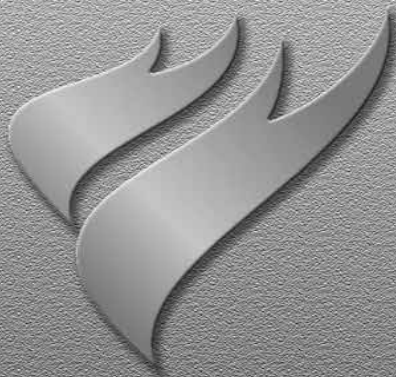


**INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.**

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
L U X U R Y F I R E P L A C E S

TC30 BLACK DIAMOND BURNER KIT INSTRUCTIONS



**SKU# 22150004
For TC30 Series D
Fireplaces**



Visit www.townandcountryfireplaces.net for the most recent version of this manual

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Contents of Package

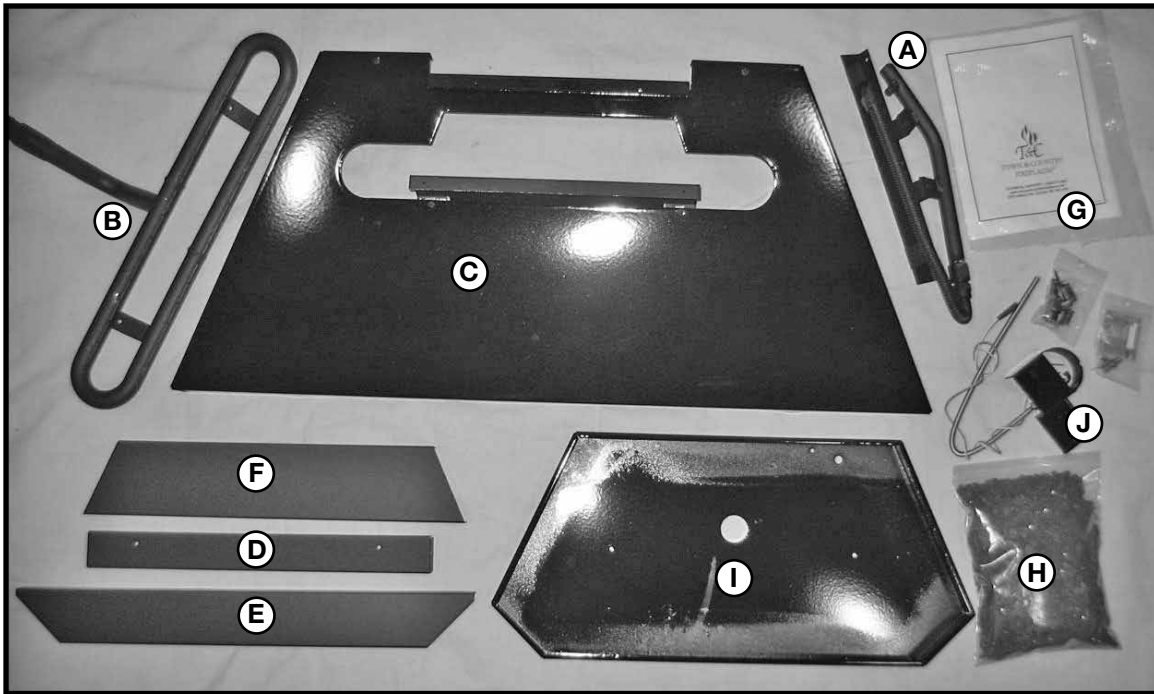


Figure 1: Black Diamond burner kit parts.

NOTE: A PORCELAIN PANEL SET MUST BE USED WITH THE BLACK DIAMOND BURNER KIT

- A MANIFOLD ASSEMBLY
(including supply tube)
- B BURNER TUBE
- C BURNER SHIELD
- D MEDIA SPACER, Center
- E MEDIA SPACER, Front
- F MEDIA SPACER, Rear
- G HARDWARE PACKAGE
- H 5 lbs. GLASS MEDIA
- I BURNER TRAY
- J PILOT SHIELD
(including pilot and pilot supply tube)

Burner Manifold Installation

NOTE: If unit is to be converted to Propane, See “Propane Conversion” on page 13 before proceeding.

