

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

TC54 COUNTRY HOME BURNER KIT



**SKU# 22150054
For TC54 Series D
Fireplaces**



Package Contents

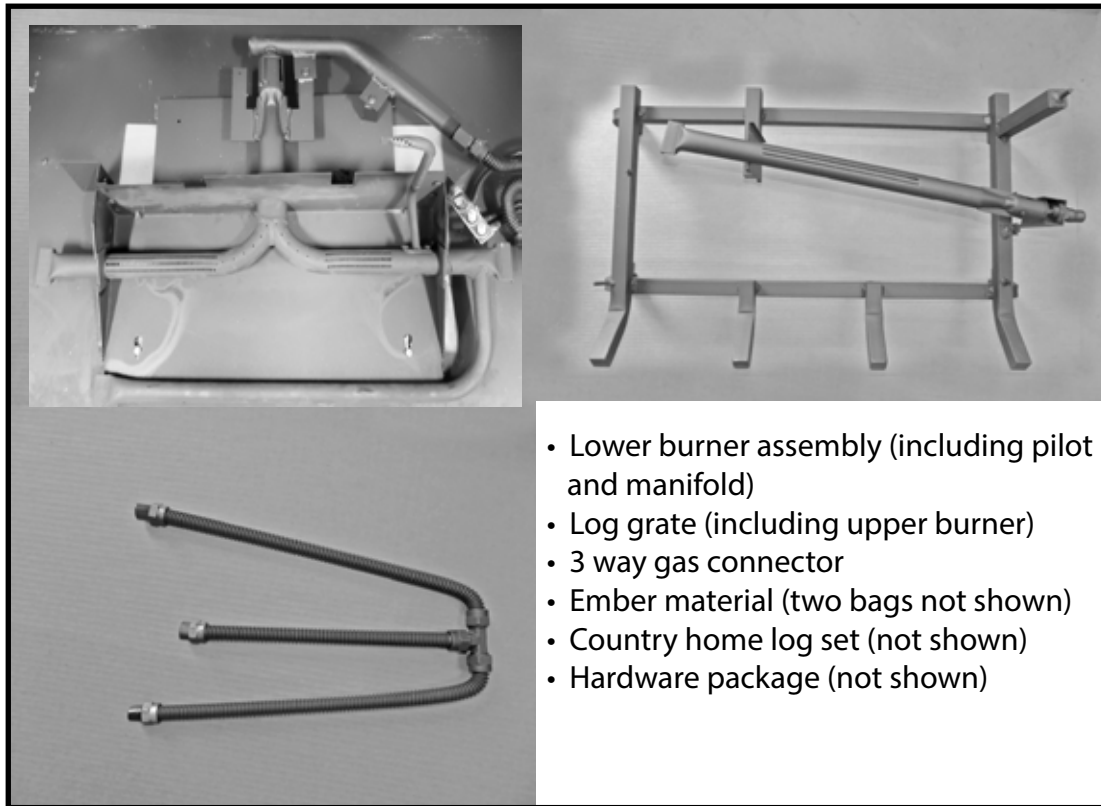


Figure 1: Country home package contents.

Note: If converting this fireplace from natural gas to propane at the same time as installing this new log set, complete the propane gas conversion, See “Propane Conversion” on page 11 first to avoid possible damage to the new log set.

Burner / Grate Installation



Figure 2: Access cover to valve control center.

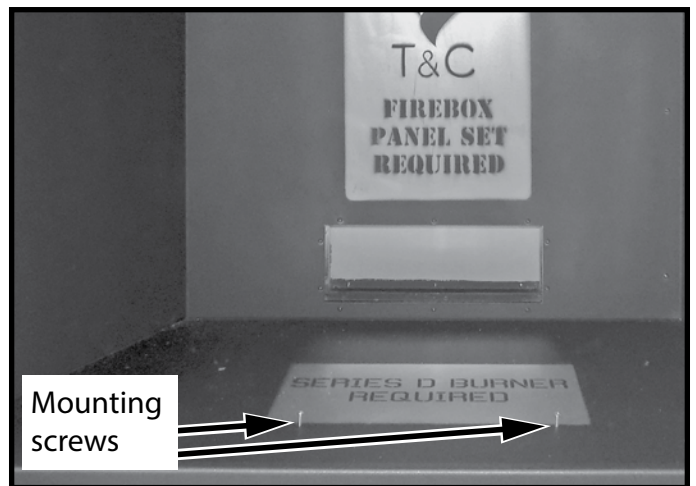


Figure 3: Lower burner mounting screws.

1. Remove the cover to the valve control center located on the inside right of the firebox (Figure 2).
2. If installing burner into a new fireplace, place the lower burner onto the floor of the fireplace and secure the burner with the two mounting screws (Figure 3).

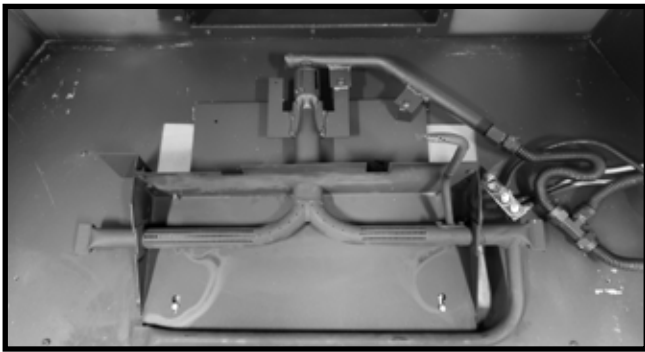


Figure 4: Lower burner placement.



Figure 5: Lower burner keyhole slot.

