LIT SERVICE & WIRING SHEET
W10449707 C

SERVICE SHEET

W10449677 A

⚠WARNING

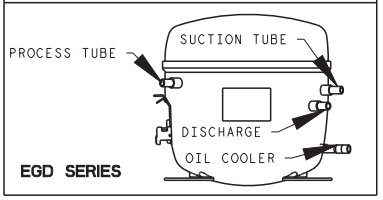
Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

* Normal operating conditions are viewed when the air and temperature controls are at mid-sitting, freezer section O 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.

PERFORMANCE DATA *(NORMAL OPERATING CONDITIONS)			
		SYSTEM PRESSURE (PSIG)	
AMB	WATTS	HIGH SIDE	LOW SIDE
70°	140 ± 20	95 ± 20	-7 TO 3
90°	150 ± 20	135 ± 20	-4 TO 3
110°	170 ± 20	185 ± 20	-2 TO 4

(OIL COOLER IS OPTIONAL)
EMBRACO



SERVICE INFORMATION (W10503846 A)

1. COMPRESSOR SUCTION AND PROCESS STUBS MAY NOT BE INTERCHANGED.
2. REFRIGERANT CHARGE MUST BE APPLIED TO HIGH SIDE ONLY.
3. ICE MAKER AND WATER VALVE NOT ORIGINAL EQUIPTMENT ON ALL MODELS.
4. NOTE: ICE MAKER CYCLE MUST BE INITIATED ELECTRICALLY. DO NOT TRY TO MANUALLY START CYCLE.
5. SERVICE DEFROST BI-METALS -50°F OPEN
6. PART NUMBER CAN BE FOUND ON THE COMPONENT.

SERVICEABLE ELECTRICAL PARTS MATRIX (COMPONENTS BY CUBIC FOOT SIZE)

SERVICEABLE PARTS	22 CFT	25/26 CFT	WATTAGE	RESISTANCE (Ω)
	120V AC		120V AC	120V AC
COMPRESSOR	EGD60HLC	EGD70HLC		
	W10391109	W10405532		
RUN WINDINGS	*			1-5
START WINDINGS	*			3-11
START DEVICE, OVERLOAD	See Note 6			
RUN CAPACITOR (IF EQUIPPED)	See Note 6			
ELECTRIC AIR BAFFLE ASSY	See Note 6		4	
THERMISTOR	See Note 6			2.7K AT 77°F (25°C)
USER INTERFACE CONTROL	See Note 6			
MAIN CONTROL	See Note 6			
DEFROST HEATER	See Note 6		550-650	27-21
DEFROST BI-METAL	See Note 6			
EVAPORATOR FAN MOTOR	See Note 6		2-9	
CONDENSER FAN MOTOR	See Note 6		3-12	

STEPS TO ENTER ELECTRONIC DEFROST CONTROL TEST MODE (IF APPLICABLE)

OPTION #1 (BI-METAL CLOSED)
STEPS
#1 - POWER OFF TO REFRIGERATOR FOR AT LEAST 30 SECONDS
#2 - THERMOSTAT OFF
#3 - POWER ON TO REFRIGERATOR

OPTION #2 (BI-METAL CLOSED)
STEPS
#1 - THERMOSTAT OFF 15 SECONDS
#2 - THERMOSTAT ON 5 SECONDS
(REPEAT STEPS 1 AND 2 TWO MORE TIMES)
#3 - THERMOSTAT OFF

ENTER TEST MODE

IN 3-8 SECONDS, CONTROL WILL TURN ON DEFROST HEATER. DEFROST HEATER WILL TURN ON FOR 21 MINUTES OR UNTIL BI-METAL OPENS. TO TERMINATE TEST EARLY, REMOVE POWER FROM REFRIGERATOR.
NOTE: IF OPTION #2 DOES NOT WORK, TRY OPTION #1 BEFORE REPLACING CONTROL. ALWAYS CHECK CONNECTIONS BEFORE REPLACING CONTROL.
HELPFUL HINT: UPON ENTERING TEST MODE, A RELAY TURNS OFF THE COMPRESSOR AND TURNS ON THE DEFROST HEATER. LISTEN FOR THE RELAY TO CLICK. IF RELAY CLICKS ONCE UPON ENTERING TEST MODE, CHECK FOR DEFROST HEAT. IF RELAY CLICKS TWICE (ALLOW UP TO 30 SEC BETWEEN CLICKS), CHECK FOR BI-METAL OPEN.

ATTENTION: IF BI-METAL IS BY-PASSED FOR TESTING (IF APPLICABLE), DO NOT OVERHEAT EVAPORATOR AREA.

BAFFLE MODULE DIAGNOSTIC TEST (IF APPLICABLE)

The diagnostic steps given below are for evaluating the Baffle Module. Steps 4 and 5 include the settings and results. If the results listed do not occur after putting the controls in the given settings, then further in-depth diagnosis of the product is required. Possible areas to evaluate include wiring connections to all electrical components, freezer thermostat, defrost timer, baffle module, evaporator fan, condenser fan, and compressor.

