

**Multimedia
Enhanced**

Whirlpool®

SERVICE MANUAL

Multi-Door Freestanding Refrigerator



**KRMF606ESS
KRMF706EBS**

**KRMF706ESS
WRV976FDEM**

**WRV986FDEM
WRV996FDEE**

**WRV996FDEH
WRV996FDEM**

FORWARD

This Whirlpool Service Manual (Part No. W11338620), provides the In-Home Service Professional with service information for the “Multi-Door Freestanding Refrigerator.”

The Wiring Diagram used in this Service Manual is typical and should be used for training purposes only. Always use the Wiring Diagram supplied with the product tech sheet when servicing the refrigerator.

For specific operating and installation information on the model being serviced, refer to the “Use and Care Guide” or “Installation Instructions” provided with the refrigerator.

GOALS AND OBJECTIVES

The goal of this Service Manual is to provide information that will enable the In-Home Service Professional to properly diagnose malfunctions and repair the “Multi-Door Freestanding Refrigerator.”

The objectives of this Service Manual are to:

- Understand and follow proper safety precautions.
- Successfully troubleshoot and diagnose malfunctions.
- Successfully perform necessary repairs.

WHIRLPOOL CORPORATION assumes no responsibility for any repairs made on our products by anyone other than authorized In-Home Service Professionals.

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Multi-door Freestanding Refrigerator

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Notes

Section 1: General Information

This section provides general safety, parts, and information for the “Multi-Door Freestanding Refrigerators.”

- Refrigerator Safety
- Product Specifications
- Product Feature
 - Control Panel
- Model & Serial Label and Tech sheet
 - Location
- Model Nomenclature

Refrigerator Safety

Your safety and the safety of others are very important.

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word "DANGER" or "WARNING."

These words mean:

⚠ DANGER

You can be killed or seriously injured if you don't immediately follow instructions.

⚠ WARNING

You can be killed or seriously injured if you don't follow instructions.

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: To reduce the risk of fire, electric shock, or injury when using your refrigerator, follow these basic precautions:

- Plug into a grounded 3 prong outlet.
- Connect to a potable water supply only.
- Do not remove ground prong.
- Do not use an adapter.
- Do not use an extension cord.
- Disconnect power before servicing.
- Replace all parts and panels before operating.
- Remove doors from your old refrigerator
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Remove doors from your old refrigerator.
- Use nonflammable cleaner.
- Keep flammable materials and vapors, such as **gasoline, away from refrigerator.**
- Use two or more people to move and install refrigerator.
- Disconnect power before installing ice maker (on icemaker kit ready models only).
- Use a sturdy glass when dispensing ice (on some models).
- Do not hit the refrigerator glass doors (on some models).
- Children should be supervised to ensure that they do not play with the appliance.

SAVE THESE INSTRUCTIONS

Product Specifications

KitchenAid® 25.8 Cu. Ft. 36" Multi-Door Freestanding Refrigerator with Platinum Interior Design

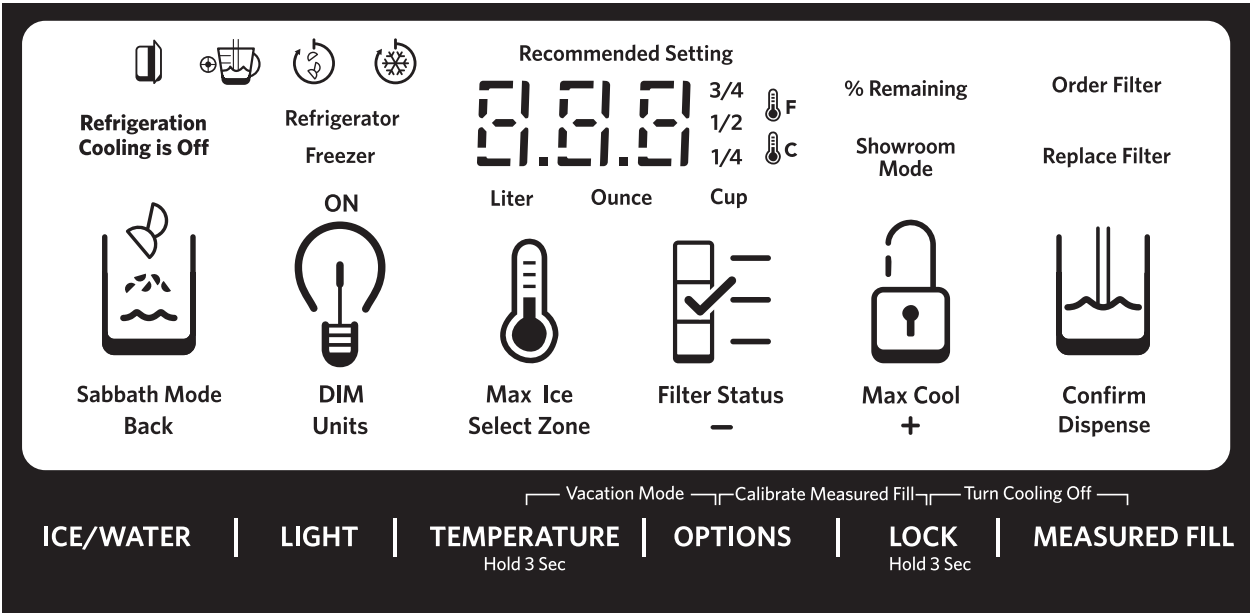
AHAM Volumes and Shelf Area	
Freezer Volume (Cu. Ft.)	7.61
Refrigerator Volume (Cu. Ft.)	18.15
Dimensions	
Capacity (FT3, Cu. Ft.)	25.76
Cabinet Width (IN, inches)	35 ⁵ / ₈
Cutout Height (IN, inches)	69
Cutout Width (IN, inches)	36
Depth Closed Excluding Handles (IN, inches)	34 ¹ / ₂
Depth Closed Including Handles (IN, inches)	36 ¹ / ₄
Depth Excluding Doors (IN, inches)	29
Depth With Door Open 90 Degree (IN, inches)	49
Depth (IN, inches)	36 ¹ / ₄
Height to Top of Cabinet (IN, inches)	68 ³ / ₈
Height to Top of Door Hinge (IN, inches)	70 ¹ / ₈
Height (IN, inches)	70 ¹ / ₈
Width (IN, inches)	36
Description	
Type of Refrigerator	French Door
Details	
Advance Foam Insulation	99.9% lower Global Warming Potential and Better Energy Performance
Cooling Type	Dual Evaporator
Exterior	
Base Grille Color	Gray
Cabinet Color	Gray
Cabinet Finish	Textured
Door Color	Stainless Steel
Door Finish	Smooth
Door Style	Flat
Handle Color	Stainless Steel
Handle Material	Metal
Handle Type	Reach Through Handle
Hidden Hinge	Yes
Number of Doors	5

GENERAL INFORMATION

Controls	
Air Filter Indicator/Reset	Yes
Automatic Defrost	Yes
Control Lockout	Yes
Door Ajar/Ope Alarm	Yes
Location of Controls	Exterior Dispenser
Max Cool/Fast Cool	Yes
Sabbath Mode	Yes
Type of Control	Electronic
Water Filter Indicator/Reset	Yes
Refrigerator Compartment	
Number of Interior Shelves	5
Conventional Shelves	No
Spill-Proof Glass Shelves	1 Adjustable Fold 1 Fixed Full Width 3 Adjustable Half Width
Shelf Supports	Cantilever
Humidity-Controlled Drawers	2 Half-Width
Non-Climate Control Drawers	No
Temperature-Controlled Drawers	2 External Refrigerated Drawers
Door Bins	1 Fixed Full-Width 3 Adjustable Gallon
Supplementary Containers	Herb Tender™ Container
Lighting	LED
Liner Finish	Platinum
Freezer Compartment	
Door Type	Pull-Out
Freezer Type	Slide-out Door 3 Tier
Shelves	No
Freezer Number of Shelves	0
Freezer Drawer/Basket	1 Full-Width Lower Plastic 1 Full-Width Middle Plastic 1 Full-Width Upper Plastic
Door Bins	Pizza Pocket
Light	LED
Dispenser	
Dispenser Type	Exterior Ice and Water
Dispenser Options	Control/Child Lock Filtered Water Measured/Metered Fill
Types of Ice	Crushed/Cubed
Icemaker	
Icemaker	Factory Installed
Icemaker Location	Refrigerator Door
Electrical	
Amps	20
Hz	60
Volts	115

Product Features

CONTROL PANEL



The controls are located above the external dispenser.

IMPORTANT: The display screen on the dispenser control panel will turn off automatically and enter “sleep” mode when the control buttons and dispenser paddles have not been used for 2 minutes or more. Press any control button to reactivate the display screen. The home screen will appear as shown.

Refrigerator Features

Temperature Controlled Exterior Drawer

IMPORTANT: The left-hand refrigerated drawer has its own temperature control. This control sets the temperature for this drawer only. The temperature for the right-hand drawer is set to the same temperature as the main refrigerator compartment.

■ Press SELECT to toggle through the temperature settings. The icon will illuminate when it is selected.



Meat/Fish	32°F (0°C)
Cold Drinks	34°F (1°C)
Greens/Herbs	36°F (2°C)
Deli/Cheese	38°F (3°C)
Thaw/Marinate	39°F (4°C)

Removable Interior Drawer Bins

The drawer bins are removable for ease in cleaning.

To remove and replace the interior bins:

1. To remove, grasp the sides of the bin and lift up and out.
2. To replace, with the rear of the bin facing the back of the refrigerator, lower the bin onto the drawer glides. See “Remove and Replace Drawer Fronts.”

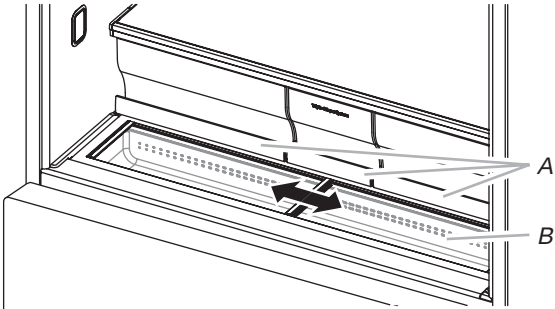
Adjustable Drawer Bin Dividers

Each refrigerated drawer has an interior drawer bin with a divider that can be inserted into one of three different positions or removed to customize the space for your food storage needs.

Easy Slide Bin

A shallow storage compartment with glass lids, which slide from side to side is located below and in front of the crisper drawers.

NOTE: This compartment is not temperature or humidity controlled, so it is not recommended for storing leafy vegetables.



A. Crisper drawer handles
B. Easy Slide bin

GENERAL INFORMATION

To remove Easy Slide bin:

1. Remove all three crisper drawers.
2. Hold the upper sliding lid near the trim and lift up to remove. Remove lower lid.
3. Grasp the front of the bin with both hands and lift up on the front to remove.

To replace Easy Slide bin:

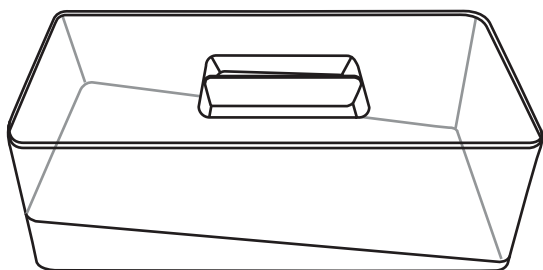
1. Slightly tilt the rear of the bin upward.
2. Align the center rib and tabs on the Easy Slide bin with the ribs and slots in the cabinet.
3. Lower the bin into place.

Herb Box

A box to store herbs and the water to keep them fresh is located within the Easy Slide bin. For your convenience, you can reposition the herb box anywhere along the length of the bin.

1. Slide open one of the bin doors to access the herb box.
2. Remove the herb box from the bin using two hands. One hand should hold the box while the other hand holds the lid.
3. Grasp the handle between your fingers and lift up to remove the lid.

NOTE: The bottom of the herb box is angled so that the roots of the herbs can be submerged in water while the leaves remain dry.



Important information to know about glass shelves and covers:

Do not clean glass shelves or covers with warm water when they are cold. Shelves and covers may break if exposed to sudden temperature changes or impact, such as bumping. Tempered glass is designed to shatter into many small, pebble-size pieces. This is normal. Glass shelves and covers are heavy. Use both hands when removing them to avoid dropping.

