530 B Vent GAS FIREPLACE HEATER

INSTALLATION BOOKLET



WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

-WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electrical switch: do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

This appliance is a domestic room heating appliance. It must not be used for any other purpose such as drying clothes etc.

This appliance is suitable for installation in a bedroom or bed sitting room.

Manufactured by **MILES INDUSTRIES LTD.** British Columbia, Canada





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1. SAFETY INFORMATION

WARNING: Do not operate the appliance with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.

(The whole window unit may be temporarily removed by the owner for cleaning the interior of the firebox, etc.)

Only the authorized Valor replacement window unit listed in the repair parts booklet must be fitted - never use substitutes.

If the glass is damaged search inside and adjacent to the appliance for any glass fragments.

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.

Young children should be carefully supervised when they are in the same room as the appliance.

Clothing or other flammable material should not be placed on or near the appliance.

This appliance must be installed and repaired by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance are kept clean. Keep curtains, clothing, furniture and other flammable materials a safe distance from all parts of the appliance and its vent system.

Keep the appliance area well clear and free from combustible materials, gasoline and other flammable vapors and liquids.

Keep the vent unit and connector at the back of the heater at least 3inches from any combustible surfaces

Keep the B-vent connector at the back of the heater clear to prevent obstruction of airflow to the connector openings.

Never attempt to burn paper or any other material in the appliance.

This appliance must be properly connected to a 4" B type venting system. It is equipped with a vent safety shutoff system. Operating when not connected to a properly installed and maintained venting system or tampering with the shutoff system can result in carbon monoxide (CO) poisoning and possible death. The venting system should be checked periodically. Recent trends in home improvement and new tighter construction techniques have contributed to problems with venting. If you suspect that your appliance is not venting properly, do not operate. Seek expert advice.

Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

NOTE

When operating your new fireplace for the first time, some vapors may be released which may cause a slight odor and could possibly set off any smoke detection alarms in the immediate vicinity. These vapors are quite normal on new appliances.

During the first hour of use the ceramic firebox walls may go a smoky color. This is not soot. It is a temporary effect lasting only while the ceramic material becomes stabilized. The walls will revert to their initial color after your fire has been used for one or two hours.

OPTIONS

Heater engine unit #530EAN and B-vent conversion kit #552BVK is used with all installations. The cast iron stove case has the following options:

Black textured - Kit #531CSB.

Black enameled - Kit #532ESB.

Green enameled – Kit #533ESG.

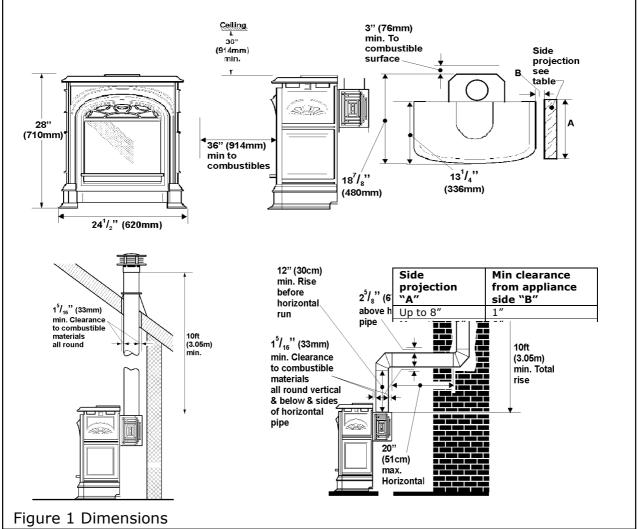
One of the above kits must be used with each installation.

Additional optional features

Remote control unit	Hand operated control for flame & heat adjustment. It may be fitted before the
	fireplace is installed or retrofitted at a later date -
	Kit #553RCK.
Circulating fan	Having variable speed and temperature control, it is designed to boost the natural convection process through the appliance. It may be fitted before the fireplace is installed or retrofitted at a later date – Kit #555CFK .
Wall switch	Optional kit that can replace the flame and heat adjustment switch fitted as standard to the appliance. Kit #557WSK

LP Gas

LPG Conversion kit Burner & injector kit for conversion from natural gas to propane – **Kit #554LPK**.



