



Service/Installation Manual
Hotel Dispenser
Model - CD300



Mile High Equipment
11100 East 45th Ave
Denver, Colorado 80239

Part Number 9081292-01

Print Date 04/02

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

Table of Contents

Introduction	Page 1
Specification/Limitations	Page 2
Diagrams	Page 3
Uncrating	Page 4
Ice Machine Installation	Page 5
Utility Connections	Page 6
Initial Start Up and Use	Page 7
Sanitation and Maintenance	Page 8
Component Identification	Page 9
Maintenance	Page 10
Service Diagnosis	Page 11
Adjustments	Page 12
Removal and Replacement	Page 13
Wiring Diagram-Push Button	Page 14-15
Wiring Diagram-Coin Mechanism	Page 16-17
Wiring Diagram-Key Card	Page 18-19
Before Calling For Service Information	Page 20
Warranty Information	Page 2

Ice-O-Matic
11100 E. 45th Ave.
Denver, Co. 80239
800-423-3367

The CD300 Service Parts Manual is available separately, Part Number 9081293-01

Specifications and Limitations

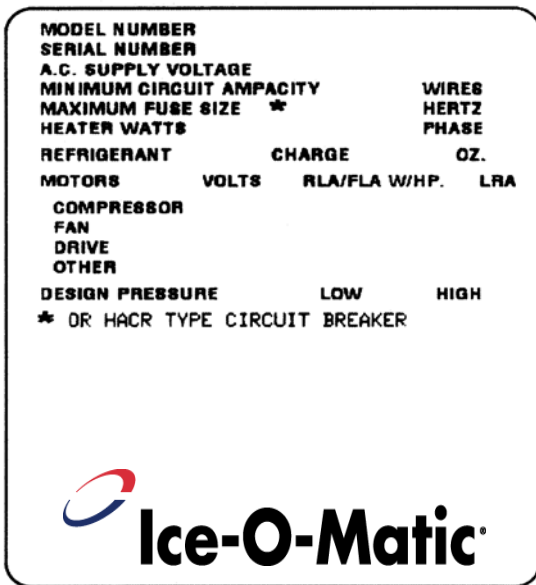
This dispenser is designed to dispense cubed ice only and to be installed and operated indoors, in a controlled environment. Its minimum and maximum operating temperature limits are the same as those for the ice machine.

Limitations:

- Must meet the same limitations as the cuber installed on top of it.
- Must allow adequate space for air flow when using and air cooled machine.
- Must allow space for utility connection at the back.
- Must have a drain.
- The CD300 is compatible with Ice-O-Matics cuber models ICE250, ICE400, ICE500 and ICE600.
- A thermostatic bin control kit is required on all ICE Series cubers. (Part Number 1051020-02)

Operating Requirements:

	<u>Minimum</u>	<u>Maximum</u>
Air Temperature	50° F	100° F
Voltage	104 VAC	126 VAC



Check the nameplate, located on the back of the dispenser cabinet for specific information.

Ice-O-Matic ice machines are not designed for outdoor installations.

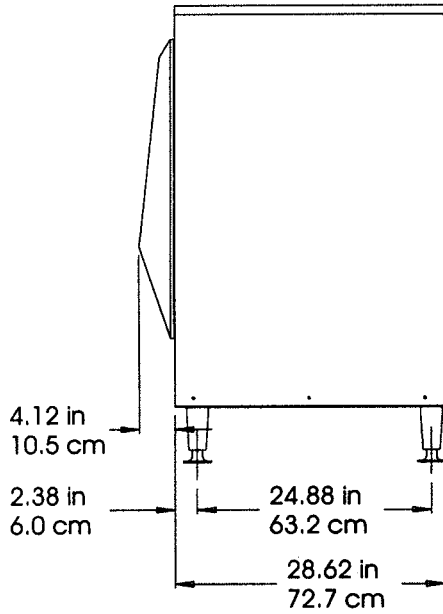
Machine requires voltage indicated on rating nameplate. Failures caused by improper voltage are not considered factory defects. Extended periods of operation at temperatures exceeding limitations constitutes misuse under the terms of the Ice-O-Matic Manufacture’s Limited Warranty, resulting in a loss of warranty coverage. Specifications and design are subject to change without notice.

Ice-O-Matic assumes no liability of any kind for products manufactured by Ice-O-Matic that have been altered in any way, including the use of any parts and/or other components not specifically approved by Ice-O-Matic.

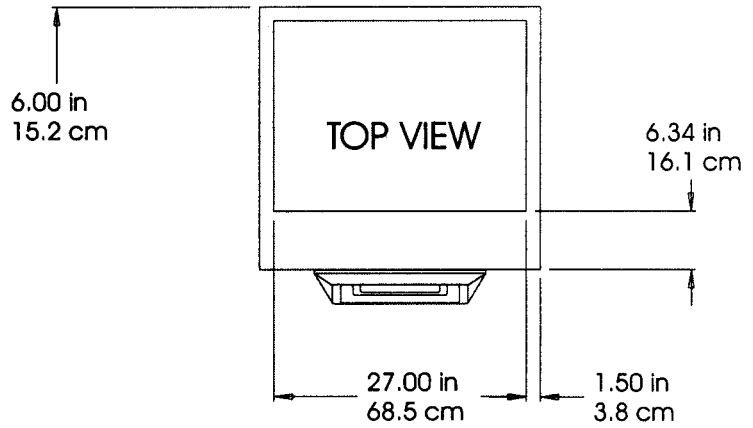
The CD300 dispenser has a 2 year Parts warranty and a 2 year Labor Warranty.

Model	Electrical	Amps	Vend Type	Finish
CD300P	115/60/1	2.2	Push Button	Stainless Steel
CD300C	115/60/1	2.2	Coin (25¢ Only)	Stainless Steel
CD300K	115/60/1	2.2	Key Card	Stainless Steel