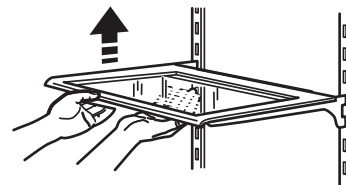
Shelves and Shelf Frames

The shelves in your refrigerator are adjustable to meet your individual storage needs.

Storing similar food items together in your refrigerator and adjusting the shelves to fit different heights of items will make finding the exact item you want easier. It will also reduce the amount of time the refrigerator door is open and save energy.

To remove and replace a shelf/shelf frame:

1. Remove the shelf/frame by tilting it up at the front and lifting it out of the shelf supports.
2. Replace the shelf/frame by guiding the rear shelf hooks into the shelf supports. Tilt the front of the shelf up until rear shelf hooks drop into the shelf supports.
3. Lower the front of the shelf and make sure that the shelf is in position.



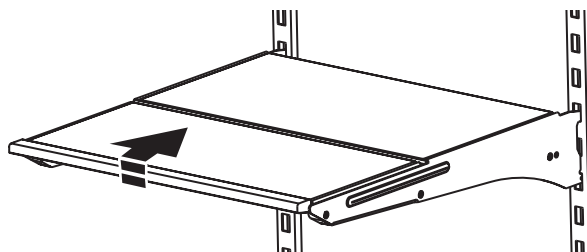
Shelves with under-shelf lighting (on some models):

- The hooks on the rear of the shelf must be fully engaged in the shelf supports to maintain proper electrical flow.
- No more than two shelves with under-shelf lighting may be used in the refrigerator at one time.

Tuck Away Shelf (on some models)

To retract and extend the front section of the shelf:

1. To retract the front-section of the shelf, slightly lift up on the front edge and push the adjustable portion of the shelf back toward the rear of the refrigerator.
2. Extend the front of the shelf by pulling the retracted portion of the shelf outward until it is fully extended.



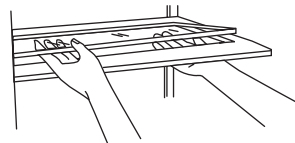
Crisper Drawers

To remove and replace the drawers:

1. Grasp the handle at the bottom of the drawer and slide the drawer straight out to the stop. Lift the drawer off the bottom guide.
2. Replace the drawer by placing it on the bottom drawer guide and pushing it past the drawer stop into position.

To remove the crisper(s) cover:

1. Remove crisper drawers.
2. Holding the glass insert firmly with one hand, press up in center of glass insert until it rises above the plastic frame. Gently slide the glass insert forward to remove.
3. Lift the cover frame up and remove it.



To replace crisper(s) cover:

1. Fit back of cover frame into supports on side walls of the refrigerator and lower the front of the cover frame into place.
2. Slide rear of glass insert into cover frame and lower front into place.
3. Replace crisper drawers.

Refrigerator Door Bins

The bins on your refrigerator door are adjustable to meet your individual storage needs.

NOTE: The smallest door bin must be installed in the lowest position on the refrigerator door.

Model & Serial Number and Tech Sheet Location

*Model and Serial plate.
Open the Left door
and look up to the
front of the ceiling.*

*Tech sheet is located
under the right
side hinge cover.*



Model Nomenclature

MODEL NUMBER	K	R	M	F	70	6	E	SS
INTERNATIONAL SALES OR MARKETING CHANNEL								
Brand K = KitchenAid								
Categories R = Freestanding Refrigeration B = Built-in Refrigeration								
Configuration/Fuel B = Bottom Mount (2-door) F = French Door (3-door) M = Multi Door (4+ door) S = Side by Side								
Product Detail R = Right-Swing Door L = Left-Swing Door X = Reversible Door F = Full Depth C = Counter Depth								
Feature Pack 10 = Non-Dispense 30 = Internal Water Dispenser 40 = External Ice & Water + White Liner 50 = External Ice & Water + White Liner + BB Interior 60 = External Ice & Water + White Liner + PB Interior 70 = External Ice & Water + Platinum Liner								
Capacity/Width 0 = 20 Cu. Ft. 2 = 22 Cu. Ft. 3 = 23 Cu. Ft. 4 = 24 Cu. Ft. 5 = 25 Cu. Ft. 6 = 26 Cu. Ft. 7 = 27 Cu. Ft. 9 = 19 OR 29 Cu. Ft.								
Year D = 2014 E = 2015 F = 2016								
Color BL = Black BS = Black Stainless BW = Premium Black with Watermarks PA = Panel Ready SB = Stainless Door with Black Cabinet SP = Stainless Steel with Pro-Style Handle SS = Stainless Steel								

Notes

Section 2: Diagnostics

This section provides diagnostic mode and sales mode information for the “Multi-Door Freestanding Refrigerator.”

- Safety
- Diagnostics Mode
- Load Test

For Service Technician Use Only

Safety

⚠ 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.

IMPORTANT: Electrostatic Discharge (ESD) Sensitive Electronics

ESD problems are present everywhere. ESD may damage or weaken the electronic control assembly. The new control assembly may appear to work well after repair is finished, but failure may occur at a later date due to ESD stress.

- Use an antistatic wrist strap. Connect wrist strap to green ground connection point or unpainted metal in the appliance

-OR-

Touch your finger repeatedly to a green ground connection point or unpainted metal in the appliance.

- Before removing the part from its package, touch the antistatic bag to a green ground connection point or unpainted metal in the appliance.
- Avoid touching electronic parts or terminal contacts; handle electronic control assembly by edges only.
- When repackaging failed electronic control assembly in antistatic bag, observe above instructions.

For Service Technician Use Only

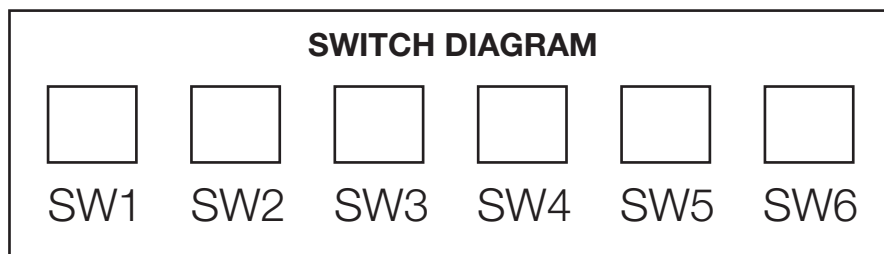
Diagnostics Mode

Component Specification

Component	Specifications of all parts 115VAC/60Hz unless noted	
Cooling		
Compressor	BTUH	Variable VEGDGH
	Watt	60 Hz / 98 W
	Current Lock rotor	3.3 A ± 15%
	Current Full load	3.3 A ± 15%
	Resistance Run windings	6.4 Ω ± 15%
	Resistance Start windings	6.4 Ω ± 8%@77°F
	Inverter	3.6 VDC, red/white = 120 VAC
Electric damper control	Maximum closing time	16 seconds
	Temperature Rating	-11°F - 110°F
	RPM	3
Condenser motor	Rotation (facing end opposite shaft)	Clockwise
	RPM	940
	Watt	3.9 W± 15% @115 VAC
	NOTE: Fan blade must be fully seated on shaft to achieve proper airflow.	
Refrigerator Evaporator fan motor	Rotation (facing end opposite shaft)	Clockwise
	RPM	940
	Watt	2.5± 15% W @12.7 VDC
Freezer Evaporator fan motor	Rotation (facing end opposite shaft)	Clockwise
	RPM	2700
	Watt	5.0± 15% W @12.7 VDC
	NOTE: Fan blade must be fully seated on shaft to achieve proper airflow.	
Freezer Evaporator Heater	Volt	115VAC
	Watt	435 ± 5% W
	Resistance	30.4± 5% Ω
Controls		
Control Board	Volt See control board section for diagnostics	120 VAC, 60HZ
Thermistor	Temperature	Resistance
	77°F	2700 Ω ± 5.0%
	36°F	7964 Ω ± 1.0%
	0°F	23,345 Ω ± 2.0%
Light switch	Type	SPDT NO/NC
	Volt	125/250 VAC
	Current	8/4 A
Ice & Water		
Dual Water Valve	Watts	Green side 10 W Red side 35 W
Isolation Valve	Watts	20 W (Green)
Ice Box Fan	Rotation (facing end opposite shaft)	Clockwise
	RPM	3500
	Watt	3.8 W ± 15% @ 12.7 VDC

For Service Technician Use Only

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.
- Allow 20 minutes to pass.
- Disconnect the product from power.
- Following the exit of the diagnostic mode, the controls will then resume normal operation.

NOTES:

- Cooling diagnostics are steps 1 through 6 and 32 through 41.
- 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.

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/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	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.	1.3	1.9	3.6	49.4%	85.3%	89.2%	28.6	18.8	8.6	36.8°F 2.7°C	36.4°F 2.4°C	36.8°F 2.6°C	-2.1°F -18.9°C	1.6°F -18.7°C	7.3°F -13.7°C	24.5°F -4.2°C	22.2°F -5.5°C	21.6°F -5.8°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		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	90°F 32°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	70°F 21°C	90°F 32°C
29 Cu. Ft.	22.2°F -5.4°C	23.2°F -4.9°C	-5.7°F -20.9°C	-6°F -21.1°C	86.5°F 30.3°C	104°F 40°C	38	67.1	31.1	31.3	121	161.3

* Pressures during FC cycle

For Service Technician Use Only

Diagnostic Load (Service) Test

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

- Control the RC & FC Evaporator Fan Motors by depressing SW3. (01 = Both Fan Mtr. off, 02 = FC Fan on).
- Depress SW3 once to advance. Step 3 will flash quickly and advances to steps 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 air flow inside pantry on left hand side when damper is open, 912 displayed). Air flow in pantry will cease when 23 is displayed.
- Depress SW3 to advance to last step.
(04 = Both RC & FC fans on).

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

- There will be a delay of 3 seconds before start of sub step 01. Each step is timed and will be automatically proceed to the next step. User will not be allowed to exit step. If exit is attempted, an invalid chime will be produced.
- Control the Sealed System loads selecting SW3.
01 = Initialize Dual Evap Valve in home position (4 min)
02 = Close both RC & FC Evap Valve (1 min)
03 = Turn compressor ON (1 min)
04 = Keep compressor ON, drive the valve to RC position & turn RC fan ON
05 = Keep compressor ON, drive the valve to FC position & turn FC fan ON. Verify air flow from the evaporator fan.
NOTE: Advance quickly through step 4 keep from locking in. Once locked in you can't exit, must wait ten minutes approximately.

Service Test - 5 Compressor Status/Speed

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

Service Test - 6 Defrost Heater/Bimetal/Sensor

- Switch on the defrost heater, wait 0.5 seconds and read the status of bimetal/sensor. Display will be blank until a valid reading is displayed.
01 = Bimetal Closed/Sensor Short
02 = Bimetal Open/Sensor Open
03 = Pass (only in case a defrost sensor is present).

Service Test - 7 Defrost Mode

- Set the Defrost Mode using CHANGE SETTING KEYS. This value shall be stored on EEPROM (in the next Power-up the Defrost Mode shall be initialized according to this setting.)
Initial display 01 = ADC ON
02 = Basic Mode ON (8 hour timer).

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.

NOTE: Do not use SW4 and 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	
Dispenser 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 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 or not present, 02 = Bin Not Full).

Service Test - 16 RC Left 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 = FC Door Open, 02 = FC Door Closed).

Service Test - 17 RC Right, Pantries, FC Doors 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 - 18 Ice Door Motor

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

Service Test - 19 Ice Maker Fill Tube Heater Status

- Control the Ice Maker Fill Tube 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.

For Service Technician Use Only

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 12|3.

Service Test - 22 Water Filter Usage

- Displays in two sequential flashes the current water filter status in gallons used since last rest 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 12|3.

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 12|3.

Service Test - 24 Water Filter Reset

- Display in two sequential flashes the current times the water filter was rest on the UI display. Wait until dash is displayed which means the end of the number. (00/00/00 to 99/99/99) Example: 123 will be displayed as 12|3.

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 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 - 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 Million 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.

Service Test - 39 RC Evap. 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 selecting SW3.
(Toggle between On and Off) (01 = ON, 02 = OFF).

Service Test - 42 UI EEPROM Control Software Version

NOTE: Not normally used.

- Displays in three sequential flashed 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 INITIATION 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 stat on the UI display. Press SW3 to start a 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 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, E1 = No Cooling, E2 = Motor Lost Position, E3 = Heater Timeout, E4 = Dry Cycle, E5 = Timed Ice Making).

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.

For Service Technician Use Only

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 SW 3 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 = Harvesting Completed,

2 = Harvesting Not Completed.

