1. Remove the bin from its carton, place it on its back and install the legs into the bottom of the bin. Bins must be installed on legs or sealed to the floor with RTV-732 sealant.
- 2. Set the bin up on its legs. Place the bin in its final location and level it with the adjustable feet in the legs.
- 3. Unpack the cuber from its carton, and set in place on the bin and adjust as required.
- 4. Remove all internal packing from the cuber.

Bin adapter and condenser air baffles may be required in certain installations.

DISPENSER INSTALLATION

The proper cuber/dispenser installation package should be ordered. This package will include gasket material and hold-down bracket.



PLUMBING CONNECTIONS

- 1. All plumbing lines and connections must conform to local and national plumbing codes.
- 2. Line shut-off valves must be located in supply water lines for cuber and condenser if product is watercooled. Water supply to water-cooled condenser must include a stand-pipe to prevent "water hammer".
- 3. Should your local water supply quality require the installation of a water filter system, consult your local distributor or dealer for proper size required.
- 4. Water supply pressure must not be lower than 20 PSI (1.37 BAR), nor should it exceed 120 PSI (8.16 BAR).

IMPORTANT: Water filters larger then 5 microns do not give proper protection. Water pressures above 80 PSI (5.44 BAR) will destroy the filter.

NOTE: Bin and cuber drain lines must never be connected together and must be vented.

ELECTRICAL

- 1. All wiring and connections must conform to national and local electrical codes.
- 2. Wire size and circuit protection must conform to specifications and cuber must be on a separate electrical circuit.
- 3. Strain relief connectors must be used at the junctions box of the control box and the cuber.
- 4. Cuber must be grounded by the control box ground screw or other method for intentional safety grounding that meets code requirements.
- 5. A manual disconnect in a convenient location to the cuber must be installed.

INSTALLATION CHECK POINTS

- 1. Has bin and cuber been leveled and sanitized?
- 2. Does electrical and plumbing meet code requirements?
- 3. Check correct operating water level in the water pan.



- 4. If water-cooled, are inlet and drain connections to condenser correct to prevent "water hammer"?
- 5. Are drain lines separate and vented?
- 6. Is there 6" clearance on all sides and top for proper air circulation?
- 7. Does the water curtain move freely, and does the float valve shut off incoming water to the water pan?

START-UP AND CHECK OUT



 Turn the Cuber's power switch to the clean (pump only) position. The water pump only should be operational. Check for an even, steady flow of water over evaporator top extrusion and down over evaporator surface. Check that all ports of the water distribution tube are open for even water discharge. The water pan should refill and the float should stop the incoming water supply.

Note: Should service be required on the float valve or strainer, turn the water supply off loosen the float hold down nut and remove the float and strainer as an assembly for ease of service.

- 2. Place the Cuber's power switch in the on position. After a 2 second delay the compressor will start. The condenser fan will operate when the condenser sensor signals the circuit board its temperature is 100°F (38°C) The water pump will operate when the evaporator cools to 25°F (-3.9°C). Depress the manual harvest switch (on the circuit board) the fan motor will stop and the water dump valve will open. In 3 seconds the hot gas solenoid will open and 15 seconds after depressing the manual harvest switch, the water pump and dump valve will close terminating the dump cycle.
- Hold the water curtain open for a maximum of 30 seconds; the Cuber should shut down. Release the water curtain(s). When the curtain(s) closes, there will be a 2 second delay, then the compressor will start and the start-up process should begin for the next ice making mode.
- 4. If all Cuber operation is as stated, allow product to operate and produce one slab of ice, then discard the ice. Allow the Cuber to continue operation to fill the storage bin.

OWNER - OPERATOR

The installation is not complete until you are sure the owner-operator understands the cuber operation and his or her responsibility of preventative maintenance.

Does the owner-operator know:

- 1. Location of electrical disconnect switch and water shut-off valves?
- 2. How to start and/or shut down the product, clean and sanitize it?
- 3. Bin full operation and reset operation of high pressure cutout (water-cooled and remote products only)?
- 4. How to clean the condenser and fan blade?
- 5. Whom to call for product information and/or service?

CLEANING PROCEDURES

Approved ice machine cleaners by brand names:

- Lime-A-Way
- Calgon Nickel Safe (green color only)

NOTE: All ice machine cleaners labeled safe for nickel ARE NOT the brand CALGON NICKEL SAFE.

CAUTION: Ice machine cleaners are acidic-based chemicals. Before beginning any cleaning of the cuber, the ice in the storage bin or dispenser must be removed.

WARNING: When using any chemical, rubber gloves and eye protection should be worn.

PREP – CLEANING

Use full-strength ice machine cleaner on a coarse-surface cloth material (such as terry cloth) and wipe down the inside wall of the evaporator area, the water pan, the water curtain and evaporator plastic extrusions. If the water distributor tube has heavy scale build-up, remove and soak it in full-strength ice machine cleaner (or exchange the tube and clean the scaled tube at a later date).

