

### **OWNER'S MANUAL**

# BOTTOM FREEZER REFRIGERATOR

Read this owner's manual thoroughly before operating the appliance and keep it handy for reference at all times.

**ENGLISH** 

GM-F223DLXQ



MFL67851614 Rev.00 210601



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### SAFETY INSTRUCTIONS

#### **READ ALL INSTRUCTIONS BEFORE USE**

#### **Safety Messages**

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 follow all safety messages.



This is the safety alert symbol.

This symbol alerts you to potential hazards that can kill or injure you and others. All safety messages will follow the safety alert symbol and either the word WARNING or CAUTION.

These words mean:



#### WARNING

You may be killed or seriously injured if you do not follow instructions.



#### **CAUTION**

You may be injured or cause damage to the product if you do not 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 may happen if the instructions are not followed.

#### WARNING

### **A** WARNING

• To reduce the risk of explosion, fire, death, electric shock, scalding or injury to persons when using this product, follow basic precautions, including the following:

#### **Installation**

- To reduce the risk of injury to persons, adhere to all industry recommended safety procedures including the use of long-sleeved gloves and safety glasses.
- Never attempt to operate this appliance if it is damaged, malfunctioning, partially disassembled, or has missing or broken parts, including a damaged cord or plug.
- Only connect this product to a dedicated grounded electrical outlet rated for use with this product (230 V, 50 Hz AC only). It is the user's responsibility to replace a standard 2-prong wall outlet with a standard 3-prong wall outlet.
- Do not use an outlet that can be turned off with a switch. Do not use an extension cord.
- The appliance must be positioned for easy access to a power source.
- When moving the refrigerator, be careful not to roll over or damage the power cord.
- Contact an authorized service center when installing or relocating the refrigerator.
- Do not, under any circumstances, cut or remove the third (ground) prong from the power cord.
- Keep packing materials out of the reach of children. Packaging material can be dangerous for children. There is a risk of suffocation.
- Do not install the refrigerator in a damp or dusty place where insulation on electrical parts may deteriorate.
- Do not place the refrigerator in direct sunlight or expose it to the heat from heating appliances such as stoves or heaters.

- Do not bend or pinch the power cord excessively or place heavy objects on it.
- When positioning the appliance, ensure the supply cord is not trapped or damaged.
- Do not locate multiple portable socket-outlets or portable power supplies at the rear of the appliance.

#### Operation

- This appliance is intended to be used in household and similar applications such as:
- staff kitchen areas in shops, offices and other working environments;
- farm houses and by clients in hotels, motels and other residential type environments;
- bed and breakfast type environments;
- catering and similar non-retail applications.
- This product is not to be used for special purposes such as the storage of medicine or test materials or for use on ships, etc.
- DO NOT allow children to climb, stand, or hang on the refrigerator doors or on the shelves in the refrigerator. They could damage the refrigerator and seriously injure themselves.
- Do not allow children to climb into the refrigerator. They could be trapped and suffocated.
- Children should be supervised to ensure that they do not play with the refrigerator.
- Keep fingers out of pinch point areas; clearances between the doors and cabinets are necessarily small. Be careful closing doors when children are nearby.
- Do not touch frozen food or the metal parts in the freezer compartment with wet or damp hands. Doing so may cause frostbite.
- Do not refreeze frozen food that has thawed completely. Doing so may result in a serious health hazard.
- Do not use an adapter plug or plug the power plug into a multi-outlet extension cord.
- If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
- Do not operate the refrigerator or touch the power cord with wet hands.
- Do not modify or extend the power cord.
- Do not use an uncertified power outlet. Do not plug appliance into a damaged wall outlet.
- Do not put hands, feet or other objects into the air vents or bottom of the refrigerator. Doing so could result in personal injury or electric shock.
- In the event of a gas leak (propane/LPG), ensure the area is adequately ventilated and contact an authorized service center before resuming use. Do not touch the refrigerator or power cord of the refrigerator.
- Disconnect the power cord immediately and contact an authorized service center if there is a strange noise, odor, or smoke coming from the appliance.
- Do not use any fuse (such as copper, steel wire, etc.) other than a standard fuse.
- Do not place or use an electrical appliance inside the refrigerator, unless it is of a type recommended by the manufacturer.
- Do not put animals inside the appliance.
- Do not place heavy or fragile objects, liquid filled containers, combustible substances, or flammable objects (such as candles and lamps) on the appliance.
- Avoid contact with any moving parts of the ejector mechanism or with the heater that releases the ice cubes.
- If connected to a circuit protected by fuses, use time delay fuse.
- Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.

- Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- DO NOT place fingers in the automatic icemaker when the refrigerator is plugged in.
- When dispensing ice from the dispenser, do not use a fragile container.

#### Maintenance

- Do not use a hair dryer to dry the inside of the refrigerator.
- Do not light a candle to remove odors in the refrigerator.
- In the event of a refrigerant leak, move flammable objects away from the refrigerator. Ensure the area is adequately ventilated and contact an authorized service center.
- Keep flammable materials and vapors, such as gasoline, away from the 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.
- Unplug the power plug before cleaning or repairing the refrigerator.
- The refrigerator and freezer compartment lights are interior LED lighting, and service should be performed by a qualified technician.
- Unplug the power plug immediately in the event of a blackout or thunderstorm.
- Turn the power off if water or dust penetrates into the refrigerator. Call a service agent.
- Do not store glass containers or soda in the freezer compartment. Contents may expand when frozen, break the container and cause injury.
- Do not store, disassemble or repair the appliance yourself or allow unqualified personnel to do so.
- Do not bend or pinch the power cord excessively or place heavy objects on it.

#### **Disposal**

- Junked or abandoned refrigerators are dangerous, even if they are sitting for only a few days. When disposing of the refrigerator, remove the packing materials from the door or take off the doors but leave the shelves in place so that children may not easily climb inside.
- If disposing of a refrigerator, make sure the refrigerant and insulation foam are removed for proper disposal by a qualified servicer. If you release the refrigerant or throw away the insulation foam, you may be fined or imprisoned in accordance with the relevant environmental law. Insulation foam contains flammable blowing gas.
- When discarding the appliance, remove the door gasket while leaving the shelves and baskets in place, and keep children away from the appliance.

### **Grounding Instructions**

- Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service personnel if you are in doubt whether the appliance is properly grounded. Do not modify the plug provided with the appliance; if it will not fit the outlet, have a proper outlet installed by a qualified electrician.
- Have a certified electrician check the wall outlet and wiring for proper grounding.
- Never unplug the appliance by pulling on the power cord. Always grip the plug firmly and pull straight out from the outlet. Failure to do so may damage the power cord, resulting in a risk of fire and electric shock.

#### Risk of Fire and Flammable Materials



This appliance contains a small amount of isobutane refrigerant (R600a), which is combustible. When transporting and installing the appliance, care should be taken to ensure that no parts of the refrigerating circuit are damaged. Refrigerant squirting out of the pipes could ignite or cause an eye injury. If a leak is detected, avoid any naked flames or potential sources of ignition and air the room in which the appliance is standing for several minutes. In order to avoid the creation of a flammable gas air mixture if a leak in the refrigerating circuit occurs, the size of the room in which the appliance may be sited depends on the amount of refrigerant used. The room must be 10.8 square feet (1 square meter) in size for every 8g of R600a refrigerant inside the appliance. The amount of refrigerant in your particular appliance is shown on the identification plate inside the appliance. Never start up an appliance showing any signs of damage. If in doubt, consult your dealer.

#### **CAUTION**

### **A** CAUTION

• To reduce the risk of minor or moderate injury to persons, malfunction, or damage to the product or property when using this product, follow basic precautions, including the following:

#### **Installation**

- Do not install the refrigerator where there may be a danger of the unit falling.
- The refrigerator must be properly installed in accordance with the Installation Instructions.

### Operation

- Do not use aerosols near the refrigerator.
- This appliance is intended to be used only in domestic and similar applications.
- Do not strike or apply excessive force to any glass surface. Do not touch glass surfaces if they are cracked or broken.
- Do not overfill or pack items too tightly into door bins. Doing so may cause damage to the bin or personal injury if items are removed with excessive force.
- Do not hang on to or place heavy objects on the refrigerator's dispenser.

#### Maintenance

- Do not use strong detergents like wax or thinners for cleaning. Clean with a soft cloth.
- Remove foreign objects (such as dust and water) off the prongs of the power plug and contact areas. Do not use a wet or damp cloth when cleaning the plug.
- Do not spray water directly on the inside or outside of the refrigerator.
- Do not clean glass shelves or covers with warm water when they are cold. They may break if exposed to sudden temperature changes

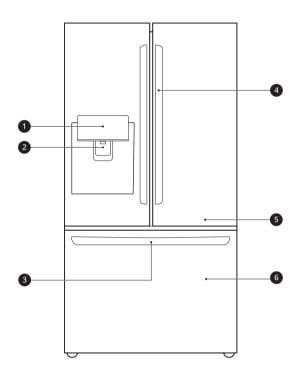
### **SAVE THESE INSTRUCTIONS**

### **PRODUCT OVERVIEW**

### **Product Features**

The images in this guide may be different from the actual components and accessories, which are subject to change by the manufacturer without prior notice for product improvement purposes.

#### **Exterior**



#### Control Panel

Sets the refrigerator temperature and freezer temperature, the water filter condition and the dispenser mode.

#### 2 Filtered Water

Dispenses purified water

#### **3** Freezer Handle

Easily opens the freezer door.

#### 4 Handle

Opens and closes the refrigerator door.

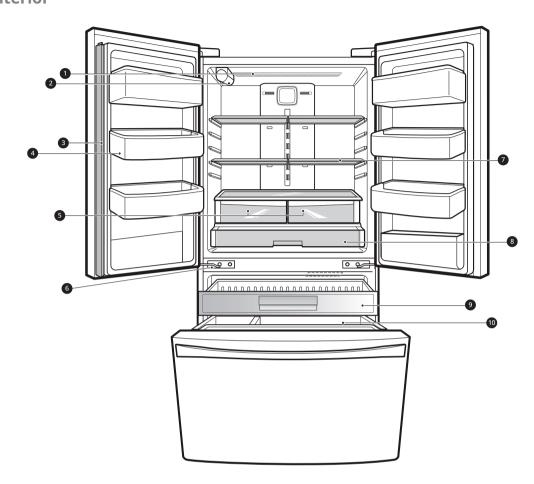
#### **5** Refrigerator

Fresh food compartment

#### 6 Freezer

Frozen food compartment

#### **Interior**



#### LED Interior Lighting

Lights up the inside of the refrigerator.

