



Service Bulletin

Gas Conversion Kits

Natural to Propane

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CAUTION

The gas supply shall be shut off prior to disconnecting the electrical power, before proceeding with the conversion.

WARNING:

This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, and explosion or production of carbon monoxide may result 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 the kit.

DANGER:

 Unit exhaust contains carbon monoxide. Operate only under a properly functioning hood with adequate makeup air.



SGL30TR & SGL40TR,
TR Gas Braising Pans



SGL30T1 & SGL40T1,
T1 Gas Braising Pans



KGT6T & KGT12T,
Gas Table Top Kettles



KGL25/T, Gas
Floor Model Kettles



KGL40/T & Up, Gas
Floor Model Kettles

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Gas Conversion Kits - SGL30TR & SGL40TR, TR Gas Braising Pans

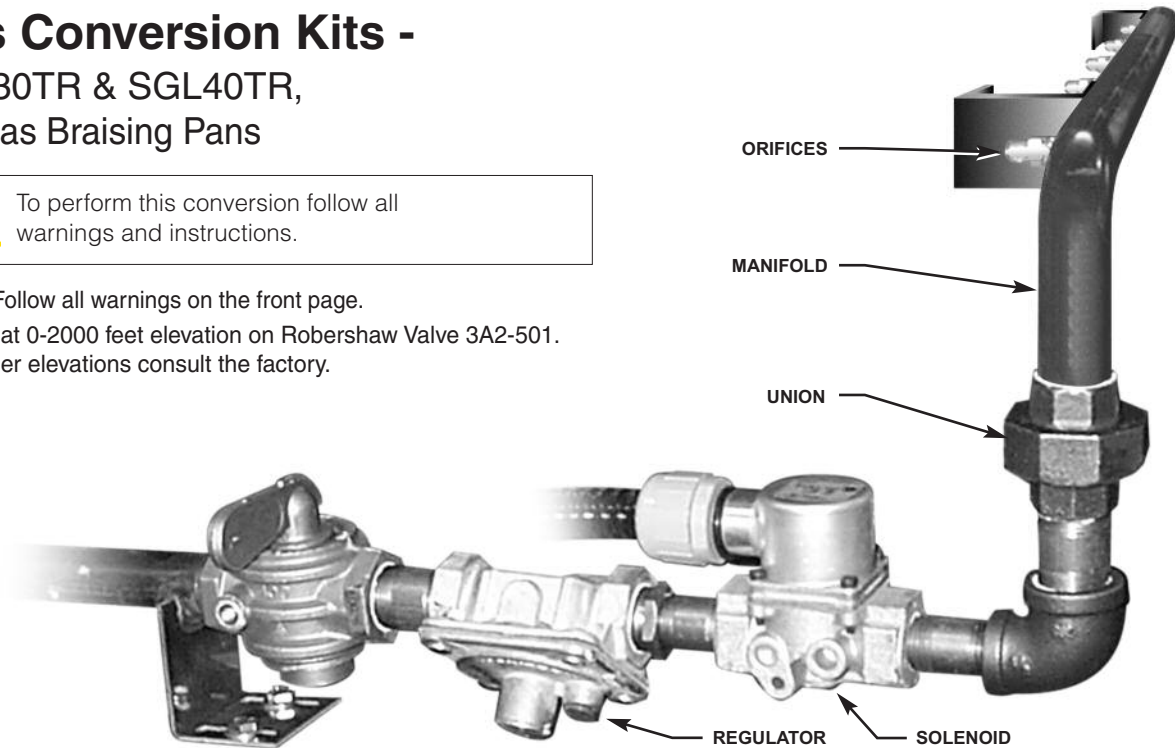


To perform this conversion follow all warnings and instructions.

NOTE: Follow all warnings on the front page.

For use at 0-2000 feet elevation on Robershaw Valve 3A2-501.

For higher elevations consult the factory.



SGL40TR Gas Conversion Kit, Natural To Propane,
Part Number KE003716-7, North America

PARTS INCLUDED

Item	Part number	Description	Qty
1.	KE55277-5	GAS ORIFICE; 0-1999/LP/0.041"	10
2.	KE02410	BURNER; PROP GAS (TR)	10
3.	KE54618-1	GAS REGULATOR; LP 10WC	1
4.	KE603911-4	LABEL; GAS CONVERSION	1
5.	KE603911-5	LABEL; CONVERTED BY	1
6.	KE003901	INSTRUCTION SHEET	1

NOTE: Follow all warnings on the front page.