Cleaning the Water System & Evaporator



- 1. Set the switch to *Clean* and allow any ice on the evaporator to release and melt away.
- 2. Remove all ice from the storage bin.
- 3. Remove the water curtains, pour 1/2 oz. of ice machine cleaner down the rear key-slot openings. The cleaner will drain into the water pan.
- 4. Return the water curtains to their proper operating position.
- Add 3 oz. for a single evaporator, or 5 oz. for a dual evaporator of "Calgon Nickel-Safe" or "Lime-A-Away" ice machine cleaner directly into the water pan the float will balance with inlet water. Set switch to CLEAN, circulate for a maximum of 15 minutes.

- 6. Depress and hold the dump switch to allow the cleaner to drain away.
- 7. Fill the water pan with clean fresh water, circulate for approximately 3 minutes. Depress and hold the DUMP switch and allow the water to drain away. **Repeat the procedure 3 times.**
- 8. After third rinse cycle, place product power switch in ice position. Allow Cuber to produce one slab of ice DISCARD THE ICE.
- 9. When the clean cycle is complete, return cuber to normal operating mode.

NOTE: Please Take Note of the Following:

- Ice machines should only be cleaned when needed, not by a timed schedule of every 60 days, etc.
- Should your ice machine require cleaning more than twice a year, consult your distributor or dealer about proper water treatment.

SANITIZING PROCEDURES

NOTE: To be performed only after cleaning the ice machine:

- 1. Add 1/4 ounce (7.08 g) sodium hypochlorite solution (common liquid laundry bleach) to the water pan and allow the pump to circulate the solution for 5 minutes. You may also use a commercial sanitizer such as Calgon Ice Machine Sanitizer following the directions on the product label.
- 2. Turn the Cuber power switch off and depress and hold the dump switch to drain the water pan.
- 3. To sanitize the bin and other surface areas, use 1 ounce of liquid bleach per gallon of water and wipe all areas with the solution. Or use a commercial sanitizer.
- 4. Place the Cuber power switch in the ice position. Discard the first batch of ice produced.
- 5. Cleaning and sanitizing are now complete. Cuber may be returned to normal service.

DUMP CYCLE

Water Pan Level Settings



- 1. With the proper water level in the water pan, start the water pump to circulate the water. Check that the float will return water level to original setting and stop inlet water.
- 2. There is a flow washer in the inlet side of the float assembly that will control inlet water pressure from 20/120 PSI (3.4/8.16 Bars). This will prevent float flutter. In low water pressure conditions, 20 PSI (1.37 Bars) or less, the flow washer may have to be removed from the float assembly for proper volume.



- 3. Push the manual dump switch allow dump action to drain the water pan. When you release the momentary switch, the pump will stop and the float will return the water level back to its original setting and shut off the water supply.
- 4. You have the option of selecting dump cycle intervals of:
 - every cycle; (Standard setting from factory)
 - every 3rd cycle;
 - every 7th cycle.



STATUS INDICATOR

D1-2 3-4	Yellow LED	Water Curtain(s)-Dip switch can be set for 1,2, or 4 curtain units
D9	Red LED	Error
D12	Green LED	Hot Gas Valve(s)
D13	Green LED	Condenser Fan
D14	Green LED	Water Pump
D15	Green LED	Compressor Contactor
D16	Green LED	Dump Valve

Water Curtain(s) Open

D1-2	Yellow LED	(on or	Curtain(s) Closed
3-4		off)	Curtain(s) Open
		,	
			Pre-Chill Mode
D1-2 3-4	Yellow LED	(on)	Water Curtain(s) closed.
D13	Green LED	(on or off)	Condenser fan cycles on and off depending upon condenser temperature. *
D15	Green LED	(on)	Contactor closed, compressor active.
			Ice Making Mode
D1-2 3-4	Yellow LED	(on)	Water Curtain(s) closed
D13	Green LED	(on or off)	Condenser fan cycles on and off depending upon condenser temperature. *
D14	Green LED	(on)	Water pump active at evaporator temperature of 20° F or lower, except during dump cycle.
D15	Green LED	(on)	Compressor contactor closed.
			Harvest Mode
D1-2	Yellow LED	(on)	Water Curtain(s) closed.
3-4	Course LED	() 15	We have meaning a kine of the second have been dear the second seco
D14	Green LED	(on) 15 sec.	water pump active for 15 sec., then deactivate.
D10 D16	Green LED	(on) 15 coo	Compressor contactor conset = compressor active.
010	Green LED	(0ff) 15 sec.	Dump valve active (15 sec.)
			Error LED
D9	Red LED		Turns on when the system is shut down.
D9	Red LED	(on) or flashing	Assists to indicate where the error may be and or what may have caused the error.
D9	Red LED	(on)	Evaporator temperature drops below, 25° F.
D9	Red LED	(on)	OPEN THERMISTOR CIRCUIT – Thermistor open / broken wire / poor connector
D9	Red LED	(on) 15 sec.	High evaporator temperature: evaporator does not fall below 40° F within 6 minutes into freeze cycle.
60	Red LED	Flashing	High temperature shutdown- condenser temperature exceeds 150° F +2, $-6°$ F.
		1/2 sec on/	
		1/2 sec. off	

* [Remote & water cooled use a resistor plug in J-3 connector] <u>1.8K ohm.</u> Fan does not <u>cycle</u>.

