

# ***Ice-O-Matic***<sup>®</sup>

## **SERVICE/INSTALLATION MANUAL HOTEL/MOTEL DISPENSER**

**GC Series Cuber Shown**

**CD10022**

**CD10522**



**ICE Series Cuber Shown**

**CD20030**

**CD20530**



**ICE-O-Matic  
11100 East 45th Avenue  
Denver, Colorado, USA 80239**



**Introduction**

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To the owner or user. This product is a source of information about the installation, start up, cleaning, maintenance and repair of the product.

The CD10022, CD10522, CD20030 and CD20530 are Ice-O-Matics brand hotel/motel ice dispenser. The CD10022 is designed to use a Ice-O-Matic model GC300, 550, ECP 400, 550, 556 ice machine as the source for ice. The CD-200-30 is designed to use a Ice-O-Matic model ICE 250, 400, 500 and 600 ice machine as the source of ice.

Ice from the cuber falls into the insulated hopper, where it is stored until needed. When a user pushes the dispense button, a rotating wheel scoops the ice up and moves the ice to the top of the hopper where there is an outlet to the ice chute.

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NOTE: The *warning* symbol where it appears in this manual. It is an alert for important safety information on a hazard that might cause serious injury.



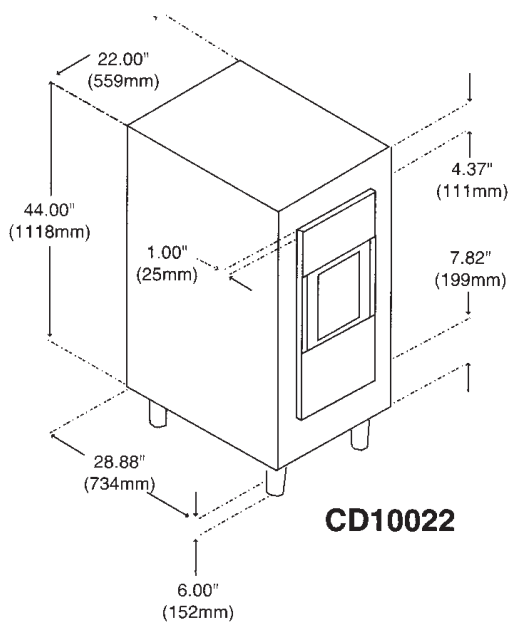
NOTE: Keep this manual for future reference.

# CD10022 CD10522 Specifications

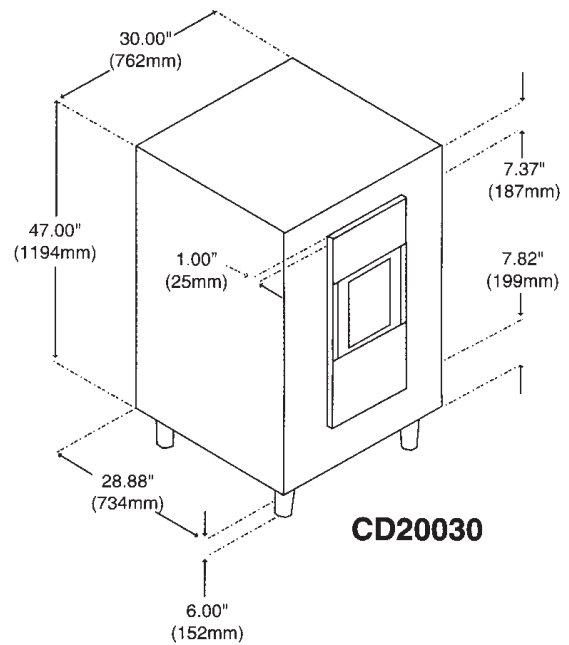
# CD20030 CD20530

Limitations:

- **Must** meet the same limitations as the cuber installed on top of it:
  - 50° F air *minimum*
  - 100° F air *maximum*
- **Must** be installed indoors
- **Must** allow space to the right for air intake when using air cooled machine.
- The CD10022 and CD10522 are compatible *only* with Ice-O-Matics' models GC 300, 550, ECP 400, 550, 556.
- The CD20030 and CD20530 are compatible *only* with Ice-O-Matics' models ICE 250, 305, 400, 500, 600.
- **Must** allow space for utility connections at the back.
- **Must** have a drain.



**CD10022**



**CD20030**

Model	Dimensions (with legs)	Basic Electrical	Finish	Ice Storage Capacity (ARI)	MaxFuse Size	Min Circuit Ampacity
CD10022	22"x30"x50"	115/60/1	S. STEEL	90 lbs.	15	2.5
CD10522	22"x30"x50"	230/50/1	S. STEEL	90 lbs.	15	1.3
CD20030	30"x30"x53"	115/60/1	S. STEEL	140 lbs.	15	1.9
CD20530	30"x30"x53"	230/50/1	S. STEEL	140 lbs.	15	1.0

## Installation: General

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After the carton has been removed from the dispenser, the legs may be installed.

