
NO. E1AH-806

ISSUED: MAY 8, 2010

REVISED: _____



**HOSHIZAKI
SELF-CONTAINED CUBER**

MODEL IM-65LE-Q

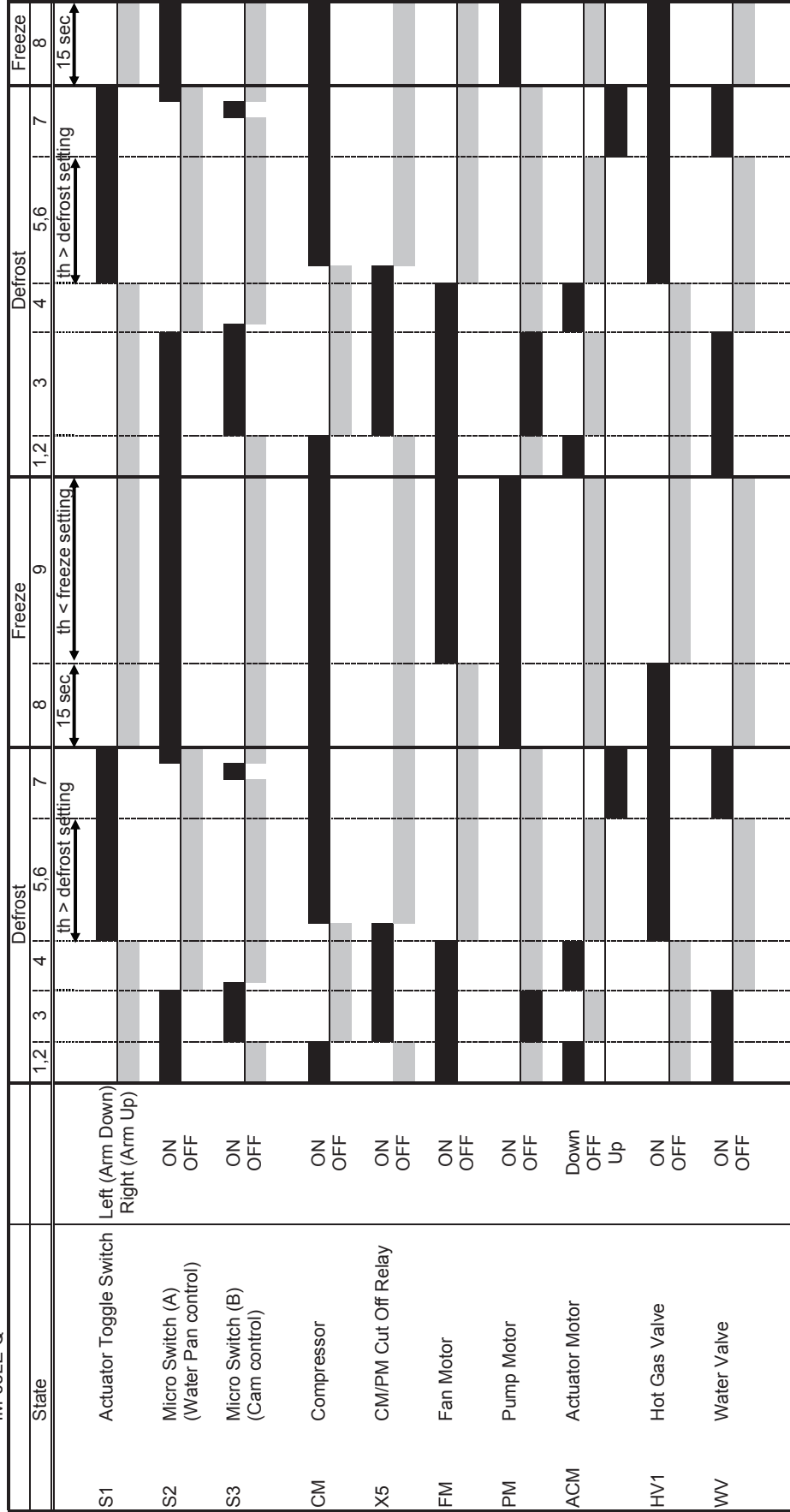
SERVICE MANUAL

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This service manual provides specific information for IM-65LE-Q only. For any other information, please refer to the service manual for the standard model IM-65LE.

