DOVRE®

Heatilator Inc.
1915 W. Saunders Street
Mt. Pleasant, IA 52641
a HON INDUSTRIES company

DV425 DIRECT VENT WALL FURNACE

OWNERS MANUAL

AND INSTALLATION INSTRUCTIONS

MODELS: DV425 NATURAL GAS
DV425L PROPANE GAS

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

-Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

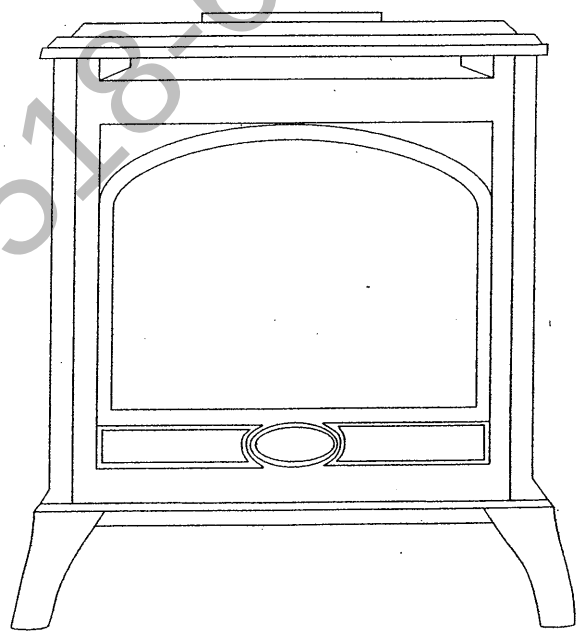
-WHAT TO DO IF YOU SMELL GAS

- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

-Installation and service must be performed by a qualified installer, service agency or the gas supplier.

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.



This heater may be installed with a vertical or horizontal direct vent termination system.

This manual must be used for installation of the DV425 Direct Vent Heater and retained by the homeowner for operating and maintenance instructions.

FOR YOUR SAFETY

The appliance area must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

Table of Contents

Safety Precautions

1. PLEASE READ THESE INSTALLATION INSTRUCTIONS COMPLETELY BEFORE BEGINNING INSTALLATION PROCEDURES. FAILURE TO FOLLOW THEM COULD CAUSE AN APPLIANCE MALFUNCTION RESULTING IN SERIOUS INJURY AND/OR PROPERTY DAMAGE.
2. DUE TO HIGH TEMPERATURES THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.
3. CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION.
4. YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.
5. CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.
6. ANY SAFETY SCREEN OR GUARD REMOVED FOR SERVICING AN APPLIANCE MUST BE REPLACED PRIOR TO OPERATING THE APPLIANCE.
7. WARNING: DO NOT OPERATE APPLIANCE WITH THE PANEL(S) REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE PANEL(S) SHOULD BE DONE BY A LICENSED OR QUALIFIED SERVICE PERSON.
8. 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.
9. ENSURE THAT THE FLOW OF COMBUSTION AND VENTILATION AIR NOT BE OBSTRUCTED.
10. ENSURE THAT ADEQUATE COMBUSTION AND VENTILATION AIR ARE PROVIDED.

III. HEATER SYSTEM COMPONENTS

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

Catalog Number	Description
DV425	Direct vent Heater - black - natural gas, standing pilot
DV425L	Direct vent Heater - black - propane gas, standing pilot
DV425PBK	Direct vent Heater - porcelain black - natural gas, standing pilot
DV425PBKL	Direct vent Heater - porcelain black - propane gas, standing pilot
DV425PCR	Direct vent Heater - porcelain creme - natural gas, standing pilot
DV425PCRL	Direct vent Heater - porcelain creme- propane gas, standing pilot
DV425PGR	Direct vent Heater - porcelain green - natural gas, standing pilot
DV425PGRL	Direct vent Heater - porcelain green - propane gas, standing pilot
DV425PBL	Direct vent Heater - porcelain blue - natural gas, standing pilot
DV425PBLL	Direct vent Heater - porcelain blue - propane gas, standing pilot
BK94	Fan kit, 150 CFM, variable speed, thermostat ON/OFF
RC6	Remote control (battery/battery)
DT9BK	Decorative glass accent - black
DT9G	Decorative glass accent - gold
WS1	Warming Shelf - painted black
WS1PBK	Warming Shelf - porcelain black
WS1PCR	Warming Shelf - porcelain creme
WS1PGR	Warming Shelf - porcelain green
WS1PBL	Warming Shelf - porcelain blue
WSB1	Warming Shelf bracket and Mitten Rod - black
WSB1G	Warming Shelf bracket and Mitten Rod - gold
DRCSTAT	Remote Thermostat Control
NCK400	Natural Gas Conversion kit
PCK400	Propane Conversion Kit

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")
906	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" (11"–14 5/8") Adjustable Vent Black
945B	45° Elbow Black
945	45° Elbow Galvanized
990B	90° Elbow Black
990	90° Elbow Galvanized
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

I. LISTINGS AND CODE APPROVALS

U.S. Certification

The DV425 Series Heater has been tested in accordance with the ANSI standard Z21.44-1995 and UL307B 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 DV425 Series Heater has been tested in accordance with CAN2.19-M81, IR41 and IR55 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.

Local codes

Check with your local building code agency prior to installing this heater 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.

A manufactured home (mobile home) installation must conform with the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280*, or, when such a standard is not applicable, the Standard for *Manufacturer Home Installations, ANSI A225.1.*

This heater is approved for installation in bedrooms and mobile homes in the United States and Canada.

DOVRE® is a registered trademark of Heatilator Inc., a HON INDUSTRIES company.

Efficiency

The efficiency rating of the appliance is a product thermal efficiency rating determined under continuous operating conditions and was determined independently of any installed system.

If any assistance is required during installation please contact your local dealer or contact DOVRE Customer Relations Department, 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641.

II. DESCRIPTION OF THE HEATER SYSTEM

The DV425 is a direct vent Heater. Combustion air is supplied from outside, not from inside the house as with other types of heaters.

The installation of this DOVRE DV425 system consists of the following:

1. Appliance
2. Venting System
3. Termination Cap

Optional components include:

1. Decorative Glass Accent
2. Fan kit
3. Warming Shelf and Bracket With Mitten Rod

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

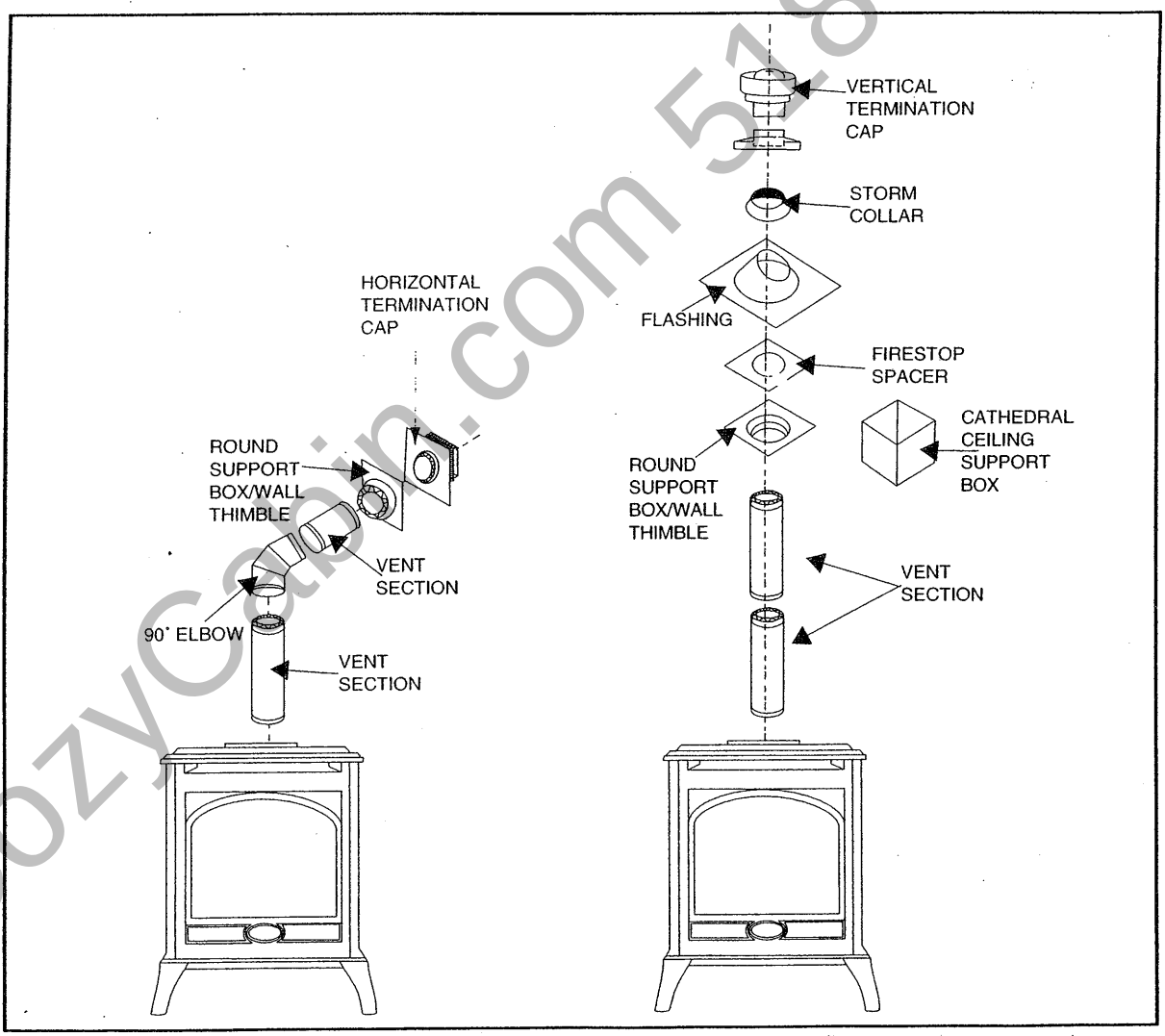
Note: Illustrations throughout these instructions reflect typical installations and are for design purposes only. Actual installation may vary slightly due to individual design preferences. However, minimum and maximum clearances must be maintained at all times.

