

# FRIGIDAIRE® Installation Instructions\* for French Door Bottom Freezer/Refrigerator

\*Please refer to your Use & Care Guide for more details.

## ⚠ WARNING

To avoid electric shock, which can cause death or severe personal injury, do not connect your refrigerator to an electrical power source until you have completed Step 2 of these instructions.

## 📌 NOTE

If you need to remove the doors to get your refrigerator into the house, please refer to "Removing Doors" in the Use & Care Guide. These installation instructions are provided only as a possible customer option. Frigidaire recommends that you use a service or kitchen contracting professional to install your refrigerator.

## ➡ IMPORTANT

If you are installing your refrigerator without connecting it to a water supply, make sure the ice maker's power switch is turned Off (see the Use & Care Guide for more details).

## ⚠ CAUTION

- Shifting the refrigerator from side to side may damage flooring.
- Do not block the toe grille on the lower front of your refrigerator. Sufficient air circulation is essential for proper operation.

## 1 Preparing For Installation

Be sure to coordinate site preparation and installation with your kitchen contractor.

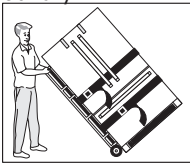
Include these minimum guidelines in your site preparation:

- Choose a place near a grounded electrical outlet.
- Do not use an extension cord or an adapter plug.
- Avoid direct sunlight and close proximity to a range, dishwasher or other heat source.
- Floor should be level and able to support a fully loaded refrigerator.
- The refrigerator's Ice Dispenser requires water supply access.
- Plan for easy access to counter tops when removing food.
- For complete access to drawers and freezer baskets, doors must be able to fully open.
- Load refrigerator from side of cabinet only.
- Do not run retaining straps over handles nor overtighten straps.
- Never use refrigerator handles to move the refrigerator.

Allow the following clearances for ease of installation, proper air circulation, and plumbing and electrical connections: Sides & Top: 3/8 inch / Rear: 1 inch

## 📌 NOTE

Please call 1-800-944-9044 if you need assistance with this installation.



## ⚠ CAUTION

Room temperatures below 55°F (13°C) or above 110°F (43°C) will impair cooling ability of your refrigerator's compressor.

## 2 Connect Water Supply

Before Installing The Water Supply Line, You Will Need:

- Basic Tools: adjustable wrench, flat-blade screwdriver, and Phillips™ screwdriver
- Access to a household cold water line with water pressure between 30 and 100 psi.
- A water supply line made of 1/4 inch (6 mm) OD, copper or stainless steel tubing. To determine the length of tubing needed, measure the distance from the ice maker inlet valve at the back of the refrigerator to your cold water pipe. Then add approximately 7 feet, so the refrigerator can be moved out for cleaning.
- A shutoff valve to connect the water supply line to your household water system. DO NOT use a self-piercing type shutoff valve.
- A compression nut and ferrule (sleeve) for connecting a copper water supply line to the ice maker inlet valve.

## ⚠ CAUTION

To Avoid Property Damage:

- Copper or Stainless Steel braided tubing is recommended for the water supply line. Water supply tubing made of 1/4 inch (6 mm) plastic is not recommended to be used. Plastic tubing greatly increases the potential for water leaks, and the manufacturer will not be responsible for any damage if plastic tubing is used for the supply line.
- Do not reuse compression fitting or use thread seal tape.
- DO NOT install water supply tubing in areas where temperatures fall below freezing.
- Chemicals from a malfunctioning softener can damage the ice maker. If the ice maker is connected to soft water, ensure that the softener is maintained and working properly.

### To Connect Water Supply Line To Ice Maker Inlet Valve

1. Disconnect refrigerator from electric power source.
2. Place end of water supply line into sink or bucket. Turn ON water supply and flush supply line until water is clear. Turn OFF water supply at shutoff valve.
3. Remove plastic cap from water valve inlet and discard cap.
4. If you use copper tubing - Slide brass compression nut, then ferrule (sleeve) onto water supply line. Push water supply line into water valve inlet as far as it will go (1/4 inch). Slide ferrule (sleeve) into valve inlet and finger tighten compression nut onto valve. Tighten another half turn with a wrench; DO NOT overtighten. See Figure 1.
5. With steel clamp and screw, secure water supply line (copper tubing only) to rear panel of refrigerator as shown.
6. Coil excess water supply line (copper tubing only), about 2 1/2 turns, behind refrigerator as shown and arrange coils so they do not vibrate or wear against any other surface.
7. Turn ON water supply at shutoff valve and tighten any connections that leak.
8. Reconnect refrigerator to electrical power source.
9. To turn ice maker on, lower wire signal arm (freezer ice maker) or set the ice maker's On/Off power switch to the "ON" position (fresh food ice maker).

