TC36
HEARTWOOD
BURNER KIT
INSTRUCTIONS

PART# TC36.NG05D
For TC36 & TC36 Arch
Series D Fireplaces
Contents of Package

- BURNER ASSEMBLY (including pilot and manifold)
- LOG GRATE
- TC36 HEARTWOOD LOGS
- EMBER MATERIAL
- HARDWARE PACKAGE
- COAL CHunks
- VERMICULITE

Burner Installation

1) Attach the burner assembly to the floor shield in the bottom of the firebox with two screws. Ensure that the front edge of the burner is flush with the front of the shield. (Fig. # 1)

2) Attach the ignition and sensor wires to the module. (Fig.#2)
3) Attach the pilot and gas supply tubes to the bulk head fitting and tighten. (Fig. #3) 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.

4) Position the slots of the grate securing brackets over the holes in the floor shield and secure with the two screws. (Fig. #4)
A large bag of ember material is shipped with the fireplace and needs to be installed on the burner to ensure optimum performance and flame appearance. A bag of coal chunks and vermiculite is also supplied; this must only be used around the burner pan to cover up the gas lines and brackets.

1. Pull apart the material into ember size pieces (approximately 1” squares) and gently place them into the burner pan. Do not compress, leave them loose for best performance.

2. Fill the burner pan with embers until level with the top of the pan at rear, and gradually slope forward to the firebox floor at the front, covering both burner tubes.

3. Place remaining ember material, coal chunks and vermiculite outside of the burner pan as desired to cover up gas lines and brackets. **Do not put coal chunks or vermiculite inside burner pan as this will cause sooting and the burner to malfunction.**

**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. Reduce the amount used on Propane models, as too much will create soot.

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*Fig. # 5*

Embers only in this area.

*Fig. # 6*

Embers, coal chunks and vermiculite.
Log Placement

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. # 6-12)
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.
Propane Conversion

If the unit is to be used on 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 must 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.

  1. Ensure the burner, pilot and gas supply are turned off, and the appliance has cooled.

  2. Remove the two screws securing the manifold assembly to the burner. (Fig. #17)

  3. Remove the manifold assembly from the burner. (Fig. #18)

  4. With a ½” wrench remove the natural gas orifice (#25) and replace with propane orifice 2.18 mm - our part # 5022.92 - (Fig. #19)

  5. Fully open the primary air shutter.

  6. Reinstall the manifold assembly and air deflector.
7. With a 7/16” wrench loosen the pilot head on the pilot assembly by a half-turn (Fig. #20)

8. Slide the pilot adjustment band over and ensure that the hole in the orifice band is showing. (Fig. #21 shows NG position, Fig. # 22 shows LP position)

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

Note: To test the supply 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. The plug is located between the right side lintel and firebox side (bottom port). (Fig. # 23)

2) Thread the extension test fitting into the open test port. (Fig. # 24)

3) Attach a pressure gauge onto the fitting.

4) 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:

<table>
<thead>
<tr>
<th>Supply Pressure</th>
<th>Natural Gas</th>
<th>Propane</th>
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</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>5.0” wc</td>
<td>12.5” wc</td>
</tr>
<tr>
<td>Maximum</td>
<td>13.9” wc</td>
<td>13.9” wc</td>
</tr>
</tbody>
</table>

Manifold Pressure

| Maximum         | 3.5” wc     | 10.0” wc |
| Minimum         | 1.6” wc     | 6.4” wc  |
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. Propane requires fully open shutter setting. 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. #25 for proper flame pattern.

Open primary air shutter if the logs, glass, and fire-box 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 Fig. #26)

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.

**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.

![Fig. #25](image1.jpg)

![Fig. #26](image2.jpg)
Replacement Parts

(WHEN ORDERING, INCLUDE PART NUMBER WITH DESCRIPTION)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>PART NO.</th>
</tr>
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<tbody>
<tr>
<td>#1</td>
<td>TC42.NG01 BURNER ASSEMBLY</td>
<td>TC36.9789</td>
</tr>
<tr>
<td>#2</td>
<td>9 PCS LOG SET</td>
<td>5098.74611</td>
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<td>#3</td>
<td>ORIFICE, NATURAL GAS (#30)</td>
<td>5022.13</td>
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<td>#4</td>
<td>PILOT ASSEMBLY</td>
<td>5005.025</td>
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<td>#5</td>
<td>MAIN SUPPLY TUBE (FLEX)</td>
<td>5019.223</td>
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<tr>
<td>#6</td>
<td>PILOT TUBE (FLEX)</td>
<td>5019.225</td>
</tr>
<tr>
<td>#7</td>
<td>PROPANE CONVERSION KIT</td>
<td>TC36.LPCEO1</td>
</tr>
</tbody>
</table>

* NOT SHOWN

KIT CONTENTS:

#1... BURNER ASSEMBLY
1a  GRATE
1b  BURNER INSULATION
1c  BURNER TRAY SUPPORT SHIELD
1d  PILOT SHIELD
1e  TC42.NG01 BURNER WELD
1f  MANIFOLD
1g  1/2 PIPE TO 1/2 TUBE CONNECTION
1h  PILOT BRACKET
1i  MAIN SUPPLY TUBE (FLEX)
1j  PILOT TUBE

#2... 9 PCS LOG SET
2a  BASE LOG (a)
2b  LEFT CENTER LOG (b)
2c  LEFT FRONT LOG (c)
2d  LOG WITH HOLE (d)
2e  RIGHT CENTER LOG (e)
2f  FRONT RIGHT LOG (f)
2g  RIGHT BASE LOG (g)
2h  CENTER TWIG (h)
2i  CENTER BASE CHUNK (i)

#3... ORIFICE, NATURAL GAS (#32)
#4... PILOT ASSEMBLY, CONVERTIBLE
#5... MAIN SUPPLY TUBE (FLEX)
#6... PILOT TUBE (FLEX)
#7... PROPANE CONVERSION KIT (Not shown)
For technical support, please contact your retailer.

Web site: www.townandcountryfireplaces.net
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