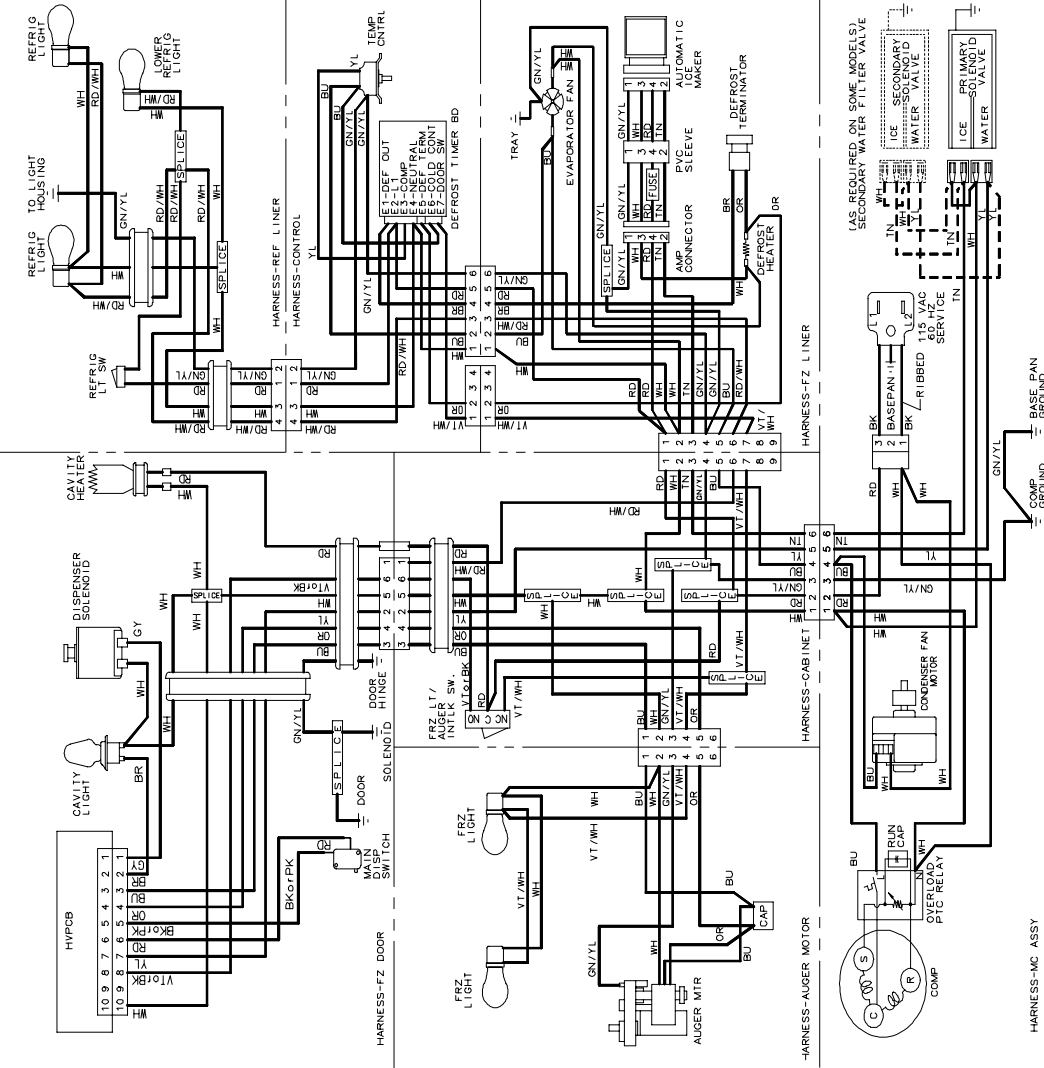
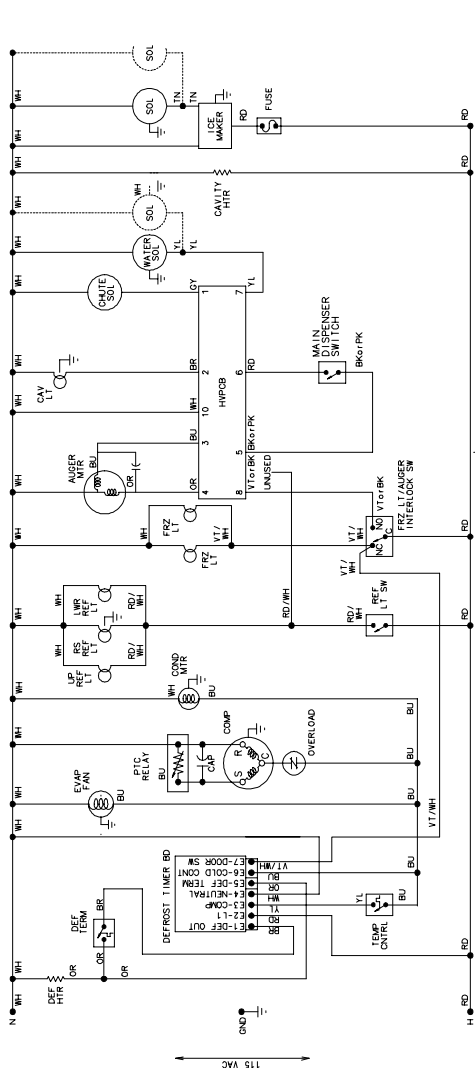