ADJUSTING BRIDGE THICKNESS



For optimum ice production and maximum cube separation, the ice connecting the individual cubes should be a minimum of 1/8" (.32cm) thick at the center area of the ice waffle.



It is normal for the ice slab to be slightly thicker at the bottom and taper off in a slight wedge pattern at the top. The top row of cubes must have a complete pattern of ice on all four sides and the back wall. Remember, when you operate the product with the panels off during testing the additional heat at the top of the evaporator will cause thinner ice at the top than when the panels are in place.

Should a different thickness of the bridge be desired, it will be required to adjust the ice thickness "POT", located on the circuit board, as follows:

- Thinner Bridge turn the ice thickness "pot" adjustment screw CW one full turn. Allow two cycles before determining if additional adjustments are required.
- Thicker Bridge turn the ice thickness "pot" adjusting screw
 CCW one full turn. Allow two cycles before determining if additional adjustments are required

tional adjustments are required.

NOTE: Never judge the thickness of the ice from the first batch of the ice produced – the first cycle is a balance cycle. Always wait for the second cycle before making any adjustments.

TOTAL ICE CAPACITY

Ice capacity of any ice maker is affected by many operating conditions, such as water and air temperature and location factors. Please review the capacity tables in this manual for average 24–hour capacity under various conditions.

NOTE: All printed capacity ratings are \pm 10% except 50 HZ units these products have 12% increase in cycle time and capacity decrease of approximately 17%.

CORNELIUS LIMITED COMMERCIAL WARRANTY PLAN TO THE ORIGINAL OWNER OF A CORNELIUS COMMERCIAL CUBE ICEMAKER

This warranty applies to Icemakers installed within the United States, Canada, Mexico and Puerto Rico only.

For warranty information outside the U.S., Canada, Mexico and Puerto Rico, contact your nearest IMI Cornelius Sales Office.

PARTS WARRANTY PERIOD

IMI CORNELIUS INC., hereinafter referred to as CORNELIUS, warrants to the original owner of a new CORNE-LIUS commercial cube ice machine ("Machine") who buys solely for commercial uses, that the Machine shall be free from defects in material and/or factory workmanship if properly installed, operated and maintained, under normal and proper use and service conditions with competent supervision. The parts warranty period is three years (36 months) from the date of installation or 39 months from the date of shipment by CORNELIUS whichever time period elapses first. With respect to compressor, solid state control board and the evaporator(s), the warranty period will be five years (60 months) from the date of installation or 63 months from the date of shipment by CORNELIUS whichever time period elapses first. Warranty on evaporator plating limited, subject to the incoming water conditions and proper cleaning and maintenance. The obligation of CORNELIUS under this warranty is limited to repair or replacement (at the option of CORNELIUS) FOB factory in Mason City, Iowa of the part (or Parts) of any Machine that is proven defective.

LIMITED LIFETIME WARRANTY

In addition to the above stated parts warranty, Cornelius further warrants the stainless steel cabinet and frame assembly to the original owner at the original installation site against cracks, rust, or corrosion under normal operating conditions. Models IACS50, AC322 and WC322 are excluded from this warranty clause.

LIMITED LABOR WARRANTY PERIOD

In addition to the parts warranty, CORNELIUS will pay scheduled straight time labor to repair or replace a defective component when failure occurs within three years (36 months) from the date of installation or 39 months from the date of shipment by CORNELIUS whichever time period elapses first. Such service is to be performed by a service agency authorized by CORNELIUS. Time and rate schedules for labor compensation will be published periodically by CORNELIUS. Additional expenses including but not limited to travel time, truck charges, overtime charges, material cost, accessing or removal of the ice machine, normal prescribed maintenance cleaning, adjustments, and ice purchases are the responsibility of the original owner.

No parts warranty or labor allowance on the motor compressor assembly will apply when the ice machine's refrigeration system is modified with a condenser heat reclaim device, or parts and assemblies not provided by CORNELIUS, unless CORNELIUS provides approval, in writing, for these modifications for specific locations.

The parts warranty shall not apply when destruction or damage is caused by alterations, unauthorized service, using other than factory authorized replacement parts, risks of transportation, accidents, misuse, damage by fire, flood or acts of God. No components or assembly from which the serial number or identification number has been altered or removed will be covered. Any defective parts to be repaired or replaced must be returned to us through a CORNELIUS distributor/dealer, transportation charges prepaid, and they must be properly sealed and tagged. The serial and model number of the Machine and the date of original installation of such Machine must be given. The warranty of repaired or replaced parts will not extend beyond the period of the original warranty. The decision of the CORNELIUS Service Department regarding the warrantability of parts and eligipility for the labor allowance will be final.

IMI CORNELIUS INC ONE CORNELIUS PLACE ANOKA, MINNESOTA 55303–6234

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P/N 163238001 Effective March 1, 1996 Starting with Production Serial Number Code 96 A



IMI CORNELIUS INC.

CORPORATE HEADQUARTERS:

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