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

Service Test - 60 Pantry UI Software Version

- Displays in three sequential flashes the Pantry 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 - 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 timeout.

Service Test - 64 Pantry UI Button Test

- Displays the pantry UI Buttons status.

Label	Control Key	Digit 1	Digit 2
Select	SW705	0	2

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 Bimetal Faulty
E6 = Dispenser UI EEPROM Faulty, Er = Communication Failure).
- 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 not installed, 02 = Switch closed/filter installed).

Service Test - 73 Pantry Heater Status

- Control the Pantry Heater selecting SW3 (toggle between On and Off) (01 = ON, 02 = OFF).

Service Test - 76 Icebox Fascia Heater

- Control the Icebox Fascia Heater selecting SW3 (toggle between On and Off) (00 = OFF, 01 = ON).

Service Test - 77 Defrost Thermistor

- The board will check the resistance value of the thermistor and display (01 = PASS, 02 = OPEN, 03 = SHORT).

Service Test - 78 Pantry UI Flashmap Version

- Displays in three sequential flashes the pantry UI flashmap version on the UI Display.

NOTE: This is repeatedly displayed during all time in the step. 00/00.00 to 99/99/99.

Service Test - 80 LED Driver Software Version

NOTE: Not normally used

- Displays in three sequential flashes the LED driver software version on the UI Display.

NOTE: This is repeatedly displayed during all time in the step. 00/00.00 to 99/99/99.

Service Test - 81 LED Driver Flash Software Version

NOTE: Not Normally Used

- Displays in three sequential flashes the LED driver flash software version on the UI Display.

NOTE: This is repeatedly displayed during all time in the step. 00/00.00 to 99/99/99.

For Service Technician Use Only
Notes

Section 3: Component Testing

This section provides the wiring diagram and component location for the “Multi-Door Freestanding Refrigerator.”

- Safety
- Wiring Diagram
- Component Location

For Service Technician Use Only

Safety

⚠ 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.

IMPORTANT: Electrostatic Discharge (ESD) Sensitive Electronics

ESD problems are present everywhere. ESD may damage or weaken the electronic control assembly. The new control assembly may appear to work well after repair is finished, but failure may occur at a later date due to ESD stress.

- Use an antistatic wrist strap. Connect wrist strap to green ground connection point or unpainted metal in the appliance

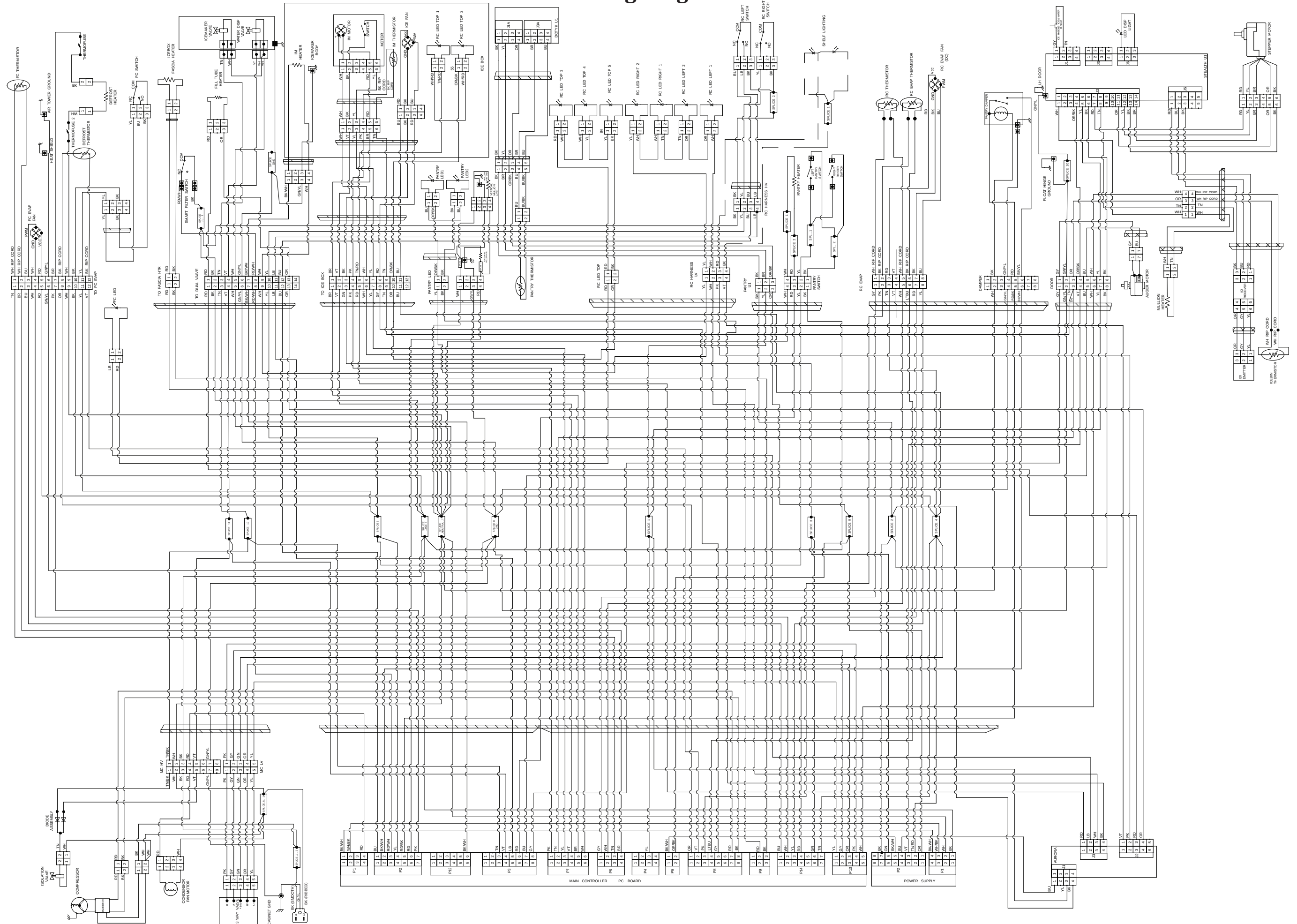
-OR-

Touch your finger repeatedly to a green ground connection point or unpainted metal in the appliance.

- Before removing the part from its package, touch the antistatic bag to a green ground connection point or unpainted metal in the appliance.
- Avoid touching electronic parts or terminal contacts; handle electronic control assembly by edges only.
- When repackaging failed electronic control assembly in antistatic bag, observe above instructions.

For Service Technician Use Only

Wiring Diagram



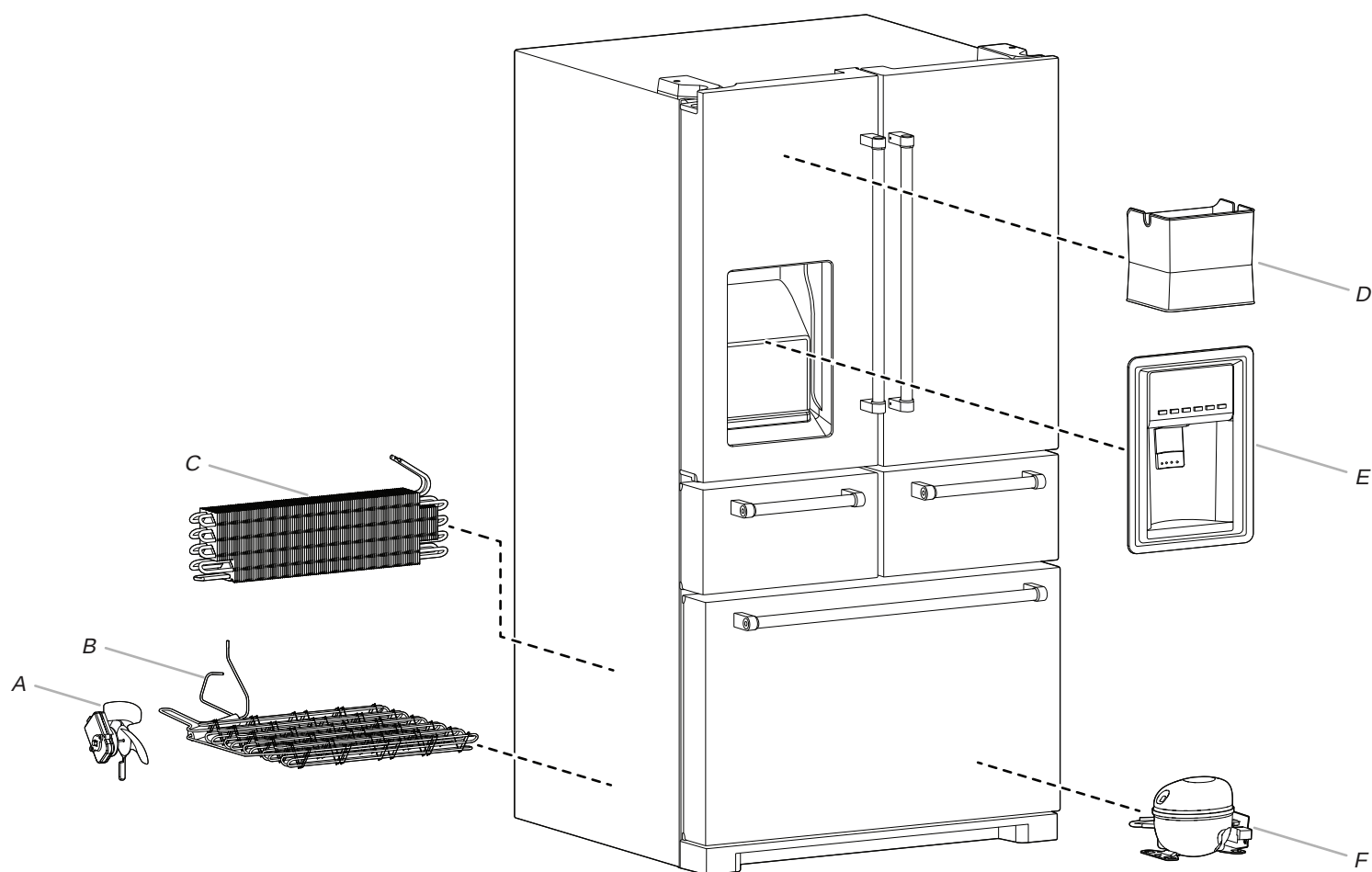
For Service Technician Use Only

	CONNECTOR	FROM	TO	VOLTAGE	CONDITIONS
POWER	P1	P1-1	P1-2	115 VAC	CONSTANT 115 VAC
		P1-3	P1-4		CONSTANT 115 VAC
	P2	P2-1	P2-5	CONSTANT 12.7 VDC	CONSTANT 12.7 VDC
		P2-2	P2-6		CONSTANT 12.7 VDC
		P2-3	P2-7		CONSTANT 12.7 VDC
		P2-4	P2-8		
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 DOOE OPEN 115 V. DOOR CLOSED = 0 V
		P2-2	P1-2		AIR BAFFLE FEEDBACK. ACTIVATE SERVICE TEST 3, STEP 3.
		P2-3	P1-2		FC DOOR OR LEFT PANTRY DOOR OR RIGHT PANTRY DOOR OR RIGHT RC DOOR OPEN 115 V, DOORS CLOSED 0 V
		P2-4	P1-1		WATER FILTER REMOVED 115 V, FILTER INSTALLED 0 V
		P2-5	P1-2		AIR BAFFLE OUTPUT. ACTIVATE SERVICE TEST 3, STEP 3
		P2-6	P1-2		HORIZONTAL MULLION HEATER, VERTICAL MULLION HEATER OUTPUT 01 = 115 V, 02 = 0 V
		P2-7	P1-2		FC DEFROST HEATER OUTPUT, THERMO FUSE. SERVICE TEST 6. 115 V
	P3	P3-3	P1-2		ICE MAKER WATER VALVE. SERVICE TEST 25. DIGIT 1 = 1 = 115 V
		P3-4	P1-2		WATER DISPENSING VALVE. SERVICE TEST 25. DIGIT 2 = 1 = 115 V
		P3-5	P1-1		LEFT RC DOOR MUST BE CLOSED = 115 V. OPEN = 0 V
		P3-6	P1-2		PANTRY HEATER OUTPUT, SERVICE TEST 73 19, 01 = 115 V, 02 = 0 V
		P3-7	P3-8	130 VDC	AUGER OUTPUT. LH RC DOOR CLOSED, ACTIVATE ICE PADDLE = 130 - 140 VDC
	P4	P4-3	COMMUNICATION		
	P5	P5-1	P5-2	5 VDC	RC THERMISTOR OUTPUT = 1.5 - 5 VDC. MAXIMUM
		P5-3	P5-4		FC THERMISTOR OUTPUT = 1.5 - 5 VDC. MAXIMUM
	P6	P6-1	P6-2	12.7 VDC	CONSTANT 12.7 VDC
	P7	P7-1	P7-2	5 VDC	IM THERMISTOR OUTPUT = 1.5 - 5 VDC. MAXIMUM
		P7-3	P7-4	12.7 VDC	IM SWITCH
		P7-5	P7-6	12.7 VDC	IM MOTOR OUTPUT TEST 57, SW3 TO ACTIVATE. UP TO 2 MIN. DELAY
	P8	P8-1	P8-2	5 VDC	FC DEFROST THERMISTOR OUTPUT= 1.5 - 5 VDC MAXIMUM
		P8-5			ICE BOX FAN PWM CONNECTION
		P8-3	P8-4	5 VDC	RC EVAP THERMISTOR OUTPUT = 1.5 - 5 VDC MAXIMUM
		P8-7	P8-8	3-6 VDC	INVERTER OUTPUT 3-6 VDC CONSTANT WHEN COMPRESSOR IS RUNNING
	P9	P9-2	P9-3	12 VDC	ICE BOX FASCIA HEATER OUTPUT
	P12	P12-6	P1-2		IM HEATER OUTPUT TEST 58. WHEN DIGIT 1 = 1 HEATER ON (115 V)
	P13	P13-1	P13-2		3 WAY REFRIGERANT VALVE, CAN NOT CHECK VOLTAGE OUTPUT
		P13-3	P13-4		3 WAY REFRIGERANT VALVE, CAN NOT CHECK VOLTAGE OUTPUT
		P13-5		5 VDC	ICE BOX SENSOR
	P14	P14-1	P14-2	14 VDC	FC FAN MOTOR. OUTPUT ACTIVE SERVICE TEST 3, STEP 2
		P14-3	P14-4		RC FAN MOTOR. OUTPUT ACTIVE SERVICE TEST 3, STEP 3
		P14-7	P14-6		CONSTANT 14 VDC