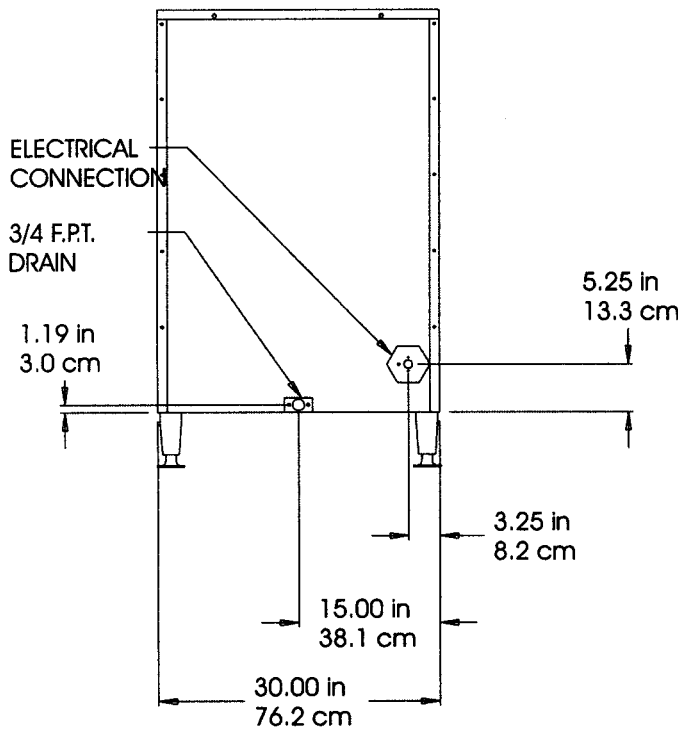
RIGHT SIDE VIEW



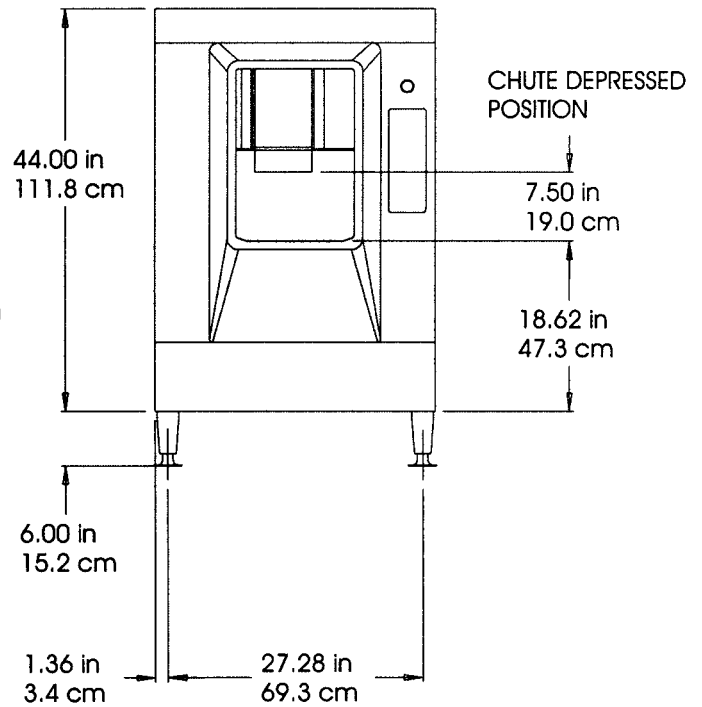
MINIMUM CLEARANCE FOR UTILITIES CONNECTION



BACK VIEW



FRONT VIEW

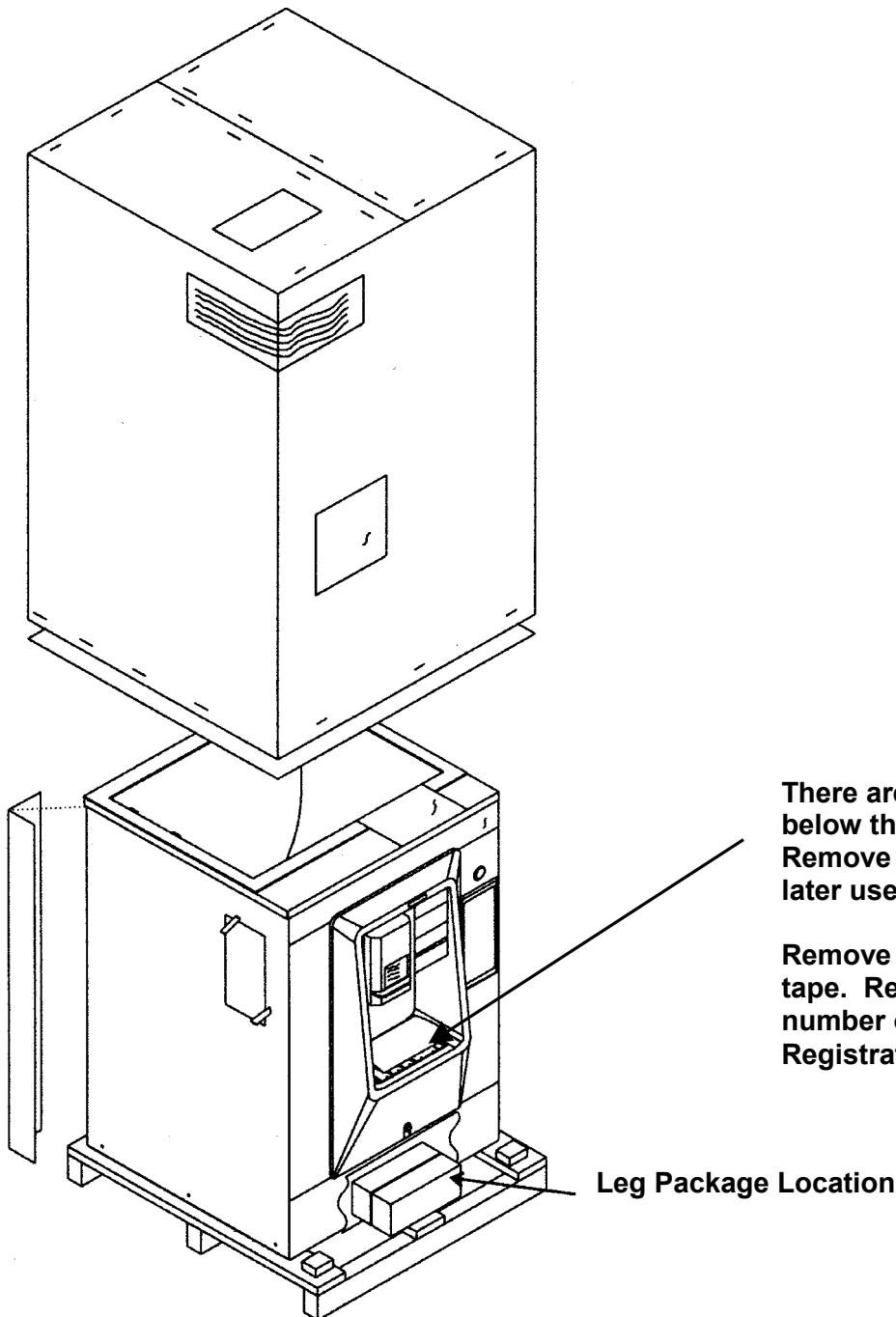


Remove the carton from the skid. Cut the plastic straps that secure the leg kit to the skid and remove the box.

Use the dispenser carton as a cushion and lay the dispenser down on its back. Remove the bolts holding the skid to the machine, and separate the skid from the dispenser.

Install the dispenser legs into the threaded holes in the dispenser bottom. Screw them in hand tight.

Return the unit to an upright position.



There are keys taped to the grill below the ice dispensing area. Remove them and save them for later use.

