

# Installation Manual

## Installation & Appliance Set-Up

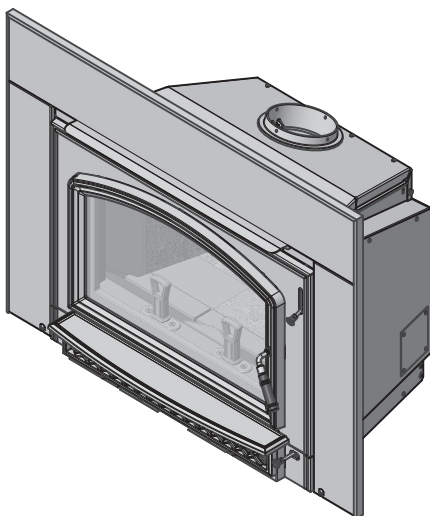
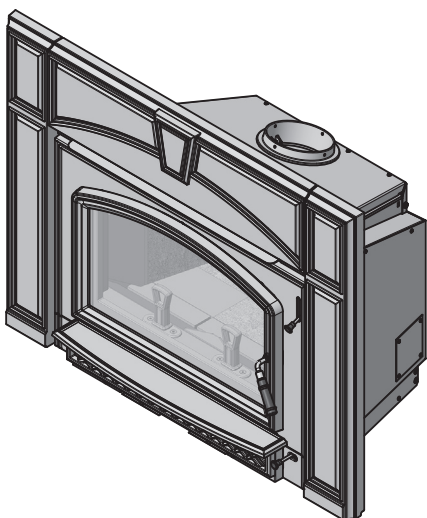
**INSTALLER:** Leave this manual with party responsible for use and operation.

**OWNER:** Retain this manual for future reference.

**NOTICE: DO NOT DISCARD THIS MANUAL**

### **QUADRA-FIRE®**

**VOYAGEUR GRAND AUSTRALIAN**  
**WOOD INSERT**  
**AUTOMATIC COMBUSTION CONTROL**  
**(ACC)**  
**MODEL:**  
**GRAND-MBK-AU**



#### **WARNING**



If the information in these instructions is not followed exactly, a fire could result causing property damage, personal injury, or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not over fire - If appliance or chimney connector glows, you are over firing. Over firing will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.



#### **WARNING**



##### **HOT SURFACES!**

Glass and other surfaces are hot during operation AND cool down.

**Hot glass and appliance will cause burns.**

- Do not touch glass until it is cooled
- Use leather gloves when reloading fuel
- NEVER allow children to touch glass
- Keep children away
- CAREFULLY SUPERVISE children in same room as appliance.
- Alert children and adults to hazards of high temperatures
- High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, draperies and other flammable materials away.



#### **WARNING**



##### **Fire Risk.**

For use with solid wood fuel only.

Other fuels may over fire and generate poisonous gases (i.e. carbon monoxide).

**Safety Alert Key:**

- **DANGER!** Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- **WARNING!** Indicates a hazardous situation which, if not avoided may result in death or serious injury.
- **CAUTION!** Indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.
- **NOTICE:** Indicates practices which may cause damage to the appliance or to property.

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# 1 Important Safety Information

## A. Insert Certification

<b>Model:</b>	Voyageur Grand AU Insert
<b>Laboratory:</b>	Vipac Ltd.
<b>Report No:</b>	30A-13-0025-TRP-331382-0
<b>Type:</b>	Hardwood only at 25% dry basis
<b>Standard:</b>	AS/NZS4013 for Hardwood

## B. BTU & Efficiency Specifications

<b>Overall Average Efficiency Burning Hardwood (AS/NZS 4012)</b>	62.8%
<b>Average Particulate Emission Factor Burning Hardwood (AS/NZS 4013)</b>	2.0 g/kg
<b>Maximum Average Heat Output Burning Hardwood</b>	9.3 kW
<b>Wetback</b>	Wetbacks are NOT an approved option and must be fitted.
<b>Vent Size:</b>	6 inches
<b>Firebox Size:</b>	2.35 cubic feet
<b>Recommended Wood Length:</b>	18 inches
<b>Fuel Orientation:</b>	Front-to-Back
<b>Approved Fuel</b>	Hardwood only with a Moisture content less than 25% (dry basis)

## C. Glass Specifications

This appliance is equipped with 5mm ceramic glass. Replace glass only with 5mm ceramic glass. Please contact your dealer for replacement glass.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified installer, service agency or your dealer.

Hearth & Home Technologies WILL NOT warranty appliances that exhibit evidence of over-firing. Evidence of over-firing includes, but is not limited to:

- Warped air tube
- Deteriorated refractory brick retainers
- Deteriorated baffle and other interior components

## D. Non-Combustible Materials

Material which will not ignite and burn, composed of any combination of the following:

- Steel
- Plaster
- Brick
- Iron
- Concrete
- Tile
- Glass
- Slate

## E. Combustible Materials

Material made of/or surfaced with any of the following materials:

- Wood
- Compressed Paper
- Plant Fibers
- Plastic
- Plywood/OSB
- Sheet Rock (drywall)

Any material that can ignite and burn: flame proofed or not, plastered or non-plastered.

**NOTE:** Hearth & Home Technologies, manufacturer of this appliance, reserves the right to alter its products, their specifications and/or price without notice.

The Quadra-Fire Voyageur Grand Australian Wood Insert is Hardwood Certified. Hardwood Particulate Emissions equaling 1.5 g/kg with a Space Heating Efficiency of 65%.

This wood appliance needs periodic inspection and repair for proper operation. It is against federal regulations to operate this wood appliance in a manner inconsistent with operating instructions in this manual.

# Install Guide

## 2 Getting Started

### A. Design and Installation Considerations

Consideration must be given to:

- Safety
- Convenience
- Traffic flow
- Chimney and chimney connector required

It is a good idea to plan your installation on paper, using exact measurements for clearances and floor protection, before actually beginning the installation. If you are not using an existing chimney, place the appliance where there will be a clear passage for a factory-built listed chimney through the ceiling and roof.

We recommend that a qualified building inspector and your insurance company representative review your plans before and after installation.

If this appliance is in an area where children may be near it is recommended that you purchase a decorative barrier to go in front of the appliance. Remember to always keep children away while it is operating and do not let anyone operate this appliance unless they are familiar with these operating instructions.



#### CAUTION

Check building codes prior to installation.

- Installation **MUST** comply with local, regional, state and national codes and regulations.
- Consult insurance carrier, local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.



#### WARNING

##### Asphyxiation Risk.



- Do NOT connect this appliance to a chimney flue servicing another appliance.
- Do NOT connect to any air distribution duct or system.

May allow flue gases to enter the house.

#### NOTICE

**Hearth & Home Technologies assumes no responsibility for the improper performance of the appliance system caused by:**

- Inadequate draft due to environmental conditions
- Down drafts
- Tight sealing construction of the structure
- Mechanical exhausting devices
- Over drafting caused by excessive chimney heights
- Ideal performance is with height of chimney between 14-16 feet (4.26-4.88m) measured from the base of the appliance.

### B. Fire Safety

To provide reasonable fire safety, the following should be given serious consideration:

1. Install at least one smoke detector on each floor of your home to ensure your safety. They should be located away from the heating appliance and close to the sleeping areas. Follow the smoke detector manufacturer's placement and installation instructions, and be sure to maintain regularly.
2. A conveniently located Class A fire extinguisher to contend with small fires resulting from burning embers.
3. A CO detector should be installed in the room with the appliance.
4. A practiced evacuation plan, consisting of at least two escape routes.
5. A plan to deal with a chimney fire as follows:
6. In the event of a chimney fire:
  - a. Evacuate the house immediately
  - b. Notify fire department.

### C. Negative Pressure



#### WARNING



##### Asphyxiation Risk.

- Negative pressure can cause spillage of combustion fumes, soot and carbon monoxide.
- Appliance needs to draft properly for safety.

Negative pressure results from the imbalance of air available for the appliance to operate properly. It can be strongest in lower levels of the house.

##### Causes include:

- Exhaust fans (kitchen, bath, etc.)
- Range hoods
- Combustion air requirements for furnaces, water appliances and other combustion appliances
- Clothes dryers
- Location of return-air vents to furnace or air conditioning
- Imbalances of the HVAC air handling system
- Upper level air leaks such as:
  - Recessed lighting
  - Attic hatch
  - Duct leaks



**To minimize the effects of negative air pressure:**

- Install optional outside air kit with the intake facing prevailing winds during the heating season
- Ensure adequate outdoor air for all combustion appliances and exhaust equipment
- Ensure furnace and air conditioning return vents are not located in the immediate vicinity of the appliance
- Avoid installing the appliance near doors, walkways or small isolated spaces
- Recessed lighting should be a "sealed can" design
- Attic hatches weather stripped or sealed
- Attic mounted duct work and air handler joints and seams taped or sealed
- Basement installations should be avoided

**WARNING****Fire Risk.**

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance.
- Modification of the appliance.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.
- Operating appliance without fully assembling all components.
- Operating appliance without legs attached (if supplied with appliance).
- Do NOT Over fire - If appliance or chimney connector glows, you are over firing.

**Any such action that may cause a fire hazard.**

**D. Tools And Supplies Needed**

Before beginning the installation be sure the following tools and building supplies are available:

Reciprocating saw	Framing material
Pliers	High temp caulking material
Hammer	Gloves
Phillips screwdriver	Framing square
Flat blade screwdriver	Electric drill and bits
Plumb line	Safety glasses
Level	Tape measure
Misc. screws and nails	7/16 socket or wrench
1/2-3/4 in. length, #6 or #8 self-drilling screws	

**E. Inspection of Appliance and Components**

- Remove appliance and components from packaging and inspect for damage.
- Report to your dealer any parts damaged in shipment.
- Read all the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.

**F. Removal of Appliance from Shipping Materials**

1. Remove box and 51mm x 102mm structural boards being careful not to damage product.
2. Using 7/16 socket or wrench remove one bolt located inside front part of appliance (**Figure 5.1**).
3. Moving to the back of the appliance and using 7/16 socket or wrench remove two bolts (**Figure 5.1**).
4. Carefully pull appliance off of pallet and put in desired location following Hearth Pad and Clearance to Combustibles on pages 8 and 9.

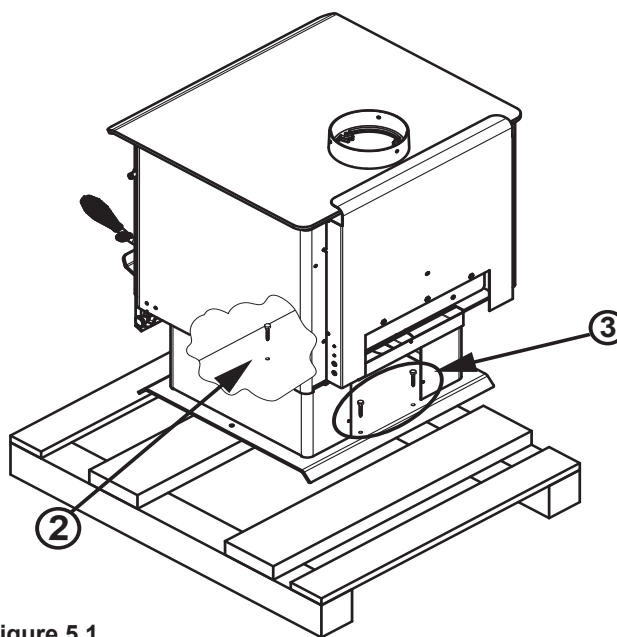


Figure 5.1

**WARNING****Fire Risk.**

Inspect appliance and components for damage. Damaged parts may impair safe operation.

- Do NOT install damaged components.
  - Do NOT install incomplete components.
  - Do NOT install substitute components.
- Report damaged parts to dealer.

