

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

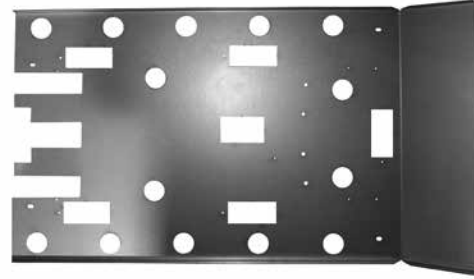
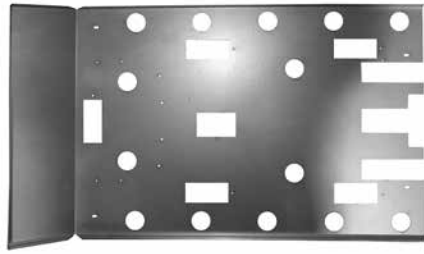
TCWS.54 SEE THRU TRANQUILITY BURNER KIT INSTRUCTIONS



SKU# 22150053
For TCWS54ST and
TCWS54 Indoor/Outdoor
Series D Fireplaces



Contents of Package



Secondary floor



Left burner (with tab)



Right burner



Outer burner tray legs



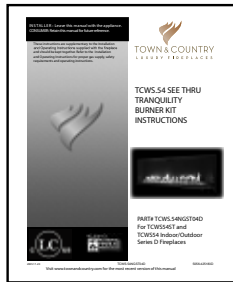
Center burner tray leg



Middle burner tray legs



Burner Tray



Manual & hardware



Rock set (5 boxes)



Tranquility Burner Installation

NOTE: For purposes of clarity, the “Front” of the fireplace shall be the side which has access to the electrical connection compartment cover, the connection to the gas valve and the side which places the control compartment cover and the coaxial vent located on top of the fireplace to your left.

Note: If converting fireplace from natural gas to propane gas, please refer to “Propane Conversion” on page 12 before proceeding.

Installing secondary floor panels and burners

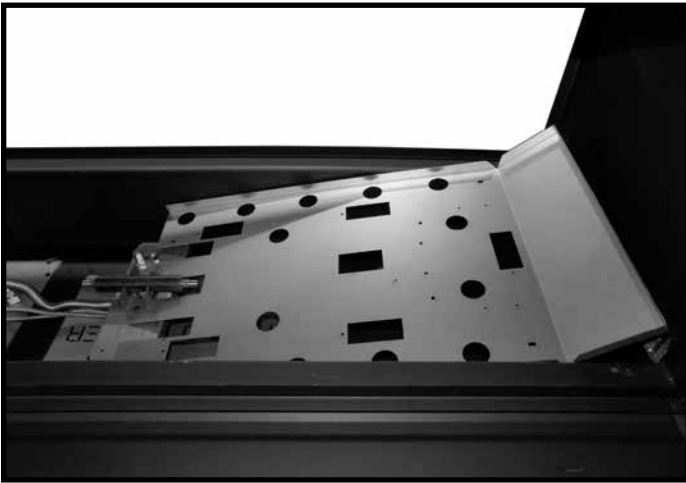


Figure 1: Inserting right side secondary floor.

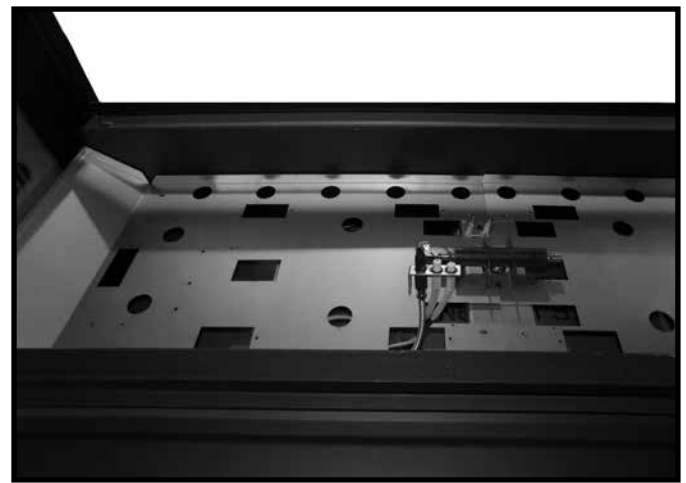


Figure 2: Inserting left side secondary floor.

1. With the electrical connection compartment to your left, insert one of the two secondary floor panel on the right hand side of the fireplace.
2. Insert the other secondary floor panel into the left side of the firebox. As the panel is lowered, feed the pilot assembly through the square opening in the panel as shown in Figure 3. Once the pilot is through the hole, and the secondary floor panels are seated properly, secure them with the screws provided.
3. Secure the center leg to the right hand secondary floor panel as shown in Figure 4.

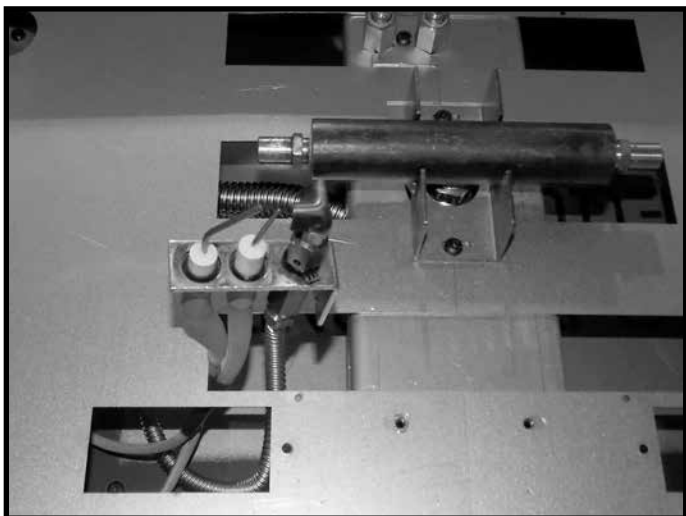


Figure 3: Feeding pilot assembly up through the left side secondary floor.

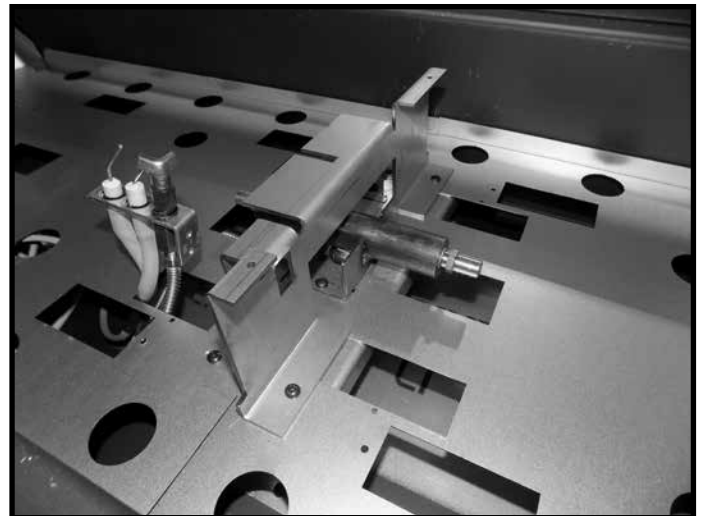


Figure 4: Securing the center leg.

