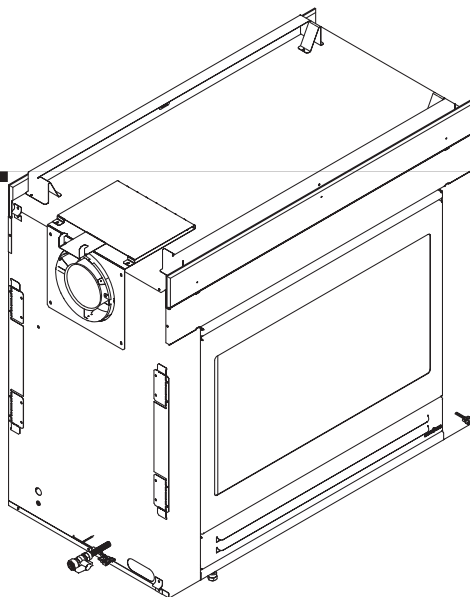


MODELS:

ST-HVBI-AUB

→ ST-HVBILP-AUB



SAI Global
Gas Safety
Certified

Ref No GSCS20165
AS 4553:2008

NOTICE



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

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

- **DO NOT USE OR STORE FLAMMABLE MATERIALS NEAR THIS APPLIANCE.**
- **DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS IN OPERATION.**
- **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.

⚠ WARNING



HOT SURFACES!

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

Hot glass will cause burns.

- **DO NOT** touch glass until it is cooled
 - **NEVER** allow children to touch glass
 - Keep children away
 - **CAREFULLY SUPERVISE** children in same room as fireplace.
 - Alert children and adults to hazards of high temperatures.
- High temperatures may ignite clothing or other flammable materials.**
- **DO NOT** PLACE ARTICLES ON OR AGAINST THIS APPLIANCE.
 - Keep clothing, furniture, draperies and other flammable materials away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

This is a room sealed appliance and no other ventilation is required than what is provided.

WARNING! DO NOT modify this appliance.



No one builds a better fire

**PLEASE READ THIS MANUAL BEFORE INSTALLING AND
USING THIS APPLIANCE.**

**MODEL ST-HVBI-AUB
SAI GLOBAL APPROVED FOR NATURAL
GAS OR PROPANE AS A BALANCED FLUE
HEATER.**

Refer to the appliance data plates for gas consumptions and pressures.

Installation of this appliance should only be carried out by an authorized person in accordance with the manufacturers instructions. All relevant codes and regulations laid down by the gas fitting authorities, municipal building regulations, electrical wiring regulations, and the requirements of the AGA Gas Installation Code must be observed.

This appliance and its components are tested and safe when installed in accordance with this Installation Manual. Report to your dealer any parts damaged in shipment, specifically check glass condition. The gas logs and flue system components are in separate packages. Read all instructions before starting installation and follow these instructions

carefully during installation to ensure maximum benefit and safety. Failure to follow them will void your warranty and may present a fire hazard.

The Heat & Glo warranty will be voided by, and Heat & Glo disclaims any responsibility for the following actions:

- Installation of any damaged heater or flue system component
- Modification of the heater or balanced flue system installation other than as instructed by Heat & Glo.
- Improper positioning of the gas logs or the glass door
- Installation and/or use of any component part not manufactured or approved by Heat & Glo, notwithstanding any independent testing laboratory or other party approval of such component part or accessory.

IMPORTANT: Read all instructions carefully before starting installation. Failure to follow these installation instructions may result in a possible fire hazard and will void the warranty. Save this manual for future reference.

Heat & Glo, a brand of Hearth & Home Technologies, Inc.
7571 215th Street West, Lakeville, MN 55044
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1.0 INSTALLATION INSTRUCTIONS

When planning a heater installation, it's necessary to determine:

- Where the unit is to be installed.
- The flue system configuration to be used.
- Gas supply piping.
- Electrical wiring.
- Framing and finishing details.

- Whether optional accessories—devices such as wall switch, or remote control—are desired.

If the heater is to be installed on carpeting or tile, or on any combustible material other than wood flooring, the heater should be installed on a metal or wood panel that extends the full width and depth of the heater.

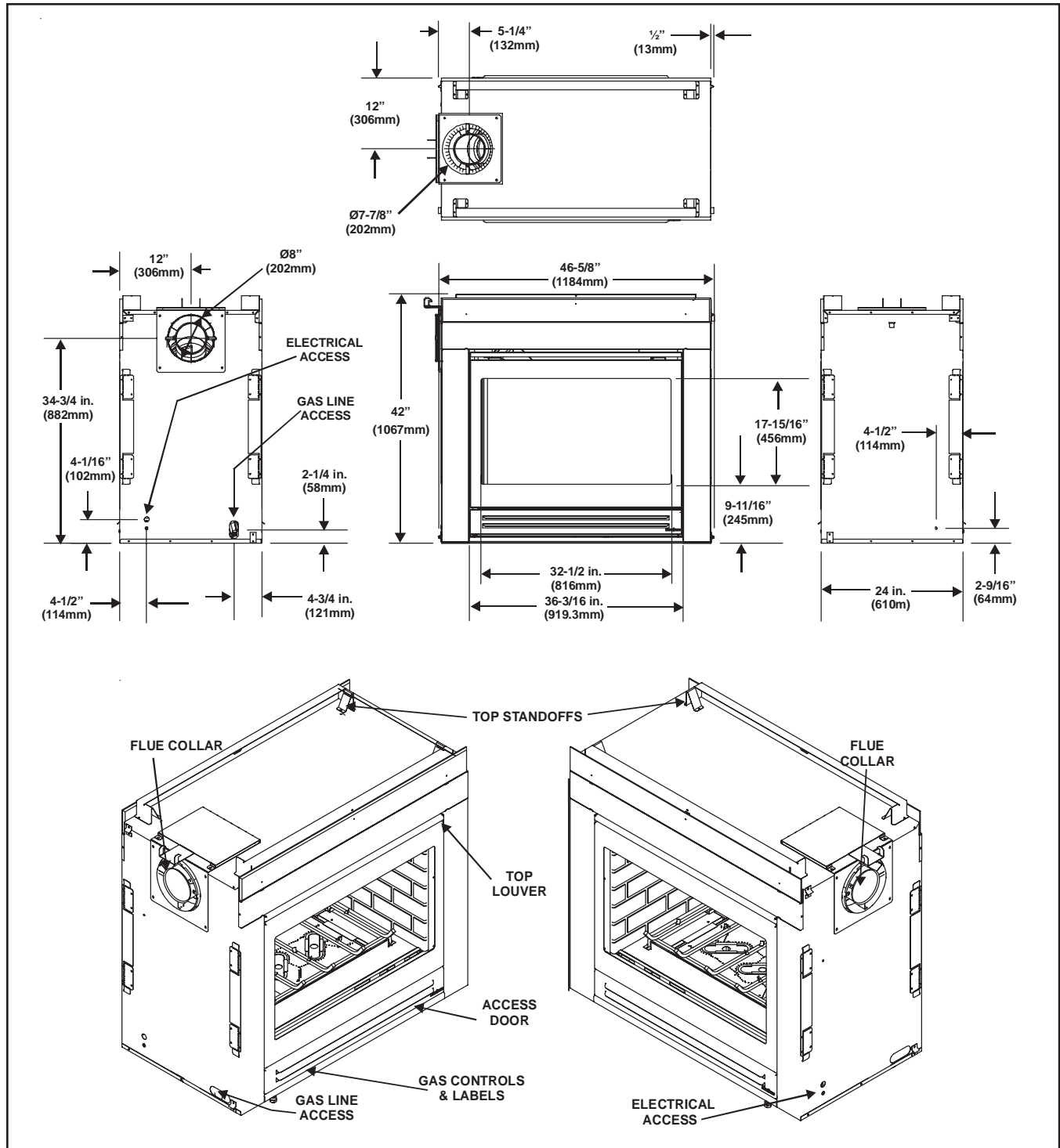
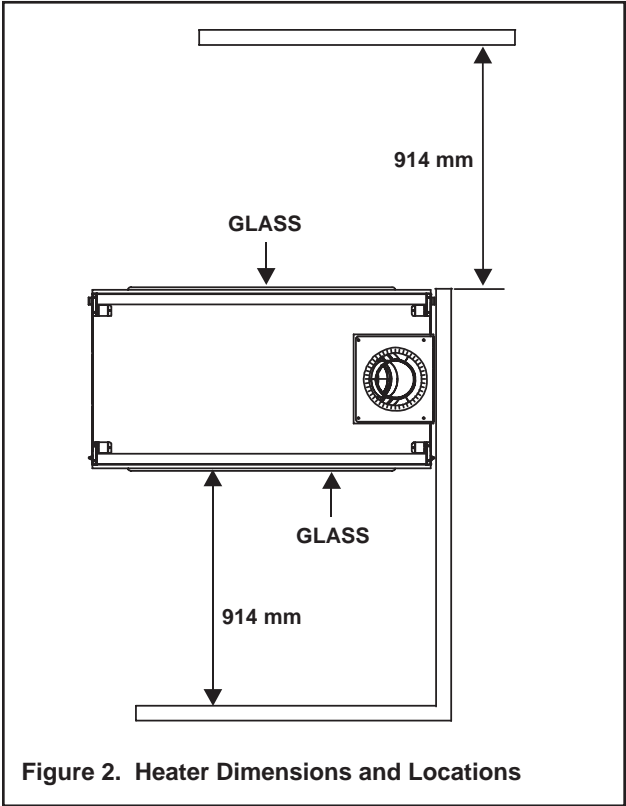


Figure 1. Diagram of the ST-HVBI-AU

1.1 Locating the Heater

The diagram below shows space and clearance requirements for locating a heater within a room.



Clearance Requirements

The top, back, and sides of the heater are defined by stand-offs. The minimum clearance to a perpendicular wall extending past the face of the heater is 25 mm (1 in.). The metal ends of the heater may **NOT** be recessed into combustible construction.

The distance from the unit to combustible construction is to be measured from the unit outer wrap surface to the combustible construction, **NOT** from the screw heads that secure the unit together.

Minimum Clearances from the Flue Pipe to Combustible Materials		
	<u>mm</u>	<u>Inches</u>
Vertical Sections	25	1
Horizontal Sections		
Top.....	75	3
Bottom	25	1
Sides.....	25	1
At Wall Firestops		
Top.....	64	2-1/2
Bottom	13	1/2
Sides.....	25	1

For minimum clearances, see the direct flue termination clearance diagrams on pages 6 and 7 in this manual.

Minimum Clearances from the Heater to Combustible Materials		
	<u>mm</u>	<u>inches</u>
Glass Sides or Ends.....	914	36
Floor	0	0
Rear Flue.....	13	1/2
Metal Sides or Ends	13	1/2
Top.....	64	2-1/2
Ceiling*	787	31

* The clearance to the ceiling is measured from the top of the unit, excluding the standoffs (see Figures 1 and 2).

1.2. Framing the Heater

Framing can be built before or after the heater is set in place. Framing should be positioned to accommodate wall coverings and heater facing material. The diagram below shows framing reference dimensions.

CAUTION: MEASURE HEATER DIMENSIONS AND VERIFY FRAMING METHODS AND WALL COVERING DETAILS, BEFORE FRAMING CONSTRUCTION BEGINS.

WARNING: FRAMING DIMENSIONS ASSUME USE OF 1/2 INCH (12.7 MM) (THICK WALL COVERING MATERIALS ON EXTERIOR OF FRAMING ONLY AND NO SHEET-ROCK ON INTERIOR OF FRAMING.

* **Note:** These dimensions show the center of the horizontal flue pipe. The center of the framing hole is one inch (25.4 mm) above the center of the flue pipe. Framing should be constructed of 51 mm x 102 mm (2 in. x 4 in.) lumber or heavier.

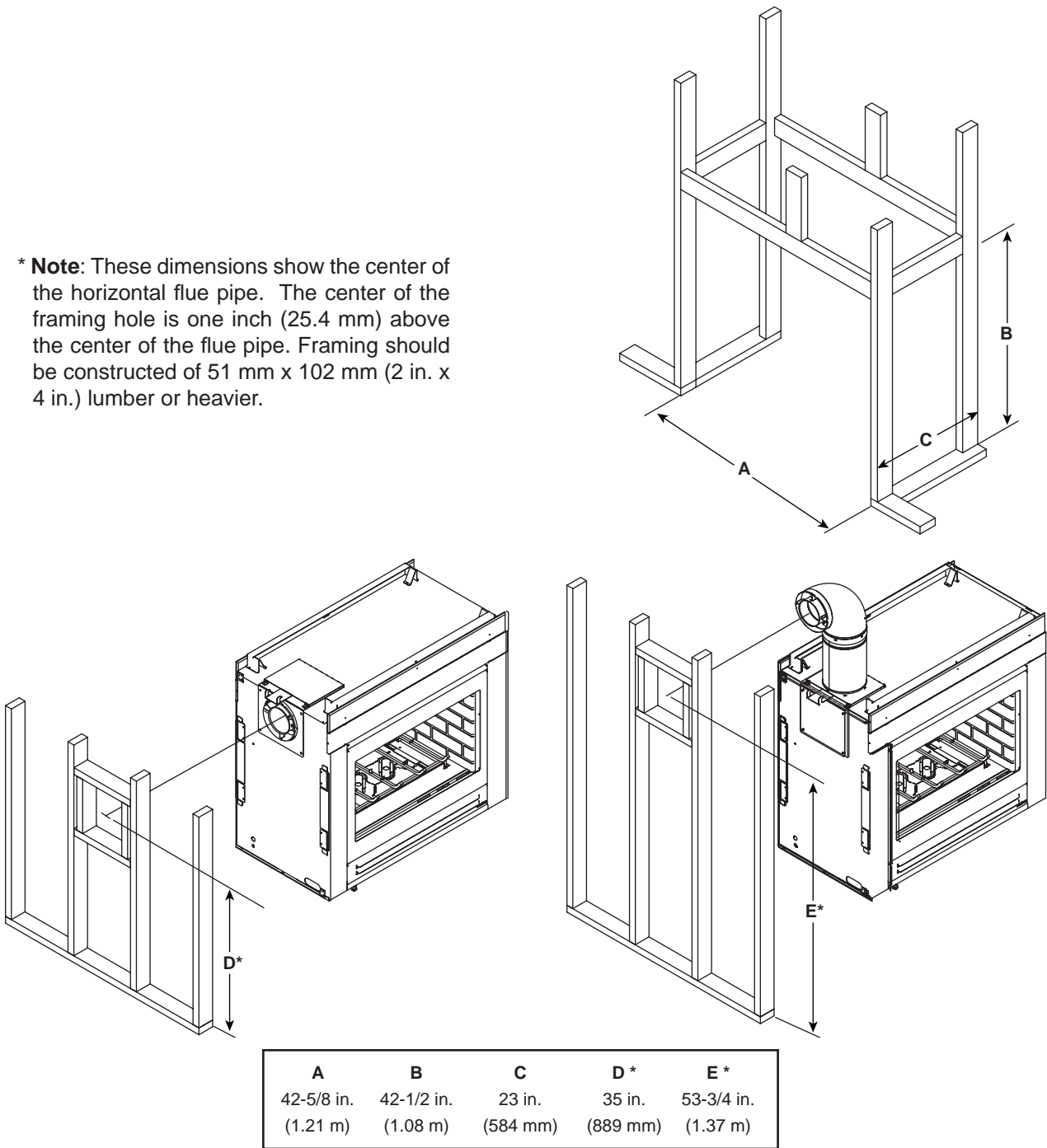
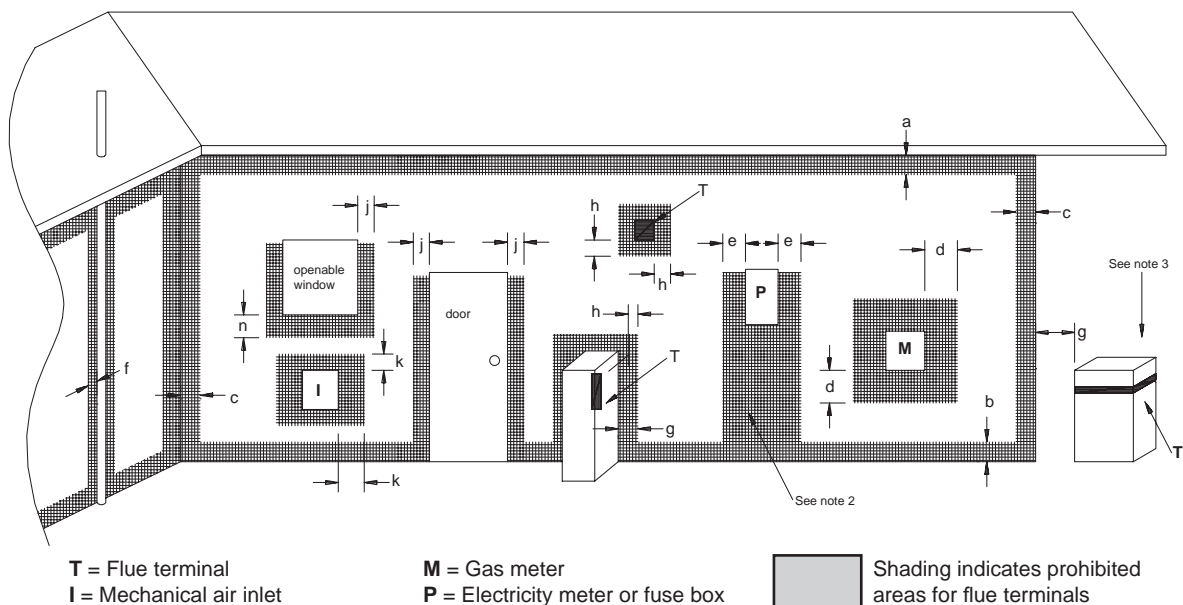


