

# SERVICE AND WIRING SHEET

26-May-2005 02:17:29

**2313728 REL**



## WARNING

**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

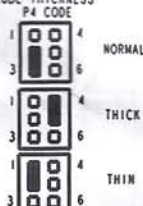
• Normal operating conditions are viewed when the air and temperature controls are at mid-setting, freezer section 0 to -5°F and unit is cycling.

NOTE: Wall and pressure readings will vary and are influenced by the existing condition of the appliance, such as iced-up evaporator, condition of condenser, defrost cycle, pull-down time and customer use.

### SERVICE INFORMATION ( 2313724 REL )

- REFRIGERANT CHARGE MUST BE APPLIED TO THE HIGH SIDE ONLY.
- THIS UNIT OPERATES AT 120 volts AC EXCEPT FOR CUTTER GRID, ELECTRONIC CONTROLS AND (OPTIONAL) LIGHT WHICH OPERATES AT 8.7 VOLTS.
- THE TRANSFORMER, CUTTER GRID AND ELECTRONIC CONTROL REMAIN ENERGIZED IN ON & CLEAN MODE.

CIRCUIT BOARD JUMPER  
 CUBE THICKNESS

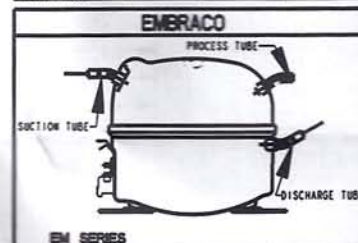


### TYPICAL

ICE PRODUCTION, lbs. 24 hrs

Ambient °F	Water Temperature °F			
	50°	60°	70°	80°
100°	37	36	35	34
90°	44	42	40	38
80°	42	40	38	36
70°	44	43	41	40

PERFORMANCE DATA			
TEMPERATURE	SYSTEM PRESSURE AT THE END OF FREEZER CYCLE		CYCLE TIME IN MINUTES
	SUCTION	HEAD	
AMBIENT 70° WATER 60°	1-4	85-80	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	85-80	20-25
AMBIENT 90° WATER 80°	2-5	85-100	23-30
AMBIENT 100° WATER 80°	2-6	85-105	30-38



### SERVICEABLE ELECTRICAL PARTS MATRIX

SERVICEABLE PARTS	15" ICEMAKER		WATTAGE		RESISTANCE	
	120V		@120V			
COMPRESSOR	2208370		244			
RUN WINDINGS					1-5	
START WINDINGS					3-11	
RELAY	2217224					
OVERLOAD	2217223					
CIRCULATING PUMP	2208482		26-30		19.6	
WATER VALVE	2185758		12 NOM.		285	
SOLENOID COIL (HGV)	759112		7-9		385	
THERMISTOR BIN	2313633				10k@25°C	
THERMISTOR-ICE CONTROL	2313635				10k@25°C	
PC BOARD	2304016		23			
TRANSFORMER	2185657		40			
CONDENSER FAN MOTOR	2183437		12-15		185	

ICE BIN THERMISTOR				
BIN	CUT-IN		CUT-OUT	
	TEMPERATURE	RESISTANCE	TEMPERATURE	RESISTANCE
	40°F±1°F	25.9kΩ±3%	35°F±1°F	29.8kΩ±3%

EVAPORATOR THERMISTOR				
ICE THICKNESS	CUT-IN		CUT-OUT	
	TEMPERATURE	RESISTANCE	TEMPERATURE	RESISTANCE
NORMAL	52.5°F±0.3°	18.7kΩ±1%	6.5°F±0.3°	69.5kΩ±1%
THICK	52.5°F±0.3°	18.7kΩ±1%	4.5°F±0.3°	73.9kΩ±1%
THIN	52.5°F±0.3°	18.7kΩ±1%	8.5°F±0.3°	65.3kΩ±1%

IF EVAPORATOR THERMISTOR IS NOT PRESENT OR OPEN THEN ELECTRONIC CONTROL WILL CONTINUE TO MAKE ICE BASED ON TIME INSTEAD OF TEMPERATURE. ( 25 MINUTES FOR ICE MAKING AND 4 MINUTES FOR HARVEST )