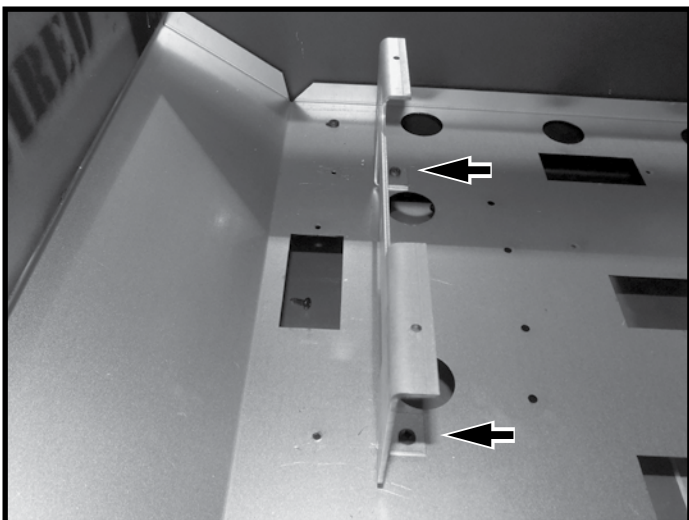


Figure 5: Securing outer leg on left hand side secondary floor panel.

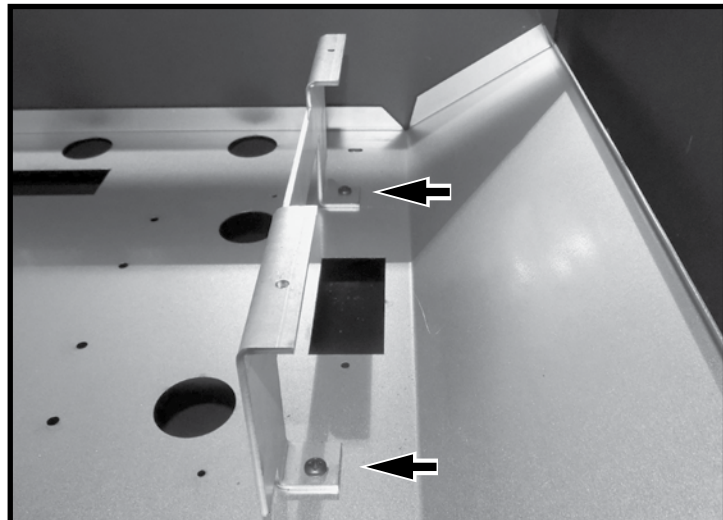


Figure 6: Securing outer leg on right hand side secondary floor panel.

4. Place one of the two outer legs on the left hand secondary floor panel. Be sure to secure this leg in the orientation shown and secure to the second set of holes in from the left side (Figure 5).
5. Place the other outer leg on the right hand secondary floor panel. Be sure to secure this leg in the orientation shown and secure to the set of holes furthest to the right (Figure 6).
6. Secure the pilot assembly, with the pilot shielded, to the center leg as shown in Figure 7. Use two Robertson screws supplied with kit.

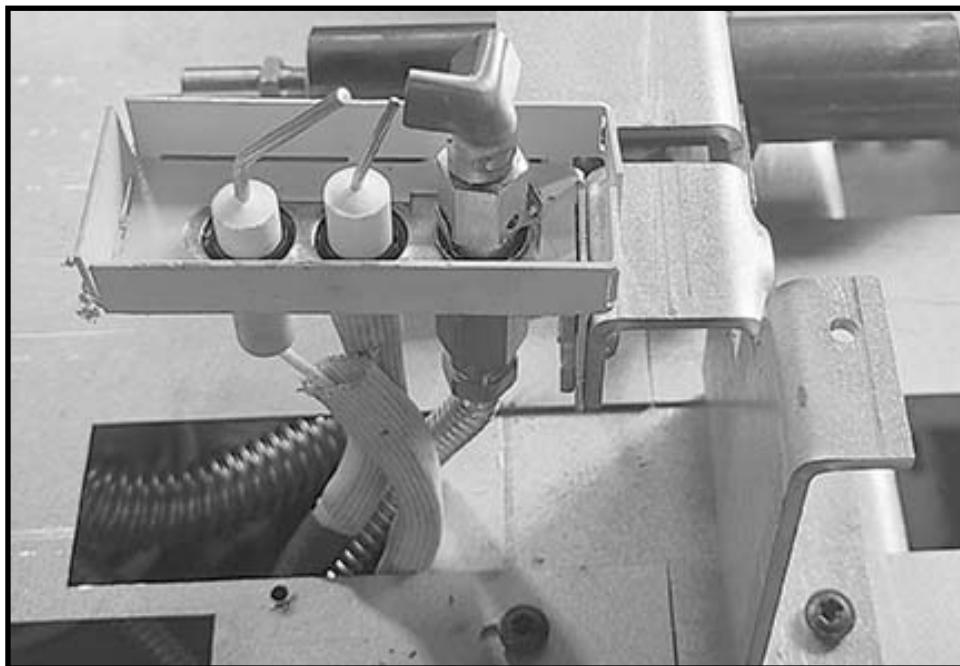


Figure 7: Securing pilot assembly to center leg.

NOTE: Check air shutter for correct fuel setting before proceeding any further. Both burner shutters are to be set the same. Fully closed for **NATURAL GAS** and 3/16" open for **LIQUID PROPANE**.

CAUTION: The burners should be tightly butted up against each other at the center to ensure correct operation.

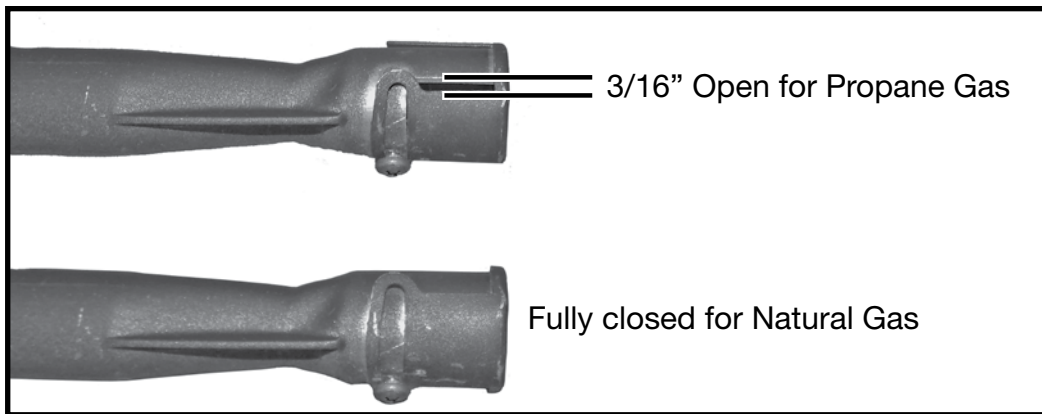


Figure 8: Shutter gap settings.