3. Tighten screws once the lower burner has been fitted onto the keyhole slots (Figure 5).
4. Replace/insert the 3 ceramic filler pieces into the center of, and to the upper left and right hand side of lower burner (Figure 6).
5. Connect the pilot gas tube to the gas manifold using a 1/2" wrench and feed the ignition and flame sensor wires (Figure 7) through the bulk head plate by pushing them through into the control compartment. These wires will be connected to the IFC in a later step.

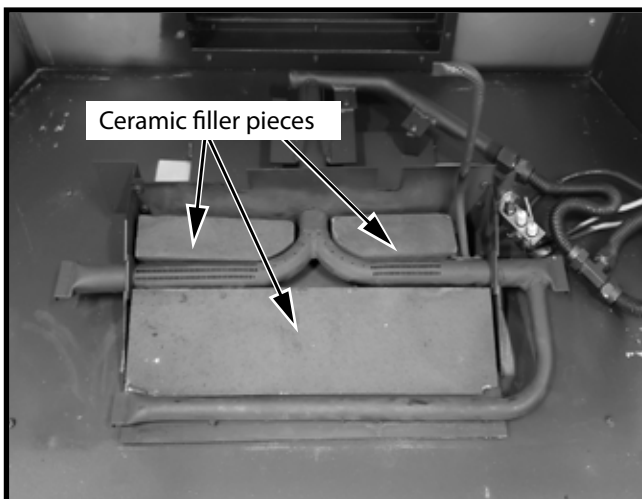


Figure 6: Ceramic filler pieces.

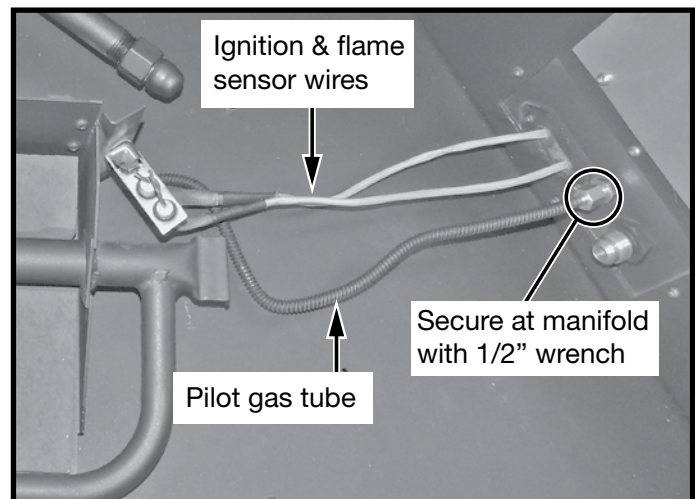


Figure 7: Lower burner gas and electrical connections.

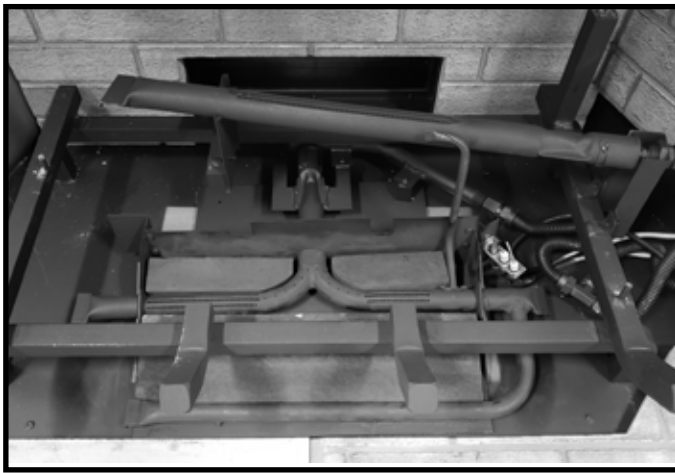


Figure 8: Log grate with upper burner.

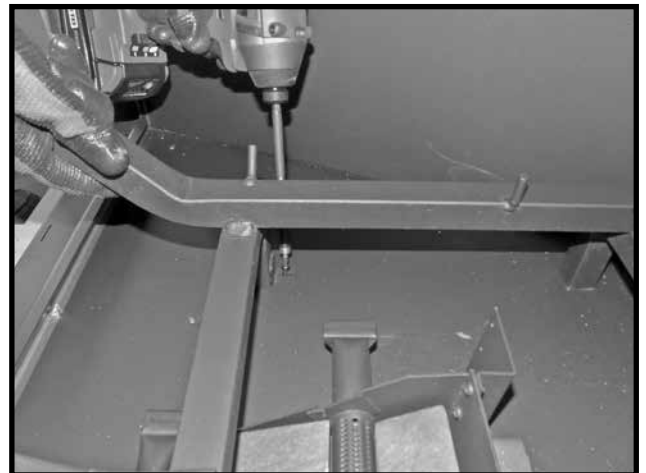


Figure 9: Securing left side of grate to firebox floor.

6. Place the log grate with the attached upper burner onto the firebox floor (Figure 8). Locate two screw holes on the firebox floor at the front of the grate and secure (Figure 9 and Figure 10).

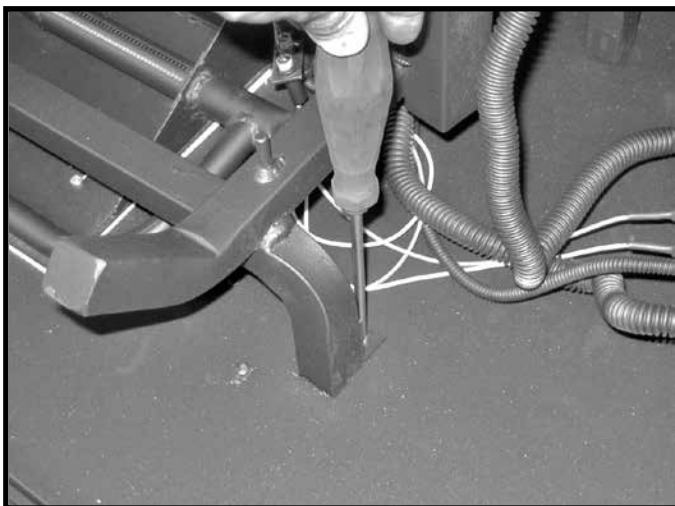


Figure 10: Securing right side of grate to firebox floor.

