



valor President



GAS FIRED VENTED ROOM HEATERS

**MODEL 520AN
For Natural Gas**

**MODEL 520AP
For L P G (Propane) Gas**

WARNING: If the information in this manual 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 heater. It must not be used for any other purpose such as drying clothes etc.

INSTALLATION & OPERATION MANUAL

Please read this manual before installing and operating your heater.

Please keep this manual for future reference.

(Vous pourrez vous procurer un manuel en langue Française chez votre concessionnaire)

600A671/02

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SAFETY INFORMATION

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.

The glass window unit must be put back in place prior to operating the appliance if it has been removed for servicing or cleaning.

Never operate with broken or damaged window glass.

This appliance should 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 at least 36ins (900mm) from the front and top of the appliance

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

If any changes are made to the room construction in the vicinity of the appliance after installation (e.g. additional mantle etc.) make sure that the changes conform to the installation requirements in this manual.

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

Keep the base of the appliance below the ashtray and the area between the outer case and the wall clear to prevent obstruction of air flow to the appliance.

This appliance must be properly connected to a venting system. The appliance is equipped with a vent safety shutoff system designed to protect against improper venting. 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 room heater 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. They are totally harmless and will disappear after a few hours use.

INSTALLATION INSTRUCTIONS

1. GENERAL

This appliance is certified by International Approval Services for use in Canada and the USA.

The installation must conform with local codes or, in the absence of local codes, with the current CAN/CGA-B149 installation code in Canada or the current National Fuel Gas Code, ANSI Z223.1 in the USA. Only qualified licensed or trained personnel should install the appliance.

The appliance rating plate is on the inner face of the back panel at the left side.

Burner Type: Aerated front and rear simplex tubes with combined pilot and cross lighting burner.

Gas Connection: A 3/8" N.P.T elbow connector is provided for connection to the appliance inlet pipe located at the center back.

Rates (Btu/h)

Natural Gas

	Altitude (Ft)*	Max.	Min.
Input	0-2000	20,000	7,700
	2000-4500	17,800	7,000
Output	0-2000	15,000	5,300
	2000-4500	12,500	4,900

* Altitudes above 2000ft require conversion kit 525HACK

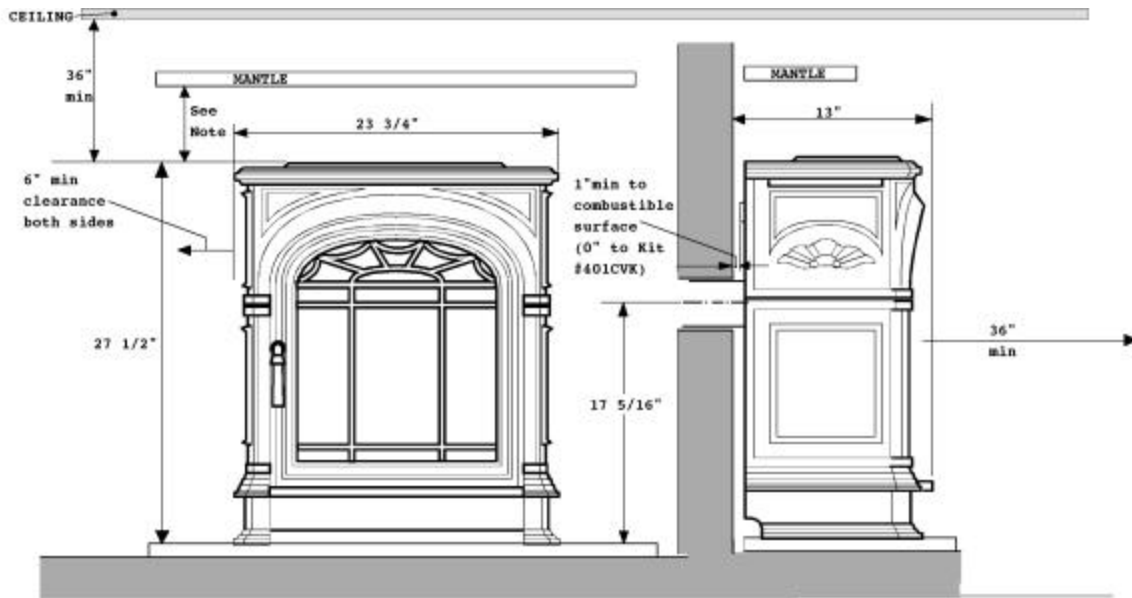
Propane

	Altitude (Ft)	Max.	Min.
Input	0-4500	17,000	8,750
Output		12,750	

Orifice Data

For verification only. Do not attempt to drill or otherwise modify appliance output.

Gas		Type	No of holes	Dia (ins)
Natural	Pilot	AMAL 40	1	0.022
	Front	Cat 18-300	7	0.025
	Rear	Cat 99-230	7	0.022
Propane	Pilot	Cat 960-10	1	0.0094
	Front	Cat 960-110	1	0.035
	Rear	Cat 960-100	1	0.034



Mantles: For a mantle not more than 7" deep - minimum clearance is 6" above extreme top surface of heater. For mantle of greater depth add 1/2" extra clearance for each extra 1" of mantle depth.

Fig.1 Dimensions & clearances

1.1 CLEARANCES:

Make sure that the minimum clearances to combustible materials are maintained during installation including adequate space for the proper operation and servicing of the heater. The minimum clearances from the heater to combustible materials are shown in figure 1. The combustion air opening below the ashlip assembly and the clearance at the sides of the case rear must not be obstructed.

1.2 FLOOR:

Do not place the heater on carpeting, vinyl or other soft surfaced floor coverings. Install only on hard surfaced materials. It is recommended for aesthetic considerations and ease of maintenance that the heater is installed on a hearth finished with brick, ceramic tile, marble etc. Raising the hearth slightly will help to minimize dust and lint accumulation under the unit. The recommended minimum hearth size is 32" wide x 15" deep. If however, the heater is installed directly on flooring of combustible material other than wood, it must be installed on a metal or wood panel extending the full width and depth of the heater.

1.3 DRAFT HOOD:

This heater has a draft hood built into its back and draws its air from either side. It must not be altered or obstructed. The draft hood must be in the same atmospheric pressure zone as the combustion air inlet to the heater.

1.4 VENTING:

This heater is a vented appliance and must be connected to a chimney or flue in accordance with the national and local codes. For added safety, this heater is equipped with a vent sensor system which will react to incorrect venting by shutting down the gas supply. The thermally activated sensor switch is located within the draft hood to detect either a blocked or disconnected vent. Certain backdraft conditions may also activate the switch.

1.5 OPTIONAL ACCESSORIES:

The following kit can be used with this appliance:-

#401CVK Concealed Vent Kit required for use with a new zero clearance type installation. It allows the heater to be installed with type B metal vent concealed behind a wall or partition and/or in a chase.

Full installation and operating instructions are supplied with the kit.

For full details above this kit, contact your dealer.

1.6 POSSIBLE INSTALLATIONS

This appliance can be installed:

1. As a retrofit
 - a. To an existing masonry fireplace and chimney
 - b. To an existing factory built zero clearance type fireplace with a factory built chimney.

The fireplace must be built in accordance with the national, state, provincial or territorial building code recognized by the authority having jurisdiction, or the National Fire Protection Association code in the USA

Any flue damper must be removed or locked open.

The chimney must be swept and both chimney and fireplace checked for soundness before installation of the heater.

