

# GAS RANGE

### INSTALLATION INSTRUCTIONS

Please read this guide thoroughly before installation.

To contact LG Electronics, 24 hours a day, 7 days a week:

#### 1-800-243-0000

Or visit us on the Web at: us.lge.com

# **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/CGA-B149.1 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 envelope attached to the back of the range.
- Skill level Installation of this appliance requires basic mechanical skills.
- Proper installation is the responsibility of the installer.
- 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.

### **READ ALL INSTRUCTIONS BEFORE INSTALLATION**

### 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.

### FOR YOUR SAFETY

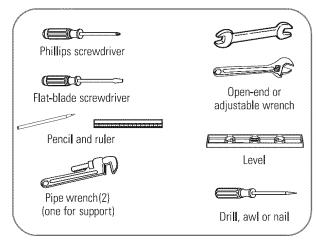
Do not store or use combustible materials, gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. • A flexible gas connector, when used, must not exceed 3 feet in length.

#### If you smell gas:

- 1. Open windows.
- 2. Don't touch electrical switches.
- 3. Extinguish any open flame.
- **4.** Immediately call your gas supplier from a neighbor's home or from a cell phone outside of the home.

# **PREPARING FOR INSTALLATION**

#### TOOLS YOU WILL NEED



#### MATERIALS YOU MAY NEED

- Gas line shut-off valve
- Pipe joint sealant or UL-approved pipe thread tape with Teflon\* that resists action of natural and LP gases
- Flexible metal appliance connector (1/2" I.D.) A 5-foot length is recommended for ease of installation but other lengths are acceptable. 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).

\* Teflon: Registered trademark of DuPont

### INSTALLATION SAFETY INSTRUCTIONS

A WARNING: 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. 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.

**IMPORTANT:** Remove all packing material and literature from oven before connecting gas and electrical supply to range.

- Have your range installed by a qualified installer.
- Your range must 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 be in accordance 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 withstand 180°F 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 withstand heat generated by the range up to 200°F.
- Avoid placing cabinets above the range. To reduce 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 ventilating 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.**

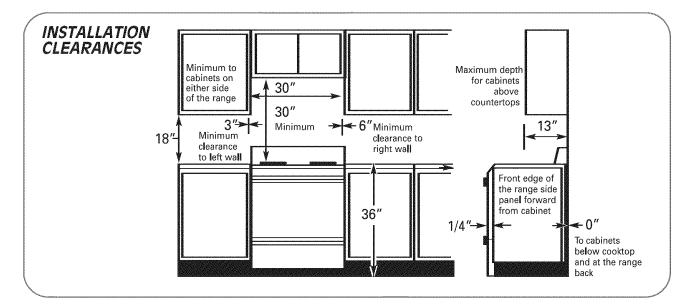
**EXCEPTION:** Installation of a listed microwave oven or cooking appliance over the cooktop shall conform to the installation instructions packed with that appliance.

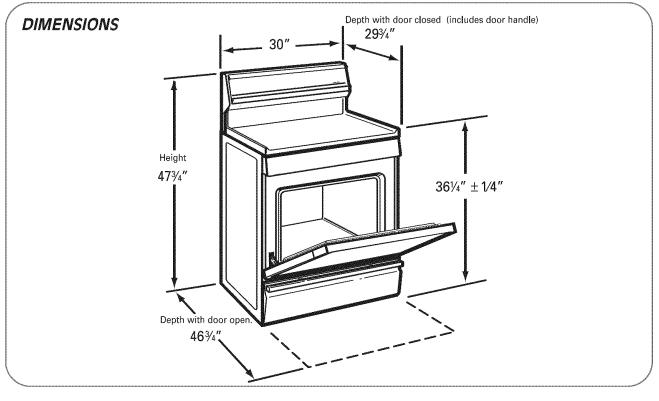
- If cabinets are placed above the range, allow a minimum clearance of 30" between the cooking surface and the bottom of unprotected cabinets.
- If a 30" clearance between cooking surface and overhead combustible material or metal cabinets cannot be maintained, protect the underside of the cabinets above 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.)
- **CAUTION:** 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.
- **CAUTION:** Do not attempt to operate the oven of this range during a power failure.

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## **DIMENSIONS AND CLEARANCES**

Provide adequate 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.





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# ANTI-TIP DEVICE

WARNING!



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.

