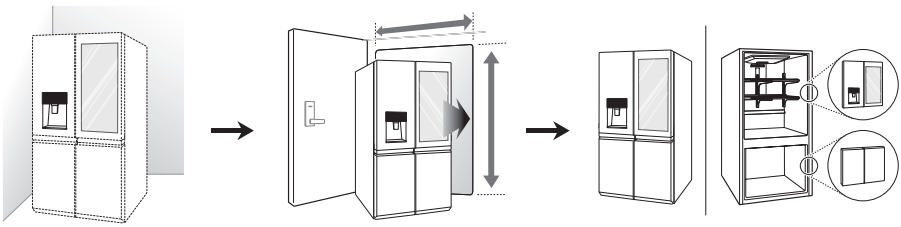
# INSTALLATION

## Installation Overview

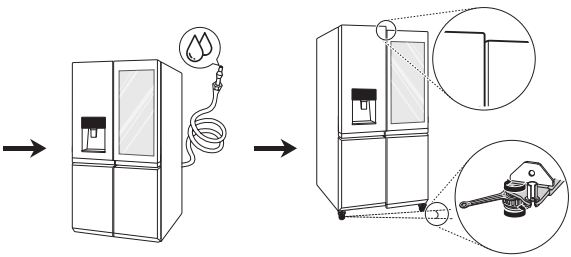
Please read the following installation instructions first after purchasing this product or transporting it to another location.



1 Unpacking your refrigerator

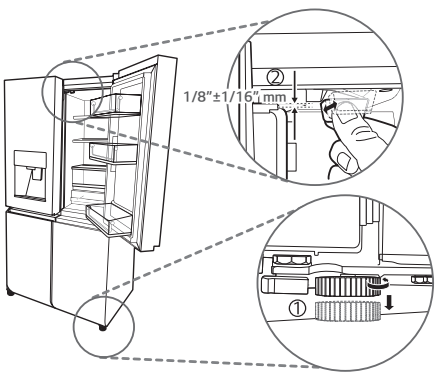
2 Choosing the proper location

3 Disassembling/Assembling



4 Connecting the water supply and water line

5 Leveling and Door Alignment




- It may be necessary to increase the refrigerator's tilt after the door bins are filled to compensate for the increased weight of the doors.
- Check if the gap between Holder and Pillar is 1/8±1/16" (4±2 mm). As in the figure, pull forward and backward with hand with speedy feeling, and check if Pillar is normally folded and spread.

**NOTE**

Connect to potable water supply only.

## Specifications

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

| Bottom-freezer refrigerator model URNTS3106N | |
|---|---|
| Description | French-door refrigerator |
| Electrical requirements | 115 VAC @ 60 Hz |
| Min./Max. Water pressure | 20 - 120psi (138 - 827kPa) |
| Dimensions | 35 7/8"(W) x 36 1/2"(D) x 70 1/4"(H) x 51 1/8"(D w/ door open)<br>912(W) X 929(D) X 1784(H) X 1298 mm (D w/ door open) |
| Net weight | 483 lb. (219 kg) |

| Bottom-freezer refrigerator model URNTC2306N | |
|---|---|
| Description | French-door refrigerator |
| Electrical requirements | 115 VAC @ 60 Hz |
| Min./Max. Water pressure | 20 - 120psi (138 - 827kPa) |
| Dimensions | 35 7/8"(W) x 29 5/8"(D) x 70 1/4"(H) x 44 3/16"(D w/ door open)<br>912(W) X 754(D) X 1784(H) X 1123 mm (D w/ door open) |
| Net weight | 430 lb. (195 kg) |

## Unpacking the Refrigerator

**WARNING**

- Use two or more people to move and install the refrigerator. Failure to do so can result in back or other injury.
- Your refrigerator is heavy. When moving the refrigerator for cleaning or service, be sure to protect the floor. 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 occur.
- Keep flammable materials and vapors, such as gasoline, away from the refrigerator. Failure to do so can result in fire, explosion, or death.

