

**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

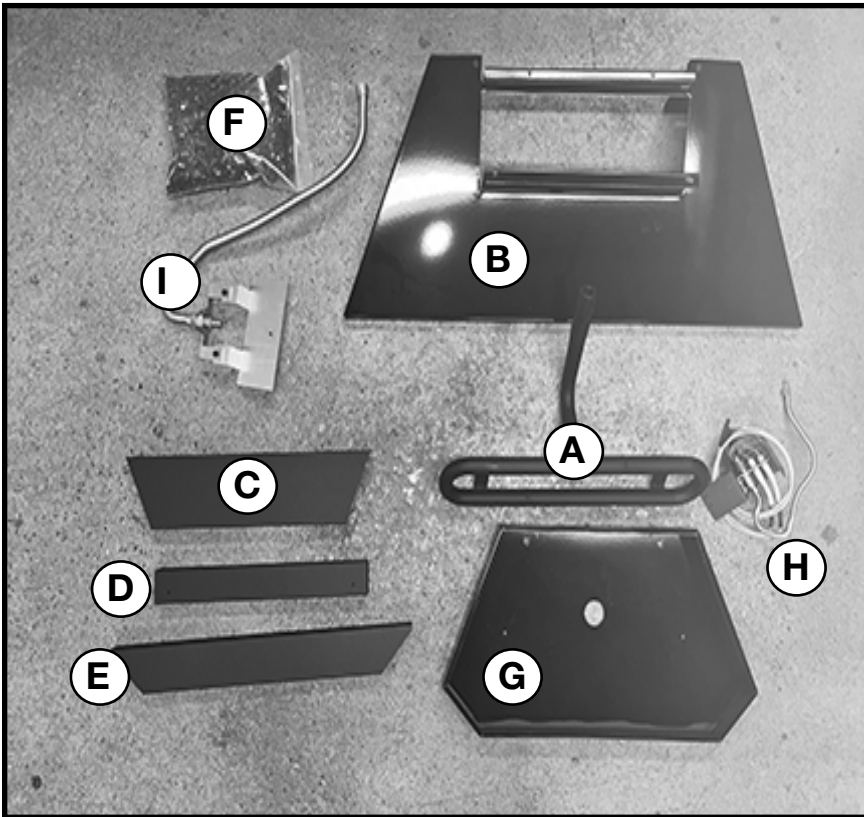
# **TC36D BLACK DIAMOND BURNER KIT INSTRUCTIONS**



**SKU# 22150014  
For TC36D & TC36D Arch  
Series D Fireplaces**



## Contents of Package



- A. Burner Tube
- B. Burner Shield
- C. Media Spacer, Rear
- D. Media Spacer, Center
- E. Media Spacer, Front
- F. 5lbs. Tumbled Glass
- G. Burner Tray
- H. Pilot Shield (including pilot and supply tube).
- I. Manifold Assembly
- Hardware Package (not shown)

Figure 1: TC36 and TC36 Arch Black Diamond burner kit contents.

## Burner/ Grate Installation



Figure 2: Access cover to valve control center.

### NOTE:

If converting to propane, refer to the propane conversion section on page 13 before continuing.

A porcelain panel set must be used in conjunction with the installation of the burner assembly.

**NOTE:** The burner shield may need to be loosened and retightened after positioning if the panel does not slip in behind it.

1. Remove access cover from the valve control center at the inside right hand side of the firebox (Figure 2).



Figure 3: Removing screws from air channel.

2. Remove 2 screws from the air channel and attach the lower rear panel to the firebox with these screws (Figure 3).
3. Attach the manifold bracket to the floor shield in the bottom of the firebox with one screw (Figure 4).

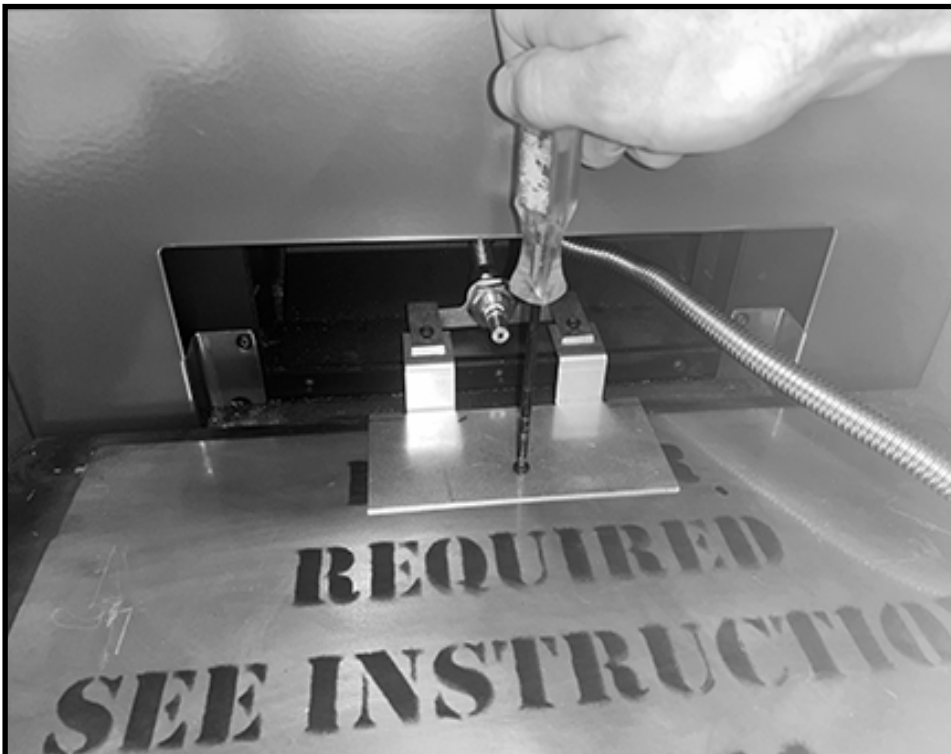


Figure 4: Attaching manifold bracket.