7. Check to see that the air shutters on the burners are set to the gas type being used before installing the burners (Figure 8).
8. The left hand burner has a tab on its underside. This tab will fit into the slot located on the top of the center leg (Figure 9).
9. While lining up the tab and the slot, fit the air shutter over the orifice. Lay the burner down onto the center leg and the outside left leg. Move the burner toward the center of the fireplace until the tab reaches its end in the slot (Figure 10).
10. Install the right hand burner by laying it down on the center leg and the outside right leg.

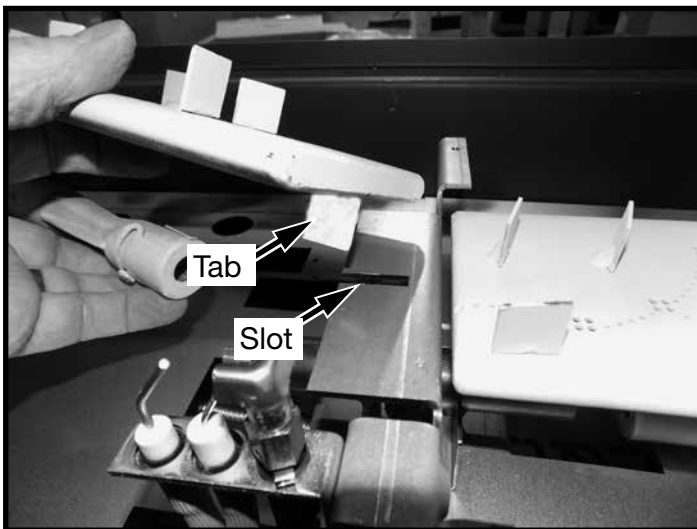


Figure 9: Installing left hand burner tab to center leg.

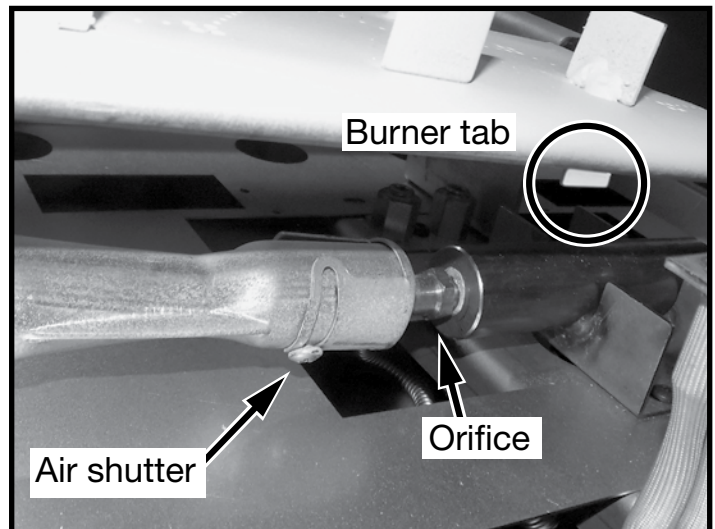


Figure 10: Installing left hand burner air shutter onto orifice.

Install Side Panels

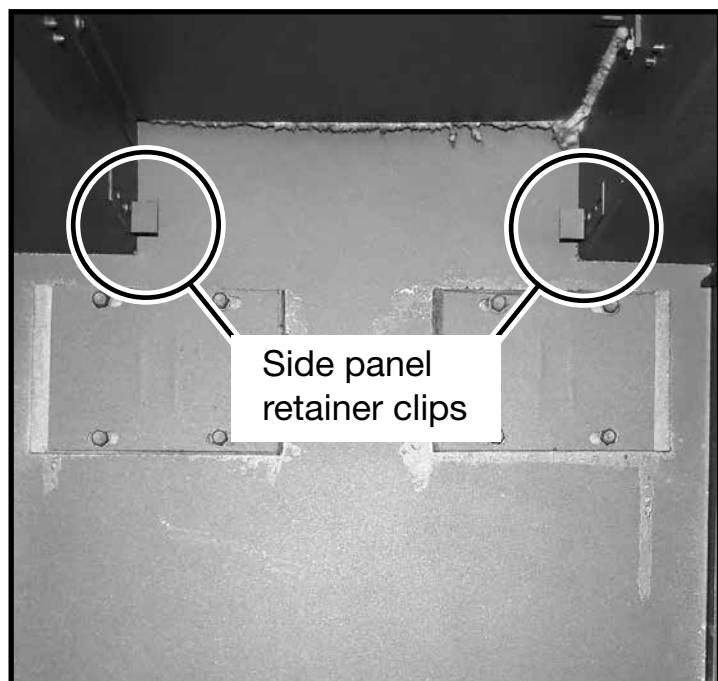


Figure 11: Side panel retainer clips location.

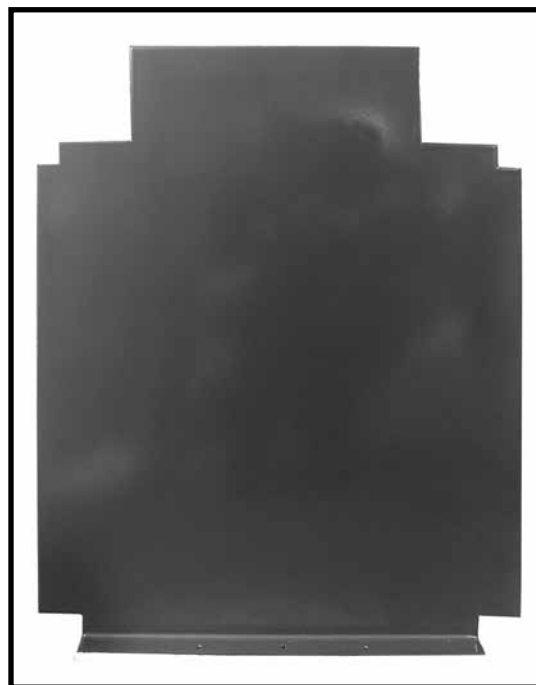


Figure 12: Side panel.

11. If not already removed, remove the side panel retainer clips located in the upper firebox (Figure 11). There are two clips at each end of the firebox.
12. Position one of the two side panel into the firebox as shown in Figure 13. Reattach the side panel retainer clips. Make sure that the clips are right up against the side panels before tightening screws (Figure 14).



Figure 13: Installing side panel.



Figure 14: Reinstalling side panel retainer clips.

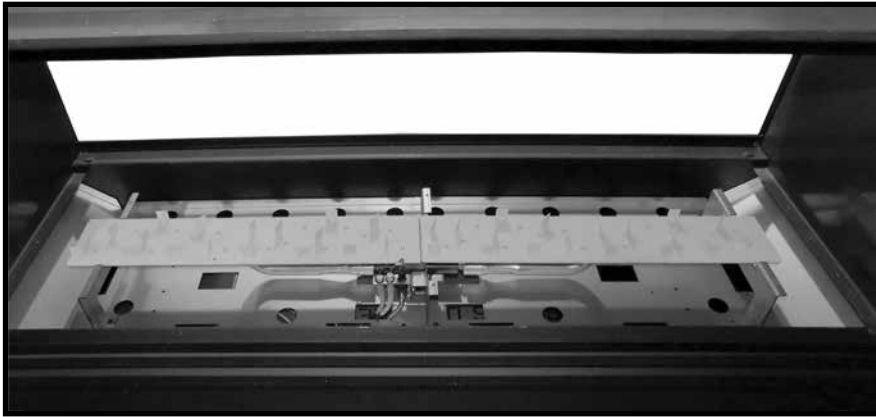


Figure 15: Burners and side panels in place.



