CERTIFICATION  I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative that the property of the context of the code of the c	Date: Date: Date	Site Plan Approved Maj Minor MM Denied	3. Building permits are void if work is not started within six (6) months of the date of issuance.  False information may invalidate a building permit and stop all work	2. Building permits do not include plumbing,	1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.  Special Zone or Reviews Zoning Appeal State and Shoreland Shoreland Shoreland	Zon		PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)  Action: Approved Approved Approved WCondit	Proposed Project Description:  install new direct vent gas fireplace  Signature:  Signature:	vent gas fireplace  FIRE DEPT:  Approved Use Group  Use Group  MANUAL CONTROL OF THE DEPT:  Approved Use Group  MANUAL CONTROL OF THE DEPT:  MANUAL CONTROL OF TH	re w/ new direct Permit Fee: Cost of Work: \$39.00 \$1,400.00	Lessee/Buyer's Name Phone: Permit Type: HVAC	Builders Insulation 515 Riverside Industrial Parkw I	e: Contractor Name:	Location of Construction:   Owner Name:   Owner Address:   Owner Address:   OTYC= PCR∏AND   450 Ray St   OTYC= PCR∏AND	Maine - Building or Use Permit Application , 04101 Tel: (207) 874-8703, Fax: (207) 874-8716
authorized by the owner of record and that o conform to all applicable laws of this he code official's authorized representative the provision of the code(s) applicable to	Date:	Apphoved w/Conditions     Denied	nal Use	bous Does Not Require Review	g Appeal Historic Preservation  Not in District or Landman		Date:	ATTIES DISTRICT (P.A.D.)  Approved w/Conditions Denied	Signature:	. =	Cost of Work: CEO District: \$1,400.00 4	12-3	ortlan 207878660	Phone	OT / CF PORTLAND	2004

SIGNATURE OF APPLICANT

PHONE

DATE

### 国の代 Financial Mortgage

If you have any: (207)775-4200.			this a		RE: Kevin	NO. OF PAGES (	OUR FAX NO.	FROM:	FAX NUMBER:	COMPANY:	To:	DATE:
If you have any problems receiving this fax, please call us at: (207)775-4200.	Mar I	S laha	runing for the inspersus	Mest you ct 452 Ry		NO. OF PAGES (INCLUDING THIS SHEET):	(207) 775- 4949	Solar Sordin			Kain (and)	12/5/67
	318653	1/ork		Shoot		ı						

78 Atlantic Place • South Portland, Maine 04106

Phone: (207) 775-4200

Toll Free 1-888-775-4200

Fax (207) 775-4949

# STATE OF MAINE CHUMNEY OR FIREPLACE DISCLOSURE

Division of Licensing & Registrative in 624-8629 or write to the Division of #35 Step House Station, Augusta, Maine Dear Consumer: State law, specifically 32 M.R.S.A., Chapter 13, requires chimney or fineplace installers, as of January 1 1992, to provide you with this Dissilosaus prior to the installation work being done on your chimney or fireplace. The purpose of this Disclosure is to help you, as a consumer, make an informed decision as to the abilities of the installar and esused each year by improperly or nanced fireplaces and chimneys. For further information about this hav, call the registration or licensure of channer or theplace morallers; however, it is just as important to realize that many thes are under what requirements the installation trust comply. It is important to note that the State of Mains does not require

the installer, beroty attent the preceding information provided is true to the best of my knowledge. I also tender production that if I fall to combinat with the standards as outlined in NFPA 211 that I shall be subject to penaltics as outlined tender. Take 32, Chapter 33, Oil and Solid Fuel Board.  Signature.	Home Telephona 2011 318 1693 Business Telephone 2011 7751 4200 Installer, please give a brief description of installation being offered.  Installer, please give a brief description of installation being offered.	MICR IDENTIFICATION  Solve 1 100 100 100 100 100 100 100 100 100	Name of Eastailer (18 incorporated)  Logal Address  / Olower and Na.)  Command Address  (Cay a Theory Command)  (Cay a Theory Cay a The	NOTE OF THE LATE STATE THEORY AND SOUND TO THE LATER PROPERTY OF THE PROPERTY
---	---	--	--	---

Chime	·						XII.		rg :
A MONTON		Alexander of	Factory Built	1. Streets	William Charles	Masony di ye, frontace, Masi Chin		Factory-Bu	S CHAR CO 17
		NEA 211		to realist security.  V		verze and solid		it Chinney and	MI (CATALON SO
が、一定に対					Manager in more	designati meta ine gallancon		Tactory-Bullt Chirency and Chicansy Units.  Tactory-built chirency and chirency units that! b	Press coeff the type of web(s) that will be invialled:
で変数が					dano vila 14		editons and all s	all be listed and	
国際で属					PA211 md 8		A CONTRACTOR OF THE PARTY OF TH	thall be install	
					all apply good	as regular by	NEA 21 P	ed in accardenc	
, ;	भूदी प्रतासी विकास				Herman ing maca	NEPA 111 for	considers of the listing send the parameter term's incornections and all requirements of NFPA 221 for climate)'s, fireplaces, versus and solid fiell applicates.  Versus and solid fiell applicates.  Versus and solid field applicates.	Factory-Suit Chimney and Chiency Units.  "Rectary-Suit cirimacy and chimney units thail be listed and shall be inscalled in accordance with the temperature	
	및 오.		73.30	· ·	- 6		ji ————————————————————————————————————	ozatete.	

### CONSUMER CHECKLIST

*:*:

- Here you asked for references to be provided by the installer?

  Is the installer familiar with the NFFA 211 codes and does the installer carry a code book?

  If the installation is a pro-fibricated of firsplace, is its manufacturer registered with the Majne Oil & Salid Fuel Bd.

  Does the installer provide any type of written guarantee for the product installation boing proposed?
- Has the installer provided you with a spinen contract? 10 M.R.S.A. Chapter 219-A requires written emmacts for
- ĉυ any home remodeling or construction with an estimated cost in excess of \$1,400.

  Have you asked the local fire heparateut or code enforcement officials to inspect the installation chaing and after completion?

Revised St97

TOTAL P. 83

PAGE. 3

#### DISPLAY CARD FRONTAGE OF WORK

Please Read Application And Notes, If Any,



#### FILL IN AND SIGN WITH INK

# APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

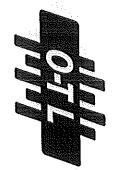
The undersigned hereby applies for a permit to install the following heating, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

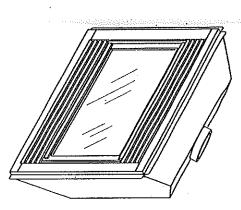
Signature of Installer	Bldg.:	Approved Fire:Ele.:	Other	•	□ Solid Fuel #	The Type of License of Installer:		IF NO Explain:	Will appliance be installed in accordance with the manufacture's installation instructions? If Yes \(\sigma\) No	Appliance Name: Dil Ges Fiseplace U.L. Approved D Yes D No	Type of Fuek:  If Gas	Attic	Location of appliance:     Basement   Floor	installer's name and address Euribles Insulation 515 Riversible Ind Pky	Location / CBL 452 Ray ST UNION Name and address of owner of appliance 672 Molosman Part
inspector's Signature		Approv  ☐ See attache	Permit Fee: \$	Cost of Work: \$ 19	Distance from Tank to Center of Flame	Number of Tanks	Size of Tank	Gas	Type of Fuel Tank	Direct Vent Type 165-75	☐ Metal Factory Built U.L. Listing #	Factory built	Type of Chimney:	n of ME. Telephone	Use of Building Lyon
gnature Date Approved		Approved with Conditions See attached letter or requirement		100/8	Center of Flame			<b>987</b>		contal UL#	L. Listing #			878-6600	Assoc) Date 16



# DIRECT-VENT FIREPLACE OWNER'S OPERATION AND INSTALLATION MANUAL

For more information, visit www.desafech.com







# NATURAL GAS MODELS CHDV36NRA AND (V)V36NA(1) SERIES PROPANE/LP GAS MODEL (V)V36PA(1) SERIES

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.

#### FOR YOUR SAFETY

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

#### 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 correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.

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

(mobile) home, where not prohibited by state or local codes. This appliance may be installed in an aftermarket, permanently located, manufactured

is not convertible for use with other gases, unless a certified kit is used This appliance is only for use with the type of gas indicated on the rating plate. This appliance

Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer.



#### **0** CONTENTS

ě	WARRANTY INFORMATION Back Cover
ć	ACCESSORIES
3 4	OWNER'S REGISTRATION FORM
ရ မ	TECHNICAL SERVICE
ນ ເ	SERVICE HINTS 36
ນ ເ	SPECIFICATIONS
s c	REPLACEMENT PARTS
s K	LLUSTRATED PARTS BREAKDOWN AND PARTS LIST 34
3 %	FROUBLESHOOTING29
28	CLEANING AND MAINTENANCE28

#### SAFETY REORNATION



MARNING: This product contains and/or generates chemicals known to the State of California to cause cancer or birth defects, or other reproductive harm.

and completely before trying to assemble, operate, or service this fireplace. Improper use of this fireplace IMPORTANT: Read this owner's manual carefully explosions, electrical shock, and carbon monoxide can cause serious injury or death from burns, fire, poisoning.

#### to death! A DANGER: Carbon monoxide poisoning may lead

service person. It has a sealed gas combustion chamber that uses a door assembly and venting pipe are not properly seated, connected, and sealed, carbon monoxide leakage (spillage) can occur. combustion gases are exhausted through the inner pipe. If the glass system. It brings in fresh air for combustion through the outer pipe and coaxial pipe (pipe within a pipe and having the same center) venting This fireplace must be installed by a qualified (certified or licensed)

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, or nausea. If serviced by a qualified service person. Some people are more affected by carbon monoxide than others. These include pregnant properly. Get fresh air at once! Have you have these signs, the fireplace may not have been installed influence of alcohol, and those at high altitudes. women, people with heart or lung disease or anemia, those under the fireplace inspected and

> odorless. An odor-making agent is added to the gas. The odor helps you detect a gas leak. However, the odor added to the gas can fade. Natural and Propane/LP Gas: Natural and propane/LP gases are Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

### WARNING: Any change controls can be dangerous. to this fireplace or its

- This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases unless a certified kit is used.
- ы For propane/LP fireplace, do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.
- ယ If you smell gas
- shut off gas supply
- 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 you gas supplier, call the fire department.
- 4. Never install the fireplace
- in a recreational vehicle
- in windy or drafty areas where curtains or other combustible (flammable) objects can make contact with the fireplace front
- in high traffic areas

# SAFETY INFORMATION

#### Continued

- 5. This fireplace reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
- Carefully supervise young children when they are in the room with fireplace.
- Do not modify this fireplace under any circumstances. Any
  parts removed for servicing must be replaced prior to operating fireplace.
- Turn fireplace off and let cool before servicing, installing, or repairing. Only a qualified service person should install, service, or repair this fireplace. Have fireplace inspected annually by a qualified service person.
- 9. You must keep control compartments, burners, and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust from carpeting, bedding material, etc. Turn off the gas valve and pilot light before cleaning fireplace.
- Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See Cleaning and Maintenance, page 28.
- 11. Keep the area around your fireplace clear of combustible materials, gasoline, and other flammable vapor and liquids. Do not run fireplace where these are used or stored. Do not place items such as clothing or decorations on or around fireplace.
- Do not use this fireplace to cook food or burn paper or other objects.
- 13. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on fireplace nameplate.
- 14. This appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSINFPA 70, or the Canadian Electrical Code, CSA C22.1.
- 15. Do not use fireplace if any part has been exposed to or under water. Immediately call a qualified service person to arrange for replacement of the unit.
- 16. Do not operate fireplace if any log is broken.
- 17. Do not use a blower insert, heat exchanger insert, or other accessory not approved for use with this fireplace.
- Do not operate fireplace with glass door removed, cracked, or broken.
- 19. Provide adequate clearances around air openings.

# PRODUCT IDENTIFICATION

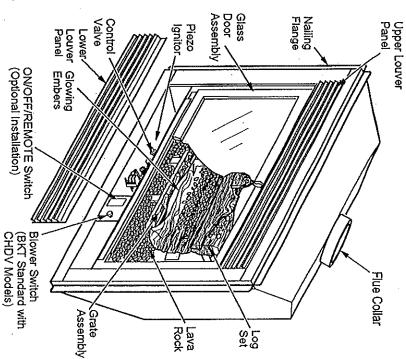


Figure 1 - Direct-Vent Fireplace with Millivolt Ignition

### LOCAL CODES

Install and use fireplace with care. Follow all local codes. In the absence to local codes, use the current *National Fuel Gas Code ANSI 7223.1/NFPA 54\** (USA) or the current *CSA-B149.1 Installation Code* (Canada).

\*Available from:

American National Standards Institute, Inc. 1430 Broadway New York, NY 10018 National Fire Protection Association, Inc. Batterymarch Park Quincy, MA 02269



## PRODUCT FEATURES

These are a few facts that can help you understand and enjoy your direct-vent fireplace:

- The venting system may be routed to the outside of your home in several ways. It may vent through the roof (vertical) or it may vent to an outside/exterior wall (horizontal). The vent pipe installation is very important to allow for proper operation. You must follow the venting instructions very carefully for either vertical or horizontal applications.
- This fireplace may be installed in any room of your house provided all local codes and these installation instructions are followed.
- This fireplace requires a wall switch, hand-held remote or wall thermostat (millivolt) for operation (see Accessories, page 39).
- This fireplace does not require electricity to operate.
- Only the blower requires electricity if installed and if you plan
  to install the blower at a later date, do not forget to wire the
  outlet at the bottom of the fireplace when framing.
- A piezo ignitor and ceramic electrode create spark to ignite the pilot light. It does not require any matches, batteries or any other sources of ignition to light the pilot.
- Each time you turn on your fireplace, you may notice some amount of condensation on the inside of the fireplace glass. This is normal and will disappear after 10-20 minutes of operation.
- Your direct-vent gas fireplace system (fireplace and venting) is a balanced and sealed gas operating unit. It requires approximately 10-20 minutes of operating time before the flame pattern stabilizes.