Figure 3. Framing Dimensions



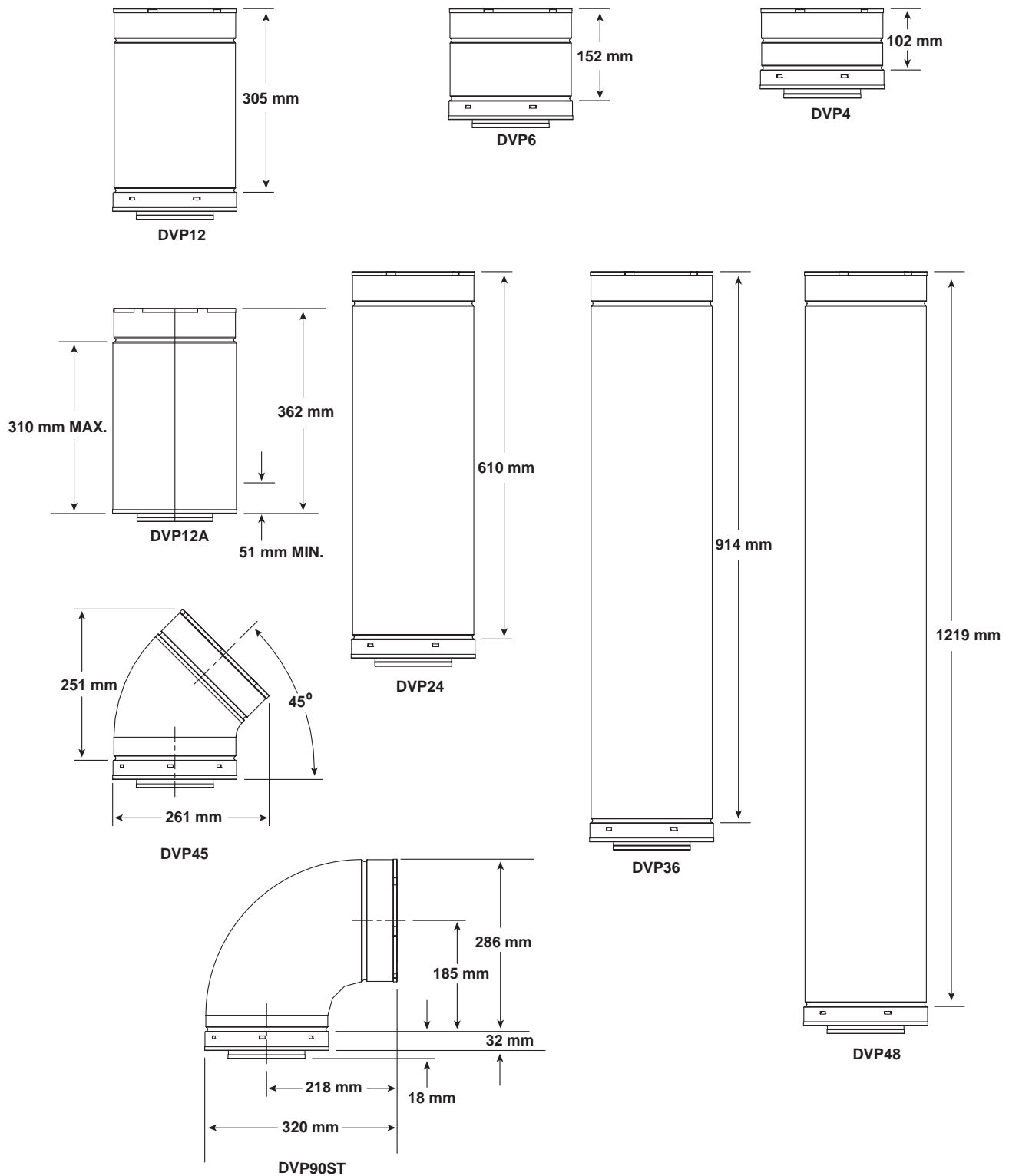
- MIN. CLEARANCE (mm)**
- a - Below eaves, balconies or other projections:
 - Appliances up to 50 MJ/h input300
 - Appliances over 50 MJ/h input500
 - b - From the ground or above a balcony300
 - c - From a return wall or external corner500
 - d - From a gas meter (M)1000
 - e - From an electricity meter or fuse box (P)500
 - f - From a drain or soil pipe150
 - g - Horizontally from any building structure (unless appliance approved for closer installation) or obstruction facing a terminal500
 - h - From any other flue terminal, cowl, or combustion air intake500
 - j - Horizontally from an openable window, door, non-mechanical air inlet, or any other opening into a building, with the exception of sub-floor ventilation:
 - Appliances up to 150 MJ/h input500
 - Appliances over 150 MJ/h input1500
 - k - From a mechanical air inlet, including a spa blower1500
 - n - Vertically below an openable window, non-mechanical air inlet or any other opening into a building, with the exception of See table below

CLEARANCE 'n' (mm)			
Space Heaters	All other appliances		
Up to 50 MJ/h input	Up to 50 MJ/h input	Over 50 MJ/h input and Up to 150 MJ/h input	Over 150 MJ/h input
150	500	1000	1500

- NOTES:**
1. All distances are measured vertically or horizontally along the wall to a point in line with the nearest part of the terminal.
 2. Prohibited area below electricity meter or fuse box extends to ground level.
 3. See clause 5.13.6.6 for restrictions on a flue terminal under a roofed area.
 4. See Appendix J, Figure J1(a) and J2(a) for clearances required from a flue terminal to a LP Gas cylinder. A flue terminal is considered to be a source of ignition.

**MINIMUM CLEARANCES REQUIRED FOR BALANCED FLUE TERMINALS
OR THE FLUE TERMINALS OF OUTDOOR APPLIANCES**

Figure 4



NOTE: PIPES OVERLAP 32 mm (1-1/4 in.) AT EACH JOINT.

Figure 5. DVP-Series Direct Flue Component Specifications (127 mm (5 in.) inner pipe / 203 mm (8 in.) outer pipe)

1.3 Flue System Approvals and Installation

A. Flue System Approvals

These models are approved to use DVP series direct flue pipe components and terminations (see Figures 5 and 6). Approved flue system components are labeled for identification. This pipe is tested and listed as an approved component of the heater. The pipe is tested to be run inside an enclosed wall. There is no requirement for inspection openings at each joint within the wall. There is no required pitch for horizontal flue runs. **NO OTHER FLUEING SYSTEMS OR COMPONENTS MAY BE USED.**

Detailed installation instructions are included with each flue termination kit and should be used in conjunction with this *Installers Guide*.

The flame and ember appearance may vary based on the type of fuel burned and the flueing configuration used.

Identifying Flue Components

The flue systems installed on this gas heater may include one, two, or three 90° elbow assemblies. The relationships of vertical rise to horizontal run in flue configurations using 90° elbows **MUST BE** strictly adhered to. The rise to run relationships are shown in the flueing drawings and tables. Refer to the diagrams on the next several pages.

This model has a 45° elbow built into it. It may be positioned to flue either horizontal or vertical. Depending on the installation, decide which direction the elbow should be facing. Remove the 8 screws from the corner cover plate. Position the 45° elbow as desired and replace the corner cover plate with the 8 screws.

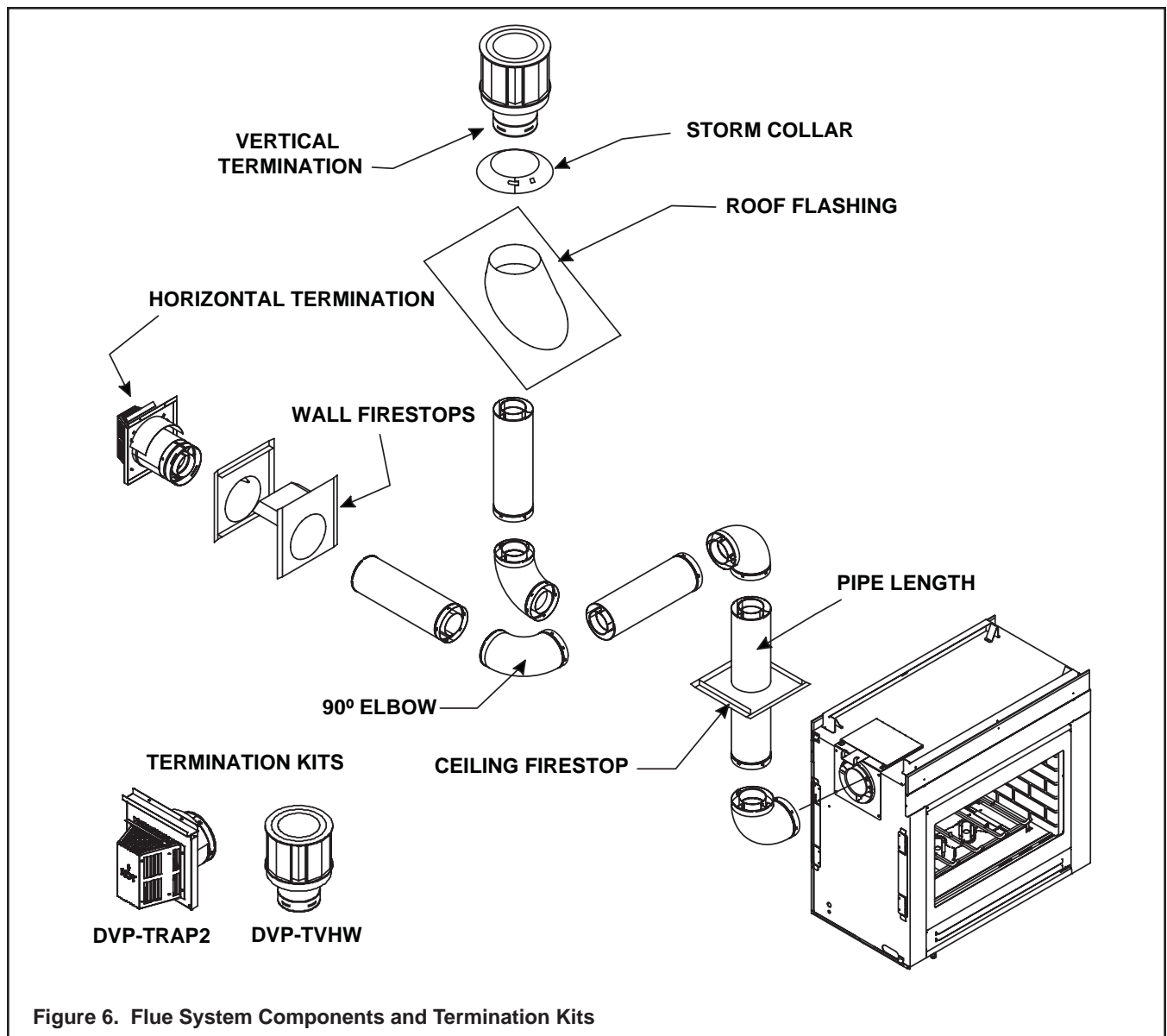


Figure 6. Flue System Components and Termination Kits

**STRAIGHT UP
VERTICAL FLUEING
V (FT.)
12.2 M MAX. (40 ft.)**

TERMINATION CAP

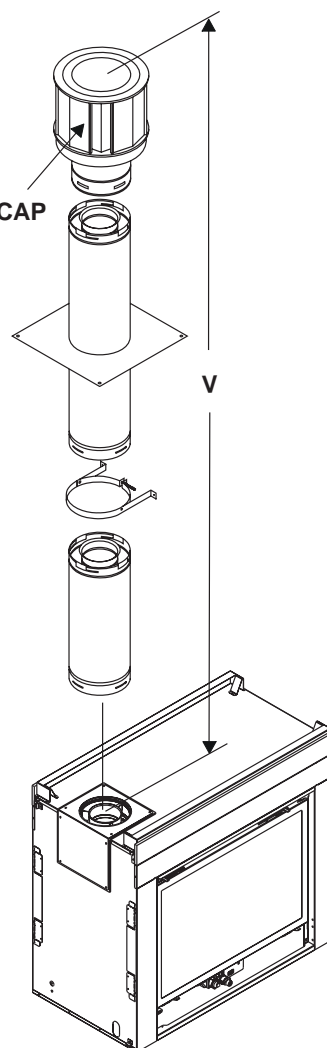


Figure 7

**STRAIGHT OUT
HORIZONTAL FLUEING
H
Max. Run
610 mm (24 in.)**

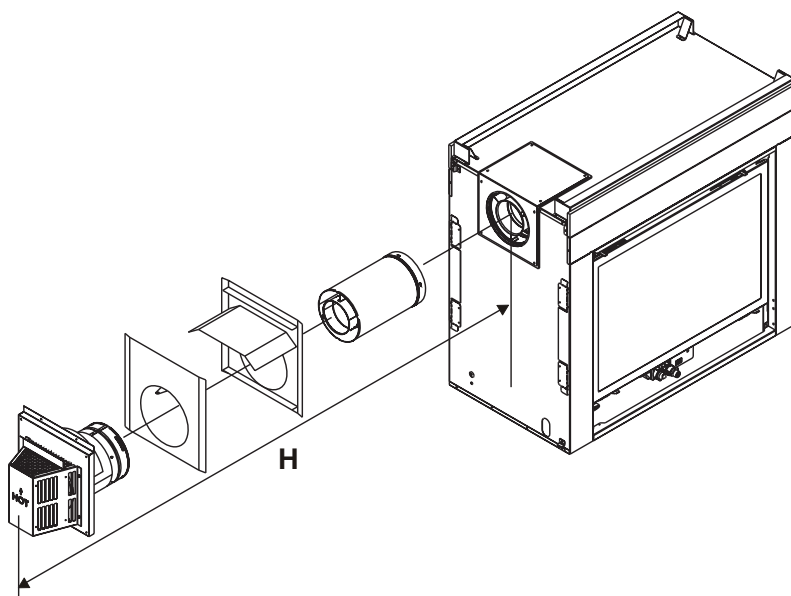


Figure 8

NATURAL GAS - FLUEING WITH ONE 90° ELBOW

V (FT.)	H (FT.)
1' MIN. (305 mm)	3' MAX. (914 mm)
2' MIN. (610 mm)	6' MAX. (1.83 m)
3' MIN. (914 mm)	9' MAX. (2.7 m)
4' MIN. (1.22 m)	12' MAX. (3.6 m)
5' MIN. (1.5 m)	15' MAX. (4.5 m)
6' MIN. (1.83 m)	18' MAX. (5.5 m)
V + H = 40' MAX. (12.2 m)	

PROPANE - FLUEING WITH ONE 90° ELBOW

V (FT.)	H (FT.)
1' MIN. (305 mm)	2' MAX. (610 mm)
2' MIN. (610 mm)	4' MAX. (1.22 m)
3' MIN. (914 mm)	6' MAX. (1.83 m)
4' MIN. (1.22 m)	8' MAX. (2.4 m)
5' MIN. (1.5 m)	10' MAX. (3.0 m)
6' MIN. (1.83 m)	12' MAX. (3.6 m)
V + H = 40' MAX. (12.2 m)	

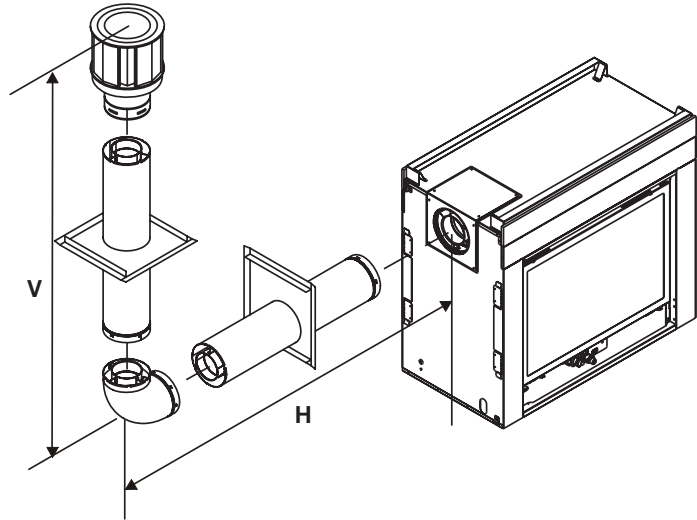
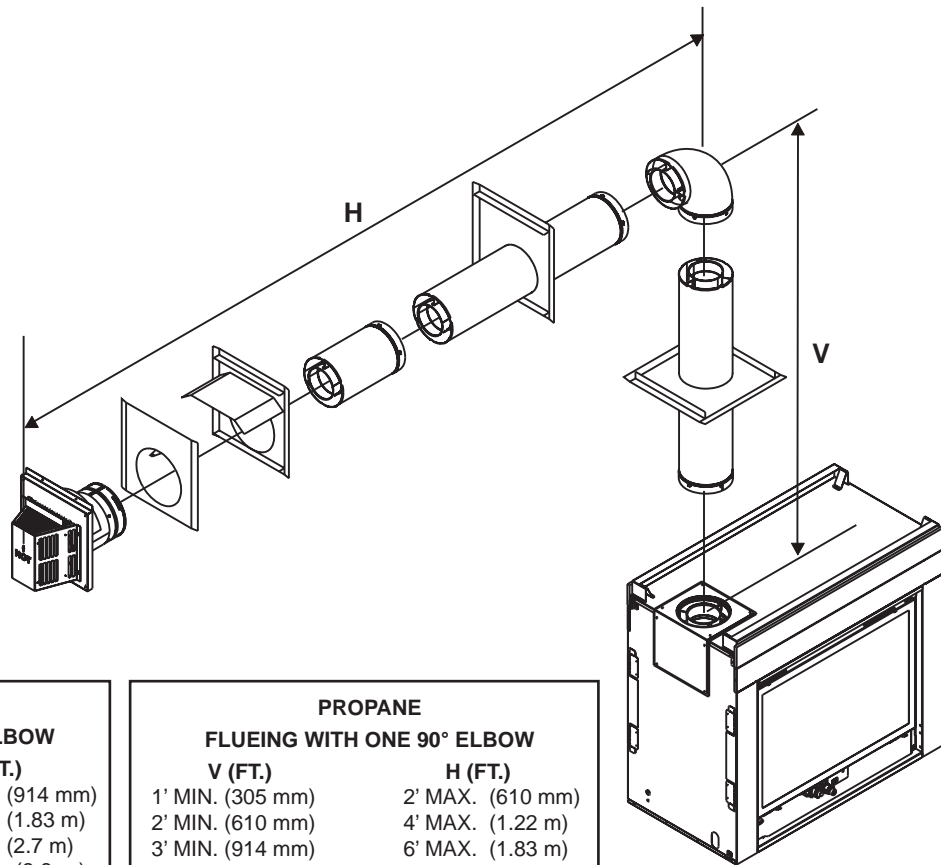


Figure 9. Flueing with One 90° Elbow



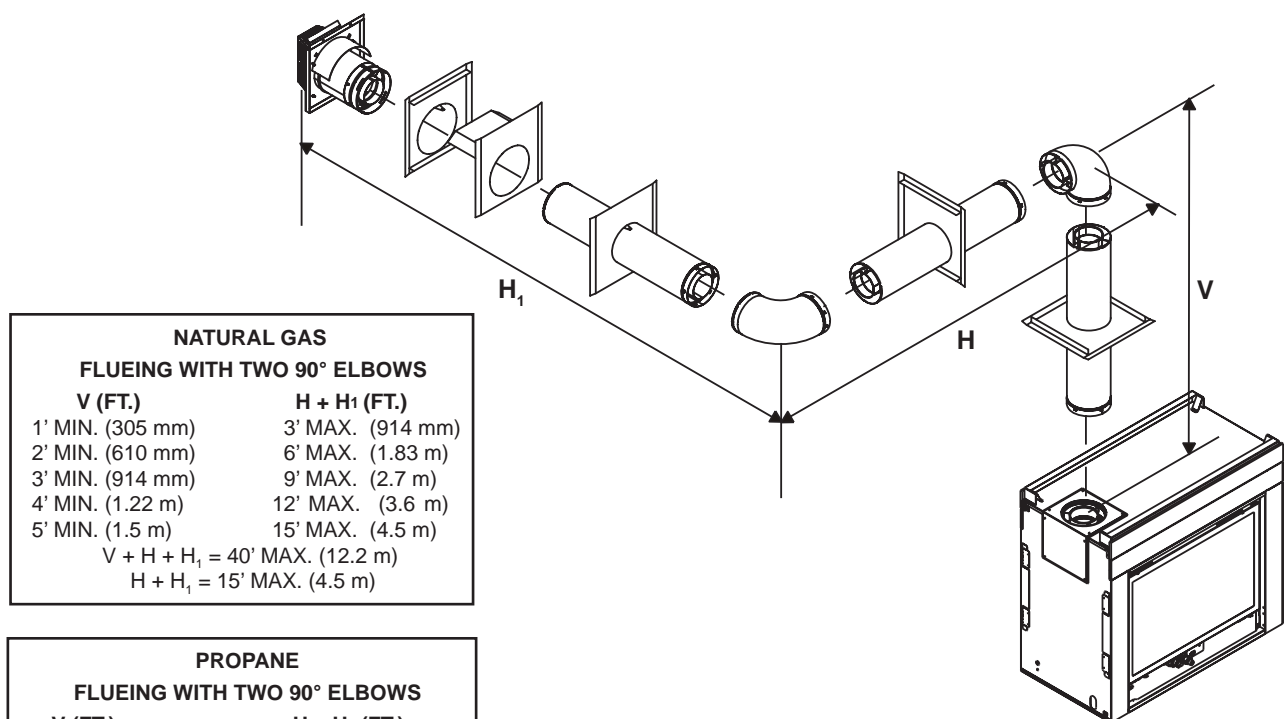
NATURAL GAS FLUEING WITH ONE 90° ELBOW

V (FT.)	H (FT.)
1' MIN. (305 mm)	3' MAX. (914 mm)
2' MIN. (610 mm)	6' MAX. (1.83 m)
3' MIN. (914 mm)	9' MAX. (2.7 m)
4' MIN. (1.22 m)	12' MAX. (3.6 m)
5' MIN. (1.5 m)	15' MAX. (4.5 m)
V + H = 40' MAX. (12.2 m)	