#### 2 Water Filter

Purifies water.

Replace the water filter every six months. See the Replacing the Water Filter section in this manual for details.

#### **3** Folding Door Mullion

Blocks the cold air of the refrigerator from escaping when the doors are closed.

#### Fixed Door Bin

Stores chilled food or drinks.

#### **5** Humidity Controlled Crisper

Helps vegetables and fruit to stay crisp and controls humidity.

#### **6** Auto-Closing Hinge

The refrigerator doors and freezer drawers close automatically when pushed slightly. (The door only closes automatically when it is open at an angle of less than 30°.)

#### Adjustable Refrigerator Shelf

The refrigerator shelves are adjustable to meet individual storage needs.

#### **8** Glide'N'Serve

Store food items at a different temperature than the regular refrigerator area.

#### 9 Pullout Drawer

Provides extra storage within the freezer compartment.

#### Durabase and Durabase Divider

Provides storage for large food items.

### **Product Specifications**

\*The appearance and specifications listed in this manual may vary due to constant product improvements.

Electrical requirements: 230 V, 50 Hz

Min. / Max. water pressure: 20 - 120 psi (138 - 827 kPa)

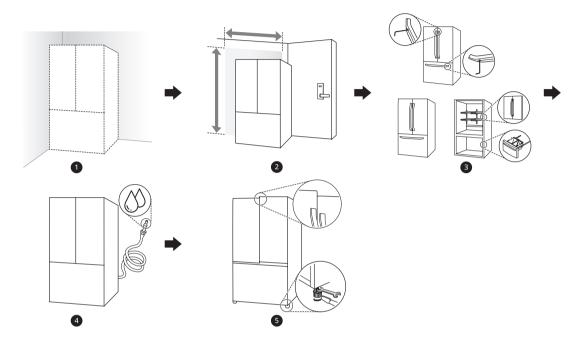
Model GM-F223DLXQ		
Description	Standard-depth, bottom freezer	
Net weight	246.9 lb (112 kg)	

### **INSTALLATION**

### **Before Installing**

#### **Installation Overview**

Please read the following installation instructions first after purchasing this product or transporting it to another location.



- Unpacking the Refrigerator
- 2 Choosing the Proper Location
- 3 Disassembling/Assembling
- 4 Connecting the Water Line
- 5 Leveling and Door Alignment

### **M** WARNING

• Connect to potable water supply only.

#### **Unpacking the Refrigerator**

#### **WARNING**

- Use two or more people to move and install the refrigerator. Failure to do so can result in back injury or other injury.
- The refrigerator is heavy. Protect the floor when moving the refrigerator for cleaning or service.
   Always pull the refrigerator straight out when moving it. Do not wiggle or walk the refrigerator when trying to move it, as floor damage could
- Keep flammable materials and vapors, such as gasoline, away from the refrigerator. Failure to do so can result in fire, explosion, or death.

#### NOTE

- Remove tape and any temporary labels from your refrigerator before using. Do not remove any warning labels, the model and serial number label
- To remove any remaining tape or glue, rub the area briskly with your thumb. Tape or glue residue can also be easily removed by rubbing a small amount of liquid dish soap over the adhesive with your fingers. Wipe with warm water and dry.
- Do not use sharp instruments, rubbing alcohol, flammable fluids, or abrasive cleaners to remove tape or glue. These products can damage the surface of your refrigerator.
- Reinstall or adjust shelves as needed.
   Refrigerator shelves are installed in the shipping position. Reinstall shelves according to your individual storage needs.

# Choosing the Proper Location

#### Water

Water supply must be easily connected for the automatic icemaker.

#### NOTE

• The water pressure must be 20 - 120 psi or 138 - 827 kPa or 1.4 - 8.4 kgf/cm2. If the refrigerator is installed in an area with low water pressure (below 20 psi or 138 kPa or 1.4 kgf/cm2), you can install a booster pump to compensate for the low pressure.

#### **Electricity**

Use an individual, grounded outlet: 230 Volts, 50 Hz, AC, 15 Amps minimum.

#### **WARNING**

- Do not overload house wiring and cause a fire hazard by plugging in multiple appliances in the same outlet with the refrigerator.
- To reduce the risk of electric shock, do not install the refrigerator in a wet or damp area.

#### **Flooring**

To avoid noise and vibration, the unit must be installed and leveled on a solidly constructed floor. If required, adjust the leveling legs to compensate for the unevenness of the floor.

#### NOTE

 Installing on carpeting, soft tile surfaces, a platform or weakly supported structure is not recommended.

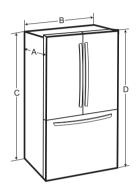
### **Ambient Temperature**

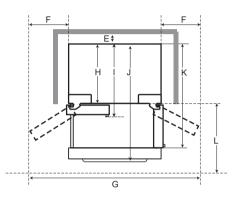
Install this appliance in an area where the temperature is between 55 °F (13 °C) and 110 °F (43 °C).

If the temperature around the appliance is too low or high, cooling ability may be adversely affected.

#### **Dimensions and Clearances**

- Check the dimensions of the appliance and the installation path to ensure there is sufficient room to move the refrigerator through doors or narrow openings.
- If an opening is too narrow to fit the refrigerator through, remove the refrigerator doors. See Removing/ Assembling the Doors and Drawers in this manual.
- The installation location chosen for the refrigerator should allow space behind the unit for connections and airflow and space in front to open the doors and drawers.
- Too small of a distance from adjacent items may result in lowered freezing capability and increased electricity consumption charges. Allow at least 27 inches (686 mm) in front of the refrigerator to open the doors, and at least 2 inches (51 mm) between the back of the refrigerator and the wall.





-	Dimension/Clearance	GM-F223DLXQ
Α	Depth without Handle	31 1/2" (800 mm)
В	Width	29 3/4" (756 mm)
С	Height to Top of Case	67" (1 700 mm)
D	Height to Top of Hinge	68 1/2" (1 740 mm)
Е	Back Clearance	2" (51 mm)
F	Case Edge Clearance (Door Fully Open)	11 7/8" (301 mm)
G	Width (Door Fully Open without Handle)	48 1/4" (1 225 mm)
Н	Depth without Door	27 5/8" (700 mm)
I	Depth with Handle	35 1/2" (901 mm)
J	Depth (Total with Freezer Drawer Open)	54 3/8" (1 380 mm)
К	Depth (Total with Door Open 90°)	43 3/8" (1 100 mm)
L	Front Clearance	33 7/8" (860 mm)

### Removing/Assembling the **Handles**

When moving the refrigerator through a narrow opening, removing the doors is preferred.

The appearance of the handles may vary from what is shown.

#### **WARNING**

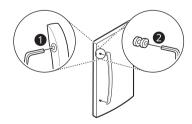
- When assembling or disassembling the refrigerator handles, grasp the handle firmly to avoid dropping it.
- Do not swing the handle into nearby people or animals.
- · Make sure that the bracket hole of the handle fits properly into the stopper bolt of the door. Assemble the set screws to fix the handle into place.
- Make sure that there is not a gap between the door and handle after assembling the handle.

#### **Tools Needed**

- 3/32 in. Allen wrench
- 1/8 in. Allen wrench
- 1/4 in. Allen wrench

### Removing the Refrigerator Handles

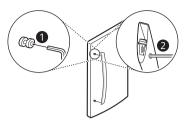
- Loosen the set screws 1 with a 3/32 in. Allen wrench and remove the handle.
- Loosen the mounting fasteners connect to the refrigerator door and handle using a ¼ in. Allen wrench, and remove the mounting fasteners.



### **Assembling the Refrigerator Handles**

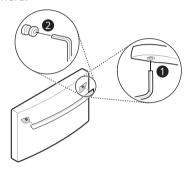
- Assemble the mounting fasteners 1 at both ends of the handle with a 1/4 in. Allen wrench.
- Place the handle on the door by fitting the handle footprints over the mounting

fasteners and tightening the set screws 2 with a 3/32 in. Allen wrench.



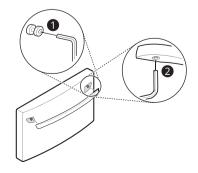
#### Removing the Freezer Drawer Handle

- Loosen the set screws 1 located on the lower side of the handle with a 1/8 in. Allen wrench and remove the handle.
- Loosen the mounting fasteners 2 with a 1/4 in. Allen wrench, and remove the mounting fasteners.



#### **Assembling the Freezer Drawer** Handle

- Assemble the mounting fasteners **1** at both ends of the handle with a 1/4 in. Allen wrench.
- Place the handle on the door by fitting the handle footprints over the mounting fasteners and tightening the set screws 2 with a 1/8 in. Allen wrench.



### Removing/Assembling the Doors and Drawers

If the entrance door is too narrow for the refrigerator to pass through, remove the refrigerator doors and move the refrigerator sideways through the doorway.

#### **WARNING**

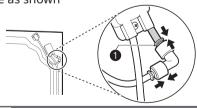
- Use two or more people to remove and install the refrigerator doors and freezer drawer.
- Disconnect the electrical supply to the refrigerator before installing.
- Do not put hands, feet or other objects into the air vents or bottom of the refrigerator.
- Be careful when handling the hinge and stopper.
- Remove food and bins before detaching the doors and drawers.
- Do not hold the handle when removing or replacing the doors and drawer as the handle may come off.

#### **Tools Needed**

- 3/32 in. Allen wrench
- 1/8 in. Allen wrench
- 1/4 in. Allen wrench
- 10 mm Socket wrench

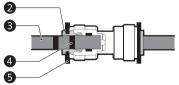
# Removing the Left Refrigerator Door

1 The water supply is connected to the upper right part of the rear surface of the refrigerator. Remove the ring in the joint area. Hold the water supply connection and gently push the collet 1 to detach the water supply line as shown



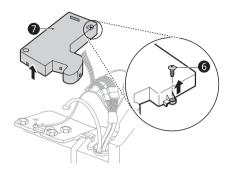
#### **NOTE**

• Disassembling/Assembling the Water Lines

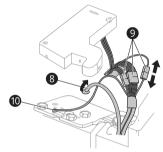


2 Collet 3 Tube 4 Insert line 5 Clip

2 Remove the screw **1** from the hinge cover at the top of the refrigerator. Lift the hook (not visible), located at the bottom of the front side of the cover **2** with a flat-head screwdriver.



