

Instructions for converting range to operate on Liquefied Petroleum Gas

INSTALLATION AND SERVICE MUST BE PERFORMED BY
A QUALIFIED INSTALLER.

IMPORTANT: SAVE FOR LOCAL ELECTRICAL 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.

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

NOTE: When surface burners are converted from Natural to L.P. the BTU ratings become:

3,000 BTU* Natural Gas to 2,000 BTU* L.P. Gas
5,000 BTU* Natural Gas to 4,500 BTU* L.P. Gas
9,000 BTU* Natural Gas to 8,000 BTU* L.P. Gas
13,000 BTU* Natural Gas to 12,000 BTU* L.P. Gas

*NOTE: For operation at elevations above 2000 ft., appliance rating shall be reduced at the rate of 4 percent for each 1000 ft. above sea level.

L.P. Kit Contents		Kit p/n 316467204 (light blue)
Part Description	Part Number	Qty.
L.P. Inner Choke	316526500	1
Surface Burner Orifice marked 0.68 mm 4,500 BTU* (blue)	316237907	1
Surface Burner Orifice marked 0.89 mm 8,000 BTU* (no color)	316237906	3
Surface Burner Orifice marked 0.40 mm 2,000 BTU* (silver)	316467405	1
Surface Burner Orifice marked 1.02 mm 12,000 BTU* (orange)	316467403	1
L.P. Kit Installation Instructions	316417515	1

Tools Required:

3/8", 1/2" and 5/8" Open End Wrench 

1/8" Wide Flat Blade Screwdriver 

7mm Nutdriver 

9/64" Allen socket wrench 

How to Convert the Range for use with LP/ Propane Gas

1. Convert the Pressure Regulator:

To access the gas regulator, remove the storage drawer or Warmer Drawer. If equipped with a storage drawer, open & remove the drawer completely. For models equipped with a Warmer Drawer, follow the instructions below to remove the Warmer Drawer.

- WARNING** Electrical Shock Hazard can occur and result in serious injury or death. Disconnect electrical power to the range before removing the Warmer Drawer for servicing.
- Locate glide lever on each side of drawer, pull up on the left glide lever and push down on the right glide lever (See Fig. 1).
- Pull the Warmer Drawer away from the range (See Fig. 2).
- Remove the regulator access cover if equipped. **Do not remove the Pressure Regulator or allow it to turn.**
- Remove the dust protector from the cap (Gas models). Use the proper size wrench to remove the cap from the regulator (All models).
- Follow the remaining instructions provided in Fig. 3.

NOTE: 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.

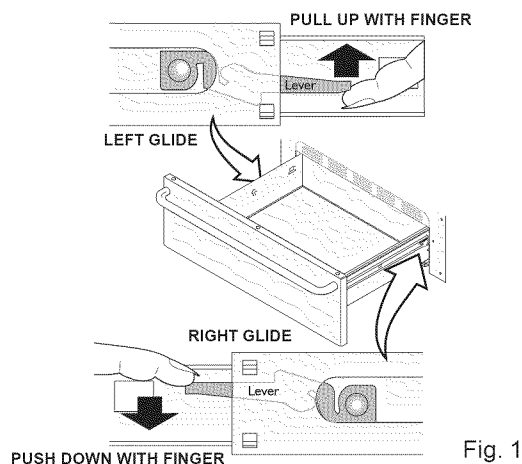


Fig. 1

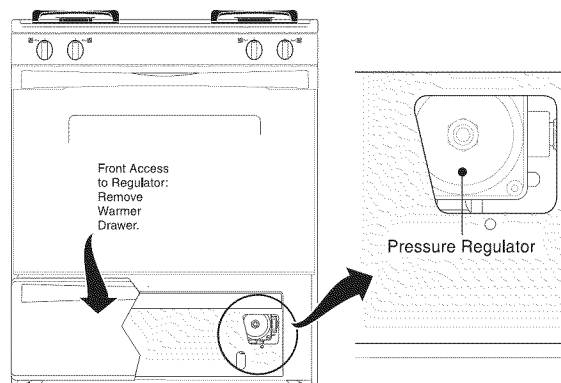
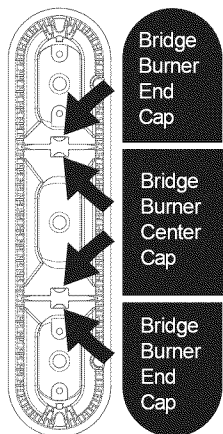


