

FOR SERVICE TECHNICIAN'S USE ONLY

NOTE: This sheet contains important Technical Service Data.

W11501236A

Tech Sheet

Do Not Remove Or Destroy

⚠ DANGER



Electrical Shock Hazard

Only authorized technicians should perform diagnostic voltage measurements.

After performing voltage measurements, disconnect power before servicing.

Failure to follow these instructions can result in death or electrical shock.

⚠ 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.

Voltage Measurement Safety Information

When performing live voltage measurements, you must do the following:

- Verify the controls are in the off position so that the appliance does not start when energized.
- Allow enough space to perform the voltage measurements without obstructions.
- Keep other people a safe distance away from the appliance to prevent potential injury.
- Always use the proper testing equipment.
- After voltage measurements, always disconnect power before servicing.

Temperature Charts

No-Load Performance, Controls in Normal Position

	Kw/24 hr/± 0.4			Percent Run Time/± 10%			Cycles/24 hr/± 10		
Ambient °F/°C	70°F 21°C	90°F 32°C	110°F 43°C	70°F 21°C	90°F 32°C	110°F 43°C	70°F 21°C	90°F 32°C	110°F 43°C
29 cu. ft	1.1	1.5	2.8	60%	85%	90%	28	18	10

	Refrigerator Compartment Average Food Temperature ± 4°F/2°C			Freezer Compartment Average Food Temperature ± 5°F/3°C			Ice Maker Compartment Average Food Temperature ± 5°F/3°C		
Ambient °F/°C	70°F 21°C	90°F 32°C	110°F 43°C	70°F 21°C	90°F 32°C	110°F 43°C	70°F 21°C	90°F 32°C	110°F 43°C
29 cu. ft	37°F 3°C	37°F 3°C	37°F 3°C	0°F -18°C	0°F -18°C	0°F -18°C	18°F -8°C	18°F -8°C	18°F -8°C

Temperature Relationship Test Chart

	Refrigerator Evaporator Inlet/ Outlet ± 5°F/3°C		Freezer Evaporator Inlet/Outlet ± 5°F/3°C		Suction Line ± 7°F/4°C	
Ambient °F/°C	70°F 21°C	90°F 32°C	70°F 21°C	90°F 32°C	70°F 21°C	90°F 32°C
29 cu. ft	15°F -9°C	20°F -7°C	-6°F -21°C	-2°F -19°C	75°F 24°C	92°F 33°C

	Average Total Wattage ± 10%		Suction Pressure ± 2 PSIG		Head Pressure ± 5 PSIG	
Ambient °F/°C	70°F 21°C	90°F 32°C	70°F 21°C 32°C	90°F 32°C	70°F 21°C	90°F 32°C
29 cu. ft	75-95	75-95	-4.5	-4	35	60

Component Specifications

Component	Specifications All Parts - 115 VAC/60 Hz unless noted	
Cooling		
Compressor	BTUH.....	Variable VEMX11C+
	Watt	60 Hz/47 to 155 W
	Current lock rotor	2.1 A
	Current full load.....	2.1 A
	Resistance full windings....	
	Resistance start windings..	
	Inverter	
*Electric Damper Control	Maximum closing time..	16 seconds
	Temperature rating.....	-11°F to 110°F/ -12°C to 43°C
	RPM	3
Condenser Motor	Rotation.....	Clockwise
	(facing end opposite shaft)	
	RPM	940 RPM
	Watt	3.9 ± 15% W
	NOTE: Fan blade must be fully seated on shaft to achieve proper airflow.	@ 115 VAC
Refrigerator Evaporator Fan Motor	Rotation.....	Clockwise
	(facing end opposite shaft)	
	RPM	3300 RPM ± 10%
	Watt	2.8 ± 15% W @ 14 VDC
Freezer Evaporator Fan Motor	Rotation.....	Clockwise
	(facing end opposite shaft)	
	RPM	2800 RPM
	Watt	5.5 ± 15% W @ 14 VDC
	NOTE: Fan blade must be fully seated on shaft to achieve proper airflow.	
Thermostat (Defrost)	Volt	120/240 VAC
	Watt	495 W
	Current	3.75/1.87 A
	Resistance across terminals ...	56 K Ω
	Above 42°F/5.6°C ± 5°.....	Open
	Below 12°F/-11°C ± 7°	Closed
Freezer Evaporator Heater	Wattage.....	365 ± 5% W
	Resistance	36.2 ± 5% Ω
Controls		
Control Board	Volt	120 VAC, 60 Hz
	See control board section for diagnostics.	
Thermistor	Temperature	Resistance
	77°F/25°C	2700 Ω ± 5.0%
	32°F/0°C	7964 Ω ± 1.0%
	0°F/-18°C.....	23,345 Ω ± 2.0%
*Light Switch	Type.....	SPDT NO/NC
	Volt	125/250 VAC
	Current	8/4 A
Ice and Water		
Dual Water Valve	Watts	Green side: 20 W
		Red side: 35 W
Isolation Valve	Watts	20 W (Green)
Ice Box Fan	Rotation.....	Clockwise
	(facing end opposite shaft)	
	RPM	3500 RPM
	Watt	4.2 ± 15% W @12.7 VDC