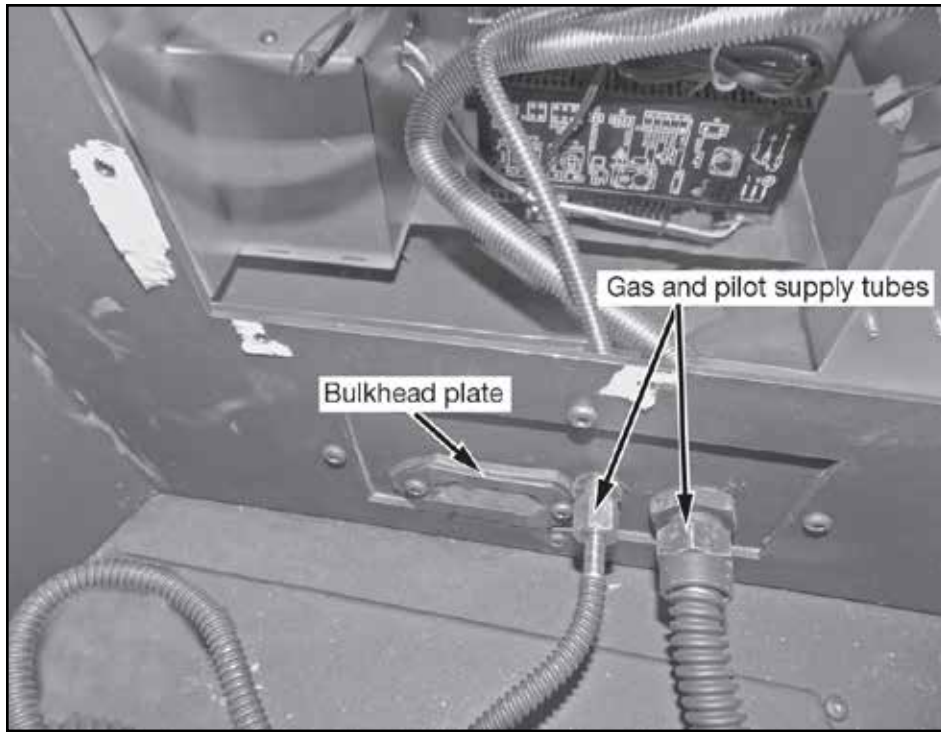


Figure 5: Gas and pilot supply tubes.

4. Attach the manifold and pilot supply tubes to the bulk head tting and tighten (Figure 5). Ensure that all connections are gas tight.
5. Feed the ignition and sensor wires through the bulkhead plate (Figure 6) to the interface module.

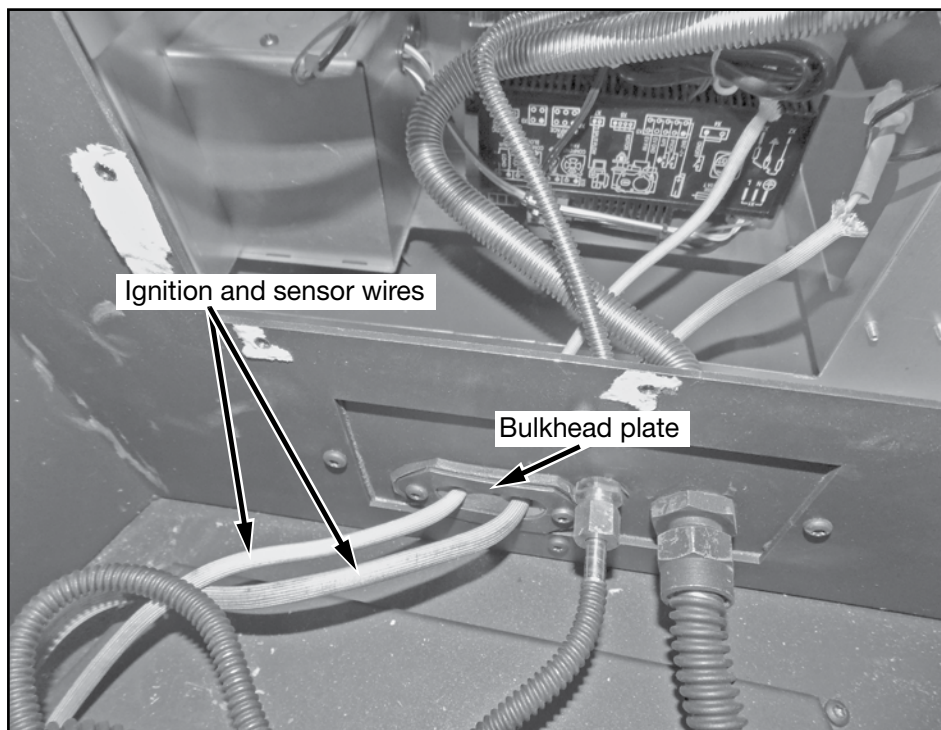


Figure 6: Ignition and sensor wire routing.