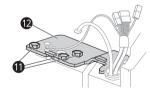
**3** Remove the cover and pull out the tube **3**. Disconnect all wire harnesses **9**. Unscrew the ground wire **6**.



4 Remove the three bolts **1** using a 10mm socket wrench. Lift off the top hinge **2**.

### **A** CAUTION

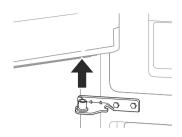
• When lifting the hinge, be careful that the door does not fall forward.



**5** Lift the door form the middle hinge pin and remove the door.

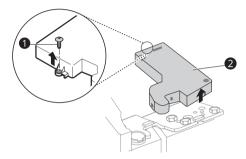
#### **A** CAUTION

• Place the door, inside facing up, on a nonscratching surface.



# Removing the Right Refrigerator Door

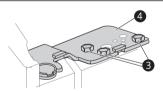
1 Remove the top hinge cover screw ①. Lift up the cover .



2 Remove the three bolts 3 using a 10mm socket wrench. Lift off the top hinge 4.

#### **A** CAUTION

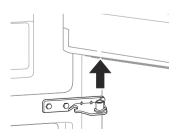
 When lifting the hinge, be careful that the door does not fall forward.



**3** Lift the door from the middle hinge pin and remove the door.

### **A** CAUTION

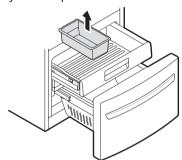
• Place the door, inside facing up, on a nonscratching surface.



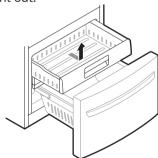
### **Removing the Freezer Drawers**

### **MARNING**

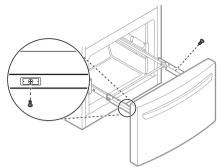
- Use two or more people to remove and install the refrigerator doors and freezer drawer.
- Be careful of sharp hinges on both sides of the drawer.
- When you lay the drawer down, be careful not to damage the floor.
- Do not sit or stand on the freezer drawer.
- To prevent accidents, keep children and pets away from the drawer. Do not leave the drawer open. If the Durabase® storage bin is removed from the freezer drawer, there is sufficient space for a small child or pet to crawl inside.
- 1 Pull the drawer open to full extension.
- **2** Gently lift and pull out the ice bin.



**3** Lift the front of the drawer up, then pull it straight out.



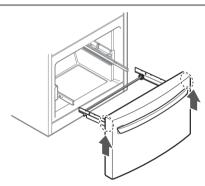
4 Remove the Durabase basket from the rails. Remove the screws from the rails at both ends.



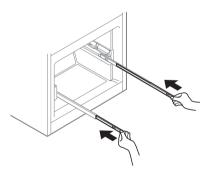
**5** Grip poth sides of the drawer and pull it up to remove it from the rails.

#### **A** CAUTION

• Do not hold the handle when removing or replacing the drawer. The handle may come off, causing personal injury.

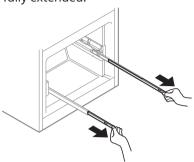


**6** Hold both rails and push them insimultaneously.



### **Assembling the Freezer Drawer**

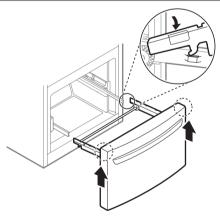
1 Pull out both rails simultaneously, until they are fully extended.



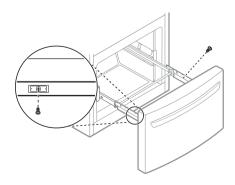
**2** Grasp the drawer on each side and hook the drawer supports into the rail tabs located on both sides.

### **A** CAUTION

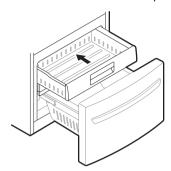
 Do not hold the handle when removing or replacing the drawer. The handle may come off, causing personal injury.



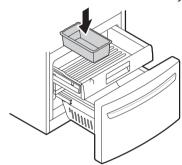
**3** Lower the door into its final position and insert the screws in the rails on both sides.



4 Insert the drawer into the frame, and push the drawer back until it clicks into place.



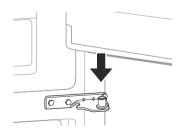
**5** Replace the ice bin in the drawer. Insert the Durabase basket in the rail assembly.



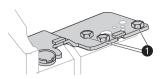
# Assembling the Right Refrigerator Door

### **A** CAUTION

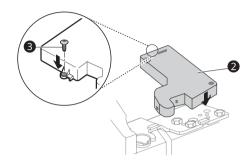
- Install the right-side door first.
- 1 Make sure that the plastic sleeve is inserted in the bottom of the door. Lower the door onto the middle hinge pin.



- **2** Align the door with the cabinet.
- 3 Line up the holes in the top hinge with the holes in the top of the refrigerator. Insert and tighten the three Bolts 1 in the hinge.



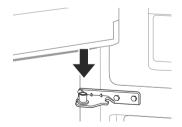
4 Hook the tabs on right side of hinge cover under the edge of the top hinge 2 and position the cover in place. Insert and tighten the cover screw 3.



# Assembling the Left Refrigerator Door

#### **A** CAUTION

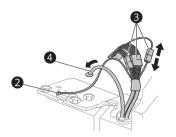
- Install the left refrigerator door after the right door is installed.
- 1 Make sure that the plastic sleeve is inserted in the bottom of the door. Lower the door onto the middle hinge pin.



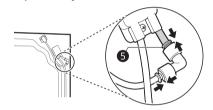
2 Line up the holes in the top hinge with the holes in the top of the refrigerator. Insert and tighten the three Bolts 1 in the hinge.



Install the grounding screw and connect the two wire harnesses . Push the water tube 4, located at the top of the left door into the hole beside the left hinge on the top of the cabinet until it exits through the back.

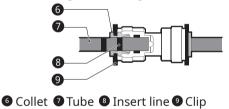


4 Hold the water supply connection and gently push in the collet (5) to connect the water supply line as shown. Insert the tube at least 5/8 inch (15 mm) into the connector. Insert the clip on the joint to fasten the tube in place.



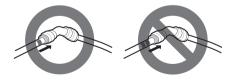
#### NOTE

• Disassembling/Assembling the Water Lines

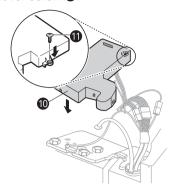


#### **NOTE**

• Gently press the collet and insert the tube until only one line shows on the tube.



4 Place the cover **1** in place. Insert and tighten the cover screw **1**.



### **Connecting the Water Line**

#### **Before Beginning**

This water line installation is not covered by the refrigerator warranty. Follow these instructions carefully to minimize the risk of expensive water damage.

If necessary, call a qualified plumber to correct water hammer before installing the water supply line to the refrigerator. Water banging in the pipes, or water hammer in residential plumbing can cause damage to refrigerator parts and lead to water leakage or flooding.

- Turn the icemaker OFF if the refrigerator will be used before the water line is connected.
- Do not install the icemaker tubing in areas where the ambient temperatures fall below freezing.

#### **WARNING**

· Connect to potable water supply only.

#### **CAUTION**

- To prevent burns and product damage, only connect the refrigerator water line to a cold water supply.
- Wear eye protection during installation to prevent injury.

#### Water Pressure

You will need a cold water supply.

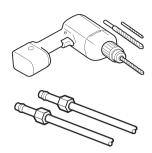
Water Pressure			
models with water filter	20 - 120 psi (138 - 827 kPa)		
where reverse osmosis water filtration system is connected to a cold water supply	40 - 60 psi minimum to reverse osmosis system (2.8 kgf/cm2 - 4.2 kgf/ cm2, or less than 2 - 3 seconds to fill a cup of 7 oz capacity)		

If the water pressure from the reverse osmosis system is less than 20 psi or 138 kPa or 1.4 kgf/ cm2 (takes more than 4 seconds to fill a cup of 7 oz or 198 cc capacity):

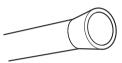
- Check to see if the sediment filter in the reverse osmosis system is blocked. Replace the filter if necessary.
- · Allow the storage tank on the reverse osmosis system to refill after heavy usage.
- If the water pressure remains low, call a licensed, qualified plumber.
- All installations must be in accordance with local plumbing code requirements.

### **Supplies Needed**

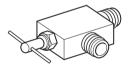
- Copper or PEX Tubing, ¼ in. outer diameter, to connect the refrigerator to the water supply. Be sure both ends of the tubing are cut square. To determine how much tubing you need, measure the distance from the water valve on the back of the refrigerator to the water supply pipe. Then, add 8 feet (2.4 m). Be sure there is sufficient extra tubing (about 8 feet [2.4 m] coiled into 3 turns of about 10 in. [25 cm] diameter) to allow the refrigerator to move out from the wall after installation.
- Power drill.
- ½ in. or adjustable wrench.
- Flat-blade and Phillips-head screwdrivers.
- Two ¼ in. outer diameter compression nuts and 2 ferrules (sleeves) to connect the copper tubing to the shutoff valve and the refrigerator water valve.



• If your existing copper water line has a flared fitting at the end, purchase an adapter (available at plumbing supply stores) to connect the water line to the refrigerator OR cut off the flared fitting with a tube cutter and then use a compression fitting.



• Shutoff valve to connect to the cold water line. The shutoff valve should have a water inlet with a minimum inside diameter of 5/32 in. at the point of connection to the COLD WATER LINE. Saddle-type shutoff valves are included in many water supply kits. Before purchasing, make sure a saddle-type valve complies with your local plumbing codes.



#### NOTE

· A self-piercing saddle type water valve should not be used.

#### **Water Line Installation Instructions**

Install the shutoff valve on the nearest frequently used drinking water line.



#### **MARNING**

• When using any electrical device (such as a power drill) during installation, be sure the device is battery-powered, double-insulated or grounded in a manner that will prevent the hazard of electric shock.