*IEC 60079-15 certified for use in explosive atmosphere

Control Board Troubleshooting

SWITCH DIAGRAM



To Enter Service Diagnostics Mode:

NOTE: Refrigerator must not be in lockout mode prior to entering Service Diagnostic Mode.

1. Press SW1 and SW2 simultaneously for 3 seconds.
2. Release both buttons when you hear the CHIME indicator. The display will show "01" to indicate the control is in Step 1 of the diagnostics routine.

To Exit Service Diagnostics Mode, Choose one of the Following Options:

- Press SW1 and SW2 simultaneously for 3 seconds
OR
- Unplug refrigerator or disconnect power
OR
- Allow 20 minutes to pass.

Following the exit of the diagnostic mode, the controls will then resume normal operation.

NOTES:

- Cooling diagnostics are Service tests 1 through 7 and 32 through 39.
- Dispensing diagnostics are Service tests 8 through 31.
- Each step must be manually advanced.
- Press SW5 to move to the next step in the sequence.
- Press SW4 to back up in the sequence to the previous step.
- Diagnostics will begin at Service Test 1.
- Each step is displayed in the 2 digits of the dispenser user interface display.
- The step results are displayed in the 2 digits on the dispenser user interface and display 2 seconds after the step number is displayed. An amber "Order Filter" light will be shown to designate that the step number is being displayed, and a red "Replace Filter" light will be shown to designate that the status of the step is being displayed.
- All button and pad inputs shall be ignored and all inputs shall be off except as described in the actions for each step.

Service Test - 1: FC Thermistor

- The board will check the resistance value of the thermistor and display flashes results on the Temp display (01 = pass, 02 = open, 03 = short).

Service Test - 2: RC Thermistor

- The board will check the resistance value of the thermistor and display the results on the Temp display (01 = pass, 02 = open, 03 = short).

Service Test - 3: Evaporator Fan and Air Baffle Motors

- Control the RC and FC evaporator fan motors by depressing SW3 (01= both fan motors off. 02 = FC fan on).
- Depress SW3 once to advance. Service Test 3 will flash quickly and advance to tests 13/23 very quickly. The result is RC fan on, pantry air damper on. Pantry air damper will open and close automatically (13 = damper open, 23 = damper closed). Verify airflow inside pantry on lefthand side when damper is open (13 displayed). Airflow in pantry will cease when "23" is displayed.
- Depress SW3 to advance to last step (04 = both RC and FC fans on).

Service Test - 4: Compressor/Condenser Fan Motor

- There will be a delay of 3 seconds before start of Sub Step 01.
NOTE: Each test is timed and will automatically proceed to the next step. User will not be allowed to exit test. If exit is attempted, an invalid chime will sound.
- Control the sealed system loads by selecting SW3 (01 = initialize dual evaporator valve in home position (4 min.), 02 = close both RC and FC evaporator valves (1 min.), 03 = turn compressor on (1 min.), 04 = keep compressor on. Drive the valve to RC position and turn RC fan on, 05 = keep compressor on. Drive the valve to FC position and turn FC fan on. Verify airflow from the evaporator fan.

NOTE: Advance quickly through Service Test 4 to keep from locking in. Once locked in, you cannot exit, and must wait approximately 10 minutes.