Follow this Standard Work Checklist

Customer: \_\_\_\_\_  
Date Install: \_\_\_\_\_  
Lot / Address: \_\_\_\_\_  
Location of Appliance: \_\_\_\_\_  
Installer: \_\_\_\_\_  
Dealer / Distributor Phone #: \_\_\_\_\_  
Serial #: \_\_\_\_\_  
Model: \_\_\_\_\_


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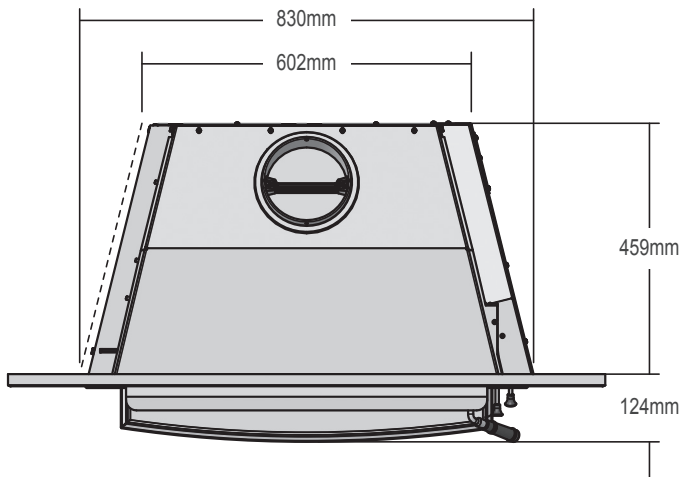



Comments: Further description of the issues, who is responsible (Installer/Builder/Other Trades, etc.) and corrective action needed:  
Comments communicated to party responsible \_\_\_\_\_ by \_\_\_\_\_ on \_\_\_\_\_  
(Builder / Gen. Contractor) (Installer) (Date)

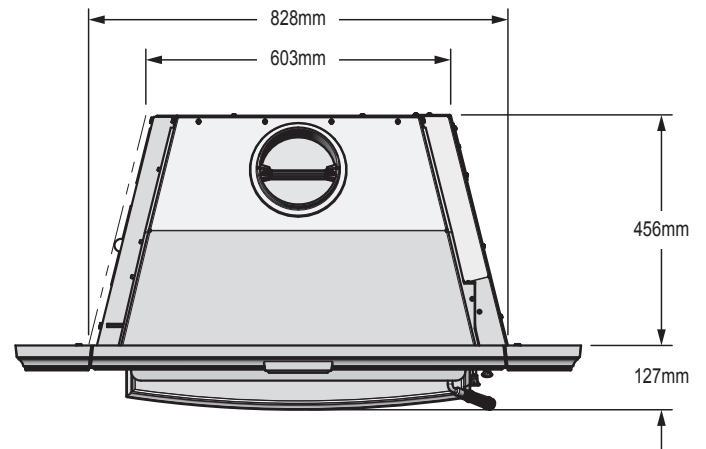
# 3 Dimensions and Clearances

## A. Appliance Dimensions

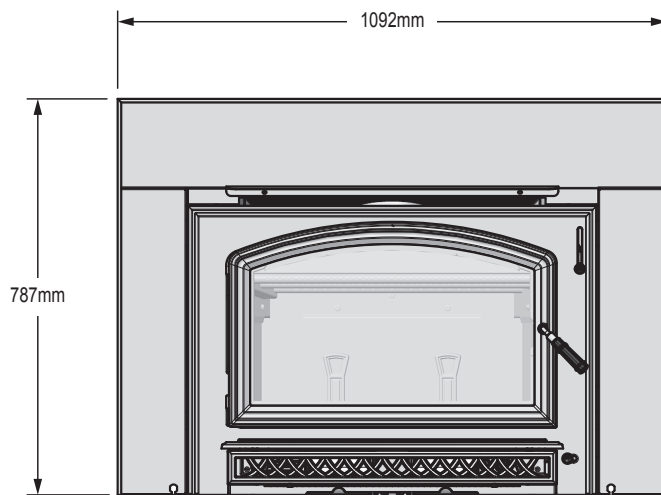
**NOTE:** Flue Collar size is 152mm inside diameter (ID)



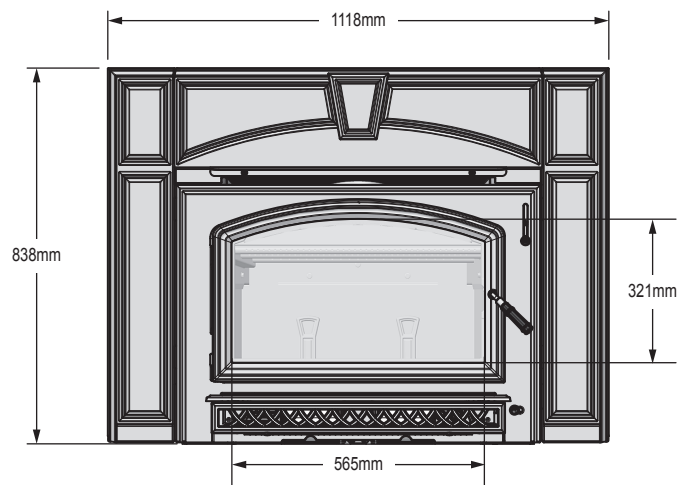
**Figure 7.1 - Top View with Steel Surround**



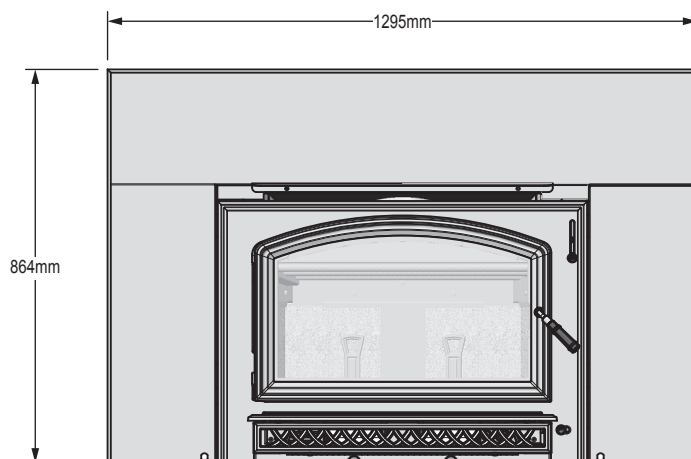
**Figure 7.4 - Top View with Cast Surround**



**Figure 7.2 - Front View with Small Steel Surround (SP-GRAND-STD and TRIMKIT-4331)**



**Figure 7.5 - Front View with Cast Surround (SP-GRAND-CC)**



**Figure 7.3 - Front View with Large Steel Surround (SP-GRAND-LRG and TRIMKIT-5134)**

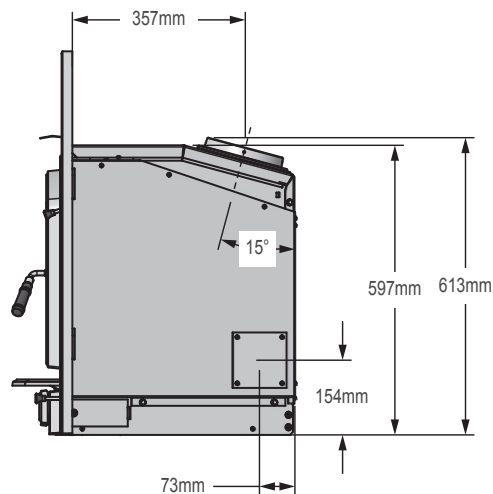


Figure 8.1 - Side View with Steel Surround

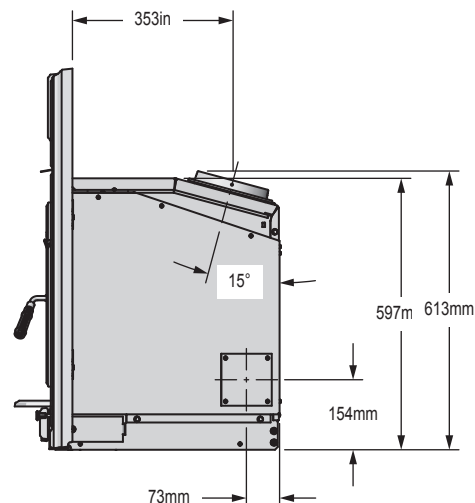


Figure 8.4 - Side View with Cast Surround

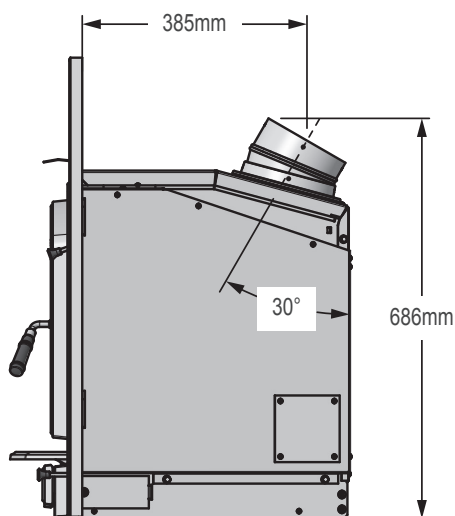


Figure 8.2 - Side View with Steel Surround and Optional 15 Degree Adapter (DV-6DLR-E15ADSS)

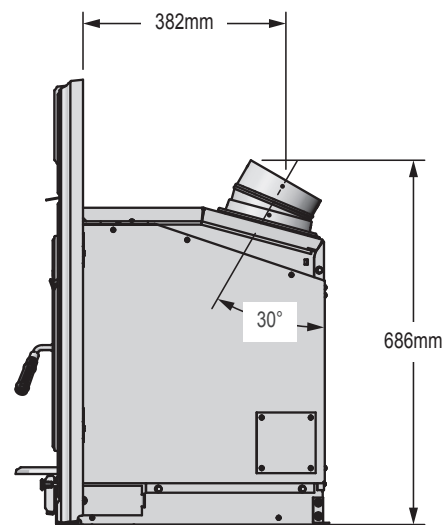


Figure 8.5 - Side View with Cast Surround and Optional 15 Degree Adapter (DV-6DLR-E15ADSS)

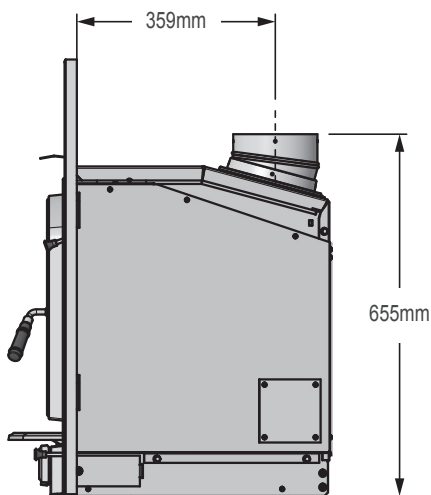


Figure 8.3 - Side View with Steel Surround and Optional 15 Degree Adapter (DV-6DLR-E15ADSS)

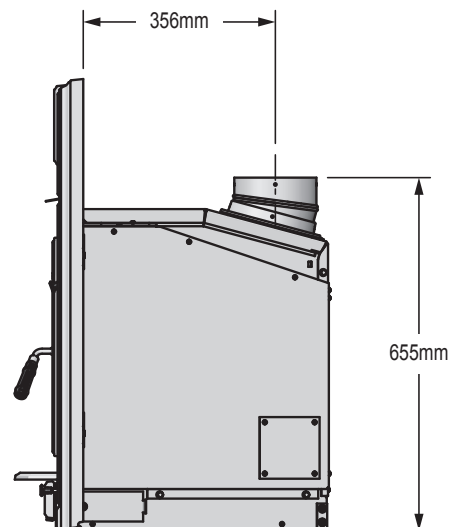


Figure 8.6 - Side View with Cast Surround and Optional 15 Degree Adapter (DV-6DLR-E15ADSS)

B. Clearances to Combustibles,

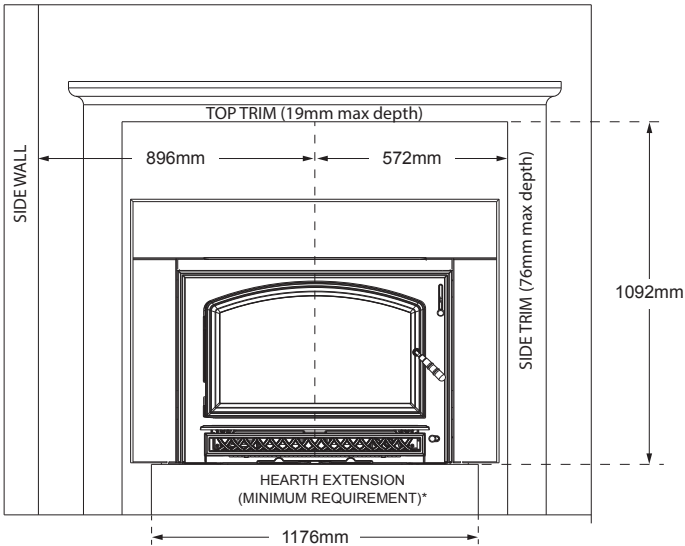


Figure 9.1

**NOTE:** If trim measurement is over 19mm in depth use mantle or side clearances to combustibles.

**Minimal requirement for extension protection\***

The hearth thermal protection minimal requirement is a minimum quantity of 2 -15mm compressed cement sheets stacked on top of each other with a thermal conductivity of 0.5 W/m°K.

Figure 9.2 is a side view diagram of the fireplace unit. It shows the unit from the side, with dimensions A, B, C, and D indicated. A is the height, B is the front width, C is the back width, and D is the depth.

