



Aladdin Hearth Products 401 N. Wynne Colville, WA 99114 A Division of Hearth Technologies Inc.

# DV750 DIRECT VENT GAS-FIRED ROOM HEATER OWNER'S MANUAL

AND INSTALLATION INSTRUCTIONS

MODELS: DV750 NATURAL GAS DV750L PROPANE GAS

This manual must be used for installation of the DV750 Gas-Fired Room Heater and retained by the homeowner for operating and maintenance instructions.

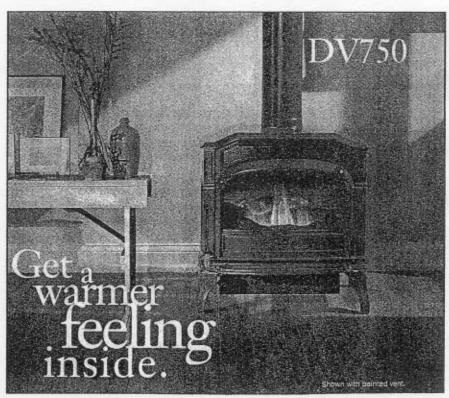
#### FOR YOUR SAFETY

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.

#### WARNING:

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information, consult a qualified installer, service agency or the gas supplier.



#### FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. This heater may be installed with a vertical or horizontal direct vent termination system.

Electrician:

Please refer to page 18 for wiring instructions.

بقم

Plumber:

Please refer to pages 8 and 17 for gas connection information.



#### PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

#### **Table of Contents**

1.	Listings and Code Approvals	3
H.	Description of the Heater System	3
III.	Heater System Components and Dimensions	4-5
IV.	Pre-Installation Preparation	8
١٧.	A. Gas Pressure	8
		8
	B. High Altitude Installation	8
V.	Step-By-Step Installation of the System	9
٧.	A. Horizontal Termination	9
	B. Vertical Termination	12
	C. Existing Masonry Chimney Installation	15
	D. Retrofit Class A Metal Chimney Installation	16
VI.	Operating lectrosticae	21
VII.	Maintenance Instructions	23
VIII.	Maintenance Instructions  Trouble Shooting	24
IX.	Trouble Shooting	25
IA.	neplacement i ano	

#### Safety Precautions

- Please read these installation instructions completely before beginning installation process.
   Failure to follow them could cause malfunction resulting in serious injury and/or property damage.
- Always check your local building codes prior to installation. This installation must comply with all local, regional, state and national codes and regulations.
- 3. Installation and repair should be done by a qualified service person. This appliance should also be inspected annually by a qualified service person. More frequent inspections/cleaning may be required if the climate is excessively dusty. It is imperative that the control compartment, burners and circulating air passage ways of the heater be kept clean.
- This appliance is a direct vent gas-fired heater.
   Do not burn wood or other material in this heater.
- NEVER leave children unattended when there is a fire burning in the appliance.
- This appliance may be vented horizontally through an outside wall or vertically above the roof line. It must not be connected to a chimney system other than the ones specified in this installation instruction.

- NEVER use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids in this appliance. Keep any flammable liquids a safe distance from the heater.
- While servicing this appliance, always shut off all electricity and gas to the appliance. This will prevent possible electrical shock or burns.
   Also, make sure the appliance is completely cooled before servicing.
- 9. During any pressure testing of the gas supply piping system that exceeds test pressures of 1/2 psig, this appliance and its individual shut-off valve must be disconnected from the piping system. If test pressures equal to or less than 1/2 psig are used in pressure testing the gas supply piping system, this appliance must be isolated from the piping system by closing its individual manual shut-off valve during testing.
- 10. 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.
- Be sure to provide adequate clearances around the air openings into the appliance and adequate accessibility clearances for servicing and proper operation.



## I. LISTINGS AND CODE APPROVALS

#### U.S. Certification

The DV750 Series Direct Vent Wall Furnace has been tested in accordance with the ANSI standard Z21.44-1995 and has been listed by UL for installation and operation as described in these Installation and Operating Instructions. All components are A.G.A. or UL safety certified.

#### Canada Certification

The DV750 Series Direct Vent Gas - Fired Room Heater has been tested in accordance with the CAN1-2.1M89, IR41, IR55 and applicable sections of CAN2.19-M81 and has been listed by UL for installation and operation as described in these Installation and Operating Instructions. All components are C.G.A. or C.S.A. safety certified.

This appliance is approved for Installation in bedrooms and mobile homes in the United States and Canada.

#### Local codes

Check with your local building code agency prior to installing this appliance to ensure compliance with local codes, including the need for permits and follow-up inspections. This installation must conform with local codes or, in the absence of local codes, with the

National Fuel Gas Code, ANSI Z223.1-latest edition, in the U.S.A. and the CANI-B149-latest edition, in Canada.

#### Optional components

This appliance has been tested and listed for use with the optional components listed on page 4. Many optional components may be purchased separately and installed at a later date. However, installation of a fan kit will require electrical power. To avoid costly reconstruction, it is recommended that a 110VAC, 60Hz receptacle be located in close proximity to the appliance.

If any assistance is required during installation please contact your local dealer or contact ARROW/DOVRE Customer Relations Department, aladdin Hearth Products, 401 N. Wynne, Colville, WA 99114.

DOVRE® is a registered trademark of Aladdin Hearth Products, a Division of Hearth Technologies Inc.

### II. DESCRIPTION OF THE HEATER SYSTEM

The DV750 is a Direct Vent Wall Furnace. Combustion Air is supplied from outside, not from inside the house as with other types of appliances.

This DOVRE DV750 system consists of the following:

- Appliance
- Venting System\*
- 3. Termination\*

Optional components include:

- 1. Decorative Glass Accent
- 2. Blower Kit
- 3. Remote control

\*Must be purchased separately

Tools and building supplies normally required for installation.

Tools:

Saw

High Temperature

Pliers

Sealant Material

Phillips Screwdriver Tape Measure 3/8" Nut Driver or Socket Electrical Drill and Bits

Plumb Line

Square

Level

Note: Illustrations throughout these instructions reflect typical installations and are for design purposes only. Actual installation may vary slightly due to individual design preferences. However, Minimum and Maximum Clearances must be maintained at all times.

The illustrations and diagrams used throughout these installation instructions are not drawn to scale.

Note: Operation of a direct vent Wall Furnace may be sporadic in high wind situations.

High Temperature Sealant Material. Sealants that will withstand high temperatures; General Electric RTV103 (Black), or equivalent. Rutland, Inc. Fireplace Mortar #63, or equivalent; Dow Corning 732 or equivalent.



## III. HEATER SYSTEM COMPONENTS

The table below is a list of only those components which may be safely used with this appliance.

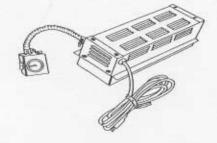
Catalog Number	Description
DV750	Direct vent gas-fired heater - black - natural gas, standing pilot
DV750L	Direct vent gas-fired heater - black - propane gas, standing pilot
DV750PBK	Direct vent gas-fired heater - porcelain black - natural gas, standing pilot
DV750PBKL	Direct vent gas-fired heater - porcelain black - propane gas, standing pilot
DV750PCR	Direct vent gas-fired heater - porcelain creme - natural gas, standing pilot
DV750PCRL	Direct vent gas-fired heater - porcelain creme- propane gas, standing pilot
DV750PGR	Direct vent gas-fired heater - porcelain green - natural gas, standing pilot
DV750PGRL	Direct vent gas-fired heater - porcelain green - propane gas, standing pilot
DV750PBL	Direct vent gas-fired heater - porcelain blue - natural gas, standing pilot
DV750PBLL	Direct vent gas-fired heater - porcelain blue - propane gas, standing pilot
BK93	Blower kit, 150 CFM, variable speed, thermostat ON/OFF
RC6	Remote control (battery/battery)
DT5G	Decorative glass accent - gold
DT5BK	Decorative glass accent - black
HHW2	Horizontal Termination Cap