STEP

1. VERIFY THAT THE PRODUCT IS NOT IN DEFROST.
2. OPEN THE REFRIGERATOR AND FREEZER DOORS SO THAT THE PRODUCT WARMS UP ENOUGH TO TRIP THE THERMOSTATS.
3. NOTE THE THERMOSTAT SETTINGS AND **REMOVE THE CONTROL BOX FRONT COVER.**
4. SET BOTH CONTROLS IN THE FOLLOWING MANNER, THEN CHECK FOR THE GIVEN RESULTS:

CONTROL	SETTING
FREEZER THERMOSTAT	COLDER (FAR RIGHT)
REFRIGERATOR THERMOSTAT	OFF (FAR LEFT)

→

COMPONENT	RESULTS
BAFFLE DOOR	10 SECONDS-CLOSED
COMPRESSOR	ON
CONDENSER FAN	ON
EVAPORATOR FAN	ON

5. SET BOTH CONTROLS IN THE FOLLOWING MANNER, THEN CHECK FOR THE GIVEN RESULTS:

CONTROL	SETTING
FREEZER THERMOSTAT	COLDER (FAR RIGHT)
REFRIGERATOR THERMOSTAT	COLDER (FAR RIGHT)

→

COMPONENT	RESULTS
BAFFLE DOOR	10 SECONDS-OPEN
COMPRESSOR	ON
CONDENSER FAN	ON
EVAPORATOR FAN	ON

6. TEST COMPLETE - BAFFLE MODULE GOOD. SET CONTROLS AT MID SETTINGS AND REPLACE CONTROL BOX FRONT COVER.

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NOTES:

1. IM SOLENOID VALVE GROUNDED THROUGH MOUNTING.
2. EVAP COVER GROUNDED THROUGH HEAT SHIELD.

WIRING DIAGRAM

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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

WIRE COLOR CODE

GN/YL	= GREEN/YELLOW TRACER
BK/WH	= BLACK/WHITE TRACER
YL/BK	= YELLOW/BLACK TRACER
RD/WH	= RED/WHITE TRACER
LB/BK	= LT. BLUE/BLACK TRACER

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 D309,461
4,649,718 4,745,775 4,862,577 4,996,848

OTHER PATENTS PENDING

SYMBOL CODE

- ○ : DISCONNECT TERMINAL
- ● : SPLICE
- : PLUG CONNECTOR
- : GROUND (CHASSIS)
- : LED

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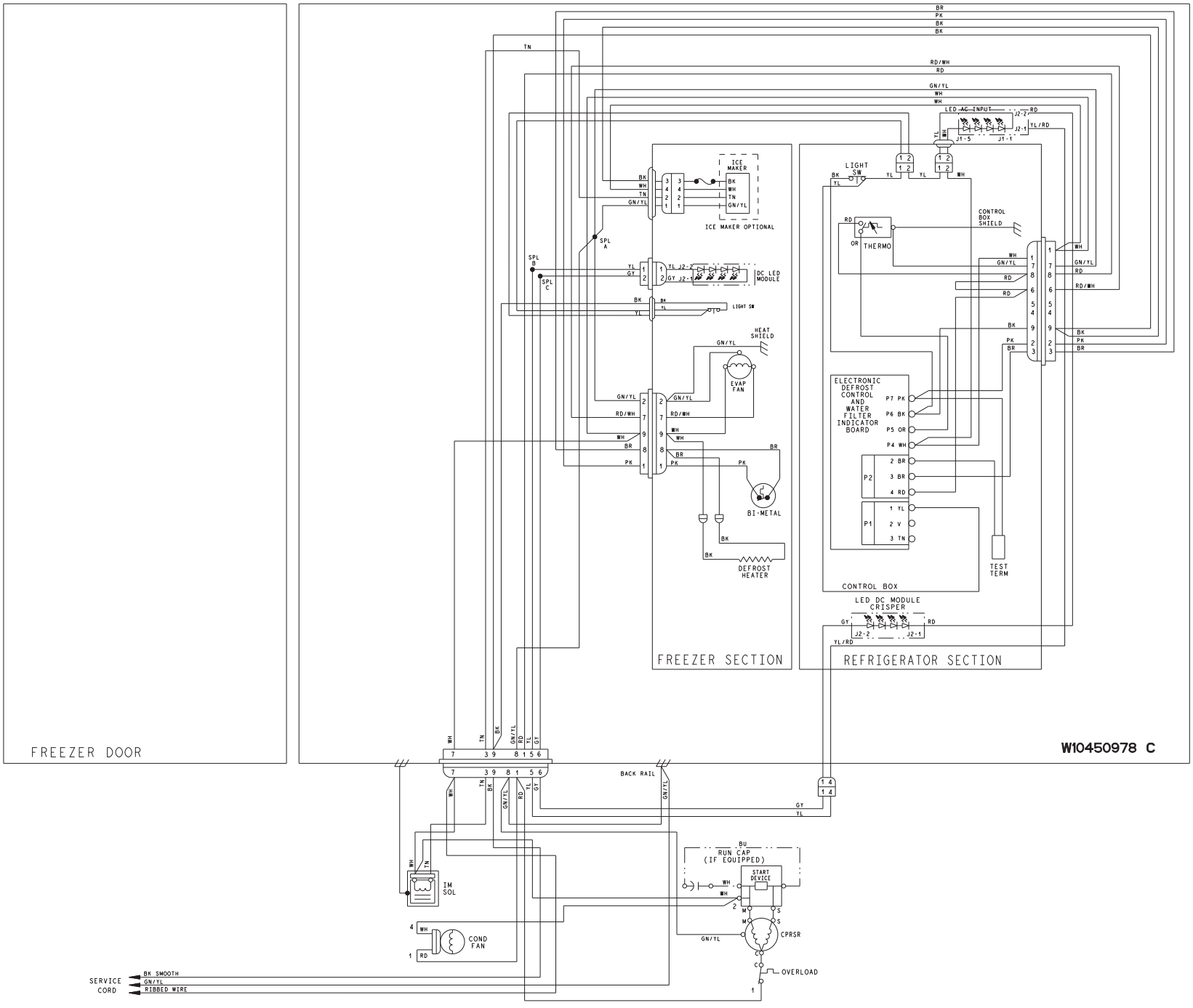

