Instructions for Converting Range to Operate on Liquefied Petroleum Gas

INSTALLATION AND SERVICES MUST BE PERFORMED BY A QUALIFIED INSTALLER
IMPORTANT: SAVE INSTRUCTION MANUAL FOR THE LOCAL INSPECTOR’S USE.
READ AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

WARNING: This conversion kit must be installed by a qualified service technician in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. Failure to follow instructions may result in fire, explosion or production of carbon monoxide causing property damage, personal injury or loss of life. The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer’s instructions supplied with this kit.

WARNING: Before proceeding with the conversion, shut off the gas supply before disconnecting electrical power to the range. Be sure power supplies are off before installing the conversion kit. Failure to do so could cause serious bodily injury.

Determine the combination of top burners that are featured on your range. Identify the parts you need from this kit to complete the L.P. conversion. When burners are converted from natural to L.P. the BTU ratings are as follows: Note: For operation at elevations above 2000ft., appliance rating shall be reduced at the rate of 4% for each 1000 ft. above sea level.

<table>
<thead>
<tr>
<th>Top Burner</th>
<th>Simmer burner</th>
<th>Griddle Burner</th>
<th>Oven Burner</th>
<th>Broil Burner</th>
<th>Bypass Jet</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTU</td>
<td>18000</td>
<td>9000</td>
<td>8000</td>
<td>6000</td>
<td>4000</td>
</tr>
<tr>
<td>Orifice Size(mm)</td>
<td>1.22/1.24</td>
<td>0.88/0.86</td>
<td>0.84/0.81</td>
<td>0.72/0.76</td>
<td>0.62/0.63</td>
</tr>
<tr>
<td>LRG3001U</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>NA</td>
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<td></td>
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</tr>
</tbody>
</table>

Top: Orifice for Oven Broiler Burner / Oven Burner
Bottom: 4000BTU/6000BTU/8000BTU/9000BTU/18000BTU Top Burner Orifice
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**IMPORTANT:** After replacing the natural gas to LP orifices, be sure to keep the original factory installed natural gas orifices for future range conversion back to natural gas.

**Tools for LP Conversion**

- **7mm Tool – Top Burner Orifice Replacement**
- **Flat Screw Driver 2.0*130 (Not Available with the LP Conversion Kit Package) – Bypass Adjustment**
- **Adjustable Wrench *2 (Not Available with the LP Conversion Kit Package) – Orifice Adjustment**

**IMPORTANT**

- 18000 BTU Single Burner
- Burner Orifice for LP 1.24mm/1.22mm
- 9000 BTU Single Burner
- Burner Orifice for LP 0.88mm/0.86mm
- 8000 BTU Single Burner
- Burner Orifice for LP 0.84mm/0.81mm
- 6000 BTU Single Burner
- Burner Orifice for LP 0.72mm/0.76mm
- 4000 BTU Single Burner
- Burner Orifice for LP 0.62mm/0.63mm
- 10000BTU Broiler Orifice for LP 0.9mm
- 18500BTU Bake Orifice for LP 1.24mm
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1. Convert the Pressure Regulator

For 30-inch Gas Range, you could find your regulator on the back left of the range’s back panel.

**IMPORTANT** Pay attention that the NG and LP are in different direction. All the gas ranges are initially designed with NG position, please have it changed in to LP position.
2. Convert Top Burner for LP/Propane Gas

Save the natural gas orifices removed from the appliance for possible future conversions to natural gas. You should rely on the following process when converting unit back to Nature gas. Take extra care when handling orifice parts, making sure the orifice is not

a. Remove top grates, burner caps and inner burner rings.

b. Lift off outer burner heads and burner bases.

c. Remove the factory installed natural gas orifices from the center of the orifice holders using a 7mm nut driver

Remember to keep the original natural gas orifices for future conversions back to natural gas.

“IMPORTANT” to identify their markings.

c1. Replace the 18000BTU burner orifice in each with orifice size 1.22/1.24mm (they are both working fine with the LP 18000BTU burner).

c2. Replace the 9000BTU burner orifice in each with orifice size 0.86/0.88mm (they are both working fine with the LP 9000BTU burner). Please remember not to over tighten the orifice and keep the orifice clean.

c3. Replace the 8000BTU burner orifice in each with orifice size 0.81/0.84mm (they are both working fine with the LP 8000BTU burner). Please remember not to over tighten the orifice and keep the orifice clean.

c4. Replace the 6000BTU burner orifice in each with orifice size 0.72/0.76mm (they are both working fine with the LP 6000BTU burner). Please remember not to over tighten the orifice and keep the orifice clean.

c5. Replace the 4000BTU burner orifice in each with orifice size 0.62/0.63mm (they are both working fine with the LP 4000BTU burner). Please remember not to over tighten the orifice and keep the orifice clean.

