

**INSTALLER: Leave this manual with the appliance.  
CONSUMER: Retain this manual for future reference.**

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.



**TOWN & COUNTRY**  
LUXURY FIREPLACES

# **TC36D TRANQUILITY BURNER KIT INSTRUCTIONS**



**SKU# 22150012(Brown) &  
22150020(Black)  
For TC36D & TC36D Arch  
Series D**



Visit [www.townandcountryfireplaces.net](http://www.townandcountryfireplaces.net) for the most recent version of this manual

## Contents of Package

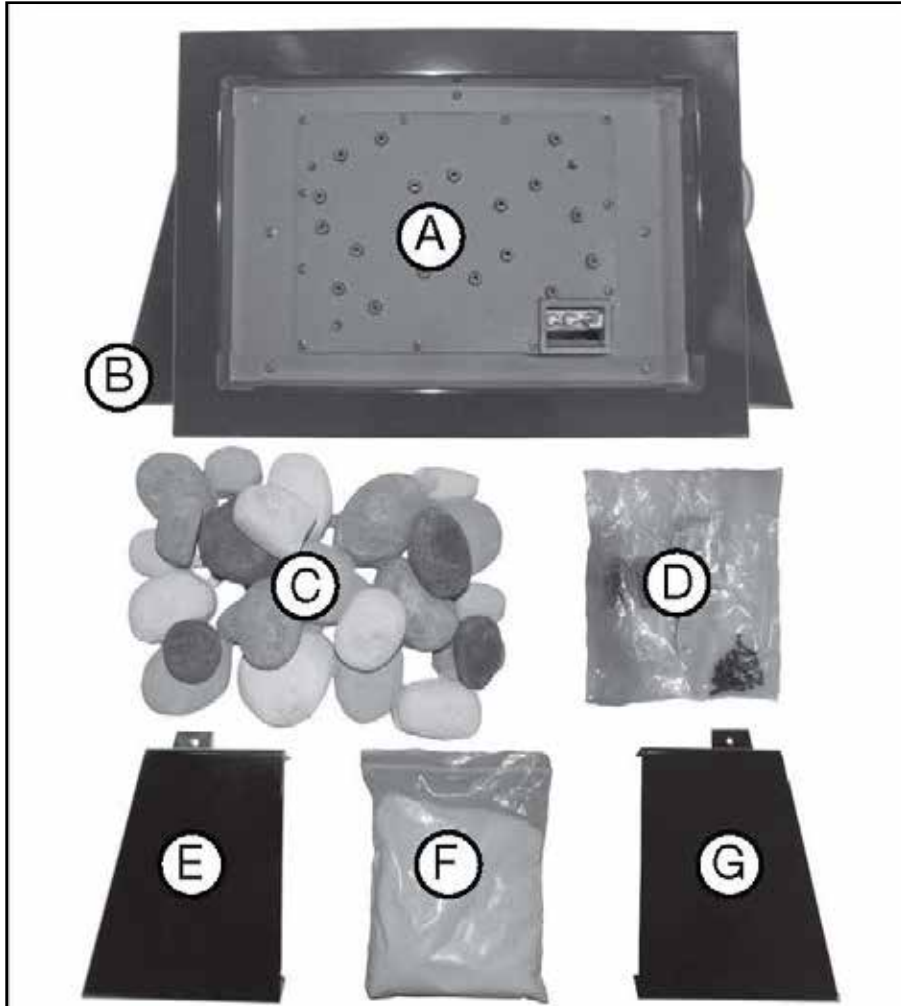


Figure 1: TC36 Tranquility burner kit parts.

- A. Burner assembly (including pilot & gas lines)
- B. Panel, base (attached to burner assembly).
- C. Pebble assembly
- D. Hardware - tapered plugs, screws, brush, panel clips.
- E. Side cover - left hand side.
- F. 2.2 lbs Sand
- G. Side cover (right hand side)

## Tranquility Burner Installation

If converting to propane see conversion instructions on page 15 before proceeding with Tranquility Burner Kit.



Figure 2: Removing floor shield.

1. Remove floor shield (2 screws) and discard the shield. Use screws to plug vacant holes.
2. Plug any other vacant holes in the bottom of the firebox with 1/2" screws, as they are not required to attach this style of burner (Figure 3).



Figure 3: Removing floor shield.



Figure 4: Base panel.

3. The base panel (Figure 4) is not used with the Tranquility burner kit and is a left over item to be discarded.

4. Remove the 10 screws securing the access cover for the valve control center (Figure 5).

5. Bend the larger flexible gas supply line, the smaller flexible pilot gas line along with the ignition and sensor wires into shape (Figure 6) so that the right hand side cover will fit over top of them before the burner is placed into the firebox (Figure 8). This cover must be positioned into the burner before the burner is placed into the firebox as there is no room to install the cover once the burner is in the firebox.

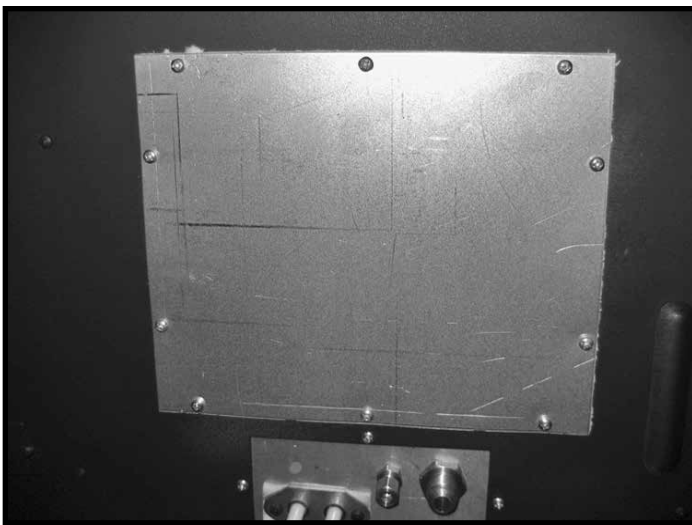


Figure 5: Access cover to valve control center.

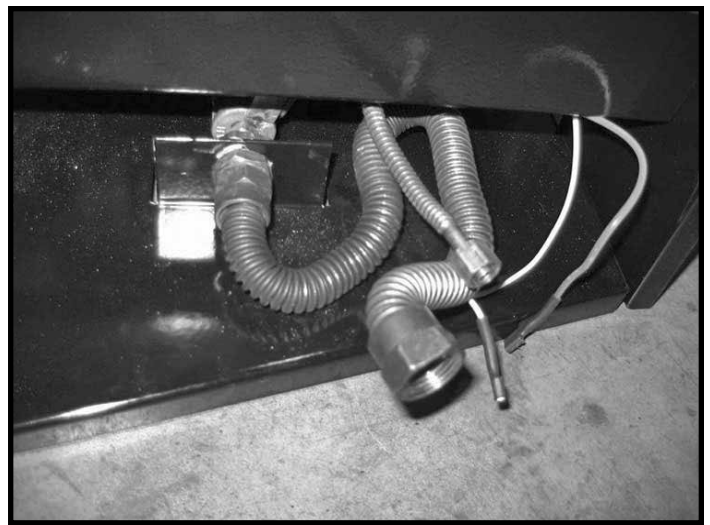


Figure 6: Flex line bent to shape.

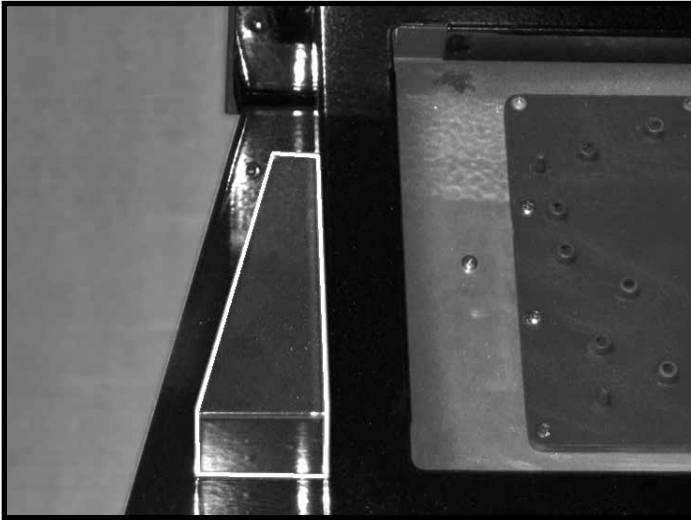


Figure 7: Left hand side cover.