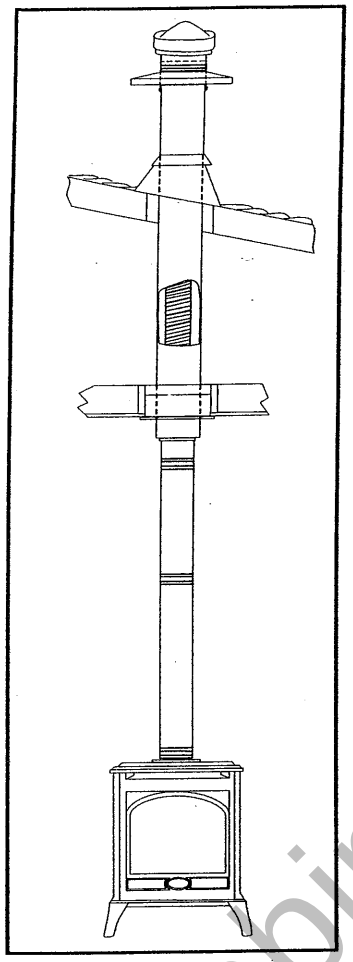
The illustrations and diagrams used throughout these installation instructions are not drawn to scale.

DURA-VENT GS Catalog #	Venting System Components Description
988	Wall Strap
981	Snorkel Termination (36")
982	Snorkel Termination (14")
971	Horizontal Kit (Horizontal Termination Cap, One 90° Black Elbow, Wall Thimble, 24" Black Pipe, 11" - 14 5/8" Adjustable Vent
980	Vertical Termination Cap with Wind Halo
984	Horizontal Termination Cap
909B	Retrofit Adjustable Chimney Connector Retrofit Chimney Connector Plate
950	VSS - Vinyl Siding Standoff/Shield
3951	Round Ceiling Support/Wall Thimble Trim Kit, Polished Brass
3960	Cathedral Ceiling Support Trim Kit, Polished Brass

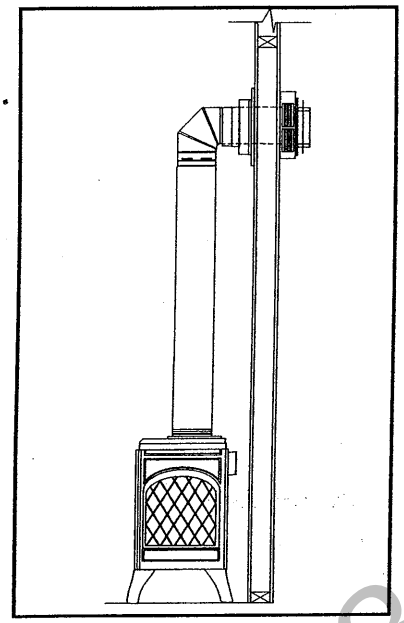
The VTA1, Vertical Termination Adapter Kit) may also be safely used with this heater. It is composed of a Vertical Termination Cap and Cover Plate for existing vertical chimney.

TYPICAL ASSEMBLY

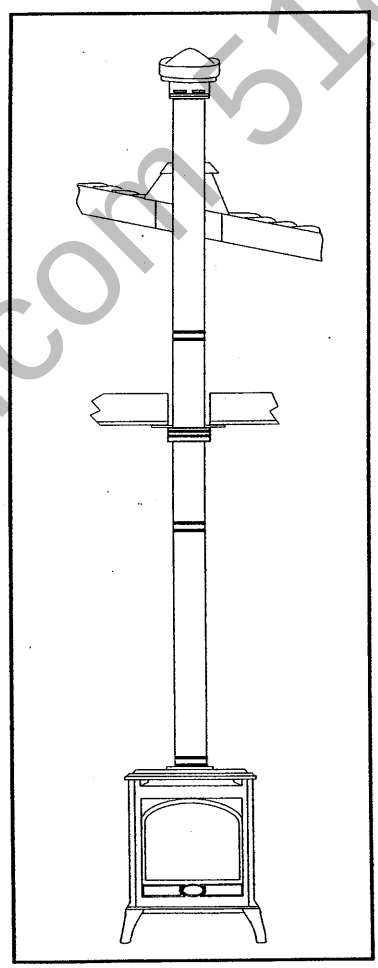




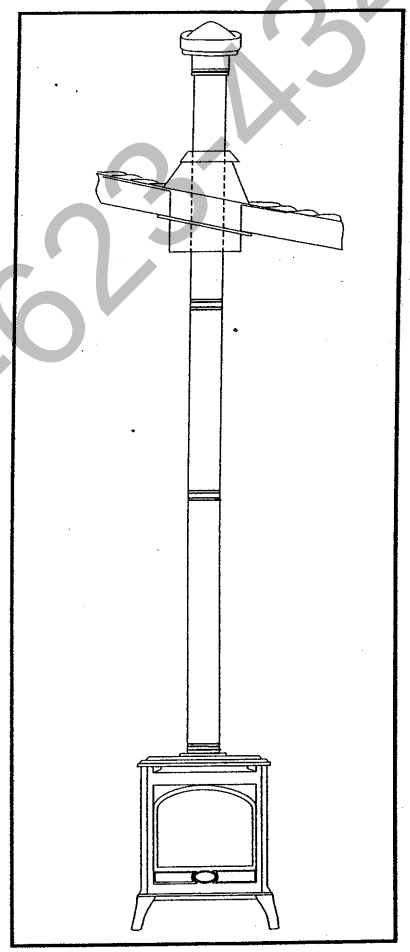
Retro-Fit Installation



Horizontal Termination



Vertical Flat Ceiling



Cathedral Ceiling

COMMON INSTALLATIONS

IV. PRE-INSTALLATION PREPARATION

WARNING: THIS HEATER 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 30,000 Btu/hr. For propane gas, the minimum inlet gas supply pressure is 11.0 inches water column and the maximum is 14.0 inches water column. Input rate is 28,000 Btu/hr.

Manifold pressure for this heater is 1.7 - 3.5 inches water column for natural gas and 5.4 - 11.0 inches water column for propane gas. This heater 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 heater, accessible for a test gage connection. Pressure taps are located on top of the valve for both inlet and outlet pressure.

B. HIGH ALTITUDE INSTALLATION

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

When installing this unit at an elevation above 2000 feet, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input should be reduced 4 percent for each 1000 feet above sea level. Check with the local gas utility for proper orifice size identification. This unit is shipped with a .106 in./2.67 mm. orifice size on natural gas versions and a .063 in./1.60 mm. orifice size on propane gas versions.

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

When installing this unit 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 TO UNIT

The following clearances to combustibles must be maintained: Minimum clearances to the floor - 0", back of unit to wall - 6", sides of unit to wall - 6", base of the unit to ceiling - 72".

Provide adequate accessibility clearances for servicing and proper operation.

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 heater 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.

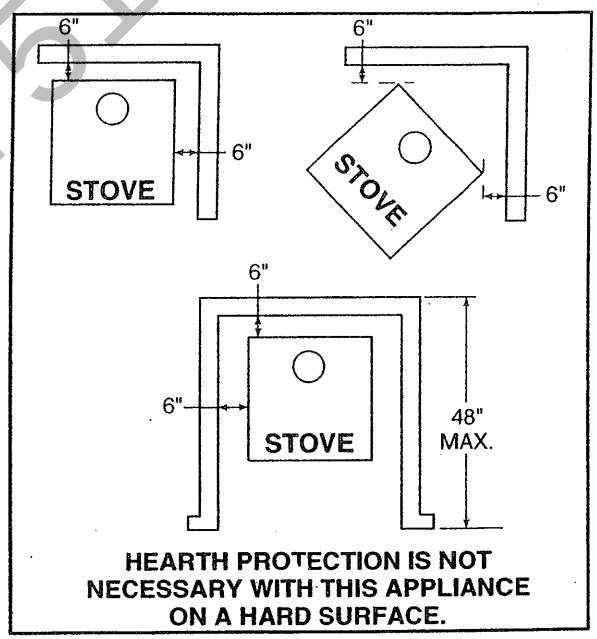


Figure 1
Minimum Clearances To Combustibles

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

Floor Protection: See page 8, the section entitled "Positioning the appliance."

V. STEP-BY-STEP INSTALLATION OF THE DV425 SYSTEM

INSTALLATION AND REPAIR SHOULD BE DONE BY A QUALIFIED SERVICE PERSON. THE HEATER 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 HEATER BE KEPT CLEAN.

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.**
3. **ALWAYS MAINTAIN THE MINIMUM AIR SPACE REQUIRED TO THE ENCLOSURE TO PREVENT FIRE.**

Tools normally required for installation.

Saw
Pliers
Phillips screwdriver
Tape measure
Plumb line
Level
Electrical drill and bits
Square
High Temperature Sealant Material*

***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.

STEP 1 - Positioning the appliance

This appliance may be placed on a combustible or non-combustible continuous, flat surface. When the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance. Slide the unit into position and level the unit from side-to-side and front-to-back. Shim as necessary.

STEP 2 - Venting System Configurations

Four types of venting configurations are possible for this heater, horizontal, vertical, existing masonry chimney, and existing Class A metal chimney.

A. Horizontal Termination

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

VERTICAL RISE	15' MAX. HORIZONTAL RUN													
	2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'
16' Thru 4'	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3'	X	X	X	X	X	X	X	X	X					
2'	X	X	X	X	X	X	X	X	X					

Figure 2
Venting Combinations

Note: A horizontal run of vent must have a 1/4" rise for every 1 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: When using three 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 Figure 2.

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

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 3. 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 4 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.