### PRE-INSTALLATION PREPARATION

# LOCATION AND SPACE REQUIREMENTS

Determine the safest and most efficient location for your DESA direct-vent fireplace. Make sure that rafters and wall studs are not in the way of the venting system. Choose a location where the heat output is not affected by drafts, air conditioning ducts, windows or doors. Figure 2 shows some common locations. Be aware of all restrictions and precautions before deciding the exact location for your fireplace and termination cap.

When deciding the location of your fireplace, follow these rules:

- Do not connect this fireplace venting to a chimney flue serving a separate solid-fuel burning fireplace or appliance.
- Due to high temperatures, do not locate this fireplace in high traffic areas, windy or drafty areas, or near furniture or draperies.
- Proper clearances must be maintained.
- If your fireplace is to be installed directly on carpeting, vinyl tile, or any combustible material other than wood, it must be installed on a metal or wood panel extending the full width and depth of the fireplace. See Figure 3.

- Your fireplace is designed to be used in zero clearance installations. Wall or framing material can be placed directly against any exterior surface on the back, sides, or top of your fireplace, except where standoff spacers are integrally attached. If standoff spacers are attached to your fireplace, these spacers can be placed directly against wall or framing material. See framing details on page 5.
- If you plan on installing a television or entertainment center recessed above your fireplace, it is recommended that you maintain a minimum 18" above top of louver opening.
- When locating termination cap, it is important to observe the minimum clearances shown in Figure 7, page 6.
- If recessing into a wall, you can avoid extra framing by position-
- ing your fireplace against an already existing framing member.
- · Do not recess termination cap into a wall or siding
- You may paint the termination cap with 450°F (232°C) heat-resistant paint to coordinate with the exterior finish.
- There must not be any obstruction such as bushes, garden sheds, fences, decks, or utility buildings within 24" from the front of the termination cap.
- Do not locate termination cap where excessive snow or ice build up may occur. Be sure to clear vent termination area after snow falls to prevent accidental blockage of venting system. When using snow blowers, do not direct snow towards vent termination area.

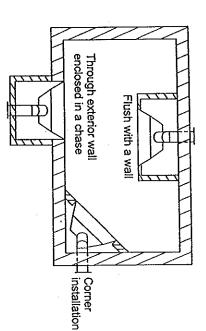


Figure 2 - Common Fireplace Locations

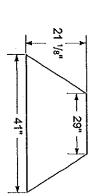


Figure 3 - Fireplace Bottom Dimensions

### PREPARATION

Continued

#### CLEARANCES

Minimum clearances to combustibles for the fireplace are as follows:

Rack, and sides

0"/mm

Back, and sides
Perpendicular walls

6" (152mm)

0"/mm

Floor Ceiling to louver opening

42" (1067mm)

Front
Top of Standoffs

36" (914mm) 0"/mm

0"/mm (See venting instructions for

specific venting clearances.) Combustible material with a maximum thickness of 5/8" may be flush with the top front of fireplace.

NOTICE: This fireplace is intended for use as supplemental heat. Use this fireplace along with your primary heating system. Do not install this fireplace as your primary heat source. If you have a central heating system, you may run system's circulating blower while using fireplace. This will help circulate the heat throughout the house. In the event of a power outage, you can use this fireplace as a heat source.

### FRAMING AND FINISHING

Figure 4 shows typical framing of this fireplace. Figure 5 shows framing for corner installation. All minimum clearances must be met.

For available accessories for this fireplace, see Accessories on page 39. If you are using a separate combustible mantel piece, refer to Figure 6 for proper installation height. You can install noncombustible mantels at any height above the fireplace.

Note: Noncombustible mantels may discolor!

Ref.

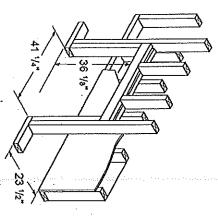


Figure 4- Framing Clearances for Installation Against an Exterior Wall

more information, visit www.desatech.com

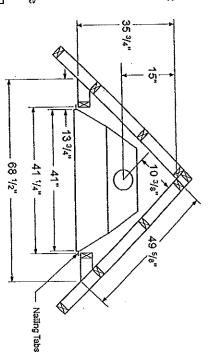


Figure 5 - Framing Clearances for Corner Installation

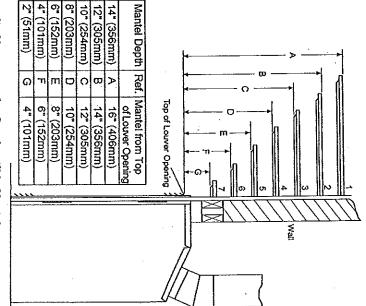


Figure 6 - Clearances for Combustible Mantels

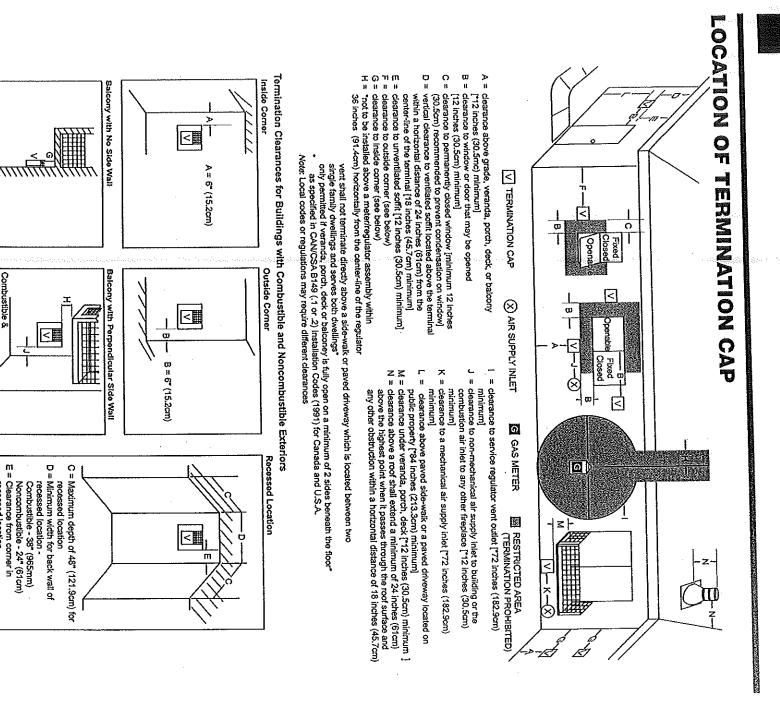


Figure 7 - Minimum Clearances for Termination Cap

G = 12" (30.5cm) minimum clearance

Combustible & Noncombustible H = 24" (61cm)
J = 20" (50.8cm)

recessed location-Combustible - 6" (15.2cm) Noncombustible - 2" (5.1cm)

NOTICE: Read these instructions completely before attempting installation.

These models are tested and approved for use with DESA (direct-vent) pipe components and terminations.

The venting system must terminate on the outside of the structure and can not be attached to a chimney or flue system serving a separate solid fuel or gas burning appliance. A direct-vent appliance must have its own venting system. DO NOT common vent this appliance.

These models are approved to be vented either horizontally through an outside wall or vertically through a roof or chase enclosure using the following guidelines:

- When venting system terminates horizontally on an outside wall, you may install a standoff if the termination cap is to be installed directly on a combustible finish such as vinyl, wood, stucco, etc.
- Never run the vent downward as this may cause excessive temperatures which could cause a fire.
- Vent pipe air space clearances to combustibles are 1" on all sides
  except on the horizontal sections, which requires 2" clearance
  from the top of the pipe. Where the termination cap penetrates a
  combustible wall, 1" air space clearance is required.
- Snorkel terminations are required when minimum clearance to grade cannot be met (see Figure 16 on page 11).
- Have fireplace and selected vent components on hand to help determine the exact measurements when elbowing or offsetting.
   Always use wall firestops when penetrating walls and firestops when penetrating ceilings or attic spaces.
- Install horizontal venting with a 1/4" rise for every 12" of run toward the termination.

WARNING: Read all instructions completely and thoroughly before attempting installation. Failure to do so could result in serious injury, property damage or loss of life.

NOTICE: Failure to follow these instructions will void the warranty.

NOTICE: Do not seal termination cap to vent pipe. Cap must be removable for vent inspection and maintenance.

### **INSTALLATION PRECAUTIONS**

- Wear gloves and safety glasses for protection
- Use extreme caution when using ladders or when on roof tops
- Be aware of electrical wiring locations in walls and ceilings

The following actions will void the warranty on your venting system:

- Installation of any damaged venting component
- Unauthorized modification of the venting system (Do not cut or alter vent components)
- Installation of any component part not manufactured or approved by DESA
- Installation other than as instructed by these instructions

WARNING: This gas fireplace and vent assembly must be vented directly to the outside. The venting system must NEVER be attached to a chimney serving a separate solid fuel burning appliance. Each direct-vent gas appliance must use a separate vent system. Do not use common vent systems.

MARNING: Vent pipe air space clearances to combustibles are 1" on all sides except on the horizontal sections, which require 2" clearances from the top of the pipe. Where the termination cap penetrates a combustible wall, 1" air space clearance is required.



Continued

### INSTALLATION PLANNING

There are two basic types of direct-vent installation:

- Horizontal Termination
- Vertical Termination

## Horizontal Termination Installation

IMPORTANT: Horizontal square terminations require only inner portion of wall firestop. Horizontal installations using round termination require exterior portion of wall firestop available only in vent kit 01491 for V and VV Series or SDHTRK-58 for CHDV Series (see Figure 14, page 10).

- 1. Set the fireplace in its desired location and determine the route your horizontal venting will take. Do not secure the fireplace until all venting has been installed. Some installations require sliding the fireplace in and out of position to make final venting connections. Figures 14 through 18 on pages 10 through 12 show different configurations for venting with horizontal termination that will help you decide which application best suits your installation. Check to see if wall studs or roof rafters are in the path of your desired venting route. If they are, you may want to adjust the location of the fireplace.
- Direct vent pipe sections and components are designed with special twist-lock connections.
- Twist-Lock Procedure: The female ends of the pipes have locking lugs (indentations). These lugs will slide straight into matching slots on the male ends of adjacent pipes. Push pipe sections together and twist one section clockwise approximately one-quarter turn until the sections are fully locked (see Figure 8). Note: Horizontal runs of vent must be supported every three feet. Use wall straps for this purpose.
- 3. Use a 45° elbow to connect venting system to fireplace flue collar. The elbow is designed to be twist-locked onto the flue collar as described in step 2. IMPORTANT: Do not attempt to alter the configuration of the elbow by cutting, twisting, bending, etc.
- 4. Assemble the desired combination of pipe and elbows to the fireplace flue collar. If there are long portions of venting run, pre-assembled pipe sections may be installed as subassemblies for convenience.
- 5. Carefully determine the location where the vent pipe assembly will penetrate the outside wall. The center of the hole should line up with the center-line of the horizontal vent pipe. Mark the wall for a 10<sup>3</sup>/<sub>4</sub>" x 10<sup>3</sup>/<sub>4</sub>" square hole. Cut and frame the square hole in the exterior wall where the vent will be terminated. If the wall being penetrated is constructed of noncombustible material, such as masonry block or concrete, a 8 ½" hole with zero clearance is acceptable (see Figure 9).

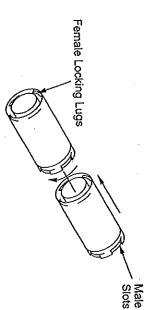


Figure 8 - Vent Pipe Connections

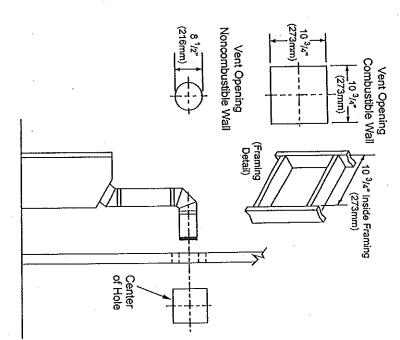


Figure 9 - Vent Opening Requirements

Continued

WARNING: Do not recess vent termination into any wall. This will cause a fire hazard.

6. Noncombustible Exterior Wall: Position the horizontal vent cap in the center of the 8 ½" round hole and attach to the exterior wall with four wood screws provided. Before attaching the vent cap to exterior wall, run a bead of non-hardening mastic (pliable sealant) around the outside edges to make a seal between it and the outside wall. Note: The four wood screws provided should be replaced with appropriate fasteners for stucco, brick, concrete, or other types of sidings.

Combustible Exterior Wall: For vinyl siding, stucco, or wood exteriors, a siding standoff may be installed between the vent cap and exterior wall. The siding standoff prevents excessive heat from damaging the siding materials. Siding material must be cut to accommodate standoff. Bolt the vent cap to the standoff. Apply non-hardening mastic around outside edge of standoff. Position the standoff/cap assembly in the center of the 10 3/4" square hole and attach to exterior wall with wood screws provided (see Figure 11). The siding standoff must sit flush against the exterior fascia material.

- Combustible Exterior Wall Only: Slide the wall firestop over the vent pipe before connecting horizontal run to vent cap (see Figure 12).
- Carefully move fireplace, with vent assembly attached, toward
  wall and insert vent pipe into horizontal termination. The pipe
  overlap should be a minimum of 1<sup>1</sup>/<sub>4</sub>".