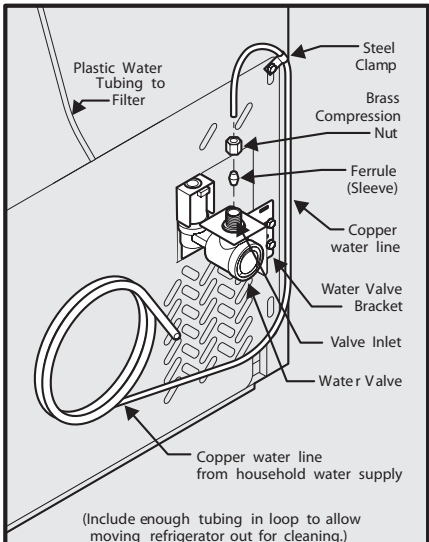


Figure 1

## 📌 NOTE

Check with your local building authority for recommendations on water lines and associated materials prior to installing your new refrigerator. Depending on your local/state building codes, Frigidaire recommends for homes with existing valves its Smart Choice® water line kit 5305513409 (with a 6 ft. Stainless Steel Water Line) and for homes without an existing valve, Frigidaire recommends its Smart Choice® water line kit 5305510264 (with a 20 ft. Copper Water Line with self-tapping saddle valve). Please refer to [www.frigidaire.com](http://www.frigidaire.com) for more information.

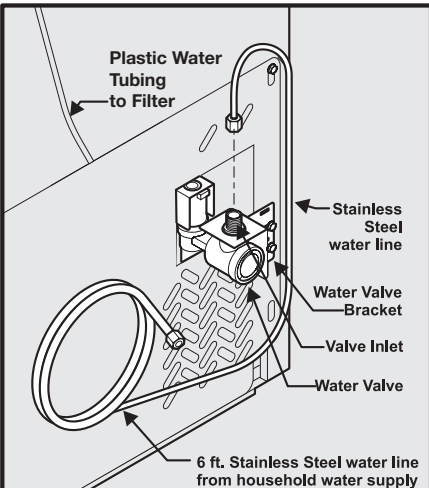


Figure 2

## 3 Level Refrigerator

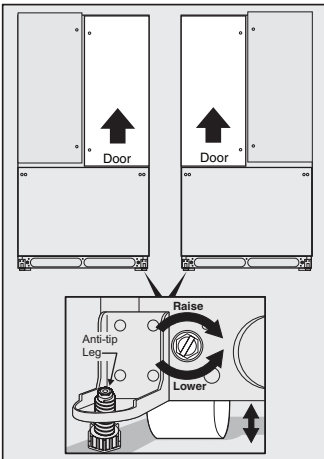
Guidelines for final positioning of your refrigerator

- All four corners of the cabinet must rest firmly on the floor.
- The sides should tilt 1/4 inch (6 mm) from front to back (to ensure that doors close and seal properly).
- Doors should align with each other and be level.

Most of these conditions can be met by raising or lowering the adjustable front rollers.

To level the cabinet using the front rollers:

1. You can raise or lower each door. Use a 3/8 inch socket wrench to turn the adjustment screws (1 per side).  
**To raise:** turn adjustment screw clockwise.  
**To lower:** turn adjustment screw counterclockwise.
2. Ensure both doors are bind-free with their seals touching the cabinet on all four sides and that cabinet is stable.
3. After unit is leveled, lower anti-tip leg until it contacts the floor.

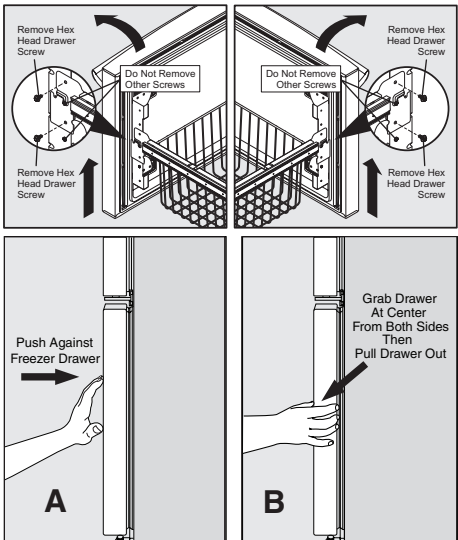


DO NOT REMOVE this label until the refrigerator has been leveled. Please follow all instructions for leveling your refrigerator.

