Propane conversion kit Prestige 42

959.141.00

△DANGER



HOT GLASS WILL CAUSE BURNS. DO NOT TOUCH GLASS UNTIL COOLED. **NEVER** ALLOW CHILDREN TO TOUCH GLASS.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and must be installed for the protection of children and other at-risk individuals.

Installer: This manual should be kept with the appliance. Consumer: Keep this manual for future reference.

Installation and service must be performed by a qualified gas installer, service agency or the gas fitter. Check local codes and read all instructions prior to installation.

Some materials used in the manufacturing process of this product can expose you to benzene which is known in the state of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65warnings.ca.gov.







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

Do NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS

- Do NOT operate any appliance.
- Do NOT touch any electrical switch.
- Do NOT use any phone in your building.
- Immediately evacuate the area and contact the gas supplier. Follow the gas supplier's instructions.
- If you cannot reach the gas supplier, call the fire
- department. **Do NOT** turn on the gas supply until the gas leak(s) has (have) been repaired.

Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

Canadä

ENER

Look for the **EnerGuide Gas Fireplace Energy** Efficiency Rating in this brochure

Based on CSA P.4.1-15



| Index | |
|--|----|
| A. Introduction | 2 |
| B. General safety instructions | 3 |
| C. Propane gas conversion kit | 5 |
| 1. Conversion kit contents | 5 |
| 2. Dismantling the burner surface | б |
| 3. Dismantling the burners | 7 |
| 4. Changing injectors | 8 |
| 5. Changing the injector on the pilot burner | 9 |
| 6. Replacing and adjusting burners | 9 |
| 7. Update the rating plate | 9 |
| 8. Continue installation | 11 |
| 9. Final check after propane conversion | 11 |
| 9.1 Gas pressure/supply pressure | 12 |
| 9.2 Ignition for the first time after propane conversion | 12 |
| 9.3 Setting the burner pressure | 12 |
| 9.4 Final check | 13 |
| 9.5 First time using the appliance | 13 |
| 10. Continue installation | 13 |

A. Introduction

DRU, a manufacturer of gas-fired heating appliances, develops and produces products that comply with the highest possible quality, performance and safety requirements. This appliance has been tested and certified in accordance with CSA/ANSI Z21.88:2019 and CSA2.33:2019. Installation and maintenance of the appliance should be performed by a professional certified expert with proved knowledge and demonstrable competence in this field.

A professional expert takes all technical aspects such as heat output, gas connection and electricity into account, as well as the combustion gas discharge requirements. The information in this installation manual will guarantee that the conversion kit is installed in such a way that it will function properly and safely. If the installation instruction is not clear, national/local regulations must be observed.

Make sure to carefully read and understand the contents of this installation manual before installing the appliance. After final delivery, the manual must be handed over to the user.

This installation manual **ONLY** describes the steps needed to convert a DRU Prestige 42 to propane gas and is **NOT** intended to substitute for any other procedures outside the scope of this conversion. Any reference to an installation manual pertains to the Prestige 42 Installation and User Manual. Keep the Prestige 42 Installation and User Manual within reach during the conversion process. A digital version is available at <u>www.druservice.us</u> and <u>www.druservice.ca</u>.

B. General safety instructions

A DRU appliance must be installed in accordance with the instructions shown in this document. Carefully read all the instructions and warnings before starting with the installation process. It is the sole responsibility of the installer to make sure this appliance is installed in compliance with the instructions and all applicable codes. Consult your local inspector to determine the need for a permit or license prior to starting the installation.

For the installation process it is imperative to wear the appropriate safety gear to guarantee personal protection and adherence to safety standards. This includes but is not limited to:

- Protective gloves to shield hands from sharp edges, hot surfaces, and potential chemical exposure.
- Safety goggles or a face shield to safeguard eyes from debris, sparks, and chemicals.
- **Respiratory protection** such as a respirator or mask equipped with appropriate filters to prevent inhalation of harmful gases, fumes, or particulates.
- Flame-resistant clothing to minimize the risk of burns from accidental contact with hot surfaces or flames during soldering, brazing, or testing of gas lines.
- Safety boots with slipresistant soles to provide stability and protection against punctures or crushing injuries.
- Hearing protection such as earplugs or earmuffs to reduce the risk of hearing damage.

Additionally, make sure there is adequate ventilation in the workspace to prevent the accumulation of combustible gases and maintain a safe working environment.

