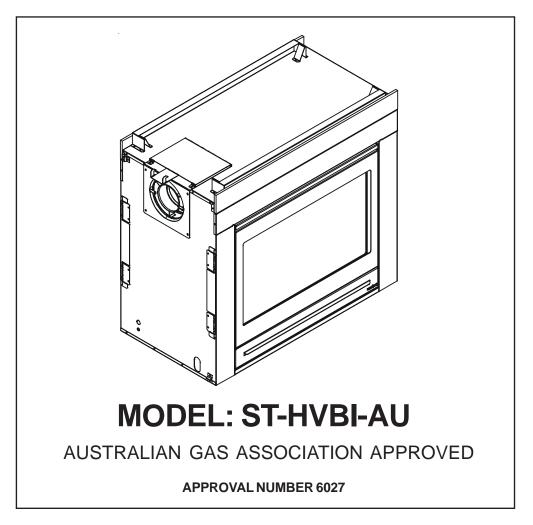


Where everything comes together

INSTALLATION AND OPERATION INSTRUCTIONS



THIS MANUAL MUST BE USED FOR INSTALLATION AND RETAINED BY HOMEOWNER FOR OPERATION AND MAINTENANCE.

HEAT & GLO, a brand of Hearth & Home Technologies Inc. 20802 Kensington Blvd., Lakeville, MN 55044, USA • (952) 985-6000

THIS PRODUCT MAY BE COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408; (Australia) 543790;586383; (Mexico) 97-0457; (New Zealand) 200265; or other U.S. and foreign patents pending.



Where everything comes together

PLEASE READ THIS MANUAL BEFORE INSTALLING AND USING THIS APPLIANCE.

MODEL ST-HVBI-AU
IS AUSTRALIAN GAS ASSOCIATION
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 manufacturer's instructions. Appliance is to be installed in full compliance with the National Gas Installation Standard AS5601, the manufacturer's instructions, and any local authorities' requirements for gas, electrical and building regulations.

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. Read all instructions before starting installation and follow these in-

structions 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, not withstanding 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.

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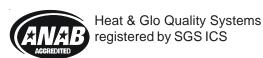


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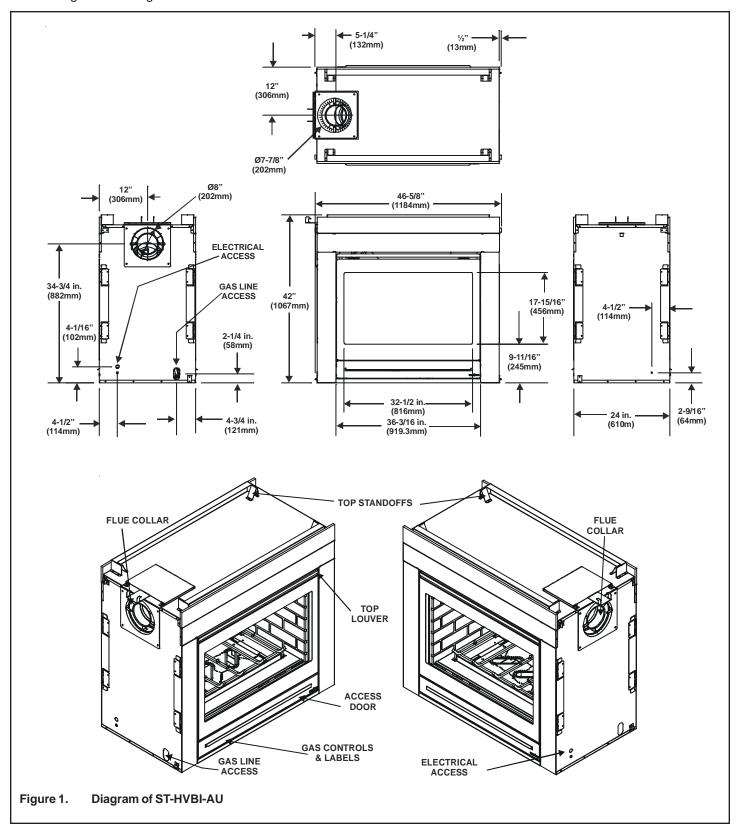
1.0 INSTALLATION INSTRUCTIONS

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

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

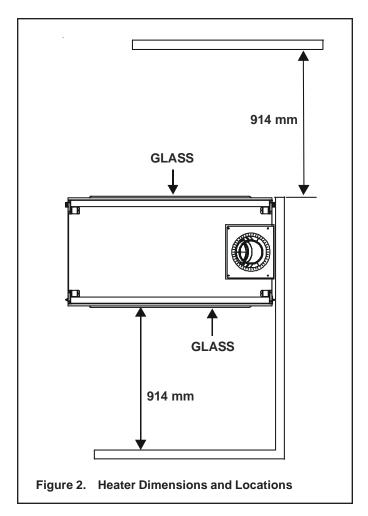
• Whether optional accessories—devices such as wall switch, or remote control—are desired.

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.



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 standoffs. The minimum clearance to a perpendicular wall extending past the face of the heater is 25 mm (1 inch). The metal ends of the heater may **NOT** be recessed into combustible construction.

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	
Тор	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).			

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		
Vertical Sections	<u>mm</u> 25	<u>Inches</u> 1
Horizontal Sections Top Bottom Sides	25	1
At Wall Firestops Top Bottom Sides	13	1/2

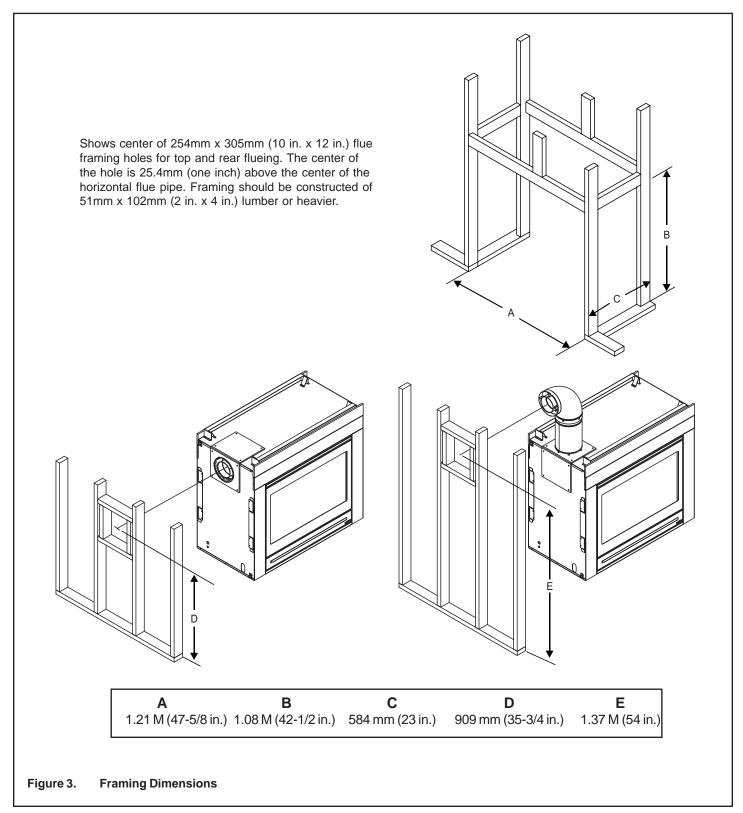
For minimum clearances, see the direct flue termination clearance diagrams on pages 6 and 7 in this manual.

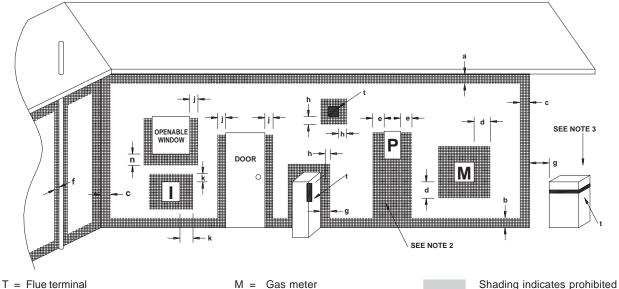
1.2 Framing the Heater

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 (12.7MM) (THICK WALL COVERING MATERIALS ON EXTERIOR OF FRAMING ONLY AND NO SHEETROCK ON INTERIOR OF FRAMING.