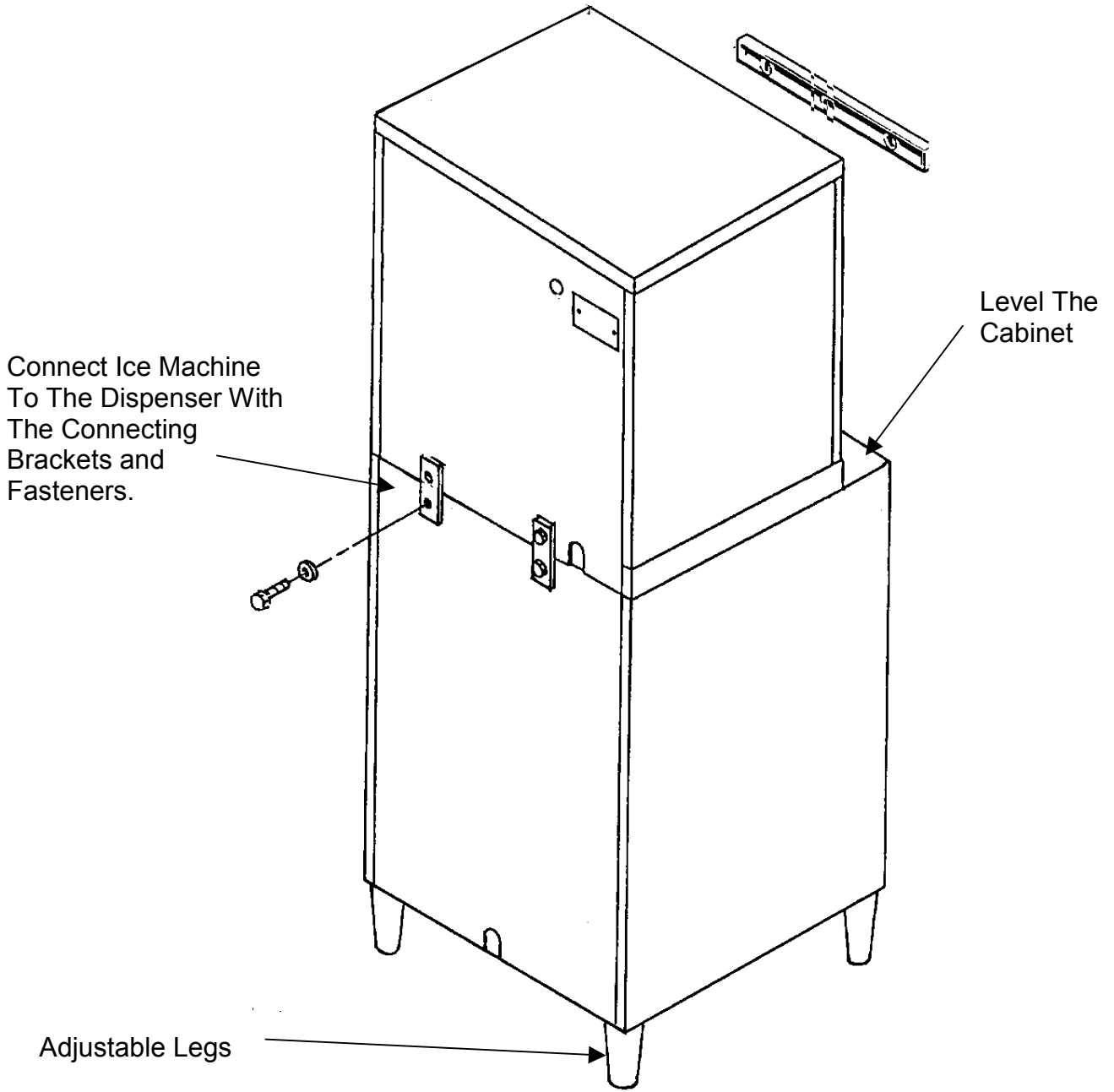
Remove all shipping material and tape. Record the model and serial number on the Warranty Registration form.

Leg Package Location

All models: Place the dispenser in the location where it will be used. Level the top edge of the dispenser front to back and left to right with the adjustable legs.

Place the ice machine on the dispenser and secure it to the dispenser with the hardware and straps. Install it according to the instructions in the manual included with the ice machine.

Note: A thermostatic bin control kit is required on all ICE Series Cubers. (PN 1051020-02)

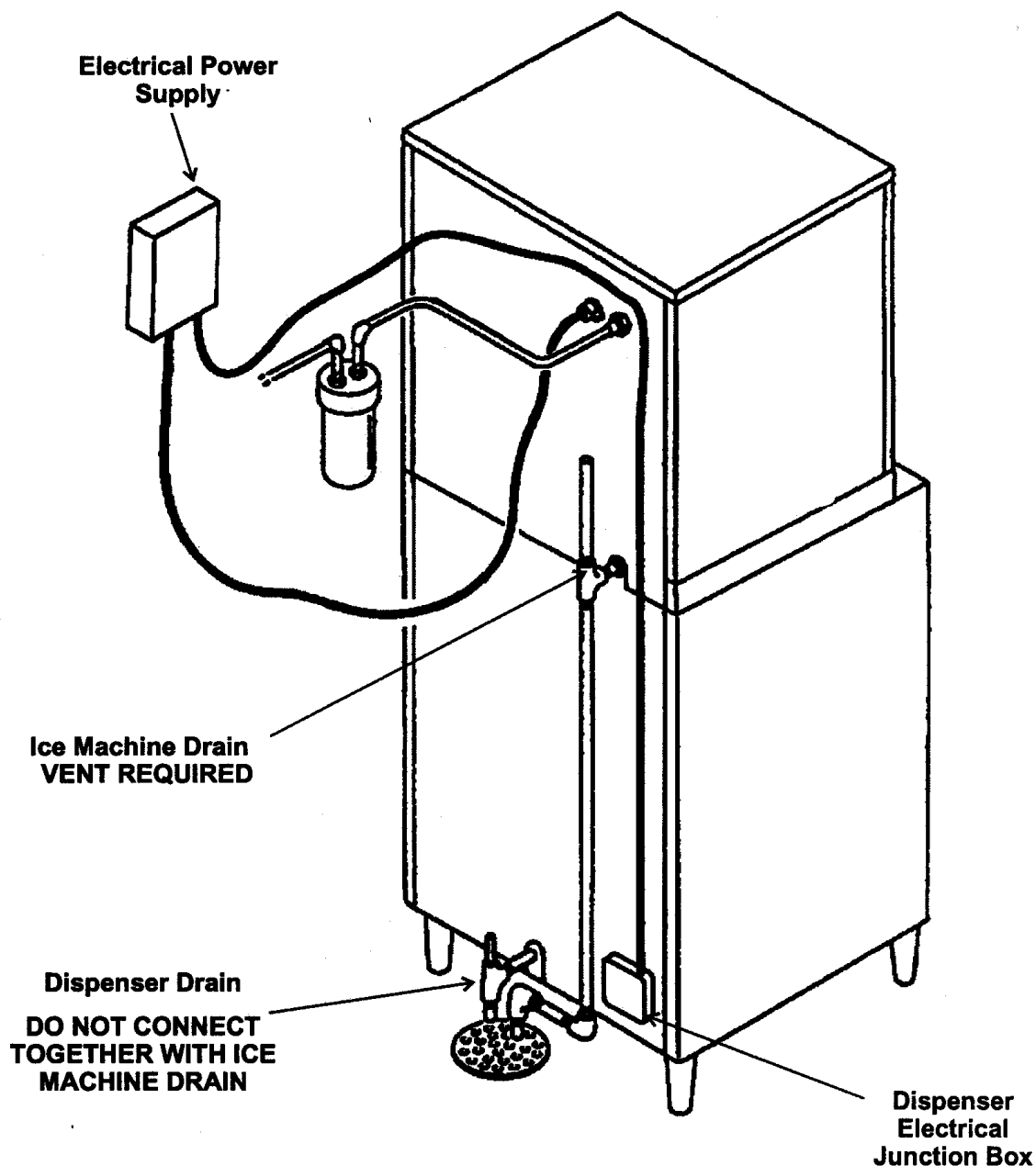


Drain Connections - Follow all applicable codes.

