

USING THE OVEN

BEFORE USING THE OVEN

NOTE

- The temperature registered by an oven thermometer may differ from the actual set oven temperature.
- It is normal for the convection fan to run while preheating during a regular bake cycle.
- The convection fan motor may run periodically during a regular bake cycle.

REMOVING AND REPLACING THE OVEN RACKS

CAUTION

- Replace oven racks before turning the oven on to prevent burns.
- DO NOT cover the racks with aluminum foil, or any other material, or place anything on the bottom of the oven. Doing so will result in poor baking and may damage the oven bottom.
- Only arrange oven racks when the oven is cool.

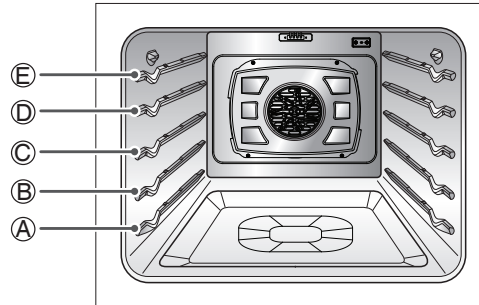
Removing the Racks

1. While wearing oven mitts, grasp the oven rack.
2. Pull the rack straight out until it stops.
3. Lift up the front of the rack.
4. Pull out the rack.

Replacing the Racks:

1. While wearing oven mitts, place the end of the rack on the support.
2. Tilt the front end of the rack up.
3. Push the rack in.
4. Check that the rack is properly in place.

Rack and Pan Placement

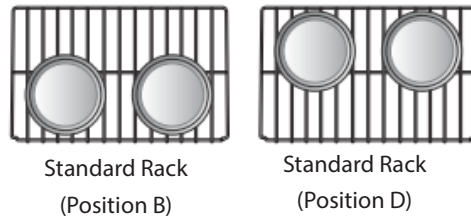


If cooking on two racks:

Place standard oven racks in positions B and D.

Place the cookware as shown below. If baking with more than one pan, place the pans so that each one has at least 1" to 1 1/2" of air space around them.

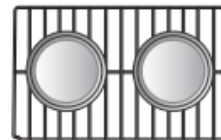
Multiple rack baking



Standard Rack
(Position B)

Standard Rack
(Position D)

Single rack baking



Standard Rack
(Position C)

Type of Food	Rack Position
Angel food cake, frozen pies	A
Bundt or pound cakes	B
Biscuits, muffins, brownies, cookies, cupcakes, layer cakes, pies	C
Casseroles	C
Turkey, roasts, or ham	A
Frozen pizza	C
Roast chicken	B

Oven Vent

- Areas near the vent may become hot during operation and may cause burns.
- **Do not** block the vent opening at the bottom of the oven.
- Avoid placing plastics near the vent as heat may distort or melt the plastic.
- It is normal for steam to be visible when cooking foods with high moisture.

BAKE

Use BAKE to prepare foods such as pastries, breads and casseroles. The oven can be programmed to bake at any temperature from 170°F (80°C) to 550°F (285°C). The default temperature is 350°F (175°C).

Setting the BAKE mode

1. Turn the Oven Mode knob to select the **BAKE** mode.
2. Set the oven temperature. For example, turn the Time/Temp knob clockwise until 375°F appears in the display.
3. Touch **START**.

The word PREHEATING and 100°F appears in the display. As the oven preheats the temperature is displayed in 5-degree increments. Once the oven reaches the desired temperature, a tone sounds.

PREHEATING

Place the food in the oven after preheating. Preheating is necessary for better cooking results.

4. When cooking is finished, turn the Oven Mode knob to the **OFF** position.
5. Remove the food from the oven.

Displays for the BAKE mode



Changing the Temperature while Baking

1. Turn the Time/Temp knob to reset the oven temperature.
For example, turn the knob clockwise to reset the temperature from 375°F to 425°F.
2. Touch **START**.

NOTE

It is normal for the convection fan to operate periodically throughout a normal bake cycle. This is to ensure even baking results.

Baking Tips

Follow the recipe or convection food directions for baking temperature, time, and rack position. Baking time and temperature will vary depending on the ingredients, size, and shape of the baking pan used.

- For best results, food should be placed on a single rack with at least 1" to 1 1/2" of air space between the pans and oven walls.
- Check for doneness at the minimum time.
- Use metal bakeware (with or without a nonstick finish), heatproof glass-ceramic, ceramic or other bakeware recommended for oven use.
- Dark metal pans or nonstick coatings will cook faster with more browning. Insulated bakeware will slightly lengthen the cooking time for most foods.

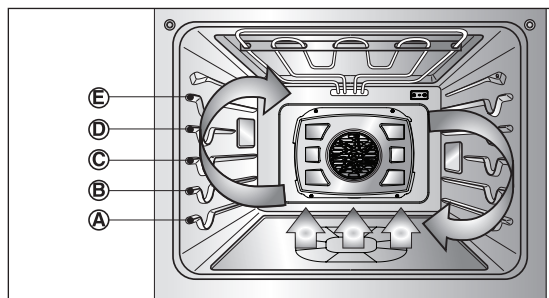
NOTE

The oven bottom has a porcelain-enamel finish. To make cleaning easier, protect the oven bottom from excessive spillovers by placing a cookie sheet on the rack below the rack you are cooking on. This is particularly important when baking a fruit pie or other foods with a high acid content. Hot fruit fillings or other foods that are highly acidic may cause pitting and damage to the porcelain-enamel surface and should be wiped up immediately.

CONVECTION BAKE

Benefits of Convection Bake

- Some foods cook up to 25 to 30% faster, saving time and energy.
- Even cooking results during multiple rack baking.
- No special pans or bakeware needed.



Convection baking uses a fan to circulate the oven's heat evenly and continuously within the oven. This improved heat distribution allows for even cooking and excellent results using multiple racks at the same time. Foods cooked on a single oven rack will generally cook faster and more evenly with Convection Bake. Multiple oven rack cooking may slightly increase cook times for some foods, but the overall result is time saved. Breads and pastries brown more evenly.

Tips for Convection Baking

- Time saved will vary depending on the amount and type of food to be cooked. Cookies and biscuits should be baked on pans with no sides or very low sides to allow heated air to circulate around the food. Food baked on pans with a dark finish will cook faster.
- When using Convection Bake with a single rack, place the oven rack in position C. If cooking on multiple racks, place the oven racks in positions B and D.
- Cookies, muffins, biscuits and other quickbreads give very good results when using multiple racks.