Wiring Diagram and Schematic

WARNING

To avoid risk of electrical shock that can cause death or severe personal injury, disconnect unit from power before servicing unless tests require power. Discharge capacitors through a 10,000-ohm resistor before handling. Wires removed during disassembly must be replaced on correct terminals to ensure proper grounding and polarization.



Technical Information—Side by Side Refrigerator

596.52672200 596.52673200 596.52674200 596.52679200

- Due to a possibility of personal injury or property damage, always contact an authorized technician for service or repair of this refrigerator.

WARNING

To avoid risk of electrical shock that can cause death or severe personal injury, disconnect unit from power before servicing unless testing is required. Discharge capacitors through a 10,000 ohm resistor before handling. Wires removed during disassembly must be replaced on correct terminals to ensure proper grounding and polarization.

No-Load Performance, Controls in Normal Position							
	Kw/24 hr ±0.4			Percent Run Time ±10%	Cycles/24 hr ±25%	Refrigerator Center Compartment Average Food Temperature ±3°F	Freezer Compartment Average Food Temperature ±3°F
Ambient °F	65°	90°	110°	65° 90° 110°	65° 90° 110°	65° 90° 110°	65° 90° 110°
26 cu ft	1.3	2.06	2.9	37 57 75	34 35 19	33 37 39	-5 -3 1

Temperature Relationship Test Chart

	Evaporator Outlet ±3°F	Evaporator Inlet ±3°F	Suction Line ±7°F	Average Total Wattage ±10%	Suction Pressure ±2 PSIG	Head Pressure ± 5 PSIG
Ambient °F	65°	90°	65°	65°	65°	65°
26 cu ft	-25 -19	-24 -19	72 98	132 146	6"(vac.) 0	87 137

Component Specifications

Part Number	Component	Test Procedures
8931612	Compressor run capacitor	Volt Capacitance 210/220 VAC 15 µfd +10% -5%
10131672	Compressor	Type BTUH Volt Watt Current Lock rotor Full load Resistance Run windings Start windings Fan Cooled, R134a refrigerant 865 BTUH 115 VAC, 60 Hz 152 watts 19.5 amps 1.35 amps 2.79 ohms 4.49 ohms
7002789	Auger Motor	Rotation (facing end opposite shaft) RPM Power to blue and white is clockwise. Power to orange and white is counterclockwise 17± 3 RPM
2466104	Light switch	Type Volt Current SPST NC 125/250 VAC 5/2.5 amps
2466101	Light switch / Interlock	Type Volt Current SPDT NO/NC 125/250 VAC 5/2.5 amps
2575401	Solenoid (Ice Chute)	Resistance across leads 101ohms ± 10%
2544002	Water Valve (primary)	Watts Brown side 35w, Purple side 20w
2544102	Water Valve (secondary)	Watts Brown side 35w, Purple side 20w

Component Specifications

 WARNING

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Part Number	Component	Test Procedures
12571701	Damper control	Settings #1 #4 #7 Closing temperatures 50.6°F 42.3°F 34.1°F
12351006	Freezer temperature control	Settings #1 - in #4 - in #4 - out #7 - out Temperatures 16.4°F ±3° 19.2°F ±1.5° -4.9°F ±1.5° -9.6°F ±3°
B2150504	Drier	Drier must be changed every time the system is opened for testing or compressor replacement. Desiccant (20) 8 x 12 4AXH - 7 M>S> - Grams
R0131583	Condenser motor (ECM)	Volt Rotation (facing end opposite shaft) RPM Watt Current 115 VAC, 60 Hz Clockwise 1250 RPM 3.72 watts ± 15% 0.06 amps
67001509	Evaporator fan motor	Volt Rotation (facing end opposite shaft) RPM Watt Note: Fan blade must be fully seated on shaft to achieve proper airflow. 115 VAC, 60 Hz Clockwise 2800 RPM 5.9 ± 15% watts
12555902	Overload/Relay	Volt Ult. trip amps @ 158°F (70°C) Close temperature Open temperature Short time trip (seconds) Short time trip (amps @77°F (25°C) 125 VAC 3.51 amps 142°F ±6° 257°F ±3° 10 seconds ± 5 14 amps
R0131454	Thermostat (Defrost)	Volt Watt Current Resistance across terminals: Above 45°F ±5° Below 15°F ±7° Between 45°F ±5° and 15°F ±7° 120/240 VAC 1000 watts 10/5 amps Open Closed Will stay in current state (open or closed) until either 45°F ±5° or 15°F ±7° is reached.

