

SERVICE AND WIRING SHEET

18-May-2005 02:37:57

2217233 P



⚠ 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.

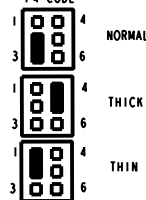
- Normal operating conditions are viewed when the air and temperature controls are at mid-setting, freezer section 0 to -5°F and unit is cycling.

NOTE: Watt 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.

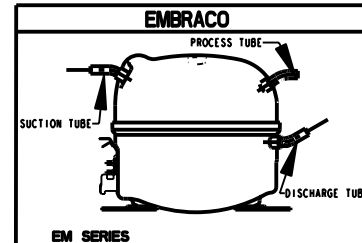
SERVICE INFORMATION (2217235 A)

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

CIRCUIT BOARD JUMPER
 CUBE THICKNESS
 P4 CODE



PERFORMANCE DATA			
TEMPERATURE	SYSTEM PRESSURE AT THE END OF FREEZER CYCLE		CYCLE TIME IN MINUTES
	SUCTION	HEAD	
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



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	2217288		*		10k@25°C	
THERMISTOR-ICE CONTROL	2217289		*		10k@25°C	
PC BOARD	2304016		23			
TRANSFORMER	2185657		40			
CONDENSER FAN MOTOR	2183437		12-15		185	

ICE BIN THERMISTOR

	CUT-IN		CUT-OUT	
	TEMPERATURE	RESISTANCE	TEMPERATURE	RESISTANCE
BIN	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)

ON CYCLE										CLEAN CYCLE																
	POWER ON START UP ONLY				OPERATION						DIAGNOSTICS (SECONDS)							CLEAN CYCLE (MINUTES)								
MINUTES	2	1	2	1/2	ICE MAKING 15min/25max	HARVEST	CYCLE DELAY	ICE BIN FULL	*ICE BIN NOT FULL	3	5	3	5	5	5	5	20	3	3	3	3	3	3	3	3	3
WATER VALVE					>6.5°F	<52°F	(10min)	<35°F	>41°F																	
CONDENSOR 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. IN "NORMAL ICE MODE" THERE IS A 10 MINUTE CYCLE DELAY.

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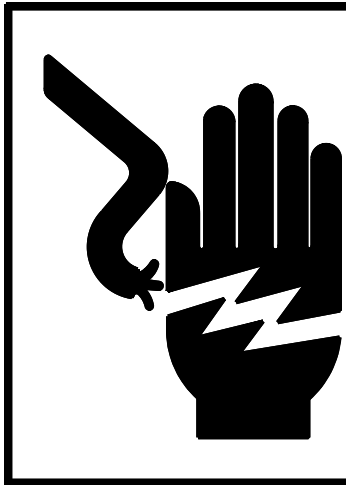
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NOTE:

1. SOLENOID VALVE GROUNDED THROUGH MOUNTING.

2. FUSE IS INTERNAL TO MOTOR.



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WIRING DIAGRAM

MANUFACTURED UNDER ONE OR MORE
OF THE FOLLOWING UNITED STATES PATENTS

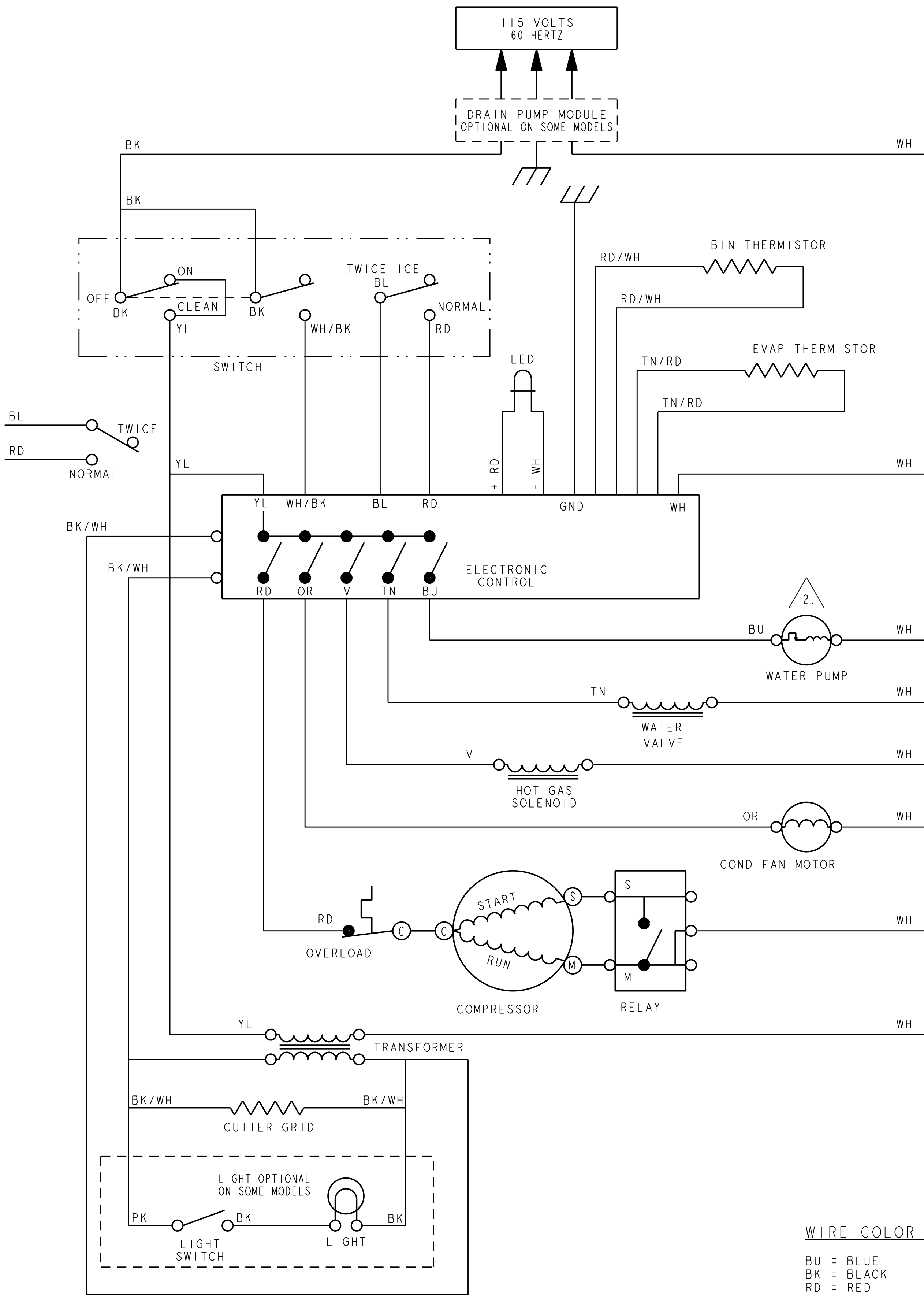
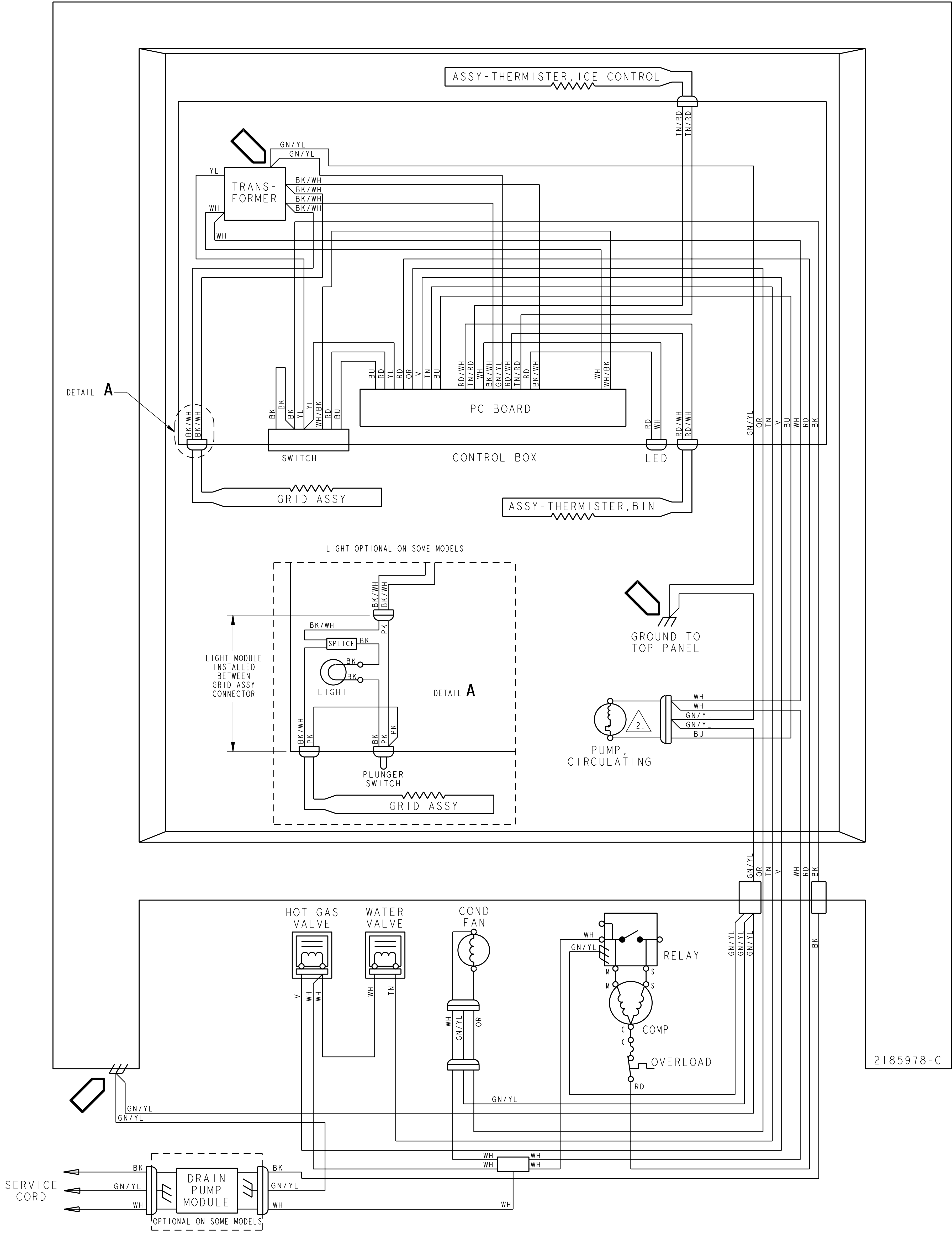
3,960,631 4,659,157 4,765,696 4,908,544 5,011,101
4,084,725 4,665,708 4,767,896 4,911,508 5,033,182
4,090,641 4,694,553 4,768,353 4,914,928 5,033,273
4,102,660 4,706,169 4,776,178 4,920,758 5,042,398
4,327,557 4,707,401 4,787,216 4,924,680 5,044,704
4,330,310 4,709,556 4,799,362 4,934,541 5,050,777
4,640,432 4,715,512 4,800,935 4,936,641 5,070,708
4,649,712 4,728,759 4,801,181 4,944,566 5,077,985
4,649,717 4,745,656 4,833,894 4,958,890 5,099,461
4,649,718 4,745,775 4,862,577 4,996,848

OTHER PATENTS PENDING

Printed in U.S.A.

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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)