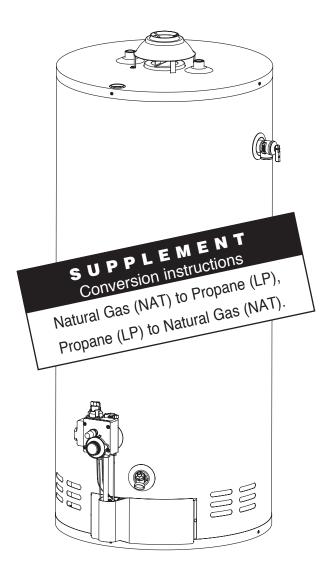
RESIDENTIAL CONVERTIBLE GAS-FIRED WATER HEATERS

(EQUIPPED WITH FVIR TECHNOLOGY)

OWNER'S MANUAL GAS CONVERSION INSTRUCTIONS



A DANGER

All gas conversions must be performed **BY A QUALIFIED SERVICE AGENCY** in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. The information in these instructions must be followed to minimize the risk of fire or explosion or to prevent property damage, personal injury, or death. The qualified service agency is responsible for the proper installation of the conversion 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 the water heater.

CAUTION

THE CONVERSION SHALL BE CARRIED OUT IN ACCORDANCE WITH LOCAL CODES, OR IN THEIR ABSENCE, WITH THE LATEST EDITION OF THE NATURAL GAS AND PROPANE INSTALLATION CODE CSA B149.1 IN CANADA OR THE NATIONAL FUEL GAS CODE ANSI Z223.1 IN THE UNITED STATES.

IMPORTANT

READ THESE INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION. PROPER INSTALLATION WILL PROVIDE SAFE & EFFICIENT SERVICE, AND AVOID NEEDLESS EXPENSE NOT COVERED BY THE WARRANTY. READ THE PRODUCT WARRANTY IN THE OWNER'S MANUAL AND REMEMBER TO FILL OUT AND RETURN TO THE MANUFACTURER, ALL RELEVANT WARRANTY CARDS AND CERTIFICATES. SHOULD YOU HAVE ANY QUESTIONS, PLEASE CONTACT YOUR LOCAL DEALER OR REFER TO THE **GETTING SERVICE FOR YOUR WATER HEATER** SECTION OF THE OWNER'S MANUAL.

SAVE THIS SUPPLEMENT FOR FUTURE REFERENCES.

THIS WATER HEATER IS FACTORY SET TO BURN NATURAL GAS (NAT)

Before putting the water heater into operation, verify that the type of gas supplied to your water heater and the type of gas your water heater is set to burn are the same. If they are not, refer to these instructions.

The conversion kit supplied in the bag attached to the drain valve of the water heater contains the following items:

- Propane main burner orifice
- Propane pilot assembly
- Temperature high limit switch set for propane (if necessary)
- Conversion label

The parts required to make this conversion are supplied in a small bag attached to the drain valve of the water heater. If this bag was not supplied with the water heater, a replacement bag can be obtained from the manufacturer by calling 1-800-363-9354, option 1.

Table 1Conversion kits

	Natural Gas				Propane			
Model Number	BTU Input	Main Burner Orifice	High Limit Switch	Kit No.	BTU Input	Main Burner Orifice	High Limit Switch	Kit No.
UG30-32MF1-C2U	32,000	#36	230°F	69999032	30,000	1.7 mm	230°F	69999031
UG40-38LF1-C2U	38,000	#32	230°F	69999034	38,000	1.9 mm	230°F	69999033
UG50-38LF-C2U	38,000	#33	240°F	06999004	36,000	#49	250°F	06999005
UG60-45MF1-C2U	45,000	3.25 mm	230°F	06999030	42,000	#47	210°F	06999009

Converting your natural gas (NAT) water heater to propane (LP):

- Shut down your water heater by rotating and partially depressing the gas control knob clockwise to the "OFF" position.
- 2. Turn "OFF" the gas supply.

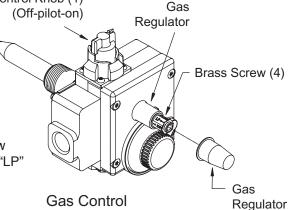


Gas Control Knob (1)

Gas Control Knob Shown In "OFF" Position (1)

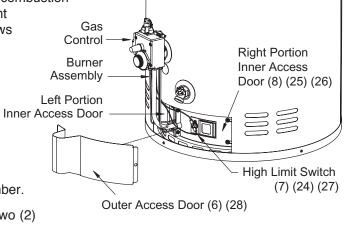
Cap (3) (5)

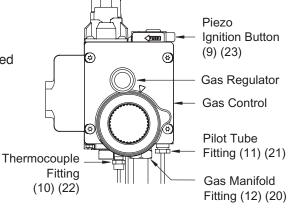
- 3. Remove the cap from the gas regulator on the gas control.
- 4.Remove the brass screw. Rotate the screw 180° and insert screw back into gas regulator (the arrow on the brass screw indicating "LP" should be pointing to the gas control).
- 5. Replace the cap over the gas regulator on the gas control.

