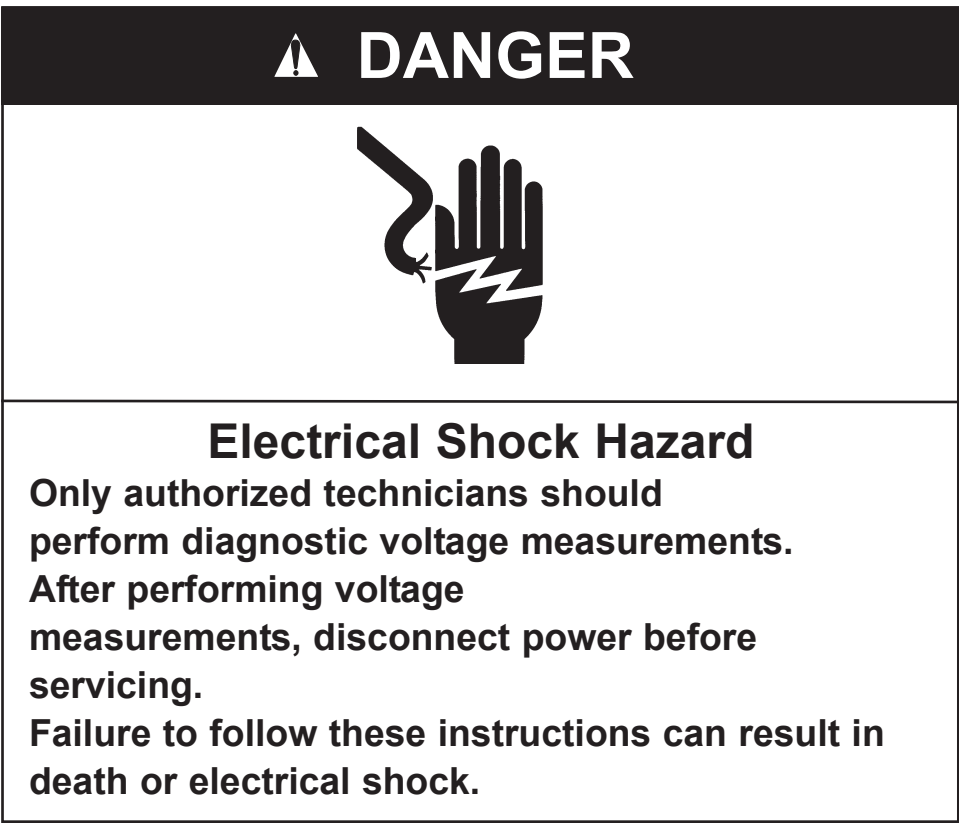


Tech Sheet **Do not Discard**

Do not Discard



Voltage Measurement Safety Information	
When performing live voltage measurements, you must do the following:	
<input type="checkbox"/>	Verify the controls are in the off position so that the appliance does not start when energized.
<input type="checkbox"/>	Allow enough space to perform the voltage measurements without obstructions.
<input type="checkbox"/>	Keep other people a safe distance away from the appliance to prevent potential injury.
<input type="checkbox"/>	Always use the proper testing equipment.
<input type="checkbox"/>	After voltage measurements, always disconnect power before servicing.

No-Load Performance, Controls in Normal Position						
	Kw/24 hr ±0.4	Percent Run Time ±10	Cycles/24 hr ±10	Refrigerator Compartment Average Food Temperature ±4°F	Freezer Compartment Average Food Temperature ±5°F	Iceemaker Compartment Average Food Temperature ±5°F
Ambient °F	70° 90° 110°	70° 90° 110°	70° 90° 110°	70° 90° 110°	70° 90° 110°	70° 90° 110°
26 cu ft	1.0 1.3 2.4	40 50 60	29 22 20	37 37 37	0 0 0	24 24 24

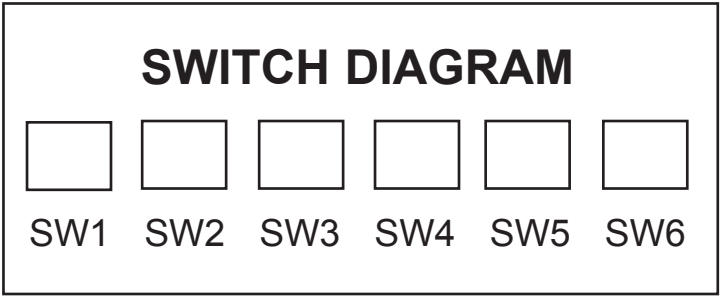
Temperature Relationship Test Chart					
	Freezer Evaporator Inlet/Outlet ±5°F	Suction Line ±7°F	Average Total Wattage ±10%	Suction Pressure ±2 PSIG	Head Pressure ± 5 PSIG
Ambient °F	70° 90°	70° 90°	70° 90°	70° 90°	70° 90°
26 cu ft	-6 -3	70 94	90-110 100-120	1.0 3.4	100 141