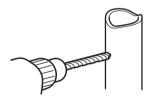
- **1** Shut off the main water supply.
  - Turn on the nearest faucet to relieve the pressure on the line.
- 2 Choose the valve location.
  - Choose a location for the valve that is easily accessible. It is best to connect into the side of a vertical water pipe. When it is necessary to connect into a horizontal water pipe, make the connection to the top or side, rather than at the bottom, to avoid drawing off any sediment from the water pipe.



- **3** Drill the hole for the valve.
  - Drill a ¼ in. hole in the water pipe using a sharp bit. Remove any burrs resulting from drilling the hole in the pipe. Be careful not to allow water to drain into the drill. Failure to drill a ¼ in. hole may result in reduced ice production or smaller cubes.

#### NOTE

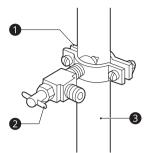
 The hookup line cannot be white, plastic tubing. Licensed plumbers must use only copper tubing (NDA tubing #49595 or #49599) or Cross Link Polyethylene (PEX) tubing.



- **4** Fasten the shutoff valve.
  - Fasten the shutoff valve to the cold water pipe with the pipe clamp.

#### NOTE

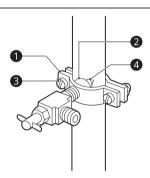
 Commonwealth of Massachusetts Plumbing Codes 248CMR shall be adhered to. Saddle valves are illegal and use is not permitted in Massachusetts. Consult with your licensed plumber.



- 1 Pipe Clamp
- 2 Saddle-Type Shutoff Valve
- 3 Vertical Cold Water Pipe
- **5** Tighten the pipe clamp.
  - Tighten the clamp screws until the sealing washer begins to swell.

#### **NOTE**

• Do not over tighten clamp or you may crush the tubing.

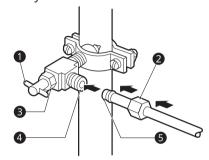


- Pipe Clamp
- 2 Inlet End
- 3 Clamp Screw
- Washer
- **6** Route the tubing.
  - Route the tubing between the cold water line and the refrigerator. Route the tubing through a hole drilled in the wall or floor (behind the refrigerator or adjacent base cabinet) as close to the wall as possible.

#### NOTE

 Be sure there is sufficient extra tubing (about 8 ft. coiled into three turns of about 10 in. diameter) to allow the refrigerator to move out from the wall after installation.

- Connect the tubing to the valve.
  - Place the compression nut and ferrule (sleeve) for copper tubing onto the end of the tubing and connect it to the shutoff valve. Make sure the tubing is fully inserted into the valve. Tighten the compression nut securely.



- Saddle-Type Shutoff Valve
- 2 Compression Nut
- Packing Nut
- 4 Outlet Valve
- 5 Ferrule (sleeve)
- Flush out the tubing.
  - Turn the main water supply on and flush out the tubing until the water is clear. Shut the water off at the water valve after about one quart of water has been flushed through the tubing.



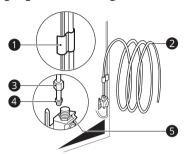
Connect the tubing to the refrigerator.

#### NOTE

- Before making the connection to the refrigerator, be sure that the refrigerator power cord is not plugged into the wall outlet.
- Remove the plastic flexible cap from the water
- Place the compression nut and ferrule (sleeve) onto the end of the tubing as shown.

#### **NOTE**

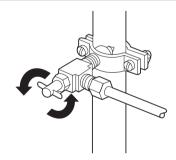
• Insert the end of the copper tubing into the connection as far as possible. While holding the tubing, tighten the fitting.



- 1 Tubing Clamp
- 2 ¼ in. Tubing
- 3 ¼ in. Compression Nut
- Ferrule (sleeve)
- Sefrigerator Connection
- **10** Turn the water on at the shutoff valve.
  - Tighten any connections that leak.

#### **A** CAUTION

· Check to see if leaks occur at the water line connections.



### Leveling and Door Alignment

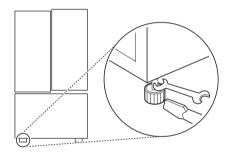
#### Leveling

The refrigerator has two front leveling legs. Adjust the legs to alter the tilt from front-to-back or side-to side. If the refrigerator seems unsteady, or the doors do not close easily, adjust the refrigerator's tilt using the instructions below:

1 Turn the leveling leg to the left to raise that side of the refrigerator or to the right to lower it. It may take several turns of the leveling leg to adjust the tilt of the refrigerator.

#### NOTE

• A flare nut wrench works best, but an open-end wrench will suffice. Do not over-tighten.



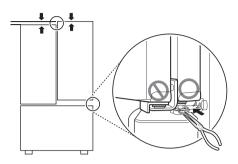
2 Open both doors and check to make sure that they close easily. If the doors do not close easily, tilt the refrigerator slightly more to the rear by turning both leveling legs to the left. It may take several more turns, and be sure to turn both leveling legs the same amount.

### **Door Alignment**

If the space between the doors is uneven, follow the instructions below to align the doors:

- With one hand, lift up both the inner and outer door sections of the right door to raise them at the middle hinge. (It may be easier to lift it with the doors open.)
- With the other hand, use pliers to insert the snap ring on the middle hinge of the inner door section as shown. Do not insert the ring on the hinge of the outer door section.

Insert additional snap rings until the right door is aligned. (Two snap rings are provided with the unit.)



### Turning on the Power

• After installing, plug the refrigerator's power cord into a 3-prong grounded outlet and push the refrigerator into the final position.

#### **A** CAUTION

- Connect to a rated power outlet.
- Have a certified electrician check the wall outlet and wiring for proper grounding.
- Do not damage or cut off the ground terminal of the power plug.

### **Position the Refrigerator**

 Arrange the coil of tubing so that it does not vibrate against the back of the refrigerator or against the wall. Push the refrigerator back to the wall.

#### Start the Icemaker \*in some models

- If the water line is connected, set the icemaker power switch to the ON position.
- The icemaker will not begin to operate until it reaches its operating temperature of 10 °F (-12 °C) or below. It will then begin operation automatically if the icemaker power switch is in the ON (I) position.

### **OPERATION**

#### **Before Use**

#### Checklist



#### Clean the refrigerator.

Clean the refrigerator thoroughly and wipe off all dust that accumulated during shipping.

#### **A** CAUTION

- Do not scratch the refrigerator with a sharp object or use a detergent that contains alcohol, a flammable liquid or an abrasive when removing any tape or adhesive from the refrigerator. Remove adhesive residue by wiping it off with your thumb or dish detergent.
- Do not peel off the model or serial number label or the technical information on the rear surface of the refrigerator.



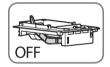
### Open refrigerator door and freezer drawer to ventilate the interior.

The inside of the refrigerator may smell like plastic at first. Remove any adhesive tape from inside the refrigerator and open the refrigerator door and the freezer drawer for ventilation.



#### Connect the power supply.

Check if the power supply is connected before use.



#### Turn off the icemaker.\*

Turn off the icemaker if the refrigerator is not yet connected to the water supply.

#### NOTE

• The icemaker water valve may buzz if the icemaker is turned on while the refrigerator is not connected to the water supply.



#### Wait for the refrigerator to cool.

Allow the refrigerator to run for at least two to three hours before putting food in it. Check the flow of cold air in the freezer compartment to ensure proper cooling.



#### **A** CAUTION

• Putting food in the refrigerator before it has cooled could cause the food to spoil, or a bad odor to remain inside the refrigerator.



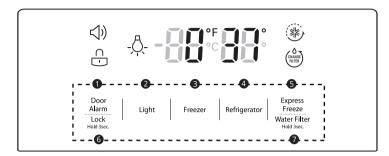
#### The refrigerator makes a loud noise after initial operation.

This is normal. The volume will decrease as the temperature decreases.

#### **Control Panel**

Depending on the model, some of the following functions may not be available. The actual control panel may differ from model to model.

#### **Control Panel Features**



#### 1 Door Alarm

When power is connected to the refrigerator, the door alarm is initially set to ON. When you press the **Door Alarm** button, the display will change to OFF and the Door Alarm function will deactivate. When either the refrigerator or the freezer door is left open for more than 60 seconds, the alarm tone will sound to let you know that the door is open. When you close the door, the door alarm will stop.

#### 2 Light

Press the Light button to turn the light on and off. When dispensing water, a light underneath the water switch will illuminate.

#### 6 Freezer

Indicates the set temperature of the freezer compartment in Celsius ( $^{\circ}$ C) or Fahrenheit ( $^{\circ}$ F). The default freezer temperature is 0 $^{\circ}$ F (-18  $^{\circ}$ C). Press the **Freezer** button repeatedly to select a new set temperature from 5  $^{\circ}$ F to -7  $^{\circ}$ F (-23  $^{\circ}$ C to -15  $^{\circ}$ C).

#### 4 Refrigerator

Indicates the set temperature of the refrigerator compartment in Celsius (°C) or Fahrenheit (°F). The default refrigerator temperature is 37 °F (3 °C). Press the **Refrigerator** button repeatedly to select a new set temperature from 43 °F to 33 °F (7 °C to 1 °C).

#### **NOTE**

- To change the temperature mode from °F to °C (or vice versa) press and hold the **Refrigerator** and **Freezer** buttons simultaneously for approximately five seconds. The temperature indicator on the display window switches between Celsius and Fahrenheit.
- The displayed temperature is the target temperature, and not the actual temperature of the refrigerator. The actual refrigerator temperature depends on the food inside the refrigerator.

#### **5** Express Freeze

This function increases both ice making and freezing capabilities.

Press the **Express Freeze** button to illuminate the icon and activate the function for 24 hours. The function automatically shuts off after 24 hours. Stop the function manually by pressing the button once more.

#### 6 Lock

If you want to activate the Lock function to lock other buttons, press and hold the **Lock** button for three seconds or more. The Lock icon will display and the Lock function is now enabled. When the Lock function is activated, no other buttons will work. The dispenser pad is also deactivated. To disable the Lock function, press and hold the **Lock** button for approximately three seconds.

#### **Water Filter**

Replace the water filter when the Water Filter indicator turns on. After replacing the water filter, press and hold the Water Filter button for three seconds to turn the indicator light off. Replace the water filter approximately every six months.