Remove tape and any temporary labels from your refrigerator before using. Do not remove any warning-type labels, the model and serial number label, or the Tech Sheet that is located under the front of the refrigerator.
But, when you remove tape and temporary label, remove them after pulling out the power plug.

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.

Refrigerator shelves are installed in the shipping position. Please reinstall shelves according to your individual storage needs.

## Choosing the Proper Location

- Select a place where a water supply can 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 on models without a water filter and 40~120 psi or 276~827 kPa or 2.8~8.4 kgf/cm² on models with a water filter.

- The refrigerator should always be plugged into its own individual properly grounded electrical outlet rated for 115 Volts, 60 Hz, AC only, and fused at 15 or 20 amperes. This provides the best performance and also prevents overloading house wiring circuits which could cause a fire hazard from overheated wires. It is recommended that a separate circuit serving only this appliance be provided.

**WARNING**

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 leveled and installed on a solidly constructed floor. If required, adjust the leveling legs to compensate for unevenness of the floor. The front should be slightly higher than the rear to aid in door closing. Leveling legs can be turned easily by tipping the cabinet slightly. Turn the leveling legs to the left to raise the unit or to the right to lower it. (See Leveling and Door Allgnment.)

**NOTE**

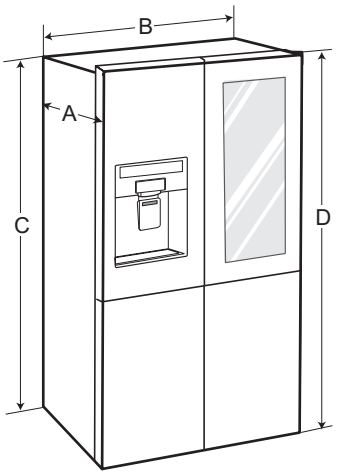
Installing on carpeting, soft tile surfaces, a platform or weakly supported structure is not recommended.

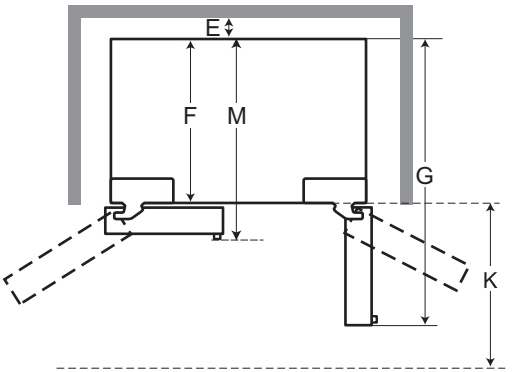
### Ambient Temperature

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, the doors must be removed.
- 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 24 inches (610 mm) in front of the refrigerator to open the doors, and at least 2 inches (50.8 mm) between the back of the refrigerator and the wall.



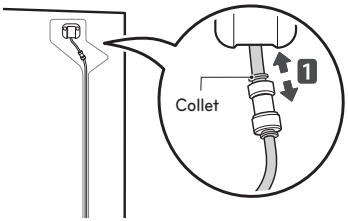




| - | List | URNTS3106N | URNTC2306N |
|---|---|---|---|
| A | Depth without handle | 36 1/2" (929 mm) | 29 5/8" (754 mm) |
| B | Width | 35 7/8" (912 mm) | 35 7/8" (912 mm) |
| C | Height to Top of Case | 68 7/8" (1751 mm) | 68 7/8" (1751 mm) |
| D | Height to Top of Hinge | 70 1/4" (1784 mm) | 70 1/4" (1784 mm) |
| E | Back Clearance | 2" (50 mm) | 2" (50 mm) |
| F | Depth without Door | 31 7/8" (811 mm) | 25" (636 mm) |
| G | Depth (Total with Door Open 90°) | 51 1/8" (1298 mm) | 44 3/16" (1123 mm) |
| K | Front Clearance | 24" (610 mm) | 24" (610 mm) |
| M | Depth with Handle | 36 1/2" (929 mm) | 29 5/8" (754 mm) |

## Removing/Assembling the Doors

### Removing the Left Refrigerator Door

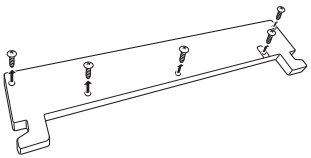
1 The water supply is connected to the upper right part of the rear surface of the refrigerator. Remove the ring in the joint area. Hold the water supply connection and gently push the collet to detach the water supply line as shown in 1.



