## IMPORTANT: THESE INSTRUCTIONS ARE TO REMAIN WITH THE HOMEOWNER

These instructions are supplementary to the Installation and Operating Instructions supplied with the fireplace and should be kept together. Refer to the Installation and Operating Instructions for proper gas supply, safety requirements and operating instructions.



# TC42 TRANQUILITY BURNER KIT INSTRUCTIONS



PART#
TC42.NG04C
For TC42 Series C





# **Contents of Package**

- 1 BURNER ASSEMBLY —
- 1 PANEL, BASE –
- 1 PEBBLE ASSEMBLY -
- 1 COVER RHS -
- 1 COVER LHS -
- 3.4 LBS SAND -
- 1 BAG TAPERED PLUGS



# **Tranquility Burner Installation**

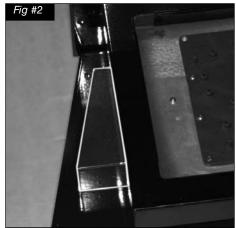
If converting to propane see conversion instructions on page #6 before proceeding.

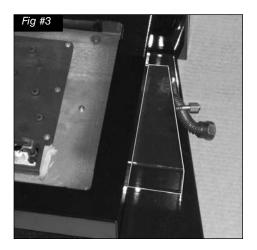
NOTE: Plug the 4 vacant holes in the bottom of the firebox with 1/2" screws, as they are not required to attach this style of burner.

- 1. Bend flex lines into the approximate shape. (Fig #1)
- 2. Place covers under the burner tray. (Fig #2 & 3)

NOTE: Shutter must be fully closed for Natural gas, fully open for Propane.









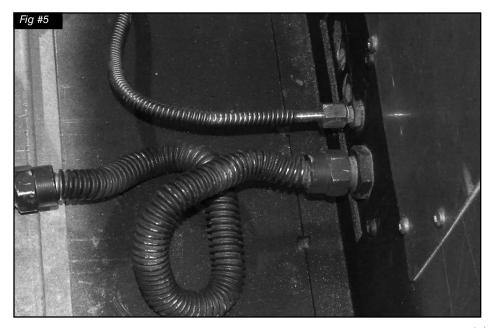
 Position lower rear porcelain panel centered at the rear of the firebox. Place burner assembly into the firebox against the rear panel. (Fig #4)



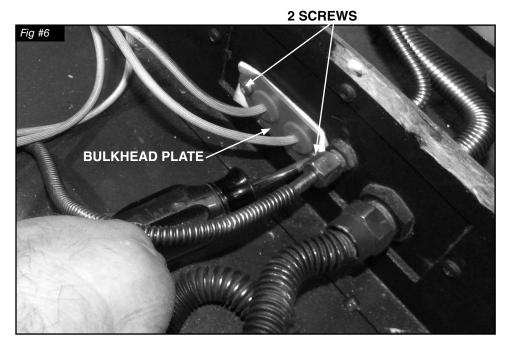
Place panel clips under both rear corners of the base plate as shown in Fig. #4a (approx. 3" from rear panel).

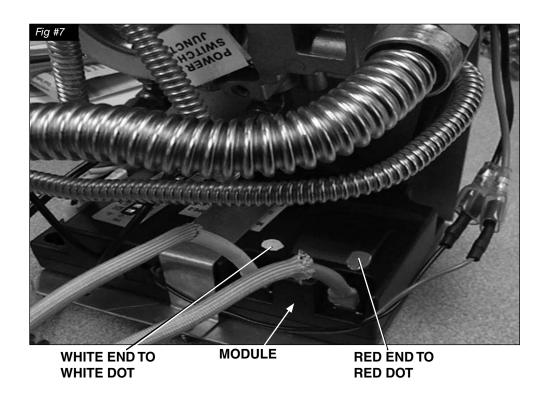


 Attach the manifold supply tube and the pilot supply tube to the bulk head fittings and tighten. (Fig. #5) Ensure that there are no leaks.