## 4 Installing & Leveling Freezer Drawer (if necessary)

1. Installing freezer drawer: Refer to "Installing Freezer Drawer" in the Use & Care Guide.
2. Leveling freezer drawer:

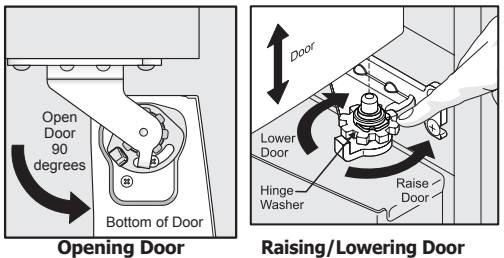
- A. Check gasket seal around top, bottom, and sides of freezer drawer.
- B. If gasket is not sealed, open drawer and slightly loosen 4 drawer screws (2 on each side) to allow drawer to rotate.
- C. Close drawer and recheck the seal on the gasket (A). Open the drawer grabbing by the sides in the center (B). Be careful not to rotate the drawer.
- D. Tighten 4 drawer screws.
- E. Recheck gasket seal.
- F. Install the toe grille by fitting into place.



## 5 Installing & Adjusting Doors (if necessary)

1. Installing doors: Refer to "Installing Doors" in the Use & Care Guide.
2. Doors final adjustment using the adjustable lower hinge (select models, if necessary):

- A. Open doors to 90 degrees.
- B. Lift the door while adjusting the washer.  
**To raise the door:** rotate washer clockwise.  
**To lower the door:** rotate washer counterclockwise.



## 6 Remove Internal Shipping Materials

Frigidaire uses packing foam and tape to secure the internal parts of your refrigerator for shipping. Once the refrigerator is in position, you can remove this material.

### What's Next?

Congratulations! You are ready to begin enjoying your new Frigidaire refrigerator.

- For important safety instructions and to learn how to operate your refrigerator, please read the entire Use & Care Guide.
- You may want to start with the "Normal Operating Sights & Sounds" section of the Guide to learn what to expect during typical operation.
- Please register your product. You can register online at [www.frigidaire.com](http://www.frigidaire.com) or you can simply send in the Registration Card.

## 7 Installation Check List

### Doors

- ☐ Handles are secure and tight
- ☐ Door seals completely to cabinet on all sides
- ☐ Fresh food doors are level

### Leveling

- ☐ Refrigerator is level, side to side and tilted 1/4 inch (6 mm) front to back
- ☐ Toe grille is properly attached to refrigerator
- ☐ Cabinet is sitting solid on all corners

### Electrical Power

- ☐ House power turned on
- ☐ Refrigerator plugged in

### Ice Maker

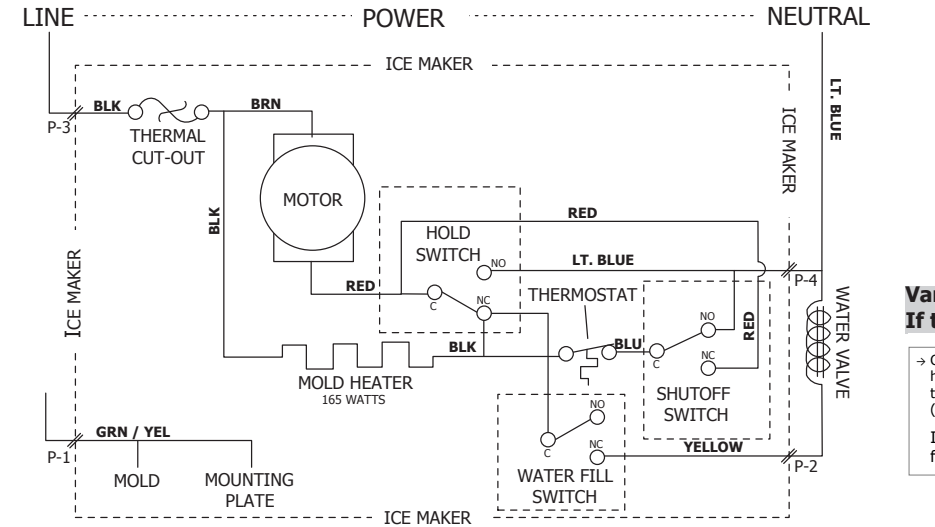
- ☐ House water supply connected to refrigerator
- ☐ No water leaks present at all connections
- ☐ Ice Maker is turned ON.