DANGER

 $\langle \overline{1} \rangle$

- Do not make **ANY** changes or modifications to the appliance.
- Installation is NOT ALLOWED in a manufactured home (USA only), mobile home or recreational vehicle.

M WARNING

- Be sure to review all safety warnings and installation guidelines contained in this manual. Consider the installation location, vent configuration, clearances, structural requirements, framing, finishing materials and local codes.
- Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information, consult a qualified installer, service agency or the gas supplier.
- ALL warnings and instructions apply to all products manufactured and distributed by DRU.
- The Micro Mesh Screen designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and must be installed. The appliance **MUST** not be used without the Micro Mesh Screen in place. If the barrier becomes damaged, the barrier must be replaced with the manufacturer's barrier for this appliance.
- Installation and service on the appliance and vent system must be done by an authorized DRU qualified installer, service agency, or gas supplier. If these components are not installed by an authorized DRU dealer/installer, the warranty of all components will be void. DRU cannot be held responsible for any damage caused by improper installation.
- The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required. Control compartments, burners, and circulating air passageways of the appliance must be kept clean. Any alteration to the product can cause soot or carbon to form and may result in damage. DRU cannot be held responsible for any damage that results from not following the instructions outlined in this manual.
- All materials and objects used to carry out the installation are prescribed by DRU. Do **NOT** install the system using different materials or objects than those approved for installation by DRU.
- Do not cover the appliance and/or do not wrap it in an insulation blanket or any other material.
- If the glass is **NOT** properly secured in place, the glass is cracked, you smell gas or you have doubts about the safe operation of the fireplace, immediately shut off the main gas supply, leave the building and call a qualified, professional engineer to inspect the installation. Any parts that are damaged or have been under water must be replaced.
- All electrical connections must be properly installed, insulated, and secured to avoid potential **ELECTRICAL SHOCK**, a **FIRE HAZARD**, or a malfunction of the system. Consult local building code requirements. In the absence of local codes, refer to the National Electric Code, ANSI/NFPA 70, or the Canadian Electric Code (CSA C22.1).

- All pictures/diagrams shown in this manual are for illustration purposes only. The actual product may vary due to product enhancements.
- Local codes and regulations that are more stringent than the requirements in this manual take precedence over DRU requirements.

MARNING CARBON MONOXIDE POISONING HAZARD

Failure to follow the steps outlined below for each appliance connected to the venting system being placed into operation could result in carbon monoxide poisoning or death. The following steps shall be followed for each appliance connected to the venting system being placed into operation, while all other appliances connected to the venting system are not in operation: 1) Seal any unused openings in the venting system.

2) Inspect the venting system for proper size and horizontal pitch, as required in the National Fuel Gas Code, ANSI Z223.1/NFPA 54 or the Natural Gas and Propane Installation Code, CSA B149.1 and these instructions. Determine that there is no blockage or restriction, leakage, corrosion and other deficiencies which could cause an

unsafe condition.

3) As far as practical, close all building doors and windows and all doors between the space in which the appliance(s) connected to the venting system are located and other spaces of the building.

4) Close fireplace dampers.

5) Turn on clothes dryers and any appliance not connected to the venting system. Turn on any exhaust fans, such as range hoods and bathroom exhausts, so they are operating at maximum speed. Do not operate a summer exhaust fan.

6) Follow the lighting instructions. Place the appliance being inspected into operation. Adjust the thermostat so appliance is operating continuously.

7) Test for spillage from draft hood equipped appliances at the draft hood relief opening after 5 minutes of main burner operation. Use the flame of a match or candle.

8) If improper venting is observed during any of the above tests, the venting system must be corrected in accordance with National Fuel Gas Code, ANSI Z223.1/NFPA and/or Natural Gas and Propane Installation Code, CSA B149.1.

9) After it has been determined that each appliance connected to the venting system properly vents when tested as outlined above, return doors, windows, exhaust fans, fireplace dampers and any other gas-fired burning appliance to their previous conditions of use.

The installation must comply with local codes or, in the absence of local codes, the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code (CSA B149.1).

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1.

If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

Always keep the area on and near the appliance free from combustible materials, gasoline and other flammable vapors and liquids.

Do not operate the appliance with the glass front removed, cracked, or broken. Replacement of the glass must be done by a licensed or qualified service person.

Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

Any safety screen, guard, or barrier removed for servicing an appliance, must be replaced prior to operating the appliance

Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children, and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at-risk individuals in the house. To restrict access to an appliance or stove, install an adjustable safety gate to keep toddlers, young children, and other at-risk individuals out of the room and away from hot surfaces.

Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning might be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean.

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

Only doors certified with the appliance shall be used.

Children and adults must be alerted to the hazards of high surface temperature and should stay away to prevent burns or clothing ignition.

C. Propane gas conversion kit

Follow the next steps closely when converting to propane gas. Use only the parts provided with the conversion kit. The conversion should be performed by a recognized gas installer.

() DANGER

- This conversion kit is **ONLY** suited for Prestige 42 (49237).
- The gas supply shall be shut off prior to disconnecting the electrical power, before proceeding.

M WARNING

The conversion kit must be installed by a qualified gas fitter 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 correct and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.

1. Conversion kit contents

Remove the conversion kit from its packaging and sort out it's contents:



2. Dismantling the burner surface

To make the appliance suitable for propane, the injectors need to be changed. It is only possible to get at these injectors by dismantling all the plates around the burners.

> Remove the Micro Mesh Screen, Appliance Control Cover and the door (See Installation manual chapter 11).

When dismantling the burner surface, proceed as follows (see Fig. 2):

- > Remove the cover plate of the ignition module by unscrewing the two self-tapping screws (Step 1).
- > Remove the cover plate of the second thermocouple by unscrewing the two self-tapping screws (Step 2).
- > Unscrew the 3 self-tapping screws from the center plate between the burners and remove it from the appliance (Step 3).
- > Unscrew the 4 self-tapping screws from the left vermiculite plate and remove it from the appliance (Step 4).
- > Unscrew the 4 self-tapping screws from the right vermiculite plate and remove it from the appliance (Step 5).
- > Remove the protective cover of the ignition module by loosening the screw and the self-tapping screw (Stap 6).



3. Dismantling the burners

The burners must next be dismantled so that the adjustment ring and the injectors can be changed.

For dismantling the burners, proceed as follows (see Fig. 3):

- > Unscrew the 2 self-tapping screws from the thermocouple. Move out of the way (Step 1).
- > Unscrew the 3 self-tapping screws from the main burner and remove it from the appliance (Step 2).
- > Unscrew the 7 self-tapping screws from the left and right upright burners and remove them from the appliance (Step 3).
- In the following steps the adjustment rings will be replaced with the ones from the conversion kit. Temporarily fix the new rings in place, these will be adjusted later.
- Remove and recycle the adjustment ring and the extension tube from the main burner (Step 4). Replace with the new adjustment ring (E).
- > Remove and recycle the adjustment ring and the extension tube from the left upright burner. Replace with the new adjustment ring (F) provided in the conversion kit (Step 5).
- > Remove and recycle the adjustment ring and the extension tube from the right upright burner. Replace with the new adjustment ring (G) provided in the conversion kit (Step 6).



4. Changing injectors

The new injectors are supplied in the conversion kit. It is important that the correct injector is installed in the correct burner. Use injectors A, B and C in Figures 1 and 4.

For changing injectors A, B and C, proceed as follows (see Fig. 4):

- > Unscrew the old injectors from blocks A and C and recycle them together with the gasket rings. (Step 1.)
- > Replace the old injectors with the new ones from the conversion kit (Step 2). Make sure they are the right size! (see Fig. 1.)
- Screw cone H onto injector C and tighten (Step 3).
- > Unscrew the old injector from block B and recycle it together with the gasket ring. (Step 4.)
- > Replace the old injector with the new one from the conversion kit (Step 5). Make sure it is the right size! (see Fig. 1.)
- Screw cone H onto injector B and tighten (Step 6).
- Injector A does not require a cone.



5. Changing the injector on the pilot burner

The new injector for the pilot flame is supplied in the conversion kit. Use injector D for this in Figures 1 and 5.

For changing injector D, proceed as follows (see Fig. 5):

- \triangleright Unscrew the pilot burner from the ignition unit. (Step 1.)
- > Replace the old injector (BL22N) with the new one (BL14LP) from the conversion kit. Recycle the old injector. (Step 2.)
- Screw the pilot burner with the new injector back onto the ignition unit. (Step 3.)



6. Replacing and adjusting burners

Before adjusting the burners it is essential to place them back into the appliance:

> Carry out steps 1 to 3, Section 1.3 (see Fig.3), in reverse order.