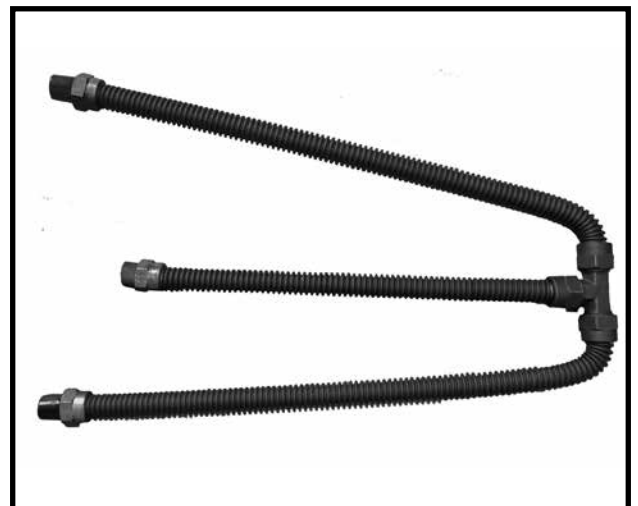


Figure 11: Gas connector.

7. The gas connector (Figure 11) will connect the upper and lower burners to the gas supply manifold. Begin by attaching the center leg of the connector to the gas fitting located onto the bulk-head (Figure 12). Continue by connecting the two remaining legs of the connector to the upper and lower burners (Figure 13). The fittings on the connectors use a 7/16" wrench.

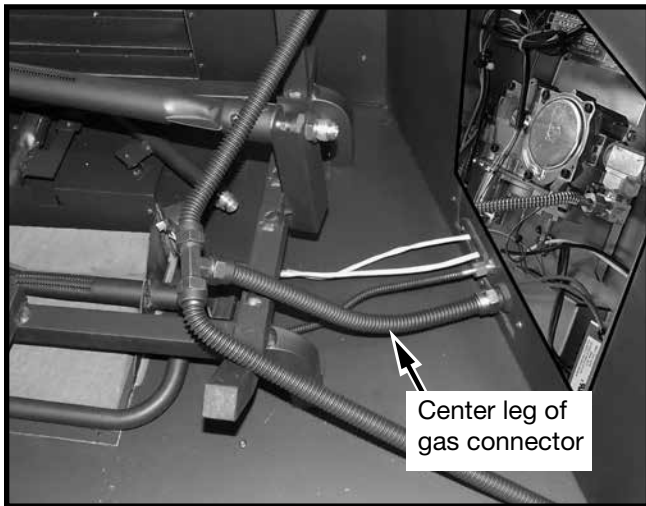


Figure 12: Attaching gas connector to bulkhead fitting.

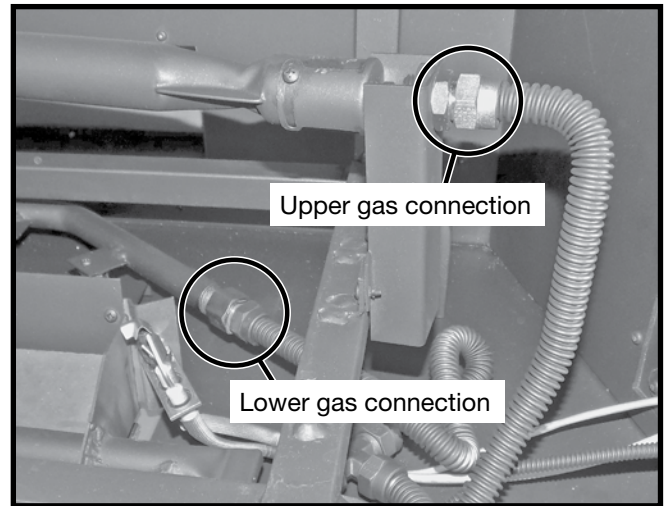


Figure 13: Gas connector to upper and lower burners.

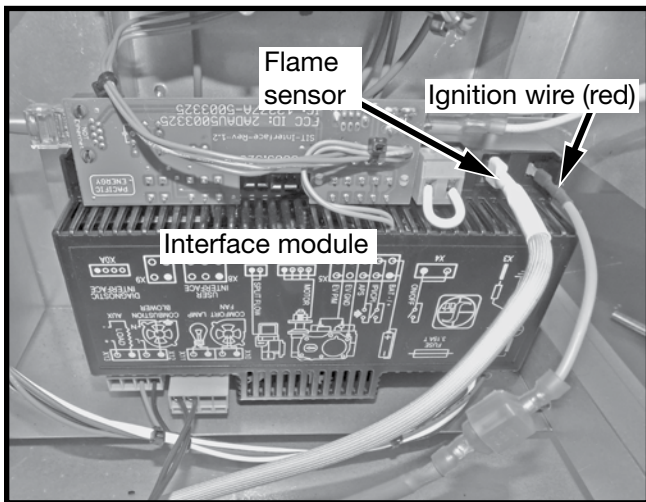


Figure 14: Interface module.