For use at 0-2000 feet elevation on Robershaw Valve 3A2-501.

For higher elevations consult the factory.

Instructions

NOTE: Use thread sealant compatible with propane gas on all threaded piping connections.

Step 1

1. Disconnect electrical connection and disconnect kettle from supply line.
2. Shut off main gas supply.

Step 2

1. Open cover and tilt pan forward.
2. Remove 2 burner hold down brackets at rear of pan (4 screws).
3. Remove the 2 front burner shields (lift out).
4. Remove all burners.
5. Remove all orifices using a 7/16 inch deep socket.
6. Replace orifices.
7. Replace burners.
8. Reassemble unit.

Step 3

1. Remove 2 screws on front to unit holding trim piece, remove trim piece and open front panel.

SGL30TR Gas Conversion Kit, Natural To Propane,
Part Number KE003716-6, North America

PARTS INCLUDED

Item	Part number	Description	Qty
1.	KE55277-5	ORIFICE; 0-1999/LP/0.041"	7
2.	KE02410	BURNER; PROP GAS (TR)	7
3.	KE54618-1	REGULATOR;LP 10WC	1
4.	KE603911-4	LABEL; GAS CONVERSION	1
5.	KE603911-5	LABEL; CONVERTED BY	1
6.	KE003901	INSTRUCTION SHEET	1

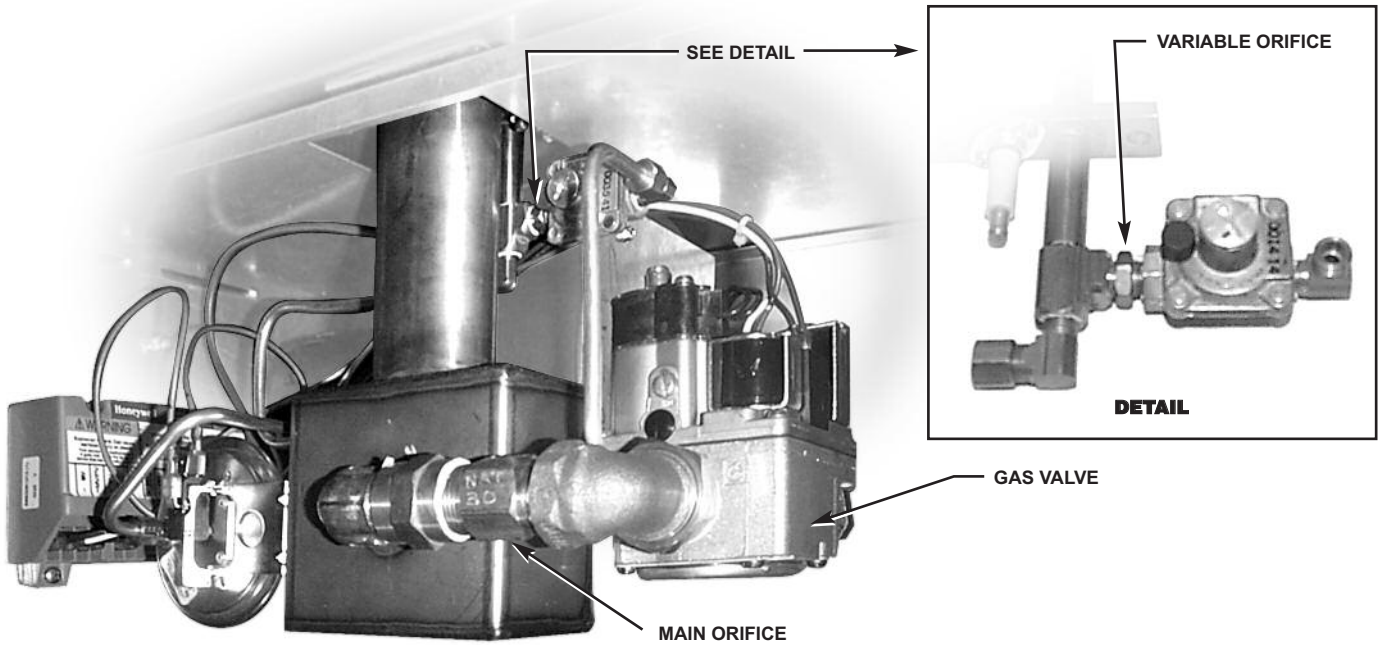
2. Remove left side panel.
3. Separate gas connection from unit.
4. Cut tie wraps holding electrical conduit to valve.
5. Remove bolts from gas train mounting bracket.
6. Separate union.
7. Pull gas train out of unit.
8. Disassemble and replace regulator with one supplied.
9. Reassemble.


