# INSTALLATION

# **Before Installing**

**Parts not Provided** 



# **Tools Needed**



0	Flat-Blade Screwdriver	6	Safety Glasses	0	1/4" Square Drive Wrench
2	Phillips Screwdriver	Ø	Adjustable Wrench (2)	2	Pliers
8	Hole Saw min. 2 1/2" bit	8	Tape Measure	ß	3/8" Square Drive Wrench + 1/2" Socket
4	Electric Drill	9	Utility Knife	4	Saw
6	Gloves	9	Level		

#### **Installation Overview**

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



- **1** Preparing Cabinet Opening
- Preparing Water and Electrical Connections
- Preparing Dishwasher

- Isliding the Dishwasher into Cabinet Opening
- **6** Connecting Water Supply Line and Power
- **6** Connecting the Drain Hose
- Leveling the Dishwasher
- **8** Securing Dishwasher in Cabinet Opening
- Final Installation Check

#### **Product Dimensions**

#### **Front View**



#### **Side View**



# **Preparing Cabinet Opening**

This dishwasher is designed to fit a standard dishwasher opening. An opening may be needed on both sides to route plumbing and electrical connections.

- To ensure proper drainage, install the dishwasher no more than 12 ft. (3.65 m) from the sink.
- The location must have sufficient space for the dishwasher door to open easily and provide at least 0.1" (2 mm) between the dishwasher and the cabinet sides.
- If installing the dishwasher in a corner, leave a minimum of 2" (50 mm) between the dishwasher and the adjacent wall.
- The adjacent wall must be free of obstructions.

• For flush installations only, you may remove the cabinet brace **1** inside the cabinet.



# **Choosing the Proper Location**

1 Select a location as close to the sink as possible for easy connections to water supply line, drain hose and electrical connection.



2 To allow for proper clearance of plumbing and electrical, use the template included with the literature to determine the clearance on the side of the cabinet where the cabinet meets the back wall. Using a 2 1/2" diameter hole saw, drill a hole in the target area as shown on the template.



#### 🛕 WARNING

- Installation damage is not covered by the warranty, and leaks caused by improper installation may result in property damage.
- Do not use existing holes unless they are in the target area.
- Failure to properly locate the hole for the water and drain lines may prevent the dishwasher from installing flush with the cabinets and could

result in kinked, pinched, crushed, stressed or damaged lines.



## **Installing Moisture Barrier Tape**

Install the moisture barrier tape to the underside of the countertop to protect the surface from condensation when the appliance is opened.

1 Clean and dry the area on the underside of the countertop and the sides of the cabinet opening where the tape will be applied.



**2** Remove the protective film from the tape.



**3** Install the tape on the underside of the countertop.



**4** Install the shorter pieces of tape on the sides of the cabinet opening at the top.



#### NOTE

- Moisture barrier tape is included in the manual assembly bag.
- If the countertop is made of granite or waterproof materials, the moisture barrier tape is not required.

• Condensation may occur on the underside or along the front edge of the countertop when the room temperature is low.

# Preparing Water and Electrical Connections

#### 🛕 WARNING

- Water Connection
  - Do not reuse an old hose. Use only a new hose when installing the dishwasher. The old hose could leak or burst causing flooding and property damage. Contact an LG Customer Information Center for assistance in buying a new hose.
- Electrical Connection
  - Use a time-delay fuse or circuit breaker.
  - Operate this appliance with the correct voltage as shown in this manual and on the rating plate.
  - The wiring must be grounded properly. If in doubt, have it checked by a qualified electrician.
  - Connect the appliance using 3-wires, including a ground wire.
  - The appliance and outlet must be positioned so that the plug is easily accessible.
  - Do not use an extension cable or adapter with this dishwasher.
  - Do not overload the outlet with more than one appliance.
  - The included 16AWG wire nuts should be used.
  - It is the personal responsibility and obligation of the product owner to have a proper outlet installed by a qualified electrician.