If local codes dictate or if condensation is a problem, a flue liner must be installed. Use a flue liner that is approved by the enforcing authority and that is installed in accordance with the manufacturers instructions. If a flexible liner system is used,

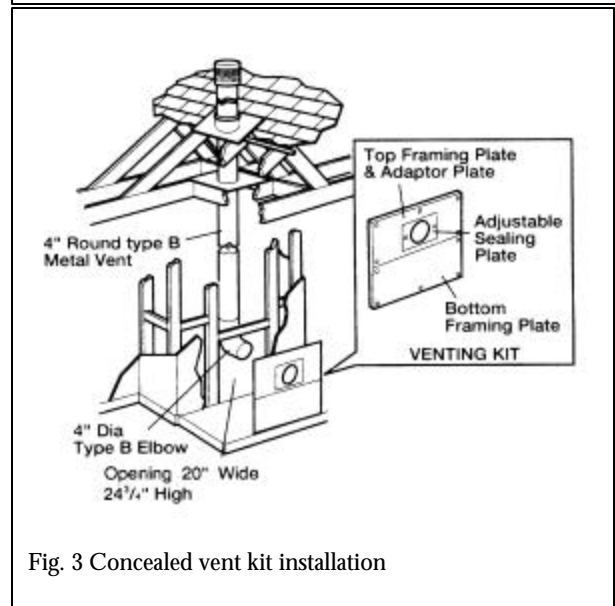
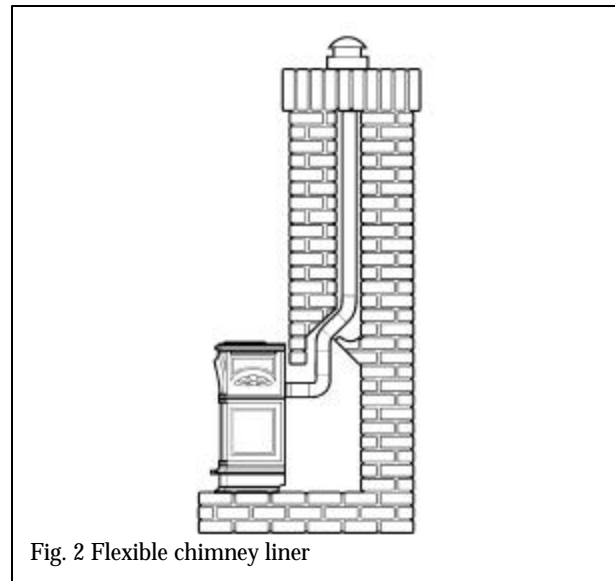
ensure that no sags or dips are allowed to occur where the liner connects to the heater (figure 2).

2. Free standing with connection to an approved chimney or vent maintaining the clearances shown in figure 1.

3. As a zero clearance installation fitted with the optional #401CVK Concealed Venting Kit.

This kit allows the heater to be installed with a type B metal vent concealed behind a wall or partition and/or in a chase. The venting kit is designed for a 4" round flue. The kit is shown in figure 3.

Clearances to combustible materials are: Outside edges of framing plate = 0". From any part of the flue adapter box = 1". Clearances from the connecting elbow are determined by local codes or, in the absence of local codes, with the current CAN/CGA1-B149 Installation Code in Canada or the current National Fuel Gas Code, ANSI Z223.1 in the USA



2. UNPACKING THE HEATER AND CASE

CONTENTS OF THE PACKAGES

Box 1 of 3 (Heat engine)

The carton contains the following:-

- 1 Heater assembly
- 3 Ceramic logs (packed in the heater)
- 1 Flue collar
- 1 Flue collar extension
- 1 Wall spacer
- 1 Smoke channel (Venting check)
- 1 Control knob
- 1 Control shaft
- 8 Threadcutting screws for flue collar & smoke channel
- 2 Plastic caps for foot screws
- 1 Caution/Instruction position label
- 2 Nuts and lockwashers for wall spacer
- 2 Flat washers and machine screws for arched lintel fixing

Box 2 of 3 (Outer case)

- 2 Side Panels (outer case)
- 1 Door assembly (outer case)

Box 3 of 3 (Outer case)

- 1 Top Plate (outer case)
- 1 Arched lintel (outer case)
- 1 Ashlip/front feet assembly (outer case).

Remove the contents carefully to prevent damage. Some items may be contained in the packaging fitments - Examine carefully before discarding. Check that all the items are present and undamaged. Note the weight of the component on the outside of each box.

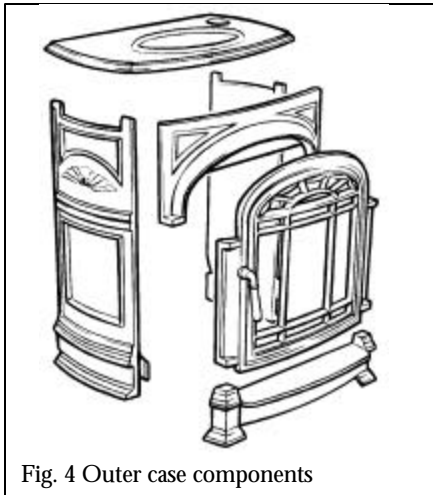


Fig. 4 Outer case components

3. ASSEMBLING THE CAST IRON OUTER CASE

Please read these instructions fully before attempting to install the Outer Case for the first time.

THE OUTER CASE COMPONENTS ARE HEAVY

The cast-iron outer case supplied with President is a high quality casting weighing around 120lbs in total, therefore it is supplied as individual components that are easily assembled together to form a whole. The weight of the heaviest piece is 28 lb. If you have any doubt of your ability to easily assemble these components, you should ask someone to assist.

Remove the outer case components from Boxes 2 and 3, identify each part, and check for transit damage. Note there are two Side Panels (left and right), a lower ashlip/front feet assembly, an Arched Lintel component, a Door, and a Top Plate. See exploded diagram below (Figure 4).

The outer case components comprise:-

- 2 Left and right side panels with leveling feet.
- 1 Ashlip/front feet assembly
- 1 Arched lintel assembly
- 1 Door assembly
- 1 Top plate

Identify the two Side Panels. Take the left panel and observe the leveling feet. The leveling feet are precision-machined to a high finish to avoid scratching the hearth.

Offer up the panel to the vertical plane of the fireplace back panel and observe that the panel sits level on the hearth leaving no discernible vertical gap against the fireplace. Adjust the leveling feet to eliminate any such gap.

Place to one side. Similarly adjust the right hand panel for level. Place to one side.

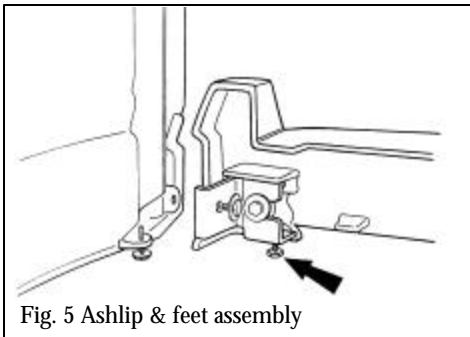


Fig. 5 Ashlip & feet assembly

Take the ashlip/front feet assembly and observe the attachment arrangements (see Figure 5) at the rear of the assembly, and place on the floor, in front of the fireplace.

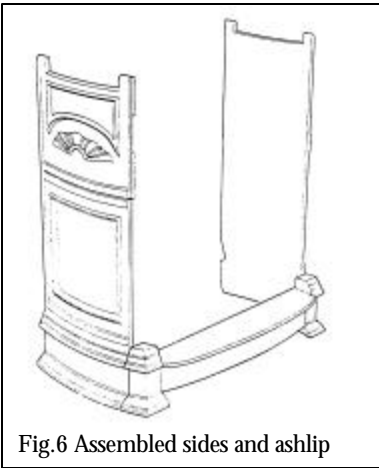


Fig.6 Assembled sides and ashlip

Take the left side panel and remove the assembly bolt using a 7/16th wrench or socket. Attach the side panel to the ashlip assembly. It may assist to slacken the ashlip bracket retaining bolt during this process. Replace side bolt and tighten both bolts. Take the remaining side panel and repeat the assembly process. Lifting carefully, place the entire Side Panel/Ashlip assembly onto the hearth. Check the Side Panel/Ashlip

assembly is level and that there is not a discernible vertical gap against the Fireplace, adjust the side panel leveling feet to eliminate any such gap. Once leveling is complete adjust the ashlip support legs so that they just touch the hearth panel (Figure 6). Carefully lift the Side Panel/Ashlip assembly off the hearth to allow preparation and connection of the heat engine.

4. PREPARATION

Turn the appliance on its side with the control valve facing upwards. Insert the control shaft into the guide tube (see figure 6A). Turn the control shaft to align the Phillips head screw with the flat on the valve shaft. Slacken the Phillips head screw and locate the control shaft boss over the valve shaft. Leave the Phillips head screw slack until the casting is fitted.

