

530 Direct 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

Vous pouvez vous procurer un exemplaire en langue Française de cette brochure chez votre marchand.

600B121-4

Note: If this appliance is intended to be installed with a B-Vent instead of Direct Vent, discard this manual. Follow the installation and operating procedure in the manual supplied with the B-Vent adapter kit #552BVK



- Safety Information
- Options
- Location
- Supply Gas
- Pack Contents
- Appliance Preparation
- Installations with different Models
- Installing to Wall
- Installations through the roof
- Installing to Frame & Fitting Heating Unit
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- Gas Supply Installation
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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.

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

The venting terminal must not be recessed into a wall or siding.

The vent terminal on the outside wall must be kept free from obstructions. No objects should be placed within 2 feet (60cm) of the vent terminal. The terminal is hot during operation and requires a guard if it is accessible to any person. An approved Valor guard is available from your dealer.

During extreme weather conditions ensure that the vent outlet is free from ice and snow before attempting to light.

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 due to the burning of curing compounds used in the manufacture of the appliance. They may cause a slight odor and could cause the flames to be the full height of the fire box, or even slightly higher, for the first few hours of operation. It is also possible that these vapors could set off any smoke detection alarms in the immediate vicinity. These vapors are quite normal on new appliances and are totally harmless. After a few hours use the vapors will have disappeared and the flames will be at their normal height.

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.

2. OPTIONS

Heater engine unit #530EAN is used with all installations.

2.1. Appliance styles

- President FS** Free standing cast iron stove.
(See figure 1),
Black textured - **Kit #531CSB**.
Black enameled – **Kit #532ESB**.
Green enameled – **Kit #533ESG**.
- President ZC** For zero clearance inset in framed recess.
Cast iron front. (See figure 2)
Black textured – **Kit #536CFB**.
Black enameled – **Kit #537EFB**.
Green enameled – **Kit #538EFG**.

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

2.2. 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**

2.3. LP Gas

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

2.4.

Venting options

2.4.1. **Direct vent installations**

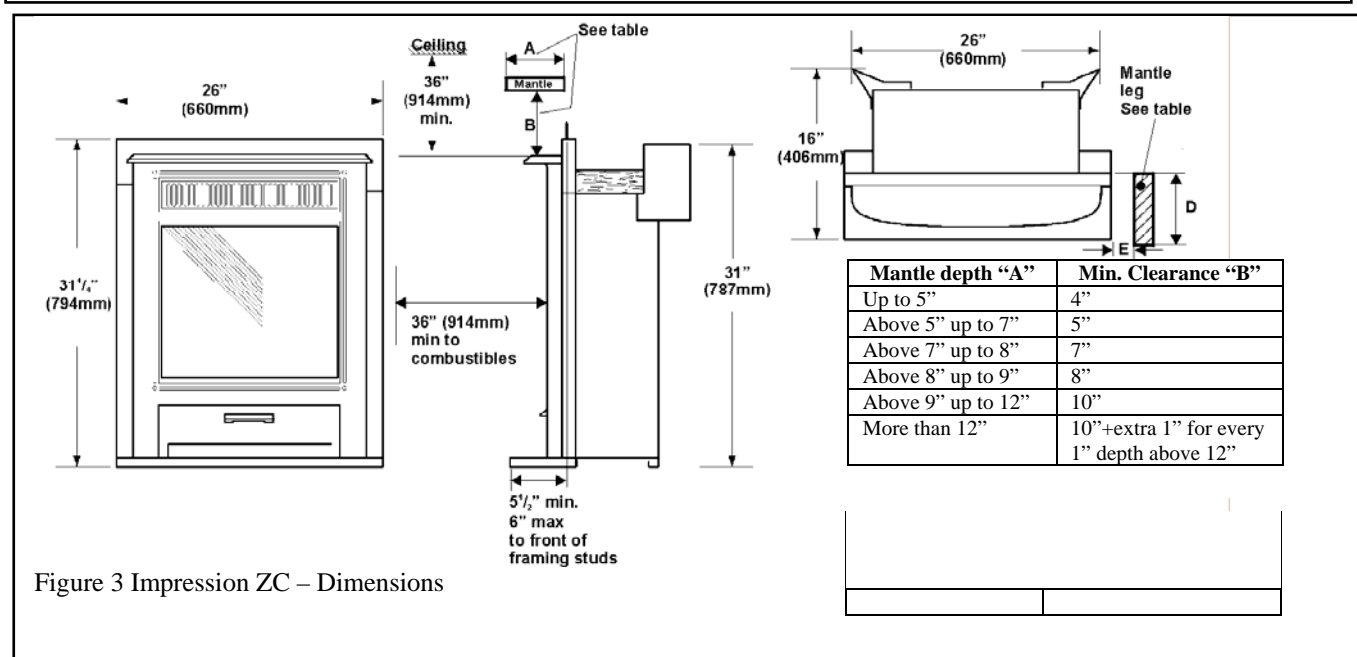
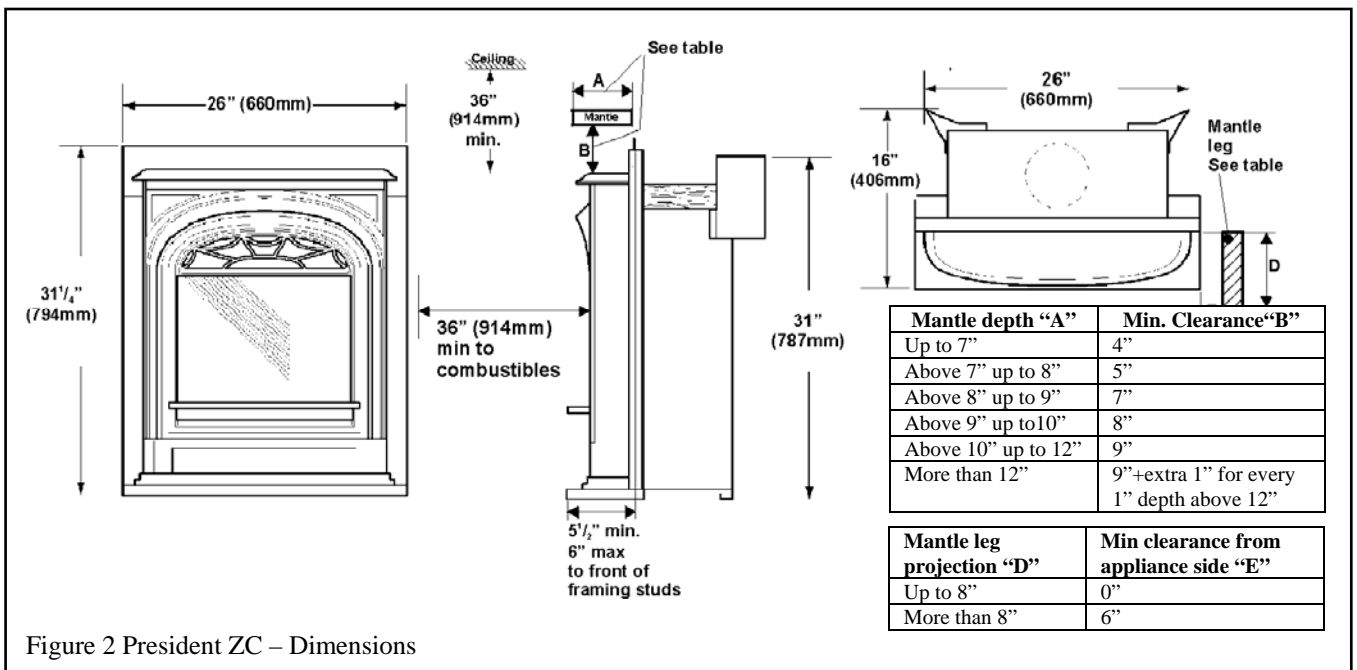
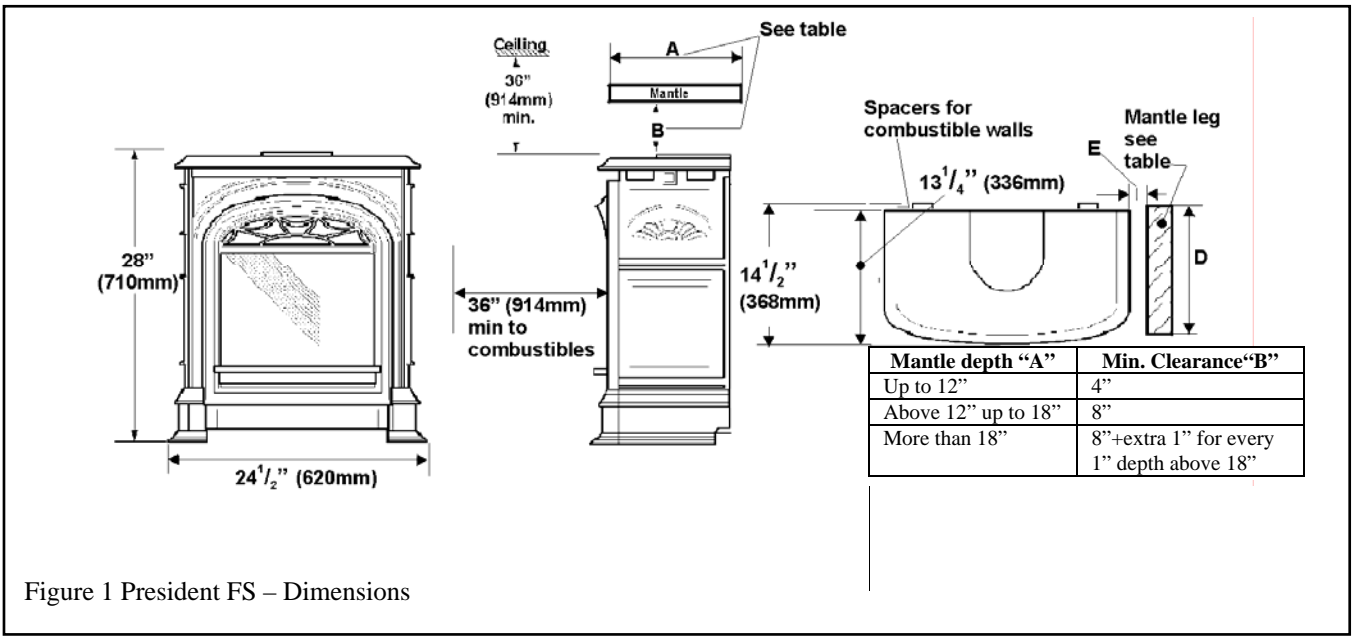
One or more of the accessories listed below must be used for each installation. See the “Location” section of this manual.

Kit#

- | | |
|--------|---------------------------------------------------------------------------------------------------------|
| 551DVK | Valor terminal kit for non-combustible wall thickness up to 26” (66cm) (Combustible maximum 14” (36cm)) |
| 558FLK | Through the wall Dura-vent pipe insulation kit |
| 817VAK | Adapter for Dura-vent pipes |
| 984 | Dura-vent DV GS horizontal square terminal cap |
| 942 | Dura-vent DV GS wall thimble kit |
| 945B | 45° Dura-vent DV GS elbow |
| 990B | 90° Dura-vent DV GS elbow |
| 908B | 6” Dura-vent DV GS pipe length |
| 907B | 9” Dura-vent DV GS pipe length |
| 906B | 12” Dura-vent DV GS pipe length |
| 904B | 24” Dura-vent DV GS pipe length |
| 903B | 36” Dura-vent DV GS pipe length |
| 902B | 48” Dura-vent DV GS pipe length |
| 911B | Adjustable 11”-14 ⁵ / ₈ ” Dura-vent DV GS pipe length |
| 981 | Dura-vent DV GS snorkel termination unit – 36” rise |
| 982 | Dura-vent DV GS snorkel termination unit – 14” rise |
| 991 | Dura-vent DV GS high wind vertical termination cap |
| 940 | Dura-vent DV GS round ceiling support |
| 941 | Dura-vent DV GS cathedral ceiling support box |
| 963 | Dura-vent DV GS ceiling firestop |
| 943 | Dura-vent DV GS adjustable roof flashing. Roof pitch 0/12 – 6/12 |
| 943S | Dura-vent DV GS steep roof flashing. Roof pitch 7/12 – 12/12 |
| 953 | Dura-vent DV GS storm collar |
| 988 | Dura-vent DV GS wall strap |
| 923GCL | Dura-vent DV GS co-axial to co-linear appliance connector |
| 923GK | Dura-vent DV GS co-linear termination kit |
| 984 | Dura-vent DV GS square terminal cap |
| 2280 | Dura-vent DV GS co-linear flex chimney liner 35ft. length. |
| 835TG | Terminal Guard |

2.4.2. **B-vent installations – For President FS only**

Kit #552BVK converts this appliance from a direct vent fireplace heater to a gravity vent fireplace heater for use with a 4” “B” type vent. A full installation and operating manual is supplied with the kit.



3. GENERAL

3.1. Approvals & codes

This appliance is certified by International Approval Services for use in Canada and the USA. The appliance is for installation directly venting through an outside wall or through the roof.

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.

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70* or the *Canadian Electrical Code, CSA C22.1*.

3.2. Ratings

	Nat. Gas	LPG ¹
Altitude (Ft)	0-4500 ²	
Input Max. (Btu/h)	20,500	19,000
Input Min (Btu/h)	6,000	11,600
Manifold pressure (in.w.c.)	3.5 – 3.9	10.3 – 10.7
Min. Supply pressure (in. w.c.)	5.0	11.0
Max. Supply pressure (in. w.c.)	10.5	14.0

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.

3.3. Wall Thickness

The appliance is suitable for a combustible wall up to 14" (36cm) thick.

A non-combustible wall can be any thickness up to the maximum horizontal run of vent pipe allowed for the particular installation – See sections 4 and 5.

4. LOCATION – PRESIDENT FS

4.1. Wall & Floor Fixing

The President FS can be installed against a wall or in the room away from walls. The appliance is designed to be fixed to the floor. The appliance can additionally or alternatively be fixed to a rear wall. The fixing positions are shown in figure 4.

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.

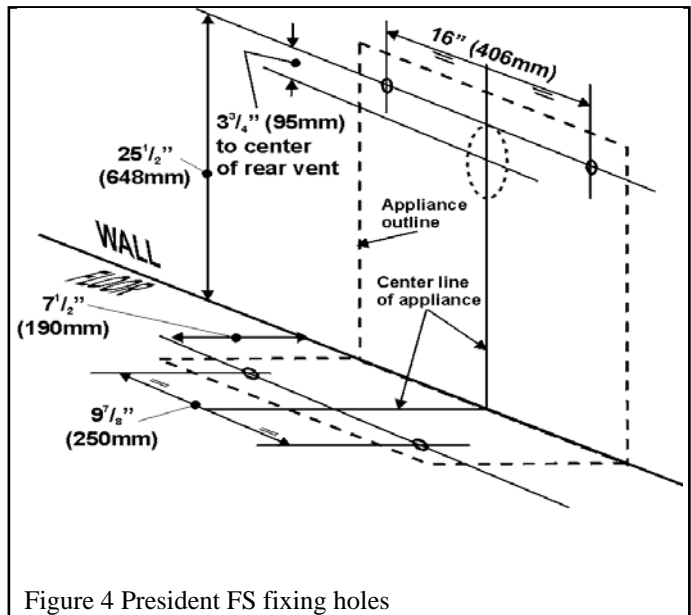


Figure 4 President FS fixing holes

4.2. Venting configurations

4.2.1. Flat on wall

Requires Valor vent kit #551DVK or Dura-vent pipe length with adapter #817VAK and Dura-vent terminal cap.

The location requirements are shown in figure 5.

The horizontal vent run can not be extended beyond the dimensions shown in figure 5 by the use of any vent accessory pipes.

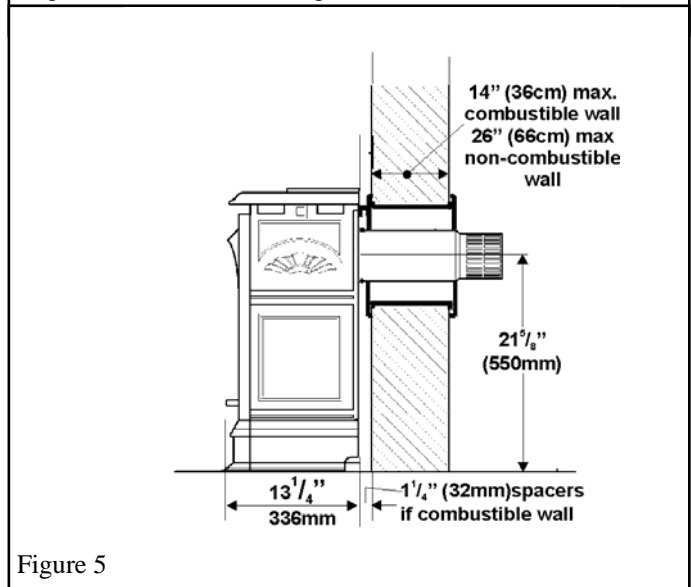


Figure 5

4.2.2. Flat on wall with snorkel termination (Fig.6)

For use on horizontal vent installations where the outside ground level is too close to the standard terminal. Adapter #817VAK, a Dura-vent pipe length and snorkel termination #981 or #982 will be required (See vent options section of this manual).

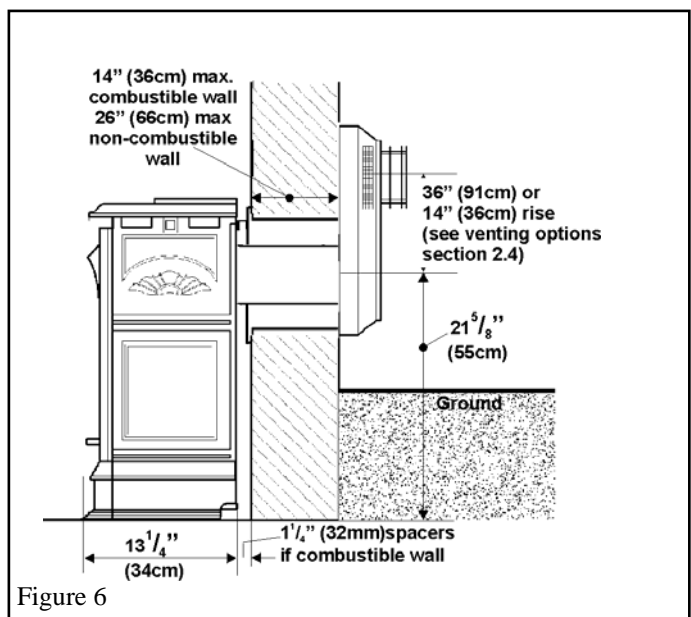


Figure 6

4.2.3. Rear vent connection, vertical vent rise with horizontal termination (Fig. 7)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories.
 Adapter #817VAK, two 90° vent elbows #990B and Dura-vent pipe lengths will be required.
 (See venting options section of this manual).
No more than two 90° elbows must be used.
 The location requirements are (See figure 7):-

	Minimum	Maximum
A: From floor to top of vent duct	3ft 7in (109cm)	10ft 7in (323cm)
B: Back of appliance to outside wall	-	5ft 5in (165cm)
C: Back of appliance to inside wall	14 ¹ / ₈ in (36cm)	-
D: Vertical pipe run	12in (30cm)	8ft (244cm)
E: Horizontal pipe run (Total before and after elbows)	-	4ft 6in (137cm)
F: Clearance to combustible materials above horizontal pipe run	2 ⁵ / ₈ in (6.7cm)	-
G: Clearance to combustible materials below horizontal pipe run	1 ⁵ / ₁₆ in (3.3cm)	-
H: Clearance to combustible materials all round vertical pipe run and at sides of horizontal pipe run	1 ⁵ / ₁₆ in (3.3cm)	-

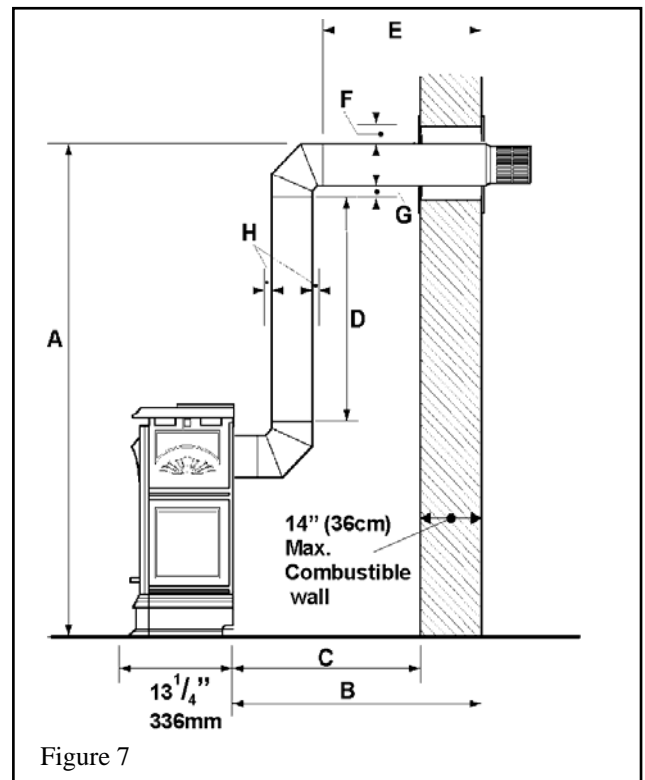


Figure 7

4.2.4. Rear vent connection, vertical vent rise with horizontal snorkel termination

For “semi-basement” situations where vertical vent rise does not raise horizontal termination sufficiently above ground level. The dimensional requirements in section 4.2.3 and figure 7 apply.
 Adapter #817VAK, two 90° vent elbows #990B, Dura-vent pipe lengths and a Dura-vent snorkel termination will be required.
 #942 Dura-vent wall thimble kit may also be necessary.
 (See venting options section of this manual).
No more than two 90° elbows must be used.