#### **CAUTION**

Display Mode (For Store Use Only)

- The Display Mode disables all cooling in the refrigerator and freezer sections to conserve energy while on display in a retail store. When activated, OFF is displayed on the control panel and the display remains on for 20 seconds.
- To deactivate / activate:
- With either refrigerator door opened, press the Express Frz. button 3 times consecutively while pressing the **Refrigerator** button. The control panel beeps and the temperature settings display to confirm that Display Mode is deactivated. Use the same procedure to activate Display Mode.

#### **NOTE**

• When the refrigerator is in the Power Saving Mode, the display remains off until a door is opened or a button is pressed. Once on, the display remains on for 20 seconds.

### **Water Dispenser**

#### **Before Use**

#### **A** CAUTION

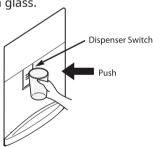
- Keep children away from the dispenser. Children may play with or damage the controls.
- If ice or water dispenses unexpectedly, turn off the water supply and contact an LG Electronics Customer Information Center.

#### **NOTE**

- The first ice water dispensed may include particles or odor from the water supply line or the water tank. Throw away the first few batches of water. This is also necessary if the refrigerator has not been used for a long time.
- The dispenser will not operate when either of the refrigerator doors is open.
- Some dripping may occur after dispensing. Hold the cup beneath the dispenser for a few seconds after dispensing to catch all of the drops.

### **Using the Water Dispenser**

To dispense cold water, push on the dispenser switch with a glass.



### **Water Tray**

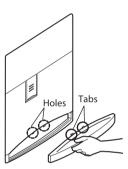
To remove the tray, press down on either of the front corners and pull out.

#### **NOTE**

• There is no drain beneath the tray. You may need to empty the tray of any liquid that collects in it.



To replace the tray, slightly tilt up the front of the tray and snap the tabs into the holes.

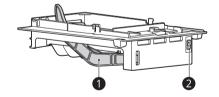


### **Automatic Icemaker**

\*on some models

#### Freezer Icemaker

This feature is only available on some models. The feature may vary depending on model purchased.



- 1 Auto Shutoff (feeler arm)
- 2 Power Switch

#### NOTE

- The icemaker produces ice once approximately 48 hours have passed after the appliance is initially installed.
- Throw away the first few batches of ice (about 140 160 cubes) after installation. This is also

necessary if the refrigerator has not been used for a longtime.

- The automatic freezer icemaker produces 12 cubes at a time, 50-110 pieces within a 24 hour period if conditions are favorable. This amount may vary according to the environment (ambient temperature around the appliance, frequency of the door being opened, amount of food stored in the appliance, etc.).
- The amount and shape of ice may vary according to the environment (ambient temperature around the appliance, frequency of the door being opened, amount of food stored in the appliance, water pressure, etc.).
- The sound of ice dropping into the ice bin is normal.
- If the ice bin is completely filled with ice, ice production will stop.
- In the event of a power outage, throw away the ice stored in the ice bin.
- Ice cubes which are stored in the ice bin for a long time may clump together and be difficult to separate. If this happens, empty the ice bin completely and clean it before reinstalling it.

## Turning the Automatic Icemaker On

To turn the automatic icemaker On/Off, press the power switch on the icemaker to the ON ( | ) or OFF (O) position.

### Normal Sounds You May Hear

- Keeping the power turned on to the icemaker before the water line is connected can damage the icemaker.
- The icemaker water valve buzzes as the icemaker fills with water. If the icemaker power button is in the ON mode, it will buzz even if it has not yet been hooked up to water. To stop the buzzing, press the icemaker power button to turn it off.
- You will hear the sound of cubes dropping into the bin and water running in the pipes as the icemaker refills.

### **Preparing for Vacation**

Set the icemaker power button to OFF and shut off the water supply to the refrigerator.

#### NOTE

• The ice bin should be emptied any time the icemaker power button is turned to the OFF mode.

If the ambient temperature will drop below freezing, have a qualified technician drain the water supply system to prevent serious property damage due to flooding caused by ruptured water lines or connections

### **Storing Food**

#### **Food Storage Tips**

Wrap or store food in the refrigerator in airtight and moisture-proof material unless otherwise noted. This prevents food odor and taste transfer throughout the refrigerator. For dated products, check date code to ensure freshness.

#### **A** CAUTION

 Do not overfill or pack items too tightly into door bins. Doing so may cause damage to the bin or personal injury if items are removed with excessive force.

#### **A** CAUTION

Do not store glass containers in the freezer.
 Contents may expand when frozen, break the container and cause injury.

Food	How to Store
Butter or Margarine	Keep opened butter in covered dish or closed compartment. When storing an extra supply, wrap in freezer packaging and freeze.
Cheese	Store in original wrapping until used. Once opened, rewrap tightly in plastic wrap or aluminum foil.
Milk	Wipe milk cartons. For coldest milk, place containers on an interior shelf.
Eggs	Store in original carton on interior shelf, not on door shelf.
Fruit	Do not wash or hull fruit until it is ready to be used. Sort and keep fruit in original container in a crisper, or store in completely closed paper bag on refrigerator shelf.

Food	How to Store
Leafy Vegetables	Remove store wrapping, trim or tear off bruised and discolored areas, wash in cold water, and drain. Place in plastic bag or plastic container and store in crisper.
Vegetables with skins (carrots, peppers)	Place in plastic bags or plastic container and store in crisper.
Fish	Freeze fresh fish and shellfish if they are not being eaten the same day purchased. Eating fresh fish and shellfish the same day purchased is recommended.
Leftovers	Cover leftovers with plastic wrap or aluminum foil, or store in plastic containers with tight lids.

#### **Storing Frozen Food**

Check a freezer guide or a reliable cookbook for further information about preparing food for freezing or food storage times.

#### Freezing

Your freezer will not quick-freeze a large quantity of food. Do not put more unfrozen food into the freezer than will freeze within 24 hours (no more than 2 to 3 pounds of food per cubic foot of freezer space). Leave enough space in the freezer for air to circulate around packages. Be careful to leave enough room at the front so the door can close tightly.

Storage times will vary according to the quality and type of food, the type of packaging or wrap used (how airtight and moisture-proof) and the storage temperature. Ice crystals inside a sealed package are normal. This simply means that moisture in the food and air inside the package have condensed, creating ice crystals.

#### **NOTE**

 Allow hot foods to cool at room temperature for 30 minutes, and then package and freeze.
 Cooling hot foods before freezing saves energy.

### **Packaging**

Successful freezing depends on correct packaging. When you close and seal the package, it must not allow air or moisture in or out. If it does, you could

have food odor and taste transfer throughout the refrigerator and could also dry out frozen food.

Packaging recommendations

- Rigid plastic containers with tight-fitting lids
- Straight-sided canning/freezing jars
- · Heavy-duty aluminum foil
- Plastic-coated paper
- Non-permeable plastic wraps
- Specified freezer-grade self-sealing plastic bags

Follow package or container instructions for proper freezing methods.

Do not use

- Bread wrappers
- Non-polyethylene plastic containers
- · Containers without tight lids
- Wax paper or wax-coated freezer wrap
- Thin, semi-permeable wrap

#### NOTE

- If you are leaving home for a short period, like a short vacation, the refrigerator should be left on.
   Refrigerated foods that are able to be frozen will stay preserved longer if stored in the freezer.
- If you are leaving the refrigerator turned off for an extended period, remove all food and unplug the power cord. Clean the interior, and leave the door open to prevent fungi from growing in the refrigerator.
- Do not store food with high moisture content towards the top of the refrigerator. The moisture could come in direct contact with the cold air and freeze
- Wash food before storing it in the refrigerator.
   Vegetables should be washed, and food packaging should be wiped down to prevent adjacent foods from being contaminated.
- If the refrigerator is kept in a hot and humid place, frequent opening of the door or storing a lot of vegetables in the refrigerator may cause condensation to form. Wipe off the condensation with a clean cloth or a paper towel.
- If the refrigerator door or freezer drawer is opened or closed too often, warm air may penetrate the refrigerator and raise its temperature. This can increase the running costs of the unit.

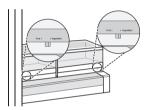
# Humidity Controlled Crispers

# Using the Humidity Controlled Crispers

This feature is only available on some models. The crispers provide fresher tasting fruit and vegetables by letting you easily control humidity inside the drawer.

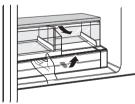
You can control the amount of humidity in the moisture-sealed crispers by adjusting the control to any setting between Vegetables and Fruit.

- **Vegetables** keeps moist air in the crisper for best storage of fresh, leafy vegetables.
- **Fruit** lets moist air out of the crisper for best storage of fruit.

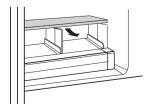


### Removing/Assembling the Humidity Controlled Crispers

1 Pull out the crisper to full extension, lift the front up, and pull straight out.



2 Lift the front of the cover up with both hands until it detaches from the back wall of the cabinet, then pull it out.



**3** To reassemble, insert the cover into the refrigerator with both hands and lower it onto the guides.



4 Slightly tilt up the front, insert the crisper into the frame and push it back into place.



#### Glide'N'Serve

#### Using the Glide'N'Serve

This drawer can be used for large party trays, deli items and beverages. This drawer should not be used to store vegetables that require high humidity.

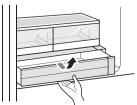
#### **A** CAUTION

• Do not place any items on the Glide'N'Serve cover.



# Detaching/Assembling the Glide'N'Serve

1 To remove the Glide'N'Serve, pull out the Glide'N'Serve to full extension, lift the front up, and pull straight out.



2 To assemble, slightly tilt up the front, insert the Glide'N'Serve into the frame and push it back into place.



### **Refrigerator Shelves**

The shelves in the refrigerator are adjustable to meet individual storage needs. Your model may have full or split shelves.

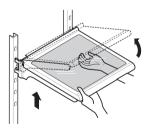
Adjusting the shelves to fit items of different heights will make finding the exact item you want easier.

#### **A** CAUTION

 Glass shelves are heavy. Use special care when removing them.

### **Detaching the Shelf**

- 1 Tilt up the front of the shelf and lift the shelf straight up.
- 2 Pull the shelf out.