I = Mechanical air inlet

Electricity meter

areas for flue terminals

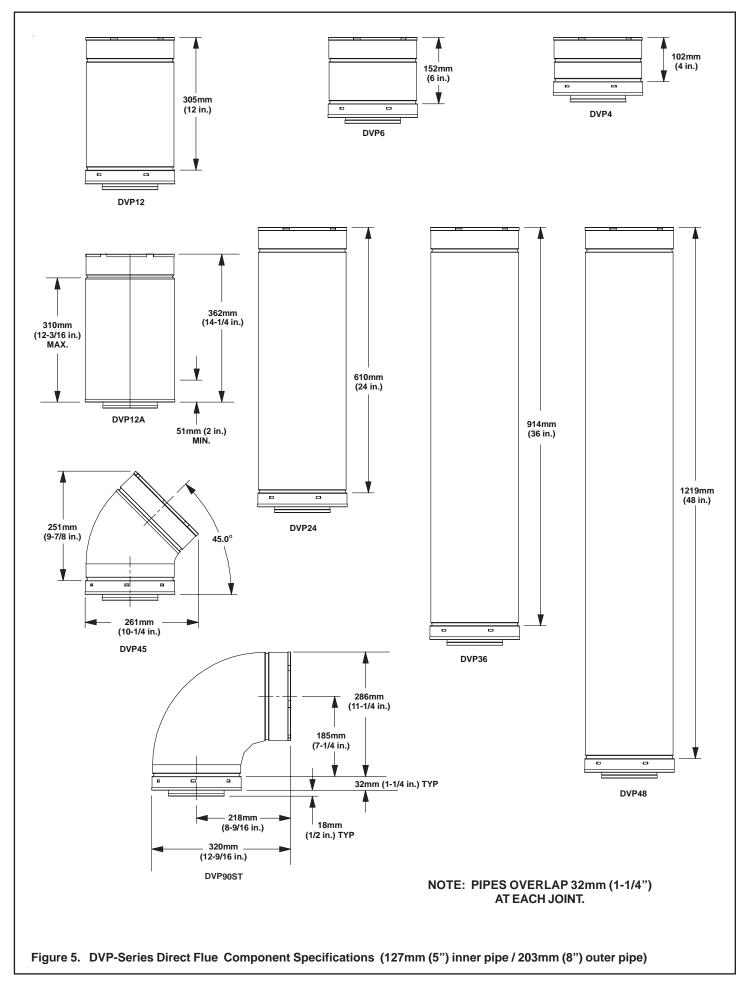
а	-	Below eaves, balconies or other projections:	MIN. CLEARANCE (mm)
		Appliances up to 50 MJ/h input	300
		Appliances over 50 MJ/h input	500
b	-	From the ground or above a balcony	300
С	-	From a return wall or external corner	500
d	-	From a gas meter (M)	1000
е	-	From an electricity meter or fuse box (P)	500
f	-	From a drain or soil pipe	150
g	-	Horizontally from any building structure (unless appliance approved	
		for closer installation) or obstruction facing a terminal	500
h	-	From any other flue terminal, cowl, or combustion air intake	500
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 input	500
		Appliances over 150 MJ/h input	1500
k	-	From a mechanical air inlet, including a spa blower	1500
n	-	Vertically below an openable window, non-mechanical air	
		inlet or any other opening into a building, with the exception of	
		sub-floor ventilation	See table below

CLEARANCES				
Space Heaters	All other Appliances			
Up to 50 MJ/h Input	Up to 50 MJ/h Input	Over 50 MJ/h and up to 150 MJ/h Input	Over 1 50 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.



→ 1.3 Flue Sytem 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.

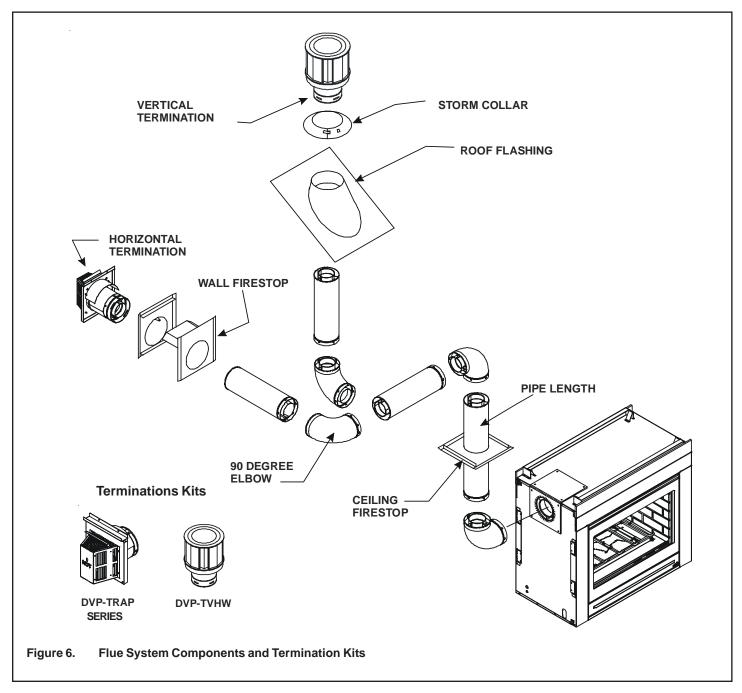
Detailed installation instructions are included with each flue termination kit and should be used in conjunction with this *Installers Guide*.

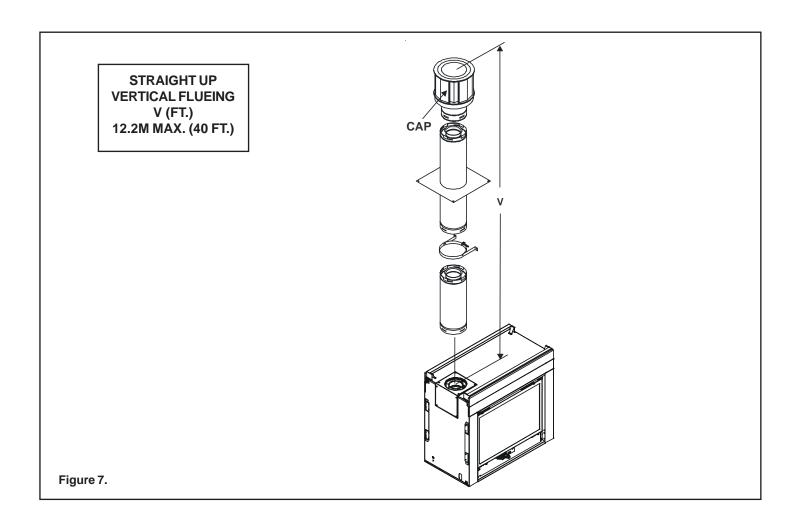
The flame and ember appearance may vary based on the type of fuel burned and the flueing configuration used.