Setting the CONVECTION BAKE Mode

1. Turn the Oven Mode knob to select the **CONV. BAKE** mode. 350°F (175°C) appears in the display.
2. Set the oven temperature. For example, turn the Time/Temp knob clockwise to set the temperature to 375°F.
3. Touch **START**. The display shows CONV BAKE and the converted temperature starting at 100°F (35°C). As the oven preheats, the display shows increasing temperatures in 5-degree increments. Once the oven reaches the desired adjusted temperature, a tone sounds. The display shows the auto converted oven temperature (reduced by 25°F or 14°C).
4. Turn the Oven Mode knob to the **OFF** position to cancel Convection Bake at any time.

NOTE

The heating elements and a fan turn off immediately when the door is opened. They turn on again approximately 1 seconds after the door is closed. Turn the Oven Mode knob to the **OFF** position to cancel Convection Bake at any time.

Displays for the CONV. BAKE mode



ROAST

Use the ROAST mode to cook large cuts of meat.

Setting the ROAST Mode

1. Turn the Oven Mode knob to select the **ROAST** mode. 350°F (175°C) appears in the display.
2. Set the oven temperature in the display.
For example, turn the Time/Temp knob clockwise to set the temperature to 375°F.
3. Touch **START**.

! NOTE

It is normal for cooling fans to run after any cooking cycle is complete, to protect the control panel.

Changing the Temperature while Roasting

1. Turn the Time/Temp knob to reset the oven temperature.
For example, turn the knob clockwise to reset the temperature from 375°F to 425°F.
2. Touch **START**.

! NOTE

- The heating elements turn off immediately when the door is opened. They turn on again in approximately 1 seconds after the door is closed.
- When preparing meats for roasting, use the broiler pan and grid. The broiler pan catches grease spills and the grid helps prevent grease splatters.
- Turn the Oven Mode knob to the **OFF** position to cancel Roast at any time.

CONVECTION ROAST

The Convection Roast mode is designed to give optimum cooking performance for roasting meats and poultry. Preheating is not necessary for meats and poultry. Heated air circulates around the food from all sides, sealing in juices and flavors. Foods are crispy brown on the outside while staying moist on the inside. Convection Roast is especially good for large tender cuts of meat.

Setting the CONVECTION ROAST Mode

1. Turn the Oven Mode knob to select the **CONV. ROAST** mode. 350°F (175°C) appears in the display.
2. Set the oven temperature. For example, turn the Time/Temp knob clockwise to set the temperature to 375°F.
3. Touch **START**. The display shows CONV ROAST and the temperature, starting at 100°F (35°C). As the oven preheats, the display shows the increasing temperature in 5-degree increments. Once the oven reaches the adjusted set temperature, a tone sounds. The display shows the auto-converted oven temperature (reduced by 25°F or 14°C), CONV ROAST, and the fan icon.
4. Turn the Oven Mode knob to the **OFF** position to cancel Convection Roast at any time.

! NOTE

The heating elements and a fan turn off immediately when the door is opened. They turn on again in approximately 1 seconds after the door is closed. When preparing meats for roasting, use the broiler pan and grid. The broiler pan catches grease spills and the grid helps prevent grease splatters. Adjust the Oven Mode knob to the **OFF** position to cancel the Convection Roast feature at any time.

! NOTE

It is normal for cooling fans to run after any cooking cycle is complete, to protect the control panel.

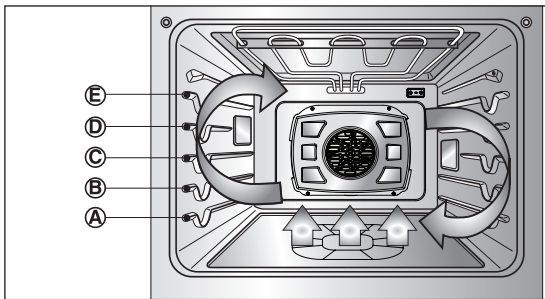
Displays for the CONV. ROAST mode



CRISP CONVECTION

Benefits of Crisp Convection:

The crisp convection mode is best for light colored and delicate baked goods like cakes, tarts, cookies, puff pastries, scones, muffins, biscuits, yeast-free breads, etc. The hot air circulated by the fan continually distributes heat more evenly than the natural movement of air in a standard thermal oven. This movement of hot air cooks foods more evenly, crisping surfaces while sealing in moisture and yielding crustier breads. The crisp convection heating element heats up faster, reducing cooking time by as much as 30 percent.



Tips for Crisp Convection

- Time saved will vary depending on the amount and type of food to be cooked. Choose cookie sheets without sides and roasting pans with very low sides to allow heated air to circulate around the food. Food baked on pans with a dark finish will cook faster.
- When using Crisp Convection with a single rack, place the oven rack in position C. If cooking on multiple racks, place the oven racks in positions B and D.
- It is important to uncover foods so that surfaces of food remain exposed to the circulating air, allowing browning and crisping.
- Keep heat loss to a minimum by only opening the oven door when necessary.

Setting the Crisp Convection Mode

1. Turn the Oven Mode knob to select the **CRISP CONV.** mode. 350°F (175°C) appears in the display.
2. Set the oven temperature. For example, turn the Time/Temp knob clockwise to set the temperature to 375°F.
3. Touch **START**. The display shows CONV and the temperature, starting at 100°F (35°C). As the oven preheats, the display shows the increasing temperature in 5-degree increments. Once the oven reaches the adjusted set temperature, a tone sounds. The display shows the auto-converted oven temperature (reduced by 25°F or 14°C).
4. Turn the Oven Mode knob to the **OFF** position to cancel Crisp Convection at any time.

NOTE

The heating elements and a fan turn off immediately when the door is opened. They turn on again in approximately 1 seconds after the door is closed. Turn the Oven Mode knob to the **OFF** position to cancel Crisp Convection at any time.

NOTE

It is normal for cooling fans to run after any cooking cycle is complete, to protect the control panel.

BROIL

Broiling uses an intense, radiant heat to cook food. Both the inner and outer broil elements heat during full broiling. Only the inner broil element heats during center broiling. The element(s) cycle on and off at intervals to maintain the oven temperature. The meat probe cannot be used with this mode.

Keep the oven door closed while broiling. Let the oven preheat for approximately five minutes before cooking food.

CAUTION

- DO NOT use a broiler pan without a grid. Oil can cause a grease fire.
- DO NOT cover the grid and broiler pan with aluminum foil. Doing so will cause a fire.
- Always use a broiler pan and grid for excess fat and grease drainage. This will help to reduce splatter, smoke, and flare-ups.