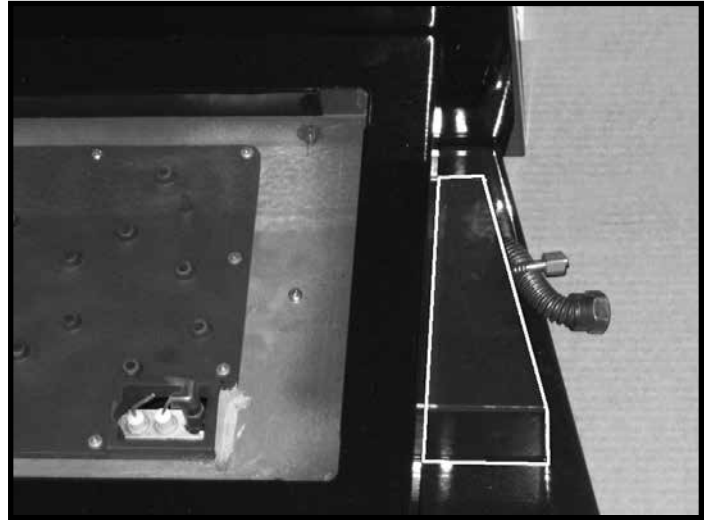


Figure 8: Right hand side cover.

6. Place side covers between the burner tray and its base (Figure 7 and Figure 8) before the burner tray is inserted into the firebox. These will remain in the retracted position until later in the installation process.

7. Remove the two lower outside screws from the Air Channel as indicated in Figure 9. The lower panel will be attached to the rear wall of the firebox using the two screws just removed.

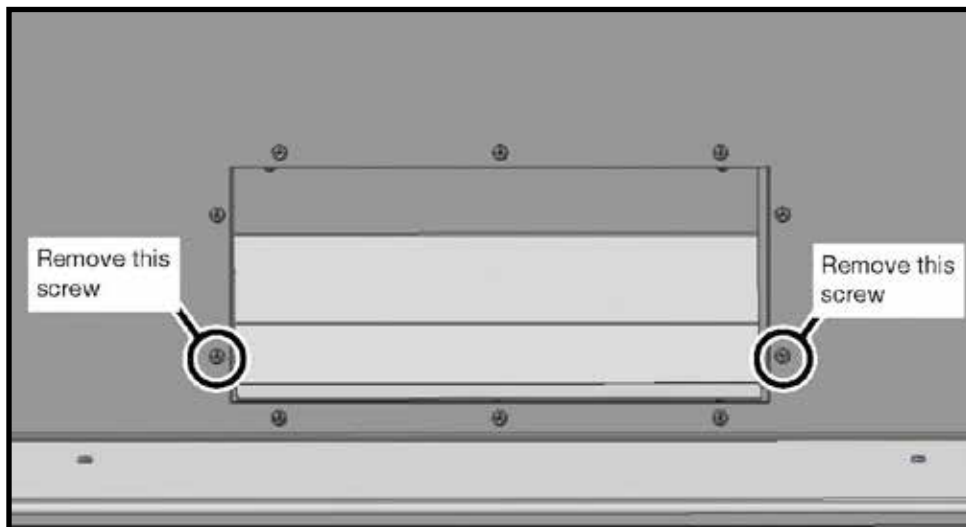


Figure 9: Air channel.

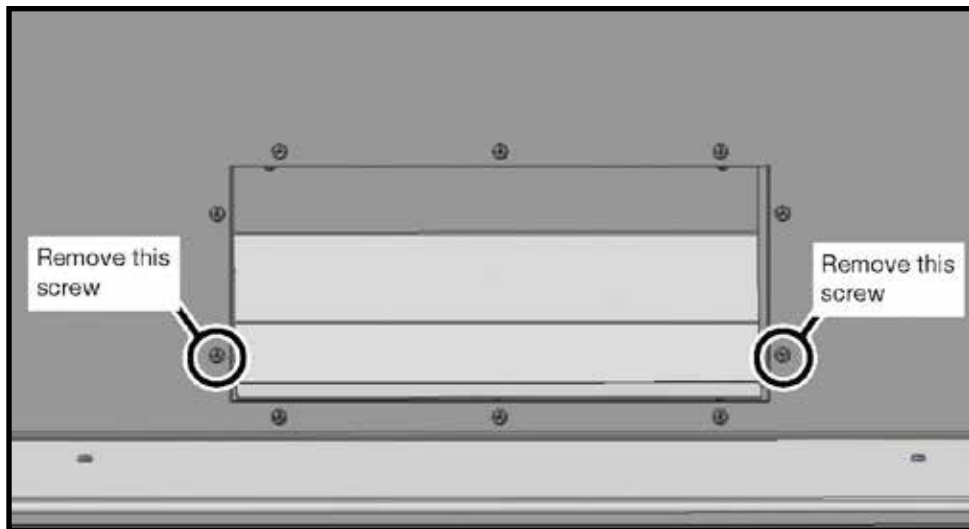


Figure 10: Air channel.

8. Mount the lower rear panel against the rear wall of the firebox and affix to the wall using the two screws previously removed from the air channel (Figure 10).
9. Position the burner tray assembly into the firebox and against the lower rear panel (Figure 11).

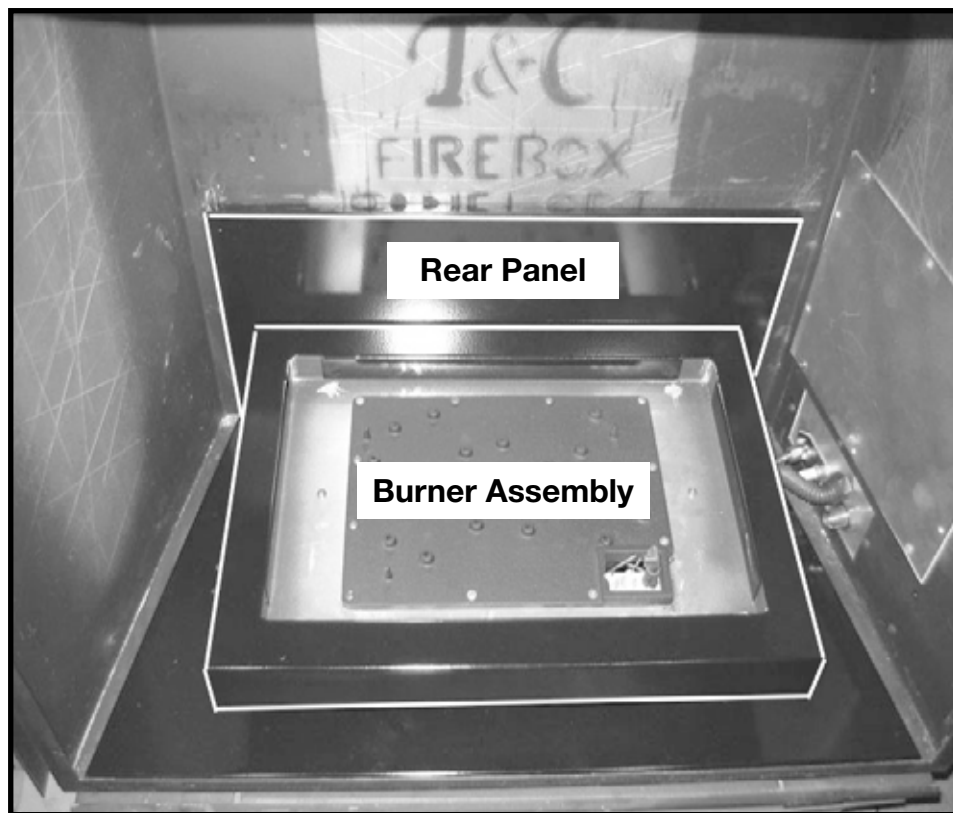


Figure 11: Lower rear panel and burner assembly.

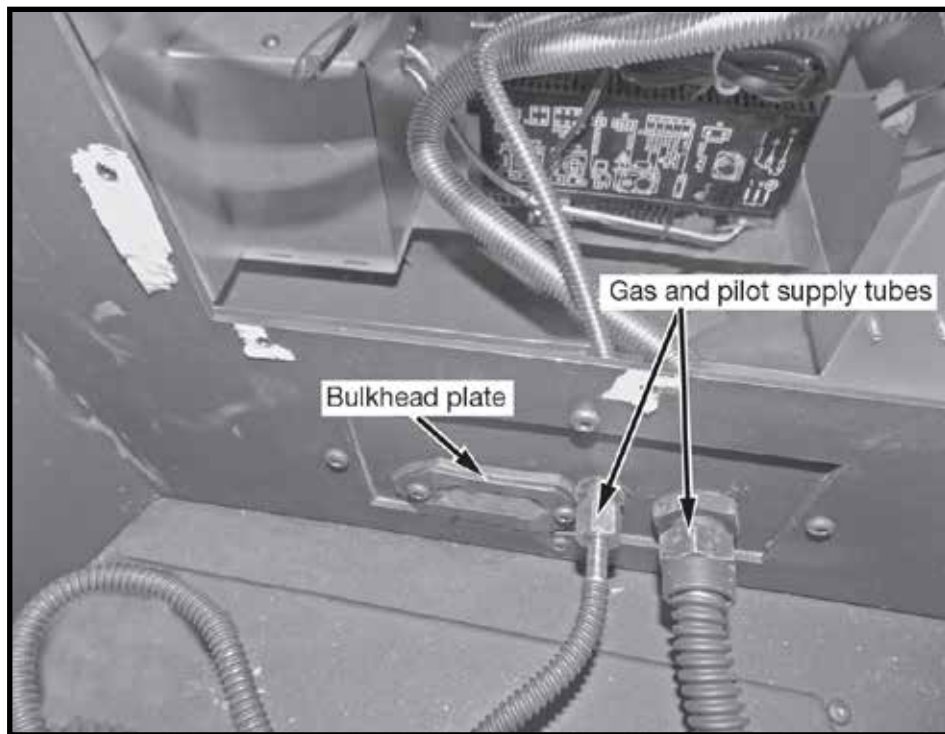


Figure 12: Gas and pilot supply tubes.