	CONNECTOR	FROM	TO	VOLTAGE	CONDITIONS
EMITTER/RECEIVER	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			
PANTRY UI	J1A	J1A-4	J1A-1	14 VDC	CONSTANT 14 VDC
		J1A-2	COMMUNICATION		
	J3A	J3-2	J3-4	5 VDC	PANTRY THERMISTOR OUTPUT = 1.5 - 5 VDC MAXIMUM
DISPENSER BOARD	J1	J1-1	J1-2	14 VDC	* 0 VDC WHEN ICE DISPENSER PAD IS PRESSED, 14 VDC WHEN RELEASED
		J1-1	J1-3		* ICE DISPENSER BUTTON IS PRESSED, (IF J1-3 USED)
		J1-2	J1-3		* ICE DISPENSER PAD IS PRESSED, (IF J1-3 USED)
	J2	J2-1	J2-8	14 VDC	FLIPPER MULLION HEATER IN ON
		J2-4	J2-6	14 VDC	CONSTANT 14 VDC
		J2-7	J2-11	14 VDC	* ICE DOOR STEPPER MOTOR IS ACTIVE
		J2-7	J2-12		* ICE DOOR STEPPER MOTOR IS ACTIVE
		J2-7	J2-13		* ICE DOOR STEPPER MOTOR IS ACTIVE
		J2-7	J2-14		* ICE DOOR STEPPER MOTOR IS ACTIVE
	J3	J3-1	J3-2	14 VDC	* 0 VDC WHEN ICE DISPENSER PAD IS PRESSED, 14 VDC WHEN RELEASED
		J3-1	J3-3		* WATER DISPENSER BUTTON 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
		J5-2	COMMUNICATION		
	J6	J6-1	J6-3	14 VDC	DISPENSER LIGHT ON
AURORA	P1	P1-1	P1-4		CONSTANT 12.7 VDC
		P1-3	COMMUNICATION		
	P2	P2-1	P2-2		SHELF LIGHTING OUTPUT
		P2-3	P2-4		FILL TUBE HEATER FREEZER FC IM, FILL TUBE HEATER RC IM OUTPUT
	P3	P3-1	P3-2		CAVITY LIGHT (POINT LED'S) OUTPUT
		P3-3	P3-4		CAVITY LIGHT (POINT LED'S) OUTPUT

For Service Technician Use Only

Component Location



- A. Condenser Fan
- B. Condenser
- C. Freezer Evaporator

- D. Ice Crusher Box
- E. Front Door Dispenser Unit
- F. Compressor

For Service Technician Use Only
Notes

Section 4: Component Access

This section provides service parts access, removal, and replacement instructions for the “Multi-Door Freestanding Refrigerator.”

- Machine Compartment Components
 - 3 way refrigerant valve
 - Refrigerant Check Valve
 - Water Valve
 - Inverter
 - Compressor
- Accessing Refrigerator Compartment Components
 - Ice Box Fascia
 - Water Filter
 - Water Reservoir Cover
 - LED Light Modules
 - Water Reservoir and Valve Assembly
 - Temperature-Controlled (DELI) Drawer
 - (DELI) Drawer User Interface
 - Crisper Base
 - Vertical Mullion
 - Secondary Mullion
 - Center Divider
 - Air Tower
 - RC Evaporator and Component Access
 - Deli Air Damper
 - RC Evaporator Fan Motor
 - RC Evaporator Thermistor
 - RC Defrost Thermistor
 - Door Switch
- Accessing Freezer Compartment Components
 - Freezer Handle
 - Freezer Baskets and Rails
 - FC Evaporator and Component Access
 - Door Switch
- Accessing Ice Maker and Dispenser Components
 - Ice Box Assembly
 - Ice Maker Fill-Tube
 - Ice Maker and Fan Motor
 - Dispenser

Machine Compartment Components

⚠ 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.

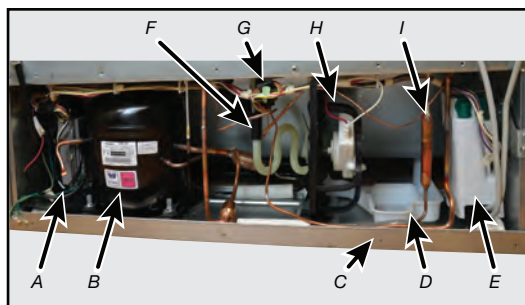
Machine Compartment Cover

1. Unplug refrigerator or disconnect power.
2. Access the machine compartment components by removing screws holding machine compartment cover on back of refrigerator.

NOTE: The components located in the machine compartment have been used on previously manufactured bottom freezer refrigerators with these exceptions:

- 3 way refrigeration valve.
- Refrigerant check valve.

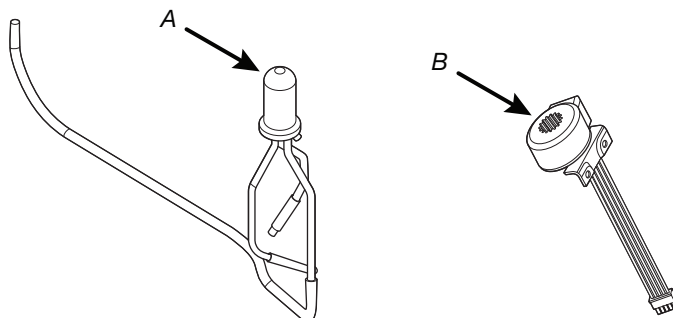
Below picture shows the components located in the machine compartment:



- A. Inverter
- B. Compressor
- C. Check valve
- D. Evaporation Pan
- E. Water valve
- F. Drain tube
- G. 3 Way valve
- H. Condenser fan
- I. Drier

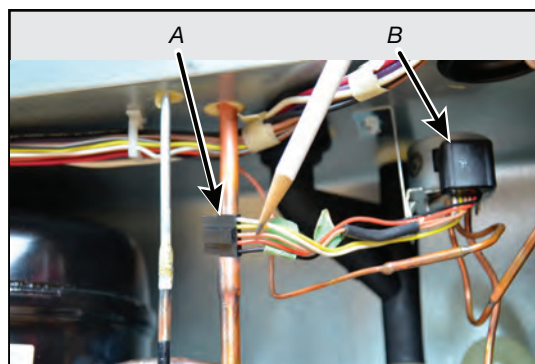
3 way refrigerant valve

3. The 3 way refrigerant valve (RKV) consists of two separate components, a replaceable magnetic operating coil and the actuating valve (valve body). The valve body is part of the sealed system and requires no repair unless there is a leak at one of the joints. The magnetic operating coil is replaceable.



A. Valve Body (Part of the sealed system) B. Magnetic Operating Coil (Replaceable)

4. Disconnect wire harness connector to coil. Straighten the three metal tabs holding the coil on the valve and then lift off.



A. Connector
B. Coil

NOTE: When replacing the magnetic coil, position the coil on the valve body and align the bendable tabs on the coil with the slots in the valve body. Firmly seat the coil and use pliers to bend tabs over to lock the coil in place.

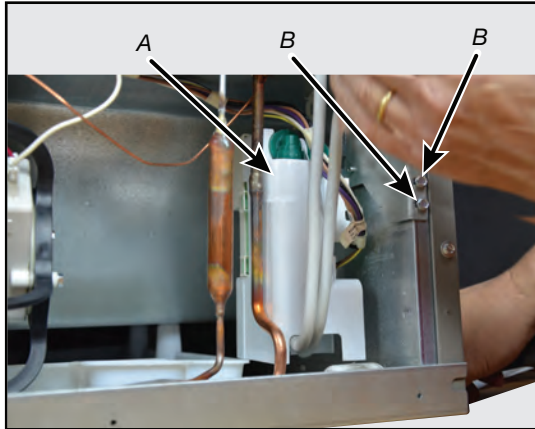
Refrigerant Check Valve

1. Unplug refrigerator or disconnect power.
2. Access the refrigerant check valve by removing screws holding machine compartment cover on back of refrigerator.
3. The refrigerant check valve is used to isolate the evaporators and prevents refrigerant flow back into the evaporator. The refrigerant check valve is part of the sealed system and requires no repair unless there is a leak at one of the joints.

Machine Compartment Components (Continued)

Water Valve

1. Unplug refrigerator or disconnect power.
2. Access the water valve by removing screws holding machine compartment cover on back of refrigerator.
3. To remove the water valve, remove the screws securing the valve to the machine compartment base.



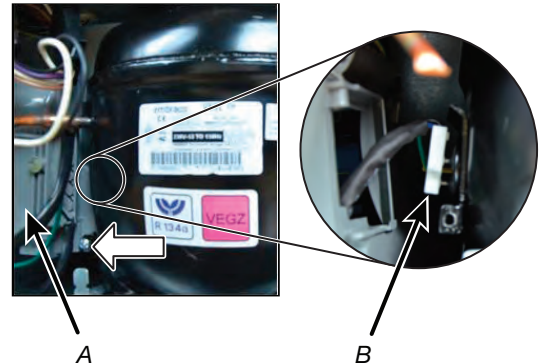
A. Water valve
B. Screws

4. Unplug the wire harnesses. Disconnect the water lines.

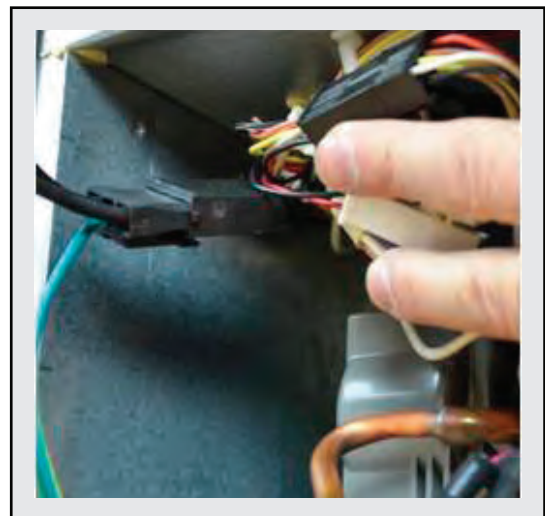


Inverter

1. Unplug refrigerator or disconnect power.
2. Access the inverter by removing screws holding machine compartment cover on back of refrigerator.
3. Remove the Phillips screw securing the inverter to the compressor terminal housing.

