

Service & Parts Manual

CD-210
Ice Dispenser

ICE-O-MATIC®

A **WELBILT** Company

11100 EAST 45TH AVE.
DENVER, COLORADO 80239
(303) 371-3737

2/1-295 3303

TWO YEAR PARTS WARRANTY

ICE-O-MATIC[®]

MILE HIGH EQUIPMENT COMPANY 11100 East 45th Avenue, Denver, CO 80239 Phone (303) 371-3737 TWX 386453

To the original owner of an ICE-O-MATIC MACHINE.

We warranty every Ice-O-Matic Ice Machine to be free from defects in material and factory workmanship if properly installed, cared for and operated under normal conditions with competent supervision. **WITHIN TWO YEARS FROM DATE OF ORIGINAL INSTALLATION WHEN REPORTED ON A WARRANTY CARD RETURNED TO THE FACTORY** we will replace, F.O.B. our plant, Denver, CO, or F.O.B. authorized Mile High Equipment Co. Parts Depots, without cost to the customer, that part of any such machine that becomes defective, **BUT** no part or assembly which has been subject to any alteration or misuse, accident, or is from a machine on which the serial number has been altered or removed. We will also honor warranty for **27 MONTHS** from date of shipment whichever period is last to expire, provided in either such case installation of the equipment is reported on warranty card and returned to the factory at the time of installation. After thorough examination, the decision of our Service Department shall be final. Any defective parts to be repaired or replaced must be returned to us, 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. We will not, however, assume any responsibility for any expenses (including labor) incurred in the field incidental to the repair or replacement of equipment covered by this warranty. Our obligation hereunder to repair or replace a defective part is the exclusive remedy for breach of this warranty; and we will not be liable for any other damages or claims, including consequential damages.

No representative, dealer, distributor or any other person is authorized or permitted to make any other warranty or obligate MILE HIGH EQUIPMENT COMPANY, to any liability not strictly in accordance with this policy. **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, AND OF ALL OTHER OBLIGATIONS OR LIABILITIES ON OUR PART.**

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ICE-O-MATIC CD-210 DISPENSER

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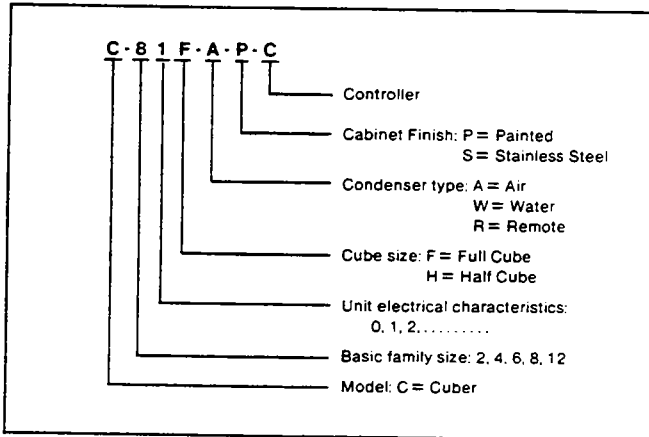
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ICE-O-MATIC® MODEL NUMBERING SYSTEM

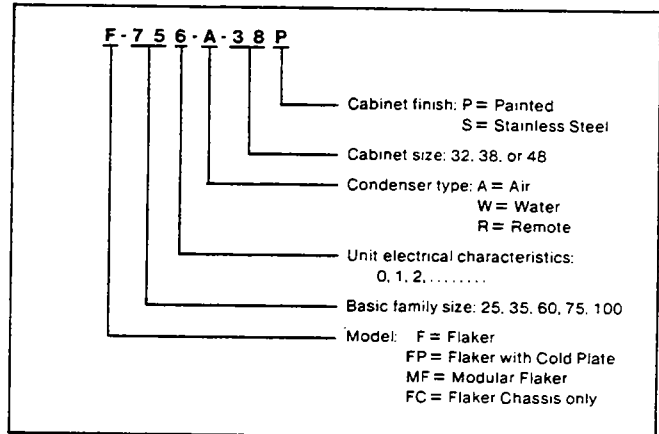
The Model Number fully describes the unit. A letter code identifies the model series. A two or three digit number identifies the basic family size and electrical characteristics. A second letter code identifies the type of condenser. Cabinet size is identified by a two digit number. Finish is identified by a letter code.