4.2.5. Corner location, horizontal vent run only (Fig. 8)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories.
 Adapter #817VAK and 45° Dura-vent elbow will be required.
 (See venting options section of this manual).
Be aware of the limited maximum vent pipe length and wall depth for this type of installation – See figure 8.

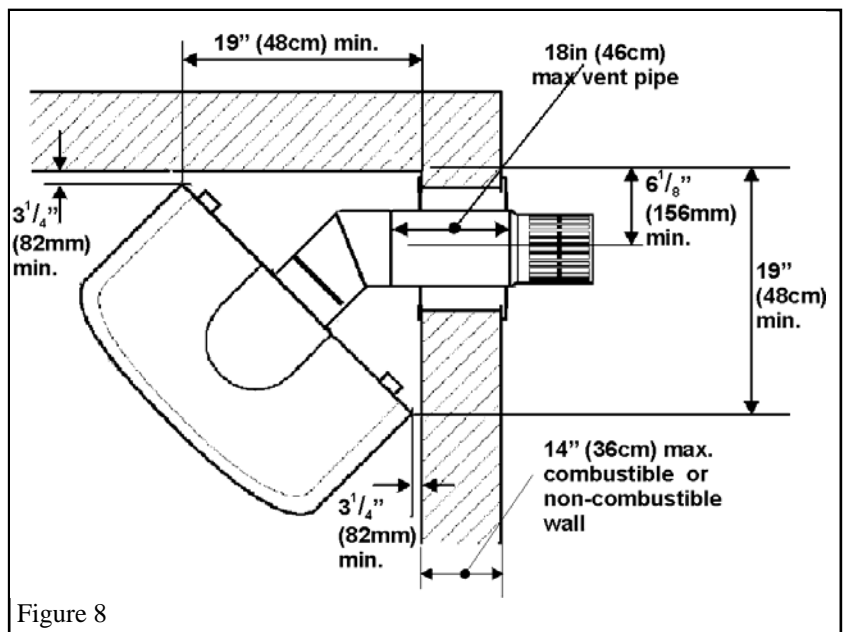


Figure 8

4.2.6. Corner location, rear vent connection, vertical rise, horizontal termination (Figs 7 & 9)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories. Adapter #817VAK, two 90° vent elbows #990B and Dura-vent pipe lengths will be required. (See venting options section of this manual). *No more than two 90° elbows must be used.* All vertical dimensional limits are as section 4.2.3. The minimum corner location is shown in fig. 9.

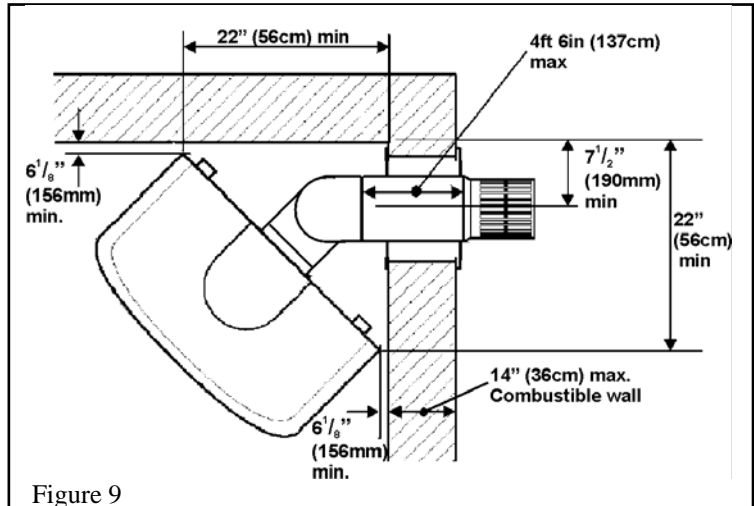


Figure 9

4.2.7. Rear vent connection, vertical vent rise with through the roof termination (Fig.10)

Adapter #817VAK, one 90° vent elbow #990B, Dura-vent pipe lengths, a vertical vent terminal and roof flashing will be required. Various other ceiling or roof items may be necessary depending on the particular installation (See venting options section of this manual).

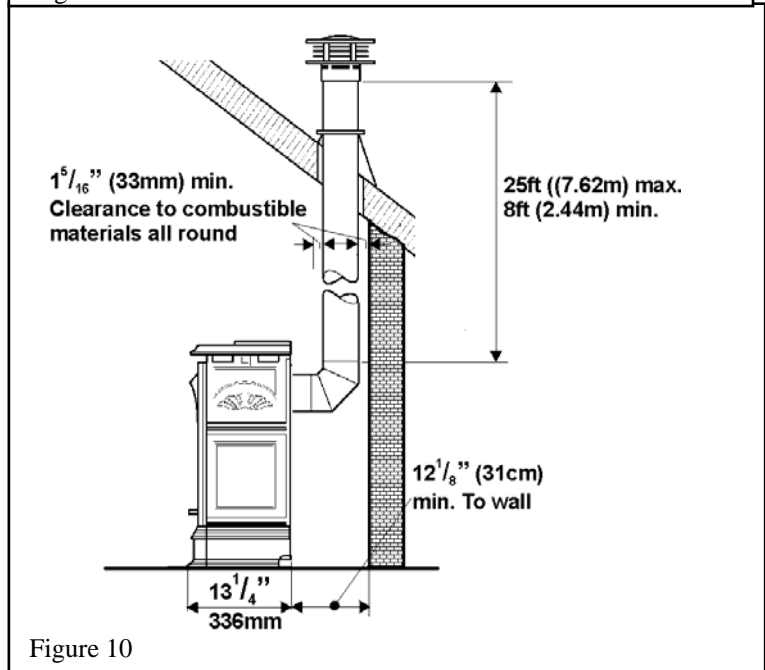


Figure 10

4.2.8. Rear vent connection, vertical vent rise with offset and through the roof termination (Fig.11)

For situations where offset is necessary in an attic to avoid obstructions or allow useful space. Adapter #817VAK, one 90° vent elbow #990B, two 45° vent elbows #984, wall straps, a vertical vent terminal, roof flashing and Dura-vent pipe lengths will be required. Various other ceiling or roof items may be necessary depending on the particular installation (See venting options section of this manual).

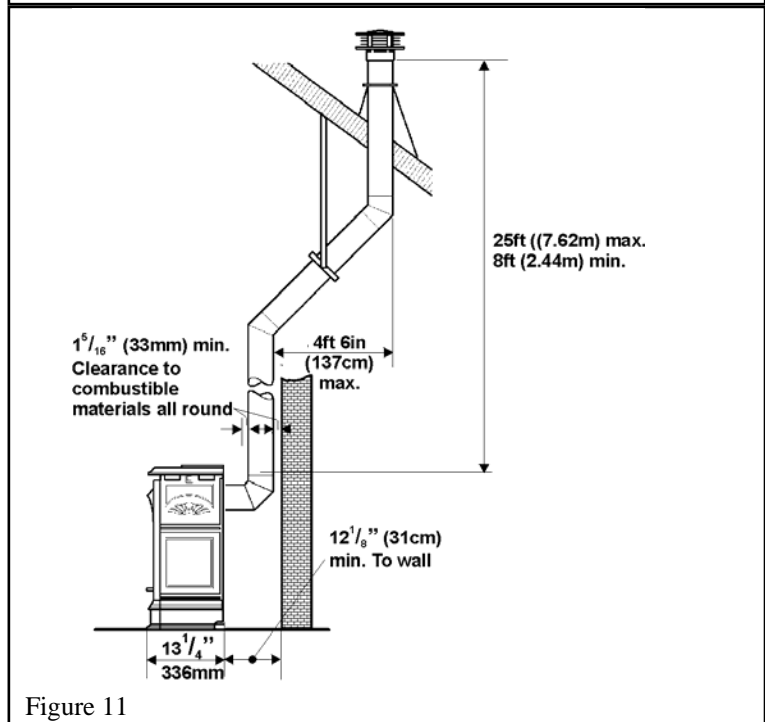


Figure 11

4.2.9. Rear vent connection, installed to fireplace chimney with co-linear liners (Fig.12)

Only for use when retro fitting a non-combustible fireplace and chimney.

The appliance must not be connected to a chimney flue serving a separate solid-fuel burning appliance.

Requires adapter #817VAK, Co-axial to co-linear connector #923GCL, two lengths of Chimney liner flex #2280, co-linear termination kit #923GK and high wind vertical vent terminal cap #991 (See vent options section of this manual).

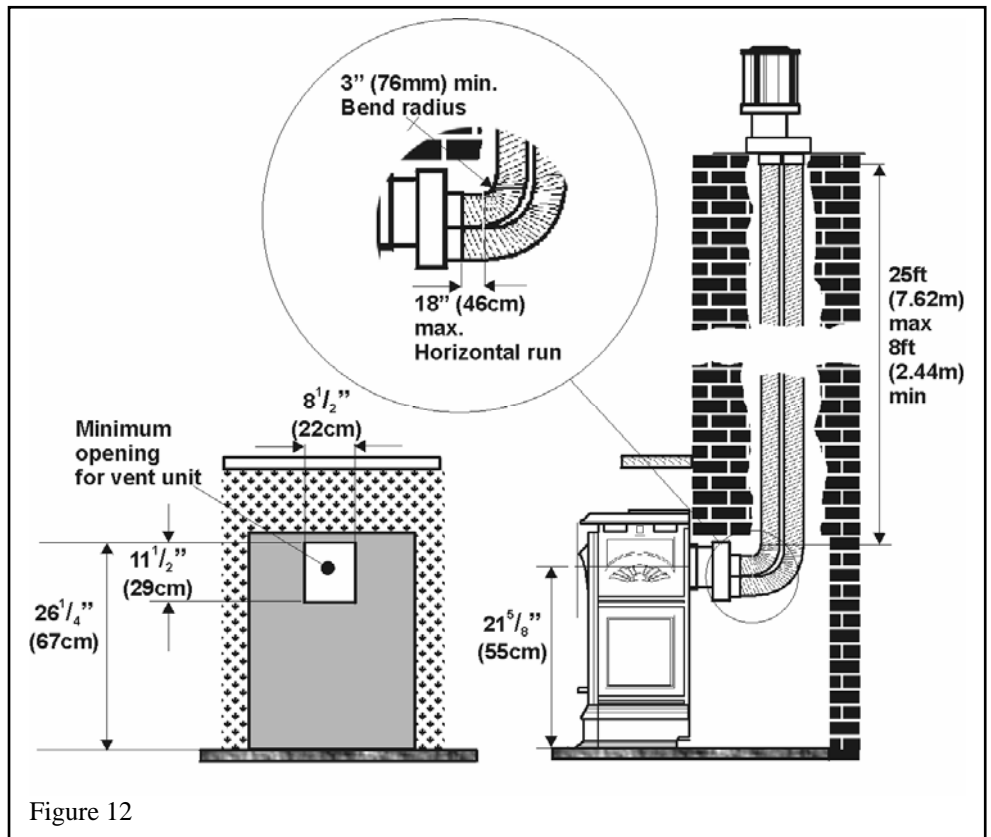


Figure 12

4.2.10. Top vent connection, vertical vent rise with horizontal rear termination (Fig.13)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories. Adapter #817VAK, one 90° vent elbow #990B and Dura-vent pipe lengths will be required. (See venting options section of this manual). *No more than two 90° elbows must be used.* The location requirements are (See figure 13):-

	Minimum	Maximum
A: From floor to top of vent duct	4ft (122cm)	11ft (335cm)
B: Back of appliance to inside wall	3 ¹ / ₄ in (79mm)	-
C: Vertical pipe run	9in (23cm)	8ft (244cm)
D: Horizontal pipe run	-	4ft 6in (137cm)
E: Clearance to combustible materials above horizontal pipe run	2 ⁵ / ₈ in (6.7cm)	-
F: Clearance to combustible materials below horizontal pipe run	1 ⁵ / ₁₆ in (3.3cm)	-
G: Clearance to combustible materials all round vertical pipe run and at sides of horizontal pipe run	1 ⁵ / ₁₆ in (3.3cm)	-

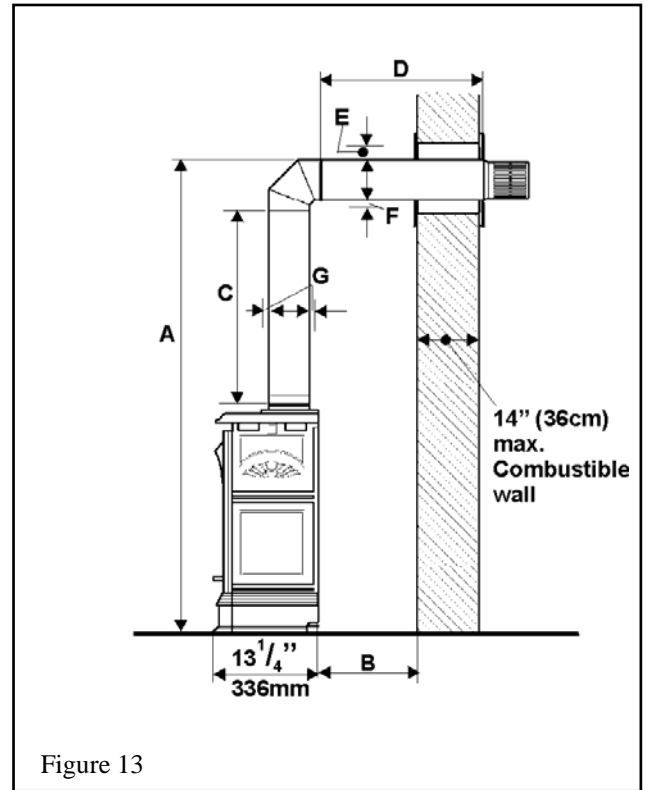


Figure 13

4.2.11. Top vent connection, vertical vent rise with horizontal side termination (Figs.13 & 14)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories. Adapter #817VAK, one 90° vent elbow #990B and Dura-vent pipe lengths will be required. (See venting options section of this manual). *No more than two 90° elbows must be used.* All vertical dimension, pipe run and clearance limits are as section 4.2.10. The minimum floor location is shown in figure 14.

4.2.12. Top vent connection, vertical vent rise with horizontal side or rear snorkel termination

The dimensional requirements in sections 4.2.10 and 4.2.11 apply.

Adapter #817VAK, one 90° vent elbow #990B, Dura-vent pipe lengths and a Dura-vent snorkel termination will be required. #942 Dura-vent thimble kit may also be necessary. (See venting section of this manual).

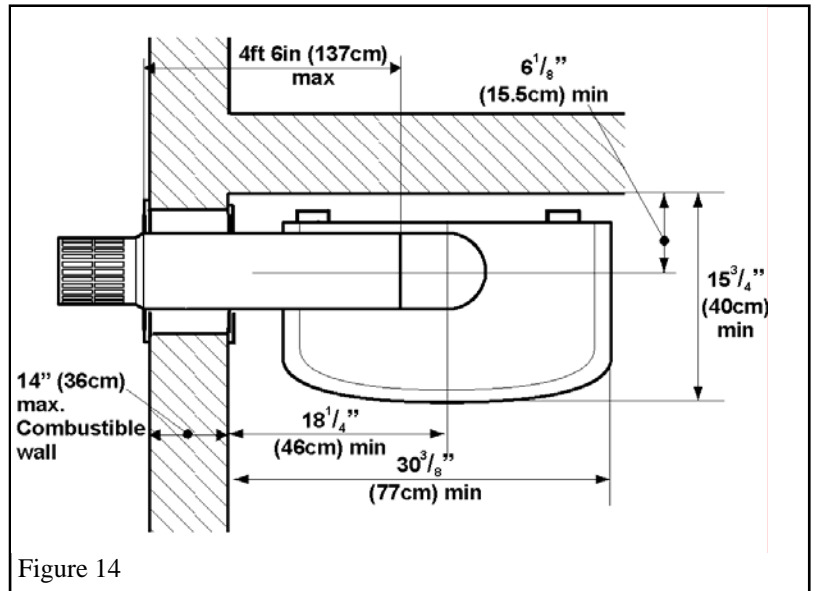


Figure 14

4.2.13. Top vent connection, corner location, vertical rise, horizontal termination, 45° pipe bend (Figs 13 & 15)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories.

Adapter #817VAK, one 90° elbow #990B, one 45° elbow #945B and Dura-vent pipe lengths will be required. (See venting section of this manual).

All vertical dimensions and clearance limits are as section 4.2.10.

The minimum corner location is shown in fig. 15.

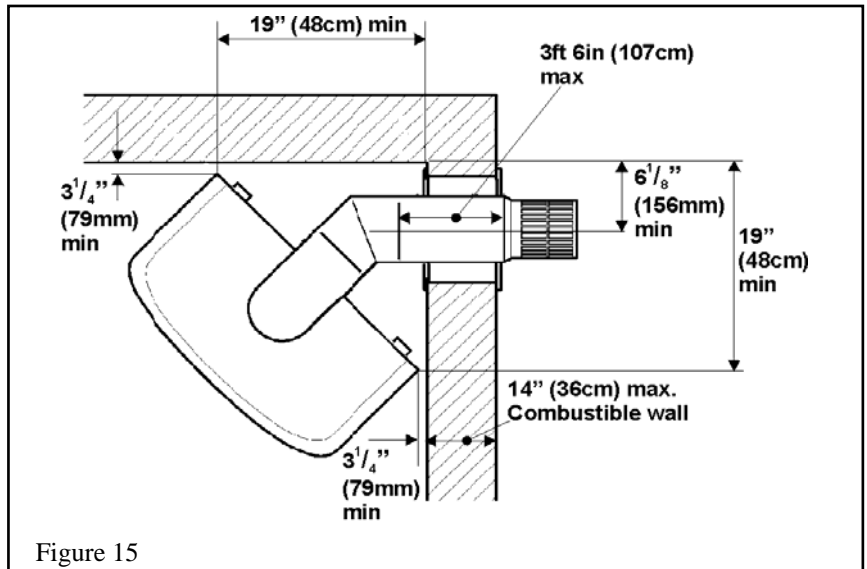


Figure 15

4.2.14. Top vent connection, corner location, vertical rise, straight horizontal termination (Figs 13 & 16)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories.

Adapter #817VAK, one 90° elbow #990B and Dura-vent pipe lengths will be required. (See venting section of this manual).

All vertical dimensions and clearance limits are as section 4.2.10.

The minimum corner location is shown in fig. 16.

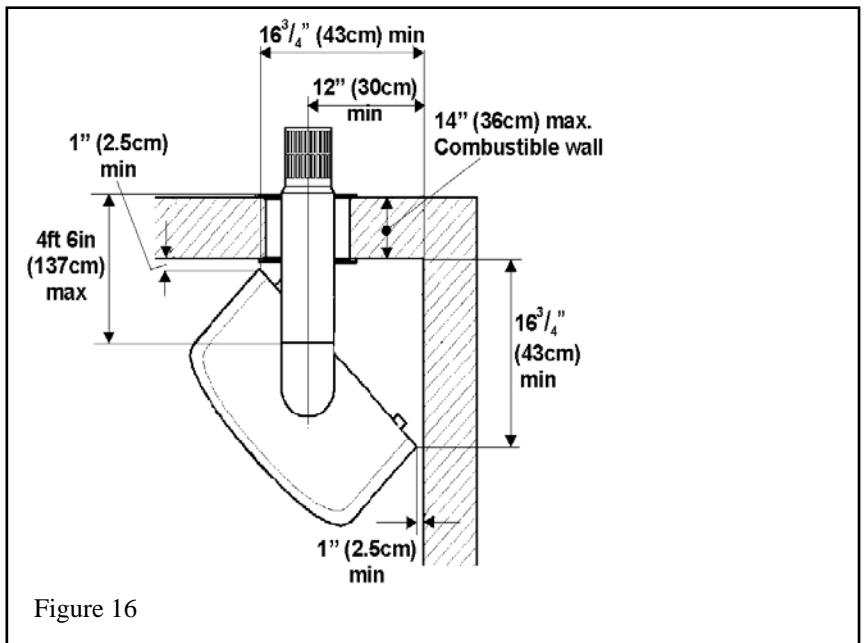


Figure 16

4.2.15. Top vent connection, vertical vent rise, through the roof termination (Fig. 17)

Adapter #817VAK, Dura-vent pipe lengths, a vertical vent terminal and roof flashing will be required. Various other ceiling or roof items may be necessary depending on the particular installation (See venting options section of this manual).