DURA-VENT GS Catalog #	Venting System Components Description	
908B	6" Black Vent (4"/6")	
907B	9" Black Vent (4"/6")	
906B	12" Black Vent (4"/6")	
906G	12" Galvanized Vent (4"/6")	
904B	24" Black Vent (4"/6")	
904	24" Galvanized Vent (4"/6")	
903B	36" Black Vent (4"/6")	
903	36" Galvanized Vent (4"/6")	
902B	48" Black Vent (4"/6")	
902	48" Galvanized Vent (4"/6")	
911B	12" Adjustable Vent Black	
945B	45° Elbow Black	
945	45° Elbow Galvanized	
990B	90° Elbow Black	
990	90° Elbow Galvanized	- 5
940	Round Ceiling Support/Wall Thimble	
941	Cathedral Ceiling Support Box	
943	Flashing 0/12 - 6/12	
943S	Flashing 7/12 - 12/12	
953	Storm Collar	
963	Firestop Spacer	
988	Wall Strap	
981	Snorkel Termination (36")	
982	Snorkel Termination (14")	

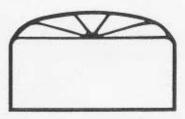


DURA-VENT GS Catalog #	Venting System Components Description
980	Vertical Termination Cap with Wind Halo
VTA1*	Vertical Termination Adapter Kit (Vertical Termination Cap, Cover Plate for existing vertical chimney)
909B*	Existing Metal Chimney, Retrofit Adjustable Chimney Connector, Retrofit Chimney Connector Plate
3951	Round Ceiling Support/Wall Thimble Trim Kit, Polished Brass
3960	Cathedral Ceiling Support Trim Kit, Polished Brass

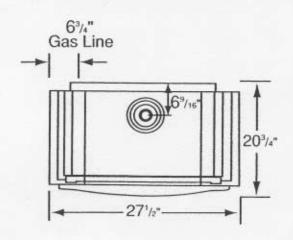
<sup>\*</sup> Available from ARROW/DOVRE Dealer only.

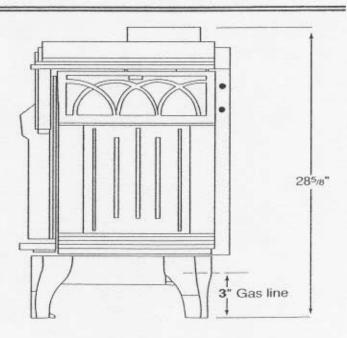


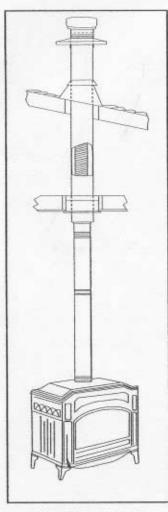
BK93 Blower Kit



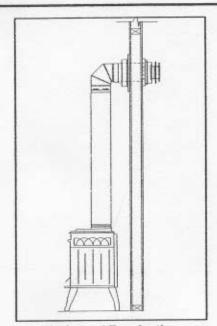
DT5G, DT5BK Decorative Glass Accent (Available in Black, or Gold)



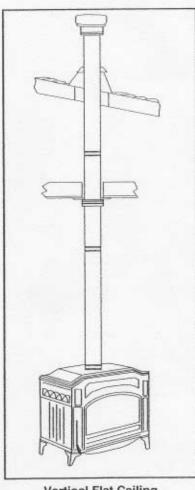




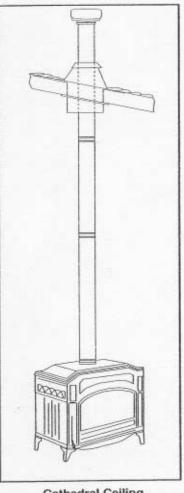
Retro-Fit Installation



**Horizontal Termination** 



**Vertical Flat Ceiling** 

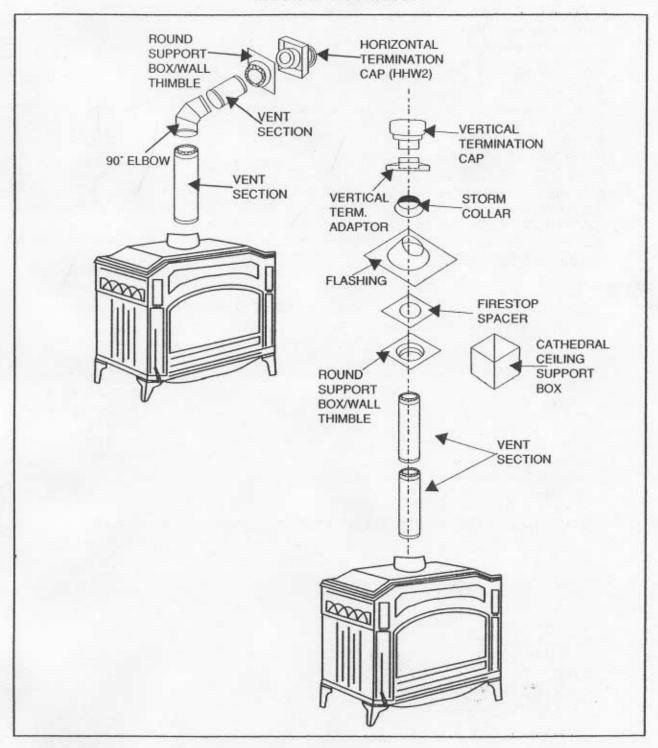


**Cathedral Ceiling** 

COMMON INSTALLATIONS



#### TYPICAL ASSEMBLY



## IV. PRE-INSTALLATION PREPARATION

INSTALLATION AND REPAIR SHOULD BE DONE BY A QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A QUALIFIED SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATING AIR PASSAGEWAYS OF THE APPLIANCE BE KEPT CLEAN.

DUE TO HIGH TEMPERATURES, THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.

WARNING: THIS APPLIANCE MAY ONLY USE THE APPROVED VENTING SYSTEMS SHOWN IN THIS INSTALLATION. IT MUST NOT BE CONNECTED TO A CHIMNEY FLUE SERVICING A SEPARATE SOLID FUEL OR GAS FUEL BURNING APPLIANCE.



#### A. GAS PRESSURE

For natural gas, the minimum inlet gas supply pressure is 4.5 inches water column, and the maximum inlet gas pressure is 7.0 inches water column, for the purpose of input adjustment. Input rate is 47,000 Btu/hr. For propane gas, the inlet gas supply pressure must be at least 11.0 inches water column and a maximum 14.0 inches water column. Input rate of 43,000 Btu/hr.

Manifold pressure for this appliance is 1.7 - 3.5 inches water column for natural gas and 5.4 - 11.0 inches water column for propane gas. This appliance has a variable adjust manifold.

A 1/8" NPT plugged tapping is provided on the gas control valve, near the outlet to the main burner immediately upstream of the gas supply connection to the appliance, accessible for a test gage connection.

#### B. HIGH ALTITUDE INSTALLATION

For U.S. installation, appliances are tested and approved for elevations from 0-2000 feet.

When installing this appliance at an elevation above 2000 feet, United States codes require a decrease of the input rating by changing the existing burner orifice to a smaller size. Check with the local gas utility for proper orifice size identification. This appliance is shipped with a 096°/2 43 mm orifice for back burners and a 089°/2 26 mm orifice for front burner on natural gas versions. For propane versions, this appliance is shipped with a 059°/1 496 mm orifice for back burner and a 052°/1 32 mm orifice for front burner.

For Canadian installation, appliances are certified for elevations from 0-4500 feet. When installing this appliance at an elevation between 0-4500 feet in Canada, the input rating does not need to be reduced.

When installing this appliance at an elevation above 4500 feet in Canada, check with local authorities.

Consult your local gas company for assistance in determining the proper orifice for your location or refer to ANSI Z223.1-latest edition, Appendix F.

#### C. CLEARANCES

The following clearances to combustibles must be maintained: Minimum clearances to the floor - 0" (see note below), back of appliance to wall - 4", sides of appliance to wall - 8", base of the appliance to ceiling - 72".

Note: When installed directly on combustible material flooring other than wood (for example carpeting, vinyl and the like), the appliance must be installed on a metal or wood panel extending the full width and depth of the appliance.

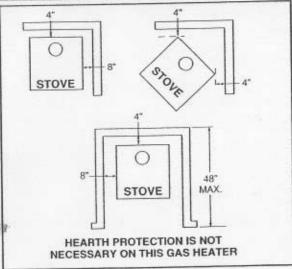


Figure 1
Minimum Clearances To Combustibles

Note: ALCOVE MINIMUM CEILING HEIGHT - 72 " to combustible ceiling; 48" to non-combustible ceiling.