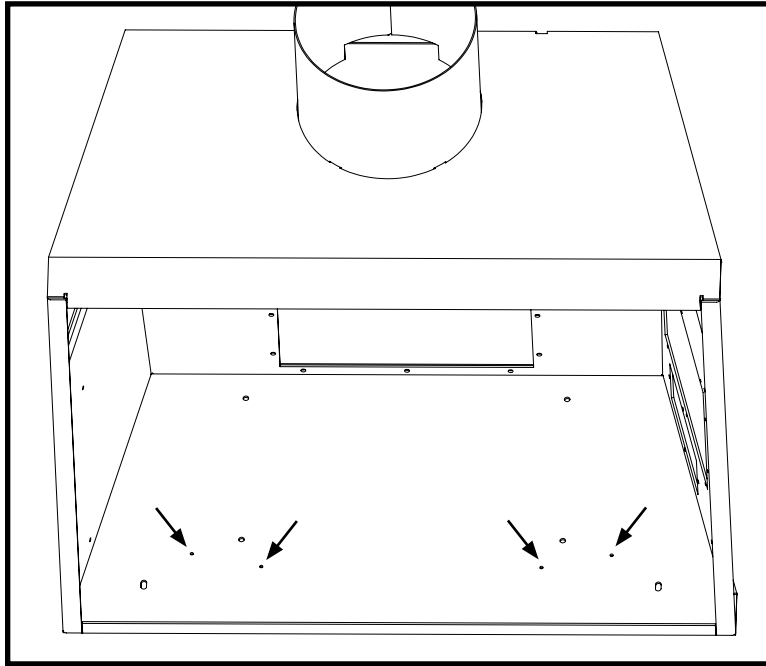


Figure 2: Firebox base.

1. 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 (Figure 2).
2. Remove access cover to the valve control center from the right side of the fire box (Figure 3).
3. Remove three screws from the rear of the firebox. Attach the manifold assembly to the rear of the firebox with the three screws previously removed (Figure 4).



Figure 3: Access cover to valve control center.

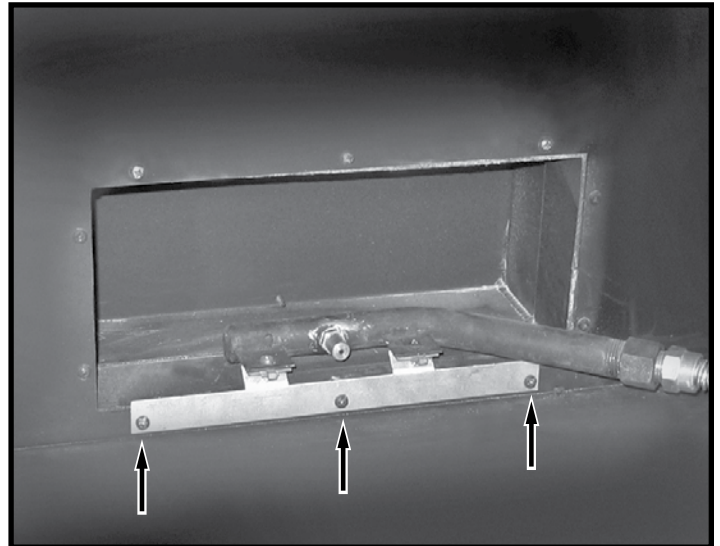


Figure 4: TC30 Black Diamond burner manifold.

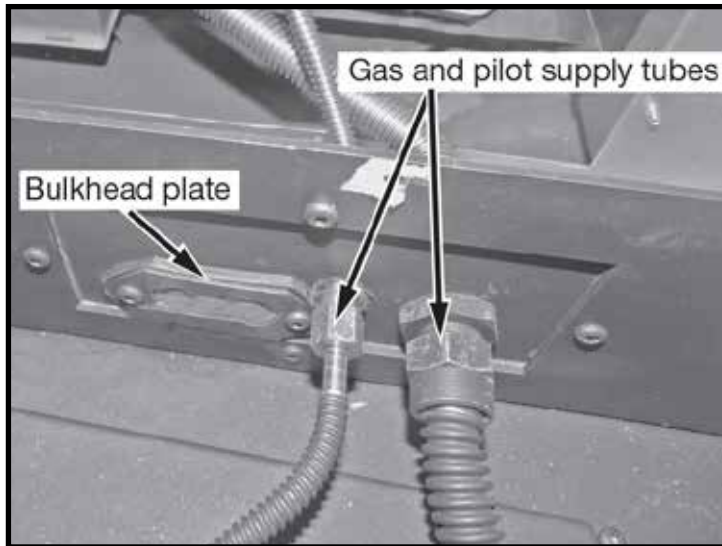


Figure 5: Gas and pilot supply tubes.

4. Attach the manifold supply tube and the pilot supply tube to the bulk head fittings and tighten (Figure 5). Ensure that the connections are gas tight.

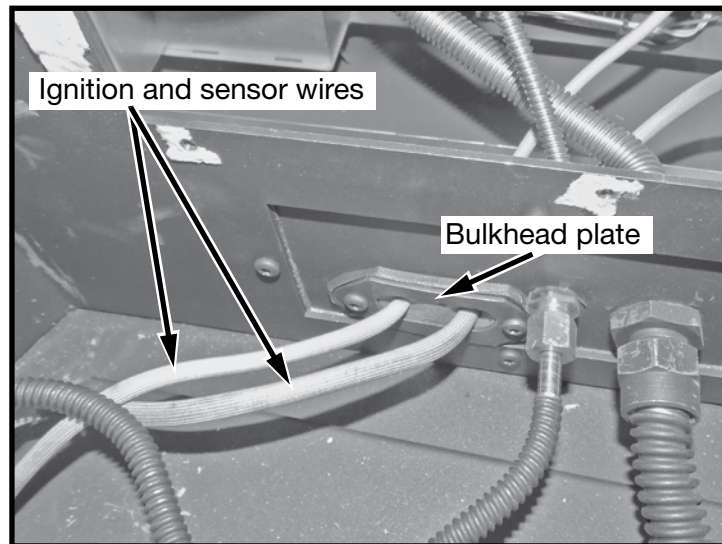


Figure 6: Ignition and sensor wires routing.