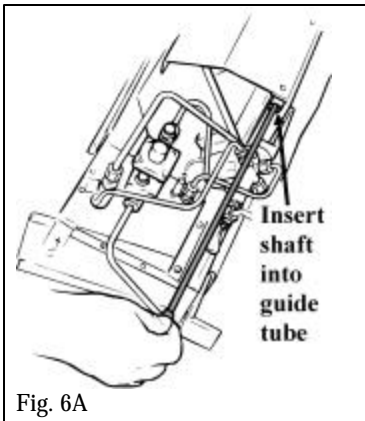


Fig. 6A

Leave the Phillips head screw slack until the casting is fitted.

Stand the heater upright. Remove the window unit assembly by detaching the knurled screws at the sides near the top. Lift the window unit up to clear locations at the bottom and place carefully aside (see fig. 7).

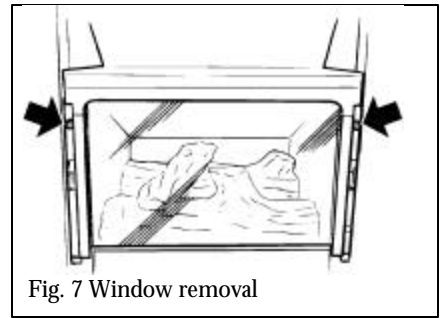


Fig. 7 Window removal

Carefully remove the ceramic logs from inside the firebox and place to one side. Fit the flue collar to the back of the heater using four thread cutting screws provided. (See fig. 8). Fit the smoke channel (for venting check) to the back of the heater using four thread cutting screws provided. (See fig. 8). Fit the top rear wall spacer provided by attaching it to the 2 bolts visible on the rear of the heater convection hood above the flue collar. (Lock washer and nuts provided in pack). (See fig. 8).

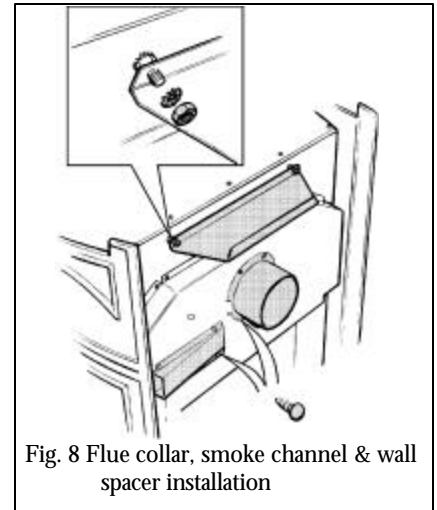


Fig. 8 Flue collar, smoke channel & wall spacer installation

(Lock washer and nuts provided in pack). (See fig. 8).

If installing to #401CVK Concealed Vent Kit

When installing the Valor President to the #401 Concealed Vent Kit, the vent collar does not penetrate sufficiently into the flue adaptor box to ensure good extraction of the combustion products. The collar extension assures good extraction.

If the Valor President is not being installed to the #401 Concealed vent kit don't use the extension.

Fitting the extension (See figure 8A):

- Make the extension into a coil small enough to fit inside the vent collar.
- Push the coiled extension right into the vent collar as far as it will go.
- Release the extension so that the coil expands against the inner diameter of the collar.
- Seal the joint between the collar and extension all round with the sealing tape.

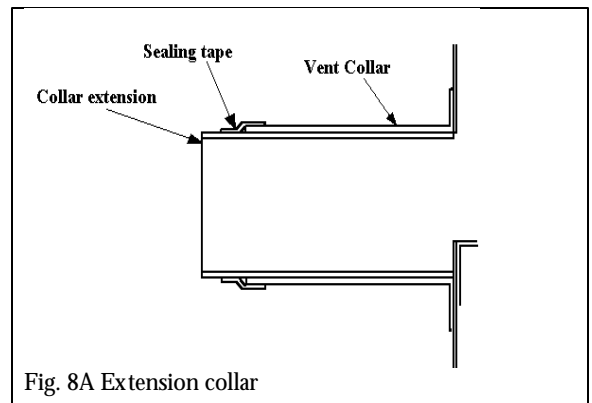


Fig. 8A Extension collar

5. CHECK IGNITION SPARK

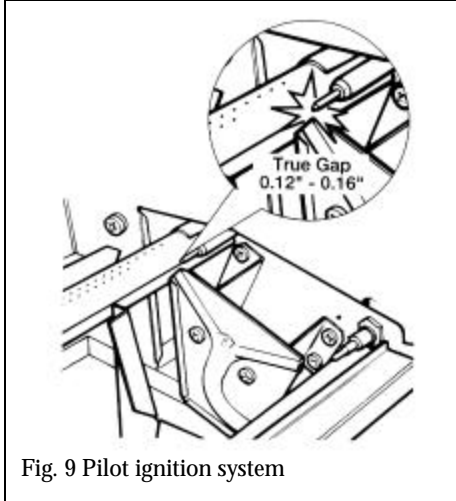


Fig. 9 Pilot ignition system

The pilot electrode is situated at the right side of the firebox above the rear port of the pilot and cross lighting burner - see figure 9. Check that there is an ignition spark at the pilot port. Fit the control knob over the control valve. To initiate a spark depress the control knob.

While keeping it depressed, turn counter clockwise until the click of the spark igniter is reached.

If there is no spark produced during several attempts, check that the electrode lead is properly connected to the electrode and that the spark gap is correct. Replace parts, if necessary, as described in the relevant servicing sections of this manual.

6. INSTALL THE FIRE

To prevent hearth damage, two plastic caps are included in the accessory pack. Fit these caps over the heads of the leveling screws in the front feet.

Level the fire by slackening the two lock nuts and turning the leveling screws in the front feet up or down as required while they bear on the hearth. When the fire is level and square to the wall, retighten the lock nuts.

7. CONNECT THE GAS SUPPLY

To gain access to the appliance connection point, the center panel in the firebox floor must be removed by unscrewing four screws and lifting it clear (see figure 10). Route the supply gas line to the heater connection point.

The appliance is supplied with a 3/8" NPT elbow connector

for connection to the supply pipe.

Use only new black iron or steel pipes or copper tubing it acceptable - check local codes.

Note: In USA copper tubing must be internally tinned for protection against sulfur compounds.

Unions in gas lines should be of ground joint type.

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.

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

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

Pressure test the supply line. 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 1/2psig (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 1/2psig (3.5kPa).

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

All leaks must be correct immediately.

When testing for leaks:-

(a) Make sure that the appliance control knob is at the OFF position.

(b) Open the manual shut-off valve

(c) 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

(d) Correct any leak detected immediately. Refit the firebox floor panel when testing results are satisfactory.

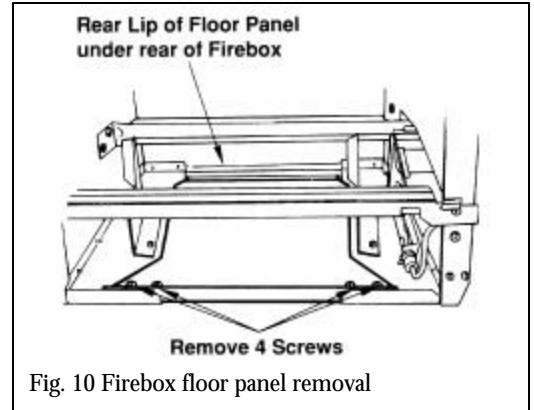


Fig. 10 Firebox floor panel removal

8. LOG INSTALLATION

8.1 Place the rear log (the log with only one short stub) in the retaining cradle behind the rear burner tube with its back against the firebox back wall (fig. 11). The short stub should be at the top right of the log. Center the log so that the gap to the firebox walls is the same at each side.

8.2 Place the front log on the retaining cradles between the rear and front burner tubes (fig. 12). Center the log so that the gap to the firebox walls is the same at each side.

8.3 Place the cross log in position (see fig. 13). The front of this log is indicated by the letter "F" embossed on its underside. Make sure that the front of the log is seated inside the follow in the front log and is not raised in front of it.

8.4 Replace the window unit. Locate its bottom edge in the support channels at the firebox sides. Refit the knurled screws at the sides near the top.