#### C. CLEARANCES (cont.)

Minimum clearances to venting are as follows: Horizontal runs require a 1½" minimum air space on the top and a ½" minimum air space on the sides and bottom of the outer vent section. If an elbow is being used in an enclosed wall, floor or ceiling, a top air space clearance of 3" must be maintained. Vertical rise sections require a 1" minimum air space completely around the vent section. These clearances must be maintained at all times.

This appliance is certified for installation in a bedroom or bed/sitting room in the U.S. and Canada.

Mobile Home Installations. Appliances installed in mobile homes must be secured to the floor in a minimum of two locations.

## V. STEP-BY-STEP INSTALLATION OF THE DV750 SYSTEM

#### WARNING:

#### BEFORE STARTING, DO THE FOLLOWING:

- 1. WEAR GLOVES AND SAFETY GLASSES FOR PROTECTION.
- 2. KEEP HAND TOOLS IN GOOD CONDITION. SHARPEN CUTTING EDGES AND MAKE SURE TOOL HANDLES ARE SECURE.
- ALWAYS MAINTAIN THE MINIMUM AIR SPACE REQUIRED TO THE ENCLOSURE TO PREVENT FIRE.

#### Positioning the appliance

When planning your appliance location, the venting system construction and necessary clearances must be considered. Slide the appliance into position and level the appliance from side-to-side and front-to-back.

#### **TERMINATION**

Four types of termination are possible for this appliance: horizontal, vertical, existing masonry chimney, and existing Class A metal chimney.

#### A. Horizontal Termination

Refer to Figure 2 (page 10) for horizontal venting recommendations. The minimum vertical rise allowed for horizontal termination is 2 ' from the top of the appliance. The maximum horizontal run allowed for venting is 15' with a minimum 4' rise.

Note: A horizontal run of vent must have a 1/4" rise for every ft. of run towards the termination. Never allow the vent to run downward. This could cause high temperatures and the possibility of a fire.

A single vertical to horizontal elbow is already calculated into the allowable 15 foot run. Each additional elbow reduces the maximum horizontal distance by three feet. Example, by using three total elbows, the maximum horizontal distance has been reduced to 9 feet (3 - 1 = 2 elbows x 3' = 6'; 15' max. - 6' of elbows = 9' of horizontal run). Even with only these three elbows (the equivalent of 6' additional horizontal feet) you now need a minimum of 4' of vertical rise. See Chart A.

If a vertical-to-horizontal elbow is enclosed within a wall, floor or ceiling, a top air space clearance of 3" must be maintained.

	2	3'	4	5'	6	7	8,	9'	10'	11'	12	13'	14"	15
16'	X	х	X	X	X	Х	X	X	х	Х	X	X	Х	X
Thru	X	х	Х	X	Х	Х	X	X	х	X	Х	X	X	X
5'	Х	х	х	х	X	Х	x	X	х	X	х	X	х	х
4'	X	Х	х	X	X	X	X	X	X	x	Х	х	х	X
3,	X	Х	х	X	X	Х	X	X	X					
2'	X	х	X	X	X	X	X	X	X					

Chart A Venting Combinations

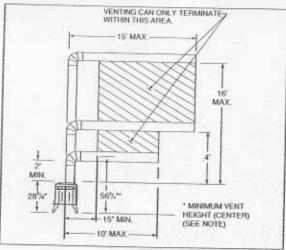


Figure 2 Horizontal Length

Due to the many different combinations that can be used when constructing venting, the number of vent sections required can only be determined by the installer.

Horizontal venting must terminate within the shaded area shown in Figure 2. Chart A illustrates the figures included in that shaded area. For example, if your vertical rise is the minimum two foot, venting can terminate anywhere between 21½" inches (includes wall thickness (assumes 4") and venting required to termination cap) and 10 feet.

Vent termination must not be recessed into the wall or siding. Figure 9 illustrates termination cap locations and minimum dimensions for each termination application. Or, follow ANSI Z223.1, latest edition.

Note: Horizontal runs will require the use of one Vent Support for every 3' of vent.

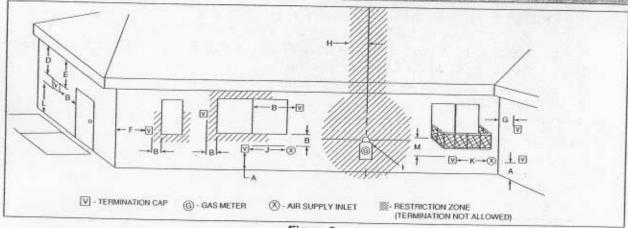


Figure 3
Termination Cap Locations

- A = Clearance above the ground, a veranda, porch, deck, or balcony - 12 inches (30 cm) minimum.
- B = Clearance to window or door that may be opened 9 inches (23 cm) minimum (in Canada 12 inches or 30 cm).
- D\* = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (60 cm) from the center-line of the terminal - 18 inches (46 cm) minimum.
- E\* = Clearance to unventilated soffit 12 inches (30 cm) minimum.
- F = Clearance to outside corner 9 inches (23 cm) as tested.
- G = Clearance to inside corner 9 inches (23 cm) as tested.
- H• = Not to be installed above a meter/regulator assembly within 3 feet (90 cm) horizontally from the center-line of the regulator.
- 1 = Clearance to service regulator vent outlet 6 feet (1.8 m) minimum.
- J = Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance - 12 inches (30 cm) minimum.

- K\* = Clearance to mechanical air supply inlet 6 feet (1.8 m) minimum.
- L+ = Clearance above a paved sidewalk or paved driveway loacated on public property - 7 feet (2.1 m) minimum. Use of a DCS200 will reduce this dimension to as low as 12 inches (30 cm).
- M# = Clearance under veranda, porch deck, or balcony 12 inches (30cm) minimum.
- A vent must not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
- # Only permitted if veranda, porch deck, or balcony is fully open on a minimum of 2 sides beneath the floor.
- As specified in Installation Codes. Note: Local codes or regulations may require different clearances.
- 30 inches(76cm) minimum distance required for vinyl soffit materials.



Preparing the wall for horizontal termination.
When using the Dura-Vent GS system, a hole measuring 10" wide and 10" high must be cut and framed in the exterior wall where venting will be terminated.

The height of the hole must be located to meet all local and national codes and not be easily blocked or obstructed. The minimum height to the center of the vent pipe is 563/4" from the base of the appliance. This figure will increase by the length of each vertically positioned vent section added to the venting system. See Figure 4.

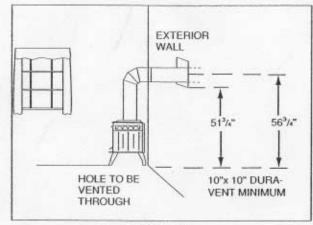


Figure 4 Exterior Wall Hole

The horizontal run of vent must have 1/4" of rise per 2 feet of run and be perpendicular to the wall. The bottom of the 10" x 10" square hole is located 51 3/4" from the base. This figure will increase by the length of each vertically positioned vent section and each 1/4" of rise per 2 feet. This will allow a 11/2" clearance around the pipe in the 10" x 10" square. See Figure 4.

If the wall being penetrated is constructed of noncombustible material, i.e., masonry block or concrete, a 7 inch diameter hole is acceptable.

2. Assembling Vent Sections. Only use vent supplied and listed for use with this appliance. Included with your Dovre DV750 is an inner flue extension. This extension must be connected to the top of the appliance before any other vent section is connected with the small hole to the top. This extension fits into the flue collar located on the appliance. See Figures 5A and 5B.

To attach a straight section to the top of the appliance, female end down, slide pipe over the outer collar on the appliance while the inner flue will slip over the flue extension. MAINTAIN MINIMUM CLEARANCES OR GREATER AROUND VENT SYSTEM. DO NOT PACK AIR SPACES WITH INSULATION OR OTHER MATERIAL.

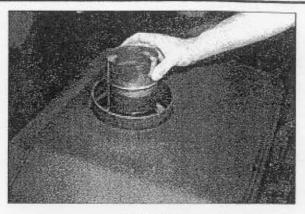


Figure 5A
Placing the Inner Flue Extension Piece

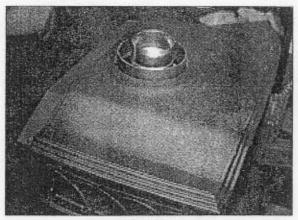


Figure 5B Proper Inner Flue Position

The Dura-Vent GS is unitized and twist-locks together. For the twist-lock procedure, do the following:

(1) Four indentations, located on the female ends of pipes and fittings, are designed to slide straight onto the male ends of adjacent pipes and fittings, by orienting the four pipe indentations so they match and slide into the four entry slots on the male ends. (Figure 6.) Push the pipe sections completely together, then twist-lock one section clockwise approximately one-quarter turn, until the two sections are fully locked. The female locking lugs will not be visible from the outside, on the Black Pipe or fittings. They may be located by examining the inside of the female ends.