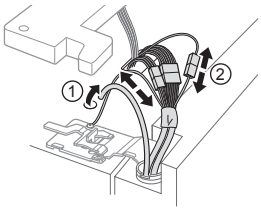

NOTE

Detachment of the water supply line is applicable only when detaching the left refrigerator door.

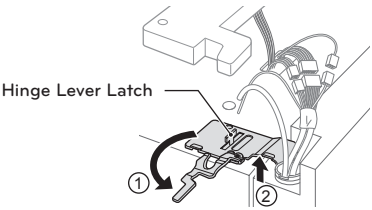
2 Remove the screws from the hinge cover at the top of the refrigerator. Lift the hook(not visible), located on the side of the cover at the bottom edge, with a flat-head screwdriver.



3 Remove the cover and pull out the tube 1. Disconnect all wire harnesses 2.



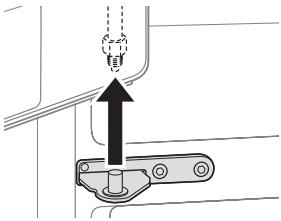

4 Rotate the hinge lever counterclockwise 1. Lift the top hinge 2 free of the hinge lever latch.




CAUTION

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

5 Lift the door from the middle hinge pin and remove the door.

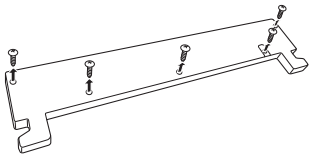


CAUTION

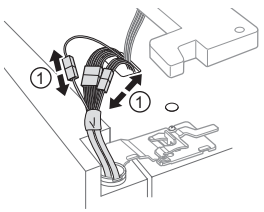
Place the door, inside facing up, on a non-scratching surface.

### Removing the Right Refrigerator Door

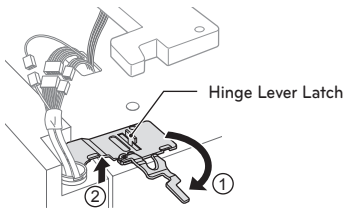
1 Remove the screws from the hinge cover at the top of the refrigerator. Lift the hook(not visible), located on the side of the cover at the bottom edge, with a flat-head screwdriver.



2 Detach the wire harness 1.



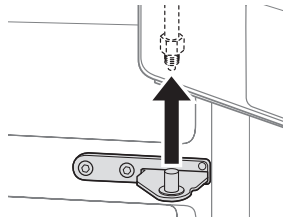

3 Rotate the hinge lever 1 clockwise. Lift the top hinge 2 free of the hinge lever latch.




**CAUTION**

When lifting the hinge free of the hinge lever latch, be careful that the door does not fall forward.

4 Lift the door from the middle hinge pin and remove the door.

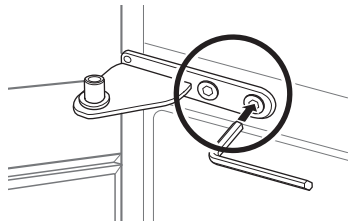


**CAUTION**

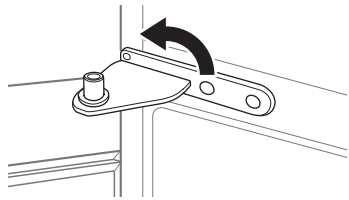
Place the door, inside facing up, on a non-scratching surface.