### Final Checks

- ☐ Shipping material removed
- ☐ Fresh Food and Freezer temperatures set

If you are not satisfied with the installation of your refrigerator, please contact the store where you purchased it or call 1-800-944-9044 for assistance.

PERFORMANCE DATA NO LOAD & NO DOOR OPENINGS AT 37°/0° CONTROL SETTING					
Type A with Run / Start Capacitor	65°F (18°C) Ambient		90°F (32°C) Ambient		
Operating Time	90 to 100%		100%		
Freezer Temperature	-5° to 2°F (-20° to -17°C)		-1° to 3°F (-18° to -16°C)		
Refrigerator Temperature	34° to 39°F (1° to 4°C)		34° to 39°F (1° to 4°C)		
Low Side Pressure	-2 to 6 psig (-14 to 41 kPa)		-2 to 6 psig (-14 to 41 kPa)		
High Side Pressure (last 1/3 cycle)	85 to 105 psig (586 to 724 kPa)		120 to 135 psig (827 to 931 kPa)		
Wattage (last 1/3 cycle)	30 to 50		50 to 70		
Amps (running)	.4 to .8		.7 to .9		
Base Voltage	115 vac (127 vac max)				
DEFROST SPECIFICATIONS					
Cabinet Size:  27' & 28' SD, 22' CD	Thermal Cutout		Heater		Defrost Thermistor Termination
	Cut-in	Cut-out	Watts	Ohms	Cut-out
	110°F (43.3°C)	135°F (57.2°C)	500	26.5	39°F (4°C)
Electronic Timer - (ADC) Defrost 24 minutes every 6-96 hours of compressor run time.					
CONDENSER FAN MOTOR					
Watts	RPM		Amps		
3.1	1100 CW Opposite Shaft		0.03 Running		
FREEZER ICE MAKER SPECIFICATIONS					
Electrical	115 vac (127 vac max)				
Thermostat	Opens at 48°F ( 9°C), Closes at 15° F ( -9°C)				
Heater Voltage	115 vac				



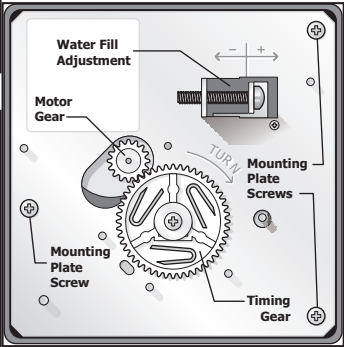
**CAUTION**

All electrical parts and wiring must be shielded from torch flame. DO NOT allow torch to touch insulation; it will char at 200°F and flash ignite (burn) at 500°F. Excessive heat will distort the plastic liner.

**FREEZER ICE MAKER INFORMATION**  
(Where Applicable)

**Test Cycling:** Remove cover by inserting screwdriver in notch at bottom and prying cover from housing. Use screwdriver to rotate motor gear counterclockwise until holding switch circuit is completed. All components of ice maker should function to complete the cycle.

**Water Fill Volume:** The water fill adjustment screw will change the fill time. One full turn is equal to 20cc (.68 oz.). The correct fill is 102 to 130cc (3.4 to 4.3 oz.). When a water valve is replaced, the fill volume must be checked.