As ice melts in the dispenser, the water must be drained away. It is critical that a proper drain be connected to the dispenser. Remember that this is a gravity drain system, the drain tubing must slope down a minimum of $\frac{1}{4}$ inch per foot of horizontal run. Usually an air gap must be established between the end of the drain tube and the building's drain receptacle. **The dispenser's vented drain must be separate from the drain used by the ice machine.**

Electrical Connections - Follow all applicable codes.

There is a junction box on the back of the dispenser, connect the power supply to the wires inside the junction box. Be certain that the ice machine and dispenser are grounded.



Final Check List

1. Is the ice machine properly installed?
2. Is the dispenser level?
3. Has the water supply been connected to the ice machine?
4. Has the proper power been connected to the ice machine and dispenser?
 - Note: When electrical power is supplied to the dispenser the rotor will rotate slightly.**
5. Have the drain line been connected are they separate from the ice machine?

Initial Start Up

1. Locate key and unlock the sink.
2. Remove the sink.
3. Locate the ON-OFF switch move it to the ON position.
4. Return the sink to its original position.
5. Simulate a vend. The rotor should move 1/6 (one sixth) of a revolution on push button dispensers and a full revolution on coin vending machines.
6. Record the ice machine model and serial number on the last page of this manual and on the warranty registration form. Mail the warranty information to Ice-O-Matic.



Operational Note: Every 6 hours the rotor will be activated to agitate the ice. This may result in some ice in the chute.

How To Use – Push Button

The ice machine will start and run periodically to maintain the ice in the dispenser's hopper. Push the "ICE" button to fill the clear plastic chute with ice. Push down on the chute to release the ice into a waiting container. Allow the chute to return all the way up to its at rest position.

How To Use – Coin Vending

The ice machine will start and run periodically to maintain the ice in the dispenser's hopper. Insert one U.S. quarter (25¢) or a special token, available from Ice-O-Matic, PN TKNS. The unit will fill the ice chute with ice, Push down on the chute to release the ice into a waiting container. Allow the chute to return all the way up to its at rest position.

How To Use – Room Card

The ice machine will start and run periodically to maintain the ice in the dispenser's hopper. Insert room card into the slot in the front of the dispenser, and push the vend button. The unit will fill the ice chute with ice, Push down on the chute to release the ice into a waiting container. Allow the chute to return all the way up to its at rest position.



Note: If the chute is not all the way up, the unit cannot resupply the chute with ice.

Schedule

An ice system represents a sizable investment of time and money in any company's business. In order to receive the best return on that investment, periodic maintenance is required. It is the user responsibility to see that the machine is properly maintained. Maintenance and cleaning should be done a minimum of twice per year, and more if the ice machine is operating in a dusty area.

Monthly:

Unlock the sink and remove it. Then pull out the removable upper drain chute. Clean out any debris that may have accumulated in it.

Check the lower drain pan for debris, remove any and pour one quart of an approved sanitizing solution into the drain pan. Flush with warm water.

Return the upper drain pan and sink to their original positions.

Ice Machine: Follow the instructions in the ice machine service manual.

Dispenser: The only maintenance required is the periodic cleaning of the drain pans, screens and sanitizing the bin.

Sanitizing

1. Vend all ice out of the dispenser
2. Remove the ice machine front panel and switch it to OFF.
Note: This would be a convenient time to clean and sanitize the ice machine.
3. Disconnect electrical power to the dispenser and ice machine.
4. Remove the sink and hopper assembly by unlocking it at the base.
5. Remove two screws at the back connecting the ice machine to the dispenser.
6. Push the ice machine back 5 ½ inches.
7. Reach in the hopper and locate the nut holding the rotor to its shaft. Unscrew the nut and remove the metal parts.
8. Push the rotor back off its drive shaft. Pull the rotor out of the dispenser.
9. Mix a cleaning solution of 8 ounces of approved ice machine cleaner and 3 quarts of warm (95°F-115°F) potable water.
10. Scrub the interior of the dispenser's hopper and rotor with the cleaning solution.
11. Scrub the metal parts removed in step 7 with the cleaning solution.
12. Scrub the inside of the ice with a clean cloth and the cleaning solution.
13. Mix two gallons of approved sanitizing solution; one possible solution is 1 ounce of household bleach to 2 gallons of warm (95°F-115°F) potable water.
14. Thoroughly wash the inside of the dispenser's hopper, including the shaft and all side of the rotor with the sanitizing solution.
15. Thoroughly wash the inside of the ice chute with the sanitizing solution.
16. Thoroughly wash the metal parts and the nut removed in step 6 with the sanitizing solution.
17. Reassemble rotor to shaft, return metal parts to rotor and secure with nut.
18. Return the ice machine, all panel, covers and the sink assembly to their original positions.
19. Resecure the ice machine to the dispenser.
20. Reconnect power and switch the ice machine ON.



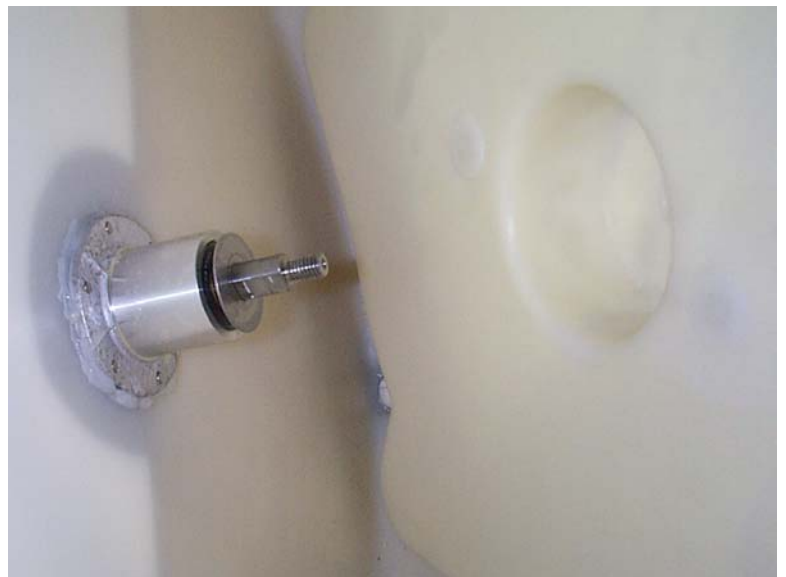
View when sink assembly is removed.



Rotor as seen from the top.



Inside view of ice chute.



Rotor shaft.

Regular inspection and maintenance will provide the best assurance of trouble free operation.



Return Springs
Check and Tighten Fasteners

Begin by removing the sink assembly. Check the action of the ice chute and return springs.



Pull out the drain chute. Clean out any debris that might be in the chute or screens.



Clean out the lower drain pan. Pour hot water into the drain to be sure that it is clean.

Thoroughly spray or wash all surfaces of the drain pan, drain chute and ice chute with an approved sanitizing solution.

Symptom	Probable Cause	Possible Correction
Does not dispense.	No power to dispenser.	Check for power.
	Ice chute not all the way up.	Push ice chute up.
	No ice in hopper.	Check ice machine, it may be off or the dispenser's storage capacity may have been exceeded.
	Dispenser ON-Off switch is OFF.	Move switch to ON position.
	<u>Push button</u> switch does not work.	Check switch, replace switch if it will not close.
	<u>Coin switch</u> does not work.	Check switch, replace switch if it will not close.
	<u>Card switch</u> does not work.	Check switch, replace switch if it will not close.
	Transformer failed.	Check-replace if open.
	Safety switch open.	Check switch, replace switch if it will not close.
	Relay has failed.	Check-replace relay if coil or contacts are open
	Gear reducer motor is open or stuck.	Check motor, replace if open.
	Drive shaft broken.	Check drive shaft, replace if broken.
	Gear reducer stripped internally.	Check if motor turns but output shaft does not. Service or replace gear reducer.
Does not stop vending.	Vend or cam switch stuck.	Check cam or vend switch.
Ice chute fills by itself.	Result of ice agitation.	This is normal.
	Rotor not timed with cam switch.	Adjust cam switch.
	Vend switch stuck.	Check vend switch.

