

## SMART DIAGNOSIS™



(Some models).

Should you experience any problems with your refrigerator, it has the capability of transmitting data via your telephone to the LG service center. This allows you to speak directly to our trained specialists. The specialist records the data transmitted from your machine and uses it to analyze the issue, providing a fast and effective diagnosis.

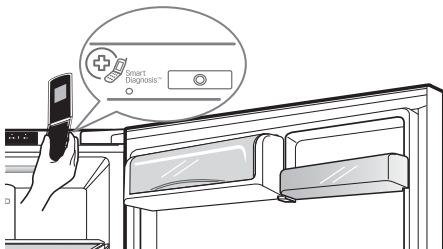
If you experience problems with your refrigerator, call 1-800-243-0000 in USA (1-888-542-2623 in Canada). Only use the Smart Diagnosis™ feature when instructed to do so by the LG call center agent. The transmission sounds that you will hear are normal and sound similar to a fax machine.

Smart Diagnosis™ cannot be activated unless your refrigerator is connected to power. If your refrigerator is unable to turn on, then troubleshooting must be done without using Smart Diagnosis™.

### Using Smart Diagnosis™

First, call 1-800-243-0000 in USA (1-888-542-2623 in Canada). Only use the Smart Diagnosis™ feature when instructed to do so by the LG call center agent.

- 1 Open the refrigerator door.
- 2 Hold the mouthpiece of your phone in front of the speaker that is located on the right side of the control pad, when instructed to do so by the call center.



- 3 Press and hold the Freezer button for three seconds while continuing to hold your phone to the speaker.



- 4 After you hear three beeps, release the Freezer button.
- 5 Keep the phone in place until the tone transmission has finished. This takes about 3 seconds, and the display will count down the time. Once the countdown is over and the tones have stopped, resume your conversation with the specialist, 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.

#### ! NOTE

- Call quality differences by region may affect the function.
- Use the home telephone for better communication performance, resulting in better service.
- Bad call quality may result in poor data transmission from your phone to the machine, which could cause Smart Diagnosis™ to malfunction.

# TROUBLESHOOTING

Review the Troubleshooting section before calling for service; doing so will save you both time and money.

| Problem   | Possible Causes   | Solutions  |
|---|---|--|
| Refrigerator and Freezer section are not cooling. | The refrigerator control is set to OFF (some models).                 | Turn the control ON. Refer to the Setting the Controls section for proper temperature settings.  |
|   | The 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.  |
|   | The refrigerator was recently installed.                              | It may take up to 24 hours for each compartment to reach the desired temperature.  |
|   | The 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 too much.                     | The refrigerator is replacing an older model.                         | Modern refrigerators require more operating time but use less energy due to more efficient technology.   |
|   | The refrigerator was recently plugged in or the power was restored.   | The refrigerator will take up to 24 hours to cool completely.  |
|   | The door 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.) |
|   | The doors are not closed completely.                                  | Firmly push the doors shut.  |
|   | The refrigerator is installed in a hot location.                      | The compressor will run longer under warm conditions. At normal room temperatures 70°F (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).   |
|   | The 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 Causes   | Solutions   |
|--|---|---|
| Refrigerator or Freezer section is too warm. | The refrigerator was recently installed.                            | It may take up to 24 hours for each compartment to reach the desired temperature.   |
|  | The air vents are blocked.  | Rearrange items to allow air to flow throughout the compartment. Refer to the airflow diagram in the Using Your Refrigerator section.   |
|  | The 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. |
|  | The 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.   |
|  | The doors are not closed correctly.                                 | See the Doors will not close correctly or pop open section in Troubleshooting.  |
|  | The 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. Refer to the Setting the Controls section for more information.   |
|  | The 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.                |

| Problem   | Possible Causes  | Solutions   |
|---|--|---|
| Interior moisture buildup.                                      | The 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.   |
|   | The doors are not closed correctly.                        | See the Doors will not close correctly section in the Troubleshooting section.  |
|   | The 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.  |
|   | The 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 the refrigerator compartment.               | Food with high water content was placed near an air vent.  | Rearrange items with high water content away from air vents.  |
|   | The 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 Setting the Controls section for more information.   |
|   | The 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 temperatures below 55°F (13°C).  |
| Frost or ice crystals form on frozen food (outside of package). | The door is opened frequently 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. Increased moisture will lead to frost and condensation. To lessen the effect, reduce the frequency and duration of door openings. |
|   | The door is not closing properly.                          | Refer to the Doors will not close correctly or pop open section in the Troubleshooting section.   |