2. GENERAL

Approvals & codes

This appliance is certified by International Approval Services for use in Canada and the USA. The appliance is for installation connected to an approved 4" metal B type vent.

This appliance is supplied for use with natural gas. It can be converted for use with LP gas with Kit #554LPK.

The appliance complies with CGA P.4.1, Testing method for measuring annual fireplace efficiencies.

The installation must conform with local codes or, in the absence of local codes with the *National Fuel Gas Code, ANSI Z223.1* or the *Canadian installation code CAN/CGA-149*. Only qualified licensed or trained personnel should install the appliance.

gs			
		Nat.	LPG 1
		Gas	
	Altitude (Ft)	0-4500 ²	
	Input Max. (Btu/h)	20,500	19,000
	Input Min (Btu/h)	6,000	10,200
	Manifold pressure (in.w.c.)	3.5 – 3.9	10.3 –
			10.7
	Min. Supply pressure (in.	5.0	11.0
	w.c.)		

Ratings

¹When converted using kit #554LPK

²Tested to *CAN/CGA - 2.17 Gas fired appliances for use at high altitudes*. In the USA installations may require deration over 2000ft - Check local codes.

3. LOCATION

The President FS can be installed as a free standing unit with the vent exiting directly from the room or with the vent exiting through an existing masonry chimney (See figure 1). The installation must conform to the minimum clearance dimensions shown in figure 1. An existing masonry chimney must be cleaned and checked to make sure that it is safe for use. Reline the chimney with an approved 4" flue liner installed according to the instructions supplied with the liner.

The appliance is suitable for fixing to the floor. If the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, it must be installed on a metal or wood panel extending the full width and depth of the appliance.

CAUTION! A GAS APPLIANCE MUST NOT BE CONNECTED TO A CHIMNEY FLUE SERVING A SEPARATE SOLID-FUEL BURNING APPLIANCE.

4. SUPPLY GAS

- All appliances are supplied for installation with natural gas. The supply pressure must be between the limits shown in section 3.2 of this manual.
- The supply connection is 3/8"NPT.
- The opening for the gas supply line is at the rear left corner of the appliance.

5. PACK CONTENTS

1

1

#530EAN Engine unit (For all appliances)

- 1 Appliance engine unit fitted with
- window
- 2 Restrictor plates type #1*
- 2 Restrictor plates type #2*
- 2 Restrictor plates type #3*
- 1 Port cover
- 1 Gas inlet pipe connection adapter
- 2 Wall spacer brackets*
- 1 Firebox ceramic rear wall
- 2 Firebox ceramic side walls
- 5 Ceramic logs
- 1 Switch unit
- 2 Wire clips
- 4 1.5V AÅ batteries
- 4 Wood screws
- 4 Wall plugs
- 2 Thread cutting screws
- * Not required for B-vent installations

#552BVK B-Vent Conversion Kit

- 1 B-vent adapter unit with vent switch
- 1 Thermocouple interrupter
- 1 Case rear cover plate
- 2 "P" clips (for wire fastening)

#531CSB, #532ESB & #533ESG President Free Standing Case Alternatives

- Top pack
 - Top casting
 - Top infill plate

Sides pack

- 1 Front casting unit
- 2 Side casting units
- 1 Top air deflector
- 1 Switch mounting bracket
- 2 Self-cutting screws
- 4 Machine screws
- 4 Washers

#553RCK Remote control unit (Additional

- option)
- Receiver unit
- 1 Remote control hand unit
- 4 1.5V AA Batteries
- 1 9V Battery

#557WSK Wall switch unit (Additional

option)

1

- 1 Wall switch unit
- 1 Battery holder
- 1 20ft (6.1m) length of connection wires
- 2 Screws for wall switch

#555CFK Circulating fan kit (Additional

option) Details are with the kit

#554LPK LPG conversion kit

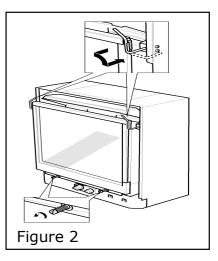
Details are with the kit

Take care when removing the contents from the packaging to prevent damage. Check that all the contents are in the packs and are undamaged.

6. APPLIANCE PREPARATION

Detach the window

- 1. Release the top of the window by pulling forward and rotating outwards the two bars at the top corners. See figure 2.
- 2. Unscrew the two spring loaded bolts securing the bottom of the window. See figure 2.
- 3. Carefully lift the window. Keep the window and bolts in a safe place.