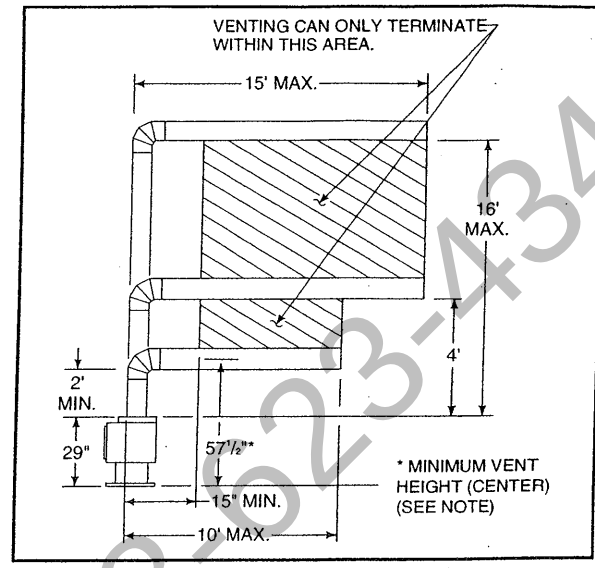


Figure 3 - Horizontal Length

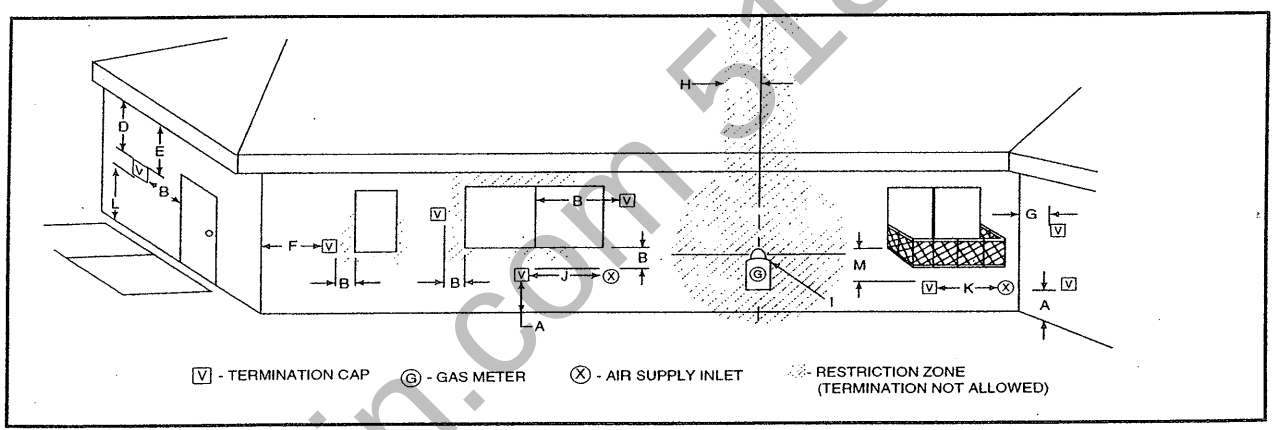


Figure 4 - Termination Cap Locations

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.**

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.

I = Clearance to service regulator vent outlet - **3 feet (90 cm) minimum-United States; 6 feet (1.8 m) min.-Canada.**

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 located 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.

1. 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 horizontal vent is 57 1/2" from the base of the unit. This figure will increase by the length of each vertically positioned vent section added to the venting system. See Figure 5.

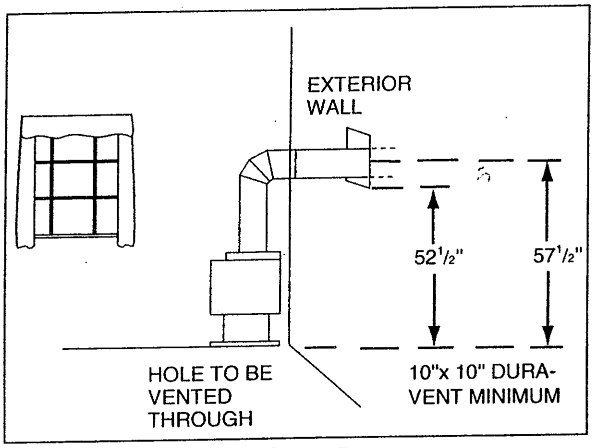


Figure 5
Exterior Wall Hole

The horizontal run of vent must have 1/4" of rise per 2 feet of run and be perpendicular to the wall.

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 venting sections. Use only vent supplied and listed for use with this heater.

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

The Dura-Vent GS is unitized and twist-locks together. For the twist-lock procedure, consult Figure 6 and 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).

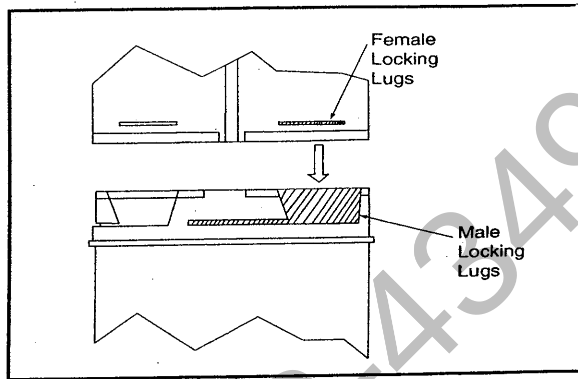


Figure 6
Twist-lock procedure

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.

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 impo tant that the vent pipe extends a minimum of 1 1/2" into vent cap.

3. Termination Cap. Position the horizontal vent termination so that 1 1/2" clearance is maintained on top of the vent sections and 1 1/2" on sides.

Before attaching the Vent Termination to the exterior wall, run a bead of non-hardening mastic around the outside edges to make a seal between the Cap and the wall.

Attach the Cap to the exterior wall with eight (8) wood screws, making sure that the arrow on the Cap is pointing up. After the Cap is attached, make sure that a 1 1/2" is maintained from top of vent to combustibles.

NOTE: For buildings with vinyl sidings, a Vinyl Siding Standoff should be installed between the vent cap and the exterior wall. Attach the Vinyl Siding Standoff to the Horizontal Vent Termination. The Vinyl Siding Standoff prevents excessive heat from possible melting the vinyl siding material.

Secure the connection between the vent pipe and the vent cap by attaching the two sheet metal strips extending from the vent cap assembly into the outer wall of the vent pipe. Use the two sheet metal scerws provided to connect the strips to the Pipe Section. Bend any remaining portion of the sheet metal strip back towards the vent cap, so it will be concealed by the decorative wall thimble cover. See Figure 7.

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.

4. Vertical rise on the exterior. For installations requiring a vertical rise on the exterior of the building, 14-inch and 36-inch tall Snorket Terminations are available. Follow the same installation procedures that are used for standard horizontal termination found in Step 4. See Figure 9.

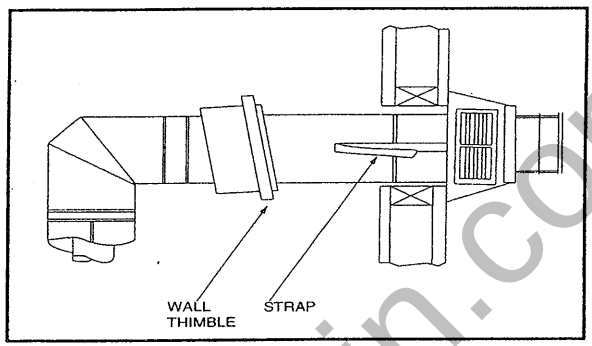


Figure 7
Insertion of Vent Pipe

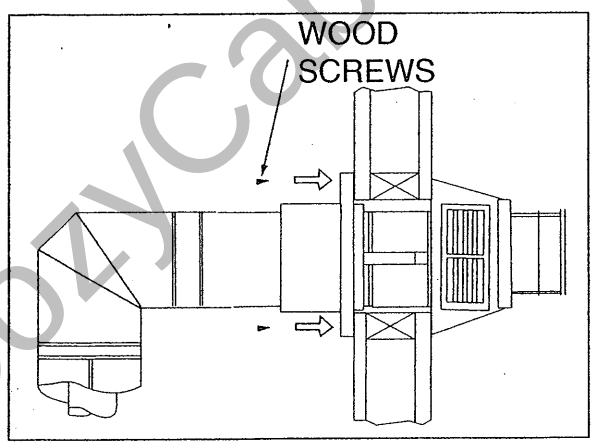


Figure 8
Decorative Wall Thimble

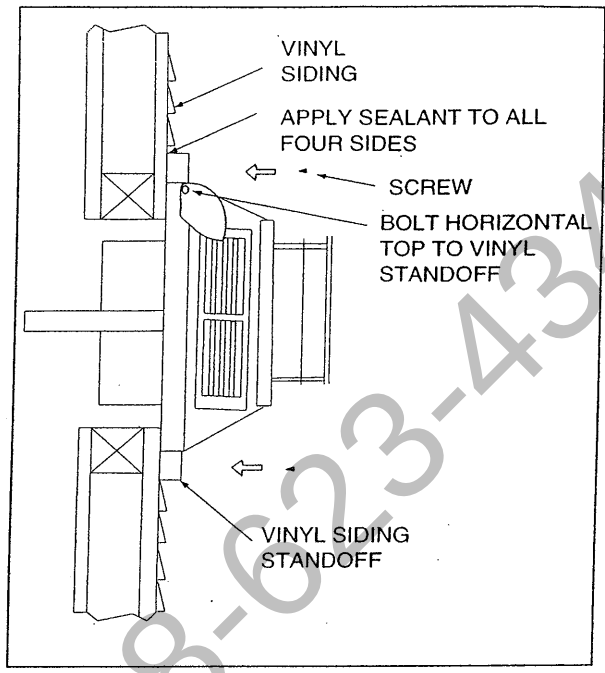


Figure 9
Vinyl Siding Standoff

B. Vertical Termination

The following figures are the maximum distances from the base of the unit, 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 unit. maximum horizontal unsupported run - 3 feet; air space clearances around vertical venting - 1/2" on all sides; air space clearances around horizontal venting - 1½" on top and ½" 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 a vertical termination every 1' of horizontal run requires at least 2' of vertical rise. (Example: a 12' overall installation height may be offset as much as 6' horizontally.) The maximum is 20 feet.