### **LOCATION**

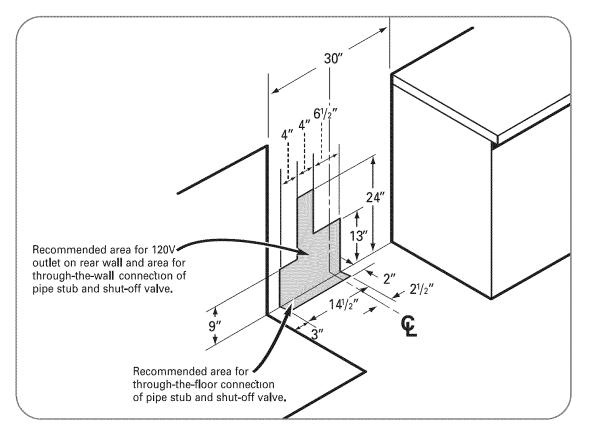
Do not locate the range where it may be subject to strong drafts. Any openings in the floor or wall behind the range should be sealed. Make sure the openings around the base of the range that supply fresh air for combustion and ventilation are not obstructed by carpeting or woodwork.

Your range, like many other household items, is heavy and can settle into 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. The range should be installed on a sheet of plywood (or similar material). When the floor covering ends at the front of the range, the area that the range will rest 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 or servicing.

Also, make sure your floor covering will withstand 180°F. (See the *Installation Safety Instructions* section.)

Make sure the wall coverings around your range can withstand the heat generated (up to 200°F) by the range. (See the *Installation Safety Instructions* section.)

### 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, if designed for LP gas (propane or butane), 10'' of water column.

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

This range is convertible for use on natural or propane gas. If you decide to use this range on LP gas, conversion must be made by a qualified LP installer before attempting to operate the range on that gas.

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 must be

between 10" and 13" of water column.

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

The pressure regulator located at the inlet of the range manifold must remain in the supply line regardless of whether natural or LP 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 1/2" and be 5 feet in length for ease of installation. In Canada, flexible connectors must be single wall metal connectors no longer than 6 feet in length.

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# **2. CONNECT THE RANGE TO GAS**

Shut off the main gas supply valve before disconnecting the old range and leave it off until the new hook-up has been completed. Don't forget to relight the pilot on other gas appliances when you turn the gas back on.

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

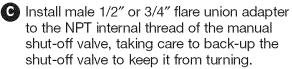
Never use an old connector when installing a new range. If the hard piping method is used, you must carefully align the pipe; the range cannot be moved after the connection is made.

To prevent gas leaks, put pipe joint compound on, or wrap pipe thread tape with Teflon\*

around, all male (external) pipe threads.

 Install a manual gas line shut-off valve in the gas line in an easily accessed location outside of the range. Make sure everyone operating the range knows where and how to shut off the gas supply to the range.

Install male 1/2" flare union adapter to the 1/2" NPT internal thread at inlet of regulator. Use a backup wrench on the regulator fitting to avoid damage. When installing the range from the front, remove the 90° elbow for easier installation.



Connect flexible metal appliance connector to the adapter on the range. Position range to permit connection at the shut-off valve.

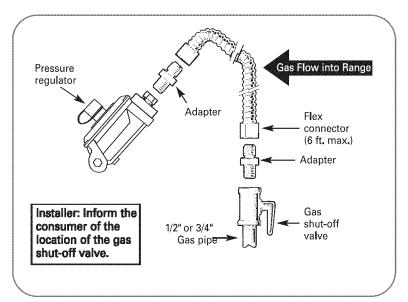
B When all connections have been made, make sure all range controls are in the off position and turn on the main gas supply valve. Use a liquid leak detector at all joints and connections to check for leaks in the system.

### DO NOT USE A FLAME TO CHECK FOR GAS LEAKS.

When using test pressures greater than 1/2 psig to pressure test the gas supply system of the residence, disconnect the range and individual shut-off valve from the gas supply piping. When using test pressures of 1/2 psig or less to test the gas supply system, simply isolate the range from the gas supply system by closing the individual shut-off valve.

\* Teflon: Registered trademark of DuPont

### FLEXIBLE CONNECTOR HOOKUP

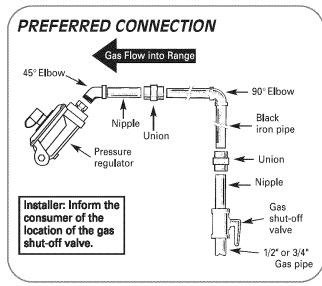


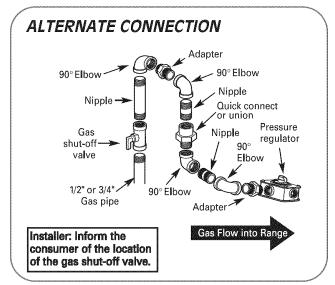
See page 8 for rigid pipe hookup options.

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### RIGID PIPE HOOKUP OPTIONS





# **3. ELECTRICAL CONNECTIONS**

#### ELECTRICAL REQUIREMENTS

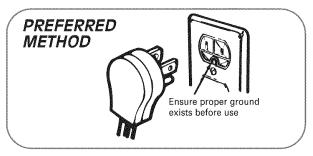
120-volt, 60 Hertz, properly grounded dedicated circuit protected by a 15-amp or 20-amp circuit breaker or time delay fuse.