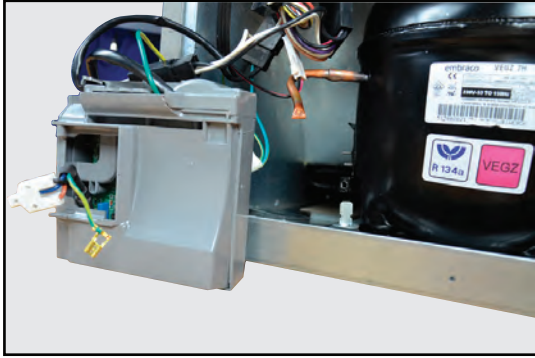


4. Position the main cabinet wiring harness out of the way to access the inverter.



Machine Compartment Components (Continued)

5. Pull the inverter far enough away from the compressor to disconnect the green chassis ground wire and the compressor terminal block.



Compressor

6. Access the compressor terminal block as shown in below figure to make resistance checks. The compressor is part of the sealed system.



A. Compressor terminal

Accessing Refrigerator Compartment Components

⚠ WARNING



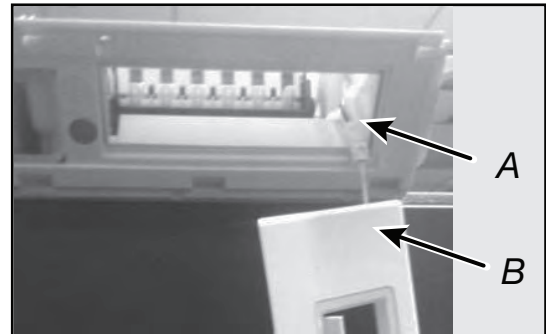
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

NOTE: If your ice box assembly has a revised ice box fascia with heater, you will need to disconnect the fascia heater wiring harness.

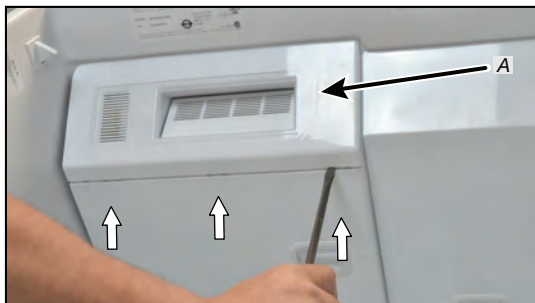


A. Fascia heater wiring harness connector

B. Ice box fascia

Ice Box Fascia

1. Unplug refrigerator or disconnect power.
2. Open both refrigerator compartment doors.
3. Remove all items from top shelves.
4. Remove the top shelves by tilting it up at the front and lifting it out of the shelf supports.
5. Remove ice box fascia using a flat blade screwdriver. Pull out bottom of fascia to disengage upper tabs.

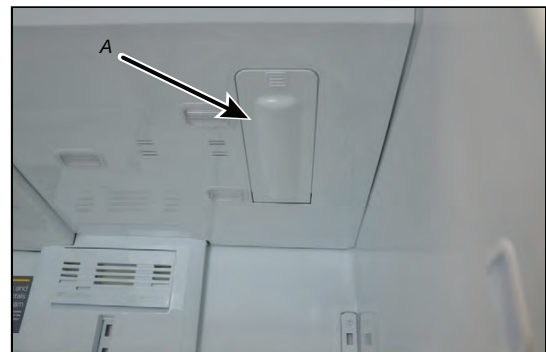


A. Ice box fascia



Water Filter

6. Locate water filter door, twist water filter counter-clockwise to remove.



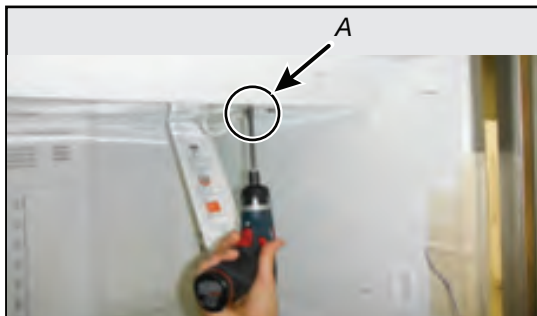
A. Water filter door



Accessing Refrigerator Compartment Components (Continued)

Water Reservoir Cover

7. Using a 1/4" (6.4 mm) nut driver remove the two screws from under the water filter door.

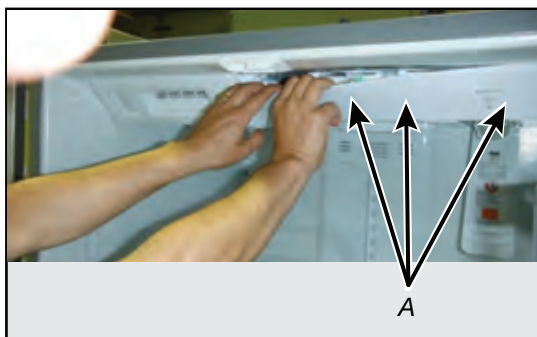


A. Two screws

8. Starting from the ice box side, place a flat head screw driver between the water reservoir cover and refrigerator compartment liner creating enough room to place your hand between the two.

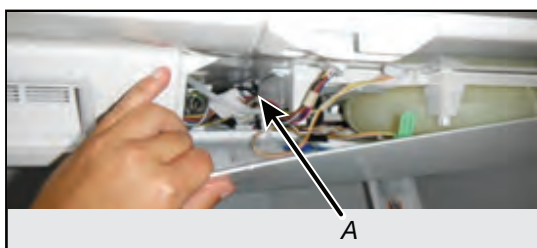


9. Working from left to right, slide your hand between the water reservoir cover and refrigerator compartment liner to disengage the snaps.



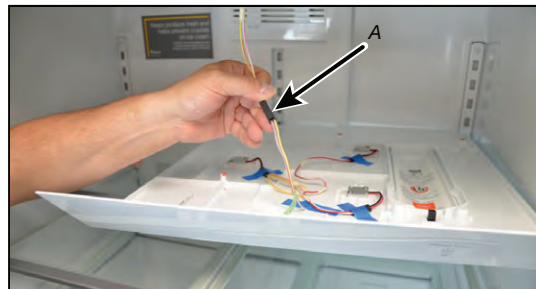
A. Snaps (not shown)

10. Disengage rear left snap.



A. Snap

11. To remove the water reservoir cover, slide it forward and disconnect LED lighting connector.



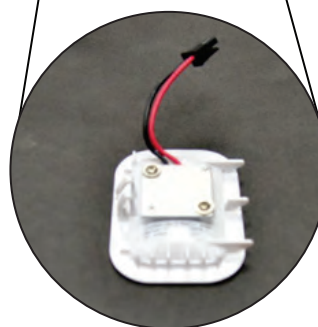
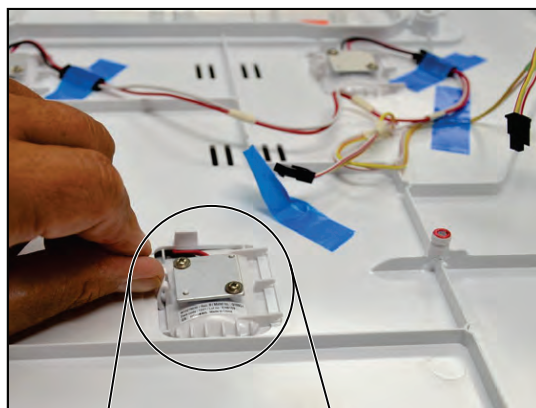
A. LED connector



LED Light Modules

12. To remove LED light modules from water reservoir cover, lift out.

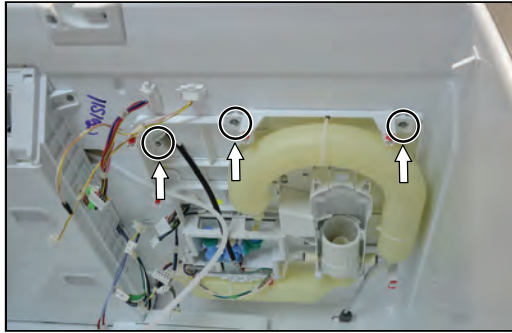
NOTE: To remove LED modules from bottom of ice box assembly and cabinet walls, protect the liner while using a putty knife to pry them out.



Accessing Refrigerator Compartment Components (Continued)

Water Reservoir and Valve Assembly

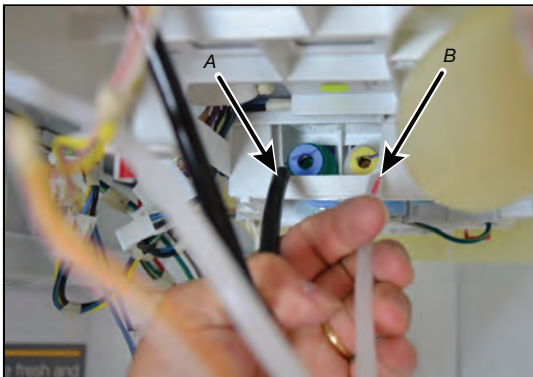
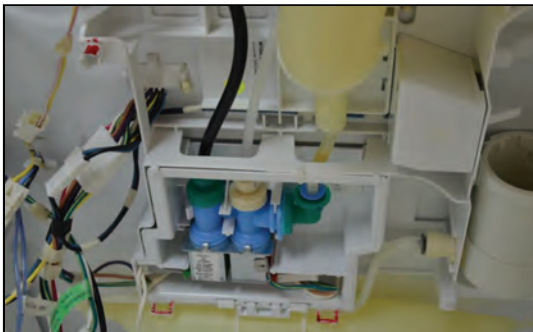
13. Remove three, 1/4" (6.4 mm) hex head screws.



14. Disconnect ice maker fill tube from the isolation valve connected to the filter head.

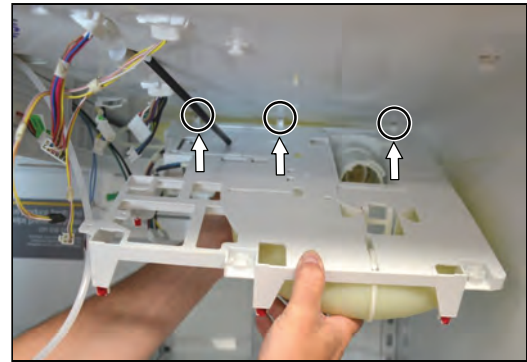


15. Disconnect electrical connections to water reservoir and valve assembly. Disconnect dispenser and ice maker fill tubes.



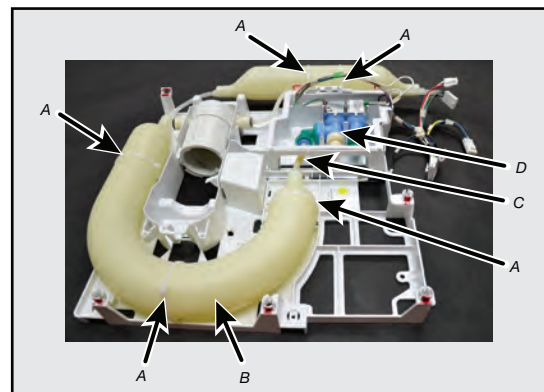
A. Dispenser fill tube
B. Ice Maker fill tube

16. Drop the front of the housing and disengage the 3 rear tabs from the three slots in the top of the refrigerator cabinet.



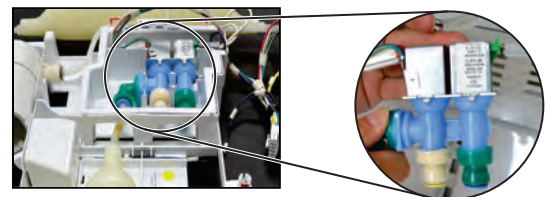
17. Disconnect 1/4" (6.4 mm) reservoir water tube from dual water valve and cut the five nylon wire ties to remove reservoir.

NOTE: Reservoir wire ties do not need to be removed to access remaining water reservoir and valve assembly components.