The following examples illustrate how Model Numbers are developed:

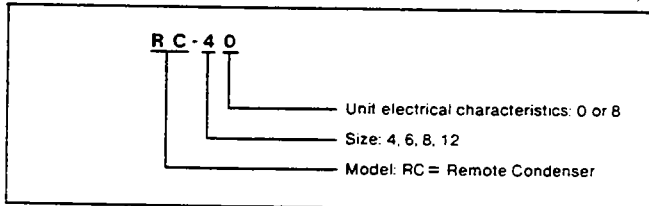
CUBERS



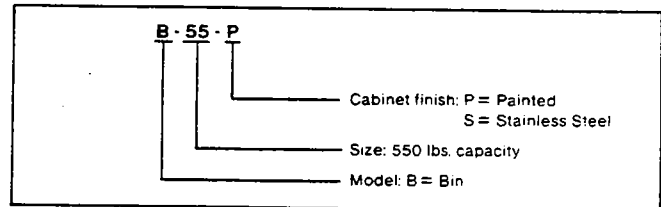
FLAKERS



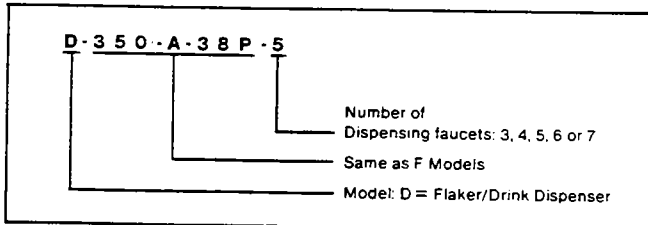
REMOTE CONDENSORS



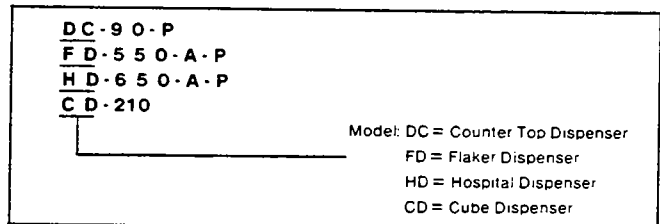
BINS



FLAKER/DRINK DISPENSER



DISPENSERS



Other model nomenclature same as Flaker Cuber nomenclature

Electrical characteristics of all units are coded in the Model Number by a one digit number appearing after the basic family size. The codes is as follows:

| Code Number | *Volts | **Cycles | Phase | No. of Service Wires Required |
|-------------|-------------|----------|-------|-------------------------------|
| 0 | 115 | 60 | 1 | 2 |
| 1 | 208-230/115 | 60 | 1 | 3 |
| 2 | 208 | 60 | 1 | 2 |
| 3 | 230 | 60 | 1 | 2 |
| 4 | 230/115 | 60 | 1 | 2 |
| 5 | 230 | 60 | 3 | 4 |
| 6 | 208-230 | 50 | 1 | 2 |
| 7 | 208-230 | 60 | 1 | 2 |
| 8 | 208-230 | 60 | 3 | 3 |
| | | 50-60 | 1 | 2 |

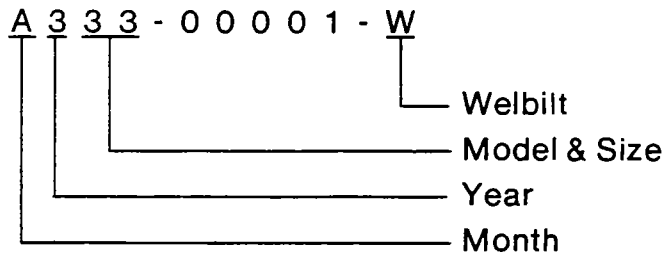
* Two voltage values separated by a hyphen (-) means that the unit is capable of operating over this voltage range.