Minimum Opening Dimensions		Millimeters
A	Height	619
B	Front Width (Steel Surround)	835
	Front Width (Cast Surround)	835
C	Back Width	610
D	Depth (Steel Surround)	464
	Depth (Cast Surround)	464

**NOTE:** Minimum opening dimensions include a 6mm clearance around unit.

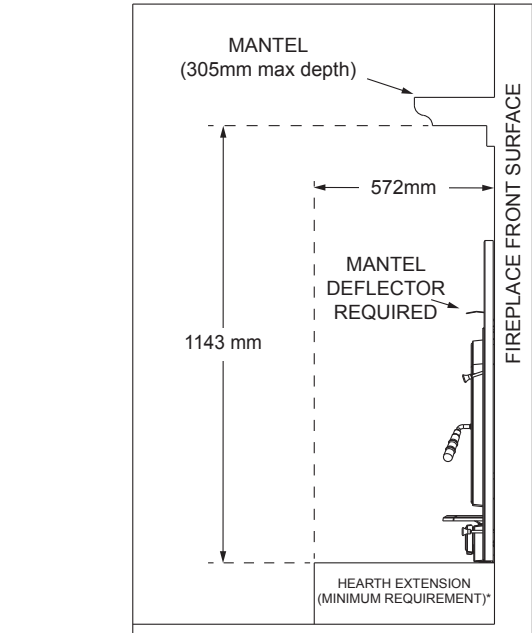


Figure 9.2

**NOTE:** The fireplace is to be set on a non-combustible surface.

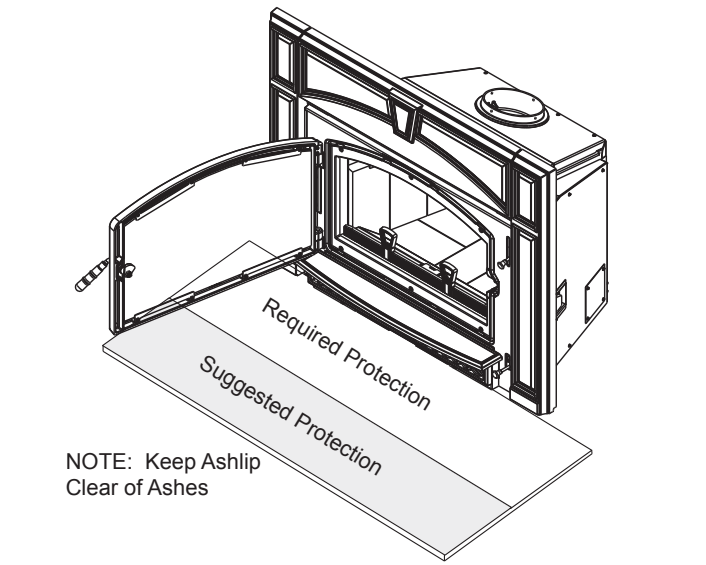


Figure 9.3

**NOTE:** Keep Ashlip Clear of Ashes

**WARNING****Fire Risk.**

- Comply with all minimum clearances to combustibles as specified.
- Failure to comply may cause house fire.

**NOTE:** Clearances may only be reduced by means approved by the regulatory authority having jurisdiction

**Material****Thermal Resistance: R value**

The R value is a measure of a material's resistance to heat transfer.

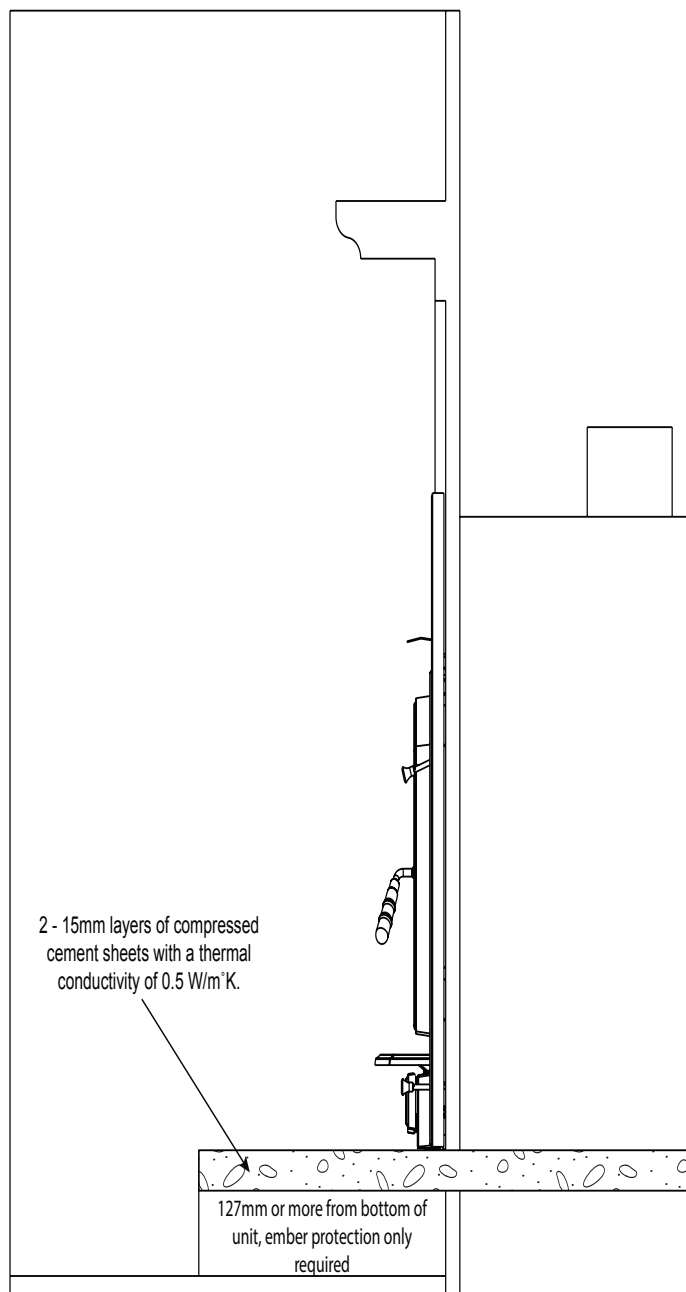
R value is convenient when more than one material is used since you can add the R values together, whereas you can not do this for k value.

The HIGHER the R factor means less heat is being conducted through the non-combustible material to the combustible material beneath it.

The R value of a material must be equal or larger then the required R value to be acceptable.

Quadra-Fire Voyager Grand ACC does not require a insulating Floor Protector, as they are tested and comply with the minimum Floor Protector requirements of **AS/NZS 2918:2001**.

**NOTE:** Heat shield requirements for heat sensitive walls. Clearances may be reduced by provision of an appropriately located heat shield refer to AS/NZS 2918:2001 3.2.3.



**Figure 10.1**

**NOTE:** Hearth Rug may be used in Suggested Area.



# 4 Chimney Systems

## A. Locating Your Appliance & Chimney

Location of the appliance and chimney will affect performance. As shown in **Figure 11.1** the chimney should:

- Install through the warm space enclosed by the building envelope. This helps to produce more draft, especially during lighting and die down of the fire.
- Penetrate the highest part of the roof. This minimizes the affects of wind turbulence and down drafts.

- Consider the appliance location in order to avoid floor and ceiling attic joists and rafters.
  - Locate termination cap away from trees, adjacent structures, uneven roof lines and other obstructions.
- Your local dealer is the expert in your geographic area and can usually make suggestions or discover solutions that will easily correct your flue problem.

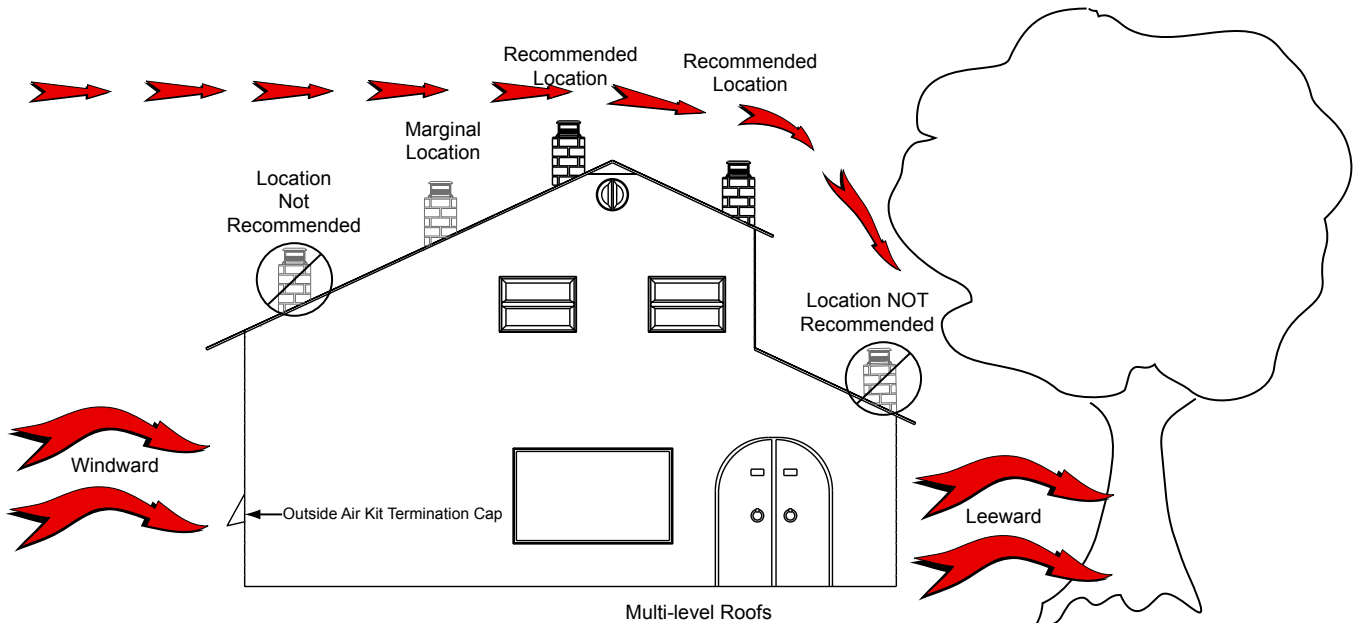


Figure 11.1

## B. Minimum Height of Flue System Exit

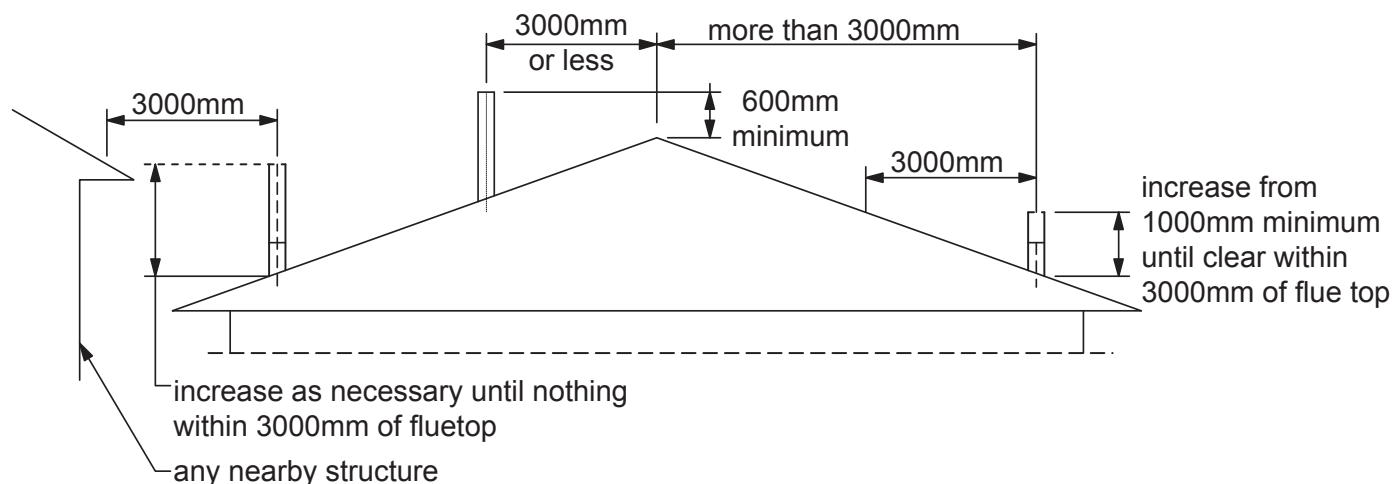


Figure 12.1

### NOTICE:

- Chimney performance may vary.
- Trees, buildings, roof lines and wind conditions affect performance.
- Chimney height may need adjustment if smoking or overdraft occurs.

### NOTICE:

**Locating the appliance in a basement or in a location of considerable air movement can cause intermittent smoke spillage from appliance. Do not locate appliance near**

- Frequently open doors
- Central heat outlets or returns

## C. Chimney Termination Requirements

Follow manufacturer's instructions for clearance, securing flashing and terminating the chimney.