Place flat portions of the carton on the floor behind the dispenser and lay the dispenser down on its back.

Thread the legs into the base of the dispenser. Be sure that the legs are screwed in all the way. Turn the leg levelers in all the way.

Move the dispenser to an upright position and set it in the location where it will be installed. Note where the drain lines and electrical connections will be made.

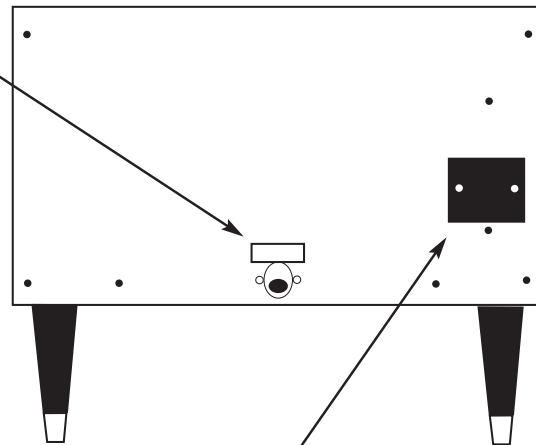
**NOTE**

Remove any packaging material from inside the storage bin. Retain keys for later use. Check that gasket tape is on the top outside edge of the dispenser where the ice machine will rest.

**Drain:** \_\_\_\_\_

The dispenser has a 3/4" FPT drain fitting at the bottom center of the back panel. Connect 3/4" *rigid* tubing to this connection, a vent is recommended for most installations. Route the drain tubing to the building drain. Follow all applicable plumbing codes.

Because the tubing will be very cold, insulation is recommended.



**Electrical:** \_\_\_\_\_

There is an electrical junction box on the lower back panel.

Make the electrical connections there. Follow all applicable electrical codes. Use a licensed electrician.

The dispenser must be installed so that it is a separate piece of equipment from the ice machine. The drains and electrical supply must be separate.

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## Installation: Ice Machine

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Check that gasket tape has been placed at the outside edge of the dispenser top.

Place corner posts from the carton on top of the dispenser, at the left and right corners.

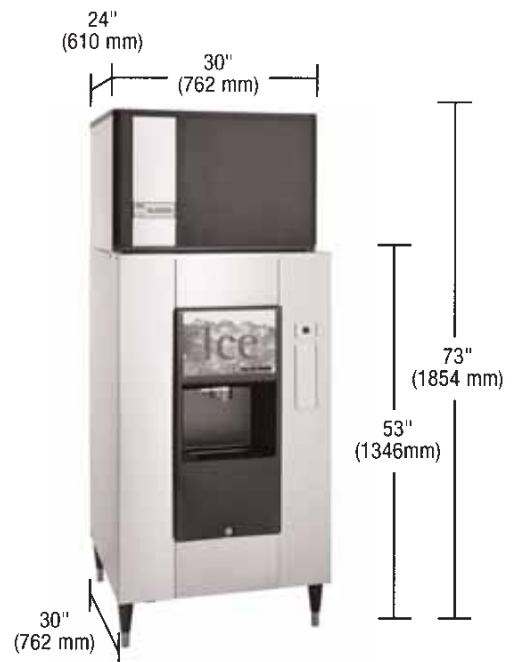
Place the ice machine onto the dispenser. The ice machine is heavy, use of a mechanical hoist is recommended.

*Carefully* remove cardboard supports and allow ice machine to rest on dispenser gasket.

Follow all instructions for installation of the ice machine.



**CD10022**



**CD20030**

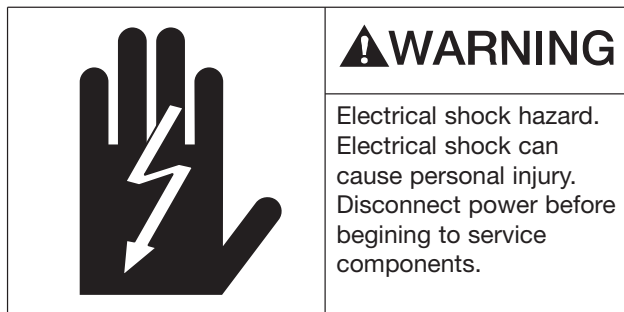
## Kits: Coin Mechanism

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Kits are available to install a coin mechanism, a room key mechanism or a key card mechanism. All kits come with detailed instructions which are also listed below.

Please follow these instructions carefully to complete the addition of the coin mechanism kit to the CD10022, CD10522, CD20030, and CD20530 ice dispenser.

1. **Disconnect** the dispenser from its electrical power supply (failure to do so may result in a serious injury).



2. Unlock and remove the decorative front cover, then remove the top front brace and the control box cover.

3. Remove all wires from the push button switch. Now remove the nuts that secure the push button cover from the inside of the dispenser panel. Then remove the cover from the dispenser. Now remove the screws that secure the push button switch to the cover and remove the push button switch.