5. Feed the ignition and sensor wires through the bulkhead plate (Figure 6) to the interface module.



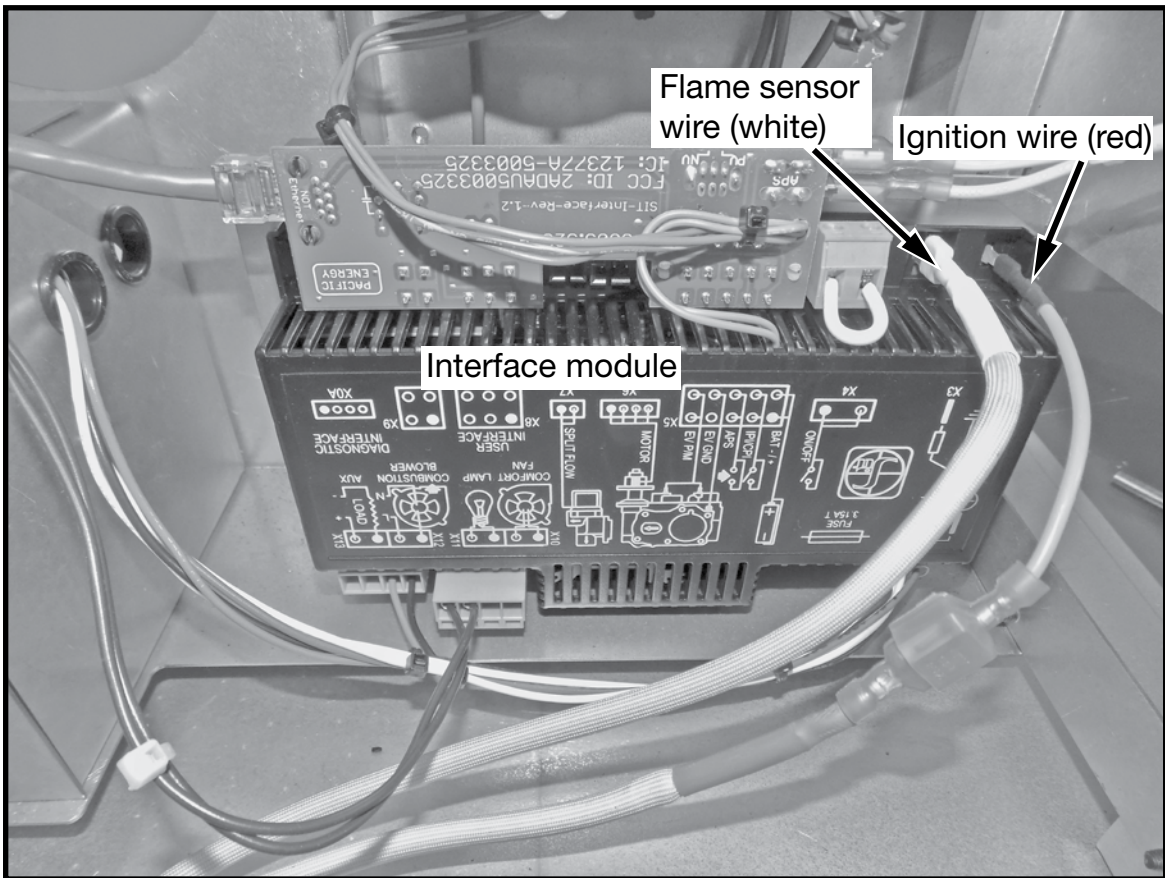


Figure 7: Interface module.

6. Attach the ignition and sensor wires to the interface module as shown in Figure 7.
7. Reinstall the valve control center access panel. See Figure 3 on page 4.

A panel set must now be installed before the Black Diamond Burner tray can be installed.

Porcelain Panel Installation

A porcelain panel set must be used in conjunction with the installation of the Black Diamond glass burner kit. Do not use the fireplace without panels

Contents of Porcelain Panel Set

1. LEFT PANEL ASSY.
2. UPPER REAR PANEL ASSY.
3. LOWER REAR PANEL
4. RIGHT PANEL ASSY.
5. BASE PANEL ASSY.*

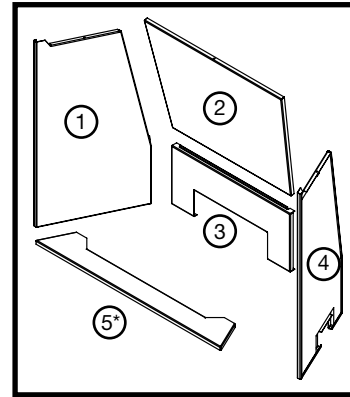


Figure 8: Porcelain panel set.