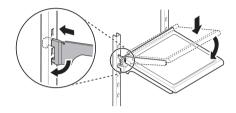
### **Assembling the Shelf**

### **A** CAUTION

• Make sure that shelves are level from one side to the other. Failure to do so may result in the shelf falling or spilled food.

#### **A** CAUTION

- Do not clean glass shelves with warm water while they are cold. Shelves may break if exposed to sudden temperature changes or impact.
- 1 Tilt the front of the shelf up and guide the shelf hooks into the slots at a desired height.
- 2 Lower the front of the shelf so that the hooks drop into the slots.



### **Door Bins**

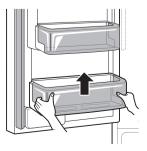
# Detaching/Assembling the Door Bins

#### **A** CAUTION

- Regularly detach and wash the storage bins and shelves; they can become easily contaminated by food.
- Do not apply excessive force while detaching or assembling the storage bins.
- Do not use the dishwasher to clean the storage bins and shelves.

The door bins are removable for easy cleaning and adjustment.

**1** To remove the bin, simply lift the bin up and pull straight out.



2 To replace the bin, slide it in above the desired support and push down until it snaps into place.

### **Durabase**

### **Using the Durabase**

### **A** CAUTION

• If the **Durabase** divider is removed, there is enough open space for children or pets to crawl inside. To prevent accidental child and pet entrapment or suffocation risk, DO NOT allow children or pets to touch or go near the drawer.

The **Durabase** divider allows you to organize the **Durabase** area into 2 sections. It can be adjusted from side to side to accommodate items of different sizes.



### **SMART FUNCTIONS**

### LG ThinQ Application

This feature is only available on models with the 9 or 1 logo.

The **LG ThinQ** application allows you to communicate with the appliance using a smartphone.

#### **LG ThinQ Application Features**

Communicate with the appliance from a smartphone using the convenient smart features.

#### **Smart Diagnosis**

 If you experience a problem while using the appliance, this smart diagnosis feature will help you diagnose the problem.

#### NOTE

- The application is subject to change for appliance improvement purposes without notice to users.
- · Functions may vary by model.

# Installing the LG ThinQ Application

Search for the LG ThinQ application from the Google Play Store or Apple App Store on a smart phone.

- Follow instructions to download and install the application.
- Run the LG ThinQ application and follow the instructions in the application to register the appliance.

### **Smart Diagnosis**

This feature is only available on models with the  $^{\textcircled{P}}$  or  $^{\textcircled{e}}$  logo.

Use this feature to help you diagnose and solve problems with your appliance.

#### NOTE

- For reasons not attributable to LGE's negligence, the service may not operate due to external factors such as, but not limited to, Wi-Fi unavailability, Wi-Fi disconnection, local app store policy, or app unavailability.
- The feature may be subject to change without prior notice and may have a different form depending on where you are located.

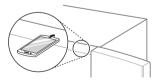
# Using Audible Diagnosis to Diagnose Issues

Follow the instructions below to use the audible diagnosis method.

- Launch the LG ThinQ application and select the Smart Diagnosis feature in the menu. Follow the instructions for audible diagnosis provided in the LG ThinQ application.
- **1** Open the refrigerator door.
- **2** Press and hold the Freezer button for 3 seconds or longer.
  - The control panel will be turned off, and then '3' will be displayed on the fridge temperature display part.



**3** Hold the phone on the upper right speaker hole.



**4** After the data transfer is complete, the diagnosis will be displayed in the application.

#### **NOTE**

 For best results, do not move the phone while the tones are being transmitted.

### **MAINTENANCE**

### Cleaning

#### **WARNING**

 Use non-flammable cleaner. Failure to do so can result in fire, explosion, or death.

#### **A** CAUTION

- Do not use an abrasive cloth or sponge when cleaning the interior and exterior of the refrigerator.
- Do not place your hand on the bottom surface of the refrigerator when opening and closing the doors.
- When lifting the hinge free of the latch, be careful that the door does not fall forward.

#### **General Cleaning Tips**

- Both the refrigerator and freezer sections defrost automatically; however, clean both sections once a month to prevent odors.
- Wipe up spills immediately.
  - Unplug the refrigerator or disconnect power before cleaning.
- Remove all removable parts, such as shelves.
- Use a clean sponge or soft cloth and a mild detergent in warm water. Do not use abrasive or harsh cleaners.
- Hand wash, rinse and dry all surfaces thoroughly.

#### **Exterior**

For products with black stainless steel exterior, spray glass cleaner on a clean, microfiber cloth and rub in direction of grain. Do not spray glass cleaner directly at the display panel. Do not use harsh or abrasive cleaners.

For products with a standard stainless steel exterior, use a damp microfiber cloth and rub in the direction of the grain. Dry with a paper towel to avoid streaks. For stubborn stains and fingerprints, use a few drops of liquid dish soap in water, and rinse with hot water before drying. Do not use abrasive or harsh cleaners.

#### **Inside Walls**

Allow freezer to warm up so the cloth will not stick

To help remove odors, wash the inside of the refrigerator with a mixture of baking soda and warm water. Mix 2 tablespoons of baking soda to 1 quart of water (26 g soda to 1 liter water.) Be sure the baking soda is completely dissolved so it does not scratch the surfaces of the refrigerator.

#### **Door Liners and Gaskets**

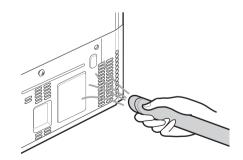
Use a clean sponge or soft cloth and a mild detergent in warm water. Do not use cleaning waxes, concentrated etergents, bleaches, or cleaners containing petroleum on plastic refrigerator parts.

#### **Plastic Parts (Covers and Panels)**

Use a clean sponge or soft cloth and a mild detergent in warm water. Do not use glass cleaners, abrasive cleansers, or flammable fluids. These can scratch or damage the material.

#### **Condenser Coils**

Use a vacuum cleaner with a brush or crevice attachment to clean the condenser cover and vents. Do not remove the panel covering the condenser coil area.



#### **Water Filter**

#### Before Replacing the Water Filter

#### **WARNING**

- To reduce the risk associated with choking, do not allow children under 3 years of age to have access to small parts during the installation of this product.
- To reduce the risk associated with the ingestion of contaminants, do not use with water that is microbiologicallyunsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.
- Use of unauthorized water filters may result in product malfunction, water leakage or water quality issues, which will not be covered under the product warranty.

### **A** CAUTION

- · Read and follow Use Instructions before installation and use of this system.
- Installation and use MUST comply with all state and local plumbing codes.
- Do not install if water pressure exceeds 120 psi (827 kPa). If your water pressure exceeds 80 psi, you must install a pressure limiting valve. Contact a plumber if uncertain how to check your water pressure.
- Do not install where water hammer conditions may occur. If water hammer conditions exist you must install a water hammer arrester. Contact a plumbing professional if you are uncertain how to check for this condition.
- Do not install on hot water supply lines. The maximum operating water temperature of this filter system is 100 °F (37.8 °C).
- Protect filter from freezing. Drain filter when temperatures drop below 40 °F (4.4 °C).
- The disposable filter cartridge MUST be replaced every 6 months, at the rated capacity or if a noticeable reduction in flow rate occurs.
- Protect from freezing, remove filter cartridge when temperatures are expected to drop below 33° F.
- Do not install systems in areas where ambient temperatures may go above 110° F (43.3° C).
- Where a backflow prevention device is installed on a water system, a device for controlling pressure due to thermal expansion must be installed.

• Ensure all tubing and fittings are secure and free of leaks.

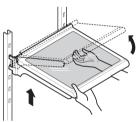
### Replacing the Water Filter

`Replace the water filter:

- Approximately every six months.
- · When the Water Filter icon turns on.
- When the ice maker output decreases.

To purchase a replacement water filter:

- · Visit your local dealer or distributor
- · Search using "water filter" on lg.com
- Use replacement cartridge: ADQ36006101
- If the top shelf, located below the water filter, is in the highest position, it will need to be removed prior to replacing the water filter.
  - To remove any shelf, tilt up the front of the shelf and lift it. Pull the shelf out.



Press the push button to open the water filter cover.





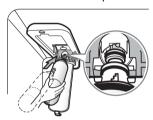
Pull the water filter downward and pull out.



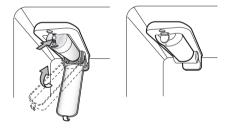
#### **NOTE**

- Replacing the water filter causes a small amount of water (around 1 oz. or 25 cc) to drain.
- Wrap a cloth around the front end of the water filter cover to collect any leaking water. Hold the water filter upright, once it is removed, to prevent any remaining water from spilling out of the water filter.
- 4 Replace with a new water filter.
  - Take the new water filter out of its packing and remove the protective cover from the o-rings.

With the water filter tabs in the horizontal position, push the new water filter into the manifold hole and turn it clockwise until it stops.



5 Swing the filter up into place in the enclosure. Close the cover until it clicks into place.



**6** After the water filter is replaced, dispense 2.5 gallons of water (flush for approximately 5 minutes) to remove trapped air and contaminants from the system.

#### **▲** NOTE

 Do not dispense the entire 2.5 gallon amount continuously. Press and release the dispenser pad for cycles of 30 seconds ON and 60 seconds OFF. After changing the filter, press and hold the Water Filter button for three seconds to reset the indicator light.

Express Freeze Water Filter Hold 3sec.

## **Before Replacing the Water Filter**

Model: LT1000P, LT1000PC, LT1000PCS

NSF System Trade Name Code: MDJ64844601

The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system as specified in NSF/ ANSI Standard 42, Standard 53 and Standard 401.



System tested and certified by NSF International against NSF/ANSI Standard 42, Standard 53 and Standard 401 for the reduction of substances listed below.