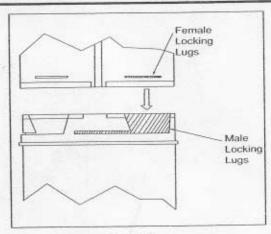


Figure 6 Twist-Lock Procedure

(2) Horizontal runs of vent must be supported every three feet. Wall Straps are available for this purpose. Before connecting the horizontal run of vent pipe to the vent termination, slide the black decorative wall thimble cover over the vent pipe.

When using the adjustable section, maintain a 1" overlap on pipe sections and secure. It is also important that the vent pipe extends a minimum of 11/2" into vent cap.

Termination Cap. Position the horizontal vent termination so that the pipe is centered in the 10" x 10" hole.

The top of the vent cap is embossed "TOP". Install it in the correct position to prevent water from entering the wall. Level the vent cap and attach it to the outside wall with four (4) screws provided.

If the wall surface is not flat (shiplapped siding, etc.), build up a flat surface with wood strips. Do not tilt or bend cap to fit uneven surfaces. The vent cap flange must be tight against the wall to prevent rain or wind penetration.

After attaching the Vent Termination to the exterior wall, run a bead of non-hardening mastic (not provided) around the outside edges to make a seal between the Cap and the wall. SEAL THE CORNERS OF THE BACK MOUNTING PLATE.

For brick, masonry or plaster walls, it may be necessary to use lag screws or expanding anchor bolts which are not furnished with the cap.

Slide the decorative wall thimble up the wall surface and attach with screws provided. Apply decorative brass or chrome trim if desired. See Figure 8.

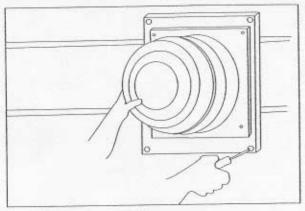


Figure 7 Insertion of Vent Pipe

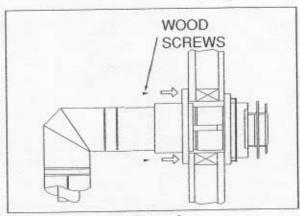


Figure 8
Decorative Wall Thimble

#### **B.** Vertical Termination

The following figures are the maximum

distances from the base of the appliance, as well as the minimum air space clearances that must be maintained: Maximum straight unsupported rise - 25 feet; Maximum height 40 from the base of the appliance maximum horizontal unsupported run - 3 feet; air space clearances around vertical venting - 1" on all sides; air space clearances around horizontal venting - 1%" on top and %" on sides and bottom. If an elbow is being used in an enclosed wall, floor or ceiling, a top air space clearance of 3" must be maintained. These clearances must be maintained at all times. In an elbow is alternation every to find topfold numerously and the strain and the

12' overall installation height may be offset as much as 6' horizontally.) The maximum is 20 feet. These clearances must be maintained at all times.

Positioning the appliance. Position the appliance in its desired location. Maintain all clearances found in Figure 1 on page 8.



2. Preparing the ceiling. Drop a plumb bob down from the ceiling to the position of the appliance flue exit, and mark the location where the vent will penetrate the ceiling. Drill a small hole at this point. Next, drop a plumb bob from the roof to the hole previously drilled in the ceiling, and mark the spot where the vent will penetrate the roof. Determine if ceiling joists, roofrafters, or other framing will obstruct the venting system. You may wish to relocate the appliance, or to offset, as shown in Figure 11, to avoid cutting loadbearing members.

To bypass any overhead obstructions, the vent system may be offset using a 45 degree elbow or a 90 degree elbow. Vent stabilizers have straps for securing these parts to joists or rafters. Plumbers tape may be purchased locally and used in conjunction with vent stabilizers. See Figure 11.

To install the Round Support Box/Wall Thimble in a flat ceiling, cut a 10-inch square hole in the ceiling, centered on the hole drilled in Step 2. Frame the hole as shown in Figure 10.

Note: For vertical Installations of 15 feet or more from the floor, use the restrictor plate provided in the log pack. Due to varying situations with different flue installations, above 15 feet with off sets, the restrictor plate may or may not be necessary. For these installations, a test burn at the installation site is recommended for final determination.

To assemble restrictor plate, remove glass to gain firebox with rectangular hole at bottom. See Figures 9A and 9B. Attach restrictor plate with four screws provided in installation pack.

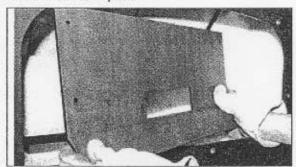


Figure 9A Placing Restrictor Plate

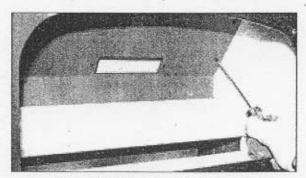


Figure 9B Mounting Restrictor Plate

Assembling vent sections. Only use vent supplied and listed for use with this appliance.

Included with your Dovre DV750 is an inner flue extension. This extension must be connected to the top of the appliance before any other vent section is connected. This extension fits into the flue collar located on the appliance. (See Figure 5, page 11.)

To attach a straight section to the top of the appliance, with the female end down, slide that pipe over the outer collar on the appliance while the inner flue slips over the flue extension. MAINTAIN MINIMUM CLEARANCES OR GREATER AROUND THE VENT SYSTEM. Do not pack air spaces with insulation or other material.

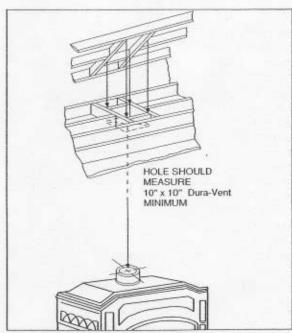


Figure 10 Ceiling and Attic Construction

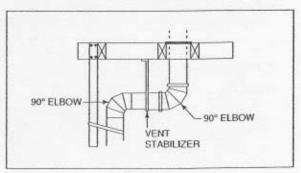


Figure 11 Elbows with Stabilizer



The Dura-Vent GS is unitized and twist-locks together. For the twist-lock procedure, do the following:

(1) Four indentations, located on the female ends of pipes and fittings, are designed to slide straight onto the male ends of adjacent pipes and fittings, by orienting the four pipe indentations so they match and slide into the four entry slots on the male ends. (See Figure 6 on page 12.) Push the pipe sections completely together, then twist-lock one section clockwise approximately one-quarter turn, until the two sections are fully locked. The female locking lugs will not be visible from the outside, on the Black Pipe or fittings. They may be located by examining the inside of the female ends.

(2) Horizontal runs of vent must be supported every three feet. Wall Straps are available for this purpose.

Assemble the desired lengths of black pipe and elbows. It is necessary to reach from the appliance up through the round support box. Ensure that all pipe and elbow connections are in their fully twist lock position.

Using the mark from Step 2, drive a nail up through the roof to mark the center. Measure to either side of the nail and mark the opening required. This is measured on the horizontal; actual length may be larger depending on the pitch of the roof. Cut out and frame the opening. See chapter 25 of the Uniform Building Code for Roof Framing details. A one inch minimum air space clearance must be maintained between the vent system and the roof.

Assemble lengths of pipe and elbows necessary to reach from the ceiling support box up through the roof line. Galvanized pipe and elbows may be utilized in the attic, as well as above the roof line. The galvanized finish is desirable above the roof line due to its higher corrosion resistance.

Note: Be sure to provide intermediate support for the vent during construction and check to be sure inadvertent loading has not dislodged the vent from the appliance or any vent joint.

4. Installing roof flashing or site-produced chase top. Position a roof flashing (or construct a chase and chase top) and secure in place with nails.

Continue to add vent sections through the roof opening, maintaining at least a one inch air space clearance. On the first vent section through the top of the flashing, slide the storm collar over the pipe so that it is on top of the flash and seal with non-hardening mastic.

Major building codes specify a minimum vent (chimney) height above the roof top depending on roof pitch. See Figures 12 and 13. Add pipe sections until the height of the Vent Cap meets the minimum building code requirements described in Figure 13. Note that for steep roof pitches, the vent height must be increased.