4. Install the small cover plate which was supplied in the kit.

5. Remove the larger cover plate which is located below where the push button switch was located.

6. Install the mounting plate provided in the kit using the nuts provided in the coin mechanism kit.

7. Secure the coin mechanism to the mounting plate from inside the dispenser cabinet using the screws, flat washers and lockwashers in the kit.

8. Mount the timer and relay from the kit in the control box. (See typical layout of the parts in the following page).

9. Remove wires #8 and #9 from the control box. These wires will be replaced by different wires which will be identified as #8 and #9.

10. Install the wires provided in the kit following the wiring diagram provided in the kit.

11. Reconnect the electrical power supply to the machine.

12. Place an ice container in the drop zone of the dispenser. Place a quarter into the coin slide mechanism. Then push and hold the safety interlock switch. Now push in the coin mechanism and release it. The dispenser should dispense ice into the ice container.

13. Determine if the correct amount of ice was dispensed. If more ice is needed, increase the time on the timer by turning the timer adjustment dial clockwise. If less ice is required, decrease the time by turning the adjustment knob counter-clockwise. The initial setting on the timer should be approximately 4 on the knob, approximately 8 seconds. (Each segment on the timer represents approximately 2 seconds). **IMPORTANT:** Make sure to **disconnect** the power supply to the machine when adjusting the timer.

14. After all adjustments have been completed and the dispenser operates satisfactorily; attach the new electrical schematic over the old one that originally came with the machine and install the coin collection box.

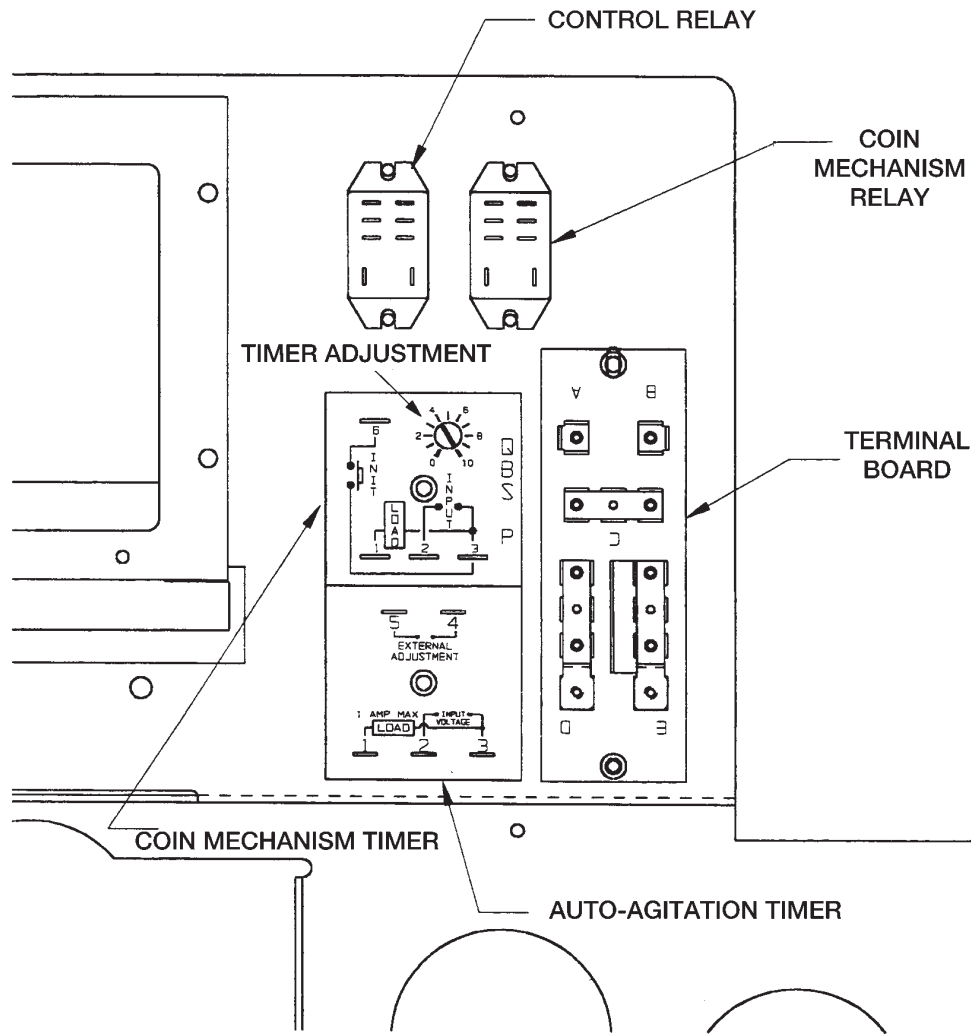
**CD10022**  
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**Kits: Coin Mechanism**

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15. Replace the control box cover, front brace and decorative front cover. The dispenser should now be restored to service.