Substance Reduction	Average Influent Challenge	NSF specified Challenge Concentration	Avg % Reduction	Average Product Water Concentration	Max Permissible Product Water Concentration	NSF Reduction Requirements
Chlorine Taste and Odor	2.0 μg/L	2.0 μg/L± 10%	>97.5%	0.050 μg/L	N/A	≥ 50.00%
Nominal Particulate Class I, , ≥ 0.5 to < 1.0 µm	12,000,000 pts/mL	12,000,000 pts/mL	99.80%	24,000 pts/ml	N/A	≥ 85.00%
Asbestos	180 MFL	10 <sup>7</sup> to 10 <sup>8</sup> MFL; fibers greater than 10 μg/Lin length	>99.00%	< 1 MFL	N/A	≥ 99.00%
Atrazine	8.5 μg/L	9.0 μg/L ± 10%	>94.10%	0.500 μg/L	3.0 μg/L	N/A
Benzene	15.0 μg/L	15.0 μg/L ± 10%	>96.60%	0.510 μg/L	5.0 μg/L	N/A
Carbofuran	74.0 µg/L	80.0 μg/L ± 10%	98.30%	1.258 μg/L	40 μg/L	N/A
Lindane	1.9 μg/L	2.0 μg/L ± 10%	>99.00%	0.019 μg/L	0.2 μg/L	N/A
P-Dichlorobenzene	230.0 μg/L	225.0 μg/L ± 10%	>99.80%	0.460 μg/L	75.0 μg/L	N/A
2,4-D	210.0 μg/L	210.0 μg/L ± 10%	>99.90%	0.210 μg/L	70.0 μg/L	N/A
Lead pH @6.5	140.0 μg/L	150.0 μg/L ± 10%	99.60%	0.560 μg/L	10.0 μg/L	N/A
Lead pH @8.5	150.0 μg/L	150.0 μg/L ± 10%	>99.70%	<0.500 μg/L	10.0 μg/L	N/A
Mercury @ pH6.5	5.9 μg/L	6.0 μg/L ± 10%	91.00%	0.531 μg/L	2.0 μg/L	N/A
Mercury @ pH8.5	5.6 μg/L	6.0 μg/L ± 10%	92.5%	0.420 μg/L	2.0 μg/L	N/A
Cyst*	100,000 cysts/L	Minimum 50,000 cysts/L	>99.99%	10 cysts/L	N/A	≥ 99.95%
Atenolol	240 ng/L	200 ± 40% ng/L	> 95.50%	10.80 ng/L	30 ng/L	N/A
Carbamazepine	1600 ng/L	1400 ± 40% ng/L	98.40%	25.60 ng/L	200 ng/L	N/A
DEET	1600 ng/L	1400 ± 40% ng/L	97.10%	46.40 ng/L	200 ng/L	N/A
Trimethoprim	170 ng/L	140 ± 40% ng/L	>96.80%	5.44 ng/L	20 ng/L	N/A
Linuron	160 ng/L	140 ± 40% ng/L	>96.60%	5.44 ng/L	20 ng/L	N/A
Phenytoin	200 ng/L	200 ± 40% ng/L	>94.80%	10.40 ng/L	30 ng/L	N/A
Ibuprofen	400 ng/L	400 ± 40% ng/L	>94.50%	22.00 ng/L	60 ng/L	N/A
Naproxen	140 ng/L	140 ± 40% ng/L	>96.10%	5.46 ng/L	20 ng/L	N/A
Estrone	120 ng/L	140 ± 40% ng/L	>96.10%	4.68 ng/L	20 ng/L	N/A
Bisphenol A	2000 ng/L	2000 ± 40% ng/L	>98.90%	22.00 ng/L	300 ng/L	N/A
Nonyl Phenol	1600 ng/L	1400 ± 40% ng/L	>97.10%	46.40 ng/L	200 ng/L	N/A

<sup>•</sup> Based on the use of Cryptosporidium parvum oocysts.

Guidelines for Application / Water Supply Parameters		
Service Flow	0.5 gpm (1.9 lpm)	
Water Supply	Community or Private Well - Potable Water	
Water Pressure	20 – 120 psi (138 – 827 kPa)	
Water Temperature	33 °F – 100 °F (0.6 °C – 37.8°C)	
Capacity	200 gallons (757 liters)	

It is essential that the manufacturer's recommended installation, maintenance and filter replacement requirements be carried out for the product to perform as advertised.

#### NOTE

• While the testing was performed under standard laboratory conditions, actual performance may vary.

For replacement filters, visit your local dealer or distributor or search under "water filters" on the lg.com website.

#### Replacement Cartridge: LT1000P, LT1000PC or LT1000PCS

LG is a trademark of LG corp.

NSF is a trademark of NSF International.

Manufactured by LG Electronics, INC:

170, Sungsanpaechoungro, Seongsan-gu, Gyeongsangnam-do, THE REPUBLIC OF KOREA

## EN ENGLISH PRODUCT FICHE

Α	Trade Mark	LG Electronics
В	Model	GM-F223DLXQ
С	Category	7 (Refrigerator-Freezer)
D	Energy efficiency class	A+
E	Energy efficiency class	361  Actual energy consumption will depend on how the appliance is used and where it is located
F	Fresh Food Storage Volume (L)	411
G	Frozen Food Storage Volume (L)	122
н	Design temperature of other compartments (>14°C)	None
I	Frost-Free Compartments	Fresh Food, Frozen Food
J	Temperature Rise time (h)	17
К	Freezing Capacity (kg/24h)	6
		Т
L	Climate Class	This appliance is intented to be used at ambient temperature between 16°C and 43°C
М	Airborne acoustical noise emissions [dB(A)]	42
N	Free standing / Built-in	Free standing

## **TROUBLESHOOTING**

## **FAQs**

### **Frequently Asked Questions**

#### Q: What are the best temperature settings for my refrigerator and freezer?

A: The default setting for the refrigerator is 37° Fahrenheit (3° Celsius). The default setting for the freezer is 0° Fahrenheit (-18° Celsius). Adjust these settings as necessary to keep food at desired temperatures. Milk should be cold when stored on the inner shelf of the refrigerator. Ice cream should be firm and ice cubes should not melt in the freezer. To switch the display from Fahrenheit to Celsius, press and hold the Freezer and Refrigerator buttons until you hear a beep and the settings in the display change.

#### Q: How do I set the refrigerator and freezer temperatures?

A: Continually press the Refrigerator or Freezer button on the control panel until the desired temperature appears. The numbers will cycle from highest to lowest and then return to the highest again with continuous pressing.

#### Q: Why do I hear a buzzing noise from my refrigerator periodically?

A: This may happen if you do not have a water source attached to your refrigerator and the icemaker is turned on. If you do not have a water source attached to the back of the refrigerator you should turn the icemaker off.

#### Q: Why does the icemaker tray look crooked?

A: This is a normal part of the icemaker cycle. The icemaker tray may appear level or with a slight tilt. The change in position is to assist in the freezing process.

# Q: My refrigerator is powered on and the controls are working, but it's not cooling and the display shows "OFF" (see below). What is wrong?

A: The refrigerator is in Display Mode. The Display Mode disables all cooling in the refrigerator and freezer sections to conserve energy while on display in a retail store. When activated, OFF is displayed on the control panel and the display remains on for 20 seconds. With either refrigerator door opened, press the **Express Frz.** button 3 times consecutively while pressing the Refrigerator button. The control panel beeps and the temperature settings display to confirm that Display Mode is deactivated. Use the same procedure to activate Display Mode.



# **Before Calling for Service**

## Cooling

Problem	Possible Cause & Solution
Refrigerator and	The refrigerator control is set to OFF (some models).
Freezer section are not cooling.	• Turn the control ON. Refer to the Setting the Controls section for proper temperature <b>settings</b> .
	Refrigerator is set to Demo Mode.
	• Demo Mode allows the lights and control display to work normally while disabling cooling, to save energy while the refrigerator is on the showroom floor. See the FAQs section of this manual for instructions on how to disable Demo Mode.
	Refrigerator is in the defrost cycle.
	During the defrost cycle, the temperature of each compartment may rise slightly. Wait 30 minutes and confirm the proper temperature has been restored once the defrost cycle has completed.
	Refrigerator was recently installed.
	• It may take up to 24 hours for each compartment to reach the desired temperature.
	Refrigerator was recently relocated.  • If the refrigerator was stored for a long period of time or moved on its side, it is necessary for the refrigerator to stand upright for 24 hours before connecting it to power.
Cooling system runs	Refrigerator is replacing an older model.
too much.	Modern refrigerators require more operating time but use less energy due to more efficient technology.
	Refrigerator was recently plugged in or power restored.
	• The refrigerator will take up to 24 hours to cool completely.
	The door is opened often or a large amount of food / hot food was added.
	• Adding food and opening the door warms the refrigerator, requiring the compressor to run longer in order to cool the refrigerator back down. In order to conserve energy, try to get everything you need out of the refrigerator at once, keep food organized so it is easy to find, and close the door as soon as the food is removed. (Refer to the Food Storage Guide.)
	Doors are not closed completely.
	Firmly push the doors shut. If they will not shut all the way, the "Doors will not close correctly or pop open" section in Troubleshooting
	Refrigerator is installed in a hot location. • The compressor will run longer under warm conditions. At normal room temperatures (70 °F or 21 °C) expect your compressor to run about 40 % to 80 % of the time. Under warmer conditions, expect it to run even more often. The refrigerator should not be operated above 110 °F (43 °C).
	Condenser / back cover is clogged.  • Use a vacuum cleaner with an attachment to clean the condenser cover and vents. Do not remove the panel covering the condenser coil area.