Figure 16: Burner tray in place.

13. With the side panels in place, install the burner tray cover and secure with six screws onto the legs. There is a opening for the pilot assembly in the burner tray (Figure 16).

Installing sand and decorative rocks



Figure 17: Brushing the sand smooth in the burner tray.

14. Pour sand into the burner tray and gently spread and smooth using the supplied brush (Figure 17). Try to keep all of the sand in the tray and avoid spill over.



Figure 18: Bottom of rock with arrow.

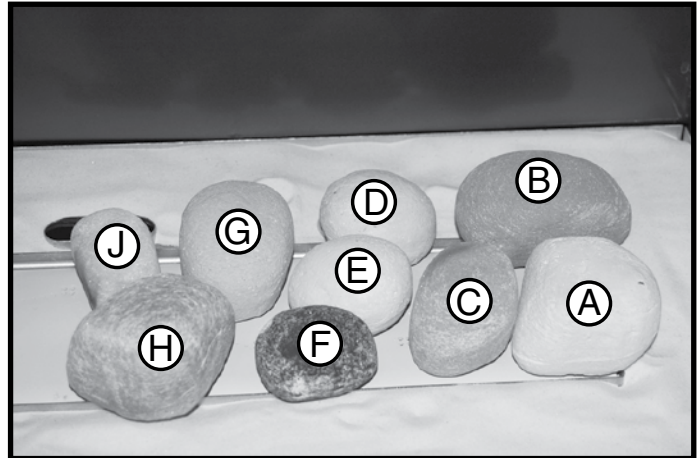


Figure 19: Single set of rocks.

15. Position yourself at the “REAR” of the fireplace - as a reminder, the front is the side which puts the electrical connection compartment and the exhaust flue on your left hand side. Each rock has a slot in it's base and is marked with a letter and an arrow (Figure 18). The rocks must be positioned so that the arrows point toward you. There are nine rocks per box and there are five boxes of rocks included with the burner kit. Four sets (Figure 19) will be placed onto the tabs with the fifth set of rocks placed randomly as desired. In this example, the final rock to be placed will be a “B” rock. Note: There is no “I” rock.

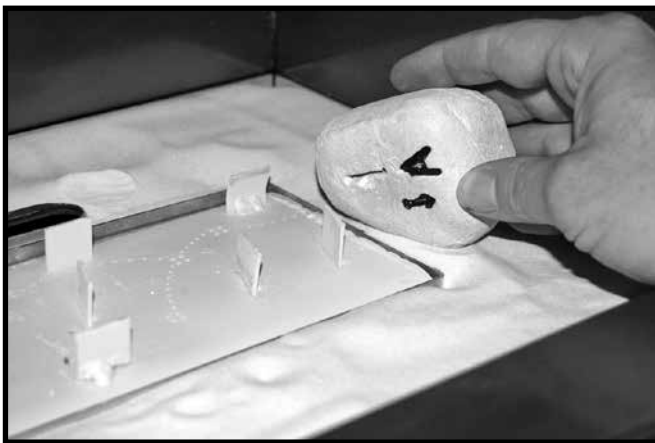


Figure 20: Rock A right side.

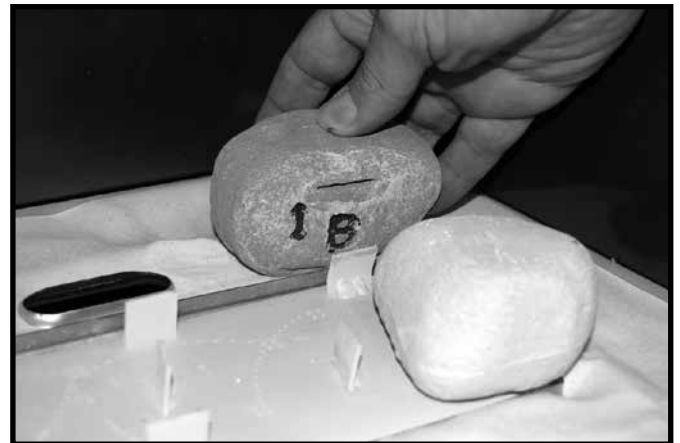


Figure 21: Rock B.

16. Begin by placing an “A” rock on the right hand most tab. Then work your way to the left placing the rocks as shown in Figure 20 through Figure 30.

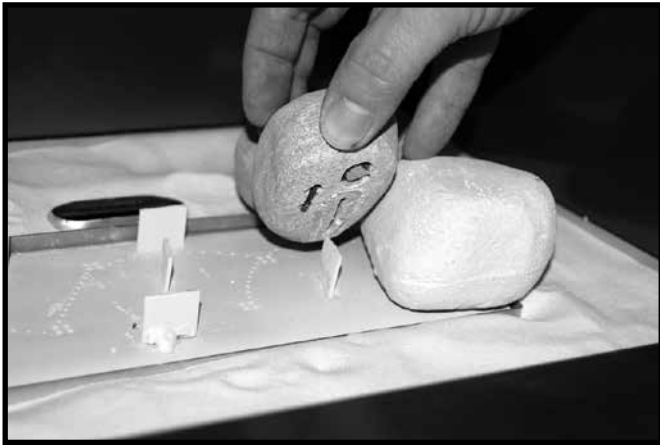


Figure 22: Rock C.

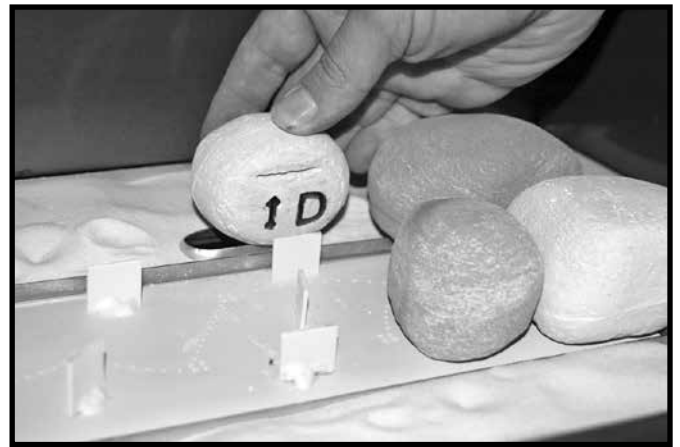


Figure 23: Rock D.

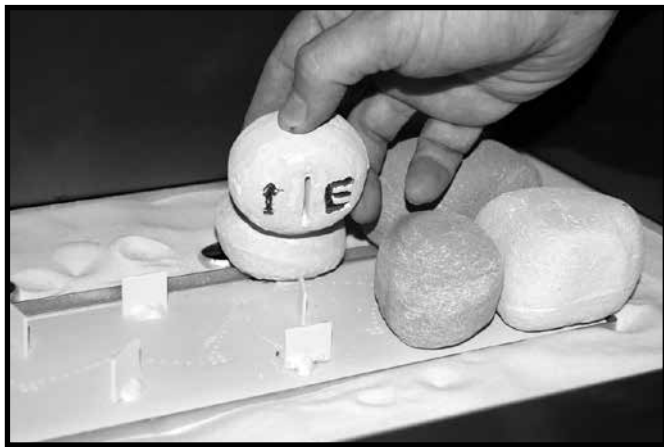


Figure 24: Rock E.