Service Test - 5: Compressor Status/Speed

- Initial Display 02 = Minimum speed
- Depress SW3. Display = 03. Compressor ramps up to maximum speed. When maximum speed is reached, 01 is displayed.
- Depress SW3. Display = 04. Speed ramps down from maximum to minimum speed. Display = 02.

Service Test - 6: Defrost Heater/Bi-metal

NOTE: If bi-metal is open, it will need to be bypassed for heater to operate. Heater should be on. Display will be blank until a valid reading is displayed (01 = bi-metal closed, 02 = bi-metal open).

Service Test - 7: Defrost Mode Selection

- The defrost mode can be set by using SW3. In ADC mode, the refrigerator will automatically defrost after a minimum of 8 hours of compressor run time up to a maximum of 96 hours of compressor run time, depending upon refrigerator usage. In basic mode, the refrigerator will automatically defrost after 8 hours of compressor run time (01 = ADC on, 02 = basic mode on 8 hour timer).

Service Test - 8: All UI (User Interface) Indicators

- Verify that all LED indicators and UI display digits turn on automatically. All indicators on for 30-second time-out. Service Test - 9: UI Button and Pad Test
- Displays the user interface buttons, and ice and water dispenser pad status as described in the following chart.
NOTE: Do not use SW4 or SW5 as these are used only to navigate through the Service Diagnostics.

Press	Digit 1	Digit 2
SW1	1	
SW2	2	
SW3	3	
SW6	6	
Ice and Water Pad		1

NOTE: SW4 and SW5 are used for navigation and are not displayed.

Service Test - 11: Dispenser Lighting

- Pressing SW3 will change the dispenser lighting setting from OFF (0%) to ON (100%) to DIM (50%). Status indicator light is blank.

Service Test - 12: Accent Light Turns On

Service Test - 15: Ice Level Sensor

- Displays the ice bin status in real time on the UI display. Verify that the full and not full levels display correctly (01 = bin full or not present, 02 = bin not full).

Service Test - 16: RC Door Switch Input

- Displays the RC door status in real time on the UI display. Verify that the open and closed statuses display correctly (01 = RC door open, 02 = RC door closed).

Service Test - 17: FC Door Switch Input

- Displays the FC door status in real time on the UI display. Verify that the open and closed statuses display correctly (01 = FC door open, 02 = FC door closed).

Service Test - 18: Ice Door Motor

- Displays the ice door stepper motor state on the UI display. Press ice dispenser paddle and verify that the mechanical operation of the ice door corresponds to the component status indicator. (01 = closed, 02 = opening, 03 = open, 04 = closing).
NOTE: Ice door will have a delay in closing after the ice paddle is released.

Service Test - 19: Ice Maker Fill Tube Heater Status

- Control the ice maker fill tube heater by selecting SW3 (toggle between on and off) (01 = on, 02 = off).

Service Test - 20: Water Filter Usage Rating

NOTE: Not normally used.

- The total water usage rating in gallons for the water filter displays in 2 sequential flashes on the UI display. A dash will display to show the end of the number. (00/0- to 99/9-). Example: 123 will be displayed as "12 3-."

Service Test - 21: Water Filter Time Rating

NOTE: Not normally used.

- The total time rating in days for the water filter displays in 2 sequential flashes on the UI display. A dash will display to show the end of the number (00/0- to 99/9-). Example: 123 will be displayed as "12 3-."

Service Test - 22: Water Filter Usage

NOTE: Not normally used.

- The current water filter status in gallons used since last reset displays in 2 sequential flashes on the UI display. A dash will display to show the end of the number (00/0- to 99/9-). Example: 123 will be displayed as "12 3-."

Service Test - 23: Water Filter Time

- The current water filter status in days since last reset displays in 2 sequential flashes on the UI display. A dash will display to show the end of the number (00/0- to 99/9-). Example: 123 will be displayed as "12 3-."

Service Test - 24: Water Filter Reset

- The current times the water filter was reset display in 2 sequential flashes on the UI display. A dash will display to show the end of the number (00/0- to 99/9-). Example: 123 will be displayed as "12 3-."

Service Test - 26: Main Control Software Version

NOTE: Not normally used.

- The main control software version displays in 3 sequential flashes on the UI display.
NOTE: Software version is repeatedly displayed during this test (00/00/00 to 99/99/99).