- Must have an approved and Listed cap
- Must not be located where it will become plugged by snow or other material
- Must terminate at least 91cm above the roof and at least 61cm above any portion of the roof within 305cm.
- Must be located away from trees or other structures



### WARNING

#### Asphyxiation Risk.

- DO NOT CONNECT THIS Appliance TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE.
- DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

May allow flue gases to enter the house.



### WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or your dealer.



### WARNING

#### Fire Risk.

Follow Chimney Connector Manufacturer's Instructions for Proper Installation.

ONLY use connector:

- Within the room, between appliance and ceiling or wall.
- Connector shall NOT pass through:
- Attic or roof space
- Closet or similar concealed space
- Floor or ceiling

Maintain minimum clearances to combustibles



## D. Venting Systems

### Chimney Connector:

It is also known as flue pipe or stove pipe. It must be 152mm minimum diameter stainless steel connector pipe.

### Chimney:

The chimney can be new or existing, masonry or prefabricated and must meet the following minimum requirements as specified below.



### WARNING



#### Risk of Fire!

Follow venting manufacturer's clearances and instructions when installing venting system.

## E. Inspections

Existing chimneys should be inspected and cleaned by a qualified professional prior to installation. The chimney must not have cracks, loose mortar or other signs of deterioration and blockage. Hearth & Home recommends a certified professional or a technician, under the direction of a certified professional.



### WARNING



#### Fire Risk.

Inspection of Chimney:

- Chimney must be in good condition.
- Factory-built chimney must be 152mm.

## F. Larger Chimneys

Hearth & Home recommended that chimneys with larger diameters than 152mm be fully relined. An oversized flue can affect draft and impair performance and will allow increased build-up of creosote.

**NOTICE:** Check with your local building authorities.

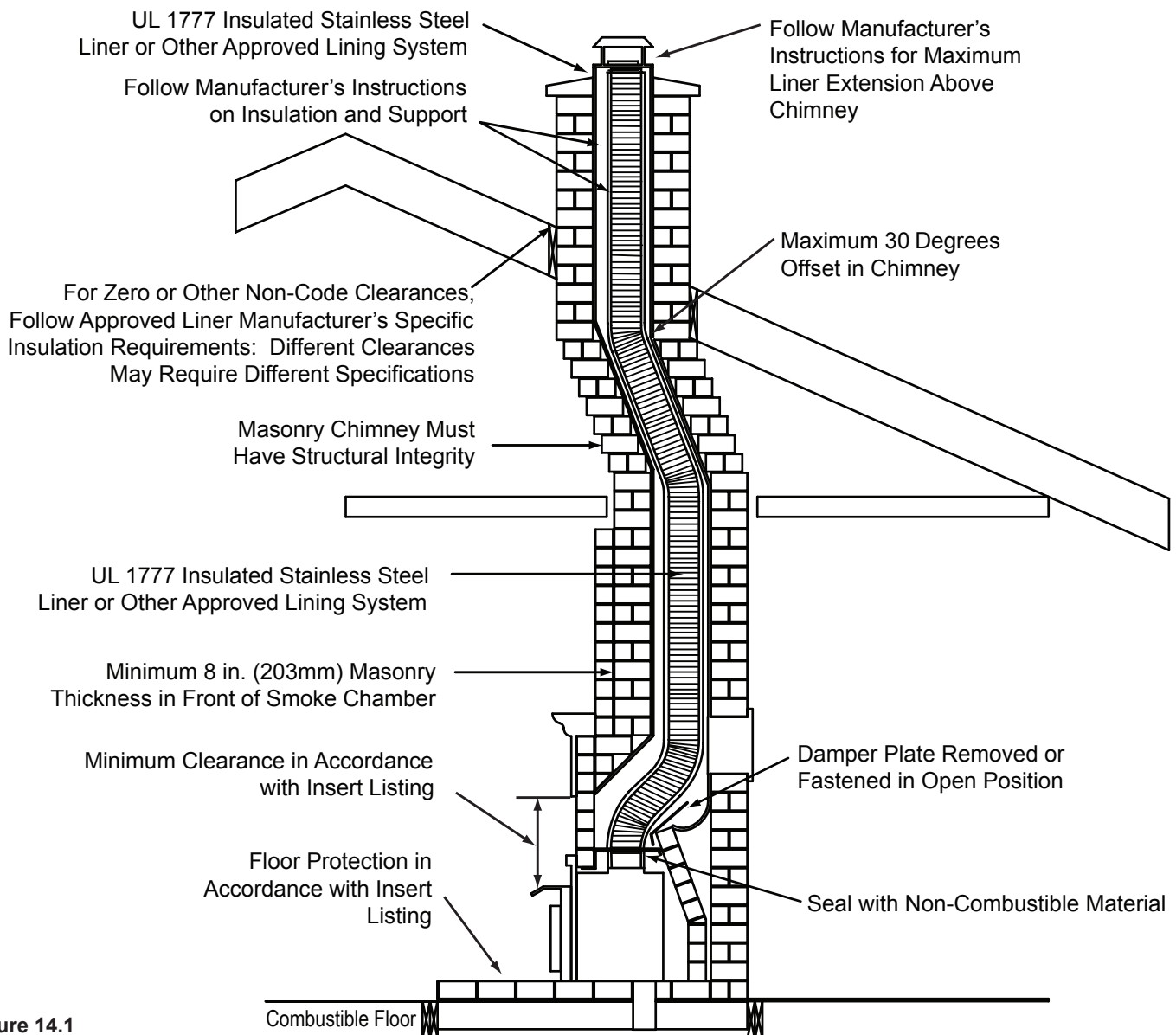
## G. Masonry Chimney

- Must have at least 16mm fire clay lining joined with refractory cement.

**NOTE:** Installations into a clay flue without a stainless steel liner may reduce draw which affects performance, will cause the glass to darken and produce excessive creosote and create start-up issues.

- The masonry wall of the chimney, if brick or modular block, must be a minimum of 102mm nominal thickness.
- A chimney of rubble stone must be at least 305mm thick.
- Should be lined with a 152mm stainless steel flue liner to improve performance and reduce creosote build-up.
- An equivalent liner must be a listed chimney liner system or other approved material.
- No dilution air is allowed to enter the chimney.
  - Secure the fireplace damper in the open position. If this cannot be accomplished, it will be necessary to remove the damper
  - Seal damper area of chimney around chimney connector with a high temperature sealant or seal insert against the face of the fireplace.
  - Both methods must be removable and replaceable for cleaning and re-installation.
- When possible, install an airtight clean-out door to the rear of the smoke shelf.

**NOTE:** Masonry chimneys are significantly less than ideal for venting solid fuel appliances. A masonry chimney is not subject to any temperature limit test, therefore a full reline is strongly recommended.



### Figure 14.1

**Generic Insert Model Shown in Illustration**

## H. Prefabricated Metal Chimney

The chimney can be new or existing, masonry or prefabricated and must meet the following minimum requirements:

- Must be minimum 152mm inside diameter of high temperature chimney.
  - Must use components required by the manufacturer for installation.
  - Must maintain clearances required by the manufacturer for installation.
  - Refer to manufacturers instructions for installation
  - This insert is listed to UL 1482 Standard and is approved for installation into listed factory-built zero clearance fireplaces listed to UL 127 conforming to the following specifications and instructions:
    - The original factory-built clearance fireplace chimney cap must be re-installed after installing the approved chimney liner meeting type UL 103 HT requirements (2100°F) per UL 1777.
    - If the chimney is not listed as meeting HT requirements, or if the factory built fireplace was tested prior to 1998, a full height listed chimney liner must be installed from the appliance flue collar to the chimney top.
    - The liner must be securely attached to the insert flue collar and the chimney top.
    - The air flow of the factory-built zero-clearance fireplace system must not be altered. The flue liner top support attachment must not reduce the air flow for the existing air-cooled chimney system.
    - No dilution air is allowed to enter the chimney.
1. Secure the fireplace damper in the open position. If this cannot be accomplished, it will be necessary to remove the damper
  2. Seal damper area of chimney around chimney connector with a high temperature sealant or seal insert against the face of the fireplace.
  3. Both methods must be removable and replaceable for cleaning and re-installation.

**NOTE:** Refer to chimney liner manufacturer for recommendations on supporting the liner. Installation into fireplaces without a permit will void the listing.

To maintain the functionality of the fireplace's chimney system you may use a Simpson Dura-Vent DuraLiner Slip Hanger, Part # 4671, and attach to the bottom of the fireplace chimney cap to support the liner. You have two options to completing the installation.

### **Option one - Not required to use liner cap:**

Re-attach the existing top of the chimney cap.

### **Option two - Using liner cap:**

Re-attach the existing top of the chimney cap and install a new storm collar and a new liner cap.



## WARNING

### **Risk of Fire!**

Follow venting manufacturer's clearances and instructions when installing venting system



## WARNING

### **Fire Risk.**

When lining air-cooled factory-built chimneys:

- Run approved chimney liner
- Re-install original factory built chimney cap ONLY
- DO NOT block cooling air openings in chimney
- Blocking cooling air will overheat the chimney

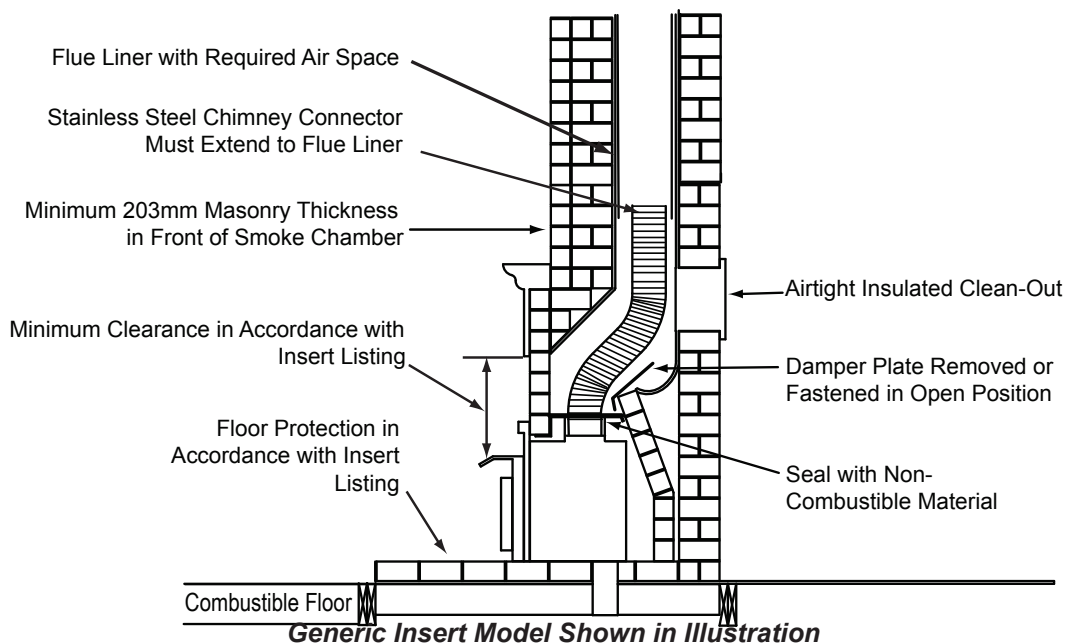


Figure 15.1

## I. Install into a Masonry Fireplace

The insert must be installed as per the requirements of your local inspection authority. It is recommended to use a full liner as it is the safest installation and provides the most optimum performance. Your retailer should be able to help you decide which system would be the best for your application.

The use of this connection method not only increases the safety of your insert by directing the hot gases up the flue, but will also help increase the unit's efficiency and decrease creosote deposits in the chimney.

When a connected flue or liner is in use, the insert is able to "breathe" better by allowing a greater draft to be created. This great draft can decrease problems such as difficult start-ups, smoking out the door and dirty glass.

## J. Install Into a Factory Built Fireplace

1. When installed in a factory built fireplace, a full stainless steel rigid is mandatory, for both safety and performance purposes. When a flue or liner is in use, the insert is able to breathe better by allowing a great draft to be created. The great draft can decrease problems such as difficult start-ups, smoking out the door, and dirty glass.
2. In order to position the flue liner, the existing rain cap must be removed from your chimney system. In most cases the flue damper should also be removed to allow passage of the liner.
3. In most cases opening the existing spark screens fully should give enough room for the insert installation. If it does not, remove and store.
4. If the floor of your fireplace is below the level of the fireplace opening, adjust the inserts leveling bolts to accommodate the difference. When additional shimming is required, use non-combustible masonry or steel shims.
5. Measure approximately the alignment of the flue liner with the position of the smoke outlet hole on the insert to check for possible offset. If an offset is required, use a proper stainless steel unit available with the chimney liner.
6. Once the above items have been checked, slide your insert into position after first positioning the flue liner and offset if required. (Re-install rain-cap at completion of installation).