Step 4

1. Reconnect electrical and gas supplies..
2. With unit operating normally check for leaks using gas leak detection fluid or a good quality electronic gas leak detector.
3. Check inlet pressure is between 12-14 inches W.C.
4. Check input rate and manifold pressure of unit. See "Measuring Input" and "Measuring Manifold Pressure".
5. Apply conversion label (KE6031911-4) as close as possible to the existing rating plate. (See page 7 "LABELS")
6. Do a free air calculation. See "Free Air Calculation".
7. Apply "Converted by" label #KE6031911-5 to the unit as near to the rating plate as possible in a conspicuous location. (See page 7 "LABELS")
8. Replace Top Cover.

Gas Conversion Kits -

SGL30T1 & SGL40T1, T1 Gas Braising Pans



 To perform this conversion follow all warnings and instructions

For use at 0-2000 feet elevation on White Rogers 36H64.
For higher elevations consult the factory.

Instructions

NOTE: Use thread sealant compatible with propane gas on all threaded piping connections.

1. Disconnect electrical connection and disconnect kettle from supply line.
2. Shut off main gas supply.
3. Remove Top Cover.
4. Remove Plug and Spring.
5. Remove Gas Orifice and "O" Ring.
6. Replace with new Gas Orifice and "O" Ring.
7. Replace Spring and Plug.
8. Reconnect electrical and gas supplies..
9. With unit operating normally check for leaks using gas leak detection fluid or a good quality electronic gas leak detector.
10. Check inlet pressure is between 12-14 inches W.C..
11. Check input rate and manifold pressure of unit. See "Measuring Input" and "Measuring Manifold Pressure".
12. Apply conversion label (KE6031911-4) as close as possible to the existing rating plate. (See page 7 "LABELS")
13. Do a free air calculation. See "Free Air Calculation".
14. Apply "Converted by" label #KE6031911-5 to the unit as near to the rating plate as possible in a conspicuous location. (See page 7 "LABELS")
15. Replace Top Cover.

SGL30T1 Gas Conversion Kit, Natural To Propane,
Part Number KE003716-8 (North America)

PARTS INCLUDED


Item	Part number	Description	Qty
1.	KE55278-12	ORIFICE; 0-1999/LP/0.128"	1
2.	SK24882-2	GAS VALVE, PROPANE	1
3.	KE603911-4	LABEL; GAS CONVERSION	1
4.	KE603911-5	LABEL; CONVERTED BY	1
5.	KE003901	INSTRUCTION SHEET	1

SGL40T1 Gas Conversion Kit, Natural To Propane,
Part Number KE003716-9 (North America)

PARTS INCLUDED

Item	Part number	Description	Qty
1.	KE55278-30	ORIFICE; 0-1999/LP/0.173"	1
2.	SK24882-2	GAS VALVE, PROPANE	1
3.	KE603911-4	LABEL; GAS CONVERSION	1
4.	KE603911-5	LABEL; CONVERTED BY	1
5.	KE003901	INSTRUCTION SHEET	1

Gas Conversion Kits - KGT6T & KGT12T, Table Top Kettles



To perform this conversion follow all warnings and instructions

For use at 0-2000 feet elevation on Honeywell VR8305.
For higher elevations consult the factory.

KGT6T Gas Conversion Kit, Natural To Propane,
Part Number KE003716-1, North America

PARTS INCLUDED

<i>Item</i>	<i>Part number</i>	<i>Description</i>	<i>Qty</i>
1.	KE53406-2	ORIFICE 0-2000/LP/KGT6/1.75mm	1
2.	KE55240-4	KIT; CONVERSION NAT TO PROP	1
3.	KE603911-4	LABEL; GAS CONVERSION	1
4.	KE603911-5	LABEL; CONVERTED BY	1
5.	KE003901	INSTRUCTION SHEET	1

KGT12T Gas Conversion Kit, Natural To Propane,
Part Number KE003716-2, North America

PARTS INCLUDED

<i>Item</i>	<i>Part number</i>	<i>Description</i>	<i>Qty</i>
1.	KE53406-12	ORIFICE 0-2000/LP/KGT12/2.15mm	1
2.	KE55240-4	KIT; CONVERSION NAT TO PROP	1
3.	KE603911-4	LABEL; GAS CONVERSION	1
4.	KE603911-5	LABEL; CONVERTED BY	1
5.	KE003901	INSTRUCTION SHEET	1