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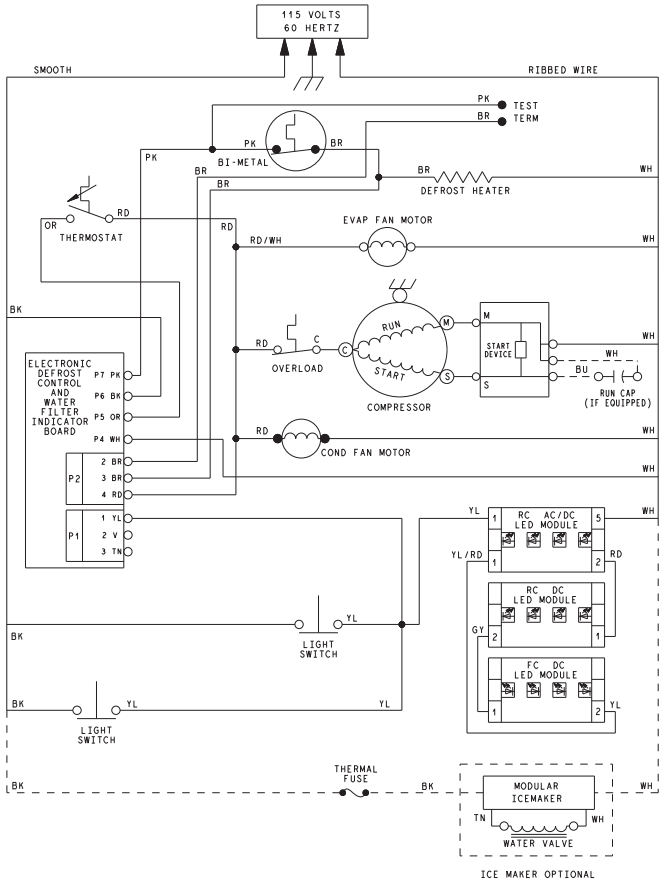

VOLTAGE TEST POINTS BARRACUDA NON-IDI W/ LED					
	FROM	COLOR	TO	COLOR	
MAIN LOADS	P6	BK	P4	WH	115VAC INPUT - CONSTANT WHEN UNIT PLUGGED IN
	P4	WH	P2-4	RD	115VAC OUTPUT TO COMPRESOR / CONDENSER FAN WHEN COOLING
	P2-4	RD/WH	P4	WH	115 VAC OUTPUT TO EVAP FAN WHEN COOLING
	P2-3	BR	P4	WH	115 VAC OUTPUT TO DEFROST HEATER WHEN ENERGIZED
	P6	BK	P4	WH	115 VAC OUTPUT TO ICE MAKER
	P1-1	YL	P6	BK	115 VAC INPUT TO FC LIGHT SWITCH
	P3	LB/BK	P6	BK	115 VAC INPUT TO DOOR SWITCH
	P6	BK	P1-1	YL	115 VAC INPUT TO RC LIGHT SWITCH
	P1-3	TN	P4	WH	115 VAC INPUT ICE MAKER WATER VALVE
	P2-3	BR	P7	PK	115 VAC INPUT BIMETAL FEEDBACK
	P2-4	RD	P5	OR	115 VDC INPUT RC THERMOSTAT
	P1	TN	P2	GY	115 VDC INPUT PADDLE
	P7	WH	P3	LB/BK	115 VAC INPUT TO LIGHT DISPENSER

VOLTAGE TEST DIAMOND LED				
J2-1	RD	J2-2	GY	11-14 VDC INPUT TO FC LIGHT
J2-1	GY	J2-2	YL	11-14 VDC INPUT TO RC LIGHT
J1-1	YL	J1-5	WH	120 VAC INPUT TO RC AC/DC LED MODULE