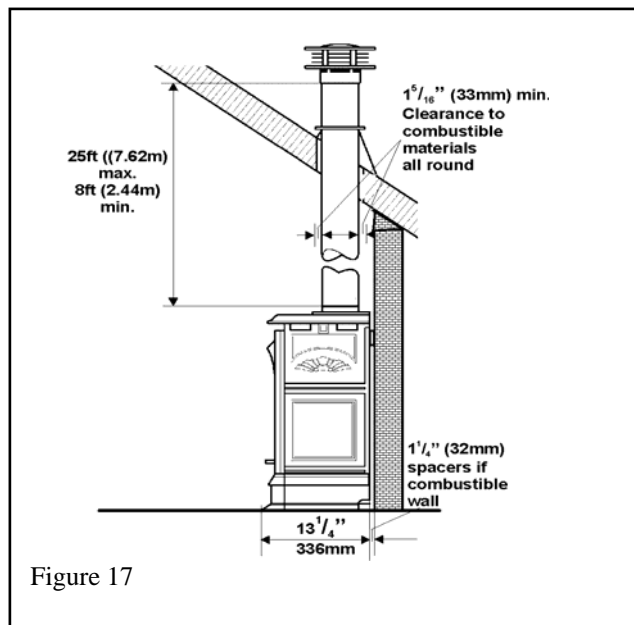
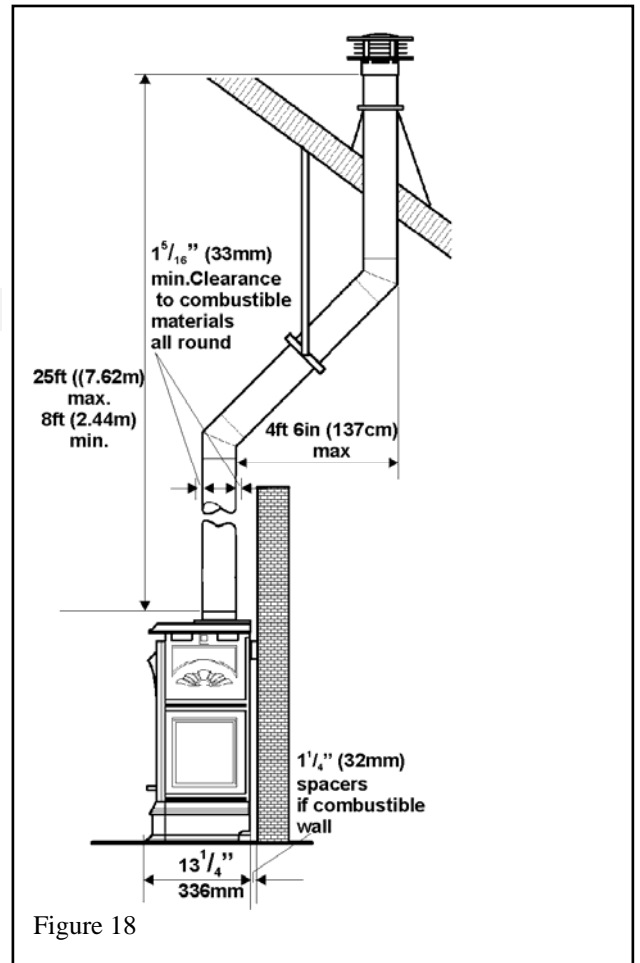


Figure 17

4.2.16. Top vent connection, vertical vent rise with offset and through the roof termination (Fig.18)

For situations where offset is necessary in an attic to avoid obstructions or allow useful space. Adapter #817VAK, two 45° vent elbows #984, wall straps, a vertical vent terminal, roof flashing and Dura-vent pipe lengths will be required. Various other ceiling or roof items may be necessary depending on the particular installation (See venting options section of this manual).



5. LOCATION – PRESIDENT ZC and IMPRESSION ZC

5.1. Framing

The framing dimensions for appliances with rear vent connection are shown in figure 19.

The framing dimensions for appliances with top vent connection are shown in figure 20.

The Zero clearance unit allows the front of the appliance surround to be positioned $\frac{1}{2}$ " , $\frac{3}{4}$ " or 1" in front of the framing studding (see figure 21). This enables a variety of wall finish thicknesses to blend with the appliance surround.

- A non combustible hearth is not necessary in front of this appliance.
- Any framing construction must be clear of the standoffs (See figures 2 & 3).
- Be aware of the area $7\frac{1}{2}$ " x $26\frac{1}{4}$ " (19cm x 67cm) immediately above the opening which must be constructed with non-combustible materials as shown in figures 19 & 20

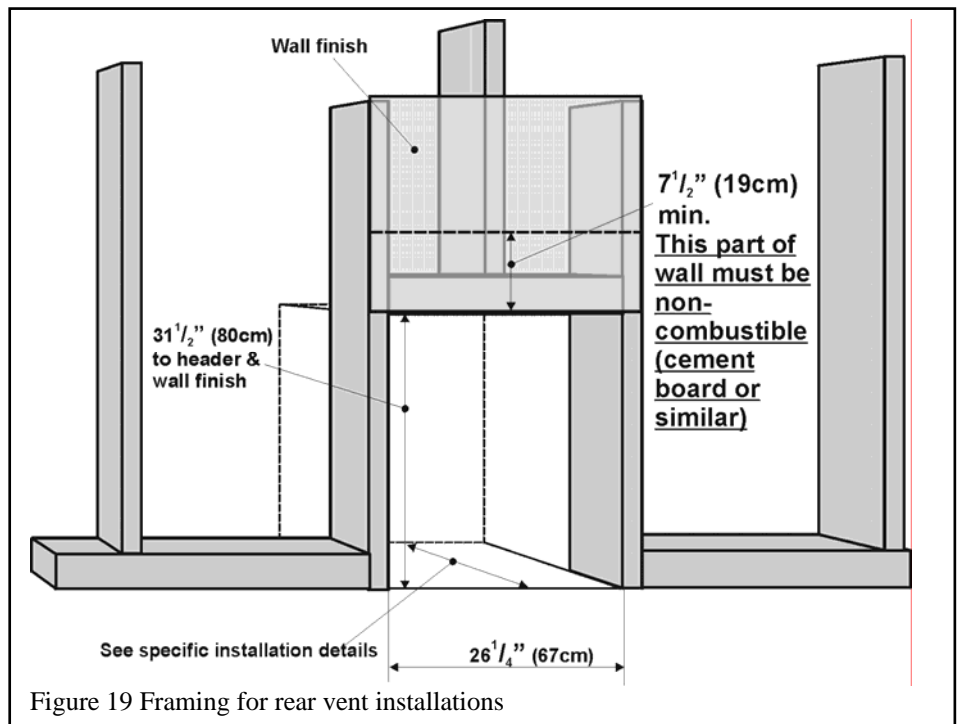


Figure 19 Framing for rear vent installations

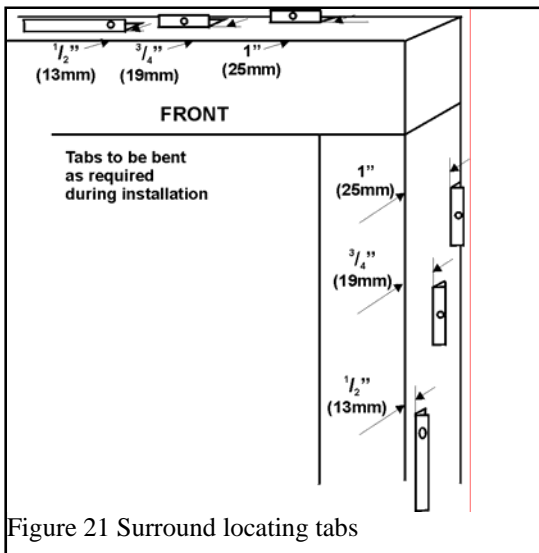


Figure 21 Surround locating tabs

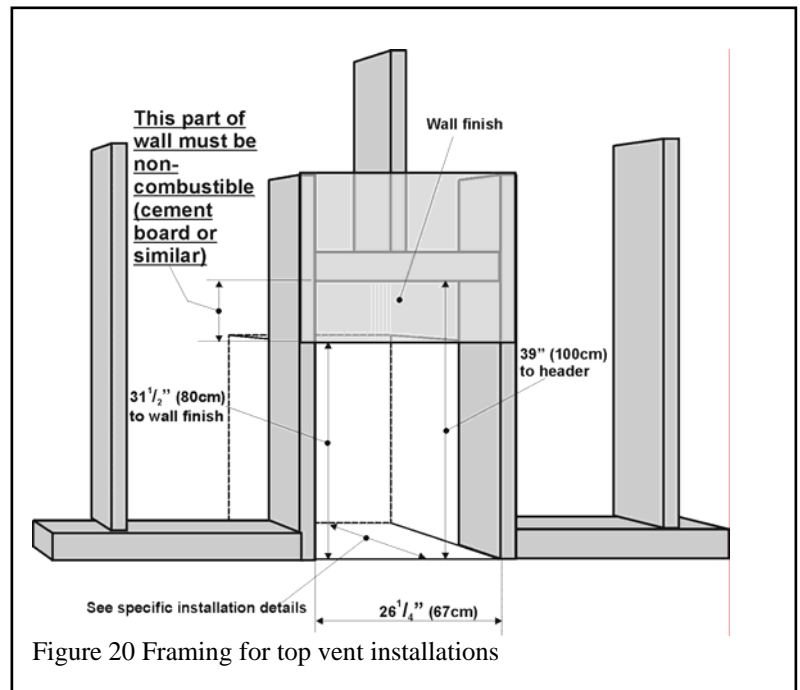


Figure 20 Framing for top vent installations

5.2. Venting configurations

5.2.1. Flat on wall (Fig. 22)

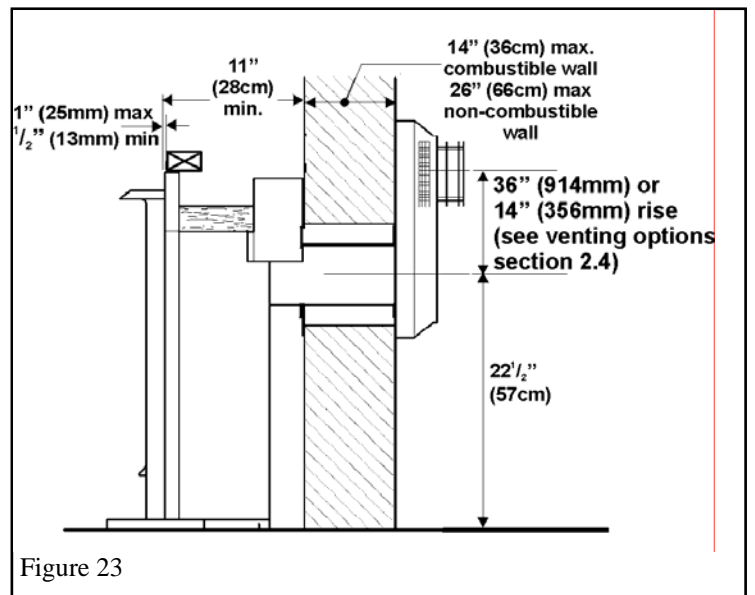
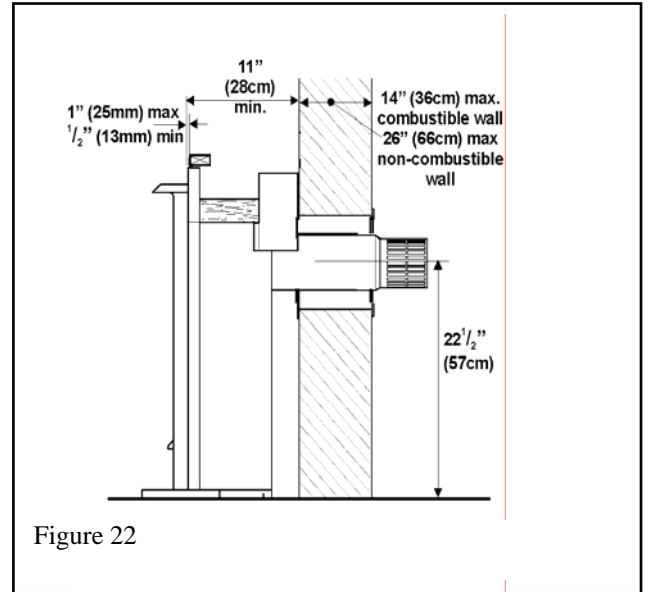
Requires standard vent kit #551DVK only.

The horizontal vent run can not be extended by the use of any vent accessory pipes.

5.2.2. Flat on wall with snorkel termination (Fig. 23)

For use on horizontal vent installations where the outside ground level is too close to the standard terminal. Adapter #817VAK, a Dura-vent pipe length and snorkel termination #981 or #982 will be required (See vent options section of this manual).

5.2.3.



Rear vent connection, vertical vent rise with horizontal termination (Fig. 24)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories.

Adapter #817VAK, two 90° vent elbows #990B and Dura-vent pipe lengths will be required.

(See venting options section of this manual).

No more than two 90° elbows must be used.

The location requirements are (See figure 24):-

	Minimum	Maximum
A: From floor to top of vent duct	3ft 7 ⁷ / ₈ " (111cm)	10ft 7 ⁷ / ₈ " (325cm)
B: Surround front to outside wall	-	6ft 2" (188cm)
C: Surround front to inside wall	23 ¹ / ₈ " (59cm)	-
D: Vertical pipe run	12in (30cm)	8ft (244cm)
E: Horizontal pipe run (Total before and after elbows)	-	4ft 6in (137cm)
F: Clearance to combustible materials above horizontal pipe run	2 ⁵ / ₈ " (6.7cm)	-
G: Clearance to combustible materials below horizontal pipe run	1 ⁵ / ₁₆ " (3.3cm)	-
H: Clearance to combustible materials all round vertical pipe run and at sides of horizontal pipe run	1 ⁵ / ₁₆ " (3.3cm)	-

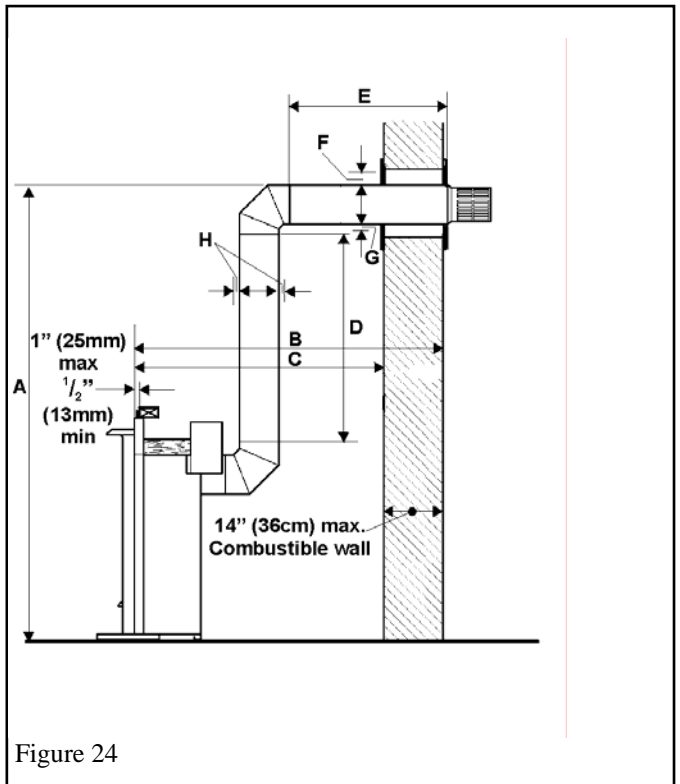


Figure 24

5.2.4. Rear vent connection, vertical vent rise with horizontal snorkel termination

For "semi-basement" situations where snorkel accessory alone does not raise termination sufficiently above ground level.

The dimensional requirements in section 5.2.3 and figure 24 apply.

Adapter #817VAK, two 90° vent elbows #990B, Dura-vent pipe lengths and a Dura-vent snorkel termination will be required.

#942 Dura-vent wall thimble kit may also be necessary.

(See venting options section of this manual).

No more than two 90° elbows must be used.

5.2.5. Corner location, horizontal vent run only (Fig. 25)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories.

Adapter #817VAK and 45° Dura-vent elbow will be required.

(See venting options section of this manual).

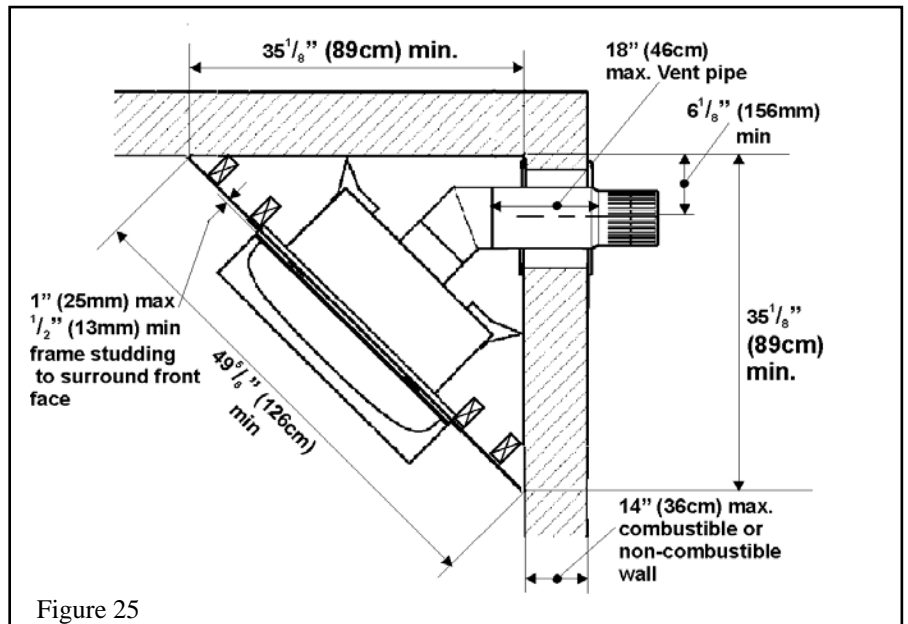


Figure 25

5.2.6. Corner location, rear vent connection, vertical rise, horizontal termination (Figs 24 & 26)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories.

Adapter #817VAK, two 90° vent elbows #990B and Dura-vent pipe lengths will be required.

(See venting options section of this manual).
No more than two 90° elbows must be used.

All vertical dimensional limits are as section 5.2.3.

The minimum corner location is shown in fig. 26.

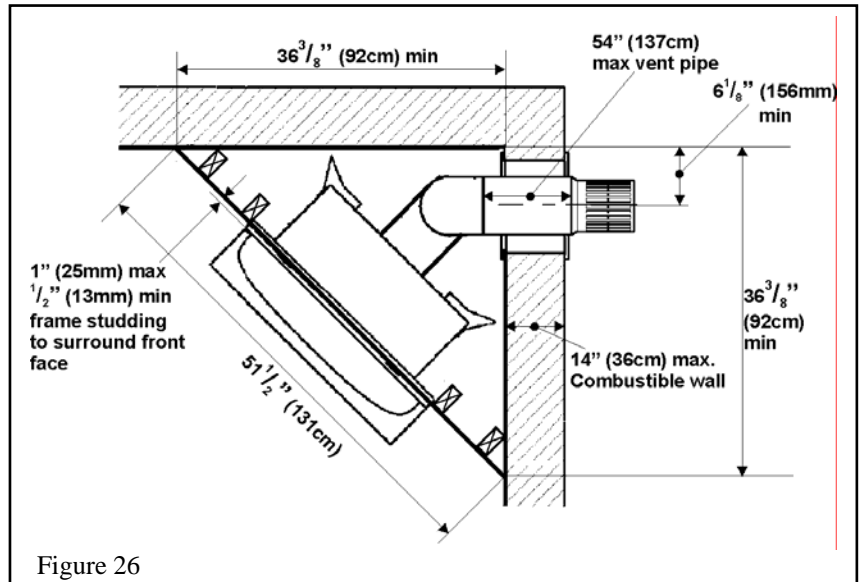


Figure 26

5.2.7. Rear vent connection, vertical vent rise with through the roof termination (Fig.27)

Adapter #817VAK, one 90° vent elbow #990B, Dura-vent pipe lengths, a vertical vent terminal and roof flashing will be required. Various other ceiling or roof items may be necessary depending on the particular installation (See venting options section of this manual).

