INSTALLER: Leave this manual with the appliance. CONSUMER: Retain this manual for future reference.

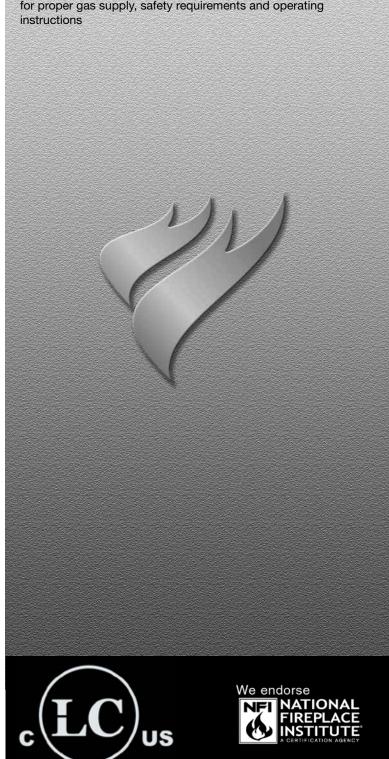
These instructions are supplementary to the Installation and Operating Instructions supplied with the fireplace and should be kept together. Refer to the Installation and Operating Instructions for proper gas supply, safety requirements and operating instructions



TC42 BLACK DIAMOND BURNER KIT INSTALLATION INSTRUCTIONS



SKU# 22150035 For TC42 Series D Fireplaces



Contents of Package

- BURNER
- BURNER TRAY ASSEMBLY
- TUMBLED GLASS
- BURNER SHIELD
- MANIFOLD ASSEMBLY (including supply tube)
- PILOT SHIELD (including pilot and pilot supply tube)
- HARDWARE PACKAGE
- MEDIA SPACER, rear
- MEDIA SPACER, front
- MEDIA SPACER, center

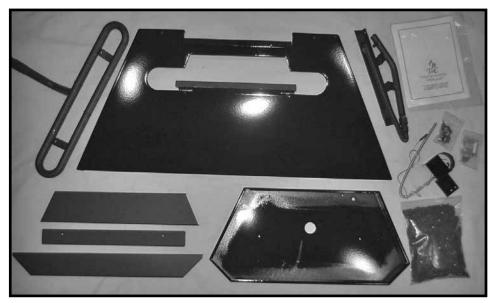


Figure 1: Contents of kit.

NOTE: MUST BE USED WITH PORCELAIN PANELS #TC42.PNLPBKB

Burner Installation —

A porcelain panel set must be used in conjunction with the installation of the burner assembly. See Installation and Operating Instructions manual for details.

 Remove the three lower screws from the air channel at the back of the firebox and attach the manifold assembly to the back of the firebox (Figure 2).

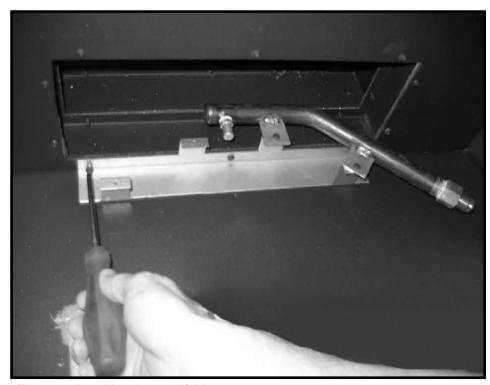


Figure 2: Attaching the manifold assy.

2. Attach the manifold and pilot supply tubes to the bulk head fitting and tighten (Figure 3).

Ensure that all connections are gas tight.

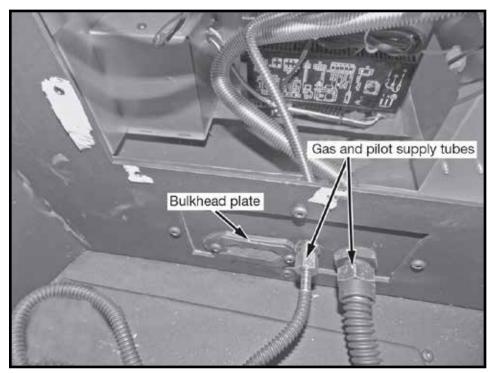


Figure 3: Gas and pilot supply tubes.