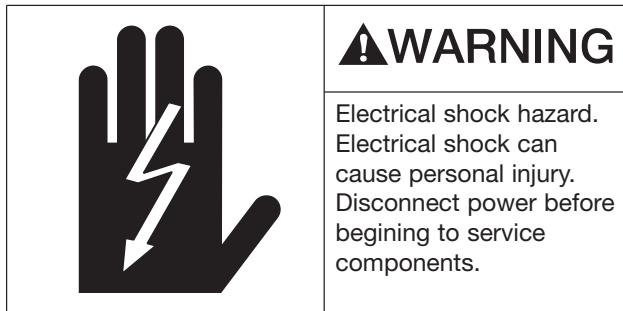


## Key Kit Installation

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This kit has been designed for use with the CD10022, CD10522, CD20030 and CD20530 ice dispenser. When this kit is installed, ice cannot be dispensed unless a specific type of key is inserted into the lock cylinder. The kit contains a universal mounting fitting for lock cylinders and a switching mechanism.

**NOTE:** The user must supply their own lock cylinders.



5. With a key in place, adjust the snap action of the micro switch so that it actuates when the key is inserted.

Now disconnect wire #8 and #9 from the normally open (NO) terminal of the dispense switch (S2) and reconnect it to the normally open (NO) terminal of the room key microswitch.

Connect wire #6 supplied in the kit to the normally open (NO) terminal of the dispense switch (S2) and to the common (C) of the room key microswitch.

Check all of the wires and terminals to make sure the unit is wired correctly and all terminal connections are tight and secure.

1. Make sure all electrical power is **disconnected** to the dispenser before attempting to install this kit.

2. Remove the front plastic molded front panel, then remove the cover plate which is located below the push button. This cover plate is held in place with 4 locknuts which are to be removed from the inside of the cabinet.

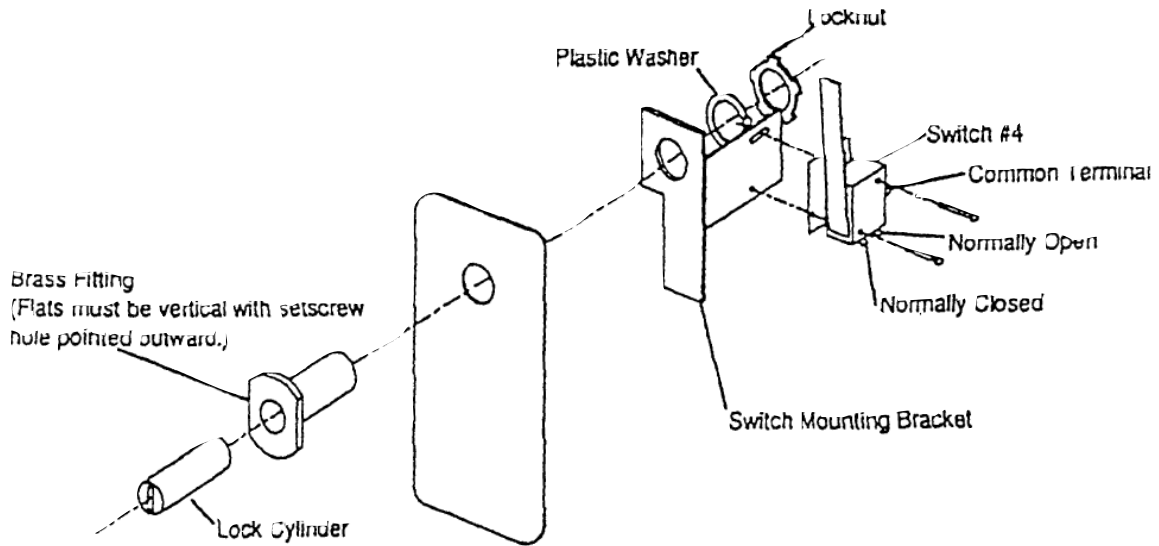
3. Obtain a lock cylinder common to those used by the establishment. Insert the cylinder in the brass fitting supplied in the kit. Mark the amount of the cylinder that extends beyond the brass fitting. Remove the cylinder from the brass fitting and cut off the cylinder at the mark.

4. Insert the brass fitting into the hole in the cover plate provided in the kit. Place switch mounting bracket behind cover plate and over the brass fitting.

Next, add the plastic washer over the brass fitting and behind the switch mounting bracket. Using the locknut provided in the kit fasten the fitting in place with the flats in a vertical position. Place the cylinder in the fitting and secure it with the key slot parallel to the flats on the fitting collar using the set screw provided.

# Key Kit Installation

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The operation of this kit is as follows:

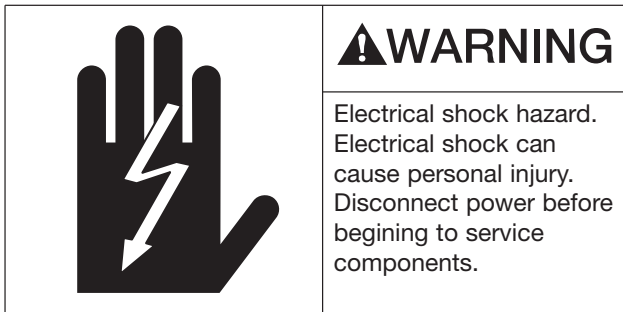
When the key is inserted into the lock cylinder, a portion of the key will extend beyond the brass fitting.