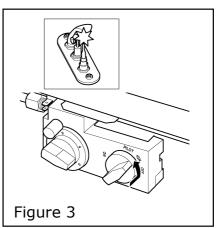


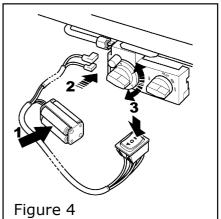
Check ignition spark

The pilot burner and electrode unit is at the left end of the burner. Push in the lighting knob and turn counter-clockwise through the "IGN" position to "PILOT". A spark should flash across from the pilot electrode to the pilot burner shield. See figure 3.

Check flame control motor

- 1. Fit the four batteries into the battery box (Which is attached to the switch wires).
- 2. Temporarily connect the switch wires to the control unit See figure 4.
- 3. Operate the switch. This should cause the flame control knob to rotate counter-clockwise. See figure 4.
- 4. Disconnect and remove after checking.

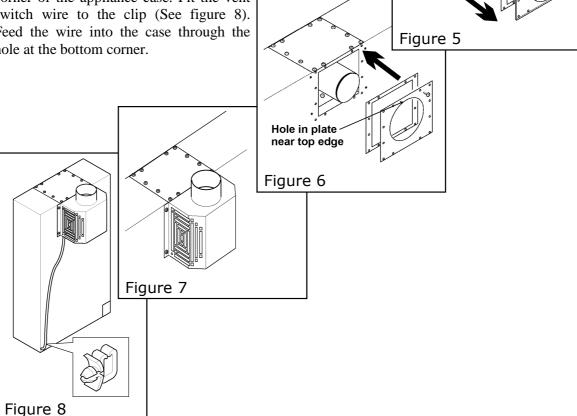


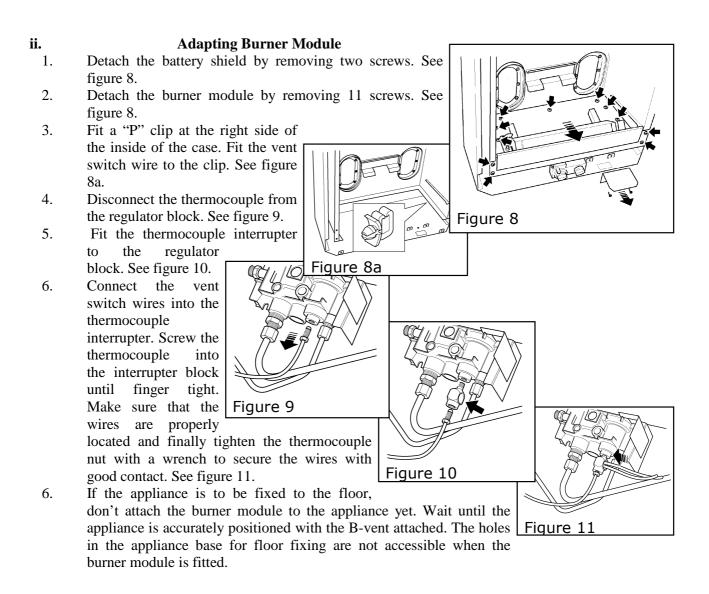


B-Vent Conversion Kit Installation i.

Fit adapter unit

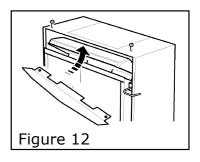
- 1. Remove the rear outlet vent collar and seal by unscrewing 12 screws (See figure 5).
- 2. Fit the rear cover plate (supplied with the kit) using the seal and 12 screws previously removed. The hole in the cover plate must be nearest the top edge (See figure 6).
- 3. Remove 4 screws from the case back (2 each side just outside of the cover plate). Fit the adapter unit to the case using these screws (See figure 7).
- Fit a "P" clip at the bottom rear right 4. corner of the appliance case. Fit the vent switch wire to the clip (See figure 8). Feed the wire into the case through the hole at the bottom corner.





Attaching top air deflector

Fit the top air deflector <u>under</u> the top panel of the appliance case. Secure with two thread cutting screws. See figure 12.