Figure 25: Rock F.

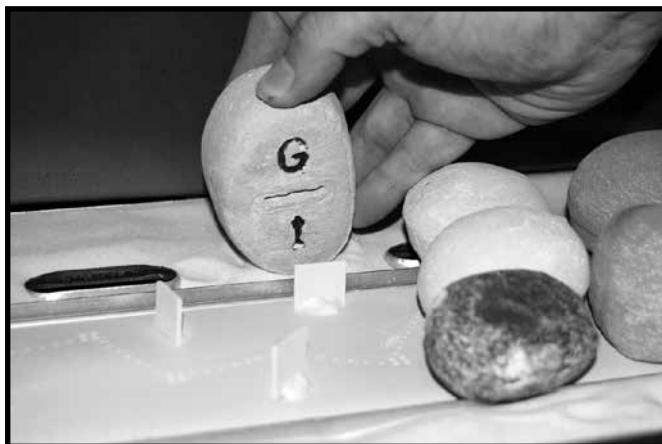


Figure 26: Rock G.

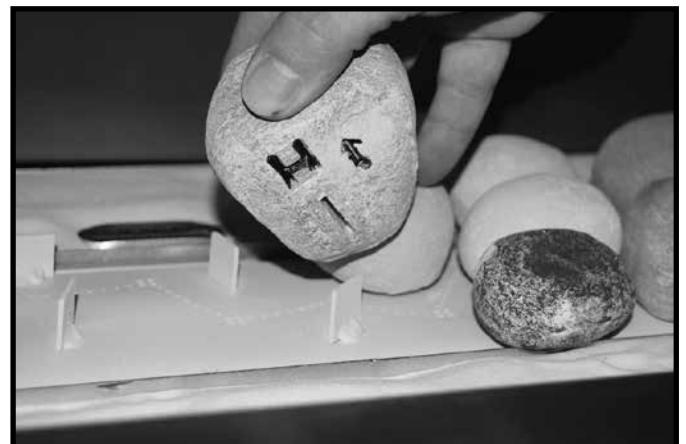


Figure 27: Rock H.



Figure 28: Rock J.



Figure 29: Rock A left side.



Figure 30: Rock B left side.



Figure 31: Exposed pilot assembly.



Figure 32: Pilot rock.



Figure 33: Pilot rock in place.

17. Pilot rock. Once all rocks have been positioned, a hollow pilot rock (Figure 32) will cover the pilot assembly. Place it so that its side opening allows the pilot flame to extend to the burners (Figure 33).
18. Place the two edge panels along the length of the fireplace (Figure 34) with the short side facing toward the center (Figure 35).

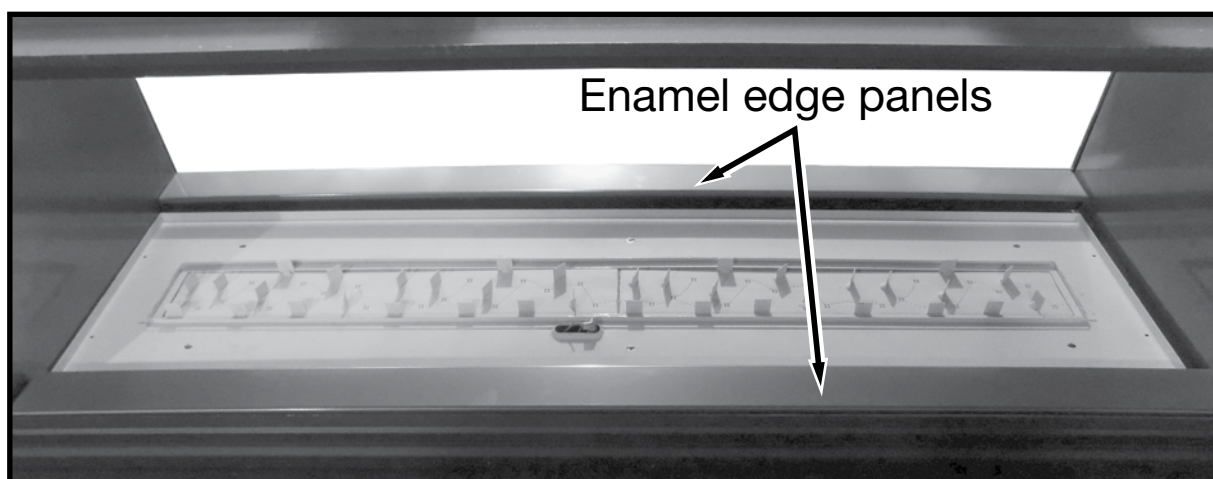


Figure 34: Edge panels in place.

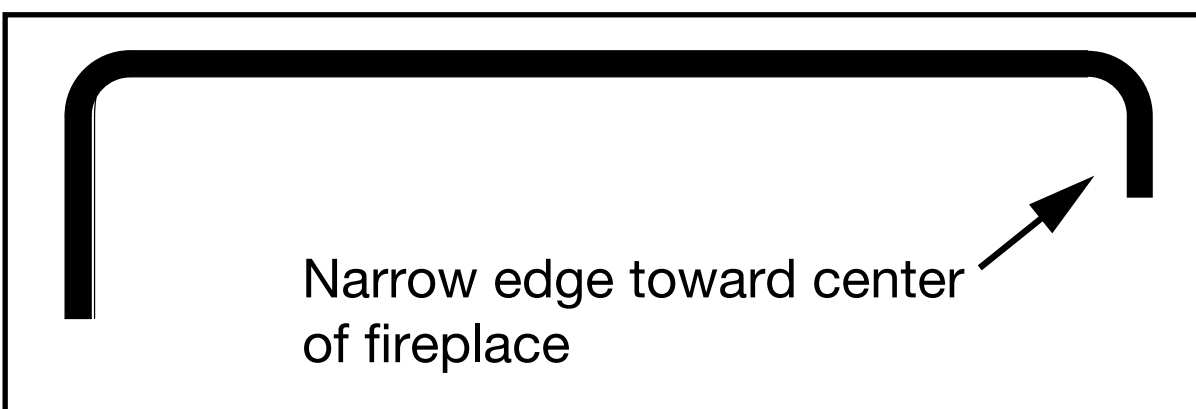


Figure 35: Edge panel profile.

Propane Conversion

If this unit is to be used on propane convert as follows using the components supplied with the propane gas conversion kit. Propane conversion kit part number is SKU# 22180011.