To adjust the burners, spacers are supplied in the conversion kit. Make sure to use the correct spacers for the different burners as every burner has its own specific measurements. Follow the steps below to adjust the burners (see Fig.6):

- Adjust the adjustment ring of the left upright burner using spacer 8.5 (F) using the allen key provided in the conversion kit (Step 1).
- Adjust the adjustment ring of the main burner using spacer 10.5 (E) using the allen key provided in the conversion kit (Step 2).
- > Adjust the adjustment ring of the right upright burner using spacer 11 (G) using the allen key provided in the conversion kit (Step 3).
- > Carry out steps 1 to 6, Section 1.2 (Fig. 2), in reverse order to re-asseble the appliance.

7. Update the rating plate

After converting the appliance, the rating plate label and the burner pressure must be adjusted. An adjusted rating plate label is supplied with the conversion kit:

It must be placed over the bottom half of the existing rating plate Place the label and replace the rating plate under the appliance (Fig. 7, step 1)

INSTALLATION MANUAL



8. Continue installation

- > If the conversion to propane gas is performed after the appliance has been fully installed: Continue to the next chapter.
- If the conversion to propane gas is part of the main installation process: Continue at chapter "8.3 Electrical connection preperation" in the installation manual.

9. Final check after propane conversion

For a good and safe operation of the appliance, the following checks and adjustments must be performed prior to putting into operation.

() DANGER

- Pets and birds in particular are sensitive to the vapors that are released when heating for the first time. **Remove the animals and keep the room well ventilated.**
- When igniting without a glass pane after installation or maintenance work, at least the following conditions must be met in addition to national and local regulations.
- Always check the pressure relief system as described in section 7.4 of the installation manual before lighting the appliance.
- It is possible that, when igniting for the first time, a flame may burst out of the appliance. Be sure to have taken at least the following safety measures:
 - Remove combustible materials around and in front of the appliance, and keep a fire extinguisher within reach.
 - Remove children, animals (especially birds) and other people from the room.
 - Make sure the room is properly ventilated.
 - Keep sufficient distance from the appliance and ignite using the remote control.

M WARNING

- During the ignition process, the gas control may **NOT** be operated manually.
- Wait at least 5 minutes after extinguishing the pilot flame before trying to ignite it again.
- The pilot flame may not be set lower using the adjustment options on the gas control.
- The pilot burner should ignite the main burner within a couple of seconds.
- The main burner(s) must transfer the flame to the entire burner smoothly without popping and must continue to burn.
- All connections must be gastight. Check all connections for gastightness. The gas control can be subjected to a maximum pressure: 13 W.C." [32,3 mBar].
- After installation, or after work has been performed, ignite the appliance for the first time without the door installed. If necessary, bleed the gas line.
- The supply pressure in domestic systems must be checked prior to ignition.

Ω NOTICE

- When checking the main burner without the door, it may shut itself off after 22 seconds. This is a safety mechanism that is caused by the second thermocouple. If this happens, it may be regarded as a successful test result.
- When the gas valve is opened, the motor will start to run; this is audible. The flame pattern and a good flame transfer can only be properly assessed if the glass pane has been installed. Consult the troubleshooting diagram in the appendix if ignition of the main burner does not comply with the aforementioned requirements.
- The flame pattern and a good flame transfer can only be assessed when the door is installed and/or closed.

| Supply pressure measuring nipple (1) | |
|--------------------------------------|----------|
| Burner pressure measuring nipple (2) | |
| | |
| Gas in | |
| Gas out - main burner | |
| Fig. 8 | 38C-2928 |

9.1 Gas pressure/supply pressure

The supply pressure needs to be checked. Follow the steps below (see Fig. 9-3):

- > Confirm the main gas supply line is closed.
- > Remove the Micro Mesh Screen, the Appliance Control Cover and the door from the appliance.
- > Open the valve of the supply pressure measuring nipple a few turns with a flat-head screwdriver and connect the pressure gauge (see Fig. 9-3, (1)).
- > Open the main gas supply and check the static supply pressure (see Table 8-1 of the installation manual).
- ▲ If there is deviation: check the pressure at the gas meter. Contact the gas company if the supply pressure is too high or too low at the gas meter.
- ➢ Close the main gas supply.
- > Disconnect the pressure gauge and close the valve of the supply pressure measuring nipple (see Fig. 9-3, (1)).