The gear motor cam must be properly adjusted to properly position the dispensing rotor.

1. Disconnect electrical power to the dispenser.
2. Locate the sink key, unlock sink and remove it from the dispenser.
3. Observe the position of the rotor through the cube chute. The rotor and cam switch must be in the positions shown. If they are not, the position of the cam must be adjusted.
4. Rotate the rotor until it has blocked the opening.
5. Loosen the cam on the shaft and rotate it until the cam switch follower drops into the lowest part of the cam.
6. Tighten the cam onto the shaft.
7. Return the sink to its original position.



Proper position of rotor at rest.

Cube chute opening.

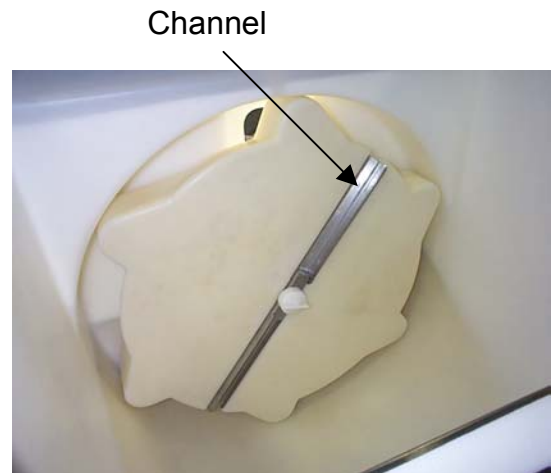


Microswitch cam follower.

Correct positions of cam and rotor at rest.

Rotor

1. Disconnect electrical power to the dispenser and ice machine.
2. At the back, remove two bolts securing the ice machine to the dispenser. If a bin thermostat is being used, pull the thermostat capillary tube up and out of the hopper.
3. Push the ice machine back 5 1/2 inches from its original position.
4. Locate the nut holding the rotor to the shaft and remove it.
5. Remove the stainless steel drive channel.
6. Push the rotor back and off the drive shaft.
7. Pull the rotor out of the dispenser.



Shaft

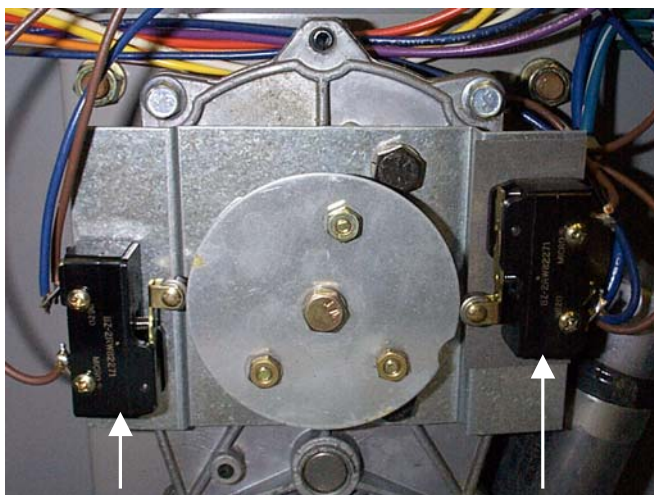
1. Remove the washer from the shaft.
2. Locate the snap ring under the washer and remove it.
3. Remove the gear drive assembly from the front of the dispenser.
4. Pull the shaft out of the drive housing.

Reverse to reassemble, be sure the washer is in place on the shaft.



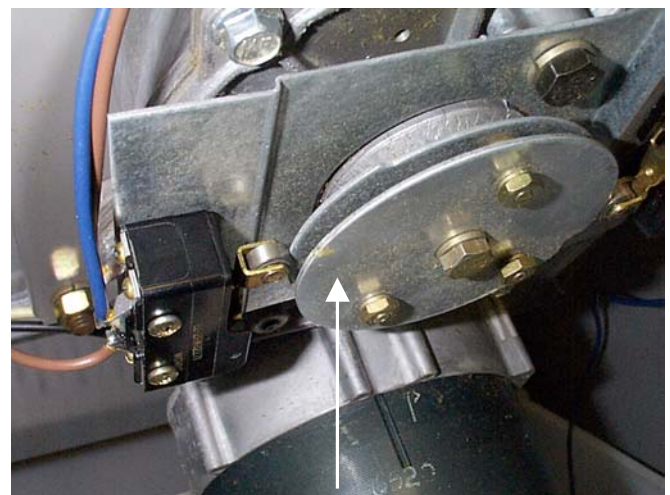
Cam Switches

All units use Cam Switch #1 (to the right of the cam). Coin units also use Cam Switch #2 (to the left of the cam). The cams must be set correctly for proper operation.