## **A** CAUTION

- When connecting the dishwasher water supply line to the house water supply, sealing tape or compound should be used on pipe threads to avoid leaks. Tape or compound should not be used on compression fittings.
- Connect the dishwasher to a hot water supply with a temperature range between 120 °F (49 °C) and 149 °F (65 °C). This temperature range provides the best washing results and shortest cycle time. To prevent damage to dishes, the temperature should not exceed 149 °F (65 °C).

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• Water supply pressure must be between 20 psi and 80 psi (140–550 kPa). If the water supply pressure exceeds 80 psi, a pressure reducing valve must be installed. Otherwise premature failure of the inlet valve may occur.

# Connecting Water Supply Line and Power

Water supply tube: Minimum 3/8" O.D. copper tubing or metal braided dishwasher supply line

1 Connect the elbow **1** to the inlet valve on the back of the dishwasher.



**2** Connect the water supply tube to the elbow.



- **3** Tighten both connections using two adjustable wrenches to avoid putting stress on the water inlet valve.
- **4** Make sure the water supply is turned off. Connect the water supply tube to the tap.



**5** Insert the power plug into an outlet.

- **6** Turn on the water and check for leaks at the connections.
  - If there is a leak, reconnect the elbow.
  - Do not cross thread or overtighten the connections to avoid leakage.



- **7** Unplug the power cord.
- **8** Turn off the water supply and disconnect the water supply tube at the tap.

# **Preparing Dishwasher**

#### **WARNING**

• Do not remove safety cover. Removal can result in fire, electric shock or death.



## **Releasing Drain Hose**

Remove the twist tie holding the drain hose to the back of the shipping brace.



# **Removable Shipping Brace**

The rear shipping brace can be removed if additional clearance is needed when installing the dishwasher under a low countertop.



# Removing Packing Materials from the Interior

Remove all packing materials from the interior of the dishwasher before installing the appliance.



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• Take care when opening or closing the appliance door before the custom door panel is installed. The door may open or close abruptly without the weight of the panel.

# **Attaching Installation Brackets**

For countertops made of wood or other materials that will not be damaged by drilling, use the metal installation brackets provided.

For countertops made of granite, marble, or other materials that could be damaged by drilling, use the wood screws to attach the dishwasher to the cabinet. See installation instructions in **Securing Dishwasher to Cabinet Opening**.

#### NOTE

- Installation brackets and screws can be found in the silverware basket.
- 1 Insert the tabbed end of the installation brackets into the slots in the upper frame. Rotate the brackets until the tabbed ends are facing up.



**2** Bend the tabs on the brackets to secure them to the frame using a pair of needle nose pliers.



# Sliding Dishwasher into Cabinet Opening

How to Slide Dishwasher

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 Do not pull or lift the dishwasher using the handle 1. Doing so can damage the door and hinges.



• Do not push the door of the dishwasher with knees when sliding the dishwasher into position. Doing so can damage the front cover.



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• Do not push the top of the dishwasher. Doing so can damage the interior of the dishwasher.



#### NOTE

 Open the door and grab the body frame and the top front opening ② of the tub to move or lift the dishwasher.



1 Align the dishwasher with the opening. Make sure the water supply line and power cord extend smoothly without kinks or bends.



2 Smooth out or pad the edges of the hole drilled for the water supply to avoid damaging the drain hose.



**3** Make sure the drain hose is straight before feeding the end of it through the hole for the

water supply. As you slide the dishwasher into the opening, slowly pull on the drain hose from inside the cabinet to take up some slack. Be careful not to kink, pinch, crush or stress the drain hose during installation to avoid leaking and water damage.



- **4** Gradually slide the dishwasher into the opening, making sure that the water supply line and power cord are passing freely through the opening and do not get caught under the dishwasher.
  - As you slide the dishwasher into the opening, stop periodically (or have an assistant help) to take up the slack by pulling the drain hose farther into the cabinet.



#### **A** CAUTION

- To avoid malfunctions or leakage, it is important that the drain hose not get kinked, pinched, stressed or crushed behind or under the dishwasher or inside the neighboring cabinet.
- Damage resulting from improper installation is not covered under the warranty.