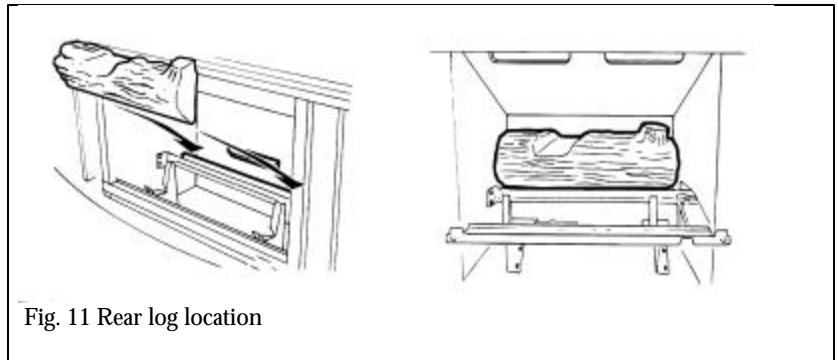


Fig. 11 Rear log location

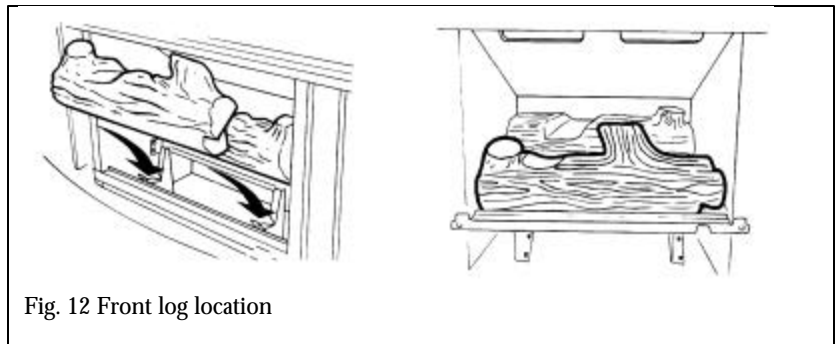


Fig. 12 Front log location

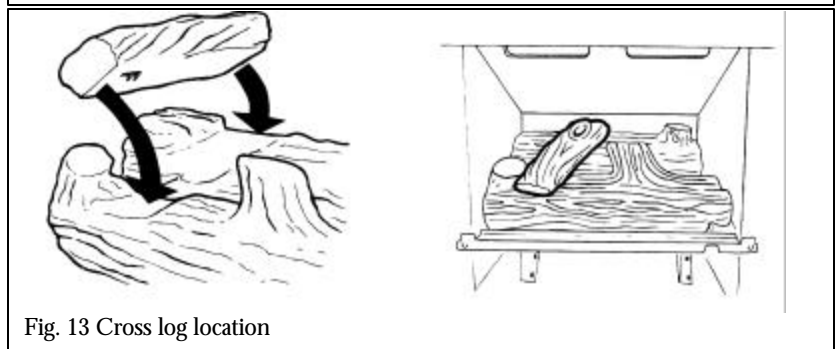






Fig. 13 Cross log location

9. CHECK APPLIANCE OPERATION

Depress the control knob. Turn counter clockwise until resistance is felt just before the piezo-electric ignition is activated. Keep the knob depressed for a few seconds to purge air from the gas lines. When it is judged that the air has been purged keep the knob depressed and turn to the ignition position. A spark should be produced which should ignite the pilot and cross lighting burner. When ignition has been achieved, keep the control knob depressed for approximately five seconds to allow the thermocouple probe to warm up then release it. If the burner does not remain alight, ensure that the air has been purged.

Check that the burners are correctly alight at the four settings on the control valve as shown in the following table:-

Control knob position	Burner appearance
	Pilot & cross lighting burner only
	Pilot & cross lighting burner on. Front burner on low
	Pilot & cross lighting burner on. Front burner on low. Rear burner on high
	Pilot & cross lighting burner on. Front burner on high. Rear burner on high

Turn off after checking. To turn off, Push the control partially in, turn clockwise and release the knob. If any resistance is experienced at the ignition position, release the knob before turning to the off position.

Note: If the fire is turned off while hot, wait three minutes before relighting.

10. CHECK SYSTEM PRESSURES

For input adjustment, the gas supply pressure to the appliance inlet must be between the figures in the table:-

Test Tapping Point	Pressures (in w.c.)			
	Natural Gas		Propane	
	Max	Min	Max	Min
Supply - upstream of heater regulator	10.5	5.0	14.0	11.0
Manifold- Downstream of heater regulator at high setting	4.2	3.8	9.7	9.3

For altitude level above 2000Ft on **Natural Gas** only:

	Max	Min
Supply - upstream of heater regulator	10.5	5.0
Manifold - Downstream of heater regulator at high setting	3.5	3.1

The burner manifold pressure is controlled by a built-in non adjustable regulator. The manifold pressure should be checked at the pressure test point which is located immediately downstream of the regulator (i.e. located above the regulator). The pressure check should be carried out with the fire alight and the control knob at the full on position. The pressure setting should be within the limits shown in the table.

If the pressure reading at this test point is incorrect but the supply system pressure is correct when measured at the test point upstream of the regulator, then the regulator is faulty and should be replaced. After checking the pressure, turn off the fire, remove the pressure gauge and replace the pressure test sealing screw. Test the sealing screw for gas soundness.

11. CHECK FOR CORRECT 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 and set the control to the full on position.

After the appliance has been alight for five minutes place a lighted smoke match or taper at the right side of the case level with the opening of the smoke channel - see figure 14.

The installation is satisfactory if the majority of the smoke is drawn into the draft diverter.

If the vent is blocked or has strong reverse flow, the thermally actuated switch mounted in the draft diverter opening will automatically shut off the gas supply within about five minutes.

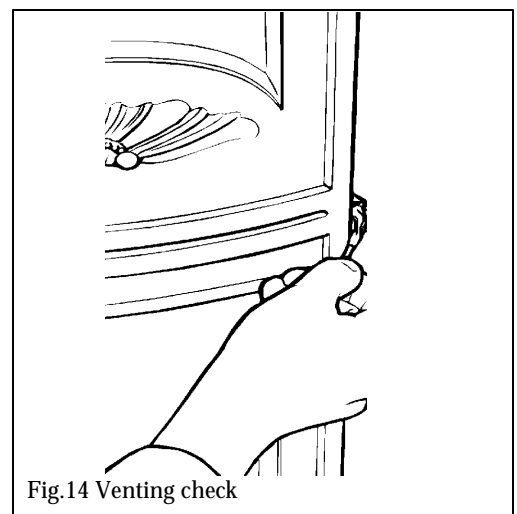


Fig.14 Venting check

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 draft diverter, turn the heater off and check cause of lack of draft, if necessary get expert advice.

12. AERATION ADJUSTMENT (See Fig. 15)

Natural gas appliances have adjustable shutters to control primary aeration on both rear and front burner tubes.

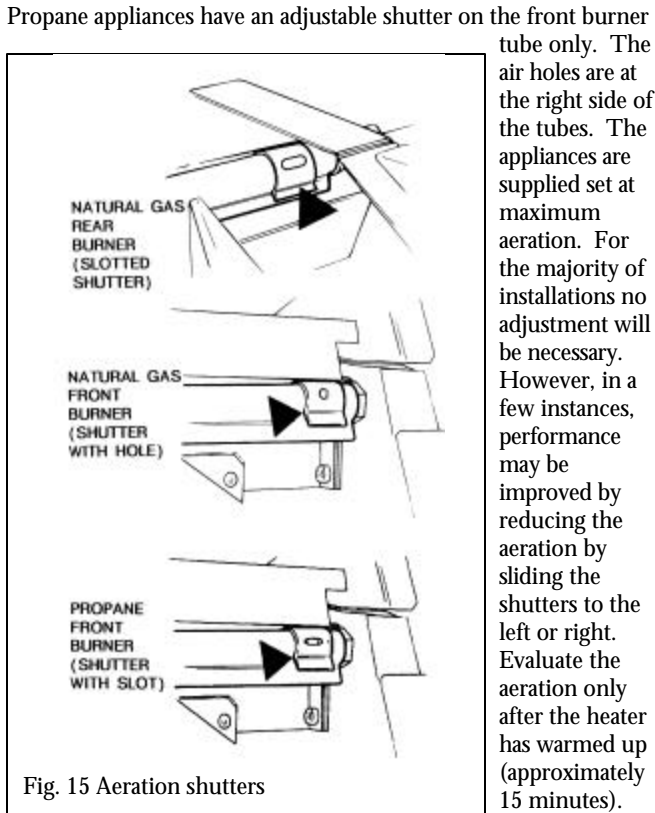


Fig. 15 Aeration shutters

Propane appliances have an adjustable shutter on the front burner tube only. The air holes are at the right side of the tubes. The appliances are supplied set at maximum aeration. For the majority of installations no adjustment will be necessary. However, in a few instances, performance may be improved by reducing the aeration by sliding the shutters to the left or right. Evaluate the aeration only after the heater has warmed up (approximately 15 minutes).