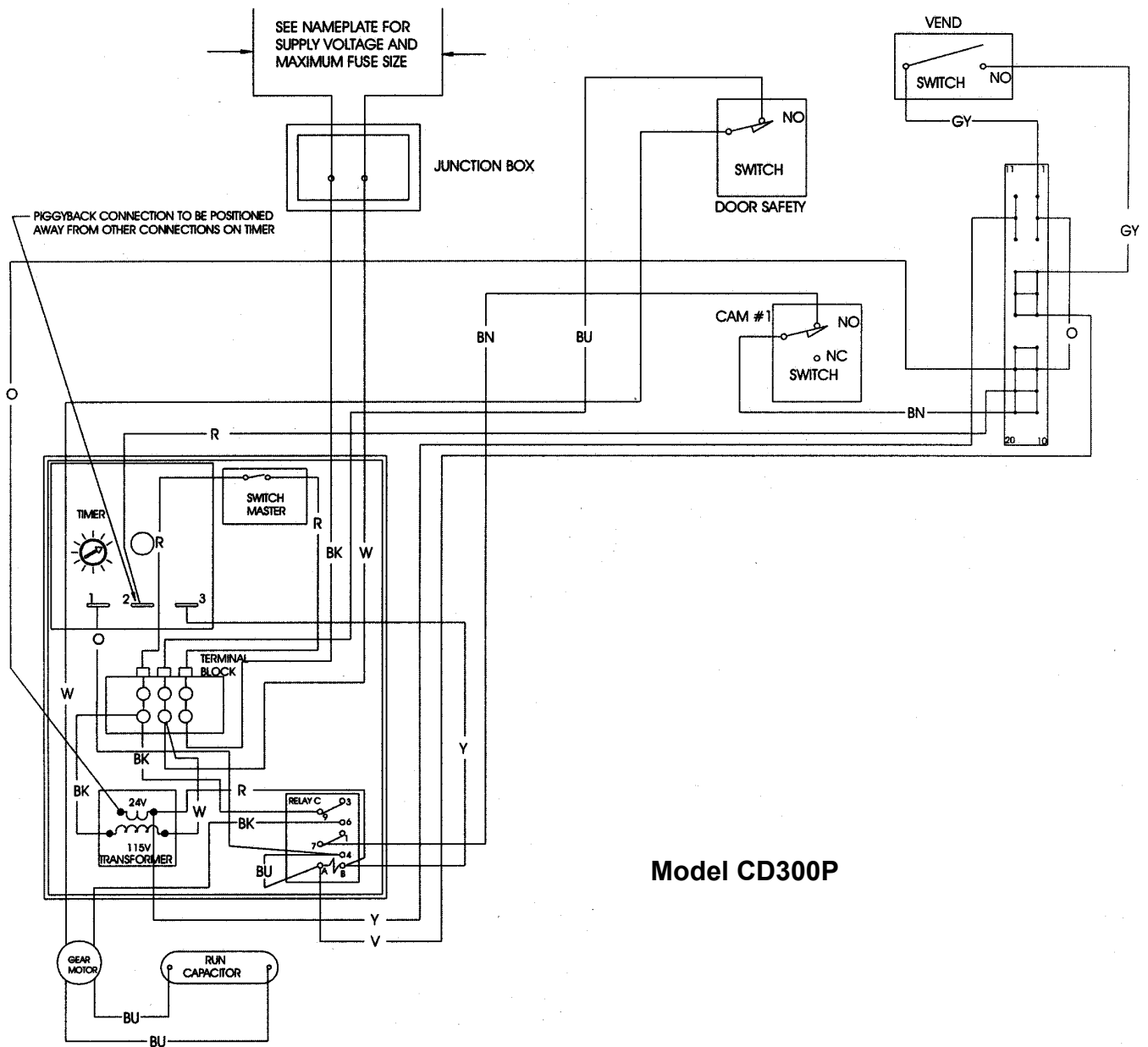
Cam Switch #2

Cam Switch #1



Cam

Button Dispensing

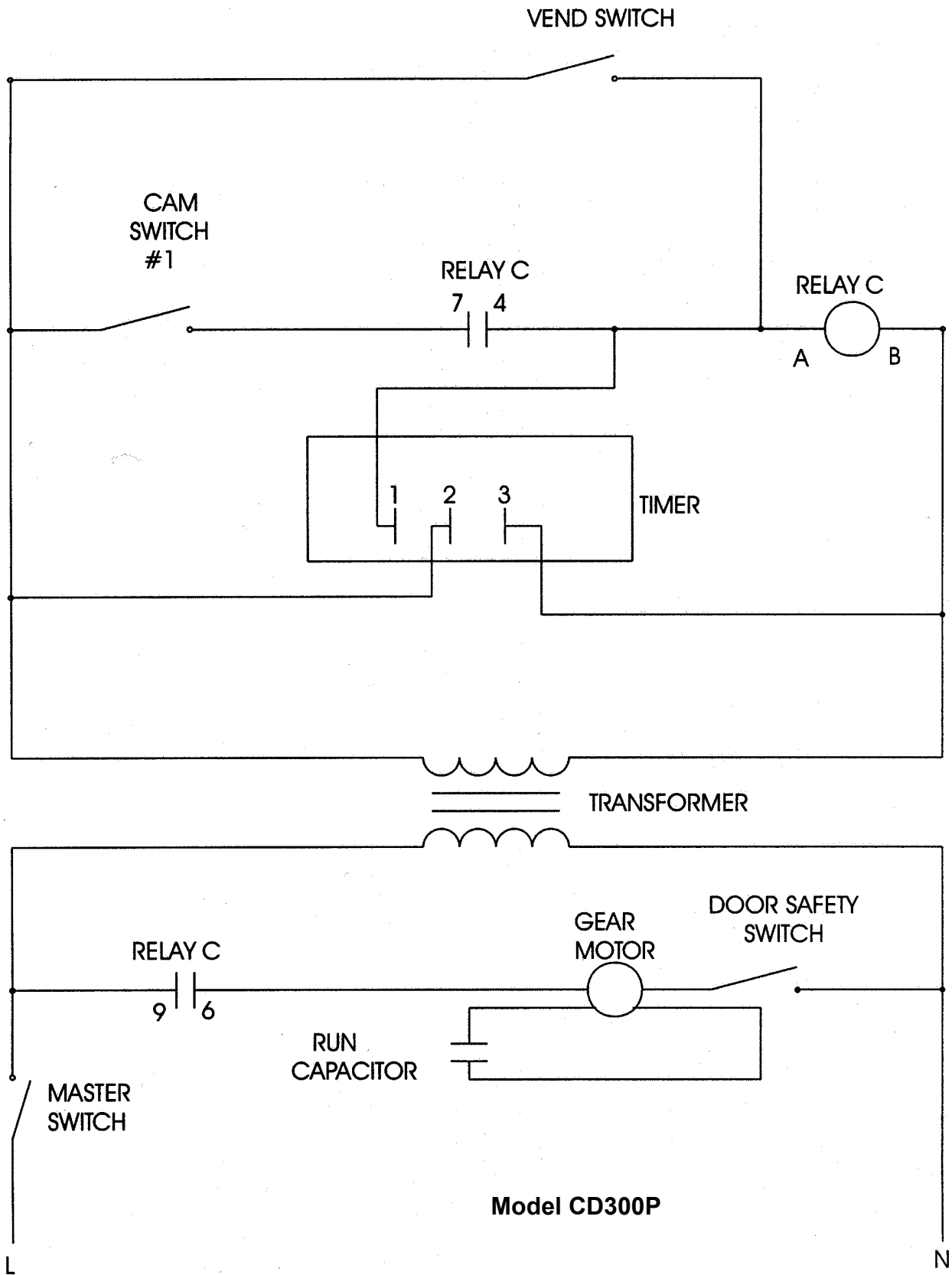


Model CD300P

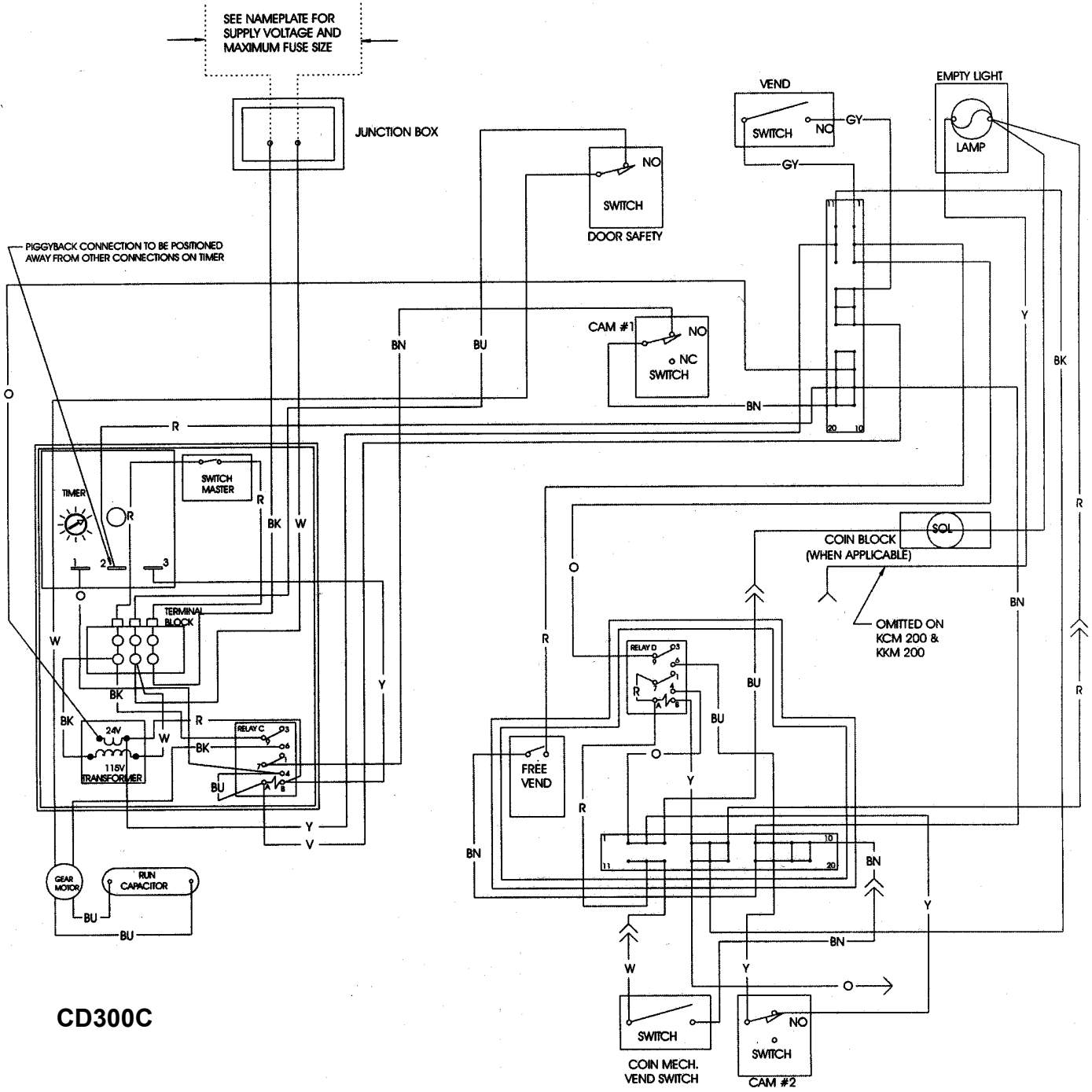
USE COPPER CONDUCTORS ONLY

THIS UNIT MUST BE GROUNDED

Button Dispensing



Coin Mechanism

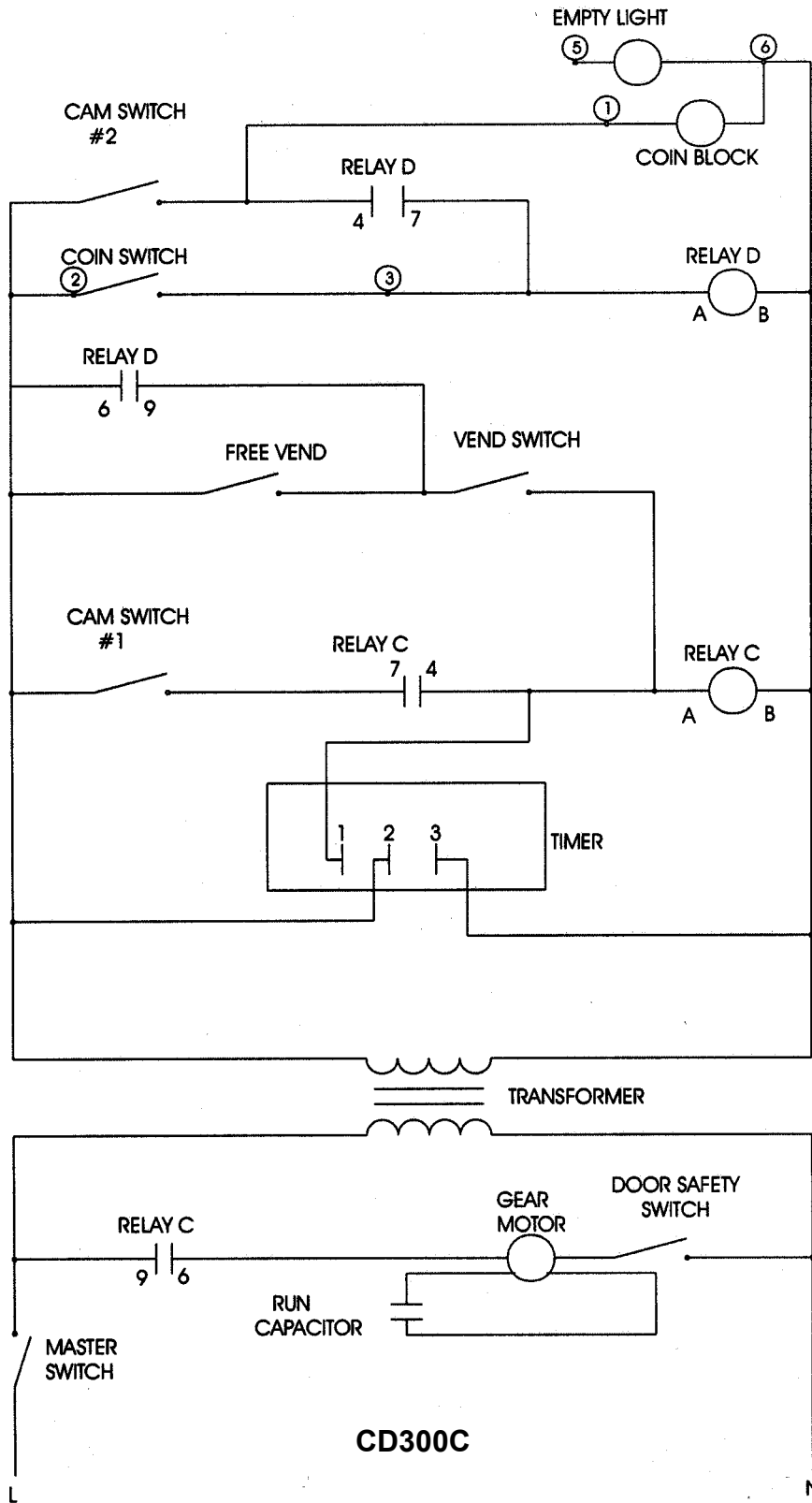


CD300C

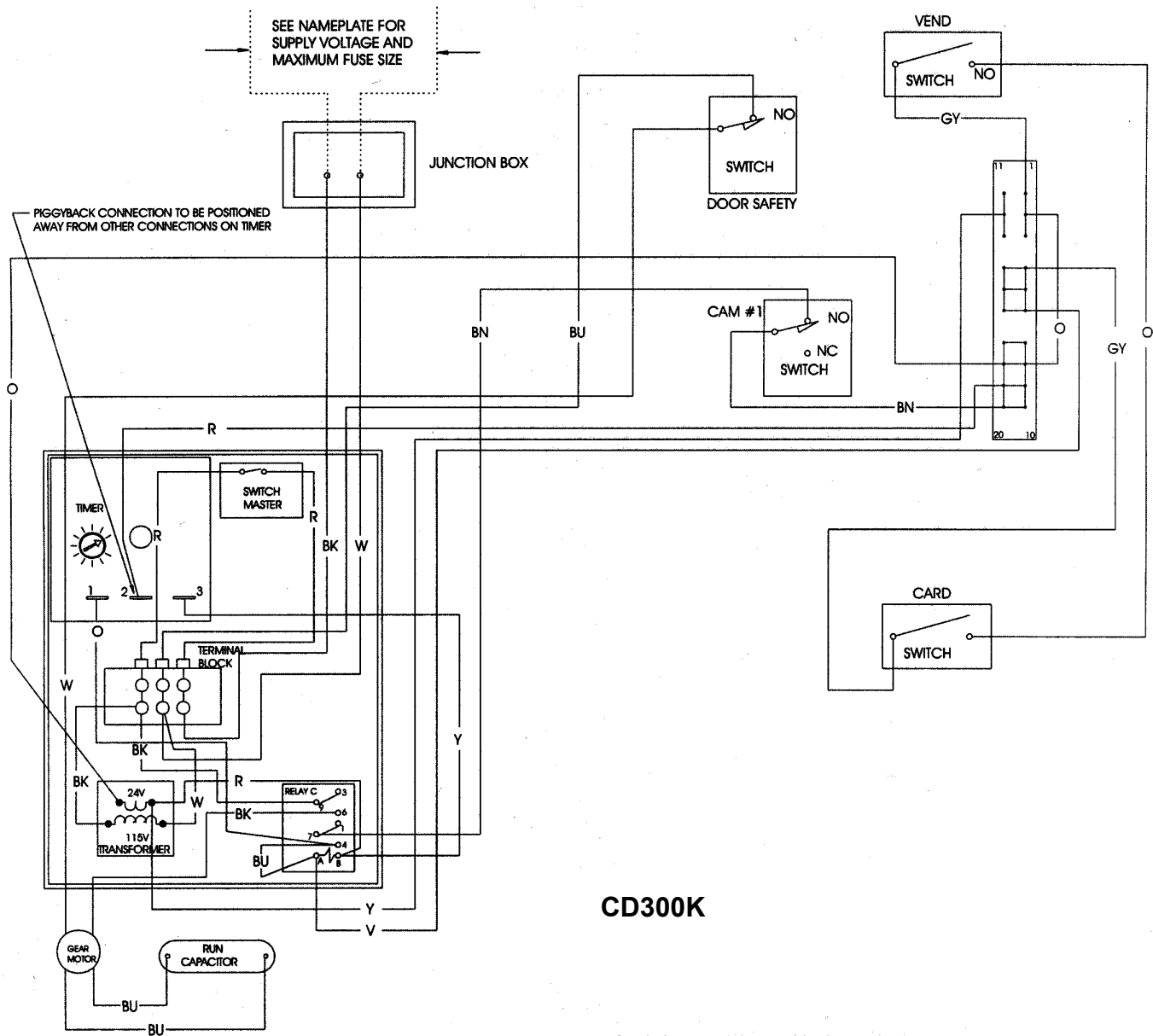