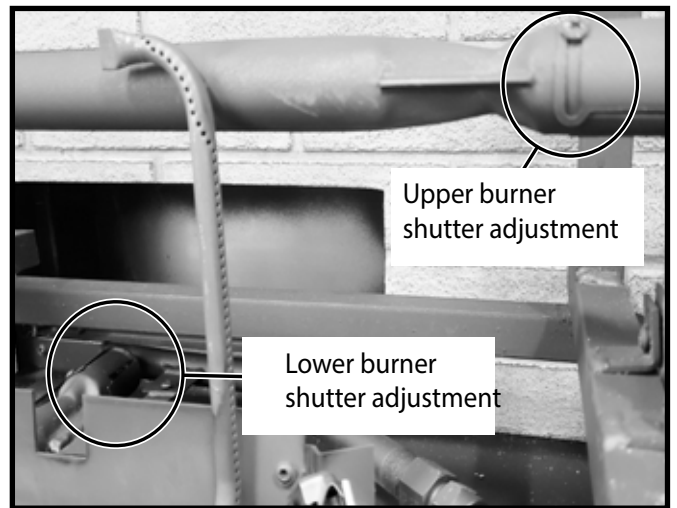


Figure 15: Air shutters locations.ai

8. Connect the ignition wire and the flame sensor wire to their proper terminals (Figure 14).
9. Close up the valve control center by installing the cover (Figure 2 on page 2).
10. Locate the air shutters for both the upper and lower burners (Figure 15). Adjust each of them so that they have an opening gap of 1/8 of an inch (Figure 16 and Figure 17). This setting is for natural gas.

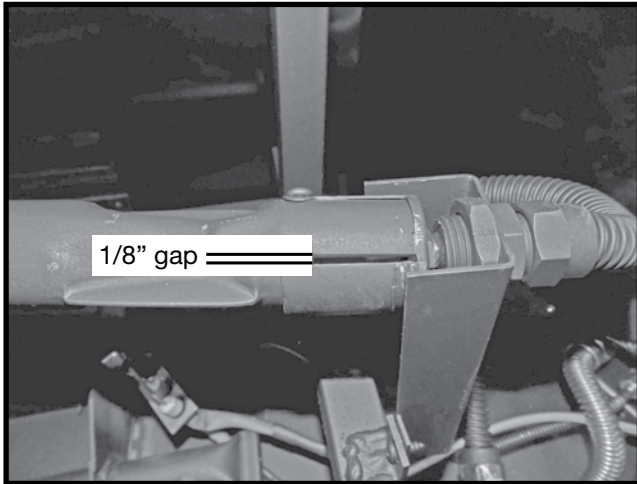


Figure 16: Upper burner air shutter.

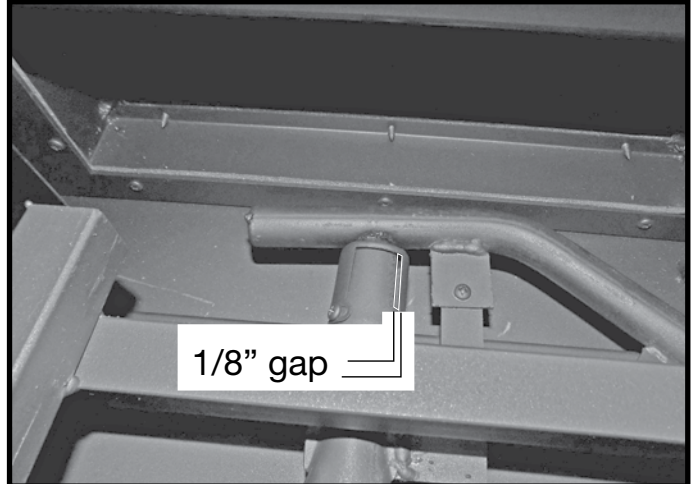


Figure 17: TC54 Burner Kit lower shutter.

Note: The panel set can be installed at any time before, during or after the burner kit has been installed. Caution should be taken to make sure that the log grate does not scratch the panels during installation.

Country Home Log Set Installation

Note: If converting this fireplace from natural gas to propane at the same time as installing this new log set, complete the propane gas conversion, See “Propane Conversion” on page 11 first to avoid possible damage to the new log set.

The logs are fragile, and should be handled with care. Unpack and inspect log set. There should be a total of seven logs. Gas plumbing and vent connections should be completed before proceeding.

Position the logs exactly as indicated by the following pictures. The three main logs have holes and / or pins. Engage each pin in the corresponding holes. The four smaller logs do not have holes or pins. They rest in position. Locate as per the diagrams.

Note: Improper placement of logs will cause sooting on internal parts and glass. The logs may need to be repositioned slightly to avoid excessive flame impingement.

Ember material and Ceramic filler pieces

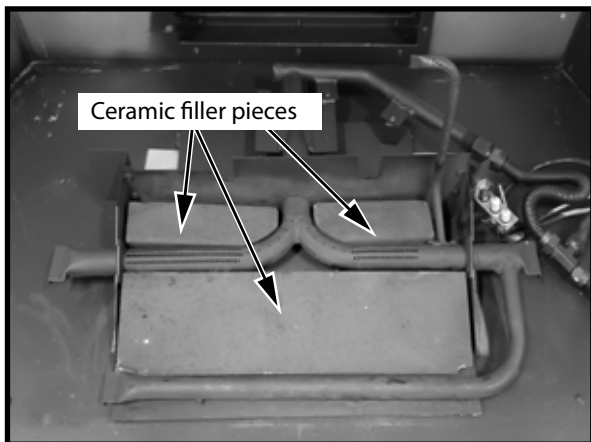


Figure 18: Ceramic filler pieces placement.