Decreasing aeration will cause the flames to appear more yellow or Orange revealing less glow in the logs. Too little aeration may result in black carbon forming and dropping into the firebox.

13. COMPLETION OF THE CAST-IRON OUTER CASE ASSEMBLY

Lifting carefully, place the entire Side Panel/Ashlip assembly onto the hearth in front of the Heater centralizing the shallow cut-out in the cast-iron ashlip against the sheet metal uprights of the Heater firebox (Figure 16).



Fig. 16 Outer case & firebox relationship

Take the cast-iron Arched Lintel component and observe the fixing attachments on the rear, and towards the inside top of the Side Panels (Figure 17).

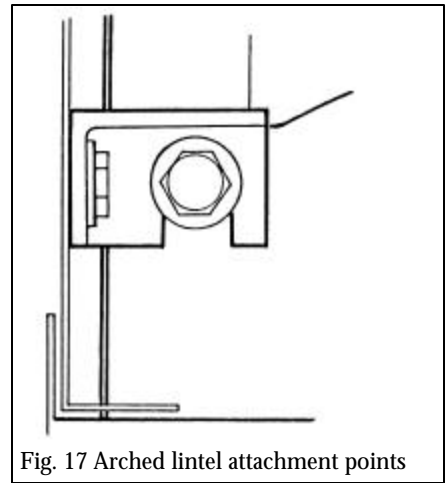


Fig. 17 Arched lintel attachment points

Offer up the arched lintel component to the side panels in turn, and locate onto the attachments in the side panel (Figure 18).



Fig. 18 Arched lintel installation

The sheet metal component attached to the rear of the arched lintel should sit on top of the horizontal front section of the heater convection hood. Ensure the Arched Lintel is a good fit, adjusting the location of the side panels slightly if necessary. Take the cast-iron door, and observe the hinges on the right hand side, looking from the front. Offer up the door to the ashlip assembly hinge

point and drop the lower hinge pin into the hole provided. Holding the door using one hand, carefully lift up the right hand side of the arched lintel component (Figure 19) and offer up the door to a position below the top hinge, which is mounted on the arched lintel. Allow the hinge pin in the arched lintel to locate into the door hinge, by carefully lowering the arched lintel into position. The door should hinge freely. Close the door.

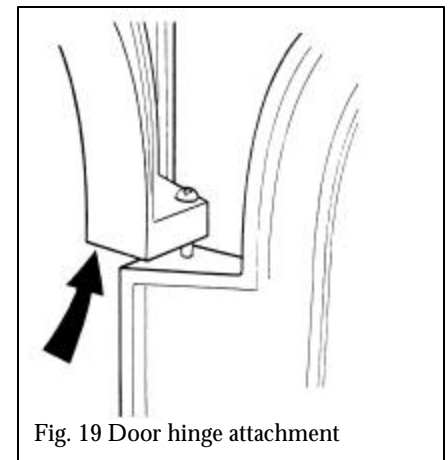


Fig. 19 Door hinge attachment

The Outer Case assembly can now be attached to the Heater. Locate the bolts and washers supplied, and fasten the Arched Lintel to the top surface of the Heat Engine as shown in Figure 20. Ensure the sheet metal components fit closely together, or adjust the Arched Lintel attachment points for height as shown in Figure 21 until they do so.

Observe the correct operation of the door. Using the handle, lift the door slightly so that it is released from the "catch". It should swing freely, and open/close easily.

If further adjustment to the door alignment is required, loosen the fastening bolts (Figure 20) and adjust the door within its "frame" by moving the outer case slightly - left to right - until the correct door operation is achieved. Refasten all bolts.

Remove the gas control knob from the extension rod. Take the Top Plate, open the hinged gas control access panel, and locate the top plate onto the two

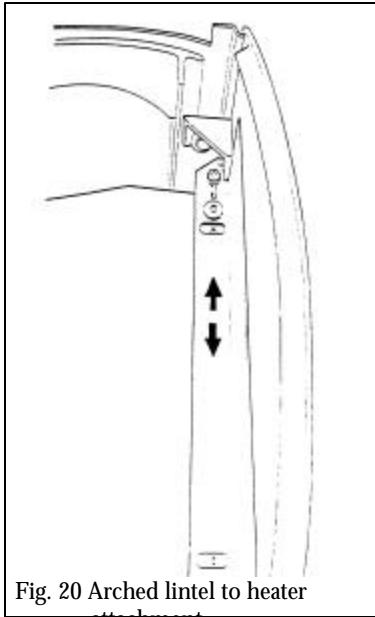


Fig. 20 Arched lintel to heater

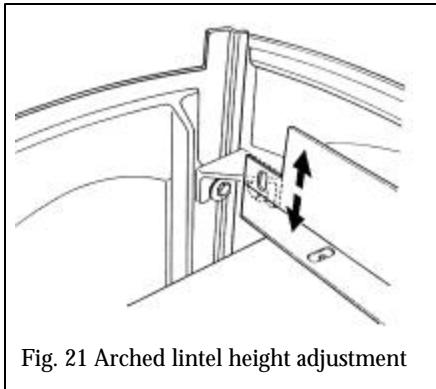


Fig. 21 Arched lintel height adjustment

Side Panels and Arched Lintel, taking care to insert the control rod through the guide hole in the gas control well (Figure 22). Refit the control knob over the control valve extension rod. Push firmly on.

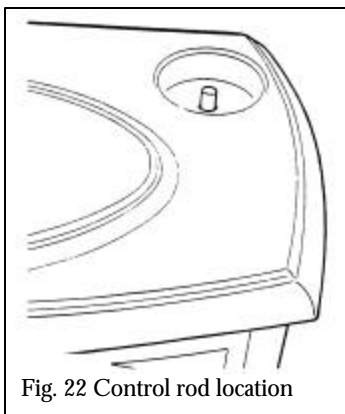


Fig. 22 Control rod location

Control Knob Adjustment

Due to variations in casting dimensions the height of the shaft linkage between the gas control valve and the control knob can vary. If the shaft is too long, it could prevent the cast iron knob access door from closing

properly. If the shaft is too short, it could prevent the pilot from lighting because the gas valve is not depressing fully.

If the shaft protrudes less than 7/8", first turn the control knob to a position between the High and Medium setting. This will give access to the Phillips head coupling screw through the hole found at the rear of the heater in the mounting bracket which holds the gas valve (see figure 22B). Adjust the coupling until 7/8" of shaft protrudes through the hole in the top of the cast iron case.

Tighten the screw.

If the shaft protrudes more than 7/8" at its lowest position,

Tighten the coupling screw at the lowest shaft position. Make a note of how much the shaft protrudes in excess of 7/8". Remove the cast iron case top and lift the rest of the cast iron case away from the heater. Screw out the leveling feet on the cast iron sides by the amount of excess shaft protrusion. (This will raise the cast iron case top so that the shaft only protrudes by 7/8"). Replace the cast iron case and top.