1. TIMING CHART

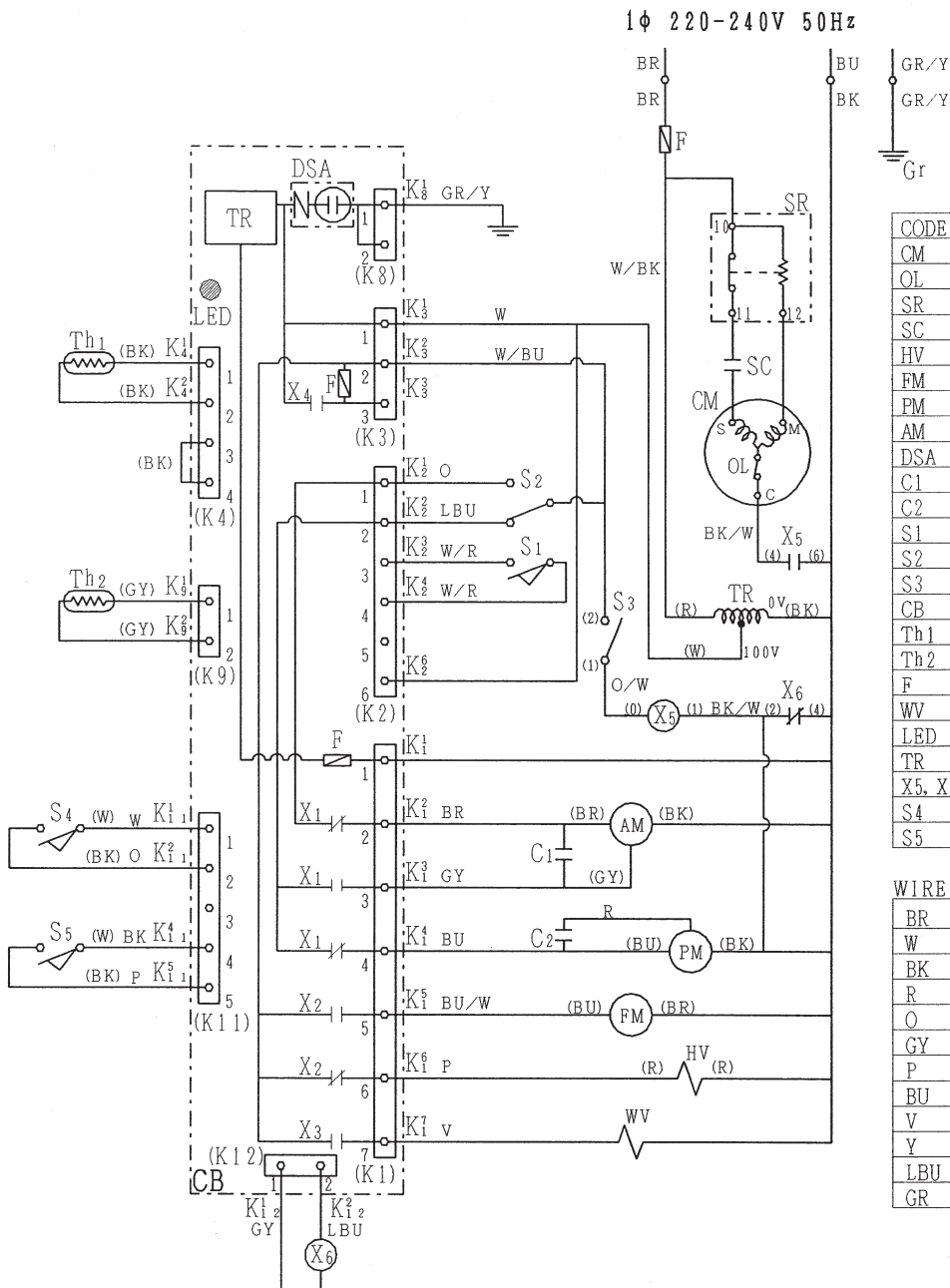
IM-65LE-Q



Operation

- State 1,2 After power supply is turned on or freeze cycle completes, FM starts, water plate opens to reach cam actuating position, and water supply begins for defrost cycle.
- State 3 If water plate does not release ice after reaching cam actuating position, ACM and CM stop.
- State 4 When water plate releases ice, WV closes and water plate starts to open further.
- State 5 When water plate fully opens and S1 moves to left (arm down) position, HV opens. When 3 minutes passes after CM stops in [state 2], CM restarts.
- State 6 Cube control thermistor senses temperature higher than defrost setting, water plate starts to close and water supply begins.
- State 7 When water plate closes and S1 moves to right (arm up) position, water supply stops and PM starts.
- State 8 When 15 seconds passes after S1 moves to right (arm up) position, FM starts and PM stops to start freezing.
- State 9 When cube control thermistor senses temperature lower than freeze setting, [state 1] begins.

