

Conversion Kit to LP Gas

FOR EKKO G U 60/14-19, EKKO G L 60/14-19, EKKO G R 60/14-19
& LINA G 60-19 FIREPLACES

INSTALLATION MANUAL

WARNING

FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

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, 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.

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1. Kit Contents

Description	Article number	Qty
Kit	0000003357	
Inject. 1/8"D=0.8		2
Inject. 1/8"D=0.9		1
Inject. 1/8"D=0.7		2
Inject. 1/8"D=1.0		1
Mixing tube 3x6 (65 mm)		5
Mixing tube 2x5 (65 mm)		1
Orifice pilot LPG		1
Gasket ring DIN 7603		6

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2. Introduction

2.1 About this manual

These are the original assembly instructions in English. A French version is also available. Please check the website (www.camina-schmid.com) for the latest version of the manual.

Compliance with these installation instructions serves your safety and is a prerequisite for proper functioning as well as environmentally compatible operation.

The following paragraph highlights and symbols are used in this manual:

DANGER

- Indicates an imminent danger that will lead to serious bodily injury or death.

WARNING

- Indicates a potentially hazardous situation which, if not avoided, could result in serious bodily injury or death.

NOTICE

- Indicates a potentially hazardous situation which, if not avoided, could result in property and environmental damage.

2.2 Things to Know before You Start

This conversion procedure consists in replacing the injector assemblies, as well as changing the pilot burner orifice. To perform this, the bottom plate must be accessible and free of any decorative media (logs, yellow glass, etc.).

If the fireplace is intended to operate with propane gas, Camina & Schmid recommends to install the natural gas to propane gas conversion kit at commissioning, once the appliance is in its intended location, connected to the venting system and to the gas supply **BUT** before installing the fireplace media and any decorative accessory (such as the black reflective glass).

Installing the conversion kit is also possible once the appliance is already in operation. In addition to essential safety measures, the fireplace will require the window panes and decorative media to be completely removed first.

2.3 Required Tools

- AW20 tool (Würth) or Torx 20 screwdriver
- Allen keys, sizes 2mm and 5mm
- Wrenches, sizes 11 mm and 17 mm
- Small short flat-head screwdriver
- Loctite 511 sealant
- Suction lifters
- Vacuum cleaner
- Gas pressure gauge
- Voltmeter
- Gas detector

3. Kit Installation

3.1 Preparation

1. Shut off gas supply and disconnect electrical power to the appliance

⚠ WARNING

Disconnection

- Before any operation, shut off gas supply to the appliance.
- Disconnect electrical power to the appliance

2. If the fireplace was in operation, allow the appliance to cool down before any removal operation.
3. Remove the barrier and glass pane following the instructions provided in the Installation manual of the appliance, and place the barrier and the glass pane in a safe place.

⚠ DANGER

Extremely Hot! Heat and Flammability

- Some parts of the fireplace are extremely hot, particularly the glass panes. The internal glass pane can exceed 400°F [205 °C] at full capacity.
- A second pane window to reduce the risk of burns from the hot glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals. Keep the second window (safety barrier) in place to reduce the risk of severe burns.
- Any glass/safety pane removed for servicing an appliance must be replaced prior to operating the appliance. Children and adults should be alerted to the hazards of high surface temperature.

4. If the appliance was in operation, remove all decorative media from the hearth. Make sure to bag the small decorative pieces and store all the removed components in a safe place for reinstallation.
5. Remove the bottom plate as follows:
 - Using a 2mm Allen key, release the screw (A) from the thermocouple (1) holding ring.
 - Optionally, remove one screw (C) from the base of the thermocouple bracket (B) using a Torx 20 screwdriver. Retain for reinstallation. Then lift the thermocouple bracket (B) with the holding ring. Retain for reinstallation.
 - Carefully lift up the bottom plate (2), from the right side, then the left and finally towards you. Pay attention not to scratch the side panels/glass panes and the painted parts. Store away for reinstallation.

NOTICE

Bottom plate removal

- The bottom plate is adjusted to the combustion chamber dimensions. Removing the bottom plate from the combustion chamber can damage the painted components and/or side panels/glass panes. Lift carefully from one side, then the other before taking it out of the fireplace.