IMPORTANT: Tighten the screw firmly against the flat face of the "D" on the control knob spindle

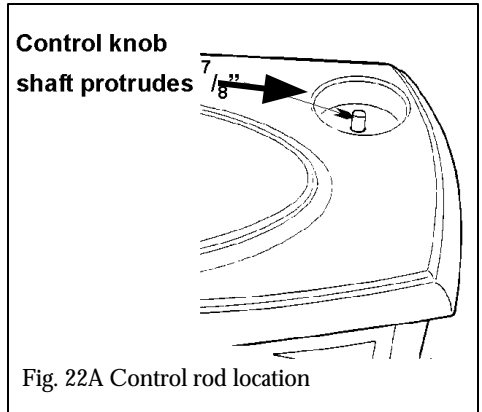


Fig. 22A Control rod location

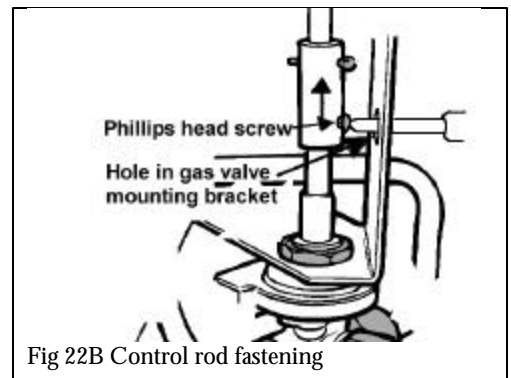


Fig 22B Control rod fastening

MAKE FINAL CHECKS AND INSTRUCT OWNER

Make sure that the logs have not been dislodged when fitting the case.

Fit the Caution & Direction label to the right hand side of the case in the position shown in Figure 23.

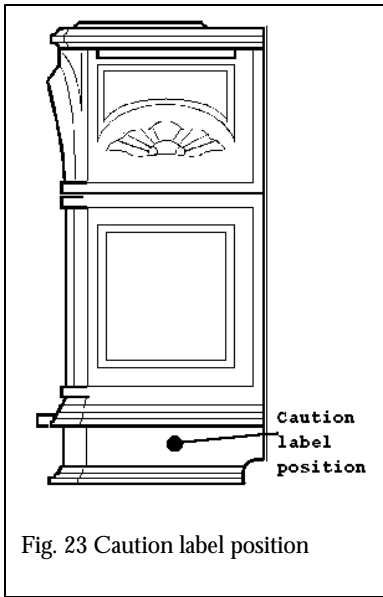



Fig. 23 Caution label position

Recheck the operation of the fire on all control positions. Instruct the owner how to correctly operate the heater and especially point out the following:- The heater has a pilot. To light the pilot, the control knob must be depressed and turned to the posit . The pilot flame can be viewed to check that it is alight. Show the owner where to view the pilot. Point out the illustration showing how to view the pilot. Explain the full lighting and control position sequence and how to





turn off. It must be explained that the gas control access panel must be kept open while the heater is in operation. Advise that the fire can be lit with a long match or taper if necessary.

Advise that the window will require cleaning periodically both outside and inside as described in the instructions. Explain how to remove and replace the window unit and logs for cleaning etc. Stress that cleaning and opening of the door should only be carried out when the heater is cold. Advise that the heater may give off a slight odor while new. This is quite normal and will disappear after a short period of use.

Advise that the bright metal firebox interior will color with use and that this is quite normal. Emphasize that if the glass panel is broken or damaged, the heater should be turned off and not used until the window unit is refitted with an authorized replacement.

14. OPERATING PROCEDURE


Full lighting instructions are given on the next pages. For your safety this heater is fitted with a Flame Supervision Device which will shut off the gas supply if for any reason the pilot flames go out. This device incorporates a fixed probe which senses heat from the pilot flame. If the probe is cool the device will prevent any gas flow unless the control knob is held down. When first turned on, the decorative flames will appear predominantly blue. After approximately 15 minutes these flames will turn yellow. After approximately 3 hours use at the high control setting the fuel pieces will show areas of charcoal gray color as would real burning logs.

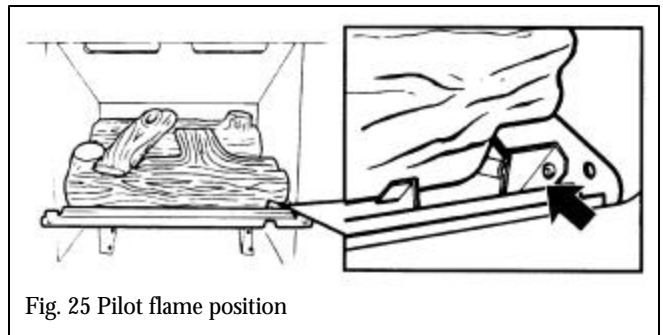
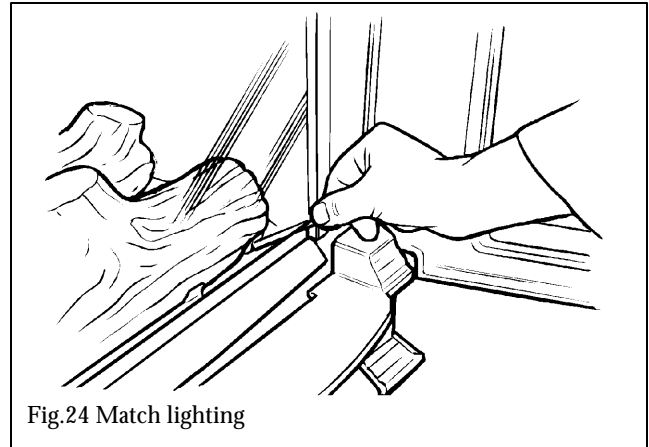
Control knob position	Burner appearance
	Pilot & cross lighting burner only
	Pilot & cross lighting burner on. Front burner on low
	Pilot & cross lighting burner on. Front burner on low. Rear burner on high
	Pilot & cross lighting burner on. Front burner on high. Rear burner on high

14.1. Lighting if ignition spark fails

In the unlikely event of failure of the ignition spark, the heater can be lit by a long burning match as follows:

Open the cast door fully to gain access to the heater. Light the match and insert through the opening in the black bar near the bottom right corner of the window. Insert the match so that about 1" is inside the black bar (see figure 24).

Open the hinged gas control access panel. Depress the control knob and turn to the  position. Keep it depressed while lighting the pilot and for a few seconds afterwards. The pilot flame can be seen by looking through the gap at the front right corner of the logs (see figure 25). When the pilot is satisfactorily alight, close the door.



FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

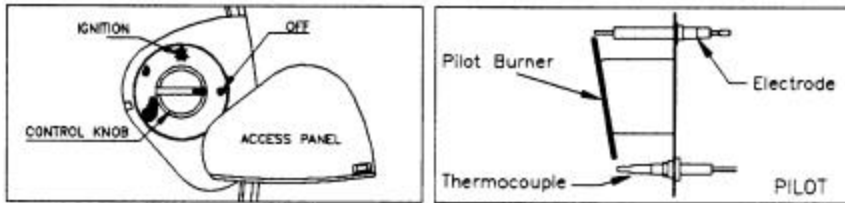
- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.**
- B. BEFORE LIGHTING smell all round the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.**




WHAT TO DO IF YOU SMELL GAS

- **Do not try to light any appliance.**
 - **Do not touch any electric 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.**
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.**
 - D. 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.**

LIGHTING INSTRUCTIONS

STOP! Read the safety information on previous page.



1. Open the hinged access panel at rear right of case top
 2. Turn the control knob on right side of heater  clockwise to "OFF" position (marked ●).
- NOTE: Knob cannot be turned to off unless knob is pushed in partially. Do not force.**
3. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information on previous page. If you don't smell gas, go to the next step.
 4. Find the pilot. It is at the right side of the firebox.
 5. Push in and turn the control knob  counterclockwise until resistance is felt just before the ignition ☆ position marked
 6. Keep pushed in for a few seconds to allow gas to flow then, keeping the knob depressed, turn to ignition to light pilot. Hold knob in for a further 5 seconds then release. The knob should pop back up. Pilot should remain lit. If it goes out repeat steps 2 through 6. If pilot does not light at all during a few attempts, try lighting with a long match as described below.
 - If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
 - If the pilot lights but will not stay alight after several tries, turn the gas control knob off and call your service technician or gas supplier.
 7. When pilot is lit, partially depress the knob and select burner setting (the knob should be depressed slightly when changing settings).
For maximum efficiency, turn to high setting (marked ) for the first 10 minutes to warm the chimney or flue.
 - Do not operate between the setting positions.
 - Do not close the access panel while heater is in operation
- Match lighting.** Open main door and insert a long match to the pilot while the control knob is pushed in and at the ignition position.

