

# INSTALLATION MANUAL GAS DOUBLE OVEN RANGE

Please read this guide thoroughly before installation.

LDG3019ST LDG3017ST LDG3016ST LDG3015ST/SB/SW LDG3011ST

P/No.: MFL62177703

www.lg.com

**INSTALLATION SAFETY INSTRUCTIONS** 

#### **BEFORE YOU BEGIN**

# Read these instructions completely and carefully.

Installation of this range must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA.54, latest edition. In Canada, installation must conform with the current Natural Gas Installation Code, CAN/CGAB149.1 or the current Propane Installation Code, CAN/CGA-B149.2, and with local codes where applicable. This range has been design-certified by CSA International according to ANSI Z21.1, latest edition and Canadian Gas Association according to CAN/CGA-1.1 latest edition.

As with any appliance using gas and generating heat, there are certain safety precautions you should follow. You will find these precautions in the Important Safety Information section in your User's Guide. Read them carefully.

- **IMPORTANT** Save these instructions for local electrical inspector's use.
- **IMPORTANT** Observe all governing codes and ordinances.

**Note to Installer:** Leave these instructions with the appliance after installation is completed.

**Note to Consumer:** Keep the User's Guide and Installation Instructions for future reference.

## NOTE: This appliance must be properly grounded.

- The electrical diagram is in an envelop attached to the back of the range.
- Skill level Installation of this appliance requires basic mechanical skills.
- Proper installation is the responsibility of theinstaller.
- Product failure due to improper installation is not covered under the Warranty.
- · Remove all tape and packaging.
- Make sure the burners are properly seated and level.
- Take the accessory pack out of the oven and/or drawer.
- Check to be sure that no range parts have come loose during shipping.

**B** 2

#### **INSTALLATION SAFETY INSTRUCTIONS** (continued)

#### **BEFORE YOU BEGIN**

Remove all tape and packing materials before using the range. Dispose of all plastic bags after unpacking the range. Never allow children to play with packing materials.

#### **IMPORTANT SAFETY INSTRUCTIONS**

Read these instructions completely and carefully. Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information, consult a qualified installer, service agency, manufacturer (dealer) or the gas supplier.



This is the safety alert symbol. This symbol alerts you to potential hazards that can kill or hurt you and others. All safety messages will follow the safety alert symbol and either the word "WARNING" or "CAUTION".

**WARNING** This symbol will alert you to hazards or unsafe practices which could cause serious bodily harm or death.

**A CAUTION** This symbol will alert you to hazards or unsafe practices which could cause bodily injury or property damage.

#### **WARNING:** If the information in

this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

 DO NOT store or use combustible materials, gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

#### WHAT TO DO IF YOU SMELL GAS

- DO NOT try to light any appliance.
- DO NOT touch any electrical switch.
- DO NOT use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

#### **INSTALLATION SAFETY INSTRUCTIONS** (continued)

#### A WARNING!



- ALL RANGES CAN TIP
  INJURY TO PERSONS
  COULD RESULT
- INSTALL ANTI-TIP DEVICES PACKED WITH RANGE
- SEE INSTALLATION INSTRUCTIONS
- DO NOT step or sit on the door. Install the Anti-Tip Bracket packed with range.
- The range could be tipped and injury might result from spilled hot liquid, food, or the range itself.

- If the range is pulled away from the wall for cleaning, service, or any other reason, ensure that the Anti-Tip Device is properly reengaged when the range is pushed back against the wall.

All ranges can tip and injury could result. To prevent accidental tipping of the range, attach an approved Anti-Tip device to the wall. (See "INSTALLING THE ANTI-TIP DEVICE" in this manual.) To check if the device is installed and engaged properly, carefully tip the range forward. The Anti-Tip device should engage and prevent the range from tipping over. If you pull the range out from the wall for any reason, make sure the Anti-Tip device is engaged when you push the range back against the wall.