3. Feed the ignition and sensor wires through the bulkhead plate (Figure 3) to the interface

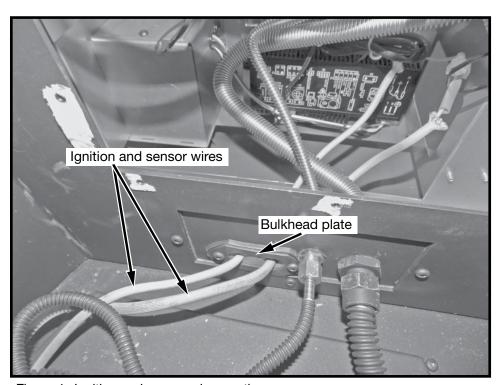


Figure 4: Ignition and sensor wires routing.

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4. Attach the ignition and sensor wires to the module (Figure 5).

Figure 5: Interface module.

5. Panel clips must be installed on the bottom of both side panels (notch facing inside) (Figure 6). To ensure proper positioning of the burner shield. This must be done at the same time as installing the porcelain side panels.



Figure 6: Panel clips.

 Install rear panel of porcelain panel set. The base panel of the porcelain panel set is not used with the Black Diamond installation, and may be discarded. 7. Install burner shield by tipping the shield into the firebox, catching the folded edges in the panel clips (Figure 7).

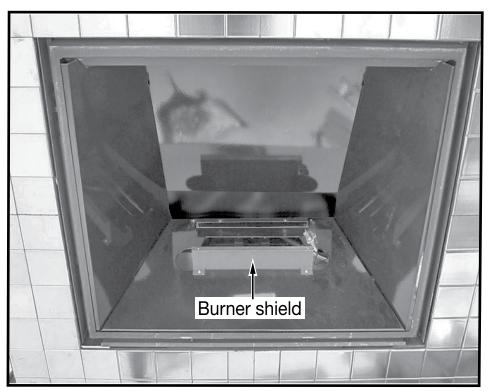


Figure 7: Installing burner shield.

8. Position clip nuts, included in hardware package, onto burner shield (Figure 8).



Figure 8: Positioning clip nuts.

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9. Attach the burner tray to the burner shield using two screws at the back of the tray (Figure 9)



Figure 9: Installing burner tray.

10. Attach pilot shield to burner tray with two screws.(Figure 10)

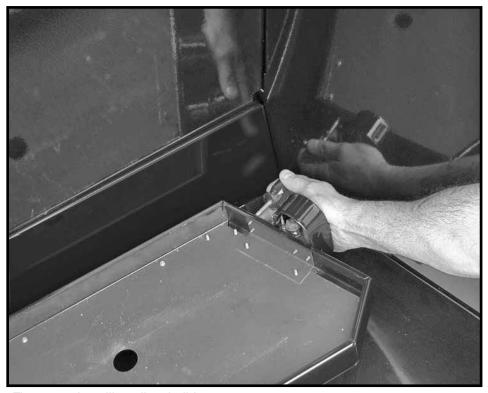


Figure 10: Installing pilot sheild.

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11. Install front & rear media spacers (Figure 11 and Figure 12).

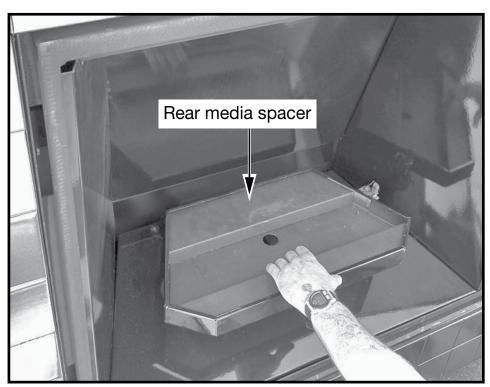


Figure 11: Rear media spacer.

12. Set the burner air shutter to fully open for propane or fully closed for natural gas.

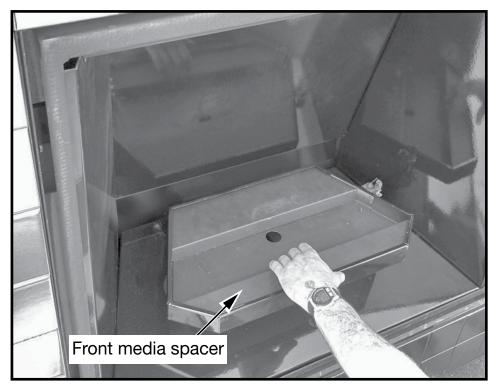


Figure 12: Front media spacer.