NOTE: This sheet contains important Technical Service Data.
FOR SERVICE TECHNICIAN ONLY
DO NOT REMOVE OR DESTROY

Component Specifications

Component	Specifications all parts 115VAC/60HZ unless noted
Cooling	
Compressor	BTUH..... 617 / EGD60HLC Watt..... 60 Hz / 101 watts Current Lock rotor..... 9.3 amps± 15% Current Full load..... 1.75 amps± 15% Resistance Run windings..... 5.1 ohms± 15% Resistance Start windings..... 5.7 ohms± 8% @77°F
Relay	TSD2
Compressor Run Capacitor	Volt..... 180 VAC Capacitance..... 12 µfd ± 10%
Electric damper control	Maximum closing time..... 16 seconds Temperature Rating..... -11°F- 110°F RPM..... 3
Condenser motor	Rotation..... Clockwise (facing end opposite shaft) RPM..... 1190 RPM Watt..... 4.1watts±15% Note: Fan blade must be fully seated on shaft to achieve proper airflow. @115VAC
Freezer Evaporator fan motor	Rotation..... Clockwise (facing end opposite shaft) RPM..... 2800 RPM Watt..... 5.5±15% watts Note: Fan blade must be fully seated on shaft to achieve proper airflow. @14 VDC
Thermostat (Defrost)	Volt..... 120/240 VAC Watt..... 495 watts Current..... 3.75/1.87 amps Resistance across terminals: Above 42°F ±5°..... Open Below 12°F ±7°..... Closed
Freezer Evaporator Heater	Volt..... 115 VAC Wattage..... 435 ±5% watts Resistance..... 30.4 ±5% ohms
Controls	
Control board	Volt..... 120 VAC,60HZ See control board section for diagnostics
Thermistor	Temperature..... Resistance 77°F..... 2700 ohms± 5.0% 32°F..... 7964 ohms± 1.0% 0°F..... 23,345 ohm± 2.0%
Light switch	Type..... SPDT NO/NC Volt..... 125/250 VAC Current..... 8/4 amps
Ice & Water	
Dual Water Valve	Watts..... Green side 20w, Red side 35w
Isolation Valve	Watts..... 20w (Green)
Ice Box Fan	Rotation..... Clockwise (facing end opposite shaft) RPM..... 3500 RPM Watt..... 4.2W ±15% watts@ 14 VDC

Control board Troubleshooting



To ENTER SERVICE DIAGNOSTICS Mode:
Press SW1 and SW2 simultaneously for 3 seconds. Release both buttons when you hear the CHIME indicator.
Unit must not be in Lockout prior to entering SERVICE DIAGNOSTIC MODE.
The display will show 01 to indicate the control is in step 1 of the diagnostics routine.

To EXIT SERVICE DIAGNOSTICS Mode: do one of the following 3 options:

- Press SW1 and SW2 simultaneously for 3 seconds.
- Disconnect the product from power.
- Allow 20 minutes to pass.

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

Cooling diagnostics are steps 1 through 7 and 32 through 39. Dispensing diagnostics are steps 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 Step 1. Each step is displayed in the two digits of the dispenser user interface display. The step results are displayed in the two digits on dispenser user interface 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 motor and air baffle motor

- Turn on the FC Evaporator Fan and Air Baffle and monitor the Air Baffle feedback. SW3 (01= Fan On / Air Baffle Open, 02 =Fan ON / Air Baffle Closed.)

Service Test - 4 Compressor/ condenser fan motor/evaporator fan

- Control the Sealed System loads selecting SW3 01 = ON, 02 = OFF

Service Test - 6 Defrost heater/Bi-metal

- Note: if bi-metal is open, it will need to be by-passed 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 product will automatically defrost after a minimum of 8 hours of compressor runtime up to maximum of 96 hours of compressor runtime, depending upon product usage. In Basic Mode the product will automatically defrost after 8 hours of compressor runtime. (01 = ADC ON, 02 = Basic Mode ON 8 hour time.)

Service Test - 8 All UI indicators

- Verify that all LED indicators and UI display digits turn on automatically. All indicators ON for 30 second timeout.

Service Test - 9 UI Button and Pad Test

- Displays the user Interface Buttons and Ice and Water Pads status as described in the Component Status Indicator column,below.

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

NOTE: Use SW4 (Fast Ice) and SW5 (Lock) to navigate through the Service Diagnostics. SW4 and SW5 are not displayed on chart.