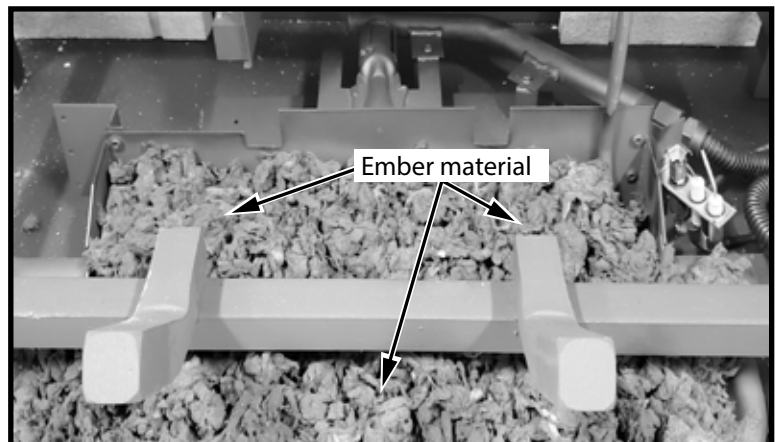


Figure 19: TC54 Burner Kit glowing embers.

Before adding the ember material please ensure that the 3 ceramic fibre filler pieces are correctly located in the burner as shown in Figure 18.

Two bags of ember material are shipped with the fireplace and need to be installed to ensure optimum performance and flame appearance.

Pull apart the material into ember size pieces (approximately 1” squares) and gently place them into the lower burner pan (Figure 19). Do not compress, leave it loose for best performance. Fill the lower burner pan level with the top of the pan at rear, and gradually slope forward to the firebox floor, covering both lower burner tubes. Place remaining ember material outside of the burner pan as desired to cover-up gas lines and brackets .

Note: Ember material placement and amount will affect flame appearance. More ember material results in lower flame height. Add or remove as needed until desired flame affect.

Do not place any ember material on the upper burner tube.



Figure 20: Ember material on lower burner.



Figure 21: First log positioning pins.

1. Place the contents of one bag of ember material onto the surface of the lower burner (Figure 20). Be sure to place enough ember material onto the front and back burner tubes so that the holes in the tubes are no longer visible.
2. Locate the first log positioning pins on the log grate (Figure 21).
3. The underside of the first log has a square slot at the right side, and a round hole at the left side. Position the right side of the log (with the square slot) onto its positioning pin. Then finish by placing the left side of the log (with the round hole) onto its positioning pin. Once the first log is in place it will hide the upper burner (Figure 22).



Figure 22: First log placement.

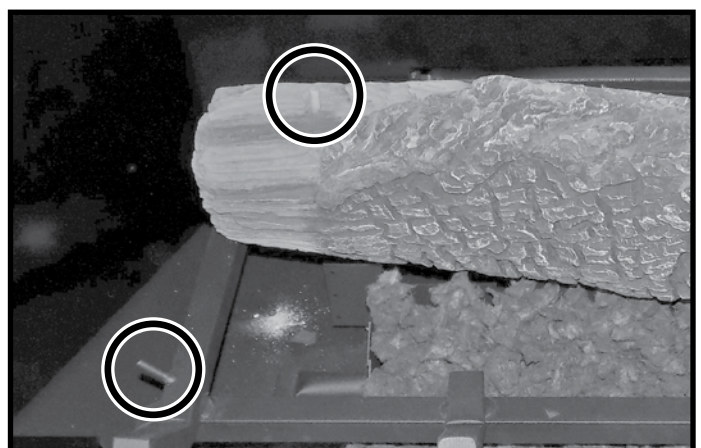


Figure 23: Second log positioning pins.

4. Locate the positioning pins for the second log placement. The pin for the lower end of the second log is located on the left side of the log grate. the upper pin for the second log placement is located on the left hand - upper side of the first log (Figure 23).



Figure 24: Second log placement.



Figure 25: Third log positioning pins.

5. There are two holes on the underside of the second log. Place the second log on the lower pin first before setting it down on top of the top pin (Figure 24).
6. Locate the positioning pins for the third log. The pin for the right side of the third log is located on log grate. the pin for the left side of the log is located on top of the first log (Figure 25).
7. Place the right hand side of the third log onto its pin before setting the left hand side of the log down onto the first log (Figure 26).



Figure 26: Third log placement.



Figure 27: Fourth log placement.

8. Place the fourth log so that it rests partly on the firebox floor while the other end covers the gas and electrical lines and makes contact with the right side wall (Figure 27).



Figure 28: Fifth log placement.



Figure 29: Sixth log placement.



Figure 30: Seventh log placement.



Figure 31: Completed log set.

9. Place the fifth log so that its crook rests against the log grates' 2nd from the left support. the lower end will rest on the floor (Figure 28).
10. Place the sixth log into the gap created by the second log. This will hide the gap (Figure 29).
11. Place the seventh and last log front and center on the floor (Figure 30).
12. Spread the remaining ember material around on the floor to cover any part of the lower burner which may be showing.

Propane Conversion

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

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.

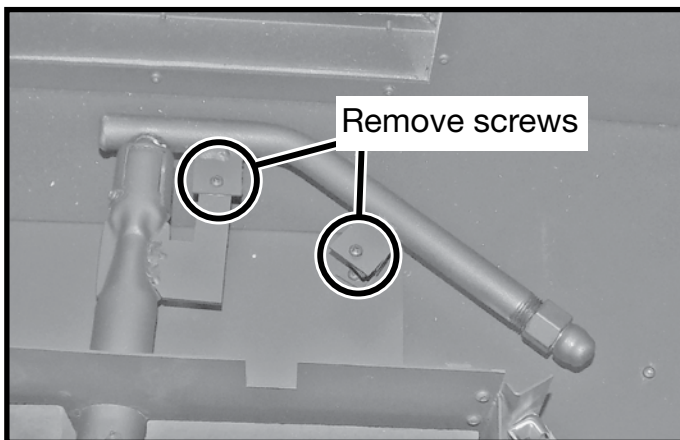


Figure 32: Lower burner orifice location.