It is this part of the key that will actuate the kit micro switch. Then when the dispense button switch is depressed and held; the machine will dispense ice.

## Key Card Kit Installation

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This kit has been designed for use with the CD10022, CD10522, CD20030 and CD20530 ice dispenser. When this kit is installed, ice **cannot** be dispensed unless a key card is inserted into the key card slot. The kit contains a universal mounting and a microswitch assembly.



1. Make sure all electrical power is **disconnected** to the dispenser before attempting to install this kit.
2. Remove the plastic molded front panel, then remove the cover plate which is located below the push button. This cover plate is held in place
3. Now disconnect wire #8 and #9 from the normally open (NO) terminal of the dispense switch (S2) and reconnect it to the normally open (NO) terminal of the room key microswitch.

Connect wire #6 supplied in the kit to the normally open (NO) terminal of the dispense switch (S2) and to the common (C) of the room key microswitch.

Reconnect all of the wires and terminals to make sure the unit is wired correctly and all terminal connections are tight and secure.

**CD10022**

**CD10522**

## Key Card Kit Installation

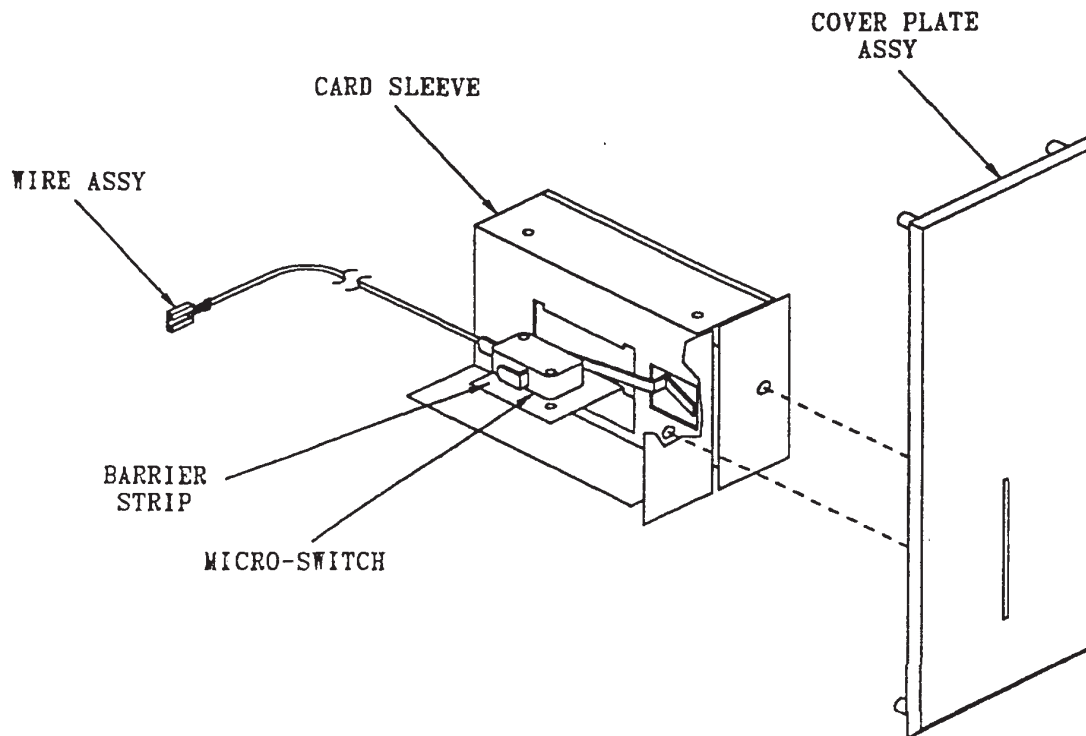
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**CD20030**

**CD20530**

The Operation of this kit is as follows:

When the key card is inserted into the key card slot, and the dispenser button switch is depressed and held, the machine will dispense ice..



## Final Check List/Initial Start Up

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1. Check that electrical power has been supplied.
2. Check that a drain, separate from the ice machine, insulated and made of *rigid* tubing, has been connected to the dispenser.
3. Check that the ice machine has been properly installed per the ice machine's installation directions.
4. Check that the machine/dispenser assembly is level front to back and left to right.
5. Check that optional kits, if any, have been correctly installed.
6. Check that the front panel key, coin box key, and key card if used, are available.

### **To Start:**

1. Connect electrical power.
2. Go through ice machine start up procedures. Let ice machine make two harvests.
3. Push vend switch button in and hold.
4. The dispensing wheel will rotate and the vend door solenoid will open the ice door.
5. Ice will be dispensed from the ice chute until dispense switch is released.
6. Remove sink, and check drain area for leaks. If none, replace sink.
7. Fill out the warranty registration form, and place it in the mail.
8. Give the operator the key(s) and instructions on the operation and maintenance of the product. Check that the operator knows who to call for service, and has the product/service manuals for the machines.