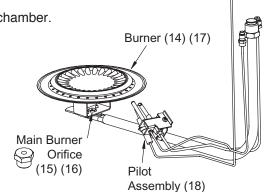


- 6. Remove the outer access door to the combustion chamber.
- 7. Disconnect the two (2) wires from the gas control to the high limit switch located on the right portion of the inner access door to the combustion chamber.
- 8. Remove the right portion of the inner access door to the combustion chamber by: first removing the two (2) screws on the right side of the door and secondly removing the two (2) screws joining the two (2) pieces together.
- 9. Disconnect the wire from the spark rod on the pilot assembly to the piezo ignition button.
- 10.Unscrew the thermocouple fitting from the gas control.
- 11. Unscrew the pilot tube fitting from the gas control.
- 12. Unscrew the gas manifold fitting from the gas control.
- 13. Remove the burner assembly from the combustion chamber.
- 14. Separate the burner from the manifold by removing the two (2) screws on the burner bracket.
- 15. Remove the natural gas main burner orifice from the manifold tube.
- 16. Install the propane main burner orifice into the manifold tube (Supplied in the bag attached to the drain valve).
- 17. Put the burner back in place by screwing the two (2) screws on the burner bracket.
- 18. Replace the pilot assembly set for natural gas with the one supplied in the bag attached to the drain valve set for propane.
- 19. Put the burner assembly back into the combustion chamber ensuring that the flat end of the manifold tube is inserted in the slot of the manifold bracket welded in the combustion chamber.
- 20. Screw the gas manifold fitting into the gas control.
- 21. Screw the pilot tube fitting into the gas control.
- 22. Screw the thermocouple fitting into the gas control.
- 23. Connect the wire from the spark rod on the pilot assembly to the piezo ignition button.
- 24. If necessary, remove the high limit switch (set for natural gas) on the right portion of the inner access door and replace it by the high limit switch supplied in the bag attached to the drain valve (set for propane).

 Refer to **Table 1**.
- 25. Inspect the gasket on the interior side of the door for damage. If damaged, change the gasket.
- 26. Replace the right portion of the inner access door to the combustion chamber.
- 27. Connect the two (2) wires from the gas control to the high limit switch located on the right portion of the inner access door to the combustion chamber.
- 28. Install the outer access door to the combustion chamber.
- 29. Attach the conversion label to the outside of the water heater near the rating plate. The label should be filled out and signed by a qualified installer or service organization.
- 30. Return the unused parts to the bag for possible future conversions.







Burner Assembly (13) (19)

Converting your propane (LP) water heater to natural gas (NAT):

To convert your water heater from propane (LP) to natural gas (NAT) follow the above steps except:

- 4. Remove the brass screw. Rotate the screw 180° and insert screw back into gas regulator (The arrow on the brass screw indicating "NAT" should be pointing to the gas control).
- 15. Remove the propane main burner orifice from the manifold tube.
- 16. Install the natural gas main burner orifice into the manifold tube (Supplied in the bag attached to the drain valve).
- 18. Replace the pilot assembly set for propane with the one supplied in the bag attached to the drain valve set for natural gas.
- 24. If necessary, remove the high limit switch (set for propane) on the right portion of the inner access door and replace it by the high limit switch supplied in the bag attached to the drain valve (set for natural gas). Refer to **Table 1**.

Leak Test the Gas Connections before Placing the Water Heater in Operation

Light the water heater as outlined in the owner's manual. Using a soap and water solution or leak test solution, test all of the gas connections to the gas control by spraying the solution on them. The appearance of bubbles means that there is a leak. If this occurs, tighten the connection and re-test.

Conversion Check List

Have you set the gas regulator on the gas control at the appropriate setting?	
Have you changed the main burner orifice?	
Have you changed the pilot assembly?	
Have you changed the high limit switch? (if necessary)	
Have you inspected the gasket on the inner access door?	_
Have you leak tested all of the gas connections?	_
• Have you filled out and placed the conversion label next to the rating plate on the water heater?	

Markings

The conversion label provided in this kit MUST BE filled out and placed on the water heater when the conversion is made.

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