Service Test - 27: Dispenser UI Control Software Version

NOTE: Not normally used.

- The dispenser UI control software version displays in 3 sequential flashes on the UI display.
NOTE: Software version is repeatedly displayed during this test (00/00/00 to 99/99/99).

Service Test - 29: Low Voltage IDI Software Version

NOTE: Not normally used.

- The low voltage software version displays in 3 sequential flashes on the UI display.
NOTE: Software version is repeatedly displayed during this test (00/00/00 to 99/99/99).

Service Test - 31 Touch Input Module Software

NOTE: Not normally used.

- The dispenser UI control software version displays in 3 sequential flashes on the UI display.
NOTE: Software version is repeatedly displayed during this test (00/00/00 to 99/99/99).

Service Test - 32: Ambient Thermistor UI Control

- This is an internal board test. The board will check the resistance value of the thermistor and display the results (01 = pass, 02 = open, 03 = short).

Service Test - 33: Humidity Sensor UI Control

- Relative humidity test (humidity % value 0-99 = pass or Er = UI failure)

Service Test - 34: Vertical Mullion Heater Mode

- Set the vertical mullion heater sensor mode by selecting SW3 (01 = sensor operation on, 02 = sensor operation off) (heater on 100%).

Service Test - 35: Vertical Mullion Heater Status

- Control the vertical mullion heater by selecting SW3 (toggle between on and off) (01 = on, 02 = off).

Service Test - 36: Ice Box Fan

- Check for fan operation. Control ice box fan by selecting SW3. Display the status on Temp Display. (01 = on, 02 = off). Verify airflow from the ice box fan.

Service Test - 37: Ice Box Thermistor

- The board will check the resistance value of the thermistor and display the results on the Temp display (01 = pass, 02 = open, 03 = short).

Service Test - 38: Forced Defrost Mode

- Set the forced defrost mode by selecting SW3 (OF = no forced defrost, Sh = short defrost, Lo = long defrost).
NOTE: If a forced defrost is selected, defrost will occur immediately after exiting the Service Diagnostic mode.

Service Test - 39: RC Evaporator Thermistor

- The board will check the resistance value of the thermistor and display the results on the Temp display (01 = pass, 02 = open, 03 = short).

Service Test - 40: Horizontal Mullion Heater Mode

- Set the horizontal mullion heater sensor mode by selecting SW3 (01 = sensor operation on, 02 = sensor operation off) (heater on 100%).

Service Test - 41: Horizontal Mullion Heater Status

- Control the horizontal mullion heater by selecting SW3 (toggle between on and off) (01 = on, 02 = off).

Service Test - 42: UI EEPROM Control Software Version

NOTE: Not normally used.

- The dispenser UI control software version displays in 3 sequential flashes on the UI display.
NOTE: Software version is repeatedly displayed during this test (00/00/00 to 99/99/99).

Service Test - 43: UI FLASH Control Software Version

NOTE: Not normally used.

- The dispenser UI control software version displays in 3 sequential flashes on the UI display.
NOTE: Software version is repeatedly displayed during this test (00/00/00 to 99/99/99).

Service Test - 45: Ice Maker Water Fill Test

NOTE: Before initiating this test, go to Service Test 57. Initiate ice maker harvest to ensure that all ice is ejected from mold before filling.

- After an initial 3-second delay, displays the ice maker water fill state on the UI display. Press SW3 to start water fill. Pressing SW3 will toggle between on and pause (02 = off, 03 = on, 04 = paused).

Service Test - 46: Water Dispensing Test

- Displays the status of the water dispense valve. Press the water dispenser pad to start water dispense (00 = water dispense valve off, 01 = water dispense valve on).

Service Test - 56: Ref. Compartment Ice Maker Error Codes

- Displays active ice maker error codes on the UI display.

E0 = No errors	E3 = Heater time-out
E1 = No cooling	E4 = Dry cycle
E2 = Motor lost position	E5 = Timed ice making

Service Test - 57: Ice Maker Harvest

- Press SW3 to activate a harvest sequence.

NOTE: Digit 1 displays the state of the sequence. Digit 2 displays the outcome of the sequence. Once initiated, the sequence cannot be exited.

Digit 1 (0 = heater and motor off, 1 = ice maker heater on, 2 = motor rotating clockwise until it reaches home position.)