TO TURN OFF GAS TO APPLIANCE

1. Push in control knob partially and turn  clockwise to off (marked ●). Do not force.

15. CLEANING

All cleaning should be carried out when the heater is cold. Normally, the heater should only need dusting. Any stains on the glass can be removed with a non abrasive cleaner.

Abrasive cleaners should never be used on the glass.

15.1 Cleaning the inside of the window:

Open the case door fully. Remove the window unit by detaching the knurled screws at sides near the top. Lift the window unit assembly up to clear the locations at the bottom - see fig 7. In installation section of this manual.

Be careful not to disturb the logs when removing the window. If they are disturbed, refit them as described in the log installation section of this manual.

Clean the window carefully by wiping with a soft cloth using a suitable non abrasive cleaner in accordance with the makers instructions. Replace the window unit. Locate its bottom edge in the support channels at the firebox sides. Refit the two knurled screws and tighten. Replace the window surround.

16 PERIODIC CHECKS

The venting system should be examined by a qualified agency regularly. We suggest annually. The flow of combustion and ventilation air must not be obstructed. A periodic visual check of the pilot and burner flames should be made (see figs. 26 & 27)

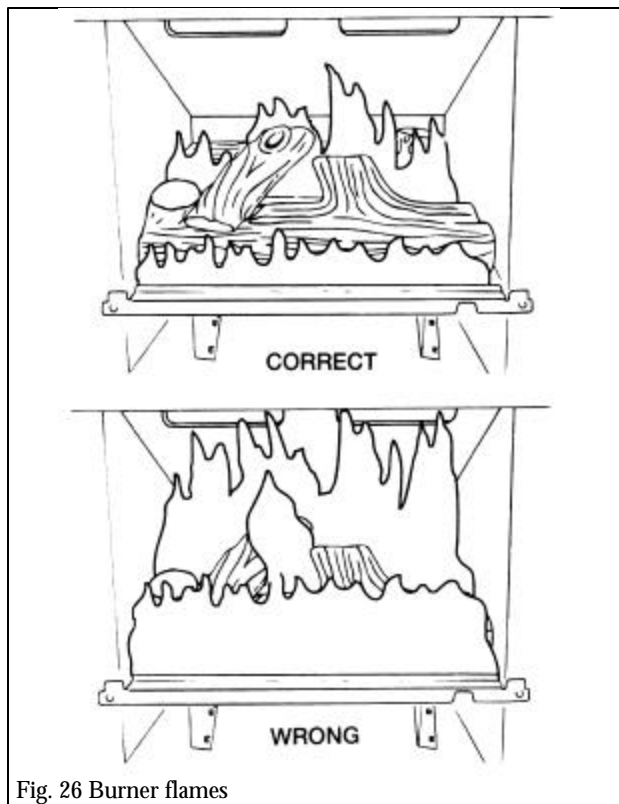


Fig. 26 Burner flames

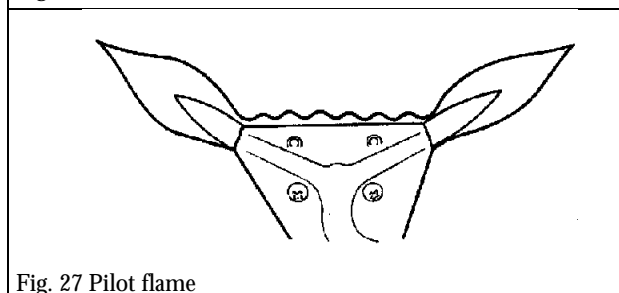


Fig. 27 Pilot flame

17. CALLING FOR SERVICING

For owner

If you require any attention to your appliance, contact your supplier quoting the model number. It is helpful if the appliance serial number is also quoted. This will be found near the back of the case at the bottom right side.

The servicing information on the following pages is for use only for a qualified service engineer.

18 SERVICING INFORMATION - (For qualified service engineers only)

The repair parts are shown on the separate repair parts leaflet. Please always quote Part Number and description with requests for spares. **TURN OFF THE GAS AND MAKE SURE THAT THE APPLIANCE IS COOL BEFORE COMMENCING ANY SERVICING. ALWAYS TEST FOR GAS SOUNDNESS AND CORRECT VENTING OF COMBUSTION PRODUCTS AFTER REFITTING THE APPLIANCE.**

Methods of removal of the window unit and control knob are described in the installation and cleaning sections of this manual.

18.1 TO REMOVE THE REAR BURNER TUBE

1. Open the cast door remove the window unit assembly and logs.
2. Unscrew the two screws securing the burner tube to the left side of the firebox. Lift the burner tube clear.
3. Refit in the reverse order. When refitting make sure that the burner tube is properly located over the injector carrier at the right side.

18.2 TO REMOVE THE FRONT BURNER TUBE

1. Open the cast door remove the window unit and logs.
2. Remove the screw securing the firebox front cross rail at the left side and decorative baffle.
3. Slacken the screw securing the cross rail and decorative baffle at the right side and swing the rail upwards at the left side to give access to the burner tube screws.
4. Unscrew the two screws securing the burner tube to the left side of the firebox. Lift the burner tube clear.
5. Refit in the reverse order. When refitting make sure that the burner tube is properly located over the injector carrier at the right side.

18.3 TO REMOVE THE ELECTRODE

1. Disassemble the outer case by reversing the procedures outline earlier in the installation manual until the condition shown in Figure 16 is reached. Carefully lift the sides and ashlip assembly forward and away from the heater.
2. Though not essential for access to the electrode, it is recommended that the window unit and logs are removed so that the electrode tip position can be checked when replaced.
3. Remove the two screws securing the electrode unit to the bulkhead panel outside the right side of the firebox. Pull the electrode with lead attached clear.
4. Disconnect the lead from the electrode.
5. Refit in the reverse order.

18.4 TO REMOVE THE PILOT & CROSS LIGHTING BURNER

1. Open the cast door remove the window unit assembly and logs.
2. To gain clear access to the pilot burner screw, detach the right hand front log support by removing two screws - see figure 28.
3. Remove the pilot and cross lighting burner by unscrewing the two screws fixing it to the bracket at the right side of the firebox - see figure 28.
4. Refit in the reverse order.

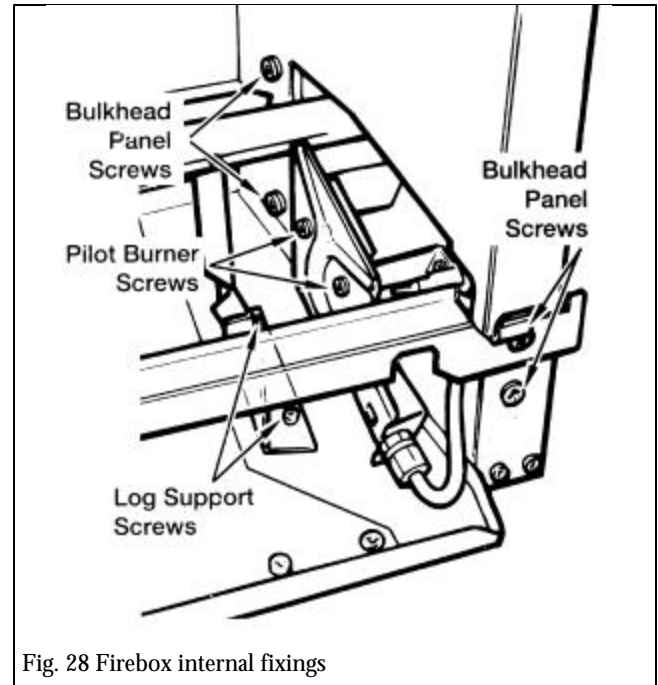


Fig. 28 Firebox internal fixings

18.5 TO REMOVE THE PILOT JET

1. Remove the two screws securing the firebox front cross rail and decorative baffle. Lift rail and baffle clear.
2. Remove the pilot and cross lighting burner - see section 19.4
3. Disconnect the pilot pipe at the jet end and spring clear of the carrier.
4. Remove the pilot jet and carrier from the bracket.
5. Refit in the reverse order. Test for leaks

18.6 TO REMOVE THE PRESSURE REGULATOR

1.Remove the outer case see section 18.3.