Two voltage values separated by a slant (/) means that both voltages must be supplied at the installation. This is usually done by a neutral wire

** Two cycle values separated by a hyphen (-) means that the unit is capable of operating at either cycle value.

SERIAL NUMBER FORMAT

| | | | |
|---------------|-----|-----------|-----|
| A - January | | | |
| B - February | | 3 - 1983 | |
| C - March | | 4 - 1984 | |
| D - April | | 5 - 1985 | |
| E - May | | 6 - 1986 | |
| F - June | | 7 - 1987 | |
| G - July | | 8 - 1988 | |
| H - August | | 9 - 1989 | |
| I - September | | 0 - 1990 | |
| J - October | | | |
| K - November | | | |
| L - December | | | |
| ALL BINS | -00 | MF-400 | -30 |
| | | MF-600 | -31 |
| | | MF-750 | -32 |
| | | MF-1000 | -33 |
| RC40 | -01 | MF-2500 | -34 |
| RC60 | -02 | MF-5000 | -35 |
| RC80 | -03 | MF-700 | -36 |
| RC120 | -04 | | |
| C-20 | -11 | HD-350 | -41 |
| C-40 | -12 | HD-650 | -42 |
| C-60 | -13 | HD-750 | -43 |
| C-81 | -14 | | |
| C-121 | -15 | FD-550 | -51 |
| C-10 | -16 | | |
| F-250 | 21 | D-250 | -61 |
| F-350 | -22 | D-350 | -62 |
| F-600 | -23 | D-600 | -63 |
| F-750 | -24 | D-750 | -64 |
| F-1000 | -25 | D-1000 | -65 |
| F-400 | -26 | D-400 | -66 |
| F-700 | -27 | D-700 | -67 |
| | | DX (used) | -99 |

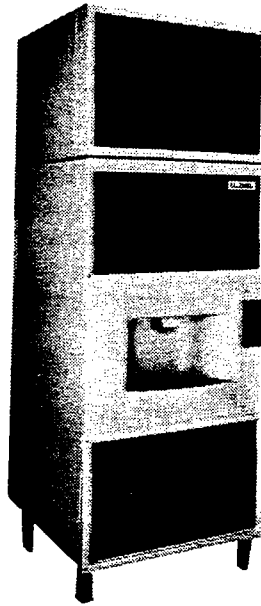


FORWARD

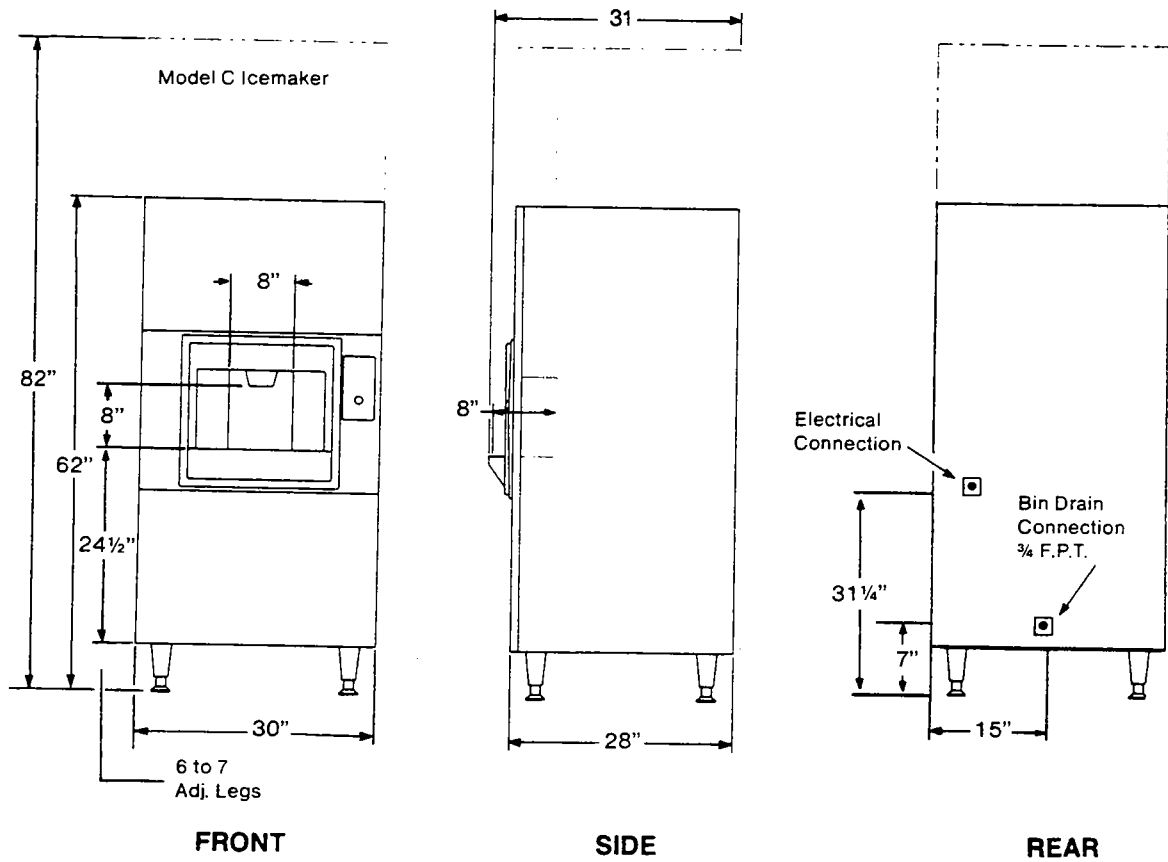
We, ICE-O-MATIC, present this service manual to aid the service men and users in the installation, operation, and maintenance of your equipment.