## K. Securing Chimney Components

All joints should be secured with 3 sheet metal screws or rivets per pipe manufacturers instructions. The sections must be attached to the insert and to each other with the crimped (male) end pointing toward the insert (**Figure 16.1**).

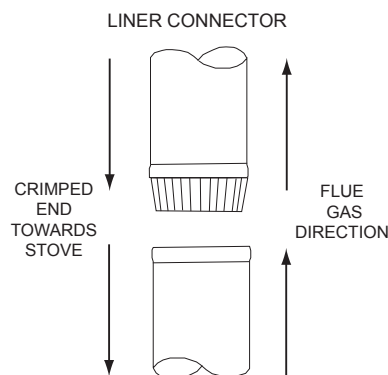


Figure 16.1



### WARNING

#### Risk of Fire!

Follow venting manufacturer's clearances and instructions when installing venting system

## L. Altering the Fireplace

The following modifications of factory-built fireplaces are permissible:

### The following parts may be removed:

Damper	Smoke Shelf or Baffle
Ember Catches	Fire Grate
Viewing Screen/Curtain	Doors

- The fireplace must not be altered. Cutting any sheet metal parts of the fireplace in which the fireplace insert is to be installed is prohibited per ANSI Z21.88 except that the damper may be removed to accommodate a direct-connect starter pipe or chimney liner,
- External trim pieces which do not affect the operation of the fireplace may be removed providing they can be stored on or within the fireplace for reassembly if the insert is removed.
- The permanent metal warning label provided in the component pack must be attached to the back of the fireplace, with screws or nails, stating that the fireplace may have been altered to accommodate the insert, and must be returned to original condition for use as a conventional fireplace.
- If the hearth extension is lower than the fireplace opening, the portion of the insert extending onto the hearth must be supported.
- Manufacturer designed adjustable support kit can be ordered from your dealer.
- Final approval of this installation type is contingent upon the authority having jurisdiction.



## M. Zero-Clearance Fireplace

A permit may be required for installations, final approval is contingent of the authority having local jurisdiction. Consult insurance carrier, local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.

Inspect the existing fireplace and chimney for any damage or flaws such as burnouts, metal or refractory warping.

Inspection to a minimum of NFPA 211 Level II is recommended. All repairs must be made prior to installing an insert. The fireplace must be structurally sound and be able to support the weight of the solid-fuel insert

The factory-built chimney must be listed per UL 127 or ULC 610-M87 for all installations. Install thermal protection per this appliance listing requirements.

A full height 6 inch diameter stainless steel full height listed chimney liner must be installed meeting type HT (2100°F) requirements per UL 1777 (USA) or ULC S635 with "0" clearance to masonry (Canada). The full liner must be attached to the insert flue collar and to the top of the existing chimney.

The flue liner top support attachment must not reduce the air flow for the existing air-cooled chimney system. Re-install original factory-built chimney cap only (See Section F., Prefabricated Metal Chimney).

To prevent room air passage to the chimney cavity of the fireplace, seal either the damper area around the chimney liner or the insert surround. Circulating air chamber (i.e. in a steel fireplace liner or metal hearth circulatory) may not be blocked. The air flow within and around the fireplace shall not be altered, blocked by the installation of the insert. (i.e. no louvers or cooling air inlet or outlet ports may be blocked by the insert or the insert surround.

See "H. Altering the Fireplace" for modifications allowed for factory-built fireplaces.



### WARNING

#### Risk of Asphyxiation!

- Do NOT connect this appliance to a chimney flue servicing another appliance or to any air distribution duct or system.

This may allow flue gases to enter the house.

## N. Ovalizing Round Stainless Steel Liners

Ovalizing round stainless steel liners to accommodate the liner passing through the damper region of a fireplace is an allowable and acceptable practice.

Ensure that the ovalization is minimized to the extent required to fit through the damper.

## O. Chimney Height / Rise and Run

To be sure that your Quadra-Fire insert burns properly, the chimney draft (static pressure) should be approximately -2.54mm water column (W.C.) during a high burn and -1.016mm W.C. during a low burn, measured 152mm above the top of the insert after one hour of operation at each burn setting.

**NOTE:** These are guidelines only, and may vary somewhat for individual installations.

- This product was designed for and tested on a 152mm chimney, 4.27-4.87m high, (includes appliance height) measured from the base of the appliance.
- The further your stack height or diameter varies from this configuration, the possibility of performance problems exists.
- Chimney height may need to be increased by 2 - 3% per each 304.8m above sea level.
- It is not recommended to use offsets or elbows at altitudes above 1219.2m above sea level or when there are other factors that affect flue draft.



### WARNING



#### Fire Risk.

Do NOT pack insulation or other combustibles between spacers.

- ALWAYS maintain specified clearances around venting and spacers.
- Install spacers as specified.

Failure to keep insulation or other material away from vent pipe may cause fire.



### WARNING



#### Fire Risk.

This appliance relies upon natural draft to operate properly.

- Chimney heights exceeding 7.62m from base of appliance may create an over-draft situation.
- Overdraft condition may create over-firing. Over-firing may ignite creosote and/or damage appliance and chimney

# 5 Appliance Set-Up

## A. Outside Air Kit Installation

A source of air (oxygen) is necessary in order for combustion to take place. Whatever combustion air is consumed by the fire must be replaced. Air is replaced via air leakage around windows and under doors. In homes that have tightly sealed doors and windows, an outside air source is needed. An optional Outside Air Kit is available.

### Items Needed for Installation (not supplied)

- 4 inch flex aluminum pipe, or if using alternate material, then it shall be made from durable, non-combustible, heat resistant material up to 350°F. Cut the pipe to the required length for your installation.
- Phillips head screw driver
- 5/32 Allen Wrench
- Silicone sealant

### Option One - Installation Instructions

1. Swing grille down to expose the two screws (**Figure 18.1**).
2. Remove the two screws and pull the access assembly away from the appliance.
3. Assemble the outside air cover plate A supplied in component pack.
4. Re-install the access assembly.
5. Remove the outside air cover plate B on outer can and discard (**Figure 18.2**).
6. Install optional flex adapter to outer can.

**NOTE:** Do not use plastic wire ties that come with the kit as they will melt. You may need to install the flex pipe into the firebox first depending on installation. Attach flex to adapter with at least 2 screws.

7. Ensure existing access hole in fireplace is sufficient to feed the 4 inch flex.
8. After sliding can into fireplace, feed flex into cut opening to obtain outside combustion air.
9. Level outer can and install appliance.

### Option Two - Installation Instructions

10. Swing grille down to expose the two screws (**Figure 18.1**).
11. Remove the two screws and pull the access assembly away from the appliance.
12. Assemble the outside air cover plate A supplied in component pack.
13. Re-install the access assembly.
14. Remove the outside air cover plate B on outer can and discard (**Figure 18.2**).
15. Ensure existing access hole in fireplace will not be covered by the outer can. Existing outside air intake hole may be under at the rear or side of outer can. Outside air may also enter down existing chimney chase in some situations.
16. Level outer can and install appliance. After installing the appliance in the outer can, seal the fireplace opening and trim package with insulation to prevent air leakage into the room.

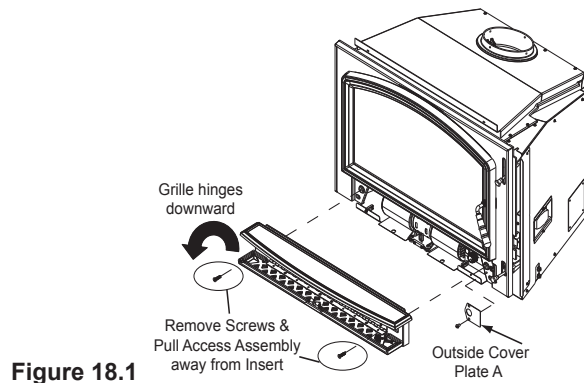


Figure 18.1

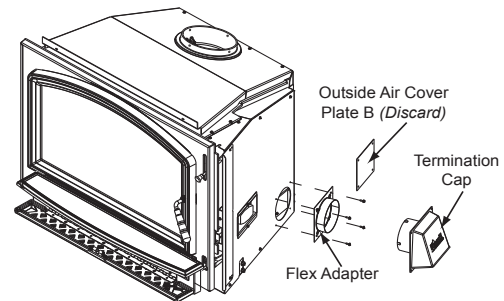


Figure 18.2



### WARNING



#### Fire Risk.

#### Asphyxiation Risk.

Do not draw outside combustion air from:

- Wall, floor or ceiling cavity
- Enclosed space such as an attic or garage
- Close proximity to exhaust vents or chimneys



Fumes or odor may result



### WARNING

#### Asphyxiation Risk.

Outside air inlet must be located to prevent blockage from:

- Leaves, snow, ice or other debris
- Block may cause combustion air starvation  
Smoke spillage may set off alarms or irritate sensitive individuals.



### WARNING

#### Asphyxiation Risk.

Length of outside air supply duct shall NOT exceed the length of the vertical height of the exhaust flue.

- Fire will not burn properly
- Smoke spillage occurs when door is opened due to air starvation.

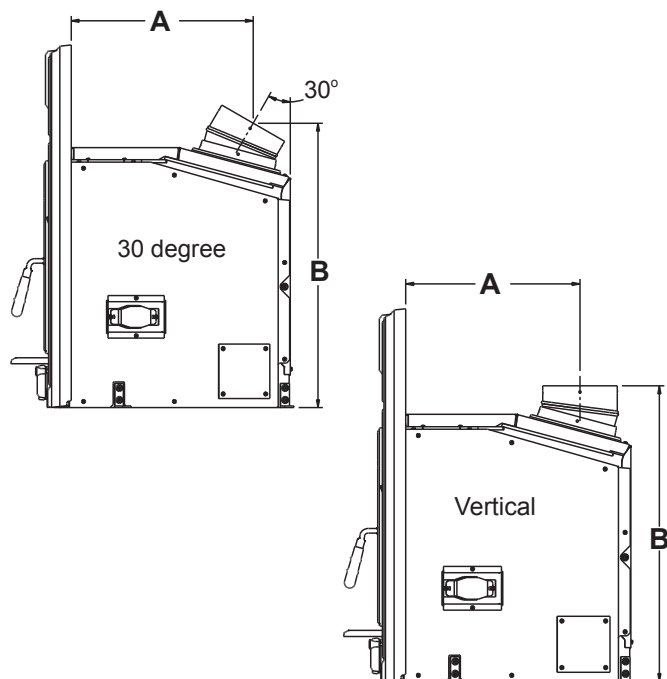


## B. Optional Offset Adapter Installation

Optional use of a Simpson Duravent 15° Universal Elbow Part Number 4615 may be purchased directly through your local Simpson Duravent Pipe Distributor or from your local Quadra-Fire dealer, Part Number DV-6DLR-E15ADSS.

**Figure 19.1** shows a vertical installation and also how to create an optional 30° elbow installation.

The 15° elbow may be secured directly to the flue collar. Follow the pipe manufacturer's instructions for using screws or rivets for attachment. Most pipe manufacturer's 152mm diameter flue liners may be attached directly to the top of the 15° elbow.

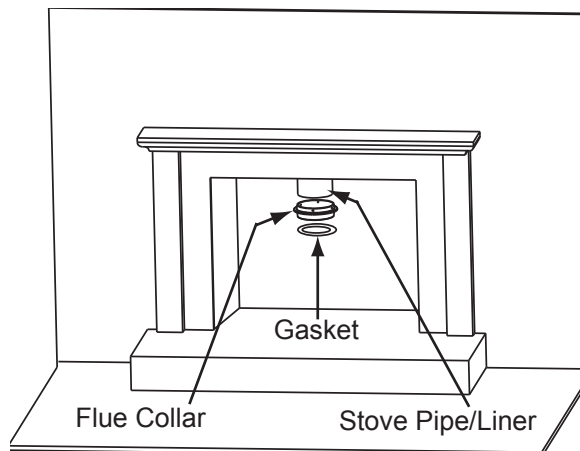


**Figure 19.1**

Flue Adapter	A	B
Vertical	344mm	532mm
30 Degree	371mm	525mm

## C. Securing Stove Pipe/Liner to Flue Collar

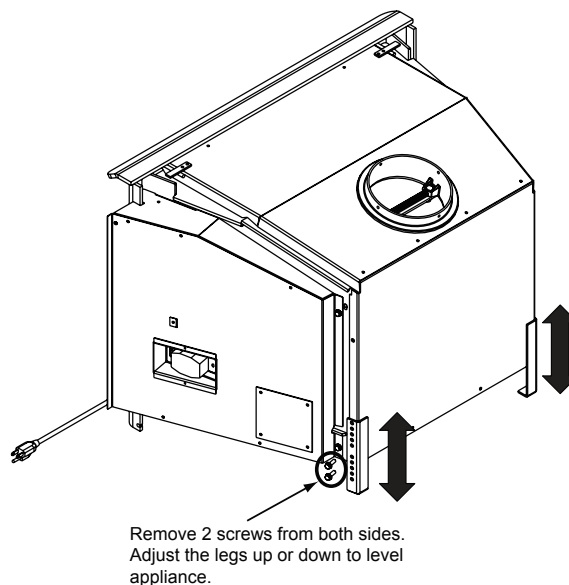
1. There are 4 already drilled holes in the flue collar 90 degrees apart. Attach the flue collar to the stove pipe/liner. If the seal is questionable use high temperature sealant such as stove mastic (**Figure 19.2**).
2. Attach gasket to bottom side of flue collar with a thin coat of silicone.