Fig. 2

Instructions for converting range to operate on Liquefied Petroleum Gas

Bridge Burner Caps



Cooktop Layout

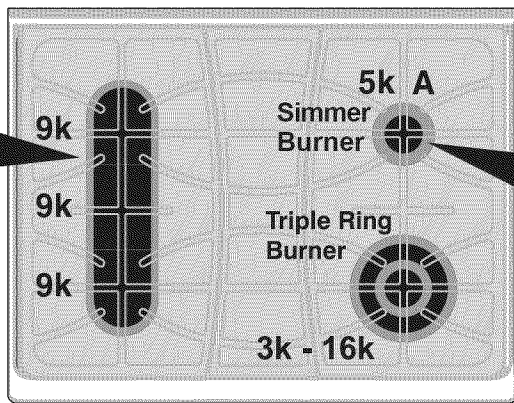
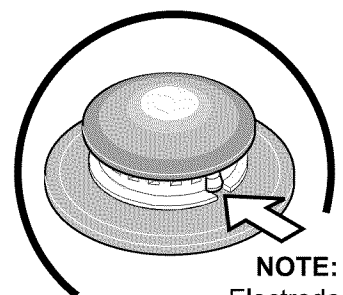
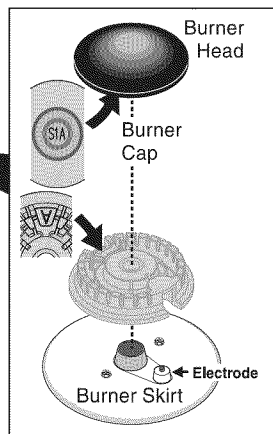


Fig. 4

Simmer Burner Assembly



NOTE:
Electrode must align into slot or hole of Simmer Burner Head

Fig. 5

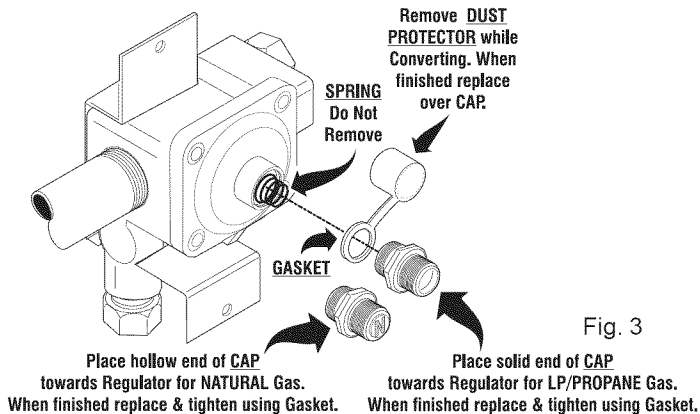


Fig. 3

2a. Convert the Triple Ring Burner for use with LP/ Propane Gas:

CAUTION Use caution when replacing each burner cap so the electrode is not damaged.

- Remove ALL Gas Burner Grates from the cooktop.
- Remove both Inner & Outer Triple Ring Burner Caps (See Fig. 6).
- Using a 9/64" Allen Wrench remove 2 black Triple Ring Burner Cap-head mounting screws as shown in Fig. 7. Retain these Cap-head Mounting screws for reinstallation purposes.
- Remove Triple Ring Burner Head and place on cooktop as shown in Fig. 8. **PLEASE NOTE:** Be careful not to pull the spark wire lead with excessive force. Leave the Triple Ring Mounting Skirt & mounting gasket setting in place on the cooktop (See Fig. 8).
- Use a 7mm Nutdriver to remove both the Natural Gas orifices as shown in Figs. 10 & 11. Use the same 7mm Nutdriver to mount the correct corresponding L.P. Orifices (Refer to L.P. Kit Contents on page 1 and Fig. 9 to determine the correct L.P. Orifice replacement);

Replace Inner Orifice (NG .80mm with LP orifice marked .40mm).
Replace Outer Orifice (NG 1.90mm with LP orifice marked 1.02mm).