10. Attach the main gas supply line and the pilot gas supply line to the bulk head fittings and tighten (Figure 12). Ensure that there are no leaks.

11. Feed the ignition and sensor wires through the bulkhead plate and gasket to the firebox (Figure 13).

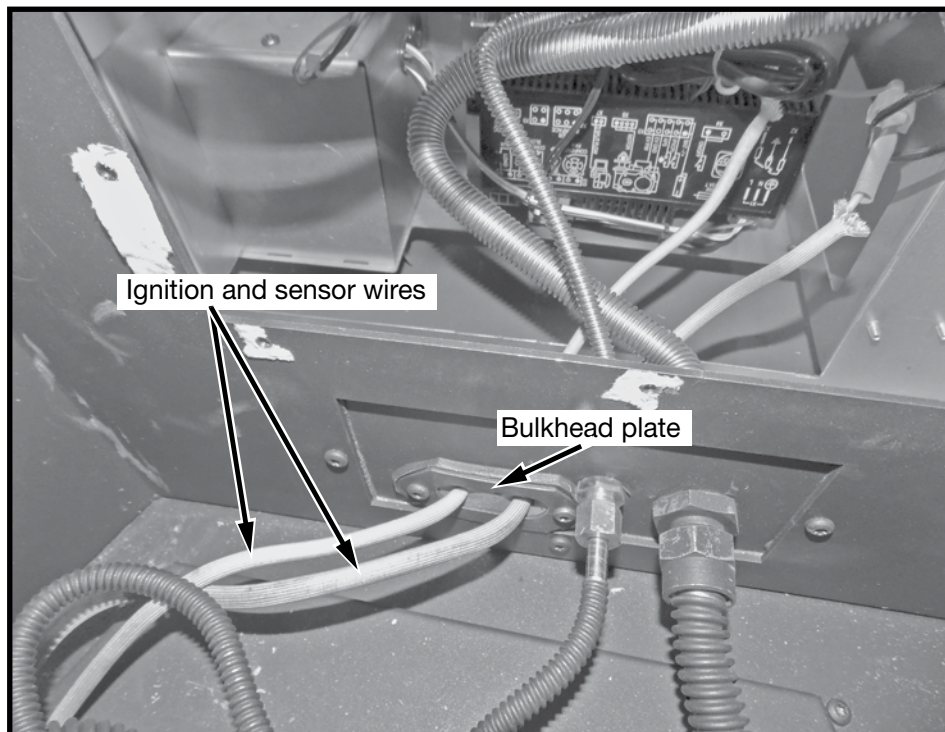


Figure 13: Ignition and sensor wires routing.

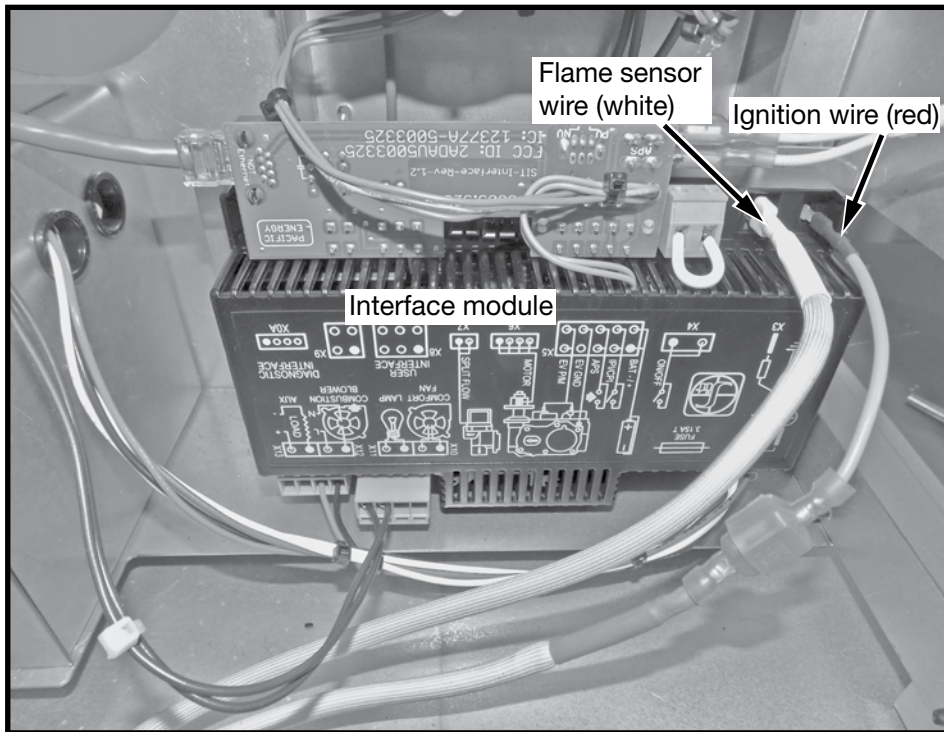


Figure 14: Ignition and sensor wires routing.

12. Attach the ignition and sensor wires to the interface module as indicated in Figure 14.

13. Once the gas and electrical lines are connected to the bulkhead and the interface module, reinstall the valve control center's access cover (Figure 5 on page 4). The panels are now ready to be installed.

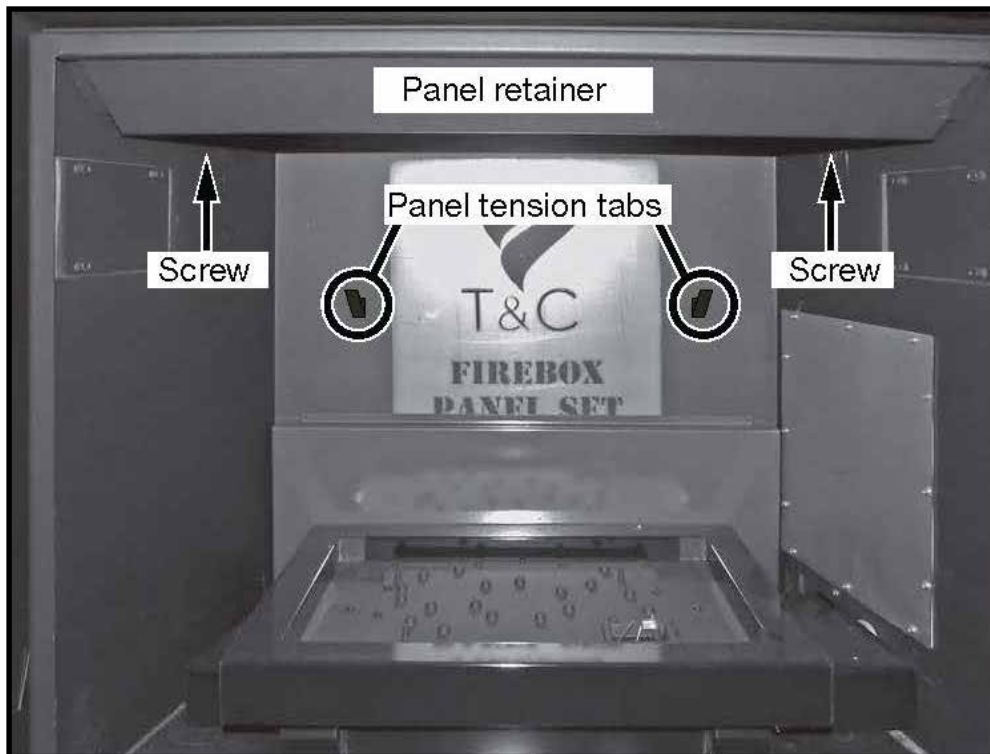


Figure 15: Lower rear panel and burner assembly.