5.2.8. Rear vent connection, vertical vent rise with offset and through the roof termination (Fig.28)

For situations where offset is necessary in an attic to avoid obstructions or allow useful space.

Adapter #817VAK, one 90° vent elbow #990B, two 45° vent elbows #984, wall straps, a vertical vent terminal, roof flashing and Dura-vent pipe lengths will be required. Various other ceiling or roof items may be necessary depending on the particular installation (See venting options section of this manual).

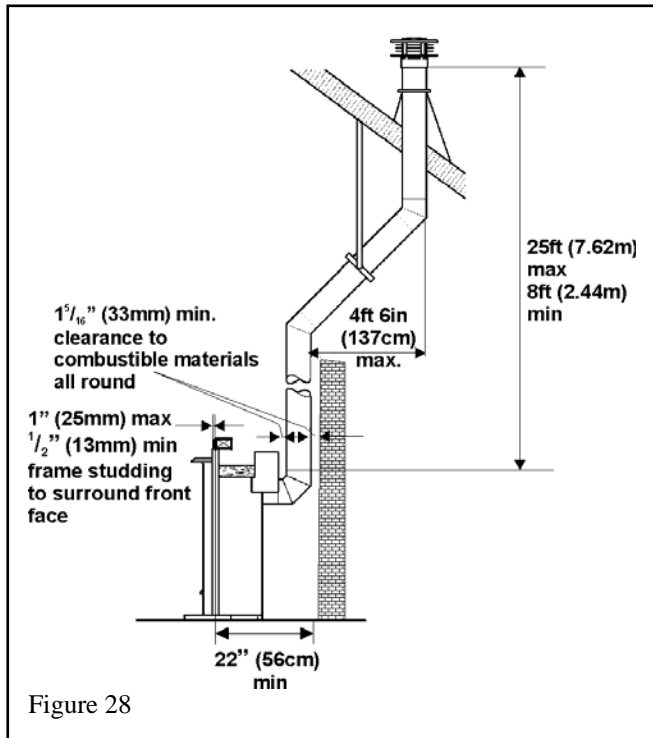


Figure 28

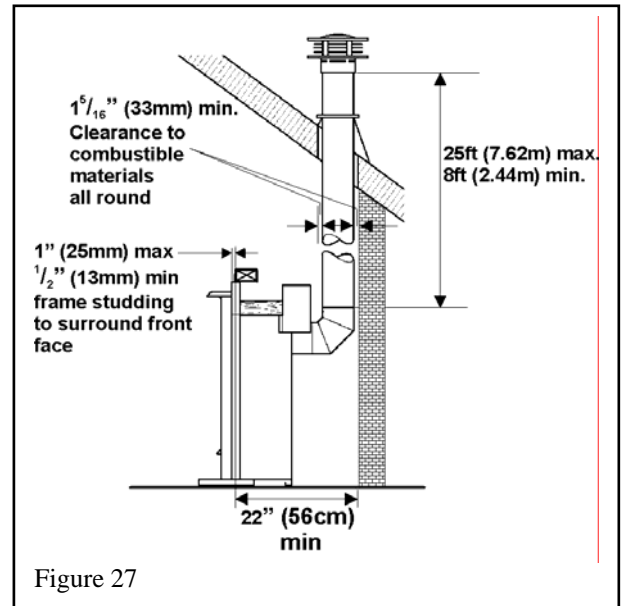


Figure 27

5.2.9. Top vent connection, vertical vent rise with horizontal rear termination (Fig.29)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories. Adapter #817VAK, two 45° elbows #945B, one 90° vent elbow #990B and Dura-vent pipe lengths will be required. (See venting options section of this manual). The location requirements are (See figure 29):-

	Minimum	Maximum
A: From floor to top of vent duct	4ft 1 1/2" (126cm)	12ft 1 1/2" (370cm)
B: Surround front to outside wall	-	5ft 8 7/8" (175cm)
C: Surround front to inside wall	15 7/8" (40cm)	-
D: Vertical pipe run	0"	8ft (244cm)
E: Horizontal pipe run	-	4ft 6" (137cm)
F: Clearance to combustible materials above horizontal pipe run	2 5/8" (6.7cm)	-
G: Clearance to combustible materials below horizontal pipe run	1 5/16" (3.3cm)	-
H: Clearance to combustible materials all round vertical pipe run and at sides of horizontal pipe run	1 5/16" (3.3cm)	-

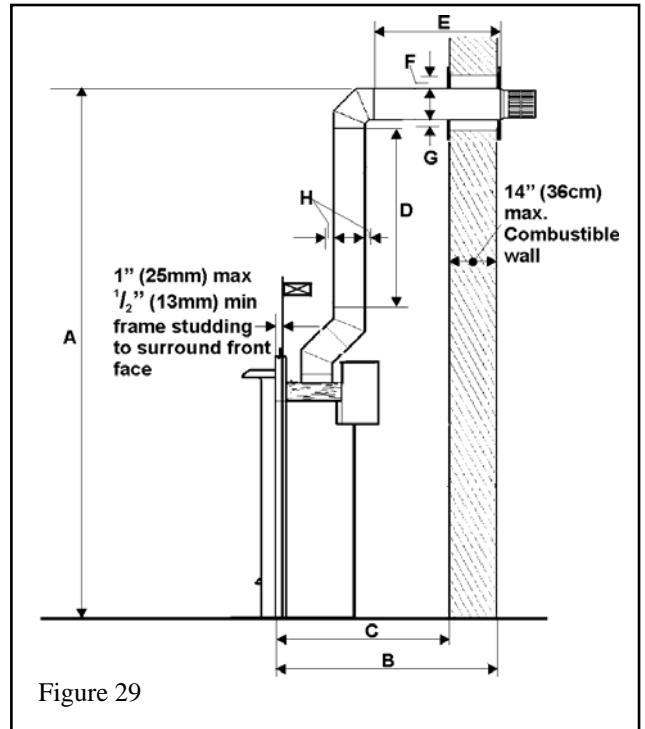


Figure 29

5.2.10. Top vent connection, vertical vent rise with horizontal side termination (Figs.29 &30)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories. Adapter #817VAK, two 45° elbows #945B, one 90° vent elbow #990B and Dura-vent pipe lengths will be required. (See venting options section of this manual). All vertical dimensions and clearance limits are as section 5.2.9. The minimum floor location is shown in figure 30.

5.2.11. Top vent connection, vertical vent rise with horizontal side or rear snorkel termination

The dimensional requirements in sections 5.2.9 and 5.2.10 apply.

Adapter #817VAK, two 45° elbows #945B, one 90° vent elbow #990B and Dura-vent pipe lengths will be required. #942 Dura-vent thimble kit may also be necessary. (See venting section of this manual).

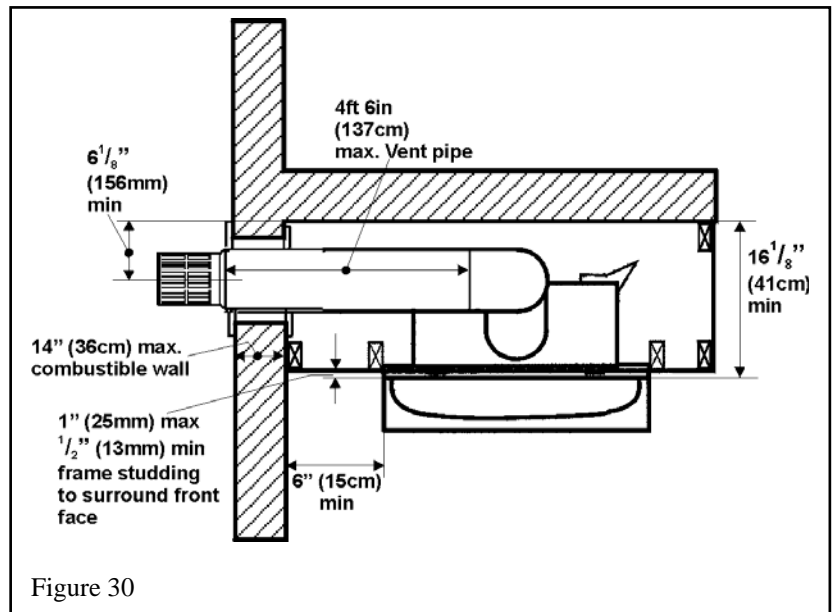


Figure 30

5.2.12. Top vent connection, corner location, vertical rise, horizontal termination, 45° pipe bend (Figs 29 & 31)

Can be used with either #551DVK standard vent kit or #984 Dura-vent terminal cap and accessories. Adapter #817VAK, two 45° elbows #945B, one 90° vent elbow #990B and Dura-vent pipe lengths will be required. (See venting section of this manual). All vertical dimensions and clearance limits are as section 5.2.9. The minimum corner location is shown in fig. 31.

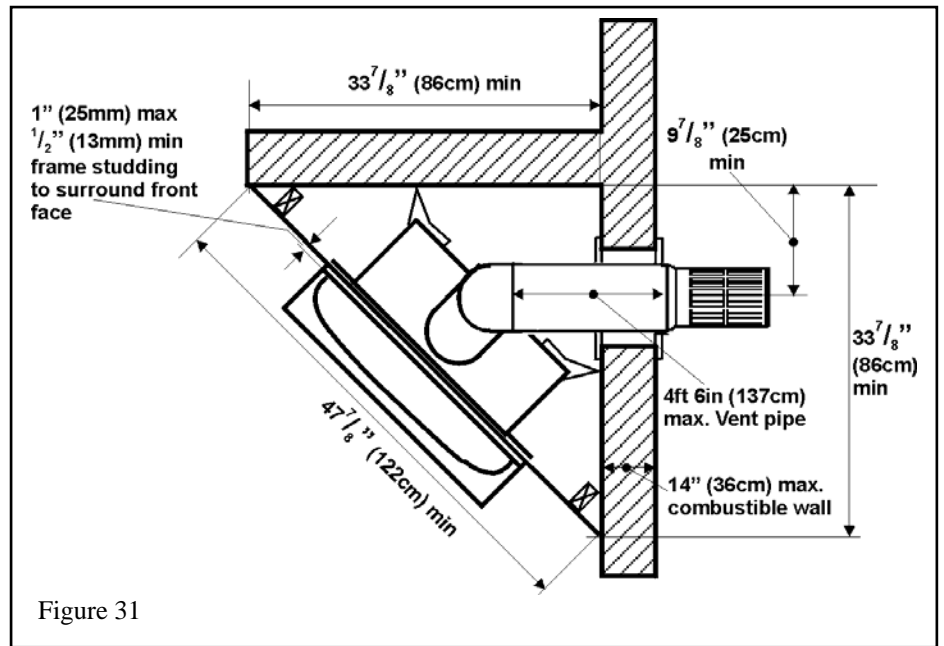


Figure 31

5.2.13. Top vent connection, vertical vent rise, through the roof termination (Fig. 32)

Adapter #817VAK, two 45° elbows #945B, Dura-vent pipe lengths, a vertical vent terminal and roof flashing will be required. Various other ceiling or roof items may be necessary depending on the particular installation (See venting options section of this manual).

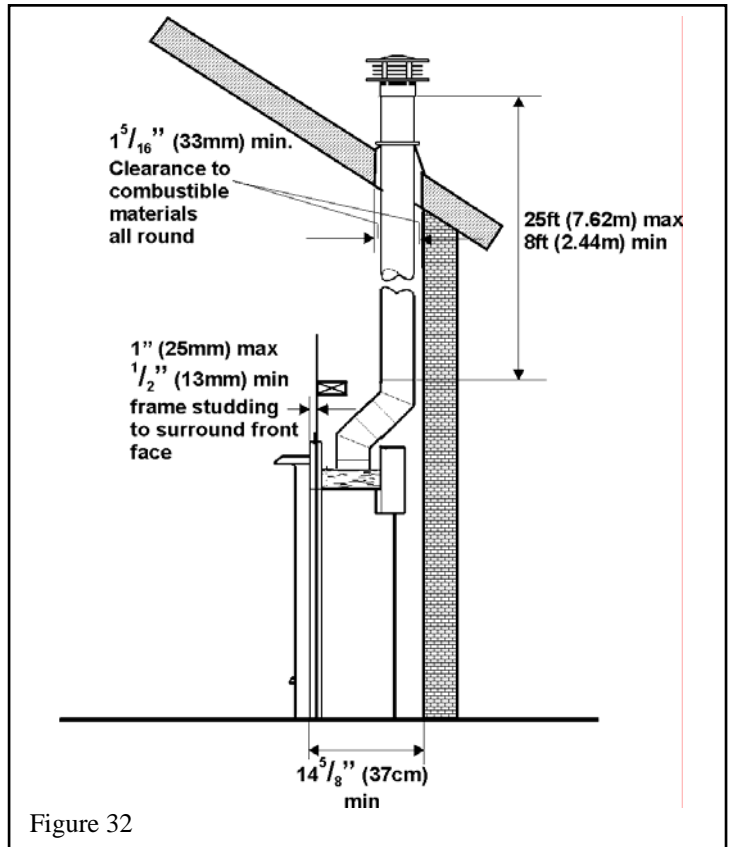


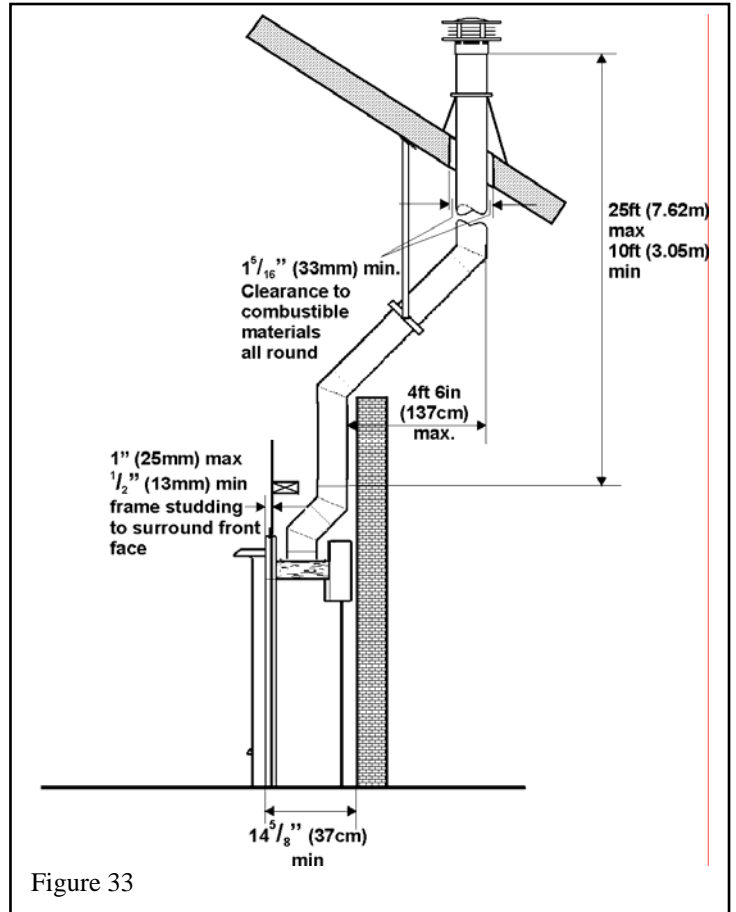
Figure 32

5.2.14. Top vent connection, vertical vent rise with offset and through the roof termination (Fig.33)

For situations where offset is necessary in an attic to avoid obstructions or allow useful space.

Adapter #817VAK, four 45° vent elbows #984, wall straps, a vertical vent terminal, roof flashing and Dura-vent pipe lengths will be required. Various other ceiling or roof items may be necessary depending on the particular installation (See venting options section of this manual).

5.3.



Vent location

- The vent terminal must be located on an outside wall or through the roof.
- This direct vent appliance is designed to operate when an undisturbed airflow hits the outside vent terminal from any direction.
- The minimum clearances from this terminal that must be maintained when located on an outside wall are shown in figure 34. Any reduction in these clearances could result in a disruption of the airflow or a safety hazard. Local codes or regulations may require greater clearances.
- The vent terminal must not be recessed into a wall or siding.
- The vent terminal should be positioned where it will not be covered by any snowdrifts.

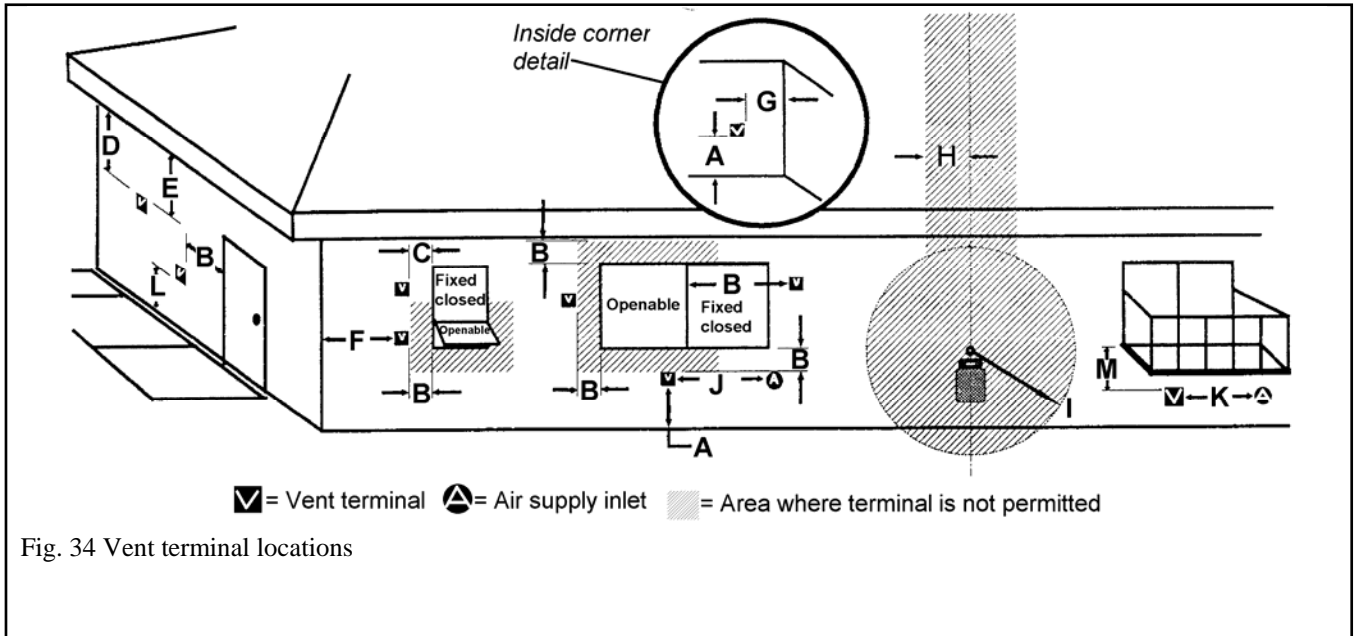


Fig. 34 Vent terminal locations

KEY	VENT TERMINAL LOCATIONS - MINIMUM DISTANCES <i>See figure 34</i>	MINIMUM CLEARANCE	
		Ins	Cms
A	Clearance above grade, verandah, porch, deck or balcony	12	30
B	Clearance to window or door that may be opened	12	30
C	Clearance to permanently closed window (recommended to prevent condensation on window)	12	30
D	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (60 cm) from the center-line of the terminal	18	46
E	Clearance to unventilated soffit	12	30
F	Clearance to outside corner	12	30
G	Clearance to inside corner	12	30
H	Horizontal clearance to center-line of meter/regulator assembly located below the terminal	36	90
I	Clearance to service regulator vent outlet	72	180
J	Clearance to non-mechanical air supply inlet to the building or the combustion air inlet to any other appliance	12	30
K	Clearance to a mechanical air supply inlet	72	180
L	Clearance above paved sidewalk or a paved driveway located on public property. <i>Note: A vent must not terminate directly above a sidewalk or paved driveway, which is located between two single family dwellings and serves both dwellings.</i>	84	210
M	Clearance under a verandah, porch, deck or balcony <i>Only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor.</i>	12	30

Note: Local codes and regulations may require different clearances.