LEGEND

1. Thermocouple
 - A. Holding ring screw
 - B. Bracket
 - C. Bracket screw
2. Bottom plate

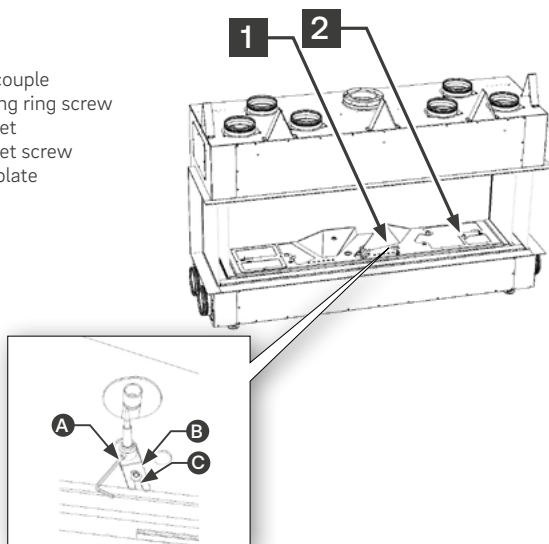


Fig.1: Thermocouple Release and Bottom Plate Removal

3.2 Installation

3.2.1 Replacing the Injector Assemblies (Fig. 2)

1. Six injector assemblies (1 to 6) are now visible; all need to be replaced to operate the fireplace with propane.
2. Replace each injector assembly in turn.

NOTE: The following process is identical for all six injector assemblies, but make sure to use the correct replacement assembly for each injector, as defined in Table 1 below:

- Remove retaining clip (B) from mixing tube body (A). Retain for reinstallation.
 - Lift mixing tube body (A) to uncover the injector (C) and gasket (D). Discard the tube.
 - Unscrew the injector (C) and gasket (D). Discard the injector and gasket.
 - Using a size 17 wrench, install new copper gasket and injector according to **Table 1** below. Make sure that the marking corresponds to the required assembly.
 - Slide mixing tube body (A) over the injector (C).
 - Fasten using retaining clip (B).
3. Repeat the process for each mixing tube separately, one after the other.