Figure 16: Panel retainer removal.

14. Remove the two screws (Figure 15) which secure the panel retainer to the ceiling. Remove the panel retainer and keep for reinstallation (Figure 16).

15. The right hand side panel has a cut out which will fit over the side cover. The correct orientation of the upper rear panel has the two insulation retaining clips on the rear of the panel at the top (both Figure 17).

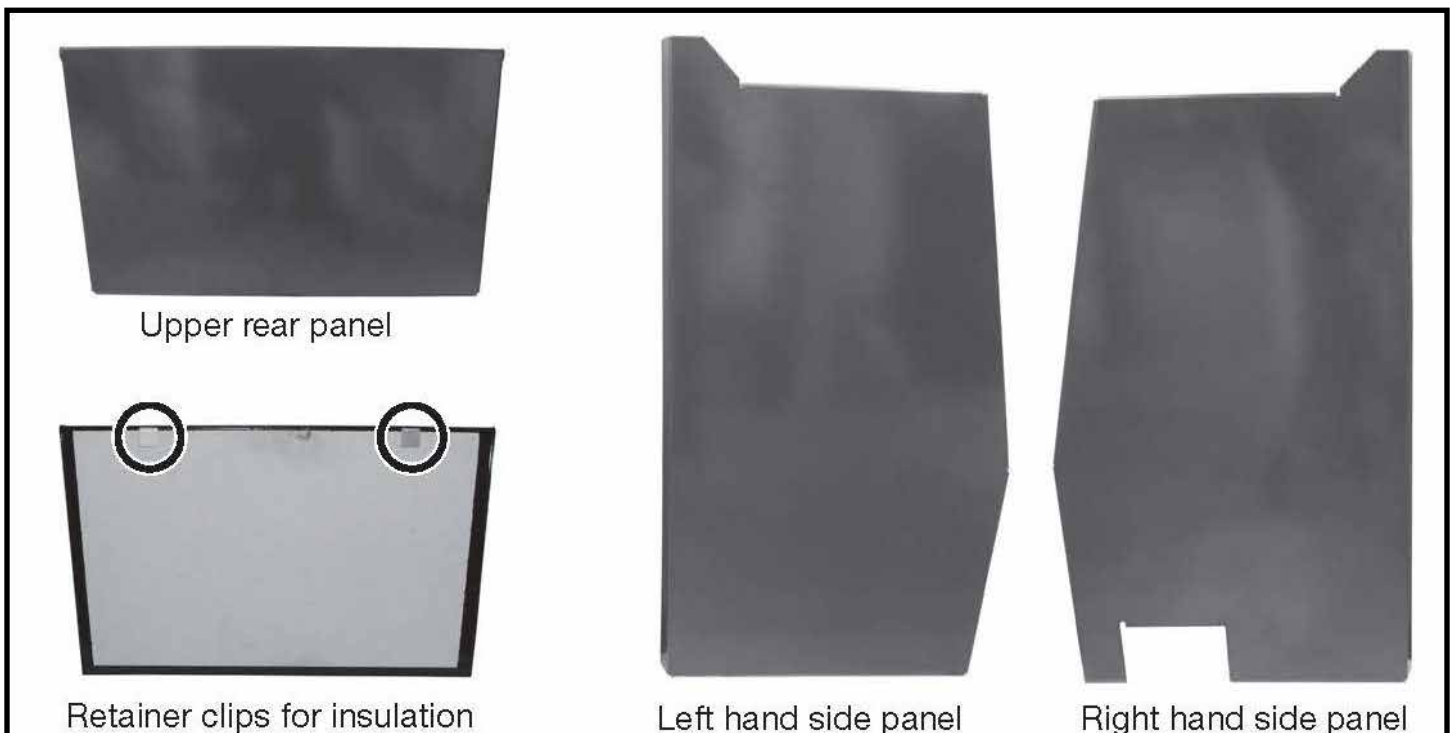


Figure 17: Panel retainer removal.



Figure 18: Right side panel partially installed.

16. Remove tag and plastic tie from the flue damper before installing the upper rear panel.

17. Install the right side panel until it's nearly up against the firebox wall (Figure 18). Leave enough room between the panel and wall so that the upper rear panel can be slipped in behind the side panel. Once upper rear panel is in place, the side panel can be pushed up to the side wall.

18. There are two panel tension tabs affixed to the rear firebox wall (Figure 15 and Figure 18). These tabs apply a small amount of pressure to the upper rear panel as this panel does not fit up against the rear wall. If upper rear panel seems too loose once installed, remove panel, bend the tabs forward and try again.

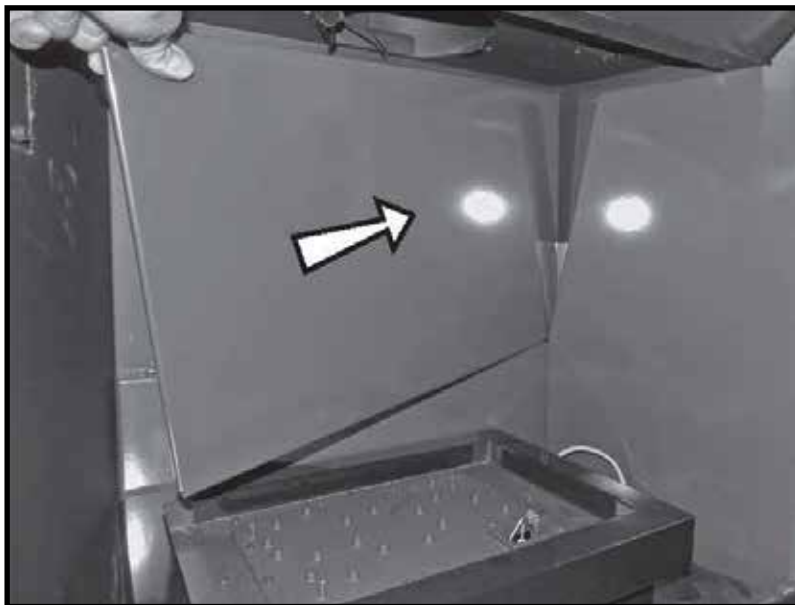


Figure 19: Lower rear panel and burner assembly.



Figure 20: Left hand side panel installed.

19. Install the upper rear panel (Figure 19). Place one end on top of the lower rear panel and slip the side of the upper rear panel in behind the side panel. Hold the upper rear panel up against the rear panel tension tabs while preparing to install the left hand side panel.

20. Install the left hand side panel (Figure 20). Check that both side panels are flush against the walls.

21. Reinsert the two screws previously removed from the panel retainer but do not tighten. Reinstall the panel retainer and fit slots to hook onto the two screws. Tighten screws (Figure 21).



Figure 21: Panel retainer reinstalled.



Figure 22: Securing side covers.

22. Move the two side covers previously placed between the burner and its base, out to the side panels. Line the screw holes in the side covers up with the screw holes in the burner tray base. Use supplied self tapping screws to secure the covers to the base (Figure 22).

23. Insert tapered plugs into raised burner ports to prevent sand from entering ports (Figure 23).

24. Place sand in tray. Use supplied brush to spread and level the sand to just below the top of raised burner ports. Gently blow excess sand from around ports (Figure 24).

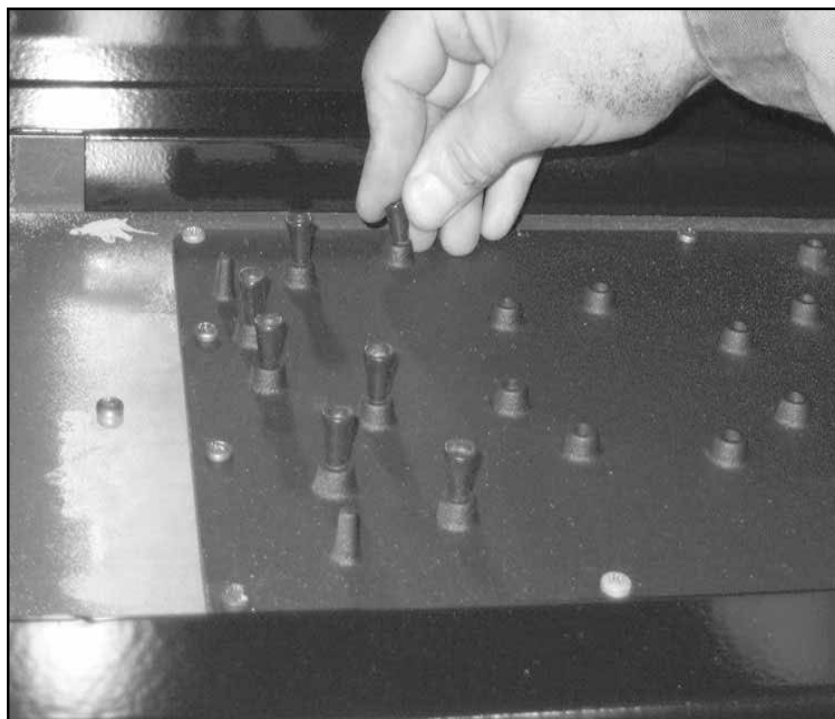


Figure 23: Inserting tapered plugs.