Problem	Possible Cause & Solution
Interior moisture	Doors are opened often or for long periods of time.
buildup.	• When the doors are opened often or for long periods of time, warm, humid air enters the compartment. This raises the temperature and moisture level within the compartment. To lessen the effect, reduce the frequency and duration of door openings.
	Doors are not closed correctly.
	• See the "Doors will not close correctly or pop open" section.
	Weather is humid.
	• Humid weather allows additional moisture to enter the compartments when the doors are opened leading to condensation or frost. Maintaining a reasonable level of humidity in the home will help to control the amount of moisture that can enter the compartments.
	Defrost cycle recently completed.
	• During the defrost cycle, the temperature of each compartment may rise slightly and condensation may form on the back wall. Wait 30 minutes and confirm that the proper temperature has been restored once the defrost cycle has completed.
	Food is not packaged correctly.
	• Food stored uncovered or unwrapped, and damp containers can lead to moisture accumulation within each compartment. Wipe all containers dry and store food in sealed packaging to prevent condensation and frost.
Food is freezing in	Food with high water content was placed near an air vent.
the refrigerator compartment.	• Rearrange items with high water content away from air vents.
•	Refrigerator temperature control is set incorrectly.
	• If the temperature is too cold, adjust the control one increment at a time and wait for the temperature to stabilize. Refer to the Control Panel section for more information.
	Refrigerator is installed in a cold location.
	• When the refrigerator is operated in temperature below 41 °F (5 °C), food can freeze in the refrigerator compartment. The refrigerator should not be operated in temperature below 55 °F (13 °C).
Refrigerator or	Incorrect temperature control settings.
Freezer section is too cold.	• If the temperature is too cold, adjust the control one increment at a time and wait for the temperature to stabilize. Refer to the Control Panel for more information.
Frost or ice crystals form on frozen food	Condensation from food with a high water content has frozen inside of the food package.
(inside of sealed package).	• This is normal for food items with a high water content.
	Food has been left in the freezer for a long period of time.
	• Do not store food items with high water content in the freezer for a long period of time.
Frost or ice crystals	Door is opened frequently or for long periods of time.
form on frozen food (outside of package).	• When the doors are opened often or for long periods of time, warm, humid air enters the compartment. This raises the temperature and moisture level within the compartment. Increased moisture will lead to frost and condensation. To lessen the effect, reduce the frequency and duration of door openings.
	Door is not closing properly.
	• Refer to the "Doors will not close correctly or pop open" section in the Troubleshooting.

Problem	Possible Cause & Solution
Refrigerator or Freezer section is too warm.	Refrigerator was recently installed.
	• It may take up to 24 hours for each compartment to reach the desired temperature.
	The air vents are blocked. Cold air circulates from the freezer to the fresh food section and back again through air vents in the wall dividing the two sections.
	Locate air vents by using your hand to sense airflow and move all packages that block vents and restrict airflow. Rearrange items to allow air to flow throughout the compartment.
	Doors are opened often or for long periods of time.
	• When the doors are opened often or for long periods of time, warm, humid air enters the compartment. This raises the temperature and moisture level within the compartment. To lessen the effect, reduce the frequency and duration of door openings.
	Unit is installed in a hot location.
	• The refrigerator should not be operated in temperatures above 110 °F (43 °C).
	A large amount of food or hot food was added to either compartment.
	Adding food warms the compartment requiring the cooling system to run. Allowing hot food to cool to room temperature before putting it in the refrigerator will reduce this effect.
	Doors are not closed correctly.
	See the "Doors will not close correctly or pop open" section in the Troubleshooting.
	Temperature control is not set correctly.
	• If the temperature is too warm, adjust the control one increment at a time and wait for the temperature to stabilize.
	Defrost cycle has recently completed.
	• During the defrost cycle, the temperature of each compartment may rise slightly and condensation may form on the back wall. Wait 30 minutes and confirm the proper temperature has been restored once the defrost cycle has completed.

## **Ice & Water**

Problem	Possible Cause & Solution
Icemaker is not	Demand exceeds ice storage capacity.
making enough ice.	• The icemaker will produce approximately 70-184 cubes in a 24 hour period.
	House water supply is not connected, valve is not turned on fully, or valve is clogged.
	• Connect the refrigerator to a cold water supply with adequate pressure and turn the water shutoff valve fully open. If the problem persists, it may be necessary to contact a plumber.
	Water filter has been exhausted.
	Replacing the water filter is recommended:     Approximately every six months.     When the water filter indicator turns on.     When the water dispenser output decreases.     When the ice cubes are smaller than normal
	Low house water supply pressure.
	The water pressure must be between 20 and 120 psi on models without a water filter and between 40 and 120 psi on models with a water filter. If the problem persists, it may be necessary to contact a plumber.
	Reverse osmosis filtration system is used.
	Reverse osmosis filtration systems can reduce the water pressure below the minimum amount and result in icemaker issues. (Refer to the Connecting the Water Line section.)
	Tubing connecting refrigerator to house supply valve is kinked.
	The tubing can kink when the refrigerator is moved during installation or cleaning resulting in reduced water flow. Straighten or repair the water supply line and arrange it to prevent future kinks.
	Doors are opened often or for long periods of time.
	• If the doors of the unit are opened often, ambient air will warm the refrigerator which will prevent the unit from maintaining the set temperature. Lowering the refrigerator temperature can help, as well as not opening the doors as frequently.
	Doors are not closed completely.
	• If the doors are not properly closed, ice production will be affected. See the "Doors will not close correctly or pop open" section in Parts & Features Troubleshooting for more information.
	The temperature setting for the freezer is too warm.
	• The recommended temperature for the freezer compartment for normal ice production is 0°F. If the freezer temperature is warmer, ice production will be affected.

Problem	Possible Cause & Solution
Icemaker is not	Refrigerator was recently installed or icemaker recently connected.
making ice	• It may take up to 24 hours for each compartment to reach the desired temperature and for the icemaker to begin making ice.
	Icemaker is not turned on.
	• Locate the icemaker ON/OFF and confirm that it is turned on.
	The ice detecting sensor is obstructed.
	• Foreign substances or frost on the ice-detecting sensor can interrupt ice production. Make sure that the sensor area is clean at all times for proper operation.
	The refrigerator is not connected to a water supply or the supply shutoff valve is not turned on.
	• Connect the refrigerator to the water supply and turn the water shutoff valve fully open.
	Icemaker shutoff (arm or sensor) obstructed.
	• If your icemaker is equipped with an ice shutoff arm, make sure that the arm moves freely.
	Reverse osmosis water filtration system is connected to your cold water supply.
	• Reverse osmosis filtration systems can reduce the water pressure below the minimum amount and result in icemaker issues. (Refer to the Connecting the Water Line section).
Ice has bad taste or	Water supply contains minerals such as sulfur.
odor.	• A water filter may need to be installed to eliminate taste and odor problems. NOTE: In some cases, a filter may not help. It may not be possible to remove all minerals/odor/taste in all water supplies.
	Icemaker was recently installed.
	• Ice that has been stored for too long will shrink, become cloudy, and may develop a stale taste. Throw away old ice and make a new supply.
	The food has not been stored properly in either compartment.
	• Rewrap the food. Odors may migrate to the ice if food is not wrapped properly.
	The interior of the refrigerator needs to be cleaned.
	• See the Maintenance section for more information.
	The ice storage bin needs to be cleaned.
	Empty and wash the bin (discard old cubes). Make sure that the bin is completely dry before reinstalling it.
Icemaker is making	Icemaker shutoff (arm/ sensor) is obstructed.
too much ice.	• Empty the ice bin. If your icemaker is equipped with an ice shutoff arm, make sure that the arm moves freely. Reinstall the ice bin and wait 24 hours to confirm proper operation.

## **Parts & Features**

Problem	Possible Cause & Solution
Doors will not close	Food packages are blocking the door open.
correctly or pop open.	Rearrange food containers to clear the door and door shelves.
	Ice bin, crisper cover, pans, shelves, door bins, or baskets are out of position.
	• Push bins all the way in and put crisper cover, pans, shelves and baskets into their correct positions. See the Operation section for more information.
	The doors were removed during product installation and not properly replaced.
	• Remove and replace the doors according to the Removing and Replacing Refrigerator Handles and Doors section.
	Refrigerator is not leveled properly.
	• See Door Alignment in the Refrigeration Installation section to level refrigerator.
Doors are difficult to	The gaskets are dirty or sticky.
open.	• Clean the gaskets and the surfaces that they touch. Rub a thin coat of appliance polish or kitchen wax on the gaskets after cleaning.
	Door was recently closed.
	• When you open the door, warmer air enters the refrigerator. As the warm air cools, it can create a vacuum. If the door is hard to open, wait one minute to allow the air pressure to equalize, then see if it opens more easily.
Refrigerator wobbles	Leveling legs are not adjusted properly.
or seems unstable	• Refer to the Leveling and Door Alignment section.
	Floor is not level.
	• It may be necessary to add shims under the leveling legs or rollers to complete installation.
Lights do not work.	LED interior lighting failure.
	• The refrigerator compartment lamp is LED interior lighting, and service should be performed by a qualified technician.
Refrigerator has an	The Air Filter may need to be set to the MAX setting or replaced.
unusual odor.	• Set the Air Filter to the MAX setting. If the odor does not go away within 24 hours, the filter may need to be replaced. See the Replacing the Air Filter section for replacement instructions.
The interior of the	The refrigerator is located near a fire source, such as a fireplace, chimney, or candle.
refrigerator is covered with dust or soot.	• Make sure that the refrigerator is not located near a fire source, such as a fireplace, chimney or candle.

## Noises

Problem	Possible Cause & Solution
Clicking	The defrost control will click when the automatic defrost cycle begins and ends. The thermostat control (or refrigerator control on some models) will also click when cycling on and off.
	• Normal Operationchimney or candle.

Problem	Possible Cause & Solution
Rattling	Rattling noises may come from the flow of refrigerant, the water line on the back of the unit, or items stored on top of or around the refrigerator.
	Normal Operation
	Refrigerator is not resting solidly on the floor.
	• Floor is weak or uneven or leveling legs need to be adjusted. See the Leveling and Door Alignment section.
	Refrigerator with linear compressor was jarred while running.
	Normal Operation
Whooshing	Evaporator fan motor is circulating air through the refrigerator and freezer compartments.
	Normal Operation
	Air is being forced over the condenser by the condenser fan.
	Normal Operation
Gurgling	Refrigerant flowing through the cooling system.
	Normal Operation
Popping	Contraction and expansion of the inside walls due to changes in temperature.
	Normal Operation
Sizzling	Water dripping on the defrost heater during a defrost cycle.
	Normal Operation
Vibrating	If the side or back of the refrigerator is touching a cabinet or wall, some of the normal vibrations may make an audible sound.
	• To eliminate the noise, make sure that the sides and back cannot vibrate against any wall or cabinet.
Dripping	Water running into the drain pan during the defrost cycle.
	Normal Operation
Pulsating or high- pitched sound	Your refrigerator is designed to run more efficiently to keep your food items at the desired temperature. The high efficiency compressor may cause your new refrigerator to run longer than your old one, but it is still more energy efficient than previous models. While the refrigerator is running, it is normal to hear a pulsating or highpitched sound.
	Normal Operation