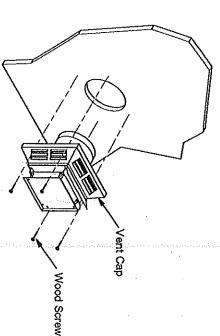


Figure 10 - Installing Horizontal Vent Cap (Noncombustible Exterior)

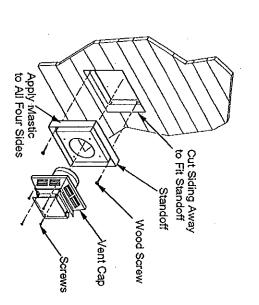


Figure 11 - Installing Siding Standoff (Combustible Exterior Wall)

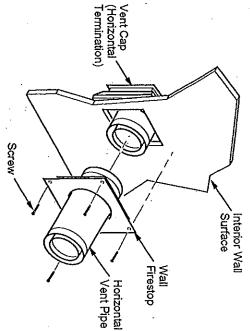


Figure 12 - Connecting Vent Cap with Horizontal Vent Pipe

# VENTING INSTALLATION INSTRUCTIONS

#### Continued

- Combustible Exterior Wall Only: Slide wall firestop against interior wall surface and attach with screws provided. See Figure 13 for horizontal termination details.
- 10. Place fireplace into position and shim with noncombustible material if needed. Nail or screw side flanges to framing to secure unit in place. *IMPORTANT*: Make sure fireplace is level before securing. If fireplace is not level it will not work properly.

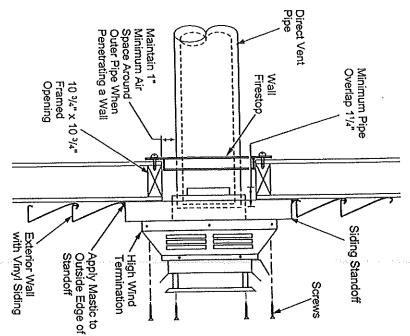


Figure 13 - Typical Horizontal Termination Cap Mounting with Additional Siding Standoff Installed

# **Horizontal Termination Configurations**

Figures 14 through 18 show different configurations and alternatives for venting with horizontal termination. Each figure includes a chart with critical minimum and maximum dimensions which MUST be met. IMPORTANT: Remember that a horizontal run of venting must have a 1/4" rise for every 12" of run toward the termination.

NOTICE: Do not seal termination cap to vent pipe. Cap must be removable for vent inspection and maintenance.

MARNING: Never run vent downward as this may cause excessive temperatures which could cause a fire. Operation of improperly installed and maintained venting system could result in serious injury, property damage or loss of life.

### GROUND FLOOR INSTALLATION

Recommended Applications:

- Installation using cabinet surrounds
- Through the wall using round or square termination (up to 12" horizontal pipe)
- NOT FOR CORNER INSTALLATION

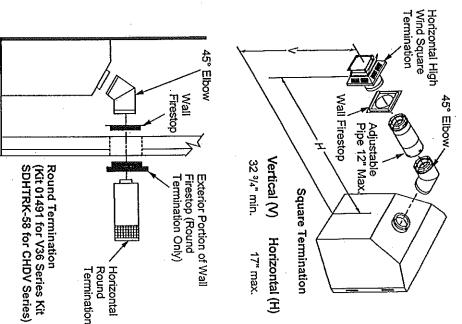


Figure 14 - Horizontal Termination Configuration for Square or Round Terminations

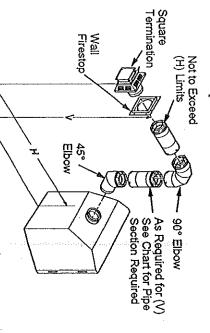
#### INSTRUCTIONS NSTALLATION

Continued

#### CORNER INSTALLATION

Recommended Applications:

- Corner ground floor installation
- Ground floor installation where pipe vents horizontally through wall (over 12" horizontal pipe)
- Basement installation where one foot clearance from ground to termination is possible



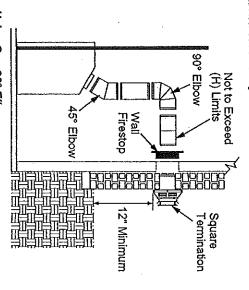


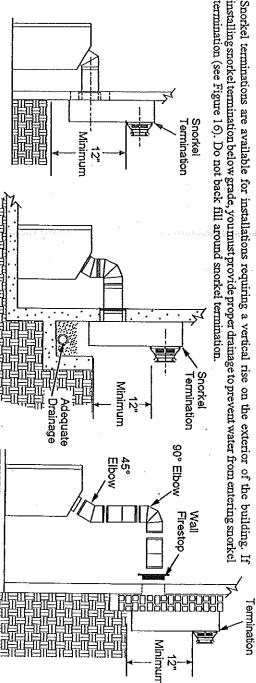
Figure 15 - Horizontal Termination Configuration for Corner Installation Using One 90° Elbow

# SNORKEL TERMINATION INSTALLATION

Recommended Applications:

- Installations requiring a vertical rise on building exterior
- Any installation using snorkel termination to achieve one foot above ground

Snorkel



For more information, visit www.desatech.com

Figure 16 - Snorkel Termination Configurations for Below Ground Installation



#### **NSTRUCTIONS** INSTALLATION

Continued

# HORIZONTAL SYSTEM INSTALLATION USING TWO 90° ELBOWS

The following configurations show the minimum vertical rise requirements for a horizontal system using two 90° elbows.

### Venting with Two 90° Elbows

Vertical (V) Horizontal (H<sub>1</sub>) Horizontal (H<sub>1</sub>) + Horizontal (H<sub>2</sub>)

8 min. 8 min. 20' max 2' max. 4' max. 6' max. 8' max. 8' max. 12' max. 18' max. 20' max. 20' max. 6' max.

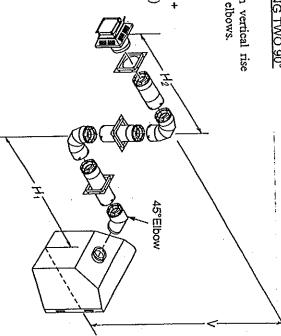


Figure 17 - Horizontal Termination Configuration for Venting Using Two 90° Elbows

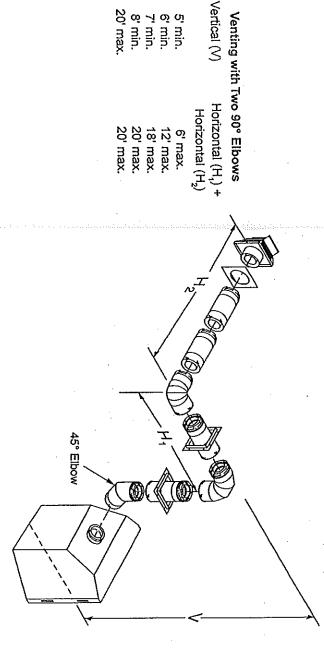


Figure 18 - Horizontal Termination Configuration for Venting Using Two 90° Elbows with Termination at 90° with Fireplace

#### INSTRUCTIONS VENTING INSTALLATION

Continued

# INSTALLATION FOR VERTICAL TERMINATION

Note: Vertical restrictor must be installed in all vertical installations.

- any maximum horizontal offset limitations. sures, attic rafters, etc. bustibles when passing through ceilings, walls, roofs, enclojoists, roof rafters, or other framing will obstruct the venting system, consider an offset (see Figure 19) to avoid cutting load Also note maximum vertical rise of the venting system and lation instructions for required clearances (air space) to combearing members. Note: Pay special attention to these instal-Determine the route your vertical venting will take. If ceiling Do not pack air spaces with insulation.
- 2 a small locating hole at this point. Set the fireplace in desired location. Drop a plumb line down from the ceiling to the position of the fireplace exit flue. Mark the center point where the vent will penetrate the ceiling. Drill

hole in the ceiling. Mark the center point where the vent will penetrate the roof. Drill a small locating hole at this point. Drop a plumb line from the inside of the roof to the locating

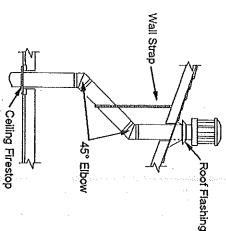


Figure 19 - Offset with Wall Strap and 45° Elbows

#### Flat Ceiling Installation

from falling into the required clearance space. Otherwise, install firestop below the framed hole. The firestop should be installed with no less than three nails per side (see Figure 20). Cut a 10 3/4" square hole in the ceiling using the locating hole as a center point. The opening should be framed to 10 3/4"x10 3/4" nail firestop from the top side. This prevents loose insulation If the area above the ceiling is an insulated ceiling or a room, page 8 using framing lumber the same size as the ceiling joists. (273mm x 273mm) inside dimensions, as shown in Figure 9 on

- N Assemble the desired lengths of pipe and elbows necessary to reach from the fireplace flue up through the firestop. Be sure all pipe and elbow connections are fully twist-locked (see Figure 8, page 8).
- ώ materials. Frame the opening as shown in Figure 9, page 8. There must be a 1" clearance from the vent pipe to combustible actual length may be larger depending on the pitch of the roof (Cover any exposed open vent pipes before cutting hole in roof.) The 10 ¾"x10 ¾" hole must be measured on the horizontal; Cut a hole in the roof using the locating hole as a center point
- 4 Connect a section of pipe and extend up through the hole.

support the vent pipe every 3 feet. Use wall straps for this purpose (see Figure 19). Whenever possible, use 45° elbows instead of 90° elbows. The 45° elbow offers less restriction to the flow of the flue gases and intake air. Note: If an offset is needed to avoid obstructions, you must

- Ņ a 1" clearance from the vent pipe to combustible materials. top edge of the flashing as shown in Figure 19. There must be ing with roofing nails. Be sure roofing material overlaps the Place the flashing over the pipe section(s) extending through the roof. Secure the base of the flashing to the roof and fram-
- solve this problem. or down-drafting in high winds. Increasing the vent height may steep roof pitches. Nearby trees, adjoining rooflines, steep pitched roofs, and other similar factors may cause poor draft meets the minimum building code requirements described in Figure 7 on page 6. Note: You must increase vent height for Continue to add pipe sections until the height of the vent cap
- Twist-lock the vent cap onto the last section of vent pipe.

material. Make sure and meet the minimum allowable clearances may frame and sheetrock the enclosure with standard construction combustibles. Do not fill any of the required air spaces with insulation floor, including storage spaces and closets, you must enclose pipe. Note: If the vent pipe passes through any occupied areas above the first ਠ

firestop above If area above is a room, install framed hole.

If area above is not a room, install firestop below



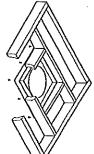


Figure 20 - Installing Firestop



Continued

# **Vertical Termination Configurations**

Figures 21 through 24 show four different configurations for vertical termination.

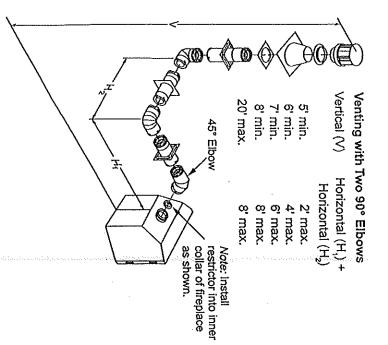


Figure 21 - Vertical Venting Configuration Using Two 90° Elbows with Two Horizontal Runs (Vertical Round High Wind Termination Shown)

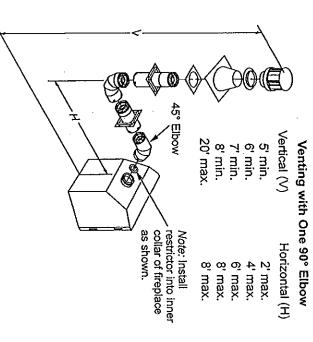


Figure 22 - Vertical Venting Configuration Using One 90° Elbow (Vertical Round High Wind Termination Shown)

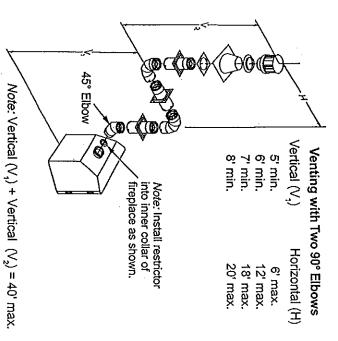


Figure 23-Vertical Venting Configuration Using Two 90° Elbows (Vertical Round High Wind Termination Shown)

#### ISTRUCTIONS INSTALL PIOZ

Continued

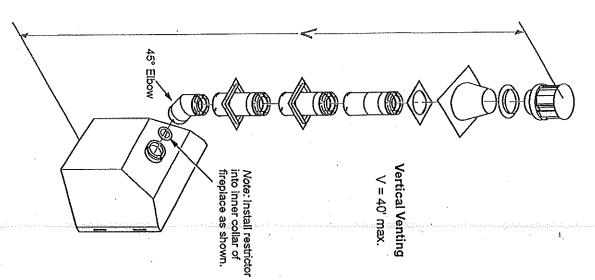


Figure 24 - Vertical Venting Configuration With No Horizontal Run (Vertical Round High Wind Termination Shown)

#### HIGH ALTITUDE INSTALLATION

elevations from 0-2000 feet (USA) and elevations from 0-4500 feet (Canada) Your DESA direct-vent fireplace has been tested and approved for

proper orifice size identification. USA), you may need to decrease the input rating by changing the existing burner orifice to a smaller size. Reduce input 4% for each 1000 feet above sea level. Check with your local gas company for When installing this fireplace at an elevation above 2000 feet (in the

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

for your location. Consult your local gas company to help determine the proper orifice

For assistance with any high altitude installation contact DESA's Customer Service Department at 1-866-672-6040.