Digit 2 (0 = in progress, 1 = harvesting completed, 2 = harvesting not completed. Doors must be closed.)

NOTE: "Harvesting not completed" does not exit the test, but indicates the time-out of 70 seconds has passed.

Service Test - 58: Ice Maker Heater Activation and Thermistor

- Press SW3 to activate the ice maker heater and to toggle between on and off.

NOTE: Digit 1 displays the state of the heater. Digit 2 displays the thermistor state.

Digit 1 (0 = ice maker heater off, 1 = ice maker heater on)

Digit 2 (0 = temperature warmer than harvest temperature, 1 = temperature cooler than harvest temperature, 2 = open, 3 = short)

Service Test - 59: Ice Maker Motor

- Press SW3 to activate a motor sequence and toggle through each test.

NOTE: Digit 1 displays the state of the motor. Digit 2 displays the status of the motor. Once initiated, the sequence cannot be exited.

Digit 1 (0 = motor off, 1 = motor rotating clockwise until home position, 2 = motor off, 3 = motor rotating counterclockwise until home position.)

Digit 2 (0 = in progress, 1 = completed, 2 = harvesting not complete)

NOTE: "Harvesting not completed" does not exit the test, but indicates the time-out of 70 seconds has passed.

Service Test - 60: Pantry UI Software Version

NOTE: Not normally used.

- The pantry UI control software version displays in 3 sequential flashes on the UI display.

NOTE: Software version is repeatedly displayed during this test (00/00/00 to 99/99/99).

Service Test - 63: All Pantry UI indicators

- Verify that all pantry LED indicators and pantry UI display digits turn on automatically. All indicators on for 30-second time-out.

Service Test - 64: Pantry UI Button Test

- Displays the pantry UI button function.

Label	Control Key	Digit 1	Digit 2
Select	SW703	0	5

Service Test - 65: Pantry Thermistor

- The board will check the resistance value of the thermistor and display the results on the Temp display (01 = pass, 02 = open, 03 = short).

Service Test - 66: Manufacturing Codes

- Displays the active manufacturing errors codes stored in the UI. Press SW3 to toggle between the errors. See status on Temp display (E0 = no error, E1 = LPIM motor faulty, E2 = damper cycle not completed, E3 = thermistor faulty, E4 = ice bin not present or full, E5 = heater bi-metal faulty, E6 = dispenser UI EEPROM faulty, Er = communication failure).

NOTE: Test is used by Whirlpool manufacturing plant only.

Service Test - 67: Water Filter Switch Status

- Displays the water filter switch status in real time on the UI display. Verify that the open and close statuses display correctly (01 = switch open, filter not installed, 02 = switch closed, filter installed).