NOTE: Use **CAUTION** not to overtighten these brass orifices. Tighten both Triple Ring Burner L.P. Orifices until snug.

- Set Triple Ring Burner Head on Burner Head Mounting Skirt by aligning the Triple Ring Burner Head Inner & Outer Venturi tubes with the holes in the Mounting Skirt. Then align the thread locations to the aluminum mounting bracket under the Triple Ring Burner Mounting Skirt (See Fig. 12).
- Secure the Triple Ring Burner Head to the cooktop using a 9/64" Allen wrench with the 2 black Cap-head Mounting Screws (Refer to Fig. 7).
- Insert Inner Choke (See Fig. 12a).
- Set both the Inner & Outer Triple Ring Burner Caps on the Triple Ring Burner Head.

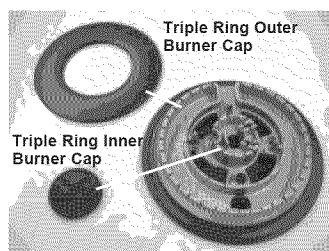


Fig. 6

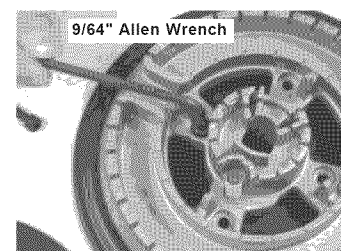


Fig. 7

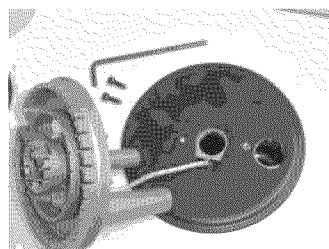


Fig. 8

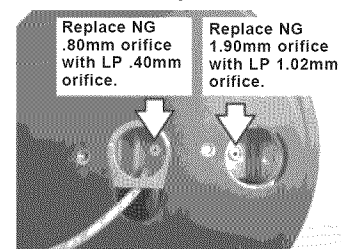


Fig. 9

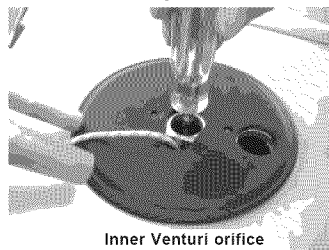


Fig. 10

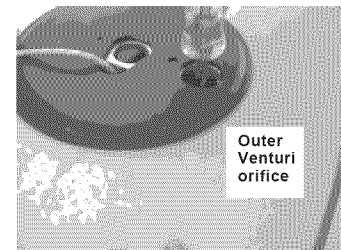


Fig. 11

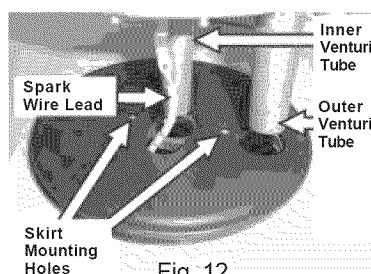


Fig. 12

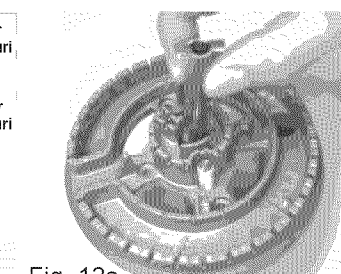


Fig. 12a

Instructions for converting range to operate on Liquefied Petroleum Gas

2b. Convert remaining Surface Burners for use with LP/Propane Gas:

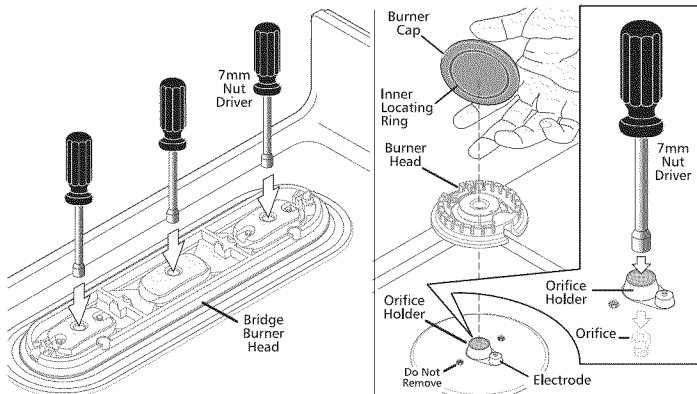
CAUTION THIS COOKTOP IS NOT REMOVABLE. Do not attempt to remove the cooktop.

CAUTION Use caution when replacing each burner cap so the electrode is not damaged.

- Remove BRIDGE and SIMMER Burner Caps and SIMMER Burner Head.
- Remove 4 factory installed natural gas orifices from the remaining orifice holders using a 7 mm nutdriver (See Fig. 13). Note: The BRIDGE Burner has 3 natural gas orifices to remove.
- Replace the orifice in each of the 4 orifice holders with kit supplied LP/Propane gas orifices (refer to the LP Kit chart listed on page 1) Also refer to Fig. 4 for the correct LP orifice installation at each of the 4 surface burner locations. Tighten each orifice until snug. Use CAUTION not to overtighten. The BRIDGE Burner orifice holders are located through the BRIDGE Burner Head at 3 locations (See Fig. 13).
- Replace all Burner Heads & Burner Caps. Match the letter A located under center of the SIMMER Burner Cap with the letter A located inside the SIMMER Burner Head (See Fig. 4). Please note: The 3 BRIDGE Burner Caps are not marked. Replace the BRIDGE Burner Caps as illustrated (See Fig. 4).
- All of the Burner Heads MUST have the Burner Caps correctly installed to insure proper ignition and gas flame size.

NOTE: The Burner Electrode for the SIMMER Burner must be located properly in slot of SIMMER Burner Head (See Fig. 5).

- Carefully replace ALL Burner Grates on cooktop.



Left-hand (Bridge) Burner

Simmer Burner

Fig. 13

3. Convert Oven Burner Orifice for LP/Propane Gas 16,000 BTU*

- Locate the oven burner spud (See Fig. 14).
- Using a 1/2" wrench, turn down the adjustable spud, which injects gas into the oven burner, until snug against the LP/Propane metering pin (approximately 2-1/2 turns). **DO NOT OVERTIGHTEN.**

4. Convert Waist-High Broiler Burner Orifice Flame for LP/Propane Gas (13,500 BTU*) —

- Open the oven door.
- Locate the broiler burner spud and turn down until snug against the LP/Propane metering pin (approximately 1 to 1-1/2 turns). **Do not over tighten** (See Fig. 14).

5. Reconnect Gas & Electrical Supply to Range (complete this step for ALL models):

Leak testing of the appliance shall be conducted according to the Installation Instructions provided with the appliance.

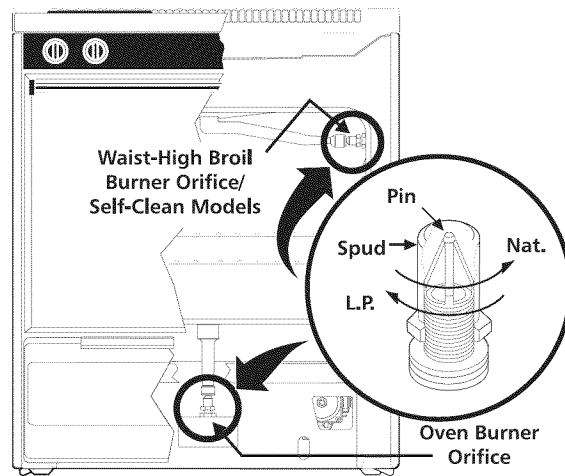


Fig. 14

Checking Manifold Gas Pressure

If it should be necessary to check the manifold gas pressure, remove the burner and connect a manometer (water gauge) or other pressure device to the top right front burner orifice. Using a rubber hose with inside diameter of approximately 1/4," hold tubing down tight over orifice. Turn burner valve on. For an accurate pressure check, have at least two (2) other surface burners burning. Be sure the gas supply (inlet) pressure is at least one inch above specified range 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 4" for Natural gas.