***Note: #5. Base panel is NOT used with the Black Diamond or Tranquility Burner Kits. It is used only with Log Set Burner Kits.**

Preparing the Firebox for Porcelain panel installation.

- Unpack and inspect the porcelain panels before removing the side panel and pre-existing panels (if installed).
- Caution: The Firebox Panels are very fragile, and should be handled with care.
- The panels need to be installed before burner and burner tray are installed.

The Side Panel Retainer (and pre-existing panels) must be removed before the new porcelain panels can be installed.

1. Remove the Side Panel Retainer located on the underside of the firebox heat shield. The retainer is located between the lip of the firebox and the heat shield (Figure 9) and is held in place by two screws which are screwed into the heat shield (Figure 10).
2. Once the side panel retainer has been removed, any pre-existing panels are easily removed. The panels are fragile. Take care to support them while being removed.

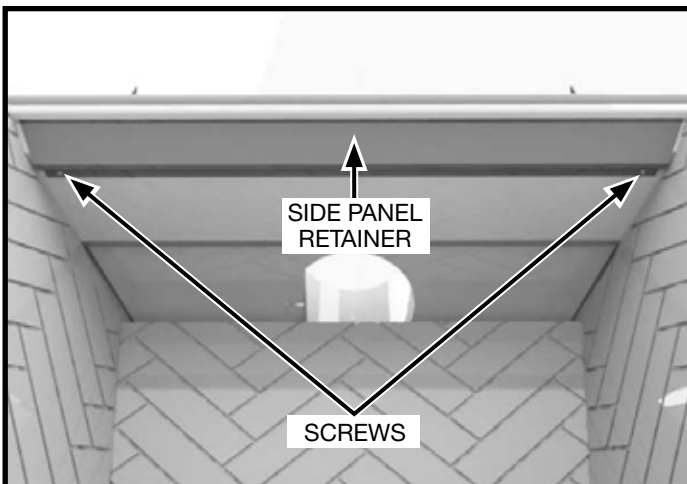


Figure 9: Side panel retainer screw location.

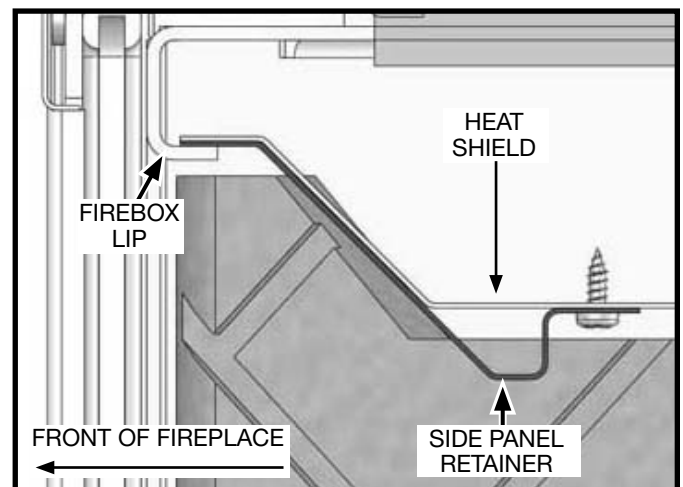


Figure 10: Side panel retainer.

Installing the Porcelain Panels

1. Begin by placing the lower rear panel against the rear wall of the firebox and support with one hand while preparing to install the right hand side panel (Figure 11).
2. Install the right hand side panel (Figure 12) and support while preparing to install the upper rear panel.



Figure 11: Lower rear panel.

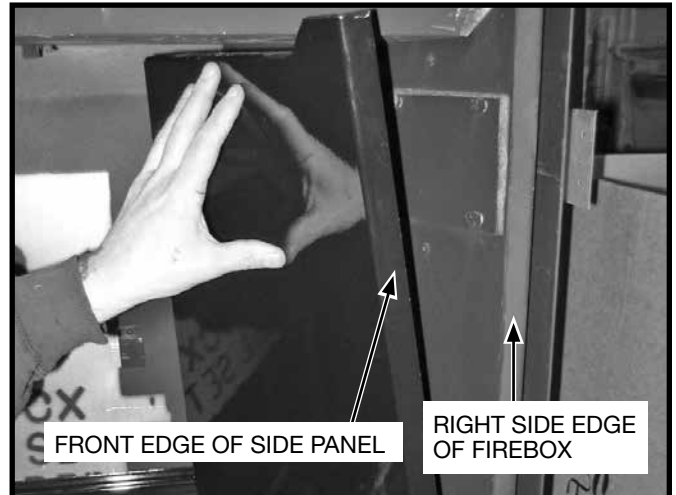


Figure 12: Positioning the right hand side panel.

3. Position upper rear panel (Figure 13) on top of lower rear panel and slip in behind the right panel. Once upper rear panel is in place, push the right side panel to its final position.
4. Install the left hand side panel (Figure 14) and position it as the right side panel was positioned. The two side panels should stay in place but may need to be supported until the side panel retainer is installed.