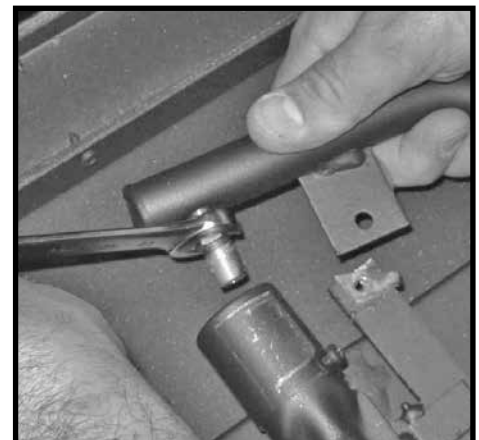


Figure 33: Removing NG orifice.

1. Ensure the burners, pilot and gas supply are turned off, and the appliance has cooled.
2. Remove the two screws securing the manifold assembly to the lower burner and remove tube (Figure 32).
3. Using a 1/2" wrench, undo and remove the natural gas burner orifice marked "ND" (Figure 33).



Figure 34: Propane orifice.

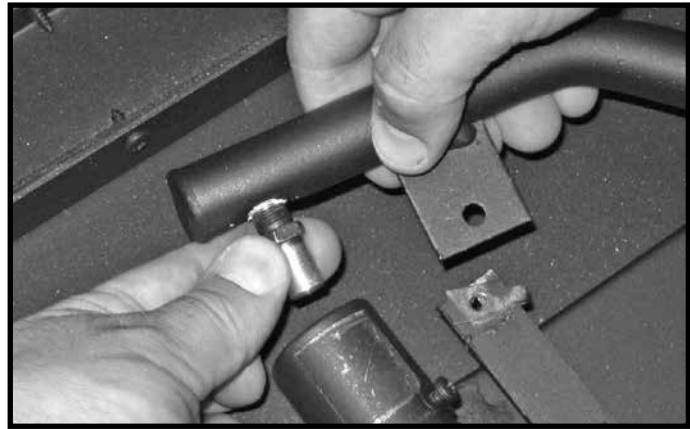


Figure 35: Applying joint compound to propane orifice.

4. Apply a small amount of pipe joint compound to the threads of the propane burner orifice (marked 2.26 mm - Figure 34) to ensure a good seal, before screwing it into the fitting (Figure 35).
5. Remove the securing screw which attaches the upper burner to the log grate and remove burner tube (Figure 37).

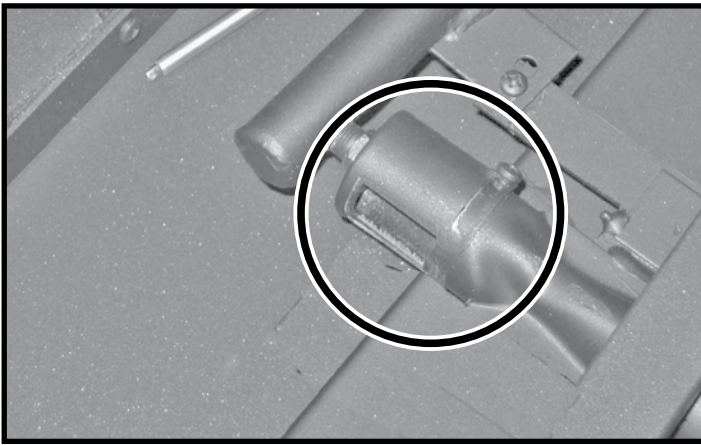


Figure 36: Lower air shutter fully opened.

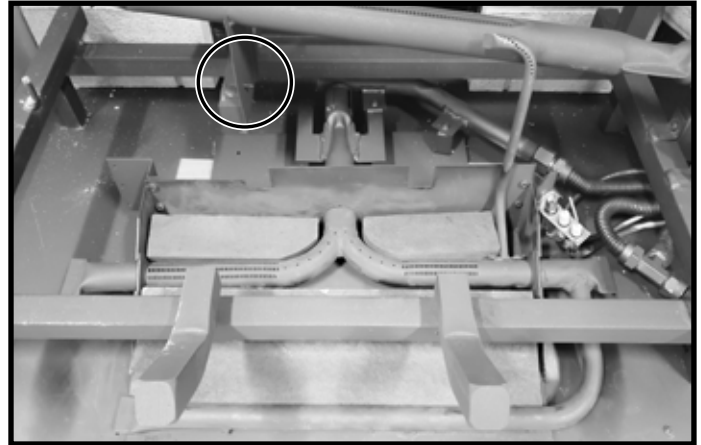


Figure 37: Upper burner securing screw location.

6. Remove the old orifice. Apply a small amount of pipe joint compound to the threads of the new orifice (marked "LD") and secure with a 1/2" wrench (Figure 38).
7. The pilot must be set for propane gas. Loosen the pilot head using a 7/16" wrench (Figure 39).



Figure 38: Replacing upper burner orifice.



Figure 39: Loosening the pilot head.