#### A WARNING!

- **NEVER** reuse old flexible connectors. The use of old flexible connectors can cause gas leaks and personal injury. Always use NEW flexible connectors when installing a gas appliance.
- Your range must be installed by a qualified installer.
- Your range should be electrically grounded in accordance with local codes or, in the absence of local codes, in accordance with the National Electrical Code (ANSI/NFPA 70, latest edition). In Canada, electrical grounding must comply with the current CSA C22.1 Canadian Electrical Code Part 1 and/or local codes. See "ELECTRICAL CONNECTIONS" in this manual.
- Before installing your range on linoleum or any other synthetic floor covering, make sure the floor covering can resist 180°F(82°C) without shrinking, warping or discoloring. Do not install the range over carpeting unless a sheet of 1/4" thick plywood or similar insulator is placed between the range and carpeting.
- Make sure the wall coverings around the range can resist heat generated by the range up to 200°F(93°C).
- Leak testing of the appliance shall be conducted according to the manufacturer's instructions.

- Avoid placing cabinets above the range. To minimize the hazard caused by reaching over the open flames of operating burners, install a ventilation hood over the range that projects forward at least 5" beyond the front of the cabinets.
- The ventilation hood must be constructed of sheet metal not less than 0.0122" thick. Install above the cooktop with a clearance of not less than 1/4" between the hood and the underside of the combustible material or metal cabinet.
   The hood must be at least as wide as the appliance and centered over the appliance.
   Clearance between the cooking surface and the ventilation hood surface MUST NEVER BE LESS THAN 24 INCHES.

**EXCEPTION:** Installation of a listed microwave oven or cooking appliance over the cooktop shall conform to the installation instructions packed with that appliance.

• If cabinets are placed above the range, allow a minimum clearance of 30" between the cooking surface and the bottom of unprotected cabinets.



#### **INSTALLATION SAFETY INSTRUCTIONS** (continued)

#### A WARNING!

- If a 30" clearance between cooking surface and overhead combustible material or metal cabinets cannot be maintained, protect the underside of the cabinets above the cooktop with not less than 1/4" insulating millboard covered with sheet metal not less than 0.0122" thick. Clearance between the cooking surface and protected cabinets MUST NEVER BE LESS THAN 24 INCHES.
- The vertical distance from the plane of the cooking surface to the bottom of adjacent overhead cabinets extending closer than 1" to the plane of the range sides must not be less than 18". (See the *Dimensions and Clearances* illustration in this manual.)

## 

- Items of interest to children should not be stored in cabinets above a range or on the backsplash of a range—children climbing on the range to reach items could be seriously injured.
- **DO NOT** attempt to operate the oven of this range during a power failure.

#### IN THE COMMONWEALTH OF MASSACHUSETTS

- This product must be installed by a licensed plumber or gas fitter.
- When using ball type gas shut-off valves, they shall be the T-handle type.
- When using a flexible gas connector, it must not exceed 3 feet in length.

### **PREPARING FOR INSTALLATION**

#### TOOLS YOU WILL NEED



#### MATERIALS YOU MAY NEED

- · Gas line shut-off valve
- Pipe joint sealant that resists action of natural and LP gases.
- Flexible metal appliance connector (3/4" or 1/2" NPT x 1/2" I.D.)

Never use an old connector when installing a new range.

- Flare union adapter for connection to gas supply line (3/4" or 1/2" NPT x 1/2" I.D.)
- Flare union adapter for connection to pressure regulator on range (1/2" NPT x 1/2" I.D.)
- · Liquid leak detector or soapy water.
- Lag bolt or 1/2" O.D. sleeve anchor (for concrete floors only).

### **DIMENSIONS AND CLEARANCES**

Provide proper clearances between the range and adjacent combustible surfaces. These dimensions must be met for safe use of your range. The location of the electrical outlet and pipe opening (see "GAS PIPE AND ELECTRICAL OUTLET LOCATIONS") may be adjusted to meet specific requirements. The range may be placed with 0" clearance (flush) at the back wall.