7. VENTING & APPLIANCE FIXING

Preparing for Floor Fixing

If it is intended to fix the appliance to the floor, position the appliance in its final location checking that the vent unit can be correctly installed. Mark through the two fixing holes in the appliance base. Move the appliance away. Plug the holes if necessary.

Venting

Reposition the appliance in its final location Connect an approved 4" vent unit to the adapter collar. Install the vent unit in accordance with the instructions supplied with the unit.

If installing to an existing masonry chimney, the chimney must be cleaned and checked to make sure that it is safe for use. Reline the chimney with an approved 4" flue liner installed according to the instructions supplied with the liner.

Floor fixing

If required, screw the appliance to the floor through the two holes in the base.

8. FITTING SIDES & SWITCH

1. Refit the burner module to the appliance using the 11 screws previously removed.

2. Unless the appliance is only going to be used with a wall switch, refit the battery shield with the two screws previously removed.

3. a) For active appliance side switch

Fit the switch mounting bracket to the right side casting with two thread cutting screws supplied. See figure 13.

Fit the two wire clips to the right side of the case. Route the switch wires round the back of the valve block and connect to the control unit. Connect the battery box. Place the battery box on the "Velcro" pad in front of the battery shield. Fit the wires into the clips. See figure 14. b) For active wall switch

The "L" shaped terminals on the 20ft wall switch wires connect with the burner control unit. Route the wires round the back of the valve block to the wall switch location.

The connections at the wall switch are shown in figure 15.

Fit the batteries supplied with the engine unit to the holder supplied with the wall switch. Fit the wall switch plate to your switch box.

c) For active remote control

Caution! Don't connect the batteries in the remote control receiver until the wires are connected to the burner control unit. A short circuit could result in destruction of the electrical components.

Route the wires from the receiver round the back of the valve block and connect to the control unit. Remove the receiver lid. Connect the battery box to the receiver wires. Fit the four 1.5 V batteries. Replace the receiver lid.

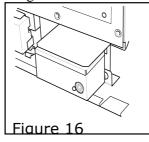
Place the remote control receiver on the "Velcro" pad in front of the battery shield. See figure 16.

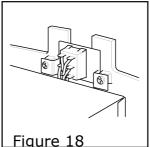
Fit the 9V battery to the handset transmitter.

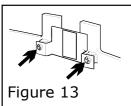
4. Fit the sides to the engine unit case with two machine screws and washers per side. See figure 17.

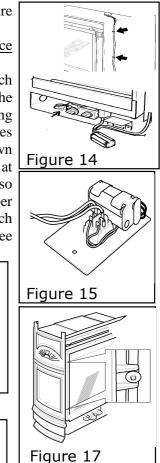
5. <u>For active appliance</u> side switch

Snap fit the switch into the opening in the switch mounting bracket. The wires should hang down from the connectors at back of the switch so that pressing the upper arrow on the switch turns the fire up. See figure 18.









9. GAS SUPPLY INSTALLATION

1. The appliance is supplied for supply gas connection at the rear left corner of the case. An adapter is included in the pack that must be fitted to the appliance inlet pipe. Supply line connection to the adapter is $\frac{3}{8}$ "NPT.

Alternatively, the appliance inlet pipe may be removed and the supply line routed directly to the control unit. An isolating valve could be fitted within the appliance case. If the circulating fan is to be installed, be aware that the supply pipe should follow the route of the original appliance inlet pipe in order to clear the fan. If intending to fit an internal isolating valve, check that it will be clear of the fan.

2. Use only new black iron or steel pipes or copper tubing if acceptable - check local codes. *Note that in USA copper tubing must be internally tinned for protection against sulfur compounds.*

3. Unions in gas lines should be of ground joint type.

4. The gas supply line must be sized and installed to provide a supply of gas sufficient to meet the maximum demand of the appliance without undue loss of pressure.

5. Sealant used must be resistant to the action of all gas constituents including LP gas. Sealant should be applied lightly to male threads to ensure excess sealant does not enter gas lines.

6. The supply line should include a manual shut-off valve to allow the appliance to be disconnected for servicing.

A plugged 1/8"NPT tapping must be installed in the line. The tapping must be accessible for test gauge connection and be immediately upstream of the gas supply connection to the appliance.