Figure 13: Installing upper rear panel.



Figure 14: Positioning the left hand side panel.

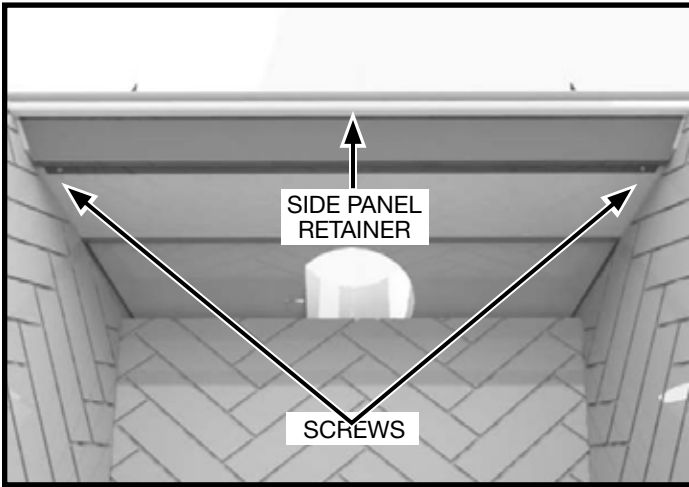


Figure 15: Side panel retainer screw location.

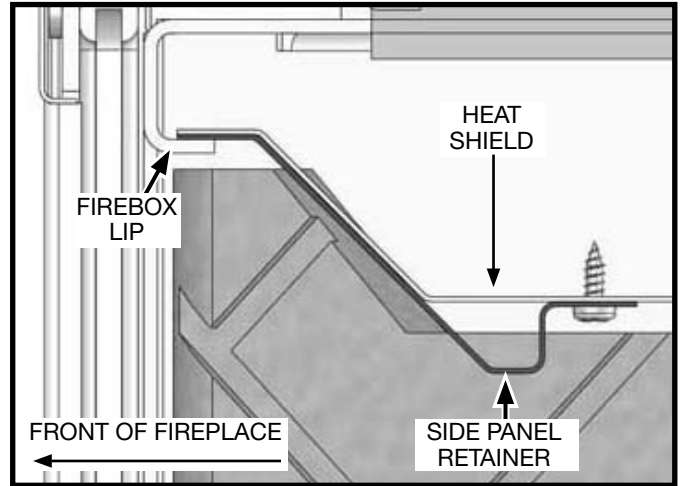


Figure 16: Side panel retainer.

5. Re-install the side panel retainer that was removed at the beginning of the procedure (Figure 15) & (Figure 16). The side panels are now fully supported.

NOTE: The base panel is NOT used with the Black Diamond Burner Kit or the Tranquility Burner Kit. It is used with Log Kits.



Black Diamond Burner Installation

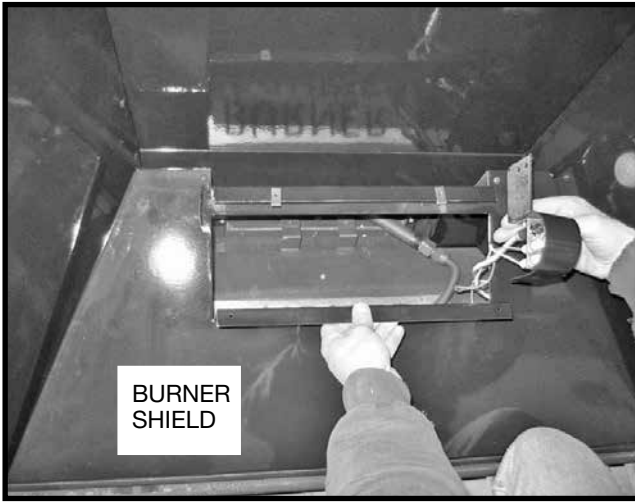


Figure 17: Installing burner shield.



Figure 18: TC30 Pilot location.

1. Install burner shield by tipping the shield into the firebox. Route pilot up through the opening in the burner shield (Figure 17).
2. Lay the pilot to the side of the burner shield (Figure 18). It will be attached to the burner tray once the burner tray is installed.



Figure 19: Attaching burner tray to burner shield.



Figure 20: Attaching pilot shield.

3. Attach the burner tray to the burner shield using two screws at the back of the tray (Figure 19).
4. Attach pilot shield to burner tray with two screws (Figure 20).



Figure 21: Rear media spacer.



Figure 22: Front media spacer.

5. Front and rear media spacers are now installed (Figure 21 & Figure 22) .

NOTE: Set the air shutter to fully open for Propane or fully closed for Natural gas.

6. Install burner by tilting burner inlet through tray (Figure 23). Ensure that the orifice has entered the inlet tube.



Figure 23: Burner installation.



Figure 24: Center media spacer.

7. Install the center media spacer and secure to the tray with two 1 1/2" screws. (Figure 24 & Figure 25) Three holes must line up to set each screw.