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

2. Preparing the ceiling. Drop a plum bob down from the ceiling to the position of the heater 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, roof rafters, or other framing will obstruct the venting system. You may wish to relocate the appliance, or to offset to avoid cutting loadbearing members.

B. Vertical Termination (cont.)

To bypass any overhead obstructions, the vent system may be offset using a 45° elbow or a 90° 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 10.

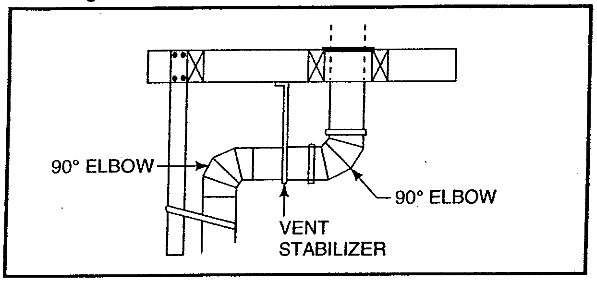


Figure 10
Elbows with Stabilizer

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 heater or any vent joint.

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.

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

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

The Dura-Vent GS is unitized and twist-locks together. For the twist-lock procedure, consult Figure 5 and 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 5.) 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 heater 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.

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. Major building codes specify a minimum vent (chimney) height above the roof top depending on roof pitch. See Figures 11 and 12. Add pipe sections until the height of the Vent Cap meets the minimum building code requirements described in Figure 15. 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.

5. Termination Cap. Twist lock the Vent Cap.

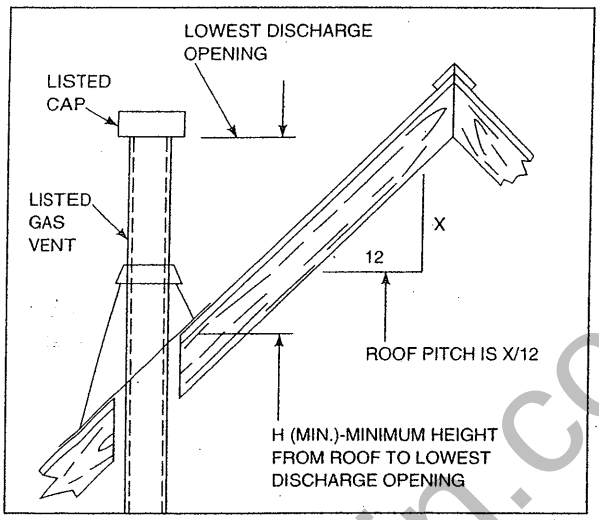


Figure 11
Vent (Chimney) Height

Roof Pitch	H (Min.) Ft.
Flat to 6/12	1.0
6/12 to 7/12	1.25
Over 7/12 to 8/12	1.5
Over 8/12 to 9/12	2.0
Over 9/12 to 10/12	2.5
Over 10/12 to 11/12	3.25
Over 11/12 to 12/12	4.0
Over 12/12 to 14/12	5.0
Over 14/12 to 16/12	6.0
Over 16/12 to 18/12	7.0
Over 18/12 to 20/12	7.5
Over 20/12 to 21/12	8.0

Figure 12
Vent (Chimney) Height

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.

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 Dura-Vent GS flue system. See Figure 13. **Before installing the liner system, the chimney passageway should be cleaned and examined to verify it is unobstructed and in good structural condition.**

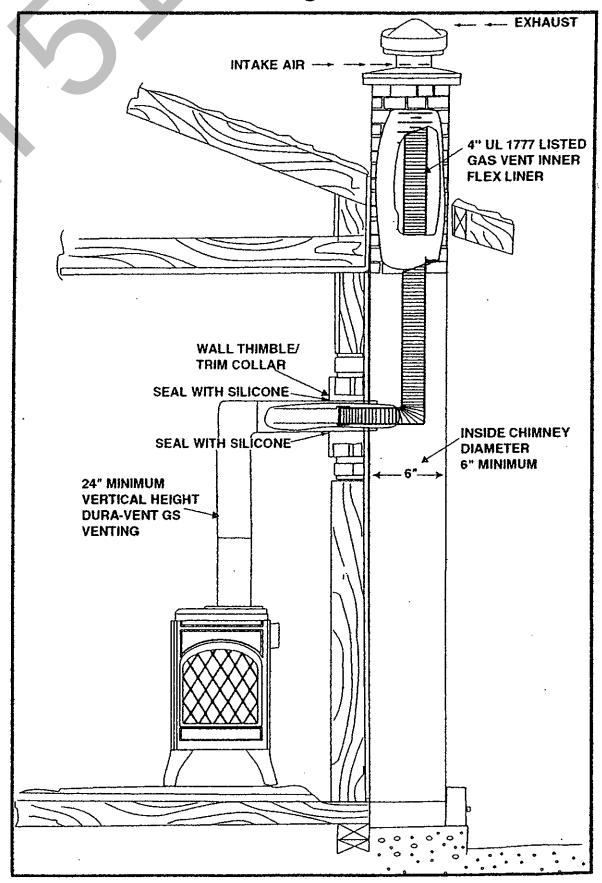


Figure 13
Adaptation to Masonry Chimney

C. Existing Masonry Chimney Installation Requirements (cont.)

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

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. After feeding the liner down the chimney, form a 90˚ angle and bring the liner through the hole in the chimney wall. (If running two liners, run the 6" liner first and then the 4" inside of it.) Extend the liner through the wall of the chimney and attach it to the venting system extending from the top of the heater.

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 14. The flashing will require a hole at least 6 1/2" in diameter. (If using a 6" liner, 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 provided. See Figure 14.

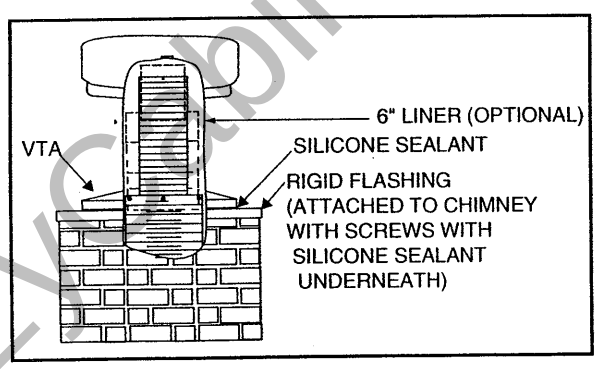


Figure 14
Masonry Termination

D.Existing Class A Metal Chimney Termination

In many cases where a DOVRE DV425 is replacing a woodstove, much of the existing Class A Metal Chimney can be incorporated into the direct vent system.

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 heater 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 size diameter is 6 inches.

Minimum height from the base of the stove to the top of termination cap is 9 feet.

The vent from the top of the heater to the Chimney must be rigid vent sections. A 4" UL 1777 listed gas vent aluminum flexible liner can be used inside the chimney. The flexible liner must be secured to the last rigid section with three (3) sheet metal screws. A minimum 3 inch overlap is required. Remove and discard the existing chimney termination cap.

Determine the length of the 4" UL 1777 listed gas vent flex liner required to meet the vent sections at the top of the heater.

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.

Place and secure the Termination Cap on the VTA with the screws provided. See Figure 15.

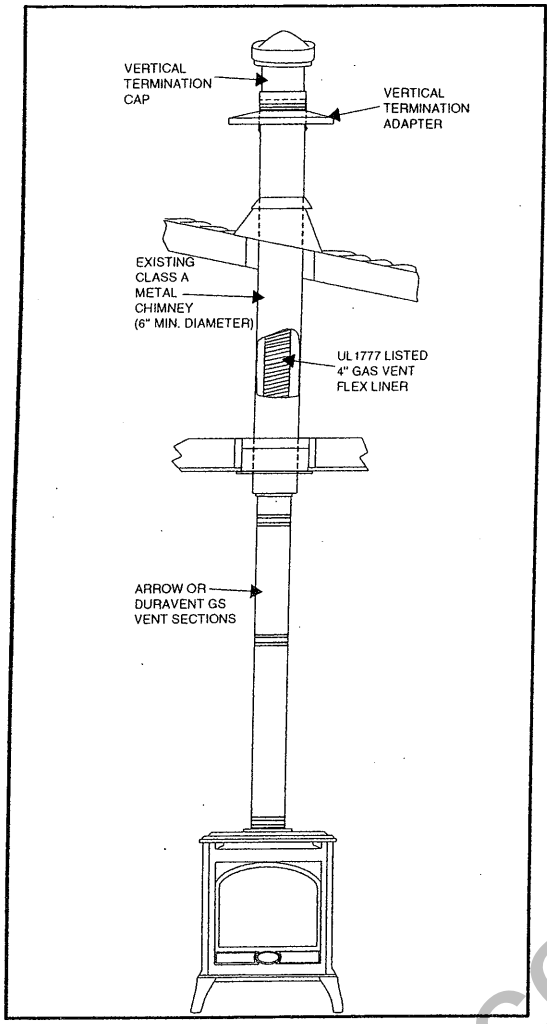


Figure 15
Retro-Fit to Metal Chimney

STEP 3 - Gas line installation

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

NOTE: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5 kPa). The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).

STEP 4 - Gas line connection

Connect the gas line to the appliance 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 the backside of the appliance. 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.

STEP 5 - Access to the gas valve.

Access to the valve and associated components can be accomplished at the lower right rear side of the heater.

STEP 6 - Wiring

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

Note: This heater 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.

A. Optional Wall Thermostat.

This heater can be used with a thermostat.

The use of a millivolt thermostat is allowed. It must be located within 20 feet.

Figure 16 shows how to connect a millivolt thermostat without the on/off switch in the circuit. Disconnect the on/off switch from the valve and connect the millivolt thermostat wires to the valve terminals.

B Optional Accessories Requirements.

Optional accessories may be added now or at a later date. The optional fan kit (BK94) requires a 110VAC supply.