**Figure 19.2**

## D. Leveling Legs

1. Remove the 2 screws already installed on each leg.
2. Move legs to the desired height.
3. Re-install the screws to secure in place.



**Figure 19.3**

### E. Securing Appliance to Stove Pipe/Liner

1. Once you have the appliance in place and secured, reach up through the flue opening and grab the attachment bar and pull down inside flue opening (**Figure 20.1**).
2. Insert the 5/16 bolts inside the cast flue and through the chimney mounting bar. Securely tighten the nuts. Fasteners are provided.
3. Re-install the tube channel assembly, baffle board, ceramic blanket and baffle protection channel.

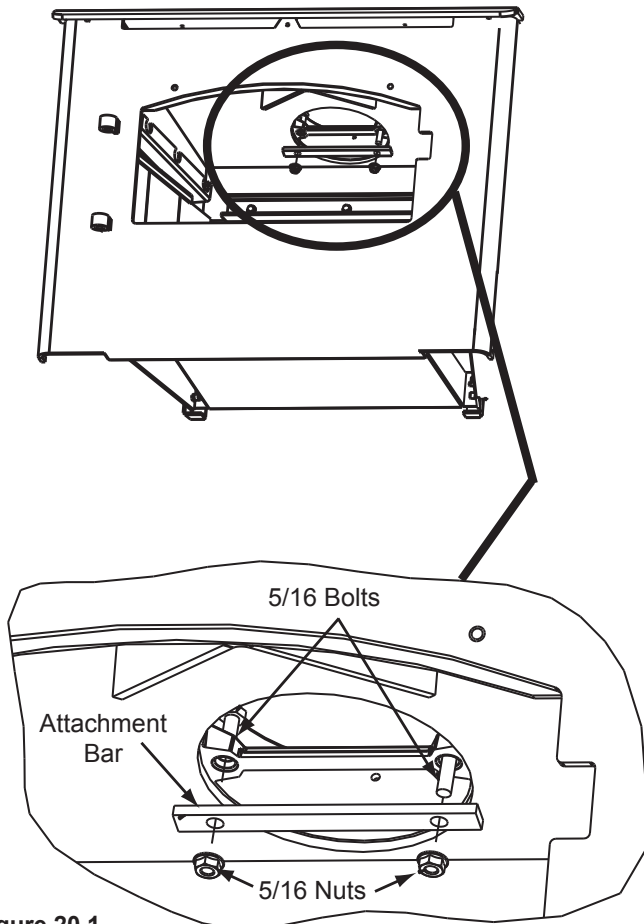


Figure 20.1

### F. Surround & Trim Kit Installation

**Standard Size: 109.22cm W x 78.74cm H**

**Large Size: 129.54cm W x 86.36cm H**

1. Lay surround face down on a protected surface to prevent scratching.
2. Using a 4 to 6 inches long Phillips head screw driver attach the side surrounds to the top surround using (2) #8 sheet metal screws on each side provided with the kit (**Figure 20.3**).
3. Lay the trim face down and place the corner brackets into position.
4. Using a standard flat screw driver tighten the corner brackets (**Figure 20.3**).
5. Slide the assembled trim set over the surround set. and then over the appliance matching the mounting tabs on the side pieces with the slots on the appliance (**Figure 20.3**).
6. Align the 2 screws in the top surround piece to the 2 alignment holes on the appliance top. Secure in place (**Figure 20.2**).
7. Use the strain relief in the surround side for blower cord installation and use the cover plug to insert into the hole where the blower cord is not installed.

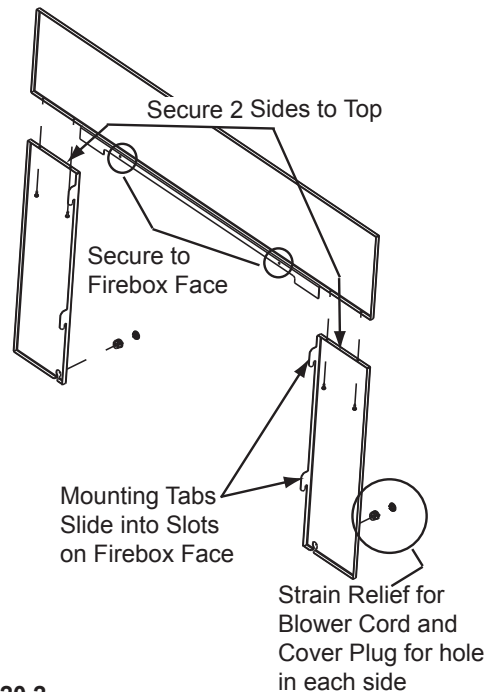


Figure 20.2

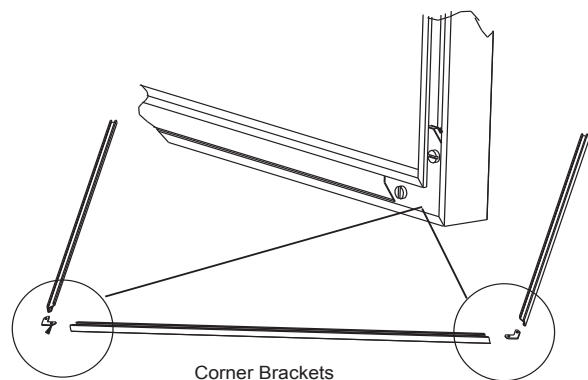


Figure 20.3

## G. Standard Surround & Cast Trim Kit

**Standard Size:** 184.15cm W x 76.2cm H

**Large Size:** 121.92cm W x 34 86.36cm H

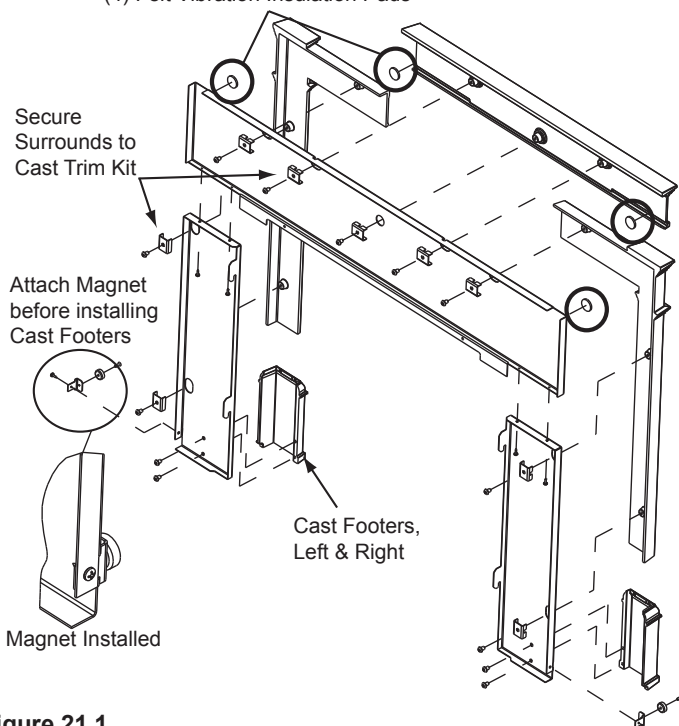
**Included in Surround Kit:** (2) side pieces, left and right; (1) top piece; (1) fastener package; (1) heat deflector.

**Included in Cast Trim Kit:** (2) cast trim legs, left and right; (1) cast trim header; (2) cast trim footers, left and right; (1) fastener package.

**Tools Needed:** Powered 4 to 6 inches long Phillips head screw driver; pliers

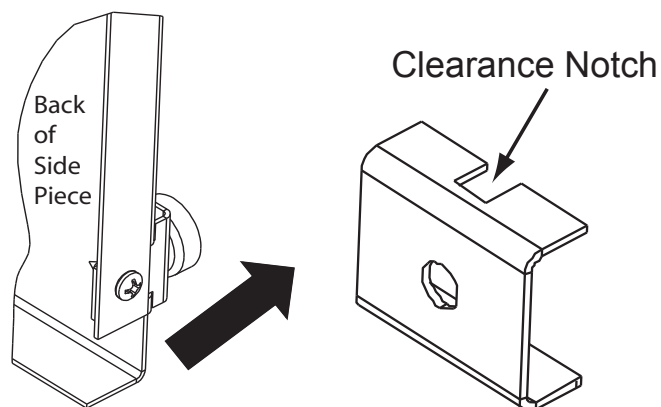
1. Remove contents from box being careful not to scratch or damage the cast trim pieces.
2. Lay surround face down on a protected surface to prevent scratching.
3. Using a 4 to 6 inches long Phillips head screw driver attach the side surrounds to the top surround using (2) #8 sheet metal screws on each side provided with the kit
4. Place the peel and stick round felt vibration insulation pads on the front side in each corner of the top metal piece and on the back side in each corner of the top cast piece (**Figure 21.1**).
5. Place the corresponding cast trim pieces (2 cast trim sides and 1 cast trim header) underneath the panel set, also face down. Align the holes in the metal pieces with the 5 bosses on the top cast piece and 2 bosses on each side piece.
6. Secure the magnet to the bracket and attach the magnet and bracket to each metal side piece at the bottom. The magnet is facing the front (**Figure 21.2**).

(4) Felt Vibration Insulation Pads



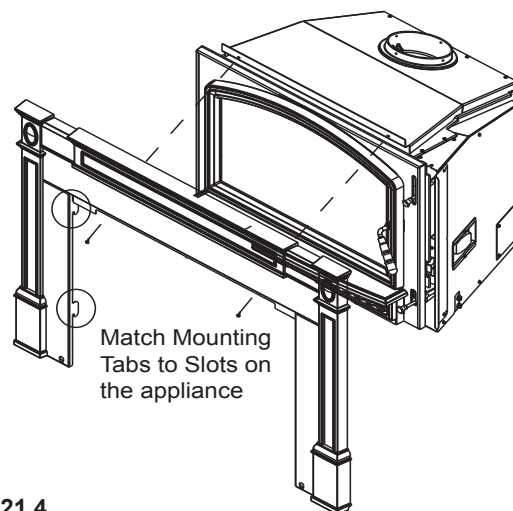
**Figure 21.1**

7. Place the cast footers under the metal sides aligning the top and bottom holes in the cast footers and metal sides.
8. The 9 mounting clips are shipped in one long strip. Hand break apart or use pliers.
9. Each clip has a clearance notch to allow room for the cast on the insert. Place the clip so the notch is facing the outer edges of the surrounds (**Figure 21.3**).
10. It is best to install all of the 1/4-20 screws only half way at first to allow for adjustments. After adjustment, tighten the 2 screws in each cast footer first and then work your way around to the rest.
11. Slide surround and trim over the top of the insert into place matching the mounting tabs on the metal sides with the slots on the insert (**Figure 21.4**).
12. Align the 2 screws in the top metal surround piece to the 2 alignment holes on the appliance top. Secure in place (**Figure 21.4**).



**Figure 21.2**

**Figure 21.3**



**Figure 21.4**



## H. All Cast Surround Kit

**Size:** 111.76cm W x 83.82cm H

**Included in Surround Kit:** (2) side pieces, left and right; (1) top piece; (1) fastener package.

**Tools Needed:** Powered 4 to 6 inches long Phillips head screw driver; pliers

1. Remove contents from box being careful not to scratch or damage the cast trim pieces.
2. Lay surround pieces face down on a protected surface to prevent scratching.
3. Align the bosses on the top piece to the holes on the side pieces. Secure the 3 pieces together.
4. Attach the mounting brackets to the side pieces included with the kit (**Figure 22.1**).

In order to get a tight seal for the surround, you must reposition a side shield. There are two holes on the shield and it will come from the factory secured in the first (left) hole. Remove the shield and re-install using the second (right) hole (**Figure 22.2**).

5. Position the trim on the appliance matching up the mounting brackets with the slots on the appliance.
6. Attach the surround to the appliance 2 screws.