CAUTION

- Should an oven fire occur, leave the oven door closed and turn the oven off. If the fire continues, throw baking soda on the fire or use a fire extinguisher.
- DO NOT put water or flour on the fire.
 - Flour may be explosive and water can cause a grease fire to spread and cause personal injury.

NOTE

The oven is designed for CLOSED DOOR broiling.

Setting the BROIL Mode

1. Place food on the broiler pan grid.
2. Turn the Oven Mode knob to select the **BROIL** mode. *HIGH-PRESS START* appears in the display.
3. Turn the Time/Temp knob to select between Full Broil (High, Med, Low) and Center Broil (High, Med, Low). Full Broil uses all of the broil heaters and Center Broil uses only the center broil heater to broil.
4. Touch **START**.
5. If using Broil, it is best to let the oven preheat for approximately five minutes before cooking food. Broil on one side until food is browned ; turn and broil on the other side.
6. When broiling is finished, turn the Oven Mode knob to the **OFF** position to cancel Broil at any time.

Smoking

Due to the intense heat associated with broiling, it is normal to experience smoke during the cooking process. This smoke is a natural by-product of searing and should not cause you to worry. If you are experiencing more smoke than you are comfortable with, use the following tips to reduce the amount of smoke in your oven.

1. Always use a broiler pan. Do not use saute pans or regular baking sheets for safety reasons.
2. NEVER use a broiler pan that is not thoroughly cleaned and at room temperature at the beginning of cooking.
3. ALWAYS run your cooktop ventilation system or vent hood during broiling.
4. Keep the interior of your oven as clean as possible. Leftover debris from prior meals can burn or catch fire.
5. Avoid fatty marinades and sugary glazes. Both of these will increase the amount of smoke you experience. If you would like to use a glaze, apply it at the very end of cooking.
6. If you are experiencing significant smoke with any food item, consider:
 - Lowering the broiler to the LO setting.
 - Lowering the rack position to cook the food further away from the broiler.
 - Using the HI broil setting to achieve the level of searing you desire, and then either switching to the LO broil setting, or switching to the BAKE function.
7. As a rule, fattier cuts of meat and fish will produce more smoke than leaner items.
8. Adhere to the recommended broil settings and cooking guidelines in the chart on the following page whenever possible.

NOTE

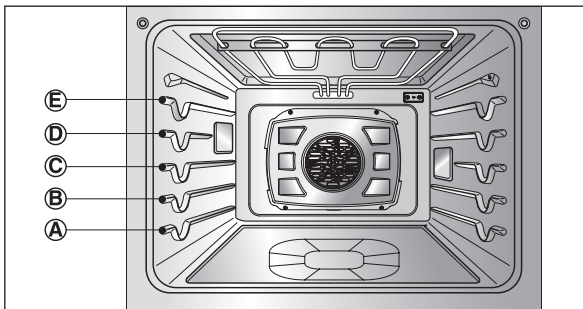
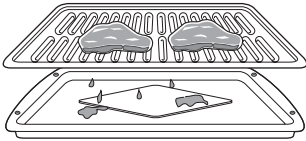
The heating element(s) turn off immediately when the door is opened. They turn on again approximately 1 seconds after the door is closed. Turn the Oven Mode knob to the **OFF** position to cancel Broil at any time.

RECOMMENDED BROILING GUIDE

The size, weight, thickness, starting temperature, and your preference of doneness will affect broiling times. The following guide is based on meats at refrigerator temperature.

! **NOTE**

Always use a broiler pan and grid when broiling.



Broiling Chart

Food	Quantity and/ or Thickness	Rack Position	First Side Time (min.)	Second Side Time (min.)	Comments
Ground Beef	1 lb. (4 patties) 1/2 to 3/4" thick	E	4-6	3-4	Space evenly. Up to 8 patties may be broiled at once.
Beef Steaks					Steaks less than 1" thick cook through before browning. Pan frying is recommended. Remove fat.
Rare	1" thick	D	6	2-3	
Medium	1 to 1-1/2 lbs.	D	7	2-3	
Well Done		D	8	3-4	
Rare	1-1/2" thick	D	10	4-6	
Medium	2 to 2-1/2 lbs.	D	12	4-8	
Well Done		D	14	8-10	
Chicken	1 whole cut up 2 to 2-1/2 lbs., split lengthwise 2 Breasts	C	20	6-8	Broil skin-side-down first.
		C	20	6-10	
Lobster Tails	2-4 10 to 12 oz. each	C	12-14	Do not turn over.	Cut through back of shell. Spread open. Brush with melted butter before broiling and after half of broiling time.
Fish Fillets	1/4 to 1/2" thick	D or E	5-6	3-4	Handle and turn very carefully. Brush with lemon butter before and during cooking, if desired.
Ham Slices (precooked)	1/2" thick	D	5	3-5	Increase time 5 to 10 minutes per side for 1-1/2" thick or home-cured ham.
Pork Chops	2 (1/2" thick)	D or E	7	6-8	Remove fat.
Well Done	2 (1" thick) about 1 lb.	D or E	9-10	7-9	
Lamb Chops					Remove fat.
Medium	2 (1" thick) about 10 to 12 oz.	D	6	4-6	
Well Done		D	8	7-9	
Medium	2 (1-1/2" thick) about 1 lb.	D	11	9	
Well Done		D	13	9-11	
Salmon Steaks	2 (1" thick) 4 (1" thick) about 1 lb.	D or E D or E	8 9	3-4 4-6	Grease pan. Brush steaks with melted butter.

Broiling Tips

Beef

- Steaks and chops should always be allowed to rest for five minutes before being cut into and eaten. This allows the heat to distribute evenly through the food and creates a more tender and juicy result.
- Pieces of meat that are thicker than two inches should be removed from the refrigerator 30 minutes prior to cooking. This will help them cook more quickly and evenly, and will produce less smoke when broiling. Cooking times will likely be shorter than the times indicated in the Broiling Chart.
- For bone-in steaks or chops that have been *Frenched* (all meat removed from around the bone), wrap the exposed sections of bone in foil to reduce burning.

Seafood

- When broiling skin-on fish, always use the Medium broil setting and always broil the skin side last.
- Seafood is best consumed immediately after cooking. Allowing seafood to rest after cooking can cause it to dry out.
- It is a good idea to rub a thin coating of oil on the surface of the broiling pan before cooking to reduce sticking, especially with fish and seafood. You can also use a light coating of non-stick pan spray.

Vegetables

- Toss vegetables lightly in oil before cooking to improve browning.