#### COMPONENTS FOR V36 AND VV36 SERIES PARTS LISTS FOR VENTING KITS AND

DESA (5/8") Pipe & Vent Kits

nize	PA58-712	P58-48	P58-36	P58-24	P58-12	P58-6	Number
nized	PA58-712 Adjustable 7"-12" Section Double Wall Pipe, Galva-	48" Section Double Wall Pipe, Galvanized	36" Section Double Wall Pipe, Galvanized	24" Section Double Wall Pipe, Galvanized	12" Section Double Wall Pipe, Galvanized	6" Section Double Wall Pipe, Galvanized	Number Description

	FPA58-6	
Section)	6 6" Durayent Collar to FMI Pipe Adaptor (6" ∞llar/Pipe	

DPA58-6 Section) 6" FMI Collar to Pipe Duravent Adaptor (6" collar/Pipe

E58-45 45 deg. Elbow, Galvanized
E58-90 90 deg. Elbow, Galvanized
FSE58-45 45 deg. Starter Elbow, Galvanized (Duravent Collarto

DSE58-45 45 deg. Starter Elbow, Galvanized (FMI Collar to FMI Pipe)

VKG-58 Ground Floor Vent Kit Duravent Pipe)

VKS-58 VKB-58 Basement Vent Kit Snorkel Vent Kit

VKR-58 Roof Vent Kit

VKC-58 Corner Vent Kit

25. 2. T. X Horizontal Round Termination Kit

HTS-58 Horizontal Round Termination, Galvanized Horizontal Square Termination, Galvanized

YT-58 Vertical Round Termination, Galvanized

ST-58-36 ST-58-14 36" Snorkel Termination, 14" Snorkel Termination, Galvanized Galvanized

SC-58 Storm Collar, Galvanized

WF-58 Wall Firestop, Galvanized

RF-58-6 Roof Flashing - 0 to 6/12 Pitch, Galvanized

RF-58-12 Roof Flashing - 6/12 to 12/12 Pitch, Galvanized

VR-58 Vertical Restrictor, Galvanized



VENTING INSTALLATION INSTRUCTIONS

Parts Lists for Venting Kits and Components for V36 and VV36 Series (Cont.)

Parts Lists for Venting Kits and Components for VV361 Model Series

Parts Lists for Venting Kits and Components for CHDV Model Series

MANUFACTOR DESCRIPTION OF THE PROPERTY OF THE		1: · It a compared to 40/40 - Cohomised (8)
	01506 Stee	Steep Pitch Flashing 9/12 to 12/12 * Galvanized (*) Storm Collar - Galvanized (4)
ZUTRICCIONU		Wall Strap (4)  Combined Stranger - Galvanized (1)
Continued	01607 Wal	Wall Firestop - Galvanized (4)
PARTS LISTS FOR VENTING KITS AND COMPO-	VR-58 Ver	Vertical Restrictor - Galvanized
NEW IS FOR V36 AND VV36 SERIES (CONT.)	PARTS LIST	OR VENTING KITS A
ı	COMPONENTS	TIS FOR CHUV MODEL SEXES
86	DESA (5/8")	DESA (5/8") Pipe & Vent Kits
	Number Description	cription
SF-58 Stucco Flashing - For use with HTS 5	SDHTSK-58	Includes: 45° Elbow (Through 5" Wall), Wall
S		Firestop, Horizontal Square Termination
~	SDHTBK-58	Basic Vertical Termination Adjustable Flash-
DESA (5/8") Pipe & Vent Kits		ing, Storm Collar
Number Description	SDHTRK-58	Horizontal Round Termination Kit
- 1		Includes: Round Termination, Wall Firestop,
Horizontal Square Termination	SDP58-12	12" Section Coaxial Pipe - Galvanized (1)
01493 Basic Vertical Termination Kit	SDP58-18	18" Section Coaxial Pipe - Galvanized (1)
Storm Collar	SDP58-36	36" Section Coaxial Pipe - Galvanized (1)
01491 Horizontal Round Termination Kit	SDP58-48	48" Section Coaxial Pipe - Galvanized (1)
45° Elbow (Through 5" Wall)	SDAP58-1724	Adjustable 17"-24" Section Coaxial Pipe -
12" Section Coaxial Pipe - Galvanized		Galvanized (1)
01498 18" Section Coaxial Pipe - Galvanized (4)	SDAP58-712	Adjustable 7"-12" Section Coaxial Pipe -
36" Section Coaxial Pipe - Galvanized	DESA Elbows	WS (i)
	Number	Description
	SDE58-45	45° Elbow - Galvanized (1)
U1606 Adjustable 17 -24 Section Coasiai ripe - Galvanized (4)	SDE58-90	90° Elbow - Galvanized (1)
	DESA Terminations	Inations
	87.T-88	Vertical Round Termination - Galvanized (1)
-	SDHT-58	
Nulliber Describability (4)	SDHTS-58	Horizontal Square Termination - Galvanized (1)
	SDVSWT-58	Vertical Round High Wind Termination (1)
	SDST14-58	14" Snorkel Termination - Galvanized (1)
122	SDST36-58	36" Snorkel Termination - Galvanized (1)
01494 Vertical Round Termination - Galvanized (1)	DESA Venti	DESA Venting Accessories
Horizontal Square Termination - Galvanized	Number	Description
	SDFSP-58	Firestop Plate (1)
	0D6C-58	Adjustable Roof Flashing [0 - 8/12] - Galvanized (1)
01801 (4 Snorkel Termination - Galvanized (1)	SDWS-58	Wall Strap (1)
Venting Accessories	SDS-58	Combustible Siding Standoff - Galvanized (1)
l (D	SDWFS-58	Steep = Italian   Steep = Ital
	VR-58	Vertical Restrictor - Galvanized (1)
U1505 Adjustable Koof Flashing [U - 8/12] - Galvanized (b)		

For more information, visit www.desatech.com

# FIREPLACE INSTALLATION

#### CHECK GAS TYPE

you purchased the fireplace for proper fireplace according to your gas type or to purchase gas conversion kit (see Accessories, page 39). have conflicting gas types, do not install fireplace. See retailer where Use proper gas type for the fireplace unit you are installing. If you

#### INSTALLING OPTIONAL BLOWER ACCESSORIES

NOTICE: If installing blower in an existing fireplace with gas connections, shut off gas supply and disconnect heater from gas supply. Contact a qualified service person to do this.

base area, be sure that the electrical power to the outlet is turned off before proceeding with blower installation. Failure to do this may result in serious injury. WARNING: If there is a duplex electrical outlet installed in the right side of the bottom of the fireplace

#### Model BK Installation

Follow all instructions provided in the blower accessory kit.

- spade terminals on the blower motor (see Figure 25). two female terminals at the end of the power cord onto the two Attach the power cord to the blower motor by firmly pushing the
- N using screw provided (see Figure 25). Tighten screws securely. Attach green ground wire from power cord to blower housing
- ပ္ပ wrapper with the exhaust port directed upward. The blower will fit inside the back opening and be held in position against Place the blower against the lower rear wall of the firebox outer the back wall by the magnets (see Figure 25)
- 4 Be certain that all wire terminals are securely attached to terground wire is tight. minals on blower motor and that the screw retaining the green
- S control shaft forward through the round opening in the switch Mount speed control box to switch bracket by placing the plastic bracket (see Figure 26)

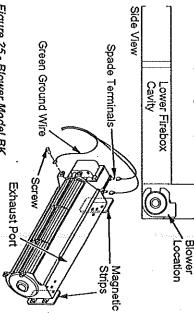


Figure 25 -Blower Model BK

- ò nut by pushing and turning lock nut with pliers clockwise until it is tight against front panel. Place control knob provided on shaft. While supporting speed control, secure control shaft with lock
- -1 warning in column 1. Turn on power to duplex outlet if previously turned off per the
- ∞ Plug in blower power cord.
- receptacle near the firebox. cord through exit hole and plug the power cord into a wall exit the left side or the right side of the firebox. Route power accessory mantel, determine whether the power cord will If your firebox is installed as a freestanding unit with an
- plug the power cord into the duplex outlet provided. Refer If your firebox installation is recessed and/or pre-wired, the duplex outlet to your firebox owner's manual for instructions on wiring

operation. CAUTION: Never touch the blower wheel while in

- Check to make sure that the power cord is completely clear of the by turning knob fully counterclockwise before continuing. wheel. Turn blower on and check for operation. Turn blower off blower wheel and that there are no other foreign objects in blower
- 10. Peel off the backing paper and stick the supplied wiring diagram decal on the firebox bottom approximately 12" in front of the blower (see Figure 27).

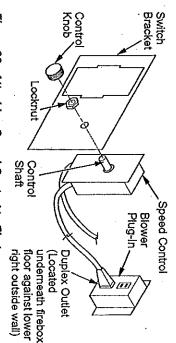


Figure 26 - Attaching Speed Control to Firebox

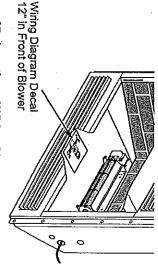


Figure 27 - Location of Wiring Diagram Decal (Model May Vary From Illustration,



more information, visit www.desatech.com

# TIREPLACE INSTALLATION

Continued

#### **Model BKT Installation**

Note: When installing the BKT thermostatically-controlled blower, you must first secure the thermal switch bracket to the blower if it has not already been factory installed.

- 1. Place the green ground wire with ring terminal between the bottom hole on the thermal switch bracket and the top ear hole on the blower assembly. Insert the phillips screw into all three pieces and tighten securely (see Figure 28).
- Connect wire harness and power cord terminals. Connect the blue jumper wire to the blower motor terminal and the right side terminal of the thermal switch. Connect the black wire to the left side of the thermal switch and the white wire to the other remaining blower motor terminal.

Note: The power cord outer insulation sleeve may have to be stripped slightly to allow enough wire length to reach and make all connections. DO NOT trim excessive length away. Just enable enough to make all connections securely.

- 3. Place the blower against the lower rear wall of the firebox outer wrapper with the exhaust port directed upward and the thermodisc positioned up near the fireplace bottom. The thermodisc must be oriented near the fireplace bottom as shown in Figure 28 in order to sense temperature and properly operate. The blower will be held in position against the back wall by the magnets incorporated onto the blower housing (see Figure 28).
- Be certain that all wire terminals are securely attached to terminals on blower motor and thermal switch, and that the screw for the thermodisc bracket and green ground wire is tight.

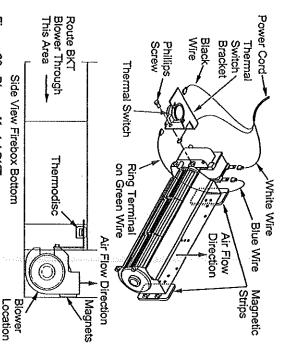


Figure 28 - Blower Model BKT

- Mount the speed control box against the mounting plate provided in the lower fireplace cavity by placing the plastic control shaft forward through the round hole (see Figure 26, page 17).
- 6. While supporting speed control, secure control shaft with lock nut by pushing and turning lock nut with pliers clockwise until it is tight against mounting plate. Place control knob provided on shaft (see Figure 26, page 17).
- 7. Check to make sure that the power cord is completely clear of the blower wheel and that there are no other foreign objects in blower wheel. Also double check all wire leads and make sure wire routing is not pinched or in a precarious position. Correct accordingly.
- Turn on power to duplex outlet if previously turned off per the warning in column 1, page 17.
- Plug in blower power cord to duplex outlet.
- 10. The blower will only run when the speed control knob is in the ON position and the thermal switch senses temperature after the fireplace begins to heat up. The blower speed can be adjusted by rotating the control knob. To turn off, turn knob fully counter-clockwise until it clicks off. If the blower is ON and has been running with the fireplace operating, the blower will continue to run for a short time after the fireplace has been turned off. As the thermal switch cools down, the blower shuts down automatically.
- 11. Peel off the backing paper and stick the supplied wiring diagram decal on the firebox bottom approximately 12" in front of the blower (see Figure 27).

### **Blower Wiring Diagram**

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

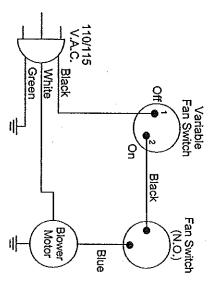


Figure 29 - Blower Wiring Diagram for Thermostat-Controlled Models

#### NSTALLATON

Continued

#### NSTALLING OCATION GAS PIPING TO FIREPLACE

MARNING: A qualified service person must connect fireplace to gas supply. Follow all local codes.

and propane/LP supply. Install the external regulator between the fireplace A CAUTION: For propane/LP units, never connect fireplace directly to the propane/LP supply. This heater requires an external regulator (not supplied).