Service Test - 73: Pantry Heater Status

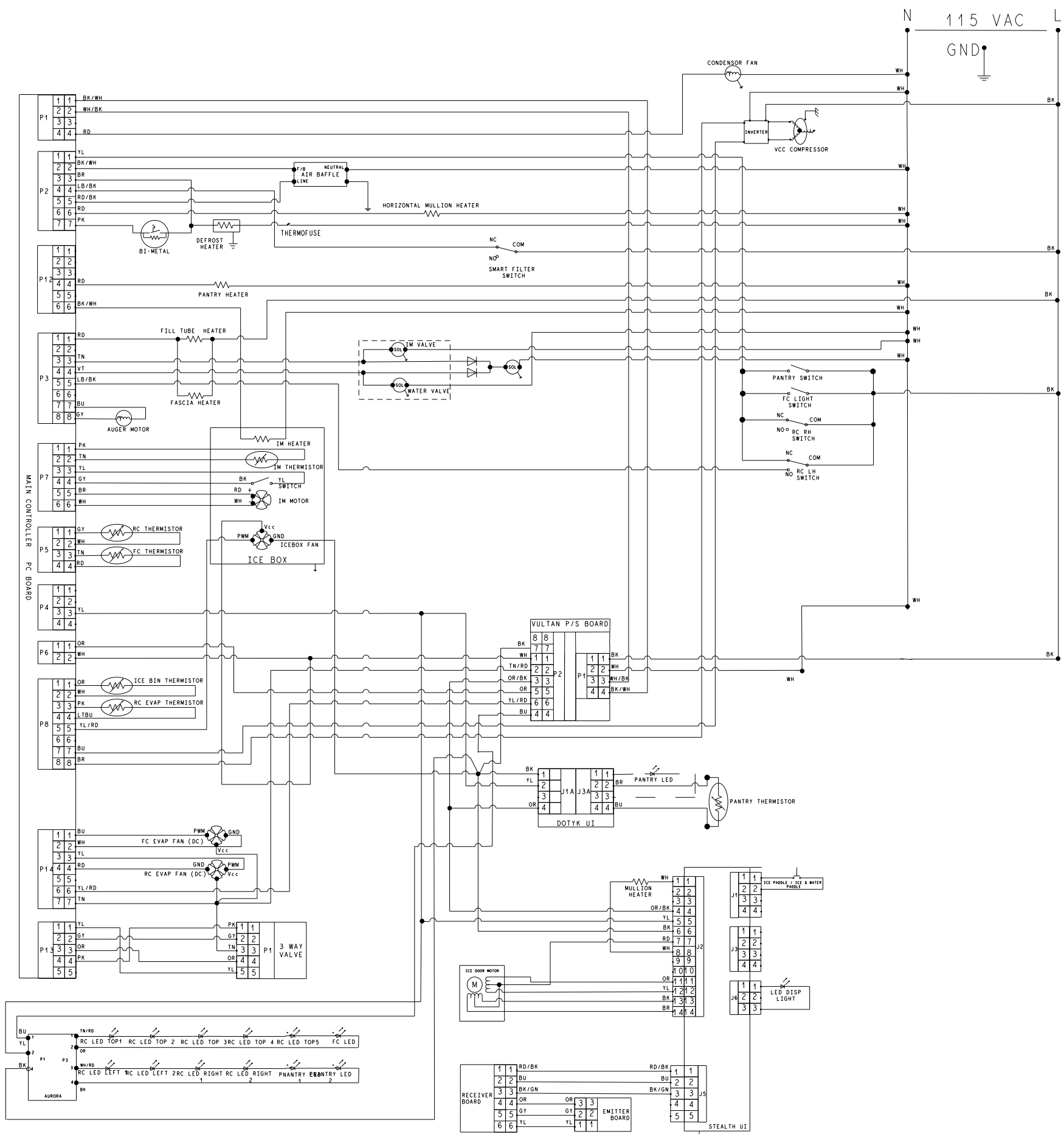
- Control the pantry heater by selecting SW3 (toggle between on and off) (01 = on, 02 = off).