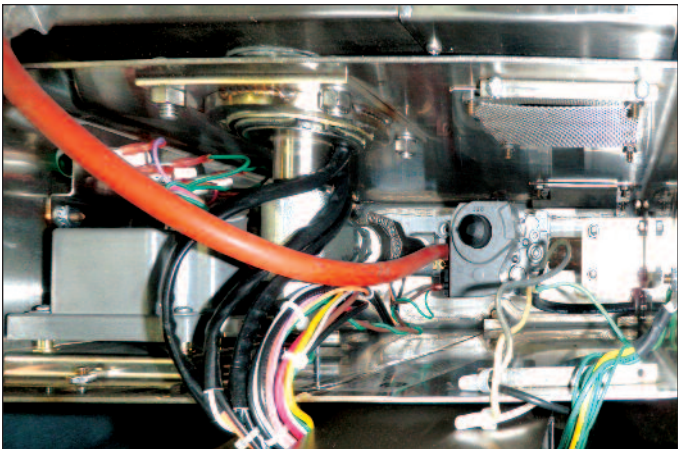


Photo showing manometer hooked up to outlet side of valve.

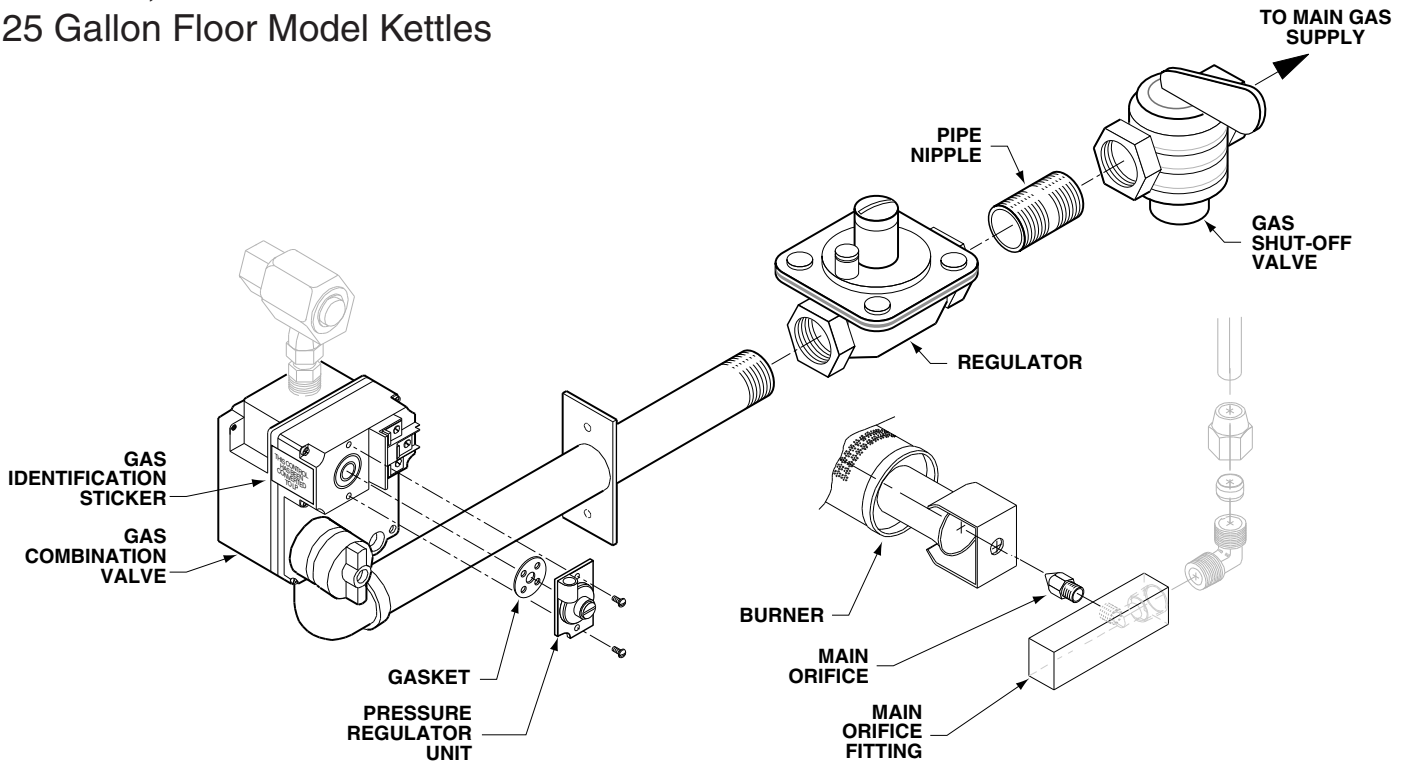
Instructions

1. Shut off gas supply.
2. Unplug electrical cord from source.
3. Replace the gas orifice with the one supplied.
4. Remove cover.
5. Remove component mounting plate to get access to the gas valve.
6. Follow instructions in KE55240-4, Gas Valve Conversion Kit to convert gas valve to 10 in W.C.
7. Apply Gas Converted Label to the gas valve.
8. Reconnect electrical and gas supplies..
9. With unit operating normally check for leaks using gas leak detection fluid or a good quality electronic gas leak detector.
10. Check inlet pressure is between 12-14 inches W.C..
11. Check input rate and manifold pressure of unit. See "Measuring Input" and "Measuring Manifold Pressure".
12. Apply conversion label (KE6031911-4) as close as possible to the existing rating plate. (See page 7 "LABELS")
13. Do a free air calculation. See "Free Air Calculation".
14. Apply "Converted by" label #KE6031911-5 to the unit as near to the rating plate as possible in a conspicuous location. (See page 7 "LABELS")
15. Replace Top Cover.

Gas Conversion Kits -

KGL25/T,

25 Gallon Floor Model Kettles



 To perform this conversion follow all warnings and instructions

For use at 0-2000 feet elevation on Robershaw Valve 3A2-501.
For higher elevations consult the factory.

KGT25T Gas Conversion Kit, Natural To Propane,
Part Number KE003716-3, North America

PARTS INCLUDED

Item	Part number	Description	Qty
1	KE53406-18	ORIFICE 0-2000/LP/KGT25/0.0780"	1
2	KE53515-2	KIT; CONVERSION NAT TO PROP	1
3	KE54618-1	PRESSURE REGULATOR (PROPANE)	1
4	KE603911-4	LABEL; GAS CONVERSION	1
5	KE603911-5	LABEL; CONVERTED BY	1
6	KE003901	INSTRUCTION SHEET	1

Instructions