Figure 24: Applying sand to burner tray.

25. Remove tapered plugs from ports.

26. Remove pebble assembly from packaging by placing hand on top and tipping upside down. Note that the rock in the lower right is hollow underneath and will fit over top of the pilot assembly (Figure 25).

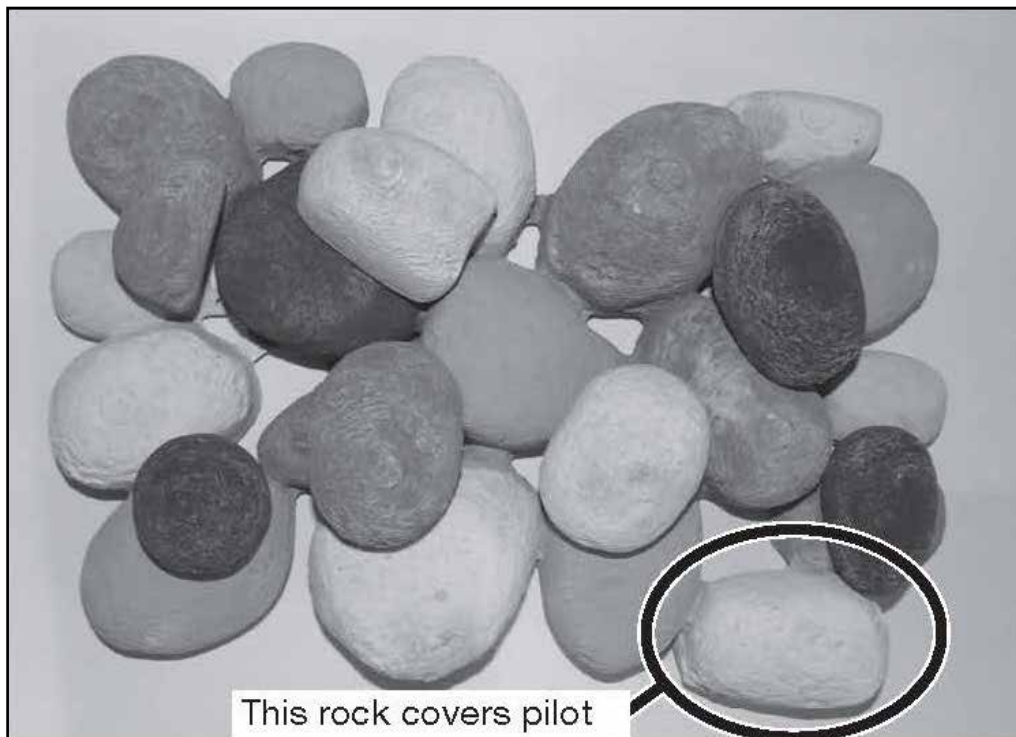


Figure 25: Tranquility rock set

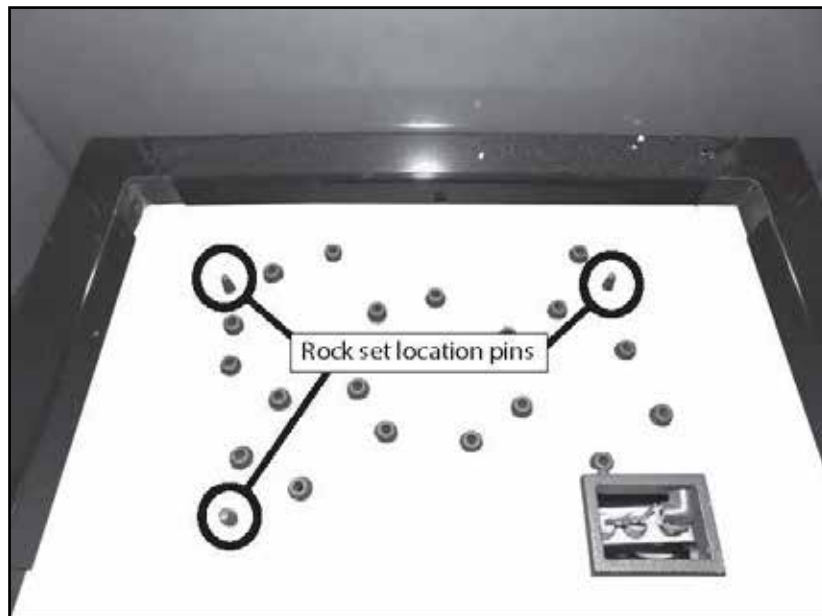


Figure 26: Location pins for rock set.

27. Gently place pebble assembly onto sand base aligning 3 holes in the bottom of the rock set to the 3 pins located on the burner tray (Figure 26).

28. Install glass door. Unit is ready for lighting.



Figure 27: TC36 Tranquility rock set in place.

# Propane 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, 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.

## CAUTION

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

**Note:** Factory supplied components must be used to ensure correct input. After conversion confirm proper manifold pressure.

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

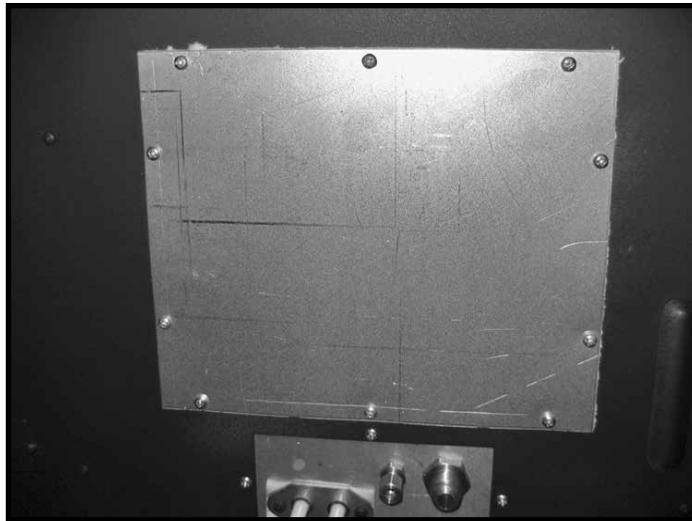


Figure 28: Access panel.

1. Remove rock set and sand if present.
2. Remove right hand side panel if present.
3. Remove all 10 screws from the Valve control center panel (Figure 28).

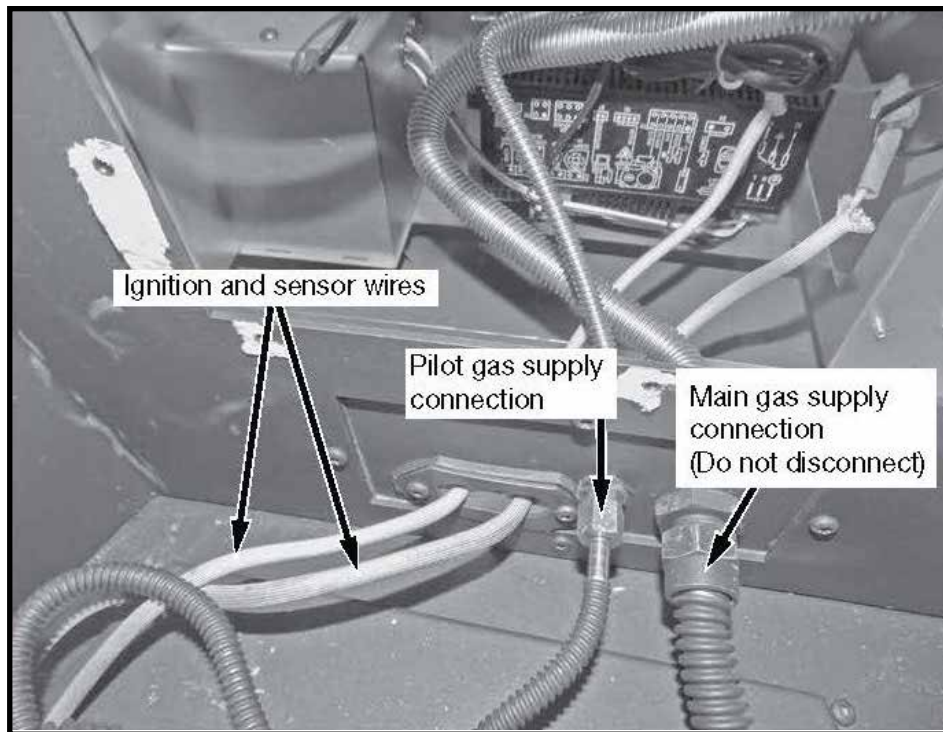


Figure 29: Connections at bulkhead.