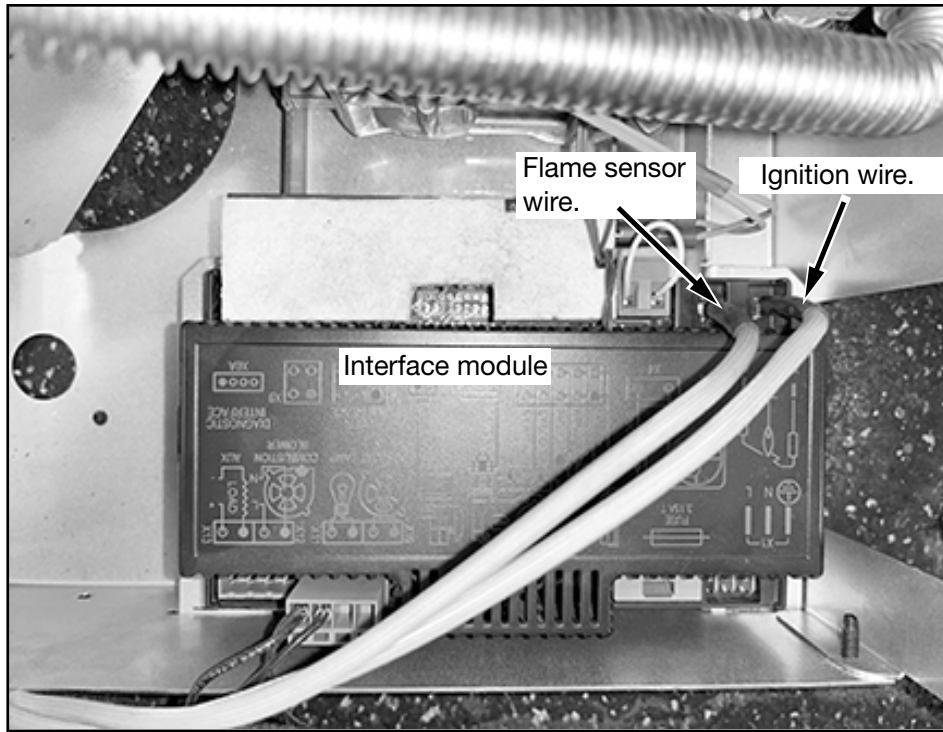


Figure 7: Interface module.

6. Attach the ignition and sensor wires to the Interface module as shown in Figure 7.
7. Reinstall the valve control center access panel (Figure 8).

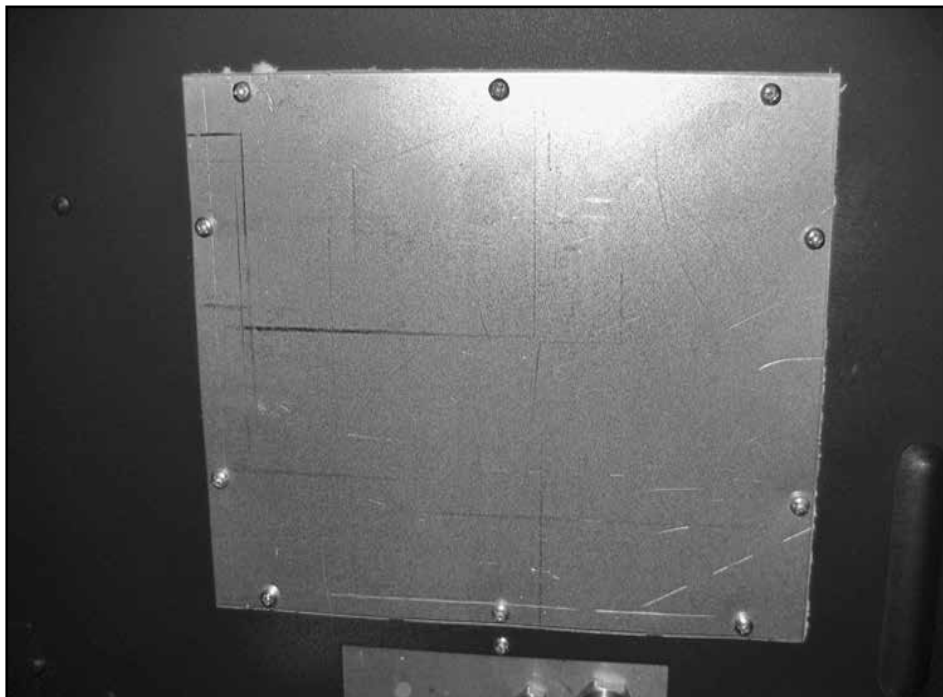


Figure 8: Re-install access cover to valve control center.

## Panel Installation



Figure 9: Installing right side panel.



Figure 9b: Panel clips.

1. Remove panel retainer from the upper heat shield. Install right side panel by placing the bottom into the rebox and tipping the top into position (Figure 9). Panel clips must be installed on the bottom of both side panels (notch facing inside)(Figure 9b). To ensure proper positioning of the burner shield. This must be done at the same time as installing the porcelain side panels.

2. Position upper rear panel on top of lower rear panel and slip in behind the right panel (Figure 10).



Figure 10: Install upper rear panel.



Figure 11: Installing left side panel.

3. While supporting the upper rear panel install the left side panel in the same manner as the right side panel (Figure 11). Secure both side panels with the previously removed panel retainer.
4. Install burner shield by tipping the shield into the rebox, feed the pilot assembly through the opening in the shield (Figure 12).