6. 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 $\frac{3}{8}$ " NPT.

The opening for the gas supply line is at the rear left corner of the appliance.

7. PACK CONTENTS

#530EAN Engine unit (Either log or coal version supplied)

- 1 Appliance engine unit fitted with window
- 2 Restrictor plates type #1 for log versions
- 2 Restrictor plates type #2 for log versions
- 2 Restrictor plates type #3 for log versions
- 2 Restrictor plates type #4 for coal versions
- 2 Restrictor plates type #5 for coal versions
- 2 Restrictor plates type #6 for coal versions
- 1 Port cover
- 1 Gas inlet pipe connection adapter
- 1 Firebox ceramic rear wall
- 2 Firebox ceramic side walls
- 5 Ceramic fuel effects (logs or coals)
- 1 Switch unit
- 2 Wire clips
- 4 1.5V AA batteries
- 4 Wood screws
- 4 Wall plugs
- 2 Thread cutting screws

#531CSB President free standing case (Alternative)

Top pack

- 1 Top casting
- 1 Top infill plate

Sides pack

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

#536CFB President

- 1 Front unit
- 1 Top air deflector
- 2 Stand-off spacers (Supplied flat)
- 2 Top insulation layers
- 1 Outer surround unit
- 1 Front plinth
- 1 Rear base support channel
- 1 Pack of thread cutting screws
- 2 Hooks (For hanging the front) – Impression only

#553RCK Remote control unit (Additional option)

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

#557WSK Wall switch unit (Additional option)

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

#551DVK Standard horizontal through-the-wall vent kit (Alternative to Dura-vent unit)

- 1 Vent pipe & terminal unit
- 2 Wall plates
- 2 Wall shields (Supplied flat)
- 12 Thread cutting screws
- 1 Styrofoam cutting support do-nut
- 8 Wood screws
- 8 Wall plugs

#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.

8. APPLIANCE PREPARATION

8.1. 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 35.
2. Unscrew the two spring loaded bolts securing the bottom of the window. See figure 35.
3. Carefully lift the window. Keep the window and bolts in a safe place.

8.2. 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 36.

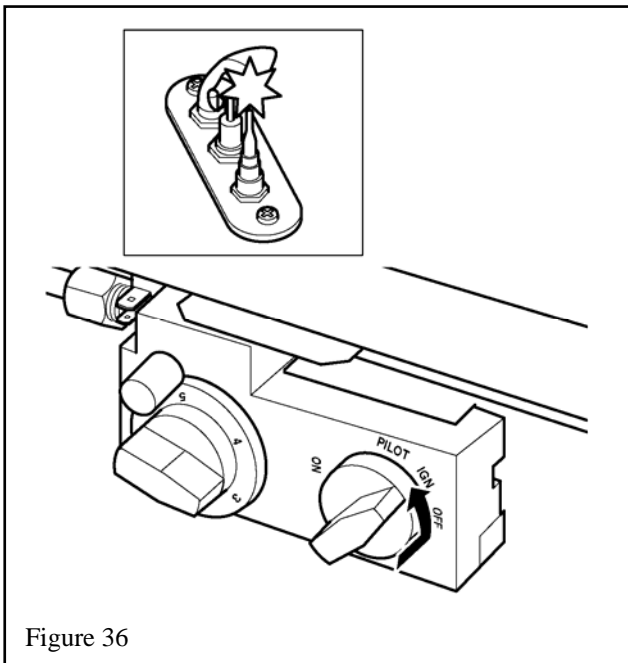


Figure 36

8.3. Check flame control motor

1. Fit the four batteries into the battery box (Which is attached to the switch wires).
2. Temporarily connect the **black** connector pad to the control unit – See figure 37.
3. Operate the switch. This should cause the flame control knob to rotate counter-clockwise. See figure 37.
4. Disconnect and remove after checking.

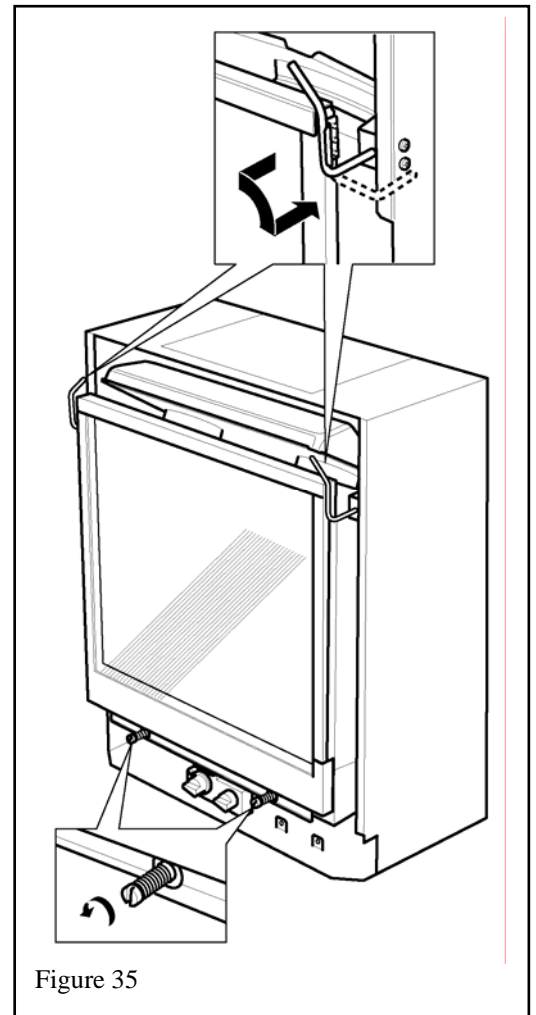


Figure 35

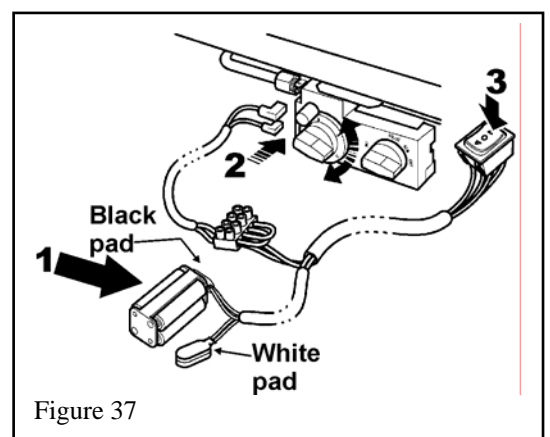


Figure 37

8.4. Top Vent Outlet Positioning

If installing with rear vent outlet go to next step.

1. Remove the top plate and seal by unscrewing 12 screws. (See figure 38).
Keep the seal, plate and screws for fitting to the back.
2. Remove the rear outer vent collar and seal by unscrewing 12 screws (See figure 38).
3. Remove the rear inner vent collar and seal by unscrewing 8 screws. (See figure 38).
4. To make sure that the collars are axially aligned, fit the Dura-vent adapter #817VAK over the outer vent collar. See figure 39.
5. Position the inner collar and seal vertically inside the top of the appliance. Drop the outer collar with adapter over the inner collar to ensure alignment. Secure the inner collar with 8 screws and the outer collar with 12 screws. See figure 39.
6. Fit the plate and seal (which was previously removed from the top) to the back of the appliance with 12 screws. See figure 39.

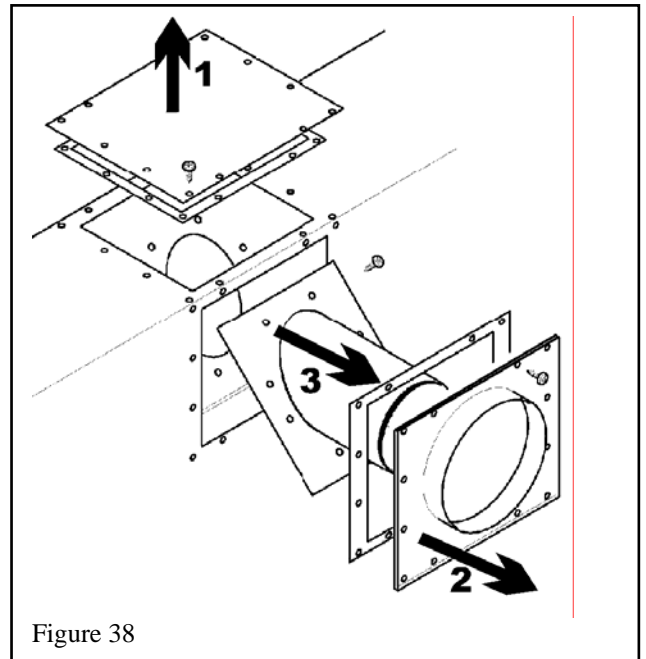


Figure 38

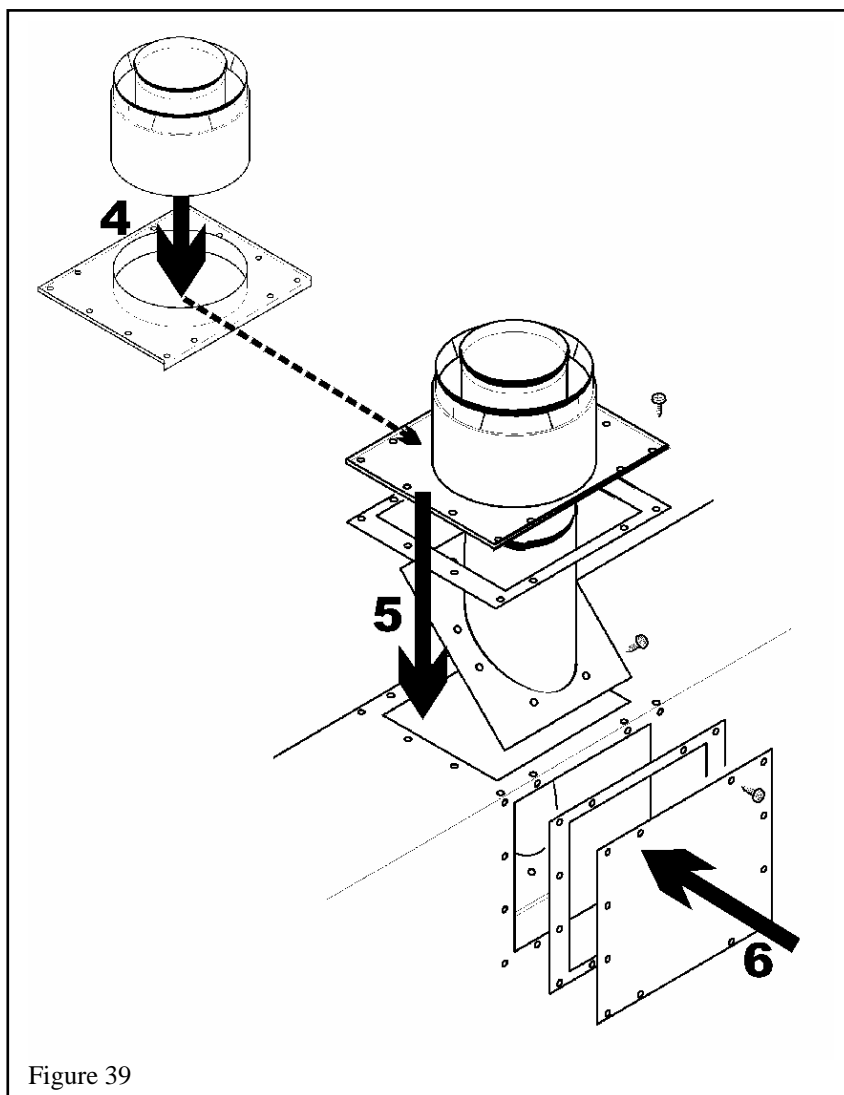


Figure 39

8.5. Rear Vent Outlet Preparation

8.5.1. For Installations With Dura-Vent DV GS Pipes

If installing flat on wall with Valor terminal kit #551DVK, ignore this step :

1. Fit the Dura-vent adapter #817VAK over the appliance vent collars pushing on firmly.
Align the adapter so that the seam on horizontal Dura-vent pipes is not at the bottom – Check by temporarily fitting a Dura-vent pipe.
2. Drill through the adapter outer tube and appliance outer collar for #6 screws. See figure 40. *Make sure that the drill does not penetrate the inner tubes.*
3. Secure the adapter to the outer collar with two #6 thread cutting screws supplied (Fig. 40).

8.5.2. For Installations With Dura-Vent DV GS Co-Linear Liners:

1. Fit the Dura-vent adapter #817VAK over the appliance vent collars pushing on firmly.
2. Fit and fully twist-lock the Dura-vent co-axial to co-linear connector #923GCL to the #817VAK adapter.
3. Keeping the connector and adapter fully twist-locked, rotate them so that the air inlet collar on the connector is at the bottom. See figure 41.
4. Drill through the adapter outer tube and appliance outer collar for #6 screws. See figure 40. *Make sure that the drill does not penetrate the inner tubes.*
5. Secure the adapter to the outer collar with two #6 thread cutting screws supplied (Fig. 40).

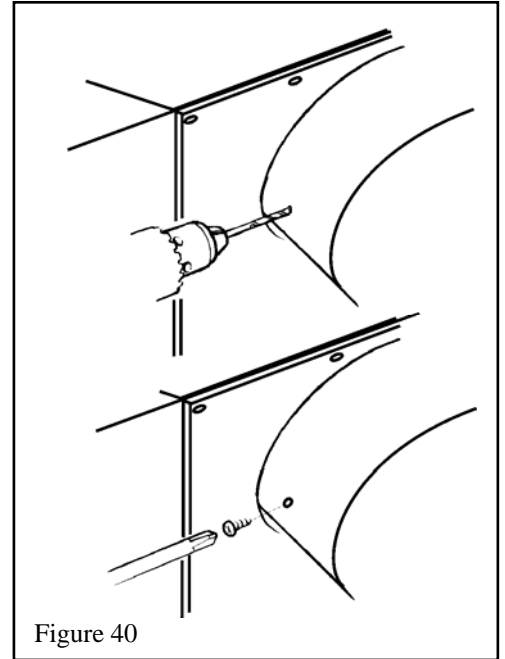


Figure 40

8.6.

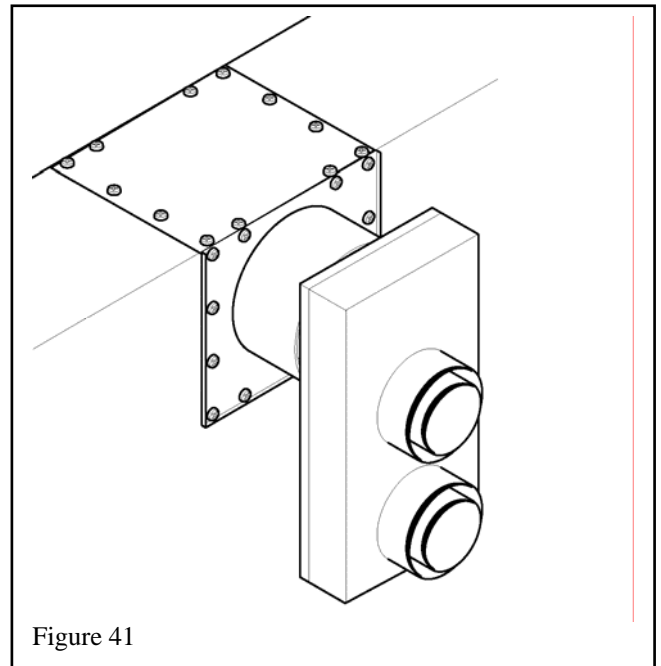


Figure 41

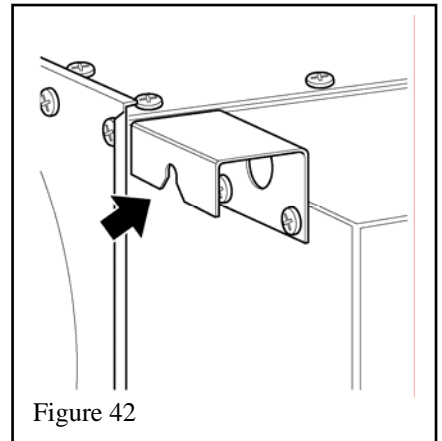
Attaching Stand-Off Spacers

8.6.1. For President FS only

These spacers need not be fitted if the rear of the appliance is more than 1¹/₄" (32mm) from any combustible material and if the installer can be absolutely certain that no combustible construction will be added at a future date – consult with the owner.

!Warning: Failure to install the stand-off spacers unless the above conditions can be assured may result in a fire hazard.

1. Remove the two screws at each of the rear top corners of the appliance. See figure 42.
2. Fit the two wall spacers (Supplied with #530EAN Engine unit) using the screws just removed. See figure 42.

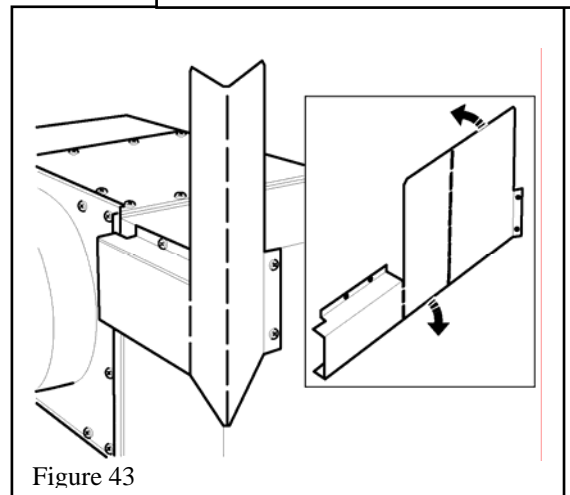


8.6.2. For ZC Models only

The stand-off spacers for these installations are supplied flat with the Zero Clearance case. These spacers are left and right handed.

!Warning: Failure to install the stand-off spacers may result in a fire hazard.

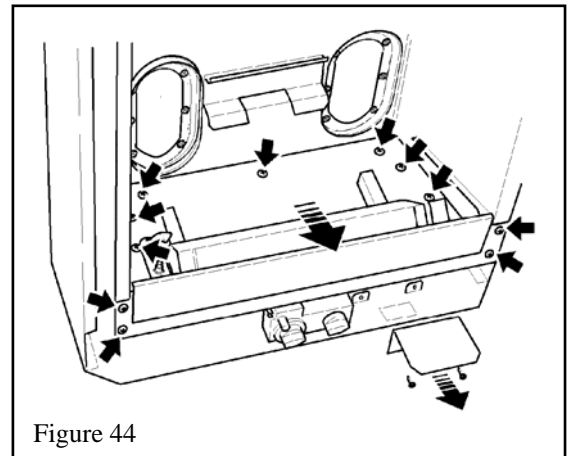
1. Remove the two screws near each of the rear top corners of the appliance and the two screws near the rear top of each side.
2. Bend the spacers as shown in figure 43.
3. Screw the spacers to the rear of the appliance using the screws just removed. See figure 43.
4. Bend the side wings of the spacers to align the two holes in each spacer with those in the appliance sides. secure the spacers using the screws just removed. See figure 43.



8.7. Attaching Plinth & Rear Support – President ZC & Impression ZC

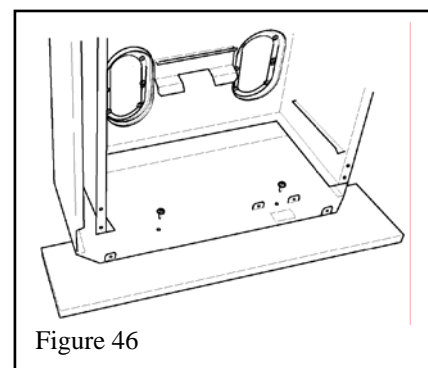
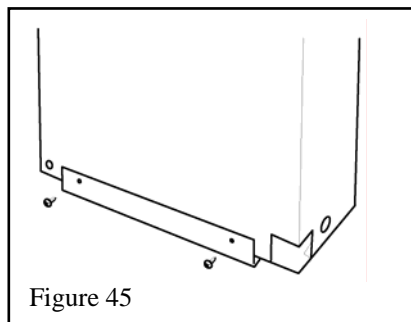
8.7.1. Detach The Burner Module

1. Detach the battery shield by removing two screws. See figure 44.
2. Detach the burner module by removing 11 screws. See figure 44.#



8.7.2. Fit The Rear Support

Fit the rear support channel under the rear of the appliance attaching it to the appliance back panel with two ³/₈" thread cutting (pointed end) screws – see figure 45.