WARM

The WARM mode maintains an oven temperature of 200°F (93°C) or less. Use the Warm mode to keep cooked food at serving temperature for up to three hours after the end of the cooking cycle. Do not use the Warm mode to try to cook food or reheat cold food.

Setting the WARM Mode

1. Turn the Oven Mode knob to select the **WARM** mode.
2. Turn the Time/Temp knob to select from High, Medium, or Low temperature levels.
3. Touch **START**.
4. Turn the Oven Mode knob to the **OFF** position to cancel Warm at any time.

! NOTE

The warm feaure has three temperature levels :
High=200°F, Med=170°F, Low=140°F
(High=93.3°C, Med=76.7°C, Low=60°C)

! NOTE

The WARM function is intended to keep food warm. Do not use it to cool food down.

Displays for the WARM mode



PROOF

The Proof feature maintains a warm environment for rising yeast-leavened products before baking.

! NOTE

For best results, cover the dough with a cloth or with plastic wrap (the plastic may need to be anchored underneath the container so the oven fan does not blow it off).

Setting the PROOF Mode

This feature maintains a warm oven for rising yeast-leavened products before baking.

1. Turn the Oven Mode knob to select the **PROOF** mode.
2. Touch **START**. The proof feature automatically provides the optimum temperature for the proof process, and therefore does not have a temperature adjustment.
3. When proofing is finished, turn the Oven Mode knob to the **OFF** position.


Display for the PROOF mode



! NOTE

- To avoid lowering the oven temperature and lengthening proofing time, do not open the oven door unnecessarily. Check bread products early to avoid over proofing.
- Do not use the proofing mode for warming food or keeping food hot. The proofing oven temperature is not hot enough to keep foods at safe temperatures. Use the WARM feature to keep food warm. Proofing doesn't operate when the oven is above 125°F(52°C). *OVEN IS HOT* shows in the display.

MEAT PROBE

The meat probe accurately measures the internal temperature of meat, poultry and casseroles. It should not be used during the broiling, self cleaning, warming or proofing mode. Always unplug and remove the meat probe from the oven before removing food. Before using, insert the probe into the center of the thickest part of meat or into the inner thigh or breast of poultry, away from fat or bone. Place food in the oven and connect the meat probe to the jack. Keep the probe as far away from heat sources as possible. Close the oven door. The meat probe icon  flashes and a warning beep sounds until the probe is removed if the oven starts cooking without the probe temperature being set.

Using the Meat Probe Feature

1. Turn the Oven Mode knob to select the **ROAST** mode. 350°F (175°C) appears in the display.
2. Set the oven temperature. For example, turn the Time/Temp knob clockwise to set the temperature to 375°F.
3. Touch **START** or **PROBE**. *PRESS START OR ENTER PROBE TEMP / 80F – 210F* appears in the display.
4. Set the probe temperature. For example, turn the Time/Temp knob clockwise to set the probe temperature to 160°F.
5. Touch **START**.

The default probe temperature is 150°F (65°C), but can be changed to any temperature between 80°F (27°C) and 210°F (100°C). The display shows the changing probe temperature. When the set probe temperature is reached, the oven shuts off automatically.

NOTE

Calculating a total cooking time by weight is no longer necessary using this feature. The following chart is recommended for setting the probe temperature.

CAUTION

Always use an oven mitt to remove the temperature probe. Do NOT touch the broil element.
- Failure to follow this warning can result in severe personal injury.

Changing the Probe Temperature while Cooking

1. Touch **PROBE**.
2. Set the probe temperature by turning the Time/Temp knob.
3. Touch **START**.

NOTE

Turn the Oven Mode knob to cancel Meat Probe at any time. To avoid breaking the probe, make sure food is completely defrosted before inserting the probe.

Recommended Probe Temperatures

Doneness	Probe Temp.
Beef, Lamb and Veal	
Rare	130°F (54°C)
Medium Rare	140°F (60°C)
Medium	150°F (66°C)
Well Done	160°F (77°C)
Beef, Lamb and Veal	
Well Done	170°F (77°C)
Poultry	
Breast, Well Done	170°F (77°C)
Thigh, Well Done	180°F (82°C)
Stuffing, Well Done	165°F (74°C)

NOTE



- The meat probe can't be used with the Broil, Self Clean, EasyClean®, Warm, or Proof modes.
- While the meat probe mode is running, **COOK TIME** does not respond.

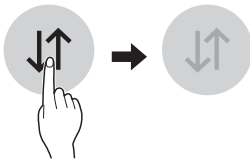
SMART FUNCTIONS

LG SMARTTHINQ APPLICATION

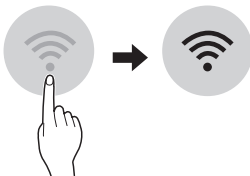
The LG SmartThinQ application allows you to communicate with the appliance using a smartphone.

BEFORE USING LG SMARTTHINQ


- For appliances with the  or  logo
- Use a smartphone to check the strength of the wireless router (Wi-Fi network) near the appliance.
 - If the distance between the appliance and the wireless router is too far, the signal strength becomes weak. It may take a long time to register or installation may fail.
 - Turn off the **Mobile data** or **Cellular Data** on your smartphone.
 - For iPhones, turn data off by going to **Settings** → **Cellular** → **Cellular Data**.



- Connect your smartphone to the wireless router.



! NOTE

- To verify the Wi-Fi connection, check that **Wi-Fi**  icon on the control panel is lit.
- The appliance supports 2.4 GHz Wi-Fi networks only. To check your network frequency, contact your Internet service provider or refer to your wireless router manual.
- LG SmartThinQ is not responsible for any network connection problems or any faults, malfunctions, or errors caused by network connection.
- The surrounding wireless environment can make the wireless network service run slowly.



! NOTE

- If the appliance is having trouble connecting to the Wi-Fi network, it may be too far from the router. Purchase a Wi-Fi repeater (range extender) to improve the Wi-Fi signal strength.
- The network connection may not work properly depending on the Internet service provider.
- The Wi-Fi connection may not connect or may be interrupted because of the home network environment.
- If the appliance cannot be registered due to problems with the wireless signal transmission, unplug the appliance and wait about a minute before trying again.
- If the firewall on your wireless router is enabled, disable the firewall or add an exception to it.
- The wireless network name (SSID) should be a combination of English letters and numbers. (Do not use special characters.)
- Smartphone user interface (UI) may vary depending on the mobile operating system (OS) and the manufacturer.
- If the security protocol of the router is set to **WEP**, network setup may fail. Change the security protocol (**WPA2** is recommended), and register the product again.