PROPANE FLUEING WITH ONE 90° ELBOW

V (FT.)	H (FT.)
1' MIN. (305 mm)	2' MAX. (610 mm)
2' MIN. (610 mm)	4' MAX. (1.22 m)
3' MIN. (914 mm)	6' MAX. (1.83 m)
4' MIN. (1.22 m)	8' MAX. (2.4 m)
5' MIN. (1.5 m)	10' MAX. (3.0 m)
V + H = 40' MAX. (12.2 m)	

Figure 10. Flueing with One 90° Elbow



NATURAL GAS
FLUEING WITH TWO 90° ELBOWS

V + V ₁ (FT.)	H (FT.)
1' MIN. (305 mm)	3' MAX. (914 mm)
2' MIN. (610 mm)	6' MAX. (1.83 m)
3' MIN. (914 mm)	9' MAX. (2.7 m)
4' MIN. (1.22 m)	12' MAX. (3.6 m)
5' MIN. (1.5 m)	15' MAX. (4.5 m)
V + V ₁ + H = 40' MAX. (12.2 m)	

PROPANE
FLUEING WITH TWO 90° ELBOWS

V + V ₁ (FT.)	H (FT.)
1' MIN. (305 mm)	2' MAX. (610 mm)
2' MIN. (610 mm)	4' MAX. (1.22 m)
3' MIN. (914 mm)	6' MAX. (1.83 m)
4' MIN. (1.22 m)	8' MAX. (2.4 m)
5' MIN. (1.5 m)	10' MAX. (3.0 m)
V + V ₁ + H = 40' MAX. (12.2 m)	

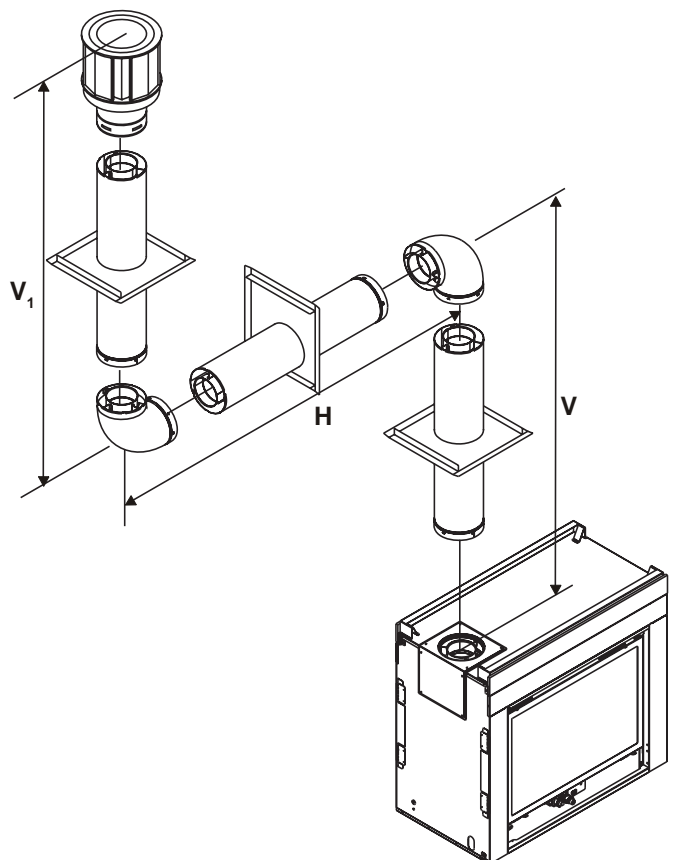


Figure 11. Flueing with Two 90° Elbows

NATURAL GAS FLUEING WITH TWO 90° ELBOWS	
V (FT.)	H + H ₁ (FT.)
1' MIN. (305 mm)	3' MAX. (914 mm)
2' MIN. (610 mm)	6' MAX. (1.83 m)
3' MIN. (914 mm)	9' MAX. (2.7 m)
4' MIN. (1.22 m)	12' MAX. (3.6 m)
5' MIN. (1.5 m)	15' MAX. (4.5 m)
V + H + H ₁ = 40' MAX. (12.2 m)	
H + H ₁ = 15' MAX. (4.5 m)	

PROPANE FLUEING WITH TWO 90° ELBOWS	
V (FT.)	H + H ₁ (FT.)
1' MIN. (305 mm)	2' MAX. (610 mm)
2' MIN. (610 mm)	4' MAX. (1.22 m)
3' MIN. (914 mm)	6' MAX. (1.83 m)
4' MIN. (1.22 m)	8' MAX. (2.4 m)
5' MIN. (1.5 m)	10' MAX. (3.0 m)
V + H + H ₁ = 40' MAX. (12.2 m)	
H + H ₁ = 10' MAX. (3.0 m)	

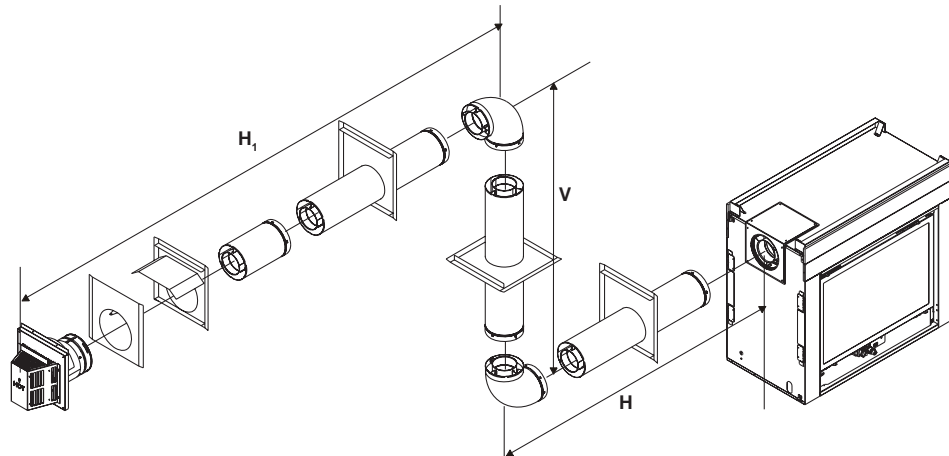
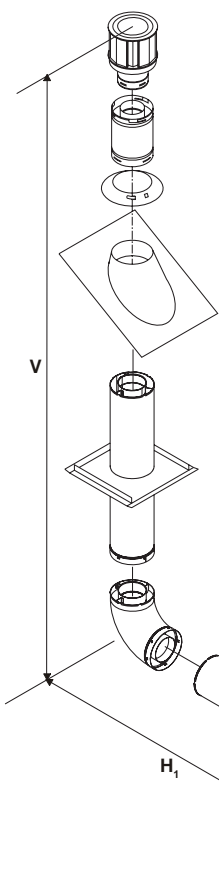


Figure 12. Flueing with Two 90° Elbows



NATURAL GAS FLUEING WITH TWO 90° ELBOWS	
V (FT.)	H + H ₁ (FT.)
1' MIN. (305 mm)	3' MAX. (914 mm)
2' MIN. (610 mm)	6' MAX. (1.83 m)
3' MIN. (914 mm)	9' MAX. (2.7 m)
4' MIN. (1.22 m)	12' MAX. (3.6 m)
5' MIN. (1.5 m)	15' MAX. (4.5 m)
V + H + H ₁ = 40' MAX. (12.2 m)	
H + H ₁ = 15' MAX. (4.5 m)	

PROPANE FLUEING WITH TWO 90° ELBOWS	
V (FT.)	H + H ₁ (FT.)
1' MIN. (305 mm)	2' MAX. (610 mm)
2' MIN. (610 mm)	4' MAX. (1.22 m)
3' MIN. (914 mm)	6' MAX. (1.83 m)
4' MIN. (1.22 m)	8' MAX. (2.4 m)
5' MIN. (1.5 m)	10' MAX. (3.0 m)
V + H + H ₁ = 40' MAX. (12.2 m)	
H + H ₁ = 10' MAX. (3.0 m)	

Figure 13. Flueing with Two 90° Elbows

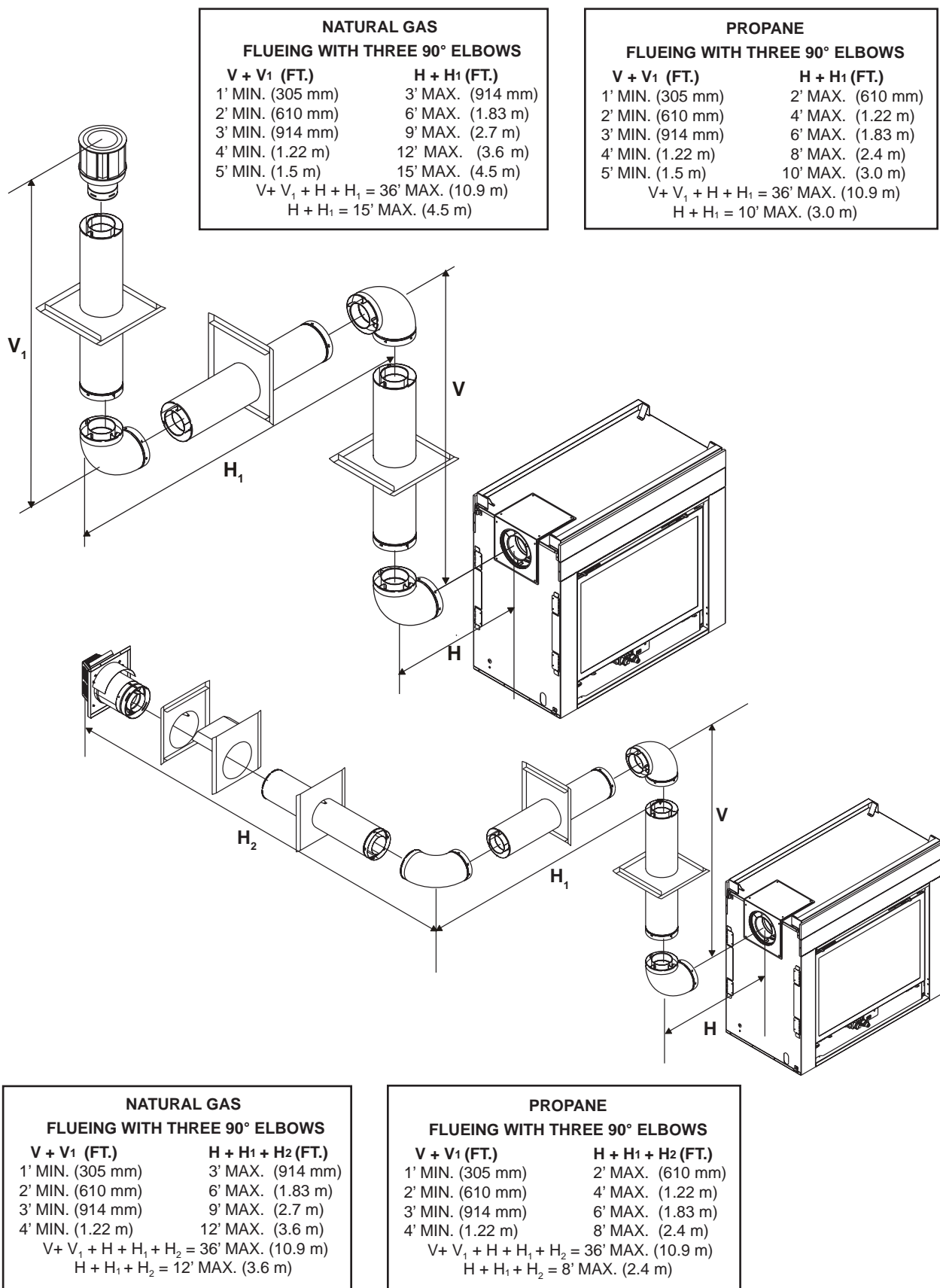
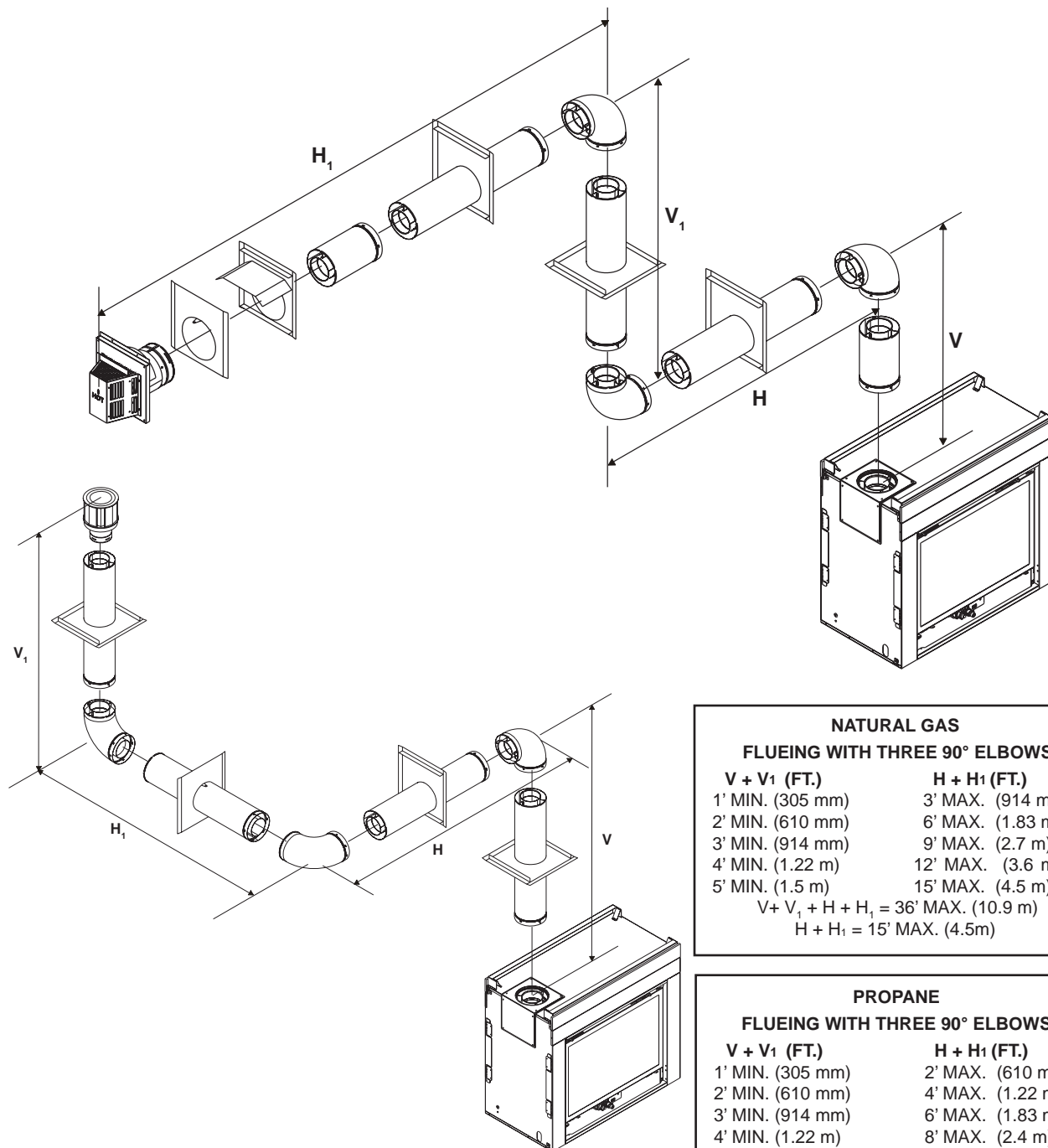


Figure 14. Flueing with three 90° elbows

NATURAL GAS	
FLUEING WITH THREE 90° ELBOWS	
V + V ₁ (FT.)	H + H ₁ (FT.)
1' MIN. (305 mm)	3' MAX. (914 mm)
2' MIN. (610 mm)	6' MAX. (1.83 m)
3' MIN. (914 mm)	9' MAX. (2.7 m)
4' MIN. (1.22 m)	12' MAX. (3.6 m)
V + V ₁ + H + H ₁ = 36' MAX. (10.9 m)	
H + H ₁ = 12' MAX. (3.6 m)	

PROPANE	
FLUEING WITH THREE 90° ELBOWS	
V + V ₁ (FT.)	H + H ₁ (FT.)
1' MIN. (305 mm)	2' MAX. (610 mm)
2' MIN. (610 mm)	4' MAX. (1.22 m)
3' MIN. (914 mm)	6' MAX. (1.83 m)
4' MIN. (1.22 m)	8' MAX. (2.4 m)
V + V ₁ + H + H ₁ = 36' MAX. (10.9 m)	
H + H ₁ = 8' MAX. (2.4 m)	



NATURAL GAS	
FLUEING WITH THREE 90° ELBOWS	
V + V ₁ (FT.)	H + H ₁ (FT.)
1' MIN. (305 mm)	3' MAX. (914 mm)
2' MIN. (610 mm)	6' MAX. (1.83 m)
3' MIN. (914 mm)	9' MAX. (2.7 m)
4' MIN. (1.22 m)	12' MAX. (3.6 m)
5' MIN. (1.5 m)	15' MAX. (4.5 m)
V + V ₁ + H + H ₁ = 36' MAX. (10.9 m)	
H + H ₁ = 15' MAX. (4.5 m)	

PROPANE	
FLUEING WITH THREE 90° ELBOWS	
V + V ₁ (FT.)	H + H ₁ (FT.)
1' MIN. (305 mm)	2' MAX. (610 mm)
2' MIN. (610 mm)	4' MAX. (1.22 m)
3' MIN. (914 mm)	6' MAX. (1.83 m)
4' MIN. (1.22 m)	8' MAX. (2.4 m)
5' MIN. (1.5 m)	10' MAX. (3.0 m)
V + V ₁ + H + H ₁ = 36' MAX. (10.9 m)	
H + H ₁ = 10' MAX. (3.0 m)	

Figure 15. Flueing with three 90° elbows

B. Installing Flue Components

After determining which direction the 45° elbow will be used follow flueing instructions accordingly.