**D** 6

#### LOCATION

Do not locate your range where it may be subject to strong drafts. Any openings in the floor or wall behind the range should be sealed. Make sure the openings around the base of the range that supply fresh air for combustion and ventilation are not blocked by carpeting or woodwork.

Your range, like many other household units, is heavy and can be installed on soft floor coverings such as cushioned vinyl or carpeting. Use care when moving the range on this type of flooring.

It is recommended that the following simple and inexpensive instructions be followed to protect your floor. When the floor covering ends at the front of the range, the area that the range will be installed on should be built up with plywood to the same level or higher than the floor covering. This will allow the range to be moved for cleaning and servicing, as well as proper air flow to the range.

Also, make sure the floor covering can resist 180°F (82°C). See the "INSTALLATION SAFETY INSTRUCTIONS" (included in this manual).

Make sure the wall coverings around your range can resist the heat generated (up to 200°F/93°C) by the range. See the "INSTALLATION SAFETY INSTRUCTIONS" (included in this manual).

## INSTALLATION INSTRUCTIONS

#### GAS PIPE AND ELECTRICAL OUTLET LOCATIONS



#### **1. PROVIDE ADEQUATE GAS SUPPLY**

# Your range is designed to operate at a pressure of 5" of water column on natural gas or 10" of water column on LP.

Make sure you are supplying your range with the type of gas for which it is configured.

This range is convertible for use on natural or LP gas. When using this range on LP gas, conversion must be made by a qualified LP installer before attempting to operate the range.

For proper operation, the pressure of natural gas supplied to the regulator must be between 5" and 13" of water column.

For LP gas, the pressure supplied to the regulator must be between 10" and 13" of water column.

When checking for correct operation of the regulator, the inlet pressure must be at least 1" more than the operating (manifold) pressure as given above.

The pressure regulator located at the inlet of the range must remain in the supply line regardless of which type of gas is being used.

A flexible metal appliance connector used to connect the range to the gas supply line should have an I.D. of 5/8" and a max of 5ft. In Canada, flexible connectors must be single wall metal connectors less than 6 feet in length.

**B** 8

## 2. CONNECT THE RANGE TO GAS

Shut off the range gas supply valve before removing the old range and leave it off until the new hook-up has been completed.

Because hard piping restricts movement of the range, the use of a CSA International-certified flexible metal appliance connector should be used unless local codes require a hard-piped connection.

**NEVER** reuse an old connector when installing a new range.

To protect against gas leaks, use a qualified pipe joint sealant on all external threads.

A Install male 1/2" or 3/4" flare union adapter to the NPT internal thread of the manual shut-off valve, taking care to back-up the shut-off valve to keep it from turning.

B Install male 1/2" flare union adapter to the 1/2" NPT internal thread at inlet of pressure regulator. Use a backup wrench on the pressure regulator fitting to prevent damage. Connect a flexible metal appliance connector to the adapter on the range. Position range to permit connection at the shut-off valve.

When all connections have been made, be sure all range controls are in the off position and turn on the main gas supply valve. Gas leaks may occur in your system and result in a dangerous situation. Gas leaks may not be detected by smell alone.

Check all gas connection joints and fittings for leaks with a non-corrosive leak detection fluid, then wipe off.

Gas suppliers recommend you purchase and install an UL approved gas detector. Install and use in accordance with Installation instructions.

#### A WARNING!

DO NOT USE A FLAME TO CHECK FOR GAS LEAKS.

#### A WARNING!

Isolate the range from the gas supply system by closing its individual shut-off valve during any pressure testing of the gas supply system at test pressures equal to or less than 1/2" psig(3.5kPa).