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

CAUTION

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

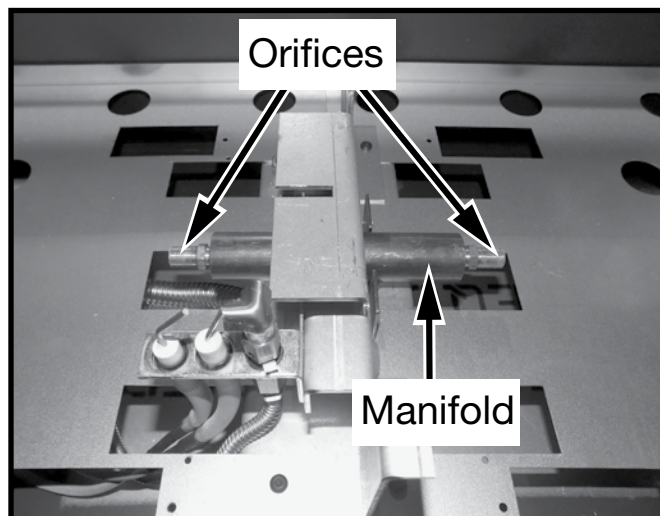


Figure 36: Orifice location.

1. If installed, remove the burner media (rocks, glass, etc.) from the burner tray. Remove the edge panels, burner tray and the burners.
2. Using a 1/2" wrench, undo the natural gas burner orifices (Figure 33) and replace with the propane gas orifices included in the conversion kit. 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 manifold.

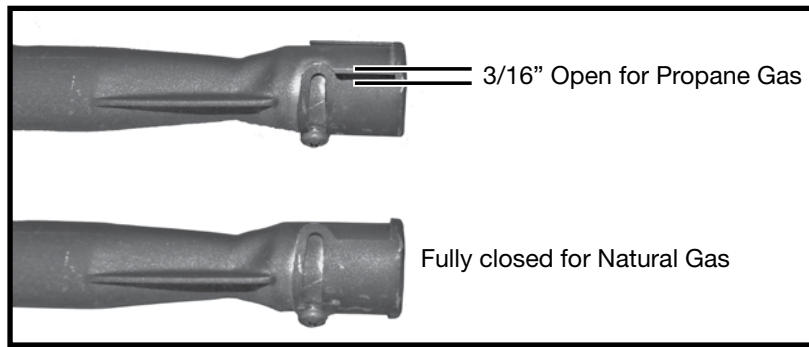


Figure 37: Shutter gap settings.

3. Loosen the primary air shutter screw on each burner, open the shutter to give a gap of 3/16" and re-tighten (Figure 37).

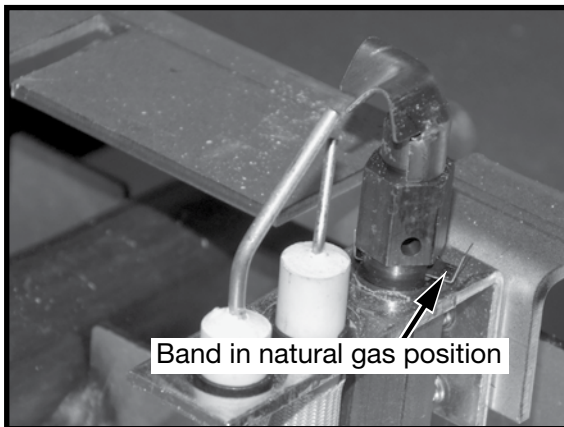


Figure 38: Pilot in natural gas position.



Figure 39: Loosening pilot head.

4. With a 7/16" wrench loosen the pilot head on the pilot assembly
5. Slide the pilot adjustment band over (Figure 40) and ensure that the hole in the orifice band is showing.

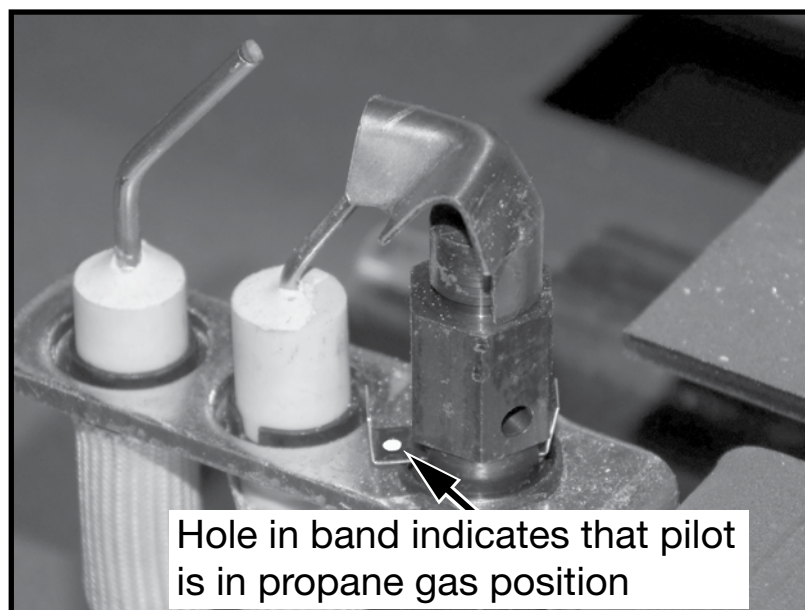


Figure 40: Pilot band in propane gas position.

Accessing the gas valve for conversion

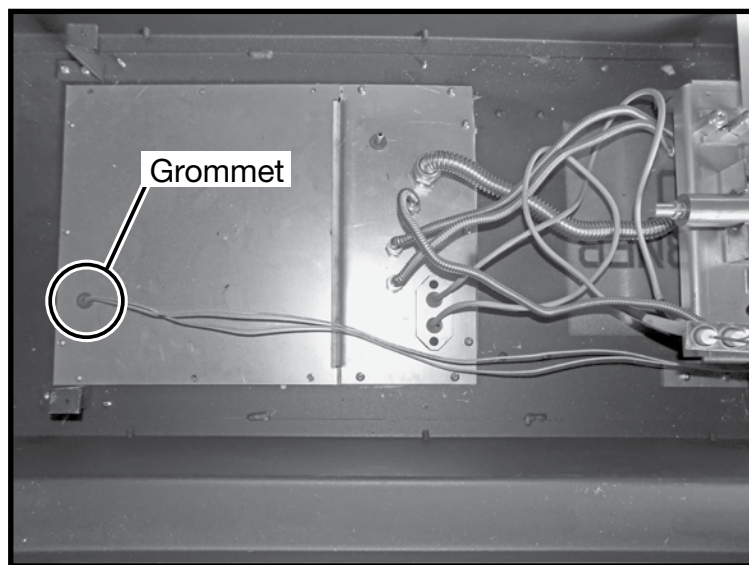


Figure 41: Wires through grommet.

1. If installed, remove the burner media (rocks, glass, etc.) from the burner tray. Remove the edge panels, burner tray, left hand burner, left hand side panel, release pilot assembly from center leg and remove left hand secondary floor panel.
2. Remove large cover panel. If this fireplace has lighting built in to the secondary floor, it will be necessary to disconnect the lighting wires from the electrical connection compartment in front of the control box in order to withdraw the lighting wires through the grommet (Figure 41). Make sure that the power is turned off at the breaker box.