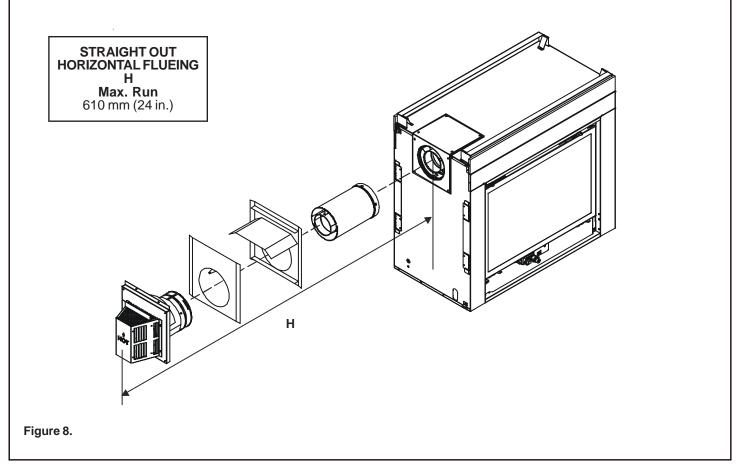
Identifying Flue Components

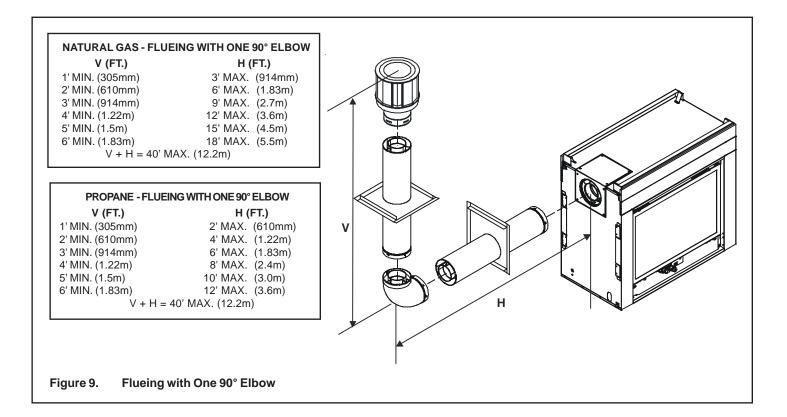
The flue systems installed on this gas heater may include one, two, or three 90° elbow assemblies. The relationships of vertical rise to horizontal run in flue configurations using 90° elbows **MUST BE** strictly adhered to. The rise to run relationships are shown in the flueing drawings and tables.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

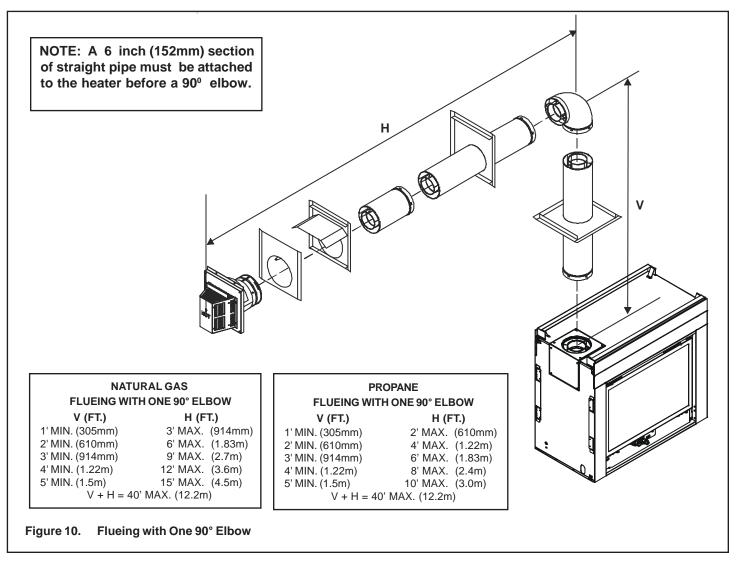
This model has a 45° elbow included with it. It may be positioned to flue either horizontal or vertical. Depending on the installation, decide which direction the elbow should be facing. Remove the 8 screws from the corner cover plate. Position the 45° elbow as desired and replace the corner cover plate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

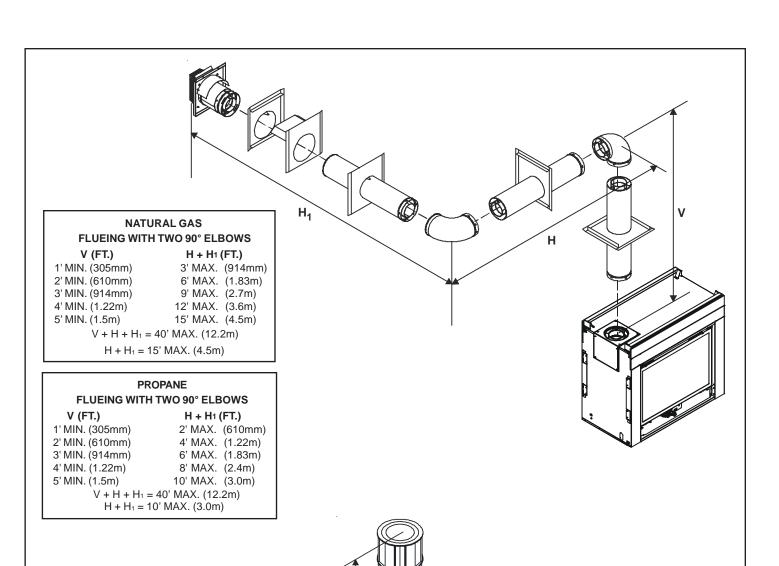












NATURAL GAS FLUEING WITH TWO 90° ELBOWS

V + V ₁ (FT.)	H (FT.)	
1' MIN. (305mm)	3' MAX. (914mm)	
2' MIN. (610mm)	6' MAX. (1.83m)	
3' MIN. (914mm)	9' MAX. (2.7m)	
4' MIN. (1.22m)	12' MAX. (3.6m)	
5' MIN. (1.5m)	15' MAX. (4.5m)	
$V + V_1 + H = 40^\circ$	MAX. (12.2m)	

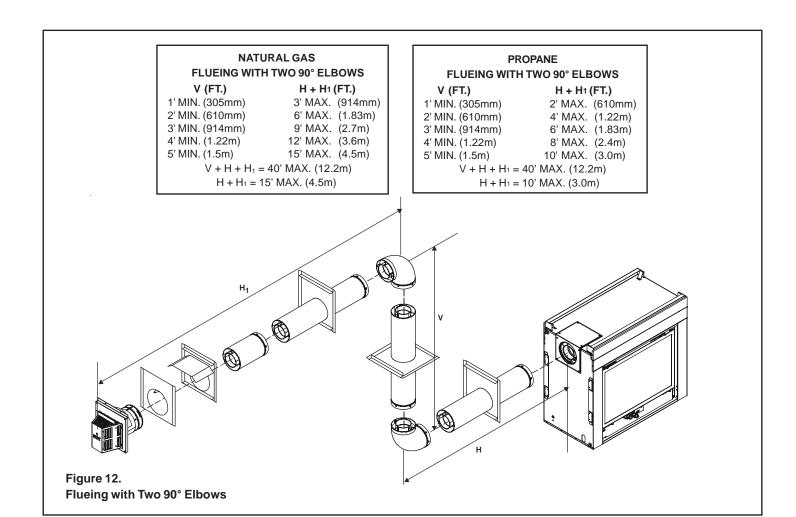
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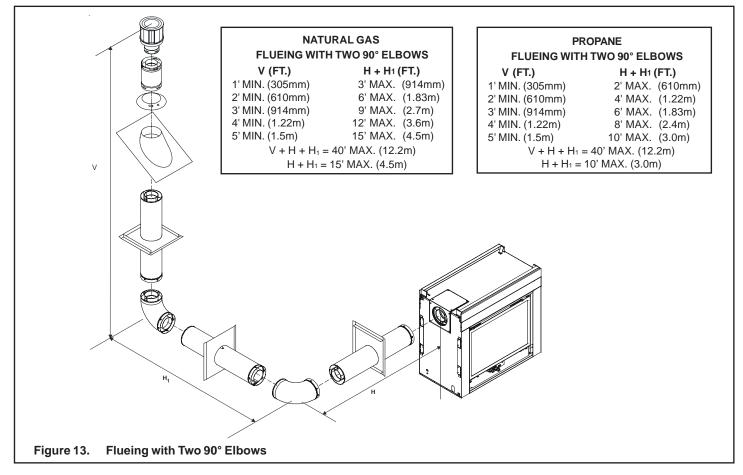
FLUEING WITH TWO 90° ELBOWS