### Removing the Freezer Doors

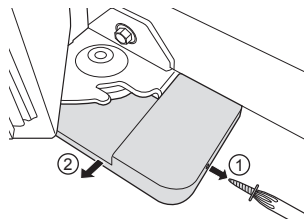
1 Remove the two hinge bolts.



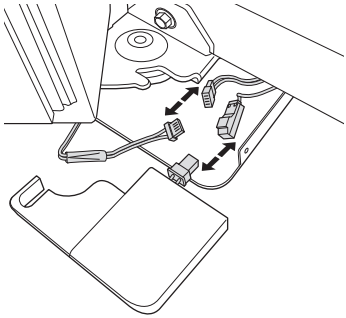
2 Twist the hinge to raise the pivoting end so that the door can be lifted off. Lift the door off the lower hinge pin and remove it.



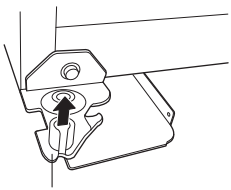
3 Unscrew the screw that attaches the lower hinge cover and remove the cover.



4 Disconnect all wire harnesses.

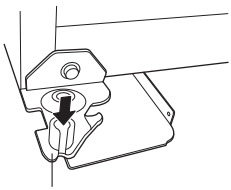


5 Remove the door by lifting it off the lower hinge pin.

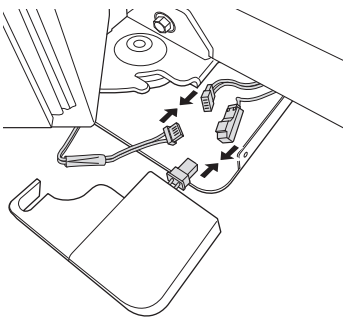



### Assembling the Freezer Doors

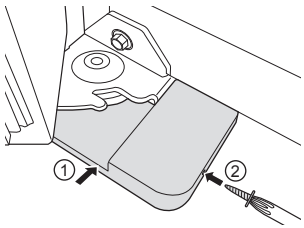
1 Lower the door onto the lower hinge pin.



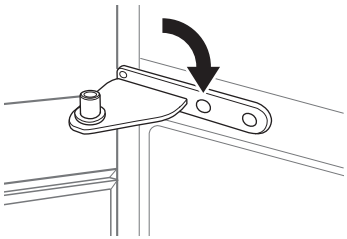
2 Connect the wire harnesses.



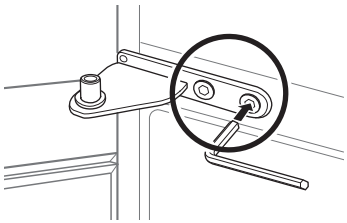
3 Position the bottom hinge cover in its place 1 and tighten the cover screw 2.




4 Position the middle hinge pin in place to hold the door and insert the two hinge bolts.



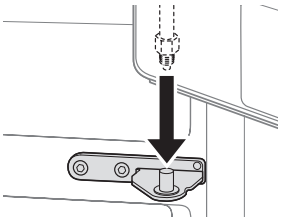
5 Tighten the two hinge bolts.



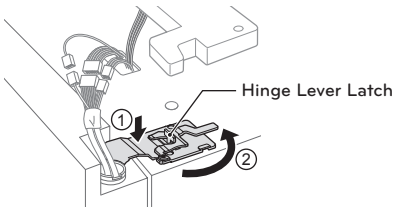
## Assembling the Right Refrigerator Door

Install the right refrigerator door first.

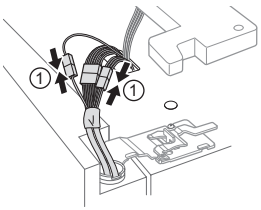
1 Make sure that the plastic sleeve is inserted in the bottom of the door. Lower the door onto the middle hinge pin as shown in the figure.



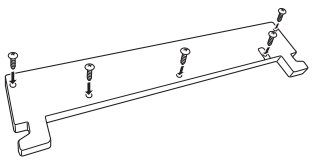
2 Fit the hinge 1 over the hinge lever latch and slot it into place. Rotate the lever 2 counterclockwise to secure the hinge.




