# **TROUBLESHOOTING**

# **FAQs: Frequently Asked Questions**

### Q: Does this dishwasher require a rinse aid to be used?

A: Rinse aid is strongly recommended to enhance the drying performance of the dishwasher. In order to be more energy efficient, the hybrid drying system does not use a heating element to assist in drying, so a rinse aid plays an integral role in the drying process. If a rinse aid is not used, water may remain on the dishes and the tub. Rinse aid helps to ensure that the majority of the water has been sheeted off of the dishes at the end of the rinse and that the load is ready for the dry cycle.

### Q: What can be done if my dishes have a cloudy, white film on them after a wash?

A: The cloudy film is usually caused by minerals in the water reacting with the dishwasher detergent. First, be certain not to use too much detergent. Refer to Adding Detergent to the Dispenser section for recommended detergent amounts. Add an extra rinse to the cycle. LG Dishwashers use less water than traditional dishwashers, so adding an extra rinse aids in rinsing the film away. If the water supply is hard, it may be necessary to add a performance booster that addresses the hard water condition.

## Q: What steps can I take to improve drying results?

A: Drying performance is directly affected by the amount of heat that remains in the tub after the heated rinse is performed. If your dishwasher is far away from your home's hot water heater, it may be necessary to run the hot water tap in the sink before starting a wash cycle, to ensure that cool water is purged from the hot water lines. This will ensure your dishwasher has a consistent supply of hot water from start to finish. Using the High Temp setting also aids in keeping the inner drum temperature and dishes hotter before drying begins.

LG dishwashers are designed to be used in conjunction with a rinse aid. Using a rinse aid will maximize the amount of water that has already been sheeted away from the dishes before the dry cycle begins. If a rinse aid is used and the performance still needs a boost, adjust the amount of rinse aid used. 2 is the default setting, but if necessary set the level to 3 so more rinse aid is used.

Water tends to bead rather than sheet off plastic and nonstick surfaces, making them more difficult to dry. If washing plastic items in a Normal cycle, select the **Extra Dry** or **Night Dry** option or both for better drying results. When the rinse aid is empty, the **Extra Dry** option is selected automatically.

Allow the dishwasher to completely finish the dry cycle before opening the door. If the door is opened in the middle of the dry cycle, the heat that is necessary for the hybrid dry system to work will escape. This will cause all of the dishes inside to remain wet once the cycle finishes.

## Q: What is the hybrid drying system?

A: The dishwasher does not rely on a heating element for the drying process; instead, it relies on the heat that is retained by the dishes and the tub during the wash and rinse cycles to turn the moisture in the tub into humidity.

Warm, moist air in the dishwasher is then pulled into a condensing duct in the door by a fan. The air then cools, which causes the humidity to condense. Room temperature air is also drawn into the duct to help the air cool down faster. When this moisture condenses into a liquid, it is drained out.

#### NOTE

• Rinse aid is required to enhance the drying performance. If no rinse aid is used, water may remain on the dishes and the tub.

## Q: Why am I hearing a whistling sound from the dishwasher?

A: It is important to determine the duration of the noise and when it happens (what part of the cycle). When water is drawn into the dishwasher, a whistling noise can be heard. This is normal. If the water pressure is too high, it will be louder, so it may be necessary to adjust the water valve to lower the pressure if the noise is too loud.

#### Q: What kinds of dishes can be placed in the dishwasher?

A: Ensure that the dishes you place in the dishwasher are dishwasher safe. Plastic dishware will not dry as effectively as glass and metal dishware. Plastic items do not retain heat as well as glass and metal dishware. Plastic cups and dishes may require some hand drying before being put away at the end of the cycle.

#### Q: Can I perform a drain only cycle?

A: To drain standing water, press and hold **Start** for three seconds until the cycle stops. Once the dishwasher finishes draining, the power turns off.

# Q: Why does my dishwasher continuously chime if I open the door during a cycle or right after the cycle has finished?

A: This is normal. The dishwasher is letting you know that the interior temperatures of the unit are hot and to use caution when placing your hands inside. Once the unit has cooled down, the chiming will stop.

#### Q: What is Control Lock and how is it activated?

A: Control Lock is a feature that prevents the controls from being changed during the cycle. It does not prevent the door from being opened or the unit from being powered off. To activate or deactivate, press Dual Zone for three seconds.

#### Q: Can I add an extension to the drain hose?

A: If an extension drain hose is required, use 5/8" or 7/8" inside diameter, 2-3 ft. length hose and a coupler for connecting the two hose ends.

#### An LED is blinking, the machine is chiming, and the dishwasher won't start. What is wrong Q: with the dishwasher?

A: This is a safety feature. The door must be closed within four seconds of pressing the **Start** button. If the door is not closed within four seconds, an LED flashes, an audible alert sounds, and the dishwasher does not operate. To start the dishwasher, open the door and either close the door and press Start (front controls) or press Start and close the door within four seconds (top controls).

#### Q: Before loading dishes, should I pre-rinse dishes?

A: No, you don't need to pre-rinse the dishes before loading especially if using the Normal and Auto cycles. The dishwasher washes dishes clean without pre-rinsing.

# **Before Calling for Service**

The appliance is equipped with an automatic error-monitoring system to detect and diagnose problems at an early stage. If the appliance does not function properly or does not function at all, check the following before you call for service.