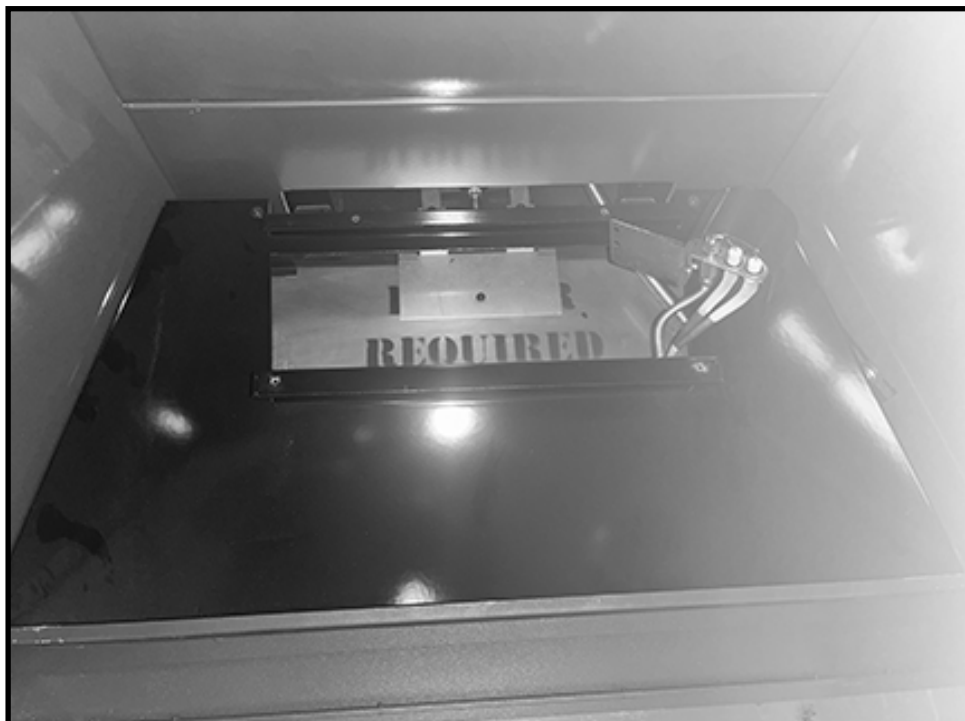


Figure 12: Installing burner shield.



Figure 13: Attaching pilot shield to burner tray.

5. With a short, stubby screwdriver, attach pilot shield to burner tray with two screws (Figure 13).
6. Attach the burner tray to the burner shield using two screws at the back of the tray (Figure 14). Ensure that front mounting holes are aligned under tray before tightening.



Figure 14: Attaching burner tray to burner shield.





Figure 15: Installing front media spacer.

7. Install front media spacers (Figure 15).

8. Install rear media spacer (Figure 16).



Figure 16: Installing rear media spacer.

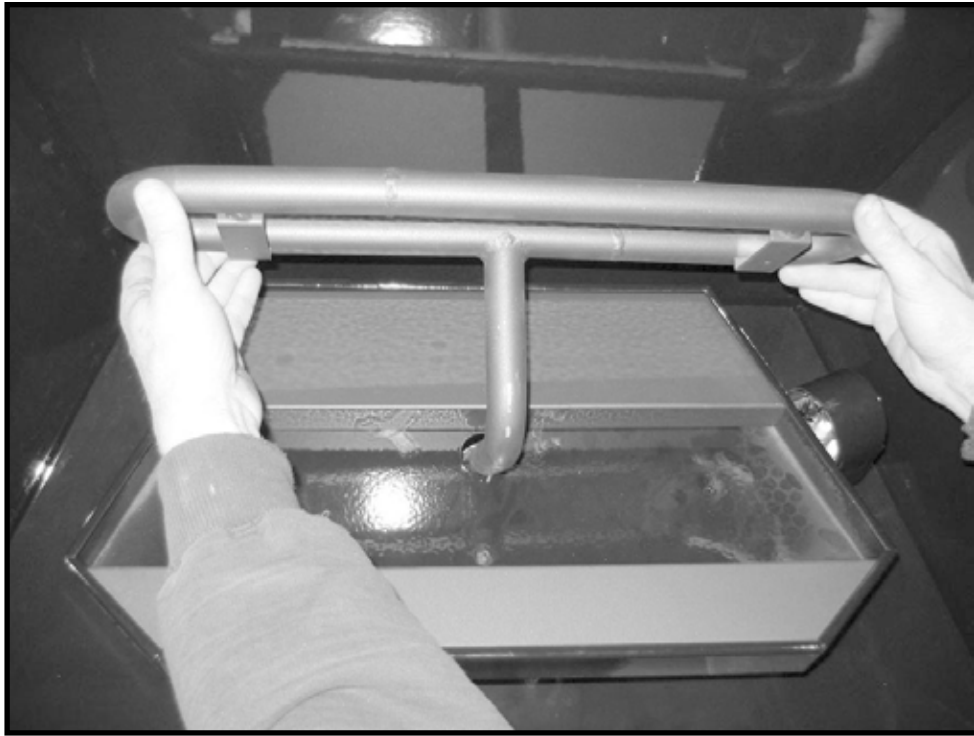


Figure 17: Installing burner tube.

9. Install burner by tilting burner tube through the tray. Ensure that the orifice has entered the tube (Figure 17 and Figure 18).