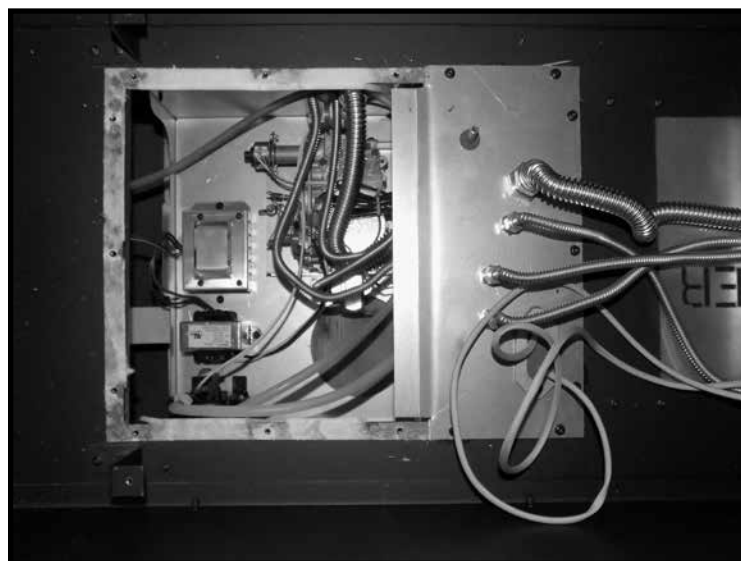


Figure 42: Large cover removed.

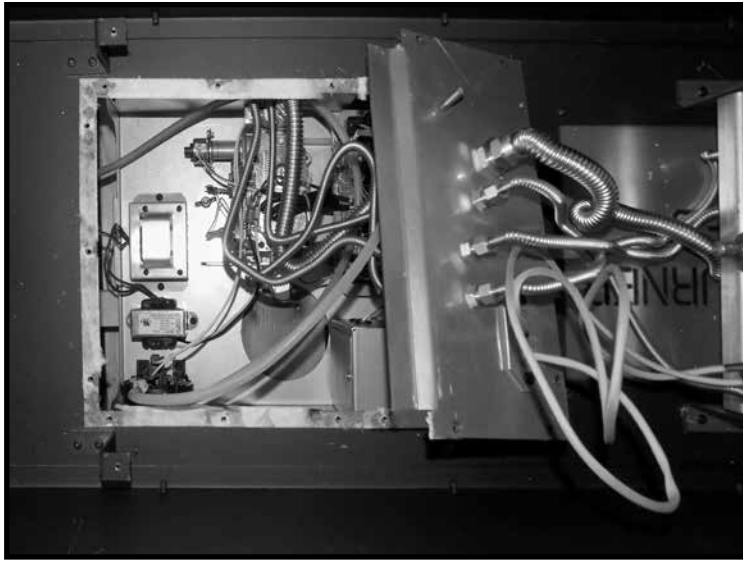


Figure 43: Small plate lifted to provide access to connector.

3. Remove screws for the small cover panel and lift the panel and flexible gas lines enough to be able to get your hand underneath it (Figure 43).
4. Locate the stepper (Figure 44) and follow its wires back to its electrical connection and disconnect (Figure 45).
5. Return to the stepper and locate the two screws attaching the stepper to the valve.
6. Complete the gas valve conversion from natural gas to propane gas according to the instructions included in the SIT propane gas conversion kit.

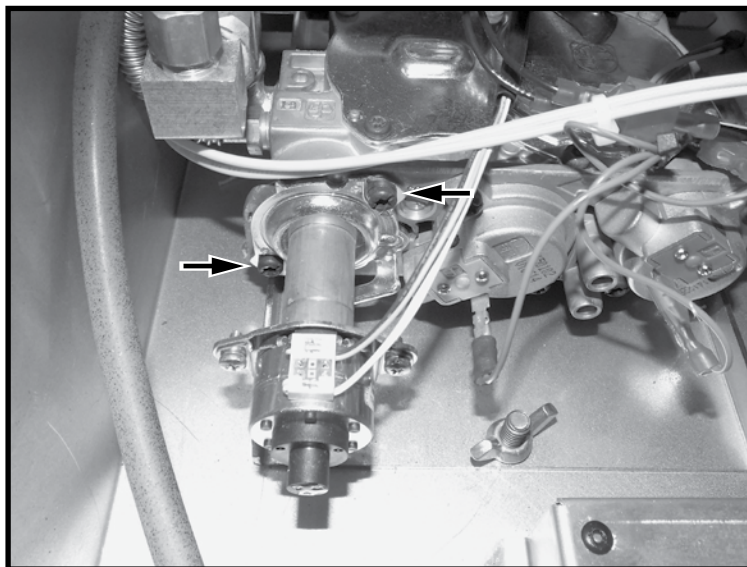


Figure 44: Stepper screws access.

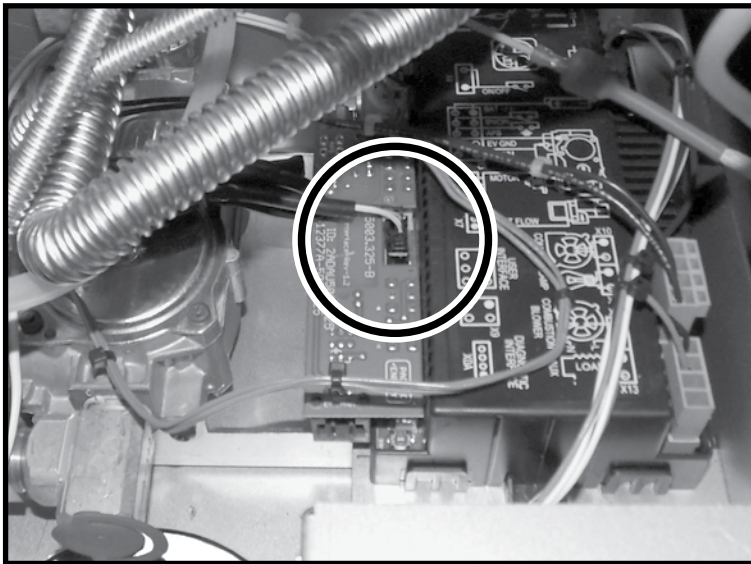


Figure 45: Stepper connector location.

7. Once conversion is complete, fill out and affix the gas conversion label (Figure 46) to the inside of the gas valve inside of control box where it will not be affected by the heat of the firebox.

This appliance was converted to propane gas	
<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <div style="background-color: #cccccc; height: 15px; width: 100%;"></div> </div> <p style="text-align: center; margin: 0;">Kit Number</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <div style="display: flex; justify-content: space-between; width: 100%;"> dd mm yy </div> </div> <p style="text-align: center; margin: 0;">Company</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <div style="background-color: #cccccc; height: 15px; width: 100%;"></div> </div> <p style="text-align: center; margin: 0;">Address</p> <p style="font-size: small; margin: 0;">The above accepts the responsibility that this conversion has been properly performed.</p>	<div style="text-align: center; margin-bottom: 10px;"> </div> <p style="text-align: center; margin: 0;">5052.52001-B</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <div style="background-color: #cccccc; height: 15px; width: 100%;"></div> </div> <p style="text-align: center; margin: 0;">Adresse</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <div style="background-color: #cccccc; height: 15px; width: 100%;"></div> </div> <p style="text-align: center; margin: 0;">Firme</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <div style="background-color: #cccccc; height: 15px; width: 100%;"></div> </div> <p style="text-align: center; margin: 0;">Numéro d'assemblage</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> <div style="background-color: #cccccc; height: 15px; width: 100%;"></div> </div>
<div style="text-align: center; margin-bottom: 10px;"> </div> <p style="text-align: center; margin: 0;">5052.52001-B</p>	<p style="text-align: center; margin: 0;">Cet appareil a été converti en gaz propane</p>

Figure 46: 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.