These vent system heights are necessary in the interest of safety and do not ensure draft-free operation. Trees, buildings, adjoining roof lines, adverse wind conditions, etc., may create a need for a taller vent system should down drafting occur.

Termination Cap. Twist lock the vent cap.

#### WARNING:

WHEN VENT SECTIONS EXCEEDING 3 FEET IN LENGTH ARE INSTALLED BETWEEN AN OFFSET/RETURN, STRUCTURAL SUPPORT MUST BE PROVIDED TO REDUCE OFF-CENTER LOADING AND PREVENT VENT SECTIONS FROM SEPARATING AT THE VENT JOINTS.

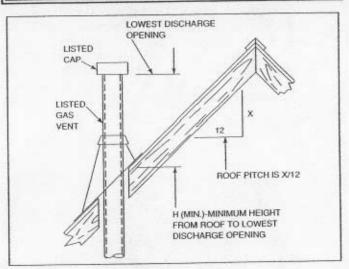


Figure 12 Vent (Chimney) Height

Roof Pitch	H (Min.) Ft.
Flat to 6/12	1.0
6/12 to 7/12	
Over 7/12 to 8/12	1.5
Over 8/12 to 9/12	
Over 9/12 to 10/12	
Over 10/12 to 11/12	3.25
Over 11/12 to 12/12	4.0
Over 12/12 to 14/12	
Over 14/12 to 16/12	
Over 16/12 to 18/12	
Over 18/12 to 20/12	
Over 20/12 to 21/12	

Figure 13 Vent (Chimney) Height



C. Existing Masonry Chimney Installation Requirements

This installation is subject to local jurisdiction. Some codes may require the use of another liner for intake air. If so, the 4" aluminum liner should be inside a 6" UL 181 listed liner. This heater can be vented through an existing Masonry Chimney but the chimney must be lined with one UL 1777 listed 4" aluminum flexible gas vent liner for exhaust. The existing flue will be used to supply the air intake to the galvanized steel flue system. See Figure 14. Before installing the liner system, the chimney passageway should be cleaned and examined to verify it is unobstructed and in good structural condition.

Measure and record the chimney dimensions to determine total flexible liner requirements.

NOTE: For vertical Installations of 15 feet or more from the floor, use the restrictor plate provided in the log pack. Due to varying situations with different flue installations, above 15 feet with offsets, the restrictor plate may or may not be necessary. For these installations, a test burn at the installation site is recommended for final determination.

To assemble restrictor plate, remove glass to gain firebox with rectangular hole at bottom. See Figure 9. Attach restrictor plate with four screws provided in installation pack.

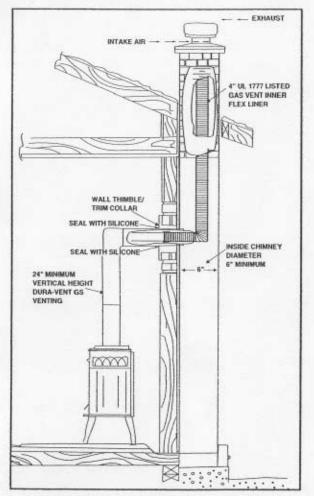


Figure 14
Adaptation to Masonry Chimney

Follow the liner manufacturer's instructions for installing the liners in the chimney. The 6" aluminum flexible liner must be run into the chimney first. Attach a flexible liner puller to the liner and secure a rope to the puller. One person should feed the liner through the chimney, and another person should pull the liner from the bottom, with the rope, guiding the liner down the chimney. After feeding the liner down the chimney, form a 90" angle and bring the liner through the hole in the chimney wall. Then run the 4" gas vent liner into the 6" liner, in the same manner. Extend both of the liners through the wall of the chimney and attach them to the venting system extending from the top of the appliance. See Figure 15.

Construct a metal flashing large enough and strong enough to cover the chimney opening and support the heater Vertical Termination Cap. The flashing needs to fold down over and around the outside of the masonry chimney so that it can be secured to the chimney by 4 screws. See Figure 16. The flashing will require a hole at least 6 ½" in diameter. Extend the 6" flexible liner through the flashing and attach it to the VTA (Vertical Termination Adapter) with screws provided. Secure the VTA to the flashing with the screws provided and seal the VTA/Flashing joint with a silicone sealant to prevent moisture from running down the liner into the chimney.

Attach the 4" gas vent liner to the Vertical Termination Cap with screws provided, then attach the Termination Cap to the VTA with screws provid-

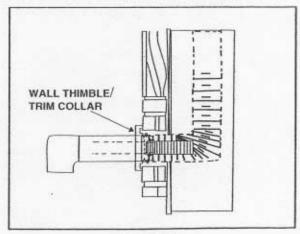


Figure 15
Venting System Connection at Wall Thimble



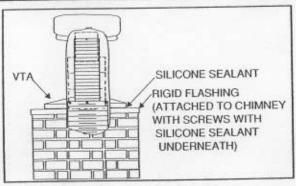


Figure 16 Masonry Termination

#### D. Existing Class A Metal Chimney Termination

In many cases where a DOVRE DV750 is replacing a woodstove, much of the existing Class A Metal Chimney can be incorporated into the direct vent system.

Minimum size diameter is 6 inches.

If the existing Class A Metal Chimney is larger than 6", an increaser/universal adapter or Dura-Vent GS Retrofit Adjustable Chimney Connector is recommended.

The existing chimney must comply with NFPA-211 codes and any local code requirements.

The chimney should be cleaned and examined to verify it is unobstructed and in good structural condition. Any structural weaknesses such as cracks, leaky joints, corroded or warped surfaces can have an adverse effect on the performance of this appliance and should be replaced or repaired.

Whenever an existing Class A Metal Chimney is on an outside wall, removal of the chimney and the use of the minimum horizontal direct vent termination kit may be less expensive.

When using an existing Class A Metal Chimney the following requirements are necessary:

Minimum height from the base of the appliance to the top of termination cap is 9 feet. **NOTE:** For vertical Installations of 15 feet or more from the floor, use the restrictor plate provided in the log pack. Due to varying situations with different flue installations, above 15 feet with off-sets, the restrictor plate may or may not be necessary. For these installations, a test burn at the installation site is recommended for final determination.

To assemble restrictor plate, remove glass to gain firebox with rectangular hole at bottom. See Figures 9A and 9B. Attaach restrictor plate with four screws provided in installation pack.

The vent from the top of the appliance to the Chimney must be Dura-Vent GS vent sections. A 4" UL 1777 listed gas vent aluminum flexible liner can be used inside the Class A Metal Chimney. The flexible liner must be secured to the last rigid section with sheet metal screws (3). A minimum 3 inch overlap is required.

Remove and discard existing chimney termination cap. Determine the length of the 4" UL 1777 listed gas vent flex liner required to meet the Dura-Vent GS vent sections at the top of the appliance.

Follow the liner manufacturer's instructions for installing the liner in the chimney. Attach a flexible liner puller to the liner and secure a rope to the puller. One person should feed the liner through the chimney, and another person should pull the liner from the bottom, with the rope, guiding the liner down the chimney. Extend and run the 4" gas vent liner down the chimney leaving 10" extending from the top of the chimney stack.

Install and secure the VTA (Vertical Termination Adapter) onto the chimney with the brackets provided.

Attach the 4" gas vent liner to the appliance Vertical Termination Cap with the screws provided.

Place and secure the Termination Cap on the VTA with the screws provided. See Figure 17.

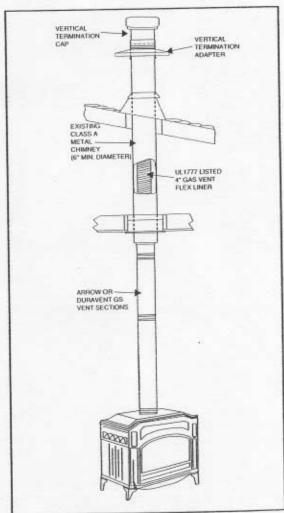


Figure 17 Retro-Fit to Metal Chimney



#### STEP 3 - DOUBLE CHECKING

When construction of the entire chimney system has been completed, double check to make sure all venting pipes and termination caps are unobstructed. Exhaust gases are extremely hot. When you have chosen a horizontal termination, be sure there are no possible future obstructions from trees, bushes, snow drifts, etc. A cap shield can be purchased to help prevent possible contact.