8.7.3. Fit The Front Plinth

Fit the front plinth under the appliance front with two thread forming screws – See figure 46.

8.8. Attaching Air Restrictors – Appliances with Vertical Vent Rise

Only

No restrictors are required for appliances, which only have a horizontal vent, run.

There are three types of restrictor supplied with each #530 engine unit. They are slightly different in size. They can be identified by the number of indents – Type 1 has 1 indent, type 2 has 2 indents etc. – See figure 47.

The restrictors cover part of the openings in the firebox rear wall ports – See figure 48.

Each restrictor can be fitted at either Maximum or minimum port opening – See figure 48.

Types 1, 2 and 3 are supplied with ceramic log appliances.

Types 4, 5, and 6 are supplied with ceramic coal appliances.

The correct restrictors to be fitted for each type of installation are shown in the table below.

To fit the restrictors, remove the center screws from the rear ports and fit the restrictors using these screws. To set the restrictors at maximum port opening, slacken the bottom screws in the ports, slide the restrictors down as far as possible and tighten the screws over the restrictors.

To set the restrictors at minimum port opening, slide the restrictors up as far as possible and tighten the screws. With the largest restrictors, the upper screws may need to be slackened to allow the restrictors to go under the screw heads.

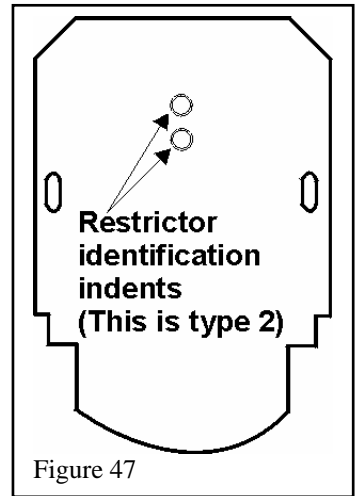


Figure 47

Vent terminal	Vertical vent pipe run	Use restrictor type		Port opening set at
		For Logs	For Coal	
Horizontal through wall	Less than 2ft (61cm)	1	4	Maximum
	From 2ft (61cm) but less than 4ft (122cm)	1	4	Minimum
	From 4ft (122cm) but less than 6ft (183cm)	2	5	Maximum
	6ft (183cm) or more	2	5	Minimum
Vertical through roof	Less than 13ft (396cm)	3	6	Maximum
	13ft (396cm) or more	3	6	Minimum

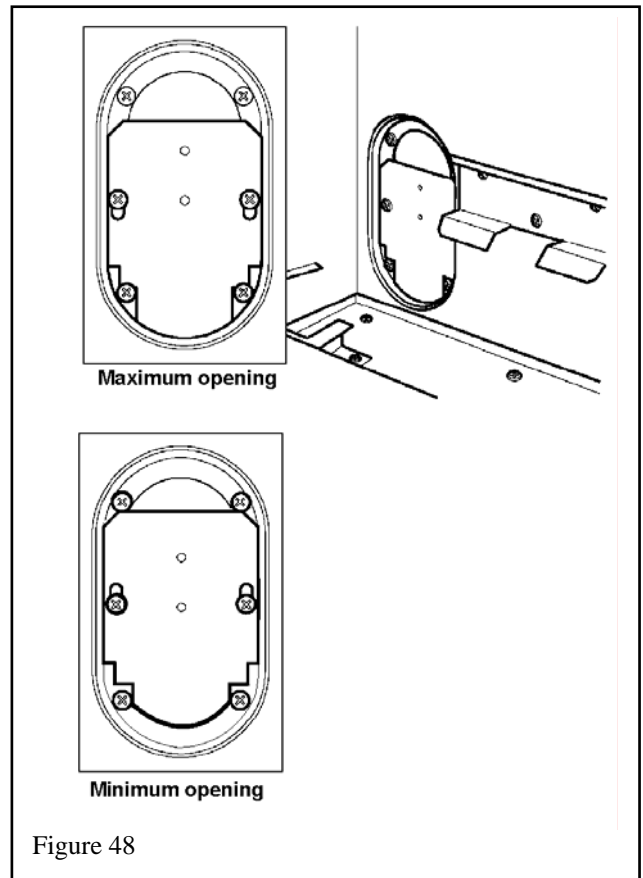
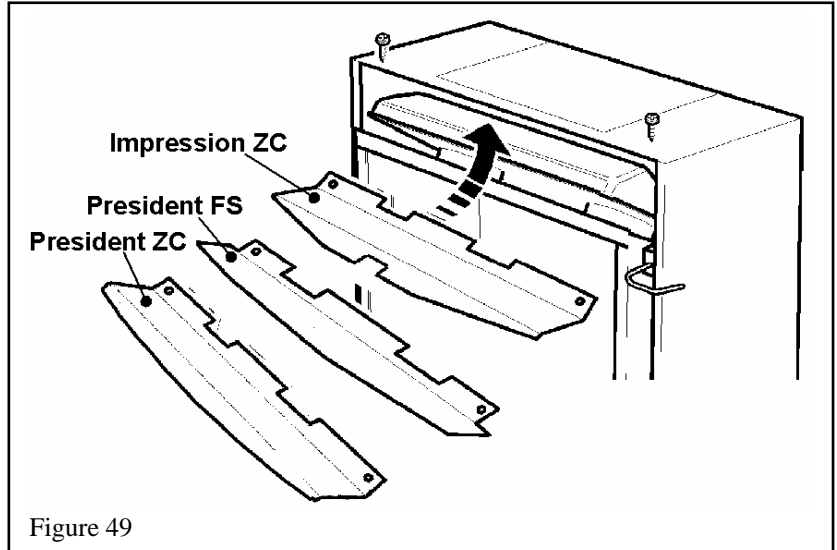


Figure 48

8.9. Attaching top air deflector

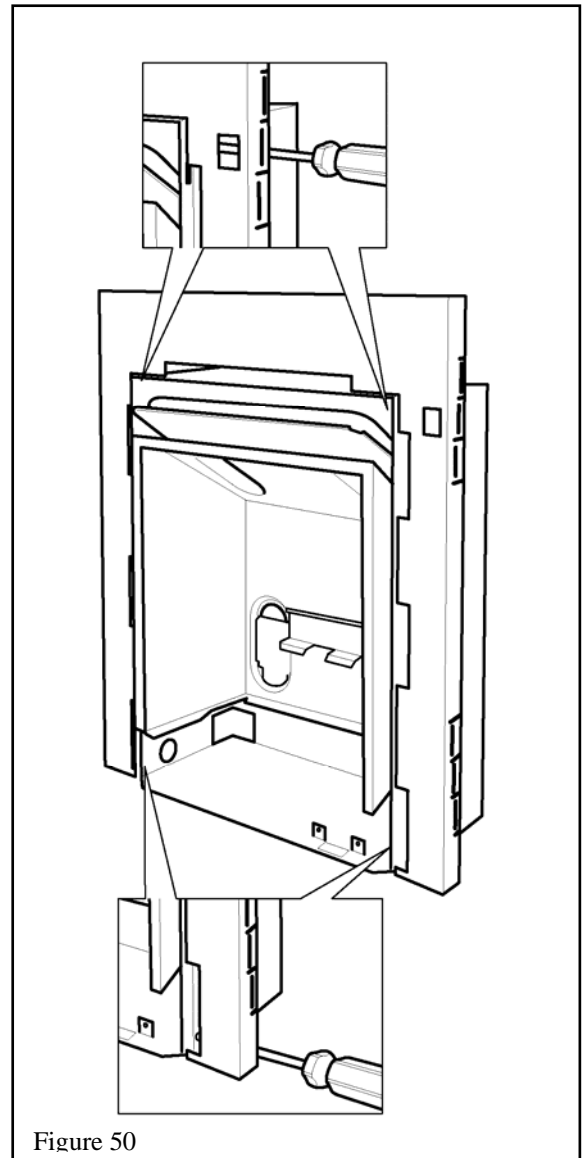
Fit the top air deflector under the top panel of the appliance case. Secure with two thread forming screws. See figure 49.



8.10. Attaching Outer Surround - ZC Models Only

1. Locate the surround over the appliance.
2. Secure the surround to the sides of the appliance case with four thread cutting screws supplied. Screw from outside through the access holes in the surround – See figure 50.
3. The outer surround has alternative locating tabs allowing its front face to be positioned $\frac{1}{2}$ " , $\frac{3}{4}$ " or 1" in front of the framing studding. This enables a variety of wall finish thicknesses to be used which will be level with the front surface of the surround. The surround is supplied with all the tabs flat. Check the wall finish requirements with the home owner. Bend the appropriate tabs – See figure 21.

8.11.



Attaching Top Insulation

Layers –ZC Models only

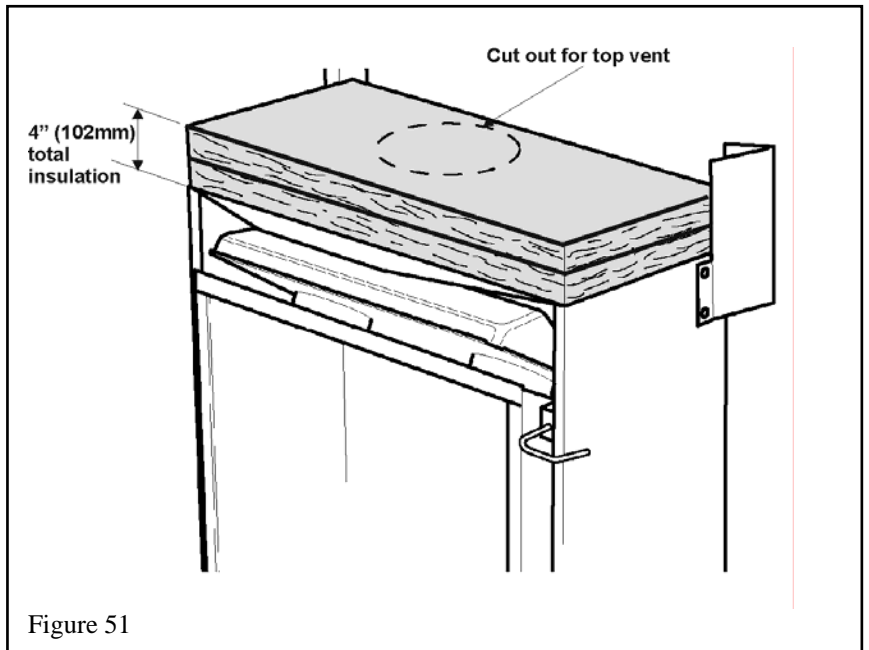
1. For top vent outlet appliances cut out a circle at the center of the insulation layers for the vent collar.
2. Place both the insulation layers on top of the appliance case inboard of the stand-off spacers. See figure 51.

!Warning: Failure to install both the insulation layers may cause a fire hazard and voids warranty.

8.12. Appliance Wall or Floor

Fixing – President FS only

The President FS can be secured to the wall and/or floor if required. The fixing positions are shown in figure 4. Holes should be drilled in the wall or floor and the holes plugged at this stage. Position the appliance accurately in its final location. Mark through the two fixing holes in the appliance base and/or the holes near the top corners at the back. Plug the holes if necessary. Don't fix the appliance at this stage. Wait until the vent pipes are installed.



9. INSTALLATIONS WITH HORIZONTAL TERMINATION – INSTALLING TO WALL

See sections 4 & 5 for full range of horizontal termination applications.

9.1. Installations except with Valor #551DVK Terminal – Vent pipe fitting

Fit all the required Dura-vent DV GS pipes and elbows securely twist locking each section. See the Dura-vent instructions supplied with the sections

9.2. Making Wall Opening

If the wall is constructed of solid non-combustible materials and has no combustible surface cladding (including wood) inside or outside the wall plates or Dura-vent thimbles will not be required.

With all the required Dura-vent pipes attached, slide the appliance into its correct location (If the Valor #551DVK terminal is being used, leave it off at this stage). If the wall has combustible material, mark the wall for a 10" x 10" square hole if the wall. If the wall is totally non-combustible (e.g. masonry block or concrete) mark for a 7" circular hole. In both cases, the center of the hole should line up with the centerline of the horizontal vent.

9.3. Flat On Wall Installations With Valor #551DVK Terminal

1. Cut the vent terminal pipe unit to size (Fig. 52).

Important! The drain hole must be clearly outside the wall.

a) Measure the wall thickness.

b) Add 1¹/₄" (32mm) for wall stand-off spacers if fitted or, if appliance is not going to touch the wall, add distance from case rear to wall.

c) Measure this total length along the vent unit from where the termination cap joins the main terminal pipes. Mark the unit.

d) Insert the Styrofoam support ring and push it as close as possible to the marked position.

e) Cut the vent tubes squarely to length.

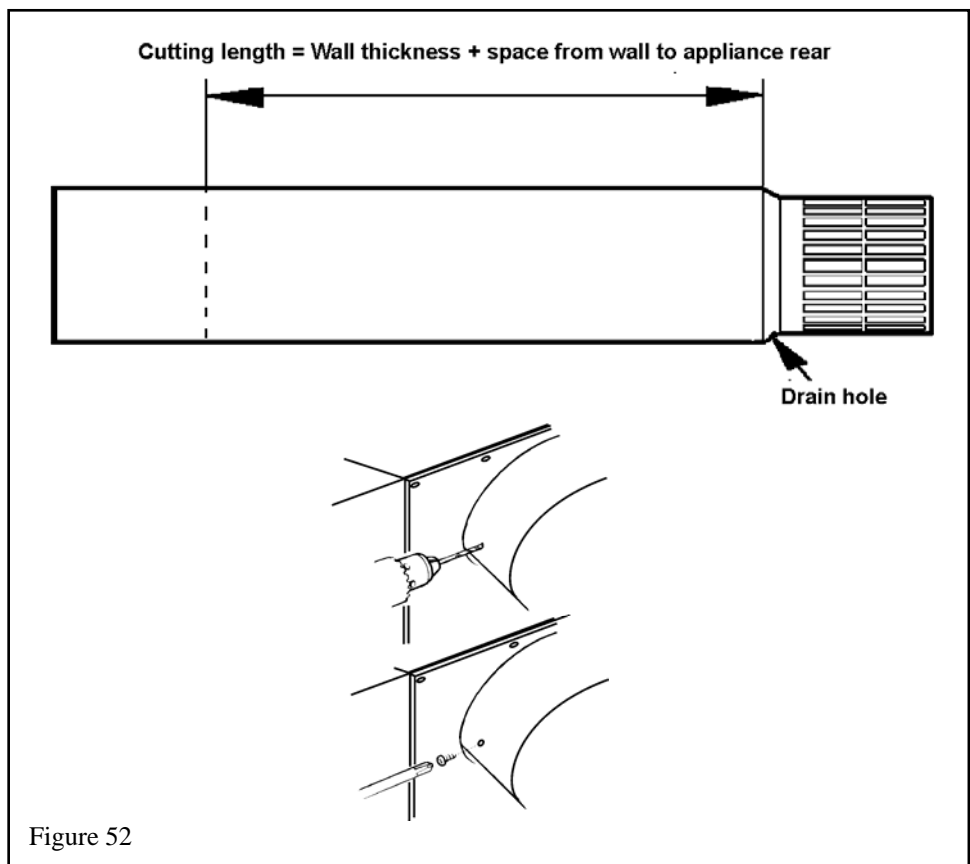
f) *Make sure that all Styrofoam is removed from the vent unit after cutting.*

2. Fit the vent unit fully over the appliance inlet and outlet collars pushing on firmly. *Make sure that the drain hole is at the bottom – the seam will be through the notch in the wall plates – See figure 55.*

3. Drill through the terminal outer tube and appliance outer collar for #6 screws. See figure 52. *Make sure that the drill does not penetrate the inner tubes.*

4. Secure the terminal to the outer collar with two #6 thread cutting screws supplied (Fig. 52).

9.4.



Preparing Wall Plates

The wall plates are not used for 7" hole in non-combustible walls.

1. Bend the wall shields and screw to the inside of the wall plates with 6 thread cutting screws per plate. see figure 53.
2. Bend the inner wall plate tab as shown in figure 54 so that the seam on the terminal tube will pass clearly through the plate with the wall shield at the top. Place the inner wall plate over the terminal unit. Slide the appliance towards the wall so that the terminal enters the wall. Slide the inner wall plate up to the wall. Mark the four holes for the wall screws. Slide the plate away.
3. Drill and plug the wall.
4. Screw the plate to the wall with 4 screws provided.

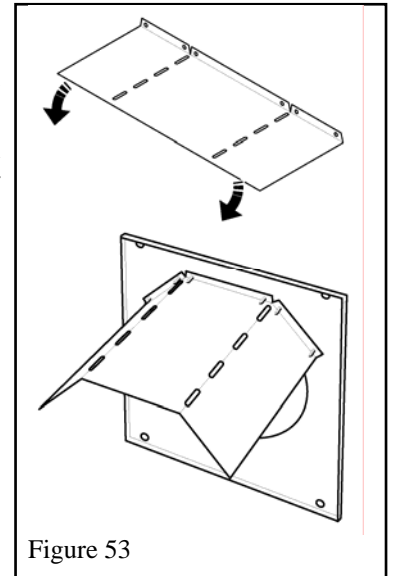


Figure 53

9.4.1. Installing Appliance to Wall.

1. Slide the appliance fully up to the wall.
2. Bend the outer wall plate tab as shown in figure 54. Place the outer wall plate over the terminal unit. Slide the wall plate up to the wall. Mark the four holes for the wall screws. Slide the plate away.
3. Drill and plug the wall.
4. Screw the plate to the wall with 4 screws provided. See figure 55.
5. FS installations - Secure the appliance to the floor or wall if necessary.

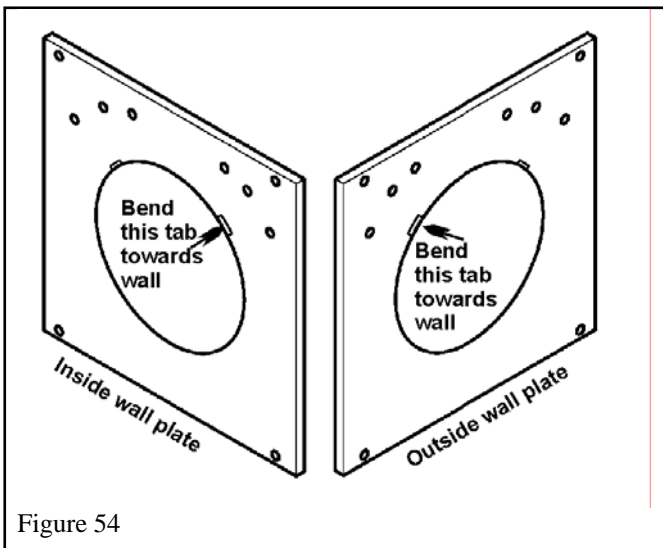


Figure 54

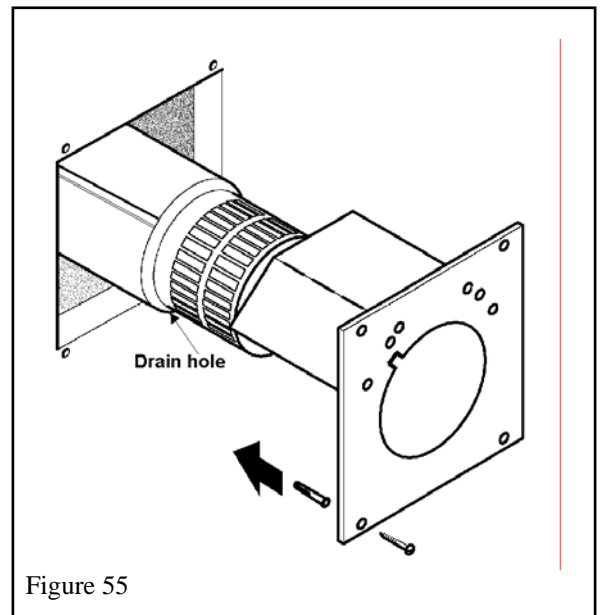


Figure 55

9.5. Installations except with Valor #551DVK Terminal – Installing to wall

Unless the wall is totally non-combustible, fit Dura-vent wall thimbles #942.

Slide the appliance into its correct position and install as detailed in the Duravent instructions supplied with the pipes.

FS installations - Secure the appliance to the floor or wall if necessary.