# Connecting Water Supply Line and Power

## **Connecting Water Supply Line**

**1** With the home water supply turned off, connect the water supply tube to the tap.

2 Tighten the connection using a square drive wrench to avoid putting stress on the water tap.



#### **Connecting Power**

Insert the power plug into a grounded outlet.

• The power cord should not be positioned behind the appliance but within 47.2 inches of the side so that the plug is easily accessible.



#### **WARNING**

• Do not use an extension cord or 2-prong adapter.



- The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- Connect to a properly rated, protected, and sized power circuit to avoid electrical overload.

# **Connecting the Drain Hose**

If the end of the drain hose does not fit the drain line, use a heat and detergent resistant adapter (not supplied). These may be obtained from a local plumbing supply store. • Cut the adapter so the end matches the size of the drain connection.



#### NOTE

- For drain hose installation, use the screw style hose clamp provided with this dishwasher in the silverware basket.
- If connecting the dishwasher's drain hose to the garbage disposal, be sure to follow your garbage disposal's manual for proper installation instructions.

## **Drain Hose Requirements**

- Follow local codes and ordinances.
- Do not exceed 12 ft. (3.65 m) distance to drain.
- Do not connect drain hoses from other appliances to the dishwasher's drain hose.
- If an extension drain hose is required, use a 5/8" or 7/8" inside diameter, 2-3 ft. length hose and a coupler for connecting the two hose ends.



#### Height of the Drain Hose

The height of the drain hose end must be at least 12" (305 mm) and within 40" (1016 mm) from the base of the dishwasher to avoid water being siphoned from the tub.



## Connecting to Disposal without Air Gap

1 Remove the knockout plug on the disposal with a hammer and screwdriver.



2 Remove the knockout plug **1** from the disposal.

## **WARNING**

• If the knockout plug has not been removed, the dishwasher will not be able to drain properly.



**3** Attach the drain hose to the disposal with the hose clamp provided. Move the hose clamp into position and tighten it with a flat-blade screwdriver.



#### Connecting Waste Tee without Air Gap

The height of the drain hose end must be at least 12" (305 mm) and within 40" (1016 mm) from the base of the dishwasher to avoid water being siphoned from the tub.

**1** Remove the knockout plug with a hammer and screwdriver.

#### **CAUTION**

• If the knockout plug has not been removed, the dishwasher will not be able to drain properly.



2 Attach the drain hose to the waste tee with the hose clamp provided. Move the clamp into position and tighten it with a flat-blade screwdriver.



## Connecting to Disposal or Waste Tee with Air Gap

- **1** Remove the knockout plug with a hammer and screwdriver.
- 2 Connect the end of the drain hose ① to the air gap ② with the hose clamp provided. Move the clamp into position and tighten it with a flat-blade screwdriver.
  - This avoids water being siphoned from the tub.



**3** If it is not connected, attach the rubber hose connector to the disposal or waste tee with a hose clamp (not provided).

# **Leveling Dishwasher**

Check that the dishwasher is level and adjust the leveling feet if necessary.

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- Failure to level the dishwasher may result in leakage, problems closing the door, or noise.
- Where the cabinet opening is narrower than recommended (see **Preparing Cabinet Opening**), the dishwasher must be carefully leveled and aligned so that the dishwasher is supported fully by the 3 leveling feet and is not hanging from the installation brackets. Failure to do so can result in leaks from the front of the dishwasher, RE errors, difficulty in closing the door, or failure to operate.

# **Checking Leveling**

To check that the tub is level from front to back, remove the lower rack and pour **135 oz. (4 L)** of water into the bottom of the tub. The water level should be near the center of both tub lower indentations at the front.



With the lower rack removed, place a level on the inside wall of the tub to check that the dishwasher is level from side to side.

• If you do not have a level, try using a smartphone level application instead.



Make sure that the gap between the tub walls and the door liner is the same on either side.



# **Adjusting Leveling Feet**

Adjust as needed until the dishwasher is completely leveled.

• Adjust the front and rear leveling feet until they are all in firm contact with the floor. Failure to level the dishwasher may prevent the door from closing properly and the dishwasher will not turn on.