#### **EXTENSION CORD CAUTIONS**

Because of potential safety hazards associated with certain conditions, we strongly recommend against the use of an extension cord. However, if you still elect to use an extension cord, it is absolutely necessary that it be a UL-listed, 3-wire grounding-type appliance extension cord and that the current carrying rating of the cord in amperes be equivalent to, or greater than, the circuit rating.

#### GROUNDING

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



#### GROUNDED.

The power cord of this appliance is equipped with a three-prong (grounding) plug which mates with a standard three-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.

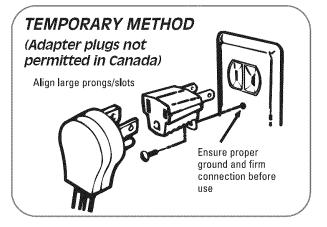
DO NOT, UNDER ANY CIRCUMSTANCES, CUT OR REMOVE THE THIRD (GROUND) PRONG FROM THE POWER CORD.

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

**3. ELECTRICAL CONNECTIONS** (continued)

A. USAGE SITUATIONS WHERE THE APPLIANCE POWER CORD WILL BE DISCONNECTED INFREQUENTLY



An adapter may be used only on a 15-amp circuit. Do not use an adapter on a 20-amp circuit. Where local codes permit, a TEMPORARY CONNECTION may be made to a properly grounded two-prong wall receptacle by the use of a UL-listed adapter, available at most

hardware stores. The larger slot in the adapter must be aligned with the larger slot in the wall receptacle to

with the larger slot in the wall receptacle to provide proper polarity in the connection of the power cord.

When disconnecting the power cord from the adapter, always hold the adapter with one hand. If this is not done, the adapter ground terminal is very likely to break with repeated use. Should this happen, DO NOT USE the appliance until a proper ground has again been established.

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Attaching the adapter ground terminal to the wall receptacle cover screw does not ground the appliance unless the cover screw is metal, and not insulated, and the wall receptacle is grounded through the house wiring. The customer should have the circuit checked by a qualified electrician to make sure the receptacle is properly grounded.

#### B. USAGE SITUATIONS WHERE THE APPLIANCE POWER CORD WILL BE DISCONNECTED FREQUENTLY

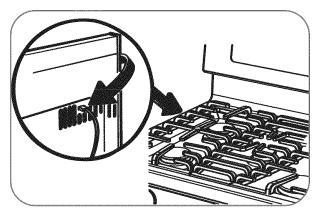
Do not use an adapter plug in these situations because disconnecting of the power cord places undue strain on the adapter and leads to eventual failure of the adapter ground terminal. The customer should have the two-prong wall receptacle replaced with a three-prong (grounding) receptacle by a qualified electrician before using the appliance.

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.

#### ELECTRICAL DISCONNECT

A Locate disconnect plug on the range back.

B Pinch sides of connector and pull out of range back.



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## 4. SEAL THE OPENINGS

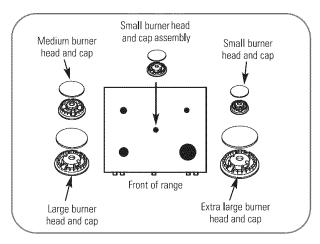
Seal any openings in the wall behind the range and in the floor under the range when hookups are completed.

# **5. ASSEMBLE THE SURFACE BURNERS**

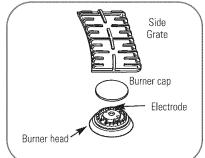
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Do not operate the burners without all parts in place.

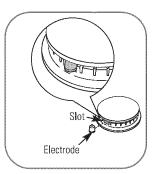
Place the burner caps and heads on the cooktop. Make sure that the caps and heads are placed in the correct locations. There are two small caps and heads, one medium, one large,



and one extra large cap and head. Assemble the side and center burners as shown.



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



# 6. CHECK IGNITION OF SURFACE BURNERS

Operation of all cooktop and oven burners should be checked after the range and gas supply lines have been carefully checked for leaks.

#### **ELECTRIC IGNITION**

Select a top burner knob and simultaneously push in and turn to *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 light within 4 seconds. After burner lights, 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 determined visually.



A Yellow flames—Call for service



B Yellow tips on outer cones—Normal for LP gas



**C Soft blue flames**—Normal for natural gas

If burner flames look like **A**, call for service. Normal burner flames should look like **B** or **C**, depending on the type of gas you use.

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



# **7. CHECK IGNITION OF OVEN BURNER**

The oven is designed to operate quietly and automatically. To operate the oven, press the *BAKE* pad and then press the number pads until 350° appears in the display. Touch the *START* pad. After 30–90 seconds, the oven burner will ignite and burn until the set temperature is reached. The oven burner will continue to cycle on and off as necessary to maintain the oven at the temperature indicated by the display.