NOTE: Use thread sealant compatible with propane gas on all threaded piping connections.

1. Disconnect electrical connection.
2. Shut off main gas supply and disconnect kettle from supply line.
3. Remove gas shut-off valve from kettle supply pipe and install regulator (pre-set to 10 " W.C. pressure) supplied in field conversion kit.
4. Re-install shut-off valve using pipe nipple supplied in kit.

5. Remove side cover from control console.
6. Remove pressure regulator unit from gas combination valve inside console, and replace with blocked pressure regulator unit from kit. Make sure gasket is correctly seated in recess in GAS COMBINATION VALVE during installation.
7. Tilt kettle. Remove kettle side box cover. Remove screw securing end of burner. Remove burner. Support main orifice fitting and remove main orifice. Install new orifice from kit.
8. Replace burner. Check MAIN orifice/Burner alignment insuring MAIN orifice points straight into the center of the burner.
9. Reconnect electrical and gas supplies..
10. With unit operating normally check for leaks using gas leak detection fluid or a good quality electronic gas leak detector.
11. Check inlet pressure is between 12-14 inches W.C..
12. Check input rate and manifold pressure of unit. See "Measuring Input" and "Measuring Manifold Pressure".
13. Apply conversion label (KE6031911-4) as close as possible to the existing rating plate. (See page 7 "LABELS")
14. Do a free air calculation. See "Free Air Calculation".
15. Apply "Converted by" label #KE6031911-5 to the unit as near to the rating plate as possible in a conspicuous location. (See page 7 "LABELS")
16. Replace Top Cover.

Gas Conversion Kits - KGL40/T & Up, Floor Model Kettles



To perform this conversion follow all warnings and instructions

For use at 0-2000 feet elevation on Robershaw Valve 3A2-501.
For higher elevations consult the factory.