13. Install burner by tilting burner inlet through tray. Ensure that the orifice has entered the inlet tube (Figure 13 and Figure 14).



Figure 13: Installing burner.

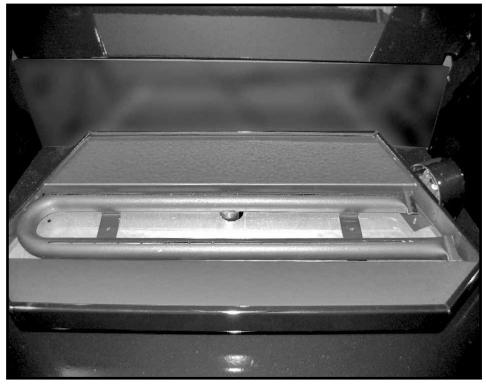


Figure 14: Burner installed.

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14. Install the center media spacer and secure spacer to the tray with the two long screws provided. (Figure 15).

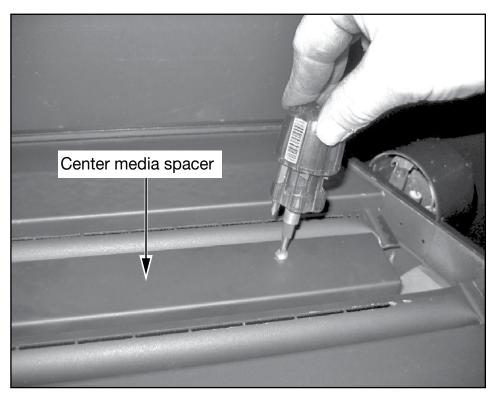


Figure 15: Center media spacer.

15. Apply just enough glass media to cover the burner assembly. (Figure 16)

NOTE: Too much glass media over the burner will cause sooting with the use of propane gas.

Unit is designed specifically to use glass media part # 5012.01.

Use of any other glass or material will void warranty.

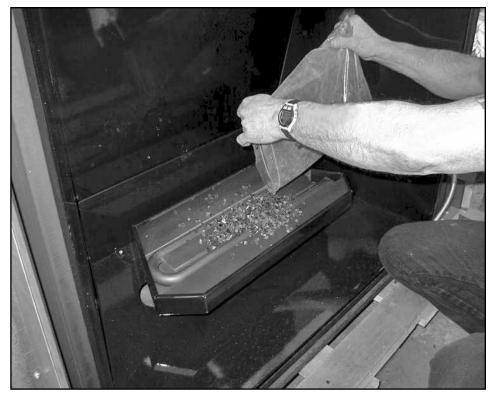


Figure 16: Applying glass media.

Propane 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.

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.

- 1. Ensure the burner, pilot and gas supply are turned off, and the appliance has cooled.
- 2. With a ½" wrench remove the natural gas orifice (Figure 17) and replace with propane orifice included in the SIT conversion kit.
- 3. Fully open the primary air shutter (Figure 18).
- 4. Remove the pilot shield from the burner tray by removing two screws (Figure 19).
- 5. With a 7/16" wrench loosen the pilot head on the pilot assembly by a half-turn (Figure 20).
- 6. Slide the pilot adjustment band over and ensure that the hole in the orifice band is showing. (Figure 21 indicates NG position, Figure 22 indicates LP position)

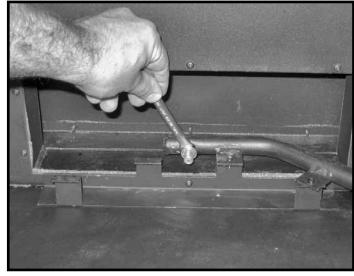


Figure 17: Replacing the orifice.

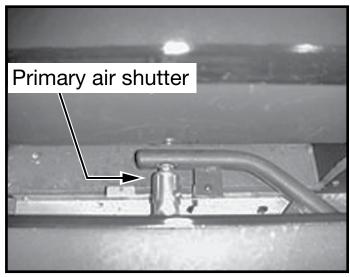


Figure 18: Primary air shutter.



Figure 19: Removing pilot shield.