Seconds to dispense 10 oz. water

Supply pressure	35 psig	45 psig	55 psig	75 psig
Filter model Bypass installed	9.0	8.0	7.0	6.0
Filter model New filter installed	11.0	10.0	8.0	7.0

A minimum supply pressure of 35 psig for water filter units. Minimum pressure requirement ensures that water valves close and sufficient water volume is available to fill icemaker. Proper fill is 140 cc. of water in 7.5 seconds. Failure of water valves to close because of low pressure will result in fill-tube freeze-up or dripping at cavity.

12566102 Adaptive Defrost Control (ADC)

 WARNING

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The ADC adapts the compressor run time between defrosts to achieve optimum defrost intervals by monitoring the cold control and length the defrost heater is on.
After initial power up, defrost intervals are 6 hr. (initial), 8 hr. (minimum), 96 hr. (maximum). Defrost is delayed for 4 min. after the control cycles compressor off.
Optimum defrost is 15 minutes. Each additional minute the defrost thermostat remains closed, 1 hr. is subtracted from the previous defrost interval. Each minute the thermostat opens prior to optimum defrost, it extends the next defrost interval 1 hr. ADC will terminate defrost at 30 minutes even if defrost thermostat has not opened and will reset the defrost interval to the 8 hr. minimum setting..
A 6 minute delay occurs after defrost thermostat opens before compressor is allowed to run. If defrost thermostat opens within 30 seconds of beginning of defrost, delay is by passed.
Four hours of continuous compressor run will initiate a defrost, and defrost interval re-sets to 8 hours.

Power up:if defrost thermostat is open, compressor is powered.

If defrost thermostat is closed, defrost is powered.

To Force or Terminate defrost: Toggle freezer door light switch 5 times within 6 sec

If cold control is open, a forced defrost will not occur until the cold control closes, then the ADC will immediately switch the function to defrost.

If cold control is closed and defrost terminator or heater circuit is open when defrost is forced, ADC shuts unit down momentarily and immediately restores power to refrigeration circuit.

If cold control is closed, a forced defrost is immediate without any delay (When the ADC cycles the unit into defrost on it's own defrost it is delayed until 4 minutes after the compressor has been cycled off by the cold control.)
When ADC is in defrost, cold control is closed and refrigeration is forced. ADC bypasses 6 minute dwell time.

Input Voltage Readings and Checks

E2 to E4 Line voltage should be present when the unit is powered
E6 to E4 Line voltage should be present when the cold control contacts are closed
E5 to E4 Line voltage should be present when the ADC is in defrost mode and the defrost terminator contacts are closed
E7 to E4 Line voltage should be present when the freezer door is open (freezer light switch closed)

Output Voltage Readings and Checks

E1 to E4 Line voltage should be present when the ADC is in defrost mode
E3 to E4 Line voltage should be present when the ADC is not in the defrost mode or compressor dwell mode

Dispenser Operation

Dispenser Operation

Select WATER, CRUSHED or CUBED mode by pushing the button on the dispenser panel. A green indicator light above the button indicates the current selection. Selection mode cannot be changed from CRUSHED to CUBED or from CUBED to CRUSHED while ice dispenser is in operation.

Dispenser Light

Light activates at full power when dispensing ice or water. A sensor activates light at half-power when light level around refrigerator is low. Activate or deactivate sensor by pushing AUTO LIGHT button located on control façade. Green light above AUTO LIGHT button indicates sensor is active.

Dispenser Lock

Prevents operation of water and ice dispensers. To activate or deactivate lock, press and hold DISPENSER LOCK button for 3 seconds. Green light above button indicates dispenser lock.

Automatic Lock Out

Shuts down both ice and water mechanisms of dispenser when either mechanism has run continuously for 3 minutes. To return power to dispenser, press and hold DISPENSER LOCK for 3 seconds. Auger motor shuts off automatically after 3 minutes of continuous operation. After about 3 minutes in shut-off state, auger motor resets automatically.

Filter Status Light

This feature reminds users to replace water filter after 6 months have passed or after 500 gallons of water are filtered, whichever happens first.

NOTE: Filter status light turns red after 6 months have passed or after 500 gallons of water are dispensed, even if bypass is installed and unit is used without filter cartridge.

Green light indicates filter in good condition. Red light indicates filter replacement needed.

The filter monitor works by keeping track of time:

- Six months is approximately 16 million seconds.
- The refrigerator's water system requires about 53,000 seconds to pass 500 gallons of water.
- Each second that water is dispensed counts as 1.20 ounces of water.
- An additional 3.20 ounces of water is counted every 30 minutes. This attempts to account for ice usage.

Filter Status Light Reset

Once filter light turns red, it remains red until reset. To reset filter indicator, press both DISPENSER LOCK and WATER pushbuttons simultaneously and hold for 4 seconds. Make sure green light flashes 3 times when indicator resets.