8. Apply glass media. Apply just enough to cover the burner assembly.

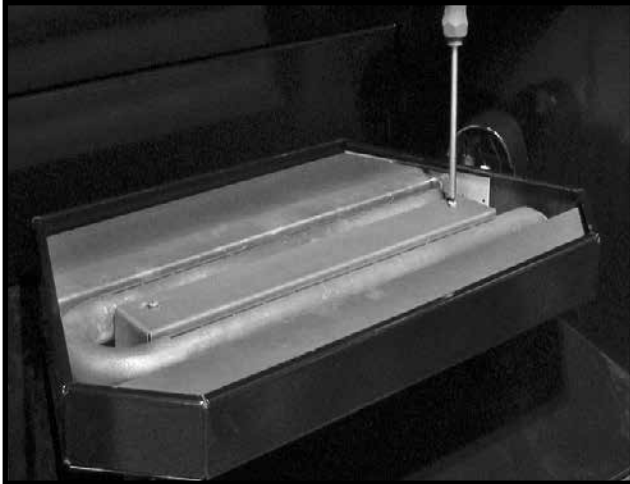


Figure 25: Securing center spacer.



Figure 26: Applying glass media.

NOTE: Too much glass media over the burner will cause sooting with the use of propane gas.



Figure 27: Burner covered with glass media.

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.

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

Note:

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

1. Ensure the burner, pilot and gas supply are turned off, and the appliance has cooled.
2. Using a 1/2" wrench, undo the natural gas burner orifice, (marked #32). (Figure 29)
3. Apply a small amount of pipe joint compound to the threads of the 1.9mm replacement propane burner orifice to ensure a good seal, before screwing it into the fitting.
4. Open primary air shutter on burner fully.
5. With a 7/16" wrench loosen the pilot head on the pilot assembly (Figure 30).

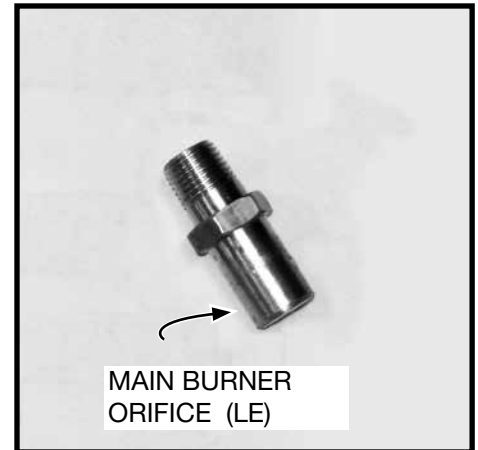


Figure 28: Orifice.



Figure 29: Removing natural gas orifice.

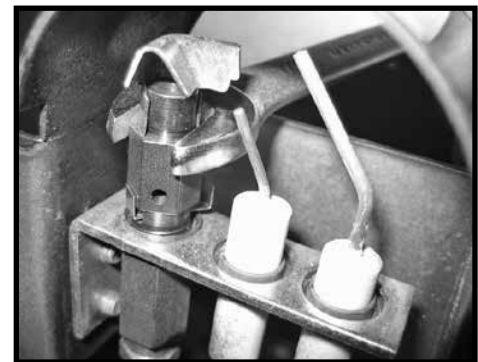


Figure 30: Loosening pilot shield.

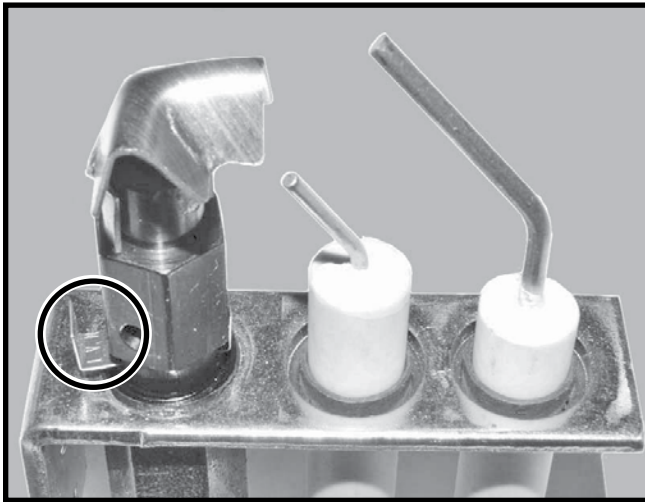


Figure 31: Band in natural gas position.

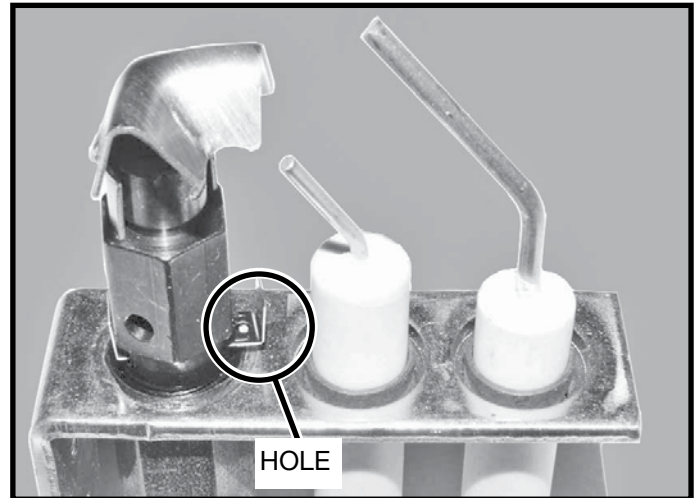


Figure 32: Band in liquid propane position.