**NOTE:** DO NOT OVER TIGHTEN SCREWS - MAY DAMAGE PORCELAIN FINISH.

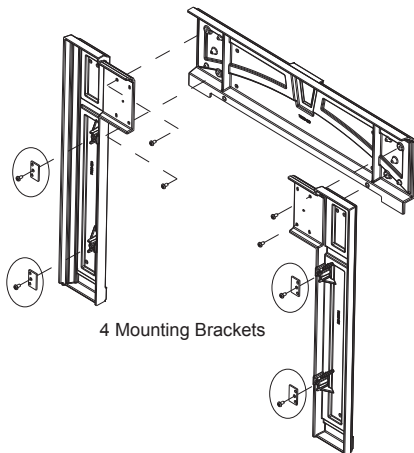


Figure 22.1

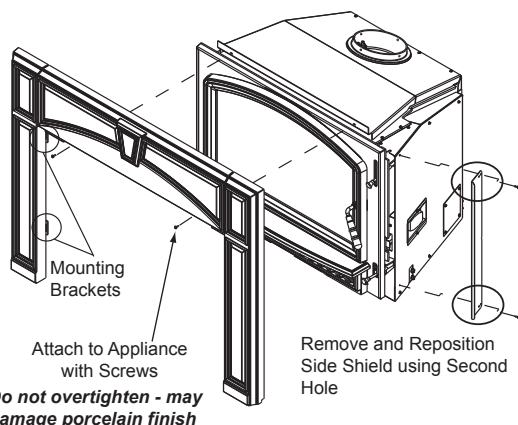


Figure 22.2

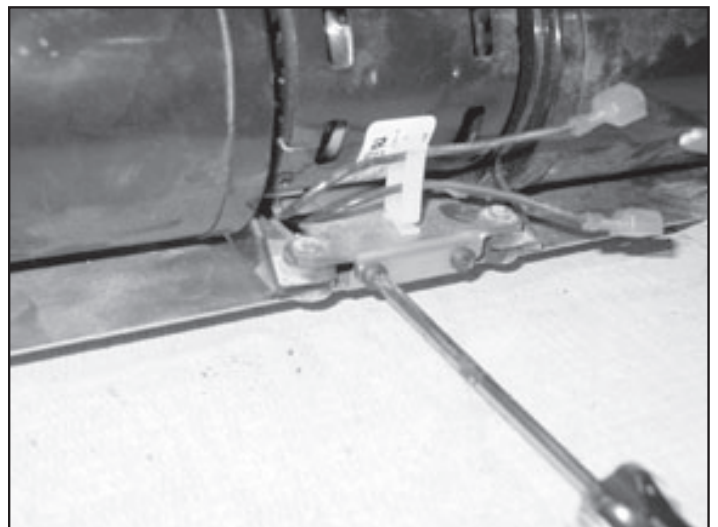
## I. Blower Cord Installation on Left Side

The blower cord is shipped to be installed on the right side of the appliance. You may relocate the cord so it is on the left side.

**Overview:** You are removing the power cord from the blower controls, re-routing the cord to the left side and re-installing the power cord to the blower controls (**Refer to the exploded drawing on Figure 25.1 on page 25**).

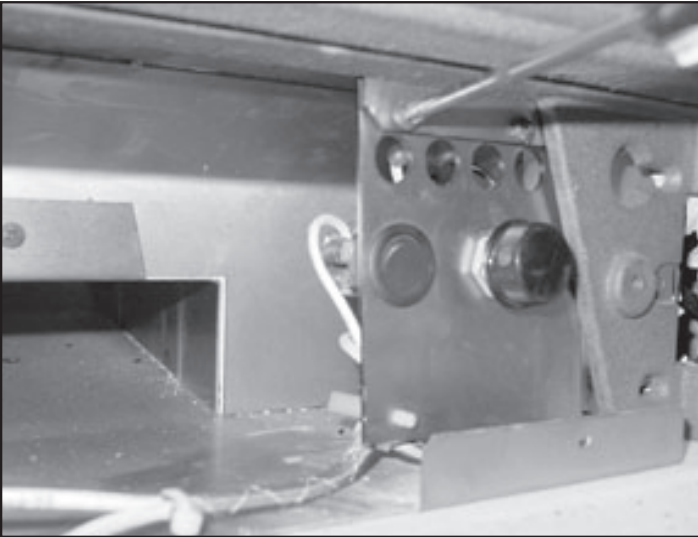


1. Swing the grille down to expose the 2 bolts, one at each end. Remove the bolts and pull blower access assembly away from appliance and store away from your work area.

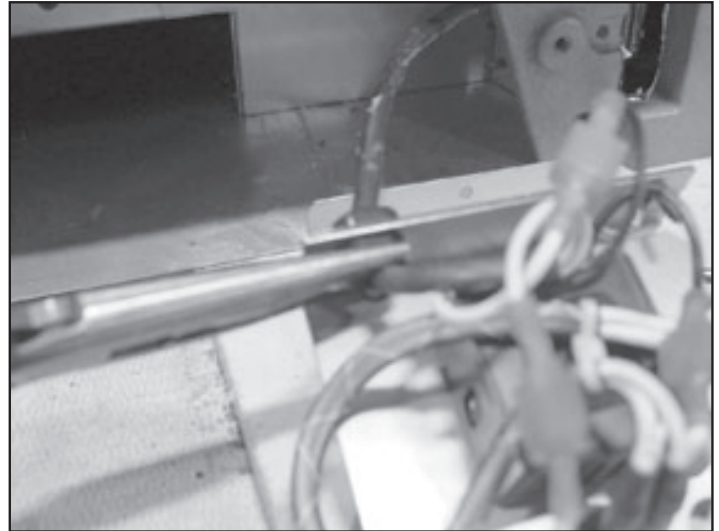


2. Remove the 2 screws in the hold down bracket in front of the blower assembly. You do not need to remove the blower from the hold down bracket.
3. Disconnect the 2 blower wires that are attached to the wire harness and pull the blower assembly away from the appliance.

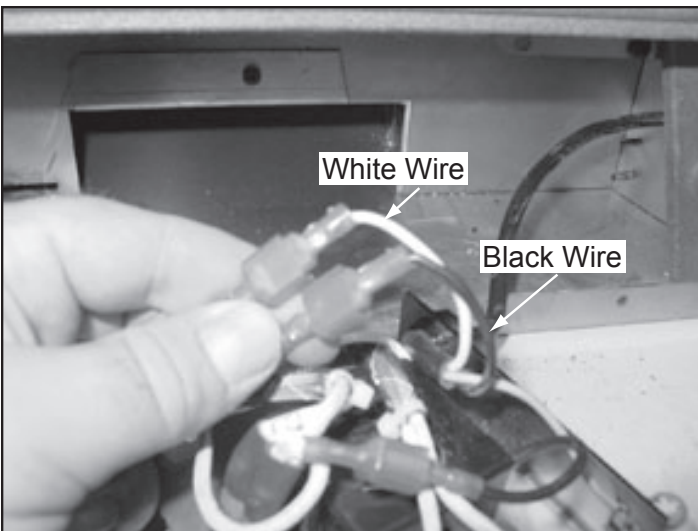




4. Remove the 2 screws at the top of the control plate. Push the bottom of the control plate to the inside of the appliance and partially remove the control plate assembly.



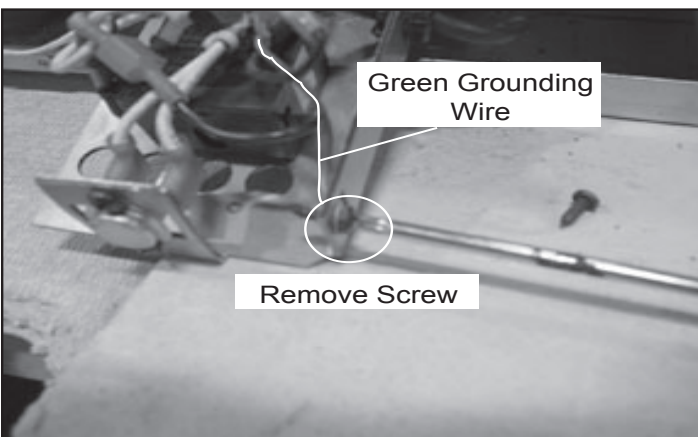
7. Use needle nose pliers to remove the strain relief that protects the power cord from the control plate.



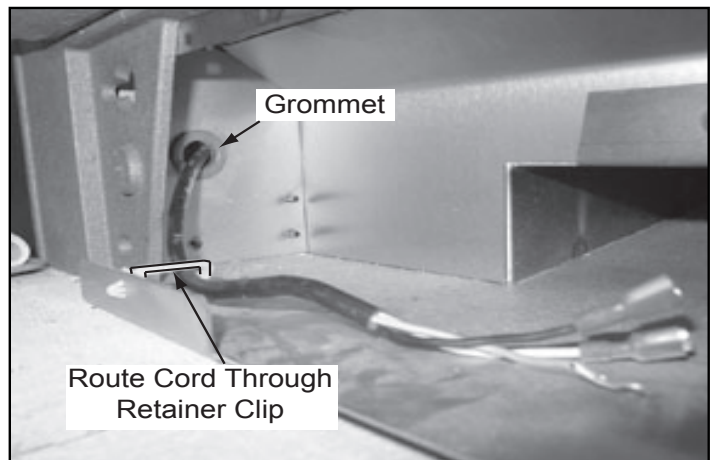
5. Locate the black and white wires that are part of the power cord and disconnect those wires from the wire harness.



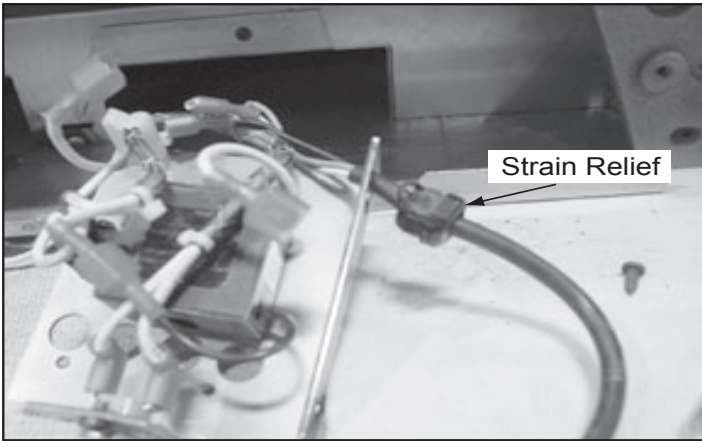
8. The power cord is now disconnected from the blower control plate. Pull the cord out through the right side of the appliance.



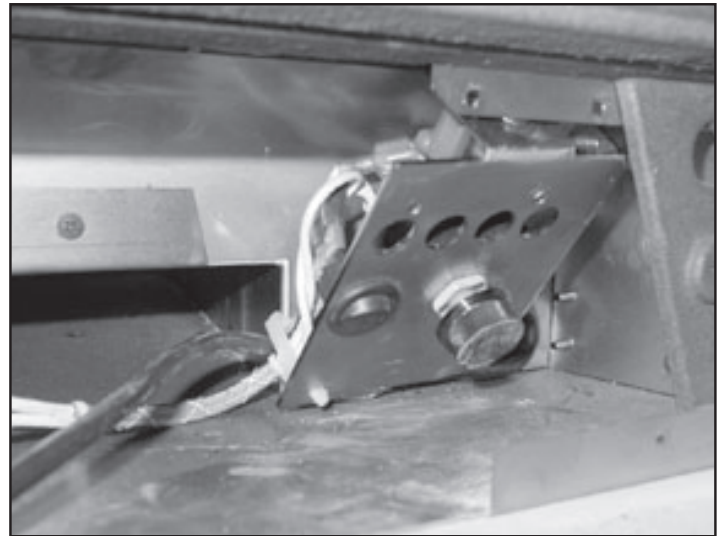
6. Remove the screw that is holding the ground lug to the control plate.



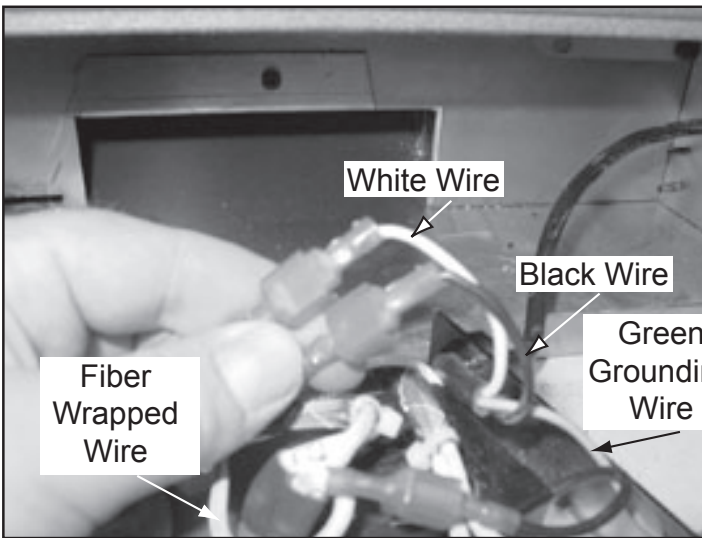
9. Insert the power cord through the left side of the appliance in the hole contains the grommet. Pull the connection ends to the right side. Route the power cord through the retainer clip.