- This heater requires the attachment of supplied 45° elbow to unit before connection of flue components.
- To attach the elbow flue, the elbow cover plate must first be removed from the unit (see Figure 16).
- The elbow can be removed from the unit by aligning the seams of the elbow to the arrows on the surrounding heat shield (see Figure 17).
- Position the elbow in the horizontal or the vertical position. Snap in place with the starting collar.
- Replace the elbow cover plate aligning it with the elbow and secure in place with the 8 screws.
- Place the rope ring around the first section of pipe and slide it up against the cover plate.

NOTE: The rope ring is needed for the heat management and to prevent cold air infiltration.

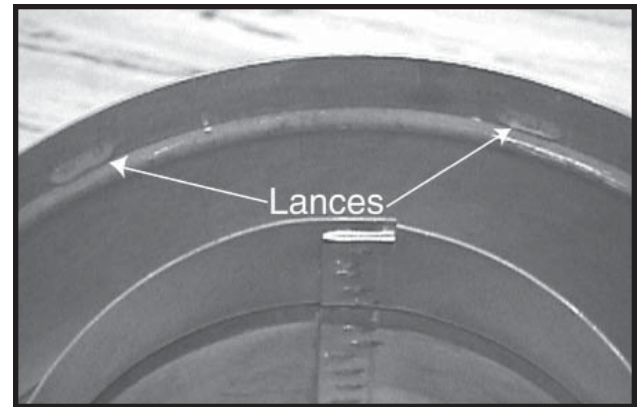
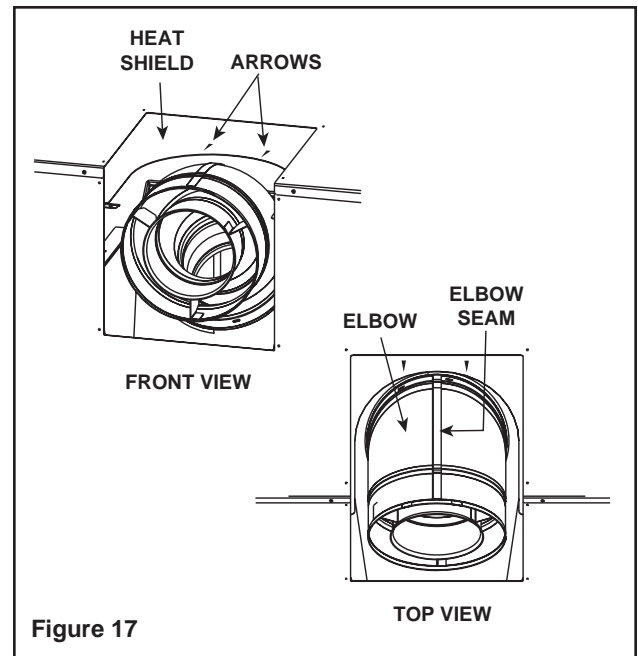
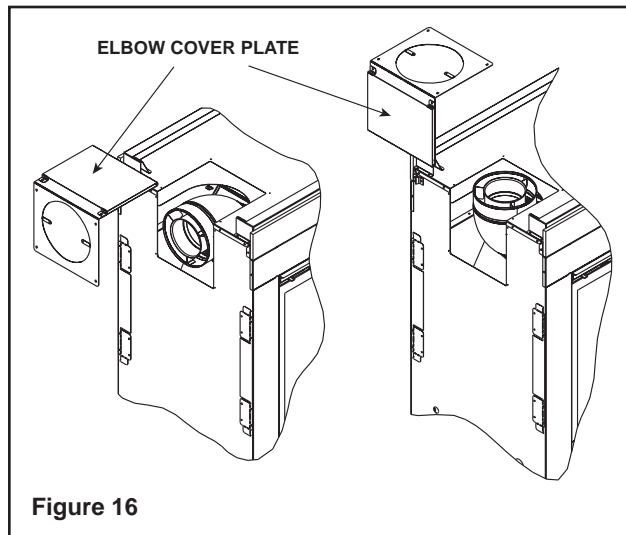




Figure 18

⚠ WARNING	
	Fire Risk
	Exhaust Fumes Risk
	Impaired Performance of Appliance
	<ul style="list-style-type: none">• Overlap pipe slip sections at least 1-1/2 inches (38 mm).• Use pilot holes for screws.• Screws must not exceed one inch long.• Pipe may separate if not properly joined.

C. Assembling Flue Components

Insert the inner flue of section A into the flared inner flue of section B.

Start the outer flue of section A over the outer flue of section B (see Figure 19). **Note:** The end of the pipe sections with the lances/tabs on it will face towards the appliance.

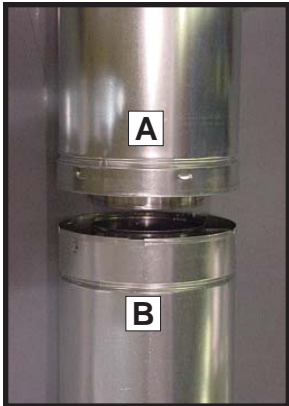


Figure 19



Figure 20

Once both inner and outer flues are started, press section A onto section B firmly until all lances have snapped into place. Check to make sure they have snapped together (see Figure 20) and the seams are not aligned (see Figure 21). Tug slightly on section A to confirm it has completely locked into place.

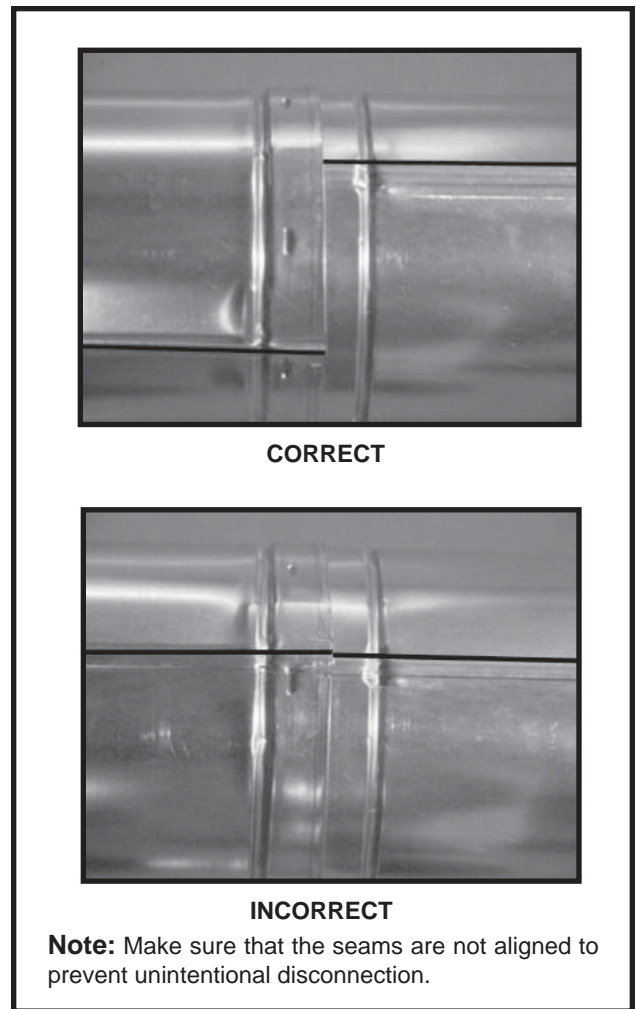


Figure 21. Seams

Note: Make sure that seams are **NOT** aligned to prevent unintentional disconnection.

For elbows that are changing the flue direction, two screws minimum should be put in the outer flue at the joint to prevent the elbow from rotating.

D. Install Support Brackets

Refer to Cinch Pipe and Termination Cap installation Instructions.

E. Install Firestops

For Horizontal Runs - Firestops are **REQUIRED** on both sides of a combustible wall through which the flue passes.

Note: Model DVP-TRAP2 does not need an exterior firestop on an exterior combustible wall. The firestop is built into the cap.

To install firestops (heat shield) for horizontal runs that pass through either interior or exterior walls:

- Cut a 10-inch by 12-inch (254 mm X 305 mm) hole through the wall.

Note: The center of the hole is one (1) inch (25.4 mm) above the center of the horizontal flue pipe.

- Position the firestops on both sides of the hole previously cut and secure the firestops with nails or screws.
- The heat shields of the firestops **MUST BE** placed towards the bottom of the firestop.
- Continue the flue run through the firestop.

Note: There must be NO INSULATION or other combustibles inside the framed firestop opening.

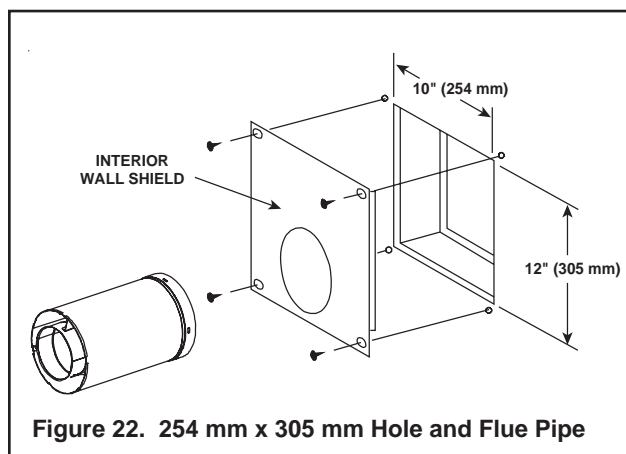


Figure 22. 254 mm x 305 mm Hole and Flue Pipe

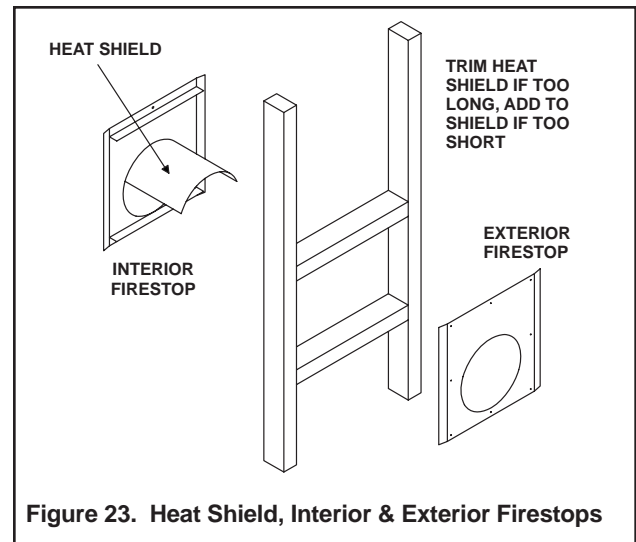


Figure 23. Heat Shield, Interior & Exterior Firestops

For Vertical Runs - One firestop is **REQUIRED** at the hole in each ceiling through which the flue passes.

To install firestops for vertical runs that pass through ceilings:

- Position a plumb bob directly over the center of the vertical flue component.
- Mark the ceiling to establish the centerpoint of the flue.
- Drill a hole or drive a nail through this center point.
- Check the floor above for any obstructions, such as wiring or plumbing runs.
- Reposition the heater and flue system, if necessary, to accommodate the ceiling joists and/or obstructions.
- Cut a 10" x 10" (254 mm X 254 mm) hole through the ceiling, using the firestop pipe opening as a guide.
- Frame the hole with framing lumber the same size as the ceiling joists.

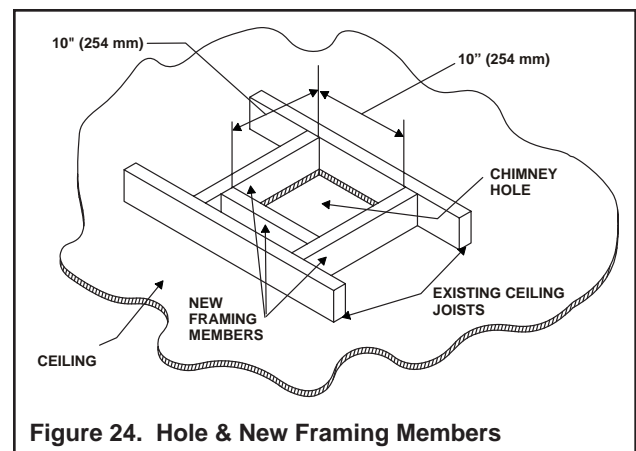
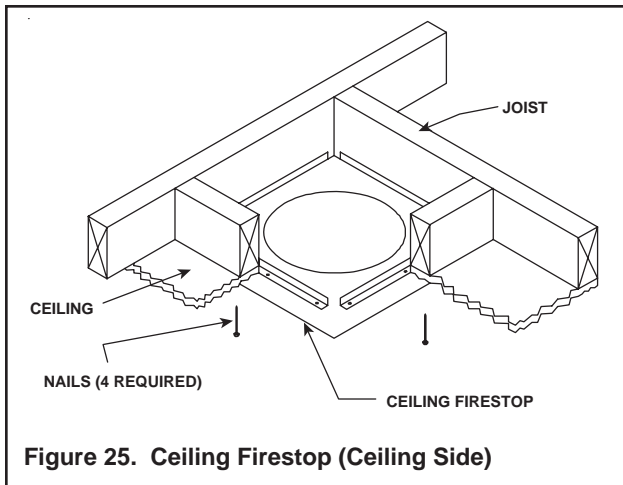


Figure 24. Hole & New Framing Members

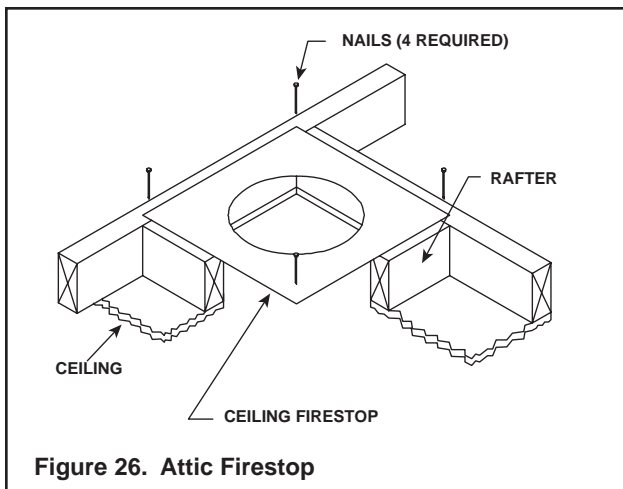
If the area above the ceiling is **NOT** an attic, position and secure the ceiling firestop on the ceiling side of the previously cut and framed hole.



If the area above the ceiling **IS** an attic, position and secure the firestop on top of the previously framed hole.

NOTE: Keep insulation away from the flue pipe at least 25 mm.

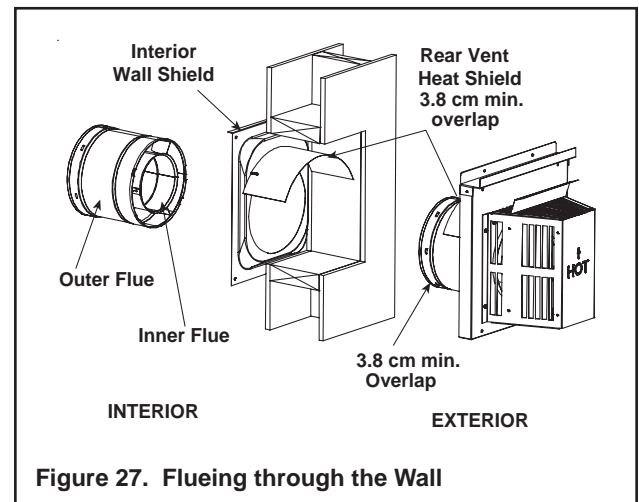
NOTE: There must be **NO INSULATION** or other combustibles inside the framed firestop opening.



F. Flue Termination

For Horizontal Terminations - To attach and secure the termination to the last section of horizontal flue:

- The rear flue heat shield **MUST** be placed one inch above the top of the flue between the wall shield and the base of the termination cap.
- One section of the heat shield is attached to the wall shield. The other is attached to the termination cap in the same manner.
- The heat shield sections will overlap to match the wall thickness (depth).
- If the wall thickness does not allow the required 1-1/2 inch heat shield overlap, an extended heat shield must be used. The extended heat shield will need to be cut to the thickness of the wall and be attached to the wall shield.
- The small leg in the shield rests on top of the flue to properly space it from the pipe section (see Figure 27).



- The termination kit should pass through the wall firestops from the exterior of the building.

- Adjust the termination cap to its final exterior position on the building and interlock the flue sections.



WARNING: THE TERMINATION CAP MUST BE POSITIONED SO THAT THE ARROW IS POINTING UP.

- Use a high-temperature sealant gasket to seal between the pipe and exterior firestop.

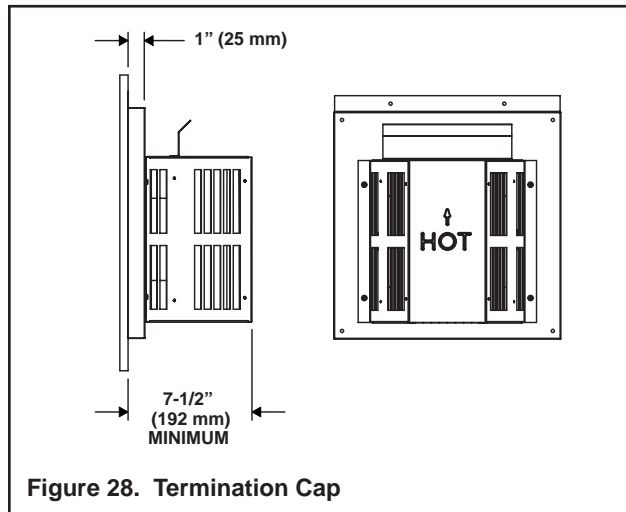


Figure 28. Termination Cap

For Vertical Terminations - To locate the flue and install the flue sections:

- Locate and mark the flue center point on the underside of the roof, and drive a nail through the center point.
- Make the outline of the roof hole around the center point nail.
- The size of the roof hole framing dimensions depend on the pitch of the roof. There **MUST BE** a 1-inch (25 mm) clearance from the vertical flue pipe to combustible materials.
- Mark the roof hole accordingly.
- Cover the opening of the installed flue pipes.
- Cut and frame the roof hole.
- Use framing lumber the same size as the roof rafters and install the frame securely. Flashing anchored to the frame must withstand heavy winds.
- Continue to install concentric flue sections up through the roof hole and up past the roof line until you reach the appropriate distance above the roof.



WARNING: FOLLOWING NATIONAL REGULATIONS AND CODES OF PRACTICE FOR MINIMUM CLEARANCES FROM GAS TERMINALS, AND PLACEMENT OF GAS TERMINAL.

NOTE: This also pertains to vertical flue systems installed on the outside of the building.