MINUTES	ON CYCLE				CLEAN CYCLE																							
	POWER ON START UP ONLY	OPERATION			DIAGNOSTICS (SECONDS)						CLEAN CYCLE (MINUTES)																	
	2	1	2	1/2	ICE MAKING 15min/25max >6.5°F	HARVEST <6.5°F	ICE BIN FULL <35°F	*ICE BIN NOT FULL >41°F	3	5	3	5	5	5	5	5	5	20	3	3	3	3	3	3	3	3	3	
WATER VALVE																												
CONDENSER FAN																												
HOT GAS SOLENOID																												
RECIRCULATING PUMP																												
COMPRESSOR																												
LED										A	B	C																

• RETURN TO ICE MAKING.  
 PRESS CLEAN SWITCH FOR DIAGNOSTIC MODE.  
 TO EXIT CLEAN/DIAGNOSTIC CYCLE PRESS "OFF" TO RESET CONTROL.  
 A. FLASHES HERE 2 TIMES IF THERE IS A BIN THERMISTOR FAULT.  
 B. FLASHES HERE 5 TIMES IF THERE IS AN EVAPORATOR THERMISTOR FAULT.  
 C. LED WILL PAUSE 3 SECONDS HERE.  
 IN "HARVEST MODE" THE WATER VALVE WILL SHUT OFF AFTER 1 FULL MINUTE. TOTAL TIME IN HARVEST MODE WILL VARY. THE MINIMUM HARVEST MODE IS 1 MINUTE / MAXIMUM IS 16 MINUTES.  
 IN "ICE MAKING MODE" THE FREEZE INTERVAL WILL BE 15 MINUTES MINIMUM TO 25 MINUTES MAXIMUM.