If, at any time, you encounter conditions that are not answered in this manual, write or call the service department of ICE-O-MATIC explaining the conditions in detail, giving THE MODEL NUMBER AND SERIAL NUMBER of the unit, and we will give your questions our immediate attention and reply.

ICE-O-MATIC
11100 E. 45th Avenue
Denver, Colorado 80239
(303) 371-3737



DIMENSIONS (Inches) & PLUMBING/ELECTRICAL CONNECTIONS DIAGRAM:



HOW THE ICE-O-MATIC CD-210 DISPENSER WORKS

The CD-210 is available with either a push button switch, hotel key, or coin mechanism to activate the dispenser. Once the push button switch, (or hotel key, coin mechanism) is depressed, the chute solenoid, and dispense motor are energized. The chute solenoid pulls open the chute damper door, and the dispense motor drives the stainless steel auger and ice is delivered out the ice delivery chute. The machine will continue to dispense ice, as long as the dispense switch is depressed.

INSTALLATION

A. Uncrating & Inspection Procedures

1. Inspect exterior of shipping carton and skid for any signs of shipping damage.
2. Using a pry bar or large screwdriver, remove all staples from bottom of carton. Do not pry against carton.
3. Lift carton straight up, entirely off dispenser. Do not discard carton until satisfactory inspection of dispenser is complete.
4. Inspect dispenser cabinet for any signs of shipping damage. Should any damage be noted, follow Freight Claim Procedures on page B-2.
5. **Gently** lay dispenser on its back and remove the four skid mounting bolts.
6. Attach the (4) 6" legs, packaged inside dispenser bin.
7. Stand the dispenser upright and **LEVEL** from front to back and side to side.
8. Fill out Quality Control Card and return to factory.

FREIGHT CLAIM PROCEDURES

IMPORTANT

THIS MERCHANDISE HAS BEEN CAREFULLY INSPECTED AND PACKED IN ACCORDANCE WITH THE CARRIER'S PACKING SPECIFICATIONS. RESPONSIBILITY FOR SAFE DELIVERY HAS BEEN ASSUMED BY THE CARRIER. IF LOSS OR DAMAGE OCCURS, YOU AS CONSIGNEE MUST FILE A CLAIM WITH THE CARRIER, AND HOLD CONTAINER FOR CARRIER'S INSPECTION.

CONCEALED LOSS OR DAMAGE

IF LOSS OR DAMAGE DOES NOT APPEAR UNTIL MERCHANDISE HAS BEEN UNPACKED MAKE A WRITTEN REQUEST FOR INSPECTION BY THE CARRIER WITHIN 15 DAYS OF THE DELIVERY DATE. THEN FILE A CLAIM WITH THE CARRIER.

DO NOT RETURN DAMAGED MERCHANDISE TO US WITHOUT WRITTEN PERMISSION. INSPECT PROMPTLY AND FILE CLAIM WITHOUT DELAY.