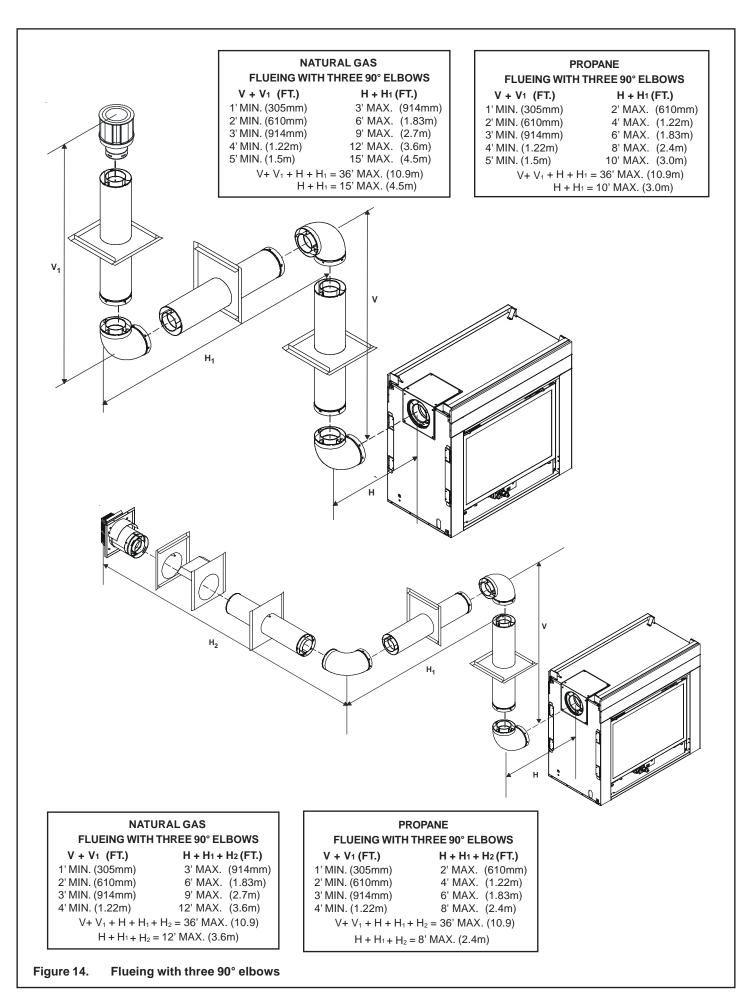
$V + V_1$ (FT.)	H (FT.)
1' MIN. (305mm)	2' MAX. (610mm)
2' MIN. (610mm)	4' MAX. (1.22m)
3' MIN. (914mm)	6' MAX. (1.83m)
4' MIN. (1.22m)	8' MAX. (2.4m)
5' MIN. (1.5m)	10' MAX. (3.0m)
$V + V_1 + H = 4$	0' MAX. (12.2m)

Figure 11. Flueing with Two 90° Elbows









NATURAL GAS FLUEING WITH THREE 90° ELBOWS

 V + V1 (FT.)
 H + H1 (FT.)

 1' MIN. (305mm)
 3' MAX. (914mm)

 2' MIN. (610mm)
 6' MAX. (1.83m)

 3' MIN. (914mm)
 9' MAX. (2.7m)

 4' MIN. (1.22m)
 12' MAX. (3.6m)

 $V+ V_1 + H + H_1 = 36' MAX. (10.9m)$ $H + H_1 = 12' MAX. (3.6m)$

PROPANE

FLUEING WITH THREE 90° ELBOWS

V + V1 (FT.)

1' MIN. (305mm)

2' MIN. (610mm)

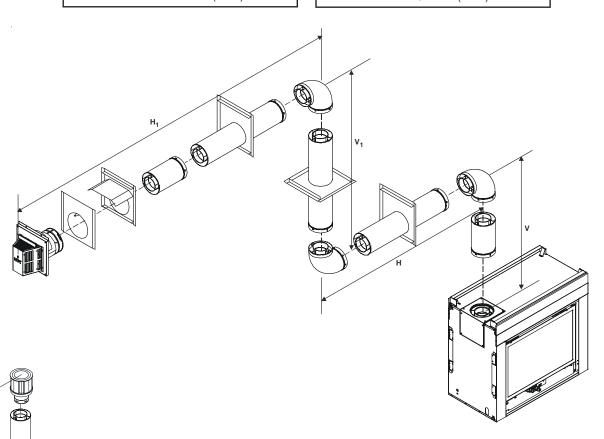
3' MIN. (914mm)

4' MIN. (1.22m)

4' MIN. (1.22m)

V+ V₁ + H + H₁ = 36' MAX. (10.9m)

H + H₁ = 8' MAX. (2.4m)



NATURAL GAS FLUEING WITH THREE 90° ELBOWS

 V + V1 (FT.)
 H + H1 (FT.)

 1' MIN. (305mm)
 3' MAX. (914mm)

 2' MIN. (610mm)
 6' MAX. (1.83m)

 3' MIN. (914mm)
 9' MAX. (2.7m)

 4' MIN. (1.22m)
 12' MAX. (3.6m)

 5' MIN. (1.5m)
 15' MAX. (4.5m)

 V+ V₁ + H + H₁ = 36' MAX. (10.9m)

 H + H₁ = 15' MAX. (4.5m)

PROPANE

FLUEING WITH THREE 90° ELBOWS

 V + V1 (FT.)
 H + H1 (FT.)

 1' MIN. (305mm)
 2' MAX. (610mm)

 2' MIN. (610mm)
 4' MAX. (1.22m)

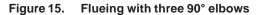
 3' MIN. (914mm)
 6' MAX. (1.83m)

 4' MIN. (1.22m)
 8' MAX. (2.4m)

 5' MIN. (1.5m)
 10' MAX. (3.0m)

 V+ V1 + H + H1 = 36' MAX. (10.9m)

 H + H1 = 10' MAX. (3.0m)



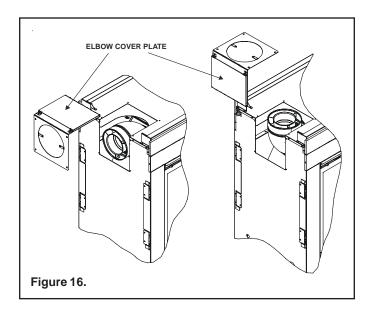
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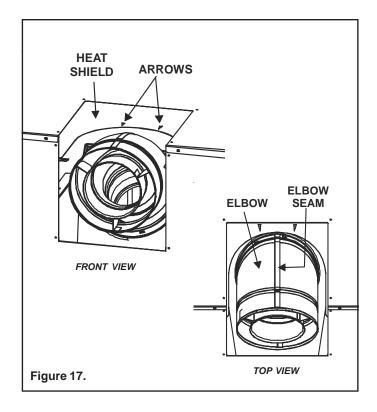
B. Installing Flue Components

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.





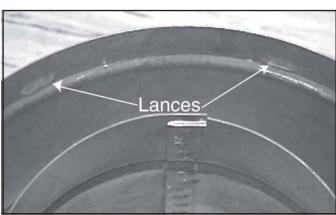


Figure 18.



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.

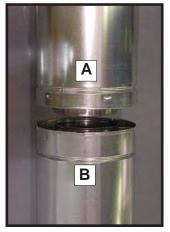
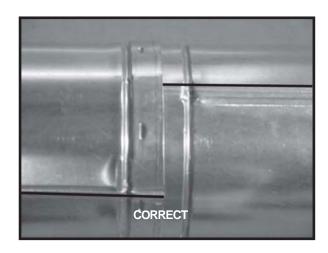


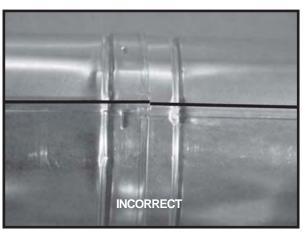


Figure 19.

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.





Note: Make sure that the seams are not aligned to prevent unintentional disconnection.

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-TRAP does not need an exterior firestop on an exterior combustible wall. The firestop is built into the cap.

To install firestops for horizontal runs that pass through either interior or exterior walls:

Cut a 10" x 12" (254mm X 305mm) hole through the wall.

NOTE: The center of the hole is one (1) inch (25.4mm) 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 top of the hole.
- Continue the flue run through the firestops.