**SERVICE DATA SHEET**

**A01544601**

**ICE & WATER - AUTOMATIC DEFROST**  
**BOTTOM FREEZER - R134a**



**IMPORTANT: PLEASE RETURN THIS SHEET TO ITS ORIGINAL LOCATION.**

ERROR CODES			SPECIAL MODES			
Display		Interpretation	Mode	Display		Activate/Deactivate (press for up to 10 sec. simultaneously)
FZ	FF			FZ	FF	
--	OP	Open FF Thermistor	Manual Defrost	d	F	+ and - / same to deactivate
OP	--	Open FZ Thermistor	Display / Showroom	77	77	Λ and - / Power-on-Reset (POR)
--	SH	Shorted FF Thermistor	Sabbath	Sb	Sb	V and - / same to deactivate
SH	--	Shorted FZ Thermistor	System Diagnostic	No FF or FZ display, all UI LEDs on.		Λ and V/ + to deactivate
SY	CF	UI to Main Control Board communication failure; on start up	FFIM Diagnostic	Numerical display of first test		Λ and V together to activate / press and hold + to deactivate
SY	CE	UI to Main Control Board communication error; after a period in operation	<b>Notes:</b> • Always check for pin back-outs, pinched or damaged wires before replacing components. • Determine whether failure is caused by the component, main control board or wiring. <b>Contact TID before replacing main control board.</b> • Refer to Service Manual for additional information.			
SY	EF	Evaporator Fan Failure				

FRESH FOOD ICE MAKER DIAGNOSTIC MODE			
Activate:	Press Λ and V temperature pads for up to 10 sec. simultaneously. Press + or - to move forward or backward through tests.		
Deactivate:	Press + for up to 10 sec. FFIM Diagnostic Mode will automatically deactivate after 5 min. of inactivity. NOTE: Silence alarm.		
Test		To activate test	Passing Result
52C	Ice Maker Thermistor	Activates automatically	FZ display shows temperature sensed by Ice Maker Thermistor. "OP" if open; "SH" if short
55C	Water Valve	Press Set	Remove ice tray to collect water into a measuring container to measure water fill. If collecting water into ice tray, first perform test 63C to empty ice tray.
57C	Evaporator Fan (FFIM)	Press Set	"On" on FZ display when fan activated, "OFF" when deactivated.
58C	Ice Level Sensor	Activates automatically	Remove ice bucket. Allow bail arm to drop freely. Pass if no alarm when tray returns to "home" position. Hold bail arm up. Pass if alarm sounds when tray returns to "home" position. This test runs continuously until another test is selected.
63C	Twist Tray	Press Set	Remove ice bucket. FZ display shows "1" and "GOOD".

**Variable Capacity Compressor (VCC) Diagnostics (select models)**  
If test 38 fails, diagnose as follows:

→ Check at the connector from the power cord harness into the inverter board, located in the machine compartment. (PUR and WHT wires)  
Is Inverter Board receiving 115 VAC from power supply?

no

• Check voltage supply.  
• Check and repair power cord harness wiring and connections.

→ Check at Inverter Board on Compressor (BLK and RED wires)  
Is Inverter Board receiving 10-15 VAC and 1-5 VDC from Main Control Board?

yes

→ Remove inverter box from the compressor and check resistance across compressor winding pairs as shown.  
Is resistance across all winding pairs equal?

no

Replace Compressor and Inverter Board.

→ Check connections from Inverter Board to Compressor  
Are connections from Inverter Board to Compressor intact?

yes

→ Check at Main Control Board (BLK/WHT and RED/BLK wires)  
Is Main Control Board sending 10-15 VAC and 1-5 VDC to Inverter Board?

no

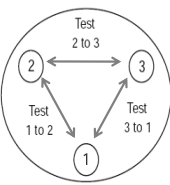
Replace Main Control Board.

→ Check at Main Control Board (BLK/WHT and RED/BLK wires)  
Is Main Control Board sending 10-15 VAC and 1-5 VDC to Inverter Board?


yes

Identify and repair damaged wires or poor connections between Main Control Board and Inverter Board.

**VCC Resistance Check**  
Check resistance between terminals 1 and 2, 2 and 3, 3 and 1. If all resistances are equal, compressor is operative.