3 Connect the wire harness 1.



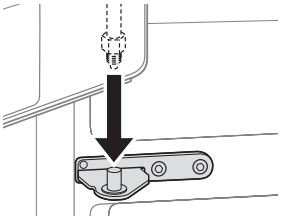

4 Position the cover in its place. Insert and tighten the cover screws.



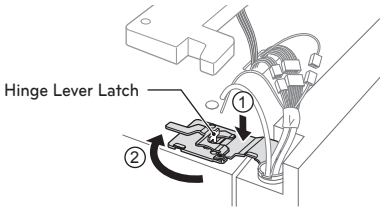
## Assembling the Left Refrigerator Door

Install the left refrigerator door after the right door is installed.

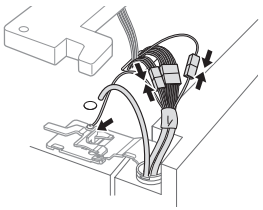
1 Make sure that the plastic sleeve is inserted in the bottom of the door. Install the refrigerator door onto the middle hinge pin.



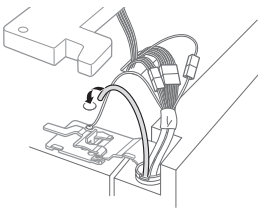
2 Fit the hinge 1 over the hinge lever latch and slot it into place. Rotate the lever clockwise 2 and fasten the hinge.



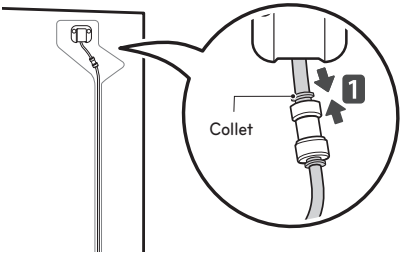

3 Connect all the wire harnesses.



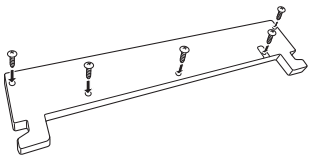
4 Push the water supply tube into the hole on the top case and pull it through the backplate.



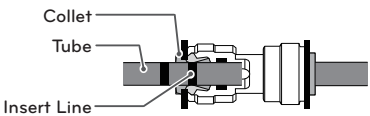
5 Hold the water supply connection and gently push in the collet to connect the water supply line as shown in 1. Insert the tube at least $^{5}/_{8}$ inch (15 mm) into the connector.



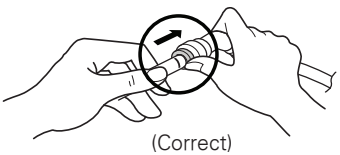

6 Position the cover in its place. Insert and tighten the cover screws.



NOTE




1) Gently insert the tube until only one line shows on the tube.



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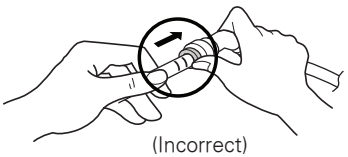


(Incorrect)

2) Pull the tube to make sure that the tube is tightly fastened.

## Connecting the Water Line

### Before You Begin

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

Water hammer (water banging in the pipes) in house plumbing can cause damage to refrigerator parts and can lead to water leakage or flooding. Call a qualified plumber to correct water hammer before installing the water supply line to the refrigerator.

**CAUTION**

To prevent burns and product damage, only connect the refrigerator water line to a cold water supply.

If you use your refrigerator before connecting the water line, make sure the icemaker power switch on the control panel is in the OFF position.

**CAUTION**

Do not install the icemaker tubing in areas where temperatures fall below freezing.

## Water Pressure

The water pressure must be 20~120 psi or 138~827 kPa or 1.4~8.4 kgf/cm² on models without a water filter and 40~120 psi or 276~827 kPa or 2.8~8.4 kgf/cm² on models with a water filter.