4. Disconnect the pilot gas supply line at the bulkhead (Figure 29). DO NOT disconnect the main gas supply line from the bulkhead.

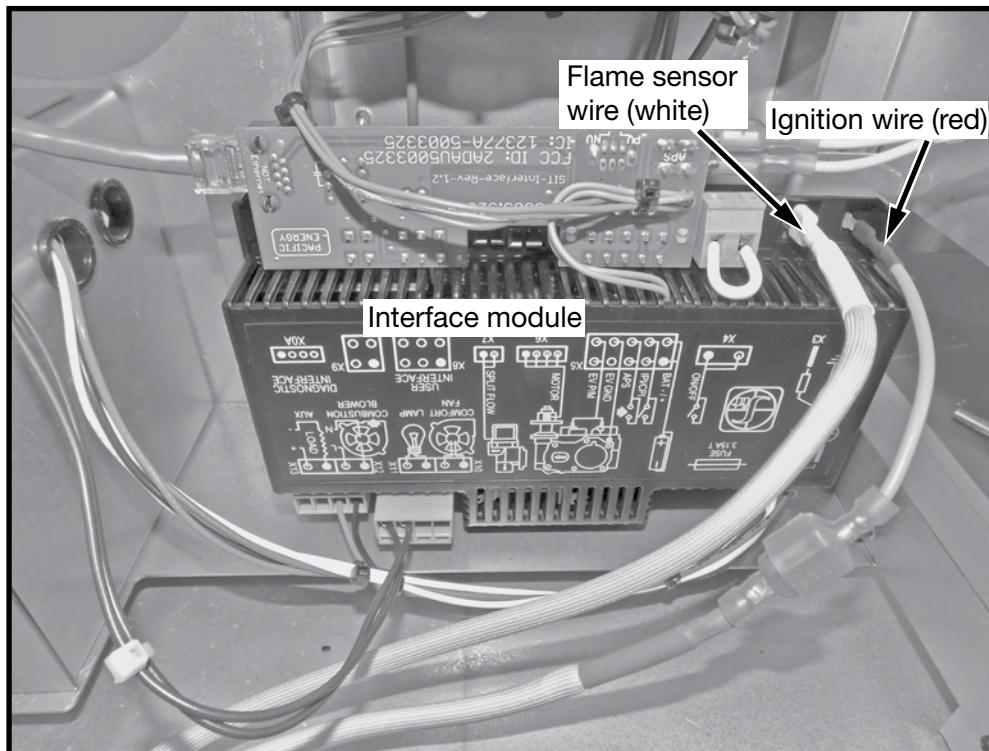


Figure 30: Disconnecting flame sensor and ignition wires at interface.

5. Disconnect the flame sensor wire and the ignition wire from the interface module (Figure 30) and withdraw the wires back through the bulkhead plate and into the rebox area.



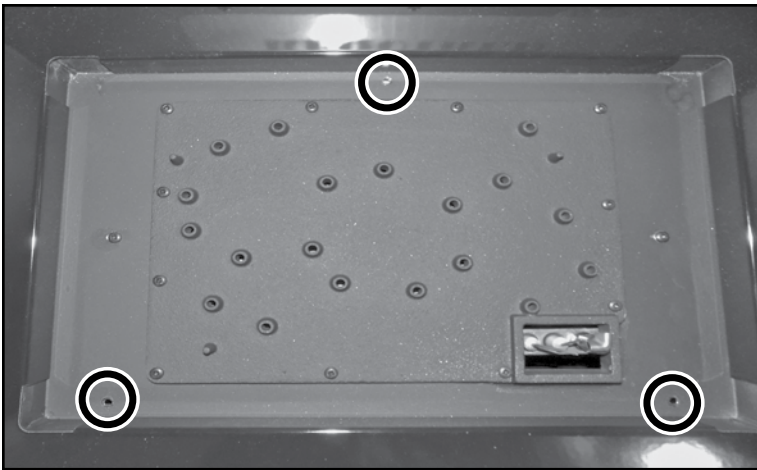


Figure 31: Removing front burner tray screws.

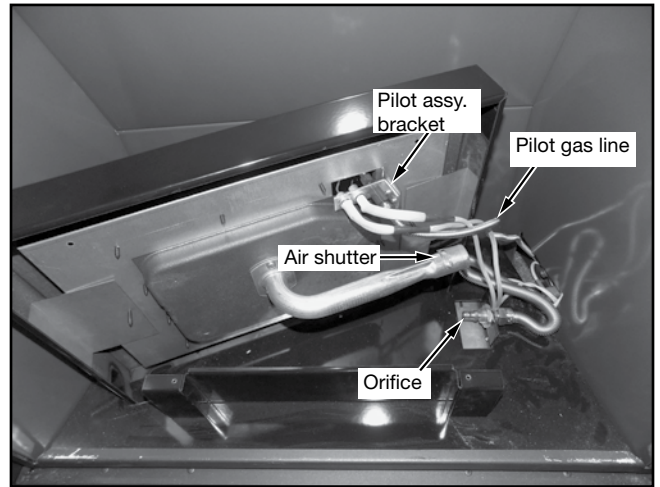


Figure 32: Underside of burner.

6. Remove the 2 front and 1 rear screws holding the burner tray in place (Figure 31).
7. Gently lift up the burner tray from its supports while sliding it to the left to disengage the burner tube from the orifice. Lift the tray, turn it on its side and lay it on its edge to expose the orifice and the pilot assembly (Figure 32). Remove the pilot assembly bracket with its wires and pilot gas line attached while the burner kit is on its side (See “Figure 36” on page 18).
8. Using a 1/2” wrench, undo the natural gas burner orifice (Figure 32) and replace with the propane gas orifice that comes with the conversion kit (Figure 33). Apply a small amount of pipe joint compound to the threads of the propane burner orifice to ensure a good seal, before screwing it into the fitting.

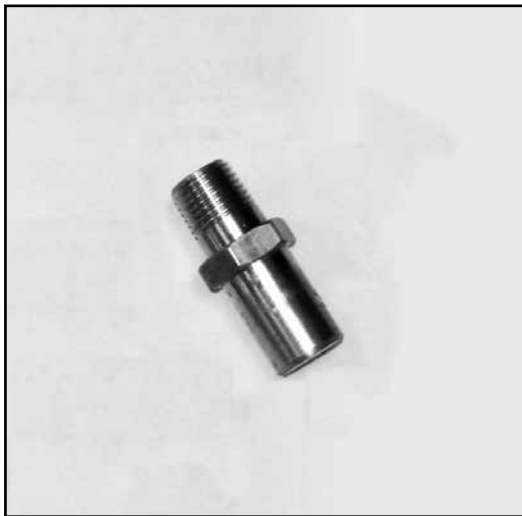


Figure 33: Orifice.

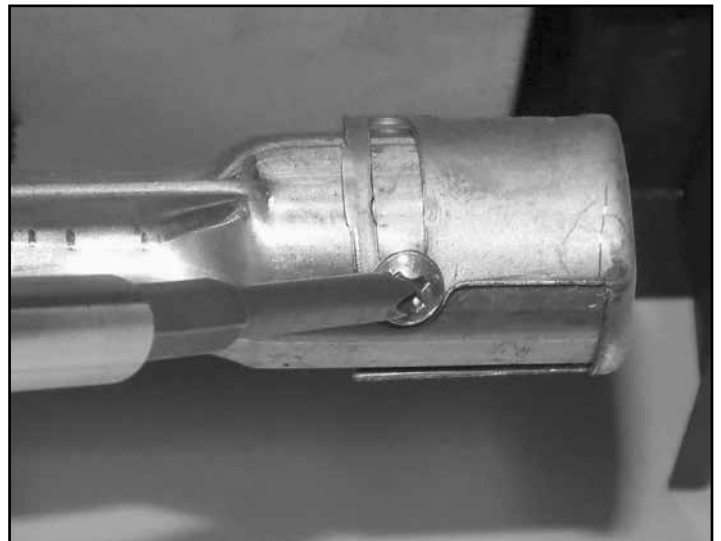


Figure 34: Air shutter fully closed for natural gas.