To seal the roof hole, and to divert rain and snow from the flue system:

- Attach a flashing to the roof using nails, and use a non-hardening flexible joint sealant around the edges of the flashing base where it meets the roof.
- Attach a storm collar over the flashing joint to form a water-tight seal. Place non-hardening flexible joint sealant around the joint, between the storm collar and the vertical pipe.
- Slide the termination cap over the end of the flue pipe and snap into place.

NOTICE: Failure to properly caulk the roof flashing and pipe seams may permit entry of water.

- Caulk the gap between the roof flashing and the outside diameter of the pipe.
- Caulk the perimeter of the flashing where it contacts the roof surface. See Figure 29.
- Caulk the overlap seam of any exposed pipe sections that are located above the roof line.

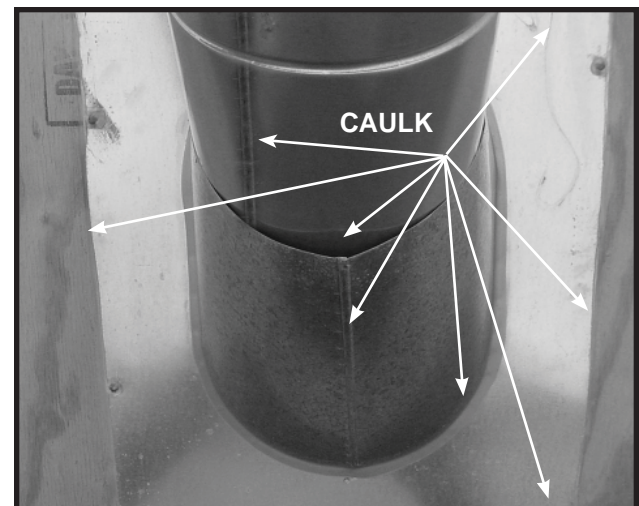
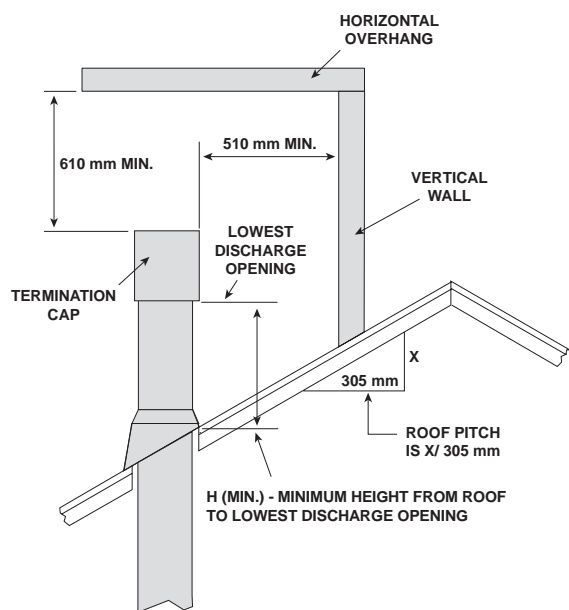


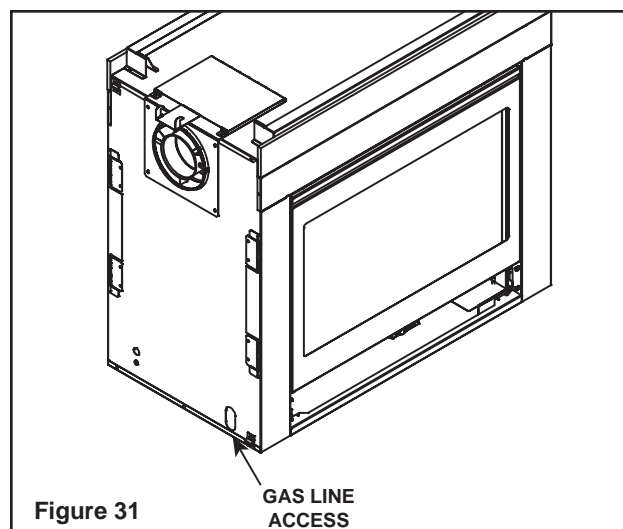
Figure 29.



Angle	H (Min.) mm
0°-26.6°	500*
26.6°-30.3°	500*
30.3°-33.7°	500*
33.7°-36.9°	610*
36.9°-39.8°	760
39.8°-42.5°	990
42.5°-45.0°	1220
45.0°-49.4°	1520
49.4°-53.1°	1830
53.1°-56.3°	2130
56.3°-59.0°	2290
59.0°-60.3°	2440

*910 mm minimum in snow regions

Figure 30. Minimum Height from Roof to Lowest Discharge Opening




1.4 CONNECTING THE GAS SUPPLY

The gas is introduced to the appliance on the left hand side (see Figure 31). After the gas pipe installation is complete, check carefully all gas connections for leaks with a soap solution. **DO NOT USE AN OPEN FLAME.**

NOTE: The gas supply line should be purged of any trapped air prior to the first firing of the unit.

1.5 IGNITION SYSTEM WIRING

- This gas heater is equipped with an electronic ignition system which operates on a 6 volt system.
- This appliance requires 220-240 VAC to be wired to the factory installed junction box. Check factory installed power cord for damage before using.



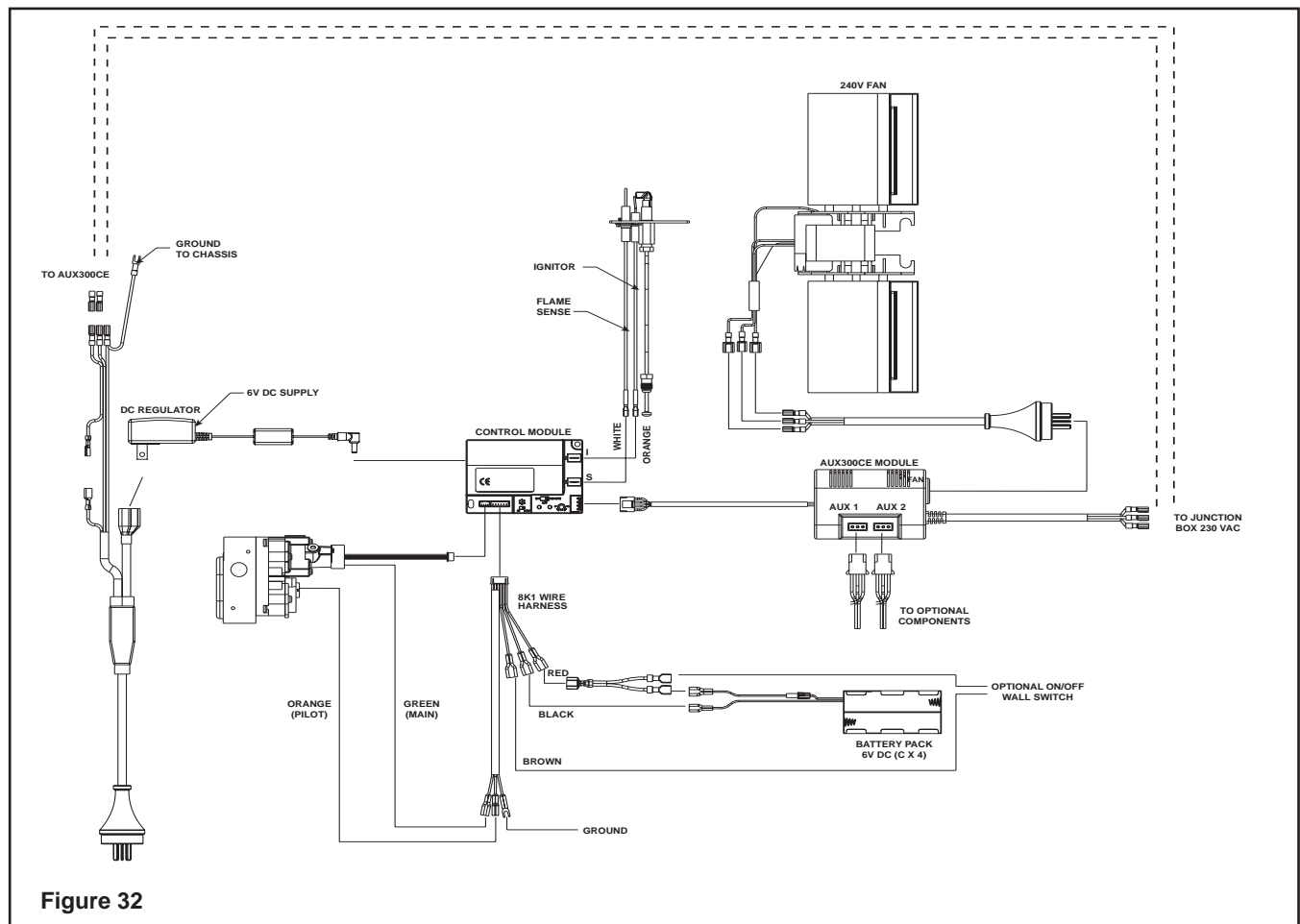
⚠ WARNING

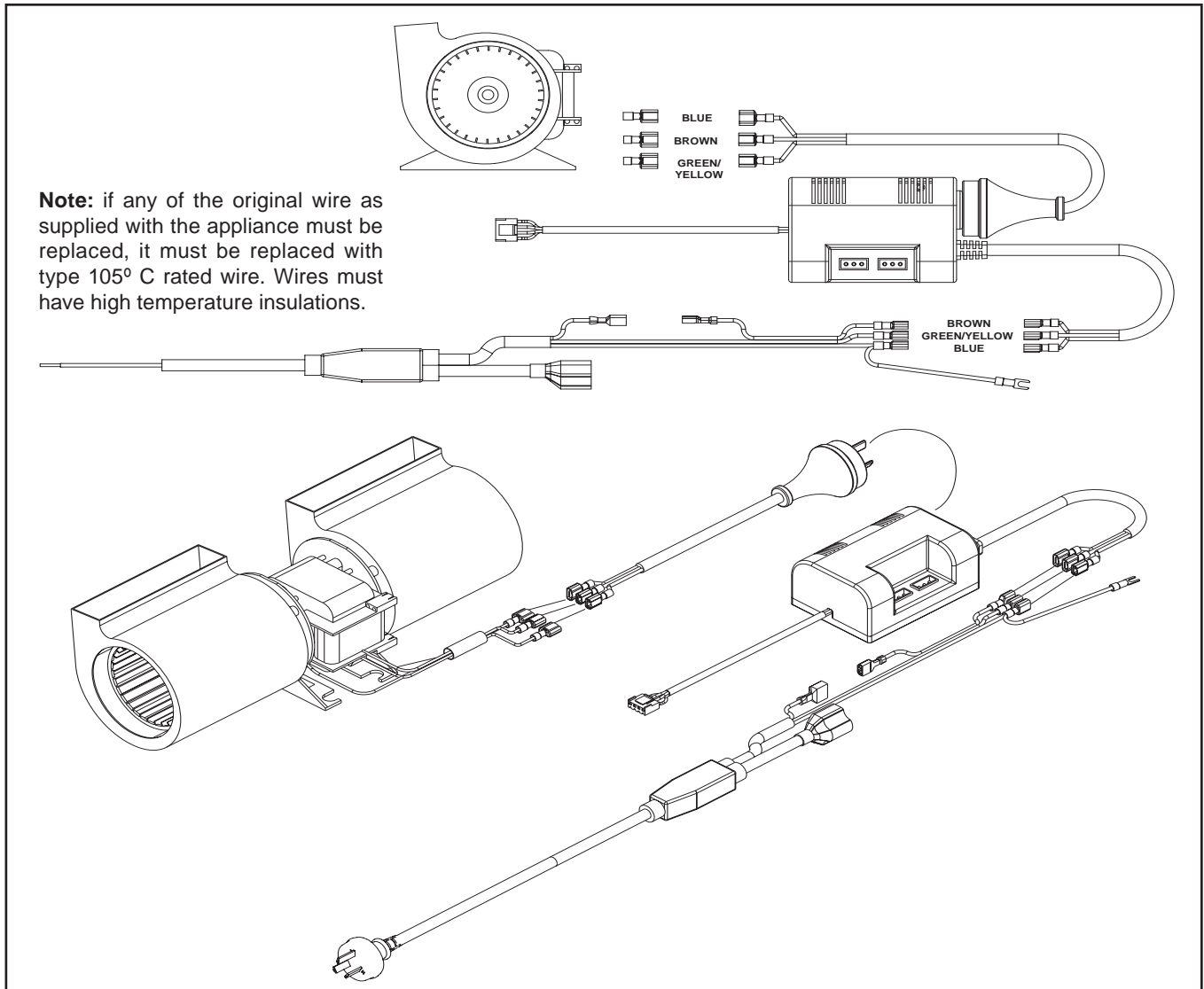
Shock hazard.

- Replace damaged wire with type 105° C rated wire.
- Wire must have high temperature insulation.

CAUTION

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.





Note: if any of the original wire as supplied with the appliance must be replaced, it must be replaced with type 105° C rated wire. Wires must have high temperature insulations.

Figure 33. Fan, Switches and Fan Wiring Diagram



1.6 BLOWER WIRING

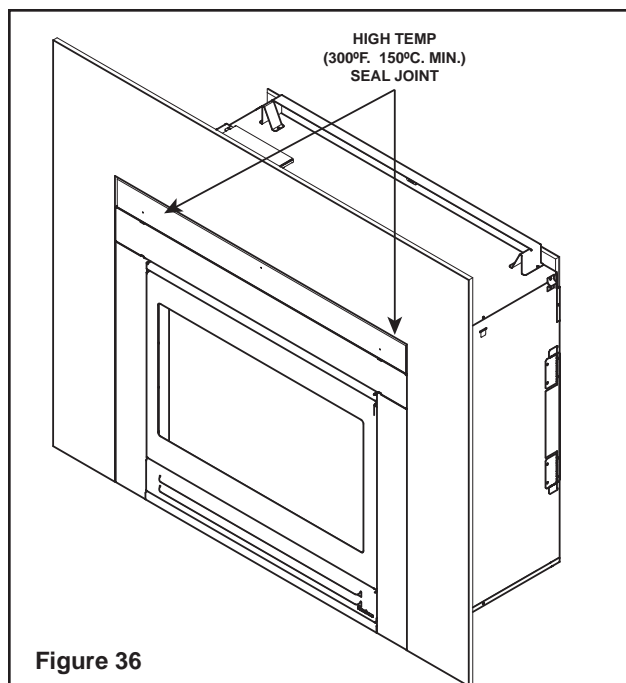
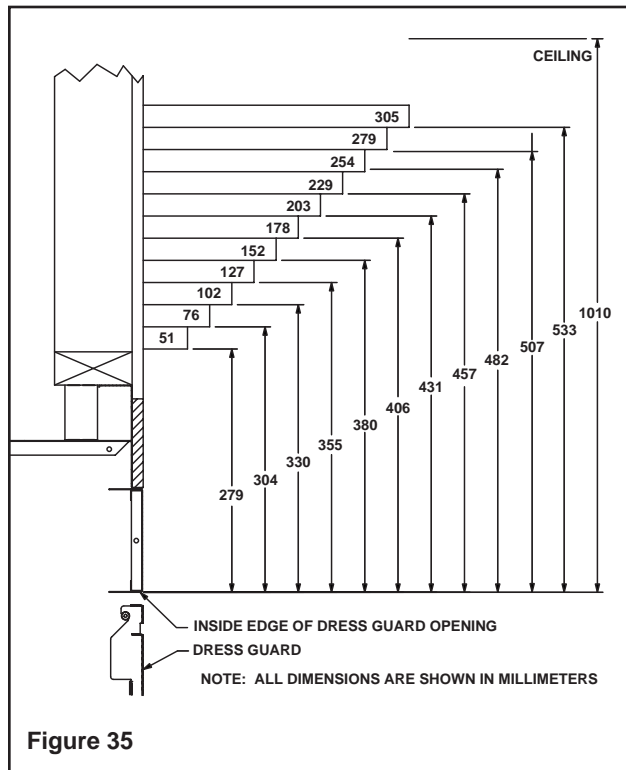
These heaters have a factory installed electrical junction box, variable speed fan and temperature sensing remote. These components are located behind the lower grille. Use of the fan requires that the junction box (factory installed) be connected to 220-240 VAC service before permanently enclosing the heater. The access hole for connecting the service wires is found on the lower exterior side of the appliance. See Figure 31. Figure 33 shows the fan, switches, and fan wiring diagram.

NOTE: If the supply cord is damaged, it must be replaced by the manufacturer, an authorized service agent, or a similarly qualified person in order to avoid a hazard.

1.7. MANTEL CLEARANCES

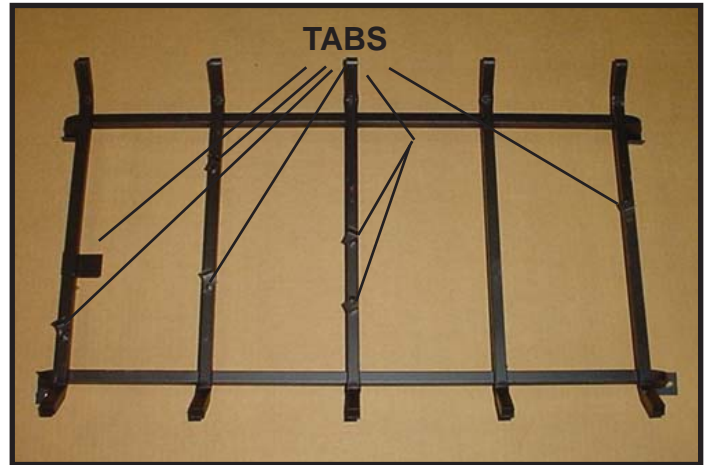
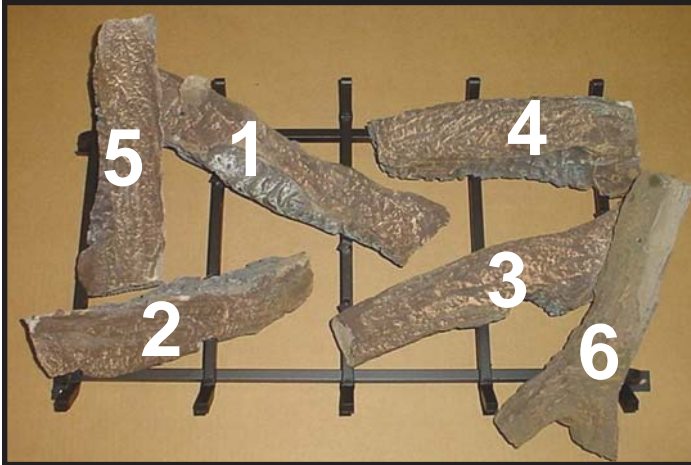
Clearance to a mantelpiece is 279 mm. See Figure 35.

If joints between the finished walls and the heater surround (top and sides) are sealed, a 150° C. minimum sealant material must be used. These joints are not required to be sealed. Only non-combustible material (using 150° C. minimum adhesive, if needed) can be applied as facing to the heater surround (see Figure 36).