If a reverse osmosis water filtration system is connected to the cold water supply, this water line installation is not covered by the refrigerator warranty. Follow the instructions carefully to minimize the risk of expensive water damage.

If a reverse osmosis water filtration system is connected to the cold water supply, the water pressure to the reverse osmosis system needs to be a minimum of 40 to 60 psi (276~414 kPa or 2.8~4.2 kgf/cm², less than 2.0~3.0 sec. to fill a cup of 7 oz or 198 cc capacity).

**CAUTION**

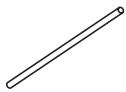
Wear eye protection during installation to prevent injury.

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 4.0 sec to fill a cup of 7 oz or 198 cc capacity):

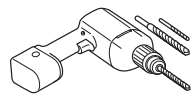
- Check to see if the sediment filter in the reverse osmosis system is blocked. Replace the filter if necessary.
- Allow the storage tank on the reverse osmosis system to refill after heavy usage.
- If the issue concerning water pressure from reverse osmosis remains, call a licensed, qualified plumber.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

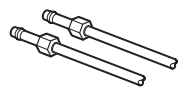
## What You Will Need

- **Copper 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.

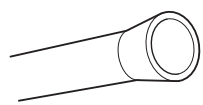


- **Power drill.**
- **½ in. or adjustable wrench.**
- **Flat blade and Phillips head screwdrivers.**

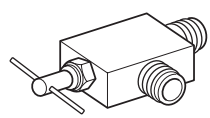




- **Two ¼ in. outer diameter compression nuts and 2 ferrules (sleeves)** to connect the copper tubing to the shutoff valve and the refrigerator water valve.
- If your existing copper water line has a flared fitting at the end, you will need an adapter (available at plumbing supply stores) to connect the water line to the refrigerator OR you can 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

**WARNING**

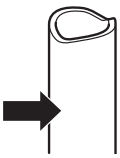
When using any electrical device (such as a power drill) during installation, be sure the device is battery powered, double insulated or grounded in a manner that will prevent the hazard of electric shock.

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

1 SHUT OFF THE MAIN WATER SUPPLY

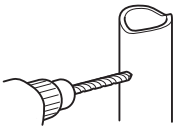
Turn on the nearest faucet to relieve the pressure on the line.

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



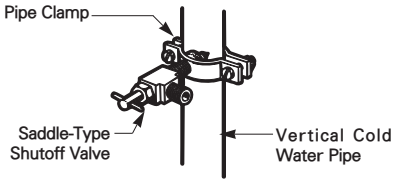
Drill a ¼ in. hole in the water pipe using a sharp bit. Remove any burrs resulting from drilling the hole in the pipe. Be careful not to allow water to drain into the drill. Failure to drill a ¼ in. hole may result in reduced ice production or smaller cubes.

**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.



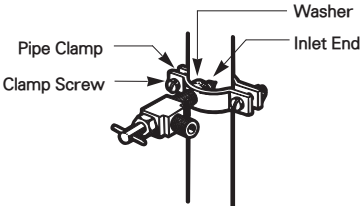

**NOTE**

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

5 TIGHTEN THE PIPE CLAMP

Tighten the clamp screws until the sealing washer begins to swell.

**NOTE:** Do not overtighten the clamp or you may crush the tubing.




6 ROUTE THE TUBING

Route the tubing between the cold water line and the refrigerator.

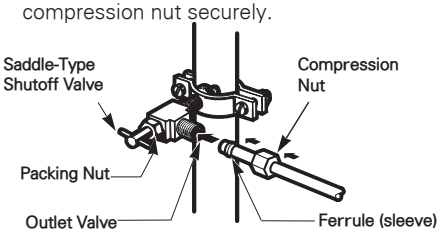
Route the tubing through a hole drilled in the wall or floor (behind the refrigerator or adjacent base cabinet) as close to the wall as possible.

**NOTE**

Be sure there is sufficient extra tubing (about 8 feet coiled into 3 turns of about 10 in. diameter) to allow the refrigerator to move out from the wall after installation.