INSTALLING THE LG SMARTTHINQ APPLICATION

Search for the LG SmartThinQ application from the Google Play Store or Apple App Store on a smart phone. Follow instructions to download and install the application.

LG SMARTTHINQ APPLICATION FEATURES

- For appliances with the  or  logo

Cleaning

This function helps you to check the energy efficiency, usage and guide of EasyClean®.

Smart Diagnosis™

This function provides useful information for diagnosing and solving issues with the appliance based on the pattern of use.

Settings

Allows you to set various options on the oven and in the Application.

Monitoring

This function helps you recognize the current status, remaining time, cook settings and end time on the screen.

Push Alerts

Turn on the Push Alerts to receive appliance status notifications.

The notifications are triggered even if the LG SmartThinQ application is off.

Timer

You can set the timer from the application.

Firmware Update

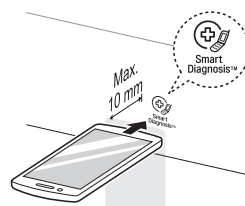
Keep the appliance updated.

! NOTE



- If you change your wireless router, Internet service provider, or password, delete the registered appliance from the LG SmartThinQ application and register it again.
- This information is current at the time of publication. The application is subject to change for product improvement purposes without notice to users.

SMART DIAGNOSIS™ FUNCTION

Should you experience any problems with the appliance, it has the capability of transmitting data via your telephone to the LG Customer Information Center. NFC or Wi-Fi equipped models can also transmit data to a smartphone using the LG SmartThinQ application.



SMART DIAGNOSIS™ THROUGH THE CUSTOMER INFORMATION CENTER

- For appliances with the  or  logo

This method allows you to speak directly to our trained specialists. The specialist records the data transmitted from the appliance and uses it to analyze the issue, providing a fast and effective diagnosis.

1. Call the LG call center at: (LG U.S.) 1-800-243-0000 (LG Canada) 1-888-542-2623.
2. When instructed to do so by the call center agent, hold the mouthpiece of your phone over the Smart Diagnosis™ logo on the machine. Hold the phone no more than one inch from (but not touching) the machine.

! NOTE



Do not touch any other buttons or icons on the display screen.

3. Press and hold the **Start** button for three seconds.
4. Keep the phone in place until the tone transmission has finished. This takes about 6 seconds and the display will count down the time.
5. Once the countdown is over and the tones have stopped, resume your conversation with the call center agent, who will then be able to assist you in using the information transmitted for analysis.

! NOTE

- For best results, do not move the phone while the tones are being transmitted.
- If the call center agent is not able to get an accurate recording of the data, you may be asked to try again.

LG SMARTTHINQ SMART DIAGNOSIS™

- For appliances with the  or  logo

Use the Smart Diagnosis feature in the LG SmartThinQ application for help diagnosing issues with the appliance without the assistance of the LG Customer Information Center.

Follow the instructions in the LG SmartThinQ application to perform a Smart Diagnosis using your smartphone.

1. Open the LG SmartThinQ application on the smart phone.
2. In the application, select the appliance from your list of connected appliances and then press the dots at the upper right of the screen.
3. Select **Smart Diagnosis**, then press the **Start Smart Diagnosis** button.

! NOTE

- If the diagnosis fails several times, use the following instructions.

4. Select the **Audible Diagnosis**.
5. Follow the instructions on the smart phone.
6. Keep the phone in place until the tone transmission has finished. View the diagnosis on the phone.

! NOTE

- Smart Diagnosis™ cannot be activated unless the appliance can be turned on using the **Power** button. If the appliance cannot be turned on, troubleshooting must be done without using Smart Diagnosis™.
- The Smart Diagnosis™ function depends on the local call quality.
- The communication performance will improve and you can receive better service if you use the home phone.
- If the Smart Diagnosis™ data transfer is poor due to poor call quality, you may not receive the best Smart Diagnosis™ service.

OPEN SOURCE SOFTWARE NOTICE INFORMATION

To obtain the source code under GPL, LGPL, MPL, and other open source licenses, that is contained in this product, please visit <http://opensource.lge.com>. In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to opensource@lge.com.

This offer is valid for a period of three years after our last shipment of this product. This offer is valid to anyone in receipt of this information.

Wireless module (LCW-003) Specifications	
Frequency Range	2412~2462 MHz
Output Power (max.)	IEEE 802.11 b : 17.56 dBm IEEE 802.11 g : 25.53 dBm IEEE 802.11 n : 25.29 dBm

FCC NOTICE (FOR TRANSMITTER MODULE CONTAINED IN THIS PRODUCT)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference and
- 2) this device must accept any interference received, including interference that may cause undesired operation of the device.

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC RF RADIATION EXPOSURE STATEMENT

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with a minimum distance of 20 cm (7.8 inches) between the antenna and your body. Users must follow the specific operating instructions for satisfying RF exposure compliance.

MAINTENANCE

SELF-CLEAN

The self clean cycle uses extremely hot temperatures to clean the oven cavity. While running the Self Clean cycle, you may notice smoking or an odor. This is normal; especially if the oven is heavily soiled. During Self Clean, the kitchen should be well-ventilated to minimize the odors from cleaning.

CAUTION

- DO NOT leave small children unattended near the appliance. During the Self Clean cycle, the outside of the oven can become very hot to touch.
- If you have pet birds, move them to another well-ventilated room. The health of some birds is extremely sensitive to the fumes given off during the Self Clean cycle of any oven.
- DO NOT line the oven walls, racks, bottom or any other part of the oven with aluminum foil or any other material. Doing so will destroy heat distribution, produce poor baking results and cause permanent damage to the oven interior (aluminum foil will melt to the interior surface of the oven).
- DO NOT force the door open. This can damage the automatic door locking system. Use care when opening the oven door after the Self Clean cycle. Stand to the side of the oven when opening the door to allow hot air or steam to escape. The oven may still be VERY HOT.

Before starting Self Clean:

- Remove the oven racks, broiler pan, broiler grid, all cookware, aluminum foil or any other material from the oven.
- The kitchen should be well-ventilated to minimize the odors from cleaning.
- Wipe any heavy spillovers on the bottom of the oven.
- Make sure that the oven light bulb cover is in place and the oven light is off.
- The oven light cannot be turned on during a self clean cycle. The oven light cannot be turned on until the oven temperature has cooled below 500°F (260°C) after a self clean cycle is complete.