1.8 LOG PLACEMENT

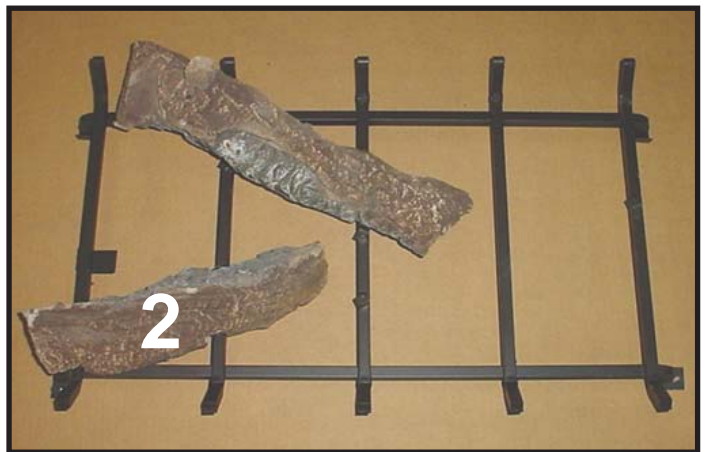
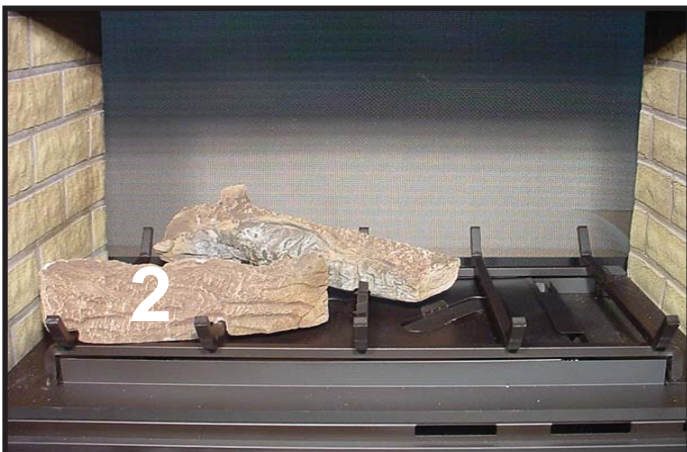
Log Assembly: LOG-ST-CE



CAUTION: Logs are fragile. Carefully remove the log packages from the heater and the tags from their packages. Handle logs gently. Place the logs in the heater by following the steps shown. Replace the glass door and dress guard previously removed prior to lighting the unit. Be certain the gas logs are properly positioned. Logs #4 and #5 are the same log. See Service Parts pages for individual assembly photos.



LOG #1 (SRV2068-700): Place log #1 behind grate tabs on the second and third grate bars on the left rear corner. Position so that the bottom grooves fit over bars and the log is snug against the grate tabs.



LOG #2 (SRV2068-701): Locate log #2 in left front corner of the log grate using bottom grooves for placement. Push log against grate tabs on first and second bars.



LOG #3 (SRV2068-702): Position log #3 across the third, fourth and fifth grate bars and push towards the rear against the grate tabs on bars three and five.



LOG #4 (SRV2068-703): Place log #4 in the right rear corner of the log grate using bottom grooves for placement. Align log #4 by using the grate corner and rear cross bar as stops.



LOG #5 (SRV2068-703): Place log #5 on top of flat spot on log #1 and against the inside of log #2. Be careful not to reposition log #2 when placing this log.



LOG #6 (SRV582-705): Position log #6 on top of the groove in log #3 with the forked end resting on the grate assembly as shown.

1.9 INSTALLER TESTING

The space heater must be tested and be operating according to manufacturers specifications prior to the installer leaving the site. Note: the tips of the flames should never hit the top of the firebox after the unit has warmed up. Please contact your dealer or a qualified service person to replace injector or adjust valve.

- Upon completing the gas line connection, a small amount of air will be in the lines. When first lighting the pilot, it will take a few minutes for the lines to purge themselves of this air. Once the purging is complete, the pilot and burner will light and operate as indicated in the Lighting Instructions.

Subsequent lightings of the appliance will not require such purging.

Follow the Safety Information and Lighting Instructions pages of this manual to light the appliance.

To obtain proper operation, it is imperative that the pilot and main burner flame characteristics are steady, not lifting or floating. Typically, the top 3/8 inch (9.5 mm) of the flame sensor rod should be engulfed in the pilot flame (see Figure 37). See Table 1 for pressure requirements.

Follow TROUBLESHOOTING section for adjusting the appliance to operate properly.

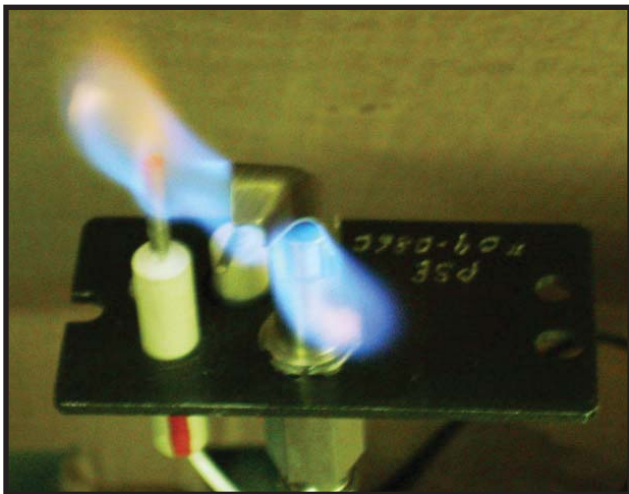


Figure 37. Pilot Assembly

Table 1.

	Natural Gas	Propane Gas
Inlet Pressure	1.13 kPa	2.75 kPa
Outlet Pressure	.80 kPa	2.40 kPa
Max. Gas Consumption	44.0 mJ/h	42.5 mJ/h
→ Burner Injector	#30	#49

2.0 OPERATING INSTRUCTIONS

This appliance is a balanced flue heater and is designed to operate with all combustion air being siphoned from the outside of the building and all exhaust gases expelled to the outside of the building.



WARNING: THIS UNIT IS NOT FOR USE WITH SOLID FUEL.

The control system for this model employs an electronic pilot ignition. It consists of a 6V gas control valve/variable regulator, an electronic module, a thermocouple and a remote control. The controls are located in the lower compartment behind the lower door, and access is gained by lifting the door up.



WARNING: DO NOT CONNECT 220-240 VAC TO THE GAS CONTROL VALVE OR CONTROL WIRING SYSTEM OF THIS UNIT.

When lit for the first time, the appliance will emit a slight odor for an hour or two. This is due to paint and lubricants used in the manufacturing process. Additionally, for the first few minutes after each lighting, vapor may condense and fog the glass and the flames may be blue. After a few minutes this moisture will disappear and within 15-30 minutes the flames should become yellow.

The heater may produce a noise, caused from metal expansion and contraction as it heats up and cools down. This noise is similar to one that a furnace or heat duct may produce and does not affect the operation or longevity of the heater.

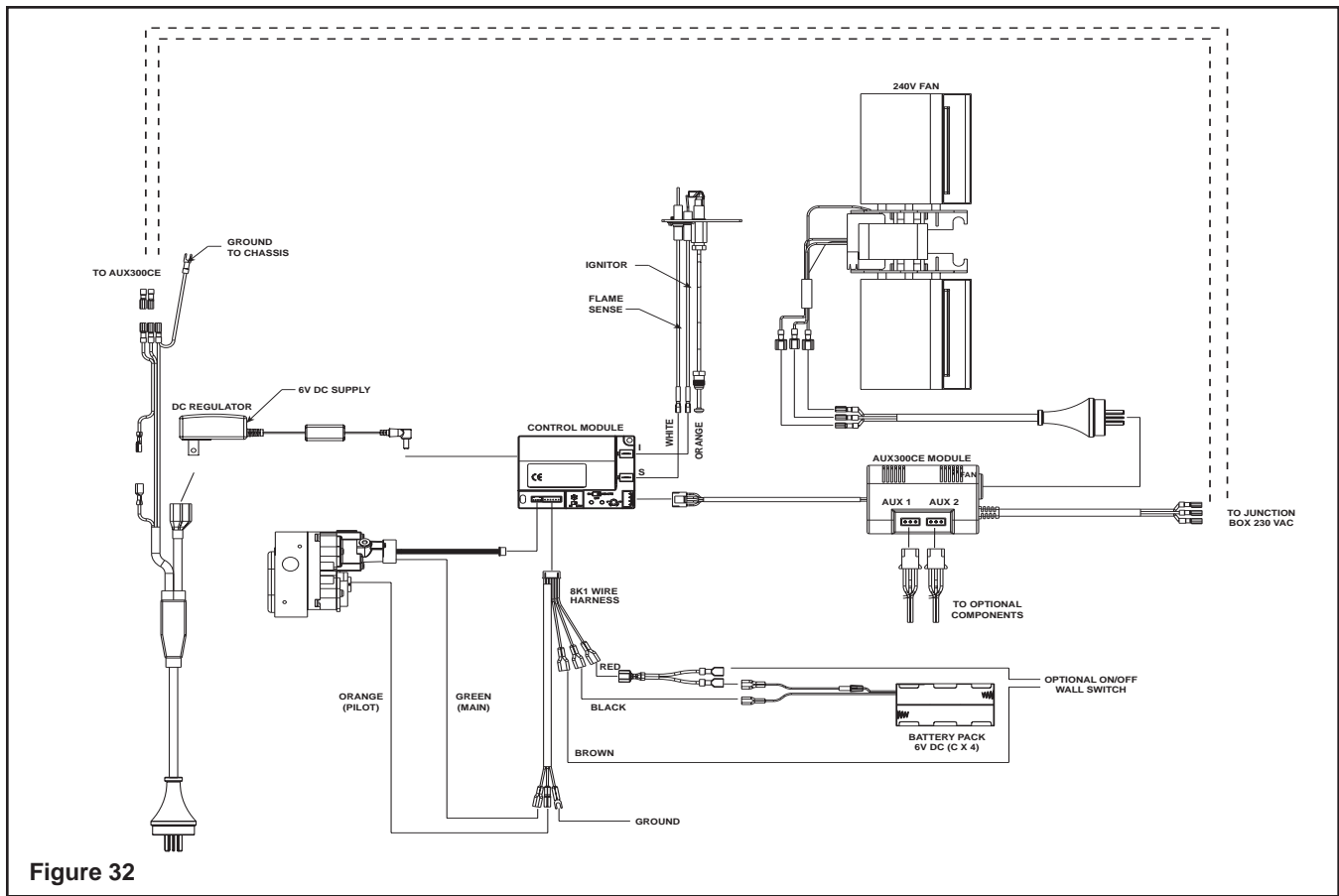


Figure 32

⚠ WARNING



HOT SURFACES!

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

Hot glass will cause burns.

- **DO NOT** touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away

- CAREFULLY SUPERVISE children in same room as fireplace.
- 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.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

2.1 OPERATING CAUTIONS

- This appliance may exhibit a slight carbon deposition.
- Do not place articles on or against this appliance.
- Do not use or store flammable materials near this appliance.
- Do not spray aerosols in the vicinity of this appliance while it is in operation.

- The dress guard is fitted to this appliance to reduce the risk of fire or injury from burns and no part of it should be permanently removed. For protection of young children or the infirm, a secondary guard is required.
- The dress guard must be in place and sealed and the fixed mesh trim assembly must be in place on the heater before the unit can be placed into safe operation.
- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the unit and to replace any part of the control system and any gas control which has been underwater.
- Do not operate this appliance with the glass door removed, cracked, or broken. Replacement of the glass door should be done by a licensed or qualified person. Do not strike or slam the glass door.
- The glass door assembly shall only be replaced as a complete unit as supplied by the gas heater manufacturer. No substitute materials may be used.

2.2. SAFETY & LIGHTING INFORMATION

Follow **SAFETY INFORMATION** and **LIGHTING INSTRUCTIONS** to light the appliance.

By design, the flame pattern will not be identical from unit to unit. Additionally, flame pattern may vary depending on installation type and weather conditions.

NOTE: THE TIPS OF THE FLAMES SHOULD NEVER HIT THE TOP OF THE FIREBOX.

LIGHTING INSTRUCTIONS (IPI)

FOR YOUR SAFETY READ BEFORE LIGHTING

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

- A.** This appliance is equipped with an intermittent pilot ignition (IPI) device which automatically lights the burner. **DO NOT** try to light the burner by hand.
- B. BEFORE LIGHTING**, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- WHAT TO DO IF YOU SMELL GAS**
- **DO NOT** try to light any appliance.
 - **DO NOT** touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- C. 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.

WARNING:

DO NOT CONNECT LINE VOLTAGE (110/120 VAC OR 220/240 VAC) TO THE CONTROL VALVE.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

If not installed, operated, and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or fuel combustion which are known to the State of California to cause cancer, birth defects, or other reproductive harm.

Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

For additional information on operating your
Hearth & Home Technologies fireplace, please refer to www.fireplaces.com.

CAUTION:

Hot while in operation. **DO NOT** touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

DO NOT operate the appliance with fixed glass assembly removed, cracked or broken. Replacement of the fixed glass assembly should be done by a licensed or qualified service person.

NOT FOR USE WITH SOLID FUEL

For use with natural gas and propane. A conversion kit, as supplied by the manufacturer, shall be used to convert this appliance to the alternate fuel.

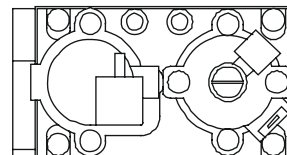
Also Certified for Installation in a Bedroom or a Bedsitting Room.

For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

LIGHTING INSTRUCTIONS (IPI)

1. This appliance is equipped with an ignition device which automatically lights the burner. **DO NOT** try to light the burner by hand.

**GAS
VALVE**



2. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" in the Safety Information located on the left side of this label. If you do not smell gas, go to next step.
3. To light the burner:

Equipped with wall switch: Turn ON/OFF switch to ON.

Equipped with remote or wall control: Press ON or FLAME button.

Equipped with thermostat: Set temperature to desired setting.
4. If the appliance does not light after three tries, call your service technician or gas supplier.

TO TURN OFF GAS TO APPLIANCE

1. Equipped with wall switch: Turn ON/OFF switch to OFF.

Equipped with remote or wall control: Press OFF button.

Equipped with thermostat: Set temperature to lowest setting.
2. Service technician should turn off electric power to the control when performing service.

593-913G

Final inspection by _____

2.3 CONTROL MODULE OPERATION



1. The control module has an ON/OFF/REMOTE selector switch that must be set. See Figure 39.

OFF Position: Appliance will ignore all power inputs and will not respond to any commands from a wall switch or optional remote. The unit should be in the OFF position during installation, service, battery installation, fuel conversion, and in the event that the control goes into LOCK-OUT mode as a result of an error code.

ON Position: Appliance will ignite and run continuously in the HI flame setting, with no adjustment in flame output. This mode of operation is primarily used for initial installation or power outage operation with battery backup.

REMOTE Position: Appliance will initiate commands from a wired wall switch and/or one of the optional wireless remote options.

2. A wall switch can be wired into the control module brown and red wires. See Figure 32.
3. If using a wired wall switch with the module in REMOTE mode, the flame output can be adjusted with the HI/LO selector switch on the module. See Figure 39. Note that the flame HI/LO selector switch will become inactive once an optional remote control (RC200/RC300) is programmed to the control module. Note that the control module will always ignite the fireplace on HI and remain so for the initial 10 seconds of operation. If the HI/LO is switched to the LO position, the flame output will automatically drop to the lowest setting after the flame has been established for 10 sec. After this 10 second period, the flame can be adjusted from HI to LO with the switch.
4. The control module has safety feature that automatically shuts down the fireplace after 9 hours of continuous operation without receiving a command from the wall switch or optional remote.
5. If you intend to use both a wired wall switch and an optional remote control to operate your fireplace, the wall switch will override any commands given by the remote.
6. The module has the capability to recognize potential malfunctions. If these occur, it will fail to ignite and/or respond to a command to ignite via the wall switch and/or optional remote. In this case, the module may have gone into LOCK-OUT mode. In this state, it will emit a RED/GREEN LED error code. To reset the error code, switch the selector to OFF, and then back to REMOTE or ON. If the ignition command again fails, the module will emit an LED error code, prior to going back into LOCK-OUT mode. Contact your dealer for service if this occurs.

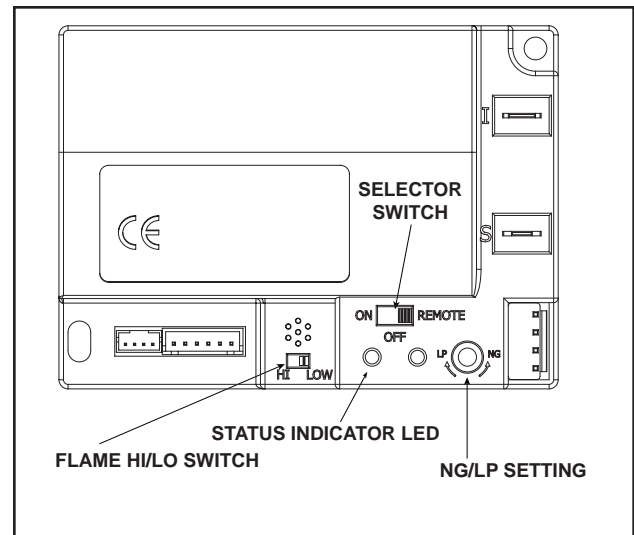


Figure 39. Control Module

2.4 REMOTE CONTROL OPERATION

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

- Installation and use of any damaged system component.
- Modification of the system component.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

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

Fireplace Specific Information

Standard fireplace features vary. Consult the installation manual for available options.

The included **AUX300CE** receiver provides additional features: Fan control and two Aux functions.

The **RC300AU** remote control system functions include: On/Off, Thermostat Mode, Timer Countdown, and Flame Adjustment (for fireplaces with variable flame).

Kit Contents

RC300AU

- RC300AU Transmitter
- AAA Batteries (3)
- Wall Holder
- Drywall Anchor (2)
- Screws (2)

Introduction

The RC300AU multifunctional remote control is designed to control pilot light, flame height, blower speed, and up to two 220-240VAC auxiliary functions on your gas fireplace. The RC300AU is equipped with thermostat functions which can automatically control the temperature in the room in which it is installed. The control is only for use with the Hearth & Home Technologies IntelliFire Plus™ system (IPI). The AUX300CE module is rated for 220-240VAC, 50-60 Hz, and is required for operation of this remote control device.

Installation Precautions

The installation of this remote control must be performed by a qualified service technician. This remote control is tested and safe when installed in accordance with this installation manual. Do not install any components that may be damaged.

Do not modify, disassemble, or substitute any of the components included with this kit. Installation of this unit must be done by a qualified service technician.

Placement of this remote control may affect performance. An assessment of the space should be done prior to installation for optimum performance.

Determine Location

Determine the location for the remote control. The selected location should be in the same space as the gas fireplace. Never place this unit in a separate room. The remote control must be placed within 30 feet (9.14 m) of the fireplace but should not be exposed to extreme heat.

The RC300AU is approved for interior installation and should not be used in exterior applications.

- Keep remote control out of reach of children.

FCC Requirements

WARNING! Risk of Fire! Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules and EN298 for multi-functional control. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Contact the dealer or an experienced radio TV technician for help.

Changing Temperature Scale

To change the temperature display between Celsius and Fahrenheit, remove the battery cover from the back of the remote control and slide the switch to your desired temperature scale (see Figure 40). The screen will automatically change the indicators on the room temperature and set temperature portion.