 Secure the electrical bulkhead plate and gasket to the firebox. (2 screws) Attach the ignition and sensor wires to the module. Red end to the connector marked by the red dot, white end to the connector marked by the white dot(Fig. #6 & 7)



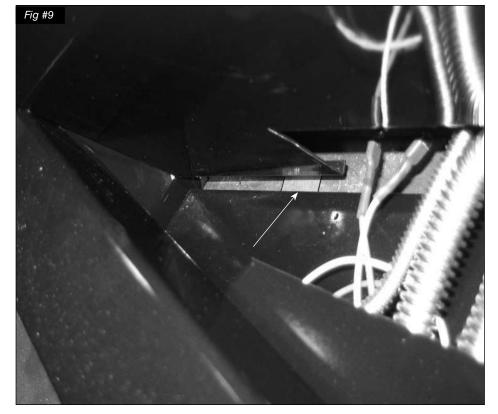




6. Remove panel retainer from upper heat shield. Install right porcelain panel tilting in from front corner. (Fig #8)



Slip the side panels into the panel clip as shown in Fig #9. Finish the installation as per instructions.



- Position upper rear panel on the top of the lower rear panel and behind the right panel. While supporting the upper rear panel install and secure left porcelain panel in the same manner as the right panel. (Fig #10)
- 8. Secure with the previously removed panel retainer.



 Slide covers out and attach to base with one screw each. (Fig #11)





 Insert tapered plugs into raised burner ports to prevent sand from entering ports. (Fig #12)



- Place sand in tray. Brush sand smooth and level to just below top of raised burner ports.
   (Fig #13)
- 12. Gently blow excess sand from around ports.
- 13. Remove tapered plugs from ports.



14. Remove pebble assembly from packaging by placing hand on top and tipping upside down. Gently place pebble assembly onto sand base using pins to locate position. (Fig #14)

## NOTE:

Lift pebble assembly from bottom. Do not lift by top rocks. Hollowed out rock must cover the pilot.



15. Place trim rocks at desired locations in the sand around the pebble assembly. Install glass door. Unit is ready for lighting.

## NOTE:

Do not place trim rocks on top of the pebble assembly. Sooting will occur.



## **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, 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.

If the unit is to be used on propane convert as follows using the components supplied with this burner:

### **CAUTION**

The gas supply and electrical power shall be shut off before proceeding with the conversion.

## **Propane Conversion**

Pour utilise avec du modèle: Date:

Kit # TC42.LPKTB/EB/EC for use with model: TC42

Series C PACIFIC ENERGY

By / Par:

### LP GAS/ **DU GAZ LP**

12.5 in/wc /12.5 po/c.e. (3.11 kPa) 13.9 in/wc / 13.9 po/c.e. (3.45 kPa) 11.0 in/wc / 11.0 po/c.e. (.95 kPa)

3/32" (2.38 mm)

Max.: 61,000 (17.9) Min.: 46,200 (13.5)

This appliance was converted to PROPANE GAS with this kit on this date by the organization which accepts the responsibility that this conversion has been properly made. / Cet appariel etair converter au gaz LP par l'emploi de la trousse de conversion par une organization qui accepte la responsibilité pour une installation en bon état.

260411 6-TC42C 5052.5206C

MAIN BURNER (3/32") ORIFICE (5021.31)

MINIMUM RATE SCREW (5005.016)

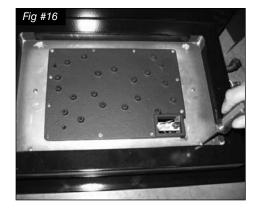
CONVERSION LABEL (5052.5206C)

Note: Factory supplied components must be used to ensure correct input.

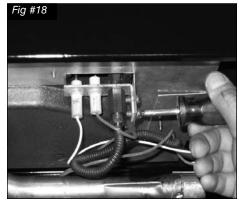
After conversion confirm proper manifold pressure.