VISIBLE LOSS OR DAMAGE

ANY EXTERNAL EVIDENCE OF LOSS OR DAMAGE MUST BE FULLY DESCRIBED AND NOTED ON YOUR FREIGHT BILL OR EXPRESS RECEIPT AND SIGNED BY THE CARRIER'S AGENT. CLAIM SHOULD THEN BE FILED ON A FORM AVAILABLE FROM THE CARRIER REQUEST.

**DO NOT RETURN DAMAGED
MERCHANDISE TO ICE-O-MATIC**

FILE YOUR CLAIM AS ABOVE

INSTALLATION

DANGER: Electrical shock and/or injury from moving parts inside this machine can cause serious injury. Electrical Supply Voltage must be disconnected while performing the set-up procedure.

B. Set-up Procedure

NOTE: All installations must conform with local plumbing and electrical codes.

CAUTION: Make certain all power to equipment is off during installation!

1. Install the power supply line or cord into the electrical box located on the rear panel. NOTE: All wiring must conform with local codes.
2. Install drain line to $\frac{3}{4}$ " FPT.

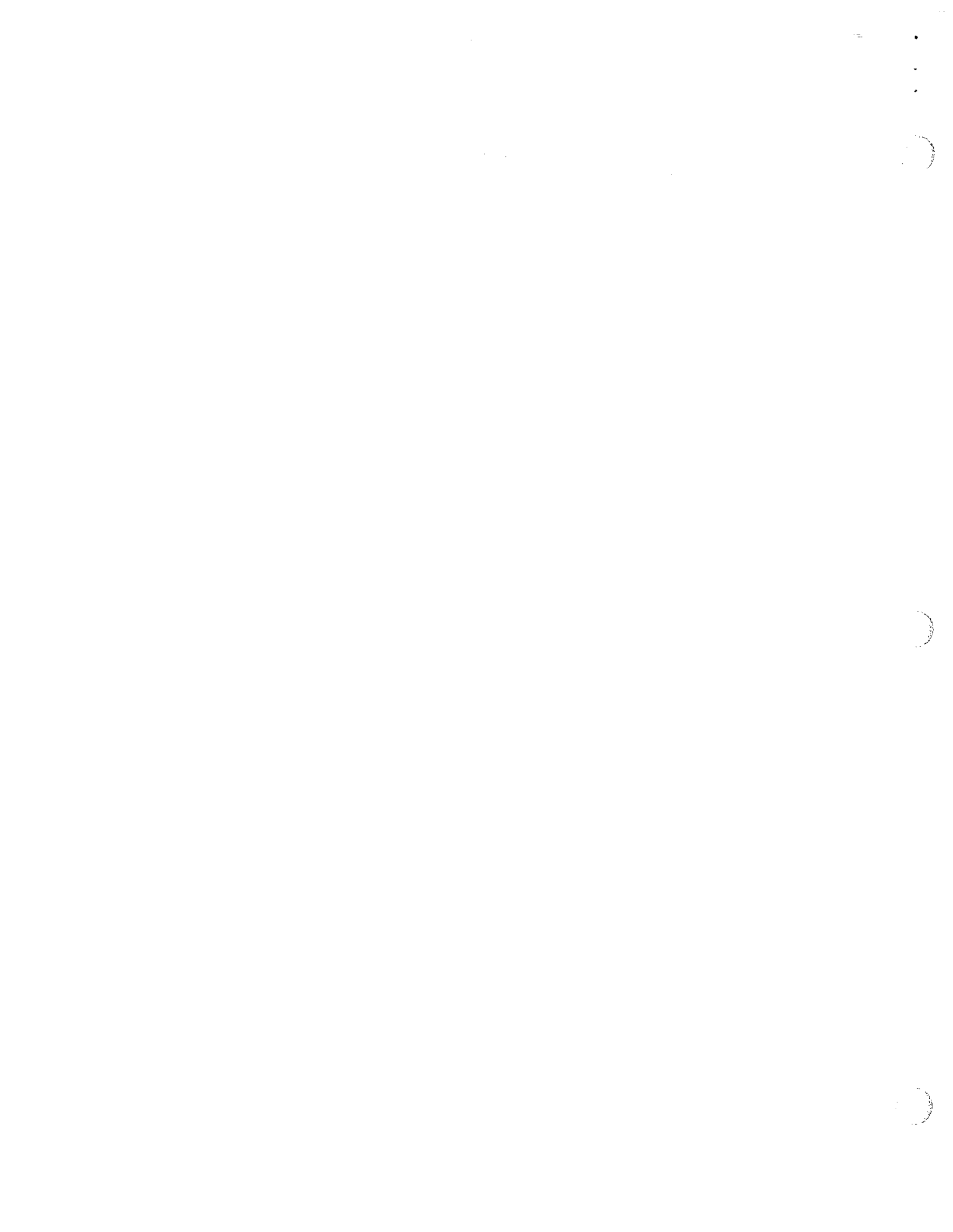
IMPORTANT: Run all drain lines separately to an open or trapped drain.