SYSTEM DIAGNOSTIC MODE			
<b>Activate:</b>		Press Λ and V for up to 10 sec. simultaneously. Press + to advance through tests.	
<b>Deactivate:</b>		Press + for up to 10 sec. Diagnostic Mode will automatically deactivate after 5 min. of inactivity. <b>Note: Silence alarm.</b>	
• Tests marked with "*" may not be applicable to this unit and will not be displayed in System Diagnostic Mode. • Tests displayed in diagnostic mode but not described below are for internal purposes only; advance through. • View UI display for "on," "off," "CL," "OP," "SH," "LO," "HI" or numerical results of tests. • Listen for operating sounds; feel for heat or air flow as appropriate to determine results of tests.			
Test		To activate test:	Passing result
--	First Screen	--	All LED lights on UI illuminated.
--	Second Screen	--	All segments on UI temperature displays illuminated.
--	Third Screen	--	Blank UI display, no lights illuminated.
28	Dispenser Paddle	Press disp. paddle	"on" on UI when depressed; "off" when released.
46	Humidity Sensor	Activates automatically	"OP" if open, "SH" if short. AC Heater System: Displays %RH. DC Heater System: "HI" – heater should be on. "Lo" – heater should be off. %RH is displayed when humidity is between "Lo" and "HI" values; heater could be on or off.
47	Dispenser Pocket Heater	Press set	AC Heater System: "--" ; test not available. DC Heater System: heater on when "on", off when "off".
2	Freezer Defrost Heater	Press set	Freezer defrost heater on when "on"; off when "off".
3*	FF Light (Incandescent Models)	Press set	FF lights on when "on"; off when "off"
8	Water Valve (Dispenser)	Press set	FF doors must be closed. <b>Be prepared to collect water at dispenser.</b> Water dispenses when "on"; stops when "off".
9*	FZ Light (Incandescent Models)	Press set	FZ lights on when "on", off when "off".
10	Auger Motor	Press set	FF door must be closed. Motor running when "on"; motor stopped when "off".
11	Cube/Crush Solenoid	Press set	FF door must be closed. <b>Do not leave solenoid in activated state.</b> Solenoid activated when "on"; deactivated when "off".
12	VCC Condenser Fan	Press set	Fan running when "on"; stopped when "off".
43	Anticondensation Heater	Press set	Flip mullion heater and dispenser pocket heater on when "on"; off when "off"
38*	VCC Compressor	Press set	Compressor running when "on"; stopped when "off".
13*	FF Light (LED Models)	Press set	FF lights on when "on"; off when "off".
15	Evaporator Fan	Press set	Stopped when "off". Listen for speed change from "LO" to "HI".
20*	FZ Light (LED Models)	Press set	FZ lights on when "on", off when "off".
22	Damper	Press set	With inspection mirror, observe damper open when "OP"; closed when "CL".
23	FF Door	Open/close FF door	"CL" on UI when door closed; "OP" when open.
24	FZ Door	Open/close FZ door	"CL" on UI when door closed; "OP" when open.
26	Ice Maker Defrost Heater	Activates automatically	Relay is activated automatically. If "CL" is shown, defrost limit switch is closed and heater should be heating up. If "OP" is shown, defrost limit switch is open and heater will not activate.
29	FF Thermistor	Activates automatically	UI shows temperature sensed by FF thermistor; pass if within 10°F of temperature measured with gauge at FF thermistor location. "OP-" if open; "SH-" if short.
30	FZ Thermistor	Activates automatically	UI shows temperature sensed by FZ thermistor; pass if within 10°F of temperature measured with gauge at FZ thermistor location. "OP" if open; "SH" if short.
33	Ambient Thermistor @ Main Board	Activates automatically	UI shows temperature sensed at main board; pass if within +20°F/-10°F of temperature measured with gauge at main board location. "OP" if open; "SH" if short.
34*	Ambient Thermistor @UI	Activates automatically	UI shows temperature sensed at UI; pass if within +20°F/-10°F of temperature measured with gauge at UI location. "OP" if open; "SH" if short.
39	Evaporator Thermistor	Activates automatically	UI shows temperature sensed by evaporator thermistor; pass if within 10°F of temperature measured with gauge at evaporator thermistor location. "OP" if open; "SH" if short.
45	Ice Maker Mold Thermistor	Activates automatically	UI shows temperature sensed at ice maker; pass if within +20°F/-10°F of temperature measured with gauge at ice maker mold. "OP" if open; "SH" if short.
0-	Firmware Parameters	Press set	Displays digit sequence; record.
2-	Main Board Firmware	Press set	Displays digit sequence; record.
4-	UI Firmware	Press set	Displays digit sequence; record.

**IMPORTANT SAFETY NOTE**

The information provided herein is designed to assist qualified repair personnel only. Untrained persons should not attempt to make repairs due to the possibility of electrical shock. Disconnect power cord before servicing this appliance.

**IMPORTANT**

If any green grounding wires are removed during servicing, they must be returned to their original position and properly secured.