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

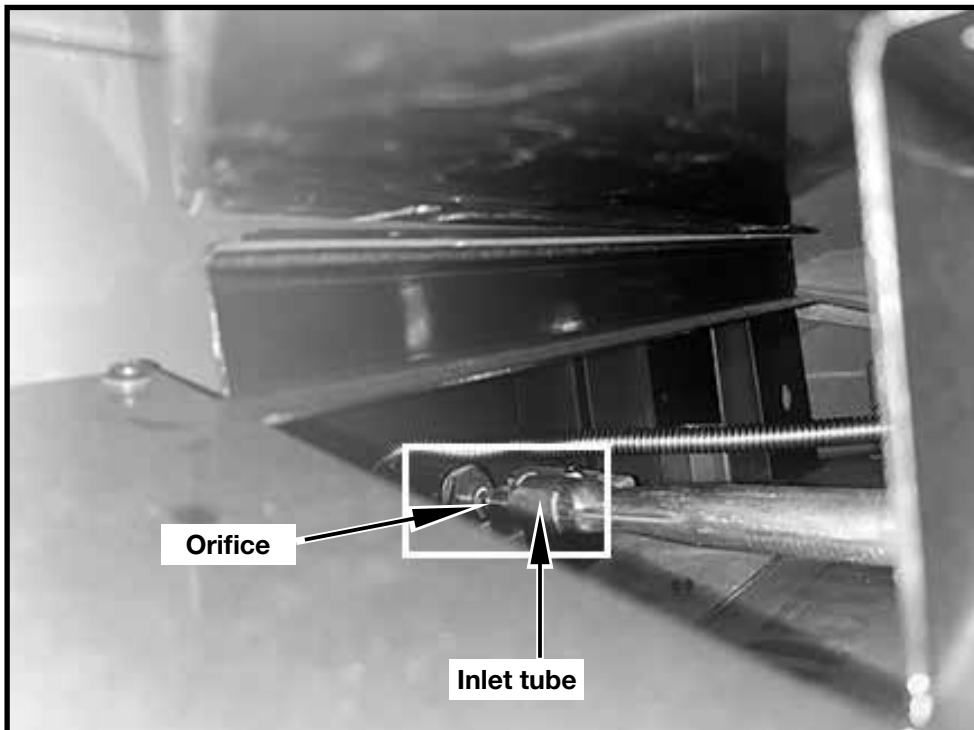


Figure 18: Orifice and inlet tube.



Figure 19: Center media spacer and securing screws.

10. Install the center media spacer. Secure the spacer and burner with two long screws (Figure 19).

Four holes must line up to set each screw. Some pressure may need to be applied to the front tray support on the shield to align the holes (Figure 20).

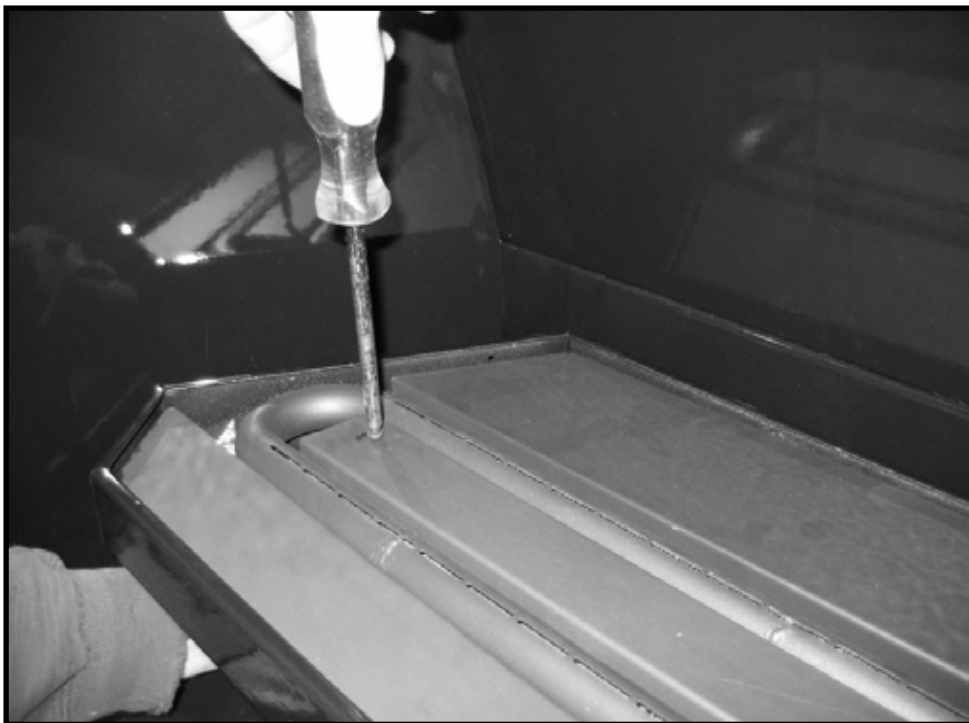


Figure 20: Securing center media spacer.



Figure 21: Applying glass media.

11. Apply just enough glass media to cover the burner assembly (Figure 21).

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

# 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 fireplace:

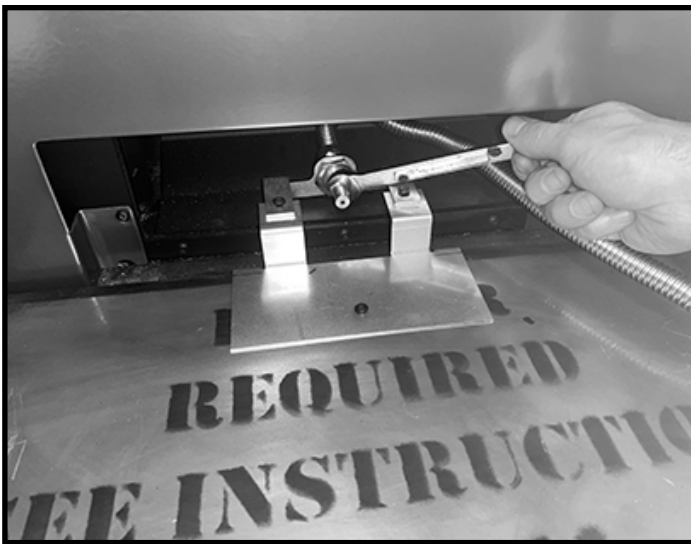


Figure 22: Replacing the orifice.