## **FLEXIBLE CONNECTOR HOOKUP**



## **3. ELECTRICAL CONNECTIONS**

#### ELECTRICAL REQUIREMENTS

120 Volt, 60 Hertz, properly grounded dedicated circuit protected by a 15 or 20 Amp circuit breaker, or slow blow fuse.

#### GROUNDING

#### IMPORTANT: FOR PERSONAL SAFETY, THIS APPLIANCE MUST BE PROPERLY GROUNDED.

The power cord of this appliance is equipped with a 3-prong (grounding) plug which mates with a standard 3-prong grounding wall receptacle to minimize the possibility of electric shock hazard from this appliance.

The customer should have the wall receptacle and circuit checked by a qualified electrician to make sure the receptacle is properly grounded.

Where a standard two-prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to have it replaced with a properly grounded three-prong wall receptacle.

DO NOT, UNDER ANY CIRCUMSTANCES, CUT OR REMOVE THE THIRD (GROUND) PRONG FROM THE POWER CORD.

A word about GFCI's – GFCI's are not required or recommended for gas range receptacles.

Ground Fault Circuit Interrupters (GFCI's) are devices that sense leakage of current in a circuit and automatically switch off power when a threshold leakage level is detected. These devices must be manually reset by the consumer. The National Electrical Code requires the use of GFCI's in kitchen receptacles installed to serve countertop surfaces. Performance of the range will not be affected if operated on a GFCI-protected circuit but occasional nuisance can occur.



### A CAUTION:

The customer should have the circuit checked by a qualified electrician to make sure the receptacle is properly grounded.

**DO NOT** use an adapter plug because disconnecting of the power cord places undue strain on the adapter and leads to eventual failure of the adapter ground terminal.

The installation of appliances designed for mobile home installation must conform with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 (formerly the Federal Standard for Mobile Home Construction and Safety, Title 24, HUD, Part 280) or, when such standard is not applicable, the Standard for Manufactured Home Installations, latest edition (Manufactured Home Sites, Communities and Set-Ups), ANSI A225.1, latest edition, or with local codes. In Canada, mobile home installation must be in accordance with the current CAN/CSA Z240/MH Mobile Home Installation Code.

#### A WARNING!

POWER MUST BE DISCONNECTED BEFORE SERVICING THE APPLIANCE. FAILURE TO DO SO CAN RESULT IN DEATH OR ELECTRICAL SHOCK.

#### **4. SEAL THE OPENINGS**

Seal any openings in the wall and floor after electrical and gas supplies are completed.

## **5. ASSEMBLE THE SURFACE BURNERS**

#### 

DO NOT operate the burners without all parts in place.

Place the burner caps and heads on the cooktop. Make sure that the caps and heads are placed in the correct locations. There is one small, one medium, one large and one extra large burner head and cap.





Make sure the hole in the burner head is positioned over the electrode.

### **6. CHECK IGNITION OF SURFACE BURNERS**

#### ELECTRIC IGNITION

Select a top burner knob and simultaneously push in and turn to the "LITE" position. You will hear a clicking sound indicating proper operation of the spark module.

Once the air has been purged from the supply lines, burner should ignite within 4 seconds.

After burner ignites, rotate knob out of the "**LITE**" position. Try each burner in succession until all burners have been checked.

#### QUALITY OF FLAMES

The combustion quality of burner flames needs to be confirmed visually.

	A Yellow flames—Call for service
	B Yellow tips on outer cones— It is normal for LP gas
88888	<b>C Soft blue flames</b> — It is normal for natural gas
With LP as	s some vellow tinning on outer cones

With LP gas, some yellow tipping on outer cones is normal.

# **INSTALLATION INSTRUCTIONS**

#### 7. ADJUST THE SURFACE BURNER TO THE LOW FLAME(SIMMER) SETTING.

- 1) Light all surface burners.
- Turn the knob on the burner being adjusted to "LO".
- 3) Remove knob.
- 4) Insert a small, flat bladed screwdriver into the valve shaft as shown in Fig. 1.