6. Slide the pilot adjustment band over and ensure that the hole in the orifice band is showing. Figure 31 indicates NG position. Figure 32 indicates LP position.
7. Fill in the conversion label (Figure 34) . 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.

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

8. Remove access panel, 10 screws, and set aside (Figure 33).
9. Attach the access panel to the side of the firebox with the previously removed screws.

Note: Gasket must be installed with access panel.

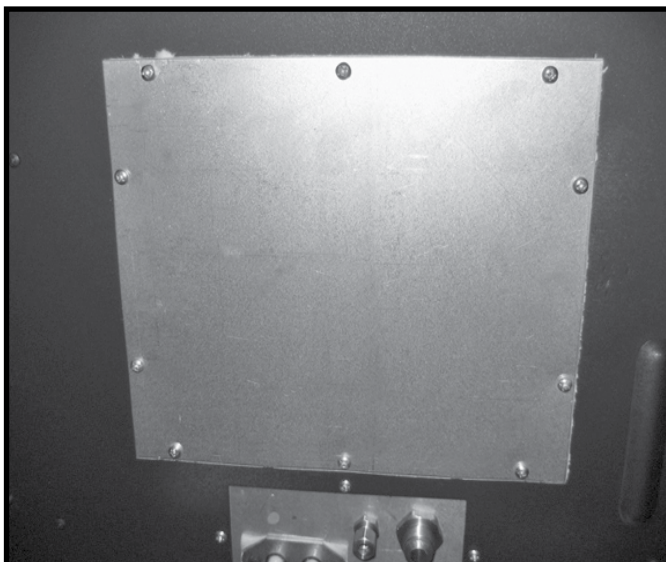


Figure 33: Access panel.

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

Figure 34: Natural gas to propane conversion label.

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.

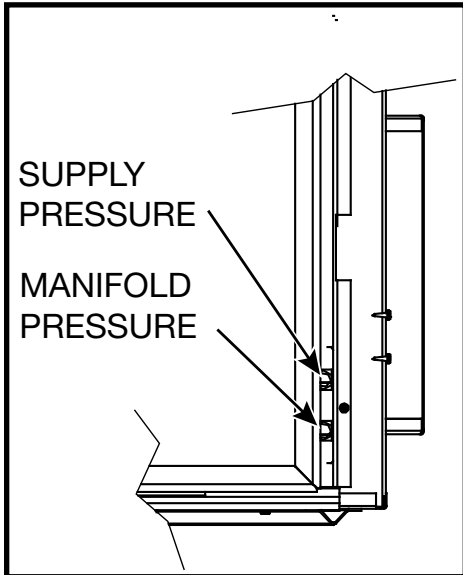


Figure 35: Gas test ports.

Correct gas pressure requirement:

Propane

Min. Pressure
(For purpose of input adjustment)

5.0" WC

Natural Gas

12.5" WC

Max. Pressure

13.9" WC

13.9" WC

Manifold Pressure

Maximum

3.5" WC

10" WC

Minimum

1.6" WC

6.4" WC

1. Remove the plug from the pressure test port. The plug is located between the right side lintel and firebox side (Figure 36).
2. Thread the extension test fitting into the open test port (Figure 37).
3. Attach a pressure gauge onto the fitting.
4. When testing is complete remove the extension test fitting and replace the plug. Thread sealant will be required to ensure a gas tight connection.



Figure 36: Removing manifold pressure plug.



Figure 37: Adjusting manifold pressure.

Burner Flame Adjustment

The air shutter on the burner tube controls the primary combustion air to the gas burner and is preset 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 38 for proper flame pattern.

Open primary air shutter if the glass media, 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.

The flame should be just orange and “lazy”.

It should NEVER be set to create sooting on internal parts and window glass.