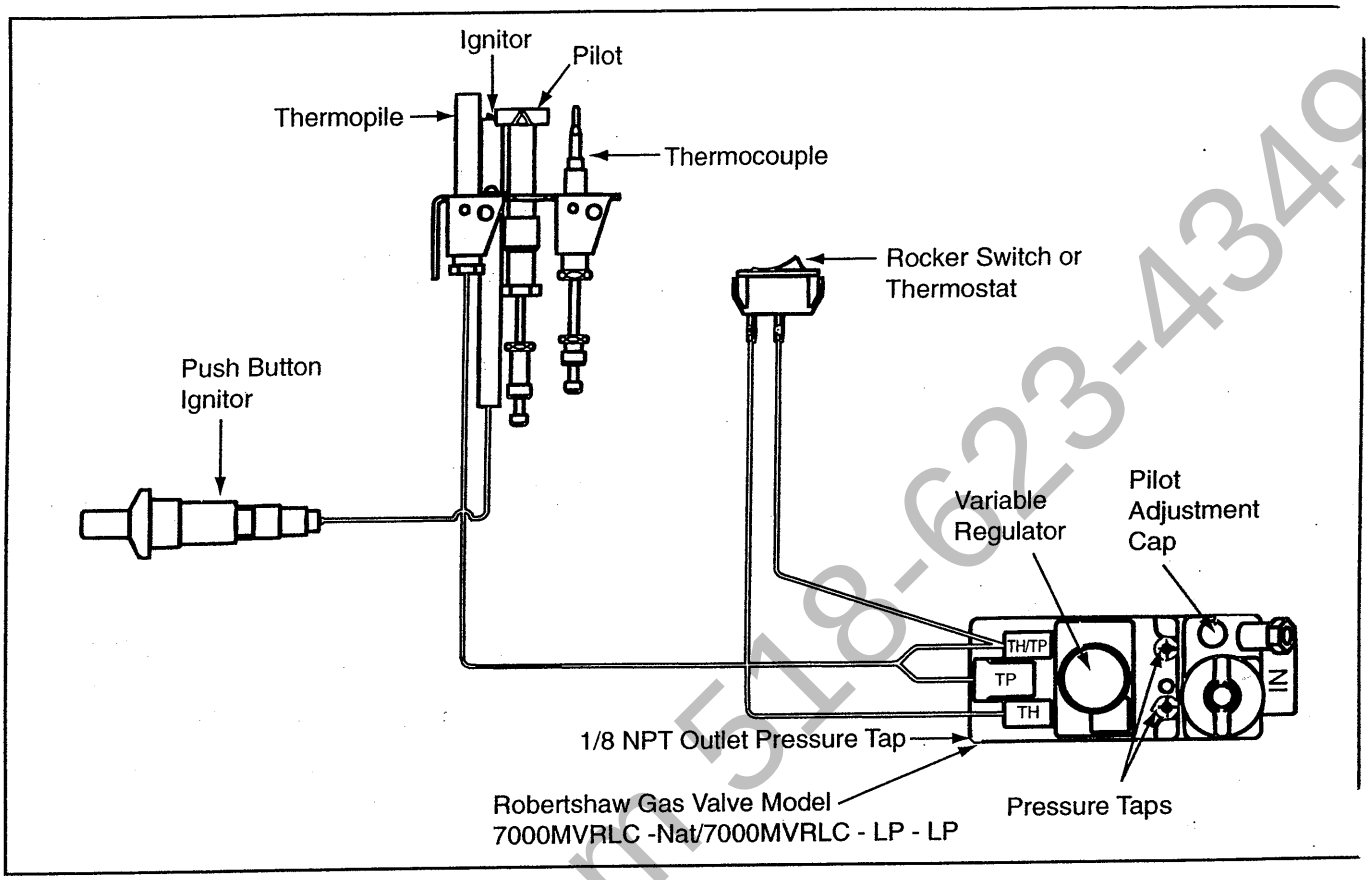


Figure 16a
Optional Wiring Diagram

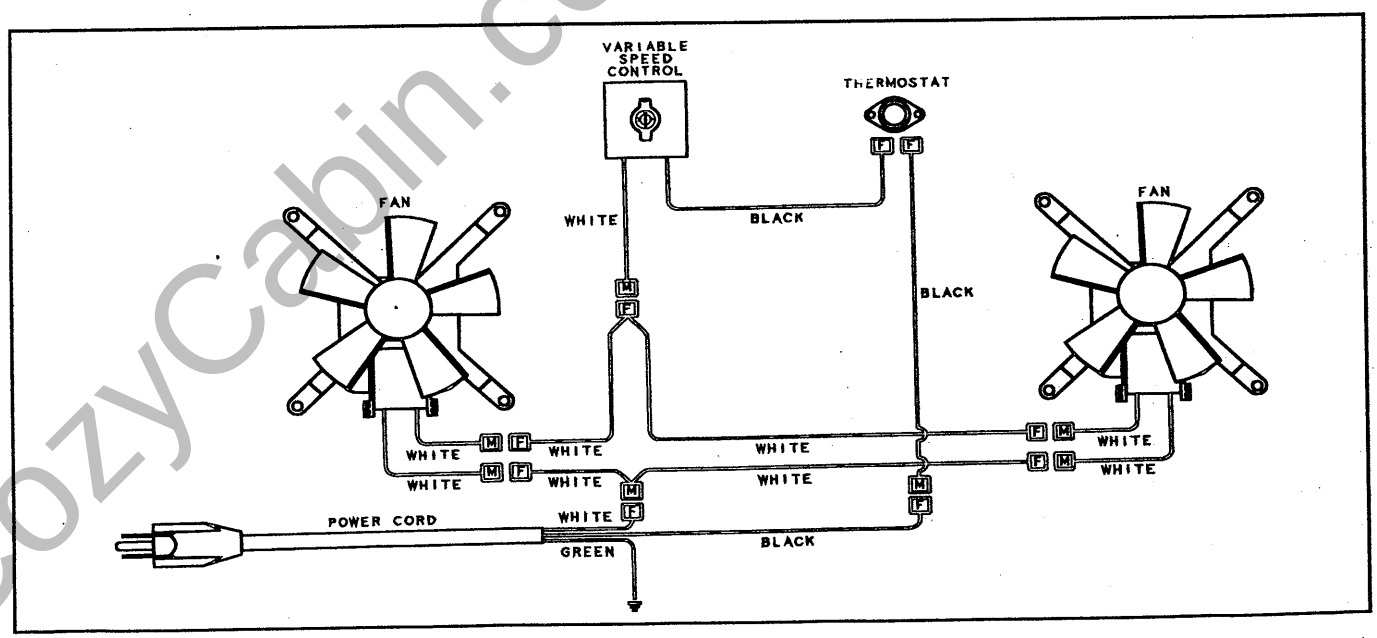


Figure 16b
Fan Wiring Diagram

Optional Blower Kit

The DV425 has been tested and listed with the use of an optional blower kit (BK94). The fan motors do not require lubrication; however, the blades and housing should be vacuumed and cleaned as needed.

BK94 Installation

1. Remove both of the cover plates from the backshield of the DV425 by removing the four (4) screws that hold each in place. See Figure 17.
2. Install each fan in the openings in the backshield with the screws from the cover plates. Install with the motor windings to the bottom. See Figure 18.
3. Plug the wires from the wiring harness onto the male ends of the fans. See Figure 16.
4. Install the blower housing onto the backshield. Position the housing over the switch and control knob and attach with the screws provided. See Figure 19. Be careful not to pinch the wires between the housing and the backshield.

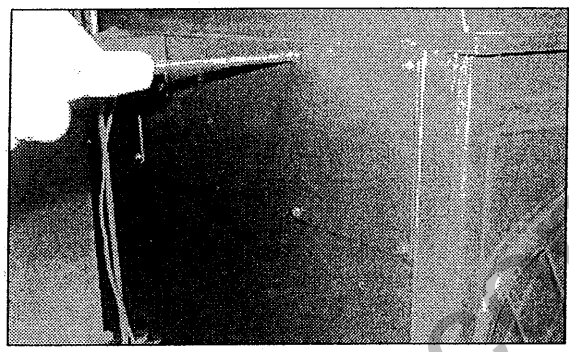


Figure 17
Removal of Fan Cover Plate

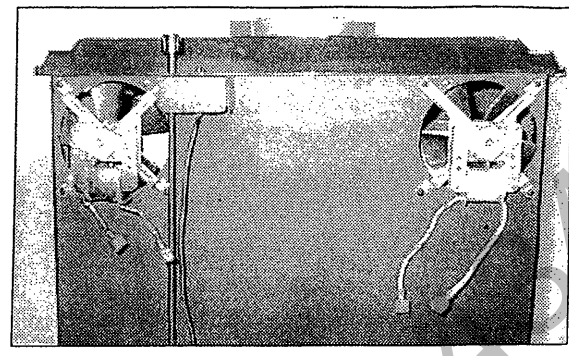


Figure 18
Fan Installation on Back Shield

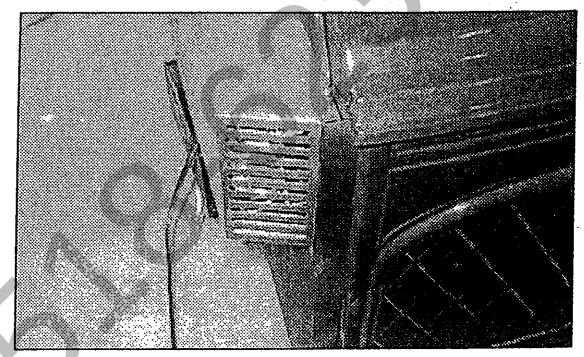


Figure 19
Attaching Blower Housing

WARNING

Electrical Grounding Instructions

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

STEP 7 - Firebox entry

1. Remove the bolt from the bottom of the unit that holds the front face in position.

2. Carefully lift the front face up and pull the bottom forward. Place in a safe place.

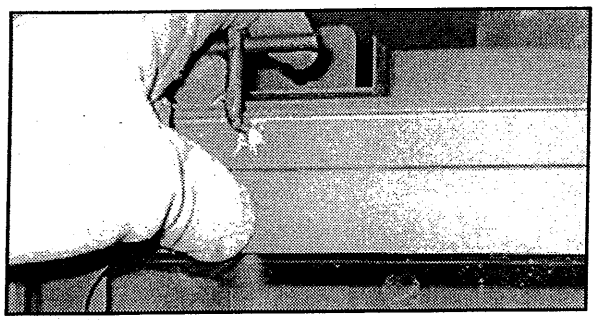


Figure 20
Removal of Sealed Glass

3. Remove the glass frame assembly by pulling the latch releases forward and lifting up. See Figure 20. Lift the glass frame assembly up, removing the three (3) tabs at the bottom from the slots. See Figure 21.