| Problem  | Possible Causes   | Solutions  |
|--|---|--|
| Refrigerator or Freezer section is too cold.                     | Incorrect temperature control settings.   | If the temperature is too cold, adjust the control one increment at a time and wait for the temperature to stabilize. Refer to the Setting the Controls section for more information.  |
| Frost or ice crystals on frozen food (inside of sealed package). | Condensation from food with a high water content has frozen inside of the food 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.  |
| Icemaker is not making enough ice.<br>(Ice maker installed only) | Demand exceeds ice storage capacity.  | The icemaker will produce approximately 70~210 cubes in a 24 hour period.  |
|  | The house water supply is not connected, the valve is not turned on fully, or the valve is clogged. | Connect the refrigerator to a cold water supply with adequate pressure and turn the water shutoff valve fully open.<br>If the problem persists, it may be necessary to contact a plumber.  |
|  | The water filter has been exhausted.  | It is recommended that you replace the water filter: <ul style="list-style-type: none"> <li>• Approximately every six months.</li> <li>• When the water filter indicator turns on.</li> <li>• When the water dispenser output decreases.</li> <li>• When the ice cubes are smaller than normal.</li> </ul> |
|  | Low house water supply pressure.  | The water pressure must be between 20 and 120 psi (0,14 y 0,82 MPa) on models without a water filter and between 40 and 120 psi (0,28 y 0,82 MPa) on models with a water filter.<br>If the problem persists, it may be necessary to contact a plumber.   |
|  | A reverse osmosis filtration system is used.  | Reverse osmosis filtration systems can reduce the water pressure below the minimum amount and result in icemaker issues.<br>(Refer to the "Water Pressure" section.)   |
|  | The tubing connecting the refrigerator to the 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.   |

| Problem  | Possible Causes   | Solutions   |
|--|---|---|
| Icemaker is not making enough ice (continued).<br>(Ice maker installed only) | The 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. |
|  | The doors are not closed completely.  | If the doors are not properly closed, ice production will be affected. See the Doors will not close completely 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.  |
| Icemaker is not making ice.<br>(Ice maker installed only)                    | The refrigerator was recently installed or the icemaker recently connected.                       | It may take up to 24 hours for each compartment to reach the desired temperature and for the icemaker to begin making ice.  |
|  | The icemaker is not turned on.  | Locate the icemaker ON/OFF switch and confirm that it is in the ON (I) position.  |
|  | 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.   |
|  | The icemaker shutoff (arm or sensor) is obstructed.   | If your icemaker is equipped with an ice shutoff arm, make sure that the arm moves freely. If your icemaker is equipped with the electronic ice shutoff sensor, make sure that there is a clear path between the two sensors.                       |
|  | A 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 "Water Pressure" section.)   |

| Problem  | Possible Causes  | Solutions   |
|--|--|---|
| Ice has a bad taste or odor.<br>(Ice maker installed only)     | The water supply contains minerals such as sulfur.   | A water filter may need to be installed to eliminate taste and odor problems.<br><br>NOTE: In some cases, a filter may not help. It may not be possible to remove all minerals / odor / taste in all water supplies.  |
|  | The icemaker was recently installed.   | Discard the first few batches of ice to avoid discolored or bad tasting ice.  |
|  | The ice has been stored for too long.  | 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 "Care and Cleaning" 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 too much ice.<br>(Ice maker installed only) | The icemaker shutoff (arm/sensor) is obstructed.   | Empty the ice bin. If your icemaker is equipped with an ice shutoff arm, make sure that the arm moves freely. If your icemaker is equipped with the electronic ice shutoff sensor, make sure that there is a clear path between the two sensors. Reinstall the ice bin and wait 24 hours to confirm proper operation. |
| Clicking   | The defrost control will click when the automatic defrost cycle begins and ends.<br>The thermostat control (or refrigerator control on some models) will also click when cycling on and off. | Normal Operation  |

| Problem                         | Possible Causes  | Solutions   |
|---------------------------------|--|---|
| 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  |
|                                 | The refrigerator is not resting solidly on the floor.  | The floor is weak or uneven or the leveling legs need to be adjusted. See the "Door Alignment" section. |
|                                 | The refrigerator with a linear compressor was jarred while running.  | Normal Operation  |
| Whooshing                       | The 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 is 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 is 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 high-pitched sound. | Normal Operation  |