## **Adjusting Front Leveling Feet**

Use a flat-blade screwdriver to turn the front leveling feet and adjust the front of the tub.

• Turn the front leveling feet clockwise to raise the front of the tub and counterclockwise to lower it.



- The adjustments work identically for both front leveling feet.
- When a flat-blade screwdriver is unavailable, use a 1/4" square drive wrench ① or 3/8" square drive wrench ② with 1/2" socket ③ to turn the front leveling feet and adjust the front of the tub.



#### **Adjusting Rear Leveling Foot**

Use a Phillips screwdriver to adjust the rear leveling foot and the rear of the tub using the center screw at the base of the appliance in the front.

• Turn the center screw clockwise to raise the rear of the tub and counterclockwise to lower it.



#### NOTE

• To avoid damaging the screw, do not use an electric screwdriver.

# Securing Dishwasher in Cabinet Opening

There are 2 options for securing the dishwasher. If the countertop is made of wood or a material that can safely be drilled into, secure the dishwasher to the countertop with the provided brackets. If the countertop is granite, marble, or a material that cannot be drilled into, secure the dishwasher to the cabinet frame with the provided wood screws.

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• Ensure the dishwasher is level and all leveling feet are in firm contact with the floor before attaching the dishwasher to the countertop or cabinet. If the dishwasher is not leveled properly, the door may not close properly or water may leak.

#### NOTE

- Installation brackets and screws can be found in the silverware basket.
- Use a magnetic screwdriver.
- Cover the filter hole with towels to prevent screws from falling down into the pump.

#### **Securing Dishwasher to Countertop**

Use the bracket screws provided to secure the brackets at the top of the dishwasher to the underside of the wood countertop.



#### **Securing Dishwasher to Cabinet Frame**

If desired, the dishwasher can also be secured to the cabinet frame using the instructions which follow.

1 Remove the 2 plastic caps from the mounting bracket access holes.



**2** Drive a wood screw through the mounting bracket and into the cabinet frame.



**3** Reinstall the plastic caps.

#### **Attaching Toe Kick**

1 Attach the provided lower cover to the base of the dishwasher.



2 Attach a custom toe kick. If needed, use a saw to cut a notch in the top of the custom toe kick to provide clearance for the cabinet panel when opening the door.



# **Final Installation Check**

#### **Testing the Dishwasher**

Check if the dishwasher is properly installed.

- **1** Turn on the circuit breaker.
- **2** Turn on the house water supply.
- **3** Make sure that the door opens and closes smoothly.
  - If necessary, level the dishwasher again.
  - If the door will not close, make sure the rack is level.



• Make sure that all packaging materials have been removed.



- **4** Power on the dishwasher and run a **Turbo** cycle to verify proper operation.
- **5** Check for leaks at the drain hose and water supply connection.
- 6 If a water leak is detected, press and hold the **Start** button for 3 seconds to cancel the wash cycle and automatically drain the water from the dishwasher. Tighten all water connections and run another cycle. Repeat until no leaks are detected.

# **Installation Check Error Codes**

Refer to the chart below before calling for service.

Error Code	Possible Cause and Solution		
OE	Drain hose is kinked or pinched.		
	<ul> <li>Feed the drain and water supply hoses through the hole under the sink. Then gradually slide the dishwasher into the cabinet while pulling on the hoses under the sink to take up any slack. This helps avoid kinking the hoses or trapping them beneath the dishwasher.</li> <li>Drain hose is connected to the disposal without removing the knockout plug.</li> </ul>		
	<ul> <li>Remove the knockout plug from the disposal.</li> <li>Waste tee or disposal is clogged.</li> <li>Remove knockout plug on the waste tee or disposal.</li> </ul>		

Error Code	Possible Cause and Solution		
١E	Water supply line is kinked under dishwasher.		
	<ul> <li>Feed the drain and water supply hoses through the hole under the sink. Then gradually slide the dishwasher into the cabinet while pulling on the hoses under the sink to take up any slack. This helps avoid kinking the hoses or trapping them beneath the dishwasher.</li> <li>House water supply is not turned on.</li> <li>Turn the water faucet on.</li> </ul>		