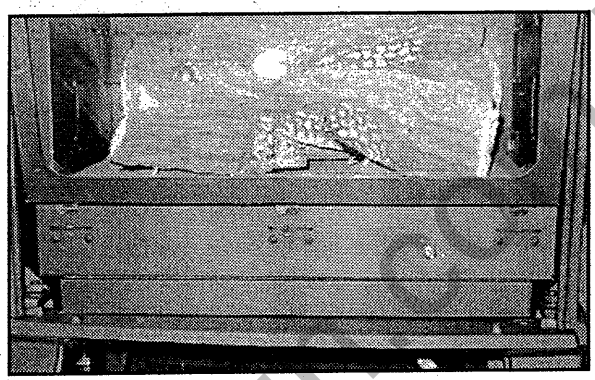


Figure 21
Glass removed by lifting from slots

STEP 8 - Log Placement

The logs are fastened to the hearth pan and shipped in place. See Figure 22.

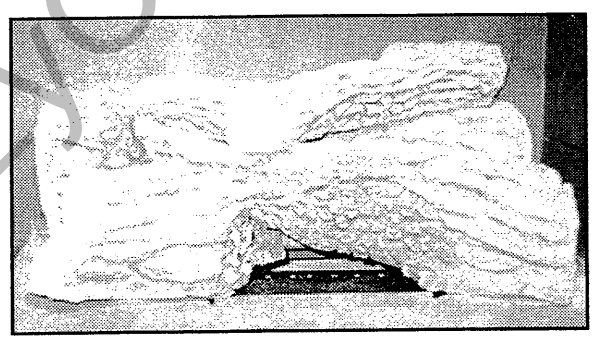


Figure 22
Log Placement

STEP 9 - Placing the Rock Wool

Tear the rock wool into pieces, no bigger than 1/2" diameter, and place them over the front gas ports so that the flame can touch the rock wool. This creates the glowing ember look. Be sure not to pack the rock wool tight against the gas ports. See Figure 23.

Do not cover the small ports under the log on the right side.

Figure 23
Placing the Rock Wool

The rock wool can easily affect the appearance of the flame. Some experimenting may be necessary to get an acceptable looking flame. Too much rock wool on the ports can cause improper combustion and cause sooting (especially with an appliance using propane gas).

NOTE:

The hearth pan/log assembly is held in place with a screw on each side towards the center.

If it becomes necessary to remove the log assembly from the unit, remove the screw from each side of the hearth pan and remove the complete assembly. See Figure 24.

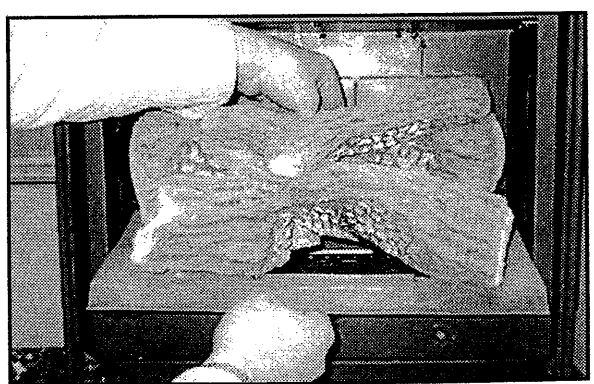


Figure 24
Removal of Log Assembly

Step 10 - Adjustable Flue Restrictor

The DV425 has an adjustable flue restrictor for maximum performance for vertical installations. The unit is shipped with the restrictor in the open position and should be left open with any horizontal installations.

By loosening the screw in the firebox and sliding towards the rear of the firebox, the restrictor will close down. See Figure 25.

The amount to close the restrictor will depend on the flue height.

If the vertical height is 20 feet or more, the restrictor can be closed all the way. Anything less will require some setting less than closed. That setting will vary depending on the installation.

Any offsets in a vertical installation will restrict the system and the flue restrictor will not need to be closed as much.

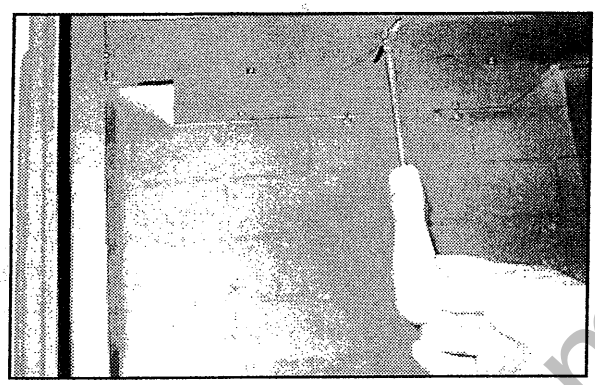


Figure 25

Adjustable Flue Restrictor

Step 11 - 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 12 - Install the Glass

After cleaning the glass, carefully place the glass frame assembly onto the unit by positioning the tabs at the bottom of the frame into the slots. Pull the latch releases forward and hook over the glass frame.

Step 13 - Optional DT9 Installation

The decorative trim can be installed at this time.

1. Lay the front face on a flat surface being careful not to damage it.

2. Lay the DT9 onto the front face and attach with screws provided.

The screws are thread cutters and a power screwdriver is necessary to drive the screws into position. See Figure 26.

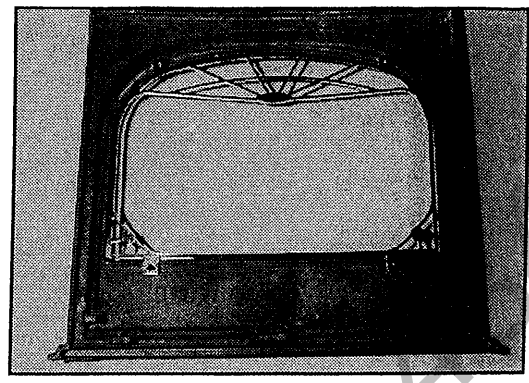


Figure 26

DT9 Installation

Step 14 - Replacing the Front Face

Carefully lift the front face into position and replace the screw to hold it in position.

WARNING

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

WARNING

DO NOT OPERATE APPLIANCE WITH THE PANEL(S) REMOVED, CRACKED OR BROKEN. REPLACEMENT OF THE PANEL(S) SHOULD BE DONE BY A LICENSED OR QUALIFIED SERVICE PERSON.

PreUse Check

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

1. Check to make sure the logs are securely in placeand the rock wool has all been placed correctly. (Refer to Steps 8 and 9.)
2. Check to see that all wiring is correct and enclosed to prevent possible shock.
3. Check to ensure there are no gas leaks. This may be done with a soap and water solution.
4. Make sure the glass is sealed and in its proper position. Never operate this heater with the door opened or glass removed or not sealed.
5. 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.
6. Read and understand these Instructions thoroughly before attempting to operate this heater.

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 gas appliance has a manual ignition device that lights the pilot. When lighting the pilot, follow these instructions exactly.

B. STOP! BEFORE READING FURTHER, smell around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle to the floor.

WHAT TO DO IF YOU SMELL GAS:

*Do not try to light the appliance.
*Do not touch any electric switch; do not use any telephone in your building.
*Immediately call your gas supplier from a neighbor's tele phone. Follow the instructions of your utility.
*If you cannot reach your utility, call the fire department.

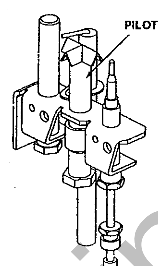
C. IF THE PILOT LIGHT AND BURNER WENT OUT DURING USE, YOU MUST TAKE THE GLASS OFF THE APPLIANCE AND WAIT TO CLEAR OUT ANY GAS. FOLLOW THE LIGHTING INSTRUCTIONS BELOW.

D. Use only your hand to push in or turn the gas control knob to light the pilot. Never use tools. If the knob will not push in or turn by hand, do not try to repair it; call a qualified service technician. Using a tool or attempting repairs may result in a fire or explosion.

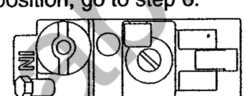
E. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above.
2. Turn off all electric power to the appliance. If your appliance has a thermostat, set to lowest setting.
3. Open control access panel.
4. Find the pilot. The pilot is inside the combustion chamber next to the main burner.



5. If the gas control knob is at the "OFF" position, go to step 7. If the gas control knob is at the "ON" position, go to step 6.



6. If the pilot light went out during normal use with the gas control knob at the "ON" position, turn the gas control knob to the "OFF" position. REMOVE THE FIXED GLASS PANEL. Wait ten (10) minutes to clear out any gas.
7. Smell for gas, including near the floor. If you don't smell gas, go to the next step. If you smell gas, wait another five (5) minutes or until the gas odor is no longer present before continuing. If the odor of gas does not disappear after fifteen (15) minutes, STOP! Follow "B" in the safety information above.
8. Replace glass panel if it has been removed.
9. Turn gas control knob counterclockwise ↶ to the "PILOT" position.
10. Push the gas control knob in all the way and hold. At the same time, push in red ignition button repeatedly until the pilot lights. Never hold the gas control knob in for more than ten (10) seconds if the pilot does not light. Once the pilot lights, continue to hold the gas control knob in for 15 seconds. Release the gas control knob and it will pop back up. If pilot does not remain lit, repeat steps 6 through 9.

*If gas control knob does not pop back up when released, turn the knob to "OFF" and call your service technician or gas supplier.
*If the pilot will not stay on after two attempts, turn the gas control knob to "OFF" and call your service technician or gas supplier.