KGL40/T Gas Conversion Kit, Natural To Propane,
Part Number KE003716-5, North America

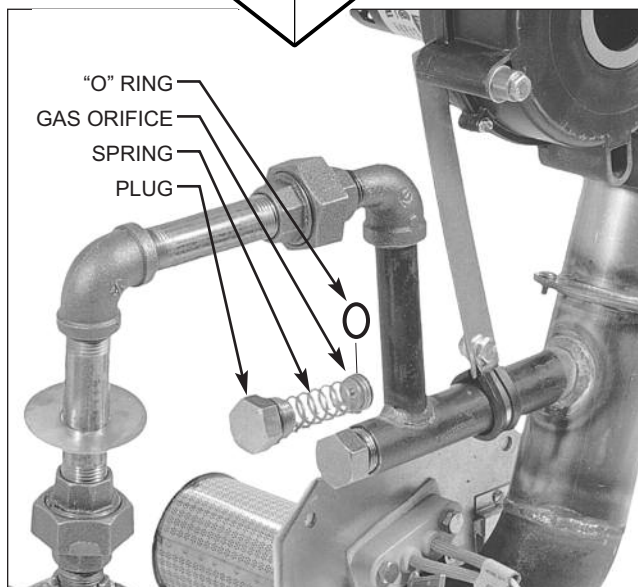
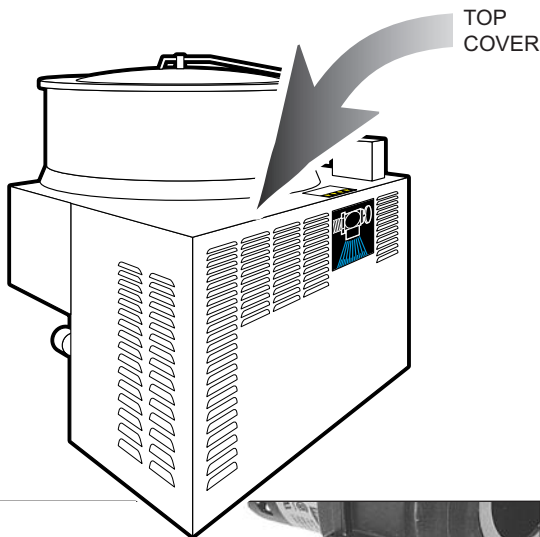
PARTS INCLUDED

Item	Part number	Description	Qty
1	FA05002-29	O-RING;EPDM-E515 (A-114)	1
2	KE53403-5	GAS ORIFICE PROP 0-2000/0.177"	1
3	KE54420-1	WASHER;AIR INTAKE,LP,CE (KGL/HAM,T)	1
4	KE603911-4	LABEL; GAS CONVERSION	1
5	KE603911-5	LABEL; CONVERTED BY	1
6	KE003901	INSTRUCTION SHEET	1

KGL60/T & UP Gas Conversion Kit, Natural To Propane,
Part Number KE003716-4, North America

PARTS INCLUDED

Item	Part number	Description	Qty
1	FA05002-29	O-RING;EPDM-E515 (A-114)	1
2	KE53403-7	GAS ORIFICE PROP 0-2000/0.209"	1
3	KE54420-1	WASHER;AIR INTAKE,LP,CE (KGL/HAM,T)	1
4	KE603911-4	LABEL; GAS CONVERSION	1
5	KE603911-5	LABEL; CONVERTED BY	1
6	KE003901	INSTRUCTION SHEET	1



Instructions

NOTE: Use thread sealant compatible with propane gas on all threaded piping connections.

1. Disconnect electrical connection and disconnect kettle from supply line.
2. Shut off main gas supply.
3. Remove Top Cover.
4. Remove Plug and Spring.
5. Remove Gas Orifice and "O" Ring.
6. Replace with new Gas Orifice and "O" Ring.
7. Replace Spring and Plug.
8. Reconnect electrical and gas supplies.
9. With unit operating normally check for leaks using gas leak detection fluid or a good quality electronic gas leak detector.
10. Check inlet pressure is between 12-14 inches W.C..
11. Check input rate and manifold pressure of unit. See "Measuring Input" and "Measuring Manifold Pressure".
12. Apply conversion label (KE603911-4) as close as possible to the existing rating plate. (See page 7 "LABELS")
13. Do a free air calculation. See "Free Air Calculation".
14. Apply "Converted by" label #KE603911-5 to the unit as near to the rating plate as possible in a conspicuous location. (See page 7 "LABELS")
15. Replace Top Cover.

Labels

CONVERSION LABEL

Shown below is the Conversion label with new Propane gas specifications. Place as closely to the existing rating label as possible.