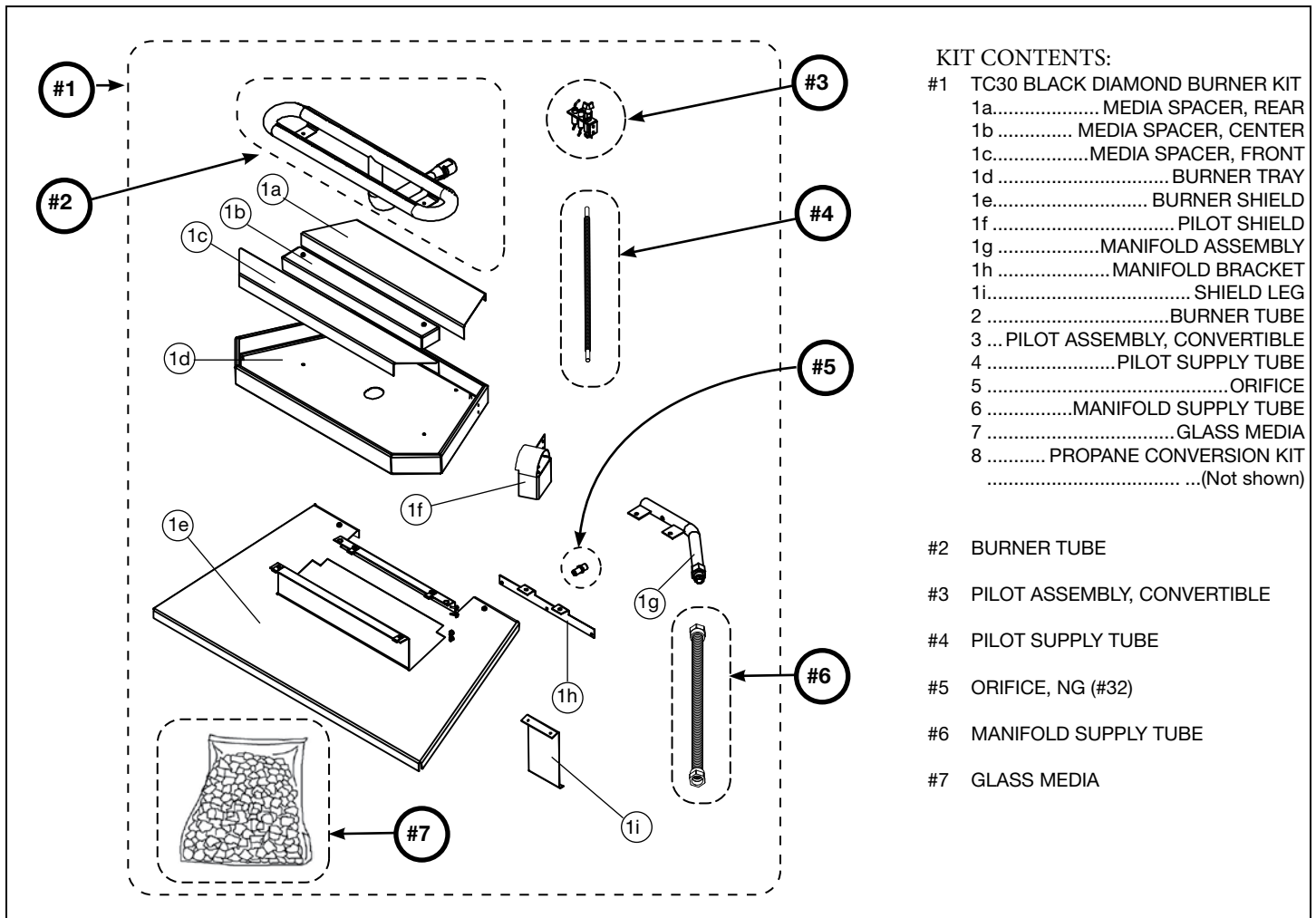


Figure 38: Desirable flame pattern.

Replacement Parts

(WHEN ORDERING, INCLUDE PART NUMBER WITH DESCRIPTION)

ITEM	DESCRIPTION	PART NO.
#1	TC30 BLACK DIAMOND BURNER KIT	22150004
#2	BURNER TUBE	TC36. 5011835WELD
#3	PILOT ASSEMBLY, CONVERTIBLE.....	TCRP.5005025
#4	PILOT SUPPLY TUBE	5019.225
#5	ORIFICE, NG (#32)	5021.332.A
#6	MANIFOLD SUPPLY TUBE	5019.223
#7	GLASS MEDIA	5012.01
#8	PROPANE CONVERSION KIT.....	TC30.DLPKIT (NOT SHOWN)



KIT CONTENTS:

- #1 TC30 BLACK DIAMOND BURNER KIT
- 1a..... MEDIA SPACER, REAR
- 1b..... MEDIA SPACER, CENTER
- 1c..... MEDIA SPACER, FRONT
- 1d..... BURNER TRAY
- 1e..... BURNER SHIELD
- 1f..... PILOT SHIELD
- 1g..... MANIFOLD ASSEMBLY
- 1h..... MANIFOLD BRACKET
- 1i..... SHIELD LEG
- 2..... BURNER TUBE
- 3... PILOT ASSEMBLY, CONVERTIBLE
- 4..... PILOT SUPPLY TUBE
- 5..... ORIFICE
- 6..... MANIFOLD SUPPLY TUBE
- 7..... GLASS MEDIA
- 8..... PROPANE CONVERSION KIT
- (Not shown)

- #2 BURNER TUBE
- #3 PILOT ASSEMBLY, CONVERTIBLE
- #4 PILOT SUPPLY TUBE
- #5 ORIFICE, NG (#32)
- #6 MANIFOLD SUPPLY TUBE
- #7 GLASS MEDIA



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