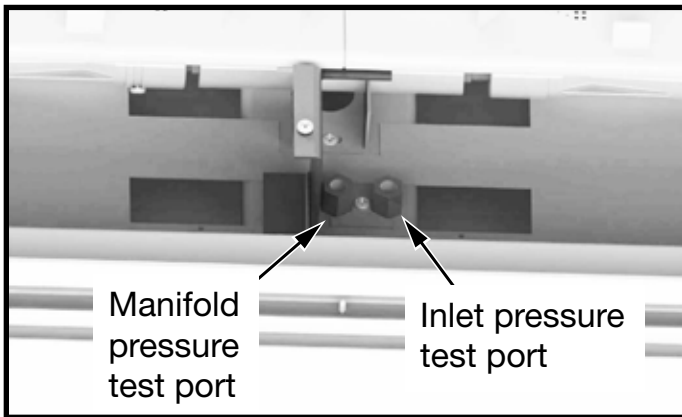


Figure 47: Gas pressure test ports.

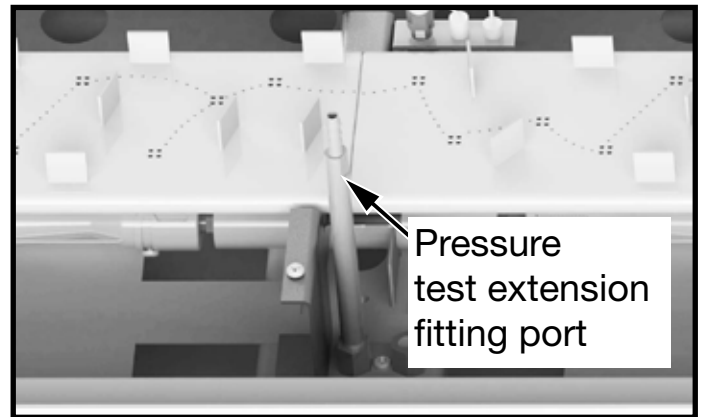


Figure 48: Pressure test extension fitting.

1. If installed, remove all media and the burner tray.
2. Remove the plug from the pressure test port using a 3/16" hex key. The pressure test ports are located next to the center tray leg opposite from the pilot (Figure 47).
3. Thread the extension test fitting into the open port (Figure 48).
4. Attach a pressure gauge onto the fitting and rest the gauge on secondary floor where it will be visible with the doors closed and unit running.
5. 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	3.5" WC	10" 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 See “Shutter gap settings.” on page 13. 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 49 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 49: Desirable flame appearance.

NOTE:

Proper air shutter setting is required.

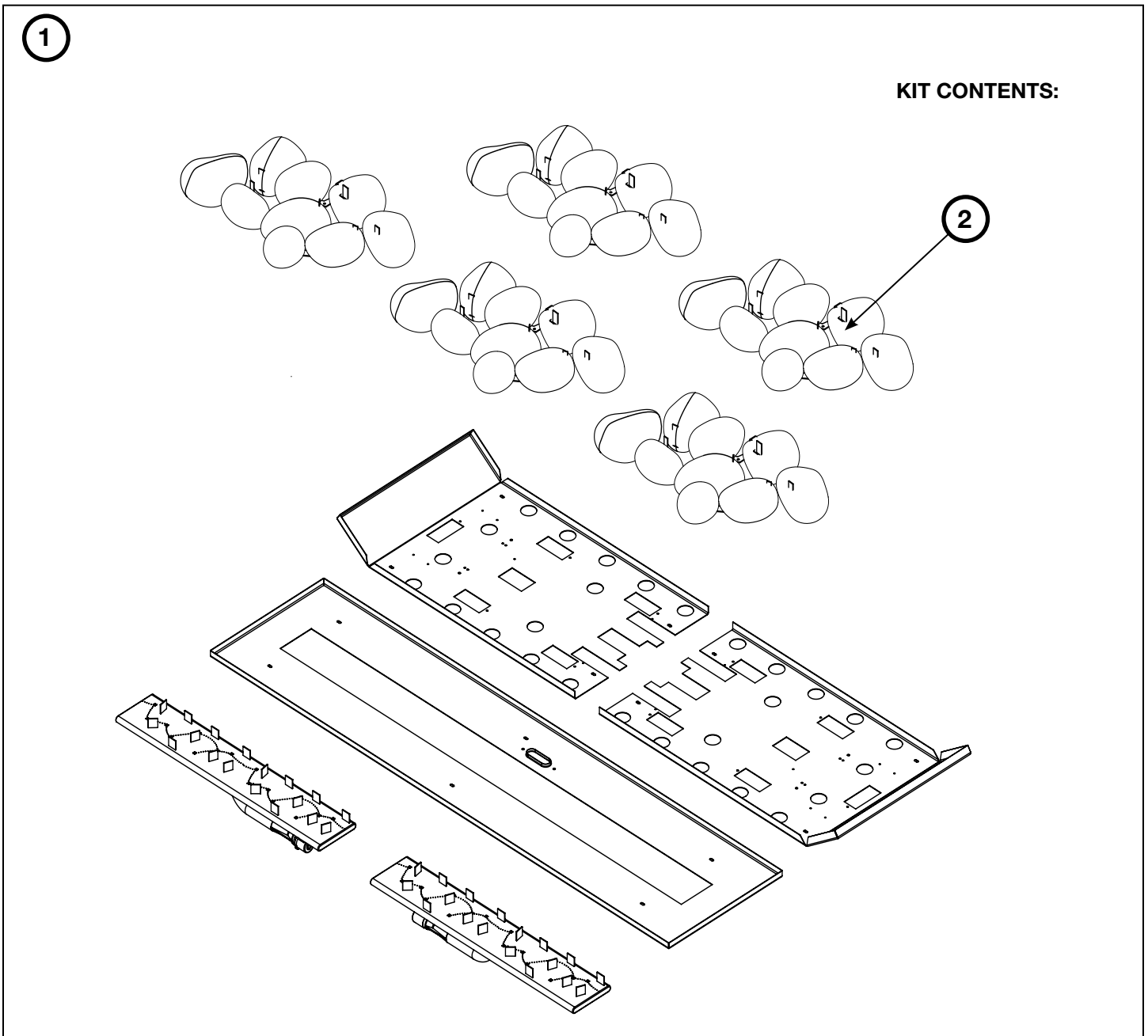
The flame should be just orange and “lazy”. It should NEVER be set to create sooting on internal parts and window glass.

Parts Diagram

(WHEN ORDERING, INCLUDE PART NUMBER WITH DESCRIPTION)

ITEM	DESCRIPTIONPART	NO.	SKU
#1	TRANQUILITY BURNER KIT		22150053
#2	PEBBLE ASSEMBLY(1 Box).....		80001272
* #3	SAND (1 Bag)		80000486
* #4	PILOT ROCK		80000559

* NOT SHOWN



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