TC42 COUNTRY HOME BURNER KIT INSTRUCTIONS (NATURAL GAS ONLY)

PART# TC42.NG02CN
For TC42 Series C
Burner Installation

1. Place the keyhole slots in the burner over the two screws located in the firebox base. (Fig. #1 & 1a)

2. Slide the burner back to engage the screws in the small part of the keyhole slot and tighten screws. (Fig. #1b)

3. Remove access cover from side of firebox(Fig. #1c)
Burner/Grate Installation

4. Secure the electrical bulkhead plate and gasket to the firebox. (2 screws) Attach the ignition and sensor wires to the module. Red end to the connector marked by the red dot, white end to the connector marked by the white dot. Fig.#2 & Fig.#3
5. Attach the pilot and gas supply tubes to the bulk head fitting and tighten. (Fig. # 3b) Ensure the connections are gas tight. Conceal the spark and sensor wires below the supply tubes.

A panel set must now be installed. See Installation and Operating Instructions manual for details.

6. Position the slots of the grate securing brackets over the holes in the floor shield and secure with the two screws (Fig. # 4).
7. Attach rear deflector to rear of grate using the two screws provided (Fig. # 5).

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**Ember Material Placement**

A large bag of ember material is shipped with the fireplace and needs 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 burner pan. Do not compress, leave it loose for best performance.

Fill the burner pan level with the top of the pan at rear, and gradually slope forward to the firebox floor at the front, covering both 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.
Gas plumbing and vent connections should be completed before proceeding.

The logs are fragile, and should be handled with care. Unpack and inspect log set. There should be a total of seven logs.

Position the logs 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 (fig. # 6-13).
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.
**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 using a 3/16" hex head wrench. The plug is located between the right side lintel and firebox side. (Fig. #14)

2. Thread the extension test fitting into the open test port. (Fig. #15)

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.

Correct gas pressure requirement:

<table>
<thead>
<tr>
<th>Supply Pressure (For purpose of input adjustment)</th>
<th>Natural Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>5.0&quot; WC</td>
</tr>
<tr>
<td>Maximum</td>
<td>13.9&quot; WC</td>
</tr>
<tr>
<td>Manifold Pressure</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>3.8&quot; WC</td>
</tr>
<tr>
<td>Minimum</td>
<td>2.1&quot; WC</td>
</tr>
</tbody>
</table>
The air shutter on the burner tube controls the primary combustion air to the gas burner and is pre-set closed 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 Fig. #17 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.

**Caution: Proper air shutter setting is a must.**
The flame should be just orange and “lazy.” It should NEVER be set to create sooting on internal parts and glass.

**Burner Flame Adjustment**

To Adjust: (See Fig. #18)

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 log set and set aside.
3. Remove the air deflector from the log grate.
4. Loosen the screw in the Primary Air Shutter.
5. Rotate the shutter to increase or decrease the amount of primary air.
6. Reassemble in reverse order.
### Replacement Parts

(When ordering, include part number with description)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>PART NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>BURNER ASSEMBLY</td>
<td>TC42.NG02CN2</td>
</tr>
<tr>
<td>*#2</td>
<td>7 PCS LOG SET</td>
<td>5098.311</td>
</tr>
<tr>
<td>#3</td>
<td>ORIFICE, NATURAL GAS (#25)</td>
<td>5022.12</td>
</tr>
</tbody>
</table>

* NOT SHOWN

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**KIT CONTENTS:**

- #1... BURNER ASSEMBLY  
  - 1a GRATE  
  - 1b BURNER TRAY  
  - 1c BURNER TRAY SUPPORT SHIELD  
  - 1d BURNER TRAY SHIELD GASKET  
  - 1e MANIFOLD  
  - 1f 1/2 PIPE TO 1/2 TUBE CONNECTION  
  - 1g PILOT BRACKET  
  - 1h AIR DEFLECTOR (Not shown)

- #2 NOT SHOWN

- #3... ORIFICE, NATURAL GAS (#25)

- #4... PILOT ASSEMBLY, CONVERTIBLE

- #5... MAIN SUPPLY TUBE

- #6... PILOT TUBE
TECHNICAL SUPPORT: 1-250-748-1184
townandcountryfireplaces.net
2975 Allenby Rd., Duncan, BC V9L 6V8