#### Installation Items Needed

Before installing fireplace, make sure you have the items listed below

- external regulator (supplied by installer)
- piping (check local codes)
- scalant (resistant to propane/LP gas)
- equipment shutoff valve \*
- sediment trap test gauge connection \*
- tee joint
- pipe wrench
- approved flexible gas line with gas connector (if allowed by local codes
- is an acceptable alternative to test gauge connection. Purchase the CSA design-certified equipment shutoff valve from your retailer. \* A CSA design-certified equipment shutoff valve with 1/8" NPT tap

external regulator. The external regulator will reduce incoming down protects it with the vent pointing down as shown in Figure 30. Pointing the vent fireplace regulator damage could occur. For propane/LP connection only, the installer must supply an 4 inches of water. You must reduce incoming gas pressure to between 11 and from freezing rain or sleet If you do not reduce incoming gas pressure, Install external regulator gas

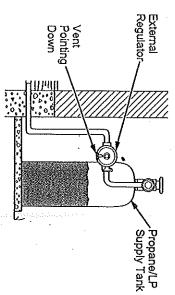


Figure 30 - External Regulator with Vent Pointing Down (Propane/LP Only)

The participant exign

visit www.desatech.com

If pipe is too small, undue loss of volume will occur. areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to fireplace. Internally-tinned copper tubing may be used in certain CAUTION: Use only new, black iron or steel pipe.

plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from fireplace (see Figure 31). Installation must include an equipment shutoff valve, union, and

shutting off the an accessible location. The main gas valve is for turning on or IMPORTANT: Install main gas valve (equipment shutoff valve) in gas to the appliance

equipment shutoff valve to fireplaces. Check your building codes for any special requirements for locating

could result in clogged fireplace valves. prevent excess sealant from going into pipe. Excess sealant in pipe Apply pipe joint sealant lightly to male NPT threads. This will

to liquid petroleum (LP) gas. WARNING: Use pipe joint sealant that is resistant

fireplace may not run properly. trols. If sediment trap/drip leg is not installed or is installed wrong contaminants. This keeps them from going into fireplace gas conmatter is not likely to freeze. A sediment trap traps moisture is within reach for cleaning. Install in piping system between fuel supply and fireplace. Locate sediment trap/drip leg where trapped line as shown in Figure 31. Locate sediment trap/drip leg where We recommend that you install a sediment trap/drip leg in supply and

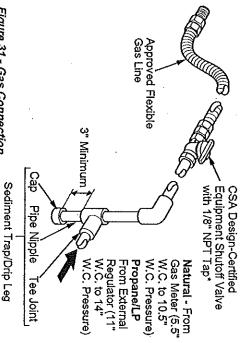


Figure 31 - Gas Connection

plied with the appliance or you can purchase it from your retailer. The CSA design-certified equipment shutoff valve may be sup-



# FIREPLACE INSTALLATION

Continued

# CONNECTING FIREPLACE TO GAS SUPPLY

### Installation Items Needed

- 5/16" hex socket wrench or nut-driver
- sealant (resistant to propane/LP gas, not provided)
- 1. Open lower louver door panel by gently pulling forward.
- Route flexible gas line (provided by installer) from equipment shutoff valve to fireplace. Route flexible gas supply line through one of the access holes on side of fireplace.
- Attach flexible gas line from gas supply to control valve (see Figure 32).
- Check all gas connections for leaks. See Checking Gas Connections.

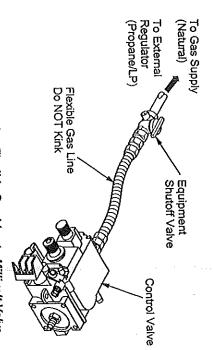


Figure 32 - Connecting Flexible Gas Line to Millivolt Valve

## CHECKING GAS CONNECTIONS

MARNING: Test all gas piping and connections for leaks after installing or servicing. Correct all leaks at once.

WARNING: Never use an open flame to check for a leak. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.

# Pressure Testing Gas Supply Piping System

Test Pressures in Excess Of 1/2 PSIG (3.5 kPa)

Disconnect fireplace and its individual equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig (3.5 kPa) will damage fireplace gas regulator.

- Cap off open end of gas pipe where equipment shutoff valve was connected.
- 3. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas fireplace or opening main gas valve located on or near gas meter for natural gas fireplace, or using compressed air.
- Check all joints of gas supply piping system. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.
- Reconnect fireplace and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

# Test Pressures Equal To or Less Than 1/2 PSIG (3.5 kPa)

- Close equipment shutoff valve (see Figure 33).
- Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas fireplace or opening main gas valve located on or near gas meter for natural gas fireplace, or using compressed air.
- Check all joints from propane/LP supply tank or gas meter to
  equipment shutoff valve (see Figure 34, for propane/LP or Figure 35, page 21, for natural gas). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.

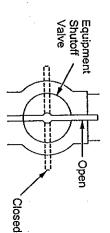


Figure 33 - Equipment Shutoff Valve

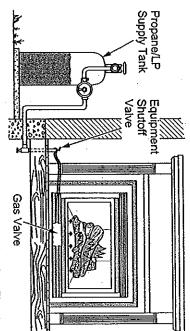


Figure 34 - Checking Gas Joints for Propane/LP Gas Fireplace

#### D C M ZSTALLATION

Continued

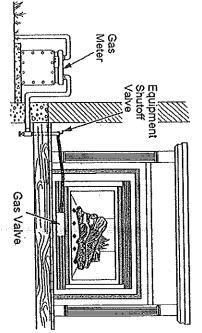


Figure 35 - Checking Gas Joints for Natural Gas Fireplace

# **Pressure Testing Fireplace Gas Connections**

- Open equipment shutoff valve (see Figure 33, page 20).
- Open propane/LP supply tank valve for propane/LP fireplace gas fireplace. main gas valve located on or near gas meter for natural
- Make sure control knob of fireplace is in the OFF position.
- यं य (see Figure 34 for propane/LP or Figure 35 for natural gas). Check all joints from equipment shutoff valve to gas valve Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.
- ĊΛ Light fireplace (see Operating Fireplace, pages 25 through 27). Check all other internal joints for leaks.
- Ġ Turn off fireplace (see To Turn Off Gas to Appliance, page 25).

#### INSTALLING OPTIONAL WALL MOUNT SWITCH - GWMS2

Connect one terminal of 25 ft. wire for the wall switch to the TPTH terminal on the valve. Connect remaining wire terminal wires are not connected as shown the switch will not work. nals are in the positions on the unit as pictured in Figure 36. If to the TH terminal on the valve. Make sure that the wire termi-

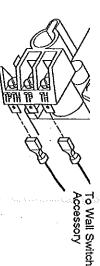


Figure 36 - Connecting Wall Swith to Control Valve

- 'n the burner system to a convenient location to mount your switch Route the 25 ft. wire through openings provided on the sides of
- Connect one bare wire end to each of the terminals of the GWMS2 wall switch.
- Install the wall switch and cover in the wall

### HELD REMOTE CONTROL - (C)GHRCB AND (C)GHRCTB SERIES INSTALLING OPTIONAL WIRELESS HAND-

NOTICE: Use only alkaline batteries (not included).

### Installing Remote Receiver

- Open bottom louver and locate the switch bracket on the left.
- ы able to access the back of the remote receiver. Unscrew the switch bracket. Lean bracket forward so you are
- 'n Slide a 9-volt alkaline battery (not included) through the clip Locate the battery clip mounted on the back of the receiver. (see Figure 37).
- Attach the terminal wires to the battery
- Ų Remove wire from TH to TPTH on control valve (see Figure 37).
- 9 Connect wires from receiver to TH and TPTH to control valve (see Figure 38).
- . 1 Replace the switch bracket

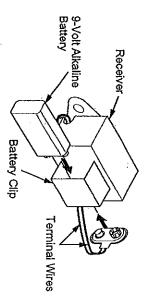


Figure 37 - Attaching Alkaline Battery to Receiver

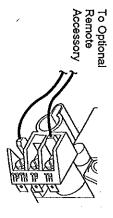


Figure 38 - Control Valve Terminals



# Installing Optional Wireless Hand-Held Remote Control • (C)GHRCB and (C)GHRCTB Series RemovingReplacing Glass Door

#### D の M **INSTALLATION**

Continued

#### Installing 9-Volt Alkaline Battery in Hand-Held Remote Control Unit

- Remove battery cover on back of remote control unit.
- Attach terminal wires to a 9-volt alkaline battery (not included). Place battery into the battery housing.
- Replace battery cover onto remote control unit.

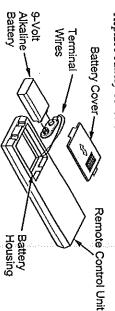


Figure 39 - Installing Alkaline Battery in Hand-Held Remote Control Unit ([C]GHRCB)

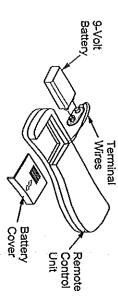


Figure 40 - Installing Battery in Hand-Held Remote Control Unit ([C]GHRCTB Series)

# REMOVING/REPLACING GLASS DOOR

broken glass door panel or without the glass door panel securely in place. For replacement part information see Replacement Parts, page 36. CAUTION: Do not operate this fireplace with a

handling or removing broken glass. Do not remove if glass is hot. Keep children and pets away from glass. A CAUTION: Wear gloves and safety glasses while

glass door or louvers. WARNING: If fireplace has been running, turn off and unplug fireplace. Let cool before removing

### Removing Louver Panels

they are disengaged from the locating holes (see Figure 41). Repeat for bottom spring latches and pull the louvers outward. To install or Remove the top and bottom louver panels by simultaneously pulling both top end spring latches towards the center of the appliance until replace items removed, simply reverse the procedures above

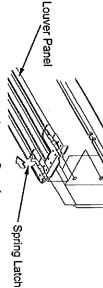


Figure 41 - Removing Louver Panel

### Removing Glass Doors

If replacement of glass is necessary, the entire assembly, glass and frame, must be replaced. If glass is broken, wear gloves and tape the remaining fragments onto the frame.

- and then down and forward to remove screen/rod assembly Remove screen assembly by pushing the rod either left or right from the firebox. Set assembly aside.
- 'n two below firebox that hold glass door in place (see Figure 42). Lift up on latches to unlock. There are two on top of firebox and
- 'n the left side of door frame assembly (see Figure 42) ing injury, remove the five screws from the hinge located on While holding glass door to prevent it from falling and caus-
- 4 before closing door. This will ensure seating of the gasket. Remount the new frame at the hinge with five new screws

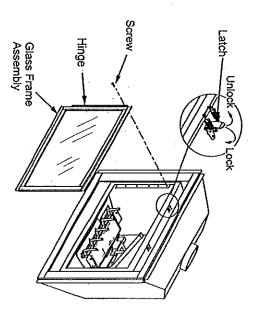


Figure 42 - Removing/Replacing Glass Door

#### T RMU LYOM INSTALLATION

#### Continued

- tab on door and pushing down and back on latch (see Figure 42). Close glass door frame. Lock latches by placing the bar under the
- ġ Replace screen/rod assembly by reversing step 1.
- Replace louvers by reversing procedure under Removing Louver Panels, page 22.

#### Cleaning Glass Door

See Cleaning and Maintenance on page 28.

### BL36DA(SA) AND BL36DHA(SA) INSTALLING OPTIONAL BRICKLINER MODELS

WARNING: If fireplace has been running, turn off and unplug fireplace. Let cool before installing brick liner.

This brick liner kit is optional. You may purchase brick liner from your local retailer or see *Accessories*, page 39.

A CAUTION: Always handle brick panels with two hands. Do not force brick panels into place. Excessive force will break brick panels.

- Remove top and bottom louvers to allow access to door latches.
- Unlock door latches and open glass door. See Removing/Replacing Glass Door, steps 1 and 2 on page 22
- lava rock, and ember material ing brick liner in an existing fireplace, carefully remove logs, If installing brick liner in new fireplace, go to step 4. If install-
- of firebox. Set shield and screws aside. Remove three screws from deflector shield on the inside top
- Ġ edge of grate (see Figure 43). Install rear brick panel first. Rest bottom edge of panel on back Install left side brick panel by sliding it between the grate and
- Install the right brick panel using the same method described

the side of the firebox (see Figure 44).

- Replace deflector shield using screws removed in step 4.
- Follow instructions to install logs, lava rock, and ember material
- 0 and replace screen. See Removing/Replacing Glass Door, Close glass door and lock latches on top and bottom of door
- Ξ Close top and bottom louvers.

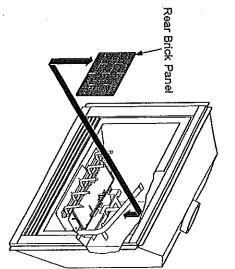


Figure 43 - Installing Rear Brick Panel

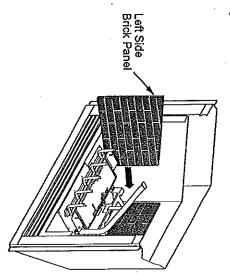


Figure 44 - Installing Side Brick Panels

#### INSTALLATOR

Continued

#### INSTALLING LOGS, LAVA ROCK AND **GLOWING EMBERS**

supplied with fireplace logs exactly as instructed. Do not modify logs. Only use logs Each log is marked with a number. These numbers will help you identify the log when installing. It is very important to install these

Open louvers, remove screen, unlock door latches, and open glass door. See Removing Replacing Glass Door, steps 1 and 2 on page 22. Install logs according to instructions for fireplace model numbers.

- Place log #1 (base log) onto pin on left front side of grate as shown in Figure 45.
- Rest left side of log #2 (front log) onto top of log #1. Place right side of log onto second pin located on right side of grate (see Figure 46).
- Place log #3 (rear log) onto pins on rear of grate as shown in Figure 47.
- #3 as shown in Figure 48 Place log #4 (crossover log) onto pins from both logs #2 and
- 'n Place log #5 (top log) onto right pin of front log (#2) and the smooth surface of crossover log (#4) as shown in Figure 49. Make sure it is seated properly.
- ò smooth surface of rear log (#3) as shown in Figure 50. Make Place log #6 (left log) onto left pin of front log (#2) and the sure it is seated properly.

