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



TC36D HEARTWOOD BURNER KIT INSTRUCTIONS



SKU# 22150019 For TC36D & TC36D Arch Series D



Contents of Package

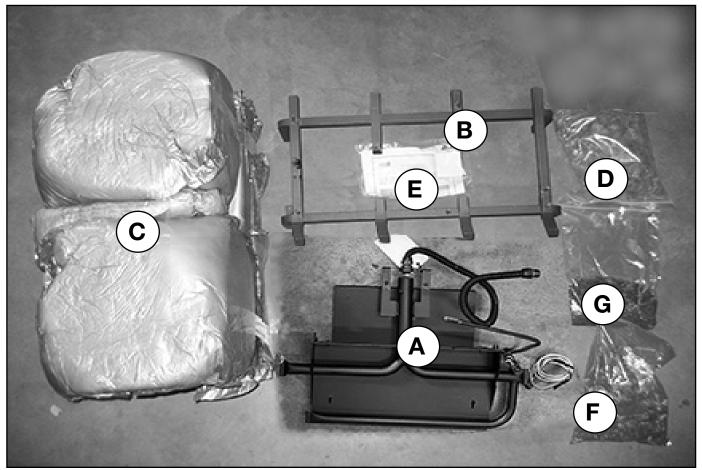


Figure 1: TC36 Heartwood burner kit parts.

- A. BURNER ASSEMBLY (including pilot and manifold)
- B. LOG GRATE
- C. TC36 LOGS
- D. EMBER MATERIAL
- E. HARDWARE PACKAGE
- F. COAL CHUNKS
- G. VERMICULITE

Burner Installation

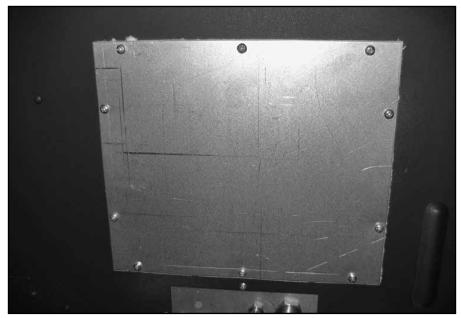


Figure 2: Access cover to valve control center.

- 1. Remove the 10 screws securing the access cover for the valve control center (Figure 2).
- 2. Attach the main gas supply line and the pilot gas supply line to the bulk head fittings and tighten. Ensure that there are no leaks. Feed the ignition and sensor wires through the bulkhead plate and gasket to the firebox(Fig. # 3)

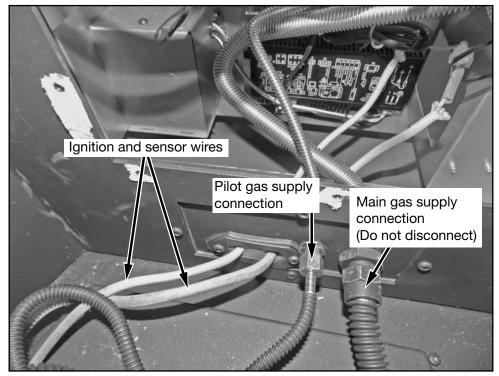


Figure 3: Gas supply tubes and Ignition/Sensor wire routing.

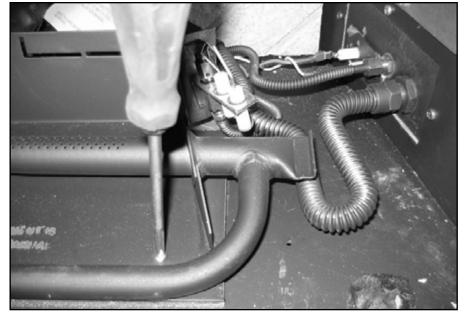


Figure 4: Attach burner to firebox shield.

- 3. 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.(Figure 4).
- 4. Attach the ignition and sensor wires to the module. (Fig.#5).