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

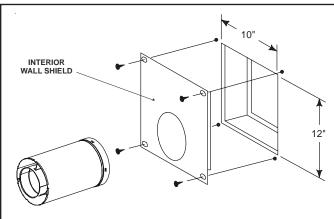
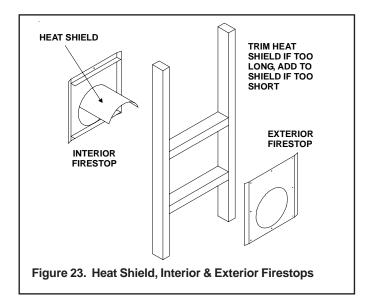


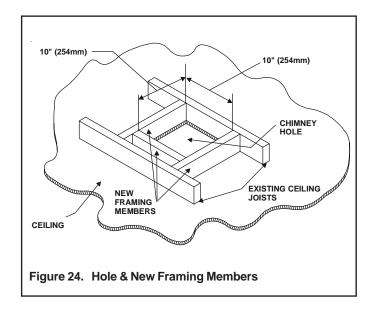
Figure 22. 10" x 12" Hole and Flue Pipe



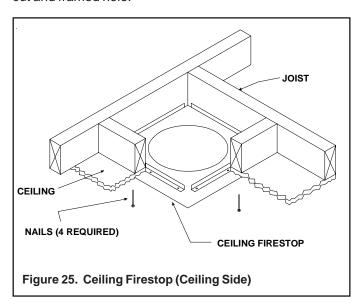
For Vertical Runs - One ceiling firestop is **REQUIRED** at the hole in each ceiling through which the flue passes.

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 centerpoint.
- 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 an 10-inch X 10-inch (254mm x 254mm) hole through the ceiling, using the centerpoint previously marked.
- Frame the hole with framing lumber the same size as the ceiling joists.



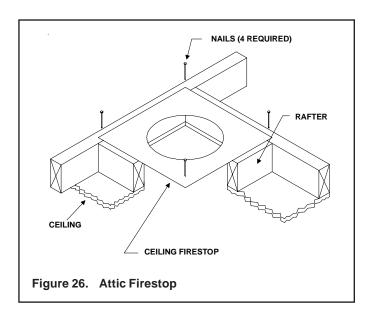
If the area above the ceiling is **NOT** an attic, position and secure the ceiling firestop on the ceiling side of the previously cut and framed hole.



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 25mm.

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

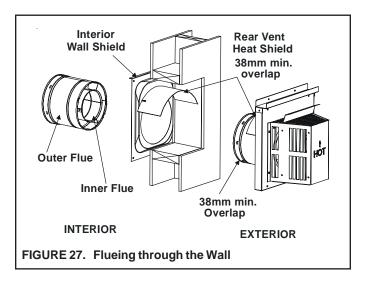


WARNING: FLUEING TERMINALS SHALL NOT BE RECESSED INTO A WALL OR SIDING. FLUE TERMINATION CLEARANCES MUST BE FOLLOWED TO AVOID FIRE DANGER.

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).



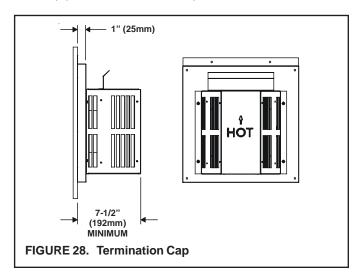
• The termination kit should pass through the wall firestops from the exterior of the building.

 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.



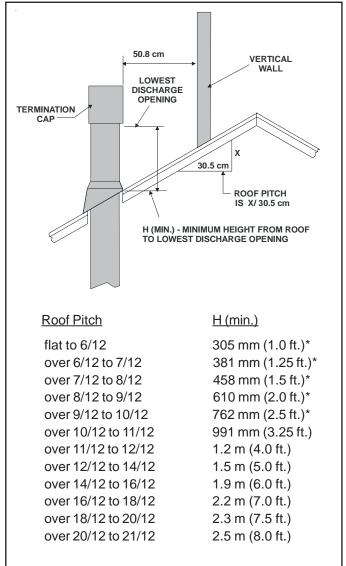
For Vertical Terminations - To locate the flue and install the flue sections:

- Locate and mark the flue centerpoint on the underside of the roof, and drive a nail through the centerpoint.
- Make the outline of the roof hole around the centerpoint nail.
- The size of the roof hole framing dimensions depend on the pitch of the roof. There MUST BE a 25.4mm 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 (for inside flue installations) or up past the roof line until you reach the appropriate distance above the roof (for outside terminations).

WARNING: FOLLOWING NATIONAL REG-ULATIONS 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.

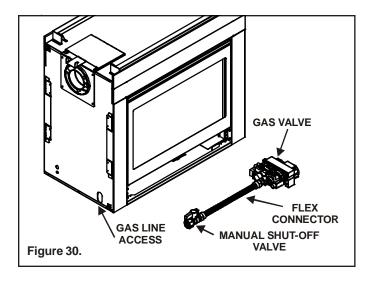
To seal the roof hole, and to divert rain and snow from the flue system:

- Attach a flashing to the roof using nails, and use a nonhardening mastic 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 mastic 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.



* 91.4

Figure 29. 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 30). 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 fireplace is equipped with an electronic ignition system which operates on a 6 volt system.
- This appliance requires 240 VAC to be wired to the factory installed junction box. Maintain correct polarity when wiring the junction box.



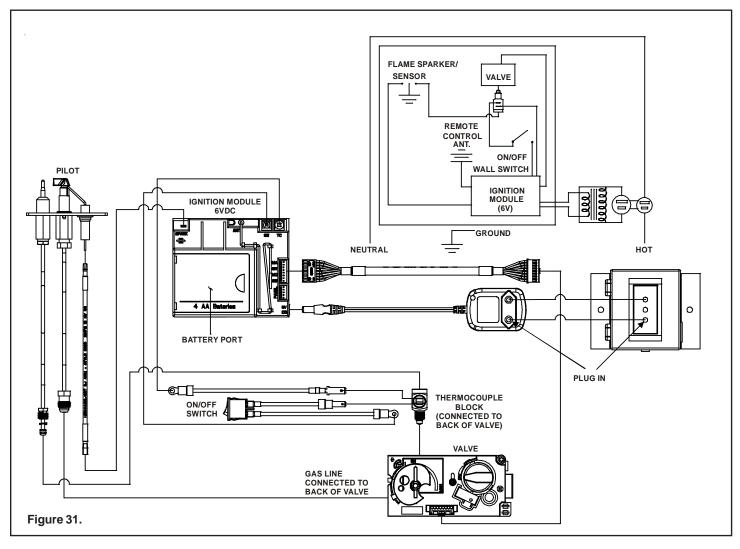
WARNING

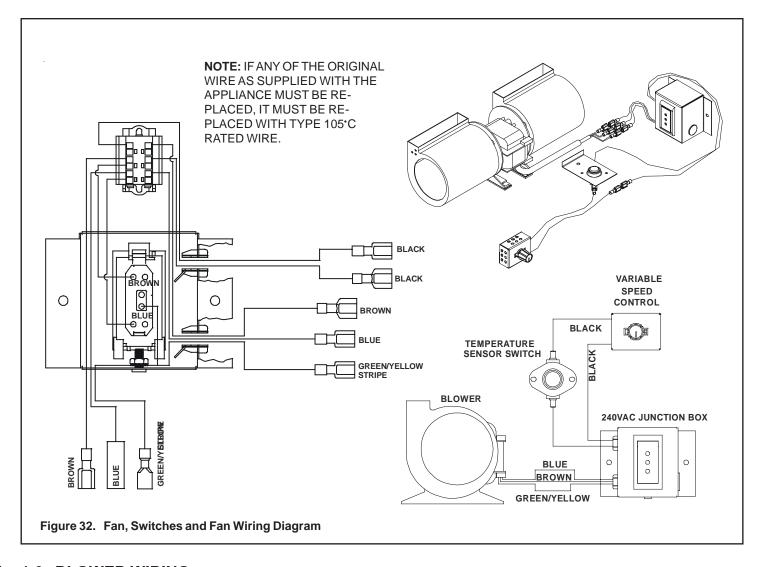
Shock Risk

- 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.