FOR SERVICE TECHNICIAN'S USE ONLY

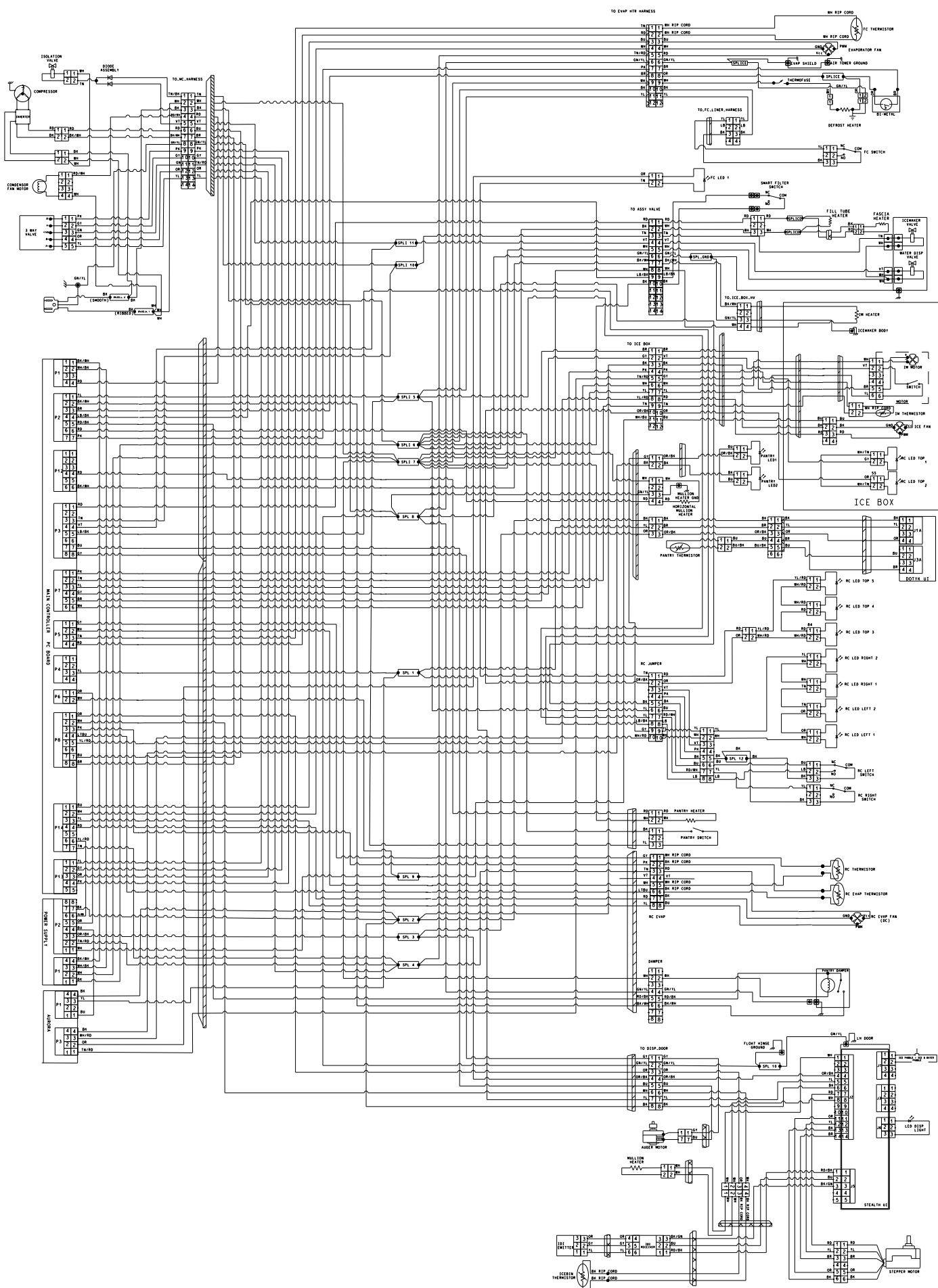
Schematic

W11501236A
Assy: W11509417

DWG. No.: W11495229 Rev. A



Wiring Diagram



Color Symbol Legend			
Symbol	Color	Symbol	Color
WH	White	RD	Red
BK	Black	BU	Blue
YL	Yellow	GN	Green
BR	Brown	OR	Orange
VT	Violet	LB	Light Blue
TR	Transparent	N	Neutral
GY	Gray	TN	Tan
PK	Pink		

COMPONENT		FROM	TO	VOLTAGE	CONDITIONS
Power Supply	P1	P1-1	P1-2	115 VAC	Constant 115 VAC
		P1-3	P1-4		Constant 115 VAC
	P2	P2-1	P2-4	14 VDC	Constant 14 VDC
		P2-2	P2-5		Constant 14 VDC
		P2-3	P2-6		Constant 14 VDC
Main Control	P1	P1-1	P1-2	115 VAC	Constant 115 VAC
		P1-2	P1-4		Condenser fan. Service Test 4. 115 VAC, if condenser fan on.
	P2	P2-1	P1-2	115 VAC	RC or FC door open = 115 V. Doors closed = 0 V.
		P2-2	P1-2		Air baffle feedback. Service Test 3, Step 3.
		P2-3	P1-2		FC defrost heater output, bi-metal bypass. Service Test 6. 115 V, if bi-metal closed.
		P2-4	P1-2		Water filter removed = 115 V. Water filter installed = 0 V.
		P2-5	P1-2		Air baf output. Service Test 3, Step 3.
		P2-6	P1-2		Fill tube /fascia/pantry heater output. Service Test 19. 01 = 115 V. 02 = 0 V.
	P3	P2-7	P1-2	115 VAC	FC defrost heater output with bi-metal. Service Test 6. 115 V.
		P3-1	P2-1		RC or FC door open = 115 V. Doors closed = 0 V.
		P3-3	P1-2		Ice maker water valve. Service Test 25. Digit 1 = 1 = 115 V (water valve on).
		P3-4	P1-2		Water dispensing valve. Service Test 25. Digit 2 = 1 = 115 V.
		P3-5	P1-2		Left RC door must be closed = 115 V. Open = 0 V.
		P3-7	P3-8		Auger output. LH RC door closed. Activate ice paddle = 130 to 140 VDC.
	P4	P4-1	P4-4	14 VDC	Constant 14 VDC.