> The burner assembly must be removed from the unit if previously installed.

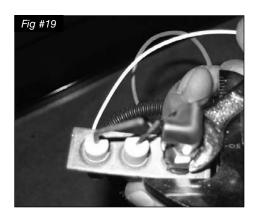
- Remove the 2 front screws holding the burner tray in place. (Fig. #16)
- Gently lift up the burner tray while sliding to the left to disengage the burner tube from the orifice. Then tip back to expose the orifice.
- Using a 1/2" wrench, undo the natural gas burner orifice, (marked #25). Apply a small amount of pipe joint compound to the threads of the propane burner orifice (marked 3/32) to ensure a good seal, before screwing it into the fitting. Loosen the primary air shutter screw, open shutter fully and re-tighten. (Fig. #17)
- 4. Remove the 2 screws holding the pilot assembly in place with a stubby screwdriver. (Fig #18)



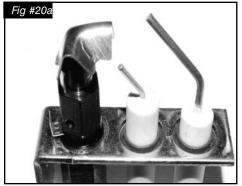








5. With a 7/16" wrench loosen the pilot head on the pilot assembly using a wrench to hold the bracket steady. (Fig. #19)



**NG POSITION** 

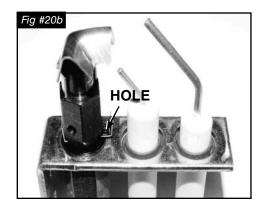
- 6. Slide the pilot adjustment band over and ensure that the hole in the orifice band is showing.
- Fig. #20a shows NG position

Fig. #20b shows LP position).



Re-attach the pilot assembly.

Remove the access panel, 10 screws, and set aside.

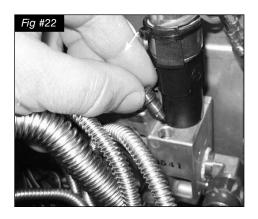


LP POSITION



8. Remove the minimum rate screw located in the valve. (Fig. #21)

The minimum rate screw is sealed with an o-ring. Use a thin bladed screwdriver to back the screw out past the limit of the threading. At this point a groove on the screw body will be visible just above the valve body. Insert a thin tool (knife blade or fine screwdriver blade) into the groove and gently pry the screw up.

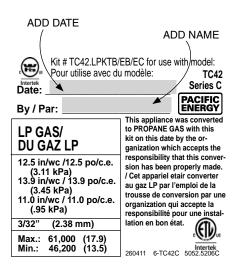


 Replace the minimum rate screw with the one provided in the propane conversion kit supplied with this fireplace. Ensure that the screw is fully seated. (Fig. #22)

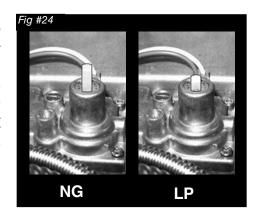


 Pull off the aluminum cap from the top of the pressure regulator. (Fig. #23)





- Press down on the center post and rotate 90°. The center post should stay down. (Fig. #24). Replace the aluminum cap.
- 12. Fill in the date and the name of the person who performed the conversion in the white area on the conversion label. Peel off the protective backing and apply the conversion label directly over the gas specifications on the rating label.



 Re-attach the access panel to the side of the firebox with the screws previously removed. (Fig. #25)



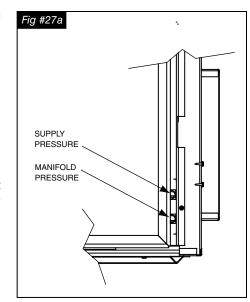
## **Gas Pressure Check**

Note: To test the gas pressure, turn off the gas supply before removing the plug from the supply pressure test port or manifold pressure test port.

Verify gas pressures with the fireplace lit and on the highest setting.