7. Pressure test the supply line for leaks.

- The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½psig (3.5kPa).
- The appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½psig (3.5kPa).
- Failure to either disconnect or isolate the appliance during pressure testing may result in regulator or valve damage. Consult your dealer in this case.
- 8. The minimum supply pressure is given in section 3 of this manual.

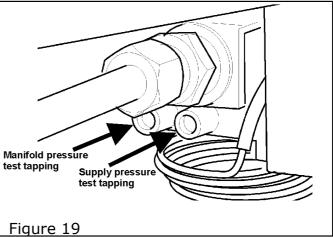
9. All piping and connections must be tested for leaks after installation or servicing. All leaks must be corrected immediately.

When testing for leaks:

- Make sure that the appliance is turned off.
- Open the manual shut-off valve.
- Test for leaks by applying a liquid detergent or soap solution to all joints. Bubbles forming indicate a gas leak. *Never use an open flame to check for leaks.*

Correct any leak detected immediately.

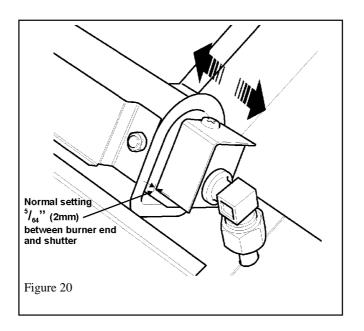
10. The pressure test tapping locations are shown in figure 19. A built-in non-adjustable regulator controls the burner manifold pressure. The correct pressure range is shown in the table in section 3 of this manual. The pressure check

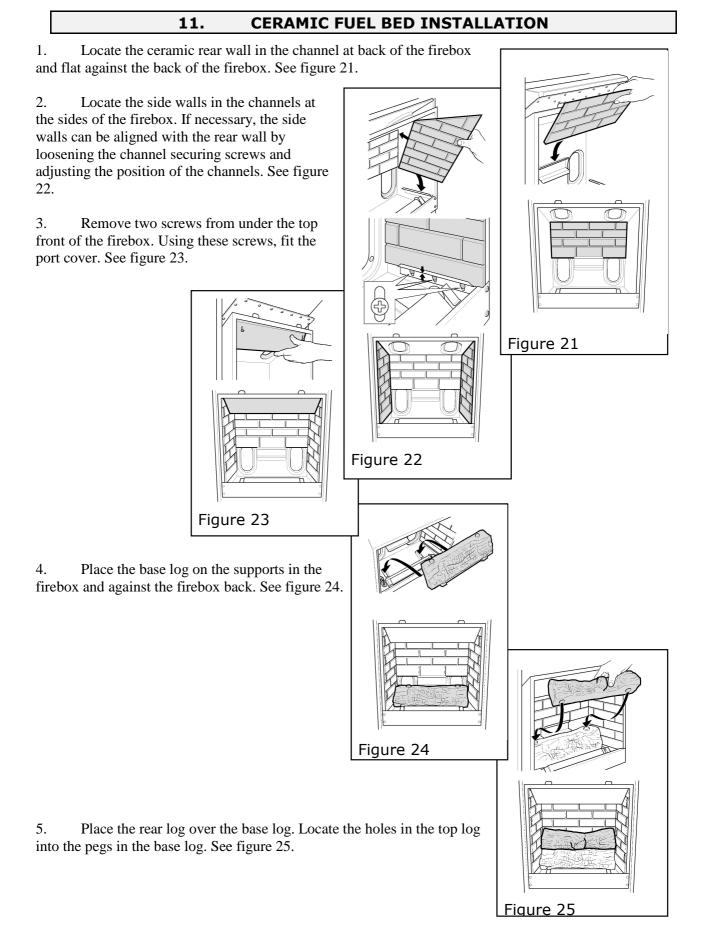


should be made with the burner alight and the thermostat at its highest setting. See lighting instruction section for full operating details.