NOTE

- Remove oven racks and accessories before starting the self clean cycle.
- If oven racks are left in the oven cavity during the self clean cycle, they will discolor and become difficult to slide in and out.
- Clean the frame of the oven and door with hot soapy water. Rinse well.
- Do not clean the gasket. The fiberglass material of the oven door gasket cannot withstand abrasion.
- It is essential for the gasket to remain intact. If you notice it becoming worn or frayed, replace it.
- Wipe up any heavy spillovers on the oven bottom.
- Make sure that the oven light bulb cover is in place and the oven light is off.

Setting Self Clean

The Self-Clean function has cycle times of 3, 4, or 5 hours.

Self Clean Soil Guide

Soil Level	Cycle Setting
lightly soiled oven cavity	3 Hour Self Clean
moderately soiled oven cavity	4 Hour Self Clean
heavily soiled oven cavity	5 Hour Self Clean

1. Remove all racks and accessories from the oven.
2. Turn the Oven Mode knob to select the **SELF CLEAN** mode. The oven defaults to the recommended four-hour self clean for a moderately soiled oven. Turn the Time/Temp. knob to adjust the self clean time from 3 to 5 hours.
3. Press **START**.
4. Once the Self Clean is set, the oven door locks automatically and the lock icon displays. You will not be able to open the oven door until the oven has cooled. The lock releases automatically when the oven has cooled.

CAUTION

DO NOT force the oven door open when the lock icon is displayed. The oven door will remain locked until the oven temperature has cooled. Forcing the door open will damage the door.

Setting Self Clean with a Delayed Start

1. Remove all racks and accessories from the oven.
2. Turn the Oven Mode knob to select the **SELF CLEAN** mode. The oven defaults to the recommended four-hour self clean for a moderately soiled oven. Turn the Time/Temp knob to select the self clean time from 3 to 5 hours.
3. Press **START TIME**.
4. Turn the Time/Temp knob to enter the time of day you would like the Self Clean to start.
5. Press **START**.

! NOTE

It may become necessary to cancel or interrupt a self clean cycle due to excessive smoke or fire in the oven. To cancel the Self Clean function, turn the Oven Mode knob to the **OFF** position.

During Self Clean

- The self clean cycle uses extremely hot temperatures to clean the oven cavity. While running the Self Clean cycle, you may notice smoking or an odor. This is normal, especially if the oven is heavily soiled.
- As the oven heats, you may hear sounds of metal parts expanding and contracting. This is normal and will not damage the oven.
- Do not force the oven door open when **LOCKED** is displayed. The oven door will remain locked until the oven temperature has cooled. Forcing the door open will damage the door.

! NOTE

- The Self Clean cycle cannot be started if the Lockout feature is active.
- Once the Self Clean cycle is set, the oven door will lock automatically. You will not be able to open the oven door until the oven is cooled. The lock will release automatically.
- Once the door has been locked, the **LOCKED** indicator light will stop flashing and remain on. Allow about 15 seconds for the oven door lock to activate.
- If the clock is set for a 12 hour display (default) the Delayed Self Clean can never be set to start more than 12 hours in advance.

After the Self Clean Cycle

- The oven door will remain locked until the oven temperature has cooled.
- You may notice some white ash in the oven. Wipe it off with a damp cloth or a soap-filled steel wool pad after the oven cools. If the oven is not clean after one clean cycle, repeat the cycle.
- If oven racks were left in the oven and do not slide smoothly after a clean cycle, wipe racks and rack supports with a small amount of vegetable oil to make them glide more easily.
- Fine lines may appear in the porcelain because it went through heating and cooling. This is normal and will not affect performance.

Displays for the SELF CLEAN mode



EasyClean®

LG's new oven with EasyClean® enamel technology provides two cleaning options for the oven interior. The EasyClean® feature takes advantage of LG's new enamel to help lift soils without harsh chemicals, and it runs using ONLY WATER for just 10 minutes in low temperatures to help loosen LIGHT soils before hand-cleaning.

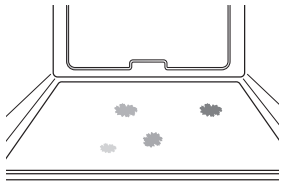
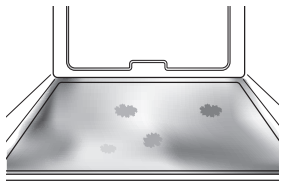
While EasyClean® is quick and effective for small and LIGHT soils, the Self Clean feature can be used to remove HEAVY built up soils. The intensity and high heat of the Self Clean cycle may result in smoke which will require the opening up of windows to provide ventilation. Compared to the more intense Self Clean process, your LG's oven gives you the option of cleaning with LESS HEAT, LESS TIME, and virtually NO SMOKE OR FUMES.

When needed, your oven still provides the Self Clean option for longer, more thorough cleaning for heavier, built up soils.

BENEFITS OF EasyClean®

- **Helps loosen light soils** before hand-cleaning
- **EasyClean® only uses water;** no chemical cleaners
- Makes for a better Self Clean experience
 - Delays the need for a Self Clean cycle
 - **Minimizes smoke and odors**
 - Can allow shorter Self Clean time

WHEN TO USE EasyClean®

Suggested Cleaning Method	Example of Oven Soiling	Soil Pattern	Types of Soils	Common Food Items That Can Soil Your Oven
EasyClean®		Small drops or spots	Cheese or other ingredients	Pizza
		Light splatter	Fat/grease	Steaks, broiled Fish, broiled Meat roasted at low temperatures
Self Clean*		Medium to heavy splatter	Fat/grease	Meat roasted at high temperatures
		Drops or spots	Filling or Sugar based soils Cream or tomato sauce	Pies Casseroles

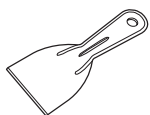
* The Self Clean cycle can be used for soil that has been built up over time.

CLEANING TIPS

- Allow the oven to cool to room temperature before using the EasyClean® cycle. If your oven cavity is above 150°F (65°C), "OVEN IS HOT- - PLEASE WAIT" will appear in the display, and the EasyClean® cycle will not be activated until the oven cavity cools down.
- A plastic spatula can be used as a scraper to scrape off any chunks or debris before and during oven cleaning.
- Using the rough side of a non-scratch scouring pad may help to take off burnt-on stains better than a soft sponge or towel.
- Certain non-scratch scrubbing sponges, such as those made of melamine foam, available at your local stores, can also help improve cleaning.
- The oven should be level to ensure that the bottom surface of the oven cavity is entirely covered by water at the beginning of the EasyClean® cycle.
- For best results, use distilled or filtered water. Tap water may leave mineral deposits on the oven bottom.
- Soil baked on through several cooking cycles will be more difficult to remove with the EasyClean® cycle.
- Do not open the oven door during the EasyClean® cycle. Water will not get hot enough if the door is opened during the cycle.
- For hard to reach areas such as the back surface of the lower oven, it is better to use the Self Clean cycle.