#### STEP 4 - Gas line installation

Install the gas line piping up to the back side of the appliance. A separate manual shut-off valve (supplied) should always be used.

Connect the gas line to the appliance manual valve inlet, using 1/2" pipe. To ease installation, a listed flexible connector and manual shut-off valve are supplied. The manual shut-off valve should be connected opposite the gas valve. Gas connections can be made from outside the appliance by opening the lower panel. All connections must be checked for leaks with a soap and water solution.

Bleed the gas line to extract any air that may have been trapped inside the pipe.

NOTE: During any pressure testing of the gas supply piping system that exceeds test pressures of 1/2 psig, this appliance and its individual shutoff valve must be disconnected from the piping system. If test pressures equal to or less than 1/2 psig are used in pressure testing the gas supply piping system, this appliance must be isolated from the piping system by closing its individual manual shut-off valve during the testing.

#### STEP 5 - Valve door opening

The valve door, located at the base of the appliance on the left side, opens simply by lifting it up and sliding it back. See Figure 18. This will expose the gas valve and pilot controls. To close, simply pull forward and swing the door down.

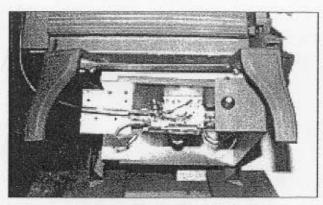


Figure 18 Door for Valve Opening

#### Step 6 - Wiring

 Optional accessories may be added now or at a later date. The optional blower kit (BK93) requires a 110VAC outlet nearby.



1b. Figure 19 shows how to connect a millivolt thermostat without the on/off switch in the circuit.

Disconnect the on/off switch from the valve and wire the millivolt thermostat as indicated.

Note: This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with National Electric Code ANSI/NFPA 70-latest edition. This appliance can be used with a thermostat.

Note: This appliance DOES NOT require a 110 VAC supply for operation.

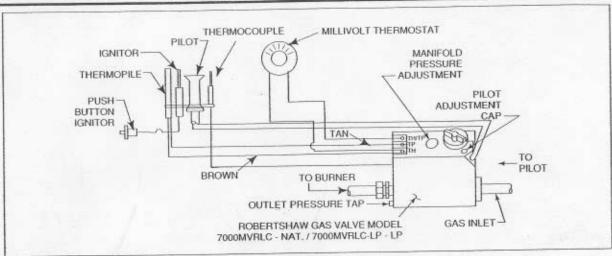


Figure 19 Wiring Diagram

#### STEP 7 - Firebox entry

 To gain access into the appliance firebox, lift the handle of the cast door up and open.

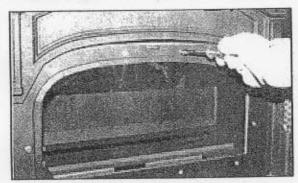


Figure 20A Removal of Sealed Glass

2. To remove the sealed glass, loosen the four (4) nuts on the bottom glass frame with a 3/8" nut driver or socket, but do not remove. See Figures 20A and 20B. Next remove the six (6) nuts on the glass frame. Hold the glass in place while removing the six (6) nuts. See Figure 20B. Carefully lift the glass and frame from the appliance.

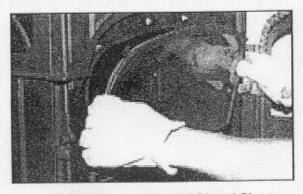


Figure 20B Removal of Sealed Glass

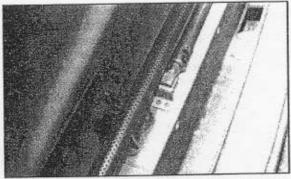


Figure 21 Air Shutter Location

NOTE: Check the air shutter before placing the logs into position. See Figure 21.

#### STEP 8 - Positioning the Logs

 See Figure 22. Place the BACK LOG on the back plate, positioning it so the BACK LOG sits behind the tab on left side.

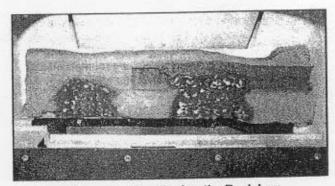


Figure 22 Positioning the Back Log



 See Figure 23A and 23B. Place the FRONT LOG on the front plate, positioning the FRONT LOG to the left and flush to the firebox front. Place the TOP LOG in the notch on the BACK LOG.

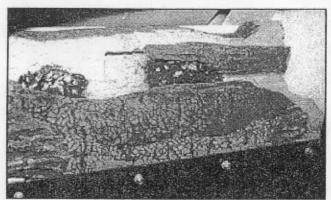


Figure 23A
Front Log Positioned Properly

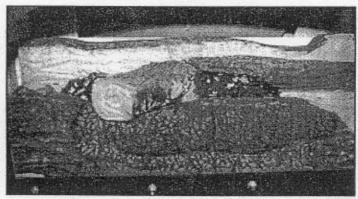


Figure 23B Middle Log Positioned Properly

#### Step 9 - Clean the Glass

To clean the glass, use a non-abrasive, mild cleaning solution. (For example, a glass cleaner or for stubborn film, an oven cleaner.) Apply an adequate amount to the glass and wipe off with a damp cloth. Be sure all cleaner is thoroughly rinsed from the glass.

#### Step 10 - Install the Glass

After cleaning the glass, carefully place it into the frame assembly. Slide the slots on the bottom of the frame assembly over the screws on the front of the firebox. Replace the six (6) nuts at the top and sides of the frame assembly. Snug the nuts being sure not to over tighten.

#### Step 11 - Close the Cast Door

Secure the door by pressing the handle down.

#### WARNING:

NEVER OPERATE THIS APPLIANCE WITH THE DOOR AND/OR GLASS REMOVED OR NOT SEALED.

#### Step 12 - Air Shutter Adjustment

The air shutters can be adjusted to provide the correct air to gas mixture for an optimum flame appearance. Although the appliance is shipped with air shutters set at 1/2" open for natural gas and fully open for propane, during shipment the air shutters may have moved out of position. Check the air shutter before placing the logs in position. Due to differences in altitude and venting configurations, fine-tuning the flame may be needed to obtain optimum flame appearance.

#### CAUTION:

Appliance may be hot to the touch. Gloves should be worn during any air shutter adjustments.

Start the appliance and let it burn for fifteen minutes. To achieve optimum flame appearance, the air shutters may have to be adjusted.

- A no optimum flame should be blue at the base with yellow-orange on the top. The flame should burn right off the burner ports. If the flames are too blue, adjust the air control by closing.
- B Flames that do not have enough air will appear tall and black tipped. By opening the air shutter, the flame can be provided with more air to obtain optimum flame appearance. If the air shutter is fully open, but flames remain sooty, shut off the appliance and contact your Dovre dealer for a remedy.

Note: Optimum flame appearance can only be achieved if logs are positioned correctly.

- C Flames that have too much air will appear blue and short. By closing the air shutter, the flame can be adjusted for yellow-orange flame appearance.
- D Flames that lift or become ghostly are a dangerous situation. Shut off the appliance, check vent configuration. If the vent configuration is correct, relight the appliance. If the flame continues to lift or become ghostly, shut off the appliance and contact your Dovre dealer for information to remedy the problem.
- To gain access to the air shutters, open the door and locate the air shutter cover plate (Figure A).
- Remove the air shutter cover plate using a 3/8" socket. Carefully remove the cover plate and gasket.
- Using air shutter adjustment tool provided in the log pack, place the hole in the tool over the peg on the air shutter (Figure B).
- -To provide the burner with more air, push the tool in, rotating the air shutter open.
- -To restrict the burner with less air, pull tool towards you, rotating the air shutter closed.
- Place the air shutter cover plate back on the appliance and observe the flame. If more adjustment needs to be made, repeat step 3 until optimum flame is achieved.



Figure A

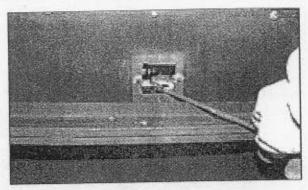


Figure B

#### PreUse Check

Before operating this appliance, please review the safety precautions given on page 2 as well as the items listed below:

- The front air shutter on the burner stem is shipped with an opening of 1/2" for Natural Gas and fully open on Propane Gas. The rear air shutter is shipped with an opening of 1/2" for Natural Gas and fully open on Propane Gas.
- Check to make sure the logs have all been placed correctly. (Refer to Step 8 on page 19.)
- Check to see that all wiring is correct and enclosed to prevent possible shock.
- Check to ensure there are no gas leaks. This may be done with a soap and water solution.
- Make sure the glass is sealed and in its proper position. Never operate this appliance with the door opened or glass removed or not sealed.
- Verify that all venting and caps are unobstructed. Exhaust gases are extremely hot. Check for obstructions from trees, bushes, snow drifts, etc. A DCS200 cap shield can be purchased to help prevent possible contact with the horizontal termination cap.
- Read and understand these Instructions thoroughly before attempting to operate this appliance.