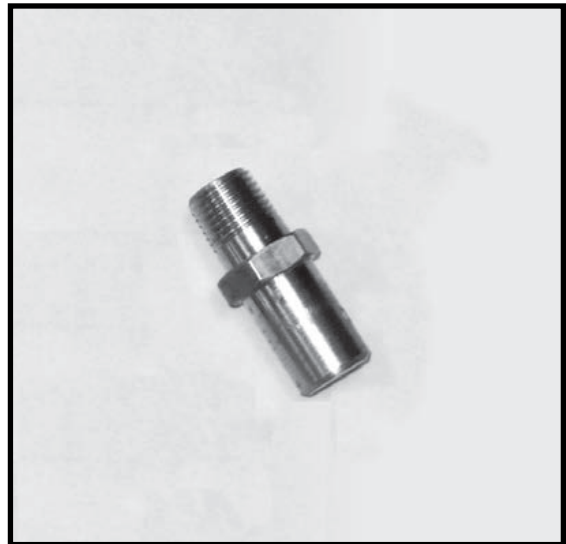


Figure 23: TC36 orifice.

1. Ensure the burner, pilot and gas supply are turned off, and the appliance has cooled.
2. With a  $\frac{1}{2}$ " wrench remove the natural gas orifice (Figure 22) and replace with propane orifice (marked "L1") (Figure 23).



Figure 24: Removing the pilot shield from burner tray.

3. Fully open the primary air shutter.
4. Remove the pilot shield from the burner tray by removing two screws (Figure 24).
5. With a 7/16" wrench, loosen the pilot head on the pilot assembly (Figure 25)

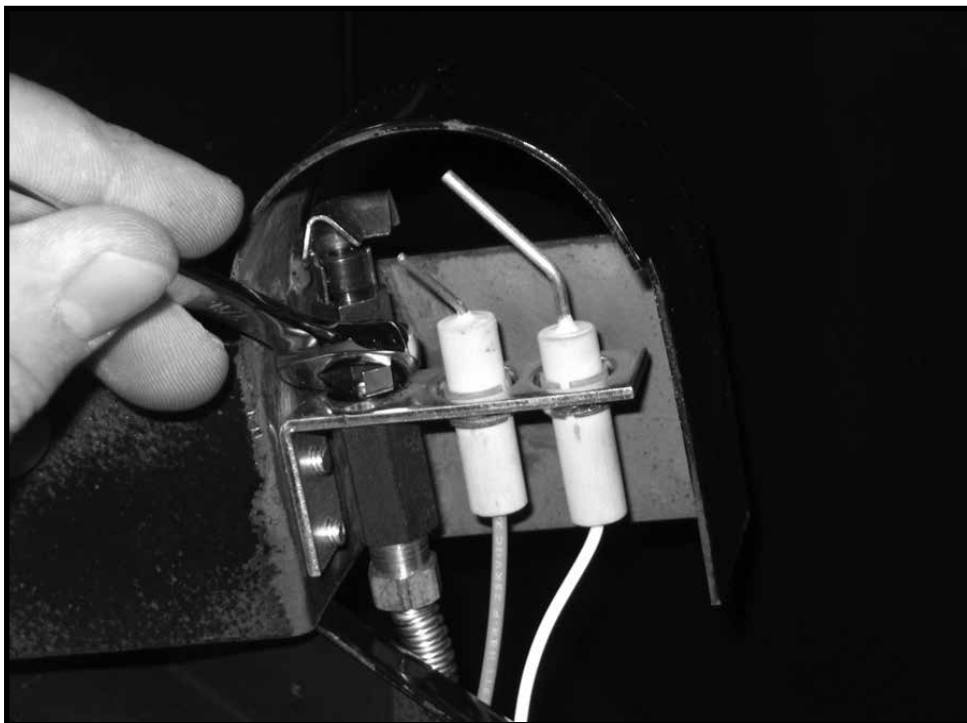


Figure 25: Loosening the pilot head.