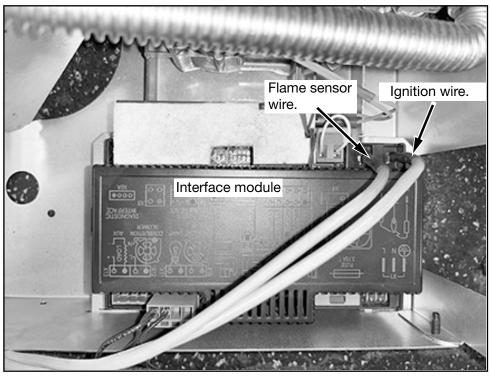


Figure 5: Attach Ignition and Sensor wires.

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



Figure 6: Attach log grate to floor.

5. Position the slots of the grate securing brackets over the holes in the floor shield and secure with the two screws.(Figure 6).

Burner Installation

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.

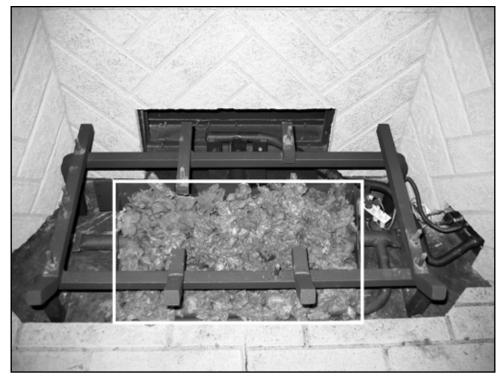


Figure 7: Embers only in this area.

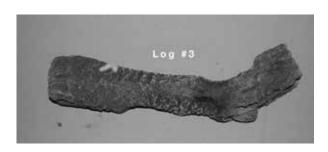


Figure 8: Embers, coal chunks and vermiculite.

Log Set Assembly -

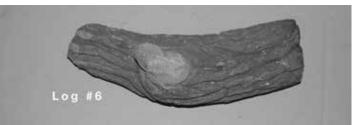






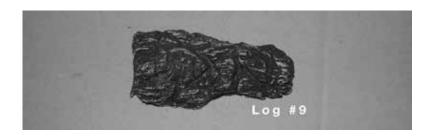












Log Placement

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. # 9-14)

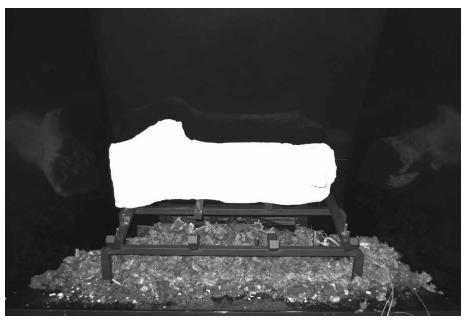


Figure 9: Log #1

- 1. Place Log 1 onto the back of the log grate and align the two pins on the log grate with the holes in the bottom of the log.
- 2. Place Log 2 into the log grate on the left and engage the two pins on the log grate into the holes in the bottom of the log.



Figure 10: Log #2





Figure 11: Log #3

- 3. Place Log 3 on the oustide of the log grate, on the left, with the bottom resting on the log grate. Align the log with the end against the panel on the left and the top end pointing towards the front of the fireplace.
- 4. Place Log 4 into the log grate in the center and engage the pin on the log grate into the hole in the bottom of the log. Align the log with the thin end down and the thicker end up at a slight angle.