USE COPPER CONDUCTORS ONLY

THIS UNIT MUST BE GROUNDING

Coin Mechanism

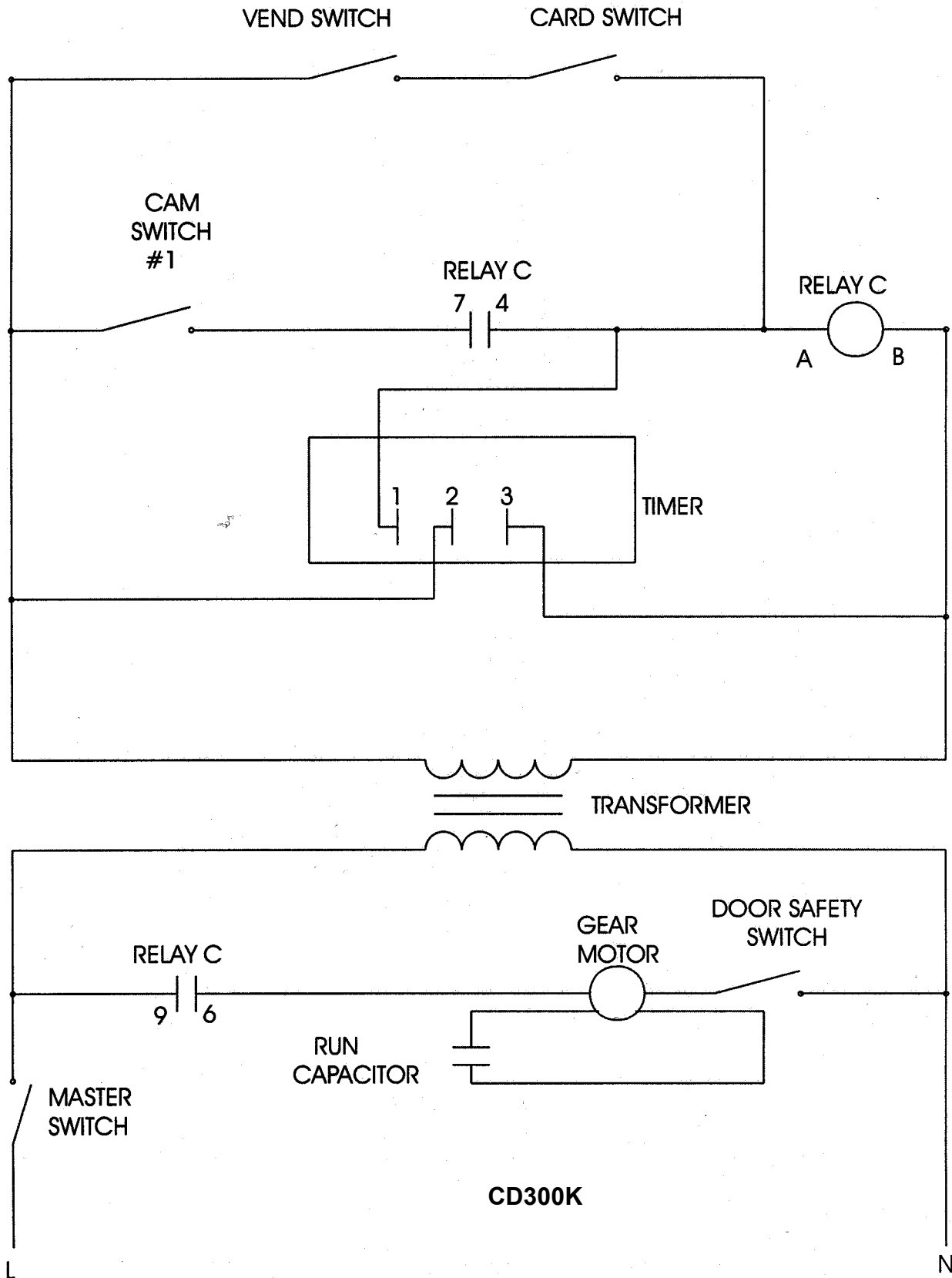


Key Card



USE COPPER CONDUCTORS ONLY

Key Card



Check these things.

1. Is the dispenser plugged in?
2. Has the dispenser's internal switch been switched to the **ON** position?
3. Is the ice machine plugged in?
4. Has the ice machine's internal switch been switched to the **ON** position?
5. Is there ice in the dispenser?
6. Is the ice chute all the way up?

Record this information for future reference.

Dispenser

Model Number: _____

Serial Number: _____

Date of Installation: _____

Service Company: _____

Ice Machine

Model Number: _____

Serial Number: _____

Date of Installation: _____

Service Company: _____