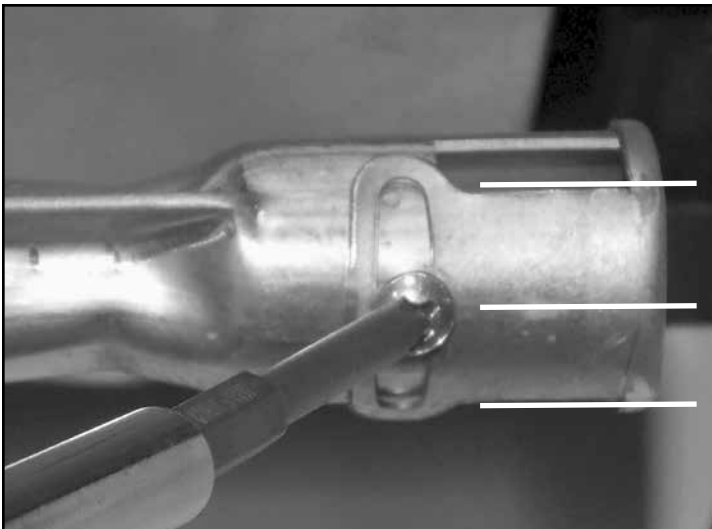


Figure 35: Air shutter half opened for propane gas.

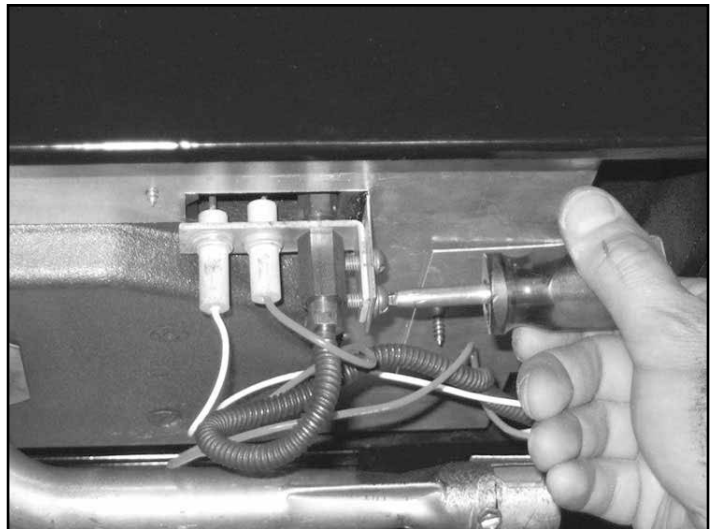


Figure 36: Removing pilot assembly.

9. Loosen the primary air shutter screw (Figure 34), open shutter half way and re-tighten (Figure 35).
10. Remove the 2 screws holding the pilot assembly in place with a short screwdriver (Figure 36).
11. With a 7/16" wrench, loosen the pilot head on the pilot assembly using a wrench to hold the bracket steady (Figure 37).

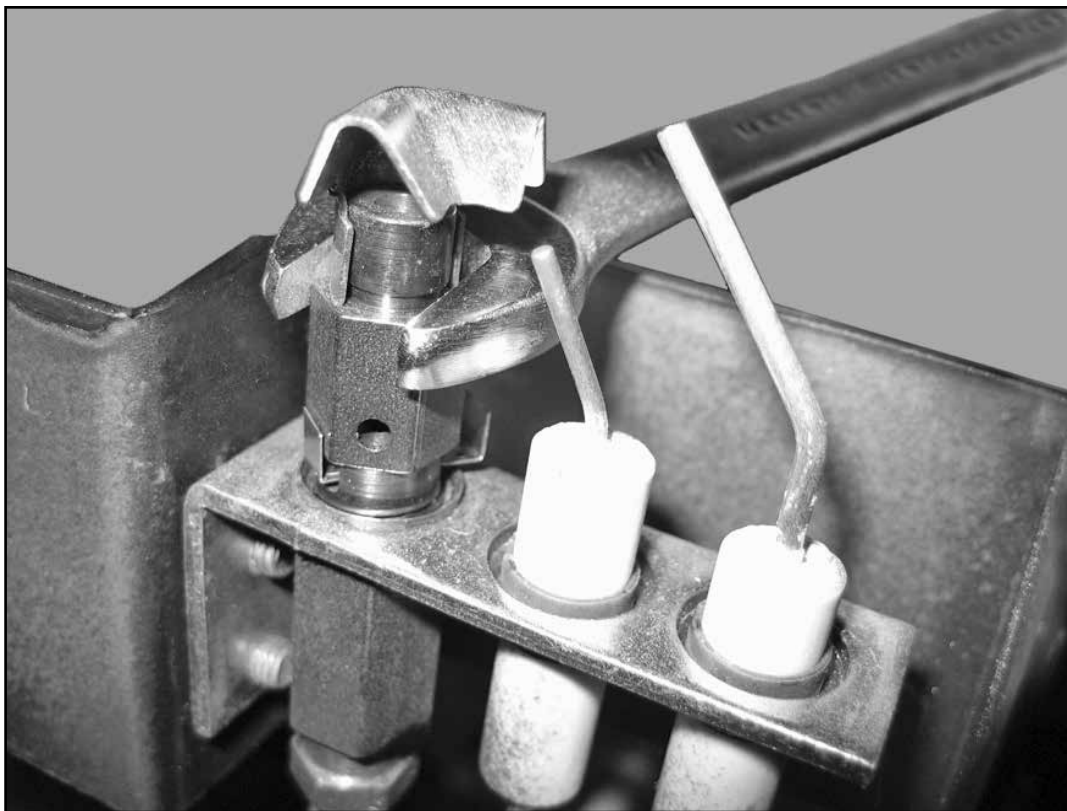


Figure 37: Loosening pilot shield.

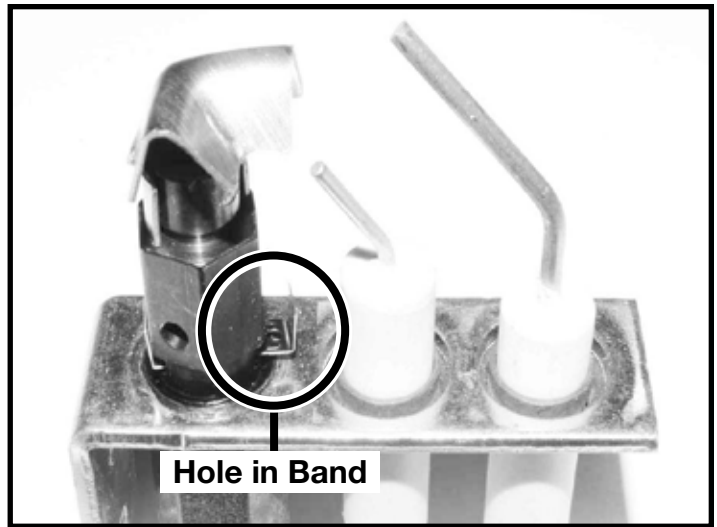
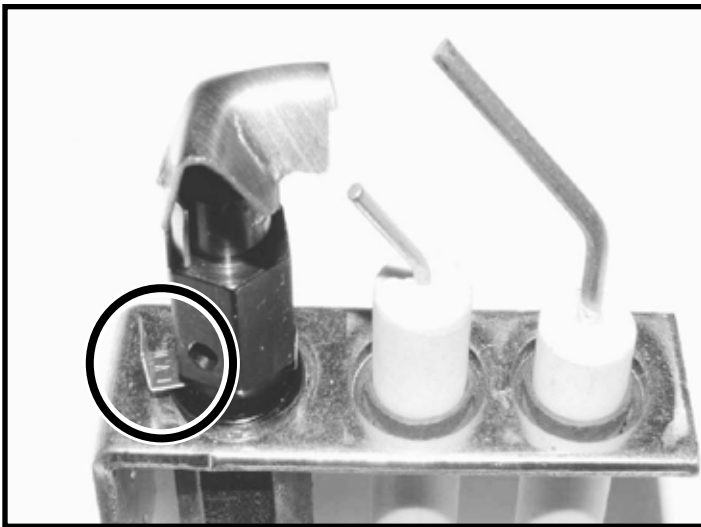


Figure 38: Air shutter half opened for propane gas.

Figure 39: Removing pilot assembly.

12. Slide the pilot adjustment band over and ensure that the hole in the orifice band is showing. Figure 38 shows the pilot in the natural gas position. Figure 39 shows the pilot in propane gas position.

13. On the gas conversion label (Figure 40) included in the conversion kit, 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. Rating label can be found on a metal plate stored on the left hand side of the fireplace, behind the decorative trim.

14. Reattach the access cover, right hand enamel panel piece, burner tray, sand and rock set.

|   |   |
|---|---|
| This appliance was converted to propane gas   |   |
| Kit Number  | <b>PACIFIC ENERGY</b><br>5052.52001-B   |
| dd / mm / yy  | conversion a été<br>responsabilité que cette<br>ci-dessus accepte la<br>l'entreprise désignée |
| Company   | Adresse   |
| Address   | Firme   |
| The above accepts the<br>responsibility that this<br>conversion has been<br>properly performed. | ! m a   |
| 5052.52001-B  | Numero d'assemblage   |
| <b>PACIFIC ENERGY</b>   |   |
| Cet appareil a été converti en gaz propane  |   |

Figure 40: Removing pilot assembly.