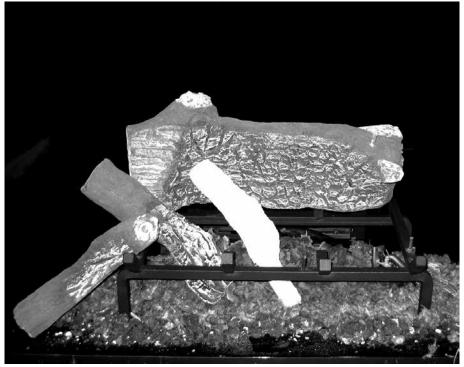


Figure 12: Log #4

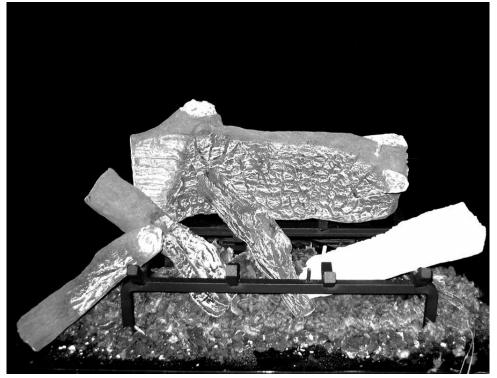


Figure 13: Log #5

- 5. Place Log 5 inside of the log grate on the right and engage the two pins on the log grate inside the holes in the bottom fo the log.
- 6. Place Log 6 outside of the log grate on the far right. Align the log with the narrow end towards the front of the firpelace.



Figure 14: Log #6

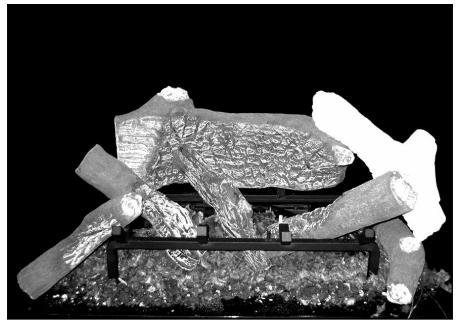


Figure 15: Log #7

- 7. Place Log 7 on the right side with the wider end resting on Log 6 and engage the pin on the top end of Log 1 into the hole in the narrow end of Log 7.
- 8. Place Log 8 into the center of the log grate and engage the pin on the log grate into the hole in the bottom of the log. Align the log with the inner end resting on the end of Log 5 at a slight angle.

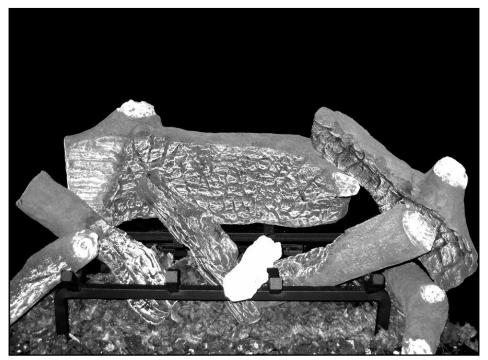


Figure 16: Log #8

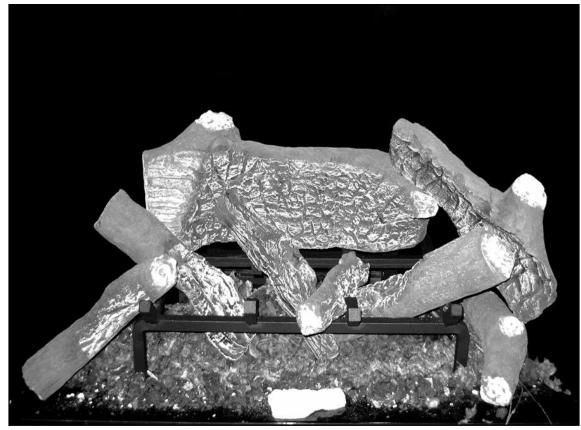
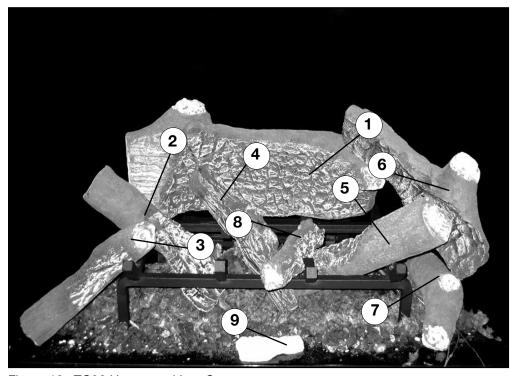


Figure 17: Log #9

9. Place Log 9 in front of the log grate and centered on the ember pieces and ember chunks.



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.

Figure 18: TC36 Heartwood Log Set



Propane Conversion

Note: The propane conversion kit is not included with the burner kit. The conversion kit is an option which must be ordered separately.