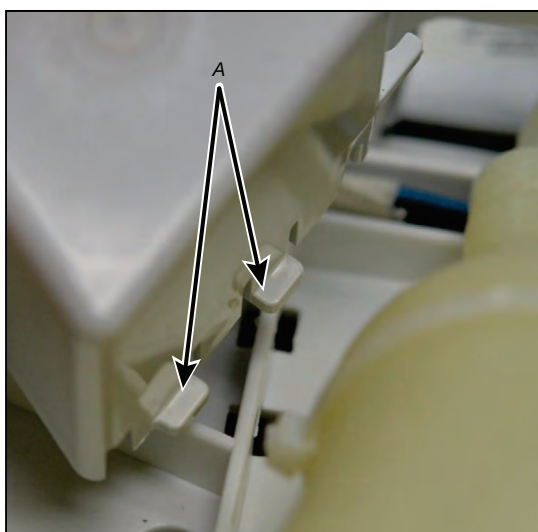
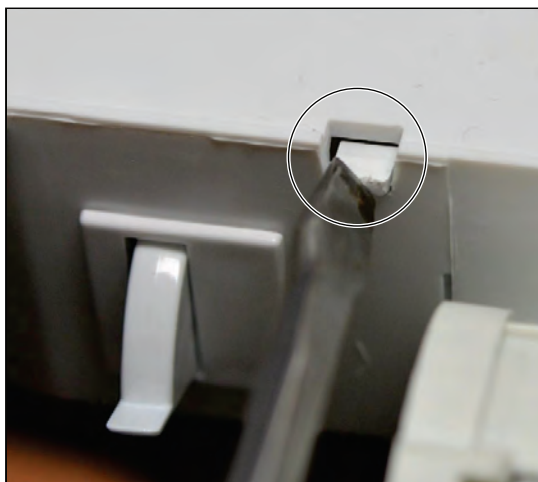
A. Wire ties
B. Reservoir
C. 1/4" (6.4 mm) reservoir water tube
D. Dual water valve

18. Lift dual water valve to remove.



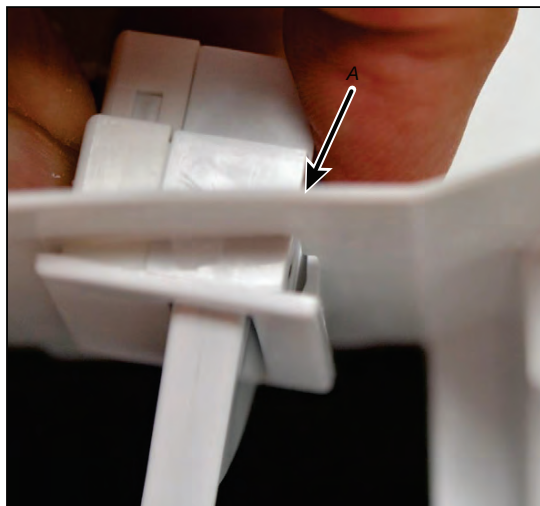
Accessing Refrigerator Compartment Components (Continued)

19. Depress tab and lift up on filter switch cover to disengage the two tabs on opposite side to remove cover.

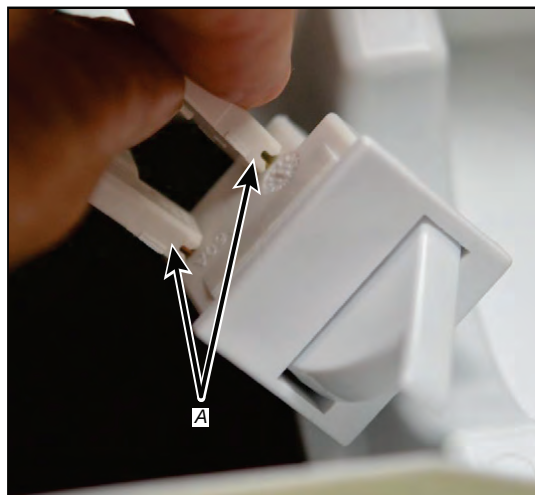


A. Tabs

20. To remove filter switch, depress release tab and push the switch through, disconnect wires.



A. Release tab



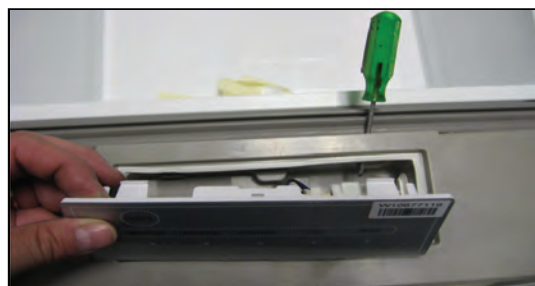
A. Connectors

Temperature-Controlled (DELI) Drawer

1. Unplug refrigerator or disconnect power.
2. Open both refrigerator compartment doors.
3. Remove all items on the bottom shelves.

(DELI) Drawer User Interface

4. To remove drawer interface, insert a screwdriver and push tabs. Disconnect wiring harness and separate the deli user interface control board.



(DELI) Drawer Door

5. Push on the tab and lift the door off to remove the crisper and pantry door.



Accessing Refrigerator Compartment Components (Continued)

6. Disconnect the wiring before removing the pantry door from the rails. Remove the wiring cover from the inside of the door. Push out the release tabs and pull the harness connection to remove.



How to Remove Center Crisper to access the refrigerator evaporator



Horizontal Alignment



Vertical Alignment



Pantry Door fronts



Crisper Base

1. Complete **Refrigerator Compartment Components** instructions steps [1-10](#) and **Temperature Controlled (DELI) Drawer** instructions steps [1-6](#).
2. Remove the foam piece on the front which pops up.



3. Lift the crisper base out.



4. At the front-left side, remove the harness cover using a flat blade screwdriver.



Accessing Refrigerator Compartment Components (Continued)

5. Remove the harness out and unplug.



6. Release the crisper base locks on the left and right side using flat blade screwdriver.



7. Remove the screws under the crisper base.



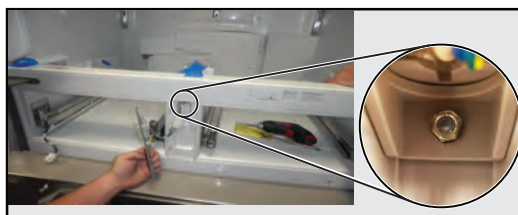
8. Lift up the crisper base to remove.

Vertical Mullion

9. Carefully pry at sides to pop out the vertical mullion and unhook.



10. Remove 1/4" (6.4 mm) small vertical mullion and screw at the top.



11. Remove doors and lower hinges.



Accessing Refrigerator Compartment Components (Continued)

Secondary Mullion

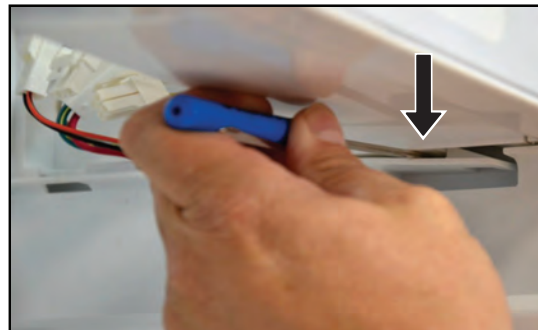
- 12.** Depress tabs to remove right side and left side harness cover. Disconnect harness.



- 13.** Release the tabs under the mullion at the both end.



- 14.**



- 15.** Slide out the secondary mullion slightly.

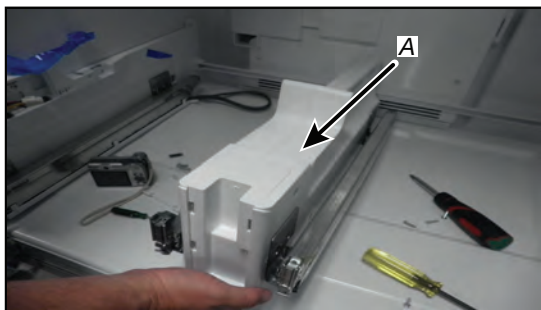


- 16.** Remove the secondary mullion out using both hands.

Accessing Refrigerator Compartment Components (Continued)

Center Divider

17. Pull forward the center divider and lift out.

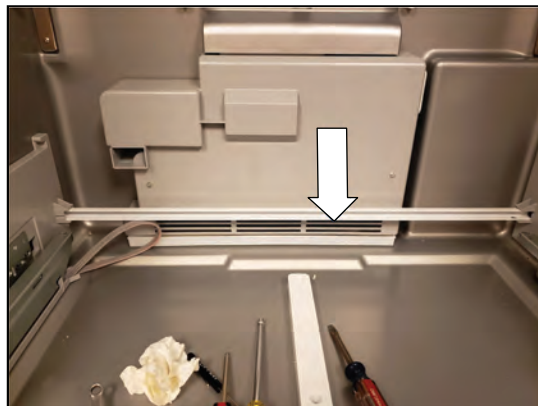


A. Center Divider

18. To remove the rails on the divider, remove the two screws holding the divider.
NOTE: When removing rails on either sides of divider there is a screw that goes into the rail on other side to help hold it. Remove this screw also.



19. Remove rear support by sliding the rail to the left and pulling the right side out and forward.



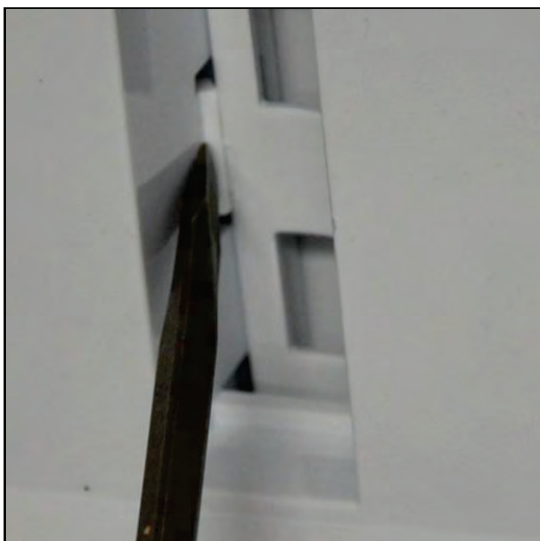
20. Remove side rail assemblies on both sides by lifting up and pulling forward.



Accessing Refrigerator Compartment Components (Continued)

Air Tower

1. Complete **Refrigerator Compartment Components** instructions steps [1-10](#) and **Temperature Controlled (DELI) Drawer** instructions steps [1-6](#).
2. Remove any remaining items and shelves in Refrigerator Compartment.
3. Release 6 locking tabs, there are two tabs at 3 locations along the center shelf rail.

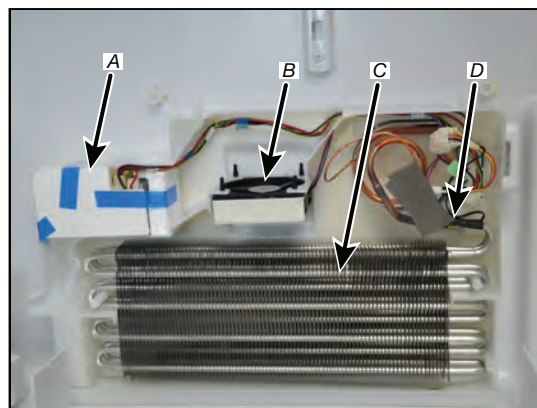


4. Drop down the air tower and remove.



RC Evaporator and Component Access

5. Remove two, 1/4" (6.4 mm) hex head screws to remove RC evaporator cover to access RC evaporator and evaporator components.