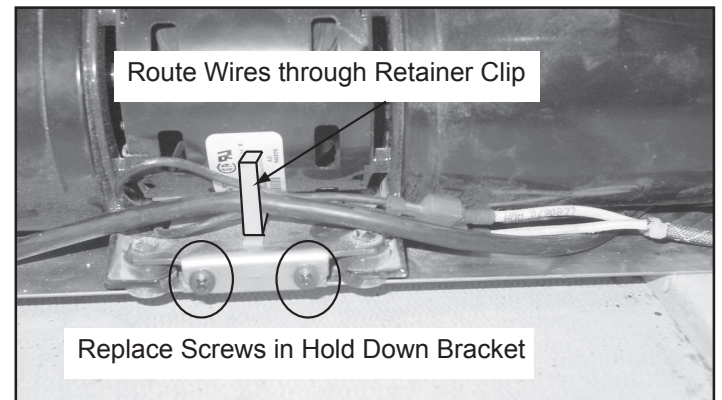
10. Replace the strain relief on the power cord in the same position as before. Locate the indentation on the cord made by the strain relief. Once replaced, push the strain relief back into the control plate.



12. Insert the control plate assembly back into the appliance as shown. Tilt the assembly forward and then lift up and rotate the bottom towards the front of the appliance at the same time ensure that the snap disc holder is properly seated. Secure plate to the appliance.



11. Connect the white wire on the power cord into the fiber wrapped wire on the wire harness. Connect the black wire on the power cord to the white wire on the rheostat. Re-attach the green ground terminal to the control plate.



13. Push in the blower and hold down bracket into appliance matching up the tab on the bracket and placement slot on the appliance. Secure bracket and reconnect blower wires (no polarity to worry about) routing wires through the retainer clip.

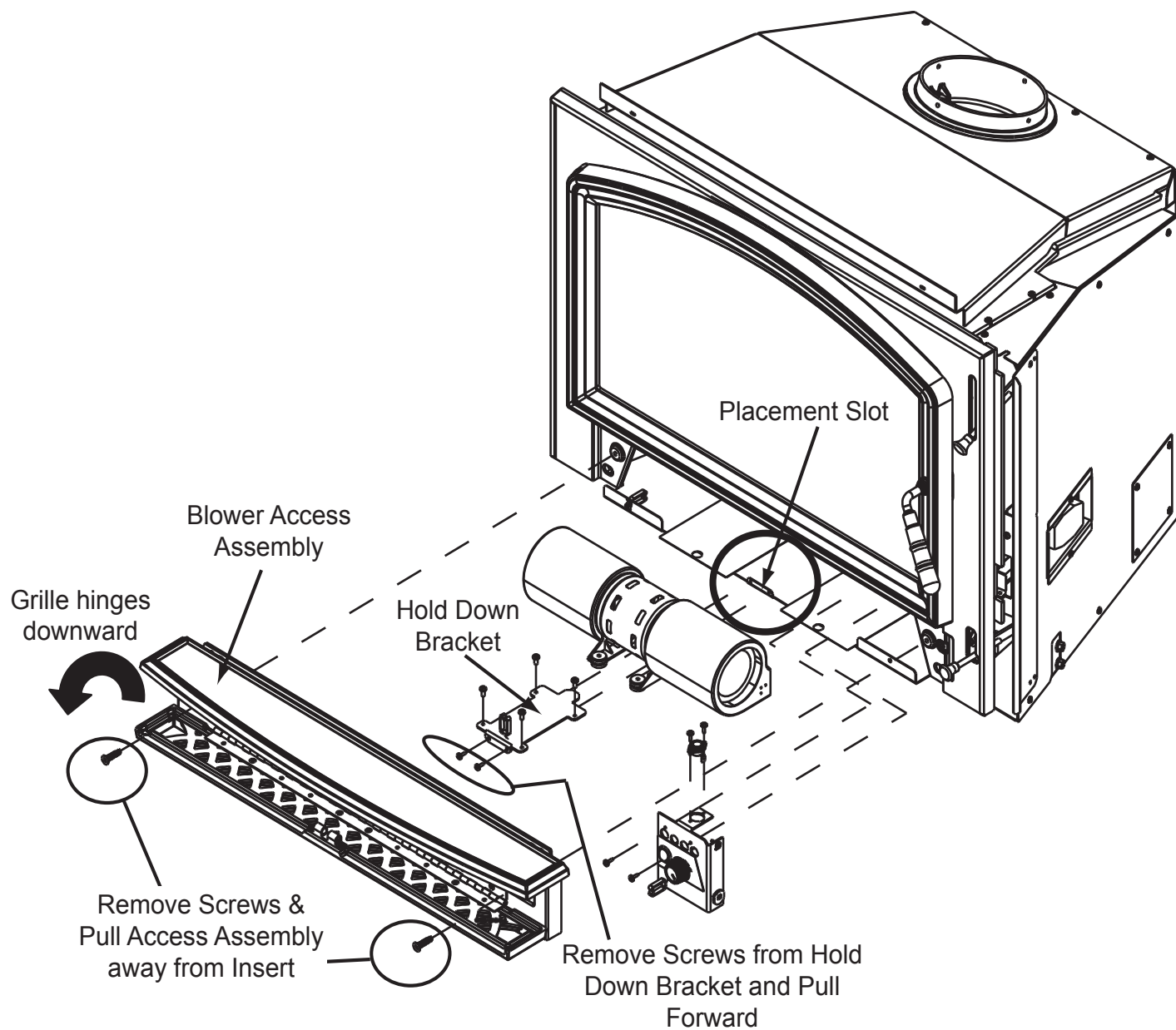


Figure 25.1

6 Accessory List

A. Accessory List

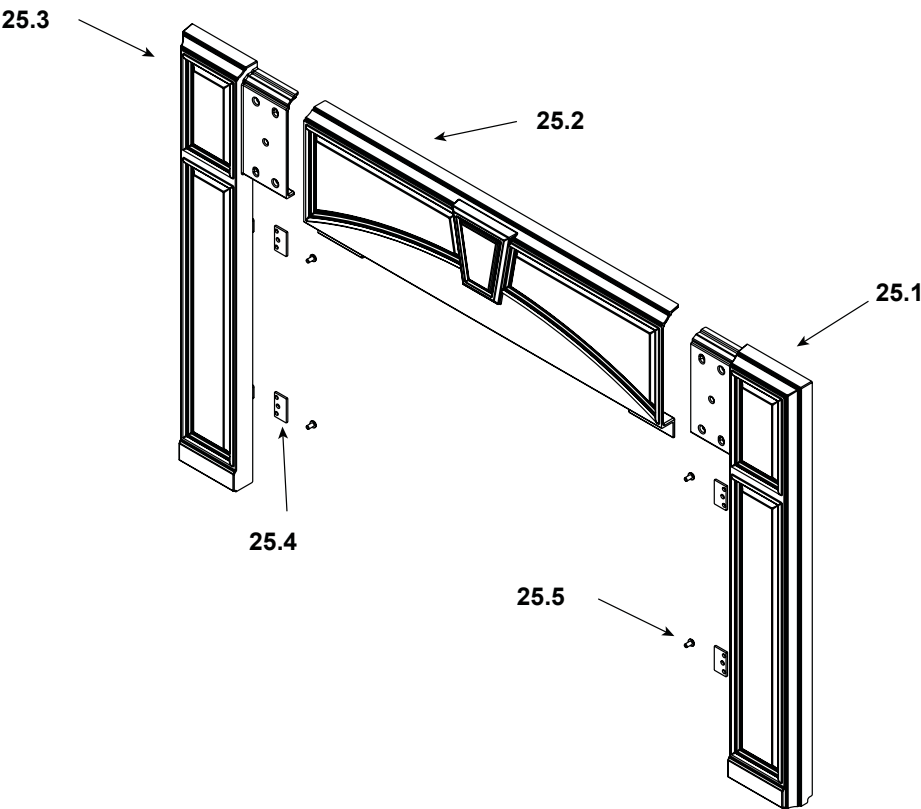


Service Parts

GRAND-MBK-AU

Beginning Manufacturing Date: April 2013  
Ending Manufacturing Date: Active

#25 Cast Surround Assemblies



IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.



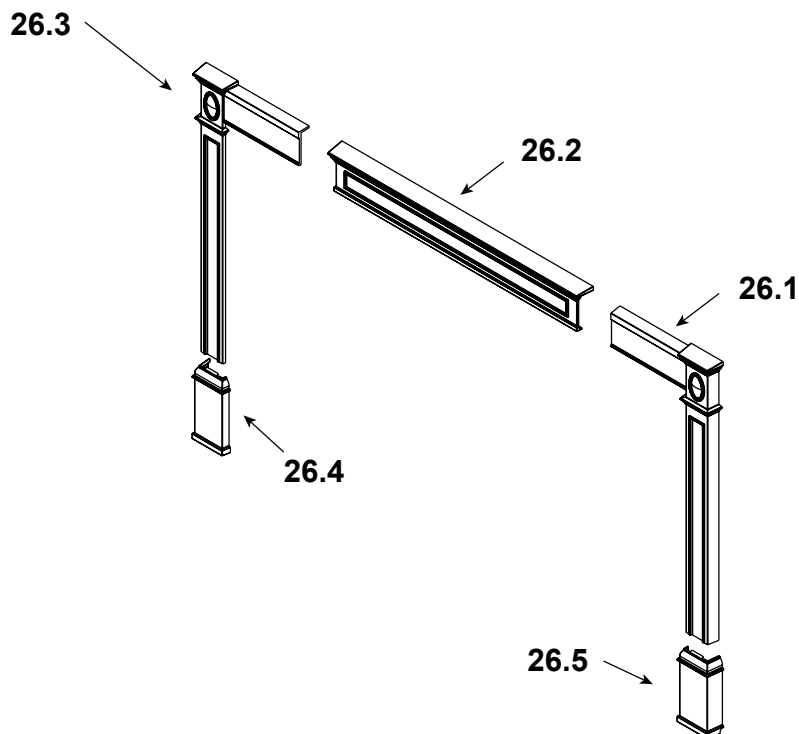
Stocked  
at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
25	Surrounds, Cast	Matte Black	SP-GRAND-CC-MBK	
25.1	Surround Right	Matte Black	SRV7075-131MBK	
25.2	Surround Top	Matte Black	SRV7075-129MBK	
25.3	Surround Left	Matte Black	SRV7075-133MBK	
25.4	Surround Retainer	Qty 4 req	SRV7063-136	
25.5	1/4-20 x 50 Phillips Pan Head Screw	Pkg of 12	32281/12	Y
	Component Pack		SRV7063-054	

Additional service part numbers appear on following page.



## #26 Metal Surround Assemblies



IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers.** Provide model number and serial number when requesting service parts from your dealer or distributor.



**Stocked  
at Depot**

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
26.1	Trim Leg Right	Matte Black	414-7130MBK	
26.2	Trim Header	Matte Black	414-7110MBK	
26.3	Trim Leg Left	Matte Black	414-7120MBK	
26.4	Trim Footer Left	Matte Black	414-7090MBK	
26.5	Trim Footer Right	Matte Black	414-7100MBK	
	Component Pack		SRV7063-055	
	Surrounds, Metal	Standard	SP-GRAND-STD	
		Large	SP-GRAND-LRG	
	Trim Kit	Black	TRIMKIT-4331-BK	
		Gold	TRIMKIT-4331-GD	
		Nickel	TRIMKIT-4331-NL	
	Trim Kit	Black	TRIMKIT-5134-BK	
		Gold	TRIMKIT-5134-GD	
		Nickel	TRIMKIT-5134-NL	
	Component Pack		SRV7063-056	
	Mantel Deflector		SRV7075-512	





### CONTACT INFORMATION

Hearth & Home Technologies  
352 Mountain House Road  
Halifax, PA 17032  
Division of HNI INDUSTRIES

**Please contact your Quadra-Fire dealer with any questions or concerns.  
For the number of your nearest Quadra-Fire dealer  
log onto [www.quadrafire.com](http://www.quadrafire.com)**

### **CAUTION**



#### **DO NOT DISCARD THIS MANUAL**

Important operating and maintenance instructions included.

- Read, understand and follow these instructions for safe installation and operation.

- Leave this manual with party responsible for use and operation.

**DO NOT  
DISCARD**

### **We recommend that you record the following pertinent information for your heating appliance.**

Date purchased/installed: \_\_\_\_\_

Serial Number: \_\_\_\_\_ Location on appliance: \_\_\_\_\_

Dealership purchased from: \_\_\_\_\_ Dealer phone: 1(\_\_\_\_)\_\_\_\_ - \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

This product may be covered by one or more of the following patents: (United States) 5341794, 5263471, 6688302, 7216645, 7047962 or other U.S. and foreign patents pending.