If the unit is to be used with propane gas, convert the fireplace from natural gas as follows using the components supplied with this burner kit.

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

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.

- 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 (Figure 19).
- 3. Remove the manifold assembly from the burner (Figure 20).

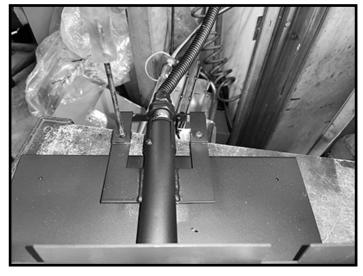


Figure 19: Unscrewing manifold from the burner.

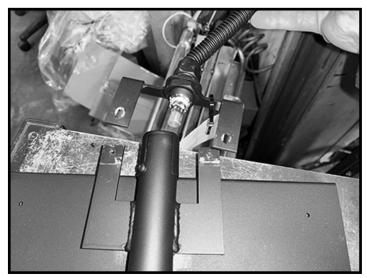


Figure 20: Orifice exposed.

- 4. With a 1/2" wrench remove the natural gas orifice (Figure 21).
- 5. Install the propane orifice (marked "LI") (Figure 22).
- 6. Fully open the primary air shutter.



Figure 21: Removing orifice.



Figure 22: Orifice.

- 7. Reinstall the manifold assembly.
- 8. With a 7/16" wrench loosen the pilot head on the pilot assembly by a half-turn (Figure 23)
- 9. Slide the pilot adjustment band over and ensure that the hole in the orifice band is showing. Figure 24 shows the pilot band in natural gas position. Figure 25 shows the pilot band in propane position.

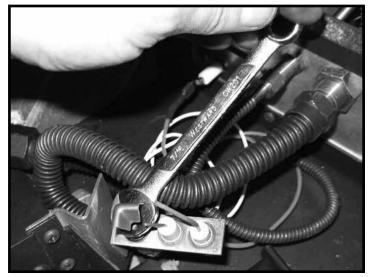
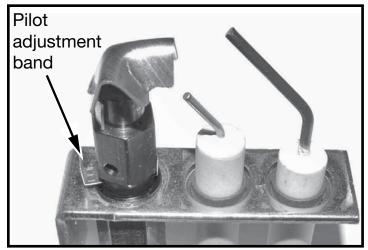


Figure 23: Loosening the pilot head.



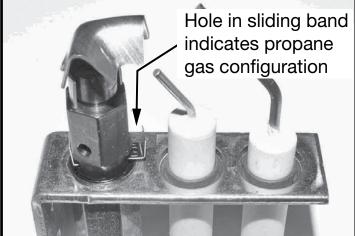


Figure 24: Pilot band in natural gas position.

Figure 25: Pilot band in propane gas position.

- 1.
- 2. Open the air shutter by following the steps in the "Flame Adjustment" on page 17.
- 3. Complete the gas valve conversion from natural gas to propane gas according to the instructions included in the SIT propane gas conversion kit.
- 4. Fill in the conversion label Figure 26. 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.

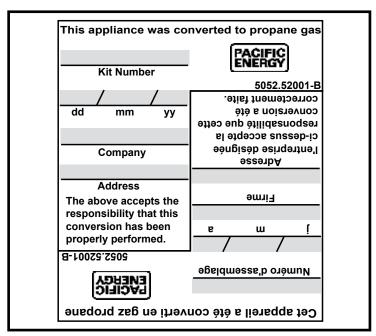


Figure 26: Propane conversion label.

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

Gas Pressure Test-





Figure 27: Removing manifold pressure plug.

Figure 28: Adjusting manifold pressure.

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. With a 3/16" Hex key, remove the plug from the pressure test port. The plug is located between the right side lintel and firebox side (bottom port). (Fig. # 27)
- 2. Thread the extension test fitting into the open test port. (Fig. # 28)
- 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:

Supply Pressure (For the purpose of input		s Propane
Minimum	5.0" wc	12.5" wc
Maximum	13.9" wc	13.9" wc

Manifold Pressure

Maximum	3.5" wc	10.0" wc
Minimum	1.6" wc	6.4" wc

Flame Adjustment-



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.