11. Turn gas control knob counterclockwise ↶ to the "ON" position. The knob can be turned to the "ON" position only if it is popped out.
12. Close the access panel.
13. Turn on electrical power to the appliance. If equipped with a thermostat, set to the desired setting.

TO TURN OFF GAS TO APPLIANCE

1. Turn rocker switch to OFF or the wall thermostat to lowest setting if your unit is so equipped.
2. Turn off all electric power to the appliance if service is to be performed.
3. Open control access panel.
4. Turn gas control clockwise ↷ to "OFF".
5. Close control access panel.

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.

Subsequent lightings of the appliance will not require such purging.

CAUTION: During the initial purging and subsequent lightings, NEVER allow the gas valve control knob to remain depressed in the "pilot" position without pushing the red ignitor button at least once every second.

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.

ON/OFF SWITCH FOR THE BURNER

The on/off switch for the burner is located at the rear of the unit.

The knob beside the switch controls the flame setting. Turning clockwise increases the flame and counterclockwise turns the flame to low.

See Figure 27.

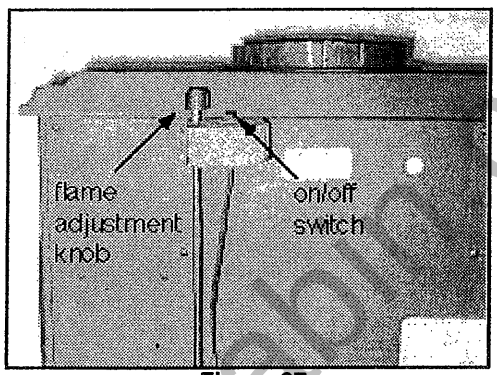


Figure 27
Flame Adjustment

AIR SHUTTER ADJUSTMENT

The air shutter adjusts the amount of air that mixes with the gas as it enters the burner pan. It is used to fine tune the flame as necessary for differences in altitude and vent configuration. The shutter is shipped in the open position.

It can be adjusted by removing the front face and turning the adjustment screw. See Figure 28.

Turning the screw in will close the shutter; turning the screw out will open the shutter.

The shutter can be adjusted while the unit is in operation. However, the unit should be shutoff and allowed to cool **before** removing the front face.

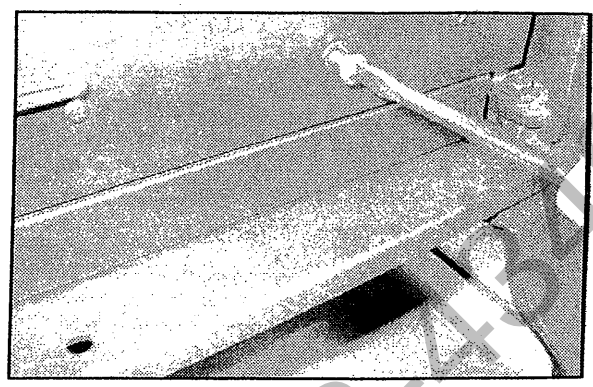


Figure 28
Air Shutter Adjustment

NOTE
Allow the unit to cool before replacing the front face.

Allow the unit to operate about 15-20 minutes. This will give the flame time to reach its height and color before making adjustments to the air shutter. As the shutter is closed, the flame should get taller and darker.

The appliance 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 unit.

Keep the control compartment, logs, and burner area surrounding the logs clean by vacuuming or brushing at least twice a year.

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

SEASONAL SHUTDOWN

When the burning season comes to an end, the entire system should be shut down to prevent gas running to the appliance while it is not in use.

OPERATION PROCEDURE DURING REGULAR USE

Simply turn the switch/thermostat to the ON position. This will ignite the main burner.

SHUTDOWN DURING REGULAR USE

Simply turn the switch/thermostat to OFF. This will disengage the burner and the flames will extinguish.

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 21.)

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 Figures 29 and 30.

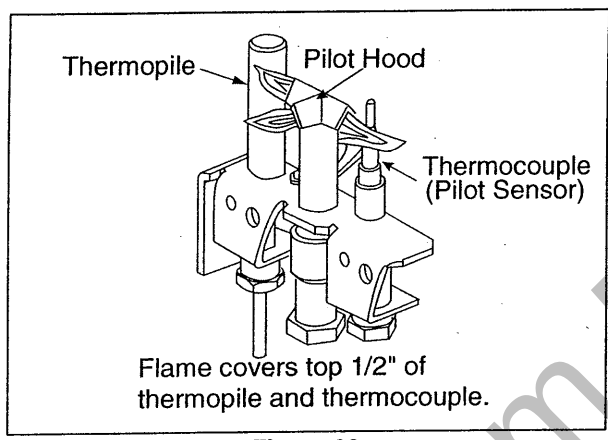


Figure 29

Standing Pilot

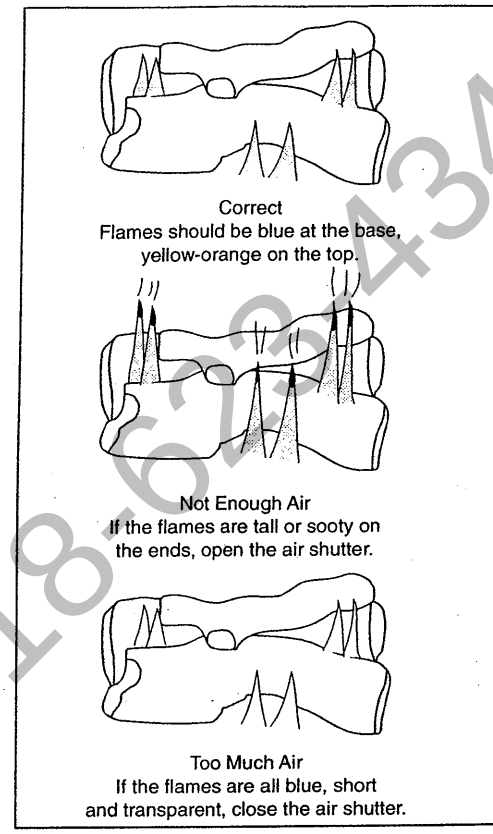


Figure 30

Flame Patterns

NOTE: If the air shutter is open all the way and the flames remain sooty, shut off gas to the appliance and contact a qualified gas service technician.

If the vent configuration is installed incorrectly, the vent may cause the flames inside the appliance to lift or "ghost" - a dangerous situation. Inspect the flames after installation to ensure proper performance. If the vent configuration is correct, yet the flames are lifting or ghosting, shut off gas to the appliance and contact the dealer for information on remedying the problem.

Venting System Inspection

The heater 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.

WARNING

Do not use this heater 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.

Cleaning the glass

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

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

To open the door and remove the glass for cleaning, follow Step 7 on page 18.

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.

Never operate this heater 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 direct or through your local distributor. Never use substitute material. Only ceramic glass may be used on this heater.

Glass Latch Releases

The paint may flake off of the latches in time. The latch is still good and can be touched up with hi-temp black paint. **DO NOT PAINT WHEN HOT.**

Log cleaning

Logs can be easily lifted out of position. Carbon build-up can be removed with a vacuum cleaner.