### **Electrical Sequence:**

Pushing the dispenser switch closes the contacts to the gearmotor and to the ice door solenoid. The ice door solenoid will open and the dispensing wheel will start to turn bringing ice to the ice chute, and ice is released to fall into the ice container supplied by the customer. The machine will continue to dispense ice as long as the dispensing switch is held.

When the dispensing switch is released, the dispensing wheel will stop and the ice door solenoid will close.

This unit is equipped with an automatic agitation cycle which will cause the dispensing wheel to rotate for approximately 3 seconds every 2 hours. During this agitation cycle the ice door will remain closed.

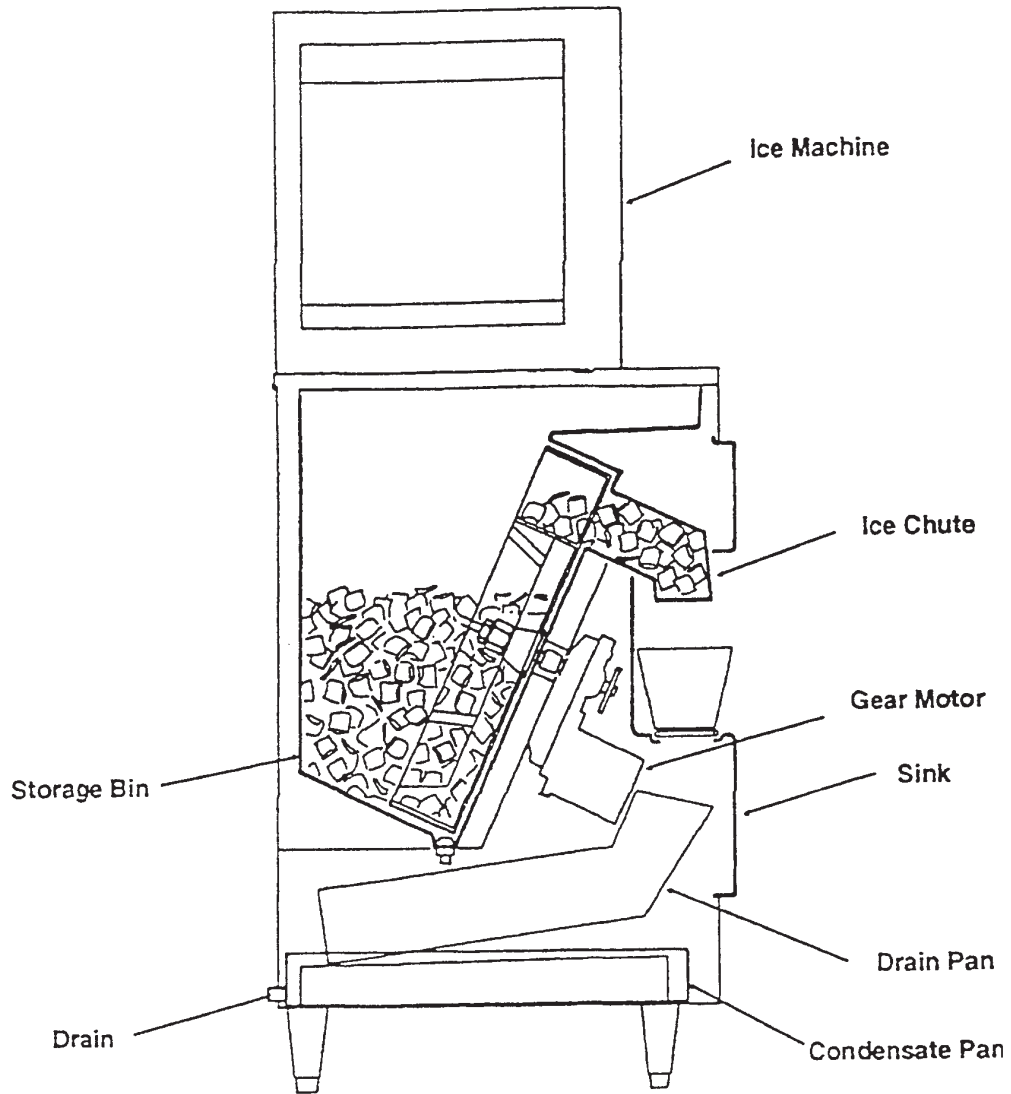
CD10022

CD10522

Operational Schematic

CD20030

CD20530



**General Care and Ceaning:**


Periodically inspect and clean the ice dispenser to keep it operating at peak performance.


Wash the outside of the dispenser with warm water and soap. Rinse off and dry.

**Cleaning and Sanitizing of the Ice Storage Bin:**

The minerals, chlorine and other impurities in the water are rejected from the water during the freeze cycle of the ice machine. These minerals will collect in the storage bin. The ice storage bin should be cleaned and sanitized every 90 days.