Figure 29: Desirable flame appearance.

The air shutter on the burner tube controls the primary combustion air to the gas burner and is preset 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. #29 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.

For Propane, start with the air shutter fully open and adjust to decrease air if needed.

Caution: Burner area may be hot!

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

To Adjust: (See Fig. #30)

- 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) Re assemble in reverse order.

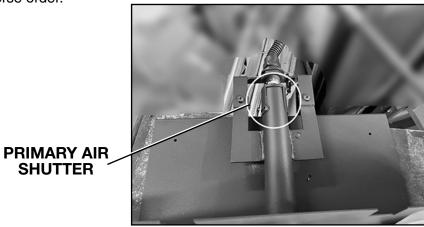


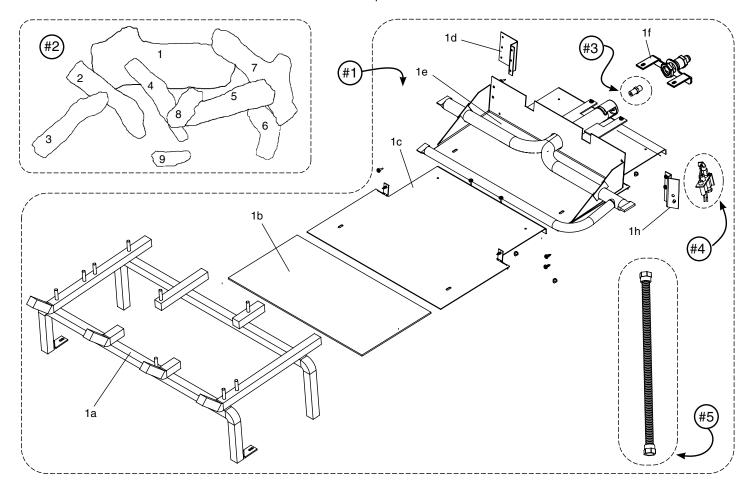
Figure 30: Shutter adjustment

-Parts Diagram-

(WHEN ORDERING, INCLUDE PART NUMBER WITH DESCRIPTION)

ITEMDESCRIPTIONPART NO.			
#1TC36.NG05D BURNER	. 22150019		
#29 PCS LOG SET	.80001226		
#3ORIFICE, NATURAL GAS	. marked "NI"		

ITEM	DESCRIPTION	PART NO.
#4	PILOT ASSEMBLY	80002855
#5	MAIN SUPPLY TUBE (FLEX)	800002875
*#6	PROPANE CONVERSION KIT	22180004
	* NOT SHOWN	



KIT CONTENTS:

- **#1.... BURNER ASSEMBLY** 1a GRATE
 - 1a
 - 1b
 - BURNER INSULATION BURNER TRAY SUPPORT SHIELD 1c
 - PILOT SHIELD 1d
 - TC42.NG01 BURNER WELD
 - MANIFOLD 1f
 - 1/2 PIPE TO 1/2 TUBE CONNECTION
 - PILOT BRACKET

- ORIFICE, NATURAL GAS
- PILOT ASSEMBLY
- MAIN SUPPLY TUBE
- #2.... 9 PCS LOG SET EMBER MATERIAL (Not shown)
 - BASE LOG (a)
 - LEFT CENTER LOG (b)

 - LEFT CENTER LOG (b)
 LEFT FRONT LOG (c)
 LOG WITH HOLE (d)
 RIGHT CENTER LOG (e)
 FRONT RIGHT LOG (f)
 RIGHT BASE LOG (g)
 - 6
 - CENTER TWIG (h) 8
 - CENTER BASE CHUNK (i)

- #3.... ORIFICE, NATURAL GAS(MARKED "NI")
- #4.... PILOT ASSEMBLY, CONVERTIBLE
- #5.... MAIN SUPPLY TUBE (FLEX)
- #6.... PROPANE CONVERSION KIT (Not shown)



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