7 CONNECT THE TUBING TO THE VALVE

Place the compression nut and ferrule (sleeve) for the 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.




8 FLUSH OUT THE TUBING

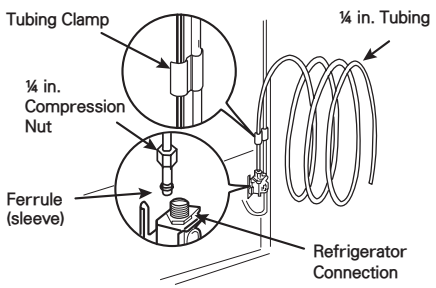
Turn the main water supply on and flush out the tubing until the water is clear.

Shut the water off at the water valve after about one quart of water has been flushed through the tubing.

9 CONNECT THE TUBING TO THE REFRIGERATOR

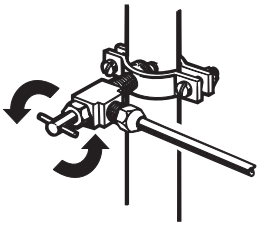
NOTE: Before making the connection to the refrigerator, be sure that the refrigerator power cord is not plugged into the wall outlet.

a. Remove the plastic flexible cap from the water valve.
b. Place the compression nut and ferrule (sleeve) onto the end of the tubing as shown.
c. Insert the end of the copper tubing into the connection as far as possible. While holding the tubing, tighten the fitting.




10 TURN THE WATER ON AT THE SHUTOFF VALVE

Tighten any connections that leak.



**CAUTION**

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

11 PLUG IN 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.

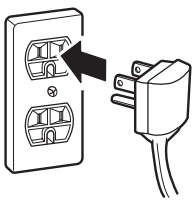
12 START THE ICEMAKER

Turn the icemaker ON at the control panel.

The icemaker will not begin to operate until it reaches its operating temperature of 15°F (–9°C) or below. It will then begin operation automatically if the icemaker has been turned ON.

## Turning On The Power

Plug in the refrigerator.



**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.

NOTE

The front leveling legs must be extended fully so they are in firm contact with the floor (even if leveling or door alignment is not needed).

## Leveling

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

The refrigerator has two front leveling legs—one on the right and one on the left. Adjust the legs to alter the tilt from front-to-back or side-to-side. If the refrigerator seems unsteady, or you want the doors to close more 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 again 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 you should turn both leveling legs the same amount.

## Door Mullion and Auto Open Door

Once the door bins are filled, the doors may become misaligned, preventing the door mullion or the Auto Open Door function from working properly.

If the mullion on the left refrigerator door does not open and close properly or the right door stays ajar after the Auto Open Door function, follow the directions below.

1 Make sure both front leveling legs are extended fully and in firm contact with the floor.

2 Follow the instructions in the Door Alignment section to raise the left refrigerator door until the door mullion is once again working properly.

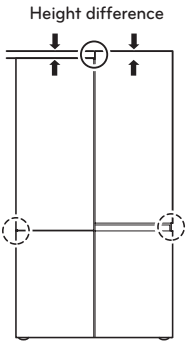
3 Adjust the right refrigerator door so it aligns with the left refrigerator door.

## Door Alignment

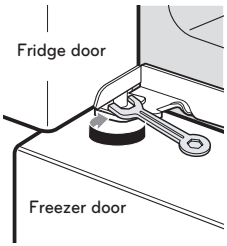
If the floor is not flat, the door heights may differ. In this case, use the following method to adjust the difference.

### Adjusting Door Height

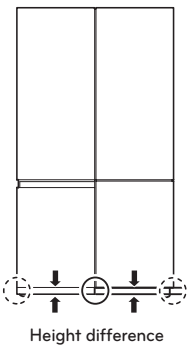
Adjusting Fridge Door Height




Open the fridge door and use a wrench to rotate the door hinge bolt as shown.




Adjusting Freezer Door Height




Open the freezer door and use a wrench to rotate the door hinge bolt as shown.