1. Remove all of the ice stored inside the dispenser bin by holding in dispensing button and shut off the ice maker.

	<p><b>⚠️ WARNING</b></p>
	<p>Electrical shock hazard. Electrical shock can cause personal injury. Disconnect power before beginning to service components.</p>

	<p><b>⚠️ WARNING</b></p>
	<p>Moving parts in bin will cause injury if hands are in the way. disconnect electrical power before beginning procedures.</p>

2. Disconnect the electrical power.
3. Locate key and remove front panel.
4. Remove top front panel (in front of ice machine)
5. Reach into the opening, locate the


sweep arm securing the wheel to the drive shaft. Remove the sweep arm by rotating it in the counter clockwise direction.

6. Pull the wheel off the drive shaft and leave it in the dispenser.

7. Mix a solution of 5 ounces of ice machine cleaner to 1 gallon of warm (95° F-115° F) water. Rubber gloves and eye protection to be worn. Wash the entire bin area and the delivery area. Use a clean brush or cloth.

8. Rinse all areas washed with clean, fresh water.

9. Using the ice machine cleaning solution, clean the ice grill, sink, and water pan. Rinse these parts with clean, fresh water.

<p><b>⚠️ WARNING</b></p>	<p>Ice machine cleaner contains acids. These compounds may cause burns. If swallowed, <b>DO NOT</b> induce vomiting. Give large amounts of water or milk. Call physician <b>immediately!</b> In case of external contact, flush with water. <b>KEEP OUT OF THE REACH OF CHILDREN!</b></p>
	

10. Mix a solution of ice machine sanitixer and water: 1 ounce of household bleach to 2 gallons of (95° F-115° F) water. Wash all interior surfaces and the wheel withthe sanitizer solution. Use a clean cloth.
11. Allow the parts to air dry.
- 12.Reassemble wheel and sweep arm onto drive shaft.
13. Replace all panels.
14. Reconnect power, be sure ice machine is switched back on.






Service Diagnosis

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PROBLEM	POSSIBLE CAUSE	PROBABLE FIX
Does not vend	No ice	Check ice machine
	No power	Check power supply
	Vend switch open	Check / replace vend switch
	Sink interlock switch open	Check / replace sink interlock switch
	Ice jams in chute	Machine is not level
	Front panel not on all the way	Reinstall panel
	Gear motor open	Check/replace gearmotor
	Relay does not operate	Check wiring
		Check power to relay
		Check for burnt contacts
	Ice door does not open	Check for power to solenoid
	Check for disengaged door linkage	
	Drive shaft broken	Check/replace drive shaft
Coin Mechanism	Does not vend, no ice	Check the above, plus coin switch
		Check wiring
		Check timer
Leaks water	Bin drain leaks	Check bin drain connections and fittings
		Check for clogged bin drain tubing

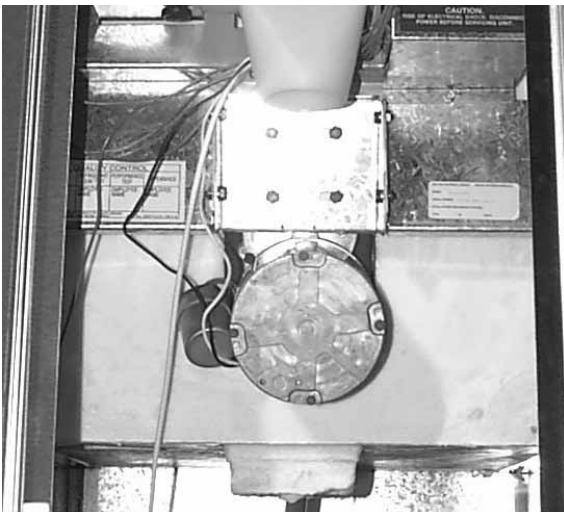
## Removal and Replacement

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	<b>⚠ WARNING</b>
Electrical shock hazard. Electrical shock can cause personal injury. Disconnect power before beginning to service components.	

### **Gear Motor:**

1. Disconnect electrical power.
2. Locate key and remove front panel.
3. Remove dispenser wheel.
4. Disconnect wires at gearmotor.
5. Remove 4 bolts securing gearmotor bracket to cabinet.
6. Pull gearmotor out of cabinet.
7. Remove gearmotor from bracket.
8. Reverse steps to reassemble.