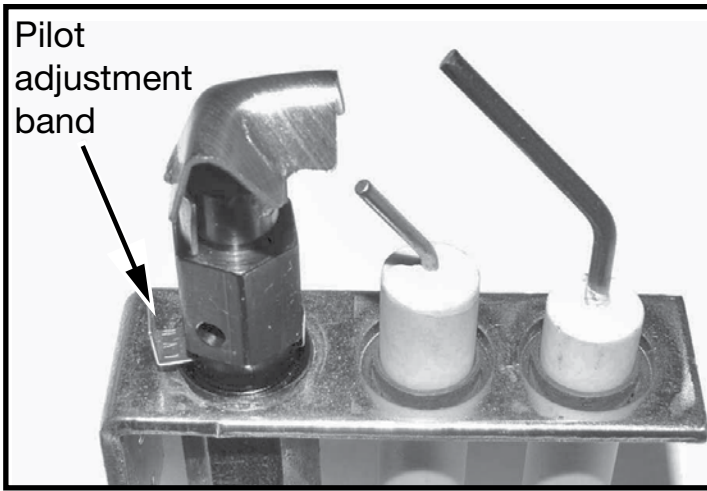


Figure 40: Pilot band in NG position.

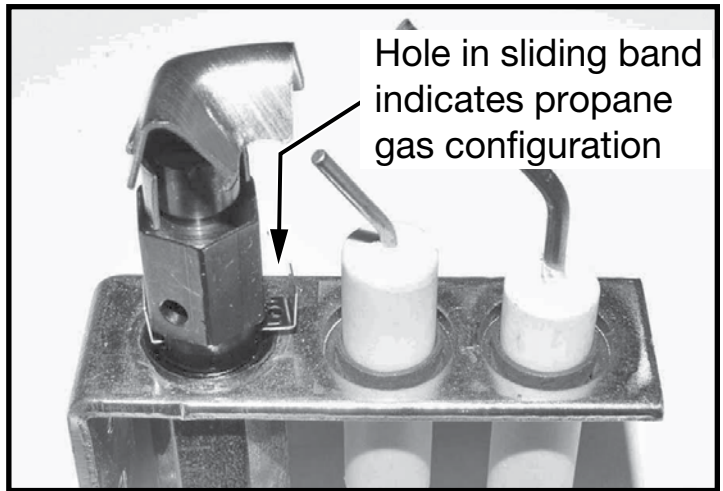


Figure 41: Pilot band in propane gas position.

8. Once the pilot head is loosened, slide the pilot band from the natural gas position over to the propane gas position. When the pilot band is in the propane gas position, a hole will be visible in the band itself (Figure 41) while a hole will not be visible in the band when it is in the natural gas position. Tighten the pilot head once the pilot band is in its new position.
9. The gas valve assembly must be converted for Propane Gas. The hardware and full instructions are included in the SIT conversion kit. Access to the gas valve assembly is made through the side wall panel (Figure 42).

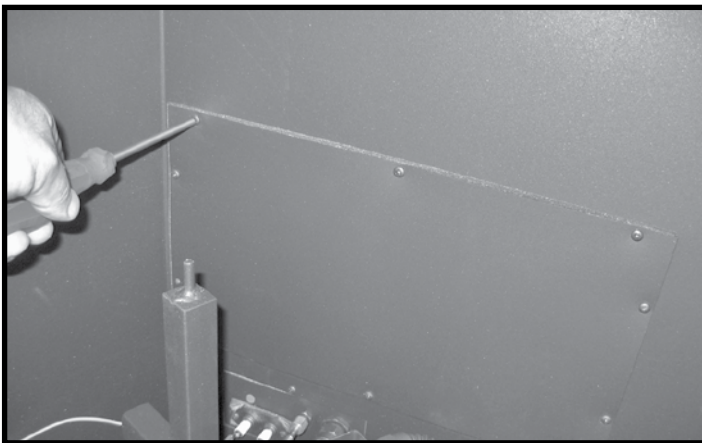


Figure 42: Gas valve access panel.

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

Figure 43: Propane Conversion Label.

10. Once the conversion is complete, 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. Figure 43.

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.

There are four ports on this fireplace the top two are connected to the rear burner and the bottom two are to the front burner.

Manifold pressures should be checked on both to ensure they are correct.

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

Correct gas pressure requirement:

Supply Pressure	Natural Gas
Minimum	5.0" wc
Maximum	13.9" wc
Manifold Pressure	
Maximum	3.5" wc
Minimum	1.6" wc

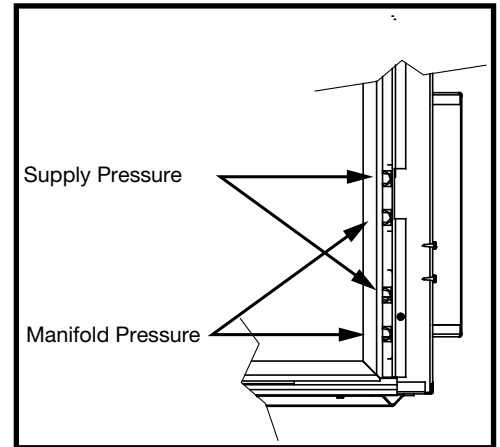


Figure 44: Test ports.



Figure 45: Removing test port plug.

1. Remove the plug from the pressure test port. The plug is located between the right side lintel and firebox side (Figure 44 and Figure 45).
2. Thread the extension test fitting into the open test port (Figure 46).
3. Attach a pressure gauge onto the fitting.
4. Check all gas connections and ensure there are no leaks.
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.



Figure 46: Installing extension.

Burner Flame Adjustment

An air shutter on each of the burner tubes controls the primary combustion air to the gas burners and are preset to 1/8" open 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 48 for proper flame pattern.

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

Caution: Burner area may be hot!

Turn off the fireplace and allow the unit to cool before proceeding.

To Adjust: (See Figure 47)

1. Open and remove window frame and set aside. See "Window Frame Removal" section found in the Installation and Operating Instructions manual.
2. Remove the logs and set aside.
3. Loosen the screw in the Primary Air Shutter.
4. Rotate the shutter to increase or decrease the amount of primary air.
5. Return all components to their original positions and inspect flame appearance.