To check ignition of the broil burner, touch the **BROIL HI/LO** pad and then the **START** pad. After 30–90 seconds, the broil burner will ignite.

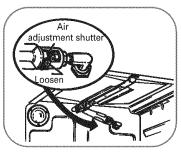
Electric ignition requires electrical power to operate. In case of a power outage, the oven burners on these models cannot be lit manually with a match. Gas will not flow unless the glow bar is hot.

If the oven is in use when a power outage occurs, the burner will shut off and cannot be re-lit until power is restored.

### 8. ADJUST BROIL AND OVEN BURNER AIR ADJUSTMENT SHUTTERS, IF NECESSARY

Air adjustment shutters for the top and bottom burners regulate the flow of air to the flames.

The air adjustment shutter for the top (broil) burner is in the center of the rear wall of the oven.

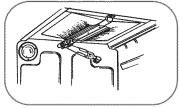


The shutter for the oven burner is near the back wall behind the warming drawer. Remove the drawer. See the *Care and Cleaning of the Range* section of your User's Guide.

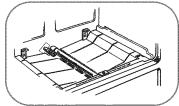


To adjust the flow of air to either burner, loosen the Phillips head screw and rotate the shutter toward open or closed position as needed.

The flames for the top (broil) burner should be steady with approximately 1" blue cones and should not extend out over the edges of the burner baffle.

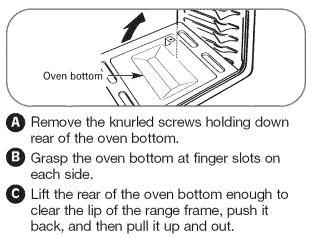


To determine if the bottom burner flames are burning properly, remove the oven bottom. Flames should have approximately

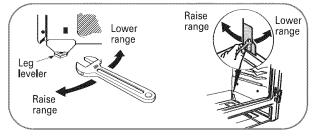


1" blue cones and, if range is supplied with natural gas, should burn with no yellow tipping. (With most LP gas, small yellow tips at the end of outer cones are normal.) Flames should not lift off burner ports. If lifting is observed, gradually reduce air shutter opening until flames are stabilized.

#### TO REMOVE THE OVEN BOTTOM:



### 9. LEVELING THE RANGE

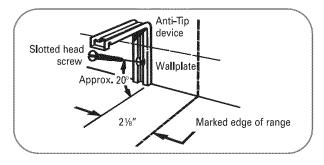


- A Install the oven shelves in the oven and position the range where it will be installed.
- B Check for levelness by placing a spirit level or a cup, partially filled with water, on one of the oven shelves. If using a spirit level, take two readings—with the level placed diagonally first in one direction and then the other.

- Remove the drawer. See the *Care and Cleaning of the Range* section in the User's Guide. The front leveling legs can be adjusted from the bottom and the rear legs can be adjusted from the top or the bottom.
- Use an open-end or adjustable wrench to adjust the leveling legs until the range is level.
- After the range is level, slide the range away from the wall so that the Anti-Tip device can be installed.

# 10. INSTALLING THE ANTI-TIP DEVICE

- **WARNING**
- · Range must be secured with an approved Anti-Tip device.
- Unless properly installed, the range could be tipped by you or a child standing, sitting or leaning on an open door.
- 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.
- If the Anti-Tip device supplied with the range does not fit this application, use the universal Anti-Tip device MBM34391101.



A Mark the wall where the RIGHT EDGE of the range is to be located. Be sure to allow for the countertop overhang if you intend to install the range next to cabinets.



B Locate the outside edge of the device 21/8" toward the center of the range from the marked edge of the range.

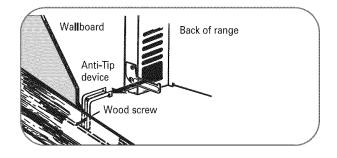
O Using the device as a template, mark the position of the hole for the screw.

**D** For wood construction, drill a pilot hole at an angle of 20 degrees from the horizontal. A nail or awl may be used if a drill is not available.

B Mount the Anti-Tip device with the screw provided.

For cement or concrete construction, you will need a 1/4" x 11/2" lag bolt and a 1/2" O.D. sleeve anchor, which are not provided. Drill the recommended size hole for the hardware.

Install the sleeve anchor into the drilled hole and then install the lag bolt through the device. The bolts must be properly tightened as recommended for the hardware.



Slide the range against the wall, and check for proper installation by grasping the front edge of the cooktop and carefully attempting to tilt the range forward.

### 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 unobstructed.

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

This range leaves the factory set for use with natural gas. If you want to convert to LP gas, the conversion must be performed by a qualified LP gas installer.

The conversion instructions and LP orifices can be found attached to the range next to the pressure regulator.

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