On right front valve for model LDG3019ST there is a secondary adjustment for the low flame for the outer burners.

Insert a small, flat blade screwdriver into the hole next to the valve stem to adjust the outer flame as shown in Fig. 2.

Turn the adjustment screw until the flame reaches the desired size.

5) Replace the knob.

Note: Hold the valve shaft with one hand while turning the screw for adjustment with the other.



6) Test the flame stability.

**Test 1:** Turn the knob from "HI" to "LO" quickly. If the flame goes out, increase the flame size and test again.

**Test 2:** With the burner on a "LO" setting, open and close the oven door quickly. If the flame is extinguished by the air currents created by the door movement, increase the flame height and test again.

7) Repeat steps 1-6 for each surface burner.

#### 8. CHECK OPERATION OF BAKE/BROIL BURNERS

To check ignition of the Bake burner, follow the steps below:

- 1) Remove all packing from inside the oven cavity.
- 2) Press "Bake" (350 will be shown in the display).
- 3) Press Start.

It may take between 30 and 90 seconds for the burner to start heating.

To check ignition of the Broil burner, follow the steps below:

- 1) Press "Broil" ("Hi" will be shown in the display).
- 2) Make sure the door is closed.
- 3) Press Start.

It may take between 30 and 90 seconds for the burner to start heating.

NOTE: Do not try and light either the bake or broil burners during a power outage. The range has an electrical ignition system and can not be used without power.

# 9. AIR SHUTTER ADJUSTMENT FOR BAKE AND BROIL BURNERS.

The range comes from the factory with air shutters adjusted for proper air flow for natural gas. If converted to LP, follow the instructions provided in the conversion kit to properly adjust the air shutters. LP conversion must be performed by a qualified technician.

### **10. INSTALLING THE ANTI-TIP DEVICE**

#### INSTALL THE BRACKET USING THE BRACKET INSTALLATION SHEET



The Anti-tip bracket is packaged with an installation template.

The instructions include necessary information to complete the installation.

Read and follow range installation instruction sheet.

#### A WARNING

- Range must be secured with an approved Anti-Tip device.
- The range could be tipped by standing, sitting or leaning on an open door if the range or Anti-Tip device is not properly installed.
- After installing the Anti-Tip device, verify that it is in place by carefully attempting to tilt the range forward.
- This range has been designed to meet all recognized industry tip standards for all normal conditions.
- The installation of the Anti-Tip device must meet all local codes for securing the appliance.
- The use of this device does not preclude tipping of the range when not properly installed.

## **11. LEVELING THE RANGE**



- A Install the oven shelves in the oven and locate the range where it will be installed.
- Check if the range is level by placing a spirit level or a cup, partially filled with water, on one of the oven shelves. If using a spirit level, take two readings— with the level placed diagonally first in one direction –① and then the other –②.
- Remove the lower door. See the "CARE AND CLEANING OF THE RANGE" section in the owner's manual. The front and rear leveling legs can be adjusted from the bottom.
- Use an open-end or adjustable wrench to adjust the leveling legs until the range is level.

#### WHEN ALL HOOKUPS ARE COMPLETE

Make sure all controls are left in the off position. Make sure the flow of combustion and ventilation air to the range is unblocked.

#### **CONVERTING TO LP GAS** (OR CONVERTING BACK TO NATURAL GAS FROM LP)

This range leaves the factory set for use with natural gas. The conversion to LP gas must be performed by a qualified LP gas installer when converting to LP gas.

The conversion instructions and LP orifices can be found attached to the range on the back.

Keep these instructions and the orifices in case you want to convert back to natural gas.

# Memo



LG Customer Information Center	
<b>1-800-243-0000</b> USA, Consumer User <b>1-888-865-3026</b> USA, Commercial User	
Register your product Online!	
www.lg.com	

Printed in Mexico