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

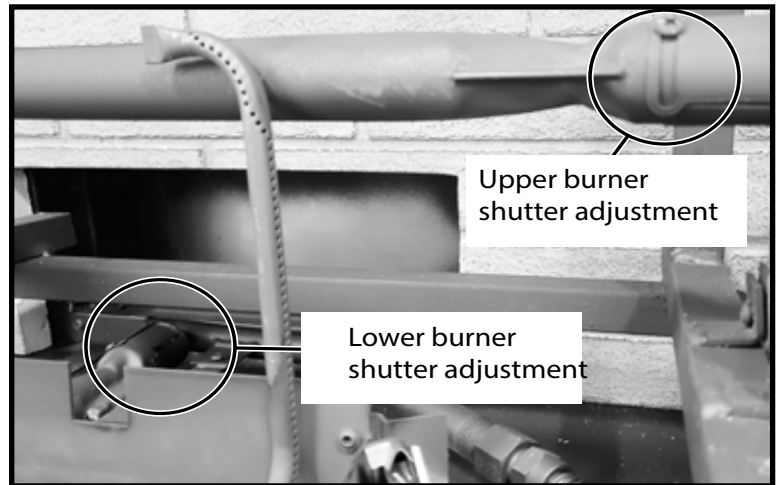


Figure 47: Primary air shutters location.



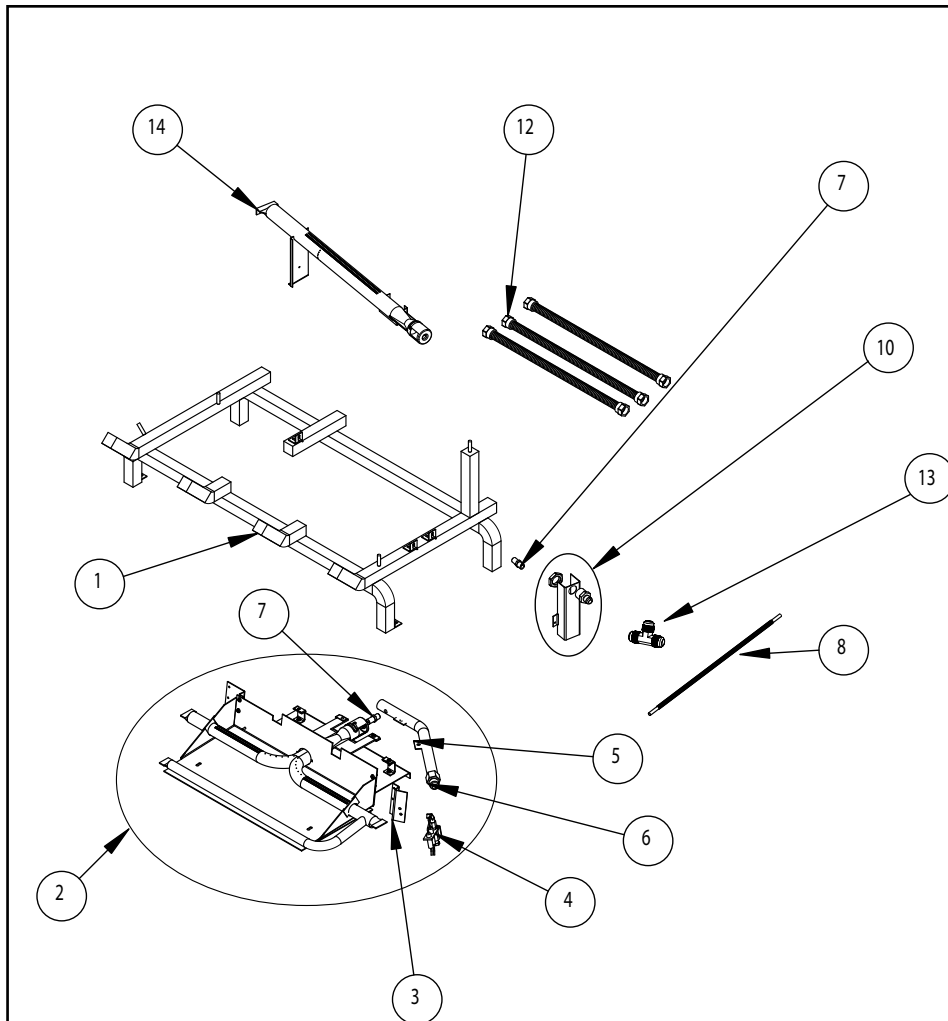
Figure 48: Desired flame appearance.



Parts Diagram

ITEM	DESCRIPTION	PART NO.
1	LOG GRATE ASSEMBLY	TC54.8181
2	LOWER BURNER ASSEMBLY	TC54.90859
3	PILOT BRACKET	Included with lower burner assy
4	PLOT ASSEMBLY	TCRP.5005025
5	MANIFOLD WELDED ASSEMBLY	TC42.90881WLD
6	FITTING, DORMONT, BURNER SUPPLY	5019.221
7	ORIFICE (NG)	marked "ND"
8	FLEX, 1/4" LINE , DORMONT	5019.225
9	FITTING, ORIFICE INLET	included with upper burner bracket
* 10	UPPER BURNER BRACKET	TC54.81875
11	1/2-14NPT BRASS LOCKNUT	included with upper burner bracket
12	FLEX, 1/2" LINE , DORMONT	5019.223
13	T-CONNECTOR FITTING	5019.013
14	BURNER, TC54, REAR	5011.8302
	LOG SET, COMPLETE	5094.542646
	PROPANE CONVERSION KIT	22180009

***Sold only in sets**



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For technical support, please contact your supplier.

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