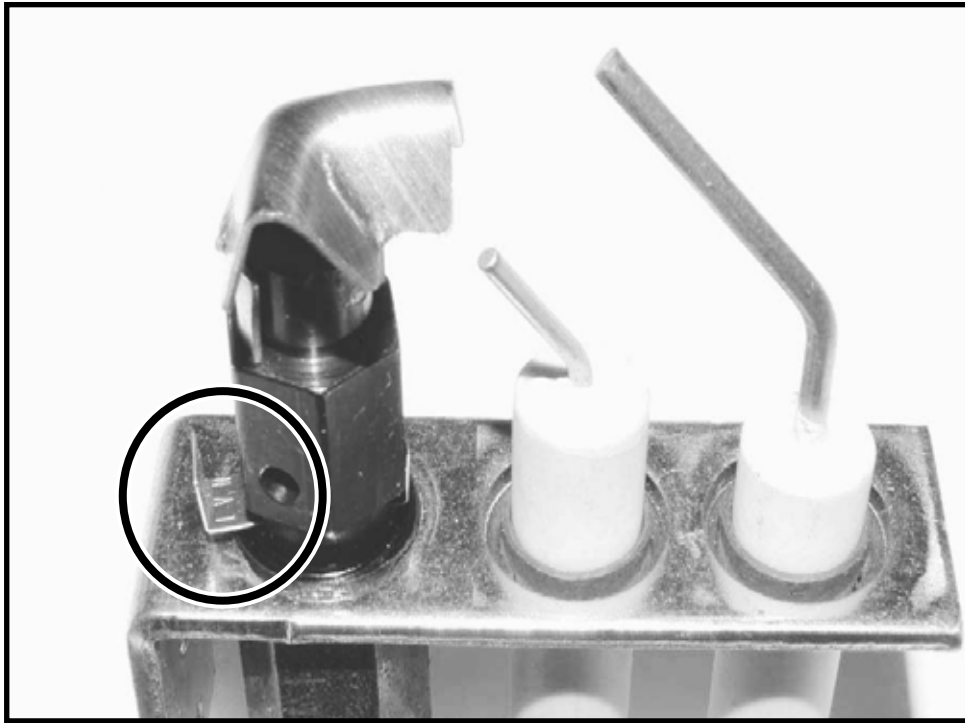


Figure 26: Band in natural gas position.

- Slide the pilot adjustment band over and ensure that the hole in the orifice band is showing. Figure 26 indicates that the pilot is in the Natural Gas position. Figure 27 indicates that the pilot is in the Propane Gas position.

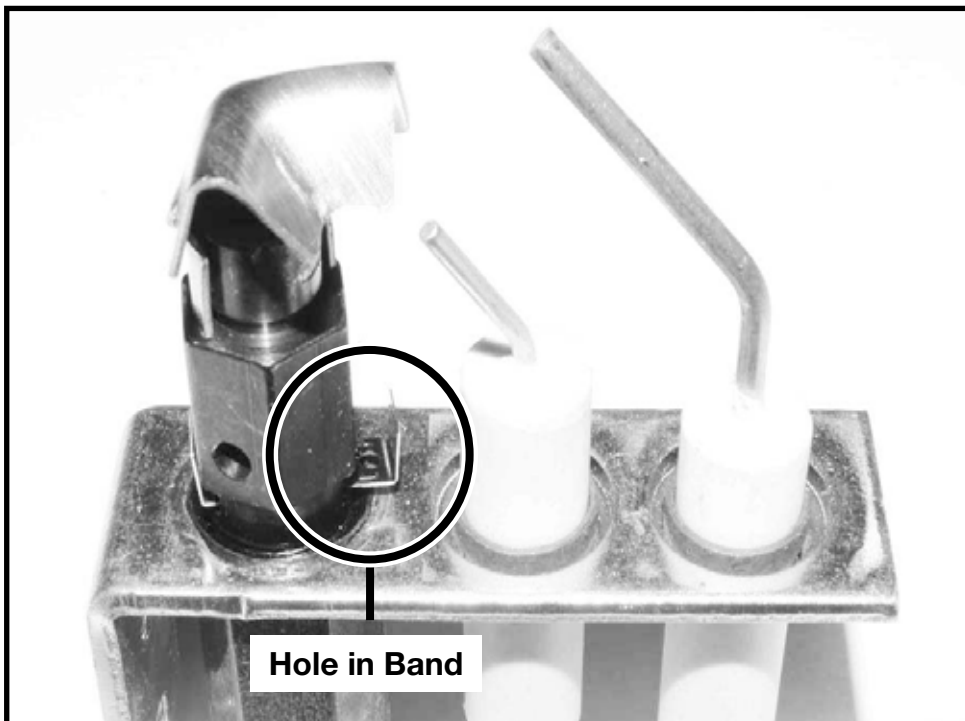


Figure 25: Loosening the pilot head.

7. Fill in the conversion label (Figure 28). 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.

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

Figure 28: Propane Conversion Label.

**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. Use a 3/16" Hex key to remove the blanking plug from the pressure test port. The plug is located between the right side lintel and firebox side (Figure 29).
2. Thread the extension test fitting into the open test port (Figure 30)
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.

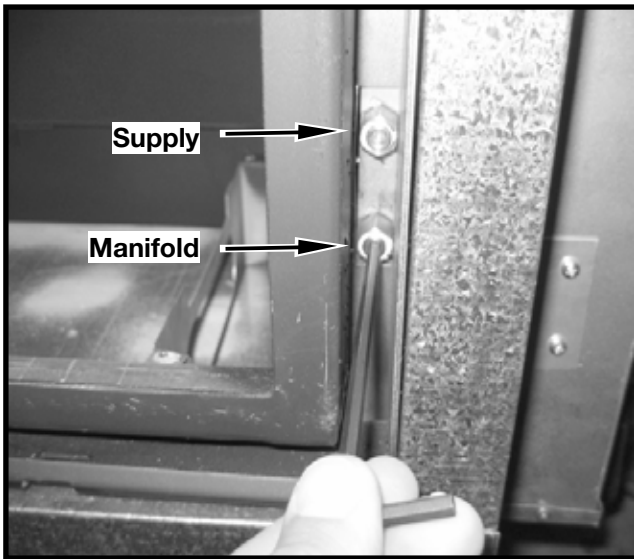


Figure 29: Removing blanking plugs.



Figure 30: Attaching test extension.