2. WIRING DIAGRAM



CODE	PARTS NAME
CM	COMPRESSOR
OL	MOTOR PROTECTOR
SR	STARTER
SC	START CAPACITOR
HV	HOT GAS VALVE
FM	FAN MOTOR
PM	PUMP MOTOR
AM	ACTUATOR MOTOR
DSA	SURGE ABSORBER
C1	CAPACITOR (AM)
C2	CAPACITOR (PM)
S1	BIN CONTROL SWITCH
S2	TOGGLE SWITCH
S3	WASHING SWITCH
CB	CONTROLLER BOARD
Th1	THERMISTOR-CUBE CONTROL
Th2	THERMISTOR-AMBIENT TEMP
F	FUSE
WV	WATER VALVE
LED	SERVICE CALL LAMP
TR	TRANSFORMER
X5. X6	POWER RELAY
S4	CAM SWITCH
S5	WATER PLATE SWITCH

WIRE	COLOR	CODE
BR	BROWN	
W	WHITE	
BK	BLACK	
R	RED	
O	ORANGE	
GY	GRAY	
P	PINK	
BU	BLUE	
V	VIOLET	
Y	YELLOW	
LBU	LIGHT BLUE	
GR	GREEN	

3. DIP SWITCH SETTING

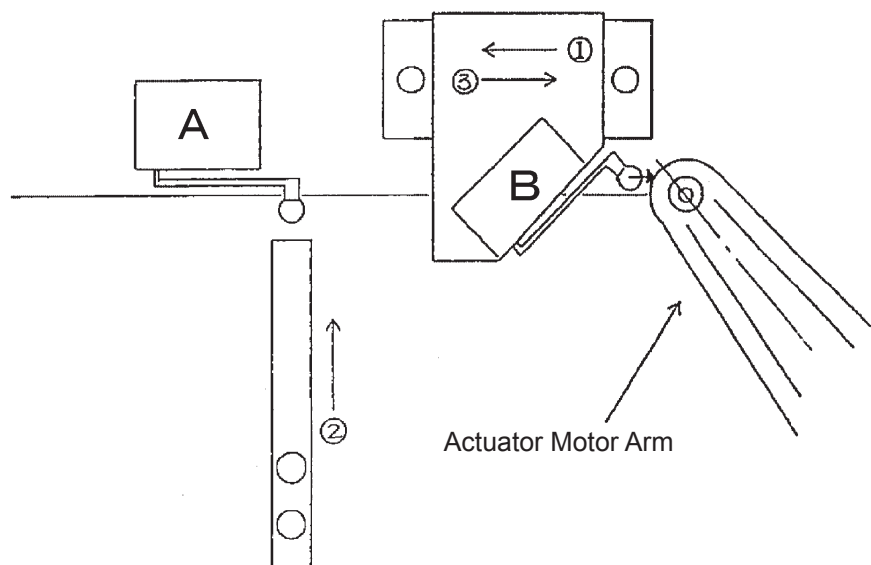
Dip Switch No.	Volume Setting
Freeze VR DSW 1	A
Defrost VR DSW 2	4
Dimple Range DSW 3	4
Water Supply DSW 4	0
Code Setting 1 DSW 5	9
Code Setting 2 DSW 6	7

4. SERVICE DIAGNOSIS

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PROBLEM	POSSIBLE CAUSE		REMEDY
[1] Deformed ice.	a) Water Pan Lower Evaporator	1. Upper and Lower Evaporators not aligned.	1. Readjust.
	b) Lower Evaporator	1. Coating damaged, removed or worn.	1. Replace.
[2] Cam Arm will not stop at a proper position.	a) Micro Switch (A)	1. Open circuit or moisture inside.	1. Replace.
	b) Micro Switch (B)	1. Open circuit or moisture inside.	1. Replace.

5. ADJUSTMENT OF MICRO SWITCH



To adjust the Micro Switch (A):

- 1) Close the Water Pan.
- 2) Push up the lever until the Micro Switch (A) trips with a click sound. Then, push the lever 1 mm further up to lock in position. Do not bend the actuator by pushing up the lever too much.
- 3) After adjustment, check for proper operation.

To adjust the Micro Switch (B):

- 1) Push the loosely fit Switch Bracket fully to the left.
- 2) Turn the Actuator Motor Arm to position the roller of the Micro Switch (B) as shown above.
- 3) Push the Switch Bracket fully to the right until the Micro Switch (B) trips with a click sound. Then, lock the Switch Bracket in that position.
- 4) After adjustment, check for proper operation.