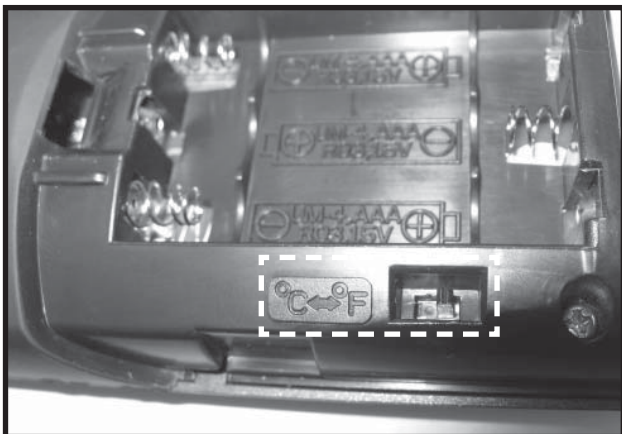


Figure 40. Temperature Scale

Installation of Remote Control Housing

CAUTION! Risk of Fire! DO NOT install damaged or modified components. Warranty will be voided if damaged or modified components are installed.

1. Remove remote control components from packaging.
2. Remove battery cover from the back of the remote by sliding it down and install 3 AAA batteries.

To prevent unintended operation when not using your fireplace for an extended period of time (summer months, vacation, trips, etc):

- Remove batteries from remote control.
 - Unplug switching adapter and remove back-up batteries.
3. Secure the remote control housing on a flat wall surface using the two screws and wall anchors provided. See Figure 41.

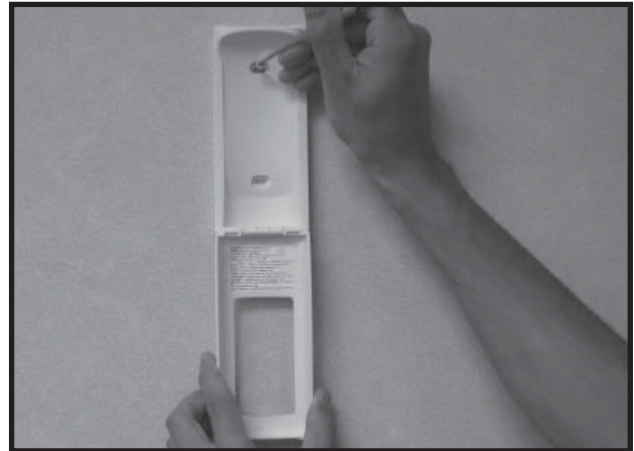


Figure 41. Mounting Remote Control Housing

4. Place remote control inside housing. See Figure 42.



Figure 42. Remote in Housing

5. Close the housing door. See Figure 42.



Figure 43. Mounting Remote Control Housing

AUX300CE Module Installation

- Insert the 4 hole harness from the AUX300CE module into the 4 pin plug on the control module. See Figure 44.

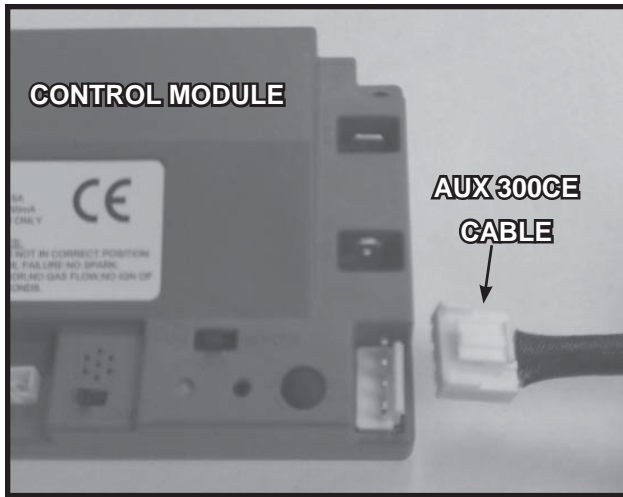


Figure 44. AUX 300 module installation

Fan Installation

- Insert the 3 prong plug from the fan into the receptacle located in the AUX300CE module. See Figure 45.
- Insert 3 prong plug from AUX300CE module into REM/AUX receptacle of fireplace junction box.

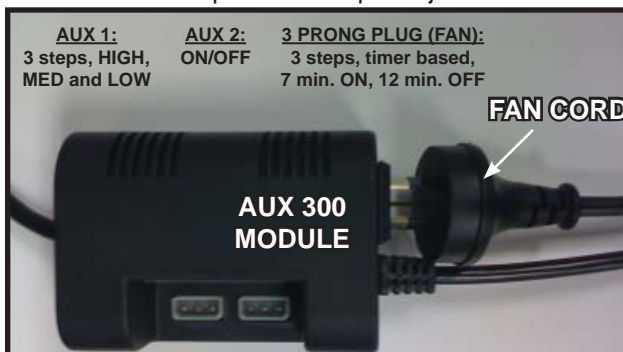


Figure 45. Plug Fan into AUX300CE Module

Programming the RC300AU to the Control Module

CAUTION! Risk of burns! DO NOT program the remote control to the control module when fireplace is hot.

- Verify the ON/OFF/REMOTE switch is in the REMOTE position. Green LED light will blink three times and the control module will beep once 5 seconds later when ready. See Figure 46.
- Using a small item (such as a paper clip) press and release the LEARN button located near the ON/OFF/REMOTE switch. See Figure 46.
- Control module will beep once and LED will blink green for 10 seconds.
- While the LED is blinking, press the POWER button on the remote control. A double beep will come out of the control module to indicate that it has been programmed successfully.

NOTICE: Up to three remote controls can be programmed into the control module. Simply press a button on the other remote controls during the 10 second programming process to add another remote into the system. It is recommended to program only one RC300AU remote control.

To clear memory in the control module, use a small item (such as a paper clip) to press and release the LEARN button. Control module will beep once and LED will blink green for 10 seconds **DO NOT** press any buttons on the remote during the ten seconds that the green LED blinks. The memory will be cleared. Note that the RC300AU will not be programmed if it's in STANDBY mode. Press the ON/OFF button twice to switch to IDLE mode.

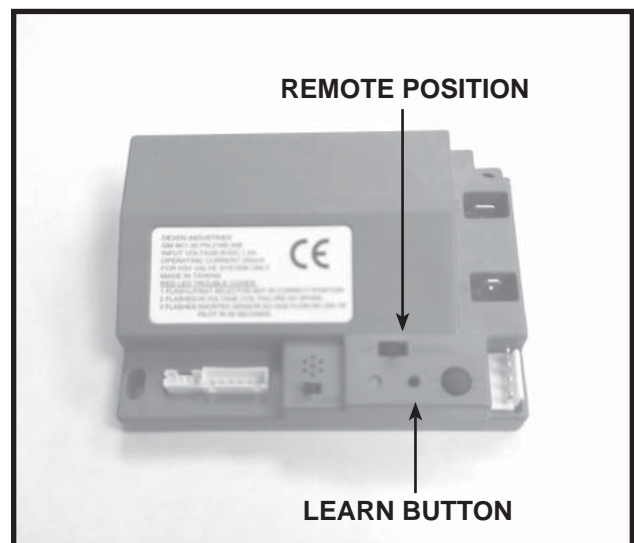
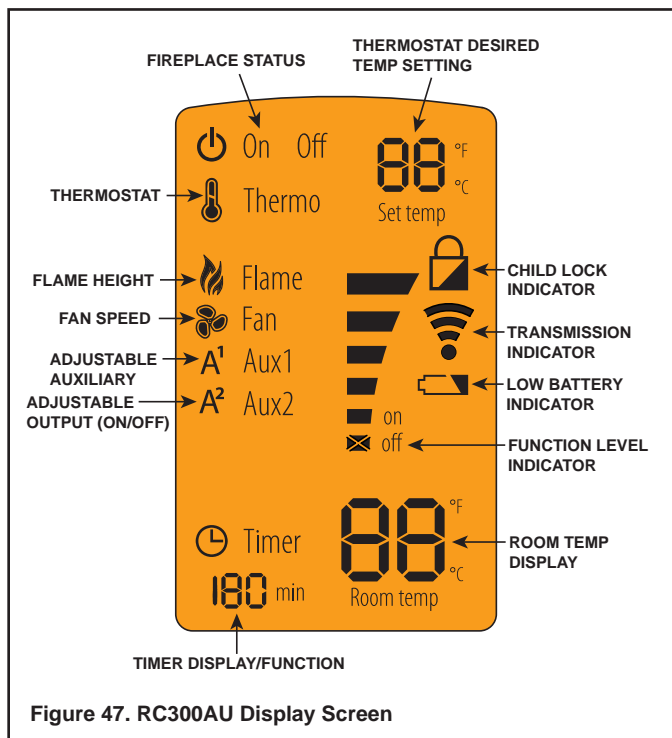


Figure 46. Programming RC300AU

Display Screen

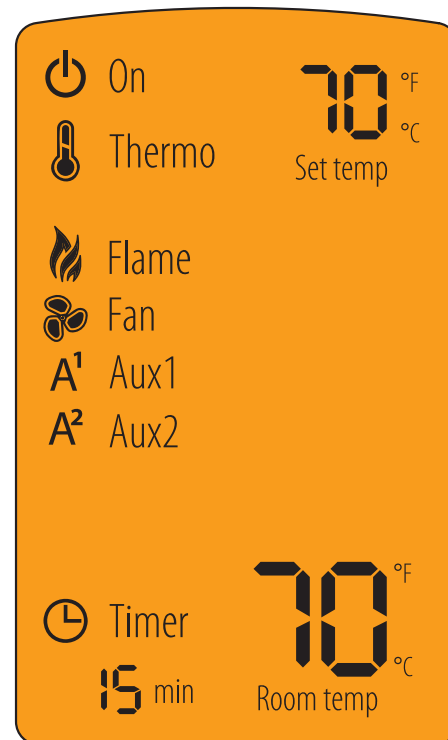


Function Buttons

- POWER** Use POWER button to turn the unit on and off.
- Menu** Use MENU button to display the menu functions. Only functions that can be activated will be displayed. *For example: Flame Height will not be displayed when the remote status is OFF.*
- Select** Use the SELECT button to select the current feature.
- UP** Use the UP and DOWN arrows to toggle through the menu functions and value selections in the submenus.
- DOWN**

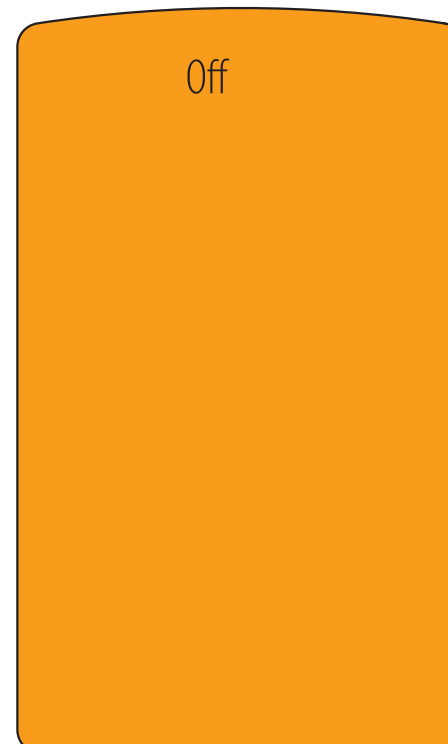
Idle When Remote is in ON Mode

The remote control will go into an idle mode if no buttons are pressed within 5 seconds. Press any button to resume full functionality. In idle mode only active functions will show on the screen.



Standby mode

The remote control will go into a standby mode if no buttons are pressed within 5 minutes. Press the POWER button to reactivate the remote control to ON mode. Active functions will be displayed



About ON Mode

- All functions can be accessed when the remote control is in the ON mode.
- Only active functions will be displayed when the remote control is in the ON mode. For example: if the fan is the only function that's active, the fan icon and flame will be the only icon shown in the display.

About OFF Mode

Only the following functions can be accessed in the OFF mode:

- AUX1
- AUX2

Only active functions will be displayed when the remote control is in the OFF mode.

Turning ON the Fireplace

- Press and hold the POWER button for 5 seconds to unlock remote, back light will illuminate. Press the POWER button again to turn the fireplace ON. The fireplace will first ignite the pilot. The main burner will be lit, once the pilot flame has been established. The remote will be locked again when the fireplace is turned OFF.

NOTICE: Whenever the fireplace is cycled from OFF to ON, the main burner will light on high for 10 seconds before returning to the previous user setting.

Adjusting Flame Height

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **FLAME** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to adjust the **FLAME HEIGHT**, then press **SELECT**. The **FLAME HEIGHT** can be adjusted to 5 different settings.

NOTICE: FLAME HEIGHT will not be adjustable for first ten seconds when fireplace is turned on.

NOTICE: The system will remember the previous FLAME HEIGHT setting and will automatically adjust after 10 seconds.

Adjusting Fan Speed

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **FAN** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to adjust the **FAN SPEED**, then press **SELECT**. The **FAN SPEED** can be adjusted to 3 different settings: HIGH, MEDIUM, LOW.

NOTICE: The fan has a timer built into the control module. After the fireplace is turned ON the timer will wait for 7 minutes before turning on the fan. In addition, the fan will remain on for 12 minutes after the fireplace has been turned OFF.

NOTICE: Whenever the fan is turned ON, the FAN will start up on the high setting for 10 seconds before adjusting to the previous user setting.

AUX1 Function (Unit dependent Function)

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **AUX1** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to adjust the **AUX1** output, then press **SELECT**. The **AUX1** function can be adjusted to 4 different settings: HI, MED, LOW and OFF.

AUX2 Function (Unit dependent Function)

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **AUX2** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to turn the **AUX2 ON** or **OFF**, then press **SELECT**. The **AUX2** function can be either be turned **ON** or **OFF**.

NOTICE: When the fireplace is turned OFF both AUX1 and AUX2 will be turned off. The AUX1 and AUX2 functions can be activated from the remote's OFF mode, when the flame is off. When the fireplace is turned back ON, the AUX1 and AUX2 settings will be restored to the previous setting.

Adjusting Thermostat

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **THERMO** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to turn the **THERMO ON** or **OFF**, then press **SELECT** (the **SET TEMP** will start blinking). Using the **UP** and **DOWN** arrows select the desired temperature and press **SELECT**.

NOTICE: If the **THERMO** function is on, the **SET TEMP** can be adjusted at any time by pressing the **UP** and **DOWN** arrows.

NOTICE: As the **ROOM TEMP (RT)** approaches **SET TEMP (ST)**, the remote system will automatically adjust the flame height. If the **RT** rises above **ST**, the fireplace will shut down the main burner. After this, the fireplace will turn back on after the **RT** drops below the **ST**.

NOTICE: The system will remember the previous **TEMPERATURE** setting when **THERMOSTAT** mode is cycled **ON** or **OFF**.

NOTICE: If your installation includes an optional wired **ON/OFF** wall switch, it should be in the **OFF** position when using the **RC300AU** in thermostat mode.

Adjusting Timer

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **TIMER** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to turn the **TIMER ON** or **OFF**, then press **SELECT**. Using the **UP** and **DOWN** arrows select the desired set time and press **SELECT**. Timer operates in increments of 15, 30, 45, 60, 90, 120 and 180 minutes.

Setting the Child Lock

- Press and hold the **MENU** and **UP** arrow buttons simultaneously for 4 seconds to enable or disable the child lock feature.

NOTICE: No functions will be usable until child lock feature is disabled.

Power Outage

- If fireplace battery backup system **IS** installed at time of power outage, fireplace operation will not be interrupted.
- If fireplace battery backup system **IS NOT** installed at time of power outage, fireplace will shut off. To resume fireplace operation, install battery backup.

NOTICE: Battery polarity must be correct or module damage will occur.

Manual Fireplace Shutoff

In the unlikely event that the remote wall switch malfunctions and will not turn off the fireplace, call your dealer for service assistance. In the meantime, you may choose one of the following actions to turn off the fireplace:

CAUTION! Risk of burns! Fireplace surfaces are hot when operating and during cool down. Use care and wear gloves when opening the front and accessing components inside the fireplace.

Check remote screen for battery level indicator, replace the batteries if low battery is indicated. See Figure 47. ←

Turn off the control module:

- Open or remove the decorative front to access the control module.
- Move switch to **OFF**. See Figure 39. ←

Disconnect power to the control module:

- Open or remove the decorative front to access power cord to the junction box and/or back-up batteries.
- Unplug the control module and/or remove back-up batteries.

Shut off gas to the appliance:

- Open or remove the decorative front and locate the gas shut-off valve to the left of the gas control.
- Rotate the shut off valve 90 degrees to turn off gas supply.

Turn off power to the fireplace (if back-up batteries are not installed):

- Locate house circuit breaker for fireplace.
- Turn off the circuit breaker.

3.0 SERVICING AND MAINTENANCE

1. **HEATER SERVICING:** Frequency of heater servicing will depend upon use and type of installation.
2. **IMPORTANT:** TURN OFF GAS BEFORE SERVICING APPLIANCE. IT IS RECOMMENDED THAT A COMPETENT SERVICE TECHNICIAN PERFORM SERVICE CHECK-UPS AT THE BEGINNING OF EACH HEATING SEASON.
3. The appliance and flue system should be inspected before initial use and at least annually by a qualified field service person.
4. Inspect the external flue cap on a regular basis to make sure that no debris is interfering with the air flow.
5. Keep the control compartment, logs, and burner area surrounding the logs clean by vacuuming or brushing at least twice a year.

CAUTION: THE LOGS GET VERY HOT - HANDLE ONLY WHEN COOL.



WARNING: DO NOT USE ABRASIVE CLEANERS ON THE GLASS DOOR ASSEMBLY. DO NOT ATTEMPT TO CLEAN THE GLASS DOOR WHEN IT IS HOT.

6. The glass door should be cleaned using a household glass cleaner. **DO NOT** handle or attempt to clean the glass when it is **HOT**.
7. Visually inspect the flexible power supply cord; if damaged, contact the service agent for a special replacement cord assembly.

8. In order to properly clean the burner and pilot assembly, turn off the gas to the unit and remove the logs exposing the burner and pilot assembly. Clean all foreign materials from top of burner. Check to make sure that the burner orifice is clean.
9. Visually inspect the pilot periodically. Brush or blow away any dust or linen accumulations. If the pilot orifice is plugged, disassembly may be required to remove any foreign materials from the orifice or tubing. When the appliance is put back in service, check burner flame patterns. Flames should be steady, not floating.

To obtain proper operation, it is imperative that the pilot and main burner flame characteristics are steady, not lifting or floating. Typically, the top 3/8 inch of the thermocouple should be engulfed in the pilot flame (See Figure 48).