11-98



## VI. OPERATING INSTRUCTIONS

#### FOR YOUR SAFETY READ BEFORE LIGHTING

#### WARNING:

IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

- A. This appliance has a pilot which must be lighted either by hand or with a push button piezo. When lighting the pilot, follow these instructions exactly.
- 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 supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

- C. If the pilot light and burner went out during use, you must take the glass off the appliance, and wait to clear out any gas. Follow the lighting instructions.
- D. Use only your hand to push in or turn knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it; call a qualified service technician. Forced or attempted repair may result in a fire or explosion.
- E. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.

#### WARNING:

CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION. YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.

#### CAUTION:

ANY SAFETY GUARD REMOVED FOR SERVICING THIS APPLIANCE MUST BE REPLACED PRIOR TO OPERATING.

CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.



 Initial and Seasonal Lighting Procedure. Initial lighting constitutes the first time the appliance has been lit after installation. Seasonal lighting refers to lighting the appliance after it has been unused and the gas valve has been turned to OFF.

Be sure the switch and the gas valve knob have been turned to the OFF position. See Figure 25. If they are not, do so and allow the appliance to sit for five minutes so any gas that may have accumulated in the main burner compartment escapes.

Turn the gas valve knob to PILOT, as shown in Figure 26, and press in. While holding it in, light the pilot by pressing the red ignitor button several times until the gas ignites. Continue to hold in the gas valve knob for about one minute after the pilot is lit. Release the gas knob. The pilot should remain lit. If it goes out, turn everything to the OFF position, let it sit for five minutes and repeat this step again.

When the pilot remains lit, turn the gas valve knob to the ON position. See Figure 27. You may now turn the switch to the ON position which will ignite the main burner. Start the appliance and let it burn for lifteen minutes. To achieve optimum flame appearance, the air shutters may have to be adjusted.

CAUTION: Appliance may be hot to the touch. Gloves should be worn during any air shutter adjustments.

## Note: Optimum flame appearance can only be achieved if logs are positioned correctly.

- A. An optimum flame should be blue at the base with yellow-orange on the top. The flame should burn right off the burner ports. If the flames are too blue, adjust the air control by closing.
- B. Flames that do not have enough air will appear tall and black tipped. By opening the air shutter, the flame can be provided with more air to obtain optimum flame appearance. If the air shutter is fully open, but flames remain sooty, shut off the appliance and contact your Dovre dealer for a remedy.
- C. Flames that have too much air will appear blue and short. By closing the air shutter, the flame can be adjusted for yellow-orange flame appearance.
- D. Flames that lift or become ghostly are a dangerous situation. Shut off the appliance, check vent configuration. If the vent configuration is correct, relight the appliance. If the flame continues to lift or become ghostly, shut off the appliance and contact your Dovre dealer for information to remedy the problem.
- To gain access to the air shutters, open the door and locate the air shutter cover plate (Figure A).
- Remove the air shutter cover plate using a 3/8" socket.Carefully remove the cover plate and gasket.

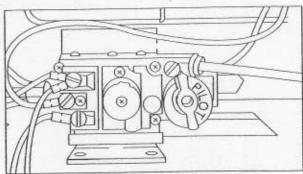


Figure 25
Standing Pilot Ignition Valve "OFF"

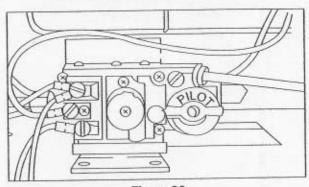


Figure 26 Standing Pilot Ignition Valve to "PILOT"

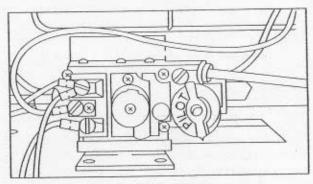


Figure 27
Standing Pilot Ignition to "ON"

#### WARNING: EXPLOSION AND FIRE HAZARD

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



- Using air shutter adjustment tool provided in the log pack, place the hole in the tool over the peg on the air shutter (Figure B).
- -To provide the burner with more air, push the tool in, rotating the air shutter open.
- -To restrict the burner with less air, pull tool towards you, rotating the air shutter closed.
- Place the air shutter cover plate back on the appliance and observe the flame. If more adjustment needs to be made, repeat step 3 until optimum flame is achieved.
- Seasonal Shutdown. When the burning season comes to an end, the entire system should be shut down. This way, no gas will be running to the appliance while it is not in use.

To shut down the appliance for a long period of time, you must first shut off the main burner by moving the switch to the OFF position.

Locate the gas valve knob and turn it to the PILOT position. Press in slightly and continue turning to the OFF position. Your entire system is now shut down.

- Lighting Procedure During Regular Use. Simply turn the switch to the ON position. This will ignite the main burner.
- Shutdown During Regular Use. Simply turn the switch to OFF. This will stop gas flow to the burner and the flames will extinguish.

When first operated, this unit may release an odor for the first several hours. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing. The glass will also require cleaning after the initial burn. (Instructions for cleaning the glass are given on page 20.)

Each time this appliance is lit, it will cause condensation and fogging on the glass. The condensation and fogging will disappear in a few minutes.

#### VII. MAINTENANCE INSTRUCTIONS

#### Cleaning the burner and control compartment

Keep the burner compartment clean. Brush this area with a clean, dry paint brush and vacuum at least once a year. Always turn off the gas valve and ON/OFF switch before cleaning. (See Step 2, page 22.)

#### Checking flame patterns

Visually check the flame of the burner periodically, making sure the flames are steady; not lifting or floating. The flame color should be blue with yellow tips. The thermopile tip should be covered with flame. See Figure 28.

#### Venting system inspection

The appliance and venting system should be inspected before use each season, and at least annually, by a qualified field service person, to ensure that the flow of combustion and ventilation air is not obstructed.

#### Cleaning the glass

It is recommended to wear gloves while handling or removing the glass. DO NOT REMOVE THE GLASS WHEN HOT!

To open the door and remove the glass for cleaning, follow Step 7 on page 19.

To clean the glass, use a non-abrasive, mild cleaning solution. (For example, a glass cleaner or for stubborn film, an oven cleaner.) Apply an adequate amount to the glass and wipe off with a damp cloth. Be sure all cleaner is thoroughly rinsed from the glass.

Note: When cleaning the glass, NEVER use abrasive materials. NEVER clean glass when hot.

Never operate this appliance without the glass properly secured in place or if the glass is broken.

In the event of glass breakage, follow door removal instructions. This will allow the removal of all glass fragments and sheet metal edge protection strips. Vacuum all remaining glass pieces with a shop vac. (DO NOT VACUUM IF PIECES ARE HOT.) Replace glass ordered through your local distributor. Never use substitute material. Only ceramic glass may be used on this appliance.

#### Log cleaning

Logs can be easily lifted out of position. Carbon buildup can be removed with a vacuum cleaner.