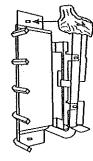


Figure 45 - Installing Log No. 1

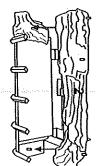


Figure 46 - Installing Log No. 2

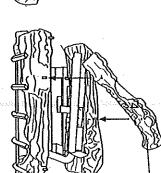


Figure 47 - Installing Log No. 3

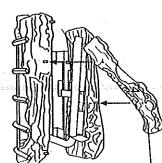


Figure 48 - Installing Log No. 4

Place lava rock along sides and front of firebox bottom in areas that are visible only. It is not necessary to use all of the lava rock provided.

NOTICE: Do not put lava rock on burner or under burner. Placing lava rock on burner will cause performance problems.

- œ material provided. terial in one area. It is not necessary to use all of the ember material. Do not block air slots by using too much ember mathe glowing ember appearance as the flame touches the ember the burner and grate prongs (see Figure 51). This will create Pull ember material apart into pieces no larger than a dime. Place these pieces loosely and sparingly directly onto the exposed section of the front burner and along the space between
- 9 Close glass door, lock door latches, replace screen, and close louvers (see Removing/Replacing Glass Door, steps 5 through on page 23).

A WARNING: The glass door must be securely in place before running this fireplace. Do not run this fireplace if glass is missing or broken.

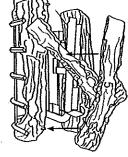


Figure 49 - Installing Log. No. 5

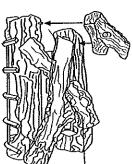


Figure 50 - Installing Log No.

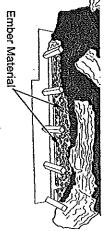


Figure 51 - Placing Ember Material on Burner

#### OPMRATING TRIPLACE



#### FOR YOUR SAFETY READ BEFORE LIGHTING



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

- When lighting the pilot, follow these instructions exactly. This appliance has a pilot which must be lighted by hand
- BEFORE LIGHTING smell all around the appliance area is heavier than air and will settle on the floor. for gas. Be sure to smell next to the floor because some gas

### WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- Ç Use only your hand to push in or turn the gas control knob. don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion. Never use tools. If the knob will not push in or turn by hand,
- Ö Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect and any gas control which has been under water the appliance and to replace any part of the control system

#### INSTRUCTIONS LIGHTING

- STOP! Read the safety information above.
- Open lower louver panel.
- ω in im Turn off all electric power to the fireplace.
- Ųì ₽ to "OFF" Push in gas control knob slightly and turn clockwise
- Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas, go to the next step.
- ò quire accessing for lighting. The pilot is located by the main burner and should not re-
- 00 -1 Turn gas control knob counterclockwise, to "PILOI".
- repeat steps 5 through 8. and it will pop back. Pilot should remain lit. If it goes out, one (1) minute after the pilot is lit. Release gas control knob ately light the pilot by repeatedly depressing the piezo spark ignitor until a flame appears. Continue to hold for about Push in gas control knob all the way and hold. Immedi-
- and immediately call your service technician or gas supplier. If gas control knob does not pop up when released, stop
- If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.

- Turn on all electric power to the fireplace
- 10. Turn gas control knob counterclockwise to "ON"
- input as desired. This valve is equipped with a HI/LO feature. Set fireplace
- Close lower louver panel

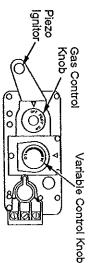


Figure 52 - Control Valve

#### TO TURN OFF GAS TO APPLIANCE



be performed. Turn off all electrical power to the appliance if service is to

ψ

- Push in gas control knob slightly and turn clockwise to "OFF"
- 'n Close lower louver panel

# Shutting Off Burners Only (pilot stays lit)

of the following: You may shut off the burners and keep the pilot lit by doing one

- Turn gas control knob clockwise position. to the PILOT
- Set selector switch in the OFF position



- Remove glass door (see Removing/Replacing Glass Door, pages 22 and 23).
- Follow steps 1 through 8 under Lighting Instructions.

'n

۳

- 'n Depress gas control knob and light pilot with match
- 4 low steps 10 through 14 under Lighting Instructions. Keep gas control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release gas control knob. Fol-
- Ņι Replace glass door (see Removing/Replacing Glass Door, pages 22 and 23).



#### 5

Continued



#### OPTIONAL HAND-HELD REMOTE OPERATION



rately (see Accessories, page 39). Follow instructions included with the remote control. Note: All remote control accessories must be purchased sepa-

NOTICE: You must light the pilot before using the hand-held remote control unit. See Lighting Instructions on page 25.

was last turned off. You can now turn the burner on and off may light if hand-held remote was on when selector switch with the hand-held remote control unit. to the REMOTE position (see Figure 53). Note: The burner knob anywhere between HI and LO. Slide the selector switch Turn control knob to ON position. Adjust flame adjustment After lighting, let pilot flame burn for about one minute

drain the battery. MOTE or ON position when the pilot is not lit. This will IMPORTANT: Do not leave the selector switch in the RE-

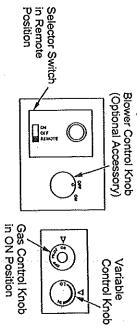


Figure 53 - Setting the Selector Switch, Gas Control Knob, and Variable Control Knob for Remote Operation

#### ON/OFF SERIES (MODELS GHRCB AND CGHRCIB

(see Figure 54) Hold the control button on the hand-held remote until burner turns on. Hold the control button again until burner turns off

state, the light will not light up when any button is pressed. the fire is on it will be turned off automatically. In the locked light stops flashing. Hand-held remote control is now locked. If TO LOCK press both buttons on hand-held remote control until

now unlocked. control until the light stops flashing. The hand-held remote is TO UNLOCK press both buttons together on hand-held remote



Figure 54 - On/Off Hand-Held Remote Control Unit (C)GHRCB

#### AND CGHRCTB) THERMOSTAT SERIES (MODELS **GHRCTB**

mode (MANU) or thermostatic mode (AUTO) (see Figure 55). To select Fahrenheit/Centigrade mode display, carefully press the "C/ The hand-held remote can be operated using either the manual T mode button with the end of a paper clip or similar blunt object.

#### Manual Mode

- the hand-held remote control. Press the POWER and LOCK buttons together to turn on
- Press the MANU button to turn on the fireplace.
- ыβ the fireplace. Press the POWER and LOCK buttons together to turn off

### Auto (Thermostatic) Mode

- ۳ the hand-held remote control Press the POWER and LOCK buttons together to turn On
- ы Press AUTO button to select this mode.
- မှ + or - buttons. Set the desired room temperature by pressing the TEMP
- the fireplace Press the POWER and LOCK buttons together to turn off

center of the room facing towards the fireplace turn off the fireplace. Ideally, place the hand-held remote in the close to the fireplace. The radiant heat from the fireplace will Note: Do not leave the hand-held remote in the AUTO mode

temperature will affect its operation in the AUTO mode. Note: Do not hold the hand-held remote for a long time. Body

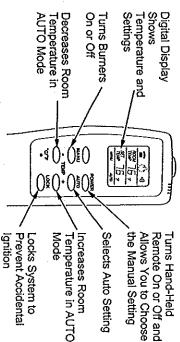


Figure 55-Thermostat Hand-Held Remote Control Unit (C)GHRCTB

#### Safety Features

child safety feature to prevent accidental ignition of the fire-place, the receiver ON/OFF/REMOTE switch should be in the OFF position. When away from home for an extended period of time or as a

#### OPERATION T REPLACE

#### Auto Shutoff Feature

- off. This feature is not available in the MANU mode. enheit (28 degrees Centigrade), the hand-held remote con-If the average room temperature exceeds 82 degrees Fahrperform a safety override and shut the fireplace
- 'n the fireplace after 8 minutes. cannot transmit to the receiver, the receiver will shut off held remote is misplaced, obstructed, or for any reason The receiver continuously receives signals from the handremote to control the room temperature. If the hand-

#### Key Pad Lock Feature

the POWER and LOCK buttons to gether to turn the unit on or off. mote control, etc.). The keypad is locked in either on or off. Press hand-held remote in the MANU or AUTO mode to prevent inadvertent operation (i.e. children operating the hand-held re-This feature allows the user to lock/unlock the keypad on the



#### WALL MOUNTED THERMOSTAT OPERATING OPTIONAL GWMT1



will occur. MARNING: Do not connect the thermostat to a power source. Electrical shock and/or a fire hazard

page 26. Set wall thermostat to desired temperature Light the fireplace as instructed in Lighting Instructions on

and requires no adjustment or leveling. This thermostat has been electronically calibrated at the factory

room temperature for a minimum of 30 minutes for proper Upon installation, the thermostat must be allowed to stabilize at

To turn the fireplace off, adjust thermostat to the lowest setting and turn the gas control knob back to PILOT. The pilot will

on the heater to the OFF position. IMPORTANT: To turn the pilot off, turn the gas control knob



#### OPERATING OPTIONAL **BLOWER ACCESSORY**



switch bracket to the left just inside the louver panel. the fireplace. Blower controls are located on the left side of the Locate the blower controls by opening the lower louver panel on

trolled blower have an ON setting and an OFF setting. The blower will only run when the switch is in the ON position. In the The BK manual blower and the BKT thermostatically-con-OFF position, the blower will not operate.

> blower turns on. After the heater modulates to the pilot position, the blower will continue to run. The blower will shut off after the thermostat (wall mounted or remote control) for the fireplace, firebox temperature decreases. time. The fireplace may run for several minutes before the your fireplace and blower will not turn on and off at the same Note for BKT Only: If you are using BKT blower with optional

dust, dirt, or other obstructions that will hinder the flow of air. Periodically check the louvers of the firebox and remove any The blower helps distribute heated air from the fireplace.

#### NSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often

#### PILOT ASSEMBLY

a qualified service person to readjust the pilot if necessary The pilot assembly is factory preset for the proper flame height. Alterations may have occurred during shipping and handling. Call

must extend beyond both the thermocouple and thermopile. of about 1/8" above the pilot flame. The flame from the pilot burner The height of the thermopile must be 3/8" to 1/2" above the pilot flame as shown in Figure 56. The thermocouple must be at a height

If you pilot assembly does not meet these requirements:

- turn fireplace off (see To Turn Off Gas to Appliance, page 25)
- see Troubleshooting, pages 29 through 31

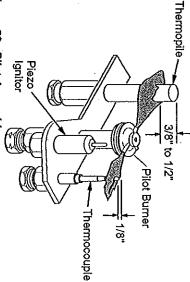


Figure 56 - Pilot Assembly

### BURNER FLAME PATTERN

installation type and weather conditions. will be different from unit to unit and will vary depending on Burner flames will be steady; not lifting or floating. Flame patterns

tion to ensure proper installation and performance or "ghost". This can be dangerous. Inspect the flames after installa-If the vent configuration is installed incorrectly, the flames will lift



#### NSPECTING

Venting System

Continued

Figure 57 shows a typical flame pattern If burner flame pattern differs from that described:

- turn fireplace off (see To Turn Off Gas to Appliance, page 25)
- see Troubleshooting, pages 29 through 31



Figure 57 - Typical Flame Pattern

# CLEANING AND MAINTENANCE

cleaning. MARNING: Turn off fireplace and let cool before

sive lint from carpeting, bedding material, pet hair, etc. Fireplace may need more frequent cleaning due to excesfireplace inspected yearly by a qualified service person. spect these areas of fireplace before each use. and circulating air passageways of fireplace clean. CAUTION: You must keep control areas, burners, Have ż

#### GLASS DOOR

fireplace with the glass door removed, cracked, or broken. strike, slam, or otherwise abuse glass. Do not operate WARNING: Handle glass door panel with care. Do not

cleaner to clean glass. Do not clean glass when hot may damage glass. Use a nonabrasive household glass MARNING: Do not use abrasive cleaners as this

each heating season, depending on the usage and circumstances present. Refer to Removing/Replacing Glass Door, pages 22 and 23 of operation. abrasive household cleaner and warm water after the first two weeks glass should be cleaned several times with a non-ammonia, nonstart-up a slight film may form on the glass due to paint curing. The other airborne particles to cling to the glass surface. During initia condensation to form on the inside of the glass causing lint, dust, and Glass must be cleaned periodically. During start-up it is normal for of this manual when removing glass door for cleaning. Thereafter, clean the glass two or three times during

WARNING: Only pairs suppressions broken or damturer should be used when replacing broken or damaged glass door panel (see Replacement Parts, page aged glass door panel (see Replacement Parts, page aged glass door panel is a complete unit. No substitute materials may be used. WARNING: Only parts supplied by the manufac-

> handling or removing broken glass. Do not remove if glass is hot. Keep children and pets away from glass. CAUTION: Wear gloves and safety glasses while

pieces with a shop vac. If glass has been broken, carefully remove glass door (see Removing/Replacing Glass Door, pages 22 and 23). Vacuum all glass

CAUTION: Do not vacuum if pieces are hot

No substitutions may be made. See Removing/Replacing fireplace (see Replacement Parts, page 36 for detail on ordering). Use only the tempered glass door replacement intended for this Door, pages 22 and 23 for instructions for replacing glass door. Glass

door removed, cracked, or broken. MARNING: Do not operate fireplace with the glass

### PILOT AND BURNERS

- Remove ember material before cleaning burners and replace when cleaning is complete.
- remove dust, dirt, or lint. Burner and controls should be cleaned with compressed air to
- Use a vacuum cleaner or small, soft bristled brush to remove excess dust, dirt, or lint.

#### LOGS

- If you remove logs for cleaning, refer to Installing Logs, Rock, and Glowing Embers, page 24, to properly replace logs.
- Use a vacuum cleaner to remove any carbon buildup on logs.
- Replace log(s) if broken. See Replacement Parts on page 36.
- Replace ember material periodically as needed. See Replace. ment Parts on page 36.