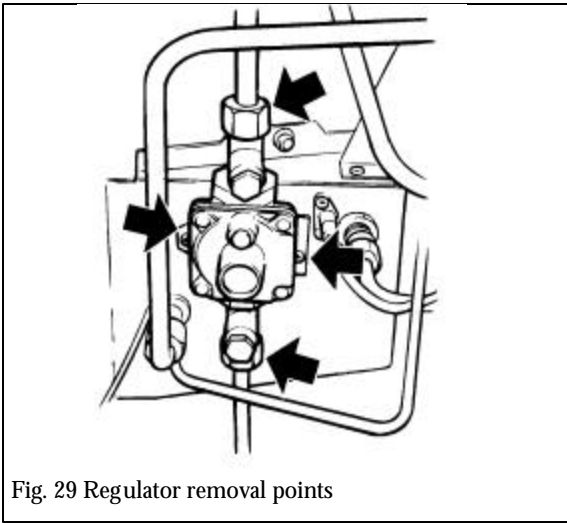


Fig. 29 Regulator removal points

2.Disconnect the pipes from each end of the regulator and spring them free from the test tapping tee pieces.

3.Remove the two regulator bracket screws and lift the regulator unit free.

4.Fit new regulator assembly in the reverse order. When replacing make sure that the regulator flow direction is correct. The regulator has a flow direction arrow on its back face. Seal with pipe sealant.

5. Note that if fitting a new regulator, the regulator fixing holes are unthreaded. Tapping screws are used.

18.7 TO REMOVE THE CONTROL VALVE AND IGNITION SPARK GENERATOR

1.Remove the outer case (see section 18.3)

2.Disconnect the heater from the venting system and pull forward to gain access to the rear of the control valve.

3.Disconnect the electrode lead

4.Disconnect the valve extension rod by removing the split pin just above the valve spindle and lifting rod upwards (see fig.30)

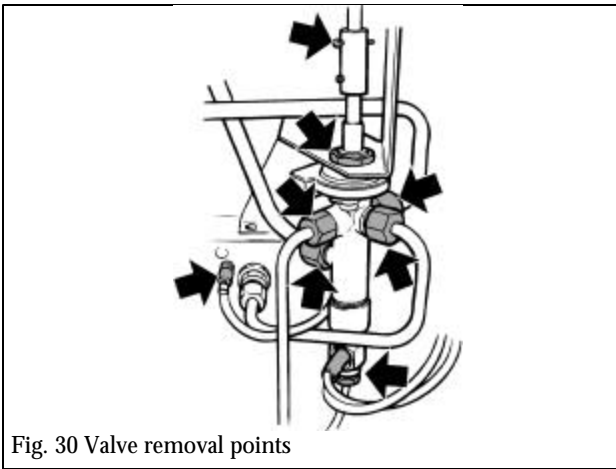


Fig. 30 Valve removal points

5.Disconnect the four pipes from the control valve.

6.Remove the control valve securing nut.

7.Disconnect the thermocouple and vent sensor wires from the interrupter block.

8.Transfer the extension rod/valve spindle connector to the replacement valve.

9.Refit in reverse order. Test for leaks.

18.8 TO REMOVE THE IGNITION SPARK GENERATOR

1.Remove the control valve and spark generator as 18.7 above.

2.Make sure that the valve is in the off position.

3.Remove the circlip holding the spark generator to the valve. Remove the generator.

4.Refit in the reverse order. Seal with pipe sealant.

18.9 TO REMOVE THE THERMOCOUPLE

1.Remove the outer case (see section 18.3)

2.Remove the window unit assembly

3.Undo the thermocouple from the interrupter block at the bottom of the control valve (note that the vent sensor wires will then be loose). Undo the nut securing the thermocouple probe to the manifold panel and withdraw the thermocouple.

4.Remove the screw securing the firebox front cross rail and decorative baffle at the right side.

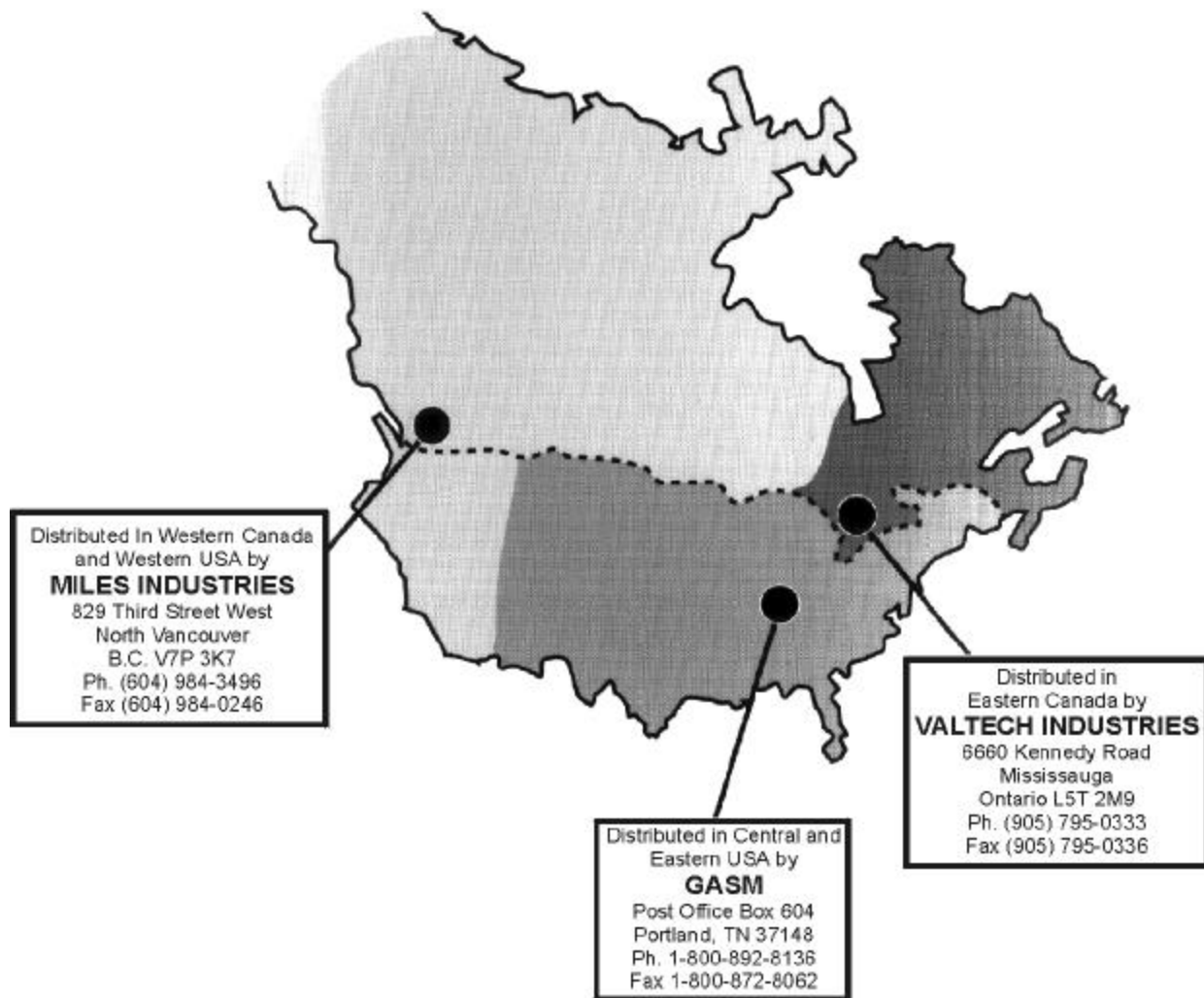
5.Slacken the screw securing the cross rail and decorative baffle at the left side and swing the rail down at the right side to give access to the nut securing the thermocouple probe.

6.Refit in the reverse order. When reconnecting the thermocouple nut to the control valve, make sure that the vent sensor wires are properly located. Initially screw the thermocouple nut until finger tight, then finally tighten a further quarter turn with a wrench.

Manufactured by

Valor HEATING

BIRMINGHAM, ENGLAND



Because our policy is one of constant development and improvement, details may vary slightly from those given in this publication.