### **Dispense Wheel:**

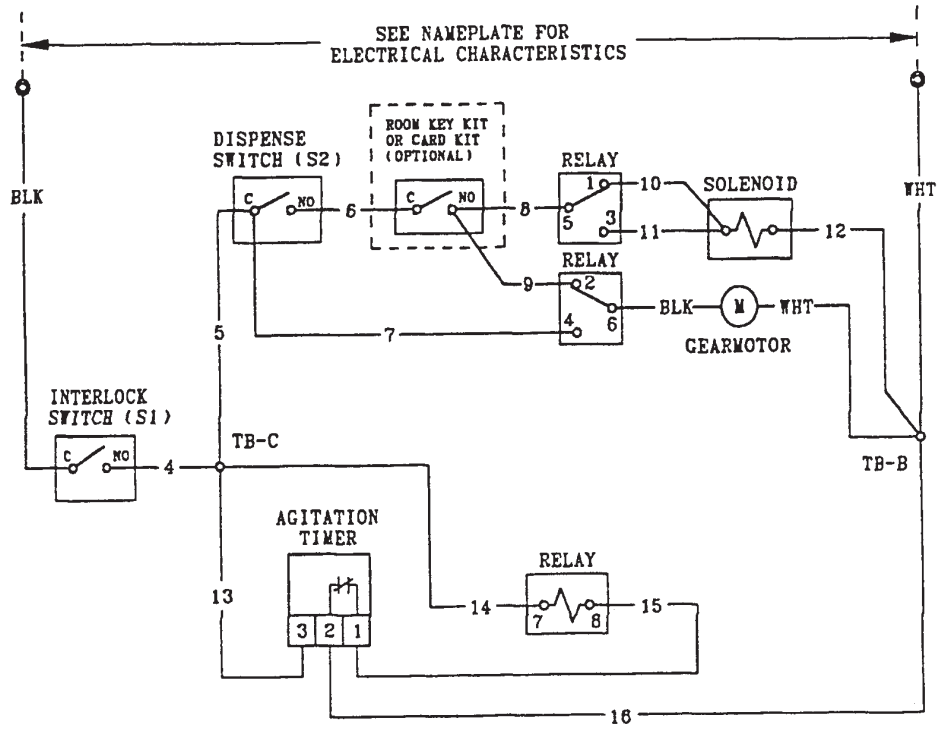
1. Remove all of the ice stored inside the dispenser bin and shut off the ice maker.
2. Disconnect the electrical power.
3. Remove ice machine from dispenser.
4. Remove large dispenser top panel.
5. Reach into opening, locate the sweep arm which secures the wheel to the drive shaft. Remove the sweep arm.
6. Pull the wheel off the drive shaft and remove it from the dispenser.
7. Reverse steps to reassemble.



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CD10522

CD20030  
CD20530

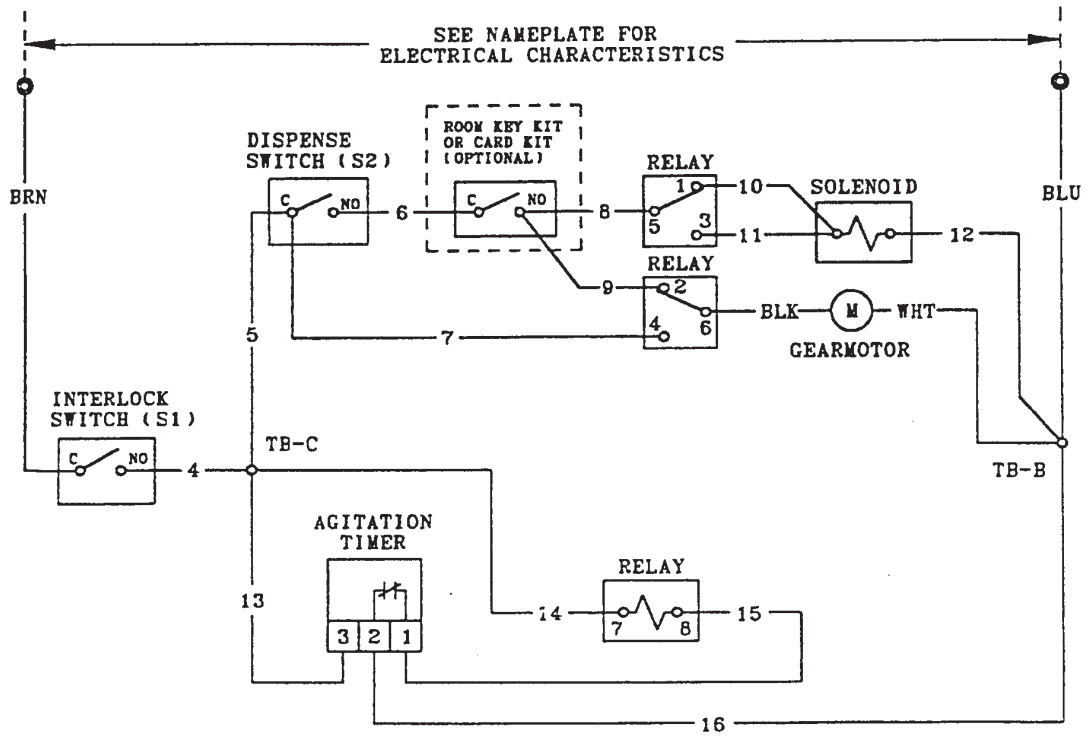
Standard With Room Key Kit or Card Kit Electrical Schematic



CD10022  
CD10522

CD20030  
CD20530

Standard With Room Key Kit or Card Kit Electrical Schematic



CD10022  
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CD20530

With Coin Mechanism Electrical Schematic