9.2 Ignition for the first time after propane conversion

For an optimal flame pattern, both the burner pressure and the lowest position must be set. For adjusting the burner pressure, proceed as follows (Fig. 7 and 8):

- > Open the valve of the burner pressure measuring nipple a few turns with a flat-head screwdriver and connect the pressure gauge (see Fig. 8, (2)).
- > Open the main gas supply and start the ignition procedure as described in Chapter "Ignition" of the user manual.
- ➢ If the pilot flame does not ignite:
 - Repeat the ignition procedure until the pilot burner ignites;
 - Consult the fault codes table in the installation manual if this does not happen after a few attempts.
- > After igniting the pilot flame, the main burner will ignite and will automatically set to the highest setting.

9.3 Setting the burner pressure

The burner pressure has been set to natural gas by factory default. Follow the steps below to set the appliance to Propane gas (see Fig. 7 and 8):

- > Confirm the appliance is set to the highest flame.
- The high setting adjustment screw is a small and delicate part. Handle accordingly (see Fig. 7, step 2).
- > Measure and adjust the burner pressure using a small flat-head screwdriver. Loosen/tighten the screw on the front of the gas control to set the pressure as specified in Table 1-1 (see Fig. 7, step 2).
- > Set the appliance to the lowest flame using the remote control.
- Measure and adjust to the specified pressure using the supplied allen key. Loosen/tighten the screw on the back of the gas control as specified in Table 1-1 (see Fig. 7, step 2).
- Set the appliance at the highest flame using the remote control measure and confirm if the pressure has been set properly. If needed, make adjustments (see Fig. 7, step 2).
- > Check whether the main burner continues to burn.
- ➢ If the main burner does not continue to burn:
 - 1. Wait until the message 'OFF' disappears from the display on the remote control.
 - 2. Repeat the ignition procedure only a few times until the main burner remains ignited.
 - 3. After a few failed ignition cycles, see Chapter "Malfunctions" of the installation manual.
- Switch the appliance off and close the gas supply.
- > Disconnect the pressure gauge and close the valve of the burner pressure measuring nipple (2) (see Fig. 8).

| Table 1: Propane gas pres | sures |
|---------------------------|--|
| Altitude rating | US: 4% input reduction for each 1000ft above sea level CA: 0 - 4500 ft. [0 - 1370m] |
| Maximum input | 44.700 Btu/hr |
| Minimum input | 11.300 Btu/hr |
| Nominal inlet pressure | 11 W.C." [2,74 kPa] |
| Minimum inlet pressure | 8 W.C." [1,99 kPa] |
| Maximum inlet pressure | 13 W.C." [3,23 kPa] |
| Manifold pressure | 7.8 W.C." [1,94 kPa] |
| Low setting pressure | 7.3 W.C." [1,82kPa] |
| High setting pressure | 7.8 W.C." [1,94kPa] |
| Main burner injector | 0,95mm |
| Upright burner injectors | Left: 1,25mm Right: 1,3mm |
| Pilot injector | BL14LP |

9.4 Final check

- P The flame pattern and a good flame transfer can only be assessed when the door is installed and/or closed.
- > Clean the glass pane on the inside before first operation as described in the user manual.
- Replace the door, the Appliance Control Cover, and the Micro Mesh Screen in the appliance as described in corresponding chapters of the installation manual.
- Switch the appliance on and open the gas supply.
- Repeat the ignition procedure a few times and perform checks as described in chapter "Final check" of the installation manual.
- > Check the operation of the main burner from a cold condition (pilot flame off), it should ignite within a few seconds.
- > From now on, the pilot flame must ignite and the burners must burn smoothly.
- > Check that the flame pattern is right.
- See chapter "Malfunctions" of the installation manual if the flame pattern is not right.
- > Clean the glass pane after heating for the first time as described in the user manual.

9.5 First time using the appliance

When heating for the first time, the flame pattern can be affected by the curing of paints and solvents. In case of a cold start, the appliance must first reach the correct temperature before the flame pattern can be assessed.

10. Continue installation

- If the conversion to propane gas is performed after the appliance has been fully installed: The conversion process is completed.
- > If the conversion to propane gas is part of the main installation process: Continue at chapter 13 in the installation manual.



iam everywhere



DRU Verwarming B.V. PO Box 1021 | 6920 BA Duiven Ratio 8 | 6921 RW Duiven The Netherlands +31 (0)26 - 319 5 319 www.drufire.com



United Buyers Group LLC 401 Linn St, 53913 Baraboo, WI United States of America +1 608 448 2449 support@united-buyers-group.com www.united-buyers-group.com





BY APPOINTMENT OF THE COURT OF THE NETHERLANDS

www.drufire.com