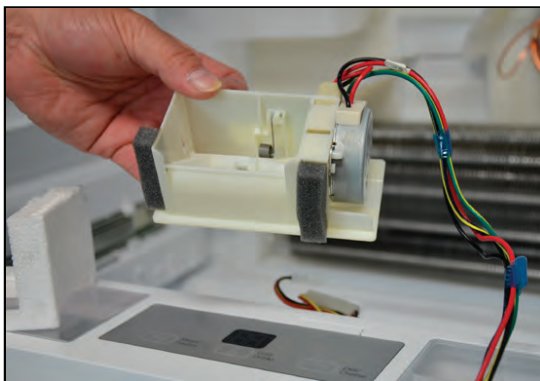
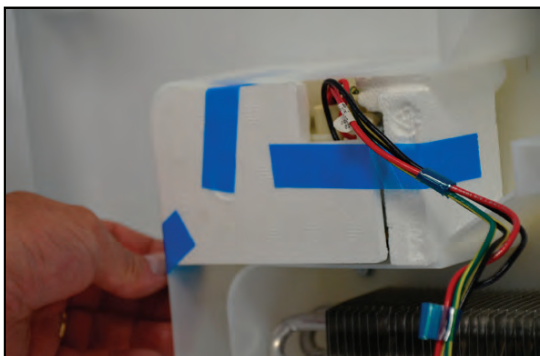


- A. Deli air damper
 B. RC evaporator fan motor
 C. Evaporator
 D. RC evaporator thermistor

Accessing Refrigerator Compartment Components (Continued)

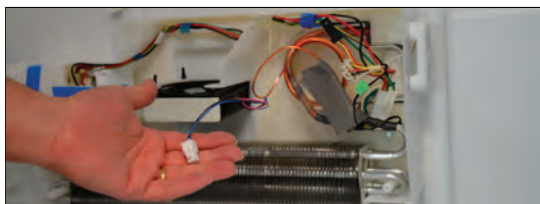
Deli Air Damper

6. Remove tape to access deli air damper.

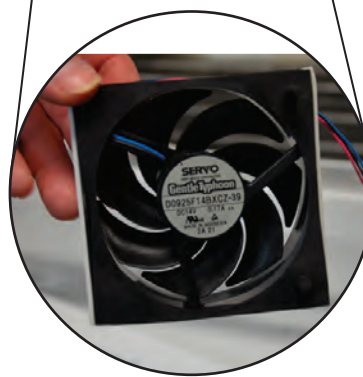
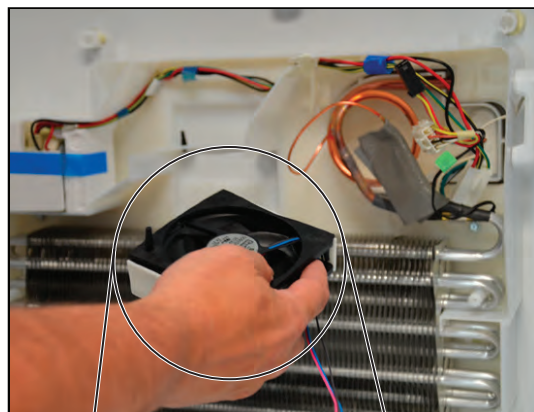


RC Evaporator Fan Motor

7. Disconnect wire harness.

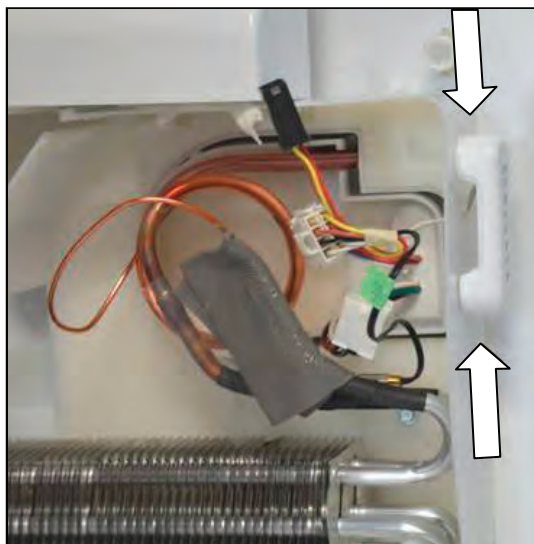


8. Separate the fan motor from the housing. There are four rubber isolators that secure the motor to the housing. Remove the fan motor.

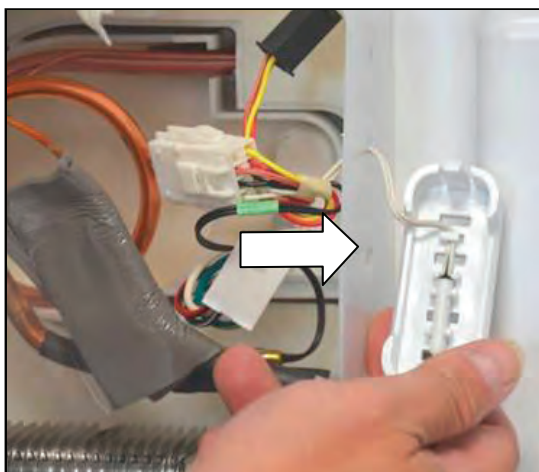


RC Evaporator Thermistor

9. Grasp the top and bottom of the thermistor housing and depress while you pull out on the housing. The evaporator thermistor is part of the RC wiring harness.



Accessing Refrigerator Compartment Components (Continued)



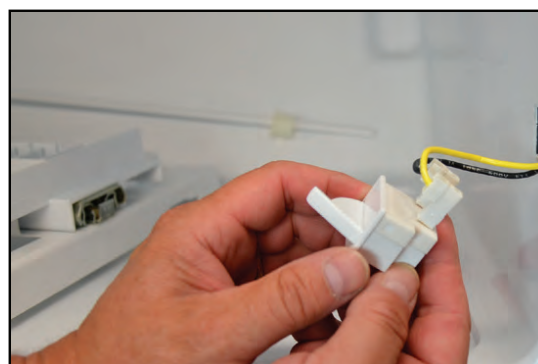
Door Switch

1. To remove the door switch from the cabinet wall, protect the liner while using a putty knife to pry it out. Disconnect harness connectors.



RC Defrost Thermistor

10. RC defrost thermistor clips on the evaporator coil and senses the coil temperature. The defrost thermistor is part of the RC wiring harness. To replace, order the wiring harness.



Accessing Freezer Compartment Components

⚠ WARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

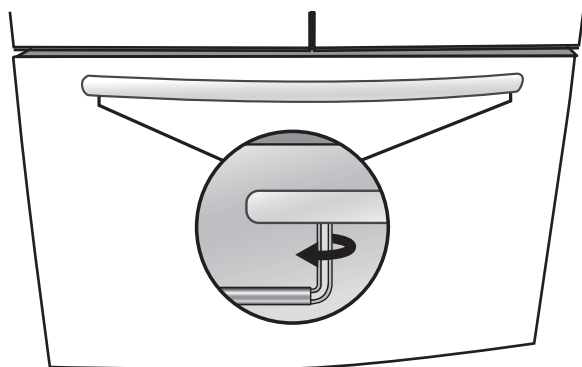
Failure to do so can result in death or electrical shock.

Freezer Handle

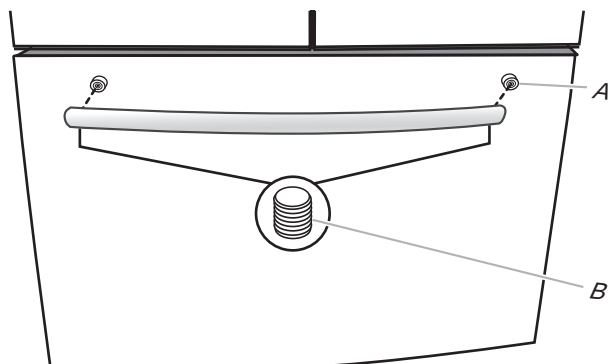


Freezer Door Removal

1. While holding the handle, insert the short end of the hex key into a setscrew hole and slightly rotate the hex key until it is engaged in the setscrew.



2. Using a right to left motion loosen the setscrew a quarter-turn at a time.



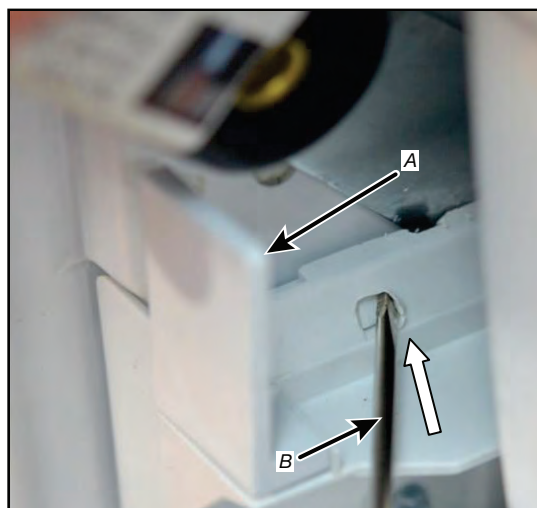
A. Shoulder screw

B. Setscrews inside the handle

3. Repeat steps 1 and 2 for the other setscrew. Slowly pull the handle away from the door or drawer.
4. If necessary, use a Phillips screwdriver to remove the shoulder screws from the door.

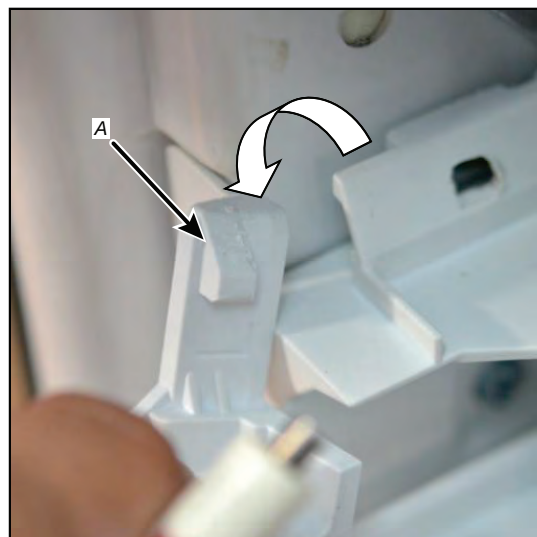
Freezer Baskets and Rails

1. Open the freezer drawer to its full extension.
2. Remove the two, 1/4" (6.4 mm) screws on top-inside of freezer drawer front (one on the left-hand side and one on the right-hand side).
3. Lift up on the drawer front to release the plastic studs from the drawer glide bracket slots.
4. Pull out lower basket as far as possible to access basket-stops.
5. Insert a stiff blade putty knife behind the rail past the basket-stop and force the rail inward while inserting a small blade screwdriver into the square slot in the rail. Pry out the freezer basket-stop. Only one basket-stop needs to be removed.



A. Basket stop

B. Screwdriver



A. Basket stop

Accessing Freezer Compartment Components(Continued)

6. With a basket-stop removed, pull out both baskets. Lift out the upper basket. Push the lower basket toward the rear slightly to disengage the hooks and lift out.



7. Remove rail slides by pressing in tabs.



8. Remove screw(s) and pull rail forward off of slots to remove complete rail.



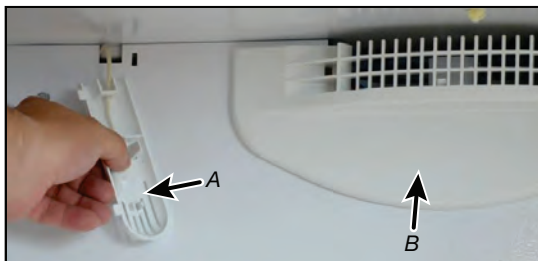
9. Remove rails by releasing tabs.



Accessing Freezer Compartment Components(Continued)

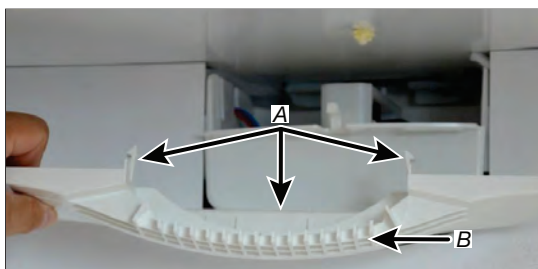
FC Evaporator and Component Access

1. Complete **Freezer Basket and Rails** instructions steps [1-6](#).
2. Remove the thermistor cover by releasing the two tabs on the right side. The freezer thermistor connector can be accessed behind the FC evaporator cover.



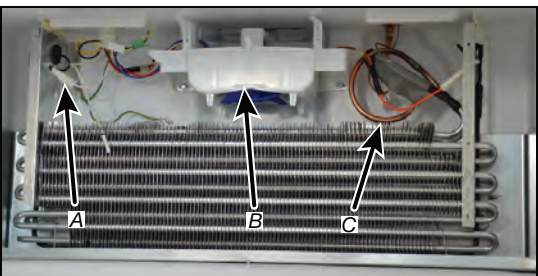
A. Thermistor cover
B. Fan cover

3. Release the two tabs and then the center tab on the fan cover.



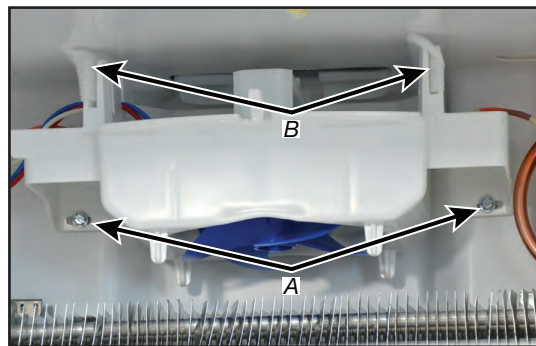
A. Tabs
B. Fan cover

4. Remove the four, 1/4" (6.4 mm) screws to remove FC evaporator cover to access FC evaporator and evaporator components.