Service Test - 11 Dispenser Lighting

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

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, 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 close status 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 close status display correctly. (01 = FC Door open, 02 = FC Door Closed)

Service Test - 19 Ice Maker Fill Tube Heater and Facia Heater Status

- Control the Ice Maker Fill Tube Heater and Facia Heater selecting SW3 (toggle between On and Off) (01 = ON, 02 = OFF)

Service Test - 20 Water Filter Usage Rating

- Displays in two sequential flashes the total water usage rating in gallons for the water filter on the UI display. Wait until dash is displayed which means end of the number. (00/0- to 99/9-) Example: 123 will be displayed as 123-

Service Test - 21 Water Filter Time Rating

- Displays in two sequential flashes the total time rating in days for the water filter on the UI display. Wait until dash is displayed which means end of the number. (00/0- to 99/9-) Example: 123 will be displayed as 123-

Service Test - 22 Water Filter Usage

- Displays in two sequential flashes the current water filter status in gallons used since last reset on the UI display. Wait until dash is displayed which means end of the number. (00/0- to 99/9-) Example: 123 will be displayed as 123-

Service Test - 23 Water Filter Time

- Displays in two sequential flashes the current water filter status in days since last reset on the UI display. Wait until dash is displayed which means end of the number. (00/0- to 99/9-) Example: 123 will be displayed as 123-

Service Test - 24 Water Filter Reset

- Display in two sequential flashes the current times the water filter was reset on the UI display. Wait until dash is displayed which means end of the number. (00/0- to 99/9-) Example: 123 will be displayed as 123-

Service Test - 26 Main Control Software Version NOTE: Not normally used

- Displays in three sequential flashes the Main Control software version on the UI display.

NOTE: This is repeatedly displayed during all time in this step. 00/00/00 to 99/99/99

Service Test - 27 Dispenser UI Control Software Version NOTE: Not normally used

- Displays in three sequential flashes the Dispenser UI Control software version on the UI display.

NOTE: This is repeatedly displayed during all time in this step. 00/00/00 to 99/99/99

Service Test - 29 Low Voltage IDI Software Version NOTE: Not normally used

- Displays in three sequential flashes the low voltage software version on the UI display. **NOTE:** This is repeatedly displayed during all time in this step. 00/00/00 to 99/99/99

Service Test - 31 Touch Input Module Software NOTE: Not normally used

- Displays in three sequential flashes the Dispenser UI Control software version on the UI display.

NOTE: This is repeatedly displayed during all time in this step. 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 = Fail)

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 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 using SW3. Display the status on Temp Display. (01 = ON, 02 = OFF). Verify air flow from the IB 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 - 41 EEPROM Control Software Version NOTE: Not normally used

- Displays in three sequential flashes the Dispenser UI Control software version on the UI display.

NOTE: This is repeatedly displayed during all time in this step. 00/00/00 to 99/99/99

Service Test - 43 UI FLASH Control Software Version

NOTE: Not normally used

- Displays in three sequential flashes the Dispenser UI Control software version on the UI display.

NOTE: This is repeatedly displayed during all time in this step. 00/00/00 to 99/99/99

Service Test - 45 Ice Maker Water Fill Test

NOTE: BEFORE INITIATING THIS TEST, GO TO STEP 57, INITIATE ICE MAKER HARVEST TO INSURE 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 awater 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 pad to initiate a water dispense. (00 = Water Dispense Valve Off, 01 = Water Dispense Valve On)

Service Test - 56 Ice Maker Error Codes

- Displays active Ice Maker Error Codes on the UI display.

E0 = No Errors, Functioning IceMaker.
E1 = No Cooling, IM timed out. Ice compt. unable to reach desired temps. Possible cooling or fan issue.
E2 = Motor Lost Position, IM didn't find home during harvest and exceeded Max attempts. Check for obstructions in IM, If none found verify operation of IM.
E3 = Heater Time-out, Ice mold heater was "ON" longer than Max allowable.
IM heater is driven to a temp., if temp. not reached a time delay shuts it down. Possible heater issue.
E4 = Dry Cycle, Unit detected dry-cycles above Min rqmt. Possible valve or frozen fill tube.
E5 = IM Bad Thermistor, Ice Storage temp satisfied but Ice Mold in frozen state to long. Possible an ice mold thermistor issue.

Service Test - 57 Ice Maker Harvest

- Press SW3 to activate a Harvest sequence. 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 = IM Heater ON, 2 = Motor Rotating CW until it finds 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 step, but indicates the timeout 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. Digit 1 displays the state of the heater. Digit 2 displays the thermistor state.

Digit 1 0 = IM Heater OFF, 1 = IM Heater ON
Digit 2 0 = Temp warmer than harvest temp, 1 = Temp cooler than harvest temp, 2 = Open, 3 = Short

Service Test - 59 Ice Maker Motor

- Press SW3 to activate a Motor sequence and toggle through each step. 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 CW until home position, 2 = Motor OFF, 3 = Motor Rotating CCW until home position
Digit 2 0 = In Progress, 1 = Completed, 2 = Homing Not Complete ("See step 57)

NOTE: Harvesting Not Completed does not exit the step, but indicates the timeout of 70 seconds has passed.

Service Test - 66 Manufacturing Codes

NOTE: Step 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 status display correctly. (01 = Switch open, filter installed, 02 = Switch closed, filter not installed)