EasyClean® INSTRUCTION GUIDE

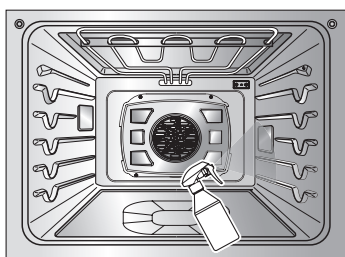
1. Remove oven racks and accessories from the oven.
2. Scrape off and remove any burnt-on debris with a plastic scraper.



Suggested plastic scrapers:

- Hard plastic spatula
- Plastic pan scraper
- Plastic paint scraper
- Old credit card

3. Fill a spray bottle (10 oz or 300 ml) with water and use the spray bottle to thoroughly spray the inside surfaces of the oven.



4. Use at least $\frac{1}{5}$ (2 oz or 60 ml) of the water in the bottle to completely saturate the soil on both the walls and in the corners of the oven.
5. Spray or pour the remaining water (8 oz or 240 ml) onto the bottom center of the oven cavity. The indentation on the oven bottom should be fully covered to submerge all soils. Add water if necessary.

! NOTE

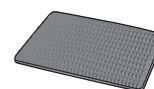
If cleaning multiple ovens, use an entire bottle of water to clean each oven. Do not spray water directly on the door. Doing so will result in water dripping to the floor.

6. Close the oven door.
Turn the Oven Mode knob to select the **EasyClean®** mode.
Press **START**.

! CAUTION

- Some surfaces may be hot after the EasyClean® cycle. Wear rubber gloves while cleaning to prevent burns.
- During the EasyClean® cycle, the oven bottom becomes hot enough to cause burns. Wait until the cycle is over before wiping the inside surface of the oven. Failure to do so may result in burns.
- Avoid leaning or resting on the oven door glass while cleaning the oven cavity.

7. A tone will sound at the end of the 10-minute cycle. adjust the Oven Mode knob to OFF position to clear the display and end the tone.
8. After the cleaning cycle and during hand-cleaning, enough water should remain on the oven bottom to completely submerge all soils. Add water if necessary. Place a towel on the floor in front of the oven to capture any water that may spill out during hand-cleaning.
9. Clean the oven cavity immediately after the EasyClean® cycle by scrubbing with a wet, non-scratch scouring sponge or pad. (The scouring side will not scratch the finish.) Some water may spill into the bottom vents while cleaning, but it will be captured in a pan under the oven cavity and will not hurt the burner.



! NOTE

DO NOT use any steel scouring pads, abrasive pads or cleaners as these materials can permanently damage the oven surface.

10. Once the oven cavity is cleaned, wipe any excess water with a clean dry towel. Replace racks and any other accessories.
11. If some light soils remain, repeat the above steps, making sure to thoroughly soak the soiled areas. If stubborn soils remain after multiple EasyClean® cycles, run the Self Clean cycle. Be sure that the oven cavity is empty of oven racks and other accessories, and that the oven cavity surface is dry before running the Self Clean cycle. Consult the Self Clean section of your owner's manual for further details.

! NOTE

- If you forget to saturate the inside of the oven with water before starting EasyClean®, turn the Oven Mode knob to the OFF position to end the cycle. Wait for the oven to cool to room temperature and then spray or pour water into the oven and start another EasyClean® cycle.
- The cavity gasket may be wet when the EasyClean® cycle finishes. This is normal. Do not clean the gasket.
- If mineral deposits remain on the oven bottom after cleaning, use a cloth or sponge soaked in vinegar to remove them.

CHANGING THE OVEN LIGHT

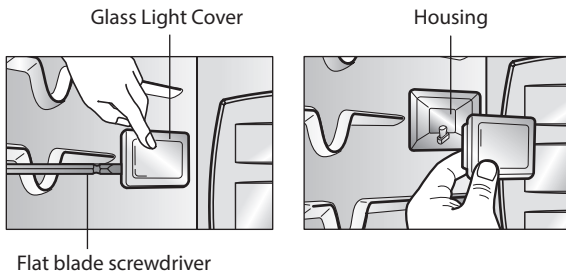
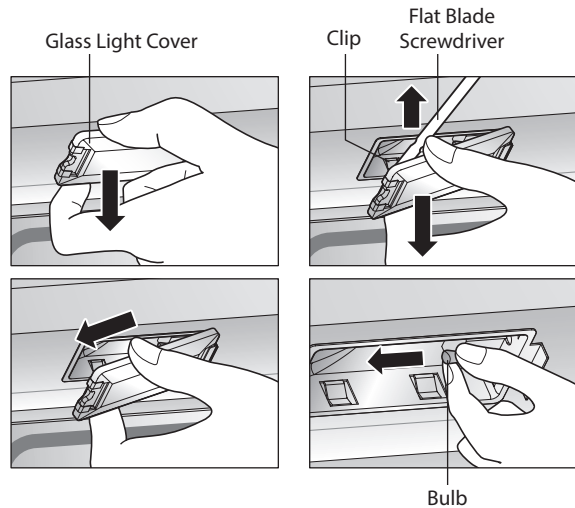
The oven light is a standard 10-watt halogen bulb for ovens.

Replacing Lamp on Side Wall

• **Make sure oven and bulb are cool.**

1. Unplug oven or disconnect power.
2. Remove oven racks.
3. Slide a flat blade screwdriver between the housing and the glass light cover.
4. Support the glass light cover with two fingers to prevent the cover from falling to the bottom of the oven.
5. Gently twist the screwdriver blade to loosen the glass light cover.
6. Remove bulb from socket.
7. Replace bulb, replace light cover by snapping back into place.
8. Plug in oven or reconnect power.

8. Plug in oven or reconnect power.



! WARNING

- **Before replacing the oven light bulb, DISCONNECT the electrical power to the oven at the main fuse or circuit breaker panel.**
 - Failure to do so can result in severe personal injury, death, or electrical shock.
- **Make sure oven and bulb are cool.**
- **Wear gloves while changing the oven light.** Glass fragments from broken bulbs can cause risk of injury.