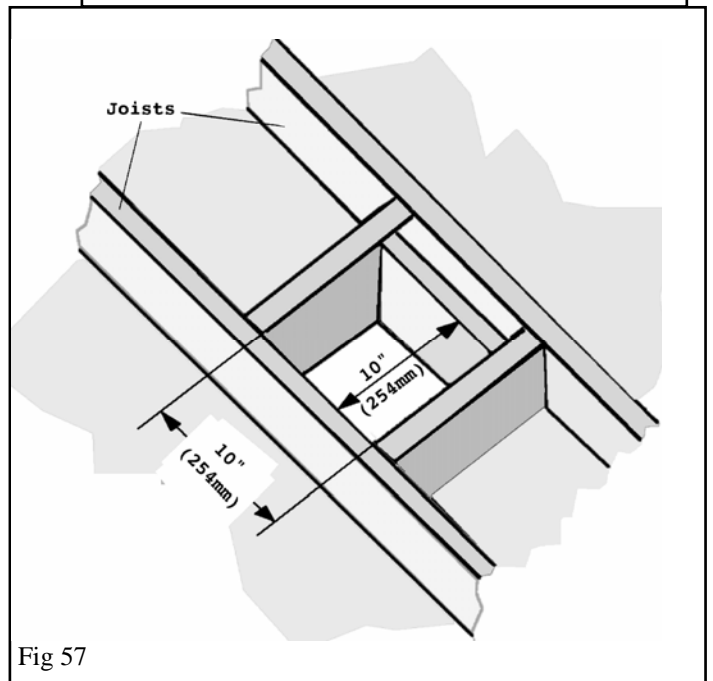
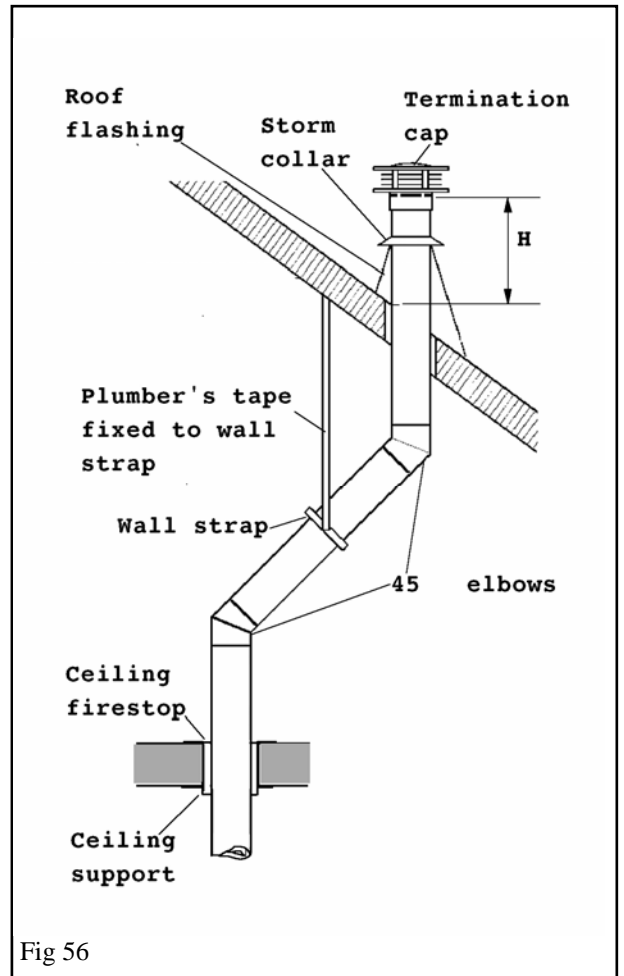
10. INSTALLATIONS WITH THROUGH THE ROOF VERTICAL TERMINATION

10.1. All Co-axial Vent Installations

1. Check the roof pitch to determine which roof flashing will be needed - see vent accessories section 2.4.
2. The distance from the roof to the lowest terminal discharge opening ("H" in fig. 56) depends on the roof pitch and must be in accordance with the current CAN/CGA-B149 in Canada or ANSI Z223.1 in the USA.
3. The minimum clearances to combustibles all round the vent pipes must be in accordance with the dimensions shown in sections 4 & 5 of this manual.
4. If rear vent connection to the appliance, fit a 90° Dura-vent DV GS elbow to the appliance vent adapter.
5. Place the appliance in its proper location.
6. Drop a plumb from the ceiling to the center of the appliance vent opening. Mark the position on the ceiling. Drill a small hole at the marked position.
7. Determine the position where the vent will pass through the roof. If directly above the position where it penetrates the ceiling, drop a plumb from the roof to the small hole in the ceiling and mark the roof at this spot. If rafters or other obstructions will prevent a vertical exit or if clear attic space is desired, the roof outlet can be offset using 45° elbows - see fig. 56.
8. Drill a small hole at the marked position.
9. A ceiling firestop must be installed at the second floor and higher floors. A ceiling support should be used below the flat ceiling. To install the firestop & support cut and frame a 10" (254mm) square hole centered on the small hole previously drilled - see fig. 57.
10. Fit vent accessory elbows and pipe lengths as required up through ceiling support boxes and firestops.
11. If installation includes offset, support the offsetting pipes every 3 feet (1m) with wall straps (fig. 26).
12. Cut a hole in the roof centered on the small hole. The hole must allow for the minimum clearances to combustibles - see sections 4 & 5.
13. Fit pipe lengths through the roof. Fit roof flashing securing it with roofing nails.
14. Fit storm collar and termination cap.
15. FS installations - Secure the appliance to the floor or wall if necessary.

10.2. Co-linear Vent Installations

1. The chimney and fireplace opening sizes are shown in section 4.2.9 of this manual.
2. Place the appliance (fitted with the co-linear adapter (see section 8.5.2) near the fireplace opening but allow space for manipulating the chimney liners on to the appliance.
3. Drop the Dura-vent DV GS flexible liners into the chimney from outside.
4. Fit the liners to the co-linear adapter and move the appliance to its proper position. Be aware of the minimum liner bend radius and minimum liner horizontal run shown in section 4.2.9.
5. Fit the Dura-vent DV GS termination kit and flashing to the exterior of the chimney.
6. Secure the appliance to the floor or wall if necessary.



11. INSTALLING TO FRAME & FITTING SWITCH- ZC APPLIANCES

1. Secure the appliance to the framing by fixing to the studding through the bent tabs in the outer surround.

2. Refit the burner module using the 11 screws previously removed (Figure 58).

3. a) For appliance surround switch as only active switch
- Feed the switch wires through the switch opening in the surround.
 - Route round the back of the valve and connect to the control unit.
 - Connect the battery box to the **black** connection pad. See figure 59.
 - Snap fit the switch into the surround opening. 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 59.

b) For active wall switch

Check with the home owner if the outer surround is to be covered by tiling etc. If not, snap the appliance switch into the surround opening but don't connect wires to the appliance. If tiling is to be applied, don't fit the appliance 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 to the wall switch location.

The connections to the wall switch are shown in figure 60. Connect so that, when installed in wall, pressing the upper rocker arrow increases the flame height.

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 without active appliance switch.

Check with the home owner if the outer surround is to be covered by tiling etc. If not, snap the appliance switch into the surround opening but don't connect wires to the appliance. If tiling is to be applied, don't fit the appliance switch.

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 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.

Fit the 9V battery to the handset transmitter.

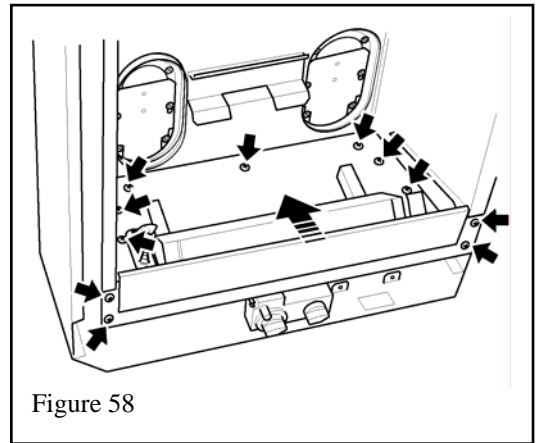


Figure 58

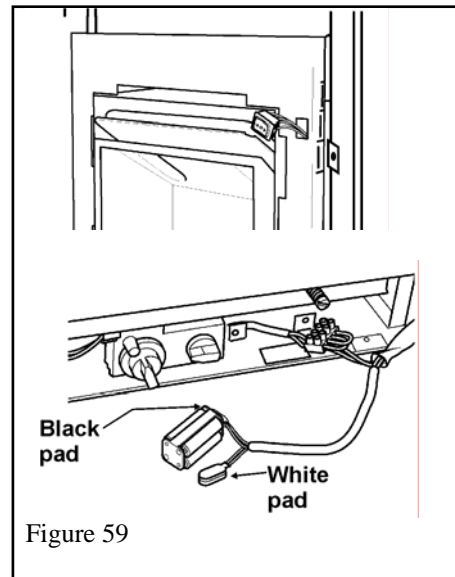


Figure 59

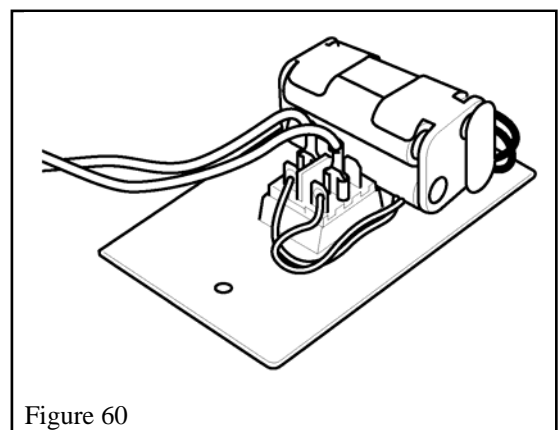


Figure 60

d) For active remote control with active appliance switch

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.

A set of four batteries and battery box is supplied with the appliance and a further set with the remote control unit. Only one set is required. The other set can be kept by the owner as spares.

- Feed the switch wires through the switch opening in the surround.
- Cut off the "L" terminals from the switch wires **on the remote control receiver** and remove insulation from approximately 1/4" at ends of wires. See figure 60a.
- Securely connect the wires to the terminal block. **Connect the black wire to the terminal opposite the brown wire. Connect the wire with the white stripe to the terminal opposite the yellow wire.** See figure 60b.
- Route the wires round the back of the valve and connect the "L" terminals to the control unit.
- Remove the remote control receiver lid. Remove the cover from the **white** connection pad. Fit this connection pad to the remote control receiver terminals. See figure 60c.
- Fit the **black** connection pad to a battery box. Fit four 1.5V batteries. See figure 60c.
- Place the batteries and connection pad in the receiver box and replace the lid.

Fit the 9V battery to the handset transmitter.

4. Refit the battery shield with the two screws previously removed – Figure 61. *This shield is not needed if wall switch is installed.*

5. *Unless fitting wall switch,* place the battery box or remote control receiver on the "Velcro" pad in front of the battery shield. See figure 62.

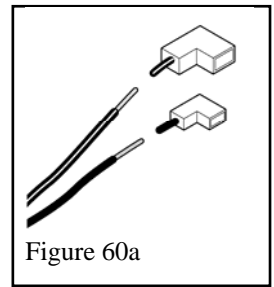


Figure 60a

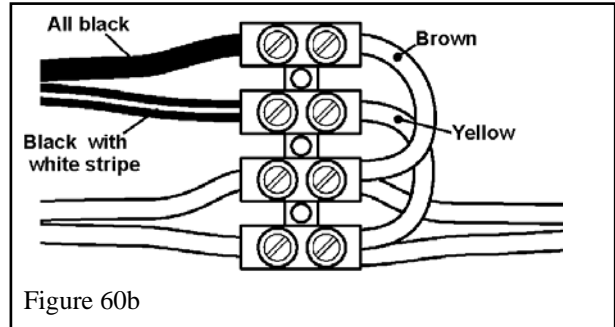


Figure 60b

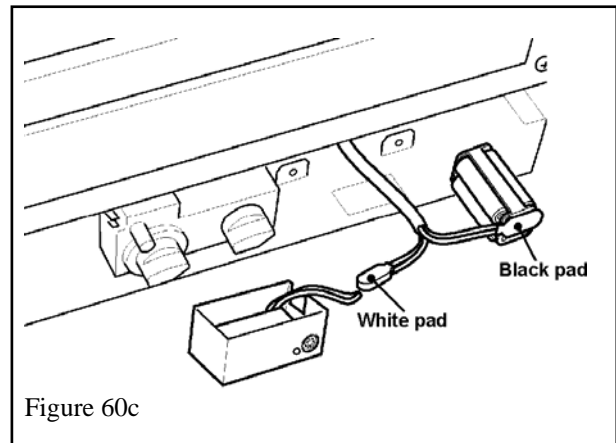


Figure 60c

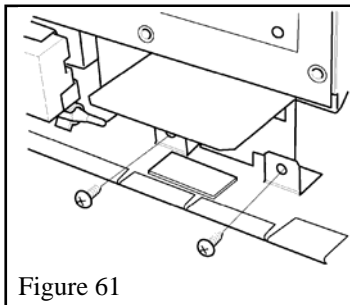


Figure 61

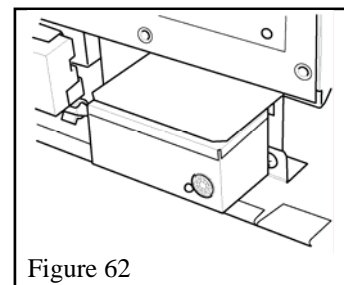


Figure 62

12. FITTING SIDES & SWITCH – FS MODELS

1. a) For active appliance side switch as only active switch

- Snap fit the switch into the opening in the switch mounting bracket. See figure 63
- Fit the two wire clips to the right side of the case.
- Route the switch wires round the back of the valve and connect to the control unit.
- Connect the battery box to the **black** connection pad. See figure 64.
- Place the battery box on the “Velcro” pad in front of the battery shield. Fit the wires into the clips. See figure 64.

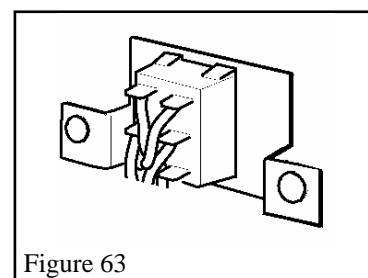


Figure 63

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 burner to the wall switch location.

The connections at the wall switch are shown in figure 60.

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 without active appliance switch

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 burner 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 62.

Fit the 9V battery to the handset transmitter.

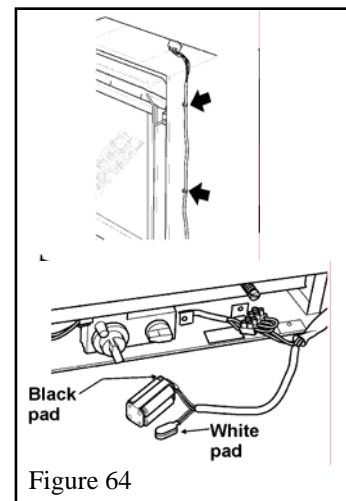


Figure 64

d) For active remote control with active appliance side switch

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.

A set of four batteries and battery box is supplied with the appliance and a further set with the remote control unit. Only one set is required. The other set can be kept by the owner as spares.

- Snap fit the switch into the opening in the switch mounting bracket. See figure 63.
- Fit the two wire clips to the right side of the case.
- Cut off the “L” terminals from the switch wires **on the remote control receiver** and remove insulation from approximately ¼” at ends of wires. See figure 60a.
- Securely connect the wires to the terminal block. **Connect the black wire to the terminal opposite the brown wire. Connect the wire with the white stripe to the terminal opposite the yellow wire.** See figure 60b.
- Route the wires round the back of the valve and connect the “L” terminals to the control unit.
- Remove the remote control receiver lid. Remove the cover from the **white** connection pad. Fit this connection pad to the remote control receiver terminals. See figure 60c.
- Fit the **black** connection pad to a battery box. Fit four 1.5V batteries. See figure 60c.
- Place the batteries and connection pad in the receiver box and replace the lid.
- Fit the 9V battery to the handset transmitter.

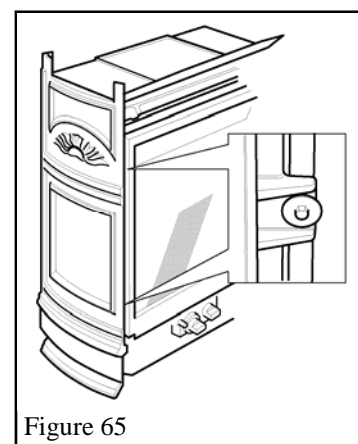


Figure 65

2. Fit the sides to the engine unit case with two machine screws and washers per side. See figure 65.

3. For active appliance side switch

Fit the switch mounting bracket to the right side casting with two thread cutting screws supplied. 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 66.

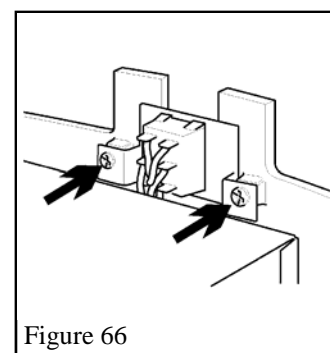


Figure 66

13. GAS SUPPLY INSTALLATION

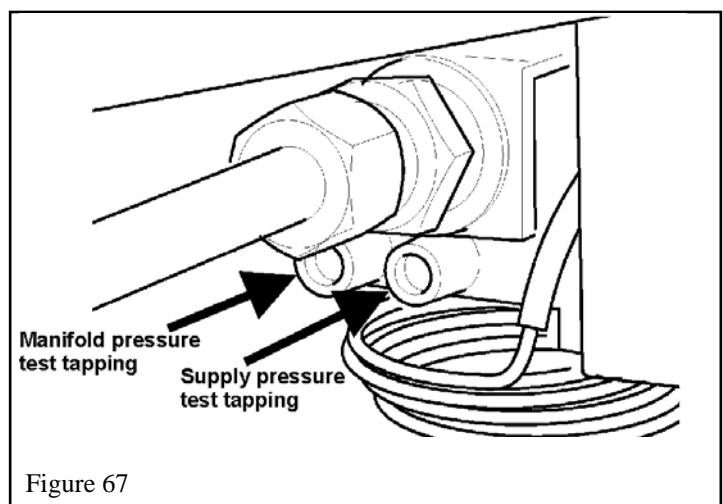
1. The appliance is supplied for supply gas connection at the rear left corner of the case. An adapter is included in the pack that must be fitted to the appliance inlet pipe. Supply line connection to the adapter is $\frac{3}{8}$ "NPT. Alternatively, the appliance inlet pipe may be removed and the supply 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 $\frac{1}{8}$ "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 $\frac{1}{2}$ psig (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 $\frac{1}{2}$ psig (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 67. 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.

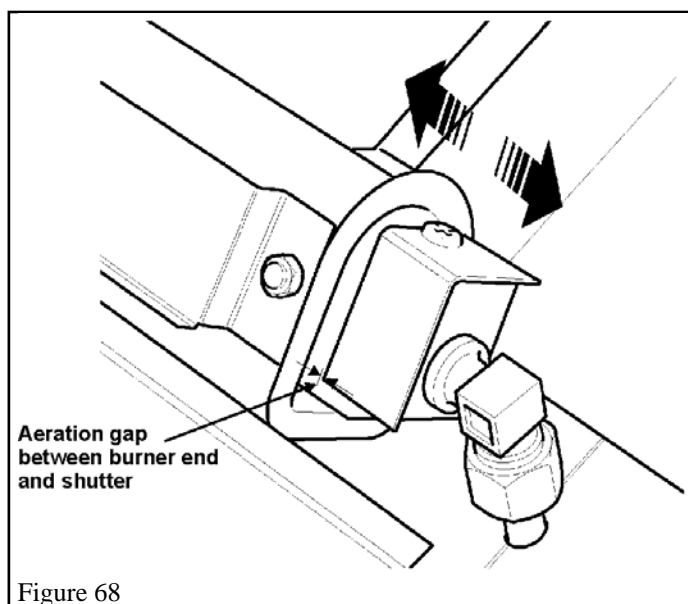


14.AERATION SETTING CHECK

The burner is equipped with an adjustable shutter to control primary aeration. See figure 68. The shutter is factory set at an aeration gap which will give optimum performance for the vast majority of installations. 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 ceramic fuel effects 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.

If converted for LPG refer to the instructions supplied with kit #554LPK for the correct shutter setting.



15. CERAMIC FUEL BED INSTALLATION

15.1. Ceramic Walls Installation

1. Locate the ceramic rear wall in the channel at back of the firebox and flat against the back of the firebox. See figure 69.
2. Locate the side walls in the channels at the sides of the firebox. See figure 70.
3. Remove two screws from under the top front of the firebox. Using these screws, fit the port cover. See figure 71.