### Correct gas pressure requirement:

Supply Pressure	Natural Gas	Propane
Minimum	5.0" wc	12.5" wc
Maximum	13.9" wc	13.9" wc
<b>Manifold Pressure</b>		
Maximum	3.5" wc	10.0" wc
Minimum	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. For LP, 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. #26 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 31: Example of desirable flame appearance.

### **NOTE:**

**Proper air shutter setting is required.**

**The flame should be just orange and “lazy”. It should NEVER be set to create sooting on internal parts and window glass. Allow the fireplace to run for 30 minutes before evaluating flame appearance. See Figure 31 for an example of what a desirable flame pattern should look like.**

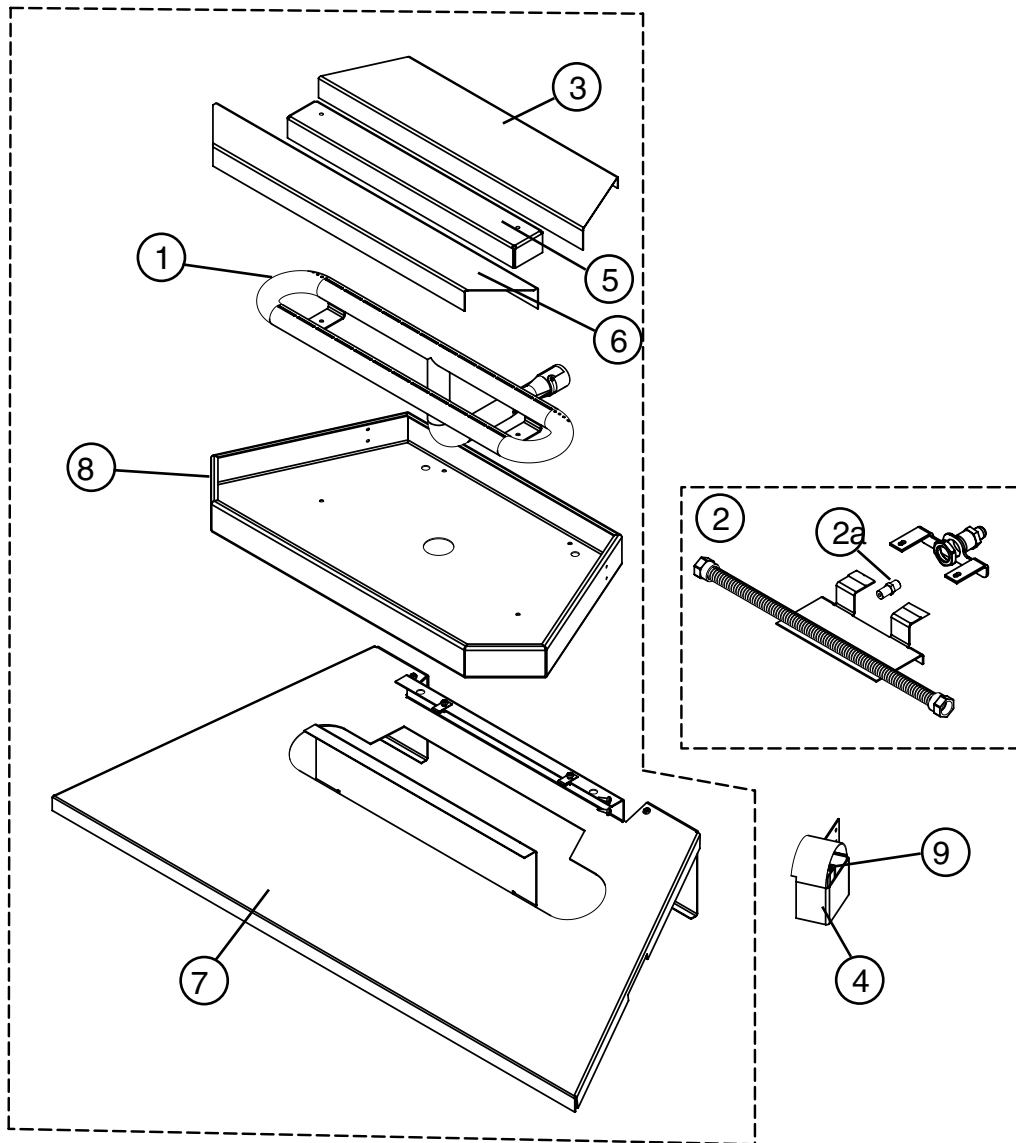
# Parts Diagram

NOTE: FIREPLACE & VALVE REPLACEMENT PARTS ARE LOCATED IN THE APPLIANCE INSTRUCTIONS

ITEM...	DESCRIPTION.....	PART NO.
1.....	BURNER TUBE .....	80000429
2a.....	ORIFICE, NG..... marked "NI"..	80001626
.....	ORIFICE, LP.....marked "LI"..	80002669
2.....	MANIFOLD ASSEMBLY .....	80001102
**3.....	MEDIA SPACER, REAR.....	9634
4.....	PILOT SHIELD .....	80002775
**5.....	MEDIA SPACER, CENTER .....	9635.001
**6.....	MEDIA SPACER, FRONT.....	9634.5

ITEM.....	DESCRIPTION.....	PART NO.
**7.....	BURNER SHIELD.....	9636.001
8.....	BURNER TRAY.....	80001103
9.....	PILOT ASSEMBLY, CONVERTIBLE.....	80000522
	c/w 1/4" flex tube(not shown)	
	HARDWARE PACKAGE.....	80002858

\*\*Not sold separately



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