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

- Disconnect the range and its individual shut-off valve from the gas supply piping system during any pressure testing of that system at test pressures greater than 14" of water column pressure (approximately 1/2" psig).
- 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 gas supply piping system at test pressures equal to or less than 14" of water column pressure (approximately 1/2" psig).

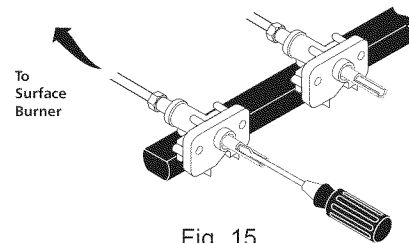


Fig. 15

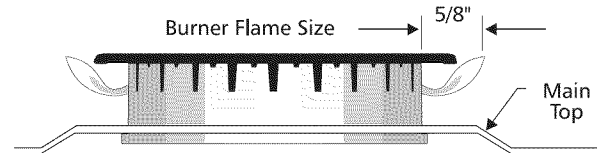


Fig. 16

6. Test to verify if "LOW" setting should be adjusted:

- Push in & turn control to LITE until burner ignites.
- Push in & quickly turn knob to LOWEST POSITION.
- If burner goes out, reset control to OFF.
- Remove the surface burner control knob.
- Insert a thin-bladed screwdriver into the hollow valve stem and engage the slotted screw inside. Flame size can be increased or decreased with the turn of the screw. Turn counterclockwise to increase flame size. Turn clockwise to decrease flame size. (See Figs. 15 & 16).

Adjust flame until you can quickly turn knob from LITE to LOWEST POSITION without extinguishing the flame. Flame should be as small as possible without going out.

Instructions for converting range to operate on Liquefied Petroleum Gas

7. Adjust Air Shutter-Oven Burner :

The air shutter for the oven burner may need adjustment, especially if the appliance has been converted for use with LP/Propane gas. The approximate flame length of the oven burner is 1 inch (distinct inner blue flame (See Fig. 17).

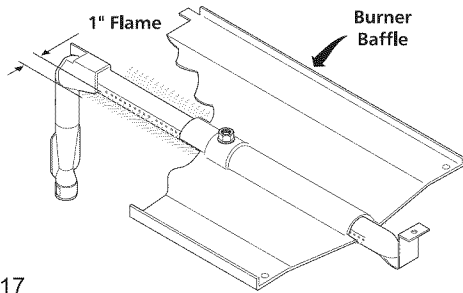


Fig. 17

To determine if the oven burner flame is set properly:

- To access the air shutter you must remove the Warmer Drawer, see instructions for Steps 1a, 1b & 1c.
- Remove the oven bottom by removing the screws at rear of oven bottom. Lift up the rear of oven bottom and slide toward back of range to disengage from front of oven front frame.
- Remove burner baffle by removing nut located on top of baffle and two screws from front edge of oven front frame. Lift baffle straight up and out of the oven.
- Set the oven to bake at 350°F and observe the flame. If the flame is yellow in color, increase air shutter opening size. If the flame is a distinct blue color, but lifting away from the burner; reduce the air shutter opening size.
- Turn off oven and allow to cool before adjusting air shutter. To adjust loosen lock-screw (See Fig. 18), reposition air shutter, and tighten lock-screw.

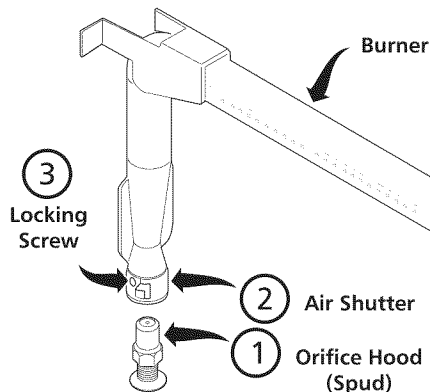


Fig. 18

Retest the burner by repeating step "d" above. When the burner flame is a distinct blue color burning steady, the air shutter is adjusted correctly.