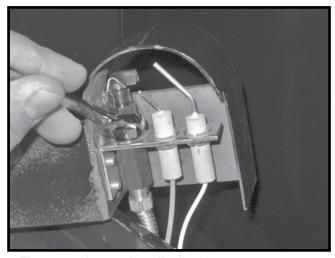


Figure 20: Loosening pilot head.

- 7. Remove access panel to gain access to the gas valve for propane conversion.
- 8. Complete the gas valve conversion from natural gas to propane gas according to the instructions included in the SIT propane gas conversion kit.

9. Fill in the conversion label (Figure 23) . 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.

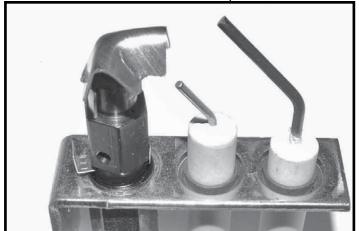


Figure 21: Pilot band in natural gas position.

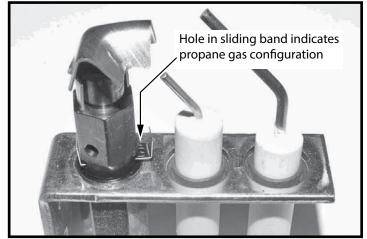


Figure 22: Pilot band in propane gas position.

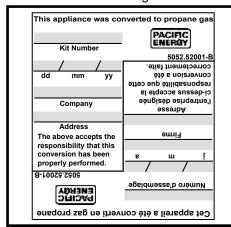


Figure 23: Conversion label (5052.52001-B).

Burner Flame Adjustment

The air shutter on the burner inlet tube controls the primary combustion air to the gas burner and is pre-set to the closed position 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 24 for proper flame pattern.

Open primary air shutter if the 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.

CAUTION: Burner area may be hot!

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



Figure 24: Example of desirable flame.

To Adjust:

- 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 lower rear panel and set aside.
- 3. Loosen the screw securing the primary air shutter.
- 4. Rotate the shutter to increase or decrease the amount of primary air.
- 5. Re-tighten the primary air shutter.
- 6. Reinstall lower rear panel.

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

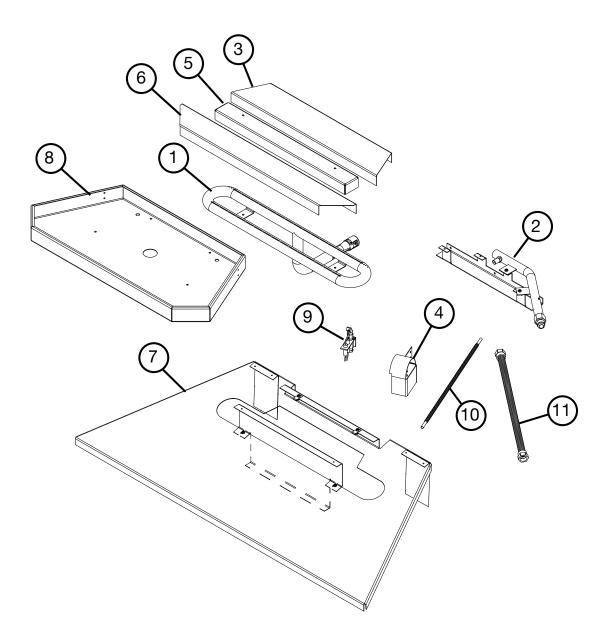


Replacement Parts

ITEM / DESCRIPTION

PART NO.

1	BURNER	TC42.5011832
2	MANIFOLD ASSEMBLY	TC42.9640
3	MEDIA SPACER, REAR	9645
4	PILOT SHIELD	
5	MEDIA SPACER, CENTRE	9647.001
6	MEDIA SPACER, FRONT	9646
7	BURNER SHIELD	TC42.9642
8	BURNER TRAY	TC42.9641PBK
9	PILOT ASSEMBLY, CONVERTIBLE	TCRP.5005025
10	1/4" FLEX TUBE (Pilot)	5019.225
	1/2" FLEX TUBE (Manifold)	
	HARDWARE PACKAGE	TC36.HK03
	TUMBLED GLASS	TCRP5012.01





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www.townandcountryfireplaces.net 2975 Allenby Rd., Duncan, BC V9L 6V8