Replacing Lamp on Top Wall

• **Make sure oven and bulb are cool.**

1. Unplug oven or disconnect power.
2. Remove oven racks.
3. Slide a flat blade screwdriver between the housing and the glass light cover.
4. Support the glass light cover with two fingers to prevent the cover from falling to the bottom of the oven.
5. Gently twist the screwdriver blade to loosen the glass light cover.
6. Remove bulb from socket.
7. Replace bulb, replace light cover by snapping back into place and push the clip to hold the glass light cover tightly.

CLEANING THE EXTERIOR

Painted Parts and Trim

For general cleaning, use a cloth with hot and soapy water. For more difficult soils and built-up grease, apply a liquid detergent directly onto the soil. Leave on soil for 30 to 60 minutes. Rinse with a damp cloth and dry. **DO NOT** use abrasive cleaners on any of these materials; they can scratch the parts and trim.

Stainless Steel Surfaces

Do not use a steel-wool pad, it will scratch the surface.

1. Place a small amount of Stainless Steel Appliance Cleaner or polish on a damp cloth or damp paper towel.
2. Clean a small area, rubbing with the grain of the stainless steel if applicable.

3. Dry and buff with a clean, dry paper towel or soft cloth.
4. Repeat as necessary.

! NOTE

If a mineral oil-based stainless steel appliance cleaner has been used before to clean the appliance, wash the surface with a mild soap and water prior to using the Stainless Steel Appliance Cleaner or polish.

Broiler Pan and Grid

Do not clean the broiler pan or grid in a self-cleaning mode.

After broiling, remove the broiler pan from the oven. Remove the grid from the pan. Carefully pour out the grease from the pan into a proper container.



Wash and rinse the broiler pan and grid in hot water with a soap-filled or plastic scouring pad.

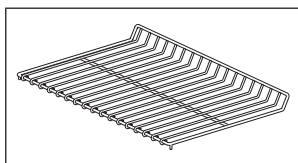
If food has burned on, sprinkle the grid with cleaner while hot and cover with wet paper towels or a dishcloth. Soaking the pan will remove burned-on foods.

Both the broiler pan and grid may be cleaned with a commercial oven cleaner.

Both the broiler pan and grid can also be cleaned in a dishwasher.

Oven Racks

Remove the oven racks before operating the self-clean cycle. Leaving the racks in place could cause discoloration.



If the racks are cleaned in the self-clean cycle, their color will turn slightly blue and finish will be dull. After the self-clean cycle is complete and the oven has cooled, rub the sides of the racks with wax paper or a cloth containing a small amount of oil. This will make the racks glide more easily into the rack tracks.

Oven Cavity

DO NOT use oven cleaners.

NEVER wipe a warm or hot porcelain surface with a damp sponge; it may cause chipping or crazing (tiny hairlike cracks). Food spills should be cleaned when the oven cools. At high temperature, foods react with porcelain and a permanent dull spot can result. When cleaning a spot, use only non-abrasive cleaners or scrubbers.

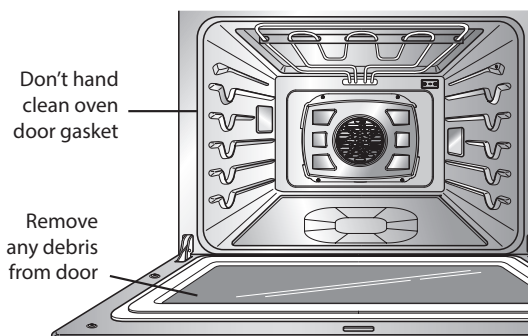
Oven Door

Use soap and water to thoroughly clean the top, sides, and front of the oven door. Rinse well. You may use a glass cleaner on the outside glass of the oven door. **DO NOT** immerse the door in water. **DO NOT spray or allow water or the glass cleaner to enter the door vents.** **DO NOT use oven cleaners, cleaning powders,** or any harsh abrasive cleaning materials on the outside of the oven door.

DO NOT clean the oven door gasket. The oven door gasket is made of a woven material which is essential for a good seal. Care should be taken not to rub, damage, or remove this gasket.

! CAUTION

- **DO NOT use harsh abrasive cleaners or sharp metal scrapers to clean the oven door glass since they can scratch the surface.**
 - Doing so may result in the glass shattering.



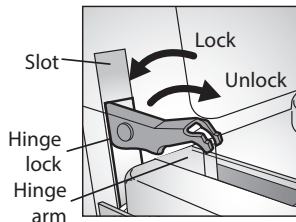
REMOVING AND REPLACING THE LIFT-OFF OVEN DOOR

CAUTION

- **Be careful when removing and lifting the door.**
- **DO NOT lift the door by the handle.**
 - The door is very heavy.

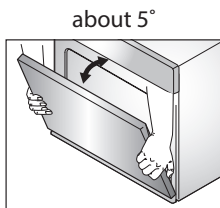
Removing the Door

1. Open the door fully.
2. Pull the hinge locks down toward the door frame to the unlocked position.



Hinge lock open

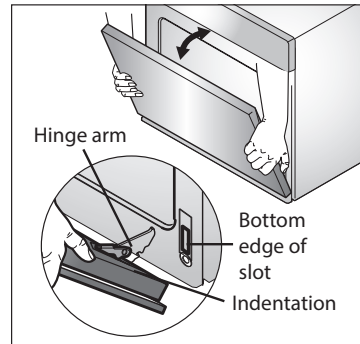
3. Firmly grasp both sides of the door at the top.
4. Close door to the door removal position, which is approximately 5 degrees.



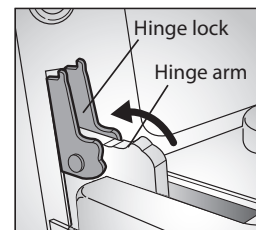
5. Lift door up and out until the hinge arm is clear of the slot.

Replacing the Door

1. Firmly grasp both sides of the door at the top.
2. With the door at the same angle as the removal position, seat the indentation of the hinge arm into the bottom edge of the hinge slot. The notch in the hinge arm must be fully seated into the bottom of the slot.



3. Open the door fully. If the door will not open fully, the indentation is not seated correctly in the bottom edge of the slot.
4. Push the hinge locks up against the front frame of the oven cavity to the locked position.



Hinge locked

5. Close the oven door.

DOOR CARE INSTRUCTIONS

- Most oven doors contain glass that can break.
 1. Do not close the oven door until all the oven racks are fully in place.
 2. Do not hit the glass with pots, pans, or any other object.
 3. Scratching, hitting, jarring, or stressing the glass may weaken its structure causing an increased risk of breakage at a later time.