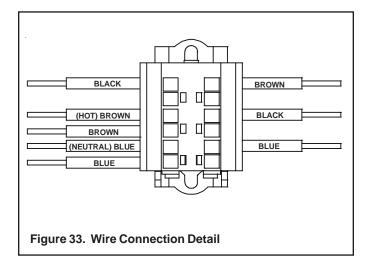


→ 1.6 BLOWER WIRING

These heaters have a factory installed fan, electrical junction boxes, variable speed rheostat control switch and temperature sensor switch for the fan. These components are located behind the lower grille.

Use of the fan requires that the junction box (factory installed) be connected to 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 unit. Figure 32 shows the fan, switches, and fan wiring diagram. Figure 33 shows the wire connection detail.

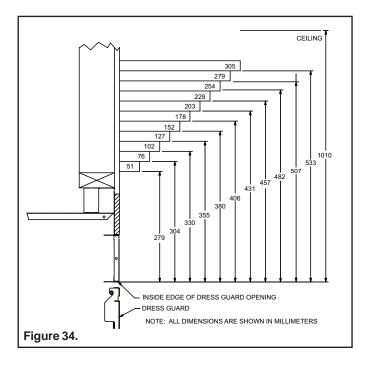
NOTE: If the supply cord is damaged, it must be replaced by the manufacturer, an authorized service agent, or a similarly qualified person in order to avoid a hazard.

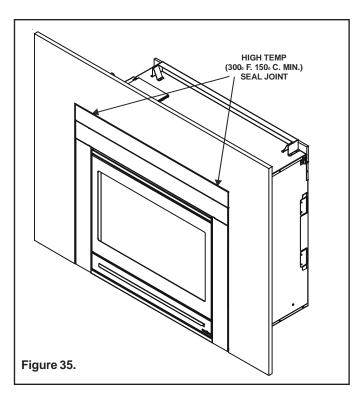


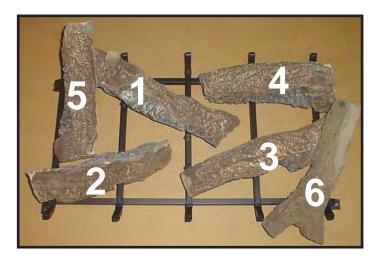
1.7 MANTEL CLEARANCES

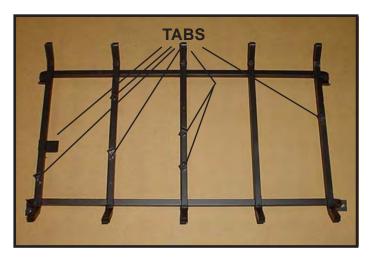
Clearance to a mantelpiece is 279 mm. See Figure 34.

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 35).



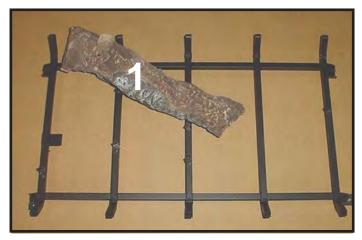






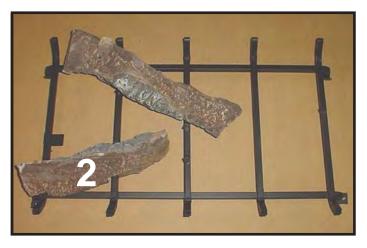
CAUTION: Logs are fragile. Carefully remove the log packages from the heater and the tags from their packages. Handle logs gently. Place the logs in the heater by following the steps shown. Replace the glass door and dress guard previously removed prior to lighting the unit. Be certain the gas logs are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





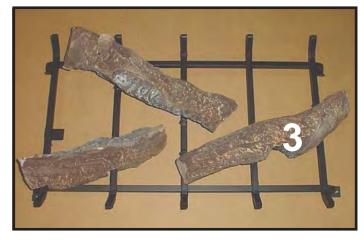
LOG #1 (SRV2068-700): Place log #1 behind grate tabs on the second and third grate bars on the left rear corner. Position so that the bottom grooves fit over bars and the log is snug against the grate tabs.





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

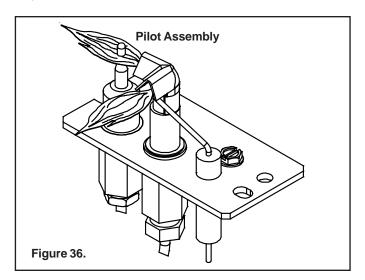
The space heater must be tested and be operating according to manufacturers specifications prior to the installer leaving the site. Note: the tips of the flames should never hit the top of the firebox after the unit has warmed up. Please contact your dealer or a qualified service person to replace injector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

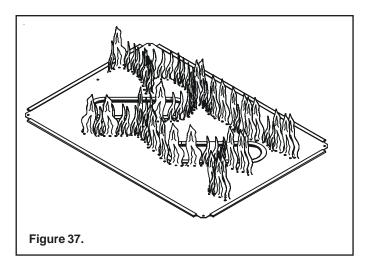
Upon completing the gas line connection, a small amount of air will be in the lines. When first lighting the pilot light, it will take a few minutes for the lines to purge themselves of this air. Once the purging is complete, the pilot and burner will light and operate as indicated in the Lighting Instructions.

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 (9.5mm) of the flame sensor rod should be engulfed in the pilot flame (see Figure 36).





Burner flame patterns are shown in Figure 37.

Follow TROUBLESHOOTING section for adjusting the appliance to operate properly.

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.

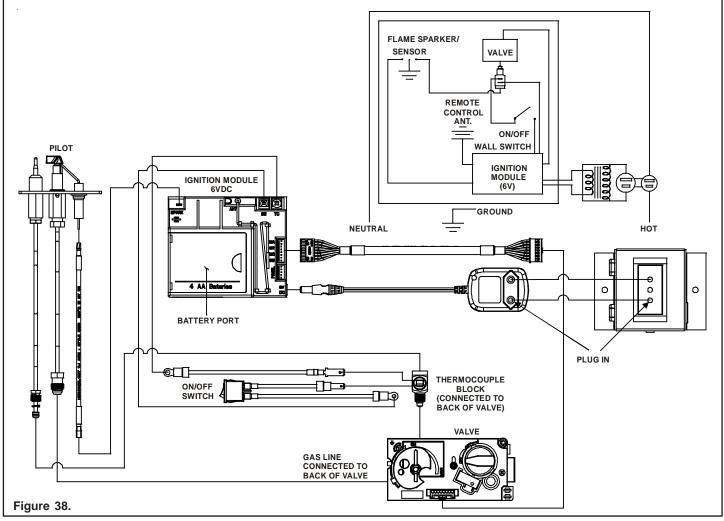
The control system for this model employs an electronic pilot ignition. It consists of a 6V gas control valve/variable regulator, an electronic module, a thermocouple and a remote control. The controls are located in the lower compartment behind the lower door, and access is gained by lifting the door up. See Figure 1.



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.



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 IN-STRUCTIONS** 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.

After the unit has warmed up (i.e. approximately 15 minutes) flame height should be slightly (about 2" [51mm]) below the top of the mesh trim assembly. If the flame height is higher than this, adjustments must be made to prevent overheating the gasket and glass. Please contact your dealer or a qualified service person to replace the injector or adjust the valve.

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

These gas models have remote control valve which allow you to increase or decrease the height of the main burner flames. Push the ▲ button to increase the flame height and the ▼ button to decrease the flame height.

☐ 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 electronic ignition device which automatically lights the burner. Do not try to light the burner by hand.

WHAT TO DO IF YOU SMELL GAS

· Do not try to light any appliance.

WARNING:

DO NOT CONNECT 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.

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

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 panel(s) removed, cracked or broken. Replacement of the panel(s) should be done by a licensed or qualified service person.

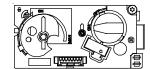
NOT FOR USE WITH SOLID FUEL

For use with natural, propane and butane gases.