Problem	Possible Cause	Solutions
Dishwasher will not operate.	Start button is not pressed.	Press the Start button.
	Door is not completely closed.	Make sure that the door is completely closed and latched.
	Power supply or power supply line is not connected.	Connect the power supply or power supply line properly.
	Fuse is blown or circuit breaker tripped.	Replace the fuse or reset the circuit breaker.
Dishwasher operates too long.	Dishwasher is connected to cold water.	Check the water supply connection or water heater setting. (Heating cold water takes longer.)
Odor	The previous cycle was stopped before completion and residual water remains in the dishwasher.	Turn on the power, run the Cancel cycle option to remove the residual water, then run the Turbo cycle using detergent but with the dishwasher empty.
	There is food in the bottom of the unit or in the filter.	Clean the filter and the interior according to the Maintenance section of the owner's manual.
	Unwashed dishes are left in the unit for a long time.	Cycle with one cup of white vinegar in a dishwasher safe glass or bowl placed on the upper rack. (Vinegar is an acid, and with constant use it could damage your appliance.)
Water remains in tub after completion of cycle.	Drain hose is kinked or clogged.	Adjust hose or clear blockage.
Food soil remains on dishes.	Improper cycle selection.	Select correct cycle based on soil level and type of dishware being washed.
	Water temperature is too low.	Check water supply connection or water heater setting.
	Dishwashing detergent was not used.	Use recommended detergent.
	Low inlet water pressure.	Water pressure should be between 20 and 80 psi.
	Water jet holes on spray arms blocked.	Clean the spray arms.
	Improper loading of dishes.	Make sure dishes do not block spray arm rotation or interfere with detergent dispenser.
	Filters are clogged.	Clean filters.
Cloudiness on glassware.	Combination of excessive detergent and hard water.	Use less detergent and use a rinse aid to minimize the problem.
Black or gray marks on dishes.	Aluminum items rubbing dishes during cycle.	Reposition the dishes.
Yellow or brown film on inside surfaces of dishwasher.	Coffee or tea stains.	Eliminate the stain by using a stain removal product.

Problem	Possible Cause	Solutions
	Low water temperature.	Water supply should be at least 120 °F for best wash performance.
	Overloading.	Do not overload the dishwasher.
	Improper loading.	See the Operation section.
	Insufficient water pressure.	Water pressure should be between 20 and 80 psi.
	Insufficient detergent.	Add the recommended amount of detergent. See the Operation section.
	Rinse aid dispenser is empty.	Refill rinse aid dispenser.
Spots and filming on dishes.	Hard water buildup in the tub.	Remove all dishes, silverware and silverware holder from dishwasher.  Only racks should remain in tub. For best results, use citric acid powder (can be found in canning sections of most grocery stores or online). Measure 3 tablespoons (40 g) of citric acid powder. Fill main wash compartment with measured powder. If you cannot find citric acid powder, pour approximately one cup (200-300 mL) of white vinegar into shallow bowl and place in upper rack. Run Machine Clean cycle. Do not use detergent.
Noise	Some level of noise is normal during operation.	<ul><li>Detergent cover opening.</li><li>Drain pump at the beginning of drain cycle.</li></ul>
	The dishwasher is not level.	Adjust leveling feet.
	Nozzle arm knocking against dishes.	Reposition the dishes.
Dishes don't dry.	Rinse agent dispenser empty.	Check and refill the rinse agent dispenser if empty.
Lamps do not illuminate.	Power is not connected.	Connect power supply.
Spray arms do not rotate smoothly.	Holes of spray arms are blocked by food particles.	Clean the holes of spray arms.
Upper rack is crooked.	Rack is poorly adjusted.	See the Height Adjustable Upper Rack section.
Dishwasher continuously chimes when the door is opened, during or right after a cycle has completed.	This is a safety measure. Contact with escaping steam or the hot contents of the dishwasher could result in injury.	Close the door until the dishwasher and dishes have cooled down. The chiming will stop if the door is closed or the interior temperature has cooled.

Problem	Possible Cause	Solutions
Dishwasher chimes if panel is touched during operation.	Bumping into or touching the control panel during operation may result in a disabled button sound. Only the Power, Start, and Control Lock buttons are enabled during operation to prevent cycle settings from being changed inadvertently.	<ul> <li>Button sounds can be turned off by pressing and holding Half Load for three seconds.</li> <li>The end of cycle chime and safety alert sounds will still sound.</li> </ul>
Dishwasher did not finish cycle.	Door was opened during cycle.	If the door is opened during a cycle, the Start key must be pressed within 4 minutes or the machine turns off and all settings are lost.
Leaking in front of unit	Dishwasher not leveled properly.	Verify the unit is level from side to side and from front to back. See leveling instructions in the Installation section.
P1, P2, P3, or P4 appears in display.	The Download cycle is selected.	This is not an error code. This code indicates the current Download cycle.

## **Error Codes**

Problem	Possible Cause	Solutions
IE	Water inlet problem.	Check for a clogged, kinked or frozen water inlet hose.
		Check water supply.
<u> </u>	Drainage Problem.	Check for a clogged, kinked or frozen water drain hose.
	Air gap or disposal is clogged.	Clean air gap or disposal.
	Filters are clogged.	Clean Filters.
AE	Water leakage	Turn off the water supply to the dishwasher and call an LG Electronics Customer Information Center at 1-800-984-6306 (U.S.A.).  The dishwasher makes an alert sound for 10 seconds, and runs the drain pump intermittently. If power is turned off to the machine, the machine powers back on automatically until the AE error is resolved.
FE	Excessive Water supplied.	
HE	Heater circuit failure.	
<u>EE</u>	Thermistor failure.	<ul> <li>Please call an LG Electronics Customer Information Center at 1-800-984-6306 (U.S.A.).</li> </ul>
LE	Motor trouble	
mE_	Vario motor trouble	