 Remove the plug from the pressure test port. The plug is located between the right side lintel and firebox side. (Fig. #26)





- Thread the extension test fitting into the open port.
   (Fig. #27)
- 3. Attach a pressure gauge onto the fitting.
- 4. When testing is complete shut off the gas, remove the fitting and replace the plug. Thread sealant will be required to ensure a gas tight connection.

## **Correct gas pressure requirement:**

Supply Pressure	Natural Gas	Propane
Min. Pressure (For purpose of input adjustment)	5.0" WC	12.5" WC
Max. Pressure	13.9" WC	13.9" WC
Manifold Pressure		
Maximum	3.8" WC	11" WC
Minimum	2.1" WC	5.5" WC



# **Burner Flame Adjustment**

The air shutter on the burner inlet tube controls the primary combustion air. It is set to the closed position at the factory for natural gas fuel. Some adjustment may be necessary to obtain desired flame and to eliminate carbon deposits. Evaluate flame appearance after the fireplace has reached operating temperature. See Fig. #28 for proper flame pattern.

Open primary air if the window glass and firebox have carbon accumulation and/or the flames are long, dark and stringy. The shutter may also be opened to lessen the flame height.



#### NOTE:

Proper air shutter setting is required.

For Propane the primary shutter must be fully open.

The flame should be just orange and "lazy". It should NEVER be set to create sooting on internal parts and window glass.

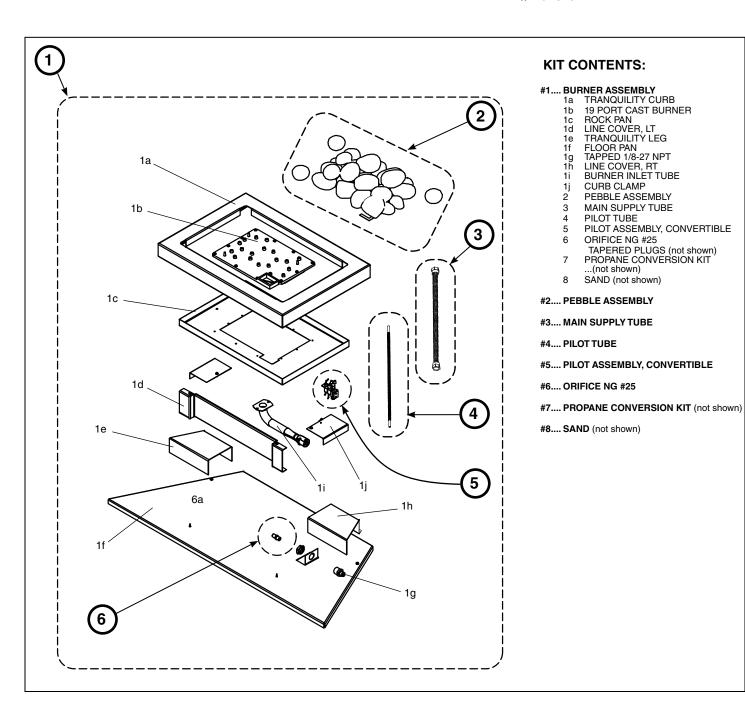


## **Replacement Parts**

(WHEN ORDERING, INCLUDE PART NUMBER WITH DESCRIPTION)

ITEMPART NO.	ITEMPART NO.
#1TRANQUILITY BURNER KITTC42.NG04C	#5PILOT ASSEMBLY, CONVERTIBLE TCRP.5005025
#2 PEBBLE ASSEMBLY TC42.9499	#6 ORIFICE, NATURAL GAS (#25) 5022.12
#3 MAIN SUPPLY TUBE 5019.223	* #7TC42.LPCE01
#45019.225	* #8TC42.SAND34

**★** NOT SHOWN







Technical support: 1-250-748-1184 Web site: www.townandcountryfireplaces.net 2975 Allenby Rd., Duncan, BC V9L 6V8