Put the burner flame ring back to the main burner bases. Put back the inner burner rings, burner caps and grates.
3. Convert Oven Burner Orifice for LP/Propane Gas

a. Remove all the screws on the back panel, then take out the back panel. The Bake Orifice is located on the bottom right of the back of the range;

b. Remove the orifice using an adjustable wrench. There’s an aluminum pipe connecting safety valve and orifice, be careful so that you won’t break the pipe.

c. Use adjustable wrench to lose the orifice nut with the orifice, then screw out the screws on the bracket so that you could get access to the orifice, at last screw out the orifice and replace with the LP Bake Orifice (1.24mm).
4. Convert Broiler Burner Orifice, please follow the next several steps:

a. Remove all the screws on the back panel, then take out the back panel. The Bake Orifice is located on the bottom right of the back of the range;

b. Remove the orifice using an adjustable wrench. There’s an “S” size aluminum pipe connecting safety valve and orifice, be careful so that you won’t break the pipe.

c. Use adjustable wrench to lose the orifice nut with the orifice, then screw out the screws on the bracket so that you could get access to the orifice, at last screw out the orifice and replace with the LP Broiler Orifice (0.9mm).
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5. Convert Burner Valves for LP/Propane Gas
   
a. Get Access to the Bypass Orifices.
   
a.1 Take out the back panel (16 screws)
   
a.2 Take out the drip pan (5 screws on each side)
   
a.3 Take out the side panels
   
a.4 Take out the control panel (take out the 6 knobs, and screw out the screws connecting control panel);
   
a.5 Take out the micro-switches;
   
a.6 Find the Bypass Orifice located on the gas valve.
   
b. Locate the bypass orifice (brass yellow screw) on the bottom right of the gas valve (you could get access through the red circle shown below), and the bypass is located on the bottom right of the gas valve part;
   
c. Put the knob back, adjust the flame by rotating the knob. The original location of bypass is for NG. If converted to LP, the bypass needs to be screwed in (in clockwise direction) to tightest position.

Originally, the Bypass is located at NG Position.

For LP conversion of bypass, not bypass orifice needs to be changed.

Screw the Bypass Orifice to bottom (clockwise).

c. Save the main bypass jets, in the plastic bag labeled main jets and simmer bypass jets in the bag for simmer jets.

When you are using your top burners, if the flame needs to be adjusted accordingly to fit your need, please adjust the bypass orifices on the burner valve.

Put back the knob on and adjust the flame by rotating the bypass via a small flat screw driver. Check the flame’s condition to get the best performance.
6. Reconnect Gas and Electrical Supply to Range.

Leak testing of the appliance shall be conducted according to the installation instructions provided with the range.

Checking for Manifold Gas Pressure

If it is necessary to check the manifold gas pressure, remove the burner cap, inner ring, outer burner head and burner base of the right front top burner and connect a manometer (water gauge) or another pressure test device to the burner orifice. Use a rubber hose with inside diameter of approximately ¼” and hold the end of the tube tight over the orifice. Turn the gas valve on. For a more accurate pressure check, have at least two other top burners burning. Be sure that the gas supply (inlet) pressure is at least one inch above the specified manifold pressure. The gas supply pressure should never be over 14” water column. When properly adjusted the manifold water column pressure is 10” for LP/Propane gas or 5” for Natural Gas.

7. Installation of New LP / Propane Rating / Serial Plate

Record the model and serial number on the LP / Propane Rating serial plate provided in this kit. The information can be obtained from the existing Rating / Serial plate. Place the new plate as close as possible to the existing Rating / Serial plate on the range.

⚠️ CAUTION ⚠️  Do not use a flame to check for gas leaks

a. Disconnect the range and its individual shut-off valve from the gas supply piping system during any pressure of that system at test pressures greater than 14” of water column pressure (approximately ½”
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psig) b. The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the supply system at test pressure equal to or less than 14” water column pressure (approximately ½” psig)