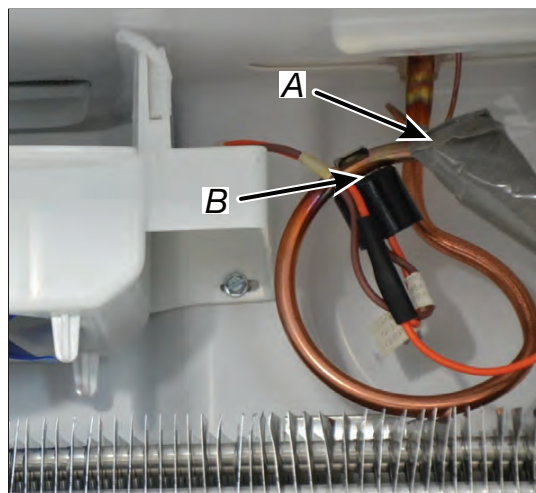
A. Freezer thermistor connector
B. Freezer fan assembly
C. Freezer Bimetal

5. Remove two screws to remove the fan assembly. When installing fan make sure foam gaskets are in place.



A. Screws
B. Foam gaskets

6. Remove noise mastic tape to access bimetal before installing. Unclip the bimetal from the suction line.



A. Mastic
B. Bimetal

Door Switch

1. To remove the door switch from the cabinet wall, protect the liner while using a putty knife to pry it out. Disconnect harness connectors.



Accessing Ice Maker and Dispenser Components

⚠ WARNING



Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

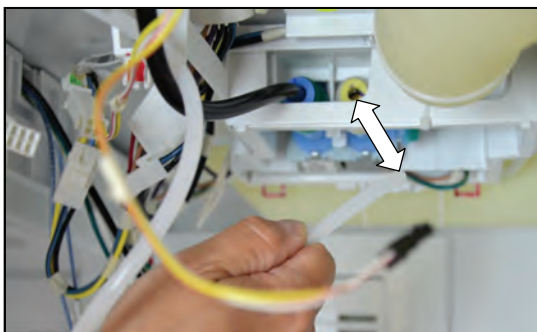
Failure to do so can result in death or electrical shock.

Ice Box Assembly

1. Complete the steps [1-11](#) from **Refrigerator Compartment Components** instructions.
2. Disconnect electrical connections to ice box assembly.



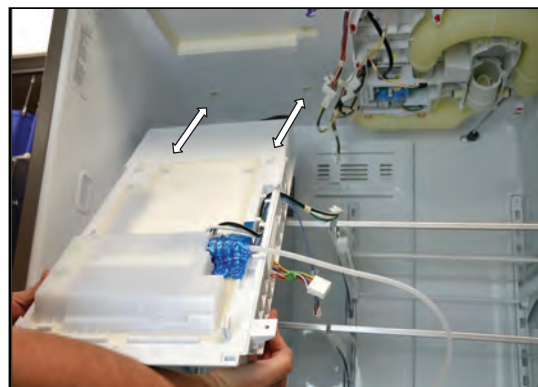
3. Disconnect ice maker fill tube from water valve.



4. Locate the two 1/4" (6.4 mm) screws attaching the ice box assembly and remove using 1/4" (6.4 mm) nut driver while supporting ice maker.

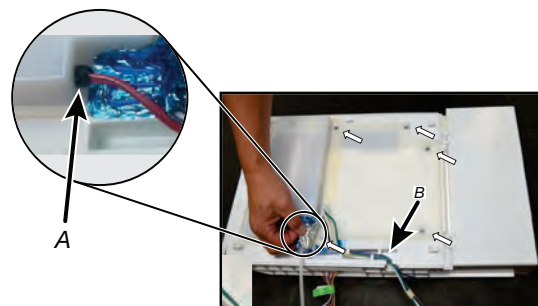


5. Drop down the front of the ice maker assembly and slide out to disengage the two tabs from the slots in the top of the cabinet.



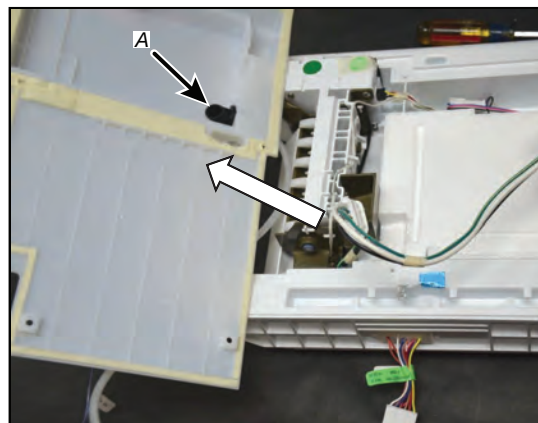
Ice Maker Fill-Tube

6. Remove foil fill tube heater from the ice maker fill-tube on the ice box. Remove all wires from channel on ice box assembly.
NOTE: Some models have a ice box fascia with fascia heater wired through the foil fill tube heater, you may need to remove the fascia heater wires and grommet from the ice box cover.



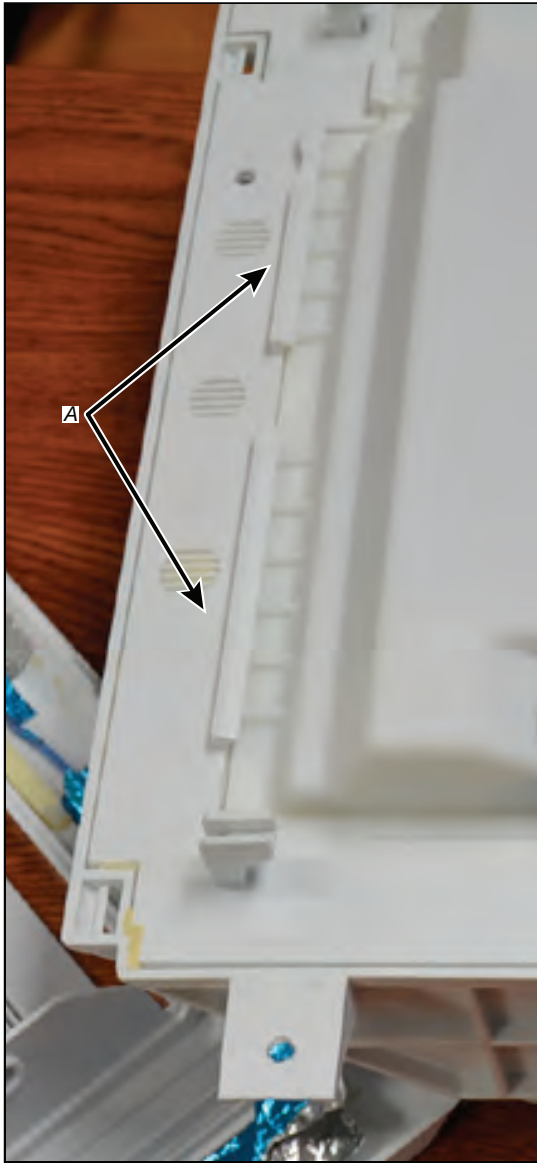
A. Grommet
B. Channel

7. Use a straight blade screw driver to remove five, 1/4" (6.4 mm) screws securing the ice box cover to the ice box assembly.
8. Remove ice box cover while guiding ice maker harness through slot in ice box cover. Note lip for reassembly.



A. Slot

Accessing Ice Maker and Dispenser Components (Continued)



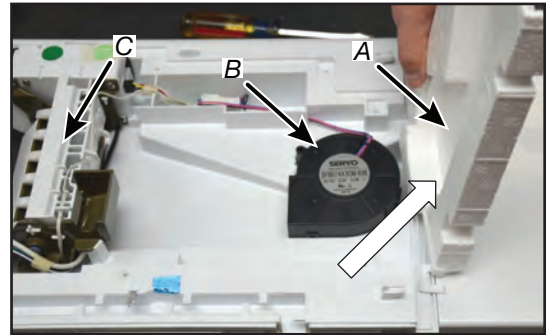
A. Lip

9. Remove ice maker fill tube by pushing into ice box cover and pulling through hole.

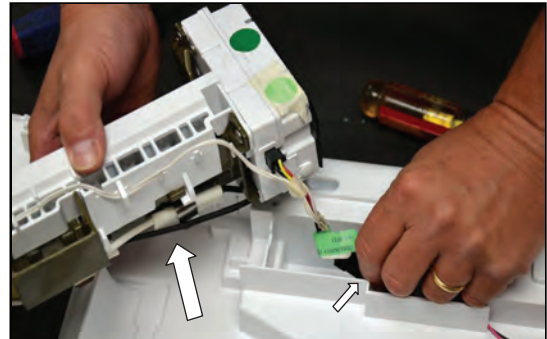


Ice Maker and Fan Motor

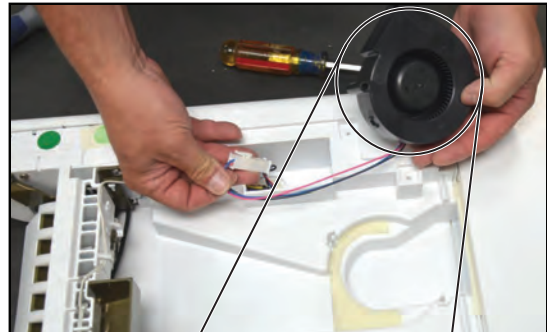
10. Remove foam block.



11. Lift out ice maker and disconnect the wire harness.



12. Lift out the fan motor and disconnect the wire harness.



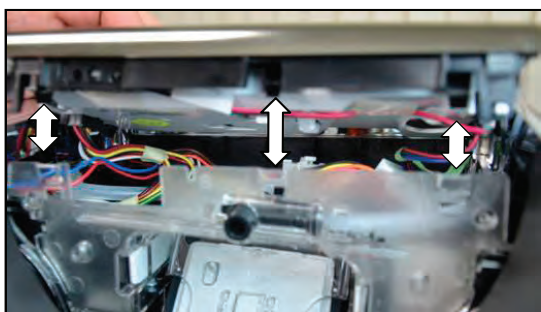
Accessing Ice Maker and Dispenser Components (Continued)

Dispenser

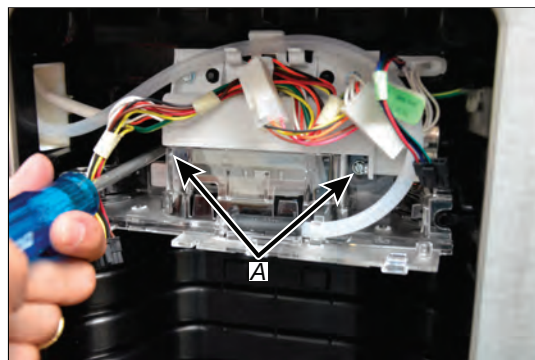
1. To remove user interface (UI) assembly, insert small screwdriver to depress black tabs on underside of UI in these 3 locations.



2. Pull out and lower UI, then disconnect board from wire harness connectors to remove.

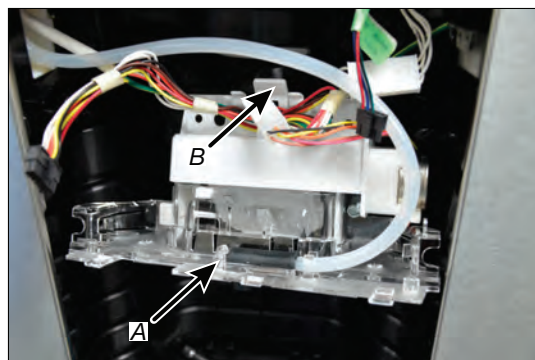


3. To remove ice door assembly, first remove two screws securing assembly to refrigerator door.



A. Screws

4. Disconnect dispenser hose by removing hose from locator channel and then by locating and depressing the tab to release.



A. Tab
B. Locator channel

5. Pull out the assembly to service.

Notes

PRODUCT SPECIFICATIONS & WARRANTY INFORMATION SOURCES

IN THE UNITED STATES:

FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:

FOR WHIRLPOOL PRODUCTS: 1-800-253-1301

FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:

THE TECHNICAL ASSISTANCE LINE: 1-800-832-7174

**HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN
AUTHORIZED IN-HOME SERVICE PROFESSIONAL**

FOR LITERATURE ORDERS (CUSTOMER EXPERIENCE CENTER):

PHONE: 1-800-851-4605

FOR TECHNICAL INFORMATION AND SERVICE POINTERS:

www.servicematters.com

IN CANADA:

FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL

1-800-461-5681

FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:

THE TECHNICAL ASSISTANCE LINE: 1-800-488-4791

**HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN
AUTHORIZED IN-HOME SERVICE PROFESSIONAL**