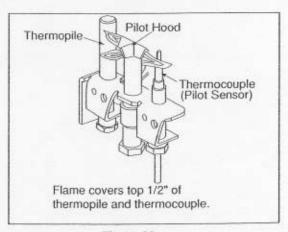


Figure 28 Standing Pilot



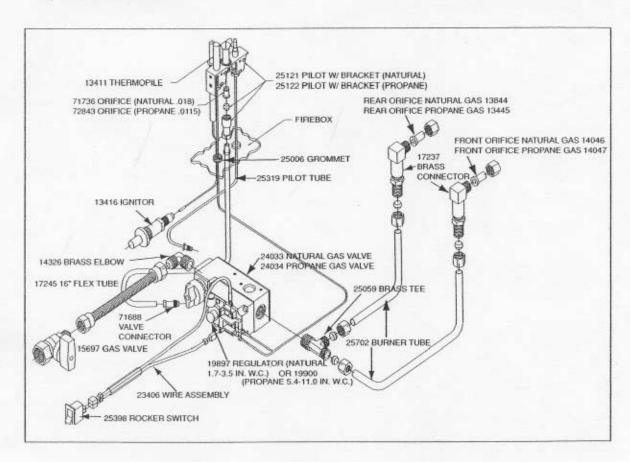
## VIII. TROUBLE SHOOTING

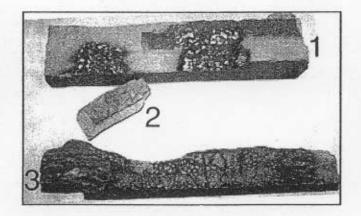
	Problem	Cause	Corrective Action
1.	Burner will not ignite.	A. 110 volts of electrical current has burned out the valve and thermopile.	Remove voltage and replace valve and thermopile.
2.	Spark ignitor will not light the pilot after repeat press- ing of Red Button.	A. Defective ignitor.	Check for loose connections on ignitor.  Check for spark. If ignitor connection is correct and no spark, replace ignitor.
		B. Misaligned ignitor.	Spark should be extending approx. 1/8" to the bottom of the pilot hood. Adjust gap to give proper spark. Remove hands from ignitor before pressing Red Button.
3.	Pilot light will not stay lit.	Defective pilot thermocouple.	Check pilot flame. See Figure 29. Adjust flame if necessary.  Be sure thermocouple is secured tight into pilot bracket and in contact constantly with pilot flame.
			Be sure wiring connections are tight throughout system.  Double check that wiring matches the wiring diagram exactly. See Figure 19.
4.	With pilot lit, valve and on/off switch in "On" position, no gas to burner.	A. On/off switch defective.	Check on/off switch for proper connections. Connect wires across terminal at on/off switch. If burner comes on, replace on/off switch. If burner does not come on, connect to on/off switch junctions at valve. If burner comes on, replace wires.
		B. Plugged burner orifice.	Check burner orifice; remove blockage.
		C. Bad Thermopile Connection.	Double check that wiring matches the wiring diagram exactly. See Figure 19.
5	. Glass Fogs up.	A. A normal result of gas combustion.	No action is necessary. After the heater has warmed up, the glass will clear.
6	. Blue flames.	A. A normal result during the first 20 minutes of burning	No action is necessary. Flames will begin to turn more yellowish after about 20 minutes of burning.



#### IX. REPLACEMENT PARTS

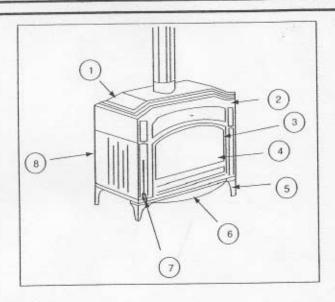
Replacement parts are available from your distributor/dealer, or through Aladdin Hearth Products, 401 N. Wynne, Colville, WA 99114. If any of the original wiring as supplied with the heater must be replaced, it must be replaced with Type 18 ga., 105C wire, or its equivalent.

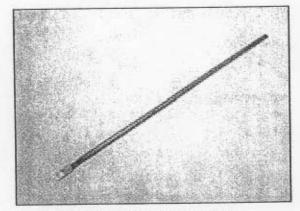




ITEM	PART NO.	DESCRIPTION		
1	25159	Back Log		
2	25655	Middle Log		
3	25161	Front Log		







10-Air Shutter Adjustment Tool

ITEM	PART NO.	DESCRIPTION
1	24214	Top Plate-Black
	24393	Top Plate-Porcelain Black
	24397	Top Plate-Porc. Creme
	24393	Top Plate-Porc. Green
	24406	Top Plate-Porc. Blue
2	25704	Front Plate-Black
	25744	Front Plate-Porc. Black
	25745	Front Plate-Porc. Creme
	25746	Front Plate-Porc. Green
	25747	Front Plate-Porc. Blue
3	30174	Door Assembly Black
	24391	Door Assy - Porc. Black
	24396	Door Assy - Porc. Creme
	24382	Door Assy - Porc. Green
	24405	Door Assy - Porc. Blue
4	29708	Glass Frame Assembly
5	20651	Leg - Black
	20749	Leg - Porc. Black
	20860	Leg - Porc. Creme
	20861	Leg - Porc. Green
	21701	Leg - Porc. Blue
6	20626	Ash Lip - Black
	20737	Ash Lip - Porc. Black
	20854	Ash Lip - Porc. Creme
	20855	Ash Lip - Porc. Green
	21695	Ash Lip - Porc. Blue
7	20664	Spring Handle
8	24216	Heat Shield L & R - Black
	24392	Heat Shield L & R Porc. Black
	24398	Heat Shield L & R Porc. Creme
	24384	Heat Shield L & R Porc. Green
	24407	Heat Shield L & R Porc. Blue
9	25320	Restrictor Plate
10	25759	Air Shutter Adjustment Tool



## LIFETIME WARRANTY

#### LIFETIME WARRANTY

The Aladdin Hearth Products limited Lifetime Warranty guarantees that the following components will work as designed for the lifetime of the stove or Aladdin Hearth Products will repair or replace them. These items include but are not limited to steel and cast iron components, flame plate, firebox reflector, combustion chambers, heat exchanger systems, stainless steel firebox components, burners, gas logs, gold plating, doors, glass damaged by thermal breakage, steel baffles and manifold tubes.

#### THREE YEAR WARRANTY

Our EZ Clean and ceramic firepots are both covered under Aladdin's three-year warranty program.

#### ONE YEAR WARRANTY

All electrical components such as but not limited to blowers, wiring vacuum switches, speed controls, control boxes, thermodisc switches, pilot assembly, ignitors and gas valves are covered under Aladdin's one-year warranty ty program. Carburators are covered under Aladdin's one-year warranty. Labor to repair or replace these parts is covered for one year, reimbursed per our warranty service fee schedule.

#### CONDITIONS

This warranty is non-transferable and is made to the original retail price purchaser only, provided that the purchase was made through an authorized dealer of Aladdin Hearth Products. This Aladdin product must be installed by a competent, authorized service contractor. It must be installed and operated at all times in accordance with the Installation and Operating Instructions furnished with this product, as well as any applicable local and national codes. Any alteration, willful abuse, accident, or misuse of the product shall nullify this warranty.

Labor to repair or replace items covered under the limited Lifetime Warranty will be covered for the first five years per our warranty service fee reimbursement schedule. Parts covered under the limited Lifetime Warranty will be covered for the lifetime of the appliance up to a maximum of five years after Aladdin Hearth Products discontinues the model. Adjustments, regular maintenance and cleaning, and temporary repairs do not qualify for a service call fee and will not be covered. The replacement of consumer replaceable items and installation of upgraded component parts do not qualify for a service call fee, and will not be covered.

This limited Lifetime Warranty does not extend to or include surface finish of the stove, door gasketing, glass gasketing, thermocouple covers, firebrick, kaowool or other ceramic insulating materials. It does not cover installation or operational-related such as overfiring, use of corrosive driftwood, downdrafts or spillage caused by environmental conditions, nearby trees, building, hilltops, mountains, inadequate venting or ventilation, excessive offsets, or negative air pressures caused by mechanical systems such as furnaces, fans, clothes dryers, etc.

Any installation, construction, transportation or other related costs or expenses arising from defective part(s), repair, replacement, etc., will not be covered by this warranty, nor will Aladdin Hearth Products assume responsibility for them. Further, Aladdin Hearth Products will not be responsible for any incidental, indirect, or consequential damages, except as provided by law. Aladdin Hearth Products will not be responsible for any alteration to the unit which causes sooting that results in damage to the interior or exterior of the building in which this appliance is installed. This limited Lifetime Warranty does not apply to venting components, hearth components or other accessories used in conjunction with the installation of this product not manufactured by Aladdin Hearth Products.

This warranty is void if the stove has been operated in atmospheres contaminated by chlorine, fluorine, or there is any damage to the stove or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation. Aladdin Hearth Products may, at its discretion, fully discharge all obligations with respect to this warranty by either repairing or replacing the unit, or refunding the wholesale price of the defective part(s).

This limited Lifetime Warranty is effective on all Dovre and Arrow stoves sold at point of purchase after July1, 1998, and all Quadra-Fire stoves sold after September 1, 1996, and supersedes any and all warranties currently in existence.

# Attention

## INSTALLER

Please return these
Operating & Installation
Instructions to the
Consumer



Aladdin Hearth Products
401 N. Wynne
Colville, WA 99114
A Division of Hearth Technologies Inc.