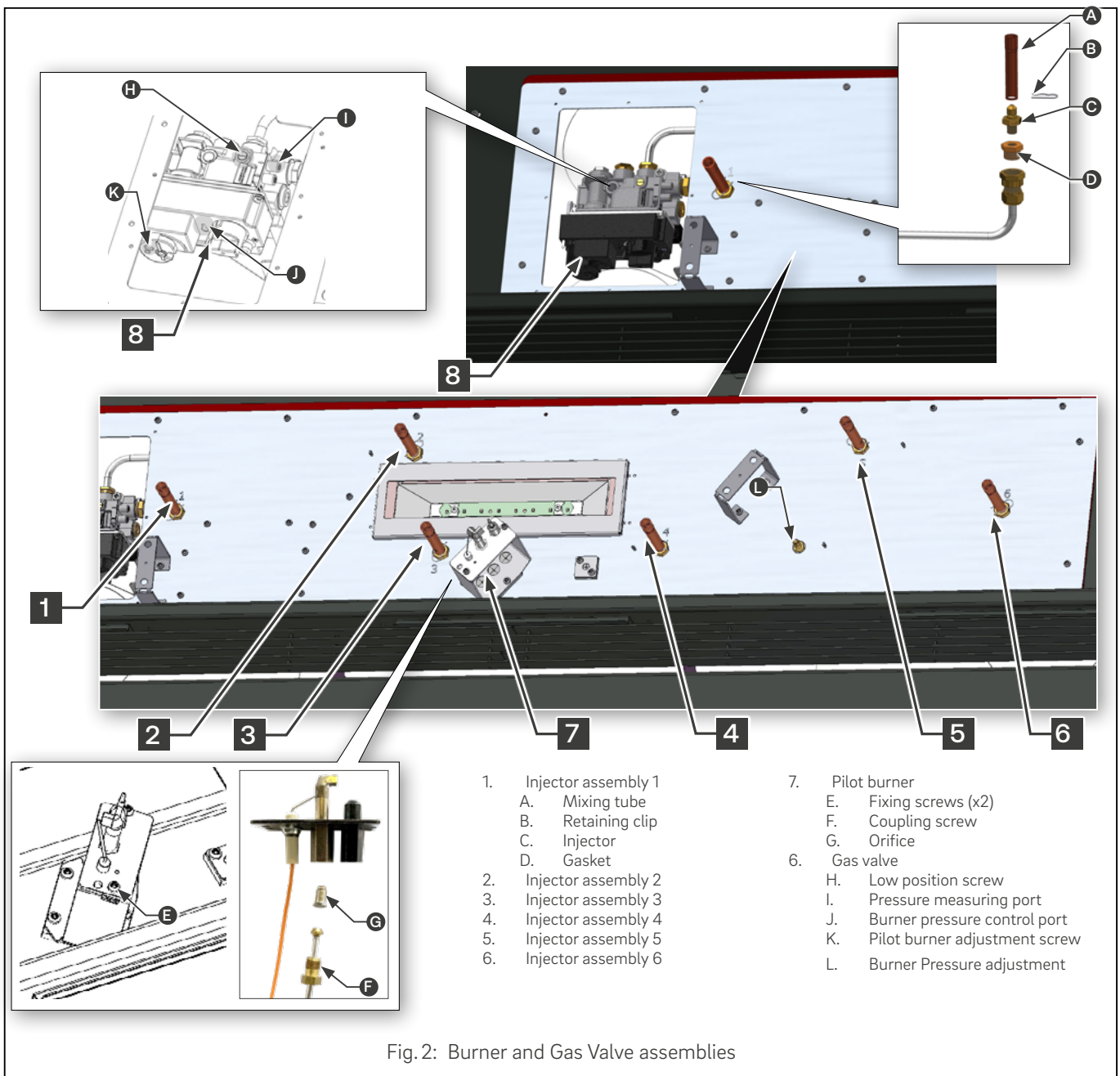
NOTICE

Replacement of injector assemblies

- **Injector assemblies must be replaced one after the other. If all are removed at once, the manifold underneath will fall to the bottom of the appliance. This will cause a lot of work to recover and reassemble.**

Table 1: Injector Assemblies for Propane

Tube number	Description	Marking
1	Inject. 1/8"	0.8
	Mixing tube	3 x 6mm
	Gasket ring DIN 7603	
2	Inject. 1/8"	0.9
	Mixing tube	3 x 6mm
	Gasket ring DIN 7603	
3	Inject. 1/8"	0.7
	Mixing tube	2 x 5mm
	Gasket ring DIN 7603	
4	Inject. 1/8"	1.0
	Mixing tube	3 x 6mm
	Gasket ring DIN 7603	
5	Inject. 1/8"	0.7
	Mixing tube	3 x 6mm
	Gasket ring DIN 7603	
6	Inject. 1/8"	0.8
	Mixing tube	3 x 6mm
	Gasket ring DIN 7603	



3.2.2 Replacing the Pilot Burner Orifice (Fig. 2)

1. Remove two Torx 20 screws (E). Retain for reinstallation
2. Gently pull up the pilot burner unit (7) from the console.

NOTE: If reflective glass panel needs to be installed, the operation can be performed at this stage. Refer to the instructions provided with the accessory.

3. Release the coupling screw (F) from the burner pipe.
4. Using a size 11 wrench, remove NG orifice marked 018N (G) - and discard.
5. Install LP orifice available in the kit. It is marked 012LP.
6. Set the coupling screw (F) back in place on the burner pipe.
7. Reinstall pilot burner unit (7) back on the console using two retained screws (E).

4. Adjustments

Note: refer to Table 2 on page 8 for a complete list of specifications.

- Using an adapted tool, remove 8 AW20 screws from left service hatch. Remove and retain all for reinstallation.

NOTICE

Removal of service hatch

- The hatch is sealed with a silicone filled ceramic fiber gasket, so remove carefully as it may be stuck by the fresh paint.
- The gas valve (8) is now visible.
 - Check that the correct gas type is supplied to the gas valve.
 - To bleed air from the gas line, open the gas supply until gas reached the appliance, then close the gas supply
 - Release the sealing screw of the pressure measuring nipple (I) for incoming gas pressure and attach a gas pressure gauge.
 - Open the gas supply and measure the supply pressure. It must be between 8 and 13" WC for LPG.
 - Close the gas nipple (I) when the pressure is correct, and test for gas leakage.
 - In case of leak, check and correct the connections until the circuit is tight.

⚠ DANGER

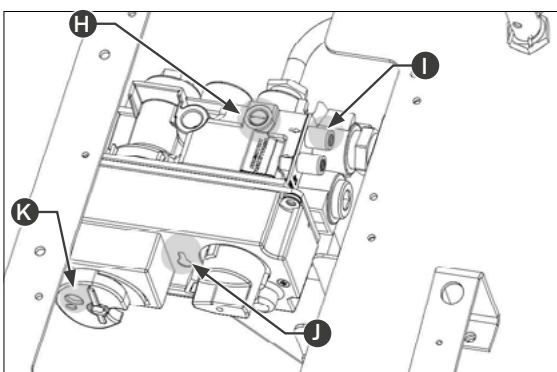
Gas leak test

- Never check for gas leaks with an open flame (lighter) but with a gas detector intended for this purpose.**
- Carefully place the bottom plate back in its initial location, making sure to gently insert the second thermocouple through its dedicated opening.