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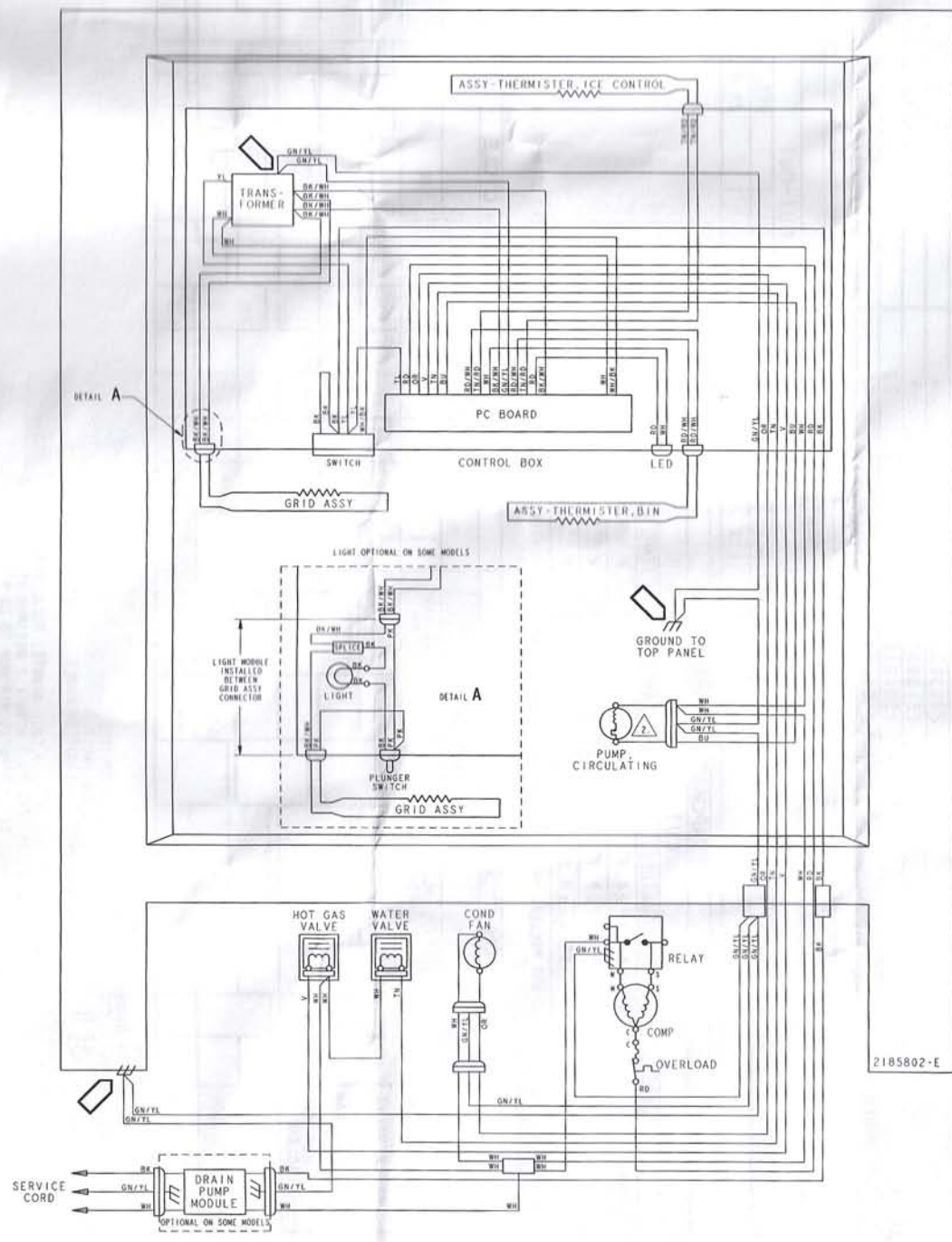
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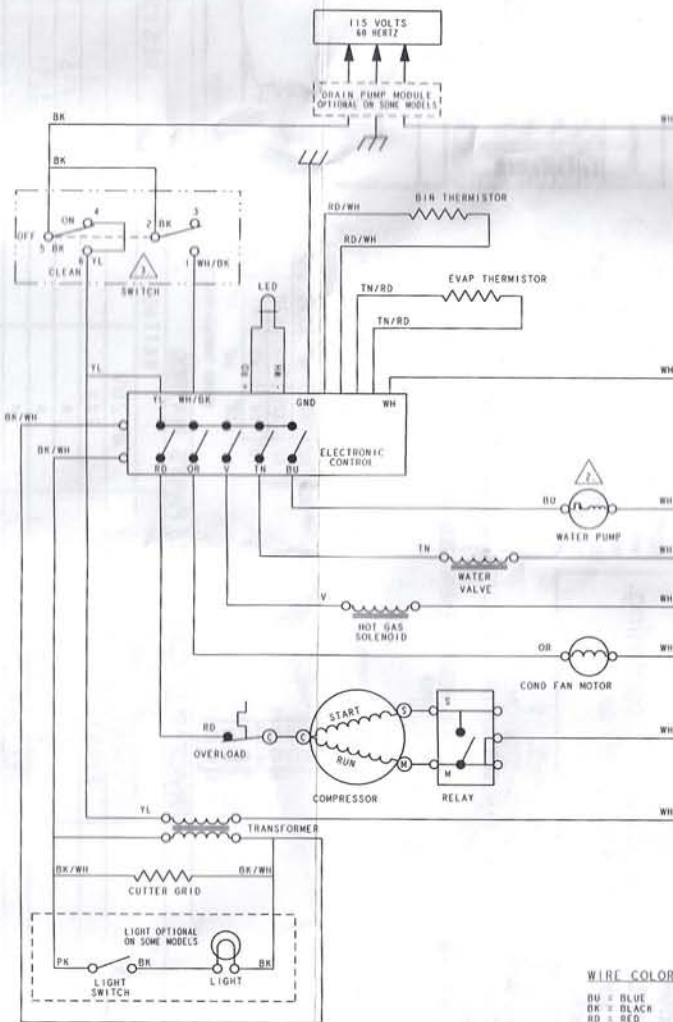
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NOTE:  
 1 SOLENOID VALVE GROUND THROUGH MOUNTING.  
 2 FUSE IS INTERNAL TO MOTOR.  
 3 COLOR DESIGNATION IS FOR THE PUSH BUTTON SWITCH.  
 NUMBER DESIGNATION IS FOR THE ROCKER SWITCH.

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WIRING DIAGRAM



WIRE COLOR CODE

- BU = BLUE
- BK = BLACK
- RD = RED
- WH = WHITE
- YL = YELLOW
- OR = ORANGE
- BR = BROWN
- GY = GRAY
- PK = PINK
- V = VIOLET
- TN = TAN
- OR/BK = ORANGE/BLACK TRACER
- YL/RD = YELLOW/RED TRACER
- BU/BK = BLUE/BLACK TRACER
- WH/BU = WHITE/BLUE TRACER
- BK/YL = BLACK/YELLOW TRACER
- WH/RD = WHITE/RED TRACER
- GN/YL = GREEN/YELLOW TRACER
- BK/WH = BLACK/WHITE TRACER
- YL/BK = YELLOW/BLACK TRACER
- RD/WH = RED/WHITE TRACER

SYMBOL CODE

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

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