LIGHTING INSTRUCTIONS

 This gas fireplace is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.

> GAS VALVE



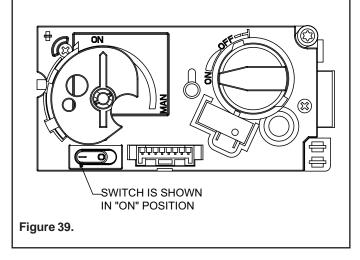
- 2. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the Safety Information located on the left side of this label. If you don't smell gas, go to next step.
- 4. If the gas fireplace will not operate, check the batteries then follow the instructions "To Turn Off Gas to Appliance" and call your service technician or gas supplier.

GAS TO APPLIANCE

- 1. Push the "OFF" button on remote.
- 2. Remove power from receiver.

2.3 POWER OUTAGE

In the event of a power interruption during operation, either push the OFF button on the remote control or open access door and push the switch to OFF (as shown in Figure 39) to shut off manually. The switch must be returned to the ON position prior to operation once power is restored.



2.4 FAN OPERATION

The accessory fan is wired in series with a speed control switch and a temperature sensor switch. Set the speed control to an "ON" position and light the heater. The temperature sensor switch will automatically start the fan when the switch warms up—and stop the fan when it cools down. You can manually stop the fan by turning the speed control switch to "OFF". See Figure 32 for fan wiring diagram.

3.0 SERVICING AND MAINTENANCE

- 1. **HEATER SERVICING:** Frequency of heater servicing will depend upon use and type of installation.
- IMPORTANT: TURN OFF GAS BEFORE SERVICING APPLIANCE. IT IS RECOMMENDED THAT A COMPE-TENT 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.

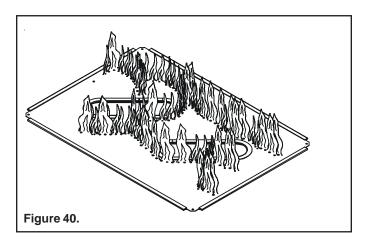
CAUTION: THE LOGS GET VERY HOT - HANDLE ONLY WHEN COOL.



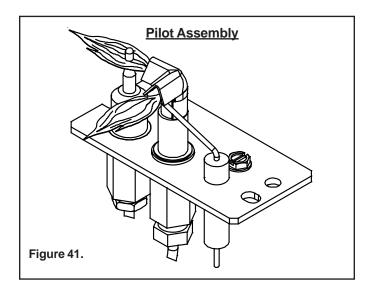
WARNING: DO NOT USE ABRASIVE CLEAN-ERS ON THE GLASS DOOR ASSEMBLY. DO NOT ATTEMPT TO CLEAN THE GLASS DOOR WHEN IT IS HOT.

- The glass door should be cleaned using a household glass cleaner. **DO NOT** handle or attempt to clean the glass when it is **HOT**.
- 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.

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 with Figure 40.



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 41).



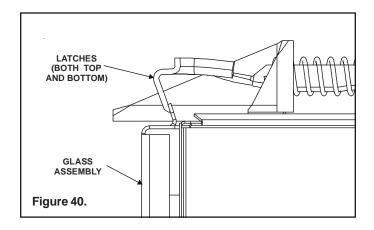
3.1 REMOVAL OF COVERS FOR SERVICING

A. Control Compartment Access Door

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

B. Trim door and Glass Door

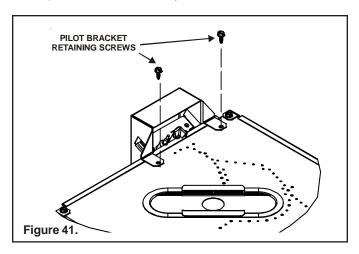
- Lift the front trim door up and out away from the appliance side surrounds. Replace the door when servicing is complete.
- Note carefully how the glass assembly is held in place.
 Release the four spring latches at the bottom and top of the glass door. Carefully lift the glass up and out away from the appliance. See Figure 40.



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 41.) 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	1. Inspect gasket seal and its condition.
Assembly and Glass	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	 Inspect for paint condition, warpage, corrosion or perforation. Sand and repaint as necessary.
	2. Replace gas fireplace if firebox has been perforated.
Burner Ignition and Operation	1. Verify burner is properly secured and aligned with pilot or igniter.
Operation	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.
	8. Inspect pilot flame strength. Clean or replace orifice as necessary.
	9. Inspect thermocouple 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

With proper installation and maintenance, your Gas Heater should provide years of trouble-free service. If you experience a problem, refer to the Troubleshooting Guide below. This guide will assist a qualified service person in the diagnosis of problems and the corrective action to be taken.

Electronic Ignition System

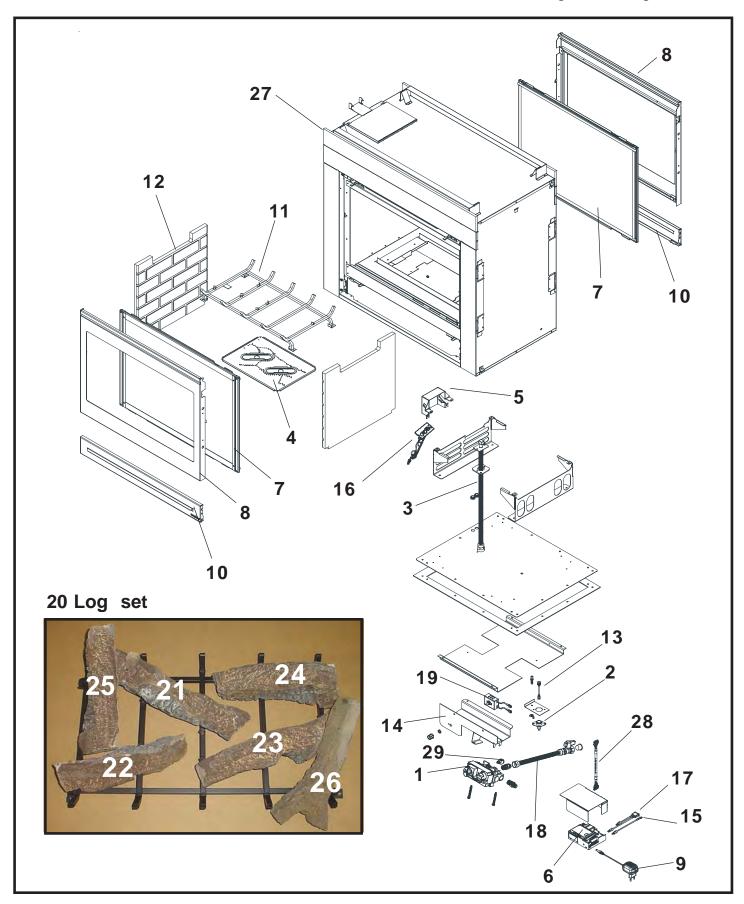
Symptom	Possible Causes	Corrective Actions
1. No transmission, motor does not turn.	a. Receiver must learn new code.	Press and hold the receiver's reset button until you hear 2 acoustic signals. After the second longer acoustic signal, release the reset button and within the subsequent 20 seconds, press the down arrow on the remote handset until you hear an additional long acoustic signal confirming the new code is set.
2. No ignition. No tone.	a. Receiver	Replace receiver and reprogram code.
3. No ignition; one 5 seconds continuous tone (7 shorts	a. ON/OFF switch is in OFF position.	Push switch to ON position.
beeps might be heard prior to the 5 seconds tone).	b. Loose wire.	Secure wire.
,	c. Receiver.	Replace receiver and reprogram.
	d. Bent pins on 8 wire connector.	Straighten pins on 8 wire connector.
	e. Valve.	Replace valve.
4. No pilot flame and control	a. Air in the pilot supply line.	Purge the line or start ignition several times.
continues to spark.	b. Thermocouple circuit wired incorrectly.	Check polarity of the thermocouple wires.
	c. No spark at pilot burner	Check spark gap, check wiring connection. Check for spark in location along cable.
	d. Valve.	Replace valve. Do not over tighten.
	e. Over tightened thermocouple interrupter.	Replace valve and thermocouple interrupter.
	f. Receiver.	Replace receiver and reprogram code.
5. Pilot is lit and control continues to spark. Valve shuts off after 10 to30 seconds. Valve operates manually.	a. Receiver.	Replace receiver and reprogram code.
6. Pilot is lit, sparking stops if	a. Thermocouple.	Replace thermocouple.
a flame is present. Valve shuts off after 10 to 60 seconds. Valve does not work manually.	b. Low inlet pressure to valve.	Confirm sufficient inlet pressure to the valve. Adjust or replace inlet regulator if necessary.
The state of the s	c. Valve.	Replace valve and the thermocouple interrupter.
7. 3 short beeps while the motor turns.	a. Batteries are low.	Replace batteries - quality alkaline recommended. WARNING: Creating an electrical short between the batteries/battery box and metal parts of the appliance may render the receiver inoperable.
8. Pilot flame lights but there is no main gas flow.	a. Manual override know (if equipped) is in MAN position.	Turn Manual override know to ON position.
	b. Valve turned don to pilot flow.	Turn flame to high fire by pressing up button on remote handset.
	c. Low inlet pressure to valve.	Confirm sufficient inlet pressure to the valve.
9. Pilot sparks, but pilot will not light.	a. Correct gas supply.	Verify that incoming gas line ball valve is "open". Verify that inlet pressure reading is within acceptable limits, inlet pressure must not exceed 50 mbar.
	b. Ignitor gap is too large.	Verify that spark gap from ignitor to pilot hood is .43 cm.
	c. Module is not grounded.	Verify module is securely grounded to metal chassis of fireplace.