NOTICE

Bottom plate installation

- The bottom plate is adjusted to the combustion chamber dimensions. Installing the bottom plate into the combustion chamber can damage the painted components and/or side panels. Lower carefully from one side, then the other before when placing it back into the fireplace.**
 - The second thermocouple is very sensitive. Use care when reinstalling the bottom plate, then the thermocouple bracket.**
- Slide thermocouple bracket (Fig. 1, ref B) with holding ring over the thermocouple. Fasten bracket holding screw (Fig. 1, ref C). Using a 2mm Allen key, tighten holding ring screw (Fig. 1, ref. A).
 - Using an adapted tool, remove 8 AW20 screws from the bottom panel service hatch to gain access to the gas valve.
 - In order to perform the tests and adjustments, the burner logs need to be installed. Refer to the Installation Manual of the appliance for the correct positioning on the injectors.
 - Open the pressure test nipple (I or L) to check the burner pressure. Place the hose of the gas pressure gauge on the pressure measuring nipple.
 - Place a small flat screwdriver into the pilot burner adjustment screw (K).



- H. The low position screw is used to set the minimum burner pressure.
- I. Pressure measuring nipples, one for supply pressure (arrow in, towards the gas valve) and one for burner pressure (arrow out, away from the gas valve). The burner pressure can also be measured on top of the burner mounting plate (L).
- J. Access to the burner pressure control screw.
- K. Pilot burner adjustment screw.
- L. Burner pressure measuring nipple (not shown - it is located close to Mixing tube n°5).

Fig. 3: Gas Valve and Burner Adjustments

15. Start the appliance as indicated in the Installation Manual.
16. Set the pilot burner to the indicated setting. To check whether the setting is correct, use a voltmeter; turn down until thermocouple voltage goes below 10 mV. Then slowly turn up until thermocouple is between 12 and 14mV between the red wire on the thermocouple breaker and ground (See Fig. below).
17. Check that the second thermocouple is in the correct position. If not, the appliance will switch off after 20 seconds.



18. To perform any thermocouple adjustments, make sure that the appliance is switched off.
19. Using a 2mm Allen key, adjust the thermocouple tip position by tightening or releasing the screw (Fig. 1, ref. A) in the holding ring.
20. Restart and repeat steps 18 and 19 until the appliance is running more than 28 seconds without switching off.



21. Set burner pressure as follows :

- Adjust the gas valve to the maximum position via the remote control. The maximum burner pressure for LPG should conform with data in „Table 2: Product Specifications“ below.
- Then adjust the gas valve to the minimum position with the remote control. The minimum burner pressure for LPG should conform with data in „Table 2: Product Specifications“ below.

Note: this must be done in the first burner position, so with only the two middle burners switched on.

22. Stop the appliance as indicated in the Installation Manual.
23. Remove the measuring equipment and close the pressure measuring nipple (Fig. 3, ref. I or L).
24. Using the gas detector, check that the nipple is completely closed.
25. Reinstall the bottom service hatch using the 8 retained AW20 screws.
26. Start the appliance to check for gas leaks. If none is found, stop the appliance.
27. Reinstall the service hatch using the 8 retained AW20 screws.
28. Reinstall non burning logs and decorative media, refer to the installation manual for the correct procedures.
29. Reinstall glass pane and barrier, refer to the installation manual for the correct procedures.

Table 2: Product Specifications

	Unit	Natural gas	LPG
Model		EKKO G U 60/14-19	
		EKKO G R 60/14-19, EKKO G L 60/14-19	
		LINA G 60-19	
Gas		Natural	Propane
Altitude	Feet* [m]	0 - 4,500 [0 - 1,370]	
Input Maximum	Btu/h	43,500	35,600
	kW	12.7	10.5
Input Minimum	Btu/h	20,800 Btu/h	15,400
	kW	6.0	4.5
Efficiency	%	67.7	69.8
Burner Pressure high	inwc	4.0	6.7
	kPa	0.99	1.66
Burner Pressure low	inwc	2.3	2.6
	kPa	0.56	0.65
Minimum Supply Pressure	inwc	4	8
	kPa	1.00	2.00
Maximum Supply Pressure	inwc	10.5	13
	kPa	2.54	3.23
Main Burner Injector Marking		1: 1.4 4: 1.6 2: 1.2 5: 1.1 3: 1.1 6: 1.4	1: 0.8 4: 1.0 2: 0.9 5: 0.7 3: 0.7 6: 0.8
Pilot Injector Marking		18	12