**For complete valve conversion installation instructions, refer to the instruction book included in the SIT conversion kit.**

# 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.**

1. Remove the plug from the pressure test port. The plug is located between the right side lintel and firebox side (Figure 41).
2. Thread the extension test fitting into the open port (Figure 42).
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.



Figure 41: Removing manifold pressure plug.

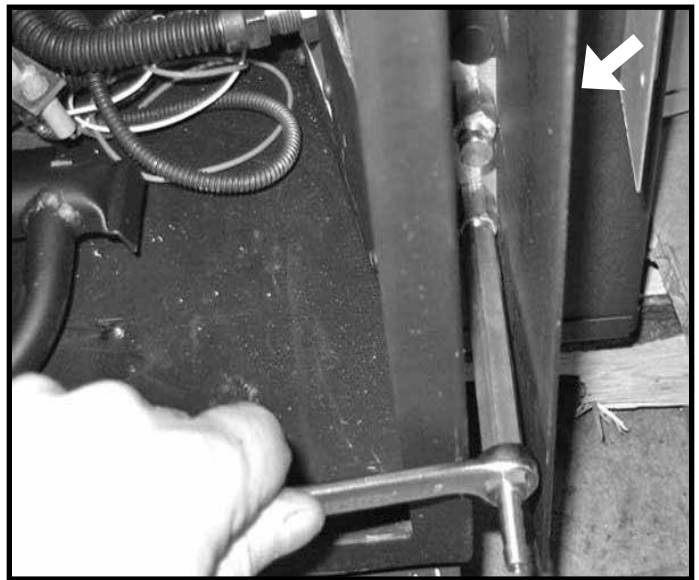


Figure 42: Adjusting manifold pressure.

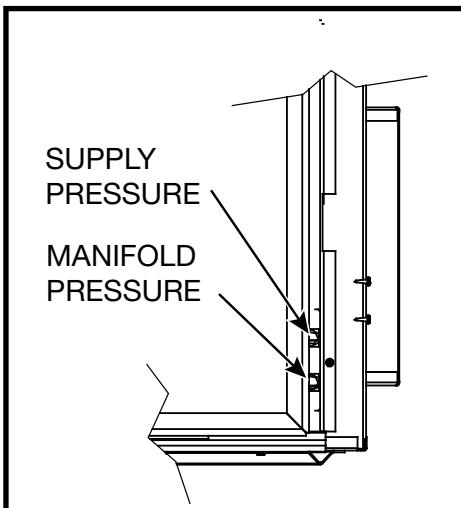


Figure 43: Gas test ports.

### Correct gas pressure requirement:

| Supply Pressure  | Natural Gas | Propane  |
|--|-------------|----------|
| <b>Min. Pressure</b><br><small>(For purpose of input adjustment)</small> | 5.0" WC     | 12.5" WC |
| <b>Max. Pressure</b>   | 13.9" WC    | 13.9" WC |
| <b>Manifold Pressure</b>   |             |          |
| <b>Maximum</b>   | 3.5" WC     | 10" WC   |
| <b>Minimum</b>   | 1.6" WC     | 6.4" WC  |

## Burner Flame Adjustment

The air shutter on the burner 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 (Figure 44) 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.



Figure 44: Desirable flame appearance.

### NOTE:

Proper air shutter setting is required, fully closed for natural gas and half open for propane.

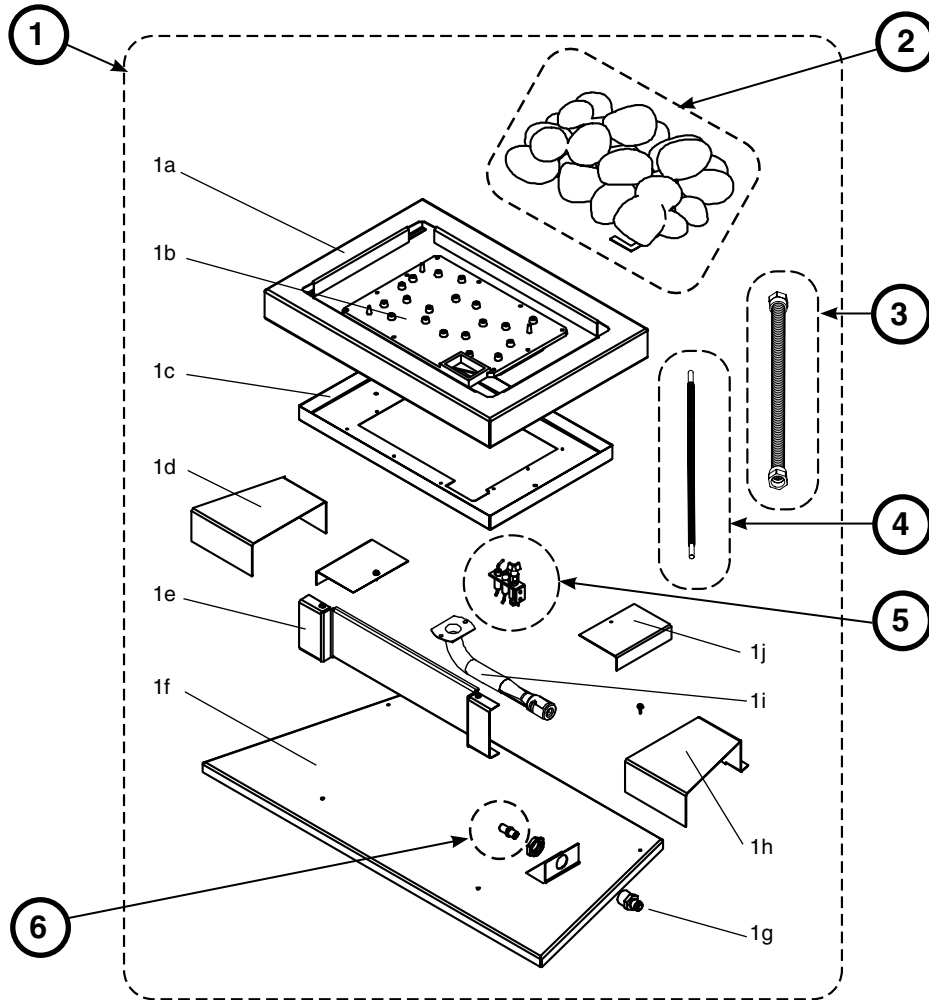
The flame should be just orange and “lazy”. It should NEVER be set to create sooting on internal parts and window glass.

# Parts Diagram

(WHEN ORDERING, INCLUDE PART NUMBER WITH DESCRIPTION)

| ITEM.....DESCRIPTION.....PART NO.            | ITEM.....DESCRIPTION.....PART NO.                 |
|--|---|
| #1.....TRANQUILITY BURNER KIT.....TC36.NG04D | #5.....PILOT ASSEMBLY, CONVERTIBLE ..TCRP.5005025 |
| #2.....PEBBLE ASSEMBLY.....TC36.9499         | #6.....ORIFICE, NATURAL GAS (#30).....marked "NI" |
| #3.....MAIN SUPPLY TUBE.....5019.223         | * #7.....PROPANE CONVERSION KIT.....22180004      |
| #4.....PILOT TUBE.....5019.225               | * #8.....SAND.....TC36.SAND22                     |

\* NOT SHOWN



## KIT CONTENTS:

### #1 BURNER ASSEMBLY

- 1a .....TRANQUILITY CURB
- 1b ..... 19 PORT CAST BURNER
- 1c .....ROCK PAN
- 1d ..... LINE COVER, LT
- 1e .....TRANQUILITY LEG
- 1f .....FLOOR PAN
- 1g .....TAPPED 1/8-27 NPT
- 1h ..... LINE COVER, RT
- 1i .....BURNER INLET TUBE
- 1j ..... CURB CLAMP

### #2 PEBBLE ASSEMBLY

- #3 MAIN SUPPLY TUBE
- #4 PILOT TUBE
- #5 PILOT ASSEMBLY, CONVERTIBLE
- #6 ORIFICE NG
- #7 PROPANE CONVERSION KIT (not shown)
- #8 SAND (not shown)



© 2017 Copyright Pacic Energy Fireplace Products LTD

Reproduction, adaptation, or translation  
without prior written permission is prohibited,  
except as allowed under the copyright laws.



**TFor technical support, please contact your retailer.**

**Web site: [www.townandcountryfireplaces.net](http://www.townandcountryfireplaces.net)  
2975 Allenby Rd., Duncan, BC V9L 6V8**

Printed in Canada