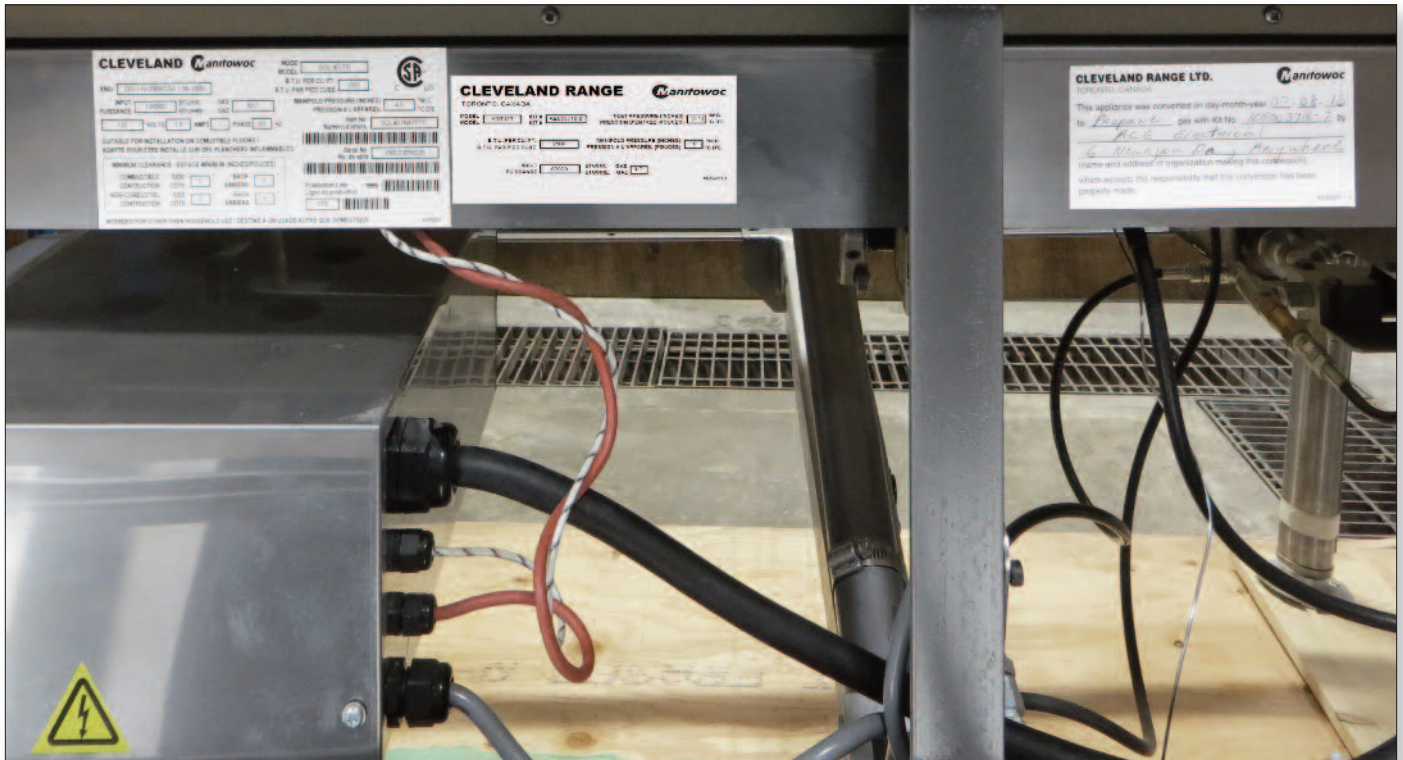
CLEVELAND RANGE			
TORONTO, CANADA			
MODEL	KIT #	INLET PRESSURE (INCHES)	"W.C.
<input type="text" value="KGT12T"/>	<input type="text" value="KE003716-2"/>	<input type="text" value="12-14"/>	"C.D.E.
MODEL	KIT #	PRESSION D'ENTRÉE (POUCES)	"C.D.E.
<input type="text" value="KGT12T"/>	<input type="text" value="KE003716-2"/>	<input type="text" value="12-14"/>	"C.D.E.
B.T.U. PER CU. FT.	MANIFOLD PRESSURE (INCHES)	"W.C.	
<input type="text" value="2500"/>	<input type="text" value="10"/>	"C.D.E.	
B.T.U. PAR PIED CUBE	PRESSION A L'APPAREIL (POUCES)	"C.D.E.	
<input type="text" value="2500"/>	<input type="text" value="10"/>	"C.D.E.	
INPUT	BTU/HR.	GAS	
PUISSANCE	BTU/HRE.	GAZ	
<input type="text" value="53000"/>	<input type="text" value="53000"/>	<input type="text" value="LP"/>	
KE603911-4			

CONVERTED BY LABEL

Complete the label as shown. Obtain your kit number form the kit supplied. Place as close as reasonably possible to the existing rating label in a conspicuous location

CLEVELAND RANGE LTD.			
TORONTO, CANADA			
This appliance was converted on day-month-year <u>DD-MM-YY</u>			
to <u>GAS TYPE</u> gas with Kit No. <u>KE003716-X</u> by			
<u>COMPANY NAME</u>			
<u>COMPANY ADDRESS</u>			
(name and address of organization making this conversion),			
which accepts the responsibility that this conversion has been properly made.			
KE603911-5			

EXISTING RATING LABEL



LABEL PLACEMENT EXAMPLE

Example of a SGL30-TR brazing pan with labels applied.