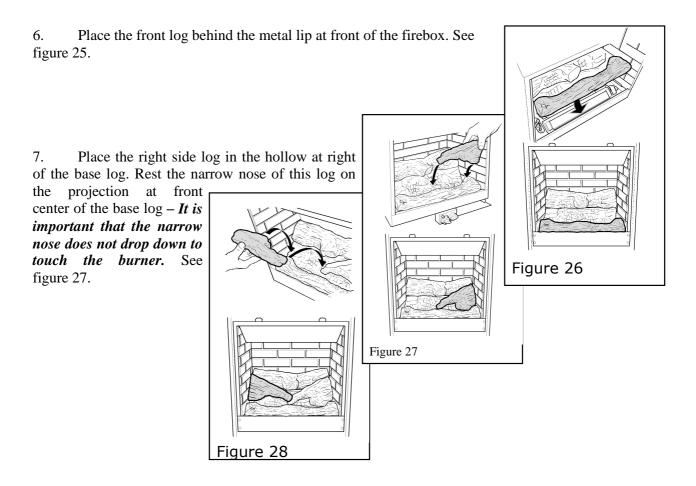
10. AERATION SETTING CHECK

The burner is equipped with an adjustable shutter to control primary aeration. The shutter is set at the factory with a gap of $\frac{5}{64}$ " (2mm) - See figure 20. For the vast majority of installations this setting will give optimum performance and should not be altered. In a few unusual installations performance may be improved by adjusting the aeration. The need for adjustment should be determined by operating the appliance with the logs and window installed. See the "Final checks" section in this manual for adjustment details. *The shutter setting is very critical. A change of* $\frac{1}{64}$ " *can make a substantial difference to the performance.*

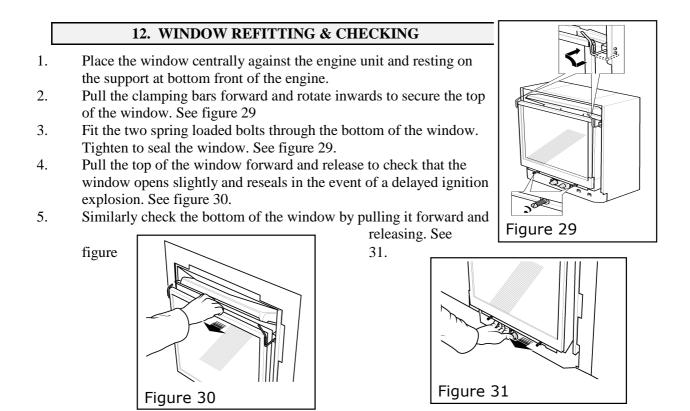




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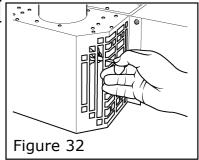
8. Place the left side log on base log at the left side. Locate its nose tip behind the nose of the right side log. *It is important that the narrow nose does not drop down to touch the burner*. See figure 28.



13. OPERATION CHECKS

Burner operation

1. Check ignition, pilot stability, burner flames and the full range of the thermostat using the rotary switch inside the appliance and all other controls (appliance rocker switch, wall switch, remote hand unit). See owner's lighting instructions further on in this manual for full details.



Aeration adjustment

As described in section 11, burner aeration is adjustable. For the vast majority of installations, no adjustment will be necessary. However, in a very few instances, performance may be improved by adjusting the aeration by sliding the shutter (See figure 20). Evaluate the aeration only after the unit has warmed up – approximately 15 minutes.

The shutter setting is very sensitive. Small adjustments can make a substantial difference to the flames. We strongly advise that adjustments be made in steps of no more than 1/64" (0.4mm).

Increasing aeration will cause the flame to appear more transparent and blue making the logs glow more. Decreasing aeration will cause the flames to appear more yellow or orange making the logs glow less. *Too little aeration may result in black carbon forming and dropping into the firebox.*

Venting

A check for correct venting of combustion products must be made before the installed heater is left with the customer. The test should be made in the following manner.

Light the heater. Turn the gas control to the on position and thermostat to the highest setting.

After the appliance has been alight for five minutes place a lighted smoke match or taper inside an opening in the B-vent adapter box. See figure 32.

The installation is satisfactory if the majority of the smoke is drawn into the adapter box and up to the vent pipe.

If the vent is blocked or has strong reverse flow, the thermally actuated switch mounted in the adapter box will automatically shut off the gas supply within about ten minutes. If most of the smoke is not drawn in, leave for about ten minutes and then try again.

If the majority of the smoke is still not drawn into the adapter and vent pipe, turn the heater off and check cause of lack of draft, if necessary get expert advice.