COMPONENT	FROM	TO	VOLTAGE	CONDITIONS	
Main Control	P4	P4-3	Communication		
	P5	P5-1	P5-2	5 VDC	RC thermistor output = 1.5 to 5 VDC maximum.
		P5-3	P5-4		FC thermistor output = 1.5 to 5 VDC maximum.
	P7	P7-1	P7-2	5 VDC	Ice maker thermistor output = 1.5 to 5 VDC maximum.
		P7-5	P7-6	14 VDC	Ice maker motor output. Press SW3 to activate Test 57. Up to a 2 minute delay.
	P8	P8-1	P8-2	5 VDC	Ice bin thermistor output = 1.5 to 5 VDC maximum.
		P8-5			Ice box fan PWM connection.
		P8-3	P8-4	5 VDC	RC evaporator thermistor output = 1.5 to 5 VDC.
		P8-7	P8-8	3 to 6 VDC	Inverter output 3 to 6 VDC when compressor is running.*
	P9	P9-2	P9-3	12 VDC	Shelf lighting output.
	P12	P12-4	P1-2	115 VAC	Pantry heater output. Service Test 73. 01 = 115 VAC.
		P12-6	P1-2		Ice maker heater output. Service Test 58. Digit 1 = Heater on (115 V).
	P13	P13-1	P13-2		3-way refrigerant valve. Cannot check voltage output.
		P13-3	P13-4		3-way refrigerant valve. Cannot check voltage output.
P14	P14-1	P14-2	14 VDC	FC fan motor output. Service Test 3, Step 2.	
	P14-3	P14-4		RC fan motor output. Service Test 3, Step 3.	
	P14-7	P14-6		Constant 14 VDC.	
Receiver/ Emitter	J1	J1-1	J1-3	14 VDC	Constant 14 VDC.
		J1-2	Communication		
		J1-5			
		Refer to Service Test 15 for verifying the emitter/receiver boards			

COMPONENT		FROM	TO	VOLTAGE	CONDITIONS	
Pantry UI	J1A	J1A-4	J1A-1	14 VDC	Constant 14 VDC.	
		J1A-2 Communication				
Dispenser Board	J3A	J3A-1	J3A-3	14 VDC	LED output = 14 VDC, when turned on.	
		J3A-2	J3A-4	5 VDC	Pantry thermostat output = 1.5 to 5.0 VDC.	
	J1	J1-1	J1-2	14 VDC	"0 VDC when water dispenser pad is pressed. 14 VDC when released.	
		J1-1	J1-3		"Ice dispenser pad is pressed" (if J1-3 is used).	
		J1-2	J1-3		"Ice dispenser pad is pressed" (if J1-3 is used).	
		J2-1	J2-8		Flipper mullion heater in on	
		J2-4	J2-6	14 VDC	Constant 14 VDC.	
		J2-7	J2-11		"Ice door stepper motor is active" (if used).	
		J2-7	J2-12		"Ice door stepper motor is active" (if used).	
		J2-7	J2-13		"Ice door stepper motor is active" (if used).	
		J2-7	J2-14	"Ice door stepper motor is active" (if used).		
		J3	J3-1	J3-2	14 VDC	"0 VDC when water dispenser pad is pressed. 14 VDC when released.
	J3-1		J3-3	"Water dispenser pad is pressed" (if J3-3 used).		
	J3-2		J3-3	"Water dispenser pad is pressed" (if J3-3 used).		
	J5	J5-1	J5-3	14 VDC	Constant 14 VDC.	
	J6	J5-2	Communication			
		J6-1	J6-3	14 VDC	Dispenser light on.	
		P1-1	P1-4			
	Aurora	P1	P1-3	Communication		
		P3	P3-1	P3-2		Cavity light (point LED's) output.
P3-3			P3-4		Cavity light (point LED's) output.	

*Pulsing DC signal. May not be read with all meters.