#### **VENTING SYSTEM**

guidelines: Conduct annual inspection of the venting system following these

- these items replaced immediately by a qualified service person. corrosion (rust spots or streaks and, in extreme cases, holes). Have Check areas of venting system that are exposed to the weather for
- Ņ move any toreign material. Remove the vent cap and shine a flashlight into the vent.
- ယ cold weather. elbows, or exterior portions of the system being exposed to and can be caused by having excessive lateral runs, too many condensation can cause corrosion of caps, pipes, and fittings Check for evidence of excessive condensation. Continuous
- 4 Inspect joints to verify straps for rigidity. disturbed and loosened. Check mechanical supports such as wall that no pipe section or fitting has been

### IROUDE INSTOOTING

Note: For additional help, visit DESA's technical service web site at www.desatech.com.

Note: All troubleshooting items are listed in order of operation.

WARNING: Turn off heater and let cool before servicing. Only a qualified service person should service and repair heater.

CAUTION: Neveruse awire, needle, or similar object to clean pilot. This can damage pilot unit.

order of operation.	Γ	- Invitation of the state of th	L	Commission of the Commission o
OBSERVED PROBLEM	2	POSSIBLE CAUSE	교	REMEDY
When ignitor button is pressed, there is no spark at pilot		<ol> <li>Ignitor electrode not connected to ignitor cable</li> </ol>	:-	1. Reconnect ignitor cable
	<i>i</i> >	Ignitor cable pinched or wet		Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry
	ှယ	3. Piezo ignitor nut is loose	μ	Tighten nut holding piezo ignitor. Nut is located behind the mounting bracket
e desire	4, 1	Broken ignitor cable	4, n	Replace ignitor cable
	γ'n	Bad piezo ignitor	γ'n	Replace piezo ignitor Replace pilot assembly
	.79	Ignitor electrode positioned wrong	i	Replace pilot assembly
When ignitor button is pressed, there is spark at pilot but no ignition	H	Gas supply turned off or equipment shutoff valve closed	-	Turn on gas supply or open equipment shutoff valve
1 to 600 was a	$\omega$ $\wp$	Gas control knob not in PILOT position Gas control knob not pressed in while	$\ddot{n}$	Turn gas control knob to PILOT position Press in gas control knob while in PILOT
laga sang	4	Air in gas lines when installed	4	Continue holding down control knob.
. So had		·		Repeat igniting operation until air is removed
	'n	Depleted gas supply (propane/LP models only)	'n	Contact local propane/LP gas company
	è	Pilot is clogged	è,	Clean pilot (see Cleaning and Mainte- nance, page 28) or replace pilot assembly
	7.	Gas regulator setting is not correct	7.	Replace gas control
Pilot lights but flame goes out when control knob is released	2:	<ol> <li>Gas control knob not fully pressed in</li> <li>Gas control knob not pressed in long enough</li> </ol>	2:	Press in gas control knob fully After pilot lights, keep gas control knob pressed in 30 seconds
	ω 4	Equipment shutoff valve not fully open Pilot flame not touching thermocouple,	4 ω	Fully open equipment shutoff valve A) Contact local natural or propane/LP
		which allows thermocouple to cool, causing pilot flame to go out. This prob-		gas company B) Clean pilot (see Cleaning and
the disk		the following:		Maintenance, page 28) or replace pi- lot assembly
		A) City one presents		

Thermocouple damaged Control valve damaged

79.50

Replace pilot assembly Replace control valve

1/4 turn more

trol valve

A) Low gas pressure
B) Dirty or partially clogged pilot

Thermocouple connection loose at con-

Ŋ

Hand tighten until snug, then tighten

## TROUBLESHOOTING Continued

		-	
OBSERVED PROBLEM	7	POSSIBLE CAUSE	REMEDY
Burner does not light after pilot is lit	;	Burner orifice clogged	<ol> <li>Clean burner (see Cleaning and Mainte- nance, page 28) or replace burner orifice</li> </ol>
· control of the cont	Ы	Inlet gas pressure is too low	<ol><li>Contact local propane/LP or natural gas company</li></ol>
	ပ်	Thermopile leads disconnected or im-	3. Reconnect leads
	4,	Thermopile is defective	4. Replace thermopile
Delayed ignition burner	r.	Manifold pressure is too low	<ol> <li>Contact local propane/LP or natural gas company</li> </ol>
	ы	Burner porting or orifice clogged	2. Clean burner (see Cleaning and Main- tenance, page 28) or replace burner orifice
Burner backfiring during combustion	:-	Burner orifice is clogged or damaged	<ol> <li>Clean burner (see Cleaning and Mainte- nance, page 28) or replace burner orifice</li> </ol>
	'n'n	Damaged burner Gas regulator defective	Replace damaged burner     Replace gas control
Slight smoke or odor during initial operation	1.	Residues from manufacturing processes and logs curing	1. Problem will stop after a few hours of operation
Heater produces a whistling noise when burner is lit	2 1	Turning gas control knob to HI position when burner is cold Air in gas line	<ol> <li>Turn gas control knob to LO position and let warm up for a minute</li> <li>Operate burner until air is removed from line. Have gas line checked by local pro-</li> </ol>
	ω	Dirty or partially clogged burner orifice	pane/LP or natural gas company 3. Clean burner (see Cleaning and Mainte- nance, page 28) or replace burner orifice
Glass soots	:-	Flame impingement on logs	<ol> <li>Adjust the log set so that the flame does not excessively impinge on it</li> </ol>
	<i>i</i> >	Debris around burner air mixer	2. Inspect the opening at the base of the burner to see that it is NOT packed with any type of material
Fireplace produces a clicking/ticking noise just after burners are lit or shut off	: <del>-</del>	Metal expanding while heating or contracting while cooling	1. This is common. If noise is excessive, contact qualified service person
Remote does not function	hond i	Battery is not installed or battery power is low	1. Replace 9-volt batteries in receiver and remote control

### TROUBLESHOOTING

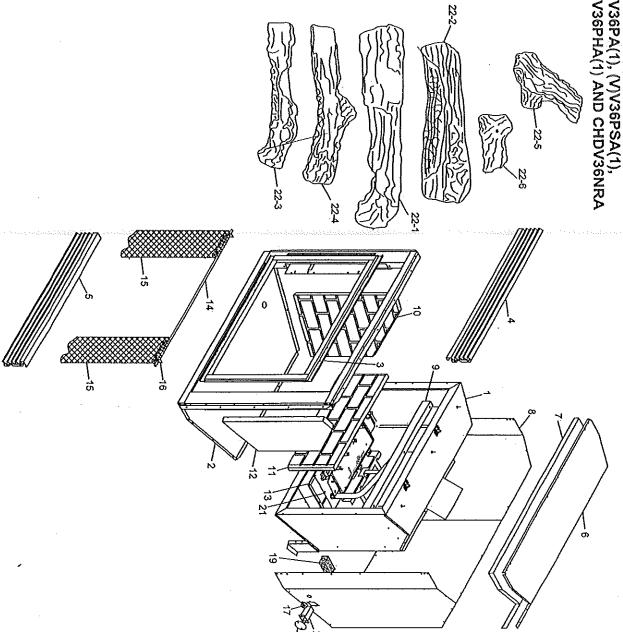
Continued

- WARNING: If you smell gas
  Shut off gas supply.
  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.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces unwanted odors	Gas leak. See Warning statement above	1. Locate and correct all leaks (see Checking Gas Connections, page 20)
Fireplace shuts off in use	<ol> <li>High or gusting winds</li> <li>Low line pressure</li> <li>Pilot is partially clogged</li> <li>Inner vent pipe leaking exhaust gasses</li> </ol>	
	<ol> <li>inner vent pipe leaking exhaust gasses into system</li> <li>Glass too loose and air tight gasket leaks in corners after usage</li> <li>Bad thermopile or thermocouple</li> <li>Improper vent cap installation</li> </ol>	<ol> <li>Locate and correct all leaks (see Checking Gas Connections, page 20)</li> <li>Tighten glass</li> <li>Replace faulty component</li> <li>Check for proper installation and freedom from debris or blockage</li> </ol>
Gas odor even when control knob is in OFF position	<ol> <li>Gas leak. See Warning statement above</li> <li>Control valve defective</li> </ol>	<ol> <li>Locate and correct all leaks (see Checking Gas Connections, page 20)</li> <li>Replace control valve</li> </ol>
Gas odor during combustion	Cas leak. See Warning statement above	<ol> <li>Locate and correct all leaks (see Check- ing Gas Connections, page 20)</li> </ol>
Dark residue on logs or inside of fireplace	l. Improper log placement	1. Properly locate logs (see Installing Logs, Lava Rock, and Glowing Embers, pages 24 and 25)
		<ol> <li>Clean out air holes at burner inlets. Periodically repeat as needed</li> </ol>
	<ol> <li>Burner flame holes blocked</li> <li>Improper venting or excessive blockage</li> </ol>	3. Remove blockage or replace burner 4. Have the vent system inspected, including the termination cap. Remove any
	<ol><li>Excessive amounts of embers and pan material</li></ol>	5. Clear excess embers until a minimum gap of 1/2" remains under the grate

## BREAKDOWN

MODELS (V)V36NA(1), (V)V36NSA(1), (V)V36NHA(1), (V)V36PA(1), (V)V36PSA(1), (V)V36PHA(1) AND CHDV36NRA



#### PARTS LIST

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 36 of this manual.

The state of the s	T	T	-				•	- With			-			-						West or the										*****	MACO D	~
- Charles and the control of the con		22-6	22-5	22-4	22-3	22-2	22-1	8		,	2 5					잙	74	ಭ	13	3	ੋ	φ	∞	7	ത	Ċη	4		ω	Ν.		NO KEY
25487 27253 55240		22-6 109133-01	22-5 109132-01	22-4 109131-01	22-3 109130-01	22-2 109129-01	22-1 109128-01	108032-01	100700-02	100/00-01	24460	24353	21171	14123	11418	12105	108719-01	108076-01	-			109082-01	* *	108016-01	108015-01	108011-02	108011-01	108010-02	108010-01	*	**	(V)V36NA(1) (V)V36PA(1)
25487 27253 55240	i an	109133-01	109132-01	109131-01	109130-01	109129-01	109128-01	108032-01	20-00-00-02	100/60-01	74460	24353	21171	14123	11418	12105	108719-01	108076-01	See Below	See Below	See Below	109082-01	**	108016-01	108015-01	108011-02	108011-01	108010-02	108010-01	*	*	(V)V36NSA(1) (V)V36PSA(1)
25487 27253 55240	PARTS AVAI	109133-01	109132-01	109131-01	109130-01	109129-01	109128-01	108032-01	100100-02	100760-01	24460	24353	21171	14123	11418	12105	108719-01	108076-01	See Below	See Below	See Below	109082-01	*	108016-01	108015-01	108011-02	108011-01	108010-02	108010-01	*	· ##	(V)V36NHA(1) (V)V36PHA(1)
25487 27253 55240 PCDM-36VA	PARTS AVAILABLE - NOT S	109133-01	109132-01	109131-01	109130-01	109129-01	109128-01	108032-01	100700-02	100760-01	24460	24353	21171	14123	11418	12105	108719-01	108076-01	See Below	See Below	See Below	109082-01	*	108016-01	108015-01	108011-02	108011-01	1	108010-01	*	**	CHDV36NRA
Lava Rock/Bag Assy Notice Label Vent Label Conversion Kit	SHOWN	Base Log (Log 6)	Left Log (Log 5)	Top Log (Log 4)	Crossover Log (Log 3)	Rear Log (Log 2)	Front Log (Log 1)	Log Set	(See pages 38 and 30)	Burner Assembly (Natural Gas)	Gas Conduit Assembly	Handy Box Assembly	Gas Knock-Out Cover	Strain Relief	Push-On Nut	Screen	Screen Rod	Burner Base Gasket	Right Refractory Brick Panel	Rear Refractory Brick Panel	Left Refractory Brick Panel	Heat Shield	Fireplace Surround	Fireplace Top Insulation	Fireplace Top	Bottom Louver Assy	Top Louver Assy	Door Assembly (VV Models Only)	Door Assembly (V/CHDV Models Only)	Face Weldment	Firebox Assembly	DESCRIPTION
				<u>.</u>	٠.	٠.	٠.			د،			N		N	N	ے.	_		. د	٠.	٠.			_	۰.	_	_	\	. د		ατγ.

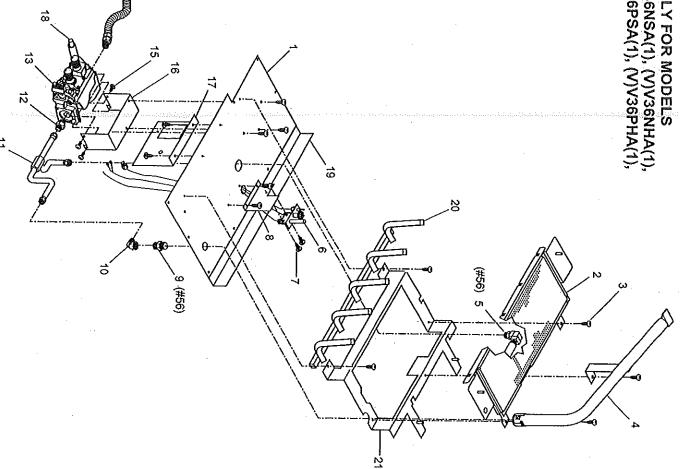
	Right Refractory Brick Panel	111216-01	111216-02	110990-01	20-066011
<b>-</b>	Rear Refractory Brick Panel	111217-01	111217-02	110991-01	110991-02
_	Left Refractory Brick Panel	111215-01	111215-02	110989-01	110989-02
ΩTY	DESCRIPTION	VV36PHA(1)	V36PHA(1)	VV36PSA(1)	V36NSA(1), V36PSA(1) VV36PSA(1)
		VV36NHA(1)	V36NHA(1)	VV36NSA(1) V36NHA(1)	CHDV36NRA
		REFRACTORY BRICK PANELS	EFRACTORY	20	

<sup>\*\*</sup> Part not available for field replacement.