Securing Ice Machine To Dispenser

Carefully set the icemaker on top dispenser. Using the (2) mounting straps, and (4) $\frac{1}{4}$ -20 screws, (packaged in bin area) secure ice machine to dispenser.

Installing Ice Machine Cover On Icemaker

Remove 4 side panel front screws (2 on each side). With front of icemaker in place slip ice machine cover over front panel of icemaker. Align mounting holes in ice machine cover with the same screw holes and re-install screws.



CLEANING PROCEDURES

WARNING! WHEN USING CLEANING FLUIDS OR ANY CHEMICALS, RUBBER GLOVES AND EYE PROTECTION SHOULD BE WORN.

1. DISCONNECT ELECTRICAL POWER TO ICE MAKER.
2. REMOVE ALL ICE FROM BIN.
3. DISCONNECT ELECTRICAL POWER TO DISPENSER.
4. REMOVE THE FRONT PANEL FROM THE ICE MACHINE FOR ACCESS TO BIN AREA. FOR GREATER ACCESS, REMOVE BLUE SHIELD (EVAPORATOR CURTAIN).
5. PREPARE A SOLUTION OF APPROVED ICE MACHINE CLEANER ACCORDING TO LABEL INSTRUCTIONS ON THE CONTAINER.
6. USING THE CLEANING SOLUTION AND A NON-METALLIC BRISTLE BRUSH, SCRUB THE INTERIOR OF THE ICE BIN AND THE AUGER.
7. RINSE ALL PARTS THOROUGHLY WITH CLEAN WATER.
8. WASH THE BIN AND AUGER USING THE FOLLOWING SANITIZING SOLUTION: PREPARE 1-1/2 TO 2 GALLONS OF APPROVED EPA/FDA SODIUM HYPOCHLORIDE FOOD EQUIPMENT SANITIZER TO FORM A SOLUTION WITH 100 PPM CHLORINE YIELD MINIMUM.
9. RETURN THE ICE MAKER AND DISPENSER TO OPERATION.
10. CHECK FOR PROPER OPERATION.

9071519-01



GENERAL SERVICE INFORMATION

SERVICE DIAGNOSIS

| <u>Condition</u> | <u>Possible Cause or Remedy</u> |
|---|---|
| 1. Dispenser will not deliver ice. | a. Thoroughly check all wire connections. b. Defective chute solenoid. c. Defective dispense motor. |
| 2. Excessive bridging or clustering of ice. | a. Extremely low usage of dispenser. b. Water running into dispenser from ice machine |
| 3. Thumping noise. | a. Loose or misaligned chain. To tighten chain, loosen 3 nuts mounting motor bracket to front metal panel and push bottom of motor bracket toward left side of machine. Retighten nuts before running machine. If misaligned, loosen set screws in sprocket or sprockets, align sprockets. Chain should be parallel to front panel. Tighten set screws. b. Tighten all nuts firmly. Check nuts on front auger bearing flange. |

COIN MECHANISM

| | |
|--|---|
| 4. Coin Mech does not operate consistently. | a. Remove coin-mech timer and check cam. Replace if necessary. |
| 5. Coin Mech not dispensing enough ice/too much ice. | a. Replace existing cam with appropriate size cam. |
| 6. Slide goes back but does not take money. | a. Remove timer and arrange wires to allow enough clearance for the slide to operate correctly. |

ICE-O-MATIC®

A **WELBILT** Company

PARTS SECTION

**When Ordering Parts
Please Specify
Model and Serial Number**

MILE HIGH EQUIPMENT

DENVER, COLORADO 80239 U.S.A.