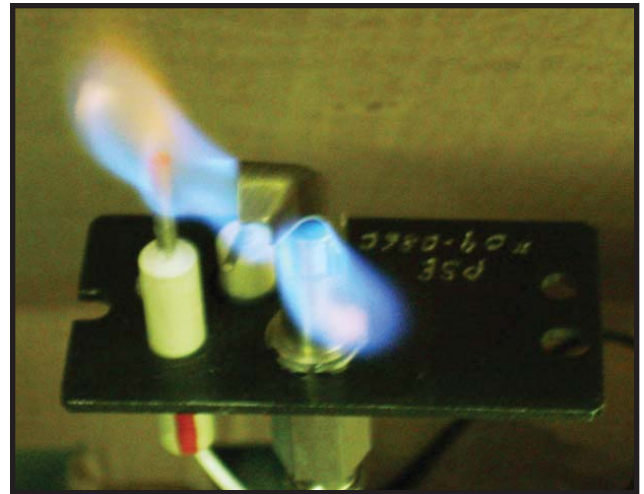


Figure 48

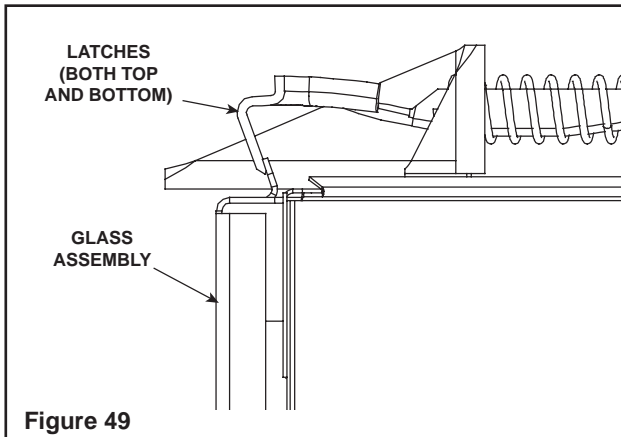
3.1. REMOVAL OF COVERS FOR SERVICING

A. Control Compartment Access Door

- Rotate the bottom door down to access the gas controls.

B. Trim door and Glass Door

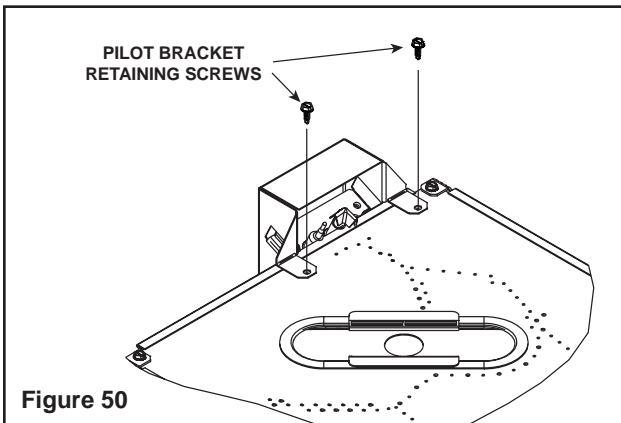
- Lift the front trim door up and out away from the appliance side surrounds. Replace the door when servicing is complete.
- Note carefully how the glass assembly is held in place. Release the four spring latches at the bottom and top of the glass door. Carefully lift the glass up and out away from the appliance. See Figure 49.



3.2. REMOVAL OF COMPONENTS FOR SERVICE

A. Burner

- Remove the logs and grate.
- Remove the cover plates at the ends of the burner.
- Remove the four retaining screws in the burner corners. Remove two pilot bracket retaining screws (see Figure 50.) Slide the burner away from the burner orifice.



CAUTION: ALL SCREWS WHICH WERE REMOVED MUST BE REPLACED.

B. Pilot Assembly/Ignition System

- Remove the log set, log grate, base pan and burner.
- Disconnect the gas supply tube from the underside of the gas valve.
- Disconnect the ignition cable and thermocouple retaining nut.
- Unscrew the pilot assembly bracket and remove.

3.3 PARTS REPLACEMENT

A. Fan/Switches

- Unplug the fan wires from the junction box wires by pulling the male and female connectors apart and slide the fan out the front of the lower controls compartment.
- Disconnect the wires from the fan speed control switch, pull off the knob and remove the nut holding the speed control to the bracket.
- Disconnect the wires from the fan temperature sensor switch and remove the nut holding the switch bracket onto the side of the firebox.

3.4 ADJUSTMENTS AND REPLACEMENT PARTS

Adjustments and replacement parts for this appliance should only be done by a qualified service person. A wiring diagram for the appliance is shown in **SECTION 2.0 OPERATING INSTRUCTIONS**. A replacement part table is shown in **SECTION 4.0** of this manual.

3.5. MAINTENANCE TASKS

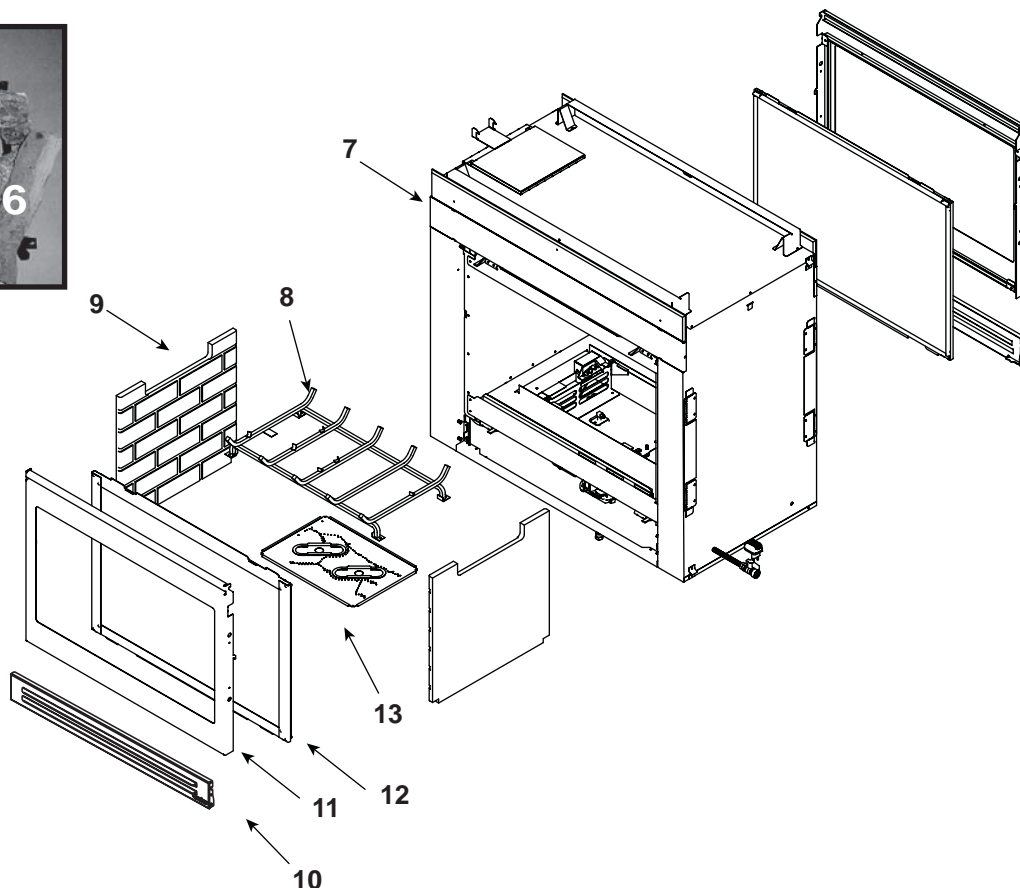
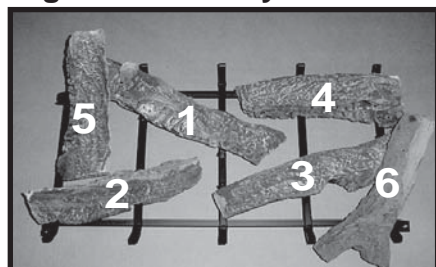
Inspect	Maintenance Tasks
Doors	1. Inspect for scratches, dents or other damage and repair as necessary.
	2. Verify no obstructions to airflow.
	3. Verify maintenance of proper clearance to combustible household objects.
Gasket Seal, Glass Assembly and Glass	1. Inspect gasket seal and its condition.
	2. Inspect glass panels for scratches and nicks that can lead to breakage when exposed to heat.
	3. Confirm there is no damage to glass or glass frame. Replace as necessary.
	4. Verify that latches engage properly, clip studs are not stripped, and glass attachment components are intact and operating properly. Replace as necessary.
	5. Clean glass. Replace glass assembly if severely coated with silicate deposits that cannot be removed.
Valve Compartment and Firebox Top	1. Vacuum and wipe out dust, cobwebs, debris or pet hair. Use caution when cleaning these areas. Screw tips that have penetrated the sheet metal are sharp and should be avoided.
	2. Remove any foreign objects.
	3. Verify unobstructed air circulation.
Logs	1. Inspect for broken, damaged, or missing logs. Replace as necessary.
	2. Verify correct log placement and no flame impingement causing sooting. Correct as necessary.
Firebox	1. Inspect for paint condition, warpage, corrosion or perforation. Sand and repaint as necessary.
	2. Replace appliance if firebox has been perforated.
Burner Ignition and Operation	1. Verify burner is properly secured and aligned with pilot or igniter.
	2. Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.
	3. Replace ember materials with new dime-size and shape pieces. Do not block ports or obstruct lighting paths.
	4. Check for smooth lighting and ignition carryover to all ports. Verify there is no ignition delay.
	5. Inspect for lifting or other flame problems.
	6. Inspect orifice for soot, dirt or corrosion.
	7. Verify manifold and inlet pressures. Adjust regulator as required.
	8. Inspect pilot flame strength. Clean or replace orifice as necessary.
	9. Inspect thermocouple/thermopile or IPI sensor rod for soot, corrosion and deterioration. Clean with emery cloth or replace as required.
Flueing	1. Inspect venting for blockage or obstruction such as bird nests, leaves, etc.
	2. Confirm that termination cap remains clear and unobstructed by plants, etc.
	3. Verify that termination cap clearance to subsequent construction (building additions, decks, fences or sheds) has been maintained.
	4. Inspect for corrosion or separation.
	5. Verify weather stripping, sealing and flashing remains intact.
Remote controls	1. Verify operation of remote.
	2. Replace batteries in remote transmitters and battery-powered receivers.

3.6 TROUBLESHOOTING

IntelliFire Plus™ Ignition System

Symptom	Possible Cause	Corrective Action
1. Pilot won't light. The ignitor/module makes noise, but no spark.	A. Incorrect wiring.	Verify "S" wire (white) for sensor and "I" wire (orange) for ignitor are connected to correct terminals on module and pilot assembly.
	B. Loose connections or electrical shorts in the wiring.	Verify no loose connections or electrical shorts in wiring from module to pilot assembly. Verify connections underneath pilot assembly are tight; also verify igniter and flame sense wires are not grounding out to metal chassis, pilot burner, pilot enclosure, mesh screen if present, or any other metal object.
	C. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .17 in. or 1/8 in. (3 mm).
2. Pilot won't light, there is no noise or spark.	A. No power, transformer installed incorrectly, or depleted batteries.	Verify that transformer is installed and plugged into module. Check voltage of transformer at connection to module. Acceptable readings of a good transformer are between 6.4 and 6.6 volts AC. Battery power supply voltage must be at least 4 volts. If below 4 volts, replace batteries.
	B. A shorted or loose connection in wiring configuration or wiring harness.	Remove and reinstall the wiring harness that plugs into module. Verify there is a tight fit. Verify pilot assembly wiring to module. Remove and verify continuity of each wire in wiring harness. Replace any damaged components.
	C. Improper wall switch wiring.	Verify that 110/VAC power is "ON" to junction box.
	D. Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.
3. Pilot sparks, but Pilot will not light.	A. Gas supply.	Verify that incoming gas line ball valve is "open". Verify that inlet pressure reading is within acceptable limits.
	B. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .17 in. or 1/8 in. (3 mm).
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.
	D. Pilot valve solenoid	Verify that 1.5 to 1.8 VDC is supplied to pilot solenoid from module. If below 1.5 volts, replace module. If 1.5 volts or greater, replace valve.
4. Pilot lights but continues to spark, and main burner will not ignite. (If the pilot continues to spark after the pilot flame has been lit, flame rectification has not occurred.)	A. A shorted or loose connection in flame sensing rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify flame sense or igniter wires are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
	B. Poor flame rectification or contaminated flame sensing rod.	With fixed glass assembly in place, verify that flame is engulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. With a multi-meter, verify that current in series between module and sense lead is at least 0.14 microamps. Verify correct pilot orifice is installed and gas inlet is set to pressure specifications. Clean flame sensing rod with emery cloth to remove any contaminants that may have accumulated on flame sensing rod.
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance. Verify that wire harness is firmly connected to the module.
	D. Damaged pilot assembly or contaminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Clean flame sensing rod with emery cloth to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multi-meter with ohms set at lowest range. Replace pilot if any damage is detected.

Log Set Assembly

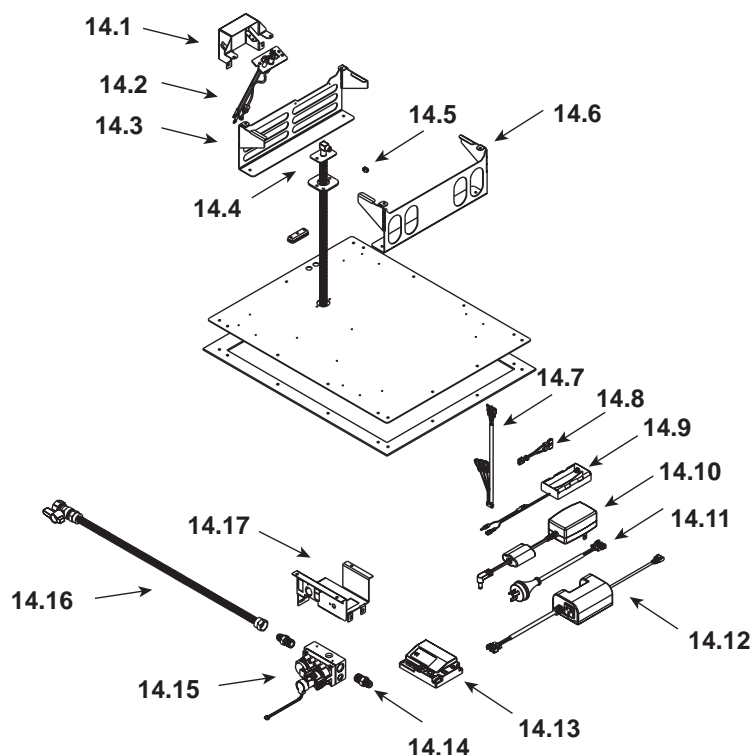


IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual may be ordered from an authorized dealer.

ITEM	DESCRIPTION	COMMENTS	PART NUMBER
	Log Set Assembly		LOGS-ST-CE
1	Log #1		SRV2068-700
2	Log #2		SRV2068-701
3	Log #3		SRV2068-702
4	Log #4		SRV2068-703
5	Log #5		SRV2068-703
6	Log #6		SRV582-705
7	Insulation Board		2005-272
8	Grate		2068-020
9	Side Refractory		SRV2005-730
10	Lower Door		2082-042
11	Dress Guard		2068-040
12	Glass Door Assembly		GLA-6TRXI
13	Burner Assembly N		2082-011
	Burner Assembly P		2082-013

Additional service part numbers appear on following page.

#14 Valve Assembly



IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual may be ordered from an authorized dealer.

ITEM	DESCRIPTION	COMMENTS	PART NUMBER
14.1	Pilot Bracket		2082-118
14.2	Pilot Assembly N, 24"		2198-014
	Pilot Assembly P, 24"		2198-015
14.3	Burner Support		2082-112
14.4	Flexible Gas Connector		530-302A
14.5	Orifice N (#30C)		582-830
	Orifice P (#49C)		582-849
14.6	Burner Leg		2082-113
14.7	Wire Harness		2166-304
14.8	Jumper Wire		2187-198
14.9	Battery Pack**		4067-223
14.10	Transformer		2166-305
14.11	Jumper to Fan		2166-375
14.12	Aux 300 CE		2166-340
14.13	Module, Gray		2166-306
14.14	Male Connector	Pkg of 5	303-315/5
14.15	Valve N		2166-302
	Valve P		2166-303
14.16	Gas Shutoff Assembly		2098-034
14.17	Valve Bracket		2118-104

**Fuse for battery pack can be sourced locally, not a warranty item. Specs are 500mA~10A 3/4" long

Additional service part numbers appear on following page.

Service Parts List

ST-HVBI-AUB

IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual may be ordered from an authorized dealer.

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Limited Lifetime Warranty

Hearth & Home Technologies Inc. LIMITED LIFETIME WARRANTY

Hearth & Home Technologies Inc., on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet, coal and electric hearth appliances that are purchased from an HHT authorized dealer.

WARRANTY COVERAGE:

HHT warrants to the original owner of the HHT appliance at the site of installation, and to any transferee taking ownership of the appliance at the site of installation within two years following the date of original purchase, that the HHT appliance will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. HHT, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

WARRANTY PERIOD:

Warranty coverage begins on the date of original purchase. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized HHT dealer/ distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from HHT, regardless of the installation or occupancy date. The warranty period for parts and labor for covered components is produced in the following table.

The term "Limited Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood, pellet, and coal appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

Warranty Period		HHT Manufactured Appliances and Venting							Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Coal	Electric	Venting	
1 Year		X	X	X	X	X	X	X	All parts and material except as covered by Conditions, Exclusions, and Limitations listed
2 years				X	X	X			Igniters, electronic components, and glass
		X	X	X	X	X			Factory-installed blowers
			X						Molded refractory panels
3 years				X					Firepots and burnpots
5 years	1 year			X	X				Castings and baffles
7 years	3 years		X	X	X				Manifold tubes, HHT chimney and termination
10 years	1 year	X							Burners, logs and refractory
Limited Lifetime	3 years	X	X	X	X	X			Firebox and heat exchanger
90 Days		X	X	X	X	X	X	X	All replacement parts beyond warranty period

See conditions, exclusions, and limitations on next page.

Limited Lifetime Warranty (*continued*)

WARRANTY CONDITIONS:

- This warranty only covers HHT appliances that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the HHT appliance remains at the site of original installation.
- Contact your installing dealer for warranty service. If the installing dealer is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.

WARRANTY EXCLUSIONS:

This warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period. These parts include: paint, wood, pellet and coal gaskets, firebricks, grates, flame guides, light bulbs, batteries and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the appliance in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the appliance; (2) failure to install the appliance in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operating instructions; (7) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the appliance.
- Non-HHT venting components, hearth components or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
- HHT's obligation under this warranty does not extend to the appliance's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

This warranty is void if:

- The appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The appliance is subjected to prolonged periods of dampness or condensation.
- There is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

LIMITATIONS OF LIABILITY:

- The owner's exclusive remedy and HHT's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state. EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.

For Service or Replacement Parts Contact:

Melbourne

Jetmaster
444 Swan Street
Richmond 3121
(03) 9429-5573

Perth

Fireplace Corner
277 Lord Street
East Perth 6000
(08) 9228-2600

Sydney

Jetmaster
10 Martin Avenue
Arncliffe 2205
(02) 9597-7222

This product may be covered by one or more of the following patents: (United States) 5328356, 5601073, 5613487, 5647340, 5890485, 5941237, 5947112, 5996575, 6006743, 6019099, 6053165, 6145502, 6170481, 6374822, 6484712, 6601579, 6769426, 6863064, 7077122, 7098269, 7258116, 7470729 or other U.S. and foreign patents pending.

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