

SERVICE AND WIRING SHEET

2180831



WARNING

ELECTRICAL SHOCK HAZARD

DISCONNECT FROM ELECTRICAL SUPPLY BEFORE SERVICING UNIT. REINSTALL ALL PANELS BEFORE OPERATING.

Water Solenoid Valve—.25 GPM Flow Washer—80 Mesh Inlet Screen (759296)
 Water Pump Motor—39 watts, .75 amps, 3350 RPM—Internal Overload (1127834)
 water dispenser uses restricted inlet to obtain proper pump capacity.
 Overload—Current and ambient sensitive
 Relay—Current (magnetic) Type with N/O Start Contacts
 Condenser—Forced Air—~~COPPER~~ ALUMINUM
 Evaporator—Stainless Steel
 Refrigerant Charge (R134a)—See Serial Plate
 Drier—Molecular Sieve—High Side
 Running Amps—3.5 (average)
 Bin Storage Capacity—35 lb. maximum
 Capacity—See chart for ambients and water temperatures.

THERMOSTAT	CUT-IN	CUT-OUT	ALTITUDE CORRECTION
Ice Thickness (Evaporator) Warm Position Cold Position (759308)	38°F±1.5° 38°F±1.5°	10.6°±2.9° -4.8°F±2.7°	Adjust range screw according to chart on thermostat control bracket.
Bin Shut-Off (759309)	41°F±1.5°	35°F±1.5°	

IMPORTANT NOTE:

When changing an evaporator thermostat, make sure that at least 8 inches of capillary tube is "S" shaped and laying tight against the bracket soldered to the bottom of the evaporator. Tape at least 1" of capillary tube to the hot gas line at the front edge of the evaporator. This shortens the defrost time.

Ice Production, lbs. 24 hrs.

Ambient °F	100°	35	34	33	32
	90°	42	40	38	36
	80°	44	41	39	34
	70°	46	42	39	35
		50°	60°	70°	80°
		Water Temperature °F.			

Maximum ice production will only be obtained under ideal conditions. Capacities shown on the graph are average and variances are normal.

Additional factors which reduce the production capacity of the ice maker are (a) making cubes thicker than 1/2", (b) increased ice meltage in the storage bin due to high ambients (25% is average).

If possible, to maintain production capacity, avoid locating ice makers in dusty or greasy atmospheres or adjacent to unusually high temperature equipment such as ovens, ranges, and steam tables.

PERFORMANCE DATA

Temperature	Suction Pressure at End of Freeze Cycle	Head Pressure at End of Freeze Cycle	Cycle Time in Minutes
Ambient 70° Water 60°	1-4	65-80	18-22
Ambient 90° Water 60°	2-5	85-100	21-27
Ambient 100° Water 60°	2-6	85-105	28-35
Ambient 70° Water 80°	1-4	65-80	20-25
Ambient 90° Water 80°	2-5	85-100	23-30
Ambient 100° Water 80°	2-6	85-105	30-38

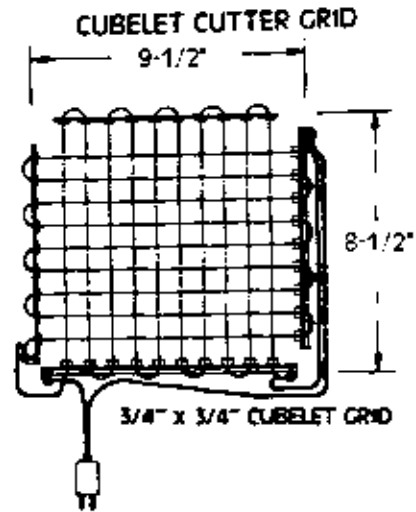
⚠ WARNING

Electrical Shock Hazard
Disconnect power before servicing.
Failure to do so could result in serious injury or death.

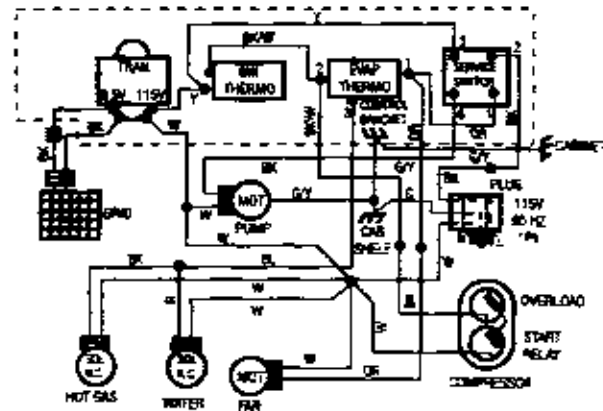
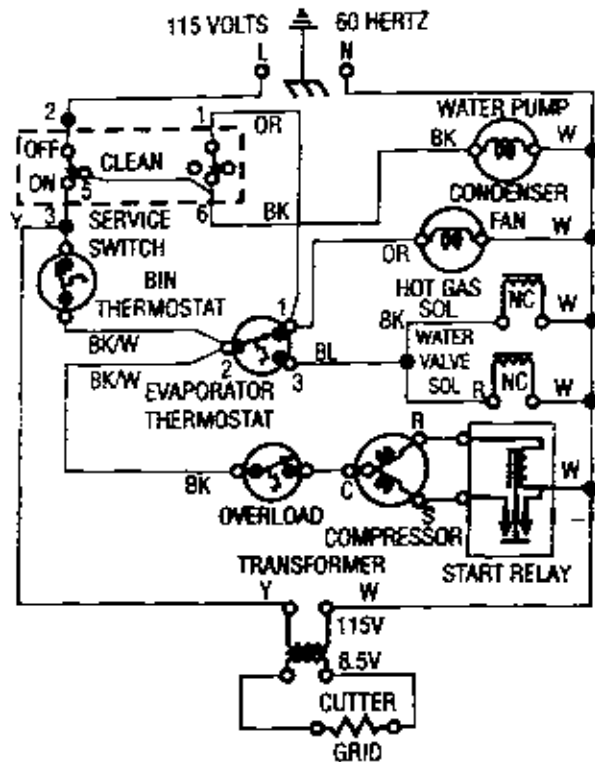
FUSE SIZE: 15 OR 20 AMPS.

COLOR CHART	
R	RED
BK	BLACK
BL	BLUE
W	WHITE
Y	YELLOW
OR	ORANGE
BK/W	BLACK/WHITE TRACER
G/Y	GREEN/YELLOW TRACER

- ⊙ = CONNECTOR - SCREW
- = CONNECTOR - CLOSED END
- = DISCONNECT TERMINAL
- = PERMANENT CONNECTION
- = PLUG CONNECTOR
- ⏏ = GROUND (CHASSIS)



NOTE CONTACTS SHOWN IN FREEZING CYCLE



UNIT WIRING DIAGRAM

This model operates at 115 volts except for the cutter grid circuit which operates at 8.5 volts at 1.0 amp for Cubelet Grid.

The compressor runs at all times except when the bin thermostat becomes satisfied and opens up. This energizes the system except for the transformer and cutter grid.

Under normal operating conditions, when the evaporator reaches the preset temperature (-10.6°F to -4.8°F, depending on thickness of ice) the evaporator thermostat opens, terminating operation of the fan motor and pump motor. The hot gas solenoid and the water valve solenoid are energized at this time and remain so until the evaporator reaches 38 ± 1.5°F.

THINGS TO REMEMBER:

- Water enters pan only during the defrost cycle.
- Normal defrost time consumes 60 to 120 seconds.

Part No. 2180831