MODEL _____ SERIAL NO. _____

VOLTS _____ Hz. _____ Ph. _____ WIRE _____

COMPRESSOR R.L.A. _____ L.R.A. _____

MOTORS: (EA) H.P./WATTS F.L.A. _____

AUGER _____

FAN _____

HARVEST _____

PUMP _____

BIN DISPENSER _____

MINIMUM CIRCUIT AMPACITY _____

MAXIMUM BRANCH CIRCUIT FUSE SIZE
OR HACR TYPE CIRCUIT BREAKER..... _____

BEVERAGE FAUCET AMPS..... _____

USE WITH ICE-O-MATIC
REMOTE CONDENSER MODEL NO. _____

TOTAL SYSTEM
REFRIGERANT CHARGE: TYPE: _____ Oz.: _____ Grams: _____

MILE HIGH EQUIPMENT COMPANY

DENVER, COLORADO 80239 U.S.A.

MODEL _____ SERIAL
NUMBER _____

| DESIGN PRESSURES | | |
|------------------|-----|------|
| | PSI | BARS |
| HI | | |
| LO | | |



CD-210 PARTS SECTION

CABINET PARTS

| INDEX NUMBER | DESCRIPTION | PART NUMBER | NUMBER REQUIRED PER MACHINE | REMARKS |
|-----------------|--------------------|----------------|--------------------------------------|------------------------|
| 1 | Front Panel | | 1 | |
| | Push Button | 9051250-01 | 1 | |
| | Coin | 9051250-02 | 1 | |
| | Key | 9051250-03 | 1 | |
| | Ving Card | 9051250-04 | 1 | |
| | Decal-Push Button | 9071389-01 | 1 | |
| | False Front | 9051185-01 | 1 | |
| 2 | Push Button Switch | 9101141-01 | 1 | Opt. assy. |
| 3 | Leg Set | 9021001-03 | 1 | Opt. assy. Set of 4 |

ELECTRICAL COMPONENTS

| | | | | |
|----|-----------------------------|------------|---|-----------------------------|
| 1 | Dispense Motor | 9161082-01 | 1 | |
| 2 | Auger | 9131158-01 | 1 | |
| 3 | Chute Solenoid | 9101143-01 | 1 | |
| 4 | Solenoid Mounting Cover | 9131223-01 | 1 | |
| 5 | Solenoid Tension Spring | 9021061-01 | 1 | |
| 6 | Linkage, Discharge Chute | 9131222-01 | 1 | Connecting Link Solenoid |
| 7 | Contact Block | 9101141-02 | 1 | On Dispense Switch |
| 8 | Contactor | 9101002-03 | 1 | |
| 9 | Overload Relay | 9101152-01 | 1 | |
| 10 | Overload Heater | 9101152-03 | 1 | |

DRIVE SYSTEM

| | | | | |
|----|---------------------------|------------|---|------------|
| 1 | Chain | 6101001-02 | 1 | |
| 2 | Chain Guard | 3012240-01 | 1 | |
| 3 | Connecting Link | 9111009-02 | 1 | #40 Single |
| 4 | Sprocket | 9111007-08 | 1 | 12 Tooth |
| 5 | Sprocket | 9111007-09 | 1 | 14 Tooth |
| 6 | Motor Mounting Bracket | 2021417-01 | 1 | |
| 7 | Key Square | 9021028-01 | 1 | 3/16 x 3/4 |
| 8 | Bushing Assembly | 9121036-01 | 1 | |
| 9 | Bearing | 9121040-01 | 1 | |
| 9A | Bearing Flange Set | 9121040-02 | 1 | |
| 10 | Grommet | 9051002-09 | 1 | 3/4 x 1/16 |
| 11 | Ice Chute Assembly | 2021419-01 | 1 | |
| 12 | Ice Chute Gasket | 9051263-01 | 1 | |
| 13 | Ice Deflector | 3011924-01 | 1 | |
| 14 | Drain Fitting Assy. | 2041454-01 | 1 | |