#### ILLOSIRATED PARTS

BURNER ASSEMBLY FOR MODELS (V)V36NA(1), (V)V36NSA(1), (V)V36NHA(1), (V)V36PA(1), (V)V36PHA(1), (V)V36PHA(1), (V)V36NRA



#### PARTS S

BURNER ASSEMBLY FOR MODELS (V)V36NA(1), (V)V36NSA(1), (V)V36NHA(1), (V)V36PA(1), (V)V36PHA(1), (V)V36PHA(1), (V)V36NRA

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under Replacement Parts on page 36 of this manual.

Ö	NUMBER	DESCRIPTION
_	**	Burner Assembly Base
N	108759-01	Pan Burner Assembly
ω	11165	Screw #10 x 5/8 MD TR BLK
4	108763-01	Tube Burner
Ú٦	104506-26	Pan Burner Orifice (Natural Gas)
	104506-20	Pan Burner Orifice (Propane/LP Gas)
თ	108084-02	Pilot Assembly (Natural Gas)
	108084-03	Pilot Assembly (Propane/LP Gas)
7	11102	Screw #8-32 x 3/8 PPH Zinc
œ	108755-01	Pilot Bracket
ω	104506-25	Tube Burner Orifice (Natural Gas)
	14544	Tube Burner Orifice (Propane/LPGas)
6	14528	Brass Elbow Fitting
=	14554	Tubing Assembly
12	14500	Brass Fitting
3	14389	Millivolt Valve (Natural Gas)
	14390	Millivolt Valve (Propane/LP Gas)
14	14253	Flexible Gas Line
귥	11107	Screw #10-32 x 1/4 PPH Zinc
16	26808	Valve Bracket
17	26827	Switch Bracket
ळ	14261	Piezo Ignitor
19	110986-01	Air Baffle (Natural Gas)
	110986-02	Air Baffle (Propane/LP Gas)
20	108761-01	Grate Assembly
21	108754-01	Grate Base

<sup>\*\*</sup>Not a field replaceable part.

8

# REPLACEMENT PARTS

Note: Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

### PARTS UNDER WARRANTY

Contact authorized retailers of this product. If they can not supply original replacement part(s), call DESA's Customer Service Department at 1-866-672-6040.

When calling DESA, have ready

- your name
- your address
- model and serial numbers of your fireplace
- how fireplace was malfunctioning
- type of gas used (propane/LP or natural gas)
- purchase date

Usually, we will ask you to return the part to the factory.

# PARTS NOT UNDER WARRANTY

Contact authorized retailers of this product. If they can not supply original replacement part(s), call DESA at 1-866-672-6040 for referral information.

When calling DESA, have ready

- model number of your fireplace
- the replacement part number

### SPECIFICATIONS

	(V)V36NA(1)	CHDV36NRA	(V)V36PA(1)
Btu	18,000/ 26,000 Btu/hr	18,000/ 26,000 Btu/br	17,500/ 25,000 Btu/hr
Gas Type	Natural	Natural	Propane/LP
Ignition	Piezo	Piezo	Piezo
Manifold Pressure	3.5" w.c.	3.5" w.c.	10.0" w.c.
Minimum Inlet Supply Pressure	5.5" w.c.	5.5" w.c.	11.0" w.c.
Dimension, Inches/mm (HxWxD)Fireplace (Actual size of firebox.	36"x41"x21 ½"	36"x41"x21 <sup>1</sup> /8"	36"x41"x21 ¹/ <sub>8</sub> "
Measurements do not	914x1041x	914x1041x	914x1041x
include nailing flanges or standoffs).	537 mm	537 mm	537 mm
Carton	38"x44"x22"	38"x44"x22"	38"x44"x22"
	965x1118x 559 mm	965x1118x 559 mm	965x1118x 559 mm
Weight, lbs/kg* Fireplace	120 lbs/55 kg	180 lbs/82 kg	120 lbs/55 kg
Shipping	123 lbs/56 kg	183 lbs/83 kg	123 lbs/56 kg

<sup>\*</sup>For refractory lined models add 60 pounds for 36" models.

### SERVICE HINTS

When Gas Pressure Is Too Low

- pilot will not stay lit
- burners will have delayed ignition
- fireplace will not produce specified heat
- propane/LP gas supply might be low (propane/LP units only)

You may feel your gas pressure is too low. If so, contact your local gas supplier.

## TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting. If so, contact DESA's Customer Service Department at 1-866-672-6040. When calling, please have your model and serial numbers of your heater ready.

You can also visit DESA's technical service web site at www.desatech.com.

# OWNER'S REGISTRATION FORM In order to provide better customer service for this and future purchases, we recommend that you register your product with us. You can register online at <a href="https://www.desatech.com">www.desatech.com</a>. If access to our website is not available to you, please complete this Owner's Registration Form and mail to the address on the back of this owner's manual please provide the collection.

to register your	Model:	(Comfort Glow, Vanguard, etc.) (EFP33PR, VTGH33NR, etc.)  Note: Keep receipt for warranty verification.  7 or 9 digit number located on product or identification tag.  Last Name:
to register your	Note: Keep receipt for war 7 or 9 digit number located Last Name: Zip: Product with DESA:	ranty verification.  I on product or identification tag.  Country:
to register your	7 or 9 digit number located Last Name: Zip: Product with DESA:	on product or identification tag.  Country:
to register your	State: Zip: product with DESA:	Country:
to register your	State: Zip:	Country:
to register your	product with DESA:	Couray.
to register your	product with DESA:	
to register your	product with DESA:	
nouse O Utility	Shed/Outbuilding O Gara	ge O Bedroom O Bathroom O Other
ou plan to purcha	se this type of product befo	O Yes
Female O Both	_	
Under 10,000		O 25,000 to 50,000 O 50,000 to 100,000
O	-	
O Propane (LP G	as) OFuel Oil O Wood	O Natural Gas O Electric O Other
essional Installer	O Self O Other	
		Natural Gas/Utility Co. O Home Center/Builder's Supply
O Sudden Cold		O Replace Older Model O D.I.Y. Home Project
was on Sale O	Energy Savings/High Effic	ency O Construction Project O Other
a High School	_	
	C	ol Completed College O Completed Graduate School
O Under \$15,00	O \$15,000 to \$19,99	O \$20,000 to \$34,999 O \$35,000 to \$49,999
9,999 0\$100,	000 and Over	
-		
vere the following	ž.	
Not Important	-	Very Important
0	0	0.
0	0	0
0	0	0
0	0	0
0	0	0
) (	) C	0
) <u>(</u>	) O	•
o c	<b>)</b> 0	0
0 (	o (	) C
0 (	0 0	) C
	<b>)</b>	
	0 (	0 (
0	0	0 (
0	0	0
0	0	0
0 C	00	00
	OLiving/Family Room OOffice/Warehouse Outility If you bought this product yourself, did you plan to purche Who selected the product? O Male O Female O Both What is the population of your area? O Under 10,000 O 100,000 to 250,000 O Over 250,000 What is your primary source of heat? O Professional Installer Cost of product excluding sales tax? \$	Female O Utility Shed/Outlou plan to purchase this type Female O Both Under 10,000 O 10,000  D Propane (LP Gas) O Flassional Installer O Self Sessional Installer O Self O Sudden Cold Weather Was on Sale O Energy Snd? O Advertising O Rele e High School O Complet 29 O 30 - 39 O 40 - 49 O Under \$15,000 O \$15 9,999 O \$100,000 and C O O O O O O O O O O O O O O O O O O

0

# WARRANTY INFORMATION

٦ .	KEEP THIS WARRANTY
	Model
1700E 41	Serial No.
	Date Purchased

Always specify model and serial numbers when communicating with the factory.

make no other warranty, expressed or implied We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We

### LIMITED WARRANTY DIRECT-VENT FIREPLACE

the Bill of Sale or cancelled check must be presented product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty DESA warrants this product to be free from defects in materials and components for two (2) years from the date of first purchase, provided that the

warranty. The heater MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit retailers of this product and/or DESA who will provide original factory replacement parts. Failure to use original factory replacement parts voids this condition and an allowance for labor when provided by a DESA Authorized Service Center. Warranty part(s) MUST be obtained through authorized This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this heater to proper operating

any and all such other costs related to repairing a defective heater will be the responsibility of the owner. This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO TWO (2) YEARS ON ALL COMPONENTS FROM THE DATE OF FIRST PURCHASE; AND DESA'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

so the above limitation on implied warranties, or exclusion or limitation on damages may not apply to you. Some states do not allow a limitation on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages,

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state

For information about this warranty write:



2701 Industrial Drive
P.O. Box 90004
Bowling Green, KY 42102-9004
www.desatech.com



NOT A UPC

111252-01 Rev. B 09/03

For more information Visit www.desaitech.com

#### DOO MSSORIES

fireplace models. NOTICE: All accessories may not be available for ali

Purchase these fireplace accessories from your local retailer. If they can not supply these accessories, call DESA's Sales Department at 1-866-672-6040, for information. You can also write to the address listed on the back page of this manual

#### BRICK LINER

(Not Shown)

BL36DA - Textured Refractory Brick Liner Kit BL36DSA - Standard Refractory Brick Liner Kit

BL36DHA - Textured Refractory Herringbone Brick Liner Kit BL36DHSA - Standard Refractory Herringbone Brick Liner Kit

Complete installation instructions included in this manual. This brick liner adds a touch of style to your direct-vent fireplace.

### (Not Shown) FLEXIBLE GAS LINE CONNECTOR - GA5081

For all models.

### (Not Shown) (Included with CHDV Models) PROPANE/NATURAL GAS CONVERSION KIT

PCDM-36VA - Propane/LP Gas Conversion Kit NCDM-36VA - Natural Gas Conversion Kit

### FACE/LOUVER PANEL KIT

(Not Shown)

FPD36 - Filligree Panel Kit - Black

FPD36B - Filligree Panel Kit - Brushed Brass FPD36P - Filligree Panel Kit - Platinum FPD36PB - Filligree Panel Kit - Polished Brass

#### LOUVER TRIM KIT (Rolled Louvers (Not Shown Only)

LT36B - Rolled Louver Trim Kit - Brushed LT36P - Rolled Louver Trim Kit - Platinum LT36PB - Rolled Louver Trim Kit - Polishe Brushed Brass Polished Brass

### DEFLECTION HOODS

(Not Shown)

HD36 - Hood - Black (2" Brow)

### PERIMETER TRIM KIT

(Not Shown)

PT36 - Perimeter Trim Kit - Black

PT36B - Perimeter Trim Kit - Brushed Brass
PT36P - Perimeter Trim Kit - Platinum

PT36PB - Perimeter Trim Kit - Polished Brass

r more information, visit www.desatech.com



#### MANUAL BLOWER KIT -

distribution. Complete installation and operation instructions in-Manual variable control blower accessory provides better heat



#### BLOWER KIT - BKT THERMOSTATICALLY- CONTROLLED

included in this manual. cally, as needed. Complete installation and operation instructions Provides better heat distribution. Blower turns off and on automati-



### REMOTE CONTROL KIT - (C)GHRCTB SERIES RECEIVER AND HAND-HELD THERMOSTAT

fireplace on or off without leaving the comfort of your easy chair. controlled mode. Allows the fireplace to be operated in a manually or thermostatically-You can adjust your heat settings and turn the



### CONTROL KIT - (C)GHRCB SERIES RECEIVER AND HAND-HELD ON/OFF REMOTE

Allows the fireplace to be turned on and off conveniently

### KIT - GWMT1 (Not Shown) WALL MOUNTED THERMOSTAT CONTROL

Allows easy wall access for thermostatic operation of your fireplace

### (Not Shown) WALL MOUNTED ON/OFF SWITCH - GWMS2

Allows burner system to be turned on and off with a wall switch



2701 Industrial Drive P.O. Box 90004 Bowling Green, KY 42102-9004

Postage Required

TAPE

City of Portland,	City of a variable, value - Dunding of Use Permit			Date Applied For:	CBL:
389 Congress Stree	389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716	207) 874-8716	04-1517	10/07/2004	400 D008001
Location of Construction:	Owner Name:	Ожж	Owner Address:		Phone:
450 Ray St	Jordan John R	450	450 Ray St		
Business Name:	Contractor Name:	Contr	Contractor Address:		Phone
	Builders Insulation	515	515 Riverside Industrial Parkw	Portlan	(207) 878-6600
Lessee/Buyer's Name	Phone:	Perm	Permit Type:		
THE RESERVE THE PROPERTY OF TH		ΛΗ	HVAC		
Proposed Use:	14-20-	Proposed Pro	Proposed Project Description:	The state of the s	
single family home w	single family home w/ new direct vent gas fireplace	install new	direct want man f		
			and an ect sem say medial	replace	
Dept: Zoning Note:			entect vent gas i	replace	
Dept: Building	Status: Approved	Reviewer: Tammy Munson	mmy Munson	oproval Da	ute: 10/22/2004 Ok to Issue: 🗹
14000	Status: Approved  Status: Approved with Conditions	Reviewer: Tammy Munson  Reviewer: Tammy Munson	mmy Munson mmy Munson	proval Da	5
	Dept: Zoning Status: Approved Reviev Note:  Dept: Building Status: Approved with Conditions Reviev Note:	Reviewer: Ta	mmy Munson mmy Munson	oproval Da	<u>t</u>

Residente de la Contraction de