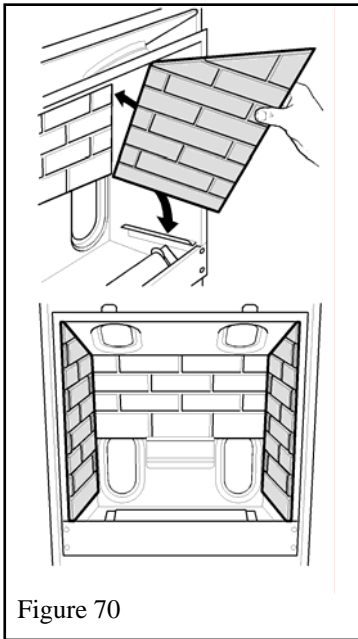


Figure 70

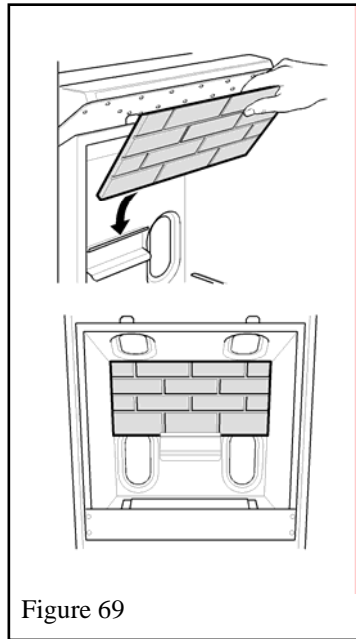


Figure 69

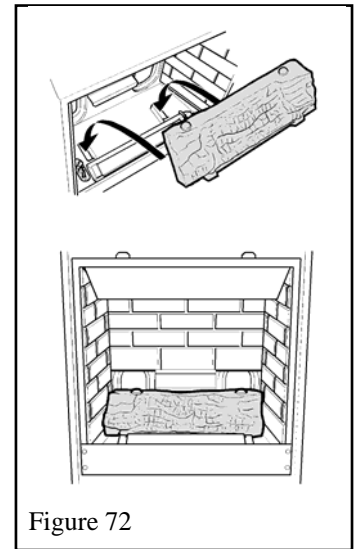
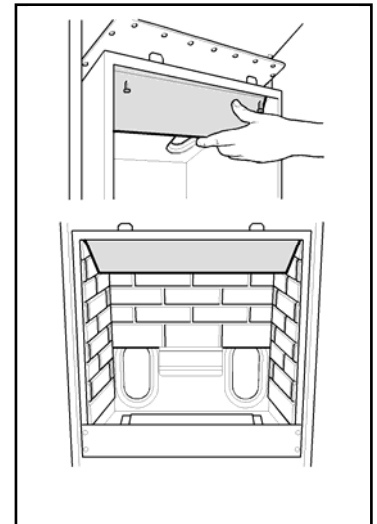


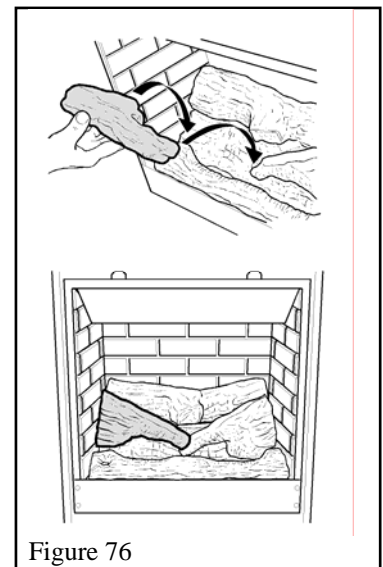
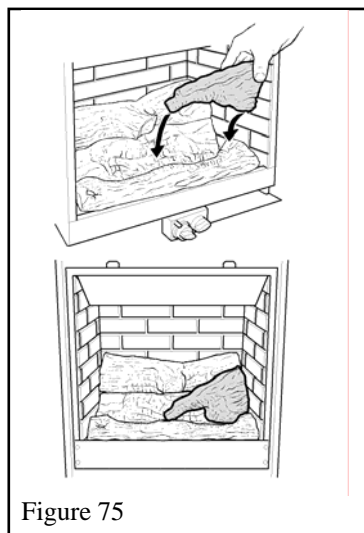
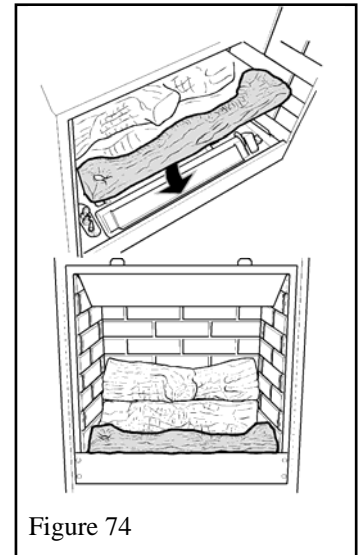
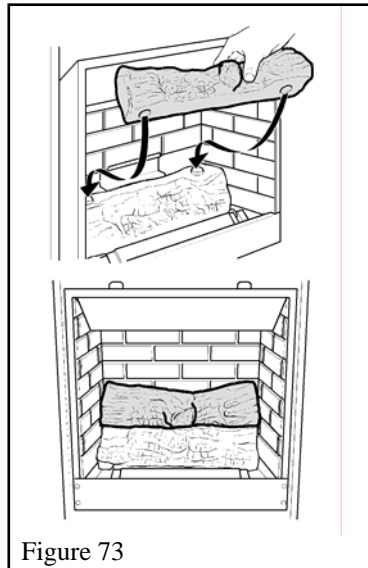
Figure 72



15.2. Ceramic Logs Installation

(See Section 15.3 for ceramic coals)

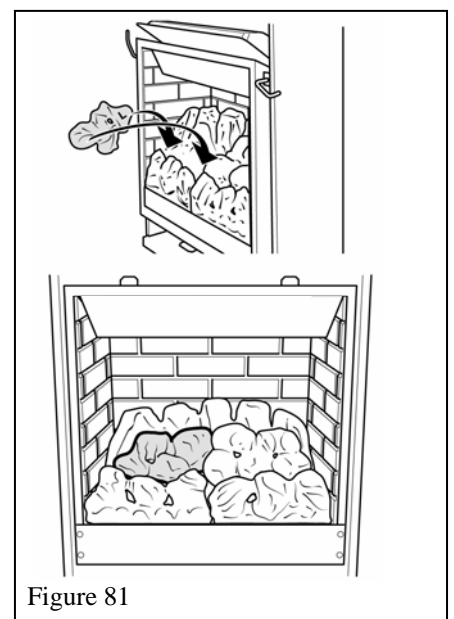
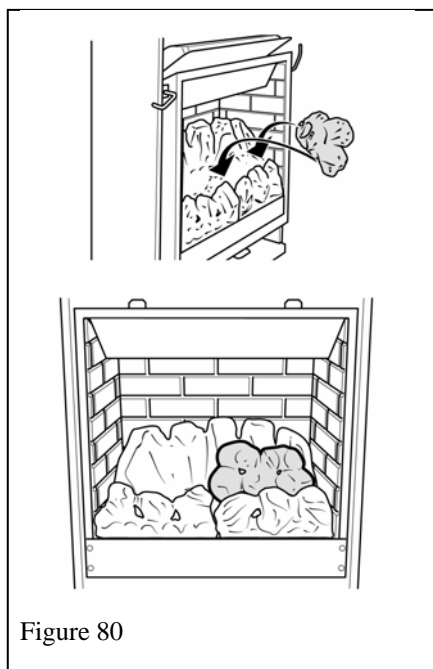
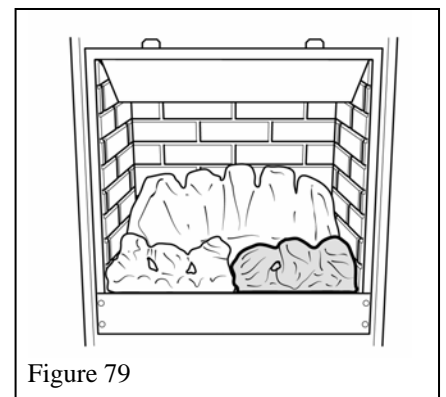
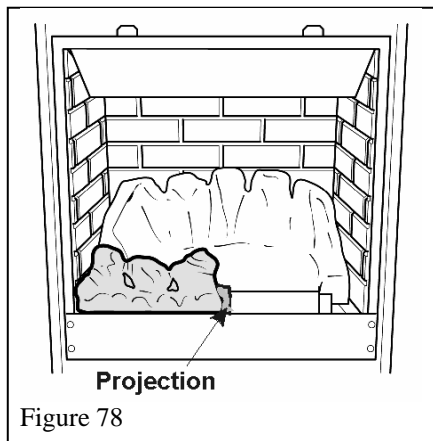
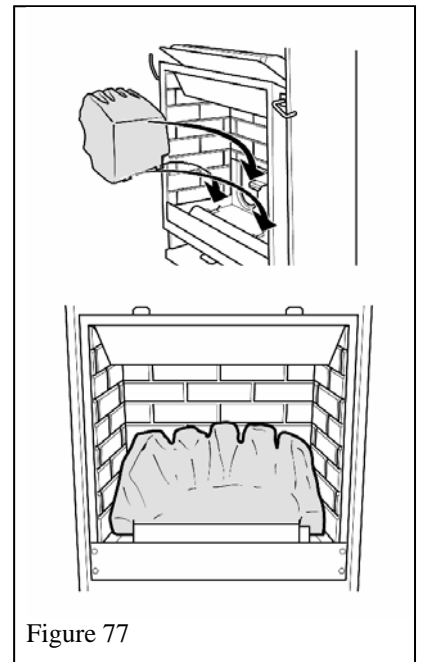
1. Place the base log on the supports in the firebox and against the firebox back. See figure 72.
2. Place the rear log over the base log. Locate the holes in the top log into the pegs in the base log. See figure 73.
3. Place the front log behind the metal lip at front of the firebox. See figure 74.
4. Place the right side log in the hollow at right of the base log. Rest the narrow nose of this log on the projection at front center of the base log – ***It is important that the narrow nose does not drop down to touch the burner***. See figure 75.
5. 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 76.



15.3. Ceramic Coals Installation

(See section 15.2 for ceramic logs)

1. Place the base coal on the supports in the firebox and against the firebox back. See figure 77.
2. Place the left front coal in position behind the metal lip at the front of the firebox. The side projection on this coal should be near the middle front of the firebox. See figure 78.
3. Place the right front coal behind the metal lip at the front of the firebox. Its left side should rest over the projection on the left front coal. See figure 79.
4. The center right coal has letter "R" embossed underneath. Place this coal behind the front right coal. See figure 80.
5. The center left coal has letter "L" embossed underneath. Place this coal behind the front left coal. See figure 81.



16. WINDOW REFITTING & CHECKING

1. Place the window centrally against the engine unit and resting on the support at bottom front of the engine.
2. Pull the clamping bars forward and rotate inwards to secure the top of the window. See figure 82
3. Fit the two spring loaded bolts through the bottom of the window and tighten to secure the bottom of the window. See figure 82.
4. Pull the top of the window forward and release to check that the window opens slightly and returns in the event of a delayed ignition explosion. See figure 83.
5. Similarly check the bottom of the window by pulling it forward and releasing. See figure 84.
6. Apply light hand pressure against the window frame sides to bed in the window seal.

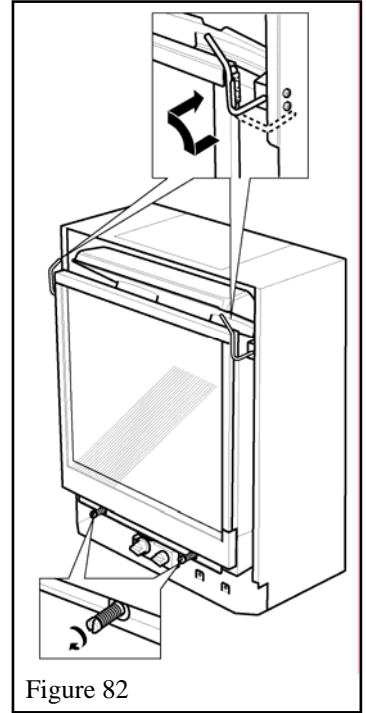


Figure 82

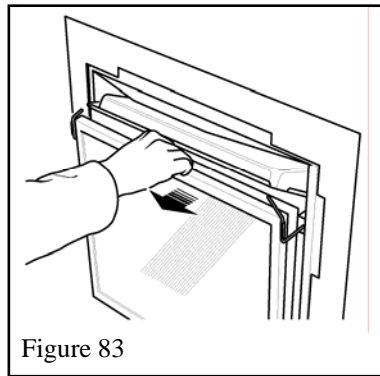


Figure 83

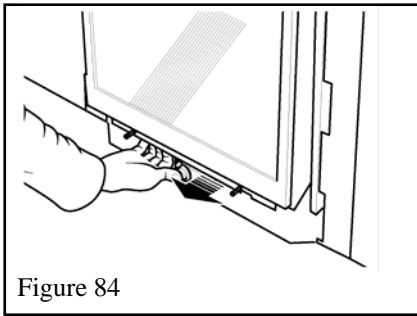


Figure 84

17. OPERATION CHECKS

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.

2. Aeration adjustment

As described in section 14, 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 68). 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 $\frac{1}{64}$ " (0.4mm).

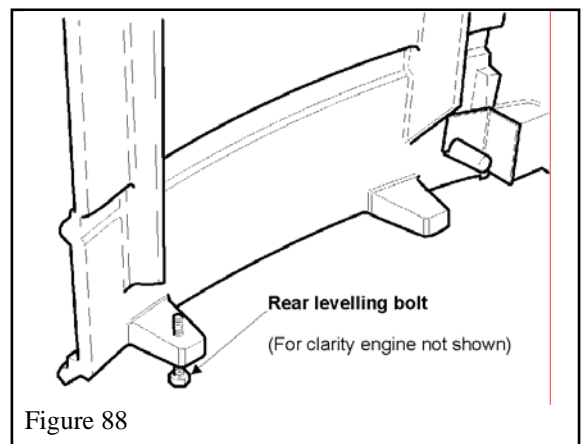
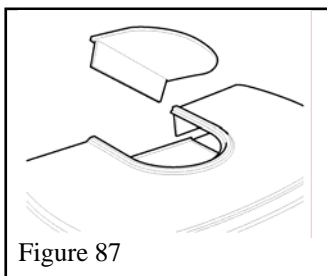
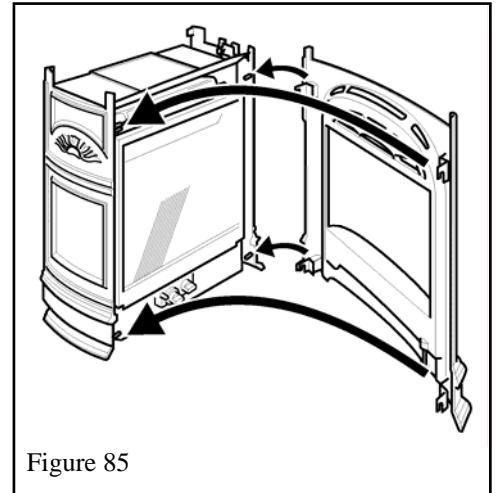
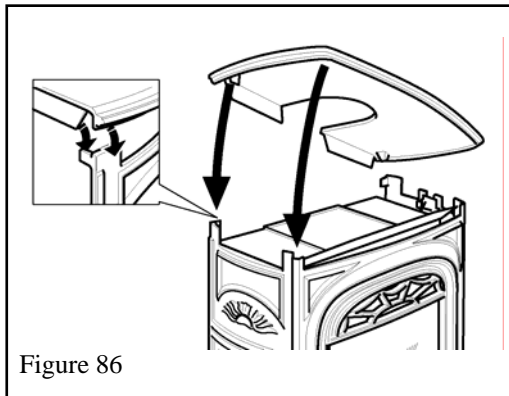
Increasing aeration will cause the flame to appear more transparent and blue making the ceramic fuel effects glow more.

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

18. INSTALLATION COMPLETION

18.1. **President FS**

1. Hang the front casting by the hooks at the four corners as shown in figure 85.
2. Fit the top casting making sure that the corners locate as shown in figure 86.
3. *If rear vent connection:* Fit the top infill casting. See figure 87.
4. If necessary the appliance can be leveled by the adjustment bolts at the back of the side castings. See figure 88.



18.2. President ZC

1. If tiling is to be applied right up to the sides of the front unit, the top of the front can be moved forward to allow the tiling to go behind the top. To move the top, slacken the clamping bolts, slide the top forward, retighten the bolts (See figure 89).
2. Hang the front unit by the hooks at the top corners (See figure 90).

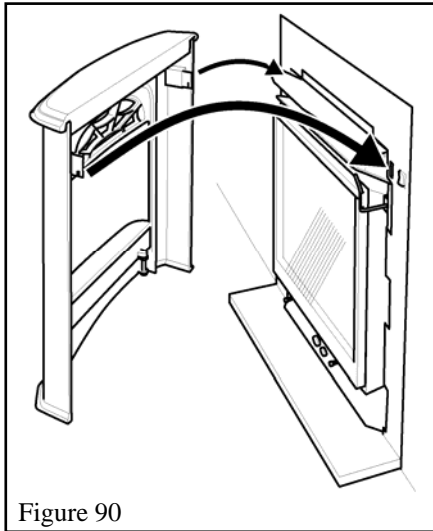


Figure 90

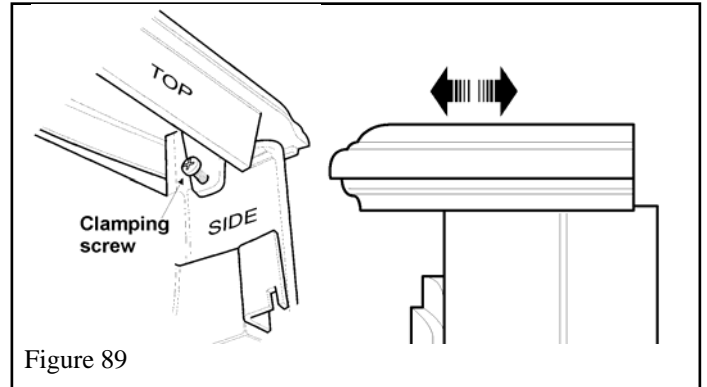


Figure 89

18.3. Impression ZC

1. If tiling is to be applied right up to the sides of the front unit, the top of the front can be moved forward to allow the tiling to go behind the top. To move the top, slacken the clamping bolts, slide the top forward, retighten the bolts (See figure 89).
2. Raise vertically the two tabs in the metal base of the appliance. See figure 91.
3. Fit the two top hanging hooks using four $\frac{3}{8}$ " thread cutting screws. Hang the front unit by the hooks at the top corners. See figure 92.
4. Secure the bottom of the front with two thread cutting screws provided. Screw into the two raised tabs. See figure 92.

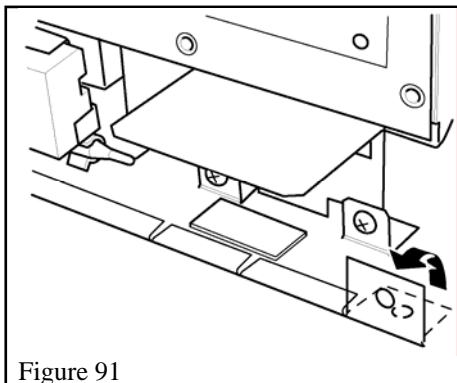


Figure 91

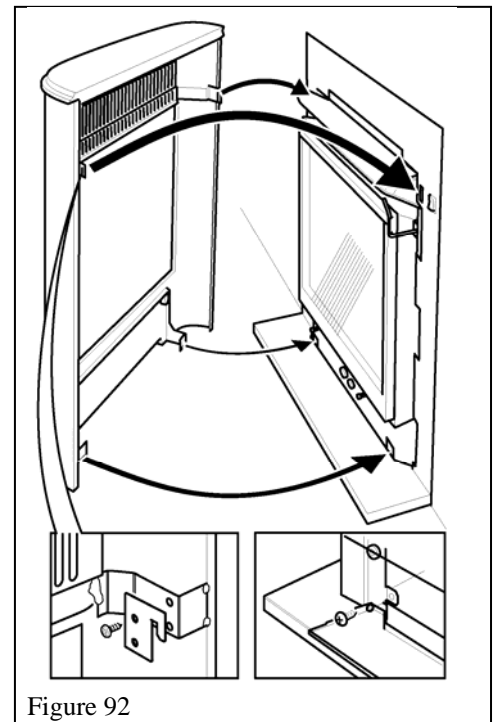


Figure 92