Electronic Ignition System - (continued)

Symptom	Possible Causes	Corrective Actions
10. Glass soots.	a. Flame impingement on logs.	Adjust the log set so that the flame does not impinge on it.
	b. Improper venturi setting.	Adjust the air shutter at the base of the burner.
	c. Debris around venturi.	Inspect the opening at the base of the burner. It is imperative that NO material be placed in this opening.
11. Flame burns blue and lifts off burner.	Insufficient oxygen being supplied.	Check to make sure flue cap is installed properly and free of debris. Make sure that flue system points are tight and have no leaks.
		2. Check to make sure that no material has been placed in the opening at the burner base or in the area of the air holes in the center of the base pan beneath the burne.
		3. Be sure glass is tighened properly on unit, particularly on top corners.

Where everything comes together (NG, LP) Exploded Parts Diagram

Beginning Manufacturing Date: 4/06 Ending Manufacturing Date: _____



Service Parts List ST-HVBI-AU

IMPORTANT: When ordering, supply serial and model numbers to ensure correct service parts.

ITEM	PARTS	PART NUMBER
1	Valve NG	2098-136
	Valve LP	2098-137
2	Temperature Sensor	046-530
3	Flexible Gas Connector	530-302A
4	Burner Assembly NG	2082-011
7	Burner Assembly LP /BU	2082-013
5	Pilot Bracket	2082-118
6	Control Module	2098-142
7	Glass Door Assembly	GLA-6TRXI
8	Dress Guard	2068-040
9	6 Volt Transformer	2098-144
10	Lower Door	2082-041
11	Grate	2068-020
12	Side Refractory	SRV2005-730
13	Male/Female Wire Harness (20 in).	107-558A
14	Valve Bracket	2082-103
15	Block Control Wire	2098-148
16	Pilot Assembly NG	2098-050
16	Pilot Assembly LP	2098-051
17	Switch Wire Assembly	2098-145
18	Flex Ball Valve	2078-022
19	Rheostat	491-510A
20	Log Set Assembly (Sold only as a Set)	LOGS-ST-CE
24	Log #1	SRV2068-700
22	Log #2	SRV2068-701
23	Log #3	SRV2068-702
24	Log #4	SRV2068-703
25	Log #5	SRV2068-703
26	Log #6	SRV582-705
27	Insulation Board	2005-172
28	Wire Assembly	2098-143
29	Thermocouple Block	2098-146
	Rheostat Knob	100-512
	Orifice NG	582-830
	Orifice LP	582-849
	Orifice BU	582-851
	Heat Shield, Control Module	2078-121
	Fiberglass Rope	060-455
	Blower Motor	100-505A
	Lava Rock	2005-790
	Mineral Wool	050-721
	Junction Box	2078-025
	Glass Latch Assembly	386-122A
	Power Cord	546-251A
	Accesssories	
	Multi Function Remote Control-Battery	REM-DLX-CE
	Conversion Kit NG	P2N-STHVBI-AU
	Conversion Kit LP	N2P-STHVBI-AU



LIMITED 10 YEAR WARRANTY HEAT & GLO PRODUCTS

In order to presumptively establish the dates to which your HEAT & GLO Limited Warranty runs, you must mail the completed warranty card to HEAT & GLO, a brand of Hearth & Home Technologies Inc., 20802 Kensington Blvd., Lakeville, MN 55044, USA, within 60 days of the date of the heater installation. If you fail to do so, you may be required to prove the date of installation before warranty work can be performed.

The warranty exclusions and limitations of liability are effective upon installation of the heater.

Subject to the conditions set forth herein, HEAT & GLO, a brand of Hearth & Home Technologies Inc. ("HEAT & GLO") extends the following warranty with respect to HEAT & GLO.

If HEAT & GLO is reasonably satisfied that any part or portion of the heater covered by this Limited Warranty is defective in material or workmanship under normal use and service as described in the Operating Instructions, HEAT & GLO will take the following actions:

- 1. If the defect is reported during the first year from the date of installation (stainless steel burners and fiber logs are covered for 3 years), HEAT & GLO will replace or repair the defective components at its sole expense. The decision whether to replace a component shall be made at HEAT & GLO's sole discretion. This Limited Warranty does not cover components broken during shipping, misuse or careless handling. HEAT & GLO shall be not responsible for any indirect, incidental, or consequential damages or for any costs other than those incurred by HEAT & GLO to repair or replace the defective component. If components (including venting) other than factory approved components are used, all warranty and liability on the heater is voided. Defects reported after the first year will not be covered by warranty unless they fall within the purview of paragraph 2 or 3 below.
- 2. If the following defects are reported during the second year after the date of installation, HEAT & GLO will supply replacement parts at the current wholesale price: defective electrical or manual components, optional components or accessories, and glass panels (not including glass panels broken during misuse or careless handling). HEAT & GLO shall not be responsible for any labor, transportation or other costs. Furthermore, it shall not be liable for any indirect, incidental or consequential damages.
- 3. HEAT & GLO will replace or repair a defective firebox or heat exchanger, at any time during the 10 years from the date of installation. The decision whether to replace the defective component shall be made at HEAT & GLO's sole discretion. HEAT & GLO shall not be responsible for any indirect, incidental or consequential damages or for any costs other than those incurred by HEAT & GLO to repair or replace the defective component.

This Limited Warranty is the exclusive remedy available to you. If HEAT & GLO cannot effectively resolve a warranty problem in an expedient and cost-effective manner, it can discharge its entire warranty liability by refunding the price of the product to you.

Products made by other manufacturers, whether sold with the heater or added thereafter, are NOT covered by this Limited Warranty. The use of other unauthorized components will make this warranty null and void. This Limited Warranty will also be void if the appliance is not installed by a qualified installer in accordance with the Installation Instructions. Furthermore, the Limited Warranty will be void if the heater is not operated, at all times, according to the Operating Instructions furnished with the heater. Any service work <u>must</u> be performed by authorized service representatives.

EXCEPT TO THE EXTENT PROVIDED BY LAW, NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY TO THE HEATER PRODUCT. In States that do not allow limitations on how long an implied warranty lasts, or do not allow exclusion of indirect damages, those limitations or exclusions may not apply to you. You may also have additional rights not covered in this Limited Warranty.

HEAT & GLO reserves the right to make changes at any time, without notice, in design, material, specifications and prices. It also reserves the right to discontinue styles and products.