- Replace burner baffle & oven bottom.

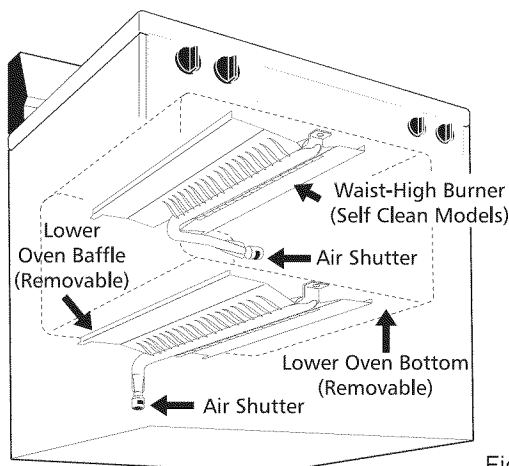


Fig. 19

8. Adjust Air Shutter-Broil Burner:

- Observe the flame to determine if the broiler burner flame is properly adjusted. It should be steady with approximately 1" blue cones and no yellow or orange flame tips (See Fig. 19).
- If adjustment to the air shutter is necessary, locate the broiler burner air shutter (See Fig. 20), loosen shutter lock screw, and adjust to obtain optimum flame. This will normally be completely open for LP/Propane gas. If the flame is yellow in color, increase the air shutter opening size. If the flame is a distinct blue, but lifting away from the burner, reduce the air shutter opening size. Tighten the shutter set screw.

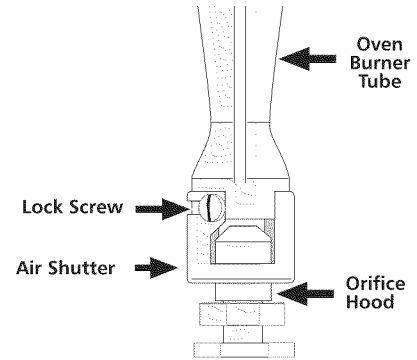


Fig. 20

9. Replace Warmer Drawer:

- Pull the bearing glides to the front of the chassis glide (See Fig. 21).
- Align the glide on each side of the drawer with the glide slots on the range.
- Push the drawer into the range until levers "click" (approximately 2"). Pull the drawer open again to seat bearing glides into position. **If you do not hear the levers "click" or the bearing glides do not feel seated remove the drawer and repeat steps "a" through "c".** This will minimize possible damage to the bearing glides.

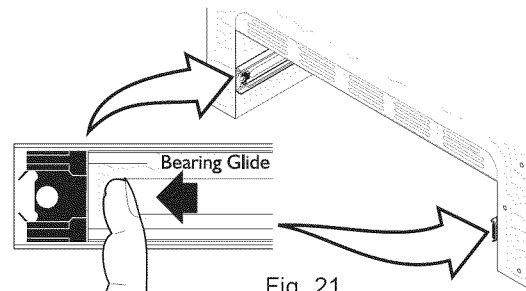


Fig. 21

Conversion back to Natural Gas:

If it becomes necessary to convert the range back to natural gas:

- Disconnect gas & electrical supply from range.
- Convert pressure regulator (See Step 1).
- Remove the 4 LP burner orifices using 7mm nutdriver & replace with the 4 original factory installed natural gas orifices at their original locations (See Fig. 4 for locations).
- Convert Oven Burner Orifice for Natural Gas by loosening spud counter-clockwise (See Step 3; approximately 2-1/2 turns).
- Convert Waist-High Broiler Burner Orifice for Natural Gas by loosening spud counter-clockwise (See Step 4; approximately 1 to 1-1/2 turns).
- Re-adjust LO (Low) Setting for Surface Burner Valves following instructions (See Step 6).
- Readjust Oven & Broil Burner Air Shutters (See Steps 7 & 8).