Reference

MEASURING MANIFOLD PRESSURE

1. Turn gas control knob OFF.
2. Remove outlet pressure tap plug from gas control and connect pressure gauge. See picture.
3. Turn gas control knob to ON.
4. To obtain an accurate outlet pressure reading, main burner must be cycled on and off several times to stabilize the pressure regulator diaphragm.
5. Light main burner and read pressure gauge.
6. If necessary, adjust pressure regulator to match appliance rating.
 - a. Remove pressure regulator adjustment cap screw.
 - b. Using a screwdriver, turn inner adjustment screw clockwise ~ to increase, or counterclockwise ~ to decrease gas pressure to main burner.
 - c. Always replace cap screw and tighten firmly to prevent gas leakage.
7. Turn gas control knob to OFF.
8. Remove pressure gauge and replace outlet pressure tap plug and pressure regulator cap screw.

FREE AIR CALCULATION

Insert drager pump or gas analyser tube 4" down the center of the flue and take one sample each of Carbon Dioxide (CO₂) and Carbon Monoxide (CO) and record results.

% CO (PPM)	% CO ₂
Dilution Factor	

With results obtained for CO₂ use chart to determine dilution factor for gas type used.

Enter these numbers in the following formula to determine the concentration of carbon monoxide in an air free sample of flue gas.

$$\text{Dilution Factor} \times \frac{\text{CO (PPM)}}{10,000} = \text{\% Carbon Monoxide}$$

Result must not exceed 0.08% carbon monoxide.

MEASURING INPUT

1. Make sure that the only gas flowing through the meter is for the appliance being checked.
2. Make certain that other appliances are turned off with their pilot flames extinguished (or deduct their gas consumption from the meter reading).
3. Turn gas control knob to ON position.
4. To obtain an accurate outlet pressure reading, cycle main burner on and off several times to stabilize the pressure regulator diaphragm.
5. Using a watch with a second hand, carefully clock the gas meter to determine the time per revolution. Determine the exact main burner gas flow rate in cubic feet per hour (cfh). Multiply by the Btu per cubic foot of the gas.
6. Compare actual input with the input stamped on the burner nameplate.
7. If necessary, adjust pressure regulator to match appliance rating.
 - a. Remove pressure regulator adjustment cap screw.
 - b. Using a screwdriver, turn inner adjustment screw clockwise ~ to increase or counterclockwise ~ to decrease gas pressure to main burner.
 - c. Always replace cap screw and tighten firmly to prevent gas leakage.
8. Turn gas supply back on to other appliances and relight all pilot flames according to appliance manufacturer instructions.
9. Proceed to Checkout section.

CARBON DIOXIDE IN SAMPLE (PERCENT)	FACTOR PROPANE GAS	FACTOR NATURAL GAS
4.0	3.50	3.05
4.2	3.33	2.90
4.4	3.18	2.77
4.6	3.04	2.65
4.8	2.92	2.54
5.0	2.80	2.44
5.2	2.69	2.34
5.4	2.59	2.26
5.6	2.50	2.18
5.8	2.41	2.10
6.0	2.33	2.03
6.2	2.26	1.97
6.4	2.19	1.91
6.6	2.12	1.85
6.8	2.06	1.80

CARBON DIOXIDE IN SAMPLE (PERCENT)	FACTOR PROPANE GAS	FACTOR NATURAL GAS
7.0	2.00	1.74
7.2	1.94	1.70
7.4	1.89	1.65
7.6	1.84	1.61
7.8	1.79	1.56
8.0	1.75	1.53
8.2	1.71	1.49
8.4	1.67	1.45
8.6	1.63	1.42
8.8	1.59	1.39
9.0	1.56	1.36
9.2	1.52	1.33
9.4	1.49	1.30
9.6	1.46	1.27
9.8	1.43	1.24
10.0	1.40	1.22