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

VIII. TROUBLE SHOOTING

STANDING PILOT

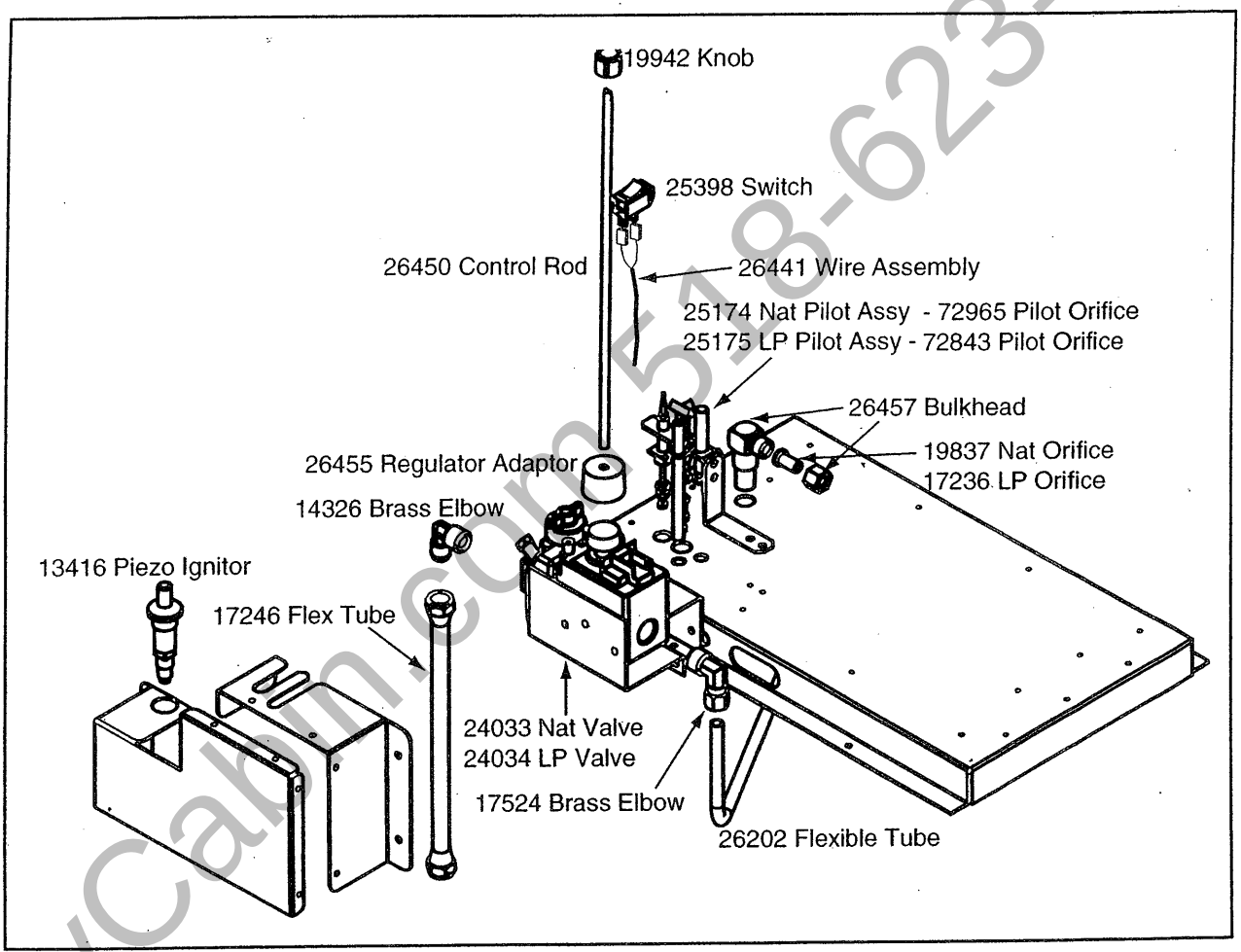
Problem	Cause	Corrective Action
1. Spark ignitor will not light pilot after repeated pressing of red button.	A. Defective ignitor.	Replace ignitor.
	B. Misaligned electrode.	Spark should be approximately 1/8" to bottom of pilot hood. Adjust gap to give proper spark. Remove hands from electrode before pressing red button.
	C. No gas to pilot/plugged orifice.	Check valve knob position & any shut-off valves. If propane, check for empty tank. Check pilot orifice; remove any blockage.
	D. Ignitor wire grounding out.	Replace pilot assembly.
	E. Loose ignitor wiring.	Check for spark. If electrode connection is correct & no spark, replace ignitor.
2. Pilot will not stay lit.	A. Pilot flame not in constant contact with pilot sensor.	Check log placement. Check pilot flame; adjust flame if necessary.
	B. Pilot sensor not tightened/seated in valve properly.	Check that pilot sensor connector is tight in valve.
	C. Defective pilot sensor thermocouple.	Replace pilot sensor thermocouple.
	D. Faulty valve.	Replace valve.
3. With pilot lit, valve and ON/OFF switch in "ON" position, burner will not light.	A. 110 volts of electricity has burned out valve.	Remove voltage and replace valve.
	B. 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 doesn't come on, connect to ON/OFF switch junctions at valve. If burner comes on, replace wires.
	C. Plugged burner orifice.	Check burner orifice, remove blockage.
	D. Defective thermopile.	Replace thermopile.
	E. Burner not on orifice.	Check burner; place on orifice.
	F. Loose or faulty wiring.	Check for loose connections; verify wiring (See Figure 16).
	G. Faulty valve.	Replace valve.
4. Appliance turns itself off after a period of time, but pilot stays lit.	A. Intermittent short in ON/OFF wiring system.	Have a qualified service technician check venting system for blockage (i.e. bird nests, damage). Ensure proper venting condition. Check/replace ON/OFF wiring system.
	B. Defective thermopile.	Replace thermopile.
5. Appliance turns itself off after a period of time, pilot no longer lit.	A. Pilot flame not in constant contact with pilot sensor.	Check log placement; check pilot flame, adjust flame if necessary.
	B. Defective pilot sensor thermocouple.	Replace pilot sensor thermocouple.
6. Glass doors fog up.	A. Normal result of gas combustion.	No action necessary - glass will clear as appliance warms.
7. Blue flames.	A. Normal result during first 20 minutes of burning.	No action necessary - flames will turn more yellow after about 20 minutes.
8. Glass has film on it.	A. Normal result during initial few hours of operation.	Clean glass with Brasso or silver polish.
	B. Improper log placement causing soot.	Check log placement; reposition if necessary.
	C. Dark yellow tipped flame.	Open air shutter to increase air to gas ratio.

IX. REPLACEMENT PARTS

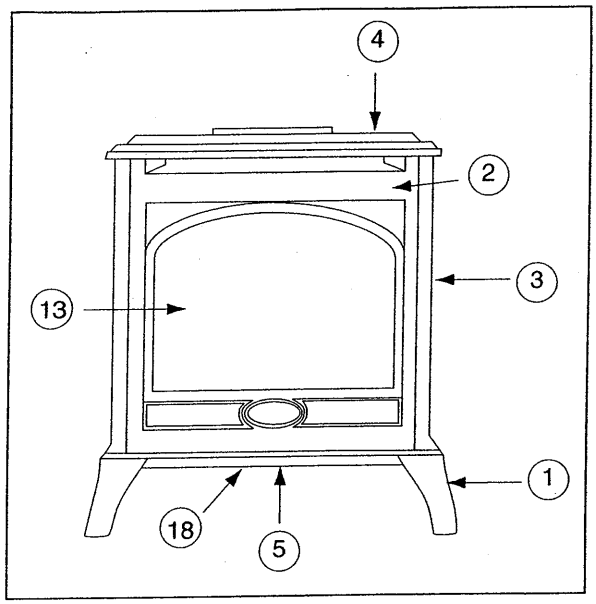
Replacement parts are available from your distributor/dealer, or through Arrow/Dovre, 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641.

If necessary, a conversion kit is available from your distributor/dealer, or through Arrow/Dovre. To convert from propane to natural gas, use the NCK 400. To convert from natural to propane gas, use the PCK 400.

ITEM	PART NO.	DESCRIPTION
A	26409	Gas Log Assembly
1	26410	Front Log
2	26412	Back Log
3	25799	Top Log
4	14333	Mineral Wool (Not Shown)
5	26384	Hearth Plate



** 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	26404	Leg-Black
	26420	Leg-Porcelain Black
	26425	Leg-Porcelain Blue
	26431	Leg-Porcelain Creme
	26437	Leg-Porcelain Green
2	26403	Front Face-Black
	26419	Front Face-Porcelain Black
	26426	Front Face-Porcelain Blue
	26432	Front Face-Porcelain Creme
	26438	Front Face-Porcelain Green
3	26400	Side Plate-Black
	26417	Side Plate-Porcelain Black
	26423	Side Plate-Porcelain Blue
	26429	Side Plate-Porcelain Creme
	26435	Side Plate-Porcelain Green
4	26401	DV425 Top Plate-Black
	26418	DV425 Top Plate-Porcelain Black
	26424	DV425 Top Plate-Porcelain Blue
	26430	DV425 Top Plate-Porcelain Creme
	26436	DV425 Top Plate-Porcelain Green
5	26402	Bottom Plate
6	26395	Left Refractory (not shown)
	26396	Right Refractory (not shown)
	26397	Back Refractory (not shown)
7	26455	Regulator Adaptor (not shown)
8	26450	Control Rod (not shown)
9	26447	Shutter (not shown)
10	26443	Shutter Screw (not shown)
11	26388	Ceramic Glass Assembly
12	26454	DV425 Glass Gasket (not shown)
13	26386	Glass Frame Assembly
14	26448	Switch Bracket (not shown)
15	21952	Glass Latch (not shown)
16	26398	DV425 Back Plate (not shown)
17	26390	DV425 Burner Assembly (not shown)
18	26415	Wing Bolt

HEATILATOR INC. FULL AND LIMITED WARRANTIES FOR ARROW®/DOVRE® GAS APPLIANCES

Heatilator Inc., a HON INDUSTRIES company ("Heatilator"), extends the following warranties for ARROW®/DOVRE® gas appliances installed in the United States of America or the Dominion of Canada. Dealers and Heatilator's employees have no authority to make any warranty or authorize any remedies in addition to or inconsistent with the terms of these warranties.

FULL WARRANTY. Heatilator warrants the following components of your ARROW®/DOVRE® gas appliances (the "Appliance") under normal use in accordance with the Operating Instructions and the Listing Agency Identification Label against any original defects in material and workmanship for a period of one (1) year from the date of installation: firebox assembly, standard and optional components manufactured by Heatilator (not including the logs, baffle, or vent system components), blower assembly, speed control switch, valve, pilot assembly, burner, piezo ignitor, electronic ignition assembly (where applicable), and door seal.

This Warranty runs only to the original consumer purchaser while the Appliance is in its location of original installation. In the event of a defect covered by this Warranty, Heatilator will, at its sole option, repair or replace the appliance at no charge to you.

LIMITED WARRANTY. Heatilator warrants the steel and cast iron components of the Appliance under normal use in accordance with the Operating Instructions and the Listing Agency Identification Label against any original defects in material and workmanship for an additional four (4) years after expiration of the full warranty. In the event of a defect covered by this Warranty, Heatilator will replace the steel and cast iron components of the appliance, but will not pay any freight or labor expenses associated with repairing or replacing such components.

Heatilator's obligation under these warranties does not extend to damages resulting from (1) installation or operation not in accordance with both the Installation Instructions and the Operating Instructions furnished with the Appliance; (2) installation which does not comply with local building codes; (3) shipping, improper handling, improper operation, abuse, misuse, accident or unworkmanlike repairs; (4) use of fuels other than those specified in the Operating Instructions; (5) installation or use of any components not expressly authorized and approved by Heatilator; and/or (6) modification of the Appliance not expressly authorized and approved by Heatilator.

These warranties gives you specific legal rights. You may also have other rights which vary from state to state.

LIMITATION OF LIABILITY.

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Because some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, the above limitations or exclusions may not apply to you.

HOW TO OBTAIN SERVICE. To obtain service under these warranties, you must:

1. Send written notice of the claimed condition to Heatilator Inc., ARROW®/DOVRE® Customer Relations Department, 1915 West Saunders Street, Mt. Pleasant, Iowa 52641.
2. Provide proof of purchase to Heatilator.
3. Provide Heatilator reasonable opportunity to investigate the claim, including reasonable opportunity to inspect the appliance prior to any repair or replacement work and before the Appliance or any component of the Appliance has been removed from the place of original installation.
4. Obtain Heatilator's consent to any warranty work before the work is done.

Attention

INSTALLER

Please return these Operating & Installation Instructions to the Consumer

heatilator®

The first name in fireplaces

Heatilator Inc.
1915 W. Saunders Street
Mt. Pleasant, IA 52641
a HON INDUSTRIES company
319/385-9211FAX 319/385-5862